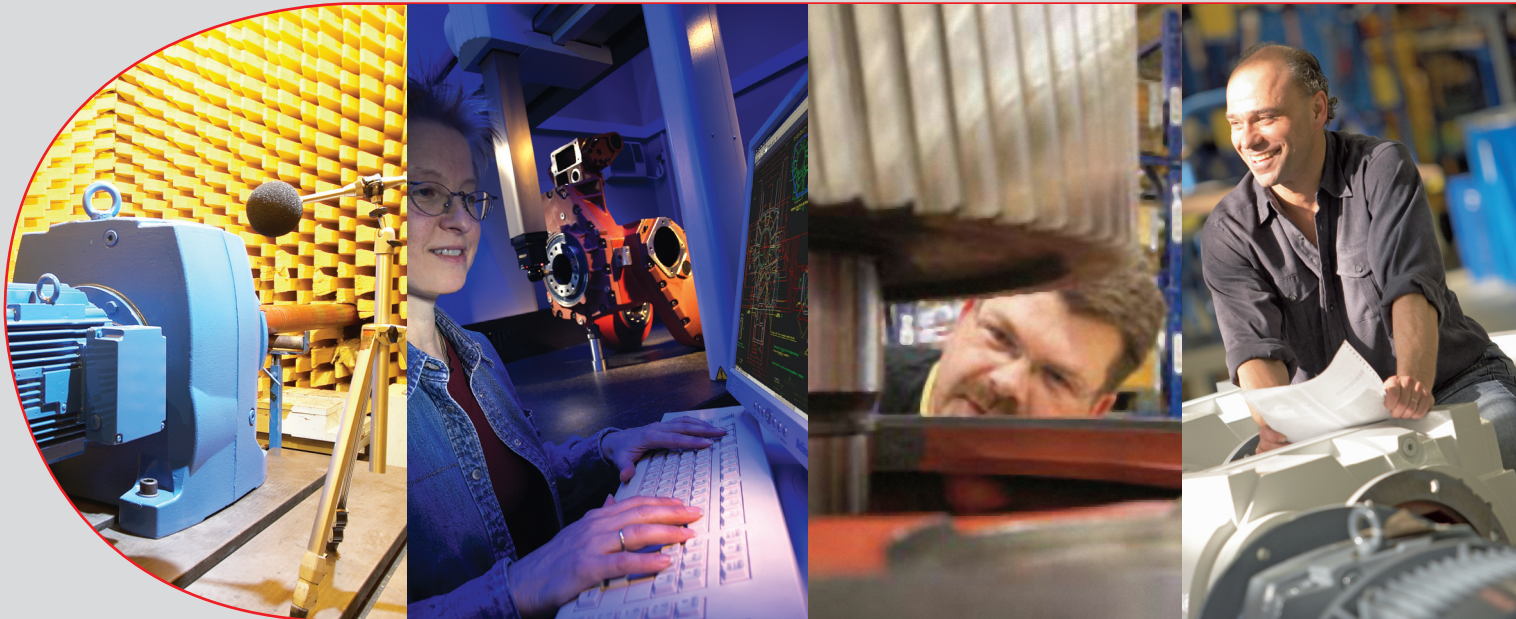


S4

Geared Motors. Gear Units.





Flexibility in the range. Speed of implementation. Reliability of partnership.

Content

	The Rexnord Group	S 6	
1	The S4 Product Family	S 7	1
2	Product Description	S 8	2
3	Instructions for Drive Selection	S 17	3
4	SI4 Inline	SI 1	4
5	SP4 Parallel shaft	SP 1	5
6	SK4 Helical bevel	SK 1	6
7	Technical Appendix	T 1	7
8	Starting up	T 67	8
9	Maintenance	T 68	9
10	Malfunctions	T 70	10
11	Lubrication	T 71	11
12	Positions of Lubricant Attachments	T 79	12
13	Index	T 89	13

Content

1	The S4 Product Family	S8
1.1	Use as prescribed	S8
2	Product Description	S8
2.1	Quality through innovation and control	S8
2.2	Certificates	S9
2.2.1	EC Certificate of conformity	S9
2.2.2	DIN EN ISO 9001:2000	S10
2.2.3	Other	S11
2.3	General technical data	S12
2.3.1	Motor output and output torque	S12
2.3.2	Output speeds	S12
2.3.3	Service Factor	S12
2.3.4	Weights	S12
2.4	General construction design and dimensioning	S12
2.4.1	The gear unit	S12
2.4.2	The motor	S13
2.4.3	The brake motor	S13
2.4.4	Operating conditions	S13
2.4.5	Outputs, torques and speeds	S13
2.4.6	Installation instructions	S13
2.4.7	Reference to applicable standards	S14
2.4.8	Delivery instructions	S14
2.5	Notes about the operation in hazardous atmosphere (ATEX)	S14
2.5.1	Zonal classification	S14
2.5.2	Device safety classified into categories	S14
2.5.3	Type of protection for gear units	S15
2.5.4	Type of protection for motors	S16
3	Instructions for Drive Selection	S17
3.1	Service factors / Applications / Operating conditions	S17
3.1.1	Required Service Factor (SF_{min})	S17
3.1.2	Selecting the frame size	S17
3.1.3	Required application factors for different applications	S18
3.2	External loads, axial / radial, conversion, connections	S20
3.3	Thermal break even performance	S20
3.4	Notes about the dimensional drawings	S21
3.5	Delivery times	S21
3.6	Shaft arrangements	S21
3.7	Types of construction outside of the axis intersection	S22
4	SI4 Inline	S11
4.1	Version variants for SI4 helical geared motors	SI1
4.2	Principle design of helical geared motors	SI3
4.3	Ordering information	SI4
4.4	Selection tables for SI4 geared motors	SI27
4.5	Dimensional drawings of geared motors	SI59
4.6	Selection of gear unit SI4	SI131
4.7	Dimensional drawings of gear units	SI141

5	SP4 Parallel shaft	SP1
5.1	Version variants for SP4 parallel shaft helical geared motors	SP1
5.2	Principle design of parallel shaft helical geared motors	SP3
5.3	Ordering information	SP4
5.4	Selection tables for SP4 geared motors	SP6
5.5	Dimensional drawings of geared motors	SP52
5.6	Selection of gear unit SP4	SP116
5.7	Dimensional drawings of gear units	SP126
6	SK4 Helical bevel	SK1
6.1	Version variants for SK4 parallel shaft helical bevel geared motors	SK1
6.2	Principle design of helical bevel geared motors	SK3
6.3	Ordering information	SK4
6.4	Selection tables for SK4 geared motors	SK6
6.5	Dimensional drawings of geared motors	SK48
6.6	Selection of gear unit SK4	SK96
6.7	Dimensional drawings of gear units	SK106
7	Technical Appendix	T1
7.1	Technical Appendix, General	T1
7.1.1	Symbols used	T1
7.2	Project Planning checklist	T3
7.2.1	Coating systems	T6
7.3	Technical Appendix, Electrical	T8
7.3.1	Electrical data of single-speed motors	T8
7.3.1.1	4 pole, 50 Hz, Table 1	T8
7.3.1.2	6 pole, 50 Hz	T10
7.3.1.3	8 pole, 50 Hz	T11
7.3.2	Electrical data of pole-changing motors	T12
7.3.2.1	4/2 pole, 50 Hz, constant torque, D/YY (Dahlander)	T12
7.3.2.2	6/4 pole, 50 Hz, constant torque, Y/Y (separate windings)	T13
7.3.2.3	8/4 pole, 50 Hz, constant torque, D/YY (Dahlander)	T14
7.3.2.4	8/6 pole, 50 Hz, constant torque, Y/Y (separate windings)	T15
7.3.2.5	8/2 pole, 50 Hz, constant torque, Y/Y (separate windings)	T16
7.3.2.6	4/2 pole, 50 Hz, fan characteristic, Y/YY (Dahlander)	T17
7.3.2.7	6/4 pole, 50 Hz, fan characteristic, Y/Y (separate windings)	T18
7.3.2.8	8/4 pole, 50 Hz, fan characteristic, Y/YY (Dahlander)	T19
7.3.2.9	8/6 pole, 50 Hz, fan characteristic, Y/Y (separate windings)	T20
7.3.2.10	8/2 pole, 50 Hz, fan characteristic, Y/Y (separate windings)	T21
7.3.3	Type of enclosure	T22
7.3.4	Insulation class	T22
7.3.5	Protection against tropical influences	T22
7.3.6	Protection of motors against non-permissible loads	T22
7.3.7	Protective devices	T23
7.3.8	Safe switching of high inductances	T23
7.3.9	50-Hz motors on a 60-Hz supply system	T24
7.3.10	Operation with inverter	T24
7.3.11	Standard version	T27
7.3.12	Explosion-protected motors	T27
7.3.13	Thermal standards	T27
7.3.14	Tolerances	T28

Content

7.3.15	Calculation of maximum permissible operating frequency of motors: Z	T28
7.3.16	Spring-applied single-disk safety brake for direct current and dry run	T29
7.3.17	Brake kit	T30
7.3.18	Brake data	T31
7.3.19	Power capability per braking	T32
7.3.20	Brake rectifier	T33
7.3.21	Tachometer generator	T33
7.3.22	Encoder	T34
7.3.23	Tacho	T35
7.3.24	Motors with forced ventilation	T36
7.3.25	Terminal box position	T37
7.3.26	Connection diagrams	T38
7.3.27	2nd shaft end	T38
7.3.28	Plug connectors (Harting)	T38
7.3.29	Cast iron fan	T38
7.3.30	Cable entries	T38
7.4	Technical Appendix, Mechanical	T39
7.4.1	Principle design of U and I lantern	T39
7.4.2	Backstops in the input lantern	T41
7.4.3	Backstop at the intermediate shaft for SK4 helical bevel geared motors	T41
7.4.4	Slip coupling in the input lantern	T41
7.4.5	Motor base versions	T42
7.4.6	Gear unit with free drive shaft	T42
7.4.7	SI4 gear units SCA, SFA and SCP with integrated oil pump	T43
7.4.8	Noise level	T44
7.4.9	Mass moments of inertia J (10 ⁻³ kgm ²)	T46
7.4.10	External loads at the output shaft	T50
7.4.11	Installation, General Conditions	T52
7.4.12	Mounting power transmission elements	T53
7.4.13	Mounting coupling on output shaft	T53
7.4.14	Mounting Coupling on Input Shaft to Install the Motor (I-lantern)	T54
7.4.15	Mounting a Flange Motor with Coupling	T54
7.4.16	Mounting gear units with solid shaft	T56
7.4.17	Mounting shaft-mounted geared motors with hollow shaft with keyway	T57
7.4.18	Mounting shaft-mounted geared motors with hollow shaft with shrink-fit ring	T59
7.4.19	Mounting shaft-mounted geared motors with hollow shaft with conical taper bush	T61
7.4.20	Torque support SP4	T63
7.4.21	Torque support SK4	T64
7.4.22	Protection covers for SP4 output shafts	T65
7.4.23	Protection covers for SK4 output shafts	T65
7.4.24	Foot plates for SK4 gear units size 2 to 5	T66
8	Starting up	T67
8.1	Checks	T67
8.2	Motor	T67
8.2.1	Electrical connection	T67
8.2.2	Cable entry	T67
9	Maintenance	T68
9.1	Oil level check and leak test	T68
9.2	Visual inspection	T68

Content

9.3	Oil change	T68
9.4	Regreasing	T69
9.5	Backstops	T69
9.6	General Maintenance	T69
9.7	Inspection and maintenance intervals (overview)	T69
9.8	Extended periods of standstill	T70
9.9	Long-term preservation	T70
10	Malfunctions	T70
11	Lubrication	T71
11.1	Selection of lubricants	T71
11.2	Oil viscosity	T72
11.3	Oil quantity	T72
11.3.1	Oil-filling quantities for 2-stage and 3-stage SI4 gear units	T72
11.3.2	Oil-filling quantities of combined SI4 gear units	T73
11.3.3	Oil filling quantities for 2-stage and 3-stage SP4 gear units	T73
11.3.4	Oil-filling quantities of combined SP4 gear units	T74
11.3.5	Oil-filling quantities for 3-stage helical bevel gear units	T74
11.3.6	Oil-filling quantities of combined SK4 gear units	T74
11.4	Regreasing quantities of roller bearing grease	T75
11.4.1	Regreasing quantities for SI4 U- and I-lanterns	T75
11.4.2	Regreasing quantities for SP4 U- and I-lanterns	T75
11.4.3	Regreasing quantities for SK4 U- and I-lanterns	T75
11.4.4	Grease regreasing quantity for shaft bearings	T76
11.4.5	Regreasing facility for roller bearing grease	T77
11.5	Lubricant cooling for SP4 gear units	T78
11.5.1	Assembly of the pipe system	T78
12	Positions of Lubricant Attachments	T79
12.1	Oil attachments sizes S...1 and S...2	T79
12.2	Oil attachments S...3 to S...9	T79
12.3	SI4 arrangement	T79
12.4	SP4 arrangement	T81
12.4.1	SP..3 to SP..5	T81
12.4.2	SP..6 and SP..7	T81
12.4.3	SP..8	T81
12.4.4	SP..8 agitator versions with oil-level indicator and drain cock	T82
12.4.5	SP..1 to SP..5 (SI4 preliminary stage)	T82
12.4.6	SP..6 and SP..7 (SI4 preliminary stage)	T82
12.4.7	SP..8 (SI4 preliminary stage)	T82
12.5	SK4 arrangement	T83
12.5.1	SK..3 to SK..9	T83
12.5.2	SK..7 to SK..9 with SI4 preliminary stage	T84
12.6	Oil level indicator	T85
12.6.1	Position of the oil level indicator for SI4	T86
12.7	Oil filling	T87
12.8	Oil drain	T87
12.9	Bleeding	T87
12.10	Oil expansion tank	T87
13	Index	T89

The Rexnord Group

The Rexnord Group

Higher performance in an association

Integrated solutions for mechanical power transmission components are our strength. We created an association with leading companies that offer economic solutions matched to each other for your drive engineering - from individual product to integrated system solution.

Rexnord - Antriebstechnik	Industrial clutches	BSD® Thomas® Omega™
Rexnord - France	Mechanical drive elements	Sureflex® Pencoflex Hydroflow
Rexnord - Kette	Industrial chains	Rex® Link Belt®
Rexnord - Marbett	Conveyor systems accessories	Marbett® ROBO®
Rexnord - MCC	Hinge band chains	Table Top® Mat Top®
Rexnord - Stephan	Geared motors	Rexnord-Stephan S4 Rexnord-Stephan G3

Your basis for success

High-quality products, application expertise and absolute reliability - your decision for the complete spectrum of the Rexnord family is a decision for a strong and reliable partner.

The Rexnord-Stephan company

Rexnord-Stephan, a company of the Rexnord group, has been developing and manufacturing a broad range of gear units, geared motors and other products in the area of powertransmission at its location in Hameln for decades. Sophisticated design, calculation, and manufacturing technologies have given Rexnord-Stephan an excellent reputation as a partner for individual drive solutions. Customer-oriented special gearboxes or backlash-free precision gear units for industrial robots in addition to the S4 standard series are a permanent component of our product range. With approx. On a production area of 17,000 m², we manufacture according to state-of-the-art, computer-supported and particularly "lean" management principles of the third millennium. Rexnord-Stephan is an association partner of the Rexnord group for mechanical drive engineering. Besides planning, project planning, and dimensioning, we offer our customers not only individual products via worldwide sales, but also tailor-made solutions. Whether subassemblies or fully contained systems - we have the right solution for your application.

We feature excellent references for the development, design and manufacture of individual drive solutions. Our worldwide sales also offers package solutions with high-rating gear units and drive elements.

- Standard gear units
- Drive packages
- Complete solutions
- Special gear units
- Low-backlash gear units

The S4 Product Family

The S4 Product Family

● Strong

Features

The optimized gearing and shaft geometry compensates deflection under load. Application-hardened, hard-machined gear wheels correspond to high quality requirements.

Gear unit casings, covers, feet, flanges, and motor casings are heavily ribbed and securely connected to each other.

Carefully dimensioned shaft and roller bearings absorb high external loads. The components are dimensioned to withstand peak loads even under the most adverse operating conditions.

● Silent

Features

Optimized gearing geometry and precise abrasive engineering practice create a smooth rolling of the tooth flanks involved in the engagement.

The inside of the casing was reinforced by ribs similar to the star-shaped output cover.

Using high-precision machining of the motor flange, motor and gear unit were integrated into a harmonic unit.

● Standard

Features

Connection dimensions of shafts, feet, and flanges are identical with those of the market standard.

The Rexnord-Stephan S4 program features a broad range of designs and numerous standard options. Additional information can be found in the overview of the product program.

● Smart

Features

The EasyFit System:

Pre-assembled gear units are factory assembled in Germany.

Pre-assembled gear units, motors and wheel sets are stocked in the Rexnord assembly centers throughout the world.

Short assembly time and high part interchangeability are granted at each assembly center side due to the unique EasyFit System.

Advantages

The *Rexnord-Stephan S4* transfers higher torques with a given shaft-center distance for a long, low-maintenance service life.

The ruggedly designed casing ensures maximum robustness under high load and failure-free operation.

High load-carrying capacities to absorb high external forces at the input and output shaft ensure a long bearing life of the *Rexnord-Stephan S4* geared motor.

Advantages

The result is a nearly perfect tooth engagement, even load distribution across the complete face width, minimum vibrations and, therefore, a smooth, low-noise running.

Perfectly tied-in ribs dampen vibrations and ensure that vibrations are not passed on to the environment as noise.

The pinion mounted directly on the motor shaft engages in the gearing of the gear unit without angle error and does not create any disturbing noise.

Advantages

The *Rexnord-Stephan S4* series corresponds to the market standard; based on the outstanding performance specifications, it is predestined to replace existing drives.

The most economical design for the respective application can be selected and is available worldwide.

Advantages

Guaranteed High Quality.

Over millions of design variants can be quickly assembled through a corresponding combination of pre-assembly components which allows for worldwide availability.

Short delivery time.

1. The S4 Product Family

2. Product description

1 The S4 Product Family

The Rexnord-Stephan **S4** preassembly system offers the right components for every application.

The S4 series includes a complete range of coaxial helical geared motors, parallel shaft helical geared motors, and helical bevel geared motors.

The four **S** - **S**trong, **S**ilent, **S**tandard, **S**mart - identify the S4.

"**S**trong" because of the high rated torques that are above the market standard. They are the most powerful drives on the geared motor market.

"**S**ilent" because of the optimized gearing geometry and precision-finished face flanks that allow for an extremely smooth, low-noise running, and

"**S**tandard" because of market-oriented dimensions that facilitate the conversion to S4 and allow for a simple assembly for a worldwide geared motor application.

"**S**mart" The unique EasyFit system allows in minutes to assembly a customize geared motor at dealers place (assembly house).

The modular S4 series was built using a minimum of components, thereby ensuring high reliability and simple maintenance.

1.1 Use as prescribed

Gear units/geared motors are designed for the purpose of converting rotational speed and torque. They are intended for use in industrial systems and may only be used as recommended in the Rexnord-Stephan technical documentation and in accordance with the specifications on the nameplate.

2 Product Description

2.1 Quality through innovation and control

The products manufactured by Rexnord-Stephan meet very high quality requirements. Constant control with strict compliance of initiated quality guidelines meets highest demands. State-of-the-art processing centers, contiguous measuring and test technology, and a distinctive quality awareness in all employees are a guarantor for efficient and function-oriented products.

Flexible production flows, supported by the Rexnord-Stephan modular system, guarantee high availability while considering individual demands.

The torsionally-rigid gear unit casings are made of high-quality cast iron and guarantee a vibration-free operation. The robust structure of the S4 geared motors is based on ribbed castings and optimum roller bearings to allow for absorbing even high external loads.

A high efficiency is reached through helical, hardened and precision-machined gear wheels. The motor output becomes effective at the output shaft without nearly any losses.



The gear units are tested in the experimental test field and tested for extreme requirements. With standard motor type of enclosure IP 55 and insulation class F, our electric motors are even safe to operate under extreme operating conditions.

Constant innovation and always looking for better manufacturing processes allow for withstanding the growing requirements of the market.

2. Product Description

2.2 Certificates

2.2.1 EC Certificate of conformity

EC Certificate of Conformity EG Konformitätserklärung			
EC Directive 89/336/EEC "Electromagnetic Compatibility" amended by RL 91/263/EEC, 92/31/EEC and 93/68/EEC		EG-Richtlinie 89/336/EWG „Elektromagnetische Verträglichkeit“ geändert durch RL 91/263/EWG, 92/31/EWG und 93/68/EWG	
EC Directive 73/23/EEC "Electrical equipment designed for use within certain voltage limits" amended by RL 93/68/EEC		EG-Richtlinie 73/23/EWG „Elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen“ geändert durch RL 93/68/EWG	
STATEMENT		ERKLÄRUNG	
We		Hiermit erklären wir	
Rexnord-Stephan GmbH & Co. KG Ohsener Straße 79-83 D 31789 Hameln Germany,		Rexnord-Stephan GmbH & Co. KG Ohsener Straße 79-83 D 31789 Hameln Deutschland,	
herewith declare that		dass die	
A. C. motors with squirrel cage rotor Size S63. to S280.		Asynchron-Drehstrommotoren mit Käfigläufer Baugröße S63. bis S280.	
correspond to the specification of the above mentioned EC directive. Following standards concur with the describe products:		mit den Vorschriften o.g. Europäischer Richtlinien übereinstimmen. Folgende Normen werden bei den bezeichneten Produkten eingehalten:	
EN 50081-1; EN 50082-2 DIN EN 60034-1; DIN EN 60034-2; DIN EN 60034-5 DIN EN 60034-6; DIN EN 60034-9		EN 50081-1; EN 50082-2 DIN EN 60034-1; DIN EN 60034-2; DIN EN 60034-5 DIN EN 60034-6; DIN EN 60034-9	
This certificate attests the conformity with the named directives, however, it is not a promise of properties in the meaning of product liability!		Diese Erklärung ist keine Zusicherung von Eigen- schaften im Sinne des Produkthaftungsgesetzes. Die Sicherheitshinweise der Produktinformationen sind zu beachten!	
Hameln, 2004 Jul.			
 <hr/> Dr. Detlev Petersen Direktor Marketing und Technik Director Marketing and Engineering			
In case of electronic transmission the document remains validity also without signature.		Bei elektronischer Übermittlung bleibt das Dokument auch ohne Unterschrift gültig.	
Ersteller: LJ	06.07.2004 Ind 02	3P0109-02.doc	Copyright reserved
			Seite 1/1 Page

2. Product Description

2.2.2 DIN EN ISO 9001:2000

CERTIFICATE



Management system as per
DIN EN ISO 9001 : 2000

In accordance with TÜV CERT procedures, it is hereby certified that



Rexnord-Stephan GmbH & Co. KG
Ohsener Str. 79 - 83
31789 Hameln
Germany

applies a management system in line with the above standard for the following scope

**design, manufacturing, assembly, sales and after salesservice
of gear units, geared motors and drive packages**

Certificate Registration No. 78 100 045108
Audit Report No. 3501 0016

Valid until 2010-03-21
Initial certification 2004-03-22

G. Bräutigam
TÜV CERT Certification Body
at TÜV NORD CERT GmbH

Essen, 2007-03-14

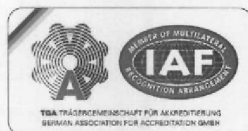
This certification was conducted in accordance with the TÜV CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH

Langemarckstrasse 20

45141 Essen

www.tuev-nord-cert.com





TGA-ZM-30-96-00

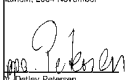



2. Product Description

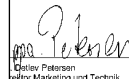
2.2.3 Other

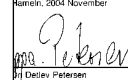

Electromagnetic Compatibility EEC Elektromagnetische Verträglichkeit EMV		Stephan
89/336/EEC amended by 92/31/EEC and 93/68/EEC		89/336/EWG geändert durch 92/31/EWG und 93/68/EWG
STATEMENT	ERKLÄRUNG	
We	Hiermit erklären wir	
Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Germany,	Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Deutschland,	
herewith declare that Gear Units and Geared Motors	dass die Getriebe und Getriebemotoren	
S14 SP4 SK4	S14 SP4 SK4	
correspond to the specification of the EMC directive. The corresponding basic technical standard EN 50081-1 and EN 50082-2 are met if the instruction on EMC correct installation is observed.	den Vorschriften der EMV-Richtlinie entsprechen. Die zugehörigen Fachnormen EN 50081-1 und EN 50082-2 werden erfüllt, wenn die Hinweise zur EMV-gerechten Installation beachtet werden.	
Hameln, 2004 November		
 Dr. Detlev Petersen Director Marketing and Engineering		
In case of electronic transmission the document remains validly also without signature.	Bei elektronischer Übermittlung bleibt das Dokument auch ohne Unterschrift gültig.	
Editor: LJ 15.11.2004 3P018E.41 Copyright reserved Seite / Page: 1/2		

Declaration by the Manufacturer Herstellereklärung		Stephan
Machinery Directive 2006/42/EC		Maschinenrichtlinie 98/37/EG
Declaration by the Manufacturer in accordance with Article 4.2 and Annex II B of the Directive		Herstellereklärung gemäß Artikel 4.2 und Anhang II B von der obigen Richtlinie
PROHIBITION TO PUT INTO SERVICE	VERBOT DER INBETRIEBNAHME	
We	Hiermit erklären wir,	
Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Germany,	Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Deutschland,	
will declare that: Gear Units and Geared Motors:	daß die Getriebe und Getriebemotoren:	
S14 SP4 SK4	S14 SP4 SK4	
intended to be incorporated into machinery or to be combined with other machinery to constitute machinery covered by Directive 98/37/EEC as a whole. Furthermore declare that it is not allowed to put the unit and geared motor into service until the entry into which they are to be incorporated or if they are to be a component has been found and proved to be in conformity with the Machinery Directive and with national implementing legislation, as a whole, including the gear units and geared motors referred to in this declaration.	vorgesehen sind zum Einbau in eine Maschine oder mit anderen Maschinen zu einer Maschine, im Sinne der Richtlinie 98/37/EG inklusive deren Anordnungen, zusammengeführt wird. Desweiteren erklären wir, daß die Inbetriebnahme der Getriebe und Getriebemotoren solange untersagt ist, bis die Maschine, in welche sie eingebaut werden oder von welcher sie eine Komponente darstellen, als Ganzes (d.h. inklusive der Getriebe und Getriebemotoren, für welches diese Erklärung ausgestellt wurde) den Bestimmungen der Maschinenrichtlinie sowie dem entsprechenden nationalen Rechtskreis zur Umsetzung der Richtlinie ins nationale Recht entspricht, und die entsprechende Konformitätserklärung vorliegt.	
harmonized standards: EN 292-1 EN 292-2 EN 294 EN 340 EN 60204-1	Angewandte harmonisierte Normen: DIN EN 292-1 DIN EN 292-2 DIN EN 294 DIN EN 349 DIN EN 60204-1	
Hameln, 2004 November		
 Dr. Detlev Petersen Director Marketing and Engineering		
In case of electronic transmission the document remains validly also without signature.	Bei elektronischer Übermittlung bleibt das Dokument auch ohne Unterschrift gültig.	
Editor: LJ 15.11.2004 3P018E.00 Copyright reserved Page: Seite: 1/2		

EC Certificate of Conformity EG Konformitätserklärung		Stephan
EC Directive 89/336/EEC "Electromagnetic Compatibility" amended by RL 91/263/EEC, 92/31/EEC and 93/68/EEC		EG-Richtlinie 89/336/EWG "Elektromagnetische Verträglichkeit" geändert durch RL 91/263/EWG, 92/31/EWG und 93/68/EWG
EC Directive 73/23/EEC "Electrical equipment designed for use within certain voltage limits" amended by RL 93/68/EEC		EG-Richtlinie 73/23/EWG "Elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen" geändert durch RL 93/68/EWG
STATEMENT	ERKLÄRUNG	
We	Hiermit erklären wir	
Rexnord-Stephan GmbH & Co. KG Ohsener Straße 79-83 D 31789 Hameln Germany,	Rexnord-Stephan GmbH & Co. KG Ohsener Straße 79-83 D 31789 Hameln Deutschland,	
herewith declare that	dass die	
A. C. motors with squirrel cage rotor Size S63, to S280.	Asynchron-Drehstrommotoren mit Käfigläufer Baugröße S63, bis S280.	
correspond to the specification of the above mentioned EC directive. Following standards concur with the describe products: EN 50081-1; EN 50082-2 DIN EN 60034-1; DIN EN 60034-2; DIN EN 60034-5 DIN EN 60034-8; DIN EN 60034-9	mit den Vorschriften o.g. Europäischer Richtlinien übereinstimmen. Folgende Normen werden bei den bezeichneten Produkten eingehalten: EN 50081-1; EN 50082-2 DIN EN 60034-1; DIN EN 60034-2; DIN EN 60034-5 DIN EN 60034-8; DIN EN 60034-9	
this certificate attests the conformity with the named directives. However, it is not a promise or guarantee of the meaning of product liability!	Diese Erklärung ist keine Zusage von Eigenhaftung im Sinne des Produkthaftungsgesetzes. Die Sicherheits Hinweise der Produktinformationen sind zu beachten!	
Hameln, 2004 November		
 Dr. Detlev Petersen Director Marketing and Engineering		
In case of electronic transmission the document remains validly also without signature.	Bei elektronischer Übermittlung bleibt das Dokument auch ohne Unterschrift gültig.	
Editor: LJ 06.07.2004 3P019E.02 Copyright reserved Seite / Page: 1/2		

Certificate of Conformity Konformitätserklärung		Stephan
European Parliament Directive Directive 94/9/EC		Richtlinie des Europäischen Parlamentes Richtlinie 94/9/EG
Declaration of Conformity according to directive 94/9/EC, appendix VIII		Konformitätserklärung Nach: Richtlinie 94/9/EG, Anhang VIII
Applied standards: DIN EN 13463-1 DIN EN 13463-3 DIN EN 13463-8	Angewandte Normen: DIN EN 13463-1 DIN EN 13463-3 DIN EN 13463-8	
We	Hiermit erklären wir,	
Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Germany,	Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Deutschland,	
herewith declare that the gear / geared motors	erklären, dass die Getriebe / Getriebemotoren der Reihe	
S14 SK4 SP4	S14 SK4 SP4	
that are subject to this declaration conforms to the requirements # 2 G and # 2 D of the EC directive 94/9/EC.	auf die sich diese Erklärung bezieht, den Anforderungen # 2 G und # 2 D der EG Richtlinie 94/9/EG entspricht.	
Rexnord-Stephan provide the documents required according to 94/9/EC appendix VIII, i.e.: TUV Nord, no. 8000119040	Rexnord-Stephan hinterlegt die gemäß 94/9/EG Anhang VIII geforderten Unterlagen bei: TUV Nord, Nr. 8000119040	
Hameln, 2004 November		
 Dr. Detlev Petersen Director Marketing and Engineering		
In case of electronic transmission the document remains validly also without signature.	Bei elektronischer Übermittlung bleibt das Dokument auch ohne Unterschrift gültig.	
Editor: LJ 15.11.2004 3P018E.20 Copyright reserved Page: Seite: 1/1		

Certificate of Conformity Konformitätserklärung		Stephan
European Parliament Directive Directive 94/9/EC		Richtlinie des Europäischen Parlamentes Richtlinie 94/9/EG
Declaration of Conformity according to directive 94/9/EC, appendix VIII		Konformitätserklärung Nach: Richtlinie 94/9/EG, Anhang VIII
Applied standards: DIN EN 13463-1 DIN EN 13463-3 DIN EN 13463-8	Angewandte Normen: DIN EN 13463-1 DIN EN 13463-3 DIN EN 13463-8	
We	Hiermit erklären wir,	
Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Germany,	Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Deutschland,	
herewith declare that the gear / geared motors	erklären, dass die Getriebe / Getriebemotoren der Reihe	
S14 SK4 SP4	S14 SK4 SP4	
that are subject to this declaration conforms to the requirements # 3 G and # 3 D of the EC directive 94/9/EC.	auf die sich diese Erklärung bezieht, den Anforderungen # 3 G und # 3 D der EG Richtlinie 94/9/EG entspricht.	
Rexnord-Stephan provide the documents required according to 94/9/EC appendix VIII for inspection.	Rexnord-Stephan hinterlegt die gemäß 94/9/EG Anhang VIII geforderten Unterlagen zur Einsicht bereit.	
Hameln, 2004 November		
 Dr. Detlev Petersen Director Marketing and Engineering		
In case of electronic transmission the document remains validly also without signature.	Bei elektronischer Übermittlung bleibt das Dokument auch ohne Unterschrift gültig.	
Editor: LJ 15.11.04 3P0109.21 Copyright reserved Page: Seite: 1/1		

Quality Certificate Qualitätsprüf Zertifikat		Stephan
DIN EN 55350-18:4.1.1		
We	Hiermit bescheinigen wir,	
Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Germany,	Rexnord-Stephan GmbH&Co.KG Ohsener Straße 79-83 D 31789 Hameln Deutschland,	
confirm that Gear Units and Geared Motors	dass die Getriebe und Getriebemotoren	
S14 SP4 SK4	S14 SP4 SK4	
have been manufactured and supplied in conformity with the parallel, related drawings and in the quantity is indicated in our acknowledgement.	Entsprechend den gültigen Stücklisten und Zeichnungen gefertigt und in der Stückzahl gemäß Liefererschein geliefert wurden.	
Quality The gear unit(s) has (have) been manufactured and supplied in accordance with our quality management system. All the components of the gear unit(s) are new and have been machined out of accurately controlled first quality materials. Machining is done according to the latest rules in machinery production. During and after manufacturing, the components have been controlled according inspection instructions using high precision control equipment like CNC-coordinate measuring machines or housings and CNC gear measuring machines for gears.	Qualität Die Getriebe wurden in Übereinstimmung mit unserem Qualitätsmanagementsystem hergestellt. Alle Komponenten sind neu und aus kontrolliertem erstklassigen Material hergestellt. Die Fertigung erfolgte auf modernen Produktionsmaschinen nach dem neuesten Stand der Technik. Während und nach der Produktion wurden die Komponenten nach Prüfverfahren kontrolliert, wobei hochgenau Messmittelungen wie z.B. CNC-Verzahnungsmittel- und CNC-Koordinatenmeßmaschinen eingesetzt wurden.	
After assembly the gear unit(s) has (have) been submitted to our standard final inspection regarding conformity with dimensional drawing, ratio, oil tightness, namplate indications and completeness of accessories. The gear unit(s) has (have) passed the inspections indicated and has (have) been released or despatch by our quality inspectors only.	Nach der Montage wurde jedes Getriebe einer Endprüfung unterzogen, wobei die Übereinstimmung mit den Zeichnungen, Anschlußmaße, Übersetzung, Öl Dichtheit, Typenschildberechnung und die Vollständigkeit des Zubehörs geprüft wurde. Die gelieferten Getriebe haben die Endprüfung bestanden und sind für die Verwendung von unseren Qualitätsprüfern freigegeben worden.	
Hameln, 2004 November		
 Dr. Detlev Petersen Director Marketing and Engineering		
 Dr. Detlev Petersen Director Marketing and Engineering		
In case of electronic transmission the document remains validly also without signature.	Bei elektronischer Übermittlung bleibt das Dokument auch ohne Unterschrift gültig.	
Editor: LJ 15.11.2004 3P010E.67 Copyright reserved Page: Seite: 1/2		

2. Product Description

2.3 General technical data

2.3.1 Motor output and output torque

The motor output and torque values listed in the selection tables refer to normal operating conditions and the standard type of construction or to comparable types of construction of the respective type of gear unit. The decisive factor is that the drive stage does not completely run in the oil bath.

2.3.2 Output speeds

The output speeds listed in the selection tables are guide values and can be calculated using the specified motor speed n_1 (for rated operation) and the respectively valid exact gear ratio i_{ex} . However, the actual output speed depends on the effective motor load and the local supply conditions and, therefore, may deviate slightly.

2.3.3 Service Factor

The Service Factor SF listed in the selection tables is calculated using the maximum permissible torque of the gear unit and the output torque permitted by the installed motor output. Service Factor are not standardized and, therefore, may differ dependent upon the manufacturer. For Rexnord-Stephan S4 geared motors, a gear unit with an application factor of SF = 1 already offers an enduring dimensioning and, therefore, ensure highest reliability. In case of doubt, we would gladly provide you with more information in a personal consultation.

2.3.4 Weights

The weights specified are guide values for further dimensioning. Due to the variation in gear ratios and different types of construction (oil quantity), the exact weights may deviate slightly.

2.4 General construction design and dimensioning

2.4.1 The gear unit

Gear wheels	Carburized and hardened helical and ground or rotary-beveled spur gears. Bevel gear wheels with helical gearing, lapped bearing surfaces
Castings	GG-20 cast iron as standard
Bearings	Sufficiently dimensioned roller bearings so that input and output shaft can absorb significant external loads
Shafts	Output shafts made of quenched and tempered steel
Lubrication	Splash lubrication with gear unit oil or grease for designs with oil-feed tubing, the lubrication is carried out via integrated pump. Roller bearing at the output shaft end is lubricated for life with grease.
Seals	Radial shaft seals, with dust lip at the output side
Efficiency	The efficiency of a gear unit is primarily determined by splash losses, bearing and gearing friction. On an average across all sizes, the efficiency measures approx. 99 % for standard (or similar) types of construction for each gear stage.

2. Product Description

2.4.2 The motor

Design	Geared motors with integrated motor up to 45 kW (pinion directly on motor shaft). For universal motor assembly (drive end U), a standard IEC motor of B5 may be attached.
Casting	Aluminum alloy as standard up to size 132. A motor housing of cast iron is available as an option. Cast iron is standard starting with size 160.
Bearing	Deep-groove ball bearing lubricated for life. Starting at size 200 with equipment for regreasing.
Type of enclosure	IP 55, higher types of enclosure available upon request. Number of poles: Preferably 4-pole motors (1,500 rpm), other number of poles and pole changing motors are possible.
Voltages	up to 3 kW: 230/400 V \pm 10% 50 Hz, 265/460 V \pm 10% 60 Hz from 4 kW to 22 kW: 400/690 V \pm 10% 50 Hz, 460 V delta \pm 10% 60 Hz. Other voltages upon request
Insulation	Insulation class F, utilized to B. Suitable for humidity up to 95%.
Cable entries	On principle, the cable entries of the motors are implemented with the corresponding metric threads. Screwed cable glands are not part of the scope of delivery.
Efficiency class	The standard motors are manufactured according to efficiency class EFF 2. Energy efficient motors to efficiency class EFF 1 are available as an option.
Standards	The motors in the range of 0.12 to 22 kW, are according to the standards to CE, CSA and UL. Country specific executions for USA and Canada are possible on request.

2.4.3 The brake motor

Design:	Integrated, DC-excited spring-applied disk brake. Connection via a rectifier installed in the terminal box.
Voltage:	Connection: 230 or 400 VAC corresponding to 102 or 178 V DC at the brake coil.
Type of enclosure:	IP 55 as standard.

2.4.4 Operating conditions

Please consult page 14, chapter 2.5 for hazardous locations according to ATEX.

The geared motors are suited for use at ambient temperatures from -10 °C to +40 °C and installation altitudes up to 1.000 m.a.s.l..

As delivered with oil filling (see above), ambient temperatures from 0 °C to 40 °C are permitted as standard.

In case of deviating ambient temperatures and in aggressive environments (acid vapors or similar), the manufacturer must be consulted first.

2.4.5 Outputs, torques and speeds

The outputs and torques listed in the tables refer to a condition at operating temperature with permissible ambient temperatures and standard lubricants. The specified output speeds are rounded values and refer to the rated speed of the motor at delivered rated output.

2.4.6 Installation instructions

The geared motor must be installed free of vibrations. Power transmission elements such as belt pulleys or similar should be arranged as close to the gear unit housing as possible. The cooling air intake of the motor must not be obstructed by unfavorable installation or contamination. The brake must be accessible for maintenance work.

2. Product Description

2.4.7 Reference to applicable standards

The gear unit components, such as shafts, pinions, gear wheels, and bearings are dimensioned according to pertinent EN, ISO or DIN standards.

2.4.8 Delivery instructions

Lubricant:	Sizes 1 and 2: Filled with lubricant for life, ventilation not necessary.
Gear unit oil:	Starting with size 3: Gear units for Germany, Switzerland, and Austria are delivered in filled condition (except for SCA, SCP), otherwise unfilled (internally preserved). Before commissioning, the drain plug must be replaced by the supplied vent plug.
Coating:	RAL 5002 top coat as standard.
Terminal box:	Bores are closed with plastic plugs. Screwed glands are not supplied.
Corrosion protection:	Uncoated parts of the drives (e.g. output shafts) are corrosion-protected.
Lifting Lugs:	Starting with gear unit size 3 and motor size 112.

2.5 Notes about the operation in hazardous atmosphere (ATEX)

Attention! You can not select gearboxes and geared motors for application in hazardous locations (ATEX) from this catalogue. Please advise requirements to your nearest Rexnord branch. In the framework of harmonizing European laws, the EC Directive 94/9/EG, generally known as ATEX 100a, has been in force since July 2003. Rexnord-Stephan gear units and geared motors implemented as parallel shaft gear units, helical and bevel gear units in ATEX design meet all the requirements of EC Directive 94/9/EG for device category 2 and 3. The drives can be delivered for use in gaseous as well as dust atmosphere.

2.5.1 Zonal classification

According to Directive 99/92 EG (ATEX 137), the system operator together with the controlling authority determines which zone must be taken into account. The zone definition is carried out according to different criteria, such as operating condition of the system, the period in which an explosive atmosphere may occur, and whether an air-dust or an air-gas mixture occurs.

Probability of occurrence	Air-gas mixture (G) zone	Air-dust mixture (D) zone
Continuous and long-term	0	20
Occasionally during normal operation	1	21
Rarely, without importance during normal operation	2	22

2.5.2 Device safety classified into categories

Electrical and mechanical equipment are classified into three categories according to the safety requirements. Assigning the devices to the categories is determined by the manufacturer based on a detailed danger analysis. The connection between the zones and the device category is specified in Directive 94/9/EG.

Rexnord-Stephan gear units meet all requirements of category 2 and 3. The design, dimensioning and classification into the corresponding category was performed in close collaboration with TÜV NORD CERT. Devices of category 1 are not supplied by Rexnord-Stephan. Devices of category 2 meet all requirements of category 3 and may also be used here.

2. Product Description

Category	Type of defect	Prerequisite/use
1 (no drives from Rexnord-Stephan)	Safety in normal operation and also for rare faults (two errors occurring simultaneously must be handled)	Devices of this category: <ul style="list-style-type: none"> ● 1 G in zone 0, 1 and 2 for gas ● 1 D in zone 20, 21 and 22 for dust
2	Safety in normal operation and in case of an expected fault	Devices of this category: <ul style="list-style-type: none"> ● 2 G in zone 1 and 2 for gas ● 2 D in zone 21 and 22 for dust
3	Safety in normal operation	Devices of this category: <ul style="list-style-type: none"> 3G in zone 2 for Gas 3D in zone 22 for dust

Rexnord-Stephan gear units to Directive 94/9/EG for use in air-gas and air-dust mixture.

Rexnord-Stephan has several decades of experience in the design, manufacture and use of drives in hazardous areas. With the introduction of Directive 94/9/EG, the standard series EN 13463 was issued as the basis for explosion protection for mechanical devices.

Rexnord-Stephan S4 gear units in the designs SI, SP and SK meet all requirements of category 2. Requirements for dust protection and gas protection were taken into account for the approval. For this reason, no distinctions are made with respect to categories 2 and 3. Our gear units of category 2 also meet all requirements of category 3.

2.5.3 Type of protection for gear units

Protection through structural safety

EN 13463-5 (identifier "c")

For this type of explosion protection, the protection is ensured through design and construction measures at the devices as well as the experience of the manufacturer.

Protection through liquid enclosure

EN 13463-8 (identifier "k")

Potential ignition sources inside the gear unit are rendered ineffective through complete or partial immersion in a protective liquid (gear unit oil) or through constant wetting with a liquid film, the protective liquid can be exclusively intended for preventing a potential ignition source to become effective. In devices such as gear units, it also serves the purpose of lubricating and cooling moving parts.

Rexnord-Stephan gear units for category 2G and 2D

Gear units of category 2G can be used in zone 1 and 2 for gases and gear units of category 2D can be used in zone 21 and 22 for dust. For category 2, Rexnord-Stephan issues a certificate of conformity and certifies the following:

- The compliance of the products with standard EN 13463 with the relevant sections.
- The internal manufacturing control according to Directive 94/9/EG Appendix VIII
- Filing the product documentation with the notified body, TÜV NORD CERT

Rexnord-Stephan gear units for category 3G and 3D

Gear units of category 3 can be used in zone 2 for gases and zone 22 for dust. A separate certification for category 3 is not issued since all devices for category 2 also meet the requirements of category 3.

2. Product Description

Rexnord-Stephan geared motors conforming to Directive 94/9/EG

The experiences collected over decade-long use in hazardous atmosphere also entered into the dimensioning and design according to the new ATEX directives. The following components were taken into account based on this experience:

- Shrink-fit ring covers according to the standard
- All bolts are secured against automatic loosening and protected against rust
- Stainless steel nameplates
- Proven shaft seals at input and output shaft
- High-quality lubricants
- Oil-level control for all sizes

2.5.4 Type of protection for motors

Motors to Directive 94/9/EG for use with gas

The ATEX motors used by Rexnord are manufactured by a well-known German manufacturer. The EN 50014 standard is the basis for the approval. Supplementary standards specify the measures of how an ignition is prevented.

Flameproof enclosure to EN 50018, type of protection "d"

Motors of this type of enclosure can be used for mains operation and inverter operation in zone 1. Motors with flame-proof enclosure can only be combined with the Rexnord gear unit in lantern version.

Increased safety to EN 50019, type of protection "e"

The basis of this type of enclosure is avoiding high temperatures at the surface and in the inside during normal operation and in case of a fault, such as a blocked rotor with applied supply voltage. Motors to EN 50019 can be used in zone 1 with mains operation.

Protection through non-sparking equipment to EN 50021, type of protection "n"

The motor design ensures that no gases are ignited during normal operation. A malfunction is not taken into account. Motors to "n" can be used in zone 2 with mains operation.

Motors to Directive 94/9/EG for use with dust

The EN 50281-1 standard serves as the basis for the approval of motors in an explosive dust-gas atmosphere. The decisive factor consists of meeting certain criteria against the intrusion of foreign particles in accordance with EN 60259 IP types of enclosure. Motors of category 3 require at least type of enclosure IP54 and category 2 type of enclosure IP6x.

Dust-proof motors to EN50281-1-1, type of enclosure IP65

Design measures prevent any dust from entering into the inside of the motor. The surface temperature under normal operating conditions does not cause an ignition of dust deposits. A protection in case of faults is ensured through temperature monitoring. These motors correspond to category 2D and can be used in zone 21 and 22 with mains operation.

Dust-protected motors to EN50281-1-1, type of enclosure IP55

In this case, dust cannot enter the motor in dangerous quantities. Only the surface temperature represents an ignition risk and, for this reason, must be protected with temperature sensors. These motors are certified to category 3D and can be used for mains operation in zone 22. For inverter operation, Rexnord can perform a corresponding acceptance with the selected inverter.

3. Instructions for Drive Selection

3 Instructions for Drive Selection

3.1 Service factors / Applications / Operating conditions

3.1.1 Required Service Factor (SF_{min})

Determine the required application factor according to the following formula:

$$SF_{min} = F \times C$$

whereby the following applies:

F = application factor dependent upon the load characteristic values of the application and the operating time.

The values listed below can be used as guide values for applications that are not listed.

Both criteria - the "Load characteristics related to the application" as well as the "inertia factor M " - must be taken into account. The criterion resulting in the highest F -value is decisive.

Load characteristics of the application	M	F		
		8h/24h	16h/24h	24h/24h
Uniform loads	<0,2	0.8 - 1*	1	1.2
Moderate shock load	<3	1.1	1.25	1.5
Heavy shock load	<10	1.4	1.6	1.7

$$M = \text{inertia factor}$$

$$M = \frac{\text{Moment of inertia of driven machine related to the motor shaft}}{\text{Mass moments of inertia of the motor (+ brake)}}$$

C = correction factor dependent upon the number of start-ups per hour.

Start-ups / hour		C		
		8h/24h	16h/24h	24h/24h
	<10	1	1	1
	<100	1.1	1.1	1.15
	<500	1.1	1.15	1.25

3.1.2 Selecting the frame size

A geared motor must be selected for the required motor output (P_m) and the output speed (n_2) whose Service Factor (SF) is greater than or equal to the required Service Factor (SF_{min}). The selection can also be made based on the available output torque (T_{2m}) of the geared motor.

3. Instructions for Drive Selection

3.1.3 Required application factors for different applications

APPLICATION	Runtime hours/day		
	8h/24h	16h/24h	24h/24h
Construction and building materials machinery			
Mixer	1.25	1.5	1.75
Cement mills	1.5	1.75	2
Mortar guns	0.8 - 1*	1	1.25
Breweries, distilleries			
Mills	0.8 - 1*	1	1.25
Bottling machinery	0.8 - 1*	1	1.25
Elevators			
Bucket elevators	1	1.25	1.5
Load elevators	1	1.25	1.5
Escalators	0.8 - 1*	1	1.25
Filters	1	1.25	1.5
Generators	0.8 - 1*	1	1.25
Wood and plastics processing			
Main drive for saws	1.5	1.75	2
Feed drives for saws	1	1.25	1.5
Crushers	1.5	1.75	2
Machines for gluing, veneering	0.8 - 1*	1	1.25
Drills	0.8 - 1*	1	1.25
Extruders	1.25	1.5	1.75
Machine tools			
Roller straightening, punching device, bending machines	1.25	1.5	1.75
Main and feed drives	1	1.25	1.5
Supply and servo drives	0.8 - 1*	1	1.25
Presses	1.75	2	2
Edging machines	1.5	1.75	2
Plate shears	1.75	2	2
Cranes and hoisting machines			
Hoisting gears, traveling drives	**	**	**
Packaging machines			
Packing machines	1.25	1.5	1.75
Wrapping machines	0.8 - 1*	1	1.25
Compressors			
Centrifugal compressors	1	1.25	1.5
Rotating screw compressors	1	1.25	1.5
Mixers			
Constant density	0.8 - 1*	1	1.25
Variable density	1	1.25	1.5
Iron and steel industry			
Wire-drawing benches	1.25	1.5	1.75
Winding drums	1	1.25	1.5
Roller-table drives	**	**	**

* = 0.8 if operating time < 3h/24h and no external loads occur

** = drives must be dimensioned by the manufacturer

+ = it is recommended consulting the manufacturer for selecting the reverse lock

3. Instructions for Drive Selection

APPLICATION	Runtime hours/day		
	8h/24h	16h/24h	24h/24h
Iron and steel industry			
Non-reversible rolling mills - multi-operation	1.25	1.5	1.75
- single operation	1.5	1.75	2
Mills			
Ball mills, rod mills	1.75	1.75	1.75
Hammer mills, centrifugal mills	1.5	1.75	2
Winding drives	**	**	**
Pumps			
Rotary pumps	1	1.25	1.5
Circulation, gear, vane pumps	0.8 - 1*	1	1.25
Piston pumps: 1 cylinder	**	**	**
2 cylinders or more	1	1.25	1.5
Screw pumps	1 +	1.25 +	1.5
Agitators			
Pure liquid (constant density)	0.8 - 1*	1	1.25
Liquid with variable density	1	1.25	1.5
Liquid mixed with solid bodies	1.25	1.5	1.75
Conveyor systems			
Even load	0.8 - 1*	1	1.25
Heavy operation, chain, screw conveyor	1	1.25	1.5
Shaker conveyor	1.5	1.75	2
Fans			
Radial	0.8 - 1*	1	1.25
Industrial fans	1	1.25	1.5
Fan drives in cooling towers	2.0	2.0	2,0
Food-processing industry			
Crusher	1.75	2	2,25
Root cutting, kneading machines	1.25	1.5	1,75
Meat grinders	1.25	1.5	1,5
Filling machines	0.8 - 1*	1	1,25
Dough kneading machine	1	1.25	1,5
Extruders	1.25	1.5	1,75
Sugar-cane cutter	1.75	1.75	1,75
Toaster	1.25	1.25	1,25
Waste water facilities			
Surface aerator	1.5	1.5	1.5
Revolving systems	1.75	1.75	1.75
Rakes and channels	0.8 - 1*	1	1.25
Screw pumps	1	1.25	1.5
Screens			
Revolving screens (stones, grit)	1	1.25	1.5
Screens with water circulation	0.8 - 1*	1	1.25
Servo drives for systems			
Service operation	0.8 - 1*	-	-
Setting-up mode, operation without load	1.25	1.25	1.25
Normal operation	Same as main drive		

* = 0.8 if operating time < 3h/24h and no external loads occur

** = drives must be dimensioned by the manufacturer

+ = it is recommended consulting the manufacturer for selecting the reverse lock

3. Instructions for Drive Selection

APPLICATION	Runtime hours/day		
	8h/24h	16h/24h	24h/24h
Agricultural machines			
Mechanical gutter cleaners	0.8 - 1*	1	-
Harvesting machines	0.8 - 1*	1	-
Textile machinery			
Looms	1.25	1.5	1.75
Spinning machines	0.8 - 1*	1	1.25
Laundry machines	1	1.25	1.5
Print and paper technology			
Sheeting cutter	1	1.25	1.5
Winding drives	0.8 - 1*	1	1.25
Bale feeder	1	1.25	1.25

* = 0.8 if operating time < 3h/24h and no external loads occur
 ** = drives must be dimensioned by the manufacturer
 + = it is recommended consulting the manufacturer for selecting the reverse lock

These Service factors (SF) are empirical values that are based on AGMA and ISO information and experience. They apply to driven machines corresponding to today's state of the art for normal operating conditions and for actuating with electric motors. A consultation is required for special applications, passenger elevators or special operating conditions, e.g. high mass acceleration factors.

3.2 External loads, axial / radial, conversion, connections

The permissible radial loads listed in the selection tables are guide values and used only for rough orientation purposes. The data refer to action of load in the middle of the respective solid shaft. If no radial load is present, half the value of the radial load specified in the selection tables is permitted as axial load. The resulting maximum value of a radial load for each gear unit size generally occurs at low speeds and is determined by the material and geometry of the shaft. For all lower values of the frame size, the predetermined bearing life LH10 of the output shaft bearing is limiting. Since variables such as torque, speed, direction of rotation and load angle of action enter into the calculation and Rexnord-Stephan always assumes the worst-case scenario, significantly higher external loads are permissible in most cases while giving the effective loads. Please contact us and we will gladly recalculate your specific case.

3.3 Thermal break even performance

Torque and output stated in the selection charts are mechanical limit values. Depending on mounting position and mounting situation it is possible that the gearbox will overload thermal before reaching the mechanical breakeven performance. Outputs marked (1) are exceeding the thermal break even performance already under normal application conditions.

If the real operation conditions are known, the heat breakeven performance can be recalculated by Rexnord Stephan. The heat breakeven performance can be increased by using appropriate measures (such as using synthetic lubricants with increased thermal consistency). The following data is necessary for recalculation:

Type or gearbox	Installation site
Mounting position	<input type="radio"/> in a small, closed room
Input speed (range) 1/min	<input type="radio"/> large rooms
Ratio	<input type="radio"/> outside
Used outputkW	Mounting situation (sketch/drawing)
Duty / power-on time
Ambient Temperature °C

3. Instructions for Drive Selection

Increased splash losses may occur for mounting positions with high oil level. (SI all V-mountings, SP mounting pos. 2, 5 and 6, SK mounting pos. 2 and 4) or input speed above 1800 1/min and may lead to excessive heating. Please contact Rexnord Stephan in these individual cases.

3.4 Notes about the dimensional drawings

The dimensional drawings featured in this catalog are nonbinding. In particular, slightly deviating dimensions may occur for motor dimensions dependent upon the technical requirements. Binding dimensional drawings can be created upon request.

Note:

The user is responsible for providing protective covers and professional setup of the complete equipment.

The flanges on the output side are manufactured according to DIN 42955-N, whereby the tolerances of the centering gears correspond to DIN 42948.

Keyways of the output shafts are manufactured according to DIN 6885-T1-"Form A".

Detailed dimensions of the shafts and recommendations for the designs of the machine shafts can be found in the technical appendix of this catalog.

3.5 Delivery times

Manufacturing and stocking of S4 components are constantly adapted to customer demands. Modern control methods are used in the process. Delivery time for standard design is max. 3 weeks. If necessary we can also achieve 24h delivery service. We can also achieve short delivery times for all remaining geared motors. Please contact us and we will gladly assist you.

3.6 Shaft arrangements

In most cases, different shaft arrangements can be implemented for the parallel shaft helical geared motors SP4 and the helical bevel geared motors SK4.

Definitions:

Gear unit with solid shaft SP.N.../SK.N...

Design L: Shaft output left (top view)

Design R: Shaft output right (top view)

Design T: Shaft output right and left (top view)

Gear unit with hollow shaft SP.H.../SK.H...

Design L: Machine shaft is inserted in the hollow shaft from the left (top view)

Design R: Machine shaft is inserted in the hollow shaft from the right (top view)

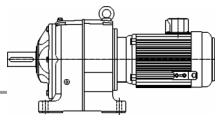
Design T: Machine shaft is inserted through the hollow shaft. Shaft output right and left (top view)

Gear unit with hollow shaft with shrinkdisc SP.S.../SK.S... + SP.C.../SK.C...

Design L: Machine shaft is inserted in the hollow shaft from the left (top view)

Design R: Machine shaft is inserted in the hollow shaft from the right (top view)

Design T: Machine shaft is inserted through the hollow shaft. Shaft output right and left (top view)



4. SI4

Gear unit with hollow shaft with taper bush SP.B.../SK.B...

Design L: Machine shaft is inserted in the hollow shaft from the left (top view)

Design R: Machine shaft is inserted in the hollow shaft from the right (top view)

Design T: Machine shaft is inserted through the hollow shaft. Shaft output right and left (top view)

Gear unit with hollow spline shaft SP.T.../SK.T...

Design L: Machine shaft is inserted in the hollow shaft from the left (top view)

Design R: Machine shaft is inserted in the hollow shaft from the right (top view)

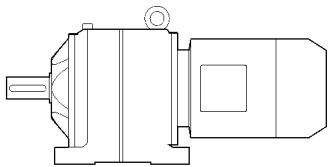
Design T: Machine shaft is inserted through the hollow shaft. Shaft output right and left (top view)

3.7 Types of construction outside of the axis intersection

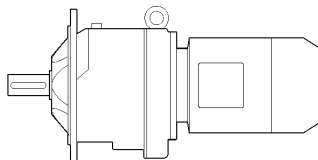
In addition to the mounting positions in the axis intersection, any other mounting positions are also feasible. The use of geared motors in sloping positions are frequently permissible. However, the optimum lubricant supply must always be ensured. Fill quantities and required oil attachments are specified by Rexnord-Stephan. Please contact us. We will find a solution for your mounting position.

4 SI4 Inline

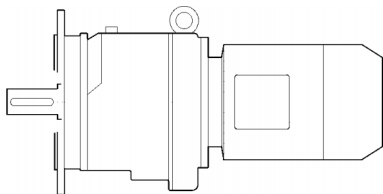
4.1 Version variants for SI4 helical geared motors



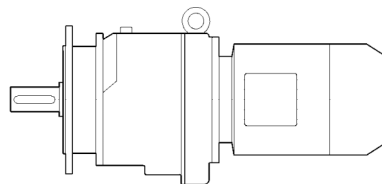
SIFN
Foot mounting



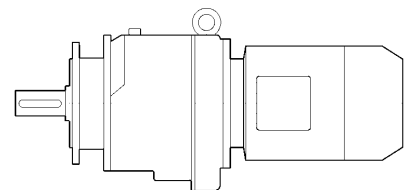
SICF
Flange: large diameter with bearing neck



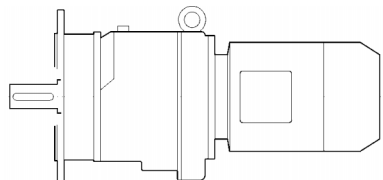
SICD
Flange: large diameter



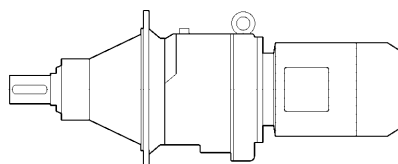
SICE
Flange: medium diameter



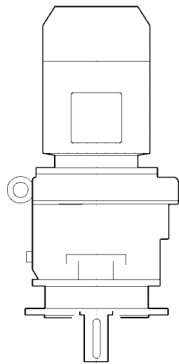
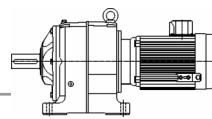
SICR
Flange: small diameter



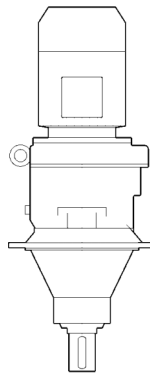
SICM
Flange: reinforced version



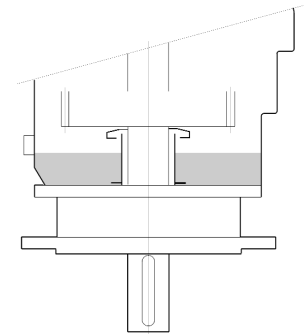
SICL
Flange: agitator versio



SICA
Flange: reinforced version
Version with dry well and integrated pump

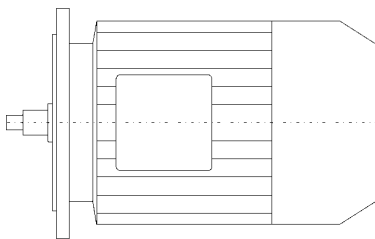


SICP
Flange: agitator version
Version with tubing and integrated pump

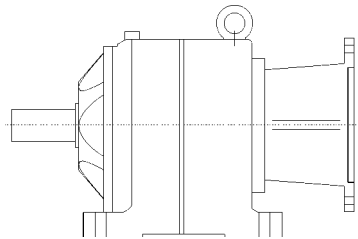


The dry well system

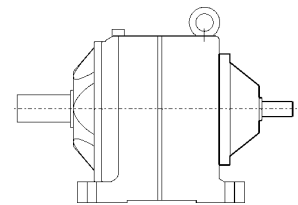
Versions on the drive end



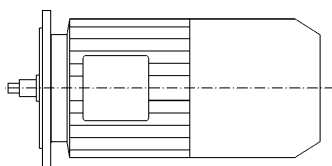
Integral motor



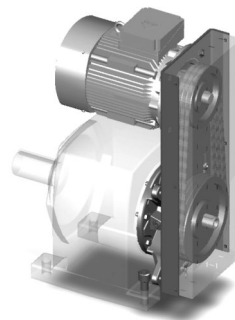
- U
Lantern for IEC standard motors



- I
Gear unit with free input shaft





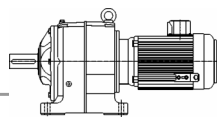
Integrated brake motor



- M
Motor base version for V-belt drive,
motor mounting position IM B5 (schematic drawing)

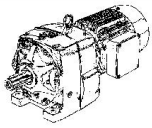
Overview

	9 sizes								
	1	2	3	4	5	6	7	8	9
T2m (Nm)	200	420	820	1600	2800	5000	9000	15000	25000
Pm (kW)	0.12 to 90 kW								
i	2.8 ... 63  B			12.5 ... 224  C			125 ... 30000 combined		

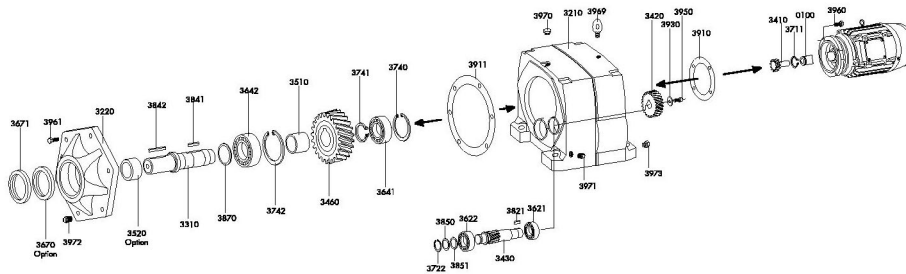


4. SI4

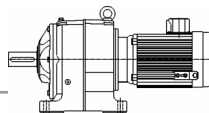
4.2 Principle design of helical geared motors



The following illustration shows the principle design of a helical geared motor. It is intended as a reference aid to the individual parts lists. Variations depending on the gear unit size and version are possible.



Item no.	Description
0100	Motor
3210	Casing
3220	Cover
3310	Output shaft
3410	Pinion
3420	Gear wheel
3430	Pinion shaft
3460	Gear wheel
3510	Spacer ring (bushing)
3520	Bearing race (option)
3621	Bearing
3622	Bearing
3641	Bearing
3670	Seal (option)
3671	Seal
3850	Support ring
3851	Shim ring
3870	Support ring
3930	Washer
3950	Bolt or nut
6342	Bearing
371. / 372. / 374.	Retaining ring
382. / 384.	Feather key
3910 / 3911	Gasket
396.	Bolt or nut
397.	Oil screw plug



4.3 Ordering information

Gear units with two and three stages

S	I	³	⁴	⁵	⁶	⁷	⁸	⁹	¹⁰	-	¹¹	-	¹²
----------	----------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	---------------	---	---------------	---	---------------

Gear units with more than 3 stages

S	I	³	⁴	⁵	⁶	⁷	²⁵	²⁶	²⁷	⁸	⁹	¹⁰	¹¹	¹²
----------	----------	--------------	--------------	--------------	--------------	--------------	---------------	---------------	---------------	--------------	--------------	---------------	---------------	---------------

3 Casing
F Foot mounting
C Flange version

7 Number of stages
B 2-stage
C 3-stage

4 Output shaft
N Basic version
F Mounting flange, large with bearing neck
D Mounting flange, large
E Mounting flange, medium
R Mounting flange, small
M Flange for high-performance shaft/bearing
A Flange for high-performance shaft/bearing, tubing, mounting position V1, V5, V15
L Elongated bearing casing
P Elongated bearing casing, tubing mounting position V1, V5, V15

8 Total gear ratio

9 Drive unit
 No designation: Integrated motor
U IEC flange motor
I I-lantern
M Motor chair

10 Accessories for gear units
R Reversal lock on drive shaft
 Specify free direction of rotation (from gearbox size 2 and motor IEC 100)

5 Size
 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9

11 Motor

12 Mounting positions

6 Design index:
6 Metric version
7 Inch version

Only for gear units with more than 3 stages

25 Size preliminary stage gear unit

26 Design index prel.-stage gear unit

27 Number of stages prel.-stage gear unit

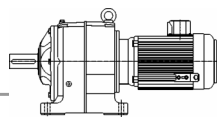
Example:

S	I	³	⁴	⁵	⁶	⁷	⁸	⁹	¹⁰	¹¹	¹²
			F	N	3	6	B	25		112	B3

SI foot casing, basic version, size 3, design index 6, 2-stage, gear ratio $i = 1/25$, Rexnord-Stephan integral motor size 112, horizontal mounting position

S	I	³	⁴	⁵	⁶	⁷	²⁵	²⁶	²⁷	⁸	⁹	¹⁰	¹¹	¹²
			C	R	5	6	C	1	6	B	350	U	R	90 - V1

SI flange casing, small mounting flange, size 5, design index 6, 3-stage, size primary-stage gear unit 1, design index primary-stage gear unit 6, 2-stage primary-stage gear unit, total gear ratio $i = 1/350$, U-lantern with integrated reverse lock, motor size 90, Vertical mounting position, output shaft down



4. SI4

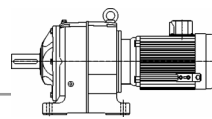
EARED MOTOR CODING

<p>3</p> <p>N </p> <p>F </p> <p>N </p> <p>N </p> <p>N </p> <p>M A </p> <p>L P </p>	<p>2</p> <p>F </p> <p>C </p>	<p>8</p> <p> Bremskit</p> <p> Integrierter Motor</p> <p> Integrierter Bremsmotor</p> <p> IEC</p> <p>U + (R)</p> <p> I + (R)</p> <p> M</p>
--	---	---

Mounting positions

B3 	B6 	B7 	B8 	V5 	V6 *
B5 	B35 	V1 	V3 * 	V15 	V36 *
B65 	B75 	B85 	B5 I * 	B5 II 	B5 III *

*: refer to Rexnord-Stephan



4.4 Auswahltabellen Getriebemotoren SI4
Selection tables for SI4 geared motors
Tableaux de sélection pour les motoréducteurs SI4

Beispiel: Auswahltabelle Getriebemotoren
 Example: Geared Motor selection table
 Exemple de tableau de sélection pour motoréducteurs

Motorleistung
Motor output
Puissance moteur

Exakte Übersetzung
Exact gear ratio
Valeur exacte du rapport de démultiplication

Zulässige Radialkraft für verstärkte Lagerung
Permissible radial force for reinforced bearing
Force radiale admissible pour paliers support renforcés

Motordrehzahl
Motor speed
Vitesse moteur

Zulässige Radialkraft
Permissible radial force
Force radiale admissible

Maßbilder
Dimensional drawings
Schémas d'encombrement

P

0.12 kW

n₁

1360 min⁻¹

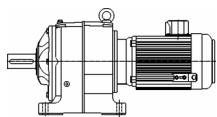
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
485.6	42.00	2	SIFN16B2.8 - 71A-4G	2.80		3 900	15	M01
423.6	39.00	3	SIFN16B3.15 - 71A-4G	3.21		4 100	15	M01
395.3	38.00	3	SIFN16B3.55 - 71A-4G	3.44		4 200	15	M01
343.5	34.00	3	SIFN16B4 - 71A-4G	3.96		4 400	15	M01
297.1	31.00	4	SIFN16B4.5 - 71A-4G	4.58		4 600	15	M01
275.7	30.00	4	SIFN16B5 - 71A-4G	4.93		4 800	15	M01
237.8	27.00	5	SIFN16B5.6 - 71A-4G	5.72		5 000	15	M01

Grundausführung SIFN • Basic version SIFN • Version de base SIFN

Drehmoment der Abtriebswelle • Torque of output shaft • Couple de l'arbre de sortie


Verfügbarer Servicefaktor • Available Service Factor SF • Facteur de service disponible

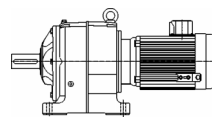
Genaue Drehzahl der Abtriebswelle • Exact speed of output shaft & rated load • Vitesse exacte de l'arbre de sortie




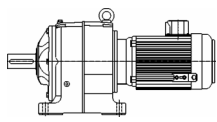
4. SI4

P 0.12 kW
n₁ 1360 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
485.6	42.00	2	SIFN16B2.8 - 71A-4G	2.80		3 900	15	M01	
423.6	39.00	3	SIFN16B3.15 - 71A-4G	3.21		4 100	15	M01	
395.3	38.00	3	SIFN16B3.55 - 71A-4G	3.44		4 200	15	M01	
343.5	34.00	3	SIFN16B4 - 71A-4G	3.96		4 400	15	M01	
297.1	31.00	4	SIFN16B4.5 - 71A-4G	4.58		4 600	15	M01	
275.7	30.00	4	SIFN16B5 - 71A-4G	4.93		4 800	15	M01	
237.8	27.00	5	SIFN16B5.6 - 71A-4G	5.72		5 000	15	M01	
207.4	25.00	6	SIFN16B6.3 - 71A-4G	6.56		5 200	15	M01	
193.5	24.00	6	SIFN16B7.1 - 71A-4G	7.03		5 400	15	M01	
168.2	22.00	7	SIFN16B8 - 71A-4G	8.09		5 600	15	M01	
145.5	20.00	8	SIFN16B9 - 71A-4G	9.35		5 900	15	M01	
135.0	20.00	8	SIFN16B10 - 71A-4G	10.08		6 000	15	M01	
125.0	20.00	9	SIFN16B11.2 - 71A-4G	10.88		6 000	15	M01	
106.5	17.00	11	SIFN16B12.5 - 71A-4G	12.76		6 000	15	M01	
97.9	15.00	12	SIFN16B14 - 71A-4G	13.89		6 000	15	M01	
81.9	13.00	14	SIFN16B16 - 71A-4G	16.61		6 000	15	M01	
74.4	12.00	15	SIFN16B18 - 71A-4G	18.28		6 000	15	M01	
68.9	10.00	17	SIFN16C20 - 71A-4G	19.75		6 000	15	M01	
67.2	11.00	17	SIFN16B20 - 71A-4G	20.24		6 000	15	M01	
60.3	9.50	19	SIFN16B22.4 - 71A-4G	22.55		6 000	15	M01	
64.3	10.00	18	SIFN16C22.4 - 71A-4G	21.17		6 000	15	M01	
53.7	8.40	21	SIFN16B25 - 71A-4G	25.32		6 000	15	M01	
55.8	9.30	21	SIFN16C25 - 71A-4G	24.36		6 000	15	M01	
48.3	7.60	24	SIFN16B28 - 71A-4G	28.18		6 000	15	M01	
48.3	8.00	24	SIFN16C28 - 71A-4G	28.16		6 000	15	M01	
43.2	6.80	27	SIFN16B31.5 - 71A-4G	31.52		6 000	15	M01	
44.8	7.80	26	SIFN16C31.5 - 71A-4G	30.35		6 000	15	M01	
37.1	5.80	31	SIFN16B35.5 - 71A-4G	36.64		6 000	15	M01	
41.5	7.20	28	SIFN16C35.5 - 71A-4G	32.76		6 000	15	M01	
33.3	5.20	34	SIFN16B40 - 71A-4G	40.82		6 000	15	M01	
35.4	6.20	32	SIFN16C40 - 71A-4G	38.45		6 000	15	M01	
32.3	5.10	35	SIFN16B45 - 71A-4G	42.13		6 000	15	M01	
32.5	5.70	35	SIFN16C45 - 71A-4G	41.82		6 000	15	M01	
26.8	4.20	43	SIFN16B50 - 71A-4G	50.73		6 000	15	M01	
27.2	4.70	42	SIFN16C50 - 71A-4G	50.02		6 000	15	M01	
24.1	3.80	47	SIFN16B56 - 71A-4G	56.32		6 000	15	M01	
24.7	4.30	46	SIFN16C56 - 71A-4G	55.07		6 000	15	M01	
21.5	3.40	53	SIFN16B63 - 71A-4G	63.15		6 000	15	M01	
22.3	3.90	51	SIFN16C63 - 71A-4G	60.95		6 000	15	M01	
20.0	3.50	57	SIFN16C71 - 71A-4G	67.91		6 000	15	M01	
17.8	3.10	64	SIFN16C80 - 71A-4G	76.26		6 000	15	M01	
16.0	2.80	72	SIFN16C90 - 71A-4G	84.89		6 000	15	M01	
14.3	2.50	80	SIFN16C100 - 71A-4G	94.93		6 000	15	M01	
12.3	2.20	93	SIFN16C112 - 71A-4G	110.35		6 000	15	M01	
11.1	1.90	104	SIFN16C125 - 71A-4G	122.95		6 000	15	M01	
10.7	1.90	107	SIFN16C140 - 71A-4G	126.90		6 000	15	M01	
8.9	1.60	129	SIFN16C160 - 71A-4G	152.80		6 000	15	M01	
8.0	1.40	143	SIFN16C180 - 71A-4G	169.63		6 000	15	M01	
7.9	2.90	145	SIFN26C16B180 - 71A-4G	171.96		6 500	33	M06	
7.1	1.20	160	SIFN16C200 - 71A-4G	190.21		6 000	15	M01	
6.9	2.50	166	SIFN26C16B200 - 71A-4G	197.13		6 500	33	M06	
6.4	2.40	178	SIFN26C16B224 - 71A-4G	211.23		6 500	33	M06	




P 0.12 kW n₁ 1360 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
5.6	2.10	205	SIFN26C16B250 - 71A-4G	243.10		6 500	33	M06	
4.8	1.80	237	SIFN26C16B280 - 71A-4G	281.05		6 500	33	M06	
4.5	1.60	255	SIFN26C16B315 - 71A-4G	302.87		6 500	33	M06	
4.2	1.50	276	SIFN26C16B355 - 71A-4G	326.98		6 500	33	M06	
3.7	2.70	307	SIFN36C16B355 - 71A-4G	364.61		11 000	53	M12	
3.5	1.30	323	SIFN26C16B400 - 71A-4G	383.72		6 500	33	M06	
3.5	2.50	331	SIFN36C16B400 - 71A-4G	392.92		11 000	53	M12	
3.3	1.20	352	SIFN26C16B450 - 71A-4G	417.41		6 500	33	M06	
3.2	2.30	357	SIFN36C16B450 - 71A-4G	424.21		11 000	53	M12	
2.7	1.00	421	SIFN26C16B500 - 71A-4G	499.23		6 500	33	M06	
2.7	2.00	419	SIFN36C16B500 - 71A-4G	497.82		11 000	53	M12	
2.5	0.91	463	SIFN26C16B560 - 71A-4G	549.58		6 500	33	M06	
2.5	1.80	456	SIFN36C16B560 - 71A-4G	541.52		11 000	53	M12	
2.2	0.82	513	SIFN26C16B630 - 71A-4G	608.32		6 500	33	M06	
2.1	1.50	546	SIFN36C16B630 - 71A-4G	647.67		11 000	53	M12	
2.2	3.00	529	SIFN46C16B630 - 71A-4G	627.74		21 000	72	M20	
1.9	1.40	601	SIFN36C16B710 - 71A-4G	712.99		11 000	53	M12	
2.0	2.70	585	SIFN46C16B710 - 71A-4G	694.84		21 000	72	M20	
1.7	1.20	665	SIFN36C16B800 - 71A-4G	789.20		11 000	53	M12	
1.8	2.50	652	SIFN46C16B800 - 71A-4G	774.13		21 000	72	M20	
1.5	1.10	741	SIFN36C16B900 - 71A-4G	879.26		11 000	53	M12	
1.6	2.20	732	SIFN46C16B900 - 71A-4G	869.28		21 000	72	M20	
1.4	0.99	832	SIFN36C16B1000 - 71A-4G	987.34		11 000	53	M12	
1.4	2.00	815	SIFN46C16B1000 - 71A-4G	967.66		21 000	72	M20	
1.2	0.89	926	SIFN36C16B1120 - 71A-4G	1099.08		11 000	53	M12	
1.3	1.80	912	SIFN46C16B1120 - 71A-4G	1082.17		21 000	72	M20	
1.2	3.00	947	SIFN56C16B1120 - 71A-4G	1123.99		25 500	113	M28	
1.1	1.50	1060	SIFN46C16B1250 - 71A-4G	1257.96		21 000	72	M20	
1.1	2.70	1055	SIFN56C16B1250 - 71A-4G	1252.24		25 500	113	M28	
1.0	1.40	1181	SIFN46C16B1400 - 71A-4G	1401.50		21 000	72	M20	
1.0	2.50	1139	SIFN56C16C1400 - 71A-4G	1352.25		25 500	113	M28	
0.9	1.30	1262	SIFN46C16C1600 - 71A-4G	1497.90		21 000	72	M20	
0.8	2.00	1424	SIFN56C16C1600 - 71A-4G	1689.48		25 500	113	M28	
0.7	1.00	1593	SIFN46C16C1800 - 71A-4G	1890.84		21 000	72	M20	
0.7	1.80	1576	SIFN56C16C1800 - 71A-4G	1870.05		25 500	113	M28	
0.7	0.93	1713	SIFN46C16C2000 - 71A-4G	2033.51		21 000	72	M20	
0.7	1.60	1755	SIFN56C16C2000 - 71A-4G	2083.46		25 500	113	M28	
0.7	2.90	1695	SIFN66C36B2000 - 71A-4G	2011.80		38 000	198	M36	
0.6	0.83	1924	SIFN46C16C2240 - 71A-4G	2283.46		21 000	72	M20	
0.6	1.40	1934	SIFN56C16C2240 - 71A-4G	2294.72		25 500	113	M28	
0.6	2.70	1883	SIFN66C36B2240 - 71A-4G	2234.89		38 000	198	M36	
0.5	1.30	2194	SIFN56C16C2500 - 71A-4G	2604.33		25 500	113	M28	
0.5	2.30	2132	SIFN66C36B2500 - 71A-4G	2530.65		38 000	198	M36	
0.5	1.10	2454	SIFN56C16C2800 - 71A-4G	2912.51		25 500	113	M28	
0.5	2.20	2325	SIFN66C36B2800 - 71A-4G	2759.62		38 000	198	M36	
0.5	1.10	2514	SIFN56C16C3150 - 71A-4G	2983.14		25 500	113	M28	
0.4	1.90	2586	SIFN66C36C3150 - 71A-4G	3069.27		38 000	198	M36	
0.4	1.00	2800	SIFN56C16C3550 - 71A-4G	3323.53		25 500	113	M28	
0.4	1.70	2929	SIFN66C36C3550 - 71A-4G	3476.10		38 000	198	M36	
0.3	0.81	3438	SIFN56C16C4000 - 71A-4G	4080.83		25 500	113	M28	
0.4	1.60	3194	SIFN66C36C4000 - 71A-4G	3790.55		38 000	198	M36	
0.4	2.80	3254	SIFN76C36C4000 - 71A-4G	3861.96		52 500	293	M46	




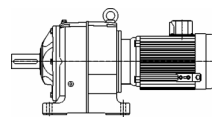
4. SI4


P 0.12 kW
n₁ 1360 min⁻¹

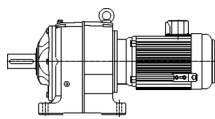
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.3	1.40	3697	SIFN66C36C4500 - 71A-4G	4387.60		38 000	198	M36	
0.3	2.40	3685	SIFN76C36C4500 - 71A-4G	4373.86		52 500	293	M46	
0.3	1.20	4082	SIFN66C36C5000 - 71A-4G	4844.73		38 000	198	M36	
0.3	2.20	4019	SIFN76C36C5000 - 71A-4G	4769.52		52 500	293	M46	
0.2	1.00	4884	SIFN66C36C5600 - 71A-4G	5796.28		38 000	198	M36	
0.2	1.90	4652	SIFN76C36C5600 - 71A-4G	5520.77		52 500	293	M46	
0.2	0.92	5438	SIFN66C36C6300 - 71A-4G	6453.66		38 000	198	M36	
0.2	1.80	5136	SIFN76C36C6300 - 71A-4G	6095.96		52 500	293	M46	
0.2	2.80	5341	SIFN86C36C6300 - 71A-4G	6338.25		82 000	463	M55	
0.2	0.83	6015	SIFN66C36C7100 - 71A-4G	7139.32		38 000	198	M36	
0.2	1.50	6145	SIFN76C36C7100 - 71A-4G	7293.26		52 500	293	M46	
0.2	1.30	6842	SIFN76C36C8000 - 71A-4G	8120.42		52 500	293	M46	
0.2	1.20	7569	SIFN76C36C9000 - 71A-4G	8983.16		52 500	293	M46	
0.1	1.10	8408	SIFN76C36C10000 - 71A-4G	9979.31		52 500	293	M46	
0.1	3.00	8443	SIFN96C36C10000 - 71A-4G	10020.21		105 000	673	M64	

P 0.18 kW
n₁ 1370 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
489.2	28.00	4	SIFN16B2.8 - 71A-4G	2.80		3 900	15	M01	
426.7	26.00	4	SIFN16B3.15 - 71A-4G	3.21		4 100	15	M01	
398.3	25.00	4	SIFN16B3.55 - 71A-4G	3.44		4 200	15	M01	
346.0	23.00	5	SIFN16B4 - 71A-4G	3.96		4 400	15	M01	
299.3	21.00	6	SIFN16B4.5 - 71A-4G	4.58		4 600	15	M01	
277.8	20.00	6	SIFN16B5 - 71A-4G	4.93		4 700	15	M01	
239.5	18.00	7	SIFN16B5.6 - 71A-4G	5.72		5 000	15	M01	
208.9	17.00	8	SIFN16B6.3 - 71A-4G	6.56		5 200	15	M01	
195.0	16.00	9	SIFN16B7.1 - 71A-4G	7.03		5 300	15	M01	
169.4	15.00	10	SIFN16B8 - 71A-4G	8.09		5 600	15	M01	
146.5	14.00	12	SIFN16B9 - 71A-4G	9.35		5 800	15	M01	
136.0	13.00	13	SIFN16B10 - 71A-4G	10.08		6 000	15	M01	
126.0	13.00	14	SIFN16B11.2 - 71A-4G	10.88		6 000	15	M01	
107.3	11.00	16	SIFN16B12.5 - 71A-4G	12.76		6 000	15	M01	
98.7	10.00	17	SIFN16B14 - 71A-4G	13.89		6 000	15	M01	
82.5	8.60	21	SIFN16B16 - 71A-4G	16.61		6 000	15	M01	
74.9	7.80	23	SIFN16B18 - 71A-4G	18.28		6 000	15	M01	
69.4	6.90	25	SIFN16C20 - 71A-4G	19.75		6 000	15	M01	
67.7	7.10	25	SIFN16B20 - 71A-4G	20.24		6 000	15	M01	
60.8	6.40	28	SIFN16B22.4 - 71A-4G	22.55		6 000	15	M01	
64.7	6.80	27	SIFN16C22.4 - 71A-4G	21.17		6 000	15	M01	
54.1	5.70	32	SIFN16B25 - 71A-4G	25.32		6 000	15	M01	
56.2	6.20	31	SIFN16C25 - 71A-4G	24.36		6 000	15	M01	
48.6	5.10	35	SIFN16B28 - 71A-4G	28.18		6 000	15	M01	
48.6	5.40	35	SIFN16C28 - 71A-4G	28.16		6 000	15	M01	
43.5	4.60	40	SIFN16B31.5 - 71A-4G	31.52		6 000	15	M01	
45.1	5.30	38	SIFN16C31.5 - 71A-4G	30.35		6 000	15	M01	
37.4	3.90	46	SIFN16B35.5 - 71A-4G	36.64		6 000	15	M01	



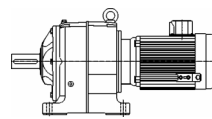
P 0.18 kW n₁ 1370 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
41.8	4.90	41	SIFN16C35.5 - 71A-4G	32.76		6 000	15	M01	
33.6	3.50	51	SIFN16B40 - 71A-4G	40.82		6 000	15	M01	
35.6	4.10	48	SIFN16C40 - 71A-4G	38.45		6 000	15	M01	
32.5	3.40	53	SIFN16B45 - 71A-4G	42.13		6 000	15	M01	
32.8	3.80	52	SIFN16C45 - 71A-4G	41.82		6 000	15	M01	
27.0	2.80	64	SIFN16B50 - 71A-4G	50.73		6 000	15	M01	
27.4	3.20	63	SIFN16C50 - 71A-4G	50.02		6 000	15	M01	
24.3	2.50	71	SIFN16B56 - 71A-4G	56.32		6 000	15	M01	
24.9	2.90	69	SIFN16C56 - 71A-4G	55.07		6 000	15	M01	
21.7	2.30	79	SIFN16B63 - 71A-4G	63.15		6 000	15	M01	
22.5	2.60	76	SIFN16C63 - 71A-4G	60.95		6 000	15	M01	
20.2	2.30	85	SIFN16C71 - 71A-4G	67.91		6 000	15	M01	
18.0	2.10	96	SIFN16C80 - 71A-4G	76.26		6 000	15	M01	
16.1	1.90	107	SIFN16C90 - 71A-4G	84.89		6 000	15	M01	
14.4	1.70	119	SIFN16C100 - 71A-4G	94.93		6 000	15	M01	
12.4	1.40	138	SIFN16C112 - 71A-4G	110.35		6 000	15	M01	
11.1	1.30	154	SIFN16C125 - 71A-4G	122.95		6 000	15	M01	
11.3	2.80	152	SIFN26C125 - 71A-4G	121.16		6 500	23	M06	
10.8	1.30	159	SIFN16C140 - 71A-4G	126.90		6 000	15	M01	
9.8	2.40	175	SIFN26C140 - 71A-4G	139.43		6 500	23	M06	
9.0	1.00	192	SIFN16C160 - 71A-4G	152.80		6 000	15	M01	
8.8	2.10	196	SIFN26C160 - 71A-4G	156.44		6 500	23	M06	
8.1	0.94	213	SIFN16C180 - 71A-4G	169.63		6 000	15	M01	
8.0	1.90	216	SIFN26C16B180 - 71A-4G	171.96		6 500	33	M06	
7.2	0.84	239	SIFN16C200 - 71A-4G	190.21		6 000	15	M01	
6.9	1.70	247	SIFN26C16B200 - 71A-4G	197.13		6 500	33	M06	
6.5	1.60	265	SIFN26C16B224 - 71A-4G	211.23		6 500	33	M06	
6.1	2.90	280	SIFN36C16B224 - 71A-4G	223.09		11 000	53	M12	
5.6	1.40	305	SIFN26C16B250 - 71A-4G	243.10		6 500	33	M06	
5.4	2.60	321	SIFN36C16B250 - 71A-4G	255.75		11 000	53	M12	
4.9	1.20	353	SIFN26C16B280 - 71A-4G	281.05		6 500	33	M06	
5.0	2.40	344	SIFN36C16B280 - 71A-4G	274.04		11 000	53	M12	
4.5	1.10	380	SIFN26C16B315 - 71A-4G	302.87		6 500	33	M06	
4.3	2.10	396	SIFN36C16B315 - 71A-4G	315.39		11 000	53	M12	
4.2	1.00	410	SIFN26C16B355 - 71A-4G	326.98		6 500	33	M06	
3.8	1.80	457	SIFN36C16B355 - 71A-4G	364.61		11 000	53	M12	
3.6	0.87	481	SIFN26C16B400 - 71A-4G	383.72		6 500	33	M06	
3.5	1.70	493	SIFN36C16B400 - 71A-4G	392.92		11 000	53	M12	
3.3	0.80	524	SIFN26C16B450 - 71A-4G	417.41		6 500	33	M06	
3.2	1.50	532	SIFN36C16B450 - 71A-4G	424.21		11 000	53	M12	
3.1	2.90	550	SIFN46C16B450 - 71A-4G	438.29		21 000	72	M20	
2.8	1.30	625	SIFN36C16B500 - 71A-4G	497.82		11 000	53	M12	
2.9	2.70	598	SIFN46C16B500 - 71A-4G	476.78		21 000	72	M20	
2.5	1.20	679	SIFN36C16B560 - 71A-4G	541.52		11 000	53	M12	
2.4	2.20	715	SIFN46C16B560 - 71A-4G	570.23		21 000	72	M20	
2.1	1.00	813	SIFN36C16B630 - 71A-4G	647.67		11 000	53	M12	
2.2	2.00	788	SIFN46C16B630 - 71A-4G	627.74		21 000	72	M20	
1.9	0.92	895	SIFN36C16B710 - 71A-4G	712.99		11 000	53	M12	
2.0	1.80	872	SIFN46C16B710 - 71A-4G	694.84		21 000	72	M20	
1.7	0.83	990	SIFN36C16B800 - 71A-4G	789.20		11 000	53	M12	
1.8	1.60	971	SIFN46C16B800 - 71A-4G	774.13		21 000	72	M20	
1.8	2.90	974	SIFN56C16B800 - 71A-4G	776.71		25 500	113	M28	




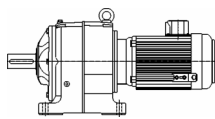
4. SI4

P 0.18 kW
n₁ 1370 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.6	1.50	1091	SIFN46C16B900 - 71A-4G	869.28		21 000	72	M20	
1.6	2.60	1085	SIFN56C16B900 - 71A-4G	864.61		25 500	113	M28	
1.4	1.30	1214	SIFN46C16B1000 - 71A-4G	967.66		21 000	72	M20	
1.4	2.30	1213	SIFN56C16B1000 - 71A-4G	966.92		25 500	113	M28	
1.3	1.20	1358	SIFN46C16B1120 - 71A-4G	1082.17		21 000	72	M20	
1.2	2.00	1410	SIFN56C16B1120 - 71A-4G	1123.99		25 500	113	M28	
1.1	1.00	1578	SIFN46C16B1250 - 71A-4G	1257.96		21 000	72	M20	
1.1	1.80	1571	SIFN56C16B1250 - 71A-4G	1252.24		25 500	113	M28	
1.0	0.91	1758	SIFN46C16B1400 - 71A-4G	1401.50		21 000	72	M20	
1.0	1.70	1697	SIFN56C16C1400 - 71A-4G	1352.25		25 500	113	M28	
1.0	2.90	1713	SIFN66C36B1400 - 71A-4G	1365.20		38 000	198	M36	
0.9	0.85	1879	SIFN46C16C1600 - 71A-4G	1497.90		21 000	72	M20	
0.8	1.30	2120	SIFN56C16C1600 - 71A-4G	1689.48		25 500	113	M28	
0.8	2.40	2049	SIFN66C36B1600 - 71A-4G	1633.34		38 000	198	M36	
0.7	1.20	2346	SIFN56C16C1800 - 71A-4G	1870.05		25 500	113	M28	
0.8	2.20	2282	SIFN66C36B1800 - 71A-4G	1818.59		38 000	198	M36	
0.7	1.10	2614	SIFN56C16C2000 - 71A-4G	2083.46		25 500	113	M28	
0.7	2.00	2524	SIFN66C36B2000 - 71A-4G	2011.80		38 000	198	M36	
0.6	0.97	2879	SIFN56C16C2240 - 71A-4G	2294.72		25 500	113	M28	
0.6	1.80	2804	SIFN66C36B2240 - 71A-4G	2234.89		38 000	198	M36	
0.5	0.86	3268	SIFN56C16C2500 - 71A-4G	2604.33		25 500	113	M28	
0.5	1.60	3175	SIFN66C36B2500 - 71A-4G	2530.65		38 000	198	M36	
0.6	2.90	3108	SIFN76C36B2500 - 71A-4G	2476.98		52 500	293	M46	
0.5	1.40	3462	SIFN66C36B2800 - 71A-4G	2759.62		38 000	198	M36	
0.5	2.60	3492	SIFN76C36B2800 - 71A-4G	2783.49		52 500	293	M46	
0.4	1.30	3851	SIFN66C36C3150 - 71A-4G	3069.27		38 000	198	M36	
0.4	2.30	3888	SIFN76C36B3150 - 71A-4G	3099.21		52 500	293	M46	
0.4	1.10	4361	SIFN66C36C3550 - 71A-4G	3476.10		38 000	198	M36	
0.4	2.10	4357	SIFN76C36B3550 - 71A-4G	3472.33		52 500	293	M46	
0.4	1.10	4756	SIFN66C36C4000 - 71A-4G	3790.55		38 000	198	M36	
0.4	1.90	4845	SIFN76C36C4000 - 71A-4G	3861.96		52 500	293	M46	
0.3	0.91	5505	SIFN66C36C4500 - 71A-4G	4387.60		38 000	198	M36	
0.3	1.60	5488	SIFN76C36C4500 - 71A-4G	4373.86		52 500	293	M46	
0.3	2.60	5812	SIFN86C36C4500 - 71A-4G	4632.23		82 000	463	M55	
0.3	0.82	6078	SIFN66C36C5000 - 71A-4G	4844.73		38 000	198	M36	
0.3	1.50	5984	SIFN76C36C5000 - 71A-4G	4769.52		52 500	293	M46	
0.3	2.30	6471	SIFN86C36C5000 - 71A-4G	5157.60		82 000	463	M55	
0.2	1.30	6927	SIFN76C36C5600 - 71A-4G	5520.77		52 500	293	M46	
0.2	2.10	7158	SIFN86C36C5600 - 71A-4G	5705.56		82 000	463	M55	
0.2	1.20	7648	SIFN76C36C6300 - 71A-4G	6095.96		52 500	293	M46	
0.2	1.90	7952	SIFN86C36C6300 - 71A-4G	6338.25		82 000	463	M55	
0.2	0.98	9151	SIFN76C36C7100 - 71A-4G	7293.26		52 500	293	M46	
0.2	2.70	9188	SIFN96C36C7100 - 71A-4G	7323.15		105 000	673	M64	
0.2	0.88	10188	SIFN76C36C8000 - 71A-4G	8120.42		52 500	293	M46	
0.2	2.40	10230	SIFN96C36C8000 - 71A-4G	8153.70		105 000	673	M64	
0.2	0.80	11271	SIFN76C36C9000 - 71A-4G	8983.16		52 500	293	M46	
0.2	2.20	11317	SIFN96C36C9000 - 71A-4G	9019.98		105 000	673	M64	
0.1	2.00	12572	SIFN96C36C10000 - 71A-4G	10020.21		105 000	673	M64	




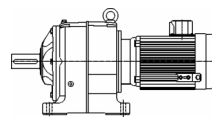
P 0.25 kW n₁ 1400 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
499.9	21.00	5	SIFN16B2.8 - 71A-4G	2.80		3 900	16	M01	
436.1	19.00	5	SIFN16B3.15 - 71A-4G	3.21		04 100	16	M01	
407.0	19.00	6	SIFN16B3.55 - 71A-4G	3.44		4 200	16	M01	
353.6	17.00	7	SIFN16B4 - 71A-4G	3.96		4 400	16	M01	
305.9	15.00	8	SIFN16B4.5 - 71A-4G	4.58		4 600	16	M01	
283.8	15.00	8	SIFN16B5 - 71A-4G	4.93		4 700	16	M01	
244.7	13.00	10	SIFN16B5.6 - 71A-4G	5.72		4 900	16	M01	
213.5	12.00	11	SIFN16B6.3 - 71A-4G	6.56		5 200	16	M01	
199.2	12.00	12	SIFN16B7.1 - 71A-4G	7.03		5 300	16	M01	
173.1	11.00	14	SIFN16B8 - 71A-4G	8.09		5 500	16	M01	
149.7	10.00	16	SIFN16B9 - 71A-4G	9.35		5 800	16	M01	
139.0	9.90	17	SIFN16B10 - 71A-4G	10.08		5 900	16	M01	
128.7	9.70	19	SIFN16B11.2 - 71A-4G	10.88		6 000	16	M01	
109.7	8.30	22	SIFN16B12.5 - 71A-4G	12.76		6 000	16	M01	
100.8	7.60	24	SIFN16B14 - 71A-4G	13.89		6 000	16	M01	
84.3	6.40	28	SIFN16B16 - 71A-4G	16.61		6 000	16	M01	
76.6	5.80	31	SIFN16B18 - 71A-4G	18.28		6 000	16	M01	
70.9	5.00	34	SIFN16C20 - 71A-4G	19.75		6 000	16	M01	
69.2	5.20	35	SIFN16B20 - 71A-4G	20.24		6 000	16	M01	
62.1	4.70	38	SIFN16B22.4 - 71A-4G	22.55		6 000	16	M01	
66.1	5.00	36	SIFN16C22.4 - 71A-4G	21.17		6 000	16	M01	
55.3	4.20	43	SIFN16B25 - 71A-4G	25.32		6 000	16	M01	
57.5	4.60	42	SIFN16C25 - 71A-4G	24.36		6 000	16	M01	
49.7	3.70	48	SIFN16B28 - 71A-4G	28.18		6 000	16	M01	
49.7	4.00	48	SIFN16C28 - 71A-4G	28.16		6 000	16	M01	
44.4	3.30	54	SIFN16B31.5 - 71A-4G	31.52		6 000	16	M01	
46.1	3.90	52	SIFN16C31.5 - 71A-4G	30.35		6 000	16	M01	
38.2	2.90	62	SIFN16B35.5 - 71A-4G	36.64		6 000	16	M01	
42.7	3.60	56	SIFN16C35.5 - 71A-4G	32.76		6 000	16	M01	
34.3	2.60	70	SIFN16B40 - 71A-4G	40.82		6 000	16	M01	
36.4	3.10	66	SIFN16C40 - 71A-4G	38.45		6 000	16	M01	
33.2	2.50	72	SIFN16B45 - 71A-4G	42.13		6 000	16	M01	
33.5	2.80	71	SIFN16C45 - 71A-4G	41.82		6 000	16	M01	
27.6	2.10	87	SIFN16B50 - 71A-4G	50.73		6 000	16	M01	
28.0	2.30	85	SIFN16C50 - 71A-4G	50.02		6 000	16	M01	
24.9	1.90	96	SIFN16B56 - 71A-4G	56.32		6 000	16	M01	
25.4	2.10	94	SIFN16C56 - 71A-4G	55.07		6 000	16	M01	
22.2	1.70	108	SIFN16B63 - 71A-4G	63.15		6 000	16	M01	
23.0	1.90	104	SIFN16C63 - 71A-4G	60.95		6 000	16	M01	
20.6	1.70	116	SIFN16C71 - 71A-4G	67.91		6 000	16	M01	
18.4	1.50	130	SIFN16C80 - 71A-4G	76.26		6 000	16	M01	
16.5	1.40	145	SIFN16C90 - 71A-4G	84.89		6 000	16	M01	
15.9	2.80	150	SIFN26C90 - 71A-4G	87.84		6 500	24	M06	
14.7	1.20	162	SIFN16C100 - 71A-4G	94.93		6 000	16	M01	
14.3	2.50	167	SIFN26C100 - 71A-4G	98.16		6 500	24	M06	
12.7	1.10	188	SIFN16C112 - 71A-4G	110.35		6 000	16	M01	
12.9	2.30	185	SIFN26C112 - 71A-4G	108.76		6 500	24	M06	
11.4	0.95	210	SIFN16C125 - 71A-4G	122.95		6 000	16	M01	
11.6	2.00	207	SIFN26C125 - 71A-4G	121.16		6 500	24	M06	
11.0	0.92	216	SIFN16C140 - 71A-4G	126.90		6 000	16	M01	
10.0	1.80	238	SIFN26C140 - 71A-4G	139.43		6 500	24	M06	
8.9	1.60	267	SIFN26C160 - 71A-4G	156.44		6 500	24	M06	





4. SI4

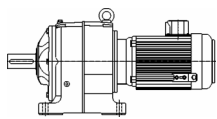
P 0.25 kW
n₁ 1400 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
8.4	2.90	285	SIFN36C160 - 71A-4G	166.99		11 000	44	M12	
8.1	1.40	293	SIFN26C16B180 - 71A-4G	171.96		6 500	34	M06	
7.8	2.70	308	SIFN36C16B180 - 71A-4G	180.52		11 000	54	M12	
7.1	1.20	336	SIFN26C16B200 - 71A-4G	197.13		6 500	34	M06	
6.8	2.30	353	SIFN36C200 - 71A-4G	207.24		11 000	44	M12	
6.6	1.20	360	SIFN26C16B224 - 71A-4G	211.23		6 500	34	M06	
6.3	2.20	380	SIFN36C16B224 - 71A-4G	223.09		11 000	54	M12	
5.8	1.00	415	SIFN26C16B250 - 71A-4G	243.10		6 500	34	M06	
5.5	1.90	436	SIFN36C16B250 - 71A-4G	255.75		11 000	54	M12	
5.0	0.88	479	SIFN26C16B280 - 71A-4G	281.05		6 500	34	M06	
5.1	1.80	467	SIFN36C16B280 - 71A-4G	274.04		11 000	54	M12	
4.6	0.81	516	SIFN26C16B315 - 71A-4G	302.87		6 500	34	M06	
4.4	1.50	538	SIFN36C16B315 - 71A-4G	315.39		11 000	54	M12	
4.4	2.90	547	SIFN46C16B315 - 71A-4G	321.02		21 000	73	M20	
3.8	1.30	622	SIFN36C16B355 - 71A-4G	364.61		11 000	54	M12	
4.0	2.70	590	SIFN46C16B355 - 71A-4G	345.94		21 000	73	M20	
3.6	1.20	670	SIFN36C16B400 - 71A-4G	392.92		11 000	54	M12	
3.7	2.50	637	SIFN46C16B400 - 71A-4G	373.48		21 000	73	M20	
3.3	1.10	723	SIFN36C16B450 - 71A-4G	424.21		11 000	54	M12	
3.2	2.10	747	SIFN46C16B450 - 71A-4G	438.29		21 000	73	M20	
2.8	0.97	849	SIFN36C16B500 - 71A-4G	497.82		11 000	54	M12	
2.9	2.00	813	SIFN46C16B500 - 71A-4G	476.78		21 000	73	M20	
2.6	0.89	923	SIFN36C16B560 - 71A-4G	541.52		11 000	54	M12	
2.5	1.60	972	SIFN46C16B560 - 71A-4G	570.23		21 000	73	M20	
2.5	2.90	956	SIFN56C16B560 - 71A-4G	560.89		25 500	114	M28	
2.2	1.50	1070	SIFN46C16B630 - 71A-4G	627.74		21 000	73	M20	
2.3	2.60	1059	SIFN56C16B630 - 71A-4G	620.84		25 500	114	M28	
2.0	1.40	1185	SIFN46C16B710 - 71A-4G	694.84		21 000	73	M20	
2.0	2.40	1179	SIFN56C16B710 - 71A-4G	691.69		25 500	114	M28	
1.8	1.20	1320	SIFN46C16B800 - 71A-4G	774.13		21 000	73	M20	
1.8	2.10	1324	SIFN56C16B800 - 71A-4G	776.71		25 500	114	M28	
1.6	1.10	1482	SIFN46C16B900 - 71A-4G	869.28		21 000	73	M20	
1.6	1.90	1474	SIFN56C16B900 - 71A-4G	864.61		25 500	114	M28	
1.4	0.97	1650	SIFN46C16B1000 - 71A-4G	967.66		21 000	73	M20	
1.4	1.70	1649	SIFN56C16B1000 - 71A-4G	966.92		25 500	114	M28	
1.4	3.00	1670	SIFN66C36B1000 - 71A-4G	979.54		38 000	199	M36	
1.3	0.87	1845	SIFN46C16B1120 - 71A-4G	1082.17		21 000	73	M20	
1.2	1.50	1917	SIFN56C16B1120 - 71A-4G	1123.99		25 500	114	M28	
1.3	2.70	1821	SIFN66C36B1120 - 71A-4G	1068.15		38 000	199	M36	
1.1	1.30	2135	SIFN56C16B1250 - 71A-4G	1252.24		25 500	114	M28	
1.1	2.40	2108	SIFN66C36B1250 - 71A-4G	1236.39		38 000	199	M36	
1.0	1.20	2306	SIFN56C16C1400 - 71A-4G	1352.25		25 500	114	M28	
1.0	2.10	2328	SIFN66C36B1400 - 71A-4G	1365.20		38 000	199	M36	
0.8	0.97	2881	SIFN56C16C1600 - 71A-4G	1689.48		25 500	114	M28	
0.9	1.80	2785	SIFN66C36B1600 - 71A-4G	1633.34		38 000	199	M36	
0.7	0.88	3189	SIFN56C16C1800 - 71A-4G	1870.05		25 500	114	M28	
0.8	1.60	3101	SIFN66C36B1800 - 71A-4G	1818.59		38 000	199	M36	
0.8	3.00	3036	SIFN76C36B1800 - 71A-4G	1780.55		52 500	294	M46	
0.7	1.50	3431	SIFN66C36B2000 - 71A-4G	2011.80		38 000	199	M36	
0.7	2.70	3324	SIFN76C36B2000 - 71A-4G	1949.38		52 500	294	M46	
0.6	1.30	3811	SIFN66C36B2240 - 71A-4G	2234.89		38 000	199	M36	
0.6	2.40	3828	SIFN76C36B2240 - 71A-4G	2244.83		52 500	294	M46	



P		0.25 kW							
n₁		1400 min⁻¹							
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.6	1.20	4315	SIFN66C36B2500 - 71A-4G	2530.65		38 000	199	M36	
0.6	2.10	4224	SIFN76C36B2500 - 71A-4G	2476.98		52 500	294	M46	
0.5	1.10	4706	SIFN66C36B2800 - 71A-4G	2759.62		38 000	199	M36	
0.5	1.90	4746	SIFN76C36B2800 - 71A-4G	2783.49		52 500	294	M46	
0.5	0.96	5234	SIFN66C36C3150 - 71A-4G	3069.27		38 000	199	M36	
0.5	1.70	5285	SIFN76C36B3150 - 71A-4G	3099.21		52 500	294	M46	
0.5	2.90	5166	SIFN86C36C3150 - 71A-4G	3029.31		82 000	464	M55	
0.4	0.84	5928	SIFN66C36C3550 - 71A-4G	3476.10		38 000	199	M36	
0.4	1.50	5921	SIFN76C36B3550 - 71A-4G	3472.33		52 500	294	M46	
0.4	2.50	5979	SIFN86C36C3550 - 71A-4G	3506.46		82 000	464	M55	
0.4	1.40	6586	SIFN76C36C4000 - 71A-4G	3861.96		52 500	294	M46	
0.4	2.30	6602	SIFN86C36C4000 - 71A-4G	3871.78		82 000	464	M55	
0.3	1.20	7458	SIFN76C36C4500 - 71A-4G	4373.86		52 500	294	M46	
0.3	1.90	7899	SIFN86C36C4500 - 71A-4G	4632.23		82 000	464	M55	
0.3	1.10	8133	SIFN76C36C5000 - 71A-4G	4769.52		52 500	294	M46	
0.3	1.70	8795	SIFN86C36C5000 - 71A-4G	5157.60		82 000	464	M55	
0.3	0.96	9414	SIFN76C36C5600 - 71A-4G	5520.77		52 500	294	M46	
0.2	1.50	9729	SIFN86C36C5600 - 71A-4G	5705.56		82 000	464	M55	
0.3	2.60	9453	SIFN96C36C5600 - 71A-4G	5543.39		105 000	674	M64	
0.2	0.87	10395	SIFN76C36C6300 - 71A-4G	6095.96		52 500	294	M46	
0.2	1.40	10808	SIFN86C36C6300 - 71A-4G	6338.25		82 000	464	M55	
0.2	2.40	10438	SIFN96C36C6300 - 71A-4G	6120.94		105 000	674	M64	
0.2	2.00	12488	SIFN96C36C7100 - 71A-4G	7323.15		105 000	674	M64	
0.2	1.80	13904	SIFN96C36C8000 - 71A-4G	8153.70		105 000	674	M64	
0.2	1.60	15381	SIFN96C36C9000 - 71A-4G	9019.98		105 000	674	M64	
0.1	1.50	17087	SIFN96C36C10000 - 71A-4G	10020.21		105 000	674	M64	

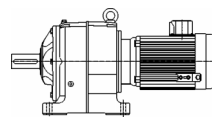
P		0.37 kW							
n₁		1400 min⁻¹							
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
499.9	14.00	7	SIFN16B2.8 - 71B-4G	2.80		3 900	17	M01	
436.1	13.00	8	SIFN16B3.15 - 71B-4G	3.21		4 100	17	M01	
407.0	13.00	9	SIFN16B3.55 - 71B-4G	3.44		4 100	17	M01	
353.6	12.00	10	SIFN16B4 - 71B-4G	3.96		4 300	17	M01	
305.9	10.00	12	SIFN16B4.5 - 71B-4G	4.58		4 500	17	M01	
283.8	10.00	12	SIFN16B5 - 71B-4G	4.93		4 600	17	M01	
244.7	9.00	14	SIFN16B5.6 - 71B-4G	5.72		4 900	17	M01	
213.5	8.30	17	SIFN16B6.3 - 71B-4G	6.56		5 100	17	M01	
199.2	8.20	18	SIFN16B7.1 - 71B-4G	7.03		5 200	17	M01	
173.1	7.50	20	SIFN16B8 - 71B-4G	8.09		5 500	17	M01	
149.7	6.80	24	SIFN16B9 - 71B-4G	9.35		5 700	17	M01	
139.0	6.70	25	SIFN16B10 - 71B-4G	10.08		5 900	17	M01	
128.7	6.60	27	SIFN16B11.2 - 71B-4G	10.88		6 000	17	M01	
109.7	5.60	32	SIFN16B12.5 - 71B-4G	12.76		6 000	17	M01	
100.8	5.10	35	SIFN16B14 - 71B-4G	13.89		6 000	17	M01	
84.3	4.30	42	SIFN16B16 - 71B-4G	16.61		6 000	17	M01	
76.6	3.90	46	SIFN16B18 - 71B-4G	18.28		6 000	17	M01	
69.2	3.50	51	SIFN16B20 - 71B-4G	20.24		6 000	17	M01	




4. SI4

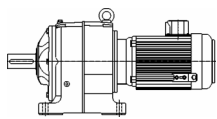
P 0.37 kW
n₁ 1400 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
62.1	3.20	57	SIFN16B22.4 - 71B-4G	22.55		6 000	17	M01	
66.1	3.40	53	SIFN16C22.4 - 71B-4G	21.17		6 000	17	M01	
55.3	2.80	64	SIFN16B25 - 71B-4G	25.32		6 000	17	M01	
57.5	3.10	61	SIFN16C25 - 71B-4G	24.36		6 000	17	M01	
49.7	2.50	71	SIFN16B28 - 71B-4G	28.18		6 000	17	M01	
49.7	2.70	71	SIFN16C28 - 71B-4G	28.16		6 000	17	M01	
44.4	2.30	80	SIFN16B31.5 - 71B-4G	31.52		6 000	17	M01	
46.1	2.60	77	SIFN16C31.5 - 71B-4G	30.35		6 000	17	M01	
38.2	1.90	92	SIFN16B35.5 - 71B-4G	36.64		6 000	17	M01	
42.7	2.40	83	SIFN16C35.5 - 71B-4G	32.76		6 000	17	M01	
34.3	1.70	103	SIFN16B40 - 71B-4G	40.82		6 000	17	M01	
36.4	2.10	97	SIFN16C40 - 71B-4G	38.45		6 000	17	M01	
33.2	1.70	106	SIFN16B45 - 71B-4G	42.13		6 000	17	M01	
33.5	1.90	106	SIFN16C45 - 71B-4G	41.82		6 000	17	M01	
27.6	1.40	128	SIFN16B50 - 71B-4G	50.73		6 000	17	M01	
28.0	1.60	126	SIFN16C50 - 71B-4G	50.02		6 000	17	M01	
28.0	2.80	126	SIFN26B50 - 71B-4G	50.07		6 500	25	M06	
24.9	1.30	142	SIFN16B56 - 71B-4G	56.32		6 000	17	M01	
25.2	3.00	140	SIFN26C56 - 71B-4G	55.60		6 500	25	M06	
22.2	1.10	159	SIFN16B63 - 71B-4G	63.15		6 000	17	M01	
23.0	1.30	154	SIFN16C63 - 71B-4G	60.95		6 000	17	M01	
21.7	2.60	163	SIFN26C63 - 71B-4G	64.64		6 500	25	M06	
20.6	1.20	171	SIFN16C71 - 71B-4G	67.91		6 000	17	M01	
19.5	2.30	182	SIFN26C71 - 71B-4G	71.97		6 500	25	M06	
18.4	1.00	192	SIFN16C80 - 71B-4G	76.26		6 000	17	M01	
17.7	2.10	200	SIFN26C80 - 71B-4G	79.24		6 500	25	M06	
16.5	0.93	214	SIFN16C90 - 71B-4G	84.89		6 000	17	M01	
15.9	1.90	222	SIFN26C90 - 71B-4G	87.84		6 500	25	M06	
14.7	0.83	240	SIFN16C100 - 71B-4G	94.93		6 000	17	M01	
14.3	1.70	248	SIFN26C100 - 71B-4G	98.16		6 500	25	M06	
12.9	1.50	274	SIFN26C112 - 71B-4G	108.76		6 500	25	M06	
11.9	2.80	296	SIFN36C112 - 71B-4G	117.28		11 000	45	M12	
11.6	1.40	306	SIFN26C125 - 71B-4G	121.16		6 500	25	M06	
10.8	2.50	327	SIFN36C125 - 71B-4G	129.74		11 000	45	M12	
10.0	1.20	352	SIFN26C140 - 71B-4G	139.43		6 500	25	M06	
9.7	2.30	364	SIFN36C140 - 71B-4G	144.13		11 000	45	M12	
8.9	1.10	395	SIFN26C160 - 71B-4G	156.44		6 500	25	M06	
8.4	1.90	421	SIFN36C160 - 71B-4G	166.99		11 000	45	M12	
8.1	0.97	434	SIFN26C16B180 - 71B-4G	171.96		6 500	35	M06	
7.8	1.80	456	SIFN36C16B180 - 71B-4G	180.52		11 000	55	M12	
7.1	0.84	498	SIFN26C16B200 - 71B-4G	197.13		6 500	35	M06	
6.8	1.60	523	SIFN36C200 - 71B-4G	207.24		11 000	45	M12	
6.3	1.50	563	SIFN36C16B224 - 71B-4G	223.09		11 000	55	M12	
6.2	2.80	568	SIFN46C16B224 - 71B-4G	225.17		21 000	74	M20	
5.5	1.30	645	SIFN36C16B250 - 71B-4G	255.75		11 000	55	M12	
5.8	2.60	609	SIFN46C16B250 - 71B-4G	241.27		21 000	74	M20	
5.1	1.20	692	SIFN36C16B280 - 71B-4G	274.04		11 000	55	M12	
5.0	2.30	701	SIFN46C16B280 - 71B-4G	277.68		21 000	74	M20	
4.4	1.00	796	SIFN36C16B315 - 71B-4G	315.39		11 000	55	M12	
4.4	2.00	810	SIFN46C16B315 - 71B-4G	321.02		21 000	74	M20	
3.8	0.89	920	SIFN36C16B355 - 71B-4G	364.61		11 000	55	M12	
4.0	1.80	873	SIFN46C16B355 - 71B-4G	345.94		21 000	74	M20	




P	0.37 kW
n₁	1400 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
3.6	0.83	992	SIFN36C16B400 - 71B-4G	392.92		11 000	55	M12	
3.7	1.70	943	SIFN46C16B400 - 71B-4G	373.48		21 000	74	M20	
3.6	2.80	988	SIFN56C16B400 - 71B-4G	391.62		25 500	115	M28	
3.2	1.40	1106	SIFN46C16B450 - 71B-4G	438.29		21 000	74	M20	
3.3	2.60	1075	SIFN56C16B450 - 71B-4G	426.00		25 500	115	M28	
2.9	1.30	1203	SIFN46C16B500 - 71B-4G	476.78		21 000	74	M20	
2.7	2.20	1286	SIFN56C16B500 - 71B-4G	509.50		25 500	115	M28	
2.5	1.10	1439	SIFN46C16B560 - 71B-4G	570.23		21 000	74	M20	
2.5	2.00	1416	SIFN56C16B560 - 71B-4G	560.89		25 500	115	M28	
2.2	1.00	1584	SIFN46C16B630 - 71B-4G	627.74		21 000	74	M20	
2.3	1.80	1567	SIFN56C16B630 - 71B-4G	620.84		25 500	115	M28	
2.0	0.91	1754	SIFN46C16B710 - 71B-4G	694.84		21 000	74	M20	
2.0	1.60	1746	SIFN56C16B710 - 71B-4G	691.69		25 500	115	M28	
2.0	2.80	1795	SIFN66C36B710 - 71B-4G	711.36		38 000	200	M36	
1.8	0.82	1954	SIFN46C16B800 - 71B-4G	774.13		21 000	74	M20	
1.8	1.40	1960	SIFN56C16B800 - 71B-4G	776.71		25 500	115	M28	
1.7	2.50	2033	SIFN66C36B800 - 71B-4G	805.65		38 000	200	M36	
1.6	1.30	2182	SIFN56C16B900 - 71B-4G	864.61		25 500	115	M28	
1.6	2.30	2183	SIFN66C36B900 - 71B-4G	864.90		38 000	200	M36	
1.4	1.10	2440	SIFN56C16B1000 - 71B-4G	966.92		25 500	115	M28	
1.4	2.00	2472	SIFN66C36B1000 - 71B-4G	979.54		38 000	200	M36	
1.2	0.99	2837	SIFN56C16B1120 - 71B-4G	1123.99		25 500	115	M28	
1.3	1.90	2696	SIFN66C36B1120 - 71B-4G	1068.15		38 000	200	M36	
1.1	0.89	3160	SIFN56C16B1250 - 71B-4G	1252.24		25 500	115	M28	
1.1	1.60	3120	SIFN66C36B1250 - 71B-4G	1236.39		38 000	200	M36	
1.1	2.80	3205	SIFN76C36B1250 - 71B-4G	1269.92		52 500	295	M46	
1.0	0.82	3413	SIFN56C16C1400 - 71B-4G	1352.25		25 500	115	M28	
1.0	1.50	3445	SIFN66C36B1400 - 71B-4G	1365.20		38 000	200	M36	
1.0	2.50	3657	SIFN76C36B1400 - 71B-4G	1448.88		52 500	295	M46	
0.9	1.20	4122	SIFN66C36B1600 - 71B-4G	1633.34		38 000	200	M36	
0.9	2.20	4045	SIFN76C36B1600 - 71B-4G	1602.81		52 500	295	M46	
0.8	1.10	4590	SIFN66C36B1800 - 71B-4G	1818.59		38 000	200	M36	
0.8	2.00	4494	SIFN76C36B1800 - 71B-4G	1780.55		52 500	295	M46	
0.7	0.98	5077	SIFN66C36B2000 - 71B-4G	2011.80		38 000	200	M36	
0.7	1.80	4920	SIFN76C36B2000 - 71B-4G	1949.38		52 500	295	M46	
0.7	3.00	5010	SIFN86C36B2000 - 71B-4G	1985.27		82 000	465	M55	
0.6	0.89	5640	SIFN66C36B2240 - 71B-4G	2234.89		38 000	200	M36	
0.6	1.60	5665	SIFN76C36B2240 - 71B-4G	2244.83		52 500	295	M46	
0.6	2.70	5566	SIFN86C36B2240 - 71B-4G	2205.41		82 000	465	M55	
0.6	1.40	6251	SIFN76C36B2500 - 71B-4G	2476.98		52 500	295	M46	
0.6	2.40	6190	SIFN86C36C2500 - 71B-4G	2452.88		82 000	465	M55	
0.5	1.30	7025	SIFN76C36B2800 - 71B-4G	2783.49		52 500	295	M46	
0.5	2.10	7011	SIFN86C36C2800 - 71B-4G	2778.01		82 000	465	M55	
0.5	1.20	7822	SIFN76C36B3150 - 71B-4G	3099.21		52 500	295	M46	
0.5	2.00	7645	SIFN86C36C3150 - 71B-4G	3029.31		82 000	465	M55	
0.4	1.00	8763	SIFN76C36B3550 - 71B-4G	3472.33		52 500	295	M46	
0.4	1.70	8849	SIFN86C36C3550 - 71B-4G	3506.46		82 000	465	M55	
0.4	2.80	8799	SIFN96C36B3550 - 71B-4G	3486.56		105 000	675	M64	
0.4	0.92	9747	SIFN76C36C4000 - 71B-4G	3861.96		52 500	295	M46	
0.4	1.50	9771	SIFN86C36C4000 - 71B-4G	3871.78		82 000	465	M55	
0.4	2.60	9787	SIFN96C36C4000 - 71B-4G	3877.79		105 000	675	M64	
0.3	0.82	11039	SIFN76C36C4500 - 71B-4G	4373.86		52 500	295	M46	



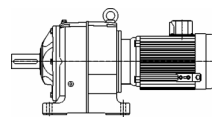
4. SI4


P 0.37 kW
n₁ 1400 min⁻¹

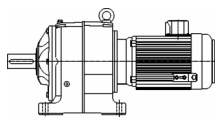
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.3	1.30	11691	SIFN86C36C4500 - 71B-4G	4632.23		82 000	465	M55	
0.3	2.30	11084	SIFN96C36C4500 - 71B-4G	4391.79		105 000	675	M64	
0.3	1.20	13016	SIFN86C36C5000 - 71B-4G	5157.60		82 000	465	M55	
0.3	2.10	12086	SIFN96C36C5000 - 71B-4G	4789.07		105 000	675	M64	
0.2	1.00	14399	SIFN86C36C5600 - 71B-4G	5705.56		82 000	465	M55	
0.3	1.80	13990	SIFN96C36C5600 - 71B-4G	5543.39		105 000	675	M64	
0.2	0.94	15996	SIFN86C36C6300 - 71B-4G	6338.25		82 000	465	M55	
0.2	1.60	15448	SIFN96C36C6300 - 71B-4G	6120.94		105 000	675	M64	
0.2	1.40	18482	SIFN96C36C7100 - 71B-4G	7323.15		105 000	675	M64	
0.2	1.20	20578	SIFN96C36C8000 - 71B-4G	8153.70		105 000	675	M64	
0.2	1.10	22764	SIFN96C36C9000 - 71B-4G	9019.98		105 000	675	M64	
0.1	0.99	25288	SIFN96C36C10000 - 71B-4G	10020.21		105 000	675	M64	

P 0.55 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
507.1	9.70	10	SIFN16B2.8 - 80A-4G	2.80		3 800	19	M01	
442.3	8.80	12	SIFN16B3.15 - 80A-4G	3.21		4 000	19	M01	
412.8	8.60	13	SIFN16B3.55 - 80A-4G	3.44		4 100	19	M01	
358.7	7.90	15	SIFN16B4 - 80A-4G	3.96		4 300	19	M01	
310.2	7.10	17	SIFN16B4.5 - 80A-4G	4.58		4 500	19	M01	
287.9	6.90	18	SIFN16B5 - 80A-4G	4.93		4 600	19	M01	
248.2	6.10	21	SIFN16B5.6 - 80A-4G	5.72		4 800	19	M01	
216.5	5.60	24	SIFN16B6.3 - 80A-4G	6.56		5 000	19	M01	
202.1	5.60	26	SIFN16B7.1 - 80A-4G	7.03		5 100	19	M01	
175.6	5.10	30	SIFN16B8 - 80A-4G	8.09		5 400	19	M01	
151.9	4.70	35	SIFN16B9 - 80A-4G	9.35		5 600	19	M01	
140.9	4.60	37	SIFN16B10 - 80A-4G	10.08		5 700	19	M01	
130.5	4.50	40	SIFN16B11.2 - 80A-4G	10.88		5 900	19	M01	
111.2	3.80	47	SIFN16B12.5 - 80A-4G	12.76		6 000	19	M01	
102.3	3.50	51	SIFN16B14 - 80A-4G	13.89		6 000	19	M01	
85.5	2.90	61	SIFN16B16 - 80A-4G	16.61		6 000	19	M01	
77.7	2.70	68	SIFN16B18 - 80A-4G	18.28		6 000	19	M01	
70.2	2.40	75	SIFN16B20 - 80A-4G	20.24		6 000	19	M01	
63.0	2.20	83	SIFN16B22.4 - 80A-4G	22.55		6 000	19	M01	
56.1	1.90	94	SIFN16B25 - 80A-4G	25.32		6 000	19	M01	
58.3	2.10	90	SIFN16C25 - 80A-4G	24.36		6 000	19	M01	
50.4	1.70	104	SIFN16B28 - 80A-4G	28.18		6 000	19	M01	
45.1	1.50	117	SIFN16B31.5 - 80A-4G	31.52		6 000	19	M01	
46.8	1.80	112	SIFN16C31.5 - 80A-4G	30.35		6 000	19	M01	
38.8	1.30	136	SIFN16B35.5 - 80A-4G	36.64		6 000	19	M01	
43.3	1.70	121	SIFN16C35.5 - 80A-4G	32.76		6 000	19	M01	
40.8	2.80	129	SIFN26B35.5 - 80A-4G	34.81		6 500	27	M06	
34.8	1.20	151	SIFN16B40 - 80A-4G	40.82		6 000	19	M01	
36.9	1.40	142	SIFN16C40 - 80A-4G	38.45		6 000	19	M01	
36.6	2.50	143	SIFN26B40 - 80A-4G	38.78		6 500	27	M06	
36.7	2.90	143	SIFN26C40 - 80A-4G	38.71		6 500	27	M06	




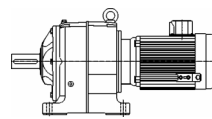
P 0.55 kW n₁ 1420 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
33.7	1.20	156	SIFN16B45 - 80A-4G	42.13		6 000	19	M01	
31.8	2.20	165	SIFN26B45 - 80A-4G	44.63		6 500	27	M06	
32.0	2.60	164	SIFN26C45 - 80A-4G	44.40		6 500	27	M06	
28.0	0.96	188	SIFN16B50 - 80A-4G	50.73		6 000	19	M01	
28.4	1.10	185	SIFN16C50 - 80A-4G	50.02		6 000	19	M01	
28.4	1.90	185	SIFN26B50 - 80A-4G	50.07		6 500	27	M06	
27.6	2.20	190	SIFN26C50 - 80A-4G	51.42		6 500	27	M06	
25.2	0.86	208	SIFN16B56 - 80A-4G	56.32		6 000	19	M01	
25.8	0.98	204	SIFN16C56 - 80A-4G	55.07		6 000	19	M01	
25.5	2.00	206	SIFN26C56 - 80A-4G	55.60		6 500	27	M06	
23.3	0.89	225	SIFN16C63 - 80A-4G	60.95		6 000	19	M01	
22.0	1.80	239	SIFN26C63 - 80A-4G	64.64		6 500	27	M06	
20.9	0.80	251	SIFN16C71 - 80A-4G	67.91		6 000	19	M01	
19.7	1.60	266	SIFN26C71 - 80A-4G	71.97		6 500	27	M06	
17.9	1.40	293	SIFN26C80 - 80A-4G	79.24		6 500	27	M06	
17.8	2.80	295	SIFN36C80 - 80A-4G	79.73		11 000	47	M12	
16.2	1.30	325	SIFN26C90 - 80A-4G	87.84		6 500	27	M06	
16.1	2.50	326	SIFN36C90 - 80A-4G	88.04		11 000	47	M12	
14.5	1.20	363	SIFN26C100 - 80A-4G	98.16		6 500	27	M06	
13.5	2.10	390	SIFN36C100 - 80A-4G	105.33		11 000	47	M12	
13.1	1.00	402	SIFN26C112 - 80A-4G	108.76		6 500	27	M06	
12.1	1.90	434	SIFN36C112 - 80A-4G	117.28		11 000	47	M12	
11.7	0.94	448	SIFN26C125 - 80A-4G	121.16		6 500	27	M06	
10.9	1.70	480	SIFN36C125 - 80A-4G	129.74		11 000	47	M12	
10.2	0.81	516	SIFN26C140 - 80A-4G	139.43		6 500	27	M06	
9.9	1.50	533	SIFN36C140 - 80A-4G	144.13		11 000	47	M12	
8.5	1.30	618	SIFN36C160 - 80A-4G	166.99		11 000	47	M12	
9.1	2.80	580	SIFN46C160 - 80A-4G	156.72		21 000	66	M20	
7.9	1.20	668	SIFN36C16B180 - 80A-4G	180.52		11 000	57	M12	
8.1	2.50	650	SIFN46C180 - 80A-4G	175.71		21 000	66	M20	
6.9	1.10	767	SIFN36C200 - 80A-4G	207.24		11 000	47	M12	
7.2	2.20	726	SIFN46C16B200 - 80A-4G	196.41		21 000	76	M20	
6.4	0.99	825	SIFN36C16B224 - 80A-4G	223.09		11 000	57	M12	
6.3	1.90	833	SIFN46C16B224 - 80A-4G	225.17		21 000	76	M20	
5.6	0.87	946	SIFN36C16B250 - 80A-4G	255.75		11 000	57	M12	
5.9	1.80	892	SIFN46C16B250 - 80A-4G	241.27		21 000	76	M20	
5.2	0.81	1014	SIFN36C16B280 - 80A-4G	274.04		11 000	57	M12	
5.1	1.60	1027	SIFN46C16B280 - 80A-4G	277.68		21 000	76	M20	
5.0	2.60	1061	SIFN56C16B280 - 80A-4G	286.83		25 500	117	M28	
4.4	1.30	1187	SIFN46C16B315 - 80A-4G	321.02		21 000	76	M20	
4.6	2.40	1143	SIFN56C16B315 - 80A-4G	309.10		25 500	117	M28	
4.1	1.30	1280	SIFN46C16B355 - 80A-4G	345.94		21 000	76	M20	
4.3	2.30	1234	SIFN56C16B355 - 80A-4G	333.71		25 500	117	M28	
3.8	1.20	1381	SIFN46C16B400 - 80A-4G	373.48		21 000	76	M20	
3.6	1.90	1448	SIFN56C16B400 - 80A-4G	391.62		25 500	117	M28	
3.2	0.99	1621	SIFN46C16B450 - 80A-4G	438.29		21 000	76	M20	
3.3	1.80	1576	SIFN56C16B450 - 80A-4G	426.00		25 500	117	M28	
3.0	0.91	1763	SIFN46C16B500 - 80A-4G	476.78		21 000	76	M20	
2.8	1.50	1884	SIFN56C16B500 - 80A-4G	509.50		25 500	117	M28	
2.8	2.60	1895	SIFN66C36B500 - 80A-4G	512.37		38 000	202	M36	
2.5	1.30	2075	SIFN56C16B560 - 80A-4G	560.89		25 500	117	M28	
2.6	2.50	2035	SIFN66C36B560 - 80A-4G	550.14		38 000	202	M36	




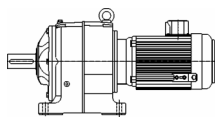
4. SI4

P 0.55 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
2.3	1.20	2296	SIFN56C16B630 - 80A-4G	620.84		25 500	117	M28	
2.2	2.10	2352	SIFN66C36B630 - 80A-4G	635.98		38 000	202	M36	
2.1	1.10	2558	SIFN56C16B710 - 80A-4G	691.69		25 500	117	M28	
2.0	1.90	2631	SIFN66C36B710 - 80A-4G	711.36		38 000	202	M36	
1.8	0.97	2873	SIFN56C16B800 - 80A-4G	776.71		25 500	117	M28	
1.8	1.70	2980	SIFN66C36B800 - 80A-4G	805.65		38 000	202	M36	
1.6	0.88	3198	SIFN56C16B900 - 80A-4G	864.61		25 500	117	M28	
1.6	1.60	3199	SIFN66C36B900 - 80A-4G	864.90		38 000	202	M36	
1.5	2.60	3446	SIFN76C36B900 - 80A-4G	931.69		52 500	297	M46	
1.4	1.40	3623	SIFN66C36B1000 - 80A-4G	979.54		38 000	202	M36	
1.4	2.50	3643	SIFN76C36B1000 - 80A-4G	985.04		52 500	297	M46	
1.3	1.30	3951	SIFN66C36B1120 - 80A-4G	1068.15		38 000	202	M36	
1.3	2.20	4023	SIFN76C36B1120 - 80A-4G	1087.67		52 500	297	M46	
1.1	1.10	4573	SIFN66C36B1250 - 80A-4G	1236.39		38 000	202	M36	
1.1	1.90	4697	SIFN76C36B1250 - 80A-4G	1269.92		52 500	297	M46	
1.0	0.99	5049	SIFN66C36B1400 - 80A-4G	1365.20		38 000	202	M36	
1.0	1.70	5359	SIFN76C36B1400 - 80A-4G	1448.88		52 500	297	M46	
1.0	2.80	5321	SIFN86C36B1400 - 80A-4G	1438.59		82 000	467	M55	
0.9	0.83	6041	SIFN66C36B1600 - 80A-4G	1633.34		38 000	202	M36	
0.9	1.50	5928	SIFN76C36B1600 - 80A-4G	1602.81		52 500	297	M46	
0.9	2.50	5924	SIFN86C36B1600 - 80A-4G	1601.76		82 000	467	M55	
0.8	1.40	6586	SIFN76C36B1800 - 80A-4G	1780.55		52 500	297	M46	
0.8	2.30	6638	SIFN86C36B1800 - 80A-4G	1794.60		82 000	467	M55	
0.7	1.20	7210	SIFN76C36B2000 - 80A-4G	1949.38		52 500	297	M46	
0.7	2.00	7343	SIFN86C36B2000 - 80A-4G	1985.27		82 000	467	M55	
0.6	1.10	8303	SIFN76C36B2240 - 80A-4G	2244.83		52 500	297	M46	
0.6	1.80	8157	SIFN86C36B2240 - 80A-4G	2205.41		82 000	467	M55	
0.6	3.00	8337	SIFN96C36B2240 - 80A-4G	2254.03		105 000	677	M64	
0.6	0.98	9162	SIFN76C36B2500 - 80A-4G	2476.98		52 500	297	M46	
0.6	1.70	9072	SIFN86C36C2500 - 80A-4G	2452.88		82 000	467	M55	
0.6	2.70	9199	SIFN96C36B2500 - 80A-4G	2487.13		105 000	677	M64	
0.5	0.87	10295	SIFN76C36B2800 - 80A-4G	2783.49		52 500	297	M46	
0.5	1.50	10275	SIFN86C36C2800 - 80A-4G	2778.01		82 000	467	M55	
0.5	2.40	10337	SIFN96C36B2800 - 80A-4G	2794.90		105 000	677	M64	
0.5	1.30	11204	SIFN86C36C3150 - 80A-4G	3029.31		82 000	467	M55	
0.5	2.20	11510	SIFN96C36B3150 - 80A-4G	3111.91		105 000	677	M64	
0.4	1.20	12969	SIFN86C36C3550 - 80A-4G	3506.46		82 000	467	M55	
0.4	1.90	12896	SIFN96C36B3550 - 80A-4G	3486.56		105 000	677	M64	
0.4	1.00	14320	SIFN86C36C4000 - 80A-4G	3871.78		82 000	467	M55	
0.4	1.70	14343	SIFN96C36C4000 - 80A-4G	3877.79		105 000	677	M64	
0.3	0.88	17133	SIFN86C36C4500 - 80A-4G	4632.23		82 000	467	M55	
0.3	1.50	16244	SIFN96C36C4500 - 80A-4G	4391.79		105 000	677	M64	
0.3	1.40	17713	SIFN96C36C5000 - 80A-4G	4789.07		105 000	677	M64	
0.3	1.20	20503	SIFN96C36C5600 - 80A-4G	5543.39		105 000	677	M64	
0.2	1.10	22639	SIFN96C36C6300 - 80A-4G	6120.94		105 000	677	M64	
0.2	0.92	27086	SIFN96C36C7100 - 80A-4G	7323.15		105 000	677	M64	
0.2	0.83	30158	SIFN96C36C8000 - 80A-4G	8153.70		105 000	677	M64	




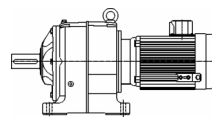
P 0.75 kW n₁ 1415 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
505.3	7.10	14	SIFN16B2.8 - 80B-4G	2.80		3 800	20	M01	
440.8	6.50	16	SIFN16B3.15 - 80B-4G	3.21		4 000	20	M01	
411.3	6.30	17	SIFN16B3.55 - 80B-4G	3.44		4 000	20	M01	
357.4	5.70	20	SIFN16B4 - 80B-4G	3.96		4 200	20	M01	
309.2	5.20	23	SIFN16B4.5 - 80B-4G	4.58		4 400	20	M01	
286.9	5.00	25	SIFN16B5 - 80B-4G	4.93		4 500	20	M01	
247.4	4.50	29	SIFN16B5.6 - 80B-4G	5.72		4 800	20	M01	
215.8	4.10	33	SIFN16B6.3 - 80B-4G	6.56		5 000	20	M01	
201.4	4.10	36	SIFN16B7.1 - 80B-4G	7.03		5 100	20	M01	
175.0	3.70	41	SIFN16B8 - 80B-4G	8.09		5 300	20	M01	
151.3	3.40	47	SIFN16B9 - 80B-4G	9.35		5 500	20	M01	
140.4	3.30	51	SIFN16B10 - 80B-4G	10.08		5 600	20	M01	
130.1	3.30	55	SIFN16B11.2 - 80B-4G	10.88		5 700	20	M01	
110.9	2.80	65	SIFN16B12.5 - 80B-4G	12.76		6 000	20	M01	
101.9	2.60	70	SIFN16B14 - 80B-4G	13.89		6 000	20	M01	
85.2	2.10	84	SIFN16B16 - 80B-4G	16.61		6 000	20	M01	
77.4	1.90	93	SIFN16B18 - 80B-4G	18.28		6 000	20	M01	
69.9	1.80	102	SIFN16B20 - 80B-4G	20.24		6 000	20	M01	
62.8	1.60	114	SIFN16B22.4 - 80B-4G	22.55		6 000	20	M01	
55.9	1.40	128	SIFN16B25 - 80B-4G	25.32		6 000	20	M01	
55.8	2.80	128	SIFN26B25 - 80B-4G	25.36		6 500	28	M06	
50.2	1.30	143	SIFN16B28 - 80B-4G	28.18		6 000	20	M01	
50.3	2.50	142	SIFN26B28 - 80B-4G	28.12		6 500	28	M06	
50.0	2.90	143	SIFN26C28 - 80B-4G	28.31		6 500	28	M06	
44.9	1.10	160	SIFN16B31.5 - 80B-4G	31.52		6 000	20	M01	
46.6	1.30	154	SIFN16C31.5 - 80B-4G	30.35		6 000	20	M01	
45.0	2.30	159	SIFN26B31.5 - 80B-4G	31.42		6 500	28	M06	
47.1	2.80	152	SIFN26C31.5 - 80B-4G	30.06		6 500	28	M06	
38.6	0.97	185	SIFN16B35.5 - 80B-4G	36.64		6 000	20	M01	
43.2	1.20	166	SIFN16C35.5 - 80B-4G	32.76		6 000	20	M01	
40.6	2.00	176	SIFN26B35.5 - 80B-4G	34.81		6 500	28	M06	
39.0	2.30	183	SIFN26C35.5 - 80B-4G	36.25		6 500	28	M06	
34.7	0.87	207	SIFN16B40 - 80B-4G	40.82		6 000	20	M01	
36.8	1.00	195	SIFN16C40 - 80B-4G	38.45		6 000	20	M01	
36.5	1.80	196	SIFN26B40 - 80B-4G	38.78		6 500	28	M06	
36.6	2.10	196	SIFN26C40 - 80B-4G	38.71		6 500	28	M06	
33.6	0.84	213	SIFN16B45 - 80B-4G	42.13		6 000	20	M01	
31.7	1.60	226	SIFN26B45 - 80B-4G	44.63		6 500	28	M06	
31.9	1.90	225	SIFN26C45 - 80B-4G	44.40		6 500	28	M06	
28.3	1.40	253	SIFN26B50 - 80B-4G	50.07		6 500	28	M06	
27.5	1.60	260	SIFN26C50 - 80B-4G	51.42		6 500	28	M06	
28.2	2.80	254	SIFN36B50 - 80B-4G	50.15		11 000	48	M12	
25.5	1.50	281	SIFN26C56 - 80B-4G	55.60		6 500	28	M06	
24.4	2.40	294	SIFN36B56 - 80B-4G	58.11		11 000	48	M12	
25.4	2.90	282	SIFN36C56 - 80B-4G	55.78		11 000	48	M12	
21.9	1.30	327	SIFN26C63 - 80B-4G	64.64		6 500	28	M06	
22.4	2.60	320	SIFN36C63 - 80B-4G	63.17		11 000	48	M12	
19.7	1.20	364	SIFN26C71 - 80B-4G	71.97		6 500	28	M06	
20.5	2.40	349	SIFN36C71 - 80B-4G	68.88		11 000	48	M12	
17.9	1.00	401	SIFN26C80 - 80B-4G	79.24		6 500	28	M06	
17.7	2.00	404	SIFN36C80 - 80B-4G	79.73		11 000	48	M12	
16.1	0.94	445	SIFN26C90 - 80B-4G	87.84		6 500	28	M06	





4. SI4

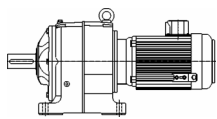
P 0.75 kW
n₁ 1415 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
16.1	1.80	446	SIFN36C90 - 80B-4G	88.04		11 000	48	M12	
14.4	0.85	497	SIFN26C100 - 80B-4G	98.16		6 500	28	M06	
13.4	1.50	533	SIFN36C100 - 80B-4G	105.33		11 000	48	M12	
12.1	1.40	594	SIFN36C112 - 80B-4G	117.28		11 000	48	M12	
10.9	1.20	657	SIFN36C125 - 80B-4G	129.74		11 000	48	M12	
11.8	2.60	605	SIFN46C125 - 80B-4G	119.59		21 000	67	M20	
9.8	1.10	730	SIFN36C140 - 80B-4G	144.13		11 000	48	M12	
10.8	2.40	665	SIFN46C140 - 80B-4G	131.33		21 000	67	M20	
8.5	0.97	845	SIFN36C160 - 80B-4G	166.99		11 000	48	M12	
9.0	2.00	793	SIFN46C160 - 80B-4G	156.72		21 000	67	M20	
7.8	0.90	914	SIFN36C16B180 - 80B-4G	180.52		11 000	58	M12	
8.1	1.80	889	SIFN46C180 - 80B-4G	175.71		21 000	67	M20	
7.2	1.60	994	SIFN46C16B200 - 80B-4G	196.41		21 000	77	M20	
7.0	2.70	1018	SIFN56C16B200 - 80B-4G	201.19		25 500	118	M28	
6.3	1.40	1140	SIFN46C16B224 - 80B-4G	225.17		21 000	77	M20	
6.6	2.60	1091	SIFN56C16B224 - 80B-4G	215.58		25 500	118	M28	
5.9	1.30	1221	SIFN46C16B250 - 80B-4G	241.27		21 000	77	M20	
5.7	2.20	1256	SIFN56C16B250 - 80B-4G	248.11		25 500	118	M28	
5.1	1.10	1405	SIFN46C16B280 - 80B-4G	277.68		21 000	77	M20	
4.9	1.90	1452	SIFN56C16B280 - 80B-4G	286.83		25 500	118	M28	
4.4	0.98	1625	SIFN46C16B315 - 80B-4G	321.02		21 000	77	M20	
4.6	1.80	1564	SIFN56C16B315 - 80B-4G	309.10		25 500	118	M28	
4.1	0.91	1751	SIFN46C16B355 - 80B-4G	345.94		21 000	77	M20	
4.2	1.70	1689	SIFN56C16B355 - 80B-4G	333.71		25 500	118	M28	
3.9	2.70	1838	SIFN66C36B355 - 80B-4G	363.09		38 000	203	M36	
3.8	0.85	1890	SIFN46C16B400 - 80B-4G	373.48		21 000	77	M20	
3.6	1.40	1982	SIFN56C16B400 - 80B-4G	391.62		25 500	118	M28	
3.7	2.60	1960	SIFN66C36B400 - 80B-4G	387.33		38 000	203	M36	
3.3	1.30	2156	SIFN56C16B450 - 80B-4G	426.00		25 500	118	M28	
3.2	2.30	2220	SIFN66C36B450 - 80B-4G	438.67		38 000	203	M36	
2.8	1.10	2579	SIFN56C16B500 - 80B-4G	509.50		25 500	118	M28	
2.8	1.90	2593	SIFN66C36B500 - 80B-4G	512.37		38 000	203	M36	
2.5	0.99	2839	SIFN56C16B560 - 80B-4G	560.89		25 500	118	M28	
2.6	1.80	2785	SIFN66C36B560 - 80B-4G	550.14		38 000	203	M36	
2.3	0.89	3142	SIFN56C16B630 - 80B-4G	620.84		25 500	118	M28	
2.2	1.60	3219	SIFN66C36B630 - 80B-4G	635.98		38 000	203	M36	
2.3	2.80	3178	SIFN76C36B630 - 80B-4G	627.78		52 500	298	M46	
2.0	0.80	3501	SIFN56C16B710 - 80B-4G	691.69		25 500	118	M28	
2.0	1.40	3601	SIFN66C36B710 - 80B-4G	711.36		38 000	203	M36	
2.1	2.60	3488	SIFN76C36B710 - 80B-4G	689.07		52 500	298	M46	
1.8	1.20	4078	SIFN66C36B800 - 80B-4G	805.65		38 000	203	M36	
1.8	2.30	3950	SIFN76C36B800 - 80B-4G	780.40		52 500	298	M46	
1.6	1.10	4378	SIFN66C36B900 - 80B-4G	864.90		38 000	203	M36	
1.5	1.90	4716	SIFN76C36B900 - 80B-4G	931.69		52 500	298	M46	
1.4	1.00	4958	SIFN66C36B1000 - 80B-4G	979.54		38 000	203	M36	
1.4	1.80	4986	SIFN76C36B1000 - 80B-4G	985.04		52 500	298	M46	
1.4	3.00	4950	SIFN86C36B1000 - 80B-4G	978.04		82 000	468	M55	
1.3	0.92	5406	SIFN66C36B1120 - 80B-4G	1068.15		38 000	203	M36	
1.3	1.60	5505	SIFN76C36B1120 - 80B-4G	1087.67		52 500	298	M46	
1.2	2.60	5820	SIFN86C36B1120 - 80B-4G	1149.77		82 000	468	M55	
1.1	0.80	6258	SIFN66C36B1250 - 80B-4G	1236.39		38 000	203	M36	
1.1	1.40	6428	SIFN76C36B1250 - 80B-4G	1269.92		52 500	298	M46	



P		0.75 kW							
n₁		1415 min⁻¹							
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.1	2.30	6480	SIFN86C36B1250 - 80B-4G	1280.17		82 000	468	M55	
1.0	1.20	7333	SIFN76C36B1400 - 80B-4G	1448.88		52 500	298	M46	
1.0	2.10	7281	SIFN86C36B1400 - 80B-4G	1438.59		82 000	468	M55	
0.9	1.10	8113	SIFN76C36B1600 - 80B-4G	1602.81		52 500	298	M46	
0.9	1.90	8107	SIFN86C36B1600 - 80B-4G	1601.76		82 000	468	M55	
0.9	3.00	8338	SIFN96C36B1600 - 80B-4G	1647.33		105 000	678	M64	
0.8	1.00	9012	SIFN76C36B1800 - 80B-4G	1780.55		52 500	298	M46	
0.8	1.70	9083	SIFN86C36B1800 - 80B-4G	1794.60		82 000	468	M55	
0.8	2.70	9284	SIFN96C36B1800 - 80B-4G	1834.16		105 000	678	M64	
0.7	0.91	9867	SIFN76C36B2000 - 80B-4G	1949.38		52 500	298	M46	
0.7	1.50	10048	SIFN86C36B2000 - 80B-4G	1985.27		82 000	468	M55	
0.7	2.40	10270	SIFN96C36B2000 - 80B-4G	2029.03		105 000	678	M64	
0.6	1.30	11163	SIFN86C36B2240 - 80B-4G	2205.41		82 000	468	M55	
0.6	2.20	11409	SIFN96C36B2240 - 80B-4G	2254.03		105 000	678	M64	
0.6	1.20	12415	SIFN86C36C2500 - 80B-4G	2452.88		82 000	468	M55	
0.6	2.00	12589	SIFN96C36B2500 - 80B-4G	2487.13		105 000	678	M64	
0.5	1.10	14061	SIFN86C36C2800 - 80B-4G	2778.01		82 000	468	M55	
0.5	1.80	14146	SIFN96C36B2800 - 80B-4G	2794.90		105 000	678	M64	
0.5	0.98	15333	SIFN86C36C3150 - 80B-4G	3029.31		82 000	468	M55	
0.5	1.60	15751	SIFN96C36B3150 - 80B-4G	3111.91		105 000	678	M64	
0.4	0.85	17748	SIFN86C36C3550 - 80B-4G	3506.46		82 000	468	M55	
0.4	1.40	17647	SIFN96C36B3550 - 80B-4G	3486.56		105 000	678	M64	
0.4	1.30	19627	SIFN96C36C4000 - 80B-4G	3877.79		105 000	678	M64	
0.3	1.10	22229	SIFN96C36C4500 - 80B-4G	4391.79		105 000	678	M64	
0.3	1.00	24240	SIFN96C36C5000 - 80B-4G	4789.07		105 000	678	M64	
0.3	0.89	28058	SIFN96C36C5600 - 80B-4G	5543.39		105 000	678	M64	
0.2	0.81	30981	SIFN96C36C6300 - 80B-4G	6120.94		105 000	678	M64	

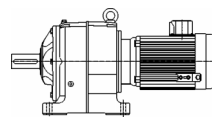
P		1.1 kW							
n₁		1410 min⁻¹							
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
503.5	4.80	21	SIFN16B2.8 - 90S-4G	2.80		3 700	25	M01	
439.2	4.40	24	SIFN16B3.15 - 90S-4G	3.21		3 900	25	M01	
409.9	4.30	26	SIFN16B3.55 - 90S-4G	3.44		4 000	25	M01	
356.1	3.90	29	SIFN16B4 - 90S-4G	3.96		4 100	25	M01	
308.1	3.50	34	SIFN16B4.5 - 90S-4G	4.58		4 300	25	M01	
285.9	3.40	37	SIFN16B5 - 90S-4G	4.93		4 400	25	M01	
246.5	3.10	43	SIFN16B5.6 - 90S-4G	5.72		4 600	25	M01	
215.0	2.80	49	SIFN16B6.3 - 90S-4G	6.56		4 800	25	M01	
200.7	2.80	52	SIFN16B7.1 - 90S-4G	7.03		4 900	25	M01	
174.4	2.50	60	SIFN16B8 - 90S-4G	8.09		5 100	25	M01	
150.8	2.30	70	SIFN16B9 - 90S-4G	9.35		5 300	25	M01	
140.0	2.30	75	SIFN16B10 - 90S-4G	10.08		5 400	25	M01	
129.6	2.20	81	SIFN16B11.2 - 90S-4G	10.88		5 500	25	M01	
110.5	1.90	95	SIFN16B12.5 - 90S-4G	12.76		5 800	25	M01	
101.5	1.70	103	SIFN16B14 - 90S-4G	13.89		5 900	25	M01	
84.9	1.50	124	SIFN16B16 - 90S-4G	16.61		6 000	25	M01	
85.7	2.90	123	SIFN26B16 - 90S-4G	16.46		6 300	33	M06	



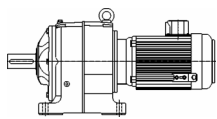
4. SI4

P 1.1 kW
n₁ 1410 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
77.1	1.30	136	SIFN16B18 - 90S-4G	18.28		6 000	25	M01	
79.2	2.70	133	SIFN26B18 - 90S-4G	17.80		6 500	33	M06	
82.5	2.90	127	SIFN26C18 - 90S-4G	17.09		6 400	33	M06	
69.7	1.20	151	SIFN16B20 - 90S-4G	20.24		6 000	25	M01	
68.2	2.30	154	SIFN26B20 - 90S-4G	20.69		6 500	33	M06	
74.0	2.70	142	SIFN26C20 - 90S-4G	19.06		6 500	33	M06	
62.5	1.10	168	SIFN16B22.4 - 90S-4G	22.55		6 000	25	M01	
61.2	2.10	172	SIFN26B22.4 - 90S-4G	23.03		6 500	33	M06	
62.7	2.50	168	SIFN26C22.4 - 90S-4G	22.49		6 500	33	M06	
55.7	0.95	189	SIFN16B25 - 90S-4G	25.32		6 000	25	M01	
55.6	1.90	189	SIFN26B25 - 90S-4G	25.36		6 500	33	M06	
56.0	2.20	188	SIFN26C25 - 90S-4G	25.20		6 500	33	M06	
50.0	0.86	210	SIFN16B28 - 90S-4G	28.18		6 000	25	M01	
50.1	1.70	209	SIFN26B28 - 90S-4G	28.12		6 500	33	M06	
49.8	2.00	211	SIFN26C28 - 90S-4G	28.31		6 500	33	M06	
46.5	0.88	226	SIFN16C31.5 - 90S-4G	30.35		6 000	25	M01	
44.9	1.50	234	SIFN26B31.5 - 90S-4G	31.42		6 500	33	M06	
46.9	1.90	224	SIFN26C31.5 - 90S-4G	30.06		6 500	33	M06	
43.0	0.82	244	SIFN16C35.5 - 90S-4G	32.76		6 000	25	M01	
40.5	1.40	259	SIFN26B35.5 - 90S-4G	34.81		6 500	33	M06	
38.9	1.60	270	SIFN26C35.5 - 90S-4G	36.25		6 500	33	M06	
38.5	2.60	273	SIFN36B35.5 - 90S-4G	36.65		11 000	53	M12	
38.7	3.00	271	SIFN36C35.5 - 90S-4G	36.41		11 000	53	M12	
36.4	1.20	289	SIFN26B40 - 90S-4G	38.78		6 500	33	M06	
36.4	1.50	288	SIFN26C40 - 90S-4G	38.71		6 500	33	M06	
34.6	2.40	304	SIFN36B40 - 90S-4G	40.81		11 000	53	M12	
36.2	2.80	291	SIFN36C40 - 90S-4G	39.00		11 000	53	M12	
31.6	1.10	332	SIFN26B45 - 90S-4G	44.63		6 500	33	M06	
31.8	1.30	331	SIFN26C45 - 90S-4G	44.40		6 500	33	M06	
31.2	2.10	336	SIFN36B45 - 90S-4G	45.14		11 000	53	M12	
30.9	2.40	340	SIFN36C45 - 90S-4G	45.60		11 000	53	M12	
28.2	0.97	373	SIFN26B50 - 90S-4G	50.07		6 500	33	M06	
27.4	1.10	383	SIFN26C50 - 90S-4G	51.42		6 500	33	M06	
28.1	1.90	374	SIFN36B50 - 90S-4G	50.15		11 000	53	M12	
28.7	2.20	366	SIFN36C50 - 90S-4G	49.12		11 000	53	M12	
25.4	1.00	414	SIFN26C56 - 90S-4G	55.60		6 500	33	M06	
24.3	1.70	433	SIFN36B56 - 90S-4G	58.11		11 000	53	M12	
25.3	2.00	416	SIFN36C56 - 90S-4G	55.78		11 000	53	M12	
21.8	0.87	482	SIFN26C63 - 90S-4G	64.64		6 500	33	M06	
22.3	1.70	471	SIFN36C63 - 90S-4G	63.17		11 000	53	M12	
20.5	1.60	513	SIFN36C71 - 90S-4G	68.88		11 000	53	M12	
17.7	1.40	594	SIFN36C80 - 90S-4G	79.73		11 000	53	M12	
18.8	2.90	559	SIFN46C80 - 90S-4G	74.99		21 000	72	M20	
16.0	1.30	656	SIFN36C90 - 90S-4G	88.04		11 000	53	M12	
16.8	2.60	624	SIFN46C90 - 90S-4G	83.75		21 000	72	M20	
13.4	1.00	785	SIFN36C100 - 90S-4G	105.33		11 000	53	M12	
14.8	2.20	712	SIFN46C100 - 90S-4G	95.56		21 000	72	M20	
12.0	0.94	874	SIFN36C112 - 90S-4G	117.28		11 000	53	M12	
13.6	2.10	772	SIFN46C112 - 90S-4G	103.60		21 000	72	M20	
10.9	0.85	967	SIFN36C125 - 90S-4G	129.74		11 000	53	M12	
11.8	1.80	891	SIFN46C125 - 90S-4G	119.59		21 000	72	M20	
11.4	3.00	925	SIFN56C125 - 90S-4G	124.11		25 500	113	M28	




P 1.1 kW n₁ 1410 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
10.7	1.60	978	SIFN46C140 - 90S-4G	131.33		21 000	72	M20	
10.2	2.70	1031	SIFN56C140 - 90S-4G	138.44		25 500	113	M28	
9.0	1.40	1168	SIFN46C160 - 90S-4G	156.72		21 000	72	M20	
9.2	2.40	1147	SIFN56C160 - 90S-4G	153.96		25 500	113	M28	
8.0	1.20	1309	SIFN46C180 - 90S-4G	175.71		21 000	72	M20	
8.0	2.10	1307	SIFN56C16B180 - 90S-4G	175.50		25 500	123	M28	
7.2	1.10	1463	SIFN46C16B200 - 90S-4G	196.41		21 000	82	M20	
7.0	1.90	1499	SIFN56C16B200 - 90S-4G	201.19		25 500	123	M28	
6.3	0.95	1677	SIFN46C16B224 - 90S-4G	225.17		21 000	82	M20	
6.5	1.70	1606	SIFN56C16B224 - 90S-4G	215.58		25 500	123	M28	
5.8	0.89	1797	SIFN46C16B250 - 90S-4G	241.27		21 000	82	M20	
5.7	1.50	1848	SIFN56C16B250 - 90S-4G	248.11		25 500	123	M28	
5.8	2.80	1818	SIFN66C36B250 - 90S-4G	244.01		38 000	208	M36	
4.9	1.30	2137	SIFN56C16B280 - 90S-4G	286.83		25 500	123	M28	
5.0	2.40	2110	SIFN66C36B280 - 90S-4G	283.24		38 000	208	M36	
4.6	1.20	2303	SIFN56C16B315 - 90S-4G	309.10		25 500	123	M28	
4.4	2.10	2363	SIFN66C36B315 - 90S-4G	317.13		38 000	208	M36	
4.2	1.10	2486	SIFN56C16B355 - 90S-4G	333.71		25 500	123	M28	
3.9	1.80	2705	SIFN66C36B355 - 90S-4G	363.09		38 000	208	M36	
3.6	0.96	2917	SIFN56C16B400 - 90S-4G	391.62		25 500	123	M28	
3.6	1.70	2886	SIFN66C36B400 - 90S-4G	387.33		38 000	208	M36	
3.5	3.00	3019	SIFN76C36B400 - 90S-4G	405.24		52 500	303	M46	
3.3	0.88	3174	SIFN56C16B450 - 90S-4G	426.00		25 500	123	M28	
3.2	1.50	3268	SIFN66C36B450 - 90S-4G	438.67		38 000	208	M36	
3.1	2.70	3351	SIFN76C36B450 - 90S-4G	449.84		52 500	303	M46	
2.8	1.30	3817	SIFN66C36B500 - 90S-4G	512.37		38 000	208	M36	
2.9	2.40	3679	SIFN76C36B500 - 90S-4G	493.78		52 500	303	M46	
2.6	1.20	4098	SIFN66C36B560 - 90S-4G	550.14		38 000	208	M36	
2.5	2.20	4130	SIFN76C36B560 - 90S-4G	554.31		52 500	303	M46	
2.2	1.10	4738	SIFN66C36B630 - 90S-4G	635.98		38 000	208	M36	
2.2	1.90	4677	SIFN76C36B630 - 90S-4G	627.78		52 500	303	M46	
2.0	0.94	5299	SIFN66C36B710 - 90S-4G	711.36		38 000	208	M36	
2.0	1.80	5133	SIFN76C36B710 - 90S-4G	689.07		52 500	303	M46	
2.0	2.90	5137	SIFN86C36B710 - 90S-4G	689.53		82 000	473	M55	
1.8	0.83	6002	SIFN66C36B800 - 90S-4G	805.65		38 000	208	M36	
1.8	1.50	5814	SIFN76C36B800 - 90S-4G	780.40		52 500	303	M46	
1.8	2.60	5773	SIFN86C36B800 - 90S-4G	774.86		82 000	473	M55	
1.5	1.30	6941	SIFN76C36B900 - 90S-4G	931.69		52 500	303	M46	
1.6	2.30	6484	SIFN86C36B900 - 90S-4G	870.34		82 000	473	M55	
1.4	1.20	7338	SIFN76C36B1000 - 90S-4G	985.04		52 500	303	M46	
1.4	2.10	7286	SIFN86C36B1000 - 90S-4G	978.04		82 000	473	M55	
1.3	1.10	8103	SIFN76C36B1120 - 90S-4G	1087.67		52 500	303	M46	
1.2	1.80	8566	SIFN86C36B1120 - 90S-4G	1149.77		82 000	473	M55	
1.1	0.95	9461	SIFN76C36B1250 - 90S-4G	1269.92		52 500	303	M46	
1.1	1.60	9537	SIFN86C36B1250 - 90S-4G	1280.17		82 000	473	M55	
1.1	2.70	9290	SIFN96C36B1250 - 90S-4G	1246.98		105 000	683	M64	
1.0	0.83	10794	SIFN76C36B1400 - 90S-4G	1448.88		52 500	303	M46	
1.0	1.40	10717	SIFN86C36B1400 - 90S-4G	1438.59		82 000	473	M55	
1.0	2.40	10258	SIFN96C36B1400 - 90S-4G	1376.90		105 000	683	M64	
0.9	1.30	11933	SIFN86C36B1600 - 90S-4G	1601.76		82 000	473	M55	
0.9	2.00	12272	SIFN96C36B1600 - 90S-4G	1647.33		105 000	683	M64	
0.8	1.10	13369	SIFN86C36B1800 - 90S-4G	1794.60		82 000	473	M55	




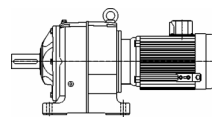
4. SI4


P 1.1 kW
n₁ 1410 min⁻¹

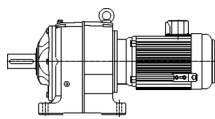
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.8	1.80	13664	SIFN96C36B1800 - 90S-4G	1834.16		105 000	683	M64	
0.7	1.00	14790	SIFN86C36B2000 - 90S-4G	1985.27		82 000	473	M55	
0.7	1.70	15116	SIFN96C36B2000 - 90S-4G	2029.03		105 000	683	M64	
0.6	0.91	16430	SIFN86C36B2240 - 90S-4G	2205.41		82 000	473	M55	
0.6	1.50	16792	SIFN96C36B2240 - 90S-4G	2254.03		105 000	683	M64	
0.6	0.82	18274	SIFN86C36C2500 - 90S-4G	2452.88		82 000	473	M55	
0.6	1.30	18529	SIFN96C36B2500 - 90S-4G	2487.13		105 000	683	M64	
0.5	1.20	20821	SIFN96C36B2800 - 90S-4G	2794.90		105 000	683	M64	
0.5	1.10	23183	SIFN96C36B3150 - 90S-4G	3111.91		105 000	683	M64	
0.4	0.96	25974	SIFN96C36B3550 - 90S-4G	3486.56		105 000	683	M64	
0.4	0.87	28889	SIFN96C36C4000 - 90S-4G	3877.79		105 000	683	M64	

P 1.5 kW
n₁ 1410 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
503.5	3.50	28	SIFN16B2.8 - 90L-4G	2.80		3 600	26	M01	
439.2	3.20	33	SIFN16B3.15 - 90L-4G	3.21		3 800	26	M01	
409.9	3.10	35	SIFN16B3.55 - 90L-4G	3.44		3 900	26	M01	
356.1	2.90	40	SIFN16B4 - 90L-4G	3.96		4 000	26	M01	
308.1	2.60	46	SIFN16B4.5 - 90L-4G	4.58		4 200	26	M01	
285.9	2.50	50	SIFN16B5 - 90L-4G	4.93		4 200	26	M01	
246.5	2.20	58	SIFN16B5.6 - 90L-4G	5.72		4 500	26	M01	
215.0	2.10	67	SIFN16B6.3 - 90L-4G	6.56		4 700	26	M01	
200.7	2.00	71	SIFN16B7.1 - 90L-4G	7.03		4 800	26	M01	
174.4	1.90	82	SIFN16B8 - 90L-4G	8.09		4 900	26	M01	
150.8	1.70	95	SIFN16B9 - 90L-4G	9.35		5 100	26	M01	
140.0	1.70	102	SIFN16B10 - 90L-4G	10.08		5 200	26	M01	
129.6	1.60	110	SIFN16B11.2 - 90L-4G	10.88		5 300	26	M01	
110.5	1.40	130	SIFN16B12.5 - 90L-4G	12.76		5 500	26	M01	
113.8	2.90	126	SIFN26B12.5 - 90L-4G	12.39		5 700	34	M06	
101.5	1.30	141	SIFN16B14 - 90L-4G	13.89		5 600	26	M01	
99.2	2.50	144	SIFN26B14 - 90L-4G	14.21		5 900	34	M06	
84.9	1.10	169	SIFN16B16 - 90L-4G	16.61		5 800	26	M01	
85.7	2.20	167	SIFN26B16 - 90L-4G	16.46		6 100	34	M06	
77.1	0.97	186	SIFN16B18 - 90L-4G	18.28		5 900	26	M01	
79.2	2.00	181	SIFN26B18 - 90L-4G	17.80		6 200	34	M06	
69.7	0.88	206	SIFN16B20 - 90L-4G	20.24		6 000	26	M01	
68.2	1.70	210	SIFN26B20 - 90L-4G	20.69		6 400	34	M06	
74.0	2.00	194	SIFN26C20 - 90L-4G	19.06		6 300	34	M06	
66.6	0.84	215	SIFN16C22.4 - 90L-4G	21.17		6 000	26	M01	
61.2	1.50	234	SIFN26B22.4 - 90L-4G	23.03		6 500	34	M06	
62.7	1.80	229	SIFN26C22.4 - 90L-4G	22.49		6 500	34	M06	
55.6	1.40	258	SIFN26B25 - 90L-4G	25.36		6 500	34	M06	
56.0	1.60	256	SIFN26C25 - 90L-4G	25.20		6 500	34	M06	
58.8	3.00	243	SIFN36B25 - 90L-4G	23.97		11 000	54	M12	
50.1	1.30	286	SIFN26B28 - 90L-4G	28.12		6 500	34	M06	
49.8	1.50	288	SIFN26C28 - 90L-4G	28.31		6 500	34	M06	




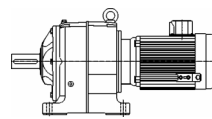
P 1.5 kW n ₁ 1410 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
50.8	2.60	282	SIFN36B28 - 90L-4G	27.74		11 000	54	M12	
44.9	1.10	319	SIFN26B31.5 - 90L-4G	31.42		6 500	34	M06	
46.9	1.40	305	SIFN26C31.5 - 90L-4G	30.06		6 500	34	M06	
46.0	2.30	311	SIFN36B31.5 - 90L-4G	30.63		11 000	54	M12	
43.0	2.50	333	SIFN36C31.5 - 90L-4G	32.80		11 000	54	M12	
40.5	1.00	354	SIFN26B35.5 - 90L-4G	34.81		6 500	34	M06	
38.5	1.90	372	SIFN36B35.5 - 90L-4G	36.65		11 000	54	M12	
38.7	2.20	370	SIFN36C35.5 - 90L-4G	36.41		11 000	54	M12	
36.4	0.91	394	SIFN26B40 - 90L-4G	38.78		6 500	34	M06	
36.4	1.10	393	SIFN26C40 - 90L-4G	38.71		6 500	34	M06	
34.6	1.70	415	SIFN36B40 - 90L-4G	40.81		11 000	54	M12	
36.2	2.10	396	SIFN36C40 - 90L-4G	39.00		11 000	54	M12	
31.8	0.93	451	SIFN26C45 - 90L-4G	44.40		6 500	34	M06	
31.2	1.60	459	SIFN36B45 - 90L-4G	45.14		11 000	54	M12	
30.9	1.80	463	SIFN36C45 - 90L-4G	45.60		11 000	54	M12	
30.3	3.00	472	SIFN46B45 - 90L-4G	46.48		21 000	73	M20	
27.4	0.80	522	SIFN26C50 - 90L-4G	51.42		6 500	34	M06	
28.1	1.40	509	SIFN36B50 - 90L-4G	50.15		11 000	54	M12	
28.7	1.60	499	SIFN36C50 - 90L-4G	49.12		11 000	54	M12	
27.1	2.60	529	SIFN46B50 - 90L-4G	52.12		21 000	73	M20	
24.3	1.20	590	SIFN36B56 - 90L-4G	58.11		11 000	54	M12	
25.3	1.40	567	SIFN36C56 - 90L-4G	55.78		11 000	54	M12	
27.1	3.00	529	SIFN46C56 - 90L-4G	52.10		21 000	73	M20	
22.3	1.30	642	SIFN36C63 - 90L-4G	63.17		11 000	54	M12	
23.6	2.60	606	SIFN46C63 - 90L-4G	59.67		21 000	73	M20	
20.5	1.20	700	SIFN36C71 - 90L-4G	68.88		11 000	54	M12	
20.1	2.20	712	SIFN46C71 - 90L-4G	70.07		21 000	73	M20	
17.7	1.00	810	SIFN36C80 - 90L-4G	79.73		11 000	54	M12	
18.8	2.10	762	SIFN46C80 - 90L-4G	74.99		21 000	73	M20	
16.0	0.92	894	SIFN36C90 - 90L-4G	88.04		11 000	54	M12	
16.8	1.90	851	SIFN46C90 - 90L-4G	83.75		21 000	73	M20	
14.8	1.60	971	SIFN46C100 - 90L-4G	95.56		21 000	73	M20	
14.5	2.80	986	SIFN56C100 - 90L-4G	97.06		25 500	114	M28	
13.6	1.50	1052	SIFN46C112 - 90L-4G	103.60		21 000	73	M20	
13.4	2.60	1069	SIFN56C112 - 90L-4G	105.19		25 500	114	M28	
11.8	1.30	1215	SIFN46C125 - 90L-4G	119.59		21 000	73	M20	
11.4	2.20	1261	SIFN56C125 - 90L-4G	124.11		25 500	114	M28	
10.7	1.20	1334	SIFN46C140 - 90L-4G	131.33		21 000	73	M20	
10.2	2.00	1406	SIFN56C140 - 90L-4G	138.44		25 500	114	M28	
9.0	1.00	1592	SIFN46C160 - 90L-4G	156.72		21 000	73	M20	
9.2	1.80	1564	SIFN56C160 - 90L-4G	153.96		25 500	114	M28	
8.0	0.90	1785	SIFN46C180 - 90L-4G	175.71		21 000	73	M20	
8.0	1.60	1783	SIFN56C16B180 - 90L-4G	175.50		25 500	124	M28	
7.9	2.70	1823	SIFN66C36B180 - 90L-4G	179.42		38 000	209	M36	
7.2	0.80	1995	SIFN46C16B200 - 90L-4G	196.41		21 000	83	M20	
7.0	1.40	2044	SIFN56C16B200 - 90L-4G	201.19		25 500	124	M28	
7.0	2.50	2039	SIFN66C36B200 - 90L-4G	200.69		38 000	209	M36	
6.5	1.30	2190	SIFN56C16B224 - 90L-4G	215.58		25 500	124	M28	
6.5	2.30	2201	SIFN66C36B224 - 90L-4G	216.68		38 000	209	M36	
5.7	1.10	2520	SIFN56C16B250 - 90L-4G	248.11		25 500	124	M28	
5.8	2.00	2479	SIFN66C36B250 - 90L-4G	244.01		38 000	209	M36	
4.9	0.96	2914	SIFN56C16B280 - 90L-4G	286.83		25 500	124	M28	




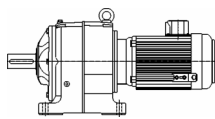
4. SI4

P 1.5 kW
n₁ 1410 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
5.0	1.70	2877	SIFN66C36B280 - 90L-4G	283.24		38 000	209	M36	
4.6	0.89	3140	SIFN56C16B315 - 90L-4G	309.10		25 500	124	M28	
4.4	1.60	3222	SIFN66C36B315 - 90L-4G	317.13		38 000	209	M36	
4.4	2.80	3224	SIFN76C36B315 - 90L-4G	317.39		52 500	304	M46	
4.2	0.83	3390	SIFN56C16B355 - 90L-4G	333.71		25 500	124	M28	
3.9	1.40	3689	SIFN66C36B355 - 90L-4G	363.09		38 000	209	M36	
3.8	2.40	3724	SIFN76C36B355 - 90L-4G	366.58		52 500	304	M46	
3.6	1.30	3935	SIFN66C36B400 - 90L-4G	387.33		38 000	209	M36	
3.5	2.20	4117	SIFN76C36B400 - 90L-4G	405.24		52 500	304	M46	
3.2	1.10	4456	SIFN66C36B450 - 90L-4G	438.67		38 000	209	M36	
3.1	2.00	4570	SIFN76C36B450 - 90L-4G	449.84		52 500	304	M46	
2.8	0.96	5205	SIFN66C36B500 - 90L-4G	512.37		38 000	209	M36	
2.9	1.80	5016	SIFN76C36B500 - 90L-4G	493.78		52 500	304	M46	
2.8	3.00	5057	SIFN86C36B500 - 90L-4G	497.77		82 000	474	M55	
2.6	0.89	5589	SIFN66C36B560 - 90L-4G	550.14		38 000	209	M36	
2.5	1.60	5631	SIFN76C36B560 - 90L-4G	554.31		52 500	304	M46	
2.5	2.60	5682	SIFN86C36B560 - 90L-4G	559.36		82 000	474	M55	
2.2	1.40	6378	SIFN76C36B630 - 90L-4G	627.78		52 500	304	M46	
2.3	2.40	6185	SIFN86C36B630 - 90L-4G	608.83		82 000	474	M55	
2.0	1.30	7000	SIFN76C36B710 - 90L-4G	689.07		52 500	304	M46	
2.0	2.10	7005	SIFN86C36B710 - 90L-4G	689.53		82 000	474	M55	
1.8	1.10	7928	SIFN76C36B800 - 90L-4G	780.40		52 500	304	M46	
1.8	1.90	7872	SIFN86C36B800 - 90L-4G	774.86		82 000	474	M55	
1.5	0.95	9465	SIFN76C36B900 - 90L-4G	931.69		52 500	304	M46	
1.6	1.70	8842	SIFN86C36B900 - 90L-4G	870.34		82 000	474	M55	
1.6	2.80	8862	SIFN96C36B900 - 90L-4G	872.30		105 000	684	M64	
1.4	0.90	10007	SIFN76C36B1000 - 90L-4G	985.04		52 500	304	M46	
1.4	1.50	9936	SIFN86C36B1000 - 90L-4G	978.04		82 000	474	M55	
1.4	2.50	10036	SIFN96C36B1000 - 90L-4G	987.93		105 000	684	M64	
1.3	0.81	11049	SIFN76C36B1120 - 90L-4G	1087.67		52 500	304	M46	
1.2	1.30	11680	SIFN86C36B1120 - 90L-4G	1149.77		82 000	474	M55	
1.3	2.30	11074	SIFN96C36B1120 - 90L-4G	1090.09		105 000	684	M64	
1.1	1.20	13005	SIFN86C36B1250 - 90L-4G	1280.17		82 000	474	M55	
1.1	2.00	12668	SIFN96C36B1250 - 90L-4G	1246.98		105 000	684	M64	
1.0	1.00	14614	SIFN86C36B1400 - 90L-4G	1438.59		82 000	474	M55	
1.0	1.80	13988	SIFN96C36B1400 - 90L-4G	1376.90		105 000	684	M64	
0.9	0.92	16272	SIFN86C36B1600 - 90L-4G	1601.76		82 000	474	M55	
0.9	1.50	16735	SIFN96C36B1600 - 90L-4G	1647.33		105 000	684	M64	
0.8	0.82	18231	SIFN86C36B1800 - 90L-4G	1794.60		82 000	474	M55	
0.8	1.30	18633	SIFN96C36B1800 - 90L-4G	1834.16		105 000	684	M64	
0.7	1.20	20613	SIFN96C36B2000 - 90L-4G	2029.03		105 000	684	M64	
0.6	1.10	22898	SIFN96C36B2240 - 90L-4G	2254.03		105 000	684	M64	
0.6	0.99	25266	SIFN96C36B2500 - 90L-4G	2487.13		105 000	684	M64	
0.5	0.88	28393	SIFN96C36B2800 - 90L-4G	2794.90		105 000	684	M64	



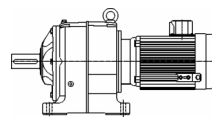
P 2.2 kW n₁ 1420 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
507.1	2.40	41	SIFN16B2.8 - 100A-4G	2.80		3 500	29	M01	
442.3	2.20	47	SIFN16B3.15 - 100A-4G	3.21		3 600	29	M01	
412.8	2.20	51	SIFN16B3.55 - 100A-4G	3.44		3 700	29	M01	
358.7	2.00	59	SIFN16B4 - 100A-4G	3.96		3 800	29	M01	
345.7	3.00	61	SIFN26B4 - 100A-4G	4.11		4 000	37	M06	
310.2	1.80	68	SIFN16B4.5 - 100A-4G	4.58		4 000	29	M01	
307.7	2.70	68	SIFN26B4.5 - 100A-4G	4.62		4 100	37	M06	
287.9	1.70	73	SIFN16B5 - 100A-4G	4.93		4 000	29	M01	
289.8	2.60	72	SIFN26B5 - 100A-4G	4.90		4 200	37	M06	
248.2	1.50	85	SIFN16B5.6 - 100A-4G	5.72		4 300	29	M01	
216.5	1.40	97	SIFN16B6.3 - 100A-4G	6.56		4 400	29	M01	
232.8	3.00	90	SIFN26B6.3 - 100A-4G	6.10		4 500	37	M06	
202.1	1.40	104	SIFN16B7.1 - 100A-4G	7.03		4 500	29	M01	
197.2	2.70	107	SIFN26B7.1 - 100A-4G	7.20		4 700	37	M06	
175.6	1.30	120	SIFN16B8 - 100A-4G	8.09		4 600	29	M01	
176.1	2.60	119	SIFN26B8 - 100A-4G	8.06		4 900	37	M06	
151.9	1.20	138	SIFN16B9 - 100A-4G	9.35		4 800	29	M01	
156.7	2.40	134	SIFN26B9 - 100A-4G	9.06		5 000	37	M06	
140.9	1.10	149	SIFN16B10 - 100A-4G	10.08		4 800	29	M01	
147.6	2.40	142	SIFN26B10 - 100A-4G	9.62		5 100	37	M06	
130.5	1.10	161	SIFN16B11.2 - 100A-4G	10.88		4 900	29	M01	
122.4	2.10	172	SIFN26B11.2 - 100A-4G	11.60		5 300	37	M06	
111.2	0.95	189	SIFN16B12.5 - 100A-4G	12.76		5 000	29	M01	
114.6	2.00	183	SIFN26B12.5 - 100A-4G	12.39		5 300	37	M06	
102.3	0.88	205	SIFN16B14 - 100A-4G	13.89		5 100	29	M01	
99.9	1.70	210	SIFN26B14 - 100A-4G	14.21		5 500	37	M06	
86.3	1.50	244	SIFN26B16 - 100A-4G	16.46		5 600	37	M06	
90.2	2.90	233	SIFN36C16 - 100A-4G	15.74		11 000	57	M12	
79.8	1.40	263	SIFN26B18 - 100A-4G	17.80		5 700	37	M06	
77.7	2.60	270	SIFN36C18 - 100A-4G	18.27		11 000	57	M12	
83.1	2.80	253	SIFN36B18 - 100A-4G	17.09		11 000	57	M12	
68.6	1.20	306	SIFN26B20 - 100A-4G	20.69		5 800	37	M06	
74.5	1.40	282	SIFN26C20 - 100A-4G	19.06		5 700	37	M06	
73.2	2.50	287	SIFN36B20 - 100A-4G	19.41		11 000	57	M12	
61.6	1.10	341	SIFN26B22.4 - 100A-4G	23.03		5 800	37	M06	
63.1	1.30	333	SIFN26C22.4 - 100A-4G	22.49		5 800	37	M06	
64.6	2.20	325	SIFN36B22.4 - 100A-4G	21.98		11 000	57	M12	
56.0	0.96	375	SIFN26B25 - 100A-4G	25.36		5 900	37	M06	
56.4	1.10	373	SIFN26C25 - 100A-4G	25.20		5 900	37	M06	
59.2	2.00	355	SIFN36B25 - 100A-4G	23.97		11 000	57	M12	
50.5	0.87	416	SIFN26B28 - 100A-4G	28.12		5 900	37	M06	
50.2	1.00	419	SIFN26C28 - 100A-4G	28.31		5 900	37	M06	
51.2	1.80	410	SIFN36B28 - 100A-4G	27.74		11 000	57	M12	
47.2	0.94	445	SIFN26C31.5 - 100A-4G	30.06		6 000	37	M06	
46.4	1.60	453	SIFN36B31.5 - 100A-4G	30.63		11 000	57	M12	
38.7	1.30	542	SIFN36B35.5 - 100A-4G	36.65		11 000	57	M12	
39.0	1.50	539	SIFN36C35.5 - 100A-4G	36.41		11 000	57	M12	
40.0	2.70	525	SIFN46B35.5 - 100A-4G	35.47		21 000	76	M20	
34.8	1.20	604	SIFN36B40 - 100A-4G	40.81		11 000	57	M12	
36.4	1.40	577	SIFN36C40 - 100A-4G	39.00		11 000	57	M12	
36.5	2.40	576	SIFN46B40 - 100A-4G	38.96		21 000	76	M20	
37.5	2.90	561	SIFN46C40 - 100A-4G	37.89		21 000	76	M20	





4. SI4

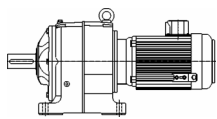
P 2.2 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
31.5	1.10	668	SIFN36B45 - 100A-4G	45.14		11 000	57	M12	
30.5	2.00	688	SIFN46B45 - 100A-4G	46.48		21 000	76	M20	
34.1	2.60	617	SIFN46C45 - 100A-4G	41.69		21 000	76	M20	
28.3	0.97	742	SIFN36B50 - 100A-4G	50.15		11 000	57	M12	
28.9	1.10	727	SIFN36C50 - 100A-4G	49.12		11 000	57	M12	
27.2	1.80	771	SIFN46B50 - 100A-4G	52.12		21 000	76	M20	
30.2	2.30	695	SIFN46C50 - 100A-4G	46.97		21 000	76	M20	
24.4	0.84	860	SIFN36B56 - 100A-4G	58.11		11 000	57	M12	
25.5	0.99	825	SIFN36C56 - 100A-4G	55.78		11 000	57	M12	
27.3	2.10	771	SIFN46C56 - 100A-4G	52.10		21 000	76	M20	
22.5	0.88	935	SIFN36C63 - 100A-4G	63.17		11 000	57	M12	
23.8	1.80	883	SIFN46C63 - 100A-4G	59.67		21 000	76	M20	
20.6	0.80	1019	SIFN36C71 - 100A-4G	68.88		11 000	57	M12	
20.3	1.50	1037	SIFN46C71 - 100A-4G	70.07		21 000	76	M20	
21.0	2.80	1003	SIFN56C71 - 100A-4G	67.77		25 500	117	M28	
18.9	1.40	1109	SIFN46C80 - 100A-4G	74.99		21 000	76	M20	
18.4	2.50	1142	SIFN56C80 - 100A-4G	77.16		25 500	117	M28	
17.0	1.30	1239	SIFN46C90 - 100A-4G	83.75		21 000	76	M20	
16.8	2.20	1252	SIFN56C90 - 100A-4G	84.66		25 500	117	M28	
14.9	1.10	1414	SIFN46C100 - 100A-4G	95.56		21 000	76	M20	
14.6	1.90	1436	SIFN56C100 - 100A-4G	97.06		25 500	117	M28	
13.7	1.00	1533	SIFN46C112 - 100A-4G	103.60		21 000	76	M20	
13.5	1.80	1556	SIFN56C112 - 100A-4G	105.19		25 500	117	M28	
11.9	0.90	1769	SIFN46C125 - 100A-4G	119.59		21 000	76	M20	
11.4	1.50	1836	SIFN56C125 - 100A-4G	124.11		25 500	117	M28	
11.9	2.80	1767	SIFN66C125 - 100A-4G	119.46		38 000	174	M36	
10.8	0.82	1943	SIFN46C140 - 100A-4G	131.33		21 000	76	M20	
10.3	1.40	2048	SIFN56C140 - 100A-4G	138.44		25 500	117	M28	
10.4	2.50	2023	SIFN66C140 - 100A-4G	136.74		38 000	174	M36	
9.2	1.20	2278	SIFN56C160 - 100A-4G	153.96		25 500	117	M28	
9.5	2.30	2210	SIFN66C160 - 100A-4G	149.41		38 000	174	M36	
8.1	1.10	2596	SIFN56C16B180 - 100A-4G	175.50		25 500	127	M28	
8.1	1.90	2604	SIFN66C180 - 100A-4G	176.00		38 000	174	M36	
7.1	0.94	2977	SIFN56C16B200 - 100A-4G	201.19		25 500	127	M28	
7.3	1.70	2868	SIFN66C200 - 100A-4G	193.85		38 000	174	M36	
6.6	0.88	3189	SIFN56C16B224 - 100A-4G	215.58		25 500	127	M28	
6.6	1.60	3185	SIFN66C224 - 100A-4G	215.26		38 000	174	M36	
6.3	2.70	3339	SIFN76C36B224 - 100A-4G	225.66		52 500	307	M46	
5.8	1.40	3610	SIFN66C36B250 - 100A-4G	244.01		38 000	212	M36	
5.6	2.40	3738	SIFN76C36B250 - 100A-4G	252.66		52 500	307	M46	
5.0	1.20	4190	SIFN66C36B280 - 100A-4G	283.24		38 000	212	M36	
4.9	2.10	4280	SIFN76C36B280 - 100A-4G	289.28		52 500	307	M46	
4.5	1.10	4692	SIFN66C36B315 - 100A-4G	317.13		38 000	212	M36	
4.5	1.90	4696	SIFN76C36B315 - 100A-4G	317.39		52 500	307	M46	
3.9	0.93	5372	SIFN66C36B355 - 100A-4G	363.09		38 000	212	M36	
3.9	1.70	5423	SIFN76C36B355 - 100A-4G	366.58		52 500	307	M46	
4.0	2.80	5297	SIFN86C36B355 - 100A-4G	358.05		82 000	477	M55	
3.7	0.87	5730	SIFN66C36B400 - 100A-4G	387.33		38 000	212	M36	
3.5	1.50	5995	SIFN76C36B400 - 100A-4G	405.24		52 500	307	M46	
3.6	2.60	5880	SIFN86C36B400 - 100A-4G	397.46		82 000	477	M55	
3.2	1.40	6655	SIFN76C36B450 - 100A-4G	449.84		52 500	307	M46	
3.2	2.30	6608	SIFN86C36B450 - 100A-4G	446.64		82 000	477	M55	




P n₁										
2.2 kW 1420 min⁻¹										
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg			
2.9	1.20	7305	SIFN76C36B500 - 100A-4G	493.78		52 500	307	M46		
2.9	2.00	7364	SIFN86C36B500 - 100A-4G	497.77		82 000	477	M55		
2.6	1.10	8201	SIFN76C36B560 - 100A-4G	554.31		52 500	307	M46		
2.5	1.80	8276	SIFN86C36B560 - 100A-4G	559.36		82 000	477	M55		
2.5	3.00	8425	SIFN96C36B560 - 100A-4G	569.46		105 000	687	M64		
2.3	0.97	9288	SIFN76C36B630 - 100A-4G	627.78		52 500	307	M46		
2.3	1.70	9007	SIFN86C36B630 - 100A-4G	608.83		82 000	477	M55		
2.3	2.80	9024	SIFN96C36B630 - 100A-4G	609.91		105 000	687	M64		
2.1	0.88	10195	SIFN76C36B710 - 100A-4G	689.07		52 500	307	M46		
2.1	1.50	10201	SIFN86C36B710 - 100A-4G	689.53		82 000	477	M55		
2.0	2.40	10551	SIFN96C36B710 - 100A-4G	713.17		105 000	687	M64		
1.8	1.30	11464	SIFN86C36B800 - 100A-4G	774.86		82 000	477	M55		
1.8	2.10	11642	SIFN96C36B800 - 100A-4G	786.93		105 000	687	M64		
1.6	1.20	12876	SIFN86C36B900 - 100A-4G	870.34		82 000	477	M55		
1.6	1.90	12905	SIFN96C36B900 - 100A-4G	872.30		105 000	687	M64		
1.5	1.00	14470	SIFN86C36B1000 - 100A-4G	978.04		82 000	477	M55		
1.4	1.70	14616	SIFN96C36B1000 - 100A-4G	987.93		105 000	687	M64		
1.2	0.88	17011	SIFN86C36B1120 - 100A-4G	1149.77		82 000	477	M55		
1.3	1.60	16128	SIFN96C36B1120 - 100A-4G	1090.09		105 000	687	M64		
1.1	1.40	18449	SIFN96C36B1250 - 100A-4G	1246.98		105 000	687	M64		
1.0	1.20	20371	SIFN96C36B1400 - 100A-4G	1376.90		105 000	687	M64		
0.9	1.00	24372	SIFN96C36B1600 - 100A-4G	1647.33		105 000	687	M64		
0.8	0.92	27136	SIFN96C36B1800 - 100A-4G	1834.16		105 000	687	M64		
0.7	0.83	30019	SIFN96C36B2000 - 100A-4G	2029.03		105 000	687	M64		

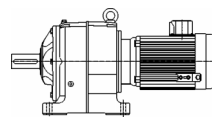
P n₁										
3.0 kW 1425 min⁻¹										
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg			
508.9	1.80	56	SIFN16B2.8 - 100B-4G	2.80		3 400	31	M01		
511.5	2.40	56	SIFN26B2.8 - 100B-4G	2.79		3 500	39	M06		
443.9	1.60	65	SIFN16B3.15 - 100B-4G	3.21		3 500	31	M01		
458.8	2.40	62	SIFN26B3.15 - 100B-4G	3.11		3 600	39	M06		
414.2	1.60	69	SIFN16B3.55 - 100B-4G	3.44		3 500	31	M01		
388.6	2.40	74	SIFN26B3.55 - 100B-4G	3.67		3 800	39	M06		
359.9	1.40	80	SIFN16B4 - 100B-4G	3.96		3 600	31	M01		
347.0	2.20	83	SIFN26B4 - 100B-4G	4.11		3 800	39	M06		
311.3	1.30	92	SIFN16B4.5 - 100B-4G	4.58		3 700	31	M01		
308.8	2.00	93	SIFN26B4.5 - 100B-4G	4.62		4 000	39	M06		
288.9	1.30	99	SIFN16B5 - 100B-4G	4.93		3 800	31	M01		
290.8	1.90	99	SIFN26B5 - 100B-4G	4.90		4 000	39	M06		
249.1	1.10	115	SIFN16B5.6 - 100B-4G	5.72		4 100	31	M01		
260.5	2.40	110	SIFN26B5.6 - 100B-4G	5.47		4 200	39	M06		
217.3	1.00	132	SIFN16B6.3 - 100B-4G	6.56		4 200	31	M01		
233.6	2.20	123	SIFN26B6.3 - 100B-4G	6.10		4 300	39	M06		
202.8	1.00	141	SIFN16B7.1 - 100B-4G	7.03		4 200	31	M01		
197.9	2.00	145	SIFN26B7.1 - 100B-4G	7.20		4 500	39	M06		
176.2	0.94	163	SIFN16B8 - 100B-4G	8.09		4 300	31	M01		




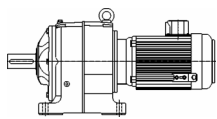
4. SI4

P 3.0 kW
n₁ 1425 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
176.7	1.90	162	SIFN26B8 - 100B-4G	8.06		4 600	39	M06	
152.4	0.86	188	SIFN16B9 - 100B-4G	9.35		4 400	31	M01	
157.2	1.80	182	SIFN26B9 - 100B-4G	9.06		4 700	39	M06	
141.4	0.84	203	SIFN16B10 - 100B-4G	10.08		4 400	31	M01	
148.1	1.80	193	SIFN26B10 - 100B-4G	9.62		4 700	39	M06	
131.0	0.82	219	SIFN16B11.2 - 100B-4G	10.88		4 400	31	M01	
122.8	1.50	233	SIFN26B11.2 - 100B-4G	11.60		4 900	39	M06	
115.0	1.40	249	SIFN26B12.5 - 100B-4G	12.39		4 900	39	M06	
112.5	2.80	255	SIFN36B12.5 - 100B-4G	12.67		11 000	59	M12	
100.3	1.30	286	SIFN26B14 - 100B-4G	14.21		5 000	39	M06	
105.0	2.60	273	SIFN36B14 - 100B-4G	13.57		11 000	59	M12	
86.6	1.10	331	SIFN26B16 - 100B-4G	16.46		5 100	39	M06	
90.6	2.10	316	SIFN36C16 - 100B-4G	15.74		11 000	59	M12	
89.8	2.30	319	SIFN36B16 - 100B-4G	15.87		11 000	59	M12	
80.1	1.00	358	SIFN26B18 - 100B-4G	17.80		5 100	39	M06	
78.0	1.90	367	SIFN36C18 - 100B-4G	18.27		11 000	59	M12	
83.4	2.10	344	SIFN36B18 - 100B-4G	17.09		11 000	59	M12	
68.9	0.87	416	SIFN26B20 - 100B-4G	20.69		5 100	39	M06	
74.8	1.00	383	SIFN26C20 - 100B-4G	19.06		5 100	39	M06	
73.4	1.80	390	SIFN36B20 - 100B-4G	19.41		11 000	59	M12	
63.3	0.93	452	SIFN26C22.4 - 100B-4G	22.49		5 100	39	M06	
64.8	1.60	442	SIFN36B22.4 - 100B-4G	21.98		11 000	59	M12	
56.6	0.83	507	SIFN26C25 - 100B-4G	25.20		5 100	39	M06	
59.5	1.50	482	SIFN36B25 - 100B-4G	23.97		11 000	59	M12	
57.4	2.80	499	SIFN46B25 - 100B-4G	24.84		19 400	78	M20	
60.7	3.00	472	SIFN46C25 - 100B-4G	23.48		19 100	78	M20	
51.4	1.30	558	SIFN36B28 - 100B-4G	27.74		11 000	59	M12	
50.3	2.50	570	SIFN46B28 - 100B-4G	28.34		20 100	78	M20	
53.5	2.80	535	SIFN46C28 - 100B-4G	26.62		19 800	78	M20	
46.5	1.20	616	SIFN36B31.5 - 100B-4G	30.63		11 000	59	M12	
46.4	2.30	618	SIFN46B31.5 - 100B-4G	30.73		20 500	78	M20	
47.6	2.70	602	SIFN46C31.5 - 100B-4G	29.94		20 400	78	M20	
38.9	0.98	737	SIFN36B35.5 - 100B-4G	36.65		11 000	59	M12	
39.1	1.10	732	SIFN36C35.5 - 100B-4G	36.41		11 000	59	M12	
40.2	2.00	713	SIFN46B35.5 - 100B-4G	35.47		21 000	78	M20	
41.5	2.30	690	SIFN46C35.5 - 100B-4G	34.34		21 000	78	M20	
34.9	0.88	820	SIFN36B40 - 100B-4G	40.81		11 000	59	M12	
36.5	1.00	784	SIFN36C40 - 100B-4G	39.00		11 000	59	M12	
36.6	1.80	783	SIFN46B40 - 100B-4G	38.96		21 000	78	M20	
37.6	2.10	762	SIFN46C40 - 100B-4G	37.89		21 000	78	M20	
35.5	3.00	806	SIFN56B40 - 100B-4G	40.09		22 900	119	M28	
31.2	0.89	917	SIFN36C45 - 100B-4G	45.60		11 000	59	M12	
30.7	1.50	935	SIFN46B45 - 100B-4G	46.48		21 000	78	M20	
34.2	1.90	838	SIFN46C45 - 100B-4G	41.69		21 000	78	M20	
32.0	2.70	896	SIFN56B45 - 100B-4G	44.58		23 500	119	M28	
29.0	0.83	987	SIFN36C50 - 100B-4G	49.12		11 000	59	M12	
27.3	1.30	1048	SIFN46B50 - 100B-4G	52.12		21 000	78	M20	
30.3	1.70	944	SIFN46C50 - 100B-4G	46.97		21 000	78	M20	
30.3	3.00	947	SIFN56C50 - 100B-4G	47.10		23 900	119	M28	
27.4	1.50	1047	SIFN46C56 - 100B-4G	52.10		21 000	78	M20	
27.3	2.70	1050	SIFN56C56 - 100B-4G	52.21		24 500	119	M28	
23.9	1.30	1200	SIFN46C63 - 100B-4G	59.67		21 000	78	M20	




P 3.0 kW n ₁ 1425 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
23.7	2.30	1208	SIFN56C63 - 100B-4G	60.09		25 300	119	M28	
20.3	1.10	1409	SIFN46C71 - 100B-4G	70.07		21 000	78	M20	
21.0	2.10	1363	SIFN56C71 - 100B-4G	67.77		25 500	119	M28	
19.0	1.10	1508	SIFN46C80 - 100B-4G	74.99		21 000	78	M20	
18.5	1.80	1551	SIFN56C80 - 100B-4G	77.16		25 500	119	M28	
17.0	0.95	1684	SIFN46C90 - 100B-4G	83.75		21 000	78	M20	
16.8	1.60	1702	SIFN56C90 - 100B-4G	84.66		25 500	119	M28	
16.4	2.90	1744	SIFN66C90 - 100B-4G	86.77		38 000	176	M36	
14.9	0.83	1921	SIFN46C100 - 100B-4G	95.56		21 000	78	M20	
14.7	1.40	1951	SIFN56C100 - 100B-4G	97.06		25 500	119	M28	
14.8	2.60	1939	SIFN66C100 - 100B-4G	96.46		38 000	176	M36	
13.5	1.30	2115	SIFN56C112 - 100B-4G	105.19		25 500	119	M28	
13.0	2.30	2200	SIFN66C112 - 100B-4G	109.44		38 000	176	M36	
11.5	1.10	2495	SIFN56C125 - 100B-4G	124.11		25 500	119	M28	
11.9	2.10	2402	SIFN66C125 - 100B-4G	119.46		38 000	176	M36	
10.3	1.00	2783	SIFN56C140 - 100B-4G	138.44		25 500	119	M28	
10.4	1.80	2749	SIFN66C140 - 100B-4G	136.74		38 000	176	M36	
9.3	0.90	3095	SIFN56C160 - 100B-4G	153.96		25 500	119	M28	
9.5	1.70	3004	SIFN66C160 - 100B-4G	149.41		38 000	176	M36	
8.1	1.40	3538	SIFN66C180 - 100B-4G	176.00		38 000	176	M36	
7.4	1.30	3897	SIFN66C200 - 100B-4G	193.85		38 000	176	M36	
7.3	2.30	3908	SIFN76C36B200 - 100B-4G	194.40		52 500	309	M46	
6.6	1.20	4328	SIFN66C224 - 100B-4G	215.26		38 000	176	M36	
6.3	2.00	4537	SIFN76C36B224 - 100B-4G	225.66		52 500	309	M46	
5.8	1.00	4905	SIFN66C36B250 - 100B-4G	244.01		38 000	214	M36	
5.6	1.80	5079	SIFN76C36B250 - 100B-4G	252.66		52 500	309	M46	
5.6	2.90	5138	SIFN86C36B250 - 100B-4G	255.59		82 000	479	M55	
5.0	0.88	5694	SIFN66C36B280 - 100B-4G	283.24		38 000	214	M36	
4.9	1.50	5816	SIFN76C36B280 - 100B-4G	289.28		52 500	309	M46	
5.1	2.70	5638	SIFN86C36B280 - 100B-4G	280.43		82 000	479	M55	
4.5	1.40	6381	SIFN76C36B315 - 100B-4G	317.39		52 500	309	M46	
4.4	2.30	6512	SIFN86C36B315 - 100B-4G	323.90		82 000	479	M55	
3.9	1.20	7370	SIFN76C36B355 - 100B-4G	366.58		52 500	309	M46	
4.0	2.10	7198	SIFN86C36B355 - 100B-4G	358.05		82 000	479	M55	
3.5	1.10	8147	SIFN76C36B400 - 100B-4G	405.24		52 500	309	M46	
3.6	1.90	7990	SIFN86C36B400 - 100B-4G	397.46		82 000	479	M55	
3.2	1.00	9043	SIFN76C36B450 - 100B-4G	449.84		52 500	309	M46	
3.2	1.70	8979	SIFN86C36B450 - 100B-4G	446.64		82 000	479	M55	
3.1	2.70	9329	SIFN96C36B450 - 100B-4G	464.07		105 000	689	M64	
2.9	0.91	9927	SIFN76C36B500 - 100B-4G	493.78		52 500	309	M46	
2.9	1.50	10007	SIFN86C36B500 - 100B-4G	497.77		82 000	479	M55	
2.8	2.40	10313	SIFN96C36B500 - 100B-4G	513.00		105 000	689	M64	
2.6	0.81	11144	SIFN76C36B560 - 100B-4G	554.31		52 500	309	M46	
2.5	1.30	11245	SIFN86C36B560 - 100B-4G	559.36		82 000	479	M55	
2.5	2.20	11448	SIFN96C36B560 - 100B-4G	569.46		105 000	689	M64	
2.3	1.20	12240	SIFN86C36B630 - 100B-4G	608.83		82 000	479	M55	
2.3	2.00	12262	SIFN96C36B630 - 100B-4G	609.91		105 000	689	M64	
2.1	1.10	13862	SIFN86C36B710 - 100B-4G	689.53		82 000	479	M55	
2.0	1.70	14338	SIFN96C36B710 - 100B-4G	713.17		105 000	689	M64	
1.8	0.96	15578	SIFN86C36B800 - 100B-4G	774.86		82 000	479	M55	
1.8	1.60	15820	SIFN96C36B800 - 100B-4G	786.93		105 000	689	M64	
1.6	0.86	17497	SIFN86C36B900 - 100B-4G	870.34		82 000	479	M55	




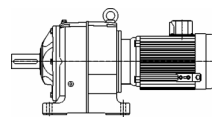
4. SI4


P 3.0 kW
n₁ 1425 min⁻¹

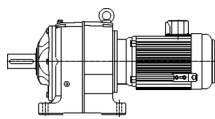
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
1.6	1.40	17537	SIFN96C36B900 - 100B-4G	872.30		105 000	689	M64
1.4	1.30	19861	SIFN96C36B1000 - 100B-4G	987.93		105 000	689	M64
1.3	1.10	21915	SIFN96C36B1120 - 100B-4G	1090.09		105 000	689	M64
1.1	1.00	25069	SIFN96C36B1250 - 100B-4G	1246.98		105 000	689	M64
1.0	0.90	27681	SIFN96C36B1400 - 100B-4G	1376.90		105 000	689	M64

P 4.0 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
507.1	1.30	75	SIFN16B2.8 - 112M-4G	2.80		3 200	37	M01
509.7	1.80	75	SIFN26B2.8 - 112M-4G	2.79		3 400	45	M06
442.3	1.20	86	SIFN16B3.15 - 112M-4G	3.21		3 300	37	M01
457.2	1.80	84	SIFN26B3.15 - 112M-4G	3.11		3 500	45	M06
412.8	1.20	93	SIFN16B3.55 - 112M-4G	3.44		3 300	37	M01
387.3	1.80	99	SIFN26B3.55 - 112M-4G	3.67		3 600	45	M06
358.7	1.10	106	SIFN16B4 - 112M-4G	3.96		3 400	37	M01
345.7	1.70	110	SIFN26B4 - 112M-4G	4.11		3 700	45	M06
310.2	0.97	123	SIFN16B4.5 - 112M-4G	4.58		3 400	37	M01
307.7	1.50	124	SIFN26B4.5 - 112M-4G	4.62		3 700	45	M06
287.9	0.94	133	SIFN16B5 - 112M-4G	4.93		3 500	37	M01
289.8	1.40	132	SIFN26B5 - 112M-4G	4.90		3 800	45	M06
248.2	0.84	154	SIFN16B5.6 - 112M-4G	5.72		3 800	37	M01
259.6	1.80	147	SIFN26B5.6 - 112M-4G	5.47		4 000	45	M06
232.8	1.70	164	SIFN26B6.3 - 112M-4G	6.10		4 100	45	M06
197.2	1.50	194	SIFN26B7.1 - 112M-4G	7.20		4 200	45	M06
199.5	3.00	191	SIFN36B7.1 - 112M-4G	7.12		9 400	65	M12
176.1	1.40	217	SIFN26B8 - 112M-4G	8.06		4 300	45	M06
174.3	2.80	219	SIFN36B8 - 112M-4G	8.15		9 700	65	M12
156.7	1.30	244	SIFN26B9 - 112M-4G	9.06		4 300	45	M06
158.8	2.70	240	SIFN36B9 - 112M-4G	8.94		10 000	65	M12
147.6	1.30	259	SIFN26B10 - 112M-4G	9.62		4 300	45	M06
137.5	2.40	278	SIFN36B10 - 112M-4G	10.33		10 300	65	M12
122.4	1.20	312	SIFN26B11.2 - 112M-4G	11.60		4 400	45	M06
124.4	2.30	307	SIFN36B11.2 - 112M-4G	11.41		10 600	65	M12
114.6	1.10	333	SIFN26B12.5 - 112M-4G	12.39		4 400	45	M06
112.1	2.10	341	SIFN36B12.5 - 112M-4G	12.67		10 900	65	M12
99.9	0.94	382	SIFN26B14 - 112M-4G	14.21		4 400	45	M06
104.6	2.00	365	SIFN36B14 - 112M-4G	13.57		11 000	65	M12
86.3	0.81	443	SIFN26B16 - 112M-4G	16.46		4 400	45	M06
89.5	1.70	427	SIFN36B16 - 112M-4G	15.87		11 000	65	M12
83.1	0.80	460	SIFN26C18 - 112M-4G	17.09		4 400	45	M06
77.7	1.40	491	SIFN36C18 - 112M-4G	18.27		11 000	65	M12
83.1	1.60	460	SIFN36B18 - 112M-4G	17.09		11 000	65	M12
80.2	2.90	476	SIFN46B18 - 112M-4G	17.70		17 200	84	M20
73.2	1.40	522	SIFN36B20 - 112M-4G	19.41		11 000	65	M12
68.3	2.50	559	SIFN46B20 - 112M-4G	20.78		18 000	84	M20
78.1	2.70	489	SIFN46C20 - 112M-4G	18.19		17 400	84	M20




P 4.0 kW n₁ 1420 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
64.6	1.20	591	SIFN36B22.4 - 112M-4G	21.98		11 000	65	M12	
63.8	2.30	598	SIFN46B22.4 - 112M-4G	22.24		18 300	84	M20	
69.6	2.60	549	SIFN46C22.4 - 112M-4G	20.40		17 900	84	M20	
59.2	1.10	645	SIFN36B25 - 112M-4G	23.97		11 000	65	M12	
57.2	2.10	668	SIFN46B25 - 112M-4G	24.84		18 800	84	M20	
51.2	0.96	746	SIFN36B28 - 112M-4G	27.74		11 000	65	M12	
50.1	1.80	762	SIFN46B28 - 112M-4G	28.34		19 400	84	M20	
53.3	2.10	716	SIFN46C28 - 112M-4G	26.62		19 100	84	M20	
46.4	0.87	824	SIFN36B31.5 - 112M-4G	30.63		11 000	65	M12	
46.2	1.70	827	SIFN46B31.5 - 112M-4G	30.73		19 800	84	M20	
47.4	2.00	805	SIFN46C31.5 - 112M-4G	29.94		19 700	84	M20	
46.6	2.90	819	SIFN56B31.5 - 112M-4G	30.46		20 700	125	M28	
39.0	0.84	979	SIFN36C35.5 - 112M-4G	36.41		11 000	65	M12	
40.0	1.50	954	SIFN46B35.5 - 112M-4G	35.47		20 400	84	M20	
41.4	1.70	924	SIFN46C35.5 - 112M-4G	34.34		20 300	84	M20	
39.5	2.50	967	SIFN56B35.5 - 112M-4G	35.94		21 500	125	M28	
41.2	3.00	928	SIFN56C35.5 - 112M-4G	34.48		21 300	125	M28	
36.5	1.30	1048	SIFN46B40 - 112M-4G	38.96		20 800	84	M20	
37.5	1.60	1019	SIFN46C40 - 112M-4G	37.89		20 700	84	M20	
35.4	2.20	1078	SIFN56B40 - 112M-4G	40.09		22 000	125	M28	
37.0	2.70	1031	SIFN56C40 - 112M-4G	38.33		21 800	125	M28	
30.5	1.10	1250	SIFN46B45 - 112M-4G	46.48		21 000	84	M20	
34.1	1.40	1121	SIFN46C45 - 112M-4G	41.69		21 000	84	M20	
31.8	2.00	1199	SIFN56B45 - 112M-4G	44.58		22 600	125	M28	
32.5	2.40	1174	SIFN56C45 - 112M-4G	43.63		22 500	125	M28	
27.2	1.00	1402	SIFN46B50 - 112M-4G	52.12		21 000	84	M20	
30.2	1.30	1263	SIFN46C50 - 112M-4G	46.97		21 000	84	M20	
30.1	2.20	1267	SIFN56C50 - 112M-4G	47.10		22 800	125	M28	
27.3	1.10	1401	SIFN46C56 - 112M-4G	52.10		21 000	84	M20	
27.2	2.00	1404	SIFN56C56 - 112M-4G	52.21		23 300	125	M28	
26.4	2.60	1448	SIFN66B56 - 112M-4G	53.82		38 000	182	M36	
23.8	1.00	1605	SIFN46C63 - 112M-4G	59.67		21 000	84	M20	
23.6	1.70	1616	SIFN56C63 - 112M-4G	60.09		24 000	125	M28	
22.5	2.90	1697	SIFN66C63 - 112M-4G	63.10		38 000	182	M36	
20.3	0.85	1885	SIFN46C71 - 112M-4G	70.07		21 000	84	M20	
21.0	1.50	1823	SIFN56C71 - 112M-4G	67.77		24 500	125	M28	
19.4	2.50	1967	SIFN66C71 - 112M-4G	73.11		38 000	182	M36	
18.4	1.30	2076	SIFN56C80 - 112M-4G	77.16		25 000	125	M28	
17.5	2.30	2185	SIFN66C80 - 112M-4G	81.23		38 000	182	M36	
16.8	1.20	2277	SIFN56C90 - 112M-4G	84.66		25 400	125	M28	
16.4	2.10	2334	SIFN66C90 - 112M-4G	86.77		38 000	182	M36	
14.6	1.10	2611	SIFN56C100 - 112M-4G	97.06		25 500	125	M28	
14.7	1.90	2595	SIFN66C100 - 112M-4G	96.46		38 000	182	M36	
13.5	0.99	2829	SIFN56C112 - 112M-4G	105.19		25 500	125	M28	
13.0	1.70	2944	SIFN66C112 - 112M-4G	109.44		38 000	182	M36	
12.8	3.00	2983	SIFN76C112 - 112M-4G	110.90		52 500	277	M46	
11.4	0.84	3339	SIFN56C125 - 112M-4G	124.11		25 500	125	M28	
11.9	1.60	3213	SIFN66C125 - 112M-4G	119.46		38 000	182	M36	
11.8	2.80	3235	SIFN76C125 - 112M-4G	120.26		52 500	277	M46	
10.4	1.40	3678	SIFN66C140 - 112M-4G	136.74		38 000	182	M36	
10.0	2.40	3819	SIFN76C140 - 112M-4G	141.97		52 500	277	M46	
9.5	1.20	4019	SIFN66C160 - 112M-4G	149.41		38 000	182	M36	




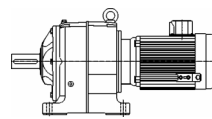
4. SI4

P 4.0 kW
n₁ 1420 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
9.1	2.10	4215	SIFN76C160 - 112M-4G	156.70		52 500	277	M46	
8.1	1.10	4734	SIFN66C180 - 112M-4G	176.00		38 000	182	M36	
8.1	1.90	4691	SIFN76C180 - 112M-4G	174.37		52 500	277	M46	
7.3	0.96	5214	SIFN66C200 - 112M-4G	193.85		38 000	182	M36	
7.3	1.70	5229	SIFN76C36B200 - 112M-4G	194.40		52 500	315	M46	
7.1	2.80	5363	SIFN86C36B200 - 112M-4G	199.38		82 000	485	M55	
6.6	0.86	5790	SIFN66C224 - 112M-4G	215.26		38 000	182	M36	
6.3	1.50	6070	SIFN76C36B224 - 112M-4G	225.66		52 500	315	M46	
6.4	2.50	6005	SIFN86C36B224 - 112M-4G	223.24		82 000	485	M55	
5.6	1.30	6796	SIFN76C36B250 - 112M-4G	252.66		52 500	315	M46	
5.6	2.20	6875	SIFN86C36B250 - 112M-4G	255.59		82 000	485	M55	
4.9	1.20	7781	SIFN76C36B280 - 112M-4G	289.28		52 500	315	M46	
5.1	2.00	7543	SIFN86C36B280 - 112M-4G	280.43		82 000	485	M55	
4.5	1.10	8538	SIFN76C36B315 - 112M-4G	317.39		52 500	315	M46	
4.4	1.70	8713	SIFN86C36B315 - 112M-4G	323.90		82 000	485	M55	
4.4	2.90	8604	SIFN96C36B315 - 112M-4G	319.84		105 000	695	M64	
3.9	0.91	9861	SIFN76C36B355 - 112M-4G	366.58		52 500	315	M46	
4.0	1.60	9631	SIFN86C36B355 - 112M-4G	358.05		82 000	485	M55	
3.9	2.50	9851	SIFN96C36B355 - 112M-4G	366.20		105 000	695	M64	
3.5	0.83	10901	SIFN76C36B400 - 112M-4G	405.24		52 500	315	M46	
3.6	1.40	10691	SIFN86C36B400 - 112M-4G	397.46		82 000	485	M55	
3.5	2.30	10808	SIFN96C36B400 - 112M-4G	401.79		105 000	695	M64	
3.2	1.20	12014	SIFN86C36B450 - 112M-4G	446.64		82 000	485	M55	
3.1	2.00	12483	SIFN96C36B450 - 112M-4G	464.07		105 000	695	M64	
2.9	1.10	13390	SIFN86C36B500 - 112M-4G	497.77		82 000	485	M55	
2.8	1.80	13799	SIFN96C36B500 - 112M-4G	513.00		105 000	695	M64	
2.5	1.00	15047	SIFN86C36B560 - 112M-4G	559.36		82 000	485	M55	
2.5	1.60	15318	SIFN96C36B560 - 112M-4G	569.46		105 000	695	M64	
2.3	0.92	16377	SIFN86C36B630 - 112M-4G	608.83		82 000	485	M55	
2.3	1.50	16406	SIFN96C36B630 - 112M-4G	609.91		105 000	695	M64	
2.1	0.81	18548	SIFN86C36B710 - 112M-4G	689.53		82 000	485	M55	
2.0	1.30	19184	SIFN96C36B710 - 112M-4G	713.17		105 000	695	M64	
1.8	1.20	21168	SIFN96C36B800 - 112M-4G	786.93		105 000	695	M64	
1.6	1.10	23464	SIFN96C36B900 - 112M-4G	872.30		105 000	695	M64	
1.4	0.94	26575	SIFN96C36B1000 - 112M-4G	987.93		105 000	695	M64	
1.3	0.85	29323	SIFN96C36B1120 - 112M-4G	1090.09		105 000	695	M64	

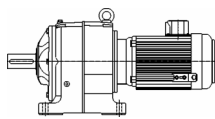
P 5.5 kW
n₁ 1440 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
516.9	1.30	102	SIFN26B2.8 - 132S-4G	2.79		3 200	56	M06	
517.2	2.50	102	SIFN36B2.8 - 132S-4G	2.78		6 900	76	M12	
463.6	1.30	113	SIFN26B3.15 - 132S-4G	3.11		3 200	56	M06	
445.6	2.50	118	SIFN36B3.15 - 132S-4G	3.23		7 200	76	M12	
392.7	1.30	134	SIFN26B3.55 - 132S-4G	3.67		3 300	56	M06	
398.0	2.50	132	SIFN36B3.55 - 132S-4G	3.62		7 400	76	M12	
350.6	1.20	150	SIFN26B4 - 132S-4G	4.11		3 300	56	M06	




4. SI4

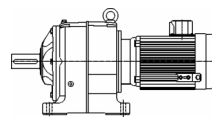
P 5.5 kW n₁ 1440 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
347.6	2.40	151	SIFN36B4 - 132S-4G	4.14		7 700	76	M12	
312.0	1.10	168	SIFN26B4.5 - 132S-4G	4.62		3 400	56	M06	
316.8	2.40	166	SIFN36B4.5 - 132S-4G	4.55		7 900	76	M12	
293.9	1.00	179	SIFN26B5 - 132S-4G	4.90		3 400	56	M06	
274.3	2.50	191	SIFN36B5 - 132S-4G	5.25		8 200	76	M12	
263.2	1.30	200	SIFN26B5.6 - 132S-4G	5.47		3 700	56	M06	
263.0	2.60	200	SIFN36B5.6 - 132S-4G	5.48		8 400	76	M12	
236.1	1.20	222	SIFN26B6.3 - 132S-4G	6.10		3 700	56	M06	
226.6	2.40	232	SIFN36B6.3 - 132S-4G	6.36		8 800	76	M12	
200.0	1.10	263	SIFN26B7.1 - 132S-4G	7.20		3 800	56	M06	
202.4	2.20	260	SIFN36B7.1 - 132S-4G	7.12		9 000	76	M12	
178.6	1.00	294	SIFN26B8 - 132S-4G	8.06		3 800	56	M06	
176.7	2.10	297	SIFN36B8 - 132S-4G	8.15		9 300	76	M12	
158.9	0.98	331	SIFN26B9 - 132S-4G	9.06		3 800	56	M06	
161.1	2.00	326	SIFN36B9 - 132S-4G	8.94		9 500	76	M12	
149.7	0.97	351	SIFN26B10 - 132S-4G	9.62		3 800	56	M06	
139.5	1.80	377	SIFN36B10 - 132S-4G	10.33		9 800	76	M12	
124.1	0.85	423	SIFN26B11.2 - 132S-4G	11.60		3 700	56	M06	
126.2	1.70	416	SIFN36B11.2 - 132S-4G	11.41		10 000	76	M12	
116.2	0.80	452	SIFN26B12.5 - 132S-4G	12.39		3 700	56	M06	
113.7	1.60	462	SIFN36B12.5 - 132S-4G	12.67		10 200	76	M12	
116.4	2.90	451	SIFN46B12.5 - 132S-4G	12.37		15 100	95	M20	
106.1	1.50	495	SIFN36B14 - 132S-4G	13.57		10 400	76	M12	
103.4	2.80	508	SIFN46B14 - 132S-4G	13.93		15 600	95	M20	
90.8	1.20	579	SIFN36B16 - 132S-4G	15.87		10 700	76	M12	
93.2	2.50	564	SIFN46B16 - 132S-4G	15.45		16 000	95	M20	
78.8	1.00	666	SIFN36C18 - 132S-4G	18.27		10 900	76	M12	
84.3	1.20	623	SIFN36B18 - 132S-4G	17.09		10 800	76	M12	
81.4	2.20	646	SIFN46B18 - 132S-4G	17.70		16 500	95	M20	
74.2	1.00	708	SIFN36B20 - 132S-4G	19.41		11 000	76	M12	
69.3	1.80	758	SIFN46B20 - 132S-4G	20.78		17 100	95	M20	
79.1	2.00	664	SIFN46C20 - 132S-4G	18.19		16 600	95	M20	
65.5	0.90	802	SIFN36B22.4 - 132S-4G	21.98		11 000	76	M12	
64.7	1.70	811	SIFN46B22.4 - 132S-4G	22.24		17 400	95	M20	
70.6	1.90	744	SIFN46C22.4 - 132S-4G	20.40		17 100	95	M20	
64.4	2.90	815	SIFN56B22.4 - 132S-4G	22.35		18 300	136	M28	
60.1	0.82	874	SIFN36B25 - 132S-4G	23.97		11 000	76	M12	
58.0	1.50	906	SIFN46B25 - 132S-4G	24.84		17 800	95	M20	
58.7	2.70	894	SIFN56B25 - 132S-4G	24.52		18 600	136	M28	
50.8	1.40	1034	SIFN46B28 - 132S-4G	28.34		18 300	95	M20	
51.2	2.30	1025	SIFN56B28 - 132S-4G	28.11		19 200	136	M28	
53.3	2.50	986	SIFN56C28 - 132S-4G	27.03		19 100	136	M28	
46.9	1.20	1121	SIFN46B31.5 - 132S-4G	30.73		18 500	95	M20	
48.1	1.50	1092	SIFN46C31.5 - 132S-4G	29.94		18 500	95	M20	
47.3	2.20	1111	SIFN56B31.5 - 132S-4G	30.46		19 600	136	M28	
40.6	1.10	1294	SIFN46B35.5 - 132S-4G	35.47		19 000	95	M20	
41.9	1.30	1252	SIFN46C35.5 - 132S-4G	34.34		19 000	95	M20	
40.1	1.80	1311	SIFN56B35.5 - 132S-4G	35.94		20 200	136	M28	
41.8	2.20	1258	SIFN56C35.5 - 132S-4G	34.48		20 100	136	M28	
37.0	0.99	1421	SIFN46B40 - 132S-4G	38.96		19 300	95	M20	
38.0	1.20	1382	SIFN46C40 - 132S-4G	37.89		19 300	95	M20	
35.9	1.60	1462	SIFN56B40 - 132S-4G	40.09		20 600	136	M28	





4. SI4

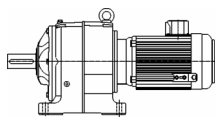
P 5.5 kW
n₁ 1440 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
37.6	2.00	1398	SIFN56C40 - 132S-4G	38.33		20 500	136	M28	
38.6	3.00	1362	SIFN66B40 - 132S-4G	37.35		38 000	193	M36	
31.0	0.83	1695	SIFN46B45 - 132S-4G	46.48		19 800	95	M20	
34.5	1.10	1521	SIFN46C45 - 132S-4G	41.69		19 500	95	M20	
32.3	1.50	1626	SIFN56B45 - 132S-4G	44.58		21 000	136	M28	
33.0	1.80	1591	SIFN56C45 - 132S-4G	43.63		21 000	136	M28	
32.7	2.60	1605	SIFN66B45 - 132S-4G	44.00		38 000	193	M36	
30.7	0.93	1713	SIFN46C50 - 132S-4G	46.97		19 900	95	M20	
30.6	1.60	1718	SIFN56C50 - 132S-4G	47.10		21 200	136	M28	
29.7	2.30	1768	SIFN66B50 - 132S-4G	48.46		38 000	193	M36	
28.5	2.70	1840	SIFN66C50 - 132S-4G	50.46		38 000	193	M36	
27.6	0.84	1900	SIFN46C56 - 132S-4G	52.10		20 100	95	M20	
27.6	1.50	1904	SIFN56C56 - 132S-4G	52.21		21 600	136	M28	
26.8	1.90	1963	SIFN66B56 - 132S-4G	53.82		38 000	193	M36	
26.2	2.50	2007	SIFN66C56 - 132S-4G	55.03		38 000	193	M36	
24.0	1.30	2192	SIFN56C63 - 132S-4G	60.09		22 000	136	M28	
22.8	2.20	2301	SIFN66C63 - 132S-4G	63.10		38 000	193	M36	
21.2	1.10	2472	SIFN56C71 - 132S-4G	67.77		22 200	136	M28	
19.7	1.90	2666	SIFN66C71 - 132S-4G	73.11		38 000	193	M36	
18.7	0.99	2814	SIFN56C80 - 132S-4G	77.16		22 500	136	M28	
17.7	1.70	2963	SIFN66C80 - 132S-4G	81.23		38 000	193	M36	
17.0	0.91	3088	SIFN56C90 - 132S-4G	84.66		22 600	136	M28	
16.6	1.60	3165	SIFN66C90 - 132S-4G	86.77		38 000	193	M36	
16.4	2.80	3208	SIFN76C90 - 132S-4G	87.97		52 500	288	M46	
14.9	1.40	3518	SIFN66C100 - 132S-4G	96.46		38 000	193	M36	
14.2	2.40	3701	SIFN76C100 - 132S-4G	101.47		52 500	288	M46	
13.2	1.30	3991	SIFN66C112 - 132S-4G	109.44		38 000	193	M36	
13.0	2.20	4045	SIFN76C112 - 132S-4G	110.90		52 500	288	M46	
12.1	1.10	4357	SIFN66C125 - 132S-4G	119.46		38 000	193	M36	
12.0	2.10	4386	SIFN76C125 - 132S-4G	120.26		52 500	288	M46	
10.5	1.00	4987	SIFN66C140 - 132S-4G	136.74		38 000	193	M36	
10.1	1.70	5178	SIFN76C140 - 132S-4G	141.97		52 500	288	M46	
10.7	3.00	4930	SIFN86C36B140 - 132S-4G	135.18		82 000	496	M55	
9.6	0.92	5449	SIFN66C160 - 132S-4G	149.41		38 000	193	M36	
9.2	1.60	5715	SIFN76C160 - 132S-4G	156.70		52 500	288	M46	
9.2	2.60	5723	SIFN86C36B160 - 132S-4G	156.91		82 000	496	M55	
8.3	1.40	6360	SIFN76C180 - 132S-4G	174.37		52 500	288	M46	
8.2	2.30	6408	SIFN86C36B180 - 132S-4G	175.69		82 000	496	M55	
7.4	1.30	7090	SIFN76C36B200 - 132S-4G	194.40		52 500	326	M46	
7.2	2.10	7272	SIFN86C36B200 - 132S-4G	199.38		82 000	496	M55	
6.4	1.10	8230	SIFN76C36B224 - 132S-4G	225.66		52 500	326	M46	
6.5	1.80	8142	SIFN86C36B224 - 132S-4G	223.24		82 000	496	M55	
5.7	0.98	9215	SIFN76C36B250 - 132S-4G	252.66		52 500	326	M46	
5.6	1.60	9322	SIFN86C36B250 - 132S-4G	255.59		82 000	496	M55	
5.9	2.80	8976	SIFN96C36B250 - 132S-4G	246.10		105 000	706	M64	
5.0	0.85	10551	SIFN76C36B280 - 132S-4G	289.28		52 500	326	M46	
5.1	1.50	10228	SIFN86C36B280 - 132S-4G	280.43		82 000	496	M55	
5.0	2.40	10419	SIFN96C36B280 - 132S-4G	285.66		105 000	706	M64	
4.4	1.30	11814	SIFN86C36B315 - 132S-4G	323.90		82 000	496	M55	
4.5	2.10	11666	SIFN96C36B315 - 132S-4G	319.84		105 000	706	M64	
4.0	1.10	13059	SIFN86C36B355 - 132S-4G	358.05		82 000	496	M55	
3.9	1.90	13356	SIFN96C36B355 - 132S-4G	366.20		105 000	706	M64	



P 5.5 kW n ₁ 1440 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
3.6	1.00	14497	SIFN86C36B400 - 132S-4G	397.46		82 000	496	M55	
3.6	1.70	14654	SIFN96C36B400 - 132S-4G	401.79		105 000	706	M64	
3.2	0.92	16290	SIFN86C36B450 - 132S-4G	446.64		82 000	496	M55	
3.1	1.50	16926	SIFN96C36B450 - 132S-4G	464.07		105 000	706	M64	
2.9	0.83	18155	SIFN86C36B500 - 132S-4G	497.77		82 000	496	M55	
2.8	1.30	18711	SIFN96C36B500 - 132S-4G	513.00		105 000	706	M64	
2.5	1.20	20770	SIFN96C36B560 - 132S-4G	569.46		105 000	706	M64	
2.4	1.10	22245	SIFN96C36B630 - 132S-4G	609.91		105 000	706	M64	
2.0	0.96	26012	SIFN96C36B710 - 132S-4G	713.17		105 000	706	M64	
1.8	0.87	28702	SIFN96C36B800 - 132S-4G	786.93		105 000	706	M64	

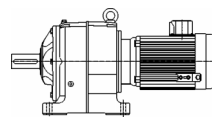
P 7.5 kW n ₁ 1445 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
518.7	0.98	138	SIFN26B2.8 - 132MA-4G	2.79		2 900	57	M06	
519.0	1.80	138	SIFN36B2.8 - 132MA-4G	2.78		6 700	77	M12	
515.2	2.70	139	SIFN46B2.8 - 132MA-4G	2.80		9 600	96	M20	
465.2	0.97	154	SIFN26B3.15 - 132MA-4G	3.11		2 900	57	M06	
447.1	1.80	160	SIFN36B3.15 - 132MA-4G	3.23		7 000	77	M12	
459.4	2.70	156	SIFN46B3.15 - 132MA-4G	3.15		9 900	96	M20	
394.1	0.99	182	SIFN26B3.55 - 132MA-4G	3.67		2 900	57	M06	
399.3	1.80	179	SIFN36B3.55 - 132MA-4G	3.62		7 200	77	M12	
399.1	2.70	179	SIFN46B3.55 - 132MA-4G	3.62		10 300	96	M20	
351.8	0.91	204	SIFN26B4 - 132MA-4G	4.11		2 900	57	M06	
348.8	1.80	205	SIFN36B4 - 132MA-4G	4.14		7 400	77	M12	
352.1	2.70	203	SIFN46B4 - 132MA-4G	4.10		10 700	96	M20	
313.1	0.81	229	SIFN26B4.5 - 132MA-4G	4.62		2 900	57	M06	
317.9	1.80	225	SIFN36B4.5 - 132MA-4G	4.55		7 500	77	M12	
313.0	2.70	229	SIFN46B4.5 - 132MA-4G	4.62		11 000	96	M20	
275.2	1.80	260	SIFN36B5 - 132MA-4G	5.25		7 800	77	M12	
273.0	2.70	262	SIFN46B5 - 132MA-4G	5.29		11 500	96	M20	
264.2	0.96	271	SIFN26B5.6 - 132MA-4G	5.47		3 200	57	M06	
263.9	1.90	271	SIFN36B5.6 - 132MA-4G	5.48		8 100	77	M12	
236.9	0.91	302	SIFN26B6.3 - 132MA-4G	6.10		3 200	57	M06	
227.4	1.70	315	SIFN36B6.3 - 132MA-4G	6.36		8 400	77	M12	
238.8	3.00	300	SIFN46B6.3 - 132MA-4G	6.05		12 100	96	M20	
200.7	0.81	357	SIFN26B7.1 - 132MA-4G	7.20		3 200	57	M06	
203.1	1.60	353	SIFN36B7.1 - 132MA-4G	7.12		8 600	77	M12	
207.5	2.80	345	SIFN46B7.1 - 132MA-4G	6.97		12 600	96	M20	
177.4	1.50	404	SIFN36B8 - 132MA-4G	8.15		8 800	77	M12	
183.0	2.70	391	SIFN46B8 - 132MA-4G	7.90		13 000	96	M20	
161.6	1.50	443	SIFN36B9 - 132MA-4G	8.94		9 000	77	M12	
162.7	2.60	440	SIFN46B9 - 132MA-4G	8.88		13 400	96	M20	
140.0	1.30	512	SIFN36B10 - 132MA-4G	10.33		9 200	77	M12	
141.9	2.40	505	SIFN46B10 - 132MA-4G	10.18		13 800	96	M20	
126.6	1.30	566	SIFN36B11.2 - 132MA-4G	11.41		9 300	77	M12	
128.6	2.30	557	SIFN46B11.2 - 132MA-4G	11.24		14 200	96	M20	





4. SI4

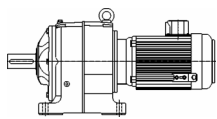
P 7.5 kW
n₁ 1445 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
114.1	1.10	628	SIFN36B12.5 - 132MA-4G	12.67		9 500	77	M12	
116.9	2.10	613	SIFN46B12.5 - 132MA-4G	12.37		14 500	96	M20	
106.5	1.10	673	SIFN36B14 - 132MA-4G	13.57		9 500	77	M12	
103.7	2.00	690	SIFN46B14 - 132MA-4G	13.93		14 900	96	M20	
91.1	0.92	786	SIFN36B16 - 132MA-4G	15.87		9 700	77	M12	
93.5	1.80	766	SIFN46B16 - 132MA-4G	15.45		15 200	96	M20	
84.5	0.85	847	SIFN36B18 - 132MA-4G	17.09		9 700	77	M12	
81.6	1.60	877	SIFN46B18 - 132MA-4G	17.70		15 600	96	M20	
84.7	2.50	846	SIFN56C18 - 132MA-4G	17.07		16 300	137	M28	
83.0	2.80	863	SIFN56B18 - 132MA-4G	17.40		16 400	137	M28	
69.5	1.40	1030	SIFN46B20 - 132MA-4G	20.78		16 100	96	M20	
73.6	2.50	973	SIFN56B20 - 132MA-4G	19.63		16 800	137	M28	
65.0	1.30	1102	SIFN46B22.4 - 132MA-4G	22.24		16 300	96	M20	
64.7	2.20	1108	SIFN56B22.4 - 132MA-4G	22.35		17 300	137	M28	
58.2	1.10	1231	SIFN46B25 - 132MA-4G	24.84		16 500	96	M20	
58.9	2.00	1215	SIFN56B25 - 132MA-4G	24.52		17 600	137	M28	
51.0	1.00	1405	SIFN46B28 - 132MA-4G	28.34		16 800	96	M20	
51.4	1.70	1393	SIFN56B28 - 132MA-4G	28.11		18 000	137	M28	
53.5	1.90	1340	SIFN56C28 - 132MA-4G	27.03		17 900	137	M28	
52.8	3.00	1356	SIFN66B28 - 132MA-4G	27.36		38 000	194	M36	
47.0	0.92	1523	SIFN46B31.5 - 132MA-4G	30.73		17 000	96	M20	
48.3	1.10	1484	SIFN46C31.5 - 132MA-4G	29.94		17 000	96	M20	
47.4	1.60	1510	SIFN56B31.5 - 132MA-4G	30.46		18 200	137	M28	
48.4	2.80	1480	SIFN66B31.5 - 132MA-4G	29.86		38 000	194	M36	
44.1	3.00	1624	SIFN66C31.5 - 132MA-4G	32.77		38 000	194	M36	
40.7	0.80	1758	SIFN46B35.5 - 132MA-4G	35.47		17 200	96	M20	
42.1	0.94	1702	SIFN46C35.5 - 132MA-4G	34.34		17 300	96	M20	
40.2	1.30	1781	SIFN56B35.5 - 132MA-4G	35.94		18 700	137	M28	
41.9	1.60	1709	SIFN56C35.5 - 132MA-4G	34.48		18 600	137	M28	
42.3	2.40	1694	SIFN66B35.5 - 132MA-4G	34.18		38 000	194	M36	
39.4	2.80	1817	SIFN66C35.5 - 132MA-4G	36.65		38 000	194	M36	
38.1	0.85	1878	SIFN46C40 - 132MA-4G	37.89		17 400	96	M20	
36.0	1.20	1987	SIFN56B40 - 132MA-4G	40.09		18 900	137	M28	
37.7	1.50	1900	SIFN56C40 - 132MA-4G	38.33		18 800	137	M28	
38.7	2.20	1851	SIFN66B40 - 132MA-4G	37.35		38 000	194	M36	
36.5	2.50	1961	SIFN66C40 - 132MA-4G	39.57		38 000	194	M36	
32.4	1.10	2210	SIFN56B45 - 132MA-4G	44.58		19 100	137	M28	
33.1	1.30	2162	SIFN56C45 - 132MA-4G	43.63		19 100	137	M28	
32.8	1.90	2181	SIFN66B45 - 132MA-4G	44.00		38 000	194	M36	
32.4	2.30	2209	SIFN66C45 - 132MA-4G	44.56		38 000	194	M36	
30.7	1.20	2335	SIFN56C50 - 132MA-4G	47.10		19 200	137	M28	
29.8	1.70	2402	SIFN66B50 - 132MA-4G	48.46		38 000	194	M36	
28.6	2.00	2501	SIFN66C50 - 132MA-4G	50.46		38 000	194	M36	
27.7	1.10	2588	SIFN56C56 - 132MA-4G	52.21		19 300	137	M28	
26.9	1.40	2667	SIFN66B56 - 132MA-4G	53.82		38 000	194	M36	
26.3	1.80	2727	SIFN66C56 - 132MA-4G	55.03		38 000	194	M36	
24.0	0.94	2978	SIFN56C63 - 132MA-4G	60.09		19 400	137	M28	
22.9	1.60	3127	SIFN66C63 - 132MA-4G	63.10		38 000	194	M36	
23.4	2.90	3063	SIFN76C63 - 132MA-4G	61.80		52 500	289	M46	
21.3	0.83	3359	SIFN56C71 - 132MA-4G	67.77		19 300	137	M28	
19.8	1.40	3623	SIFN66C71 - 132MA-4G	73.11		38 000	194	M36	
20.9	2.60	3432	SIFN76C71 - 132MA-4G	69.24		52 500	289	M46	



P 7.5 kW n₁ 1445 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
17.8	1.20	4026	SIFN66C80 - 132MA-4G	81.23		38 000	194	M36	
18.5	2.30	3874	SIFN76C80 - 132MA-4G	78.17		52 500	289	M46	
16.7	1.20	4301	SIFN66C90 - 132MA-4G	86.77		38 000	194	M36	
16.4	2.10	4360	SIFN76C90 - 132MA-4G	87.97		52 500	289	M46	
15.0	1.00	4781	SIFN66C100 - 132MA-4G	96.46		38 000	194	M36	
14.2	1.80	5029	SIFN76C100 - 132MA-4G	101.47		52 500	289	M46	
14.5	3.00	4933	SIFN86C100 - 132MA-4G	99.53		82 000	459	M55	
13.2	0.92	5424	SIFN66C112 - 132MA-4G	109.44		38 000	194	M36	
13.0	1.60	5497	SIFN76C112 - 132MA-4G	110.90		52 500	289	M46	
13.0	2.70	5489	SIFN86C112 - 132MA-4G	110.75		82 000	459	M55	
12.1	0.84	5921	SIFN66C125 - 132MA-4G	119.46		38 000	194	M36	
12.0	1.50	5960	SIFN76C125 - 132MA-4G	120.26		52 500	289	M46	
11.7	2.30	6120	SIFN86C36B125 - 132MA-4G	123.47		82 000	497	M55	
10.2	1.30	7037	SIFN76C140 - 132MA-4G	141.97		52 500	289	M46	
10.7	2.20	6700	SIFN86C36B140 - 132MA-4G	135.18		82 000	497	M55	
9.2	1.20	7767	SIFN76C160 - 132MA-4G	156.70		52 500	289	M46	
9.2	1.90	7777	SIFN86C36B160 - 132MA-4G	156.91		82 000	497	M55	
8.3	1.00	8643	SIFN76C180 - 132MA-4G	174.37		52 500	289	M46	
8.2	1.70	8708	SIFN86C36B180 - 132MA-4G	175.69		82 000	497	M55	
8.3	2.90	8678	SIFN96C180 - 132MA-4G	175.09		105 000	669	M64	
7.4	0.93	9635	SIFN76C36B200 - 132MA-4G	194.40		52 500	327	M46	
7.2	1.50	9882	SIFN86C36B200 - 132MA-4G	199.38		82 000	497	M55	
7.4	2.30	9675	SIFN96C36B200 - 132MA-4G	195.20		105 000	707	M64	
6.4	0.80	11184	SIFN76C36B224 - 132MA-4G	225.66		52 500	327	M46	
6.5	1.40	11065	SIFN86C36B224 - 132MA-4G	223.24		82 000	497	M55	
6.8	2.30	10592	SIFN96C36B224 - 132MA-4G	213.71		105 000	707	M64	
5.7	1.20	12668	SIFN86C36B250 - 132MA-4G	255.59		82 000	497	M55	
5.9	2.00	12197	SIFN96C36B250 - 132MA-4G	246.10		105 000	707	M64	
5.2	1.10	13899	SIFN86C36B280 - 132MA-4G	280.43		82 000	497	M55	
5.1	1.80	14159	SIFN96C36B280 - 132MA-4G	285.66		105 000	707	M64	
4.5	0.93	16054	SIFN86C36B315 - 132MA-4G	323.90		82 000	497	M55	
4.5	1.60	15853	SIFN96C36B315 - 132MA-4G	319.84		105 000	707	M64	
4.0	0.85	17746	SIFN86C36B355 - 132MA-4G	358.05		82 000	497	M55	
3.9	1.40	18150	SIFN96C36B355 - 132MA-4G	366.20		105 000	707	M64	
3.6	1.30	19914	SIFN96C36B400 - 132MA-4G	401.79		105 000	707	M64	
3.1	1.10	23001	SIFN96C36B450 - 132MA-4G	464.07		105 000	707	M64	
2.8	0.98	25426	SIFN96C36B500 - 132MA-4G	513.00		105 000	707	M64	
2.5	0.89	28225	SIFN96C36B560 - 132MA-4G	569.46		105 000	707	M64	
2.4	0.83	30230	SIFN96C36B630 - 132MA-4G	609.91		105 000	707	M64	

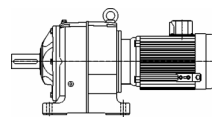
P 9.0 kW n₁ 1435 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
515.1	0.81	167	SIFN26B2.8 - 132MB-4G	2.79		2 700	59	M06	
515.4	1.50	167	SIFN36B2.8 - 132MB-4G	2.78		6 600	79	M12	
511.6	2.20	168	SIFN46B2.8 - 132MB-4G	2.80		9 500	98	M20	
462.0	0.81	186	SIFN26B3.15 - 132MB-4G	3.11		2 700	59	M06	




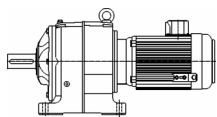
4. SI4

P 9.0 kW
n₁ 1435 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
444.0	1.50	194	SIFN36B3.15 - 132MB-4G	3.23		6 800	79	M12	
456.2	2.20	188	SIFN46B3.15 - 132MB-4G	3.15		9 800	98	M20	
391.4	0.82	220	SIFN26B3.55 - 132MB-4G	3.67		2 700	59	M06	
396.6	1.50	217	SIFN36B3.55 - 132MB-4G	3.62		7 000	79	M12	
396.4	2.20	217	SIFN46B3.55 - 132MB-4G	3.62		10 200	98	M20	
346.4	1.50	248	SIFN36B4 - 132MB-4G	4.14		7 200	79	M12	
349.6	2.20	246	SIFN46B4 - 132MB-4G	4.10		10 500	98	M20	
315.7	1.50	272	SIFN36B4.5 - 132MB-4G	4.55		7 300	79	M12	
310.8	2.20	276	SIFN46B4.5 - 132MB-4G	4.62		10 900	98	M20	
273.3	1.50	314	SIFN36B5 - 132MB-4G	5.25		7 500	79	M12	
271.1	2.20	317	SIFN46B5 - 132MB-4G	5.29		11 300	98	M20	
262.1	1.60	328	SIFN36B5.6 - 132MB-4G	5.48		7 900	79	M12	
265.9	2.60	323	SIFN46B5.6 - 132MB-4G	5.40		11 500	98	M20	
225.8	1.40	381	SIFN36B6.3 - 132MB-4G	6.36		8 100	79	M12	
237.1	2.50	362	SIFN46B6.3 - 132MB-4G	6.05		11 900	98	M20	
201.7	1.40	426	SIFN36B7.1 - 132MB-4G	7.12		8 300	79	M12	
206.0	2.30	417	SIFN46B7.1 - 132MB-4G	6.97		12 300	98	M20	
176.1	1.30	488	SIFN36B8 - 132MB-4G	8.15		8 400	79	M12	
181.7	2.20	473	SIFN46B8 - 132MB-4G	7.90		12 700	98	M20	
160.5	1.20	535	SIFN36B9 - 132MB-4G	8.94		8 600	79	M12	
161.6	2.10	532	SIFN46B9 - 132MB-4G	8.88		13 100	98	M20	
139.0	1.10	618	SIFN36B10 - 132MB-4G	10.33		8 700	79	M12	
140.9	2.00	610	SIFN46B10 - 132MB-4G	10.18		13 500	98	M20	
125.7	1.10	684	SIFN36B11.2 - 132MB-4G	11.41		8 800	79	M12	
127.7	1.90	673	SIFN46B11.2 - 132MB-4G	11.24		13 800	98	M20	
113.3	0.95	759	SIFN36B12.5 - 132MB-4G	12.67		8 900	79	M12	
116.0	1.80	741	SIFN46B12.5 - 132MB-4G	12.37		14 000	98	M20	
105.7	0.89	813	SIFN36B14 - 132MB-4G	13.57		8 900	79	M12	
103.0	1.70	834	SIFN46B14 - 132MB-4G	13.93		14 400	98	M20	
105.2	2.90	817	SIFN56B14 - 132MB-4G	13.64		15 100	139	M28	
92.9	1.50	925	SIFN46B16 - 132MB-4G	15.45		14 600	98	M20	
94.9	2.70	906	SIFN56B16 - 132MB-4G	15.12		15 400	139	M28	
81.1	1.30	1060	SIFN46B18 - 132MB-4G	17.70		15 000	98	M20	
84.1	2.10	1022	SIFN56C18 - 132MB-4G	17.07		15 800	139	M28	
82.5	2.30	1042	SIFN56B18 - 132MB-4G	17.40		15 900	139	M28	
69.0	1.10	1245	SIFN46B20 - 132MB-4G	20.78		15 300	98	M20	
73.1	2.00	1175	SIFN56B20 - 132MB-4G	19.63		16 200	139	M28	
64.5	1.10	1332	SIFN46B22.4 - 132MB-4G	22.24		15 500	98	M20	
64.2	1.80	1338	SIFN56B22.4 - 132MB-4G	22.35		16 600	139	M28	
57.8	0.94	1488	SIFN46B25 - 132MB-4G	24.84		15 600	98	M20	
58.5	1.60	1468	SIFN56B25 - 132MB-4G	24.52		16 800	139	M28	
59.5	2.80	1444	SIFN66B25 - 132MB-4G	24.12		38 000	196	M36	
50.6	0.82	1698	SIFN46B28 - 132MB-4G	28.34		15 800	98	M20	
53.9	0.94	1594	SIFN46C28 - 132MB-4G	26.62		15 800	98	M20	
51.1	1.40	1683	SIFN56B28 - 132MB-4G	28.11		17 100	139	M28	
52.5	2.50	1639	SIFN66B28 - 132MB-4G	27.36		38 000	196	M36	
50.6	2.80	1698	SIFN66C28 - 132MB-4G	28.35		38 000	196	M36	
47.9	0.89	1793	SIFN46C31.5 - 132MB-4G	29.94		15 900	98	M20	
47.1	1.30	1824	SIFN56B31.5 - 132MB-4G	30.46		17 300	139	M28	
48.1	2.30	1789	SIFN66B31.5 - 132MB-4G	29.86		38 000	196	M36	
43.8	2.50	1963	SIFN66C31.5 - 132MB-4G	32.77		38 000	196	M36	
39.9	1.10	2153	SIFN56B35.5 - 132MB-4G	35.94		17 500	139	M28	




P 9.0 kW n₁ 1435 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
41.6	1.40	2065	SIFN56C35.5 - 132MB-4G	34.48		17 500	139	M28	
42.0	2.00	2047	SIFN66B35.5 - 132MB-4G	34.18		38 000	196	M36	
39.2	2.30	2195	SIFN66C35.5 - 132MB-4G	36.65		38 000	196	M36	
35.8	1.00	2401	SIFN56B40 - 132MB-4G	40.09		17 600	139	M28	
37.4	1.20	2295	SIFN56C40 - 132MB-4G	38.33		17 600	139	M28	
38.4	1.80	2237	SIFN66B40 - 132MB-4G	37.35		38 000	196	M36	
36.3	2.10	2370	SIFN66C40 - 132MB-4G	39.57		38 000	196	M36	
32.2	0.90	2670	SIFN56B45 - 132MB-4G	44.58		17 700	139	M28	
32.9	1.10	2613	SIFN56C45 - 132MB-4G	43.63		17 700	139	M28	
32.6	1.60	2635	SIFN66B45 - 132MB-4G	44.00		38 000	196	M36	
32.2	1.90	2669	SIFN66C45 - 132MB-4G	44.56		38 000	196	M36	
32.4	2.50	2649	SIFN76B45 - 132MB-4G	44.23		52 500	291	M46	
30.5	0.99	2821	SIFN56C50 - 132MB-4G	47.10		17 700	139	M28	
29.6	1.40	2902	SIFN66B50 - 132MB-4G	48.46		38 000	196	M36	
28.4	1.70	3022	SIFN66C50 - 132MB-4G	50.46		38 000	196	M36	
29.1	3.00	2958	SIFN76C50 - 132MB-4G	49.39		52 500	291	M46	
27.5	0.90	3127	SIFN56C56 - 132MB-4G	52.21		17 600	139	M28	
26.7	1.20	3223	SIFN66B56 - 132MB-4G	53.82		38 000	196	M36	
26.1	1.50	3296	SIFN66C56 - 132MB-4G	55.03		38 000	196	M36	
25.9	2.70	3324	SIFN76C56 - 132MB-4G	55.50		52 500	291	M46	
22.7	1.30	3779	SIFN66C63 - 132MB-4G	63.10		38 000	196	M36	
23.2	2.40	3701	SIFN76C63 - 132MB-4G	61.80		52 500	291	M46	
19.6	1.10	4379	SIFN66C71 - 132MB-4G	73.11		38 000	196	M36	
20.7	2.20	4147	SIFN76C71 - 132MB-4G	69.24		52 500	291	M46	
17.7	1.00	4865	SIFN66C80 - 132MB-4G	81.23		38 000	196	M36	
18.4	1.90	4682	SIFN76C80 - 132MB-4G	78.17		52 500	291	M46	
16.5	0.96	5197	SIFN66C90 - 132MB-4G	86.77		38 000	196	M36	
16.3	1.70	5268	SIFN76C90 - 132MB-4G	87.97		52 500	291	M46	
15.9	2.80	5400	SIFN86C90 - 132MB-4G	90.17		82 000	461	M55	
14.9	0.87	5777	SIFN66C100 - 132MB-4G	96.46		36 200	196	M36	
14.1	1.50	6077	SIFN76C100 - 132MB-4G	101.47		52 500	291	M46	
14.4	2.50	5961	SIFN86C100 - 132MB-4G	99.53		82 000	461	M55	
12.9	1.40	6642	SIFN76C112 - 132MB-4G	110.90		52 500	291	M46	
13.0	2.30	6633	SIFN86C112 - 132MB-4G	110.75		82 000	461	M55	
11.9	1.20	7202	SIFN76C125 - 132MB-4G	120.26		52 500	291	M46	
11.6	1.90	7395	SIFN86C36B125 - 132MB-4G	123.47		82 000	499	M55	
10.1	1.10	8503	SIFN76C140 - 132MB-4G	141.97		52 500	291	M46	
10.6	1.90	8096	SIFN86C36B140 - 132MB-4G	135.18		82 000	499	M55	
10.1	2.90	8538	SIFN96C140 - 132MB-4G	142.55		105 000	671	M64	
9.2	0.96	9385	SIFN76C160 - 132MB-4G	156.70		52 500	291	M46	
9.1	1.60	9398	SIFN86C36B160 - 132MB-4G	156.91		82 000	499	M55	
9.1	2.70	9423	SIFN96C160 - 132MB-4G	157.34		105 000	671	M64	
8.2	0.86	10443	SIFN76C180 - 132MB-4G	174.37		52 500	291	M46	
8.2	1.40	10522	SIFN86C36B180 - 132MB-4G	175.69		82 000	499	M55	
8.2	2.40	10486	SIFN96C180 - 132MB-4G	175.09		105 000	671	M64	
7.2	1.30	11941	SIFN86C36B200 - 132MB-4G	199.38		82 000	499	M55	
7.4	1.90	11691	SIFN96C36B200 - 132MB-4G	195.20		105 000	709	M64	
6.4	1.10	13370	SIFN86C36B224 - 132MB-4G	223.24		82 000	499	M55	
6.7	1.90	12799	SIFN96C36B224 - 132MB-4G	213.71		105 000	709	M64	
5.6	0.98	15308	SIFN86C36B250 - 132MB-4G	255.59		82 000	499	M55	
5.8	1.70	14739	SIFN96C36B250 - 132MB-4G	246.10		105 000	709	M64	
5.1	0.89	16795	SIFN86C36B280 - 132MB-4G	280.43		82 000	499	M55	




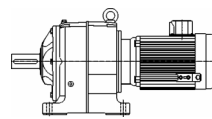
4. SI4


P 9.0 kW
n₁ 1435 min⁻¹

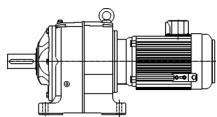
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
5.0	1.50	17109	SIFN96C36B280 - 132MB-4G	285.66		105 000	709	M64	
4.5	1.30	19156	SIFN96C36B315 - 132MB-4G	319.84		105 000	709	M64	
3.9	1.10	21932	SIFN96C36B355 - 132MB-4G	366.20		105 000	709	M64	
3.6	1.00	24064	SIFN96C36B400 - 132MB-4G	401.79		105 000	709	M64	
3.1	0.90	27793	SIFN96C36B450 - 132MB-4G	464.07		105 000	709	M64	
2.8	0.81	30724	SIFN96C36B500 - 132MB-4G	513.00		105 000	709	M64	

P 11.0 kW
n₁ 1465 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
526.2	1.30	200	SIFN36B2.8 - 160M-4G	2.78		6 300	148	M12	
522.3	1.90	201	SIFN46B2.8 - 160M-4G	2.80		9 300	167	M20	
453.3	1.30	232	SIFN36B3.15 - 160M-4G	3.23		6 500	148	M12	
465.8	1.90	226	SIFN46B3.15 - 160M-4G	3.15		9 600	167	M20	
404.9	1.30	259	SIFN36B3.55 - 160M-4G	3.62		6 700	148	M12	
404.7	1.90	260	SIFN46B3.55 - 160M-4G	3.62		9 900	167	M20	
353.6	1.20	297	SIFN36B4 - 160M-4G	4.14		6 800	148	M12	
356.9	1.90	294	SIFN46B4 - 160M-4G	4.10		10 300	167	M20	
322.3	1.20	326	SIFN36B4.5 - 160M-4G	4.55		7 000	148	M12	
317.3	1.90	331	SIFN46B4.5 - 160M-4G	4.62		10 600	167	M20	
279.0	1.20	376	SIFN36B5 - 160M-4G	5.25		7 100	148	M12	
276.7	1.90	380	SIFN46B5 - 160M-4G	5.29		10 900	167	M20	
267.6	1.30	393	SIFN36B5.6 - 160M-4G	5.48		7 500	148	M12	
271.5	2.20	387	SIFN46B5.6 - 160M-4G	5.40		11 200	167	M20	
230.5	1.20	456	SIFN36B6.3 - 160M-4G	6.36		7 700	148	M12	
242.1	2.10	434	SIFN46B6.3 - 160M-4G	6.05		11 500	167	M20	
205.9	1.10	510	SIFN36B7.1 - 160M-4G	7.12		7 800	148	M12	
210.3	2.00	499	SIFN46B7.1 - 160M-4G	6.97		11 900	167	M20	
179.8	1.00	584	SIFN36B8 - 160M-4G	8.15		7 900	148	M12	
185.5	1.90	566	SIFN46B8 - 160M-4G	7.90		12 300	167	M20	
163.9	1.00	641	SIFN36B9 - 160M-4G	8.94		8 000	148	M12	
164.9	1.80	637	SIFN46B9 - 160M-4G	8.88		12 600	167	M20	
141.9	0.92	740	SIFN36B10 - 160M-4G	10.33		8 100	148	M12	
143.8	1.70	730	SIFN46B10 - 160M-4G	10.18		12 900	167	M20	
128.4	0.88	818	SIFN36B11.2 - 160M-4G	11.41		8 100	148	M12	
130.4	1.60	806	SIFN46B11.2 - 160M-4G	11.24		13 200	167	M20	
132.0	3.00	796	SIFN56B11.2 - 160M-4G	11.10		13 900	208	M28	
118.5	1.50	887	SIFN46B12.5 - 160M-4G	12.37		13 400	167	M20	
116.0	2.60	906	SIFN56B12.5 - 160M-4G	12.63		14 300	208	M28	
105.2	1.40	999	SIFN46B14 - 160M-4G	13.93		13 600	167	M20	
107.4	2.50	978	SIFN56B14 - 160M-4G	13.64		14 500	208	M28	
94.8	1.30	1108	SIFN46B16 - 160M-4G	15.45		13 800	167	M20	
96.9	2.20	1084	SIFN56B16 - 160M-4G	15.12		14 700	208	M28	
82.8	1.10	1269	SIFN46B18 - 160M-4G	17.70		14 100	167	M20	
85.8	1.70	1224	SIFN56C18 - 160M-4G	17.07		15 000	208	M28	
84.2	1.90	1248	SIFN56B18 - 160M-4G	17.40		15 100	208	M28	
70.5	0.94	1490	SIFN46B20 - 160M-4G	20.78		14 300	167	M20	




P 11.0 kW n₁ 1465 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
74.6	1.70	1407	SIFN56B20 - 160M-4G	19.63		15 300	208	M28	
72.1	2.80	1456	SIFN66B20 - 160M-4G	20.31		38 000	265	M36	
65.9	0.88	1595	SIFN46B22.4 - 160M-4G	22.24		14 300	167	M20	
65.6	1.50	1602	SIFN56B22.4 - 160M-4G	22.35		15 600	208	M28	
67.5	2.60	1555	SIFN66B22.4 - 160M-4G	21.69		38 000	265	M36	
66.1	2.90	1588	SIFN66C22.4 - 160M-4G	22.15		38 000	265	M36	
62.4	0.83	1684	SIFN46C25 - 160M-4G	23.48		14 500	167	M20	
59.8	1.40	1758	SIFN56B25 - 160M-4G	24.52		15 700	208	M28	
60.7	2.40	1729	SIFN66B25 - 160M-4G	24.12		38 000	265	M36	
52.1	1.20	2015	SIFN56B28 - 160M-4G	28.11		15 900	208	M28	
53.5	2.10	1962	SIFN66B28 - 160M-4G	27.36		38 000	265	M36	
51.7	2.30	2032	SIFN66C28 - 160M-4G	28.35		38 000	265	M36	
48.1	1.10	2184	SIFN56B31.5 - 160M-4G	30.46		15 900	208	M28	
49.1	1.90	2141	SIFN66B31.5 - 160M-4G	29.86		38 000	265	M36	
44.7	2.10	2350	SIFN66C31.5 - 160M-4G	32.77		38 000	265	M36	
40.8	0.93	2577	SIFN56B35.5 - 160M-4G	35.94		16 000	208	M28	
42.5	1.10	2472	SIFN56C35.5 - 160M-4G	34.48		16 000	208	M28	
42.9	1.70	2451	SIFN66B35.5 - 160M-4G	34.18		38 000	265	M36	
40.0	1.90	2628	SIFN66C35.5 - 160M-4G	36.65		38 000	265	M36	
40.7	2.80	2582	SIFN76B35.5 - 160M-4G	36.01		52 500	360	M46	
36.5	0.83	2875	SIFN56B40 - 160M-4G	40.09		15 900	208	M28	
38.2	1.00	2748	SIFN56C40 - 160M-4G	38.33		15 900	208	M28	
39.2	1.50	2678	SIFN66B40 - 160M-4G	37.35		38 000	265	M36	
37.0	1.80	2838	SIFN66C40 - 160M-4G	39.57		38 000	265	M36	
36.9	2.60	2850	SIFN76B40 - 160M-4G	39.74		52 500	360	M46	
33.6	0.90	3128	SIFN56C45 - 160M-4G	43.63		15 800	208	M28	
33.3	1.30	3155	SIFN66B45 - 160M-4G	44.00		38 000	265	M36	
32.9	1.60	3195	SIFN66C45 - 160M-4G	44.56		38 000	265	M36	
33.1	2.10	3171	SIFN76B45 - 160M-4G	44.23		52 500	360	M46	
32.7	2.80	3210	SIFN76C45 - 160M-4G	44.76		52 500	360	M46	
31.1	0.83	3377	SIFN56C50 - 160M-4G	47.10		15 700	208	M28	
30.2	1.20	3475	SIFN66B50 - 160M-4G	48.46		38 000	265	M36	
29.0	1.40	3618	SIFN66C50 - 160M-4G	50.46		37 700	265	M36	
29.7	2.50	3541	SIFN76C50 - 160M-4G	49.39		52 500	360	M46	
27.2	0.98	3859	SIFN66B56 - 160M-4G	53.82		37 200	265	M36	
26.6	1.30	3946	SIFN66C56 - 160M-4G	55.03		37 000	265	M36	
26.4	2.30	3980	SIFN76C56 - 160M-4G	55.50		52 500	360	M46	
23.2	1.10	4524	SIFN66C63 - 160M-4G	63.10		35 500	265	M36	
23.7	2.00	4431	SIFN76C63 - 160M-4G	61.80		52 500	360	M46	
20.0	0.95	5242	SIFN66C71 - 160M-4G	73.11		33 200	265	M36	
21.2	1.80	4965	SIFN76C71 - 160M-4G	69.24		52 500	360	M46	
20.8	3.00	5051	SIFN86C71 - 160M-4G	70.44		82 000	530	M55	
18.0	0.86	5824	SIFN66C80 - 160M-4G	81.23		31 200	265	M36	
18.7	1.60	5605	SIFN76C80 - 160M-4G	78.17		52 500	360	M46	
19.2	2.70	5477	SIFN86C80 - 160M-4G	76.38		82 000	530	M55	
16.9	0.80	6221	SIFN66C90 - 160M-4G	86.77		29 800	265	M36	
16.7	1.40	6307	SIFN76C90 - 160M-4G	87.97		52 500	360	M46	
16.2	2.30	6465	SIFN86C90 - 160M-4G	90.17		82 000	530	M55	
14.4	1.20	7275	SIFN76C100 - 160M-4G	101.47		52 500	360	M46	
14.7	2.10	7136	SIFN86C100 - 160M-4G	99.53		82 000	530	M55	
13.2	1.10	7952	SIFN76C112 - 160M-4G	110.90		52 500	360	M46	
13.2	1.90	7941	SIFN86C112 - 160M-4G	110.75		82 000	530	M55	




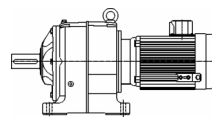
4. SI4


P 11.0 kW
n₁ 1465 min⁻¹

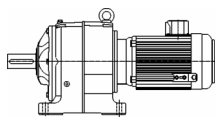
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
12.2	1.00	8623	SIFN76C125 - 160M-4G	120.26		52 500	360	M46	
11.9	1.60	8853	SIFN86C36B125 - 160M-4G	123.47		82 000	568	M55	
12.1	2.90	8658	SIFN96C125 - 160M-4G	120.75		105 000	740	M64	
10.3	0.88	10179	SIFN76C140 - 160M-4G	141.97		52 500	360	M46	
10.8	1.50	9692	SIFN86C36B140 - 160M-4G	135.18		82 000	568	M55	
10.3	2.40	10221	SIFN96C140 - 160M-4G	142.55		105 000	740	M64	
9.3	0.80	11235	SIFN76C160 - 160M-4G	156.70		52 500	360	M46	
9.3	1.30	11251	SIFN86C36B160 - 160M-4G	156.91		82 000	568	M55	
9.3	2.20	11282	SIFN96C160 - 160M-4G	157.34		105 000	740	M64	
8.3	1.20	12597	SIFN86C36B180 - 160M-4G	175.69		82 000	568	M55	
8.4	2.00	12554	SIFN96C180 - 160M-4G	175.09		105 000	740	M64	
7.3	1.00	14296	SIFN86C36B200 - 160M-4G	199.38		82 000	568	M55	
7.5	1.60	13996	SIFN96C36B200 - 160M-4G	195.20		105 000	778	M64	
6.6	0.94	16006	SIFN86C36B224 - 160M-4G	223.24		82 000	568	M55	
6.9	1.60	15323	SIFN96C36B224 - 160M-4G	213.71		105 000	778	M64	
5.7	0.82	18326	SIFN86C36B250 - 160M-4G	255.59		82 000	568	M55	
6.0	1.40	17645	SIFN96C36B250 - 160M-4G	246.10		105 000	778	M64	
5.1	1.20	20482	SIFN96C36B280 - 160M-4G	285.66		105 000	778	M64	
4.6	1.10	22933	SIFN96C36B315 - 160M-4G	319.84		105 000	778	M64	
4.0	0.95	26257	SIFN96C36B355 - 160M-4G	366.20		105 000	778	M64	
3.6	0.87	28809	SIFN96C36B400 - 160M-4G	401.79		105 000	778	M64	

P 15.0 kW
n₁ 1460 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
524.4	0.92	273	SIFN36B2.8 - 160L-4G	2.78		5 900	168	M12	
520.5	1.40	275	SIFN46B2.8 - 160L-4G	2.80		9 000	187	M20	
532.6	2.50	269	SIFN56B2.8 - 160L-4G	2.74		9 300	228	M28	
451.8	0.91	317	SIFN36B3.15 - 160L-4G	3.23		6 100	168	M12	
464.2	1.40	309	SIFN46B3.15 - 160L-4G	3.15		9 200	187	M20	
482.9	2.50	297	SIFN56B3.15 - 160L-4G	3.02		9 500	228	M28	
403.5	0.92	355	SIFN36B3.55 - 160L-4G	3.62		6 100	168	M12	
403.3	1.40	355	SIFN46B3.55 - 160L-4G	3.62		9 500	187	M20	
419.4	2.50	342	SIFN56B3.55 - 160L-4G	3.48		9 900	228	M28	
352.4	0.91	406	SIFN36B4 - 160L-4G	4.14		6 200	168	M12	
355.7	1.40	403	SIFN46B4 - 160L-4G	4.10		9 800	187	M20	
371.2	2.30	386	SIFN56B4 - 160L-4G	3.93		10 200	228	M28	
321.2	0.91	446	SIFN36B4.5 - 160L-4G	4.55		6 300	168	M12	
316.3	1.40	453	SIFN46B4.5 - 160L-4G	4.62		10 000	187	M20	
336.3	2.50	426	SIFN56B4.5 - 160L-4G	4.34		10 400	228	M28	
278.1	0.91	515	SIFN36B5 - 160L-4G	5.25		6 300	168	M12	
275.8	1.40	519	SIFN46B5 - 160L-4G	5.29		10 300	187	M20	
295.4	3.00	485	SIFN56B5 - 160L-4G	4.94		11 000	228	M28	
266.6	0.97	537	SIFN36B5.6 - 160L-4G	5.48		6 800	168	M12	
270.6	1.60	529	SIFN46B5.6 - 160L-4G	5.40		10 700	187	M20	
267.8	2.90	535	SIFN56B5.6 - 160L-4G	5.45		11 300	228	M28	
229.7	0.88	624	SIFN36B6.3 - 160L-4G	6.36		6 900	168	M12	




P 15.0 kW									
n ₁ 1460 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
241.3	1.50	594	SIFN46B6.3 - 160L-4G	6.05		10 900	187	M20	
232.6	2.70	616	SIFN56B6.3 - 160L-4G	6.28		11 600	228	M28	
205.2	0.83	698	SIFN36B7.1 - 160L-4G	7.12		6 900	168	M12	
209.6	1.40	683	SIFN46B7.1 - 160L-4G	6.97		11 200	187	M20	
205.9	2.60	696	SIFN56B7.1 - 160L-4G	7.09		11 900	228	M28	
184.9	1.40	775	SIFN46B8 - 160L-4G	7.90		11 500	187	M20	
186.5	2.50	768	SIFN56B8 - 160L-4G	7.83		12 200	228	M28	
164.4	1.30	871	SIFN46B9 - 160L-4G	8.88		11 700	187	M20	
164.3	2.40	872	SIFN56B9 - 160L-4G	8.88		12 500	228	M28	
143.4	1.20	999	SIFN46B10 - 160L-4G	10.18		11 900	187	M20	
146.2	2.30	980	SIFN56B10 - 160L-4G	9.99		12 700	228	M28	
129.9	1.20	1103	SIFN46B11.2 - 160L-4G	11.24		12 100	187	M20	
131.5	2.20	1089	SIFN56B11.2 - 160L-4G	11.10		12 900	228	M28	
118.1	1.10	1213	SIFN46B12.5 - 160L-4G	12.37		12 200	187	M20	
115.6	1.90	1240	SIFN56B12.5 - 160L-4G	12.63		13 200	228	M28	
104.8	1.00	1367	SIFN46B14 - 160L-4G	13.93		12 300	187	M20	
107.0	1.80	1338	SIFN56B14 - 160L-4G	13.64		13 300	228	M28	
106.1	3.00	1350	SIFN66B14 - 160L-4G	13.76		33 700	285	M36	
94.5	0.92	1516	SIFN46B16 - 160L-4G	15.45		12 300	187	M20	
96.6	1.60	1483	SIFN56B16 - 160L-4G	15.12		13 400	228	M28	
92.6	2.60	1548	SIFN66B16 - 160L-4G	15.77		34 100	285	M36	
82.5	0.81	1737	SIFN46B18 - 160L-4G	17.70		10 700	187	M20	
83.9	1.40	1707	SIFN56B18 - 160L-4G	17.40		13 600	228	M28	
79.9	2.30	1793	SIFN66B18 - 160L-4G	18.28		34 300	285	M36	
74.4	1.20	1926	SIFN56B20 - 160L-4G	19.63		13 700	228	M28	
71.9	2.10	1992	SIFN66B20 - 160L-4G	20.31		34 400	285	M36	
73.2	2.30	1958	SIFN66C20 - 160L-4G	19.96		34 400	285	M36	
65.3	1.10	2192	SIFN56B22.4 - 160L-4G	22.35		13 700	228	M28	
67.3	1.90	2128	SIFN66B22.4 - 160L-4G	21.69		34 400	285	M36	
65.9	2.10	2173	SIFN66C22.4 - 160L-4G	22.15		34 400	285	M36	
59.6	1.00	2405	SIFN56B25 - 160L-4G	24.52		13 600	228	M28	
60.5	1.70	2366	SIFN66B25 - 160L-4G	24.12		34 200	285	M36	
56.7	2.90	2525	SIFN76B25 - 160L-4G	25.73		52 500	380	M46	
51.9	0.87	2758	SIFN56B28 - 160L-4G	28.11		13 500	228	M28	
53.4	1.50	2684	SIFN66B28 - 160L-4G	27.36		33 900	285	M36	
51.5	1.70	2781	SIFN66C28 - 160L-4G	28.35		33 800	285	M36	
51.9	2.60	2760	SIFN76B28 - 160L-4G	28.13		52 500	380	M46	
47.9	0.80	2989	SIFN56B31.5 - 160L-4G	30.46		13 400	228	M28	
48.9	1.40	2930	SIFN66B31.5 - 160L-4G	29.86		33 500	285	M36	
47.9	2.40	2992	SIFN76B31.5 - 160L-4G	30.50		52 500	380	M46	
42.3	0.83	3383	SIFN56C35.5 - 160L-4G	34.48		13 000	228	M28	
42.7	1.20	3354	SIFN66B35.5 - 160L-4G	34.18		32 700	285	M36	
39.8	1.40	3596	SIFN66C35.5 - 160L-4G	36.65		32 100	285	M36	
40.5	2.10	3533	SIFN76B35.5 - 160L-4G	36.01		52 500	380	M46	
39.1	1.10	3665	SIFN66B40 - 160L-4G	37.35		31 900	285	M36	
36.9	1.30	3883	SIFN66C40 - 160L-4G	39.57		31 400	285	M36	
36.7	1.90	3899	SIFN76B40 - 160L-4G	39.74		52 500	380	M46	
37.6	2.40	3814	SIFN76C40 - 160L-4G	38.87		52 500	380	M46	
33.2	0.95	4317	SIFN66B45 - 160L-4G	44.00		30 100	285	M36	
32.8	1.10	4372	SIFN66C45 - 160L-4G	44.56		29 900	285	M36	
33.0	1.50	4339	SIFN76B45 - 160L-4G	44.23		52 500	380	M46	
32.6	2.00	4392	SIFN76C45 - 160L-4G	44.76		52 500	380	M46	




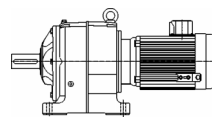
4. SI4


P 15.0 kW
n₁ 1460 min⁻¹

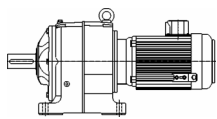
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
30.1	0.84	4755	SIFN66B50 - 160L-4G	48.46		28 700	285	M36	
28.9	1.00	4951	SIFN66C50 - 160L-4G	50.46		28 000	285	M36	
29.6	1.90	4846	SIFN76C50 - 160L-4G	49.39		52 500	380	M46	
26.5	0.93	5399	SIFN66C56 - 160L-4G	55.03		26 400	285	M36	
26.3	1.70	5445	SIFN76C56 - 160L-4G	55.50		52 500	380	M46	
26.1	2.70	5481	SIFN86C56 - 160L-4G	55.87		82 000	550	M55	
23.1	0.81	6191	SIFN66C63 - 160L-4G	63.10		23 400	285	M36	
23.6	1.50	6063	SIFN76C63 - 160L-4G	61.80		52 500	380	M46	
22.7	2.40	6323	SIFN86C63 - 160L-4G	64.45		82 000	550	M55	
21.1	1.30	6793	SIFN76C71 - 160L-4G	69.24		52 500	380	M46	
20.7	2.20	6911	SIFN86C71 - 160L-4G	70.44		82 000	550	M55	
18.7	1.20	7669	SIFN76C80 - 160L-4G	78.17		52 500	380	M46	
19.1	2.00	7494	SIFN86C80 - 160L-4G	76.38		82 000	550	M55	
16.6	1.00	8630	SIFN76C90 - 160L-4G	87.97		52 500	380	M46	
16.2	1.70	8847	SIFN86C90 - 160L-4G	90.17		82 000	550	M55	
16.5	2.90	8666	SIFN96C90 - 160L-4G	88.33		105 000	760	M64	
14.4	0.90	9955	SIFN76C100 - 160L-4G	101.47		52 500	380	M46	
14.7	1.50	9764	SIFN86C100 - 160L-4G	99.53		82 000	550	M55	
14.3	2.50	9996	SIFN96C100 - 160L-4G	101.88		105 000	760	M64	
13.2	0.83	10881	SIFN76C112 - 160L-4G	110.90		52 500	380	M46	
13.2	1.40	10866	SIFN86C112 - 160L-4G	110.75		82 000	550	M55	
13.1	2.30	10925	SIFN96C112 - 160L-4G	111.36		105 000	760	M64	
11.8	1.20	12114	SIFN86C36B125 - 160L-4G	123.47		82 000	588	M55	
12.1	2.10	11847	SIFN96C125 - 160L-4G	120.75		105 000	760	M64	
10.8	1.10	13262	SIFN86C36B140 - 160L-4G	135.18		82 000	588	M55	
10.2	1.80	13986	SIFN96C140 - 160L-4G	142.55		105 000	760	M64	
9.3	0.97	15395	SIFN86C36B160 - 160L-4G	156.91		82 000	588	M55	
9.3	1.60	15437	SIFN96C160 - 160L-4G	157.34		105 000	760	M64	
8.3	0.87	17237	SIFN86C36B180 - 160L-4G	175.69		82 000	588	M55	
8.3	1.50	17178	SIFN96C180 - 160L-4G	175.09		105 000	760	M64	
7.5	1.10	19151	SIFN96C36B200 - 160L-4G	195.20		105 000	798	M64	
6.8	1.10	20967	SIFN96C36B224 - 160L-4G	213.71		105 000	798	M64	
5.9	1.00	24144	SIFN96C36B250 - 160L-4G	246.10		105 000	798	M64	
5.1	0.89	28026	SIFN96C36B280 - 160L-4G	285.66		105 000	798	M64	
4.6	0.80	31380	SIFN96C36B315 - 160L-4G	319.84		105 000	798	M64	

P 18.5 kW
n₁ 1455 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
518.7	1.10	341	SIFN46B2.8 - 180M-4G	2.80		8 700	217	M20	
530.8	2.00	333	SIFN56B2.8 - 180M-4G	2.74		9 100	258	M28	
462.6	1.10	382	SIFN46B3.15 - 180M-4G	3.15		8 900	217	M20	
481.2	2.00	367	SIFN56B3.15 - 180M-4G	3.02		9 300	258	M28	
401.9	1.10	440	SIFN46B3.55 - 180M-4G	3.62		9 100	217	M20	
417.9	2.00	423	SIFN56B3.55 - 180M-4G	3.48		9 600	258	M28	
354.5	1.10	498	SIFN46B4 - 180M-4G	4.10		9 400	217	M20	
370.0	1.80	478	SIFN56B4 - 180M-4G	3.93		9 800	258	M28	




P 18.5 kW									
n ₁ 1455 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
315.2	1.10	561	SIFN46B4.5 - 180M-4G	4.62		9 500	217	M20	
335.1	2.00	527	SIFN56B4.5 - 180M-4G	4.34		10 000	258	M28	
274.9	1.10	643	SIFN46B5 - 180M-4G	5.29		9 700	217	M20	
294.4	2.40	600	SIFN56B5 - 180M-4G	4.94		10 600	258	M28	
269.6	1.30	655	SIFN46B5.6 - 180M-4G	5.40		10 200	217	M20	
266.9	2.40	662	SIFN56B5.6 - 180M-4G	5.45		10 900	258	M28	
240.4	1.20	735	SIFN46B6.3 - 180M-4G	6.05		10 400	217	M20	
231.8	2.20	762	SIFN56B6.3 - 180M-4G	6.28		11 200	258	M28	
208.9	1.20	846	SIFN46B7.1 - 180M-4G	6.97		10 600	217	M20	
205.2	2.10	861	SIFN56B7.1 - 180M-4G	7.09		11 400	258	M28	
184.3	1.10	959	SIFN46B8 - 180M-4G	7.90		10 800	217	M20	
185.9	2.00	951	SIFN56B8 - 180M-4G	7.83		11 600	258	M28	
163.8	1.00	1078	SIFN46B9 - 180M-4G	8.88		10 900	217	M20	
163.8	1.90	1079	SIFN56B9 - 180M-4G	8.88		11 800	258	M28	
142.9	0.98	1237	SIFN46B10 - 180M-4G	10.18		11 000	217	M20	
145.7	1.80	1212	SIFN56B10 - 180M-4G	9.99		12 000	258	M28	
129.5	0.95	1364	SIFN46B11.2 - 180M-4G	11.24		11 100	217	M20	
131.1	1.80	1348	SIFN56B11.2 - 180M-4G	11.10		12 100	258	M28	
130.6	3.00	1353	SIFN66B11.2 - 180M-4G	11.14		31 100	315	M36	
115.2	1.60	1534	SIFN56B12.5 - 180M-4G	12.63		12 200	258	M28	
115.3	2.70	1532	SIFN66B12.5 - 180M-4G	12.62		31 300	315	M36	
106.7	1.40	1656	SIFN56B14 - 180M-4G	13.64		12 300	258	M28	
105.8	2.50	1670	SIFN66B14 - 180M-4G	13.76		31 400	315	M36	
96.2	1.30	1836	SIFN56B16 - 180M-4G	15.12		12 300	258	M28	
92.2	2.10	1915	SIFN66B16 - 180M-4G	15.77		31 400	315	M36	
83.6	1.10	2113	SIFN56B18 - 180M-4G	17.40		12 300	258	M28	
79.6	1.80	2219	SIFN66B18 - 180M-4G	18.28		31 200	315	M36	
74.1	1.00	2383	SIFN56B20 - 180M-4G	19.63		12 200	258	M28	
71.6	1.70	2466	SIFN66B20 - 180M-4G	20.31		31 000	315	M36	
73.4	3.00	2407	SIFN76B20 - 180M-4G	19.83		52 500	410	M46	
65.1	0.88	2713	SIFN56B22.4 - 180M-4G	22.35		12 000	258	M28	
67.1	1.60	2634	SIFN66B22.4 - 180M-4G	21.69		30 700	315	M36	
65.2	2.70	2709	SIFN76B22.4 - 180M-4G	22.31		52 500	410	M46	
59.3	0.81	2977	SIFN56B25 - 180M-4G	24.52		11 800	258	M28	
60.3	1.40	2928	SIFN66B25 - 180M-4G	24.12		30 200	315	M36	
56.5	2.30	3125	SIFN76B25 - 180M-4G	25.73		52 500	410	M46	
57.8	2.90	3056	SIFN76C25 - 180M-4G	25.17		52 500	410	M46	
53.2	1.20	3322	SIFN66B28 - 180M-4G	27.36		29 300	315	M36	
51.3	1.40	3442	SIFN66C28 - 180M-4G	28.35		28 900	315	M36	
51.7	2.10	3415	SIFN76B28 - 180M-4G	28.13		52 500	410	M46	
50.9	2.60	3468	SIFN76C28 - 180M-4G	28.56		52 500	410	M46	
48.7	1.10	3626	SIFN66B31.5 - 180M-4G	29.86		28 500	315	M36	
47.7	2.00	3703	SIFN76B31.5 - 180M-4G	30.50		52 500	410	M46	
46.8	2.40	3778	SIFN76C31.5 - 180M-4G	31.12		52 500	410	M46	
42.6	0.99	4151	SIFN66B35.5 - 180M-4G	34.18		26 900	315	M36	
39.7	1.10	4450	SIFN66C35.5 - 180M-4G	36.65		25 900	315	M36	
40.4	1.70	4372	SIFN76B35.5 - 180M-4G	36.01		52 500	410	M46	
41.0	2.10	4311	SIFN76C35.5 - 180M-4G	35.50		52 500	410	M46	
39.0	0.90	4535	SIFN66B40 - 180M-4G	37.35		25 600	315	M36	
36.6	1.50	4825	SIFN76B40 - 180M-4G	39.74		52 500	410	M46	
37.4	1.90	4720	SIFN76C40 - 180M-4G	38.87		52 500	410	M46	
32.6	0.92	5411	SIFN66C45 - 180M-4G	44.56		22 400	315	M36	




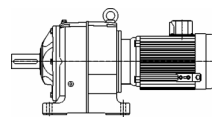
4. SI4


P 18.5 kW
n₁ 1455 min⁻¹

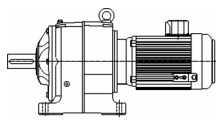
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
32.9	1.20	5370	SIFN76B45 - 180M-4G	44.23		52 500	410	M46	
32.5	1.70	5435	SIFN76C45 - 180M-4G	44.76		52 500	410	M46	
33.1	2.80	5339	SIFN86C45 - 180M-4G	43.98		82 000	580	M55	
28.8	0.82	6127	SIFN66C50 - 180M-4G	50.46		19 500	315	M36	
29.5	1.50	5997	SIFN76C50 - 180M-4G	49.39		52 500	410	M46	
29.3	2.50	6028	SIFN86C50 - 180M-4G	49.65		82 000	580	M55	
26.2	1.30	6739	SIFN76C56 - 180M-4G	55.50		52 500	410	M46	
26.0	2.20	6784	SIFN86C56 - 180M-4G	55.87		82 000	580	M55	
23.5	1.20	7503	SIFN76C63 - 180M-4G	61.80		52 500	410	M46	
22.6	1.90	7825	SIFN86C63 - 180M-4G	64.45		82 000	580	M55	
21.0	1.10	8407	SIFN76C71 - 180M-4G	69.24		52 500	410	M46	
20.7	1.80	8553	SIFN86C71 - 180M-4G	70.44		82 000	580	M55	
20.9	3.00	8441	SIFN96C71 - 180M-4G	69.52		105 000	790	M64	
18.6	0.95	9491	SIFN76C80 - 180M-4G	78.17		52 500	410	M46	
19.0	1.60	9274	SIFN86C80 - 180M-4G	76.38		82 000	580	M55	
18.5	2.60	9530	SIFN96C80 - 180M-4G	78.49		105 000	790	M64	
16.5	0.84	10681	SIFN76C90 - 180M-4G	87.97		52 500	410	M46	
16.1	1.40	10948	SIFN86C90 - 180M-4G	90.17		82 000	580	M55	
16.5	2.30	10724	SIFN96C90 - 180M-4G	88.33		105 000	790	M64	
14.6	1.20	12084	SIFN86C100 - 180M-4G	99.53		82 000	580	M55	
14.3	2.00	12370	SIFN96C100 - 180M-4G	101.88		105 000	790	M64	
13.1	1.10	13447	SIFN86C112 - 180M-4G	110.75		82 000	580	M55	
13.1	1.80	13521	SIFN96C112 - 180M-4G	111.36		105 000	790	M64	
12.0	1.70	14661	SIFN96C125 - 180M-4G	120.75		105 000	790	M64	
10.2	1.40	17308	SIFN96C140 - 180M-4G	142.55		105 000	790	M64	
9.2	1.30	19104	SIFN96C160 - 180M-4G	157.34		105 000	790	M64	
8.3	1.20	21259	SIFN96C180 - 180M-4G	175.09		105 000	790	M64	

P 22.0 kW
n₁ 1460 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
520.5	0.93	404	SIFN46B2.8 - 180L-4G	2.80		8 400	247	M20	
532.6	1.70	394	SIFN56B2.8 - 180L-4G	2.74		8 800	288	M28	
464.2	0.93	453	SIFN46B3.15 - 180L-4G	3.15		8 600	247	M20	
482.9	1.70	435	SIFN56B3.15 - 180L-4G	3.02		9 000	288	M28	
403.3	0.93	521	SIFN46B3.55 - 180L-4G	3.62		8 800	247	M20	
419.4	1.70	501	SIFN56B3.55 - 180L-4G	3.48		9 300	288	M28	
355.7	0.93	591	SIFN46B4 - 180L-4G	4.10		8 900	247	M20	
371.2	1.50	566	SIFN56B4 - 180L-4G	3.93		9 500	288	M28	
316.3	0.93	664	SIFN46B4.5 - 180L-4G	4.62		9 100	247	M20	
336.3	1.70	625	SIFN56B4.5 - 180L-4G	4.34		9 600	288	M28	
275.8	0.93	762	SIFN46B5 - 180L-4G	5.29		9 200	247	M20	
295.4	2.10	711	SIFN56B5 - 180L-4G	4.94		10 300	288	M28	
270.6	1.10	776	SIFN46B5.6 - 180L-4G	5.40		9 800	247	M20	
267.8	2.00	784	SIFN56B5.6 - 180L-4G	5.45		10 500	288	M28	
241.3	1.00	871	SIFN46B6.3 - 180L-4G	6.05		9 900	247	M20	
232.6	1.90	903	SIFN56B6.3 - 180L-4G	6.28		10 700	288	M28	




P 22.0 kW n₁ 1460 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
209.6	0.98	1002	SIFN46B7.1 - 180L-4G	6.97		10 000	247	M20	
205.9	1.80	1020	SIFN56B7.1 - 180L-4G	7.09		10 900	288	M28	
184.9	0.92	1136	SIFN46B8 - 180L-4G	7.90		10 100	247	M20	
186.5	1.70	1126	SIFN56B8 - 180L-4G	7.83		11 000	288	M28	
164.4	0.88	1278	SIFN46B9 - 180L-4G	8.88		10 200	247	M20	
164.3	1.60	1278	SIFN56B9 - 180L-4G	8.88		11 100	288	M28	
159.3	3.00	1319	SIFN66B9 - 180L-4G	9.16		28 900	345	M36	
143.4	0.83	1465	SIFN46B10 - 180L-4G	10.18		9 100	247	M20	
146.2	1.60	1437	SIFN56B10 - 180L-4G	9.99		11 200	288	M28	
147.6	2.80	1424	SIFN66B10 - 180L-4G	9.89		29 000	345	M36	
129.9	0.80	1617	SIFN46B11.2 - 180L-4G	11.24		7 600	247	M20	
131.5	1.50	1597	SIFN56B11.2 - 180L-4G	11.10		11 300	288	M28	
131.0	2.60	1603	SIFN66B11.2 - 180L-4G	11.14		29 200	345	M36	
115.6	1.30	1818	SIFN56B12.5 - 180L-4G	12.63		11 300	288	M28	
115.7	2.30	1815	SIFN66B12.5 - 180L-4G	12.62		29 200	345	M36	
107.0	1.20	1963	SIFN56B14 - 180L-4G	13.64		11 300	288	M28	
106.1	2.10	1980	SIFN66B14 - 180L-4G	13.76		29 100	345	M36	
96.6	1.10	2176	SIFN56B16 - 180L-4G	15.12		11 200	288	M28	
92.6	1.80	2270	SIFN66B16 - 180L-4G	15.77		28 800	345	M36	
83.9	0.96	2504	SIFN56B18 - 180L-4G	17.40		11 000	288	M28	
79.9	1.60	2630	SIFN66B18 - 180L-4G	18.28		28 200	345	M36	
83.1	2.90	2527	SIFN76B18 - 180L-4G	17.56		52 500	440	M46	
74.4	0.85	2824	SIFN56B20 - 180L-4G	19.63		10 700	288	M28	
71.9	1.40	2922	SIFN66B20 - 180L-4G	20.31		27 500	345	M36	
73.2	1.60	2872	SIFN66C20 - 180L-4G	19.96		27 700	345	M36	
73.6	2.60	2853	SIFN76B20 - 180L-4G	19.83		52 500	440	M46	
67.3	1.30	3121	SIFN66B22.4 - 180L-4G	21.69		27 100	345	M36	
65.4	2.30	3210	SIFN76B22.4 - 180L-4G	22.31		52 500	440	M46	
65.7	2.80	3198	SIFN76C22.4 - 180L-4G	22.22		52 500	440	M46	
60.5	1.20	3470	SIFN66B25 - 180L-4G	24.12		26 100	345	M36	
56.7	2.00	3703	SIFN76B25 - 180L-4G	25.73		52 500	440	M46	
58.0	2.50	3622	SIFN76C25 - 180L-4G	25.17		52 500	440	M46	
53.4	1.00	3937	SIFN66B28 - 180L-4G	27.36		24 600	345	M36	
51.5	1.20	4079	SIFN66C28 - 180L-4G	28.35		24 200	345	M36	
51.9	1.80	4047	SIFN76B28 - 180L-4G	28.13		52 500	440	M46	
51.1	2.20	4110	SIFN76C28 - 180L-4G	28.56		52 500	440	M46	
48.9	0.95	4297	SIFN66B31.5 - 180L-4G	29.86		23 400	345	M36	
47.9	1.70	4389	SIFN76B31.5 - 180L-4G	30.50		52 500	440	M46	
46.9	2.00	4478	SIFN76C31.5 - 180L-4G	31.12		52 500	440	M46	
42.7	0.83	4919	SIFN66B35.5 - 180L-4G	34.18		21 100	345	M36	
39.8	0.95	5274	SIFN66C35.5 - 180L-4G	36.65		19 700	345	M36	
40.5	1.40	5181	SIFN76B35.5 - 180L-4G	36.01		52 500	440	M46	
41.1	1.80	5109	SIFN76C35.5 - 180L-4G	35.50		52 500	440	M46	
41.4	3.00	5073	SIFN86C35.5 - 180L-4G	35.25		82 000	610	M55	
36.9	0.88	5694	SIFN66C40 - 180L-4G	39.57		18 000	345	M36	
36.7	1.30	5719	SIFN76B40 - 180L-4G	39.74		52 500	440	M46	
37.6	1.60	5593	SIFN76C40 - 180L-4G	38.87		52 500	440	M46	
37.2	2.70	5648	SIFN86C40 - 180L-4G	39.25		82 000	610	M55	
33.0	1.10	6364	SIFN76B45 - 180L-4G	44.23		52 500	440	M46	
32.6	1.40	6441	SIFN76C45 - 180L-4G	44.76		52 500	440	M46	
33.2	2.40	6328	SIFN86C45 - 180L-4G	43.98		82 000	610	M55	
29.6	1.30	7107	SIFN76C50 - 180L-4G	49.39		52 500	440	M46	




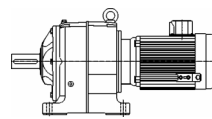
4. SI4


P 22.0 kW
n₁ 1460 min⁻¹

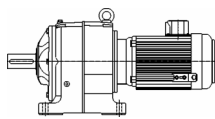
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
29.4	2.10	7144	SIFN86C50 - 180L-4G	49.65		82 000	610	M55	
26.3	1.10	7987	SIFN76C56 - 180L-4G	55.50		52 500	440	M46	
26.1	1.90	8039	SIFN86C56 - 180L-4G	55.87		82 000	610	M55	
23.6	1.00	8892	SIFN76C63 - 180L-4G	61.80		52 500	440	M46	
22.7	1.60	9273	SIFN86C63 - 180L-4G	64.45		82 000	610	M55	
23.5	2.80	8929	SIFN96C63 - 180L-4G	62.05		105 000	820	M64	
21.1	0.90	9963	SIFN76C71 - 180L-4G	69.24		52 500	440	M46	
20.7	1.50	10136	SIFN86C71 - 180L-4G	70.44		82 000	610	M55	
21.0	2.50	10004	SIFN96C71 - 180L-4G	69.52		105 000	820	M64	
18.7	0.80	11248	SIFN76C80 - 180L-4G	78.17		52 500	440	M46	
19.1	1.40	10991	SIFN86C80 - 180L-4G	76.38		82 000	610	M55	
18.6	2.20	11294	SIFN96C80 - 180L-4G	78.49		105 000	820	M64	
16.2	1.20	12975	SIFN86C90 - 180L-4G	90.17		82 000	610	M55	
16.5	2.00	12710	SIFN96C90 - 180L-4G	88.33		105 000	820	M64	
14.7	1.00	14321	SIFN86C100 - 180L-4G	99.53		82 000	610	M55	
14.3	1.70	14660	SIFN96C100 - 180L-4G	101.88		105 000	820	M64	
13.2	0.94	15936	SIFN86C112 - 180L-4G	110.75		82 000	610	M55	
13.1	1.60	16024	SIFN96C112 - 180L-4G	111.36		105 000	820	M64	
12.1	1.40	17375	SIFN96C125 - 180L-4G	120.75		105 000	820	M64	
10.2	1.20	20512	SIFN96C140 - 180L-4G	142.55		105 000	820	M64	
9.3	1.10	22640	SIFN96C160 - 180L-4G	157.34		105 000	820	M64	
8.3	0.99	25194	SIFN96C180 - 180L-4G	175.09		105 000	820	M64	

P 30.0 kW
n₁ 1465 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
534.4	1.30	536	SIFN56B2.8 - 200L-4G	2.74		8 300	298	M28	
517.2	2.90	554	SIFN66B2.8 - 200L-4G	2.83		20 900	355	M36	
484.5	1.30	591	SIFN56B3.15 - 200L-4G	3.02		8 400	298	M28	
465.9	2.80	615	SIFN66B3.15 - 200L-4G	3.14		21 100	355	M36	
420.8	1.30	681	SIFN56B3.55 - 200L-4G	3.48		8 600	298	M28	
391.0	2.50	733	SIFN66B3.55 - 200L-4G	3.75		21 300	355	M36	
372.5	1.10	769	SIFN56B4 - 200L-4G	3.93		8 700	298	M28	
364.1	2.50	787	SIFN66B4 - 200L-4G	4.02		21 300	355	M36	
337.5	1.30	849	SIFN56B4.5 - 200L-4G	4.34		8 800	298	M28	
315.0	2.30	910	SIFN66B4.5 - 200L-4G	4.65		21 300	355	M36	
296.4	1.50	967	SIFN56B5 - 200L-4G	4.94		9 400	298	M28	
293.6	3.00	976	SIFN66B5 - 200L-4G	4.99		25 000	355	M36	
271.5	0.81	1055	SIFN46B5.6 - 200L-4G	5.40		8 700	257	M20	
268.7	1.50	1066	SIFN56B5.6 - 200L-4G	5.45		9 500	298	M28	
264.5	3.00	1083	SIFN66B5.6 - 200L-4G	5.54		25 200	355	M36	
233.4	1.40	1228	SIFN56B6.3 - 200L-4G	6.28		9 600	298	M28	
222.0	2.70	1291	SIFN66B6.3 - 200L-4G	6.60		25 500	355	M36	
206.6	1.30	1387	SIFN56B7.1 - 200L-4G	7.09		9 700	298	M28	
206.7	2.60	1386	SIFN66B7.1 - 200L-4G	7.09		25 500	355	M36	
187.1	1.30	1531	SIFN56B8 - 200L-4G	7.83		9 700	298	M28	
178.8	2.40	1602	SIFN66B8 - 200L-4G	8.19		25 500	355	M36	




P 30.0 kW n₁ 1465 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
164.9	1.20	1737	SIFN56B9 - 200L-4G	8.88		9 600	298	M28	
159.9	2.20	1792	SIFN66B9 - 200L-4G	9.16		25 400	355	M36	
146.7	1.10	1953	SIFN56B10 - 200L-4G	9.99		9 500	298	M28	
148.1	2.10	1935	SIFN66B10 - 200L-4G	9.89		25 200	355	M36	
132.0	1.10	2170	SIFN56B11.2 - 200L-4G	11.10		9 400	298	M28	
131.5	1.90	2179	SIFN66B11.2 - 200L-4G	11.14		24 900	355	M36	
116.0	0.97	2471	SIFN56B12.5 - 200L-4G	12.63		9 100	298	M28	
116.1	1.70	2467	SIFN66B12.5 - 200L-4G	12.62		24 300	355	M36	
116.9	3.00	2450	SIFN76B12.5 - 200L-4G	12.53		51 500	450	M46	
107.4	0.90	2667	SIFN56B14 - 200L-4G	13.64		8 900	298	M28	
106.5	1.50	2690	SIFN66B14 - 200L-4G	13.76		23 800	355	M36	
104.1	2.70	2753	SIFN76B14 - 200L-4G	14.08		52 300	450	M46	
96.9	0.81	2957	SIFN56B16 - 200L-4G	15.12		8 600	298	M28	
92.9	1.30	3085	SIFN66B16 - 200L-4G	15.77		22 700	355	M36	
93.5	2.40	3065	SIFN76B16 - 200L-4G	15.67		52 500	450	M46	
80.2	1.10	3574	SIFN66B18 - 200L-4G	18.28		21 100	355	M36	
83.4	2.10	3434	SIFN76B18 - 200L-4G	17.56		52 500	450	M46	
72.1	1.00	3971	SIFN66B20 - 200L-4G	20.31		19 700	355	M36	
73.9	1.90	3877	SIFN76B20 - 200L-4G	19.83		52 500	450	M46	
74.6	2.30	3839	SIFN76C20 - 200L-4G	19.63		52 500	450	M46	
67.5	0.97	4242	SIFN66B22.4 - 200L-4G	21.69		18 700	355	M36	
65.7	1.70	4363	SIFN76B22.4 - 200L-4G	22.31		52 500	450	M46	
65.9	2.10	4345	SIFN76C22.4 - 200L-4G	22.22		52 500	450	M46	
60.7	0.87	4716	SIFN66B25 - 200L-4G	24.12		16 800	355	M36	
56.9	1.50	5032	SIFN76B25 - 200L-4G	25.73		52 500	450	M46	
58.2	1.80	4922	SIFN76C25 - 200L-4G	25.17		52 500	450	M46	
51.7	0.86	5543	SIFN66C28 - 200L-4G	28.35		13 200	355	M36	
52.1	1.30	5500	SIFN76B28 - 200L-4G	28.13		52 500	450	M46	
51.3	1.60	5585	SIFN76C28 - 200L-4G	28.56		52 500	450	M46	
51.5	2.70	5560	SIFN86C28 - 200L-4G	28.43		82 000	620	M55	
48.0	1.20	5964	SIFN76B31.5 - 200L-4G	30.50		52 500	450	M46	
47.1	1.50	6085	SIFN76C31.5 - 200L-4G	31.12		52 500	450	M46	
46.7	2.40	6134	SIFN86C31.5 - 200L-4G	31.37		82 000	620	M55	
40.7	1.00	7041	SIFN76B35.5 - 200L-4G	36.01		52 500	450	M46	
41.3	1.30	6943	SIFN76C35.5 - 200L-4G	35.50		51 600	450	M46	
41.6	2.20	6894	SIFN86C35.5 - 200L-4G	35.25		82 000	620	M55	
36.9	0.94	7772	SIFN76B40 - 200L-4G	39.74		51 600	450	M46	
37.7	1.20	7601	SIFN76C40 - 200L-4G	38.87		50 700	450	M46	
37.3	2.00	7675	SIFN86C40 - 200L-4G	39.25		82 000	620	M55	
32.7	1.00	8753	SIFN76C45 - 200L-4G	44.76		48 700	450	M46	
33.3	1.70	8600	SIFN86C45 - 200L-4G	43.98		82 000	620	M55	
32.6	2.80	8789	SIFN96C45 - 200L-4G	44.95		105 000	830	M64	
29.7	0.93	9658	SIFN76C50 - 200L-4G	49.39		46 900	450	M46	
29.5	1.50	9708	SIFN86C50 - 200L-4G	49.65		82 000	620	M55	
29.5	2.60	9698	SIFN96C50 - 200L-4G	49.59		105 000	830	M64	
26.4	0.83	10854	SIFN76C56 - 200L-4G	55.50		44 300	450	M46	
26.2	1.40	10925	SIFN86C56 - 200L-4G	55.87		82 000	620	M55	
26.3	2.30	10898	SIFN96C56 - 200L-4G	55.73		105 000	830	M64	
22.7	1.20	12602	SIFN86C63 - 200L-4G	64.45		82 000	620	M55	
23.6	2.10	12134	SIFN96C63 - 200L-4G	62.05		105 000	830	M64	
20.8	1.10	13774	SIFN86C71 - 200L-4G	70.44		82 000	620	M55	
21.1	1.80	13595	SIFN96C71 - 200L-4G	69.52		105 000	830	M64	




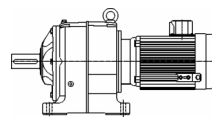
4. SI4


P 30.0 kW
n₁ 1465 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
19.2	1.00	14936	SIFN86C80 - 200L-4G	76.38		82 000	620	M55
18.7	1.60	15348	SIFN96C80 - 200L-4G	78.49		105 000	830	M64
16.2	0.85	17633	SIFN86C90 - 200L-4G	90.17		82 000	620	M55
16.6	1.40	17272	SIFN96C90 - 200L-4G	88.33		105 000	830	M64
14.4	1.30	19923	SIFN96C100 - 200L-4G	101.88		105 000	830	M64
13.2	1.10	21776	SIFN96C112 - 200L-4G	111.36		105 000	830	M64
12.1	1.10	23613	SIFN96C125 - 200L-4G	120.75		105 000	830	M64
10.3	0.90	27876	SIFN96C140 - 200L-4G	142.55		105 000	830	M64
9.3	0.81	30768	SIFN96C160 - 200L-4G	157.34		105 000	830	M64

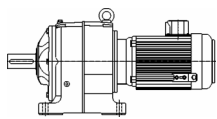
P 37.0 kW
n₁ 1470 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
518.9	2.40	681	SIFN66B2.8 - 225S-4G	2.83		19 500	425	M36
467.5	2.20	756	SIFN66B3.15 - 225S-4G	3.14		19 500	425	M36
392.3	2.10	901	SIFN66B3.55 - 225S-4G	3.75		19 400	425	M36
365.4	2.00	967	SIFN66B4 - 225S-4G	4.02		19 200	425	M36
316.1	1.80	1118	SIFN66B4.5 - 225S-4G	4.65		18 900	425	M36
294.6	2.40	1199	SIFN66B5 - 225S-4G	4.99		23 300	425	M36
265.4	2.50	1331	SIFN66B5.6 - 225S-4G	5.54		23 400	425	M36
222.7	2.20	1586	SIFN66B6.3 - 225S-4G	6.60		23 300	425	M36
207.4	2.10	1703	SIFN66B7.1 - 225S-4G	7.09		23 100	425	M36
179.4	1.90	1969	SIFN66B8 - 225S-4G	8.19		22 800	425	M36
160.4	1.80	2202	SIFN66B9 - 225S-4G	9.16		22 300	425	M36
148.6	1.70	2378	SIFN66B10 - 225S-4G	9.89		21 900	425	M36
131.9	1.50	2678	SIFN66B11.2 - 225S-4G	11.14		21 100	425	M36
129.5	2.70	2729	SIFN76B11.2 - 225S-4G	11.35		48 200	520	M46
116.5	1.30	3032	SIFN66B12.5 - 225S-4G	12.62		20 100	425	M36
117.3	2.40	3011	SIFN76B12.5 - 225S-4G	12.53		48 700	520	M46
104.4	2.20	3383	SIFN76B14 - 225S-4G	14.08		49 100	520	M46
80.4	0.93	4393	SIFN66B18 - 225S-4G	18.28		15 000	425	M36
72.4	0.84	4881	SIFN66B20 - 225S-4G	20.31		12 900	425	M36
74.1	1.50	4765	SIFN76B20 - 225S-4G	19.83		49 400	520	M46
74.9	1.90	4719	SIFN76C20 - 225S-4G	19.63		48 700	520	M46
66.4	0.85	5325	SIFN66C22.4 - 225S-4G	22.15		10 900	425	M36
65.9	1.40	5362	SIFN76B22.4 - 225S-4G	22.31		49 100	520	M46
66.2	1.70	5341	SIFN76C22.4 - 225S-4G	22.22		48 300	520	M46
65.2	2.80	5420	SIFN86C22.4 - 225S-4G	22.55		82 000	690	M55
57.1	1.20	6185	SIFN76B25 - 225S-4G	25.73		48 400	520	M46
58.4	1.50	6050	SIFN76C25 - 225S-4G	25.17		47 600	520	M46
59.5	2.50	5934	SIFN86C25 - 225S-4G	24.69		82 000	690	M55
52.3	1.10	6761	SIFN76B28 - 225S-4G	28.13		47 700	520	M46
51.5	1.30	6865	SIFN76C28 - 225S-4G	28.56		46 500	520	M46
51.7	2.20	6833	SIFN86C28 - 225S-4G	28.43		82 000	690	M55
48.2	1.00	7331	SIFN76B31.5 - 225S-4G	30.50		46 900	520	M46
47.2	1.20	7480	SIFN76C31.5 - 225S-4G	31.12		45 500	520	M46
46.9	2.00	7540	SIFN86C31.5 - 225S-4G	31.37		82 000	690	M55



P 37.0 kW n₁ 1470 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
40.8	0.84	8655	SIFN76B35.5 - 225S-4G	36.01		44 600	520	M46	
41.4	1.10	8534	SIFN76C35.5 - 225S-4G	35.50		43 500	520	M46	
41.7	1.80	8473	SIFN86C35.5 - 225S-4G	35.25		82 000	690	M55	
41.2	2.90	8569	SIFN96C35.5 - 225S-4G	35.65		105 000	900	M64	
37.8	0.96	9343	SIFN76C40 - 225S-4G	38.87		41 700	520	M46	
37.7	2.70	9381	SIFN96C40 - 225S-4G	39.03		105 000	900	M64	
32.8	0.84	10759	SIFN76C45 - 225S-4G	44.76		38 400	520	M46	
32.7	2.30	10803	SIFN96C45 - 225S-4G	44.95		105 000	900	M64	
29.6	1.30	11933	SIFN86C50 - 225S-4G	49.65		82 000	690	M55	
29.6	2.10	11920	SIFN96C50 - 225S-4G	49.59		105 000	900	M64	
26.3	1.10	13429	SIFN86C56 - 225S-4G	55.87		82 000	690	M55	
26.4	1.90	13395	SIFN96C56 - 225S-4G	55.73		105 000	900	M64	
22.8	0.97	15490	SIFN86C63 - 225S-4G	64.45		82 000	690	M55	
20.9	0.89	16931	SIFN86C71 - 225S-4G	70.44		81 600	690	M55	
19.2	0.82	18358	SIFN86C80 - 225S-4G	76.38		74 600	690	M55	
18.7	1.30	18865	SIFN96C80 - 225S-4G	78.49		105 000	900	M64	
16.6	1.20	21230	SIFN96C90 - 225S-4G	88.33		105 000	900	M64	
14.4	1.00	24488	SIFN96C100 - 225S-4G	101.88		105 000	900	M64	
13.2	0.93	26766	SIFN96C112 - 225S-4G	111.36		105 000	900	M64	
12.2	0.86	29023	SIFN96C125 - 225S-4G	120.75		105 000	900	M64	

P 45.0 kW n₁ 1470 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
518.9	1.90	828	SIFN66B2.8 - 225M-4G	2.83		17 800	455	M36	
467.5	1.80	919	SIFN66B3.15 - 225M-4G	3.14		17 600	455	M36	
392.3	1.70	1095	SIFN66B3.55 - 225M-4G	3.75		17 200	455	M36	
365.4	1.70	1176	SIFN66B4 - 225M-4G	4.02		16 900	455	M36	
316.1	1.50	1360	SIFN66B4.5 - 225M-4G	4.65		16 200	455	M36	
342.5	2.90	1255	SIFN76B4.5 - 225M-4G	4.29		36 700	550	M46	
294.6	2.00	1459	SIFN66B5 - 225M-4G	4.99		21 400	455	M36	
265.4	2.00	1619	SIFN66B5.6 - 225M-4G	5.54		21 200	455	M36	
222.7	1.80	1929	SIFN66B6.3 - 225M-4G	6.60		20 700	455	M36	
207.4	1.70	2072	SIFN66B7.1 - 225M-4G	7.09		20 400	455	M36	
179.4	1.60	2395	SIFN66B8 - 225M-4G	8.19		19 600	455	M36	
186.3	2.90	2307	SIFN76B8 - 225M-4G	7.89		43 900	550	M46	
160.4	1.50	2679	SIFN66B9 - 225M-4G	9.16		18 800	455	M36	
163.2	2.70	2632	SIFN76B9 - 225M-4G	9.00		44 500	550	M46	
148.6	1.40	2892	SIFN66B10 - 225M-4G	9.89		18 100	455	M36	
149.1	2.50	2882	SIFN76B10 - 225M-4G	9.86		44 900	550	M46	
131.9	1.30	3257	SIFN66B11.2 - 225M-4G	11.14		16 800	455	M36	
129.5	2.20	3319	SIFN76B11.2 - 225M-4G	11.35		45 300	550	M46	
116.5	1.10	3688	SIFN66B12.5 - 225M-4G	12.62		15 200	455	M36	
117.3	2.00	3662	SIFN76B12.5 - 225M-4G	12.53		45 500	550	M46	
104.4	1.80	4115	SIFN76B14 - 225M-4G	14.08		45 500	550	M46	
81.0	2.80	5303	SIFN86C18 - 225M-4G	18.14		82 000	720	M55	
74.1	1.30	5795	SIFN76B20 - 225M-4G	19.83		44 300	550	M46	




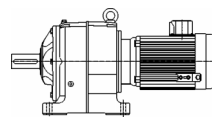
4. SI4


P 45.0 kW
n₁ 1470 min⁻¹

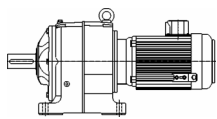
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
74.9	1.60	5739	SIFN76C20 - 225M-4G	19.63		43 500	550	M46	
74.4	2.60	5778	SIFN86C20 - 225M-4G	19.77		82 000	720	M55	
65.9	1.10	6522	SIFN76B22.4 - 225M-4G	22.31		43 400	550	M46	
66.2	1.40	6496	SIFN76C22.4 - 225M-4G	22.22		42 400	550	M46	
65.2	2.30	6592	SIFN86C22.4 - 225M-4G	22.55		82 000	720	M55	
57.1	0.97	7523	SIFN76B25 - 225M-4G	25.73		41 800	550	M46	
58.4	1.20	7358	SIFN76C25 - 225M-4G	25.17		40 900	550	M46	
59.5	2.10	7217	SIFN86C25 - 225M-4G	24.69		82 000	720	M55	
52.3	0.89	8222	SIFN76B28 - 225M-4G	28.13		40 500	550	M46	
51.5	1.10	8349	SIFN76C28 - 225M-4G	28.56		38 900	550	M46	
51.7	1.80	8311	SIFN86C28 - 225M-4G	28.43		82 000	720	M55	
51.3	3.00	8383	SIFN96C28 - 225M-4G	28.68		105 000	930	M64	
48.2	0.82	8916	SIFN76B31.5 - 225M-4G	30.50		39 100	550	M46	
47.2	0.99	9097	SIFN76C31.5 - 225M-4G	31.12		37 200	550	M46	
46.9	1.60	9170	SIFN86C31.5 - 225M-4G	31.37		82 000	720	M55	
47.0	2.70	9134	SIFN96C31.5 - 225M-4G	31.25		105 000	930	M64	
41.4	0.87	10379	SIFN76C35.5 - 225M-4G	35.50		34 100	550	M46	
41.7	1.50	10305	SIFN86C35.5 - 225M-4G	35.25		82 000	720	M55	
41.2	2.40	10421	SIFN96C35.5 - 225M-4G	35.65		105 000	930	M64	
37.7	2.20	11410	SIFN96C40 - 225M-4G	39.03		105 000	930	M64	
32.7	1.90	13139	SIFN96C45 - 225M-4G	44.95		105 000	930	M64	
29.6	1.00	14513	SIFN86C50 - 225M-4G	49.65		80 000	720	M55	
29.6	1.70	14498	SIFN96C50 - 225M-4G	49.59		105 000	930	M64	
26.3	0.92	16332	SIFN86C56 - 225M-4G	55.87		71 300	720	M55	
26.4	1.50	16292	SIFN96C56 - 225M-4G	55.73		105 000	930	M64	
22.8	0.80	18839	SIFN86C63 - 225M-4G	64.45			720	M55	
18.7	1.10	22944	SIFN96C80 - 225M-4G	78.49		105 000	930	M64	
16.6	0.97	25820	SIFN96C90 - 225M-4G	88.33		105 000	930	M64	
14.4	0.84	29783	SIFN96C100 - 225M-4G	101.88		105 000	930	M64	

P 55.0 kW
n₁ 1475 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
520.7	1.60	1009	SIFN66B2.8U - 250M4	2.83		15 700	545.5	M108	
469.1	1.50	1120	SIFN66B3.15U - 250M4	3.14		15 300	545.5	M108	
481.2	2.90	1091	SIFN76B3.15U - 250M4	3.07		33 400	650	M118	
393.6	1.40	1334	SIFN66B3.55U - 250M4	3.75		14 400	545.5	M108	
424.8	2.70	1236	SIFN76B3.55U - 250M4	3.47		33 900	650	M118	
366.6	1.40	1433	SIFN66B4U - 250M4	4.02		13 900	545.5	M108	
374.4	2.50	1403	SIFN76B4U - 250M4	3.94		34 400	650	M118	
317.1	1.20	1656	SIFN66B4.5U - 250M4	4.65		12 700	545.5	M108	
343.6	2.40	1528	SIFN76B4.5U - 250M4	4.29		34 600	650	M118	
295.6	1.60	1777	SIFN66B5U - 250M4	4.99		19 000	545.5	M108	
266.3	1.70	1972	SIFN66B5.6U - 250M4	5.54		18 600	545.5	M108	
261.7	2.90	2007	SIFN76B5.6U - 250M4	5.64		40 000	650	M118	
223.5	1.50	2350	SIFN66B6.3U - 250M4	6.60		17 600	545.5	M108	
231.1	2.70	2273	SIFN76B6.3U - 250M4	6.38		40 600	650	M118	



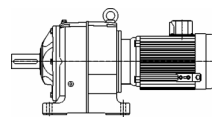
P 55.0 kW n₁ 1475 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
208.1	1.40	2523	SIFN66B7.1U - 250M4	7.09		17 000	545.5	M108	
203.6	2.50	2579	SIFN76B7.1U - 250M4	7.24		41 100	650	M118	
180.0	1.30	2917	SIFN66B8U - 250M4	8.19		15 700	545.5	M108	
186.9	2.40	2810	SIFN76B8U - 250M4	7.89		41 400	650	M118	
161.0	1.20	3263	SIFN66B9U - 250M4	9.16		14 400	545.5	M108	
163.8	2.20	3206	SIFN76B9U - 250M4	9.00		41 700	650	M118	
149.1	1.10	3523	SIFN66B10U - 250M4	9.89		13 400	545.5	M108	
149.6	2.10	3510	SIFN76B10U - 250M4	9.86		41 700	650	M118	
132.4	1.00	3967	SIFN66B11.2U - 250M4	11.14		11 500	545.5	M108	
129.9	1.80	4042	SIFN76B11.2U - 250M4	11.35		41 700	650	M118	
116.9	0.91	4492	SIFN66B12.5U - 250M4	12.62		9 200	545.5	M108	
117.7	1.60	4460	SIFN76B12.5U - 250M4	12.53		41 500	650	M118	
118.3	3.00	4440	SIFN86C12.5U - 250M4	12.47		78 900	837	M127	
107.2	0.84	4898	SIFN66B14U - 250M4	13.76		7 300	545.5	M108	
104.8	1.50	5012	SIFN76B14U - 250M4	14.08		41 000	650	M118	
104.5	2.90	5026	SIFN86C14U - 250M4	14.11		80 300	837	M127	
94.1	1.30	5581	SIFN76B16U - 250M4	15.67		40 400	650	M118	
92.3	2.60	5692	SIFN86C16U - 250M4	15.99		81 600	837	M127	
84.0	1.20	6253	SIFN76B18U - 250M4	17.56		39 400	650	M118	
81.3	2.30	6459	SIFN86C18U - 250M4	18.14		82 000	837	M127	
74.4	1.00	7059	SIFN76B20U - 250M4	19.83		38 000	650	M118	
75.1	1.30	6991	SIFN76C20U - 250M4	19.63		37 000	650	M118	
74.6	2.10	7038	SIFN86C20U - 250M4	19.77		82 000	837	M127	
66.1	0.92	7944	SIFN76B22.4U - 250M4	22.31		36 300	650	M118	
66.4	1.10	7913	SIFN76C22.4U - 250M4	22.22		35 100	650	M118	
65.4	1.90	8030	SIFN86C22.4U - 250M4	22.55		82 000	837	M127	
66.1	2.90	7945	SIFN96C22.4U - 250M4	22.31		105 000	1068	M136	
57.3	0.80	9163	SIFN76B25U - 250M4	25.73		33 600	650	M118	
58.6	1.00	8962	SIFN76C25U - 250M4	25.17		32 600	650	M118	
59.7	1.70	8791	SIFN86C25U - 250M4	24.69		82 000	837	M127	
58.4	2.70	8999	SIFN96C25U - 250M4	25.27		105 000	1068	M136	
51.6	0.88	10170	SIFN76C28U - 250M4	28.56		29 500	650	M118	
51.9	1.50	10123	SIFN86C28U - 250M4	28.43		82 000	837	M127	
51.4	2.40	10212	SIFN96C28U - 250M4	28.68		105 000	1068	M136	
47.4	0.81	11081	SIFN76C31.5U - 250M4	31.12			650	M118	
47.0	1.30	11170	SIFN86C31.5U - 250M4	31.37		82 000	837	M127	
47.2	2.20	11126	SIFN96C31.5U - 250M4	31.25		105 000	1068	M136	
41.8	1.20	12552	SIFN86C35.5U - 250M4	35.25		76 700	837	M127	
41.4	2.00	12694	SIFN96C35.5U - 250M4	35.65		105 000	1068	M136	
37.6	1.10	13976	SIFN86C40U - 250M4	39.25		70 200	837	M127	
37.8	1.80	13898	SIFN96C40U - 250M4	39.03		105 000	1068	M136	
33.5	0.96	15659	SIFN86C45U - 250M4	43.98		61 800	837	M127	
32.8	1.60	16004	SIFN96C45U - 250M4	44.95		105 000	1068	M136	
29.7	0.85	17678	SIFN86C50U - 250M4	49.65			837	M127	
29.7	1.40	17659	SIFN96C50U - 250M4	49.59		105 000	1068	M136	
26.5	1.30	19844	SIFN96C56U - 250M4	55.73		105 000	1068	M136	
23.8	1.10	22095	SIFN96C63U - 250M4	62.05		105 000	1068	M136	
21.2	1.00	24755	SIFN96C71U - 250M4	69.52		105 000	1068	M136	
18.8	0.89	27947	SIFN96C80U - 250M4	78.49		105 000	1068	M136	




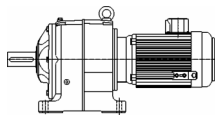
4. SI4

P 75.0 kW
n₁ 1480 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
522.5	1.20	1371	SIFN66B2.8U - 280S4	2.83		11 600	690.5	M108	
546.5	2.30	1311	SIFN76B2.8U - 280S4	2.71		30 200	795	M118	
470.7	1.10	1522	SIFN66B3.15U - 280S4	3.14		10 800	690.5	M108	
482.8	2.10	1483	SIFN76B3.15U - 280S4	3.07		30 500	795	M118	
395.0	1.00	1813	SIFN66B3.55U - 280S4	3.75		9 000	690.5	M108	
426.3	2.00	1680	SIFN76B3.55U - 280S4	3.47		30 600	795	M118	
367.9	1.00	1947	SIFN66B4U - 280S4	4.02		8 100	690.5	M108	
375.7	1.90	1906	SIFN76B4U - 280S4	3.94		30 500	795	M118	
318.2	0.91	2251	SIFN66B4.5U - 280S4	4.65		5 800	690.5	M108	
344.8	1.80	2077	SIFN76B4.5U - 280S4	4.29		30 400	795	M118	
296.6	1.20	2414	SIFN66B5U - 280S4	4.99		14 200	690.5	M108	
297.2	2.30	2410	SIFN76B5U - 280S4	4.98		36 200	795	M118	
267.2	1.20	2680	SIFN66B5.6U - 280S4	5.54		13 300	690.5	M108	
262.6	2.10	2727	SIFN76B5.6U - 280S4	5.64		36 400	795	M118	
224.2	1.10	3194	SIFN66B6.3U - 280S4	6.60		11 300	690.5	M108	
231.8	2.00	3089	SIFN76B6.3U - 280S4	6.38		36 600	795	M118	
208.8	1.00	3429	SIFN66B7.1U - 280S4	7.09		10 300	690.5	M108	
204.3	1.90	3505	SIFN76B7.1U - 280S4	7.24		36 500	795	M118	
180.7	0.96	3964	SIFN66B8U - 280S4	8.19		7 900	690.5	M108	
187.5	1.80	3819	SIFN76B8U - 280S4	7.89		36 300	795	M118	
161.5	0.88	4434	SIFN66B9U - 280S4	9.16		5 700	690.5	M108	
164.4	1.60	4358	SIFN76B9U - 280S4	9.00		35 900	795	M118	
149.6	0.84	4788	SIFN66B10U - 280S4	9.89		3 900	690.5	M108	
150.1	1.50	4771	SIFN76B10U - 280S4	9.86		35 500	795	M118	
130.4	1.30	5494	SIFN76B11.2U - 280S4	11.35		34 500	795	M118	
118.1	1.20	6062	SIFN76B12.5U - 280S4	12.53		33 500	795	M118	
118.7	2.20	6035	SIFN86C12.5U - 280S4	12.47		72 700	982	M127	
105.1	1.10	6812	SIFN76B14U - 280S4	14.08		32 100	795	M118	
104.9	2.10	6830	SIFN86C14U - 280S4	14.11		73 200	982	M127	
94.4	0.96	7585	SIFN76B16U - 280S4	15.67		30 400	795	M118	
92.6	1.90	7736	SIFN86C16U - 280S4	15.99		73 500	982	M127	
84.3	0.86	8498	SIFN76B18U - 280S4	17.56		28 300	795	M118	
81.6	1.70	8778	SIFN86C18U - 280S4	18.14		73 500	982	M127	
75.4	0.95	9501	SIFN76C20U - 280S4	19.63		24 200	795	M118	
74.9	1.60	9565	SIFN86C20U - 280S4	19.77		73 200	982	M127	
75.1	2.30	9540	SIFN96C20U - 280S4	19.71		105 000	1213	M136	
66.6	0.84	10753	SIFN76C22.4U - 280S4	22.22			795	M118	
65.6	1.40	10912	SIFN86C22.4U - 280S4	22.55		67 500	982	M127	
66.3	2.10	10797	SIFN96C22.4U - 280S4	22.31		105 000	1213	M136	
59.9	1.30	11947	SIFN86C25U - 280S4	24.69		62 800	982	M127	
58.6	2.00	12230	SIFN96C25U - 280S4	25.27		105 000	1213	M136	
52.1	1.10	13758	SIFN86C28U - 280S4	28.43		53 800	982	M127	
51.6	1.80	13878	SIFN96C28U - 280S4	28.68		105 000	1213	M136	
47.2	0.99	15181	SIFN86C31.5U - 280S4	31.37		46 400	982	M127	
47.4	1.70	15121	SIFN96C31.5U - 280S4	31.25		105 000	1213	M136	
42.0	0.88	17059	SIFN86C35.5U - 280S4	35.25		36 100	982	M127	
41.5	1.40	17252	SIFN96C35.5U - 280S4	35.65		105 000	1213	M136	
37.9	1.30	18887	SIFN96C40U - 280S4	39.03		105 000	1213	M136	
32.9	1.10	21750	SIFN96C45U - 280S4	44.95		105 000	1213	M136	
29.8	1.00	23999	SIFN96C50U - 280S4	49.59		105 000	1213	M136	
26.6	0.93	26969	SIFN96C56U - 280S4	55.73		105 000	1213	M136	
23.9	0.83	30028	SIFN96C63U - 280S4	62.05			1213	M136	



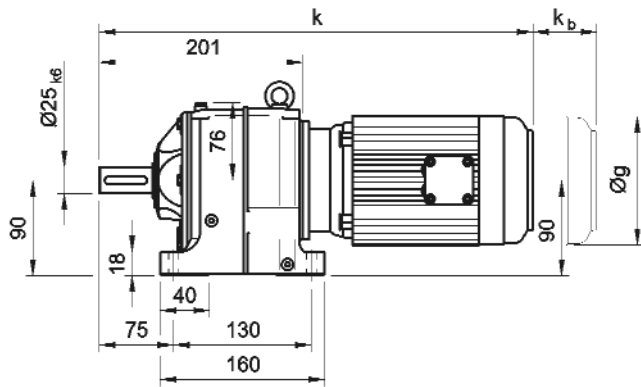
P 90.0 kW n₁ 1480 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
522.5	0.97	1645	SIFN66B2.8U - 280M4	2.83		8 500	750.5	M108	
546.5	1.90	1573	SIFN76B2.8U - 280M4	2.71		28 300	855	M118	
470.7	0.93	1826	SIFN66B3.15U - 280M4	3.14		7 300	750.5	M108	
482.8	1.80	1780	SIFN76B3.15U - 280M4	3.07		28 200	855	M118	
395.0	0.85	2176	SIFN66B3.55U - 280M4	3.75		4 200	750.5	M108	
426.3	1.70	2016	SIFN76B3.55U - 280M4	3.47		28 100	855	M118	
367.9	0.83	2336	SIFN66B4U - 280M4	4.02		2 200	750.5	M108	
375.7	1.60	2288	SIFN76B4U - 280M4	3.94		27 700	855	M118	
344.8	1.50	2493	SIFN76B4.5U - 280M4	4.29		27 300	855	M118	
296.6	1.00	2897	SIFN66B5U - 280M4	4.99		10 600	750.5	M108	
297.2	1.90	2892	SIFN76B5U - 280M4	4.98		33 800	855	M118	
267.2	1.00	3216	SIFN66B5.6U - 280M4	5.54		9 300	750.5	M108	
262.6	1.80	3273	SIFN76B5.6U - 280M4	5.64		33 800	855	M118	
224.2	0.91	3833	SIFN66B6.3U - 280M4	6.60		6 500	750.5	M108	
231.8	1.70	3707	SIFN76B6.3U - 280M4	6.38		33 500	855	M118	
208.8	0.87	4115	SIFN66B7.1U - 280M4	7.09		5 200	750.5	M108	
204.3	1.50	4206	SIFN76B7.1U - 280M4	7.24		33 000	855	M118	
180.7	0.80	4757	SIFN66B8U - 280M4	8.19		2 000	750.5	M108	
187.5	1.50	4583	SIFN76B8U - 280M4	7.89		32 600	855	M118	
164.4	1.40	5229	SIFN76B9U - 280M4	9.00		31 600	855	M118	
150.1	1.30	5725	SIFN76B10U - 280M4	9.86		30 800	855	M118	
130.4	1.10	6593	SIFN76B11.2U - 280M4	11.35		29 100	855	M118	
118.1	1.00	7274	SIFN76B12.5U - 280M4	12.53		27 500	855	M118	
118.7	1.90	7241	SIFN86C12.5U - 280M4	12.47		68 000	1042	M127	
105.1	0.89	8174	SIFN76B14U - 280M4	14.08		25 400	855	M118	
104.9	1.80	8196	SIFN86C14U - 280M4	14.11		67 900	1042	M127	
94.4	0.80	9102	SIFN76B16U - 280M4	15.67		23 000	855	M118	
92.6	1.60	9283	SIFN86C16U - 280M4	15.99		65 900	1042	M127	
81.6	1.40	10534	SIFN86C18U - 280M4	18.14		60 500	1042	M127	
74.9	1.30	11478	SIFN86C20U - 280M4	19.77		56 000	1042	M127	
75.1	1.90	11448	SIFN96C20U - 280M4	19.71		105 000	1273	M136	
65.6	1.10	13095	SIFN86C22.4U - 280M4	22.55		47 900	1042	M127	
66.3	1.80	12957	SIFN96C22.4U - 280M4	22.31		105 000	1273	M136	
59.9	1.00	14337	SIFN86C25U - 280M4	24.69		41 300	1042	M127	
58.6	1.60	14676	SIFN96C25U - 280M4	25.27		105 000	1273	M136	
52.1	0.91	16510	SIFN86C28U - 280M4	28.43		29 200	1042	M127	
51.6	1.50	16653	SIFN96C28U - 280M4	28.68		105 000	1273	M136	
47.2	0.82	18217	SIFN86C31.5U - 280M4	31.37			1042	M127	
47.4	1.40	18145	SIFN96C31.5U - 280M4	31.25		105 000	1273	M136	
41.5	1.20	20702	SIFN96C35.5U - 280M4	35.65		105 000	1273	M136	
37.9	1.10	22665	SIFN96C40U - 280M4	39.03		105 000	1273	M136	
32.9	0.96	26100	SIFN96C45U - 280M4	44.95		92 600	1273	M136	
29.8	0.87	28799	SIFN96C50U - 280M4	49.59		79 600	1273	M136	



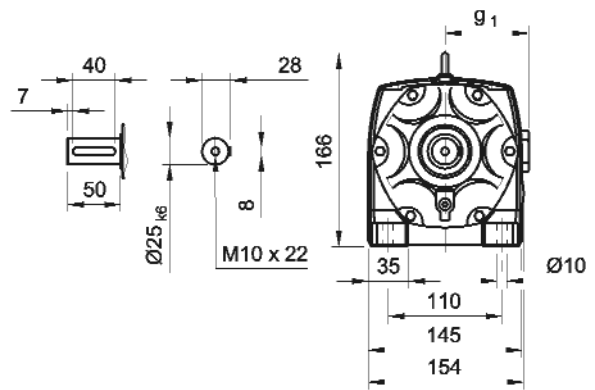
4. SI4

4.5 Maßbilder Getriebemotoren Dimensional drawings of geared motors Schémas dimensionnels des moteurs adaptés

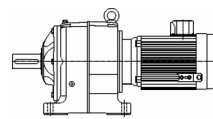
SIFN16B/C
63 - 112



SIFN16..



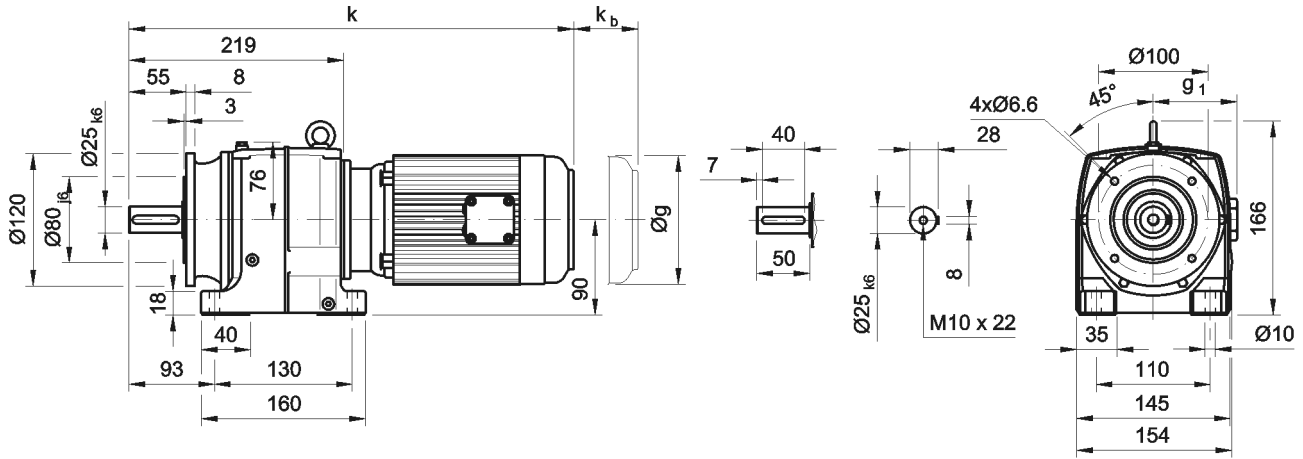
	63	71	80	90S	90L	100	112											
k	434	438	461	503	503	541	554											
ku																		
kz																		
kc																		
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



4. SI4

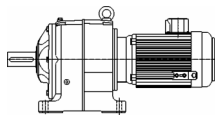
SIFR16B/C
63 - 112

SIFR16..



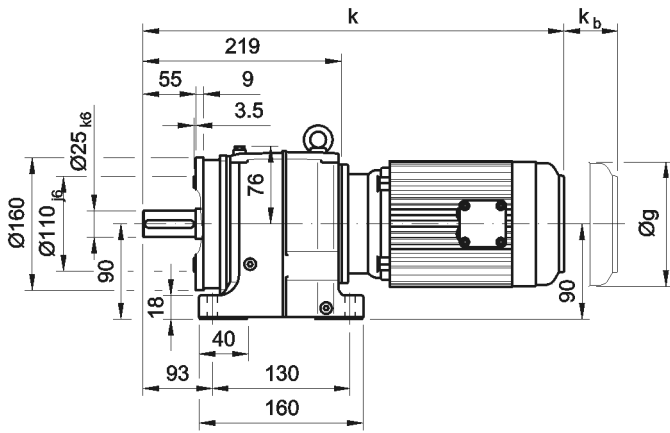
4

	63	71	80	90S	90L	100	112											
k	452	456	479	521	521	559	572											
ku																		
kz																		
kc																		
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		

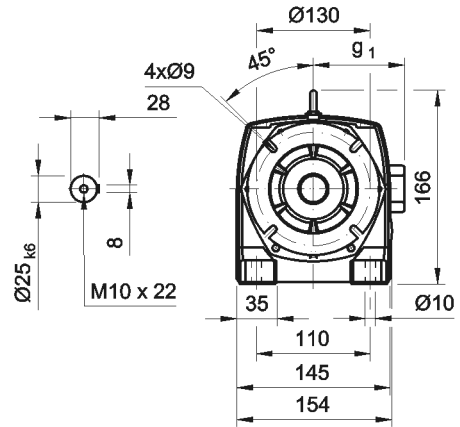


4. SI4

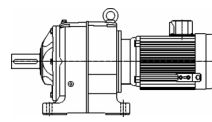
SIFE16B/C
63 - 112



SIFE16..



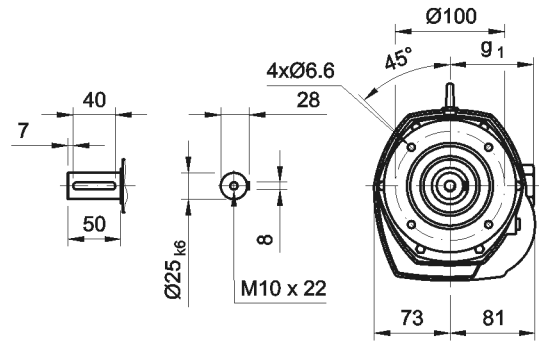
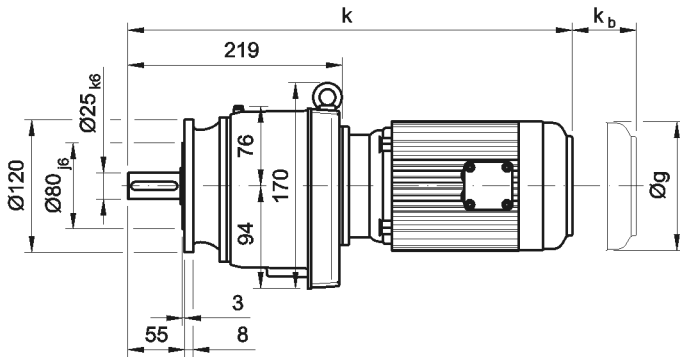
	63	71	80	90S	90L	100	112											
k	452	456	479	521	521	559	572											
ku																		
kz																		
kc																		
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



4. SI4

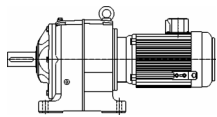
SICR16B/C
63 - 112

SICR16..



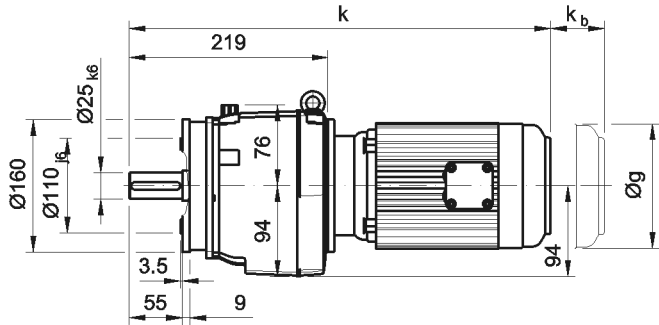
4

	63	71	80	90S	90L	100	112											
k	452	456	479	521	521	559	572											
ku																		
kz																		
kc																		
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		

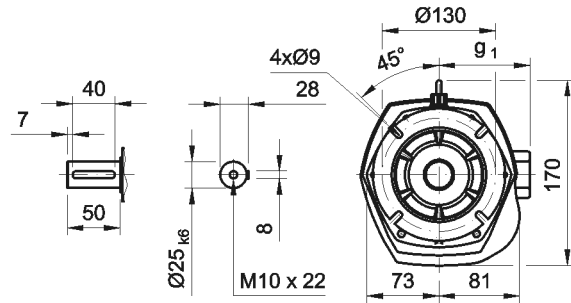


4. SI4

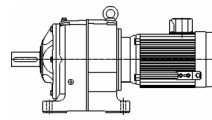
SICE16B/C
63 - 112



SICE16..



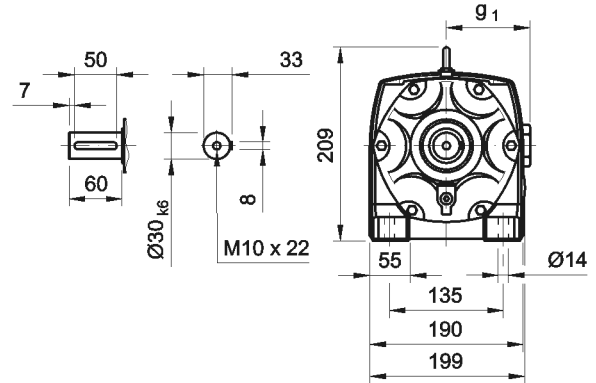
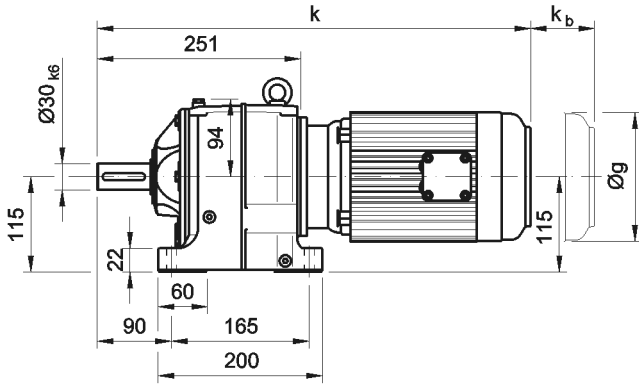
	63	71	80	90S	90L	100	112											
k	452	456	479	521	521	559	572											
ku																		
kz																		
kc																		
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



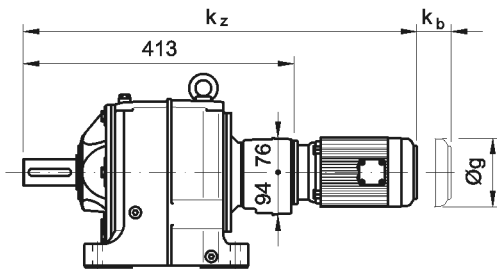
4. SI4

SIFN26B/C
63 - 160

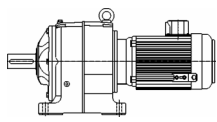
SIFN26..



SIFN26C16B/C
63 - 112

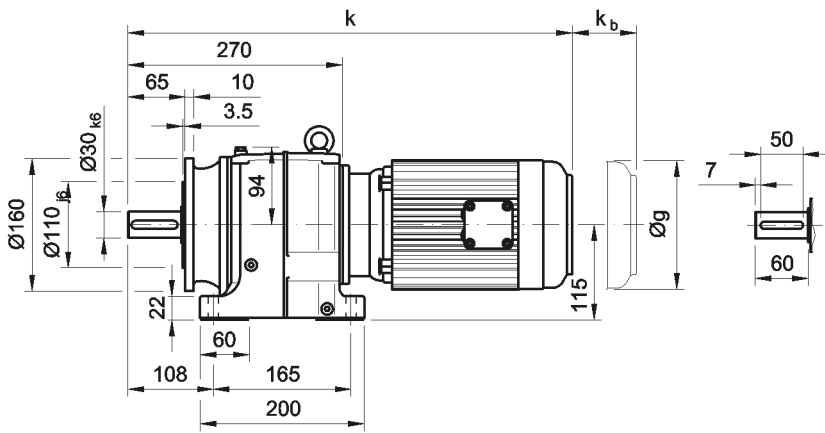


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	475	479	502	544	544	582	595	664	699	699	812	856							
ku																			
kz	646	650	673	715	715	753	766												
kc																			
kb	48	60	71	77	77	80	89	98	98	98	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			

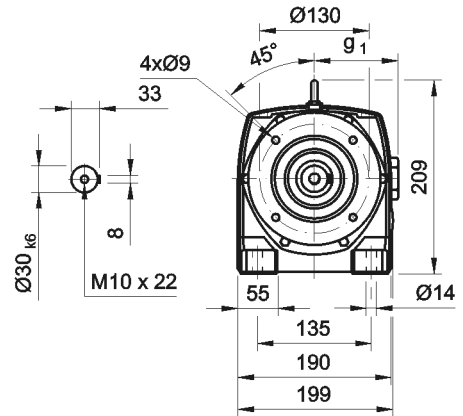


4. SI4

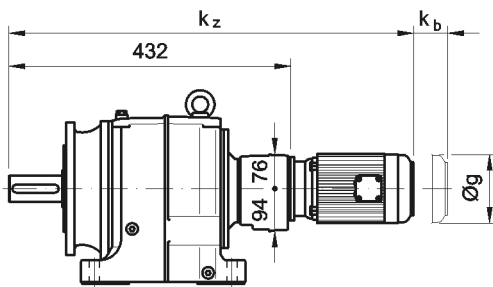
SIFR26B/C
63 - 160



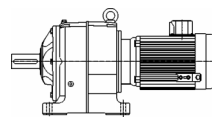
SIFR26..



SIFR26C16B/C
63 - 112

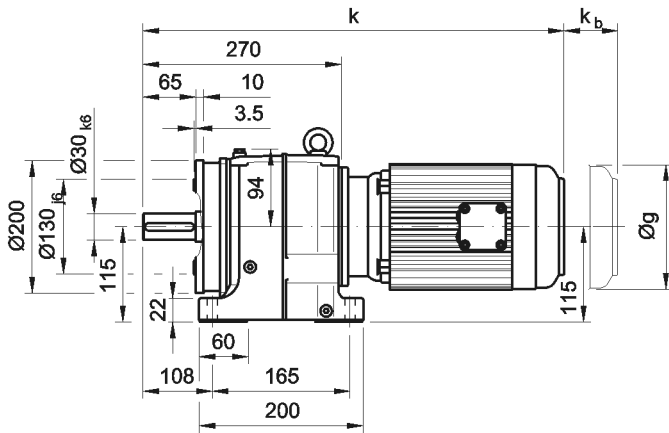


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	494	498	521	563	563	601	614	683	718	718	831	875							
ku																			
kz	665	669	692	734	734	772	785												
kc																			
kb	48	60	71	77	77	80	89	98	98	98	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			

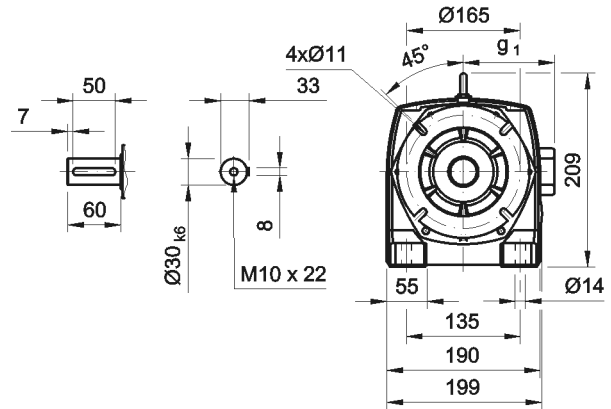


4. SI4

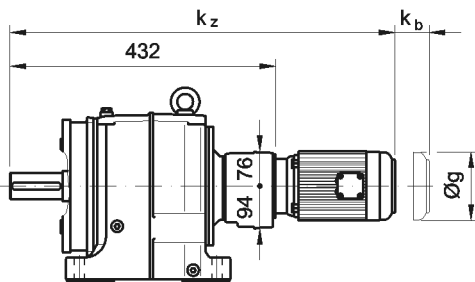
SIFE26B/C
63 - 160



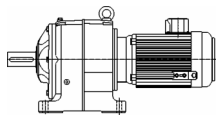
SIFE26..



SIFE26C16B/C
63 - 112

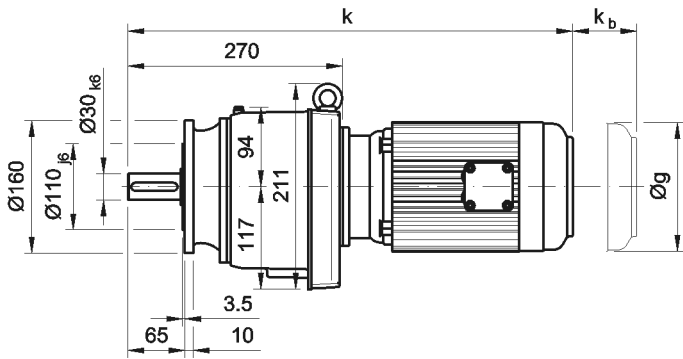


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	494	498	521	563	563	601	614	683	718	718	831	875						
ku																		
kz	665	669	692	734	734	772	785											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
Øg	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
Øam																		

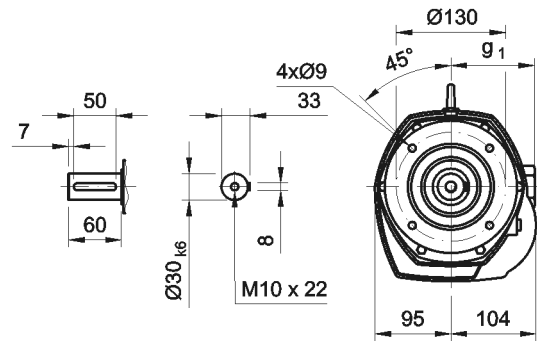


4. SI4

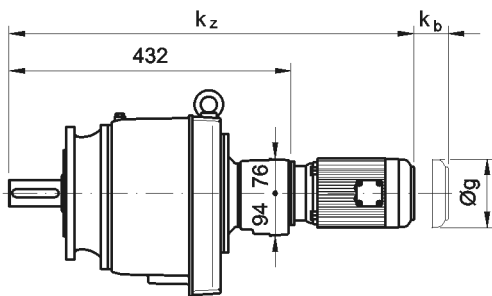
SICR26B/C
63 - 160



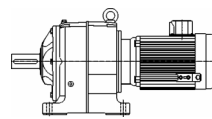
SICR26..



SICR26C16B/C
63 - 112

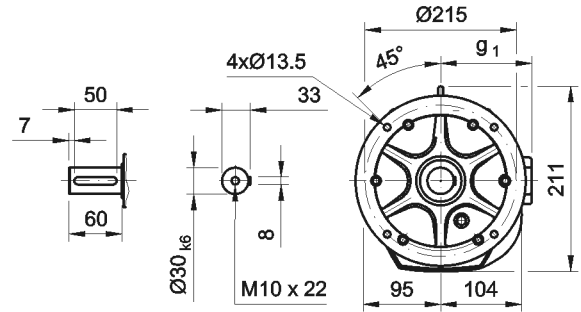
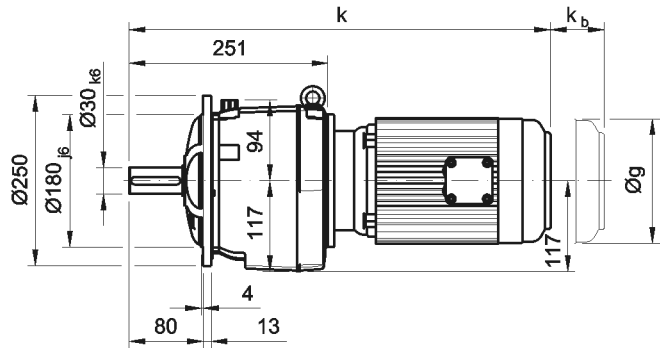


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	494	498	521	563	563	601	614	683	718	718	831	875						
ku																		
kz	665	669	692	734	734	772	785											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
Øg	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
Øm																		

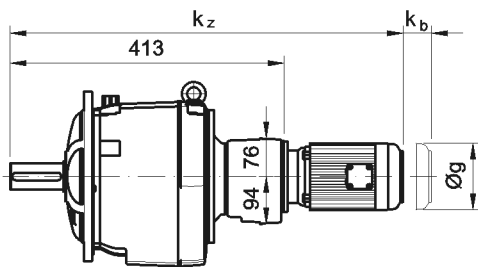


SICF26B/C
63 - 160

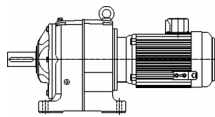
SICF26..



SICF26C16B/C
63 - 112

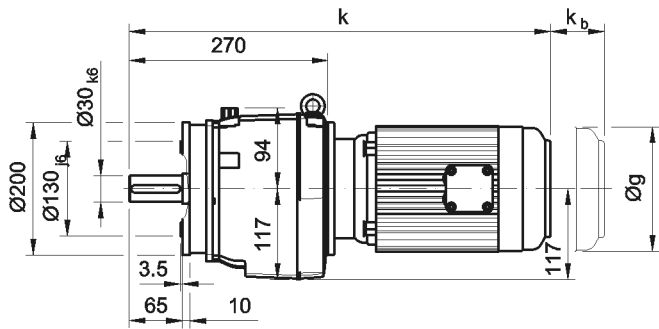


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	475	479	502	544	544	582	595	664	699	699	812	856						
ku																		
kz	646	650	673	715	715	753	766											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
Øg	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
Øam																		

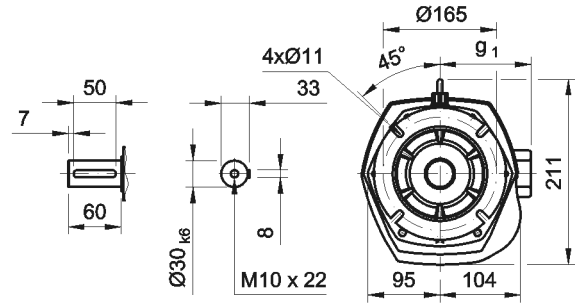


4. SI4

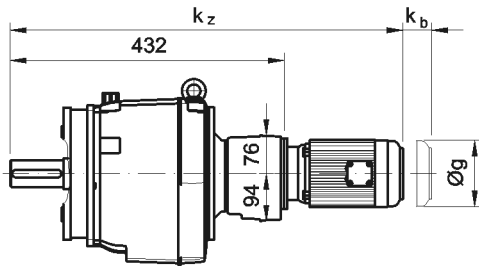
SICE26B/C
63 - 160



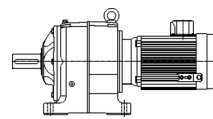
SICE26..



SICE26C16B/C
63 - 112



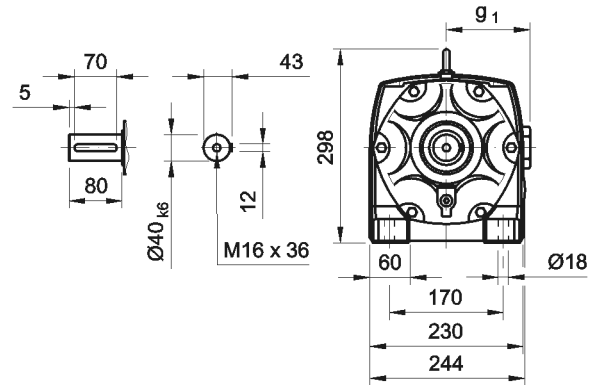
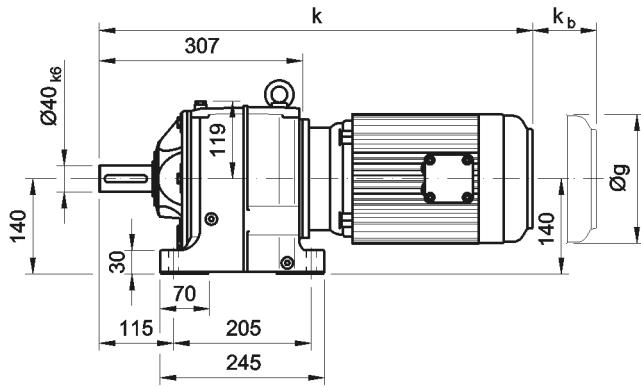
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	494	498	521	563	563	601	614	683	718	718	831	875						
ku																		
kz	665	669	692	734	734	772	785											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
g	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
am																		



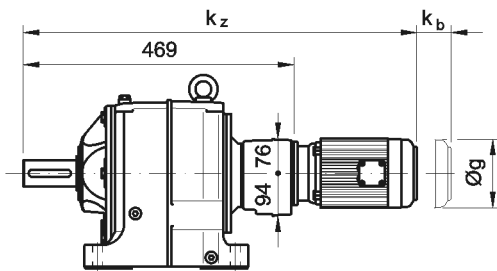
4. SI4

SIFN36B/C
63 - 160

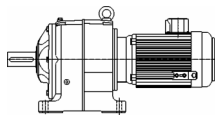
SIFN36..



SIFN36C16B/C
63 - 112

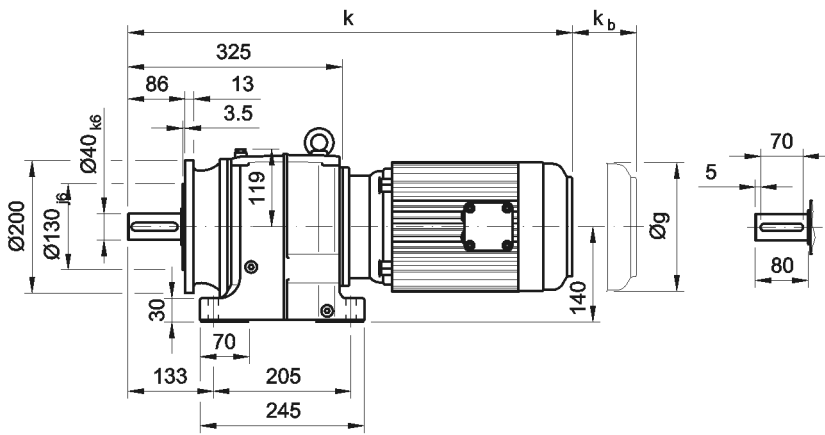


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	531	535	558	600	600	638	651	720	755	755	868	912						
ku																		
kz	702	706	729	771	771	809	822											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
Øg	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
Øam																		

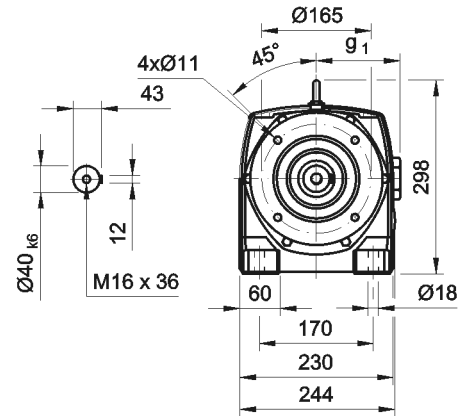


4. SI4

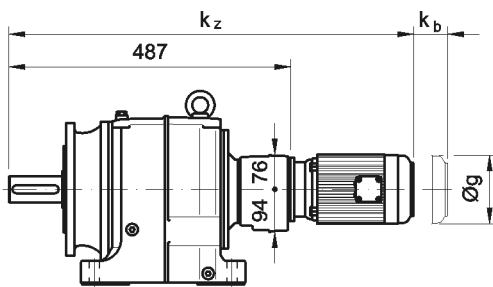
SIFR36B/C
63 - 160



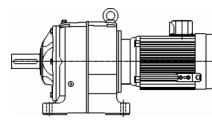
SIFR36..



SIFR36C16B/C
63 - 112

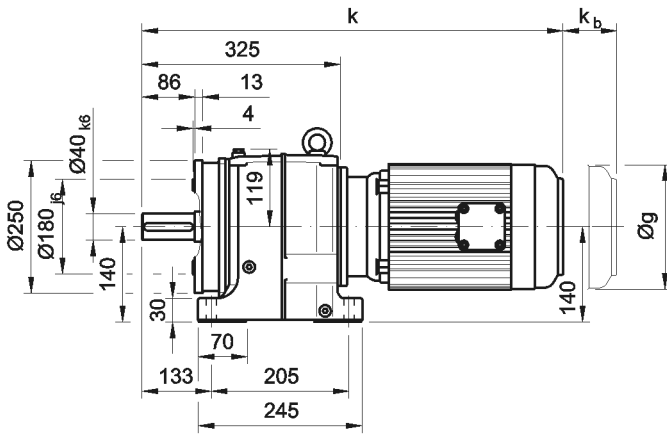


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	549	553	576	618	618	656	669	738	773	773	886	930							
ku																			
kz	720	724	747	789	789	827	840												
kc																			
kb	48	60	71	77	77	80	89	98	98	98	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			

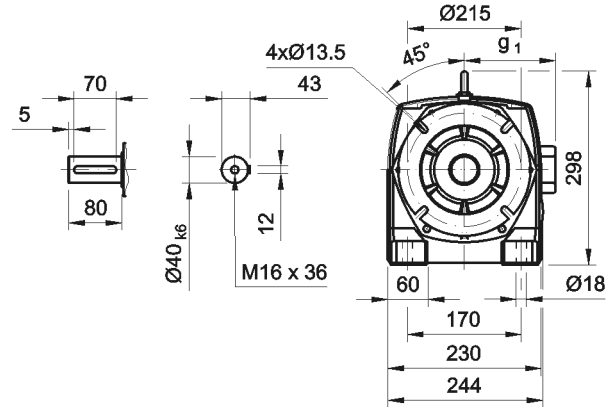


4. SI4

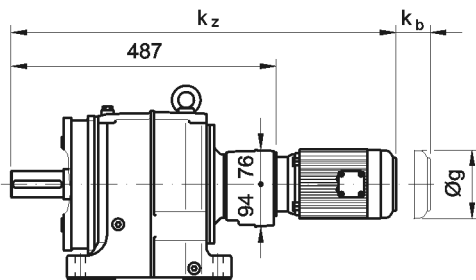
SIFE36B/C
63 - 160



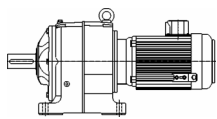
SIFE36..



SIFE36C16B/C
63 - 112

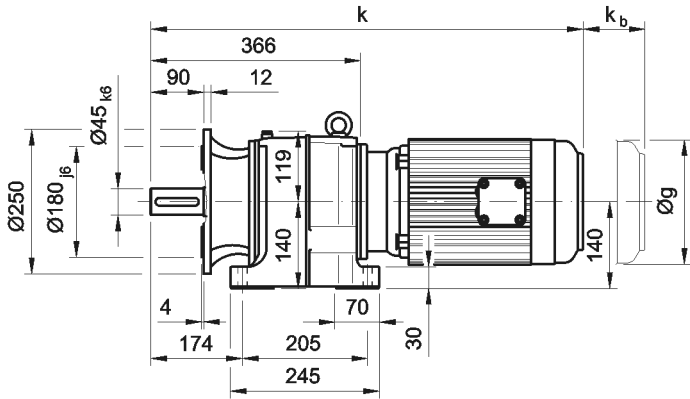


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	549	553	576	618	618	656	669	738	773	773	886	930						
ku																		
kz	720	724	747	789	789	827	840											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
Øg	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
Øam																		

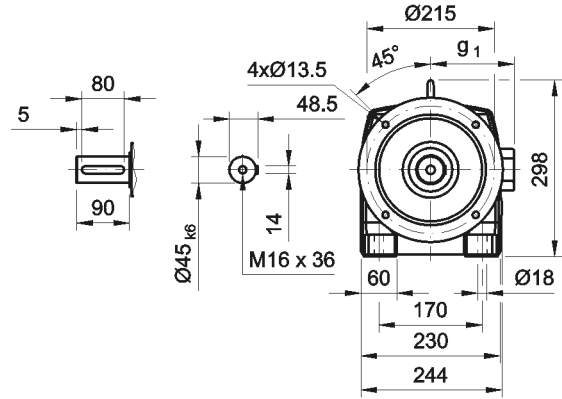


4. SI4

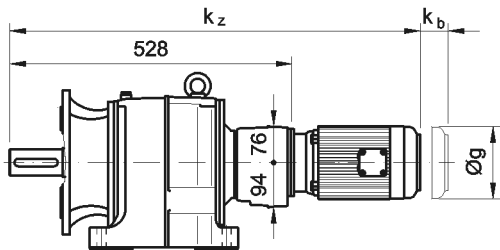
SIFM36/C
63 - 160



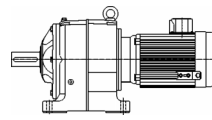
SIFM36..



SIFM36B16B/C
63 - 112

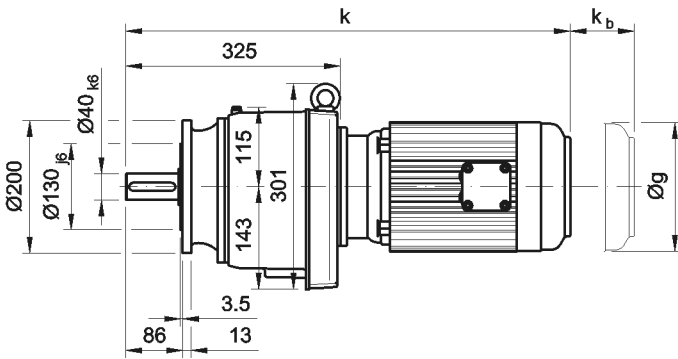


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	590	594	617	659	659	697	710	779	814	814	927	971							
ku																			
kz	761	765	788	830	830	868	881												
kc																			
kb	48	60	71	77	77	80	89	98	98	98	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			

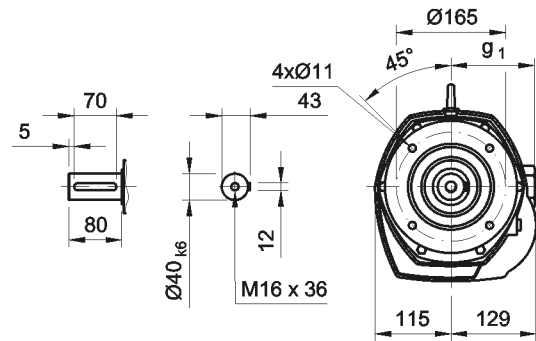


4. SI4

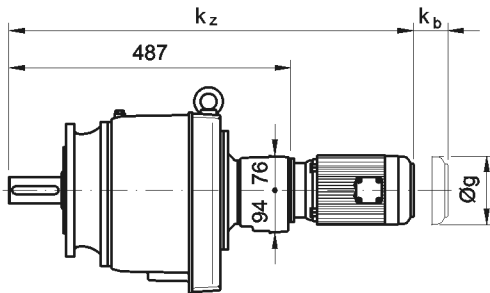
SICR36B/C
63 - 160



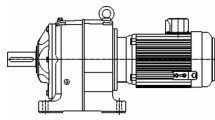
SICR36..



SICR36C16B/C
63 - 112

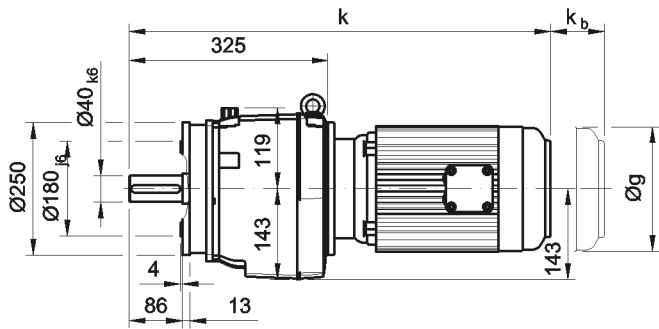


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	549	553	576	618	618	656	669	738	773	773	886	930						
ku																		
kz	720	724	747	789	789	827	840											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
Øg	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
Øam																		

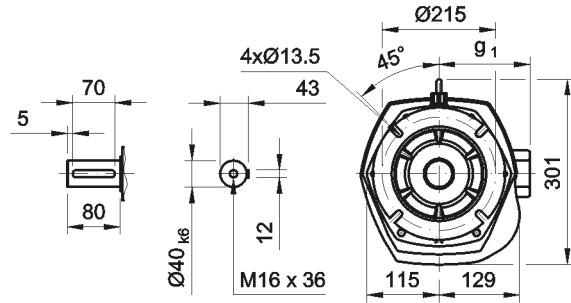


4. SI4

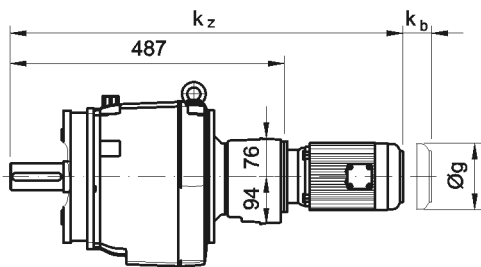
SICE36B/C
63 - 160



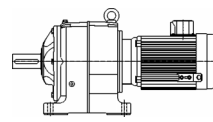
SICE36..



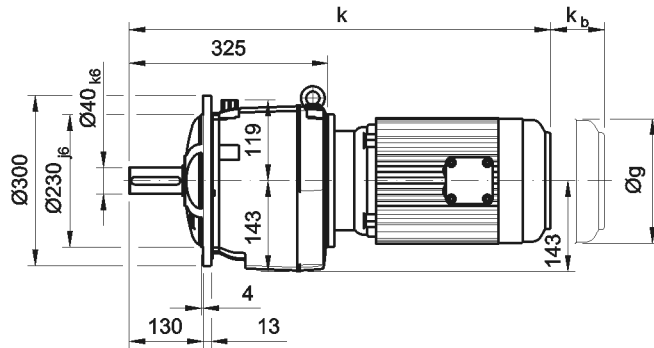
SICE36C16B/C
63 - 112



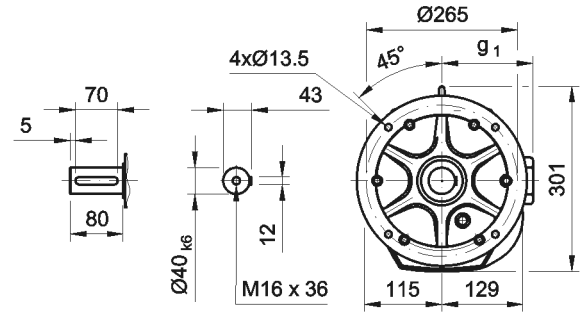
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	549	553	576	618	618	656	669	738	773	773	886	930							
ku																			
kz	720	724	747	789	789	827	840												
kc																			
kb	48	60	71	77	77	80	89	98	98	98	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			



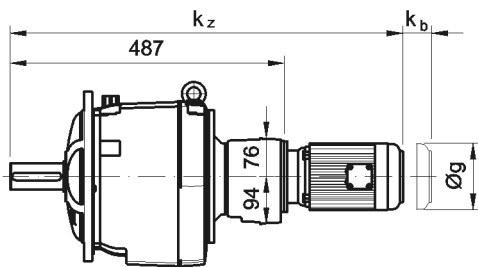
SICF36B/C
63 - 160



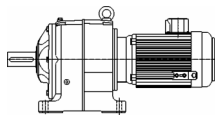
SICF36..



SICF36C16B/C
63 - 112

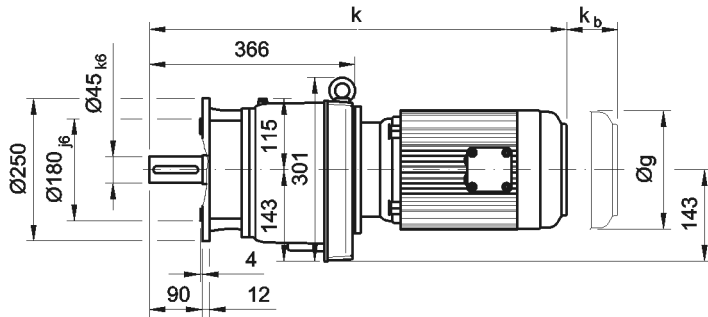


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L						
k	549	553	576	618	618	656	669	738	773	773	886	930						
ku																		
kz	720	724	747	789	789	827	840											
kc																		
kb	48	60	71	77	77	80	89	98	98	98	77	77						
Øg	121	138	157	177	177	197	219	235	235	235	330	330						
g1	96	102	125	133	133	144	165	182	182	182	287	287						
Øam																		

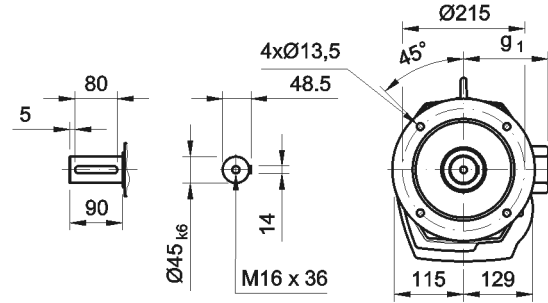


4. SI4

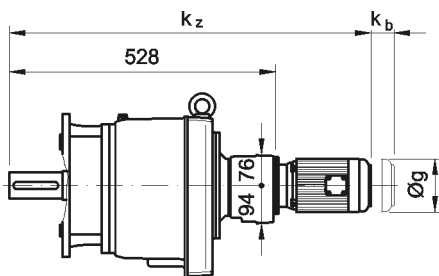
SICM36B
63 - 160



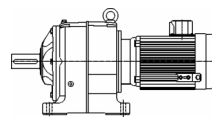
SICM36..



SICM36B16B/C
63 - 112



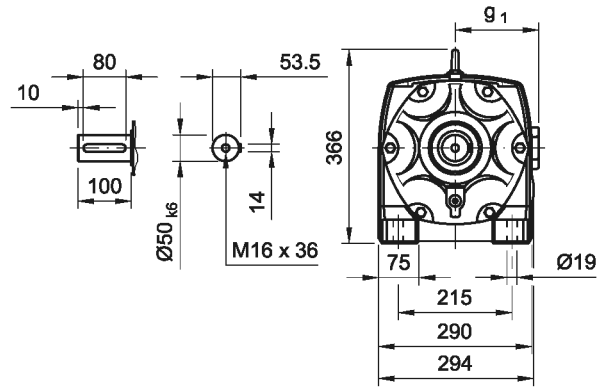
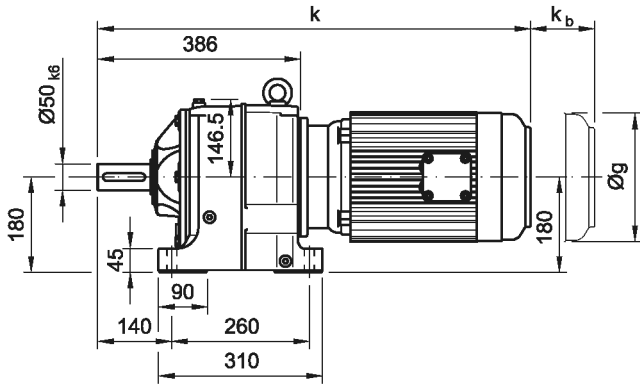
	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L								
k	590	594	617	659	659	697	710	779	814	814	927	971								
ku																				
kz	761	765	788	830	830	868	881													
kc																				
kb	48	60	71	77	77	80	89	98	98	98	77	77								
Øg	121	138	157	177	177	197	219	235	235	235	330	330								
g1	96	102	125	133	133	144	165	182	182	182	287	287								
Øam																				



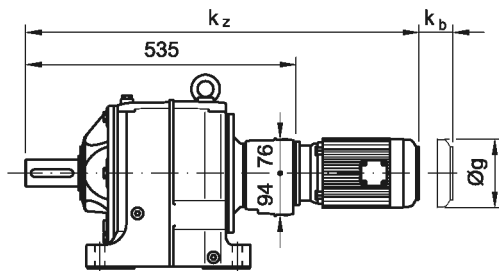
4. SI4

SIFN46B/C
80 - 200

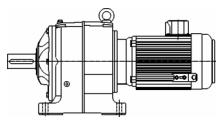
SIFN46..



SIFN46C16B/C
63 - 112

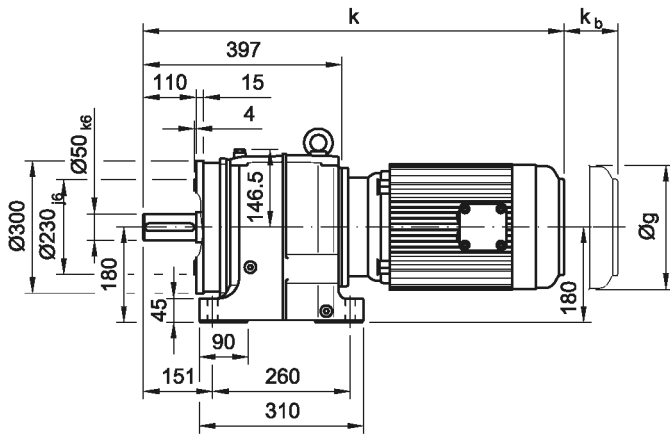


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			625	667	667	705	718	787	822	822	935	979	964	1002	1060				
ku																			
kz	768	772	795	837	837	875	888												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

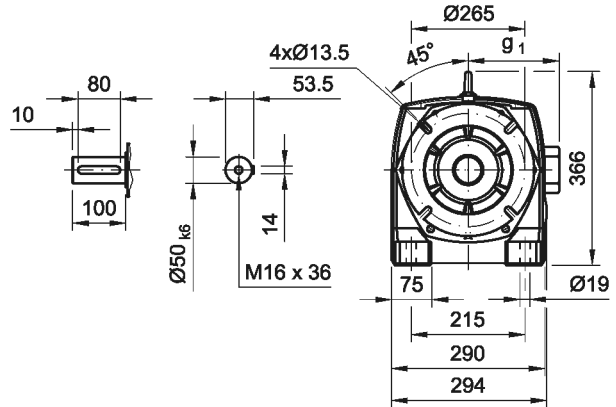


4. SI4

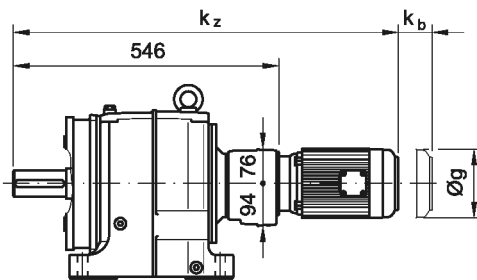
SIFE46B/C
80 - 200



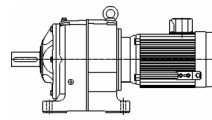
SIFE46..



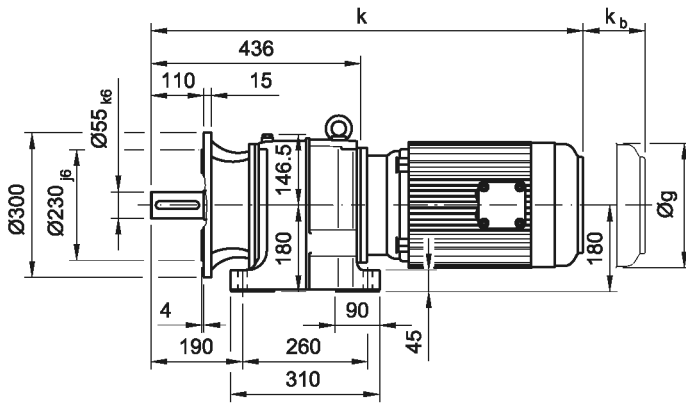
SIFE46C16B/C
63 - 112



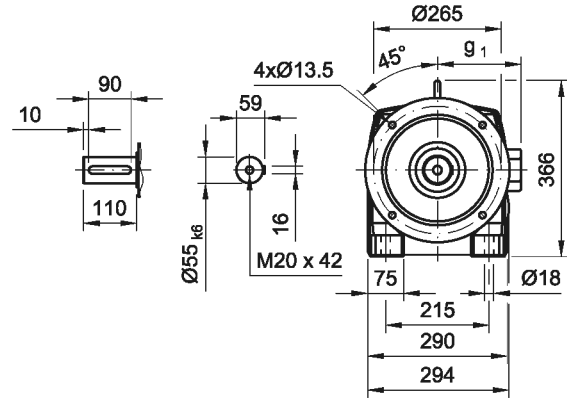
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			636	678	678	716	729	798	833	833	946	990	975	1013	1071				
ku																			
kz	779	783	806	848	848	886	899												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



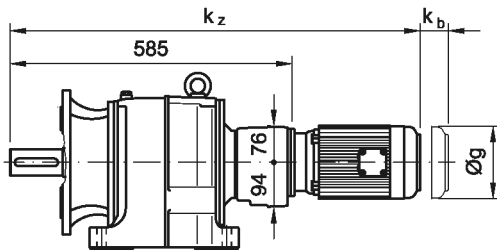
SIFM46B/C
80 - 200



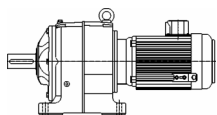
SIFM46..



SIFM46C16B/C
63 - 112

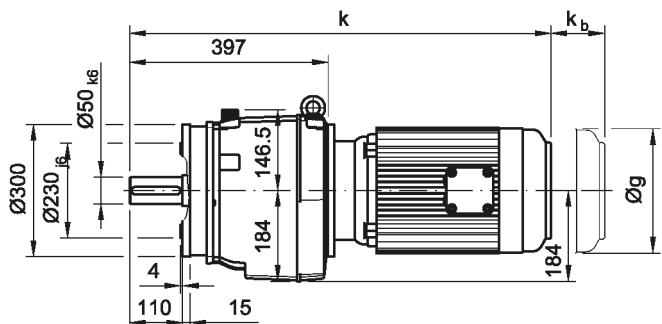


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			675	717	717	755	768	837	872	872	985	1029	1014	1052	1110				
ku																			
kz	818	822	845	887	887	925	938												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

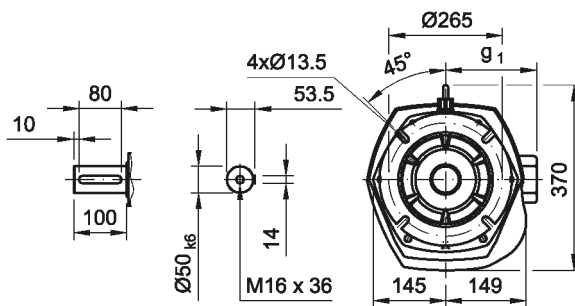


4. SI4

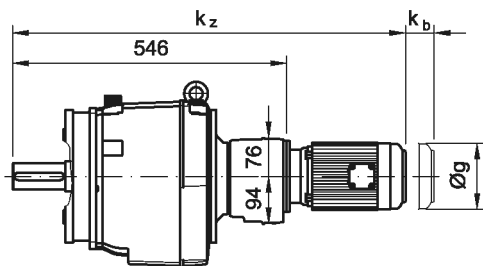
SICE46B/C
80 - 200



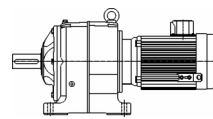
SICE46..



SICE46C16B/C
63 - 112



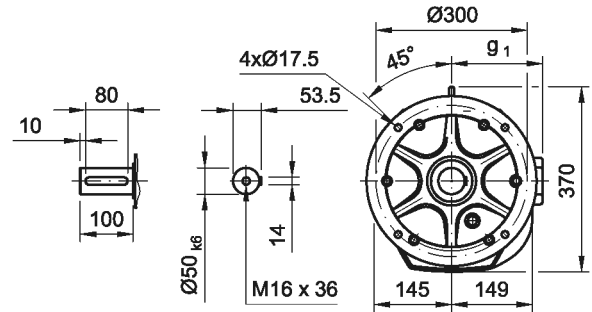
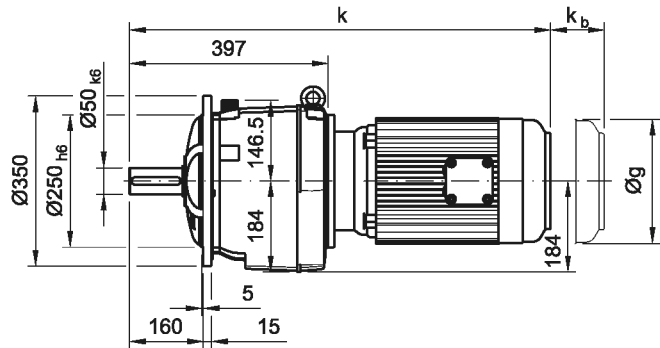
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			635	677	677	715	728	797	832	832	945	989	974	1012	1072				
ku																			
kz	778	782	805	847	847	885	898												
kc																			
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312					
Øam																			



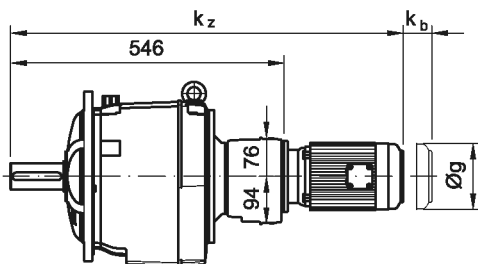
4. SI4

SICF46B/C
80 - 200

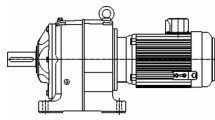
SICF46..



SICF46C16B/C
63 - 112

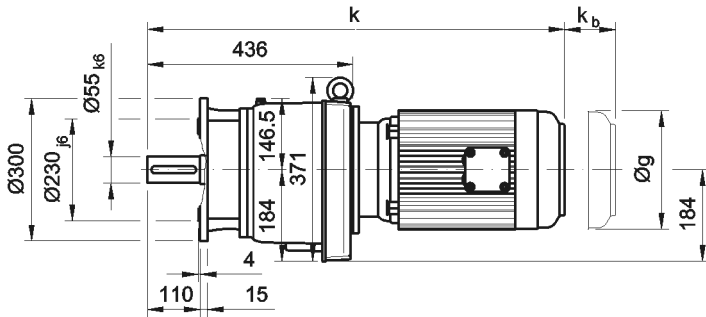


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			636	678	678	716	729	798	833	833	946	990	975	1013	1071				
ku																			
kz	779	783	806	848	848	886	899												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

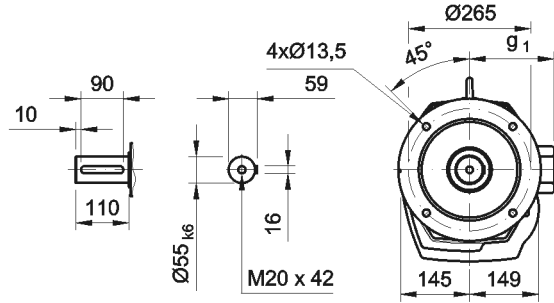


4. SI4

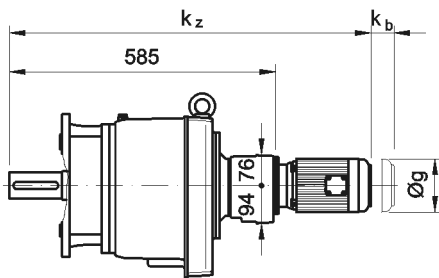
SICM46B/C
80 - 180



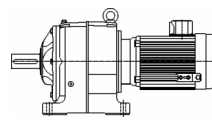
SICM46..



SICM46C16B/C
63 - 112

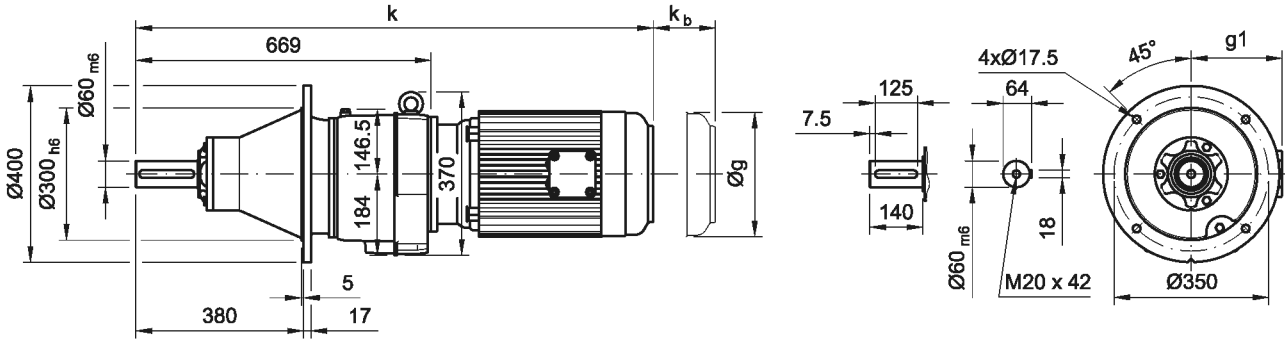


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			675	717	717	755	768	837	872	872	985	1029	1014	1052	1110				
ku																			
kz	818	822	845	887	887	925	938												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

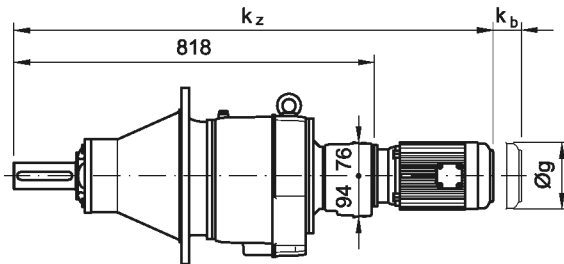


SICL46B/C
80 - 200

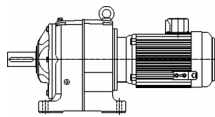
SICL46..



SICL46C16B/C
63 - 112

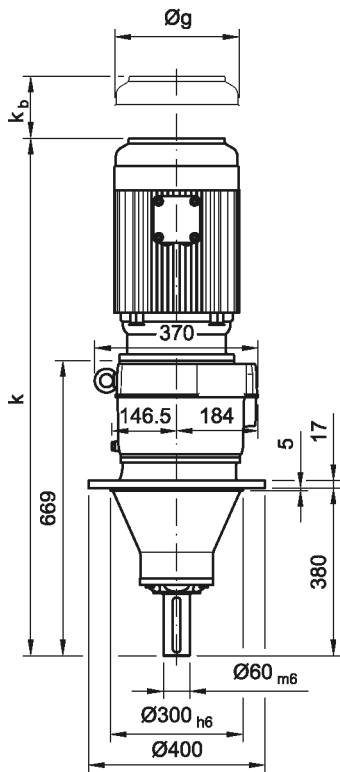


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			908	950	950	988	1001	1070	1105	1105	1218	1262	1247	1285	1343				
ku																			
kz	1051	1055	1078	1120	1120	1158	1171												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

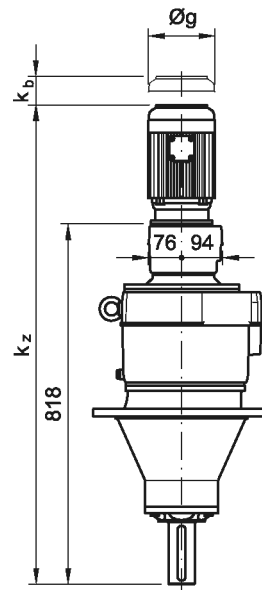


4. SI4

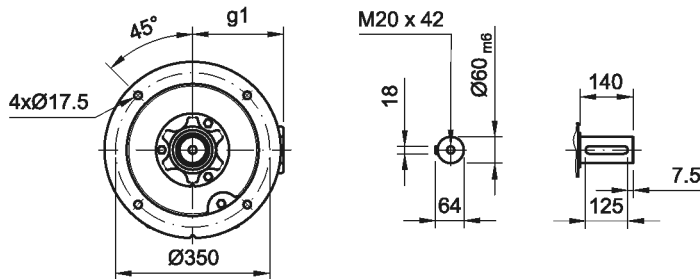
SICP46B/C
80 - 200



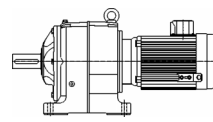
SICP46C16B/C
63 - 112



SICP46..



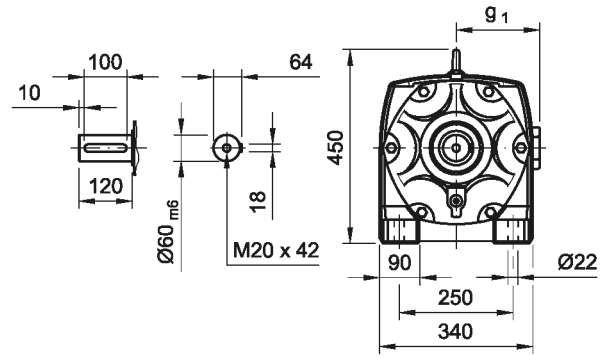
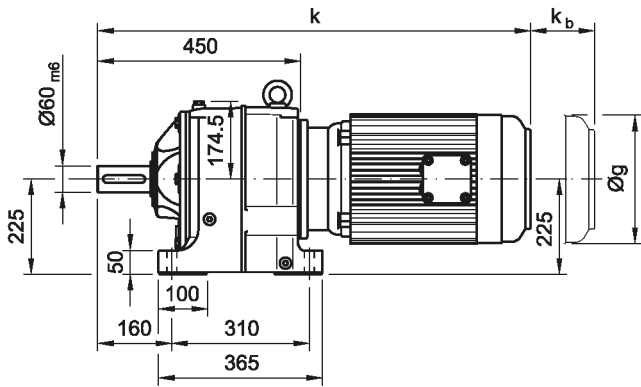
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			908	950	950	988	1001	1070	1105	1105	1218	1262	1247	1285	1343				
ku																			
kz	1051	1055	1078	1120	1120	1158	1171												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



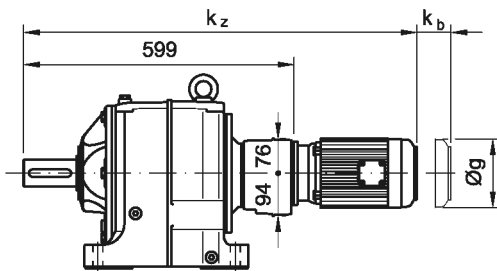
4. SI4

SIFN56B/C
80 - 200

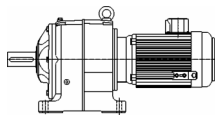
SIFN56..



SIFN56C16B/C
63 - 112

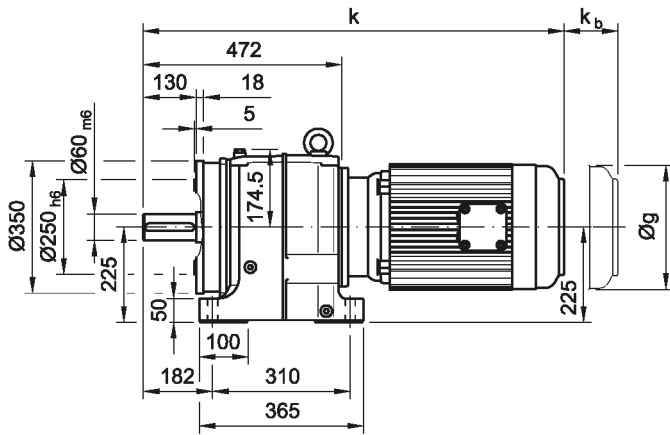


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			689	731	731	769	782	851	886	886	999	1043	1028	1066	1124				
ku																			
kz	832	836	859	901	901	939	952												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

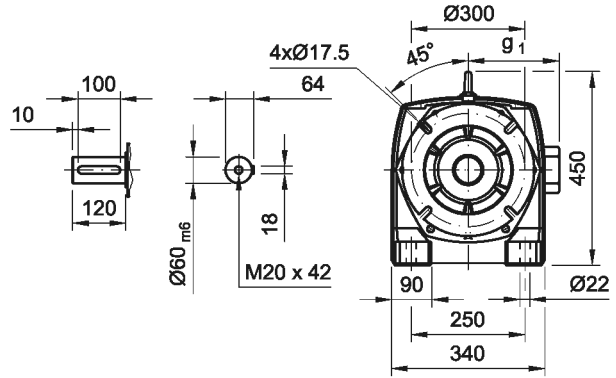


4. SI4

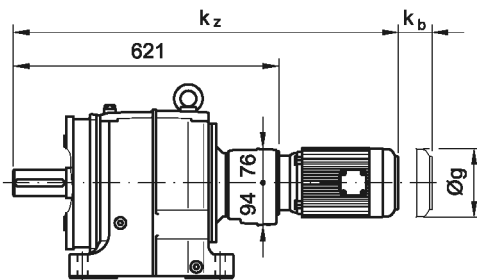
SIFE56B/C
80 - 200



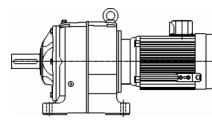
SIFE56..



SIFE56C16B/C
63 - 112

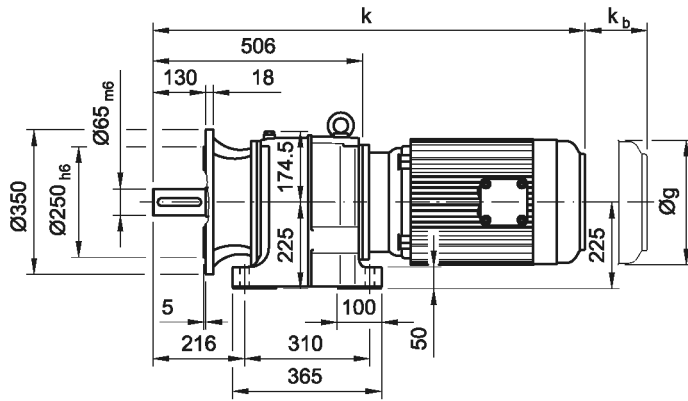


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			711	753	753	791	804	873	908	908	1021	1065	1050	1088	1146				
ku																			
kz	854	858	881	923	923	961	974												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

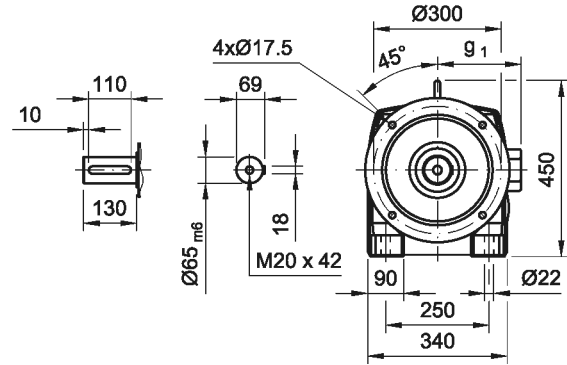


4. SI4

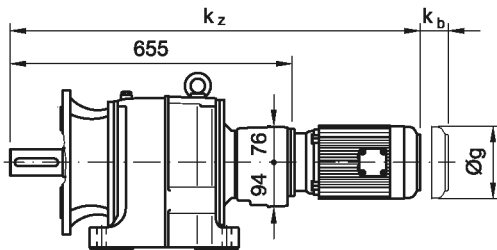
SIFM56B/C
80 - 200



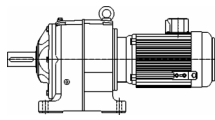
SIFM56..



SIFM56C16B/C
63 - 112

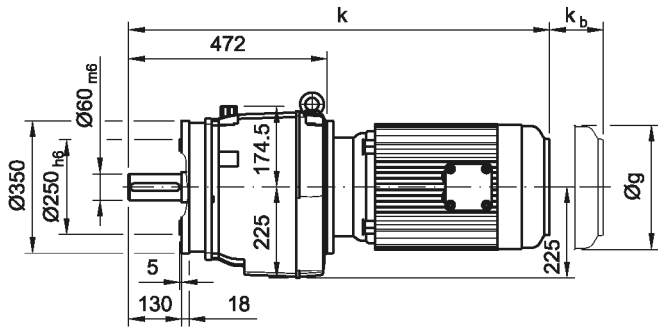


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			745	787	787	825	838	907	942	942	1055	1099	1084	1122	1180				
ku																			
kz	888	892	915	957	957	995	1008												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

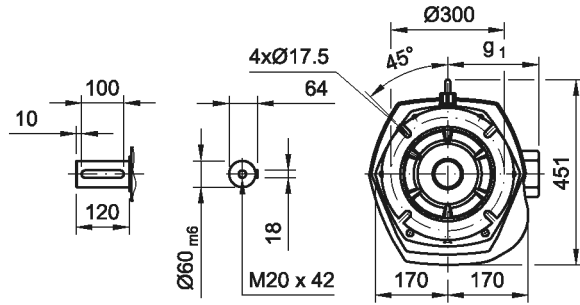


4. SI4

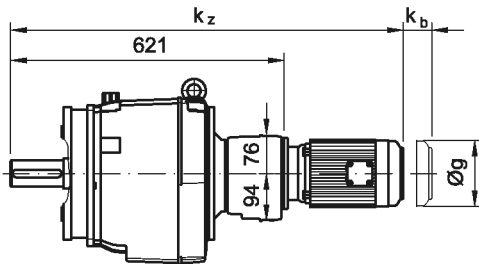
SICE56B/C
80 - 200



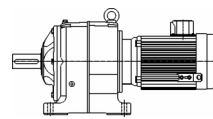
SICE56..



SICE56C16B/C
63 - 112



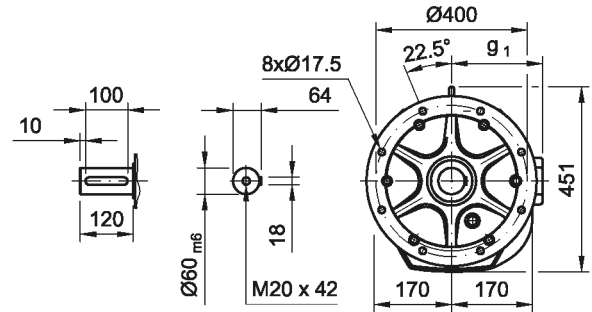
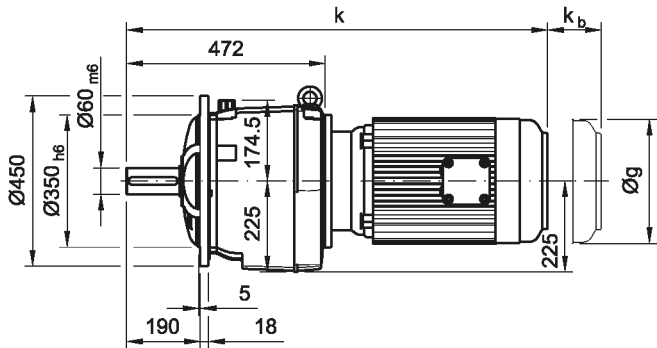
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			711	753	753	791	804	873	908	908	1021	1065	1050	1088	1146				
ku																			
kz	854	858	881	923	923	961	974												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



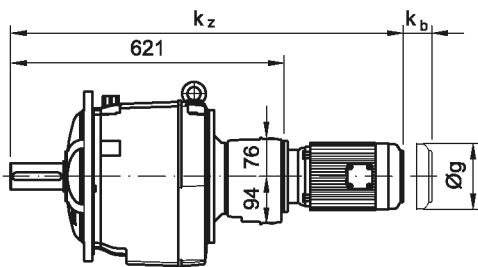
4. SI4

SICF56B/C
80 - 200

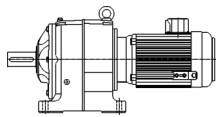
SICF56..



SICF56C16B/C
63 - 112

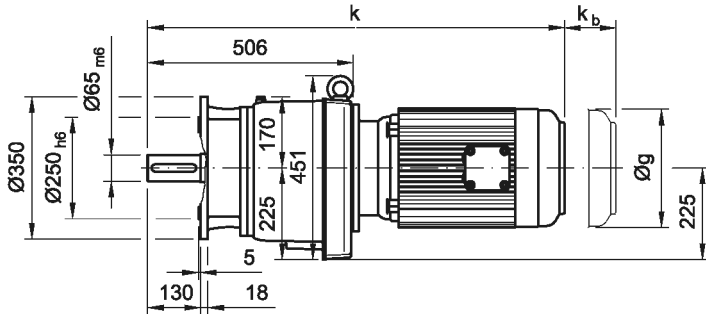


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			711	753	753	791	804	873	908	908	1021	1065	1050	1088	1146				
ku																			
kz	854	858	881	923	923	961	974												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

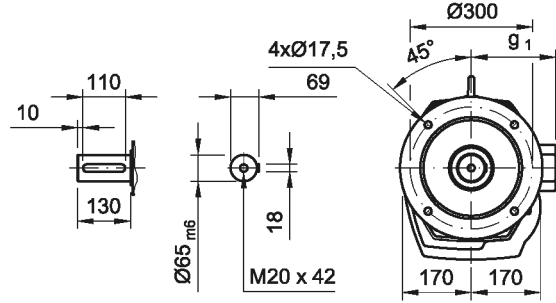


4. SI4

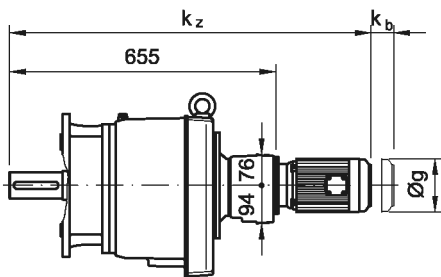
SICM56B/C
80 - 200



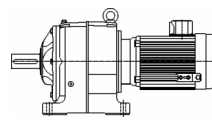
SICM56..



SICM56C16B/C
63 - 112



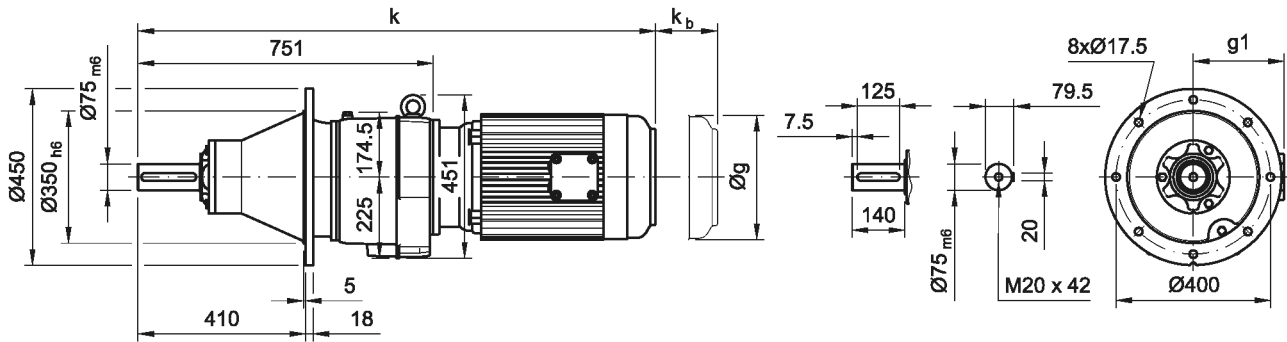
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			745	787	787	825	838	907	942	942	1055	1099	1084	1122	1180				
ku																			
kz	888	892	915	957	957	995	1008												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



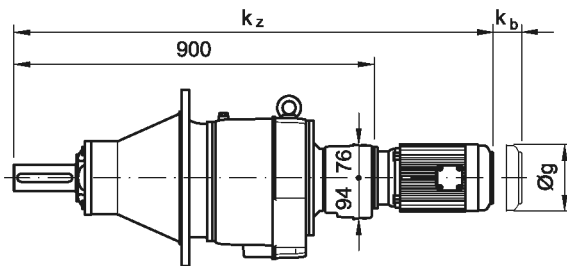
4. SI4

SICL56B/C
80 - 200

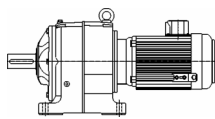
SICL56..



SICL56C16B/C
63 - 112

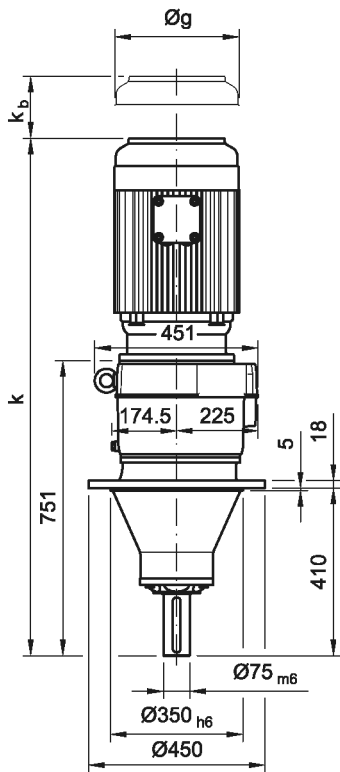


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			990	1032	1032	1070	1083	1152	1187	1187	1300	1344	1329	1367	1425				
ku																			
kz	1133	1137	1160	1202	1202	1240	1253												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
$\varnothing g$	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g_1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
$\varnothing am$																			

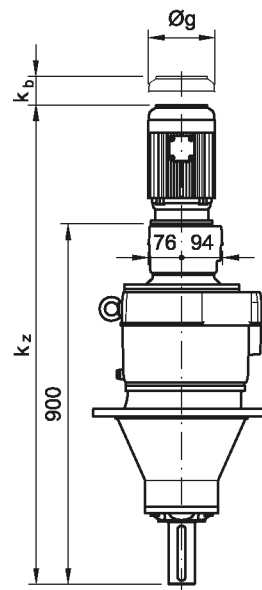


4. SI4

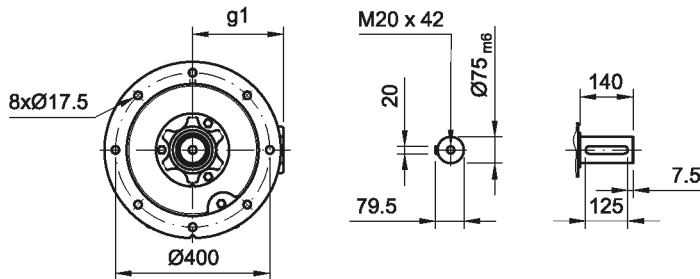
SICP56B/C
80 - 200



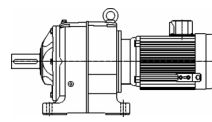
SICP56C16B
63 - 112



SICP56..



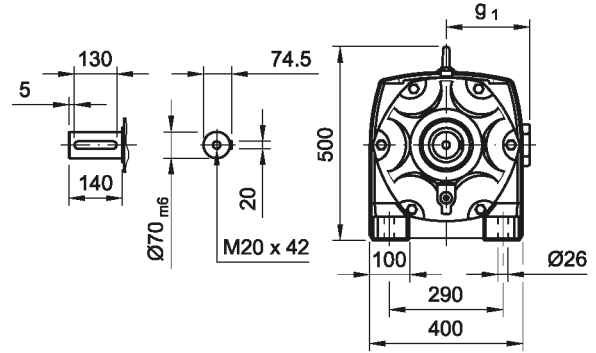
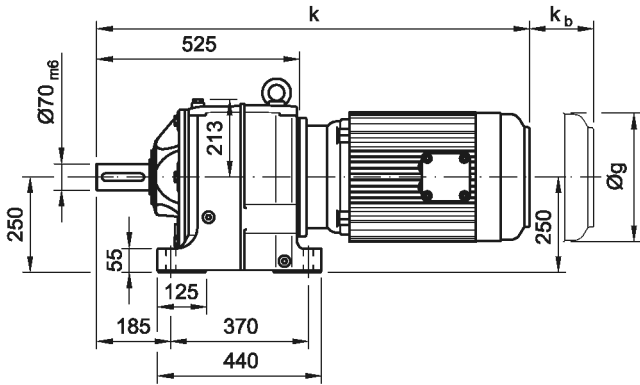
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			990	1032	1032	1070	1083	1152	1187	1187	1300	1344	1329	1367	1425				
ku																			
kz	1133	1137	1160	1202	1202	1240	1253												
kc																			
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



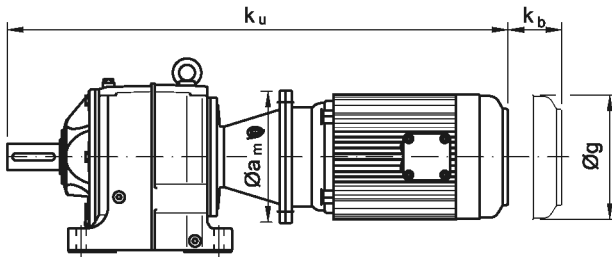
4. SI4

SIFN66B/C
100 - 225

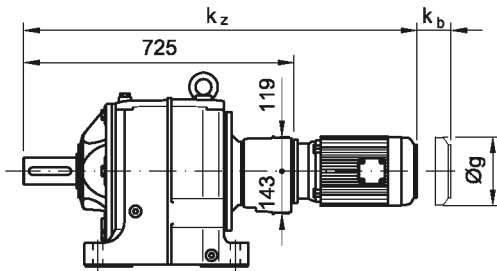
SIFN66..



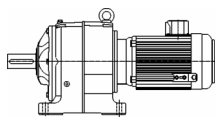
SIFN66B/C-U
100 - 280



SIFN66C36B/C
63 - 160

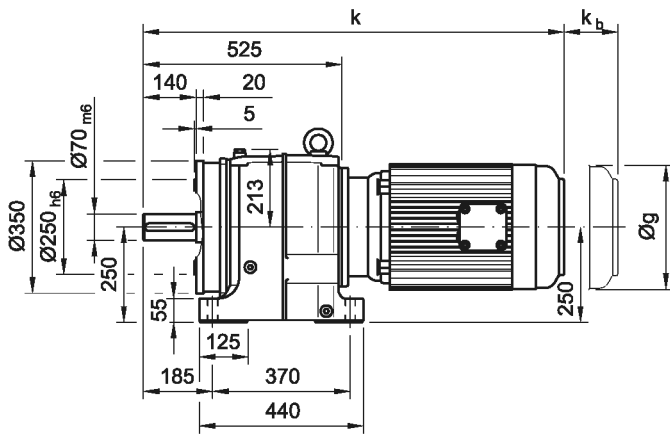


	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316				
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890	
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330									
kc																					
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

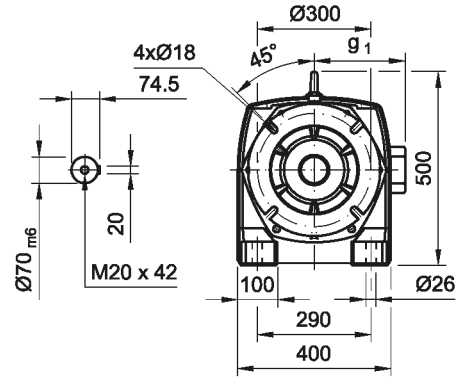


4. SI4

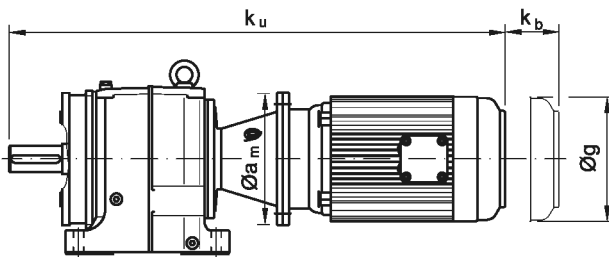
SIFE66B/C
100 - 225



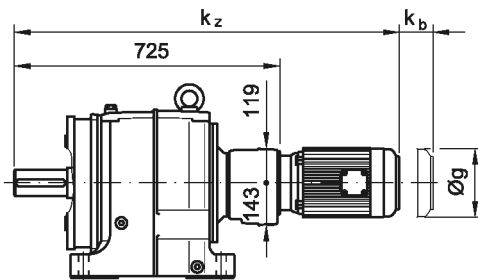
SIFE66..



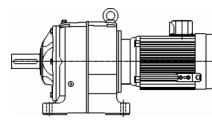
SIFE66B/C-U
100 - 280



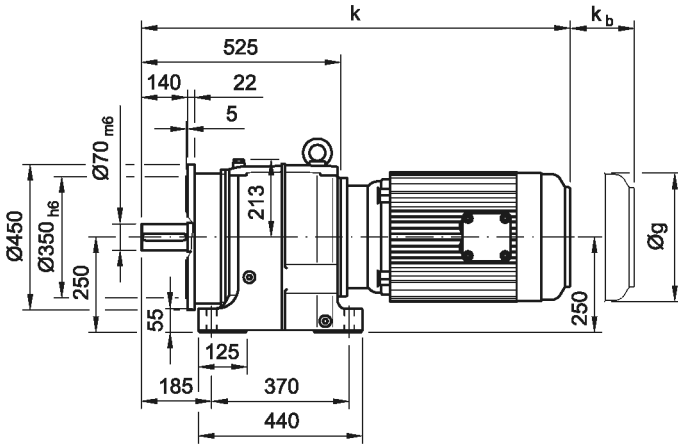
SIFE66C36B/C
63 - 160



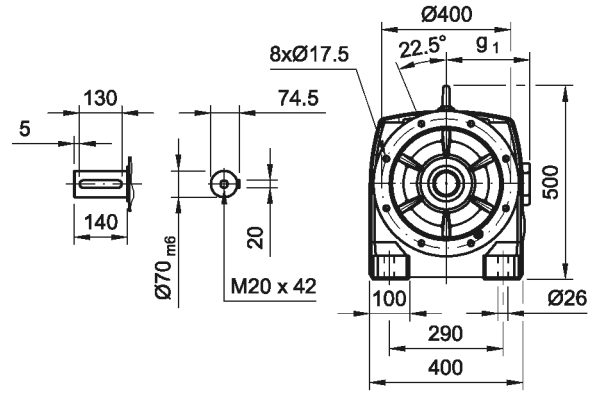
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316			
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



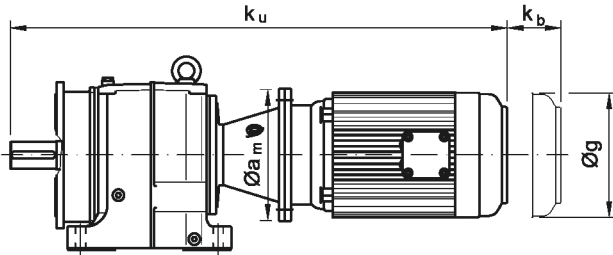
SIFD66B/C
100 - 225



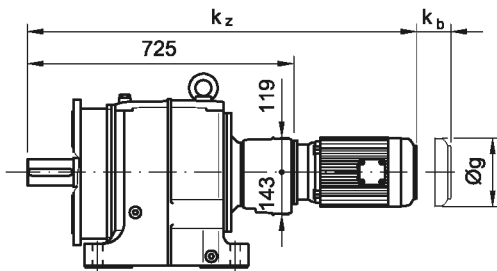
SIFD66..



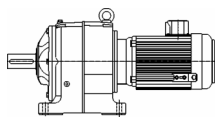
SIFD66B/C-U
100 - 280



SIFD66C36B/C
63 - 160

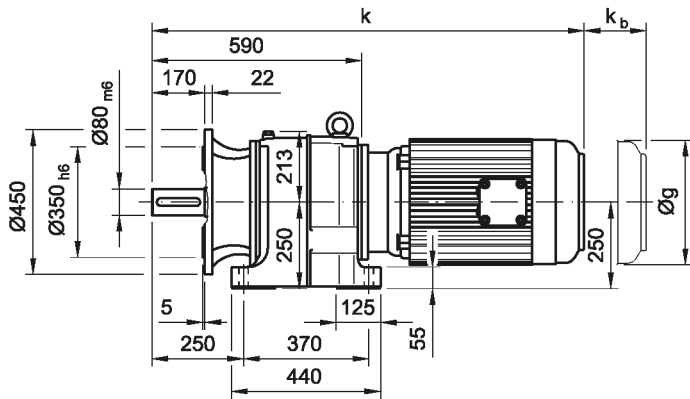


	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316				
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890	
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330									
kc																					
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

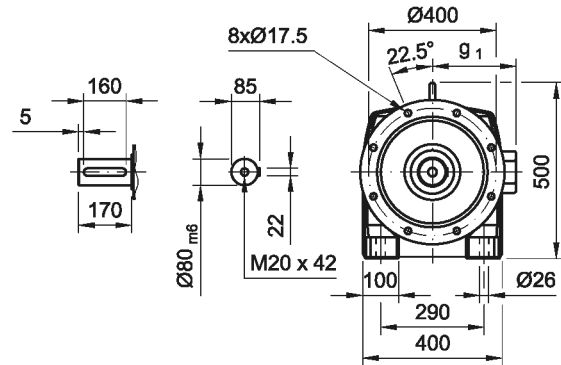


4. SI4

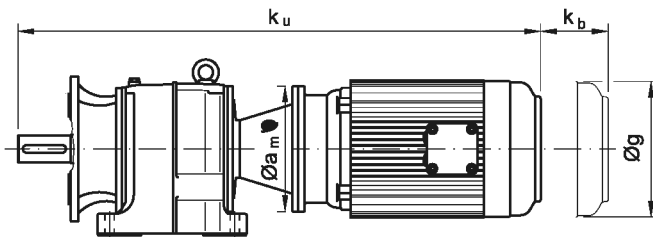
SIFM66B/C
100 - 225



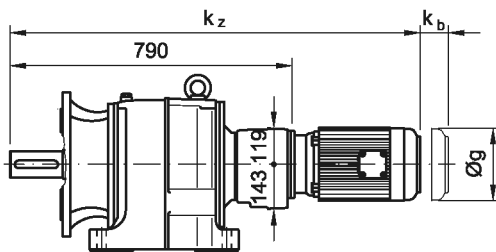
SIFM66..



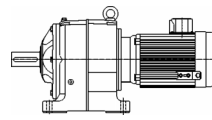
SIFM66B/C-U
100 - 280



SIFM66C36B/C
63 - 160

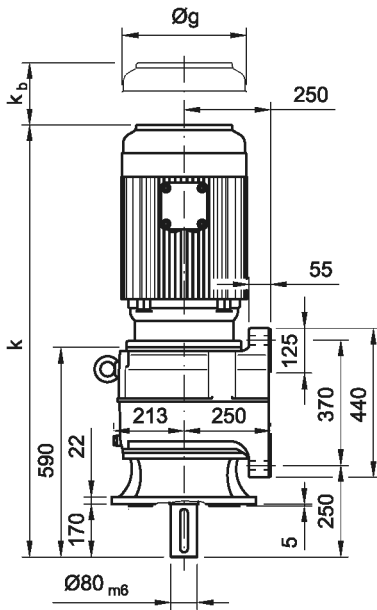


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						901	914	983	1018	1018	1131	1175	1160	1198	1272	1341	1381			
ku						1032	1047	1114	1149		1292	1347	1529	1569	1634	1699	1729	1820	1915	1955
kz	1014	1018	1041	1083	1083	1121	1134	1203	1238	1238	1351	1395								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

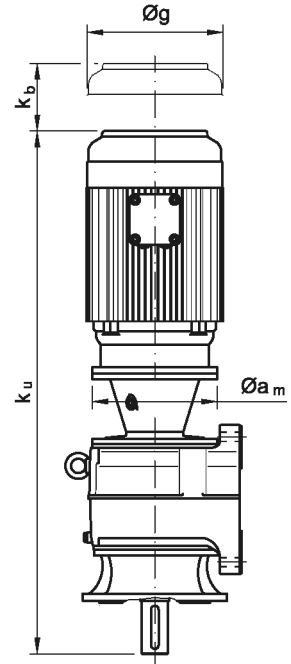


4. SI4

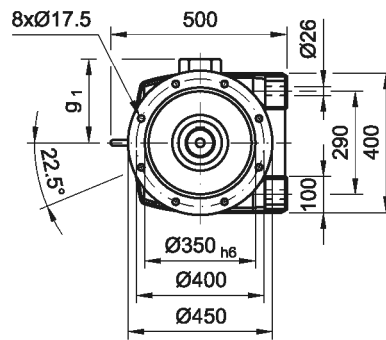
SIFA66B/C
100 - 225



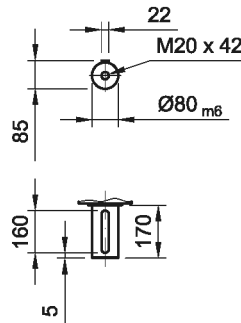
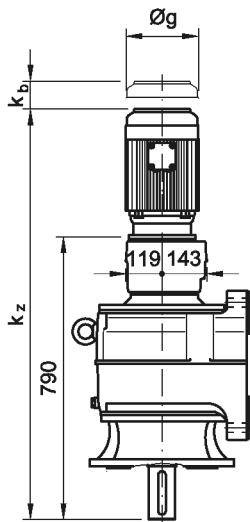
SIFA66B/C-U
100 - 280



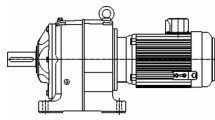
SIFA66..



SIFA66C36B/C
63 - 160

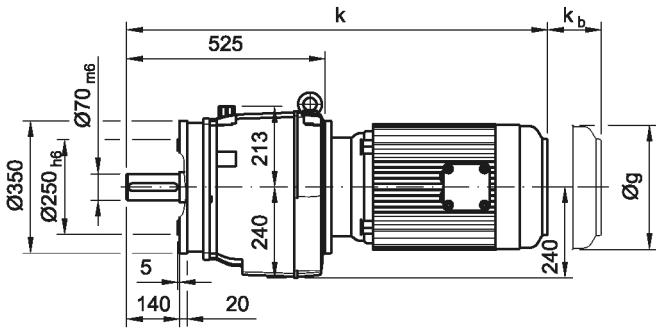


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						901	914	983	1018	1018	1131	1175	1160	1198	1272	1341	1381				
ku						1032	1047	1114	1149		1292	1347	1529	1569	1634	1699	1729	1820	1915	1955	
kz	1014	1018	1041	1083	1083	1121	1134	1203	1238	1238	1351	1395									
kc																					
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

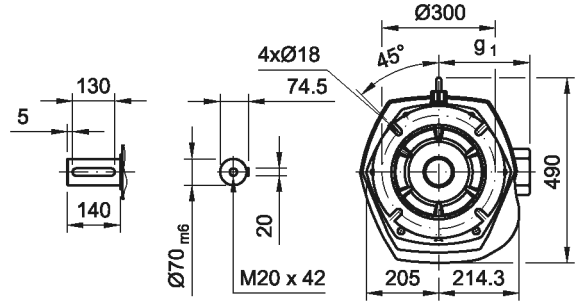


4. SI4

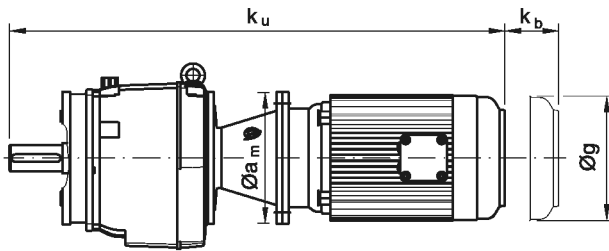
SICE66B/C
100 - 225



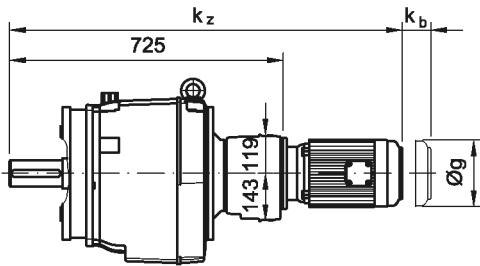
SICE66..



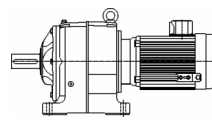
SICE66B/C-U
100 - 280



SICE66C36B/C
63 - 160



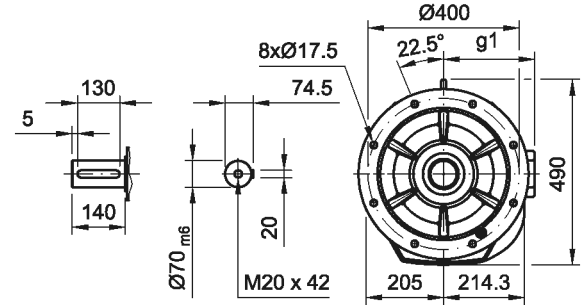
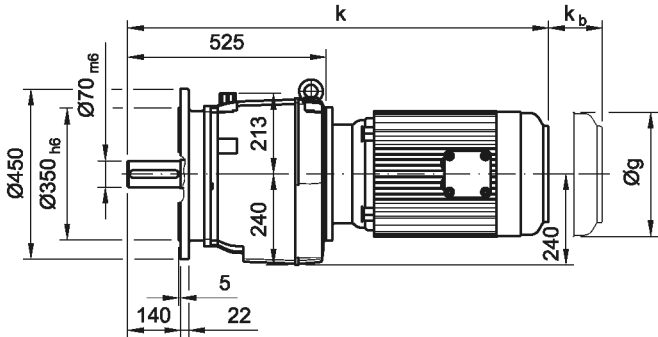
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316			
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



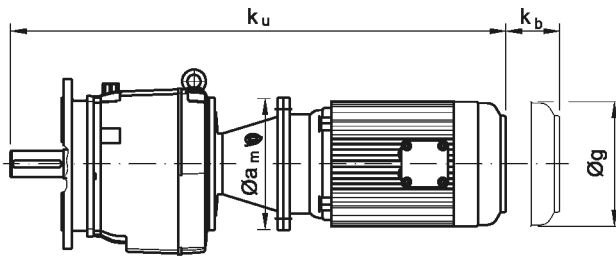
4. SI4

SICD66B/C
100 - 225

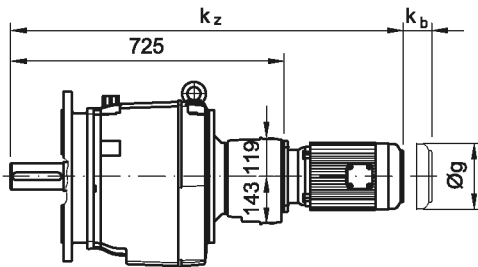
SICD66..



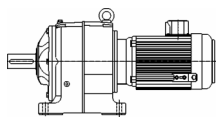
SICD66B/C-U
100 - 280



SICD66C36B/C
63 - 160

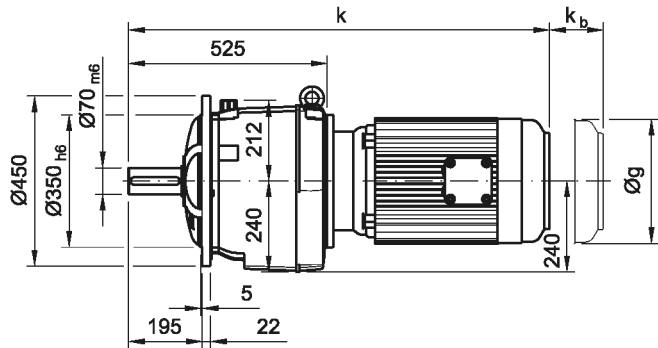


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316				
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890	
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330									
kc																					
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

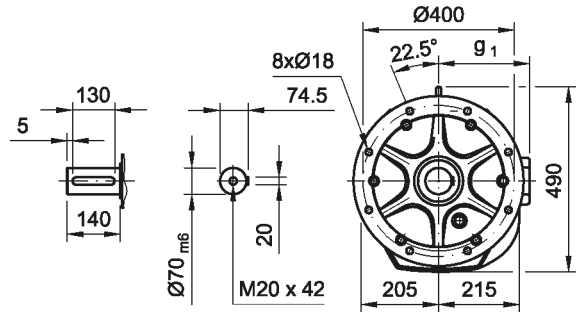


4. SI4

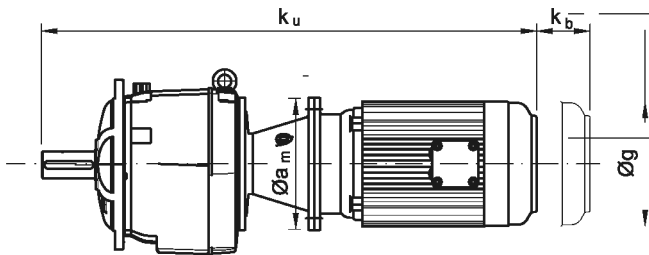
SICF66B/C
100 - 225



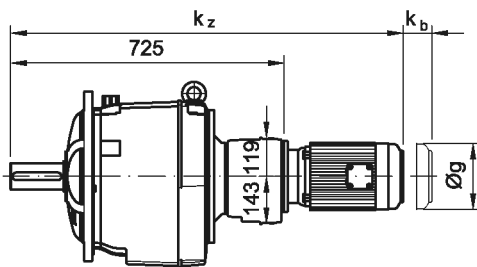
SICF66..



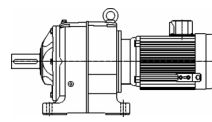
SICF66B/C
100 - 280



SICF66C36B/C
63 - 160

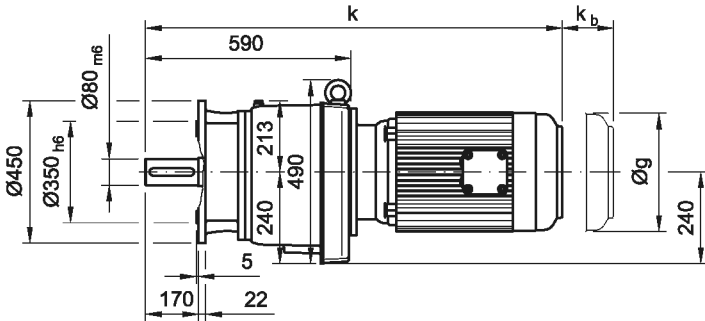


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316			
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470			
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385			
Øam																				

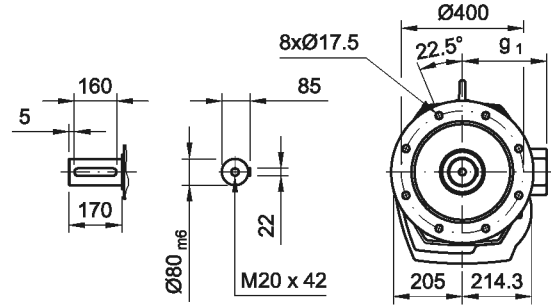


4. SI4

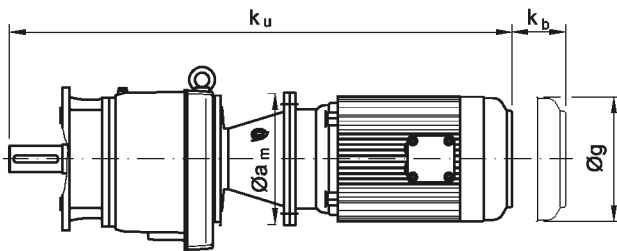
SICM66B/C
100 - 225



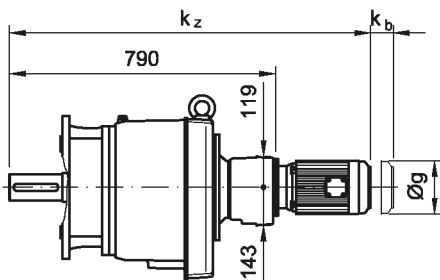
SICM66..



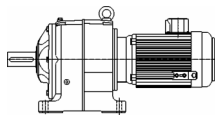
SICM66B/C-U
100 - 280



SICM66C36B/C
63 - 160

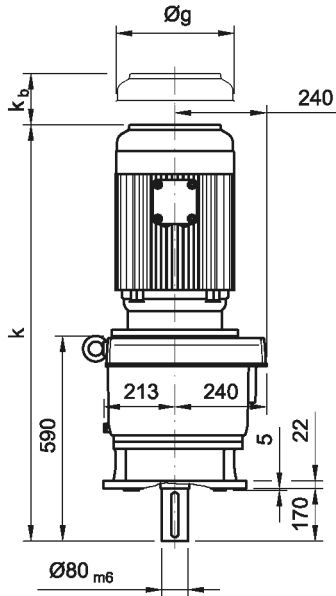


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						901	914	983	1018	1018	1131	1175	1160	1198	1272	1341	1381				
ku						1032	1047	1114	1149		1292	1347	1529	1569	1634	1699	1729	1820	1915	1955	
kz	1014	1018	1041	1083	1083	1121	1134	1203	1238	1238	1351	1395									
kc																					
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

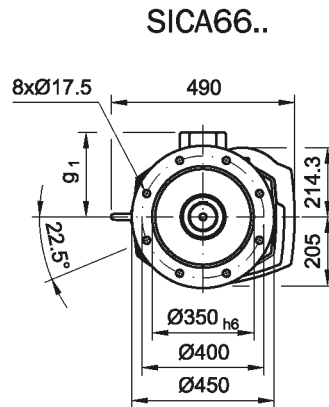
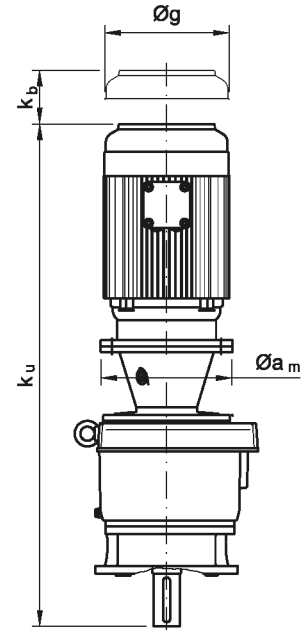


4. SI4

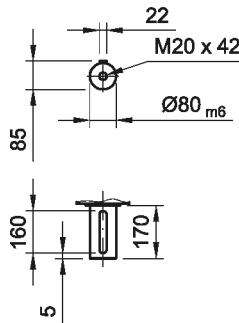
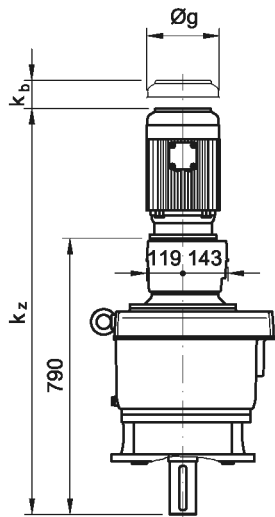
SICA66B/C
100 - 225



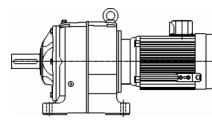
SICA66B/C-U
100 - 280



SICA66C36B/C
63 - 160



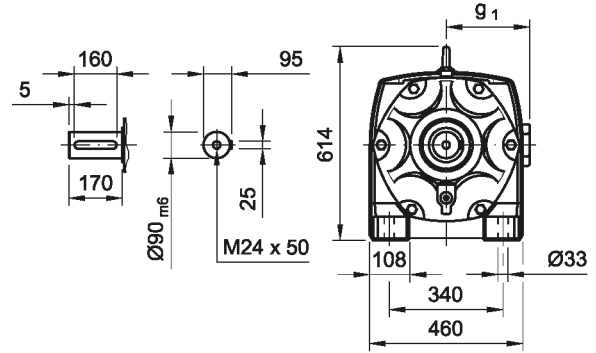
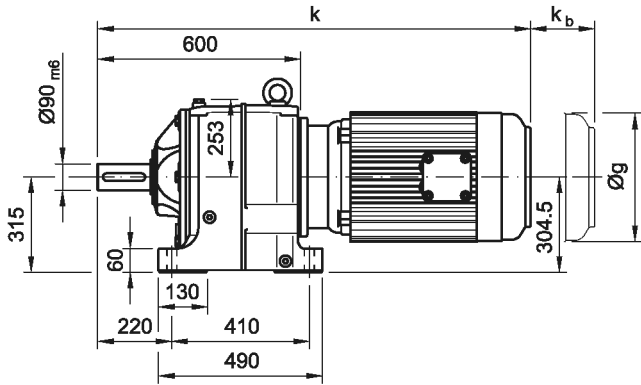
	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						901	914	983	1018	1018	1131	1175	1160	1198	1272	1341	1381				
ku						1032	1047	1114	1149		1292	1347	1529	1569	1634	1699	1729	1820	1915	1955	
kz	1014	1018	1041	1083	1083	1121	1134	1203	1238	1238	1351	1395									
kc																					
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	



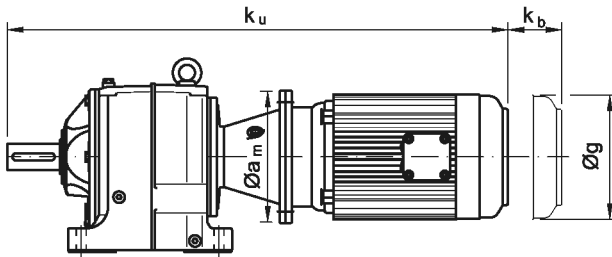
4. SI4

SIFN76B/C
100 - 225

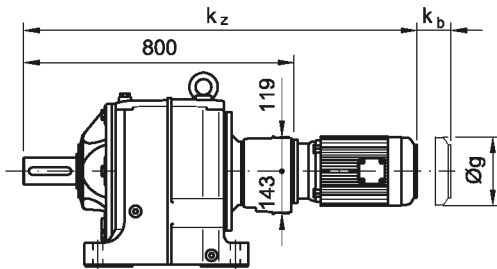
SIFN76..



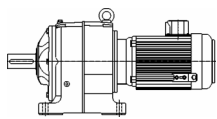
SIFN76B/C-U
100 - 280



SIFN76C36B/C
63 - 160

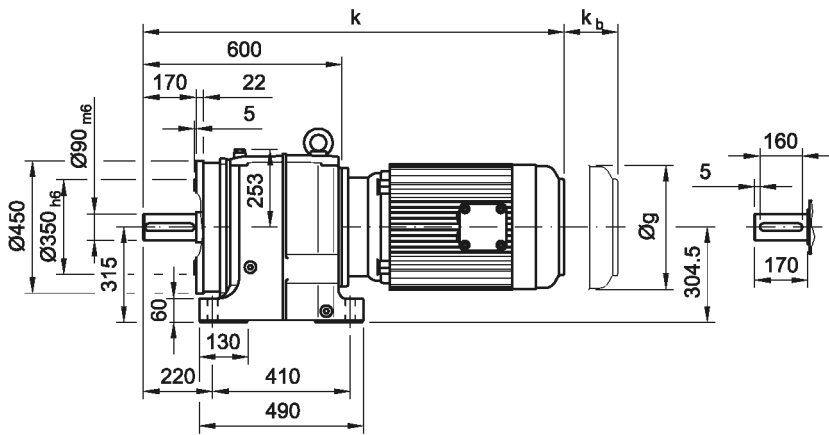


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						911	924	993	1028	1028	1141	1185	1170	1208	1282	1351	1391				
ku						1042	1057	1124	1159		1302	1357	1539	1579	1644	1709	1739	1830	1925	1965	
kz	1024	1028	1051	1093	1093	1131	1144	1213	1248	1248	1361	1405									
kc																					
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

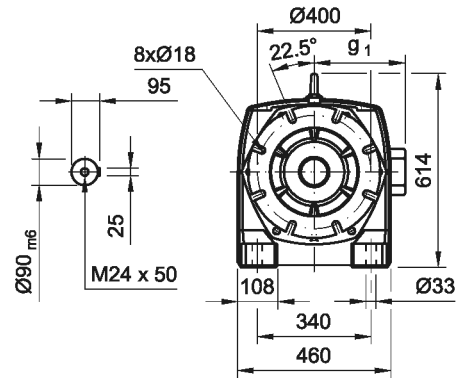


4. SI4

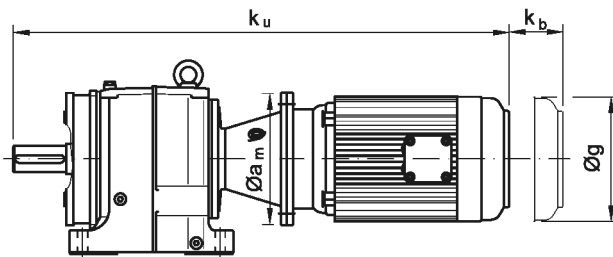
SIFE76B/C
100 - 225



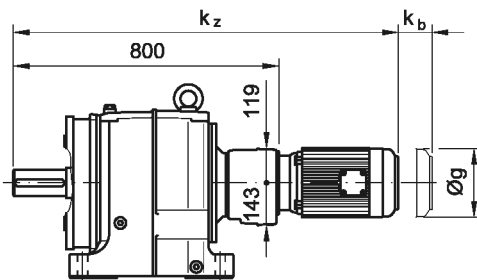
SIFE76..



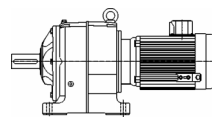
SIFE76B/C-U
100 - 280



SIFE76C36B/C
63 - 160

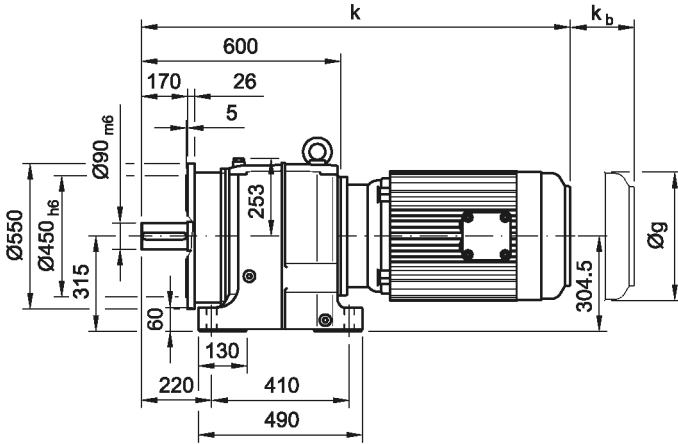


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						911	924	993	1028	1028	1141	1185	1170	1208	1282	1351	1391			
ku						1042	1057	1124	1159		1302	1357	1539	1579	1644	1709	1739	1830	1925	1965
kz	1024	1028	1051	1093	1093	1131	1144	1213	1248	1248	1361	1405								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

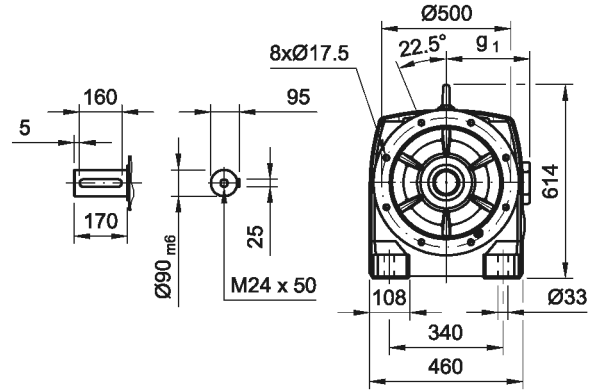


4. SI4

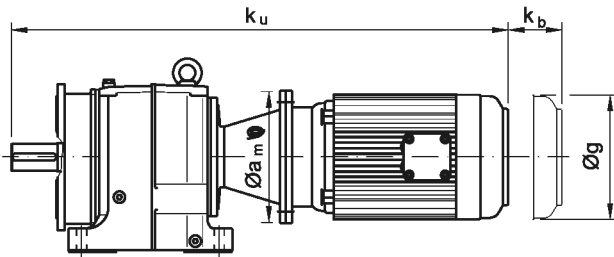
SIFD76B/C
100 - 225



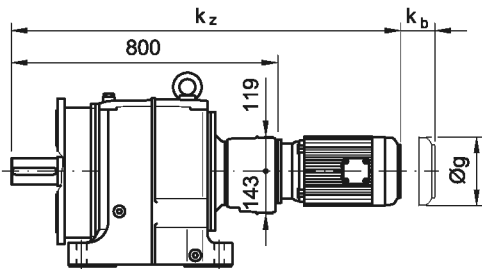
SIFD76..



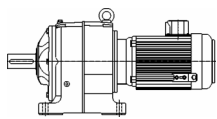
SIFD76B/C-U
100 - 280



SIFD76C36B/C
63 - 160

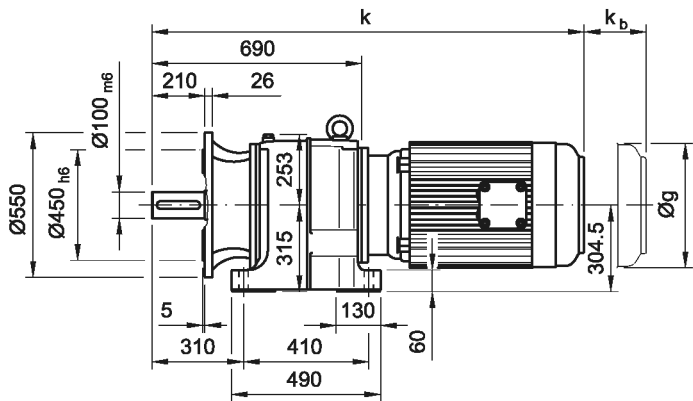


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						911	924	993	1028	1028	1141	1185	1170	1208	1282	1351	1391				
ku						1042	1057	1124	1159		1302	1357	1539	1579	1644	1709	1739	1830	1925	1965	
kz	1024	1028	1051	1093	1093	1131	1144	1213	1248	1248	1361	1405									
kc																					
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

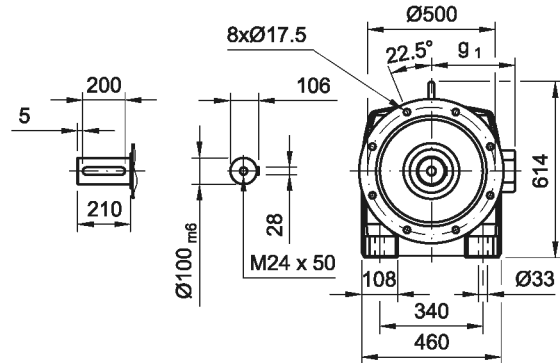


4. SI4

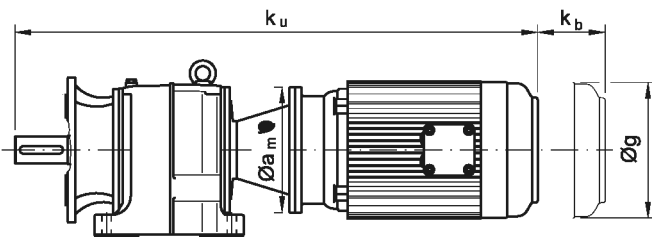
SIFM76B/C
100 - 225



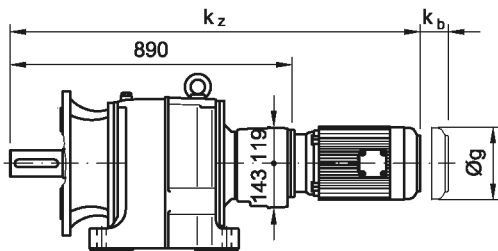
SIFM76..



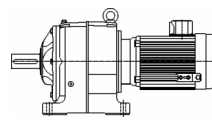
SIFM76B/C-U
100 - 280



SIFM76C36B/C
63 - 160

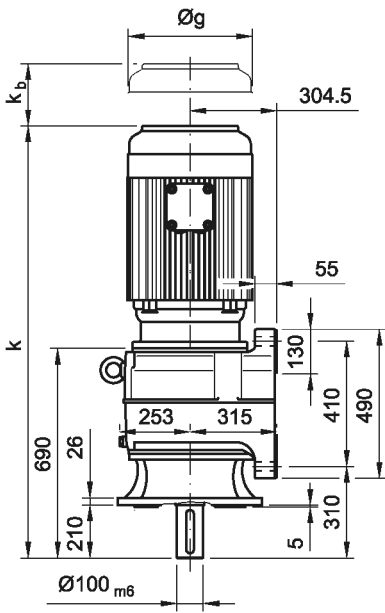


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1001	1014	1083	1118	1118	1231	1275	1260	1298	1372	1441	1481			
ku						1132	1147	1214	1249		1392	1447	1629	1669	1734	1799	1829	1920	2015	2055
kz	1114	1118	1141	1183	1183	1221	1234	1303	1338	1338	1451	1495								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

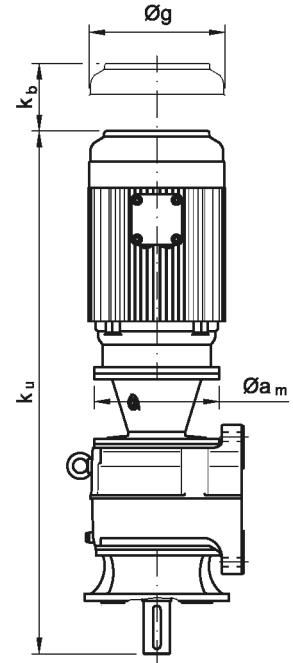


4. SI4

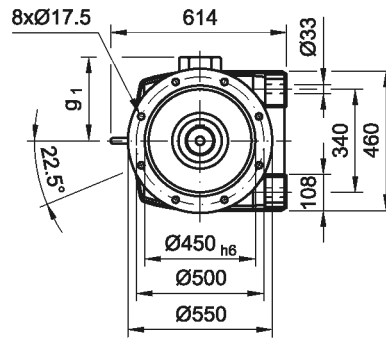
SIFA76B/C
100 - 225



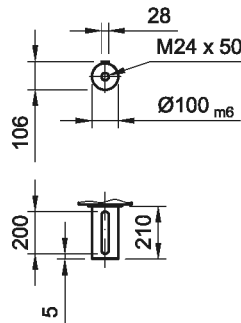
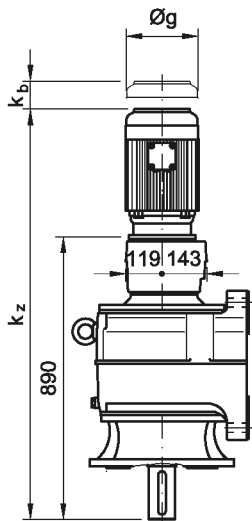
SIFA76B/C-U
100 - 280



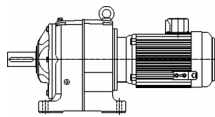
SIFA76..



SIFA76C36B/C
63 - 160

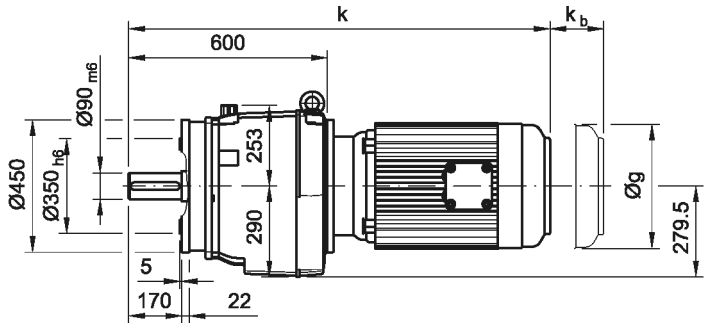


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1001	1014	1083	1118	1118	1231	1275	1260	1298	1372	1441	1481				
ku						1132	1147	1214	1249		1392	1447	1629	1669	1734	1799	1829	1920	2015	2055	
kz	1114	1118	1141	1183	1183	1221	1234	1303	1338	1338	1451	1495									
kc																					
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

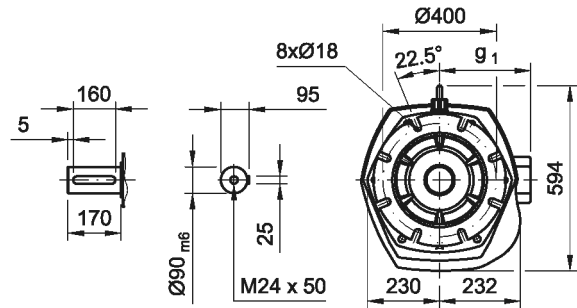


4. SI4

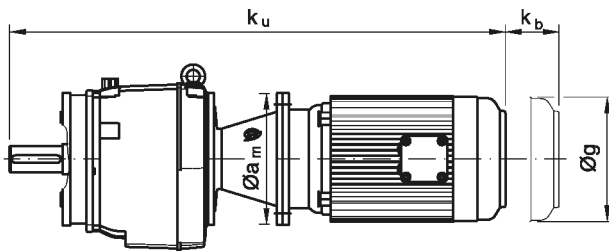
SICE76B/C
100 - 225



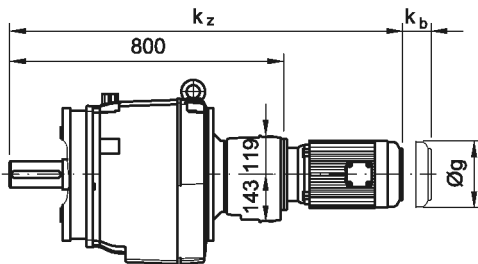
SICE76..



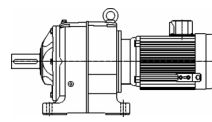
SICE76B/C-U
100 - 280



SICE76C36B/C
63 - 160

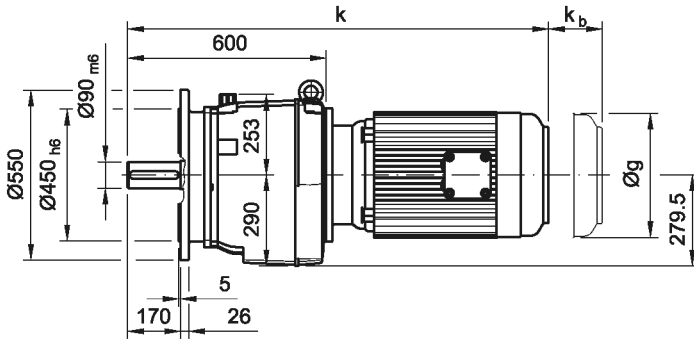


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						911	924	993	1028	1028	1141	1185	1170	1208	1282	1351	1391			
ku						1042	1057	1124	1159		1302	1357	1539	1579	1644	1709	1739	1830	1925	1965
kz	1024	1028	1051	1093	1093	1131	1144	1213	1248	1248	1361	1405								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

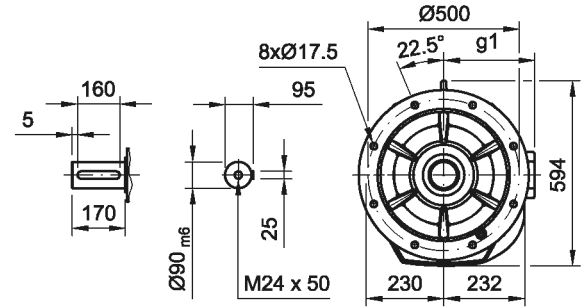


4. SI4

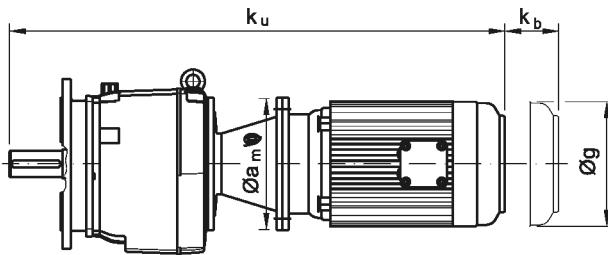
SICD76B/C
100 - 225



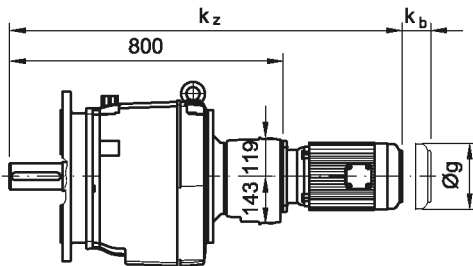
SICD76..



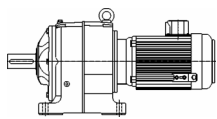
SICD76B/C-U
100 - 280



SICD76C36B/C
63 - 160

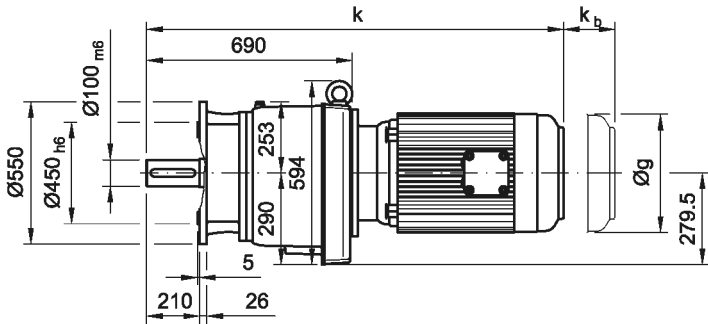


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						911	924	993	1028	1028	1141	1185	1170	1208	1282	1351	1391				
ku						1042	1057	1124	1159		1302	1357	1539	1579	1644	1709	1739	1830	1925	1965	
kz	1024	1028	1051	1093	1093	1131	1144	1213	1248	1248	1361	1405									
kc																					
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	

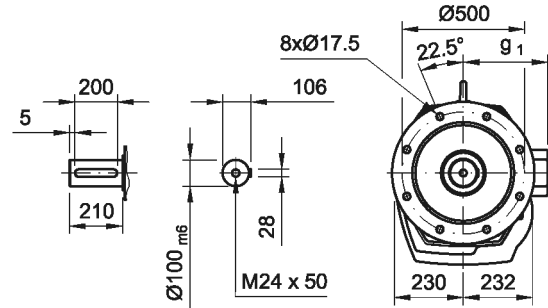


4. SI4

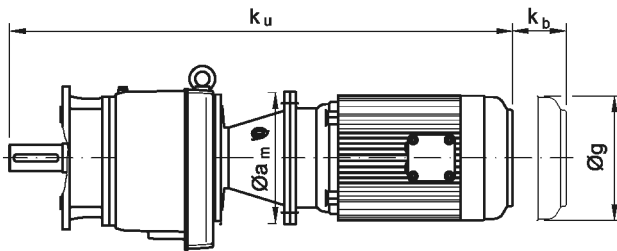
SICM76B/C
100 - 225



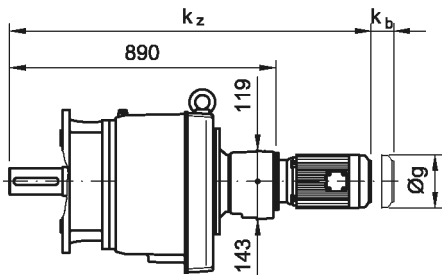
SICM76..



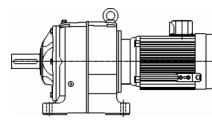
SICM76B/C-U
100 - 280



SICM76C36B/C
63 - 160

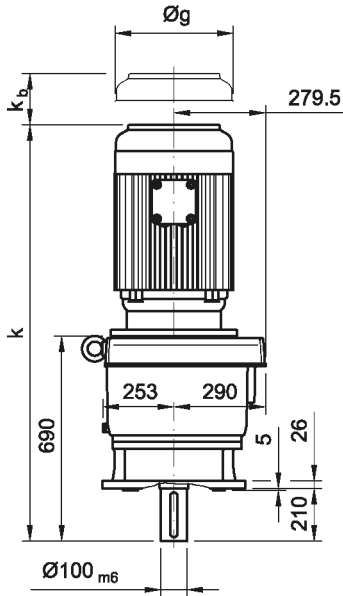


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1001	1014	1083	1118	1118	1231	1275	1260	1298	1372	1441	1481			
ku						1132	1147	1214	1249		1392	1447	1629	1669	1734	1799	1829	1920	2015	2055
kz	1114	1118	1141	1183	1183	1221	1234	1303	1338	1338	1451	1495								
kc																				
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

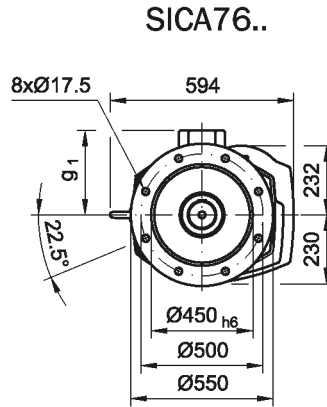
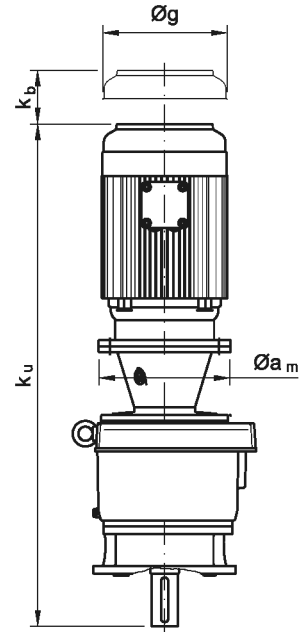


4. SI4

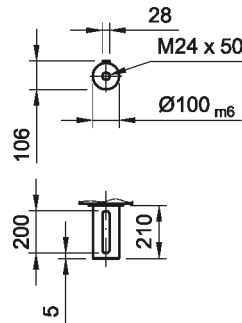
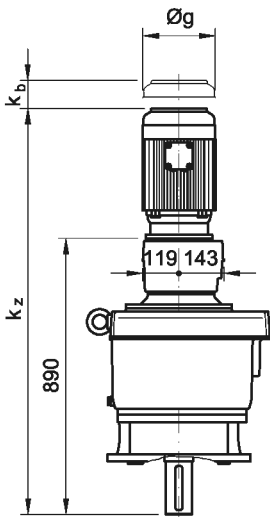
SICA76B/C
100 - 225



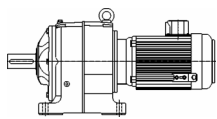
SICA76B/C-U
100 - 280



SICA76C36B/C
63 - 160



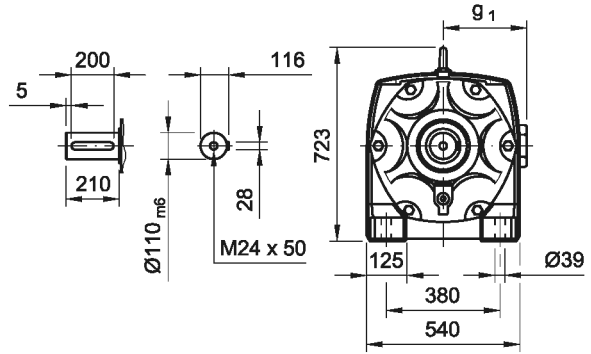
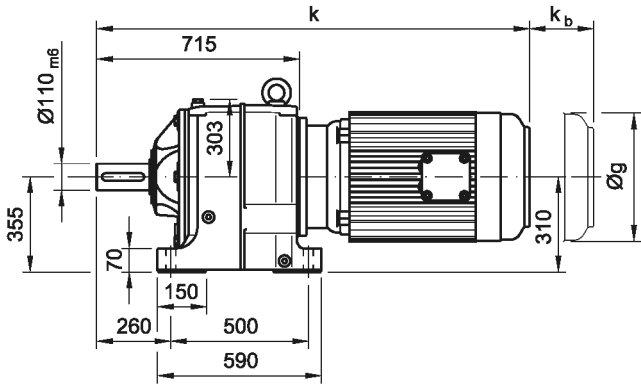
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1001	1014	1083	1118	1118	1231	1275	1260	1298	1372	1441	1481				
ku						1132	1147	1214	1249		1392	1447	1629	1669	1734	1799	1829	1920	2015	2055	
kz	1114	1118	1141	1183	1183	1221	1234	1303	1338	1338	1451	1495									
kc																					
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	



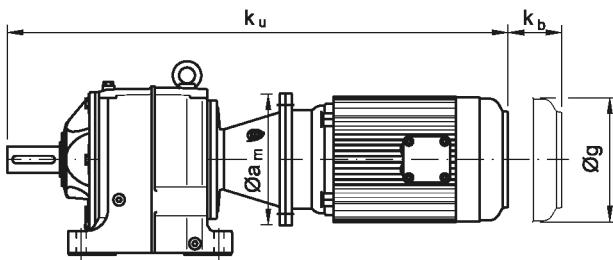
4. SI4

SIFN86B/C
100 - 225

SIFN86..

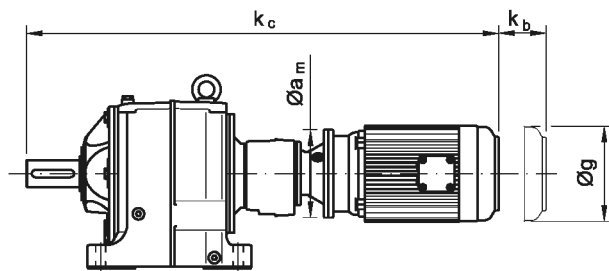
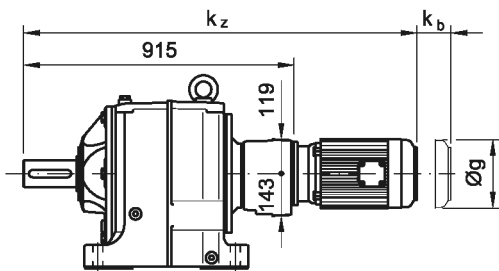


SIFN86B/C-U
100 - 280

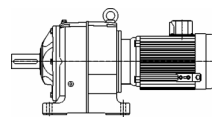


SIFN86C36B/C
63 - 160

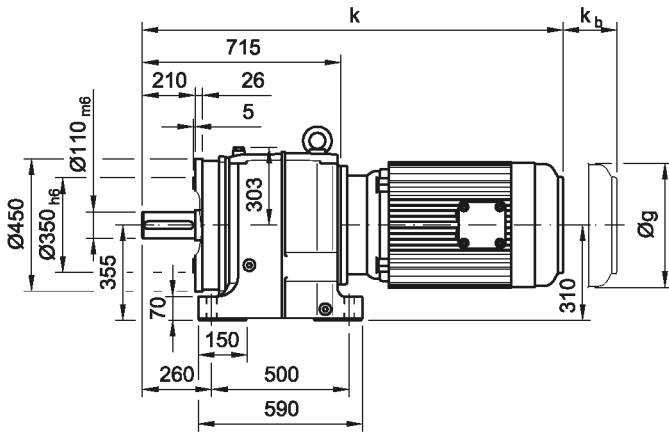
SIFN86C36B/C-U
71 - 132



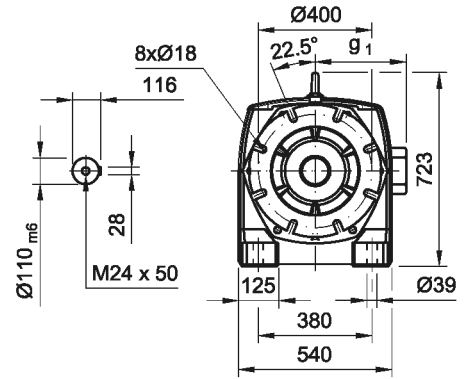
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1026	1039	1108	1143	1143	1256	1300	1285	1323	1397	1466	1506			
ku						1157	1172	1239	1274		1417	1472	1654	1694	1759	1824	1854	1945	2040	2080
kz	1139	1143	1166	1208	1208	1246	1259	1328	1363	1363	1476	1520								
kc		1225	1243	1264	1279	1314	1329	1459	1494											
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550



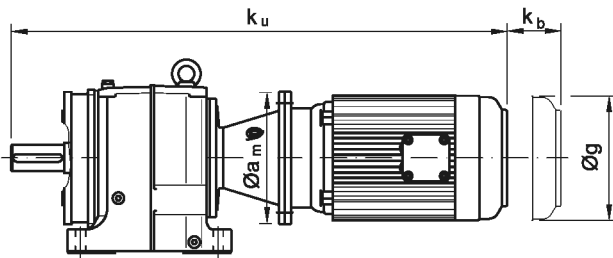
SIFE86B/C
100 - 225



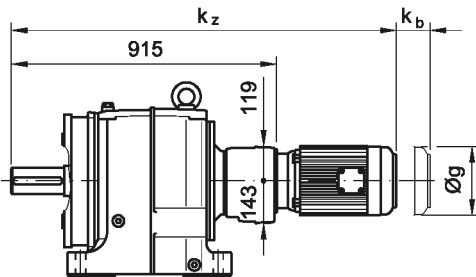
SIFE86..



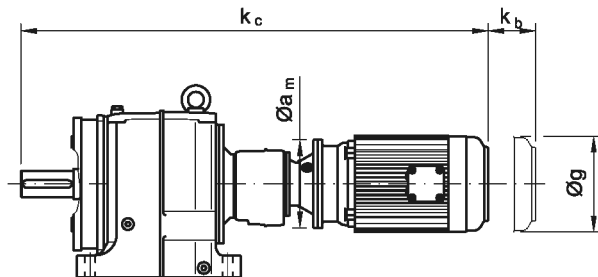
SIFE86B/C-U
100 - 280



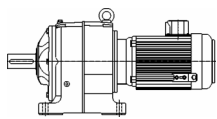
SIFE86C36B/C
63 - 160



SIFE86C36B/C-U
71 - 132



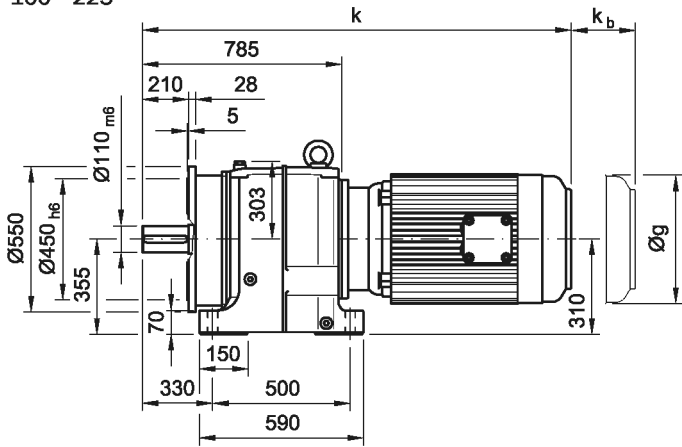
	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1026	1039	1108	1143	1143	1256	1300	1285	1323	1397	1466	1506				
ku						1157	1172	1239	1274		1417	1472	1654	1694	1759	1824	1854	1945	2040	2080	
kz	1139	1143	1166	1208	1208	1246	1259	1328	1363	1363	1476	1520									
kc		1225	1243	1264	1279	1314	1329	1459	1494												
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	



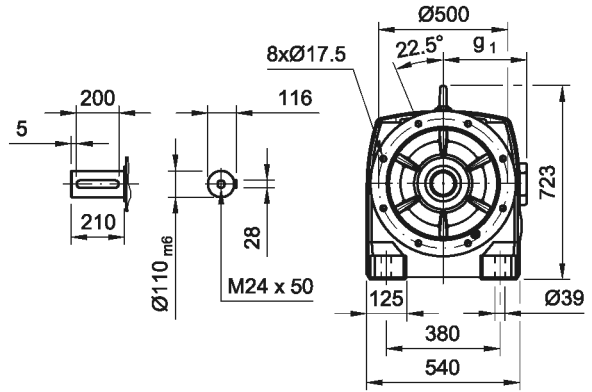
4. SI4

SIFD86B/C

100 - 225

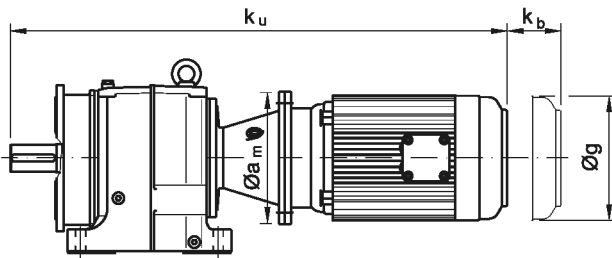


SIFD86..



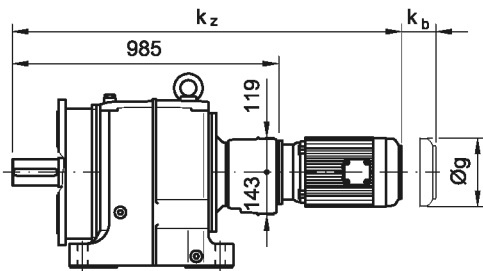
SIFD86B/C-U

100 - 280



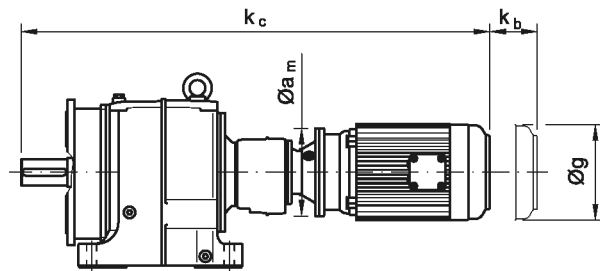
SIFD86C36B/C

63 - 160

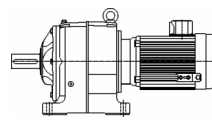


SIFD86C36B/C-I

71 - 132

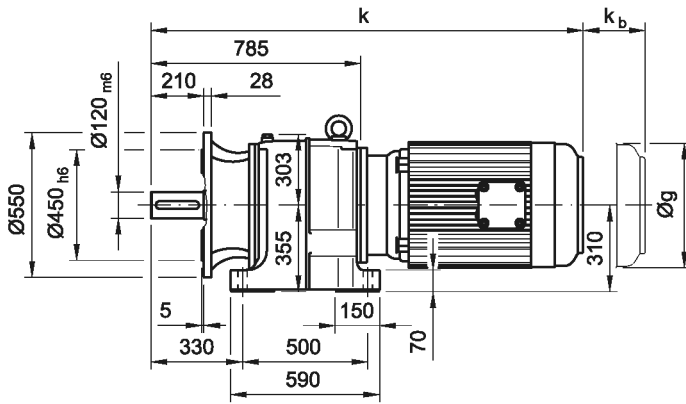


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1096	1109	1178	1213	1213	1326	1370	1355	1393	1467	1536	1576			
ku						1227	1242	1309	1344		1487	1542	1724	1764	1829	1894	1924	2015	2110	2150
kz	1209	1213	1236	1278	1278	1316	1329	1398	1433	1433	1546	1590								
kc		1295	1313	1334	1349	1384	1399	1529	1564											
kb	48	60	71	77	77	80	89	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550

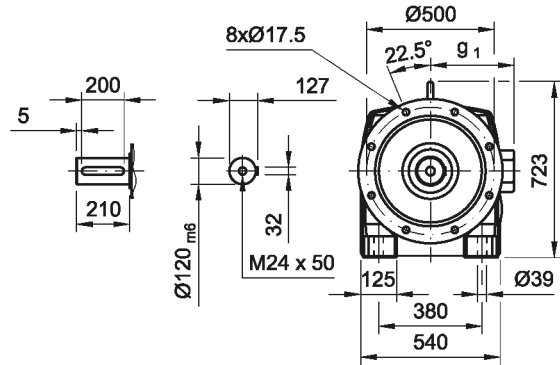


4. SI4

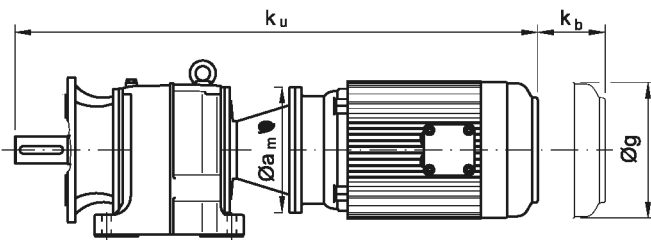
SIFM86B/C
100 - 225



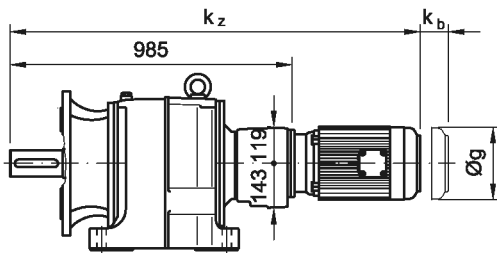
SIFM86..



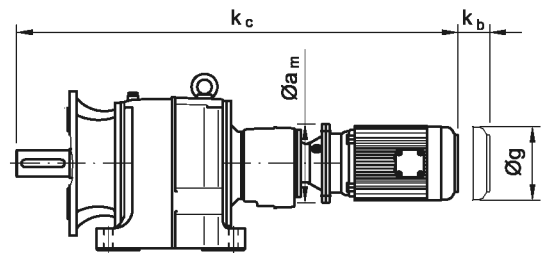
SIFM86B/C-U
100 - 280



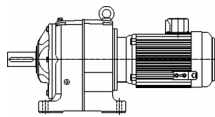
SIFM86C36B/C
63 - 160



SIFM86C36B/C-U
71 - 132

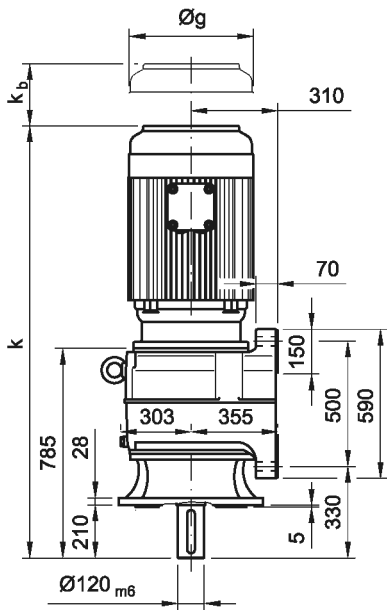


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1096	1109	1178	1213	1213	1326	1370	1355	1393	1467	1536	1576				
ku						1227	1242	1309	1344		1487	1542	1724	1764	1829	1894	1924	2015	2110	2150	
kz	1209	1213	1236	1278	1278	1316	1329	1398	1433	1433	1546	1590									
kc		1295	1313	1334	1349	1384	1399	1529	1564												
kb	48	60	71	77	77	80	89	97	97	77	77	112	112	147	148	148					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

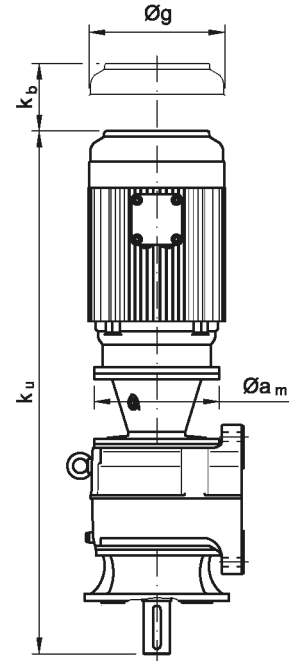


4. SI4

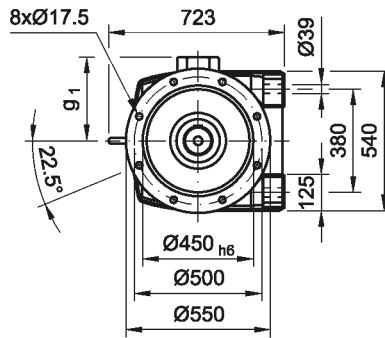
SIFA86B/C
100 - 225



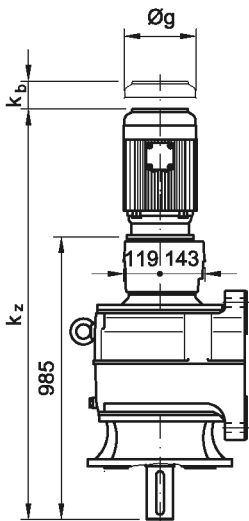
SIFA86B/C-U
100 - 280



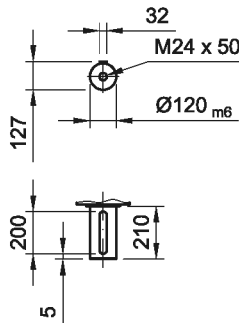
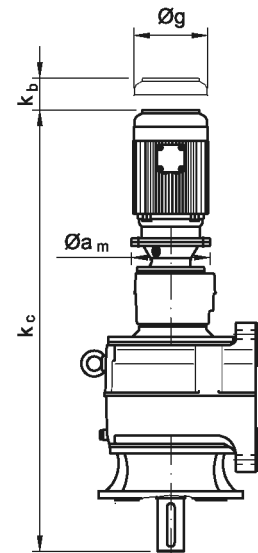
SIFA86..



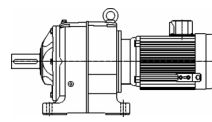
SIFA86C36B/C
63 - 160



SIFA86C36B/C-U
71 - 132

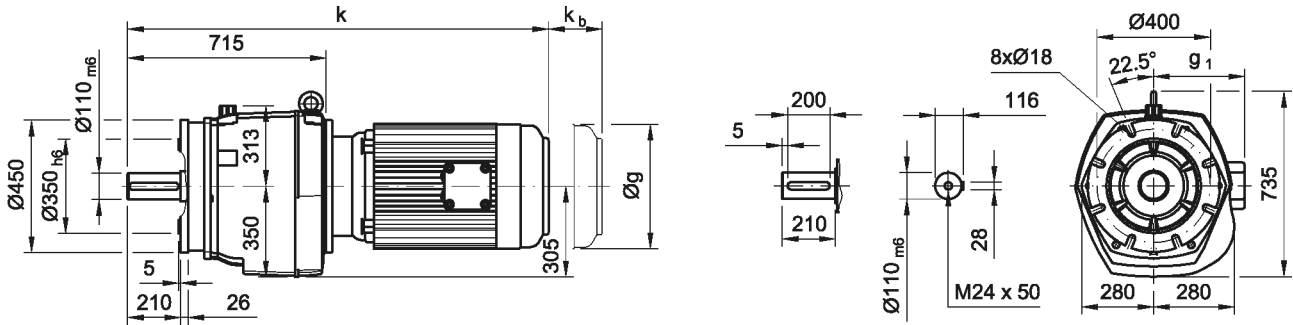


	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1096	1109	1178	1213	1213	1326	1370	1355	1393	1467	1536	1576				
ku						1227	1242	1309	1344		1487	1542	1724	1764	1829	1894	1924	2015	2110	2150	
kz	1209	1213	1236	1278	1278	1316	1329	1398	1433	1433	1546	1590									
kc		1295	1313	1334	1349	1384	1399	1529	1564												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

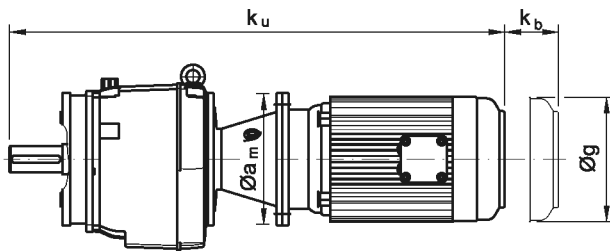


SICE86B/C
100 - 225

SICE86..

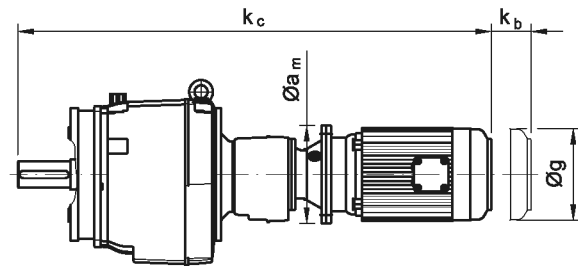
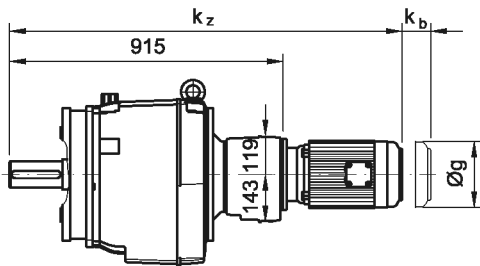


SICE86B/C-U
100 - 280

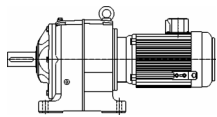


SICE86C36B/C
63 - 160

SICE86C36B/C-U
71 - 132

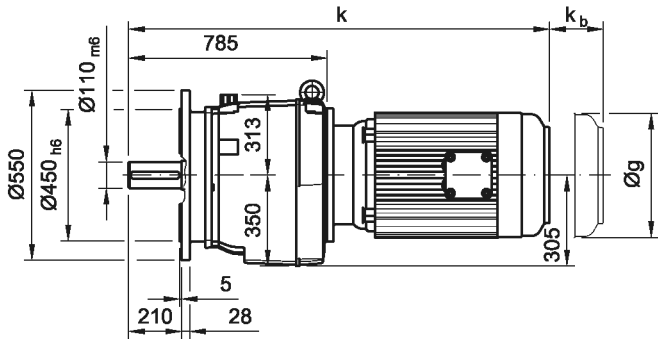


	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1026	1039	1108	1143	1143	1256	1300	1285	1323	1397	1466	1506				
ku						1157	1172	1239	1274		1417	1472	1654	1694	1759	1824	1854	1945	2040	2080	
kz	1139	1143	1166	1208	1208	1246	1259	1328	1363	1363	1476	1520									
kc		1225	1243	1264	1279	1314	1329	1459	1494												
kb	48	60	71	77	77	80	89	97	97	77	77	112	112	147	148	148					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

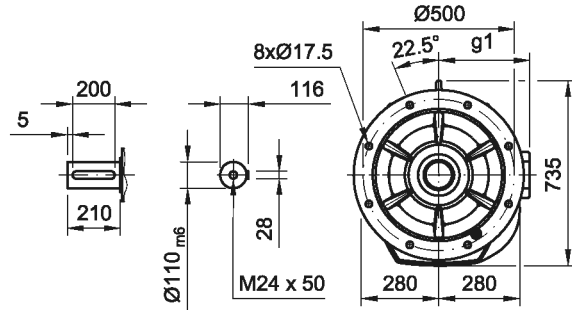


4. SI4

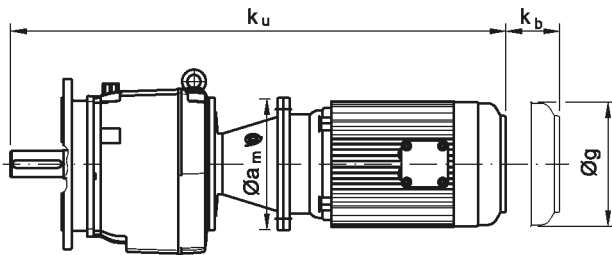
SICD86B/C
100 - 225



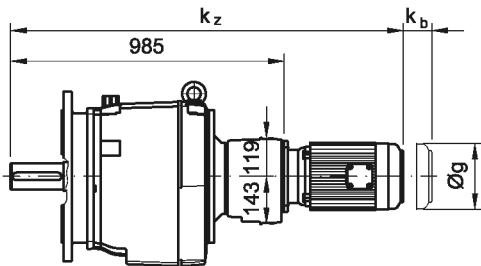
SICD86..



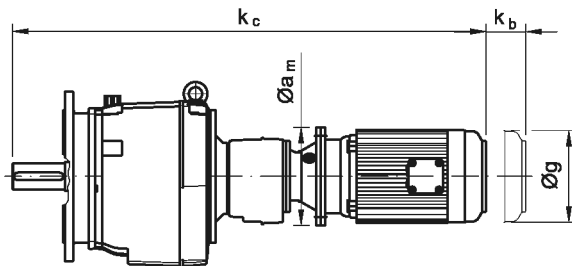
SICD86B/C-U
100 - 280



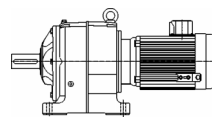
SICD86C36B/C
63 - 160



SICD86C36B/C-U
71 - 132



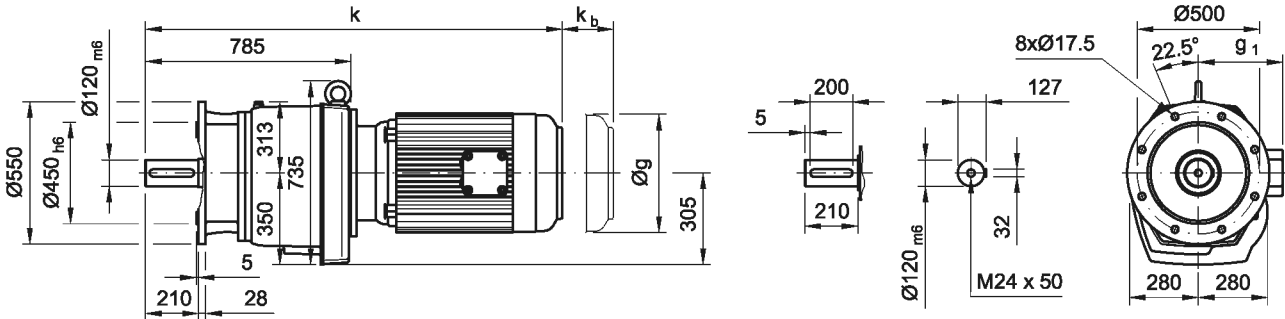
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1096	1109	1178	1213	1213	1326	1370	1355	1393	1467	1536	1576				
ku						1227	1242	1309	1344		1487	1542	1724	1764	1829	1894	1924	2015	2110	2150	
kz	1209	1213	1236	1278	1278	1316	1329	1398	1433	1433	1546	1590									
kc		1295	1313	1334	1349	1384	1399	1529	1564												
kb	48	60	71	77	77	80	89	98	98	77	77	112	112	147	148	148					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	



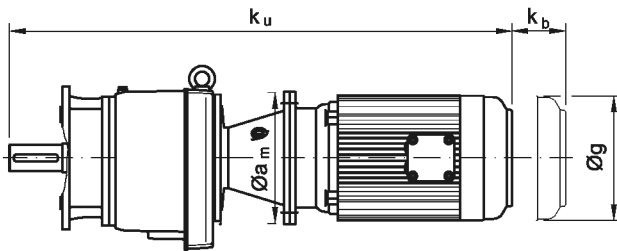
4. SI4

SICM86B/C
100 - 225

SICM86..

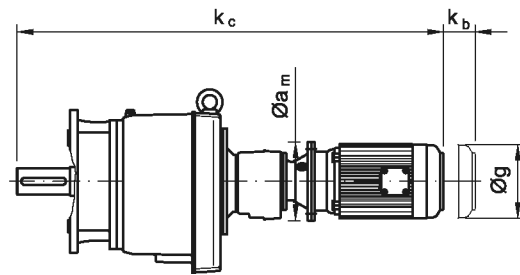
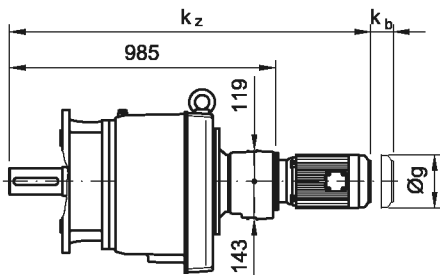


SICM86B/C-U
100 - 280

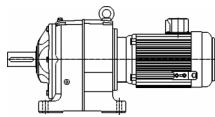


SICM86C36B/C
63 - 160

SICM86C36B/C-U
71 - 132

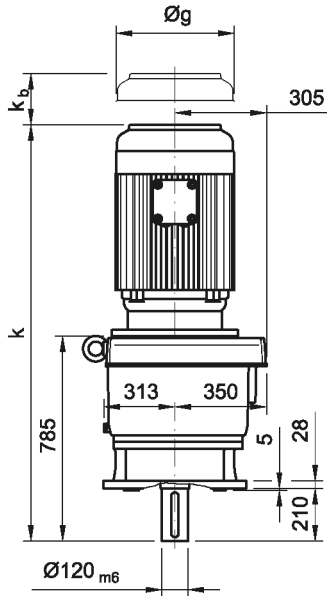


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1096	1109	1178	1213	1213	1326	1370	1355	1393	1467	1536	1576				
ku						1227	1242	1309	1344		1487	1542	1724	1764	1829	1894	1924	2015	2110	2150	
kz	1209	1213	1236	1278	1278	1316	1329	1398	1433	1433	1546	1590									
kc						1295	1313	1334	1349	1384	1399	1529	1564								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

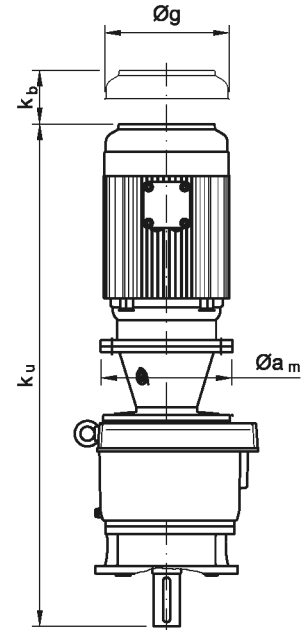


4. SI4

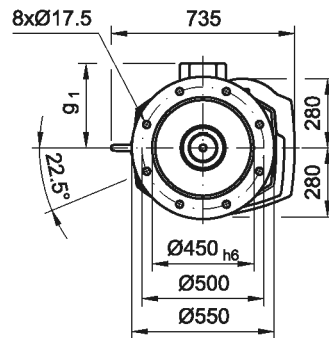
SICA86B/C
100 - 225



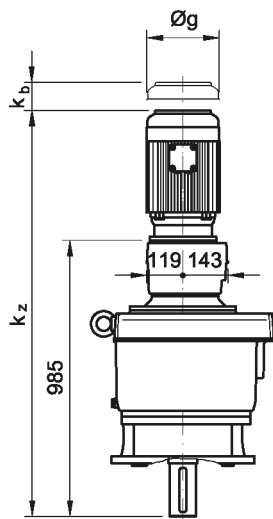
SICA86B/C-U
100 - 280



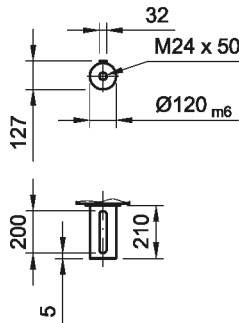
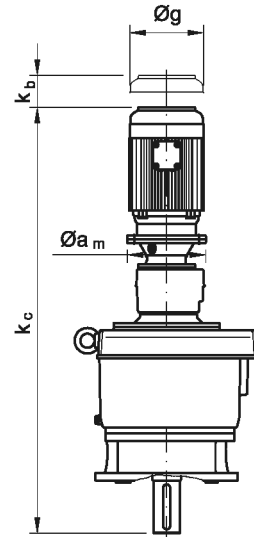
SICA86..



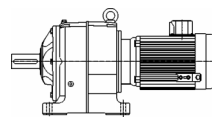
SICA86C36B/C
63 - 160



SICA86C36B/C-U
71 - 132

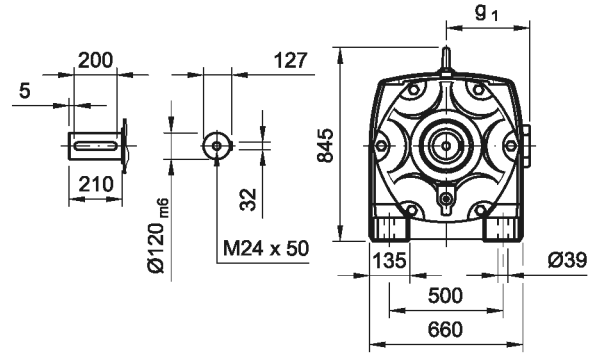
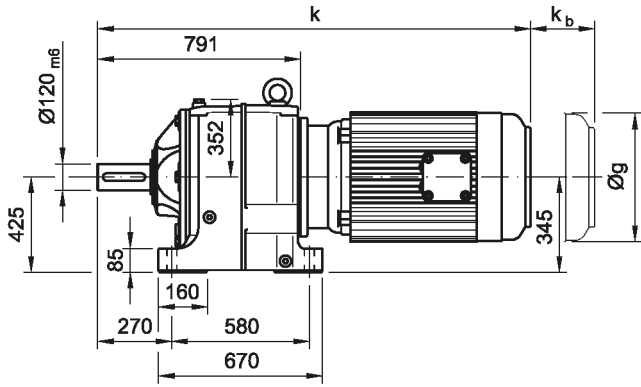


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1096	1109	1178	1213	1213	1326	1370	1355	1393	1467	1536	1576				
ku						1227	1242	1309	1344		1487	1542	1724	1764	1829	1894	1924	2015	2110	2150	
kz	1209	1213	1236	1278	1278	1316	1329	1398	1433	1433	1546	1590									
kc		1295	1313	1334	1349	1384	1399	1529	1564												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

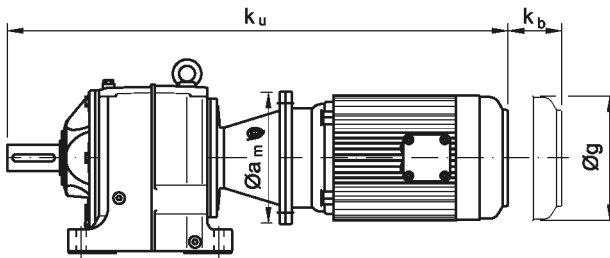


SIFN96B/C
100 - 225

SIFN96..

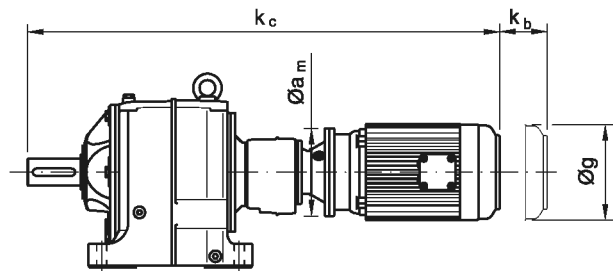
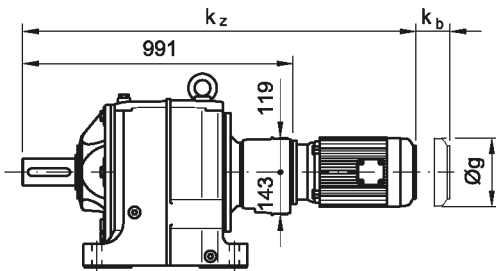


SIFN96B/C-U
100 - 280

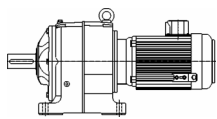


SIFN96C36B/C
63 - 160

SIFN96C36B/C-U
71 - 132



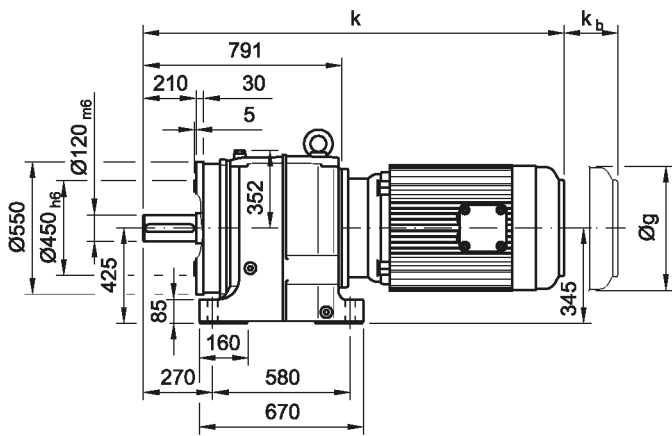
	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1102	1115	1184	1219	1219	1332	1376	1361	1399	1473	1542	1582				
ku						1233	1248	1315	1350		1493	1548	1730	1770	1835	1900	1930	2021	2116	2156	
kz	1215	1219	1242	1284	1284	1322	1335	1404	1439	1439	1552	1596									
kc		1301	1319	1340	1355	1390	1405	1535	1570												
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	



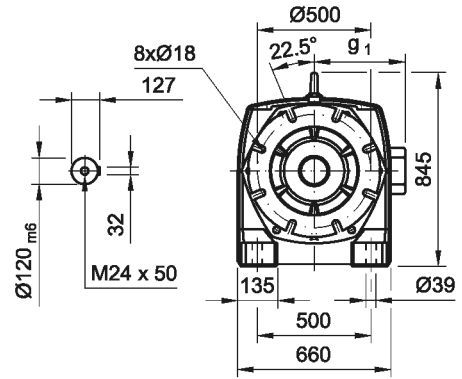
4. SI4

SIFE96B/C

100 - 225

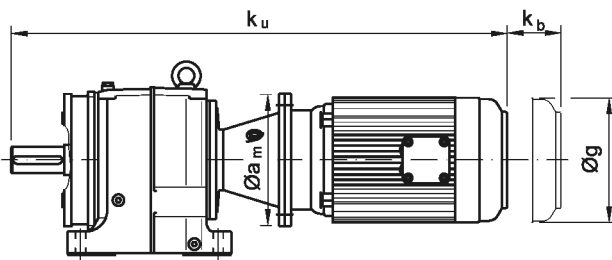


SIFE96..



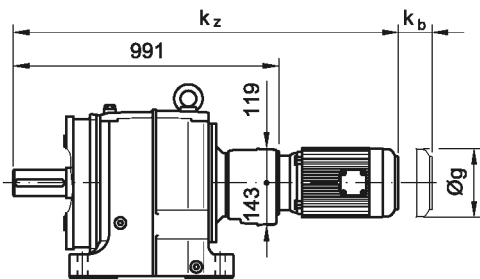
SIFE96B/C-U

100 - 280



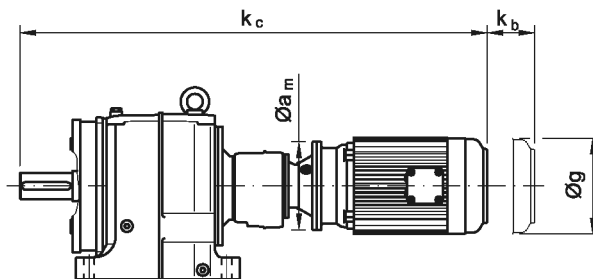
SIFE96C36B/C

63 - 160

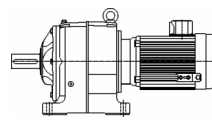


SIFE96C36B/C-U

71 - 132

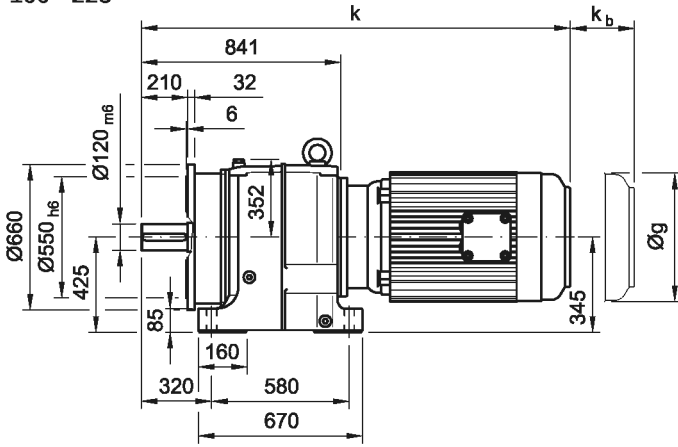


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1102	1115	1184	1219	1219	1332	1376	1361	1399	1473	1542	1582			
ku						1233	1248	1315	1350		1493	1548	1730	1770	1835	1900	1930	2021	2116	2156
kz	1215	1219	1242	1284	1284	1322	1335	1404	1439	1439	1552	1596								
kc		1301	1319	1340	1355	1390	1405	1535	1570											
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550

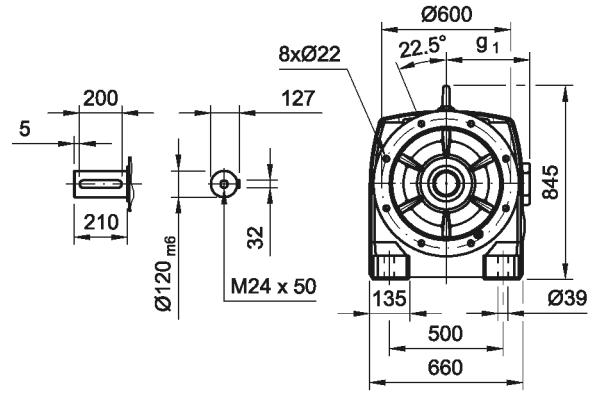


4. SI4

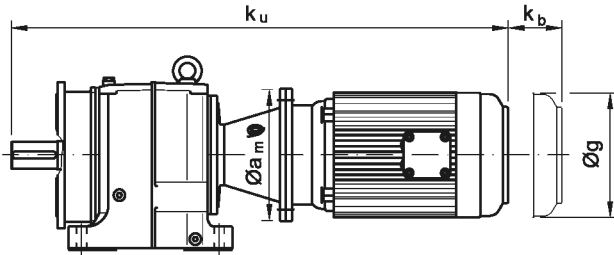
SIFD96B/C
100 - 225



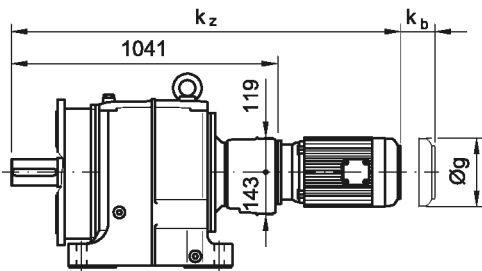
SIFD96..



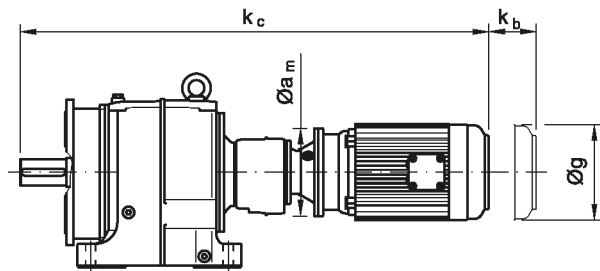
SIFD96B/C-U
100 - 280



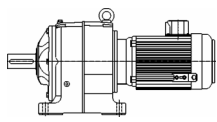
SIFD96C36B/C
63 - 160



SIFD96C36B/C-I
71 - 132

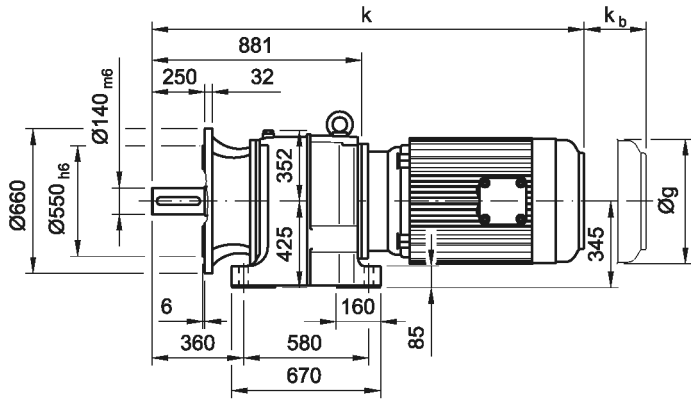


	63	71	80	90S	90L	100	112	132S	132M	132MC	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1152	1165	1234	1269	1269	1382	1426	1411	1449	1523	1592	1632				
ku						1283	1298	1365	1400		1543	1598	1780	1820	1885	1950	1980	2071	2166	2206	
kz	1265	1269	1292	1334	1334	1372	1385	1454	1489	1489	1602	1646									
kc		1351	1369	1390	1405	1440	1455	1585	1620												
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

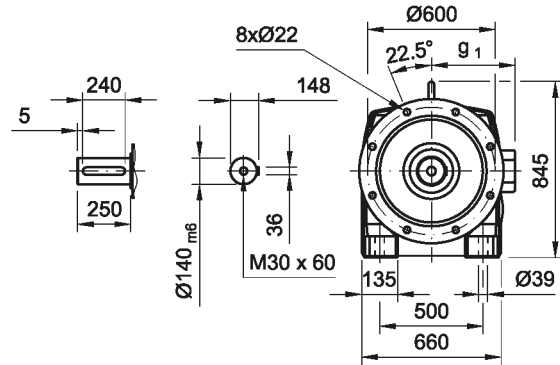


4. SI4

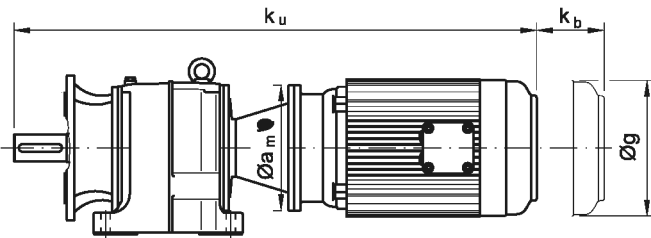
SIFM96B/C
100 - 225



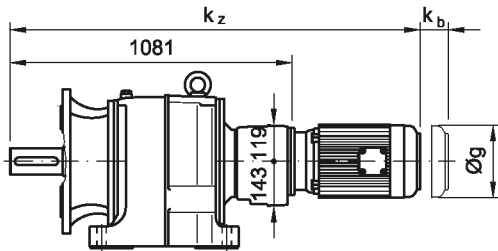
SIFM96..



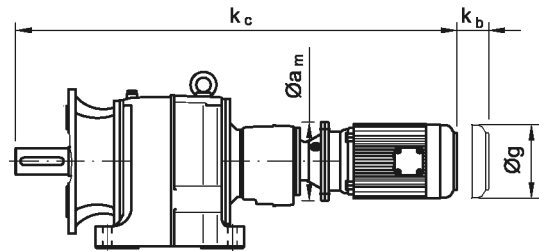
SIFM96B/C-U
100 - 280



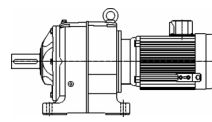
SIFM96C36B/C
63 - 160



SIFM96C36B/C-U
71 - 132

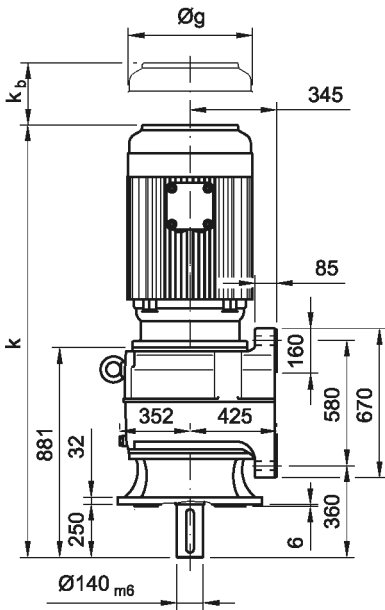


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1192	1205	1274	1309	1309	1422	1466	1451	1489	1563	1632	1672			
ku						1323	1338	1405	1440		1583	1638	1820	1860	1925	1990	2020	2111	2206	2246
kz	1305	1309	1332	1374	1374	1412	1425	1494	1529	1529	1642	1686								
kc		1391	1409	1430	1445	1480	1495	1625	1660											
kb	48	60	71	77	77	80	89	97	97	77	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550

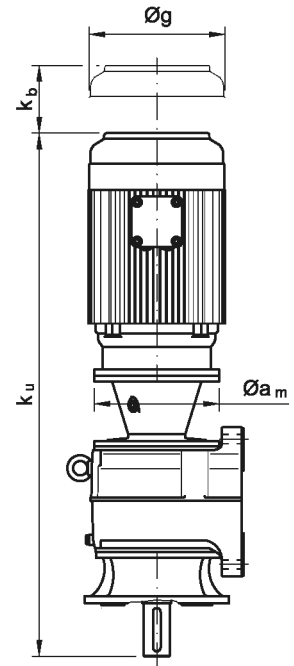


4. SI4

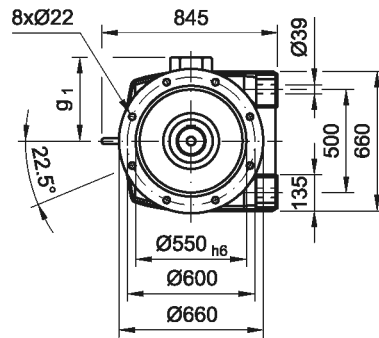
SIFA96B/C
100 - 225



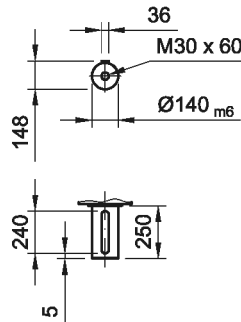
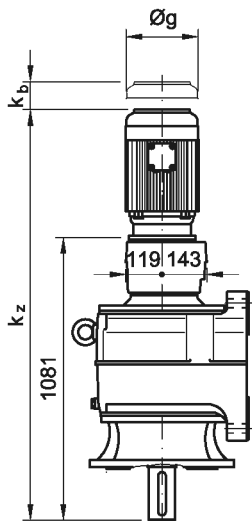
SIFA96B/C-U
100 - 280



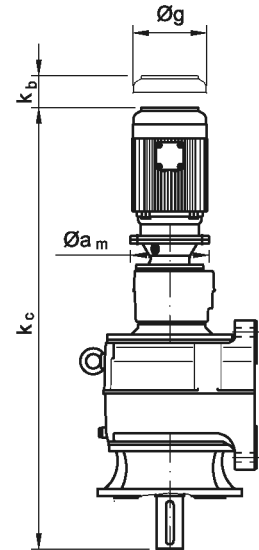
SIFA96..



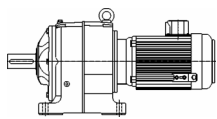
SIFA96C36B/C
63 - 160



SIFA96C36B/C-U
71 - 132

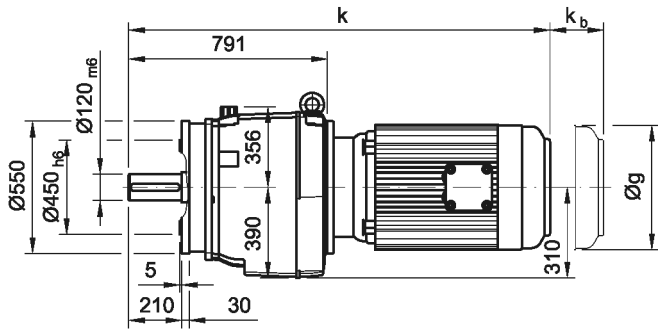


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1192	1205	1274	1309	1309	1422	1466	1451	1489	1563	1632	1672			
ku						1323	1338	1405	1440		1583	1638	1820	1860	1925	1990	2020	2111	2206	2246
kz	1305	1309	1332	1374	1374	1412	1425	1494	1529	1529	1642	1686								
kc		1391	1409	1430	1445	1480	1495	1625	1660											
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550

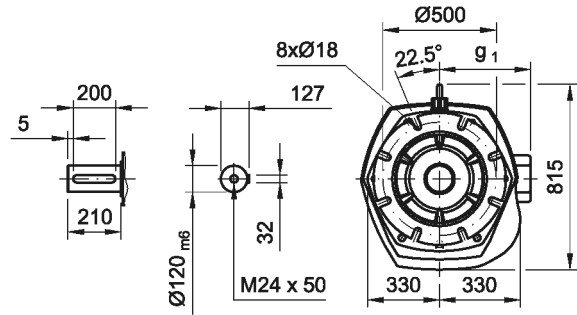


4. SI4

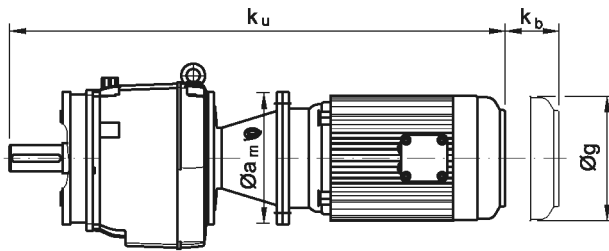
SICE96B/C
100 - 225



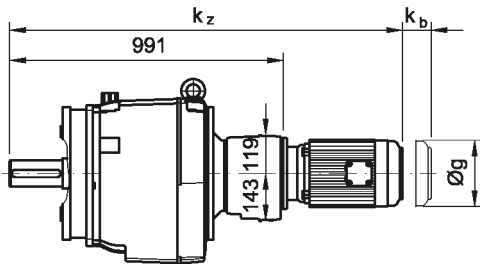
SICE96..



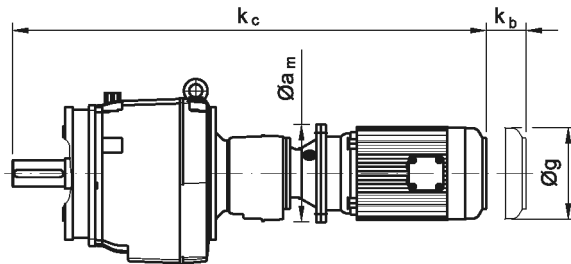
SICE96B/C-U
100 - 280



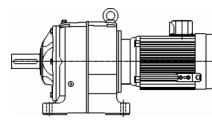
SICE96C36B/C
63 - 160



SICE96C36B/C-U
71 - 132



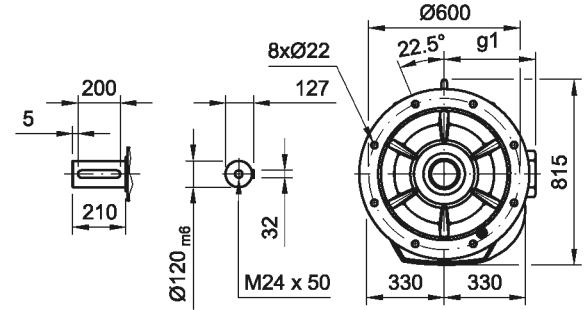
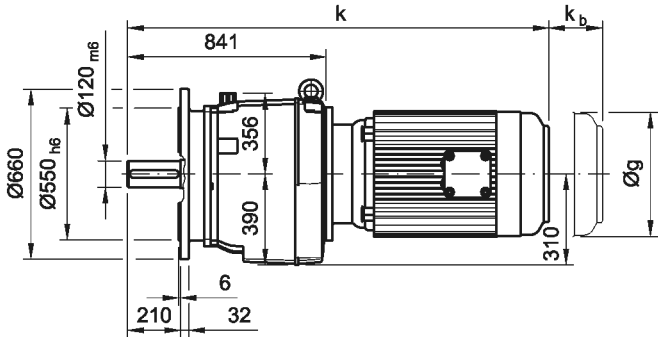
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1102	1115	1184	1219	1219	1332	1376	1361	1399	1473	1542	1582				
ku						1233	1248	1315	1350		1493	1548	1730	1770	1835	1900	1930	2021	2116	2156	
kz	1215	1219	1242	1284	1284	1322	1335	1404	1439	1439	1552	1596									
kc		1301	1319	1340	1355	1390	1405	1535	1570												
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	



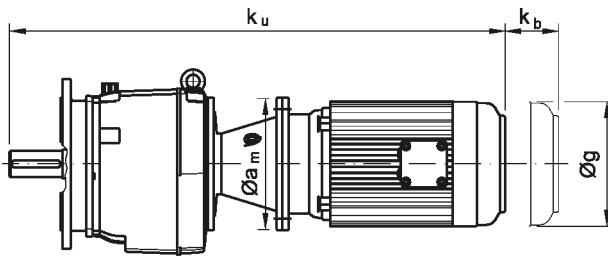
4. SI4

SICD96B/C
100 - 225

SICD96..

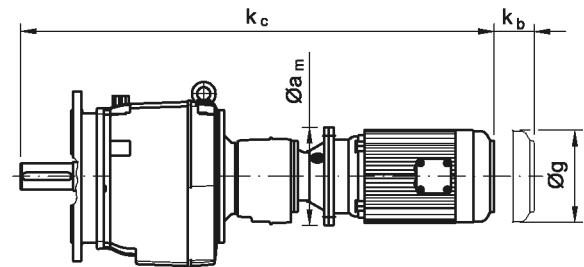
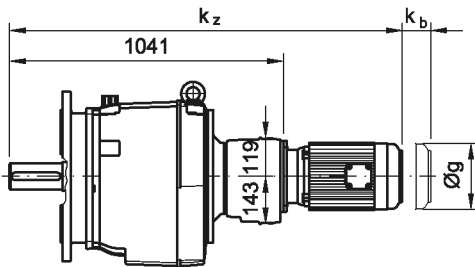


SICD96B/C-U
100 - 280

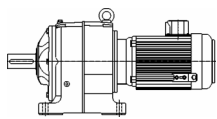


SICD96C36B/C
63 - 160

SICD96C36B/C-U
71 - 132

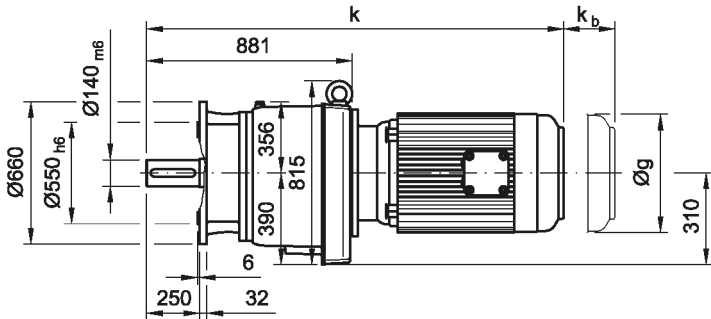


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1152	1165	1234	1269	1269	1382	1426	1411	1449	1523	1592	1632				
ku						1283	1298	1365	1400		1543	1598	1780	1820	1885	1950	1980	2071	2166	2206	
kz	1265	1269	1292	1334	1334	1372	1385	1454	1489	1489	1602	1646									
kc		1351	1369	1390	1405	1440	1455	1585	1620												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

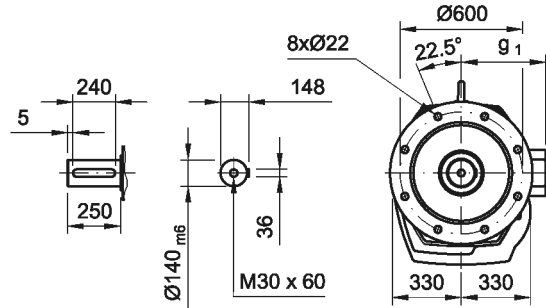


4. SI4

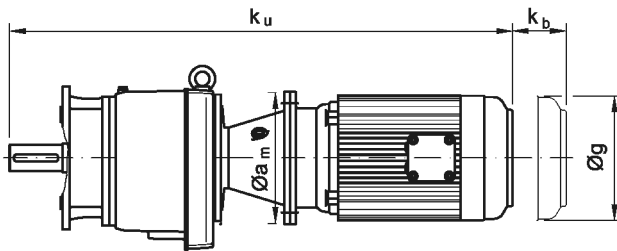
SICM96B/C
100 - 225



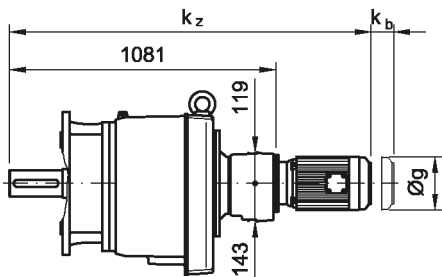
SICM96..



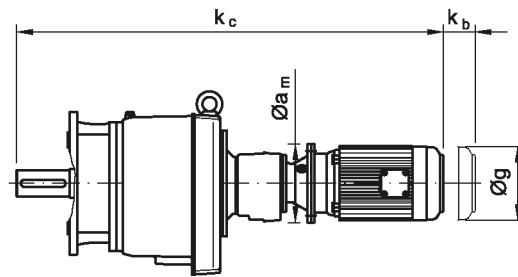
SICM96B/C-U
100 - 280



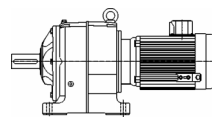
SICM96C36B/C
63 - 160



SICM96C36B/C-U
71 - 132

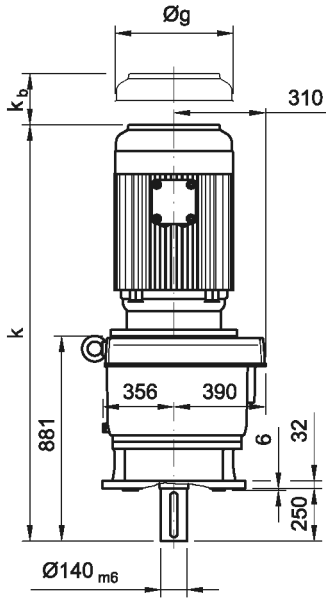


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1192	1205	1274	1309	1309	1422	1466	1451	1489	1563	1632	1672				
ku						1323	1338	1405	1440		1583	1638	1820	1860	1925	1990	2020	2111	2206	2246	
kz	1305	1309	1332	1374	1374	1412	1425	1494	1529	1529	1642	1686									
kc		1391	1409	1430	1445	1480	1495	1625	1660												
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	

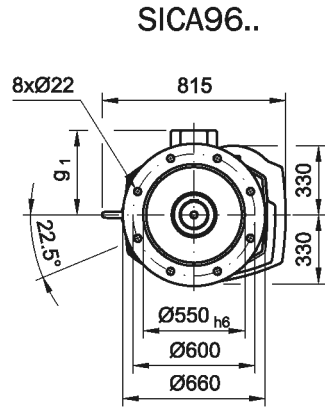
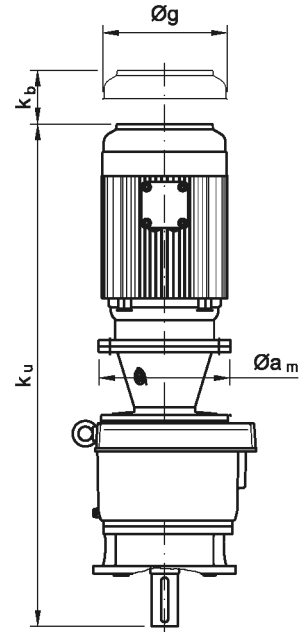


4. SI4

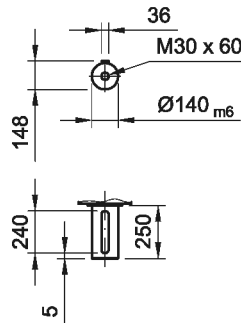
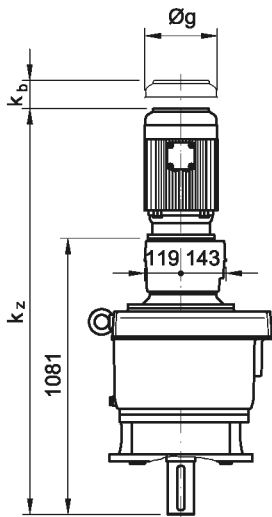
SICA96B/C
100 - 225



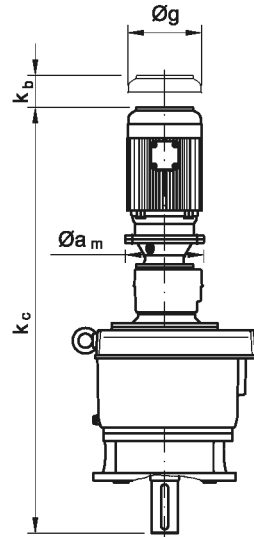
SICA96B/C-U
100 - 280



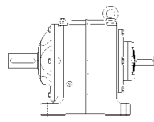
SICA96C36B/C
63 - 160



SICA96C36B/C-U
71 - 132



	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1192	1205	1274	1309	1309	1422	1466	1451	1489	1563	1632	1672				
ku						1323	1338	1405	1440		1583	1638	1820	1860	1925	1990	2020	2111	2206	2246	
kz	1305	1309	1332	1374	1374	1412	1425	1494	1529	1529	1642	1686									
kc		1391	1409	1430	1445	1480	1495	1625	1660												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam		160	200	200	200	250	250	300	300		350	350	350	350	400	450	450	550	550	550	



4. SI4

4.6 Auswahl Getriebe SI4 Selection of gear unit SI4 Sélection d'un réducteur SI4

Beispiel: Auswahltabellen Getriebe
Example: Gear unit selection table
Exemple de tableau de sélection pour réducteurs

Getriebeart und -größe
Gear unit type and size
Type et taille du réducteur

Abmessungen Seite
Dimensional drawings
Cotes latérales

Synchron Drehzahl des Motors
Synchronous speed of motor
Vitesse synchrone du moteur

Gewichte
Weights
Poids

SI..16		Type	m [kg]		M73										200 Nm			
Type	...	$n_{syn} =$	1500 min ⁻¹				1000 1/min				750 1/min							
		i_{ex}	n_2 min ⁻¹	P kW	T ₂ Nm	F _r N	n_2 min ⁻¹	P kW	T ₂ Nm	F _r N	n_2 min ⁻¹	P kW	T ₂ Nm	F _r N				
	2.8	2.78	539	14	250													
	3.15	3.23	464	14	290													
	3.55	3.62	415	14	325													
	4	4.14	362	14	370													
	4.5	4.55	330	14	405													

Max. Nenndrehmoment
Max. rated torque
Couple nominal maxi.

Zulässige Radialkraft
Permissible radial force
Force radiale admissible

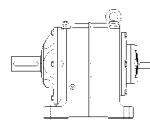
Drehmoment an der Abtriebswelle
Torque at output shaft
Couple au niveau de l'arbre de sortie

Mechanische Nennleistung des Getriebes
Mechanical rated power of gear unit
Puissance nominale mécanique du réducteur

Auswahldrehzahl der Abtriebswelle
Selection speed of output shaft
Vitesse de l'arbre de sortie

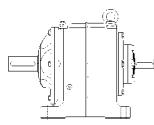
Exakte Übersetzung
Exact gear ratio
Valeur exacte du rapport de démultiplication

Nenn Übersetzung
Rated gear ratio
Réduction nominale




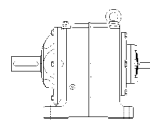
4. SI4


SI..16		Type	m [kg]				200 Nm							
		SI..16... -I	12				M73							
		SI..16... -U	14											
Type	...	n _{syn} =	1500 min ⁻¹				1000 1/min				750 1/min			
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N
SI...16B...	2.8	2.80	536	5.6	100	3270								
	3.15	3.21	467	5.1	105	3880								
	3.55	3.44	436	5.0	110	3960								
	4	3.96	379	4.6	115	4000								
	4.5	4.58	328	4.1	120	4000								
	5	4.93	304	4.0	125	4000								
	5.6	5.72	262	3.6	130	4000	175	2.4	130	4000	131	1.8	130	4000
	6.3	6.56	229	3.2	135	4000	153	2.2	135	4000	114	1.6	135	4000
	7.1	7.03	213	3.2	145	4000	142	2.2	145	4000	107	1.6	145	4000
	8	8.09	185	3.0	155	4000	124	2.0	155	4000	93	1.5	155	4000
	9	9.35	160	2.7	160	4000	107	1.8	160	4000	80	1.3	160	4000
	10	10.08	149	2.6	170	4000	99	1.8	170	4000	74	1.3	170	4000
	11.2	10.88	138	2.6	180	4000	92	1.7	180	4000	69	1.3	180	4000
	12.5	12.76	118	2.2	180	4000	78	1.5	180	4000	59	1.1	180	5000
	14	13.89	108	2.0	180	4000	72	1.4	180	4500	54	1.0	180	5000
	16	16.61	90	1.7	180	4000	60	1.1	180	4500	45	0.9	180	5000
	18	18.28	82	1.5	180	4500	55	1.0	180	5000	41	0.8	180	5000
	20	20.24	74	1.4	180	4500	49	0.9	180	5000	37	0.7	180	5500
	22.4	22.55	67	1.3	180	4500	44	0.8	180	5000	33	0.6	180	5500
	25	25.32	59	1.1	180	5000	39	0.7	180	5000	30	0.6	180	5500
	28	28.18	53	1.0	180	5000	35	0.7	180	5500	27	0.5	180	5500
31.5	31.52	48	0.9	180	5000	32	0.6	180	5500	24	0.4	180	5500	
35.5	36.64	41	0.8	180	5000	27	0.5	180	5500	20	0.4	180	5500	
40	40.82	37	0.7	180	5500	24	0.5	180	5500	18	0.3	180	5500	
45	42.13	36	0.7	180	5500	24	0.5	180	5500	18	0.3	180	5500	
50	50.73	30	0.6	180	5500	20	0.4	180	5500	15	0.3	180	5500	
56	56.32	27	0.5	180	5500	18	0.3	180	5500	13	0.3	180	5500	
63	63.15	24	0.4	180	5500	16	0.3	180	5500	12	0.2	180	5500	
SI...16C...	12.5													
	14													
	16													
	18													
	20													
	22.4													
	25	24.36	62	1.2	190	4500	41	0.8	190	5500	31	0.6	190	6000
	28	28.16	53	1.1	190	5000	36	0.7	190	5500	27	0.5	190	6000
	31.5	30.35	49	1.0	200	5000	33	0.7	200	5500	25	0.5	200	6000
	35.5	32.76	46	1.0	200	5500	31	0.6	200	6000	23	0.5	200	6000
	40	38.45	39	0.8	200	5500	26	0.5	200	6000	20	0.4	200	6000
	45	41.82	36	0.8	200	5500	24	0.5	200	6000	18	0.4	200	6000
	50	50.02	30	0.6	200	6000	20	0.4	200	6000	15	0.3	200	6000
	56	55.07	27	0.6	200	6000	18	0.4	200	6000	14	0.3	200	6000
	63	60.95	25	0.5	200	6000	16	0.3	200	6000	12	0.3	200	6000
	71	67.91	22	0.5	200	6000	15	0.3	200	6000	11	0.2	200	6000
	80	76.26	20	0.4	200	6000	13	0.3	200	6000	10	0.2	200	6000
	90	84.89	18	0.4	200	6000	12	0.2	200	6000	9	0.2	200	6000
	100	94.93	16	0.3	200	6000	11	0.2	200	6000	8	0.2	200	6000
	112	110.40	14	0.3	200	6000	9	0.2	200	6000	7	0.14	200	6000
	125	122.90	12	0.3	200	6000	8	0.2	200	6000	6	0.13	200	6000
140	126.90	12	0.2	200	6000	8	0.2	200	6000	6	0.12	200	6000	
160	152.80	10	0.2	200	6000	7	0.1	200	6000	5	0.10	200	6000	
180	169.60	9	0.2	200	6000	6	0.12	200	6000	4	0.09	200	6000	
200	190.20	8	0.2	200	6000	5	0.11	200	6000	4	0.08	200	6000	
224														
125														
140														
160														
180														
200														
224														
250														
280														
315														
355														
400														
450														
500														
560														
630														
710														
800														
900														
1000														
1120														
1250														



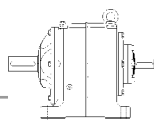
4. SI4

SI..26		Type	m [kg]				420 Nm							
		SI..26... -I SI..26... -U	22 26											
Type	...	n _{syn} =	1500 min ⁻¹				1000 1/min				750 1/min			
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N
SI...26B...	2.8	2.79	538	7.6	135	2890								
	3.15	3.11	483	7.6	150	2910								
	3.55	3.67	409	7.7	180	2940								
	4	4.11	365	7.1	185	2950								
	4.5	4.62	325	6.3	185	2940								
	5	4.90	306	5.9	185	2940								
	5.6	5.47	274	7.5	260	3000	183	5.0	260	3500	137	3.7	260	4000
	6.3	6.10	246	7.1	275	3000	164	4.7	275	4000	123	3.5	275	4500
	7.1	7.20	208	6.3	290	3000	139	4.2	290	4000	104	3.2	290	4500
	8	8.07	186	5.9	305	3500	124	4.0	305	4000	93	3.0	305	4500
	9	9.06	166	5.6	325	3500	110	3.8	325	4000	83	2.8	325	5000
	10	9.62	156	5.6	340	3500	104	3.7	340	4000	78	2.8	340	5000
	11.2	11.60	129	4.9	360	3500	86	3.2	360	4500	65	2.4	360	5000
	12.5	12.39	121	4.6	360	4000	81	3.0	360	4500	61	2.3	360	5500
	14	14.21	106	4.0	360	4000	70	2.7	360	5000	53	2.0	360	5500
	16	16.46	91	3.4	360	4500	61	2.3	360	5000	46	1.7	360	5500
	18	17.80	84	3.2	360	4500	56	2.1	360	5500	42	1.6	360	5500
	20	20.69	72	2.7	360	5000	48	1.8	360	5500	36	1.4	360	6000
	22.4	23.03	65	2.5	360	5000	43	1.6	360	5500	33	1.2	360	6000
	25	25.36	59	2.2	360	5500	39	1.5	360	6000	30	1.1	360	7500
	28	28.12	53	2.0	360	5500	36	1.3	360	6000	27	1.0	360	7500
	31.5	31.42	48	1.8	360	5500	32	1.2	360	6000	24	0.9	360	7500
35.5	34.81	43	1.6	360	5500	29	1.1	360	7500	22	0.8	360	7500	
40	38.78	39	1.5	360	6000	26	1.0	360	7500	19	0.7	360	7500	
45	44.63	34	1.3	360	7500	22	0.8	360	7500	17	0.6	360	7500	
50	50.07	30	1.1	360	7500	20	0.8	360	7500	15	0.6	360	7500	
56														
63														
SI...26C...	12.5													
	14													
	16													
	18	17.09	88	3.4	370	4500	59	2.6	420	5000	44	1.9	420	5500
	20	19.06	79	3.2	385	4500	52	2.3	420	5000	39	1.7	420	6000
	22.4	22.49	67	2.9	420	4500	44	2.0	420	5000	33	1.5	420	6500
	25	25.20	60	2.6	420	5000	40	1.7	420	5500	30	1.3	420	6500
	28	28.31	53	2.3	420	5000	35	1.6	420	6000	26	1.2	420	6500
	31.5	30.06	50	2.2	420	5000	33	1.5	420	6500	25	1.1	420	6500
	35.5	36.25	41	1.8	420	5500	28	1.2	420	6500	21	0.9	420	6500
	40	38.71	39	1.7	420	6000	26	1.1	420	6500	19	0.9	420	6500
	45	44.40	34	1.5	420	6500	23	1.0	420	6500	17	0.7	420	6500
	50	51.42	29	1.3	420	6500	19	0.9	420	6500	15	0.6	420	6500
	56	55.60	27	1.2	420	6500	18	0.8	420	6500	13	0.6	420	6500
	63	64.64	23	1.0	420	6500	15	0.7	420	6500	12	0.5	420	6500
	71	71.97	21	0.9	420	6500	14	0.6	420	6500	10.4	0.5	420	6500
	80	79.24	19	0.8	420	6500	13	0.6	420	6500	9.5	0.4	420	6500
	90	87.84	17	0.8	420	6500	11	0.5	420	6500	8.5	0.4	420	6500
100	98.16	15	0.7	420	6500	10.2	0.4	420	6500	7.6	0.3	420	6500	
112	108.80	14	0.6	420	6500	9.2	0.4	420	6500	6.9	0.3	420	6500	
125	121.20	12	0.5	420	6500	8.3	0.4	420	6500	6.2	0.3	420	6500	
140	139.40	11	0.5	420	6500	7.2	0.3	420	6500	5.4	0.2	420	6500	
160	156.40	9.6	0.4	420	6500	6.4	0.3	420	6500	4.8	0.2	420	6500	
180														
200														
224														
SI...26C16B...	125													
	140													
	160													
	180	171.90	8.7	0.4	420	6500	5.8	0.3	420	6500	4.4	0.2	420	6500
	200	197.10	7.6	0.3	420	6500	5.1	0.2	420	6500	3.8	0.2	420	6500
	224	211.20	7.1	0.3	420	6500	4.7	0.2	420	6500	3.6	0.2	420	6500
	250	243.10	6.2	0.3	420	6500	4.1	0.2	420	6500	3.1	0.14	420	6500
	280	281.00	5.3	0.2	420	6500	3.6	0.2	420	6500	2.7	0.12	420	6500
	315	303.00	5.0	0.2	420	6500	3.3	0.15	420	6500	2.5	0.11	420	6500
	355	327.10	4.6	0.2	420	6500	3.1	0.13	420	6500	2.3	0.10	420	6500
	400	383.60	3.9	0.2	420	6500	2.6	0.11	420	6500	2.0	0.09	420	6500
	450	417.50	3.6	0.2	420	6500	2.4	0.11	420	6500	1.8	0.08	420	6500
	500	499.30	3.0	0.13	420	6500	2.0	0.09	420	6500	1.5	0.07	420	6500
	560	549.50	2.7	0.12	420	6500	1.8	0.08	420	6500	1.4	0.06	420	6500
630	608.40	2.5	0.11	420	6500	1.6	0.07	420	6500	1.2	0.05	420	6500	
710	677.90	2.2	0.10	420	6500	1.5	0.06	420	6500	1.1	0.05	420	6500	
800	761.10	2.0	0.09	420	6500	1.3	0.06	420	6500	1.0	0.04	420	6500	
900	847.10	1.8	0.08	420	6500	1.2	0.05	420	6500	0.9	0.04	420	6500	
1000	947.50	1.6	0.07	420	6500	1.1	0.05	420	6500	0.8	0.03	420	6500	
1120	1101.00	1.4	0.06	420	6500	0.9	0.04	420	6500	0.7	0.03	420	6500	
1250	1227.00	1.2	0.05	420	6500	0.8	0.04	420	6500	0.6	0.03	420	6500	



SI..36		Type SI..36... -I SI..36... -U	m [kg] 42 46		 M85		820 Nm							
Type	...	n _{syn} =	1500 min ⁻¹			1000 1/min				750 1/min				
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N
SI...36B...	2.8	2.78	539	14(1)	250	6560								
	3.15	3.23	464	14(1)	290	6790								
	3.55	3.62	415	14(1)	325	6970								
	4	4.14	362	14(1)	370	7000								
	4.5	4.55	330	14(1)	405	7000								
	5	5.25	286	14(1)	470	7000								
	5.6	5.48	274	15(1)	520	7000	183	9.9	520	8500	137	7.5	520	9500
	6.3	6.36	236	14(1)	550	7000	157	9.1	550	8500	118	6.8	550	9500
	7.1	7.12	211	13(1)	580	7500	141	8.5	580	9000	105	6.4	580	10000
	8	8.15	184	12(1)	610	7500	123	7.8	610	9000	92	5.9	610	10500
	9	8.94	168	11(1)	645	8000	112	7.6	645	9500	84	5.7	645	11000
	10	10.33	145	10(1)	680	8500	97	6.9	680	10000	73	5.2	680	11000
	11.2	11.41	131	9.9	720	8500	88	6.6	720	10000	66	5.0	720	11000
	12.5	12.67	118	8.9	720	9000	79	6.0	720	11000	59	4.5	720	12000
	14	13.57	111	8.3	720	9500	74	5.6	720	11000	55	4.2	720	12000
	16	15.87	95	7.1	720	10000	63	4.8	720	11000	47	3.6	720	12000
	18	17.09	88	6.6	720	10500	59	4.4	720	11500	44	3.3	720	12000
	20	19.41	77	5.8	720	11000	52	3.9	720	12000	39	2.9	720	12000
	22.4	21.98	68	5.1	720	12000	45	3.4	720	12000	34	2.6	720	12000
	25	23.97	63	4.7	720	12000	42	3.1	720	12000	31	2.4	720	12000
	28	27.74	54	4.1	720	12000	36	2.7	720	12000	27	2.0	720	12000
	31.5	30.63	49	3.7	720	12000	33	2.5	720	12000	24	1.8	720	12000
	35.5	36.65	41	3.1	720	12000	27	2.1	720	12000	20	1.5	720	12000
	40	40.81	37	2.8	720	12000	25	1.8	720	12000	18	1.4	720	12000
	45	45.14	33	2.5	720	12000	22	1.7	720	12000	17	1.3	720	12000
50	50.15	30	2.3	720	12000	20	1.5	720	12000	15	1.1	720	12000	
56														
63														
SI...36C...	12.5													
	14													
	16													
	18													
	20													
	22.4	23.42	64	5.1	755	10500	43	3.6	800	11000	32	2.7	820	11000
	25	25.69	58	4.8	780	11000	39	3.3	820	11000	29	2.5	820	11000
	28	29.67	51	4.2	800	11000	34	2.9	820	11000	25	2.2	820	11000
	31.5	32.80	46	3.9	820	11000	30	2.6	820	11000	23	2.0	820	11000
	35.5	36.41	41	3.5	820	11000	27	2.4	820	11000	21	1.8	820	11000
	40	39.00	38	3.3	820	11000	26	2.2	820	11000	19	1.7	820	11000
	45	45.60	33	2.8	820	11000	22	1.9	820	11000	16	1.4	820	11000
	50	49.12	31	2.6	820	11000	20	1.7	820	11000	15	1.3	820	11000
	56	55.78	27	2.3	820	11000	18	1.5	820	11000	13	1.2	820	11000
	63	63.17	24	2.0	820	11000	16	1.4	820	11000	12	1.0	820	11000
	71	68.88	22	1.9	820	11000	15	1.2	820	11000	11	0.9	820	11000
	80	79.73	19	1.6	820	11000	13	1.1	820	11000	9.4	0.8	820	11000
90	88.04	17	1.5	820	11000	11	1.0	820	11000	8.5	0.7	820	11000	
100	105.30	14	1.2	820	11000	9.5	0.8	820	11000	7.1	0.6	820	11000	
112	117.30	13	1.1	820	11000	8.5	0.7	820	11000	6.4	0.5	820	11000	
125	129.70	12	1.0	820	11000	7.7	0.7	820	11000	5.8	0.5	820	11000	
140	144.10	10	0.9	820	11000	6.9	0.6	820	11000	5.2	0.4	820	11000	
160														
180														
200														
224														
SI...36C16B...	125													
	140													
	160	168.40	8.9	0.8	820	11000	5.9	0.5	820	11000	4.5	0.4	820	11000
	180	180.50	8.3	0.7	820	11000	5.5	0.5	820	11000	4.2	0.4	820	11000
	200	207.80	7.2	0.6	820	11000	4.8	0.4	820	11000	3.6	0.3	820	11000
	224	223.10	6.7	0.6	820	11000	4.5	0.4	820	11000	3.4	0.3	820	11000
	250	255.70	5.9	0.5	820	11000	3.9	0.3	820	11000	2.9	0.3	820	11000
	280	274.10	5.5	0.5	820	11000	3.6	0.3	820	11000	2.7	0.2	820	11000
	315	315.40	4.8	0.4	820	11000	3.2	0.3	820	11000	2.4	0.2	820	11000
	355	364.60	4.1	0.4	820	11000	2.7	0.2	820	11000	2.1	0.2	820	11000
	400	393.10	3.8	0.3	820	11000	2.5	0.2	820	11000	1.9	0.2	820	11000
	450	424.30	3.5	0.3	820	11000	2.4	0.2	820	11000	1.8	0.2	820	11000
	500	497.60	3.0	0.3	820	11000	2.0	0.2	820	11000	1.5	0.13	820	11000
	560	541.70	2.8	0.2	820	11000	1.8	0.2	820	11000	1.4	0.12	820	11000
	630	647.80	2.3	0.2	820	11000	1.5	0.13	820	11000	1.2	0.10	820	11000
	710	712.90	2.1	0.2	820	11000	1.4	0.12	820	11000	1.1	0.09	820	11000
800	789.40	1.9	0.2	820	11000	1.3	0.11	820	11000	1.0	0.08	820	11000	
900	879.50	1.7	0.15	820	11000	1.1	0.10	820	11000					
1000	987.50	1.5	0.13	820	11000	1.0	0.09	820	11000					
1120	1099.00	1.4	0.12	820	11000	0.9	0.08	820	11000					
1250	1229.00	1.2	0.10	820	11000	0.8	0.07	820	11000					

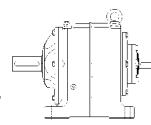
(1)Achtung! Maximale Thermische Leistung beachten • Attention! Please consult page 20 for thermal break even performance.
Attention! Vérifier svp la puissance thermique maximum.



4. SI4

SI..46		Type SI..46... -I SI..46... -U	m [kg] 71 85				M92		1600 Nm					
Type	...	n _{syn} =	1500 min ⁻¹				1000 1/min				750 1/min			
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N
SI...46B...	2.8	2.80	535	21(1)	375	8690								
	3.15	3.15	477	21(1)	420	8890								
	3.55	3.62	414	21(1)	485	9000								
	4	4.10	365	21(1)	550	9000								
	4.5	4.62	325	21(1)	620	9000								
	5	5.29	283	21(1)	710	9000								
	5.6	5.40	278	25(1)	850	9000	185	16	850	10000	139	12	850	11000
	6.3	6.05	248	24(1)	910	9000	165	16	910	10500	124	12	910	12000
	7.1	6.97	215	22(1)	980	9000	144	15	980	11000	108	11	980	12000
	8	7.90	190	21(1)	1050	9000	127	14	1050	11000	95	10	1050	12500
	9	8.88	169	20(1)	1130	9500	113	13	1130	11500	84	10	1130	13000
	10	10.18	147	19(1)	1210	9500	98	12	1210	11500	74	9.3	1210	13000
	11.2	11.24	133	18(1)	1300	10000	89	12	1300	12000	67	9.1	1300	13500
	12.5	12.37	121	17(1)	1300	10500	81	11	1300	12500	61	8.3	1300	14000
	14	13.93	108	16	1400	10500	72	11	1400	13000	54	7.9	1400	14500
	16	15.45	97	14	1400	11000	65	9.5	1400	13500	49	7.1	1400	15500
	18	17.70	85	12	1400	12000	56	8.3	1400	14000	42	6.2	1400	16000
	20	20.78	72	11	1400	12500	48	7.1	1400	14000	36	5.3	1400	17000
	22.4	22.24	67	9.9	1400	13000	45	6.6	1400	16000	34	4.9	1400	18000
	25	24.84	60	8.9	1400	14000	40	5.9	1400	16500	30	4.4	1400	19000
	28	28.34	53	7.8	1400	14500	35	5.2	1400	17500	26	3.9	1400	19000
	31.5	30.73	49	7.2	1400	15000	33	4.8	1400	18000	24	3.6	1400	19000
	35.5	35.47	42	6.2	1400	16000	28	4.1	1400	19000	21	3.1	1400	19000
40	38.96	39	5.6	1400	17000	26	3.8	1400	19000	19	2.8	1400	19000	
45	46.48	32	4.7	1400	18000	22	3.2	1400	19000	16	2.4	1400	19000	
50	52.12	29	4.2	1400	19000	19	2.8	1400	19000	14	2.1	1400	19000	
56														
63														
SI...46C...	12.5													
	14													
	16													
	18													
	20													
	22.4													
	25													
	28	26.62	56	8.9	1500	14000	38	6.3	1600	16500	28	4.7	1600	17500
	31.5	29.94	50	8.4	1600	14500	33	5.6	1600	17500	25	4.2	1600	17500
	35.5	34.34	44	7.3	1600	15500	29	4.9	1600	17500	22	3.7	1600	17500
	40	37.89	40	6.6	1600	16000	26	4.4	1600	17500	20	3.3	1600	21000
	45	41.69	36	6.0	1600	17500	24	4.0	1600	17500	18	3.0	1600	21000
	50	46.97	32	5.4	1600	17500	21	3.6	1600	17500	16	2.7	1600	21000
	56	52.10	29	4.8	1600	17500	19	3.2	1600	19000	14	2.4	1600	21000
	63	59.67	25	4.2	1600	17500	17	2.8	1600	21000	13	2.1	1600	21000
	71	70.07	21	3.6	1600	18000	14	2.4	1600	21000	11	1.8	1600	21000
	80	74.99	20	3.4	1600	19000	13	2.2	1600	21000	10.0	1.7	1600	21000
	90	83.75	18	3.0	1600	21000	12	2.0	1600	21000	9.0	1.5	1600	21000
	100	95.56	16	2.6	1600	21000	10.5	1.8	1600	21000	7.8	1.3	1600	21000
	112	103.60	14	2.4	1600	21000	9.7	1.6	1600	21000	7.2	1.2	1600	21000
	125	119.60	13	2.1	1600	21000	8.4	1.4	1600	21000	6.3	1.1	1600	21000
	140	131.30	11	1.9	1600	21000	7.6	1.3	1600	21000	5.7	1.0	1600	21000
	160	158.20	9.5	1.6	1600	21000	6.3	1.1	1600	21000	4.7	0.8	1600	21000
180	175.70	8.5	1.4	1600	21000	5.7	1.0	1600	21000	4.3	0.7	1600	21000	
200														
224														
SI...46C16B...	125													
	140													
	160													
	180													
	200	196.40	7.6	1.3	1600	21000	5.1	0.9	1600	21000	3.8	0.6	1600	21000
	224	225.20	6.7	1.1	1600	21000	4.4	0.7	1600	21000	3.3	0.6	1600	21000
	250	241.30	6.2	1.0	1600	21000	4.1	0.7	1600	21000	3.1	0.5	1600	21000
	280	277.70	5.4	0.9	1600	21000	3.6	0.6	1600	21000	2.7	0.5	1600	21000
	315	321.00	4.7	0.8	1600	21000	3.1	0.5	1600	21000	2.3	0.4	1600	21000
	355	346.10	4.3	0.7	1600	21000	2.9	0.5	1600	21000	2.2	0.4	1600	21000
	400	373.60	4.0	0.7	1600	21000	2.7	0.4	1600	21000	2.0	0.3	1600	21000
	450	438.20	3.4	0.6	1600	21000	2.3	0.4	1600	21000	1.7	0.3	1600	21000
	500	477.00	3.1	0.5	1600	21000	2.1	0.4	1600	21000	1.6	0.3	1600	21000
	560	570.40	2.6	0.4	1600	21000	1.8	0.3	1600	21000	1.3	0.2	1600	21000
	630	627.70	2.4	0.4	1600	21000	1.6	0.3	1600	21000	1.2	0.2	1600	21000
	710	695.00	2.2	0.4	1600	21000	1.4	0.2	1600	21000	1.1	0.2	1600	21000
	800	774.40	1.9	0.3	1600	21000	1.3	0.2	1600	21000	1.0	0.2	1600	21000
	900	869.50	1.7	0.3	1600	21000	1.2	0.2	1600	21000	0.9	0.14	1600	21000
1000	967.70	1.6	0.3	1600	21000	1.0	0.2	1600	21000	0.8	0.13	1600	21000	
1120	1082.00	1.4	0.2	1600	21000	0.9	0.2	1600	21000	0.7	0.12	1600	21000	
1250	1258.00	1.2	0.2	1600	21000	0.8	0.13	1600	21000	0.6	0.10	1600	21000	

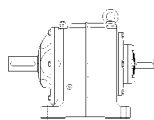
(1)Achtung! Maximale Thermische Leistung beachten • Attention! Please consult page 20 for thermal break even performance.
Attention! Vérifier svp la puissance thermique maximum.



4. SI4

SI..56		Type SI..56... -I SI..56... -U	m [kg] 112 126			2800 Nm									
Type	...	n _{syn} =	1500 min ⁻¹					1000 1/min				750 1/min			
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	
SI...56B...	2.8	2.74	547	39(1)	680	8820									
	3.15	3.02	496	39(1)	750	9010									
	3.55	3.48	431	39(1)	865	9270									
	4	3.93	381	39(1)	975	9480									
	4.5	4.34	346	39(1)	1080	9650									
	5	4.94	303	46(1)	1460	10500									
	5.6	5.45	275	45(1)	1570	10500	183	29	1570	12000	138	22	1570	13500	
	6.3	6.28	239	42(1)	1680	10500	159	28	1680	12500	119	21	1680	14000	
	7.1	7.09	212	40(1)	1800	10500	141	27	1800	13000	106	20	1800	14500	
	8	7.83	192	39(1)	1940	10500	128	26	1940	13000	96	19	1940	15000	
	9	8.89	169	37(1)	2080	11000	113	25	2080	13500	84	18	2080	15500	
	10	9.99	150	35(1)	2240	11000	100	23	2240	13500	75	18	2240	15500	
	11.2	11.10	135	34(1)	2400	11500	90	23	2400	14000	68	17	2400	16000	
	12.5	12.63	119	30	2400	11500	79	20	2400	14500	59	15	2400	17000	
	14	13.64	110	28	2400	12500	73	18	2400	15500	55	14	2400	18000	
	16	15.12	99	25	2400	13500	66	17	2400	16500	50	12	2400	19000	
	18	17.40	86	22	2400	14500	57	14	2400	17500	43	11	2400	20000	
	20	19.63	76	19	2400	15000	51	13	2400	18500	38	9.6	2400	21000	
	22.4	22.35	67	17	2400	16000	45	11	2400	19500	34	8.4	2400	22000	
	25	24.52	61	15	2400	17000	41	10	2400	20500	31	7.7	2400	23000	
	28	28.11	53	13	2400	18000	36	8.9	2400	21500	27	6.7	2400	24000	
	31.5	30.46	49	12	2400	18500	33	8.3	2400	22000	25	6.2	2400	24000	
	35.5	35.94	42	10	2400	20000	28	7.0	2400	24000	21	5.2	2400	24000	
	40	40.09	37	9.4	2400	21000	25	6.3	2400	24000	19	4.7	2400	24000	
45	44.58	34	8.5	2400	22000	22	5.6	2400	24000	17	4.2	2400	24000		
50															
56															
63															
SI...56C...	12.5														
	14														
	16														
	18														
	20														
	22.4														
	25														
	28	27.03	55	14.5	2500	17500	37	9.7	2500	19500	28	7.3	2500	22000	
	31.5	30.68	49	13.3	2600	18000	33	8.9	2600	21000	24	6.7	2600	23000	
	35.5	34.48	44	12.8	2800	18500	29	8.5	2800	22000	22	6.4	2800	23500	
	40	38.33	39	11.5	2800	19500	26	7.6	2800	23000	20	5.7	2800	24000	
	45	43.63	34	10.1	2800	21000	23	6.7	2800	23500	17	5.0	2800	25500	
	50	47.10	32	9.3	2800	22000	21	6.2	2800	24000	16	4.7	2800	25500	
	56	52.21	29	8.4	2800	22000	19	5.6	2800	25500	14	4.2	2800	25500	
	63	60.09	25	7.3	2800	22500	17	4.9	2800	25500	12	3.7	2800	25500	
	71	67.77	22	6.5	2800	23500	15	4.3	2800	25500	11	3.2	2800	25500	
	80	77.16	19	5.7	2800	24000	13	3.8	2800	25500	9.7	2.8	2800	25500	
	90	84.66	18	5.2	2800	25500	12	3.5	2800	25500	8.9	2.6	2800	25500	
100	97.06	15	4.5	2800	25500	10.3	3.0	2800	25500	7.7	2.3	2800	25500		
112	105.20	14	4.2	2800	25500	9.5	2.8	2800	25500	7.1	2.1	2800	25500		
125	124.10	12	3.5	2800	25500	8.1	2.4	2800	25500	6.0	1.8	2800	25500		
140	138.40	11	3.2	2800	25500	7.2	2.1	2800	25500	5.4	1.6	2800	25500		
160	154.00	9.7	2.9	2800	25500	6.5	1.9	2800	25500	4.9	1.4	2800	25500		
180															
200															
224															
SI...56C16B...	125														
	140														
	160														
	180	175.50	8.5	2.5	2800	25000	5.7	1.7	2800	25500	4.3	1.3	2800	25500	
	200	201.20	7.5	2.2	2800	25000	5.0	1.5	2800	25500	3.7	1.1	2800	25500	
	224	215.60	7.0	2.0	2800	25000	4.6	1.4	2800	25500	3.5	1.0	2800	25500	
	250	248.10	6.0	1.8	2800	25000	4.0	1.2	2800	25500	3.0	0.9	2800	25500	
	280	286.80	5.2	1.5	2800	25000	3.5	1.0	2800	25500	2.6	0.8	2800	25500	
	315	309.30	4.8	1.4	2800	25000	3.2	0.9	2800	25500	2.4	0.7	2800	25500	
	355	333.80	4.5	1.3	2800	25000	3.0	0.9	2800	25500	2.2	0.7	2800	25500	
	400	391.50	3.8	1.1	2800	25000	2.6	0.7	2800	25500	1.9	0.6	2800	25500	
	450	426.10	3.5	1.0	2800	25000	2.3	0.7	2800	25500	1.8	0.5	2800	25500	
	500	509.60	2.9	0.9	2800	25000	2.0	0.6	2800	25500	1.5	0.4	2800	25500	
	560	560.80	2.7	0.8	2800	25000	1.8	0.5	2800	25500	1.3	0.4	2800	25500	
	630	621.00	2.4	0.7	2800	25000	1.6	0.5	2800	25500	1.2	0.4	2800	25500	
	710	691.80	2.2	0.6	2800	25000	1.4	0.4	2800	25500	1.1	0.3	2800	25500	
800	776.80	1.9	0.6	2800	25000	1.3	0.4	2800	25500	1.0	0.3	2800	25500		
900	864.60	1.7	0.5	2800	25000	1.2	0.3	2800	25500	0.9	0.3	2800	25500		
1000	967.00	1.6	0.5	2800	25000	1.0	0.3	2800	25500	0.8	0.2	2800	25500		
1120	1124.00	1.3	0.4	2800	25000	0.9	0.3	2800	25500	0.7	0.2	2800	25500		
1250	1252.00	1.2	0.4	2800	25000	0.8	0.2	2800	25500	0.6	0.2	2800	25500		

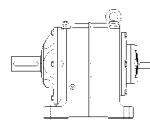
(1)Achtung! Maximale Thermische Leistung beachten • Attention! Please consult page 20 for thermal break even performance.
Attention! Vérifier svp la puissance thermique maximum.



4. SI4

SI..86		Type SI..86... -I SI..86... -U	m [kg] 445 515			 M127				15000 Nm					
Type	...	$n_{syn} =$	1500 min^{-1}				1000 1/min				750 1/min				
		i_{ex}	n_2 min^{-1}	P kW	T_2 Nm	F_r N	n_2 min^{-1}	P kW	T_2 Nm	F_r N	n_2 min^{-1}	P kW	T_2 Nm	F_r N	
SI...86B...	2.8														
	3.15														
	3.55														
	4														
	4.5														
	5														
	5.6	5.62	267	169(1)	6050	82000									
	6.3	6.23	241	162(1)	6400	82000									
	7.1	6.92	217	152(1)	6700	82000									
	8	7.70	195	143(1)	7000	82000									
	9	8.60	174	134(1)	7350	82000									
	10	9.65	155	125(1)	7700	82000									
	11.2	10.88	138	117(1)	8100	82000									
	12.5	12.34	122	109(1)	8500	82000									
	14	14.11	106	97(1)	8700	82000									
	16	15.14	99	92(1)	8900	82000									
18															
20															
22.4															
25															
28															
31.5															
35.5															
40															
45															
50															
56															
63															
SI...86C...	12.5	12.47	120	170(1)	13500	82000	80	113(1)	13500	82000	60	85	13500	77000	
	14	14.11	106	161(1)	14500	82000	71	108(1)	14500	82000	53	81	14500	78000	
	16	15.99	94	147(1)	15000	82000	63	98(1)	15000	82000	47	74	15000	82000	
	18	18.14	83	130(1)	15000	82000	55	87(1)	15000	72000	41	65	15000	82000	
	20	19.77	76	119(1)	15000	82000	51	79(1)	15000	79000	38	60	15000	82000	
	22.4	22.55	67	104(1)	15000	82000	44	70(1)	15000	82000	33	52	15000	82000	
	25	24.69	61	95(1)	15000	82000	41	64(1)	15000	82000	30	48	15000	82000	
	28	28.43	53	83(1)	15000	76000	35	55(1)	15000	82000	26	41	15000	82000	
	31.5	31.37	48	75(1)	15000	81000	32	50	15000	82000	24	38	15000	82000	
	35.5	35.25	43	67(1)	15000	82000	28	45	15000	82000	21	33	15000	82000	
	40	39.25	38	60(1)	15000	82000	25	40	15000	82000	19	30	15000	82000	
	45	43.98	34	54(1)	15000	82000	23	36	15000	82000	17	27	15000	82000	
	50	49.65	30	47	15000	82000	20	32	15000	82000	15	24	15000	82000	
	56	55.87	27	42	15000	82000	18	28	15000	82000	13	21	15000	82000	
	63	64.45	23	37	15000	82000	16	24	15000	82000	12	18	15000	82000	
	71	70.44	21	33	15000	82000	14	22	15000	82000	11	17	15000	82000	
80	76.38	20	31	15000	82000	13	21	15000	82000	9.8	15	15000	82000		
90	90.17	17	26	15000	82000	11	17	15000	82000	8.3	13	15000	82000		
100	99.53	15	24	15000	82000	10	16	15000	82000	7.5	12	15000	82000		
112	110.75	14	21	15000	82000	9.0	14	15000	82000	6.8	11	15000	82000		
125															
140															
160															
180															
200															
224															
SI...86C36B...	125	123.46	12	18	14000	82000	8.1	12	14000	82000	6.1	8.9	14000	82000	
	140	135.18	11	17	15000	82000	7.4	12	15000	82000	5.5	8.7	15000	82000	
	160	156.93	9.6	15	15000	82000	6.4	10	15000	82000	4.8	7.5	15000	82000	
	180	175.69	8.5	13	15000	82000	5.7	8.9	15000	82000	4.3	6.7	15000	82000	
	200	199.39	7.5	12	15000	82000	5.0	7.9	15000	82000	3.8	5.9	15000	82000	
	224	223.23	6.7	11	15000	82000	4.5	7.0	15000	82000	3.4	5.3	15000	82000	
	250	255.60	5.9	9.2	15000	82000	3.9	6.1	15000	82000	2.9	4.6	15000	82000	
	280	280.42	5.3	8.4	15000	82000	3.6	5.6	15000	82000	2.7	4.2	15000	82000	
	315	324.05	4.6	7.3	15000	82000	3.1	4.8	15000	82000	2.3	3.6	15000	82000	
	355	357.93	4.2	6.6	15000	82000	2.8	4.4	15000	82000	2.1	3.3	15000	82000	
	400	397.46	3.8	5.9	15000	82000	2.5	4.0	15000	82000	1.9	3.0	15000	82000	
	450	446.62	3.4	5.3	15000	82000	2.2	3.5	15000	82000	1.7	2.6	15000	82000	
	500	497.84	3.0	4.7	15000	82000	2.0	3.2	15000	82000	1.5	2.4	15000	82000	
	560	559.42	2.7	4.2	15000	82000	1.8	2.8	15000	82000	1.3	2.1	15000	82000	
	630	608.89	2.5	3.9	15000	82000	1.6	2.6	15000	82000	1.2	1.9	15000	82000	
	710	689.51	2.2	3.4	15000	82000	1.5	2.3	15000	82000	1.1	1.7	15000	82000	
800	774.80	1.9	3.0	15000	82000	1.3	2.0	15000	82000	1.0	1.5	15000	82000		
900	870.20	1.7	2.7	15000	82000	1.1	1.8	15000	82000	0.9	1.4	15000	82000		
1000	977.84	1.5	2.4	15000	82000	1.0	1.6	15000	82000	0.8	1.2	15000	82000		
1120	1149.71	1.3	2.0	15000	82000	0.9	1.4	15000	82000	0.7	1.0	15000	82000		
1250	1280.21	1.2	1.8	15000	82000	0.8	1.2	15000	82000	0.6	0.9	15000	82000		

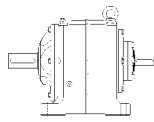
(1)Achtung! Maximale Thermische Leistung beachten • Attention! Please consult page 20 for thermal break even performance.
Attention! Vérifier svp la puissance thermique maximum.



4. SI4

SI..96		Type SI..96... -I SI..96... -U	m [kg] 655 725		M136		25000 Nm								
Type	...	n _{syn} =	1500 min ⁻¹				1000 1/min				750 1/min				
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _r N	
SI...96B...	2.8														
	3.15														
	3.55														
	4														
	4.5														
	5														
	5.6														
	6.3														
	7.1														
	8														
	9														
	10														
	11.2														
	12.5														
	14														
	16														
18															
20															
22.4															
25															
28															
31.5															
35.5															
40															
45															
50															
56															
63															
SI...96C...	12.5														
	14														
	16														
	18														
	20	19.71	76	171(1)	21500	105000	51	114(1)	21500	105000	38	86	21500	105000	
	22.4	22.31	67	162(1)	23000	105000	45	108(1)	23500	105000	34	81	23000	105000	
	25	25.27	59	149(1)	24000	105000	40	99(1)	24000	105000	30	75	24000	105000	
	28	28.68	52	137(1)	25000	105000	35	91(1)	25000	105000	26	68	25000	105000	
	31.5	31.25	48	126(1)	25000	105000	32	84(1)	25000	105000	24	63	25000	105000	
	35.5	35.65	42	110(1)	25000	105000	28	73(1)	25000	105000	21	55	25000	105000	
	40	39.03	38	101(1)	25000	105000	26	67(1)	25000	105000	19	50	25000	105000	
	45	44.95	33	87(1)	25000	105000	22	58	25000	105000	17	44	25000	105000	
	50	49.59	30	79(1)	25000	105000	20	53	25000	105000	15	40	25000	105000	
	56	55.73	27	70	25000	105000	18	47	25000	105000	13	35	25000	105000	
	63	62.05	24	63	25000	105000	16	42	25000	105000	12	32	25000	105000	
	71	69.52	22	56	25000	105000	14	38	25000	105000	11	28	25000	105000	
80	78.49	19	50	25000	105000	13	33	25000	105000	9.6	25	25000	105000		
90	88.33	17	44	25000	105000	11	30	25000	105000	8.5	22	25000	105000		
100	101.88	15	39	25000	105000	9.8	26	25000	105000	7.4	19	25000	105000		
112	111.36	13	35	25000	105000	9.0	24	25000	105000	6.7	18	25000	105000		
125	120.75	12	33	25000	105000	8.3	22	25000	105000	6.2	16	25000	105000		
140	142.55	11	28	25000	105000	7.0	18	25000	105000	5.3	14	25000	105000		
160	157.34	9.5	25	25000	105000	6.4	17	25000	105000	4.8	12	25000	105000		
180	175.09	8.6	22	25000	105000	5.7	15	25000	105000	4.3	11	25000	105000		
200															
224															
SI...96C36B...	125														
	140														
	160														
	180														
	200	195.18	7.7	18	22000	105000	5.1	12	22000	105000	3.8	8.9	22000	105000	
	224	213.69	7.0	18	24000	105000	4.7	12	24000	105000	3.5	8.8	24000	105000	
	250	246.10	6.1	16	25000	105000	4.1	11	25000	105000	3.0	8.0	25000	105000	
	280	285.70	5.3	14	25000	105000	3.5	9.2	25000	105000	2.6	6.9	25000	105000	
	315	319.86	4.7	12	25000	105000	3.1	8.2	25000	105000	2.3	6.1	25000	105000	
	355	366.25	4.1	11	25000	105000	2.7	7.1	25000	105000	2.0	5.4	25000	105000	
	400	401.81	3.7	9.8	25000	105000	2.5	6.5	25000	105000	1.9	4.9	25000	105000	
	450	464.33	3.2	8.5	25000	105000	2.2	5.6	25000	105000	1.6	4.2	25000	105000	
	500	512.88	2.9	7.7	25000	105000	1.9	5.1	25000	105000	1.5	3.8	25000	105000	
	560	569.52	2.6	6.9	25000	105000	1.8	4.6	25000	105000	1.3	3.4	25000	105000	
	630	609.97	2.5	6.4	25000	105000	1.6	4.3	25000	105000	1.2	3.2	25000	105000	
	710	713.36	2.1	5.5	25000	105000	1.4	3.7	25000	105000	1.1	2.8	25000	105000	
800	786.99	1.9	5.0	25000	105000	1.3	3.3	25000	105000	1.0	2.5	25000	105000		
900	872.48	1.7	4.5	25000	105000	1.1	3.0	25000	105000	0.9	2.3	25000	105000		
1000	988.00	1.5	4.0	25000	105000	1.0	2.6	25000	105000	0.8	2.0	25000	105000		
1120	1089.99	1.4	3.6	25000	105000	0.9	2.4	25000	105000	0.7	1.8	25000	105000		
1250	1246.91	1.2	3.1	25000	105000	0.8	2.1	25000	105000	0.6	1.6	25000	105000		

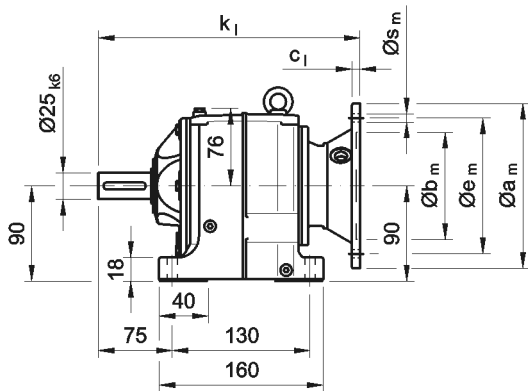
(1)Achtung! Maximale Thermische Leistung beachten • Attention! Please consult page 20 for thermal break even performance.
Attention! Vérifier svp la puissance thermique maximum.



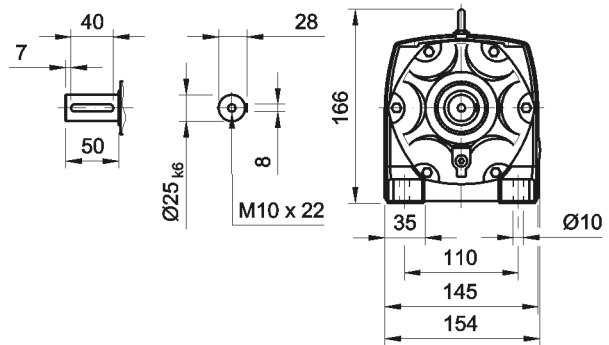
4. SI4

4.7 Maßbilder Getriebemotoren
 Dimensional drawings of gear units
 Schémas dimensionnels des unités de vitesse

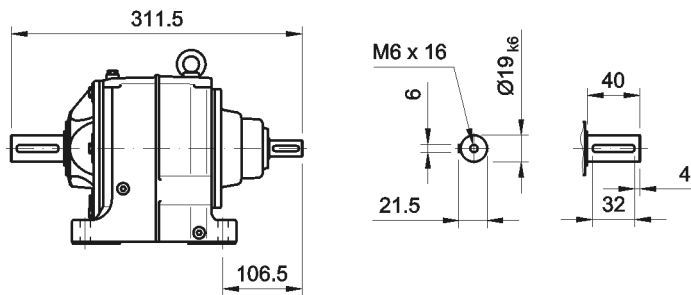
SIFN16B/C-U
 63 - 112



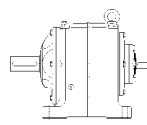
SIFN16..



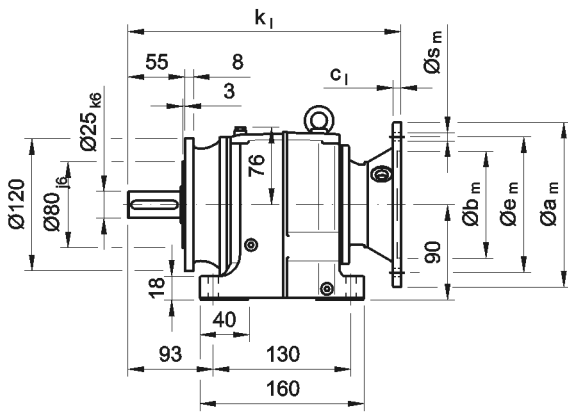
SIFN16B/C-I



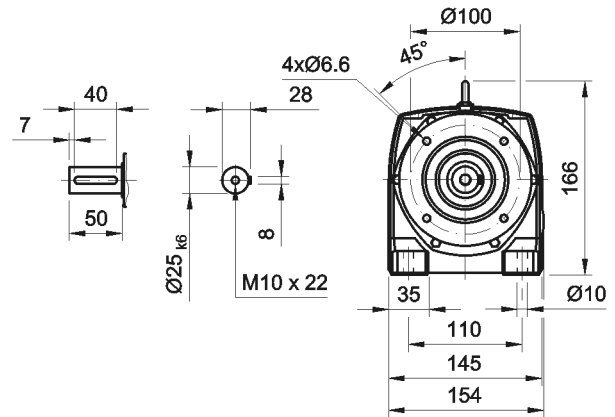
	63	71	80	90S	90L	100	112												
kl	299	299	299	299	299	299	299												
cl	8	8	10	10	10	12	12												
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7												
Øem	115	130	165	165	165	215	215												
Øam	140	160	200	200	200	250	250												
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5												
kc																			



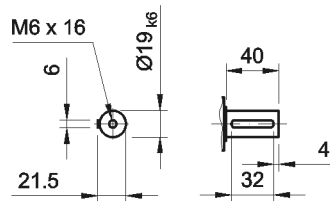
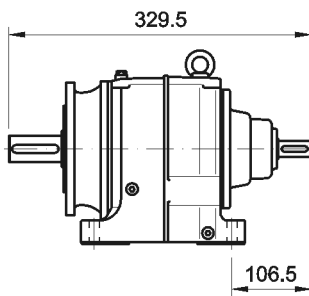
SIFR16B/C-U
63 - 112



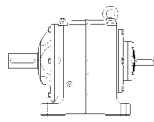
SIFR16..



SIFR16B/C-I

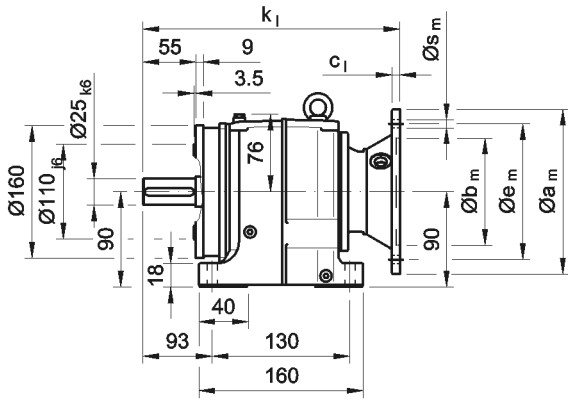


	63	71	80	90S	90L	100	112										
kl	317	317	317	317	317	317	317										
cl	8	8	10	10	10	12	12										
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7										
Øem	115	130	165	165	165	215	215										
Øam	140	160	200	200	200	250	250										
Øsm	4xM6x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5										
kc																	

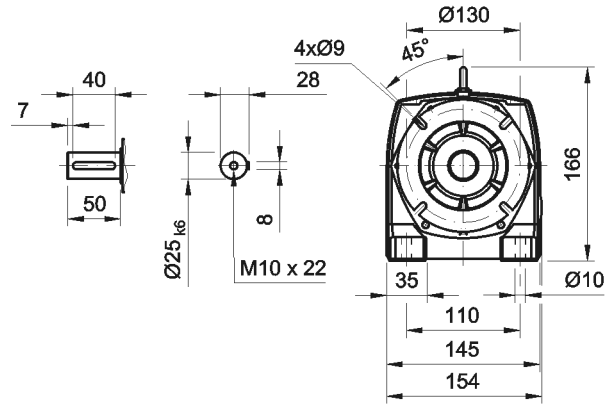


4. SI4

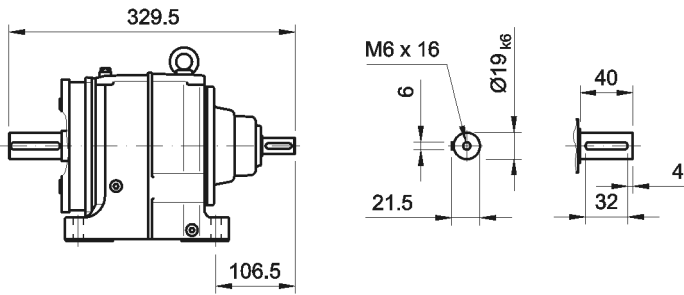
SIFE16B/C-U
63 - 112



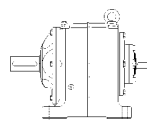
SIFE16..



SIFE16B/C-I

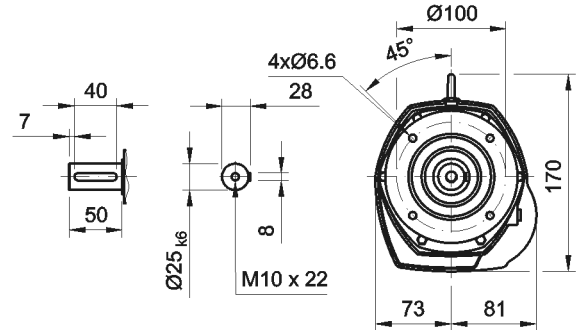
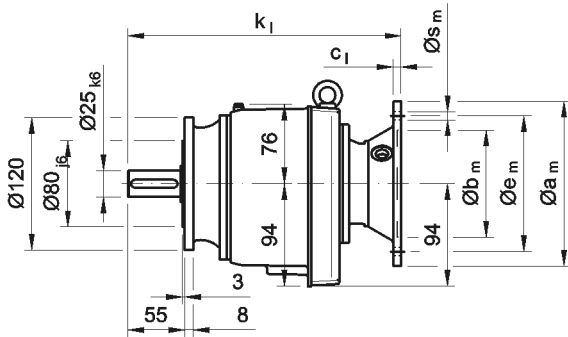


	63	71	80	90S	90L	100	112											
kl	317	317	317	317	317	317	317											
cl	8	8	10	10	10	12	12											
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Øem	115	130	165	165	165	215	215											
Øam	140	160	200	200	200	250	250											
Øsm	4x M&x16	4x M&x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5											
kc																		

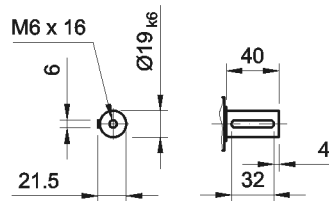
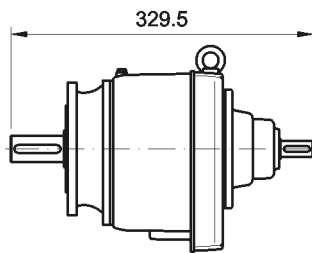


SICR16B/C-U
63 - 112

SICR16..

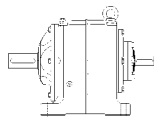


SICR16B/C-I



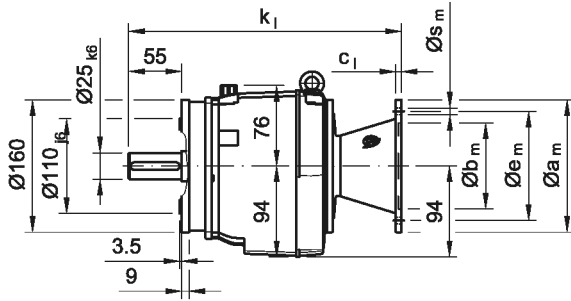
4

	63	71	80	90S	90L	100	112										
kl	317	317	317	317	317	317	317										
cl	8	8	10	10	10	12	12										
Øbm	96H7	110H7	130H7	130H7	130H7	180H7	180H7										
Øem	115	130	165	165	165	215	215										
Øam	140	160	200	200	200	250	250										
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5										
kc																	

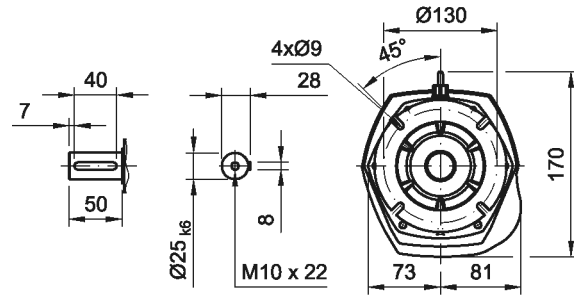


4. SI4

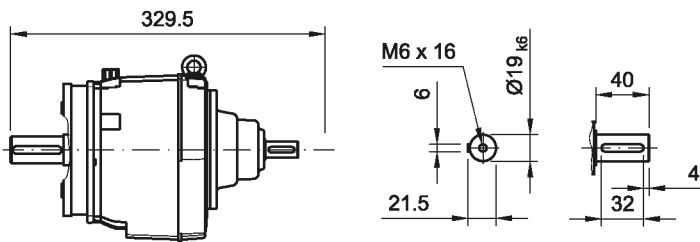
SICE16B/C-U
63 - 112



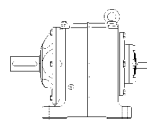
SICE16..



SICE16B/C-I

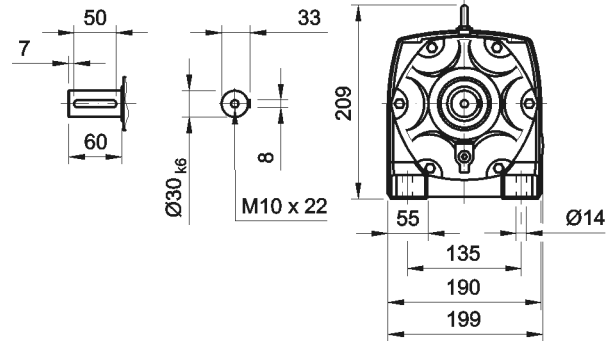
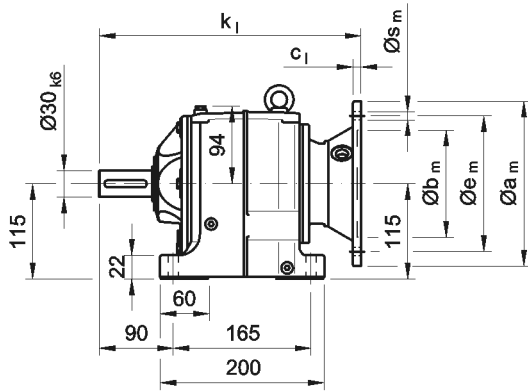


	63	71	80	90S	90L	100	112												
kl	317	317	317	317	317	317	317												
ci	8	8	10	10	10	12	12												
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7												
Øem	115	130	165	165	165	215	215												
Øam	140	160	200	200	200	250	250												
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5												
kc																			

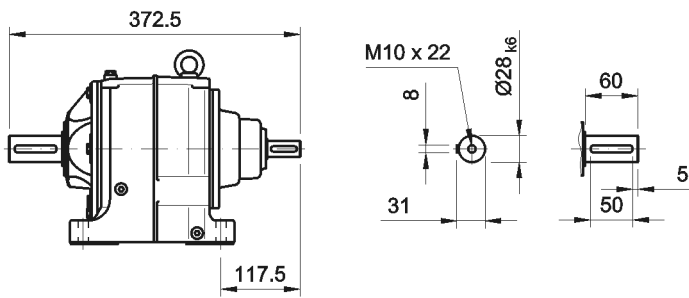


SIFN26B/C-U
71 - 132

SIFN26..

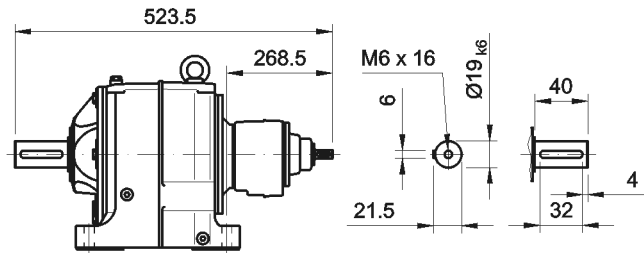
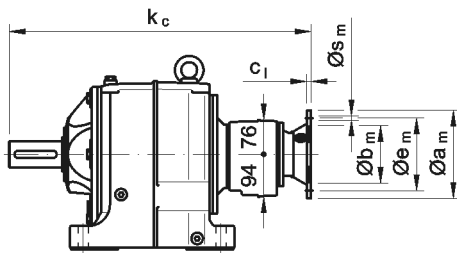


SIFN26B/C-I

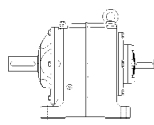


SIFN26C16B/C-U
63 - 112

SIFN26C16B/C-I

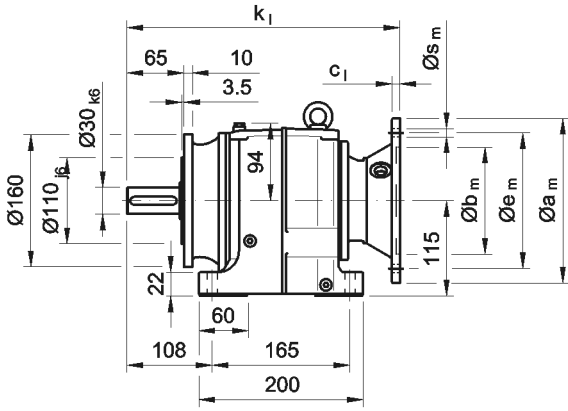


	63	71	80	90S	90L	100	112	132S	132M									
kl		340	340	340	340	340	340	403	403									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M	4x M	4 x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
kc	511	511	511	511	511	511	511											

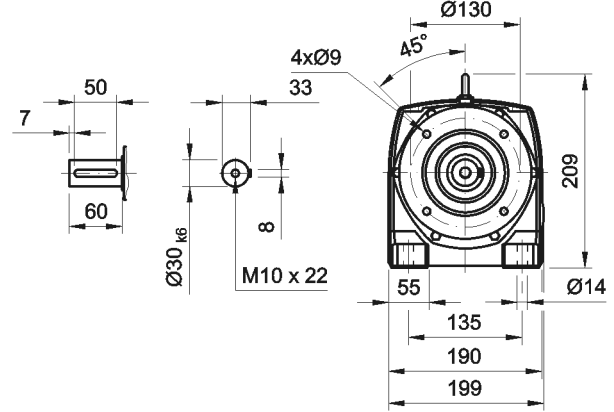


4. SI4

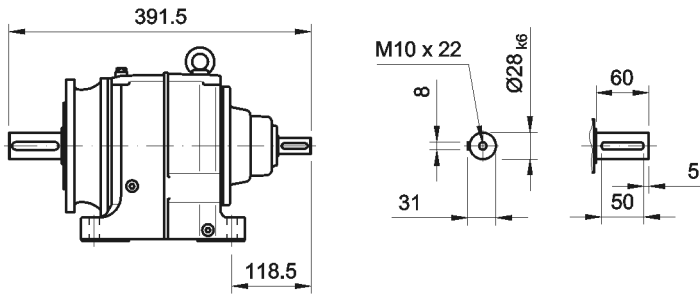
SIFR26B/C-U
71 - 132



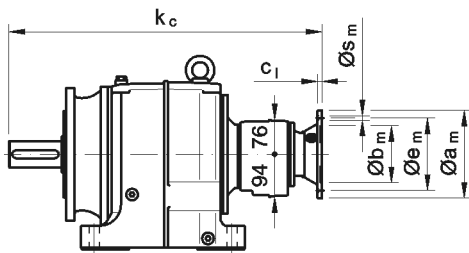
SIFR26..



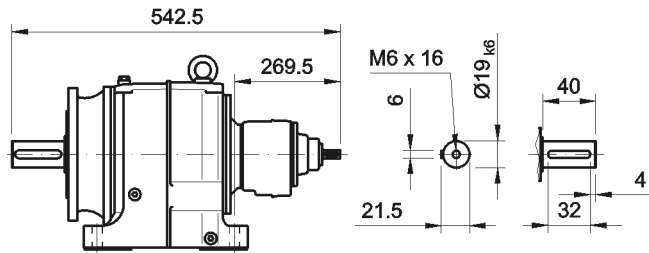
SIFR26B/C-I



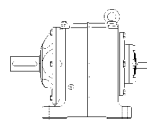
SIFR26C16B/C-U
63 - 112



SIFR26C16B/C-I

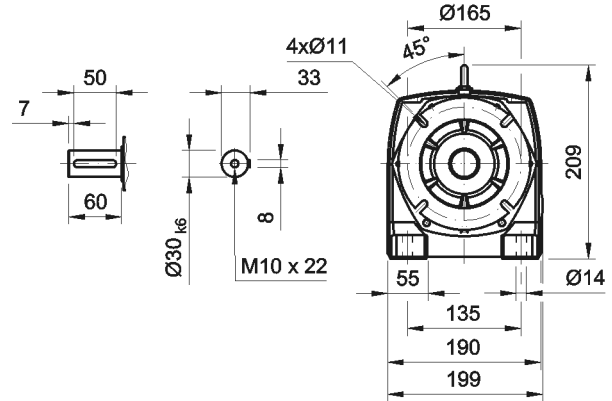
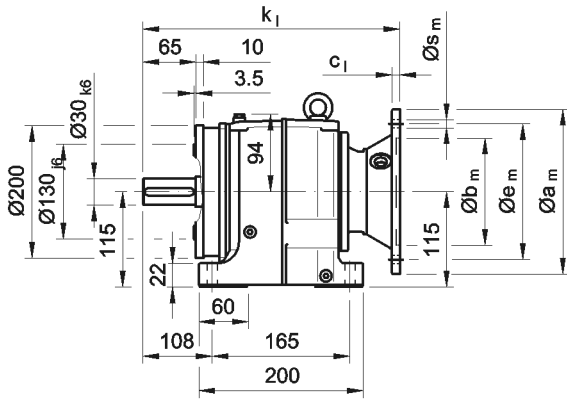


	63	71	80	90S	90L	100	112	132S	132M									
k_l		359	359	359	359	359	369	422	422									
c_l	8	8	10	10	10	12	12	13	13									
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Ø_{em}	115	130	165	165	165	215	215	265	265									
Ø_{am}	140	160	200	200	200	250	250	300	300									
Ø_{sm}	4xM6x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
k_c	530	530	530	530	530	530	530											

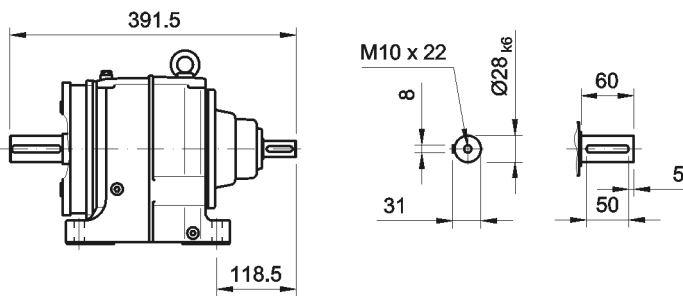


SIFE26B/C-U
71 - 132

SIFE26..

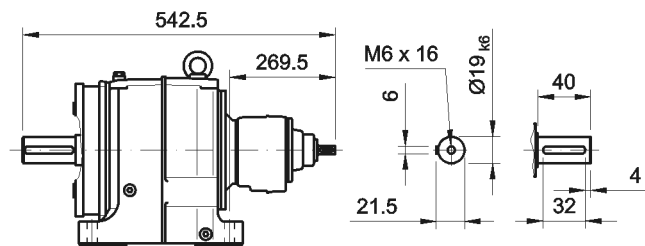
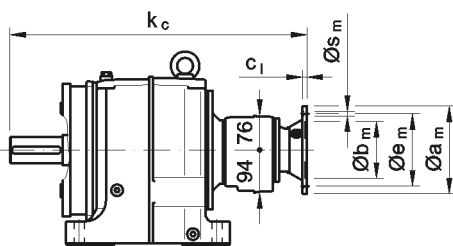


SIFE26B/C-I

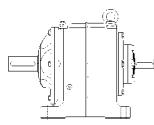


SIFE26C16B/C-U
63 - 112

SIFE26C16B/C-I

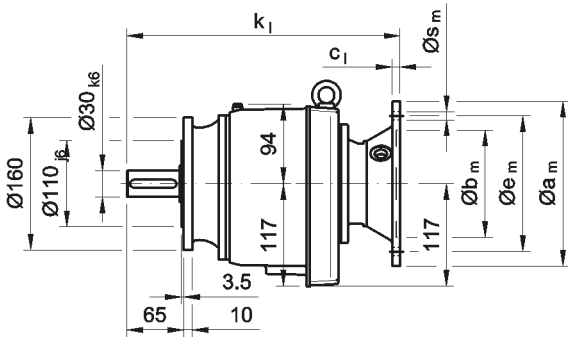


	63	71	80	90S	90L	100	112	132S	132M									
k_l		359	359	359	359	359	359	422	422									
c_l	8	8	10	10	10	12	12	13	13									
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Ø_{em}	115	130	165	165	165	215	215	265	265									
Ø_{am}	140	160	200	200	200	250	250	300	300									
Ø_{sm}	4x M	4x M	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
k_c	530	530	530	530	530	530	530											

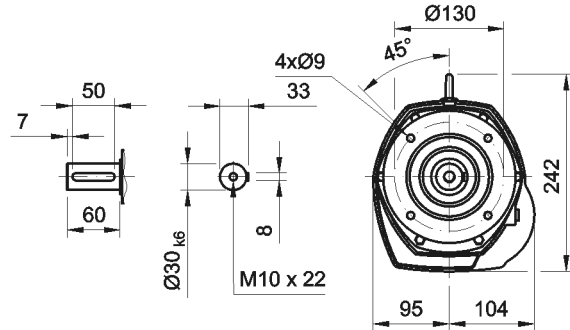


4. SI4

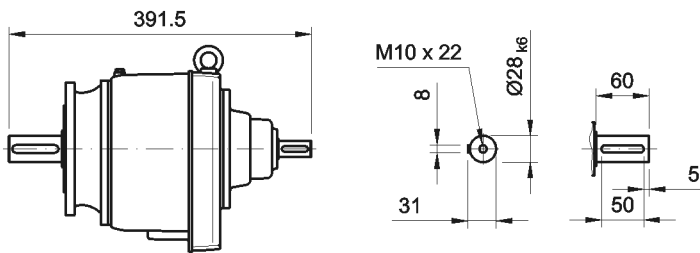
SICR26B/C-U
71 - 132



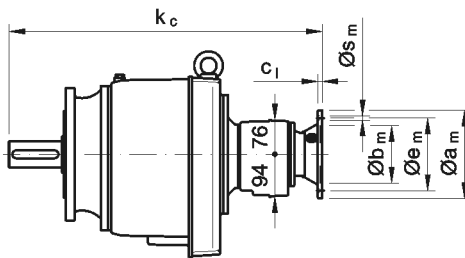
SICR26..



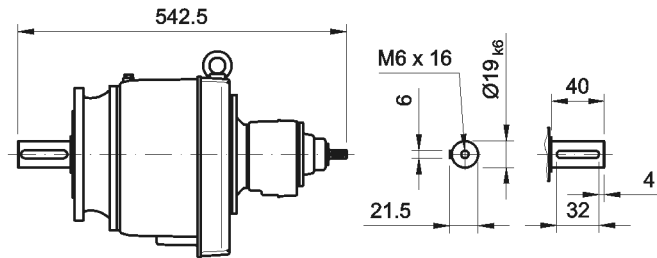
SICR26B/C-I



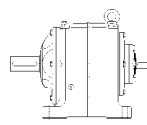
SICR26C16B/C-U
63 - 112



SICR26C16B/C-I

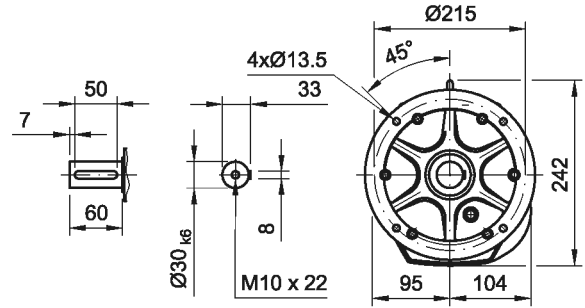
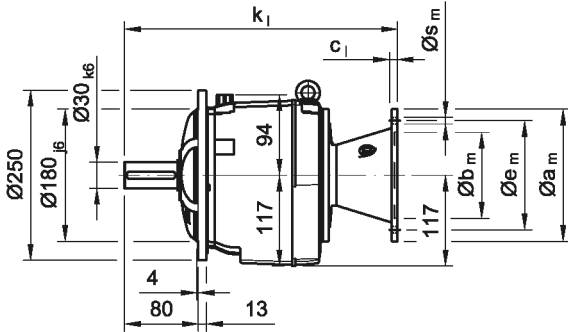


	63	71	80	90S	90L	100	112	132S	132M										
kl		359	359	359	359	359	359	422	422										
cl	8	8	10	10	10	12	12	13	13										
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7										
Øem	115	130	165	165	165	215	215	265	265										
Øam	140	160	200	200	200	250	250	300	300										
Øsm	4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5										
kc	530	530	530	530	530	530	530												

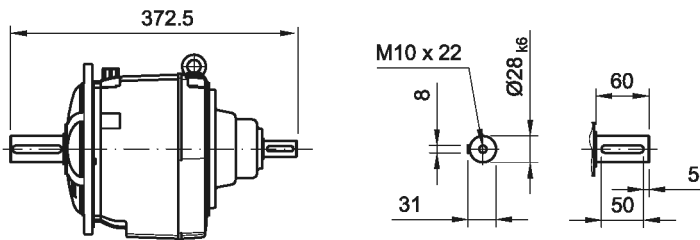


SICF26B/C-U
71 - 132

SICF26..

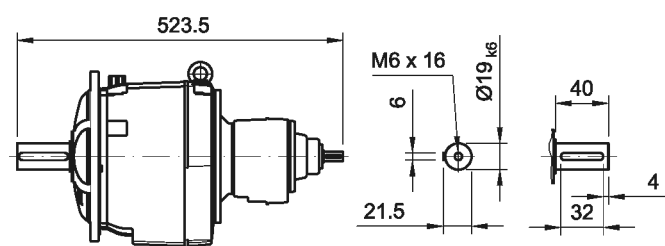
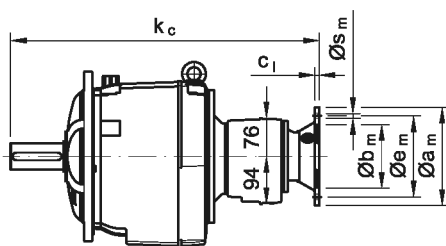


SICF26B/C-I

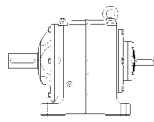


SICF26C16B/C-U
63 - 112

SICF26C16B/C-I

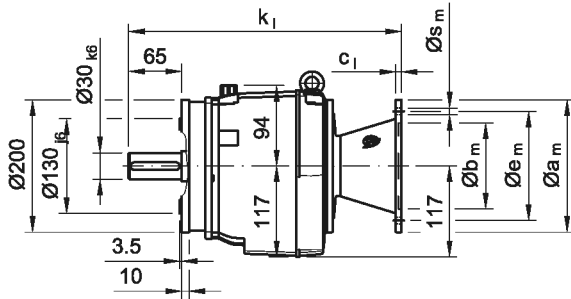


	63	71	80	90S	90L	100	112	132S	132M									
kl		340	340	340	340	340	340	403	403									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M6x16	4x Ø9	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
kc	511	511	511	511	511	511	511											

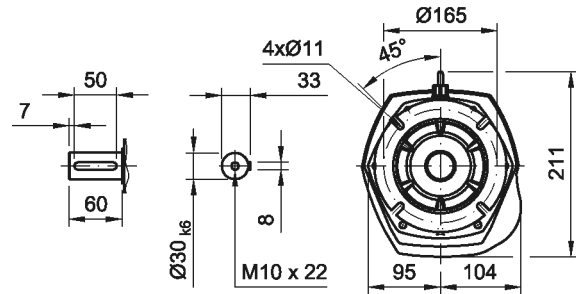


4. SI4

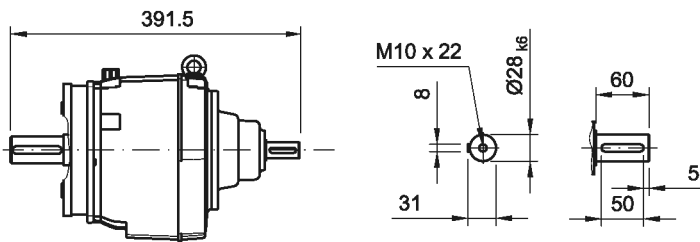
SICE26B/C-U
71 - 132



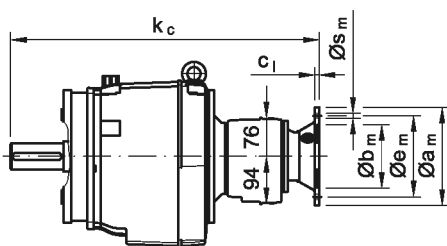
SICE26..



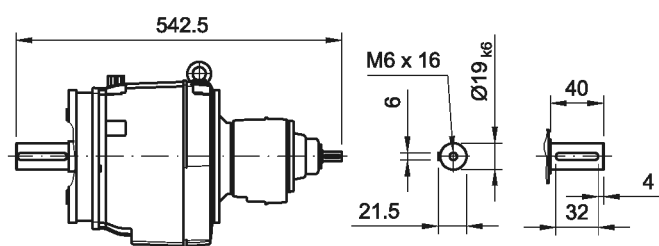
SICE26B/C-I



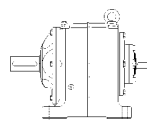
SICE26C16B/C-U
63 - 112



SICE26C16B/C-I

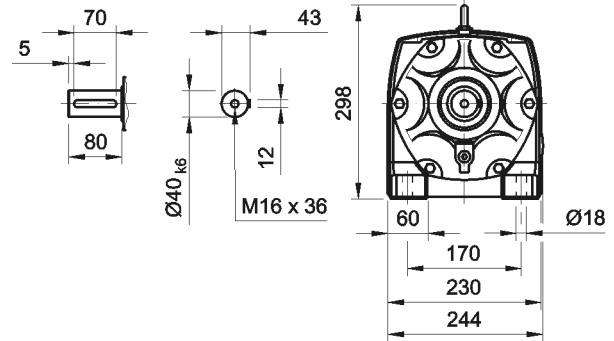
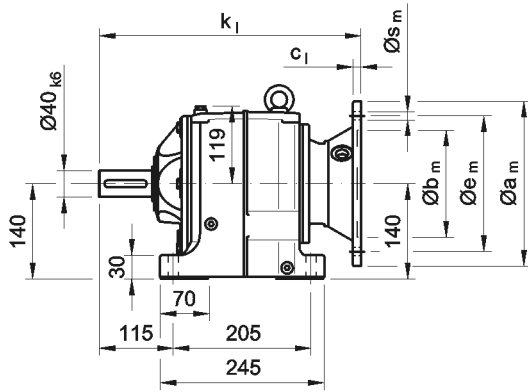


	63	71	80	90S	90L	100	112	132S	132M											
k_l		359	359	359	359	359	359	422	422											
c_l	8	8	10	10	10	12	12	13	13											
Ø_{b_m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7											
Ø_{e_m}	115	130	165	165	165	215	215	265	265											
Ø_{a_m}	140	160	200	200	200	250	250	300	300											
Ø_{s_m}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5											
k_c	530	530	530	530	530	530	530													

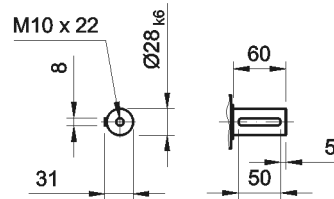
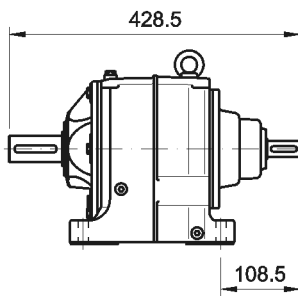


SIFN36B/C-U
71 - 132

SIFN36..

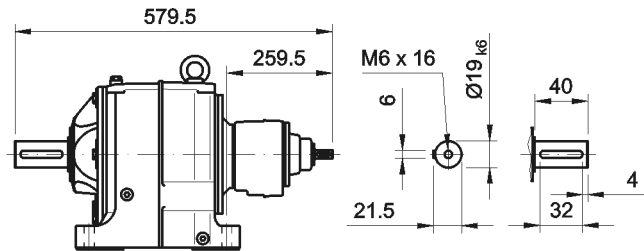
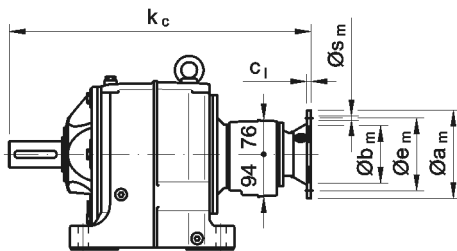


SIFN36B/C-I

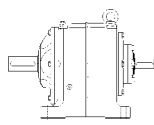


SIFN36C16B/C-U
63 - 112

SIFN36C16B/C-I

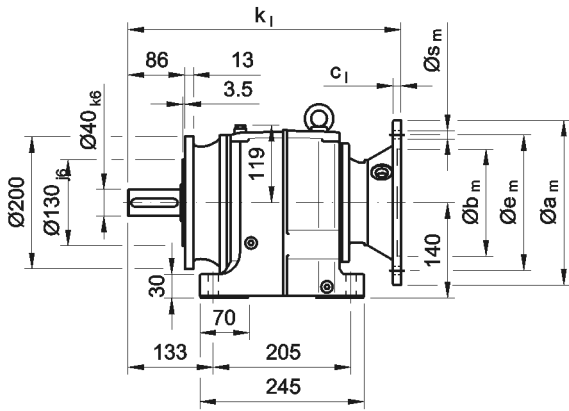


	63	71	80	90S	90L	100	112	132S	132M										
kl		396	396	396	396	396	396	459	459										
cl		8	8	10	10	10	12	12	13										
Øbm		95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem		115	130	165	165	165	215	215	265	265									
Øam		140	160	200	200	200	250	250	300	300									
Øsm		4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
kc		567	567	567	567	567	567	567											

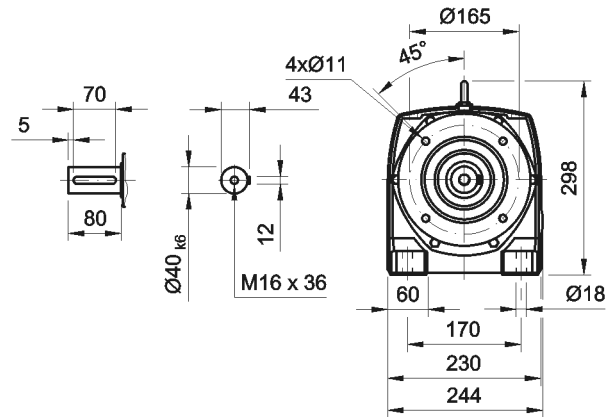


4. SI4

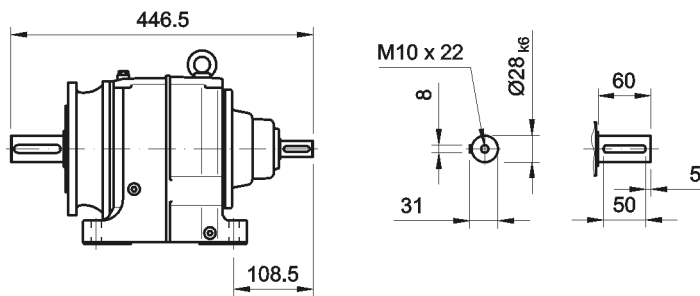
SIFR36B/C-U
71 - 132



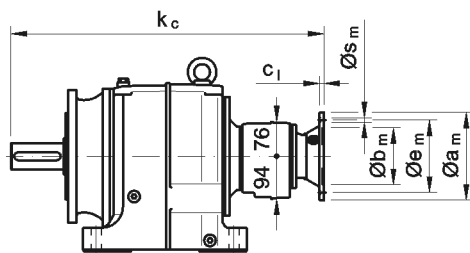
SIFR36..



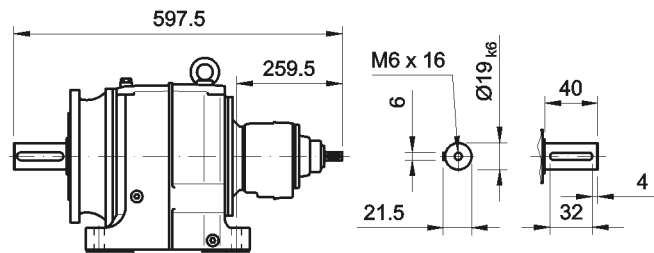
SIFR36B/C-I



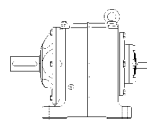
SIFR36C16B/C-U
63 - 112



SIFR36C16B/C-I

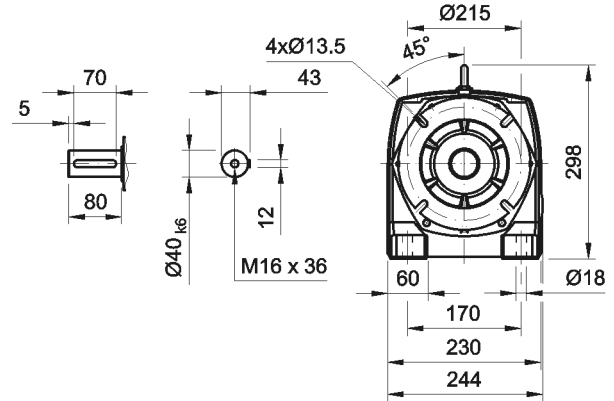
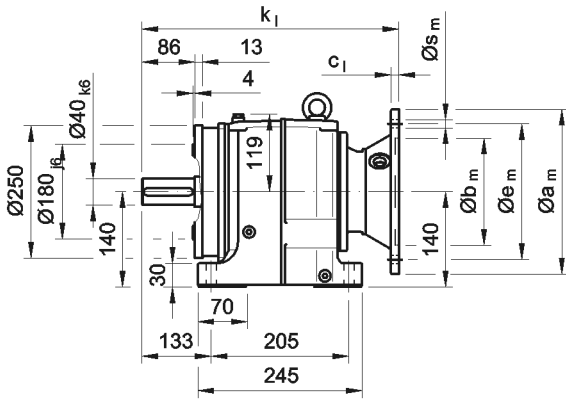


	63	71	80	90S	90L	100	112	132S	132M									
kl		414	414	414	414	414	414	477	477									
cl		8	8	10	10	10	12	12	13	13								
Øbm		95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7								
Øem		115	130	165	165	165	215	215	265	265								
Øam		140	160	200	200	200	250	250	300	300								
Øsm		4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5								
kc		585	585	585	585	585	585	585										

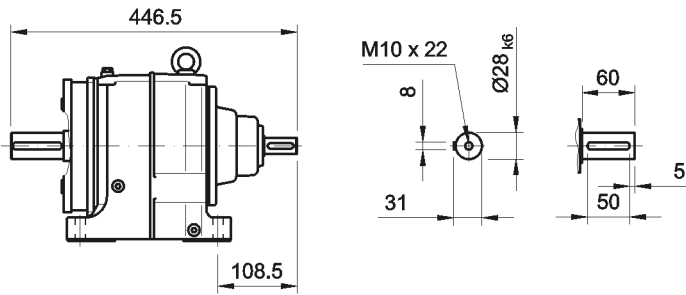


SIFE36B/C-U
71 - 132

SIFE36..

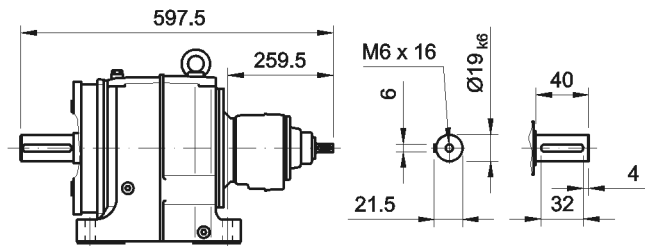
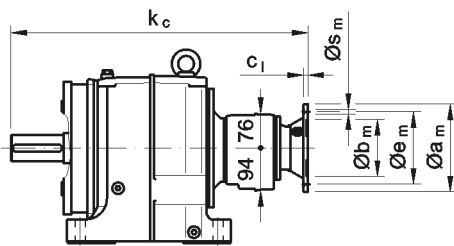


SIFE36B/C-I

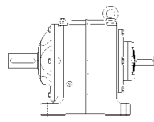


SIFE36C16B/C-U
63 - 112

SIFE36C16B/C-I

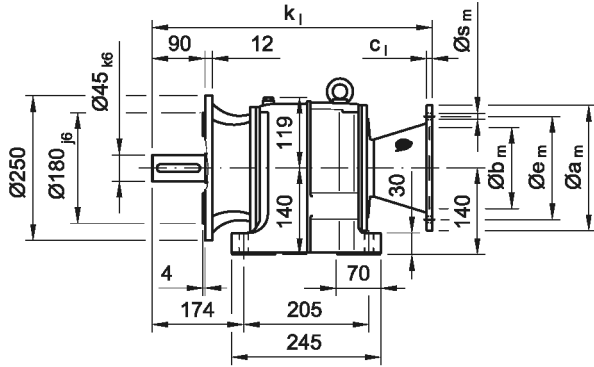


	63	71	80	90S	90L	100	112	132S	132M									
kl		414	414	414	414	414	414	477	477									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M&16	4x M&16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5									
kc	585	585	585	585	585	585	585											

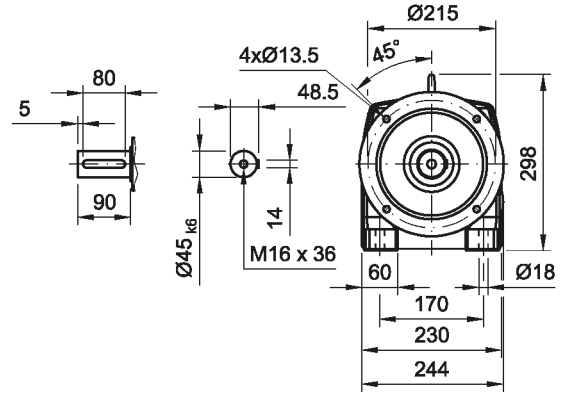


4. SI4

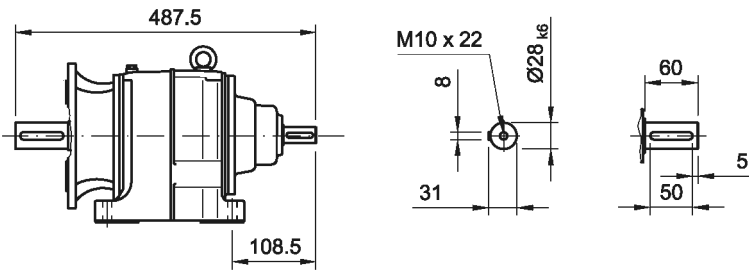
SIFM36B/U
71-132



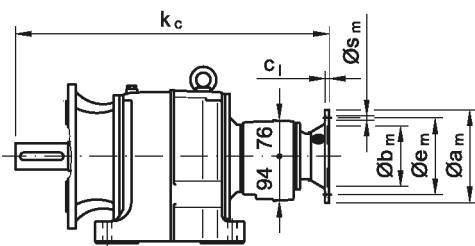
SIFM36..



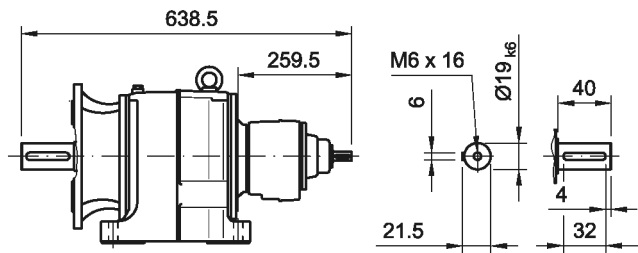
SIFM36B/I



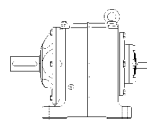
SIFM36B16B/C-U
63-112



SIFM36B16B/C-I
71-132

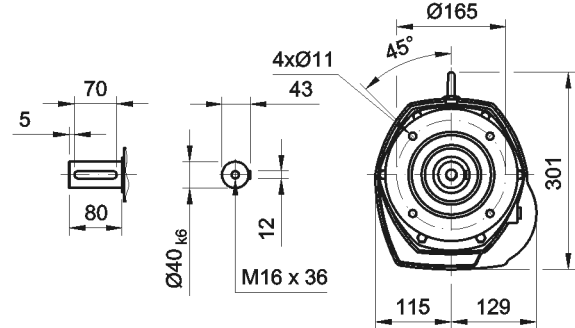
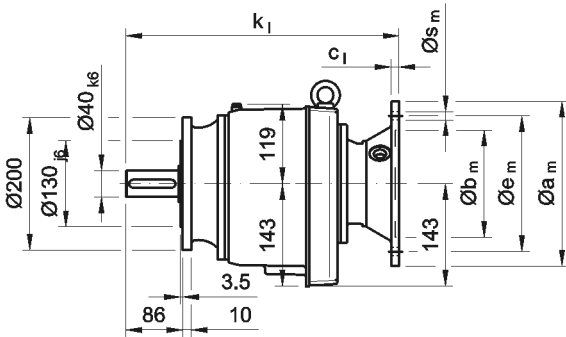


	63	71	80	90S	90L	100	112	132S	132M										
kl		455	455	455	455	455	455	518	518										
cl	8	8	10	10	10	12	12	13	13										
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7										
Øem	115	130	165	165	165	215	215	265	265										
Øam	140	160	200	200	200	250	250	300	300										
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5										
kc	626	626	626	626	626	626	626												

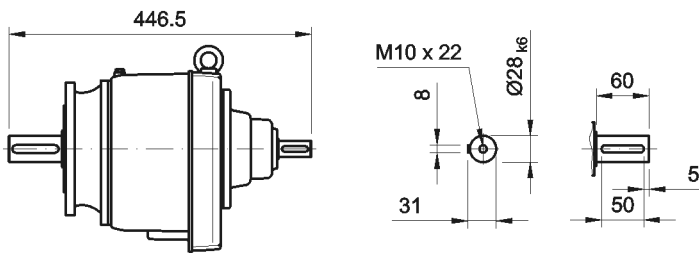


SICR36B/C-U
71 - 132

SICR36..

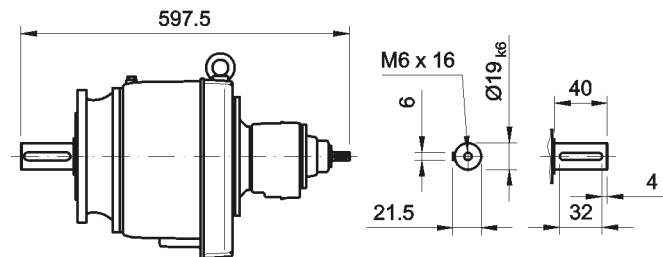
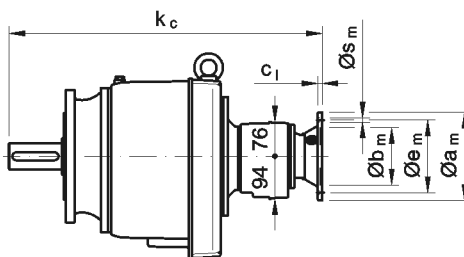


SICR36B/C-I

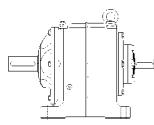


SICR36C16B/C-U
63 - 112

SICR36C16B/C-I

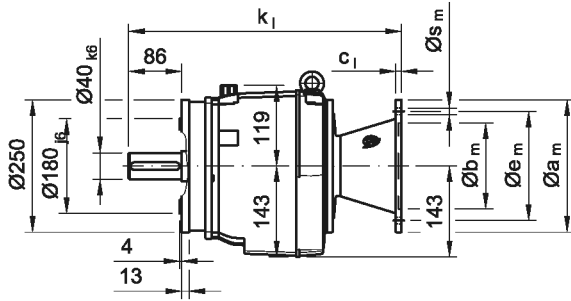


	63	71	80	90S	90L	100	112	132S	132M									
kl		414	414	414	414	414	414	477	477									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
kc	585	585	585	585	585	585	585											

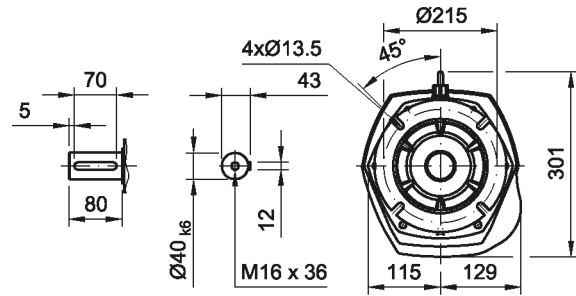


4. SI4

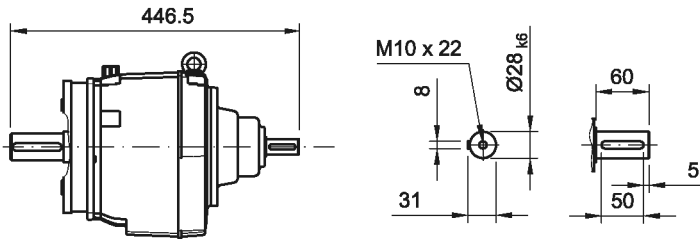
SICE36B/C-U
71 - 132



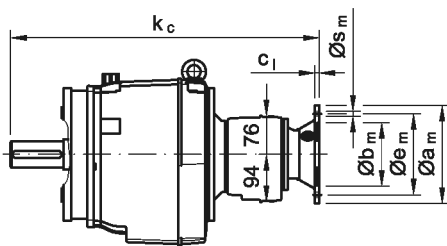
SICE36..



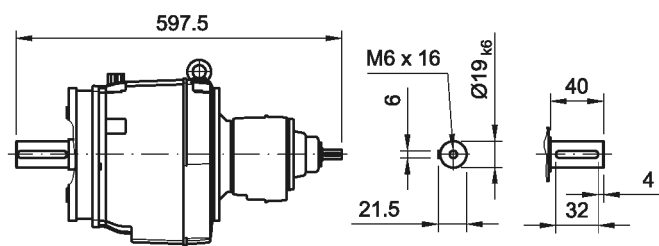
SICE36B/C-I



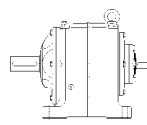
SICE36C16B/C-U
63 - 112



SICE36C16B/C-I

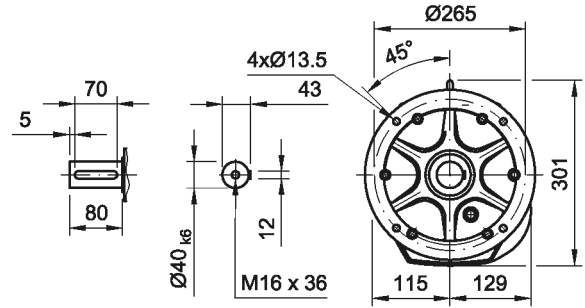
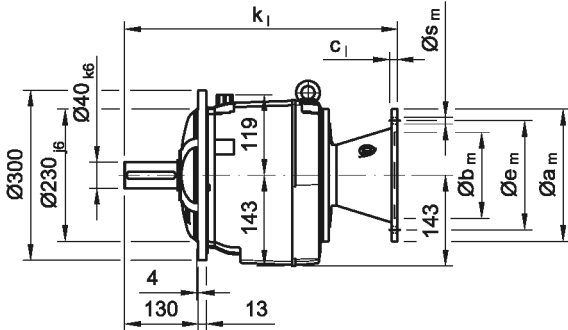


	63	71	80	90S	90L	100	112	132S	132M											
k_l		414	414	414	414	414	414	477	477											
c_l	8	8	10	10	10	12	12	13	13											
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7											
Ø_{em}	115	130	165	165	165	215	215	265	265											
Ø_{am}	140	160	200	200	200	250	250	300	300											
Ø_{sm}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5											
k_c	585	585	585	585	585	585	585													

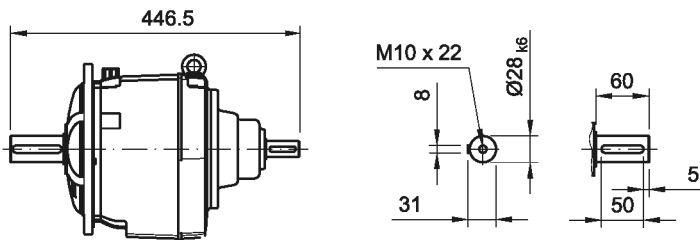


SICF36B/C-U
71 - 132

SICF36..

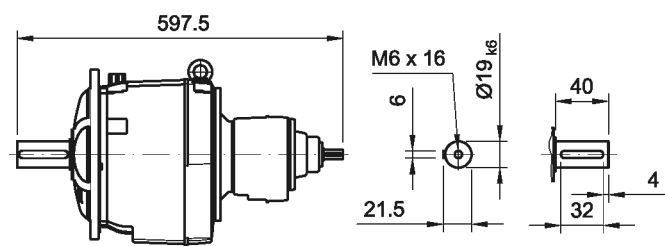
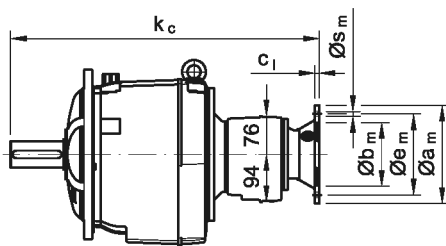


SICF36B/C-I

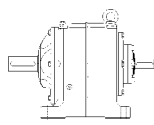


SICF36C16B/C-U
63 - 112

SICF36C16B/C-I

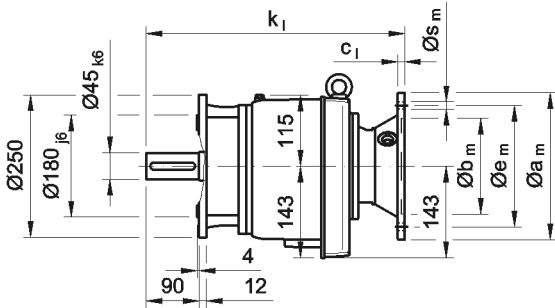


	63	71	80	90S	90L	100	112	132S	132M									
kl		414	414	414	414	414	414	477	477									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M8x16	4x Ø9	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
kc	585	585	585	585	585	585	585											

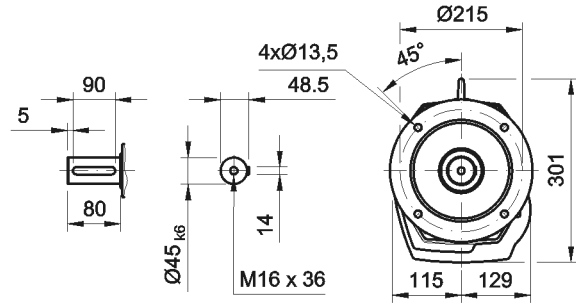


4. SI4

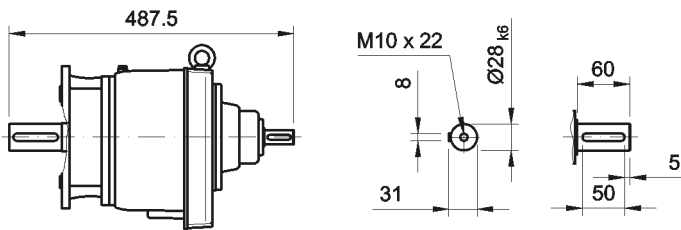
SICM36B/U
71-132



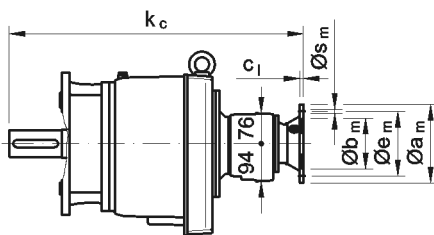
SICM36..



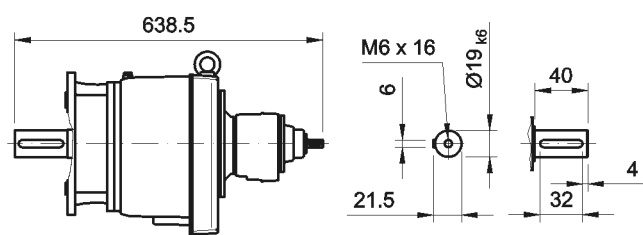
SICM36B/I



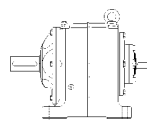
SICM36B16B/C-U
71-132



SICM36B16B/C-I

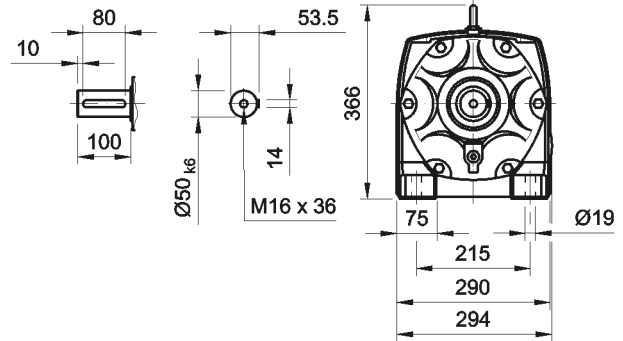
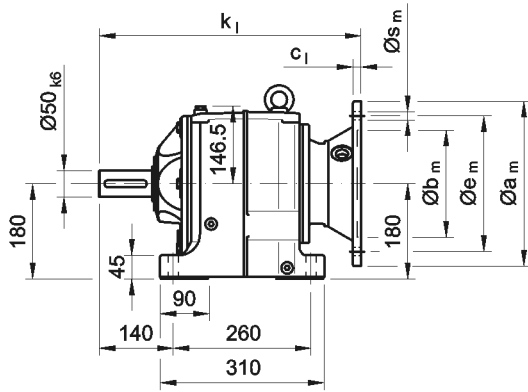


	63	71	80	90S	90L	100	112	132S	132M											
k_l		455	455	455	455	455	455	518	518											
c_l	8	8	10	10	10	12	12	13	13											
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7											
Ø_{em}	115	130	165	165	165	215	215	265	265											
Ø_{am}	140	160	200	200	200	250	250	300	300											
Ø_{sm}	4xM6x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5											
k_c	626	626	626	626	626	626	626													

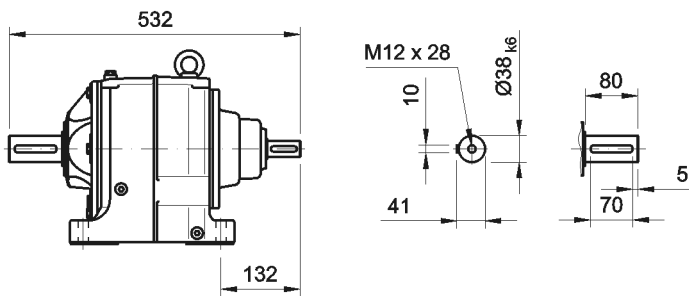


SIFN46B/C-U
80 - 180

SIFN46..

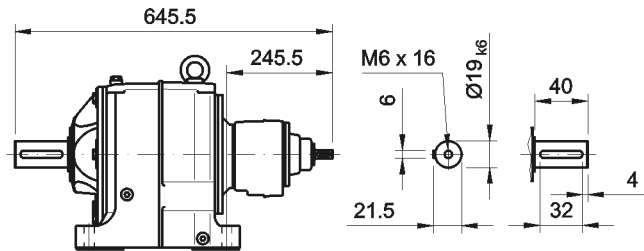
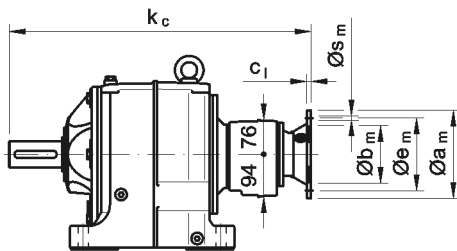


SIFN46B/C-I

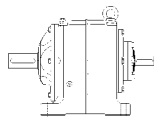


SIFN46C16B/C-U
63 - 112

SIFN46C16B/C-I

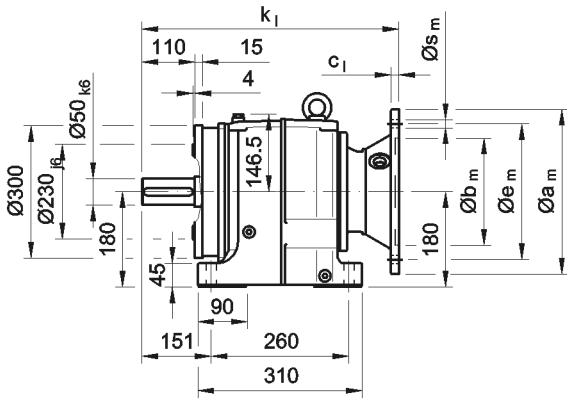


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			463	463	463	463	463	526	526	591	591	591	591						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	633	633	633	633	633	633	633												

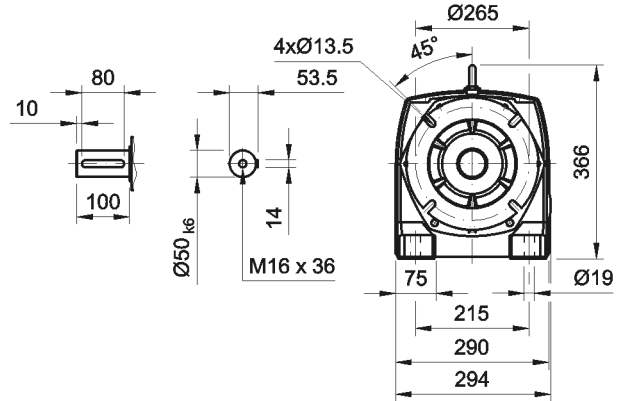


4. SI4

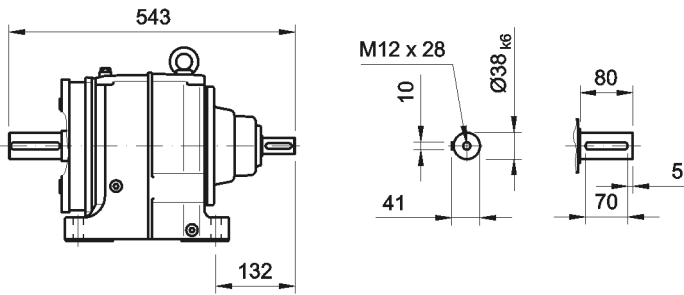
SIFE46B/C-U
80 - 180



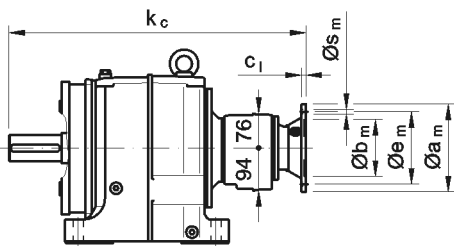
SIFE46..



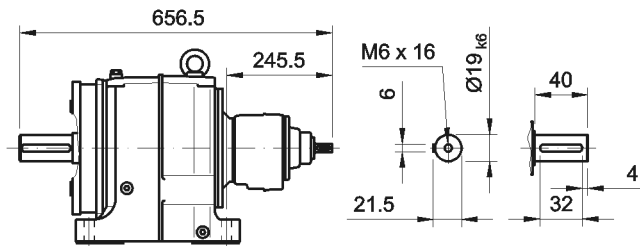
SIFE46B/C-I



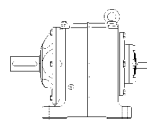
SIFE46C16B/C-U
63 - 112



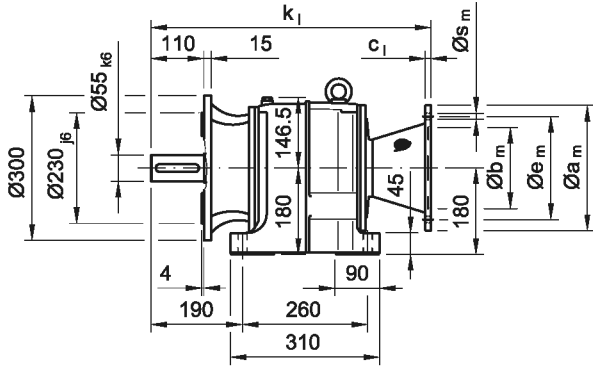
SIFE46C16B/C-I



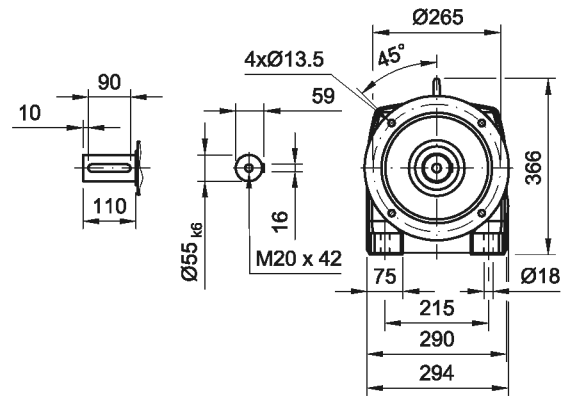
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
k_l			474	474	474	474	474	537	537	602	602	602	602						
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15						
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Ø_{em}	115	130	165	165	165	215	215	265	265	300	300	300	300						
Ø_{am}	140	160	200	200	200	250	250	300	300	350	350	350	350						
Ø_{sm}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
k_c	644	644	644	644	644	644	644												



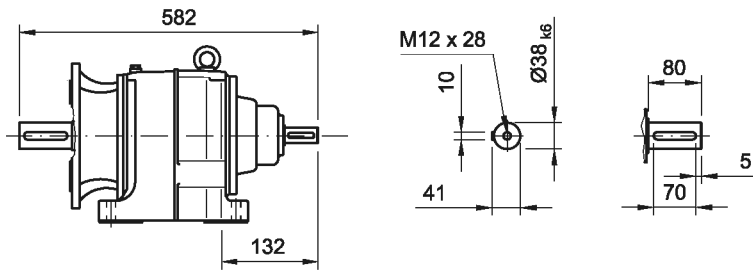
SIFM46B/C-U
80 - 180



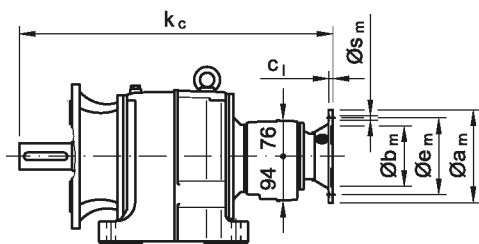
SIFM46..



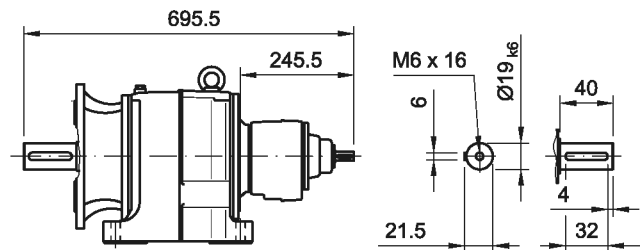
SIFM46B/C-I



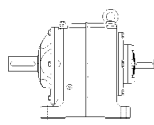
SIFM46C16B/C-U
63 - 112



SIFM46C16B/C-I

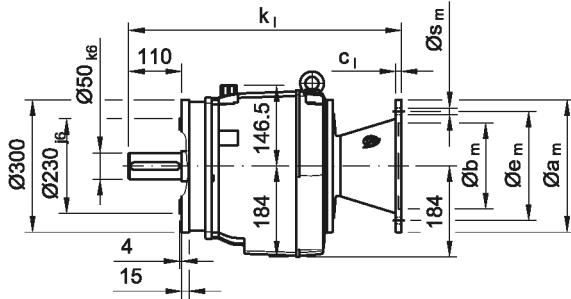


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			513	513	513	513	513	576	576	641	641	641	641						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	683	683	683	683	683	683	683												

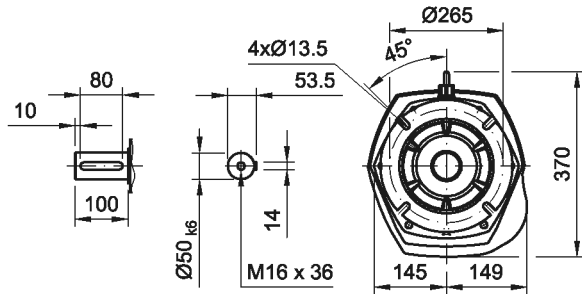


4. SI4

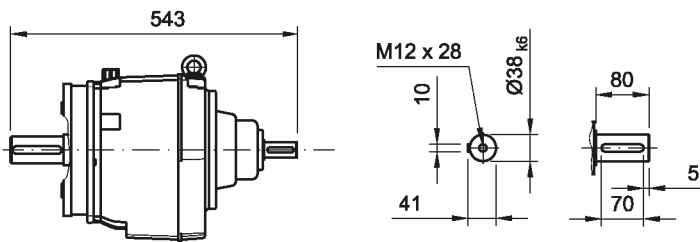
SICE46B/C-U
80 - 180



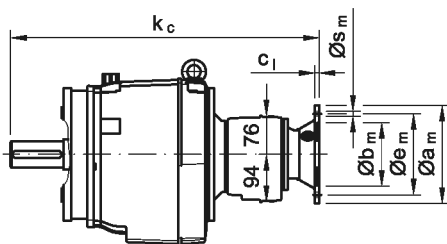
SICE46..



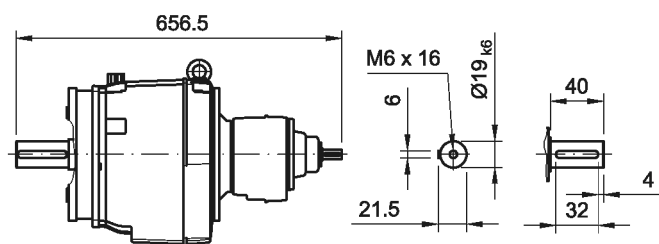
SICE46B/C-I



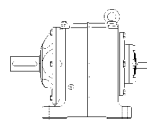
SICE46C16B/C-U
63 - 112



SICE46C16B/C-I

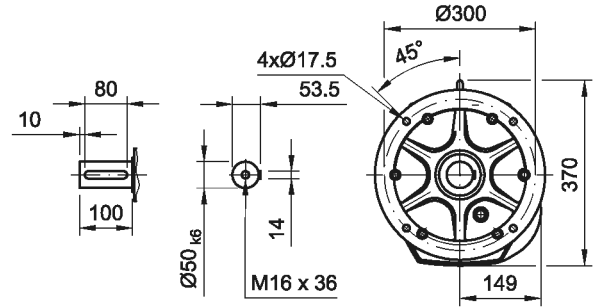
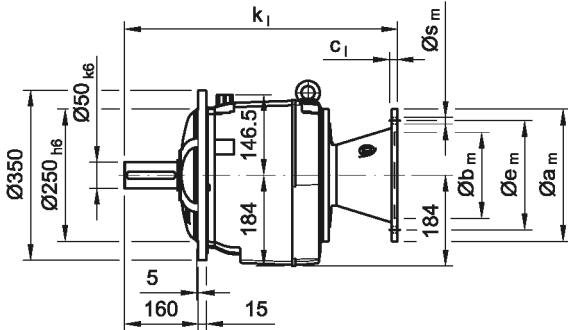


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
k_l			474	474	474	474	474	537	537	602	602	602	602						
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15						
Ø_{b_m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Ø_{e_m}	115	130	165	165	165	215	215	265	265	300	300	300	300						
Ø_{a_m}	140	160	200	200	200	250	250	300	300	350	350	350	350						
Ø_{s_m}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
k_c	644	644	644	644	644	644	644												

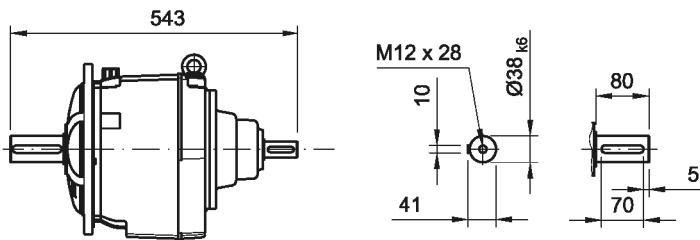


SICF46B/C-U
80 - 180

SICF46..

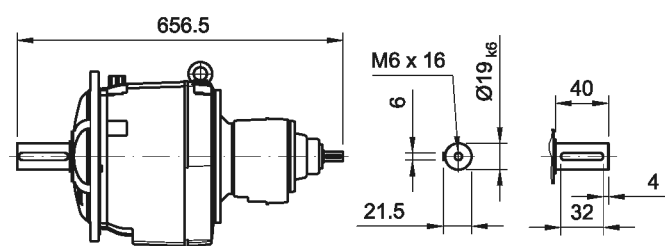
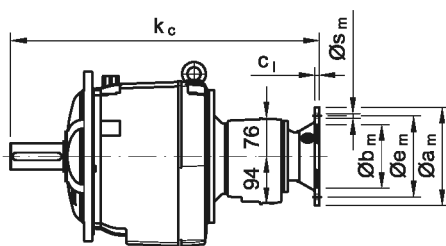


SICF46B/C-I

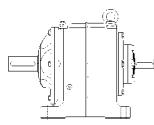


SICF46C16B/C-U
63 - 112

SICF46C16B/C-I

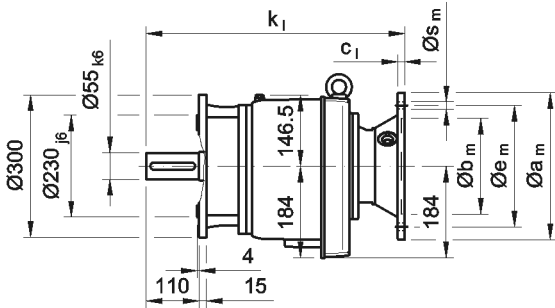


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			474	474	474	474	474	537	537	602	602	602	602						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	644	644	644	644	644	644	644												

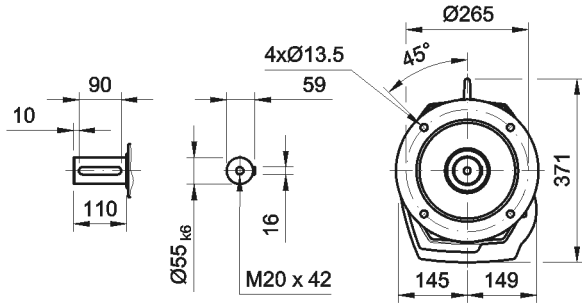


4. SI4

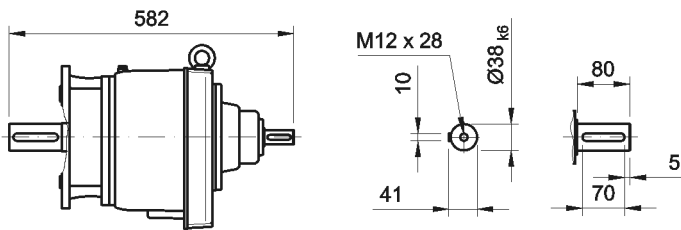
SICM46B/C-U
80 - 180



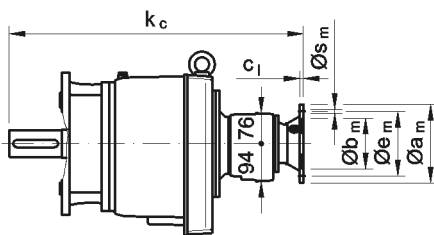
SICM46..



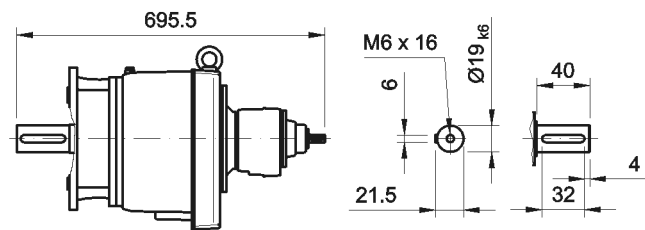
SICM46B/C-I



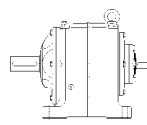
SICM46C16B/C-U
63 - 112



SICM46C16B/C-I



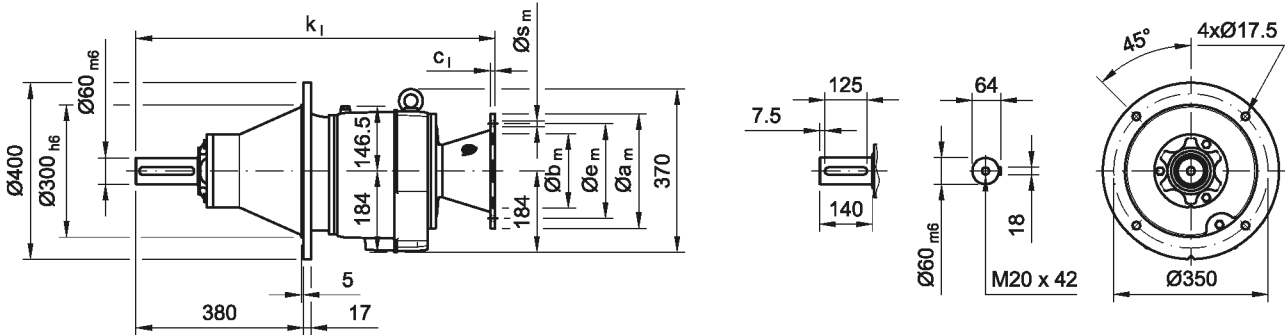
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
k_l			513	513	513	513	513	576	576	641	641	641	641						
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15						
Ø_{b m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Ø_{e m}	115	130	165	165	165	215	215	265	265	300	300	300	300						
Ø_{a m}	140	160	200	200	200	250	250	300	300	350	350	350	350						
Ø_{s m}	4xM6x16	4xM6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
k_c	683	683	683	683	683	683	683												



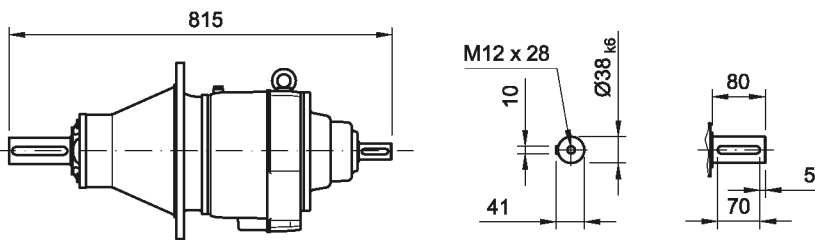
4. SI4

SICL46B/C-U
80 - 180

SICL46..

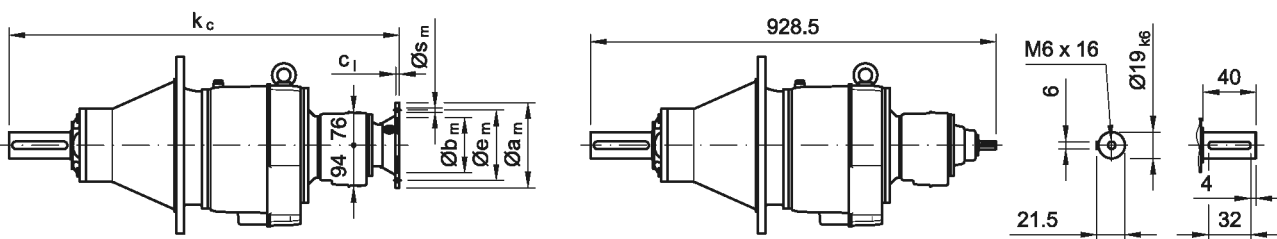


SICL46B/C-I

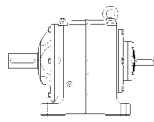


SICL46C16B/C-U
63 - 112

SICL46C16B/C-I

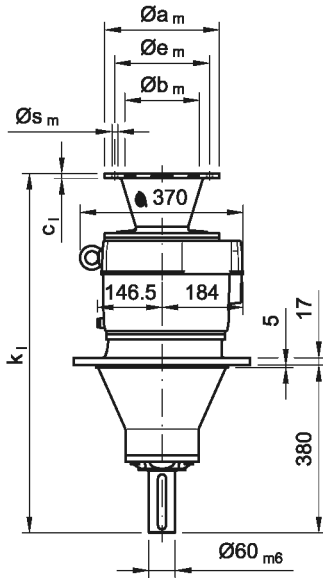


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			746	746	746	746	746	809	809	874	874	874	874						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	916	916	916	916	916	916	916												

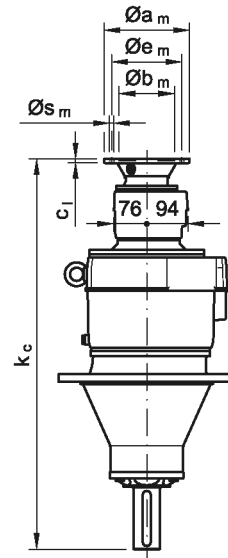


4. SI4

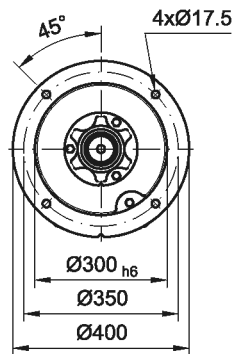
SICP46B/C-U
80 - 180



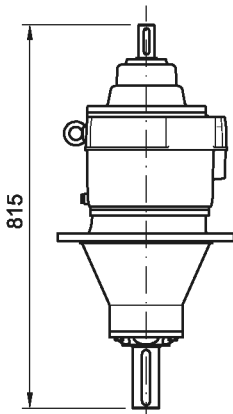
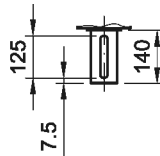
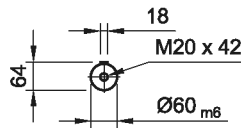
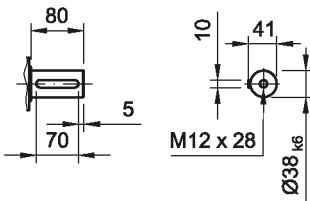
SICP46C16B/C-U
63 - 112



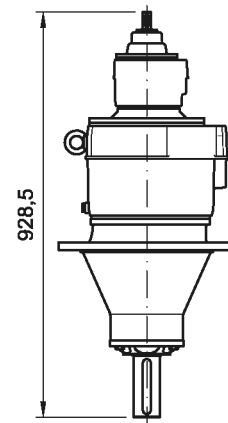
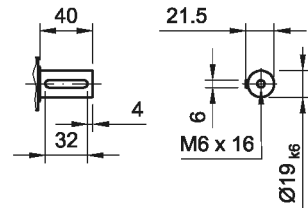
SICP46..



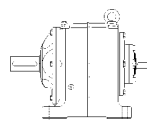
SICP46B/C-I



SICP46C16B/C-I

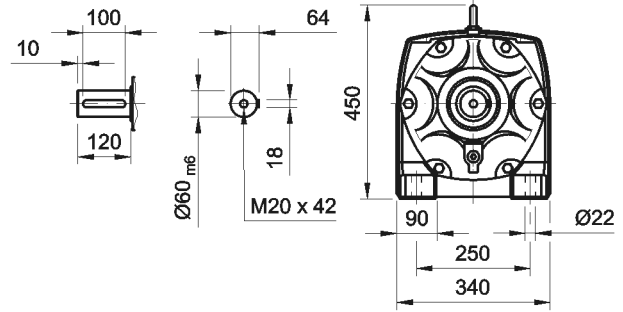
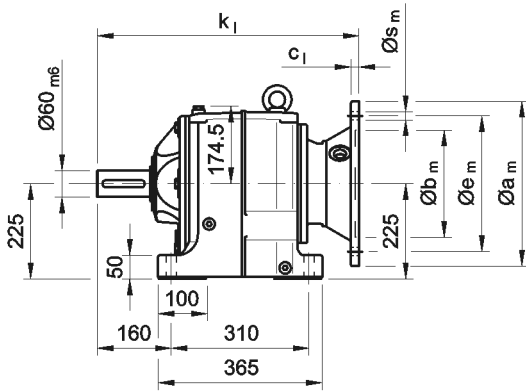


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			746	746	746	746	746	809	809	874	874	874	874						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	916	916	916	916	916	916	916												

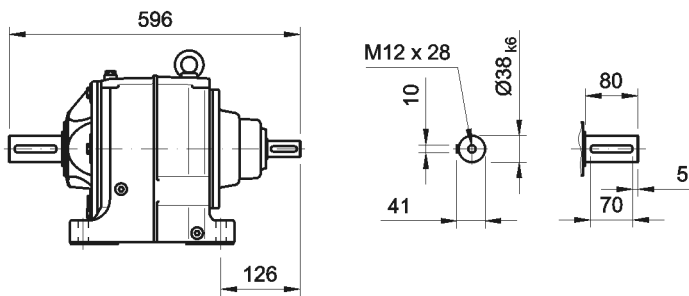


SIFN56B/C-U
80 - 180

SIFN56..

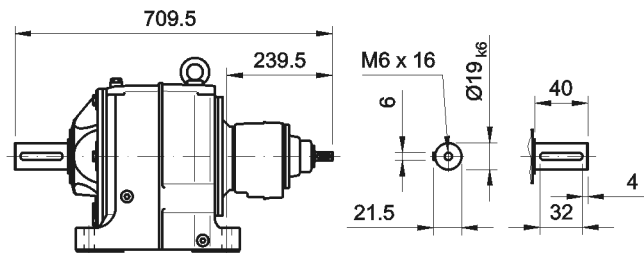
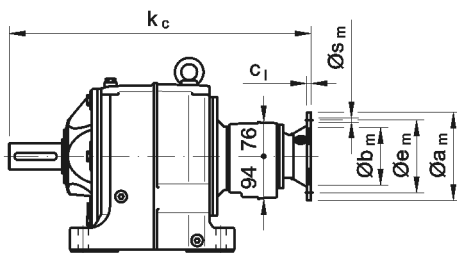


SIFN56B/C-I

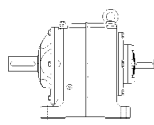


SIFN56C16B/C-U
63 - 112

SIFN56C16B/C-I

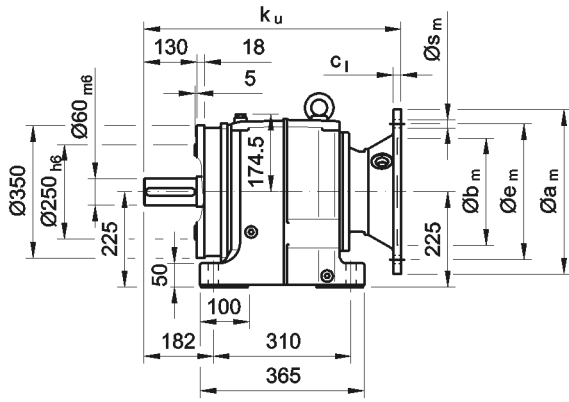


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			527	527	527	527	527	590	590	655	655	655	655						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	697	697	697	697	697	697	697												

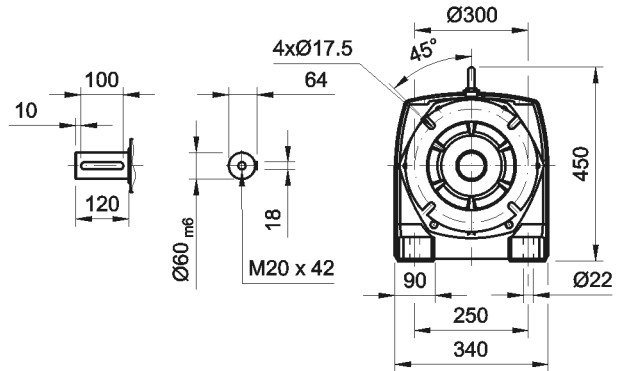


4. SI4

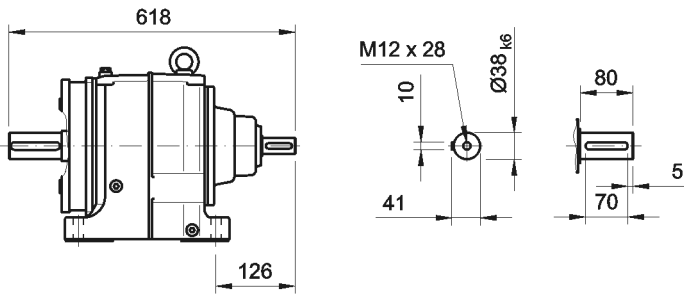
SIFE56B/C-U
80 - 180



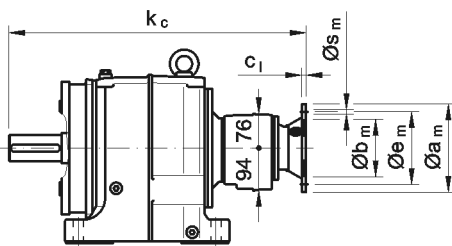
SIFE56..



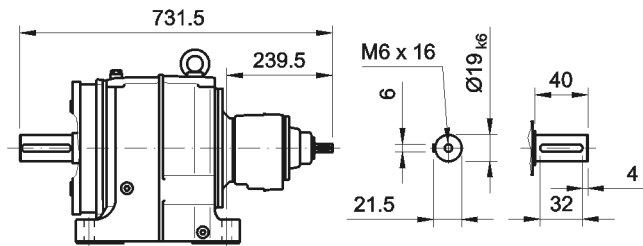
SIFE56B/C-I



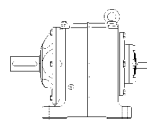
SIFE56C16B/C-U
63 - 112



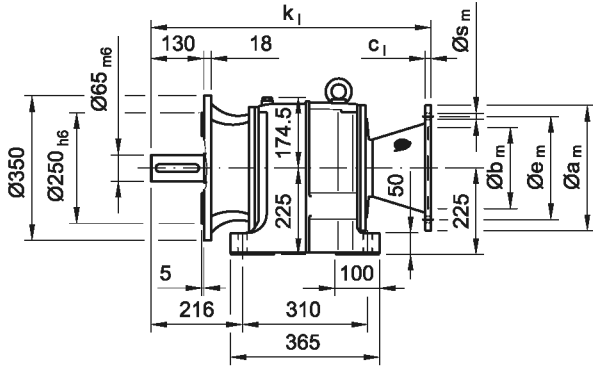
SIFE56C16B/C-I



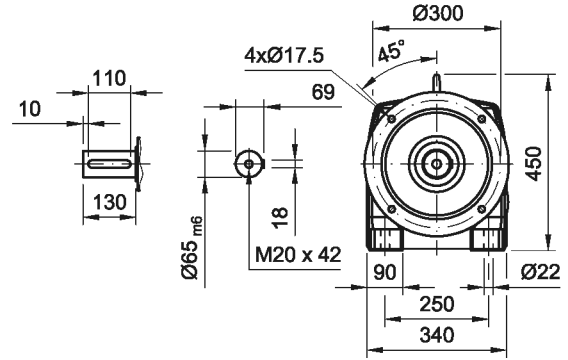
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			549	549	549	549	549	612	612	677	677	677	677						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M&x16	4x M&x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	719	719	719	719	719	719	719												



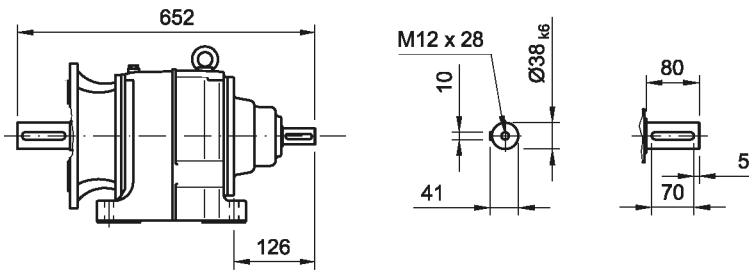
SIFM56B/C-U
80 - 180



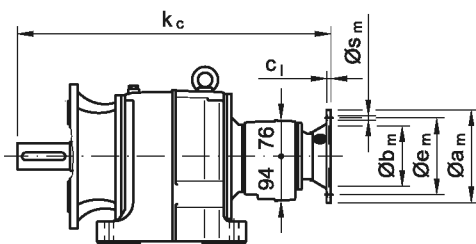
SIFM56..



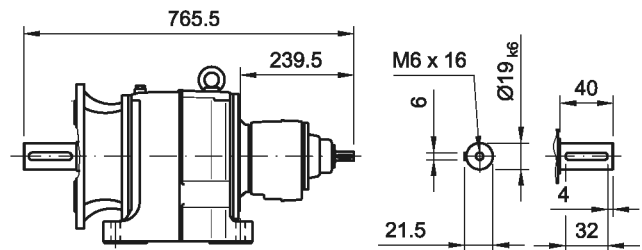
SIFM56B/C-I



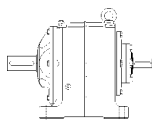
SIFM56C16B/C-U
63 - 112



SIFM56C16B/C-I

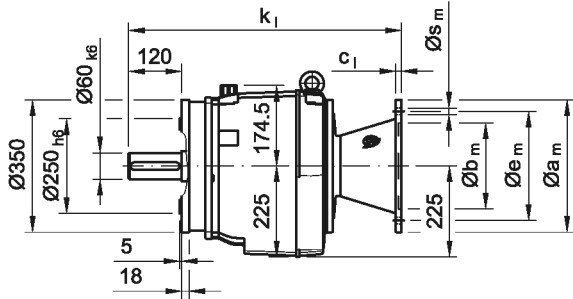


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			583	583	583	583	583	646	646	711	711	711	711						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	753	753	753	753	753	753	753												

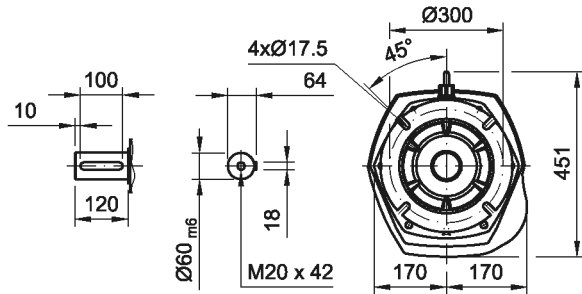


4. SI4

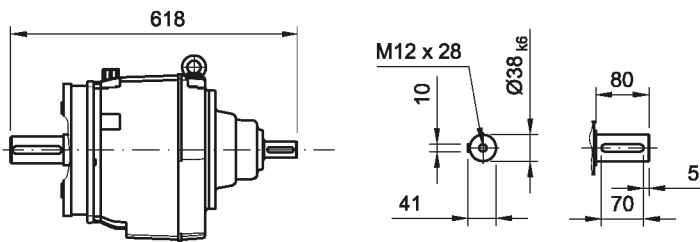
SICE56B/C-U
80 - 180



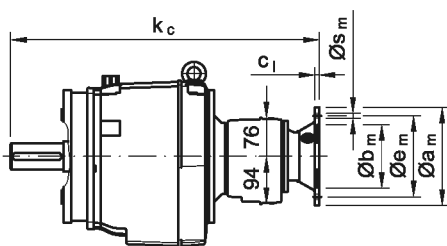
SICE56..



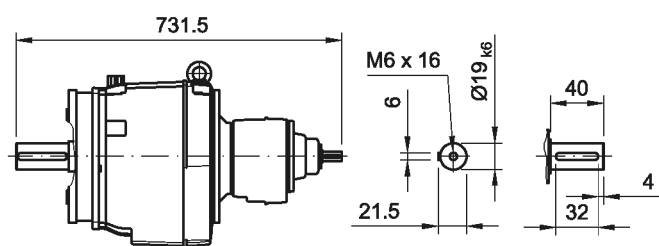
SICE56B/C-I



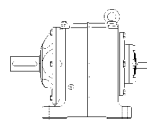
SICE56C16B/C-U
63 - 112



SICE56C16B/C-I

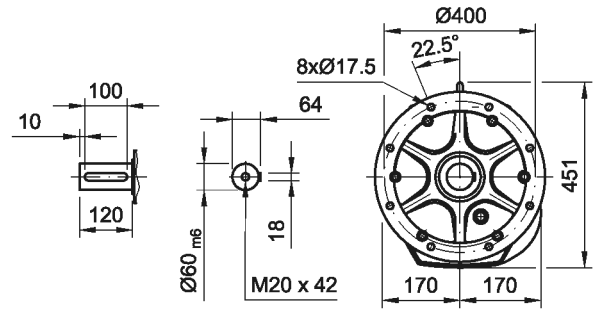
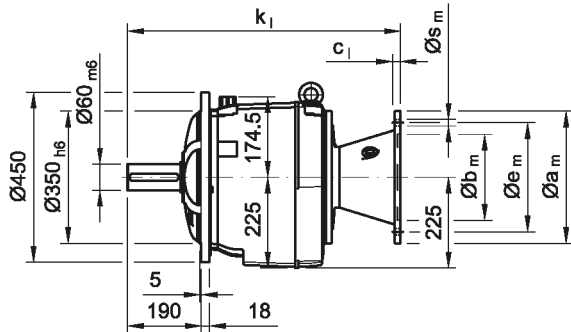


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			549	549	549	549	549	612	612	677	677	677	677						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	719	719	719	719	719	719	719												

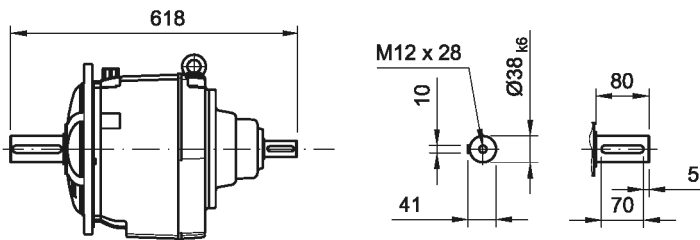


SICF56B/C-U
80 - 180

SICF56..

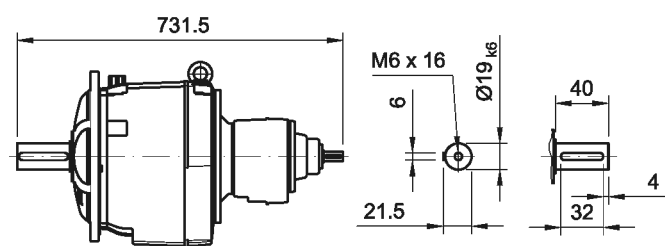
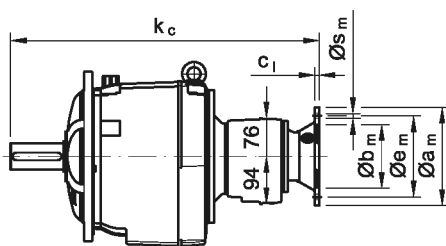


SICF56B/C-I

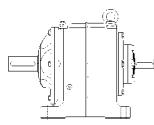


SICF56C16B/C-U
63 - 112

SICF56C16B/C-I

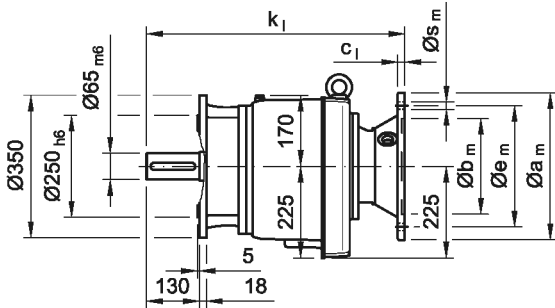


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			549	549	549	549	549	612	612	677	677	677	677						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	719	719	719	719	719	719	719												

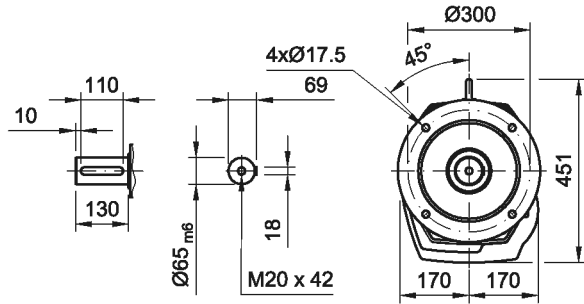


4. SI4

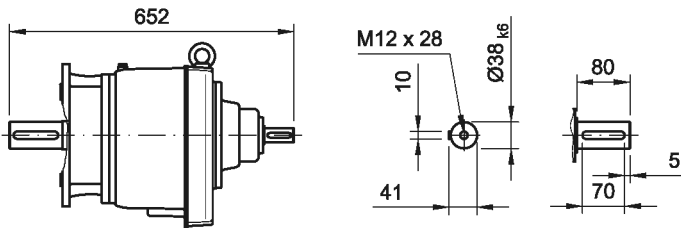
SICM56B/C-U
80 - 180



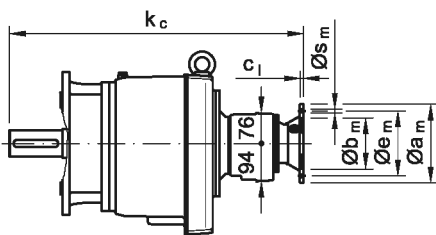
SICM56..



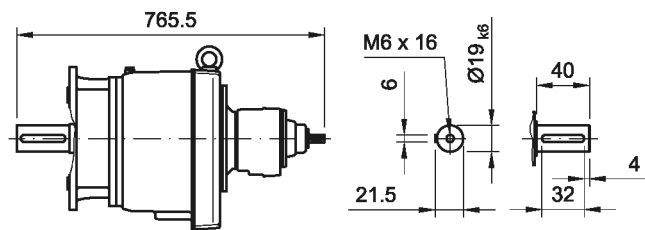
SICM56B/C-I



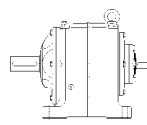
SICM56C16B/C-U
63 - 112



SICM56C16B/C-I



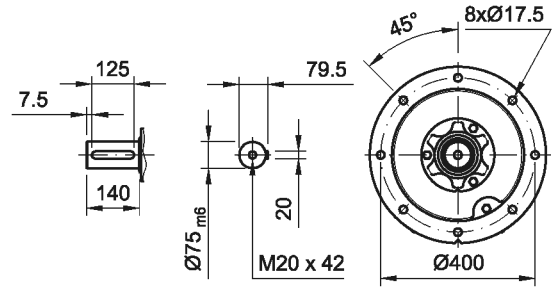
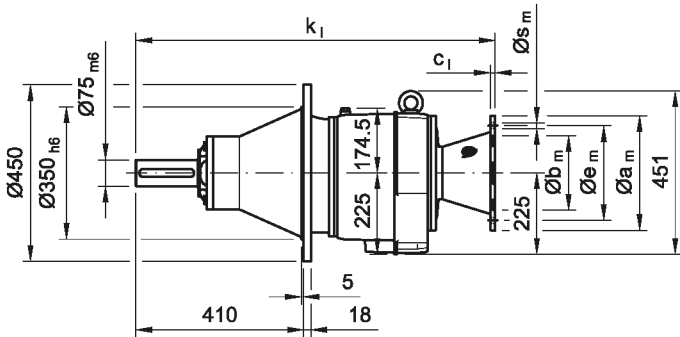
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			583	583	583	583	583	646	646	711	711	711	711						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	753	753	753	753	753	753	753												



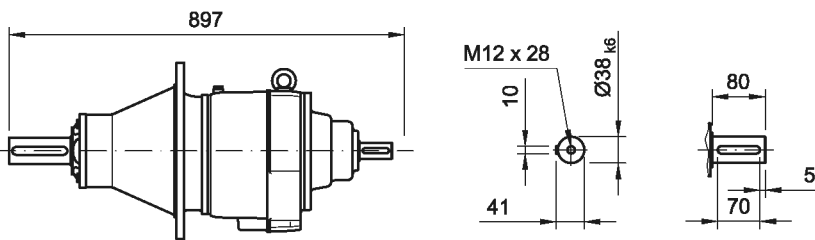
4. SI4

SICL56B/C-U
80 - 180

SICL56..

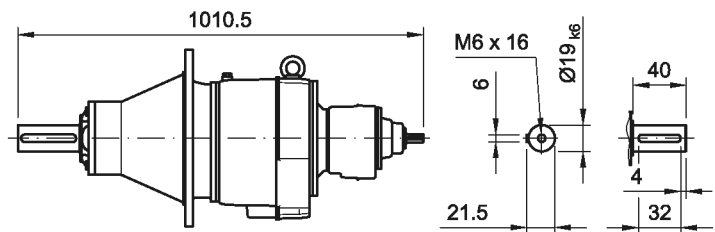
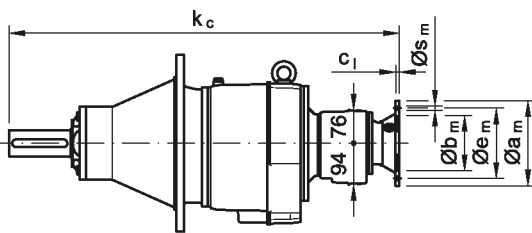


SICL56B/C-I

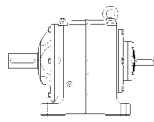


SICL56C16B/C-U
63 - 112

SICL56C16B/C-I

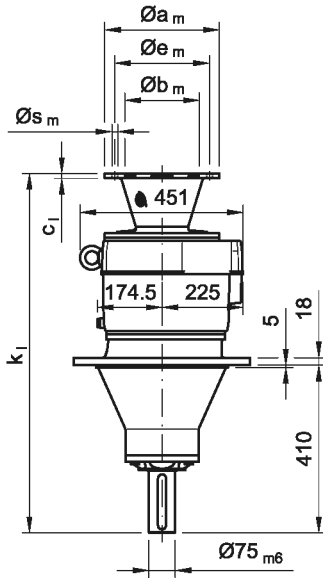


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			828	828	828	828	828	891	891	956	956	956	956						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	998	998	998	998	998	998	998												

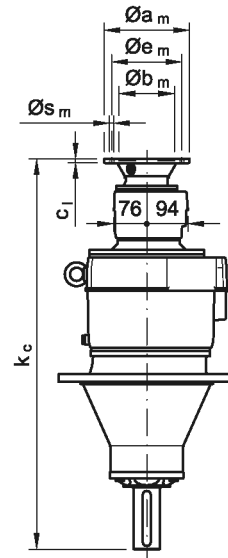


4. SI4

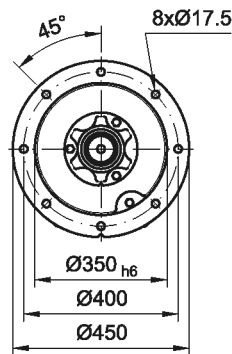
SICP56B/C-U
80 - 180



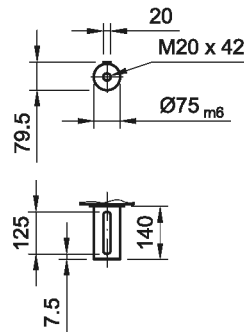
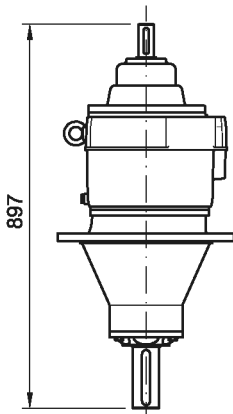
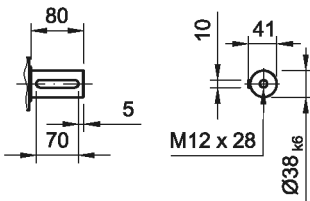
SICP56C16B/C-U
63 - 112



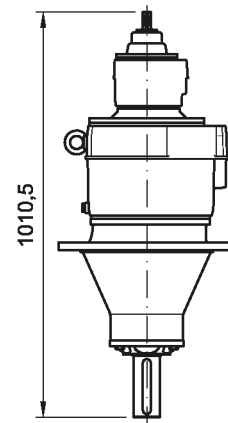
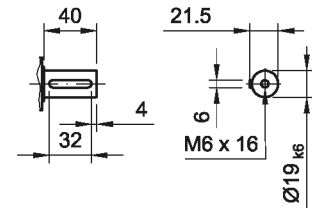
SICP56..



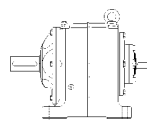
SICP56B/C-I



SICP56C16B/C-I

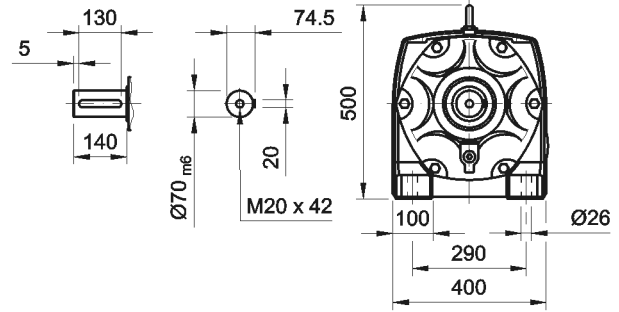
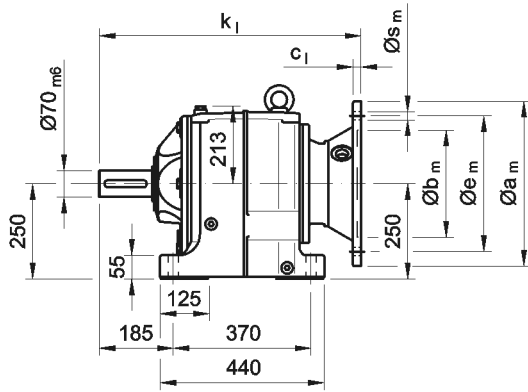


	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			828	828	828	828	828	891	891	956	956	956	956						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4xM8x16	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	998	998	998	998	998	998	998												

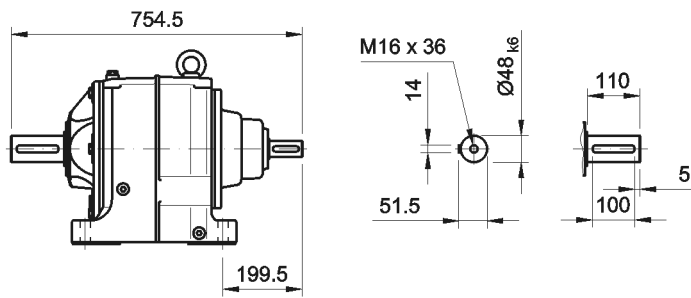


SIFN66B/C-U
100 - 280

SIFN66..

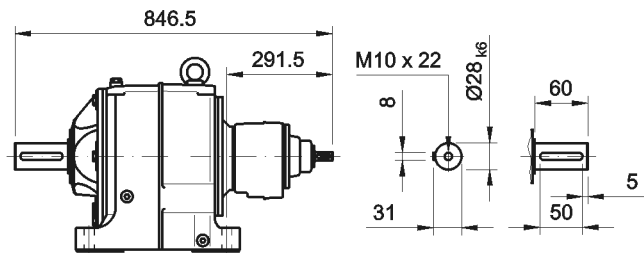
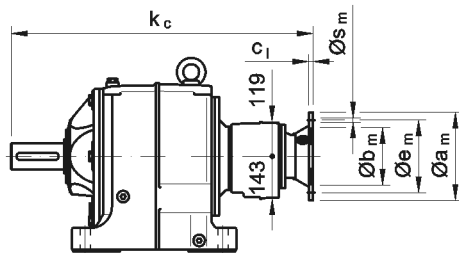


SIFN66B/C-I

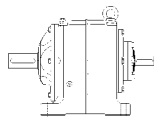


SIFN66C36B/C-U
71 - 132

SIFN66C36B/C-I

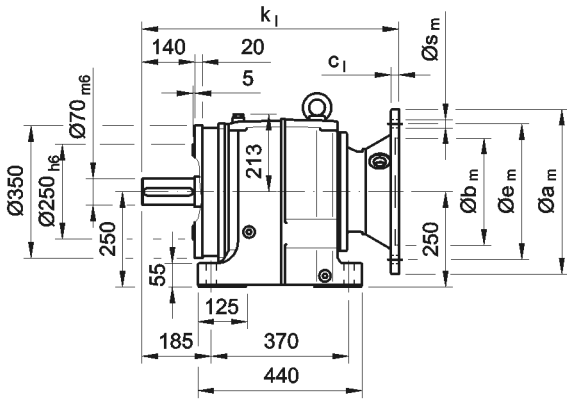


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M			
kl					657	657	657	657	722	722	814	814	839	869	869	880	880	880			
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25			
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7			
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500			
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550			
Øsm	4Mx16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	814	814	814	814	814	814	877	877													

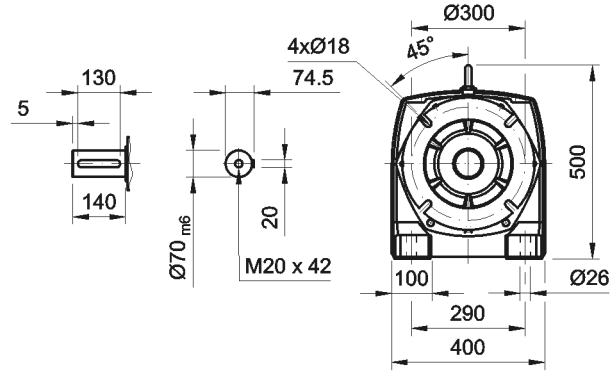


4. SI4

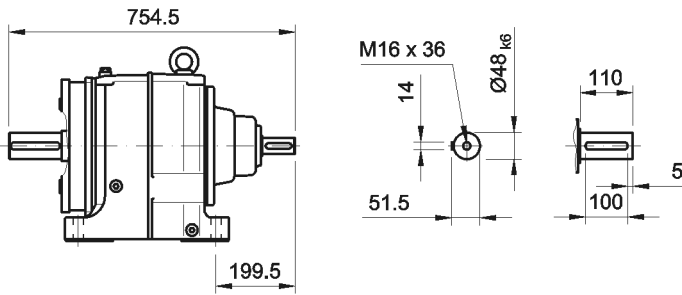
SIFE66B/C-U
100 - 280



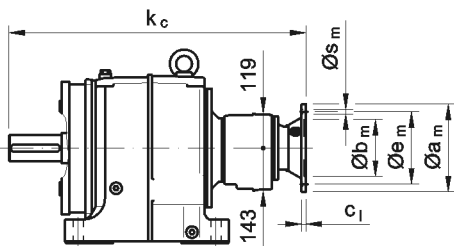
SIFE66..



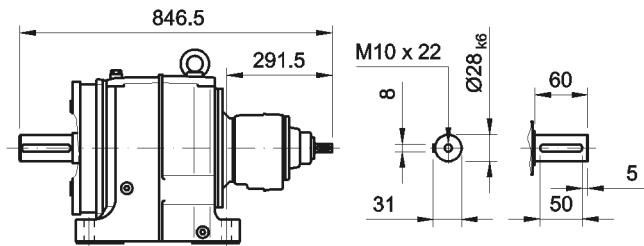
SIFE66B/C-I



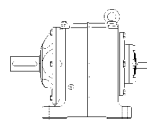
SIFE66C36B/C-U
71 - 132



SIFE66C36B/C-I

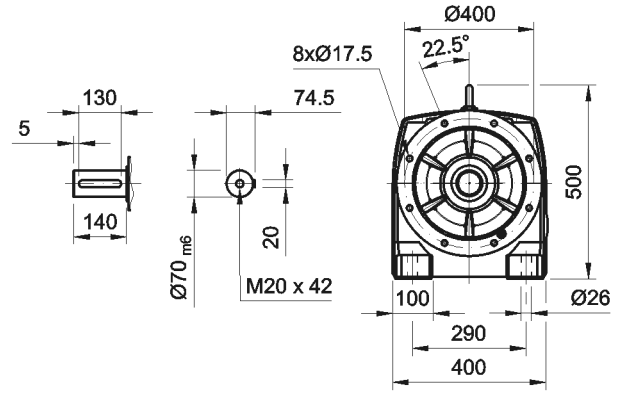
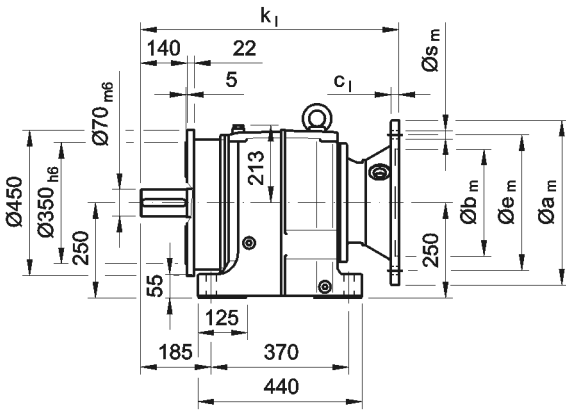


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M
k_l					657	657	657	657	722	722	814	814	839	869	869	880	880	880
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25
Ø_{bm}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7
Ø_{em}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500
Ø_{am}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550
Ø_{sm}	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5
k_c	814	814	814	814	814	814	877	877										

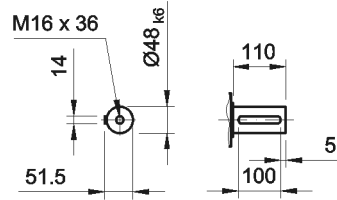
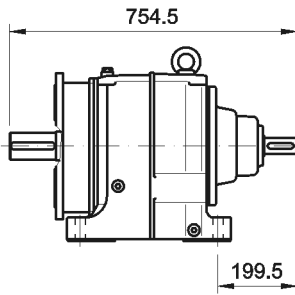


SIFD66B/C-U
100 - 280

SIFD66..

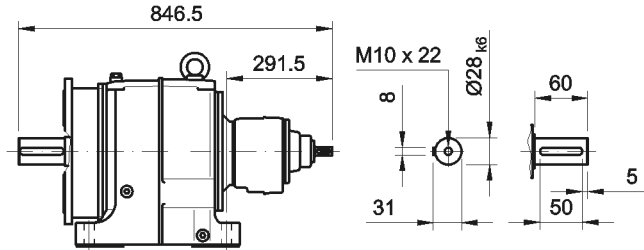
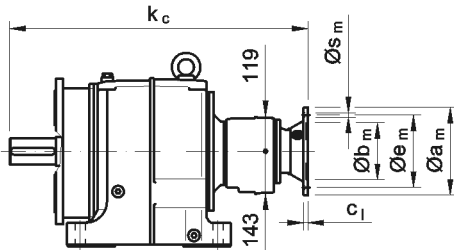


SIFD66B/C-I

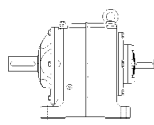


SIFD66C36B/C-U
71 - 132

SIFD66C36B/C-I

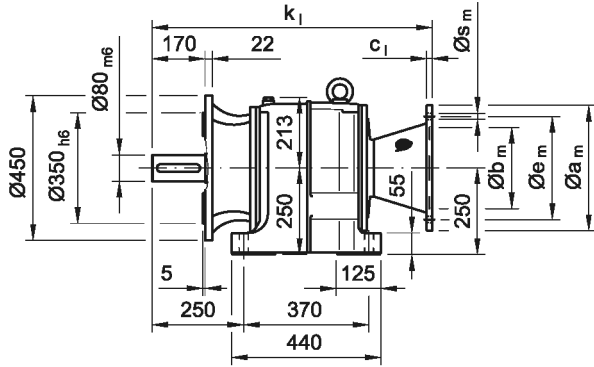


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					657	657	657	657	722	722	814	814	839	869	869	880	880	880		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	814	814	814	814	814	814	877	877												

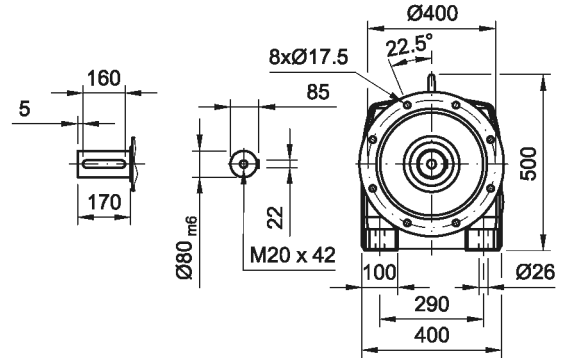


4. SI4

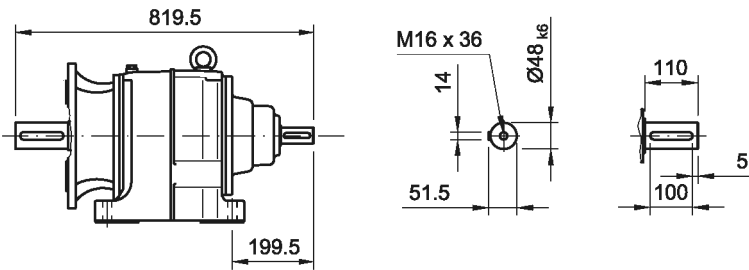
SIFM66B/C-U
100 - 280



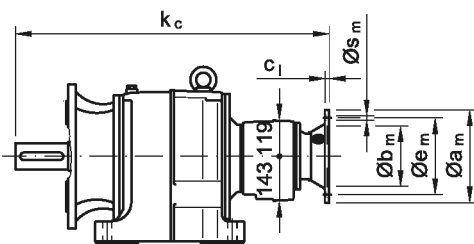
SIFM66..



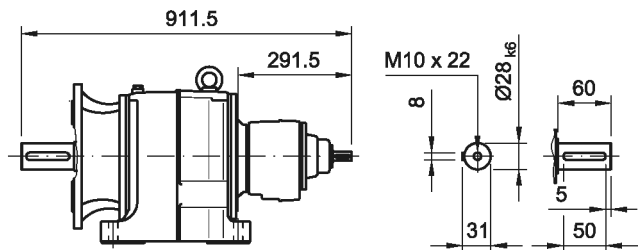
SIFM66B/C-I



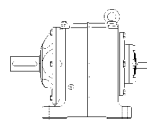
SIFM66C36B/C-U
71 - 132



SIFM66C36B/C-I

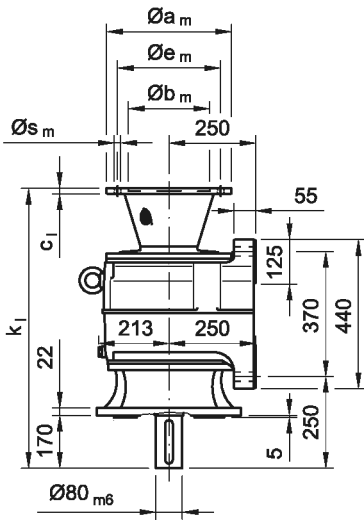


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					722	722	722	722	787	787	879	879	904	934	934	945	945	945		
ci	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	285	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	879	879	879	879	879	879	942	942												

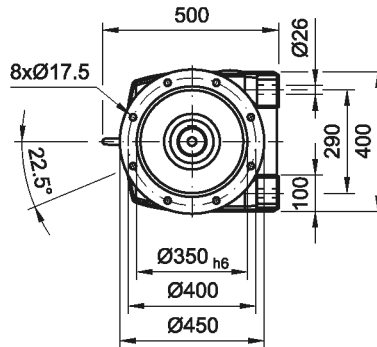


4. SI4

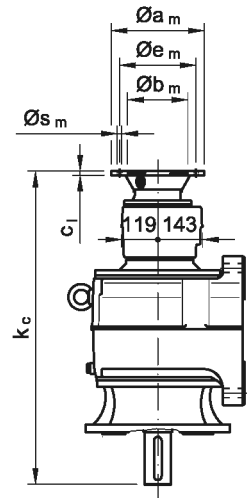
SIFA66B/C-U
100 - 280



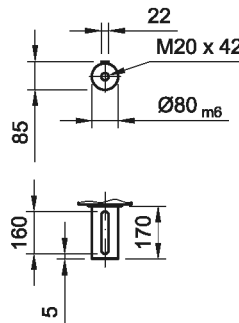
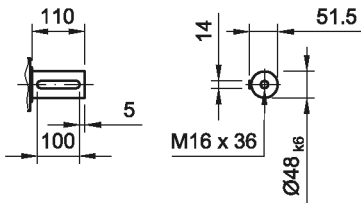
SIFA66..



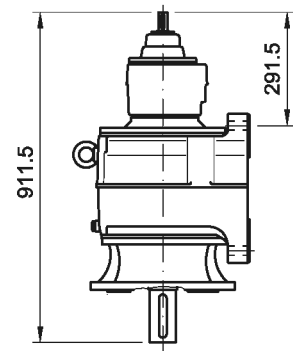
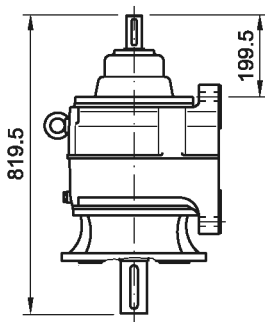
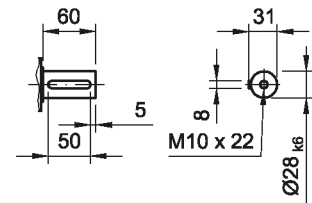
SIFA66C36B/C-U
72 - 132



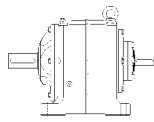
SIFA66B/C-I



SIFA66C36B/C-I

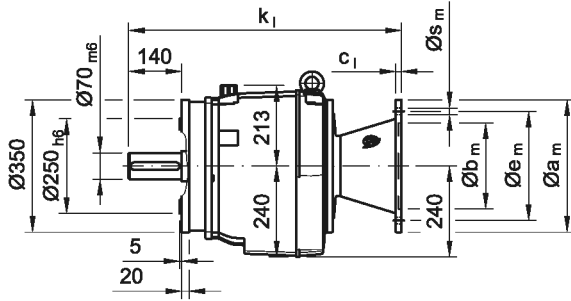


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					722	722	722	722	787	787	879	879	904	934	934	945	945	945		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
$\varnothing b_m$	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
$\varnothing e_m$	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
$\varnothing a_m$	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
$\varnothing s_m$	4x $\varnothing 16 \times 16$	4x $\varnothing 11$	4x $\varnothing 11$	4x $\varnothing 11$	4x $\varnothing 13.5$	4x $\varnothing 13.5$	4x $\varnothing 13.5$	4x $\varnothing 13.5$	4x $\varnothing 17.5$	4x $\varnothing 17.5$	4x $\varnothing 17.5$	4x $\varnothing 17.5$	4x $\varnothing 17.5$	8x $\varnothing 17.5$	8x $\varnothing 17.5$	8x $\varnothing 17.5$	8x $\varnothing 17.5$	8x $\varnothing 17.5$		
kc	879	879	879	879	879	879	942	942												

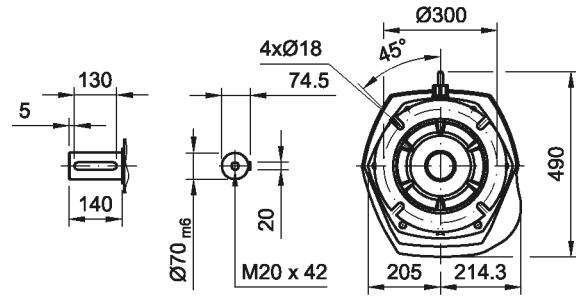


4. SI4

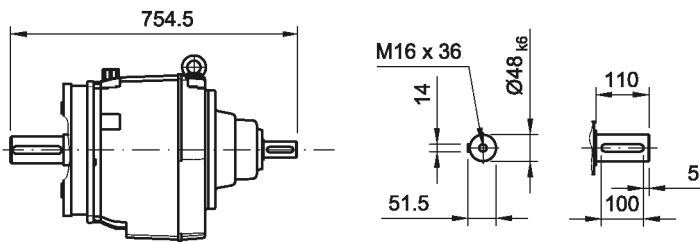
SICE66B/C-U
100 - 280



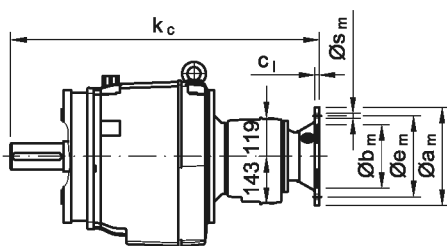
SICE66..



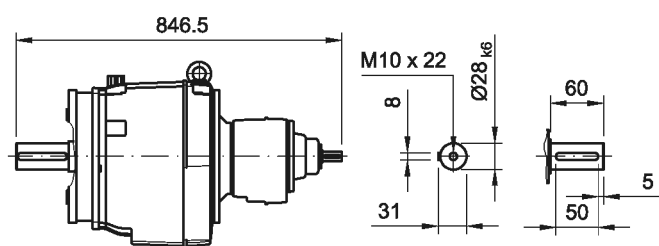
SICE66B/C-I



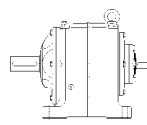
SICE66C36B/C-U
71 - 132



SICE66C36B/C-I

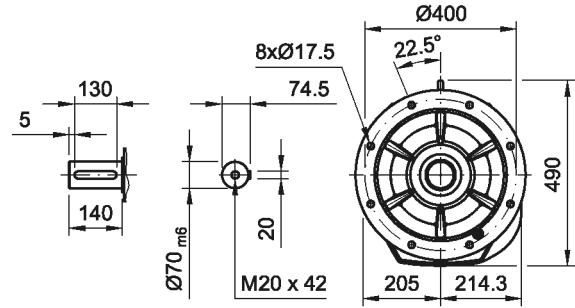
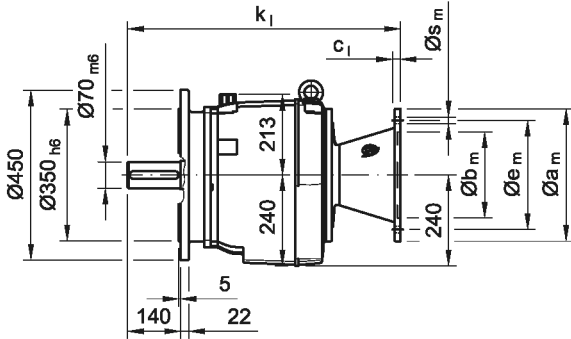


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					657	657	657	657	722	722	814	814	839	869	869	880	880	880		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	814	814	814	814	814	814	877	877												

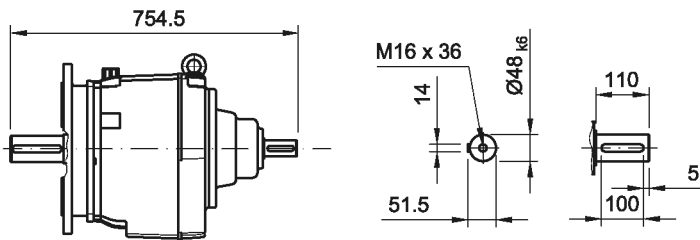


SICD66B/C-U
100 - 280

SICD66..

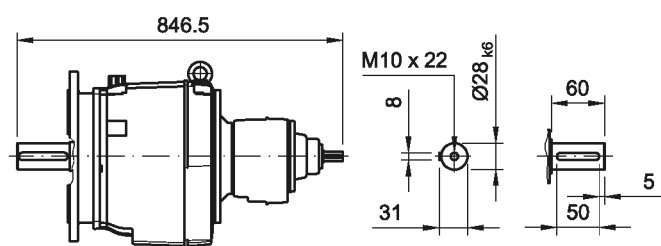
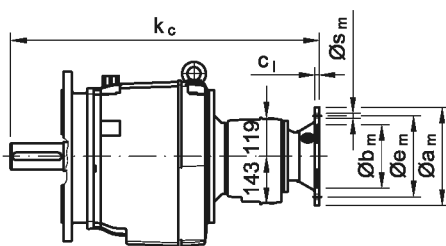


SICD66B/C-I

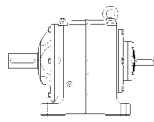


SICD66C36B/C-U
71 - 132

SICD66C36B/C-I

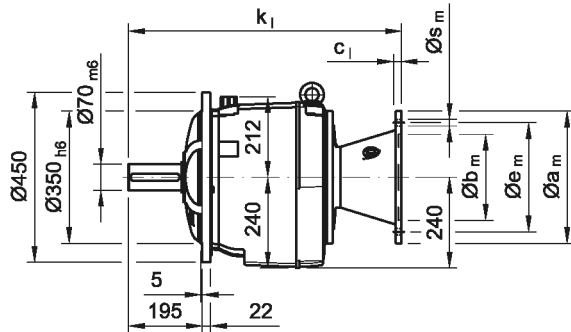


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M			
kl					657	657	657	657	722	722	814	814	839	869	869	880	880	880			
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25			
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G 7	350G 7	450G 7	450G 7	450G 7			
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500			
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550			
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	814	814	814	814	814	814	877	877													

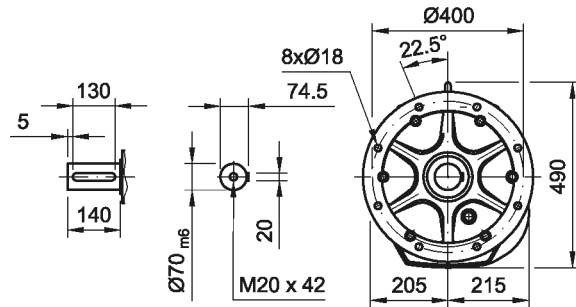


4. SI4

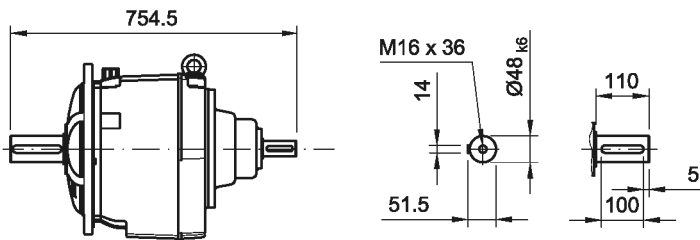
SICF66B/C-U
100 - 280



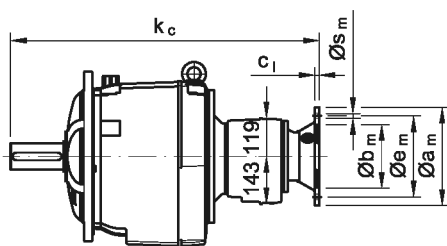
SICF66..



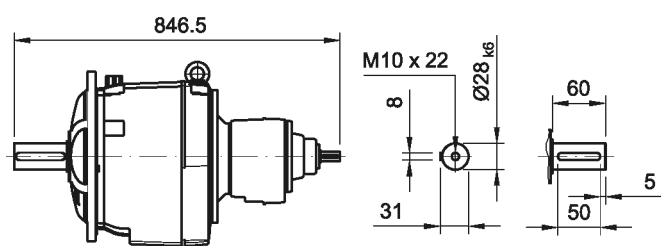
SICF66B/C-I



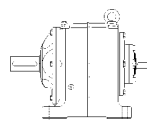
SICF66C36B/C-U
71 - 132



SICF66C36B/C-I



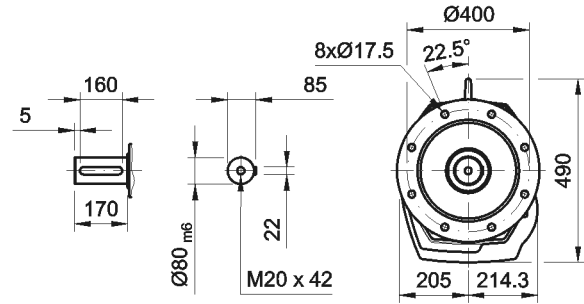
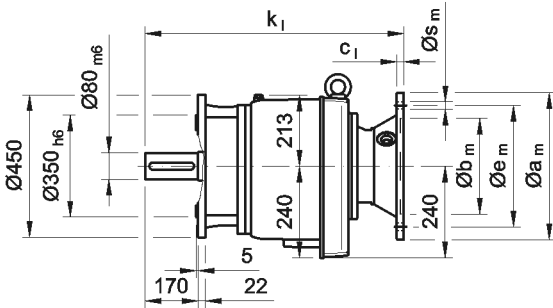
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					657	657	657	657	722	722	814	814	839	869	869	880	880	880		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	285	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	814	814	814	814	814	814	877	877												



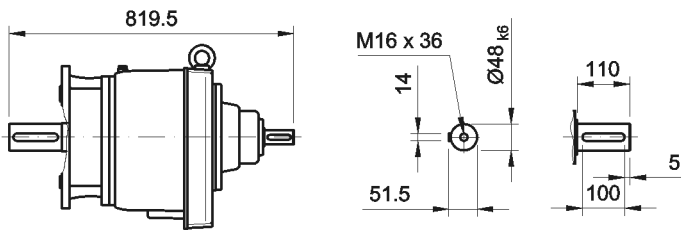
4. SI4

SICM66B/C-U
100 - 280

SICM66..

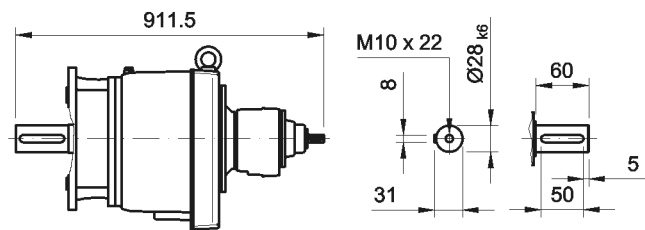
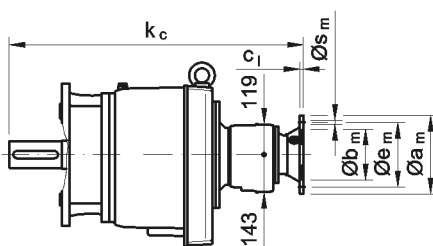


SICM66B/C-I

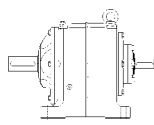


SICM66C36B/C-U
71 - 132

SICM66C36B/C-I

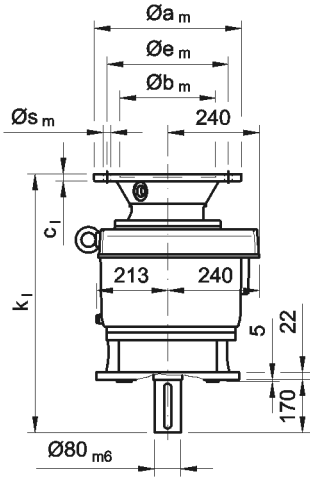


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					722	722	722	722	787	787	879	879	904	934	934	945	945	945		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	879	879	879	879	879	879	942	942												

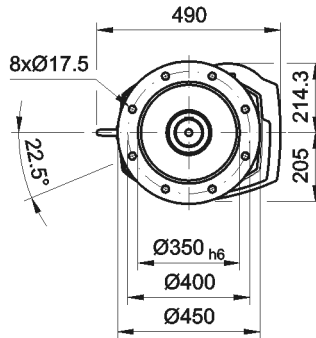


4. SI4

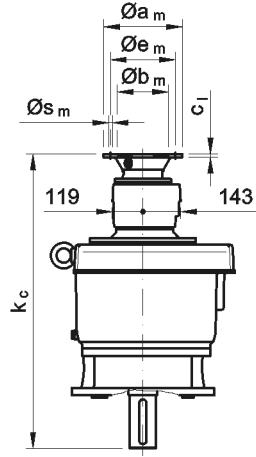
SICA66B/C-U
100 - 280



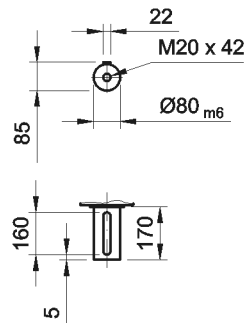
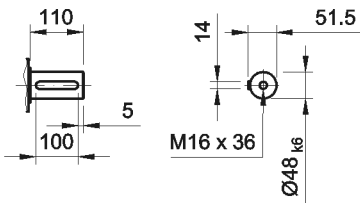
SICA66..



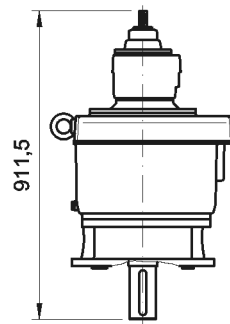
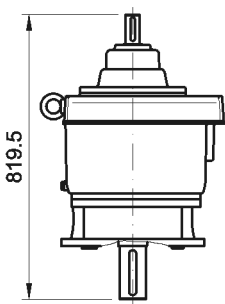
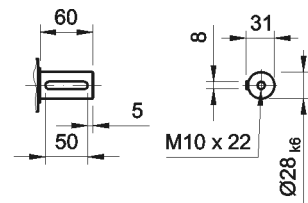
SICA66C36B/C-U
72 - 132



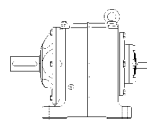
SICA66B/C-I



SICA66C36B/C-I

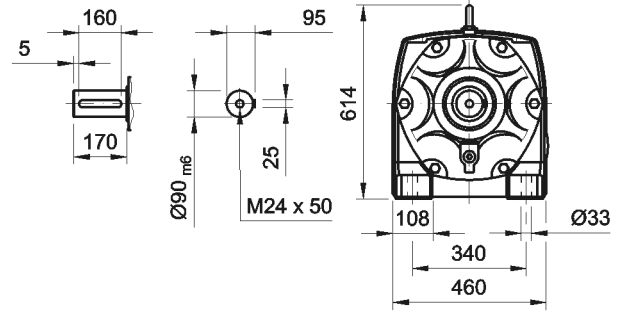
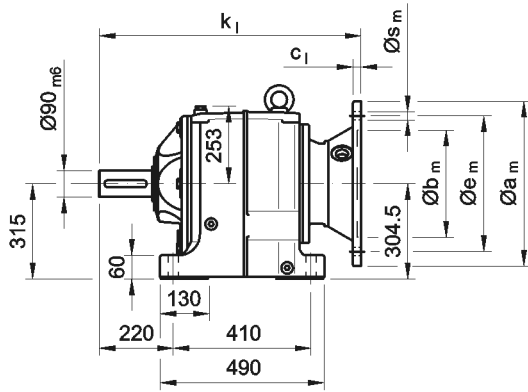


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					722	722	722	722	787	787	879	879	904	934	934	945	945	945		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	879	879	879	879	879	879	942	942												

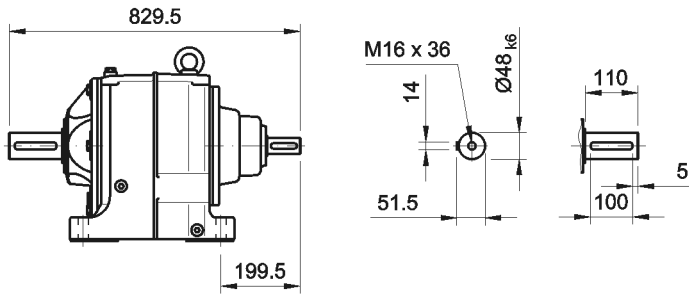


SIFN76B/C-U
100 - 280

SIFN76..

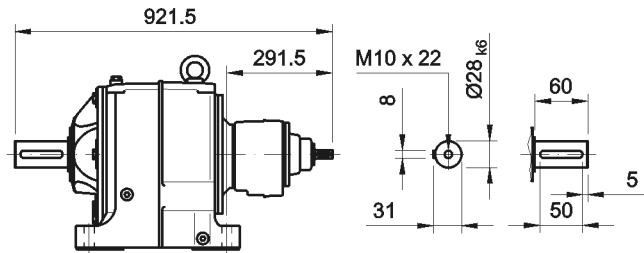
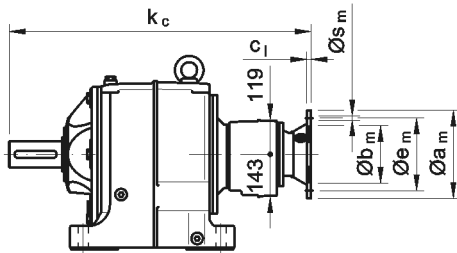


SIFN76B/C-I

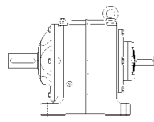


SIFN76C36B/C-U
71 - 132

SIFN76C36B/C-I

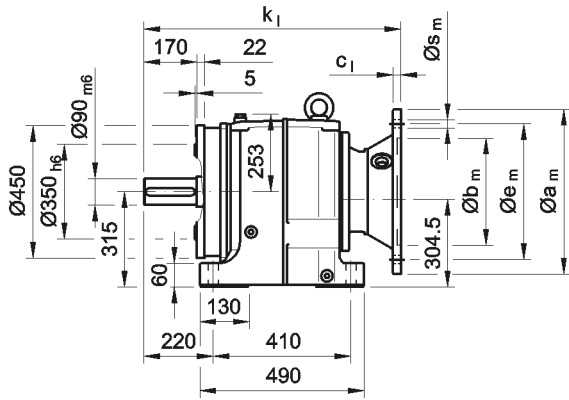


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					732	732	732	732	797	797	889	889	914	944	944	955	955	955		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x Mx16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	
kc	889	889	889	889	889	889	952	952												

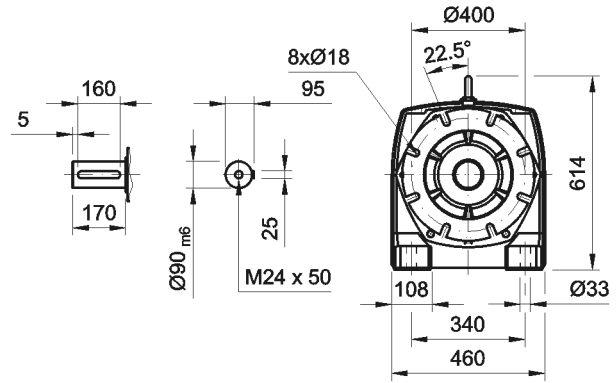


4. SI4

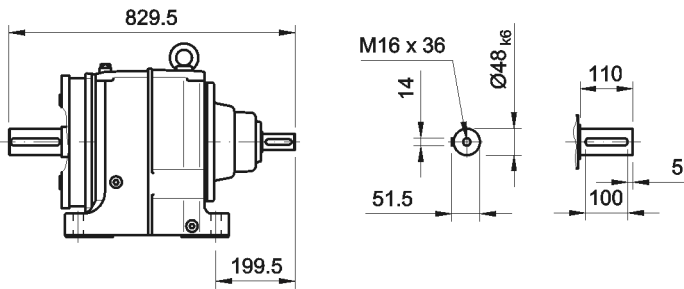
SIFE76B/C-U
100 - 280



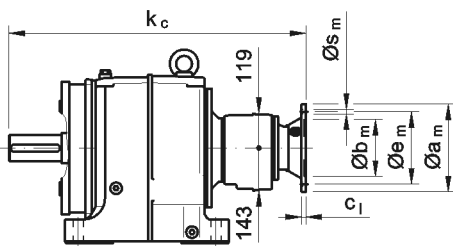
SIFE76..



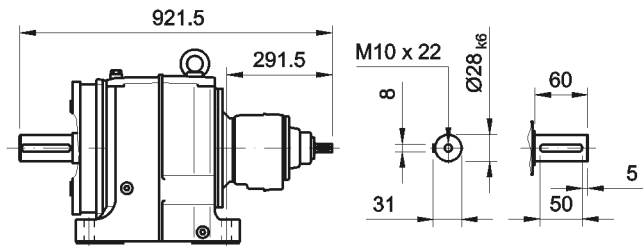
SIFE76B/C-I



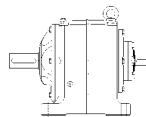
SIFE76C36B/C-U
71 - 132



SIFE76C36B/C-I

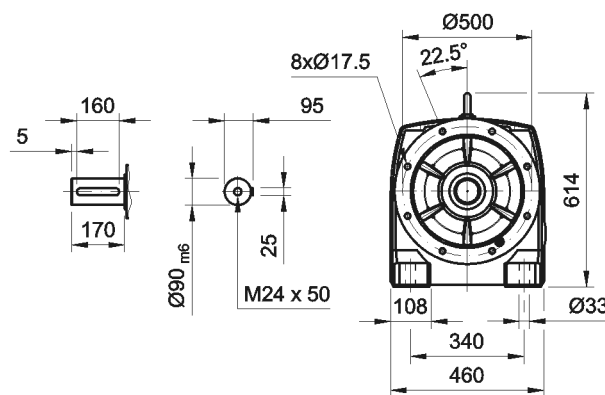
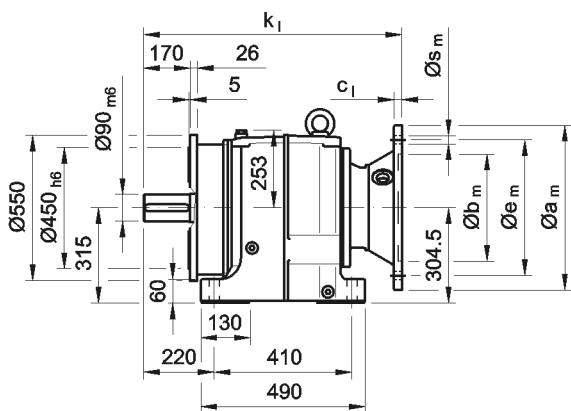


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					732	732	732	732	797	797	889	889	914	944	944	955	955	955		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
$\varnothing b_m$	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
$\varnothing e_m$	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
$\varnothing a_m$	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
$\varnothing s_m$	4x M8x16	4x $\varnothing 11$	4x $\varnothing 11$	4x $\varnothing 11$	4x $\varnothing 13,5$	4x $\varnothing 13,5$	4x $\varnothing 13,5$	4x $\varnothing 13,5$	4x $\varnothing 17,5$	4x $\varnothing 17,5$	4x $\varnothing 17,5$	4x $\varnothing 17,5$	4x $\varnothing 17,5$	8x $\varnothing 17,5$	8x $\varnothing 17,5$	8x $\varnothing 17,5$	8x $\varnothing 17,5$	8x $\varnothing 17,5$		
kc	889	889	889	889	889	889	952	952												

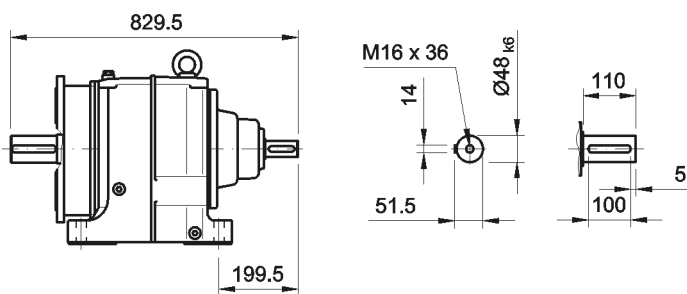


SIFD76B/C-U
100 - 280

SIFD76..

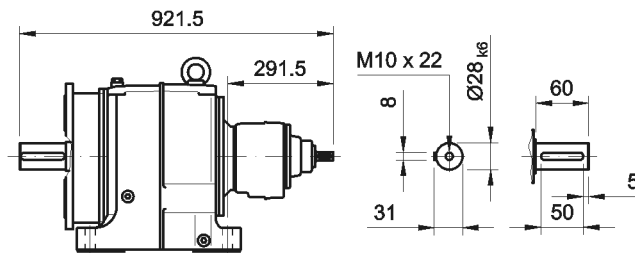
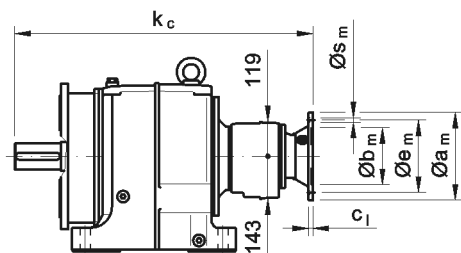


SIFD76B/C-I

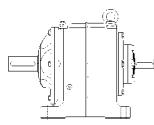


SIFD76C36B/C-U
71 - 132

SIFD76C36B/C-I

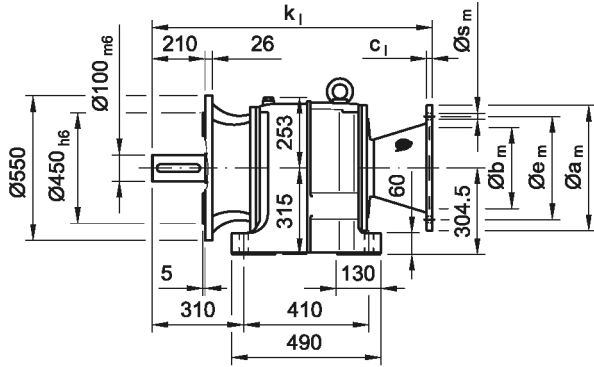


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M			
kl					732	732	732	732	797	797	889	889	914	944	944	955	955	955			
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25			
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7			
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500			
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550			
Øsm	4xM16	4xØ11	4xØ11	4xØ11	4xØ13,5	4xØ13,5	4xØ13,5	4xØ13,5	4xØ17,5	4xØ17,5	4xØ17,5	4xØ17,5	4xØ17,5	8xØ17,5	8xØ17,5	8xØ17,5	8xØ17,5	8xØ17,5	8xØ17,5		
kc	889	889	889	889	889	889	952	952													

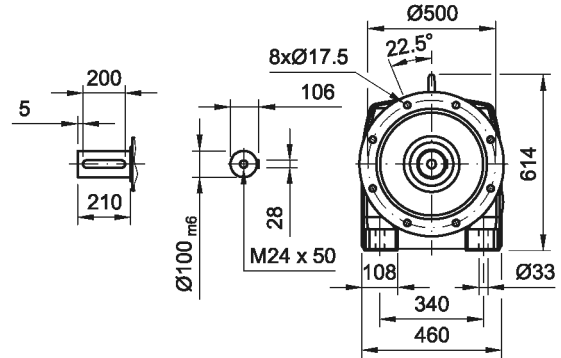


4. SI4

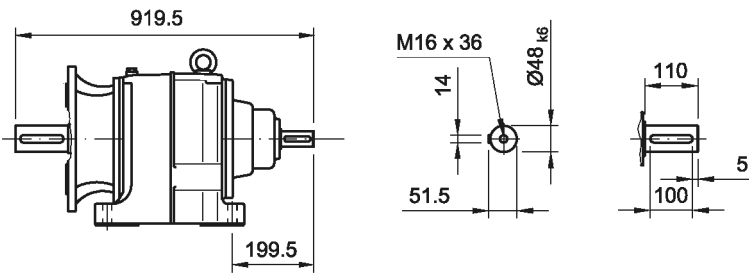
SIFM76B/C-U
100 - 280



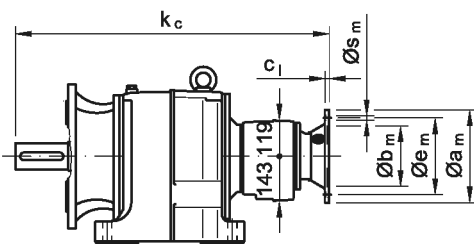
SIFM76..



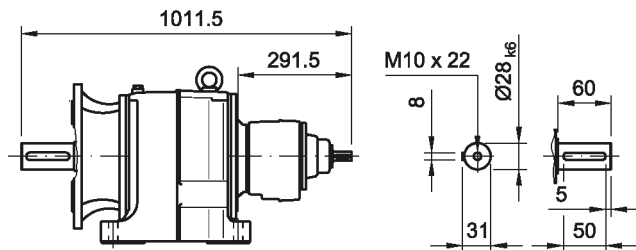
SIFM76B/C-I



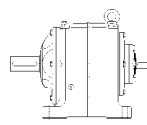
SIFM76C36B/C-U
71 - 132



SIFM76C36B/C-I



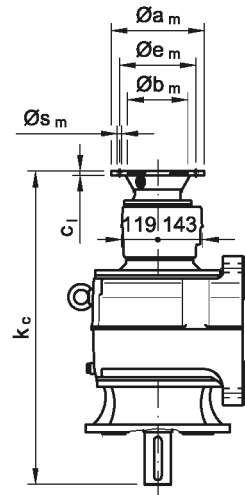
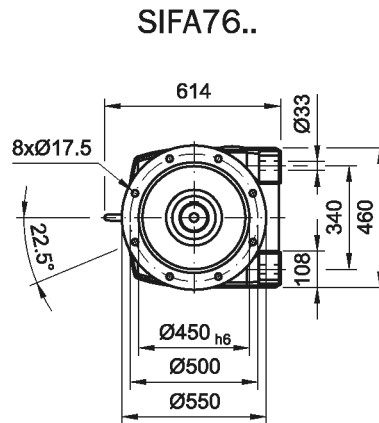
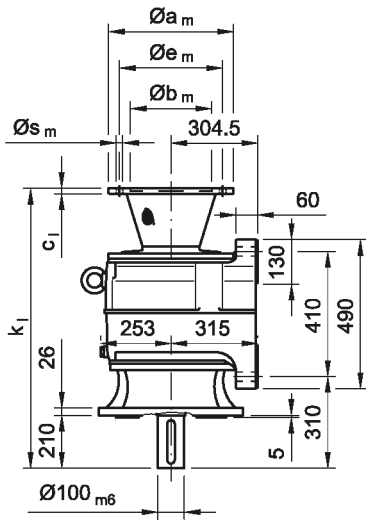
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					822	822	822	822	887	887	979	979	1004	1034	1034	1045	1045	1045		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	979	979	979	979	979	979	1042	1042												



4. SI4

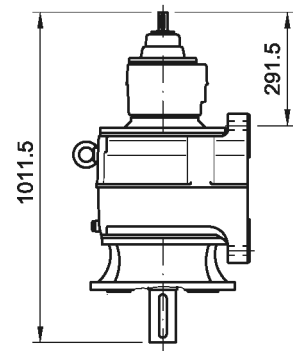
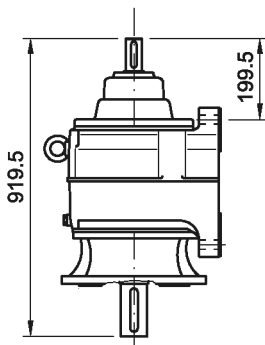
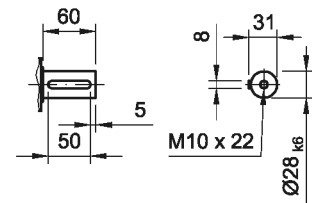
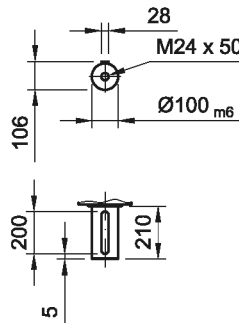
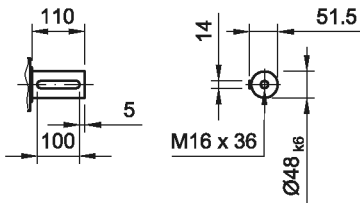
SIFA76B/C-U
100 - 280

SIFA76C36B/C-U
72 - 132

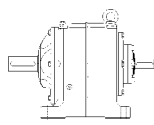


SIFA76B/C-I

SIFA76C36B/C-I

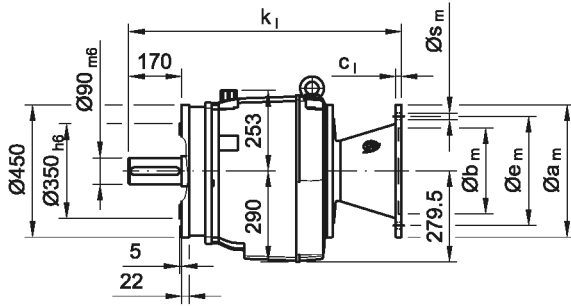


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					822	822	822	822	887	887	979	979	1004	1034	1034	1045	1045	1045		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	979	979	979	979	979	979	1042	1042												

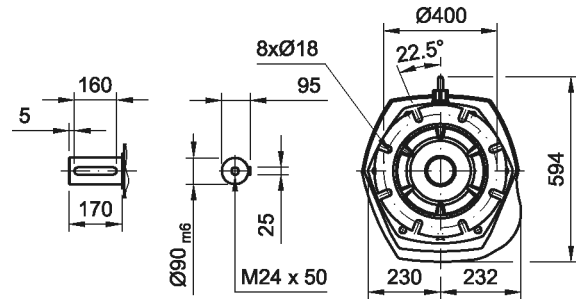


4. SI4

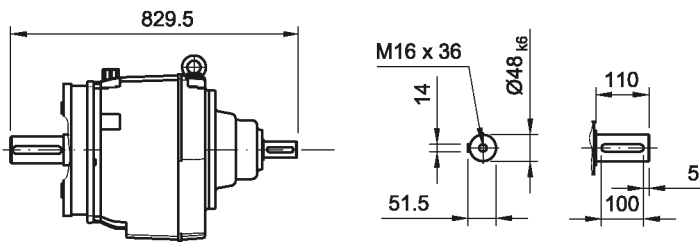
SICE76B/C-U
100 - 280



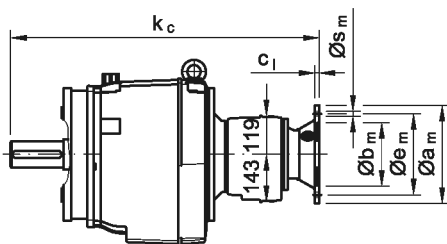
SICE76..



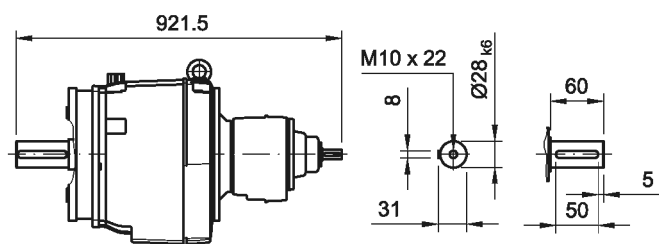
SICE76B/C-I



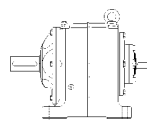
SICE76C36B/C-U
71 - 132



SICE76C36B/C-I

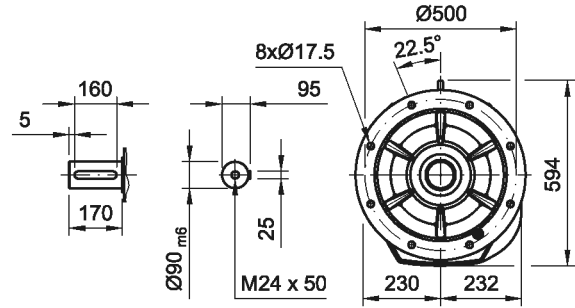
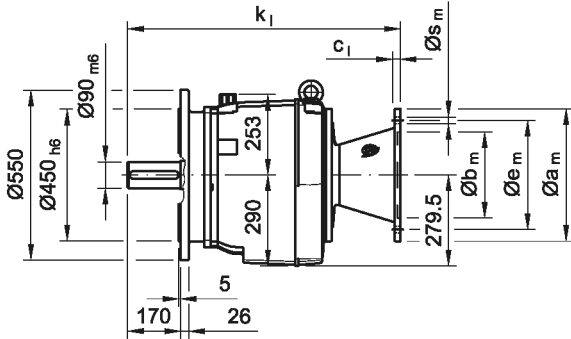


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					732	732	732	732	797	797	889	889	914	944	944	955	955	955		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	889	889	889	889	889	889	952	952												

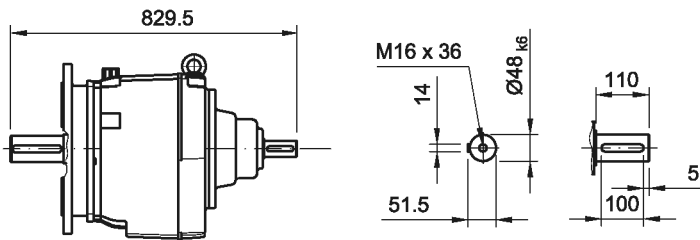


SICD76B/C-U
100 - 280

SICD76..

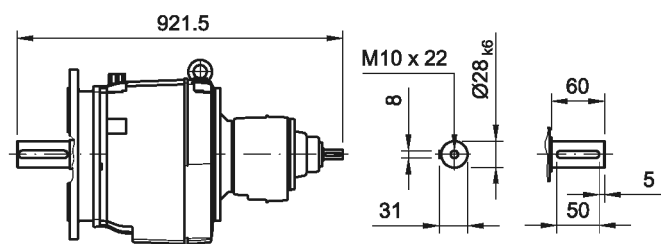
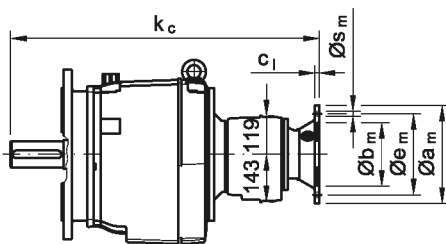


SICD76B/C-I

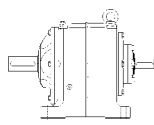


SICD76C36B/C-U
71 - 132

SICD76C36B/C-I

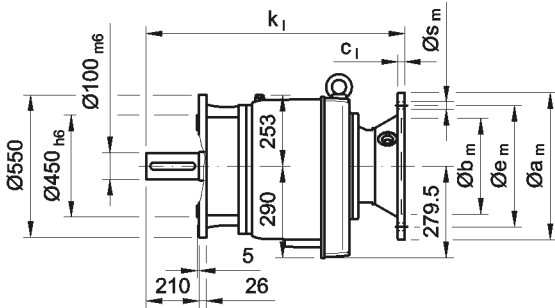


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M	
kl					732	732	732	732	797	797	889	889	914	944	944	955	955	955	
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25	
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7	
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500	
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550	
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	
kc	889	889	889	889	889	889	952	952											

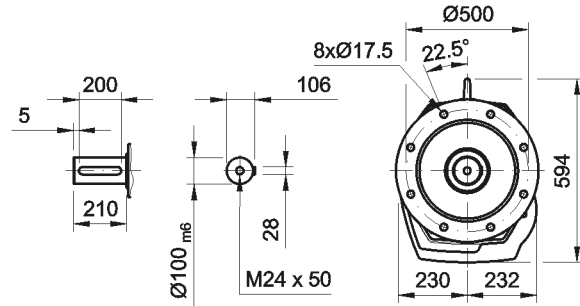


4. SI4

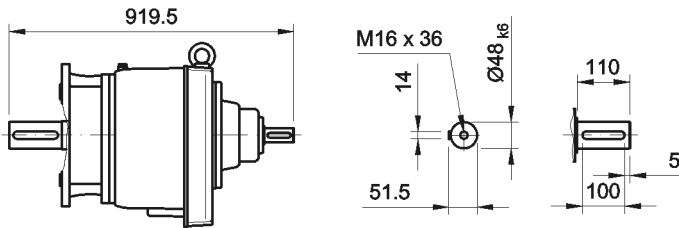
SICM76B/C-U
100 - 280



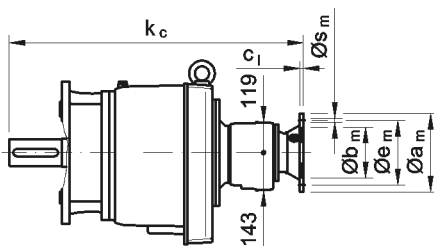
SICM76..



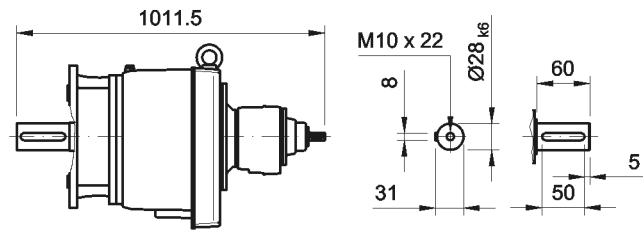
SICM76B/C-I



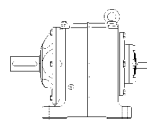
SICM76C36B/C-U
71 - 132



SICM76C36B/C-I

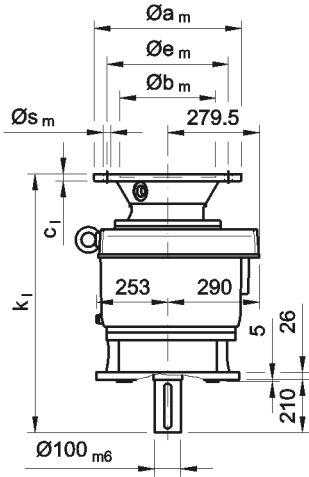


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					822	822	822	822	887	887	979	979	1004	1034	1034	1045	1045	1045		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	979	979	979	979	979	979	1042	1042												

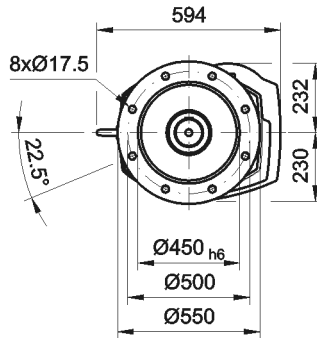


4. SI4

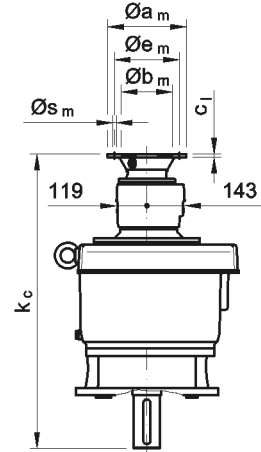
SICA76B/C-U
100 - 280



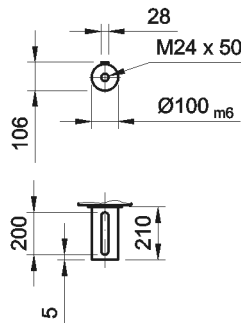
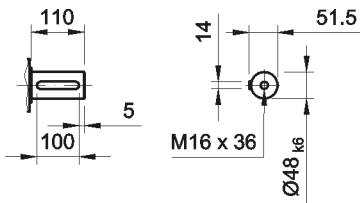
SICA76..



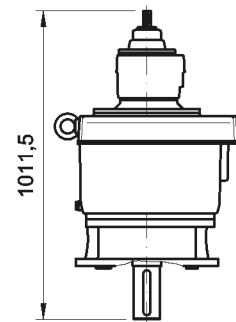
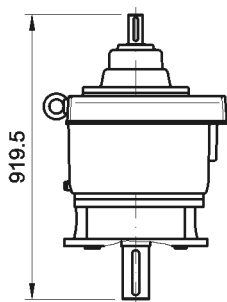
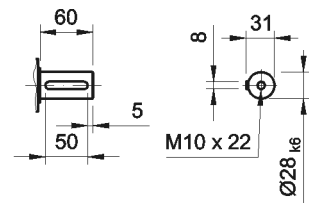
SICA76C36B/C-U
72 - 132



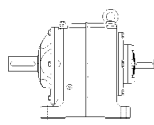
SICA76B/C-I



SICA76C36B/C-I



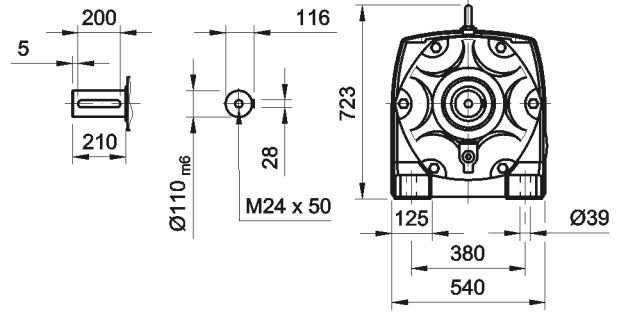
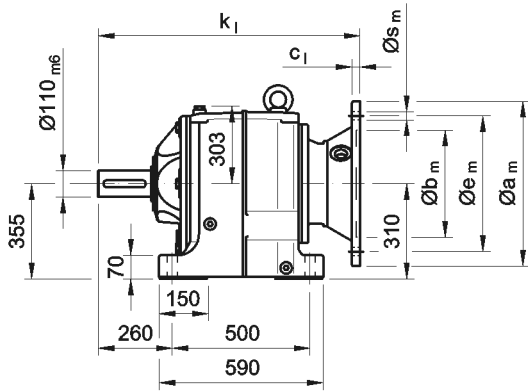
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M			
kl					822	822	822	822	887	887	979	979	1004	1034	1034	1045	1045	1045			
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25			
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7			
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500			
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550			
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	979	979	979	979	979	979	1042	1042													



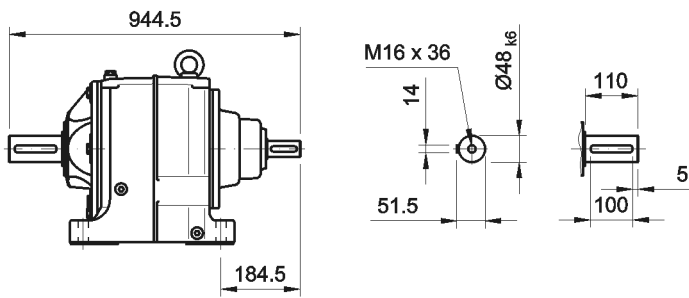
4. SI4

SIFN86B/C-U
100 - 280

SIFN86..

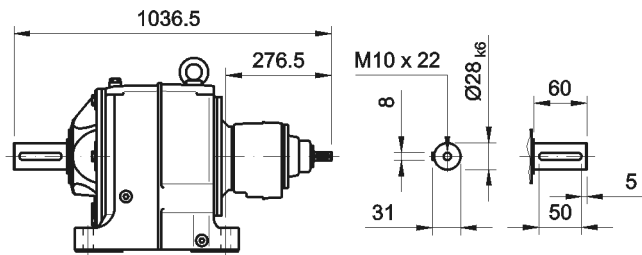
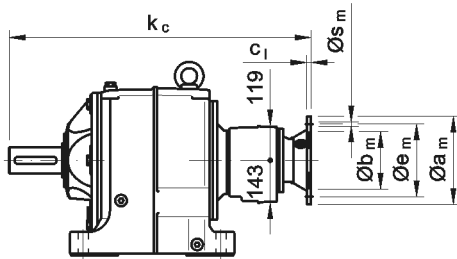


SIFN86B/C-I

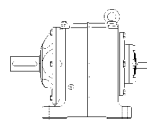


SIFN86C36B/C-U
71 - 132

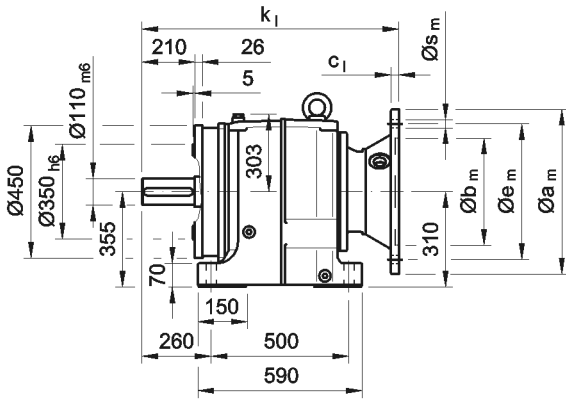
SIFN86C36B/C-I



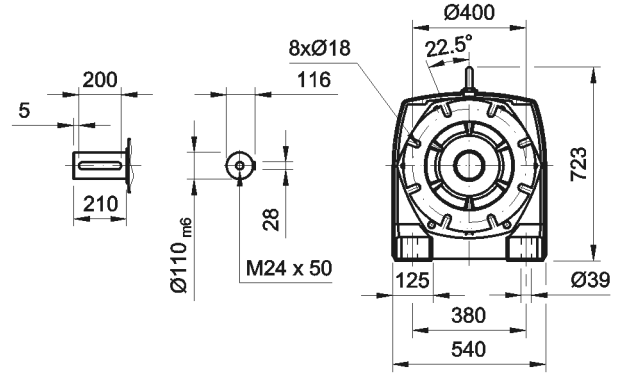
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	260M	280S	280M		
k_l					847	847	847	847	912	912	1004	1004	1029	1059	1059	1070	1070	1070		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{b m}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{e m}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{a m}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{s m}	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
k_c	1004	1004	1004	1004	1004	1004	1067	1067												



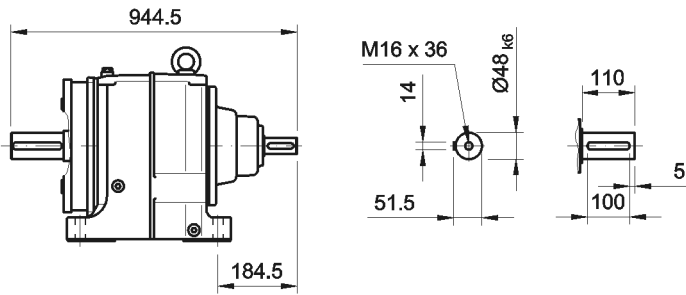
SIFE86B/C-U
100 - 280



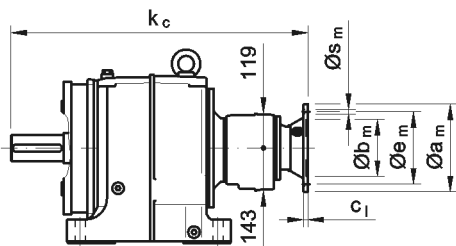
SIFE86..



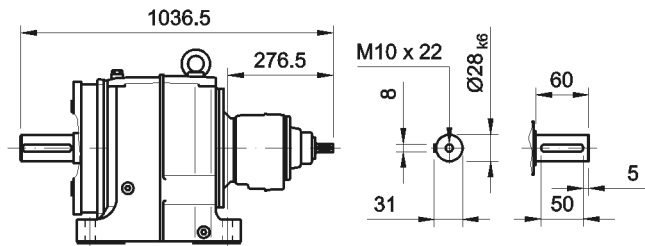
SIFE86B/C-I



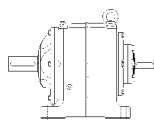
SIFE86C36B/C-U
71 - 132



SIFE86C36B/C-I

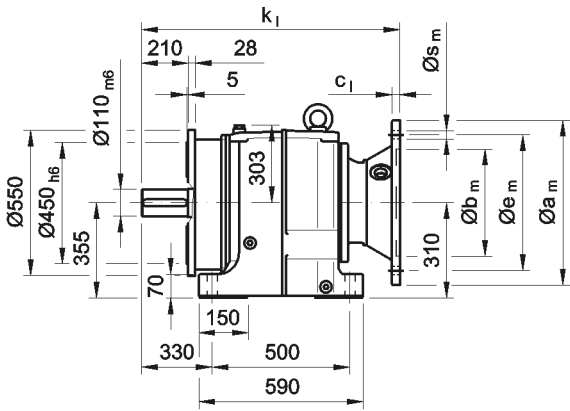


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M			
kl					847	847	847	847	912	912	1004	1004	1029	1059	1059	1070	1070	1070			
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25			
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7			
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500			
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550			
Øsm	4M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1004	1004	1004	1004	1004	1004	1067	1067													

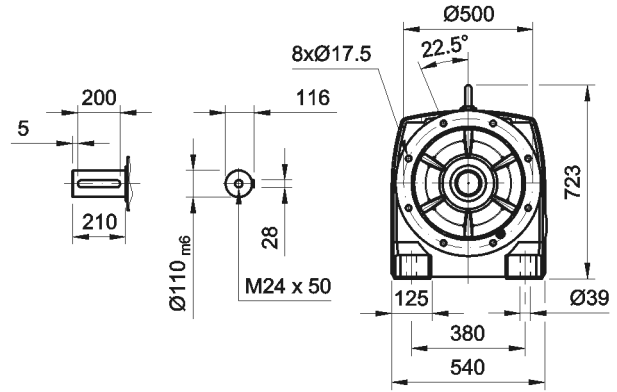


4. SI4

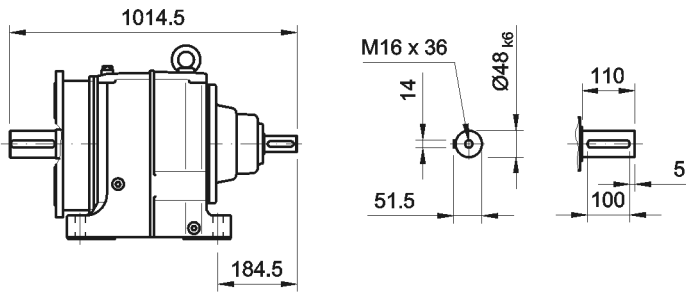
SIFD86B/C-U
100 - 280



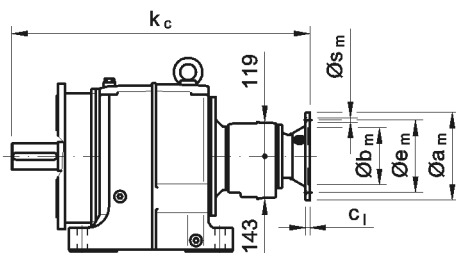
SIFD86..



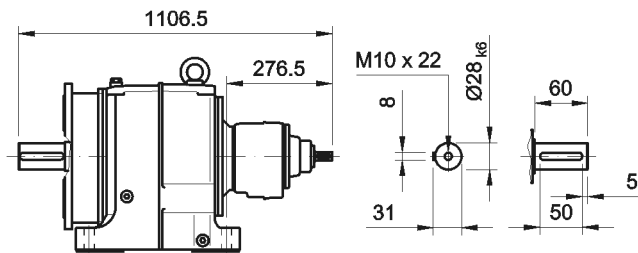
SIFD86B/C-I



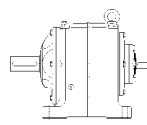
SIFD86C36B/C-U
71 - 132



SIFD86C36B/C-I

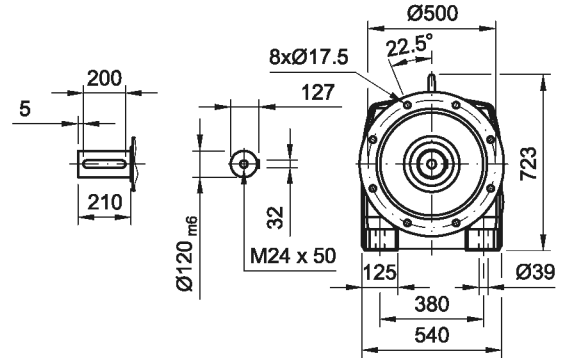
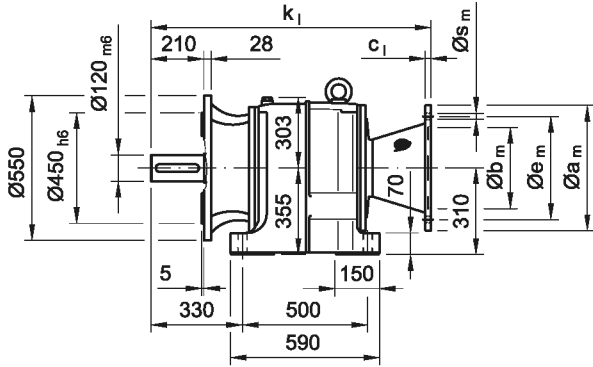


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
k_l					917	917	917	917	982	982	1074	1074	1099	1129	1129	1140	1140	1140		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{b_m}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{e_m}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{a_m}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{s_m}	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
k_c	1074	1074	1074	1074	1074	1074	1137	1137												

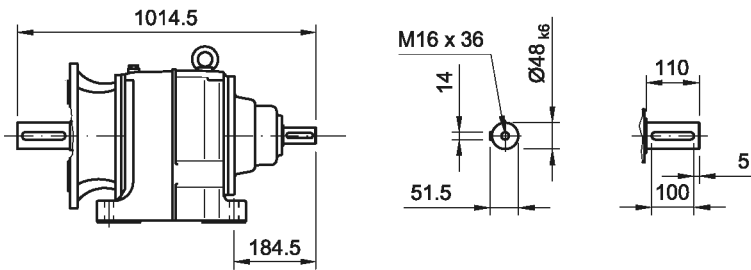


SIFM86B/C-U
100 - 280

SIFM86..

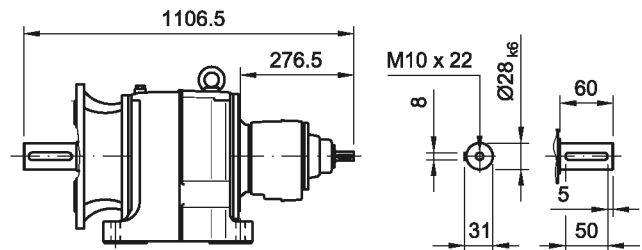
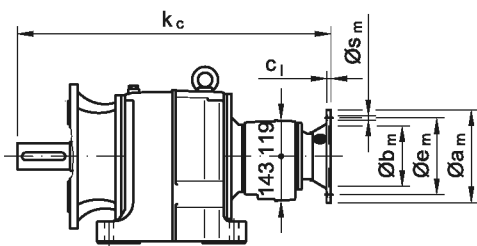


SIFM86B/C-I

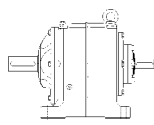


SIFM86C36B/C-U
71 - 132

SIFM86C36B/C-I



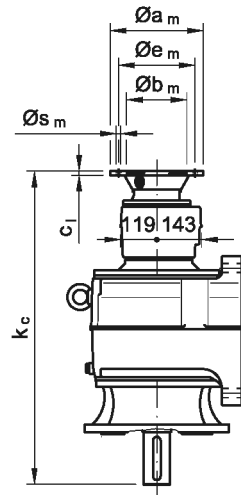
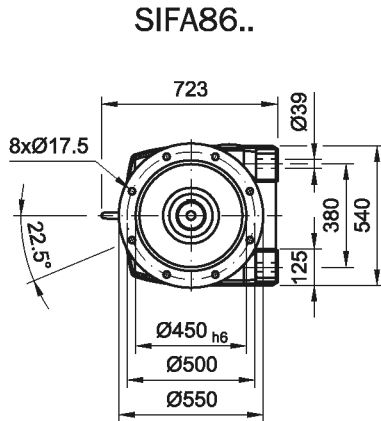
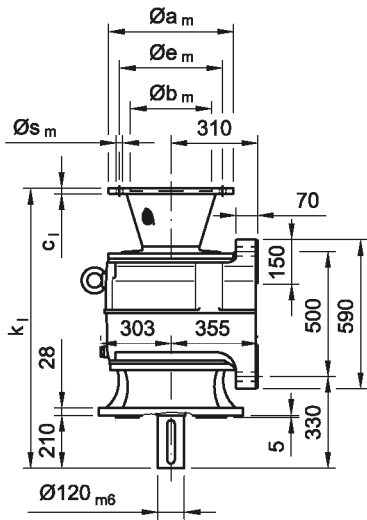
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					917	917	917	917	982	982	1074	1074	1099	1129	1129	1140	1140	1140		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1074	1074	1074	1074	1074	1074	1137	1137												



4. SI4

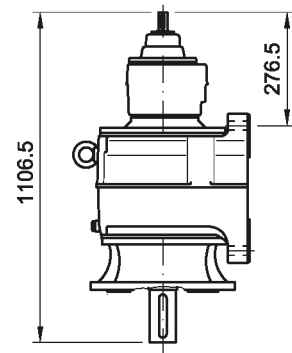
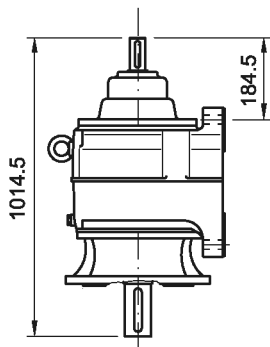
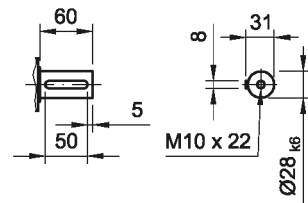
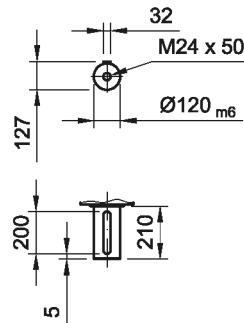
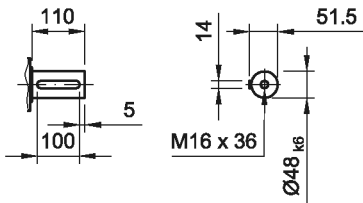
SIFA86B/C-U
100 - 280

SIFA86C36B/C-U
72 - 132

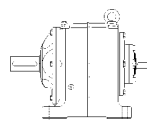


SIFA86B/C-I

SIFA86C36B/C-I

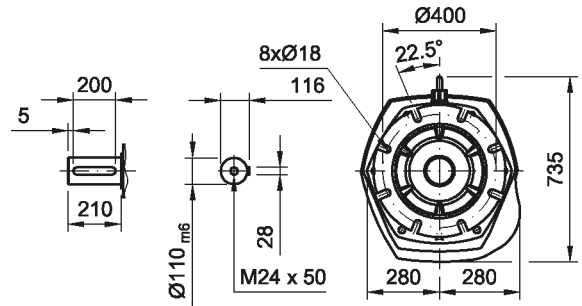
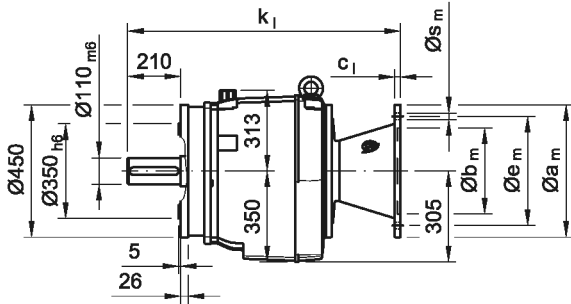


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					917	917	917	917	982	982	1074	1074	1099	1129	1129	1140	1140	1140		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	
kc	1074	1074	1074	1074	1074	1074	1137	1137												

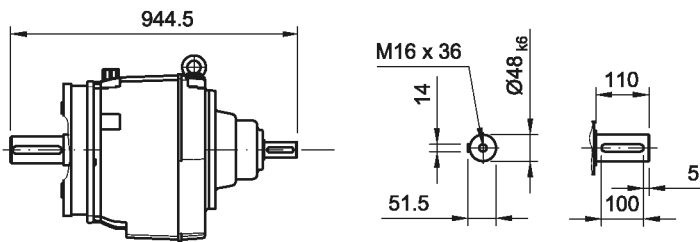


SICE86B/C-U
100 - 280

SICE86..

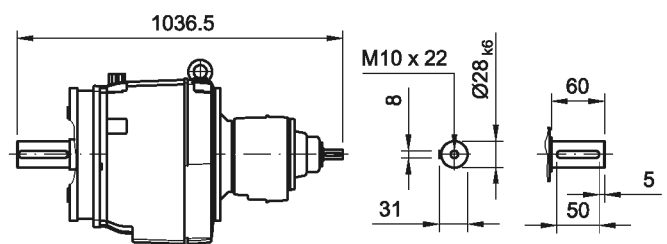
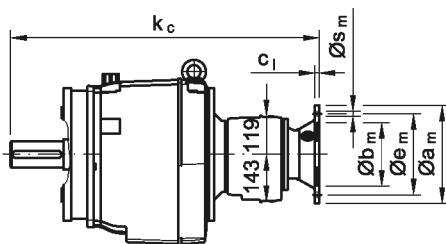


SICE86B/C-I

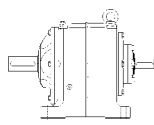


SICE86C36B/C-U
71 - 132

SICE86C36B/C-I

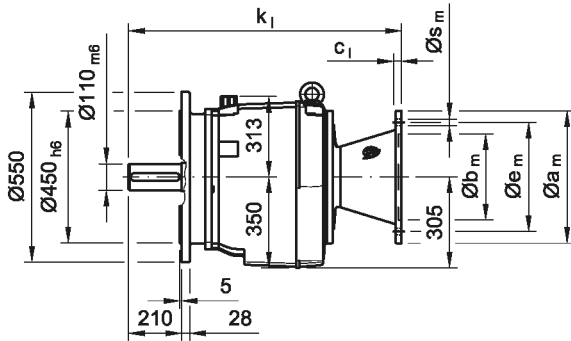


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M	
kl					847	847	847	847	912	912	1004	1004	1029	1059	1059	1070	1070	1070	
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25	
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7	
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500	
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550	
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	
kc	1004	1004	1004	1004	1004	1004	1067	1067											

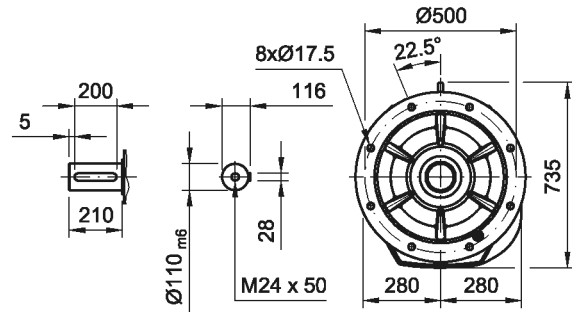


4. SI4

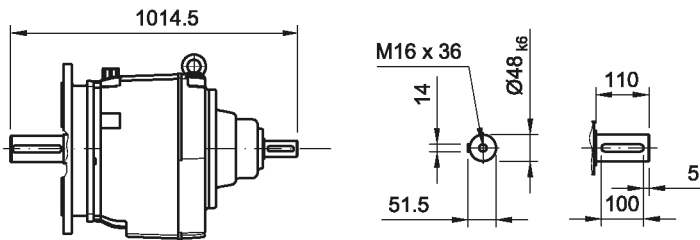
SICD86B/C-U
100 - 280



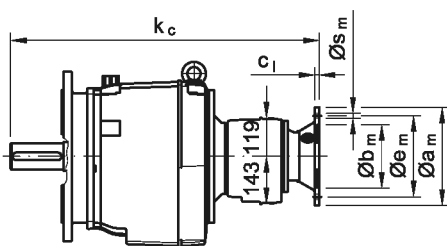
SICD86..



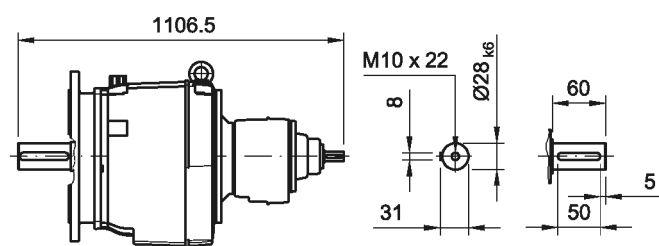
SICD86B/C-I



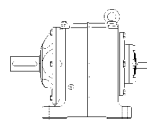
SICD86C36B/C-U
71 - 132



SICD86C36B/C-I

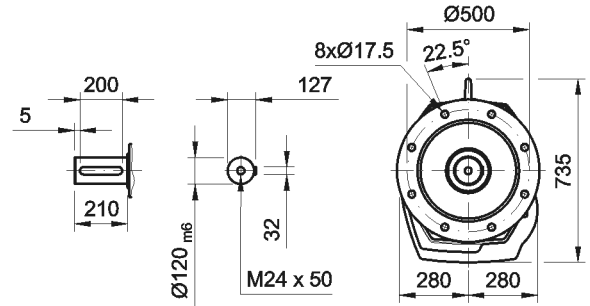
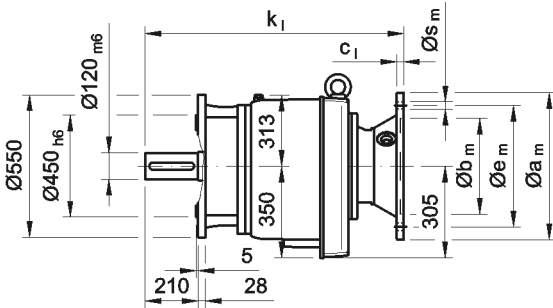


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
k_l					917	917	917	917	982	982	1074	1074	1099	1129	1129	1140	1140	1140		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{b_m}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{e_m}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{a_m}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{s_m}	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
k_c	1074	1074	1074	1074	1074	1074	1137	1137												

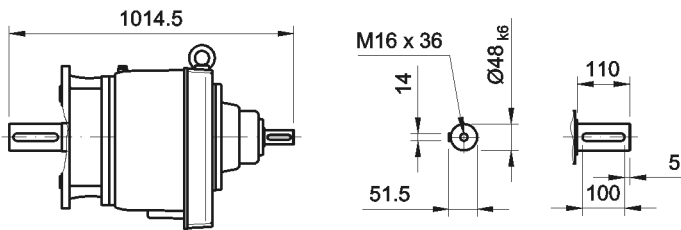


SICM86B/C-U
100 - 280

SICM86..

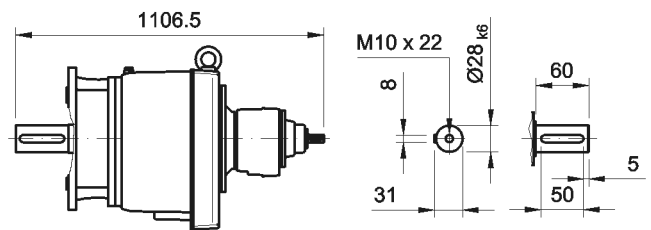
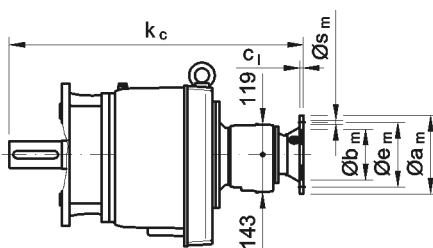


SICM86B/C-I

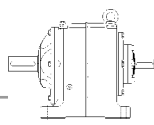


SICM86C36B/C-U
71 - 132

SICM86C36B/C-I

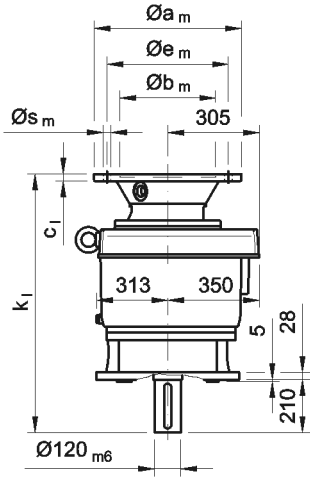


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					917	917	917	917	982	982	1074	1074	1099	1129	1129	1140	1140	1140		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5		
kc	1074	1074	1074	1074	1074	1074	1137	1137												

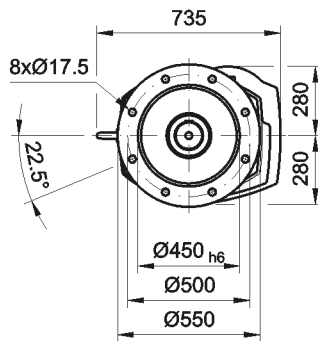


4. SI4

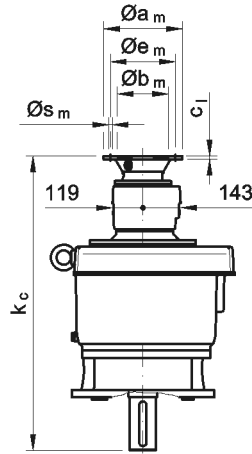
SICA86B/C-U
100 - 280



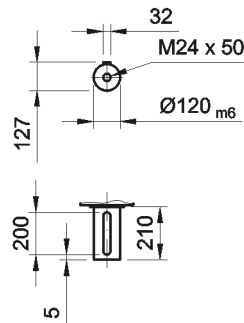
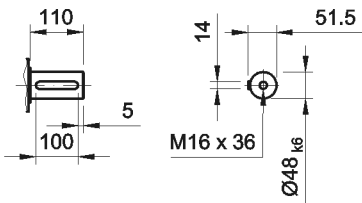
SICA86..



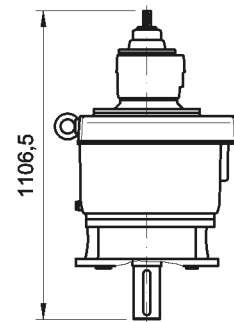
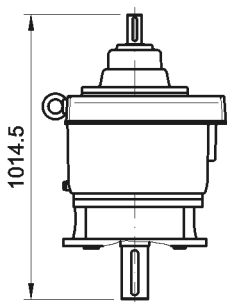
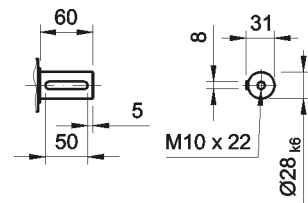
SICA86C36B/C-U
72 - 132



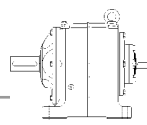
SICA86B/C-I



SICA86C36B/C-I

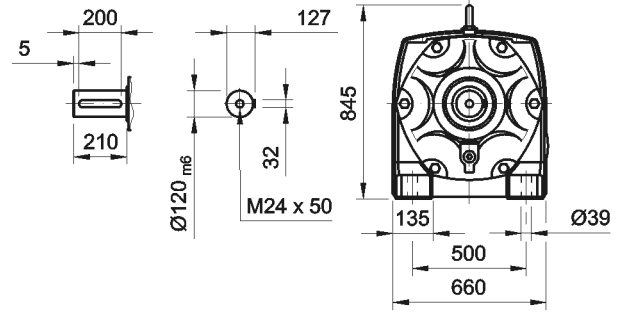
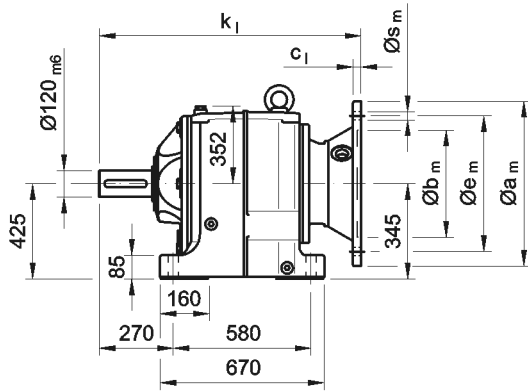


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	226M	226S	260M	280S	280M		
kl					917	917	917	917	982	982	1074	1074	1099	1129	1129	1140	1140	1140		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1074	1074	1074	1074	1074	1074	1137	1137												

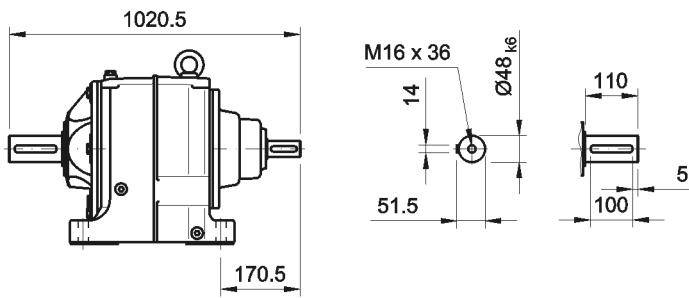


SIFN96B/C-U
100 - 280

SIFN96..

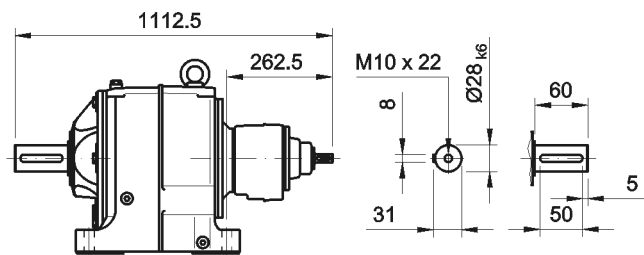
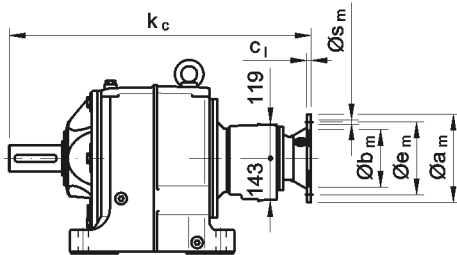


SIFN96B/C-I

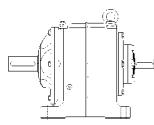


SIFN96C36B/C-U
71 - 132

SIFN96C36B/C-I

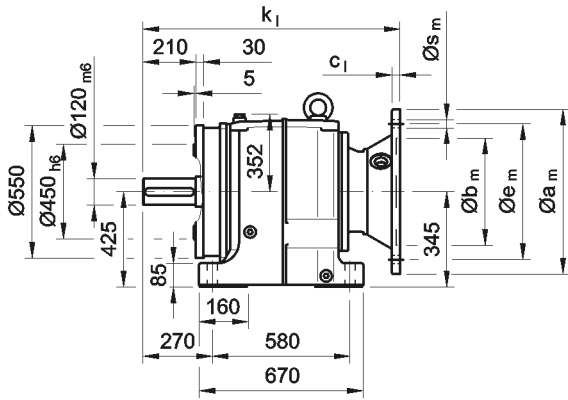


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					923	923	923	923	988	988	1080	1080	1105	1135	1135	1146	1146	1146		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1080	1080	1080	1080	1080	1080	1143	1143												

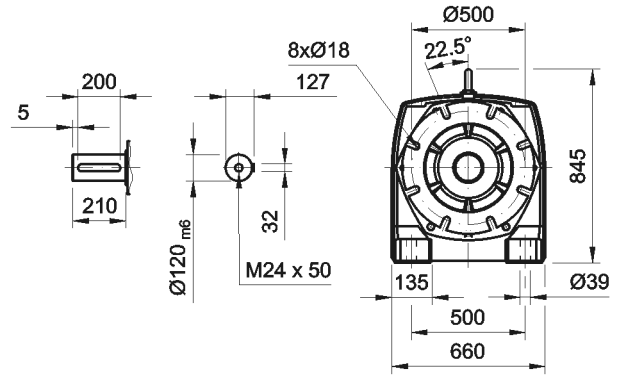


4. SI4

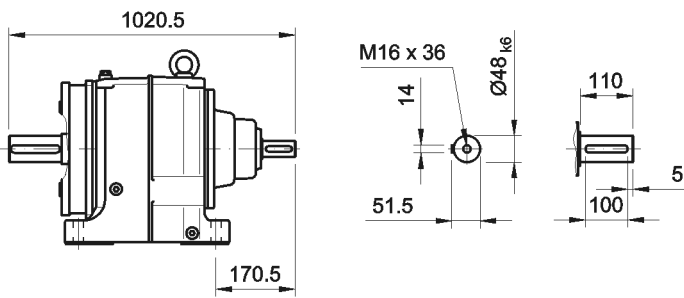
SIFE96B/C-U
100 - 280



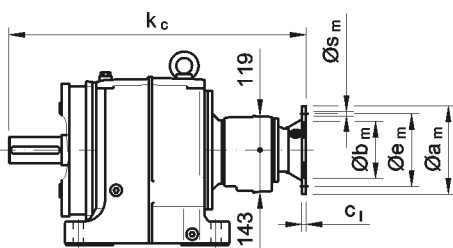
SIFE96..



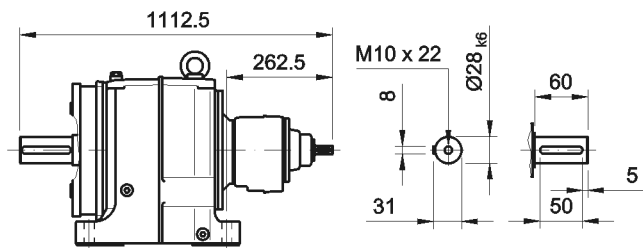
SIFE96B/C-I



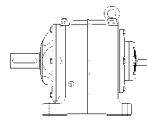
SIFE96C36B/C-U
71 - 132



SIFE96C36B/C-I

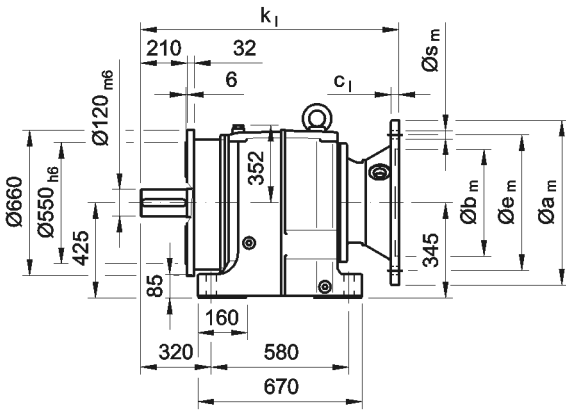


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					923	923	923	923	988	988	1080	1080	1105	1135	1135	1146	1146	1146		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1080	1080	1080	1080	1080	1080	1143	1143												

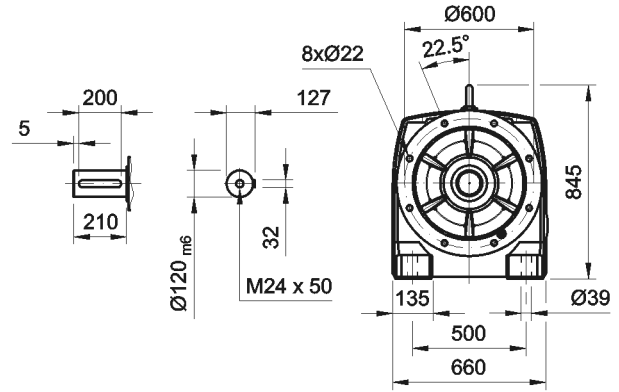


4. SI4

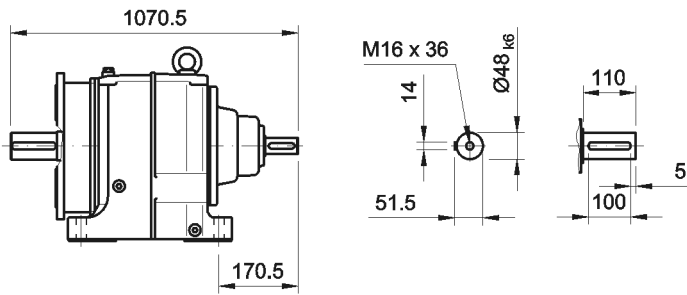
SIFD96B/C-U
100 - 280



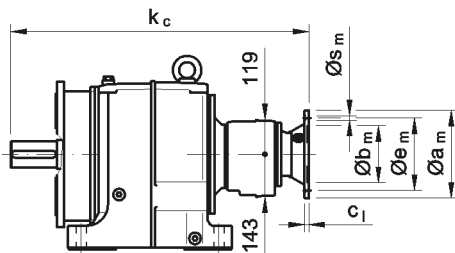
SIFD96..



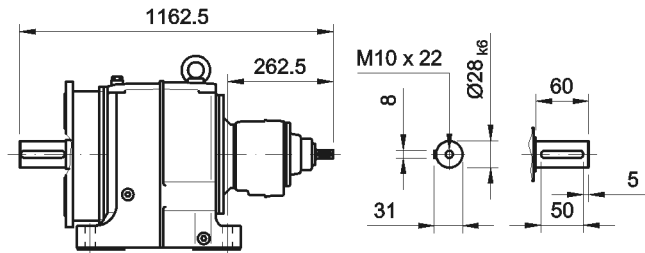
SIFD96B/C-I



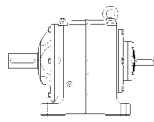
SIFD96C36B/C-U
71 - 132



SIFD96C36B/C-I

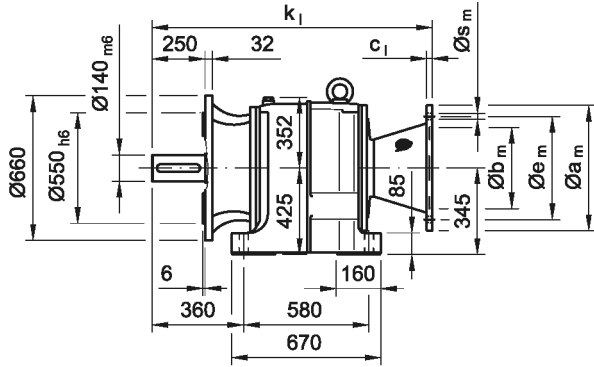


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M			
kl					973	973	973	973	1038	1038	1130	1130	1155	1185	1185	1196	1196	1196			
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25			
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7			
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500			
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550			
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1130	1130	1130	1130	1130	1130	1193	1193													

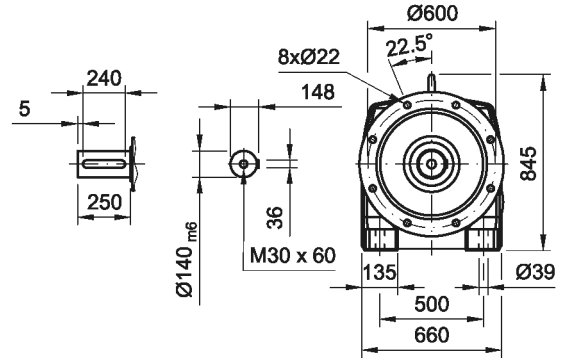


4. SI4

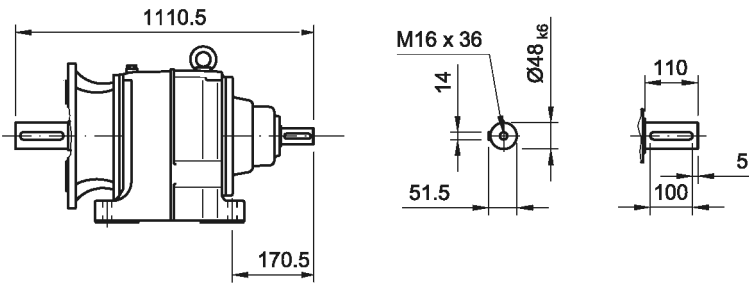
SIFM96B/C-U
100 - 280



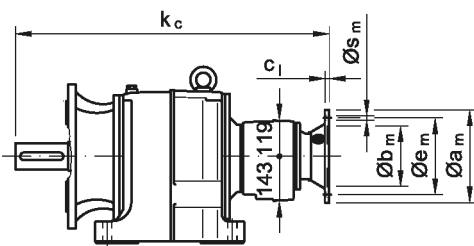
SIFM96..



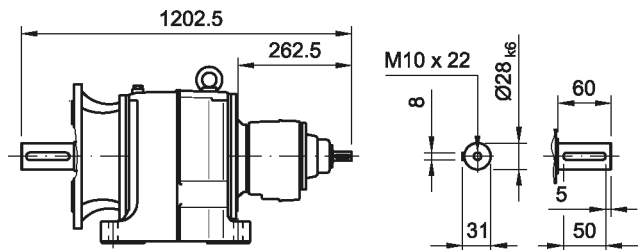
SIFM96B/C-I



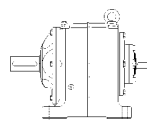
SIFM96C36B/C-U
71 - 132



SIFM96C36B/C-I



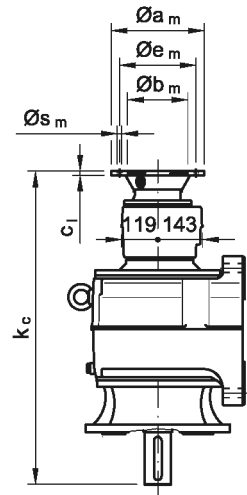
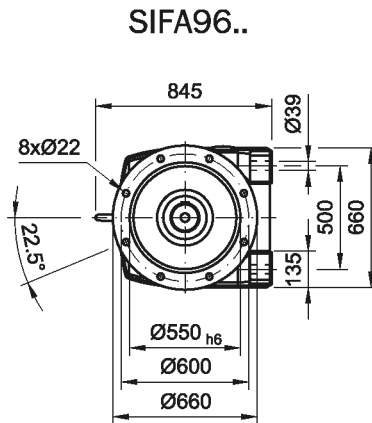
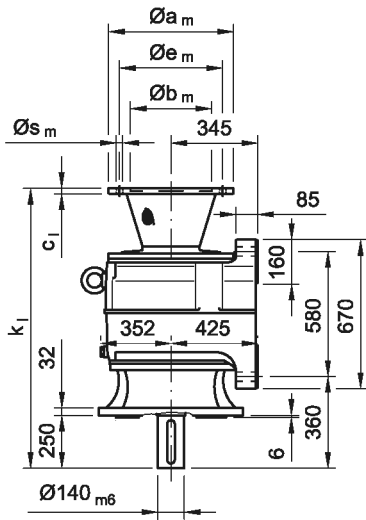
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
k_l					1013	1013	1013	1013	1078	1078	1170	1170	1195	1225	1225	1236	1236	1236		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{bm}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{em}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{am}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{sm}	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
k_c	1170	1170	1170	1170	1170	1170	1233	1233												



4. SI4

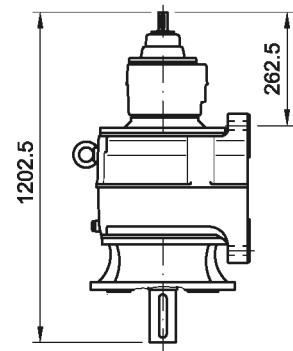
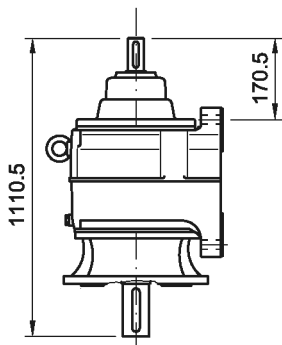
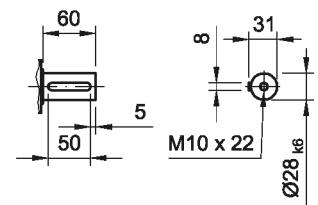
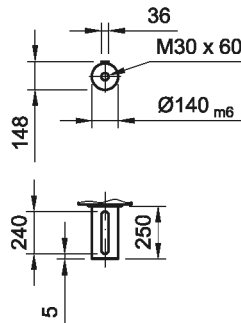
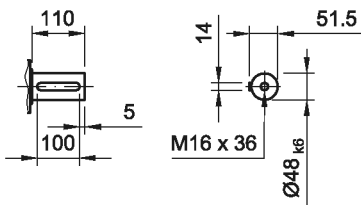
SIFA96B/C-U
100 - 280

SIFA96C36B/C-U
72 - 132

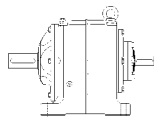


SIFA96B/C-I

SIFA96C36B/C-I

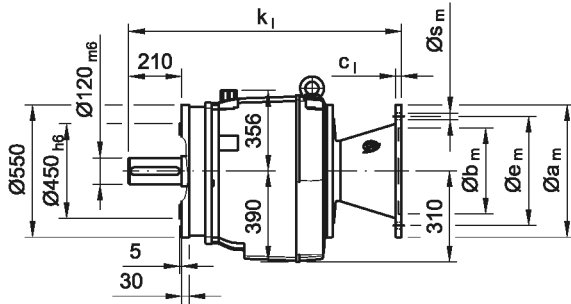


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					1013	1013	1013	1013	1078	1078	1170	1170	1195	1225	1225	1236	1236	1236		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	
kc	1170	1170	1170	1170	1170	1170	1233	1233												

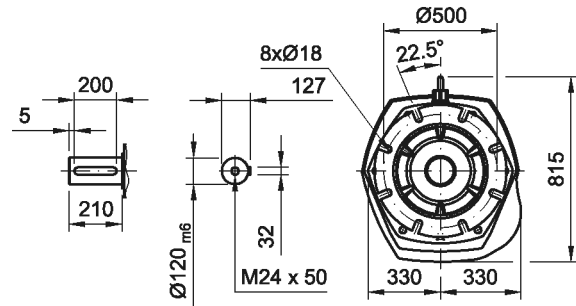


4. SI4

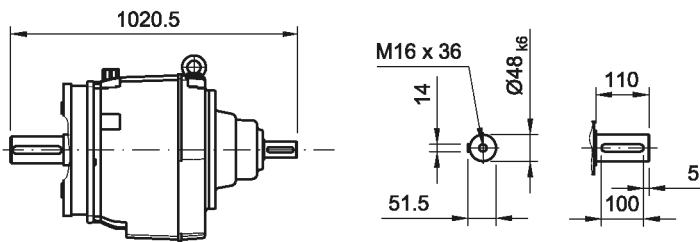
SICE96B/C-U
100 - 280



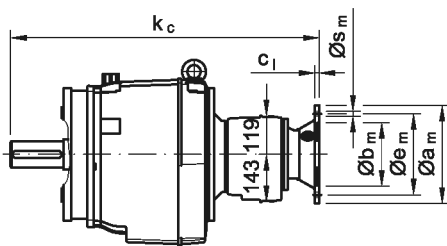
SICE96..



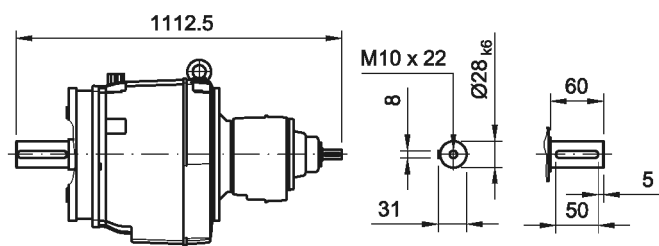
SICE96B/C-I



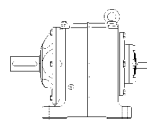
SICE96C36B/C-U
71 - 132



SICE96C36B/C-I

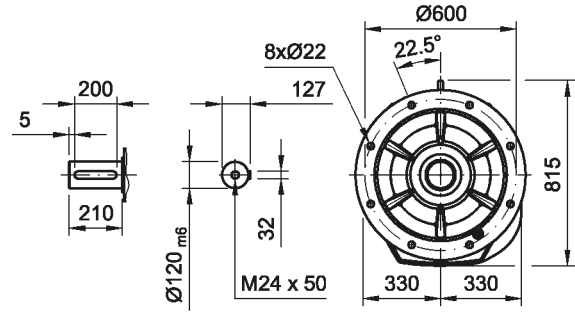
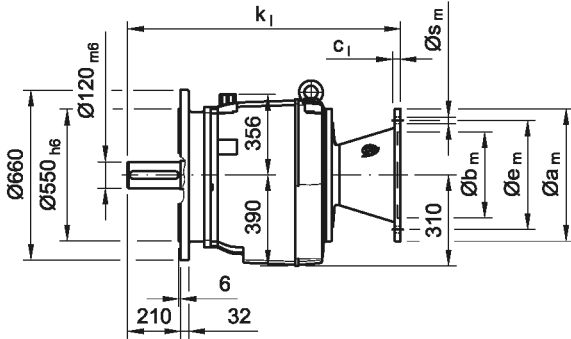


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
k_l					923	923	923	923	988	988	1080	1080	1105	1135	1135	1146	1146	1146		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{bm}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{em}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{am}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{sm}	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
k_c	1080	1080	1080	1080	1080	1080	1143	1143												

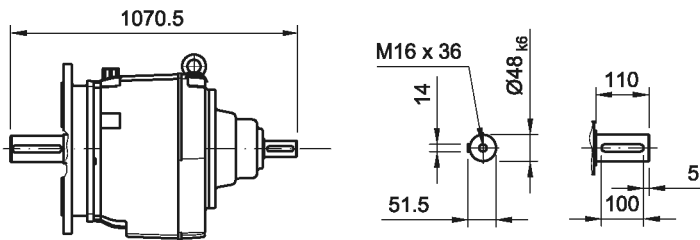


SICD96B/C-U
100 - 280

SICD96..

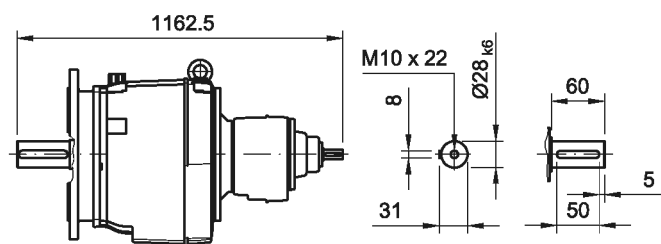
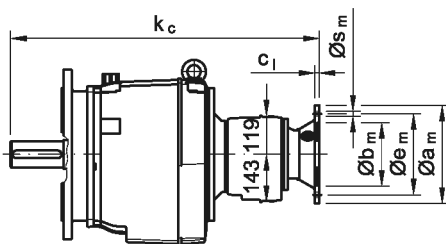


SICD96B/C-I

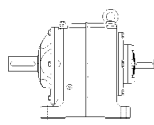


SICD96C36B/C-U
71 - 132

SICD96C36B/C-I

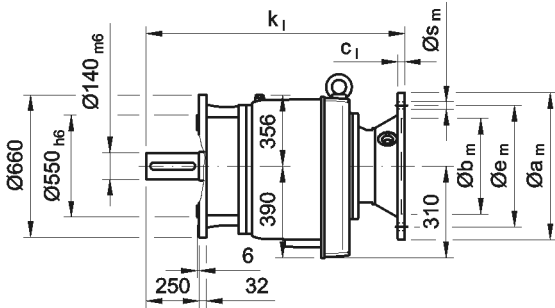


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M	
kl					973	973	973	973	1038	1038	1130	1130	1155	1185	1185	1196	1196	1196	
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25	
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7	
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500	
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550	
Øsm	4xM6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	
kc	1130	1130	1130	1130	1130	1130	1193	1193											

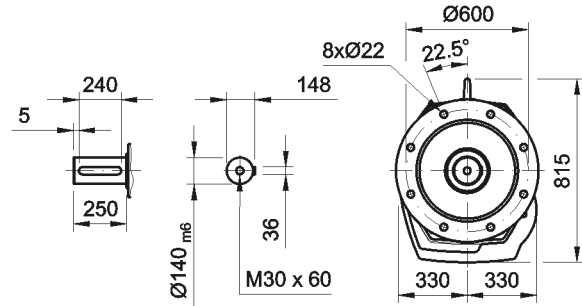


4. SI4

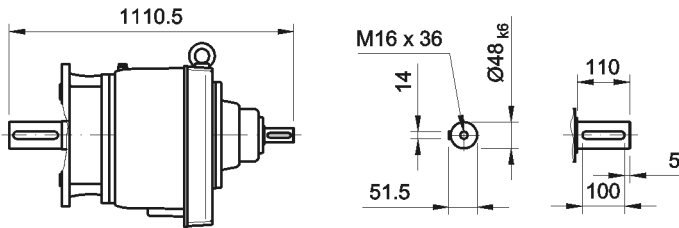
SICM96B/C-U
100 - 280



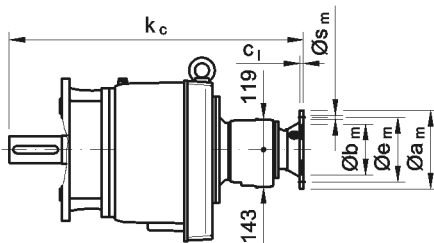
SICM96..



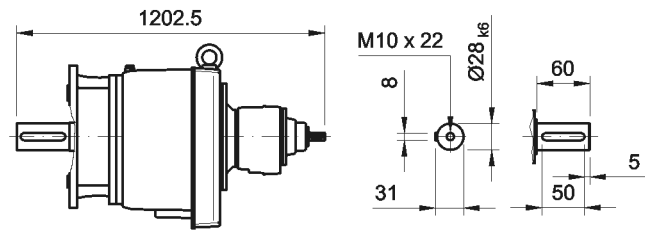
SICM96B/C-I



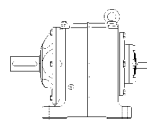
SICM96C36B/C-U
71 - 132



SICM96C36B/C-I



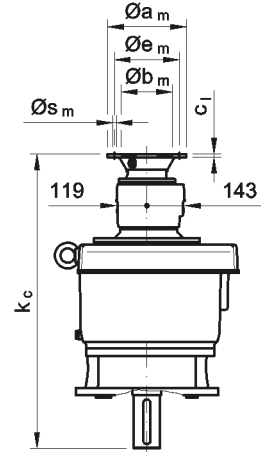
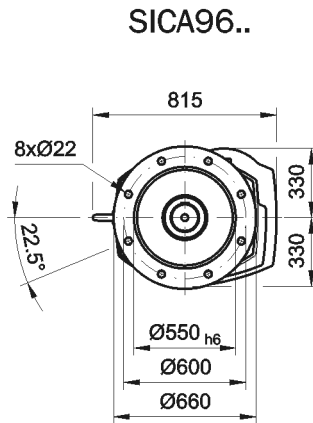
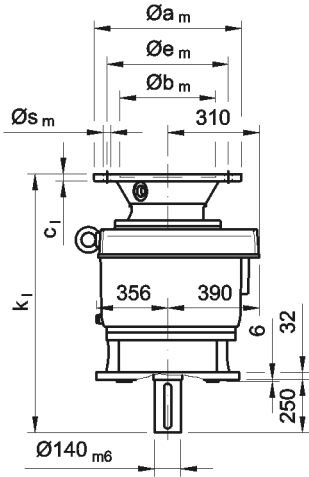
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					1013	1013	1013	1013	1078	1078	1170	1170	1195	1225	1225	1236	1236	1236		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1170	1170	1170	1170	1170	1170	1233	1233												



4. SI4

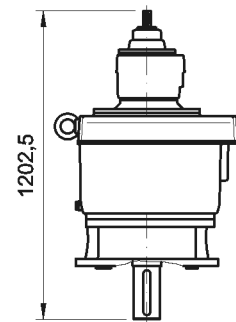
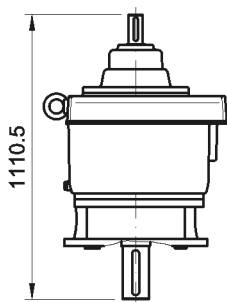
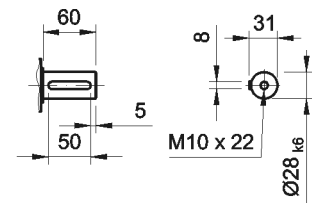
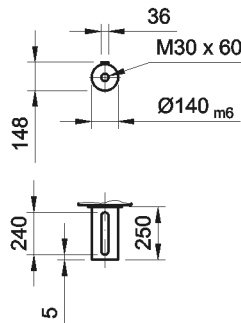
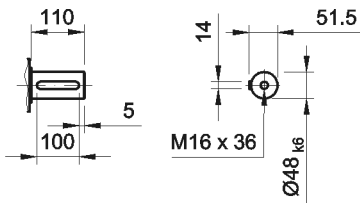
SICA96C-U
100 - 280

SICA96C36B/C-U
72 - 132

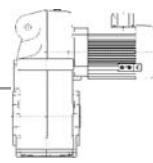


SICA96C-I

SICA96C36B/C-I

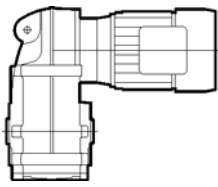


	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M			
kl					1013	1013	1013	1013	1078	1078	1170	1170	1195	1225	1225	1236	1236	1236			
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25			
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7			
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500			
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550			
Øsm	4xM8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	1170	1170	1170	1170	1170	1170	1233	1233													



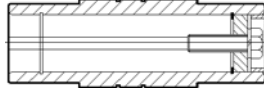
5 SP4 Parallel shaft

5.1 Version variants for SP4 parallel shaft helical geared motors



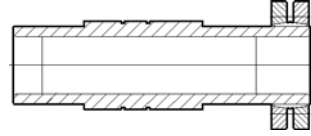
SPZH

Shaft-mounted version
Basic version with hollow shaft



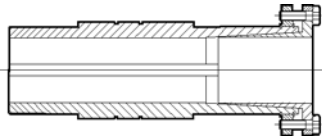
SP.H

Hollow shaft with keyway



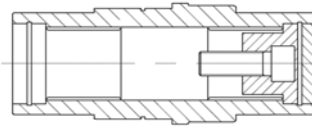
SP.S

Hollow shaft with shrink disc



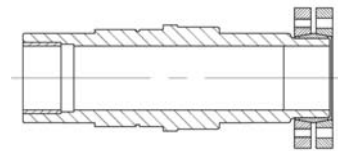
SP.B

Hollow shaft with conical
clamp sleeve



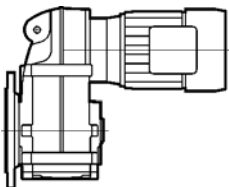
SP.T

Hollow spline shaft



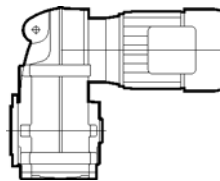
SP.C

Hollow shaft with shrink disc and
bronze bushing



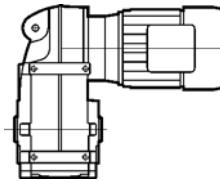
SPFH

B5 flange version with hollow shaft



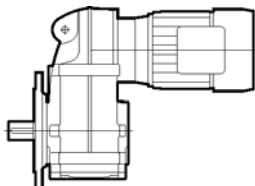
SPTH

B14 flange version with hollow shaft



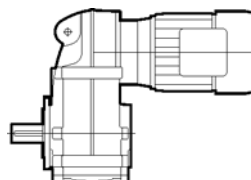
SPZH..FL

Foot mounting with hollow shaft



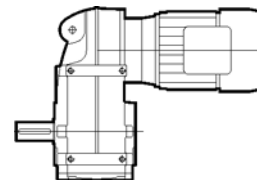
SPFN

B5 flange version with solid shaft



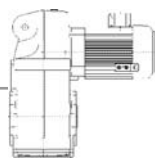
SPTN

B14 flange version with solid shaft



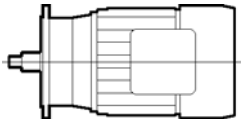
SPZN..F

Foot mounting with solid shaft

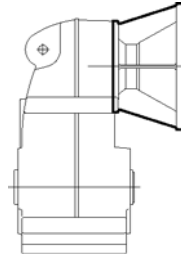


5. SP4

Versions on the drive end

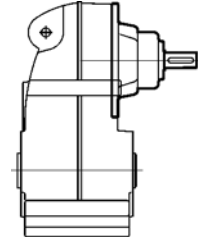


Integral motor



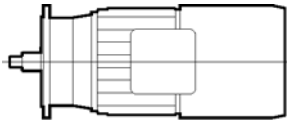
- U

Lantern for IEC standard motors

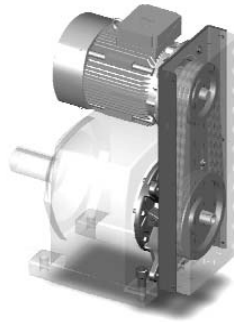


- I

Gear unit with free input shaft



Integrated brake motor

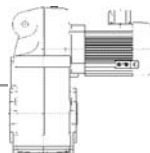


- M

Motor base version for V-belt drive,
motor mounting position IM B5 (schematic drawing)

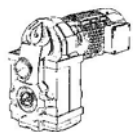
Overview

	8 sizes							
	1	2	3	4	5	6	7	8
T2m (Nm)	200	420	850	1700	3000	5400	9000	15000
Pm (kW)	0.12 to 90 kW							
i	3.15 ... 100			35.5 ... 315			100 ... 30000 combined	
	B			C				

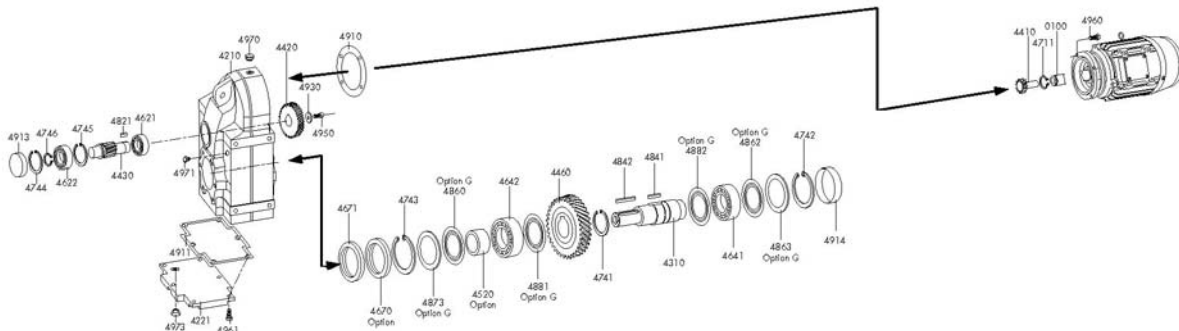


5. SP4

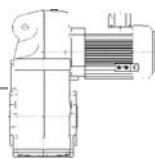
5.2 Principle design of parallel shaft helical geared motors



The following illustration shows the principle design of a parallel shaft helical geared motor. It is intended as a reference aid to the individual parts lists. Variations depending on the gear unit size and version are possible.



Item no.	Description
0100	Motor
4210	Casing
4221	Cover
4310	Output shaft
4410	Pinion
4420	Gear wheel
4430	Pinion shaft
4460	Gear wheel
4520 / 4521	Bush (option)
4621	Bearing
4622	Bearing
4641	Bearing
4642	Bearing
4671	Seal
4670	Seal
471. / 472. / 474.	Retaining ring
4811 / 4821 / 4831 / 484.	Feather key
486. / 487.	Support ring/shim ring
488.	Nilos ring
4910 / 4911	Gasket
4913	End cover
4914	End cover or protective cover for hollow shaft "H" (option)
493.	Washer
4950 / 496.	Screw
497.	Screw



5. SP4

5.3 Ordering information

Gear units with two and three stages

S	P	³	⁴	⁵	⁶	⁷	⁸	⁹	¹⁰	-	¹¹	-	¹²	¹³
---	---	--------------	--------------	--------------	--------------	--------------	--------------	--------------	---------------	---	---------------	---	---------------	---------------

Gear units with more than 3 stages

S	P	³	⁴	⁵	⁶	⁷	²⁵	²⁶	²⁷	⁸	⁹	¹⁰	¹¹	¹²	¹³
---	---	--------------	--------------	--------------	--------------	--------------	---------------	---------------	---------------	--------------	--------------	---------------	---------------	---------------	---------------

3 Output flange

- Z No flange
- F B5 flange
- T B14 flange

4 Output shaft

- H Hollow shaft with keyway
- N Solid shaft with keyway
- S Hollow shaft with shrink-fit ring
- B Hollow shaft with conical clamping sleeve
- T Hollow shaft with splining
- C Hollow shaft with shrink-fit ring and bronze bush

5 Size

1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

6 Design index:

- 6 Metric version
- 7 Inch version

7 Number of stages

- B 2-stage
- C 3-stage

8 Total gear ratio

9 Drive unit

- No designation: Integrated motor
- U IEC flange motor
- I I-latern
- M Motor chair

10 Accessories for gear units

- R Reversal lock on drive shaft (from gearbox size 3 and motor IEC 100) Specify free direction of rotation
- F foot mounting
- G reinforced bearings

11 Motor

12 Shaft arrangement

- L Output shaft left
- R Output shaft right
- T Output shaft left and right

13 Mounting positions

Only for gear units with more than 3 stages

25 Size preliminary stage gear unit

26 Design index prel.-stage gear unit

27 Number of stages prel.-stage gear unit

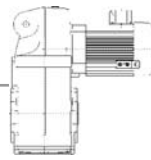
Example:

S	P	³ Z	⁴ N	⁵ 3	⁶ 6	⁷ B	⁸ 25	⁹	¹⁰	¹¹ 112	¹² L	¹³ 1
---	---	----------------	----------------	----------------	----------------	----------------	-----------------	--------------	---------------	-------------------	-----------------	-----------------

SP casing, no flange, solid shaft, size 3, design index 6, 2-stage, gear ratio $i = 1/25$, Rexnord-Stephan integral motor size 112, shaft arrangement left, mounting position 1

S	P	³ F	⁴ H	⁵ 5	⁶ 6	⁷ C	²⁵ 1	²⁶ 6	²⁷ B	⁸ 350	⁹	¹⁰	-	¹¹ 90	-	¹² L	¹³ 1
---	---	----------------	----------------	----------------	----------------	----------------	-----------------	-----------------	-----------------	------------------	--------------	---------------	---	------------------	---	-----------------	-----------------

SP casing, B5 flange, hollow shaft with keyway, size 5, design index 6, 3-stage, size primary-stage gear unit 1, design index primary-stage gear unit 6, 2-stage primary-stage gear unit, total gear ratio $i = 1/350$, moto size 90, shaft arrangement left, mounting position 1



GEARED MOTOR CODING

3

Z

F (B5)

T (B14)

4

H

N

S

B

10

-F-
Foot mounted housing; fixation on both sides possible.

9

Brake kit

Integral motor

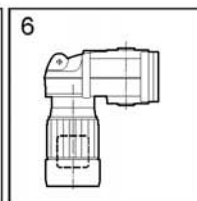
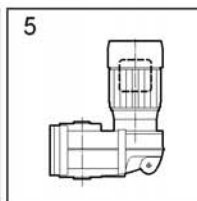
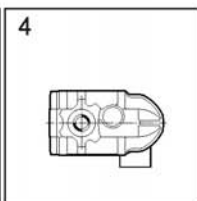
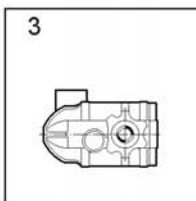
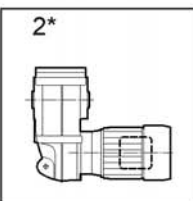
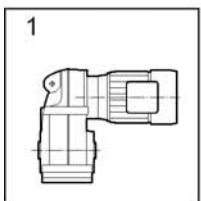
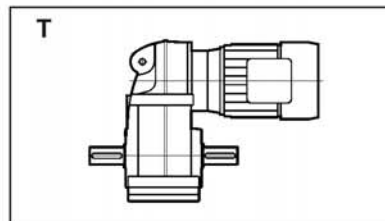
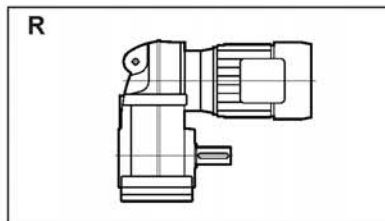
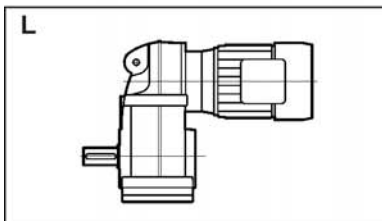
Integral brake motor

IEC-CEI

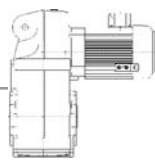
U + (R)

I (+R)

Mounting positions



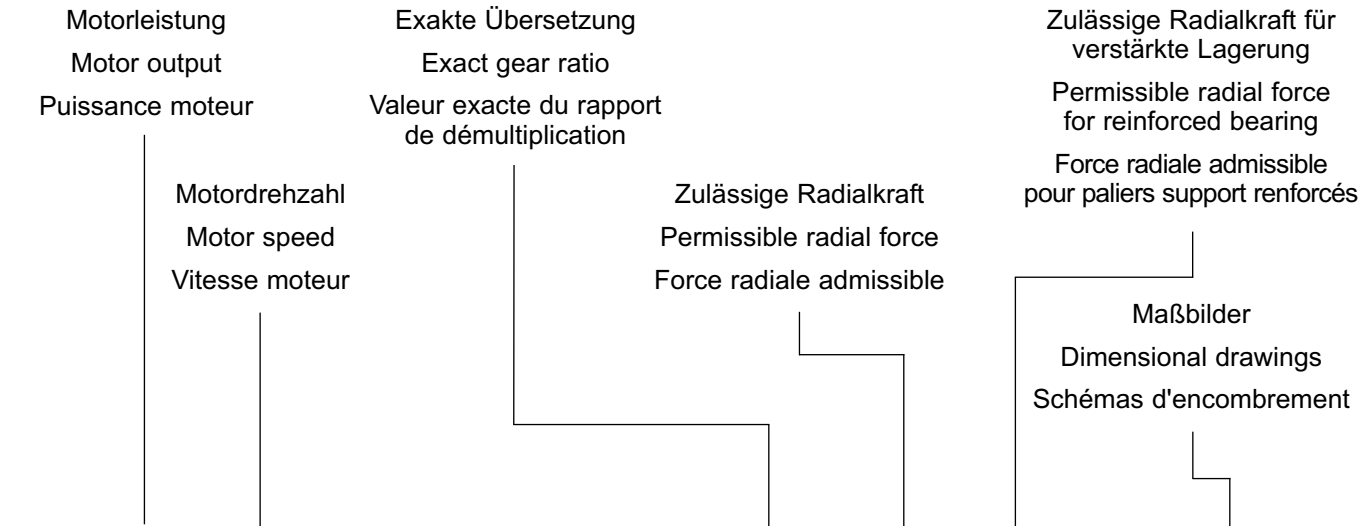
5




5. SP4

5.4 Auswahltabellen Getriebemotoren SP4 Selection tables for SP4 geared motors Tableaux de sélection pour les motoréducteurs SP4

Beispiel: Auswahltabelle Getriebemotoren
Example: Geared Motor selection table
Exemple de tableau de sélection pour motoréducteurs



P	0.12 kW
n ₁	1360 min ⁻¹

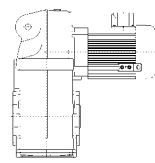
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
392.4	56.00	3	SPZH16B3.55 - 63A-4G	3.47		4 100	21	M246
342.3	49.00	3	SPZH16B4 - 63A-4G	3.97		4 300	21	M246
319.4	46.00	4	SPZH16B4.5 - 63A-4G	4.26		4 400	21	M246
277.6	40.00	4	SPZH16B5 - 63A-4G	4.90		4 600	21	M246
240.1	34.00	5	SPZH16B5.6 - 63A-4G	5.66		4 900	21	M246
222.8	32.00	5	SPZH16B6.3 - 63A-4G	6.10		5 000	21	M246

Grundausführung SPZH • Basic version SPZH • Version de base SPZH


Drehmoment der Abtriebswelle • Torque of output shaft • Couple de l'arbre de sortie

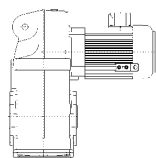
Verfügbarer Servicefaktor • Available Service Factor SF • Facteur de service disponible

Genaue Drehzahl der Abtriebswelle • Exact speed of output shaft & rated load • Vitesse exacte de l'arbre de sortie




P	0.12 kW
n₁	1360 min⁻¹

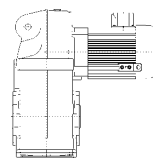
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
392.4	56.00	3	SPZH16B3.55 - 71A-4G	3.47		4 100	21	M246	
342.3	49.00	3	SPZH16B4 - 71A-4G	3.97		4 300	21	M246	
319.4	46.00	4	SPZH16B4.5 - 71A-4G	4.26		4 400	21	M246	
277.6	40.00	4	SPZH16B5 - 71A-4G	4.90		4 600	21	M246	
240.1	34.00	5	SPZH16B5.6 - 71A-4G	5.66		4 900	21	M246	
222.8	32.00	5	SPZH16B6.3 - 71A-4G	6.10		5 000	21	M246	
206.4	30.00	6	SPZH16B7.1 - 71A-4G	6.59		5 000	21	M246	
175.8	25.00	7	SPZH16B8 - 71A-4G	7.73		5 000	21	M246	
160.9	32.00	7	SPZH16B9 - 71A-4G	8.45		5 000	21	M246	
140.3	28.00	8	SPZH16B10 - 71A-4G	9.69		5 000	21	M246	
131.0	26.00	9	SPZH16B11.2 - 71A-4G	10.39		5 000	21	M246	
113.8	23.00	10	SPZH16B12.5 - 71A-4G	11.95		5 000	21	M246	
98.4	20.00	12	SPZH16B14 - 71A-4G	13.82		5 000	21	M246	
84.6	17.00	14	SPZH16B16 - 71A-4G	16.08		5 000	21	M246	
72.1	14.00	16	SPZH16B18 - 71A-4G	18.87		5 000	21	M246	
66.3	13.00	17	SPZH16B20 - 71A-4G	20.52		5 000	21	M246	
55.4	11.00	21	SPZH16B25 - 71A-4G	24.55		5 000	21	M246	
50.3	10.00	23	SPZH16B28 - 71A-4G	27.02		5 000	21	M246	
45.5	9.10	25	SPZH16B31.5 - 71A-4G	29.91		5 000	21	M246	
36.3	7.30	32	SPZH16B35.5 - 71A-4G	37.42		5 000	21	M246	
32.7	6.60	35	SPZH16B40 - 71A-4G	41.65		5 000	21	M246	
29.2	5.90	39	SPZH16B45 - 71A-4G	46.58		5 000	21	M246	
25.1	5.00	46	SPZH16B56 - 71A-4G	54.15		5 000	21	M246	
22.5	4.50	51	SPZH16B63 - 71A-4G	60.33		5 000	21	M246	
18.1	3.60	63	SPZH16B71 - 71A-4G	74.98		5 000	21	M246	
16.3	3.30	70	SPZH16B80 - 71A-4G	83.24		5 000	21	M246	
14.6	2.90	79	SPZH16B90 - 71A-4G	93.33		5 000	21	M246	
14.0	2.80	82	SPZH16B16B100 - 71A-4G	97.10		5 000	31	M246	
12.0	2.40	95	SPZH16B16B112 - 71A-4G	112.96		5 000	31	M246	
10.5	2.10	109	SPZH16B16B125 - 71A-4G	129.19		5 000	31	M246	
9.0	1.80	127	SPZH16B16B140 - 71A-4G	150.30		5 000	31	M246	
7.8	1.60	147	SPZH16B16B160 - 71A-4G	174.87		5 000	31	M246	
7.8	1.60	147	SPZH16B16B180 - 71A-4G	174.87		5 000	31	M246	
7.6	2.90	151	SPZH26B16B180 - 71A-4G	179.33	6 900	6 900	38	M254	
6.6	1.30	173	SPZH16B16B200 - 71A-4G	205.21		5 000	31	M246	
7.0	2.70	165	SPZH26B16B200 - 71A-4G	195.28	6 900	6 900	38	M254	
6.1	1.20	188	SPZH16B16B224 - 71A-4G	223.23		5 000	31	M246	
6.0	2.30	191	SPZH26B16B224 - 71A-4G	227.20	6 900	6 900	38	M254	
5.4	1.10	213	SPZH16B16B250 - 71A-4G	252.62		5 000	31	M246	
5.5	2.10	208	SPZH26B16B250 - 71A-4G	247.15	6 900	6 900	38	M254	
4.9	0.98	236	SPZH16B16B280 - 71A-4G	279.63		5 000	31	M246	
5.0	1.90	231	SPZH26B16B280 - 71A-4G	273.79	6 900	6 900	38	M254	
4.2	0.84	274	SPZH16B16B315 - 71A-4G	325.33		5 000	31	M246	
4.4	1.70	261	SPZH26B16B315 - 71A-4G	309.59	6 900	6 900	38	M254	
3.8	1.40	303	SPZH26B16B355 - 71A-4G	360.18	6 900	6 900	38	M254	
4.0	2.90	289	SPZH36B16B355 - 71A-4G	343.25	13 500	13 500	45	M262	
3.4	1.30	338	SPZH26B16B400 - 71A-4G	401.29	6 900	6 900	38	M254	
3.5	2.60	325	SPZH36B16B400 - 71A-4G	385.45	13 500	13 500	45	M262	
3.0	1.20	380	SPZH26B16B450 - 71A-4G	450.61	6 900	6 900	38	M254	
3.1	2.30	371	SPZH36B16B450 - 71A-4G	440.16	13 500	13 500	45	M262	
2.7	1.00	423	SPZH26B16B500 - 71A-4G	501.61	6 900	6 900	38	M254	
2.8	2.10	407	SPZH36B16B500 - 71A-4G	482.93	13 500	13 500	45	M262	




5. SP4


P 0.12 kW
n₁ 1360 min⁻¹

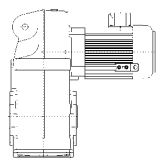
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
2.4	0.93	473	SPZH26B16B560 - 71A-4G	560.97	6 900	6 900	38	M254	
2.4	1.80	470	SPZH36B16B560 - 71A-4G	557.79	13 500	13 500	45	M262	
2.2	0.84	526	SPZH26B16B630 - 71A-4G	624.44	6 900	6 900	38	M254	
2.2	1.60	524	SPZH36B16B630 - 71A-4G	621.43	13 500	13 500	45	M262	
1.9	1.40	618	SPZH36B16B710 - 71A-4G	733.09	13 500	13 500	45	M262	
1.9	2.80	598	SPZH46B16B710 - 71A-4G	709.88	18 000	18 000	71	M270	
1.7	1.20	688	SPZH36B16B800 - 71A-4G	816.74	13 500	13 500	45	M262	
1.6	2.40	695	SPZH46B16B800 - 71A-4G	825.19	18 000	18 000	71	M270	
1.4	1.10	799	SPZH36B16B900 - 71A-4G	947.72	13 500	13 500	45	M262	
1.5	2.20	775	SPZH46B16B900 - 71A-4G	919.35	18 000	18 000	71	M270	
1.3	0.99	855	SPZH36B16B1000 - 71A-4G	1015.05	13 500	13 500	45	M262	
1.4	2.10	800	SPZH46B16B1000 - 71A-4G	948.89	18 000	18 000	71	M270	
1.2	0.92	928	SPZH36B16C1120 - 71A-4G	1101.91	13 500	13 500	45	M262	
1.2	1.80	963	SPZH46B16B1120 - 71A-4G	1142.57	18 000	18 000	71	M270	
1.2	3.00	968	SPZH56B16B1120 - 71A-4G	1148.99	27 000	27 000	108	M278	
1.1	0.83	1028	SPZH36B16C1250 - 71A-4G	1219.69	13 500	13 500	45	M262	
1.1	1.60	1045	SPZH46B16C1250 - 71A-4G	1240.35	18 000	18 000	71	M270	
1.1	2.80	1051	SPZH56B16C1250 - 71A-4G	1247.31	27 000	27 000	108	M278	
1.0	1.50	1157	SPZH46B16C1400 - 71A-4G	1372.92	18 000	18 000	71	M270	
1.0	2.50	1163	SPZH56B16C1400 - 71A-4G	1380.63	27 000	27 000	108	M278	
0.9	1.30	1305	SPZH46B16C1600 - 71A-4G	1548.45	18 000	18 000	71	M270	
0.9	2.20	1296	SPZH56B16C1600 - 71A-4G	1538.19	27 000	27 000	108	M278	
0.8	1.20	1452	SPZH46B16C1800 - 71A-4G	1723.69	18 000	18 000	71	M270	
0.8	2.00	1455	SPZH56B16C1800 - 71A-4G	1727.26	27 000	27 000	108	M278	
0.7	1.10	1611	SPZH46B16C2000 - 71A-4G	1912.00	18 000	18 000	71	M270	
0.7	1.80	1620	SPZH56B16C2000 - 71A-4G	1922.74	27 000	27 000	108	M278	
0.6	0.90	1888	SPZH46B16C2240 - 71A-4G	2240.80	18 000	18 000	71	M270	
0.6	1.60	1830	SPZH56B16C2240 - 71A-4G	2171.77	27 000	27 000	108	M278	
0.6	3.00	1857	SPZH66C36B2240 - 71A-4G	2203.92		30 000	197	M286	
0.5	0.81	2094	SPZH46B16C2500 - 71A-4G	2485.59	18 000	18 000	71	M270	
0.5	1.20	2346	SPZH56B16C2800 - 71A-4G	2784.76	27 000	27 000	108	M278	
0.5	2.20	2474	SPZH66C36B2800 - 71A-4G	2935.85		30 000	197	M286	
0.5	1.10	2534	SPZH56B16C3150 - 71A-4G	3007.06	27 000	27 000	108	M278	
0.4	2.00	2737	SPZH66C36B3150 - 71A-4G	3247.76		30 000	197	M286	
0.4	2.90	2741	SPZH76C36B3150 - 71A-4G	3253.53		50 000	288	M294	
0.4	0.99	2916	SPZH56B16C3550 - 71A-4G	3460.93	27 000	27 000	108	M278	
0.4	1.80	3040	SPZH66C36B3550 - 71A-4G	3607.91		30 000	197	M286	
0.4	2.80	2830	SPZH76C36B3550 - 71A-4G	3358.36		50 000	288	M294	
0.4	0.90	3237	SPZH56B16C4000 - 71A-4G	3842.27	27 000	27 000	108	M278	
0.3	1.60	3381	SPZH66C36C4000 - 71A-4G	4012.75		30 000	197	M286	
0.4	2.50	3176	SPZH76C36B4000 - 71A-4G	3769.68		50 000	288	M294	
0.3	0.80	3630	SPZH56B16C4500 - 71A-4G	4308.36	27 000	27 000	108	M278	
0.3	1.40	3829	SPZH66C36C4500 - 71A-4G	4544.63		30 000	197	M286	
0.3	2.10	3765	SPZH76C36C4500 - 71A-4G	4468.98		50 000	288	M294	
0.3	1.30	4176	SPZH66C36C5000 - 71A-4G	4955.74		30 000	197	M286	
0.3	1.80	4359	SPZH76C36C5000 - 71A-4G	5172.88		50 000	288	M294	
0.2	1.10	4833	SPZH66C36C5600 - 71A-4G	5736.32		30 000	197	M286	
0.2	1.70	4813	SPZH76C36C5600 - 71A-4G	5711.83		50 000	288	M294	
0.2	1.00	5337	SPZH66C36C6300 - 71A-4G	6333.97		30 000	197	M286	
0.2	1.40	5758	SPZH76C36C6300 - 71A-4G	6833.68		50 000	288	M294	
0.2	2.80	5386	SPZH86C36C6300 - 71A-4G	6391.69		82 500	443	M302	
0.2	0.89	6200	SPZH66C36C7100 - 71A-4G	7358.15		30 000	197	M286	



5. SP4


P 0.12 kW n₁ 1360 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.2	1.20	6411	SPZH76C36C7100 - 71A-4G	7608.72		50 000	288	M294	
0.2	2.50	5983	SPZH86C36C7100 - 71A-4G	7100.47		82 500	443	M302	
0.2	1.10	7092	SPZH76C36C8000 - 71A-4G	8417.09		50 000	288	M294	
0.2	2.20	6932	SPZH86C36C8000 - 71A-4G	8226.92		82 500	443	M302	
0.1	1.00	7879	SPZH76C36C9000 - 71A-4G	9350.48		50 000	288	M294	
0.1	0.88	9128	SPZH76C36C10000 - 71A-4G	10833.88		50 000	288	M294	

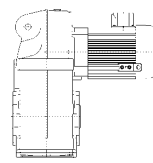
P 0.18 kW n₁ 1370 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
395.3	38.00	4	SPZH16B3.55 - 71A-4G	3.47		4 100	21	M246	
344.8	33.00	5	SPZH16B4 - 71A-4G	3.97		4 300	21	M246	
321.8	31.00	5	SPZH16B4.5 - 71A-4G	4.26		4 400	21	M246	
279.6	27.00	6	SPZH16B5 - 71A-4G	4.90		4 600	21	M246	
241.9	23.00	7	SPZH16B5.6 - 71A-4G	5.66		4 800	21	M246	
224.4	21.00	8	SPZH16B6.3 - 71A-4G	6.10		4 900	21	M246	
207.9	20.00	8	SPZH16B7.1 - 71A-4G	6.59		5 000	21	M246	
177.1	17.00	10	SPZH16B8 - 71A-4G	7.73		5 000	21	M246	
162.0	22.00	11	SPZH16B9 - 71A-4G	8.45		5 000	21	M246	
141.3	19.00	12	SPZH16B10 - 71A-4G	9.69		5 000	21	M246	
131.9	18.00	13	SPZH16B11.2 - 71A-4G	10.39		5 000	21	M246	
114.6	15.00	15	SPZH16B12.5 - 71A-4G	11.95		5 000	21	M246	
99.1	13.00	17	SPZH16B14 - 71A-4G	13.82		5 000	21	M246	
85.2	11.00	20	SPZH16B16 - 71A-4G	16.08		5 000	21	M246	
72.6	9.70	24	SPZH16B18 - 71A-4G	18.87		5 000	21	M246	
66.8	8.90	26	SPZH16B20 - 71A-4G	20.52		5 000	21	M246	
55.8	7.50	31	SPZH16B25 - 71A-4G	24.55		5 000	21	M246	
50.7	6.80	34	SPZH16B28 - 71A-4G	27.02		5 000	21	M246	
45.8	6.10	38	SPZH16B31.5 - 71A-4G	29.91		5 000	21	M246	
36.6	4.90	47	SPZH16B35.5 - 71A-4G	37.42		5 000	21	M246	
32.9	4.40	52	SPZH16B40 - 71A-4G	41.65		5 000	21	M246	
29.4	3.90	58	SPZH16B45 - 71A-4G	46.58		5 000	21	M246	
25.3	3.40	68	SPZH16B56 - 71A-4G	54.15		5 000	21	M246	
22.7	3.00	76	SPZH16B63 - 71A-4G	60.33		5 000	21	M246	
18.3	2.40	94	SPZH16B71 - 71A-4G	74.98		5 000	21	M246	
16.5	2.20	104	SPZH16B80 - 71A-4G	83.24		5 000	21	M246	
14.7	2.00	117	SPZH16B90 - 71A-4G	93.33		5 000	21	M246	
14.9	2.90	116	SPZH26B90 - 71A-4G	92.15	6 900	6 900	28	M254	
14.1	1.90	122	SPZH16B16B100 - 71A-4G	97.10		5 000	31	M246	
13.3	2.40	130	SPZH26B100 - 71A-4G	103.33	6 900	6 900	28	M254	
12.1	1.60	142	SPZH16B16B112 - 71A-4G	112.96		5 000	31	M246	
10.6	1.40	162	SPZH16B16B125 - 71A-4G	129.19		5 000	31	M246	
11.0	2.80	157	SPZH26B16B125 - 71A-4G	125.07	6 900	6 900	38	M254	
9.1	1.20	189	SPZH16B16B140 - 71A-4G	150.30		5 000	31	M246	
9.5	2.40	181	SPZH26B16B140 - 71A-4G	143.94	6 900	6 900	38	M254	
7.8	1.00	219	SPZH16B16B160 - 71A-4G	174.87		5 000	31	M246	
8.9	2.30	193	SPZH26B16B160 - 71A-4G	154.13	6 900	6 900	38	M254	




5. SP4


P 0.18 kW
n₁ 1370 min⁻¹

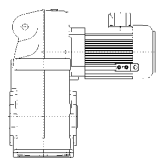
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
7.8	1.00	219	SPZH16B16B180 - 71A-4G	174.87		5 000	31	M246	
7.6	2.00	225	SPZH26B16B180 - 71A-4G	179.33	6 900	6 900	38	M254	
6.7	0.89	257	SPZH16B16B200 - 71A-4G	205.21		5 000	31	M246	
7.0	1.80	245	SPZH26B16B200 - 71A-4G	195.28	6 900	6 900	38	M254	
6.1	0.82	280	SPZH16B16B224 - 71A-4G	223.23		5 000	31	M246	
6.0	1.50	285	SPZH26B16B224 - 71A-4G	227.20	6 900	6 900	38	M254	
5.5	1.40	310	SPZH26B16B250 - 71A-4G	247.15	6 900	6 900	38	M254	
5.4	2.70	317	SPZH36B16B250 - 71A-4G	252.84	13 500	13 500	45	M262	
5.0	1.30	344	SPZH26B16B280 - 71A-4G	273.79	6 900	6 900	38	M254	
4.9	2.40	349	SPZH36B16B280 - 71A-4G	278.34	13 500	13 500	45	M262	
4.4	1.10	388	SPZH26B16B315 - 71A-4G	309.59	6 900	6 900	38	M254	
4.4	2.20	387	SPZH36B16B315 - 71A-4G	308.09	13 500	13 500	45	M262	
3.8	0.97	452	SPZH26B16B355 - 71A-4G	360.18	6 900	6 900	38	M254	
4.0	2.00	431	SPZH36B16B355 - 71A-4G	343.25	13 500	13 500	45	M262	
3.4	0.87	503	SPZH26B16B400 - 71A-4G	401.29	6 900	6 900	38	M254	
3.6	1.80	484	SPZH36B16B400 - 71A-4G	385.45	13 500	13 500	45	M262	
3.1	1.50	552	SPZH36B16B450 - 71A-4G	440.16	13 500	13 500	45	M262	
3.0	3.00	572	SPZH46B16B450 - 71A-4G	455.79	18 000	18 000	71	M270	
2.8	1.40	606	SPZH36B16B500 - 71A-4G	482.93	13 500	13 500	45	M262	
2.7	2.70	637	SPZH46B16B500 - 71A-4G	507.81	18 000	18 000	71	M270	
2.5	1.20	700	SPZH36B16B560 - 71A-4G	557.79	13 500	13 500	45	M262	
2.4	2.40	715	SPZH46B16B560 - 71A-4G	570.23	18 000	18 000	71	M270	
2.2	1.10	780	SPZH36B16B630 - 71A-4G	621.43	13 500	13 500	45	M262	
2.2	2.10	796	SPZH46B16B630 - 71A-4G	634.76	18 000	18 000	71	M270	
1.9	0.92	920	SPZH36B16B710 - 71A-4G	733.09	13 500	13 500	45	M262	
1.9	1.90	891	SPZH46B16B710 - 71A-4G	709.88	18 000	18 000	71	M270	
1.7	0.83	1025	SPZH36B16B800 - 71A-4G	816.74	13 500	13 500	45	M262	
1.7	1.60	1035	SPZH46B16B800 - 71A-4G	825.19	18 000	18 000	71	M270	
1.7	2.80	1041	SPZH56B16B800 - 71A-4G	829.83	27 000	27 000	108	M278	
1.5	1.50	1153	SPZH46B16B900 - 71A-4G	919.35	18 000	18 000	71	M270	
1.5	2.50	1160	SPZH56B16B900 - 71A-4G	924.51	27 000	27 000	108	M278	
1.4	1.40	1191	SPZH46B16B1000 - 71A-4G	948.89	18 000	18 000	71	M270	
1.4	2.40	1197	SPZH56B16B1000 - 71A-4G	954.22	27 000	27 000	108	M278	
1.2	1.20	1434	SPZH46B16B1120 - 71A-4G	1142.57	18 000	18 000	71	M270	
1.2	2.00	1442	SPZH56B16B1120 - 71A-4G	1148.99	27 000	27 000	108	M278	
1.1	1.10	1556	SPZH46B16C1250 - 71A-4G	1240.35	18 000	18 000	71	M270	
1.1	1.90	1565	SPZH56B16C1250 - 71A-4G	1247.31	27 000	27 000	108	M278	
1.0	0.99	1723	SPZH46B16C1400 - 71A-4G	1372.92	18 000	18 000	71	M270	
1.0	1.70	1732	SPZH56B16C1400 - 71A-4G	1380.63	27 000	27 000	108	M278	
0.9	0.88	1943	SPZH46B16C1600 - 71A-4G	1548.45	18 000	18 000	71	M270	
0.9	1.50	1930	SPZH56B16C1600 - 71A-4G	1538.19	27 000	27 000	108	M278	
0.9	2.80	1984	SPZH66C36B1600 - 71A-4G	1581.32		30 000	197	M286	
0.8	1.30	2167	SPZH56B16C1800 - 71A-4G	1727.26	27 000	27 000	108	M278	
0.8	2.50	2163	SPZH66C36B1800 - 71A-4G	1724.37		30 000	197	M286	
0.7	1.20	2412	SPZH56B16C2000 - 71A-4G	1922.74	27 000	27 000	108	M278	
0.7	2.20	2504	SPZH66C36B2000 - 71A-4G	1995.97		30 000	197	M286	
0.6	1.10	2725	SPZH56B16C2240 - 71A-4G	2171.77	27 000	27 000	108	M278	
0.6	2.00	2765	SPZH66C36B2240 - 71A-4G	2203.92		30 000	197	M286	
0.6	2.70	2983	SPZH76C36B2240 - 71A-4G	2377.80		50 000	288	M294	
0.5	0.83	3494	SPZH56B16C2800 - 71A-4G	2784.76	27 000	27 000	108	M278	
0.5	1.50	3683	SPZH66C36B2800 - 71A-4G	2935.85		30 000	197	M286	
0.5	2.20	3675	SPZH76C36B2800 - 71A-4G	2928.76		50 000	288	M294	



5. SP4


P		0.18 kW							
n₁		1370 min⁻¹							
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.4	1.30	4075	SPZH66C36B3150 - 71A-4G	3247.76		30 000	197	M286	
0.4	2.00	4082	SPZH76C36B3150 - 71A-4G	3253.53		50 000	288	M294	
0.4	1.20	4527	SPZH66C36B3550 - 71A-4G	3607.91		30 000	197	M286	
0.4	1.90	4214	SPZH76C36B3550 - 71A-4G	3358.36		50 000	288	M294	
0.3	1.10	5035	SPZH66C36C4000 - 71A-4G	4012.75		30 000	197	M286	
0.4	1.70	4730	SPZH76C36B4000 - 71A-4G	3769.68		50 000	288	M294	
0.3	3.00	4928	SPZH86C36C4000 - 71A-4G	3928.13		82 500	443	M302	
0.3	0.96	5702	SPZH66C36C4500 - 71A-4G	4544.63		30 000	197	M286	
0.3	1.40	5607	SPZH76C36C4500 - 71A-4G	4468.98		50 000	288	M294	
0.3	2.80	5442	SPZH86C36C4500 - 71A-4G	4337.39		82 500	443	M302	
0.3	0.88	6218	SPZH66C36C5000 - 71A-4G	4955.74		30 000	197	M286	
0.3	1.20	6490	SPZH76C36C5000 - 71A-4G	5172.88		50 000	288	M294	
0.3	2.30	6511	SPZH86C36C5000 - 71A-4G	5189.29		82 500	443	M302	
0.2	1.10	7166	SPZH76C36C5600 - 71A-4G	5711.83		50 000	288	M294	
0.2	2.10	7249	SPZH86C36C5600 - 71A-4G	5777.83		82 500	443	M302	
0.2	0.93	8574	SPZH76C36C6300 - 71A-4G	6833.68		50 000	288	M294	
0.2	1.90	8019	SPZH86C36C6300 - 71A-4G	6391.69		82 500	443	M302	
0.2	0.84	9546	SPZH76C36C7100 - 71A-4G	7608.72		50 000	288	M294	
0.2	1.70	8909	SPZH86C36C7100 - 71A-4G	7100.47		82 500	443	M302	
0.2	1.50	10322	SPZH86C36C8000 - 71A-4G	8226.92		82 500	443	M302	

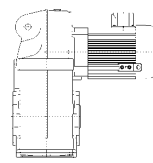
P		0.25 kW							
n₁		1400 min⁻¹							
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
403.9	28.00	6	SPZH16B3.55 - 71A-4G	3.47		4 100	22	M246	
352.4	24.00	7	SPZH16B4 - 71A-4G	3.97		4 300	22	M246	
328.8	23.00	7	SPZH16B4.5 - 71A-4G	4.26		4 400	22	M246	
285.7	20.00	8	SPZH16B5 - 71A-4G	4.90		4 600	22	M246	
247.1	17.00	10	SPZH16B5.6 - 71A-4G	5.66		4 800	22	M246	
229.3	16.00	10	SPZH16B6.3 - 71A-4G	6.10		4 900	22	M246	
212.4	15.00	11	SPZH16B7.1 - 71A-4G	6.59		5 000	22	M246	
181.0	12.00	13	SPZH16B8 - 71A-4G	7.73		5 000	22	M246	
165.6	16.00	14	SPZH16B9 - 71A-4G	8.45		5 000	22	M246	
144.4	14.00	17	SPZH16B10 - 71A-4G	9.69		5 000	22	M246	
134.8	13.00	18	SPZH16B11.2 - 71A-4G	10.39		5 000	22	M246	
117.1	11.00	20	SPZH16B12.5 - 71A-4G	11.95		5 000	22	M246	
101.3	9.80	24	SPZH16B14 - 71A-4G	13.82		5 000	22	M246	
87.1	8.40	27	SPZH16B16 - 71A-4G	16.08		5 000	22	M246	
74.2	7.10	32	SPZH16B18 - 71A-4G	18.87		5 000	22	M246	
68.2	6.60	35	SPZH16B20 - 71A-4G	20.52		5 000	22	M246	
57.0	5.50	42	SPZH16B25 - 71A-4G	24.55		5 000	22	M246	
51.8	5.00	46	SPZH16B28 - 71A-4G	27.02		5 000	22	M246	
46.8	4.50	51	SPZH16B31.5 - 71A-4G	29.91		5 000	22	M246	
37.4	3.60	64	SPZH16B35.5 - 71A-4G	37.42		5 000	22	M246	
33.6	3.20	71	SPZH16B40 - 71A-4G	41.65		5 000	22	M246	
30.1	2.90	79	SPZH16B45 - 71A-4G	46.58		5 000	22	M246	
25.9	2.50	92	SPZH16B56 - 71A-4G	54.15		5 000	22	M246	




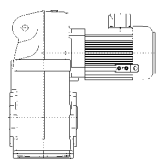
5. SP4

P 0.25 kW
n₁ 1400 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
23.2	2.20	103	SPZH16B63 - 71A-4G	60.33		5 000	22	M246	
18.7	1.80	128	SPZH16B71 - 71A-4G	74.98		5 000	22	M246	
16.8	1.60	142	SPZH16B80 - 71A-4G	83.24		5 000	22	M246	
16.9	2.50	142	SPZH26B80 - 71A-4G	83.01	6 900	6 900	29	M254	
15.0	1.40	159	SPZH16B90 - 71A-4G	93.33		5 000	22	M246	
15.2	2.10	157	SPZH26B90 - 71A-4G	92.15	6 900	6 900	29	M254	
16.0	2.90	149	SPZH26B16B90 - 71A-4G	87.51	6 900	6 900	39	M254	
14.4	1.40	166	SPZH16B16B100 - 71A-4G	97.10		5 000	32	M246	
13.5	1.80	176	SPZH26B100 - 71A-4G	103.33	6 900	6 900	29	M254	
13.8	2.50	174	SPZH26B16B100 - 71A-4G	101.81	6 900	6 900	39	M254	
12.4	1.20	193	SPZH16B16B112 - 71A-4G	112.96		5 000	32	M246	
12.9	2.40	184	SPZH26B16B112 - 71A-4G	108.11	6 900	6 900	39	M254	
10.8	1.00	220	SPZH16B16B125 - 71A-4G	129.19		5 000	32	M246	
11.2	2.10	213	SPZH26B16B125 - 71A-4G	125.07	6 900	6 900	39	M254	
9.3	0.90	256	SPZH16B16B140 - 71A-4G	150.30		5 000	32	M246	
9.7	1.80	245	SPZH26B16B140 - 71A-4G	143.94	6 900	6 900	39	M254	
9.1	1.70	263	SPZH26B16B160 - 71A-4G	154.13	6 900	6 900	39	M254	
7.8	1.40	306	SPZH26B16B180 - 71A-4G	179.33	6 900	6 900	39	M254	
7.6	2.70	312	SPZH36B16B180 - 71A-4G	183.04	12 600	13 500	46	M262	
7.2	1.30	333	SPZH26B16B200 - 71A-4G	195.28	6 900	6 900	39	M254	
7.2	2.60	331	SPZH36B16B200 - 71A-4G	194.34	12 800	13 500	46	M262	
6.2	1.10	387	SPZH26B16B224 - 71A-4G	227.20	6 900	6 900	39	M254	
6.4	2.30	373	SPZH36B16B224 - 71A-4G	218.91	13 200	13 500	46	M262	
5.7	1.00	421	SPZH26B16B250 - 71A-4G	247.15	6 900	6 900	39	M254	
5.5	2.00	431	SPZH36B16B250 - 71A-4G	252.84	13 500	13 500	46	M262	
5.1	0.94	467	SPZH26B16B280 - 71A-4G	273.79	6 900	6 900	39	M254	
5.0	1.80	475	SPZH36B16B280 - 71A-4G	278.34	13 500	13 500	46	M262	
4.5	0.83	528	SPZH26B16B315 - 71A-4G	309.59	6 900	6 900	39	M254	
4.5	1.60	525	SPZH36B16B315 - 71A-4G	308.09	13 500	13 500	46	M262	
4.1	1.50	585	SPZH36B16B355 - 71A-4G	343.25	13 500	13 500	46	M262	
3.7	2.70	638	SPZH46B16B355 - 71A-4G	374.06	18 000	18 000	72	M270	
3.6	1.30	657	SPZH36B16B400 - 71A-4G	385.45	13 500	13 500	46	M262	
3.4	2.40	702	SPZH46B16B400 - 71A-4G	411.78	18 000	18 000	72	M270	
3.2	1.10	751	SPZH36B16B450 - 71A-4G	440.16	13 500	13 500	46	M262	
3.1	2.20	777	SPZH46B16B450 - 71A-4G	455.79	18 000	18 000	72	M270	
2.9	1.00	824	SPZH36B16B500 - 71A-4G	482.93	13 500	13 500	46	M262	
2.8	2.00	866	SPZH46B16B500 - 71A-4G	507.81	18 000	18 000	72	M270	
2.5	0.89	951	SPZH36B16B560 - 71A-4G	557.79	13 500	13 500	46	M262	
2.5	1.70	972	SPZH46B16B560 - 71A-4G	570.23	18 000	18 000	72	M270	
2.4	3.00	978	SPZH56B16B560 - 71A-4G	573.43	27 000	27 000	109	M278	
2.3	0.80	1060	SPZH36B16B630 - 71A-4G	621.43	13 500	13 500	46	M262	
2.2	1.60	1082	SPZH46B16B630 - 71A-4G	634.76	18 000	18 000	72	M270	
2.2	2.70	1088	SPZH56B16B630 - 71A-4G	638.33	27 000	27 000	109	M278	
2.0	1.40	1211	SPZH46B16B710 - 71A-4G	709.88	18 000	18 000	72	M270	
2.0	2.40	1217	SPZH56B16B710 - 71A-4G	713.86	27 000	27 000	109	M278	
1.7	1.20	1407	SPZH46B16B800 - 71A-4G	825.19	18 000	18 000	72	M270	
1.7	2.00	1415	SPZH56B16B800 - 71A-4G	829.83	27 000	27 000	109	M278	
1.5	1.10	1568	SPZH46B16B900 - 71A-4G	919.35	18 000	18 000	72	M270	
1.5	1.80	1577	SPZH56B16B900 - 71A-4G	924.51	27 000	27 000	109	M278	
1.5	1.10	1618	SPZH46B16B1000 - 71A-4G	948.89	18 000	18 000	72	M270	
1.5	1.80	1627	SPZH56B16B1000 - 71A-4G	954.22	27 000	27 000	109	M278	
1.2	0.87	1948	SPZH46B16B1120 - 71A-4G	1142.57	18 000	18 000	72	M270	



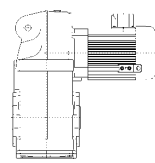
P 0.25 kW n₁ 1400 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.2	1.50	1959	SPZH56B16B1120 - 71A-4G	1148.99	27 000	27 000	109	M278	
1.2	2.80	1947	SPZH66C36B1120 - 71A-4G	1141.54		30 000	198	M286	
1.1	0.80	2115	SPZH46B16C1250 - 71A-4G	1240.35	18 000	18 000	72	M270	
1.1	1.40	2127	SPZH56B16C1250 - 71A-4G	1247.31	27 000	27 000	109	M278	
1.1	2.60	2097	SPZH66C36B1250 - 71A-4G	1229.59		30 000	198	M286	
1.0	1.20	2354	SPZH56B16C1400 - 71A-4G	1380.63	27 000	27 000	109	M278	
1.0	2.30	2381	SPZH66C36B1400 - 71A-4G	1396.25		30 000	198	M286	
0.9	1.10	2623	SPZH56B16C1600 - 71A-4G	1538.19	27 000	27 000	109	M278	
0.9	2.00	2697	SPZH66C36B1600 - 71A-4G	1581.32		30 000	198	M286	
0.9	3.00	2652	SPZH76C36B1600 - 71A-4G	1554.99		50 000	289	M294	
0.8	0.98	2945	SPZH56B16C1800 - 71A-4G	1727.26	27 000	27 000	109	M278	
0.8	1.90	2940	SPZH66C36B1800 - 71A-4G	1724.37		30 000	198	M286	
0.8	2.60	3069	SPZH76C36B1800 - 71A-4G	1799.92		50 000	289	M294	
0.7	0.88	3279	SPZH56B16C2000 - 71A-4G	1922.74	27 000	27 000	109	M278	
0.7	1.60	3404	SPZH66C36B2000 - 71A-4G	1995.97		30 000	198	M286	
0.7	2.40	3389	SPZH76C36B2000 - 71A-4G	1987.45		50 000	289	M294	
0.6	1.50	3758	SPZH66C36B2240 - 71A-4G	2203.92		30 000	198	M286	
0.6	2.00	4055	SPZH76C36B2240 - 71A-4G	2377.80		50 000	289	M294	
0.5	1.10	5006	SPZH66C36B2800 - 71A-4G	2935.85		30 000	198	M286	
0.5	1.60	4994	SPZH76C36B2800 - 71A-4G	2928.76		50 000	289	M294	
0.4	0.99	5538	SPZH66C36B3150 - 71A-4G	3247.76		30 000	198	M286	
0.4	1.40	5548	SPZH76C36B3150 - 71A-4G	3253.53		50 000	289	M294	
0.4	2.80	5307	SPZH86C36C3150 - 71A-4G	3112.09		82 500	444	M302	
0.4	0.89	6152	SPZH66C36B3550 - 71A-4G	3607.91		30 000	198	M286	
0.4	1.40	5727	SPZH76C36B3550 - 71A-4G	3358.36		50 000	289	M294	
0.4	2.60	5787	SPZH86C36C3550 - 71A-4G	3393.61		82 500	444	M302	
0.3	0.80	6843	SPZH66C36C4000 - 71A-4G	4012.75		30 000	198	M286	
0.4	1.20	6428	SPZH76C36B4000 - 71A-4G	3769.68		50 000	289	M294	
0.4	2.20	6698	SPZH86C36C4000 - 71A-4G	3928.13		82 500	444	M302	
0.3	1.00	7621	SPZH76C36C4500 - 71A-4G	4468.98		50 000	289	M294	
0.3	2.00	7396	SPZH86C36C4500 - 71A-4G	4337.39		82 500	444	M302	
0.3	0.91	8821	SPZH76C36C5000 - 71A-4G	5172.88		50 000	289	M294	
0.3	1.70	8849	SPZH86C36C5000 - 71A-4G	5189.29		82 500	444	M302	
0.2	0.82	9740	SPZH76C36C5600 - 71A-4G	5711.83		50 000	289	M294	
0.2	1.50	9853	SPZH86C36C5600 - 71A-4G	5777.83		82 500	444	M302	
0.2	1.40	10899	SPZH86C36C6300 - 71A-4G	6391.69		82 500	444	M302	
0.2	1.20	12108	SPZH86C36C7100 - 71A-4G	7100.47		82 500	444	M302	
0.2	1.10	14029	SPZH86C36C8000 - 71A-4G	8226.92		82 500	444	M302	




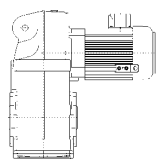
5. SP4

P 0.37 kW
n₁ 1400 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
403.9	19.00	9	SPZH16B3.55 - 71B-4G	3.47		4 100	23	M246	
352.4	16.00	10	SPZH16B4 - 71B-4G	3.97		4 200	23	M246	
328.8	15.00	11	SPZH16B4.5 - 71B-4G	4.26		4 300	23	M246	
285.7	13.00	12	SPZH16B5 - 71B-4G	4.90		4 500	23	M246	
247.1	11.00	14	SPZH16B5.6 - 71B-4G	5.66		4 700	23	M246	
229.3	11.00	15	SPZH16B6.3 - 71B-4G	6.10		4 800	23	M246	
212.4	9.90	17	SPZH16B7.1 - 71B-4G	6.59		5 000	23	M246	
181.0	8.40	20	SPZH16B8 - 71B-4G	7.73		5 000	23	M246	
165.6	11.00	21	SPZH16B9 - 71B-4G	8.45		5 000	23	M246	
144.4	9.40	24	SPZH16B10 - 71B-4G	9.69		5 000	23	M246	
134.8	8.80	26	SPZH16B11.2 - 71B-4G	10.39		5 000	23	M246	
117.1	7.60	30	SPZH16B12.5 - 71B-4G	11.95		5 000	23	M246	
101.3	6.60	35	SPZH16B14 - 71B-4G	13.82		5 000	23	M246	
87.1	5.70	41	SPZH16B16 - 71B-4G	16.08		5 000	23	M246	
74.2	4.80	48	SPZH16B18 - 71B-4G	18.87		5 000	23	M246	
68.2	4.40	52	SPZH16B20 - 71B-4G	20.52		5 000	23	M246	
57.0	3.70	62	SPZH16B25 - 71B-4G	24.55		5 000	23	M246	
51.8	3.40	68	SPZH16B28 - 71B-4G	27.02		5 000	23	M246	
46.8	3.00	75	SPZH16B31.5 - 71B-4G	29.91		5 000	23	M246	
37.4	2.40	94	SPZH16B35.5 - 71B-4G	37.42		5 000	23	M246	
33.6	2.20	105	SPZH16B40 - 71B-4G	41.65		5 000	23	M246	
30.1	2.00	118	SPZH16B45 - 71B-4G	46.58		5 000	23	M246	
25.9	1.70	137	SPZH16B56 - 71B-4G	54.15		5 000	23	M246	
23.4	2.90	151	SPZH26B56 - 71B-4G	59.95	6 900	6 900	30	M254	
23.2	1.50	152	SPZH16B63 - 71B-4G	60.33		5 000	23	M246	
21.0	2.60	169	SPZH26B63 - 71B-4G	66.79	6 900	6 900	30	M254	
18.7	1.20	189	SPZH16B71 - 71B-4G	74.98		5 000	23	M246	
20.3	2.10	174	SPZH26B71 - 71B-4G	68.94	6 900	6 900	30	M254	
16.8	1.10	210	SPZH16B80 - 71B-4G	83.24		5 000	23	M246	
16.9	1.70	209	SPZH26B80 - 71B-4G	83.01	6 900	6 900	30	M254	
15.0	0.98	236	SPZH16B90 - 71B-4G	93.33		5 000	23	M246	
15.2	1.40	233	SPZH26B90 - 71B-4G	92.15	6 900	6 900	30	M254	
16.0	2.00	221	SPZH26B16B90 - 71B-4G	87.51	6 900	6 900	40	M254	
14.4	0.94	245	SPZH16B16B100 - 71B-4G	97.10		5 000	33	M246	
13.5	1.20	261	SPZH26B100 - 71B-4G	103.33	6 900	6 900	30	M254	
13.8	1.70	257	SPZH26B16B100 - 71B-4G	101.81	6 900	6 900	40	M254	
13.2	3.00	268	SPZH36B100 - 71B-4G	106.33	10 500	13 500	37	M262	
12.4	0.81	285	SPZH16B16B112 - 71B-4G	112.96		5 000	33	M246	
12.9	1.60	273	SPZH26B16B112 - 71B-4G	108.11	6 900	6 900	40	M254	
11.2	1.40	316	SPZH26B16B125 - 71B-4G	125.07	6 900	6 900	40	M254	
11.4	2.70	311	SPZH36B16B125 - 71B-4G	123.12	10 900	13 500	47	M262	
9.7	1.20	363	SPZH26B16B140 - 71B-4G	143.94	6 900	6 900	40	M254	
9.8	2.40	359	SPZH36B16B140 - 71B-4G	142.34	11 200	13 500	47	M262	
9.1	1.10	389	SPZH26B16B160 - 71B-4G	154.13	6 900	6 900	40	M254	
9.1	2.20	387	SPZH36B16B160 - 71B-4G	153.39	11 400	13 500	47	M262	
7.8	0.97	453	SPZH26B16B180 - 71B-4G	179.33	6 900	6 900	40	M254	
7.6	1.80	462	SPZH36B16B180 - 71B-4G	183.04	11 700	13 500	47	M262	
7.2	0.89	493	SPZH26B16B200 - 71B-4G	195.28	6 900	6 900	40	M254	
7.2	1.70	490	SPZH36B16B200 - 71B-4G	194.34	11 900	13 500	47	M262	
6.4	1.50	552	SPZH36B16B224 - 71B-4G	218.91	12 100	13 500	47	M262	
6.2	3.00	573	SPZH46B16B224 - 71B-4G	226.93	17 100	18 000	73	M270	
5.5	1.30	638	SPZH36B16B250 - 71B-4G	252.84	12 300	13 500	47	M262	




P 0.37 kW n₁ 1400 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
5.7	2.70	618	SPZH46B16B250 - 71B-4G	245.00	17 400	18 000	73	M270	
5.0	1.20	702	SPZH36B16B280 - 71B-4G	278.34	12 500	13 500	47	M262	
4.9	2.30	726	SPZH46B16B280 - 71B-4G	287.51	18 000	18 000	73	M270	
4.5	1.10	778	SPZH36B16B315 - 71B-4G	308.09	12 600	13 500	47	M262	
4.5	2.20	789	SPZH46B16B315 - 71B-4G	312.75	18 000	18 000	73	M270	
4.1	0.98	866	SPZH36B16B355 - 71B-4G	343.25	12 700	13 500	47	M262	
3.7	1.80	944	SPZH46B16B355 - 71B-4G	374.06	18 000	18 000	73	M270	
3.6	0.87	973	SPZH36B16B400 - 71B-4G	385.45	12 800	13 500	47	M262	
3.4	1.60	1039	SPZH46B16B400 - 71B-4G	411.78	18 000	18 000	73	M270	
3.4	2.80	1045	SPZH56B16B400 - 71B-4G	414.09	24 900	27 000	110	M278	
3.1	1.50	1150	SPZH46B16B450 - 71B-4G	455.79	18 000	18 000	73	M270	
3.1	2.50	1157	SPZH56B16B450 - 71B-4G	458.35	25 400	27 000	110	M278	
2.8	1.30	1282	SPZH46B16B500 - 71B-4G	507.81	18 000	18 000	73	M270	
2.7	2.30	1289	SPZH56B16B500 - 71B-4G	510.66	26 000	27 000	110	M278	
2.5	1.20	1439	SPZH46B16B560 - 71B-4G	570.23	18 000	18 000	73	M270	
2.4	2.00	1447	SPZH56B16B560 - 71B-4G	573.43	26 600	27 000	110	M278	
2.2	1.10	1602	SPZH46B16B630 - 71B-4G	634.76	18 000	18 000	73	M270	
2.2	1.80	1611	SPZH56B16B630 - 71B-4G	638.33	27 000	27 000	110	M278	
2.0	0.95	1792	SPZH46B16B710 - 71B-4G	709.88	18 000	18 000	73	M270	
2.0	1.60	1802	SPZH56B16B710 - 71B-4G	713.86	27 000	27 000	110	M278	
1.9	3.00	1857	SPZH66B36B710 - 71B-4G	735.85		30 000	199	M286	
1.7	0.82	2083	SPZH46B16B800 - 71B-4G	825.19	18 000	18 000	73	M270	
1.7	1.40	2094	SPZH56B16B800 - 71B-4G	829.83	27 000	27 000	110	M278	
1.7	2.70	2068	SPZH66B36B800 - 71B-4G	819.31		30 000	199	M286	
1.5	1.20	2333	SPZH56B16B900 - 71B-4G	924.51	27 000	27 000	110	M278	
1.5	2.40	2287	SPZH66B36B900 - 71B-4G	906.35		30 000	199	M286	
1.5	1.20	2408	SPZH56B16B1000 - 71B-4G	954.22	27 000	27 000	110	M278	
1.4	2.20	2541	SPZH66B36B1000 - 71B-4G	1006.86		30 000	199	M286	
1.2	1.00	2900	SPZH56B16B1120 - 71B-4G	1148.99	27 000	27 000	110	M278	
1.2	1.90	2881	SPZH66C36B1120 - 71B-4G	1141.54		30 000	199	M286	
1.3	2.90	2792	SPZH76B36B1120 - 71B-4G	1106.11		50 000	290	M294	
1.1	0.92	3148	SPZH56B16C1250 - 71B-4G	1247.31	27 000	27 000	110	M278	
1.1	1.80	3103	SPZH66C36B1250 - 71B-4G	1229.59		30 000	199	M286	
1.1	2.50	3178	SPZH76C36B1250 - 71B-4G	1259.11		50 000	290	M294	
1.0	0.83	3484	SPZH56B16C1400 - 71B-4G	1380.63	27 000	27 000	110	M278	
1.0	1.60	3524	SPZH66C36B1400 - 71B-4G	1396.25		30 000	199	M286	
1.0	2.20	3599	SPZH76C36B1400 - 71B-4G	1426.00		50 000	290	M294	
0.9	1.40	3991	SPZH66C36B1600 - 71B-4G	1581.32		30 000	199	M286	
0.9	2.00	3924	SPZH76C36B1600 - 71B-4G	1554.99		50 000	290	M294	
0.8	1.30	4352	SPZH66C36B1800 - 71B-4G	1724.37		30 000	199	M286	
0.8	1.80	4543	SPZH76C36B1800 - 71B-4G	1799.92		50 000	290	M294	
0.7	1.10	5037	SPZH66C36B2000 - 71B-4G	1995.97		30 000	199	M286	
0.7	1.60	5016	SPZH76C36B2000 - 71B-4G	1987.45		50 000	290	M294	
0.7	3.00	5074	SPZH86C36B2000 - 71B-4G	2010.42		82 500	445	M302	
0.6	0.99	5562	SPZH66C36B2240 - 71B-4G	2203.92		30 000	199	M286	
0.6	1.30	6001	SPZH76C36B2240 - 71B-4G	2377.80		50 000	290	M294	
0.6	2.70	5613	SPZH86C36B2240 - 71B-4G	2224.01		82 500	445	M302	
0.6	2.40	6235	SPZH86C36B2500 - 71B-4G	2470.63		82 500	445	M302	
0.5	1.10	7391	SPZH76C36B2800 - 71B-4G	2928.76		50 000	290	M294	
0.5	2.10	7224	SPZH86C36B2800 - 71B-4G	2862.58		82 500	445	M302	
0.4	0.97	8211	SPZH76C36B3150 - 71B-4G	3253.53		50 000	290	M294	
0.4	1.90	7854	SPZH86C36C3150 - 71B-4G	3112.09		82 500	445	M302	




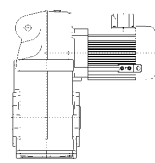
5. SP4


P 0.37 kW
n₁ 1400 min⁻¹

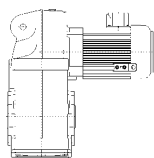
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.4	0.94	8476	SPZH76C36B3550 - 71B-4G	3358.36		50 000	290	M294	
0.4	1.80	8565	SPZH86C36C3550 - 71B-4G	3393.61		82 500	445	M302	
0.4	0.84	9514	SPZH76C36B4000 - 71B-4G	3769.68		50 000	290	M294	
0.4	1.50	9914	SPZH86C36C4000 - 71B-4G	3928.13		82 500	445	M302	
0.3	1.40	10946	SPZH86C36C4500 - 71B-4G	4337.39		82 500	445	M302	
0.3	1.10	13096	SPZH86C36C5000 - 71B-4G	5189.29		82 500	445	M302	
0.2	1.00	14582	SPZH86C36C5600 - 71B-4G	5777.83		82 500	445	M302	
0.2	0.93	16131	SPZH86C36C6300 - 71B-4G	6391.69		82 500	445	M302	
0.2	0.84	17920	SPZH86C36C7100 - 71B-4G	7100.47		82 500	445	M302	

P 0.55 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
409.7	13.00	13	SPZH16B3.55 - 80A-4G	3.47		4 000	25	M246	
357.4	11.00	15	SPZH16B4 - 80A-4G	3.97		4 200	25	M246	
333.5	10.00	16	SPZH16B4.5 - 80A-4G	4.26		4 300	25	M246	
289.8	9.00	18	SPZH16B5 - 80A-4G	4.90		4 500	25	M246	
250.7	7.80	21	SPZH16B5.6 - 80A-4G	5.66		4 600	25	M246	
232.6	7.30	23	SPZH16B6.3 - 80A-4G	6.10		4 800	25	M246	
215.5	6.70	24	SPZH16B7.1 - 80A-4G	6.59		4 900	25	M246	
183.6	5.70	29	SPZH16B8 - 80A-4G	7.73		5 000	25	M246	
168.0	7.40	31	SPZH16B9 - 80A-4G	8.45		5 000	25	M246	
146.5	6.40	36	SPZH16B10 - 80A-4G	9.69		5 000	25	M246	
136.7	6.00	38	SPZH16B11.2 - 80A-4G	10.39		5 000	25	M246	
118.8	5.20	44	SPZH16B12.5 - 80A-4G	11.95		5 000	25	M246	
102.8	4.50	51	SPZH16B14 - 80A-4G	13.82		5 000	25	M246	
88.3	3.90	59	SPZH16B16 - 80A-4G	16.08		5 000	25	M246	
75.3	3.30	70	SPZH16B18 - 80A-4G	18.87		5 000	25	M246	
69.2	3.00	76	SPZH16B20 - 80A-4G	20.52		5 000	25	M246	
57.9	2.50	91	SPZH16B25 - 80A-4G	24.55		5 000	25	M246	
52.6	2.30	100	SPZH16B28 - 80A-4G	27.02		5 000	25	M246	
47.5	2.10	111	SPZH16B31.5 - 80A-4G	29.91		5 000	25	M246	
37.9	1.70	138	SPZH16B35.5 - 80A-4G	37.42		5 000	25	M246	
34.1	1.50	154	SPZH16B40 - 80A-4G	41.65		5 000	25	M246	
34.3	2.90	153	SPZH26B40 - 80A-4G	41.43	6 100	6 900	32	M254	
30.5	1.30	172	SPZH16B45 - 80A-4G	46.58		5 000	25	M246	
30.8	2.60	171	SPZH26B45 - 80A-4G	46.12	6 200	6 900	32	M254	
27.5	2.30	191	SPZH26B50 - 80A-4G	51.57	6 400	6 900	32	M254	
26.2	1.10	200	SPZH16B56 - 80A-4G	54.15		5 000	25	M246	
23.7	2.00	222	SPZH26B56 - 80A-4G	59.95	6 500	6 900	32	M254	
23.5	1.00	223	SPZH16B63 - 80A-4G	60.33		5 000	25	M246	
21.3	1.80	247	SPZH26B63 - 80A-4G	66.79	6 700	6 900	32	M254	
18.9	0.83	277	SPZH16B71 - 80A-4G	74.98		5 000	25	M246	
20.6	1.40	255	SPZH26B71 - 80A-4G	68.94	6 700	6 900	32	M254	
17.1	1.20	307	SPZH26B80 - 80A-4G	83.01	6 800	6 900	32	M254	
18.2	2.90	288	SPZH36B80 - 80A-4G	77.94	9 100	13 500	39	M262	
15.4	0.98	341	SPZH26B90 - 80A-4G	92.15	6 900	6 900	32	M254	




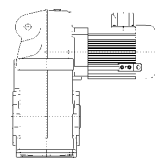
P 0.55 kW n₁ 1420 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
16.2	1.40	324	SPZH26B16B90 - 80A-4G	87.51	6 900	6 900	42	M254	X
16.6	2.70	317	SPZH36B90 - 80A-4G	85.68	9 300	13 500	39	M262	
13.7	0.81	382	SPZH26B100 - 80A-4G	103.33	6 900	6 900	32	M254	X
13.9	1.20	377	SPZH26B16B100 - 80A-4G	101.81	6 900	6 900	42	M254	X
13.4	2.00	393	SPZH36B100 - 80A-4G	106.33	9 700	13 500	39	M262	
14.2	2.30	369	SPZH36B16B100 - 80A-4G	99.84	9 700	13 500	49	M262	
13.1	1.10	400	SPZH26B16B112 - 80A-4G	108.11	6 900	6 900	42	M254	
13.3	2.10	396	SPZH36B16B112 - 80A-4G	106.98	9 700	13 500	49	M262	X
11.4	0.95	463	SPZH26B16B125 - 80A-4G	125.07	6 900	6 900	42	M254	X
11.5	1.90	455	SPZH36B16B125 - 80A-4G	123.12	9 900	13 500	49	M262	
9.9	0.83	532	SPZH26B16B140 - 80A-4G	143.94	6 900	6 900	42	M254	
10.0	1.60	526	SPZH36B16B140 - 80A-4G	142.34	10 100	13 500	49	M262	X
9.3	1.50	567	SPZH36B16B160 - 80A-4G	153.39	10 200	13 500	49	M262	
8.7	2.80	605	SPZH46C160 - 80A-4G	163.58	14 800	18 000	65	M270	
7.8	1.30	677	SPZH36B16B180 - 80A-4G	183.04	10 400	13 500	49	M262	
7.8	2.50	669	SPZH46C180 - 80A-4G	180.96	15 100	18 000	65	M270	
7.3	1.20	719	SPZH36B16B200 - 80A-4G	194.34	10 400	13 500	49	M262	
7.1	2.30	744	SPZH46C200 - 80A-4G	201.03	15 400	18 000	65	M270	
6.5	1.00	810	SPZH36B16B224 - 80A-4G	218.91	10 500	13 500	49	M262	
6.1	2.00	861	SPZH46C224 - 80A-4G	232.92	15 700	18 000	65	M270	
5.6	0.91	935	SPZH36B16B250 - 80A-4G	252.84	10 500	13 500	49	M262	
5.8	1.90	906	SPZH46B16B250 - 80A-4G	245.00	15 900	18 000	75	M270	X
5.1	0.83	1030	SPZH36B16B280 - 80A-4G	278.34	10 400	13 500	49	M262	
4.9	1.60	1069	SPZH46C280 - 80A-4G	289.06	16 200	18 000	65	M270	
4.9	2.70	1073	SPZH56C280 - 80A-4G	290.23	21 400	27 000	102	M278	
4.5	1.50	1157	SPZH46B16B315 - 80A-4G	312.75	16 400	18 000	75	M270	
4.4	2.40	1204	SPZH56C315 - 80A-4G	325.39	21 800	27 000	102	M278	
3.8	1.20	1384	SPZH46B16B355 - 80A-4G	374.06	16 600	18 000	75	M270	
3.8	2.10	1391	SPZH56B16B355 - 80A-4G	376.16	22 400	27 000	112	M278	
3.4	1.10	1523	SPZH46B16B400 - 80A-4G	411.78	16 700	18 000	75	M270	
3.4	1.90	1532	SPZH56B16B400 - 80A-4G	414.09	22 700	27 000	112	M278	
3.1	1.00	1686	SPZH46B16B450 - 80A-4G	455.79	16 700	18 000	75	M270	
3.1	1.70	1695	SPZH56B16B450 - 80A-4G	458.35	23 100	27 000	112	M278	
2.8	0.91	1878	SPZH46B16B500 - 80A-4G	507.81	16 700	18 000	75	M270	
2.8	1.50	1889	SPZH56B16B500 - 80A-4G	510.66	23 400	27 000	112	M278	
2.5	0.81	2109	SPZH46B16B560 - 80A-4G	570.23	16 600	18 000	75	M270	
2.5	1.40	2121	SPZH56B16B560 - 80A-4G	573.43	23 600	27 000	112	M278	
2.5	2.70	2060	SPZH66B36B560 - 80A-4G	557.02		30 000	201	M286	
2.2	1.20	2361	SPZH56B16B630 - 80A-4G	638.33	23 800	27 000	112	M278	
2.3	2.40	2275	SPZH66B36B630 - 80A-4G	615.05		30 000	201	M286	
2.0	1.10	2640	SPZH56B16B710 - 80A-4G	713.86	23 900	27 000	112	M278	
1.9	2.00	2722	SPZH66B36B710 - 80A-4G	735.85		30 000	201	M286	
1.7	0.94	3069	SPZH56B16B800 - 80A-4G	829.83	23 900	27 000	112	M278	
1.7	1.80	3030	SPZH66B36B800 - 80A-4G	819.31		30 000	201	M286	
1.8	2.70	2990	SPZH76B36B800 - 80A-4G	808.38		50 000	292	M294	
1.5	0.85	3419	SPZH56B16B900 - 80A-4G	924.51	23 800	27 000	112	M278	
1.6	1.60	3352	SPZH66B36B900 - 80A-4G	906.35		30 000	201	M286	
1.6	2.40	3329	SPZH76B36B900 - 80A-4G	900.07		50 000	292	M294	
1.5	0.82	3529	SPZH56B16B1000 - 80A-4G	954.22	23 800	27 000	112	M278	
1.4	1.50	3724	SPZH66B36B1000 - 80A-4G	1006.86		30 000	201	M286	
1.4	2.20	3683	SPZH76B36B1000 - 80A-4G	995.69		50 000	292	M294	
1.2	1.30	4222	SPZH66C36B1120 - 80A-4G	1141.54		30 000	201	M286	




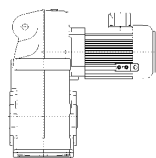
5. SP4

P 0.55 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.3	2.00	4091	SPZH76B36B1120 - 80A-4G	1106.11		50 000	292	M294	
1.2	1.20	4548	SPZH66C36B1250 - 80A-4G	1229.59		30 000	201	M286	
1.1	1.70	4657	SPZH76C36B1250 - 80A-4G	1259.11		50 000	292	M294	
1.0	1.10	5164	SPZH66C36B1400 - 80A-4G	1396.25		30 000	201	M286	
1.0	1.50	5274	SPZH76C36B1400 - 80A-4G	1426.00		50 000	292	M294	
1.0	3.00	5055	SPZH86C36B1400 - 80A-4G	1366.81		82 500	447	M302	
0.9	0.94	5849	SPZH66C36B1600 - 80A-4G	1581.32		30 000	201	M286	
0.9	1.40	5751	SPZH76C36B1600 - 80A-4G	1554.99		50 000	292	M294	
0.9	2.70	5582	SPZH86C36B1600 - 80A-4G	1509.21		82 500	447	M302	
0.8	0.86	6378	SPZH66C36B1800 - 80A-4G	1724.37		30 000	201	M286	
0.8	1.20	6657	SPZH76C36B1800 - 80A-4G	1799.92		50 000	292	M294	
0.8	2.20	6678	SPZH86C36B1800 - 80A-4G	1805.63		82 500	447	M302	
0.7	1.10	7351	SPZH76C36B2000 - 80A-4G	1987.45		50 000	292	M294	
0.7	2.00	7436	SPZH86C36B2000 - 80A-4G	2010.42		82 500	447	M302	
0.6	0.91	8795	SPZH76C36B2240 - 80A-4G	2377.80		50 000	292	M294	
0.6	1.80	8226	SPZH86C36B2240 - 80A-4G	2224.01		82 500	447	M302	
0.6	1.60	9138	SPZH86C36B2500 - 80A-4G	2470.63		82 500	447	M302	
0.5	1.40	10588	SPZH86C36B2800 - 80A-4G	2862.58		82 500	447	M302	
0.5	1.30	11511	SPZH86C36C3150 - 80A-4G	3112.09		82 500	447	M302	
0.4	1.20	12552	SPZH86C36C3550 - 80A-4G	3393.61		82 500	447	M302	
0.4	1.00	14529	SPZH86C36C4000 - 80A-4G	3928.13		82 500	447	M302	
0.3	0.94	16043	SPZH86C36C4500 - 80A-4G	4337.39		82 500	447	M302	




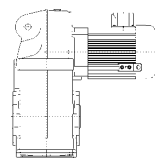
P 0.75 kW n ₁ 1415 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
408.3	9.30	18	SPZH16B3.55 - 80B-4G	3.47		3 900	26	M246	
356.1	8.20	20	SPZH16B4 - 80B-4G	3.97		4 100	26	M246	
332.4	7.60	22	SPZH16B4.5 - 80B-4G	4.26		4 200	26	M246	
288.8	6.60	25	SPZH16B5 - 80B-4G	4.90		4 400	26	M246	
249.8	5.70	29	SPZH16B5.6 - 80B-4G	5.66		4 600	26	M246	
231.8	5.30	31	SPZH16B6.3 - 80B-4G	6.10		4 700	26	M246	
214.7	4.90	33	SPZH16B7.1 - 80B-4G	6.59		4 800	26	M246	
183.0	4.20	39	SPZH16B8 - 80B-4G	7.73		5 000	26	M246	
167.4	5.40	43	SPZH16B9 - 80B-4G	8.45		5 000	26	M246	
146.0	4.70	49	SPZH16B10 - 80B-4G	9.69		5 000	26	M246	
136.2	4.40	53	SPZH16B11.2 - 80B-4G	10.39		5 000	26	M246	
118.4	3.80	60	SPZH16B12.5 - 80B-4G	11.95		5 000	26	M246	
102.4	3.30	70	SPZH16B14 - 80B-4G	13.82		5 000	26	M246	
88.0	2.80	81	SPZH16B16 - 80B-4G	16.08		5 000	26	M246	
75.0	2.40	95	SPZH16B18 - 80B-4G	18.87		5 000	26	M246	
68.9	2.20	104	SPZH16B20 - 80B-4G	20.52		5 000	26	M246	
57.6	1.90	124	SPZH16B25 - 80B-4G	24.55		5 000	26	M246	
52.4	1.70	137	SPZH16B28 - 80B-4G	27.02		5 000	26	M246	
47.3	2.90	151	SPZH26B28 - 80B-4G	29.92	5 400	6 900	33	M254	
47.3	1.50	151	SPZH16B31.5 - 80B-4G	29.91		5 000	26	M246	
42.7	2.60	168	SPZH26B31.5 - 80B-4G	33.11	5 500	6 900	33	M254	
37.8	1.20	189	SPZH16B35.5 - 80B-4G	37.42		5 000	26	M246	
38.4	2.40	187	SPZH26B35.5 - 80B-4G	36.89	5 600	6 900	33	M254	
34.0	1.10	211	SPZH16B40 - 80B-4G	41.65		5 000	26	M246	
34.2	2.10	210	SPZH26B40 - 80B-4G	41.43	5 700	6 900	33	M254	
30.4	0.98	236	SPZH16B45 - 80B-4G	46.58		5 000	26	M246	
30.7	1.90	233	SPZH26B45 - 80B-4G	46.12	5 800	6 900	33	M254	
27.4	1.70	261	SPZH26B50 - 80B-4G	51.57	5 900	6 900	33	M254	
26.1	0.84	274	SPZH16B56 - 80B-4G	54.15		5 000	26	M246	
23.6	1.50	303	SPZH26B56 - 80B-4G	59.95	5 900	6 900	33	M254	
23.5	2.80	305	SPZH36B56 - 80B-4G	60.18	8 100	13 500	40	M262	
21.2	1.30	338	SPZH26B63 - 80B-4G	66.79	6 000	6 900	33	M254	
21.3	2.50	337	SPZH36B63 - 80B-4G	66.57	8 300	13 500	40	M262	
20.5	1.00	349	SPZH26B71 - 80B-4G	68.94	6 000	6 900	33	M254	
19.1	2.30	374	SPZH36B71 - 80B-4G	73.95	8 400	13 500	40	M262	
17.0	0.86	420	SPZH26B80 - 80B-4G	83.01	6 000	6 900	33	M254	
18.2	2.20	394	SPZH36B80 - 80B-4G	77.94	8 500	13 500	40	M262	
16.2	0.99	443	SPZH26B16B90 - 80B-4G	87.51	6 000	6 900	43	M254	
16.5	2.00	434	SPZH36B90 - 80B-4G	85.68	8 600	13 500	40	M262	
13.9	0.85	515	SPZH26B16B100 - 80B-4G	101.81	6 000	6 900	43	M254	
13.3	1.50	538	SPZH36B100 - 80B-4G	106.33	8 800	13 500	40	M262	
14.2	1.70	505	SPZH36B16B100 - 80B-4G	99.84	8 800	13 500	50	M262	
13.1	0.80	547	SPZH26B16B112 - 80B-4G	108.11	6 000	6 900	43	M254	
13.2	1.60	541	SPZH36B16B112 - 80B-4G	106.98	8 800	13 500	50	M262	
12.7	3.00	563	SPZH46C112 - 80B-4G	111.21	12 900	18 000	66	M270	
11.5	1.40	623	SPZH36B16B125 - 80B-4G	123.12	8 900	13 500	50	M262	
11.5	2.70	622	SPZH46C125 - 80B-4G	122.80	13 100	18 000	66	M270	
9.9	1.20	720	SPZH36B16B140 - 80B-4G	142.34	9 000	13 500	50	M262	
9.6	2.30	744	SPZH46C140 - 80B-4G	146.92	13 500	18 000	66	M270	
9.2	1.10	776	SPZH36B16B160 - 80B-4G	153.39	9 000	13 500	50	M262	
8.7	2.10	828	SPZH46C160 - 80B-4G	163.58	13 700	18 000	66	M270	
7.7	0.92	926	SPZH36B16B180 - 80B-4G	183.04	8 900	13 500	50	M262	




5. SP4

P 0.75 kW
n₁ 1415 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
7.8	1.90	916	SPZH46C180 - 80B-4G	180.96	13 900	18 000	66	M270	
7.3	0.86	984	SPZH36B16B200 - 80B-4G	194.34	8 800	13 500	50	M262	
7.0	1.70	1017	SPZH46C200 - 80B-4G	201.03	14 100	18 000	66	M270	
6.7	2.70	1072	SPZH56B16B200 - 80B-4G	211.76	18 800	27 000	113	M278	
7.4	3.00	971	SPZH56C200 - 80B-4G	191.86	18 500	27 000	103	M278	
6.1	1.40	1179	SPZH46C224 - 80B-4G	232.92	14 200	18 000	66	M270	
6.4	2.60	1121	SPZH56C224 - 80B-4G	221.46	19 000	27 000	103	M278	
5.8	1.40	1240	SPZH46B16B250 - 80B-4G	245.00	14 300	18 000	76	M270	
5.8	2.40	1231	SPZH56C250 - 80B-4G	243.22	19 300	27 000	103	M278	
4.9	1.20	1463	SPZH46C280 - 80B-4G	289.06	14 400	18 000	66	M270	
4.9	2.00	1469	SPZH56C280 - 80B-4G	290.23	19 800	27 000	103	M278	
4.5	1.10	1583	SPZH46B16B315 - 80B-4G	312.75	14 300	18 000	76	M270	
4.3	1.80	1647	SPZH56C315 - 80B-4G	325.39	20 000	27 000	103	M278	
3.8	0.90	1893	SPZH46B16B355 - 80B-4G	374.06	14 200	18 000	76	M270	
3.8	1.50	1904	SPZH56B16B355 - 80B-4G	376.16	20 300	27 000	113	M278	
3.4	0.82	2084	SPZH46B16B400 - 80B-4G	411.78	14 000	18 000	76	M270	
3.4	1.40	2096	SPZH56B16B400 - 80B-4G	414.09	20 400	27 000	113	M278	
3.6	2.80	1972	SPZH66B36B400 - 80B-4G	389.65		30 000	202	M286	
3.1	1.30	2320	SPZH56B16B450 - 80B-4G	458.35	20 500	27 000	113	M278	
3.2	2.50	2234	SPZH66B36B450 - 80B-4G	441.30		30 000	202	M286	
2.8	1.10	2585	SPZH56B16B500 - 80B-4G	510.66	20 500	27 000	113	M278	
2.9	2.30	2436	SPZH66B36B500 - 80B-4G	481.22		30 000	202	M286	
2.5	1.00	2902	SPZH56B16B560 - 80B-4G	573.43	20 400	27 000	113	M278	
2.5	2.00	2819	SPZH66B36B560 - 80B-4G	557.02		30 000	202	M286	
2.7	3.00	2676	SPZH76B36B560 - 80B-4G	528.65		50 000	293	M294	
2.2	0.90	3231	SPZH56B16B630 - 80B-4G	638.33	20 200	27 000	113	M278	
2.3	1.80	3113	SPZH66B36B630 - 80B-4G	615.05		30 000	202	M286	
2.3	2.60	3097	SPZH76B36B630 - 80B-4G	611.92		50 000	293	M294	
2.0	0.80	3613	SPZH56B16B710 - 80B-4G	713.86	19 900	27 000	113	M278	
1.9	1.50	3724	SPZH66B36B710 - 80B-4G	735.85		30 000	202	M286	
2.1	2.30	3420	SPZH76B36B710 - 80B-4G	675.68		50 000	293	M294	
1.7	1.30	4147	SPZH66B36B800 - 80B-4G	819.31		30 000	202	M286	
1.8	2.00	4092	SPZH76B36B800 - 80B-4G	808.38		50 000	293	M294	
1.6	1.20	4587	SPZH66B36B900 - 80B-4G	906.35		30 000	202	M286	
1.6	1.80	4556	SPZH76B36B900 - 80B-4G	900.07		50 000	293	M294	
1.4	1.10	5096	SPZH66B36B1000 - 80B-4G	1006.86		30 000	202	M286	
1.4	1.60	5040	SPZH76B36B1000 - 80B-4G	995.69		50 000	293	M294	
1.2	0.95	5778	SPZH66C36B1120 - 80B-4G	1141.54		30 000	202	M286	
1.3	1.40	5599	SPZH76B36B1120 - 80B-4G	1106.11		50 000	293	M294	
1.3	2.70	5481	SPZH86C36B1120 - 80B-4G	1082.86		82 500	448	M302	
1.2	2.50	5977	SPZH86C36B1200 - 80B-4G	1180.82		82 500	448	M302	
1.2	0.88	6224	SPZH66C36B1250 - 80B-4G	1229.59		30 000	202	M286	
1.1	1.30	6373	SPZH76C36B1250 - 80B-4G	1259.11		50 000	293	M294	
1.0	1.10	7218	SPZH76C36B1400 - 80B-4G	1426.00		50 000	293	M294	
1.0	2.20	6918	SPZH86C36B1400 - 80B-4G	1366.81		82 500	448	M302	
0.9	1.00	7871	SPZH76C36B1600 - 80B-4G	1554.99		50 000	293	M294	
0.9	2.00	7639	SPZH86C36B1600 - 80B-4G	1509.21		82 500	448	M302	
0.8	0.88	9110	SPZH76C36B1800 - 80B-4G	1799.92		50 000	293	M294	
0.8	1.60	9139	SPZH86C36B1800 - 80B-4G	1805.63		82 500	448	M302	
0.7	0.80	10059	SPZH76C36B2000 - 80B-4G	1987.45		50 000	293	M294	
0.7	1.50	10176	SPZH86C36B2000 - 80B-4G	2010.42		82 500	448	M302	
0.6	1.30	11257	SPZH86C36B2240 - 80B-4G	2224.01		82 500	448	M302	

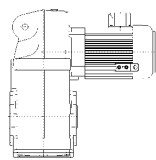


P	0.75 kW
n₁	1415 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
0.6	1.20	12505	SPZH86C36B2500 - 80B-4G	2470.63		82 500	448	M302
0.5	1.00	14489	SPZH86C36B2800 - 80B-4G	2862.58		82 500	448	M302
0.5	0.95	15752	SPZH86C36C3150 - 80B-4G	3112.09		82 500	448	M302
0.4	0.87	17177	SPZH86C36C3550 - 80B-4G	3393.61		82 500	448	M302


P	1.1 kW
n₁	1410 min⁻¹

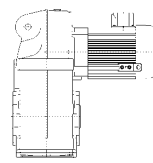
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
406.8	6.40	26	SPZH16B3.55 - 90S-4G	3.47		3 900	31	M246
354.9	5.50	30	SPZH16B4 - 90S-4G	3.97		4 000	31	M246
331.2	5.20	32	SPZH16B4.5 - 90S-4G	4.26		4 100	31	M246
287.8	4.50	37	SPZH16B5 - 90S-4G	4.90		4 300	31	M246
248.9	3.90	42	SPZH16B5.6 - 90S-4G	5.66		4 400	31	M246
231.0	3.60	45	SPZH16B6.3 - 90S-4G	6.10		4 500	31	M246
213.9	3.30	49	SPZH16B7.1 - 90S-4G	6.59		4 600	31	M246
182.3	2.80	58	SPZH16B8 - 90S-4G	7.73		4 800	31	M246
166.8	3.70	63	SPZH16B9 - 90S-4G	8.45		5 000	31	M246
145.5	3.20	72	SPZH16B10 - 90S-4G	9.69		5 000	31	M246
135.8	3.00	77	SPZH16B11.2 - 90S-4G	10.39		5 000	31	M246
118.0	2.60	89	SPZH16B12.5 - 90S-4G	11.95		5 000	31	M246
102.0	2.20	103	SPZH16B14 - 90S-4G	13.82		5 000	31	M246
87.7	1.90	120	SPZH16B16 - 90S-4G	16.08		5 000	31	M246
74.7	1.60	141	SPZH16B18 - 90S-4G	18.87		5 000	31	M246
68.7	1.50	153	SPZH16B20 - 90S-4G	20.52		5 000	31	M246
67.5	2.80	156	SPZH26B20 - 90S-4G	20.89	4 600	6 900	38	M254
62.1	2.60	169	SPZH26B22.4 - 90S-4G	22.72	4 700	6 900	38	M254
57.4	1.30	183	SPZH16B25 - 90S-4G	24.55		5 000	31	M246
51.9	2.20	202	SPZH26B25 - 90S-4G	27.18	4 800	6 900	38	M254
52.2	1.10	201	SPZH16B28 - 90S-4G	27.02		5 000	31	M246
47.1	2.00	223	SPZH26B28 - 90S-4G	29.92	4 800	6 900	38	M254
47.1	1.00	223	SPZH16B31.5 - 90S-4G	29.91		5 000	31	M246
42.6	1.80	247	SPZH26B31.5 - 90S-4G	33.11	4 900	6 900	38	M254
37.7	0.83	279	SPZH16B35.5 - 90S-4G	37.42		5 000	31	M246
38.2	1.60	275	SPZH26B35.5 - 90S-4G	36.89	4 900	6 900	38	M254
34.0	1.40	309	SPZH26B40 - 90S-4G	41.43	5 000	6 900	38	M254
34.5	2.80	305	SPZH36B40 - 90S-4G	40.91	6 900	13 500	45	M262
30.6	1.30	344	SPZH26B45 - 90S-4G	46.12	5 000	6 900	38	M254
31.2	2.50	337	SPZH36B45 - 90S-4G	45.17	7 100	13 500	45	M262
27.3	1.10	384	SPZH26B50 - 90S-4G	51.57	5 000	6 900	38	M254
26.1	2.10	403	SPZH36B50 - 90S-4G	54.05	7 200	13 500	45	M262
23.5	0.99	447	SPZH26B56 - 90S-4G	59.95	4 900	6 900	38	M254
23.4	1.90	448	SPZH36B56 - 90S-4G	60.18	7 300	13 500	45	M262
21.1	0.88	498	SPZH26B63 - 90S-4G	66.79	4 900	6 900	38	M254
21.2	1.70	496	SPZH36B63 - 90S-4G	66.57	7 400	13 500	45	M262
19.1	1.50	551	SPZH36B71 - 90S-4G	73.95	7 400	13 500	45	M262
18.6	2.90	566	SPZH46B71 - 90S-4G	75.97	11 000	18 000	71	M270
18.1	1.50	581	SPZH36B80 - 90S-4G	77.94	7 400	13 500	45	M262




5. SP4

P 1.10 kW
n₁ 1410 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
18.1	2.90	580	SPZH46C80 - 90S-4G	77.80	11 000	18 000	71	M270	
16.5	1.30	638	SPZH36B90 - 90S-4G	85.68	7 400	13 500	45	M262	
16.0	2.60	656	SPZH46C90 - 90S-4G	88.11	11 200	18 000	71	M270	
13.3	1.00	792	SPZH36B100 - 90S-4G	106.33	7 400	13 500	45	M262	
14.7	2.40	716	SPZH46C100 - 90S-4G	96.08	11 400	18 000	71	M270	
13.2	1.10	797	SPZH36B16B112 - 90S-4G	106.98	7 300	13 500	55	M262	
12.7	2.10	829	SPZH46C112 - 90S-4G	111.21	11 600	18 000	71	M270	
11.5	0.93	917	SPZH36B16B125 - 90S-4G	123.12	7 200	13 500	55	M262	
11.5	1.90	915	SPZH46C125 - 90S-4G	122.80	11 700	18 000	71	M270	
10.9	3.00	967	SPZH56C125 - 90S-4G	129.77	15 800	27 000	108	M278	
9.9	0.80	1060	SPZH36B16B140 - 90S-4G	142.34	7 000	13 500	55	M262	
9.6	1.60	1095	SPZH46C140 - 90S-4G	146.92	11 800	18 000	71	M270	
10.2	2.80	1035	SPZH56C140 - 90S-4G	138.87	15 900	27 000	108	M278	
8.6	1.40	1219	SPZH46C160 - 90S-4G	163.58	11 800	18 000	71	M270	
9.1	2.50	1155	SPZH56C160 - 90S-4G	155.10	16 200	27 000	108	M278	
7.8	1.30	1348	SPZH46C180 - 90S-4G	180.96	11 800	18 000	71	M270	
8.0	2.20	1318	SPZH56C180 - 90S-4G	176.96	16 500	27 000	108	M278	
7.0	1.10	1498	SPZH46C200 - 90S-4G	201.03	11 800	18 000	71	M270	
6.7	1.80	1578	SPZH56B16B200 - 90S-4G	211.76	16 700	27 000	118	M278	
7.3	2.00	1429	SPZH56C200 - 90S-4G	191.86	16 600	27 000	108	M278	
6.1	0.98	1735	SPZH46C224 - 90S-4G	232.92	11 600	18 000	71	M270	
6.4	1.80	1650	SPZH56C224 - 90S-4G	221.46	16 800	27 000	108	M278	
5.8	0.93	1825	SPZH46B16B250 - 90S-4G	245.00	11 500	18 000	81	M270	
5.8	1.60	1812	SPZH56C250 - 90S-4G	243.22	16 900	27 000	108	M278	
5.5	2.90	1895	SPZH66B36B250 - 90S-4G	254.37		30 000	207	M286	
4.9	1.30	2162	SPZH56C280 - 90S-4G	290.23	16 900	27 000	108	M278	
5.2	2.70	2030	SPZH66B36B280 - 90S-4G	272.44		30 000	207	M286	
4.3	1.20	2424	SPZH56C315 - 90S-4G	325.39	16 900	27 000	108	M278	
4.4	2.30	2373	SPZH66B36B315 - 90S-4G	318.57		30 000	207	M286	
3.7	1.00	2802	SPZH56B16B355 - 90S-4G	376.16	16 600	27 000	118	M278	
4.1	2.20	2556	SPZH66B36B355 - 90S-4G	343.14		30 000	207	M286	
3.4	0.94	3085	SPZH56B16B400 - 90S-4G	414.09	16 400	27 000	118	M278	
3.6	1.90	2903	SPZH66B36B400 - 90S-4G	389.65		30 000	207	M286	
3.7	2.80	2808	SPZH76B36B400 - 90S-4G	376.96		50 000	298	M294	
3.1	0.85	3415	SPZH56B16B450 - 90S-4G	458.35	16 000	27 000	118	M278	
3.2	1.70	3288	SPZH66B36B450 - 90S-4G	441.30		30 000	207	M286	
3.3	2.50	3189	SPZH76B36B450 - 90S-4G	428.06		50 000	298	M294	
2.9	1.50	3585	SPZH66B36B500 - 90S-4G	481.22		30 000	207	M286	
2.9	2.20	3612	SPZH76B36B500 - 90S-4G	484.80		50 000	298	M294	
2.5	1.30	4150	SPZH66B36B560 - 90S-4G	557.02		30 000	207	M286	
2.7	2.00	3938	SPZH76B36B560 - 90S-4G	528.65		50 000	298	M294	
2.3	1.20	4582	SPZH66B36B630 - 90S-4G	615.05		30 000	207	M286	
2.3	1.80	4559	SPZH76B36B630 - 90S-4G	611.92		50 000	298	M294	
1.9	1.00	5482	SPZH66B36B710 - 90S-4G	735.85		30 000	207	M286	
2.1	1.60	5034	SPZH76B36B710 - 90S-4G	675.68		50 000	298	M294	
2.0	2.90	5215	SPZH86C36B710 - 90S-4G	700.06		82 500	453	M302	
1.7	0.90	6104	SPZH66B36B800 - 90S-4G	819.31		30 000	207	M286	
1.7	1.30	6022	SPZH76B36B800 - 90S-4G	808.38		50 000	298	M294	
1.8	2.60	5687	SPZH86C36B800 - 90S-4G	763.39		82 500	453	M302	
1.6	0.81	6752	SPZH66B36B900 - 90S-4G	906.35		30 000	207	M286	
1.6	1.20	6705	SPZH76B36B900 - 90S-4G	900.07		50 000	298	M294	
1.6	2.30	6583	SPZH86C36B900 - 90S-4G	883.63		82 500	453	M302	

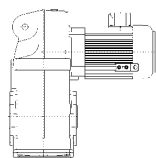


P	1.10 kW
n₁	1410 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
1.4	1.10	7418	SPZH76B36B1000 - 90S-4G	995.69		50 000	298	M294
1.5	2.10	7123	SPZH86C36B1000 - 90S-4G	956.13		82 500	453	M302
1.3	0.97	8240	SPZH76B36B1120 - 90S-4G	1106.11		50 000	298	M294
1.3	1.90	8067	SPZH86C36B1120 - 90S-4G	1082.86		82 500	453	M302
1.2	1.70	8797	SPZH86C36B1200 - 90S-4G	1180.82		82 500	453	M302
1.1	0.85	9380	SPZH76C36B1250 - 90S-4G	1259.11		50 000	298	M294
1.0	1.50	10182	SPZH86C36B1400 - 90S-4G	1366.81		82 500	453	M302
0.9	1.30	11243	SPZH86C36B1600 - 90S-4G	1509.21		82 500	453	M302
0.8	1.10	13452	SPZH86C36B1800 - 90S-4G	1805.63		82 500	453	M302
0.7	1.00	14977	SPZH86C36B2000 - 90S-4G	2010.42		82 500	453	M302
0.6	0.91	16568	SPZH86C36B2240 - 90S-4G	2224.01		82 500	453	M302
0.6	0.81	18406	SPZH86C36B2500 - 90S-4G	2470.63		82 500	453	M302


P	1.5 kW
n₁	1410 min⁻¹

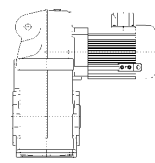
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
406.8	4.70	35	SPZH16B3.55 - 90L-4G	3.47		3 800	32	M246
354.9	4.10	40	SPZH16B4 - 90L-4G	3.97		3 900	32	M246
331.2	3.80	43	SPZH16B4.5 - 90L-4G	4.26		4 000	32	M246
287.8	3.30	50	SPZH16B5 - 90L-4G	4.90		4 100	32	M246
248.9	2.80	58	SPZH16B5.6 - 90L-4G	5.66		4 300	32	M246
231.0	2.60	62	SPZH16B6.3 - 90L-4G	6.10		4 300	32	M246
213.9	2.40	67	SPZH16B7.1 - 90L-4G	6.59		4 400	32	M246
185.5	2.80	77	SPZH26B7.1 - 90L-4G	7.60	3 500	6 900	39	M254
182.3	2.10	79	SPZH16B8 - 90L-4G	7.73		4 600	32	M246
172.2	2.60	83	SPZH26B8 - 90L-4G	8.19	3 500	6 900	39	M254
166.8	2.70	86	SPZH16B9 - 90L-4G	8.45		4 800	32	M246
145.5	2.30	98	SPZH16B10 - 90L-4G	9.69		4 900	32	M246
135.8	2.20	106	SPZH16B11.2 - 90L-4G	10.39		5 000	32	M246
118.0	1.90	121	SPZH16B12.5 - 90L-4G	11.95		5 000	32	M246
102.0	1.60	140	SPZH16B14 - 90L-4G	13.82		5 000	32	M246
92.2	2.80	155	SPZH26B14 - 90L-4G	15.30	4 000	6 900	39	M254
87.7	1.40	163	SPZH16B16 - 90L-4G	16.08		5 000	32	M246
85.5	2.60	167	SPZH26B16 - 90L-4G	16.49	4 100	6 900	39	M254
74.7	1.20	192	SPZH16B18 - 90L-4G	18.87		5 000	32	M246
79.2	2.40	181	SPZH26B18 - 90L-4G	17.80	4 100	6 900	39	M254
68.7	1.10	208	SPZH16B20 - 90L-4G	20.52		5 000	32	M246
67.5	2.10	212	SPZH26B20 - 90L-4G	20.89	4 200	6 900	39	M254
62.1	1.90	231	SPZH26B22.4 - 90L-4G	22.72	4 200	6 900	39	M254
57.4	0.92	249	SPZH16B25 - 90L-4G	24.55		5 000	32	M246
51.9	1.60	276	SPZH26B25 - 90L-4G	27.18	4 300	6 900	39	M254
52.2	0.84	275	SPZH16B28 - 90L-4G	27.02		5 000	32	M246
47.1	1.40	304	SPZH26B28 - 90L-4G	29.92	4 300	6 900	39	M254
49.3	2.90	291	SPZH36B28 - 90L-4G	28.62	6 000	13 500	46	M262
42.6	1.30	336	SPZH26B31.5 - 90L-4G	33.11	4 300	6 900	39	M254
43.5	2.60	329	SPZH36B31.5 - 90L-4G	32.41	6 100	13 500	46	M262
38.2	1.20	375	SPZH26B35.5 - 90L-4G	36.89	4 200	6 900	39	M254





5. SP4

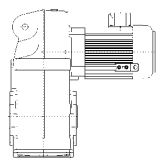
P 1.5 kW
n₁ 1410 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
39.9	2.40	359	SPZH36B35.5 - 90L-4G	35.34	6 200	13 500	46	M262	
34.0	1.00	421	SPZH26B40 - 90L-4G	41.43	4 200	6 900	39	M254	
34.5	2.00	416	SPZH36B40 - 90L-4G	40.91	6 300	13 500	46	M262	
30.6	0.94	468	SPZH26B45 - 90L-4G	46.12	4 100	6 900	39	M254	
31.2	1.90	459	SPZH36B45 - 90L-4G	45.17	6 300	13 500	46	M262	
27.3	0.84	524	SPZH26B50 - 90L-4G	51.57	4 000	6 900	39	M254	
26.1	1.50	549	SPZH36B50 - 90L-4G	54.05	6 300	13 500	46	M262	
27.8	2.90	516	SPZH46C50 - 90L-4G	50.79	9 500	18 000	72	M270	
23.4	1.40	611	SPZH36B56 - 90L-4G	60.18	6 300	13 500	46	M262	
24.8	2.90	577	SPZH46B56 - 90L-4G	56.78	9 600	18 000	72	M270	
21.2	1.30	676	SPZH36B63 - 90L-4G	66.57	6 300	13 500	46	M262	
20.8	2.50	688	SPZH46B63 - 90L-4G	67.76	9 900	18 000	72	M270	
19.1	1.10	751	SPZH36B71 - 90L-4G	73.95	6 200	13 500	46	M262	
18.6	2.10	772	SPZH46B71 - 90L-4G	75.97	10 000	18 000	72	M270	
20.6	2.40	696	SPZH46C71 - 90L-4G	68.51	9 900	18 000	72	M270	
18.1	1.10	792	SPZH36B80 - 90L-4G	77.94	6 200	13 500	46	M262	
18.1	2.20	790	SPZH46C80 - 90L-4G	77.80	10 000	18 000	72	M270	
16.5	0.98	870	SPZH36B90 - 90L-4G	85.68	6 000	13 500	46	M262	
16.0	1.90	895	SPZH46C90 - 90L-4G	88.11	10 100	18 000	72	M270	
14.1	0.84	1014	SPZH36B16B100 - 90L-4G	99.84	5 800	13 500	56	M262	
14.7	1.70	976	SPZH46C100 - 90L-4G	96.08	10 100	18 000	72	M270	
14.6	3.00	980	SPZH56C100 - 90L-4G	96.48	13 800	27 000	109	M278	
12.7	1.50	1130	SPZH46C112 - 90L-4G	111.21	10 100	18 000	72	M270	
12.8	2.60	1123	SPZH56C112 - 90L-4G	110.51	14 100	27 000	109	M278	
11.5	1.40	1247	SPZH46C125 - 90L-4G	122.80	10 100	18 000	72	M270	
10.9	2.20	1318	SPZH56C125 - 90L-4G	129.77	14 300	27 000	109	M278	
9.6	1.10	1493	SPZH46C140 - 90L-4G	146.92	9 900	18 000	72	M270	
10.2	2.10	1411	SPZH56C140 - 90L-4G	138.87	14 400	27 000	109	M278	
8.6	1.00	1662	SPZH46C160 - 90L-4G	163.58	9 700	18 000	72	M270	
9.1	1.80	1576	SPZH56C160 - 90L-4G	155.10	14 500	27 000	109	M278	
7.8	0.92	1838	SPZH46C180 - 90L-4G	180.96	9 500	18 000	72	M270	
8.0	1.60	1798	SPZH56C180 - 90L-4G	176.96	14 500	27 000	109	M278	
7.9	3.00	1823	SPZH66B36B180 - 90L-4G	179.48		30 000	208	M286	
7.0	0.83	2042	SPZH46C200 - 90L-4G	201.03	9 200	18 000	72	M270	
6.7	1.30	2151	SPZH56B16B200 - 90L-4G	211.76	14 400	27 000	119	M278	
7.3	1.50	1949	SPZH56C200 - 90L-4G	191.86	14 500	27 000	109	M278	
6.8	2.60	2106	SPZH66B36B200 - 90L-4G	207.29		30 000	208	M286	
6.4	1.30	2250	SPZH56C224 - 90L-4G	221.46	14 400	27 000	109	M278	
6.2	2.40	2328	SPZH66B36B224 - 90L-4G	229.15		30 000	208	M286	
5.8	1.20	2471	SPZH56C250 - 90L-4G	243.22	14 200	27 000	109	M278	
5.5	2.10	2584	SPZH66B36B250 - 90L-4G	254.37		30 000	208	M286	
4.9	0.98	2948	SPZH56C280 - 90L-4G	290.23	13 700	27 000	109	M278	
5.2	2.00	2768	SPZH66B36B280 - 90L-4G	272.44		30 000	208	M286	
5.0	2.80	2839	SPZH76B36B280 - 90L-4G	279.45		50 000	299	M294	
4.3	0.88	3306	SPZH56C315 - 90L-4G	325.39	13 300	27 000	109	M278	
4.4	1.70	3236	SPZH66B36B315 - 90L-4G	318.57		30 000	208	M286	
4.7	2.60	3041	SPZH76B36B315 - 90L-4G	299.30		50 000	299	M294	
4.1	1.60	3486	SPZH66B36B355 - 90L-4G	343.14		30 000	208	M286	
4.0	2.30	3555	SPZH76B36B355 - 90L-4G	349.97		50 000	299	M294	
3.6	1.40	3958	SPZH66B36B400 - 90L-4G	389.65		30 000	208	M286	
3.7	2.10	3830	SPZH76B36B400 - 90L-4G	376.96		50 000	299	M294	
3.2	1.20	4483	SPZH66B36B450 - 90L-4G	441.30		30 000	208	M286	




P 1.5 kW n_1 1410 min⁻¹									
n_{2ex} min ⁻¹	SF	T_{2m} Nm	Type	i_{ex}	F_{rN} N	F_{rN-G} N	m kg		
3.3	1.80	4349	SPZH76B36B450 - 90L-4G	428.06		50 000	299	M294	
2.9	1.10	4889	SPZH66B36B500 - 90L-4G	481.22		30 000	208	M286	
2.9	1.60	4925	SPZH76B36B500 - 90L-4G	484.80		50 000	299	M294	
2.8	2.90	5134	SPZH86C36B500 - 90L-4G	505.37		82 500	454	M302	
2.5	0.97	5659	SPZH66B36B560 - 90L-4G	557.02		30 000	208	M286	
2.7	1.50	5371	SPZH76B36B560 - 90L-4G	528.65		50 000	299	M294	
2.6	2.70	5530	SPZH86C36B560 - 90L-4G	544.34		82 500	454	M302	
2.3	0.88	6248	SPZH66B36B630 - 90L-4G	615.05		30 000	208	M286	
2.3	1.30	6216	SPZH76B36B630 - 90L-4G	611.92		50 000	299	M294	
2.3	2.40	6279	SPZH86C36B630 - 90L-4G	618.13		82 500	454	M302	
2.1	1.20	6864	SPZH76B36B710 - 90L-4G	675.68		50 000	299	M294	
2.0	2.10	7112	SPZH86C36B710 - 90L-4G	700.06		82 500	454	M302	
1.7	0.97	8212	SPZH76B36B800 - 90L-4G	808.38		50 000	299	M294	
1.8	1.90	7755	SPZH86C36B800 - 90L-4G	763.39		82 500	454	M302	
1.6	0.87	9144	SPZH76B36B900 - 90L-4G	900.07		50 000	299	M294	
1.6	1.70	8977	SPZH86C36B900 - 90L-4G	883.63		82 500	454	M302	
1.5	1.50	9713	SPZH86C36B1000 - 90L-4G	956.13		82 500	454	M302	
1.3	1.40	11001	SPZH86C36B1120 - 90L-4G	1082.86		82 500	454	M302	
1.2	1.30	11996	SPZH86C36B1200 - 90L-4G	1180.82		82 500	454	M302	
1.0	1.10	13885	SPZH86C36B1400 - 90L-4G	1366.81		82 500	454	M302	
0.9	0.98	15332	SPZH86C36B1600 - 90L-4G	1509.21		82 500	454	M302	
0.8	0.82	18343	SPZH86C36B1800 - 90L-4G	1805.63		82 500	454	M302	

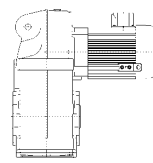
P 2.2 kW n_1 1420 min⁻¹									
n_{2ex} min ⁻¹	SF	T_{2m} Nm	Type	i_{ex}	F_{rN} N	F_{rN-G} N	m kg		
409.7	3.20	51	SPZH16B3.55 - 100A-4G	3.47		3 600	35	M246	
357.4	2.80	59	SPZH16B4 - 100A-4G	3.97		3 700	35	M246	
333.5	2.60	63	SPZH16B4.5 - 100A-4G	4.26		3 800	35	M246	
289.8	2.30	72	SPZH16B5 - 100A-4G	4.90		3 900	35	M246	
266.4	2.80	79	SPZH26B5 - 100A-4G	5.33	3 000	6 900	42	M254	
250.7	2.00	84	SPZH16B5.6 - 100A-4G	5.66		4 000	35	M246	
248.6	2.60	85	SPZH26B5.6 - 100A-4G	5.71	3 000	6 900	42	M254	
232.6	1.80	90	SPZH16B6.3 - 100A-4G	6.10		4 100	35	M246	
216.0	2.30	97	SPZH26B6.3 - 100A-4G	6.57	3 100	6 900	42	M254	
215.5	1.70	98	SPZH16B7.1 - 100A-4G	6.59		4 100	35	M246	
186.8	2.00	112	SPZH26B7.1 - 100A-4G	7.60	3 200	6 900	42	M254	
183.6	1.40	114	SPZH16B8 - 100A-4G	7.73		4 200	35	M246	
173.4	1.80	121	SPZH26B8 - 100A-4G	8.19	3 200	6 900	42	M254	
168.0	1.80	125	SPZH16B9 - 100A-4G	8.45		4 400	35	M246	
146.5	1.60	143	SPZH16B10 - 100A-4G	9.69		4 500	35	M246	
132.3	2.70	159	SPZH26B10 - 100A-4G	10.73	3 400	6 900	42	M254	
136.7	1.50	154	SPZH16B11.2 - 100A-4G	10.39		4 600	35	M246	
123.5	2.60	170	SPZH26B11.2 - 100A-4G	11.50	3 500	6 900	42	M254	
118.8	1.30	177	SPZH16B12.5 - 100A-4G	11.95		4 700	35	M246	
107.3	2.20	196	SPZH26B12.5 - 100A-4G	13.23	3 500	6 900	42	M254	
102.8	1.10	204	SPZH16B14 - 100A-4G	13.82		4 700	35	M246	




5. SP4

P 2.2 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
92.8	1.90	226	SPZH26B14 - 100A-4G	15.30	3 500	6 900	42	M254	
88.3	0.97	238	SPZH16B16 - 100A-4G	16.08		4 800	35	M246	
86.1	1.80	244	SPZH26B16 - 100A-4G	16.49	3 500	6 900	42	M254	
75.3	0.82	279	SPZH16B18 - 100A-4G	18.87		4 800	35	M246	
79.8	1.70	263	SPZH26B18 - 100A-4G	17.80	3 500	6 900	42	M254	
68.0	1.40	309	SPZH26B20 - 100A-4G	20.89	3 500	6 900	42	M254	
71.0	2.90	296	SPZH36B20 - 100A-4G	20.01	5 100	13 500	49	M262	
62.5	1.30	336	SPZH26B22.4 - 100A-4G	22.72	3 500	6 900	42	M254	
60.7	2.50	346	SPZH36B22.4 - 100A-4G	23.40	5 200	13 500	49	M262	
52.3	1.10	402	SPZH26B25 - 100A-4G	27.18	3 300	6 900	42	M254	
56.3	2.30	373	SPZH36B25 - 100A-4G	25.20	5 200	13 500	49	M262	
47.5	0.99	443	SPZH26B28 - 100A-4G	29.92	3 300	6 900	42	M254	
49.6	2.00	423	SPZH36B28 - 100A-4G	28.62	5 200	13 500	49	M262	
49.8	3.00	422	SPZH46C28 - 100A-4G	28.53	7 800	18 000	75	M270	
42.9	0.90	490	SPZH26B31.5 - 100A-4G	33.11	3 100	6 900	42	M254	
43.8	1.80	480	SPZH36B31.5 - 100A-4G	32.41	5 200	13 500	49	M262	
43.5	2.70	483	SPZH46C31.5 - 100A-4G	32.66	8 000	18 000	75	M270	
43.8	3.00	480	SPZH46B31.5 - 100A-4G	32.42	8 000	18 000	75	M270	
38.5	0.81	546	SPZH26B35.5 - 100A-4G	36.89	3 000	6 900	42	M254	
40.2	1.60	523	SPZH36B35.5 - 100A-4G	35.34	5 200	13 500	49	M262	
39.6	2.50	530	SPZH46C35.5 - 100A-4G	35.83	8 100	18 000	75	M270	
39.2	2.80	536	SPZH46B35.5 - 100A-4G	36.21	8 100	18 000	75	M270	
34.7	1.40	605	SPZH36B40 - 100A-4G	40.91	5 100	13 500	49	M262	
34.3	2.30	612	SPZH46C40 - 100A-4G	41.39	8 200	18 000	75	M270	
34.4	2.60	611	SPZH46B40 - 100A-4G	41.31	8 200	18 000	75	M270	
31.4	1.30	668	SPZH36B45 - 100A-4G	45.17	5 100	13 500	49	M262	
31.0	2.20	677	SPZH46C45 - 100A-4G	45.75	8 300	18 000	75	M270	
31.7	2.40	663	SPZH46B45 - 100A-4G	44.79	8 300	18 000	75	M270	
26.3	1.10	800	SPZH36B50 - 100A-4G	54.05	4 800	13 500	49	M262	
28.0	2.00	751	SPZH46C50 - 100A-4G	50.79	8 300	18 000	75	M270	
27.5	2.20	765	SPZH46B50 - 100A-4G	51.70	8 400	18 000	75	M270	
23.6	0.95	890	SPZH36B56 - 100A-4G	60.18	4 600	13 500	49	M262	
25.0	2.00	840	SPZH46B56 - 100A-4G	56.78	8 400	18 000	75	M270	
21.3	0.86	985	SPZH36B63 - 100A-4G	66.57	4 400	13 500	49	M262	
21.0	1.70	1002	SPZH46B63 - 100A-4G	67.76	8 300	18 000	75	M270	
22.3	2.90	941	SPZH56C63 - 100A-4G	63.59	11 700	27 000	112	M278	
18.7	1.50	1124	SPZH46B71 - 100A-4G	75.97	8 300	18 000	75	M270	
20.2	2.70	1038	SPZH56C71 - 100A-4G	70.17	11 800	27 000	112	M278	
18.3	1.50	1151	SPZH46C80 - 100A-4G	77.80	8 300	18 000	75	M270	
18.4	2.50	1142	SPZH56C80 - 100A-4G	77.21	11 900	27 000	112	M278	
16.1	1.30	1304	SPZH46C90 - 100A-4G	88.11	8 100	18 000	75	M270	
16.3	2.30	1287	SPZH56C90 - 100A-4G	86.98	11 900	27 000	112	M278	
14.8	1.20	1421	SPZH46C100 - 100A-4G	96.08	8 000	18 000	75	M270	
14.7	2.00	1427	SPZH56C100 - 100A-4G	96.48	12 000	27 000	112	M278	
12.8	1.00	1645	SPZH46C112 - 100A-4G	111.21	7 600	18 000	75	M270	
12.8	1.80	1635	SPZH56C112 - 100A-4G	110.51	12 000	27 000	112	M278	
11.6	0.94	1817	SPZH46C125 - 100A-4G	122.80	7 300	18 000	75	M270	
10.9	1.50	1920	SPZH56C125 - 100A-4G	129.77	11 800	27 000	112	M278	
11.4	3.00	1850	SPZH66C125 - 100A-4G	125.03		30 000	173	M286	
10.2	1.40	2055	SPZH56C140 - 100A-4G	138.87	11 700	27 000	112	M278	
9.7	2.50	2172	SPZH66C140 - 100A-4G	146.82		30 000	173	M286	
9.2	1.30	2295	SPZH56C160 - 100A-4G	155.10	11 500	27 000	112	M278	

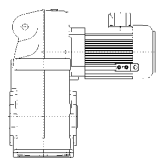


P	2.2 kW
n₁	1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
9.0	2.40	2324	SPZH66C160 - 100A-4G	157.12		30 000	173	M286
8.0	1.10	2618	SPZH56C180 - 100A-4G	176.96	11 100	27 000	112	M278
8.1	2.10	2596	SPZH66C180 - 100A-4G	175.48		30 000	173	M286
7.8	3.00	2685	SPZH76C180 - 100A-4G	181.46		50 000	264	M294
7.4	1.00	2838	SPZH56C200 - 100A-4G	191.86	10 800	27 000	112	M278
7.1	1.90	2962	SPZH66C200 - 100A-4G	200.21		30 000	173	M286
6.9	2.60	3063	SPZH76C200 - 100A-4G	207.03		50 000	264	M294
6.4	0.89	3276	SPZH56C224 - 100A-4G	221.46	10 100	27 000	112	M278
6.5	1.70	3211	SPZH66C224 - 100A-4G	217.07		30 000	173	M286
6.3	2.40	3321	SPZH76C224 - 100A-4G	224.46		50 000	264	M294
5.8	0.81	3598	SPZH56C250 - 100A-4G	243.22	9 500	27 000	112	M278
5.7	1.50	3707	SPZH66C250 - 100A-4G	250.56		30 000	173	M286
5.5	2.10	3833	SPZH76C250 - 100A-4G	259.09		50 000	264	M294
5.2	1.40	4071	SPZH66C280 - 100A-4G	275.17		30 000	173	M286
5.0	1.90	4210	SPZH76C280 - 100A-4G	284.55		50 000	264	M294
4.3	1.10	4858	SPZH66C315 - 100A-4G	328.36		30 000	173	M286
4.7	1.80	4428	SPZH76B36B315 - 100A-4G	299.30		50 000	302	M294
3.9	2.80	5378	SPZH86C36B350 - 100A-4G	363.52		82 500	457	M302
3.9	1.00	5447	SPZH66C355 - 100A-4G	368.15		30 000	173	M286
4.2	1.60	5023	SPZH76C355 - 100A-4G	339.55		50 000	264	M294
3.6	0.95	5765	SPZH66B36B400 - 100A-4G	389.65		30 000	211	M286
3.7	1.40	5632	SPZH76C400 - 100A-4G	380.68		50 000	264	M294
3.5	2.50	5970	SPZH86C36B400 - 100A-4G	403.53		82 500	457	M302
3.2	0.84	6529	SPZH66B36B450 - 100A-4G	441.30		30 000	211	M286
3.3	1.30	6333	SPZH76B36B450 - 100A-4G	428.06		50 000	302	M294
3.3	2.30	6394	SPZH86C36B450 - 100A-4G	432.19		82 500	457	M302
2.9	1.10	7172	SPZH76B36B500 - 100A-4G	484.80		50 000	302	M294
2.8	2.00	7477	SPZH86C36B500 - 100A-4G	505.37		82 500	457	M302
2.7	1.00	7821	SPZH76B36B560 - 100A-4G	528.65		50 000	302	M294
2.6	1.90	8053	SPZH86C36B560 - 100A-4G	544.34		82 500	457	M302
2.3	0.88	9053	SPZH76B36B630 - 100A-4G	611.92		50 000	302	M294
2.3	1.60	9145	SPZH86C36B630 - 100A-4G	618.13		82 500	457	M302
2.1	0.80	9996	SPZH76B36B710 - 100A-4G	675.68		50 000	302	M294
2.0	1.40	10357	SPZH86C36B710 - 100A-4G	700.06		82 500	457	M302
1.9	1.30	11294	SPZH86C36B800 - 100A-4G	763.39		82 500	457	M302
1.6	1.10	13073	SPZH86C36B900 - 100A-4G	883.63		82 500	457	M302
1.5	1.10	14146	SPZH86C36B1000 - 100A-4G	956.13		82 500	457	M302
1.3	0.94	16021	SPZH86C36B1120 - 100A-4G	1082.86		82 500	457	M302
1.2	0.86	17470	SPZH86C36B1200 - 100A-4G	1180.82		82 500	457	M302


P	3.0 kW
n₁	1425 min⁻¹

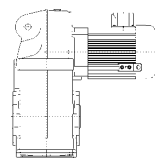
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
411.2	2.40	70	SPZH16B3.55 - 100B-4G	3.47		3 400	37	M246
358.6	2.10	80	SPZH16B4 - 100B-4G	3.97		3 500	37	M246
334.7	1.90	86	SPZH16B4.5 - 100B-4G	4.26		3 500	37	M246
306.5	2.40	93	SPZH26B4.5 - 100B-4G	4.65	2 700	6 900	44	M254




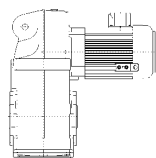
5. SP4

P 3.0 kW
n₁ 1425 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
290.8	1.70	99	SPZH16B5 - 100B-4G	4.90		3 600	37	M246	
267.3	2.10	107	SPZH26B5 - 100B-4G	5.33	2 800	6 900	44	M254	
251.6	1.40	114	SPZH16B5.6 - 100B-4G	5.66		3 700	37	M246	
249.5	1.90	115	SPZH26B5.6 - 100B-4G	5.71	2 800	6 900	44	M254	
233.4	1.30	123	SPZH16B6.3 - 100B-4G	6.10		3 700	37	M246	
216.8	1.70	132	SPZH26B6.3 - 100B-4G	6.57	2 800	6 900	44	M254	
216.2	1.20	132	SPZH16B7.1 - 100B-4G	6.59		3 800	37	M246	
187.5	1.40	153	SPZH26B7.1 - 100B-4G	7.60	2 900	6 900	44	M254	
207.4	3.00	138	SPZH36B7.1 - 100B-4G	6.87	3 800	13 500	51	M262	
184.3	1.10	155	SPZH16B8 - 100B-4G	7.73		3 800	37	M246	
174.0	1.30	165	SPZH26B8 - 100B-4G	8.19	2 900	6 900	44	M254	
168.5	1.40	170	SPZH16B9 - 100B-4G	8.45		4 000	37	M246	
152.2	2.30	188	SPZH26B9 - 100B-4G	9.36	3 000	6 900	44	M254	
147.0	1.20	195	SPZH16B10 - 100B-4G	9.69		4 100	37	M246	
132.8	2.00	216	SPZH26B10 - 100B-4G	10.73	3 000	6 900	44	M254	
137.2	1.10	209	SPZH16B11.2 - 100B-4G	10.39		4 100	37	M246	
123.9	1.90	231	SPZH26B11.2 - 100B-4G	11.50	3 000	6 900	44	M254	
119.2	0.96	240	SPZH16B12.5 - 100B-4G	11.95		4 100	37	M246	
107.7	1.70	266	SPZH26B12.5 - 100B-4G	13.23	3 000	6 900	44	M254	
103.1	0.83	278	SPZH16B14 - 100B-4G	13.82		4 100	37	M246	
93.1	1.40	308	SPZH26B14 - 100B-4G	15.30	2 900	6 900	44	M254	
93.6	2.80	306	SPZH36B14 - 100B-4G	15.23	4 500	13 500	51	M262	
86.4	1.30	331	SPZH26B16 - 100B-4G	16.49	2 900	6 900	44	M254	
84.7	2.50	338	SPZH36B16 - 100B-4G	16.83	4 500	13 500	51	M262	
80.1	1.20	358	SPZH26B18 - 100B-4G	17.80	2 800	6 900	44	M254	
76.3	2.30	376	SPZH36B18 - 100B-4G	18.68	4 500	13 500	51	M262	
68.2	1.00	420	SPZH26B20 - 100B-4G	20.89	2 700	6 900	44	M254	
71.2	2.10	402	SPZH36B20 - 100B-4G	20.01	4 500	13 500	51	M262	
62.7	0.96	457	SPZH26B22.4 - 100B-4G	22.72	2 600	6 900	44	M254	
60.9	1.80	470	SPZH36B22.4 - 100B-4G	23.40	4 400	13 500	51	M262	
64.9	2.60	441	SPZH46C22.4 - 100B-4G	21.95	6 900	18 000	77	M270	
63.3	2.90	453	SPZH46B22.4 - 100B-4G	22.52	6 900	18 000	77	M270	
52.4	0.81	546	SPZH26B25 - 100B-4G	27.18	2 300	6 900	44	M254	
56.5	1.70	507	SPZH36B25 - 100B-4G	25.20	4 400	13 500	51	M262	
55.9	2.30	512	SPZH46C25 - 100B-4G	25.48	7 000	18 000	77	M270	
55.2	2.60	519	SPZH46B25 - 100B-4G	25.80	7 000	18 000	77	M270	
49.8	1.50	575	SPZH36B28 - 100B-4G	28.62	4 300	13 500	51	M262	
47.0	2.30	609	SPZH46B28 - 100B-4G	30.30	7 100	18 000	77	M270	
44.0	1.30	652	SPZH36B31.5 - 100B-4G	32.41	4 200	13 500	51	M262	
43.6	2.00	657	SPZH46C31.5 - 100B-4G	32.66	7 100	18 000	77	M270	
44.0	2.20	652	SPZH46B31.5 - 100B-4G	32.42	7 200	18 000	77	M270	
40.3	1.20	711	SPZH36B35.5 - 100B-4G	35.34	4 100	13 500	51	M262	
39.8	1.90	720	SPZH46C35.5 - 100B-4G	35.83	7 200	18 000	77	M270	
39.4	2.10	728	SPZH46B35.5 - 100B-4G	36.21	7 200	18 000	77	M270	
34.8	1.00	822	SPZH36B40 - 100B-4G	40.91	3 800	13 500	51	M262	
34.4	1.70	832	SPZH46C40 - 100B-4G	41.39	7 200	18 000	77	M270	
34.5	1.90	831	SPZH46B40 - 100B-4G	41.31	7 200	18 000	77	M270	
37.7	3.00	760	SPZH56C40 - 100B-4G	37.78	9 900	27 000	114	M278	
31.5	0.94	908	SPZH36B45 - 100B-4G	45.17	3 600	13 500	51	M262	
31.1	1.60	920	SPZH46C45 - 100B-4G	45.75	7 100	18 000	77	M270	
31.8	1.80	900	SPZH46B45 - 100B-4G	44.79	7 100	18 000	77	M270	
32.8	2.70	874	SPZH56C45 - 100B-4G	43.49	10 100	27 000	114	M278	




P 3.0 kW n₁ 1425 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
27.6	1.60	1039	SPZH46B50 - 100B-4G	51.70	7 000	18 000	77	M270	
28.9	2.50	991	SPZH56C50 - 100B-4G	49.30	10 200	27 000	114	M278	
27.3	2.80	1049	SPZH56B50 - 100B-4G	52.18	10 200	27 000	114	M278	
25.1	1.50	1142	SPZH46B56 - 100B-4G	56.78	6 900	18 000	77	M270	
24.6	2.30	1167	SPZH56B56 - 100B-4G	58.03	10 200	27 000	114	M278	
21.0	1.20	1362	SPZH46B63 - 100B-4G	67.76	6 600	18 000	77	M270	
22.4	2.10	1278	SPZH56C63 - 100B-4G	63.59	10 300	27 000	114	M278	
18.8	1.10	1527	SPZH46B71 - 100B-4G	75.97	6 300	18 000	77	M270	
20.3	2.00	1411	SPZH56C71 - 100B-4G	70.17	10 200	27 000	114	M278	
18.3	1.10	1564	SPZH46C80 - 100B-4G	77.80	6 300	18 000	77	M270	
18.5	1.90	1552	SPZH56C80 - 100B-4G	77.21	10 200	27 000	114	M278	
16.2	0.96	1771	SPZH46C90 - 100B-4G	88.11	5 800	18 000	77	M270	
16.4	1.70	1749	SPZH56C90 - 100B-4G	86.98	10 000	27 000	114	M278	
14.8	0.88	1932	SPZH46C100 - 100B-4G	96.08	5 500	18 000	77	M270	
14.8	1.50	1940	SPZH56C100 - 100B-4G	96.48	9 900	27 000	114	M278	
14.5	2.80	1978	SPZH66C100 - 100B-4G	98.40		30 000	175	M286	
12.9	1.30	2222	SPZH56C112 - 100B-4G	110.51	9 500	27 000	114	M278	
13.1	2.50	2194	SPZH66C112 - 100B-4G	109.15		30 000	175	M286	
11.0	1.10	2609	SPZH56C125 - 100B-4G	129.77	8 900	27 000	114	M278	
11.4	2.20	2514	SPZH66C125 - 100B-4G	125.03		30 000	175	M286	
10.3	1.00	2792	SPZH56C140 - 100B-4G	138.87	8 700	27 000	114	M278	
9.7	1.90	2952	SPZH66C140 - 100B-4G	146.82		30 000	175	M286	
9.4	2.60	3052	SPZH76C140 - 100B-4G	151.82		50 000	266	M294	
10.2	2.80	2818	SPZH76B36B140 - 100B-4G	140.18		50 000	304	M294	
9.2	0.93	3118	SPZH56C160 - 100B-4G	155.10	8 100	27 000	114	M278	
9.1	1.70	3159	SPZH66C160 - 100B-4G	157.12		30 000	175	M286	
8.8	2.40	3266	SPZH76C160 - 100B-4G	162.47		50 000	266	M294	
8.1	0.82	3558	SPZH56C180 - 100B-4G	176.96	7 200	27 000	114	M278	
8.1	1.60	3528	SPZH66C180 - 100B-4G	175.48		30 000	175	M286	
7.9	2.20	3648	SPZH76C180 - 100B-4G	181.46		50 000	266	M294	
7.1	1.40	4025	SPZH66C200 - 100B-4G	200.21		30 000	175	M286	
6.9	1.90	4162	SPZH76C200 - 100B-4G	207.03		50 000	266	M294	
6.6	1.30	4364	SPZH66C224 - 100B-4G	217.07		30 000	175	M286	
6.3	1.80	4512	SPZH76C224 - 100B-4G	224.46		50 000	266	M294	
5.7	1.10	5037	SPZH66C250 - 100B-4G	250.56		30 000	175	M286	
5.5	1.50	5209	SPZH76C250 - 100B-4G	259.09		50 000	266	M294	
5.5	2.90	5217	SPZH86C36B250 - 100B-4G	259.50		82 500	459	M302	
5.2	0.99	5532	SPZH66C280 - 100B-4G	275.17		30 000	175	M286	
5.0	1.40	5720	SPZH76C280 - 100B-4G	284.55		50 000	266	M294	
5.0	2.60	5724	SPZH86C36B280 - 100B-4G	284.71		82 500	459	M302	
4.3	0.83	6601	SPZH66C315 - 100B-4G	328.36		30 000	175	M286	
4.8	1.30	6017	SPZH76B36B315 - 100B-4G	299.30		50 000	304	M294	
4.3	2.30	6611	SPZH86C36B315 - 100B-4G	328.84		82 500	459	M302	
3.9	2.10	7308	SPZH86C36B355 - 100B-4G	363.52		82 500	459	M302	
4.2	0.80	6898	SPZH66B36B355 - 100B-4G	343.14		30 000	213	M286	
4.2	1.20	6826	SPZH76C355 - 100B-4G	339.55		50 000	266	M294	
3.7	1.00	7653	SPZH76C400 - 100B-4G	380.68		50 000	266	M294	
3.5	1.80	8112	SPZH86C36B400 - 100B-4G	403.53		82 500	459	M302	
3.3	0.93	8606	SPZH76B36B450 - 100B-4G	428.06		50 000	304	M294	
3.3	1.70	8689	SPZH86C36B450 - 100B-4G	432.19		82 500	459	M302	
2.9	0.82	9746	SPZH76B36B500 - 100B-4G	484.80		50 000	304	M294	
2.8	1.50	10160	SPZH86C36B500 - 100B-4G	505.37		82 500	459	M302	




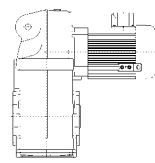
5. SP4


P 3.0 kW
n₁ 1425 min⁻¹

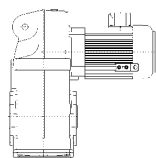
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
2.6	1.40	10943	SPZH86C36B560 - 100B-4G	544.34		82 500	459	M302
2.3	1.20	12427	SPZH86C36B630 - 100B-4G	618.13		82 500	459	M302
2.0	1.10	14074	SPZH86C36B710 - 100B-4G	700.06		82 500	459	M302
1.9	0.98	15347	SPZH86C36B800 - 100B-4G	763.39		82 500	459	M302
1.6	0.84	17764	SPZH86C36B900 - 100B-4G	883.63		82 500	459	M302

P 4.0 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
409.7	1.80	93	SPZH16B3.55 - 112M-4G	3.47		3 200	43	M246
357.4	1.50	107	SPZH16B4 - 112M-4G	3.97		3 200	43	M246
333.5	1.40	115	SPZH16B4.5 - 112M-4G	4.26		3 300	43	M246
305.4	1.80	125	SPZH26B4.5 - 112M-4G	4.65	2 500	6 900	50	M254
289.8	1.20	132	SPZH16B5 - 112M-4G	4.90		3 300	43	M246
266.4	1.50	143	SPZH26B5 - 112M-4G	5.33	2 500	6 900	50	M254
250.7	1.10	152	SPZH16B5.6 - 112M-4G	5.66		3 300	43	M246
248.6	1.40	154	SPZH26B5.6 - 112M-4G	5.71	2 500	6 900	50	M254
253.6	2.80	151	SPZH36B5.6 - 112M-4G	5.60	3 400	12 900	57	M262
232.6	1.00	164	SPZH16B6.3 - 112M-4G	6.10		3 300	43	M246
216.0	1.20	177	SPZH26B6.3 - 112M-4G	6.57	2 500	6 900	50	M254
229.4	2.50	167	SPZH36B6.3 - 112M-4G	6.19	3 500	13 300	57	M262
215.5	0.93	177	SPZH16B7.1 - 112M-4G	6.59		3 300	43	M246
186.8	1.10	204	SPZH26B7.1 - 112M-4G	7.60	2 500	6 900	50	M254
206.6	2.20	185	SPZH36B7.1 - 112M-4G	6.87	3 500	13 500	57	M262
173.4	1.00	220	SPZH26B8 - 112M-4G	8.19	2 400	6 900	50	M254
168.0	1.00	227	SPZH16B9 - 112M-4G	8.45		3 500	43	M246
151.7	1.70	252	SPZH26B9 - 112M-4G	9.36	2 600	6 900	50	M254
146.5	0.88	261	SPZH16B10 - 112M-4G	9.69		3 500	43	M246
132.3	1.50	289	SPZH26B10 - 112M-4G	10.73	2 500	6 900	50	M254
135.3	3.00	282	SPZH36B10 - 112M-4G	10.49	3 900	13 500	57	M262
136.7	0.82	279	SPZH16B11.2 - 112M-4G	10.39		3 500	43	M246
123.5	1.40	309	SPZH26B11.2 - 112M-4G	11.50	2 500	6 900	50	M254
118.2	2.60	323	SPZH36B11.2 - 112M-4G	12.01	3 900	13 500	57	M262
107.3	1.20	356	SPZH26B12.5 - 112M-4G	13.23	2 300	6 900	50	M254
107.7	2.40	355	SPZH36B12.5 - 112M-4G	13.18	3 900	13 500	57	M262
92.8	1.10	412	SPZH26B14 - 112M-4G	15.30	2 200	6 900	50	M254
93.3	2.10	410	SPZH36B14 - 112M-4G	15.23	3 800	13 500	57	M262
95.7	2.90	399	SPZH46B14 - 112M-4G	14.85	6 000	18 000	83	M270
86.1	0.99	443	SPZH26B16 - 112M-4G	16.49	2 100	6 900	50	M254
84.4	1.90	453	SPZH36B16 - 112M-4G	16.83	3 800	13 500	57	M262
86.7	2.70	441	SPZH46B16 - 112M-4G	16.38	6 100	18 000	83	M270
79.8	0.92	479	SPZH26B18 - 112M-4G	17.80	2 000	6 900	50	M254
76.0	1.70	503	SPZH36B18 - 112M-4G	18.68	3 700	13 500	57	M262
78.8	2.50	485	SPZH46B18 - 112M-4G	18.03	6 100	18 000	83	M270
71.0	1.60	538	SPZH36B20 - 112M-4G	20.01	3 700	13 500	57	M262
69.9	2.30	546	SPZH46B20 - 112M-4G	20.31	6 200	18 000	83	M270
60.7	1.40	629	SPZH36B22.4 - 112M-4G	23.40	3 500	13 500	57	M262
64.7	1.90	590	SPZH46C22.4 - 112M-4G	21.95	6 200	18 000	83	M270




P 4.0 kW n₁ 1420 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
63.0	2.10	606	SPZH46B22.4 - 112M-4G	22.52	6 200	18 000	83	M270	
56.3	1.30	678	SPZH36B25 - 112M-4G	25.20	3 400	13 500	57	M262	
55.0	1.90	694	SPZH46B25 - 112M-4G	25.80	6 200	18 000	83	M270	
49.6	1.10	770	SPZH36B28 - 112M-4G	28.62	3 200	13 500	57	M262	
46.9	1.70	815	SPZH46B28 - 112M-4G	30.30	6 200	18 000	83	M270	
43.8	0.97	872	SPZH36B31.5 - 112M-4G	32.41	2 900	13 500	57	M262	
43.5	1.50	879	SPZH46C31.5 - 112M-4G	32.66	6 100	18 000	83	M270	
43.8	1.70	872	SPZH46B31.5 - 112M-4G	32.42	6 100	18 000	83	M270	
45.2	2.50	845	SPZH56C31.5 - 112M-4G	31.43	8 800	27 000	120	M278	
44.5	2.90	858	SPZH56B31.5 - 112M-4G	31.91	8 800	27 000	120	M278	
40.2	0.89	951	SPZH36B35.5 - 112M-4G	35.34	2 700	13 500	57	M262	
39.6	1.40	964	SPZH46C35.5 - 112M-4G	35.83	6 000	18 000	83	M270	
39.2	1.60	974	SPZH46B35.5 - 112M-4G	36.21	6 000	18 000	83	M270	
42.1	2.40	906	SPZH56C35.5 - 112M-4G	33.69	8 800	27 000	120	M278	
38.8	2.70	984	SPZH56B35.5 - 112M-4G	36.58	8 900	27 000	120	M278	
34.4	1.40	1111	SPZH46B40 - 112M-4G	41.31	5 800	18 000	83	M270	
37.6	2.30	1016	SPZH56C40 - 112M-4G	37.78	8 900	27 000	120	M278	
35.8	2.60	1067	SPZH56B40 - 112M-4G	39.65	8 900	27 000	120	M278	
31.7	1.30	1205	SPZH46B45 - 112M-4G	44.79	5 700	18 000	83	M270	
32.7	2.10	1170	SPZH56C45 - 112M-4G	43.49	8 900	27 000	120	M278	
30.4	2.30	1258	SPZH56B45 - 112M-4G	46.78	8 800	27 000	120	M278	
27.5	1.20	1391	SPZH46B50 - 112M-4G	51.70	5 400	18 000	83	M270	
28.8	1.90	1326	SPZH56C50 - 112M-4G	49.30	8 800	27 000	120	M278	
27.2	2.10	1404	SPZH56B50 - 112M-4G	52.18	8 800	27 000	120	M278	
25.0	1.10	1527	SPZH46B56 - 112M-4G	56.78	5 100	18 000	83	M270	
24.5	1.70	1561	SPZH56B56 - 112M-4G	58.03	8 700	27 000	120	M278	
21.0	0.93	1823	SPZH46B63 - 112M-4G	67.76	4 400	18 000	83	M270	
22.3	1.60	1710	SPZH56C63 - 112M-4G	63.59	8 500	27 000	120	M278	
23.0	2.90	1659	SPZH66B63 - 112M-4G	61.68		30 000	181	M286	
18.7	0.81	2043	SPZH46B71 - 112M-4G	75.97	3 900	18 000	83	M270	
20.2	1.50	1887	SPZH56C71 - 112M-4G	70.17	8 300	27 000	120	M278	
20.7	2.40	1842	SPZH66B71 - 112M-4G	68.49		30 000	181	M286	
19.7	2.80	1935	SPZH66C71 - 112M-4G	71.94		30 000	181	M286	
18.3	0.81	2093	SPZH46C80 - 112M-4G	77.80	3 800	18 000	83	M270	
18.4	1.40	2077	SPZH56C80 - 112M-4G	77.21	8 000	27 000	120	M278	
17.9	2.60	2135	SPZH66C80 - 112M-4G	79.38		30 000	181	M286	
16.3	1.20	2340	SPZH56C90 - 112M-4G	86.98	7 600	27 000	120	M278	
16.3	2.30	2350	SPZH66C90 - 112M-4G	87.35		30 000	181	M286	
14.7	1.10	2595	SPZH56C100 - 112M-4G	96.48	7 200	27 000	120	M278	
14.4	2.10	2647	SPZH66C100 - 112M-4G	98.40		30 000	181	M286	
14.0	2.90	2737	SPZH76C100 - 112M-4G	101.75		50 000	272	M294	
12.8	0.98	2973	SPZH56C112 - 112M-4G	110.51	6 500	27 000	120	M278	
13.0	1.90	2936	SPZH66C112 - 112M-4G	109.15		30 000	181	M286	
12.6	2.60	3036	SPZH76C112 - 112M-4G	112.87		50 000	272	M294	
10.9	0.83	3491	SPZH56C125 - 112M-4G	129.77	5 400	27 000	120	M278	
11.4	1.60	3363	SPZH66C125 - 112M-4G	125.03		30 000	181	M286	
11.0	2.30	3478	SPZH76C125 - 112M-4G	129.29		50 000	272	M294	
11.8	2.50	3249	SPZH76B36B125 - 112M-4G	120.76		50 000	310	M294	
9.7	1.40	3949	SPZH66C140 - 112M-4G	146.82		30 000	181	M286	
9.4	2.00	4084	SPZH76C140 - 112M-4G	151.82		50 000	272	M294	
9.0	1.30	4226	SPZH66C160 - 112M-4G	157.12		30 000	181	M286	
8.7	1.80	4370	SPZH76C160 - 112M-4G	162.47		50 000	272	M294	



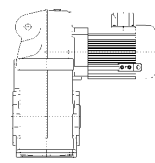
5. SP4


P 4.0 kW
n₁ 1420 min⁻¹

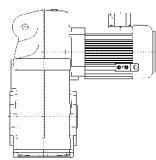
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
8.1	1.20	4720	SPZH66C180 - 112M-4G	175.48		30 000	181	M286	
7.8	1.60	4881	SPZH76C180 - 112M-4G	181.46		50 000	272	M294	
7.1	1.00	5386	SPZH66C200 - 112M-4G	200.21		30 000	181	M286	
6.9	1.40	5569	SPZH76C200 - 112M-4G	207.03		50 000	272	M294	
7.0	2.80	5445	SPZH86C36B200 - 112M-4G	202.42		82 500	465	M302	
6.5	0.94	5839	SPZH66C224 - 112M-4G	217.07		30 000	181	M286	
6.3	1.30	6038	SPZH76C224 - 112M-4G	224.46		50 000	272	M294	
6.3	2.50	6097	SPZH86C36B224 - 112M-4G	226.65		82 500	465	M302	
5.7	0.82	6740	SPZH66C250 - 112M-4G	250.56		30 000	181	M286	
5.5	1.10	6969	SPZH76C250 - 112M-4G	259.09		50 000	272	M294	
5.5	2.10	6980	SPZH86C36B250 - 112M-4G	259.50		82 500	465	M302	
5.0	1.00	7654	SPZH76C280 - 112M-4G	284.55		50 000	272	M294	
5.0	2.00	7659	SPZH86C36B280 - 112M-4G	284.71		82 500	465	M302	
4.7	0.99	8051	SPZH76B36B315 - 112M-4G	299.30		50 000	310	M294	
4.3	1.70	8846	SPZH86C36B315 - 112M-4G	328.84		82 500	465	M302	
3.9	1.50	9778	SPZH86C36B350 - 112M-4G	363.52		82 500	465	M302	
4.2	0.88	9134	SPZH76C355 - 112M-4G	339.55		50 000	272	M294	
3.5	1.40	10855	SPZH86C36B400 - 112M-4G	403.53		82 500	465	M302	
3.3	1.30	11626	SPZH86C36B450 - 112M-4G	432.19		82 500	465	M302	
2.8	1.10	13594	SPZH86C36B500 - 112M-4G	505.37		82 500	465	M302	
2.6	1.00	14643	SPZH86C36B560 - 112M-4G	544.34		82 500	465	M302	
2.3	0.90	16627	SPZH86C36B630 - 112M-4G	618.13		82 500	465	M302	
2.0	0.80	18831	SPZH86C36B710 - 112M-4G	700.06		82 500	465	M302	

P 5.5 kW
n₁ 1440 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
417.7	2.90	126	SPZH36B3.55 - 132S-4G	3.45	2 900	11 200	68	M262	
373.1	2.90	141	SPZH36B4 - 132S-4G	3.86	3 000	11 500	68	M262	
325.9	2.60	161	SPZH36B4.5 - 132S-4G	4.42	3 000	11 900	68	M262	
297.0	2.30	177	SPZH36B5 - 132S-4G	4.85	3 000	12 100	68	M262	
257.1	2.00	204	SPZH36B5.6 - 132S-4G	5.60	3 000	12 500	68	M262	
232.6	1.80	226	SPZH36B6.3 - 132S-4G	6.19	3 000	12 800	68	M262	
212.8	3.00	247	SPZH46B6.3 - 132S-4G	6.77	4 700	15 400	94	M270	
209.6	1.70	251	SPZH36B7.1 - 132S-4G	6.87	3 000	13 100	68	M262	
178.4	2.50	294	SPZH36B8 - 132S-4G	8.07	3 300	13 500	68	M262	
153.6	2.30	342	SPZH36B9 - 132S-4G	9.37	3 300	13 500	68	M262	
163.3	3.00	322	SPZH46B9 - 132S-4G	8.82	5 100	16 600	94	M270	
137.2	2.20	383	SPZH36B10 - 132S-4G	10.49	3 200	13 500	68	M262	
141.8	2.70	370	SPZH46B10 - 132S-4G	10.15	5 200	17 200	94	M270	
119.9	1.90	438	SPZH36B11.2 - 132S-4G	12.01	3 200	13 500	68	M262	
125.1	2.50	420	SPZH46B11.2 - 132S-4G	11.51	5 200	17 700	94	M270	
109.2	1.80	481	SPZH36B12.5 - 132S-4G	13.18	3 100	13 500	68	M262	
111.2	2.30	472	SPZH46B12.5 - 132S-4G	12.95	5 300	18 000	94	M270	
94.6	1.50	555	SPZH36B14 - 132S-4G	15.23	3 000	13 500	68	M262	
97.0	2.10	541	SPZH46B14 - 132S-4G	14.85	5 300	18 000	94	M270	
85.6	1.40	614	SPZH36B16 - 132S-4G	16.83	2 800	13 500	68	M262	




P 5.5 kW n₁ 1440 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
87.9	2.00	597	SPZH46B16 - 132S-4G	16.38	5 300	18 000	94	M270	
77.1	1.20	681	SPZH36B18 - 132S-4G	18.68	2 700	13 500	68	M262	
79.9	1.80	657	SPZH46B18 - 132S-4G	18.03	5 300	18 000	94	M270	
72.0	1.20	730	SPZH36B20 - 132S-4G	20.01	2 500	13 500	68	M262	
70.9	1.70	741	SPZH46B20 - 132S-4G	20.31	5 200	18 000	94	M270	
73.2	3.00	718	SPZH56B20 - 132S-4G	19.68	7 500	26 700	131	M278	
61.5	1.00	853	SPZH36B22.4 - 132S-4G	23.40	2 200	13 500	68	M262	
65.6	1.40	801	SPZH46C22.4 - 132S-4G	21.95	5 200	18 000	94	M270	
63.9	1.60	822	SPZH46B22.4 - 132S-4G	22.52	5 100	18 000	94	M270	
63.6	2.70	826	SPZH56B22.4 - 132S-4G	22.65	7 600	27 000	131	M278	
57.1	0.92	919	SPZH36B25 - 132S-4G	25.20	2 000	13 500	68	M262	
55.8	1.40	941	SPZH46B25 - 132S-4G	25.80	5 000	18 000	94	M270	
56.4	2.50	932	SPZH56B25 - 132S-4G	25.55	7 600	27 000	131	M278	
50.3	0.81	1044	SPZH36B28 - 132S-4G	28.62	1 500	13 500	68	M262	
47.5	1.30	1105	SPZH46B28 - 132S-4G	30.30	4 700	18 000	94	M270	
49.5	2.30	1061	SPZH56B28 - 132S-4G	29.09	7 600	27 000	131	M278	
44.4	1.20	1182	SPZH46B31.5 - 132S-4G	32.42	4 600	18 000	94	M270	
45.8	1.80	1146	SPZH56C31.5 - 132S-4G	31.43	7 500	27 000	131	M278	
45.1	2.20	1164	SPZH56B31.5 - 132S-4G	31.91	7 500	27 000	131	M278	
39.8	1.10	1321	SPZH46B35.5 - 132S-4G	36.21	4 300	18 000	94	M270	
42.7	1.80	1229	SPZH56C35.5 - 132S-4G	33.69	7 500	27 000	131	M278	
39.4	2.00	1334	SPZH56B35.5 - 132S-4G	36.58	7 400	27 000	131	M278	
34.9	1.00	1507	SPZH46B40 - 132S-4G	41.31	3 900	18 000	94	M270	
38.1	1.70	1378	SPZH56C40 - 132S-4G	37.78	7 300	27 000	131	M278	
36.3	1.90	1446	SPZH56B40 - 132S-4G	39.65	7 300	27 000	131	M278	
31.5	0.87	1669	SPZH46C45 - 132S-4G	45.75	3 500	18 000	94	M270	
32.1	0.99	1634	SPZH46B45 - 132S-4G	44.79	3 600	18 000	94	M270	
33.1	1.50	1586	SPZH56C45 - 132S-4G	43.49	7 100	27 000	131	M278	
30.8	1.70	1706	SPZH56B45 - 132S-4G	46.78	7 000	27 000	131	M278	
33.7	3.00	1559	SPZH66C45 - 132S-4G	42.75		30 000	192	M286	
27.9	0.90	1886	SPZH46B50 - 132S-4G	51.70	3 000	18 000	94	M270	
27.6	1.50	1903	SPZH56B50 - 132S-4G	52.18	6 700	27 000	131	M278	
30.3	2.80	1734	SPZH66B50 - 132S-4G	47.54		30 000	192	M286	
25.4	0.82	2071	SPZH46B56 - 132S-4G	56.78	2 400	18 000	94	M270	
24.8	1.30	2117	SPZH56B56 - 132S-4G	58.03	6 300	27 000	131	M278	
25.7	2.40	2042	SPZH66B56 - 132S-4G	56.00		30 000	192	M286	
22.6	1.20	2319	SPZH56C63 - 132S-4G	63.59	6 000	27 000	131	M278	
23.3	2.20	2250	SPZH66B63 - 132S-4G	61.68		30 000	192	M286	
20.5	1.10	2559	SPZH56C71 - 132S-4G	70.17	5 500	27 000	131	M278	
21.0	1.80	2498	SPZH66B71 - 132S-4G	68.49		30 000	192	M286	
20.0	2.10	2624	SPZH66C71 - 132S-4G	71.94		30 000	192	M286	
19.4	2.90	2713	SPZH76C71 - 132S-4G	74.39		50 000	283	M294	
18.7	1.00	2816	SPZH56C80 - 132S-4G	77.21	5 000	27 000	131	M278	
18.1	1.90	2895	SPZH66C80 - 132S-4G	79.38		30 000	192	M286	
17.5	2.70	2994	SPZH76C80 - 132S-4G	82.09		50 000	283	M294	
16.6	0.91	3172	SPZH56C90 - 132S-4G	86.98	4 200	27 000	131	M278	
16.5	1.70	3186	SPZH66C90 - 132S-4G	87.35		30 000	192	M286	
15.9	2.40	3295	SPZH76C90 - 132S-4G	90.33		50 000	283	M294	
14.9	0.82	3519	SPZH56C100 - 132S-4G	96.48	3 400	27 000	131	M278	
14.6	1.50	3589	SPZH66C100 - 132S-4G	98.40		30 000	192	M286	
14.2	2.20	3711	SPZH76C100 - 132S-4G	101.75		50 000	283	M294	
13.2	1.40	3981	SPZH66C112 - 132S-4G	109.15		30 000	192	M286	




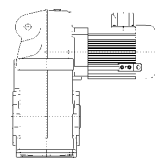
5. SP4


P 5.5 kW
n₁ 1440 min⁻¹

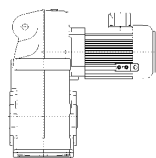
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
12.8	1.90	4117	SPZH76C112 - 132S-4G	112.87		50 000	283	M294	
11.5	1.20	4560	SPZH66C125 - 132S-4G	125.03		30 000	192	M286	
11.1	1.70	4716	SPZH76C125 - 132S-4G	129.29		50 000	283	M294	
9.8	1.00	5355	SPZH66C140 - 132S-4G	146.82		30 000	192	M286	
9.5	1.40	5537	SPZH76C140 - 132S-4G	151.82		50 000	283	M294	
10.3	1.60	5113	SPZH76B36B140 - 132S-4G	140.18		50 000	321	M294	
9.2	0.96	5730	SPZH66C160 - 132S-4G	157.12		30 000	192	M286	
8.9	1.40	5926	SPZH76C160 - 132S-4G	162.47		50 000	283	M294	
8.2	0.86	6400	SPZH66C180 - 132S-4G	175.48		30 000	192	M286	
7.9	1.20	6618	SPZH76C180 - 132S-4G	181.46		50 000	283	M294	
8.3	2.40	6360	SPZH86C36B180 - 132S-4G	174.39		82 500	476	M302	
7.0	1.10	7551	SPZH76C200 - 132S-4G	207.03		50 000	283	M294	
7.1	2.00	7383	SPZH86C36B200 - 132S-4G	202.42		82 500	476	M302	
6.4	0.98	8187	SPZH76C224 - 132S-4G	224.46		50 000	283	M294	
6.4	1.80	8266	SPZH86C36B224 - 132S-4G	226.65		82 500	476	M302	
5.6	0.85	9450	SPZH76C250 - 132S-4G	259.09		50 000	283	M294	
5.5	1.60	9465	SPZH86C36B250 - 132S-4G	259.50		82 500	476	M302	
5.1	1.40	10384	SPZH86C36B280 - 132S-4G	284.71		82 500	476	M302	
4.4	1.30	11994	SPZH86C36B315 - 132S-4G	328.84		82 500	476	M302	
4.0	1.10	13259	SPZH86C36B350 - 132S-4G	363.52		82 500	476	M302	
3.6	1.00	14718	SPZH86C36B400 - 132S-4G	403.53		82 500	476	M302	
3.3	0.95	15763	SPZH86C36B450 - 132S-4G	432.19		82 500	476	M302	
2.8	0.81	18432	SPZH86C36B500 - 132S-4G	505.37		82 500	476	M302	

P 7.5 kW
n₁ 1445 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
486.6	2.50	147	SPZH36B3.15 - 132MA-4G	2.97	2 600	10 500	69	M262	
444.8	3.00	161	SPZH46B3.15 - 132MA-4G	3.25	3 900	12 600	95	M270	
419.2	2.10	171	SPZH36B3.55 - 132MA-4G	3.45	2 600	10 800	69	M262	
396.6	2.90	181	SPZH46B3.55 - 132MA-4G	3.64	4 000	12 900	95	M270	
374.4	2.10	191	SPZH36B4 - 132MA-4G	3.86	2 600	11 100	69	M262	
344.6	2.70	208	SPZH46B4 - 132MA-4G	4.19	4 000	13 400	95	M270	
327.0	1.90	219	SPZH36B4.5 - 132MA-4G	4.42	2 600	11 400	69	M262	
304.0	2.60	236	SPZH46B4.5 - 132MA-4G	4.75	4 100	13 800	95	M270	
298.0	1.70	240	SPZH36B5 - 132MA-4G	4.85	2 600	11 700	69	M262	
270.2	2.50	265	SPZH46B5 - 132MA-4G	5.35	4 200	14 200	95	M270	
258.0	1.50	278	SPZH36B5.6 - 132MA-4G	5.60	2 500	12 000	69	M262	
235.7	2.30	304	SPZH46B5.6 - 132MA-4G	6.13	4 200	14 700	95	M270	
233.4	1.40	307	SPZH36B6.3 - 132MA-4G	6.19	2 500	12 200	69	M262	
213.6	2.20	335	SPZH46B6.3 - 132MA-4G	6.77	4 200	15 000	95	M270	
210.3	1.20	341	SPZH36B7.1 - 132MA-4G	6.87	2 400	12 400	69	M262	
194.1	2.30	369	SPZH46B7.1 - 132MA-4G	7.44	4 300	15 300	95	M270	
179.0	1.80	400	SPZH36B8 - 132MA-4G	8.07	2 700	13 200	69	M262	
183.7	2.30	390	SPZH46B8 - 132MA-4G	7.87	4 500	15 700	95	M270	
154.2	1.70	465	SPZH36B9 - 132MA-4G	9.37	2 600	13 500	69	M262	
163.8	2.20	437	SPZH46B9 - 132MA-4G	8.82	4 500	16 100	95	M270	




P 7.5 kW n₁ 1445 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
137.7	1.60	520	SPZH36B10 - 132MA-4G	10.49	2 400	13 500	69	M262	
142.3	2.00	503	SPZH46B10 - 132MA-4G	10.15	4 500	16 600	95	M270	
120.3	1.40	595	SPZH36B11.2 - 132MA-4G	12.01	2 200	13 500	69	M262	
125.5	1.90	570	SPZH46B11.2 - 132MA-4G	11.51	4 500	17 000	95	M270	
109.6	1.30	653	SPZH36B12.5 - 132MA-4G	13.18	2 100	13 500	69	M262	
111.6	1.70	642	SPZH46B12.5 - 132MA-4G	12.95	4 500	17 400	95	M270	
111.2	3.00	644	SPZH56B12.5 - 132MA-4G	13.00	6 400	23 500	132	M278	
94.9	1.10	755	SPZH36B14 - 132MA-4G	15.23	1 800	13 500	69	M262	
97.3	1.50	736	SPZH46B14 - 132MA-4G	14.85	4 400	17 800	95	M270	
100.0	2.80	716	SPZH56B14 - 132MA-4G	14.45	6 500	24 000	132	M278	
85.9	1.00	834	SPZH36B16 - 132MA-4G	16.83	1 500	13 500	69	M262	
88.2	1.40	812	SPZH46B16 - 132MA-4G	16.38	4 300	18 000	95	M270	
87.9	2.50	815	SPZH56B16 - 132MA-4G	16.45	6 500	24 700	132	M278	
77.3	0.92	926	SPZH36B18 - 132MA-4G	18.68	1 200	13 500	69	M262	
80.2	1.40	893	SPZH46B18 - 132MA-4G	18.03	4 100	18 000	95	M270	
81.4	2.40	880	SPZH56B18 - 132MA-4G	17.75	6 500	25 100	132	M278	
72.2	0.86	992	SPZH36B20 - 132MA-4G	20.01	1 000	13 500	69	M262	
71.2	1.20	1006	SPZH46B20 - 132MA-4G	20.31	3 900	18 000	95	M270	
73.4	2.20	975	SPZH56B20 - 132MA-4G	19.68	6 400	25 600	132	M278	
64.2	1.20	1116	SPZH46B22.4 - 132MA-4G	22.52	3 700	18 000	95	M270	
63.8	2.00	1123	SPZH56B22.4 - 132MA-4G	22.65	6 300	26 300	132	M278	
56.7	0.95	1263	SPZH46C25 - 132MA-4G	25.48	3 400	18 000	95	M270	
56.0	1.10	1279	SPZH46B25 - 132MA-4G	25.80	3 400	18 000	95	M270	
56.6	1.90	1266	SPZH56B25 - 132MA-4G	25.55	6 200	26 900	132	M278	
47.7	0.93	1502	SPZH46B28 - 132MA-4G	30.30	2 800	18 000	95	M270	
49.7	1.70	1442	SPZH56B28 - 132MA-4G	29.09	6 000	27 000	132	M278	
44.6	0.90	1607	SPZH46B31.5 - 132MA-4G	32.42	2 500	18 000	95	M270	
46.0	1.30	1558	SPZH56C31.5 - 132MA-4G	31.43	5 800	27 000	132	M278	
45.3	1.60	1582	SPZH56B31.5 - 132MA-4G	31.91	5 800	27 000	132	M278	
39.9	0.84	1795	SPZH46B35.5 - 132MA-4G	36.21	2 000	18 000	95	M270	
42.9	1.30	1670	SPZH56C35.5 - 132MA-4G	33.69	5 600	27 000	132	M278	
39.5	1.50	1813	SPZH56B35.5 - 132MA-4G	36.58	5 400	27 000	132	M278	
41.5	2.80	1726	SPZH66B35.5 - 132MA-4G	34.82		30 000	193	M286	
38.2	1.20	1873	SPZH56C40 - 132MA-4G	37.78	5 300	27 000	132	M278	
36.4	1.40	1965	SPZH56B40 - 132MA-4G	39.65	5 100	27 000	132	M278	
37.9	2.30	1889	SPZH66C40 - 132MA-4G	38.12		30 000	193	M286	
38.0	2.70	1884	SPZH66B40 - 132MA-4G	38.01		30 000	193	M286	
30.9	1.20	2319	SPZH56B45 - 132MA-4G	46.78	4 400	27 000	132	M278	
33.8	2.20	2119	SPZH66C45 - 132MA-4G	42.75		30 000	193	M286	
33.2	2.40	2156	SPZH66B45 - 132MA-4G	43.51		30 000	193	M286	
27.7	1.10	2586	SPZH56B50 - 132MA-4G	52.18	3 900	27 000	132	M278	
30.4	2.10	2356	SPZH66B50 - 132MA-4G	47.54		30 000	193	M286	
28.4	3.00	2522	SPZH76C50 - 132MA-4G	50.88		50 000	284	M294	
24.9	0.94	2876	SPZH56B56 - 132MA-4G	58.03	3 200	27 000	132	M278	
25.8	1.70	2776	SPZH66B56 - 132MA-4G	56.00		30 000	193	M286	
26.0	2.90	2753	SPZH76B56 - 132MA-4G	55.55		50 000	284	M294	
22.7	0.86	3152	SPZH56C63 - 132MA-4G	63.59	2 600	27 000	132	M278	
23.4	1.60	3057	SPZH66B63 - 132MA-4G	61.68		30 000	193	M286	
22.3	2.50	3216	SPZH76C63 - 132MA-4G	64.88		50 000	284	M294	
20.6	0.81	3478	SPZH56C71 - 132MA-4G	70.17	1 700	27 000	132	M278	
21.1	1.30	3395	SPZH66B71 - 132MA-4G	68.49		30 000	193	M286	
20.1	1.50	3566	SPZH66C71 - 132MA-4G	71.94		30 000	193	M286	



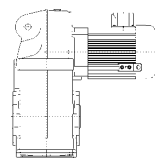
5. SP4


P 7.5 kW
n₁ 1445 min⁻¹

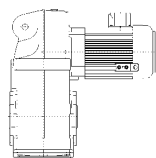
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
19.4	2.20	3687	SPZH76C71 - 132MA-4G	74.39		50 000	284	M294	
18.2	1.40	3935	SPZH66C80 - 132MA-4G	79.38		30 000	193	M286	
17.6	2.00	4069	SPZH76C80 - 132MA-4G	82.09		50 000	284	M294	
16.5	1.30	4330	SPZH66C90 - 132MA-4G	87.35		30 000	193	M286	
16.0	1.80	4477	SPZH76C90 - 132MA-4G	90.33		50 000	284	M294	
14.7	1.10	4877	SPZH66C100 - 132MA-4G	98.40		30 000	193	M286	
14.2	1.60	5043	SPZH76C100 - 132MA-4G	101.75		50 000	284	M294	
14.3	3.00	5007	SPZH86C100 - 132MA-4G	101.01		81 900	439	M302	
13.2	1.00	5410	SPZH66C112 - 132MA-4G	109.15		30 000	193	M286	
12.8	1.40	5594	SPZH76C112 - 132MA-4G	112.87		50 000	284	M294	
13.0	2.70	5526	SPZH86C112 - 132MA-4G	111.49		82 500	439	M302	
11.6	0.89	6197	SPZH66C125 - 132MA-4G	125.03		30 000	193	M286	
11.2	1.20	6408	SPZH76C125 - 132MA-4G	129.29		50 000	284	M294	
11.6	2.40	6149	SPZH86C125 - 132MA-4G	124.07		82 500	439	M302	
9.5	1.10	7525	SPZH76C140 - 132MA-4G	151.82		50 000	284	M294	
8.9	0.99	8052	SPZH76C160 - 132MA-4G	162.47		50 000	284	M294	
8.0	0.89	8994	SPZH76C180 - 132MA-4G	181.46		50 000	284	M294	
8.3	1.70	8643	SPZH86C36B180 - 132MA-4G	174.39		82 500	477	M302	
7.3	0.82	9772	SPZH76B36B200 - 132MA-4G	197.17		50 000	322	M294	
7.1	1.50	10033	SPZH86C36B200 - 132MA-4G	202.42		82 500	477	M302	
6.4	1.30	11233	SPZH86C36B224 - 132MA-4G	226.65		82 500	477	M302	
5.6	1.20	12862	SPZH86C36B250 - 132MA-4G	259.50		82 500	477	M302	
5.1	1.10	14111	SPZH86C36B280 - 132MA-4G	284.71		82 500	477	M302	
4.4	0.92	16299	SPZH86C36B315 - 132MA-4G	328.84		82 500	477	M302	
4.0	0.83	18017	SPZH86C36B350 - 132MA-4G	363.52		82 500	477	M302	

P 9.0 kW
n₁ 1435 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
483.2	2.10	178	SPZH36B3.15 - 132MB-4G	2.97	2 400	10 300	71	M262	
441.7	2.50	195	SPZH46B3.15 - 132MB-4G	3.25	3 700	12 400	97	M270	
416.3	1.80	206	SPZH36B3.55 - 132MB-4G	3.45	2 400	10 600	71	M262	
393.9	2.40	218	SPZH46B3.55 - 132MB-4G	3.64	3 800	12 800	97	M270	
371.8	1.80	231	SPZH36B4 - 132MB-4G	3.86	2 300	10 900	71	M262	
342.2	2.30	251	SPZH46B4 - 132MB-4G	4.19	3 800	13 200	97	M270	
324.7	1.60	265	SPZH36B4.5 - 132MB-4G	4.42	2 300	11 200	71	M262	
301.9	2.10	285	SPZH46B4.5 - 132MB-4G	4.75	3 900	13 600	97	M270	
296.0	1.40	290	SPZH36B5 - 132MB-4G	4.85	2 200	11 300	71	M262	
268.4	2.00	320	SPZH46B5 - 132MB-4G	5.35	3 900	13 900	97	M270	
256.3	1.20	335	SPZH36B5.6 - 132MB-4G	5.60	2 100	11 600	71	M262	
234.0	1.90	367	SPZH46B5.6 - 132MB-4G	6.13	3 900	14 400	97	M270	
231.8	1.10	371	SPZH36B6.3 - 132MB-4G	6.19	2 000	11 800	71	M262	
212.1	1.80	405	SPZH46B6.3 - 132MB-4G	6.77	3 900	14 600	97	M270	
208.8	1.00	412	SPZH36B7.1 - 132MB-4G	6.87	1 900	12 000	71	M262	
192.8	1.90	446	SPZH46B7.1 - 132MB-4G	7.44	3 900	14 900	97	M270	
177.7	1.50	484	SPZH36B8 - 132MB-4G	8.07	2 200	12 800	71	M262	
182.4	1.90	471	SPZH46B8 - 132MB-4G	7.87	4 100	15 300	97	M270	




P 9.0 kW n₁ 1435 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
153.1	1.40	561	SPZH36B9 - 132MB-4G	9.37	2 000	13 000	71	M262	
162.7	1.80	528	SPZH46B9 - 132MB-4G	8.82	4 100	15 700	97	M270	
136.8	1.40	628	SPZH36B10 - 132MB-4G	10.49	1 800	13 200	71	M262	
141.3	1.60	608	SPZH46B10 - 132MB-4G	10.15	4 000	16 100	97	M270	
140.8	2.90	610	SPZH56B10 - 132MB-4G	10.19	5 900	21 800	134	M278	
119.4	1.20	720	SPZH36B11.2 - 132MB-4G	12.01	1 500	13 300	71	M262	
124.7	1.50	689	SPZH46B11.2 - 132MB-4G	11.51	4 000	16 500	97	M270	
124.1	2.70	693	SPZH56B11.2 - 132MB-4G	11.56	5 900	22 400	134	M278	
108.9	1.10	789	SPZH36B12.5 - 132MB-4G	13.18	1 300	13 400	71	M262	
110.8	1.40	775	SPZH46B12.5 - 132MB-4G	12.95	3 800	16 800	97	M270	
110.4	2.50	778	SPZH56B12.5 - 132MB-4G	13.00	5 900	23 000	134	M278	
94.3	0.93	912	SPZH36B14 - 132MB-4G	15.23	900	13 500	71	M262	
96.7	1.30	889	SPZH46B14 - 132MB-4G	14.85	3 600	17 100	97	M270	
99.3	2.30	865	SPZH56B14 - 132MB-4G	14.45	5 900	23 500	134	M278	
85.3	0.84	1008	SPZH36B16 - 132MB-4G	16.83	500	13 500	71	M262	
87.6	1.20	981	SPZH46B16 - 132MB-4G	16.38	3 500	17 300	97	M270	
87.3	2.10	985	SPZH56B16 - 132MB-4G	16.45	5 800	24 100	134	M278	
79.6	1.10	1080	SPZH46B18 - 132MB-4G	18.03	3 300	17 500	97	M270	
80.8	2.00	1063	SPZH56B18 - 132MB-4G	17.75	5 800	24 400	134	M278	
70.7	1.00	1216	SPZH46B20 - 132MB-4G	20.31	3 000	17 700	97	M270	
72.9	1.80	1179	SPZH56B20 - 132MB-4G	19.68	5 600	24 900	134	M278	
63.7	0.96	1349	SPZH46B22.4 - 132MB-4G	22.52	2 600	17 800	97	M270	
63.4	1.70	1357	SPZH56B22.4 - 132MB-4G	22.65	5 400	25 500	134	M278	
61.7	3.00	1393	SPZH66B22.4 - 132MB-4G	23.26		30 000	195	M286	
55.6	0.87	1545	SPZH46B25 - 132MB-4G	25.80	2 100	17 900	97	M270	
56.2	1.50	1530	SPZH56B25 - 132MB-4G	25.55	5 200	25 900	134	M278	
55.5	2.80	1548	SPZH66B25 - 132MB-4G	25.85		30 000	195	M286	
49.3	1.40	1742	SPZH56B28 - 132MB-4G	29.09	4 800	26 400	134	M278	
52.0	2.70	1653	SPZH66B28 - 132MB-4G	27.61		30 000	195	M286	
45.7	1.10	1882	SPZH56C31.5 - 132MB-4G	31.43	4 500	26 600	134	M278	
45.0	1.30	1911	SPZH56B31.5 - 132MB-4G	31.91	4 500	26 600	134	M278	
46.8	2.50	1838	SPZH66B31.5 - 132MB-4G	30.69		30 000	195	M286	
39.2	1.20	2191	SPZH56B35.5 - 132MB-4G	36.58	3 900	26 900	134	M278	
41.2	2.30	2085	SPZH66B35.5 - 132MB-4G	34.82		30 000	195	M286	
38.0	1.00	2263	SPZH56C40 - 132MB-4G	37.78	3 700	27 000	134	M278	
36.2	1.20	2375	SPZH56B40 - 132MB-4G	39.65	3 500	27 000	134	M278	
37.6	1.90	2283	SPZH66C40 - 132MB-4G	38.12		30 000	195	M286	
37.8	2.20	2276	SPZH66B40 - 132MB-4G	38.01		30 000	195	M286	
36.4	3.00	2361	SPZH76C40 - 132MB-4G	39.42		50 000	286	M294	
30.7	1.00	2802	SPZH56B45 - 132MB-4G	46.78	2 500	27 000	134	M278	
33.6	1.80	2560	SPZH66C45 - 132MB-4G	42.75		30 000	195	M286	
33.0	2.00	2606	SPZH66B45 - 132MB-4G	43.51		30 000	195	M286	
31.7	2.80	2709	SPZH76B45 - 132MB-4G	45.22		50 000	286	M294	
27.5	0.93	3125	SPZH56B50 - 132MB-4G	52.18	1 700	27 000	134	M278	
30.2	1.70	2847	SPZH66B50 - 132MB-4G	47.54		30 000	195	M286	
28.2	2.50	3047	SPZH76C50 - 132MB-4G	50.88		50 000	286	M294	
28.7	2.70	2990	SPZH76B50 - 132MB-4G	49.92		50 000	286	M294	
25.6	1.40	3354	SPZH66B56 - 132MB-4G	56.00		30 000	195	M286	
25.8	2.40	3327	SPZH76B56 - 132MB-4G	55.55		50 000	286	M294	
23.3	1.30	3694	SPZH66B63 - 132MB-4G	61.68		30 000	195	M286	
22.1	2.10	3885	SPZH76C63 - 132MB-4G	64.88		50 000	286	M294	
21.0	1.10	4102	SPZH66B71 - 132MB-4G	68.49		30 000	195	M286	

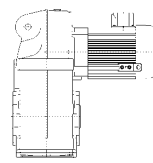

5. SP4


P	9.0 kW
n₁	1435 min⁻¹

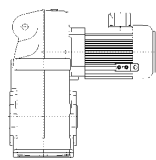
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
19.9	1.30	4309	SPZH66C71 - 132MB-4G	71.94		30 000	195	M286	
19.3	1.80	4455	SPZH76C71 - 132MB-4G	74.39		50 000	286	M294	
18.1	1.20	4754	SPZH66C80 - 132MB-4G	79.38		30 000	195	M286	
17.5	1.60	4916	SPZH76C80 - 132MB-4G	82.09		50 000	286	M294	
16.4	1.10	5232	SPZH66C90 - 132MB-4G	87.35		30 000	195	M286	
15.9	1.50	5410	SPZH76C90 - 132MB-4G	90.33		50 000	286	M294	
16.8	2.90	5125	SPZH86C90 - 132MB-4G	85.57		77 300	441	M302	
14.6	0.93	5894	SPZH66C100 - 132MB-4G	98.40		30 000	195	M286	
14.1	1.30	6094	SPZH76C100 - 132MB-4G	101.75		50 000	286	M294	
14.2	2.50	6050	SPZH86C100 - 132MB-4G	101.01		79 800	441	M302	
13.1	0.84	6537	SPZH66C112 - 132MB-4G	109.15		30 000	195	M286	
12.7	1.20	6760	SPZH76C112 - 132MB-4G	112.87		50 000	286	M294	
12.9	2.20	6678	SPZH86C112 - 132MB-4G	111.49		81 200	441	M302	
11.1	1.00	7743	SPZH76C125 - 132MB-4G	129.29		50 000	286	M294	
11.6	2.00	7431	SPZH86C125 - 132MB-4G	124.07		82 500	441	M302	
9.5	0.88	9092	SPZH76C140 - 132MB-4G	151.82		50 000	286	M294	
8.8	0.82	9730	SPZH76C160 - 132MB-4G	162.47		50 000	286	M294	
8.2	1.40	10444	SPZH86C36B180 - 132MB-4G	174.39		82 500	479	M302	
7.1	1.20	12123	SPZH86C36B200 - 132MB-4G	202.42		82 500	479	M302	
6.3	1.10	13574	SPZH86C36B224 - 132MB-4G	226.65		82 500	479	M302	
5.5	0.97	15541	SPZH86C36B250 - 132MB-4G	259.50		82 500	479	M302	
5.0	0.88	17052	SPZH86C36B280 - 132MB-4G	284.71		82 500	479	M302	

P	11.0 kW
n₁	1465 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
493.3	1.70	213	SPZH36B3.15 - 160M-4G	2.97	2 100	10 000	140	M262	
450.9	2.10	233	SPZH46B3.15 - 160M-4G	3.25	3 500	12 200	166	M270	
425.0	1.50	247	SPZH36B3.55 - 160M-4G	3.45	2 000	10 300	140	M262	
402.1	2.00	261	SPZH46B3.55 - 160M-4G	3.64	3 500	12 500	166	M270	
379.6	1.50	277	SPZH36B4 - 160M-4G	3.86	2 000	10 500	140	M262	
349.4	1.90	301	SPZH46B4 - 160M-4G	4.19	3 500	12 900	166	M270	
331.5	1.30	317	SPZH36B4.5 - 160M-4G	4.42	1 900	10 700	140	M262	
308.2	1.80	341	SPZH46B4.5 - 160M-4G	4.75	3 500	13 200	166	M270	
302.2	1.20	348	SPZH36B5 - 160M-4G	4.85	1 800	10 900	140	M262	
274.0	1.70	383	SPZH46B5 - 160M-4G	5.35	3 500	13 500	166	M270	
261.6	1.00	402	SPZH36B5.6 - 160M-4G	5.60	1 600	11 100	140	M262	
238.9	1.60	440	SPZH46B5.6 - 160M-4G	6.13	3 500	13 900	166	M270	
255.3	3.00	412	SPZH56B5.6 - 160M-4G	5.74	5 000	18 500	203	M278	
236.7	0.93	444	SPZH36B6.3 - 160M-4G	6.19	1 500	11 200	140	M262	
216.5	1.50	485	SPZH46B6.3 - 160M-4G	6.77	3 400	14 100	166	M270	
213.2	0.84	493	SPZH36B7.1 - 160M-4G	6.87	1 300	11 300	140	M262	
196.8	1.60	534	SPZH46B7.1 - 160M-4G	7.44	3 300	14 400	166	M270	
206.4	2.90	509	SPZH56B7.1 - 160M-4G	7.10	5 300	19 600	203	M278	
181.4	1.30	579	SPZH36B8 - 160M-4G	8.07	1 600	12 100	140	M262	
186.2	1.60	564	SPZH46B8 - 160M-4G	7.87	3 600	14 800	166	M270	
179.3	2.70	586	SPZH56B8 - 160M-4G	8.17	5 300	20 300	203	M278	



P 11.0 kW n₁ 1465 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
156.3	1.20	672	SPZH36B9 - 160M-4G	9.37	1 300	12 300	140	M262	
166.1	1.50	632	SPZH46B9 - 160M-4G	8.82	3 600	15 100	166	M270	
158.7	2.60	662	SPZH56B9 - 160M-4G	9.23	5 400	20 800	203	M278	
139.6	1.10	752	SPZH36B10 - 160M-4G	10.49	1 000	12 300	140	M262	
144.3	1.40	728	SPZH46B10 - 160M-4G	10.15	3 400	15 500	166	M270	
143.8	2.50	731	SPZH56B10 - 160M-4G	10.19	5 300	21 200	203	M278	
121.9	0.99	861	SPZH36B11.2 - 160M-4G	12.01	600	12 400	140	M262	
127.3	1.30	825	SPZH46B11.2 - 160M-4G	11.51	3 200	15 700	166	M270	
126.7	2.20	829	SPZH56B11.2 - 160M-4G	11.56	5 300	21 800	203	M278	
111.1	0.90	945	SPZH36B12.5 - 160M-4G	13.18	300	12 400	140	M262	
113.2	1.20	928	SPZH46B12.5 - 160M-4G	12.95	3 000	16 000	166	M270	
112.7	2.10	932	SPZH56B12.5 - 160M-4G	13.00	5 200	22 300	203	M278	
98.7	1.10	1064	SPZH46B14 - 160M-4G	14.85	2 700	16 200	166	M270	
101.4	1.90	1036	SPZH56B14 - 160M-4G	14.45	5 100	22 700	203	M278	
89.4	1.00	1175	SPZH46B16 - 160M-4G	16.38	2 500	16 300	166	M270	
89.1	1.70	1179	SPZH56B16 - 160M-4G	16.45	4 900	23 200	203	M278	
81.3	0.94	1292	SPZH46B18 - 160M-4G	18.03	2 200	16 400	166	M270	
82.5	1.70	1273	SPZH56B18 - 160M-4G	17.75	4 800	23 500	203	M278	
83.7	3.00	1255	SPZH66B18 - 160M-4G	17.51		30 000	264	M286	
72.1	0.86	1456	SPZH46B20 - 160M-4G	20.31	1 700	16 400	166	M270	
74.4	1.50	1411	SPZH56B20 - 160M-4G	19.68	4 600	23 800	203	M278	
73.0	2.70	1440	SPZH66B20 - 160M-4G	20.08		30 000	264	M286	
65.0	0.80	1615	SPZH46B22.4 - 160M-4G	22.52	1 300	16 400	166	M270	
64.7	1.40	1624	SPZH56B22.4 - 160M-4G	22.65	4 200	24 200	203	M278	
63.0	2.50	1668	SPZH66B22.4 - 160M-4G	23.26		30 000	264	M286	
57.3	1.30	1832	SPZH56B25 - 160M-4G	25.55	3 800	24 600	203	M278	
56.7	2.40	1853	SPZH66B25 - 160M-4G	25.85		30 000	264	M286	
50.4	1.20	2085	SPZH56B28 - 160M-4G	29.09	3 300	24 800	203	M278	
53.1	2.30	1980	SPZH66B28 - 160M-4G	27.61		30 000	264	M286	
46.6	0.93	2253	SPZH56C31.5 - 160M-4G	31.43	2 900	24 900	203	M278	
45.9	1.10	2288	SPZH56B31.5 - 160M-4G	31.91	2 800	24 900	203	M278	
47.7	2.10	2201	SPZH66B31.5 - 160M-4G	30.69		30 000	264	M286	
45.3	3.00	2318	SPZH76B31.5 - 160M-4G	32.32		50 000	355	M294	
40.0	1.00	2623	SPZH56B35.5 - 160M-4G	36.58	2 000	25 000	203	M278	
42.1	1.90	2497	SPZH66B35.5 - 160M-4G	34.82		30 000	264	M286	
41.5	2.90	2533	SPZH76B35.5 - 160M-4G	35.33		50 000	355	M294	
38.8	0.85	2709	SPZH56C40 - 160M-4G	37.78	1 800	25 100	203	M278	
36.9	0.97	2843	SPZH56B40 - 160M-4G	39.65	1 500	25 100	203	M278	
38.4	1.60	2733	SPZH66C40 - 160M-4G	38.12		30 000	264	M286	
38.5	1.80	2725	SPZH66B40 - 160M-4G	38.01		30 000	264	M286	
37.2	2.50	2826	SPZH76C40 - 160M-4G	39.42		50 000	355	M294	
38.2	2.70	2747	SPZH76B40 - 160M-4G	38.31		50 000	355	M294	
31.3	0.86	3354	SPZH56B45 - 160M-4G	46.78	100	24 900	203	M278	
34.3	1.50	3065	SPZH66C45 - 160M-4G	42.75		30 000	264	M286	
33.7	1.70	3120	SPZH66B45 - 160M-4G	43.51		30 000	264	M286	
32.4	2.40	3243	SPZH76B45 - 160M-4G	45.22		50 000	355	M294	
30.8	1.40	3409	SPZH66B50 - 160M-4G	47.54		30 000	264	M286	
29.3	2.20	3579	SPZH76B50 - 160M-4G	49.92		50 000	355	M294	
26.2	1.20	4015	SPZH66B56 - 160M-4G	56.00		30 000	264	M286	
26.4	2.00	3983	SPZH76B56 - 160M-4G	55.55		50 000	355	M294	
23.8	1.10	4422	SPZH66B63 - 160M-4G	61.68		30 000	264	M286	
22.6	1.70	4652	SPZH76C63 - 160M-4G	64.88		50 000	355	M294	




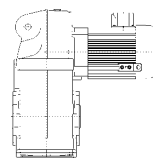
5. SP4

P 11.0 kW
n₁ 1465 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
21.4	0.92	4911	SPZH66B71 - 160M-4G	68.49		30 000	264	M286	
19.7	1.50	5334	SPZH76C71 - 160M-4G	74.39		50 000	355	M294	
20.3	2.90	5177	SPZH86C71 - 160M-4G	72.20		72 400	510	M302	
18.5	0.97	5692	SPZH66C80 - 160M-4G	79.38		30 000	264	M286	
17.8	1.40	5886	SPZH76C80 - 160M-4G	82.09		50 000	355	M294	
18.6	2.70	5658	SPZH86C80 - 160M-4G	78.91		73 500	510	M302	
16.8	0.88	6263	SPZH66C90 - 160M-4G	87.35		30 000	264	M286	
16.2	1.20	6477	SPZH76C90 - 160M-4G	90.33		50 000	355	M294	
17.1	2.40	6135	SPZH86C90 - 160M-4G	85.57		74 600	510	M302	
14.4	1.10	7296	SPZH76C100 - 160M-4G	101.75		50 000	355	M294	
14.5	2.10	7243	SPZH86C100 - 160M-4G	101.01		76 600	510	M302	
13.0	0.99	8093	SPZH76C112 - 160M-4G	112.87		50 000	355	M294	
13.1	1.90	7994	SPZH86C112 - 160M-4G	111.49		77 800	510	M302	
11.3	0.86	9270	SPZH76C125 - 160M-4G	129.29		50 000	355	M294	
11.8	1.70	8896	SPZH86C125 - 160M-4G	124.07		78 900	510	M302	
10.5	0.80	10051	SPZH76B36B140 - 160M-4G	140.18		50 000	393	M294	
8.4	1.20	12504	SPZH86C36B180 - 160M-4G	174.39		81 500	548	M302	
7.2	1.00	14514	SPZH86C36B200 - 160M-4G	202.42		82 000	548	M302	
6.5	0.92	16251	SPZH86C36B224 - 160M-4G	226.65		82 000	548	M302	
5.6	0.81	18606	SPZH86C36B250 - 160M-4G	259.50		81 700	548	M302	

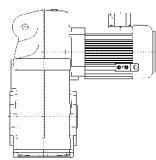
P 15.0 kW
n₁ 1460 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
491.6	1.30	291	SPZH36B3.15 - 160L-4G	2.97	1 600	9 400	160	M262	
449.4	1.50	319	SPZH46B3.15 - 160L-4G	3.25	3 000	11 700	186	M270	
457.2	2.90	313	SPZH56B3.15 - 160L-4G	3.19	4 200	15 600	223	M278	
423.5	1.10	338	SPZH36B3.55 - 160L-4G	3.45	1 400	9 600	160	M262	
400.8	1.50	357	SPZH46B3.55 - 160L-4G	3.64	3 000	12 000	186	M270	
414.6	2.70	346	SPZH56B3.55 - 160L-4G	3.52	4 300	16 000	223	M278	
378.3	1.10	379	SPZH36B4 - 160L-4G	3.86	1 300	9 800	160	M262	
348.2	1.40	411	SPZH46B4 - 160L-4G	4.19	2 900	12 300	186	M270	
360.0	2.60	398	SPZH56B4 - 160L-4G	4.06	4 300	16 500	223	M278	
330.4	0.96	434	SPZH36B4.5 - 160L-4G	4.42	1 100	9 900	160	M262	
307.1	1.30	466	SPZH46B4.5 - 160L-4G	4.75	2 900	12 600	186	M270	
318.7	2.40	449	SPZH56B4.5 - 160L-4G	4.58	4 300	17 000	223	M278	
301.1	0.87	476	SPZH36B5 - 160L-4G	4.85	900	10 000	160	M262	
273.0	1.20	525	SPZH46B5 - 160L-4G	5.35	2 800	12 800	186	M270	
288.7	2.30	496	SPZH56B5 - 160L-4G	5.06	4 300	17 300	223	M278	
238.1	1.10	602	SPZH46B5.6 - 160L-4G	6.13	2 600	13 000	186	M270	
254.4	2.20	563	SPZH56B5.6 - 160L-4G	5.74	4 300	17 800	223	M278	
215.8	1.10	664	SPZH46B6.3 - 160L-4G	6.77	2 500	13 200	186	M270	
226.9	2.20	631	SPZH56B6.3 - 160L-4G	6.43	4 600	18 500	223	M278	
196.1	1.20	730	SPZH46B7.1 - 160L-4G	7.44	2 300	13 400	186	M270	
205.7	2.20	696	SPZH56B7.1 - 160L-4G	7.10	4 500	18 900	223	M278	
180.8	0.93	792	SPZH36B8 - 160L-4G	8.07	400	10 900	160	M262	
185.6	1.20	772	SPZH46B8 - 160L-4G	7.87	2 700	13 900	186	M270	




5. SP4

P 15.0 kW n₁ 1460 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
178.7	2.00	802	SPZH56B8 - 160L-4G	8.17	4 500	19 400	223	M278	
155.8	0.87	919	SPZH36B9 - 160L-4G	9.37		10 800	160	M262	
165.5	1.10	865	SPZH46B9 - 160L-4G	8.82	2 500	14 100	186	M270	
158.2	1.90	906	SPZH56B9 - 160L-4G	9.23	4 400	19 800	223	M278	
139.1	0.83	1030	SPZH36B10 - 160L-4G	10.49		10 800	160	M262	
143.8	1.00	996	SPZH46B10 - 160L-4G	10.15	2 200	14 200	186	M270	
143.3	1.80	1000	SPZH56B10 - 160L-4G	10.19	4 300	20 200	223	M278	
140.0	2.90	1023	SPZH66B10 - 160L-4G	10.43		26 900	284	M286	
126.8	0.94	1129	SPZH46B11.2 - 160L-4G	11.51	1 800	14 300	186	M270	
126.3	1.60	1135	SPZH56B11.2 - 160L-4G	11.56	4 100	20 600	223	M278	
125.2	2.70	1144	SPZH66B11.2 - 160L-4G	11.66		27 500	284	M286	
112.8	0.87	1270	SPZH46B12.5 - 160L-4G	12.95	1 400	14 400	186	M270	
112.3	1.50	1275	SPZH56B12.5 - 160L-4G	13.00	3 800	20 900	223	M278	
115.9	2.60	1235	SPZH66B12.5 - 160L-4G	12.59		27 900	284	M286	
101.1	1.40	1417	SPZH56B14 - 160L-4G	14.45	3 600	21 200	223	M278	
103.0	2.40	1391	SPZH66B14 - 160L-4G	14.18		28 600	284	M286	
88.8	1.30	1613	SPZH56B16 - 160L-4G	16.45	3 200	21 500	223	M278	
90.9	2.30	1575	SPZH66B16 - 160L-4G	16.06		29 100	284	M286	
82.2	1.20	1742	SPZH56B18 - 160L-4G	17.75	2 900	21 600	223	M278	
83.4	2.20	1718	SPZH66B18 - 160L-4G	17.51		29 500	284	M286	
74.2	1.10	1931	SPZH56B20 - 160L-4G	19.68	2 500	21 800	223	M278	
72.7	2.00	1970	SPZH66B20 - 160L-4G	20.08		30 000	284	M286	
64.5	1.00	2222	SPZH56B22.4 - 160L-4G	22.65	1 800	21 900	223	M278	
62.8	1.80	2282	SPZH66B22.4 - 160L-4G	23.26		30 000	284	M286	
66.2	2.90	2164	SPZH76B22.4 - 160L-4G	22.06		46 700	375	M294	
57.2	0.94	2506	SPZH56B25 - 160L-4G	25.55	1 100	21 900	223	M278	
56.5	1.70	2536	SPZH66B25 - 160L-4G	25.85		30 000	284	M286	
58.6	2.70	2443	SPZH76B25 - 160L-4G	24.90		47 800	375	M294	
50.2	0.86	2854	SPZH56B28 - 160L-4G	29.09	200	21 800	223	M278	
52.9	1.70	2709	SPZH66B28 - 160L-4G	27.61		30 000	284	M286	
52.1	2.50	2749	SPZH76B28 - 160L-4G	28.02		48 900	375	M294	
45.8	0.80	3131	SPZH56B31.5 - 160L-4G	31.91		21 700	223	M278	
47.6	1.50	3011	SPZH66B31.5 - 160L-4G	30.69		30 000	284	M286	
45.2	2.20	3171	SPZH76B31.5 - 160L-4G	32.32		50 000	375	M294	
41.9	1.40	3416	SPZH66B35.5 - 160L-4G	34.82		30 000	284	M286	
41.3	2.10	3466	SPZH76B35.5 - 160L-4G	35.33		50 000	375	M294	
38.4	1.30	3729	SPZH66B40 - 160L-4G	38.01		30 000	284	M286	
37.0	1.80	3867	SPZH76C40 - 160L-4G	39.42		50 000	375	M294	
38.1	2.00	3758	SPZH76B40 - 160L-4G	38.31		50 000	375	M294	
33.6	1.20	4269	SPZH66B45 - 160L-4G	43.51		30 000	284	M286	
32.3	1.70	4437	SPZH76B45 - 160L-4G	45.22		50 000	375	M294	
30.7	1.00	4664	SPZH66B50 - 160L-4G	47.54		30 000	284	M286	
29.2	1.60	4897	SPZH76B50 - 160L-4G	49.92		50 000	375	M294	
26.1	0.88	5494	SPZH66B56 - 160L-4G	56.00		30 000	284	M286	
26.3	1.50	5450	SPZH76B56 - 160L-4G	55.55		50 000	375	M294	
26.3	2.70	5457	SPZH86C56 - 160L-4G	55.62		65 400	530	M302	
23.7	0.80	6051	SPZH66B63 - 160L-4G	61.68		30 000	284	M286	
22.5	1.30	6365	SPZH76C63 - 160L-4G	64.88		50 000	375	M294	
23.3	2.40	6141	SPZH86C63 - 160L-4G	62.59		66 700	530	M302	
19.6	1.10	7299	SPZH76C71 - 160L-4G	74.39		50 000	375	M294	
20.2	2.10	7083	SPZH86C71 - 160L-4G	72.20		68 100	530	M302	
17.8	0.99	8054	SPZH76C80 - 160L-4G	82.09		50 000	375	M294	




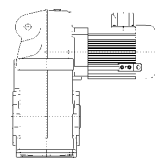
5. SP4

P 15.0 kW
n₁ 1460 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
18.5	1.90	7742	SPZH86C80 - 160L-4G	78.91		68 900	530	M302
16.2	0.90	8862	SPZH76C90 - 160L-4G	90.33		50 000	375	M294
17.1	1.80	8395	SPZH86C90 - 160L-4G	85.57		69 600	530	M302
14.3	0.80	9983	SPZH76C100 - 160L-4G	101.75		50 000	375	M294
14.5	1.50	9910	SPZH86C100 - 160L-4G	101.01		70 700	530	M302
13.1	1.40	10939	SPZH86C112 - 160L-4G	111.49		71 200	530	M302
11.8	1.20	12172	SPZH86C125 - 160L-4G	124.07		71 600	530	M302
8.4	0.88	17109	SPZH86C36B180 - 160L-4G	174.39		71 400	568	M302

P 18.5 kW
n₁ 1455 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
447.9	1.20	394	SPZH46B3.15 - 180M-4G	3.25	2 600	11 300	216	M270
455.7	2.30	388	SPZH56B3.15 - 180M-4G	3.19	3 900	15 300	253	M278
399.4	1.20	442	SPZH46B3.55 - 180M-4G	3.64	2 500	11 500	216	M270
413.1	2.20	428	SPZH56B3.55 - 180M-4G	3.52	3 900	15 700	253	M278
347.0	1.10	509	SPZH46B4 - 180M-4G	4.19	2 400	11 800	216	M270
358.8	2.10	492	SPZH56B4 - 180M-4G	4.06	3 900	16 100	253	M278
306.1	1.10	577	SPZH46B4.5 - 180M-4G	4.75	2 300	12 000	216	M270
317.6	2.00	556	SPZH56B4.5 - 180M-4G	4.58	3 800	16 500	253	M278
272.1	1.00	649	SPZH46B5 - 180M-4G	5.35	2 100	12 200	216	M270
287.7	1.90	614	SPZH56B5 - 180M-4G	5.06	3 800	16 800	253	M278
284.1	2.90	622	SPZH66B5 - 180M-4G	5.12		22 300	314	M286
237.3	0.93	744	SPZH46B5.6 - 180M-4G	6.13	1 800	12 300	216	M270
253.5	1.80	697	SPZH56B5.6 - 180M-4G	5.74	3 700	17 200	253	M278
254.0	2.70	696	SPZH66B5.6 - 180M-4G	5.73		22 900	314	M286
215.1	0.89	821	SPZH46B6.3 - 180M-4G	6.77	1 600	12 400	216	M270
226.1	1.80	781	SPZH56B6.3 - 180M-4G	6.43	4 000	17 900	253	M278
229.1	2.90	771	SPZH66B6.3 - 180M-4G	6.35		23 600	314	M286
205.0	1.70	862	SPZH56B7.1 - 180M-4G	7.10	3 900	18 300	253	M278
206.4	2.80	856	SPZH66B7.1 - 180M-4G	7.05		24 200	314	M286
185.0	0.94	955	SPZH46B8 - 180M-4G	7.87	1 800	13 100	216	M270
178.1	1.60	992	SPZH56B8 - 180M-4G	8.17	3 700	18 700	253	M278
173.2	2.60	1020	SPZH66B8 - 180M-4G	8.40		25 000	314	M286
165.0	0.89	1071	SPZH46B9 - 180M-4G	8.82	1 500	13 100	216	M270
157.6	1.50	1121	SPZH56B9 - 180M-4G	9.23	3 500	19 000	253	M278
161.3	2.50	1095	SPZH66B9 - 180M-4G	9.02		25 400	314	M286
143.3	0.81	1233	SPZH46B10 - 180M-4G	10.15	1 000	13 200	216	M270
142.8	1.50	1237	SPZH56B10 - 180M-4G	10.19	3 300	19 300	253	M278
139.5	2.30	1266	SPZH66B10 - 180M-4G	10.43		26 100	314	M286
125.8	1.30	1404	SPZH56B11.2 - 180M-4G	11.56	3 000	19 500	253	M278
124.8	2.20	1416	SPZH66B11.2 - 180M-4G	11.66		26 600	314	M286
111.9	1.20	1578	SPZH56B12.5 - 180M-4G	13.00	2 600	19 800	253	M278
115.6	2.10	1529	SPZH66B12.5 - 180M-4G	12.59		26 900	314	M286
100.7	1.10	1754	SPZH56B14 - 180M-4G	14.45	2 200	19 900	253	M278
102.6	2.00	1722	SPZH66B14 - 180M-4G	14.18		27 400	314	M286
88.5	1.00	1997	SPZH56B16 - 180M-4G	16.45	1 700	20 000	253	M278

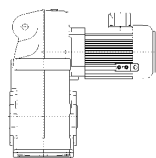


P	18.5 kW
n₁	1455 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
90.6	1.80	1949	SPZH66B16 - 180M-4G	16.06		27 800	314	M286
92.5	3.00	1910	SPZH76B16 - 180M-4G	15.73		42 400	405	M294
81.9	0.98	2156	SPZH56B18 - 180M-4G	17.75	1 300	20 000	253	M278
83.1	1.80	2126	SPZH66B18 - 180M-4G	17.51		28 100	314	M286
82.3	2.70	2147	SPZH76B18 - 180M-4G	17.68		43 400	405	M294
73.9	0.91	2389	SPZH56B20 - 180M-4G	19.68	700	20 000	253	M278
72.5	1.60	2438	SPZH66B20 - 180M-4G	20.08		28 400	314	M286
73.9	2.60	2390	SPZH76B20 - 180M-4G	19.69		44 300	405	M294
64.2	0.83	2750	SPZH56B22.4 - 180M-4G	22.65		19 900	253	M278
62.5	1.50	2824	SPZH66B22.4 - 180M-4G	23.26		28 700	314	M286
66.0	2.40	2678	SPZH76B22.4 - 180M-4G	22.06		45 100	405	M294
56.3	1.40	3138	SPZH66B25 - 180M-4G	25.85		28 800	314	M286
58.4	2.20	3023	SPZH76B25 - 180M-4G	24.90		46 000	405	M294
52.7	1.30	3352	SPZH66B28 - 180M-4G	27.61		28 800	314	M286
51.9	2.00	3402	SPZH76B28 - 180M-4G	28.02		46 800	405	M294
47.4	1.20	3727	SPZH66B31.5 - 180M-4G	30.69		28 800	314	M286
45.0	1.80	3924	SPZH76B31.5 - 180M-4G	32.32		47 600	405	M294
41.8	1.10	4228	SPZH66B35.5 - 180M-4G	34.82		28 600	314	M286
41.2	1.70	4289	SPZH76B35.5 - 180M-4G	35.33		48 100	405	M294
38.2	0.95	4628	SPZH66C40 - 180M-4G	38.12		28 300	314	M286
38.3	1.10	4615	SPZH66B40 - 180M-4G	38.01		28 300	314	M286
38.0	1.60	4651	SPZH76B40 - 180M-4G	38.31		48 400	405	M294
33.4	0.97	5283	SPZH66B45 - 180M-4G	43.51		27 700	314	M286
32.2	1.40	5491	SPZH76B45 - 180M-4G	45.22		49 000	405	M294
33.1	2.80	5339	SPZH86C45 - 180M-4G	43.97		60 400	560	M302
30.6	0.84	5772	SPZH66B50 - 180M-4G	47.54		27 200	314	M286
29.1	1.30	6061	SPZH76B50 - 180M-4G	49.92		49 100	405	M294
29.5	2.50	5982	SPZH86C50 - 180M-4G	49.26		61 500	560	M302
26.2	1.20	6744	SPZH76B56 - 180M-4G	55.55		49 100	405	M294
26.2	2.20	6753	SPZH86C56 - 180M-4G	55.62		62 600	560	M302
22.4	1.00	7877	SPZH76C63 - 180M-4G	64.88		48 900	405	M294
23.2	2.00	7599	SPZH86C63 - 180M-4G	62.59		63 500	560	M302
19.6	0.89	9032	SPZH76C71 - 180M-4G	74.39		48 200	405	M294
20.2	1.70	8766	SPZH86C71 - 180M-4G	72.20		64 500	560	M302
17.7	0.80	9967	SPZH76C80 - 180M-4G	82.09		47 500	405	M294
18.4	1.60	9581	SPZH86C80 - 180M-4G	78.91		64 900	560	M302
17.0	1.40	10389	SPZH86C90 - 180M-4G	85.57		65 300	560	M302
14.4	1.20	12265	SPZH86C100 - 180M-4G	101.01		65 600	560	M302
13.1	1.10	13537	SPZH86C112 - 180M-4G	111.49		65 600	560	M302
11.7	1.00	15064	SPZH86C125 - 180M-4G	124.07		65 300	560	M302


P	22.0 kW
n₁	1460 min⁻¹

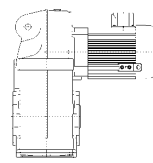
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
449.4	1.00	467	SPZH46B3.15 - 180L-4G	3.25	2 200	10 900	246	M270
457.2	2.00	459	SPZH56B3.15 - 180L-4G	3.19	3 600	15 000	283	M278
468.1	3.00	449	SPZH66B3.15 - 180L-4G	3.12		19 600	344	M286





5. SP4

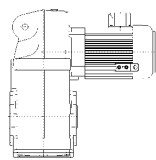
P 22.0 kW
n₁ 1460 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
400.8	1.00	524	SPZH46B3.55 - 180L-4G	3.64	2 100	11 100	246	M270	
414.6	1.90	507	SPZH56B3.55 - 180L-4G	3.52	3 500	15 300	283	M278	
421.7	2.90	498	SPZH66B3.55 - 180L-4G	3.46		20 100	344	M286	
348.2	0.94	603	SPZH46B4 - 180L-4G	4.19	1 900	11 300	246	M270	
360.0	1.80	584	SPZH56B4 - 180L-4G	4.06	3 500	15 700	283	M278	
353.8	2.70	594	SPZH66B4 - 180L-4G	4.13		20 900	344	M286	
307.1	0.89	684	SPZH46B4.5 - 180L-4G	4.75	1 700	11 400	246	M270	
318.7	1.70	659	SPZH56B4.5 - 180L-4G	4.58	3 400	16 100	283	M278	
329.6	2.70	637	SPZH66B4.5 - 180L-4G	4.43		21 200	344	M286	
273.0	0.84	769	SPZH46B5 - 180L-4G	5.35	1 400	11 500	246	M270	
288.7	1.60	728	SPZH56B5 - 180L-4G	5.06	3 300	16 300	283	M278	
285.1	2.40	737	SPZH66B5 - 180L-4G	5.12		21 800	344	M286	
254.4	1.50	826	SPZH56B5.6 - 180L-4G	5.74	3 100	16 700	283	M278	
254.9	2.30	824	SPZH66B5.6 - 180L-4G	5.73		22 300	344	M286	
226.9	1.50	926	SPZH56B6.3 - 180L-4G	6.43	3 400	17 400	283	M278	
229.9	2.50	914	SPZH66B6.3 - 180L-4G	6.35		23 100	344	M286	
205.7	1.50	1021	SPZH56B7.1 - 180L-4G	7.10	3 200	17 600	283	M278	
207.1	2.40	1014	SPZH66B7.1 - 180L-4G	7.05		23 600	344	M286	
185.6	0.80	1132	SPZH46B8 - 180L-4G	7.87	900	12 200	246	M270	
178.7	1.40	1176	SPZH56B8 - 180L-4G	8.17	3 000	17 900	283	M278	
173.8	2.20	1209	SPZH66B8 - 180L-4G	8.40		24 300	344	M286	
158.2	1.30	1328	SPZH56B9 - 180L-4G	9.23	2 700	18 200	283	M278	
161.9	2.10	1298	SPZH66B9 - 180L-4G	9.02		24 600	344	M286	
143.3	1.20	1466	SPZH56B10 - 180L-4G	10.19	2 400	18 400	283	M278	
140.0	2.00	1500	SPZH66B10 - 180L-4G	10.43		25 200	344	M286	
126.3	1.10	1664	SPZH56B11.2 - 180L-4G	11.56	1 900	18 500	283	M278	
125.2	1.80	1678	SPZH66B11.2 - 180L-4G	11.66		25 600	344	M286	
112.3	1.00	1870	SPZH56B12.5 - 180L-4G	13.00	1 400	18 600	283	M278	
115.9	1.80	1812	SPZH66B12.5 - 180L-4G	12.59		25 800	344	M286	
117.9	3.00	1782	SPZH76B12.5 - 180L-4G	12.38		39 500	435	M294	
101.1	0.95	2079	SPZH56B14 - 180L-4G	14.45	900	18 600	283	M278	
103.0	1.70	2040	SPZH66B14 - 180L-4G	14.18		26 200	344	M286	
102.4	2.70	2052	SPZH76B14 - 180L-4G	14.26		40 500	435	M294	
88.8	0.87	2366	SPZH56B16 - 180L-4G	16.45	100	18 600	283	M278	
90.9	1.60	2310	SPZH66B16 - 180L-4G	16.06		26 400	344	M286	
92.8	2.50	2264	SPZH76B16 - 180L-4G	15.73		41 300	435	M294	
82.2	0.83	2555	SPZH56B18 - 180L-4G	17.75		18 500	283	M278	
83.4	1.50	2519	SPZH66B18 - 180L-4G	17.51		26 600	344	M286	
82.6	2.30	2544	SPZH76B18 - 180L-4G	17.68		42 100	435	M294	
72.7	1.40	2889	SPZH66B20 - 180L-4G	20.08		26 700	344	M286	
74.2	2.20	2833	SPZH76B20 - 180L-4G	19.69		42 800	435	M294	
62.8	1.30	3347	SPZH66B22.4 - 180L-4G	23.26		26 700	344	M286	
66.2	2.00	3174	SPZH76B22.4 - 180L-4G	22.06		43 500	435	M294	
56.5	1.20	3719	SPZH66B25 - 180L-4G	25.85		26 600	344	M286	
58.6	1.80	3583	SPZH76B25 - 180L-4G	24.90		44 100	435	M294	
52.9	1.10	3973	SPZH66B28 - 180L-4G	27.61		26 500	344	M286	
52.1	1.70	4032	SPZH76B28 - 180L-4G	28.02		44 700	435	M294	
47.6	1.10	4416	SPZH66B31.5 - 180L-4G	30.69		26 200	344	M286	
45.2	1.50	4651	SPZH76B31.5 - 180L-4G	32.32		45 200	435	M294	
41.9	0.97	5010	SPZH66B35.5 - 180L-4G	34.82		25 600	344	M286	
41.3	1.40	5084	SPZH76B35.5 - 180L-4G	35.33		45 400	435	M294	
41.5	3.00	5057	SPZH86C35.5 - 180L-4G	35.14		56 300	590	M302	




P 22.0 kW									
n₁ 1460 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
38.3	0.80	5485	SPZH66C40 - 180L-4G	38.12		25 100	344	M286	
38.4	0.91	5469	SPZH66B40 - 180L-4G	38.01		25 100	344	M286	
38.1	1.30	5512	SPZH76B40 - 180L-4G	38.31		45 600	435	M294	
37.0	2.60	5683	SPZH86C40 - 180L-4G	39.49		57 400	590	M302	
33.6	0.82	6260	SPZH66B45 - 180L-4G	43.51		24 000	344	M286	
32.3	1.20	6507	SPZH76B45 - 180L-4G	45.22		45 600	435	M294	
33.2	2.40	6327	SPZH86C45 - 180L-4G	43.97		58 200	590	M302	
29.2	1.10	7183	SPZH76B50 - 180L-4G	49.92		45 400	435	M294	
29.6	2.10	7089	SPZH86C50 - 180L-4G	49.26		59 000	590	M302	
26.3	1.00	7993	SPZH76B56 - 180L-4G	55.55		45 000	435	M294	
26.3	1.90	8003	SPZH86C56 - 180L-4G	55.62		59 800	590	M302	
22.5	0.86	9335	SPZH76C63 - 180L-4G	64.88		44 000	435	M294	
23.3	1.70	9006	SPZH86C63 - 180L-4G	62.59		60 400	590	M302	
20.2	1.40	10388	SPZH86C71 - 180L-4G	72.20		60 800	590	M302	
18.5	1.30	11355	SPZH86C80 - 180L-4G	78.91		60 900	590	M302	
17.1	1.20	12312	SPZH86C90 - 180L-4G	85.57		60 900	590	M302	
14.5	1.00	14535	SPZH86C100 - 180L-4G	101.01		60 500	590	M302	
13.1	0.93	16043	SPZH86C112 - 180L-4G	111.49		60 000	590	M302	
11.8	0.84	17853	SPZH86C125 - 180L-4G	124.07		59 100	590	M302	

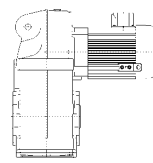
P 30.0 kW									
n₁ 1465 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
458.8	1.40	624	SPZH56B3.15 - 200L-4G	3.19	2 800	14 300	293	M278	
469.7	2.20	610	SPZH66B3.15 - 200L-4G	3.12		18 900	354	M286	
416.0	1.40	689	SPZH56B3.55 - 200L-4G	3.52	2 700	14 500	293	M278	
423.1	2.10	677	SPZH66B3.55 - 200L-4G	3.46		19 300	354	M286	
361.3	1.30	793	SPZH56B4 - 200L-4G	4.06	2 500	14 800	293	M278	
355.1	2.00	807	SPZH66B4 - 200L-4G	4.13		20 000	354	M286	
367.6	2.90	779	SPZH76B4 - 200L-4G	3.99		29 400	445	M294	
319.8	1.20	896	SPZH56B4.5 - 200L-4G	4.58	2 300	15 000	293	M278	
330.7	2.00	866	SPZH66B4.5 - 200L-4G	4.43		20 200	354	M286	
323.9	2.70	884	SPZH76B4.5 - 200L-4G	4.52		30 200	445	M294	
289.7	1.20	989	SPZH56B5 - 200L-4G	5.06	2 100	15 200	293	M278	
286.0	1.80	1002	SPZH66B5 - 200L-4G	5.12		20 700	354	M286	
297.3	2.60	964	SPZH76B5 - 200L-4G	4.93		30 800	445	M294	
255.3	1.10	1122	SPZH56B5.6 - 200L-4G	5.74	1 700	15 300	293	M278	
255.7	1.70	1120	SPZH66B5.6 - 200L-4G	5.73		21 100	354	M286	
260.6	2.40	1099	SPZH76B5.6 - 200L-4G	5.62		31 700	445	M294	
227.7	1.10	1258	SPZH56B6.3 - 200L-4G	6.43	2 000	16 000	293	M278	
230.7	1.80	1242	SPZH66B6.3 - 200L-4G	6.35		21 900	354	M286	
206.4	1.10	1388	SPZH56B7.1 - 200L-4G	7.10	1 700	16 200	293	M278	
207.8	1.70	1378	SPZH66B7.1 - 200L-4G	7.05		22 200	354	M286	
207.0	3.00	1384	SPZH76B7.1 - 200L-4G	7.08		33 700	445	M294	
179.3	1.00	1598	SPZH56B8 - 200L-4G	8.17	1 200	16 300	293	M278	
174.4	1.60	1643	SPZH66B8 - 200L-4G	8.40		22 700	354	M286	
182.7	2.90	1568	SPZH76B8 - 200L-4G	8.02		34 600	445	M294	




5. SP4

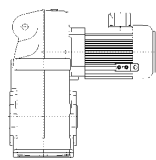
P 30.0 kW
n₁ 1465 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
193.5	2.90	1480	SPZH86C8 - 200L-4G	7.57		38 900	600	M302	
158.7	0.94	1805	SPZH56B9 - 200L-4G	9.23	700	16 300	293	M278	
162.4	1.60	1764	SPZH66B9 - 200L-4G	9.02		22 900	354	M286	
161.0	2.70	1779	SPZH76B9 - 200L-4G	9.10		35 500	445	M294	
171.0	2.90	1675	SPZH86C9 - 200L-4G	8.57		40 000	600	M302	
143.8	0.90	1993	SPZH56B10 - 200L-4G	10.19	200	16 300	293	M278	
140.5	1.40	2039	SPZH66B10 - 200L-4G	10.43		23 200	354	M286	
147.8	2.60	1938	SPZH76B10 - 200L-4G	9.91		36 000	445	M294	
151.0	2.90	1898	SPZH86C10 - 200L-4G	9.70		41 200	600	M302	
126.7	0.82	2261	SPZH56B11.2 - 200L-4G	11.56		16 100	293	M278	
125.6	1.40	2281	SPZH66B11.2 - 200L-4G	11.66		23 300	354	M286	
129.5	2.30	2212	SPZH76B11.2 - 200L-4G	11.31		36 800	445	M294	
133.0	2.90	2153	SPZH86C11.2 - 200L-4G	11.01		42 300	600	M302	
116.3	1.30	2462	SPZH66B12.5 - 200L-4G	12.59		23 400	354	M286	
118.3	2.20	2421	SPZH76B12.5 - 200L-4G	12.38		37 300	445	M294	
122.1	2.90	2346	SPZH86C12.5 - 200L-4G	12.00		43 100	600	M302	
103.3	1.20	2773	SPZH66B14 - 200L-4G	14.18		23 400	354	M286	
102.7	2.00	2788	SPZH76B14 - 200L-4G	14.26		38 100	445	M294	
91.2	1.10	3140	SPZH66B16 - 200L-4G	16.06		23 300	354	M286	
93.1	1.90	3077	SPZH76B16 - 200L-4G	15.73		38 600	445	M294	
83.7	1.10	3424	SPZH66B18 - 200L-4G	17.51		23 200	354	M286	
82.9	1.70	3457	SPZH76B18 - 200L-4G	17.68		39 100	445	M294	
73.0	1.00	3926	SPZH66B20 - 200L-4G	20.08		22 800	354	M286	
74.4	1.60	3850	SPZH76B20 - 200L-4G	19.69		39 400	445	M294	
63.0	0.92	4549	SPZH66B22.4 - 200L-4G	23.26		22 200	354	M286	
66.4	1.50	4313	SPZH76B22.4 - 200L-4G	22.06		39 700	445	M294	
56.7	0.87	5054	SPZH66B25 - 200L-4G	25.85		21 600	354	M286	
58.8	1.30	4869	SPZH76B25 - 200L-4G	24.90		39 900	445	M294	
58.0	3.00	4940	SPZH86C25 - 200L-4G	25.26		50 200	600	M302	
53.1	0.83	5399	SPZH66B28 - 200L-4G	27.61		21 100	354	M286	
52.3	1.20	5480	SPZH76B28 - 200L-4G	28.02		40 000	445	M294	
53.0	2.80	5408	SPZH86C28 - 200L-4G	27.66		50 800	600	M302	
45.3	1.10	6321	SPZH76B31.5 - 200L-4G	32.32		39 700	445	M294	
46.0	2.40	6228	SPZH86C31.5 - 200L-4G	31.85		51 700	600	M302	
41.5	1.00	6908	SPZH76B35.5 - 200L-4G	35.33		39 400	445	M294	
41.7	2.20	6872	SPZH86C35.5 - 200L-4G	35.14		52 300	600	M302	
38.2	0.99	7491	SPZH76B40 - 200L-4G	38.31		39 000	445	M294	
37.1	1.90	7723	SPZH86C40 - 200L-4G	39.49		52 800	600	M302	
32.4	0.87	8844	SPZH76B45 - 200L-4G	45.22		37 900	445	M294	
33.3	1.70	8598	SPZH86C45 - 200L-4G	43.97		53 100	600	M302	
29.3	0.82	9761	SPZH76B50 - 200L-4G	49.92		36 900	445	M294	
29.7	1.60	9634	SPZH86C50 - 200L-4G	49.26		53 300	600	M302	
26.3	1.40	10876	SPZH86C56 - 200L-4G	55.62		53 300	600	M302	
23.4	1.20	12239	SPZH86C63 - 200L-4G	62.59		53 100	600	M302	
20.3	1.10	14118	SPZH86C71 - 200L-4G	72.20		52 500	600	M302	
18.6	0.97	15431	SPZH86C80 - 200L-4G	78.91		51 800	600	M302	
17.1	0.90	16732	SPZH86C90 - 200L-4G	85.57		51 000	600	M302	




5. SP4

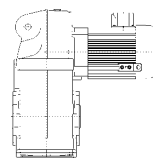
P 37.0 kW n₁ 1470 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
471.3	1.80	750	SPZH66B3.15 - 225S-4G	3.12		18 300	424	M286	
472.8	2.60	747	SPZH76B3.15 - 225S-4G	3.11		27 100	515	M294	
424.6	1.70	832	SPZH66B3.55 - 225S-4G	3.46		18 600	424	M286	
417.7	2.50	846	SPZH76B3.55 - 225S-4G	3.52		27 900	515	M294	
356.3	1.60	992	SPZH66B4 - 225S-4G	4.13		19 100	424	M286	
368.8	2.30	958	SPZH76B4 - 225S-4G	3.99		28 700	515	M294	
331.8	1.60	1065	SPZH66B4.5 - 225S-4G	4.43		19 300	424	M286	
325.0	2.20	1087	SPZH76B4.5 - 225S-4G	4.52		29 400	515	M294	
287.0	1.50	1231	SPZH66B5 - 225S-4G	5.12		19 700	424	M286	
298.3	2.10	1184	SPZH76B5 - 225S-4G	4.93		30 000	515	M294	
256.6	1.40	1377	SPZH66B5.6 - 225S-4G	5.73		19 900	424	M286	
261.5	1.90	1351	SPZH76B5.6 - 225S-4G	5.62		30 700	515	M294	
231.5	1.50	1526	SPZH66B6.3 - 225S-4G	6.35		20 800	424	M286	
235.0	2.60	1503	SPZH76B6.3 - 225S-4G	6.25		31 900	515	M294	
208.5	1.40	1694	SPZH66B7.1 - 225S-4G	7.05		21 000	424	M286	
207.7	2.50	1701	SPZH76B7.1 - 225S-4G	7.08		32 700	515	M294	
175.0	1.30	2019	SPZH66B8 - 225S-4G	8.40		21 300	424	M286	
183.3	2.30	1927	SPZH76B8 - 225S-4G	8.02		33 400	515	M294	
194.2	2.40	1820	SPZH86C8 - 225S-4G	7.57		38 000	670	M302	
163.0	1.30	2168	SPZH66B9 - 225S-4G	9.02		21 400	424	M286	
161.6	2.20	2187	SPZH76B9 - 225S-4G	9.10		34 100	515	M294	
171.6	2.40	2059	SPZH86C9 - 225S-4G	8.57		39 000	670	M302	
141.0	1.20	2506	SPZH66B10 - 225S-4G	10.43		21 400	424	M286	
148.3	2.10	2383	SPZH76B10 - 225S-4G	9.91		34 500	515	M294	
151.5	2.40	2333	SPZH86C10 - 225S-4G	9.70		40 000	670	M302	
126.0	1.10	2803	SPZH66B11.2 - 225S-4G	11.66		21 400	424	M286	
130.0	1.90	2718	SPZH76B11.2 - 225S-4G	11.31		35 100	515	M294	
133.5	2.40	2647	SPZH86C11.2 - 225S-4G	11.01		41 000	670	M302	
116.7	1.10	3027	SPZH66B12.5 - 225S-4G	12.59		21 300	424	M286	
118.7	1.80	2976	SPZH76B12.5 - 225S-4G	12.38		35 500	515	M294	
122.5	2.40	2884	SPZH86C12.5 - 225S-4G	12.00		41 700	670	M302	
103.7	1.00	3408	SPZH66B14 - 225S-4G	14.18		21 000	424	M286	
103.1	1.60	3427	SPZH76B14 - 225S-4G	14.26		36 000	515	M294	
91.6	0.93	3859	SPZH66B16 - 225S-4G	16.06		20 600	424	M286	
93.4	1.50	3782	SPZH76B16 - 225S-4G	15.73		36 200	515	M294	
83.1	1.40	4250	SPZH76B18 - 225S-4G	17.68		36 400	515	M294	
82.1	3.00	4305	SPZH86C18 - 225S-4G	17.91		45 500	670	M302	
72.3	2.80	4884	SPZH86C20 - 225S-4G	20.32		46 400	670	M302	
66.4	2.70	5322	SPZH86C22.4 - 225S-4G	22.14		46 900	670	M302	
59.0	1.10	5985	SPZH76B25 - 225S-4G	24.90		36 200	515	M294	
58.2	2.50	6072	SPZH86C25 - 225S-4G	25.26		47 600	670	M302	
52.5	1.00	6735	SPZH76B28 - 225S-4G	28.02		35 800	515	M294	
53.2	2.30	6648	SPZH86C28 - 225S-4G	27.66		48 000	670	M302	
45.5	0.91	7769	SPZH76B31.5 - 225S-4G	32.32		35 000	515	M294	
46.2	2.00	7655	SPZH86C31.5 - 225S-4G	31.85		48 500	670	M302	
41.6	0.85	8491	SPZH76B35.5 - 225S-4G	35.33		34 200	515	M294	
41.8	1.80	8447	SPZH86C35.5 - 225S-4G	35.14		48 700	670	M302	
38.4	0.80	9208	SPZH76B40 - 225S-4G	38.31		33 400	515	M294	
37.2	1.60	9492	SPZH86C40 - 225S-4G	39.49		48 800	670	M302	
26.4	1.10	13368	SPZH86C56 - 225S-4G	55.62		47 700	670	M302	
23.5	1.00	15044	SPZH86C63 - 225S-4G	62.59		46 800	670	M302	
20.4	0.86	17353	SPZH86C71 - 225S-4G	72.20		45 200	670	M302	




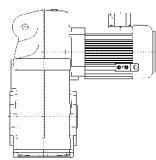
5. SP4

P 45.0 kW
n₁ 1470 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
471.3	1.50	912	SPZH66B3.15 - 225M-4G	3.12		17 600	454	M286	
472.8	2.10	909	SPZH76B3.15 - 225M-4G	3.11		26 500	545	M294	
424.6	1.40	1012	SPZH66B3.55 - 225M-4G	3.46		17 900	454	M286	
417.7	2.00	1029	SPZH76B3.55 - 225M-4G	3.52		27 200	545	M294	
356.3	1.30	1206	SPZH66B4 - 225M-4G	4.13		18 200	454	M286	
368.8	1.90	1165	SPZH76B4 - 225M-4G	3.99		27 900	545	M294	
331.8	1.30	1295	SPZH66B4.5 - 225M-4G	4.43		18 400	454	M286	
325.0	1.80	1322	SPZH76B4.5 - 225M-4G	4.52		28 600	545	M294	
287.0	1.20	1497	SPZH66B5 - 225M-4G	5.12		18 600	454	M286	
298.3	1.70	1441	SPZH76B5 - 225M-4G	4.93		29 000	545	M294	
256.6	1.10	1675	SPZH66B5.6 - 225M-4G	5.73		18 700	454	M286	
261.5	1.60	1644	SPZH76B5.6 - 225M-4G	5.62		29 700	545	M294	
231.5	1.20	1856	SPZH66B6.3 - 225M-4G	6.35		19 600	454	M286	
235.0	2.10	1828	SPZH76B6.3 - 225M-4G	6.25		30 900	545	M294	
208.5	1.20	2061	SPZH66B7.1 - 225M-4G	7.05		19 700	454	M286	
207.7	2.00	2069	SPZH76B7.1 - 225M-4G	7.08		31 500	545	M294	
175.0	1.10	2456	SPZH66B8 - 225M-4G	8.40		19 700	454	M286	
183.3	1.90	2344	SPZH76B8 - 225M-4G	8.02		32 000	545	M294	
194.2	2.00	2213	SPZH86C8 - 225M-4G	7.57		37 000	700	M302	
163.0	1.00	2637	SPZH66B9 - 225M-4G	9.02		19 600	454	M286	
161.6	1.80	2660	SPZH76B9 - 225M-4G	9.10		32 500	545	M294	
171.6	2.00	2505	SPZH86C9 - 225M-4G	8.57		37 900	700	M302	
141.0	0.97	3048	SPZH66B10 - 225M-4G	10.43		19 400	454	M286	
148.3	1.70	2898	SPZH76B10 - 225M-4G	9.91		32 800	545	M294	
151.5	2.00	2837	SPZH86C10 - 225M-4G	9.70		38 800	700	M302	
126.0	0.91	3409	SPZH66B11.2 - 225M-4G	11.66		19 100	454	M286	
130.0	1.60	3306	SPZH76B11.2 - 225M-4G	11.31		33 200	545	M294	
133.5	2.00	3219	SPZH86C11.2 - 225M-4G	11.01		39 600	700	M302	
116.7	0.88	3681	SPZH66B12.5 - 225M-4G	12.59		18 800	454	M286	
118.7	1.50	3620	SPZH76B12.5 - 225M-4G	12.38		33 400	545	M294	
122.5	2.00	3507	SPZH86C12.5 - 225M-4G	12.00		40 100	700	M302	
103.7	0.82	4145	SPZH66B14 - 225M-4G	14.18		18 300	454	M286	
103.1	1.30	4168	SPZH76B14 - 225M-4G	14.26		33 600	545	M294	
105.2	2.90	4084	SPZH86C14 - 225M-4G	13.97		42 100	700	M302	
93.4	1.30	4599	SPZH76B16 - 225M-4G	15.73		33 600	545	M294	
93.0	2.70	4622	SPZH86C16 - 225M-4G	15.81		42 800	700	M302	
83.1	1.10	5168	SPZH76B18 - 225M-4G	17.68		33 400	545	M294	
82.1	2.50	5235	SPZH86C18 - 225M-4G	17.91		43 500	700	M302	
72.3	2.30	5941	SPZH86C20 - 225M-4G	20.32		44 000	700	M302	
66.4	2.20	6473	SPZH86C22.4 - 225M-4G	22.14		44 300	700	M302	
59.0	0.90	7279	SPZH76B25 - 225M-4G	24.90		32 000	545	M294	
58.2	2.00	7385	SPZH86C25 - 225M-4G	25.26		44 700	700	M302	
52.5	0.83	8191	SPZH76B28 - 225M-4G	28.02		31 000	545	M294	
53.2	1.90	8085	SPZH86C28 - 225M-4G	27.66		44 800	700	M302	
46.2	1.60	9310	SPZH86C31.5 - 225M-4G	31.85		44 800	700	M302	
41.8	1.50	10273	SPZH86C35.5 - 225M-4G	35.14		44 600	700	M302	
37.2	1.30	11544	SPZH86C40 - 225M-4G	39.49		44 200	700	M302	
26.4	0.92	16258	SPZH86C56 - 225M-4G	55.62		41 300	700	M302	
23.5	0.82	18296	SPZH86C63 - 225M-4G	62.59		39 600	700	M302	




P 55.0 kW									
n ₁ 1475 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
472.9	1.20	1111	SPZH66B3.15U - 250M4	3.12		16 700	544.4	M350	
474.4	1.80	1107	SPZH76B3.15U - 250M4	3.11		25 800	644.5	M358	
426.0	1.20	1233	SPZH66B3.55U - 250M4	3.46		16 900	544.4	M350	
419.2	1.70	1253	SPZH76B3.55U - 250M4	3.52		26 400	644.5	M358	
357.5	1.10	1469	SPZH66B4U - 250M4	4.13		17 100	544.4	M350	
370.1	1.60	1419	SPZH76B4U - 250M4	3.99		27 000	644.5	M358	
332.9	1.10	1578	SPZH66B4.5U - 250M4	4.43		17 100	544.4	M350	
326.1	1.50	1610	SPZH76B4.5U - 250M4	4.52		27 500	644.5	M358	
288.0	0.99	1824	SPZH66B5U - 250M4	5.12		17 200	544.4	M350	
299.3	1.40	1755	SPZH76B5U - 250M4	4.93		27 900	644.5	M358	
257.5	0.93	2040	SPZH66B5.6U - 250M4	5.73		17 100	544.4	M350	
262.3	1.30	2002	SPZH76B5.6U - 250M4	5.62		28 300	644.5	M358	
232.3	1.00	2261	SPZH66B6.3U - 250M4	6.35		18 000	544.4	M350	
235.8	1.80	2227	SPZH76B6.3U - 250M4	6.25		29 500	644.5	M358	
209.3	0.96	2510	SPZH66B7.1U - 250M4	7.05		18 000	544.4	M350	
208.4	1.70	2521	SPZH76B7.1U - 250M4	7.08		30 000	644.5	M358	
175.6	0.89	2991	SPZH66B8U - 250M4	8.40		17 600	544.4	M350	
184.0	1.60	2855	SPZH76B8U - 250M4	8.02		30 300	644.5	M358	
194.8	1.60	2696	SPZH86C8U - 250M4	7.57		35 800	815	M366	
163.5	0.86	3212	SPZH66B9U - 250M4	9.02		17 400	544.4	M350	
162.1	1.50	3240	SPZH76B9U - 250M4	9.10		30 600	644.5	M358	
172.2	1.60	3051	SPZH86C9U - 250M4	8.57		36 500	815	M366	
148.8	1.40	3530	SPZH76B10U - 250M4	9.91		30 700	644.5	M358	
152.0	1.60	3456	SPZH86C10U - 250M4	9.70		37 200	815	M366	
130.4	1.30	4027	SPZH76B11.2U - 250M4	11.31		30 800	644.5	M358	
133.9	1.60	3921	SPZH86C11.2U - 250M4	11.01		37 800	815	M366	
119.1	1.20	4409	SPZH76B12.5U - 250M4	12.38		30 800	644.5	M358	
122.9	1.60	4272	SPZH86C12.5U - 250M4	12.00		38 200	815	M366	
103.4	1.10	5077	SPZH76B14U - 250M4	14.26		30 500	644.5	M358	
105.6	2.40	4974	SPZH86C14U - 250M4	13.97		40 100	815	M366	
93.7	1.00	5602	SPZH76B16U - 250M4	15.73		30 200	644.5	M358	
93.3	2.20	5630	SPZH86C16U - 250M4	15.81		40 500	815	M366	
91.2	2.40	5760	SPZH86B16U - 250M4	16.18		40 600	815	M366	
83.4	0.94	6296	SPZH76B18U - 250M4	17.68		29 700	644.5	M358	
79.7	2.10	6586	SPZH86B18U - 250M4	18.50		41 000	815	M366	
74.9	0.87	7010	SPZH76B20U - 250M4	19.69		29 000	644.5	M358	
74.3	2.00	7068	SPZH86B20U - 250M4	19.85		41 100	815	M366	
66.9	0.80	7854	SPZH76B22.4U - 250M4	22.06		28 100	644.5	M358	
66.6	1.80	7884	SPZH86C22.4U - 250M4	22.14		41 200	815	M366	
58.4	1.70	8995	SPZH86C25U - 250M4	25.26		41 000	815	M366	
53.3	1.50	9848	SPZH86C28U - 250M4	27.66		40 800	815	M366	
46.3	1.30	11341	SPZH86C31.5U - 250M4	31.85		40 200	815	M366	
42.0	1.20	12514	SPZH86C35.5U - 250M4	35.14		39 600	815	M366	
37.3	1.10	14062	SPZH86C40U - 250M4	39.49		38 500	815	M366	
33.5	0.96	15657	SPZH86C45U - 250M4	43.97		37 300	815	M366	
29.9	0.86	17542	SPZH86C50U - 250M4	49.26		35 600	815	M366	

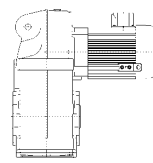

5. SP4

P 75.0 kW
n₁ 1480 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
474.5	0.89	1509	SPZH66B3.15U - 280S4	3.12		15 000	689.4	M350	
476.0	1.30	1505	SPZH76B3.15U - 280S4	3.11		24 300	789.5	M358	
427.4	0.87	1676	SPZH66B3.55U - 280S4	3.46		15 000	689.4	M350	
420.6	1.20	1703	SPZH76B3.55U - 280S4	3.52		24 700	789.5	M358	
358.7	0.80	1997	SPZH66B4U - 280S4	4.13		14 800	689.4	M350	
371.3	1.20	1929	SPZH76B4U - 280S4	3.99		25 100	789.5	M358	
327.2	1.10	2189	SPZH76B4.5U - 280S4	4.52		25 400	789.5	M358	
300.3	1.00	2385	SPZH76B5U - 280S4	4.93		25 500	789.5	M358	
263.2	0.96	2721	SPZH76B5.6U - 280S4	5.62		25 700	789.5	M358	
236.6	1.30	3027	SPZH76B6.3U - 280S4	6.25		26 900	789.5	M358	
209.1	1.20	3425	SPZH76B7.1U - 280S4	7.08		27 000	789.5	M358	
184.6	1.20	3880	SPZH76B8U - 280S4	8.02		26 900	789.5	M358	
195.5	1.20	3663	SPZH86C8U - 280S4	7.57		33 400	960	M366	
162.7	1.10	4403	SPZH76B9U - 280S4	9.10		26 800	789.5	M358	
172.7	1.20	4146	SPZH86C9U - 280S4	8.57		33 800	960	M366	
149.3	1.00	4797	SPZH76B10U - 280S4	9.91		26 500	789.5	M358	
152.5	1.20	4696	SPZH86C10U - 280S4	9.70		34 100	960	M366	
130.9	0.94	5473	SPZH76B11.2U - 280S4	11.31		26 000	789.5	M358	
134.4	1.20	5329	SPZH86C11.2U - 280S4	11.01		34 200	960	M366	
119.5	0.89	5992	SPZH76B12.5U - 280S4	12.38		25 600	789.5	M358	
123.3	1.20	5806	SPZH86C12.5U - 280S4	12.00		34 300	960	M366	
103.8	0.80	6900	SPZH76B14U - 280S4	14.26		24 500	789.5	M358	
105.9	1.70	6760	SPZH86C14U - 280S4	13.97		36 000	960	M366	
93.6	1.60	7651	SPZH86C16U - 280S4	15.81		36 000	960	M366	
91.5	1.80	7828	SPZH86B16U - 280S4	16.18		36 000	960	M366	
80.0	1.60	8951	SPZH86B18U - 280S4	18.50		35 600	960	M366	
74.6	1.50	9605	SPZH86B20U - 280S4	19.85		35 400	960	M366	
66.8	1.30	10715	SPZH86C22.4U - 280S4	22.14		34 800	960	M366	
58.6	1.20	12225	SPZH86C25U - 280S4	25.26		33 800	960	M366	
53.5	1.10	13384	SPZH86C28U - 280S4	27.66		32 900	960	M366	
46.5	0.97	15412	SPZH86C31.5U - 280S4	31.85		31 100	960	M366	
42.1	0.88	17006	SPZH86C35.5U - 280S4	35.14		29 500	960	M366	


P 90.0 kW
n₁ 1480 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
476.0	1.10	1805	SPZH76B3.15U - 280M4	3.11		23 200	849.5	M358	
420.6	1.00	2043	SPZH76B3.55U - 280M4	3.52		23 500	849.5	M358	
371.3	0.97	2315	SPZH76B4U - 280M4	3.99		23 700	849.5	M358	
327.2	0.91	2626	SPZH76B4.5U - 280M4	4.52		23 700	849.5	M358	
300.3	0.87	2862	SPZH76B5U - 280M4	4.93		23 700	849.5	M358	
263.2	0.80	3265	SPZH76B5.6U - 280M4	5.62		23 700	849.5	M358	
236.6	1.10	3632	SPZH76B6.3U - 280M4	6.25		24 900	849.5	M358	
209.1	1.00	4111	SPZH76B7.1U - 280M4	7.08		24 700	849.5	M358	
184.6	0.97	4656	SPZH76B8U - 280M4	8.02		24 400	849.5	M358	
195.5	0.99	4396	SPZH86C8U - 280M4	7.57		31 500	1020	M366	
162.7	0.90	5283	SPZH76B9U - 280M4	9.10		23 900	849.5	M358	



5. SP4

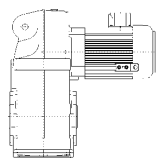
P 90.0 kW
n₁ 1480 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
172.7	0.99	4975	SPZH86C9U - 280M4	8.57		31 700	1020	M366	
149.3	0.87	5756	SPZH76B10U - 280M4	9.91		23 400	849.5	M358	
152.5	0.99	5636	SPZH86C10U - 280M4	9.70		31 700	1020	M366	
134.4	0.99	6395	SPZH86C11.2U - 280M4	11.01		31 600	1020	M366	
123.3	0.99	6967	SPZH86C12.5U - 280M4	12.00		31 400	1020	M366	
105.9	1.40	8112	SPZH86C14U - 280M4	13.97		33 000	1020	M366	
91.5	1.50	9394	SPZH86B16U - 280M4	16.18		32 500	1020	M366	
80.0	1.30	10741	SPZH86B18U - 280M4	18.50		31 700	1020	M366	
74.6	1.20	11526	SPZH86B20U - 280M4	19.85		31 100	1020	M366	
66.8	1.10	12858	SPZH86C22.4U - 280M4	22.14		30 000	1020	M366	
58.6	1.00	14670	SPZH86C25U - 280M4	25.26		28 300	1020	M366	
53.5	0.93	16061	SPZH86C28U - 280M4	27.66		26 900	1020	M366	
46.5	0.81	18495	SPZH86C31.5U - 280M4	31.85		24 200	1020	M366	

5

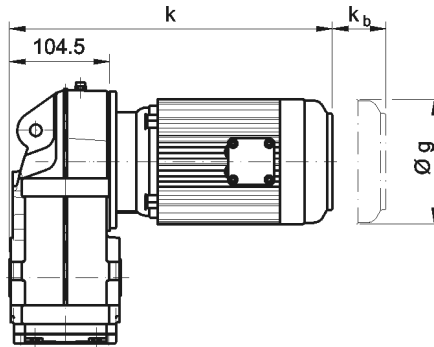
Notizen / Notice / Notes:

5. SP4

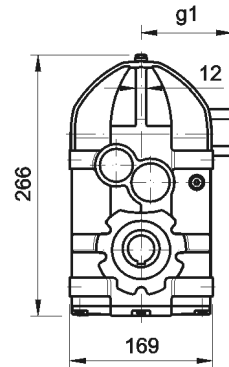


**5.5 Maßbilder Getriebemotoren
Dimensional drawings of geared motors
Schémas dimensionnels des motoréducteurs**

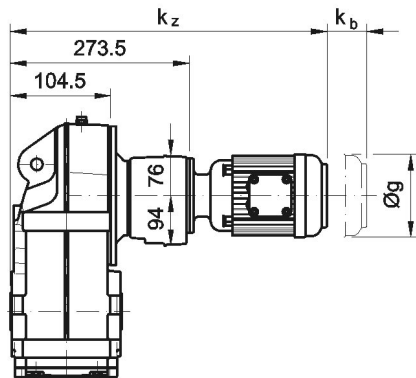
SPZ..16B
63 - 112



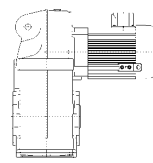
SPZ..16..



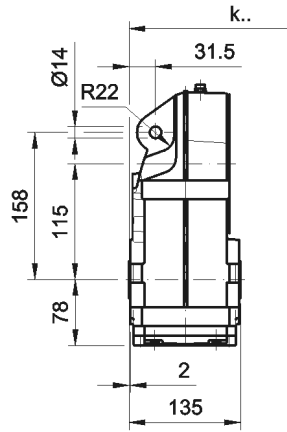
SPZ..16B16B/C
63 - 112



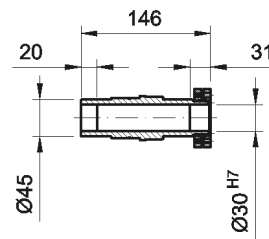
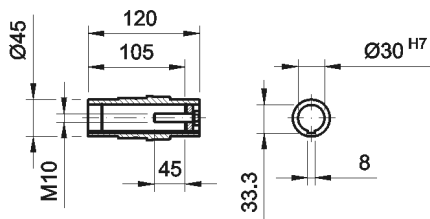
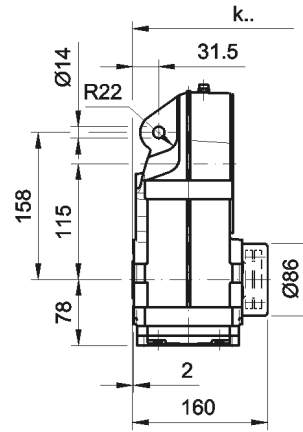
	63	71	80	90S	90L	100	112										
k	338	342	365	407	407	445	458										
ku																	
kz	507	511	534	576	576	614	627										
kb	48	60	71	77	77	80	89										
Øg	121	138	157	177	177	197	219										
g1	96	102	125	133	133	144	165										
Øam																	



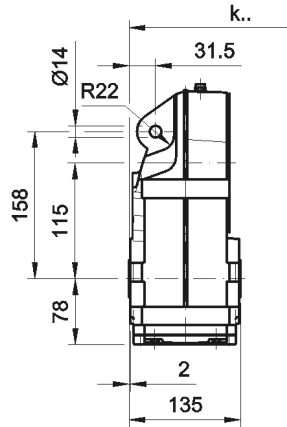
SPZH16..



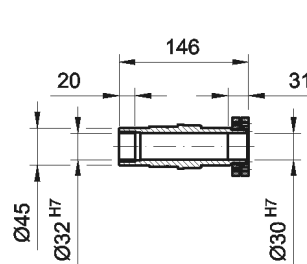
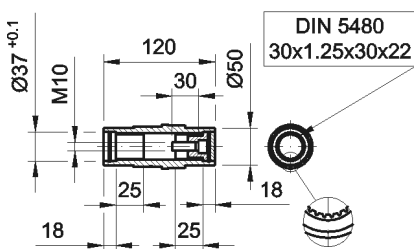
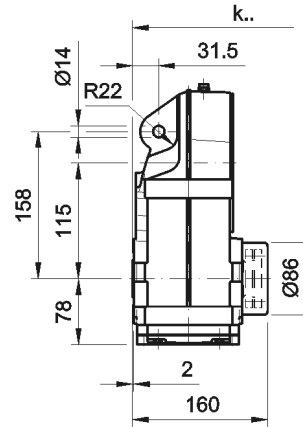
SPZS16..



SPZT16..

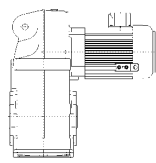


SPZC16..

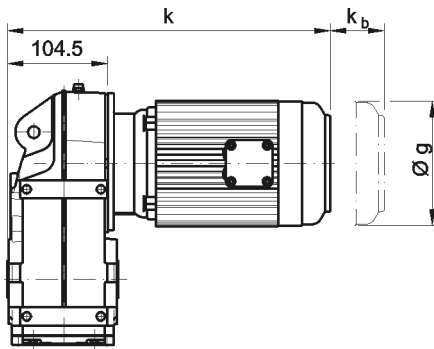


5

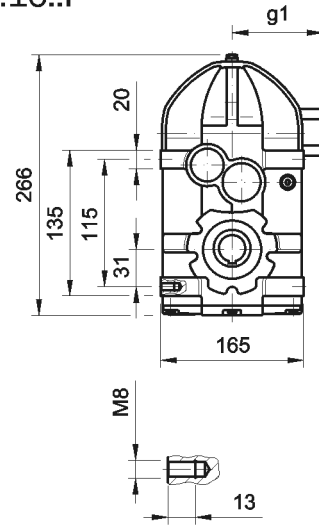
5. SP4



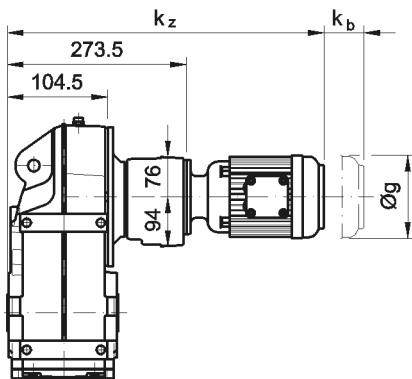
SPZ..16BF
63 - 112



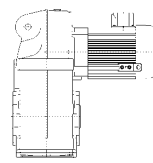
SPZ..16..F



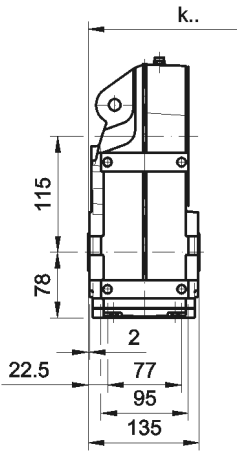
SPZ..16B16B/CF
63 - 112



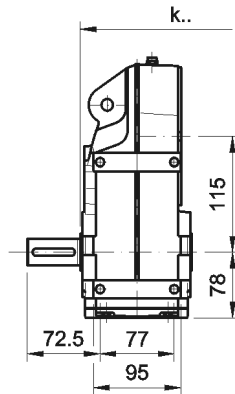
	63	71	80	90S	90L	100	112											
k	338	342	365	407	407	445	458											
ku																		
kz	507	511	534	576	576	614	627											
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



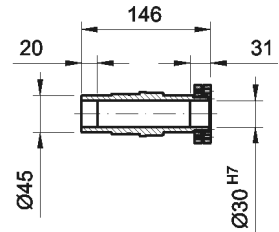
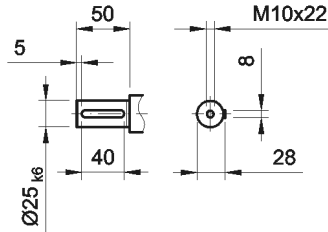
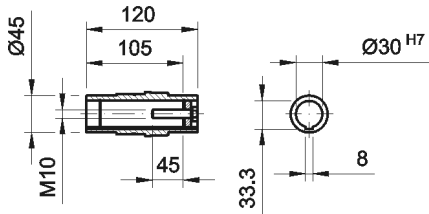
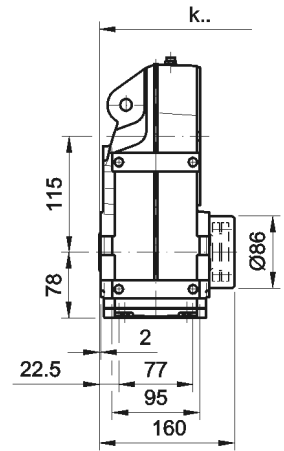
SPZH16..F..



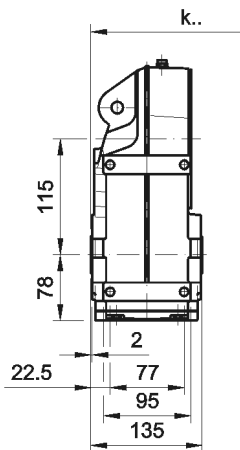
SPZN16..F..



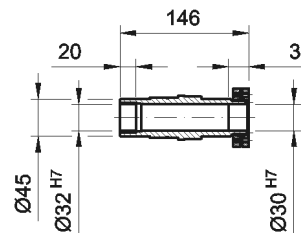
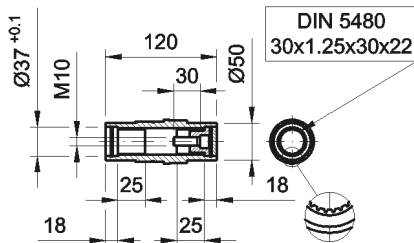
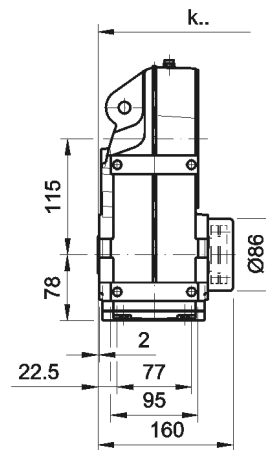
SPZS16..F..



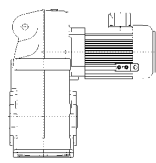
SPZT16..F..



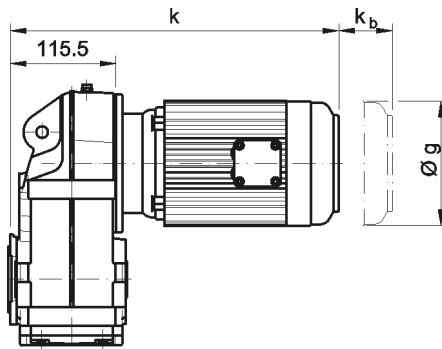
SPZC16..F..



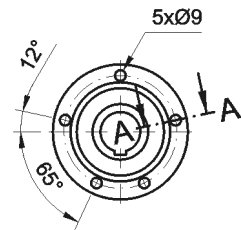
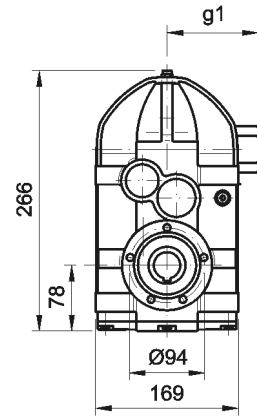
5. SP4



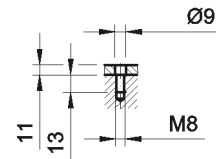
SPT..16B
63 - 112



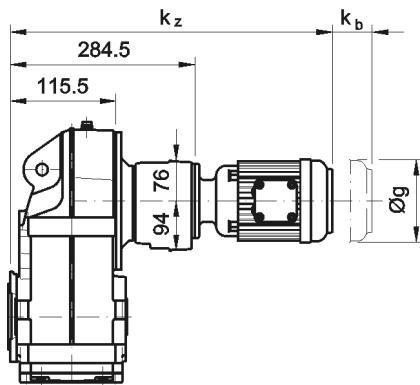
SPT..16..



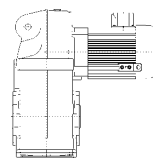
A - A



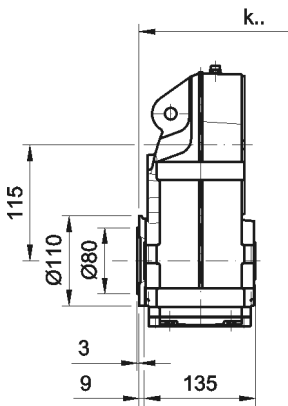
SPT..16B16B/C
63 - 112



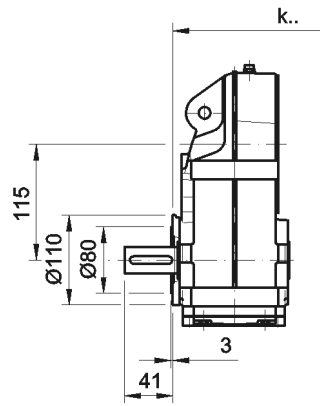
	63	71	80	90S	90L	100	112												
k	349	353	376	418	418	456	469												
ku																			
kz	518	522	545	587	587	625	638												
kb	48	60	71	77	77	80	89												
Øg	121	138	157	177	177	197	219												
g1	96	102	125	133	133	144	165												
Øam																			



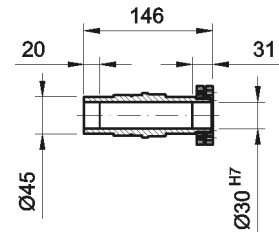
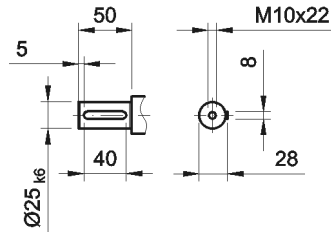
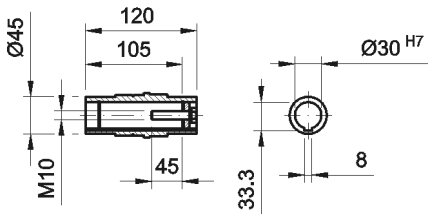
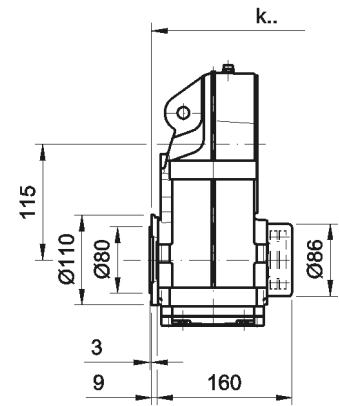
SPTH16..



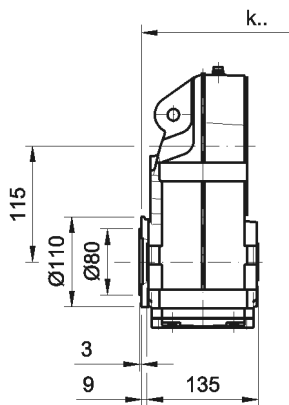
SPTN16..



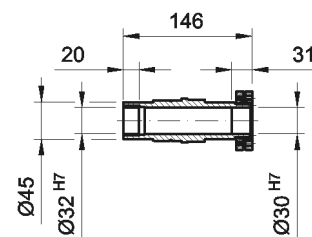
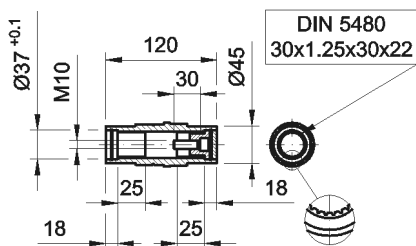
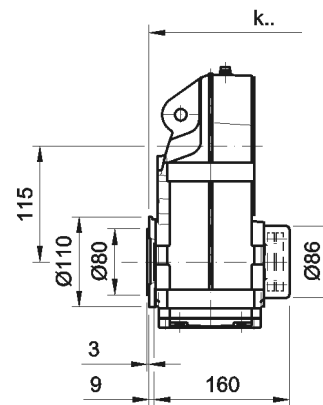
SPTS16..



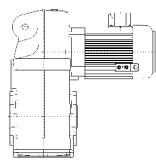
SPTT16..



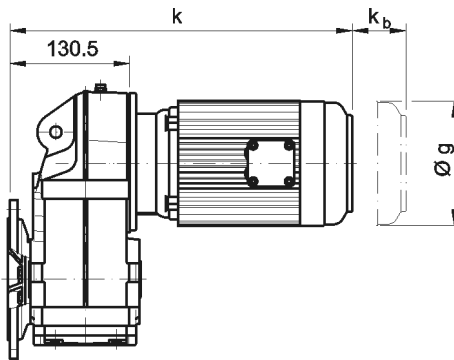
SPTC16..



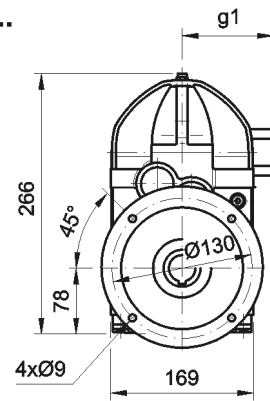
5. SP4



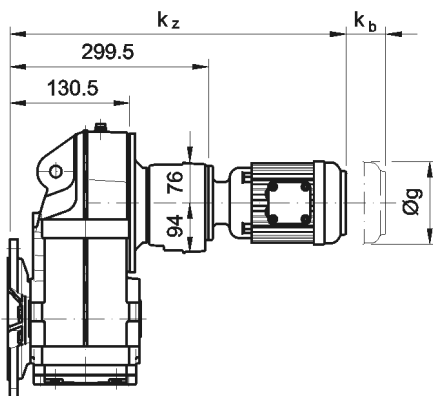
SPF..16B
63 - 112



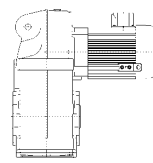
SPF..16..



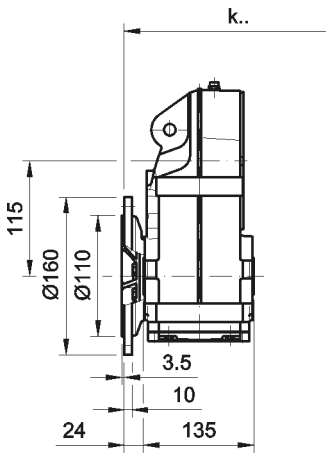
SPF..16B16B/C
63 - 112



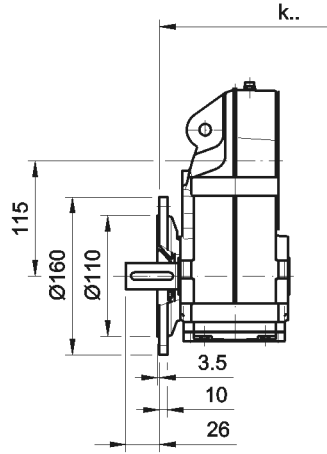
	63	71	80	90S	90L	100	112											
k	364	368	391	433	433	471	484											
ku																		
kz	533	537	560	602	602	640	653											
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



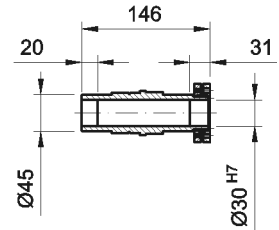
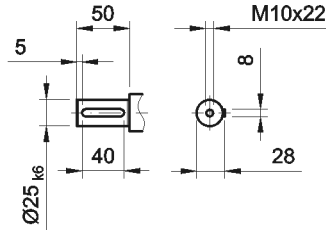
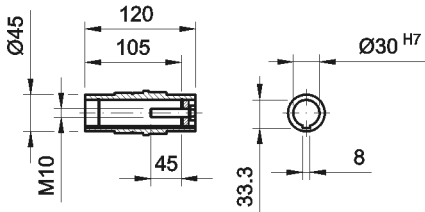
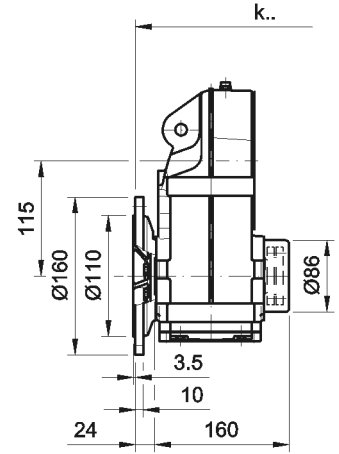
SPFH16..



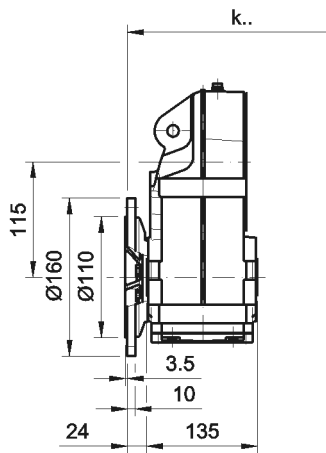
SPFN16..



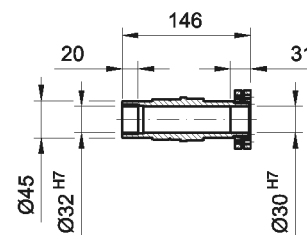
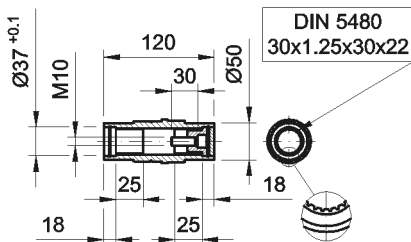
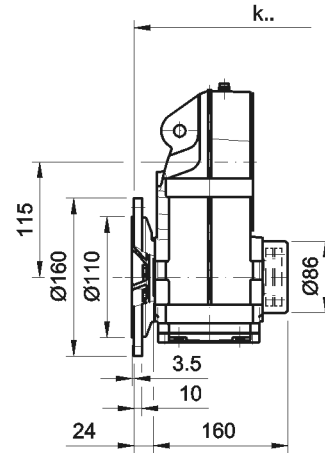
SPFS16..



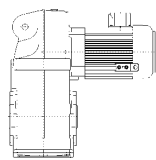
SPFT16..



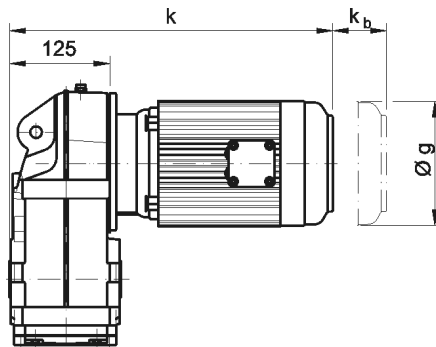
SPFC16..



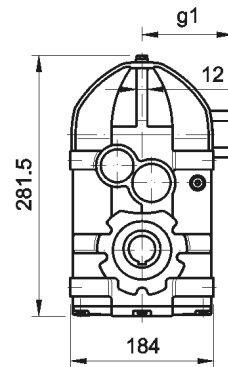
5. SP4



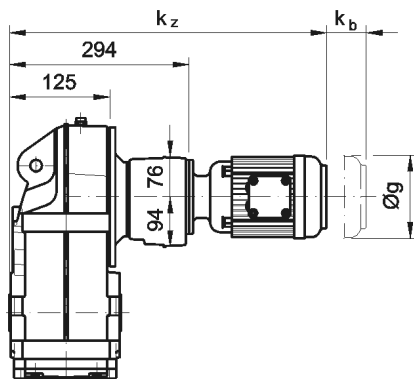
SPZ..26B
63 - 112



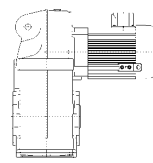
SPZ..26..



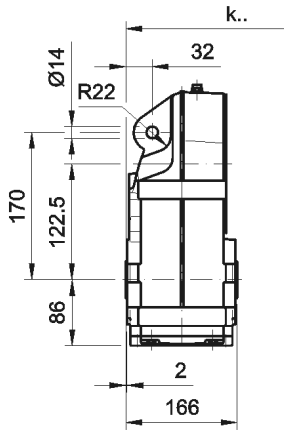
SPZ..26B16B/C
63 - 112



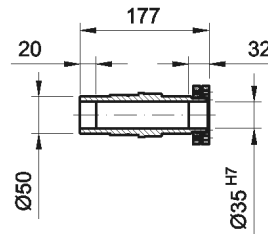
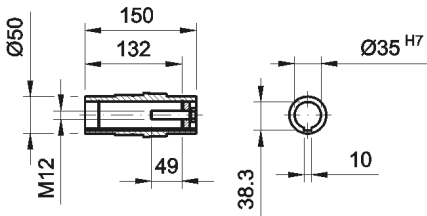
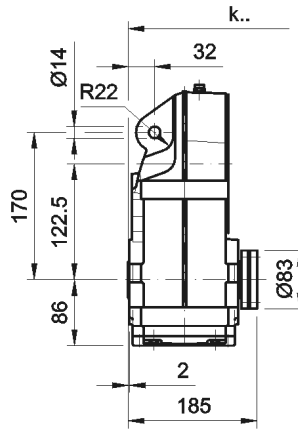
	63	71	80	90S	90L	100	112											
k	358	362	385	427	427	465	478											
ku																		
kz	527	531	554	596	596	634	647											
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



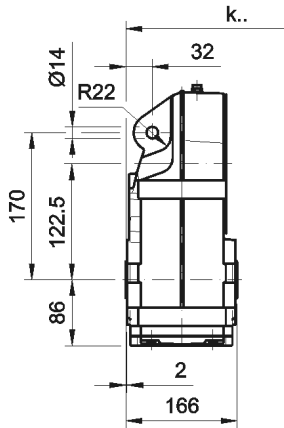
SPZH26..



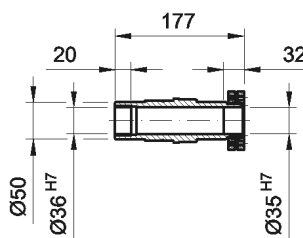
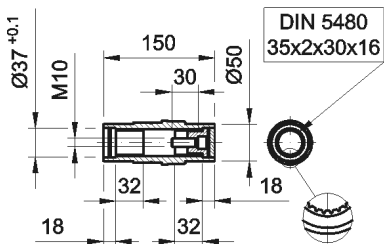
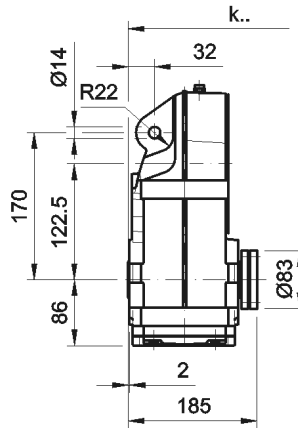
SPZS26..



SPZT26..

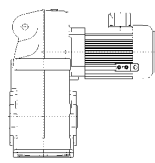


SPZC26..

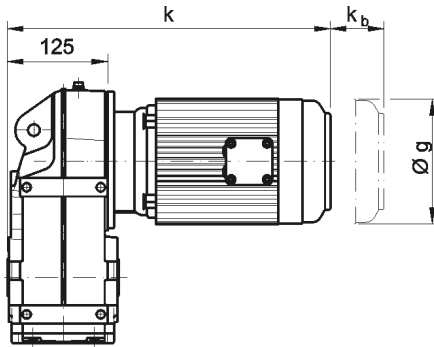


5

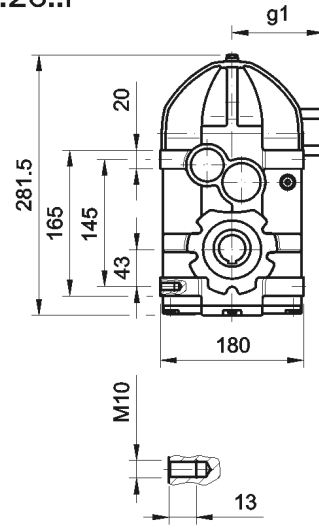
5. SP4



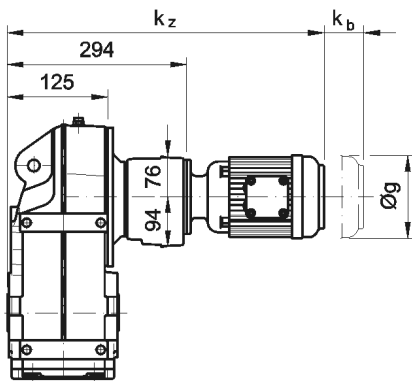
SPZ..26BF
63 - 112



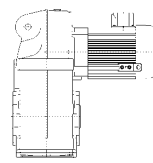
SPZ..26..F



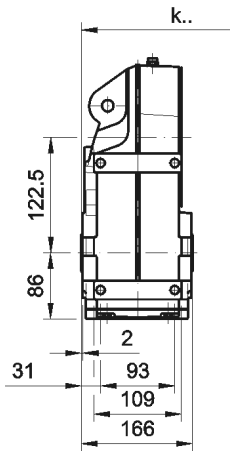
SPZ..26B16B/CF
63 - 112



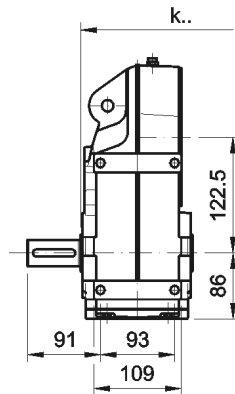
	63	71	80	90S	90L	100	112											
k	358	362	385	427	427	465	478											
ku																		
kz	527	531	554	596	596	634	647											
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



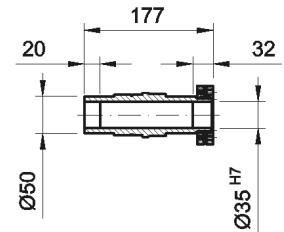
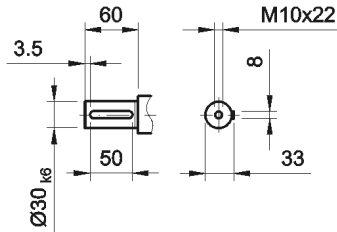
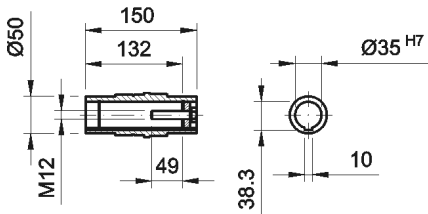
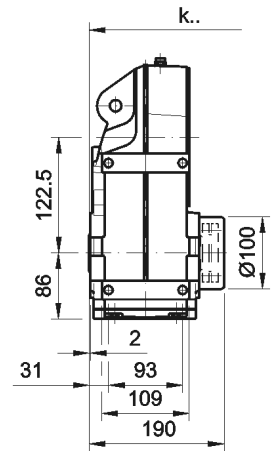
SPZH26..F..



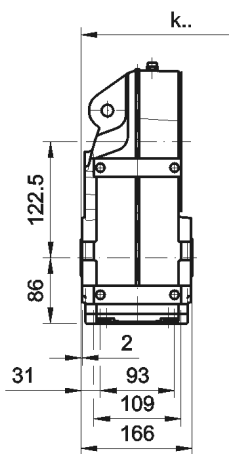
SPZN26..F..



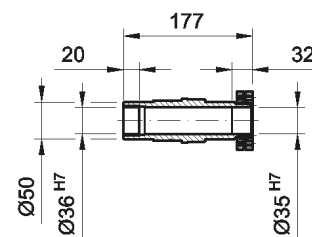
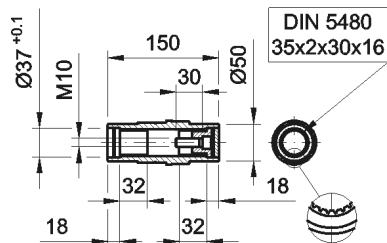
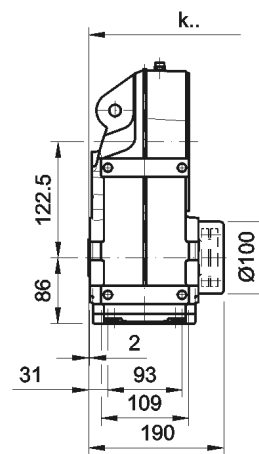
SPZS26..F..



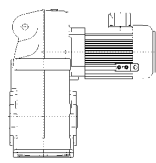
SPZT26..F..



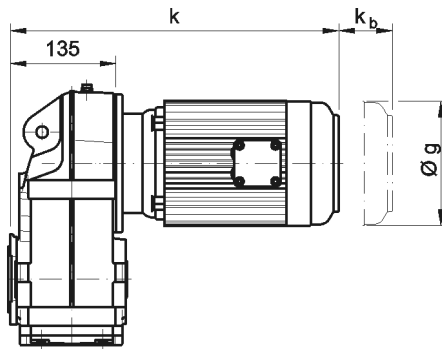
SPZC26..F..



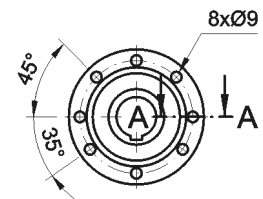
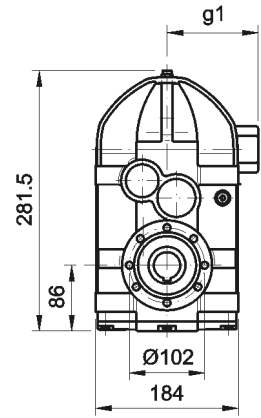
5. SP4



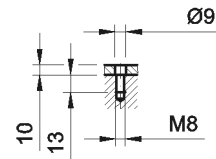
SPT..26B
63 - 112



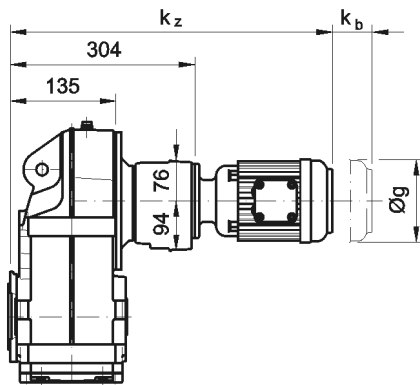
SPT..26..



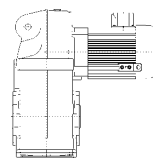
A - A



SPT..26B16B/C
63 - 112



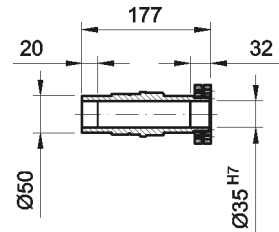
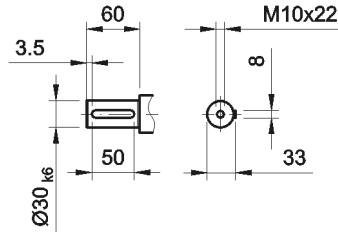
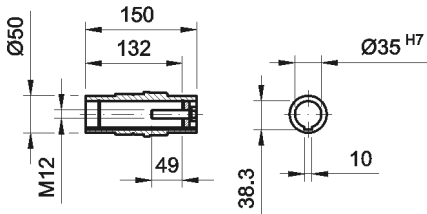
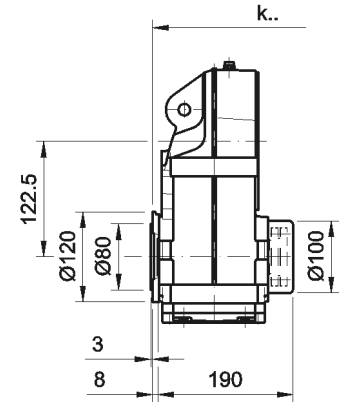
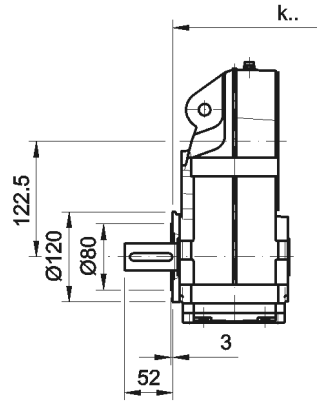
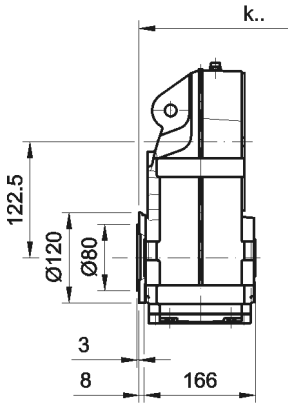
	63	71	80	90S	90L	100	112											
k	368	372	395	437	437	475	488											
ku																		
kz	537	541	564	606	606	644	657											
kb	48	60	71	77	77	80	89											
Øg	121	138	157	177	177	197	219											
g1	96	102	125	133	133	144	165											
Øam																		



SPTH26..

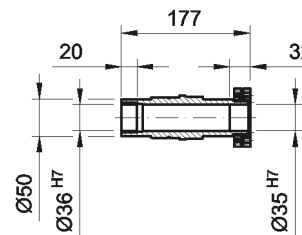
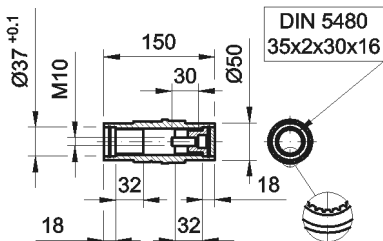
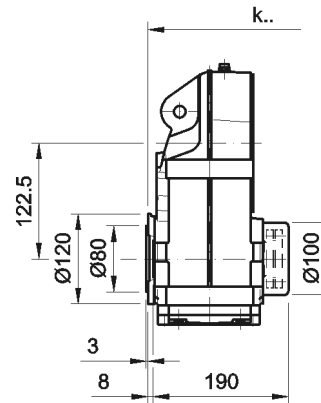
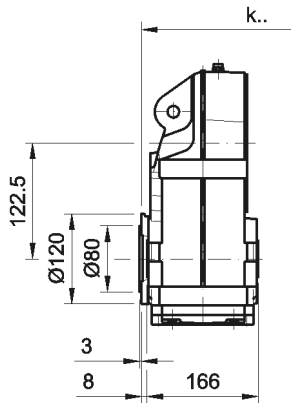
SPTN26..

SPTS26..

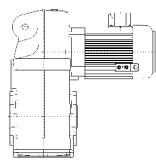


SPTT26..

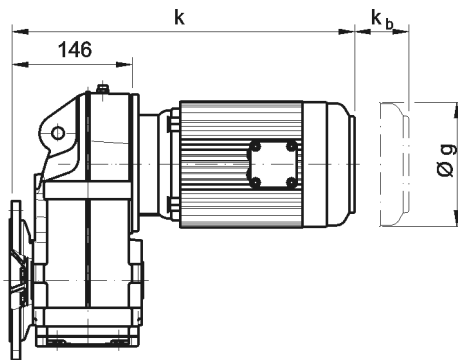
SPTC26..



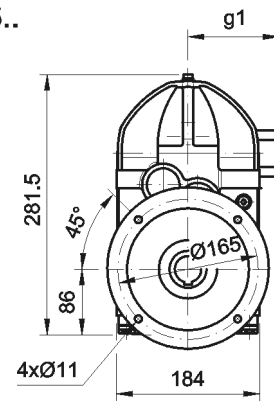
5. SP4



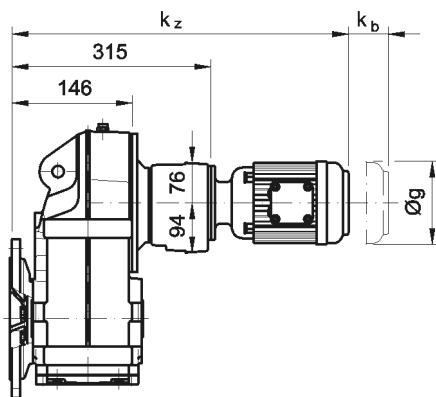
SPF..26B
63 - 112



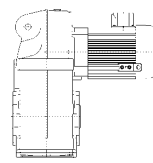
SPF..26..



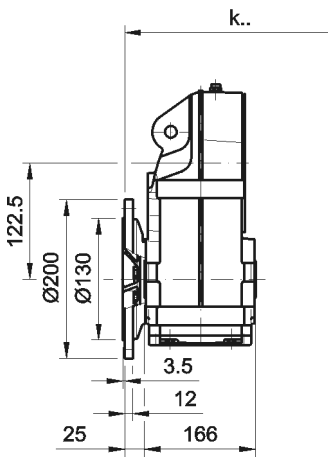
SPF..26B16B/C
63 - 112



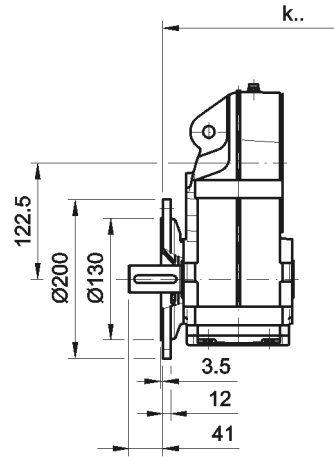
	63	71	80	90S	90L	100	112												
k	379	383	406	448	448	486	499												
ku																			
kz	548	552	575	617	617	655	668												
kb	48	60	71	77	77	80	89												
Øg	121	138	157	177	177	197	219												
g1	96	102	125	133	133	144	165												
Øam																			



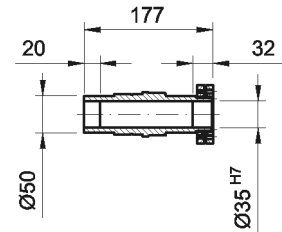
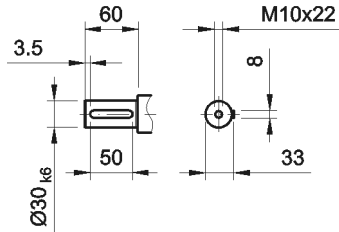
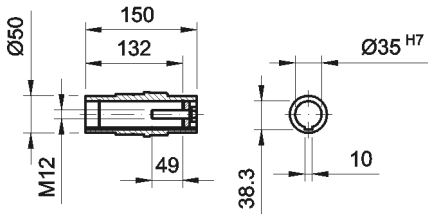
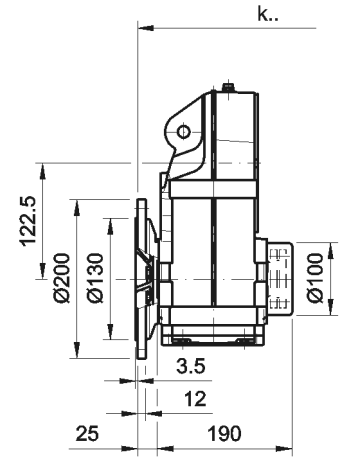
SPFH26..



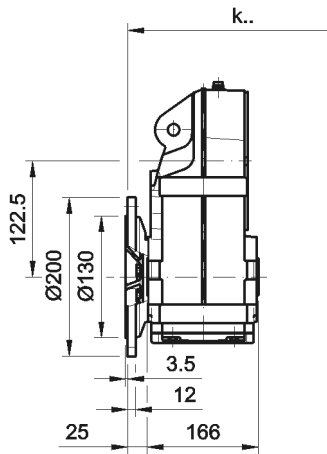
SPFN26..



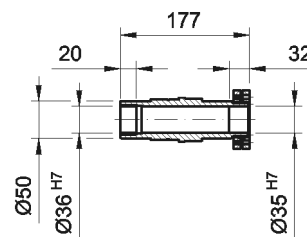
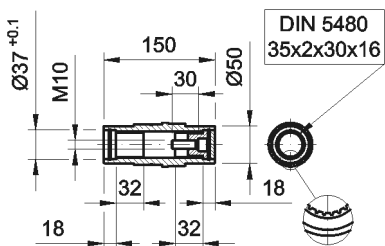
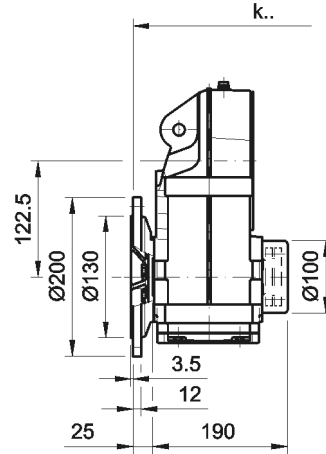
SPFS26..



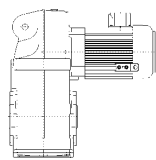
SPFT26..



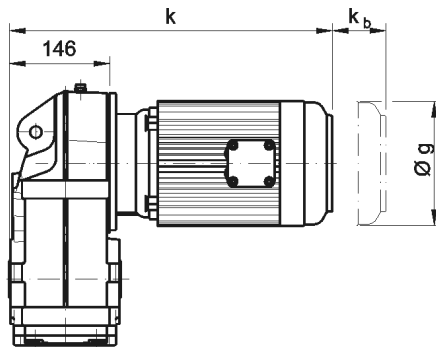
SPFC26..



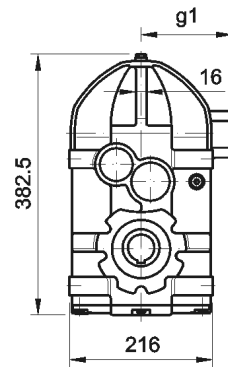
5. SP4



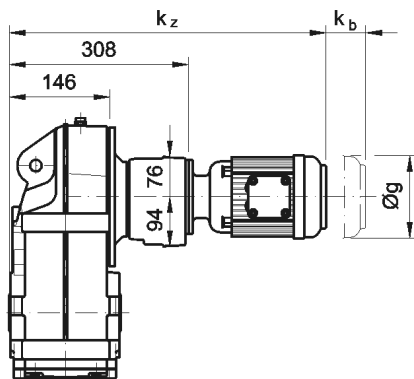
SPZ..36B
63 - 160



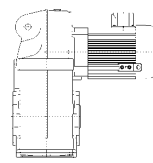
SPZ..36..



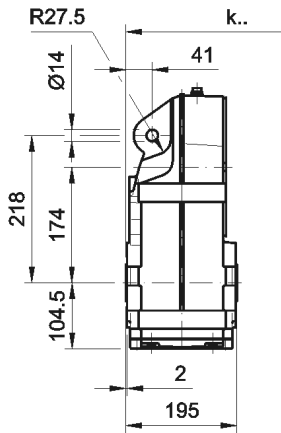
SPZ..36B16B/C
63 - 112



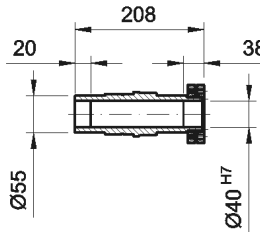
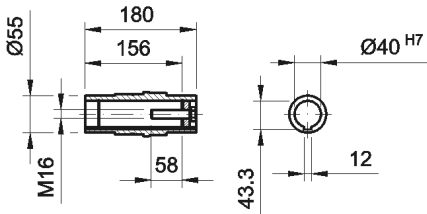
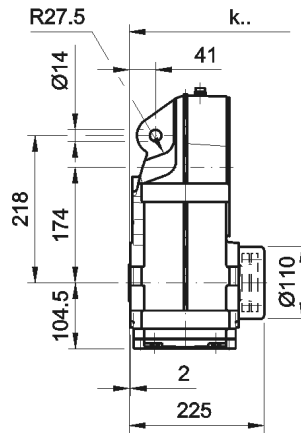
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L								
k	370	374	397	439	439	477	490	559	594	594	707	751								
ku																				
kz	541	545	568	610	610	648	661													
kb	48	60	71	77	77	80	89	98	98	98	77	77								
Øg	121	138	157	177	177	197	219	235	235	235	330	330								
g1	96	102	125	133	133	144	165	182	182	182	287	287								
Øam																				



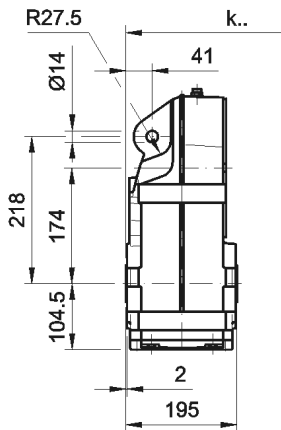
SPZH36..



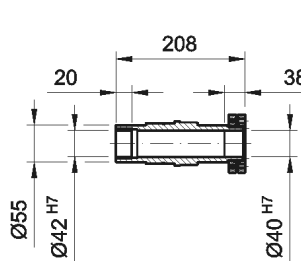
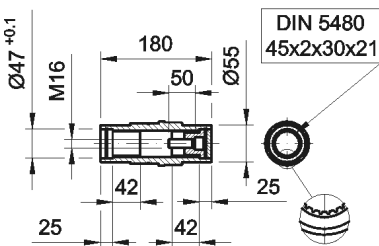
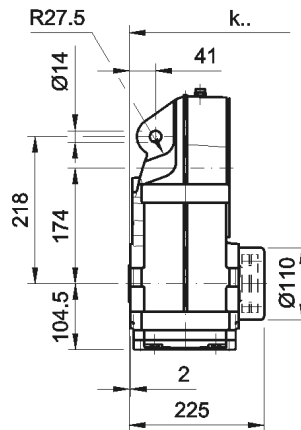
SPZS36..



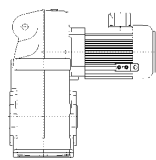
SPZT36..



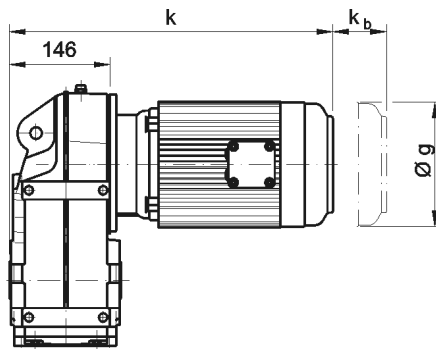
SPZC36..



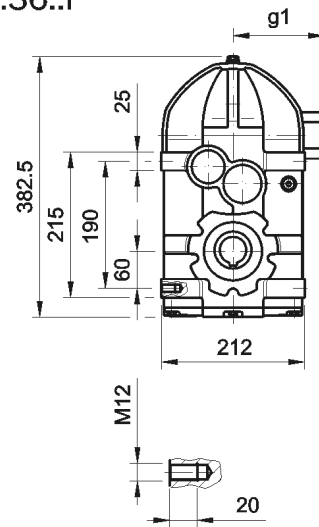
5. SP4



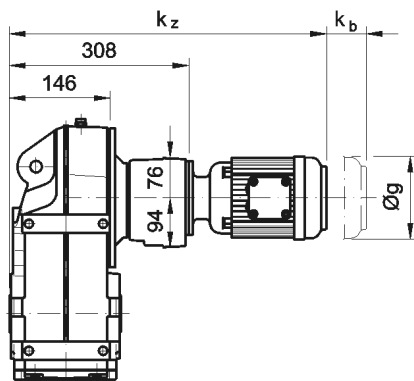
SPZ..36BF
63 - 160



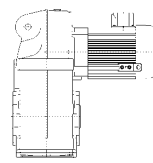
SPZ..36..F



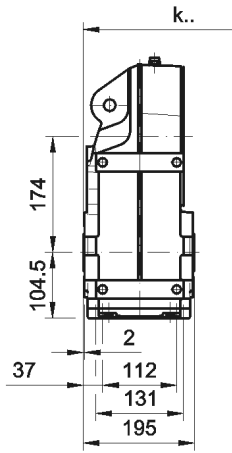
SPZ..36B16B/CF
63 - 112



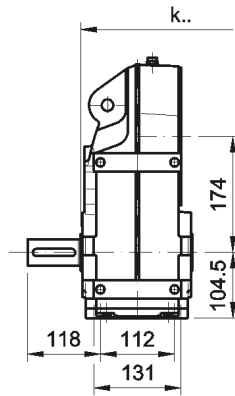
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L								
k	370	374	397	439	439	477	490	559	594	594	707	751								
ku																				
kz	541	545	568	610	610	648	661													
kb	48	60	71	77	77	80	89	98	98	98	77	77								
Øg	121	138	157	177	177	197	219	235	235	235	330	330								
g1	96	102	125	133	133	144	165	182	182	182	287	287								
Øam																				



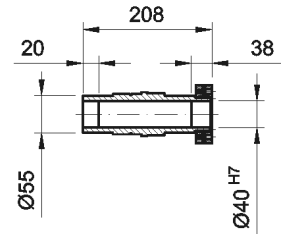
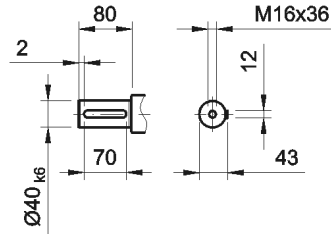
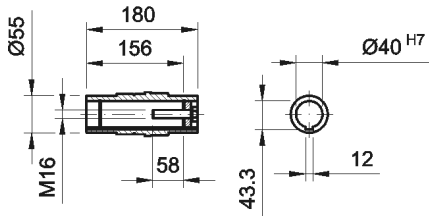
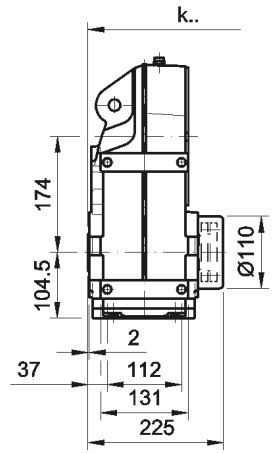
SPZH36..F..



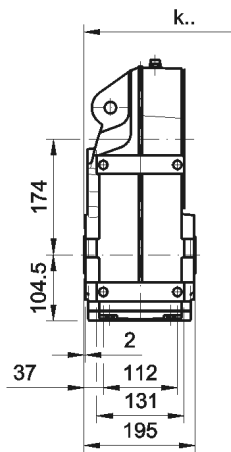
SPZN36..F..



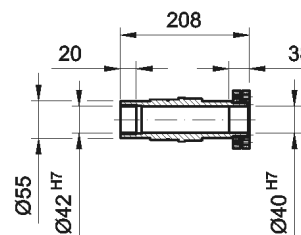
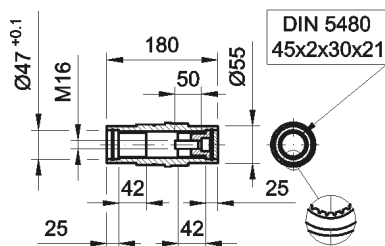
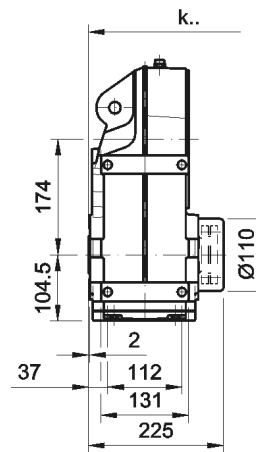
SPZS36..F..



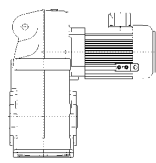
SPZT36..F..



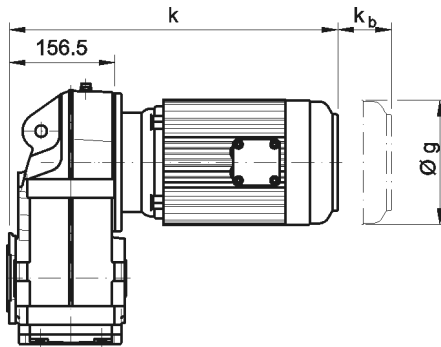
SPZC36..F..



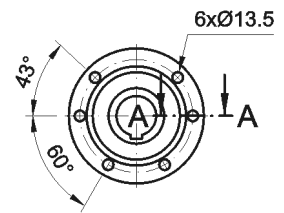
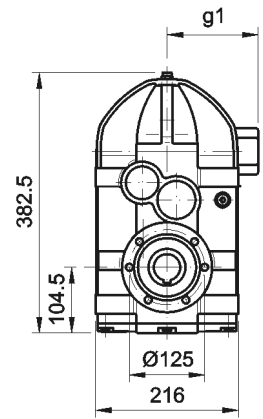
5. SP4



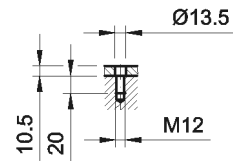
SPT..36B
63 - 160



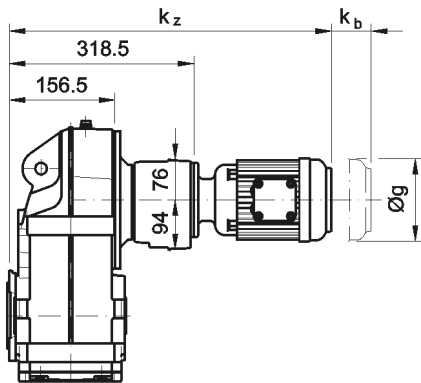
SPT..36..



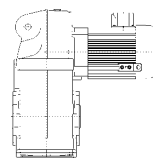
A - A



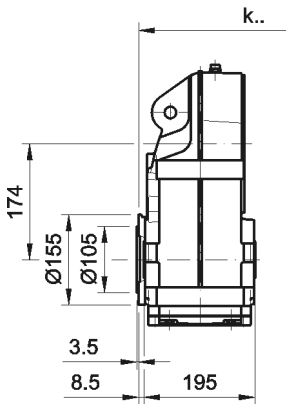
SPT..36B16B/C
63 - 112



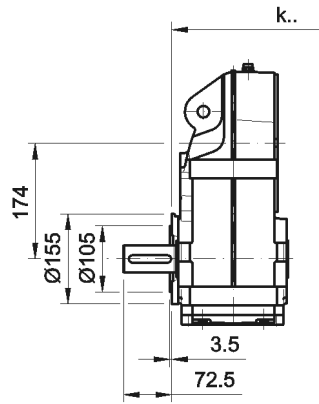
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	381	385	408	450	450	488	501	570	605	605	718	762							
ku																			
kz	552	556	579	621	621	659	672												
kb	48	60	71	77	77	80	89	97	97	97	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			



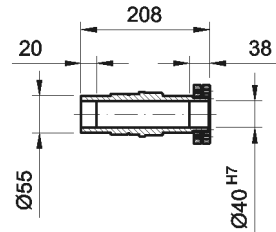
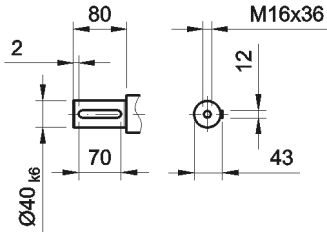
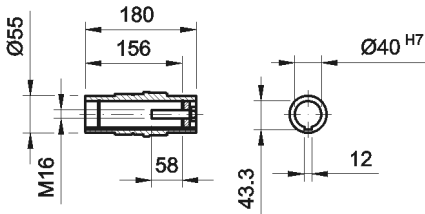
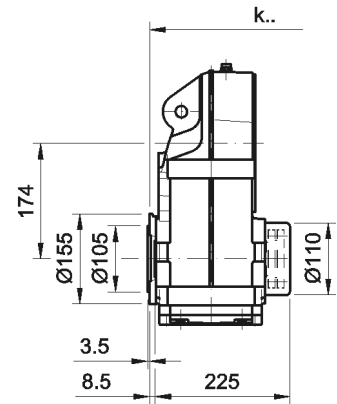
SPTH36..



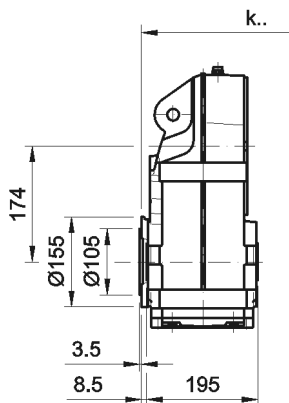
SPTN36..



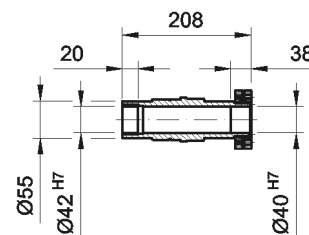
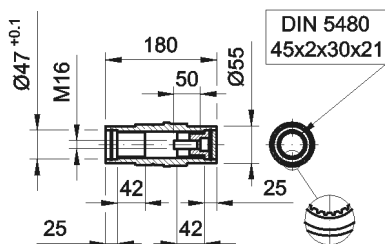
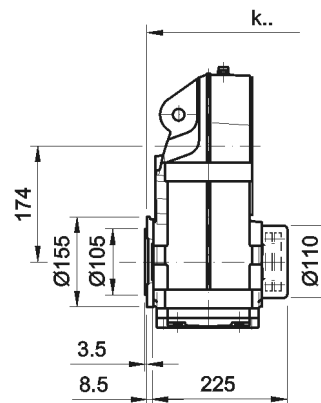
SPTS36..



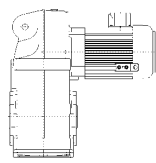
SPTT36..



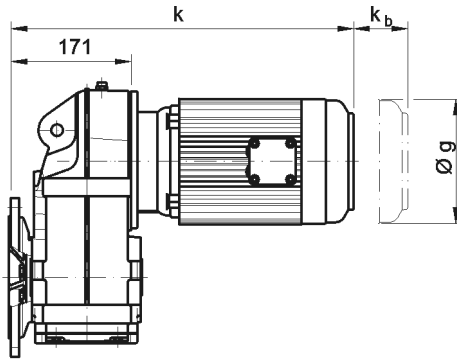
SPTC36..



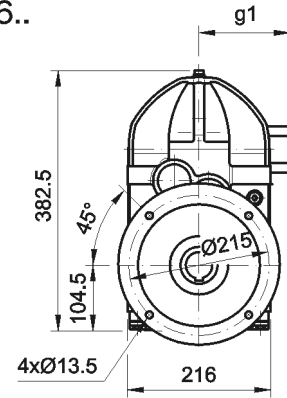
5. SP4



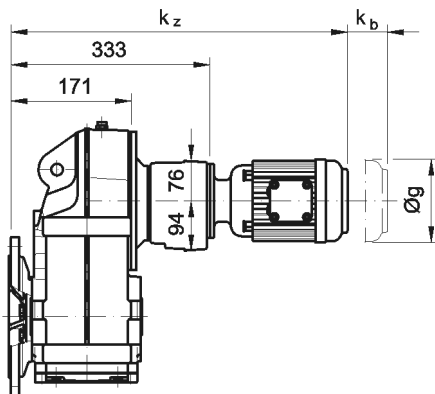
SPF..36B
63 - 160



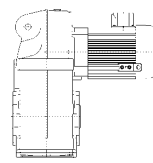
SPF..36..



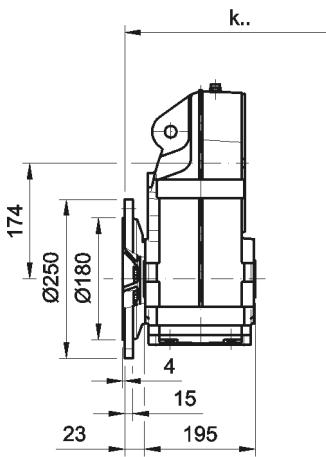
SPF..36B16B/C
63 - 112



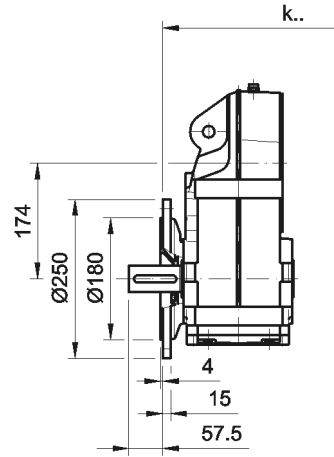
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L								
k	395	399	422	464	464	502	515	584	619	619	732	776								
ku																				
kz	566	570	593	635	635	673	686													
kb	48	60	71	77	77	80	89	98	98	98	77	77								
Øg	121	138	157	177	177	197	219	235	235	235	330	330								
g1	96	102	125	133	133	144	165	182	182	182	287	287								
Øam																				



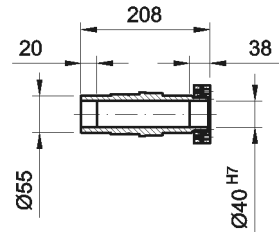
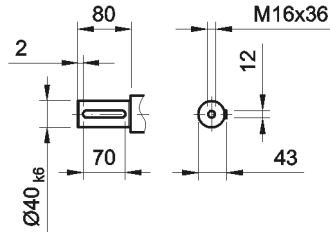
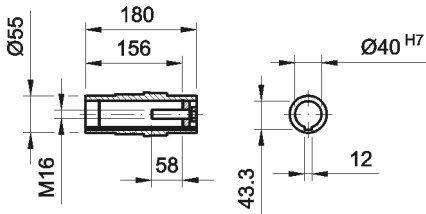
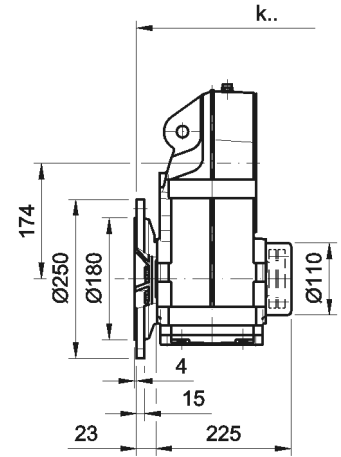
SPFH36..



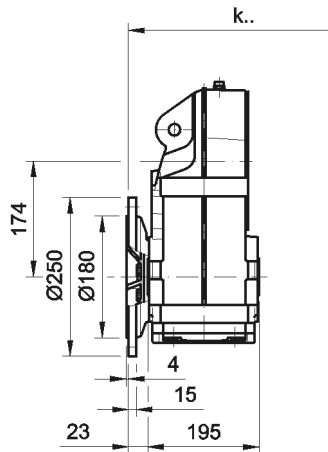
SPFN36..



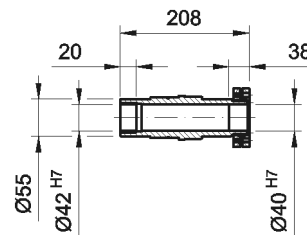
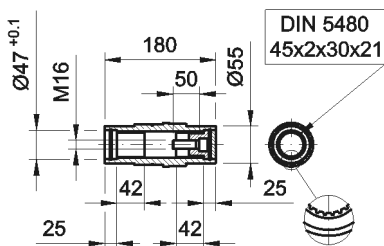
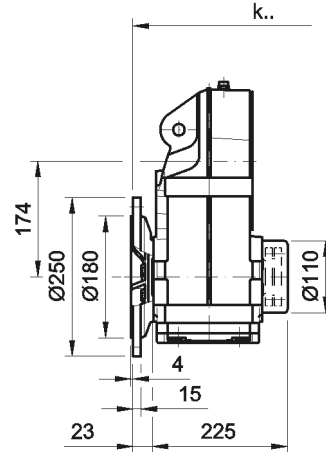
SPFS36..



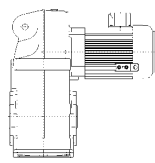
SPFT36..



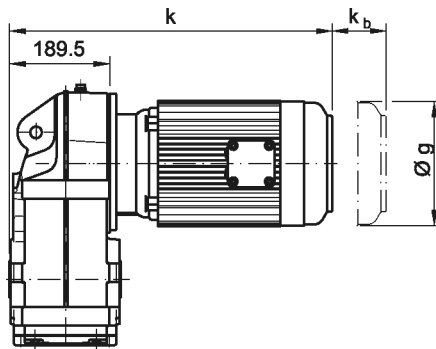
SPFC36..



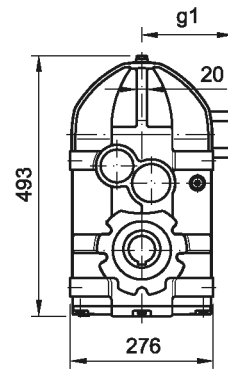
5. SP4



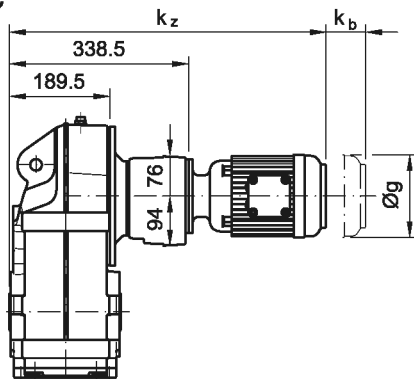
SPZ..46B/C
80 - 200



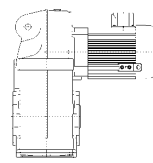
SPZ..46..



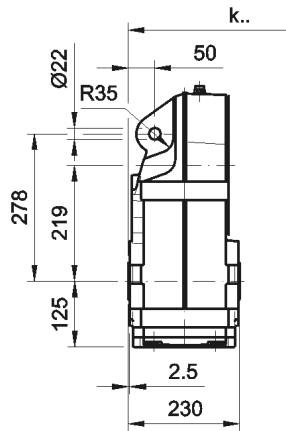
SPZ..46B/C16B/C
63 - 112



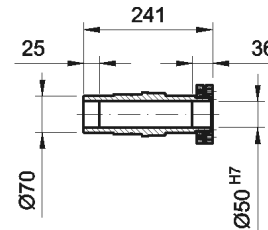
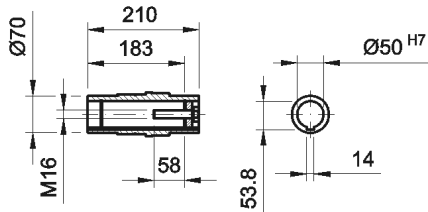
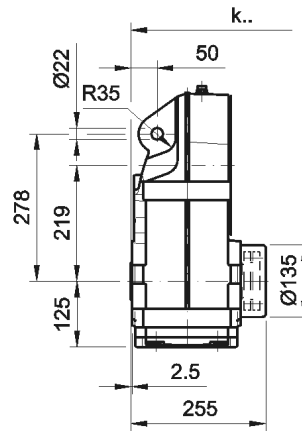
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L					
k			429	471	471	509	522	591	626	626	739	783	768	806	864					
ku																				
kz	572	576	599	641	641	679	692													
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350					
Øam																				



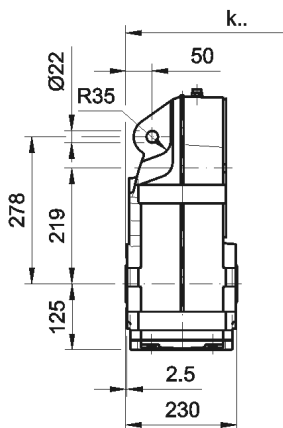
SPZH46..



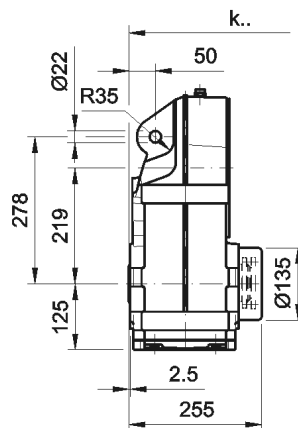
SPZS46..



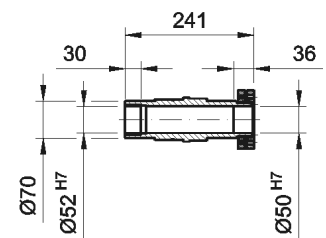
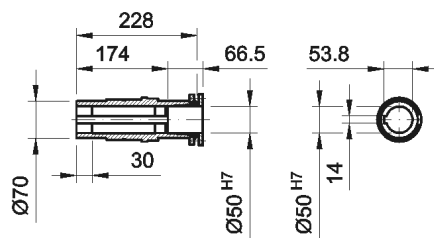
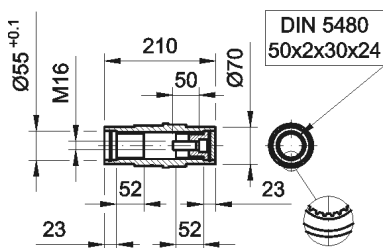
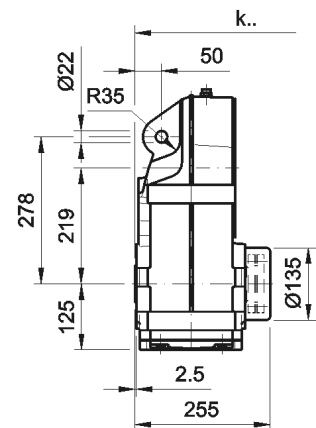
SPZT46..



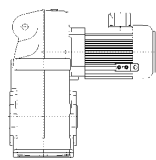
SPZB46..



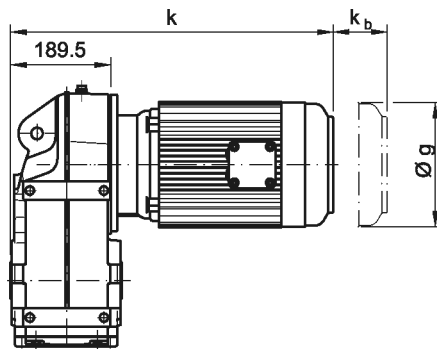
SPZC46..



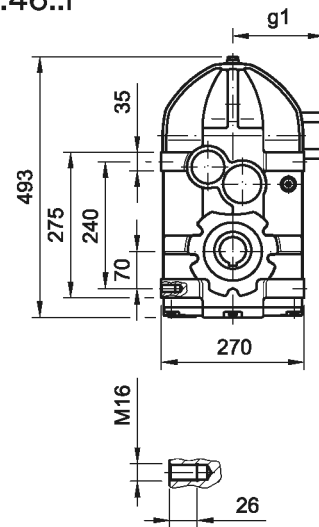
5. SP4



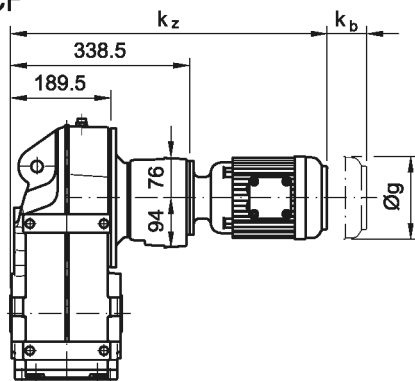
SPZ..46B/CF
80 - 200



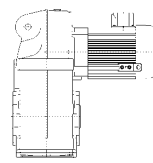
SPZ..46..F



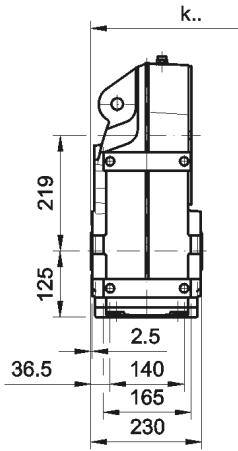
SPZ..46B/C16B/CF
63 - 112



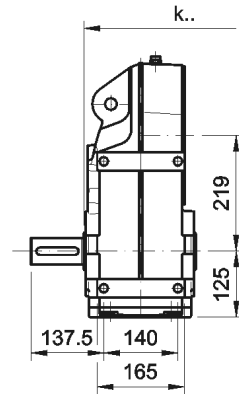
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L					
k			429	471	471	509	522	591	626	626	739	783	768	806	864					
ku																				
kz	572	576	599	641	641	679	692													
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350					
Øam																				



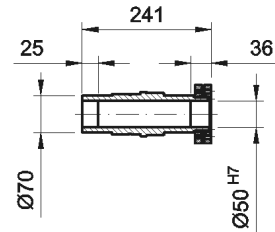
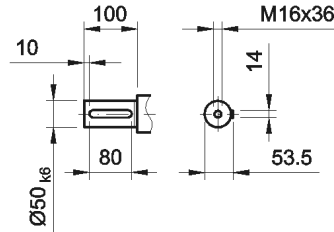
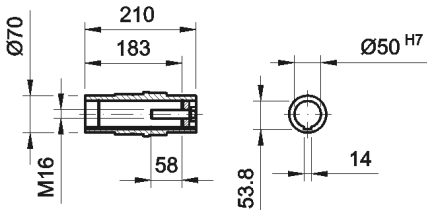
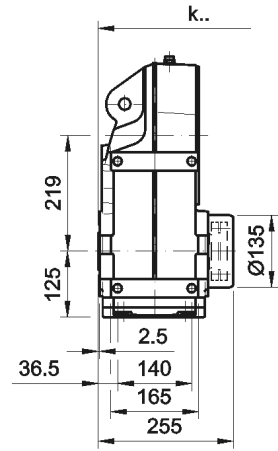
SPZH46..F..



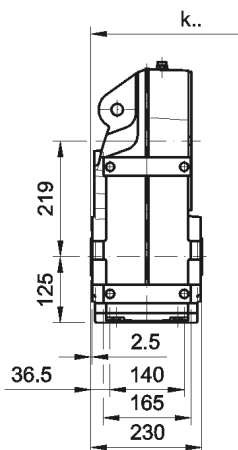
SPZN46..F..



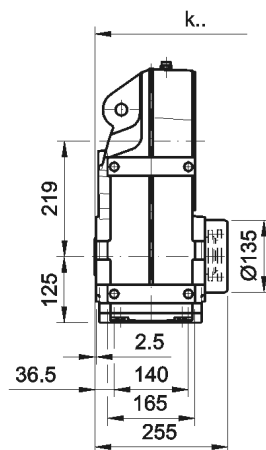
SPZS46..F..



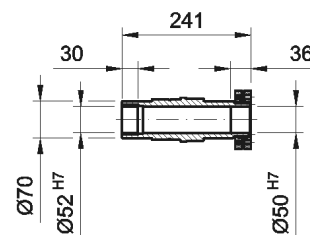
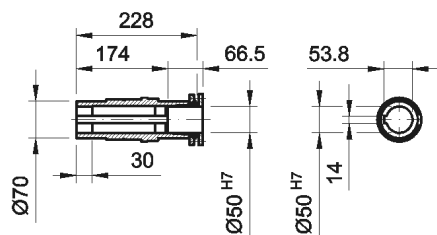
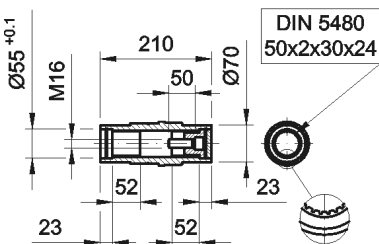
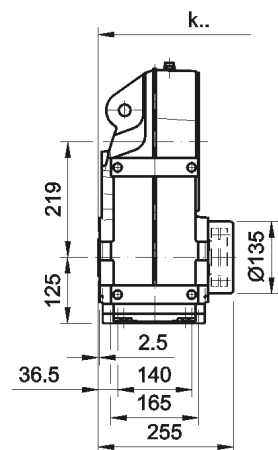
SPZT46..F..



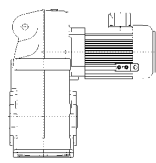
SPZB46..F..



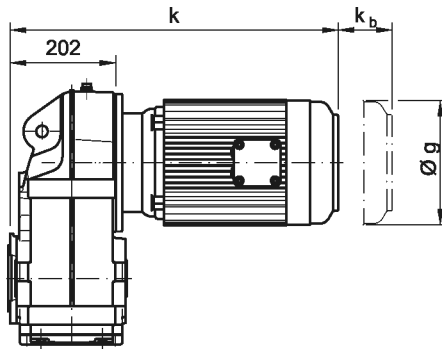
SPZC46..F..



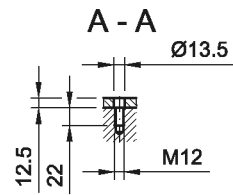
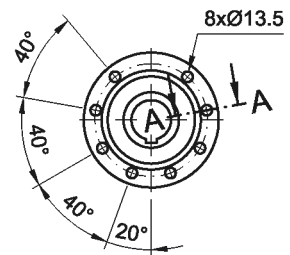
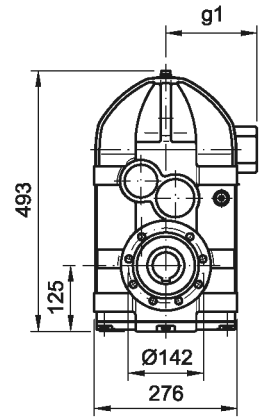
5. SP4



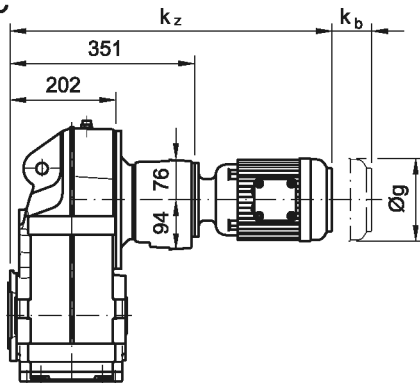
SPT..46B/C
80 - 200



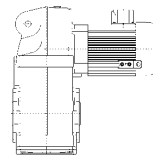
SPT..46..



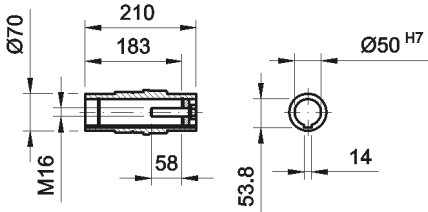
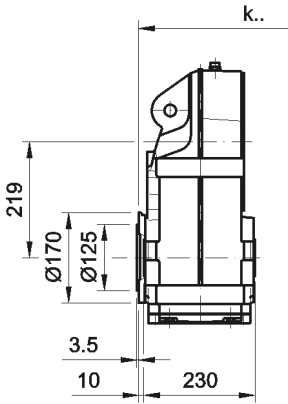
SPT..46B/C16B/C
63 - 112



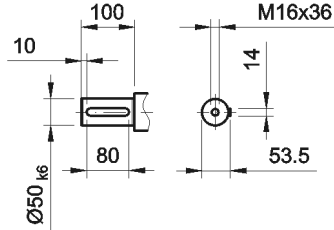
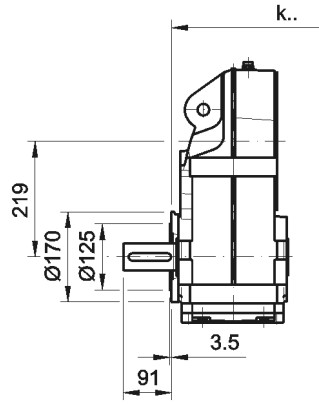
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L					
k			441	483	483	521	534	603	638	638	751	795	780	818	876					
ku																				
kz	584	588	611	653	653	691	704													
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350					
Øam																				



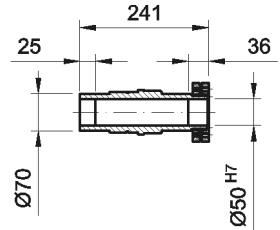
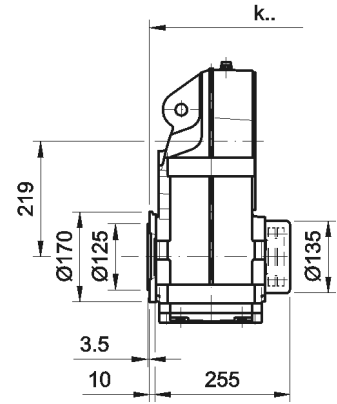
SPTH46..



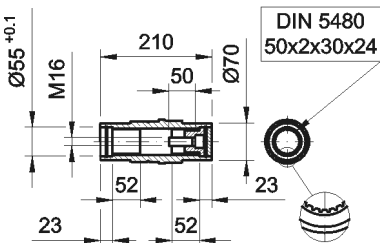
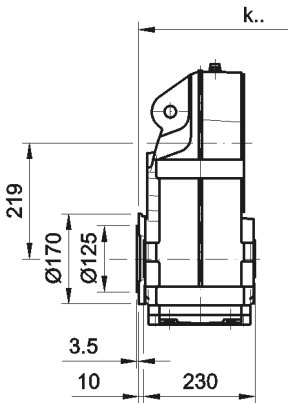
SPTN46..



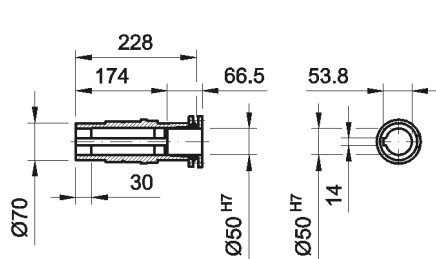
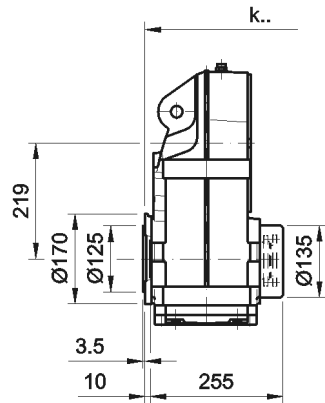
SPTS46..



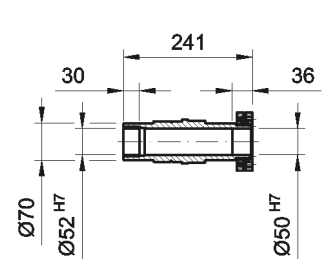
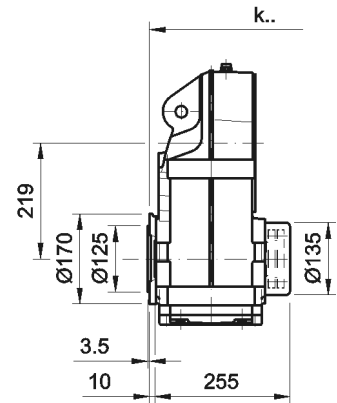
SPTT46..



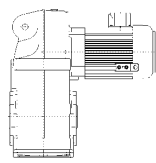
SPTB46..



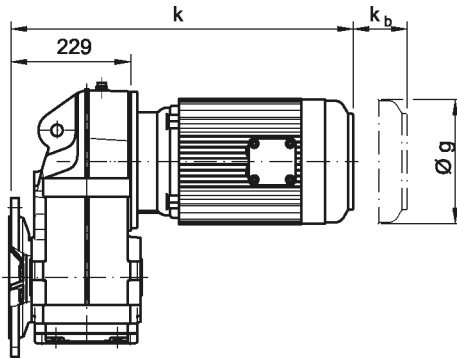
SPTC46..



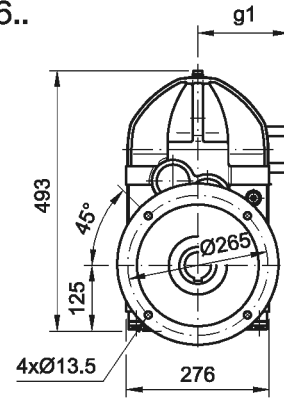
5. SP4



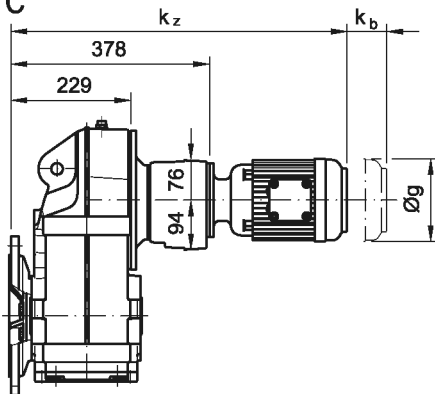
SPF..46B/C
80 - 200



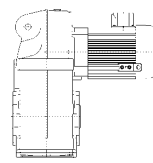
SPF..46..



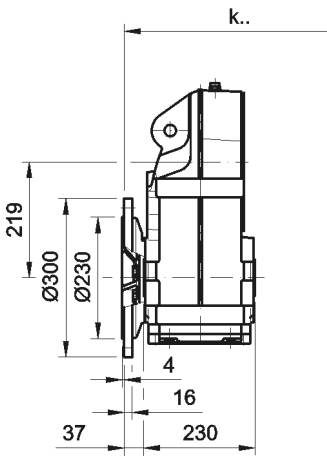
SPF..46B/C16B/C
63 - 112



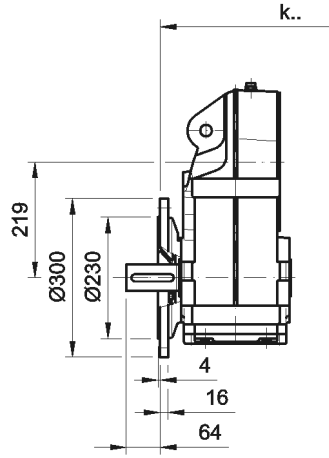
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L					
k			468	510	510	548	561	630	665	665	778	822	807	845	903					
ku																				
kz	611	615	638	680	680	718	731													
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350					
Øam																				



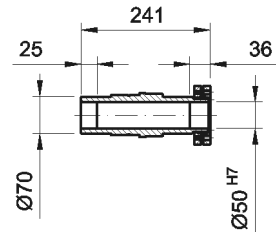
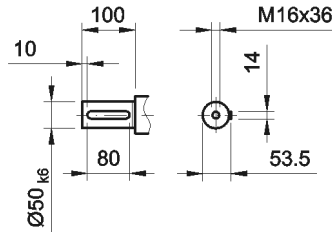
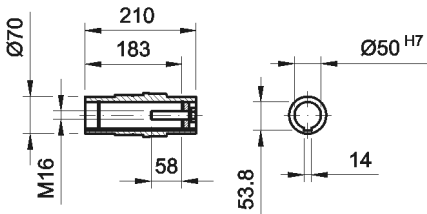
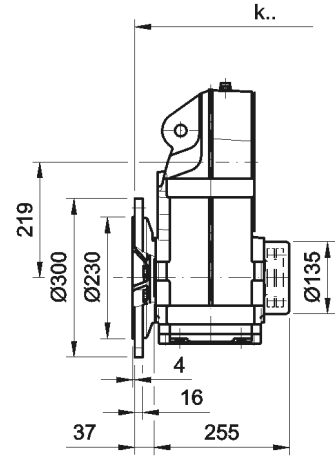
SPFH46..



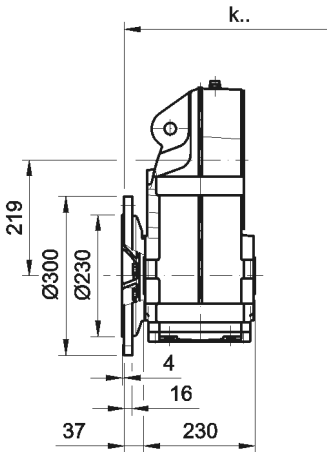
SPFN46..



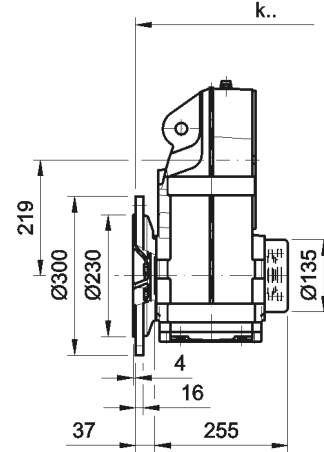
SPFS46..



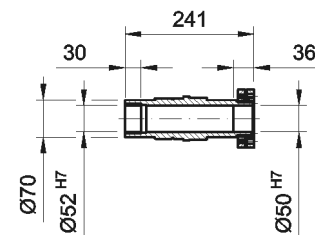
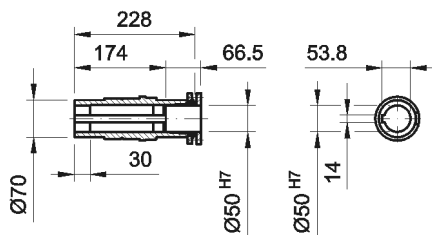
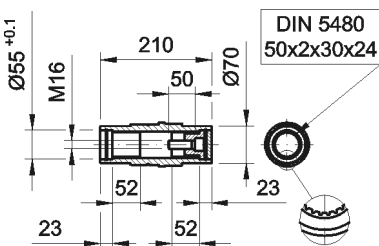
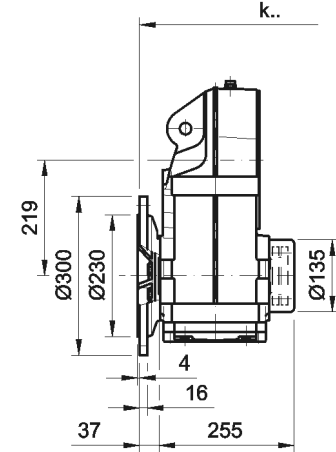
SPFT46..



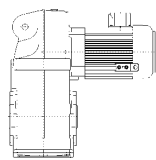
SPFB46..



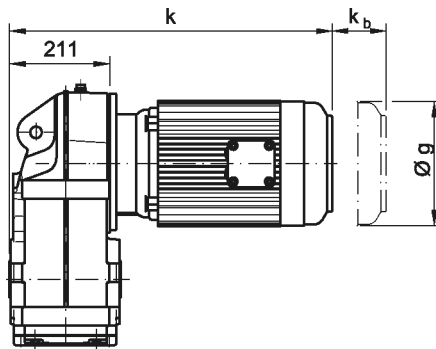
SPFC46..



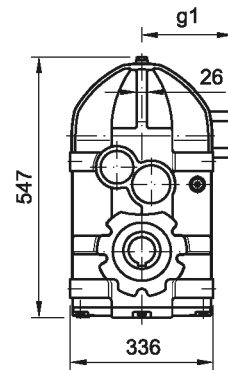
5. SP4



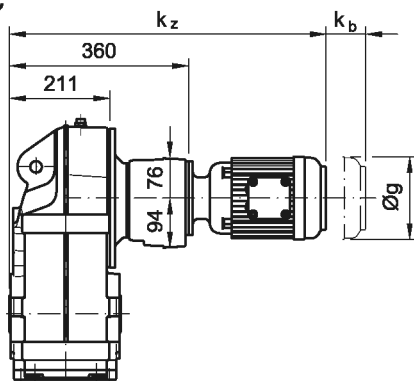
SPZ..56B/C
80 - 200



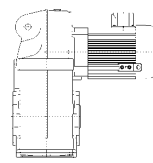
SPZ..56..



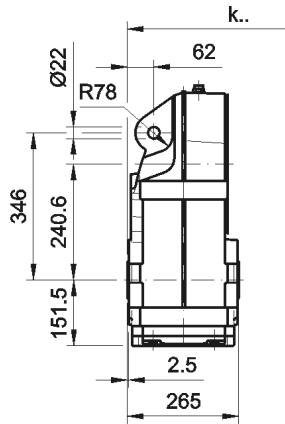
SPZ..56B/C16B/C
63 - 112



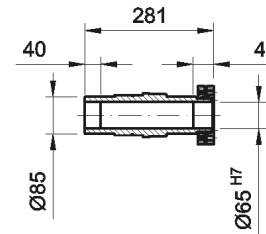
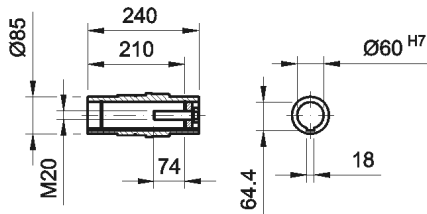
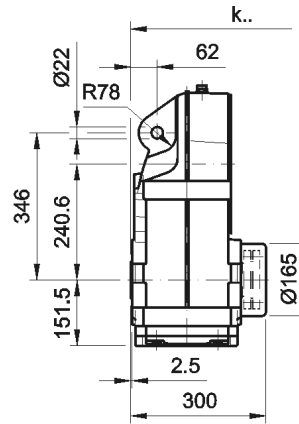
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L					
k			450	492	492	530	543	612	647	647	760	804	789	827	885					
ku																				
kz	593	597	620	662	662	700	713													
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350					
Øam																				



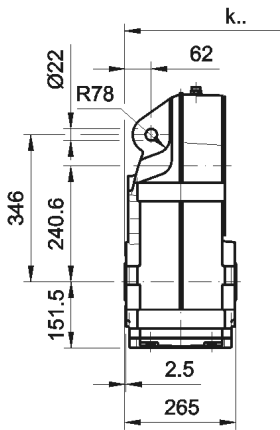
SPZH56..



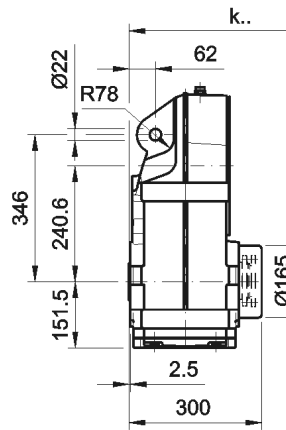
SPZS56..



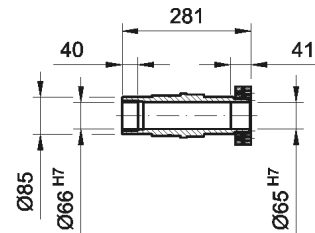
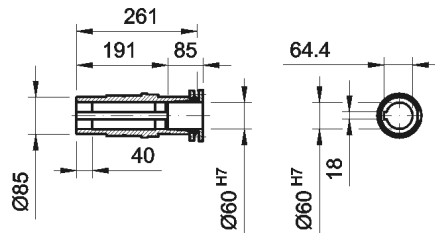
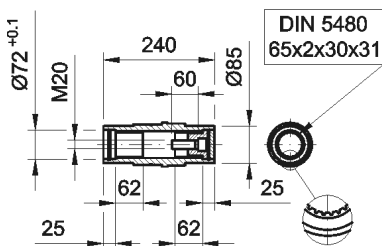
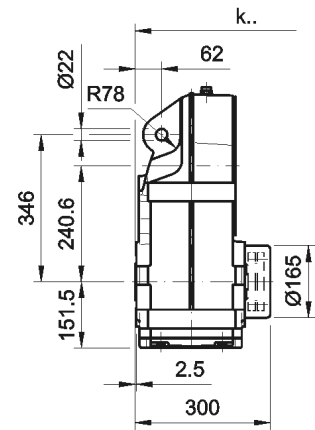
SPZT56..



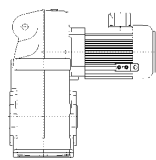
SPZB56..



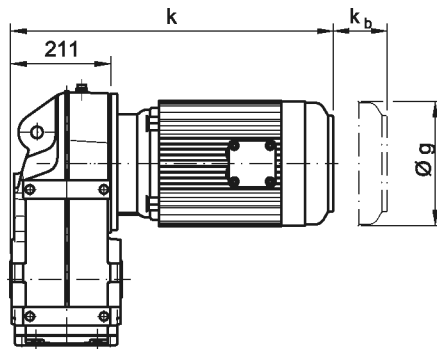
SPZC56..



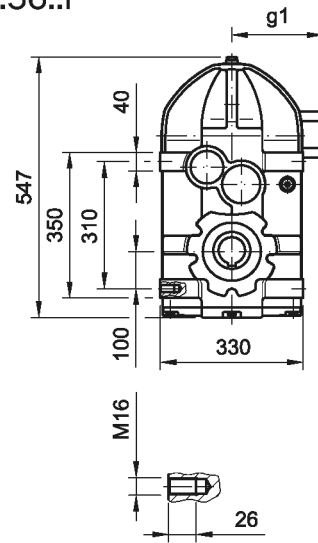
5. SP4



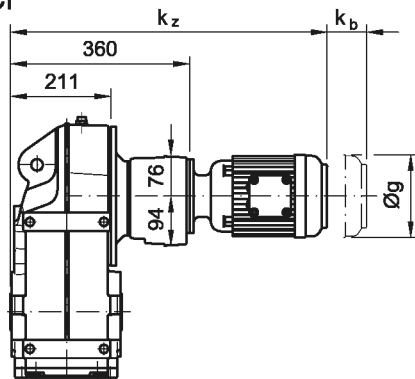
SPZ..56B/CF
80 - 200



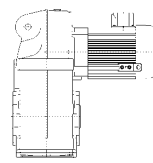
SPZ..56..F



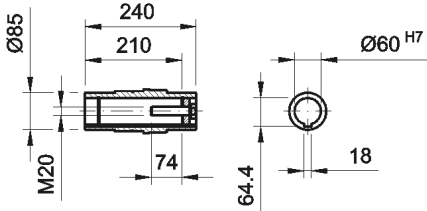
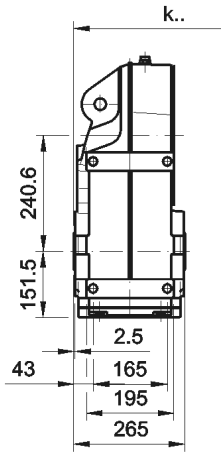
SPZ..56B/C16B/CF
63 - 112



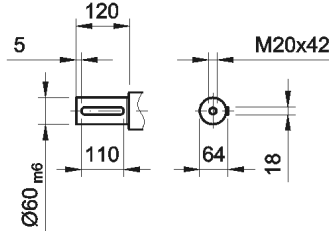
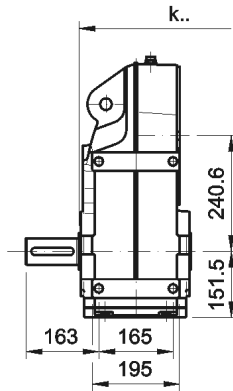
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L					
k			450	492	492	530	543	612	647	647	760	804	789	827	885					
ku																				
kz	593	597	620	662	662	700	713													
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350					
Øam																				



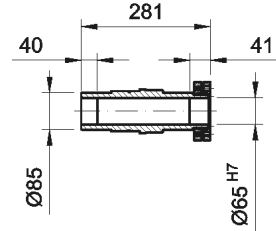
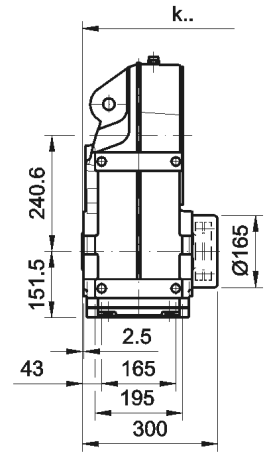
SPZH56..F..



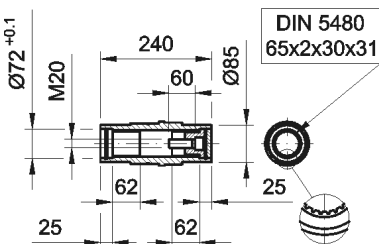
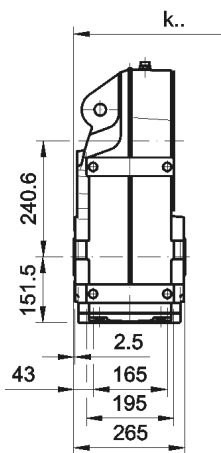
SPZN56..F..



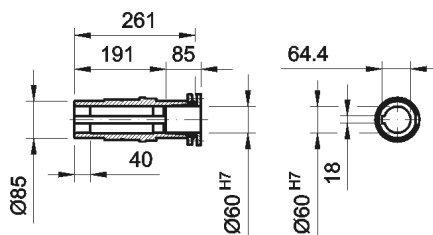
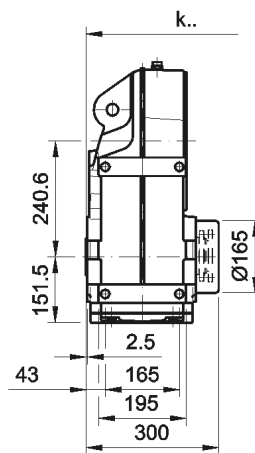
SPZS56..F..



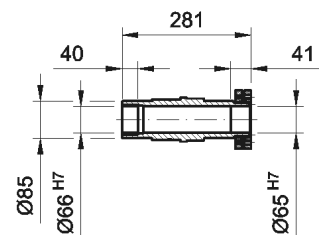
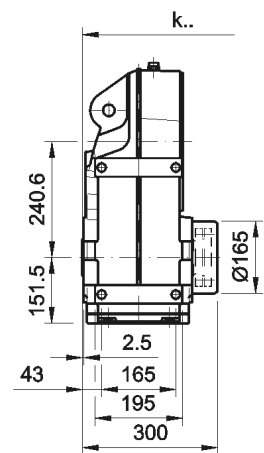
SPZT56..F..



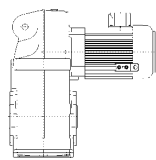
SPZB56..F..



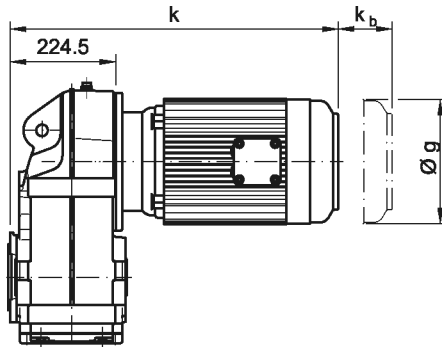
SPZC56..F..



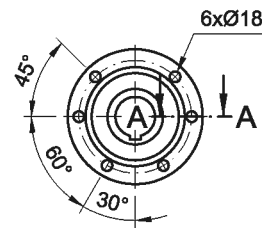
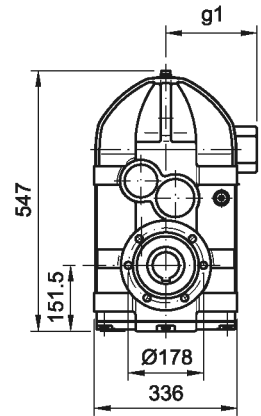
5. SP4



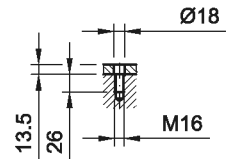
SPT..56B/C
80 - 200



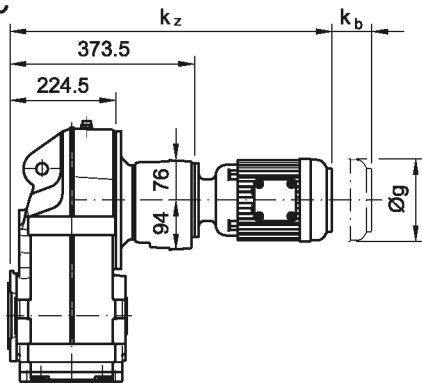
SPT..56..



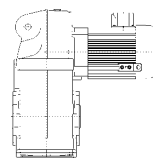
A - A



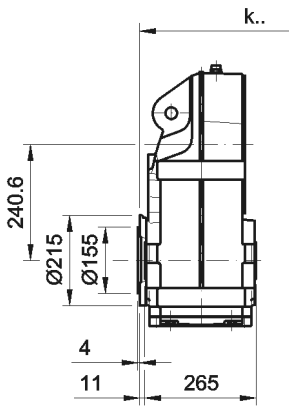
SPT..56B/C16B/C
63 - 112



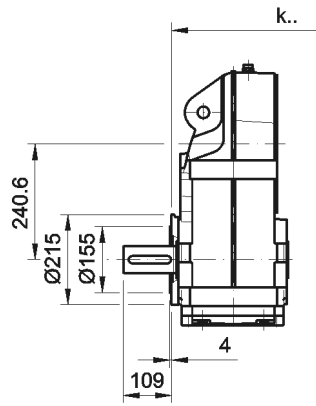
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L					
k			464	506	506	544	557	626	661	661	774	818	803	841	899					
ku																				
kz	607	611	634	676	676	714	727													
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420					
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350					
Øam																				



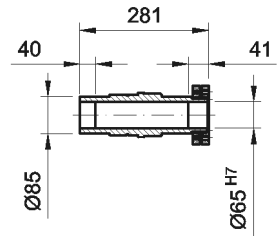
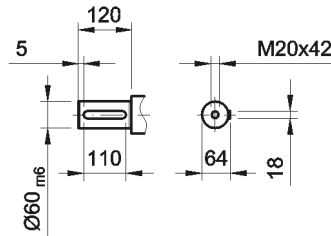
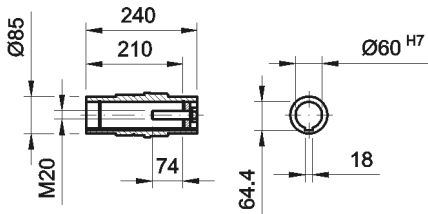
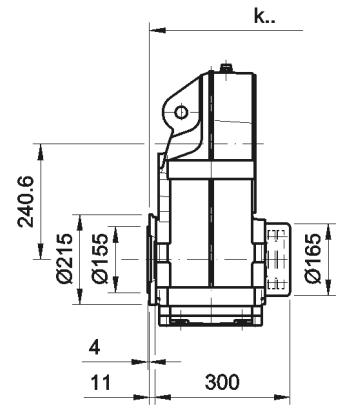
SPTH56..



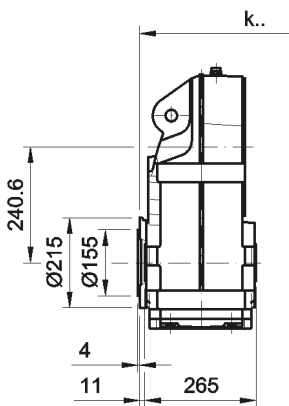
SPTN56..



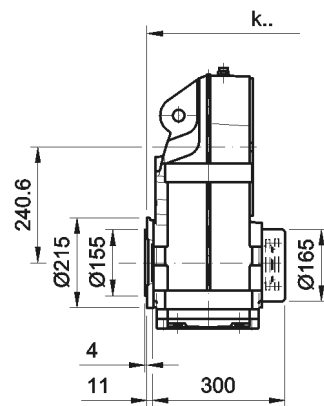
SPTS56..



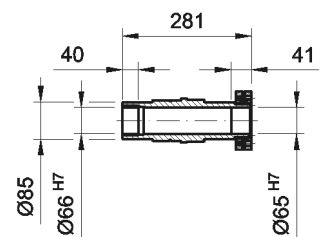
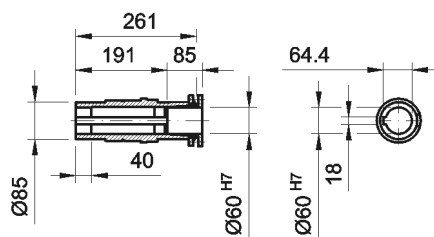
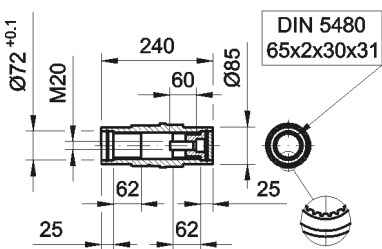
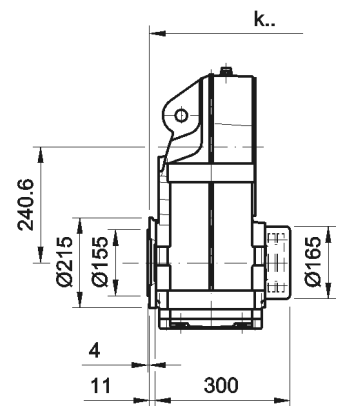
SPTT56..



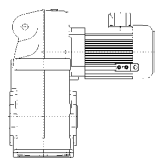
SPTB56..



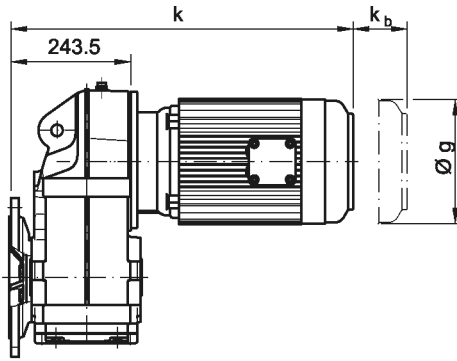
SPTC56..



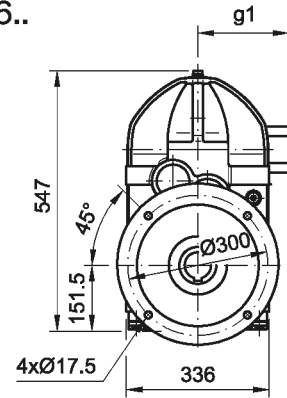
5. SP4



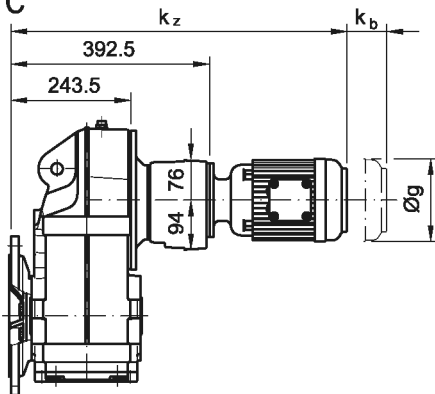
SPF..56B/C
80 - 200



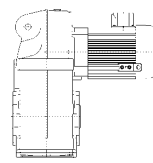
SPF..56..



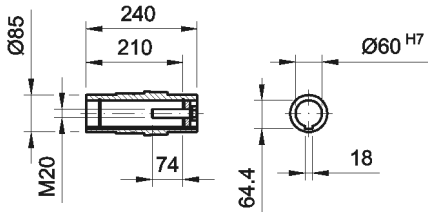
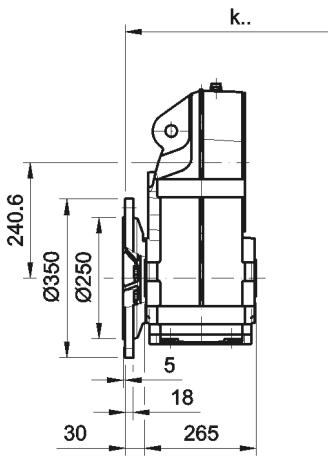
SPF..56B/C16B/C
63 - 112



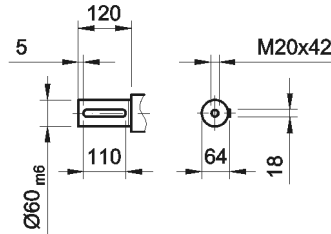
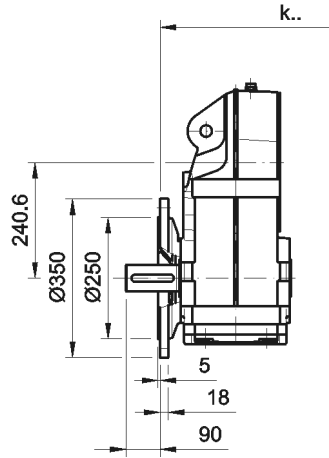
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			483	525	525	563	576	645	680	680	793	837	822	860	918				
ku																			
kz	626	623	653	695	695	733	746												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



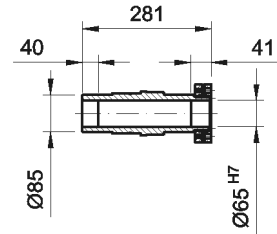
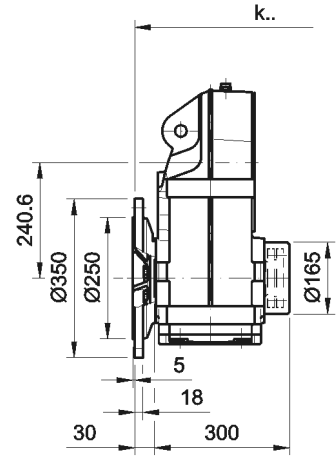
SPFH56..



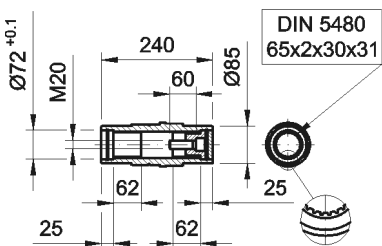
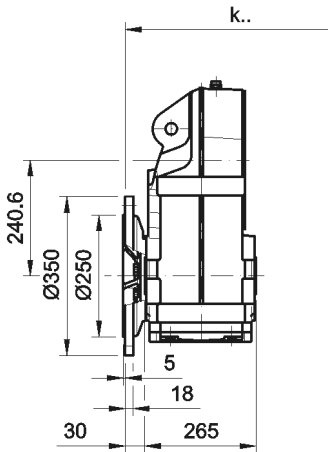
SPFN56..



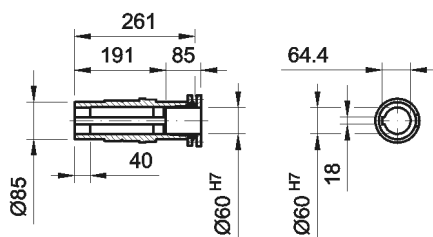
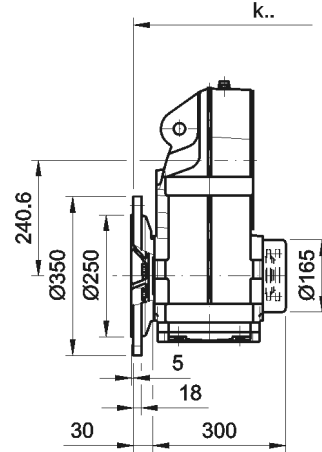
SPFS56..



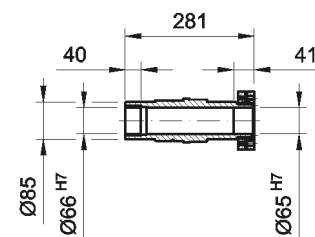
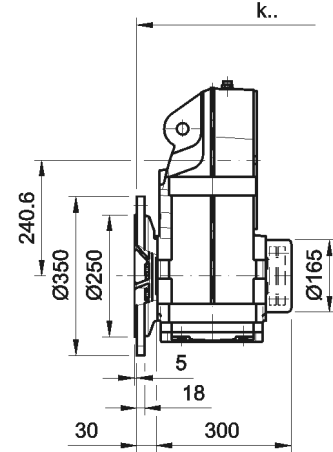
SPFT56..



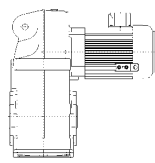
SPFB56..



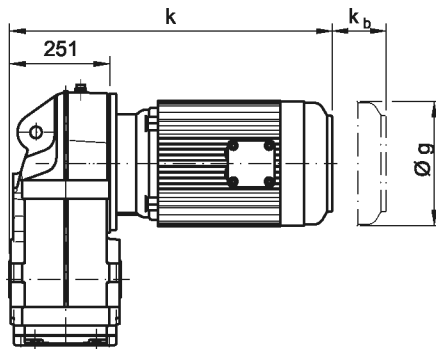
SPFC56..



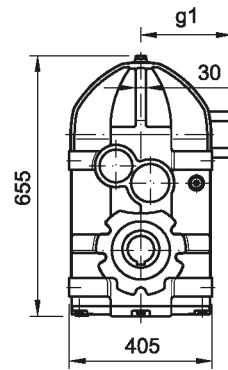
5. SP4



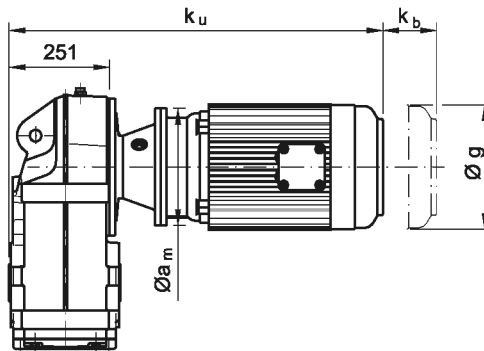
SPZ..66B/C
100 - 225



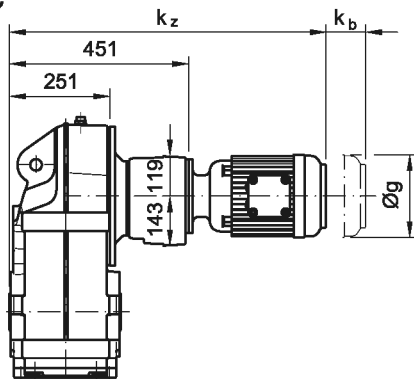
SPZ..66..



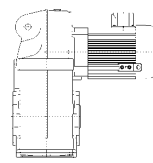
SPZ..66B/C-U
100 - 280



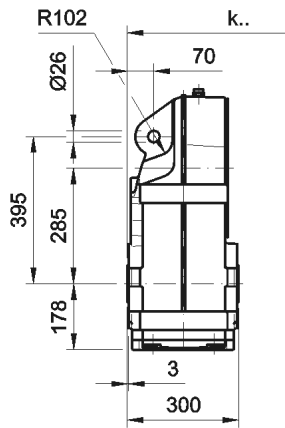
SPZ..66B/C36B/C
63 - 160



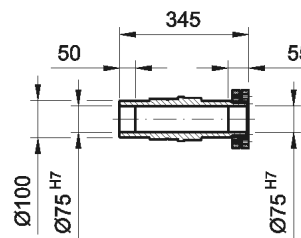
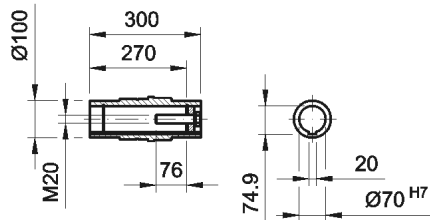
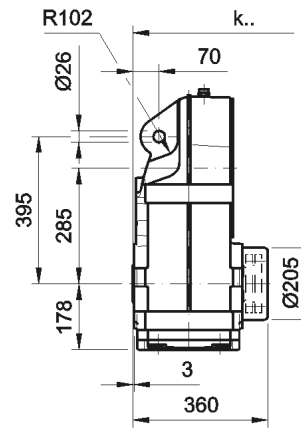
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						562	575	644	679	679	792	836	821	859	933	1002	1042			
ku						693	708	775	810		953	1008	1190	1230	1295	1360	1390	1481	1576	1616
kz	675	679	702	744	744	782	795	864	899	899	1012	1056								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



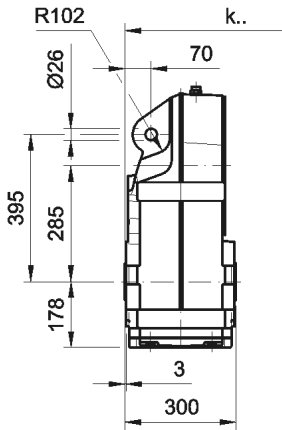
SPZH66..



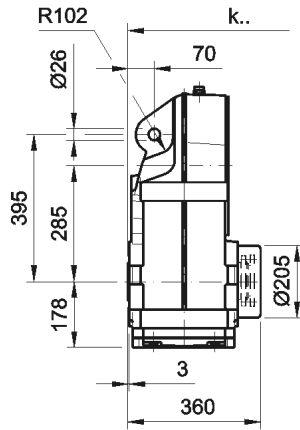
SPZS66..



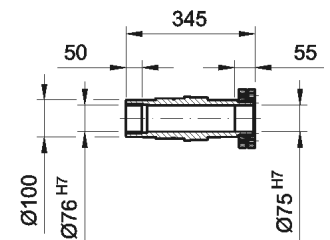
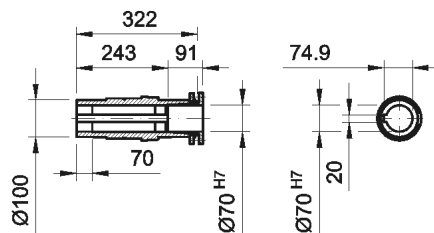
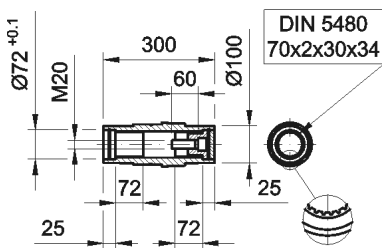
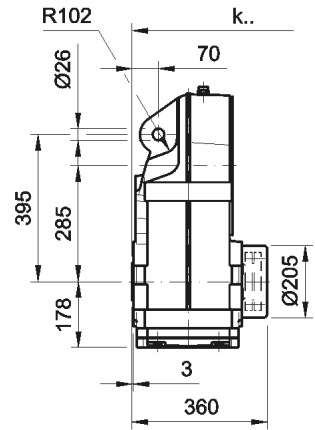
SPZT66..



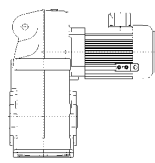
SPZB66..



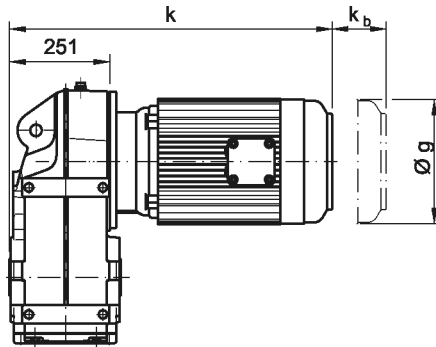
SPZC66..



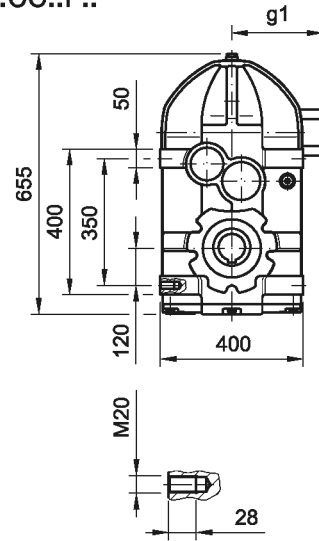
5. SP4



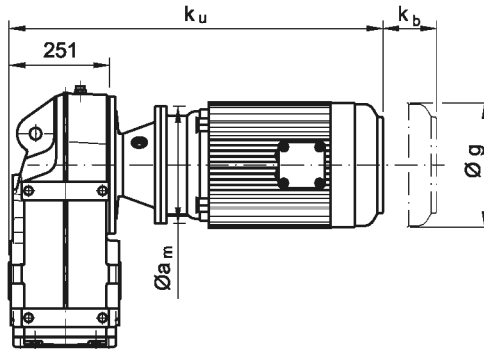
SPZ..66B/CF
100 - 225



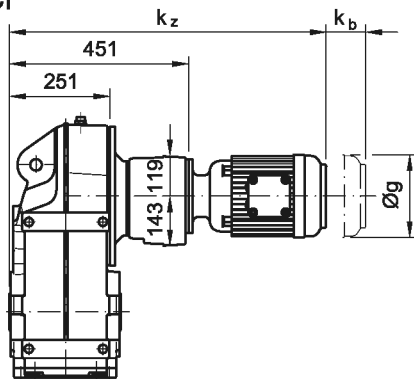
SPZ..66..F..



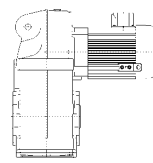
SPZ..66B/CF-U
100 - 280



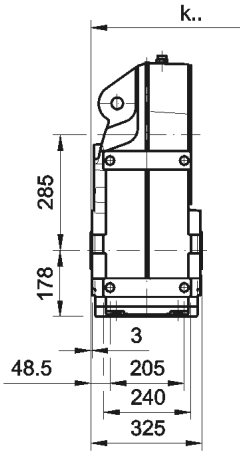
SPZ..66B/C36B/CF
63 - 160



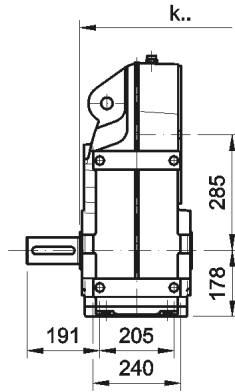
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						562	575	644	679	679	792	836	821	859	933	1002	1042			
ku						693	708	775	810		953	1008	1190	1230	1295	1360	1390	1481	1576	1616
kz	675	679	702	744	744	782	795	864	899	899	1012	1056								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



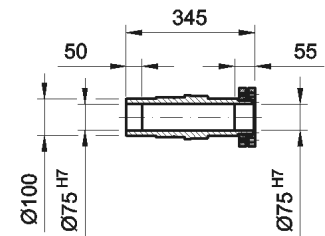
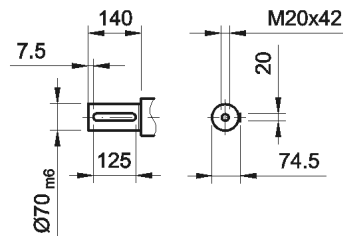
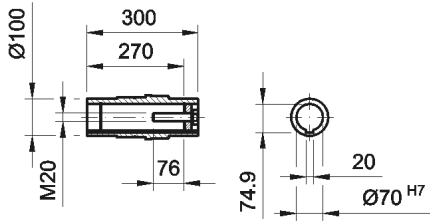
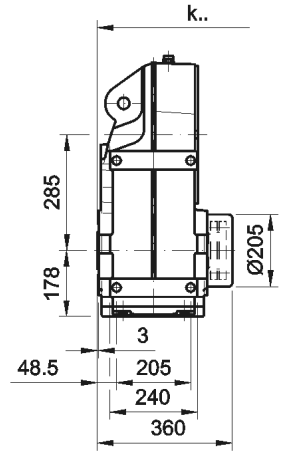
SPZH66..F..



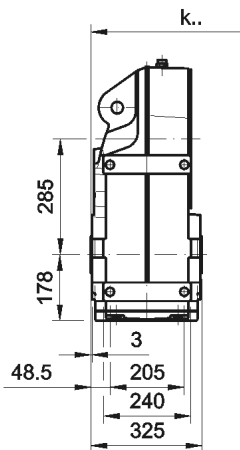
SPZN66..F..



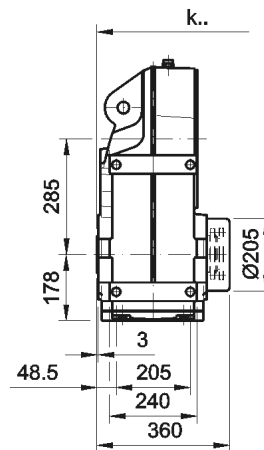
SPZS66..F..



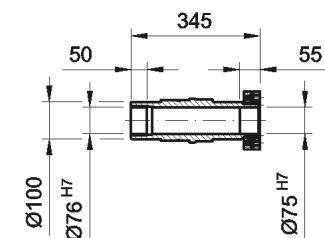
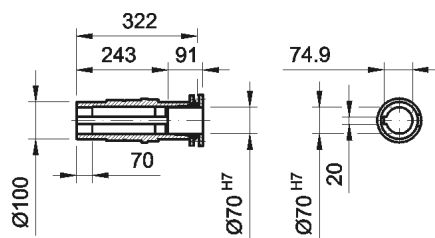
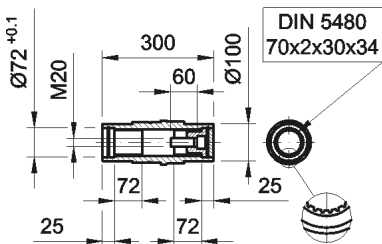
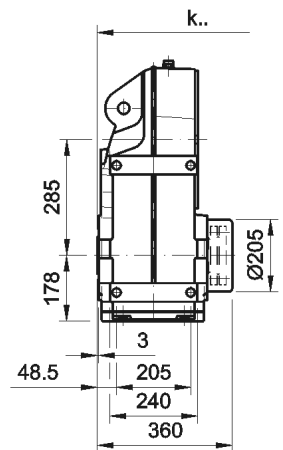
SPZT66..F..



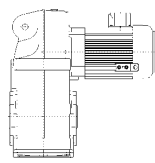
SPZB66..F..



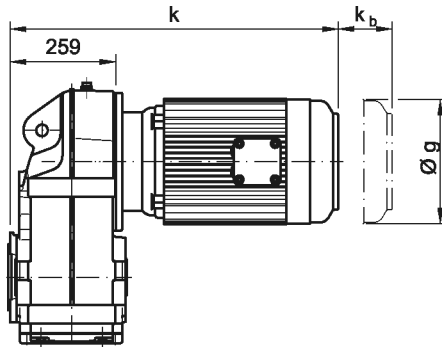
SPZC66..F..



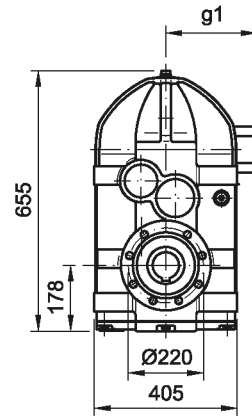
5. SP4



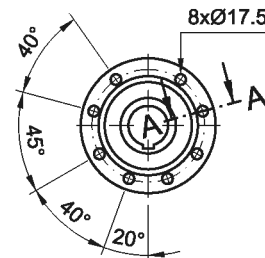
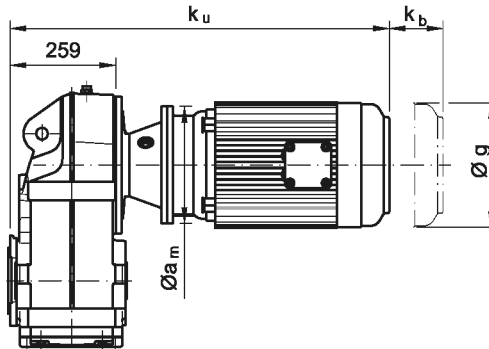
SPT..66B/C
100 - 225



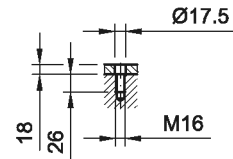
SPT..66..



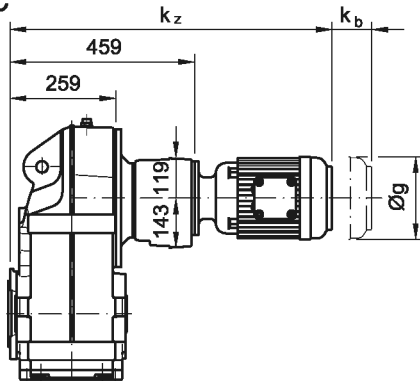
SPT..66B/C-U
100 - 280



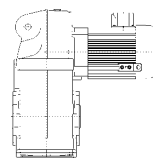
A - A



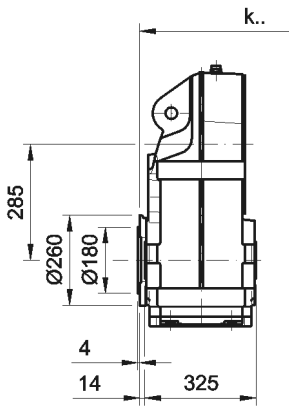
SPT..66B/C36B/C
63 - 160



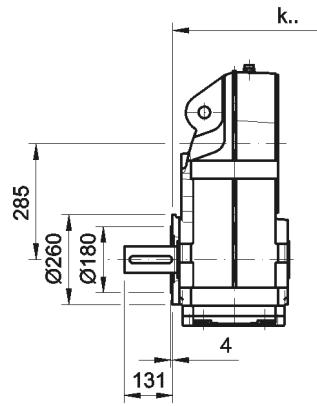
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						570	583	652	687	687	800	844	829	867	941	1010	1050			
ku						701	716	783	818		961	1016	1198	1238	1303	1368	1398	1489	1584	1624
kz	683	687	710	752	752	790	803	872	907	907	1020	1064								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300			350	350	350	350	400	450	450	550	550	550



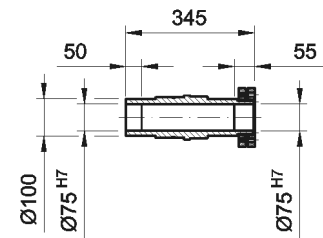
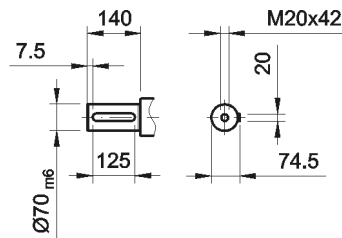
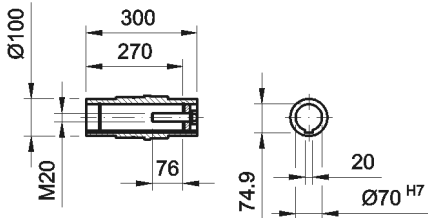
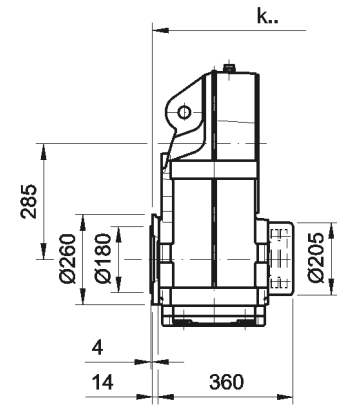
SPTH66..



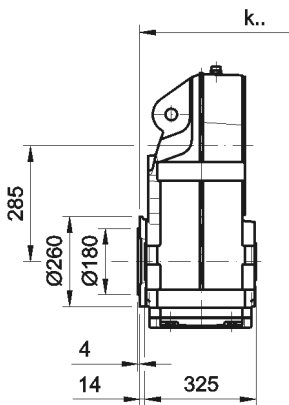
SPTN66..



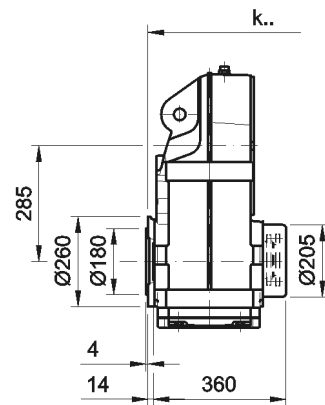
SPTS66..



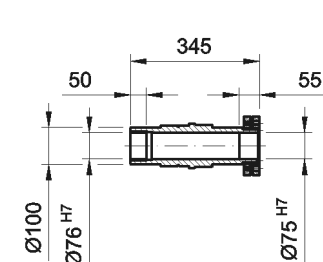
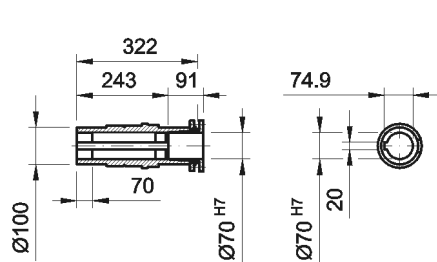
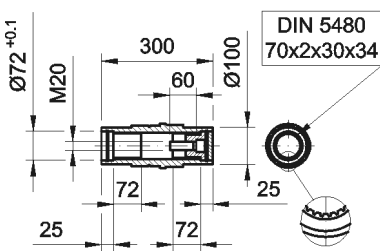
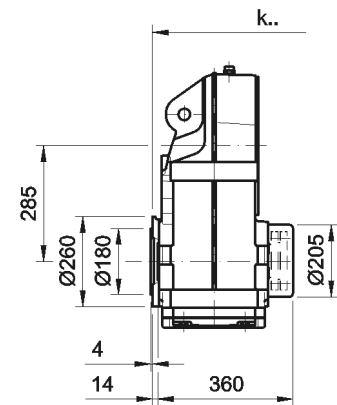
SPTT66..



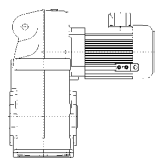
SPTB66..



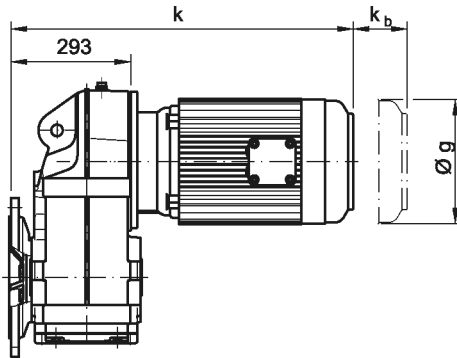
SPTC66..



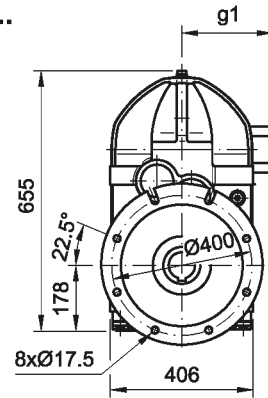
5. SP4



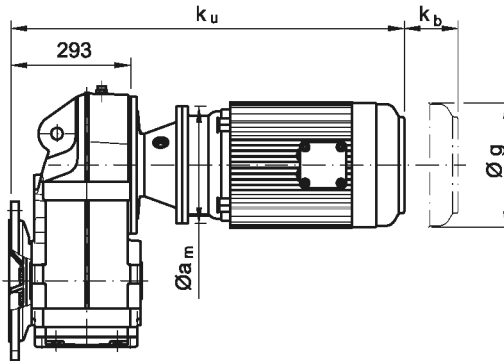
SPF..66B/C
100 - 225



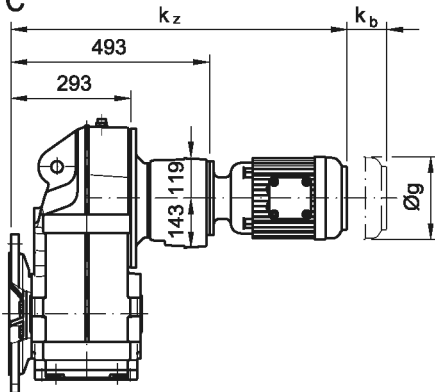
SPF..66..



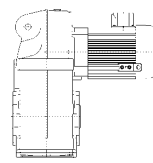
SPF..66B/C-U
100 - 280



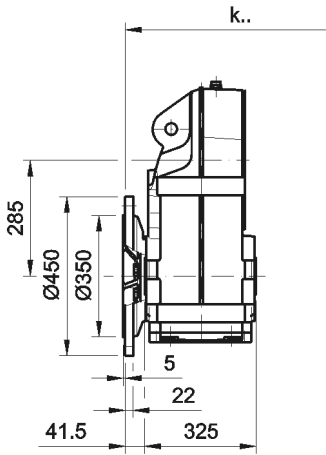
SPF..66B/C36B/C
63 - 160



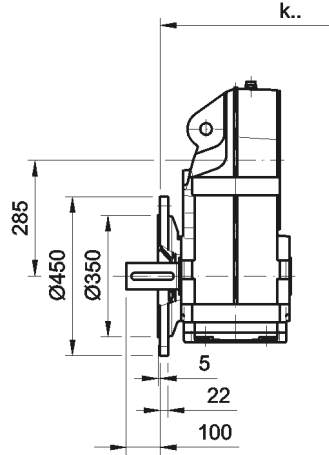
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						604	617	686	721	721	834	878	863	901	975	1044	1084			
ku						735	750	817	852		995	1050	1232	1272	1337	1402	1432	1523	1618	1658
kz	717	721	744	786	786	824	837	906	941	941	1054	1098								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



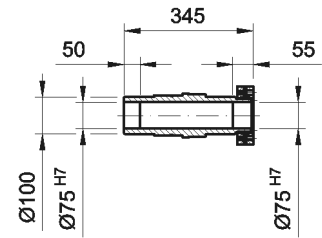
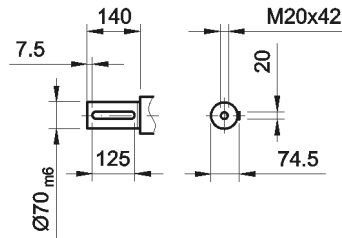
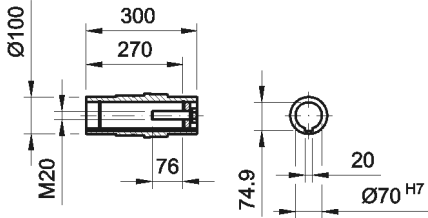
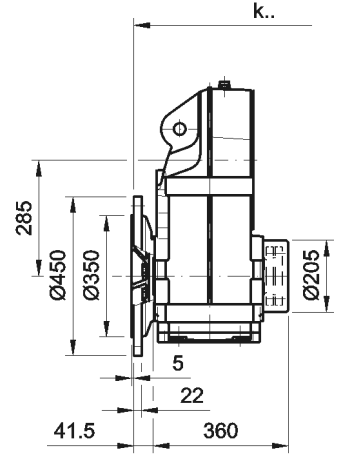
SPFH66..



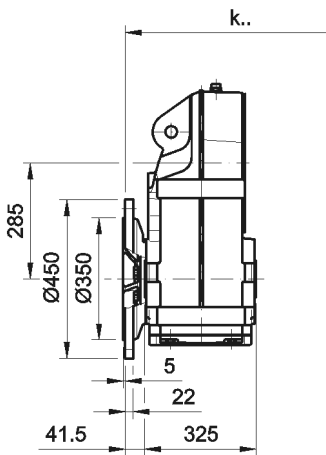
SPFN66..



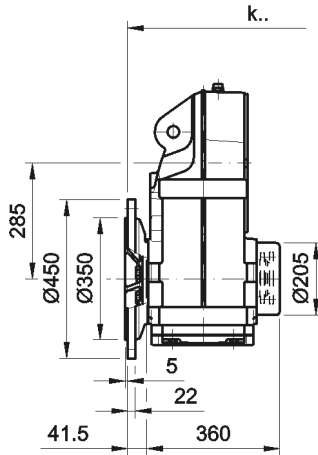
SPFS66..



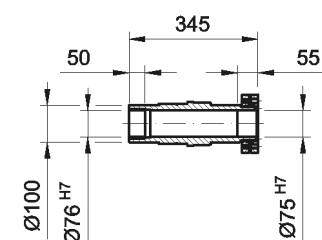
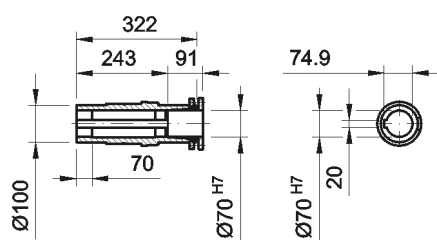
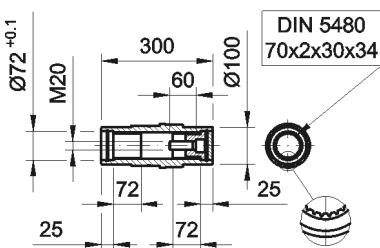
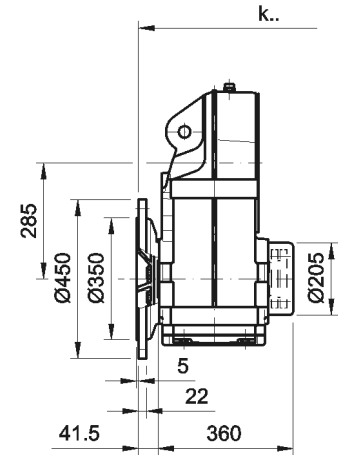
SPFT66..



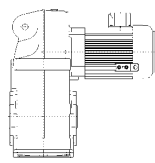
SPFB66..



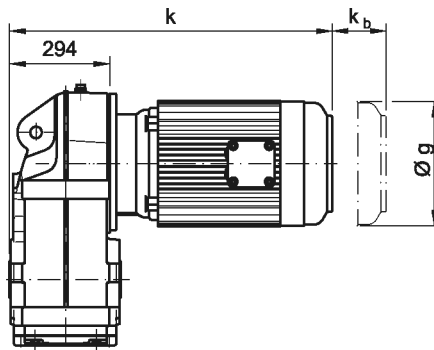
SPFC66..



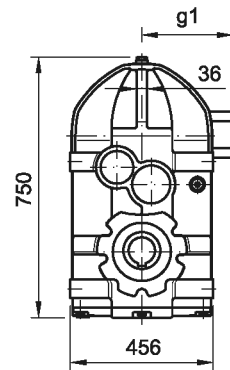
5. SP4



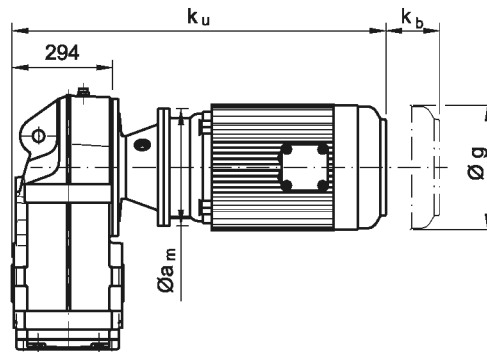
SPZ..76B/C
100 - 225



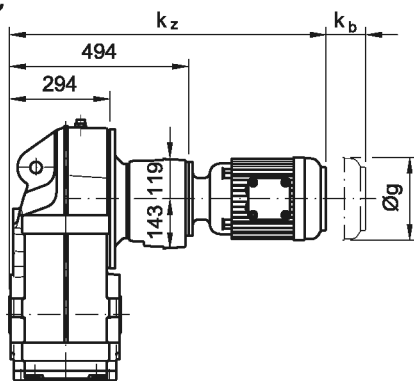
SPZ..76..



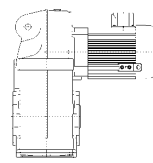
SPZ..76B/C-U
100 - 280



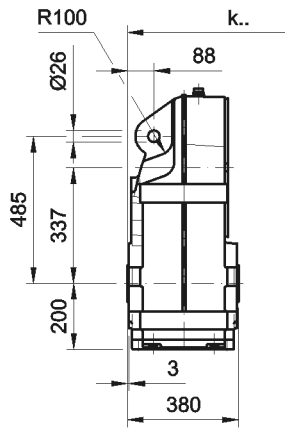
SPZ..76B/C36B/C
63 - 160



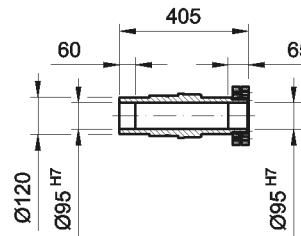
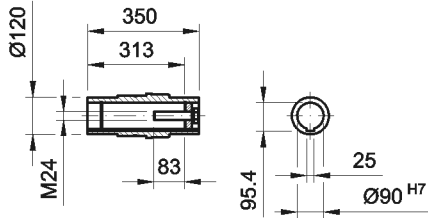
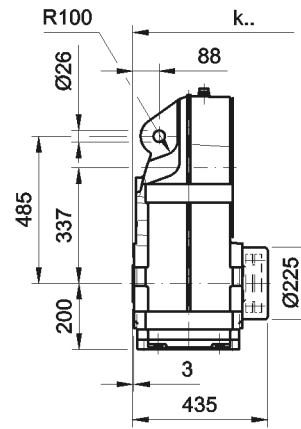
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						605	618	687	722	722	835	879	864	902	976	1045	1085				
ku						736	751	818	853		996	1051	1233	1273	1338	1403	1433	1524	1619	1659	
kz	718	722	745	787	787	825	838	907	942	942	1055	1099									
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	



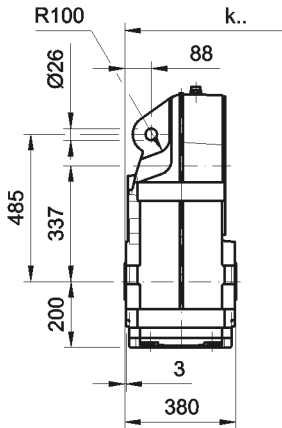
SPZH76..



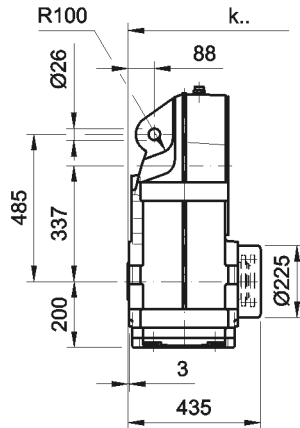
SPZS76..



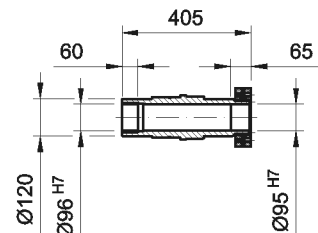
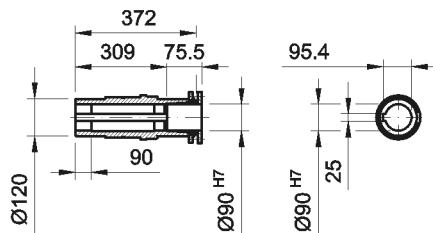
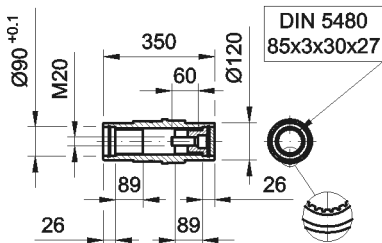
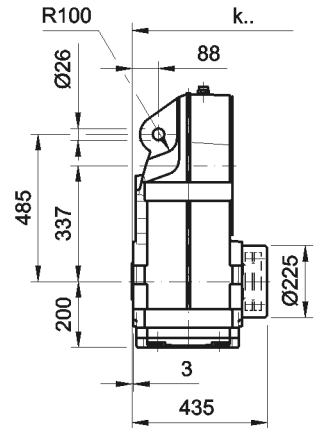
SPZT76..



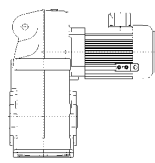
SPZB76..



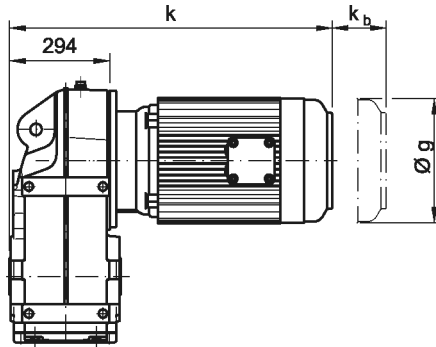
SPZC76..



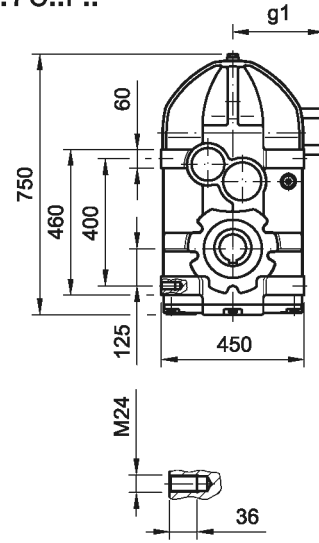
5. SP4



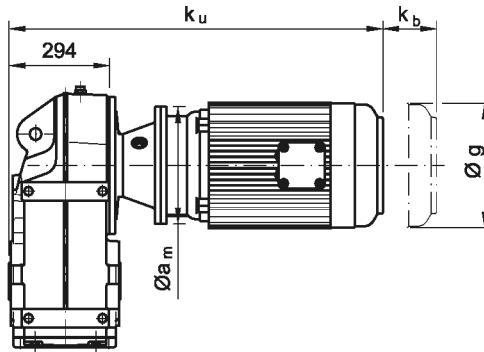
SPZ..76B/CF
100 - 225



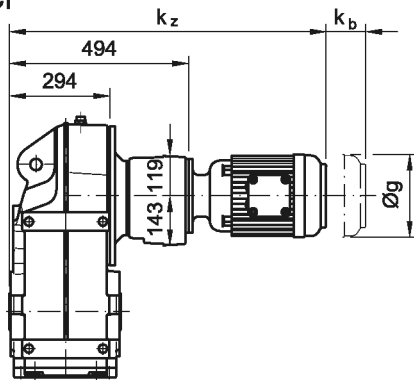
SPZ..76..F..



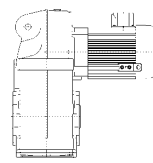
SPZ..76B/CF-U
100 - 280



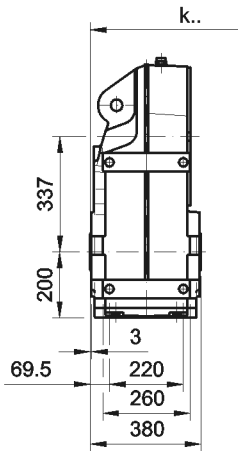
SPZ..76B/C36B/CF
63 - 160



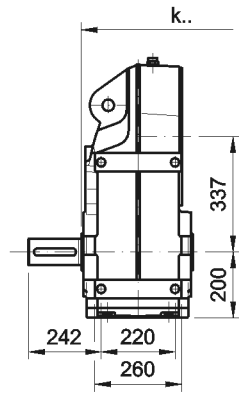
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M		
k						605	618	687	722	722	835	879	864	902	976	1045	1085					
ku						736	751	818	853		996	1051	1233	1273	1338	1403	1433	1524	1619	1659		
kz	718	722	745	787	787	825	838	907	942	942	1055	1099										
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148					
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580		
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445		
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550		



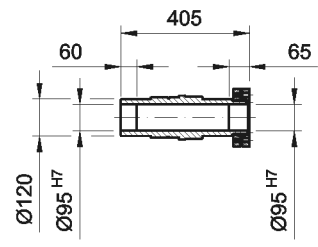
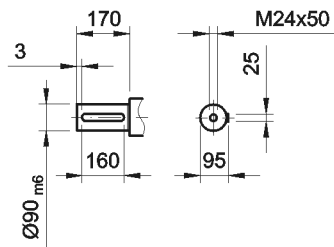
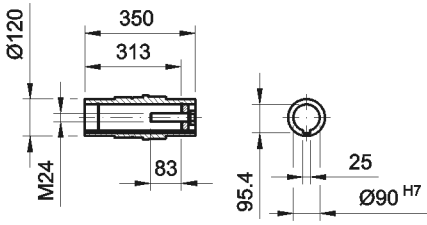
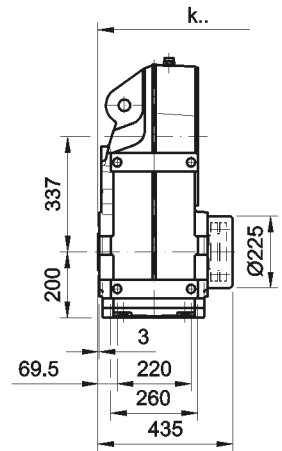
SPZH76..F..



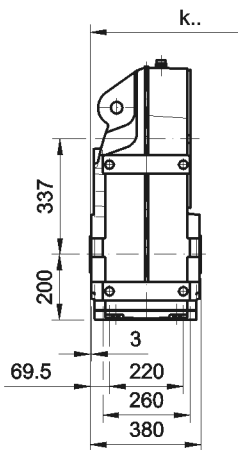
SPZN76..F..



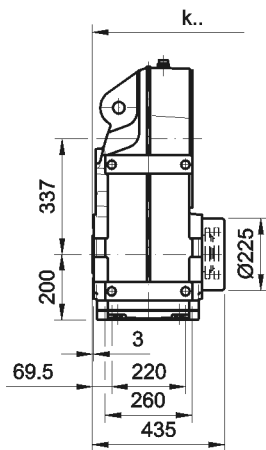
SPZS76..F..



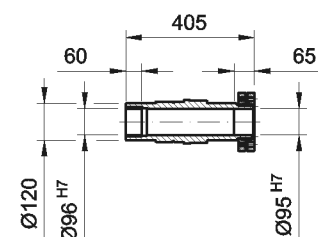
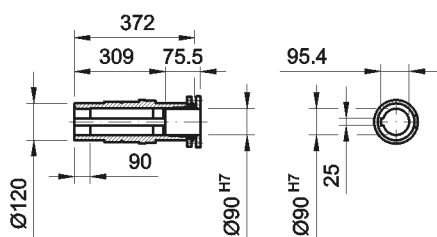
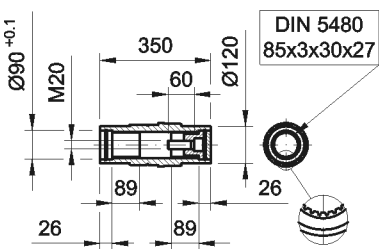
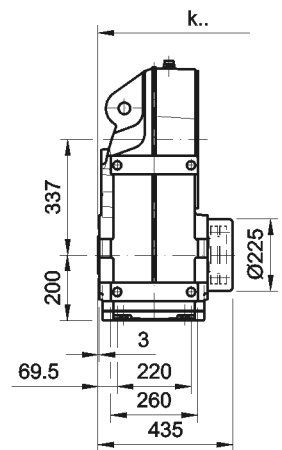
SPZT76..F..



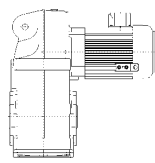
SPZB76..F..



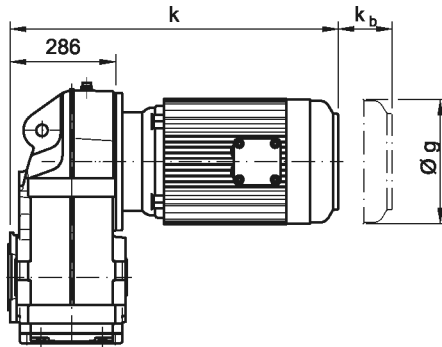
SPZC76..F..



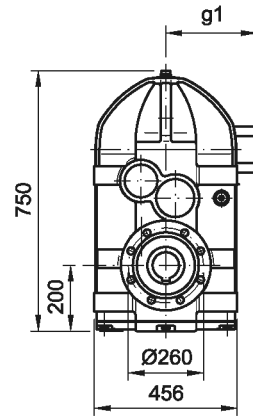
5. SP4



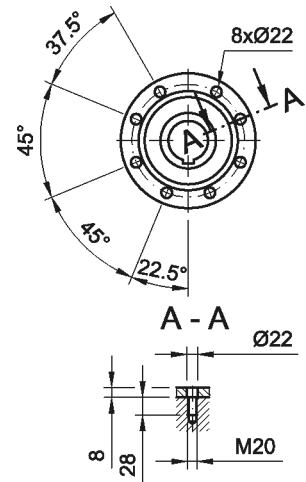
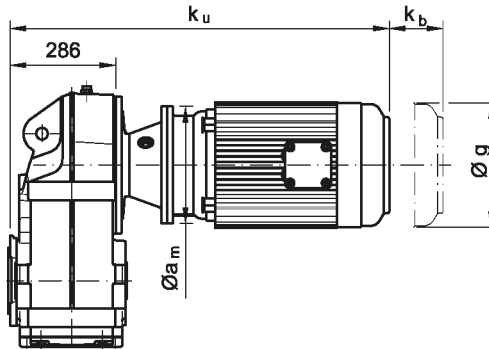
SPT..76B/C
100 - 225



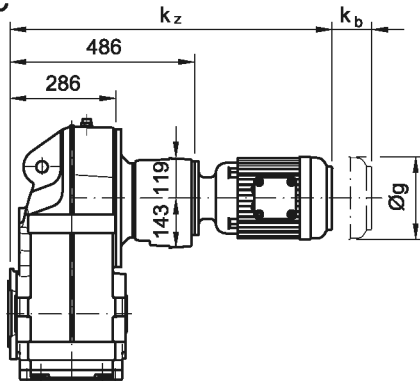
SPT..76..



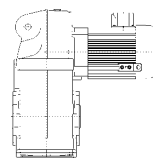
SPT..76B/C-U
100 - 280



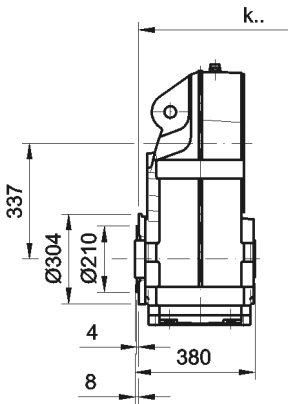
SPT..76B/C36B/C
63 - 160



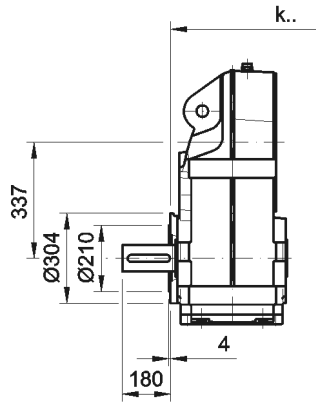
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						597	610	679	714	714	827	871	856	894	968	1037	1077				
ku						728	743	810	845		988	1043	1225	1265	1330	1395	1425	1516	1611	1651	
kz	710	714	737	779	779	817	830	899	934	934	1047	1091									
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	



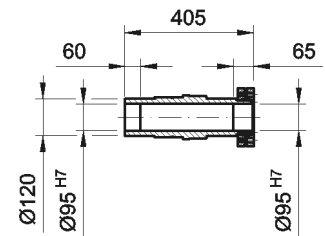
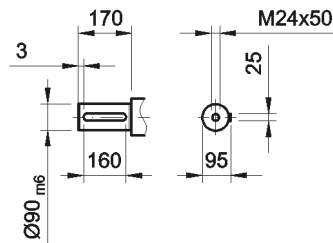
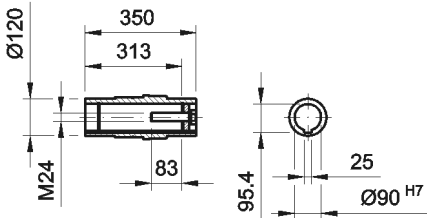
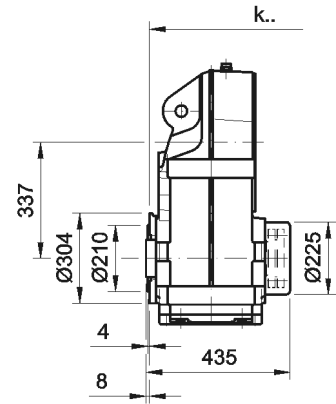
SPTH76..



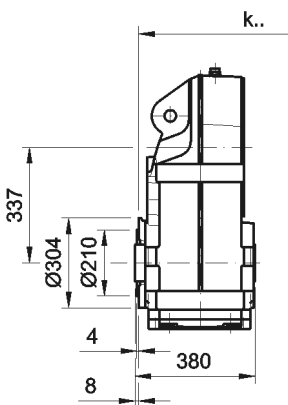
SPTN76..



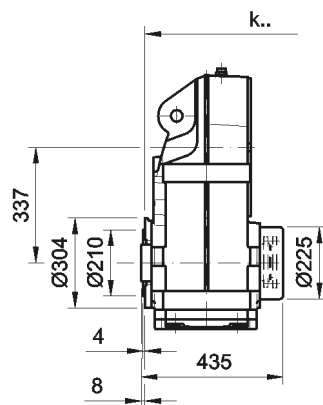
SPTS76..



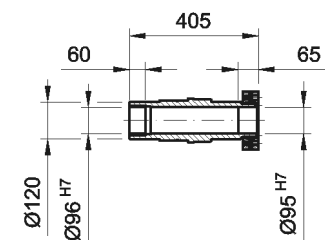
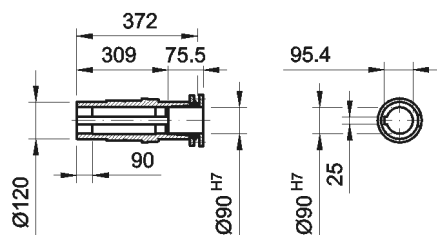
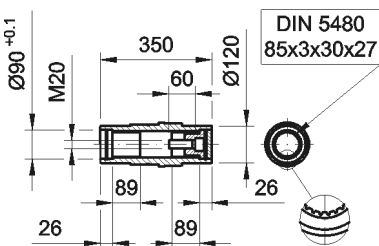
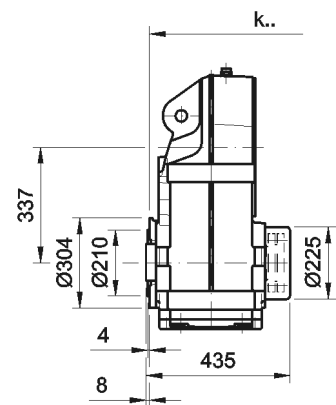
SPTT76..



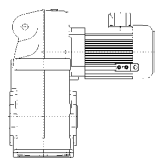
SPTB76..



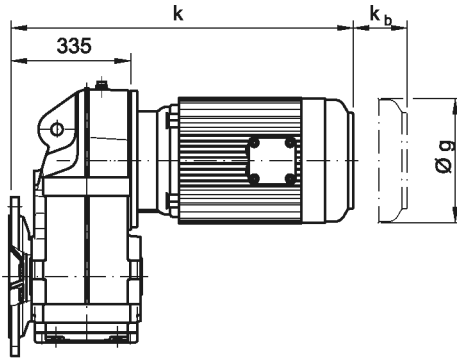
SPTC76..



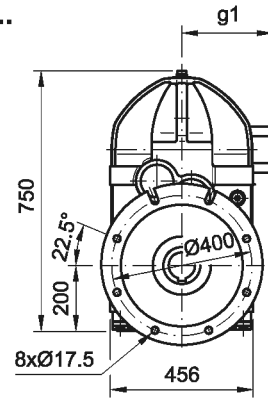
5. SP4



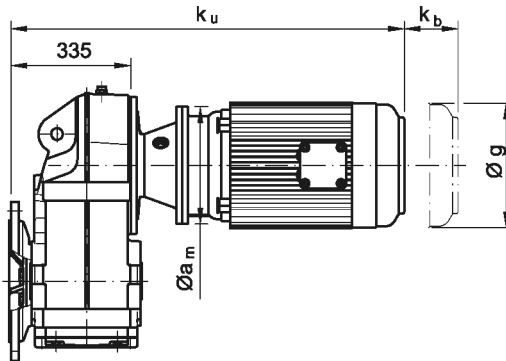
SPF..76B/C
100 - 225



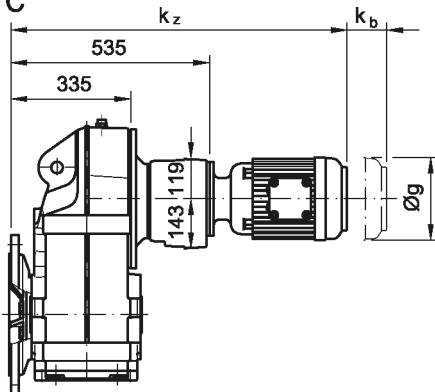
SPF..76..



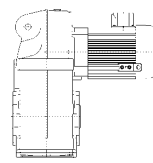
SPF..76B/C-U
100 - 280



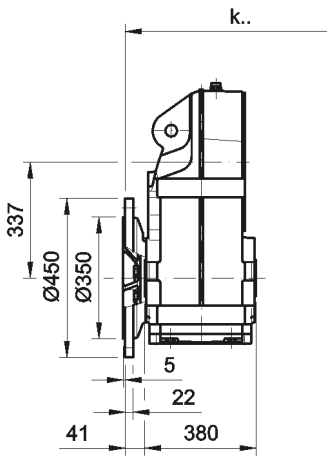
SPF..76B/C36B/C
63 - 160



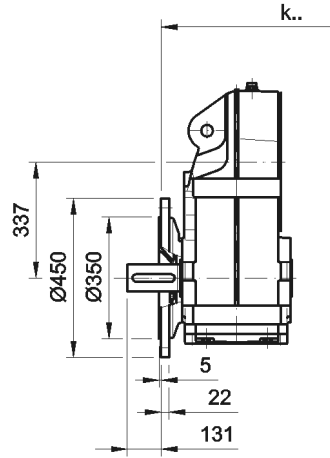
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						646	659	728	763	763	876	920	905	943	1017	1086	1126			
ku						777	792	859	894		1037	1092	1274	1314	1379	1444	1474	1565	1660	1700
kz	759	763	786	828	828	866	879	948	983	983	1096	1140								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



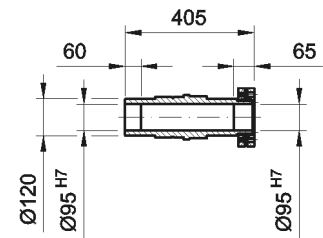
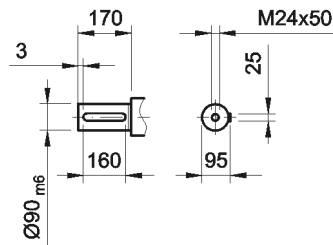
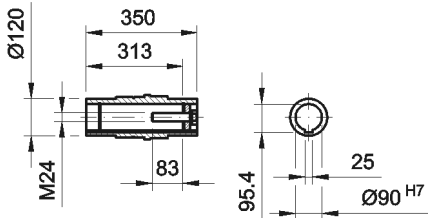
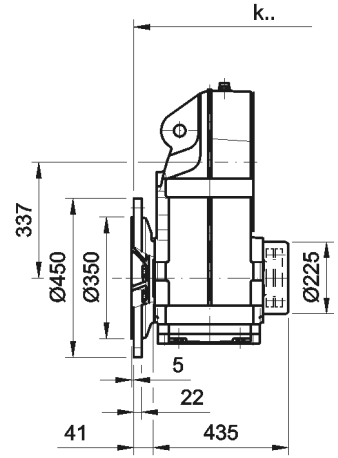
SPFH76..



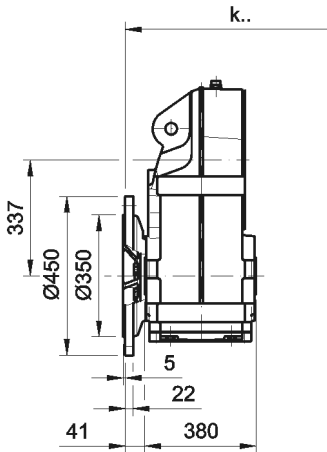
SPFN76..



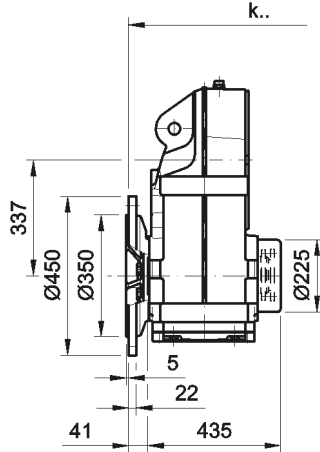
SPFS76..



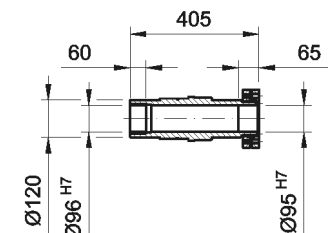
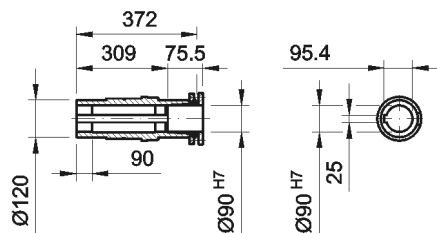
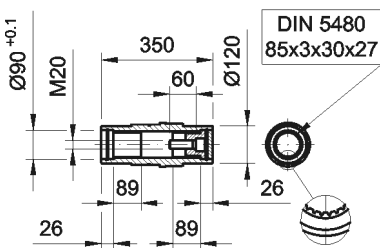
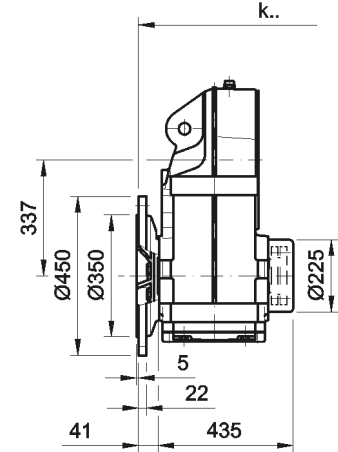
SPFT76..



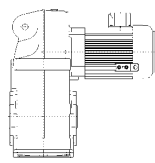
SPFB76..



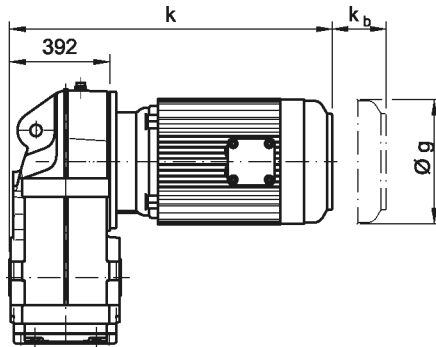
SPFC76..



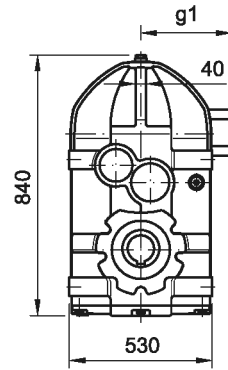
5. SP4



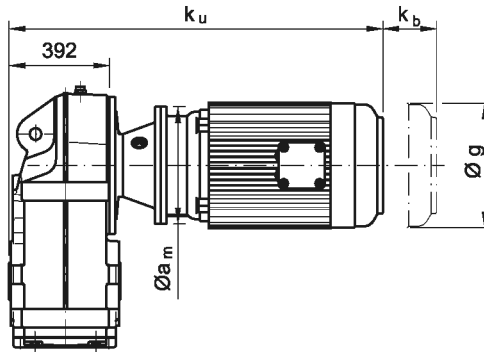
SPZ..86B/C
100 - 225



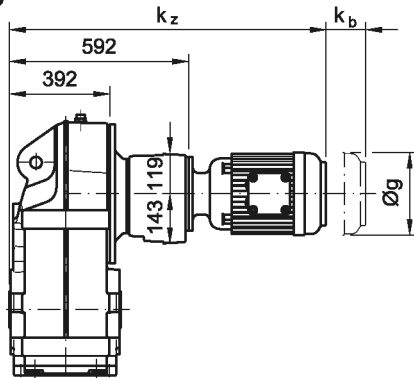
SPZ..86..



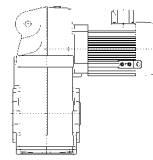
SPZ..86B/C-U
100 - 280



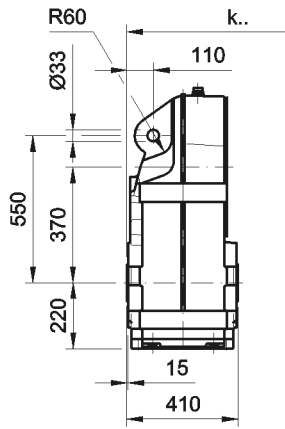
SPZ..86B/C36B/C
63 - 160



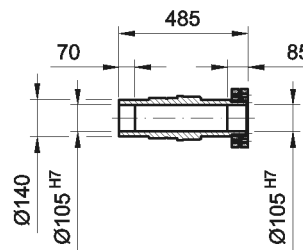
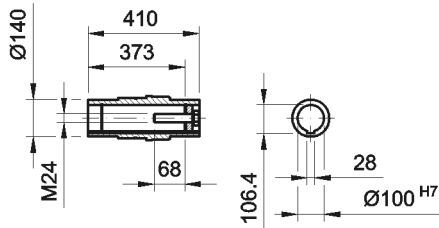
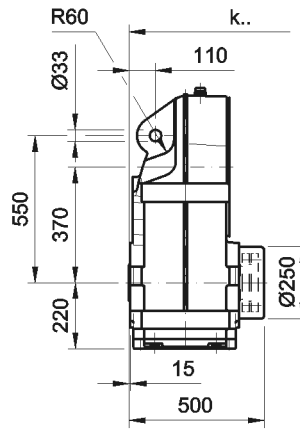
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						703	716	785	820	820	933	977	962	1000	1074	1143	1183			
ku						834	849	916	951		1094	1149	1331	1371	1436	1501	1531	1622	1717	1757
kz	816	820	843	885	885	923	936	1005	1040	1040	1153	1197								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



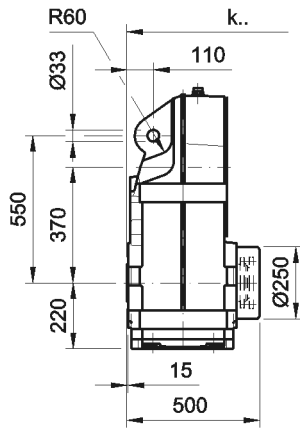
SPZH86..



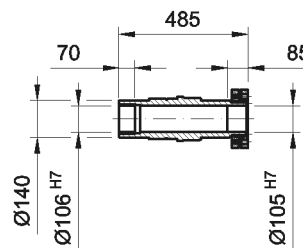
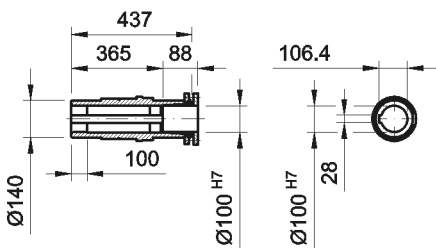
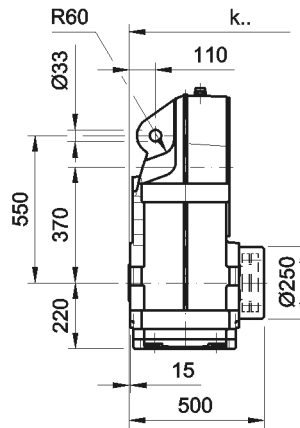
SPZS86..



SPZB86..

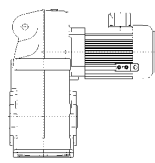


SPZC86..

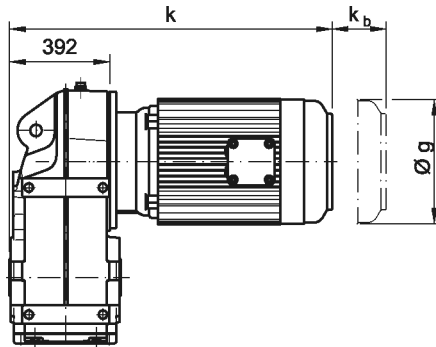


5

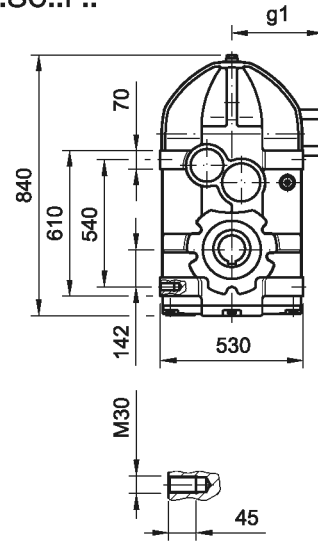
5. SP4



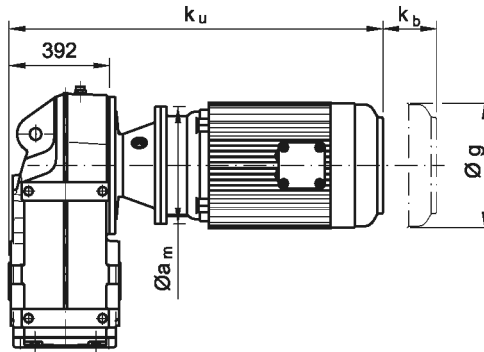
SPZ..86B/CF
100 - 225



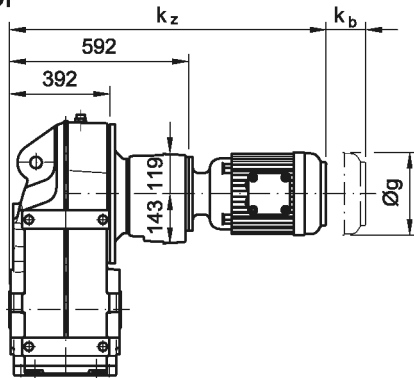
SPZ..86..F..



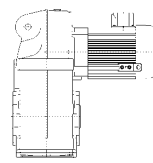
SPZ..86B/CF-U
100 - 280



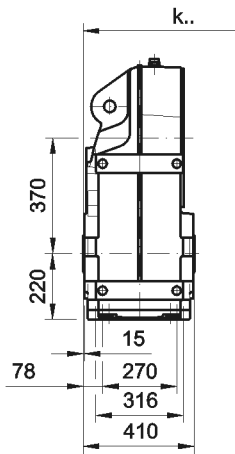
SPZ..86B/C36B/CF
63 - 160



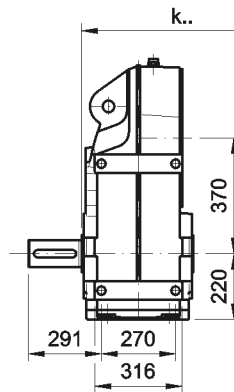
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						703	716	785	820	820	933	977	962	1000	1074	1143	1183				
ku						834	849	916	951		1094	1149	1331	1371	1436	1501	1531	1622	1717	1757	
kz	816	820	843	885	885	923	936	1005	1040	1040	1153	1197									
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	



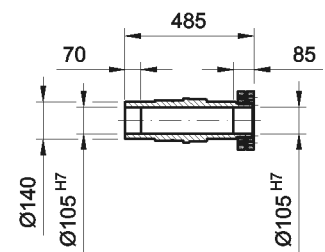
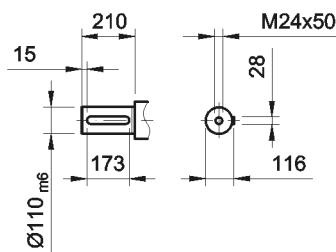
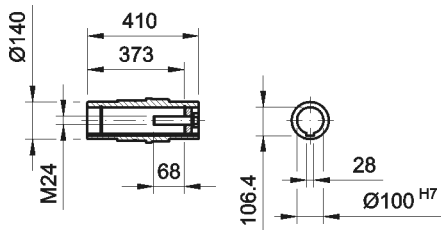
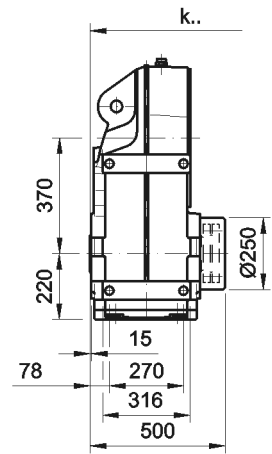
SPZH86..F..



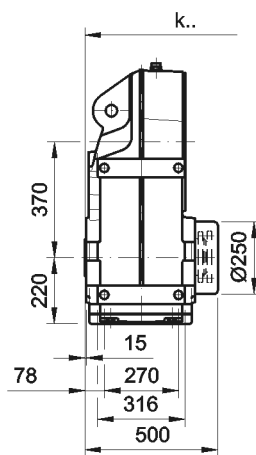
SPZN86..F..



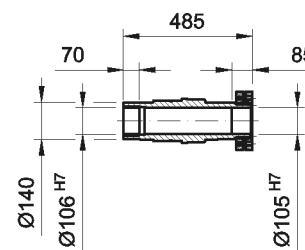
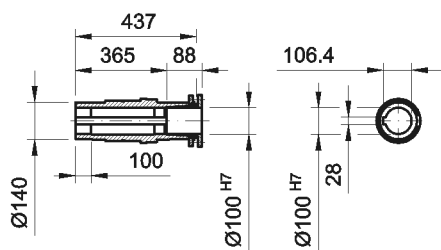
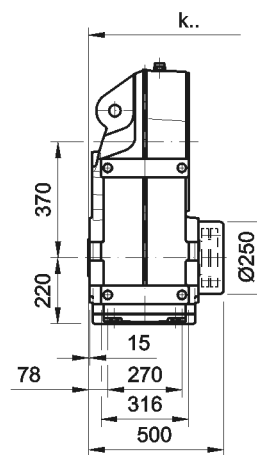
SPZS86..F..



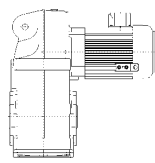
SPZB86..F..



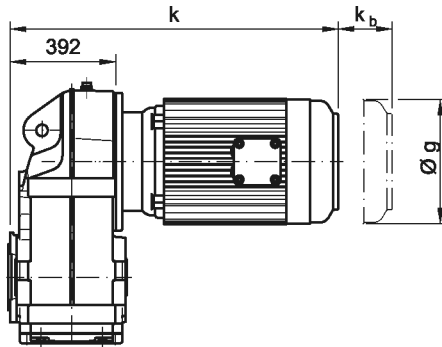
SPZC86..F..



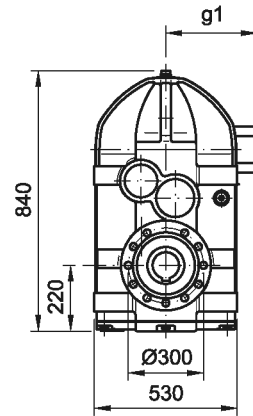
5. SP4



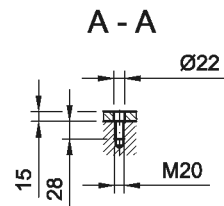
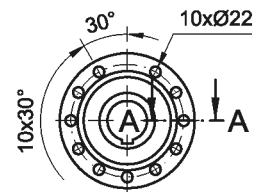
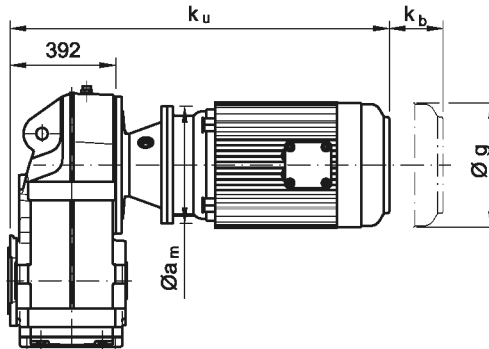
SPT..86B/C
100 - 225



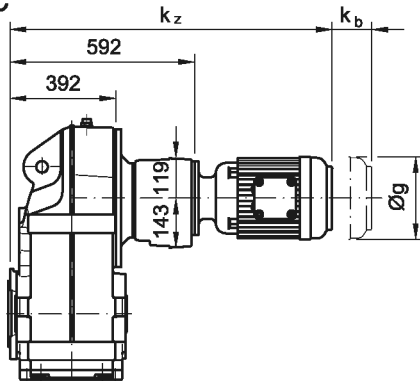
SPT..86..



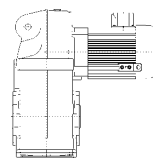
SPT..86B/C-U
100 - 280



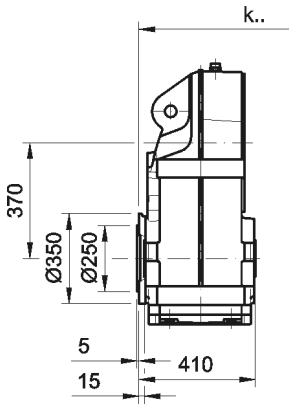
SPT..86B/C36B/C
63 - 160



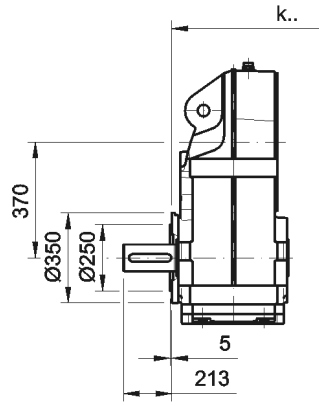
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						703	716	785	820	820	933	977	962	1000	1074	1143	1183			
ku						834	849	916	951		1094	1149	1331	1371	1436	1501	1531	1622	1717	1757
kz	816	820	843	885	885	923	936	1005	1040	1040	1153	1197								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



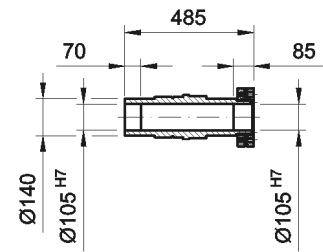
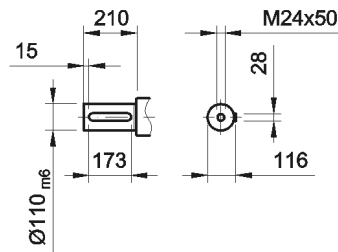
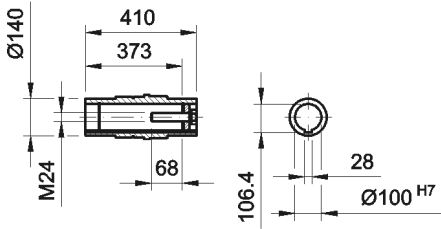
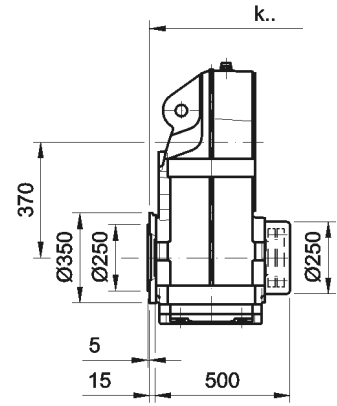
SPTH86..



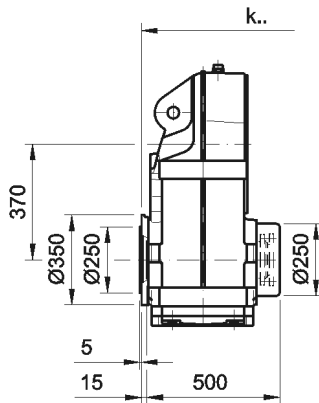
SPTN86..



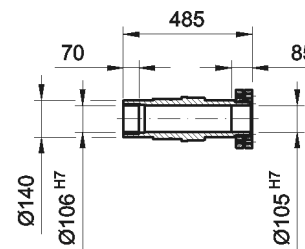
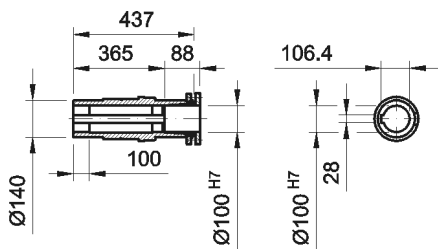
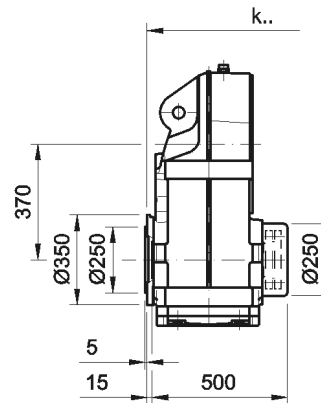
SPTS86..



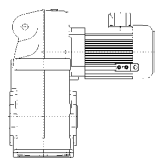
SPTB86..



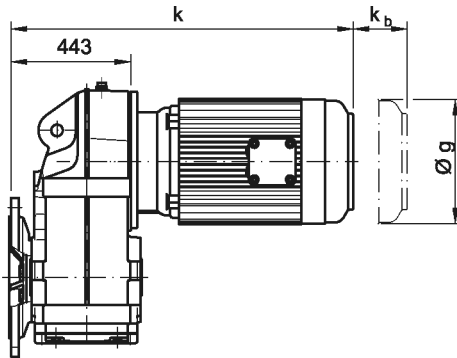
SPTC86..



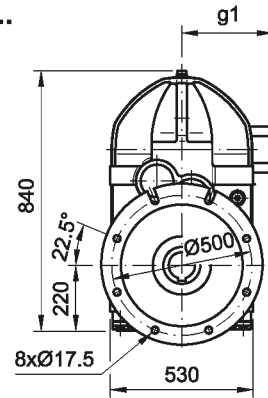
5. SP4



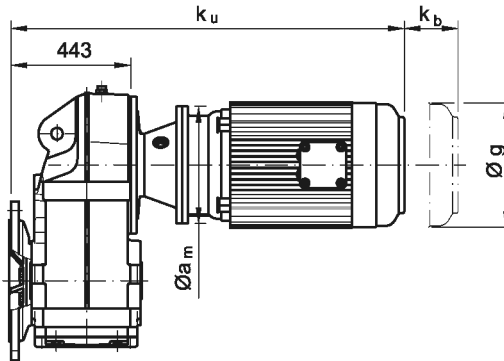
SPF 86B/C
100 - 225



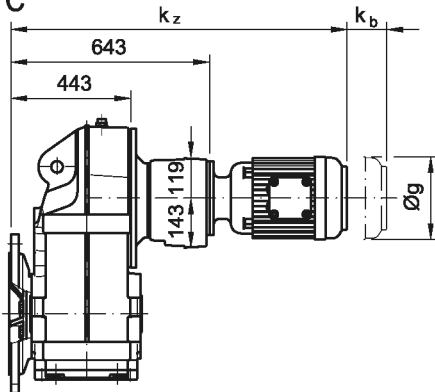
SPF..86..



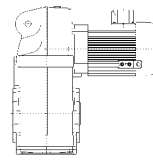
SPF..86B/C-U
100 - 280



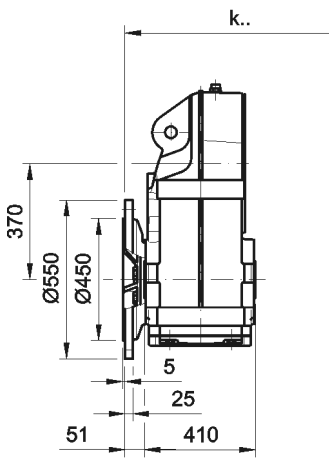
SPF..86B/C36B/C
63 - 160



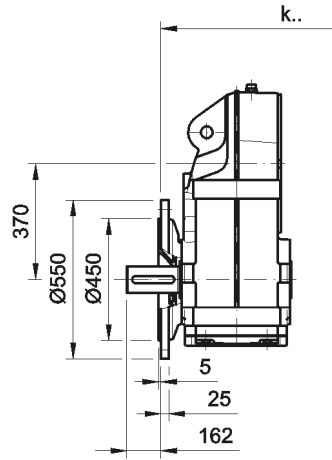
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						754	767	836	871	871	984	1028	1013	1051	1125	1194	1234				
ku						885	900	967	1002		1145	1200	1382	1422	1487	1552	1582	1673	1768	1808	
kz	867	871	894	936	936	974	987	1056	1091	1091	1204	1248									
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	



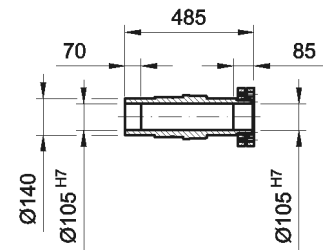
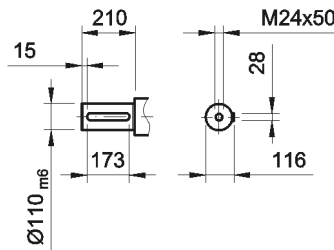
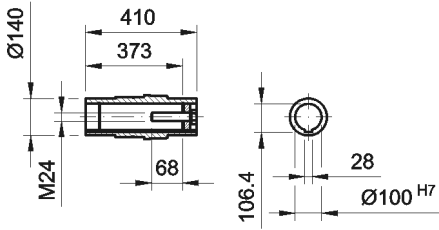
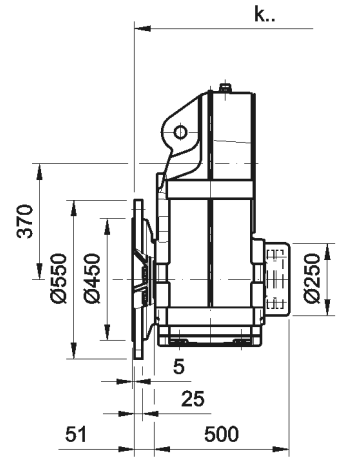
SPFH86..



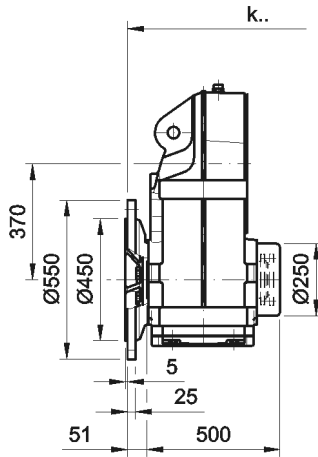
SPFN86..



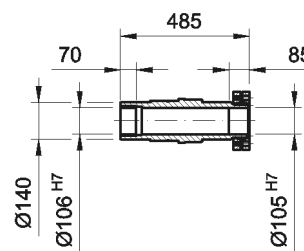
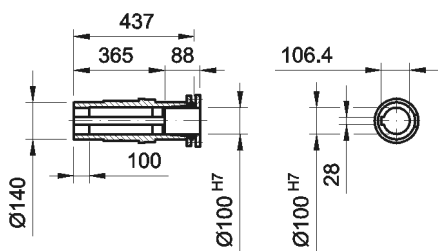
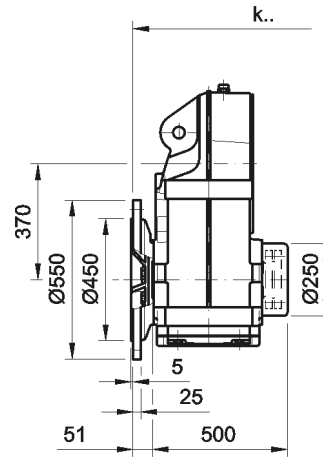
SPFS86..



SPFB86..



SPFC86..





5. SP4

5.6 Auswahl Getriebe SP4 Selection of gear unit SP4 Sélection d'un réducteur SP4

Beispiel: Auswahltabellen Getriebe
Example: Gear unit selection table
Exemple de tableau de sélection pour réducteurs

Getriebeart und -größe
Gear unit type and size
Type et taille du réducteur

Abmessungen Seite
Dimensional drawings
Cotes latérales

Synchrondrehzahl des Motors
Synchronous speed of motor
Vitesse synchrone du moteur

Gewichte
Weights
Poids

Max. Nenndrehmoment
Max. rated torque
Couple nominal maxi.

Type		n _{syn} =		1500 min ⁻¹				1000 1/min				750 1/min					
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N
2,8	3,15																
3,55	3,47	433	4,0	88	2610		289	4,0	132	2690		216	3,7	165	2770		
4	3,97	378	4,0	101	2630		252	4,0	152	2640		189	3,3	165	2910		
4,5	4,26	352	4,1	112	2650		235	4,1	165	2700		176	3,0	165	3080		
5	4,90	306	4,0	125	2670		204	3,5	165	2840		153	2,6	165	3280		
5,6	5,67	265	4,0	144	2620		177	3,0	165	3000		132	2,3	165	3460		

SP..16

Type
SP..16... -I
SP..16... -U

m [kg]
25
27



200 Nm

Zulässige Radialkraft für verstärkte Lagerung
Permissible radial force for reinforced bearings
Force radiale admissible pour paliers support renforcés

Zulässige Radialkraft
Permissible radial force
Force radiale admissible

Drehmoment an der Abtriebswelle
Torque at output shaft
Couple au niveau de l'arbre de sortie

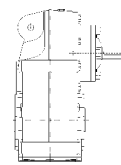
Mechanische Nennleistung des Getriebes
Mechanical rated power of gear unit
Puissance nominale mécanique du réducteur

Auswahldrehzahl der Abtriebswelle
Selection speed of output shaft
Vitesse de l'arbre de sortie


Exakte Übersetzung
Exact gear ratio

Valeur exacte du rapport de démultiplication

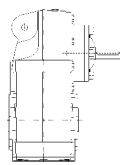
Nenn Übersetzung
Rated gear ratio
Réduction nominale



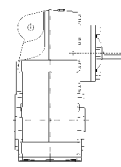
5. SP4

SP..16		Type	m [kg]					230 Nm										
		SP...16...-I	18															
		SP...16...-U	20															
Type	...	$n_{syn} =$	1500 min ⁻¹					1000 1/min					750 1/min					
		i_{ex}	n_2	P	T ₂	F _{rN}	F _{rN-G}	n_2	P	T ₂	F _{rN}	F _{rN-G}	n_2	P	T ₂	F _{rN}	F _{rN-G}	
			min ⁻¹	kW	Nm	N	N	min ⁻¹	kW	Nm	N	N	min ⁻¹	kW	Nm	N	N	
SP...16B...	2.8																	
	3.15																	
	3.55	3.47	433	7.5	165	2610		289	5.0	165	2690		216	3.7	165	2770		
	4	3.97	378	6.5	165	2630		252	4.3	165	2640		189	3.3	165	2910		
	4.5	4.26	352	6.1	165	2650		235	4.1	165	2700		176	3.0	165	3080		
	5	4.90	306	5.3	165	2670		204	3.5	165	2840		153	2.6	165	3280		
	5.6	5.67	265	4.6	165	2620		177	3.0	165	3000		132	2.3	165	3460		
	6.3	6.10	246	4.2	165	2670		164	2.8	165	3180		123	2.1	165	3660		
	7.1	6.59	228	3.9	165	2770		152	2.6	165	3400		114	2.0	165	3900		
	8	7.73	194	3.4	165	2910		129	2.2	165	3590		97	1.7	165	4090		
	9	8.46	177	4.3	230	2910		118	2.8	230	3460		89	2.1	230	4000		
	10	9.69	155	3.7	230	2930		103	2.5	230	3640		77	1.9	230	4210		
	11.2	10.39	144	3.5	230	3100		96	2.3	230	3860		72	1.7	230	4440		
	12.5	11.95	126	3.0	230	3310		84	2.0	230	4080		63	1.5	230	4680		
	14	13.82	109	2.6	230	3550		72	1.7	230	4310		54	1.3	230	4920		
	16	16.08	93	2.2	230	3760		62	1.5	230	4570		47	1.1	230	5000		
	18	18.87	79	1.9	230	4000		53	1.3	230	4840		40	0.96	230	5000		
	20	20.52	73	1.8	230	4210		49	1.2	230	5000		37	0.88	230	5000		
	22.4	22.40	67	1.6	230	4440		45	1.1	230	5000		33	0.81	230	5000		
	25	24.55	61	1.5	230	4680		41	0.98	230	5000		31	0.74	230	5000		
28	27.02	56	1.3	230	5000		37	0.89	230	5000		28	0.67	230	5000			
31.5	29.91	50	1.2	230	5000		33	0.81	230	5000		25	0.60	230	5000			
35.5	37.42	40	1.0	230	5000		27	0.64	230	5000		20	0.48	230	5000			
40	41.65	36	0.87	230	5000		24	0.58	230	5000		18	0.43	230	5000			
45	46.58	32	0.78	230	5000		21	0.52	230	5000		16	0.39	230	5000			
50	49.00	31	0.74	230	5000		20	0.49	230	5000		15	0.37	230	5000			
56	54.15	28	0.67	230	5000		18	0.44	230	5000		14	0.33	230	5000			
63	60.33	25	0.60	230	5000		17	0.40	230	5000		12	0.30	230	5000			
71	74.98	20	0.48	230	5000		13	0.32	230	5000		10	0.24	230	5000			
80	83.24	18	0.43	230	5000		12	0.29	230	5000		9.0	0.22	230	5000			
90	93.33	16	0.39	230	5000		11	0.26	230	5000		8.0	0.19	230	5000			
100																		
SP...16C...	35.5																	
	40																	
	45																	
	50																	
	56																	
	63																	
	71																	
	80																	
	90																	
	100																	
	112																	
	125																	
	140																	
	160																	
	180																	
	SP...16B16B...	200																
		224																
250																		
280																		
315																		
100		97.10	15	0.37	230	5000		10	0.25	230	5000		7.7	0.19	230	5000		
112		113.0	13	0.32	230	5000		8.8	0.21	230	5000		6.6	0.16	230	5000		
125		129.2	12	0.28	230	5000		7.7	0.19	230	5000		5.8	0.14	230	5000		
140		139.3	11	0.26	230	5000		7.2	0.17	230	5000		5.4	0.13	230	5000		
160		162.1	9.3	0.22	230	5000		6.2	0.15	230	5000		4.6	0.11	230	5000		
180		174.9	8.6	0.21	230	5000		5.7	0.14	230	5000		4.3	0.10	230	5000		
200		205.1	7.3	0.18	230	5000		4.9	0.12	230	5000		3.7	0.09	230	5000		
224		223.3	6.7	0.16	230	5000		4.5	0.11	230	5000		3.4	0.08	230	5000		
250		252.6	5.9	0.14	230	5000		4.0	0.10	230	5000		3.0	0.07	230	5000		
280		279.7	5.4	0.13	230	5000		3.6	0.09	230	5000		2.7	0.06	230	5000		
315		325.4	4.6	0.11	230	5000		3.1	0.07	230	5000		2.3	0.06	230	5000		
355		362.5	4.1	0.10	230	5000		2.8	0.07	230	5000		2.1	0.05	230	5000		
400	407.1	3.7	0.09	230	5000		2.5	0.06	230	5000		1.8	0.04	230	5000			
450	453.0	3.3	0.08	230	5000		2.2	0.05	230	5000		1.7	0.04	230	5000			
500	506.7	3.0	0.07	230	5000		2.0	0.05	230	5000		1.5	0.04	230	5000			
560	564.1	2.7	0.06	230	5000		1.8	0.04	230	5000		1.3	0.03	230	5000			
630	606.3	2.5	0.06	230	5000		1.6	0.04	230	5000		1.2	0.03	230	5000			
710	677.3	2.2	0.05	230	5000		1.5	0.04	230	5000		1.1	0.03	230	5000			
800	815.5	1.8	0.04	230	5000		1.2	0.03	230	5000		0.9	0.02	230	5000			
900																		
1000																		
1120																		

5. SP4



SP..26		Type SP...26... -I SP...26... -U					m [kg] 25 27		M310				440 Nm					
Type	...	1500 min ⁻¹					1000 1/min					750 1/min						
		n _{syn} = i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
SP...26B...	2.8																	
	3.15																	
	3.55																	
	4																	
	4.5	4.65	323	7.4	220	1500	6900	215	5.0	220	2000	6900	161	3.7	220	2500	6900	6900
	5	5.33	281	6.5	220	2000	6900	188	4.3	220	2500	6900	141	3.2	220	2500	6900	6900
	5.6	5.71	263	6.0	220	2000	6900	175	4.0	220	2500	6900	131	3.0	220	3000	6900	6900
	6.3	6.57	228	5.3	220	2000	6900	152	3.5	220	2500	6900	114	2.6	220	3000	6900	6900
	7.1	7.60	197	4.5	220	2500	6900	132	3.0	220	3000	6900	99	2.3	220	3500	6900	6900
	8	8.19	183	4.2	220	2500	6900	122	2.8	220	3000	6900	92	2.1	220	3500	6900	6900
	9	9.36	160	7.2	430	1000	6900	107	4.8	430	2000	6900	80	3.6	430	2000	6900	6900
	10	10.73	140	6.4	435	1500	6900	93	4.2	435	2000	6900	70	3.2	435	2500	6900	6900
	11.2	11.50	130	6.0	440	1500	6900	87	4.0	440	2000	6900	65	3.0	440	2500	6900	6900
	12.5	13.23	113	5.2	440	1500	6900	76	3.5	440	2000	6900	57	2.6	440	3000	6900	6900
	14	15.30	98	4.5	440	2000	6900	65	3.0	440	2500	6900	49	2.3	440	3000	6900	6900
	16	16.49	91	4.2	440	2000	6900	61	2.8	440	2500	6900	45	2.1	440	3500	6900	6900
	18	17.80	84	3.9	440	2000	6900	56	2.6	440	3000	6900	42	1.9	440	3500	6900	6900
	20	20.89	72	3.3	440	2500	6900	48	2.2	440	3000	6900	36	1.7	440	4000	6900	6900
	22.4	22.72	66	3.0	440	2500	6900	44	2.0	440	3500	6900	33	1.5	440	4000	6900	6900
	25	27.18	55	2.5	440	3000	6900	37	1.7	440	3500	6900	28	1.3	440	4500	6900	6900
	28	29.92	50	2.3	440	3000	6900	33	1.5	440	4000	6900	25	1.2	440	4500	6900	6900
	31.5	33.11	45	2.1	440	3500	6900	30	1.4	440	4500	6900	23	1.0	440	4500	6900	6900
	35.5	36.89	41	1.9	440	3500	6900	27	1.2	440	4500	6900	20	0.94	440	4500	6900	6900
	40	41.43	36	1.7	440	4000	6900	24	1.1	440	4500	6900	18	0.83	440	4500	6900	6900
	45	46.12	33	1.5	440	4000	6900	22	1.0	440	4500	6900	16	0.75	440	4500	6900	6900
	50	51.57	29	1.3	440	4500	6900	19	0.89	440	4500	6900	15	0.67	440	4500	6900	6900
	56	59.95	25	1.2	440	4500	6900	17	0.77	440	4500	6900	13	0.58	440	4500	6900	6900
63	66.79	22	1.0	440	4500	6900	15	0.69	440	4500	6900	11	0.52	440	4500	6900	6900	
71	68.94	22	0.83	365	4500	6900	15	0.55	365	4500	6900	11	0.42	365	4500	6900	6900	
80	83.01	18	0.68	360	4500	6900	12	0.45	360	4500	6900	9.0	0.34	360	4500	6900	6900	
90	92.15	16	0.57	335	4500	6900	11	0.38	335	4500	6900	8.1	0.29	335	4500	6900	6900	
100	103.33	15	0.47	310	4500	6900	10	0.31	310	4500	6900	7.3	0.24	310	4500	6900	6900	
SP...26C...	35.5																	
	40																	
	45																	
	50																	
	56																	
	63																	
	71																	
	80																	
	90																	
	100																	
	112																	
	125																	
	140																	
	160																	
	180																	
	SP...26B16B...	100	101.80	15	0.68	440	4500	6900	10	0.45	440	4500	6900	7.4	0.34	440	4500	6900
		112	108.1	14	0.64	440	4500	6900	9.3	0.43	440	4500	6900	6.9	0.32	440	4500	6900
125		125.1	12	0.55	440	4500	6900	8.0	0.37	440	4500	6900	6.0	0.28	440	4500	6900	
140		143.9	10	0.48	440	4500	6900	6.9	0.32	440	4500	6900	5.2	0.24	440	4500	6900	
160		154.2	9.7	0.45	440	4500	6900	6.5	0.30	440	4500	6900	4.9	0.22	440	4500	6900	
180		179.4	8.4	0.39	440	4500	6900	5.6	0.26	440	4500	6900	4.2	0.19	440	4500	6900	
200		195.2	7.7	0.35	440	4500	6900	5.1	0.24	440	4500	6900	3.8	0.18	440	4500	6900	
224		227.1	6.6	0.30	440	4500	6900	4.4	0.20	440	4500	6900	3.3	0.15	440	4500	6900	
250		247.2	6.1	0.28	440	4500	6900	4.0	0.19	440	4500	6900	3.0	0.14	440	4500	6900	
280		273.8	5.5	0.25	440	4500	6900	3.7	0.17	440	4500	6900	2.7	0.13	440	4500	6900	
315		309.6	4.8	0.22	440	4500	6900	3.2	0.15	440	4500	6900	2.4	0.11	440	4500	6900	
355		360.3	4.2	0.19	440	4500	6900	2.8	0.13	440	4500	6900	2.1	0.10	440	4500	6900	
400		401.4	3.7	0.17	440	4500	6900	2.5	0.11	440	4500	6900	1.9	0.09	440	4500	6900	
450		450.7	3.3	0.15	440	4500	6900	2.2	0.10	440	4500	6900	1.7	0.08	440	4500	6900	
500		501.6	3.0	0.14	440	4500	6900	2.0	0.09	440	4500	6900	1.5	0.07	440	4500	6900	
560		561.0	2.7	0.12	440	4500	6900	1.8	0.08	440	4500	6900	1.3	0.06	440	4500	6900	
630		624.5	2.4	0.11	440	4500	6900	1.6	0.07	440	4500	6900	1.2	0.06	440	4500	6900	
710	726.6	2.1	0.10	440	4500	6900	1.4	0.06	440	4500	6900	1.0	0.05	440	4500	6900		
800	749.8	2.0	0.09	440	4500	6900	1.3	0.06	440	4500	6900	1.0	0.05	440	4500	6900		
900	902.9	1.7	0.08	440	4500	6900	1.1	0.05	440	4500	6900	0.83	0.04	440	4500	6900		
1000																		
1120																		

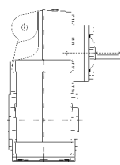


5. SP4

SP..36		Type	m [kg]		850 Nm													
		SP...36... -I	34															
		SP...36... -U	38															
				M326														
Type	...	n _{syn} =	1500 min ⁻¹					1000 1/min					750 1/min					
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
SP...36B...	2.8																	
	3.15	2.97	505	19.3(1)	365	1500	9450	337	12.9(1)	365	1500	10330	253	9.7	365	2000	11480	
	3.55	3.45	435	16.6(1)	365	1500	6580	290	11	365	2000	10840	218	8.3	365	2000	12060	
	4	3.86	389	16.7(1)	410	1500	9710	259	11	410	1500	11020	194	8.3	410	2000	12180	
	4.5	4.42	339	14.8(1)	415	1000	9830	226	9.8	415	2000	11540	170	7.4	415	2000	12660	
	5	4.85	309	13.4(1)	415	1500	10230	206	9.0	415	2000	11940	155	6.7	415	2500	13250	
	5.6	5.60	268	11.6(1)	415	1500	10670	179	7.8	415	2000	12420	134	5.8	415	2500	13500	
	6.3	6.19	242	10.5(1)	415	1500	11140	162	7.0	415	2500	13500	121	5.3	415	3000	13500	
	7.1	6.87	218	9.5(1)	415	2000	11300	146	6.3	415	2500	13390	109	4.7	415	3000	13500	
	8	8.07	186	14.4(1)	740	500	11620	124	9.6	740	1500	13500	93	7.2	740	2000	13500	
	9	9.37	160	13.4(1)	800	500	11830	107	8.9	800	1000	13500	80	6.7	800	2000	13500	
	10	10.49	143	12.7(1)	850	500	12360	95	8.5	850	1000	13500	71	6.4	850	1500	13500	
	11.2	12.01	125	11	850	500	12950	83	7.4	850	1500	13500	62	5.6	850	2000	13500	
	12.5	13.18	114	10	850	500	13500	76	6.8	850	1500	13500	57	5.1	850	2000	13500	
	14	15.23	98	8.8	850	1000	13500	66	5.8	850	2000	13500	49	4.4	850	2500	13500	
	16	16.83	89	7.9	850	1000	13500	59	5.3	850	2000	13500	45	4.0	850	3000	13500	
	18	18.68	80	7.1	850	1500	13500	54	4.8	850	2500	13500	40	3.6	850	3000	13500	
	20	20.01	75	6.7	850	1500	13500	50	4.4	850	2500	13500	37	3.3	850	3500	13500	
	22.4	23.40	64	5.7	850	2000	13500	43	3.8	850	3000	13500	32	2.9	850	4000	13500	
	25	25.20	60	5.3	850	2000	13500	40	3.5	850	3500	13500	30	2.6	850	4000	13500	
	28	28.62	52	4.7	850	2500	13500	35	3.1	850	3500	13500	26	2.3	850	4500	13500	
	31.5	32.41	46	4.1	850	3000	13500	31	2.7	850	4000	13500	23	2.1	850	4500	13500	
	35.5	35.34	42	3.8	850	3000	13500	28	2.5	850	4500	13500	21	1.9	850	4500	13500	
	40	40.91	37	3.3	850	3500	13500	24	2.2	850	4500	13500	18	1.6	850	4500	13500	
	45	45.17	33	3.0	850	4000	13500	22	2.0	850	4500	13500	17	1.5	850	4500	13500	
	50	54.05	28	2.5	850	4000	13500	19	1.6	850	4500	13500	14	1.2	850	4500	13500	
	56	60.18	25	2.2	850	4500	13500	17	1.5	850	4500	13500	12	1.1	850	4500	13500	
	63	66.57	23	2.0	850	4500	13500	15	1.3	850	4500	13500	11	1.0	850	4500	13500	
71	73.95	20	1.8	850	4500	13500	14	1.2	850	4500	13500	10	0.90	850	4500	13500		
80	77.94	19	1.7	850	4500	13500	13	1.1	850	4500	13500	9.6	0.86	850	4500	13500		
90	85.68	18	1.6	850	4500	13500	12	1.0	850	4500	13500	8.8	0.78	850	4500	13500		
100	106.33	14	1.2	800	4500	13500	9.4	0.79	800	4500	13500	7.1	0.59	800	4500	13500		
SP...36C...	35.5																	
	40																	
	45																	
	50																	
	56																	
	63																	
	71																	
	80																	
	90																	
	100																	
	112																	
	125																	
	140																	
	160																	
	180																	
	SP...36B 10B...	100	99.85	15	1.3	850	4500	13500	10.0	0.89	850	4500	13500	7.5	0.67	850	4500	13500
112		107.0	14	1.2	850	4500	13500	9.3	0.83	850	4500	13500	7.0	0.62	850	4500	13500	
125		123.1	12	1.1	850	4500	13500	8.1	0.72	850	4500	13500	6.1	0.54	850	4500	13500	
140		142.3	11	0.94	850	4500	13500	7.0	0.63	850	4500	13500	5.3	0.47	850	4500	13500	
160		153.5	9.8	0.87	850	4500	13500	6.5	0.58	850	4500	13500	4.9	0.43	850	4500	13500	
180		183.1	8.2	0.73	850	4500	13500	5.5	0.49	850	4500	13500	4.1	0.36	850	4500	13500	
200		194.3	7.7	0.69	850	4500	13500	5.1	0.46	850	4500	13500	3.9	0.34	850	4500	13500	
224		219.0	6.9	0.61	850	4500	13500	4.6	0.41	850	4500	13500	3.4	0.30	850	4500	13500	
250		252.9	5.9	0.53	850	4500	13500	4.0	0.35	850	4500	13500	3.0	0.26	850	4500	13500	
280		278.3	5.4	0.48	850	4500	13500	3.6	0.32	850	4500	13500	2.7	0.24	850	4500	13500	
315		308.2	4.9	0.43	850	4500	13500	3.2	0.29	850	4500	13500	2.4	0.22	850	4500	13500	
355		343.3	4.4	0.39	850	4500	13500	2.9	0.26	850	4500	13500	2.2	0.19	850	4500	13500	
400		385.5	3.9	0.35	850	4500	13500	2.6	0.23	850	4500	13500	1.9	0.17	850	4500	13500	
450		440.2	3.4	0.30	850	4500	13500	2.3	0.20	850	4500	13500	1.7	0.15	850	4500	13500	
500		483.0	3.1	0.28	850	4500	13500	2.1	0.18	850	4500	13500	1.6	0.14	850	4500	13500	
560		557.8	2.7	0.24	850	4500	13500	1.8	0.16	850	4500	13500	1.3	0.12	850	4500	13500	
630	621.5	2.4	0.21	850	4500	13500	1.6	0.14	850	4500	13500	1.2	0.11	850	4500	13500		
710	733.2	2.0	0.18	850	4500	13500	1.4	0.12	850	4500	13500	1.0	0.09	850	4500	13500		
800	816.8	1.8	0.16	850	4500	13500	1.2	0.11	850	4500	13500	0.92	0.08	850	4500	13500		
900	947.8	1.6	0.14	850	4500	13500	1.1	0.09	850	4500	13500	0.79	0.07	850	4500	13500		
1000	1015	1	0.13	850	4500	13500	1.0	0.09	850	4500	13500	0.74	0.07	850	4500	13500		
1120																		

(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.

5. SP4



M334

SP..46

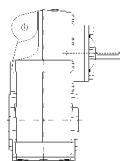
Type
SP...46... -I
SP...46... -U

m [kg]
70
84

1700 Nm

Type	...	n _{syn} =		1500 min ⁻¹				1000 1/min				750 1/min						
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
SP...46B...	2.8	3.29	495	23.3(1)	450	2000	10780											
	3.15	3.29	456	23.4(1)	490	2000	10780	304	17	525	2000	12090	228	14	580	2500	13140	
	3.55	3.64	412	22.9(1)	530	2000	10930	274	17	585	2000	12310	206	14	645	2000	13360	
	4	4.19	358	21.4(1)	570	1500	11090	238	16	650	2000	12470	179	13	720	2000	13500	
	4.5	4.75	316	20.2(1)	610	1500	11370	210	15	695	2000	12880	158	13	770	2000	13790	
	5	5.35	281	19.1	650	1500	11660	187	14	740	2000	13100	140	12	820	2000	14270	
	5.6	6.13	245	17.7	690	1500	11930	163	13	790	2000	13440	122	11	870	2000	14560	
	6.3	6.77	222	16.9	730	1500	12280	148	13	835	2000	13800	111	11	920	2000	14390	
	7.1	7.45	201	16.0	760	1500	12760	134	12	870	2000	14360	101	9	860	2500	16120	
	8	7.87	191	18.0	900	1500	12580	127	14	1030	2000	14220	95	11	1135	2000	15350	
	9	8.82	170	16.9	950	1500	13060	113	13	1085	2000	14710	85	11	1200	2000	15910	
	10	10.15	148	15.5	1000	1500	13240	99	12	1140	2000	15000	74	9.7	1260	2000	16270	
	11.2	11.51	130	14.5	1060	1500	13620	87	11	1210	2000	15410	65	9.1	1340	2000	16690	
	12.5	12.95	116	13.3	1100	2000	14100	77	10	1260	2000	15840	58	8.4	1390	2000	17200	
	14	14.85	101	12.1	1140	2000	14720	67	9.2	1300	2000	16410	51	7.6	1440	2000	17630	
	16	16.38	92	11.2	1170	2000	15200	61	8.5	1335	2000	17050	46	7.1	1480	2500	18000	
	18	18.03	83	10.5	1210	2000	15770	55	8.0	1380	2500	17710	42	6.6	1525	2500	18000	
	20	20.31	74	9.7	1250	2000	16270	49	7.3	1425	2500	18000	37	6.1	1575	2500	18000	
	22.4	22.52	67	9.1	1300	2000	16770	44	6.9	1480	2500	18000	33	5.7	1640	2500	18000	
	25	25.80	58	8.2	1350	2500	17340	39	6.3	1540	2500	18000	29	5.2	1700	3000	18000	
	28	30.30	50	7.3	1400	2500	17850	33	5.5	1600	3000	18000	25	4.4	1700	3500	18000	
	31.5	32.42	46	7.0	1450	2500	18000	31	5.3	1650	3000	18000	23	4.1	1700	3500	18000	
	35.5	36.21	41	6.5	1510	2500	18000	28	4.9	1700	3000	18000	21	3.7	1700	4000	18000	
	40	41.31	36	6.0	1570	2500	18000	24	4.3	1700	3500	18000	18	3.2	1700	4500	18000	
	45	44.79	33	5.7	1620	3000	18000	22	4.0	1700	4000	18000	17	3.0	1700	5000	18000	
	50	51.70	29	5.2	1700	3000	18000	19	3.4	1700	4500	18000	15	2.6	1700	5500	18000	
	56	56.78	26	4.7	1700	3500	18000	18	3.1	1700	5000	18000	13	2.4	1700	5500	18000	
	63	67.76	22	3.9	1700	4000	18000	15	2.6	1700	5500	18000	11	2.0	1700	5500	18000	
71	75.97	20	3.4	1650	4500	18000	13	2.3	1650	5500	18000	10	1.7	1650	5500	18000		
80																		
90																		
100																		
SP...46C...	35.5	35.83	42	5.9	1350	3500	18000	28	5.0	1700	3000	18000	21	3.7	1700	4000	18000	
	40	41.39	36	5.3	1400	3500	18000	24	4.3	1700	3500	18000	18	3.2	1700	4500	18000	
	45	45.75	33	5.0	1460	3500	18000	22	3.9	1700	4000	18000	16	2.9	1700	5500	18000	
	50	50.79	30	4.6	1500	4000	18000	20	3.5	1700	4500	18000	15	2.6	1700	5500	18000	
	56	54.40	28	4.4	1540	4000	18000	18	3.3	1700	5000	18000	14	2.5	1700	5500	18000	
	63	63.60	24	4.0	1620	4000	18000	16	2.8	1700	5500	18000	12	2.1	1700	5500	18000	
	71	68.51	22	3.8	1660	4500	18000	15	2.6	1700	5500	18000	11	1.9	1700	5500	18000	
	80	77.80	19	3.4	1700	4500	18000	13	2.3	1700	5500	18000	9.6	1.7	1700	5500	18000	
	90	88.11	17	3.0	1700	5500	18000	11	2.0	1700	5500	18000	8.5	1.5	1700	5500	18000	
	100	96.08	16	2.8	1700	5500	18000	10	1.9	1700	5500	18000	7.8	1.4	1700	5500	18000	
	112	111.20	13	2.4	1700	5500	18000	9.0	1.6	1700	5500	18000	6.7	1.2	1700	5500	18000	
	125	122.80	12	2.2	1700	5500	18000	8.1	1.4	1700	5500	18000	6.1	1.1	1700	5500	18000	
	140	146.90	10	1.8	1700	5500	18000	6.8	1.2	1700	5500	18000	5.1	0.91	1700	5500	18000	
	160	163.60	9.2	1.6	1700	5500	18000	6.1	1.1	1700	5500	18000	4.6	0.82	1700	5500	18000	
	180	181.00	8.3	1.5	1700	5500	18000	5.5	0.98	1700	5500	18000	4.1	0.74	1700	5500	18000	
	200	201.00	7.5	1.3	1700	5500	18000	5.0	0.89	1700	5500	18000	3.7	0.66	1700	5500	18000	
	224																	
	250																	
	280																	
	315																	
SP...46B16C...	100																	
	112																	
	125																	
	140																	
	160																	
	180	182.2	8.2	1.5	1700	5500	18000	5.5	0.98	1700	5500	18000	4.1	0.73	1700	5500	18000	
	200	210.6	7.1	1.3	1700	5500	18000	4.7	0.85	1700	5500	18000	3.6	0.63	1700	5500	18000	
	224	227.0	6.6	1.2	1700	5500	18000	4.4	0.78	1700	5500	18000	3.3	0.59	1700	5500	18000	
	250	245.1	6.1	1.1	1700	5500	18000	4.1	0.73	1700	5500	18000	3.1	0.54	1700	5500	18000	
	280	287.4	5.2	0.93	1700	5500	18000	3.5	0.62	1700	5500	18000	2.6	0.46	1700	5500	18000	
	315	312.9	4.8	0.85	1700	5500	18000	3.2	0.57	1700	5500	18000	2.4	0.43	1700	5500	18000	
	355	374.1	4.0	0.71	1700	5500	18000	2.7	0.48	1700	5500	18000	2.0	0.36	1700	5500	18000	
	400	411.7	3.6	0.65	1700	5500	18000	2.4	0.43	1700	5500	18000	1.8	0.32	1700	5500	18000	
	450	455.9	3.3	0.59	1700	5500	18000	2.2	0.39	1700	5500	18000	1.6	0.29	1700	5500	18000	
	500	507.9	3.0	0.53	1700	5500	18000	2.0	0.35	1700	5500	18000	1.5	0.26	1700	5500	18000	
560	570.3	2.6	0.47	1700	5500	18000	1.8	0.31	1700	5500	18000	1.3	0.23	1700	5500	18000		
630	634.7	2.4	0.42	1700	5500	18000	1.6	0.28	1700	5500	18000	1.2	0.21	1700	5500	18000		
710	710.0	2.1	0.38	1700	5500	18000	1.4	0.25	1700	5500	18000	1.1	0.19	1700	5500	18000		
800	825.3	1.8	0.32	1700	5500	18000	1.2	0.22	1700	5500	18000	0.91	0.16	1700	5500	18000		
900	919.4	1.6	0.29	1700	5500	18000	1.1	0.19	1700	5500	18000	0.82	0.15	1700	5500	18000		
1000	949	1.6	0.28	1700	5500	18000	1.1	0.19	1700	5500	18000	0.79	0.14	1700	5500	18000		
1120	1143	1.3	0.23	1700	5500	18000	0.88	0.16	1700	5500	18000	0.7	0.12	1700	5500	18000		

(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.



5. SP4

Type		SP..66		Type	m [kg]		M350		5500 Nm									
		SP...66... -I	SP...66... -U	201	286													
Type		$n_{syn} =$	1500 min ⁻¹				1000 1/min				750 1/min							
...		i_{ex}	n_2 min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n_2 min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n_2 min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
SP...66B...	2.8																	
	3.15	3.12	481	68(1)	1350		19000	321	52	1540		20000	240	43	1700		22000	
	3.55	3.46	433	65.8(1)	1450		20000	289	50	1650		21000	217	42	1830		22500	
	4	4.13	364	60.9(1)	1600		19500	242	46	1820		21000	182	38	2020		23000	
	4.5	4.43	339	60.3(1)	1700		20000	226	46	1940		22000	169	38	2150		23500	
	5	5.12	293	55.2(1)	1800		20000	195	42	2050		22000	146	35	2270		24000	
	5.6	5.73	262	52.1(1)	1900		20000	175	40	2170		23000	131	33	2400		24500	
	6.3	6.35	236	55.7(1)	2250		20000	157	42	2570		22500	118	35	2840		24500	
	7.1	7.05	213	53.5(1)	2400		20500	142	41	2740		23000	106	34	3020		25000	
	8	8.40	179	49.6(1)	2650		20500	119	38	3020		23000	89	31	3340		25000	
	9	9.02	166	47.9(1)	2750		21500	111	36	3140		24000	83	30	3470		26000	
	10	10.43	144	44.4(1)	2950		21500	96	34	3370		24000	72	28	3720		26500	
	11.2	11.66	129	41.8(1)	3100		22000	86	32	3540		25000	64	26	3910		27000	
	12.5	12.59	119	40.5(1)	3250		23000	79	31	3700		26000	60	26	4100		27500	
	14	14.18	106	37.7(1)	3400		30000	71	29	3880		26500	53	24	4290		28500	
	16	16.06	93	35.2(1)	3600		24000	62	27	4100		27000	47	22	4540		29500	
	18	17.51	86	34	3750		25000	57	26	4280		28000	43	21	4730		30000	
	20	20.08	75	31	3950		25500	50	23	4500		28500	37	19	4980		30000	
	22.4	23.26	64	28	4200		26000	43	22	4790		29000	32	18	5290		30000	
	25	25.85	58	27	4400		26500	39	20	5020		30000	29	17	5500		30000	
	28	27.61	54	26	4500		21500	36	19	5130		25000	27	16	5500		27500	
	31.5	30.69	49	24	4650		22500	33	18	5300		25500	24	14	5500		28500	
	35.5	34.82	43	22	4850		24000	29	17	5500		27500	22	12	5500		30000	
	40	38.01	39	21	5000		26500	26	15	5500		30000	20	11	5500		30000	
	45	43.51	34	19	5150		27000	23	13	5500		30000	17	10	5500		30000	
	50	47.54	32	16	4850		28000	21	12	5500		30000	16	9	5500		30000	
	56	56.00	27	14	4850		30000	18	10	5500		30000	13	8	5500		30000	
	63	61.68	24	12	4850		30000	16	9	5500		30000	12	7	5500		30000	
71	68.49	22	10	4500		30000	15	8	5130		30000	11	6	5500		30000		
80																		
90																		
100																		
SP...66C...	35.5																	
	40	38.12	39	18.1	4400		30000	26	14	5016		30000	20	11	5500		30000	
	45	42.75	35	17.1	4650		30000	23	13	5301		30000	18	10	5500		30000	
	50	49.20	30	15.6	4900		30000	20	12	5500		30000	15	8.8	5500		30000	
	56	55.78	27	14.9	5300		30000	18	10	5500		30000	13	7.7	5500		30000	
	63	62.74	24	13.5	5400		30000	16	9.2	5500		30000	12	6.9	5500		30000	
	71	71.94	21	12.0	5500		30000	14	8.0	5500		30000	10	6.0	5500		30000	
	80	79.38	19	10.9	5500		30000	13	7.3	5500		30000	9.4	5.4	5500		30000	
	90	87.35	17	9.9	5500		30000	11	6.6	5500		30000	8.6	4.9	5500		30000	
	100	98.40	15	8.8	5500		30000	10	5.9	5500		30000	7.6	4.4	5500		30000	
	112	109.20	14	7.9	5500		30000	9.2	5.3	5500		30000	6.9	4.0	5500		30000	
	125	125.00	12	6.9	5500		30000	8.0	4.6	5500		30000	6.0	3.5	5500		30000	
	140	146.80	10	5.9	5500		30000	6.8	3.9	5500		30000	5.1	2.9	5500		30000	
	160	157.10	9.5	5.5	5500		30000	6.4	3.7	5500		30000	4.8	2.7	5500		30000	
	180	175.50	8.5	4.9	5500		30000	5.7	3.3	5500		30000	4.3	2.5	5500		30000	
	200	200.20	7.5	4.3	5500		30000	5.0	2.9	5500		30000	3.7	2.2	5500		30000	
	224	217.10	6.9	4.0	5500		30000	4.6	2.7	5500		30000	3.5	2.0	5500		30000	
	250	250.60	6.0	3.4	5500		30000	4.0	2.3	5500		30000	3.0	1.7	5500		30000	
	280	275.20	5.5	3.1	5500		30000	3.6	2.1	5500		30000	2.7	1.6	5500		30000	
	315																	
	100																	
	112																	
	125																	
	140																	
	160																	
	180																	
	200																	
	224																	
250																		
280	272.4	5.5	3.2	5500		30000	3.7	2.1	5500		30000	2.8	1.6	5500		30000		
315	318.6	4.7	2.7	5500		30000	3.1	1.8	5500		30000	2.4	1.4	5500		30000		
355	343.1	4.4	2.5	5500		30000	2.9	1.7	5500		30000	2.2	1.3	5500		30000		
400	389.7	3.8	2.2	5500		30000	2.6	1.5	5500		30000	1.9	1.1	5500		30000		
450	441.3	3.4	2.0	5500		30000	2.3	1.3	5500		30000	1.7	0.98	5500		30000		
500	481.2	3.1	1.8	5500		30000	2.1	1.2	5500		30000	1.6	0.90	5500		30000		
660	556.9	2.7	1.6	5500		30000	1.8	1.0	5500		30000	1.3	0.78	5500		30000		
630	615.0	2.4	1.4	5500		30000	1.6	0.94	5500		30000	1.2	0.70	5500		30000		
710	735.8	2.0	1.2	5500		30000	1.4	0.78	5500		30000	1.0	0.59	5500		30000		
800	819.3	1.8	1.1	5500		30000	1.2	0.70	5500		30000	0.92	0.53	5500		30000		
900	906.3	1.7	0.95	5500		30000	1.1	0.64	5500		30000	0.83	0.48	5500		30000		
1000	1007	1.5	0.86	5500		30000	1.0	0.57	5500		30000	0.74	0.43	5500		30000		
1120																		

(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.



5. SP4

SP..76		Type	m [kg]		8000 Nm													
		SP...76... -I	292		M358													
		SP...76... -U	359															
Type	...	1500 min ⁻¹					1000 1/min					750 1/min						
		n _{syn} = i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
SP...76B...	2.8																	
	3.15	3.11	482	99(1)	1950		26000	322	75(1)	2220		27500	241	62(1)	2460		29500	
	3.55	3.52	426	94(1)	2100		26500	284	71(1)	2400		28000	213	59(1)	2650		30500	
	4	3.99	376	89(1)	2250		27000	251	68(1)	2570		29000	188	56(1)	2840		31000	
	4.5	4.52	332	83(1)	2400		27000	221	63(1)	2740		30000	166	52(1)	3020		32000	
	5	4.93	304	80(1)	2500		27500	203	57(1)	2679		31000	152	47(1)	2961		34000	
	5.6	5.62	267	73(1)	2600		28000	178	55(1)	2960		31500	133	46(1)	3280		34000	
	6.3	6.25	240	98(1)	3900		28000	160	75(1)	4450		28500	120	62(1)	4920		31000	
	7.1	7.08	212	93(1)	4200		26000	141	71(1)	4790		29000	106	59(1)	5290		31500	
	8	8.02	187	88(1)	4500		26000	125	67(1)	5130		29500	94	56(1)	5670		32000	
	9	9.10	165	82(1)	4750		27000	110	62(1)	5415		30000	82	52(1)	5985		32500	
	10	9.91	151	79(1)	5000		27500	101	60(1)	5700		31000	76	50(1)	6300		33000	
	11.2	11.31	133	72(1)	5150		29000	88	54(1)	5870		32000	66	45(1)	6490		34500	
	12.5	12.38	121	68(1)	5350		29500	81	52(1)	6100		33000	61	43(1)	6740		35500	
	14	14.26	105	61(1)	5550		30500	70	46(1)	6330		34000	53	38	6990		36500	
	16	15.73	95	57(1)	5750		31500	64	44(1)	6555		35000	48	36	7245		38000	
	18	17.68	85	52(1)	5900		33000	57	40(1)	6730		37000	42	33	7430		40000	
	20	19.69	76	49(1)	6100		34000	51	37	6950		38000	38	31	7690		41000	
	22.4	22.06	68	45(1)	6300		35000	45	34	7180		39000	34	28	7940		43000	
	25	24.90	60	41(1)	6550		36000	40	31	7470		40500	30	25	8000		45000	
	28	28.02	54	38	6800		37000	36	28	7520		42500	27	22	8000		47000	
	31.5	32.32	46	34	7050		38000	31	26	8000		43500	23	19	8000		49500	
	35.5	35.33	42	32	7250		40500	28	24	8000		46500	21	18	8000		50000	
	40	38.31	39	30	7400		42000	26	22	8000		48500	20	16	8000		50000	
	45	45.22	33	27	7700		43500	22	19	8000		50000	17	14	8000		50000	
50	49.92	30	25	8000		45000	20	17	8000		50000	15	13	8000		50000		
56	55.55	27	23	8000		47000	18	15	8000		50000	14	11	8000		50000		
63																		
71																		
80																		
90																		
100																		
SP...76C...	35.5																	
	40	39.42	38	28	7050		43000	25	21	8000		50000	19	16	8000		50000	
	45	44.20	34	26	7300		45000	23	19	8000		50000	17	14	8000		50000	
	50	50.88	29	23	7600		46000	20	16	8000		50000	15	12	8000		50000	
	56	57.68	26	22	7900		47500	17	15	8000		50000	13	11	8000		50000	
	63	64.88	23	19	8000		49500	15	13	8000		50000	12	9.7	8000		50000	
	71	74.39	20	17	8000		50000	13	11	8000		50000	10	8.4	8000		50000	
	80	82.09	18	15	8000		50000	12	10	8000		50000	9.1	7.7	8000		50000	
	90	90.33	17	14	8000		50000	11	9.3	8000		50000	8.3	7.0	8000		50000	
	100	101.75	15	12	8000		50000	10	8.2	8000		50000	7.4	6.2	8000		50000	
	112	112.90	13	11	8000		50000	8.9	7.4	8000		50000	6.6	5.6	8000		50000	
	125	129.30	12	9.7	8000		50000	7.7	6.5	8000		50000	5.8	4.9	8000		50000	
	140	151.80	10	8.3	8000		50000	6.6	5.5	8000		50000	4.9	4.1	8000		50000	
	160	162.50	9.2	7.7	8000		50000	6.2	5.2	8000		50000	4.6	3.9	8000		50000	
	180	181.50	8.3	6.9	8000		50000	5.5	4.6	8000		50000	4.1	3.5	8000		50000	
	200	207.00	7.2	6.1	8000		50000	4.8	4.0	8000		50000	3.6	3.0	8000		50000	
	224	224.50	6.7	5.6	8000		50000	4.5	3.7	8000		50000	3.3	2.8	8000		50000	
	250	259.10	5.8	4.8	8000		50000	3.9	3.2	8000		50000	2.9	2.4	8000		50000	
	280	284.50	5.3	4.4	8000		50000	3.5	2.9	8000		50000	2.6	2.2	8000		50000	
	315																	
	100																	
	112																	
	125																	
	140																	
	160																	
180																		
200																		
224																		
SP...76C36B...	250																	
	280	279.4	5.4	4.5	8000		50000	3.6	3.0	8000		50000	2.7	2.2	8000		50000	
	315	299.3	5.0	4.2	8000		50000	3.3	2.8	8000		50000	2.5	2.1	8000		50000	
	355	350.0	4.3	3.6	8000		50000	2.9	2.4	8000		50000	2.1	1.8	8000		50000	
	400	376.9	4.0	3.3	8000		50000	2.7	2.2	8000		50000	2.0	1.7	8000		50000	
	450	428.1	3.5	2.9	8000		50000	2.3	2.0	8000		50000	1.8	1.5	8000		50000	
	500	484.8	3.1	2.6	8000		50000	2.1	1.7	8000		50000	1.5	1.3	8000		50000	
	760	528.7	2.8	2.4	8000		50000	1.9	1.6	8000		50000	1.4	1.2	8000		50000	
	630	611.8	2.5	2.1	8000		50000	1.6	1.4	8000		50000	1.2	1.0	8000		50000	
	710	675.6	2.2	1.9	8000		50000	1.5	1.2	8000		50000	1.1	0.93	8000		50000	
	800	808.4	1.9	1.6	8000		50000	1.2	1.0	8000		50000	0.93	0.78	8000		50000	
	900	900.1	1.7	1.4	8000		50000	1.1	0.93	8000		50000	0.83	0.70	8000		50000	
	1000	996	1.5	1.3	8000		50000	1.0	0.84	8000		50000	0.75	0.63	8000		50000	
	1120	1106	1.4	1.1	8000		50000	0.90	0.76	8000		50000	0.68	0.57	8000		50000	

(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.

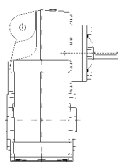


5. SP4

SP..86		Type	m [kg]				M366				15000 Nm							
		SP...86... -I SP...86... -U	650 710															
Type	...	1500 min ⁻¹					1000 1/min					750 1/min						
		n _{syn} = i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
SP...86B...	2.8																	
	3.15																	
	3.55																	
	4	3.99	376	268(1)	6800		31000											
	4.5	4.42	339	252(1)	7100		32000											
	5	4.91	305	237(1)	7400		33000											
	5.6	5.47	274	221(1)	7700		35000											
	6.3	6.11	245	206(1)	8000		35000											
	7.1	7.36	204	237(1)	11100		36000											
	8	8.17	184	221(1)	11500		37000											
	9	9.07	165	206(1)	11900		39000											
	10	10.10	149	191(1)	12300		41000											
	11.2	11.28	133	177(1)	12700		41000											
	12.5	12.65	119	164(1)	13200		42000											
	14	14.26	105	149(1)	13500		42000											
	16	16.18	93	134(1)	13800		46000											
	18	18.50	81	120(1)	14100		46000											
	20	19.85	76	114(1)	14400		48000											
	SP...86C...	10																
		11.2																
12.5																		
14		13.97	107	132(1)	11700		41000											
16		15.81	95	123(1)	12400		42000											
18		17.91	84	115(1)	13100		44000											
20		20.32	74	107(1)	13800		46000											
22.4		22.14	68	102(1)	14400		46000											
25		25.26	59	93(1)	15000		50000											
28		27.66	54	85(1)	15000		53000											
31.5		31.85	47	74(1)	15000		56000											
35.5		35.14	43	67	15000		57000											
40		39.49	38	60	15000		61000											
45		43.97	34	54	15000		64000											
50		49.26	30	48	15000		68000											
56		55.62	27	42	15000		72000											
63		62.59	24	38	15000		76000											
71		72.20	21	33	15000		79000											
80		78.91	19	30	15000		82000											
90		85.57	18	28	15000		87000											
100	101.01	15	23	15000		91000												
112	111.49	13	21	15000		97000												
125	124.07	12	19	15000		99000												
140	138.28	11	17	15000		99000												
160	149.94	10	16	15000		99000												
180	177.02	8	13	15000		99000												
200	195.38	8	12	15000		99000												
224	217.42	7	11	15000		99000												
SP...86C36C...	250																	
	280																	
	315																	
	100																	
	112																	
	125																	
	140																	
	160																	
	180	174.4	8.6	14	15000		99000											
	200	202.4	7.4	12	15000		99000											
	224	226.6	6.6	10	15000		99000											
	250	259.5	5.8	9.1	15000		99000											
	280	284.7	5.3	8.3	15000		99000											
	315	328.8	4.6	7.2	15000		99000											
	355	363.5	4.1	6.5	15000		99000											
400	403.5	3.7	5.8	15000		99000												
450	432.2	3.5	5.5	15000		99000												
500	505.4	3.0	4.7	15000		99000												
860	544.3	2.8	4.3	15000		99000												
630	618.1	2.4	3.8	15000		99000												
710	700.1	2.1	3.4	15000		99000												
800	763.4	2.0	3.1	15000		99000												
900	883.6	1.7	2.7	15000		99000												
1000	956	1.6	2.5	15000		99000												
1120	1083	1.4	2.2	15000		99000												

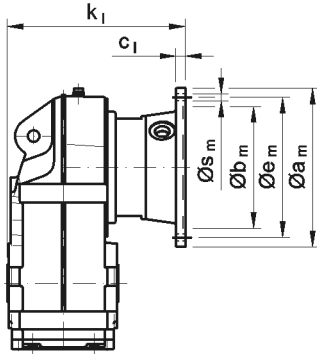
(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.

5. SP4

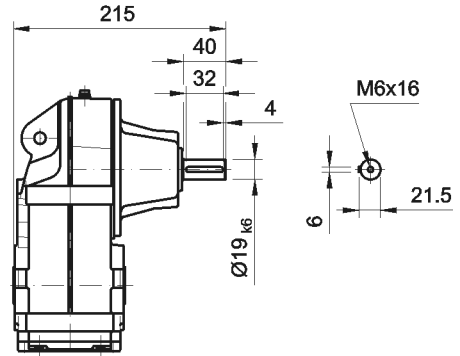


5.7 Maßbilder Getriebe
Dimensional drawings of gear units
Schémas dimensionnels des unités de vitesse

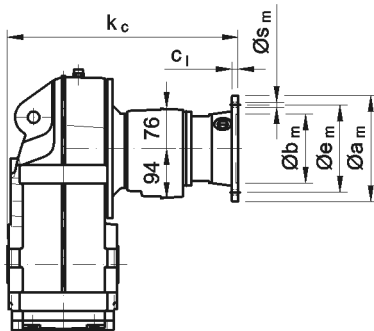
SPZ..16B-U
63 - 112



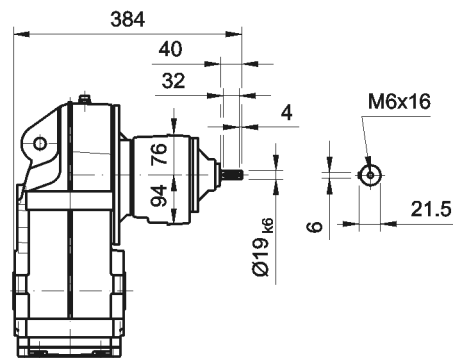
SPZ..16B-I



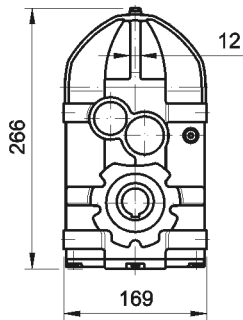
SPZ..16B16B/C-U
63 - 112



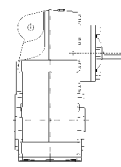
SPZ..16B16B/C-I



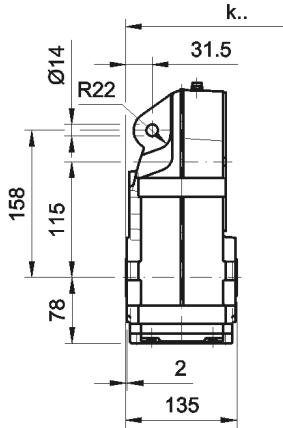
SPZ..16..



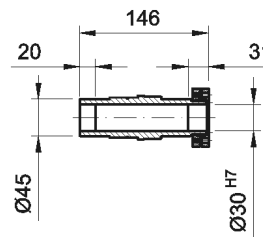
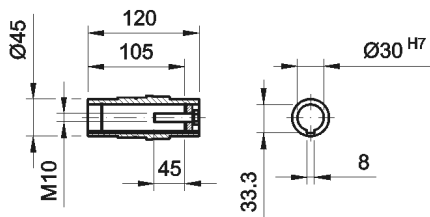
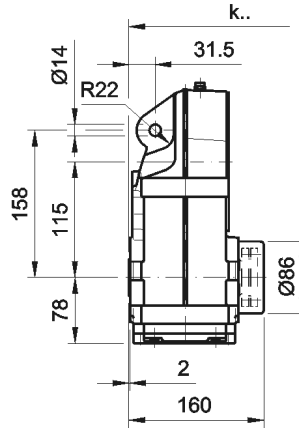
	63	71	80	90S	90L	100	112											
kl	203	203	203	203	203	203	203											
cl	8	8	10	10	10	12	12											
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Øem	115	130	165	165	165	215	215											
Øam	140	160	200	200	200	250	250											
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5											
kc	372	372	372	372	372	372	372											



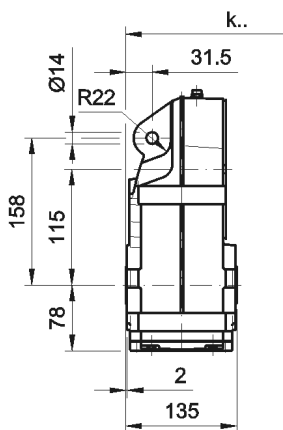
SPZH16..



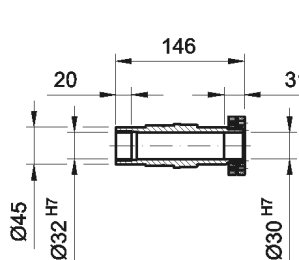
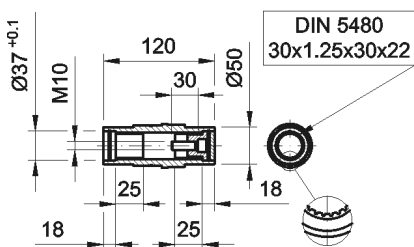
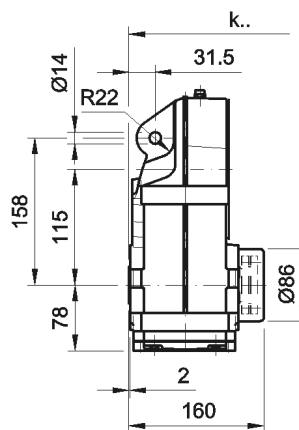
SPZS16..



SPZT16..



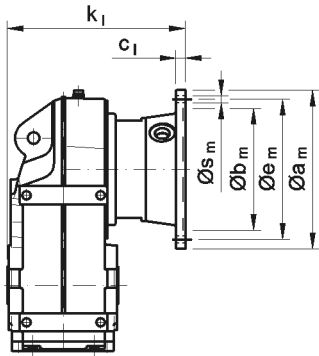
SPZC16..



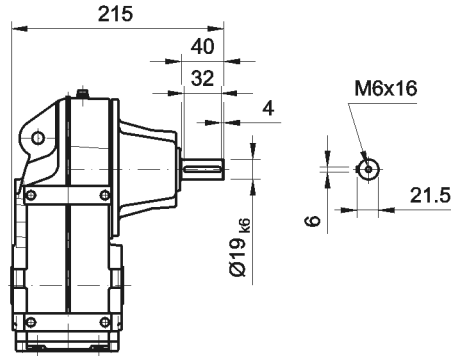
5. SP4



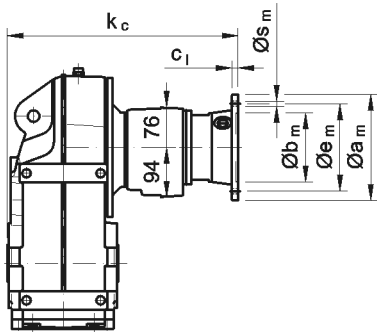
SPZ..16BF-U
63 - 112



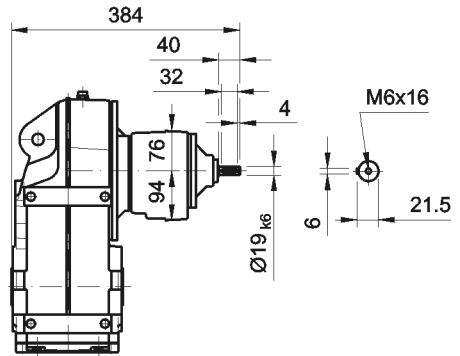
SPZ..16BF-I



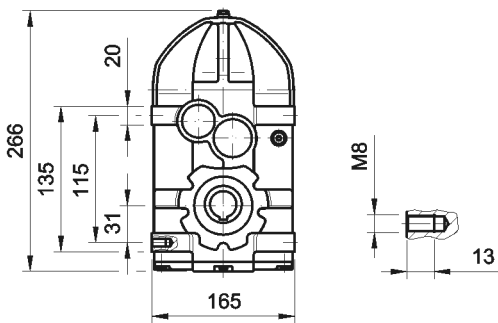
SPZ..16B16B/CF-U
63 - 112



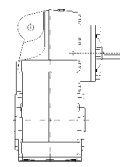
SPZ..16B16B/CF-I



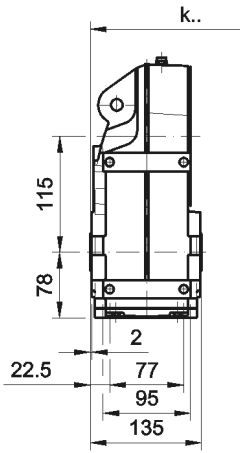
SPZ..16..F..



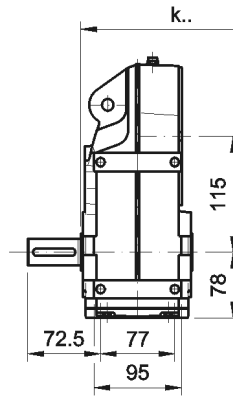
	63	71	80	90S	90L	100	112													
kl	203	203	203	203	203	203	203													
cl	8	8	10	10	10	12	12													
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7													
Øem	115	130	165	165	165	215	215													
Øam	140	160	200	200	200	250	250													
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5													
kc	372	372	372	372	372	372	372													



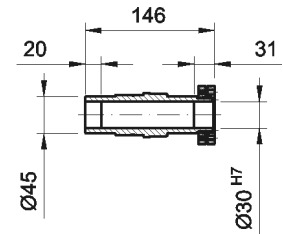
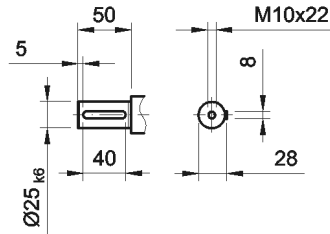
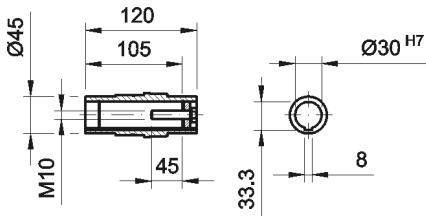
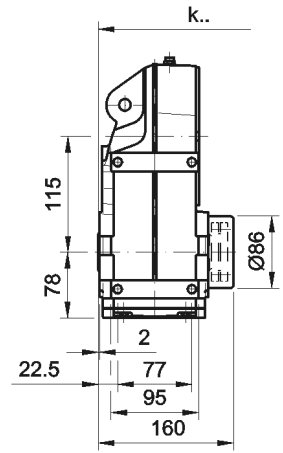
SPZH16..F..



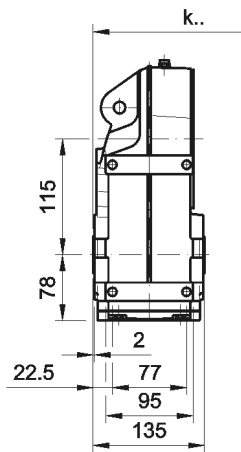
SPZN16..F..



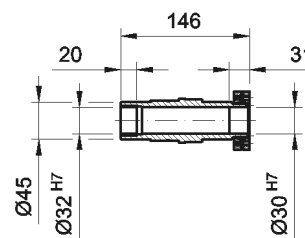
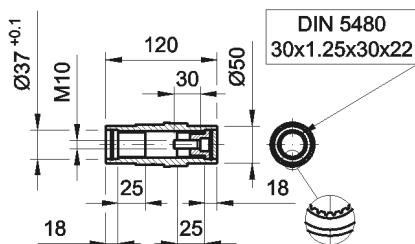
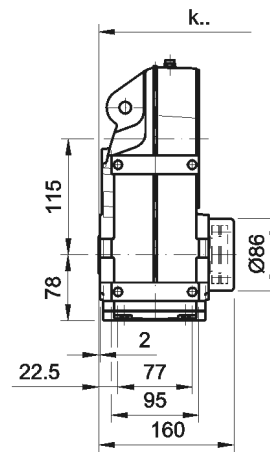
SPZS16..F..



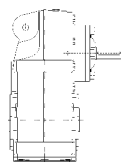
SPZT16..F..



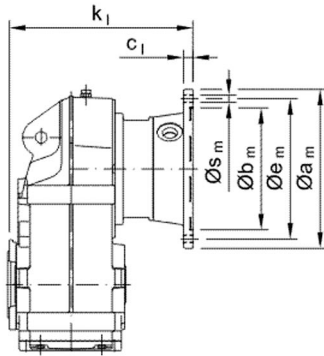
SPZC16..F..



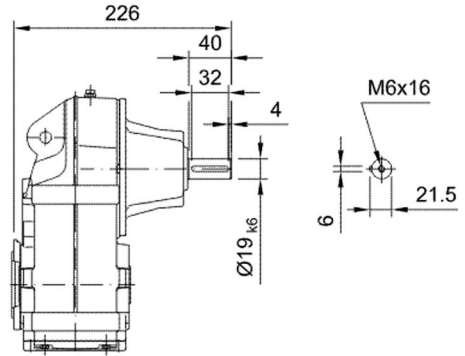
5. SP4



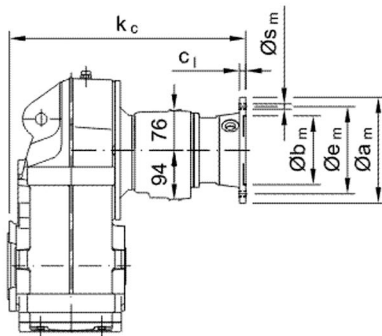
SPT..16B-U
63 - 112



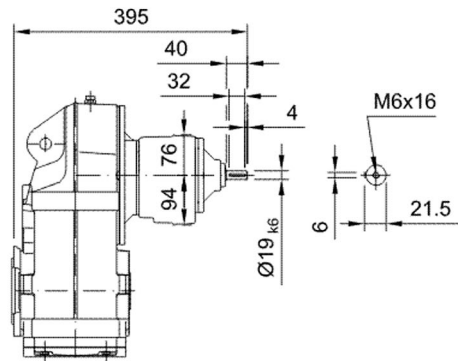
SPT..16B-I



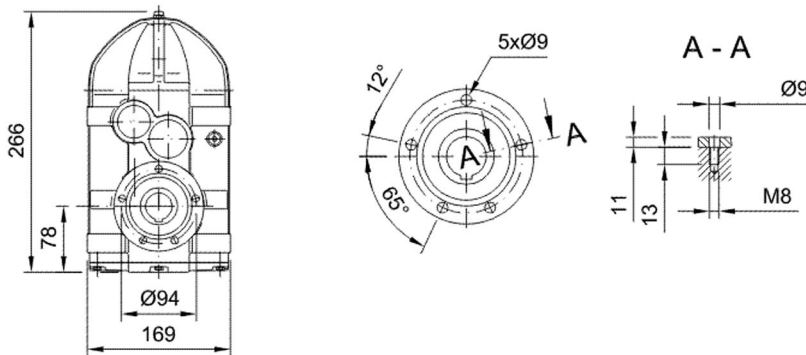
SPT..16B16B/C-U
63 - 112



SPT..16B16B/C-I



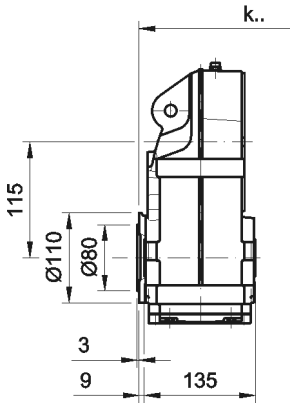
SPT..16..



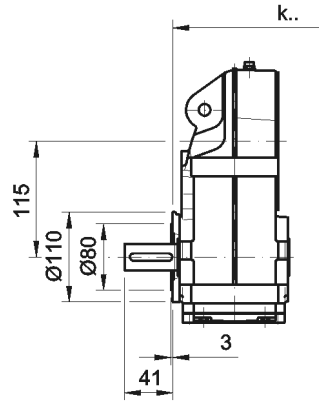
	63	71	80	90S	90L	100	112											
k_l	214	214	214	214	214	214	214											
c_l	8	8	10	10	10	12	12											
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Ø_{em}	115	130	165	165	165	215	215											
Ø_{am}	140	160	200	200	200	250	250											
Ø_{sm}	4x M8x16x M8x16 4x Ø11			4x Ø11		4x Ø11		4x Ø13,5 4x Ø13,5										
k_c	383	383	383	383	383	383	383											



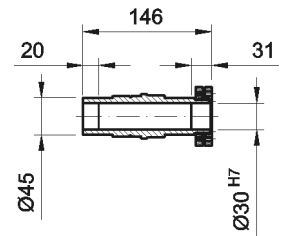
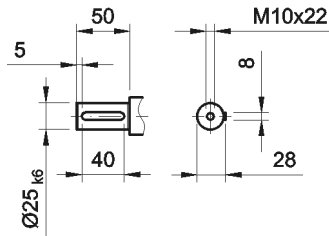
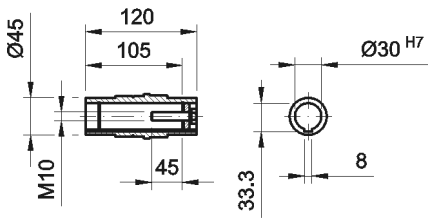
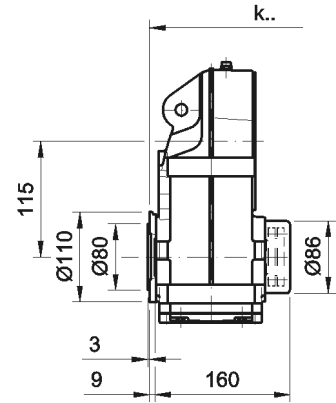
SPTH16..



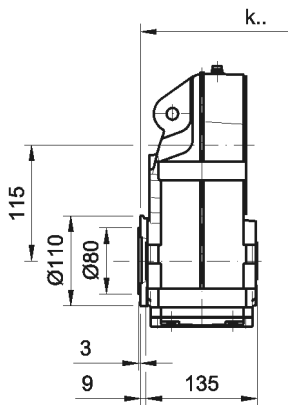
SPTN16..



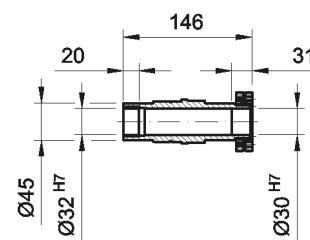
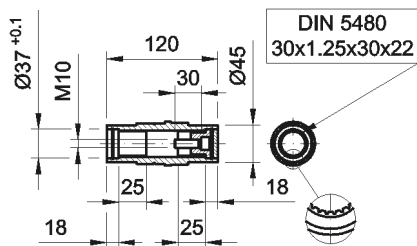
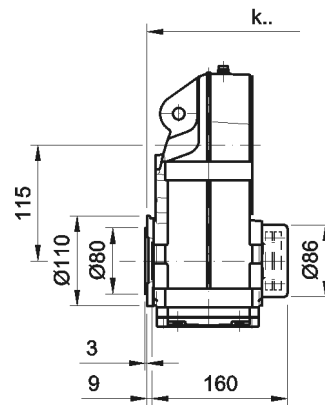
SPTS16..



SPTT16..



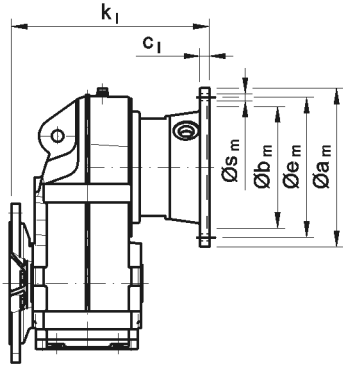
SPTC16..



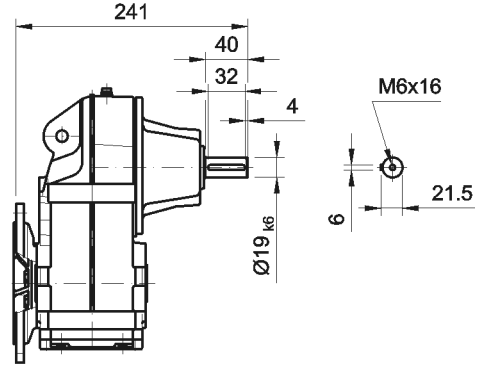
5. SP4



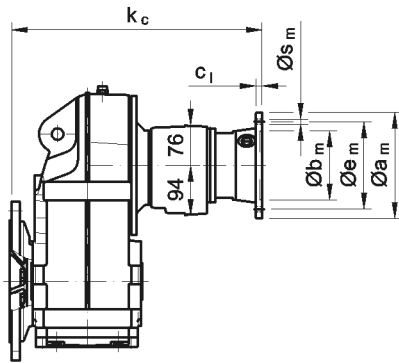
SPF..16B-U
63 - 112



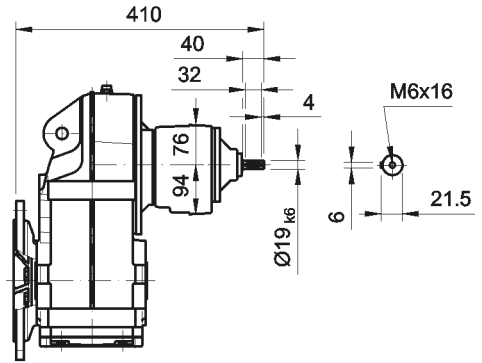
SPF..16B-I



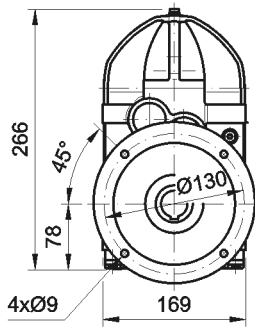
SPF..16B16B/C-U
63 - 112



SPF..16B16B/C-I



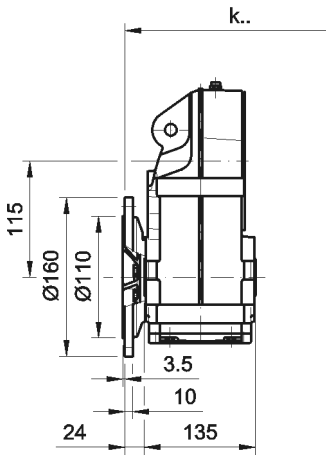
SPF..16..



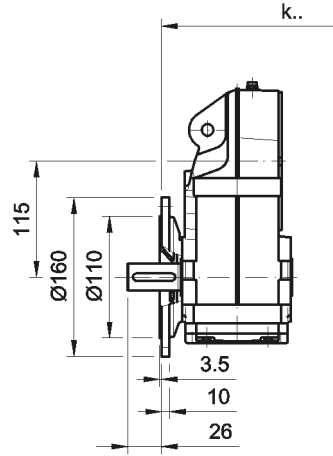
	63	71	80	90S	90L	100	112												
k_l	229	229	229	229	229	229	229												
c_l	8	8	10	10	10	12	12												
Ø_{b_m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7												
Ø_{e_m}	115	130	165	165	165	215	215												
Ø_{a_m}	140	160	200	200	200	250	250												
Ø_{s_m}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5												
k_c	398	398	398	398	398	398	398												



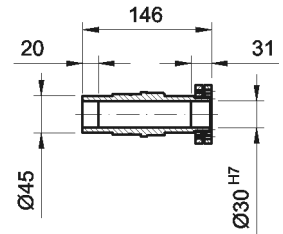
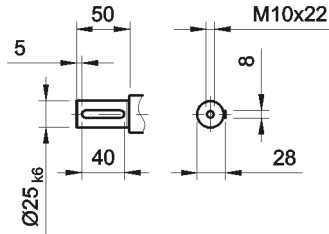
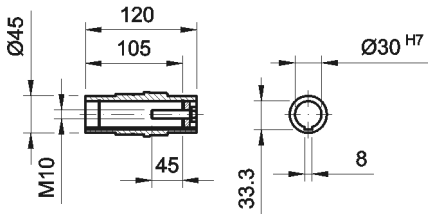
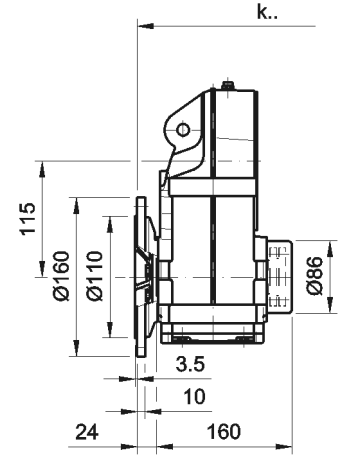
SPFH16..



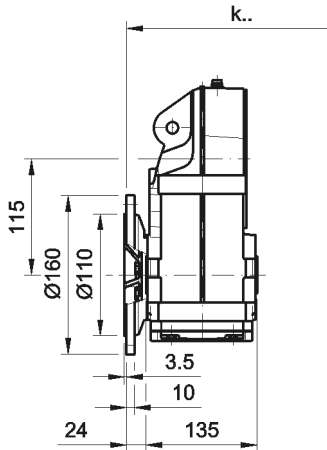
SPFN16..



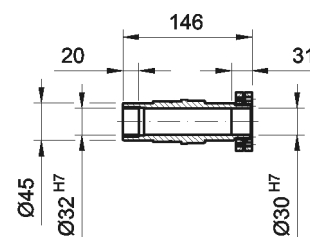
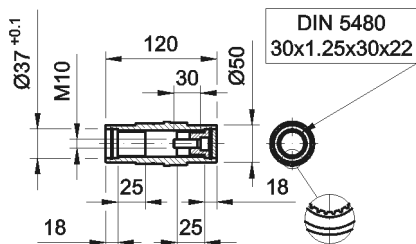
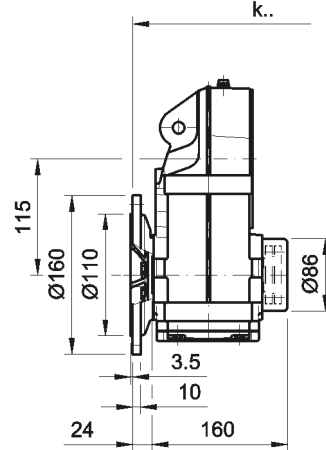
SPFS16..



SPFT16..



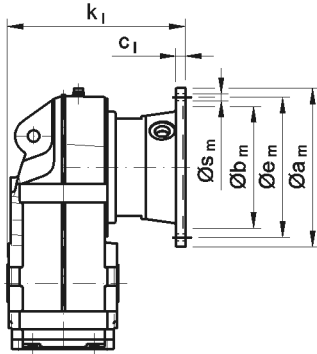
SPFC16..



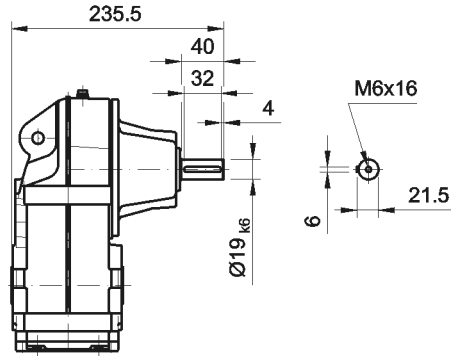
5. SP4



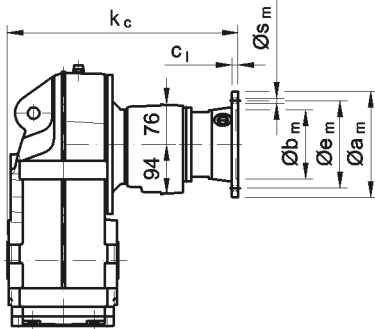
SPZ..26B-U
63 - 112



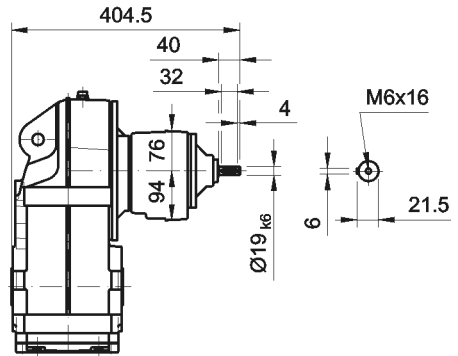
SPZ..26B-I



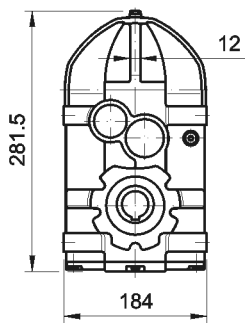
SPZ..26B16B/C-U
63 - 112



SPZ..26B16B/C-I



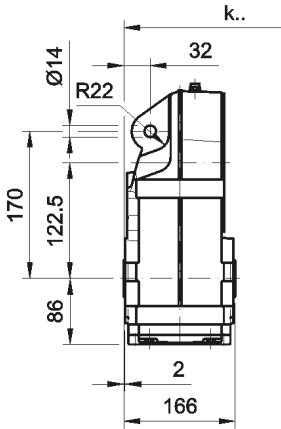
SPZ..26..



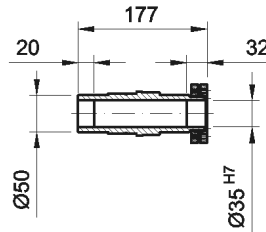
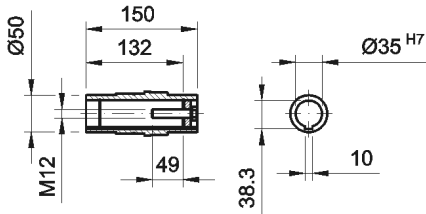
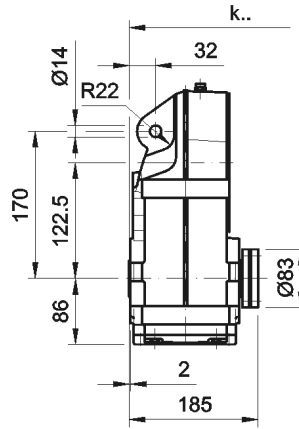
	63	71	80	90S	90L	100	112											
kl	223	223	223	223	223	223	223											
cl	8	8	10	10	10	12	12											
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Øen	115	130	165	165	165	215	215											
Øam	140	160	200	200	200	250	250											
Øen	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5											
kc	392	392	392	392	392	392	392											



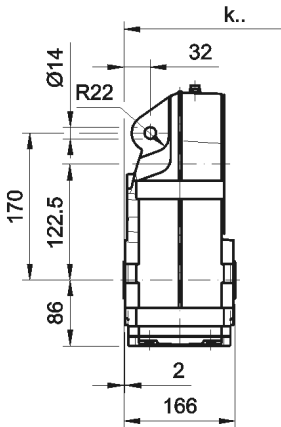
SPZH26..



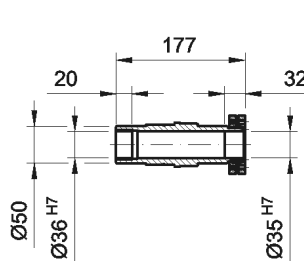
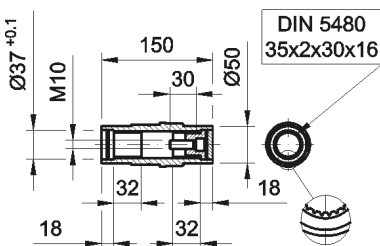
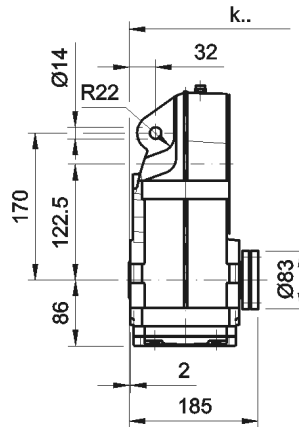
SPZS26..



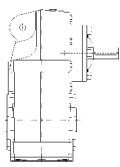
SPZT26..



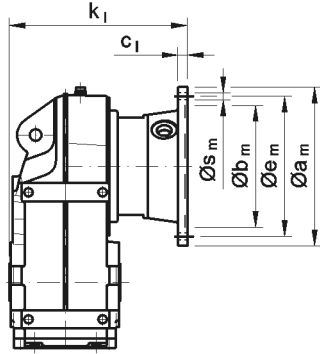
SPZC26..



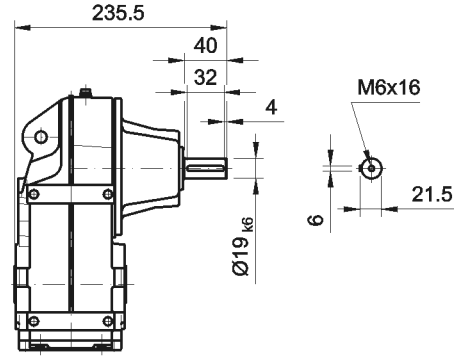
5. SP4



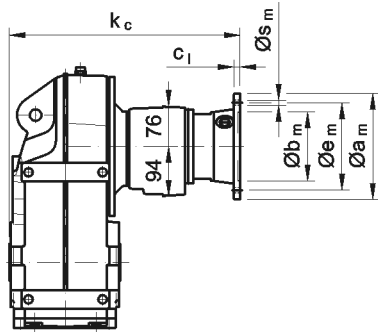
SPZ..26BF-U
63 - 112



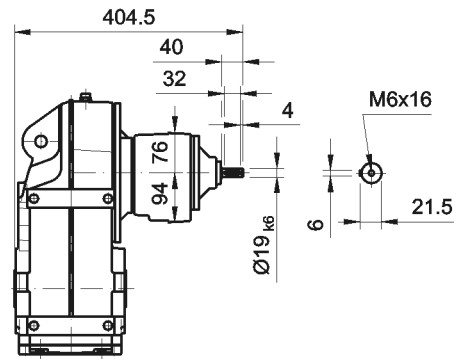
SPZ..26BF-I



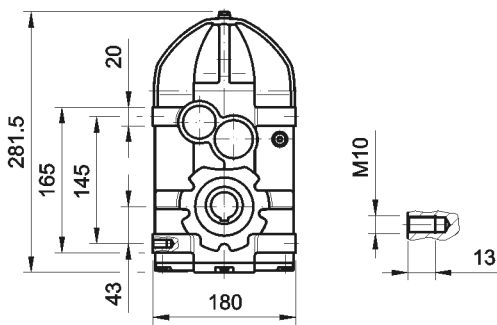
SPZ..26B16B/CF-U
63 - 112



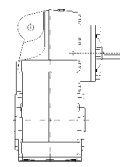
SPZ..26B16B/CF-I



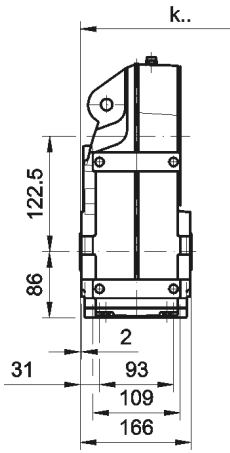
SPZ..26..F..



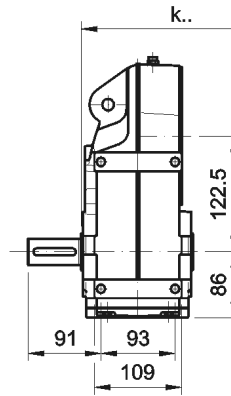
	63	71	80	90S	90L	100	112											
kl	223	223	223	223	223	223	223											
cl	8	8	10	10	10	12	12											
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Øem	115	130	165	165	165	215	215											
Øam	140	160	200	200	200	250	250											
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5											
kc	392	392	392	392	392	392	392											



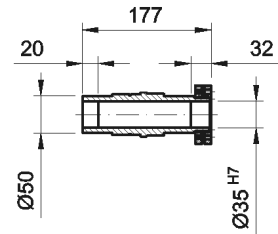
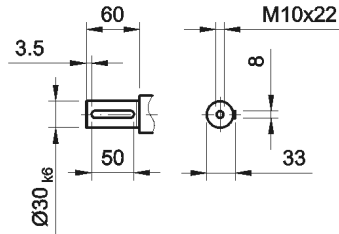
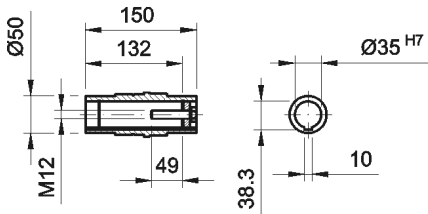
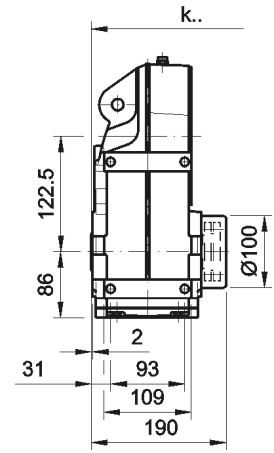
SPZH26..F..



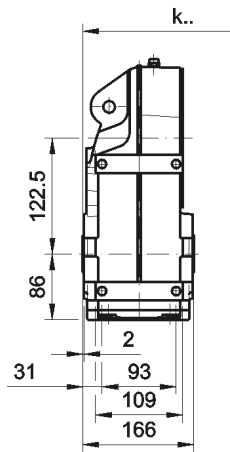
SPZN26..F..



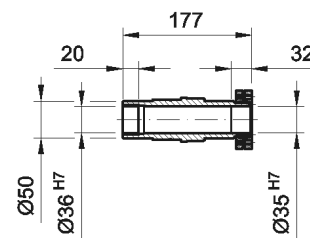
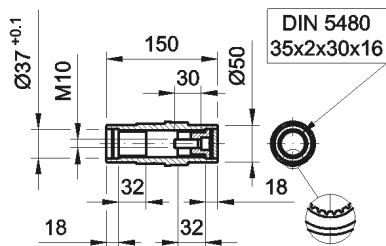
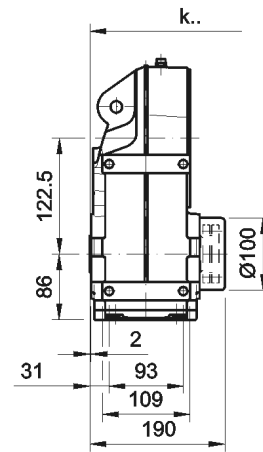
SPZS26..F..



SPZT26..F..



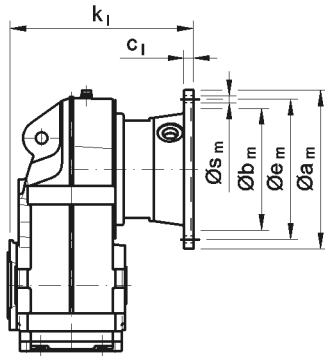
SPZC26..F..



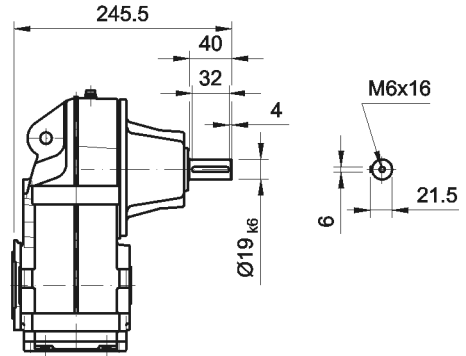
5. SP4



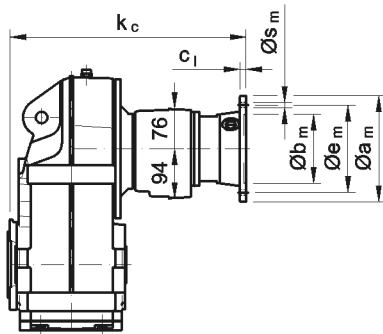
SPT..26B-U
63 - 112



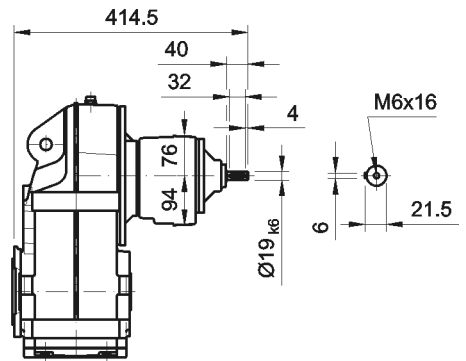
SPT..26B-I



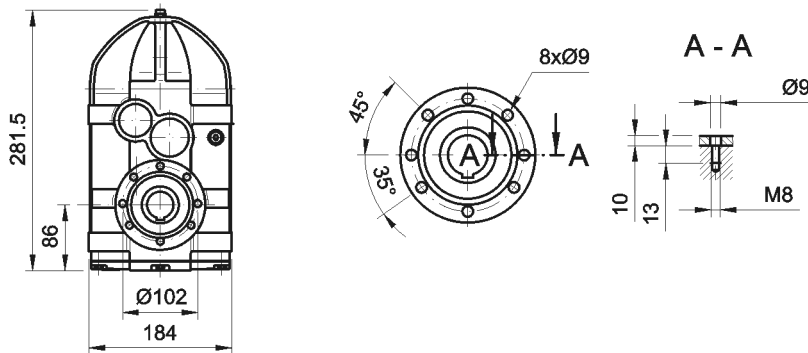
SPT..26B16B/C-U
63 - 112



SPT..26B16B/C-I



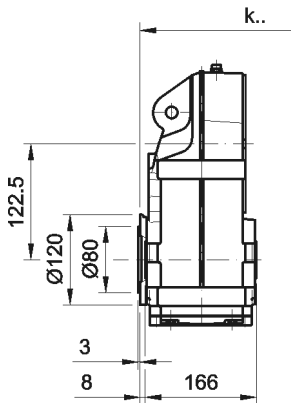
SPT..26..



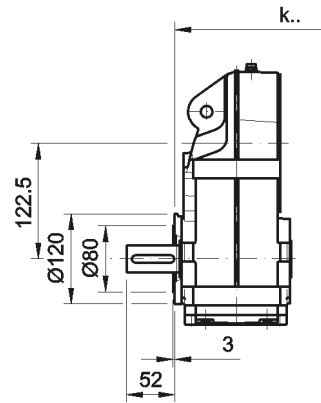
	63	71	80	90S	90L	100	112											
kl	233	233	233	233	233	233	233											
cl	8	8	10	10	10	12	12											
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Øem	115	130	165	165	165	215	215											
Øam	140	160	200	200	200	250	250											
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5											
kc	402	402	402	402	402	402	402											



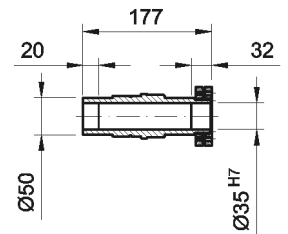
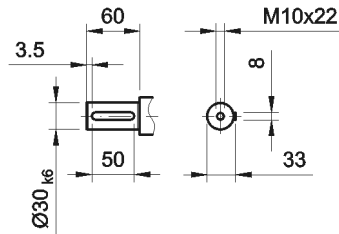
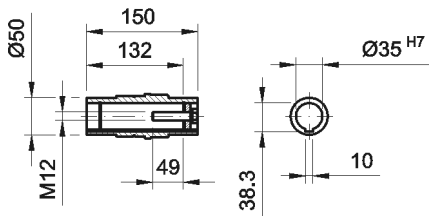
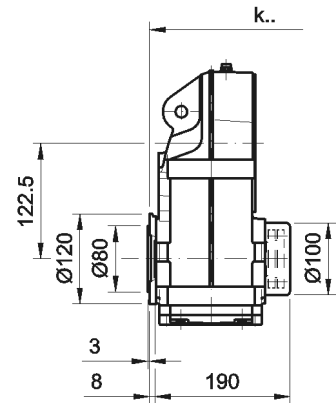
SPTH26..



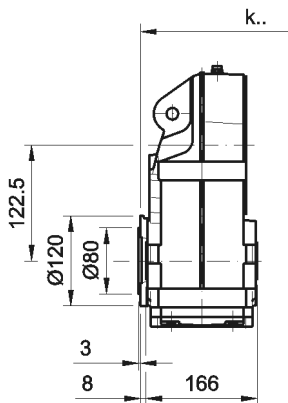
SPTN26..



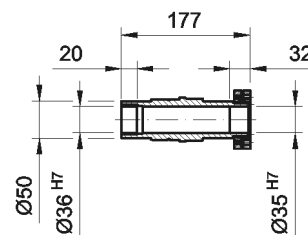
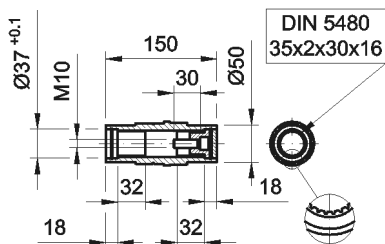
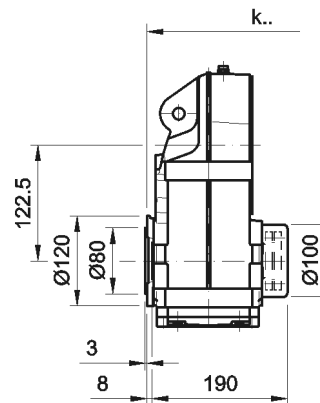
SPTS26..



SPTT26..



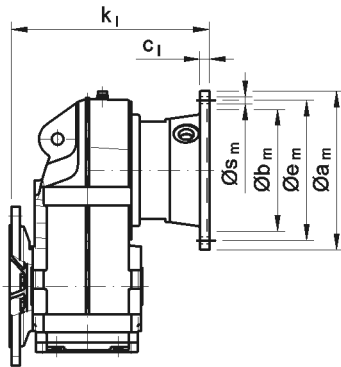
SPTC26..



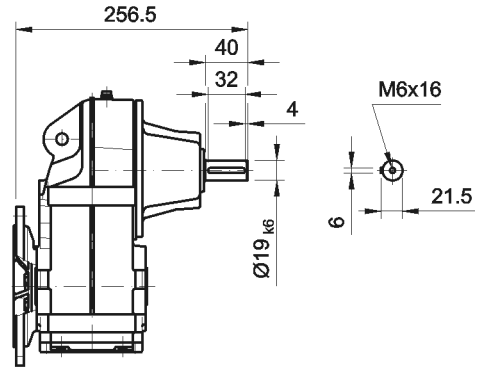
5. SP4



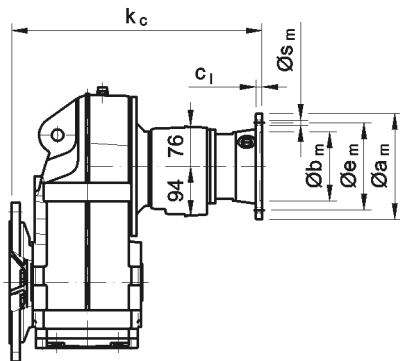
SPF..26B-U
63 - 112



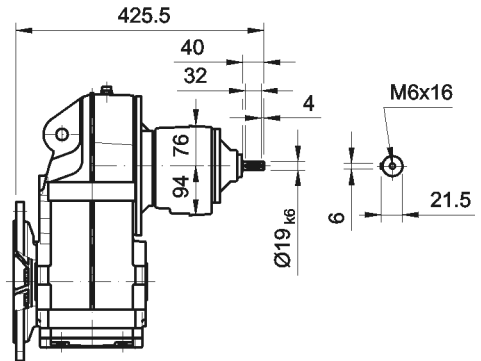
SPF..26B-I



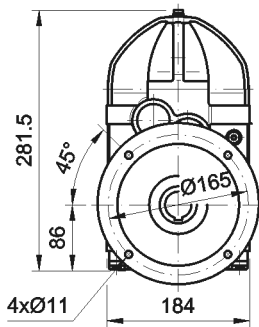
SPF..26B16B/C-U
63 - 112



SPF..26B16B/C-I



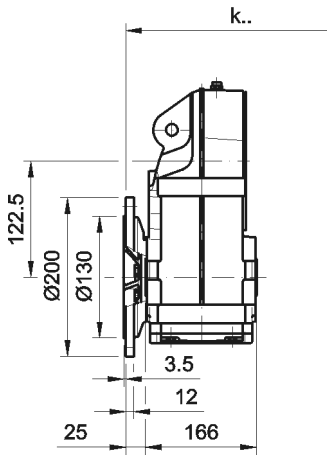
SPF..26..



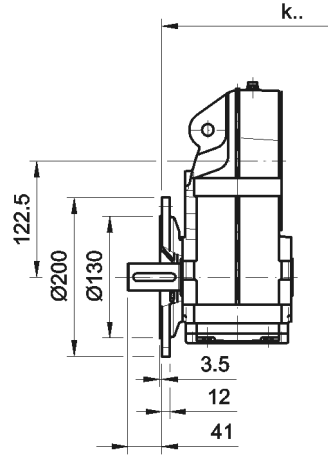
	63	71	80	90S	90L	100	112											
k_l	244	244	244	244	244	244	244											
c_l	8	8	10	10	10	12	12											
Ø_{b_m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Ø_{e_m}	115	130	165	165	165	215	215											
Ø_{a_m}	140	160	200	200	200	250	250											
Ø_{s_m}	4x M6x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5											
k_c	413	413	413	413	413	413	413											



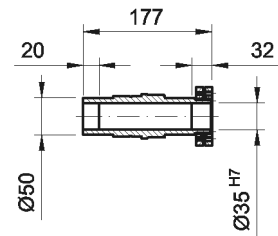
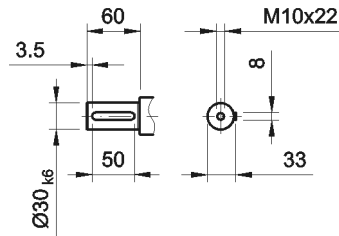
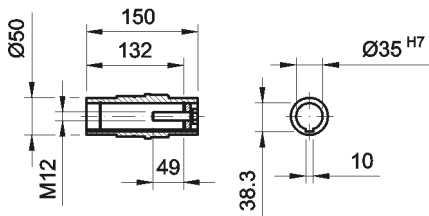
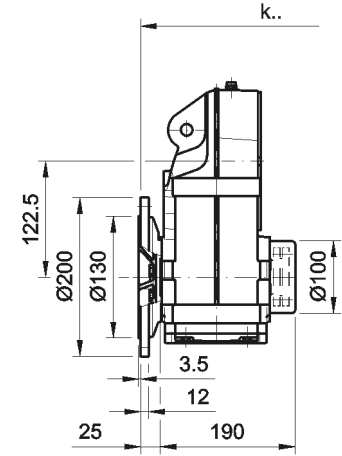
SPFH26..



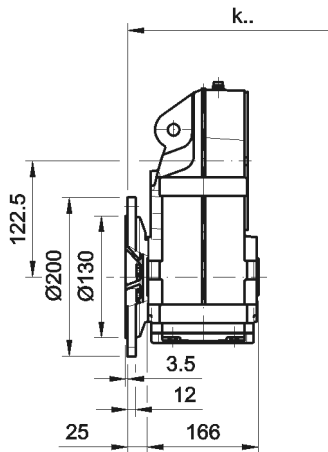
SPFN26..



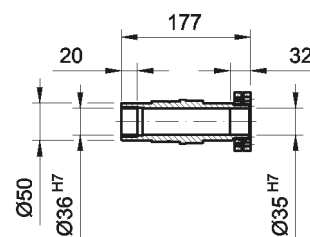
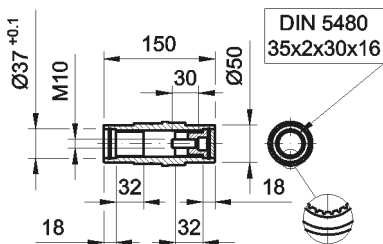
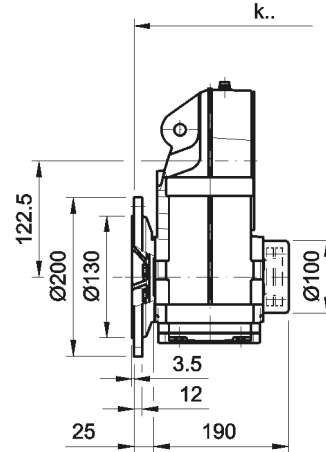
SPFS26..



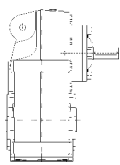
SPFT26..



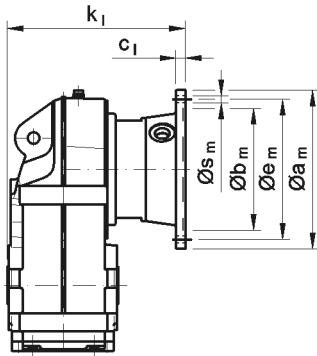
SPFC26..



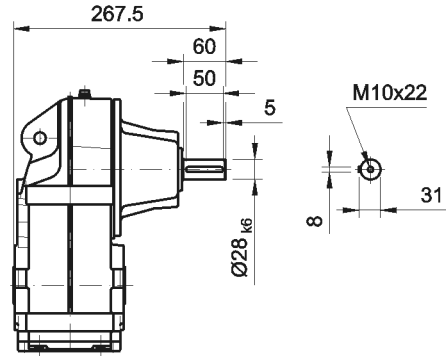
5. SP4



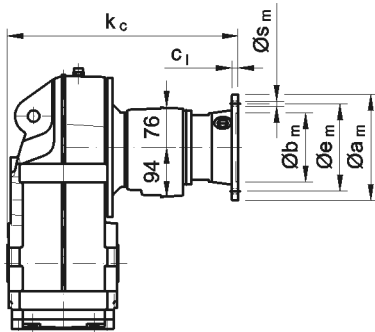
SPZ..36B-U
71 - 132



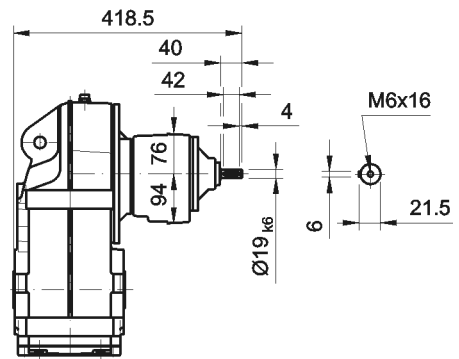
SPZ..36B-I



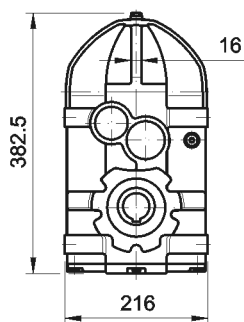
SPZ..36B16B/C-U
63 - 112



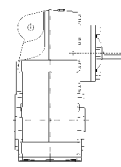
SPZ..36B16B/C-I



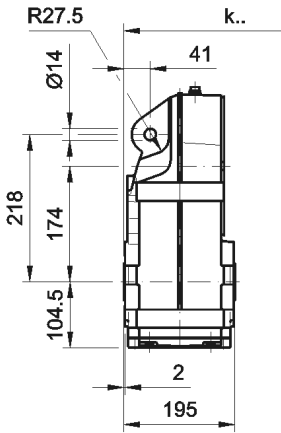
SPZ..36..



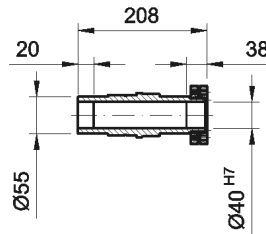
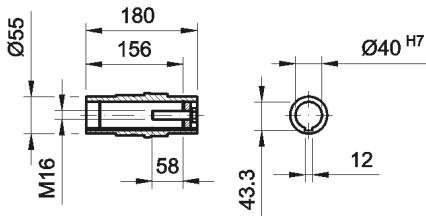
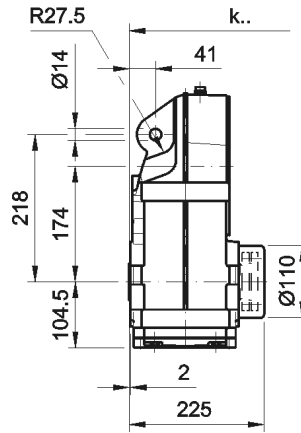
	63	71	80	90S	90L	100	112	132S	132M										
kl		235	235	235	235	235	235	298	298										
cl	8	8	10	10	10	12	12	13	13										
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7										
Øem	115	130	165	165	165	215	215	265	265										
Øam	140	160	200	200	200	250	250	300	300										
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5										
kc	406	406	406	406	406	406	406												



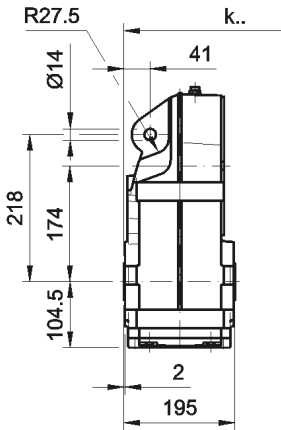
SPZH36..



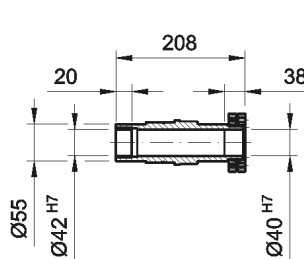
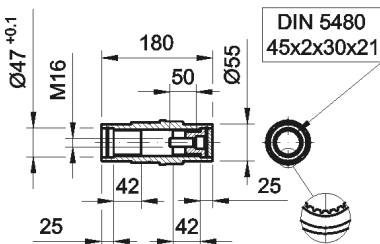
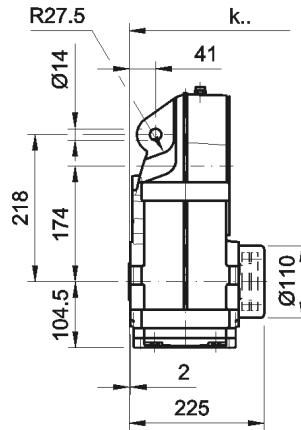
SPZS36..



SPZT36..



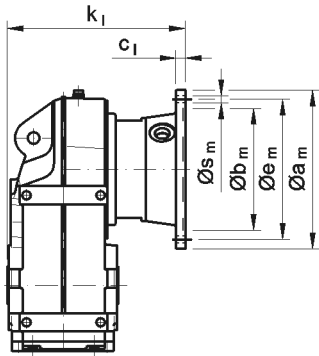
SPZC36..



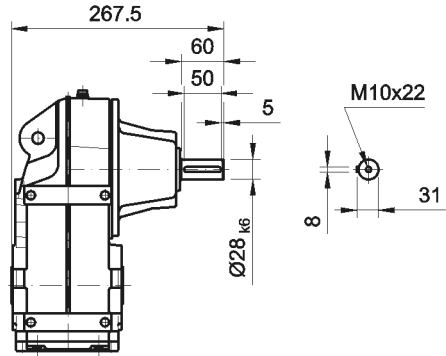
5. SP4



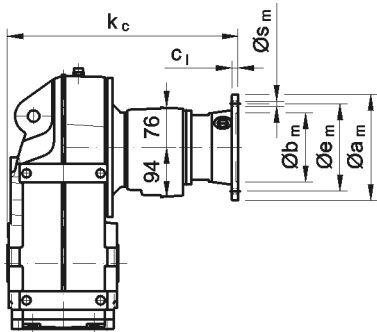
SPZ..36BF-U
71 - 132



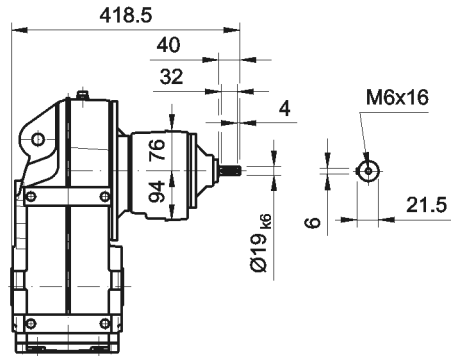
SPZ..36BF-I



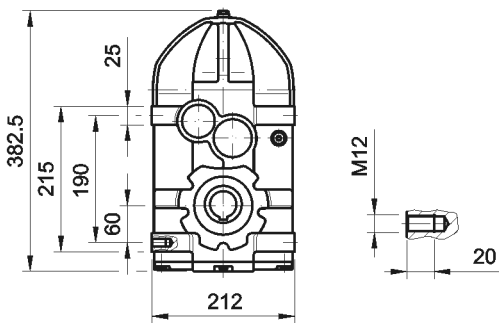
SPZ..36B16B/CF-U
63 - 112



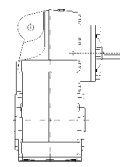
SPZ..36B16B/CF-I



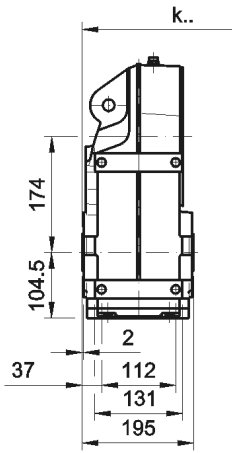
SPZ..36..F..



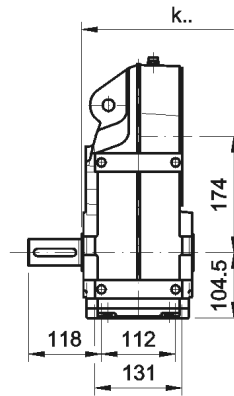
	63	71	80	90S	90L	100	112	132S	132M										
kl		235	235	235	235	235	235	298	298										
cl	8	8	10	10	10	12	12	13	13										
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7										
Øem	115	130	165	165	165	215	215	265	265										
Øam	140	160	200	200	200	250	250	300	300										
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5										
kc	406	406	406	406	406	406	406												



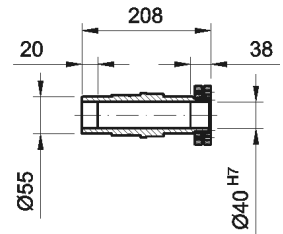
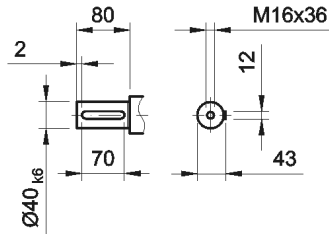
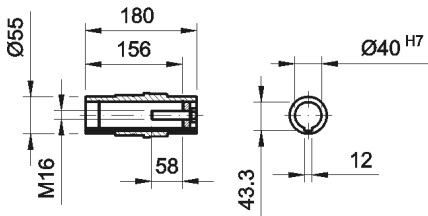
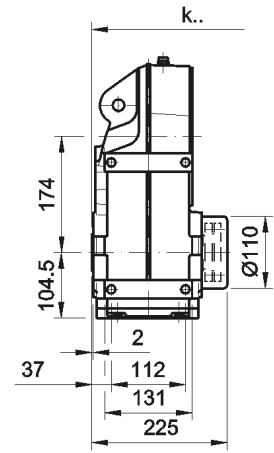
SPZH36..F..



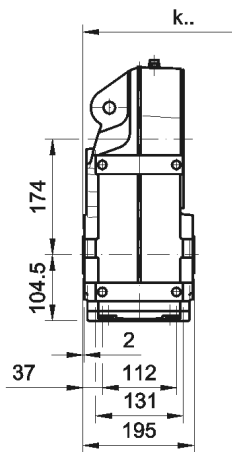
SPZN36..F..



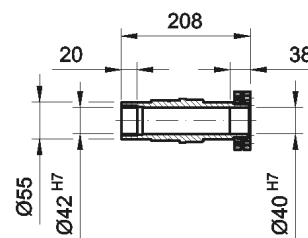
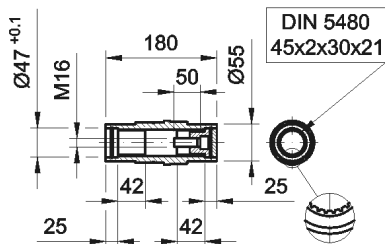
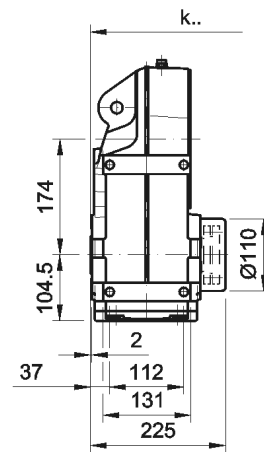
SPZS36..F..



SPZT36..F..



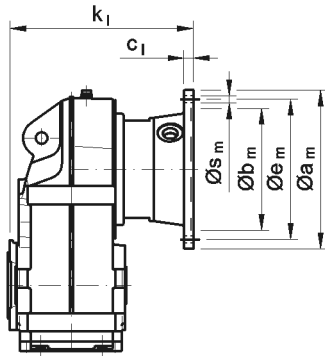
SPZC36..F..



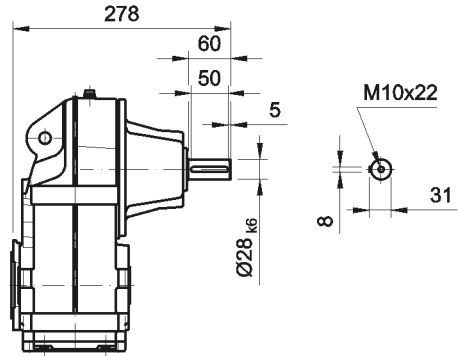
5. SP4



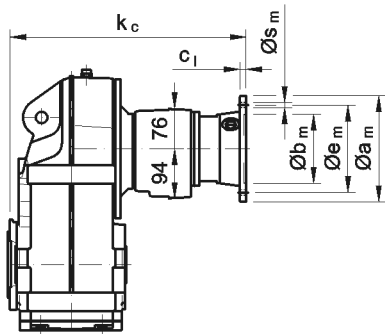
SPT..36B-U
71 - 132



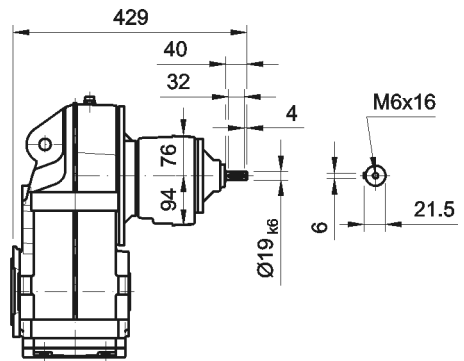
SPT..36B-I



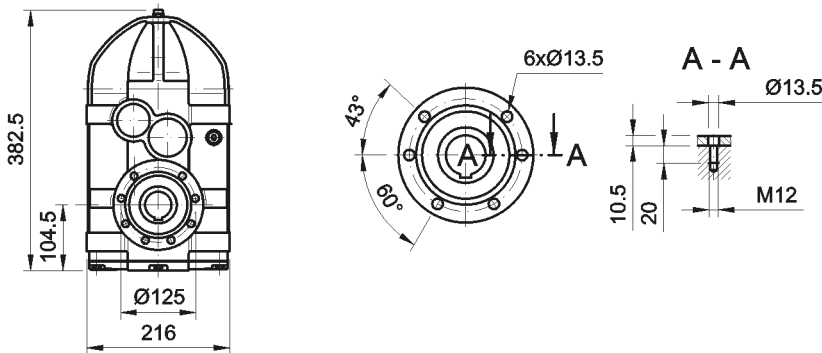
SPT..36B16B/C-U
63 - 112



SPT..36B16B/C-I



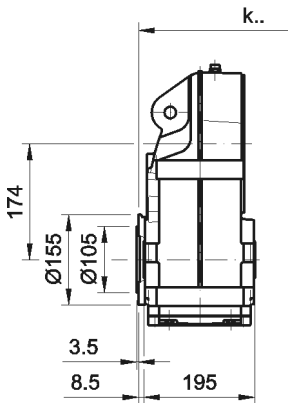
SPT..36..



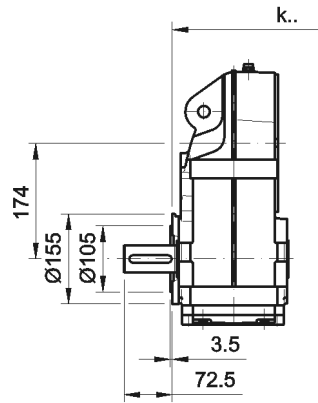
	63	71	80	90S	90L	100	112	132S	132M									
kl		246	246	246	246	246	246	308	308									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
kc	417	417	417	417	417	417	417											



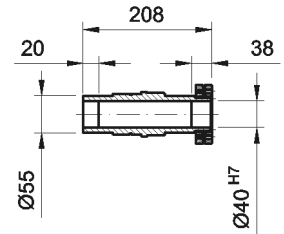
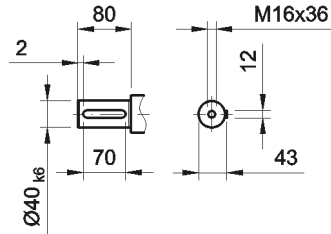
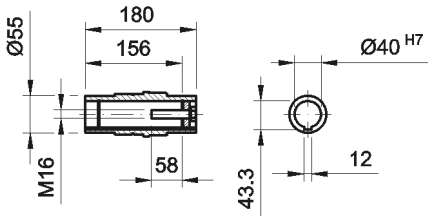
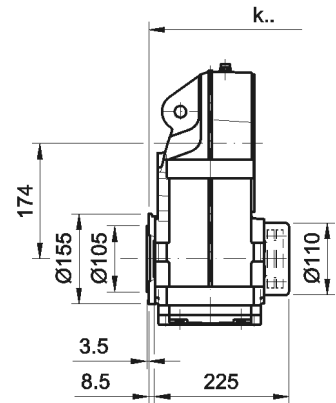
SPTH36..



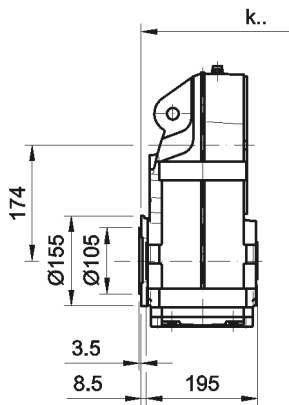
SPTN36..



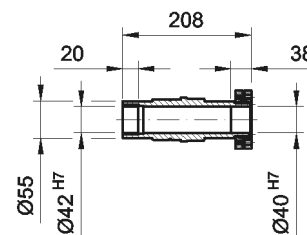
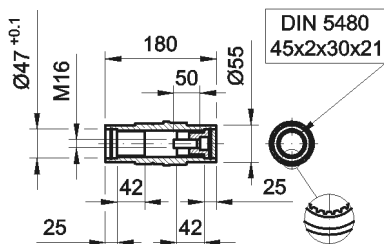
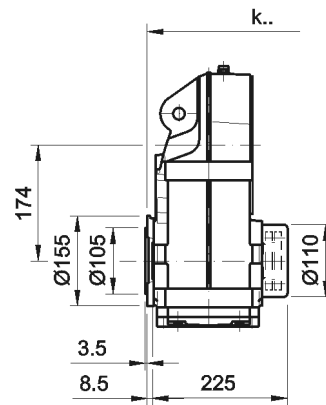
SPTS36..



SPTT36..



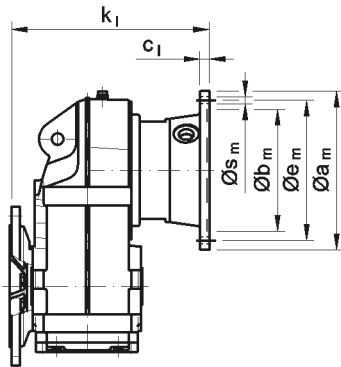
SPTC36..



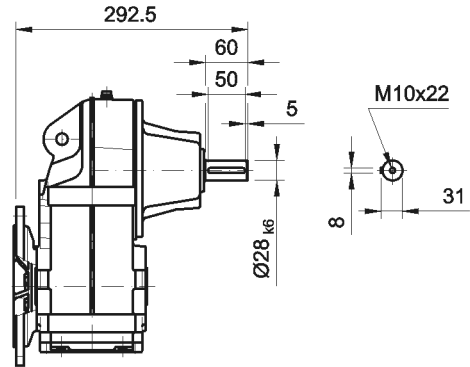
5. SP4



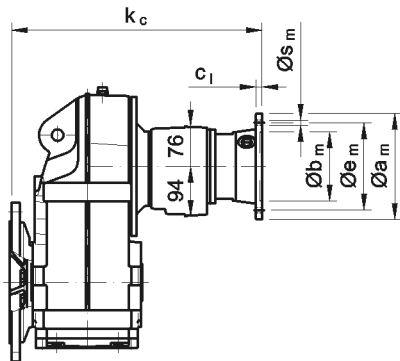
SPF..36B-U
71 - 132



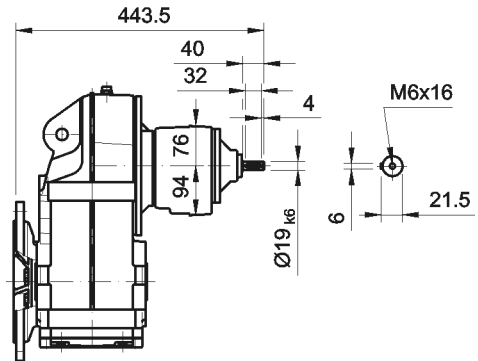
SPF..36B-I



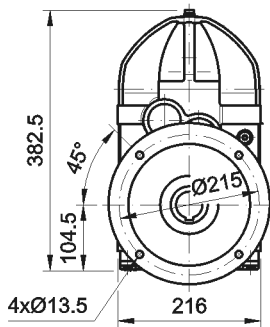
SPF..36B16B/C-U
63 - 112



SPF..36B16B/C-I



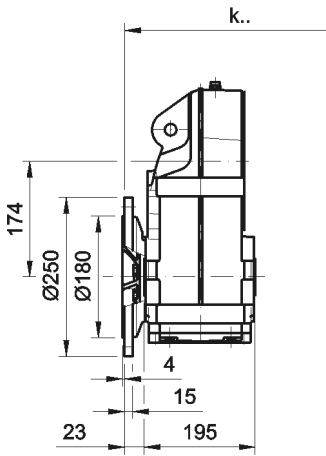
SPF..36..



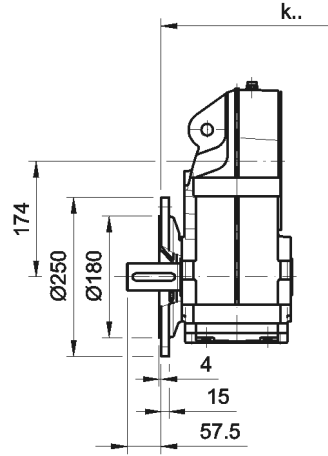
	63	71	80	90S	90L	100	112	132S	132M									
k_l		260	260	260	260	260	260	323	323									
c_l	8	8	10	10	10	12	12	13	13									
Ø_{b_m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Ø_{e_m}	115	130	165	165	165	215	215	265	265									
Ø_{a_m}	140	160	200	200	200	250	250	300	300									
Ø_{s_m}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
k_c	431	431	431	431	431	431	431											



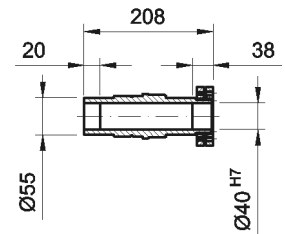
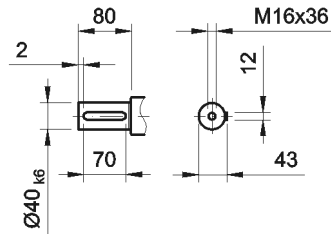
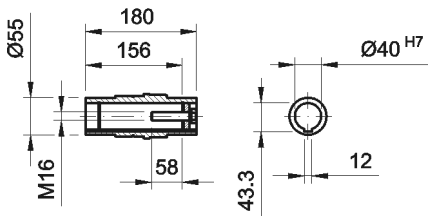
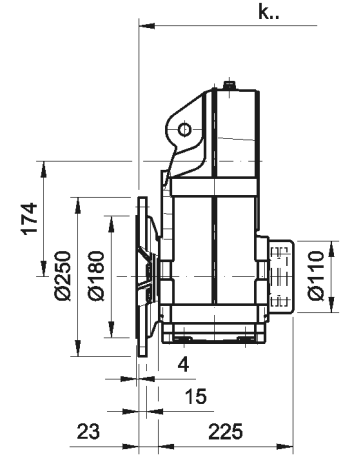
SPFH36..



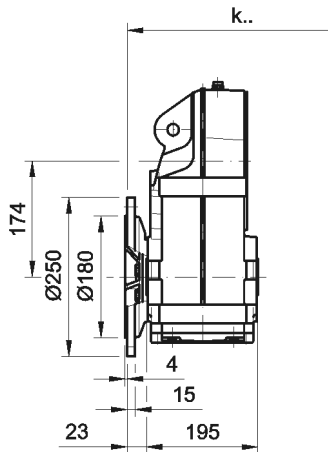
SPFN36..



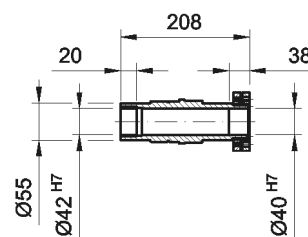
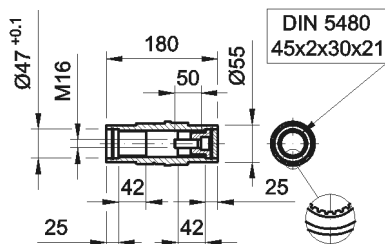
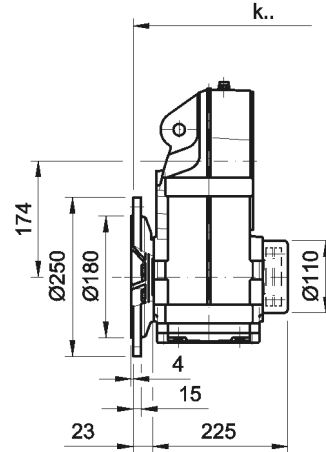
SPFS36..



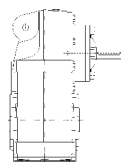
SPFT36..



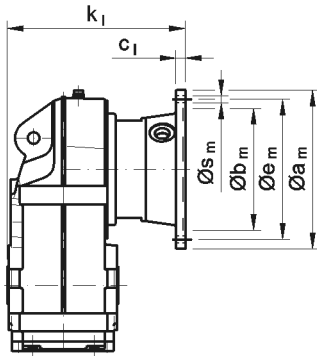
SPFC36..



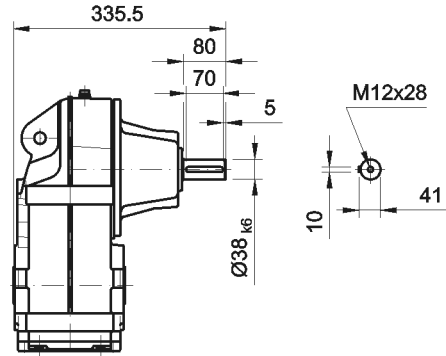
5. SP4



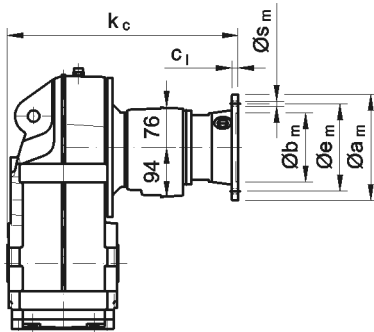
SPZ..46B/C-U
80 - 180



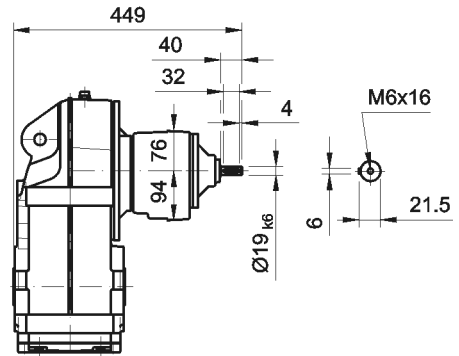
SPZ..46B/C-I



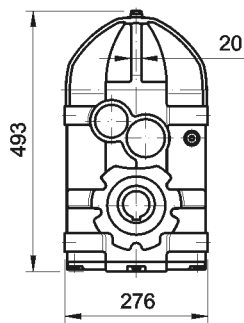
SPZ..46B/C16B/C-U
63 - 112



SPZ..46B/C16B/C-I



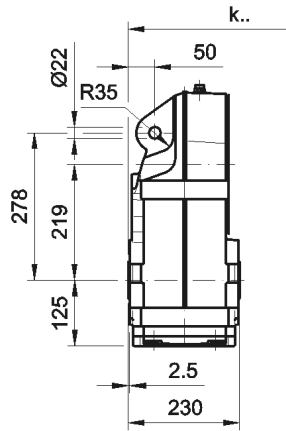
SPZ..46..



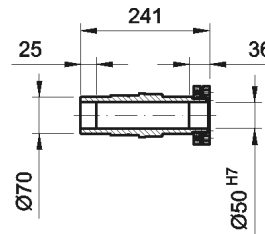
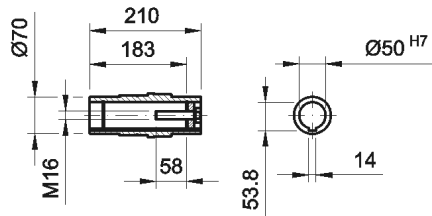
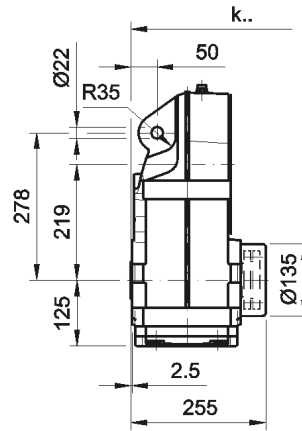
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			267	267	267	267	267	329	329	394	394	394	394						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	437	437	437	437	437	437	437												



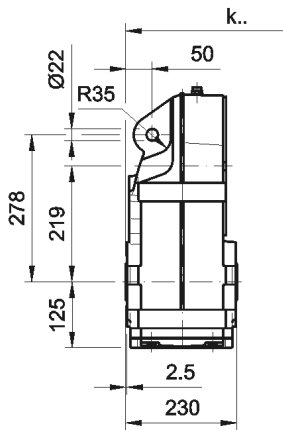
SPZH46..



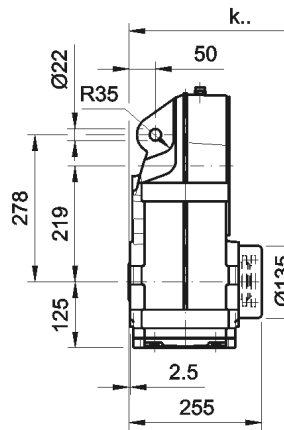
SPZS46..



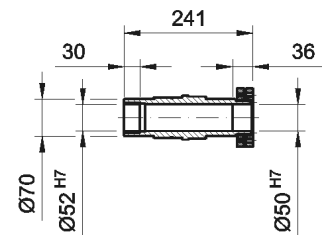
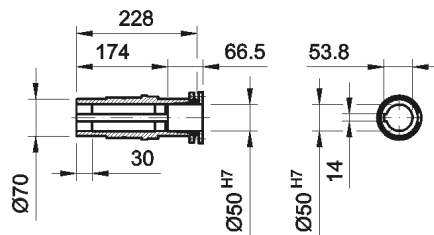
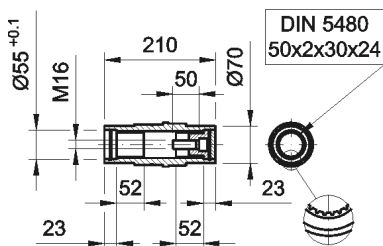
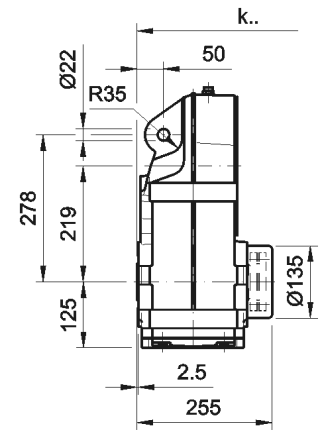
SPZT46..



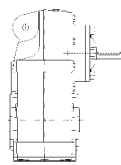
SPZB46..



SPZC46..

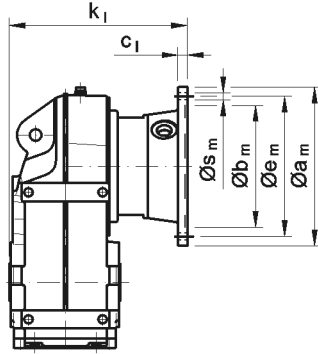


5. SP4

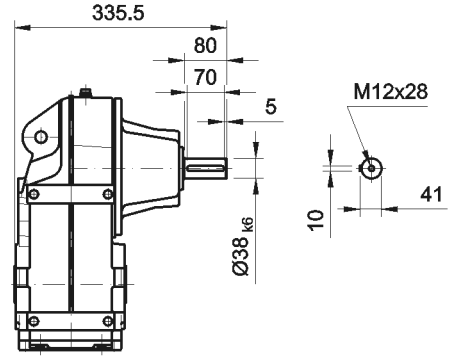


SPZ..46B/CF-U

80 - 180

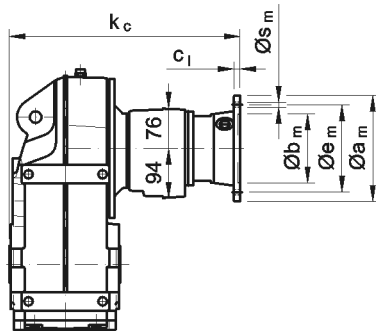


SPZ..46B/CF-I

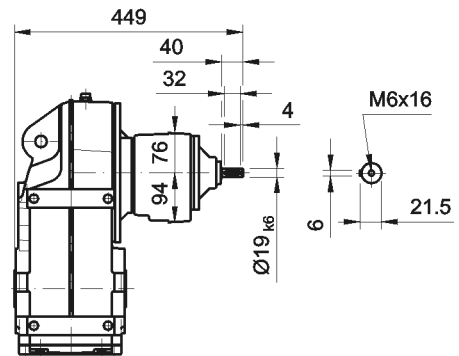


SPZ..46B/C16B/CF-U

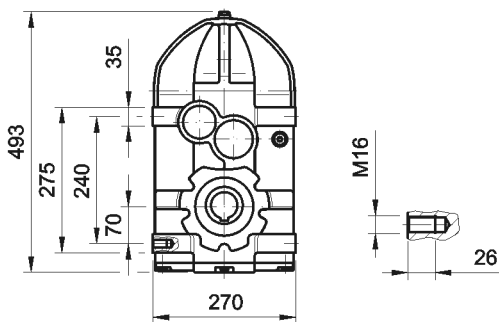
63 - 112



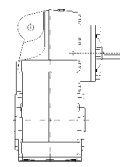
SPZ..46B/C16B/CF-I



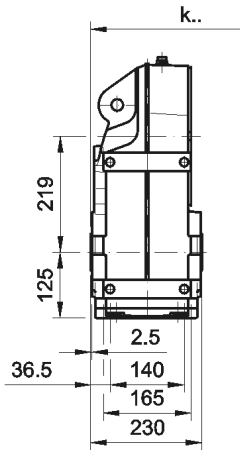
SPZ..46..F..



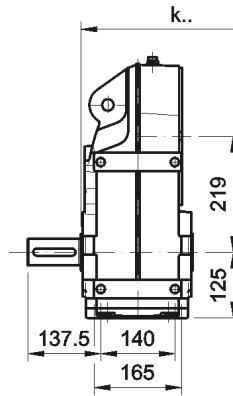
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			267	267	267	267	267	329	329	394	394	394	394						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	437	437	437	437	437	437	437												



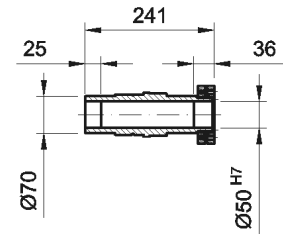
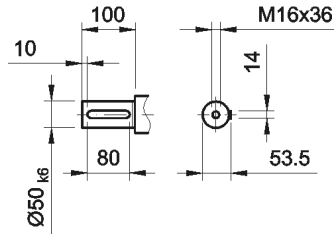
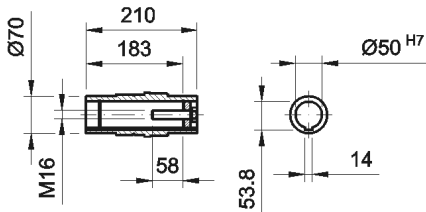
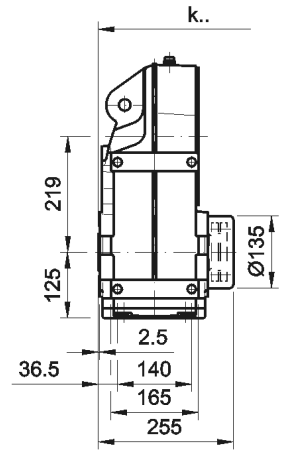
SPZH46..F..



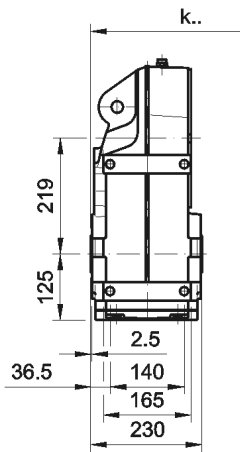
SPZN46..F..



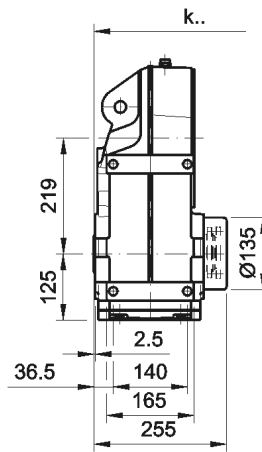
SPZS46..F..



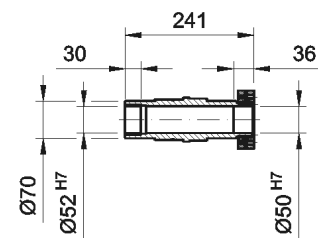
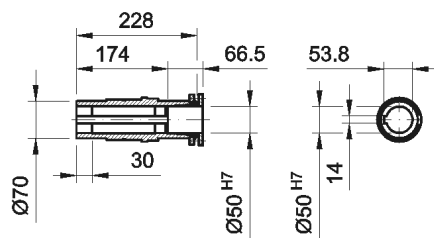
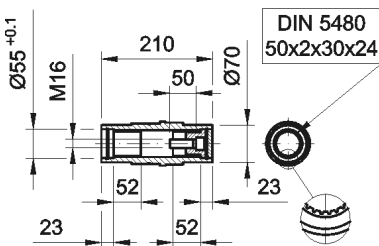
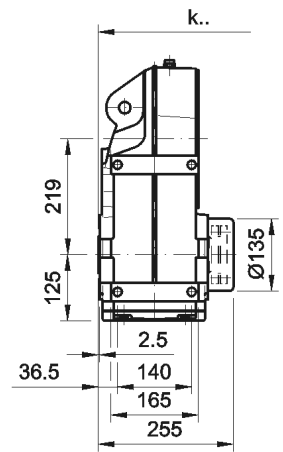
SPZT46..F..



SPZB46..F..



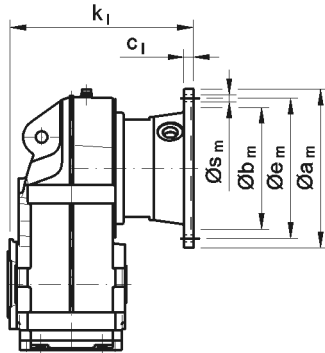
SPZC46..F..



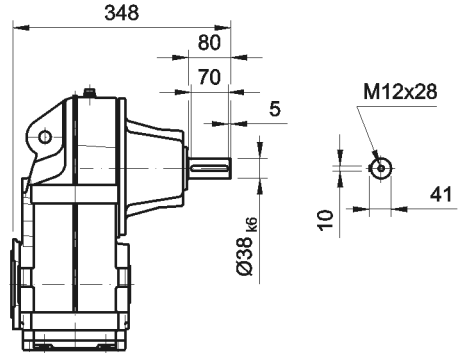
5. SP4



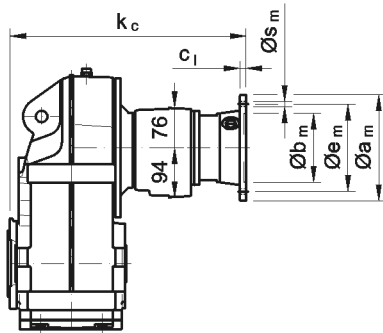
SPT..46B/C-U
80 - 180



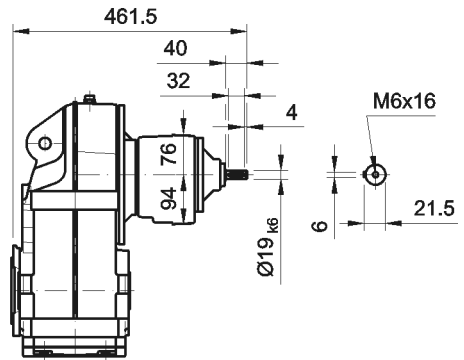
SPT..46B/C-I



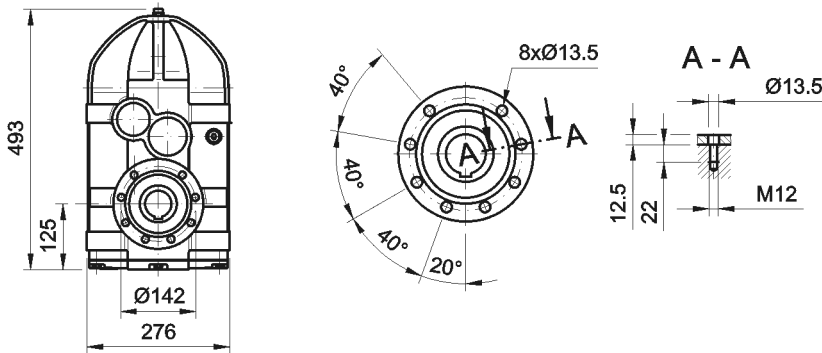
SPT..46B/C16B/C-U
63 - 112



SPT..46B/C16B/C-I



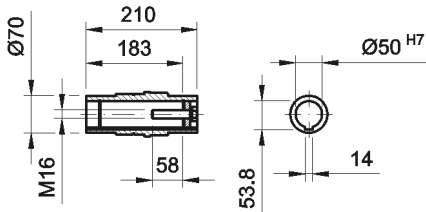
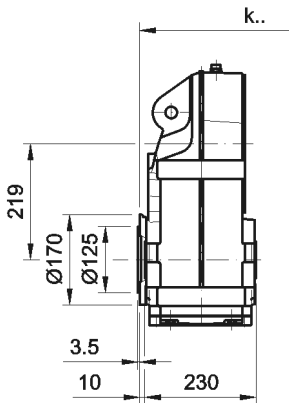
SPT..46..



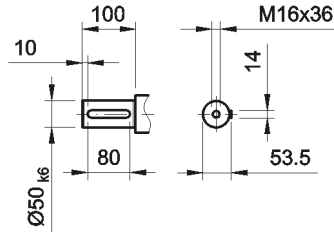
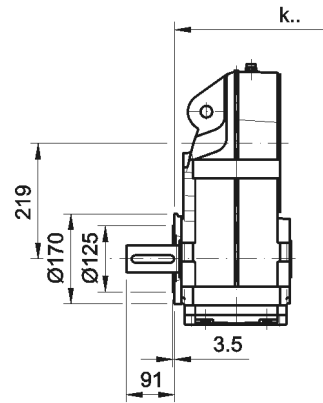
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			279	279	279	279	279	342	342	407	407	407	407						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	449	449	449	449	449	449	449												



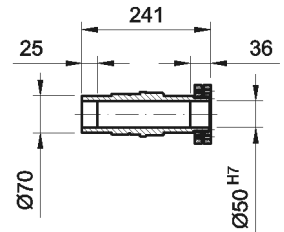
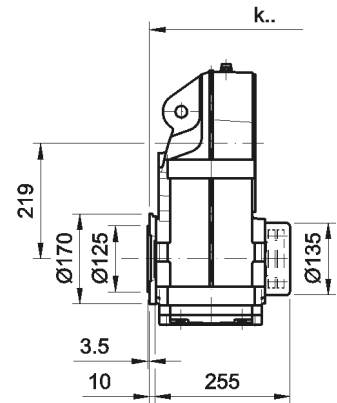
SPTH46..



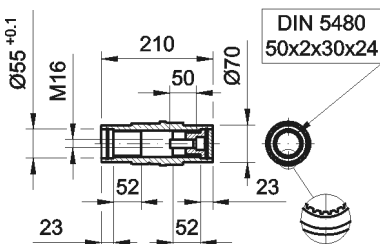
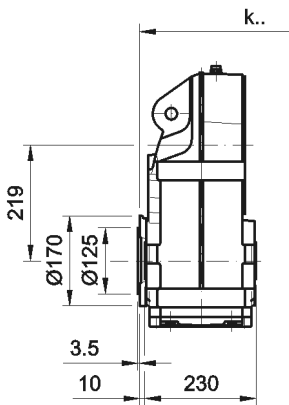
SPTN46..



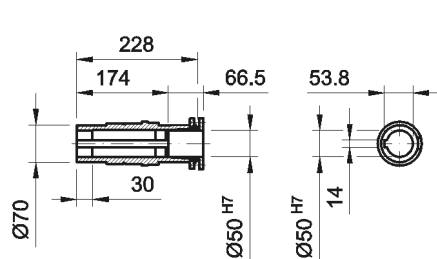
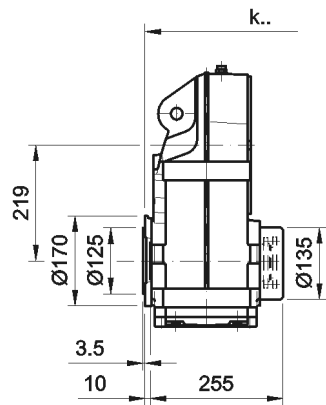
SPTS46..



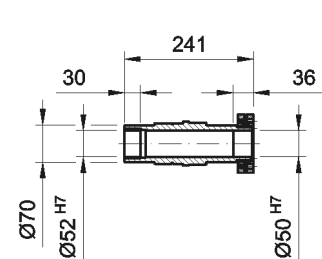
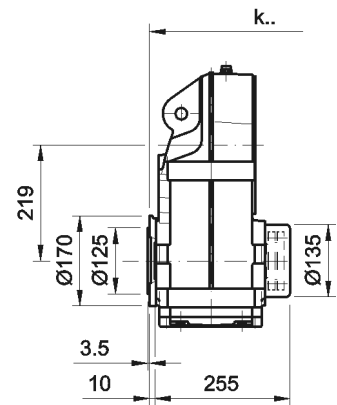
SPTT46..



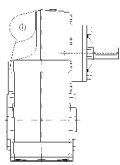
SPTB46..



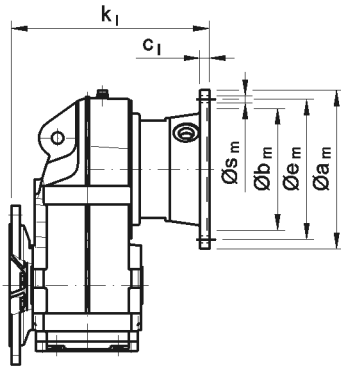
SPTC46..



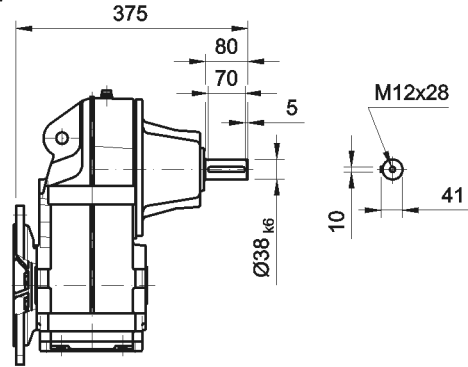
5. SP4



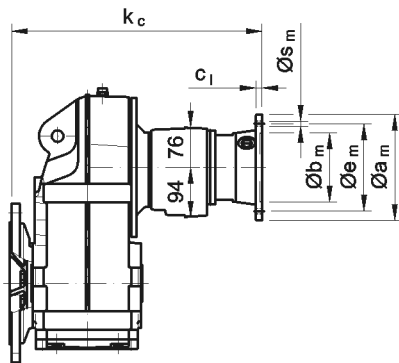
SPF..46B/C-U
80 - 180



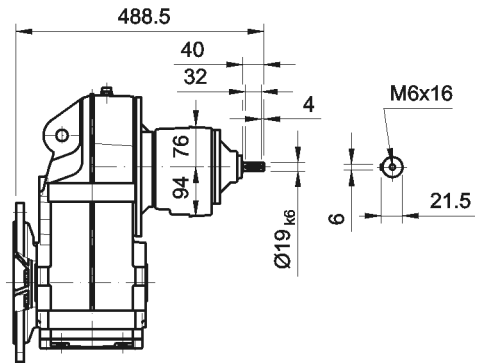
SPF..46B/C-I



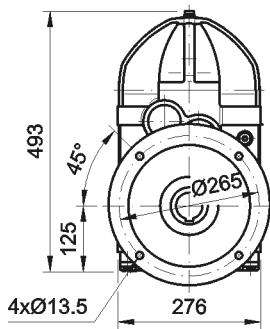
SPF..46B/C16B/C-U
63 - 112



SPF..46B/C16B/C-I



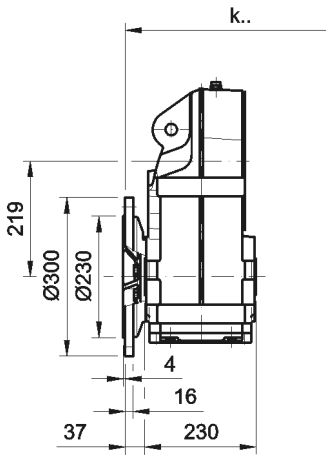
SPF..46..



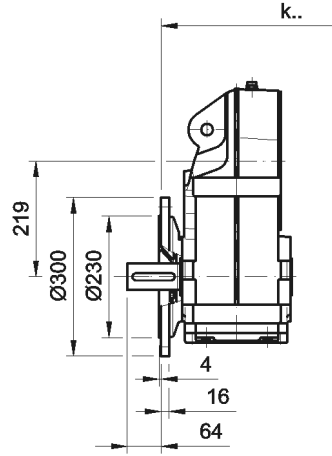
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
k_l			306	306	306	306	306	369	369	434	434	434	434						
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15						
Ø_{b_m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Ø_{e_m}	115	130	165	165	165	215	215	265	265	300	300	300	300						
Ø_{a_m}	140	160	200	200	200	250	250	300	300	350	350	350	350						
Ø_{s_m}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
k_c	476	476	476	476	476	476	476												



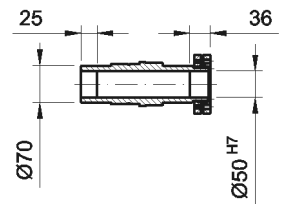
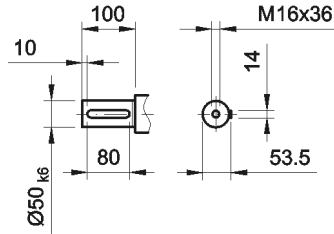
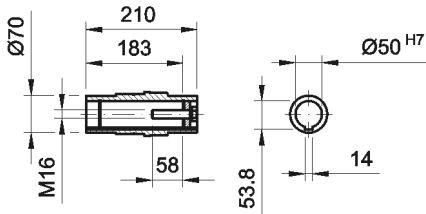
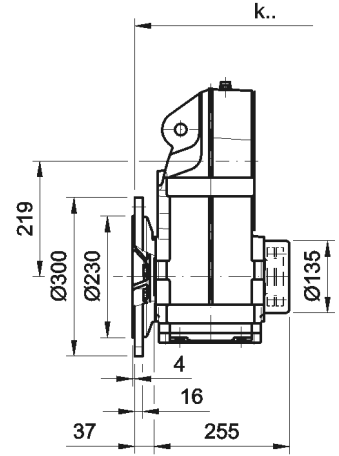
SPFH46..



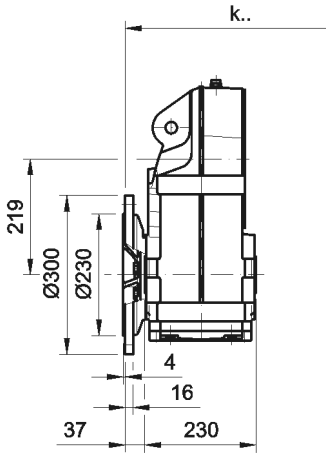
SPFN46..



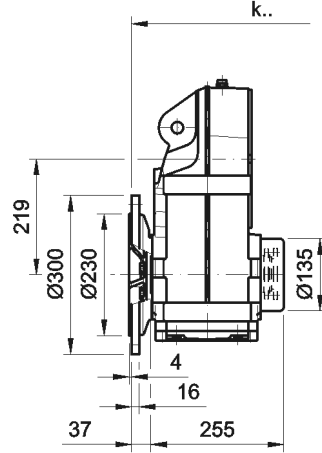
SPFS46..



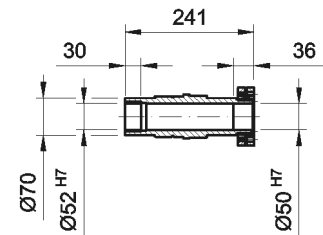
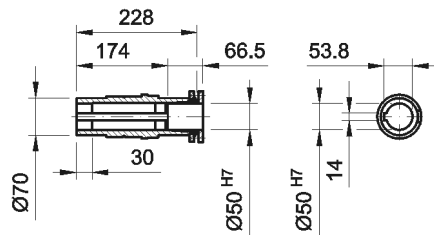
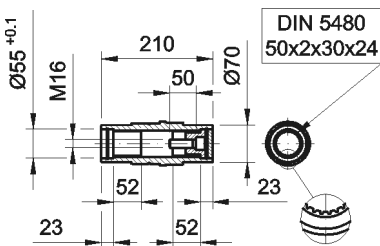
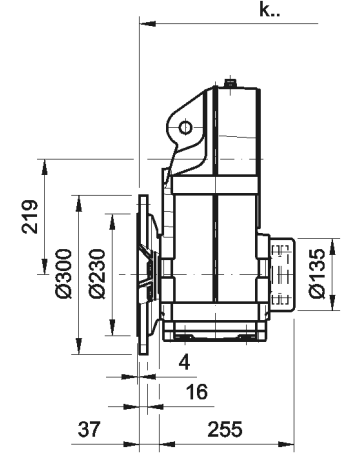
SPFT46..



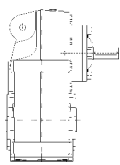
SPFB46..



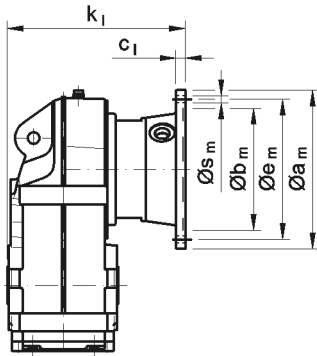
SPFC46..



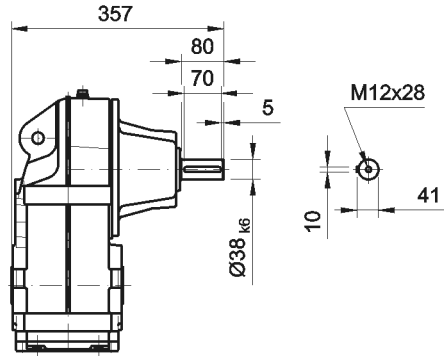
5. SP4



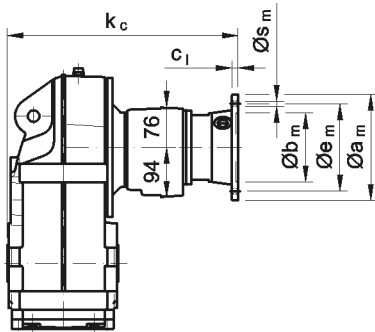
SPZ..56B/C-U
80 - 180



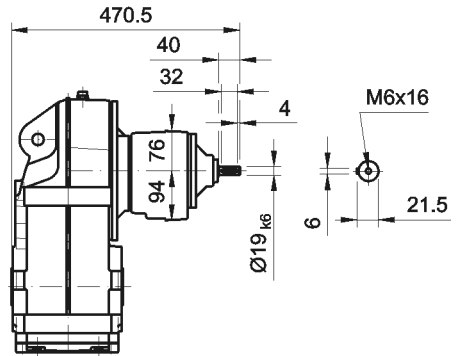
SPZ..56B/C-I



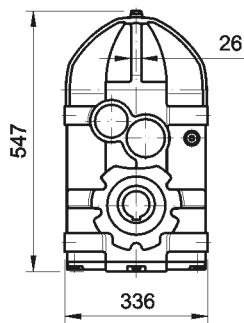
SPZ..56B/C16B/C-U
63 - 112



SPZ..56B/C16B/C-I



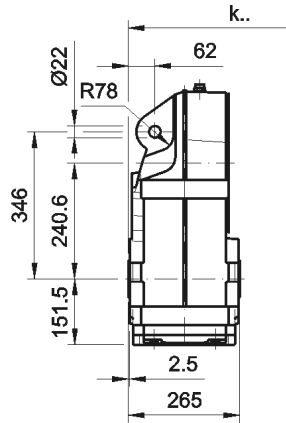
SPZ..56..



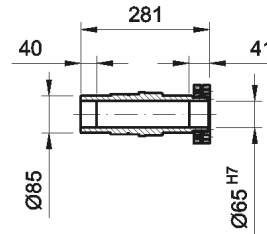
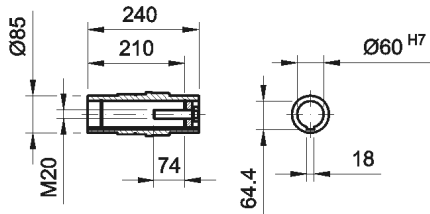
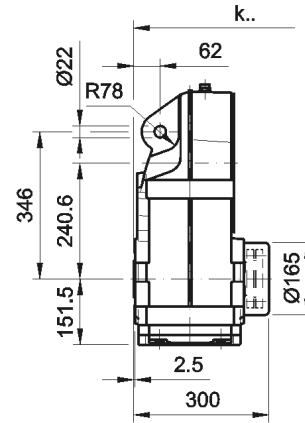
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			288	288	288	288	288	351	351	416	416	416	416						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	458	458	458	458	458	458	458												



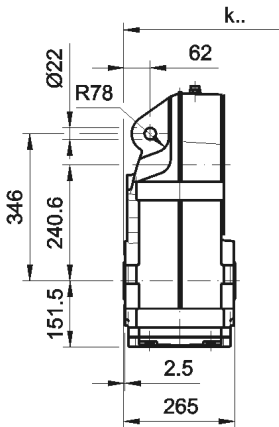
SPZH56..



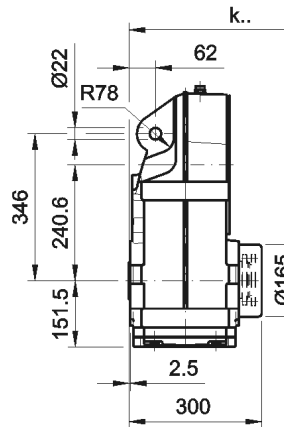
SPZS56..



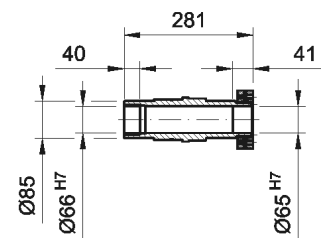
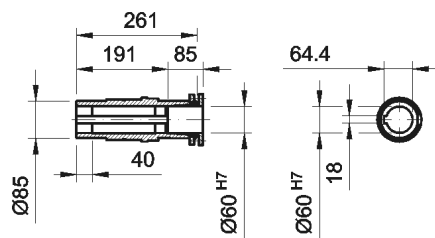
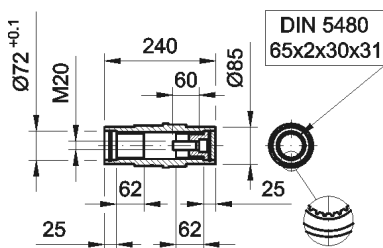
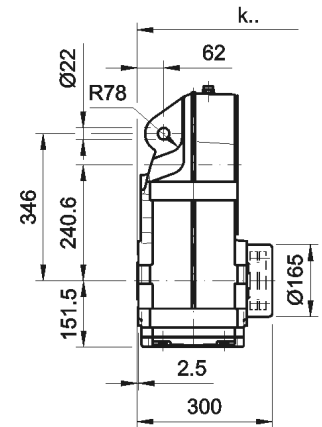
SPZT56..



SPZB56..



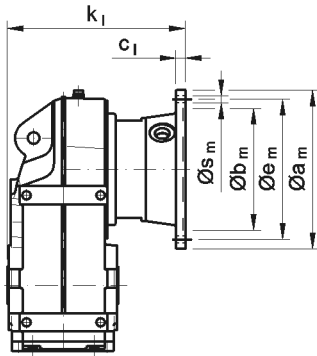
SPZC56..



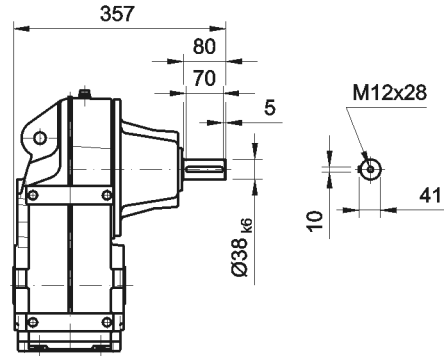
5. SP4



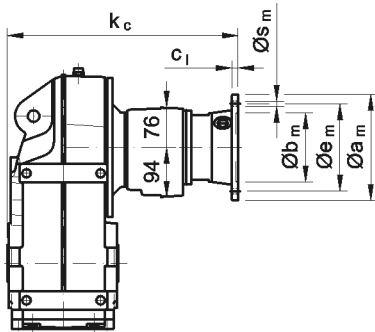
SPZ..56B/CF-U
80 - 180



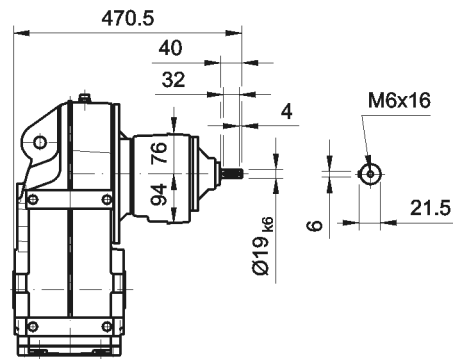
SPZ..56B/CF-I



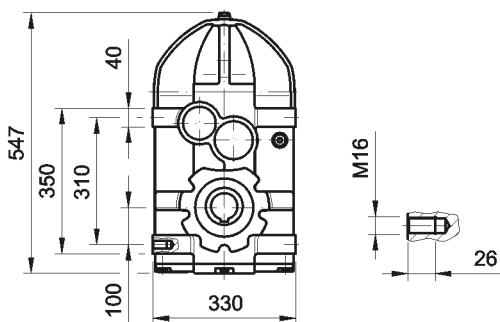
SPZ..56B/C16B/CF-U
63 - 112



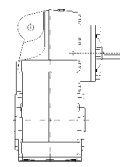
SPZ..56B/C16B/CF-I



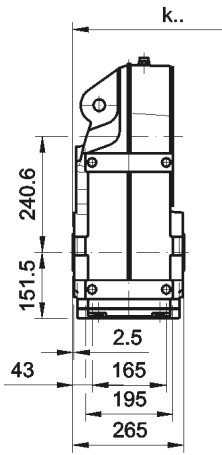
SPZ..56..F..



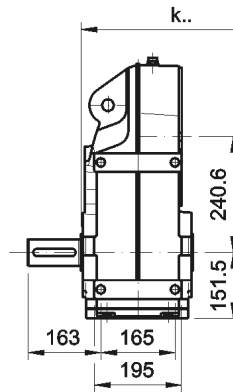
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			288	288	288	288	288	351	351	416	416	416	416						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	458	458	458	458	458	458	458												



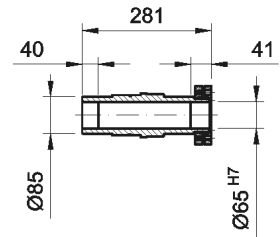
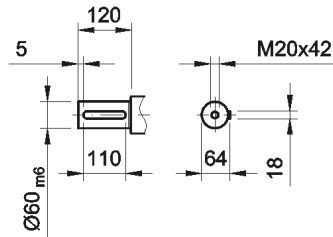
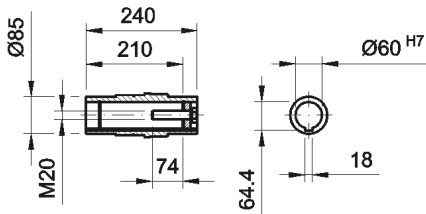
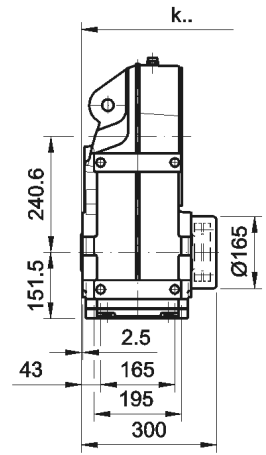
SPZH56..F..



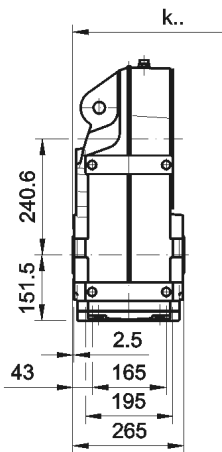
SPZN56..F..



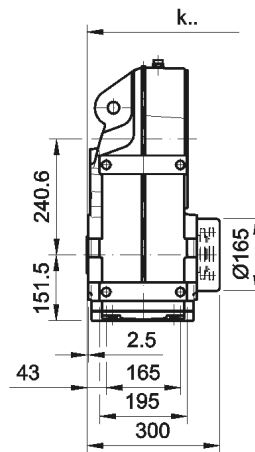
SPZS56..F..



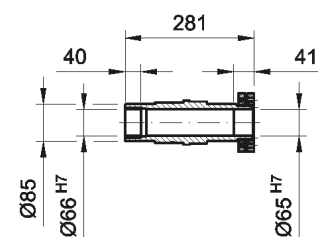
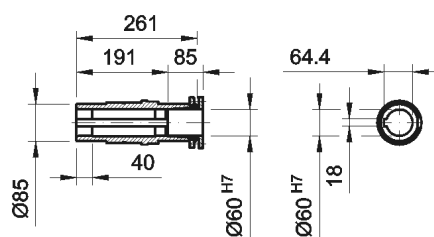
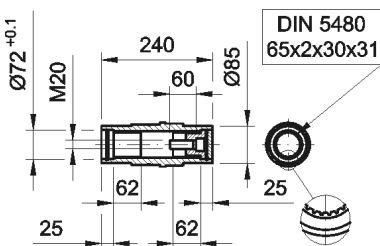
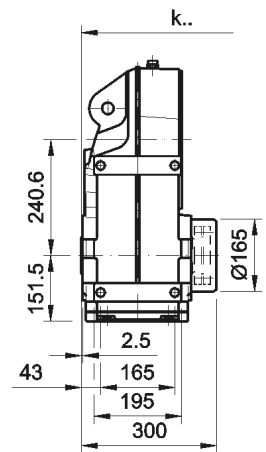
SPZT56..F..



SPZB56..F..



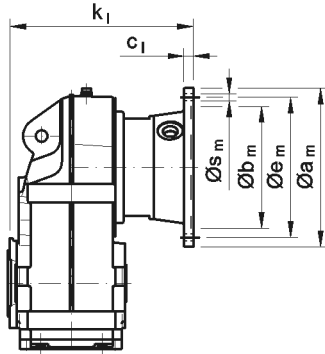
SPZC56..F..



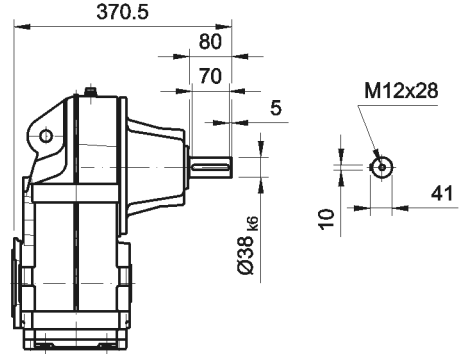
5. SP4



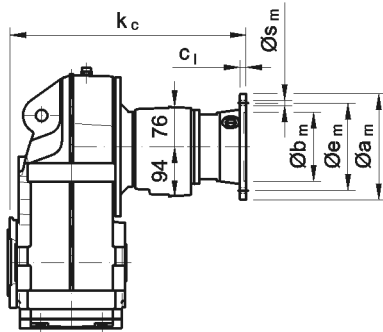
SPT..56B/C-U
80 - 180



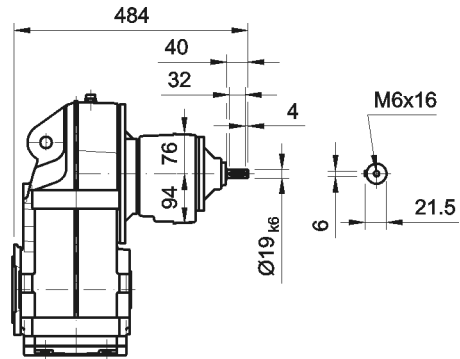
SPT..56B/C-I



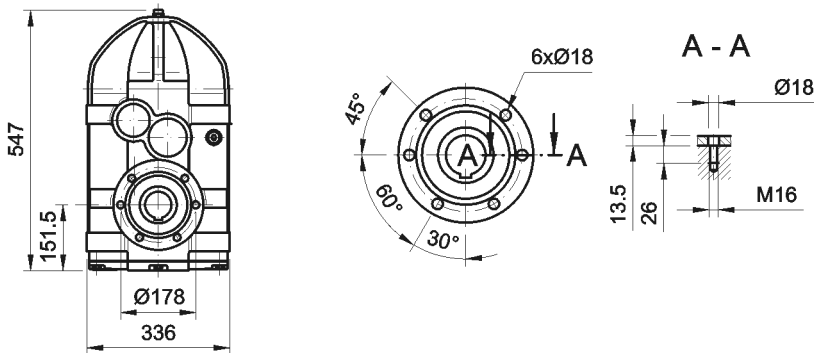
SPT..56B/C16B/C-U
63 - 112



SPT..56B/C16B/C-I



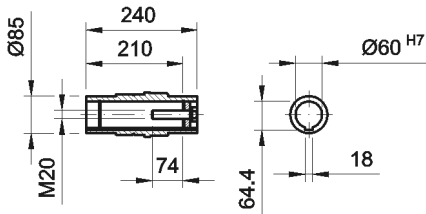
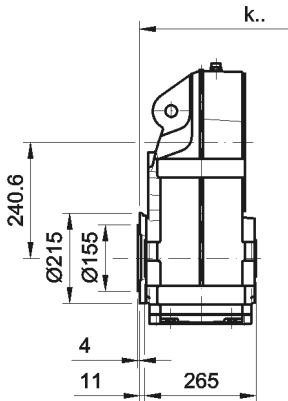
SPT..56..



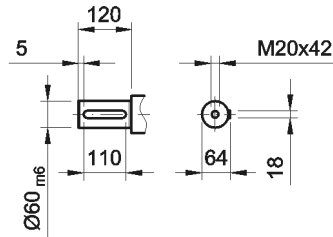
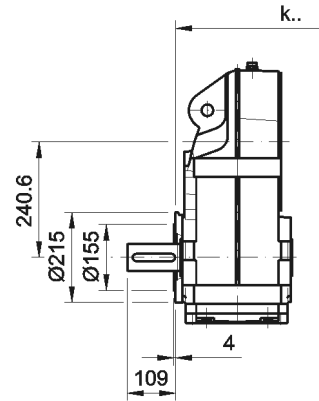
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			302	302	302	302	302	364	364	429	429	429	429						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	472	472	472	472	472	472	472												



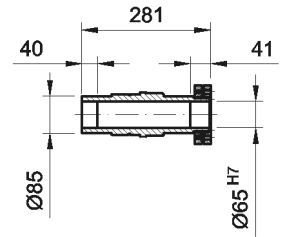
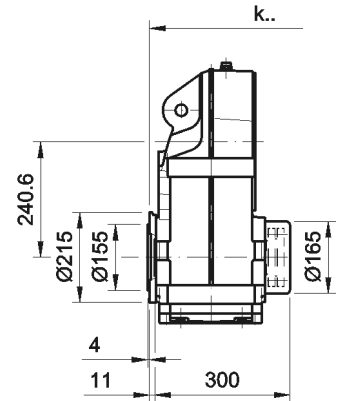
SPTH56..



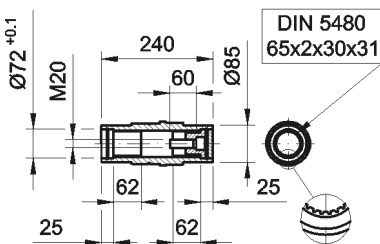
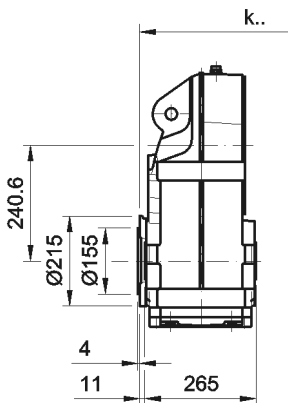
SPTN56..



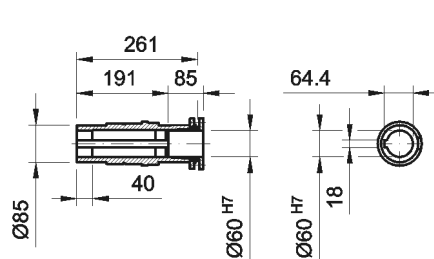
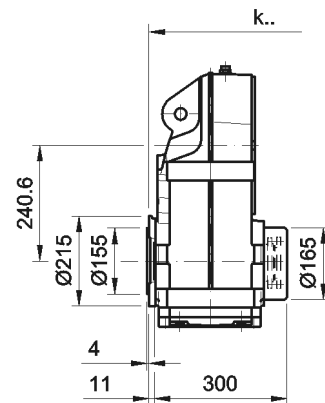
SPTS56..



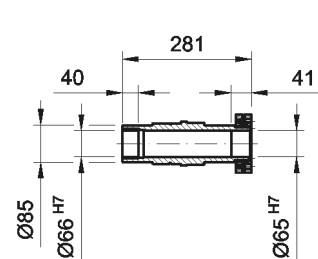
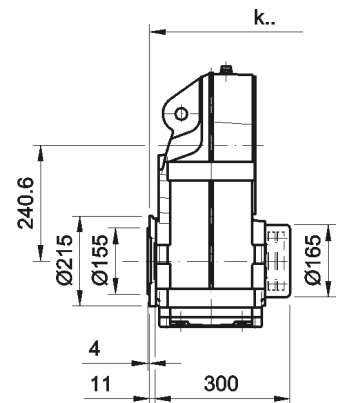
SPTT56..



SPTB56..



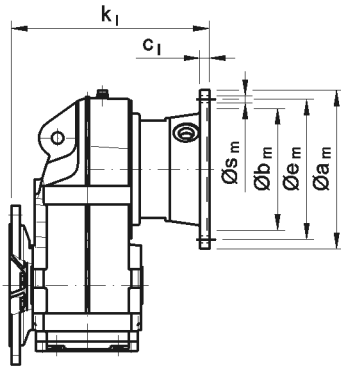
SPTC56..



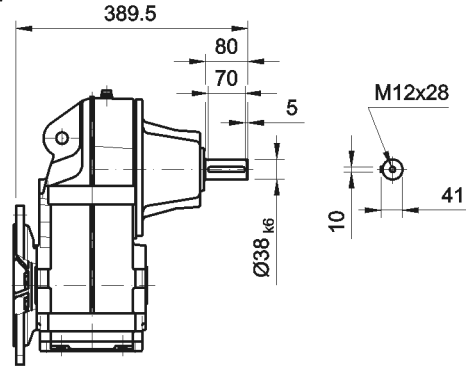
5. SP4



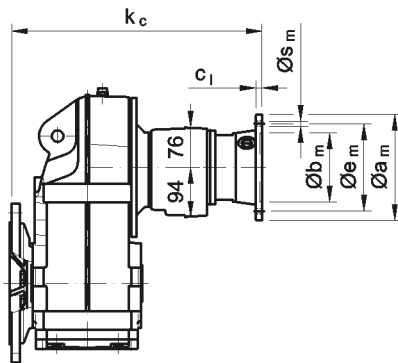
SPF..56B/C-U
80 - 180



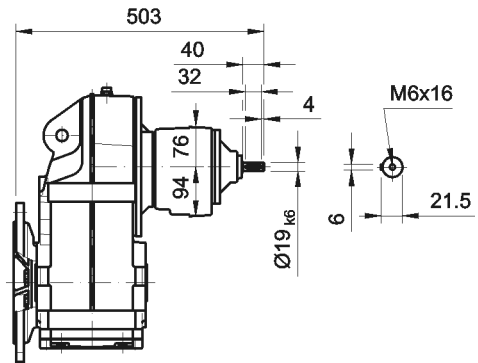
SPF..56B/C-I



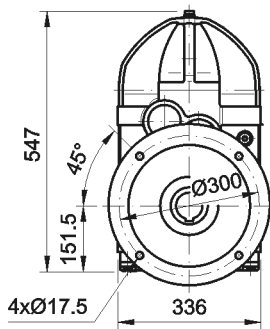
SPF..56B/C16B/C-U
63 - 112



SPF..56B/C16B/C-I



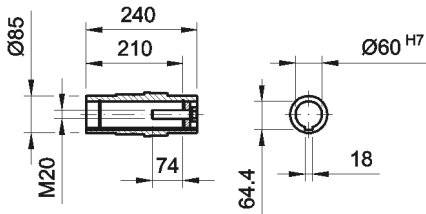
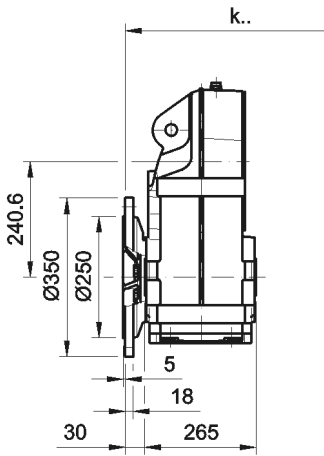
SPF..56..



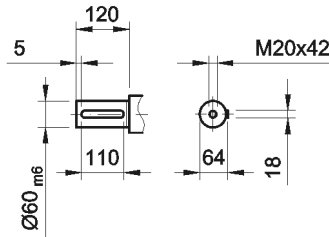
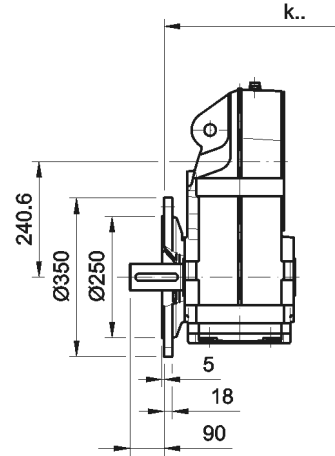
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
k_l			321	321	321	321	321	383	383	448	448	448	448						
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15						
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Ø_{em}	115	130	165	165	165	215	215	265	265	300	300	300	300						
Ø_{am}	140	160	200	200	200	250	250	300	300	350	350	350	350						
Ø_{sm}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
k_c	491	491	491	491	491	491	491												



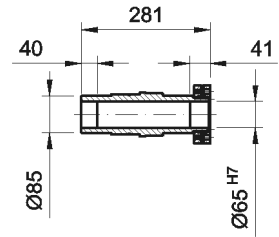
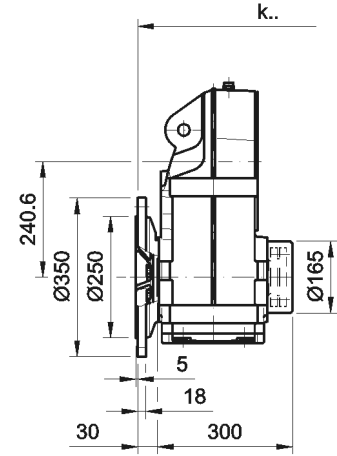
SPFH56..



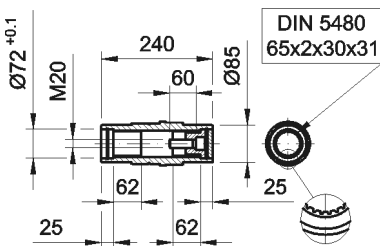
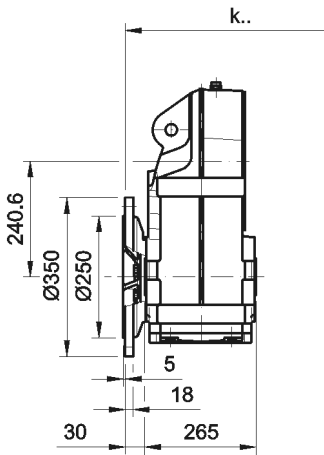
SPFN56..



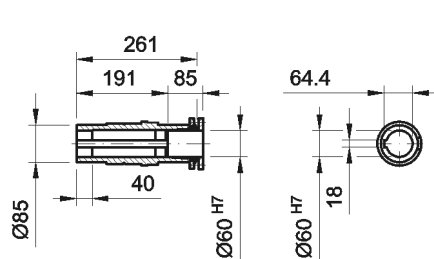
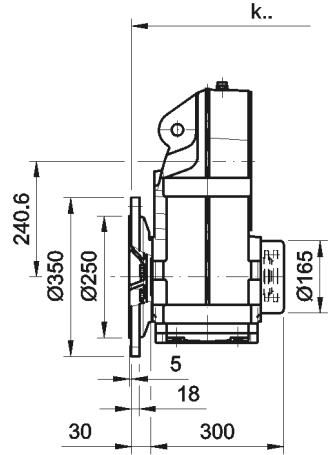
SPFS56..



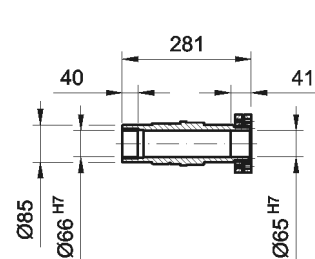
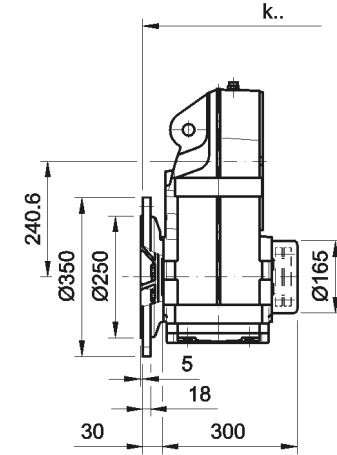
SPFT56..



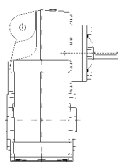
SPFB56..



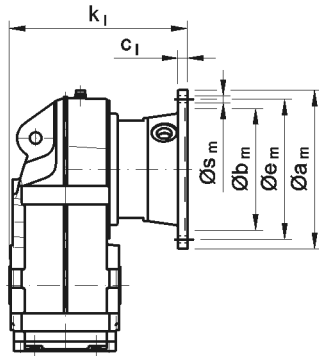
SPFC56..



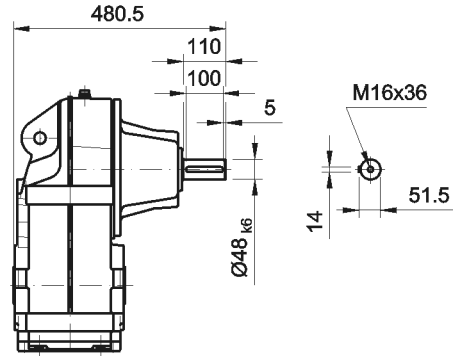
5. SP4



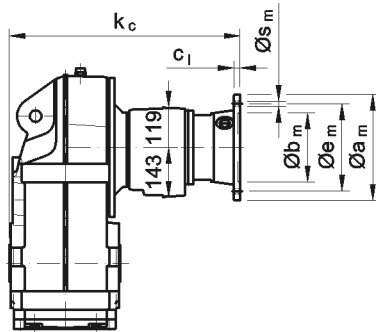
SPZ..66B/C-U
100 - 280



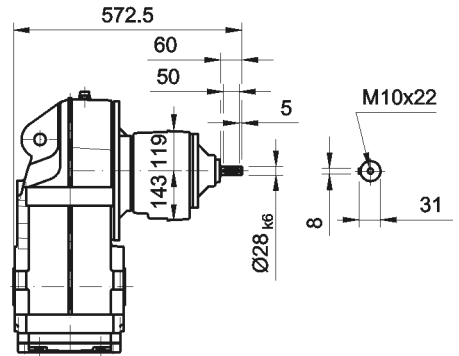
SPZ..66B/C-I



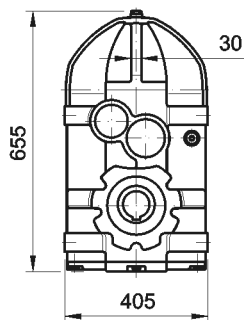
SPZ..66B/C36B/C-U
71 - 132



SPZ..66B/C36B/C-I



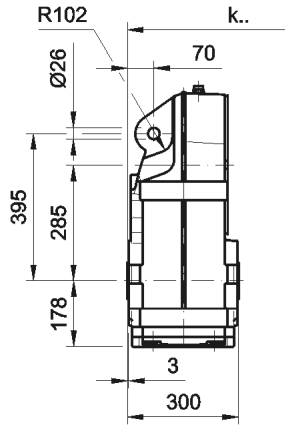
SPZ..66..



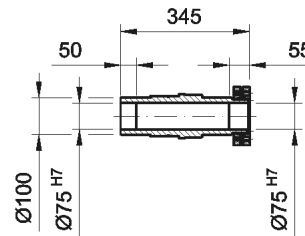
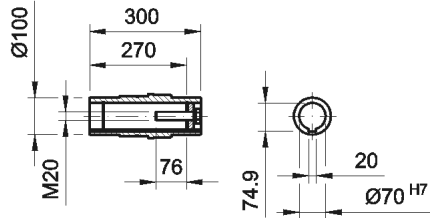
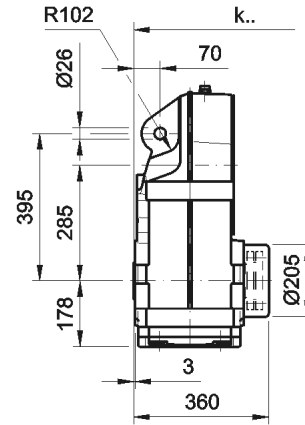
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					383	383	383	383	448	448	540	540	565	595	595	606	606	606		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	540	540	540	540	540	540	603	603												



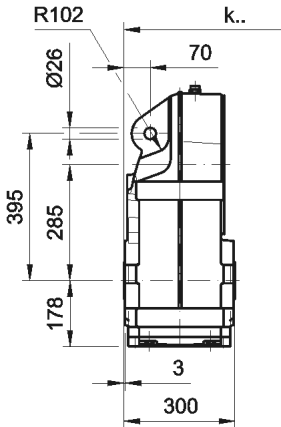
SPZH66..



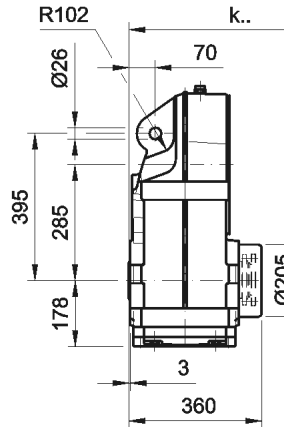
SPZS66..



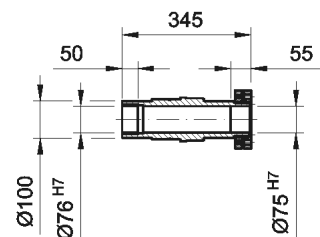
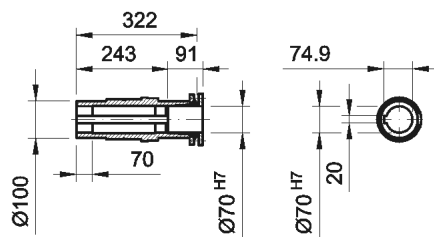
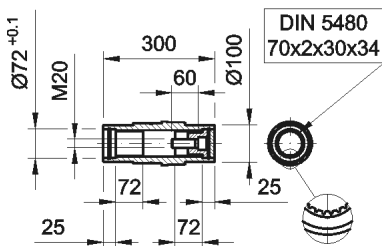
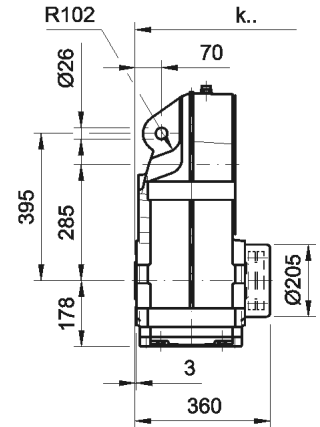
SPZT66..



SPZB66..



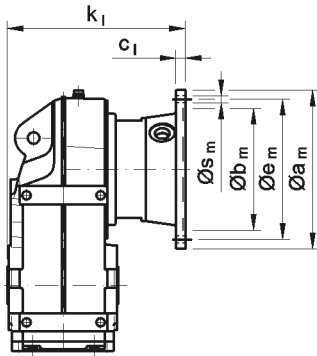
SPZC66..



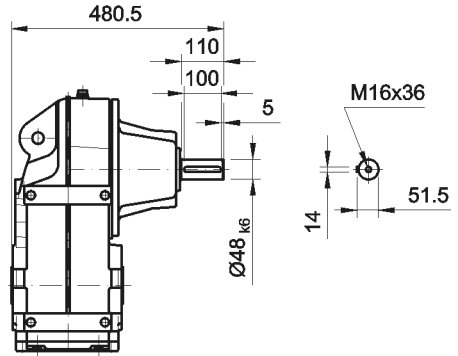
5. SP4



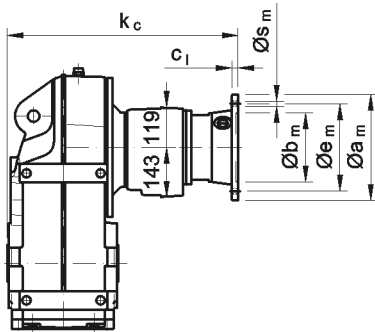
SPZ..66B/CF-U
100 - 280



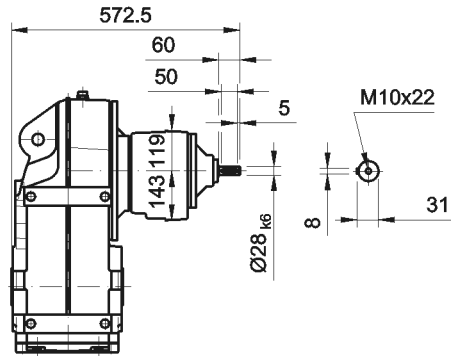
SPZ..66B/CF-I



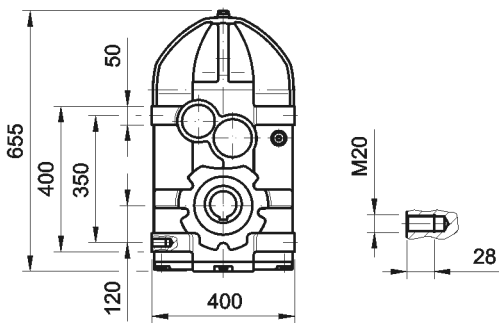
SPZ..66B/C36B/CF-U
71 - 132



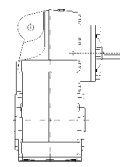
SPZ..66B/C36B/CF-I



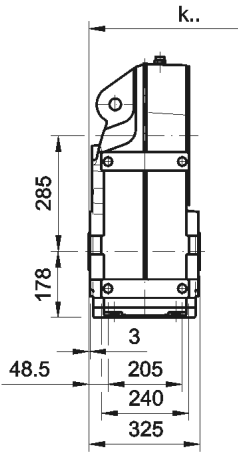
SPZ..66..F..



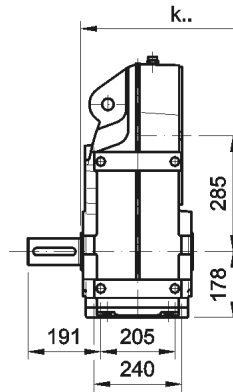
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					383	383	383	383	448	448	540	540	565	595	595	606	606	606		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	540	540	540	540	540	540	603	603												



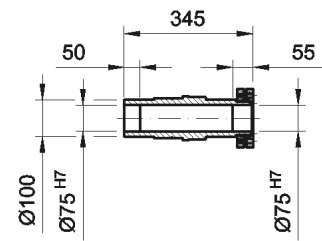
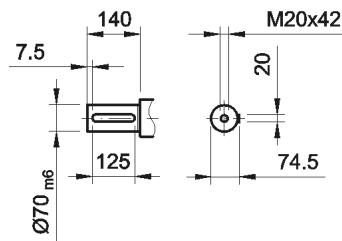
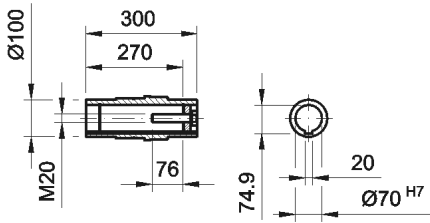
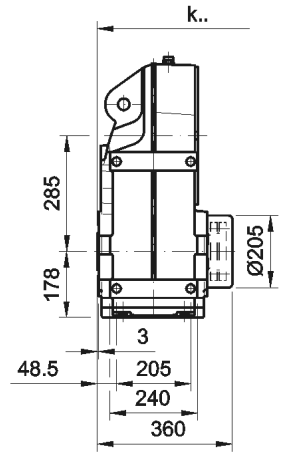
SPZH66..F..



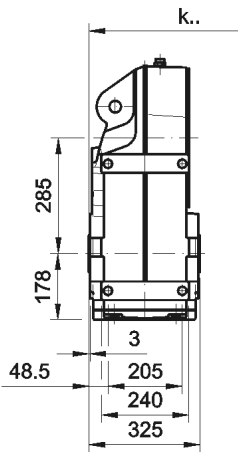
SPZN66..F..



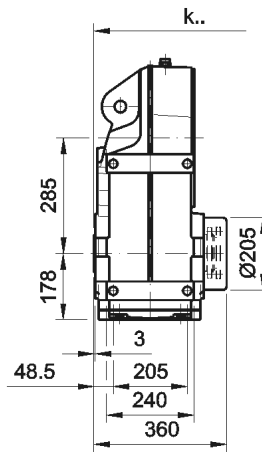
SPZS66..F..



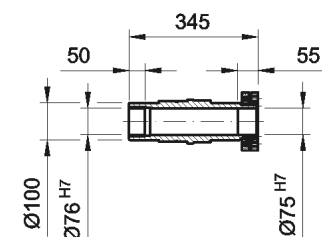
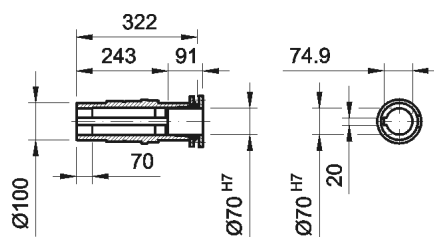
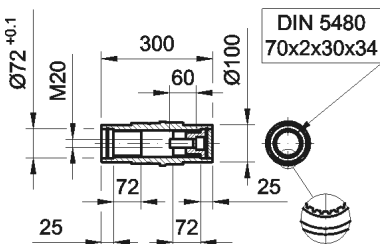
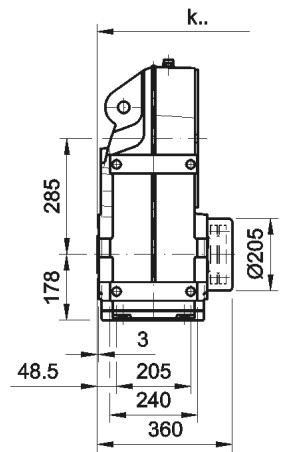
SPZT66..F..



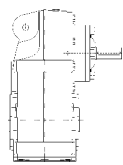
SPZB66..F..



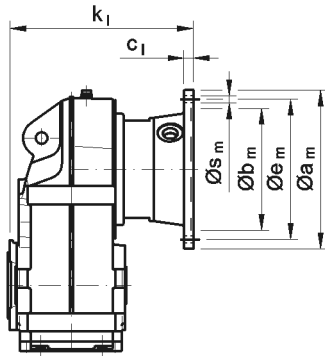
SPZC66..F..



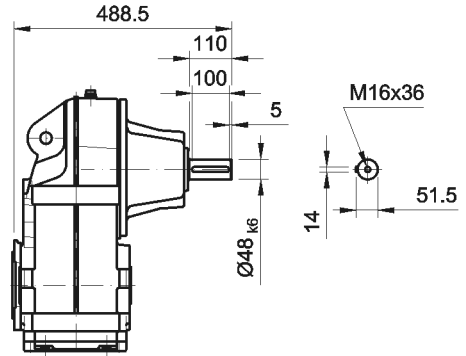
5. SP4



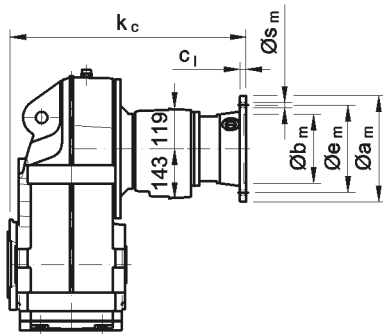
SPT..66B/C-U
100 - 280



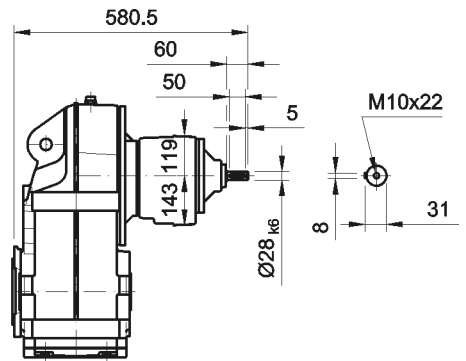
SPT..66B/C-I



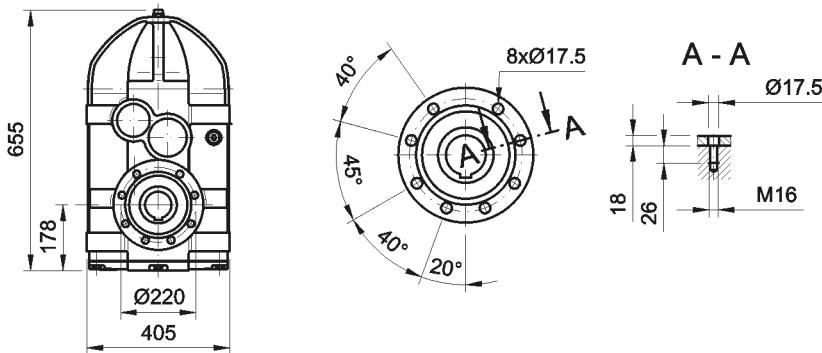
SPT..66B/C36B/C-U
71 - 132



SPT..66B/C36B/C-I



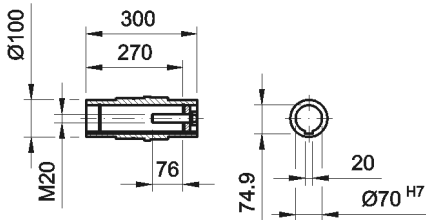
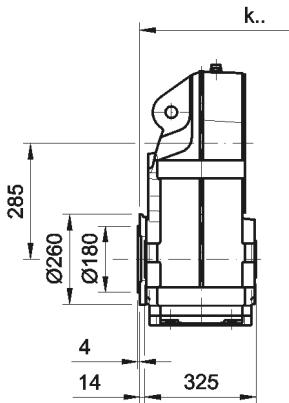
SPT..66..



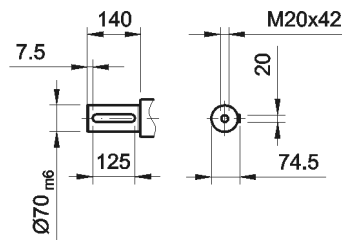
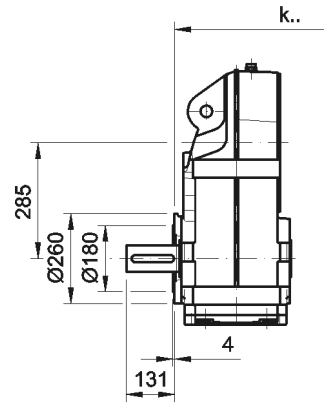
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					391	391	391	391	456	456	548	548	573	603	603	614	614	614		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	548	548	548	548	548	548	611	611												



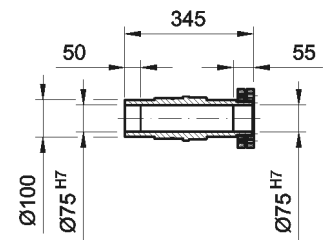
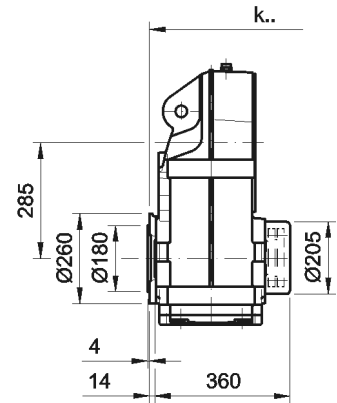
SPTH66..



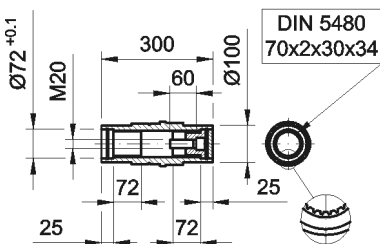
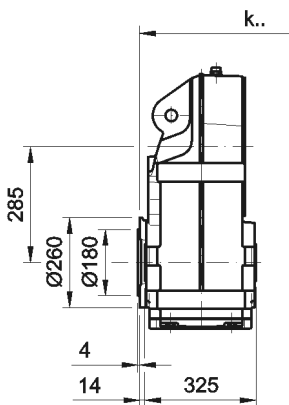
SPTN66..



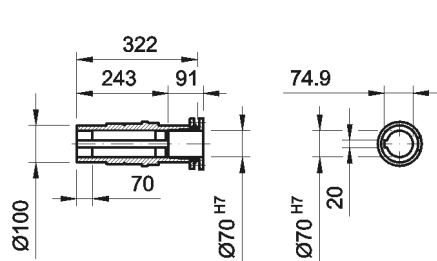
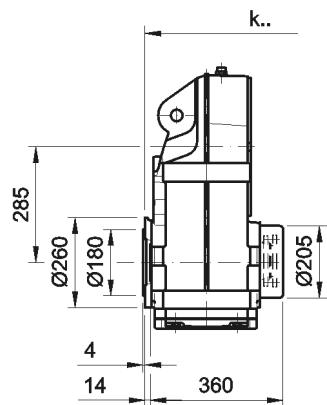
SPTS66..



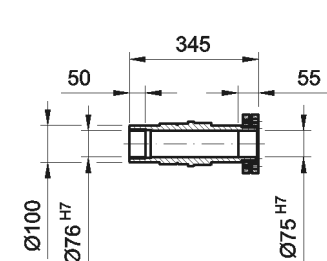
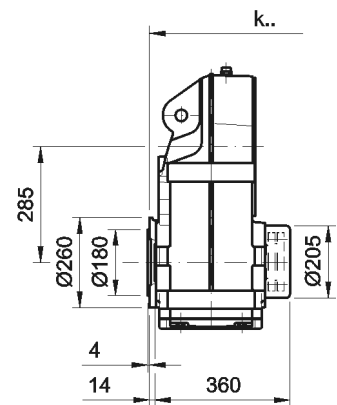
SPTT66..



SPTB66..



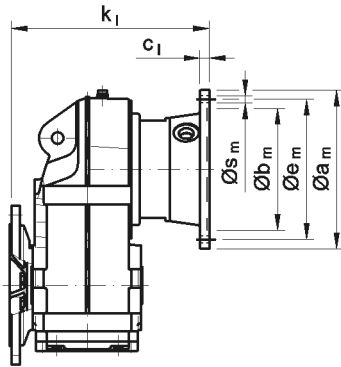
SPTC66..



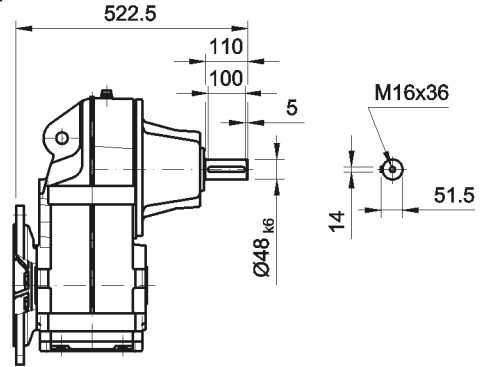
5. SP4



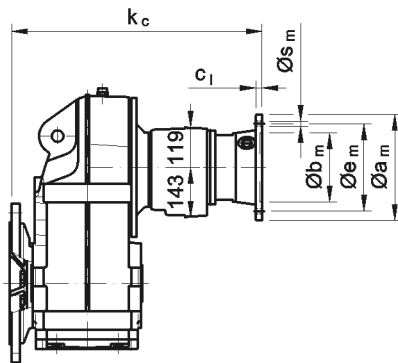
SPF..66B/C-U
100 - 280



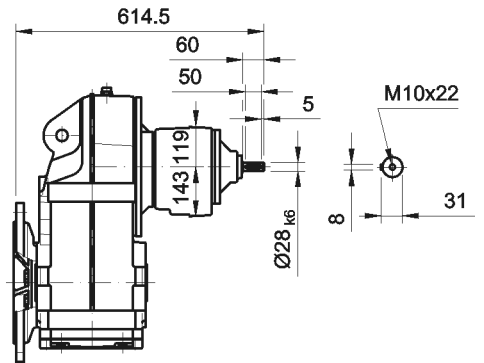
SPF..66B/C-I



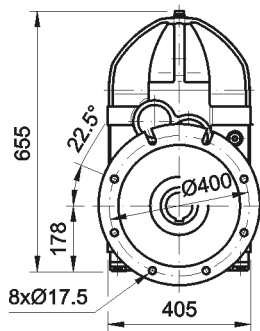
SPF..66B/C36B/C-U
71 - 132



SPF..66B/C36B/C-I



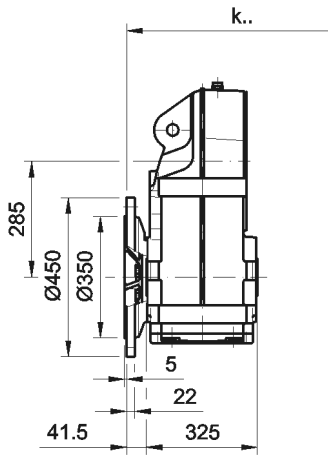
SPF..66..



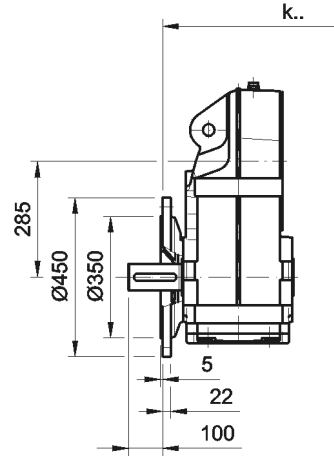
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					425	425	425	425	490	490	582	582	607	637	637	648	648	648		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	582	582	582	582	582	582	645	645												



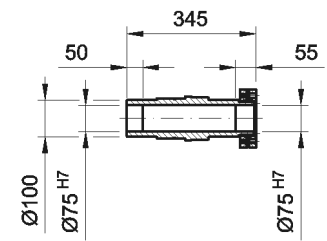
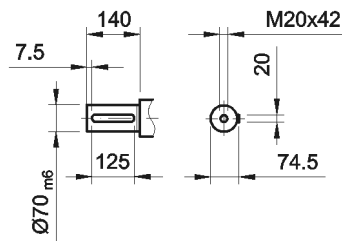
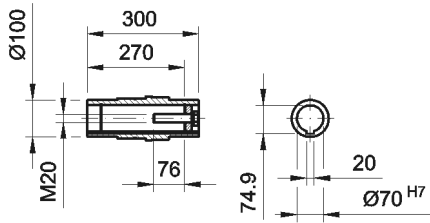
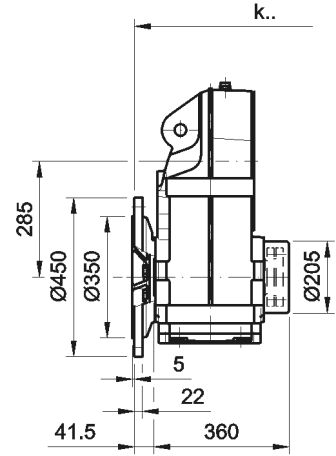
SPFH66..



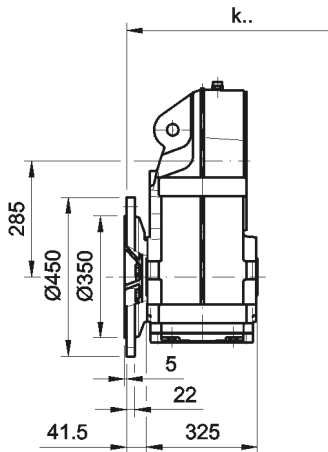
SPFN66..



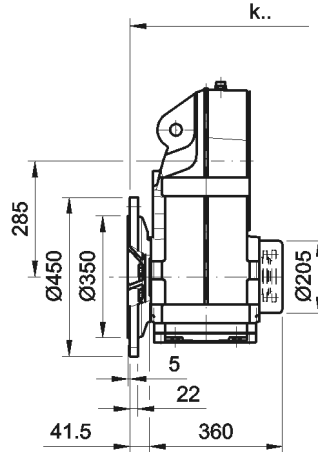
SPFS66..



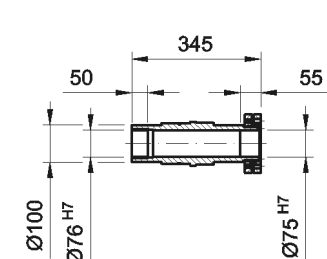
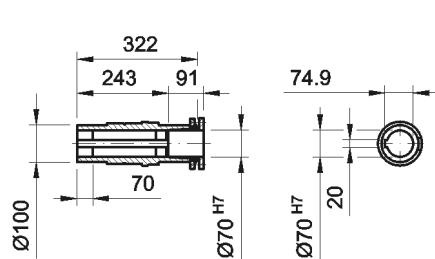
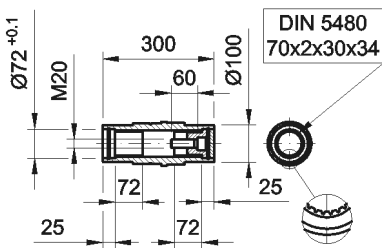
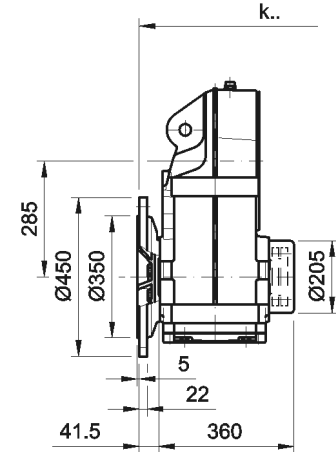
SPFT66..



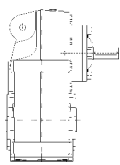
SPFB66..



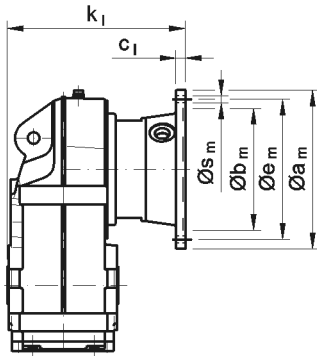
SPFC66..



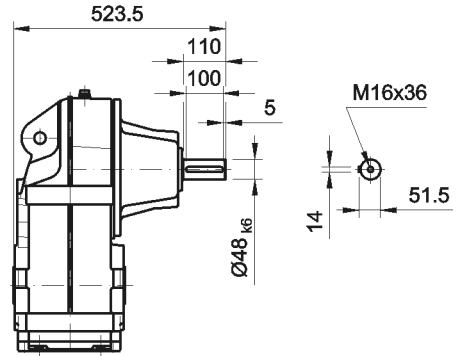
5. SP4



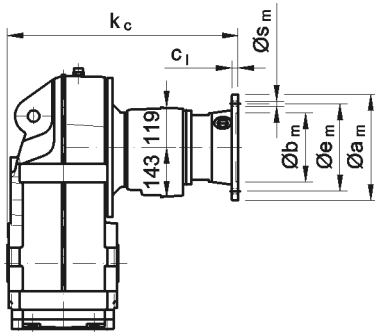
SPZ..76B/C-U
100 - 280



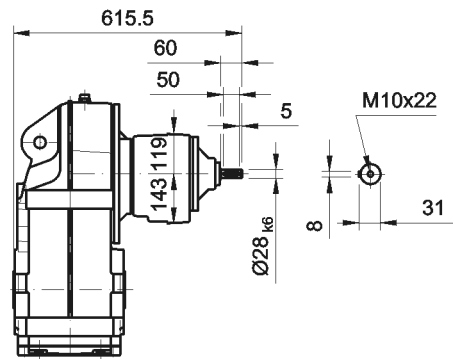
SPZ..76B/C-I



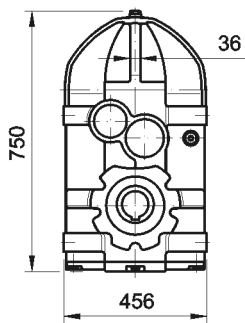
SPZ..76B/C36B/C-U
71 - 132



SPZ..76B/C36B/C-I



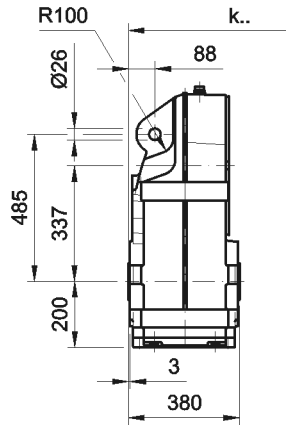
SPZ..76..



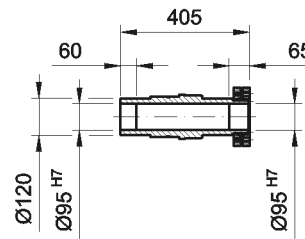
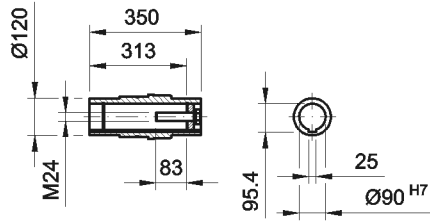
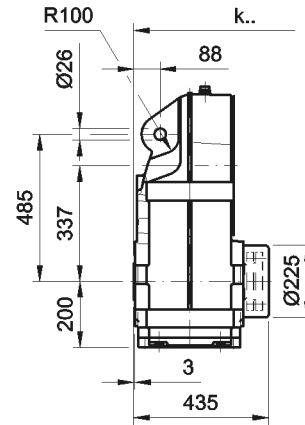
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					426	426	426	426	491	491	583	583	608	638	638	649	649	649		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	M246	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	583	583	583	583	583	583	646	646												



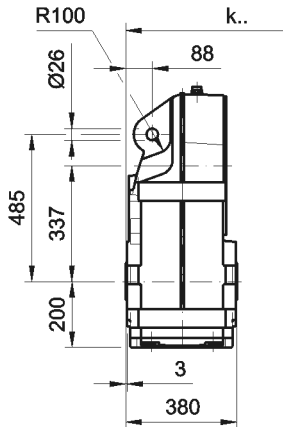
SPZH76..



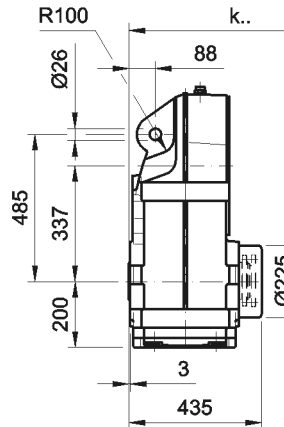
SPZS76..



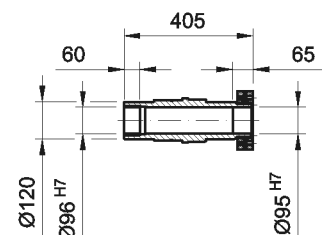
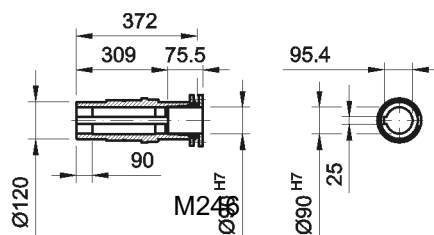
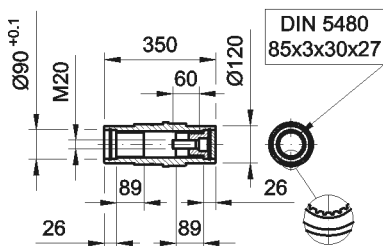
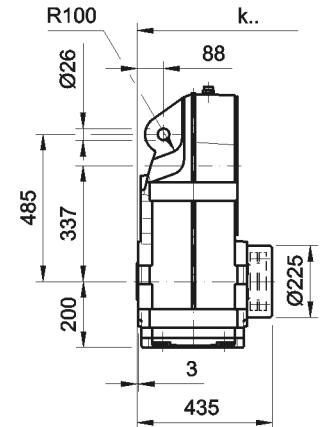
SPZT76..



SPZB76..



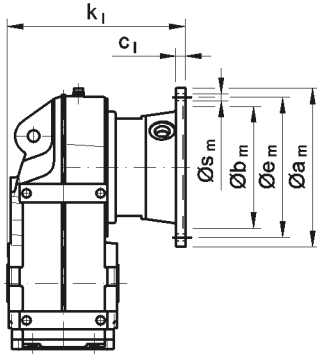
SPZC76..



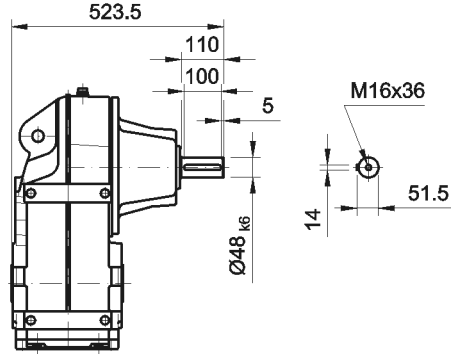
5. SP4



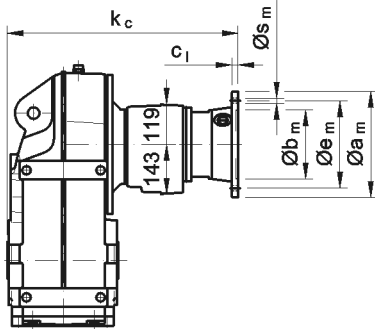
SPZ..76B/CF-U
100 - 280



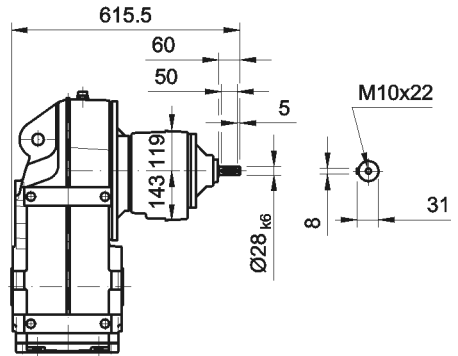
SPZ..76B/CF-I



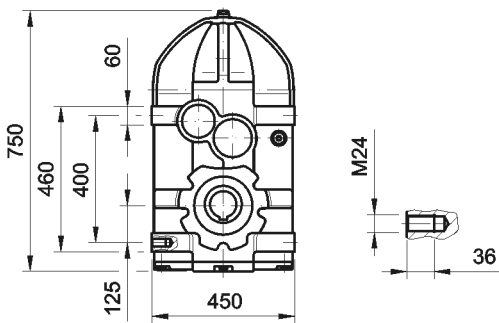
SPZ..76B/C36B/CF-U
71 - 132



SPZ..76B/C36B/CF-I



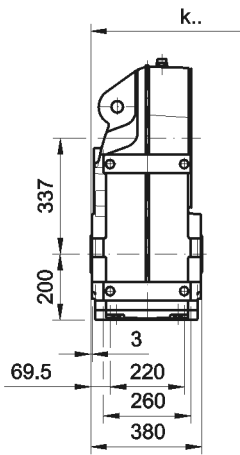
SPZ..76..F..



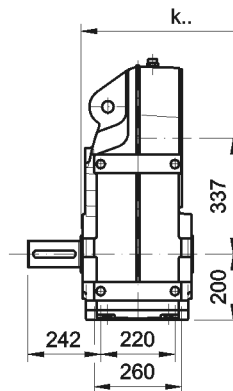
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					426	426	426	426	491	491	583	583	608	638	638	649	649	649		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	583	583	583	583	583	583	646	646												



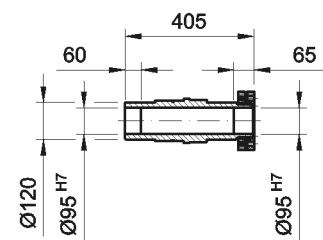
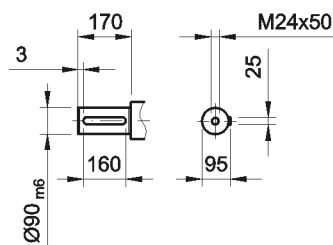
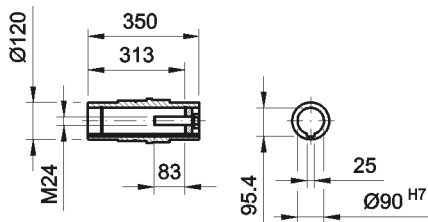
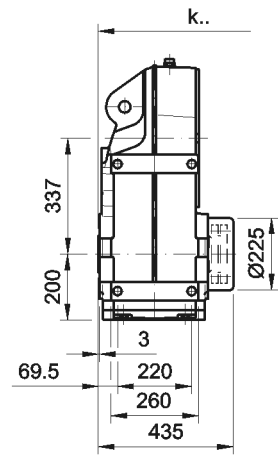
SPZH76..F..



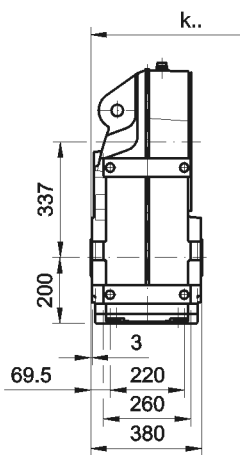
SPZN76..F..



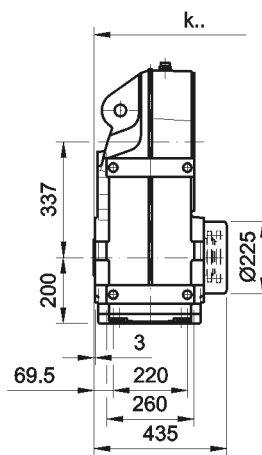
SPZS76..F..



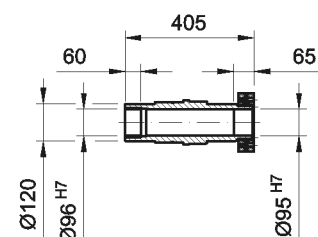
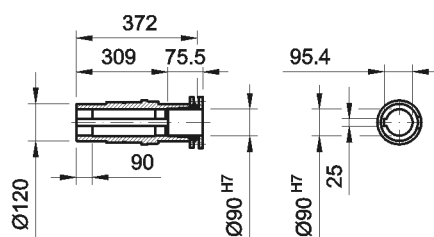
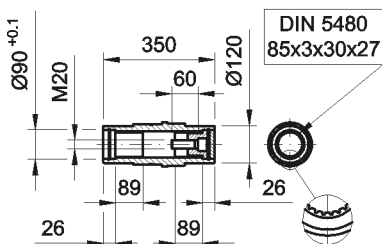
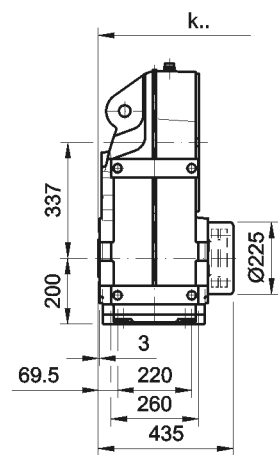
SPZT76..F..



SPZB76..F..



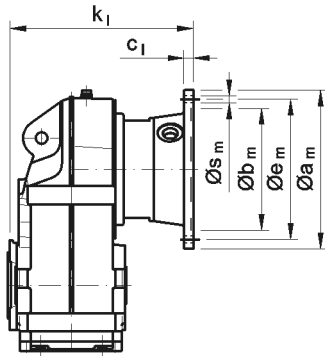
SPZC76..F..



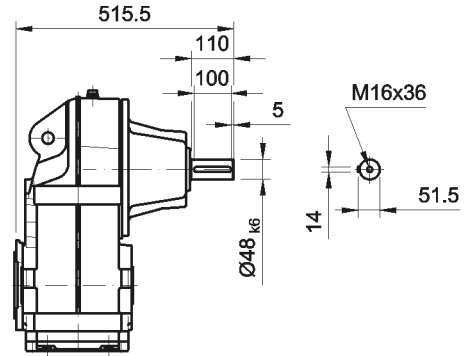
5. SP4



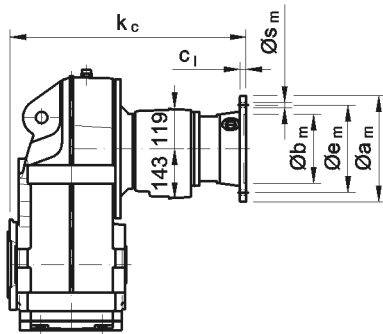
SPT..76B/C-U
100 - 280



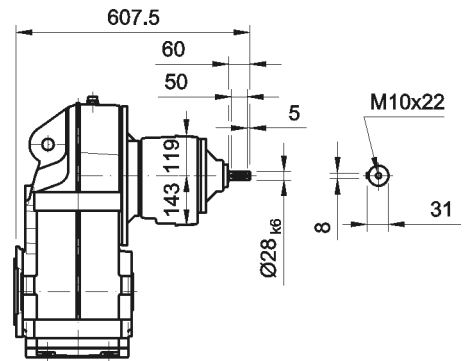
SPT..76B/C-I



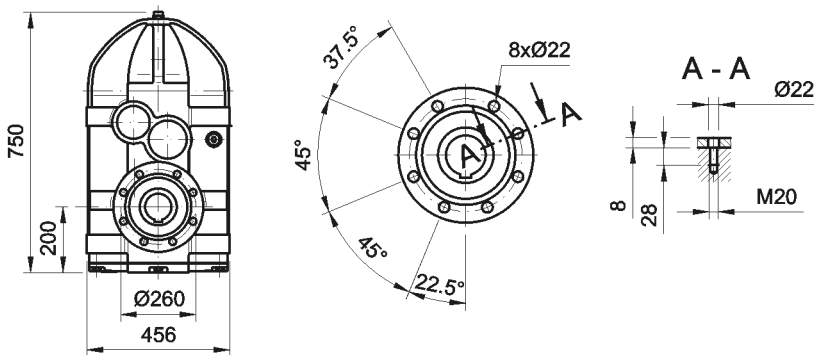
SPT..76C36B-U
71 - 132



SPT..76C36B-I



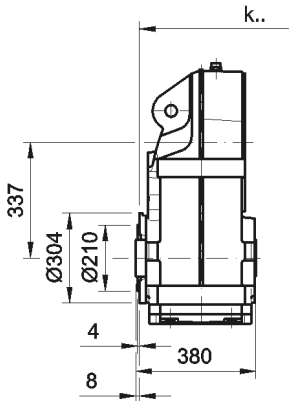
SPT..76..



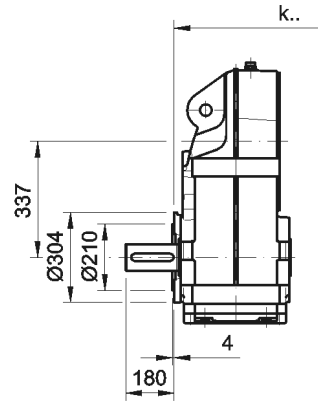
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					418	418	418	418	483	483	575	575	600	630	630	641	641	641		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5		
kc	575	575	575	575	575	575	638	638												



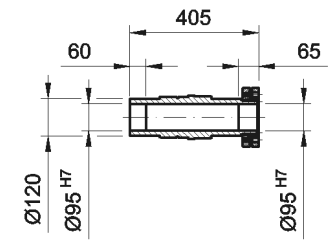
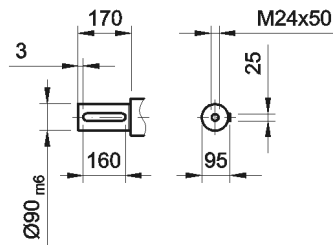
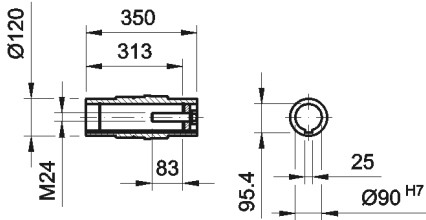
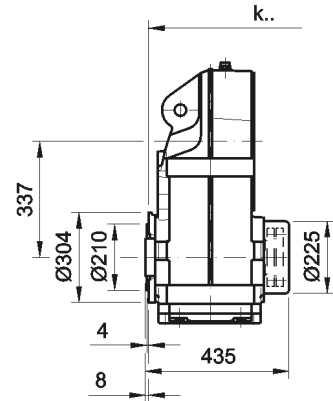
SPTH76..



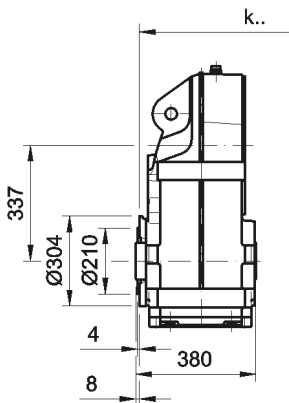
SPTN76..



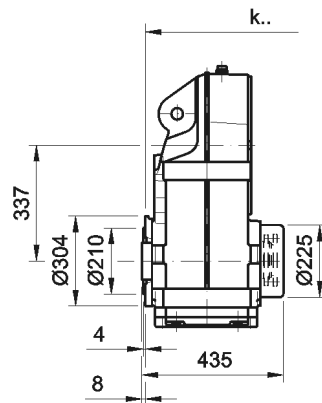
SPTS76..



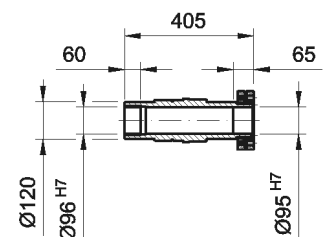
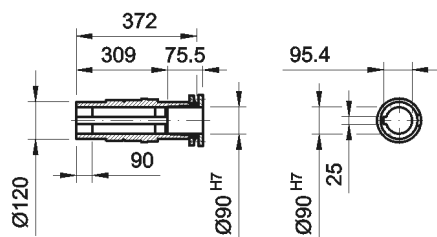
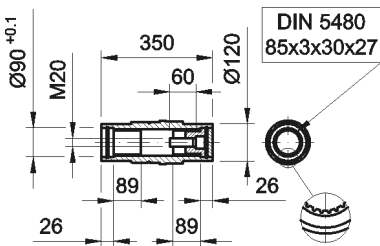
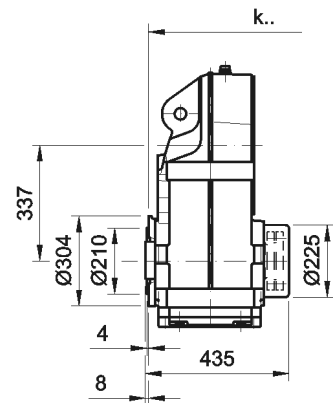
SPTT76..



SPTB76..



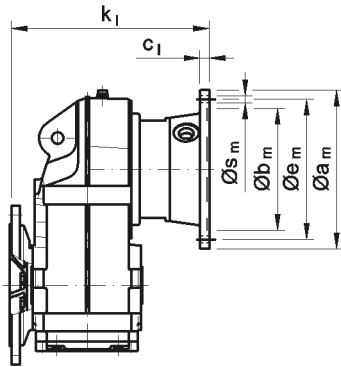
SPTC76..



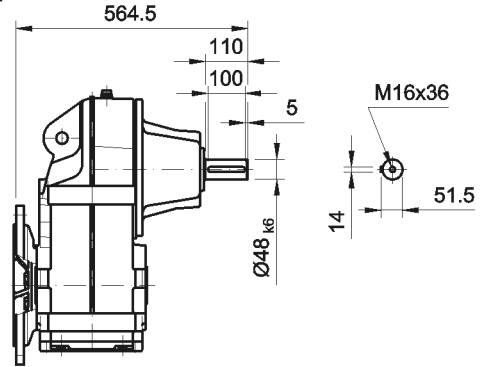
5. SP4



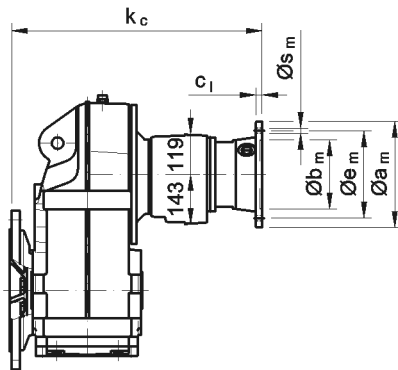
SPF..76B/C-U
100 - 280



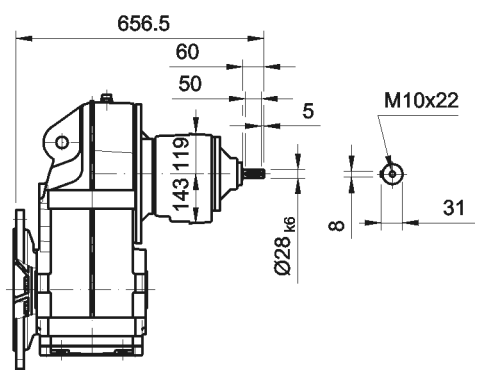
SPF..76B/C-I



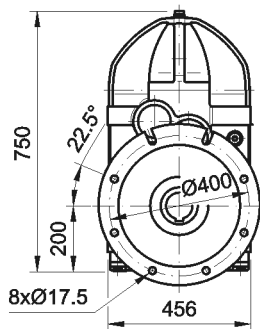
SPF..76B/C36B/C-U
71 - 132



SPF..76B/C36B/C-I



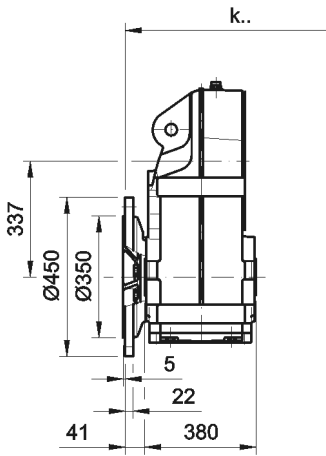
SPF..76..



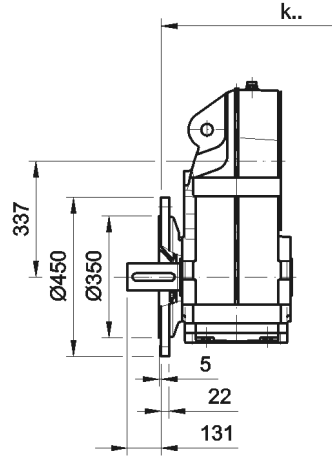
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
k_l					467	467	467	467	532	532	624	624	649	679	679	690	690	690		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{b_m}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{e_m}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{a_m}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{s_m}	4x M8/16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
k_c	624	624	624	624	624	624	687	687												



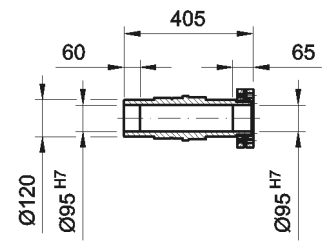
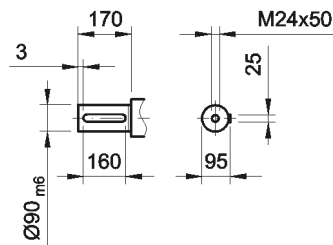
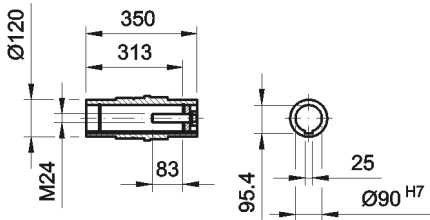
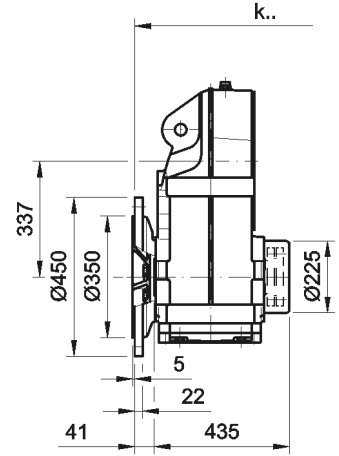
SPFH76..



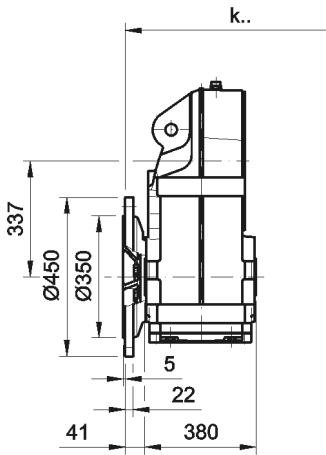
SPFN76..



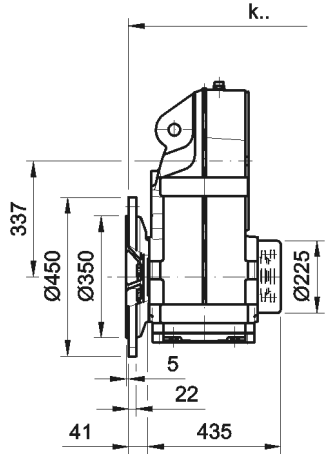
SPFS76..



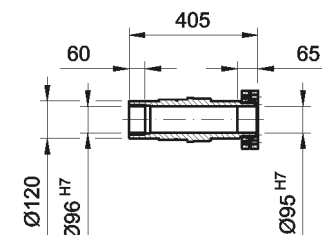
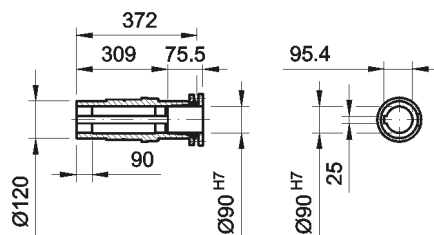
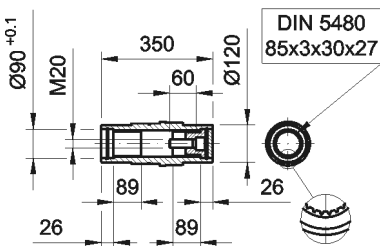
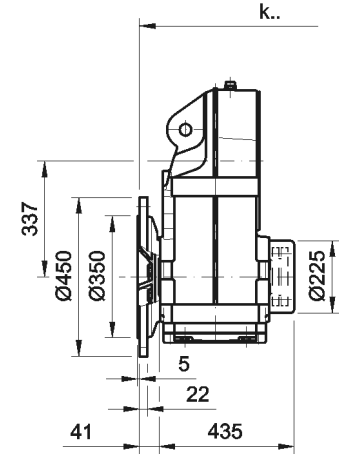
SPFT76..



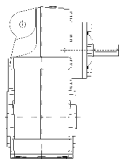
SPFB76..



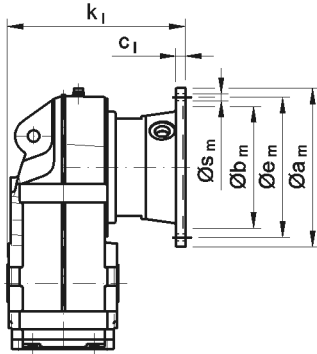
SPFC76..



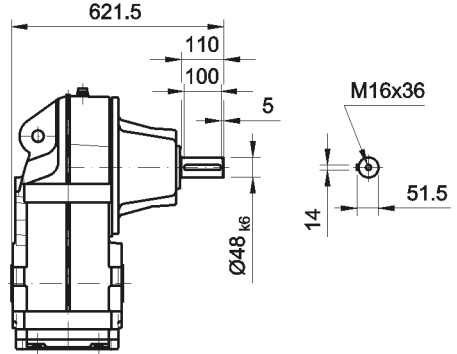
5. SP4



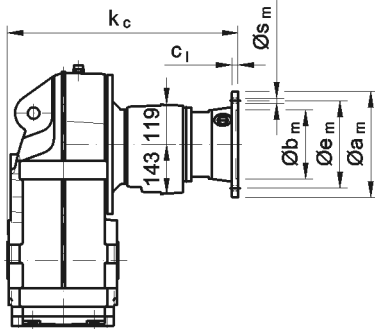
SPZ..86B/C-U
100 - 280



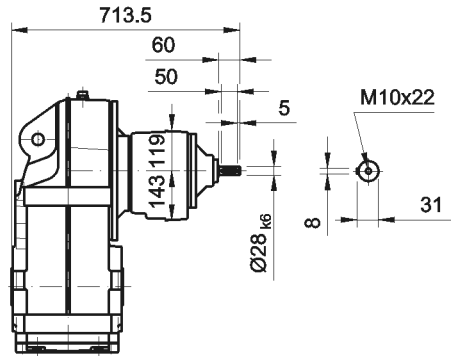
SPZ..86B/C-I



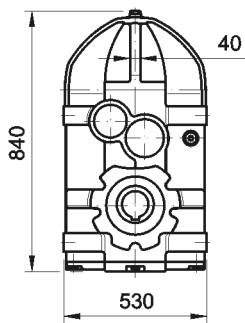
SPZ..86C36B-U
71 - 132



SPZ..86C36B-I



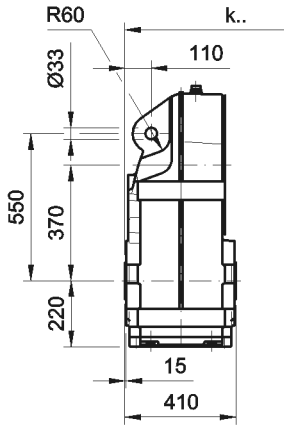
SPZ..86..



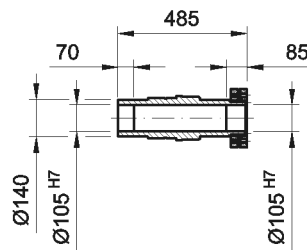
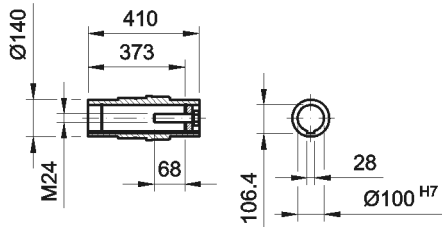
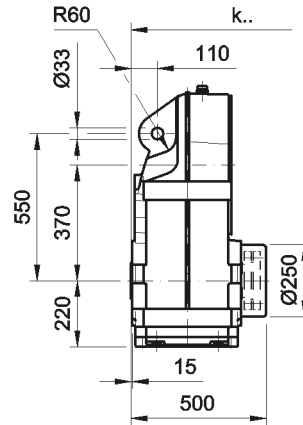
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					524	524	524	524	589	589	681	681	706	736	736	747	747	747		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	681	681	681	681	681	681	744	744												



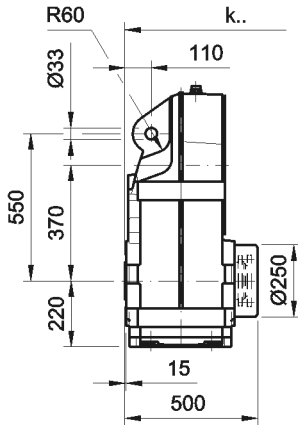
SPZH86..



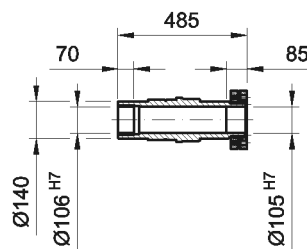
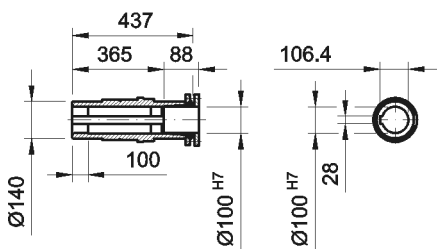
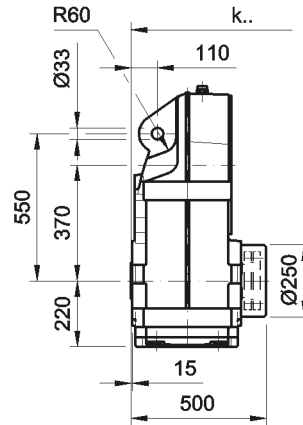
SPZS86..



SPZB86..



SPZC86..

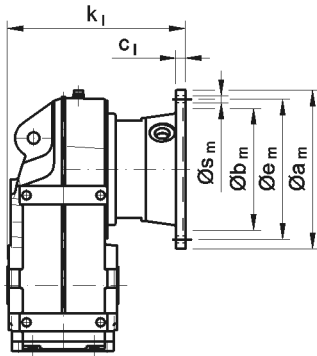


5

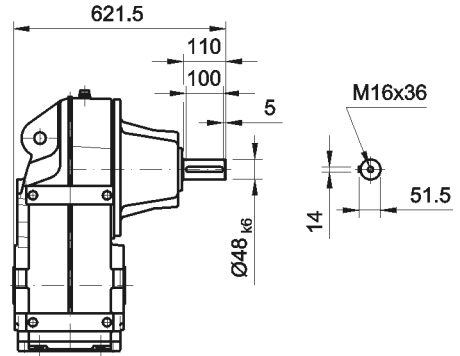
5. SP4



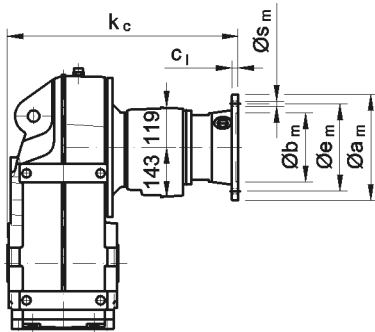
SPZ..86B/CF-U
100 - 280



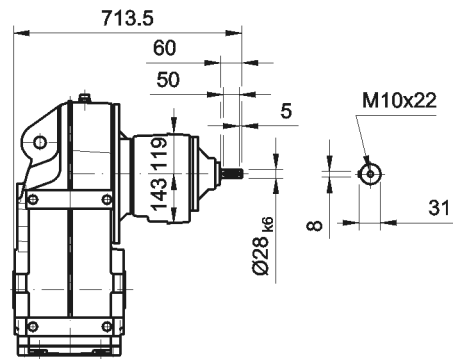
SPZ..86B/CF-I



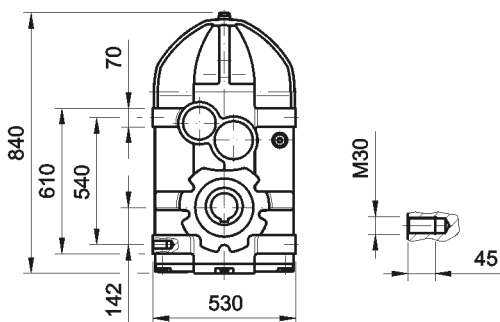
SPZ..86B/C36B/CF-U
71 - 132



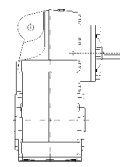
SPZ..86B/C36B/CF-I



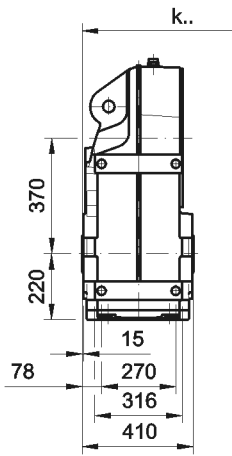
SPZ..86..F..



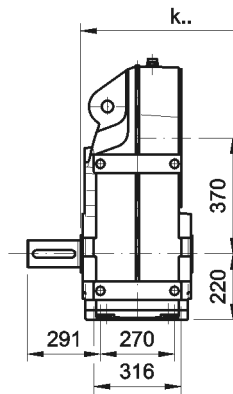
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					524	524	524	524	589	589	681	681	706	736	736	747	747	747		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	681	681	681	681	681	681	744	744												



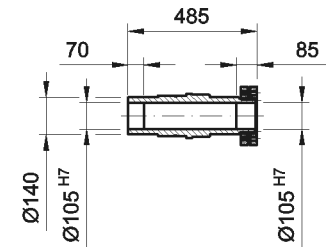
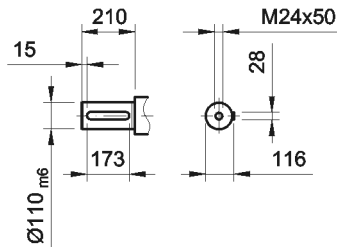
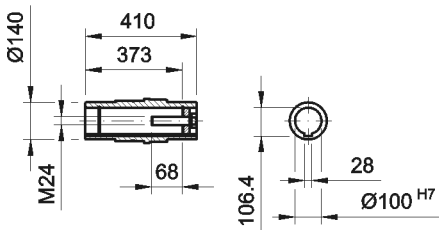
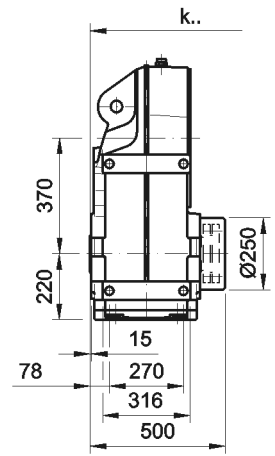
SPZH86..F..



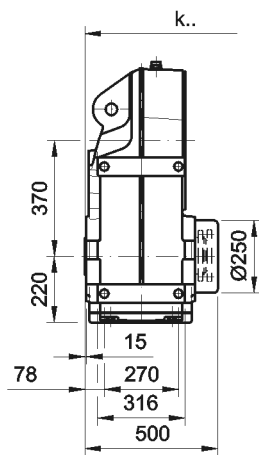
SPZN86..F..



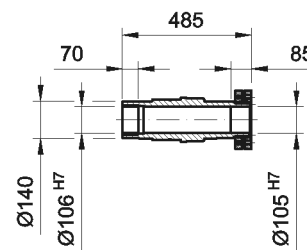
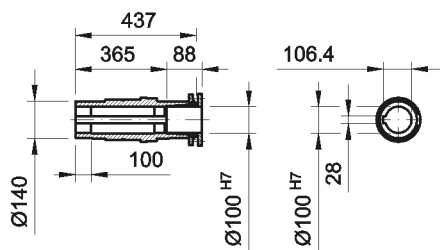
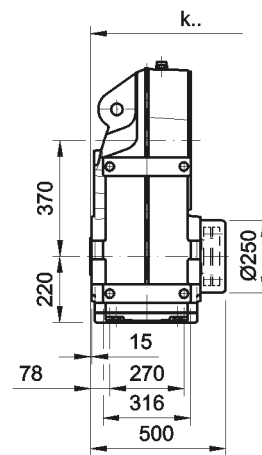
SPZS86..F..



SPZB86..F..



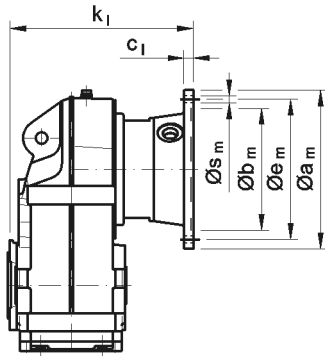
SPZC86..F..



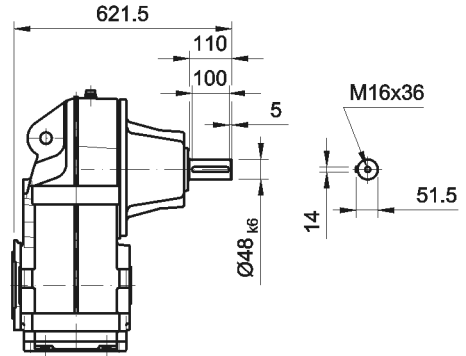
5. SP4



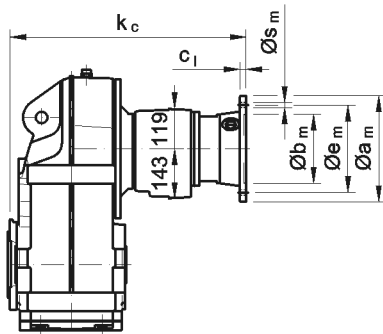
SPT..86B/C-U
100 - 280



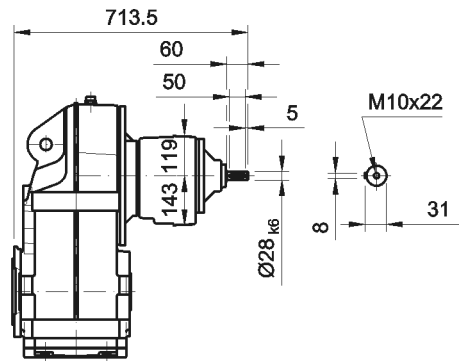
SPT..86B/C-I



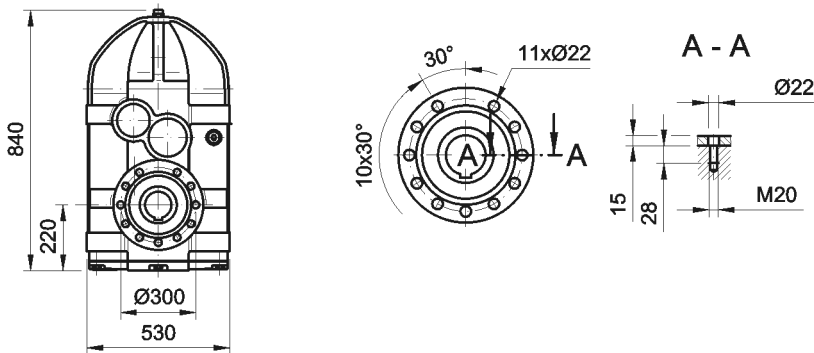
SPT..86B/C36B/C-U
71 - 132



SPT..86B/C36B/C-I



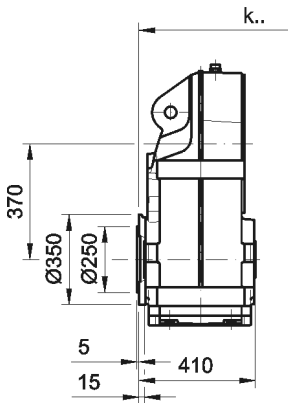
SPT..86..



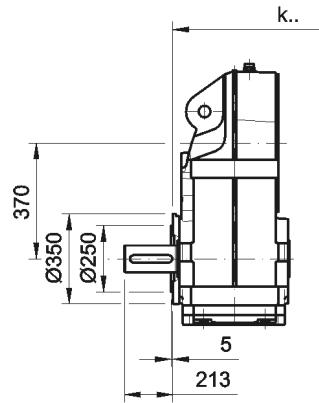
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					524	524	524	524	589	589	681	681	706	736	736	747	747	747		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	681	681	681	681	681	681	744	744												



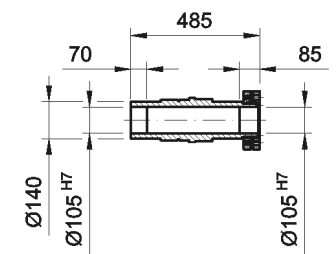
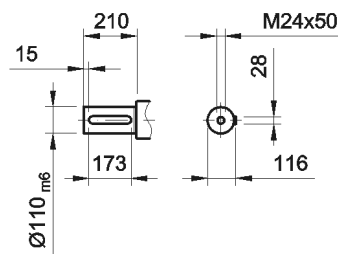
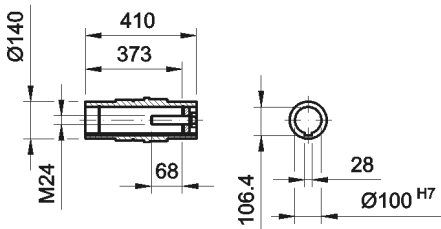
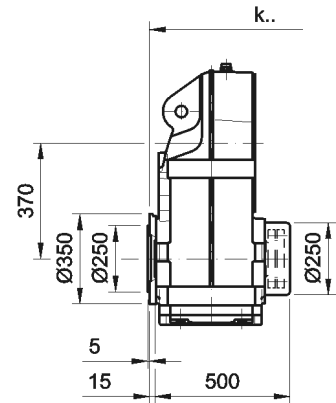
SPTH86..



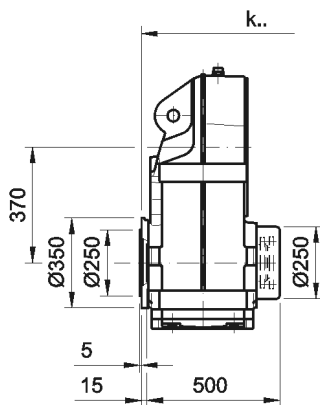
SPTN86..



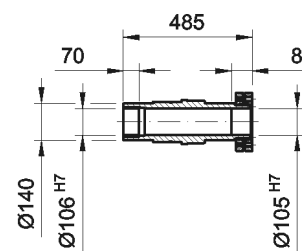
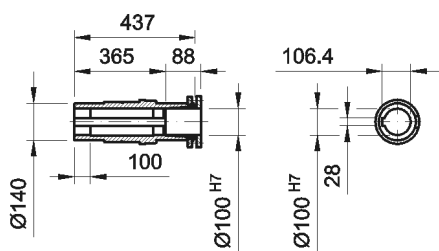
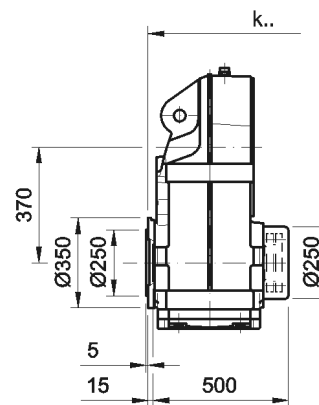
SPTS86..



SPTB86..



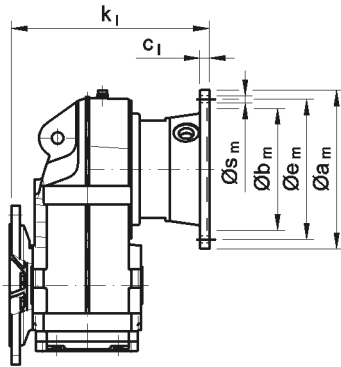
SPTC86..



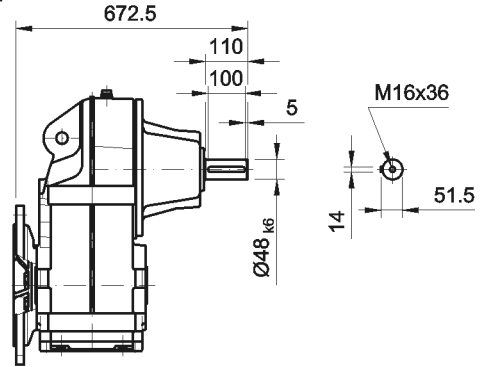
5. SP4



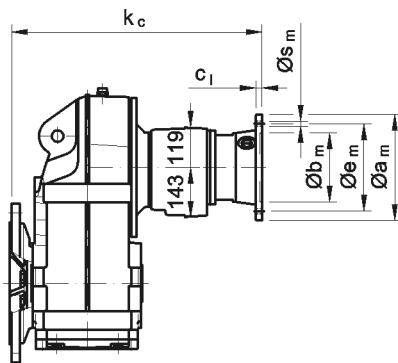
SPF..86B/C-U
100 - 280



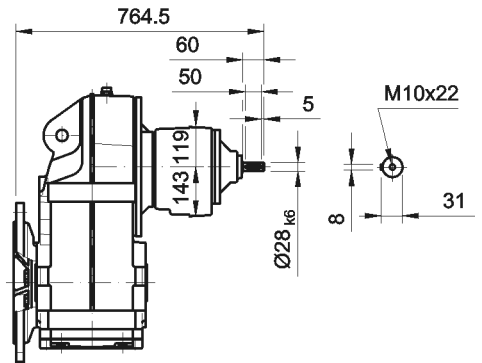
SPF..86B/C-I



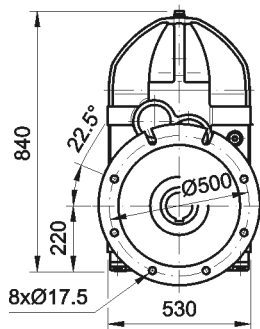
SPF..86B/C36B/C-U
71 - 132



SPF..86B/C36B/C-I



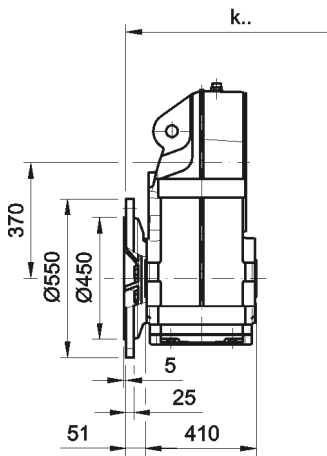
SPF..86..



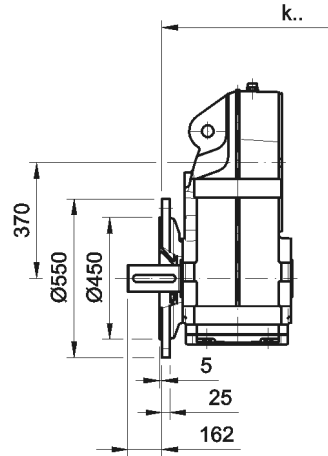
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					575	575	575	575	640	640	732	732	757	787	787	798	798	798		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	732	732	732	732	732	732	795	795												



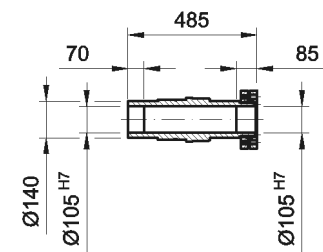
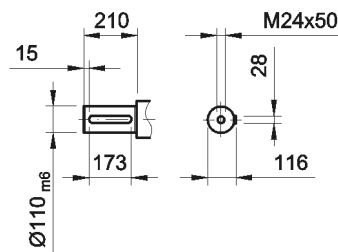
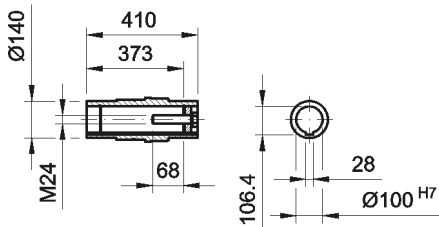
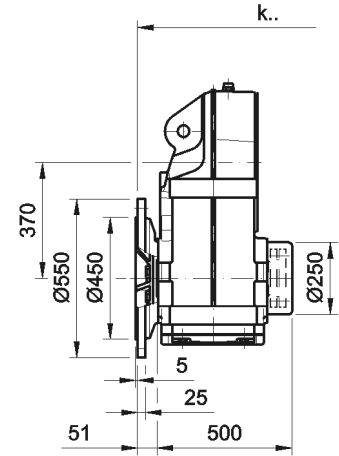
SPFH86..



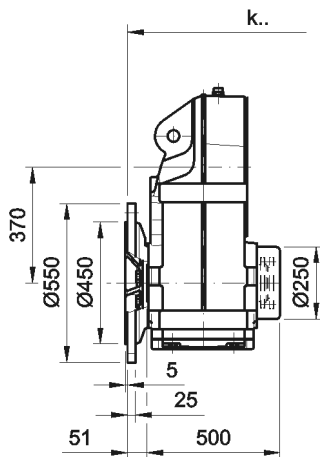
SPFN86..



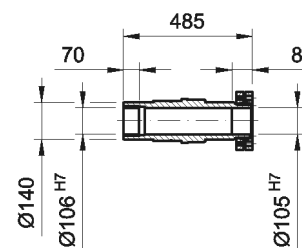
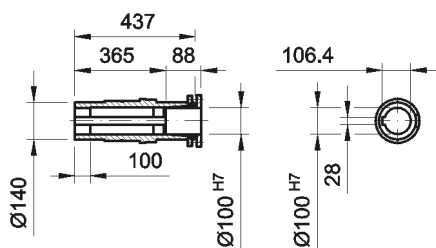
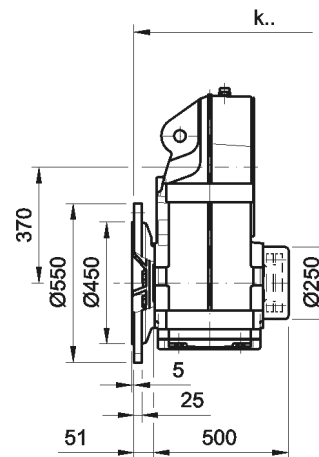
SPFS86..

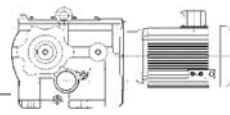


SPFB86..



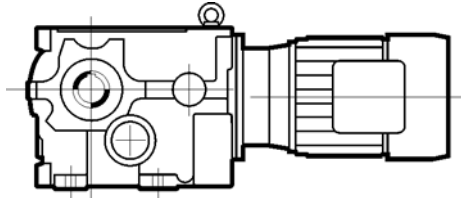
SPFC86..



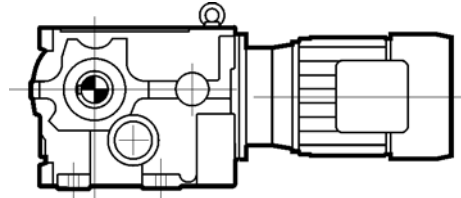


6 SK4 Helical bevel

6.1 Version variants for SP4 parallel shaft helical geared motors



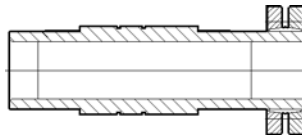
SKZH
Shaft-mounted version with hollow shaft



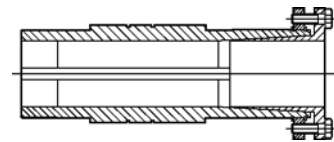
SKZN
Foot mounting with solid shaft



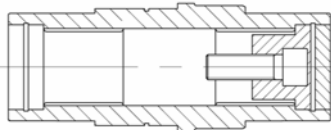
SK.H
Hollow shaft with keyway



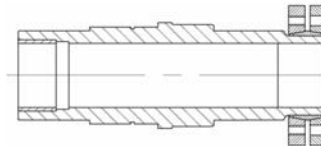
SK.S
Hollow shaft with shrink disc



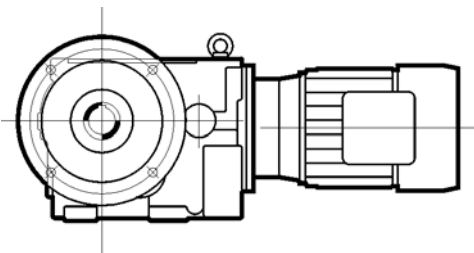
SK.B
Hollow shaft with taper bush



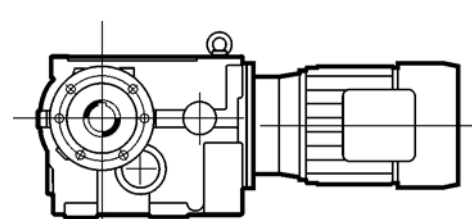
SK.T
Hollow spline shaft



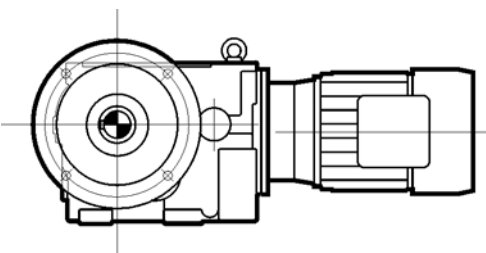
SK.C
Hollow shaft with shrink disc and bronze bushing



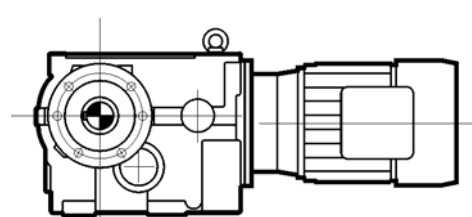
SKFH
B5 flange version with hollow shaft



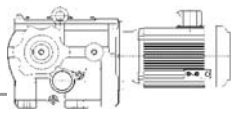
SKTH
B14 flange version with hollow shaft



SKFN
B5 flange version with solid shaft

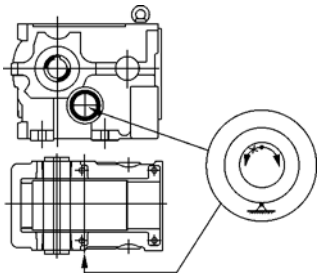


SKTN
B14 flange version with solid shaft



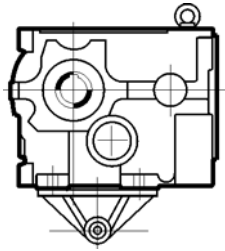
6. SK4

Versions on the drive end



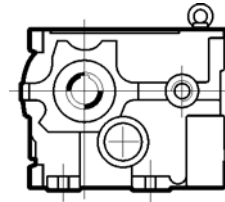
- R

Reverse lock on the intermediate shaft only possible at the location shown



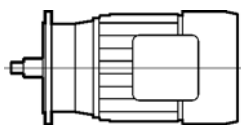
- T

torque arm

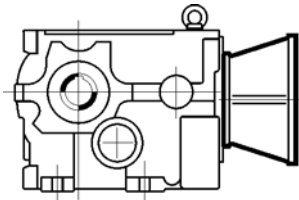


Fixing point for alternate Torque arm (for small sizes). Please consult us.

Versions on the drive end

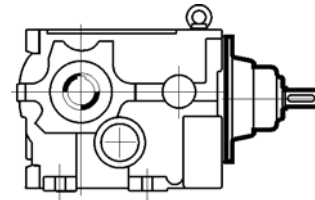


Integral motor



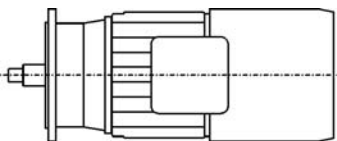
- U

Lantern for IEC standard motors

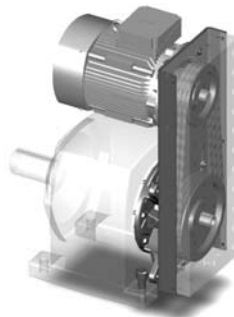


- I

Gear unit with free input shaft



Integrated brake motor

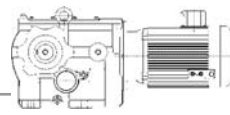


- M

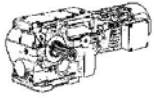
Motor base version for V-belt drive, motor mounting position IM B5 (schematic drawing)

Overview

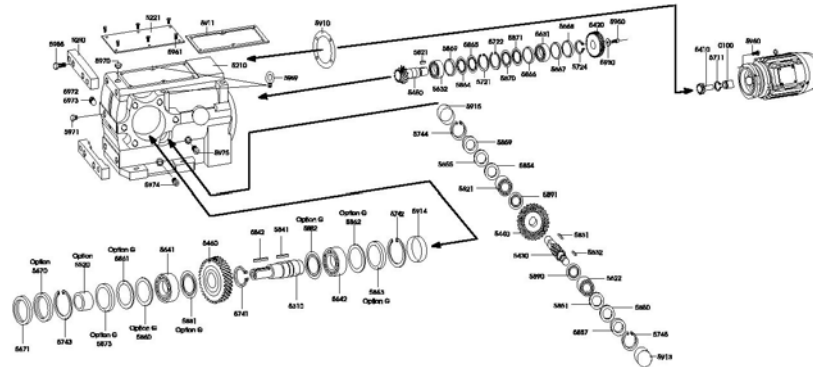
	8 sizes							
	2	3	4	5	6	7	8	9
T2m (Nm)	440	800	1600	2900	4900	8000	13000	20000
Pm (kW)	0.12 to 90 kW							
i	7.1 ... 315 C					100 ... 30000 combined		



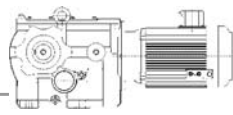
6.2 Principle design of helical bevel geared motors



The following illustration shows the principle design of a helical bevel geared motor. It is intended as a reference aid to the individual parts lists. Variations depending on the gear unit size and version are possible.



Item no.	Description
0100	Motor
5210	Casing
5221	Cover
5250	Attached foot strips
5310	Output shaft
5410	Pinion
5420	Gear wheel
5430	Pinion shaft
5440	Gear wheel
5450	Pinion shaft
5460	Gear wheel
571. / 572. / 574.	Retaining ring
5821 / 583. /584.	Feather key
585. / 586. / 587.	Support ring/shim ring
588. / 589.	Nilos ring
5910 / 5911	Gasket
5913 / 5914 / 5915	End cover
5914	End cover or protective cover for hollow shaft "H" (option)
5918	Protective cover for hollow shaft "S" (option)
593.	Washer
595. / 596. / 597.	Screw
5963	Clamping pin
597.	Screw
5621	Bearing
5622	Bearing
5631	Bearing
5632	Bearing
5641	Bearing
5642	Bearing
5670	Shaft seal
5671	Shaft seal



6. SK4

6.3 Ordering information

Three stage gearbox														
S	K	³	⁴	⁵	⁶	⁷	⁸	⁹	¹⁰	-	¹¹	-	¹²	¹³

Gear units with more than 3 stages															
S	K	³	⁴	⁵	⁶	⁷	²⁵	²⁶	²⁷	⁸	⁹	¹⁰	¹¹	¹²	¹³

3	Output flange
	Z No flange
	F B5 flange
	T B14 flange

4	Output shaft
	H Hollow shaft with keyway
	N Solid shaft with feather key
	S Hollow shaft with shrink-fit ring
	B Hollow shaft with conical clamping sleeve
	T Hollow shaft with splining
	C Hollow shaft with shrink-fit ring and bronze bush

5	Size
	2 - 3 - 4 - 5 - 6 - 7 - 8 - 9

6	Design index:
	6 Metric version
	7 Inch version

7	Number of stages
	C 3-stage

8	Total gear ratio
----------	-------------------------

9	Drive unit
	No designation: Integrated motor
	U IEC flange motor
	I I-latern
	M Motor chair

10	Accessories for gear units
	R Reversal lock on drive shaft Specify free direction of rotation (from gearbox size 3 and motor IEC 100)
	F foot mounting
	G reinforced bearings

11	Motor
-----------	--------------

12	Shaft arrangement
	L Output shaft left
	R Output shaft right
	T Output shaft left and right

13	Mounting positions
-----------	---------------------------

Only for gear units with more than 3 stages

25	Size preliminary stage gear unit
-----------	---

26	Design index prel.-stage gear unit
-----------	---

27	Number of stages prel.-stage gear unit
-----------	---

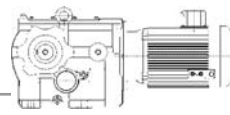
Example:

S	K	³ Z	⁴ N	⁵ 3	⁶ 6	⁷ C	⁸ 25	⁹	¹⁰	¹¹ 112	¹² L	¹³ 1
----------	----------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	------------------------	--------------	---------------	--------------------------	------------------------	------------------------

SK casing, no flange, solid shaft, size 3, design index 6, 3-stage, gear ratio $i = 1/25$, motor size 112, shaft arrangement left, mounting position 1

S	K	³ F	⁴ H	⁵ 5	⁶ 6	⁷ C	²⁵ 1	²⁶ 6	²⁷ B	⁸ 350	⁹ U	¹⁰	-	¹¹ 90	-	¹² V1
----------	----------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	------------------------	------------------------	------------------------	-------------------------	-----------------------	---------------	---	-------------------------	---	-------------------------

SK casing, B5 flange, hollow shaft with keyway, size 5, design index 6, 3-stage, size primary-stage gear unit 1, design index primary-stage gear unit 6, 2-stage primary-stage gear unit, total gear ratio $i = 1/350$, U-latern for motor size 90, shaft arrangement left, mounting position 1



GEARED MOTOR CODING

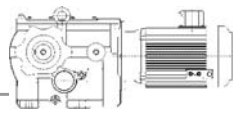
<p>2 bis</p>	<p>Z</p> <p>F (B5)</p> <p>T (b14)</p>	<p>-F- Ausführung mit angebauten Fußleisten (für Baugröße 2 bis 5)</p> <p>Rücklaufsperre an der Zwischenwelle</p>	<p>8</p>
<p>3</p>	<p>H</p> <p>N</p> <p>S</p> <p>B</p>		<p>Bremskit</p> <p>Integrierter Motor</p> <p>Integrierter Bremsmotor</p> <p>(+R)</p> <p>I (+R)</p>

Mounting positions

Vollwelle			Hohlwelle	
L	R	T	L	R

1	2*	3	4*	5	6*

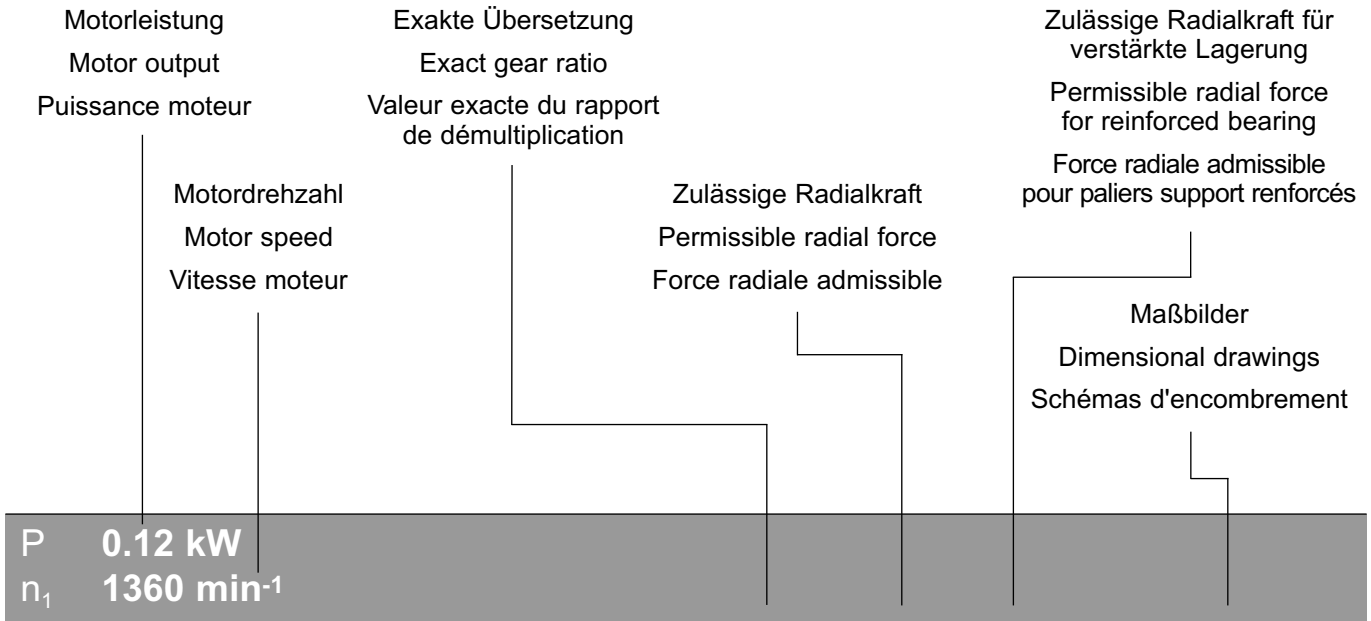
*: refer to Rexnord-Stephan




6. SK4

6.4 Auswahltabellen Getriebemotoren SK4 Selection tables for SK4 geared motors Tableaux de sélection pour les motoréducteurs SK4

Beispiel: Auswahltabelle Getriebemotoren
Example: Geared Motor selection table
Exemple de tableau de sélection pour motoréducteurs



P	0.12 kW								
n₁	1360 min⁻¹								

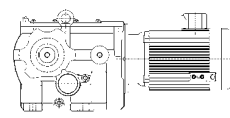
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
189.1	41.00	6	SKZN26C7.1 - 63A-4G	7.19	3 300	6 900	23	M150	
164.9	37.00	7	SKZN26C8 - 63A-4G	8.25	3 900	6 900	23	M150	
153.9	36.00	7	SKZN26C9 - 63A-4G	8.84	4 000	6 900	23	M150	
133.7	33.00	9	SKZN26C10 - 63A-4G	10.17	4 200	6 900	23	M150	
115.7	29.00	10	SKZN26C11.2 - 63A-4G	11.76	4 400	6 900	23	M150	
108.9	37.00	11	SKZN26C12.5 - 63A-4G	12.48	4 500	6 900	23	M150	

Grundausführung SKZN • Basic version SKZN • Version de base SKZN


Drehmoment der Abtriebswelle • Torque of output shaft • Couple de l'arbre de sortie

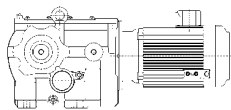
Verfügbarer Servicefaktor • Available Service Factor SF • Facteur de service disponible

Genauere Drehzahl der Abtriebswelle • Exact speed of output shaft & rated load • Vitesse exacte de l'arbre de sortie




6. SK4

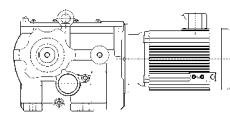
P 0.12 kW									
n ₁ 1360 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
189.1	41.00	6	SKZN26C7.1 - 71A-4G	7.19	3 300	6 900	23	M150	
164.9	37.00	7	SKZN26C8 - 71A-4G	8.25	3 900	6 900	23	M150	
153.9	36.00	7	SKZN26C9 - 71A-4G	8.84	4 000	6 900	23	M150	
133.7	33.00	9	SKZN26C10 - 71A-4G	10.17	4 200	6 900	23	M150	
115.7	29.00	10	SKZN26C11.2 - 71A-4G	11.76	4 400	6 900	23	M150	
108.9	37.00	11	SKZN26C12.5 - 71A-4G	12.48	4 500	6 900	23	M150	
95.0	33.00	12	SKZN26C14 - 71A-4G	14.31	4 000	6 900	23	M150	
88.7	32.00	13	SKZN26C16 - 71A-4G	15.34	4 800	6 900	23	M150	
77.1	29.00	15	SKZN26C18 - 71A-4G	17.65	5 000	6 900	23	M150	
66.7	26.00	17	SKZN26C20 - 71A-4G	20.40	5 300	6 900	23	M150	
61.9	24.00	19	SKZN26C22.4 - 71A-4G	21.99	5 400	6 900	23	M150	
57.3	22.00	20	SKZN26C25 - 71A-4G	23.74	5 500	6 900	23	M150	
48.8	19.00	23	SKZN26C28 - 71A-4G	27.86	5 800	6 900	23	M150	
44.9	17.00	26	SKZN26C31.5 - 71A-4G	30.30	6 000	6 900	23	M150	
37.5	14.00	31	SKZN26C35.5 - 71A-4G	36.24	6 300	6 900	23	M150	
34.1	13.00	34	SKZN26C40 - 71A-4G	39.90	6 500	6 900	23	M150	
30.8	12.00	37	SKZN26C45 - 71A-4G	44.17	6 700	6 900	23	M150	
27.6	11.00	41	SKZN26C50 - 71A-4G	49.21	6 900	6 900	23	M150	
24.6	9.50	47	SKZN26C56 - 71A-4G	55.25	6 900	6 900	23	M150	
22.1	8.50	52	SKZN26C63 - 71A-4G	61.51	6 900	6 900	23	M150	
19.8	7.60	58	SKZN26C71 - 71A-4G	68.78	6 900	6 900	23	M150	
17.0	6.50	67	SKZN26C80 - 71A-4G	79.96	6 900	6 900	23	M150	
15.3	5.90	75	SKZN26C90 - 71A-4G	89.08	6 900	6 900	23	M150	
13.6	5.20	84	SKZN26C100 - 71A-4G	100.23	6 900	6 900	23	M150	
12.3	4.70	93	SKZN26C112 - 71A-4G	110.71	6 900	6 900	23	M150	
11.1	4.20	104	SKZN26C125 - 71A-4G	122.91	6 900	6 900	23	M150	
9.4	3.60	121	SKZN26C16B140 - 71A-4G	144.19	6 900	6 900	33	M150	
9.9	3.80	116	SKZN26C140 - 71A-4G	137.82	6 900	6 900	23	M150	
8.8	3.40	130	SKZN26C16B160 - 71A-4G	154.51	6 900	6 900	33	M150	
7.6	2.90	150	SKZN26C16B180 - 71A-4G	177.82	6 900	6 900	33	M150	
6.6	2.50	173	SKZN26C16B200 - 71A-4G	205.58	6 900	6 900	33	M150	
6.1	2.40	187	SKZN26C16B224 - 71A-4G	221.53	6 900	6 900	33	M150	
6.1	2.40	187	SKZN26C16B250 - 71A-4G	221.53	6 900	6 900	33	M150	
4.8	1.90	236	SKZN26C16B280 - 71A-4G	280.68	6 900	6 900	33	M150	
4.5	1.70	257	SKZN26C16B315 - 71A-4G	305.32	6 900	6 900	33	M150	
4.3	3.00	265	SKZN36C16B315 - 71A-4G	314.08	13 500	13 500	44	M156	
3.7	1.40	308	SKZN26C16B355 - 71A-4G	365.17	6 900	6 900	33	M150	
4.0	2.80	288	SKZN36C16B355 - 71A-4G	341.66	13 500	13 500	44	M156	
3.4	1.30	339	SKZN26C16B400 - 71A-4G	402.00	6 900	6 900	33	M150	
3.3	2.30	344	SKZN36C16B400 - 71A-4G	408.63	13 500	13 500	44	M156	
3.1	1.20	375	SKZN26C16B450 - 71A-4G	444.96	6 900	6 900	33	M150	
3.0	2.10	379	SKZN36C16B450 - 71A-4G	449.84	13 500	13 500	44	M156	
2.7	1.10	418	SKZN26C16B500 - 71A-4G	495.74	6 900	6 900	33	M150	
2.7	1.90	420	SKZN36C16B500 - 71A-4G	497.92	13 500	13 500	44	M156	
2.4	0.94	469	SKZN26C16B560 - 71A-4G	556.68	6 900	6 900	33	M150	
2.5	1.70	467	SKZN36C16B560 - 71A-4G	554.74	13 500	13 500	44	M156	
2.2	0.84	522	SKZN26C16B630 - 71A-4G	619.68	6 900	6 900	33	M150	
2.2	1.50	525	SKZN36C16B630 - 71A-4G	622.93	13 500	13 500	44	M156	
2.2	3.00	529	SKZN46C16B630 - 71A-4G	628.30	18 000	18 000	66	M162	
2.0	1.40	584	SKZN36C16B710 - 71A-4G	693.43	13 500	13 500	44	M156	
1.9	2.60	610	SKZN46C16B710 - 71A-4G	723.43	18 000	18 000	66	M162	
1.8	1.20	653	SKZN36C16B800 - 71A-4G	775.48	13 500	13 500	44	M156	




6. SK4

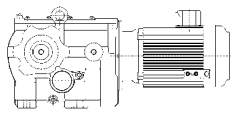
P 0.12 kW
 n_1 1360 min⁻¹

n_{2ex} min ⁻¹	SF	T_{2m} Nm	Type	i_{ex}	F_{rN} N	F_{rN-G} N	m kg		
1.7	2.30	684	SKZN46C16B800 - 71A-4G	812.35	18 000	18 000	66	M162	
1.5	1.10	760	SKZN36C16B900 - 71A-4G	901.46	13 500	13 500	44	M156	
1.5	2.10	762	SKZN46C16B900 - 71A-4G	904.29	18 000	18 000	66	M162	
1.4	0.95	846	SKZN36C16B1000 - 71A-4G	1004.32	13 500	13 500	44	M156	
1.3	1.90	852	SKZN46C16B1000 - 71A-4G	1011.30	18 000	18 000	66	M162	
1.2	0.82	979	SKZN36C16B1120 - 71A-4G	1161.48	13 500	13 500	44	M156	
1.3	1.80	913	SKZN46C16B1120 - 71A-4G	1083.14	18 000	18 000	66	M162	
1.2	3.00	941	SKZN56C16B1120 - 71A-4G	1116.38	27 000	27 000	97	M168	
1.1	1.50	1061	SKZN46C16B1250 - 71A-4G	1259.09	18 000	18 000	66	M162	
1.1	2.70	1047	SKZN56C16B1250 - 71A-4G	1242.73	27 000	27 000	97	M168	
1.0	1.40	1182	SKZN46C16B1400 - 71A-4G	1402.76	18 000	18 000	66	M162	
1.0	2.40	1171	SKZN56C16B1400 - 71A-4G	1389.78	27 000	27 000	97	M168	
0.8	1.20	1371	SKZN46C16B1600 - 71A-4G	1627.72	18 000	18 000	66	M162	
0.8	2.10	1361	SKZN56C16B1600 - 71A-4G	1615.54	27 000	27 000	97	M168	
0.8	1.10	1523	SKZN46C16B1800 - 71A-4G	1807.07	18 000	18 000	66	M162	
0.8	1.80	1517	SKZN56C16B1800 - 71A-4G	1799.88	27 000	27 000	97	M168	
0.7	0.98	1631	SKZN46C16B2000 - 71A-4G	1935.45	18 000	18 000	66	M162	
0.7	1.60	1699	SKZN56C16B2000 - 71A-4G	2016.60	27 000	27 000	97	M168	
0.7	2.80	1741	SKZN66C16B2000 - 71A-4G	2065.67	40 000	40 000	163	M174	
0.6	0.87	1829	SKZN46C16B2240 - 71A-4G	2170.23	18 000	18 000	66	M162	
0.6	2.50	1932	SKZN66C16B2240 - 71A-4G	2293.28	40 000	40 000	163	M174	
0.5	1.30	2092	SKZN56C16B2500 - 71A-4G	2483.38	27 000	27 000	97	M168	
0.5	2.30	2167	SKZN66C16B2500 - 71A-4G	2571.46	40 000	40 000	163	M174	
0.5	1.20	2346	SKZN56C16B2800 - 71A-4G	2784.63	27 000	27 000	97	M168	
0.5	2.10	2330	SKZN66C16C2800 - 71A-4G	2765.38	40 000	40 000	163	M174	
0.5	1.10	2523	SKZN56C16C3150 - 71A-4G	2994.62	27 000	27 000	97	M168	
0.4	1.90	2616	SKZN66C16C3150 - 71A-4G	3105.29	40 000	40 000	163	M174	
0.4	0.98	2843	SKZN56C16C3550 - 71A-4G	3374.61	27 000	27 000	97	M168	
0.4	1.70	2913	SKZN66C16C3550 - 71A-4G	3456.72	40 000	40 000	163	M174	
0.4	2.80	2818	SKZN76C36C3550 - 71A-4G	3344.22	65 000	65 000	284	M180	
0.4	1.50	3257	SKZN66C16C4000 - 71A-4G	3865.77	40 000	40 000	163	M174	
0.4	2.50	3262	SKZN76C36C4000 - 71A-4G	3870.96	65 000	65 000	284	M180	
0.3	1.30	3786	SKZN66C16C4500 - 71A-4G	4493.74	40 000	40 000	163	M174	
0.3	2.20	3601	SKZN76C36C4500 - 71A-4G	4274.26	65 000	65 000	284	M180	
0.3	1.20	4218	SKZN66C16C5000 - 71A-4G	5006.48	40 000	40 000	163	M174	
0.3	1.90	4309	SKZN76C36C5000 - 71A-4G	5113.77	65 000	65 000	284	M180	
0.2	1.00	4751	SKZN66C16C5600 - 71A-4G	5638.78	40 000	40 000	163	M174	
0.2	1.70	4797	SKZN76C36C5600 - 71A-4G	5693.74	65 000	65 000	284	M180	
0.2	2.60	4985	SKZN86C36C5600 - 71A-4G	5916.39	65 000	65 000	438	M186	
0.2	0.93	5275	SKZN66C16C6300 - 71A-4G	6260.09	40 000	40 000	163	M174	
0.2	1.50	5307	SKZN76C36C6300 - 71A-4G	6298.66	65 000	65 000	284	M180	
0.2	2.30	5550	SKZN86C36C6300 - 71A-4G	6587.40	65 000	65 000	438	M186	
0.2	0.83	5915	SKZN66C16C7100 - 71A-4G	7019.46	40 000	40 000	163	M174	
0.2	1.40	5896	SKZN76C36C7100 - 71A-4G	6997.13	65 000	65 000	284	M180	
0.2	2.10	6140	SKZN86C36C7100 - 71A-4G	7287.26	65 000	65 000	438	M186	
0.2	1.90	6821	SKZN86C36C8000 - 71A-4G	8095.35	65 000	65 000	438	M186	
0.2	2.90	6793	SKZN96C36C8000 - 71A-4G	8061.55	112 000	112 000	611	M192	
0.2	2.70	7546	SKZN96C36C9000 - 71A-4G	8955.51	112 000	112 000	611	M192	




6. SK4

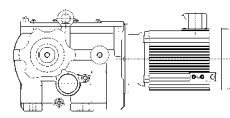
P 0.18 kW									
n ₁ 1370 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
190.5	28.00	9	SKZN26C7.1 - 71A-4G	7.19	3 300	6 900	23	M150	
166.1	25.00	10	SKZN26C8 - 71A-4G	8.25	3 900	6 900	23	M150	
155.0	24.00	11	SKZN26C9 - 71A-4G	8.84	4 000	6 900	23	M150	
134.7	22.00	13	SKZN26C10 - 71A-4G	10.17	4 200	6 900	23	M150	
116.5	20.00	15	SKZN26C11.2 - 71A-4G	11.76	4 400	6 900	23	M150	
109.7	25.00	16	SKZN26C12.5 - 71A-4G	12.48	4 400	6 900	23	M150	
95.7	22.00	18	SKZN26C14 - 71A-4G	14.31	4 000	6 900	23	M150	
89.3	22.00	19	SKZN26C16 - 71A-4G	15.34	4 700	6 900	23	M150	
77.6	19.00	22	SKZN26C18 - 71A-4G	17.65	5 000	6 900	23	M150	
67.1	17.00	26	SKZN26C20 - 71A-4G	20.40	5 200	6 900	23	M150	
62.3	16.00	28	SKZN26C22.4 - 71A-4G	21.99	5 300	6 900	23	M150	
57.7	15.00	30	SKZN26C25 - 71A-4G	23.74	5 400	6 900	23	M150	
49.2	13.00	35	SKZN26C28 - 71A-4G	27.86	5 700	6 900	23	M150	
45.2	12.00	38	SKZN26C31.5 - 71A-4G	30.30	5 900	6 900	23	M150	
37.8	9.70	45	SKZN26C35.5 - 71A-4G	36.24	6 200	6 900	23	M150	
34.3	8.80	50	SKZN26C40 - 71A-4G	39.90	6 400	6 900	23	M150	
31.0	7.90	55	SKZN26C45 - 71A-4G	44.17	6 600	6 900	23	M150	
27.8	7.10	62	SKZN26C50 - 71A-4G	49.21	6 800	6 900	23	M150	
24.8	6.30	69	SKZN26C56 - 71A-4G	55.25	6 900	6 900	23	M150	
22.3	5.70	77	SKZN26C63 - 71A-4G	61.51	6 900	6 900	23	M150	
19.9	5.10	86	SKZN26C71 - 71A-4G	68.78	6 900	6 900	23	M150	
17.1	4.40	100	SKZN26C80 - 71A-4G	79.96	6 900	6 900	23	M150	
15.4	3.90	112	SKZN26C90 - 71A-4G	89.08	6 900	6 900	23	M150	
13.7	3.50	126	SKZN26C100 - 71A-4G	100.23	6 900	6 900	23	M150	
12.4	3.20	139	SKZN26C112 - 71A-4G	110.71	6 900	6 900	23	M150	
11.1	2.90	154	SKZN26C125 - 71A-4G	122.91	6 900	6 900	23	M150	
9.9	2.50	173	SKZN26C140 - 71A-4G	137.82	6 900	6 900	23	M150	
8.9	2.30	194	SKZN26C16B160 - 71A-4G	154.51	6 900	6 900	33	M150	
7.7	2.00	223	SKZN26C16B180 - 71A-4G	177.82	6 900	6 900	33	M150	
6.7	1.70	258	SKZN26C16B200 - 71A-4G	205.58	6 900	6 900	33	M150	
6.2	1.60	278	SKZN26C16B224 - 71A-4G	221.53	6 900	6 900	33	M150	
6.0	2.80	289	SKZN36C16B224 - 71A-4G	230.04	13 300	13 500	44	M156	
6.2	1.60	278	SKZN26C16B250 - 71A-4G	221.53	6 900	6 900	33	M150	
5.5	2.60	311	SKZN36C16B250 - 71A-4G	247.90	13 500	13 500	44	M156	
4.9	1.20	352	SKZN26C16B280 - 71A-4G	280.68	6 900	6 900	33	M150	
5.1	2.40	336	SKZN36C16B280 - 71A-4G	267.64	13 500	13 500	44	M156	
4.5	1.10	383	SKZN26C16B315 - 71A-4G	305.32	6 900	6 900	33	M150	
4.4	2.00	394	SKZN36C16B315 - 71A-4G	314.08	13 500	13 500	44	M156	
3.8	0.96	458	SKZN26C16B355 - 71A-4G	365.17	6 900	6 900	33	M150	
4.0	1.90	429	SKZN36C16B355 - 71A-4G	341.66	13 500	13 500	44	M156	
3.4	0.87	504	SKZN26C16B400 - 71A-4G	402.00	6 900	6 900	33	M150	
3.4	1.60	513	SKZN36C16B400 - 71A-4G	408.63	13 500	13 500	44	M156	
3.0	1.40	564	SKZN36C16B450 - 71A-4G	449.84	13 500	13 500	44	M156	
3.1	2.90	550	SKZN46C16B450 - 71A-4G	438.69	18 000	18 000	66	M162	
2.8	1.30	625	SKZN36C16B500 - 71A-4G	497.92	13 500	13 500	44	M156	
2.9	2.70	599	SKZN46C16B500 - 71A-4G	477.20	18 000	18 000	66	M162	
2.5	1.10	696	SKZN36C16B560 - 71A-4G	554.74	13 500	13 500	44	M156	
2.4	2.20	716	SKZN46C16B560 - 71A-4G	570.74	18 000	18 000	66	M162	
2.2	1.00	782	SKZN36C16B630 - 71A-4G	622.93	13 500	13 500	44	M156	
2.2	2.00	788	SKZN46C16B630 - 71A-4G	628.30	18 000	18 000	66	M162	
2.0	0.92	870	SKZN36C16B710 - 71A-4G	693.43	13 500	13 500	44	M156	
1.9	1.80	908	SKZN46C16B710 - 71A-4G	723.43	18 000	18 000	66	M162	




6. SK4

P 0.18 kW
n₁ 1370 min⁻¹

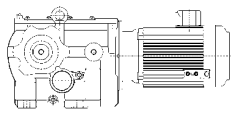
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.9	3.00	919	SKZN56C16B710 - 71A-4G	732.32	27 000	27 000	97	M168	
1.8	0.82	973	SKZN36C16B800 - 71A-4G	775.48	13 500	13 500	44	M156	
1.7	1.60	1019	SKZN46C16B800 - 71A-4G	812.35	18 000	18 000	66	M162	
1.7	2.80	1011	SKZN56C16B800 - 71A-4G	806.18	27 000	27 000	97	M168	
1.5	1.40	1135	SKZN46C16B900 - 71A-4G	904.29	18 000	18 000	66	M162	
1.5	2.50	1120	SKZN56C16B900 - 71A-4G	892.35	27 000	27 000	97	M168	
1.4	1.30	1269	SKZN46C16B1000 - 71A-4G	1011.30	18 000	18 000	66	M162	
1.4	2.20	1247	SKZN56C16B1000 - 71A-4G	994.18	27 000	27 000	97	M168	
1.3	1.20	1359	SKZN46C16B1120 - 71A-4G	1083.14	18 000	18 000	66	M162	
1.2	2.00	1401	SKZN56C16B1120 - 71A-4G	1116.38	27 000	27 000	97	M168	
1.1	1.00	1580	SKZN46C16B1250 - 71A-4G	1259.09	18 000	18 000	66	M162	
1.1	1.80	1559	SKZN56C16B1250 - 71A-4G	1242.73	27 000	27 000	97	M168	
1.1	3.00	1610	SKZN66C16B1250 - 71A-4G	1283.39	40 000	40 000	163	M174	
1.0	0.91	1760	SKZN46C16B1400 - 71A-4G	1402.76	18 000	18 000	66	M162	
1.0	1.60	1744	SKZN56C16B1400 - 71A-4G	1389.78	27 000	27 000	97	M168	
1.0	2.90	1696	SKZN66C16B1400 - 71A-4G	1352.01	40 000	40 000	163	M174	
0.8	1.40	2027	SKZN56C16B1600 - 71A-4G	1615.54	27 000	27 000	97	M168	
0.8	2.30	2085	SKZN66C16B1600 - 71A-4G	1662.10	40 000	40 000	163	M174	
0.8	1.20	2258	SKZN56C16B1800 - 71A-4G	1799.88	27 000	27 000	97	M168	
0.8	2.30	2152	SKZN66C16B1800 - 71A-4G	1715.51	40 000	40 000	163	M174	
0.7	1.10	2530	SKZN56C16B2000 - 71A-4G	2016.60	27 000	27 000	97	M168	
0.7	1.90	2592	SKZN66C16B2000 - 71A-4G	2065.67	40 000	40 000	163	M174	
0.6	1.70	2877	SKZN66C16B2240 - 71A-4G	2293.28	40 000	40 000	163	M174	
0.6	2.80	2829	SKZN76C36B2240 - 71A-4G	2255.05	65 000	65 000	284	M180	
0.6	0.90	3116	SKZN56C16B2500 - 71A-4G	2483.38	27 000	27 000	97	M168	
0.5	1.50	3226	SKZN66C16B2500 - 71A-4G	2571.46	40 000	40 000	163	M174	
0.6	2.60	3055	SKZN76C36B2500 - 71A-4G	2434.67	65 000	65 000	284	M180	
0.5	0.80	3494	SKZN56C16B2800 - 71A-4G	2784.63	27 000	27 000	97	M168	
0.5	1.40	3470	SKZN66C16C2800 - 71A-4G	2765.38	40 000	40 000	163	M174	
0.5	2.40	3397	SKZN76C36C2800 - 71A-4G	2707.87	65 000	65 000	284	M180	
0.4	1.30	3896	SKZN66C16C3150 - 71A-4G	3105.29	40 000	40 000	163	M174	
0.4	2.10	3848	SKZN76C36C3150 - 71A-4G	3066.79	65 000	65 000	284	M180	
0.4	1.10	4337	SKZN66C16C3550 - 71A-4G	3456.72	40 000	40 000	163	M174	
0.4	1.90	4196	SKZN76C36C3550 - 71A-4G	3344.22	65 000	65 000	284	M180	
0.4	2.90	4452	SKZN86C36C3550 - 71A-4G	3548.14	65 000	65 000	438	M186	
0.4	1.00	4850	SKZN66C16C4000 - 71A-4G	3865.77	40 000	40 000	163	M174	
0.4	1.60	4857	SKZN76C36C4000 - 71A-4G	3870.96	65 000	65 000	284	M180	
0.4	2.70	4854	SKZN86C36C4000 - 71A-4G	3869.10	65 000	65 000	438	M186	
0.3	0.87	5638	SKZN66C16C4500 - 71A-4G	4493.74	40 000	40 000	163	M174	
0.3	1.50	5363	SKZN76C36C4500 - 71A-4G	4274.26	65 000	65 000	284	M180	
0.3	2.30	5619	SKZN86C36C4500 - 71A-4G	4478.52	65 000	65 000	438	M186	
0.3	1.20	6416	SKZN76C36C5000 - 71A-4G	5113.77	65 000	65 000	284	M180	
0.3	2.10	6204	SKZN86C36C5000 - 71A-4G	4945.13	65 000	65 000	438	M186	
0.2	1.10	7144	SKZN76C36C5600 - 71A-4G	5693.74	65 000	65 000	284	M180	
0.2	1.80	7423	SKZN86C36C5600 - 71A-4G	5916.39	65 000	65 000	438	M186	
0.3	2.90	6864	SKZN96C36C5600 - 71A-4G	5470.56	112 000	112 000	611	M192	
0.2	1.00	7903	SKZN76C36C6300 - 71A-4G	6298.66	65 000	65 000	284	M180	
0.2	1.60	8265	SKZN86C36C6300 - 71A-4G	6587.40	65 000	65 000	438	M186	
0.2	2.40	8212	SKZN96C36C6300 - 71A-4G	6545.02	112 000	112 000	611	M192	
0.2	0.91	8779	SKZN76C36C7100 - 71A-4G	6997.13	65 000	65 000	284	M180	
0.2	1.40	9143	SKZN86C36C7100 - 71A-4G	7287.26	65 000	65 000	438	M186	
0.2	2.20	9143	SKZN96C36C7100 - 71A-4G	7287.33	112 000	112 000	611	M192	



6. SK4


P 0.18 kW n ₁ 1370 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.2	1.30	10157	SKZN86C36C8000 - 71A-4G	8095.35	65 000	65 000	438	M186	
0.2	2.00	10114	SKZN96C36C8000 - 71A-4G	8061.55	112 000	112 000	611	M192	
0.2	1.80	11236	SKZN96C36C9000 - 71A-4G	8955.51	112 000	112 000	611	M192	

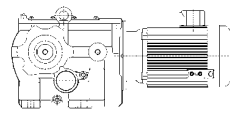
P 0.25 kW n ₁ 1400 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
194.6	20.00	12	SKZN26C7.1 - 71A-4G	7.19	3 200	6 900	24	M150	
169.8	18.00	14	SKZN26C8 - 71A-4G	8.25	3 900	6 900	24	M150	
158.4	18.00	15	SKZN26C9 - 71A-4G	8.84	3 900	6 900	24	M150	
137.7	16.00	17	SKZN26C10 - 71A-4G	10.17	4 100	6 900	24	M150	
119.1	14.00	20	SKZN26C11.2 - 71A-4G	11.76	4 300	6 900	24	M150	
112.1	18.00	21	SKZN26C12.5 - 71A-4G	12.48	4 400	6 900	24	M150	
97.8	16.00	24	SKZN26C14 - 71A-4G	14.31	3 900	6 900	24	M150	
91.3	16.00	26	SKZN26C16 - 71A-4G	15.34	4 700	6 900	24	M150	
79.3	14.00	30	SKZN26C18 - 71A-4G	17.65	4 900	6 900	24	M150	
68.6	13.00	35	SKZN26C20 - 71A-4G	20.40	5 100	6 900	24	M150	
63.7	12.00	37	SKZN26C22.4 - 71A-4G	21.99	5 200	6 900	24	M150	
59.0	11.00	40	SKZN26C25 - 71A-4G	23.74	5 300	6 900	24	M150	
50.3	9.30	48	SKZN26C28 - 71A-4G	27.86	5 600	6 900	24	M150	
46.2	8.50	52	SKZN26C31.5 - 71A-4G	30.30	5 700	6 900	24	M150	
38.6	7.10	62	SKZN26C35.5 - 71A-4G	36.24	6 100	6 900	24	M150	
35.1	6.50	68	SKZN26C40 - 71A-4G	39.90	6 200	6 900	24	M150	
31.7	5.80	75	SKZN26C45 - 71A-4G	44.17	6 400	6 900	24	M150	
28.5	5.20	84	SKZN26C50 - 71A-4G	49.21	6 600	6 900	24	M150	
25.3	4.70	94	SKZN26C56 - 71A-4G	55.25	6 800	6 900	24	M150	
22.8	4.20	105	SKZN26C63 - 71A-4G	61.51	6 900	6 900	24	M150	
20.4	3.80	117	SKZN26C71 - 71A-4G	68.78	6 900	6 900	24	M150	
17.5	3.20	136	SKZN26C80 - 71A-4G	79.96	6 900	6 900	24	M150	
15.7	2.90	152	SKZN26C90 - 71A-4G	89.08	6 900	6 900	24	M150	
14.0	2.60	171	SKZN26C100 - 71A-4G	100.23	6 900	6 900	24	M150	
12.6	2.30	189	SKZN26C112 - 71A-4G	110.71	6 900	6 900	24	M150	
11.4	2.10	210	SKZN26C125 - 71A-4G	122.91	6 900	6 900	24	M150	
10.2	1.90	235	SKZN26C140 - 71A-4G	137.82	6 900	6 900	24	M150	
9.1	1.70	263	SKZN26C16B160 - 71A-4G	154.51	6 900	6 900	34	M150	
8.7	2.90	275	SKZN36C16B160 - 71A-4G	161.36	11 700	13 500	45	M156	
7.9	1.50	303	SKZN26C16B180 - 71A-4G	177.82	6 900	6 900	34	M150	
8.1	2.70	295	SKZN36C16B180 - 71A-4G	172.89	11 900	13 500	45	M156	
6.8	1.30	351	SKZN26C16B200 - 71A-4G	205.58	6 900	6 900	34	M150	
7.0	2.40	339	SKZN36C16B200 - 71A-4G	198.98	12 300	13 500	45	M156	
6.3	1.20	378	SKZN26C16B224 - 71A-4G	221.53	6 900	6 900	34	M150	
6.1	2.00	392	SKZN36C16B224 - 71A-4G	230.04	12 700	13 500	45	M156	
6.3	1.20	378	SKZN26C16B250 - 71A-4G	221.53	6 900	6 900	34	M150	
5.6	1.90	423	SKZN36C16B250 - 71A-4G	247.90	12 900	13 500	45	M156	
5.0	0.92	479	SKZN26C16B280 - 71A-4G	280.68	6 900	6 900	34	M150	
5.2	1.80	456	SKZN36C16B280 - 71A-4G	267.64	13 100	13 500	45	M156	
4.6	0.85	521	SKZN26C16B315 - 71A-4G	305.32	6 900	6 900	34	M150	




6. SK4


P 0.25 kW
n₁ 1400 min⁻¹

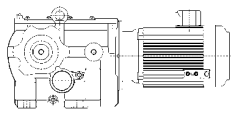
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
4.5	1.50	536	SKZN36C16B315 - 71A-4G	314.08	13 500	13 500	45	M156	
4.4	2.90	548	SKZN46C16B315 - 71A-4G	321.31	18 000	18 000	67	M162	
4.1	1.40	583	SKZN36C16B355 - 71A-4G	341.66	13 500	13 500	45	M156	
4.0	2.70	590	SKZN46C16B355 - 71A-4G	346.25	18 000	18 000	67	M162	
3.4	1.10	697	SKZN36C16B400 - 71A-4G	408.63	13 500	13 500	45	M156	
3.4	2.30	698	SKZN46C16B400 - 71A-4G	409.59	18 000	18 000	67	M162	
3.1	1.00	767	SKZN36C16B450 - 71A-4G	449.84	13 500	13 500	45	M156	
3.2	2.10	748	SKZN46C16B450 - 71A-4G	438.69	18 000	18 000	67	M162	
2.8	0.94	849	SKZN36C16B500 - 71A-4G	497.92	13 500	13 500	45	M156	
2.9	2.00	814	SKZN46C16B500 - 71A-4G	477.20	18 000	18 000	67	M162	
2.5	0.85	946	SKZN36C16B560 - 71A-4G	554.74	13 500	13 500	45	M156	
2.5	1.60	973	SKZN46C16B560 - 71A-4G	570.74	18 000	18 000	67	M162	
2.5	2.90	960	SKZN56C16B560 - 71A-4G	562.88	26 300	27 000	98	M168	
2.2	1.50	1071	SKZN46C16B630 - 71A-4G	628.30	18 000	18 000	67	M162	
2.3	2.70	1044	SKZN56C16B630 - 71A-4G	612.30	26 800	27 000	98	M168	
1.9	1.30	1234	SKZN46C16B710 - 71A-4G	723.43	18 000	18 000	67	M162	
1.9	2.20	1249	SKZN56C16B710 - 71A-4G	732.32	27 000	27 000	98	M168	
1.7	1.20	1385	SKZN46C16B800 - 71A-4G	812.35	18 000	18 000	67	M162	
1.7	2.00	1375	SKZN56C16B800 - 71A-4G	806.18	27 000	27 000	98	M168	
1.5	1.00	1542	SKZN46C16B900 - 71A-4G	904.29	18 000	18 000	67	M162	
1.6	1.80	1522	SKZN56C16B900 - 71A-4G	892.35	27 000	27 000	98	M168	
1.4	0.93	1724	SKZN46C16B1000 - 71A-4G	1011.30	18 000	18 000	67	M162	
1.4	1.70	1695	SKZN56C16B1000 - 71A-4G	994.18	27 000	27 000	98	M168	
1.4	2.80	1758	SKZN66C16B1000 - 71A-4G	1030.92	40 000	40 000	164	M174	
1.3	0.87	1847	SKZN46C16B1120 - 71A-4G	1083.14	18 000	18 000	67	M162	
1.3	1.50	1904	SKZN56C16B1120 - 71A-4G	1116.38	27 000	27 000	98	M168	
1.2	2.50	1957	SKZN66C16B1120 - 71A-4G	1147.59	40 000	40 000	164	M174	
1.1	1.30	2119	SKZN56C16B1250 - 71A-4G	1242.73	27 000	27 000	98	M168	
1.1	2.20	2188	SKZN66C16B1250 - 71A-4G	1283.39	40 000	40 000	164	M174	
1.0	1.20	2370	SKZN56C16B1400 - 71A-4G	1389.78	27 000	27 000	98	M168	
1.0	2.10	2305	SKZN66C16B1400 - 71A-4G	1352.01	40 000	40 000	164	M174	
0.9	1.00	2755	SKZN56C16B1600 - 71A-4G	1615.54	27 000	27 000	98	M168	
0.8	1.70	2834	SKZN66C16B1600 - 71A-4G	1662.10	40 000	40 000	164	M174	
0.9	3.00	2704	SKZN76C36B1600 - 71A-4G	1585.74	58 200	65 000	285	M180	
0.8	0.91	3069	SKZN56C16B1800 - 71A-4G	1799.88	27 000	27 000	98	M168	
0.8	1.70	2925	SKZN66C16B1800 - 71A-4G	1715.51	40 000	40 000	164	M174	
0.8	2.60	3039	SKZN76C36B1800 - 71A-4G	1782.32	59 900	65 000	285	M180	
0.7	0.81	3439	SKZN56C16B2000 - 71A-4G	2016.60	27 000	27 000	98	M168	
0.7	1.40	3522	SKZN66C16B2000 - 71A-4G	2065.67	40 000	40 000	164	M174	
0.7	2.40	3378	SKZN76C36B2000 - 71A-4G	1981.01	61 400	65 000	285	M180	
0.6	1.30	3911	SKZN66C16B2240 - 71A-4G	2293.28	40 000	40 000	164	M174	
0.6	2.10	3845	SKZN76C36B2240 - 71A-4G	2255.05	63 200	65 000	285	M180	
0.5	1.10	4385	SKZN66C16B2500 - 71A-4G	2571.46	40 000	40 000	164	M174	
0.6	1.90	4152	SKZN76C36B2500 - 71A-4G	2434.67	64 300	65 000	285	M180	
0.6	3.00	4324	SKZN86C36B2500 - 71A-4G	2535.63	65 000	65 000	439	M186	
0.5	1.00	4716	SKZN66C16C2800 - 71A-4G	2765.38	40 000	40 000	164	M174	
0.5	1.70	4618	SKZN76C36C2800 - 71A-4G	2707.87	65 000	65 000	285	M180	
0.5	2.70	4803	SKZN86C36B2800 - 71A-4G	2816.80	65 000	65 000	439	M186	
0.5	0.93	5295	SKZN66C16C3150 - 71A-4G	3105.29	40 000	40 000	164	M174	
0.5	1.50	5230	SKZN76C36C3150 - 71A-4G	3066.79	65 000	65 000	285	M180	
0.4	2.40	5342	SKZN86C36C3150 - 71A-4G	3132.88	65 000	65 000	439	M186	
0.4	0.83	5895	SKZN66C16C3550 - 71A-4G	3456.72	40 000	40 000	164	M174	



6. SK4


P 0.25 kW n ₁ 1400 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
0.4	1.40	5703	SKZN76C36C3550 - 71A-4G	3344.22	65 000	65 000	285	M180	
0.4	2.10	6050	SKZN86C36C3550 - 71A-4G	3548.14	65 000	65 000	439	M186	
0.4	1.20	6601	SKZN76C36C4000 - 71A-4G	3870.96	65 000	65 000	285	M180	
0.4	2.00	6598	SKZN86C36C4000 - 71A-4G	3869.10	65 000	65 000	439	M186	
0.4	3.00	6693	SKZN96C36C4000 - 71A-4G	3925.14	112 000	112 000	612	M192	
0.3	1.10	7289	SKZN76C36C4500 - 71A-4G	4274.26	65 000	65 000	285	M180	
0.3	1.70	7637	SKZN86C36C4500 - 71A-4G	4478.52	65 000	65 000	439	M186	
0.3	2.70	7299	SKZN96C36C4500 - 71A-4G	4280.21	112 000	112 000	612	M192	
0.3	0.92	8720	SKZN76C36C5000 - 71A-4G	5113.77	65 000	65 000	285	M180	
0.3	1.50	8433	SKZN86C36C5000 - 71A-4G	4945.13	65 000	65 000	439	M186	
0.3	2.40	8448	SKZN96C36C5000 - 71A-4G	4954.38	112 000	112 000	612	M192	
0.2	0.82	9709	SKZN76C36C5600 - 71A-4G	5693.74	65 000	65 000	285	M180	
0.2	1.30	10089	SKZN86C36C5600 - 71A-4G	5916.39	65 000	65 000	439	M186	
0.3	2.10	9329	SKZN96C36C5600 - 71A-4G	5470.56	112 000	112 000	612	M192	
0.2	1.20	11233	SKZN86C36C6300 - 71A-4G	6587.40	65 000	65 000	439	M186	
0.2	1.80	11161	SKZN96C36C6300 - 71A-4G	6545.02	112 000	112 000	612	M192	
0.2	1.00	12426	SKZN86C36C7100 - 71A-4G	7287.26	65 000	65 000	439	M186	
0.2	1.60	12427	SKZN96C36C7100 - 71A-4G	7287.33	112 000	112 000	612	M192	
0.2	0.94	13804	SKZN86C36C8000 - 71A-4G	8095.35	65 000	65 000	439	M186	
0.2	1.50	13747	SKZN96C36C8000 - 71A-4G	8061.55	112 000	112 000	612	M192	
0.2	1.30	15271	SKZN96C36C9000 - 71A-4G	8955.51	112 000	112 000	612	M192	

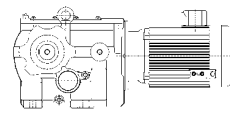
P 0.37 kW n ₁ 1400 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
194.6	14.00	18	SKZN26C7.1 - 71B-4G	7.19	3 200	6 900	25	M150	
169.8	12.00	21	SKZN26C8 - 71B-4G	8.25	3 800	6 900	25	M150	
158.4	12.00	22	SKZN26C9 - 71B-4G	8.84	3 900	6 900	25	M150	
137.7	11.00	26	SKZN26C10 - 71B-4G	10.17	4 100	6 900	25	M150	
119.1	9.80	30	SKZN26C11.2 - 71B-4G	11.76	4 200	6 900	25	M150	
112.1	12.00	32	SKZN26C12.5 - 71B-4G	12.48	4 300	6 900	25	M150	
97.8	11.00	36	SKZN26C14 - 71B-4G	14.31	3 900	6 900	25	M150	
91.3	11.00	39	SKZN26C16 - 71B-4G	15.34	4 600	6 900	25	M150	
79.3	9.70	45	SKZN26C18 - 71B-4G	17.65	4 800	6 900	25	M150	
68.6	8.50	51	SKZN26C20 - 71B-4G	20.40	5 000	6 900	25	M150	
63.7	7.90	55	SKZN26C22.4 - 71B-4G	21.99	5 100	6 900	25	M150	
59.0	7.30	60	SKZN26C25 - 71B-4G	23.74	5 200	6 900	25	M150	
50.3	6.30	70	SKZN26C28 - 71B-4G	27.86	5 400	6 900	25	M150	
46.2	5.80	76	SKZN26C31.5 - 71B-4G	30.30	5 600	6 900	25	M150	
38.6	4.80	91	SKZN26C35.5 - 71B-4G	36.24	5 800	6 900	25	M150	
35.1	4.40	101	SKZN26C40 - 71B-4G	39.90	6 000	6 900	25	M150	
31.7	3.90	111	SKZN26C45 - 71B-4G	44.17	6 100	6 900	25	M150	
28.5	3.50	124	SKZN26C50 - 71B-4G	49.21	6 300	6 900	25	M150	
25.3	3.20	139	SKZN26C56 - 71B-4G	55.25	6 500	6 900	25	M150	
22.8	2.80	155	SKZN26C63 - 71B-4G	61.51	6 700	6 900	25	M150	
20.4	2.50	174	SKZN26C71 - 71B-4G	68.78	6 800	6 900	25	M150	
17.5	2.20	202	SKZN26C80 - 71B-4G	79.96	6 900	6 900	25	M150	




6. SK4


P 0.37 kW
n₁ 1400 min⁻¹

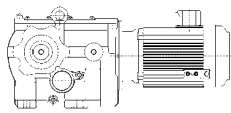
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
15.7	2.00	225	SKZN26C90 - 71B-4G	89.08	6 900	6 900	25	M150	
14.0	1.70	253	SKZN26C100 - 71B-4G	100.23	6 900	6 900	25	M150	
12.6	1.60	279	SKZN26C112 - 71B-4G	110.71	6 900	6 900	25	M150	
12.3	2.80	288	SKZN36C112 - 71B-4G	114.13	10 200	13 500	36	M156	
11.4	1.40	310	SKZN26C125 - 71B-4G	122.91	6 900	6 900	25	M150	
10.9	2.50	323	SKZN36C125 - 71B-4G	128.05	10 500	13 500	36	M156	
10.2	1.30	348	SKZN26C140 - 71B-4G	137.82	6 900	6 900	25	M150	
9.1	1.10	390	SKZN26C16B160 - 71B-4G	154.51	6 900	6 900	35	M150	
8.7	2.00	407	SKZN36C16B160 - 71B-4G	161.36	11 000	13 500	46	M156	
7.9	0.98	449	SKZN26C16B180 - 71B-4G	177.82	6 900	6 900	35	M150	
8.1	1.80	436	SKZN36C16B180 - 71B-4G	172.89	11 100	13 500	46	M156	
7.7	3.00	461	SKZN46C180 - 71B-4G	182.63	15 700	18 000	58	M162	
6.8	0.85	519	SKZN26C16B200 - 71B-4G	205.58	6 900	6 900	35	M150	
7.0	1.60	502	SKZN36C16B200 - 71B-4G	198.98	11 400	13 500	46	M156	
6.1	1.40	581	SKZN36C16B224 - 71B-4G	230.04	11 700	13 500	46	M156	
6.2	2.80	569	SKZN46C16B224 - 71B-4G	225.37	16 500	18 000	68	M162	
5.6	1.30	626	SKZN36C16B250 - 71B-4G	247.90	11 900	13 500	46	M156	
5.8	2.60	609	SKZN46C16B250 - 71B-4G	241.49	16 700	18 000	68	M162	
5.2	1.20	675	SKZN36C16B280 - 71B-4G	267.64	12 000	13 500	46	M156	
5.0	2.30	701	SKZN46C16B280 - 71B-4G	277.93	17 300	18 000	68	M162	
4.5	1.00	793	SKZN36C16B315 - 71B-4G	314.08	12 200	13 500	46	M156	
4.4	2.00	811	SKZN46C16B315 - 71B-4G	321.31	17 900	18 000	68	M162	
4.1	0.93	862	SKZN36C16B355 - 71B-4G	341.66	12 300	13 500	46	M156	
4.0	1.80	874	SKZN46C16B355 - 71B-4G	346.25	18 000	18 000	68	M162	
3.4	1.50	1034	SKZN46C16B400 - 71B-4G	409.59	18 000	18 000	68	M162	
3.4	2.70	1040	SKZN56C16B400 - 71B-4G	412.27	23 000	27 000	99	M168	
3.2	1.40	1107	SKZN46C16B450 - 71B-4G	438.69	18 000	18 000	68	M162	
3.2	2.50	1121	SKZN56C16B450 - 71B-4G	444.27	23 400	27 000	99	M168	
2.9	1.30	1204	SKZN46C16B500 - 71B-4G	477.20	18 000	18 000	68	M162	
2.9	2.30	1211	SKZN56C16B500 - 71B-4G	479.65	23 800	27 000	99	M168	
2.5	1.10	1440	SKZN46C16B560 - 71B-4G	570.74	18 000	18 000	68	M162	
2.5	2.00	1421	SKZN56C16B560 - 71B-4G	562.88	24 600	27 000	99	M168	
2.2	1.00	1586	SKZN46C16B630 - 71B-4G	628.30	18 000	18 000	68	M162	
2.3	1.80	1545	SKZN56C16B630 - 71B-4G	612.30	24 900	27 000	99	M168	
2.1	3.00	1644	SKZN66C16B630 - 71B-4G	651.25	39 200	40 000	165	M174	
1.9	0.88	1826	SKZN46C16B710 - 71B-4G	723.43	18 000	18 000	68	M162	
1.9	1.50	1848	SKZN56C16B710 - 71B-4G	732.32	25 700	27 000	99	M168	
1.9	2.60	1879	SKZN66C16B710 - 71B-4G	744.47	40 000	40 000	165	M174	
1.7	1.40	2035	SKZN56C16B800 - 71B-4G	806.18	26 100	27 000	99	M168	
1.7	2.40	2080	SKZN66C16B800 - 71B-4G	824.04	40 000	40 000	165	M174	
1.6	1.20	2252	SKZN56C16B900 - 71B-4G	892.35	26 400	27 000	99	M168	
1.5	2.10	2317	SKZN66C16B900 - 71B-4G	918.08	40 000	40 000	165	M174	
1.4	1.10	2509	SKZN56C16B1000 - 71B-4G	994.18	26 700	27 000	99	M168	
1.4	1.90	2602	SKZN66C16B1000 - 71B-4G	1030.92	40 000	40 000	165	M174	
1.3	0.99	2817	SKZN56C16B1120 - 71B-4G	1116.38	27 000	27 000	99	M168	
1.2	1.70	2896	SKZN66C16B1120 - 71B-4G	1147.59	40 000	40 000	165	M174	
1.2	2.70	2925	SKZN76C36B1120 - 71B-4G	1158.92	51 100	65 000	286	M180	
1.1	0.89	3136	SKZN56C16B1250 - 71B-4G	1242.73	27 000	27 000	99	M168	
1.1	1.50	3239	SKZN66C16B1250 - 71B-4G	1283.39	40 000	40 000	165	M174	
1.1	2.50	3257	SKZN76C36B1250 - 71B-4G	1290.36	52 300	65 000	286	M180	
1.0	0.80	3507	SKZN56C16B1400 - 71B-4G	1389.78	27 000	27 000	99	M168	
1.0	1.40	3412	SKZN66C16B1400 - 71B-4G	1352.01	40 000	40 000	165	M174	



6. SK4


P 0.37 kW n₁ 1400 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.0	2.20	3603	SKZN76C36B1400 - 71B-4G	1427.45	53 400	65 000	286	M180	
0.8	1.20	4195	SKZN66C16B1600 - 71B-4G	1662.10	40 000	40 000	165	M174	
0.9	2.00	4002	SKZN76C36B1600 - 71B-4G	1585.74	54 600	65 000	286	M180	
0.8	1.10	4330	SKZN66C16B1800 - 71B-4G	1715.51	40 000	40 000	165	M174	
0.8	1.80	4498	SKZN76C36B1800 - 71B-4G	1782.32	55 800	65 000	286	M180	
0.8	3.00	4343	SKZN86C36B1800 - 71B-4G	1720.67	65 000	65 000	440	M186	
0.7	0.94	5213	SKZN66C16B2000 - 71B-4G	2065.67	40 000	40 000	165	M174	
0.7	1.60	5000	SKZN76C36B2000 - 71B-4G	1981.01	56 800	65 000	286	M180	
0.7	2.50	5195	SKZN86C36B2000 - 71B-4G	2058.63	65 000	65 000	440	M186	
0.6	0.85	5788	SKZN66C16B2240 - 71B-4G	2293.28	40 000	40 000	165	M174	
0.6	1.40	5691	SKZN76C36B2240 - 71B-4G	2255.05	58 000	65 000	286	M180	
0.6	2.20	5785	SKZN86C36B2240 - 71B-4G	2292.11	65 000	65 000	440	M186	
0.6	1.30	6144	SKZN76C36B2500 - 71B-4G	2434.67	58 700	65 000	286	M180	
0.6	2.00	6399	SKZN86C36B2500 - 71B-4G	2535.63	65 000	65 000	440	M186	
0.5	1.20	6834	SKZN76C36C2800 - 71B-4G	2707.87	59 400	65 000	286	M180	
0.5	1.80	7109	SKZN86C36B2800 - 71B-4G	2816.80	65 000	65 000	440	M186	
0.5	2.80	7019	SKZN96C36B2800 - 71B-4G	2781.25	112 000	112 000	613	M192	
0.5	1.00	7740	SKZN76C36C3150 - 71B-4G	3066.79	60 200	65 000	286	M180	
0.4	1.60	7907	SKZN86C36C3150 - 71B-4G	3132.88	65 000	65 000	440	M186	
0.4	2.50	7864	SKZN96C36B3150 - 71B-4G	3116.10	112 000	112 000	613	M192	
0.4	0.95	8440	SKZN76C36C3550 - 71B-4G	3344.22	60 600	65 000	286	M180	
0.4	1.50	8955	SKZN86C36C3550 - 71B-4G	3548.14	65 000	65 000	440	M186	
0.4	2.30	8747	SKZN96C36C3550 - 71B-4G	3465.75	112 000	112 000	613	M192	
0.4	0.82	9769	SKZN76C36C4000 - 71B-4G	3870.96	61 100	65 000	286	M180	
0.4	1.30	9765	SKZN86C36C4000 - 71B-4G	3869.10	65 000	65 000	440	M186	
0.4	2.00	9906	SKZN96C36C4000 - 71B-4G	3925.14	112 000	112 000	613	M192	
0.3	1.20	11303	SKZN86C36C4500 - 71B-4G	4478.52	65 000	65 000	440	M186	
0.3	1.90	10802	SKZN96C36C4500 - 71B-4G	4280.21	112 000	112 000	613	M192	
0.3	1.00	12480	SKZN86C36C5000 - 71B-4G	4945.13	65 000	65 000	440	M186	
0.3	1.60	12504	SKZN96C36C5000 - 71B-4G	4954.38	112 000	112 000	613	M192	
0.2	0.87	14931	SKZN86C36C5600 - 71B-4G	5916.39	65 000	65 000	440	M186	
0.3	1.40	13806	SKZN96C36C5600 - 71B-4G	5470.56	112 000	112 000	613	M192	
0.2	1.20	16518	SKZN96C36C6300 - 71B-4G	6545.02	112 000	112 000	613	M192	
0.2	1.10	18391	SKZN96C36C7100 - 71B-4G	7287.33	112 000	112 000	613	M192	
0.2	0.98	20345	SKZN96C36C8000 - 71B-4G	8061.55	112 000	112 000	613	M192	
0.2	0.88	22601	SKZN96C36C9000 - 71B-4G	8955.51	112 000	112 000	613	M192	

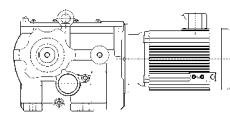
P 0.55 kW n₁ 1420 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
197.4	9.40	27	SKZN26C7.1 - 80A-4G	7.19	3 200	6 900	27	M150	
172.2	8.50	30	SKZN26C8 - 80A-4G	8.25	3 700	6 900	27	M150	
160.7	8.30	33	SKZN26C9 - 80A-4G	8.84	3 800	6 900	27	M150	
139.6	7.40	38	SKZN26C10 - 80A-4G	10.17	4 000	6 900	27	M150	
120.8	6.70	43	SKZN26C11.2 - 80A-4G	11.76	4 100	6 900	27	M150	
113.7	8.40	46	SKZN26C12.5 - 80A-4G	12.48	4 200	6 900	27	M150	
99.2	7.60	53	SKZN26C14 - 80A-4G	14.31	3 800	6 900	27	M150	




6. SK4

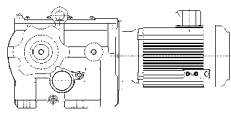
P 0.55 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
92.6	7.30	57	SKZN26C16 - 80A-4G	15.34	4 400	6 900	27	M150	
80.5	6.60	65	SKZN26C18 - 80A-4G	17.65	4 600	6 900	27	M150	
69.6	5.80	75	SKZN26C20 - 80A-4G	20.40	4 800	6 900	27	M150	
64.6	5.40	81	SKZN26C22.4 - 80A-4G	21.99	4 900	6 900	27	M150	
59.8	5.00	88	SKZN26C25 - 80A-4G	23.74	5 000	6 900	27	M150	
51.0	4.30	103	SKZN26C28 - 80A-4G	27.86	5 200	6 900	27	M150	
46.9	3.90	112	SKZN26C31.5 - 80A-4G	30.30	5 300	6 900	27	M150	
39.2	3.30	134	SKZN26C35.5 - 80A-4G	36.24	5 500	6 900	27	M150	
35.6	3.00	148	SKZN26C40 - 80A-4G	39.90	5 600	6 900	27	M150	
32.2	2.70	163	SKZN26C45 - 80A-4G	44.17	5 800	6 900	27	M150	
28.9	2.40	182	SKZN26C50 - 80A-4G	49.21	5 900	6 900	27	M150	
25.7	2.20	204	SKZN26C56 - 80A-4G	55.25	6 000	6 900	27	M150	
23.1	1.90	227	SKZN26C63 - 80A-4G	61.51	6 100	6 900	27	M150	
20.6	1.70	254	SKZN26C71 - 80A-4G	68.78	6 200	6 900	27	M150	
19.7	3.00	266	SKZN36C71 - 80A-4G	71.90	8 600	13 500	38	M156	
17.8	1.50	296	SKZN26C80 - 80A-4G	79.96	6 300	6 900	27	M150	
17.7	2.70	297	SKZN36C80 - 80A-4G	80.34	8 800	13 500	38	M156	
15.9	1.30	329	SKZN26C90 - 80A-4G	89.08	6 400	6 900	27	M150	
16.0	2.40	329	SKZN36C90 - 80A-4G	89.02	9 000	13 500	38	M156	
14.2	1.20	371	SKZN26C100 - 80A-4G	100.23	6 500	6 900	27	M150	
14.3	2.20	367	SKZN36C100 - 80A-4G	99.18	9 200	13 500	38	M156	
12.8	1.10	409	SKZN26C112 - 80A-4G	110.71	6 500	6 900	27	M150	
12.4	1.90	422	SKZN36C112 - 80A-4G	114.13	9 400	13 500	38	M156	
11.6	0.97	455	SKZN26C125 - 80A-4G	122.91	6 500	6 900	27	M150	
11.1	1.70	474	SKZN36C125 - 80A-4G	128.05	9 600	13 500	38	M156	
10.3	0.86	510	SKZN26C140 - 80A-4G	137.82	6 500	6 900	27	M150	
10.6	2.90	495	SKZN46C140 - 80A-4G	133.86	13 700	18 000	60	M162	
8.8	1.30	597	SKZN36C16B160 - 80A-4G	161.36	9 900	13 500	48	M156	
9.6	2.70	544	SKZN46C160 - 80A-4G	147.16	14 000	18 000	60	M162	
8.2	1.30	639	SKZN36C16B180 - 80A-4G	172.89	10 000	13 500	48	M156	
7.8	2.00	675	SKZN46C180 - 80A-4G	182.63	14 700	18 000	60	M162	
7.7	2.40	679	SKZN46C16B180 - 80A-4G	183.55	14 700	18 000	70	M162	
7.1	1.10	736	SKZN36C16B200 - 80A-4G	198.98	10 100	13 500	48	M156	
7.2	2.20	727	SKZN46C16B200 - 80A-4G	196.59	14 900	18 000	70	M162	
6.2	0.94	851	SKZN36C16B224 - 80A-4G	230.04	10 200	13 500	48	M156	
6.3	1.90	834	SKZN46C16B224 - 80A-4G	225.37	15 300	18 000	70	M162	
5.7	0.87	917	SKZN36C16B250 - 80A-4G	247.90	10 300	13 500	48	M156	
5.9	1.80	893	SKZN46C16B250 - 80A-4G	241.49	15 500	18 000	70	M162	
5.6	3.00	933	SKZN56C16B250 - 80A-4G	252.24	19 200	27 000	101	M168	
5.3	0.81	990	SKZN36C16B280 - 80A-4G	267.64	10 300	13 500	48	M156	
5.1	1.60	1028	SKZN46C16B280 - 80A-4G	277.93	15 900	18 000	70	M162	
4.9	2.60	1070	SKZN56C16B280 - 80A-4G	289.17	19 800	27 000	101	M168	
4.4	1.30	1188	SKZN46C16B315 - 80A-4G	321.31	16 200	18 000	70	M162	
4.6	2.40	1146	SKZN56C16B315 - 80A-4G	309.85	20 100	27 000	101	M168	
4.1	1.20	1281	SKZN46C16B355 - 80A-4G	346.25	16 400	18 000	70	M162	
4.0	2.10	1319	SKZN56C16B355 - 80A-4G	356.61	20 600	27 000	101	M168	
3.5	1.10	1515	SKZN46C16B400 - 80A-4G	409.59	16 700	18 000	70	M162	
3.4	1.80	1525	SKZN56C16B400 - 80A-4G	412.27	21 100	27 000	101	M168	
3.2	0.99	1623	SKZN46C16B450 - 80A-4G	438.69	16 800	18 000	70	M162	
3.2	1.70	1643	SKZN56C16B450 - 80A-4G	444.27	21 300	27 000	101	M168	
3.2	3.00	1638	SKZN66C16B450 - 80A-4G	442.93	33 600	40 000	167	M174	
3.0	0.91	1765	SKZN46C16B500 - 80A-4G	477.20	16 900	18 000	70	M162	




6. SK4

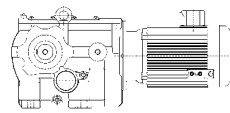
P 0.55 kW									
n ₁ 1420 min ⁻¹									
n _{2e} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
3.0	1.60	1774	SKZN56C16B500 - 80A-4G	479.65	21 600	27 000	101	M168	
2.7	2.50	1923	SKZN66C16B500 - 80A-4G	519.79	34 800	40 000	167	M174	
2.5	1.30	2082	SKZN56C16B560 - 80A-4G	562.88	21 900	27 000	101	M168	
2.5	2.30	2091	SKZN66C16B560 - 80A-4G	565.43	35 400	40 000	167	M174	
2.3	1.20	2265	SKZN56C16B630 - 80A-4G	612.30	22 100	27 000	101	M168	
2.2	2.00	2409	SKZN66C16B630 - 80A-4G	651.25	36 300	40 000	167	M174	
1.9	1.00	2709	SKZN56C16B710 - 80A-4G	732.32	22 300	27 000	101	M168	
1.9	1.80	2754	SKZN66C16B710 - 80A-4G	744.47	37 200	40 000	167	M174	
1.8	0.94	2982	SKZN56C16B800 - 80A-4G	806.18	22 400	27 000	101	M168	
1.7	1.60	3048	SKZN66C16B800 - 80A-4G	824.04	37 700	40 000	167	M174	
1.9	2.90	2803	SKZN76C36B800 - 80A-4G	757.89	43 300	65 000	288	M180	
1.6	0.85	3300	SKZN56C16B900 - 80A-4G	892.35	22 300	27 000	101	M168	
1.5	1.40	3396	SKZN66C16B900 - 80A-4G	918.08	38 300	40 000	167	M174	
1.6	2.50	3245	SKZN76C36B900 - 80A-4G	877.27	44 700	65 000	288	M180	
1.4	1.30	3813	SKZN66C16B1000 - 80A-4G	1030.92	38 800	40 000	167	M174	
1.5	2.20	3583	SKZN76C36B1000 - 80A-4G	968.67	45 500	65 000	288	M180	
1.2	1.20	4245	SKZN66C16B1120 - 80A-4G	1147.59	39 200	40 000	167	M174	
1.2	1.90	4286	SKZN76C36B1120 - 80A-4G	1158.92	46 900	65 000	288	M180	
1.1	1.00	4747	SKZN66C16B1250 - 80A-4G	1283.39	39 500	40 000	167	M174	
1.1	1.70	4773	SKZN76C36B1250 - 80A-4G	1290.36	47 700	65 000	288	M180	
1.2	2.90	4495	SKZN86C36B1250 - 80A-4G	1215.24	65 000	65 000	442	M186	
1.1	0.98	5001	SKZN66C16B1400 - 80A-4G	1352.01	39 600	40 000	167	M174	
1.0	1.50	5280	SKZN76C36B1400 - 80A-4G	1427.45	48 400	65 000	288	M180	
1.0	2.60	5090	SKZN86C36B1400 - 80A-4G	1376.06	65 000	65 000	442	M186	
0.9	0.80	6148	SKZN66C16B1600 - 80A-4G	1662.10	39 700	40 000	167	M174	
0.9	1.40	5865	SKZN76C36B1600 - 80A-4G	1585.74	49 000	65 000	288	M180	
0.9	2.30	5764	SKZN86C36B1600 - 80A-4G	1558.32	65 000	65 000	442	M186	
0.8	1.20	6592	SKZN76C36B1800 - 80A-4G	1782.32	49 600	65 000	288	M180	
0.8	2.00	6364	SKZN86C36B1800 - 80A-4G	1720.67	65 000	65 000	442	M186	
0.8	3.00	6707	SKZN96C36B1800 - 80A-4G	1813.44	112 000	112 000	615	M192	
0.7	1.10	7327	SKZN76C36B2000 - 80A-4G	1981.01	49 900	65 000	288	M180	
0.7	1.70	7614	SKZN86C36B2000 - 80A-4G	2058.63	65 000	65 000	442	M186	
0.7	2.70	7451	SKZN96C36B2000 - 80A-4G	2014.53	112 000	112 000	615	M192	
0.6	0.96	8341	SKZN76C36B2240 - 80A-4G	2255.05	50 200	65 000	288	M180	
0.6	1.50	8478	SKZN86C36B2240 - 80A-4G	2292.11	65 000	65 000	442	M186	
0.6	2.40	8222	SKZN96C36B2240 - 80A-4G	2222.86	112 000	112 000	615	M192	
0.6	0.89	9005	SKZN76C36B2500 - 80A-4G	2434.67	50 200	65 000	288	M180	
0.6	1.40	9378	SKZN86C36B2500 - 80A-4G	2535.63	65 000	65 000	442	M186	
0.6	2.20	9239	SKZN96C36B2500 - 80A-4G	2497.92	112 000	112 000	615	M192	
0.5	0.80	10016	SKZN76C36C2800 - 80A-4G	2707.87	50 100	65 000	288	M180	
0.5	1.20	10418	SKZN86C36B2800 - 80A-4G	2816.80	65 000	65 000	442	M186	
0.5	1.90	10287	SKZN96C36B2800 - 80A-4G	2781.25	112 000	112 000	615	M192	
0.5	1.10	11587	SKZN86C36C3150 - 80A-4G	3132.88	65 000	65 000	442	M186	
0.5	1.70	11525	SKZN96C36B3150 - 80A-4G	3116.10	112 000	112 000	615	M192	
0.4	0.99	13123	SKZN86C36C3550 - 80A-4G	3548.14	65 000	65 000	442	M186	
0.4	1.60	12819	SKZN96C36C3550 - 80A-4G	3465.75	112 000	112 000	615	M192	
0.4	0.91	14311	SKZN86C36C4000 - 80A-4G	3869.10	65 000	65 000	442	M186	
0.4	1.40	14518	SKZN96C36C4000 - 80A-4G	3925.14	112 000	112 000	615	M192	
0.3	1.30	15831	SKZN96C36C4500 - 80A-4G	4280.21	112 000	112 000	615	M192	
0.3	1.10	18325	SKZN96C36C5000 - 80A-4G	4954.38	112 000	112 000	615	M192	
0.3	0.99	20234	SKZN96C36C5600 - 80A-4G	5470.56	112 000	112 000	615	M192	
0.2	0.83	24208	SKZN96C36C6300 - 80A-4G	6545.02	112 000	112 000	615	M192	




6. SK4

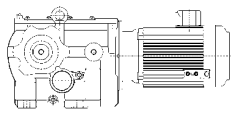
P 0.75 kW
n₁ 1415 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
196.7	6.90	36	SKZN26C7.1 - 80B-4G	7.19	3 100	6 900	28	M150	
171.6	6.20	42	SKZN26C8 - 80B-4G	8.25	3 600	6 900	28	M150	
160.1	6.00	45	SKZN26C9 - 80B-4G	8.84	3 700	6 900	28	M150	
139.1	5.40	51	SKZN26C10 - 80B-4G	10.17	3 900	6 900	28	M150	
120.4	4.90	60	SKZN26C11.2 - 80B-4G	11.76	4 000	6 900	28	M150	
113.3	6.20	63	SKZN26C12.5 - 80B-4G	12.48	4 100	6 900	28	M150	
98.9	5.50	72	SKZN26C14 - 80B-4G	14.31	3 700	6 900	28	M150	
92.3	5.30	78	SKZN26C16 - 80B-4G	15.34	4 300	6 900	28	M150	
80.2	4.80	89	SKZN26C18 - 80B-4G	17.65	4 500	6 900	28	M150	
69.3	4.30	103	SKZN26C20 - 80B-4G	20.40	4 600	6 900	28	M150	
64.4	4.00	111	SKZN26C22.4 - 80B-4G	21.99	4 700	6 900	28	M150	
59.6	3.70	120	SKZN26C25 - 80B-4G	23.74	4 800	6 900	28	M150	
50.8	3.10	141	SKZN26C28 - 80B-4G	27.86	4 900	6 900	28	M150	
46.7	2.90	153	SKZN26C31.5 - 80B-4G	30.30	5 000	6 900	28	M150	
39.0	2.40	183	SKZN26C35.5 - 80B-4G	36.24	5 200	6 900	28	M150	
35.5	2.20	202	SKZN26C40 - 80B-4G	39.90	5 300	6 900	28	M150	
32.0	2.00	224	SKZN26C45 - 80B-4G	44.17	5 300	6 900	28	M150	
28.8	1.80	249	SKZN26C50 - 80B-4G	49.21	5 400	6 900	28	M150	
26.7	3.00	268	SKZN36C50 - 80B-4G	52.91	7 600	13 500	39	M156	
25.6	1.60	280	SKZN26C56 - 80B-4G	55.25	5 500	6 900	28	M150	
24.0	2.70	298	SKZN36C56 - 80B-4G	58.91	7 800	13 500	39	M156	
23.0	1.40	311	SKZN26C63 - 80B-4G	61.51	5 500	6 900	28	M150	
21.8	2.40	328	SKZN36C63 - 80B-4G	64.86	7 900	13 500	39	M156	
20.6	1.30	348	SKZN26C71 - 80B-4G	68.78	5 600	6 900	28	M150	
19.7	2.20	364	SKZN36C71 - 80B-4G	71.90	8 100	13 500	39	M156	
17.7	1.10	405	SKZN26C80 - 80B-4G	79.96	5 600	6 900	28	M150	
17.6	2.00	407	SKZN36C80 - 80B-4G	80.34	8 200	13 500	39	M156	
15.9	0.98	451	SKZN26C90 - 80B-4G	89.08	5 600	6 900	28	M150	
15.9	1.80	451	SKZN36C90 - 80B-4G	89.02	8 400	13 500	39	M156	
14.1	0.87	507	SKZN26C100 - 80B-4G	100.23	5 500	6 900	28	M150	
14.3	1.60	502	SKZN36C100 - 80B-4G	99.18	8 500	13 500	39	M156	
12.4	1.40	578	SKZN36C112 - 80B-4G	114.13	8 600	13 500	39	M156	
12.4	2.80	579	SKZN46C112 - 80B-4G	114.33	12 600	18 000	61	M162	
11.1	1.20	648	SKZN36C125 - 80B-4G	128.05	8 700	13 500	39	M156	
11.1	2.50	643	SKZN46C125 - 80B-4G	127.01	12 800	18 000	61	M162	
10.6	2.20	678	SKZN46C140 - 80B-4G	133.86	13 000	18 000	61	M162	
8.8	0.98	817	SKZN36C16B160 - 80B-4G	161.36	8 800	13 500	49	M156	
9.6	2.00	745	SKZN46C160 - 80B-4G	147.16	13 200	18 000	61	M162	
8.2	0.91	875	SKZN36C16B180 - 80B-4G	172.89	8 800	13 500	49	M156	
7.7	1.50	924	SKZN46C180 - 80B-4G	182.63	13 700	18 000	61	M162	
7.7	1.70	929	SKZN46C16B180 - 80B-4G	183.55	13 700	18 000	71	M162	
7.7	3.00	929	SKZN56C16B180 - 80B-4G	183.45	17 000	27 000	102	M168	
7.2	1.60	995	SKZN46C16B200 - 80B-4G	196.59	13 900	18 000	71	M162	
7.0	2.70	1022	SKZN56C16B200 - 80B-4G	201.86	17 300	27 000	102	M168	
6.3	1.40	1141	SKZN46C16B224 - 80B-4G	225.37	14 100	18 000	71	M162	
6.2	2.40	1151	SKZN56C16B224 - 80B-4G	227.40	17 700	27 000	102	M168	
5.9	1.30	1222	SKZN46C16B250 - 80B-4G	241.49	14 200	18 000	71	M162	
5.6	2.20	1277	SKZN56C16B250 - 80B-4G	252.24	18 000	27 000	102	M168	
5.1	1.10	1407	SKZN46C16B280 - 80B-4G	277.93	14 400	18 000	71	M162	
4.9	1.90	1464	SKZN56C16B280 - 80B-4G	289.17	18 400	27 000	102	M168	
4.4	0.98	1626	SKZN46C16B315 - 80B-4G	321.31	14 500	18 000	71	M162	
4.6	1.80	1568	SKZN56C16B315 - 80B-4G	309.85	18 500	27 000	102	M168	




6. SK4

P 0.75 kW n₁ 1415 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
4.3	2.90	1667	SKZN66C16B315 - 80B-4G	329.31	29 800	40 000	168	M174	
4.1	0.91	1753	SKZN46C16B355 - 80B-4G	346.25	14 500	18 000	71	M162	
4.0	1.60	1805	SKZN56C16B355 - 80B-4G	356.61	18 800	27 000	102	M168	
4.0	2.80	1772	SKZN66C16B355 - 80B-4G	350.06	30 200	40 000	168	M174	
3.4	1.30	2087	SKZN56C16B400 - 80B-4G	412.27	19 000	27 000	102	M168	
3.4	2.40	2077	SKZN66C16B400 - 80B-4G	410.26	31 100	40 000	168	M174	
3.2	1.20	2249	SKZN56C16B450 - 80B-4G	444.27	19 100	27 000	102	M168	
3.2	2.20	2242	SKZN66C16B450 - 80B-4G	442.93	31 500	40 000	168	M174	
3.0	1.20	2428	SKZN56C16B500 - 80B-4G	479.65	19 200	27 000	102	M168	
2.7	1.90	2631	SKZN66C16B500 - 80B-4G	519.79	32 300	40 000	168	M174	
2.5	0.98	2849	SKZN56C16B560 - 80B-4G	562.88	19 100	27 000	102	M168	
2.5	1.70	2862	SKZN66C16B560 - 80B-4G	565.43	32 700	40 000	168	M174	
2.6	2.90	2737	SKZN76C36B560 - 80B-4G	540.72	38 100	65 000	289	M180	
2.3	0.90	3099	SKZN56C16B630 - 80B-4G	612.30	19 000	27 000	102	M168	
2.2	1.50	3296	SKZN66C16B630 - 80B-4G	651.25	33 300	40 000	168	M174	
2.3	2.60	3106	SKZN76C36B630 - 80B-4G	613.68	39 000	65 000	289	M180	
1.9	1.30	3768	SKZN66C16B710 - 80B-4G	744.47	33 700	40 000	168	M174	
2.0	2.30	3518	SKZN76C36B710 - 80B-4G	695.02	39 900	65 000	289	M180	
1.7	1.20	4171	SKZN66C16B800 - 80B-4G	824.04	33 900	40 000	168	M174	
1.9	2.10	3836	SKZN76C36B800 - 80B-4G	757.89	40 500	65 000	289	M180	
1.5	1.10	4647	SKZN66C16B900 - 80B-4G	918.08	34 000	40 000	168	M174	
1.6	1.80	4440	SKZN76C36B900 - 80B-4G	877.27	41 300	65 000	289	M180	
1.6	2.90	4413	SKZN86C36B900 - 80B-4G	871.94	63 900	65 000	443	M186	
1.4	0.94	5218	SKZN66C16B1000 - 80B-4G	1030.92	34 000	40 000	168	M174	
1.5	1.60	4903	SKZN76C36B1000 - 80B-4G	968.67	41 800	65 000	289	M180	
1.5	2.70	4813	SKZN86C36B1000 - 80B-4G	950.81	65 000	65 000	443	M186	
1.2	0.84	5809	SKZN66C16B1120 - 80B-4G	1147.59	33 800	40 000	168	M174	
1.2	1.40	5866	SKZN76C36B1120 - 80B-4G	1158.92	42 500	65 000	289	M180	
1.3	2.30	5571	SKZN86C36B1120 - 80B-4G	1100.57	65 000	65 000	443	M186	
1.1	1.20	6531	SKZN76C36B1250 - 80B-4G	1290.36	42 800	65 000	289	M180	
1.2	2.10	6151	SKZN86C36B1250 - 80B-4G	1215.24	65 000	65 000	443	M186	
1.0	1.10	7225	SKZN76C36B1400 - 80B-4G	1427.45	43 000	65 000	289	M180	
1.0	1.90	6965	SKZN86C36B1400 - 80B-4G	1376.06	65 000	65 000	443	M186	
1.0	2.80	7205	SKZN96C36B1400 - 80B-4G	1423.52	107 000	112 000	616	M192	
0.9	1.00	8026	SKZN76C36B1600 - 80B-4G	1585.74	43 000	65 000	289	M180	
0.9	1.60	7887	SKZN86C36B1600 - 80B-4G	1558.32	65 000	65 000	443	M186	
0.9	2.40	8297	SKZN96C36B1600 - 80B-4G	1639.27	110 600	112 000	616	M192	
0.8	0.89	9021	SKZN76C36B1800 - 80B-4G	1782.32	42 800	65 000	289	M180	
0.8	1.50	8709	SKZN86C36B1800 - 80B-4G	1720.67	65 000	65 000	443	M186	
0.8	2.20	9179	SKZN96C36B1800 - 80B-4G	1813.44	112 000	112 000	616	M192	
0.7	0.80	10027	SKZN76C36B2000 - 80B-4G	1981.01	42 400	65 000	289	M180	
0.7	1.20	10420	SKZN86C36B2000 - 80B-4G	2058.63	65 000	65 000	443	M186	
0.7	2.00	10196	SKZN96C36B2000 - 80B-4G	2014.53	112 000	112 000	616	M192	
0.6	1.10	11601	SKZN86C36B2240 - 80B-4G	2292.11	65 000	65 000	443	M186	
0.6	1.80	11251	SKZN96C36B2240 - 80B-4G	2222.86	112 000	112 000	616	M192	
0.6	1.00	12834	SKZN86C36B2500 - 80B-4G	2535.63	65 000	65 000	443	M186	
0.6	1.60	12643	SKZN96C36B2500 - 80B-4G	2497.92	112 000	112 000	616	M192	
0.5	0.91	14257	SKZN86C36B2800 - 80B-4G	2816.80	65 000	65 000	443	M186	
0.5	1.40	14077	SKZN96C36B2800 - 80B-4G	2781.25	112 000	112 000	616	M192	
0.5	0.82	15857	SKZN86C36C3150 - 80B-4G	3132.88	65 000	65 000	443	M186	
0.5	1.30	15772	SKZN96C36B3150 - 80B-4G	3116.10	112 000	112 000	616	M192	
0.4	1.10	17542	SKZN96C36C3550 - 80B-4G	3465.75	112 000	112 000	616	M192	




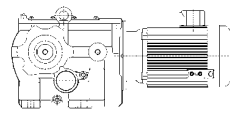
6. SK4

P 0.75 kW
n₁ 1415 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
0.4	1.00	19867	SKZN96C36C4000 - 80B-4G	3925.14	112 000	112 000	616	M192
0.3	0.92	21664	SKZN96C36C4500 - 80B-4G	4280.21	112 000	112 000	616	M192
0.3	0.80	25076	SKZN96C36C5000 - 80B-4G	4954.38	112 000	112 000	616	M192

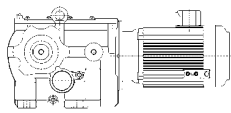
P 1.1 kW
n₁ 1410 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
196.0	4.70	54	SKZN26C7.1 - 90S-4G	7.19	3 000	6 900	33	M150
171.0	4.20	61	SKZN26C8 - 90S-4G	8.25	3 500	6 900	33	M150
159.6	4.10	66	SKZN26C9 - 90S-4G	8.84	3 600	6 900	33	M150
138.7	3.70	76	SKZN26C10 - 90S-4G	10.17	3 700	6 900	33	M150
119.9	3.30	88	SKZN26C11.2 - 90S-4G	11.76	3 800	6 900	33	M150
112.9	4.20	93	SKZN26C12.5 - 90S-4G	12.48	3 900	6 900	33	M150
98.5	3.80	107	SKZN26C14 - 90S-4G	14.31	3 500	6 900	33	M150
91.9	3.60	114	SKZN26C16 - 90S-4G	15.34	4 000	6 900	33	M150
79.9	3.30	131	SKZN26C18 - 90S-4G	17.65	4 200	6 900	33	M150
69.1	2.90	152	SKZN26C20 - 90S-4G	20.40	4 300	6 900	33	M150
64.1	2.70	164	SKZN26C22.4 - 90S-4G	21.99	4 300	6 900	33	M150
59.4	2.50	177	SKZN26C25 - 90S-4G	23.74	4 400	6 900	33	M150
50.6	2.10	208	SKZN26C28 - 90S-4G	27.86	4 500	6 900	33	M150
46.5	1.90	226	SKZN26C31.5 - 90S-4G	30.30	4 500	6 900	33	M150
38.9	1.60	270	SKZN26C35.5 - 90S-4G	36.24	4 600	6 900	33	M150
38.8	3.00	271	SKZN36C35.5 - 90S-4G	36.34	6 500	13 500	44	M156
35.3	1.50	297	SKZN26C40 - 90S-4G	39.90	4 600	6 900	33	M150
33.5	2.60	314	SKZN36C40 - 90S-4G	42.09	6 700	13 500	44	M156
31.9	1.30	329	SKZN26C45 - 90S-4G	44.17	4 600	6 900	33	M150
31.0	2.40	339	SKZN36C45 - 90S-4G	45.51	6 800	13 500	44	M156
28.7	1.20	367	SKZN26C50 - 90S-4G	49.21	4 600	6 900	33	M150
26.7	2.00	394	SKZN36C50 - 90S-4G	52.91	6 900	13 500	44	M156
25.5	1.10	412	SKZN26C56 - 90S-4G	55.25	4 600	6 900	33	M150
23.9	1.80	439	SKZN36C56 - 90S-4G	58.91	7 000	13 500	44	M156
22.9	0.96	458	SKZN26C63 - 90S-4G	61.51	4 500	6 900	33	M150
21.7	1.70	483	SKZN36C63 - 90S-4G	64.86	7 100	13 500	44	M156
20.5	0.86	512	SKZN26C71 - 90S-4G	68.78	4 500	6 900	33	M150
19.6	1.50	536	SKZN36C71 - 90S-4G	71.90	7 200	13 500	44	M156
17.5	1.30	599	SKZN36C80 - 90S-4G	80.34	7 200	13 500	44	M156
18.2	2.80	578	SKZN46C80 - 90S-4G	77.59	10 800	18 000	66	M162
15.8	1.20	663	SKZN36C90 - 90S-4G	89.02	7 300	13 500	44	M156
15.2	2.30	692	SKZN46C90 - 90S-4G	92.82	11 100	18 000	66	M162
14.2	1.10	739	SKZN36C100 - 90S-4G	99.18	7 300	13 500	44	M156
13.6	2.10	770	SKZN46C100 - 90S-4G	103.35	11 300	18 000	66	M162
12.4	0.94	850	SKZN36C112 - 90S-4G	114.13	7 200	13 500	44	M156
12.3	1.90	852	SKZN46C112 - 90S-4G	114.33	11 500	18 000	66	M162
11.0	0.84	954	SKZN36C125 - 90S-4G	128.05	7 100	13 500	44	M156
11.1	1.70	946	SKZN46C125 - 90S-4G	127.01	11 600	18 000	66	M162
10.6	2.90	988	SKZN56C125 - 90S-4G	132.65	14 700	27 000	97	M168
10.5	1.50	997	SKZN46C140 - 90S-4G	133.86	11 700	18 000	66	M162




6. SK4

P 1.1 kW n₁ 1410 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
9.5	2.60	1108	SKZN56C140 - 90S-4G	148.73	14 900	27 000	97	M168	
9.6	1.30	1096	SKZN46C160 - 90S-4G	147.16	11 800	18 000	66	M162	
8.5	2.30	1239	SKZN56C16B160 - 90S-4G	166.25	15 200	27 000	107	M168	
7.7	1.00	1361	SKZN46C180 - 90S-4G	182.63	12 000	18 000	66	M162	
7.7	1.20	1367	SKZN46C16B180 - 90S-4G	183.55	12 000	18 000	76	M162	
7.7	2.00	1367	SKZN56C16B180 - 90S-4G	183.45	15 400	27 000	107	M168	
7.2	1.10	1465	SKZN46C16B200 - 90S-4G	196.59	12 000	18 000	76	M162	
7.0	1.90	1504	SKZN56C16B200 - 90S-4G	201.86	15 500	27 000	107	M168	
6.3	0.95	1679	SKZN46C16B224 - 90S-4G	225.37	12 000	18 000	76	M162	
6.2	1.70	1694	SKZN56C16B224 - 90S-4G	227.40	15 700	27 000	107	M168	
6.1	2.80	1735	SKZN66C16B224 - 90S-4G	232.93	25 700	40 000	173	M174	
5.8	0.89	1799	SKZN46C16B250 - 90S-4G	241.49	11 900	18 000	76	M162	
5.6	1.50	1879	SKZN56C16B250 - 90S-4G	252.24	15 800	27 000	107	M168	
5.4	2.50	1932	SKZN66C16B250 - 90S-4G	259.31	26 200	40 000	173	M174	
4.9	1.30	2154	SKZN56C16B280 - 90S-4G	289.17	15 800	27 000	107	M168	
4.9	2.30	2132	SKZN66C16B280 - 90S-4G	286.13	26 600	40 000	173	M174	
4.6	1.20	2308	SKZN56C16B315 - 90S-4G	309.85	15 800	27 000	107	M168	
4.3	2.00	2453	SKZN66C16B315 - 90S-4G	329.31	27 100	40 000	173	M174	
4.0	1.10	2657	SKZN56C16B355 - 90S-4G	356.61	15 700	27 000	107	M168	
4.0	1.90	2608	SKZN66C16B355 - 90S-4G	350.06	27 300	40 000	173	M174	
3.9	3.00	2689	SKZN76C36B355 - 90S-4G	360.90	32 500	65 000	294	M180	
3.4	0.91	3071	SKZN56C16B400 - 90S-4G	412.27	15 400	27 000	107	M168	
3.4	1.60	3056	SKZN66C16B400 - 90S-4G	410.26	27 700	40 000	173	M174	
3.5	2.70	2985	SKZN76C36B400 - 90S-4G	400.62	33 000	65 000	294	M180	
3.2	0.85	3310	SKZN56C16B450 - 90S-4G	444.27	15 200	27 000	107	M168	
3.2	1.50	3300	SKZN66C16B450 - 90S-4G	442.93	27 900	40 000	173	M174	
3.3	2.50	3197	SKZN76C36B450 - 90S-4G	429.08	33 400	65 000	294	M180	
2.7	1.30	3872	SKZN66C16B500 - 90S-4G	519.79	28 100	40 000	173	M174	
2.8	2.10	3738	SKZN76C36B500 - 90S-4G	501.73	34 200	65 000	294	M180	
2.5	1.20	4212	SKZN66C16B560 - 90S-4G	565.43	28 100	40 000	173	M174	
2.6	2.00	4028	SKZN76C36B560 - 90S-4G	540.72	34 500	65 000	294	M180	
2.2	1.00	4852	SKZN66C16B630 - 90S-4G	651.25	27 900	40 000	173	M174	
2.3	1.70	4572	SKZN76C36B630 - 90S-4G	613.68	34 900	65 000	294	M180	
2.2	2.80	4689	SKZN86C36B630 - 90S-4G	629.44	55 400	65 000	448	M186	
1.9	0.88	5546	SKZN66C16B710 - 90S-4G	744.47	27 600	40 000	173	M174	
2.0	1.50	5178	SKZN76C36B710 - 90S-4G	695.02	35 300	65 000	294	M180	
2.1	2.60	5051	SKZN86C36B710 - 90S-4G	677.99	56 200	65 000	448	M186	
1.7	0.80	6139	SKZN66C16B800 - 90S-4G	824.04	27 100	40 000	173	M174	
1.9	1.40	5646	SKZN76C36B800 - 90S-4G	757.89	35 400	65 000	294	M180	
1.8	2.30	5736	SKZN86C36B800 - 90S-4G	769.89	57 400	65 000	448	M186	
1.6	1.20	6535	SKZN76C36B900 - 90S-4G	877.27	35 500	65 000	294	M180	
1.6	2.00	6496	SKZN86C36B900 - 90S-4G	871.94	58 500	65 000	448	M186	
1.6	3.00	6578	SKZN96C36B900 - 90S-4G	882.95	90 300	112 000	621	M192	
1.5	1.10	7216	SKZN76C36B1000 - 90S-4G	968.67	35 400	65 000	294	M180	
1.5	1.80	7083	SKZN86C36B1000 - 90S-4G	950.81	59 200	65 000	448	M186	
1.5	2.80	7173	SKZN96C36B1000 - 90S-4G	962.83	92 100	112 000	621	M192	
1.2	0.93	8634	SKZN76C36B1120 - 90S-4G	1158.92	34 900	65 000	294	M180	
1.3	1.60	8199	SKZN86C36B1120 - 90S-4G	1100.57	60 200	65 000	448	M186	
1.3	2.40	8303	SKZN96C36B1120 - 90S-4G	1114.48	95 100	112 000	621	M192	
1.1	0.83	9613	SKZN76C36B1250 - 90S-4G	1290.36	34 300	65 000	294	M180	
1.2	1.40	9053	SKZN86C36B1250 - 90S-4G	1215.24	60 700	65 000	448	M186	
1.1	2.20	9168	SKZN96C36B1250 - 90S-4G	1230.60	97 100	112 000	621	M192	



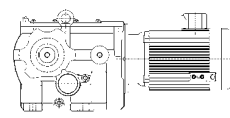
6. SK4

P 1.1 kW
n₁ 1410 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.0	1.30	10251	SKZN86C36B1400 - 90S-4G	1376.06	61 200	65 000	448	M186	
1.0	1.90	10605	SKZN96C36B1400 - 90S-4G	1423.52	100 000	112 000	621	M192	
0.9	1.10	11609	SKZN86C36B1600 - 90S-4G	1558.32	61 400	65 000	448	M186	
0.9	1.60	12212	SKZN96C36B1600 - 90S-4G	1639.27	102 600	112 000	621	M192	
0.8	1.00	12819	SKZN86C36B1800 - 90S-4G	1720.67	61 300	65 000	448	M186	
0.8	1.50	13510	SKZN96C36B1800 - 90S-4G	1813.44	104 400	112 000	621	M192	
0.7	0.85	15336	SKZN86C36B2000 - 90S-4G	2058.63	60 700	65 000	448	M186	
0.7	1.30	15008	SKZN96C36B2000 - 90S-4G	2014.53	106 000	112 000	621	M192	
0.6	1.20	16560	SKZN96C36B2240 - 90S-4G	2222.86	107 400	112 000	621	M192	
0.6	1.10	18609	SKZN96C36B2500 - 90S-4G	2497.92	108 900	112 000	621	M192	
0.5	0.97	20720	SKZN96C36B2800 - 90S-4G	2781.25	110 000	112 000	621	M192	
0.5	0.86	23214	SKZN96C36B3150 - 90S-4G	3116.10	110 800	112 000	621	M192	

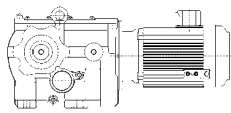
P 1.5 kW
n₁ 1410 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
196.0	3.40	73	SKZN26C7.1 - 90L-4G	7.19	2 900	6 900	34	M150	
171.0	3.10	84	SKZN26C8 - 90L-4G	8.25	3 300	6 900	34	M150	
159.6	3.00	90	SKZN26C9 - 90L-4G	8.84	3 400	6 900	34	M150	
138.7	2.70	103	SKZN26C10 - 90L-4G	10.17	3 500	6 900	34	M150	
119.9	2.40	119	SKZN26C11.2 - 90L-4G	11.76	3 600	6 900	34	M150	
112.9	3.10	127	SKZN26C12.5 - 90L-4G	12.48	3 600	6 900	34	M150	
98.5	2.80	145	SKZN26C14 - 90L-4G	14.31	3 400	6 900	34	M150	
91.9	2.70	156	SKZN26C16 - 90L-4G	15.34	3 800	6 900	34	M150	
79.9	2.40	179	SKZN26C18 - 90L-4G	17.65	3 800	6 900	34	M150	
69.1	2.10	207	SKZN26C20 - 90L-4G	20.40	3 900	6 900	34	M150	
64.1	2.00	223	SKZN26C22.4 - 90L-4G	21.99	3 900	6 900	34	M150	
59.4	1.80	241	SKZN26C25 - 90L-4G	23.74	3 900	6 900	34	M150	
50.6	1.60	283	SKZN26C28 - 90L-4G	27.86	4 000	6 900	34	M150	
47.5	2.70	301	SKZN36C28 - 90L-4G	29.67	5 800	13 500	45	M156	
46.5	1.40	308	SKZN26C31.5 - 90L-4G	30.30	4 000	6 900	34	M150	
44.5	2.50	322	SKZN36C31.5 - 90L-4G	31.68	5 900	13 500	45	M156	
38.9	1.20	368	SKZN26C35.5 - 90L-4G	36.24	3 900	6 900	34	M150	
38.8	2.20	369	SKZN36C35.5 - 90L-4G	36.34	6 000	13 500	45	M156	
35.3	1.10	405	SKZN26C40 - 90L-4G	39.90	3 900	6 900	34	M150	
33.5	1.90	428	SKZN36C40 - 90L-4G	42.09	6 100	13 500	45	M156	
31.9	0.98	449	SKZN26C45 - 90L-4G	44.17	3 800	6 900	34	M150	
31.0	1.70	462	SKZN36C45 - 90L-4G	45.51	6 200	13 500	45	M156	
28.7	0.88	500	SKZN26C50 - 90L-4G	49.21	3 700	6 900	34	M150	
26.7	1.50	537	SKZN36C50 - 90L-4G	52.91	6 200	13 500	45	M156	
23.9	1.30	598	SKZN36C56 - 90L-4G	58.91	6 200	13 500	45	M156	
25.3	2.80	566	SKZN46C56 - 90L-4G	55.67	9 400	18 000	67	M162	
21.7	1.20	659	SKZN36C63 - 90L-4G	64.86	6 200	13 500	45	M156	
23.2	2.60	617	SKZN46C63 - 90L-4G	60.70	9 600	18 000	67	M162	
19.6	1.10	730	SKZN36C71 - 90L-4G	71.90	6 200	13 500	45	M156	
20.1	2.20	714	SKZN46C71 - 90L-4G	70.26	9 800	18 000	67	M162	
17.5	0.98	816	SKZN36C80 - 90L-4G	80.34	6 100	13 500	45	M156	




6. SK4

P 1.5 kW n ₁ 1410 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
18.2	2.00	788	SKZN46C80 - 90L-4G	77.59	9 900	18 000	67	M162	
15.8	0.88	904	SKZN36C90 - 90L-4G	89.02	6 000	13 500	45	M156	
15.2	1.70	943	SKZN46C90 - 90L-4G	92.82	10 100	18 000	67	M162	
13.6	1.50	1050	SKZN46C100 - 90L-4G	103.35	10 200	18 000	67	M162	
13.9	2.80	1028	SKZN56C100 - 90L-4G	101.22	12 900	27 000	98	M168	
12.3	1.40	1161	SKZN46C112 - 90L-4G	114.33	10 200	18 000	67	M162	
12.7	2.60	1129	SKZN56C112 - 90L-4G	111.17	13 100	27 000	98	M168	
11.1	1.20	1290	SKZN46C125 - 90L-4G	127.01	10 300	18 000	67	M162	
10.6	2.20	1348	SKZN56C125 - 90L-4G	132.65	13 300	27 000	98	M168	
10.5	1.10	1360	SKZN46C140 - 90L-4G	133.86	10 300	18 000	67	M162	
9.5	1.90	1511	SKZN56C140 - 90L-4G	148.73	13 500	27 000	98	M168	
9.6	0.98	1495	SKZN46C160 - 90L-4G	147.16	10 200	18 000	67	M162	
8.5	1.70	1689	SKZN56C16B160 - 90L-4G	166.25	13 500	27 000	108	M168	
8.4	2.90	1711	SKZN66C160 - 90L-4G	168.44	22 500	40 000	164	M174	
7.7	0.86	1865	SKZN46C16B180 - 90L-4G	183.55	10 000	18 000	77	M162	
7.7	1.50	1864	SKZN56C16B180 - 90L-4G	183.45	13 500	27 000	108	M168	
7.5	2.60	1918	SKZN66C180 - 90L-4G	188.84	22 900	40 000	164	M174	
7.2	0.80	1997	SKZN46C16B200 - 90L-4G	196.59	9 900	18 000	77	M162	
7.0	1.40	2051	SKZN56C16B200 - 90L-4G	201.86	13 500	27 000	108	M168	
6.7	2.30	2144	SKZN66C16B200 - 90L-4G	211.10	23 200	40 000	174	M174	
6.2	1.20	2310	SKZN56C16B224 - 90L-4G	227.40	13 400	27 000	108	M168	
6.1	2.10	2366	SKZN66C16B224 - 90L-4G	232.93	23 500	40 000	174	M174	
5.6	1.10	2563	SKZN56C16B250 - 90L-4G	252.24	13 300	27 000	108	M168	
5.4	1.90	2634	SKZN66C16B250 - 90L-4G	259.31	23 700	40 000	174	M174	
4.9	0.95	2938	SKZN56C16B280 - 90L-4G	289.17	13 000	27 000	108	M168	
4.9	1.70	2907	SKZN66C16B280 - 90L-4G	286.13	23 900	40 000	174	M174	
5.0	2.80	2872	SKZN76C36B280 - 90L-4G	282.66	28 800	65 000	295	M180	
4.6	0.89	3148	SKZN56C16B315 - 90L-4G	309.85	12 800	27 000	108	M168	
4.3	1.50	3345	SKZN66C16B315 - 90L-4G	329.31	24 000	40 000	174	M174	
4.3	2.40	3317	SKZN76C36B315 - 90L-4G	326.48	29 400	65 000	295	M180	
4.0	1.40	3556	SKZN66C16B355 - 90L-4G	350.06	24 000	40 000	174	M174	
3.9	2.20	3666	SKZN76C36B355 - 90L-4G	360.90	29 700	65 000	295	M180	
3.4	1.20	4168	SKZN66C16B400 - 90L-4G	410.26	23 900	40 000	174	M174	
3.5	2.00	4070	SKZN76C36B400 - 90L-4G	400.62	30 000	65 000	295	M180	
3.2	1.10	4500	SKZN66C16B450 - 90L-4G	442.93	23 800	40 000	174	M174	
3.3	1.80	4359	SKZN76C36B450 - 90L-4G	429.08	30 200	65 000	295	M180	
3.1	2.80	4600	SKZN86C36B450 - 90L-4G	452.77	48 600	65 000	449	M186	
2.7	0.93	5280	SKZN66C16B500 - 90L-4G	519.79	23 200	40 000	174	M174	
2.8	1.60	5097	SKZN76C36B500 - 90L-4G	501.73	30 400	65 000	295	M180	
2.8	2.50	5106	SKZN86C36B500 - 90L-4G	502.60	49 400	65 000	449	M186	
2.5	0.85	5744	SKZN66C16B560 - 90L-4G	565.43	22 800	40 000	174	M174	
2.6	1.50	5493	SKZN76C36B560 - 90L-4G	540.72	30 400	65 000	295	M180	
2.6	2.40	5469	SKZN86C36B560 - 90L-4G	538.31	49 900	65 000	449	M186	
2.3	1.30	6234	SKZN76C36B630 - 90L-4G	613.68	30 300	65 000	295	M180	
2.2	2.00	6394	SKZN86C36B630 - 90L-4G	629.44	51 000	65 000	449	M186	
2.0	1.10	7061	SKZN76C36B710 - 90L-4G	695.02	30 000	65 000	295	M180	
2.1	1.90	6888	SKZN86C36B710 - 90L-4G	677.99	51 400	65 000	449	M186	
2.1	2.90	6975	SKZN96C36B710 - 90L-4G	686.56	81 000	112 000	622	M192	
1.9	1.00	7699	SKZN76C36B800 - 90L-4G	757.89	29 700	65 000	295	M180	
1.8	1.70	7821	SKZN86C36B800 - 90L-4G	769.89	52 000	65 000	449	M186	
1.8	2.50	7920	SKZN96C36B800 - 90L-4G	779.62	83 200	112 000	622	M192	
1.6	0.90	8912	SKZN76C36B900 - 90L-4G	877.27	28 900	65 000	295	M180	




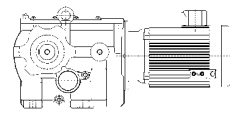
6. SK4

P 1.5 kW
n₁ 1410 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
1.6	1.50	8858	SKZN86C36B900 - 90L-4G	871.94	52 400	65 000	449	M186	
1.6	2.20	8970	SKZN96C36B900 - 90L-4G	882.95	85 300	112 000	622	M192	
1.5	0.81	9841	SKZN76C36B1000 - 90L-4G	968.67	28 200	65 000	295	M180	
1.5	1.30	9659	SKZN86C36B1000 - 90L-4G	950.81	52 600	65 000	449	M186	
1.5	2.00	9781	SKZN96C36B1000 - 90L-4G	962.83	86 700	112 000	622	M192	
1.3	1.20	11181	SKZN86C36B1120 - 90L-4G	1100.57	52 500	65 000	449	M186	
1.3	1.80	11322	SKZN96C36B1120 - 90L-4G	1114.48	89 000	112 000	622	M192	
1.2	1.10	12345	SKZN86C36B1250 - 90L-4G	1215.24	52 200	65 000	449	M186	
1.1	1.60	12501	SKZN96C36B1250 - 90L-4G	1230.60	90 300	112 000	622	M192	
1.0	0.93	13979	SKZN86C36B1400 - 90L-4G	1376.06	51 600	65 000	449	M186	
1.0	1.40	14461	SKZN96C36B1400 - 90L-4G	1423.52	92 100	112 000	622	M192	
0.9	0.82	15831	SKZN86C36B1600 - 90L-4G	1558.32	50 600	65 000	449	M186	
0.9	1.20	16653	SKZN96C36B1600 - 90L-4G	1639.27	93 600	112 000	622	M192	
0.8	1.10	18422	SKZN96C36B1800 - 90L-4G	1813.44	94 400	112 000	622	M192	
0.7	0.98	20465	SKZN96C36B2000 - 90L-4G	2014.53	95 000	112 000	622	M192	
0.6	0.89	22582	SKZN96C36B2240 - 90L-4G	2222.86	95 300	112 000	622	M192	

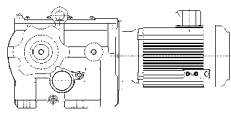
P 2.2 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
197.4	2.30	106	SKZN26C7.1 - 100A-4G	7.19	2 800	6 900	37	M150	
172.2	2.10	122	SKZN26C8 - 100A-4G	8.25	3 100	6 900	37	M150	
160.7	2.10	131	SKZN26C9 - 100A-4G	8.84	3 100	6 900	37	M150	
139.6	1.90	150	SKZN26C10 - 100A-4G	10.17	3 200	6 900	37	M150	
138.0	2.90	152	SKZN36C10 - 100A-4G	10.29	4 400	13 500	48	M156	
120.8	1.70	174	SKZN26C11.2 - 100A-4G	11.76	3 200	6 900	37	M150	
123.2	2.60	171	SKZN36C11.2 - 100A-4G	11.53	4 500	13 500	48	M156	
113.7	2.10	185	SKZN26C12.5 - 100A-4G	12.48	3 200	6 900	37	M150	
109.6	2.50	192	SKZN36C12.5 - 100A-4G	12.95	4 600	13 500	48	M156	
99.2	1.90	212	SKZN26C14 - 100A-4G	14.31	3 100	6 900	37	M150	
92.6	1.80	227	SKZN26C16 - 100A-4G	15.34	3 300	6 900	37	M150	
91.0	3.00	231	SKZN36C16 - 100A-4G	15.60	4 800	13 500	48	M156	
80.5	1.60	261	SKZN26C18 - 100A-4G	17.65	3 300	6 900	37	M150	
77.1	2.70	272	SKZN36C18 - 100A-4G	18.41	4 900	13 500	48	M156	
69.6	1.50	302	SKZN26C20 - 100A-4G	20.40	3 200	6 900	37	M150	
68.9	2.50	305	SKZN36C20 - 100A-4G	20.62	5 000	13 500	48	M156	
64.6	1.40	325	SKZN26C22.4 - 100A-4G	21.99	3 200	6 900	37	M150	
61.3	2.30	343	SKZN36C22.4 - 100A-4G	23.18	5 000	13 500	48	M156	
59.8	1.30	351	SKZN26C25 - 100A-4G	23.74	3 200	6 900	37	M150	
57.7	2.20	364	SKZN36C25 - 100A-4G	24.61	5 100	13 500	48	M156	
51.0	1.10	412	SKZN26C28 - 100A-4G	27.86	3 100	6 900	37	M150	
47.9	1.80	439	SKZN36C28 - 100A-4G	29.67	5 100	13 500	48	M156	
46.9	0.98	448	SKZN26C31.5 - 100A-4G	30.30	3 000	6 900	37	M150	
44.8	1.70	469	SKZN36C31.5 - 100A-4G	31.68	5 100	13 500	48	M156	
39.2	0.82	536	SKZN26C35.5 - 100A-4G	36.24	2 700	6 900	37	M150	
39.1	1.50	538	SKZN36C35.5 - 100A-4G	36.34	5 100	13 500	48	M156	
41.3	2.90	508	SKZN46C35.5 - 100A-4G	34.37	7 900	18 000	70	M162	




6. SK4

P 2.2 kW n₁ 1420 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
33.7	1.30	623	SKZN36C40 - 100A-4G	42.09	5 100	13 500	48	M156	
35.3	2.60	595	SKZN46C40 - 100A-4G	40.19	8 100	18 000	70	M162	
31.2	1.20	673	SKZN36C45 - 100A-4G	45.51	5 100	13 500	48	M156	
32.8	2.50	640	SKZN46C45 - 100A-4G	43.29	8 200	18 000	70	M162	
26.8	1.00	783	SKZN36C50 - 100A-4G	52.91	4 900	13 500	48	M156	
28.9	2.20	727	SKZN46C50 - 100A-4G	49.15	8 300	18 000	70	M162	
24.1	0.92	872	SKZN36C56 - 100A-4G	58.91	4 800	13 500	48	M156	
25.5	1.90	824	SKZN46C56 - 100A-4G	55.67	8 400	18 000	70	M162	
21.9	0.83	960	SKZN36C63 - 100A-4G	64.86	4 600	13 500	48	M156	
23.4	1.80	898	SKZN46C63 - 100A-4G	60.70	8 400	18 000	70	M162	
20.2	1.50	1040	SKZN46C71 - 100A-4G	70.26	8 500	18 000	70	M162	
20.0	2.80	1049	SKZN56C71 - 100A-4G	70.89	11 000	27 000	101	M168	
18.3	1.40	1148	SKZN46C80 - 100A-4G	77.59	8 500	18 000	70	M162	
17.6	2.40	1197	SKZN56C80 - 100A-4G	80.88	11 100	27 000	101	M168	
15.3	1.20	1373	SKZN46C90 - 100A-4G	92.82	8 400	18 000	70	M162	
16.2	2.20	1297	SKZN56C90 - 100A-4G	87.69	11 100	27 000	101	M168	
13.7	1.00	1529	SKZN46C100 - 100A-4G	103.35	8 200	18 000	70	M162	
14.0	1.90	1498	SKZN56C100 - 100A-4G	101.22	11 200	27 000	101	M168	
12.4	0.95	1691	SKZN46C112 - 100A-4G	114.33	8 100	18 000	70	M162	
12.8	1.80	1645	SKZN56C112 - 100A-4G	111.17	11 200	27 000	101	M168	
12.8	3.00	1647	SKZN66C112 - 100A-4G	111.35	19 000	40 000	167	M174	
11.2	0.85	1879	SKZN46C125 - 100A-4G	127.01	7 900	18 000	70	M162	
10.7	1.50	1963	SKZN56C125 - 100A-4G	132.65	11 100	27 000	101	M168	
11.0	2.60	1902	SKZN66C125 - 100A-4G	128.53	19 400	40 000	167	M174	
9.5	1.30	2200	SKZN56C140 - 100A-4G	148.73	10 900	27 000	101	M168	
10.1	2.30	2088	SKZN66C140 - 100A-4G	141.15	19 500	40 000	167	M174	
8.5	1.10	2460	SKZN56C16B160 - 100A-4G	166.25	10 700	27 000	111	M168	
8.4	2.00	2492	SKZN66C160 - 100A-4G	168.44	19 800	40 000	167	M174	
7.7	1.00	2714	SKZN56C16B180 - 100A-4G	183.45	10 400	27 000	111	M168	
7.5	1.80	2794	SKZN66C180 - 100A-4G	188.84	19 900	40 000	167	M174	
7.0	0.94	2987	SKZN56C16B200 - 100A-4G	201.86	10 000	27 000	111	M168	
6.7	1.60	3123	SKZN66C16B200 - 100A-4G	211.10	19 800	40 000	177	M174	
7.1	2.70	2973	SKZN76C36B200 - 100A-4G	200.97	24 500	65 000	298	M180	
6.2	0.83	3364	SKZN56C16B224 - 100A-4G	227.40	9 500	27 000	111	M168	
6.1	1.40	3446	SKZN66C16B224 - 100A-4G	232.93	19 700	40 000	177	M174	
6.3	2.40	3329	SKZN76C36B224 - 100A-4G	225.01	24 800	65 000	298	M180	
5.5	1.30	3836	SKZN66C16B250 - 100A-4G	259.31	19 500	40 000	177	M174	
5.5	2.10	3812	SKZN76C36B250 - 100A-4G	257.63	25 000	65 000	298	M180	
5.0	1.20	4233	SKZN66C16B280 - 100A-4G	286.13	19 300	40 000	177	M174	
5.0	1.90	4182	SKZN76C36B280 - 100A-4G	282.66	25 100	65 000	298	M180	
4.3	1.00	4872	SKZN66C16B315 - 100A-4G	329.31	18 700	40 000	177	M174	
4.3	1.70	4830	SKZN76C36B315 - 100A-4G	326.48	25 100	65 000	298	M180	
4.4	2.70	4782	SKZN86C36B315 - 100A-4G	323.21	41 600	65 000	452	M186	
4.1	0.95	5179	SKZN66C16B355 - 100A-4G	350.06	18 400	40 000	177	M174	
3.9	1.50	5339	SKZN76C36B355 - 100A-4G	360.90	25 000	65 000	298	M180	
4.0	2.50	5246	SKZN86C36B355 - 100A-4G	354.62	42 100	65 000	452	M186	
3.5	0.81	6070	SKZN66C16B400 - 100A-4G	410.26	17 300	40 000	177	M174	
3.5	1.30	5927	SKZN76C36B400 - 100A-4G	400.62	24 700	65 000	298	M180	
3.5	2.10	6060	SKZN86C36B400 - 100A-4G	409.58	42 700	65 000	452	M186	
3.3	1.30	6348	SKZN76C36B450 - 100A-4G	429.08	24 500	65 000	298	M180	
3.1	1.90	6699	SKZN86C36B450 - 100A-4G	452.77	43 100	65 000	452	M186	
3.1	2.90	6783	SKZN96C36B450 - 100A-4G	458.49	69 300	112 000	625	M192	




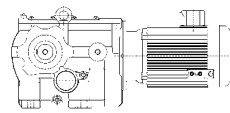
6. SK4

P 2.2 kW
n₁ 1420 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
2.8	1.10	7423	SKZN76C36B500 - 100A-4G	501.73	23 800	65 000	298	M180	
2.8	1.70	7436	SKZN86C36B500 - 100A-4G	502.60	43 300	65 000	452	M186	
2.8	2.70	7530	SKZN96C36B500 - 100A-4G	508.95	70 800	112 000	625	M192	
2.6	1.00	8000	SKZN76C36B560 - 100A-4G	540.72	23 300	65 000	298	M180	
2.6	1.60	7964	SKZN86C36B560 - 100A-4G	538.31	43 400	65 000	452	M186	
2.6	2.50	8065	SKZN96C36B560 - 100A-4G	545.11	71 700	112 000	625	M192	
2.3	0.88	9079	SKZN76C36B630 - 100A-4G	613.68	22 300	65 000	298	M180	
2.3	1.40	9312	SKZN86C36B630 - 100A-4G	629.44	43 300	65 000	452	M186	
2.2	2.10	9430	SKZN96C36B630 - 100A-4G	637.40	73 600	112 000	625	M192	
2.1	1.30	10031	SKZN86C36B710 - 100A-4G	677.99	43 200	65 000	452	M186	
2.1	2.00	10157	SKZN96C36B710 - 100A-4G	686.56	74 500	112 000	625	M192	
1.8	1.10	11390	SKZN86C36B800 - 100A-4G	769.89	42 600	65 000	452	M186	
1.8	1.70	11534	SKZN96C36B800 - 100A-4G	779.62	75 800	112 000	625	M192	
1.6	1.00	12900	SKZN86C36B900 - 100A-4G	871.94	41 800	65 000	452	M186	
1.6	1.50	13063	SKZN96C36B900 - 100A-4G	882.95	76 900	112 000	625	M192	
1.5	0.92	14067	SKZN86C36B1000 - 100A-4G	950.81	41 000	65 000	452	M186	
1.5	1.40	14245	SKZN96C36B1000 - 100A-4G	962.83	77 600	112 000	625	M192	
1.3	0.80	16283	SKZN86C36B1120 - 100A-4G	1100.57	39 100	65 000	452	M186	
1.3	1.20	16488	SKZN96C36B1120 - 100A-4G	1114.48	78 400	112 000	625	M192	
1.2	1.10	18206	SKZN96C36B1250 - 100A-4G	1230.60	78 700	112 000	625	M192	
1.0	0.95	21061	SKZN96C36B1400 - 100A-4G	1423.52	78 600	112 000	625	M192	
0.9	0.82	24253	SKZN96C36B1600 - 100A-4G	1639.27	78 100	112 000	625	M192	

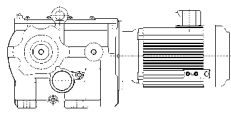
P 3.0 kW
n₁ 1425 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
198.1	1.70	145	SKZN26C7.1 - 100B-4G	7.19	2 600	6 900	39	M150	
172.8	1.60	166	SKZN26C8 - 100B-4G	8.25	2 800	6 900	39	M150	
182.3	2.40	157	SKZN36C8 - 100B-4G	7.82	3 900	13 200	50	M156	
161.3	1.50	178	SKZN26C9 - 100B-4G	8.84	2 800	6 900	39	M150	
163.5	2.30	175	SKZN36C9 - 100B-4G	8.72	4 000	13 500	50	M156	
140.1	1.40	204	SKZN26C10 - 100B-4G	10.17	2 800	6 900	39	M150	
138.5	2.10	207	SKZN36C10 - 100B-4G	10.29	4 100	13 500	50	M156	
143.2	3.00	200	SKZN46C10 - 100B-4G	9.95	5 800	16 700	72	M162	
121.2	1.20	236	SKZN26C11.2 - 100B-4G	11.76	2 800	6 900	39	M150	
123.6	1.90	232	SKZN36C11.2 - 100B-4G	11.53	4 200	13 500	50	M156	
125.1	2.80	229	SKZN46C11.2 - 100B-4G	11.39	6 000	17 300	72	M162	
114.1	1.60	251	SKZN26C12.5 - 100B-4G	12.48	2 800	6 900	39	M150	
110.0	1.80	260	SKZN36C12.5 - 100B-4G	12.95	4 300	13 500	50	M156	
114.0	2.70	251	SKZN46C12.5 - 100B-4G	12.50	6 100	17 800	72	M162	
99.6	1.40	288	SKZN26C14 - 100B-4G	14.31	2 800	6 900	39	M150	
101.9	2.40	281	SKZN36C14 - 100B-4G	13.99	4 200	13 500	50	M156	
92.9	1.30	308	SKZN26C16 - 100B-4G	15.34	2 700	6 900	39	M150	
91.4	2.20	314	SKZN36C16 - 100B-4G	15.60	4 300	13 500	50	M156	
80.7	1.20	355	SKZN26C18 - 100B-4G	17.65	2 600	6 900	39	M150	
77.4	2.00	370	SKZN36C18 - 100B-4G	18.41	4 400	13 500	50	M156	
69.8	1.10	410	SKZN26C20 - 100B-4G	20.40	2 500	6 900	39	M150	




6. SK4

P 3.0 kW n₁ 1425 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
69.1	1.80	415	SKZN36C20 - 100B-4G	20.62	4 400	13 500	50	M156	
69.1	2.90	415	SKZN46C20 - 100B-4G	20.63	6 700	18 000	72	M162	
64.8	1.00	442	SKZN26C22.4 - 100B-4G	21.99	2 400	6 900	39	M150	
61.5	1.70	466	SKZN36C22.4 - 100B-4G	23.18	4 400	13 500	50	M156	
62.9	2.80	455	SKZN46C22.4 - 100B-4G	22.64	6 800	18 000	72	M162	
60.0	0.92	477	SKZN26C25 - 100B-4G	23.74	2 300	6 900	39	M150	
57.9	1.60	495	SKZN36C25 - 100B-4G	24.61	4 400	13 500	50	M156	
54.5	2.60	526	SKZN46C25 - 100B-4G	26.15	7 000	18 000	72	M162	
48.0	1.30	597	SKZN36C28 - 100B-4G	29.67	4 300	13 500	50	M156	
49.3	2.40	581	SKZN46C28 - 100B-4G	28.91	7 100	18 000	72	M162	
45.0	1.30	637	SKZN36C31.5 - 100B-4G	31.68	4 300	13 500	50	M156	
44.4	2.20	645	SKZN46C31.5 - 100B-4G	32.09	7 100	18 000	72	M162	
39.2	1.10	731	SKZN36C35.5 - 100B-4G	36.34	4 100	13 500	50	M156	
41.5	2.10	691	SKZN46C35.5 - 100B-4G	34.37	7 200	18 000	72	M162	
33.9	0.95	846	SKZN36C40 - 100B-4G	42.09	3 900	13 500	50	M156	
35.5	1.90	808	SKZN46C40 - 100B-4G	40.19	7 200	18 000	72	M162	
31.3	0.87	915	SKZN36C45 - 100B-4G	45.51	3 800	13 500	50	M156	
32.9	1.80	870	SKZN46C45 - 100B-4G	43.29	7 200	18 000	72	M162	
29.0	1.60	988	SKZN46C50 - 100B-4G	49.15	7 200	18 000	72	M162	
28.2	2.90	1015	SKZN56C50 - 100B-4G	50.51	9 500	27 000	103	M168	
25.6	1.40	1119	SKZN46C56 - 100B-4G	55.67	7 200	18 000	72	M162	
24.0	2.40	1192	SKZN56C56 - 100B-4G	59.31	9 600	27 000	103	M168	
23.5	1.30	1220	SKZN46C63 - 100B-4G	60.70	7 100	18 000	72	M162	
22.5	2.30	1276	SKZN56C63 - 100B-4G	63.47	9 600	27 000	103	M168	
20.3	1.10	1413	SKZN46C71 - 100B-4G	70.26	7 000	18 000	72	M162	
20.1	2.00	1425	SKZN56C71 - 100B-4G	70.89	9 600	27 000	103	M168	
18.4	1.00	1560	SKZN46C80 - 100B-4G	77.59	6 800	18 000	72	M162	
17.6	1.80	1626	SKZN56C80 - 100B-4G	80.88	9 500	27 000	103	M168	
17.7	3.00	1620	SKZN66C80 - 100B-4G	80.59	16 600	40 000	169	M174	
15.4	0.86	1866	SKZN46C90 - 100B-4G	92.82	6 400	18 000	72	M162	
16.3	1.60	1763	SKZN56C90 - 100B-4G	87.69	9 400	27 000	103	M168	
15.8	2.70	1810	SKZN66C90 - 100B-4G	90.02	16 800	40 000	169	M174	
14.1	1.40	2035	SKZN56C100 - 100B-4G	101.22	9 200	27 000	103	M168	
13.9	2.40	2065	SKZN66C100 - 100B-4G	102.70	16 900	40 000	169	M174	
12.8	1.30	2235	SKZN56C112 - 100B-4G	111.17	9 000	27 000	103	M168	
12.8	2.20	2238	SKZN66C112 - 100B-4G	111.35	17 000	40 000	169	M174	
10.7	1.10	2667	SKZN56C125 - 100B-4G	132.65	8 400	27 000	103	M168	
11.1	1.90	2584	SKZN66C125 - 100B-4G	128.53	17 000	40 000	169	M174	
9.6	0.97	2990	SKZN56C140 - 100B-4G	148.73	8 000	27 000	103	M168	
10.1	1.70	2838	SKZN66C140 - 100B-4G	141.15	16 900	40 000	169	M174	
10.0	2.80	2868	SKZN76C140 - 100B-4G	142.68	21 200	65 000	262	M180	
8.6	0.84	3342	SKZN56C16B160 - 100B-4G	166.25	7 400	27 000	113	M168	
8.5	1.40	3386	SKZN66C160 - 100B-4G	168.44	16 700	40 000	169	M174	
9.0	2.50	3190	SKZN76C160 - 100B-4G	158.67	21 400	65 000	262	M180	
7.5	1.30	3796	SKZN66C180 - 100B-4G	188.84	16 300	40 000	169	M174	
8.2	2.30	3481	SKZN76C36B180 - 100B-4G	173.13	21 500	65 000	300	M180	
6.8	1.20	4244	SKZN66C16B200 - 100B-4G	211.10	15 900	40 000	179	M174	
7.1	2.00	4040	SKZN76C36B200 - 100B-4G	200.97	21 500	65 000	300	M180	
6.1	1.00	4683	SKZN66C16B224 - 100B-4G	232.93	15 400	40 000	179	M174	
6.3	1.80	4524	SKZN76C36B224 - 100B-4G	225.01	21 400	65 000	300	M180	
6.6	3.00	4367	SKZN86C36B224 - 100B-4G	217.20	35 900	65 000	454	M186	
5.5	0.94	5213	SKZN66C16B250 - 100B-4G	259.31	14 700	40 000	179	M174	




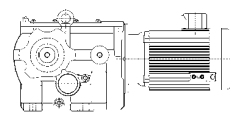
6. SK4

P 3.0 kW
n₁ 1425 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
5.5	1.50	5179	SKZN76C36B250 - 100B-4G	257.63	21 100	65 000	300	M180	
5.7	2.60	5069	SKZN86C36B250 - 100B-4G	252.12	36 500	65 000	454	M186	
5.0	0.85	5752	SKZN66C16B280 - 100B-4G	286.13	14 000	40 000	179	M174	
5.0	1.40	5683	SKZN76C36B280 - 100B-4G	282.66	20 800	65 000	300	M180	
5.0	2.30	5675	SKZN86C36B280 - 100B-4G	282.29	36 900	65 000	454	M186	
4.4	1.20	6563	SKZN76C36B315 - 100B-4G	326.48	20 200	65 000	300	M180	
4.4	2.00	6498	SKZN86C36B315 - 100B-4G	323.21	37 100	65 000	454	M186	
4.4	3.00	6580	SKZN96C36B315 - 100B-4G	327.29	60 900	112 000	627	M192	
3.9	1.10	7255	SKZN76C36B355 - 100B-4G	360.90	19 600	65 000	300	M180	
4.0	1.80	7129	SKZN86C36B355 - 100B-4G	354.62	37 200	65 000	454	M186	
4.0	2.80	7219	SKZN96C36B355 - 100B-4G	359.10	61 900	112 000	627	M192	
3.6	0.99	8054	SKZN76C36B400 - 100B-4G	400.62	18 700	65 000	300	M180	
3.5	1.60	8234	SKZN86C36B400 - 100B-4G	409.58	37 000	65 000	454	M186	
3.4	2.40	8338	SKZN96C36B400 - 100B-4G	414.76	63 400	112 000	627	M192	
3.3	0.93	8626	SKZN76C36B450 - 100B-4G	429.08	18 100	65 000	300	M180	
3.1	1.40	9102	SKZN86C36B450 - 100B-4G	452.77	36 800	65 000	454	M186	
3.1	2.20	9217	SKZN96C36B450 - 100B-4G	458.49	64 400	112 000	627	M192	
2.8	1.30	10104	SKZN86C36B500 - 100B-4G	502.60	36 300	65 000	454	M186	
2.8	2.00	10232	SKZN96C36B500 - 100B-4G	508.95	65 300	112 000	627	M192	
2.6	1.20	10822	SKZN86C36B560 - 100B-4G	538.31	35 900	65 000	454	M186	
2.6	1.80	10959	SKZN96C36B560 - 100B-4G	545.11	65 800	112 000	627	M192	
2.3	1.00	12654	SKZN86C36B630 - 100B-4G	629.44	34 600	65 000	454	M186	
2.2	1.60	12814	SKZN96C36B630 - 100B-4G	637.40	66 700	112 000	627	M192	
2.1	0.95	13630	SKZN86C36B710 - 100B-4G	677.99	33 800	65 000	454	M186	
2.1	1.40	13802	SKZN96C36B710 - 100B-4G	686.56	67 100	112 000	627	M192	
1.9	0.84	15478	SKZN86C36B800 - 100B-4G	769.89	31 900	65 000	454	M186	
1.8	1.30	15673	SKZN96C36B800 - 100B-4G	779.62	67 400	112 000	627	M192	
1.6	1.10	17751	SKZN96C36B900 - 100B-4G	882.95	67 400	112 000	627	M192	
1.5	1.00	19356	SKZN96C36B1000 - 100B-4G	962.83	67 100	112 000	627	M192	
1.3	0.89	22405	SKZN96C36B1120 - 100B-4G	1114.48	66 300	112 000	627	M192	
1.2	0.81	24740	SKZN96C36B1250 - 100B-4G	1230.60	65 300	112 000	627	M192	

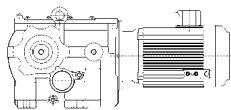
P 4.0 kW
n₁ 1420 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
197.4	1.30	193	SKZN26C7.1 - 112M-4G	7.19	2 400	6 900	45	M150	
172.2	1.20	222	SKZN26C8 - 112M-4G	8.25	2 400	6 900	45	M150	
181.6	1.80	210	SKZN36C8 - 112M-4G	7.82	3 700	12 900	56	M156	
185.5	2.60	206	SKZN46C8 - 112M-4G	7.66	5 200	15 400	78	M162	
160.7	1.10	238	SKZN26C9 - 112M-4G	8.84	2 400	6 900	45	M150	
162.9	1.70	234	SKZN36C9 - 112M-4G	8.72	3 700	13 300	56	M156	
159.8	2.40	239	SKZN46C9 - 112M-4G	8.89	5 400	15 900	78	M162	
139.6	1.00	274	SKZN26C10 - 112M-4G	10.17	2 300	6 900	45	M150	
138.0	1.60	277	SKZN36C10 - 112M-4G	10.29	3 800	13 500	56	M156	
142.7	2.30	268	SKZN46C10 - 112M-4G	9.95	5 500	16 500	78	M162	
120.8	0.92	316	SKZN26C11.2 - 112M-4G	11.76	2 200	6 900	45	M150	
123.2	1.50	310	SKZN36C11.2 - 112M-4G	11.53	3 800	13 500	56	M156	




6. SK4

P 4.0 kW n ₁ 1420 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
124.6	2.10	306	SKZN46C11.2 - 112M-4G	11.39	5 700	17 100	78	M162	
113.7	1.20	336	SKZN26C12.5 - 112M-4G	12.48	2 200	6 900	45	M150	
109.6	1.30	348	SKZN36C12.5 - 112M-4G	12.95	3 800	13 500	56	M156	
113.6	2.00	336	SKZN46C12.5 - 112M-4G	12.50	5 800	17 500	78	M162	
99.2	1.00	385	SKZN26C14 - 112M-4G	14.31	2 400	6 900	45	M150	
101.5	1.80	376	SKZN36C14 - 112M-4G	13.99	3 800	13 500	56	M156	
102.4	2.80	373	SKZN46C14 - 112M-4G	13.87	5 900	17 900	78	M162	
92.6	1.00	413	SKZN26C16 - 112M-4G	15.34	2 000	6 900	45	M150	
91.0	1.70	420	SKZN36C16 - 112M-4G	15.60	3 800	13 500	56	M156	
88.2	2.50	433	SKZN46C16 - 112M-4G	16.10	6 000	18 000	78	M162	
80.5	0.91	475	SKZN26C18 - 112M-4G	17.65	1 800	6 900	45	M150	
77.1	1.50	495	SKZN36C18 - 112M-4G	18.41	3 800	13 500	56	M156	
78.8	2.40	485	SKZN46C18 - 112M-4G	18.02	6 000	18 000	78	M162	
69.6	0.80	549	SKZN26C20 - 112M-4G	20.40	1 500	6 900	45	M150	
68.9	1.40	555	SKZN36C20 - 112M-4G	20.62	3 700	13 500	56	M156	
68.8	2.20	555	SKZN46C20 - 112M-4G	20.63	6 200	18 000	78	M162	
61.3	1.30	623	SKZN36C22.4 - 112M-4G	23.18	3 600	13 500	56	M156	
62.7	2.10	609	SKZN46C22.4 - 112M-4G	22.64	6 200	18 000	78	M162	
57.7	1.20	662	SKZN36C25 - 112M-4G	24.61	3 500	13 500	56	M156	
54.3	1.90	703	SKZN46C25 - 112M-4G	26.15	6 300	18 000	78	M162	
47.9	1.00	798	SKZN36C28 - 112M-4G	29.67	3 300	13 500	56	M156	
49.1	1.80	778	SKZN46C28 - 112M-4G	28.91	6 300	18 000	78	M162	
44.8	0.94	852	SKZN36C31.5 - 112M-4G	31.68	3 200	13 500	56	M156	
44.3	1.70	863	SKZN46C31.5 - 112M-4G	32.09	6 300	18 000	78	M162	
44.3	3.00	863	SKZN56C31.5 - 112M-4G	32.07	8 200	27 000	109	M168	
39.1	0.82	978	SKZN36C35.5 - 112M-4G	36.34	2 900	13 500	56	M156	
41.3	1.60	924	SKZN46C35.5 - 112M-4G	34.37	6 300	18 000	78	M162	
40.2	2.80	949	SKZN56C35.5 - 112M-4G	35.29	8 300	27 000	109	M168	
35.3	1.50	1081	SKZN46C40 - 112M-4G	40.19	6 200	18 000	78	M162	
35.7	2.50	1069	SKZN56C40 - 112M-4G	39.75	8 300	27 000	109	M168	
32.8	1.40	1164	SKZN46C45 - 112M-4G	43.29	6 100	18 000	78	M162	
32.2	2.40	1186	SKZN56C45 - 112M-4G	44.10	8 300	27 000	109	M168	
28.9	1.20	1322	SKZN46C50 - 112M-4G	49.15	5 900	18 000	78	M162	
28.1	2.10	1359	SKZN56C50 - 112M-4G	50.51	8 300	27 000	109	M168	
25.5	1.10	1497	SKZN46C56 - 112M-4G	55.67	5 700	18 000	78	M162	
23.9	1.80	1595	SKZN56C56 - 112M-4G	59.31	8 100	27 000	109	M168	
23.4	0.98	1633	SKZN46C63 - 112M-4G	60.70	5 500	18 000	78	M162	
22.4	1.70	1707	SKZN56C63 - 112M-4G	63.47	8 000	27 000	109	M168	
22.1	2.80	1725	SKZN66C63 - 112M-4G	64.14	14 600	40 000	175	M174	
20.2	0.85	1890	SKZN46C71 - 112M-4G	70.26	5 100	18 000	78	M162	
20.0	1.50	1907	SKZN56C71 - 112M-4G	70.89	7 800	27 000	109	M168	
18.9	2.40	2026	SKZN66C71 - 112M-4G	75.31	14 700	40 000	175	M174	
17.6	1.30	2176	SKZN56C80 - 112M-4G	80.88	7 500	27 000	109	M168	
17.6	2.30	2168	SKZN66C80 - 112M-4G	80.59	14 700	40 000	175	M174	
16.2	1.20	2359	SKZN56C90 - 112M-4G	87.69	7 300	27 000	109	M168	
15.8	2.00	2421	SKZN66C90 - 112M-4G	90.02	14 700	40 000	175	M174	
14.0	1.10	2723	SKZN56C100 - 112M-4G	101.22	6 700	27 000	109	M168	
13.8	1.80	2763	SKZN66C100 - 112M-4G	102.70	14 500	40 000	175	M174	
14.2	3.00	2691	SKZN76C100 - 112M-4G	100.03	18 500	60 900	268	M180	
12.8	0.97	2990	SKZN56C112 - 112M-4G	111.17	6 200	27 000	109	M168	
12.8	1.60	2995	SKZN66C112 - 112M-4G	111.35	14 400	40 000	175	M174	
13.1	2.70	2916	SKZN76C112 - 112M-4G	108.41	18 600	62 100	268	M180	




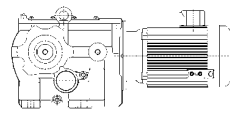
6. SK4

P 4.0 kW
n₁ 1420 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
10.7	0.81	3568	SKZN56C125 - 112M-4G	132.65	5 200	27 000	109	M168	
11.0	1.40	3457	SKZN66C125 - 112M-4G	128.53	14 000	40 000	175	M174	
11.1	2.30	3441	SKZN76C125 - 112M-4G	127.92	18 600	64 300	268	M180	
10.1	1.30	3797	SKZN66C140 - 112M-4G	141.15	13 700	40 000	175	M174	
10.0	2.10	3838	SKZN76C140 - 112M-4G	142.68	18 600	65 000	268	M180	
8.4	1.10	4531	SKZN66C160 - 112M-4G	168.44	12 800	40 000	175	M174	
8.9	1.90	4268	SKZN76C160 - 112M-4G	158.67	18 400	65 000	268	M180	
7.5	0.96	5080	SKZN66C180 - 112M-4G	188.84	12 000	40 000	175	M174	
8.2	1.70	4657	SKZN76C36B180 - 112M-4G	173.13	18 200	65 000	306	M180	
8.2	2.80	4642	SKZN86C180 - 112M-4G	172.55	31 800	82 500	422	M186	
6.7	0.86	5678	SKZN66C16B200 - 112M-4G	211.10	11 000	40 000	185	M174	
7.1	1.50	5406	SKZN76C36B200 - 112M-4G	200.97	17 700	65 000	306	M180	
7.4	2.50	5154	SKZN86C200 - 112M-4G	191.62	32 000	82 500	422	M186	
6.3	1.30	6053	SKZN76C36B224 - 112M-4G	225.01	17 200	65 000	306	M180	
6.5	2.20	5843	SKZN86C36B224 - 112M-4G	217.20	32 200	65 000	460	M186	
5.5	1.20	6930	SKZN76C36B250 - 112M-4G	257.63	16 300	65 000	306	M180	
5.6	1.90	6782	SKZN86C36B250 - 112M-4G	252.12	32 200	65 000	460	M186	
5.6	2.90	6868	SKZN96C36B250 - 112M-4G	255.31	54 500	112 000	633	M192	
5.0	1.10	7603	SKZN76C36B280 - 112M-4G	282.66	15 500	65 000	306	M180	
5.0	1.70	7594	SKZN86C36B280 - 112M-4G	282.29	32 000	65 000	460	M186	
5.0	2.60	7689	SKZN96C36B280 - 112M-4G	285.86	55 400	112 000	633	M192	
4.3	0.91	8782	SKZN76C36B315 - 112M-4G	326.48	14 100	65 000	306	M180	
4.4	1.50	8694	SKZN86C36B315 - 112M-4G	323.21	31 500	65 000	460	M186	
4.3	2.30	8804	SKZN96C36B315 - 112M-4G	327.29	56 400	112 000	633	M192	
3.9	0.82	9708	SKZN76C36B355 - 112M-4G	360.90	12 800	65 000	306	M180	
4.0	1.40	9539	SKZN86C36B355 - 112M-4G	354.62	31 000	65 000	460	M186	
4.0	2.10	9659	SKZN96C36B355 - 112M-4G	359.10	57 000	112 000	633	M192	
3.5	1.20	11017	SKZN86C36B400 - 112M-4G	409.58	29 900	65 000	460	M186	
3.4	1.80	11157	SKZN96C36B400 - 112M-4G	414.76	57 800	112 000	633	M192	
3.1	1.10	12179	SKZN86C36B450 - 112M-4G	452.77	28 900	65 000	460	M186	
3.1	1.60	12333	SKZN96C36B450 - 112M-4G	458.49	58 100	112 000	633	M192	
2.8	0.96	13520	SKZN86C36B500 - 112M-4G	502.60	27 600	65 000	460	M186	
2.8	1.50	13690	SKZN96C36B500 - 112M-4G	508.95	58 400	112 000	633	M192	
2.6	0.90	14480	SKZN86C36B560 - 112M-4G	538.31	26 600	65 000	460	M186	
2.6	1.40	14663	SKZN96C36B560 - 112M-4G	545.11	58 400	112 000	633	M192	
2.2	1.20	17146	SKZN96C36B630 - 112M-4G	637.40	58 100	112 000	633	M192	
2.1	1.10	18468	SKZN96C36B710 - 112M-4G	686.56	57 700	112 000	633	M192	
1.8	0.95	20971	SKZN96C36B800 - 112M-4G	779.62	56 800	112 000	633	M192	
1.6	0.84	23751	SKZN96C36B900 - 112M-4G	882.95	55 400	112 000	633	M192	

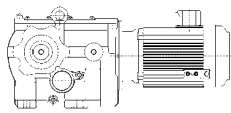
P 5.5 kW
n₁ 1440 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
184.2	1.40	285	SKZN36C8 - 132S-4G	7.82	3 200	12 500	67	M156	
188.1	1.90	279	SKZN46C8 - 132S-4G	7.66	4 900	15 000	89	M162	
165.2	1.30	318	SKZN36C9 - 132S-4G	8.72	3 200	12 800	67	M156	
162.0	1.80	324	SKZN46C9 - 132S-4G	8.89	5 000	15 500	89	M162	



6. SK4

P 5.5 kW n ₁ 1440 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
139.9	1.20	375	SKZN36C10 - 132S-4G	10.29	3 200	13 300	67	M156	
144.7	1.70	363	SKZN46C10 - 132S-4G	9.95	5 100	16 100	89	M162	
124.9	1.10	420	SKZN36C11.2 - 132S-4G	11.53	3 200	13 500	67	M156	
126.4	1.50	416	SKZN46C11.2 - 132S-4G	11.39	5 200	16 600	89	M162	
111.2	0.99	472	SKZN36C12.5 - 132S-4G	12.95	3 100	13 500	67	M156	
115.2	1.50	456	SKZN46C12.5 - 132S-4G	12.50	5 200	17 000	89	M162	
108.9	2.90	482	SKZN56C12.5 - 132S-4G	13.22	6 700	22 500	120	M168	
102.9	1.30	510	SKZN36C14 - 132S-4G	13.99	3 200	13 500	67	M156	
103.8	2.10	506	SKZN46C14 - 132S-4G	13.87	5 300	17 400	89	M162	
92.3	1.20	569	SKZN36C16 - 132S-4G	15.60	3 000	13 500	67	M156	
89.5	1.90	587	SKZN46C16 - 132S-4G	16.10	5 300	18 000	89	M162	
78.2	1.10	672	SKZN36C18 - 132S-4G	18.41	2 800	13 500	67	M156	
79.9	1.80	657	SKZN46C18 - 132S-4G	18.02	5 300	17 900	89	M162	
69.8	1.00	752	SKZN36C20 - 132S-4G	20.62	2 600	13 500	67	M156	
69.8	1.60	753	SKZN46C20 - 132S-4G	20.63	5 300	18 000	89	M162	
72.4	3.00	725	SKZN56C20 - 132S-4G	19.88	7 000	24 800	120	M168	
62.1	0.93	845	SKZN36C22.4 - 132S-4G	23.18	2 400	13 500	67	M156	
63.6	1.60	826	SKZN46C22.4 - 132S-4G	22.64	5 300	18 000	89	M162	
63.9	2.80	822	SKZN56C22.4 - 132S-4G	22.53	7 100	25 600	120	M168	
58.5	0.89	897	SKZN36C25 - 132S-4G	24.61	2 300	13 500	67	M156	
55.1	1.40	954	SKZN46C25 - 132S-4G	26.15	5 200	18 000	89	M162	
56.8	2.60	924	SKZN56C25 - 132S-4G	25.35	7 100	26 300	120	M168	
49.8	1.30	1054	SKZN46C28 - 132S-4G	28.91	5 100	18 000	89	M162	
49.5	2.40	1060	SKZN56C28 - 132S-4G	29.06	7 100	27 000	120	M168	
44.9	1.20	1170	SKZN46C31.5 - 132S-4G	32.09	5 000	18 000	89	M162	
44.9	2.20	1170	SKZN56C31.5 - 132S-4G	32.07	7 000	27 000	120	M168	
41.9	1.20	1253	SKZN46C35.5 - 132S-4G	34.37	4 900	18 000	89	M162	
40.8	2.10	1287	SKZN56C35.5 - 132S-4G	35.29	7 000	27 000	120	M168	
35.8	1.10	1466	SKZN46C40 - 132S-4G	40.19	4 600	18 000	89	M162	
36.2	1.90	1450	SKZN56C40 - 132S-4G	39.75	6 800	27 000	120	M168	
33.3	1.00	1579	SKZN46C45 - 132S-4G	43.29	4 400	18 000	89	M162	
32.7	1.70	1608	SKZN56C45 - 132S-4G	44.10	6 700	27 000	120	M168	
32.1	3.00	1634	SKZN66C45 - 132S-4G	44.81	12 500	40 000	186	M174	
29.3	0.89	1793	SKZN46C50 - 132S-4G	49.15	4 000	18 000	89	M162	
28.5	1.60	1842	SKZN56C50 - 132S-4G	50.51	6 400	27 000	120	M168	
28.5	2.70	1841	SKZN66C50 - 132S-4G	50.48	12 600	40 000	186	M174	
24.3	1.30	2163	SKZN56C56 - 132S-4G	59.31	6 000	27 000	120	M168	
25.7	2.40	2042	SKZN66C56 - 132S-4G	55.99	12 500	40 000	186	M174	
22.7	1.30	2315	SKZN56C63 - 132S-4G	63.47	5 700	27 000	120	M168	
22.5	2.10	2339	SKZN66C63 - 132S-4G	64.14	12 400	40 000	186	M174	
20.3	1.10	2586	SKZN56C71 - 132S-4G	70.89	5 300	27 000	120	M168	
19.1	1.80	2747	SKZN66C71 - 132S-4G	75.31	12 100	40 000	186	M174	
17.8	0.98	2950	SKZN56C80 - 132S-4G	80.88	4 600	27 000	120	M168	
17.9	1.70	2940	SKZN66C80 - 132S-4G	80.59	12 000	40 000	186	M174	
18.1	2.80	2901	SKZN76C80 - 132S-4G	79.53	15 900	55 700	279	M180	
16.4	0.91	3198	SKZN56C90 - 132S-4G	87.69	4 100	27 000	120	M168	
16.0	1.50	3283	SKZN66C90 - 132S-4G	90.02	11 600	40 000	186	M174	
16.5	2.50	3182	SKZN76C90 - 132S-4G	87.25	15 800	56 700	279	M180	
14.0	1.30	3746	SKZN66C100 - 132S-4G	102.70	11 100	40 000	186	M174	
14.4	2.20	3649	SKZN76C100 - 132S-4G	100.03	15 700	58 400	279	M180	
12.9	1.20	4061	SKZN66C112 - 132S-4G	111.35	10 600	40 000	186	M174	
13.3	2.00	3954	SKZN76C112 - 132S-4G	108.41	15 600	59 300	279	M180	




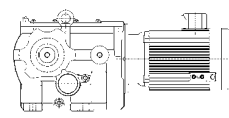
6. SK4

P 5.5 kW
n₁ 1440 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
11.2	1.00	4688	SKZN66C125 - 132S-4G	128.53	9 700	40 000	186	M174	
11.3	1.70	4666	SKZN76C125 - 132S-4G	127.92	15 100	61 100	279	M180	
11.8	2.90	4439	SKZN86C125 - 132S-4G	121.72	27 300	82 500	433	M186	
10.2	0.95	5148	SKZN66C140 - 132S-4G	141.15	8 900	40 000	186	M174	
10.1	1.50	5204	SKZN76C140 - 132S-4G	142.68	14 600	62 200	279	M180	
10.8	2.70	4851	SKZN86C140 - 132S-4G	132.99	27 400	82 500	433	M186	
8.5	0.80	6143	SKZN66C160 - 132S-4G	168.44	7 100	40 000	186	M174	
9.1	1.40	5787	SKZN76C160 - 132S-4G	158.67	14 100	63 200	279	M180	
9.2	2.30	5714	SKZN86C160 - 132S-4G	156.67	27 400	82 500	433	M186	
8.3	1.30	6315	SKZN76C36B180 - 132S-4G	173.13	13 500	64 000	317	M180	
8.3	2.10	6294	SKZN86C180 - 132S-4G	172.55	27 300	82 500	433	M186	
7.2	1.10	7330	SKZN76C36B200 - 132S-4G	200.97	12 200	65 000	317	M180	
7.5	1.90	6989	SKZN86C200 - 132S-4G	191.62	27 100	82 500	433	M186	
7.5	2.90	6966	SKZN96C36B200 - 132S-4G	191.00	47 600	112 000	644	M192	
6.4	0.97	8207	SKZN76C36B224 - 132S-4G	225.01	11 100	65 000	317	M180	
6.6	1.60	7922	SKZN86C36B224 - 132S-4G	217.20	26 600	65 000	471	M186	
6.5	2.50	8022	SKZN96C36B224 - 132S-4G	219.95	48 500	112 000	644	M192	
5.6	0.85	9396	SKZN76C36B250 - 132S-4G	257.63	9 300	65 000	317	M180	
5.7	1.40	9196	SKZN86C36B250 - 132S-4G	252.12	25 700	65 000	471	M186	
5.6	2.10	9312	SKZN96C36B250 - 132S-4G	255.31	49 200	112 000	644	M192	
5.1	1.30	10296	SKZN86C36B280 - 132S-4G	282.29	24 800	65 000	471	M186	
5.0	1.90	10426	SKZN96C36B280 - 132S-4G	285.86	49 600	112 000	644	M192	
4.5	1.10	11788	SKZN86C36B315 - 132S-4G	323.21	23 300	65 000	471	M186	
4.4	1.70	11937	SKZN96C36B315 - 132S-4G	327.29	49 800	112 000	644	M192	
4.1	1.00	12934	SKZN86C36B355 - 132S-4G	354.62	22 000	65 000	471	M186	
4.0	1.50	13097	SKZN96C36B355 - 132S-4G	359.10	49 800	112 000	644	M192	
3.5	0.87	14939	SKZN86C36B400 - 132S-4G	409.58	19 600	65 000	471	M186	
3.5	1.30	15127	SKZN96C36B400 - 132S-4G	414.76	49 400	112 000	644	M192	
3.1	1.20	16722	SKZN96C36B450 - 132S-4G	458.49	48 900	112 000	644	M192	
2.8	1.10	18563	SKZN96C36B500 - 132S-4G	508.95	48 200	112 000	644	M192	
2.6	1.00	19882	SKZN96C36B560 - 132S-4G	545.11	47 500	112 000	644	M192	
2.3	0.86	23248	SKZN96C36B630 - 132S-4G	637.40	45 400	112 000	644	M192	
2.1	0.80	25041	SKZN96C36B710 - 132S-4G	686.56	44 100	112 000	644	M192	

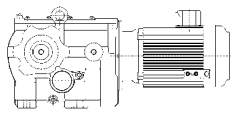
P 7.5 kW
n₁ 1445 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
184.8	0.99	387	SKZN36C8 - 132MA-4G	7.82	2 700	12 000	68	M156	
188.7	1.40	379	SKZN46C8 - 132MA-4G	7.66	4 500	14 700	90	M162	
171.4	2.80	418	SKZN56C8 - 132MA-4G	8.43	5 700	19 600	121	M168	
165.8	0.95	432	SKZN36C9 - 132MA-4G	8.72	2 700	12 300	68	M156	
162.6	1.30	440	SKZN46C9 - 132MA-4G	8.89	4 500	15 100	90	M162	
159.9	2.70	448	SKZN56C9 - 132MA-4G	9.04	5 800	20 000	121	M168	
140.4	0.85	510	SKZN36C10 - 132MA-4G	10.29	2 500	12 600	68	M156	
145.2	1.20	493	SKZN46C10 - 132MA-4G	9.95	4 600	15 600	90	M162	
142.6	2.50	502	SKZN56C10 - 132MA-4G	10.13	5 900	20 500	121	M168	
126.8	1.10	565	SKZN46C11.2 - 132MA-4G	11.39	4 600	16 000	90	M162	




6. SK4

P 7.5 kW n ₁ 1445 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
123.9	2.20	578	SKZN56C11.2 - 132MA-4G	11.66	5 900	21 300	121	M168	
115.6	1.10	620	SKZN46C12.5 - 132MA-4G	12.50	4 600	16 300	90	M162	
109.3	2.10	655	SKZN56C12.5 - 132MA-4G	13.22	6 000	21 900	121	M168	
103.3	0.97	693	SKZN36C14 - 132MA-4G	13.99	2 400	12 800	68	M156	
104.2	1.50	687	SKZN46C14 - 132MA-4G	13.87	4 600	16 700	90	M162	
92.6	0.91	773	SKZN36C16 - 132MA-4G	15.60	2 000	13 400	68	M156	
89.8	1.40	798	SKZN46C16 - 132MA-4G	16.10	4 500	17 200	90	M162	
93.8	2.70	763	SKZN56C16 - 132MA-4G	15.40	6 100	22 700	121	M168	
78.5	0.80	913	SKZN36C18 - 132MA-4G	18.41	1 600	13 500	68	M156	
80.2	1.30	893	SKZN46C18 - 132MA-4G	18.02	4 500	17 100	90	M162	
83.7	2.50	856	SKZN56C18 - 132MA-4G	17.27	6 100	23 300	121	M168	
70.0	1.20	1023	SKZN46C20 - 132MA-4G	20.63	4 300	17 900	90	M162	
72.7	2.20	985	SKZN56C20 - 132MA-4G	19.88	6 000	24 000	121	M168	
63.8	1.10	1122	SKZN46C22.4 - 132MA-4G	22.64	4 100	18 000	90	M162	
64.1	2.10	1117	SKZN56C22.4 - 132MA-4G	22.53	6 000	24 600	121	M168	
55.3	1.00	1296	SKZN46C25 - 132MA-4G	26.15	3 900	18 000	90	M162	
57.0	1.90	1256	SKZN56C25 - 132MA-4G	25.35	5 900	25 200	121	M168	
50.0	0.98	1433	SKZN46C28 - 132MA-4G	28.91	3 600	18 000	90	M162	
49.7	1.70	1441	SKZN56C28 - 132MA-4G	29.06	5 700	25 900	121	M168	
45.0	0.91	1590	SKZN46C31.5 - 132MA-4G	32.09	3 300	18 000	90	M162	
45.1	1.60	1590	SKZN56C31.5 - 132MA-4G	32.07	5 500	26 300	121	M168	
42.0	0.87	1703	SKZN46C35.5 - 132MA-4G	34.37	3 100	18 000	90	M162	
40.9	1.50	1749	SKZN56C35.5 - 132MA-4G	35.29	5 300	26 700	121	M168	
39.2	2.70	1829	SKZN66C35.5 - 132MA-4G	36.90	10 700	38 800	187	M174	
36.3	1.40	1970	SKZN56C40 - 132MA-4G	39.75	4 900	27 000	121	M168	
35.5	2.40	2018	SKZN66C40 - 132MA-4G	40.72	10 600	39 600	187	M174	
32.8	1.30	2186	SKZN56C45 - 132MA-4G	44.10	4 600	27 000	121	M168	
32.2	2.20	2221	SKZN66C45 - 132MA-4G	44.81	10 500	40 000	187	M174	
28.6	1.20	2504	SKZN56C50 - 132MA-4G	50.51	4 000	27 000	121	M168	
28.6	2.00	2502	SKZN66C50 - 132MA-4G	50.48	10 300	40 000	187	M174	
24.4	0.99	2940	SKZN56C56 - 132MA-4G	59.31	3 100	27 000	121	M168	
25.8	1.80	2775	SKZN66C56 - 132MA-4G	55.99	10 000	40 000	187	M174	
26.9	3.00	2667	SKZN76C56 - 132MA-4G	53.81	13 600	49 200	280	M180	
22.8	0.92	3146	SKZN56C63 - 132MA-4G	63.47	2 700	27 000	121	M168	
22.5	1.50	3179	SKZN66C63 - 132MA-4G	64.14	9 500	40 000	187	M174	
23.3	2.60	3070	SKZN76C63 - 132MA-4G	61.93	13 500	50 700	280	M180	
20.4	0.83	3514	SKZN56C71 - 132MA-4G	70.89	1 900	27 000	121	M168	
19.2	1.30	3733	SKZN66C71 - 132MA-4G	75.31	8 700	40 000	187	M174	
20.7	2.30	3462	SKZN76C71 - 132MA-4G	69.85	13 300	51 900	280	M180	
17.9	1.20	3995	SKZN66C80 - 132MA-4G	80.59	8 300	40 000	187	M174	
18.2	2.00	3942	SKZN76C80 - 132MA-4G	79.53	13 000	53 100	280	M180	
16.1	1.10	4461	SKZN66C90 - 132MA-4G	90.02	7 600	40 000	187	M174	
16.6	1.80	4324	SKZN76C90 - 132MA-4G	87.25	12 600	54 000	280	M180	
14.1	0.96	5090	SKZN66C100 - 132MA-4G	102.70	6 400	40 000	187	M174	
14.4	1.60	4958	SKZN76C100 - 132MA-4G	100.03	12 000	55 200	280	M180	
14.8	2.70	4828	SKZN86C100 - 132MA-4G	97.41	23 500	81 600	434	M186	
13.0	0.89	5519	SKZN66C112 - 132MA-4G	111.35	5 600	40 000	187	M174	
13.3	1.50	5373	SKZN76C112 - 132MA-4G	108.41	11 600	55 800	280	M180	
13.6	2.50	5270	SKZN86C112 - 132MA-4G	106.33	23 400	82 500	434	M186	
11.3	1.30	6340	SKZN76C125 - 132MA-4G	127.92	10 400	57 000	280	M180	
11.9	2.20	6033	SKZN86C125 - 132MA-4G	121.72	23 200	82 500	434	M186	
10.1	1.10	7072	SKZN76C140 - 132MA-4G	142.68	9 400	57 700	280	M180	



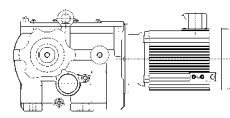
6. SK4

P 7.5 kW
n₁ 1445 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
10.9	2.00	6592	SKZN86C140 - 132MA-4G	132.99	22 900	82 500	434	M186	
10.3	2.90	6970	SKZN96C140 - 132MA-4G	140.62	41 600	112 000	607	M192	
9.1	1.00	7865	SKZN76C160 - 132MA-4G	158.67	8 300	58 200	280	M180	
9.2	1.70	7765	SKZN86C160 - 132MA-4G	156.67	22 100	82 500	434	M186	
9.2	2.60	7756	SKZN96C160 - 132MA-4G	156.48	42 000	112 000	607	M192	
8.3	0.93	8581	SKZN76C36B180 - 132MA-4G	173.13	7 100	58 600	318	M180	
8.4	1.50	8552	SKZN86C180 - 132MA-4G	172.55	21 500	82 500	434	M186	
8.3	2.30	8647	SKZN96C36B180 - 132MA-4G	174.46	42 400	112 000	645	M192	
7.2	0.80	9961	SKZN76C36B200 - 132MA-4G	200.97	4 900	58 900	318	M180	
7.5	1.40	9497	SKZN86C200 - 132MA-4G	191.62	20 600	82 500	434	M186	
7.6	2.10	9467	SKZN96C36B200 - 132MA-4G	191.00	42 500	112 000	645	M192	
6.7	1.20	10765	SKZN86C36B224 - 132MA-4G	217.20	19 200	65 000	472	M186	
6.6	1.80	10901	SKZN96C36B224 - 132MA-4G	219.95	42 600	112 000	645	M192	
5.7	1.00	12496	SKZN86C36B250 - 132MA-4G	252.12	17 200	65 000	472	M186	
5.7	1.60	12654	SKZN96C36B250 - 132MA-4G	255.31	42 400	112 000	645	M192	
5.1	0.93	13991	SKZN86C36B280 - 132MA-4G	282.29	15 200	65 000	472	M186	
5.1	1.40	14168	SKZN96C36B280 - 132MA-4G	285.86	42 000	112 000	645	M192	
4.5	0.81	16019	SKZN86C36B315 - 132MA-4G	323.21	12 400	65 000	472	M186	
4.4	1.20	16222	SKZN96C36B315 - 132MA-4G	327.29	41 100	112 000	645	M192	
4.0	1.10	17798	SKZN96C36B355 - 132MA-4G	359.10	40 200	112 000	645	M192	
3.5	0.97	20557	SKZN96C36B400 - 132MA-4G	414.76	38 400	112 000	645	M192	
3.2	0.88	22724	SKZN96C36B450 - 132MA-4G	458.49	36 800	112 000	645	M192	

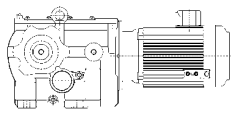
P 9.0 kW
n₁ 1435 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
183.6	0.82	468	SKZN36C8 - 132MB-4G	7.82	2 300	11 700	70	M156	
187.4	1.20	459	SKZN46C8 - 132MB-4G	7.66	4 200	14 400	92	M162	
170.2	2.30	505	SKZN56C8 - 132MB-4G	8.43	5 400	19 400	123	M168	
161.5	1.10	532	SKZN46C9 - 132MB-4G	8.89	4 200	14 800	92	M162	
158.8	2.20	541	SKZN56C9 - 132MB-4G	9.04	5 400	19 700	123	M168	
144.2	1.00	596	SKZN46C10 - 132MB-4G	9.95	4 200	15 200	92	M162	
141.6	2.10	607	SKZN56C10 - 132MB-4G	10.13	5 500	20 300	123	M168	
126.0	0.94	682	SKZN46C11.2 - 132MB-4G	11.39	4 100	15 700	92	M162	
123.0	1.90	699	SKZN56C11.2 - 132MB-4G	11.66	5 500	20 900	123	M168	
114.8	0.89	749	SKZN46C12.5 - 132MB-4G	12.50	4 100	15 900	92	M162	
108.5	1.80	792	SKZN56C12.5 - 132MB-4G	13.22	5 500	21 500	123	M168	
102.6	0.80	838	SKZN36C14 - 132MB-4G	13.99	1 800	12 300	70	M156	
103.5	1.30	831	SKZN46C14 - 132MB-4G	13.87	4 000	16 200	92	M162	
100.1	2.90	859	SKZN66C14 - 132MB-4G	14.33	9 500	30 800	189	M174	
89.2	1.10	964	SKZN46C16 - 132MB-4G	16.10	3 800	16 600	92	M162	
93.2	2.20	922	SKZN56C16 - 132MB-4G	15.40	5 500	22 300	123	M168	
89.0	2.50	966	SKZN66C16 - 132MB-4G	16.12	9 600	31 700	189	M174	
79.6	1.10	1079	SKZN46C18 - 132MB-4G	18.02	3 900	16 600	92	M162	
83.1	2.10	1034	SKZN56C18 - 132MB-4G	17.27	5 400	22 800	123	M168	
69.5	0.99	1236	SKZN46C20 - 132MB-4G	20.63	3 400	17 200	92	M162	
72.2	1.80	1190	SKZN56C20 - 132MB-4G	19.88	5 300	23 400	123	M168	




6. SK4

P 9.0 kW n ₁ 1435 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
63.4	0.94	1356	SKZN46C22.4 - 132MB-4G	22.64	3 200	17 400	92	M162	
63.7	1.70	1350	SKZN56C22.4 - 132MB-4G	22.53	5 100	24 000	123	M168	
54.9	0.86	1566	SKZN46C25 - 132MB-4G	26.15	2 800	17 600	92	M162	
56.6	1.60	1518	SKZN56C25 - 132MB-4G	25.35	4 900	24 500	123	M168	
49.6	0.81	1731	SKZN46C28 - 132MB-4G	28.91	2 500	17 700	92	M162	
49.4	1.40	1741	SKZN56C28 - 132MB-4G	29.06	4 600	25 000	123	M168	
50.2	2.80	1714	SKZN66C28 - 132MB-4G	28.61	9 800	36 000	189	M174	
44.7	1.40	1921	SKZN56C31.5 - 132MB-4G	32.07	4 300	25 400	123	M168	
44.6	2.50	1927	SKZN66C31.5 - 132MB-4G	32.18	9 600	36 800	189	M174	
40.7	1.30	2114	SKZN56C35.5 - 132MB-4G	35.29	4 000	25 700	123	M168	
38.9	2.20	2210	SKZN66C35.5 - 132MB-4G	36.90	9 400	37 800	189	M174	
36.1	1.10	2381	SKZN56C40 - 132MB-4G	39.75	3 500	26 100	123	M168	
35.2	2.00	2439	SKZN66C40 - 132MB-4G	40.72	9 200	38 500	189	M174	
32.5	1.10	2641	SKZN56C45 - 132MB-4G	44.10	2 900	26 300	123	M168	
32.0	1.80	2684	SKZN66C45 - 132MB-4G	44.81	9 000	39 100	189	M174	
31.9	3.00	2693	SKZN76C45 - 132MB-4G	44.97	12 300	46 400	282	M180	
28.4	0.96	3025	SKZN56C50 - 132MB-4G	50.51	2 100	26 600	123	M168	
28.4	1.60	3023	SKZN66C50 - 132MB-4G	50.48	8 500	39 800	189	M174	
29.6	2.80	2908	SKZN76C50 - 132MB-4G	48.55	12 300	47 100	282	M180	
24.2	0.82	3552	SKZN56C56 - 132MB-4G	59.31	900	26 700	123	M168	
25.6	1.50	3353	SKZN66C56 - 132MB-4G	55.99	8 100	40 000	189	M174	
26.7	2.50	3223	SKZN76C56 - 132MB-4G	53.81	12 100	48 000	282	M180	
22.4	1.30	3841	SKZN66C63 - 132MB-4G	64.14	7 300	40 000	189	M174	
23.2	2.20	3709	SKZN76C63 - 132MB-4G	61.93	11 700	49 300	282	M180	
19.1	1.10	4510	SKZN66C71 - 132MB-4G	75.31	6 100	40 000	189	M174	
20.5	1.90	4183	SKZN76C71 - 132MB-4G	69.85	11 300	50 300	282	M180	
19.8	3.00	4331	SKZN86C71 - 132MB-4G	72.31	21 500	74 900	436	M186	
17.8	1.00	4827	SKZN66C80 - 132MB-4G	80.59	5 500	40 000	189	M174	
18.0	1.70	4763	SKZN76C80 - 132MB-4G	79.53	10 700	51 300	282	M180	
18.6	2.80	4626	SKZN86C80 - 132MB-4G	77.24	21 400	76 000	436	M186	
15.9	0.91	5391	SKZN66C90 - 132MB-4G	90.02	4 400	40 000	189	M174	
16.4	1.50	5226	SKZN76C90 - 132MB-4G	87.25	10 200	52 000	282	M180	
16.7	2.50	5143	SKZN86C90 - 132MB-4G	85.87	21 300	77 700	436	M186	
14.0	0.80	6151	SKZN66C100 - 132MB-4G	102.70	2 800	40 000	189	M174	
14.3	1.30	5991	SKZN76C100 - 132MB-4G	100.03	9 200	52 900	282	M180	
14.7	2.20	5834	SKZN86C100 - 132MB-4G	97.41	21 000	79 600	436	M186	
13.2	1.20	6493	SKZN76C112 - 132MB-4G	108.41	8 500	53 300	282	M180	
13.5	2.00	6369	SKZN86C112 - 132MB-4G	106.33	20 700	81 000	436	M186	
11.2	1.00	7661	SKZN76C125 - 132MB-4G	127.92	6 800	54 000	282	M180	
11.8	1.80	7290	SKZN86C125 - 132MB-4G	121.72	20 000	82 500	436	M186	
11.3	2.60	7630	SKZN96C125 - 132MB-4G	127.41	38 600	112 000	609	M192	
10.1	0.94	8545	SKZN76C140 - 132MB-4G	142.68	5 400	54 300	282	M180	
10.8	1.60	7965	SKZN86C140 - 132MB-4G	132.99	19 500	82 500	436	M186	
10.2	2.40	8422	SKZN96C140 - 132MB-4G	140.62	38 800	112 000	609	M192	
9.0	0.84	9503	SKZN76C160 - 132MB-4G	158.67	3 800	54 500	282	M180	
9.2	1.40	9383	SKZN86C160 - 132MB-4G	156.67	18 000	82 500	436	M186	
9.2	2.10	9372	SKZN96C160 - 132MB-4G	156.48	38 900	112 000	609	M192	
8.3	1.30	10334	SKZN86C180 - 132MB-4G	172.55	17 000	82 500	436	M186	
8.2	1.90	10448	SKZN96C36B180 - 132MB-4G	174.46	38 900	112 000	647	M192	
7.5	1.10	11476	SKZN86C200 - 132MB-4G	191.62	15 600	82 500	436	M186	
7.5	1.70	11439	SKZN96C36B200 - 132MB-4G	191.00	38 700	112 000	647	M192	
6.6	1.00	13008	SKZN86C36B224 - 132MB-4G	217.20	13 600	65 000	474	M186	




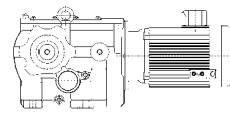
6. SK4

P 9.0 kW
n₁ 1435 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
6.5	1.50	13173	SKZN96C36B224 - 132MB-4G	219.95	38 200	112 000	647	M192
5.7	0.86	15100	SKZN86C36B250 - 132MB-4G	252.12	10 600	65 000	474	M186
5.6	1.30	15291	SKZN96C36B250 - 132MB-4G	255.31	37 200	112 000	647	M192
5.0	1.20	17120	SKZN96C36B280 - 132MB-4G	285.86	36 200	112 000	647	M192
4.4	1.00	19602	SKZN96C36B315 - 132MB-4G	327.29	34 400	112 000	647	M192
4.0	0.93	21507	SKZN96C36B355 - 132MB-4G	359.10	33 000	112 000	647	M192
3.5	0.81	24840	SKZN96C36B400 - 132MB-4G	414.76	30 000	112 000	647	M192


P 11.0 kW
n₁ 1465 min⁻¹

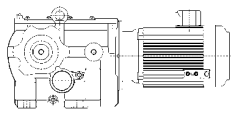
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
191.3	0.98	549	SKZN46C8 - 160M-4G	7.66	3 800	14 000	161	M162
173.8	1.90	604	SKZN56C8 - 160M-4G	8.43	5 000	19 000	192	M168
164.8	0.91	637	SKZN46C9 - 160M-4G	8.89	3 700	14 400	161	M162
162.1	1.90	648	SKZN56C9 - 160M-4G	9.04	5 000	19 300	192	M168
147.2	0.85	713	SKZN46C10 - 160M-4G	9.95	3 700	14 700	161	M162
144.6	1.70	727	SKZN56C10 - 160M-4G	10.13	5 000	19 800	192	M168
125.6	1.60	836	SKZN56C11.2 - 160M-4G	11.66	5 000	20 400	192	M168
110.8	1.50	948	SKZN56C12.5 - 160M-4G	13.22	4 900	20 900	192	M168
115.9	2.70	907	SKZN66C12.5 - 160M-4G	12.64	8 700	29 300	258	M174
105.6	1.10	994	SKZN46C14 - 160M-4G	13.87	3 300	15 500	161	M162
102.2	2.40	1028	SKZN66C14 - 160M-4G	14.33	8 800	30 200	258	M174
91.0	0.95	1154	SKZN46C16 - 160M-4G	16.10	3 000	15 800	161	M162
95.1	1.90	1104	SKZN56C16 - 160M-4G	15.40	4 800	21 600	192	M168
90.9	2.10	1156	SKZN66C16 - 160M-4G	16.12	8 900	31 000	258	M174
81.3	0.90	1292	SKZN46C18 - 160M-4G	18.02	3 000	15 800	161	M162
84.8	1.70	1238	SKZN56C18 - 160M-4G	17.27	4 600	22 000	192	M168
71.0	0.82	1480	SKZN46C20 - 160M-4G	20.63	2 400	16 200	161	M162
73.7	1.50	1425	SKZN56C20 - 160M-4G	19.88	4 400	22 600	192	M168
65.0	1.40	1616	SKZN56C22.4 - 160M-4G	22.53	4 100	23 000	192	M168
66.8	3.00	1572	SKZN66C22.4 - 160M-4G	21.93	8 800	33 100	258	M174
57.8	1.30	1817	SKZN56C25 - 160M-4G	25.35	3 700	23 400	192	M168
58.0	2.70	1810	SKZN66C25 - 160M-4G	25.24	8 700	34 000	258	M174
50.4	1.20	2084	SKZN56C28 - 160M-4G	29.06	3 200	23 800	192	M168
51.2	2.40	2052	SKZN66C28 - 160M-4G	28.61	8 500	34 800	258	M174
45.7	1.10	2299	SKZN56C31.5 - 160M-4G	32.07	2 800	24 100	192	M168
45.5	2.10	2308	SKZN66C31.5 - 160M-4G	32.18	8 200	35 500	258	M174
41.5	1.00	2530	SKZN56C35.5 - 160M-4G	35.29	2 300	24 200	192	M168
39.7	1.90	2646	SKZN66C35.5 - 160M-4G	36.90	7 800	36 300	258	M174
36.9	0.95	2850	SKZN56C40 - 160M-4G	39.75	1 600	24 400	192	M168
36.0	1.70	2920	SKZN66C40 - 160M-4G	40.72	7 400	36 800	258	M174
37.1	2.80	2832	SKZN76C40 - 160M-4G	39.50	11 000	43 800	351	M180
33.2	0.89	3162	SKZN56C45 - 160M-4G	44.10	900	24 500	192	M168
32.7	1.50	3213	SKZN66C45 - 160M-4G	44.81	7 000	37 200	258	M174
32.6	2.50	3224	SKZN76C45 - 160M-4G	44.97	10 700	44 800	351	M180
29.0	0.80	3622	SKZN56C50 - 160M-4G	50.51		24 500	192	M168
29.0	1.40	3619	SKZN66C50 - 160M-4G	50.48	6 300	37 700	258	M174



6. SK4


P 11.0 kW									
n ₁ 1465 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
30.2	2.30	3481	SKZN76C50 - 160M-4G	48.55	10 500	45 500	351	M180	
26.2	1.20	4015	SKZN66C56 - 160M-4G	55.99	5 600	38 100	258	M174	
27.2	2.10	3858	SKZN76C56 - 160M-4G	53.81	10 100	46 200	351	M180	
22.8	1.10	4599	SKZN66C63 - 160M-4G	64.14	4 500	38 400	258	M174	
23.7	1.80	4441	SKZN76C63 - 160M-4G	61.93	9 500	47 200	351	M180	
22.5	2.80	4666	SKZN86C63 - 160M-4G	65.08	19 200	71 200	505	M186	
19.5	0.91	5400	SKZN66C71 - 160M-4G	75.31	2 800	38 600	258	M174	
21.0	1.60	5008	SKZN76C71 - 160M-4G	69.85	8 800	48 000	351	M180	
20.3	2.50	5185	SKZN86C71 - 160M-4G	72.31	19 000	72 700	505	M186	
18.2	0.85	5779	SKZN66C80 - 160M-4G	80.59	2 000	38 600	258	M174	
18.4	1.40	5702	SKZN76C80 - 160M-4G	79.53	7 900	48 700	351	M180	
19.0	2.30	5538	SKZN86C80 - 160M-4G	77.24	18 800	73 600	505	M186	
16.8	1.30	6256	SKZN76C90 - 160M-4G	87.25	7 100	49 200	351	M180	
17.1	2.10	6157	SKZN86C90 - 160M-4G	85.87	18 400	75 100	505	M186	
14.6	1.10	7173	SKZN76C100 - 160M-4G	100.03	5 700	49 700	351	M180	
15.0	1.90	6985	SKZN86C100 - 160M-4G	97.41	17 700	76 800	505	M186	
14.7	2.80	7136	SKZN96C100 - 160M-4G	99.53	35 000	112 000	678	M192	
13.5	1.00	7773	SKZN76C112 - 160M-4G	108.41	4 700	49 900	351	M180	
13.8	1.70	7624	SKZN86C112 - 160M-4G	106.33	17 200	77 900	505	M186	
13.6	2.60	7738	SKZN96C112 - 160M-4G	107.92	35 100	112 000	678	M192	
11.5	0.87	9172	SKZN76C125 - 160M-4G	127.92	2 300	50 000	351	M180	
12.0	1.50	8727	SKZN86C125 - 160M-4G	121.72	16 000	79 400	505	M186	
11.5	2.20	9135	SKZN96C125 - 160M-4G	127.41	35 200	112 000	678	M192	
11.0	1.40	9536	SKZN86C140 - 160M-4G	132.99	15 100	80 400	505	M186	
10.4	2.00	10083	SKZN96C140 - 160M-4G	140.62	35 100	112 000	678	M192	
9.4	1.20	11233	SKZN86C160 - 160M-4G	156.67	12 900	81 800	505	M186	
9.4	1.80	11220	SKZN96C160 - 160M-4G	156.48	34 800	112 000	678	M192	
8.5	1.10	12372	SKZN86C180 - 160M-4G	172.55	11 300	82 500	505	M186	
8.4	1.60	12509	SKZN96C36B180 - 160M-4G	174.46	34 300	112 000	716	M192	
7.6	0.95	13739	SKZN86C200 - 160M-4G	191.62	9 300	82 500	505	M186	
7.7	1.50	13695	SKZN96C36B200 - 160M-4G	191.00	33 700	112 000	716	M192	
6.7	0.83	15574	SKZN86C36B224 - 160M-4G	217.20	6 500	65 000	543	M186	
6.7	1.30	15770	SKZN96C36B224 - 160M-4G	219.95	32 500	112 000	716	M192	
5.7	1.10	18306	SKZN96C36B250 - 160M-4G	255.31	30 600	112 000	716	M192	
5.1	0.98	20496	SKZN96C36B280 - 160M-4G	285.86	28 800	112 000	716	M192	
4.5	0.85	23467	SKZN96C36B315 - 160M-4G	327.29	26 000	112 000	716	M192	

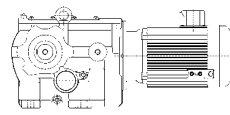
P 15.0 kW									
n ₁ 1460 min ⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
173.2	1.40	827	SKZN56C8 - 160L-4G	8.43	4 200	18 300	212	M168	
161.6	1.40	887	SKZN56C9 - 160L-4G	9.04	4 100	18 500	212	M168	
159.8	2.70	896	SKZN66C9 - 160L-4G	9.14	7 600	26 300	278	M174	
144.1	1.30	994	SKZN56C10 - 160L-4G	10.13	4 000	19 000	212	M168	
149.0	2.50	961	SKZN66C10 - 160L-4G	9.80	7 600	26 600	278	M174	
125.2	1.10	1144	SKZN56C11.2 - 160L-4G	11.66	3 900	19 400	212	M168	
132.9	2.30	1078	SKZN66C11.2 - 160L-4G	10.98	7 600	27 400	278	M174	



6. SK4


P 15.0 kW
n₁ 1460 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
110.4	1.10	1297	SKZN56C12.5 - 160L-4G	13.22	3 600	19 900	212	M168	
115.5	2.00	1240	SKZN66C12.5 - 160L-4G	12.64	7 600	28 300	278	M174	
101.9	1.70	1406	SKZN66C14 - 160L-4G	14.33	7 500	29 000	278	M174	
105.8	2.90	1354	SKZN76C14 - 160L-4G	13.81	9 500	33 600	371	M180	
94.8	1.40	1511	SKZN56C16 - 160L-4G	15.40	3 300	20 300	212	M168	
90.6	1.50	1582	SKZN66C16 - 160L-4G	16.12	7 400	29 700	278	M174	
93.2	2.60	1537	SKZN76C16 - 160L-4G	15.67	9 600	34 600	371	M180	
84.5	1.30	1694	SKZN56C18 - 160L-4G	17.27	3 000	20 600	212	M168	
73.5	1.10	1950	SKZN56C20 - 160L-4G	19.88	2 500	21 000	212	M168	
74.7	2.40	1918	SKZN66C20 - 160L-4G	19.55	7 200	30 500	278	M174	
64.8	1.00	2211	SKZN56C22.4 - 160L-4G	22.53	1 900	21 200	212	M168	
66.6	2.20	2151	SKZN66C22.4 - 160L-4G	21.93	6 900	31 300	278	M174	
57.6	0.97	2487	SKZN56C25 - 160L-4G	25.35	1 300	21 400	212	M168	
57.8	2.00	2476	SKZN66C25 - 160L-4G	25.24	6 400	32 000	278	M174	
50.2	0.88	2851	SKZN56C28 - 160L-4G	29.06	500	21 500	212	M168	
51.0	1.70	2807	SKZN66C28 - 160L-4G	28.61	5 900	32 500	278	M174	
52.4	2.90	2733	SKZN76C28 - 160L-4G	27.86	9 200	39 000	371	M180	
45.5	0.83	3146	SKZN56C31.5 - 160L-4G	32.07		21 500	212	M168	
45.4	1.60	3157	SKZN66C31.5 - 160L-4G	32.18	5 400	33 000	278	M174	
46.2	2.60	3102	SKZN76C31.5 - 160L-4G	31.62	8 900	39 800	371	M180	
39.6	1.40	3621	SKZN66C35.5 - 160L-4G	36.90	4 500	33 400	278	M174	
41.1	2.30	3487	SKZN76C35.5 - 160L-4G	35.54	8 500	40 600	371	M180	
35.9	1.20	3995	SKZN66C40 - 160L-4G	40.72	3 800	33 600	278	M174	
37.0	2.10	3875	SKZN76C40 - 160L-4G	39.50	8 100	41 300	371	M180	
32.6	1.10	4396	SKZN66C45 - 160L-4G	44.81	3 000	33 700	278	M174	
32.5	1.80	4412	SKZN76C45 - 160L-4G	44.97	7 500	42 000	371	M180	
32.5	2.90	4407	SKZN86C45 - 160L-4G	44.92	16 300	63 200	525	M186	
28.9	0.99	4952	SKZN66C50 - 160L-4G	50.48	1 800	33 800	278	M174	
30.1	1.70	4763	SKZN76C50 - 160L-4G	48.55	7 000	42 400	371	M180	
29.8	2.70	4806	SKZN86C50 - 160L-4G	48.98	16 100	64 300	525	M186	
26.1	0.89	5493	SKZN66C56 - 160L-4G	55.99	600	33 700	278	M174	
27.1	1.50	5279	SKZN76C56 - 160L-4G	53.81	6 300	42 900	371	M180	
26.0	2.40	5511	SKZN86C56 - 160L-4G	56.17	15 600	65 900	525	M186	
23.6	1.30	6076	SKZN76C63 - 160L-4G	61.93	5 100	43 400	371	M180	
22.4	2.00	6385	SKZN86C63 - 160L-4G	65.08	14 900	67 600	525	M186	
20.9	1.20	6853	SKZN76C71 - 160L-4G	69.85	3 800	43 600	371	M180	
20.2	1.80	7094	SKZN86C71 - 160L-4G	72.31	14 200	68 700	525	M186	
20.8	2.90	6882	SKZN96C71 - 160L-4G	70.15	30 100	101 100	698	M192	
18.4	1.00	7803	SKZN76C80 - 160L-4G	79.53	2 200	43 800	371	M180	
18.9	1.70	7578	SKZN86C80 - 160L-4G	77.24	13 700	69 400	525	M186	
18.5	2.60	7745	SKZN96C80 - 160L-4G	78.94	30 100	103 700	698	M192	
16.7	0.93	8560	SKZN76C90 - 160L-4G	87.25	800	43 800	371	M180	
17.0	1.50	8424	SKZN86C90 - 160L-4G	85.87	12 700	70 400	525	M186	
16.0	2.20	8934	SKZN96C90 - 160L-4G	91.06	30 000	106 800	698	M192	
14.6	0.82	9814	SKZN76C100 - 160L-4G	100.03		43 500	371	M180	
15.0	1.40	9557	SKZN86C100 - 160L-4G	97.41	11 200	71 400	525	M186	
14.7	2.00	9764	SKZN96C100 - 160L-4G	99.53	29 800	108 800	698	M192	
13.7	1.20	10432	SKZN86C112 - 160L-4G	106.33	10 100	72 000	525	M186	
13.5	1.90	10588	SKZN96C112 - 160L-4G	107.92	29 500	110 500	698	M192	
12.0	1.10	11942	SKZN86C125 - 160L-4G	121.72	7 900	72 700	525	M186	
11.5	1.60	12500	SKZN96C125 - 160L-4G	127.41	28 500	112 000	698	M192	
11.0	1.00	13048	SKZN86C140 - 160L-4G	132.99	6 200	73 100	525	M186	




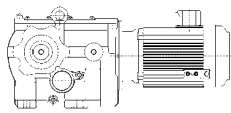
6. SK4

P	15.0 kW
n₁	1460 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
10.4	1.40	13796	SKZN96C140 - 160L-4G	140.62	27 700	112 000	698	M192	
9.3	0.85	15370	SKZN86C160 - 160L-4G	156.67	2 500	73 300	525	M186	
9.3	1.30	15352	SKZN96C160 - 160L-4G	156.48	26 600	112 000	698	M192	
8.4	1.10	17116	SKZN96C36B180 - 160L-4G	174.46	25 200	112 000	736	M192	
7.6	1.10	18739	SKZN96C36B200 - 160L-4G	191.00	23 800	112 000	736	M192	
6.6	0.93	21579	SKZN96C36B224 - 160L-4G	219.95	21 000	112 000	736	M192	
5.7	0.80	25048	SKZN96C36B250 - 160L-4G	255.31	17 400	112 000	736	M192	


P	18.5 kW
n₁	1455 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
172.6	1.10	1023	SKZN56C8 - 180M-4G	8.43	3 500	17 700	242	M168	
161.0	1.10	1097	SKZN56C9 - 180M-4G	9.04	3 400	17 900	242	M168	
159.2	2.20	1109	SKZN66C9 - 180M-4G	9.14	6 800	25 700	308	M174	
143.6	1.00	1230	SKZN56C10 - 180M-4G	10.13	3 200	18 300	242	M168	
148.5	2.10	1189	SKZN66C10 - 180M-4G	9.80	6 800	26 000	308	M174	
124.7	0.92	1416	SKZN56C11.2 - 180M-4G	11.66	2 900	18 600	242	M168	
132.5	1.80	1334	SKZN66C11.2 - 180M-4G	10.98	6 700	26 700	308	M174	
131.4	2.90	1344	SKZN76C11.2 - 180M-4G	11.07	8 600	31 300	401	M180	
110.0	0.87	1606	SKZN56C12.5 - 180M-4G	13.22	2 500	18 900	242	M168	
115.1	1.60	1535	SKZN66C12.5 - 180M-4G	12.64	6 600	27 400	308	M174	
116.3	2.60	1519	SKZN76C12.5 - 180M-4G	12.51	8 700	32 200	401	M180	
101.5	1.40	1740	SKZN66C14 - 180M-4G	14.33	6 400	28 100	308	M174	
105.4	2.40	1676	SKZN76C14 - 180M-4G	13.81	8 600	32 900	401	M180	
94.5	1.10	1870	SKZN56C16 - 180M-4G	15.40	2 000	19 300	242	M168	
90.2	1.30	1958	SKZN66C16 - 180M-4G	16.12	6 200	28 600	308	M174	
92.9	2.10	1902	SKZN76C16 - 180M-4G	15.67	8 600	33 800	401	M180	
84.3	1.00	2097	SKZN56C18 - 180M-4G	17.27	1 500	19 400	242	M168	
73.2	0.91	2413	SKZN56C20 - 180M-4G	19.88	800	19 600	242	M168	
74.4	2.00	2374	SKZN66C20 - 180M-4G	19.55	5 700	29 300	308	M174	
64.6	0.84	2736	SKZN56C22.4 - 180M-4G	22.53		19 600	242	M168	
66.4	1.80	2662	SKZN66C22.4 - 180M-4G	21.93	5 100	29 900	308	M174	
65.1	2.90	2713	SKZN76C22.4 - 180M-4G	22.34	8 100	36 100	401	M180	
57.6	1.60	3064	SKZN66C25 - 180M-4G	25.24	4 400	30 300	308	M174	
57.6	2.60	3065	SKZN76C25 - 180M-4G	25.24	7 800	36 900	401	M180	
50.9	1.40	3474	SKZN66C28 - 180M-4G	28.61	3 700	30 600	308	M174	
52.2	2.40	3383	SKZN76C28 - 180M-4G	27.86	7 400	37 500	401	M180	
45.2	1.30	3908	SKZN66C31.5 - 180M-4G	32.18	2 800	30 800	308	M174	
46.0	2.10	3839	SKZN76C31.5 - 180M-4G	31.62	6 900	38 200	401	M180	
39.4	1.10	4481	SKZN66C35.5 - 180M-4G	36.90	1 600	30 900	308	M174	
40.9	1.90	4315	SKZN76C35.5 - 180M-4G	35.54	6 300	38 700	401	M180	
41.3	3.00	4277	SKZN86C35.5 - 180M-4G	35.23	14 500	58 400	555	M186	
35.7	0.99	4944	SKZN66C40 - 180M-4G	40.72	600	30 900	308	M174	
36.8	1.70	4796	SKZN76C40 - 180M-4G	39.50	5 600	39 200	401	M180	
36.7	2.70	4816	SKZN86C40 - 180M-4G	39.67	14 200	59 800	555	M186	
32.4	1.50	5460	SKZN76C45 - 180M-4G	44.97	4 600	39 600	401	M180	
32.4	2.40	5454	SKZN86C45 - 180M-4G	44.92	13 700	61 100	555	M186	




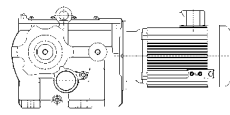
6. SK4

P 18.5 kW
n₁ 1455 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
30.0	1.40	5895	SKZN76C50 - 180M-4G	48.55	3 900	39 800	401	M180	
29.7	2.20	5947	SKZN86C50 - 180M-4G	48.98	13 200	62 000	555	M186	
27.0	1.20	6534	SKZN76C56 - 180M-4G	53.81	2 800	40 000	401	M180	
25.9	1.90	6820	SKZN86C56 - 180M-4G	56.17	12 300	63 300	555	M186	
26.2	3.00	6734	SKZN96C56 - 180M-4G	55.46	27 200	93 800	728	M192	
23.5	1.10	7520	SKZN76C63 - 180M-4G	61.93	1 100	40 000	401	M180	
22.4	1.60	7901	SKZN86C63 - 180M-4G	65.08	11 000	64 500	555	M186	
23.4	2.70	7544	SKZN96C63 - 180M-4G	62.14	27 100	96 100	728	M192	
20.8	0.94	8481	SKZN76C71 - 180M-4G	69.85		39 900	401	M180	
20.1	1.50	8779	SKZN86C71 - 180M-4G	72.31	9 900	65 300	555	M186	
20.7	2.30	8517	SKZN96C71 - 180M-4G	70.15	26 900	98 500	728	M192	
18.3	0.83	9656	SKZN76C80 - 180M-4G	79.53		39 500	401	M180	
18.8	1.40	9378	SKZN86C80 - 180M-4G	77.24	9 100	65 700	555	M186	
18.4	2.10	9585	SKZN96C80 - 180M-4G	78.94	26 500	100 800	728	M192	
16.9	1.20	10426	SKZN86C90 - 180M-4G	85.87	7 600	66 300	555	M186	
16.0	1.80	11056	SKZN96C90 - 180M-4G	91.06	25 800	103 500	728	M192	
14.9	1.10	11828	SKZN86C100 - 180M-4G	97.41	5 500	66 800	555	M186	
14.6	1.70	12084	SKZN96C100 - 180M-4G	99.53	25 200	105 100	728	M192	
13.7	1.00	12911	SKZN86C112 - 180M-4G	106.33	3 800	66 900	555	M186	
13.5	1.50	13103	SKZN96C112 - 180M-4G	107.92	24 500	106 500	728	M192	
12.0	0.88	14779	SKZN86C125 - 180M-4G	121.72	700	66 900	555	M186	
11.4	1.30	15469	SKZN96C125 - 180M-4G	127.41	22 600	109 100	728	M192	
10.9	0.81	16148	SKZN86C140 - 180M-4G	132.99		66 700	555	M186	
10.3	1.20	17074	SKZN96C140 - 180M-4G	140.62	21 200	110 500	728	M192	
9.3	1.10	19000	SKZN96C160 - 180M-4G	156.48	19 400	111 900	728	M192	

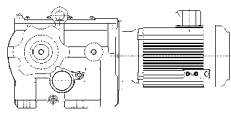
P 22.0 kW
n₁ 1460 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
173.2	0.95	1213	SKZN56C8 - 180L-4G	8.43	2 800	17 100	272	M168	
161.6	0.92	1300	SKZN56C9 - 180L-4G	9.04	2 600	17 300	272	M168	
159.8	1.90	1315	SKZN66C9 - 180L-4G	9.14	6 100	25 100	338	M174	
144.1	0.86	1458	SKZN56C10 - 180L-4G	10.13	2 300	17 500	272	M168	
149.0	1.70	1410	SKZN66C10 - 180L-4G	9.80	6 100	25 300	338	M174	
151.8	2.90	1384	SKZN76C10 - 180L-4G	9.61	7 900	29 800	431	M180	
132.9	1.50	1581	SKZN66C11.2 - 180L-4G	10.98	5 900	26 000	338	M174	
131.9	2.50	1593	SKZN76C11.2 - 180L-4G	11.07	7 900	30 700	431	M180	
115.5	1.30	1819	SKZN66C12.5 - 180L-4G	12.64	5 600	26 600	338	M174	
116.7	2.20	1800	SKZN76C12.5 - 180L-4G	12.51	7 900	31 500	431	M180	
101.9	1.20	2063	SKZN66C14 - 180L-4G	14.33	5 300	27 100	338	M174	
105.8	2.00	1987	SKZN76C14 - 180L-4G	13.81	7 800	32 100	431	M180	
102.2	3.00	2056	SKZN86C14 - 180L-4G	14.29	13 600	47 100	585	M186	
94.8	0.93	2216	SKZN56C16 - 180L-4G	15.40	700	18 200	272	M168	
90.6	1.10	2320	SKZN66C16 - 180L-4G	16.12	4 900	27 500	338	M174	
93.2	1.80	2255	SKZN76C16 - 180L-4G	15.67	7 600	32 900	431	M180	
91.4	2.80	2300	SKZN86C16 - 180L-4G	15.98	13 700	48 300	585	M186	
84.5	0.87	2485	SKZN56C18 - 180L-4G	17.27	100	18 200	272	M168	




6. SK4

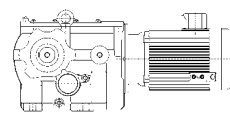
P 22.0 kW n₁ 1460 min⁻¹									
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
74.7	1.70	2814	SKZN66C20 - 180L-4G	19.55	4 300	28 000	338	M174	
75.2	2.90	2792	SKZN76C20 - 180L-4G	19.40	7 100	34 200	431	M180	
66.6	1.50	3155	SKZN66C22.4 - 180L-4G	21.93	3 400	28 400	338	M174	
65.3	2.50	3215	SKZN76C22.4 - 180L-4G	22.34	6 700	34 900	431	M180	
57.8	1.30	3632	SKZN66C25 - 180L-4G	25.24	2 400	28 600	338	M174	
57.8	2.20	3632	SKZN76C25 - 180L-4G	25.24	6 200	35 500	431	M180	
51.0	1.20	4117	SKZN66C28 - 180L-4G	28.61	1 400	28 700	338	M174	
52.4	2.00	4009	SKZN76C28 - 180L-4G	27.86	5 700	36 000	431	M180	
50.1	3.00	4197	SKZN86C28 - 180L-4G	29.17	13 200	54 900	585	M186	
45.4	1.10	4631	SKZN66C31.5 - 180L-4G	32.18	300	28 600	338	M174	
46.2	1.80	4550	SKZN76C31.5 - 180L-4G	31.62	4 900	36 400	431	M180	
44.7	2.80	4695	SKZN86C31.5 - 180L-4G	32.63	12 800	56 000	585	M186	
39.6	0.92	5310	SKZN66C35.5 - 180L-4G	36.90		28 400	338	M174	
41.1	1.60	5114	SKZN76C35.5 - 180L-4G	35.54	4 000	36 800	431	M180	
41.4	2.60	5069	SKZN86C35.5 - 180L-4G	35.23	12 500	56 800	585	M186	
35.9	0.84	5860	SKZN66C40 - 180L-4G	40.72		28 100	338	M174	
37.0	1.40	5684	SKZN76C40 - 180L-4G	39.50	3 100	37 000	431	M180	
36.8	2.30	5708	SKZN86C40 - 180L-4G	39.67	11 900	57 800	585	M186	
32.5	1.20	6470	SKZN76C45 - 180L-4G	44.97	1 700	37 200	431	M180	
32.5	2.00	6463	SKZN86C45 - 180L-4G	44.92	11 000	58 900	585	M186	
30.1	1.10	6986	SKZN76C50 - 180L-4G	48.55	800	37 200	431	M180	
29.8	1.80	7048	SKZN86C50 - 180L-4G	48.98	10 300	59 600	585	M186	
29.3	2.80	7167	SKZN96C50 - 180L-4G	49.81	24 800	89 700	758	M192	
27.1	1.00	7743	SKZN76C56 - 180L-4G	53.81		37 100	431	M180	
26.0	1.60	8082	SKZN86C56 - 180L-4G	56.17	9 000	60 600	585	M186	
26.3	2.50	7980	SKZN96C56 - 180L-4G	55.46	24 600	91 700	758	M192	
23.6	0.90	8912	SKZN76C63 - 180L-4G	61.93		36 700	431	M180	
22.4	1.40	9364	SKZN86C63 - 180L-4G	65.08	7 200	61 400	585	M186	
23.5	2.20	8941	SKZN96C63 - 180L-4G	62.14	24 200	93 700	758	M192	
20.9	0.80	10051	SKZN76C71 - 180L-4G	69.85		36 100	431	M180	
20.2	1.20	10405	SKZN86C71 - 180L-4G	72.31	5 600	61 800	585	M186	
20.8	2.00	10094	SKZN96C71 - 180L-4G	70.15	23 700	95 800	758	M192	
18.9	1.20	11114	SKZN86C80 - 180L-4G	77.24	4 500	62 000	585	M186	
18.5	1.80	11359	SKZN96C80 - 180L-4G	78.94	22 900	97 800	758	M192	
17.0	1.10	12355	SKZN86C90 - 180L-4G	85.87	2 500	62 200	585	M186	
16.0	1.50	13103	SKZN96C90 - 180L-4G	91.06	21 600	100 000	758	M192	
15.0	0.93	14017	SKZN86C100 - 180L-4G	97.41		62 100	585	M186	
14.7	1.40	14321	SKZN96C100 - 180L-4G	99.53	20 600	101 300	758	M192	
13.7	0.85	15301	SKZN86C112 - 180L-4G	106.33		61 900	585	M186	
13.5	1.30	15529	SKZN96C112 - 180L-4G	107.92	19 500	102 400	758	M192	
11.5	1.10	18333	SKZN96C125 - 180L-4G	127.41	16 800	104 300	758	M192	
10.4	0.99	20235	SKZN96C140 - 180L-4G	140.62	14 700	105 200	758	M192	
9.3	0.89	22517	SKZN96C160 - 180L-4G	156.48	12 200	105 900	758	M192	



6. SK4


P 30.0 kW
n₁ 1465 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
160.3	1.40	1787	SKZN66C9 - 200L-4G	9,14	4 500	23 700	348	M174	
168.1	2.30	1705	SKZN76C9 - 200L-4G	8.72	6 700	28 000	441	M180	
168.3	2.90	1702	SKZN86C9 - 200L-4G	8.70	11 600	40 700	595	M186	
149.6	1.30	1916	SKZN66C10 - 200L-4G	9.80	4 400	23 900	348	M174	
152.4	2.10	1880	SKZN76C10 - 200L-4G	9.61	6 500	28 600	441	M180	
151.7	2.80	1889	SKZN86C10 - 200L-4G	9.66	11 700	41 700	595	M186	
133.4	1.10	2148	SKZN66C11.2 - 200L-4G	10.98	3 900	24 300	348	M174	
132.3	1.80	2165	SKZN76C11.2 - 200L-4G	11.07	6 300	29 300	441	M180	
127.3	2.50	2251	SKZN86C11.2 - 200L-4G	11.51	11 800	43 400	595	M186	
115.9	0.99	2473	SKZN66C12.5 - 200L-4G	12.64	3 300	24 600	348	M174	
117.1	1.60	2446	SKZN76C12.5 - 200L-4G	12.51	6 000	29 900	441	M180	
118.5	2.50	2417	SKZN86C12.5 - 200L-4G	12.36	11 800	44 100	595	M186	
102.2	0.87	2803	SKZN66C14 - 200L-4G	14.33	2 700	24 900	348	M174	
106.1	1.50	2700	SKZN76C14 - 200L-4G	13.81	5 800	30 400	441	M180	
102.5	2.20	2794	SKZN86C14 - 200L-4G	14.29	11 700	45 500	595	M186	
93.5	1.30	3064	SKZN76C16 - 200L-4G	15.67	5 300	31 000	441	M180	
91.7	2.00	3125	SKZN86C16 - 200L-4G	15.98	11 500	46 600	595	M186	
83.3	2.30	3440	SKZN76C18 - 200L-4G	17.59	4 800	31 400	441	M180	
82.5	2.90	3474	SKZN86C18 - 200L-4G	17.77	11 300	47 500	595	M186	
74.9	1.20	3824	SKZN66C20 - 200L-4G	19.55	900	25 100	348	M174	
75.5	2.10	3794	SKZN76C20 - 200L-4G	19.40	4 300	31 800	441	M180	
74.3	2.80	3856	SKZN86C20 - 200L-4G	19.72	11 100	48 500	595	M186	
66.8	1.10	4288	SKZN66C22.4 - 200L-4G	21.93		25 000	348	M174	
65.6	1.80	4369	SKZN76C22.4 - 200L-4G	22.34	3 400	32 200	441	M180	
62.3	2.50	4595	SKZN86C22.4 - 200L-4G	23.50	10 400	50 000	595	M186	
58.0	0.98	4935	SKZN66C25 - 200L-4G	25.24		24 700	348	M174	
58.0	1.60	4936	SKZN76C25 - 200L-4G	25.24	2 500	32 400	441	M180	
58.1	2.50	4934	SKZN86C25 - 200L-4G	25.23	10 100	50 600	595	M186	
51.2	0.87	5595	SKZN66C28 - 200L-4G	28.61		24 300	348	M174	
52.6	1.50	5448	SKZN76C28 - 200L-4G	27.86	1 600	32 500	441	M180	
50.2	2.20	5704	SKZN86C28 - 200L-4G	29.17	9 200	51 700	595	M186	
46.3	1.30	6183	SKZN76C31.5 - 200L-4G	31.62	300	32 500	441	M180	
44.9	2.00	6380	SKZN86C31.5 - 200L-4G	32.63	8 400	52 400	595	M186	
41.2	1.20	6950	SKZN76C35.5 - 200L-4G	35.54		32 400	441	M180	
41.6	1.90	6889	SKZN86C35.5 - 200L-4G	35.23	7 700	52 900	595	M186	
42.0	2.90	6821	SKZN96C35.5 - 200L-4G	34.88	21 100	79 900	768	M192	
37.1	1.00	7725	SKZN76C40 - 200L-4G	39.50		32 100	441	M180	
36.9	1.70	7757	SKZN86C40 - 200L-4G	39.67	6 500	53 500	595	M186	
36.5	2.50	7855	SKZN96C40 - 200L-4G	40.17	20 700	82 200	768	M192	
32.6	0.91	8793	SKZN76C45 - 200L-4G	44.97		31 600	441	M180	
32.6	1.50	8784	SKZN86C45 - 200L-4G	44.92	5 000	54 000	595	M186	
33.1	2.30	8668	SKZN96C45 - 200L-4G	44.32	20 200	83 700	768	M192	
30.2	0.84	9493	SKZN76C50 - 200L-4G	48.55		31 100	441	M180	
29.9	1.40	9578	SKZN86C50 - 200L-4G	48.98	3 700	54 300	595	M186	
29.4	2.10	9740	SKZN96C50 - 200L-4G	49.81	19 600	85 400	768	M192	
26.1	1.20	10984	SKZN86C56 - 200L-4G	56.17	1 400	54 500	595	M186	
26.4	1.80	10845	SKZN96C56 - 200L-4G	55.46	18 800	86 900	768	M192	
22.5	1.00	12726	SKZN86C63 - 200L-4G	65.08		54 300	595	M186	
23.6	1.60	12151	SKZN96C63 - 200L-4G	62.14	17 700	88 400	768	M192	
20.3	0.92	14140	SKZN86C71 - 200L-4G	72.31		53 900	595	M186	
20.9	1.50	13717	SKZN96C71 - 200L-4G	70.15	16 300	89 800	768	M192	
19.0	0.86	15104	SKZN86C80 - 200L-4G	77.24		53 600	595	M186	



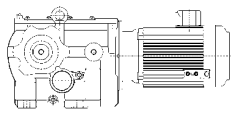
6. SK4

P	30.0 kW
n₁	1465 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
18.6	1.30	15437	SKZN96C80 - 200L-4G	78.94	14 600	91 000	768	M192
16.1	1.10	17806	SKZN96C90 - 200L-4G	91.06	12 000	92 100	768	M192
14.7	1.00	19462	SKZN96C100 - 200L-4G	99.53	10 100	92 700	768	M192
13.6	0.95	21104	SKZN96C112 - 200L-4G	107.92	8 200	93 000	768	M192
11.5	0.80	24914	SKZN96C125 - 200L-4G	127.41	3 400	93 300	768	M192


P	37.0 kW
n₁	1470 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg	
168.6	1.90	2095	SKZN76C9 - 225S-4G	8.72	5 500	27 100	511	M180
168.9	2.40	2092	SKZN86C9 - 225S-4G	8.70	10 600	39 800	665	M186
152.9	1.70	2311	SKZN76C10 - 225S-4G	9.61	5 300	27 500	511	M180
152.2	2.30	2322	SKZN86C10 - 225S-4G	9.66	10 600	40 800	665	M186
132.8	1.50	2661	SKZN76C11.2 - 225S-4G	11.07	4 900	28 100	511	M180
127.7	2.10	2767	SKZN86C11.2 - 225S-4G	11.51	10 400	42 300	665	M186
117.5	1.30	3006	SKZN76C12.5 - 225S-4G	12.51	4 500	28 600	511	M180
118.9	2.00	2971	SKZN86C12.5 - 225S-4G	12.36	10 300	42 900	665	M186
106.5	1.20	3318	SKZN76C14 - 225S-4G	13.81	4 000	28 900	511	M180
102.9	1.80	3434	SKZN86C14 - 225S-4G	14.29	10 000	44 100	665	M186
104.8	3.00	3370	SKZN96C14 - 225S-4G	14.02	18 900	63 800	838	M192
93.8	1.10	3766	SKZN76C16 - 225S-4G	15.67	3 400	29 300	511	M180
92.0	1.70	3841	SKZN86C16 - 225S-4G	15.98	9 700	45 000	665	M186
91.9	2.60	3845	SKZN96C16 - 225S-4G	16.00	19 100	65 800	838	M192
83.6	1.90	4228	SKZN76C18 - 225S-4G	17.59	2 600	29 500	511	M180
82.7	2.40	4270	SKZN86C18 - 225S-4G	17.77	9 300	45 800	665	M186
75.8	1.70	4664	SKZN76C20 - 225S-4G	19.40	1 900	29 700	511	M180
74.5	2.30	4740	SKZN86C20 - 225S-4G	19.72	8 800	46 600	665	M186
65.8	1.50	5370	SKZN76C22.4 - 225S-4G	22.34	600	29 700	511	M180
62.6	2.10	5648	SKZN86C22.4 - 225S-4G	23.50	7 700	47 700	665	M186
58.2	1.30	6067	SKZN76C25 - 225S-4G	25.24		29 700	511	M180
58.3	2.00	6065	SKZN86C25 - 225S-4G	25.23	7 100	48 200	665	M186
52.8	1.20	6697	SKZN76C28 - 225S-4G	27.86		29 500	511	M180
50.4	1.80	7011	SKZN86C28 - 225S-4G	29.17	5 800	48 900	665	M186
52.6	3.00	6712	SKZN96C28 - 225S-4G	27.93	18 800	74 200	838	M192
46.5	1.10	7600	SKZN76C31.5 - 225S-4G	31.62		29 100	511	M180
45.1	1.70	7842	SKZN86C31.5 - 225S-4G	32.63	4 600	49 300	665	M186
46.1	2.60	7658	SKZN96C31.5 - 225S-4G	31.86	18 300	76 000	838	M192
41.4	0.94	8542	SKZN76C35.5 - 225S-4G	35.54		28 500	511	M180
41.7	1.50	8467	SKZN86C35.5 - 225S-4G	35.23	3 600	49 500	665	M186
42.1	2.40	8384	SKZN96C35.5 - 225S-4G	34.88	17 900	77 200	838	M192
37.1	1.40	9535	SKZN86C40 - 225S-4G	39.67	1 900	49 700	665	M186
36.6	2.10	9655	SKZN96C40 - 225S-4G	40.17	17 000	79 100	838	M192
32.7	1.20	10796	SKZN86C45 - 225S-4G	44.92		49 800	665	M186
33.2	1.90	10654	SKZN96C45 - 225S-4G	44.32	16 200	80 300	838	M192
29.5	1.70	11972	SKZN96C50 - 225S-4G	49.81	15 000	81 600	838	M192
22.6	0.83	15642	SKZN86C63 - 225S-4G	65.08		48 100	665	M186
21.0	1.20	16860	SKZN96C71 - 225S-4G	70.15	9 900	84 400	838	M192
18.6	1.10	18974	SKZN96C80 - 225S-4G	78.94	7 400	85 000	838	M192




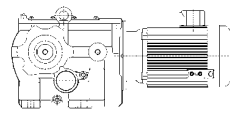
6. SK4

P 37.0 kW
n₁ 1470 min⁻¹


n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
16.1	0.91	21886	SKZN96C90 - 225S-4G	91.06	3 700	85 300	838	M192	
14.8	0.84	23922	SKZN96C100 - 225S-4G	99.53	1 100	85 200	838	M192	


P 45.0 kW
n₁ 1470 min⁻¹

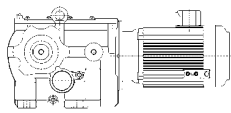
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
168.6	1.50	2548	SKZN76C9 - 225M-4G	8.72	4 300	26 000	541	M180	
168.9	2.00	2544	SKZN86C9 - 225M-4G	8.70	9 400	38 900	695	M186	
152.9	1.40	2811	SKZN76C10 - 225M-4G	9.61	3 900	26 300	541	M180	
152.2	1.90	2824	SKZN86C10 - 225M-4G	9.66	9 300	39 700	695	M186	
132.8	1.20	3237	SKZN76C11.2 - 225M-4G	11.07	3 300	26 700	541	M180	
127.7	1.70	3365	SKZN86C11.2 - 225M-4G	11.51	8 900	41 000	695	M186	
129.6	3.00	3315	SKZN96C11.2 - 225M-4G	11.34	17 200	59 600	868	M192	
117.5	1.10	3656	SKZN76C12.5 - 225M-4G	12.51	2 700	27 000	541	M180	
118.9	1.70	3613	SKZN86C12.5 - 225M-4G	12.36	8 600	41 500	695	M186	
114.2	2.70	3762	SKZN96C12.5 - 225M-4G	12.87	17 400	61 400	868	M192	
106.5	0.98	4036	SKZN76C14 - 225M-4G	13.81	2 000	27 200	541	M180	
102.9	1.50	4177	SKZN86C14 - 225M-4G	14.29	8 100	42 600	695	M186	
104.8	2.40	4099	SKZN96C14 - 225M-4G	14.02	17 400	62 600	868	M192	
93.8	0.86	4580	SKZN76C16 - 225M-4G	15.67	1 100	27 300	541	M180	
92.0	1.40	4672	SKZN86C16 - 225M-4G	15.98	7 500	43 300	695	M186	
91.9	2.10	4677	SKZN96C16 - 225M-4G	16.00	17 400	64 400	868	M192	
83.6	1.50	5143	SKZN76C18 - 225M-4G	17.59	100	27 300	541	M180	
82.7	2.00	5193	SKZN86C18 - 225M-4G	17.77	6 900	43 900	695	M186	
75.8	1.40	5672	SKZN76C20 - 225M-4G	19.40		27 300	541	M180	
74.5	1.90	5765	SKZN86C20 - 225M-4G	19.72	6 100	44 400	695	M186	
65.8	1.20	6531	SKZN76C22.4 - 225M-4G	22.34		27 000	541	M180	
62.6	1.70	6870	SKZN86C22.4 - 225M-4G	23.50	4 500	45 200	695	M186	
65.1	3.00	6603	SKZN96C22.4 - 225M-4G	22.59	16 800	69 100	868	M192	
58.2	1.10	7378	SKZN76C25 - 225M-4G	25.24		26 600	541	M180	
58.3	1.70	7376	SKZN86C25 - 225M-4G	25.23	3 800	45 400	695	M186	
57.4	2.70	7493	SKZN96C25 - 225M-4G	25.63	16 300	70 700	868	M192	
52.8	0.98	8144	SKZN76C28 - 225M-4G	27.86		26 000	541	M180	
50.4	1.50	8527	SKZN86C28 - 225M-4G	29.17	1 900	45 700	695	M186	
52.6	2.40	8164	SKZN96C28 - 225M-4G	27.93	15 800	71 700	868	M192	
46.5	0.87	9243	SKZN76C31.5 - 225M-4G	31.62		25 200	541	M180	
45.1	1.40	9538	SKZN86C31.5 - 225M-4G	32.63	200	45 800	695	M186	
46.1	2.10	9314	SKZN96C31.5 - 225M-4G	31.86	15 000	73 300	868	M192	
41.7	1.30	10298	SKZN86C35.5 - 225M-4G	35.23		45 700	695	M186	
42.1	2.00	10197	SKZN96C35.5 - 225M-4G	34.88	14 200	74 200	868	M192	
37.1	1.10	11596	SKZN86C40 - 225M-4G	39.67		45 400	695	M186	
36.6	1.70	11743	SKZN96C40 - 225M-4G	40.17	12 800	75 600	868	M192	
32.7	0.99	13131	SKZN86C45 - 225M-4G	44.92		44 900	695	M186	
33.2	1.50	12957	SKZN96C45 - 225M-4G	44.32	11 500	76 400	868	M192	
29.5	1.40	14560	SKZN96C50 - 225M-4G	49.81	9 800	77 300	868	M192	
21.0	0.98	20506	SKZN96C71 - 225M-4G	70.15	2 500	78 400	868	M192	
18.6	0.87	23077	SKZN96C80 - 225M-4G	78.94		78 200	868	M192	



6. SK4


P 55.0 kW n_1 1475 min⁻¹									
n_{2ex} min ⁻¹	SF	T_{2m} Nm	Type	i_{ex}	F_{rN} N	F_{rN-G} N	m kg		
169.2	1.30	3104	SKZN76C9U - 250M4	8.72	2 700	24 600	640.1	M228	
169.5	1.60	3099	SKZN86C9U - 250M4	8.70	8 000	37 700	809.5	M234	
153.4	1.20	3424	SKZN76C10U - 250M4	9.61	2 200	24 800	640.1	M228	
152.7	1.50	3440	SKZN86C10U - 250M4	9.66	7 600	38 400	809.5	M234	
147.3	2.80	3565	SKZN96C10U - 250M4	10.01	15 700	56 700	999.8	M240	
133.2	1.00	3942	SKZN76C11.2U - 250M4	11.07	1 300	25 000	640.1	M228	
128.1	1.40	4099	SKZN86C11.2U - 250M4	11.51	6 900	39 500	809.5	M234	
130.1	2.50	4038	SKZN96C11.2U - 250M4	11.34	15 700	58 300	999.8	M240	
117.9	0.89	4454	SKZN76C12.5U - 250M4	12.51	400	25 100	640.1	M228	
119.3	1.40	4401	SKZN86C12.5U - 250M4	12.36	6 600	39 900	809.5	M234	
114.6	2.20	4583	SKZN96C12.5U - 250M4	12.87	15 700	60 000	999.8	M240	
106.8	0.81	4916	SKZN76C14U - 250M4	13.81		25 100	640.1	M228	
103.2	1.20	5088	SKZN86C14U - 250M4	14.29	5 700	40 600	809.5	M234	
105.2	2.00	4993	SKZN96C14U - 250M4	14.02	15 600	61 000	999.8	M240	
92.3	1.10	5691	SKZN86C16U - 250M4	15.98	4 800	41 100	809.5	M234	
92.2	1.80	5697	SKZN96C16U - 250M4	16.00	15 300	62 700	999.8	M240	
83.8	1.30	6264	SKZN76C18U - 250M4	17.59		24 600	640.1	M228	
83.0	1.60	6326	SKZN86C18U - 250M4	17.77	3 900	41 500	809.5	M234	
76.0	1.20	6909	SKZN76C20U - 250M4	19.40		24 300	640.1	M228	
74.8	1.50	7022	SKZN86C20U - 250M4	19.72	2 800	41 800	809.5	M234	
74.0	2.80	7101	SKZN96C20U - 250M4	19.94	14 500	65 200	999.8	M240	
66.0	1.00	7956	SKZN76C22.4U - 250M4	22.34		23 500	640.1	M228	
62.8	1.40	8368	SKZN86C22.4U - 250M4	23.50	600	42 000	809.5	M234	
65.3	2.50	8043	SKZN96C22.4U - 250M4	22.59	13 800	66 600	999.8	M240	
58.4	0.89	8987	SKZN76C25U - 250M4	25.24		22 600	640.1	M228	
58.5	1.40	8985	SKZN86C25U - 250M4	25.23		42 000	809.5	M234	
57.5	2.20	9127	SKZN96C25U - 250M4	25.63	12 900	67 900	999.8	M240	
52.9	0.81	9921	SKZN76C28U - 250M4	27.86		21 700	640.1	M228	
50.6	1.20	10387	SKZN86C28U - 250M4	29.17		41 800	809.5	M234	
52.8	2.00	9944	SKZN96C28U - 250M4	27.93	12 200	68 700	999.8	M240	
45.2	1.10	11618	SKZN86C31.5U - 250M4	32.63		41 300	809.5	M234	
46.3	1.80	11345	SKZN96C31.5U - 250M4	31.86	10 800	69 800	999.8	M240	
41.9	1.00	12543	SKZN86C35.5U - 250M4	35.23		40 900	809.5	M234	
42.3	1.60	12421	SKZN96C35.5U - 250M4	34.88	9 600	70 500	999.8	M240	
37.2	0.92	14125	SKZN86C40U - 250M4	39.67		40 000	809.5	M234	
36.7	1.40	14304	SKZN96C40U - 250M4	40.17	7 500	71 300	999.8	M240	
32.8	0.81	15994	SKZN86C45U - 250M4	44.92		38 700	809.5	M234	
33.3	1.30	15783	SKZN96C45U - 250M4	44.32	5 700	71 700	999.8	M240	
29.6	1.10	17736	SKZN96C50U - 250M4	49.81	3 300	71 900	999.8	M240	
26.6	1.00	19748	SKZN96C56U - 250M4	55.46	600	71 900	999.8	M240	
23.7	0.90	22125	SKZN96C63U - 250M4	62.14		71 600	999.8	M240	
21.0	0.80	24978	SKZN96C71U - 250M4	70.15		70 800	999.8	M240	

P 75.0 kW n_1 1480 min⁻¹									
n_{2ex} min ⁻¹	SF	T_{2m} Nm	Type	i_{ex}	F_{rN} N	F_{rN-G} N	m kg		
169.8	0.92	4219	SKZN76C9U - 280S4	8.72		22 000	785.1	M228	
170.1	1.20	4211	SKZN86C9U - 280S4	8.70	5 100	35 300	954.5	M234	




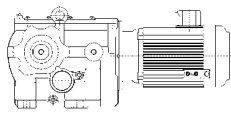
6. SK4

P 75.0 kW
n₁ 1480 min⁻¹

n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
167.3	2.30	4281	SKZN96C9U - 280S4	8.85	13 300	53 200	1144.8	M240	
153.9	0.85	4653	SKZN76C10U - 280S4	9.61		21 900	785.1	M228	
153.2	1.10	4675	SKZN86C10U - 280S4	9.66	4 400	35 800	954.5	M234	
147.8	2.10	4845	SKZN96C10U - 280S4	10.01	13 100	54 600	1144.8	M240	
128.6	1.00	5571	SKZN86C11.2U - 280S4	11.51	3 100	36 300	954.5	M234	
130.5	1.80	5488	SKZN96C11.2U - 280S4	11.34	12 800	55 900	1144.8	M240	
119.7	1.00	5981	SKZN86C12.5U - 280S4	12.36	2 500	36 500	954.5	M234	
115.0	1.60	6228	SKZN96C12.5U - 280S4	12.87	12 300	57 200	1144.8	M240	
103.6	0.91	6915	SKZN86C14U - 280S4	14.29	900	36 700	954.5	M234	
105.5	1.50	6786	SKZN96C14U - 280S4	14.02	11 900	58 000	1144.8	M240	
92.6	0.82	7734	SKZN86C16U - 280S4	15.98		36 800	954.5	M234	
92.5	1.30	7742	SKZN96C16U - 280S4	16.00	11 100	59 200	1144.8	M240	
84.1	0.93	8513	SKZN76C18U - 280S4	17.59		19 200	785.1	M228	
83.3	1.20	8597	SKZN86C18U - 280S4	17.77		36 700	954.5	M234	
84.0	2.30	8526	SKZN96C18U - 280S4	17.62	10 400	60 000	1144.8	M240	
76.3	0.85	9390	SKZN76C20U - 280S4	19.40		18 300	785.1	M228	
75.0	1.10	9543	SKZN86C20U - 280S4	19.72		36 400	954.5	M234	
74.2	2.10	9650	SKZN96C20U - 280S4	19.94	9 300	60 900	1144.8	M240	
63.0	1.00	11372	SKZN86C22.4U - 280S4	23.50		35 600	954.5	M234	
65.5	1.80	10931	SKZN96C22.4U - 280S4	22.59	7 900	61 700	1144.8	M240	
58.7	1.00	12210	SKZN86C25U - 280S4	25.23		35 100	954.5	M234	
57.7	1.60	12403	SKZN96C25U - 280S4	25.63	6 200	62 400	1144.8	M240	
50.7	0.90	14116	SKZN86C28U - 280S4	29.17		33 900	954.5	M234	
53.0	1.50	13514	SKZN96C28U - 280S4	27.93	4 900	62 700	1144.8	M240	
45.4	0.82	15789	SKZN86C31.5U - 280S4	32.63		32 500	954.5	M234	
46.5	1.30	15419	SKZN96C31.5U - 280S4	31.86	2 500	63 000	1144.8	M240	
42.4	1.20	16881	SKZN96C35.5U - 280S4	34.88	600	63 000	1144.8	M240	
36.8	1.00	19439	SKZN96C40U - 280S4	40.17		62 600	1144.8	M240	
33.4	0.93	21449	SKZN96C45U - 280S4	44.32		62 100	1144.8	M240	
29.7	0.83	24103	SKZN96C50U - 280S4	49.81		61 200	1144.8	M240	

P 90.0 kW
n₁ 1480 min⁻¹

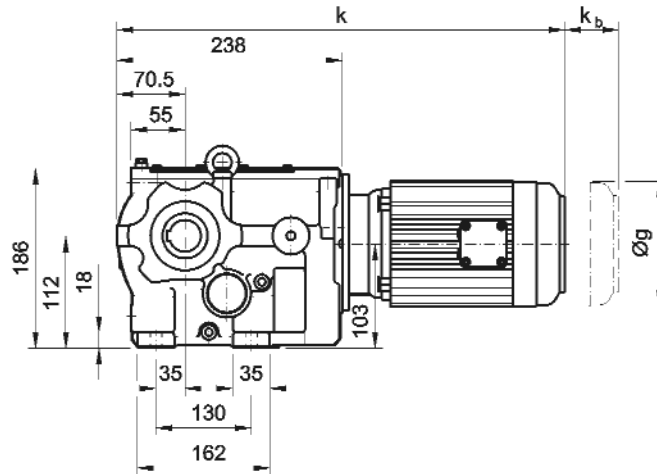
n _{2ex} min ⁻¹	SF	T _{2m} Nm	Type	i _{ex}	F _{rN} N	F _{rN-G} N	m kg		
170.1	0.99	5053	SKZN86C9U - 280M4	8.70	2 900	33 600	1014.5	M234	
167.3	1.90	5137	SKZN96C9U - 280M4	8.85	11 600	51 800	1204.8	M240	
153.2	0.93	5610	SKZN86C10U - 280M4	9.66	2 000	33 800	1014.5	M234	
147.8	1.70	5815	SKZN96C10U - 280M4	10.01	11 100	52 900	1204.8	M240	
128.6	0.86	6685	SKZN86C11.2U - 280M4	11.51	200	34 000	1014.5	M234	
130.5	1.50	6586	SKZN96C11.2U - 280M4	11.34	10 600	54 000	1204.8	M240	
119.7	0.84	7178	SKZN86C12.5U - 280M4	12.36		34 000	1014.5	M234	
115.0	1.30	7473	SKZN96C12.5U - 280M4	12.87	9 800	55 100	1204.8	M240	
105.5	1.20	8143	SKZN96C14U - 280M4	14.02	9 200	55 700	1204.8	M240	
92.5	1.10	9290	SKZN96C16U - 280M4	16.00	8 000	56 600	1204.8	M240	
83.3	0.99	10316	SKZN86C18U - 280M4	17.77		33 100	1014.5	M234	
84.0	1.90	10232	SKZN96C18U - 280M4	17.62	7 000	57 200	1204.8	M240	
75.0	0.93	11452	SKZN86C20U - 280M4	19.72		32 400	1014.5	M234	



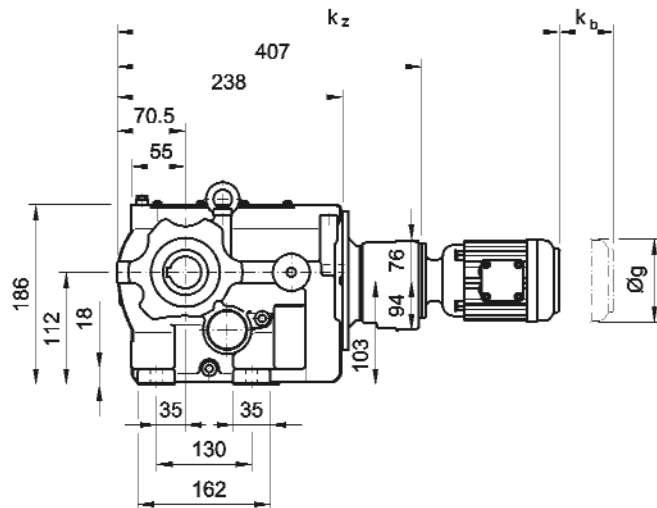
6. SK4

6.5 Maßbilder Getriebemotoren Dimensional drawings of geared motors Schémas dimensionnels des motoréducteurs

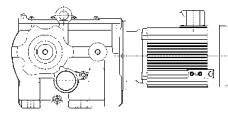
SKZ..26C
63 - 112



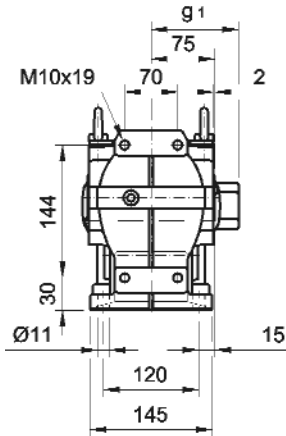
SKZ..26C16B/C
63 - 112



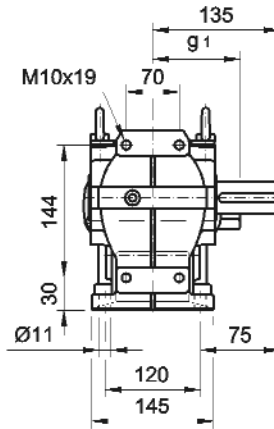
	63	71	80	90S	90L	100	112												
k	471	475	498	540	540	578	591												
ku																			
kz	640	644	667	709	709	747	760												
kb	48	60	71	77	77	80	89												
Øg	121	138	157	177	177	197	219												
g1	96	102	125	133	133	144	165												
Øam																			



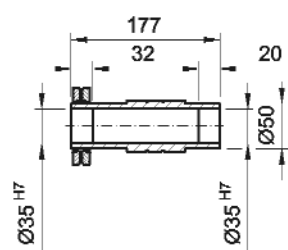
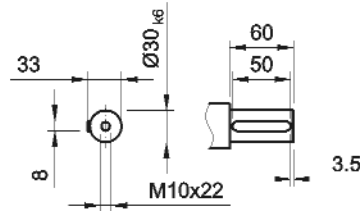
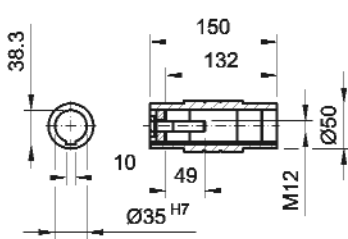
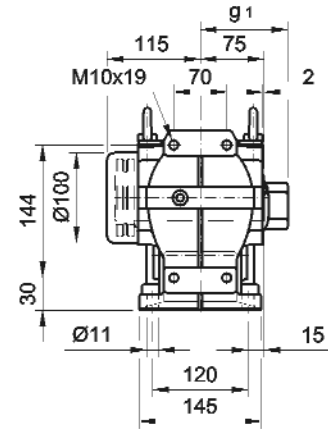
SKZH26..



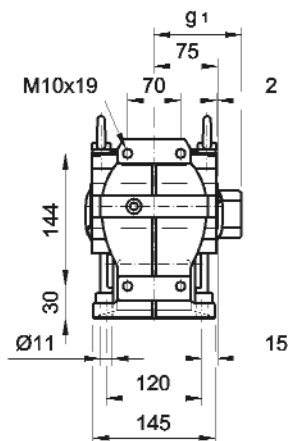
SKZN26..



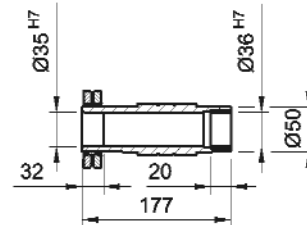
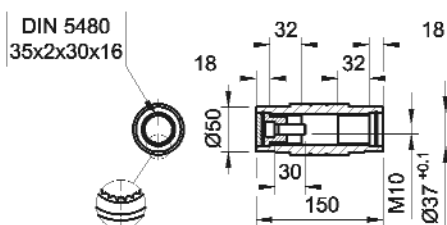
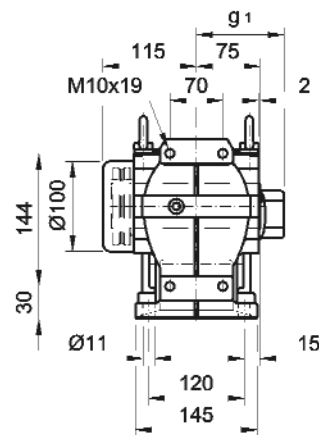
SKZS26..

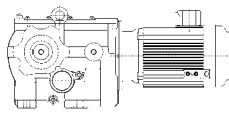


SKZT26..



SKZC26..

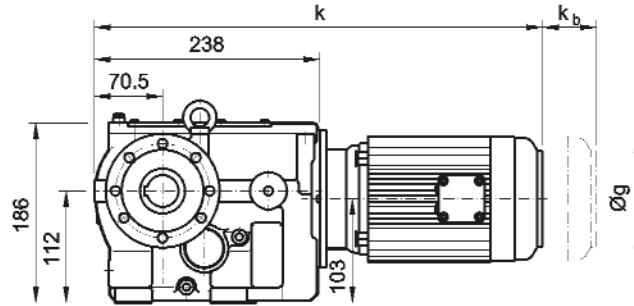




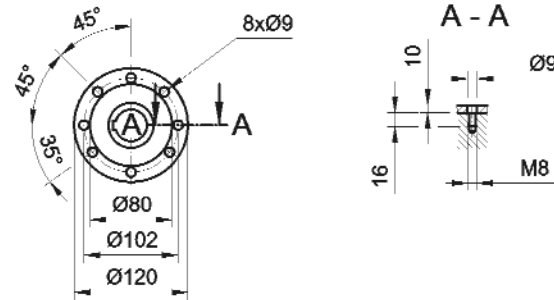
6. SK4

SKT..26C

63 - 112

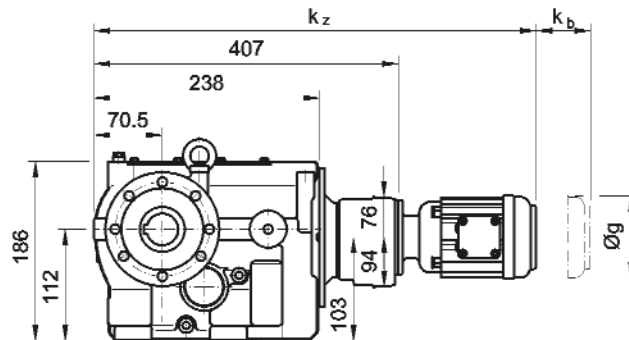


SKT..26..

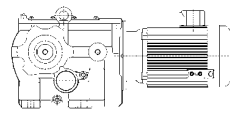


SKT..26C16B/C

63 - 112

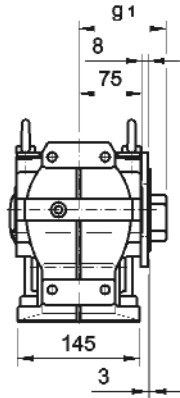


	63	71	80	90S	90L	100	112												
k	471	475	498	540	540	578	591												
ku																			
kz	640	644	667	709	709	747	760												
kb	48	60	71	77	77	80	89												
Øg	121	138	157	177	177	197	219												
g1	96	102	125	133	133	144	165												
Øam																			

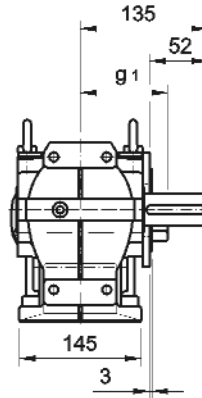


6. SK4

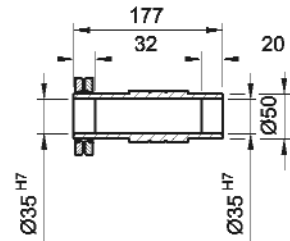
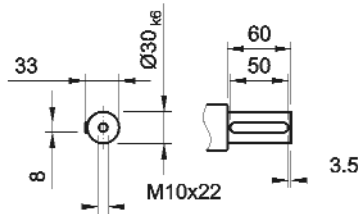
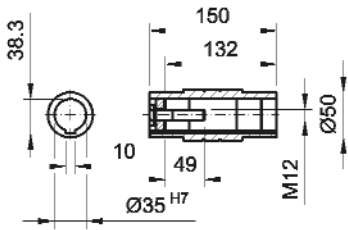
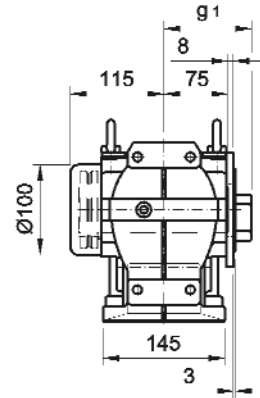
SKTH26..



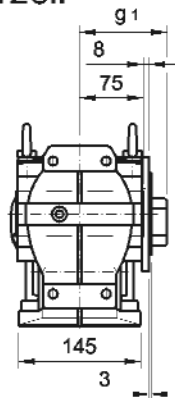
SKTN26..



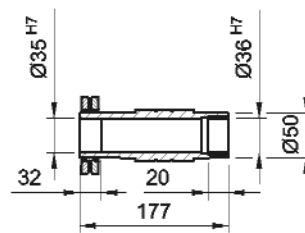
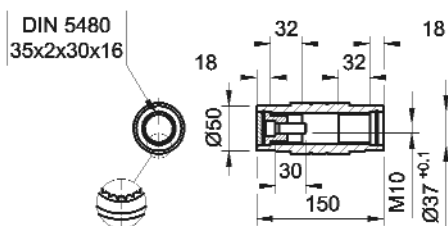
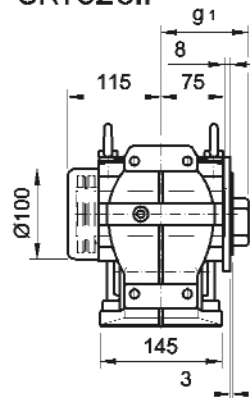
SKTS26..

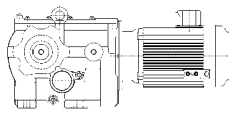


SKTT26..



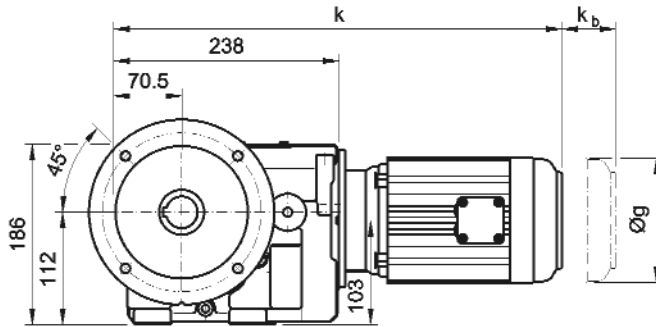
SKTC26..



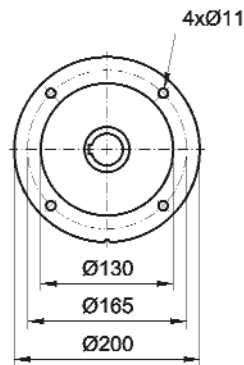


6. SK4

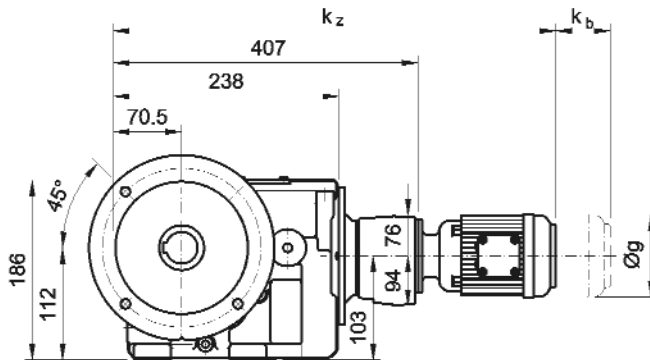
SKF..26C
63 - 112



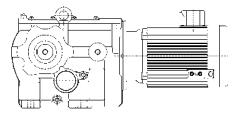
SKF..26..



SKF..26C16B/C
63 - 112

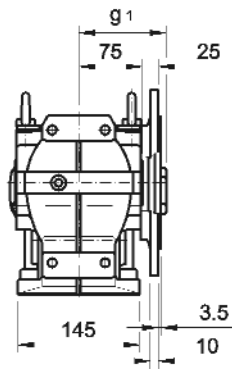


	63	71	80	90S	90L	100	112													
k	471	475	498	540	540	578	591													
ku																				
kz	640	644	667	709	709	747	760													
kb	48	60	71	77	77	80	89													
Øg	121	138	157	177	177	197	219													
g1	96	102	125	133	133	144	165													
Øam																				

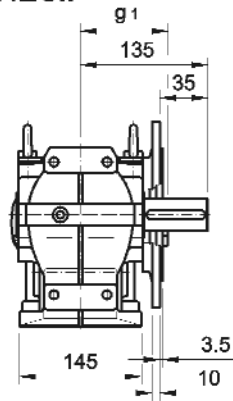


6. SK4

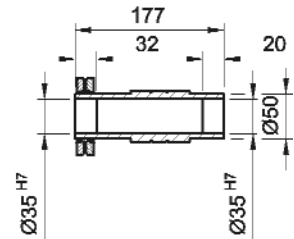
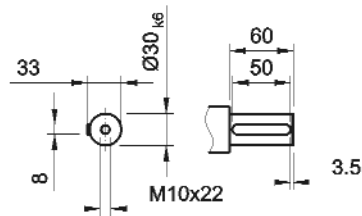
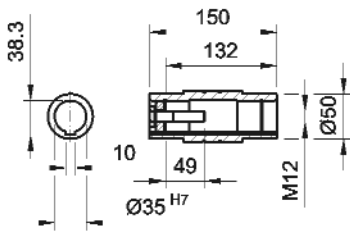
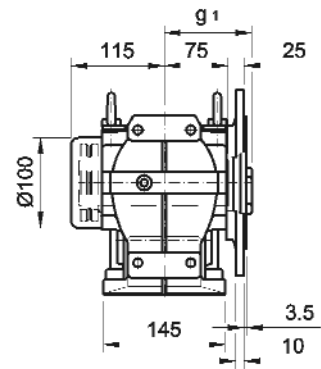
SKFH26..



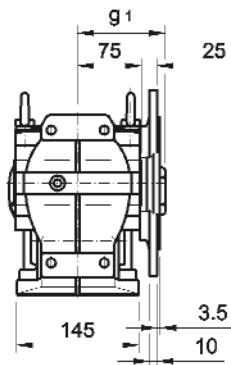
SKFN26..



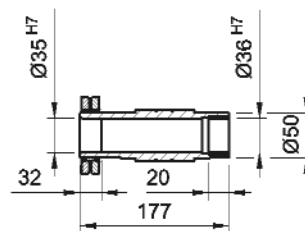
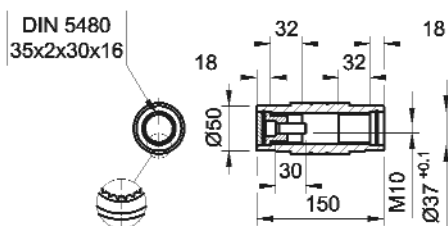
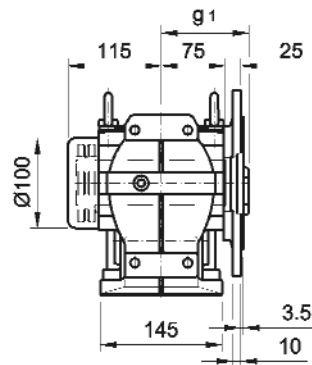
SKFS26..

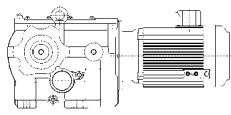


SKFT26..



SKFC26..

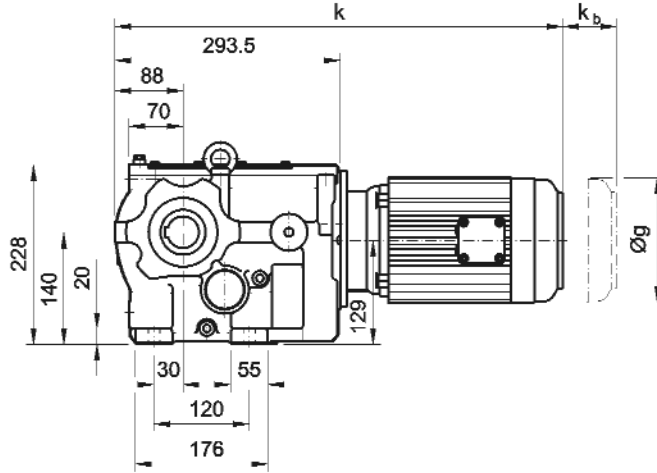




6. SK4

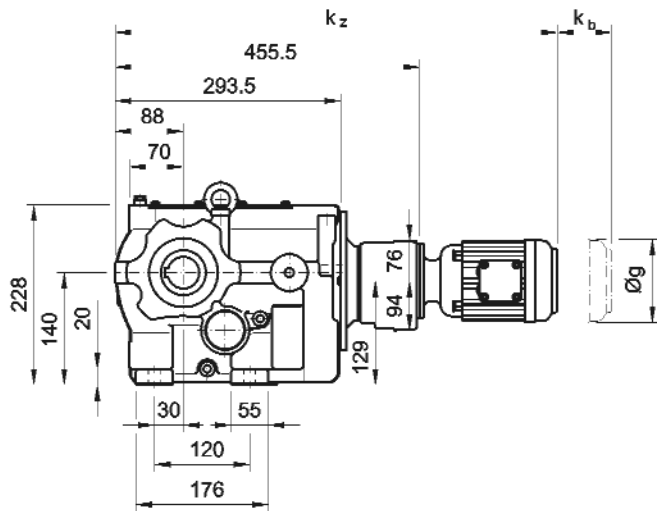
SKZ..36C

63 - 160

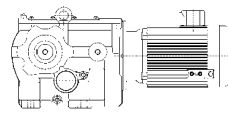


SKZ..36C16B/C

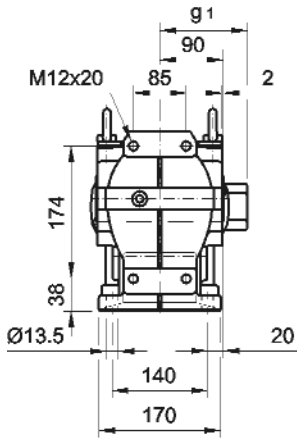
63 - 112



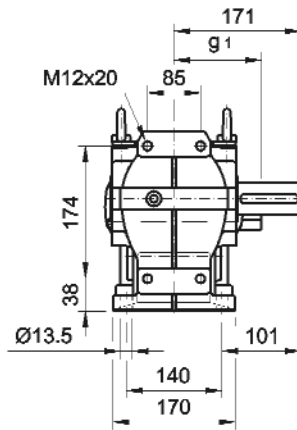
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	518	522	545	587	587	625	638	707	742	742	855	899							
ku																			
kz	689	693	716	758	758	796	809												
kb	48	60	71	77	77	80	89	97	97	97	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			



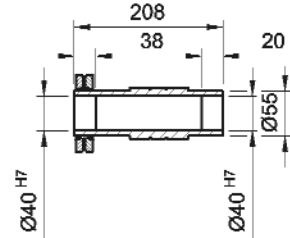
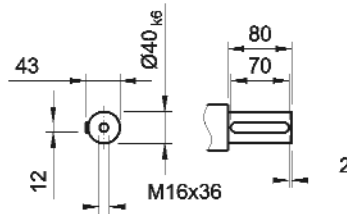
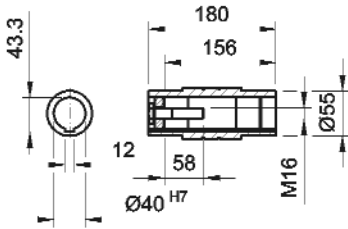
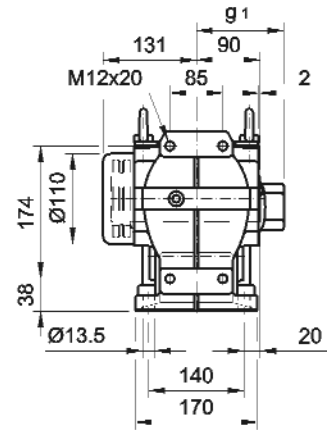
SKZH36..



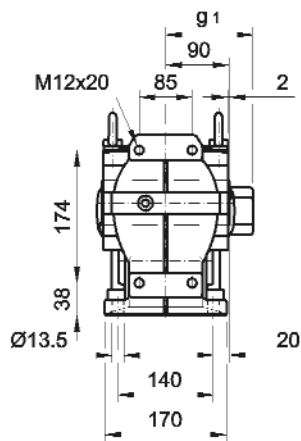
SKZN36..



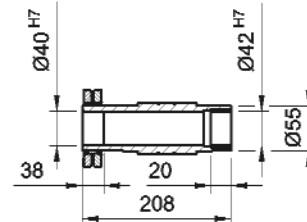
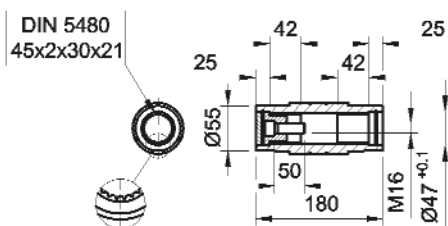
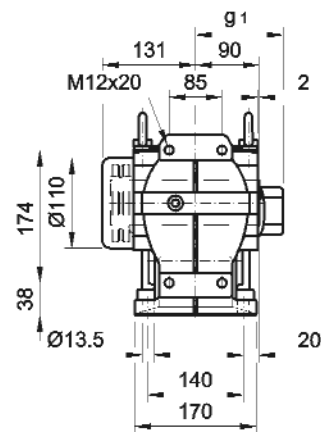
SKZS36..

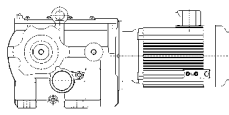


SKZT36..



SKZC36..

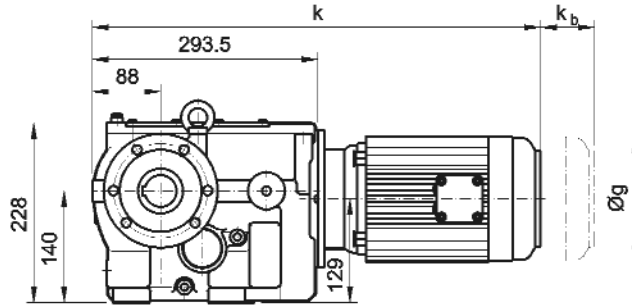




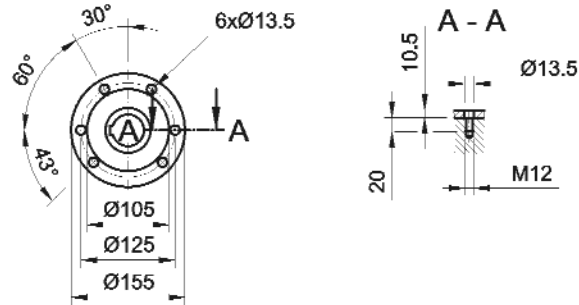
6. SK4

SKT..36C

63 - 160

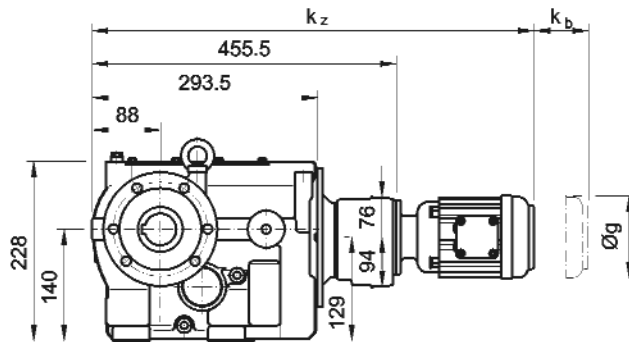


SKT..36..

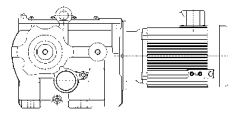


SKT..36C16B/C

63 - 112

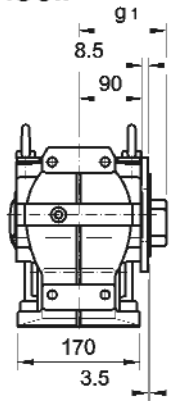


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k	518	522	545	587	587	625	638	707	742	742	855	899							
ku																			
kz	689	693	716	758	758	796	809												
kb	48	60	71	77	77	80	89	97	97	97	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			

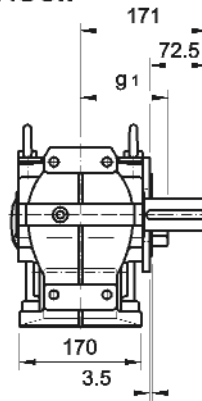


6. SK4

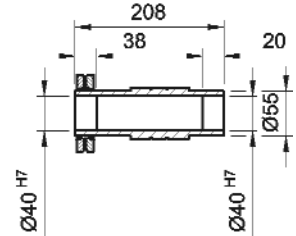
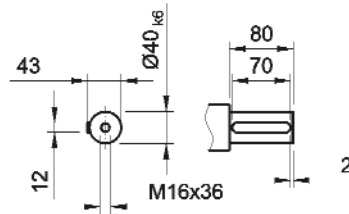
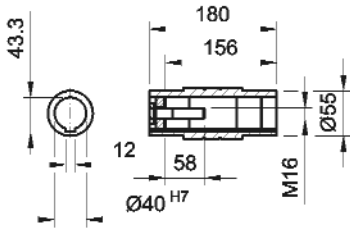
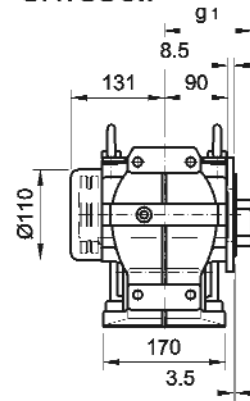
SKTH36..



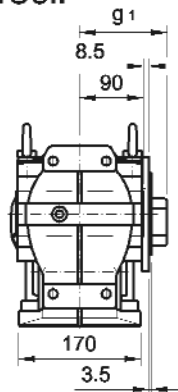
SKTN36..



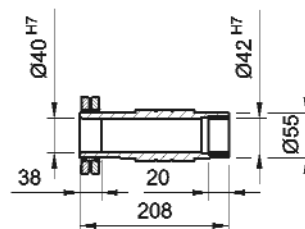
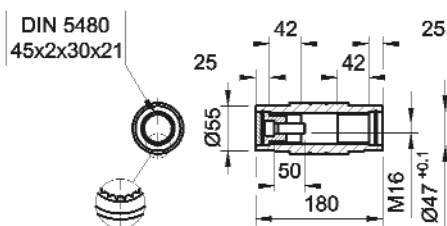
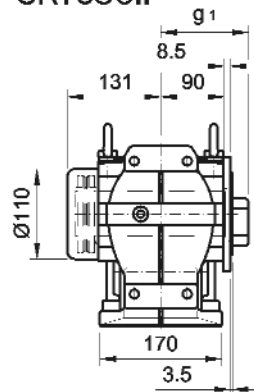
SKTS36..

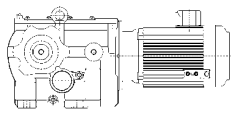


SKTT36..



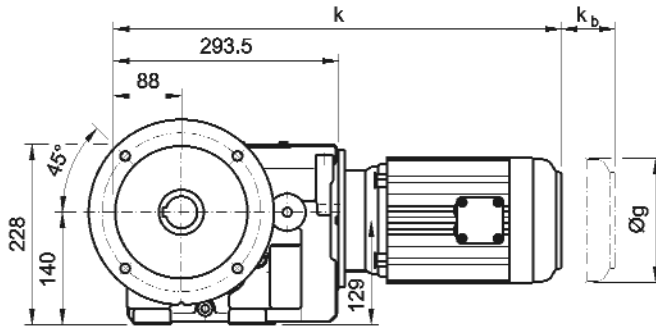
SKTC36..



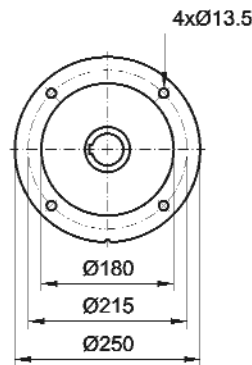


6. SK4

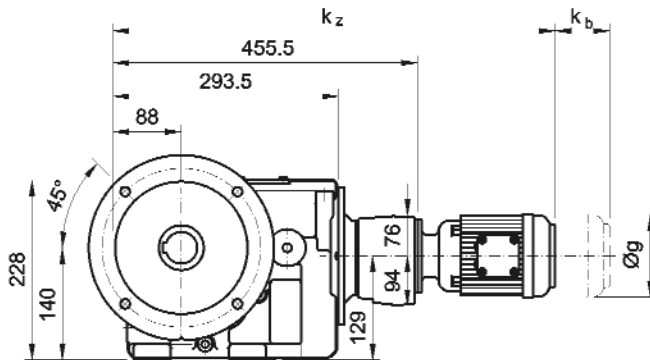
SKF..36C
63 - 160



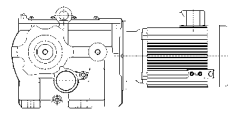
SKF..36..



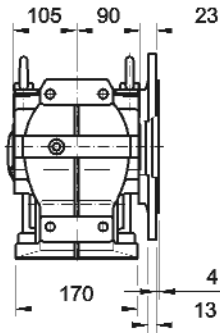
SKF..36C16B/C
63 - 112



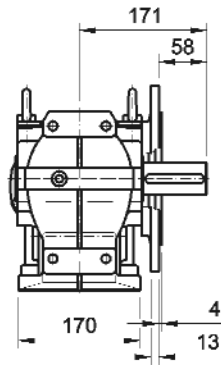
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L								
k	518	522	545	587	587	625	638	707	742	742	855	899								
ku																				
kz	689	693	716	758	758	796	809													
kb	48	60	71	77	77	80	89	97	97	97	77	77								
Øg	121	138	157	177	177	197	219	235	235	235	330	330								
g1	96	102	125	133	133	144	165	182	182	182	287	287								
Øam																				



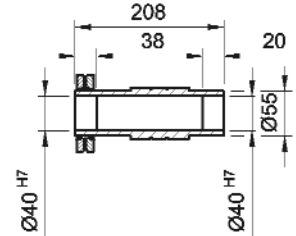
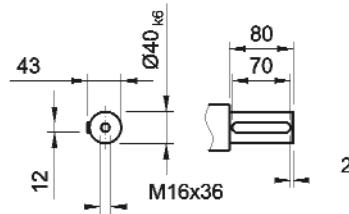
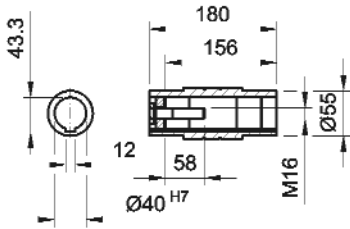
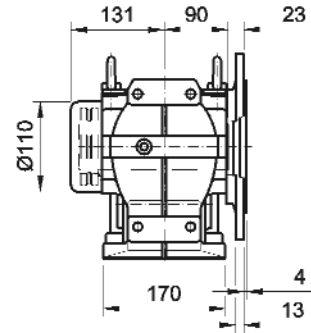
SKFH36C..



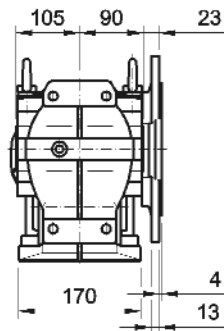
SKFN36C..



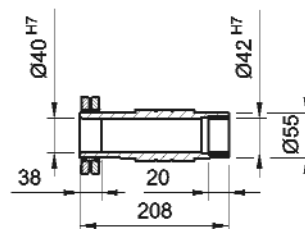
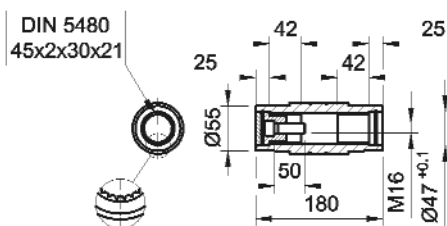
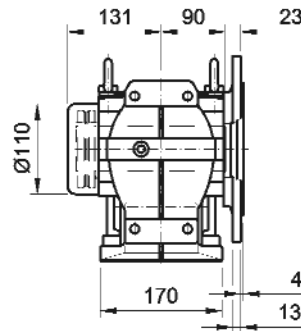
SKFS36C..

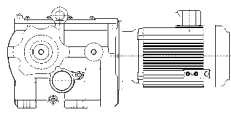


SKFT36C..



SKFC36C..

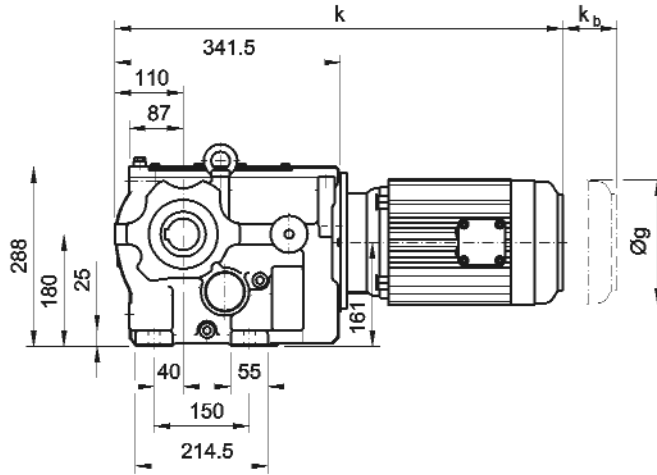




6. SK4

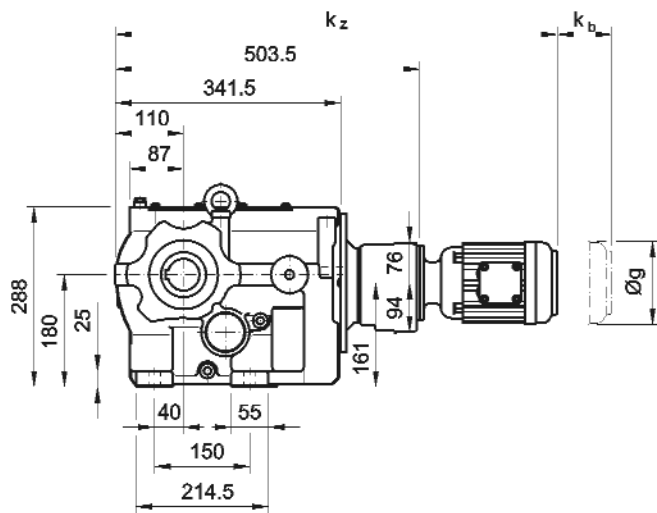
SKZ..46C

71 - 160

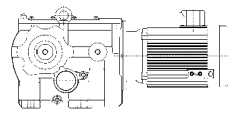


SKZ..46C16B/C

63 - 112

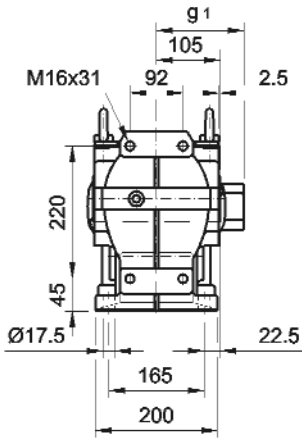


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L							
k		570	593	635	635	673	686	755	790	790	903	947							
ku																			
kz	737	741	764	806	806	844	857												
kb	48	60	71	77	77	80	89	97	97	97	77	77							
Øg	121	138	157	177	177	197	219	235	235	235	330	330							
g1	96	102	125	133	133	144	165	182	182	182	287	287							
Øam																			

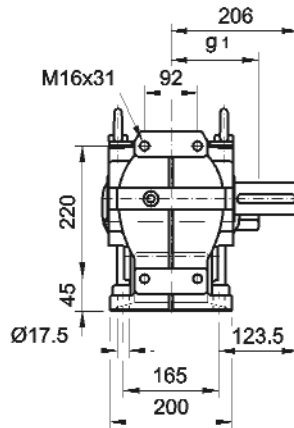


6. SK4

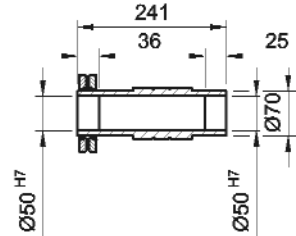
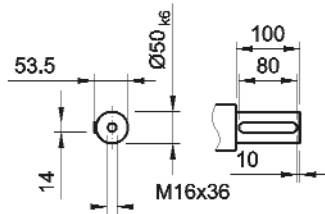
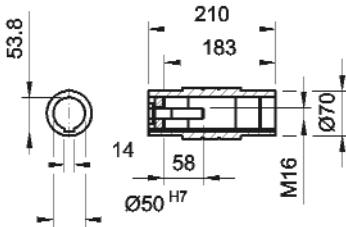
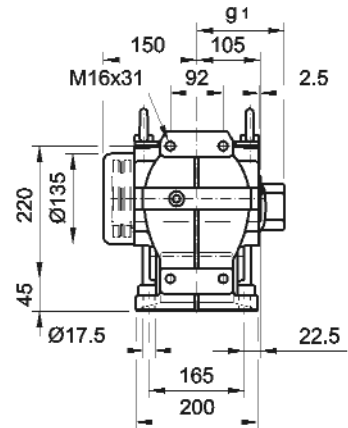
SKZH46..



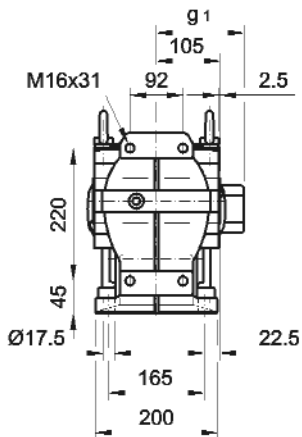
SKZN46..



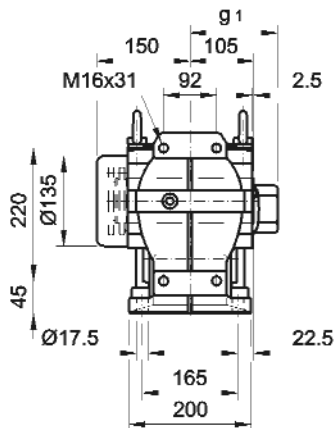
SKZS46..



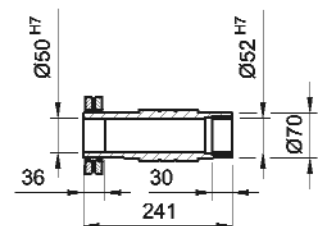
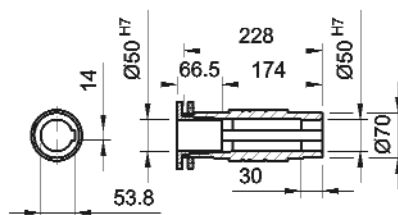
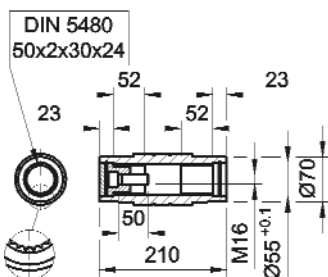
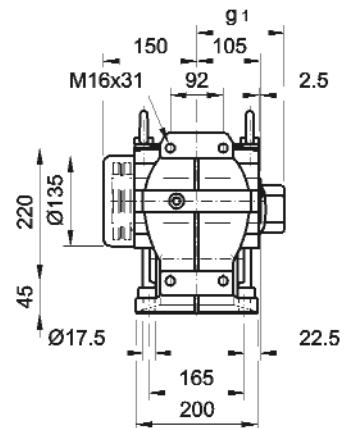
SKZT46..

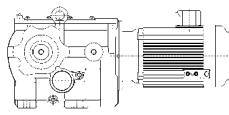


SKZB46..



SKZC46..

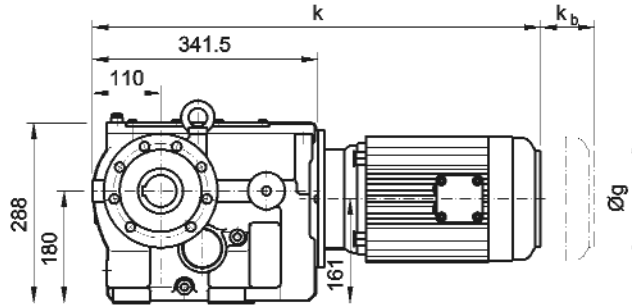




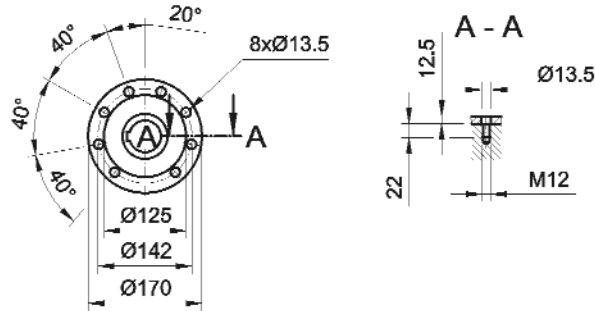
6. SK4

SKT..46C

71 - 160

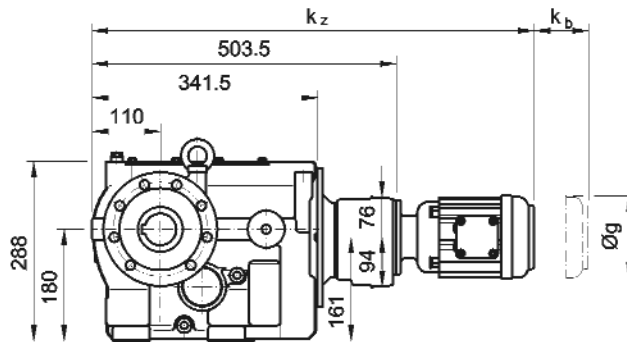


SKT..46..

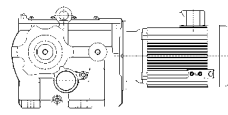


SKT..46C16B/C

63 - 112

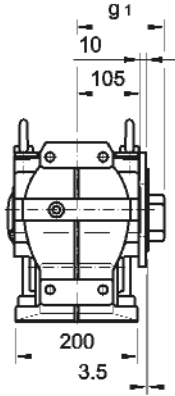


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L								
k		570	593	635	635	673	686	755	790	790	903	947								
ku																				
kz	737	741	764	806	806	844	857													
kb	48	60	71	77	77	80	89	97	97	97	77	77								
Øg	121	138	157	177	177	197	219	235	235	235	330	330								
g1	96	102	125	133	133	144	165	182	182	182	287	287								
Øam																				

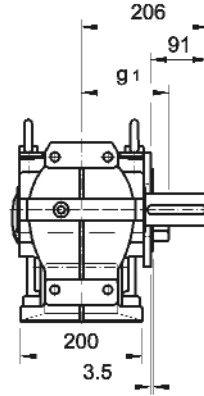


6. SK4

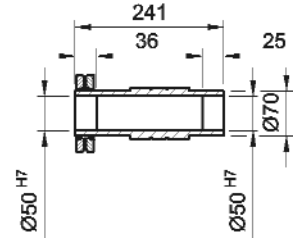
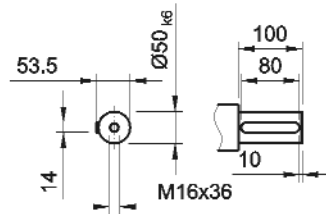
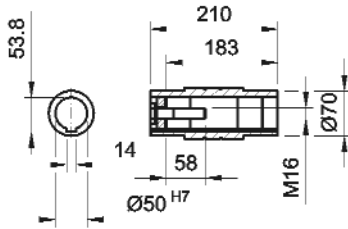
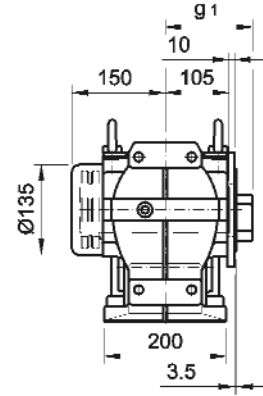
SKTH46..



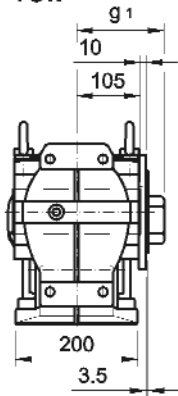
SKTN46..



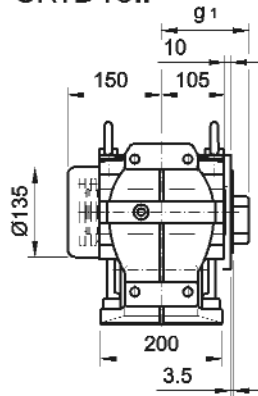
SKTS46..



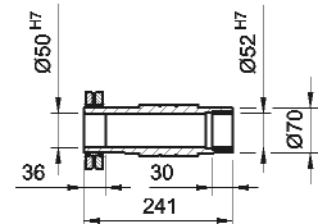
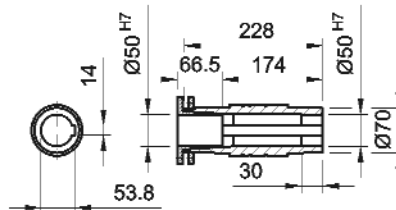
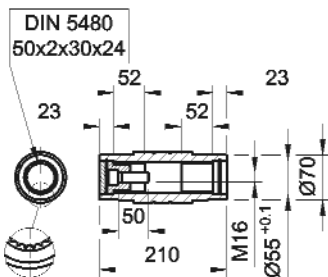
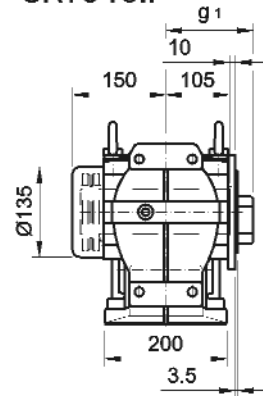
SKTT46..

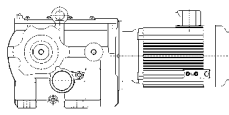


SKTB46..



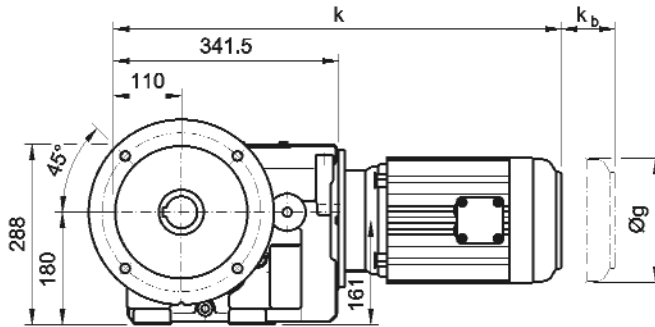
SKTC46..



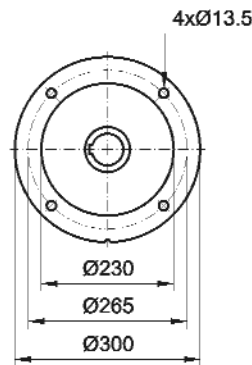


6. SK4

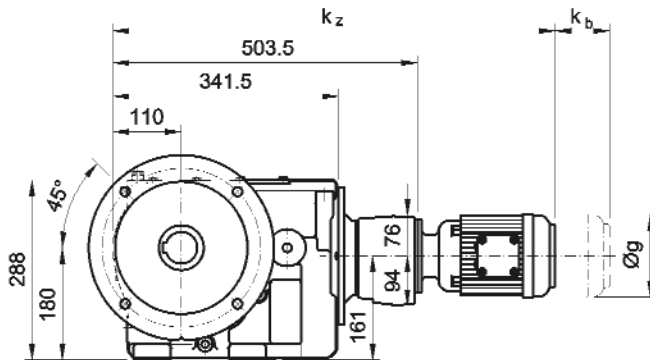
SKF..46C
71 - 160



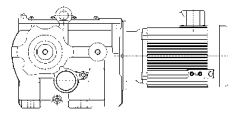
SKF..46..



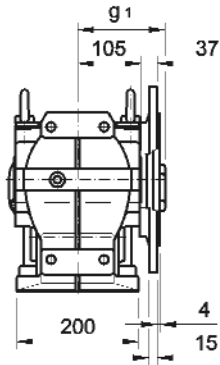
SKF..46C16B/C
63 - 112



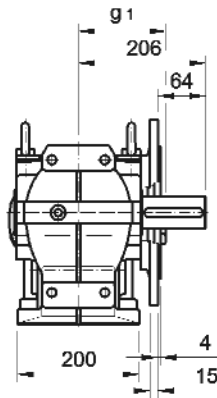
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L								
k		570	593	635	635	673	686	755	790	790	903	947								
ku																				
kz	737	741	764	806	806	844	857													
kb	48	60	71	77	77	80	89	97	97	97	77	77								
Øg	121	138	157	177	177	197	219	235	235	235	330	330								
g1	96	102	125	133	133	144	165	182	182	182	287	287								
Øam																				



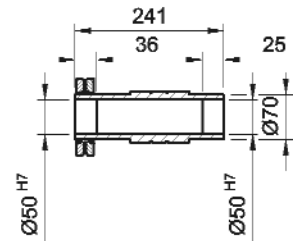
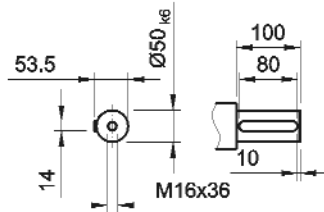
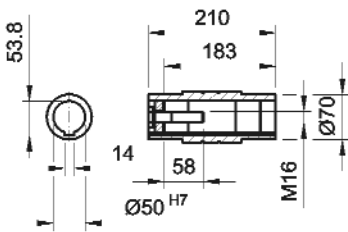
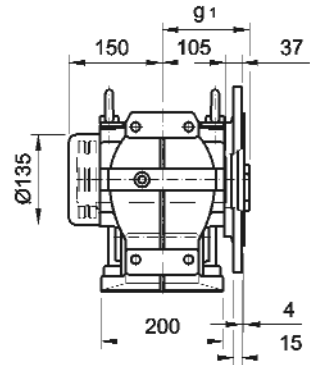
SKFH46..



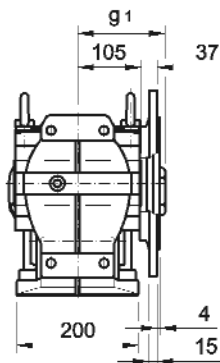
SKFN46..



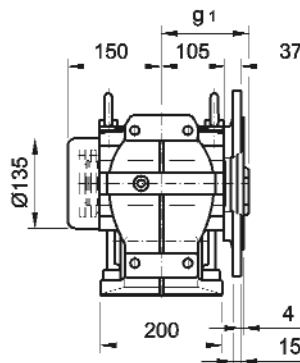
SKFS46..



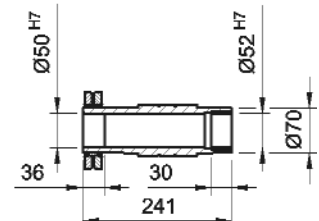
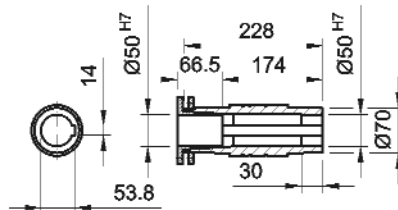
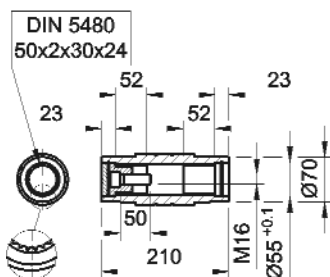
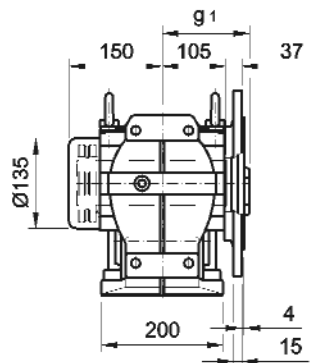
SKFT46..

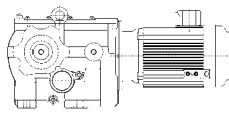


SKFB46..



SKFC46..

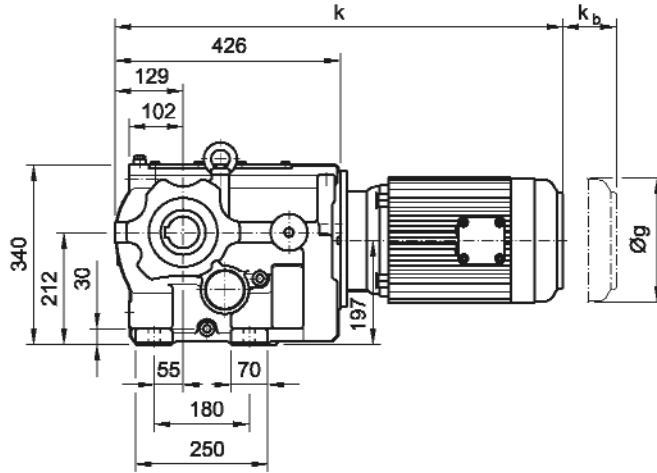




6. SK4

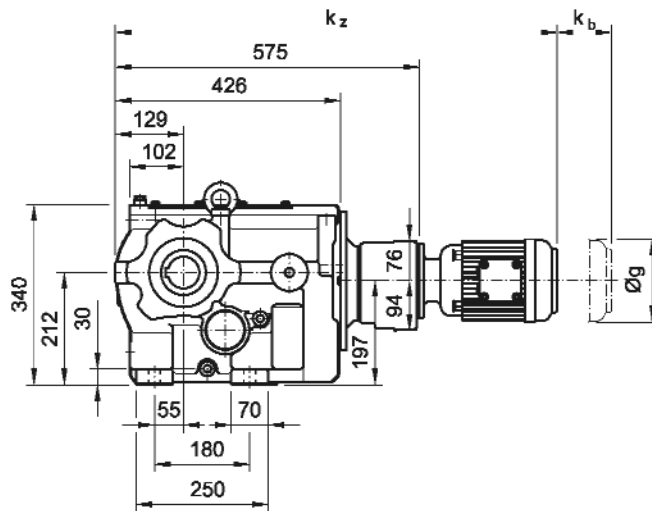
SKZ..56C

80 - 200

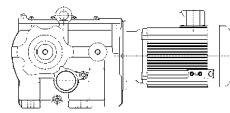


SKZ..56C16B/C

63 - 112

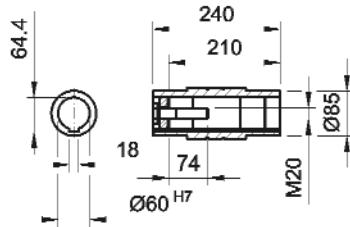
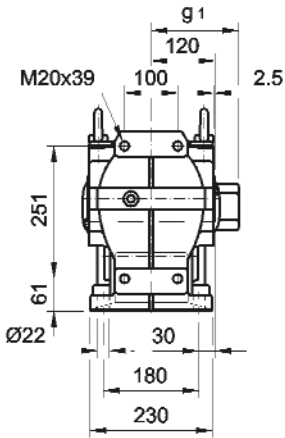


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			665	707	707	745	758	827	862	862	975	1019	1004	1042	1100				
ku																			
kz	808	812	835	877	877	915	928												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

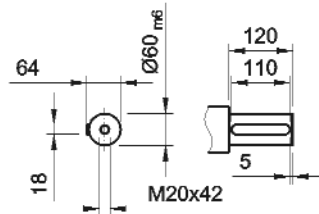
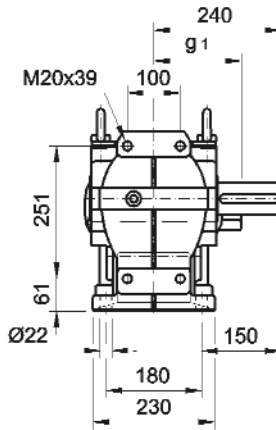


6. SK4

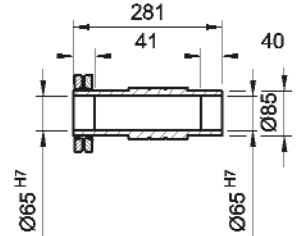
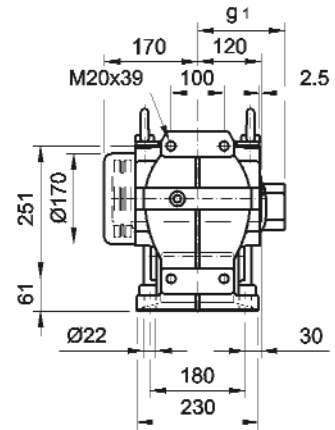
SKZH56..



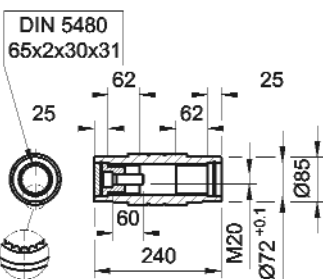
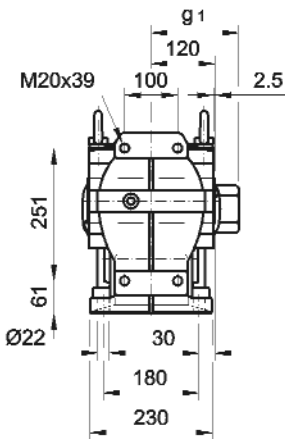
SKZN56..



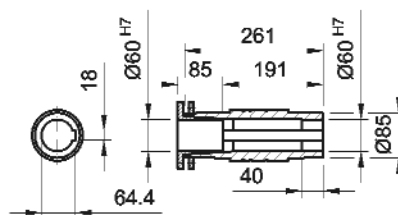
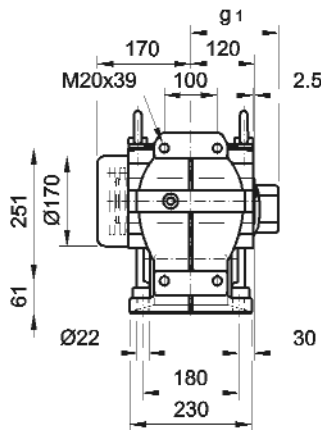
SKZS56..



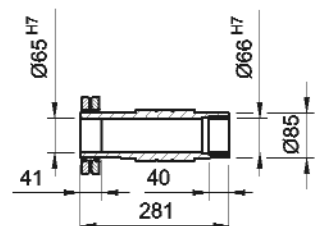
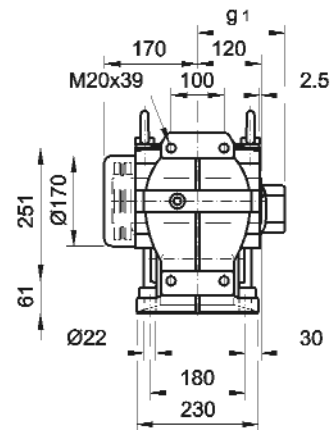
SKZT56..

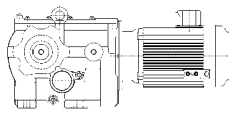


SKZB56..



SKZC56..

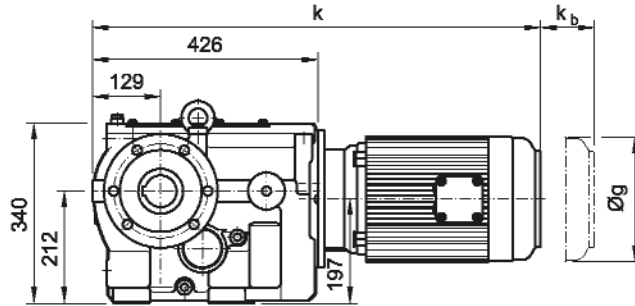




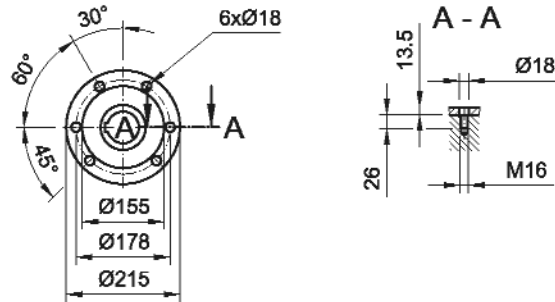
6. SK4

SKT..56C

80 - 200

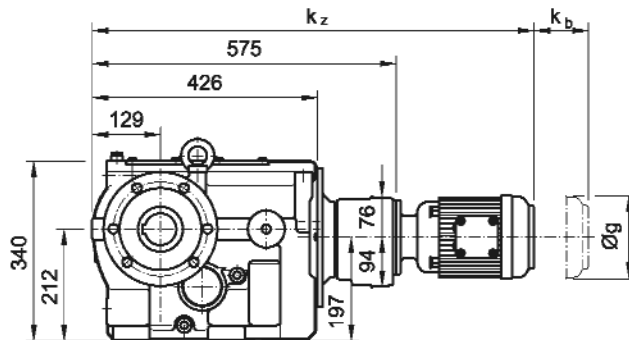


SKT..56..

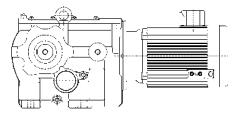


SKT..56C16B/C

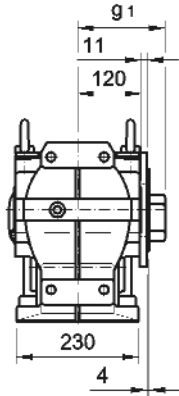
63 - 112



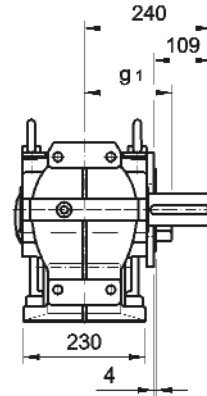
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			665	707	707	745	758	827	862	862	975	1019	1004	1042	1100				
ku																			
kz	808	812	835	877	877	915	928												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



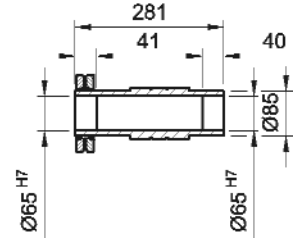
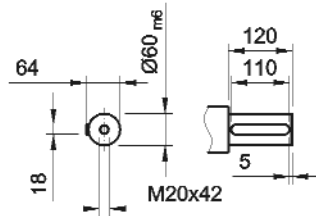
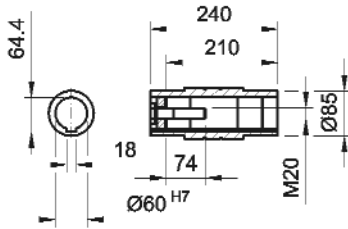
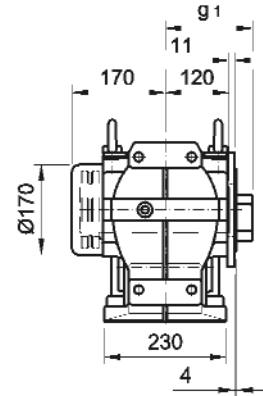
SKTH56..



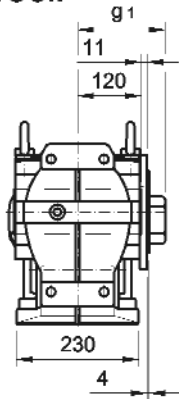
SKTN56..



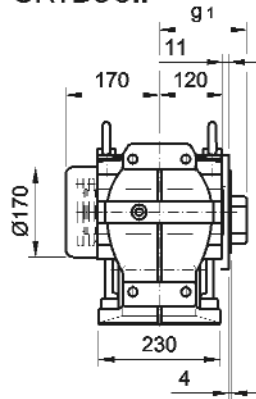
SKTS56..



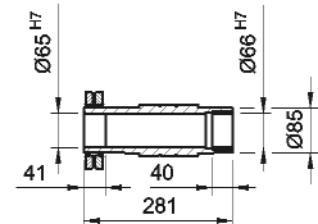
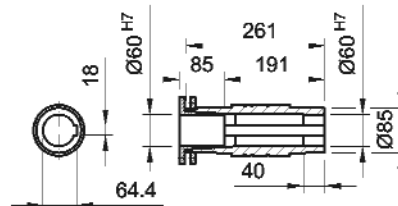
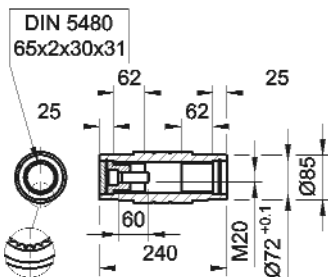
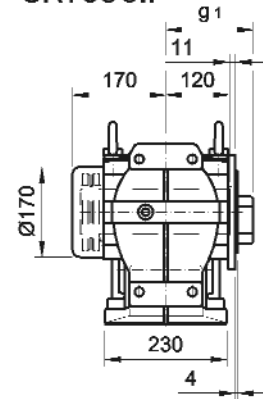
SKTT56..

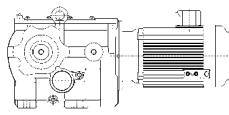


SKTB56..



SKTC56..

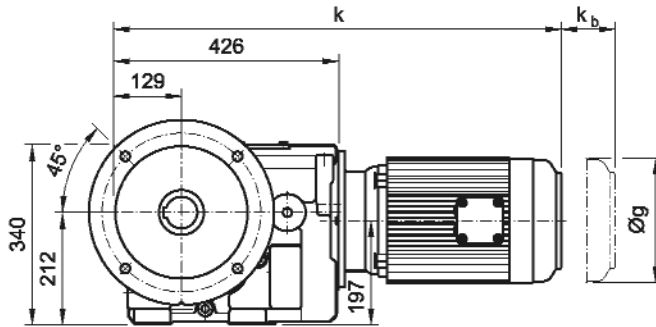




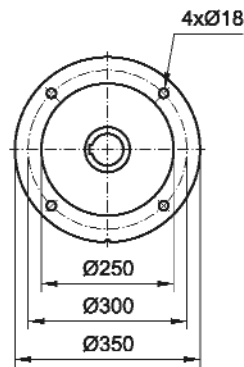
6. SK4

SKF..56C

80 - 200

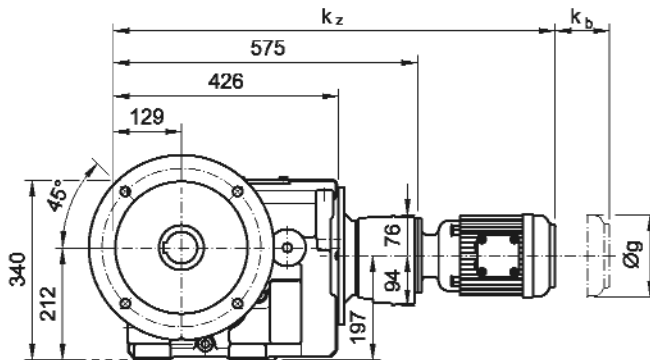


SKF..56..

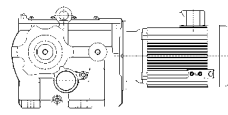


SKF..56C16B/C

63 - 112

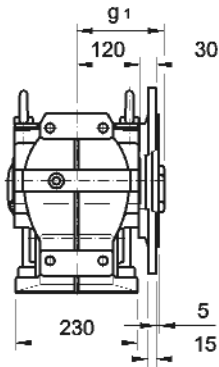


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			665	707	707	745	758	827	862	862	975	1019	1004	1042	1100				
ku																			
kz	808	812	835	877	877	915	928												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

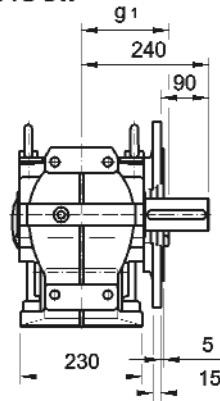


6. SK4

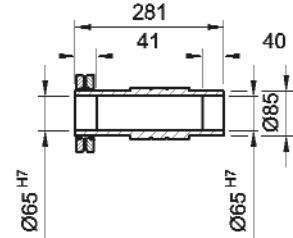
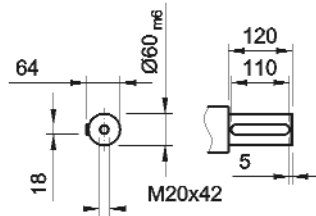
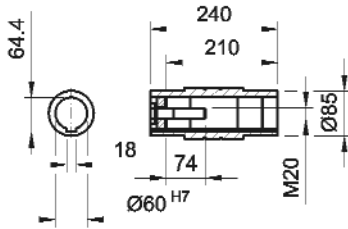
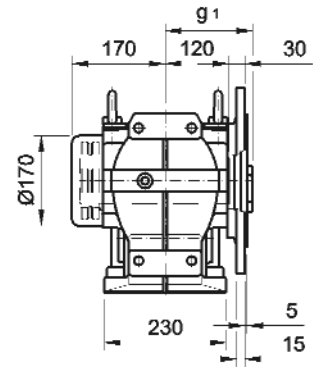
SKFH56..



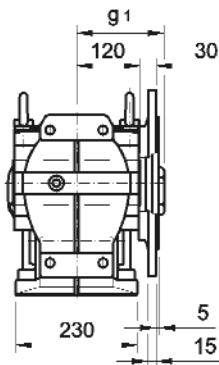
SKFN56..



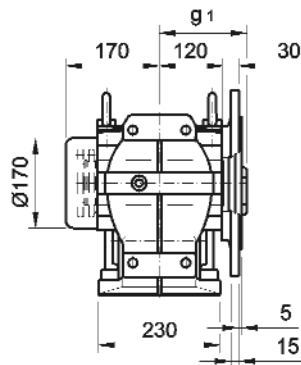
SKFS56..



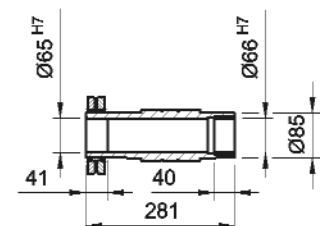
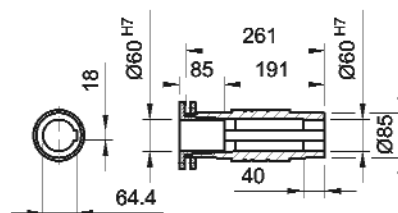
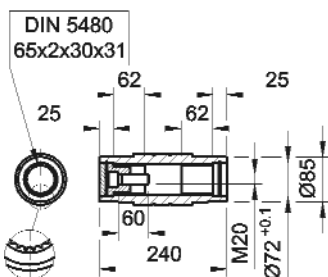
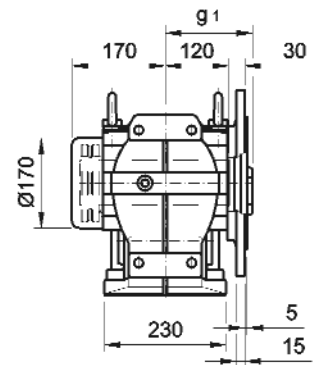
SKFT56..

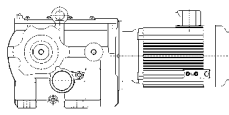


SKFB56..



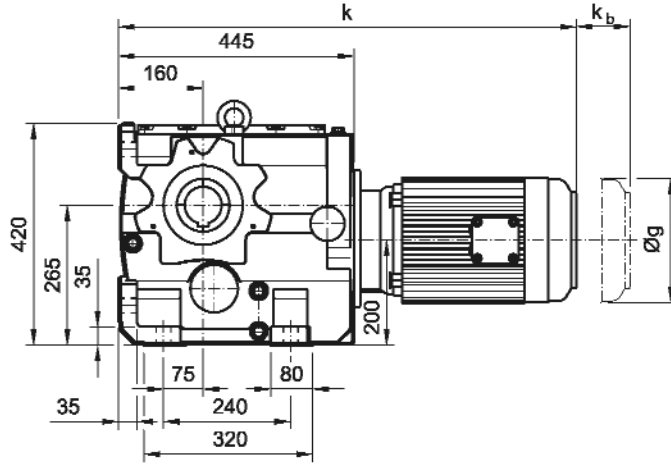
SKFC56..



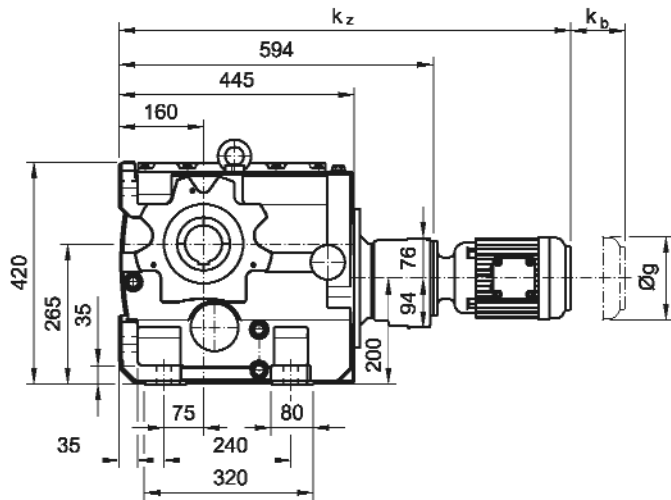


6. SK4

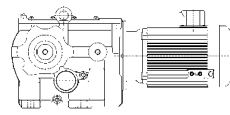
SKZ..66C
80 - 200



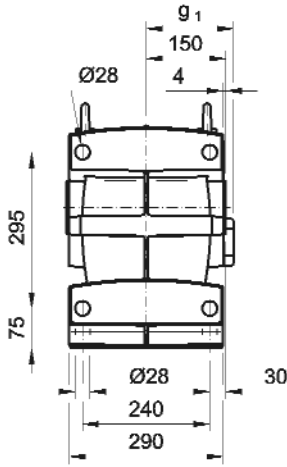
SKZ..66C16B/C
63 - 112



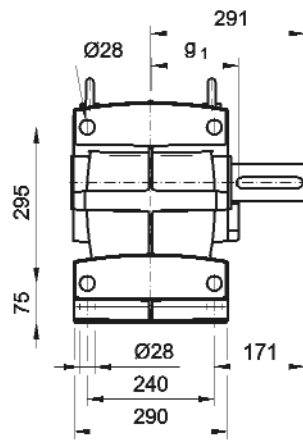
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			684	726	726	764	777	846	881	881	994	1038	1023	1061	1119				
ku																			
kz	827	831	854	896	896	934	947												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



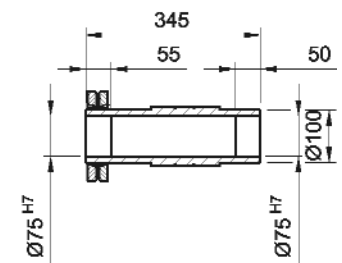
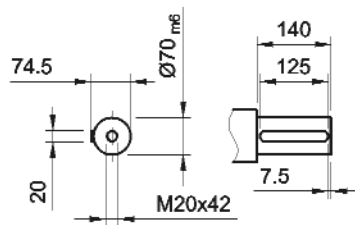
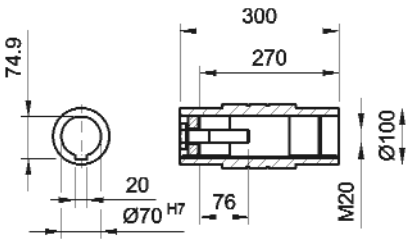
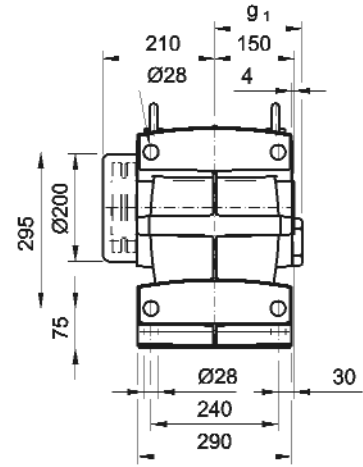
SKZH66..



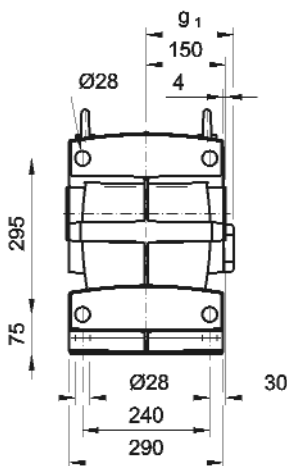
SKZN66..



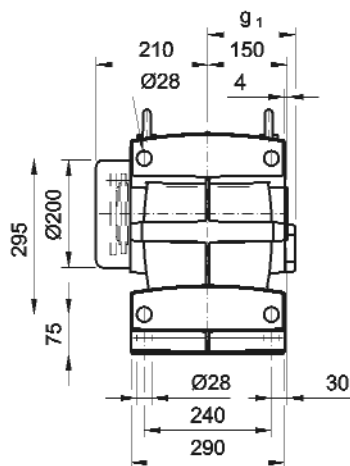
SKZS66..



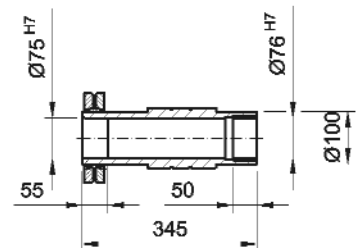
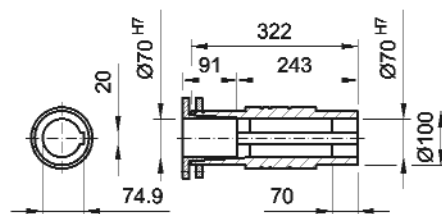
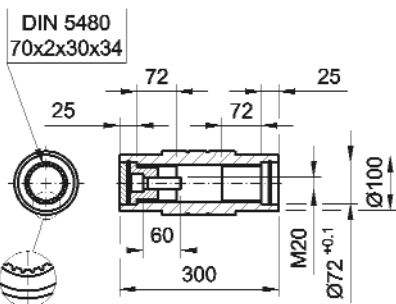
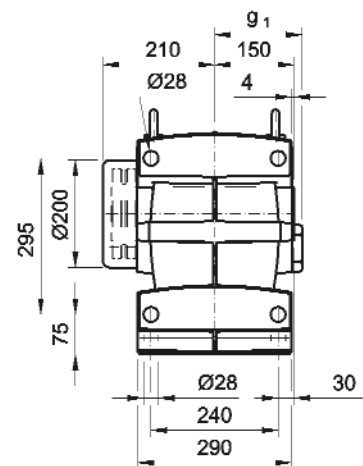
SKZT66..

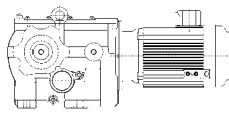


SKZB66..



SKZC66..

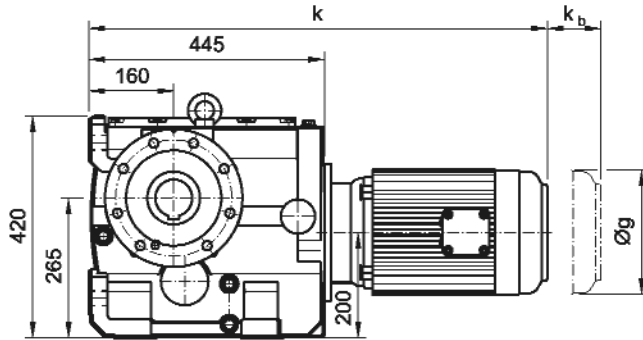




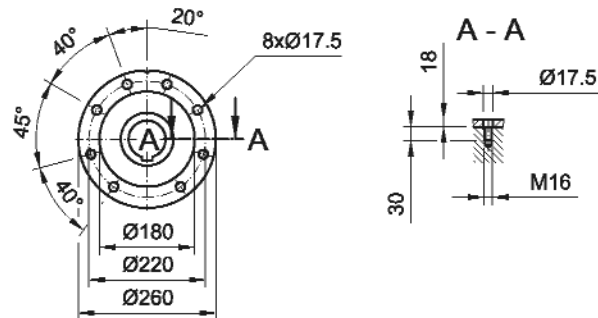
6. SK4

SKT..66C

80 - 200

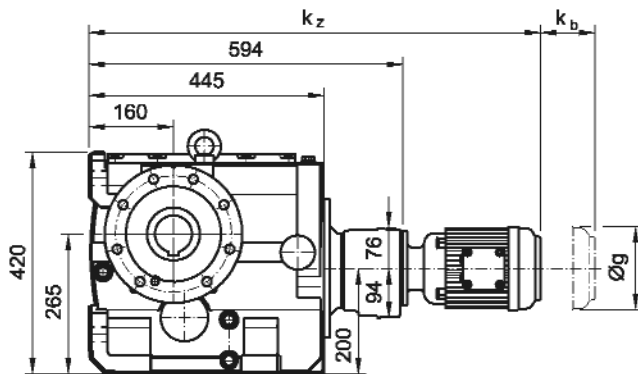


SKT..66..

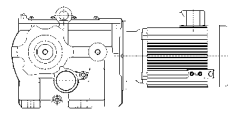


SKT..66C16B/C

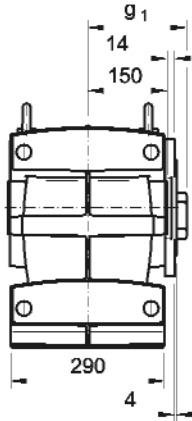
63 - 112



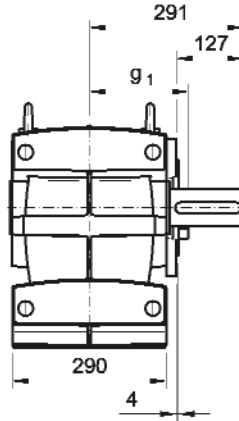
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			684	726	726	764	777	846	881	881	994	1038	1023	1061	1119				
ku																			
kz	827	831	854	896	896	934	947												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			



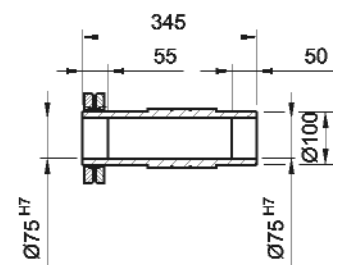
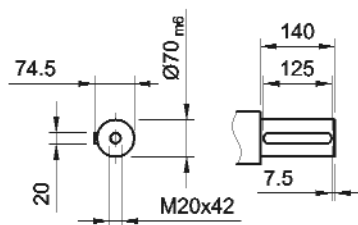
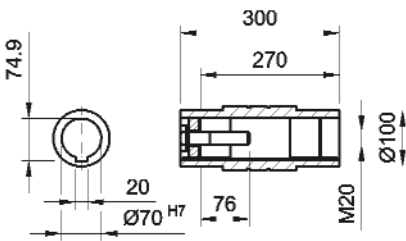
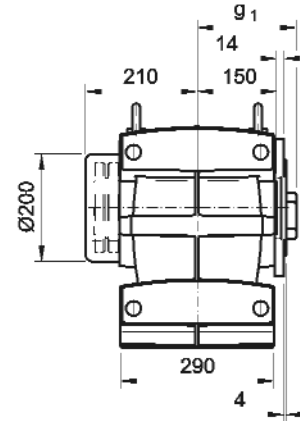
SKTH66..



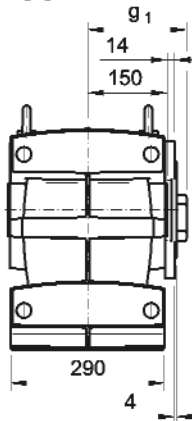
SKTN66..



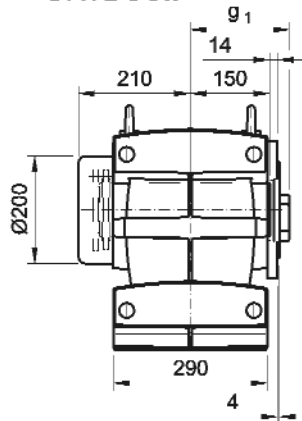
SKTS66..



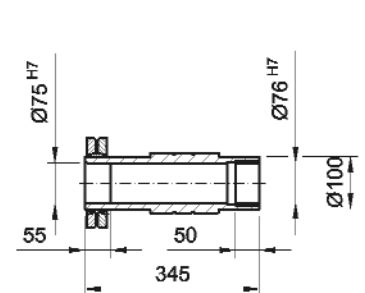
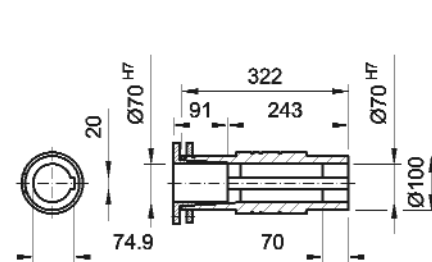
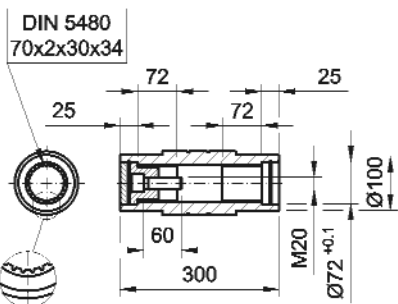
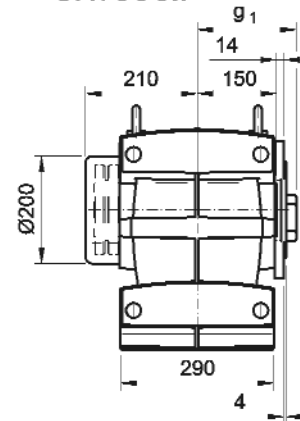
SKTT66..

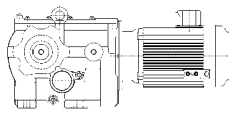


SKTB66..



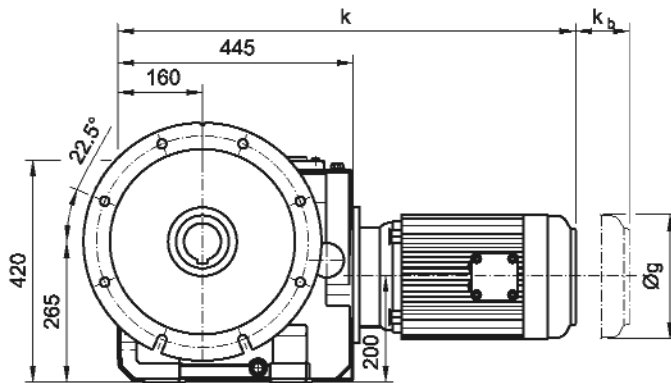
SKTC66..



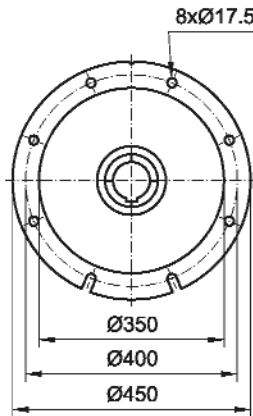


6. SK4

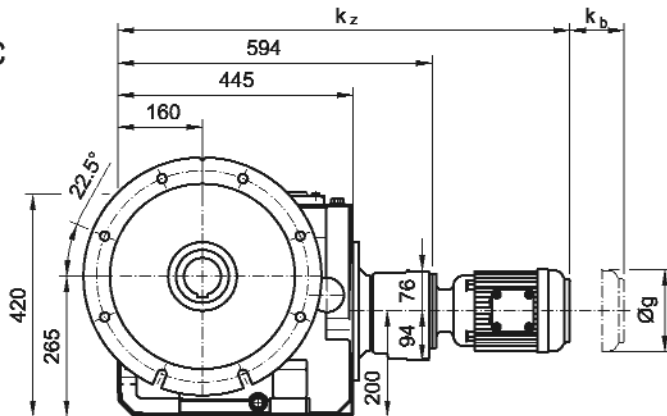
SKF..66C
80 - 200



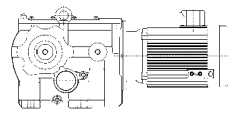
SKF..66..



SKF..66C16B/C
63 - 112

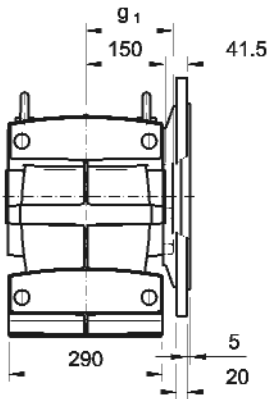


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L				
k			684	726	726	764	777	846	881	881	994	1038	1023	1061	1119				
ku																			
kz	827	831	854	896	896	934	947												
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420				
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350				
Øam																			

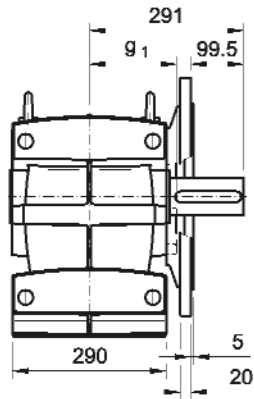


6. SK4

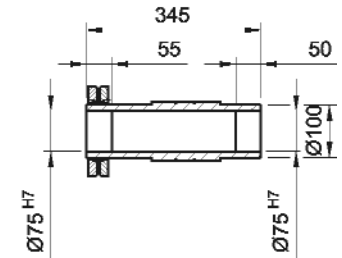
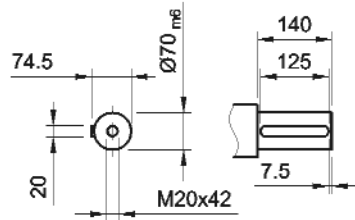
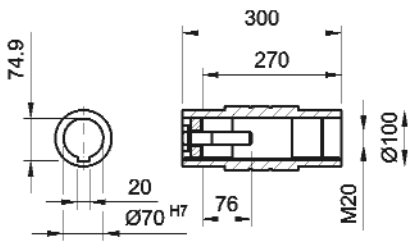
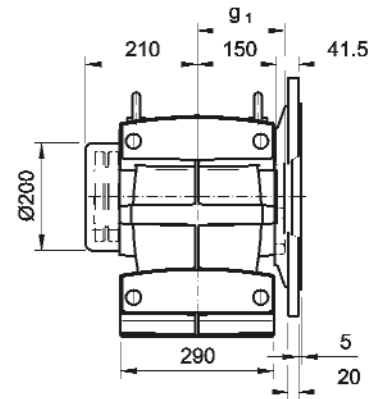
SKFH66..



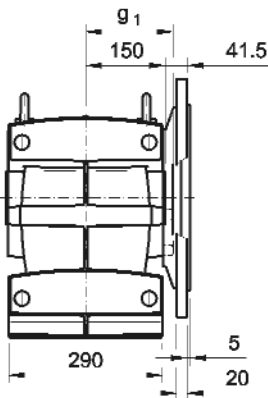
SKFN66..



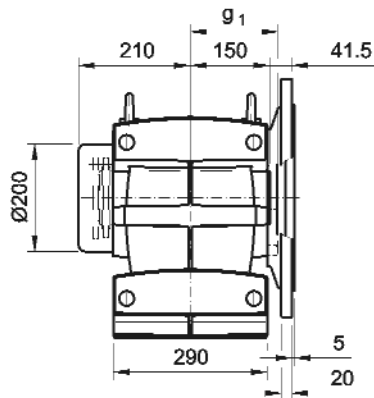
SKFS66..



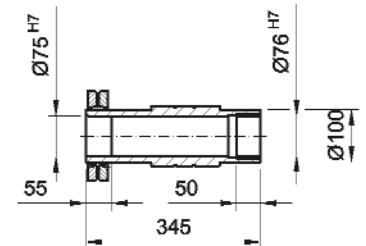
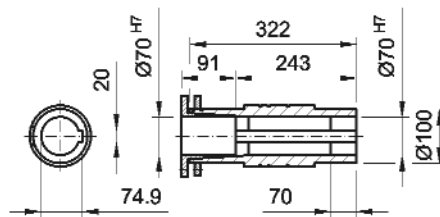
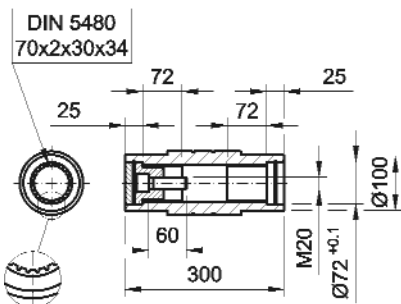
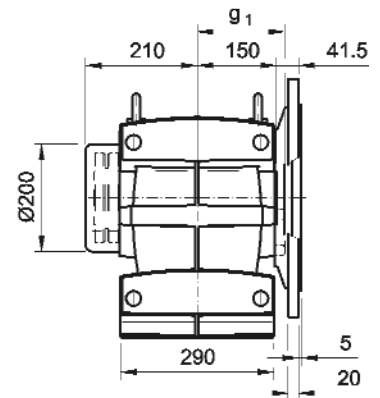
SKFT66..

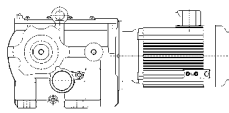


SKFB66..



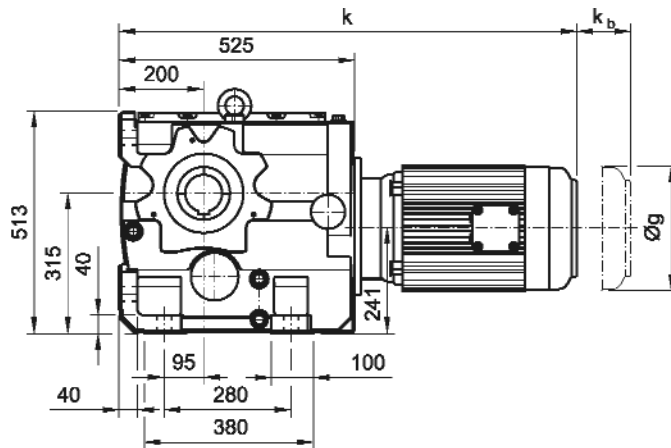
SKFC66..



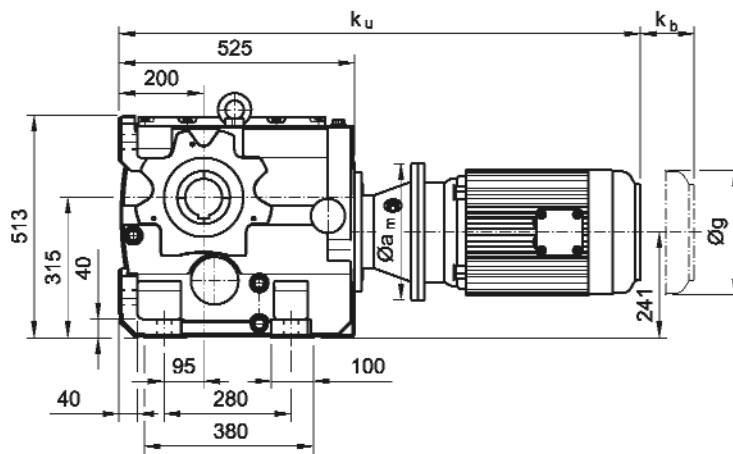


6. SK4

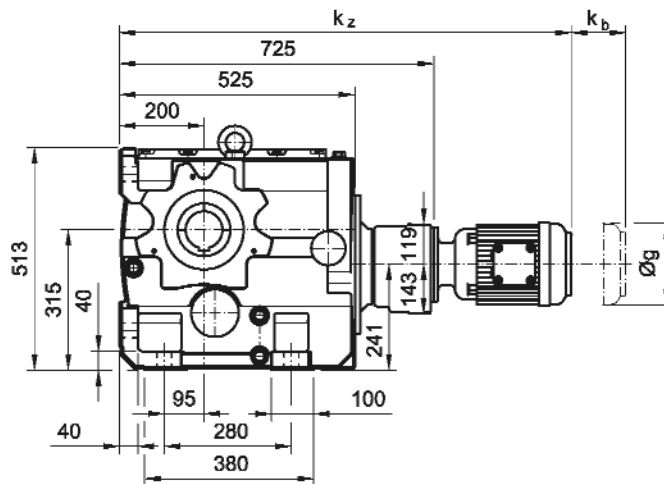
SKZ..76C
100 - 225



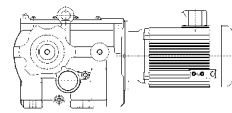
SKZ..76C-U
100 - 280



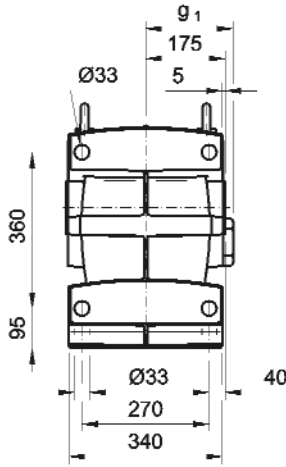
SKZ..76C36B/C
63 - 160



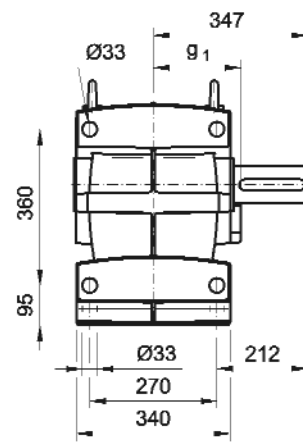
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316			
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330								
kb	48	60	71	77	77	80	89	98	98	98	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



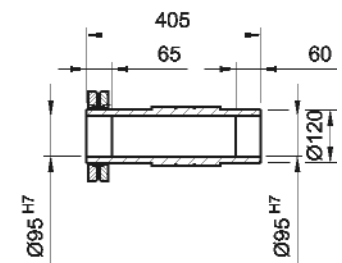
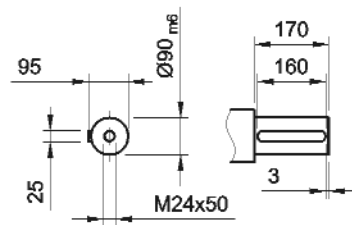
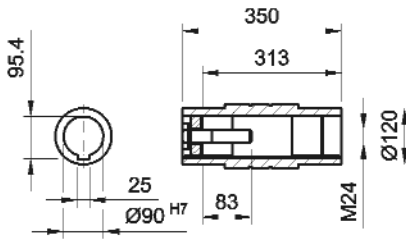
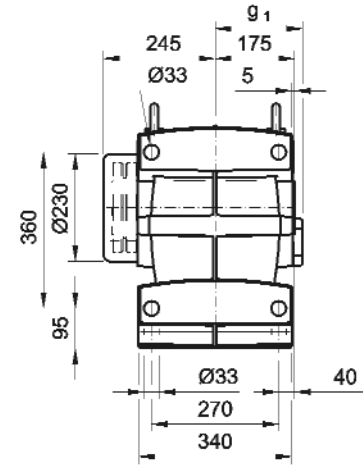
SKZH76..



SKZN76..

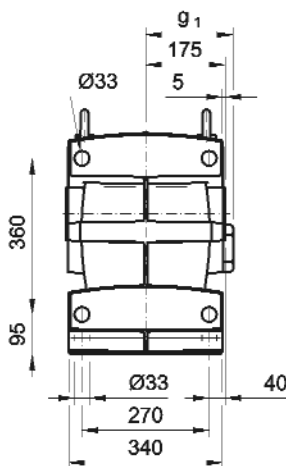


SKZS76..

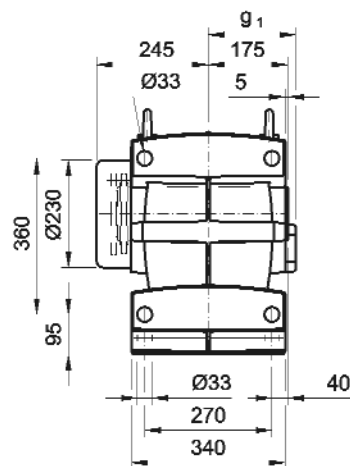


6

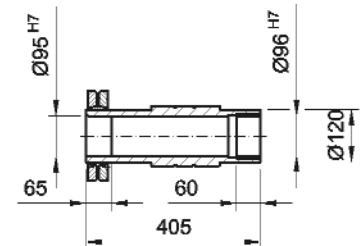
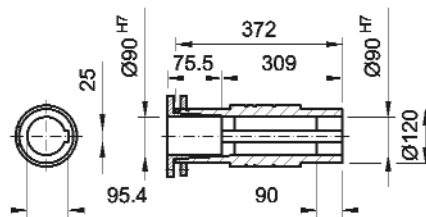
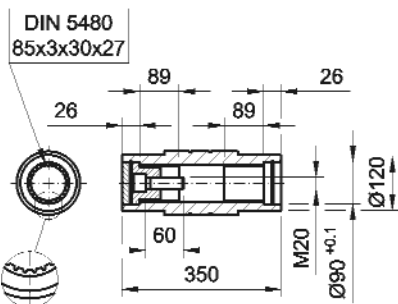
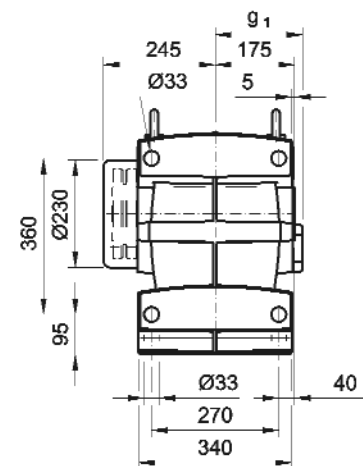
SKZT76..

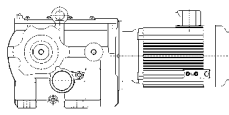


SKZB76..



SKZC76..

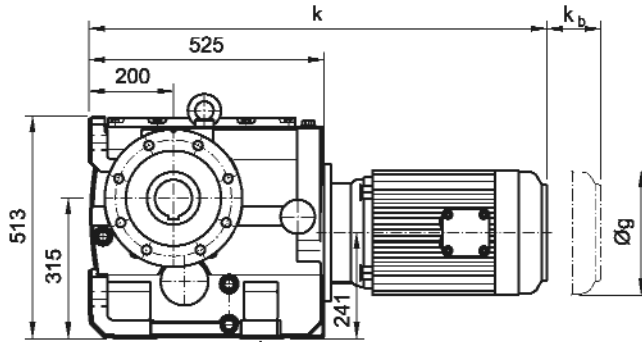




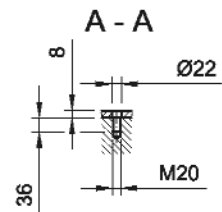
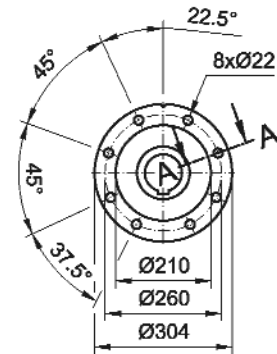
6. SK4

SKT..76C

100 - 225

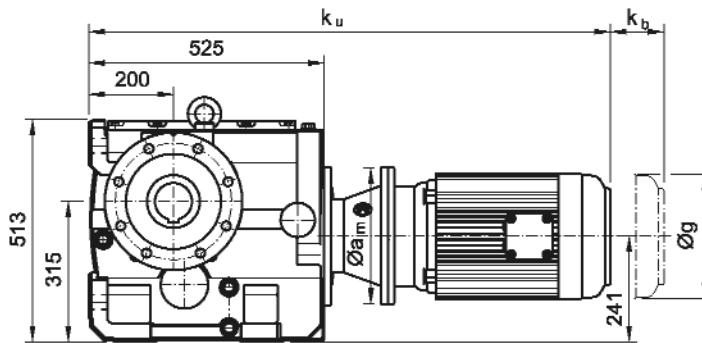


SKT..76..



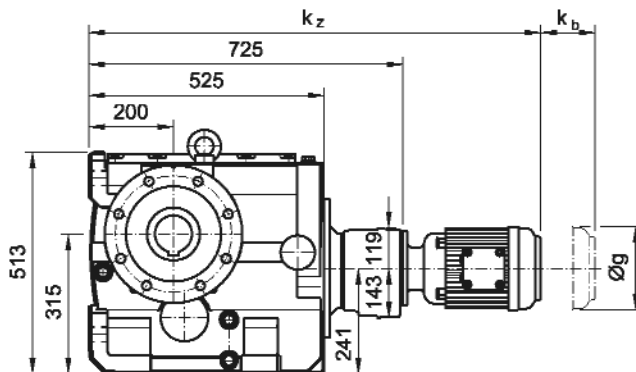
SKT..76C-U

100 - 280

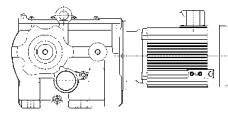


SKT..76C36B/C

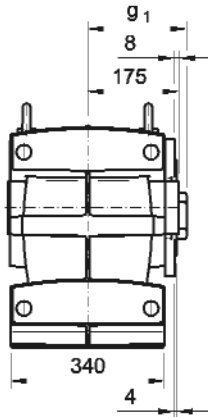
63 - 160



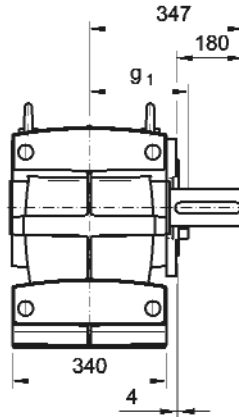
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316			
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



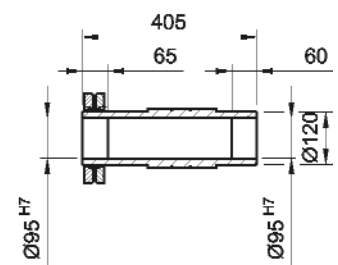
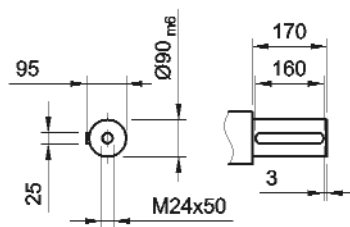
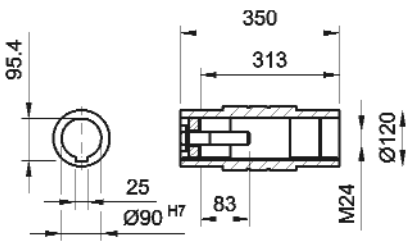
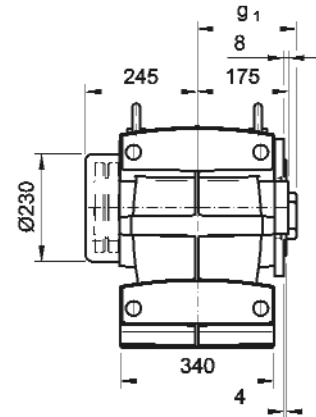
SKTH76..



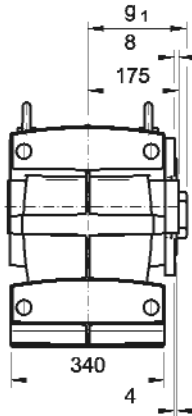
SKTN76..



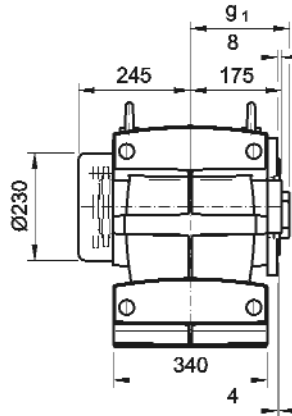
SKTS76..



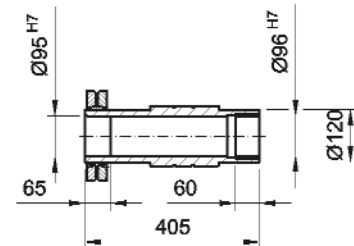
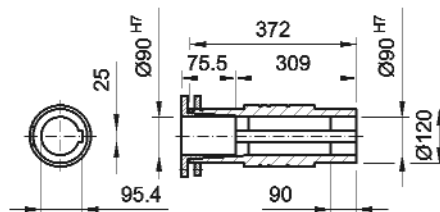
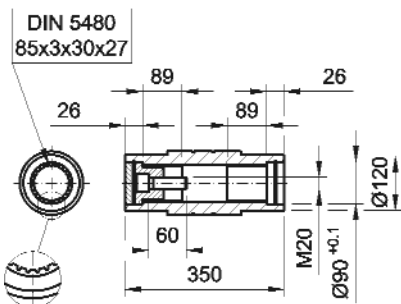
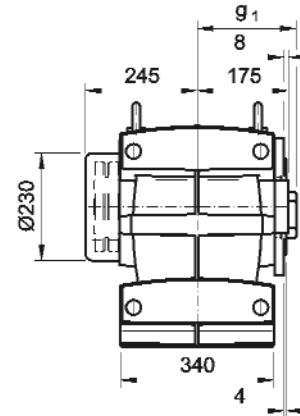
SKTT76..

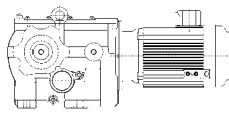


SKTB76..



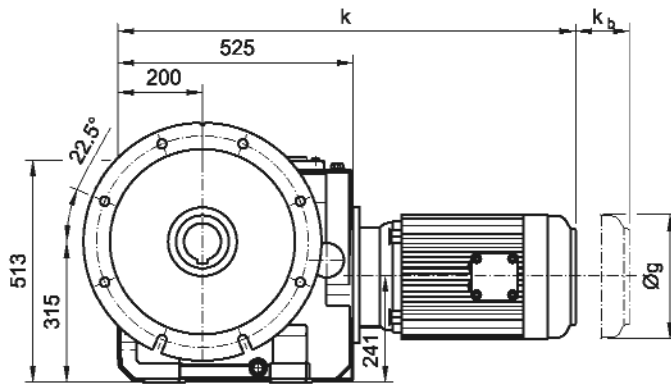
SKTC76..



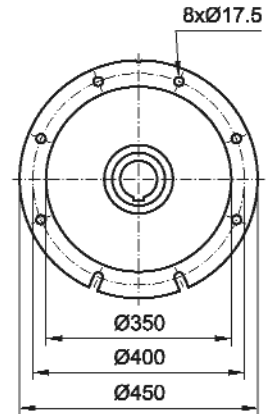


6. SK4

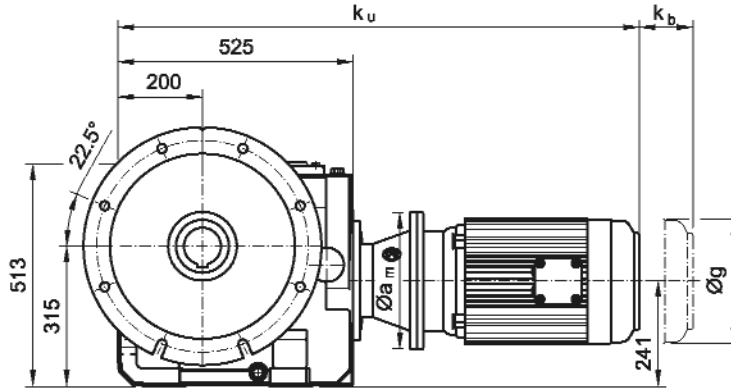
SKF..76C
100 - 225



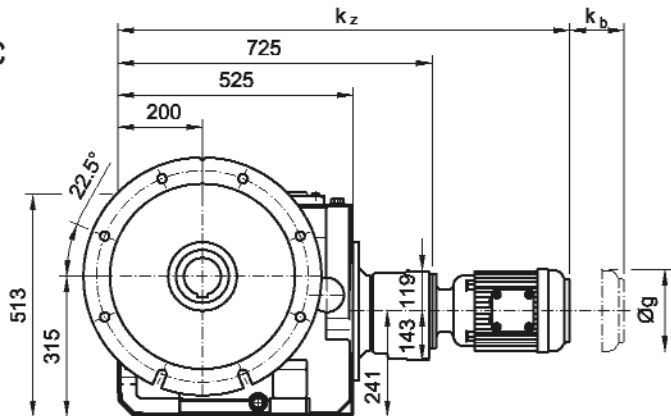
SKF..76..



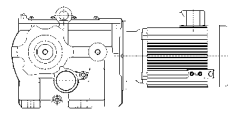
SKF..76C-U
100 - 280



SKF..76C36B/C
63 - 160

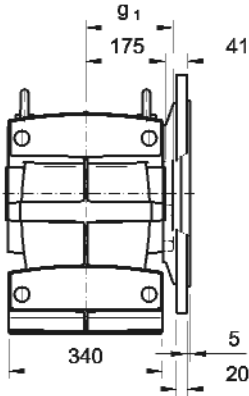


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						836	849	918	953	953	1066	1110	1095	1133	1207	1276	1316			
ku						967	982	1049	1084		1227	1282	1464	1504	1569	1634	1664	1755	1850	1890
kz	949	953	976	1018	1018	1056	1069	1138	1173	1173	1286	1330								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

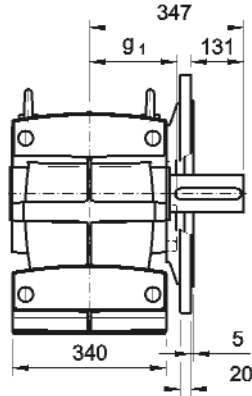


6. SK4

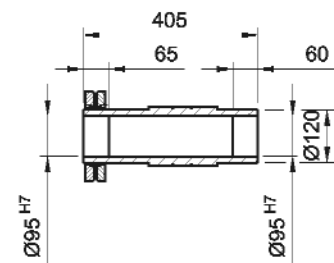
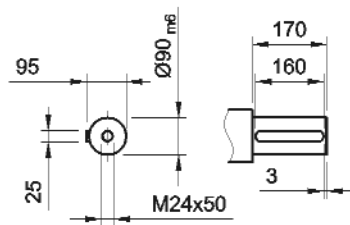
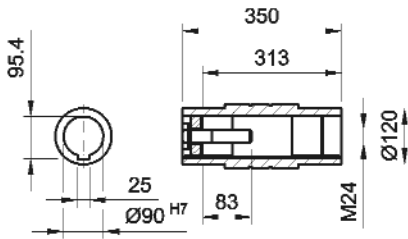
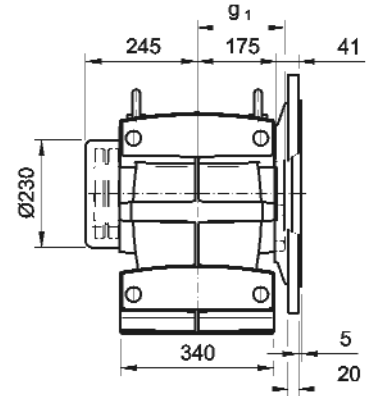
SKFH76..



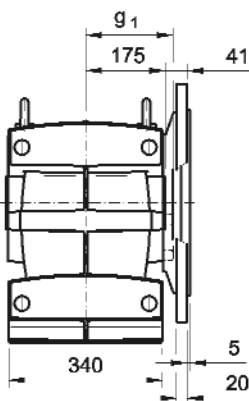
SKFN76..



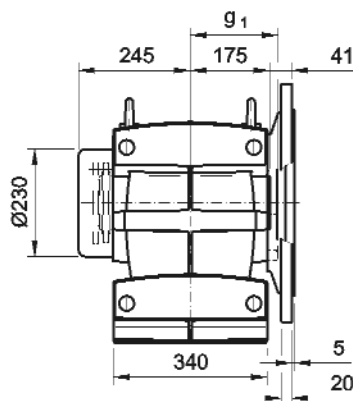
SKFS76..



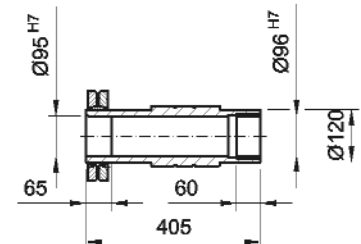
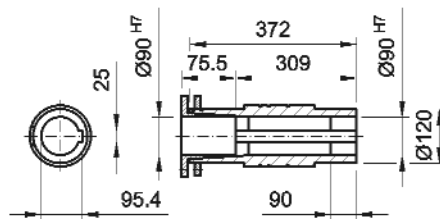
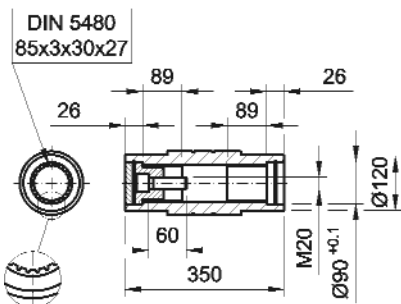
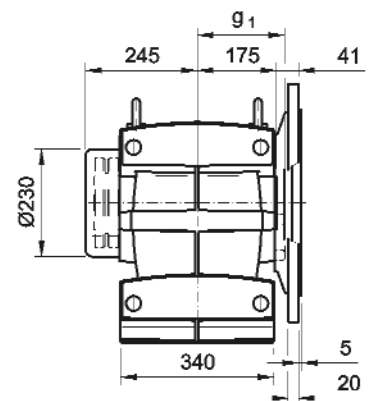
SKFT76..

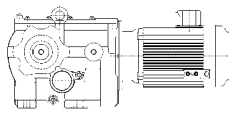


SKFB76..



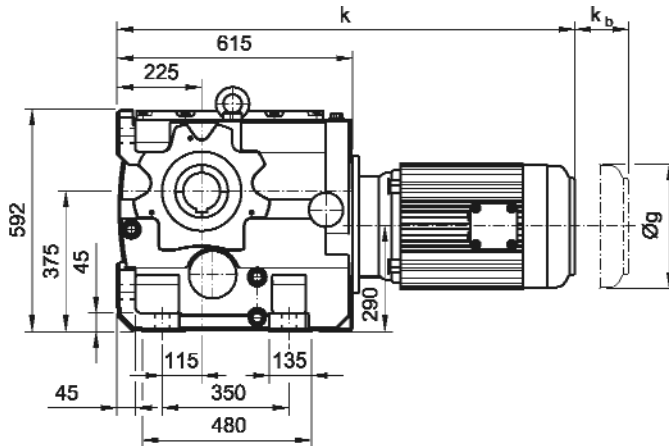
SKFC76..



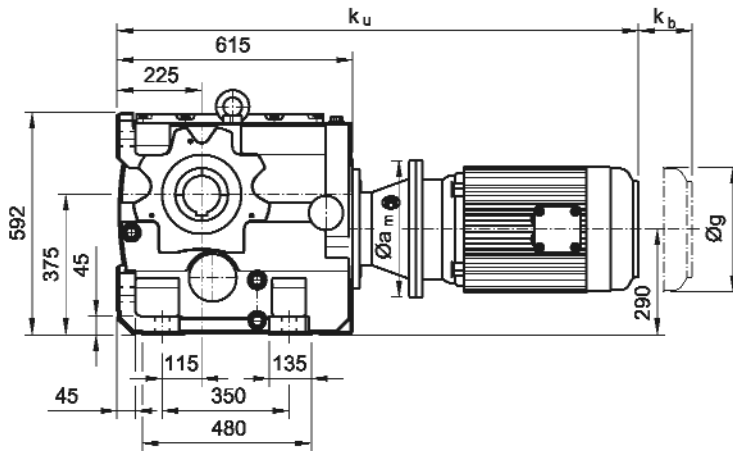


6. SK4

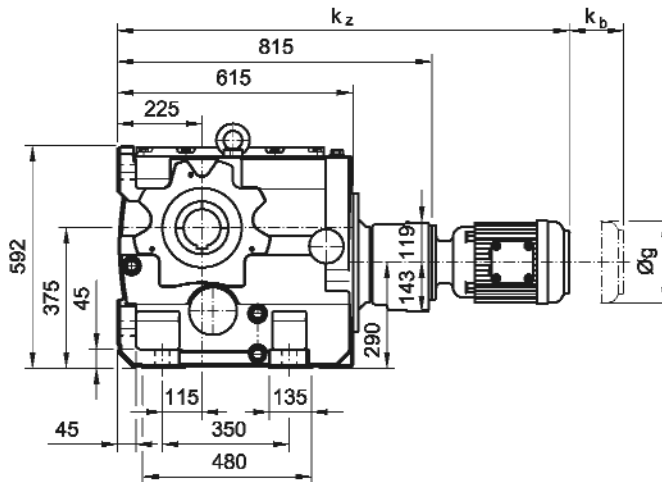
SKZ..86C
100 - 225



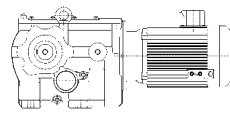
SKZ..86C-U
100 - 280



SKZ..86C36B/C
63 - 160

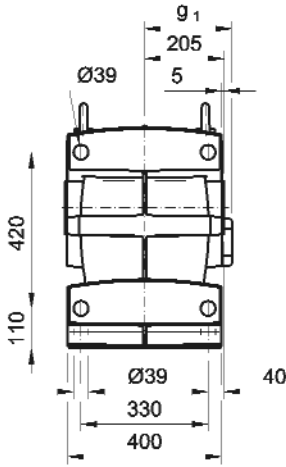


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						926	939	1008	1043	1043	1156	1200	1185	1223	1297	1366	1406			
ku						1057	1072	1139	1174		1317	1372	1554	1594	1659	1724	1754	1845	1940	1980
kz	1039	1043	1066	1108	1108	1146	1159	1228	1263	1263	1376	1420								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

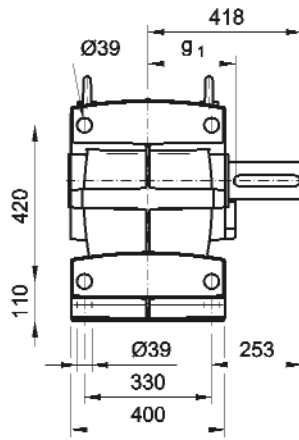


6. SK4

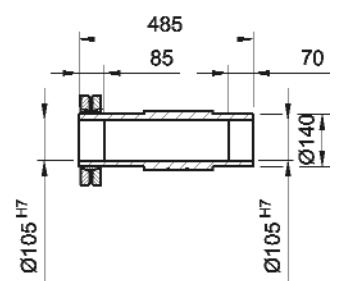
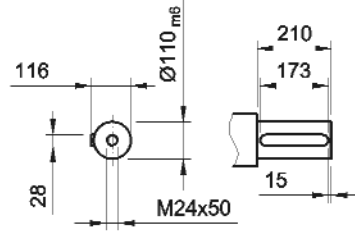
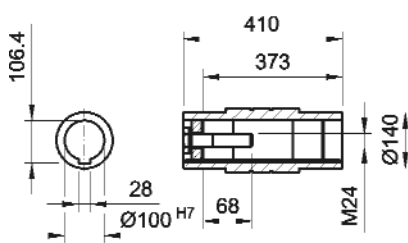
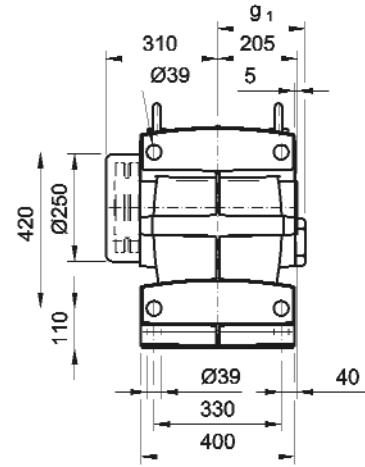
SKZH86..



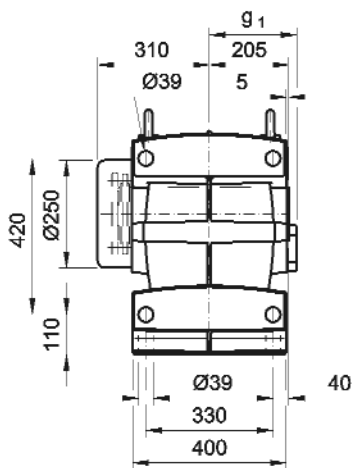
SKZN86..



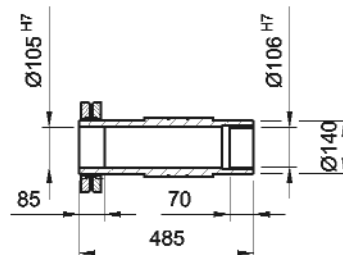
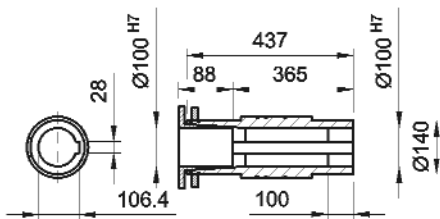
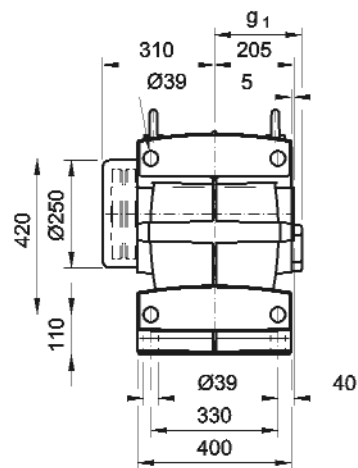
SKZS86..

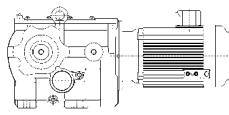


SKZB86..



SKZC86..

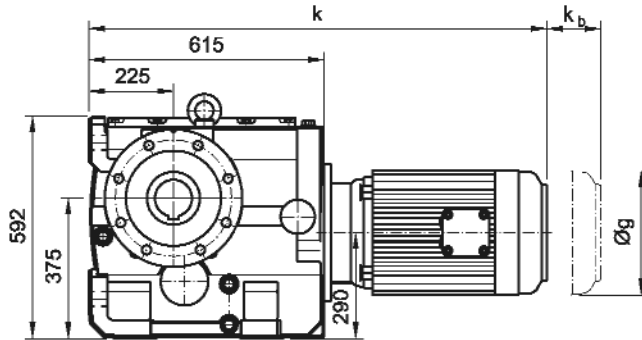




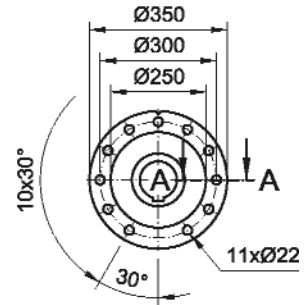
6. SK4

SKT..86C

100 - 225

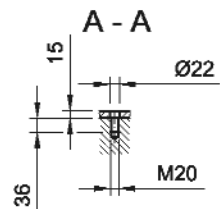
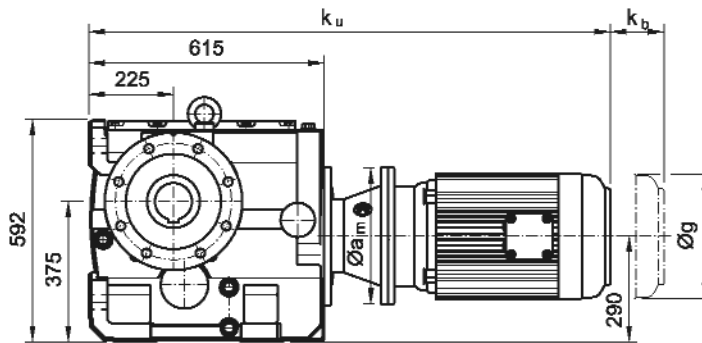


SKT..86..



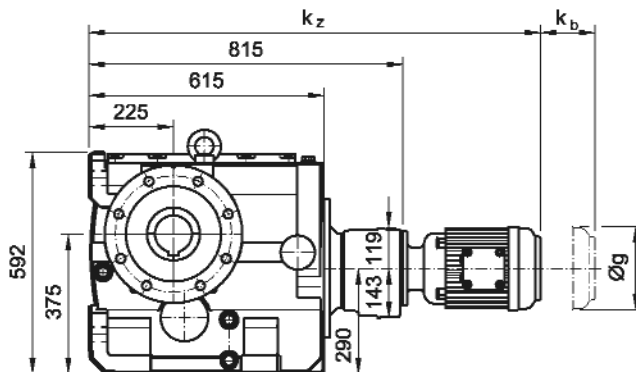
SKT..86C-U

100 - 280

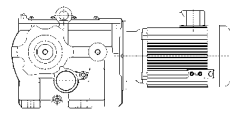


SKT..86C36B/C

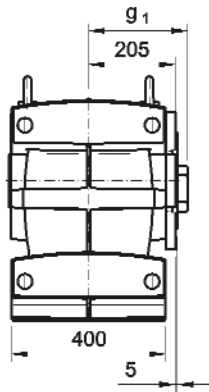
63 - 160



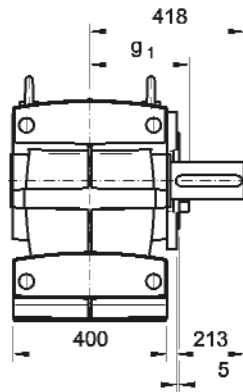
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						926	939	1008	1043	1043	1156	1200	1185	1223	1297	1366	1406			
ku						1057	1072	1139	1174		1317	1372	1554	1594	1659	1724	1754	1845	1940	1980
kz	1039	1043	1066	1108	1108	1146	1159	1228	1263	1263	1376	1420								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



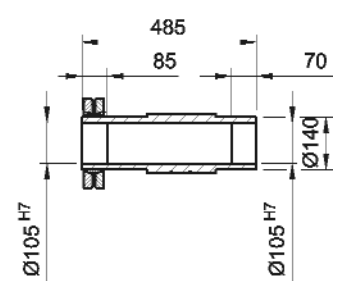
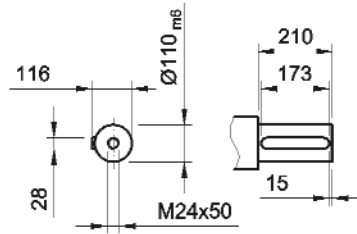
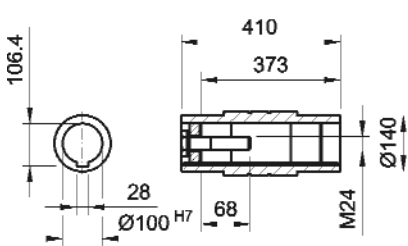
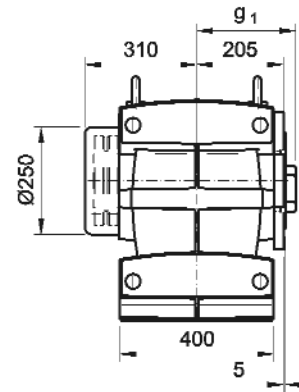
SKTH86..



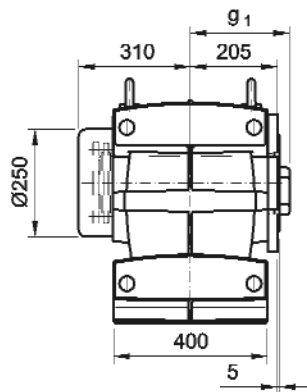
SKTN86..



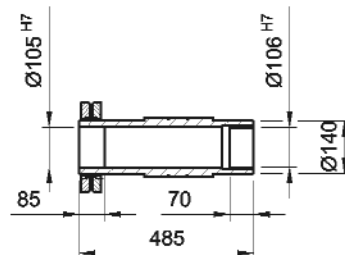
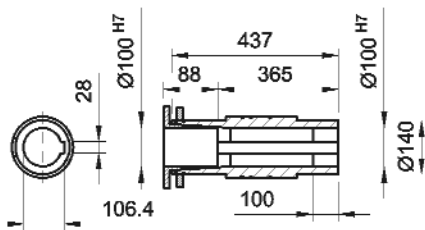
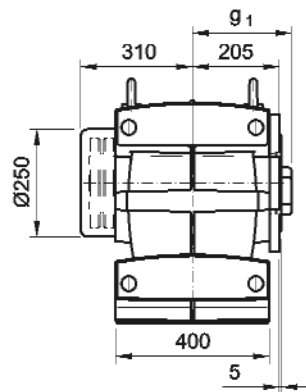
SKTS86..

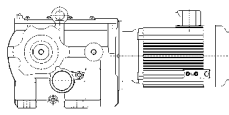


SKTB86..



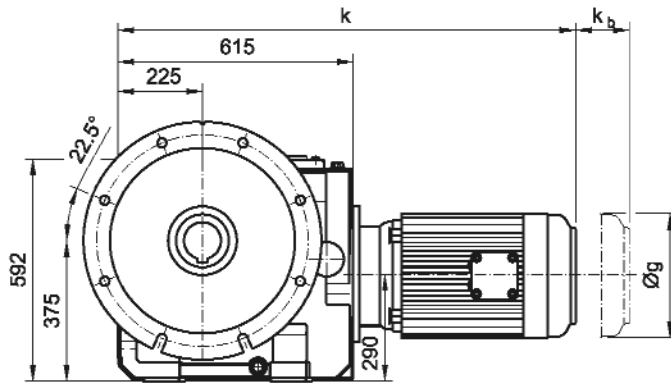
SKTC86..



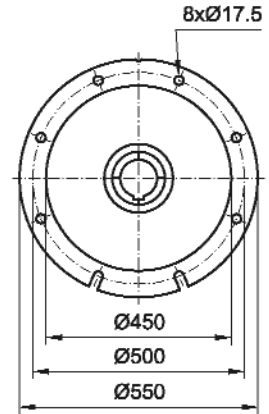


6. SK4

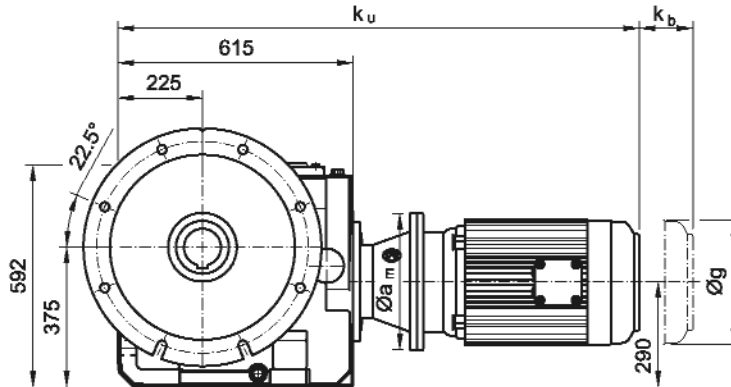
SKF..86C
100 - 225



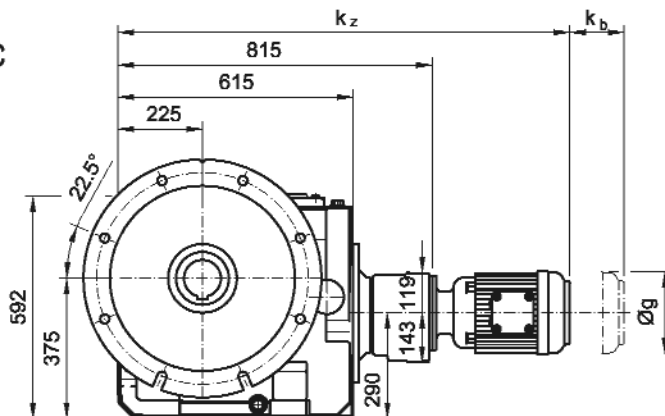
SKF..86..



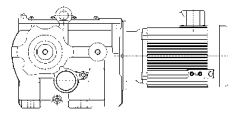
SKF..86C-U
100 - 280



SKF..86C36B/C
63 - 160

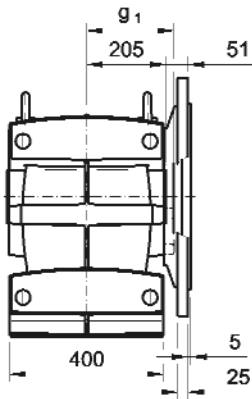


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						926	939	1008	1043	1043	1156	1200	1185	1223	1297	1366	1406			
ku						1057	1072	1139	1174		1317	1372	1554	1594	1659	1724	1754	1845	1940	1980
kz	1039	1043	1066	1108	1108	1146	1159	1228	1263	1263	1376	1420								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

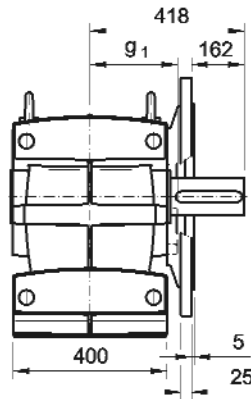


6. SK4

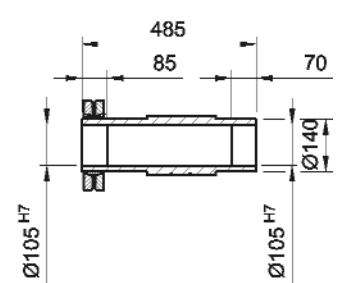
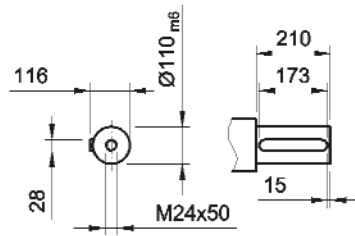
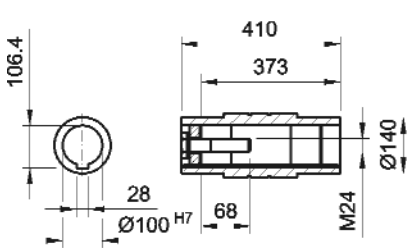
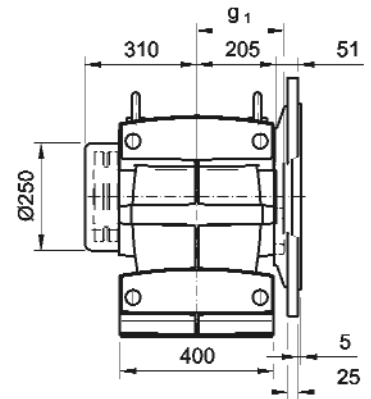
SKFH86..



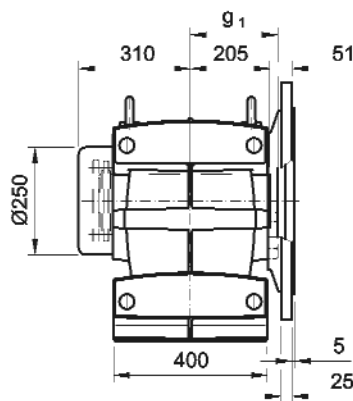
SKFN86..



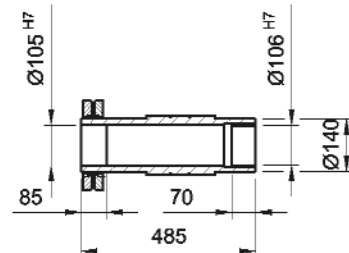
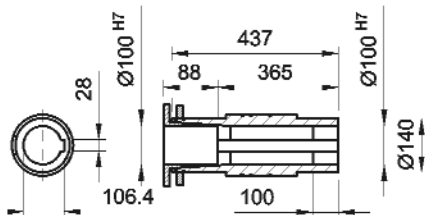
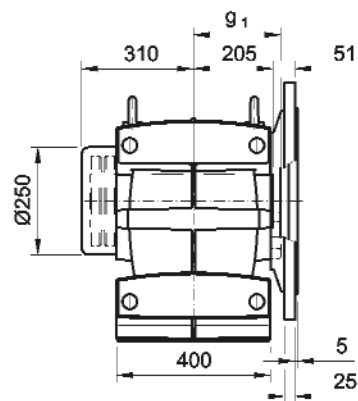
SKFS86..

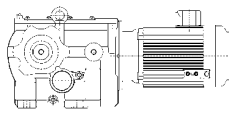


SKFB86..



SKFC86..

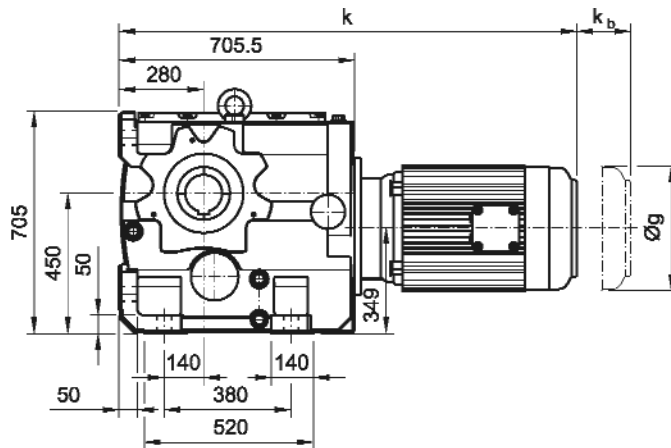




6. SK4

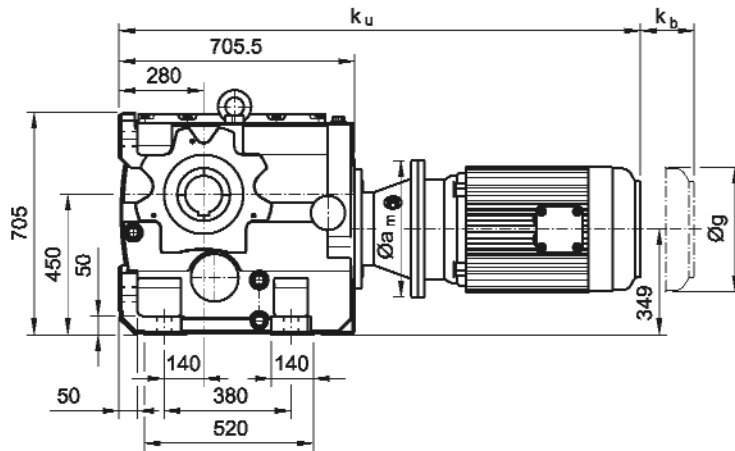
SKZ..96C

100 - 225



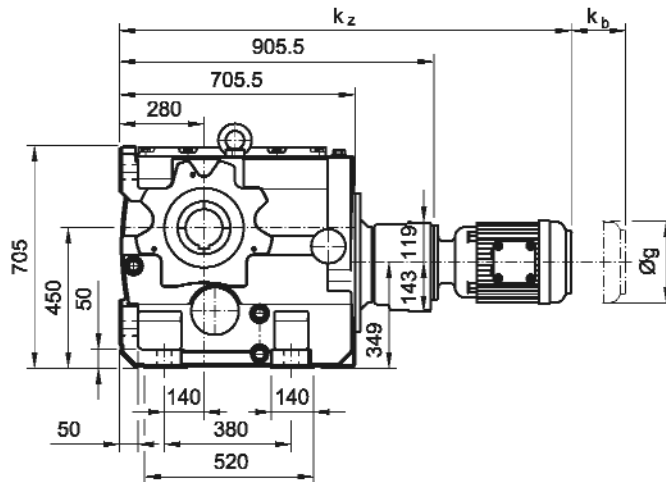
SKZ..96C-U

100 - 280

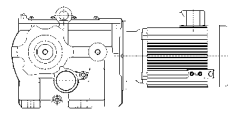


SKZ..96C36B/C

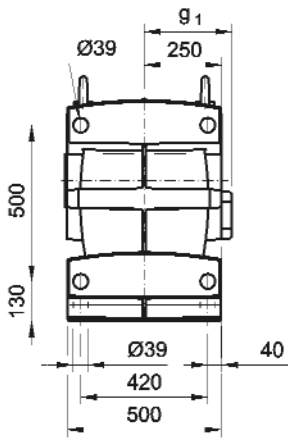
63 - 160



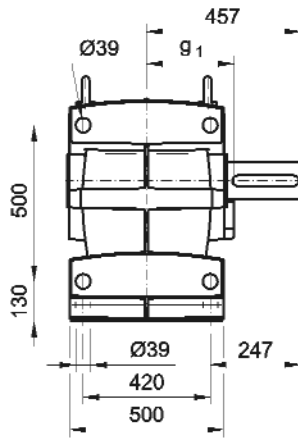
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1017	1030	1099	1134	1134	1247	1291	1276	1314	1388	1457	1497			
ku						1147	1162	1229	1264		1407	1462	1645	1685	1749	1814	1844	1935	2030	2070
kz	1130	1134	1157	1199	1199	1237	1250	1319	1354	1354	1467	1511								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550



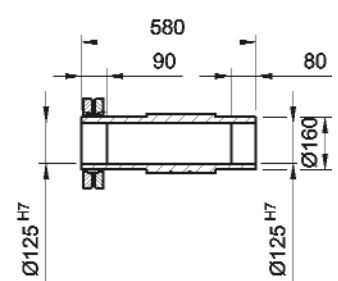
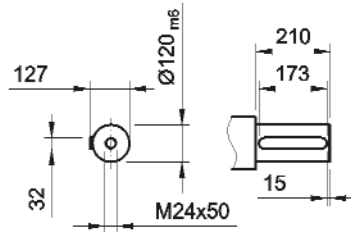
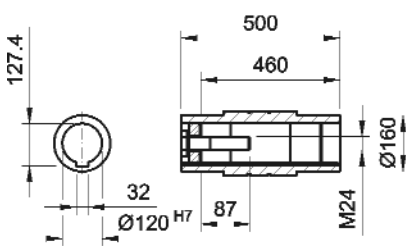
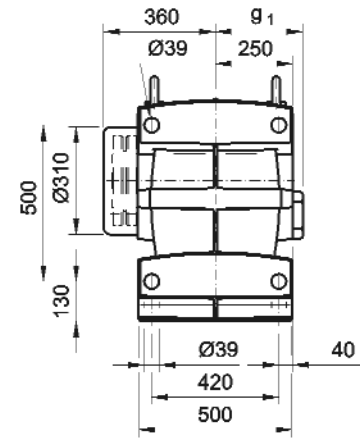
SKZH96..



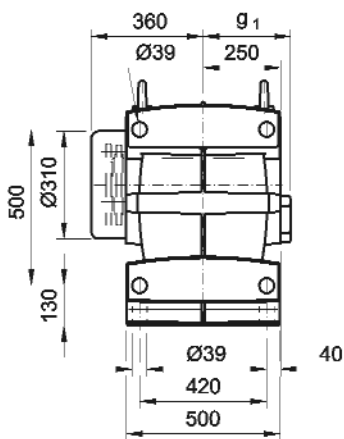
SKZN96..



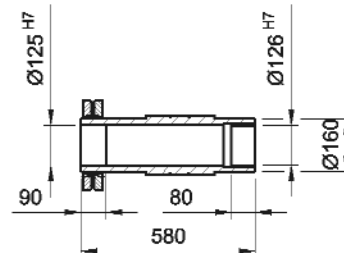
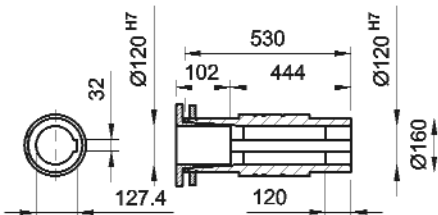
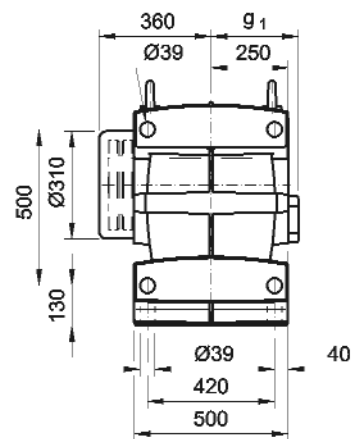
SKZS96..

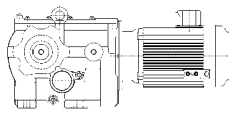


SKZB96..



SKZC96..

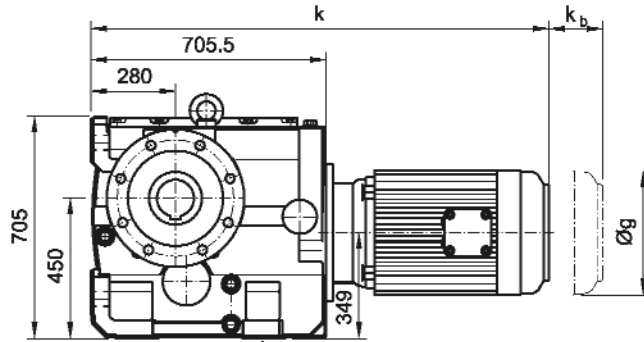




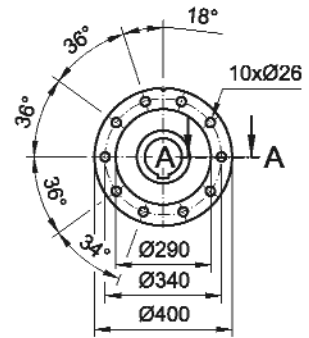
6. SK4

SKT..96C

100 - 225

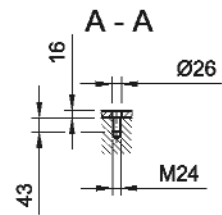
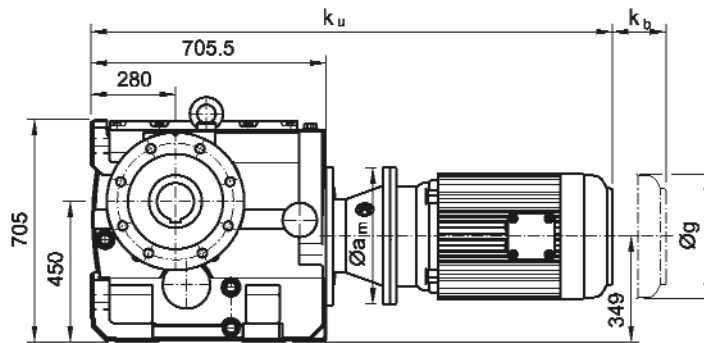


SKT..96..



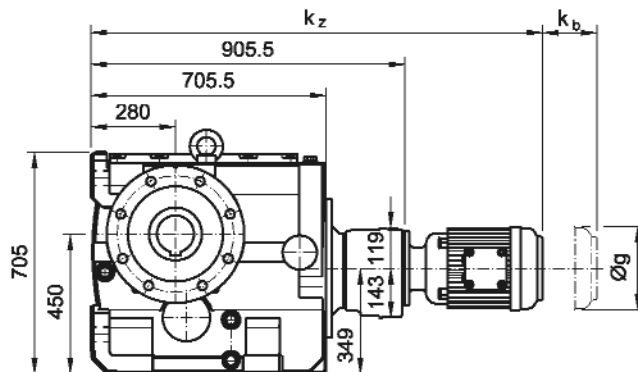
SKT..96C-U

100 - 280

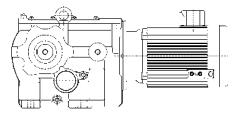


SKT..96C36B/C

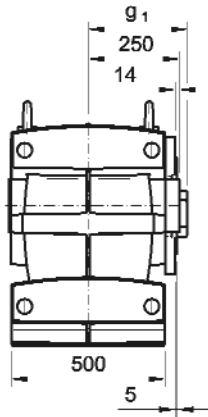
63 - 160



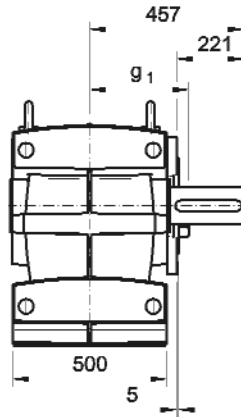
	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	
k						1017	1030	1099	1134	1134	1247	1291	1276	1314	1388	1457	1497				
ku						1147	1162	1229	1264		1407	1462	1645	1685	1749	1814	1844	1935	2030	2070	
kz	1130	1134	1157	1199	1199	1237	1250	1319	1354	1354	1467	1511									
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148				
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580	
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445	
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550	



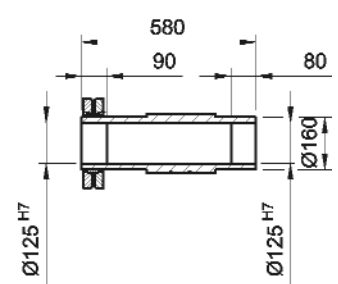
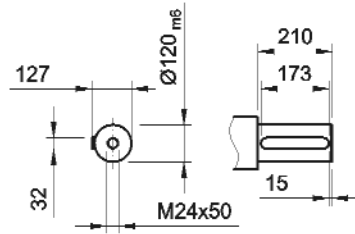
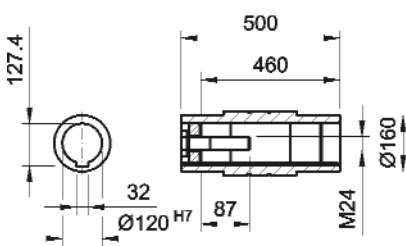
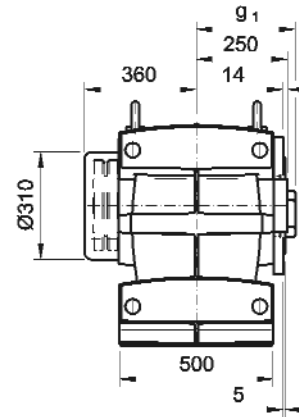
SKTH96..



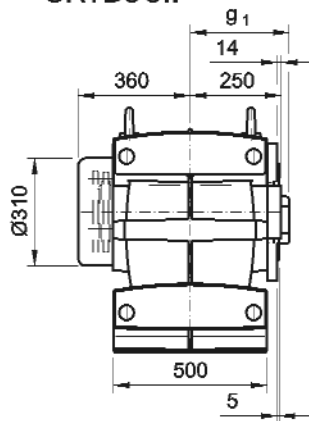
SKTN96..



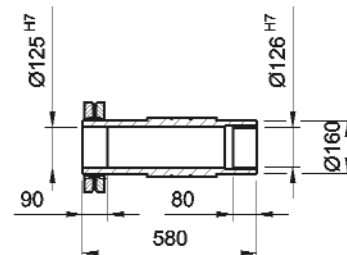
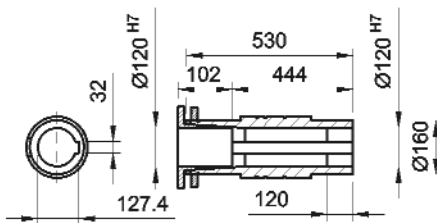
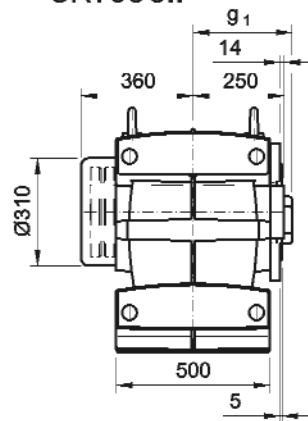
SKTS96..

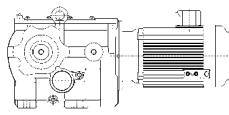


SKTB96..



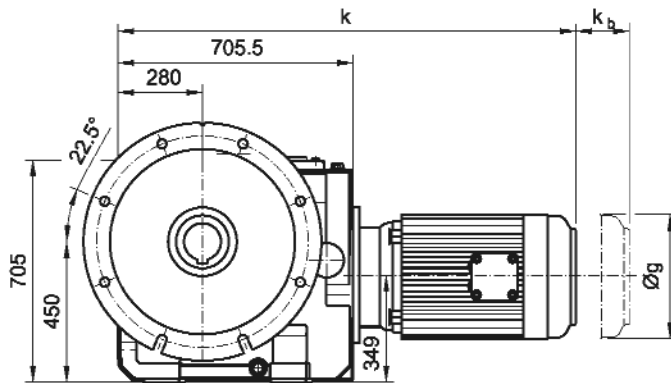
SKTC96..



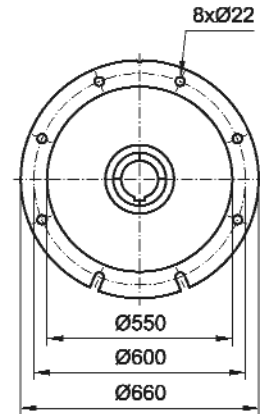


6. SK4

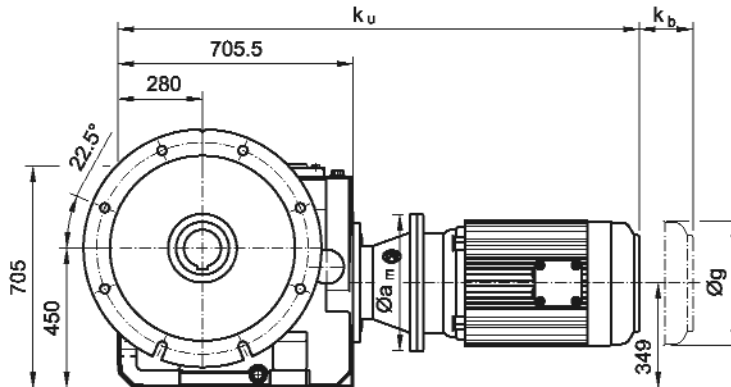
SKF..96C
100 - 225



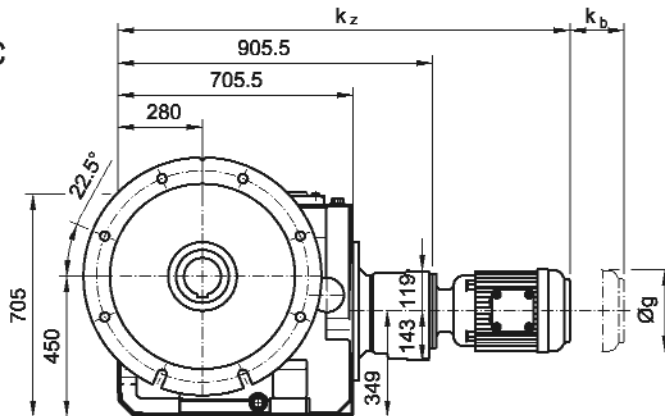
SKF..96..



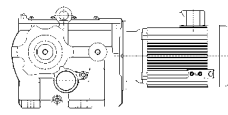
SKF..96C-U
100 - 280



SKF..96C36B/C
63 - 160

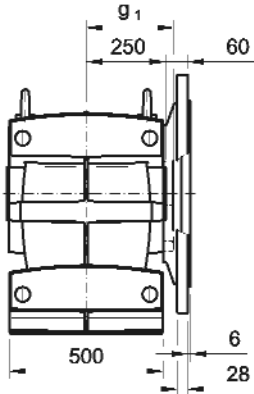


	63	71	80	90S	90L	100	112	132S	132M	132MG	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k						1017	1030	1099	1134	1134	1247	1291	1276	1314	1388	1457	1497			
ku						1147	1162	1229	1264		1407	1462	1645	1685	1749	1814	1844	1935	2030	2070
kz	1130	1134	1157	1199	1199	1237	1250	1319	1354	1354	1467	1511								
kb	48	60	71	77	77	80	89	97	97	97	77	77	112	112	147	148	148			
Øg	121	138	157	177	177	197	219	235	235	235	330	330	380	380	420	470	470	510	580	580
g1	96	102	125	133	133	144	165	182	182	182	287	287	312	312	350	385	385	375	445	445
Øam						250	250	300	300		350	350	350	350	400	450	450	550	550	550

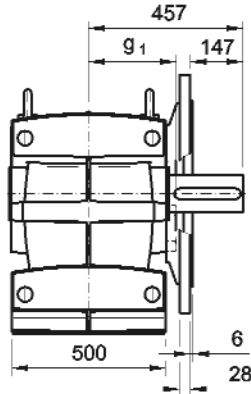


6. SK4

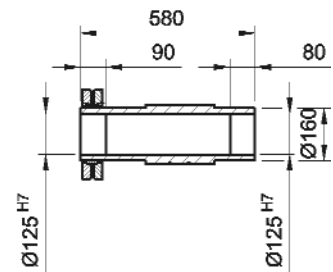
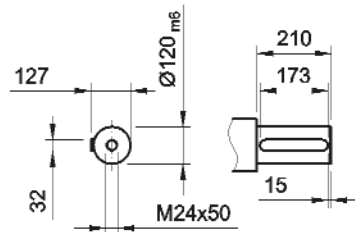
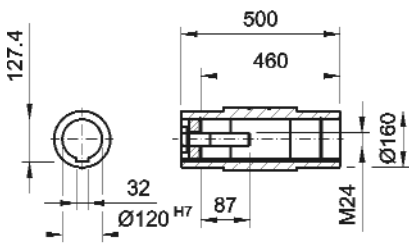
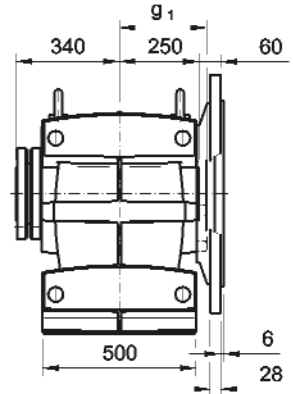
SKFH96..



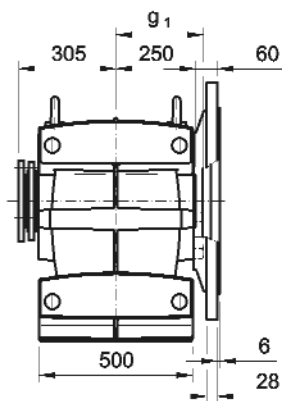
SKFN96..



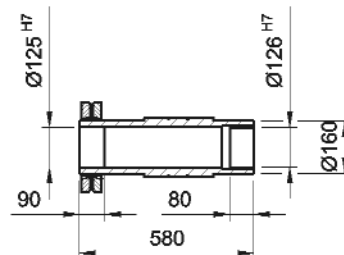
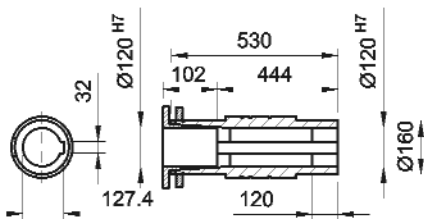
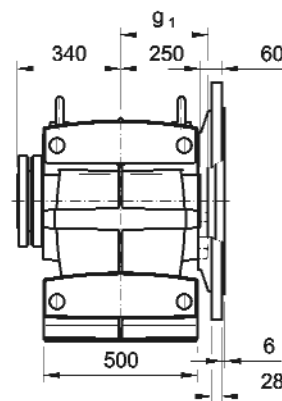
SKFS96..

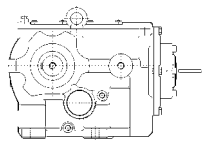


SKFB96..



SKFC96..





6. SK4

6.6 Auswahl Getriebe SK4 Selection of gear unit SK4 Sélection d'un réducteur SK4

Beispiel: Auswahltabellen Getriebe
Example: Gear unit selection table
Exemple de tableau de sélection pour réducteurs

Getriebeart und -größe
Gear unit type and size
Type et taille du réducteur

Abmessungen Seite
Dimensional drawings
Cotes latérales

Synchrondrehzahl des Motors
Synchronous speed of motor
Vitesse synchrone du moteur

Gewichte
Weights
Poids

Max. Nenndrehmoment
Max. rated torque
Couple nominal maxi.

SK..16		Type SK..16... -I SK..16... -U	m [kg] 25 27 S 125...				M193		200 Nm									
Type	...	1500 min ⁻¹						1000 1/min				750 1/min						
		i_{ex}	n_2 min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n_2 min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n_2 min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
	2.8																	
	3.15																	
	3.55	3.47	433	4.0	88	2610		289	4.0	132	2690		216	3.7	165	2770		
	4	3.97	378	4.0	101	2630		252	4.0	152	2640		189	3.3	165	2910		
	4.5	4.26	352	4.1	112	2650		235	4.1	165	2700		176	3.0	165	3080		
	5	4.90	306	4.0	125	2670		204	3.5	165	2840		153	2.6	165	3280		
	5.6	5.67	265	4.0	144	2620		177	3.0	165	3000		132	2.3	165	3460		

Zulässige Radialkraft für verstärkte Lagerung
Permissible radial force for reinforced bearings
Force radiale admissible pour paliers support renforcés

Zulässige Radialkraft
Permissible radial force
Force radiale admissible

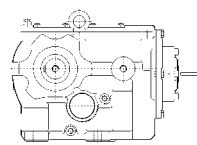
Drehmoment an der Abtriebswelle
Torque at output shaft
Couple au niveau de l'arbre de sortie

Mechanische Nennleistung des Getriebes
Mechanical rated power of gear unit
Puissance nominale mécanique du réducteur

Auswahldrehzahl der Abtriebswelle
Selection speed of output shaft
Vitesse de l'arbre de sortie

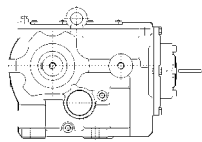
Exakte Übersetzung
Exact gear ratio
Valeur exacte du rapport de démultiplication

Nenn Übersetzung
Rated gear ratio
Réduction nominale



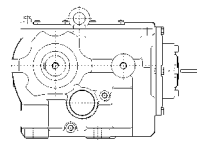
6. SK4

SK..26		Type	m [kg]					440 Nm									
		SK...26...-I	20														
		SK...26...-U	22														
		M193															
Type	...	n _{syn} =	1500 min ⁻¹					1000 1/min					750 1/min				
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N
SK...26C...	7.1	7.19	209	5.5	250	2000	8000	139	3.6	250	2500	8000	104	2.7	250	3000	8000
	8	8.25	182	5.0	260	2000	8000	121	3.3	260	2500	8000	91	2.5	260	3000	8000
	9	8.84	170	4.8	270	2000	8000	113	3.2	270	3000	8000	85	2.4	270	3500	8000
	10	10.17	147	4.3	280	2500	8000	98	2.9	280	3000	8000	74	2.2	280	3500	8000
	11.2	11.76	128	3.9	290	2500	8000	85	2.6	290	3000	8000	64	1.9	290	3500	8000
	12.5	12.48	120	4.9	390	1500	6900	80	3.3	390	2000	6900	60	2.5	390	3000	6900
	14	14.31	105	4.4	400	2000	6900	70	3.0	400	2500	6900	52	2.2	400	3000	6900
	16	15.34	98	4.2	415	2000	6900	65	2.9	415	2500	6900	49	2.1	415	3500	6900
	18	17.65	85	3.8	430	2000	6900	57	2.6	430	3000	6900	42	1.9	430	3500	6900
	20	20.40	74	3.4	440	2500	6900	49	2.3	440	3000	6900	37	1.7	440	4000	6900
	22.4	21.99	68	3.1	440	2500	6900	45	2.1	440	3500	6900	34	1.6	440	4000	6900
	25	23.74	63	2.9	440	3000	6900	42	2.0	440	3500	6900	32	1.5	440	4500	6900
	28	27.86	54	2.5	440	3000	6900	36	1.7	440	4000	6900	27	1.3	440	4500	6900
	31.5	30.30	50	2.3	440	3500	6900	33	1.5	440	4500	6900	25	1.2	440	4500	6900
	35.5	36.24	41	1.9	440	3500	6900	28	1.3	440	4500	6900	21	1.0	440	4500	6900
	40	39.90	38	1.8	440	4000	6900	25	1.2	440	4500	6900	19	0.87	440	4500	6900
	45	44.17	34	1.6	440	4000	6900	23	1.1	440	4500	6900	17	0.78	440	4500	6900
	50	49.21	30	1.4	440	4500	6900	20	0.94	440	4500	6900	15	0.70	440	4500	6900
	56	55.25	27	1.3	440	4500	6900	18	0.83	440	4500	6900	14	0.63	440	4500	6900
	63	61.51	24	1.1	440	4500	6900	16	0.75	440	4500	6900	12	0.56	440	4500	6900
71	68.78	22	1.0	440	4500	6900	15	0.67	440	4500	6900	11	0.50	440	4500	6900	
80	79.96	19	0.86	440	4500	6900	13	0.58	440	4500	6900	9.4	0.43	440	4500	6900	
90	89.08	17	0.78	440	4500	6900	11	0.52	440	4500	6900	8.4	0.39	440	4500	6900	
100	100.2	15	0.69	440	4500	6900	10.0	0.46	440	4500	6900	7.5	0.35	440	4500	6900	
112	110.7	14	0.62	440	4500	6900	9.0	0.42	440	4500	6900	6.8	0.31	440	4500	6900	
125	122.9	12	0.56	440	4500	6900	8.1	0.38	440	4500	6900	6.1	0.28	440	4500	6900	
140	137.8	11	0.50	440	4500	6900	7.3	0.33	440	4500	6900	5.4	0.25	440	4500	6900	
160																	
180																	
200																	
SK...26C16B...	160	154.5	10	0.45	440	4500	6900	6.5	0.30	440	4500	6900	4.9	0.23	440	4500	6900
	180	177.8	8.4	0.39	440	4500	6900	5.6	0.26	440	4500	6900	4.2	0.20	440	4500	6900
	200	205.6	7.3	0.34	440	4500	6900	4.9	0.23	440	4500	6900	3.6	0.17	440	4500	6900
	224	221.6	6.8	0.31	440	4500	6900	4.5	0.21	440	4500	6900	3.4	0.16	440	4500	6900
	250	239.2	6.3	0.29	440	4500	6900	4.2	0.20	440	4500	6900	3.1	0.15	440	4500	6900
	280	280.6	5.3	0.25	440	4500	6900	3.6	0.17	440	4500	6900	2.7	0.13	440	4500	6900
	315	305.4	4.9	0.23	440	4500	6900	3.3	0.15	440	4500	6900	2.5	0.12	440	4500	6900
	355	365.2	4.1	0.19	440	4500	6900	2.7	0.13	440	4500	6900	2.1	0.10	440	4500	6900
	400	402.0	3.7	0.17	440	4500	6900	2.5	0.12	440	4500	6900	1.9	0.09	440	4500	6900
	450	445.0	3.4	0.16	440	4500	6900	2.2	0.11	440	4500	6900	1.7	0.08	440	4500	6900
	500	495.8	3.0	0.14	440	4500	6900	2.0	0.10	440	4500	6900	1.5	0.07	440	4500	6900
	560	556.8	2.7	0.13	440	4500	6900	1.8	0.09	440	4500	6900	1.3	0.06	440	4500	6900
	630	619.6	2.4	0.11	440	4500	6900	1.6	0.08	440	4500	6900	1.2	0.06	440	4500	6900
	710	693.1	2.2	0.10	440	4500	6900	1.4	0.07	440	4500	6900	1.1	0.05	440	4500	6900
	800	805.7	1.9	0.09	440	4500	6900	1.2	0.06	440	4500	6900	0.9	0.05	440	4500	6900
900	897.6	1.7	0.08	440	4500	6900	1.1	0.05	440	4500	6900	0.8	0.04	440	4500	6900	
1000	999.9	1.5	0.07	440	4500	6900	1.0	0.05	440	4500	6900	0.8	0.04	440	4500	6900	
1120	1115	1.3	0.06	440	4500	6900	0.9	0.04	440	4500	6900	0.7	0.03	440	4500	6900	
1250	1204	1.2	0.06	440	4500	6900	0.8	0.04	440	4500	6900	0.6	0.03	440	4500	6900	



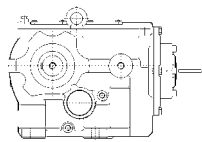
6. SK4

SK..36		Type	m [kg]					800 Nm									
		SK...36... -I	33					M204									
		SK...36... -U	37														
Type	...	n _{syn} =		1500 min ⁻¹				1000 1/min				750 1/min					
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N
SK...36V...	7.1																
	8	7.82	192	7.7	385	3000	13000	128	5.2	385	3500	15000	96	3.9	385	4500	15500
	9	8.72	172	7.4	410	3000	13500	115	4.9	410	4000	15500	86	3.7	410	4500	15500
	10	10.29	146	6.6	435	3000	14000	97	4.4	435	4000	15500	73	3.3	435	4500	15500
	11.2	11.53	130	6.1	450	3500	14500	87	4.1	450	4000	15500	65	3.1	450	5000	15500
	12.5	12.95	116	5.7	470	3500	14500	77	3.8	470	4000	15500	58	2.9	470	5000	15500
	14	13.99	107	7.5	670	1000	13500	71	5.0	670	2000	13500	54	3.8	670	2500	13500
	16	15.60	96	7.0	700	1000	13500	64	4.7	700	2000	13500	48	3.5	700	3000	13500
	18	18.41	81	6.2	730	1500	13500	54	4.2	730	2500	13500	41	3.1	730	3000	13500
	20	20.62	73	5.8	760	1500	13500	48	3.9	760	2500	13500	36	2.9	760	3500	13500
	22.4	23.18	65	5.4	790	2000	13500	43	3.6	790	3000	13500	32	2.7	790	4000	13500
	25	24.61	61	5.1	800	2000	13500	41	3.4	800	3500	13500	30	2.6	800	4000	13500
	28	29.67	51	4.2	800	2500	13500	34	2.8	800	3500	13500	25	2.1	800	4500	13500
	31.5	31.68	47	4.0	800	3000	13500	32	2.7	800	4000	13500	24	2.0	800	4500	13500
	35.5	36.34	41	3.5	800	3000	13500	28	2.3	800	4500	13500	21	1.8	800	4500	13500
	40	42.09	36	3.0	800	3500	13500	24	2.0	800	4500	13500	18	1.5	800	4500	13500
	45	45.51	33	2.8	800	4000	13500	22	1.9	800	4500	13500	16	1.4	800	4500	13500
	50	52.91	28	2.4	800	4000	13500	19	1.6	800	4500	13500	14	1.2	800	4500	13500
	56	58.91	25	2.2	800	4500	13500	17	1.4	800	4500	13500	13	1.1	800	4500	13500
	63	64.86	23	2.0	800	4500	13500	15	1.3	800	4500	13500	12	0.97	800	4500	13500
71	71.90	21	1.8	800	4500	13500	14	1.2	800	4500	13500	10	0.87	800	4500	13500	
80	80.34	19	1.6	800	4500	13500	12	1.1	800	4500	13500	9.3	0.78	800	4500	13500	
90	89.02	17	1.4	800	4500	13500	11	0.94	800	4500	13500	8.4	0.71	800	4500	13500	
100	99.2	15	1.3	800	4500	13500	10.1	0.85	800	4500	13500	7.6	0.63	800	4500	13500	
112	114.1	13	1.1	800	4500	13500	8.8	0.73	800	4500	13500	6.6	0.55	800	4500	13500	
125	128.1	12	0.98	800	4500	13500	7.8	0.65	800	4500	13500	5.9	0.49	800	4500	13500	
140	143.7	10	0.88	800	4500	13500	7.0	0.58	800	4500	13500	5.2	0.44	800	4500	13500	
160																	
180																	
200																	
SK...36C16B...	160	161.4	9	0.78	800	4500	13500	6.2	0.52	800	4500	13500	4.6	0.39	800	4500	13500
	180	172.9	8.7	0.73	800	4500	13500	5.8	0.48	800	4500	13500	4.3	0.36	800	4500	13500
	200	199.0	7.5	0.63	800	4500	13500	5.0	0.42	800	4500	13500	3.8	0.32	800	4500	13500
	224	230.0	6.5	0.55	800	4500	13500	4.3	0.36	800	4500	13500	3.3	0.28	800	4500	13500
	250	248.0	6.0	0.51	800	4500	13500	4.0	0.34	800	4500	13500	3.0	0.26	800	4500	13500
	280	267.7	5.6	0.47	800	4500	13500	3.7	0.31	800	4500	13500	2.8	0.24	800	4500	13500
	315	314.0	4.8	0.40	800	4500	13500	3.2	0.27	800	4500	13500	2.4	0.20	800	4500	13500
	355	341.8	4.4	0.37	800	4500	13500	2.9	0.25	800	4500	13500	2.2	0.19	800	4500	13500
	400	408.7	3.7	0.31	800	4500	13500	2.4	0.21	800	4500	13500	1.8	0.16	800	4500	13500
	450	449.8	3.3	0.28	800	4500	13500	2.2	0.19	800	4500	13500	1.7	0.14	800	4500	13500
	500	498.0	3.0	0.25	800	4500	13500	2.0	0.17	800	4500	13500	1.5	0.13	800	4500	13500
	560	554.9	2.7	0.23	800	4500	13500	1.8	0.15	800	4500	13500	1.4	0.12	800	4500	13500
	630	623.0	2.4	0.20	800	4500	13500	1.6	0.14	800	4500	13500	1.2	0.10	800	4500	13500
	710	693.4	2.2	0.18	800	4500	13500	1.4	0.12	800	4500	13500	1.1	0.09	800	4500	13500
	800	775.6	1.9	0.16	800	4500	13500	1.3	0.11	800	4500	13500	1.0	0.08	800	4500	13500
	900	901.6	1.7	0.14	800	4500	13500	1.1	0.10	800	4500	13500	0.8	0.07	800	4500	13500
1000	1004.0	1.5	0.13	800	4500	13500	1.0	0.09	800	4500	13500	0.7	0.07	800	4500	13500	
1120	1161	1.3	0.11	800	4500	13500	0.9	0.07	800	4500	13500	0.6	0.06	800	4500	13500	
1250	1248	1.2	0.10	800	4500	13500	0.8	0.07	800	4500	13500	0.6	0.05	800	4500	13500	




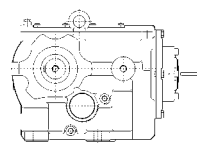
6. SK4

SK..46		Type SK...46...-I SK...46...-U					m [kg] 55 59		1600 Nm									
		M210																
Type	...	n _{syn} =		1500 min ⁻¹					1000 1/min					750 1/min				
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	
SK...46C...	7.1																	
	8	7.66	196	11.0	540	4000	14500	131	7.4	540	4500	15500	98	5.5	540	5000	16500	
	9	8.89	169	10.0	580	4000	14500	112	6.8	580	4000	15500	84	5.1	580	5000	17000	
	10	9.95	151	9.6	610	4000	14500	101	6.4	610	4500	16000	75	4.8	610	5000	17500	
	11.2	11.39	132	8.8	640	4000	15000	88	5.9	640	4500	16500	66	4.4	640	5000	18000	
	12.5	12.50	120	8.4	670	4000	15000	80	5.6	670	4500	17000	60	4.2	670	5500	18000	
	14	13.87	108	12.0	1050	2000	14500	72	7.9	1050	2000	16500	54	5.9	1050	2000	17500	
	16	16.10	93	10.5	1100	2000	15000	62	7.2	1100	2000	17000	47	5.4	1100	2500	18000	
	18	18.02	83	10.0	1160	2000	16000	55	6.7	1160	2500	17500	42	5.1	1160	2500	18000	
	20	20.63	73	9.3	1220	2000	16500	48	6.2	1220	2500	18000	36	4.6	1220	2500	18000	
	22.4	22.64	66	8.9	1280	2000	17000	44	5.9	1280	2500	18000	33	4.4	1280	2500	18000	
	25	26.15	57	8.1	1350	2500	17500	38	5.4	1350	2500	18000	29	4.1	1350	3000	18000	
	28	28.91	52	7.7	1410	2500	18000	35	5.1	1410	3000	18000	26	3.8	1410	3500	18000	
	31.5	32.09	47	7.1	1450	2500	18000	31	4.7	1450	3000	18000	23	3.5	1450	3500	18000	
	35.5	34.37	44	6.8	1480	2500	18000	29	4.5	1480	3000	18000	22	3.4	1480	4000	18000	
	40	40.19	37	6.1	1570	2500	18000	25	4.1	1570	3500	18000	19	3.1	1570	4500	18000	
	45	43.29	35	5.8	1600	3000	18000	23	3.9	1600	4000	18000	17	2.9	1600	5000	18000	
	50	49.15	31	5.1	1600	3000	18000	20	3.4	1600	4500	18000	15	2.6	1600	5500	18000	
	56	55.67	27	4.5	1600	3500	18000	18	3.0	1600	5000	18000	13	2.3	1600	5500	18000	
	63	60.70	25	4.1	1600	4000	18000	16	2.8	1600	5500	18000	12	2.1	1600	5500	18000	
71	70.26	21	3.6	1600	4500	18000	14	2.4	1600	5500	18000	11	1.8	1600	5500	18000		
80	77.59	19	3.2	1600	4500	18000	13	2.2	1600	5500	18000	9.7	1.6	1600	5500	18000		
90	92.82	16	2.7	1600	5500	18000	11	1.8	1600	5500	18000	8.1	1.4	1600	5500	18000		
100	103.4	15	2.5	1600	5500	18000	9.7	1.6	1600	5500	18000	7.3	1.2	1600	5500	18000		
112	114.3	13	2.2	1600	5500	18000	8.7	1.5	1600	5500	18000	6.6	1.1	1600	5500	18000		
125	127.0	12	2.00	1600	5500	18000	7.9	1.3	1600	5500	18000	5.9	1.0	1600	5500	18000		
140	133.9	11	1.70	1460	5500	18000	7.5	1.2	1460	5500	18000	5.6	0.86	1460	5500	18000		
160	147.2	10	1.6	1460	5500	18000	6.8	1.1	1460	5500	18000	5.1	0.8	1460	5500	18000		
180	182.6	8	1.2	1370	5500	18000	5.5	0.79	1370	5500	18000	4.1	0.6	1370	5500	18000		
200																		
SK...46C16B...	160																	
	180																	
	200	196.6	7.6	1.3	1600	5500	18000	5.1	0.85	1600	5500	18000	3.8	0.64	1600	5500	18000	
	224	225.4	6.7	1.1	1600	5500	18000	4.4	0.74	1600	5500	18000	3.3	0.56	1600	5500	18000	
	250	241.5	6.2	1.1	1600	5500	18000	4.1	0.69	1600	5500	18000	3.1	0.52	1600	5500	18000	
	280	277.9	5.4	0.90	1600	5500	18000	3.6	0.60	1600	5500	18000	2.7	0.45	1600	5500	18000	
	315	321.3	4.7	0.78	1600	5500	18000	3.1	0.52	1600	5500	18000	2.3	0.39	1600	5500	18000	
	355	346.4	4.3	0.73	1600	5500	18000	2.9	0.48	1600	5500	18000	2.2	0.36	1600	5500	18000	
	400	409.4	3.7	0.61	1600	5500	18000	2.4	0.41	1600	5500	18000	1.8	0.31	1600	5500	18000	
	450	438.5	3.4	0.57	1600	5500	18000	2.3	0.38	1600	5500	18000	1.7	0.29	1600	5500	18000	
	500	477.4	3.1	0.53	1600	5500	18000	2.1	0.35	1600	5500	18000	1.6	0.27	1600	5500	18000	
	560	570.8	2.6	0.44	1600	5500	18000	1.8	0.30	1600	5500	18000	1.3	0.22	1600	5500	18000	
	630	628.2	2.4	0.40	1600	5500	18000	1.6	0.27	1600	5500	18000	1.2	0.20	1600	5500	18000	
	710	723.6	2.1	0.35	1600	5500	18000	1.4	0.23	1600	5500	18000	1.0	0.18	1600	5500	18000	
	800	812.5	1.8	0.31	1600	5500	18000	1.2	0.21	1600	5500	18000	0.9	0.16	1600	5500	18000	
900	904.2	1.7	0.28	1600	5500	18000	1.1	0.19	1600	5500	18000	0.8	0.14	1600	5500	18000		
1000	1011.0	1.5	0.25	1600	5500	18000	1.0	0.17	1600	5500	18000	0.7	0.13	1600	5500	18000		
1120	1083	1.4	0.23	1600	5500	18000	0.9	0.16	1600	5500	18000	0.7	0.12	1600	5500	18000		
1250	1259	1.2	0.20	1600	5500	18000	0.8	0.14	1600	5500	18000	0.6	0.10	1600	5500	18000		



6. SK4

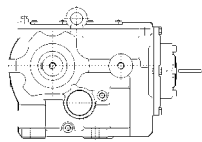
SK..56		Type SK...56... -I SK...56... -U		m [kg] 96 110		 M216		2900 Nm									
Type	...	n _{syn} =		1500 min ⁻¹				1000 1/min				750 1/min					
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N
SK...56C...	7.1																
	8	8.43	178	22	1150	4000	16500	119	15	1150	4500	17500	89	11	1150	4500	18500
	9	9.04	166	21	1200	4000	16500	111	14	1200	4500	17500	83	11	1200	5000	19000
	10	10.13	148	20	1250	4000	16500	99	13	1250	4500	17500	74	9.7	1250	5000	19500
	11.2	11.66	129	18	1300	3500	16500	86	12	1300	4500	18000	64	8.8	1300	5000	20000
	12.5	13.22	113	17	1400	3500	16500	76	11	1400	4500	18000	57	8.3	1400	5000	20500
	14	14.36	104	22	1950	1500	19000	70	14	1950	1500	21000	52	10.5	1950	1500	22500
	16	15.40	97	21	2050	1500	19500	65	14	2050	1500	22000	49	10.5	2050	1500	24000
	18	17.27	87	20	2150	1500	20500	58	13	2150	2000	23000	43	9.8	2150	2000	24500
	20	19.88	75	18	2200	1500	21000	50	12	2200	2000	23500	38	8.7	2200	2000	25500
	22.4	22.53	67	16	2300	1500	21500	44	11	2300	2000	24500	33	8.0	2300	2000	26500
	25	25.35	59	15	2400	3000	23500	39	9.9	2400	2000	25000	30	7.4	2400	2500	27000
	28	29.06	52	14	2500	2500	24000	34	9.0	2500	2000	26000	26	6.8	2500	3000	27000
	31.5	32.07	47	13	2600	2000	24000	31	8.5	2600	2000	27000	23	6.4	2600	3500	27000
	35.5	35.29	43	12	2650	2000	25000	28	7.9	2650	2500	27000	21	5.9	2650	4000	27000
	40	39.75	38	11	2700	2000	25500	25	7.1	2700	3500	27000	19	5.3	2700	5000	27000
	45	44.10	34	10	2800	2000	26500	23	6.6	2800	4000	27000	17	5.0	2800	5500	27000
	50	50.51	30	9.0	2900	2500	27000	20	6.0	2900	4500	27000	15	4.5	2900	6000	27000
	56	59.31	25	7.7	2900	3500	27000	17	5.1	2900	6000	27000	13	3.8	2900	7500	27000
	63	63.47	24	7.2	2900	4500	27000	16	4.8	2900	6500	27000	12	3.6	2900	7500	27000
71	70.89	21	6.4	2900	4500	27000	14	4.3	2900	6500	27000	11	3.2	2900	7500	27000	
80	80.88	19	5.6	2900	4500	27000	12	3.8	2900	7500	27000	9.3	2.8	2900	7500	27000	
90	87.69	17	5.2	2900	5500	27000	11	3.5	2900	7500	27000	8.6	2.6	2900	7500	27000	
100	101.2	15	4.5	2900	6000	27000	9.9	3.0	2900	7500	27000	7.4	2.3	2900	7500	27000	
112	111.2	13	4.1	2900	6500	27000	9.0	2.8	2900	7500	27000	6.7	2.1	2900	7500	27000	
125	132.7	11	3.40	2900	7500	27000	7.5	2.3	2900	7500	27000	5.7	1.7	2900	7500	27000	
140	148.7	10	3.10	2900	7500	27000	6.7	2.1	2900	7500	27000	5.0	1.6	2900	7500	27000	
160																	
180																	
200																	
SK...56C16B...	160	166.2	9	2.35	2500	7500	27000	6.0	1.6	2500	7500	27000	4.5	1.2	2500	7500	27000
	180	183.4	8.2	2.25	2600	7500	27000	5.5	1.5	2600	7500	27000	4.1	1.1	2600	7500	27000
	200	201.9	7.4	2.1	2650	7500	27000	5.0	1.4	2650	7500	27000	3.7	1.1	2650	7500	27000
	224	227.4	6.6	1.9	2700	7500	27000	4.4	1.3	2700	7500	27000	3.3	0.93	2700	7500	27000
	250	252.2	5.9	1.8	2800	7500	27000	4.0	1.2	2800	7500	27000	3.0	0.87	2800	7500	27000
	280	289.2	5.2	1.5	2800	7500	27000	3.5	1.0	2800	7500	27000	2.6	0.76	2800	7500	27000
	315	309.9	4.8	1.4	2800	7500	27000	3.2	0.95	2800	7500	27000	2.4	0.71	2800	7500	27000
	355	356.6	4.2	1.3	2800	7500	27000	2.8	0.82	2800	7500	27000	2.1	0.62	2800	7500	27000
	400	412.3	3.6	1.1	2800	7500	27000	2.4	0.71	2800	7500	27000	1.8	0.53	2800	7500	27000
	450	444.5	3.4	0.99	2800	7500	27000	2.2	0.66	2800	7500	27000	1.7	0.50	2800	7500	27000
	500	479.8	3.1	0.92	2800	7500	27000	2.1	0.61	2800	7500	27000	1.6	0.46	2800	7500	27000
	560	562.7	2.7	0.78	2800	7500	27000	1.8	0.52	2800	7500	27000	1.3	0.39	2800	7500	27000
	630	612.5	2.4	0.72	2800	7500	27000	1.6	0.48	2800	7500	27000	1.2	0.36	2800	7500	27000
	710	732.5	2.0	0.60	2800	7500	27000	1.4	0.40	2800	7500	27000	1.0	0.30	2800	7500	27000
	800	806.1	1.9	0.55	2800	7500	27000	1.2	0.36	2800	7500	27000	0.9	0.28	2800	7500	27000
	900	892.5	1.7	0.49	2800	7500	27000	1.1	0.33	2800	7500	27000	0.8	0.25	2800	7500	27000
1000	994.4	1.5	0.44	2800	7500	27000	1.0	0.30	2800	7500	27000	0.8	0.22	2800	7500	27000	
1120	1117	1.3	0.39	2800	7500	27000	0.9	0.26	2800	7500	27000	0.7	0.20	2800	7500	27000	
1250	1243	1.2	0.35	2800	7500	27000	0.8	0.24	2800	7500	27000	0.6	0.18	2800	7500	27000	



6. SK4

SK..66		Type SK...66... -I SK...66... -U	m [kg] 195 262		M222		4900 Nm												
Type	...	n _{syn} =		1500 min ⁻¹						1000 1/min					750 1/min				
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N		
SK...66C...	7.1																		
	8																		
	9	9.14	164	42(1)	2450	5500	26000	109	28	2450	4500	27000	82	21	2450	5000	28000		
	10	9.80	153	39(1)	2450	4500	26000	102	26	2450	5000	27500	77	20	2450	5500	28500		
	11.2	10.98	137	35(1)	2450	4500	26000	91	24	2450	5000	28000	68	18	2450	6000	30500		
	12.5	12.64	119	30(1)	2450	4500	26500	79	21	2450	5500	28500	59	15	2450	6500	31500		
	14	14.33	105	27	2450	5000	27000	70	18	2450	6000	29500	52	14	2450	7000	33000		
	16	16.12	93	24	2450	5000	27500	62	16	2450	6500	31000	47	12	2450	8000	37500		
	18	18.24	82	40(1)	4630	-	22500	55	28	4900	-	27000	41	21	4900	2500	30500		
	20	19.55	77	38(1)	4670	-	24000	51	26	4900	1500	28000	38	20	4900	3000	32000		
	22.4	21.93	68	34(1)	4760	-	25000	46	24	4900	2000	29500	34	18	4900	3500	33500		
	25	25.24	59	30(1)	4830	-	26000	40	21	4900	2500	31000	30	15	4900	4500	35000		
	28	28.61	52	27(1)	4880	1000	27500	35	18	4900	3500	32500	26	14	4900	5000	36500		
	31.5	32.18	47	24	4900	1500	29000	31	16	4900	4000	34500	23	12	4900	6000	38500		
	35.5	36.90	41	21	4900	2500	30500	27	14	4900	5000	36000	20	11	4900	7000	40000		
	40	40.72	37	19	4900	3000	32000	25	13	4900	5500	37500	18	9.5	4900	7500	40000		
	45	44.81	33	17	4900	3500	33500	22	12	4900	6500	39500	17	8.6	4900	8500	40000		
	50	50.48	30	15	4900	4500	35000	20	10	4900	7000	40000	15	7.6	4900	9500	40000		
	56	55.99	27	14	4900	5000	36500	18	9.2	4900	8000	40000	13	6.9	4900	10500	40000		
	63	64.14	23	12	4900	6000	38500	16	8.0	4900	9000	40000	12	6.0	4900	11500	40000		
71	75.31	20	10	4900	7000	40000	13	6.8	4900	10000	40000	10	5.1	4900	12500	40000			
80	80.59	19	9.5	4900	7500	40000	12	6.4	4900	11000	40000	9.3	4.8	4900	13500	40000			
90	90.02	17	8.5	4900	8500	40000	11	5.7	4900	12000	40000	8.3	4.3	4900	13500	40000			
100	102.7	15	7.5	4900	9500	40000	9.7	5.0	4900	13000	40000	7.3	3.7	4900	13500	40000			
112	111.3	13	6.9	4900	10500	40000	9.0	4.6	4900	13500	40000	6.7	3.5	4900	13500	40000			
125	128.5	12	6.0	4900	11500	40000	7.8	4.0	4900	13500	40000	5.8	3.0	4900	13500	40000			
140	141.2	11	5.5	4900	12500	40000	7.1	3.6	4900	13500	40000	5.3	2.8	4900	13500	40000			
160	168.4	8.9	4.6	4900	13500	40000	5.9	3.0	4900	13500	40000	4.5	2.3	4900	13500	40000			
180	188.8	7.9	4.1	4900	13500	40000	5.3	2.7	4900	13500	40000	4.0	2.1	4900	13500	40000			
200																			
SK...66C16B...	160																		
	180																		
	200	211.1	7.1	3.6	4900	13500	40000	4.7	2.5	4900	13500	40000	3.6	1.8	4900	13500	40000		
	224	232.9	6.4	3.3	4900	13500	40000	4.3	2.2	4900	13500	40000	3.2	1.7	4900	13500	40000		
	250	259.3	5.8	3.0	4900	13500	40000	3.9	2.0	4900	13500	40000	2.9	1.5	4900	13500	40000		
	280	286.1	5.2	2.7	4900	13500	40000	3.5	1.8	4900	13500	40000	2.6	1.4	4900	13500	40000		
	315	329.3	4.6	2.4	4900	13500	40000	3.0	1.6	4900	13500	40000	2.3	1.2	4900	13500	40000		
	355	350.1	4.3	2.2	4900	13500	40000	2.9	1.5	4900	13500	40000	2.1	1.1	4900	13500	40000		
	400	410.5	3.7	1.9	4900	13500	40000	2.4	1.3	4900	13500	40000	1.8	0.94	4900	13500	40000		
	450	443.0	3.4	1.8	4900	13500	40000	2.3	1.2	4900	13500	40000	1.7	0.87	4900	13500	40000		
	500	519.6	2.9	1.5	4900	13500	40000	1.9	0.99	4900	13500	40000	1.4	0.74	4900	13500	40000		
	560	565.6	2.7	1.4	4900	13500	40000	1.8	0.91	4900	13500	40000	1.3	0.68	4900	13500	40000		
	630	651.3	2.3	1.2	4900	13500	40000	1.5	0.79	4900	13500	40000	1.2	0.59	4900	13500	40000		
	710	744.4	2.0	1.1	4900	13500	40000	1.3	0.69	4900	13500	40000	1.0	0.52	4900	13500	40000		
	800	824.2	1.8	0.93	4900	13500	40000	1.2	0.62	4900	13500	40000	0.91	0.47	4900	13500	40000		
900	918.2	1.6	0.84	4900	13500	40000	1.1	0.56	4900	13500	40000	0.82	0.42	4900	13500	40000			
1000	1031.0	1.5	0.75	4900	13500	40000	1.0	0.50	4900	13500	40000	0.73	0.37	4900	13500	40000			
1120	1148	1.3	0.67	4900	13500	40000	0.9	0.45	4900	13500	40000	0.65	0.34	4900	13500	40000			
1250	1284	1.2	0.60	4900	13500	40000	0.8	0.40	4900	13500	40000	0.58	0.30	4900	13500	40000			

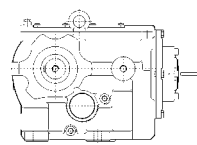
(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.



6. SK4

SK..76		Type	m [kg]					8000 Nm											
		SK...76... -I	280					M228											
		SK...76... -U	355																
Type	...	1500 min ⁻¹						1000 1/min						750 1/min					
		n _{syn} = i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N		
SK...76C...	7.1																		
	8																		
	9	8.72	172	70(1)	3900	8500	36000	115	47(1)	3900	7000	36000	86	36	4000	8000	38000		
	10	9.62	156	65(1)	3960	8000	36000	104	43(1)	3960	7500	37000	78	32	4000	8000	38500		
	11.2	11.07	136	56(1)	3960	7000	35500	90	37(1)	3960	7500	37500	68	28	4000	8500	39000		
	12.5	12.51	120	50(1)	3960	7000	36000	80	33(1)	3960	8000	38000	60	25	4000	9000	41000		
	14	13.81	109	45(1)	3960	7000	36500	72	30(1)	3960	8000	41500	54	23	4000	10000	42500		
	16	15.67	96	40(1)	3960	7500	37000	64	26(1)	3960	9000	40000	48	20	4000	11000	44500		
	18	17.59	85	70(1)	7880	4000	34500	57	47(1)	7880	-	34500	43	36	8000	3000	39500		
	20	19.40	77	65(1)	8000	2000	34000	52	43(1)	8000	1000	36500	39	32	8000	4000	41000		
	22.4	22.34	67	56(1)	8000	-	32500	45	38(1)	8000	2500	38000	34	28	8000	5000	43000		
	25	25.24	59	50(1)	8000	-	33500	40	33(1)	8000	3500	40000	30	25	8000	6000	45000		
	28	27.86	54	45(1)	8000	-	35500	36	30	8000	4500	42000	27	23	8000	7000	47500		
	31.5	31.62	47	40(1)	8000	2000	37000	32	27	8000	5500	44000	24	20	8000	8000	49500		
	35.5	35.54	42	35(1)	8000	3000	39000	28	24	8000	6500	46500	21	18	8000	9500	52000		
	40	39.50	38	32(1)	8000	4000	41000	25	21	8000	7500	48500	19	16	8000	10500	54500		
	45	44.97	33	28	8000	5000	43500	22	19	8000	9000	51000	17	14	8000	11500	57000		
	50	48.55	31	26	8000	6000	45000	21	18	8000	10000	53000	15	13	8000	13000	59500		
	56	53.81	28	24	8000	7000	47500	19	16	8000	12000	55500	14	12	8000	14000	62000		
	63	61.93	24	21	8000	8000	49500	16	14	8000	12500	58000	12	10	8000	15500	65000		
	71	69.85	21	18	8000	9500	52000	14	12	8000	13500	61000	11	9.0	8000	17000	65000		
	80	79.53	19	16	8000	10500	54500	13	11	8000	15000	63500	9.4	7.9	8000	18500	65000		
	90	87.25	17	15	8000	11500	57000	11	9.6	8000	16500	65000	8.6	7.2	8000	20000	65000		
	100	100.0	15	13	8000	13000	59500	10	8.4	8000	18000	65000	7.5	6.3	8000	21000	65000		
	112	108.4	14	12	8000	14000	62000	9.2	7.7	8000	19500	65000	6.9	5.8	8000	21000	65000		
	125	127.9	12	9.8	8000	15500	64500	7.8	6.5	8000	21000	65000	5.9	4.9	8000	21000	65000		
	140	142.7	11	8.8	8000	17000	65000	7.0	5.9	8000	21000	65000	5.3	4.40	8000	21000	65000		
	160	158.7	9.5	7.9	8000	18000	65000	6.3	5.3	8000	2100	65000	4.7	4.0	8000	21000	65000		
180																			
200																			
SK...76C36B...	160																		
	180	173.1	8.7	7.3	8000	20000	65000	5.8	4.8	8000	21000	65000	4.3	3.6	8000	21000	65000		
	200	201.0	7.5	6.3	8000	21000	65000	5.0	4.2	8000	21000	65000	3.7	3.1	8000	21000	65000		
	224	225.0	6.7	5.6	8000	21000	65000	4.4	3.7	8000	21000	65000	3.3	2.8	8000	21000	65000		
	250	257.6	5.8	4.9	8000	21000	65000	3.9	3.3	8000	21000	65000	2.9	2.5	8000	21000	65000		
	280	282.7	5.3	4.4	8000	21000	65000	3.5	3.0	8000	21000	65000	2.7	2.2	8000	21000	65000		
	315	326.6	4.6	3.8	8000	21000	65000	3.1	2.6	8000	21000	65000	2.3	1.9	8000	21000	65000		
	355	360.8	4.2	3.5	8000	21000	65000	2.8	2.3	8000	21000	65000	2.1	1.8	8000	21000	65000		
	400	400.6	3.7	3.1	8000	21000	65000	2.5	2.1	8000	21000	65000	1.9	1.6	8000	21000	65000		
	450	429.1	3.5	3.0	8000	21000	65000	2.3	2.0	8000	21000	65000	1.7	1.5	8000	21000	65000		
	500	501.8	3.0	2.5	8000	21000	65000	2.0	1.7	8000	21000	65000	1.5	1.3	8000	21000	65000		
	560	540.8	2.8	2.3	8000	21000	65000	1.8	1.6	8000	21000	65000	1.4	1.2	8000	21000	65000		
	630	613.7	2.4	2.1	8000	21000	65000	1.6	1.4	8000	21000	65000	1.2	1.0	8000	21000	65000		
	710	695.0	2.2	1.8	8000	21000	65000	1.4	1.2	8000	21000	65000	1.1	0.90	8000	21000	65000		
	800	757.9	2.0	1.7	8000	21000	65000	1.3	1.1	8000	21000	65000	1.0	0.83	8000	21000	65000		
	900	877.1	1.7	1.5	8000	21000	65000	1.1	0.96	8000	21000	65000	0.86	0.72	8000	21000	65000		
1000	968.5	1.5	1.3	8000	21000	65000	1.0	0.87	8000	21000	65000	0.77	0.65	8000	21000	65000			
1120	1159	1.3	1.1	8000	21000	65000	0.86	0.72	8000	21000	65000	0.65	0.54	8000	21000	65000			
1250	1290	1.2	0.97	8000	21000	65000	0.78	0.65	8000	21000	65000	0.58	0.49	8000	21000	65000			

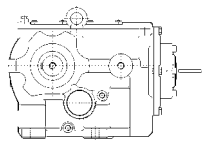
(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.



6. SK4

Type		SK..86					Type	m [kg]	13000 Nm												
		SK...86...-I SK...86...-U					SK...86...-I SK...86...-U	442 509	M234												
Type	...	n _{syn} =		1500 min ⁻¹						1000 1/min						750 1/min					
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N				
SK...86C...	7.1																				
	8																				
	9	8.70	172	90(1)	5000	12500	50000	115	60(1)	5000	12000	53500	86	45	5000	13000	55500				
	10	9.66	155	85(1)	5240	12000	52000	104	56(1)	5200	12000	54000	78	43	5200	13000	56000				
	11.2	11.51	130	78(1)	5730	10000	55000	87	52(1)	5700	11500	53500	65	39	5700	12000	56000				
	12.5	12.36	121	77(1)	6020	9500	51000	81	51(1)	6000	10500	54000	61	38	6000	11500	56500				
	14	14.29	105	69(1)	6260	9000	51000	70	46(1)	6300	10500	45500	52	34	6300	12000	57500				
	16	15.98	94	63(1)	6370	9000	52000	63	42(1)	6400	10500	55000	47	31	6400	13000	60000				
	18	17.77	84	90(1)	10220	7500	50500	56	59(1)	10000	5500	51500	42	45	10000	8500	58000				
	20	19.72	76	85(1)	10680	5500	49500	51	56(1)	10500	5500	53000	38	43	10500	8500	59500				
	22.4	23.50	64	78(1)	11700	2000	48000	43	51(1)	11500	5000	55000	32	39	11500	8000	62000				
	25	25.23	59	77(1)	12300	-	47000	40	52(1)	12500	4500	55500	30	38	12500	7500	62500				
	28	29.17	51	69(1)	12770	1000	49000	34	46	13000	5000	58000	26	34	13000	8500	65500				
	31.5	32.63	46	63(1)	13000	1500	51000	31	42	13000	6000	60500	23	31	13000	9500	68000				
	35.5	35.23	43	58(1)	13000	2500	52500	28	39	13000	6500	62500	21	29	13000	10500	70000				
	40	39.67	38	51(1)	13000	3500	55500	25	34	13000	8000	65500	19	26	13000	12000	73500				
	45	44.92	33	45	13000	5000	58500	22	30	13000	9500	69000	17	23	13000	13500	77500				
	50	48.98	31	42	13000	6000	60500	20	28	13000	11000	71500	15	21	13000	15000	82000				
	56	56.17	27	36	13000	7500	64000	18	24	13000	12500	75500	13	18	13000	17000	82500				
	63	65.08	23	31	13000	9500	68000	15	21	13000	14500	79500	12	16	13000	19000	82500				
	71	72.31	21	28	13000	10500	71000	14	19	13000	16500	82500	10	14	13000	21000	82500				
	80	77.24	19	27	13000	11500	72500	13	18	13000	17000	82500	9.7	13	13000	22000	82500				
	90	85.87	17	24	13000	13000	75500	12	16.0	13000	19000	82500	8.7	12	13000	23500	82500				
	100	97.4	15	21	13000	14500	79500	10	14.0	13000	21000	82500	7.7	11	13000	26000	82500				
112	106.3	14	19	13000	16000	82500	9.4	13.0	13000	22500	82500	7.1	9.6	13000	27000	82500					
125	121.7	12	17	13000	18000	82500	8.2	11	13000	24500	82500	6.2	8.4	13000	27000	82500					
140	133.0	11	16	13000	19500	82500	7.5	10	13000	26500	82500	5.6	7.7	13000	27000	82500					
160	156.7	9.6	13	13000	22000	82500	6.4	8.7	13000	27000	82500	4.8	6.5	13000	27000	82500					
180	172.6	9	12	13000	24000	82500	5.8	7.9	13000	27000	82500	4.3	5.9	13000	27000	82500					
200	191.6	8	11	13000	25500	82500	5.2	7.1	13000	27000	82500	3.9	5.3	13000	27000	82500					
SK...86C36B...	160																				
	180																				
	200																				
	224	217.2	6.9	9.4	13000	27000	82500	4.6	6.3	13000	27000	82500	3.5	4.7	13000	27000	82500				
	250	252.1	6.0	8.1	13000	27000	82500	4.0	5.4	13000	27000	82500	3.0	4.0	13000	27000	82500				
	280	282.3	5.3	7.2	13000	27000	82500	3.5	4.8	13000	27000	82500	2.7	3.6	13000	27000	82500				
	315	323.2	4.6	6.3	13000	27000	82500	3.1	4.2	13000	27000	82500	2.3	3.2	13000	27000	82500				
	355	354.6	4.2	5.8	13000	27000	82500	2.8	3.8	13000	27000	82500	2.1	2.9	13000	27000	82500				
	400	409.8	3.7	5.0	13000	27000	82500	2.4	3.3	13000	27000	82500	1.8	2.5	13000	27000	82500				
	450	452.6	3.3	4.5	13000	27000	82500	2.2	3.0	13000	27000	82500	1.7	2.3	13000	27000	82500				
	500	502.6	3.0	4.1	13000	27000	82500	2.0	2.7	13000	27000	82500	1.5	2.1	13000	27000	82500				
	560	538.3	2.8	3.8	13000	27000	82500	1.9	2.6	13000	27000	82500	1.4	1.9	13000	27000	82500				
	630	629.6	2.4	3.2	13000	27000	82500	1.6	2.2	13000	27000	82500	1.2	1.6	13000	27000	82500				
	710	678.0	2.2	3.0	13000	27000	82500	1.5	2.0	13000	27000	82500	1.1	1.5	13000	27000	82500				
	800	770.0	1.9	2.7	13000	27000	82500	1.3	1.8	13000	27000	82500	1.0	1.4	13000	27000	82500				
900	871.9	1.7	2.4	13000	27000	82500	1.1	1.6	13000	27000	82500	0.86	1.2	13000	27000	82500					
1000	950.9	1.6	2.2	13000	27000	82500	1.1	1.5	13000	27000	82500	0.79	1.1	13000	27000	82500					
1120	1100	1.4	1.9	13000	27000	82500	0.91	1.3	13000	27000	82500	0.68	0.93	13000	27000	82500					
1250	1215	1.2	1.7	13000	27000	82500	0.82	1.1	13000	27000	82500	0.62	0.84	13000	27000	82500					

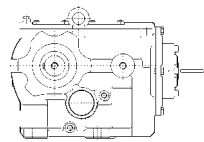
(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.



6. SK4

SK..96		Type	m [kg]		M240						20000 Nm										
		SK...96... -I	615																		
		SK...96... -U	682																		
Type	...	n _{syn} =		1500 min ⁻¹						1000 1/min						750 1/min					
		i _{ex}	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N	n ₂ min ⁻¹	P kW	T ₂ Nm	F _{rN} N	F _{rN-G} N				
SK...96C...	7.1																				
	8																				
	9	8.85	170	169(1)	9500	20000	77500	113	112(1)	9500	15500	76500	85	86	9500	14000	77000				
	10	10.01	150	157(1)	10000	19000	77000	100	105(1)	10000	13500	75500	75	79	10000	13500	78000				
	11.2	11.34	132	139(1)	10000	17500	77000	88	92(1)	10000	13000	76000	66	69	10000	14500	79000				
	12.5	12.87	117	122(1)	10000	15500	76000	78	81(1)	10000	13500	77000	58	61	10000	15000	80500				
	14	14.02	107	112(1)	10000	14500	76000	71	75(1)	10000	14000	78500	53	56	10000	15500	82000				
	16	16.00	94	98(1)	10000	12500	75000	63	65(1)	10000	14500	79500	47	49	10000	16500	85000				
	18	17.62	85	172(1)	19330	15000	78500	57	115(1)	19330	6000	74000	43	86	19500	4000	77000				
	20	19.94	75	158(1)	20000	12500	77500	50	105(1)	20000	2000	72000	38	79	20000	4000	79500				
	22.4	22.59	66	139(1)	20000	9500	76000	44	93(1)	20000	1500	74000	33	70	20000	6000	84000				
	25	25.63	59	123(1)	20000	6500	74000	39	82(1)	20000	3000	77500	29	61	20000	7500	87500				
	28	27.93	54	112(1)	20000	4000	73500	36	75(1)	20000	5000	81500	27	56	20000	9500	91500				
	31.5	31.86	47	99(1)	20000	-	72000	31	66(1)	20000	6500	85500	24	49	20000	11500	96500				
	35.5	34.88	43	90(1)	20000	2500	76000	29	60	20000	8500	90000	22	45	20000	13500	101000				
	40	40.17	37	78(1)	20000	4000	80000	25	52	20000	10500	94000	19	39	20000	15500	105500				
	45	44.32	34	71(1)	20000	6000	84000	23	47	20000	12500	99000	17	35	20000	17500	110500				
	50	49.81	30	63(1)	20000	7500	87500	20	42	20000	14500	103000	15	32	20000	20000	112000				
	56	55.46	27	57(1)	20000	9500	91500	18	38	20000	16500	108000	14	29	20000	22000	112000				
	63	62.14	24	51(1)	20000	11500	96500	16	34	20000	18500	112000	12	26	20000	24500	112000				
71	70.15	21	45	20000	13500	101000	14	30	20000	21000	112000	11	23	20000	27000	112000					
80	78.94	19	40	20000	15500	105500	13	27	20000	23500	112000	9.5	20	20000	30000	112000					
90	91.06	16	34	20000	17500	110500	11	23.0	20000	26000	112000	8.2	17	20000	32500	112000					
100	99.5	15	32	20000	20000	112000	10	21.0	20000	28500	112000	7.5	16	20000	35000	112000					
112	107.9	14	29	20000	22000	112000	9.3	19.5	20000	31000	112000	7.0	14.5	20000	37500	112000					
125	127.4	12	25	20000	24500	112000	7.8	17	20000	33500	112000	5.9	12.5	20000	37500	112000					
140	140.6	11	23	20000	27000	112000	7.1	15	20000	36500	112000	5.3	11.0	20000	37500	112000					
160	156.5	9.6	20	20000	30000	112000	6.4	13.5	20000	37500	112000	4.8	10.0	20000	37500	112000					
180																					
200																					
SK...96C36B...	160																				
	180	174.4	8.6	17.5	19500	32500	112000	5.7	11.5	19500	37500	112000	4.3	8.8	19500	37500	112000				
	200	191.0	7.9	16.5	20000	35000	112000	5.2	11.0	20000	37500	112000	3.9	8.2	20000	37500	112000				
	224	219.9	6.8	14.5	20000	37500	112000	4.5	9.5	20000	37500	112000	3.4	7.1	20000	37500	112000				
	250	255.3	5.9	12.5	20000	37500	112000	3.9	8.2	20000	37500	112000	2.9	6.2	20000	37500	112000				
	280	285.8	5.2	11.0	20000	37500	112000	3.5	7.3	20000	37500	112000	2.6	5.5	20000	37500	112000				
	315	327.3	4.6	9.6	20000	37500	112000	3.1	6.4	20000	37500	112000	2.3	4.8	20000	37500	112000				
	355	359.1	4.2	8.7	20000	37500	112000	2.8	5.8	20000	37500	112000	2.1	4.4	20000	37500	112000				
	400	415.0	3.6	7.6	20000	37500	112000	2.4	5.0	20000	37500	112000	1.8	3.8	20000	37500	112000				
	450	458.3	3.3	6.9	20000	37500	112000	2.2	4.6	20000	37500	112000	1.6	3.4	20000	37500	112000				
	500	509.0	2.9	6.2	20000	37500	112000	2.0	4.1	20000	37500	112000	1.5	3.1	20000	37500	112000				
	560	545.1	2.8	5.8	20000	37500	112000	1.8	3.8	20000	37500	112000	1.4	2.9	20000	37500	112000				
	630	637.5	2.4	4.9	20000	37500	112000	1.6	3.3	20000	37500	112000	1.2	2.5	20000	37500	112000				
	710	686.5	2.2	4.6	20000	37500	112000	1.5	3.1	20000	37500	112000	1.1	2.3	20000	37500	112000				
	800	779.7	1.9	4.0	20000	37500	112000	1.3	2.7	20000	37500	112000	1.0	2.0	20000	37500	112000				
	900	882.9	1.7	3.6	20000	37500	112000	1.1	2.4	20000	37500	112000	0.85	1.8	20000	37500	112000				
1000	962.9	1.6	3.3	20000	37500	112000	1.0	2.2	20000	37500	112000	0.78	1.7	20000	37500	112000					
1120	1114	1.3	2.8	20000	37500	112000	0.90	1.9	20000	37500	112000	0.67	1.40	20000	37500	112000					
1250	1230	1.2	2.6	20000	37500	112000	0.81	1.7	20000	37500	112000	0.61	1.30	20000	37500	112000					

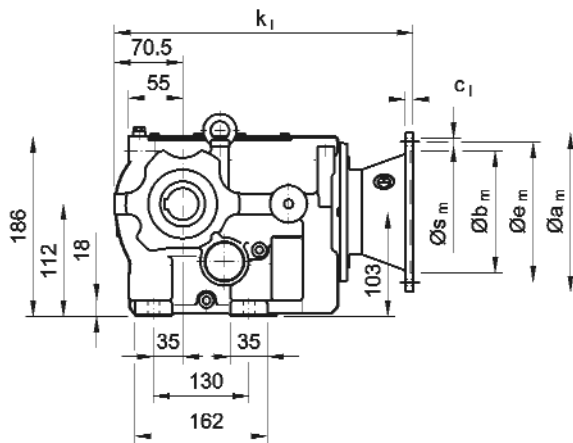
(1) Achtung. Maximale thermische Leistung beachten. Attention. Please check for max thermal power. Attention. Vérifier svp la puissance thermique maximum.



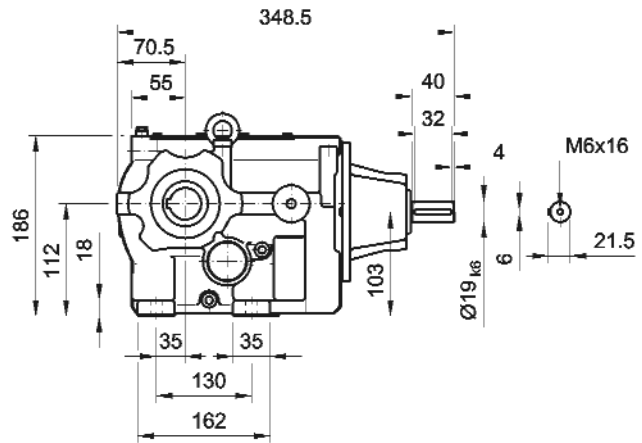
6. SK4

6.7 Maßbilder Getriebe Dimensional drawings of gear units Schémas dimensionnels des unités de vitesse

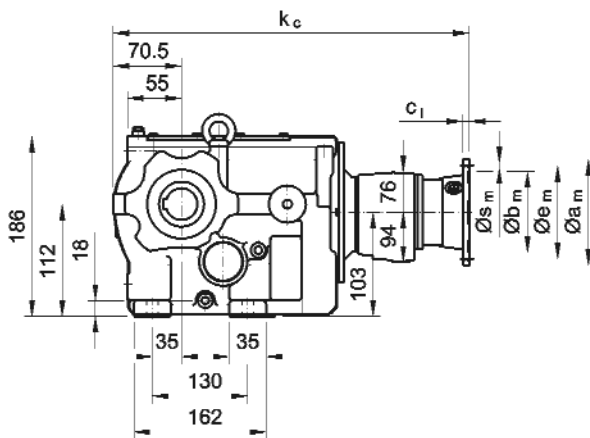
SKZ..26C-U
63 - 112



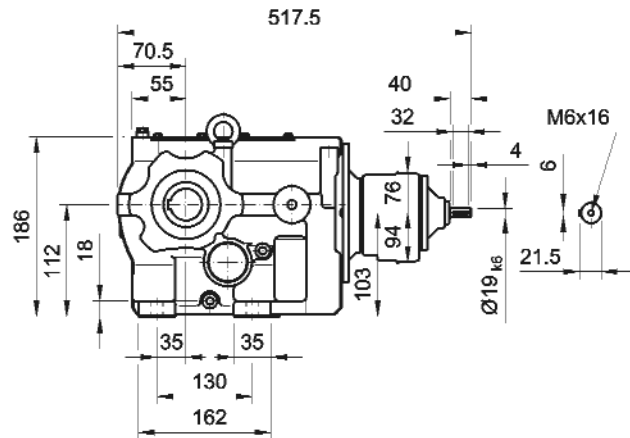
SKZ..26C-I



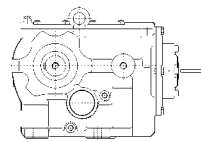
SKZ..26C16B/C-U
63 - 112



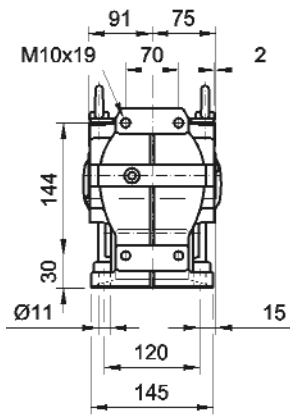
SKZ..26C16B/C-I



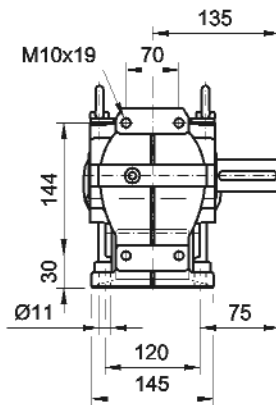
	63	71	80	90S	90L	100	112											
k_l	336	336	336	336	336	336	336											
c_l	8	8	10	10	10	12	12											
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Ø_{em}	115	130	165	165	165	215	215											
Ø_{am}	140	160	200	200	200	250	250											
Ø_{sm}	4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5											
k_c	505	505	505	505	505	505	505											



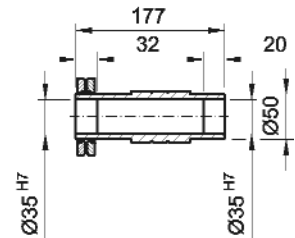
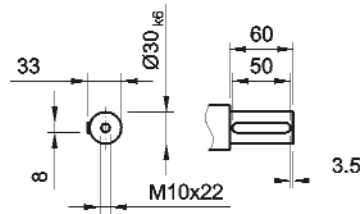
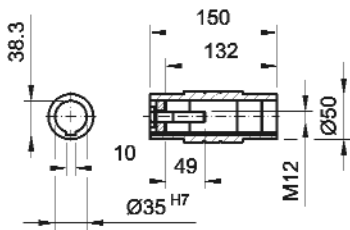
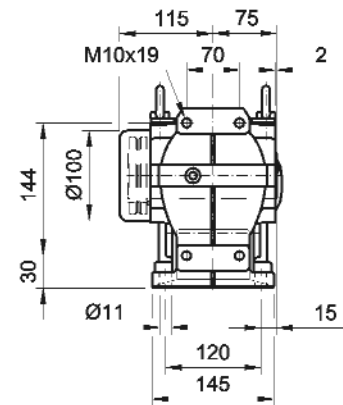
SKZH26C..



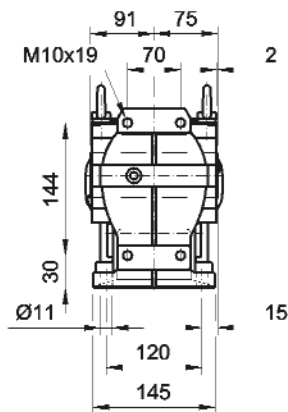
SKZN26C..



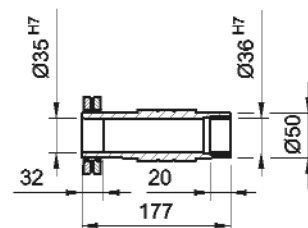
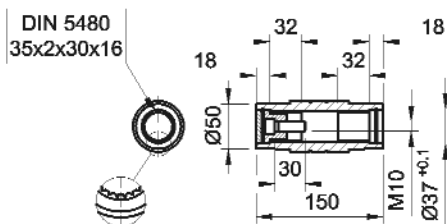
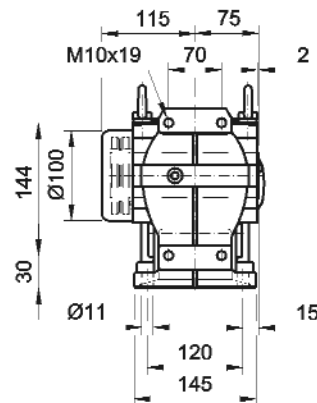
SKZS26C..

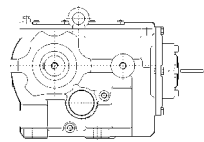


SKZT26C..



SKZC26C..

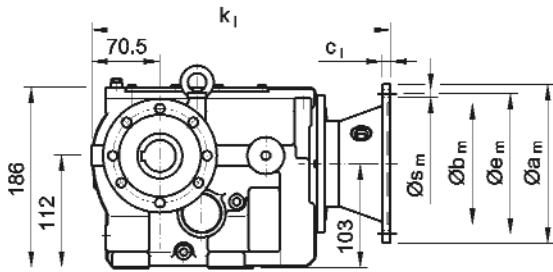




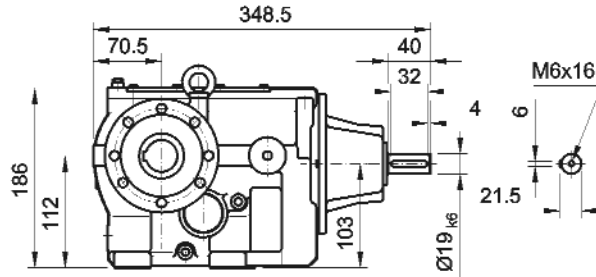
6. SK4

SKT..26C-U

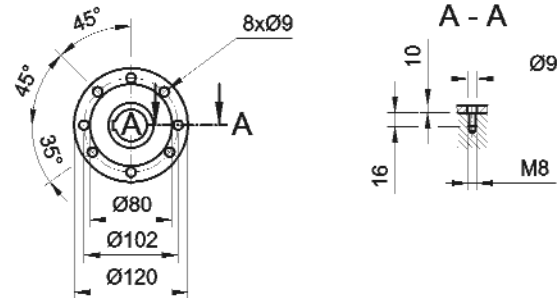
63 - 112



SKT..26C-I

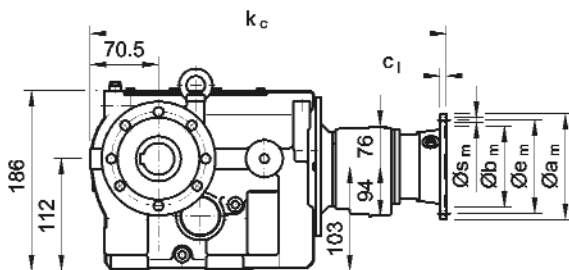


SKT..26C..

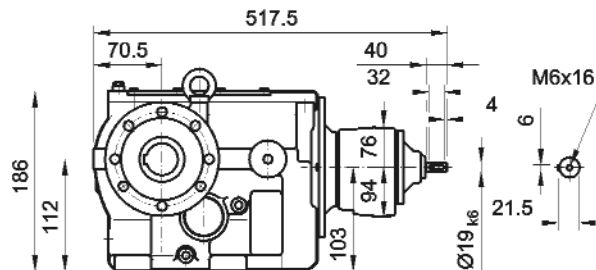


SKT..26C16B/C-U

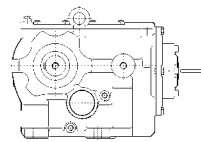
63 - 112



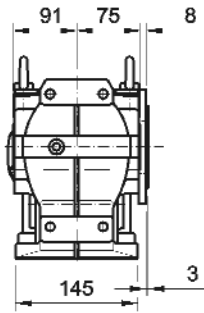
SKT..26C16B/C-I



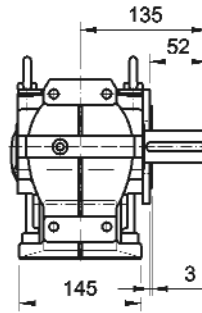
	63	71	80	90S	90L	100	112										
kl	336	336	336	336	336	336	336										
cl	8	8	10	10	10	12	12										
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7										
Øem	115	130	165	165	165	215	215										
Øam	140	160	200	200	200	250	250										
Øsm	4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5										
kc	505	505	505	505	505	505	505										



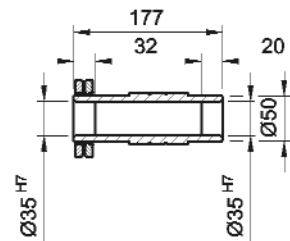
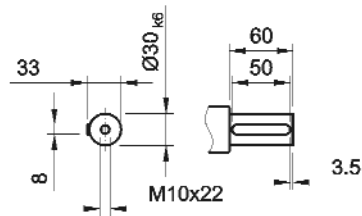
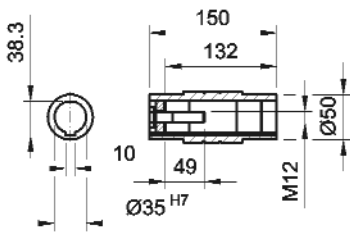
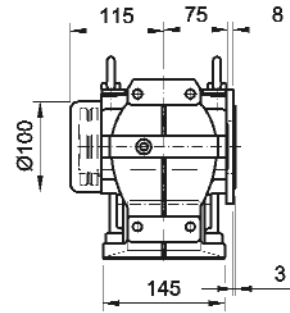
SKTH26C..



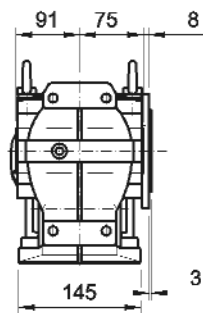
SKTN26C..



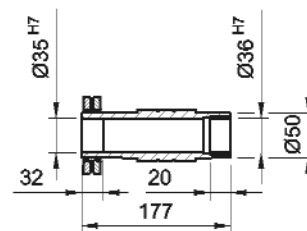
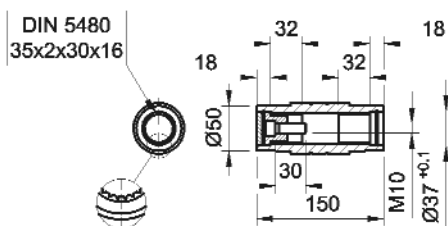
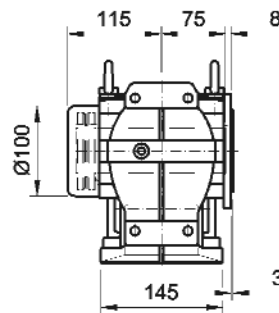
SKTS26C..

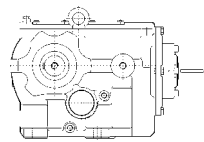


SKTT26C..



SKTC26C..

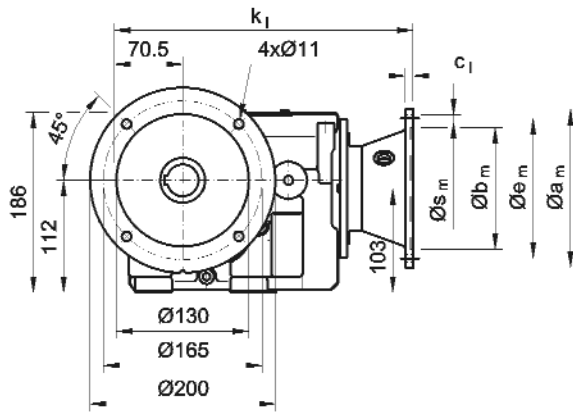




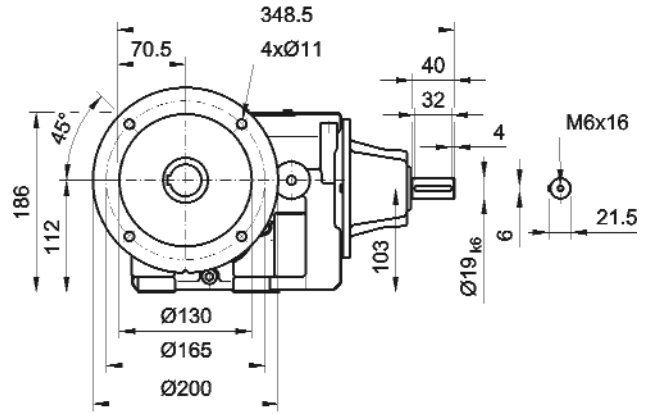
6. SK4

SKF..26C-U

63 - 112

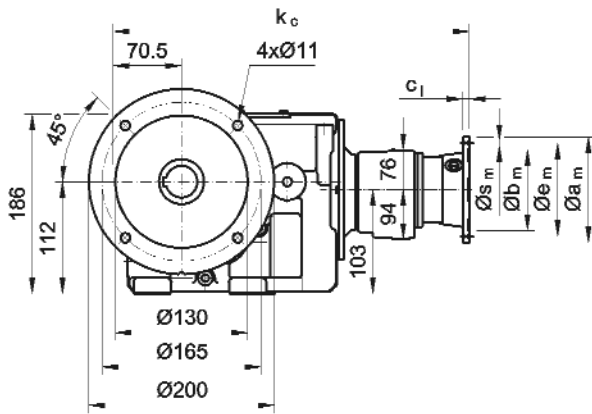


SKF..26C-I

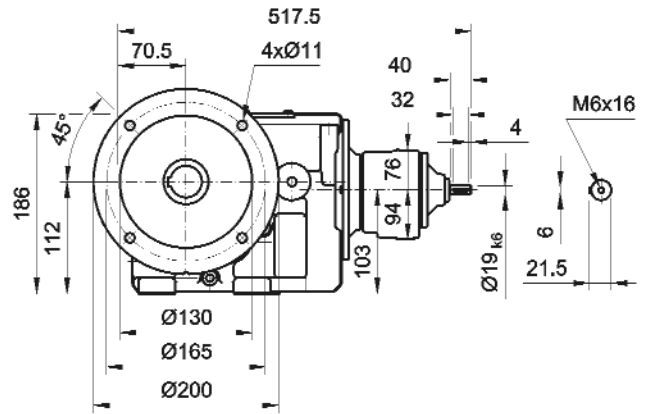


SKF..26C16B/C-U

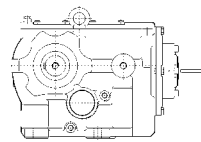
63 - 112



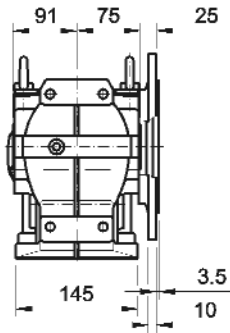
SKF..26C16B/C-I



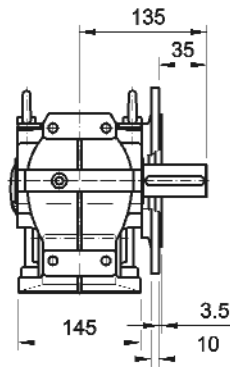
	63	71	80	90S	90L	100	112											
k_l	336	336	336	336	336	336	336											
c_l	8	8	10	10	10	12	12											
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7											
Ø_{em}	115	130	165	165	165	215	215											
Ø_{am}	140	160	200	200	200	250	250											
Ø_{sm}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5											
k_c	505	505	505	505	505	505	505											



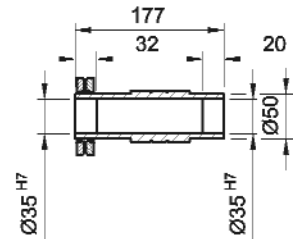
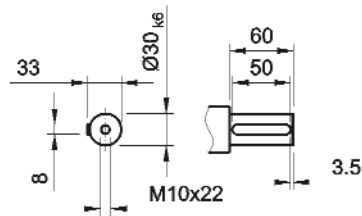
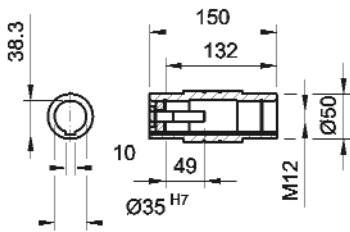
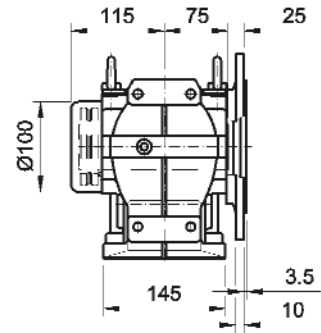
SKFH26C..



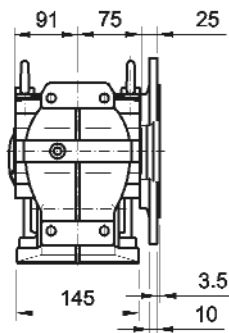
SKFN26C..



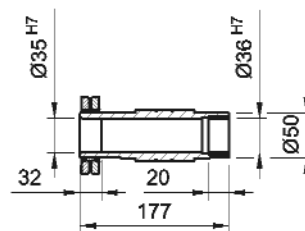
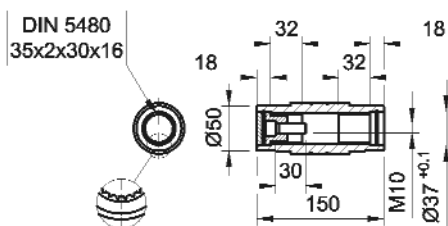
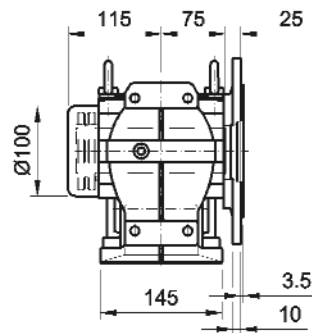
SKFS26C..

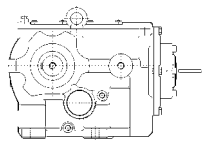


SKFT26C..



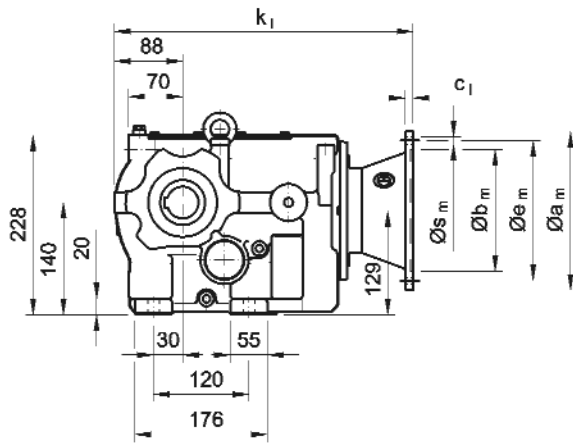
SKFC26C..



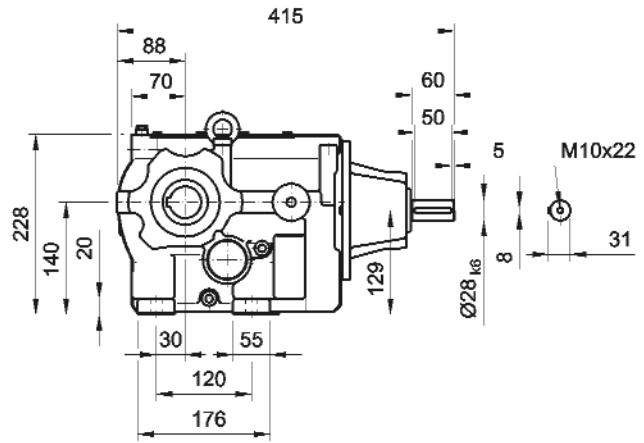


6. SK4

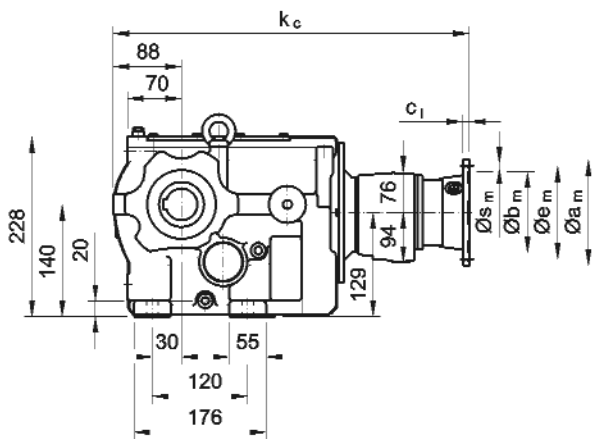
SKZ..36C-U
71 - 132



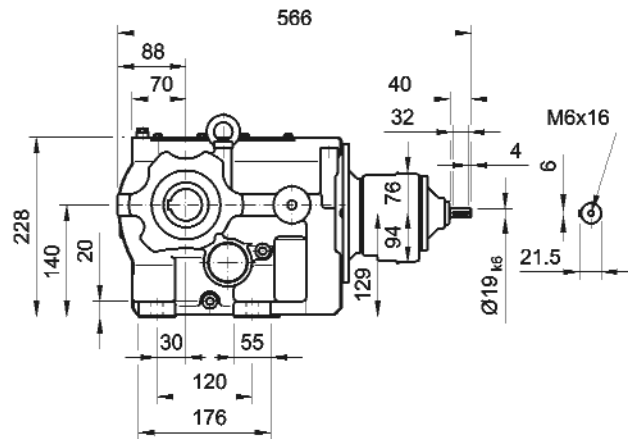
SKZ..36C-I



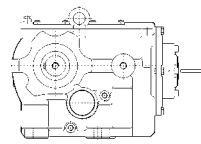
SKZ..36C16B/C-U
63 - 112



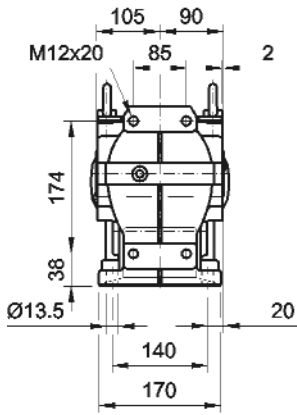
SKZ..36C16B/C-I



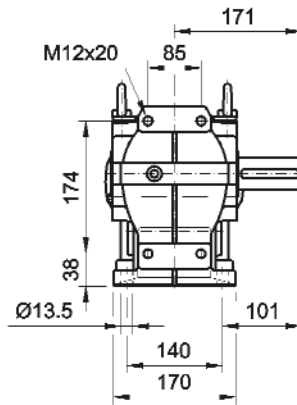
	63	71	80	90S	90L	100	112	132S	132M											
k_l		383	383	383	383	383	383	445	445											
c_l		8	8	10	10	10	12	12	13											
Ø_{bm}		95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7											
Ø_{em}		115	130	165	165	165	215	215	265											
Ø_{am}		140	160	200	200	200	250	250	300											
Ø_{sm}		4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5											
k_c		554	554	554	554	554	554	554												



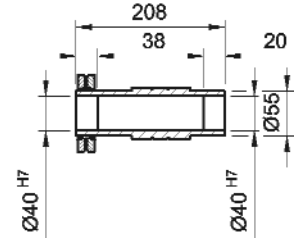
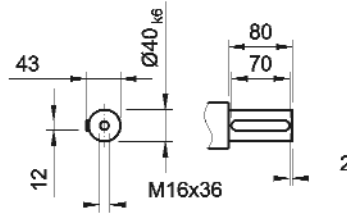
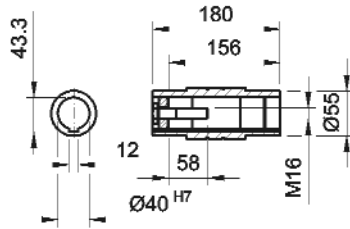
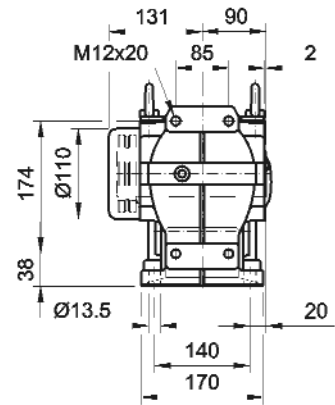
SKZH36C..



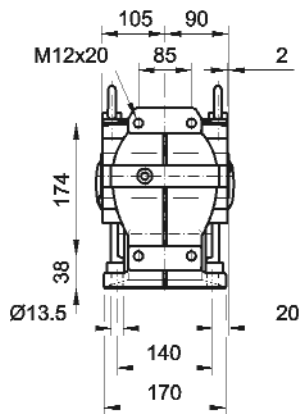
SKZN36C..



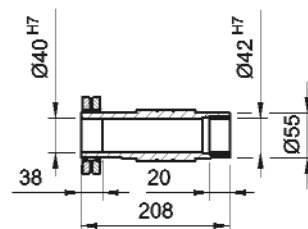
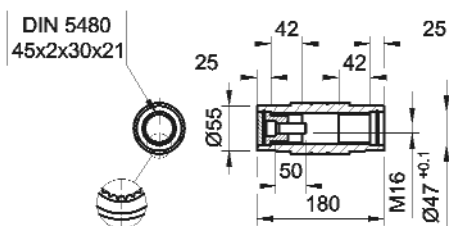
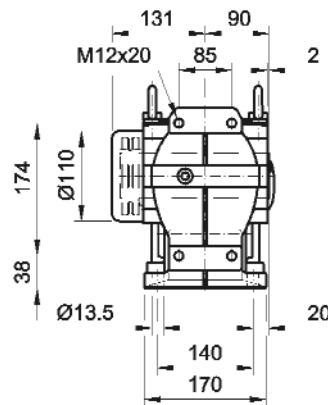
SKZS36C..

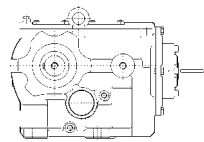


SKZT36C..



SKZC36C..

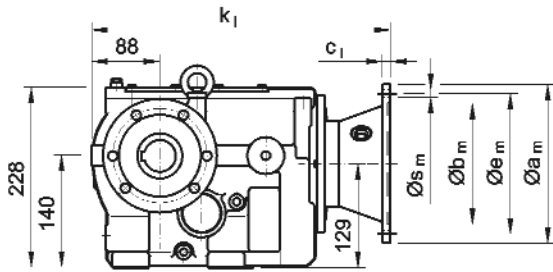




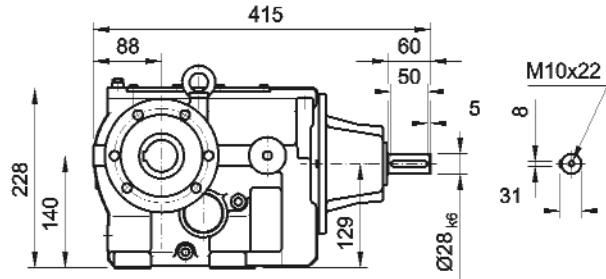
6. SK4

SKT..36C-U

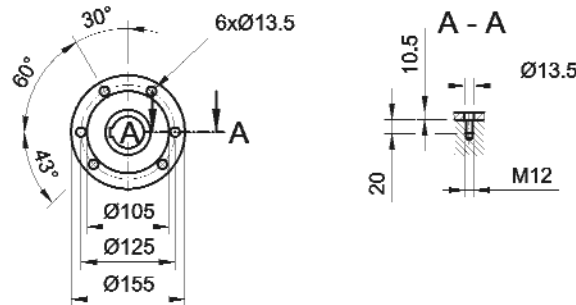
71 - 132



SKT..36C-I

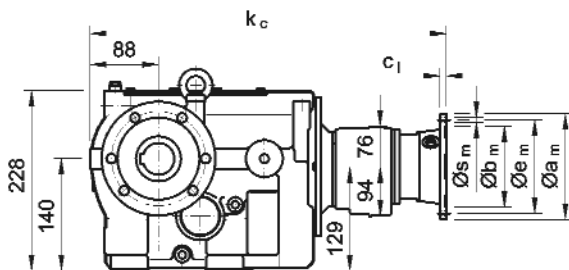


SKT..36C..

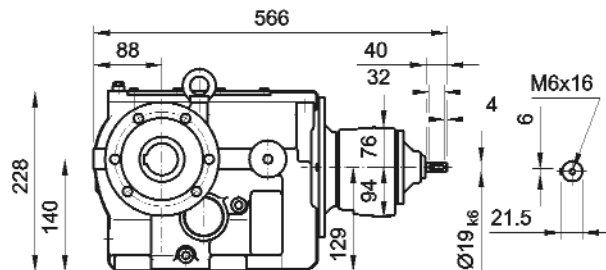


SKT..36C16B/C-U

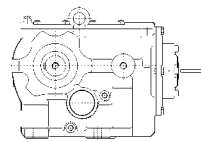
63 - 112



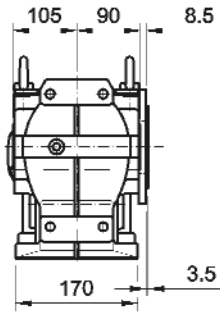
SKT..36C16B/C-I



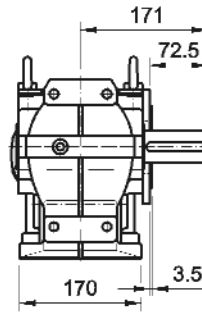
	63	71	80	90S	90L	100	112	132S	132M									
kl		383	383	383	383	383	383	445	445									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5									
kc	554	554	554	554	554	554	554											



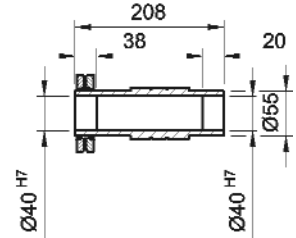
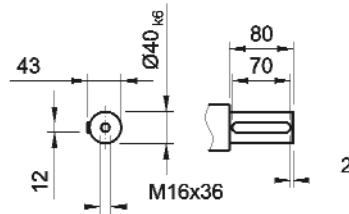
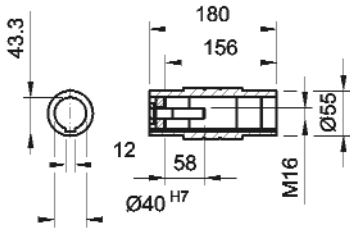
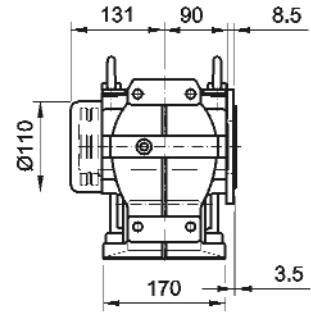
SKTH36C..



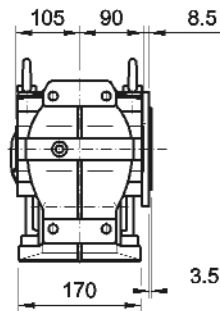
SKTN36C..



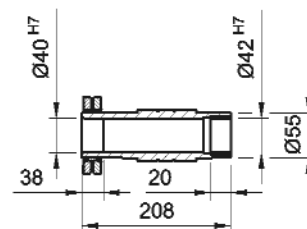
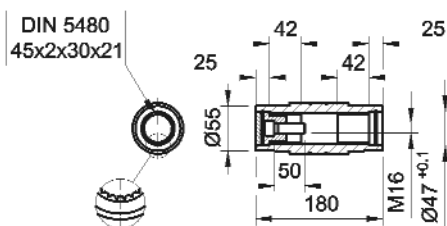
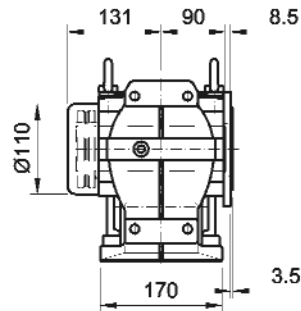
SKTS36C..

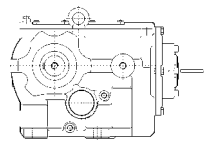


SKTT36C..



SKTC36C..

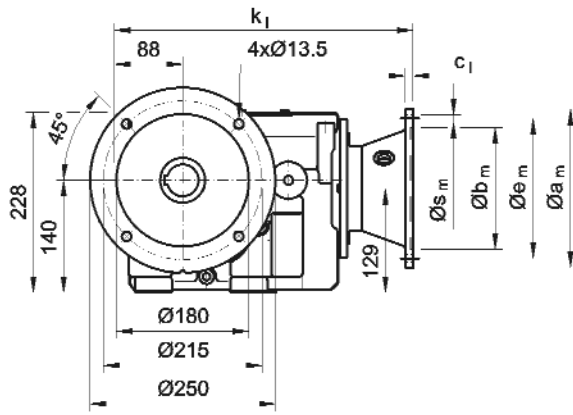




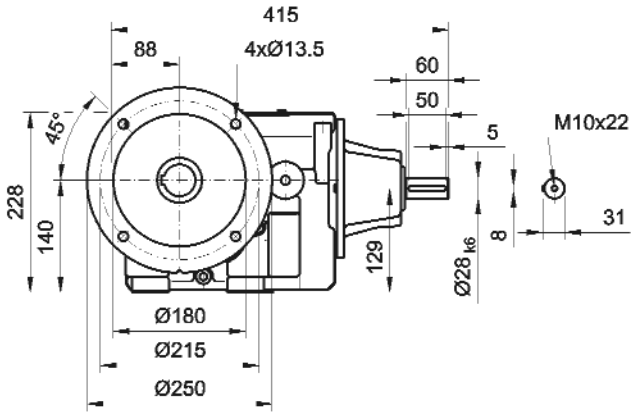
6. SK4

SKF..36C-U

71 - 132

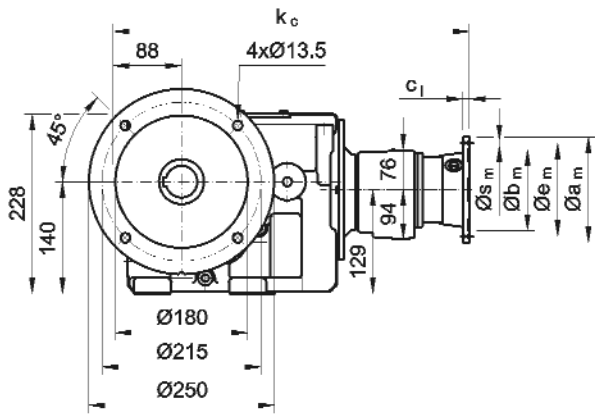


SKF..36C-I

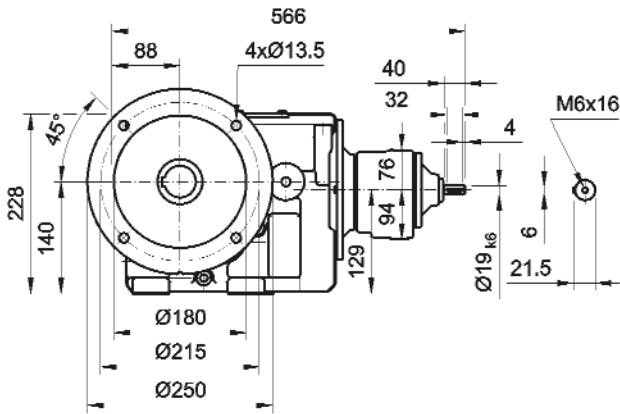


SKF..36C16B/C-U

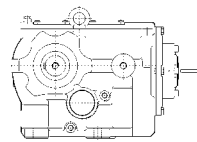
63 - 112



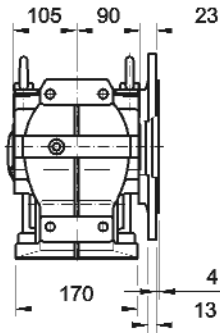
SKF..36C16B/C-I



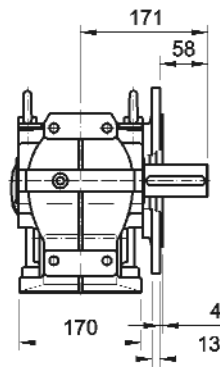
	63	71	80	90S	90L	100	112	132S	132M										
k_l		383	383	383	383	383	383	445	445										
c_l	8	8	10	10	10	12	12	13	13										
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7										
Ø_{em}	115	130	165	165	165	215	215	265	265										
Ø_{am}	140	160	200	200	200	250	250	300	300										
Ø_{sm}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5										
k_c	554	554	554	554	554	554	554												



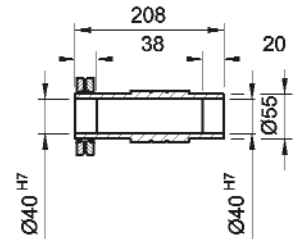
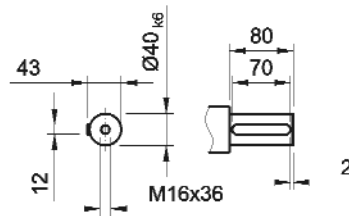
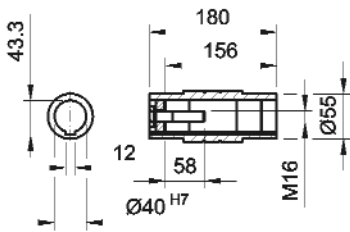
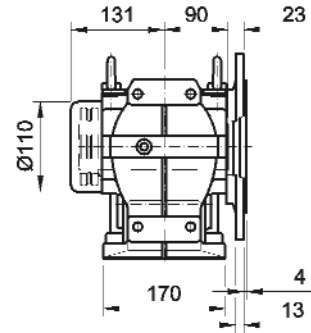
SKFH36C..



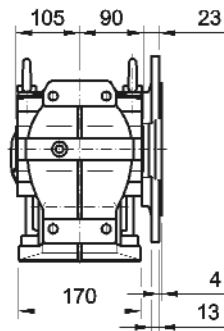
SKFN36C..



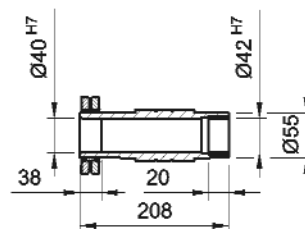
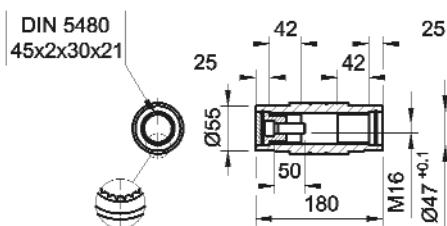
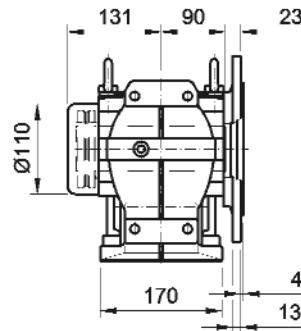
SKFS36C..

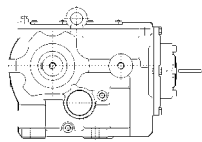


SKFT36C..



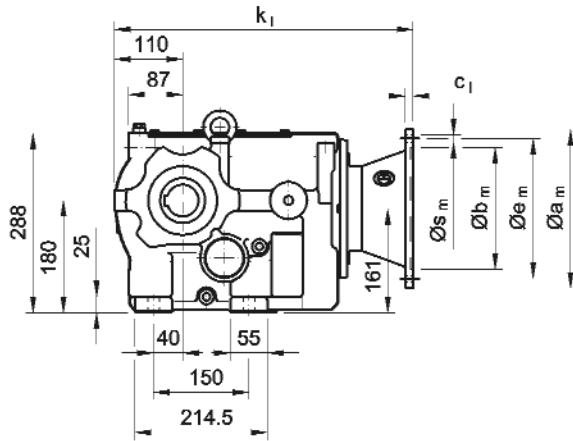
SKFC36C..



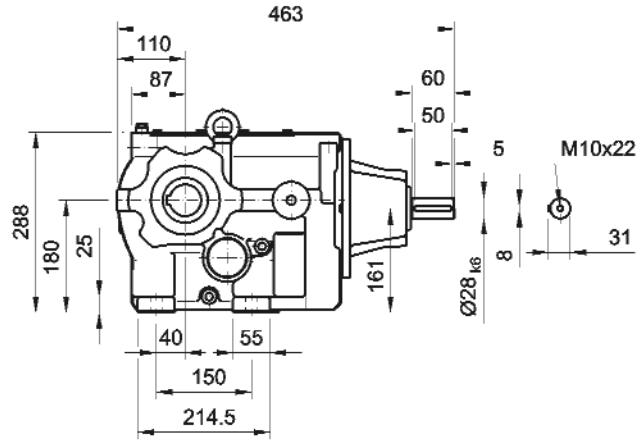


6. SK4

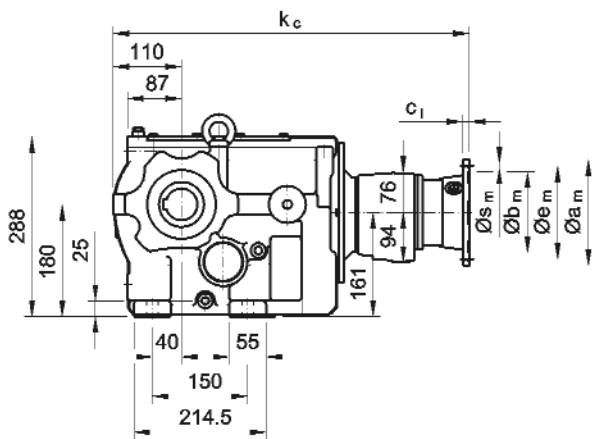
SKZ..46C-U
71 - 132



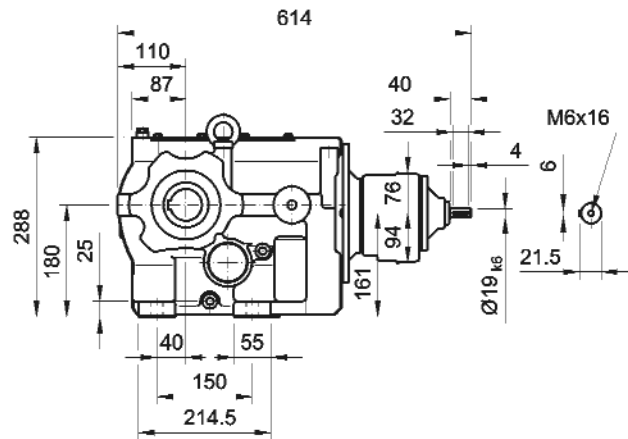
SKZ..46C-I



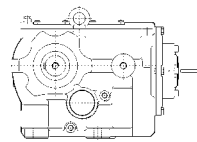
SKZ..46C16B/C-U
63 - 112



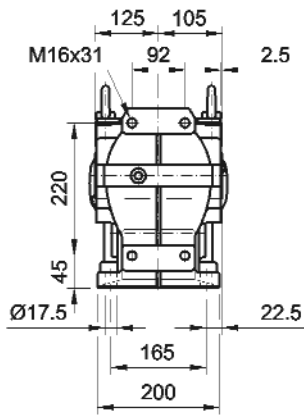
SKZ..46C16B/C-I



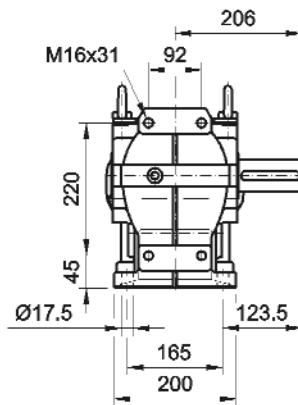
	63	71	80	90S	90L	100	112	132S	132M										
k_l		431	431	431	431	431	431	493	493										
c_l	8	8	10	10	10	12	12	13	13										
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7										
Ø_{em}	115	130	165	165	165	215	215	265	265										
Ø_{am}	140	160	200	200	200	250	250	300	300										
Ø_{sm}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5										
k_c	602	602	602	602	602	602	602												



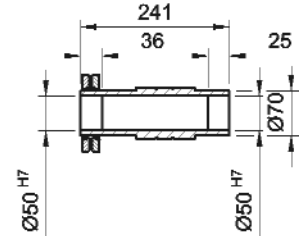
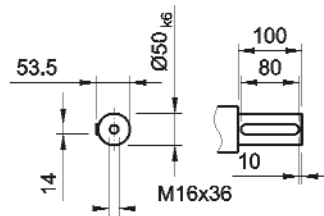
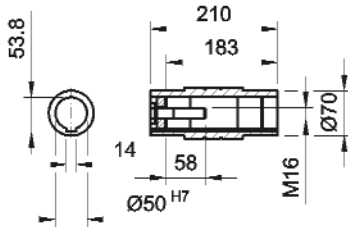
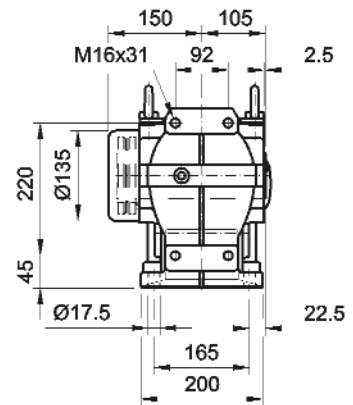
SKZH46C..



SKZN46C..

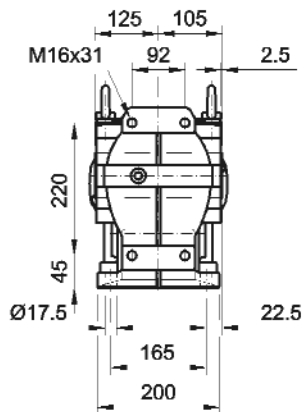


SKZS46C..

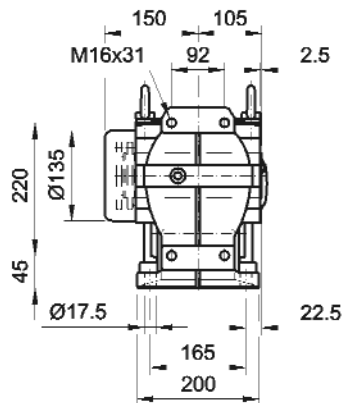


6

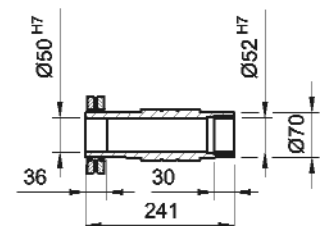
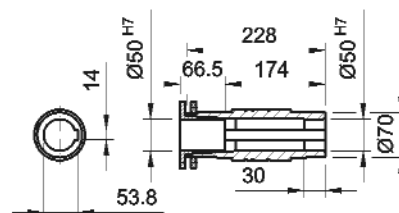
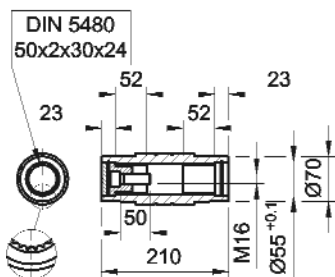
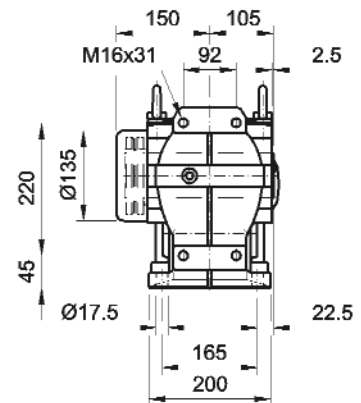
SKZT46C..

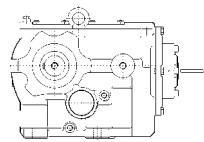


SKZB46C..



SKZC46C..

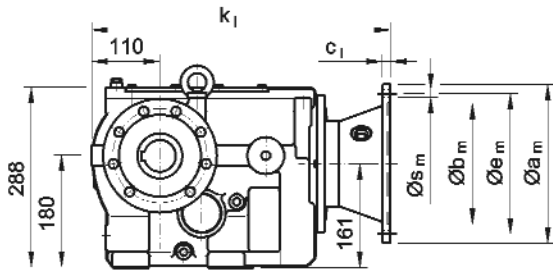




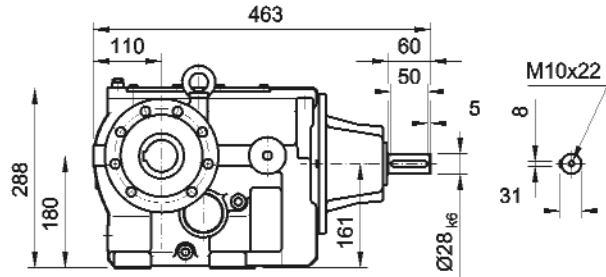
6. SK4

SKT..46C-U

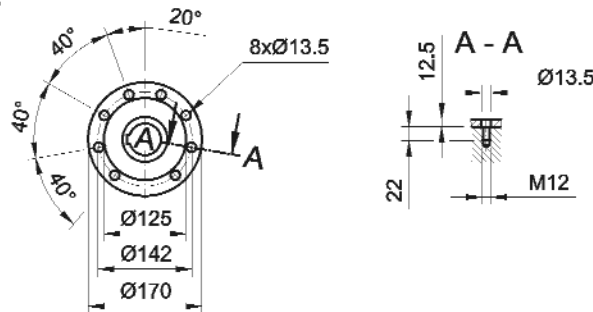
71 - 132



SKT..46C-I

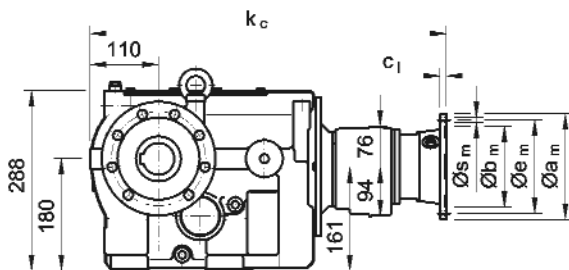


SKT..46C..

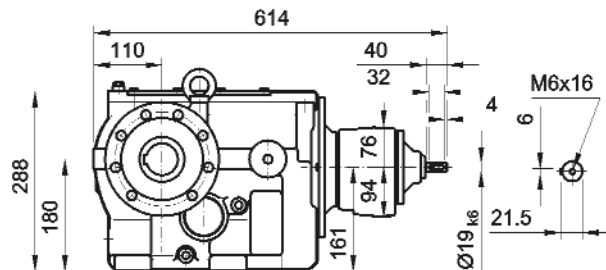


SKT..46C16B-U

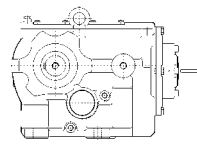
63 - 112



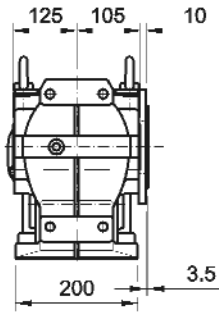
SKT..46C16B-I



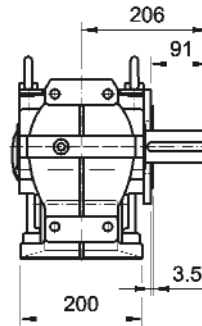
	63	71	80	90S	90L	100	112	132S	132M									
kl		431	431	431	431	431	431	493	493									
cl	8	8	10	10	10	12	12	13	13									
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7									
Øem	115	130	165	165	165	215	215	265	265									
Øam	140	160	200	200	200	250	250	300	300									
Øsm	4x M6x16	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5									
kc	602	602	602	602	602	602	602											



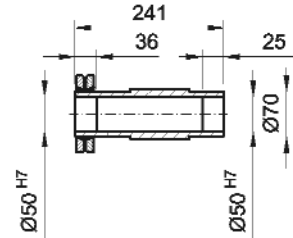
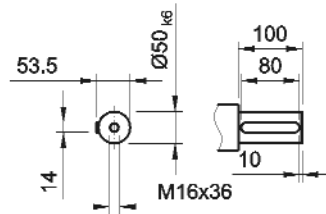
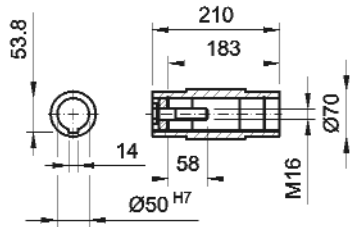
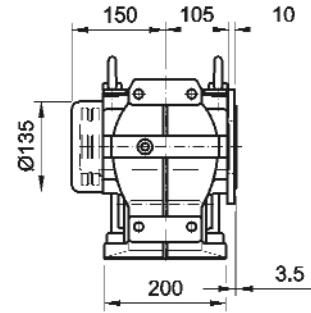
SKTH46C..



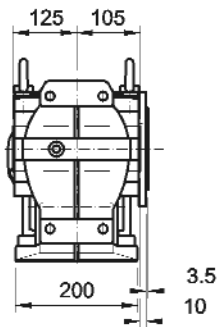
SKTN46C..



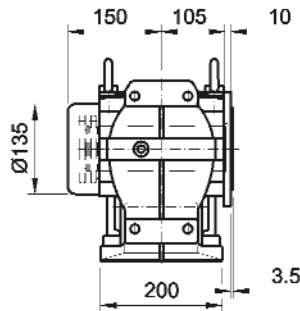
SKTS46C..



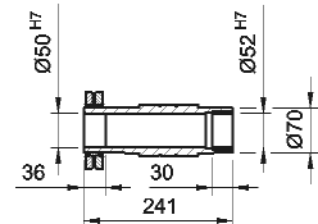
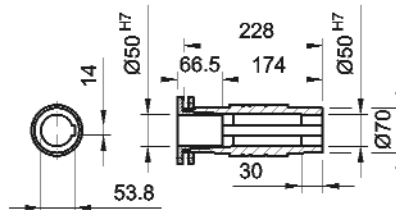
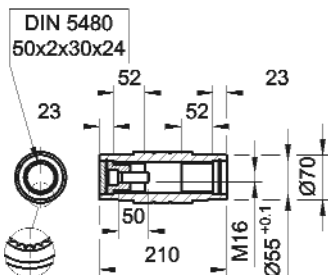
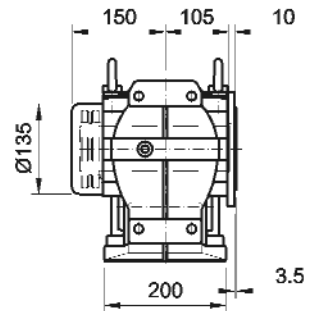
SKTT46C..

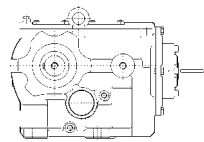


SKTB46C..



SKTC46C..

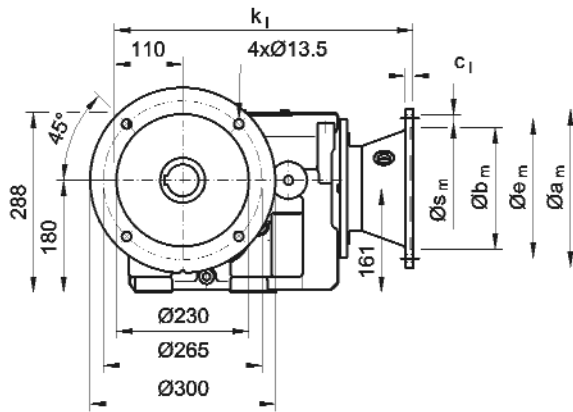




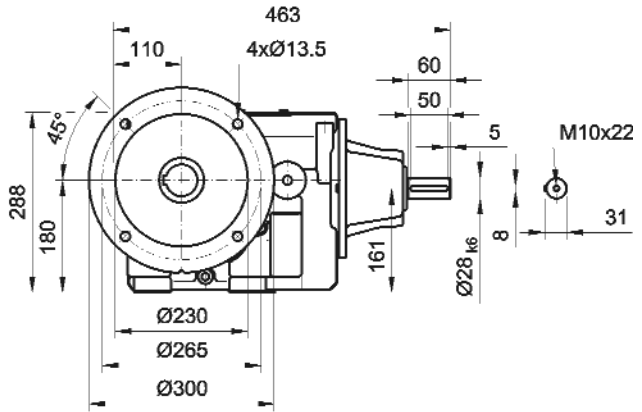
6. SK4

SKF..46C-U

71 - 132

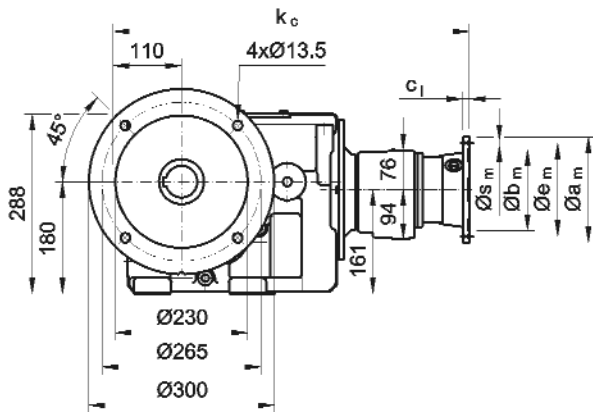


SKF..46C-I

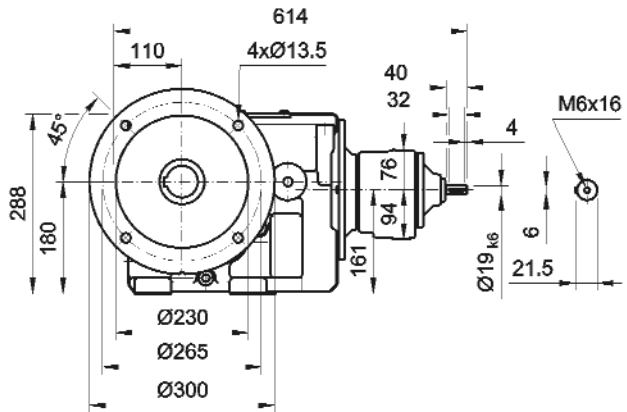


SKF..46C16B/C-U

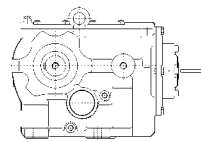
63 - 112



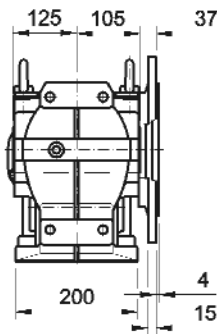
SKF..46C16B/C-I



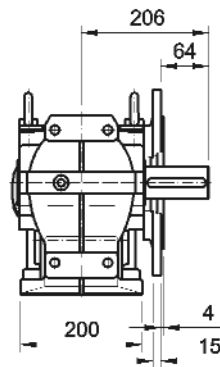
	63	71	80	90S	90L	100	112	132S	132M								
kl		431	431	431	431	431	431	493	493								
cl	8	8	10	10	10	12	12	13	13								
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7								
Øen	115	130	165	165	165	215	215	265	265								
Øam	140	160	200	200	200	250	250	300	300								
Øen	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5								
kc	602	602	602	602	602	602	602										



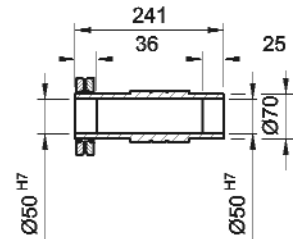
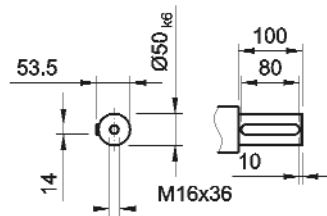
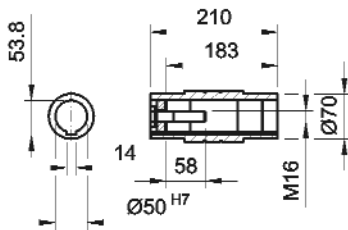
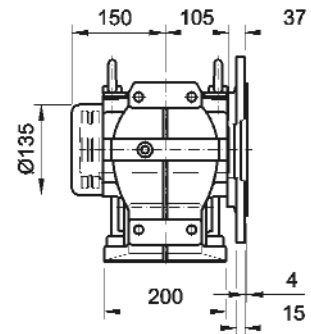
SKFH46C..



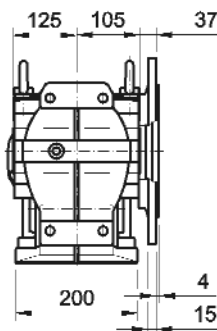
SKFN46C..



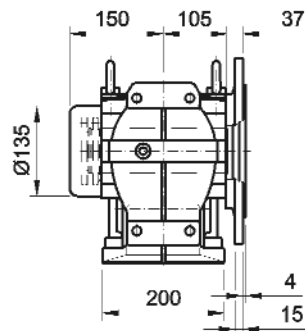
SKFS46C..



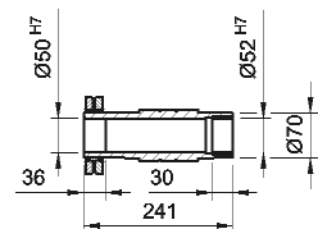
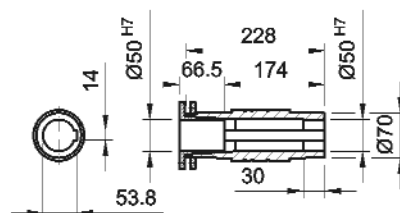
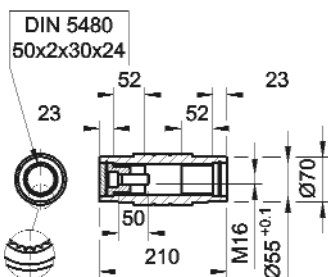
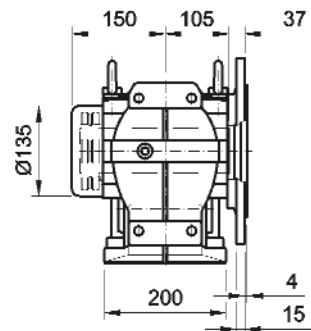
SKFT46C..

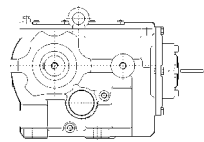


SKFB46C..



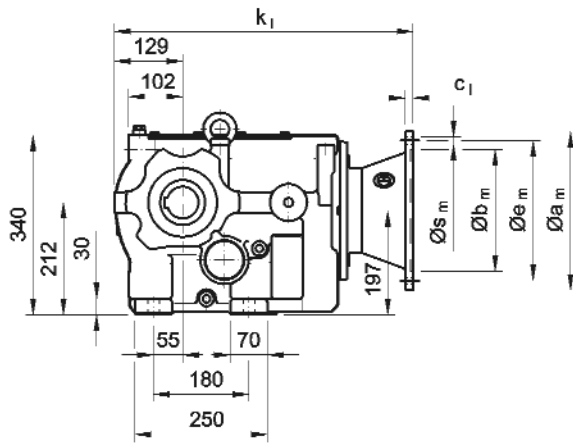
SKFC46C..



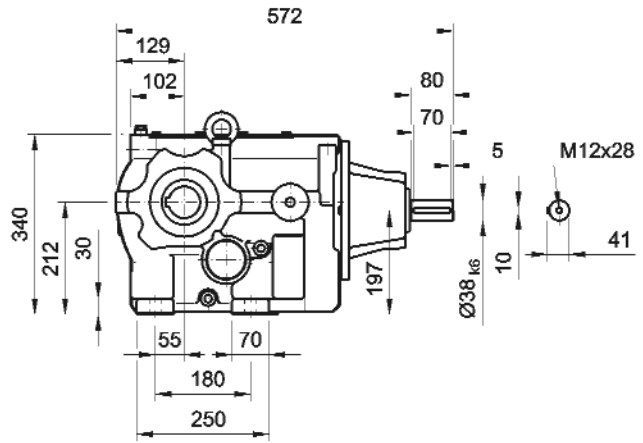


6. SK4

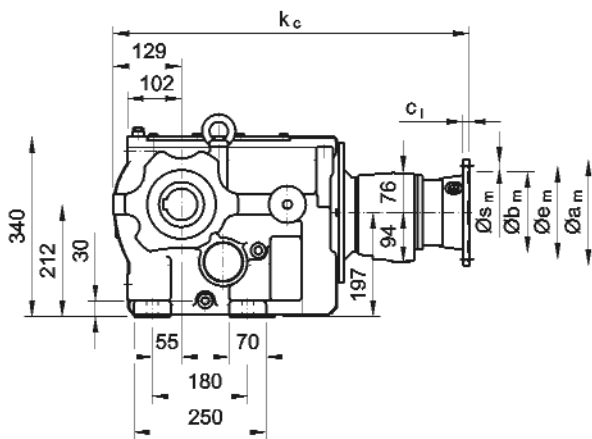
SKZ..56C-U
80 - 180



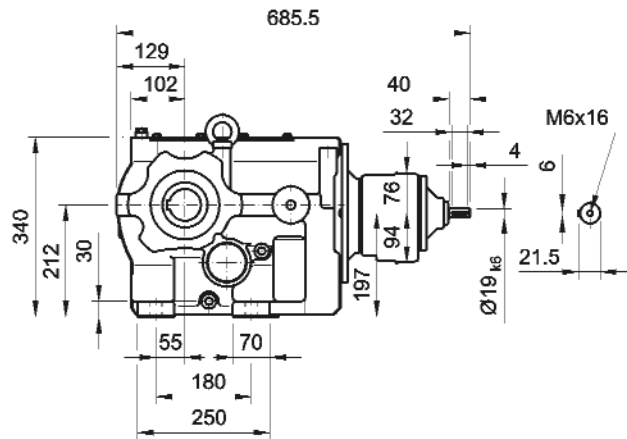
SKZ..56C-I



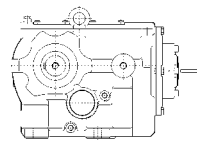
SKZ..56C16B/C-U
63 - 112



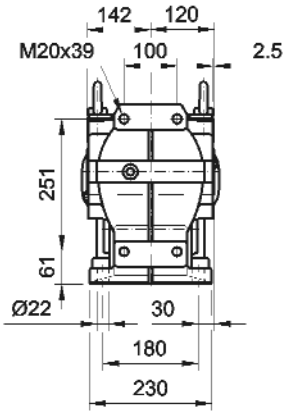
SKZ..56C16B/C-I



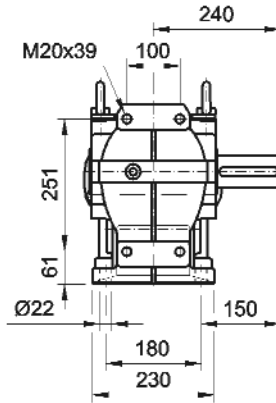
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
k_l			503	503	503	503	503	566	566	631	631	631	631						
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15						
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Ø_{em}	115	130	165	165	165	215	215	265	265	300	300	300	300						
Ø_{am}	140	160	200	200	200	250	250	300	300	350	350	350	350						
Ø_{sm}	4x M6x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
k_c	673	673	673	673	673	673	673												



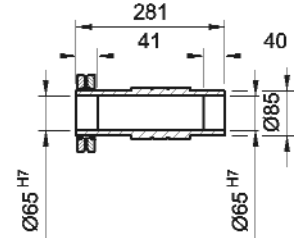
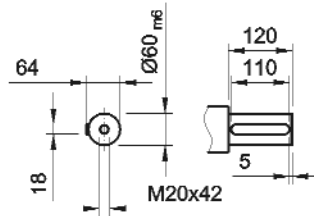
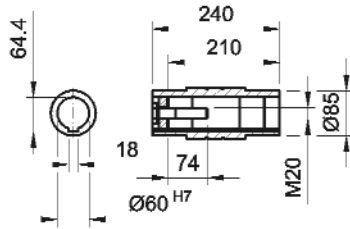
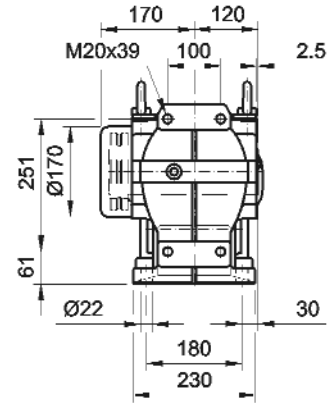
SKZH56C..



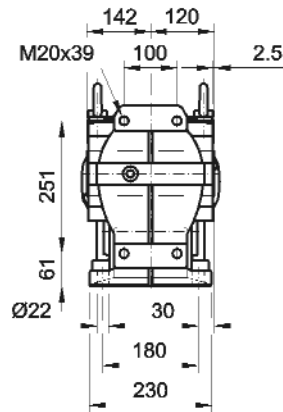
SKZN56C..



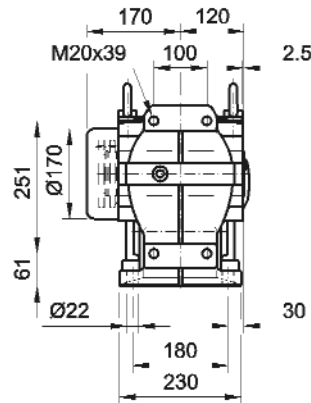
SKZS56C..



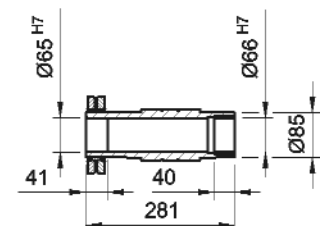
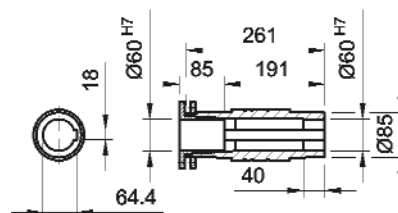
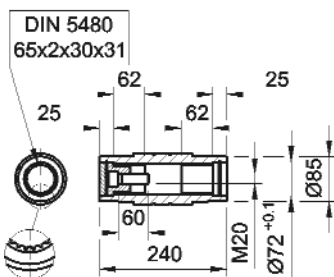
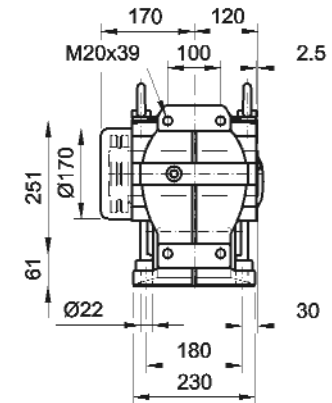
SKZT56C..

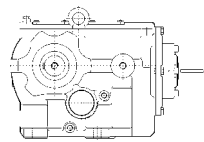


SKZB56C..



SKZC56C..

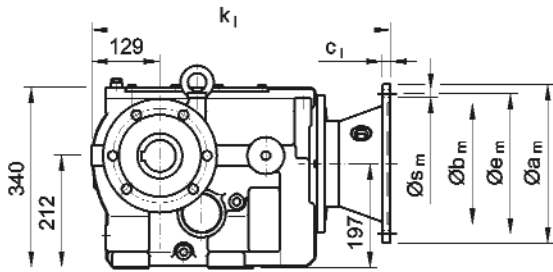




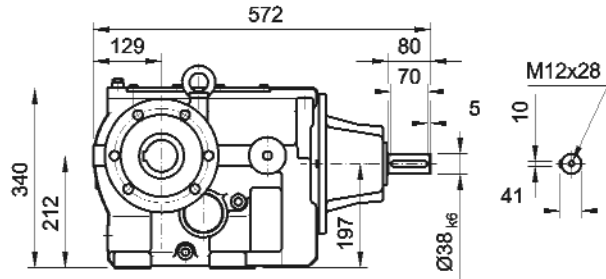
6. SK4

SKT..56C-U

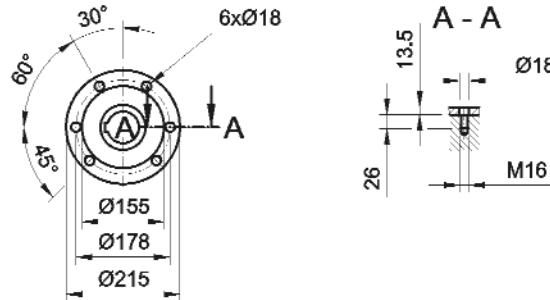
80 - 180



SKT..56C-I

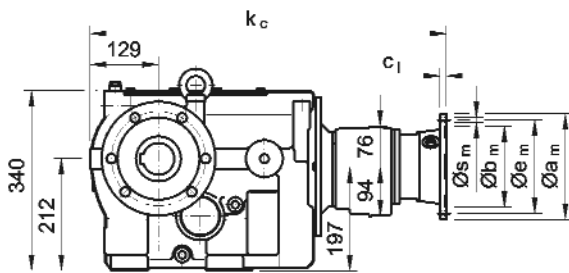


SKT..56C..

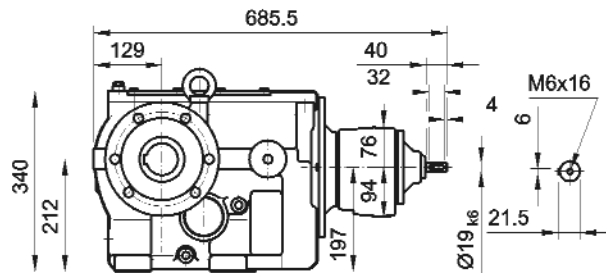


SKT..56C16B/C-U

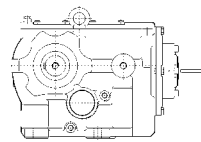
63 - 112



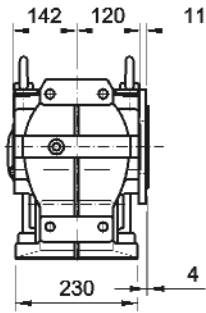
SKT..56C16B/C-I



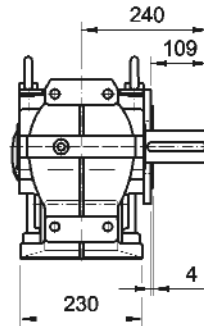
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			503	503	503	503	503	566	566	631	631	631	631						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	673	673	673	673	673	673	673												



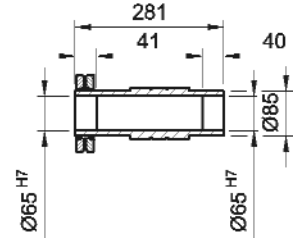
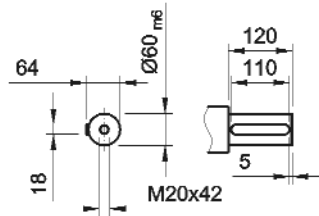
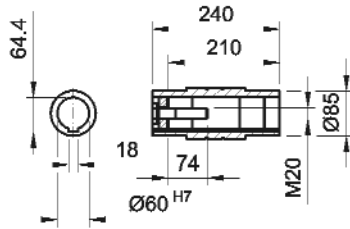
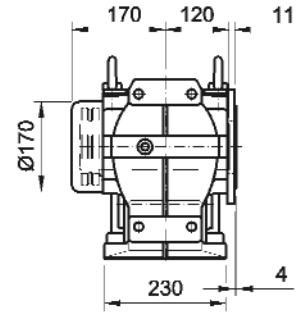
SKTH56C..



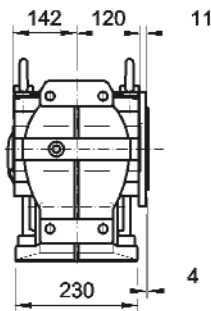
SKTN56C..



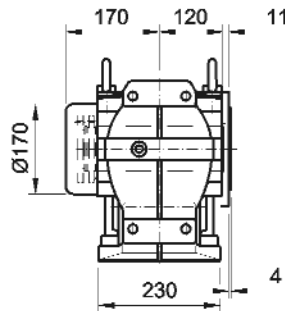
SKTS56C..



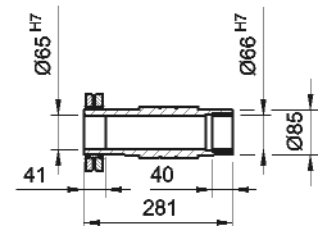
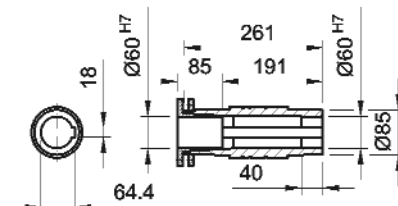
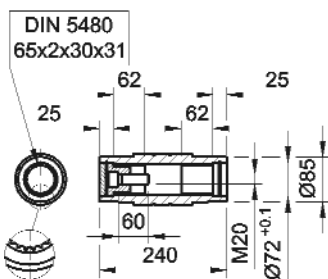
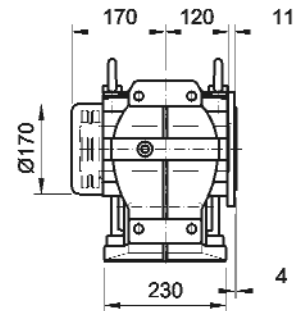
SKTT56C..

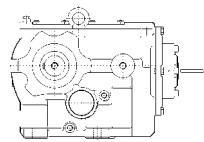


SKTB56C..



SKTC56C..

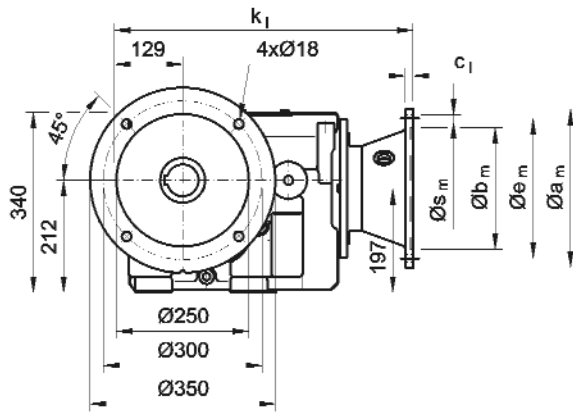




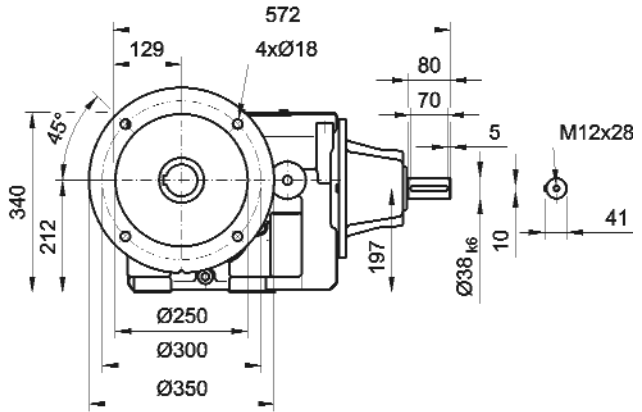
6. SK4

SKF..56C-U

80 - 180

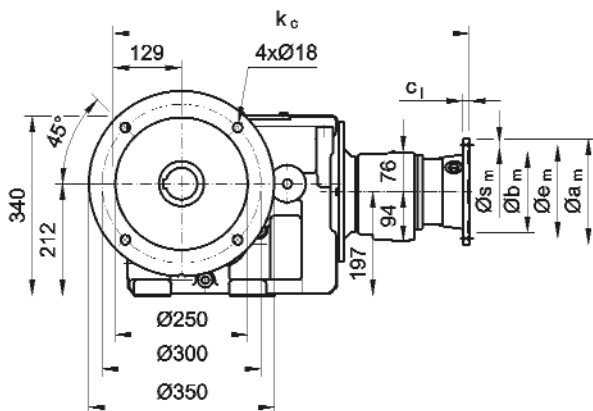


SKF..56C-I

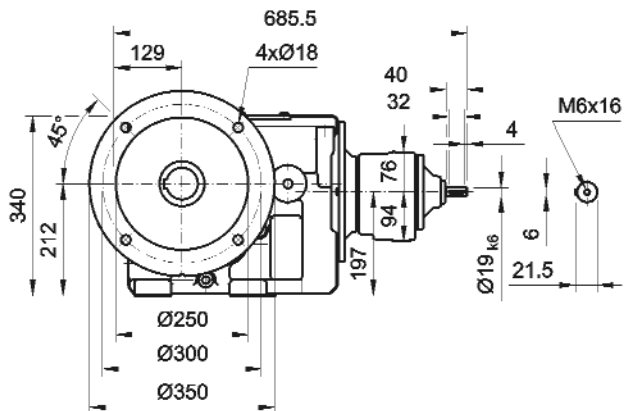


SKF..56C16B/C-U

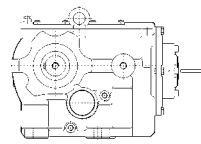
63 - 112



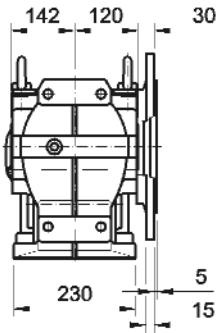
SKF..56C16B/C-I



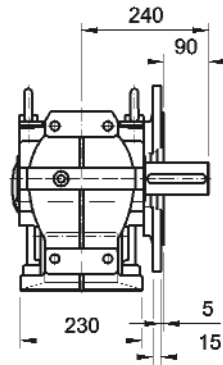
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L					
k_l			503	503	503	503	503	566	566	631	631	631	631					
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15					
Ø_{bm}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7					
Ø_{em}	115	130	165	165	165	215	215	265	265	300	300	300	300					
Ø_{am}	140	160	200	200	200	250	250	300	300	350	350	350	350					
Ø_{sm}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5					
k_c	673	673	673	673	673	673	673											



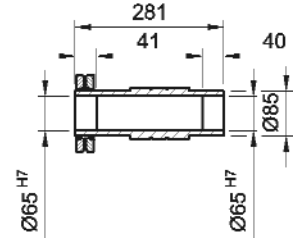
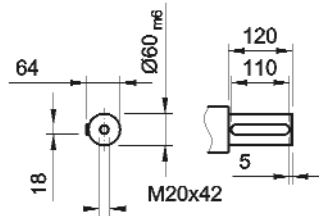
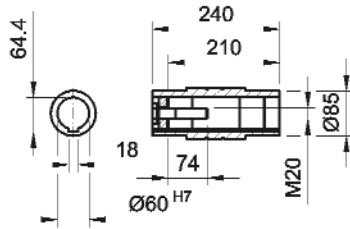
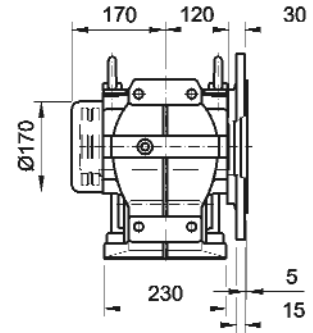
SKFH56C..



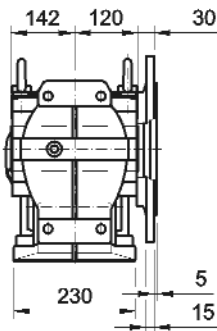
SKFN56C..



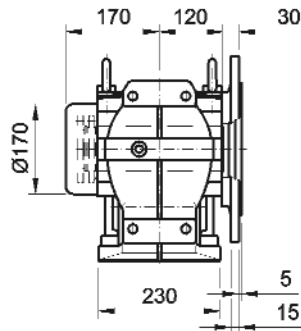
SKFS56C..



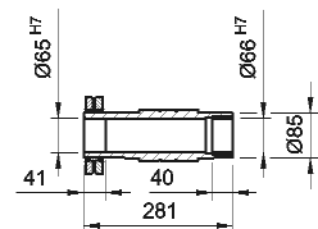
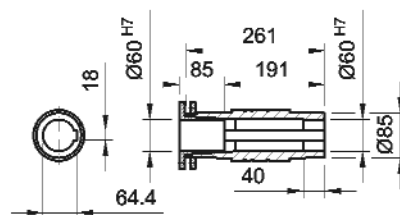
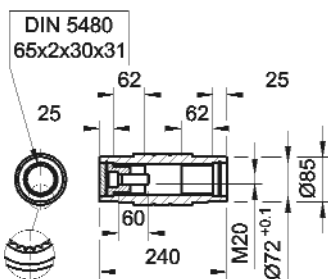
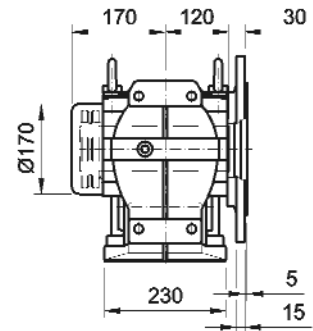
SKFT56C..

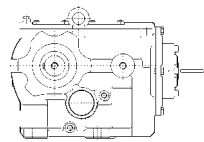


SKFB56C..



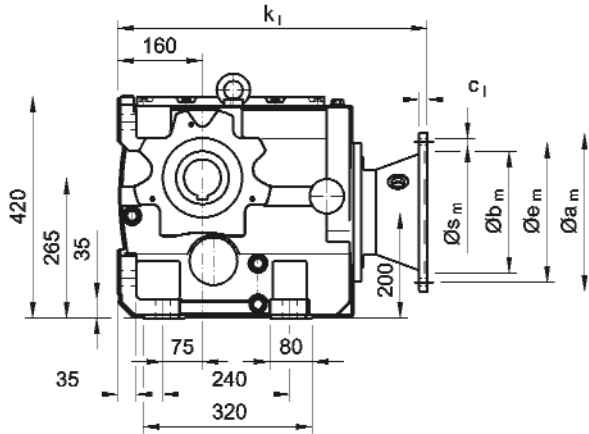
SKFC56C..



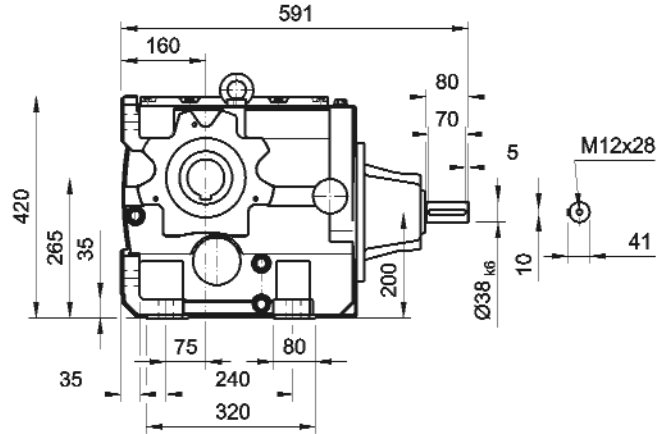


6. SK4

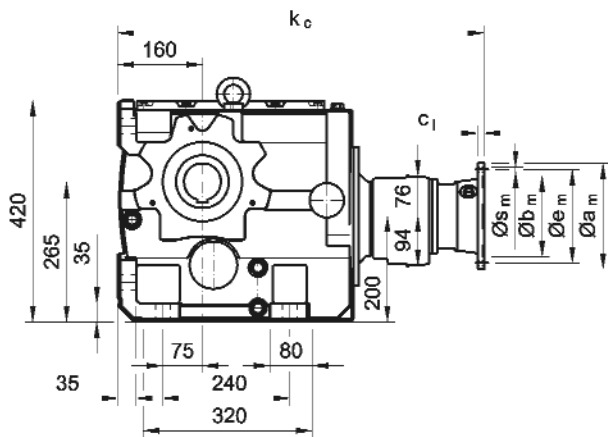
SKZ..66C-U
80 - 180



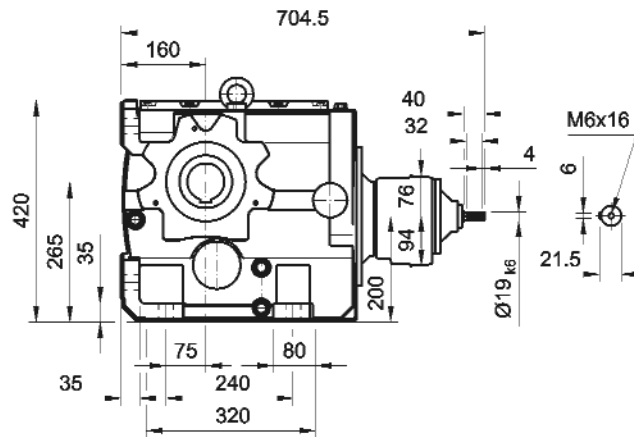
SKZ..66C-I



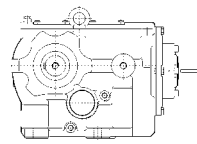
SKZ..66C16B/C-U
63 - 112



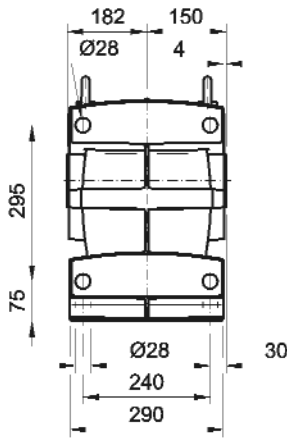
SKZ..66C16B/C-I



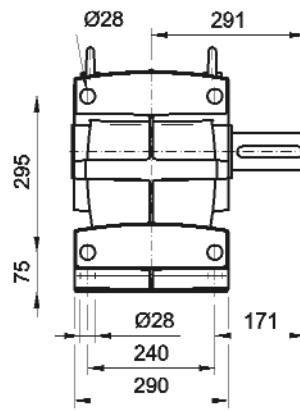
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			522	522	522	522	522	585	585	650	650	650	650						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5						
kc	692	692	692	692	692	692	692												



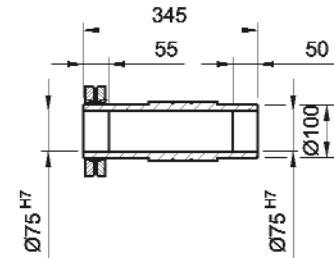
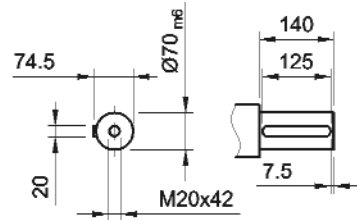
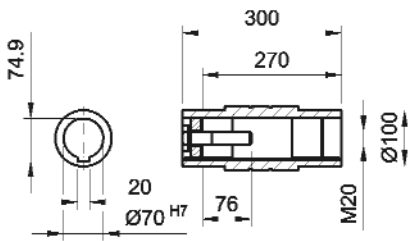
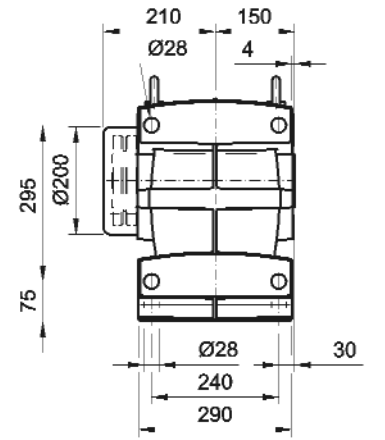
SKZH66C..



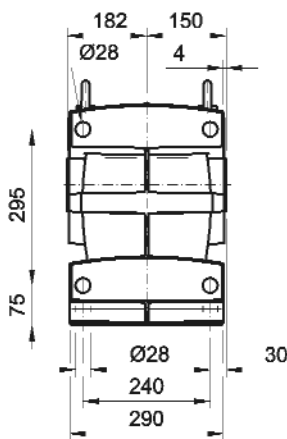
SKZN66C..



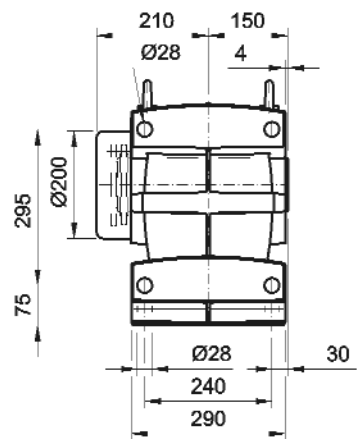
SKZS66C..



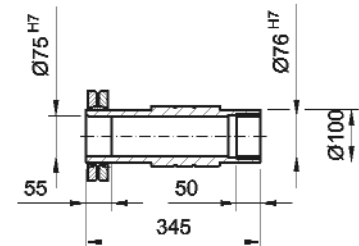
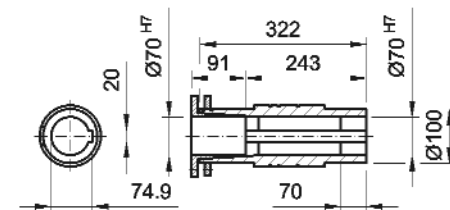
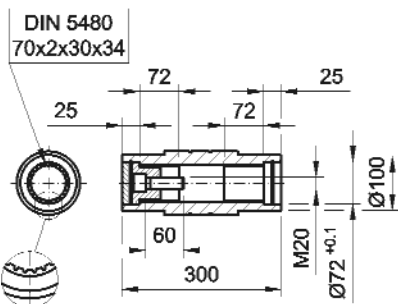
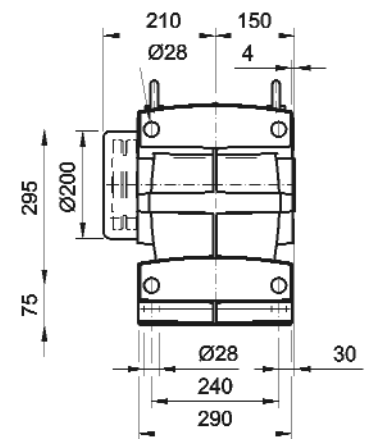
SKZT66C..

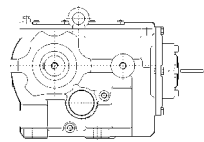


SKZB66C..



SKZC66C..

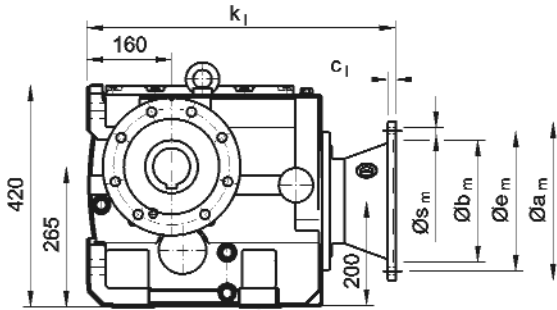




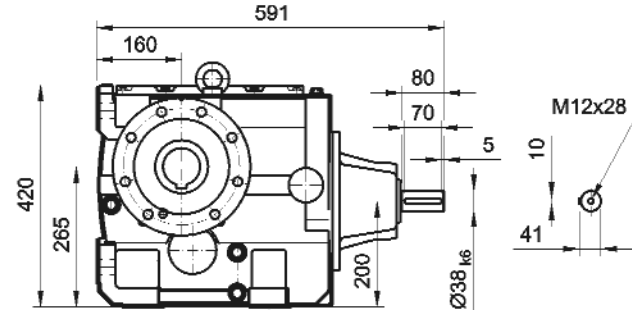
6. SK4

SKT..66C-U

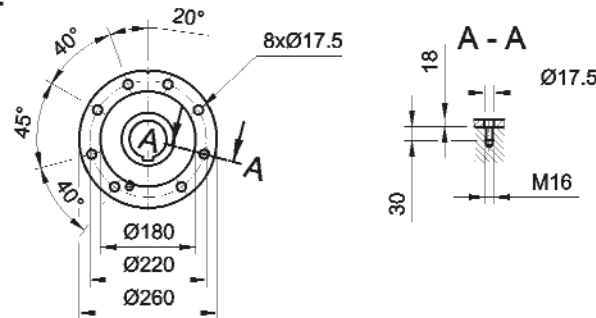
80 - 180



SKT..66C-I

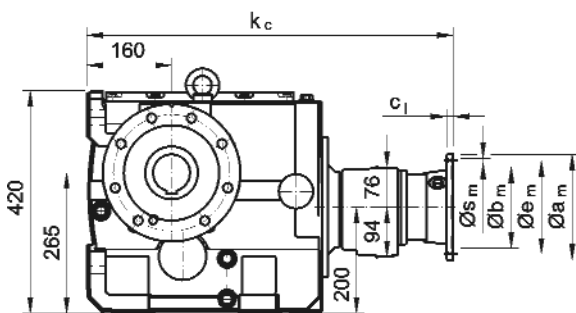


SKT..66C..

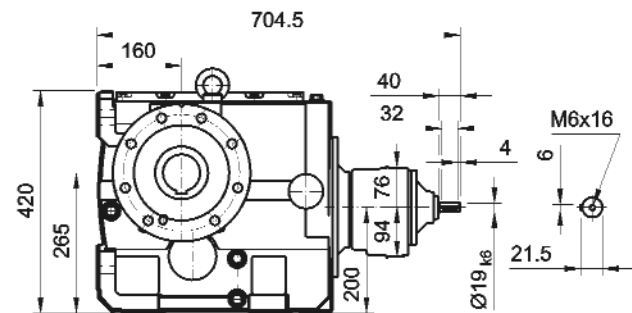


SKT..66C16B/C-U

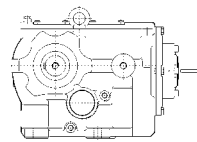
63 - 112



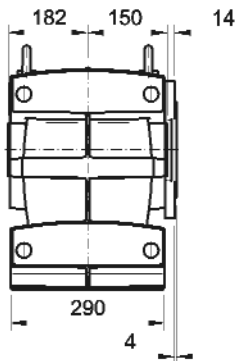
SKT..66C16B/C-I



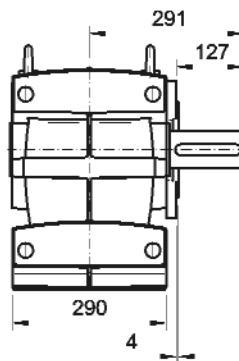
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
k_l			522	522	522	522	522	585	585	650	650	650	650						
c_l	8	8	10	10	10	12	12	13	13	15	15	15	15						
Ø_{b_m}	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Ø_{e_m}	115	130	165	165	165	215	215	265	265	300	300	300	300						
Ø_{a_m}	140	160	200	200	200	250	250	300	300	350	350	350	350						
Ø_{s_m}	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
k_c	692	692	692	692	692	692	692												



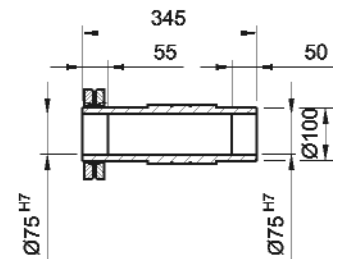
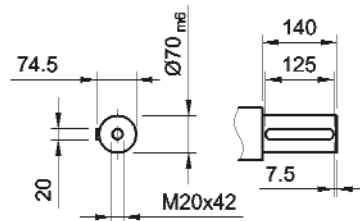
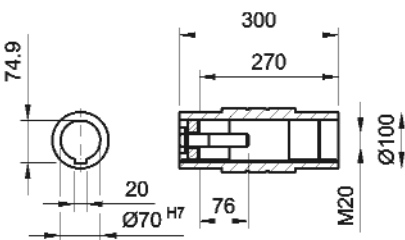
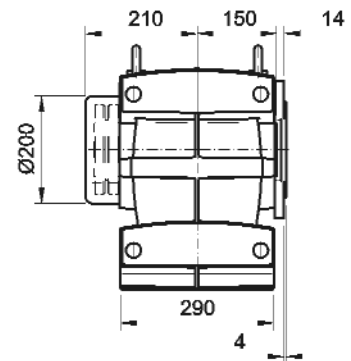
SKTH66C..



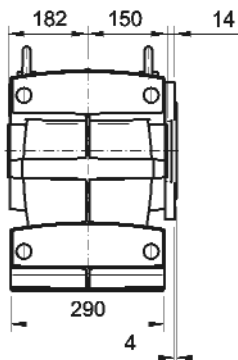
SKTN66C..



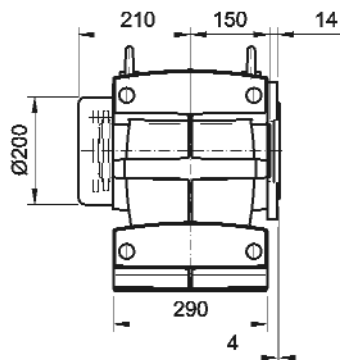
SKTS66C..



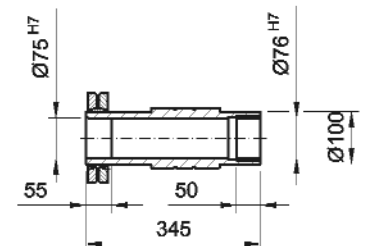
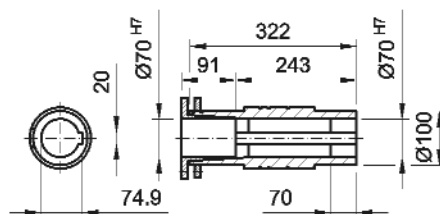
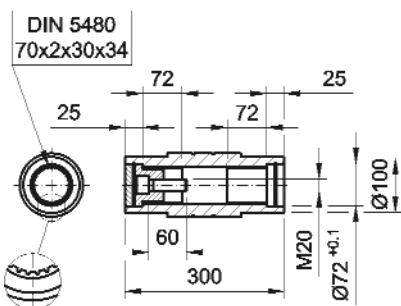
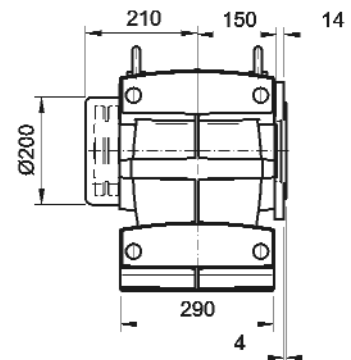
SKTT66C..

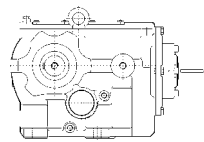


SKTB66C..



SKTC66C..

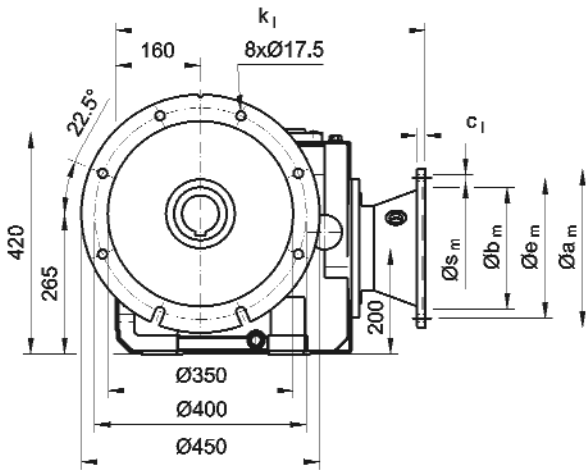




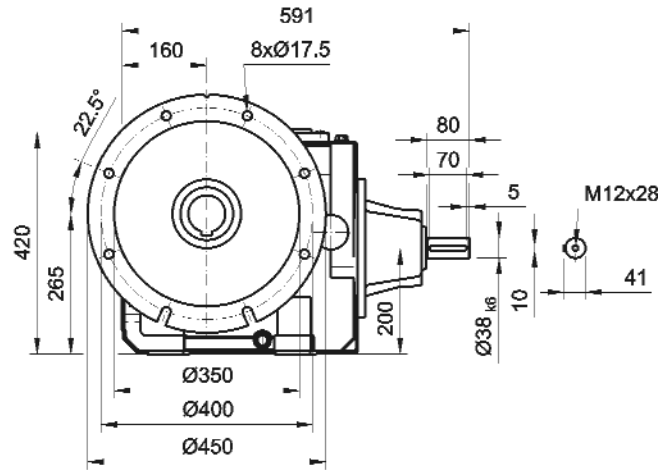
6. SK4

SKF..66C-U

80 - 180

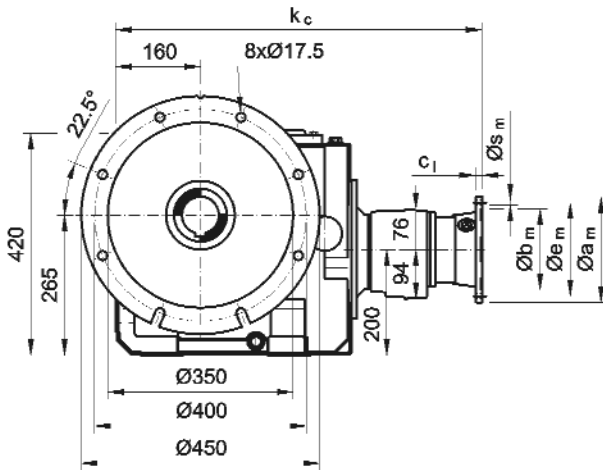


SKF..66C-I

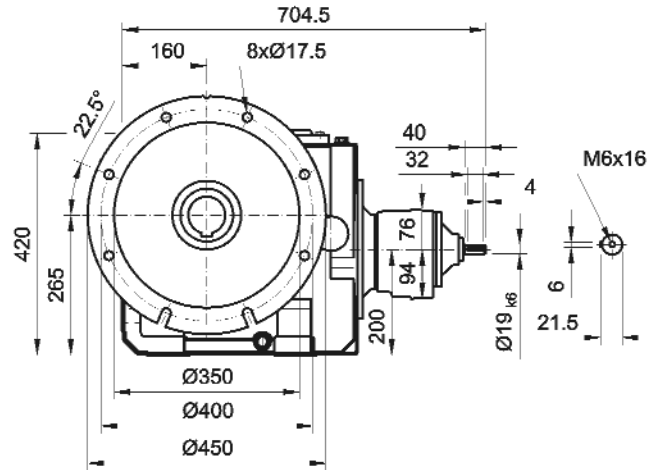


SKF..66C16B/C-U

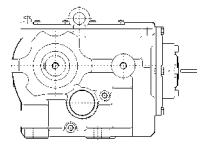
63 - 112



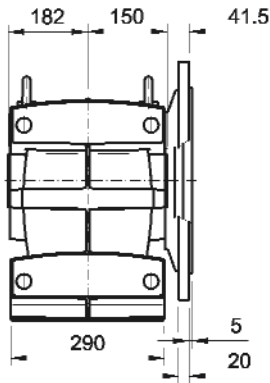
SKF..66C16B/C-I



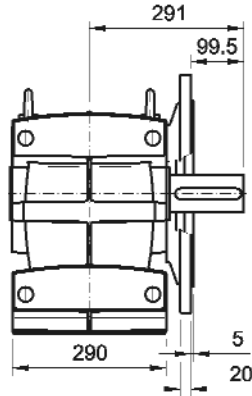
	63	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L						
kl			522	522	522	522	522	584,5	584,5	649,5	649,5	649,5	649,5						
cl	8	8	10	10	10	12	12	13	13	15	15	15	15						
Øbm	95H7	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7						
Øem	115	130	165	165	165	215	215	265	265	300	300	300	300						
Øam	140	160	200	200	200	250	250	300	300	350	350	350	350						
Øsm	4x M8x16	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5						
kc	692	692	692	692	692	692	692												



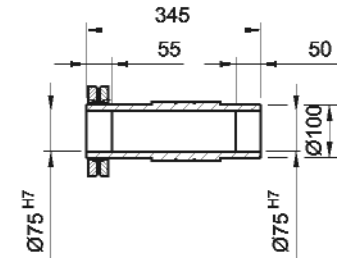
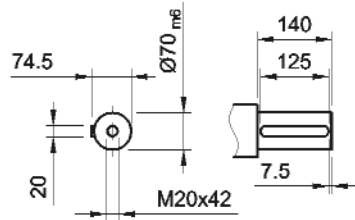
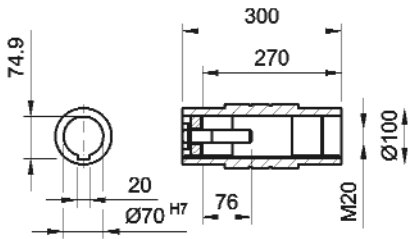
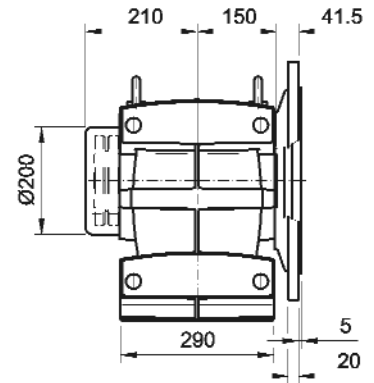
SKFH66C..



SKFN66C..

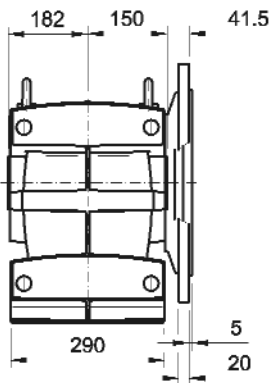


SKFS66C..

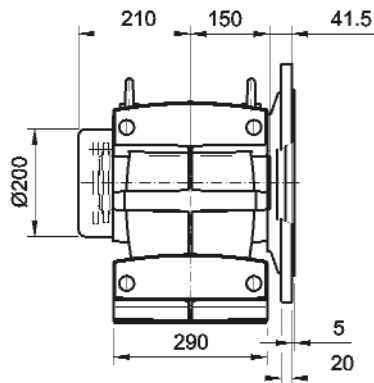


6

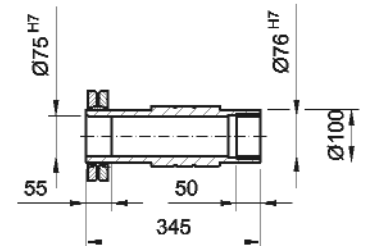
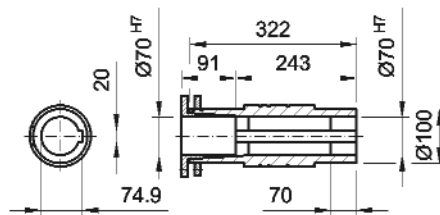
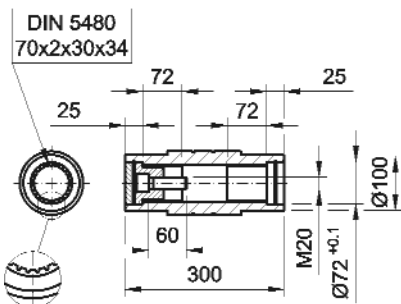
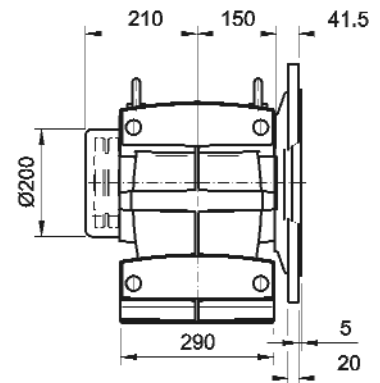
SKFT66C..

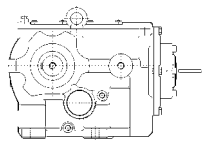


SKFB66C..



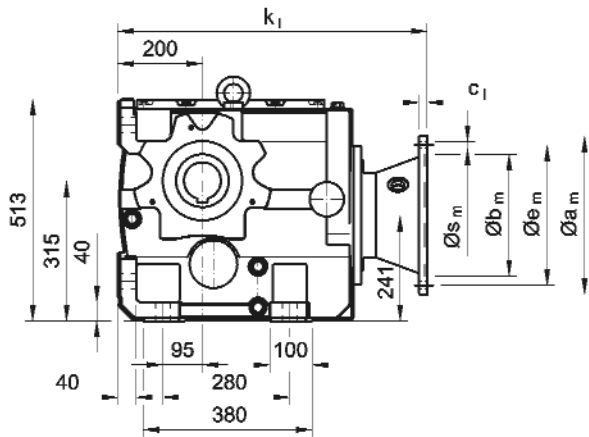
SKFC66C..



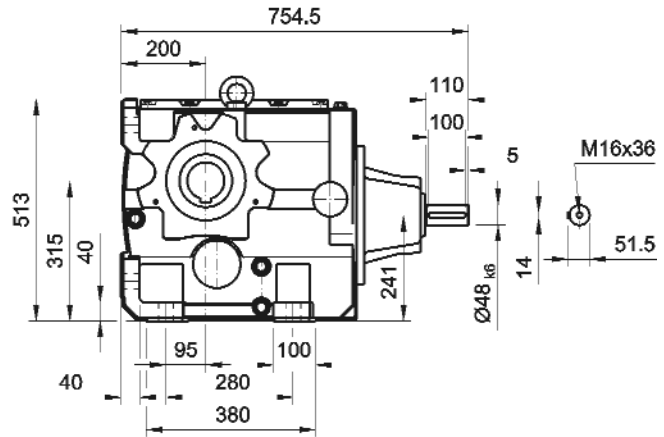


6. SK4

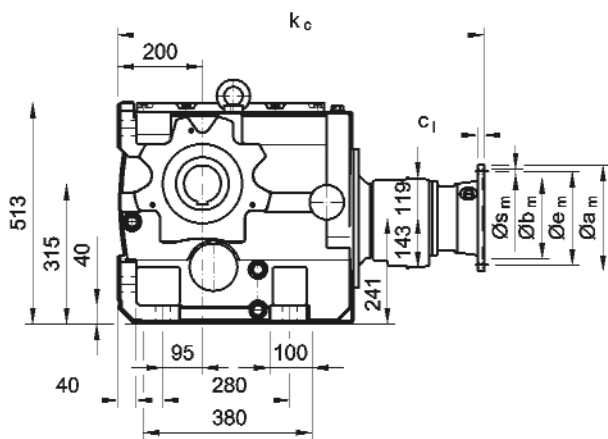
SKZ..76C-U
100 - 280



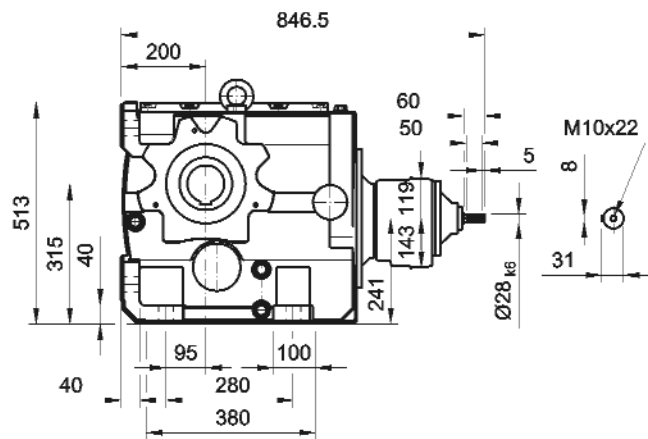
SKZ..76C-I



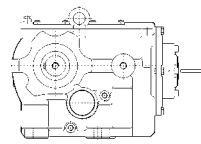
SKZ..76C36B/C-U
71 - 132



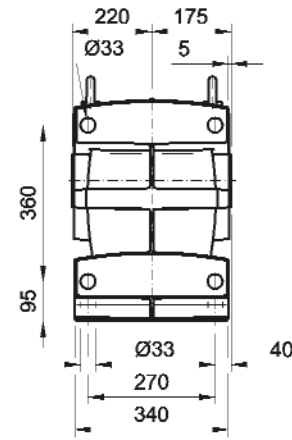
SKZ..76C36B/C-I



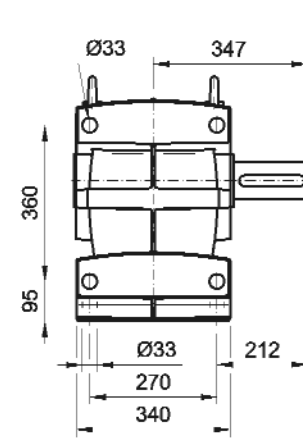
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	260M	280S	280M
kl					657	657	657	657	722	722	814	814	839	869	869	880	880	880
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5
kc	814	814	814	814	814	814	877	877										



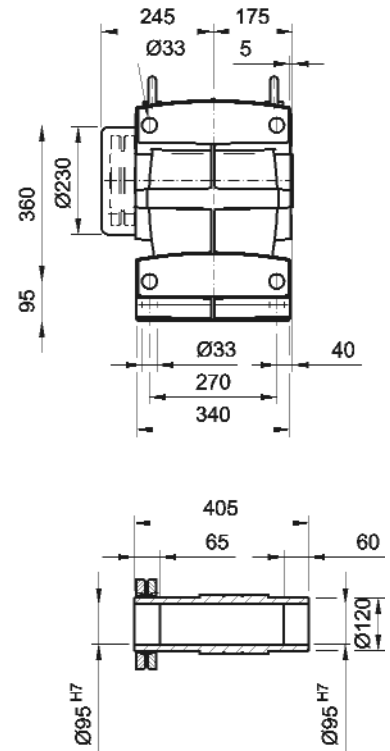
SKZH76C..



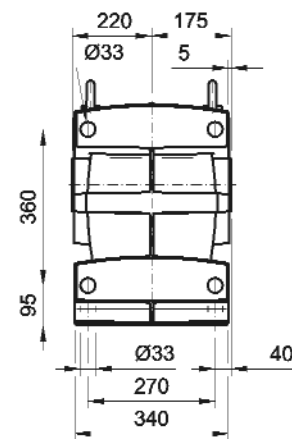
SKZN76C..



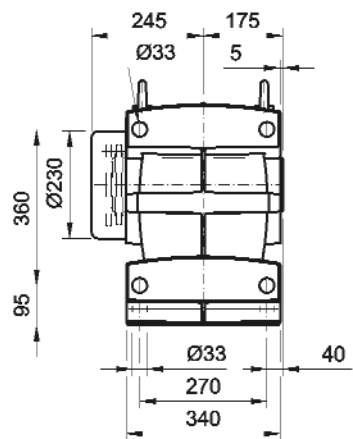
SKZS76C..



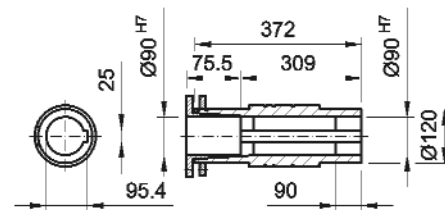
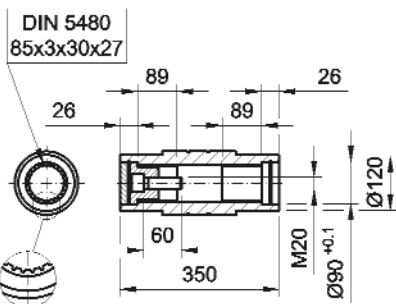
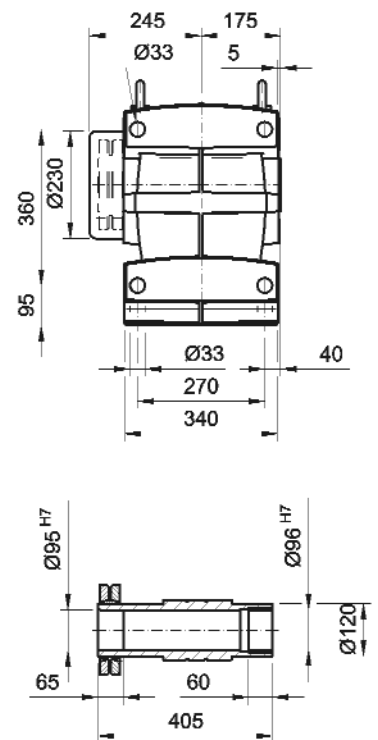
SKZT76C..

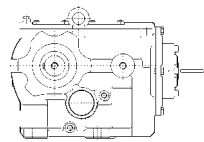


SKZB76C..



SKZC76C..

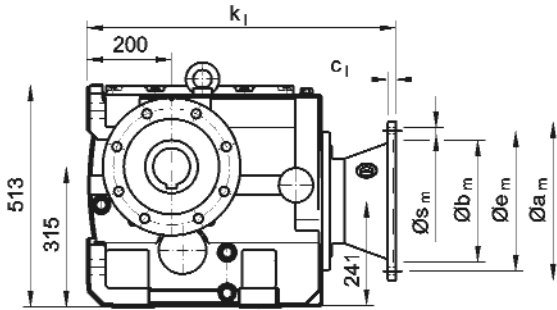




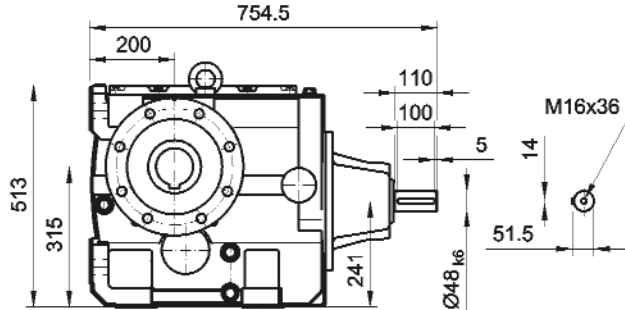
6. SK4

SKT..76C-U

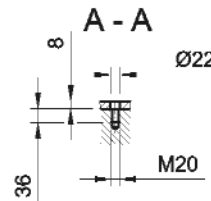
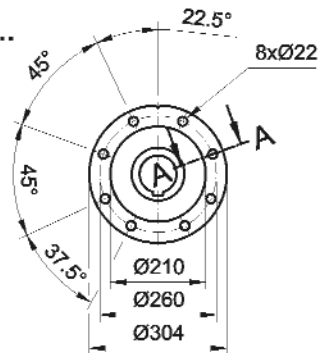
100 - 280



SKT..76C-I

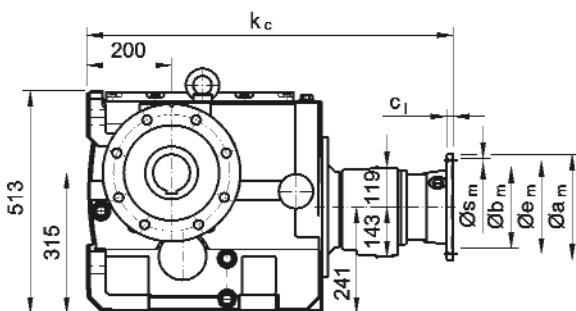


SKT..76C..

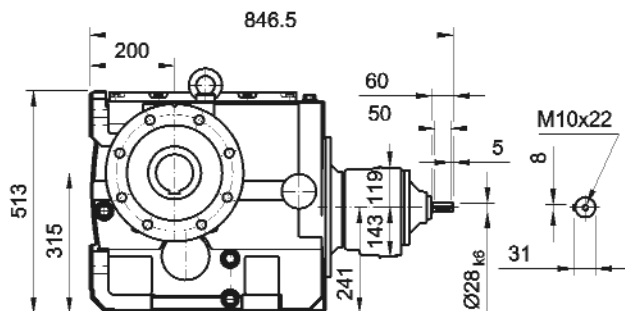


SKT..76C36B/C-U

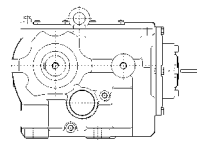
71 - 132



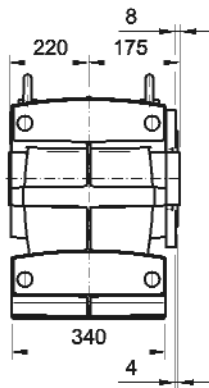
SKT..76C36B/C-I



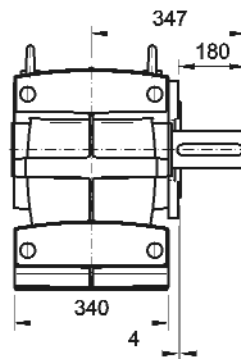
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	260M	280S	280M		
k_l					657	657	657	657	722	722	814	814	839	869	869	880	880	880		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_bm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_em	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_am	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_sm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
k_c	814	814	814	814	814	814	877	877												



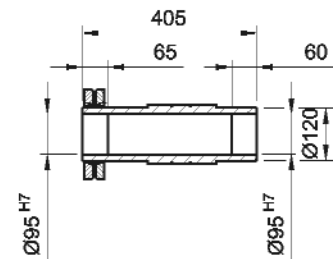
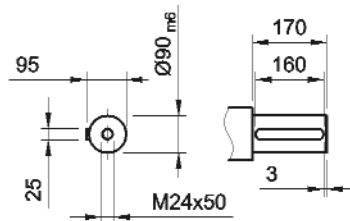
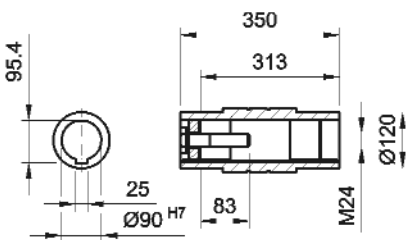
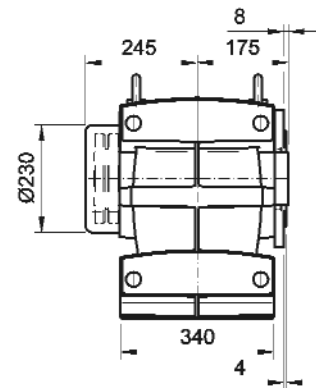
SKTH76C..



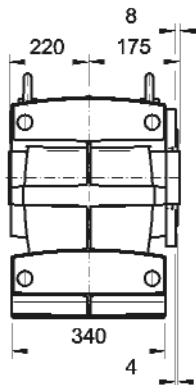
SKTN76C..



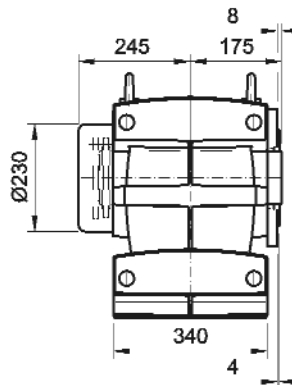
SKTS76C..



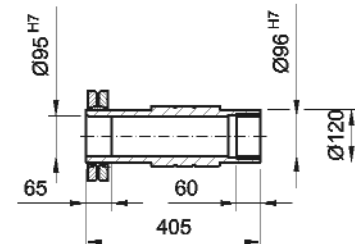
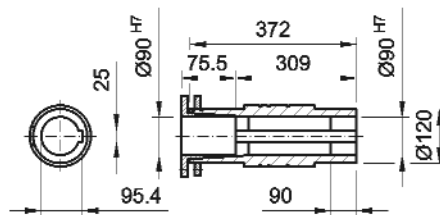
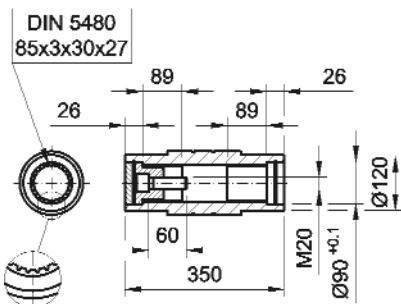
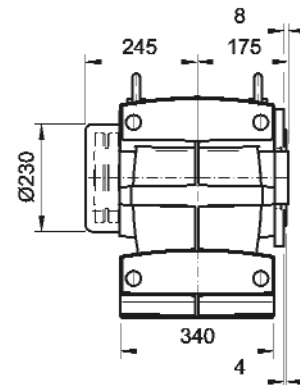
SKTT76C..

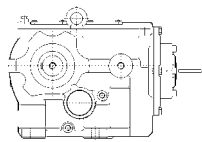


SKTB76C..



SKTC76C..

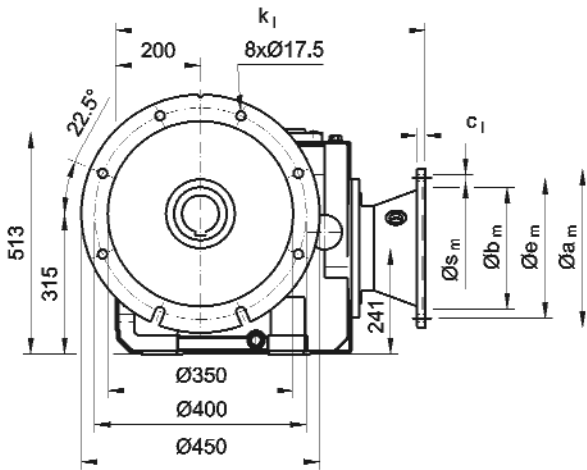




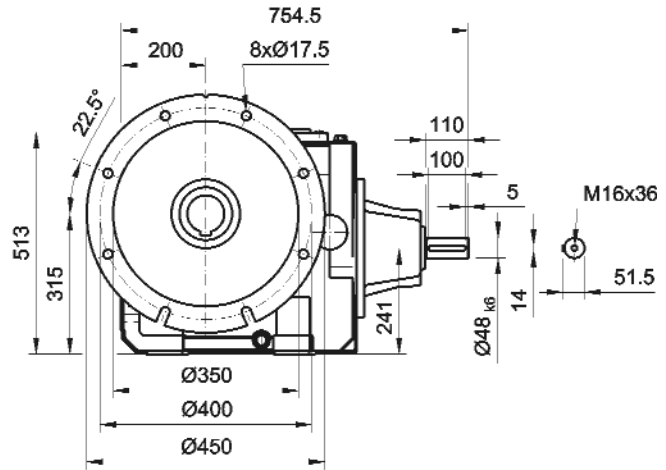
6. SK4

SKF..76C-U

100 - 280

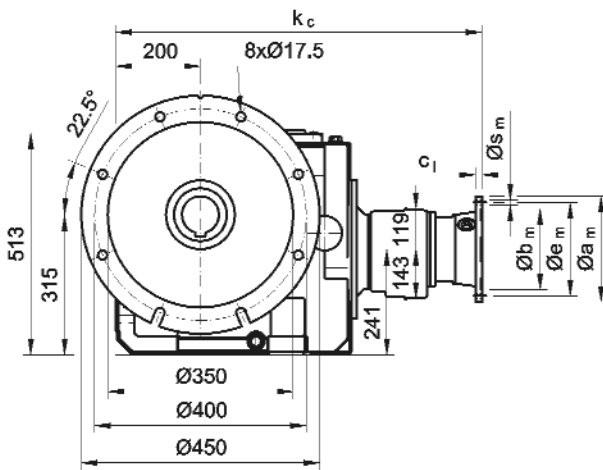


SKF..76C-I

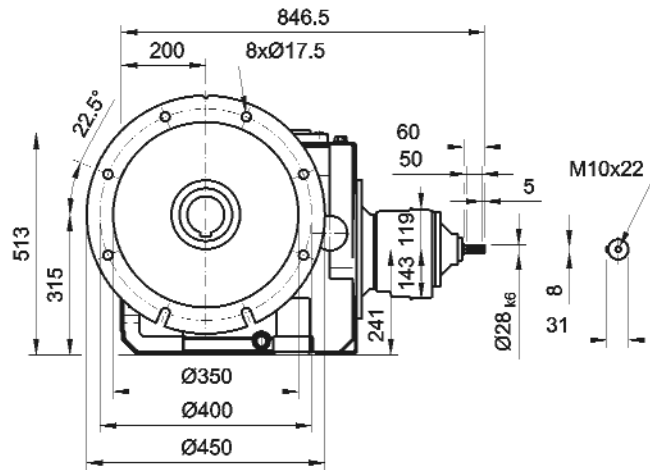


SKF..76C36B/C-U

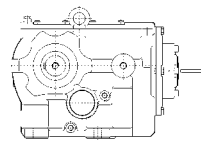
71 - 132



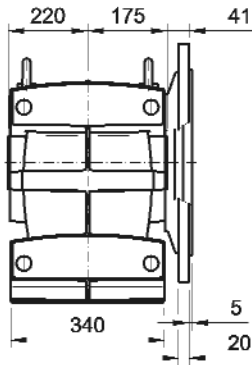
SKF..76C36B/C-I



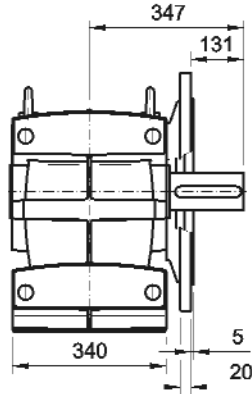
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					657	657	657	657	722	722	814	814	839	869	869	880	880	880		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5	8x Ø17,5		
kc	814	814	814	814	814	814	877	877												



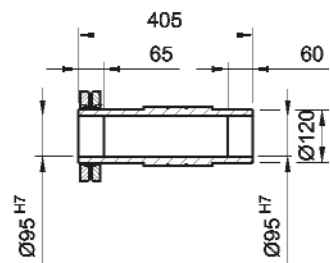
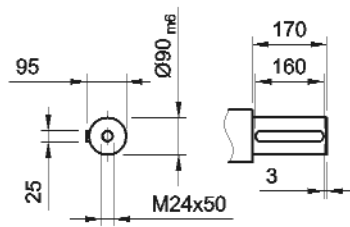
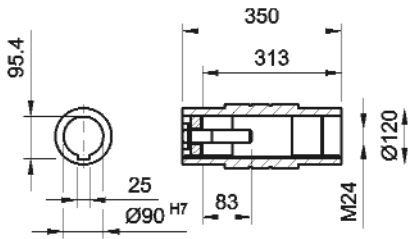
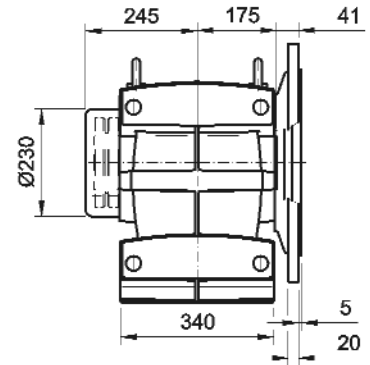
SKFH76C..



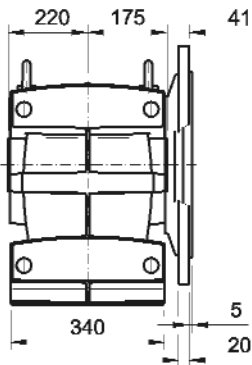
SKFN76C..



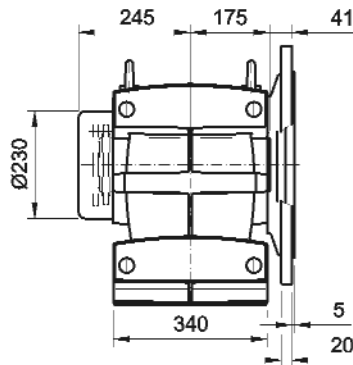
SKFS76C..



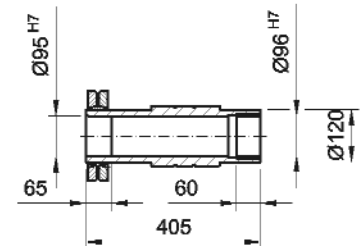
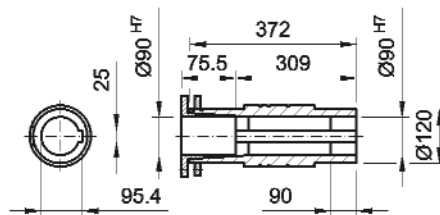
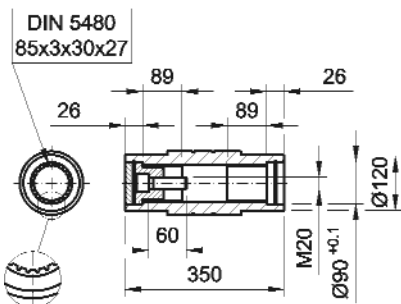
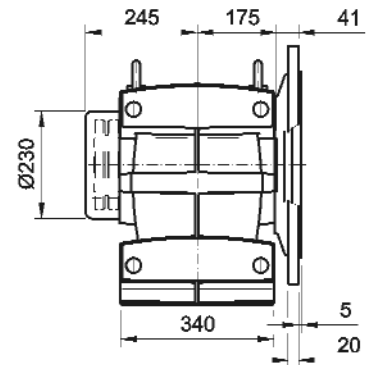
SKFT76C..

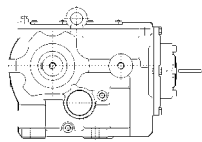


SKFB76C..



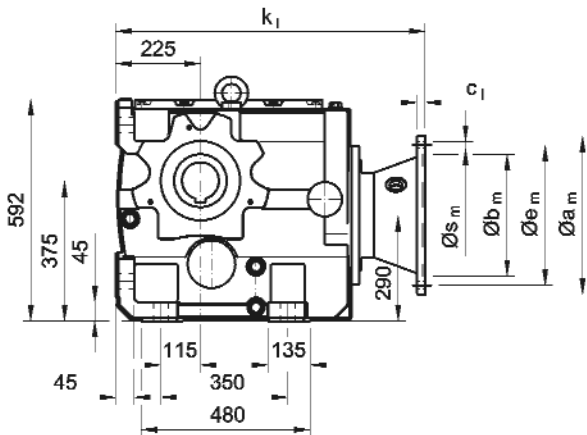
SKFC76C..



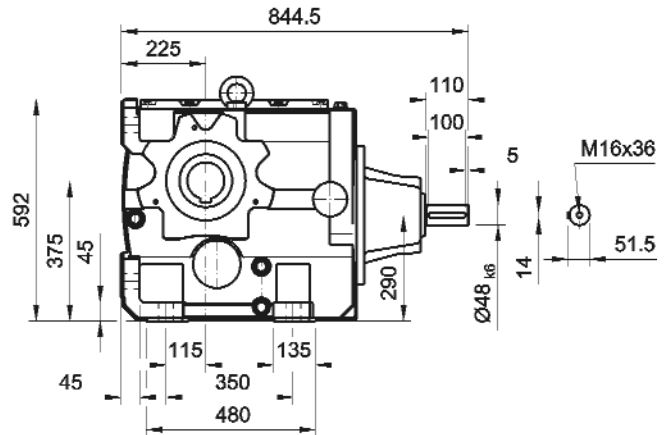


6. SK4

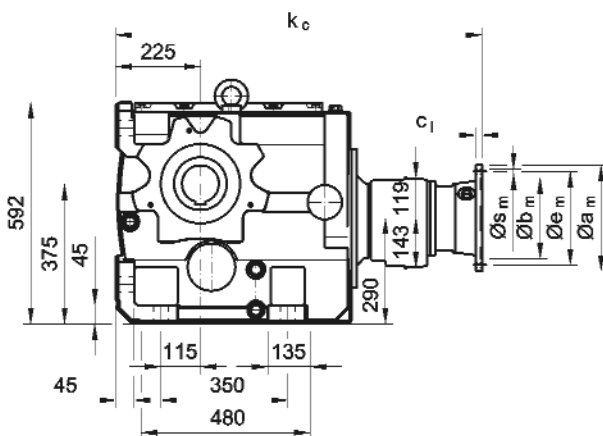
SKZ..86C-U
100 - 280



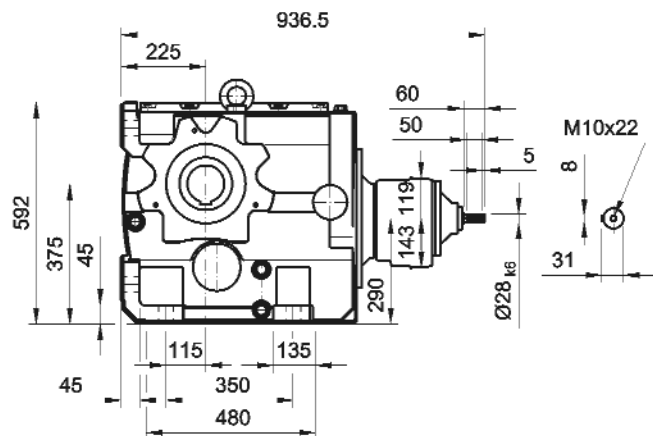
SKZ..86C-I



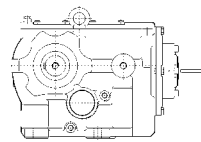
SKZ..86C36B/C-U
71 - 132



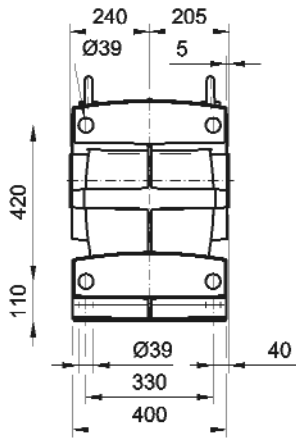
SKZ..86C36B/C-I



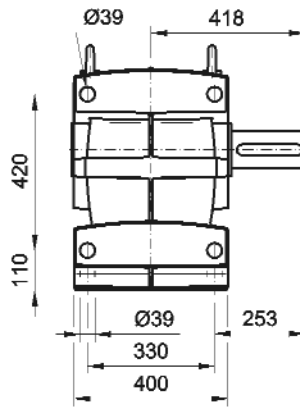
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	260M	280S	280M
kl					747	747	747	747	812	812	904	904	929	959	959	970	970	970
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5
kc	904	904	904	904	904	904	967	967										



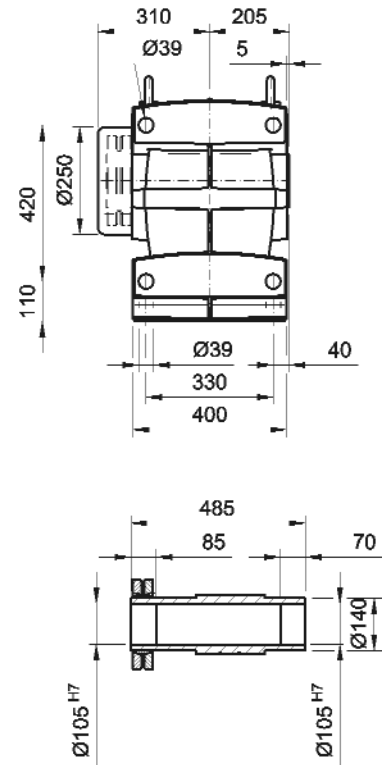
SKZH86C..



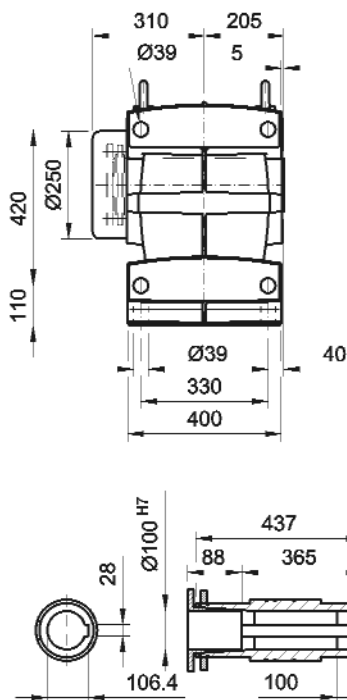
SKZN86C..



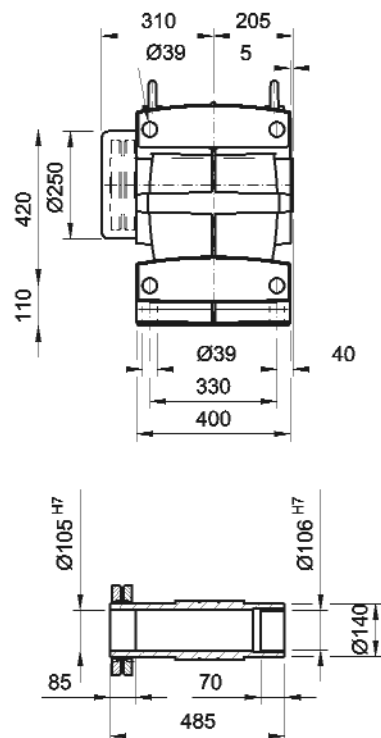
SKZS86C..

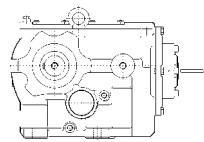


SKZB86C..



SKZC86C..

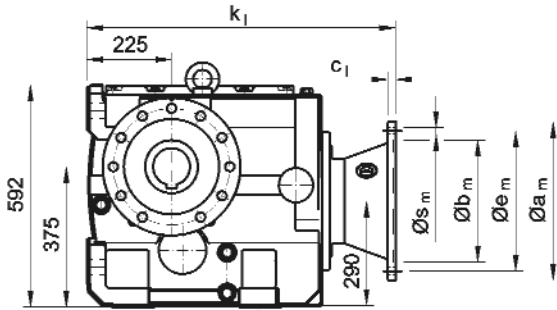




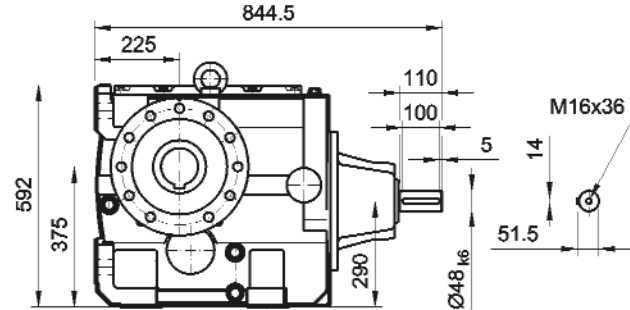
6. SK4

SKT..86C-U

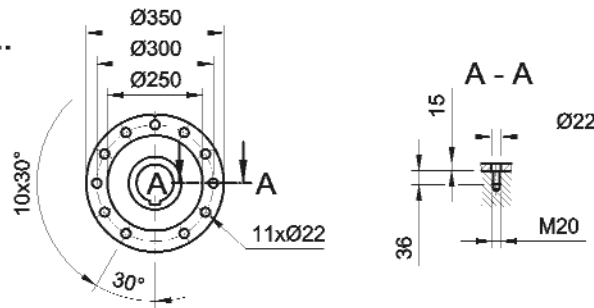
100 - 280



SKT..86C-I

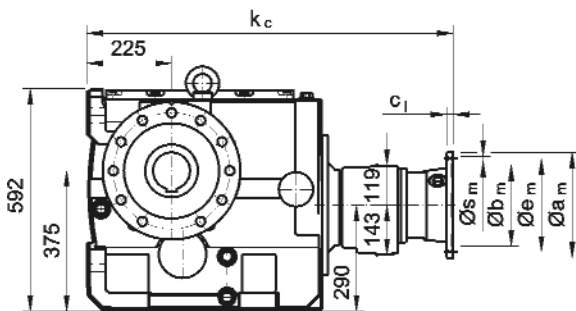


SKT..86C..

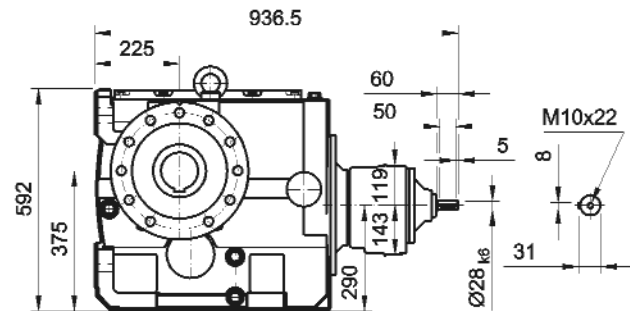


SKT..86C36B/C-U

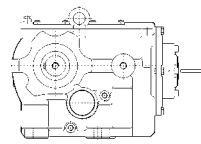
71 - 132



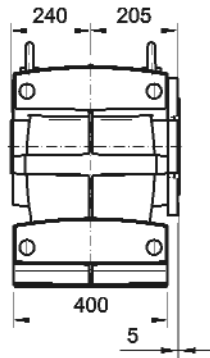
SKT..86C36B/C-I



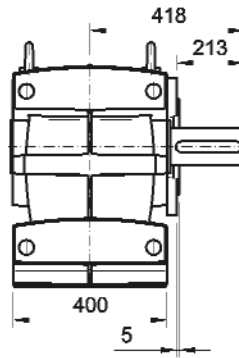
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	226M	226S	260M	280S	280M		
k_l					747	747	747	747	812	812	904	904	929	959	959	970	970	970		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{b_m}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{e_m}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{a_m}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{s_m}	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5		
k_c	904	904	904	904	904	904	967	967												



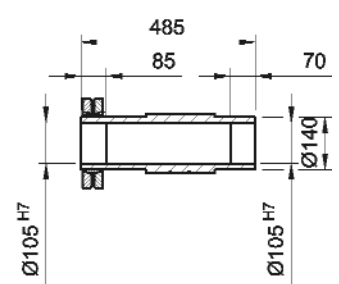
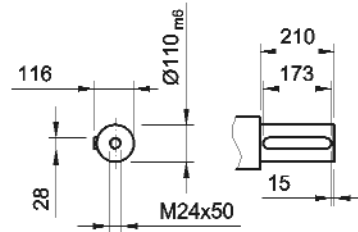
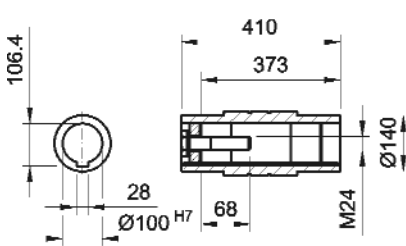
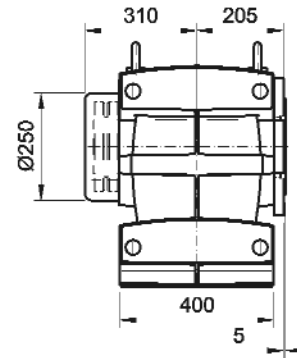
SKTH86C..



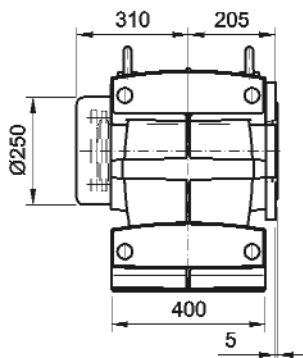
SKTN86C..



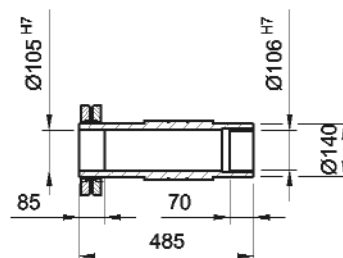
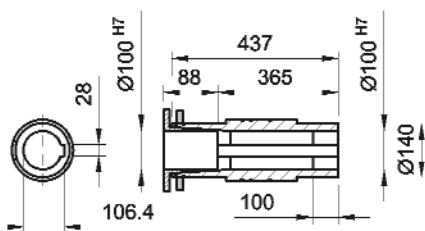
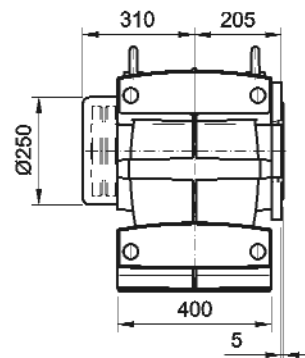
SKTS86C..

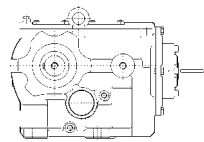


SKTB86C..



SKTC86C..

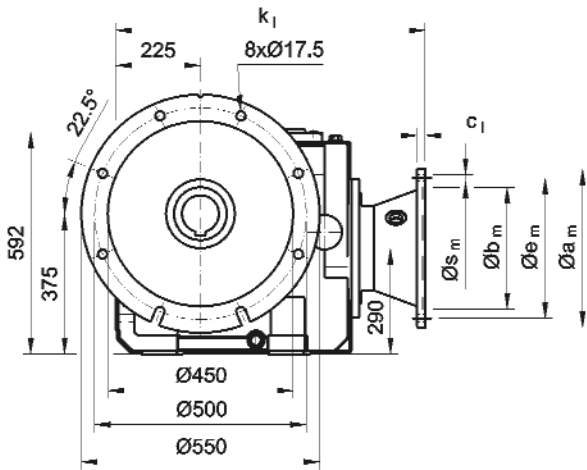




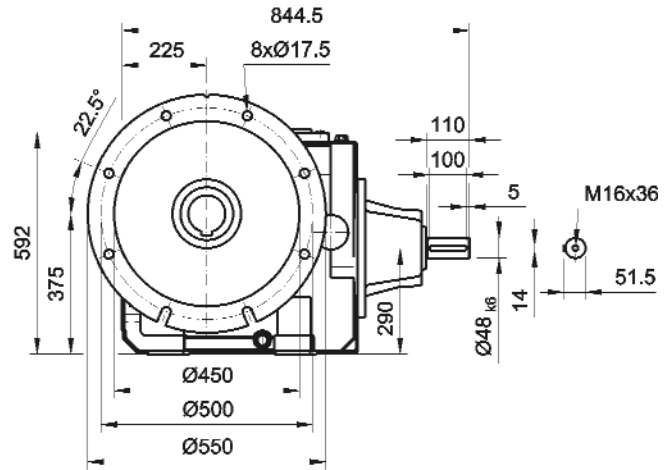
6. SK4

SKF..86C-U

100 - 280

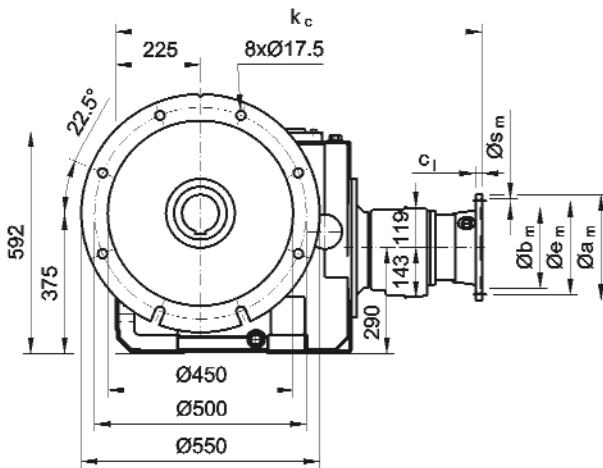


SKF..86C-I

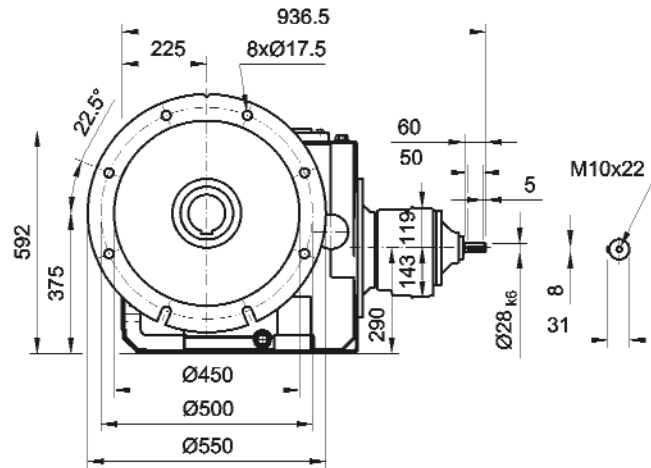


SKF..86C36B/C-U

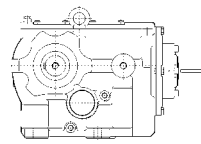
71 - 132



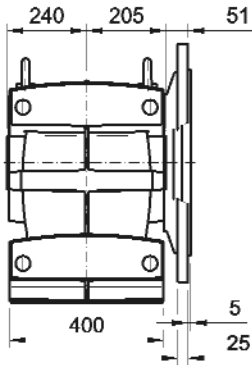
SKF..86C36B/C-I



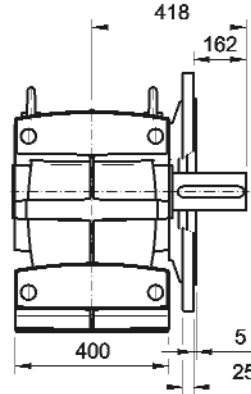
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	250M	280S	280M		
kl					747	747	747	747	812	812	904	904	929	959	959	970	970	970		
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5		
kc	904	904	904	904	904	904	967	967												



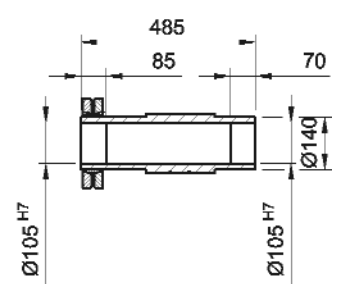
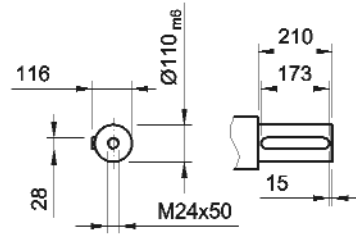
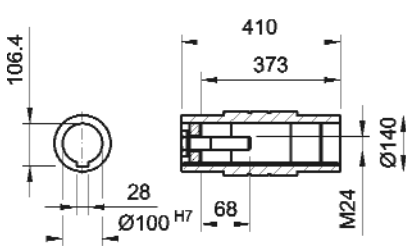
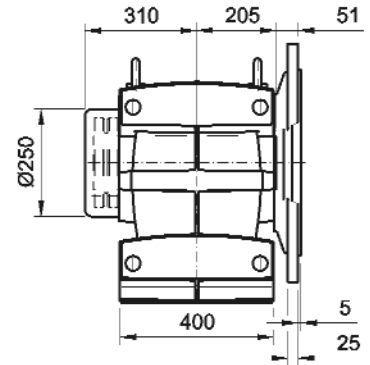
SKFH86C..



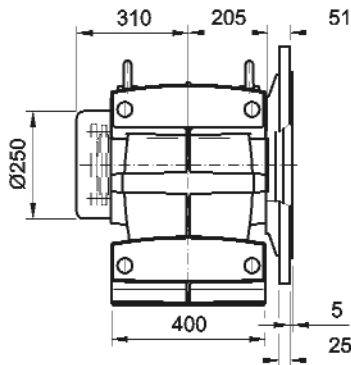
SKFN86C..



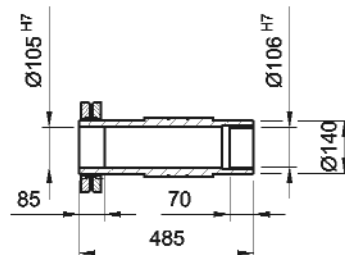
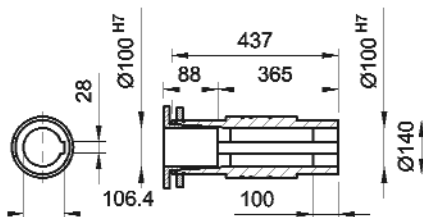
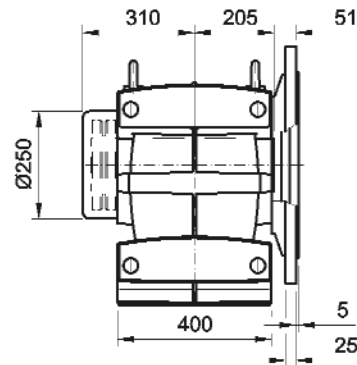
SKFS86C..

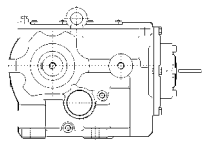


SKFB86C..



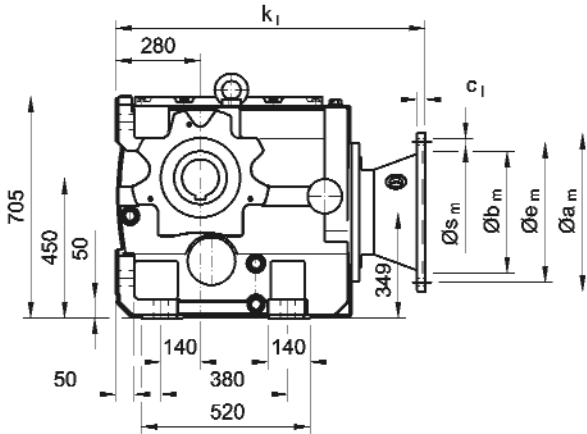
SKFC86C..



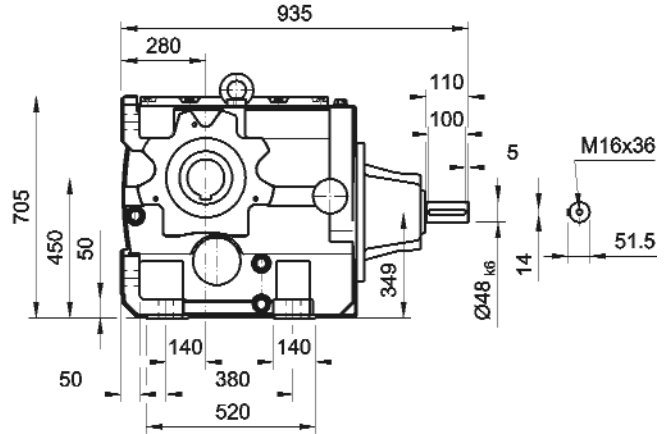


6. SK4

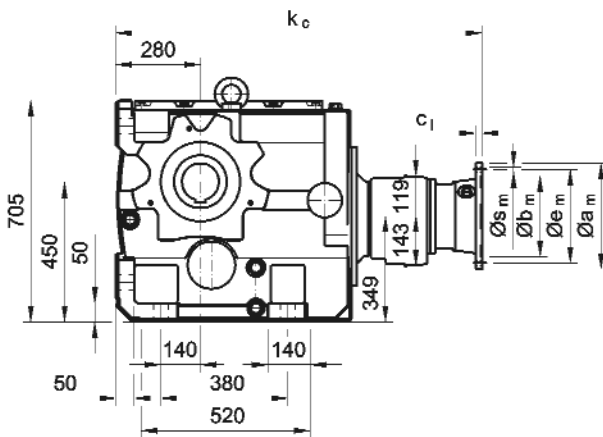
SKZ..96C-U
100 - 280



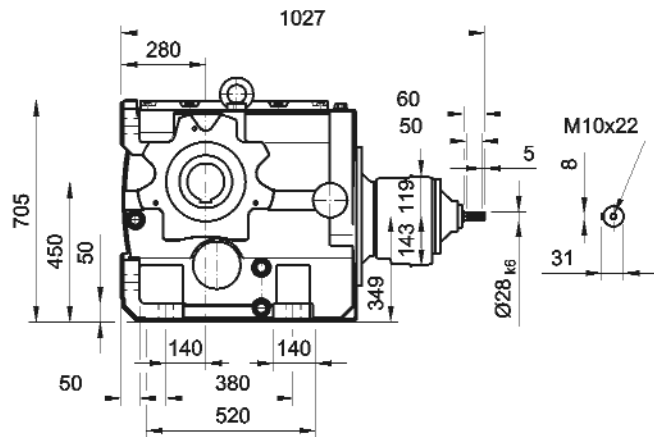
SKZ..96C-I



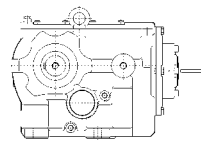
SKZ..96C36B/C-U
71 - 132



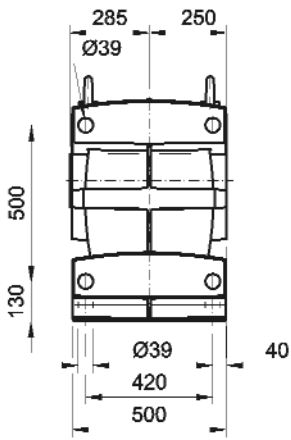
SKZ..96C36B/C-I



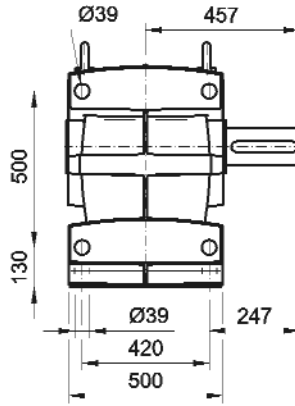
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	260M	280S	280M
kl					837	837	837	837	902	902	995	995	1019	1049	1049	1060	1060	1060
cl	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7
Øem	130	165	165	165	215	215	265	265	300	300	300	300	360	400	400	500	500	500
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550
Øsm	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5
kc	995	995	995	995	995	995	1057	1057										



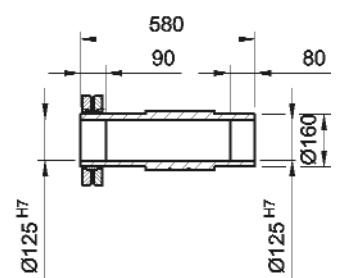
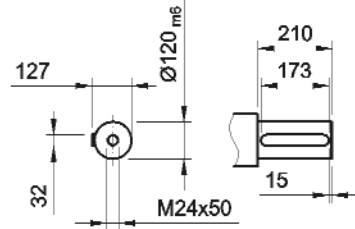
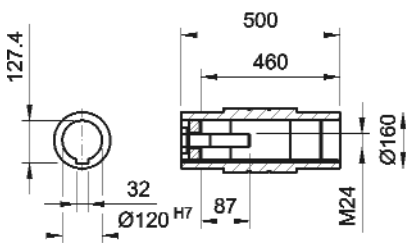
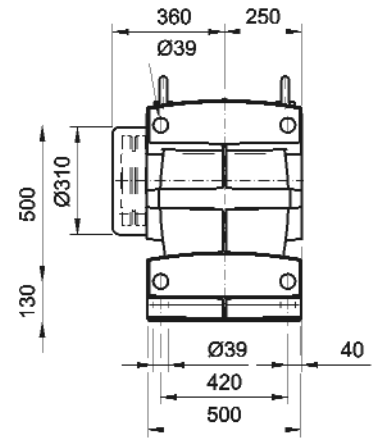
SKZH96C..



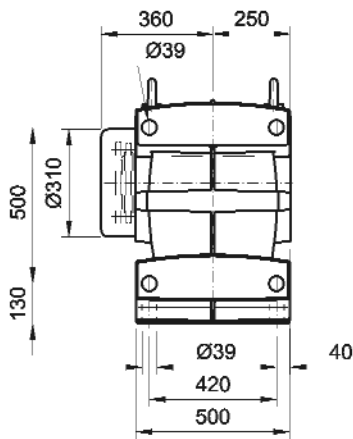
SKZN96C..



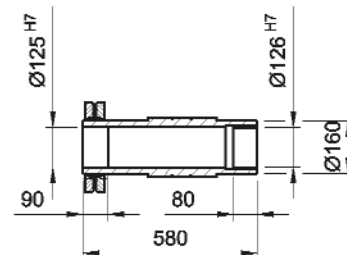
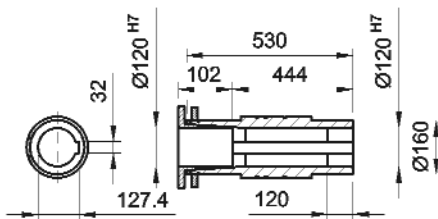
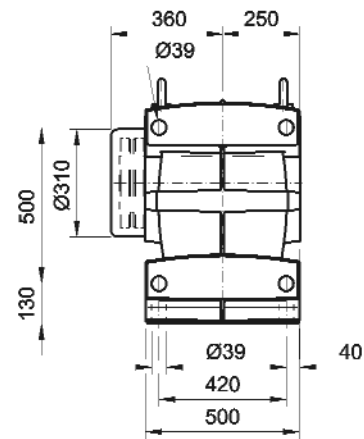
SKZS96C..

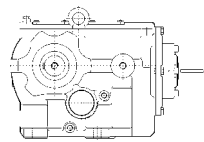


SKZB96C..



SKZC96C..

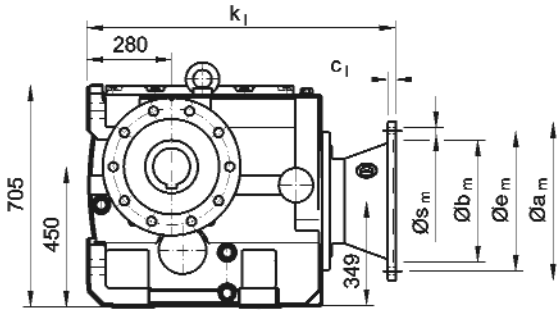




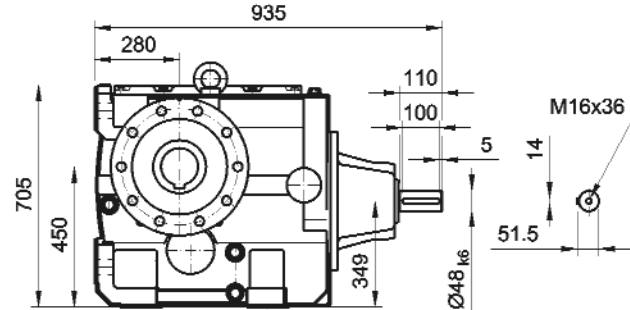
6. SK4

SKT..96C-U

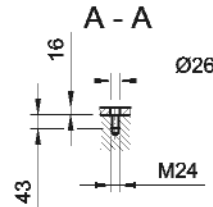
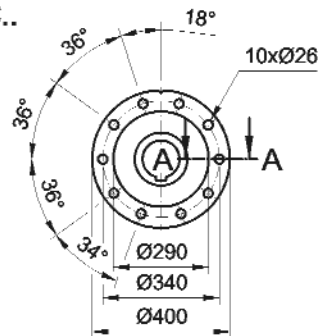
100 - 280



SKT..96C-I

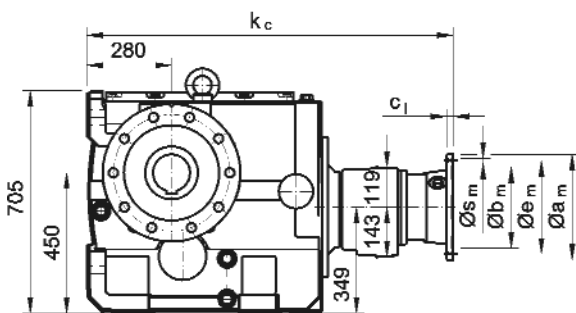


SKT..96C..

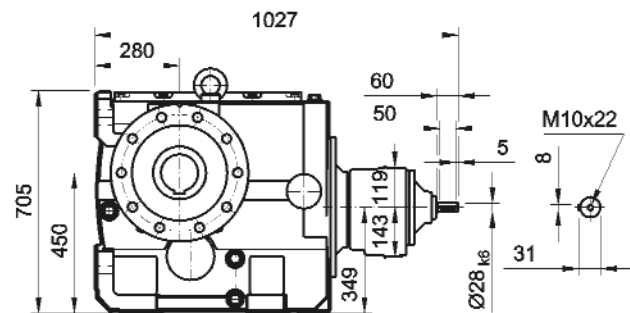


SKT..96C36B/C-U

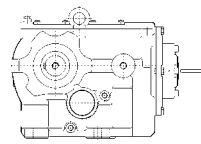
71 - 132



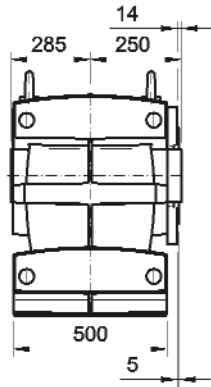
SKT..96C36B/C-I



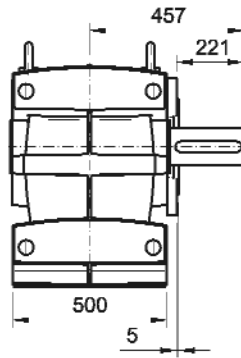
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	226M	226S	260M	280S	280M		
k_l					837	837	837	837	902	902	995	995	1019	1049	1049	1060	1060	1060		
c_l	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Ø_{b_m}	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Ø_{e_m}	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Ø_{a_m}	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Ø_{s_m}	4x M8x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø13,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5	4x Ø17,5		
k_c	995	995	995	995	995	995	1057	1057												



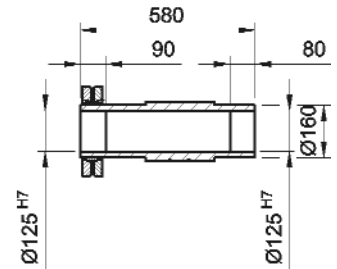
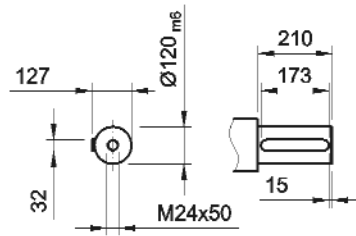
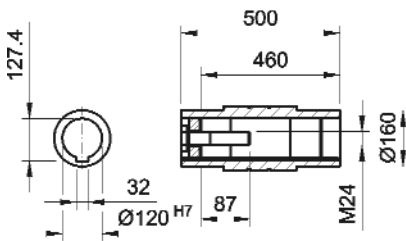
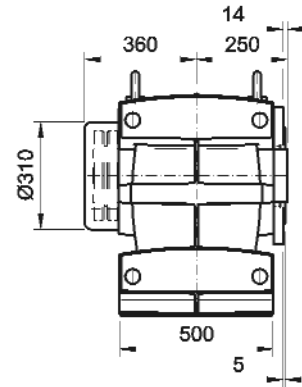
SKTH96C..



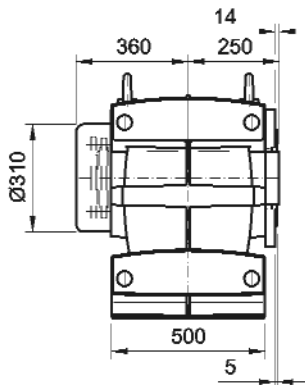
SKTN96C..



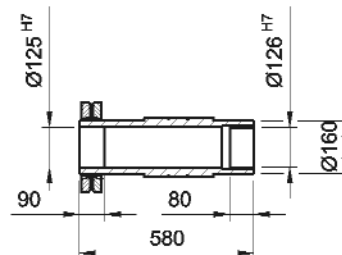
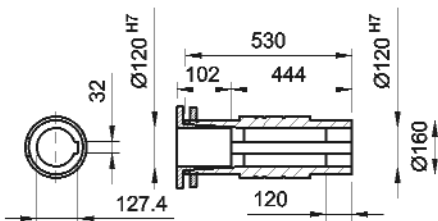
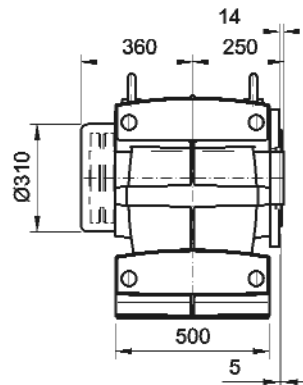
SKTS96C..

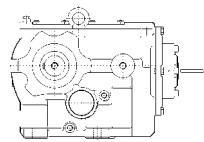


SKTB96C..



SKTC96C..

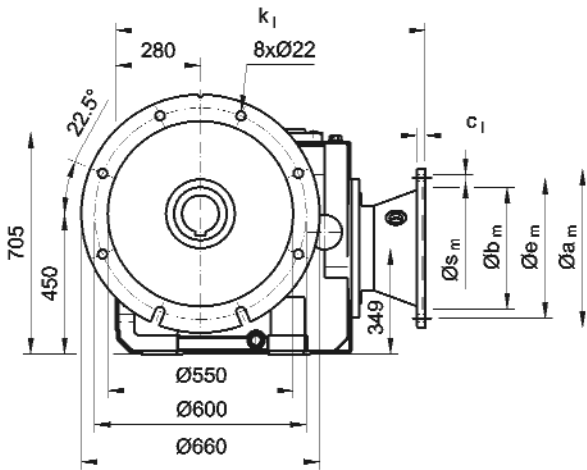




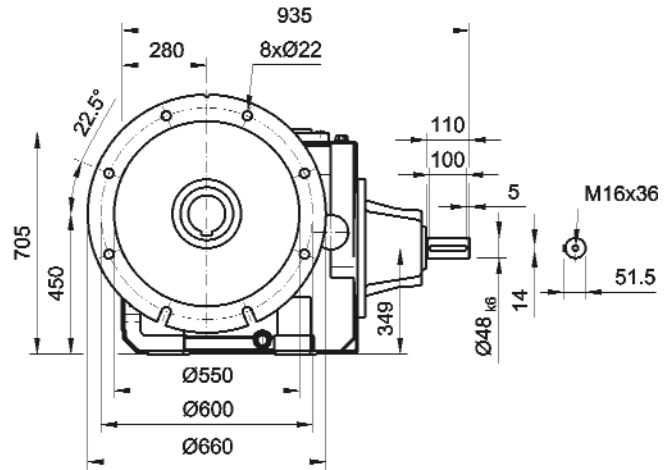
6. SK4

SKF..96C-U

100 - 280

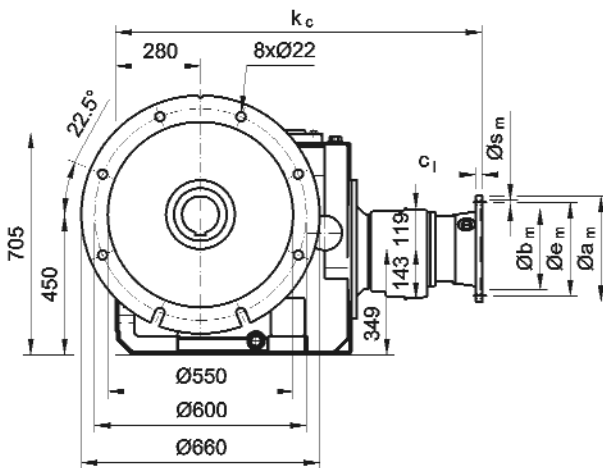


SKF..96C-I

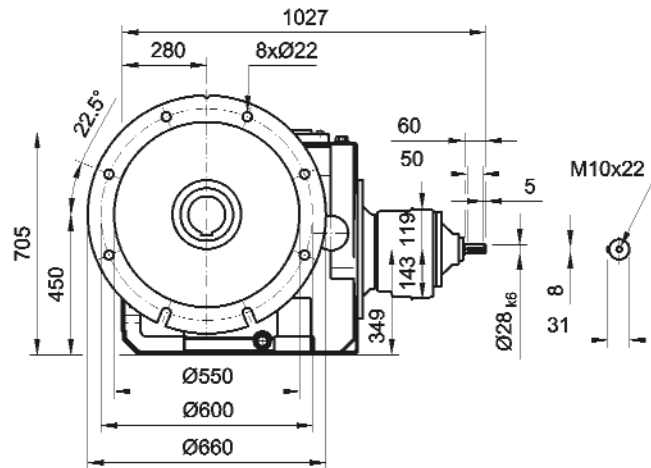


SKF..96C36B/C-U

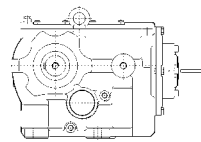
71 - 132



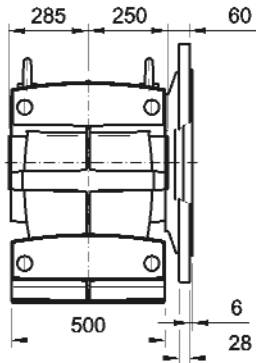
SKF..96C36B/C-I



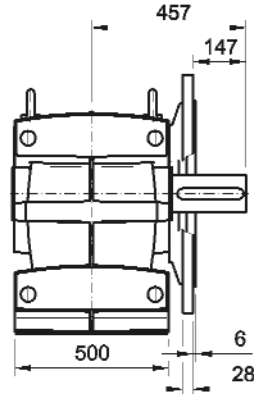
	71	80	90S	90L	100	112	132S	132M	160M	160L	180M	180L	200L	225M	225S	260M	280S	280M		
kl					837	837	837	837	902	902	995	995	1019	1049	1049	1060	1060	1060		
c1	8	10	10	10	12	12	13	13	15	15	15	15	19	19	19	25	25	25		
Øbm	110H7	130H7	130H7	130H7	180H7	180H7	230H7	230H7	250H7	250H7	250H7	250H7	300H7	350G7	350G7	450G7	450G7	450G7		
Øem	130	165	165	165	215	215	265	265	300	300	300	300	350	400	400	500	500	500		
Øam	160	200	200	200	250	250	300	300	350	350	350	350	400	450	450	550	550	550		
Øsm	4x M6x16	4x Ø11	4x Ø11	4x Ø11	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø13.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	4x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5	8x Ø17.5		
kc	995	995	995	995	995	995	1057	1057												



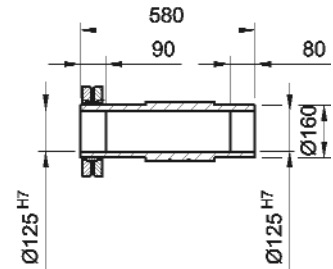
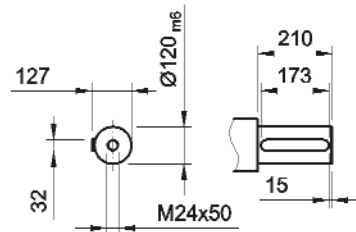
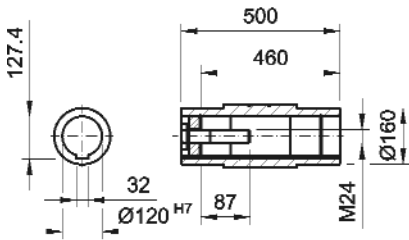
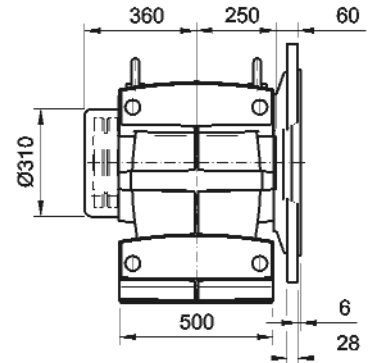
SKFH96C..



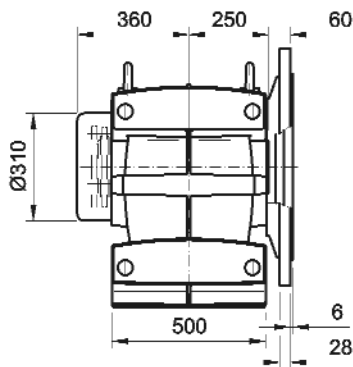
SKFN96C..



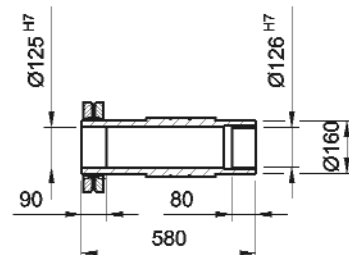
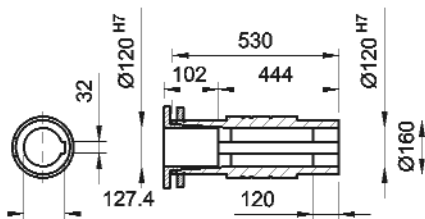
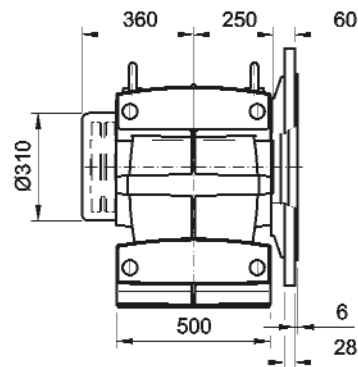
SKFS96C..



SKFB96C..



SKFC96C..



7. Technical Appendix

7 Technical Appendix

7.1 Technical Appendix, General

7.1.1 Symbols used

Formula sign	Description
C	Correction factor
$\cos \varphi$	Power factor
d	Speed of runner
F	Application factor
F_2	Factor dependent upon stray mass moment of inertia
F_b	Factor dependent upon output and operating time
F_m	Factor dependent upon load torque
F_{rN}	Permissible rated external load
F_{rN-G}	Permissible rated external load for reinforced bearing
F_p	Calculated radial load
f_r	Factor for the radial load
F_r	Calculated radial load (N)
F_x	Axial load
F_{xN}	Rated axial load
F_z	Dependent upon additional mass moment of inertia
i	Gear ratio
I_A	Starting current
i_{ex}	Exact gear ratio
i_N	Rated gear ratio
I_n	Rated current
J1	Inertia of brake hub and brake disk
J2	Inertia of the motor without brake
J3	Inertia of the motor with brake
JE	Inertia of the motor
J_{zus}	Inertia of the additional mass
M	Mass acceleration factor
m	Mass
M_b	Calculated bending moment
M_{bn}	Rated bending moment
η	Efficiency
n_1	Rated speed of the motor
n_2	Selection of the output speed
n_{2ex}	Exact speed of output shaft (full load)
Lp	Mean sound pressure level at 1 m, without load
n_{max}	Max. permissible speed
n_{syn}	Synchronous speed of the motor
P	Mechanical rated output of the gear unit
P_a	Output power
P_m	Motor output
P_N	Rated switching capacity (motor brake)
P_{zo}	Drive power

7. Technical Appendix

Formula sign	Description
r	Pitch circle radius of power transmission element
SF	Available service factor
SF_{min}	Required service factor
Sr	Speed range for motors with inverter
t_b	Brake time
t_1	Operating time of the single-disc safety brake
t_2	Braking time of the single-disc safety brake
T_2	Torque at the output shaft
t_3	Braking time of single-disc safety brakes switching at the AC side
T_A	Starting torque of the motor
T_a	Output torque (load torque)
T_B	Braking torque of the motor
T_K	Breakdown torque of the motor
T_n	Rated torque
T_S	Pull-up torque of the motor
W_{max}	Energy capability per braking
Z	Max. permissible operating frequency of brake motors
ZB	No. of brakings per hour
Z_{o1}	No-load operating frequency per hour without brake
Z_{o2}	No-load operating frequency per hour with brake

7. Technical Appendix

7.2 Project planning checklist

Data									
1. Load									
Motor output	P_m	=	kW						
Motor speed			min^{-1}						
Output power	P_a	=	kW						
Output torque	T_a	=	Nm						
Operating time in hours/day	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px 10px;">≤ 8 h</td> <td style="padding: 2px 10px;">≤ 16 h</td> <td style="padding: 2px 10px;">≤ 24 h</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	≤ 8 h	≤ 16 h	≤ 24 h					
≤ 8 h	≤ 16 h	≤ 24 h							
Torque peaks T_a	T_a	=	Nm						
Frequency			/h						
Duration			s						
Operating frequency			c/h						
Inertia of driven machine			kgm^2						
Acceleration time			s						
Reversing operation	<input style="width: 100%; height: 20px;" type="text"/>								
Backstop required	<input style="width: 100%; height: 20px;" type="text"/>								
2. Speed									
Constant speed	<input style="width: 100%; height: 20px;" type="text"/>								
Variable speed	<input style="width: 100%; height: 20px;" type="text"/>								
Direction of rotation: CW = clockwise	<input style="width: 100%; height: 20px;" type="text"/>								
CCW = counter clockwise	<input style="width: 100%; height: 20px;" type="text"/>								
3. Connection of motor/gear unit									
Geared motor (integrated assembly)	<input style="width: 100%; height: 20px;" type="text"/>								
Gear unit for IEC motors	<input style="width: 100%; height: 20px;" type="text"/>								
Free drive shaft	<input style="width: 100%; height: 20px;" type="text"/>								
Coupling	<input style="width: 100%; height: 20px;" type="text"/>								
V-belt drive:	<input style="width: 100%; height: 20px;" type="text"/>								
Diameter of belt pulley:									
Motor	\emptyset		mm						
Gear unit	\emptyset		mm						
Belt profile	<input style="width: 100%; height: 20px;" type="text"/>								
Number of belts	<input style="width: 100%; height: 20px;" type="text"/>								
Other: please specify	<input style="width: 100%; height: 20px;" type="text"/>								
4. Connection of gear unit/driven machine									
Coupling	<input style="width: 100%; height: 20px;" type="text"/>								
Sprocket, diameter	\emptyset		mm						
Pinion, diameter	\emptyset		mm						
Other: please specify	<input style="width: 100%; height: 20px;" type="text"/>								

7. Technical Appendix

5. External load on output shaft

Radial load

$$F_r = \text{N}$$

Distance between point of action and shaft shoulder

$$L_r = \text{mm}$$

Direction of load (see below)

$$Q_r = \text{°}$$

Axial load

Pointing to the gear unit

$$F_x = + \text{N}$$

Pointing away from the gear unit

$$F_x = - \text{N}$$

6. External load on drive shaft

Radial load

$$F_{rHSS} = \text{N}$$

Distance between point of action and shaft shoulder

$$L_{rHSS} = \text{mm}$$

Direction of load

$$Q_{rHSS} = \text{°}$$

Axial load

Pointing to the gear unit

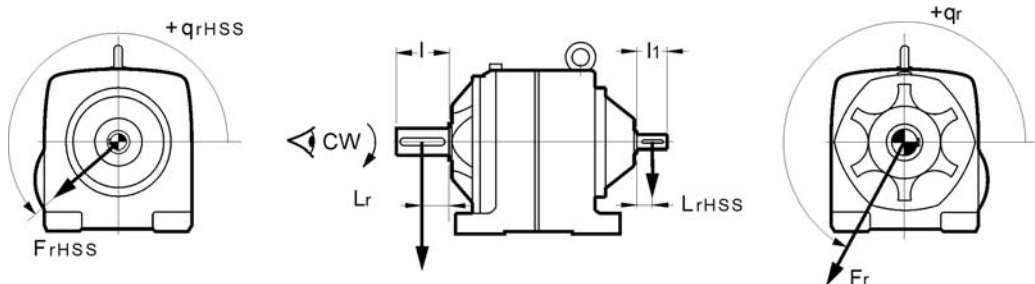
$$F_x = + \text{N}$$

Pointing away from the gear unit

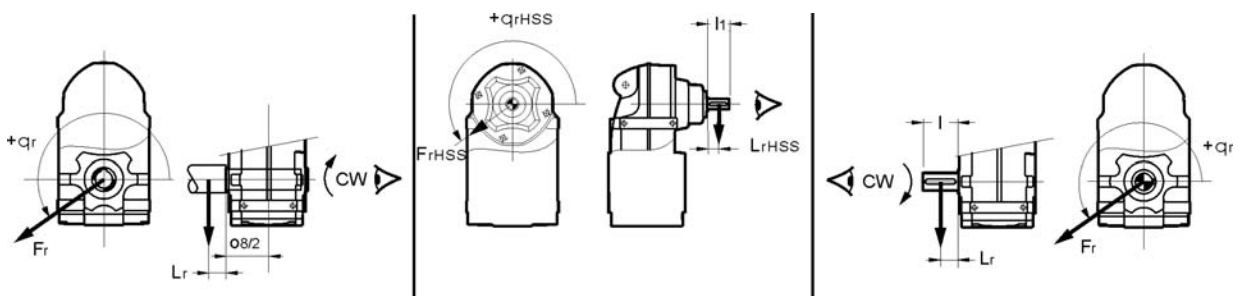
$$F_x = - \text{N}$$

Definitions:

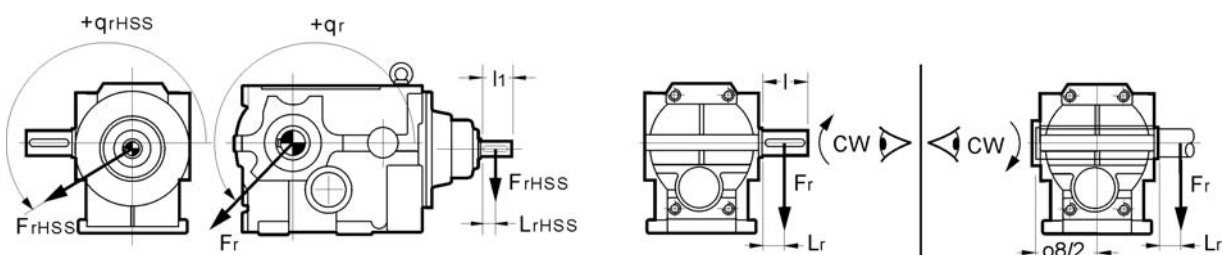
SI4



SP4



SK4



7. Technical Appendix

7. Brake				
Braking torque TB	T_B	=		Nm
Braking time	T_b	=		s
8. Mounting parameters				
Mounting position				
Ambient temperature (°C)	min/max	=	/	°C
Exposure to solar radiation	<input type="text"/>			
Max. noise emission				dB(A)
Measuring distance				M
Environmental conditions				
Air humidity in %				%
Dust	<input type="text"/>			
Aggressive atmosphere, please specify	<input type="text"/>			
Electrical details	AC		DC	V
	3 ph	1 ph		Hz
Voltage and frequency				
Operating mode		S		%
		/		
Type of enclosure	IP			
Insulation class				
Drive: Type	<input type="text"/>			
Order no.:	<input type="text"/>			

Sketch:

7. Technical Appendix

7.2.1 Coating systems

The standard available coatings for the different types of applications from Rexnord-Stephan are summarized in the following tables. Before the dip primer coating, all castings undergo grit blasting for surface preparation (SA 2 ½). If no special coating is defined, the delivery features system 1 in RAL 5002. For high-quality coatings (4...6), the final color tone can be defined by the customer. If no color tone is specified, the final coating is done in RAL 5002 (blue).

Deviating versions are possible in addition to the listed coatings (e.g. through customer regulations). However, they must be checked by Rexnord-Stephan for feasibility in each case before placing an order. It is possible that it may result in significant deviations with respect to extra prices and delivery time. Please contact us.

Table 1:

System no.:	0		1		2		3	
Paint coat								
1	Dip primer coating Color: Red-brown	20 µm	Dip primer coating Color: Red-brown	20 µm	Dip primer coating Color: Red-brown	20 µm	Dip primer coating Color: Red-brown	20 µm
2			1C top coat Color: RAL 5002 Acrylic / PVC	40 µm	1C top coat Color: RAL 7035 Acrylic / PVC	40 µm	1C top coat Color: RAL 7035 Acrylic / PVC	40 µm
3							1C top coat Color: RAL 5002 Acrylic / PVC	40 µm
4								
5								
6								
Total coating thickness		20 µm		60 µm		60 µm		100 µm
Additional paint coats							1	
Drying time less than			1 day		1 day		1 day	
Corrosion protection	++		+++		++		++++	
Temperature resistance								
Continuous load up to	100 °C		100 °C		100 °C		100 °C	
Short-term load up to	160 °C		160 °C		160 °C		160 °C	
Chemical resistance	-		+		-		++	
Mechanical resistance	-		+		-		++	
UV resistance	-		+		-		++	
Application	Only S4 - gear heads for assembly center		Standard coating for S4 indoor installation		Pre-coating for final coating at customer		High-quality coating for S4 indoor installation	
Extra price	No		No		No		Yes	

7. Technical Appendix

Table 2:

System no.:	4		5		6	
Paint coat						
1	Dip primer coat Color: Red-brown	20 µm	Dip primer coat Color: Red-brown	20 µm	Dip primer coat Color: Red-brown	20 µm
2	2C paint base Color: RAL 7035 Polyurethane (Derocryl)	40 µm	2C paint base Color: RAL 7035 Epoxy	40 µm	2C paint base Color: RAL 7035 Epoxy	40 µm
3	2C top coat Color: NKW Polyurethane (Derocryl)		2C paint base Color RAL 7035 Epoxy	40 µm	2C paint base Color RAL 7035 Epoxy	40 µm
4			2C top coat Color: NKW Epoxy	40 µm	2C top coat Color: NKW Epoxy	40 µm
5			2C top coat Color: NKW Epoxy	40 µm	2C top coat Color: NKW Epoxy	40 µm
6					2C top coat Color: NKW Polyurethane (Derocryl)	30 µm
Total coating thickness		100 µm		180 µm		210 µm
Additional paint coats	1		3		4	
Drying time less than	2 days		3 days		4 days	
Corrosion protection	+++++		+++++		+++++	
Temperature resistance						
Continuous load up to	100 °C		100 °C		100 °C	
Short-term load up to	160 °C		160 °C		160 °C	
Chemical resistance	+++		++++		+++++	
Mechanical resistance	+++		++++		+++++	
UV resistance	++++		++++		++++	
Application	Standard coating for S4 outdoor installation		High-quality coating for S4 indoor and outdoor installation at average environmental loads		High-quality coating for S4 indoor and outdoor installation in extreme applications	
Extra price	Yes		Yes		Yes	

Key				
-	Insufficient		NKW	Per customer request
+	Available			
++	Sufficient			
+++	Satisfactory			
++++	Good			
+++++	Excellent			

7. Technical Appendix

7.3 Technical Appendix, Electrical

7.3.1 Electrical data of single-speed motors

7.3.1.1 4 pole, 50 Hz, Table 1

P _n	Type	n ₁	I _n	T _n	DOL	DOL	Y / Δ	Y / Δ			cos φ		
											100%	75%	50%
			400 V										
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n	100%	75%	50%
0.12	63A-4G	1360	0.47	0.76	1.9	2.8	-	-	1.65	2	0.62	0.53	0.42
0.18	63B-4G	1370	0.65	1.15	2.2	3.1	-	-	2	2.2	0.64	0.54	0.42
0.25	71A-4G	1400	0.8	1.59	2	3.4	-	-	1.75	2.1	0.64	0.54	0.41
0.37	71B-4G	1400	1.15	2.36	2.2	3.7	-	-	2	2.2	0.63	0.54	0.42
0.55	80A-4G	1420	1.57	3.5	2	4.0	-	-	1.95	2.3	0.7	0.61	0.47
0.75	80B-4G	1415	2	4.8	2.2	4.5	-	-	1.95	2.3	0.7	0.6	0.48
1.1	90S-4G	1410	3.1	7	2.1	4.5	-	-	2.1	2.7	0.65	0.55	0.43
1.5	90L-4G	1410	3.7	9.6	2.4	5.3	-	-	1.8	2.3	0.71	0.61	0.47
2.2	100A-4G	1420	5.1	14	2.2	5.5	-	-	2	2.75	0.78	0.71	0.58
3	100B-4G	1425	6.7	19.1	2.5	6.0	-	-	2.3	3	0.8	0.74	0.61
4	112M-4G	1420	8.7	25.5	2.5	5.8	0.75	1.8	2.1	2.8	0.8	0.72	0.61
5.5	132S-4G	1440	11.7	35	2.1	6.5	0.7	2.1	1.9	2.55	0.8	0.74	0.61
7.5	132MA-4G	1445	15.1	47.8	2.3	7.5	0.7	2.4	2	2.7	0.83	0.76	0.64
9	132MB-4G	1435	17	57	2.3	7.5	0.7	2.3	2	2.7	0.83	0.76	0.66
11	160M-4G	1465	21	70	2.2	6.5	0.7	2.1	2	2.9	0.86	0.81	0.7
15	160L-4G	1460	28	95.5	2.3	7.2	0.7	2.3	2.1	3	0.87	0.8	0.68
18.5	180M-4G	1455	35	117.8	2.3	6.5	0.7	2	2.3	3.3	0.85	0.79	0.71
22	180L-4G	1460	43	140.1	2.5	7.0	0.75	2.3	2.3	3.3	0.89	0.86	0.81
30	200L-4G	1465	55	195	2.8	6.7	0.75	2.1	2.25	2.6	0.85	0.82	0.73
37	225S-4G	1470	68	240	2.8	6.7	0.75	2.1	2.25	2.6	0.85	0.83	0.75
45	225M-4G	1470	82	292	2.8	6.7	0.74	2.1	2.25	2.6	0.85	0.83	0.75
55	250M-4	1475	100	357	2.8	6.7	0.75	2.1	2.25	2.6	0.85	0.83	0.75
75	280S-4	1480	133	485	2.8	6.7	0.75	2.1	2.25	2.6	0.86	0.83	0.75
90	280M-4	1480	159	583	2.8	6.7	0.75	2.1	2.25	2.5	0.86	0.82	0.74

P_n Rated power

n₁ Rated speed

I_n Rated current

T_n Rated torque

T_A Acceleration torque

I_A Starting current

T_S Pull-up torque

T_K Breakdown torque

DOL Direct on line

Y / Δ Star / Delta switch-on

cos φ Power factor (at 100%, 75% and 50% rated power)

7. Technical Appendix

4 pole, 50 Hz, Table 2

P _n kW	Type	n ₁ min ⁻¹	η %			J ₂ kg*m ²	J ₃ kg*m ²	Z _{o1} h ⁻¹	Z _{o2} h ⁻¹	T _B Nm	L _P dB(A)
			100%	75%	50%						
0.12	63A-4G	1360	61	60	53	0.0005	0.00053	9000	6300	4	36
0.18	63B-4G	1370	64	62	57	0.00063	0.00066	9000	6300	4	36
0.25	71A-4G	1400	70	70	67	0.00066	0.00069	9000	6300	4	39
0.37	71B-4G	1400	73	73	69	0.00083	0.00086	9000	6300	4	39
0.55	80A-4G	1420	73	72	69	0.0015	0.00162	9000	5250	10	47
0.75	80B-4G	1415	77	77	74	0.0019	0.00202	9000	5250	10	47
1.1	90S-4G	1410	79	78	71	0.0028	0.00297	8400	4650	20	54
1.5	90L-4G	1410	82	83	80	0.0035	0.00367	8400	4650	20	54
2.2	100A-4G	1420	80	81	80	0.005	0.0055	6000	3350	40	58
3	100B-4G	1425	81	82	80	0.0066	0.0071	6000	3350	40	58
4	112M-4G	1420	83	84	83	0.0111	0.0116	3600	1900	40	62
5.5	132S-4G	1440	85	86	85	0.0176	0.0196	1800	1100	80	60
7.5	132MA-4G	1445	86	86	85	0.0236	0.0256	1800	1100	80	60
9	132MB-4G	1435	86	87	86	0.028	0.03	1800	1100	80	60
11	160M-4G	1465	88	88	87	0.0754	0.0791	1500	900	150	64
15	160L-4G	1460	90	90	89	0.096	0.0997	1500	900	150	64
18.5	180M-4G	1455	90	90	89	0.1747	0.1834	1200	720	240	69
22	180L-4G	1460	90	91	90	0.1906	0.1993	1200	720	240	69
30	200L-4G	1465	92.5	92.5	91.7	0.45	0.47	350	230	400	65
37	225S-4G	1470	93	93	92.2	0.56	0.58	310	190	400	66
45	225M-4G	1470	93.4	93.4	92.5	0.71	0.73	270	150	400	67
55	250M-4	1475	93.9	93.9	93	0.84	Upon request				67
75	280S-4	1480	94.4	94.4	93.4	1.56	Upon request				69
90	280M-4-	1480	94.7	94.6	93.6	1.8	Upon request				69

- η Efficiency (at 4/ 4, 3/ 4 and 1/ 2 rated load)
 J₂ Moment of inertia of the motor
 J₃ Moment of inertia of the brake
 Z_{o1} No-load operating frequency of the motor
 Z_{o2} No-load operating frequency of the brake motor
 T_B Braking torque of the disk brake
 L_P Mean sound pressure level (without gear unit)

7. Technical Appendix

7.3.1.2 6 pole, 50 Hz

P_n	Type	n_1	I_n	T_n	DOL	DOL			$\cos \varphi$	η	J
			400 V							%	
kW		min^{-1}	A	Nm	T_A/T_n	I_A/I_n	T_S/T_n	T_k/T_n		100%	$\text{kg}\cdot\text{m}^2$
0.09	63A-6G	895	0.46	0.96	2.0	2.5	2.0	2.4	0.56	50.5	0.00024
0.12	63B-6G	880	0.59	1.30	2.0	2.5	2.0	2.3	0.56	52.0	0.00027
0.18	71A-6G	925	0.88	1.85	1.6	2.8	1.6	2.1	0.51	58.0	0.00045
0.25	71B-6G	915	1.10	2.6	2.0	2.9	2.0	2.2	0.55	60.0	0.00050
0.37	80A-6G	915	1.22	3.9	2.0	3.4	2.0	2.0	0.66	66.0	0.00130
0.55	80B-6G	915	1.73	5.7	2.2	3.7	2.2	2.4	0.67	68.0	0.00175
0.75	90S-6G	935	2.43	7.7	2.4	4.5	2.4	2.4	0.64	70.0	0.00325
1.10	90L-6G	935	3.15	11.0	2.2	4.6	2.2	2.4	0.69	73.0	0.00425
1.5	100L-6G	945	3.90	15.0	2.1	4.6	2.0	2.4	0.73	76.4	0.00625
2.2	112M-6G	950	5.35	22.0	2.2	5.3	2.1	2.7	0.74	79.8	0.00123
3.0	132S-6G	955	6.7	30	1.8	5.7	1.6	2.7	0.82	78.5	0.018
4.0	132M-6G	955	9.0	40	2.2	6.0	2.0	3.1	0.80	80.0	0.023
5.5	132MX-6G	955	11.5	55	1.8	5.0	1.5	2.3	0.83	83.0	0.043
7.5	160M-6G	960	15.5	75	2.0	5.5	1.6	2.5	0.82	85.0	0.053
11.0	160L-6G	965	21.5	109	2.0	5.0	1.7	2.3	0.86	85.2	0.113
15.0	180L-6G	965	30.5	148	2.4	6.0	2.1	2.7	0.83	86.0	0.145
18.5	200L-6G	970	35	182	2.0	5.5	1.7	2.4	0.87	88.1	0.228
22.0	200LX-6G	970	41	217	2.2	6.2	1.8	2.6	0.87	88.8	0.268
30.0	225M-6G	975	54	294	2.2	6.5	1.7	2.5	0.89	90.4	0.443
37.0	250M-6	975	66	362	2.2	6.5	1.7	2.3	0.89	91.0	0.825
45.0	280S-6	980	81	438	2.0	6.0	1.5	2.0	0.87	92.0	1.28
55.0	280M-6	980	98	536	2.3	6.5	1.7	2.4	0.88	92.5	1.48

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.1.3 8 pole, 50 Hz

P _n	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	η	J ₂
			400 V							%	
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		100%	kg*m ²
0.09	71A-8G	675	0.56	1.27	1.9	2.1	1.9	2.1	0.51	45.5	0.00050
0.12	71B-8G	670	0.73	1.71	1.8	2.3	1.8	2.1	0.51	46.5	0.00060
0.18	80A-8G	690	0.78	2.5	2.0	2.8	2.0	2.2	0.59	56.5	0.00130
0.25	80B-8G	695	1.12	3.4	2.3	3.0	2.3	2.5	0.56	58.0	0.00175
0.37	90S-8G	700	1.60	5.0	1.9	3.0	1.9	2.1	0.54	61.5	0.00300
0.55	90L-8G	695	2.04	7.5	1.9	3.2	1.9	2.2	0.60	64.9	0.00375
0.75	100L-8G	705	2.70	10.2	2.0	3.3	2.0	2.3	0.60	67.0	0.00625
1.1	100LX-8G	705	3.25	14.9	2.0	4.0	2.0	2.4	0.67	73.0	0.00900
1.5	112M-8G	705	4.1	20.0	2.2	4.4	2.1	2.5	0.70	75.5	0.00123
2.2	132S-8G	705	5.5	30	1.7	4.5	1.6	2.3	0.76	75.5	0.018
3.0	132M-8G	705	7.4	41	1.7	4.5	1.6	2.3	0.75	78.0	0.023
4.0	160M-8G	710	9.3	54	1.6	4.0	1.3	1.9	0.78	79.3	0.053
5.5	160MX-8G	710	12.5	74	1.7	4.5	1.6	2.1	0.78	81.4	0.113
7.5	160L-8G	725	16.5	99	1.8	4.5	1.6	2.1	0.78	83.0	0.113
11.0	180L-8G	720	24.0	146	2.0	4.5	1.7	2.1	0.78	85.0	0.145
15.0	200L-8G	725	31.5	198	2.0	5.5	1.7	2.3	0.79	86.5	0.228
18.5	225S-8G	725	36.0	244	2.0	5.5	1.6	2.2	0.83	89.2	0.440
22.0	225M-8G	725	42.5	290	1.8	5.0	1.5	2.2	0.84	89.2	0.440
30.0	250M-8	730	61	392	2.2	5.5	1.8	2.2	0.79	90.2	0.825
37.0	280S-8	735	74	481	2.0	5.5	1.5	2.0	0.80	91.0	1.35
45.0	280M-8	735	92	585	2.3	6.0	1.8	2.4	0.77	91.5	1.55

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2 Electrical data of pole-changing motors

7.3.2.1 4/2 pole, 50 Hz, constant torque, D/YY (Dahlander)

Pn	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.12	63B-4/2G	1405	0.55	0.81	1.9	3.0	1.9	2.5	0.65	0.00024
0.18		2840	0.50	0.60	2.0	4.2	1.8	2.2	0.82	
0.17	71A-4/2G	1405	0.61	1.15	1.3	3.3	1.3	2.1	0.69	0.00050
0.23		2840	0.64	0.77	1.5	4.3	1.5	2.0	0.82	
0.30	71B-4/2G	1390	1.0	2.0	1.5	3.5	1.5	2.0	0.73	0.00054
0.45		2770	1.2	1.55	1.1	3.8	1.1	1.6	0.88	
0.48	80A-4/2G	1395	1.35	3.3	1.5	4.1	1.5	2.0	0.77	0.00087
0.55		2855	1.4	1.84	1.3	5.1	1.3	2.1	0.86	
0.70	80B-4/2G	1400	2.0	4.75	1.6	3.7	1.6	1.8	0.75	0.00107
0.85		2860	2.15	2.8	1.4	4.9	1.4	1.7		
1.1	90S-4/2G	1410	2.7	7.4	1.4	4.7	1.4	1.9	0.80	0.00207
1.4		2845	3.2	4.7	1.5	5.5	1.5	1.7	0.90	
1.4	90L-4/2G	1410	3.45	9.5	1.5	4.6	1.5	2.1	0.80	0.00260
1.8		2855	4.15	5.3	1.7	5.6	1.7	1.9	0.90	
2.0	100L-4/2G	1405	4.5	13.6	1.5	5.1	1.5	2.1	0.85	0.00400
2.4		2865	5.1	8.0	1.4	5.8	1.4	2.0	0.91	
2.6	100LX-4/2G	1440	5.85	17.2	1.7	6.1	1.7	2.5	0.80	0.00725
3.1		2900	6.8	10.2	1.6	7.3	1.6	2.6	0.87	
3.7	112M-4/2G	1425	7.8	24.8	1.5	5.7	1.5	2.3	0.80	0.0090
4.4		2890	9.1	14.5	1.6	7.0	1.6	2.4	0.78	
4.2	132S-4/2G	1430	8.4	28	1.7	6.3	1.5	2.4	0.87	0.015
5.3		2870	10.5	17.6	2.1	6.5	1.3	2.6	0.92	
5.3	132M-4/2G	1450	10.5	34.9	1.7	5.3	1.4	2.2	0.86	0.028
6.5		2910	13	21.3	2.0	6.2	2.0	2.4	0.81	
7.6	160M-4/2G	1445	15	50	1.7	5.4	1.3	2.2	0.86	0.035
9.5		2900	18	31.3	1.9	6.5	1.0	2.4	0.83	
10.5	160L-4/2G	1460	19.5	68.5	1.7	5.8	1.0	2.0	0.88	0.078
13		2915	24	42.5	1.8	6.2	0.8	1.9	0.91	
12.5	180M-4/2G	1460	23	82	2.0	6.1	1.4	2.3	0.89	0.090
16		2930	29	52	1.9	6.7	0.8	2.2	0.92	
15.5	180L-4/2G	1470	28	100	1.4	6.0	1.1	2.2	0.90	0.138
18.5		2930	32.5	60	1.4	7.2	0.6	2.1	0.89	
21.0	200L-4/2G	1465	37.5	137	1.5	6.0	1.1	2.1	0.91	0.168
25.0		2940	43	81	1.7	7.4	0.7	2.3	0.90	
25.0	225S-4/2G	1470	45	162	1.8	6.6	1.4	2.4	0.87	0.275
31.0		2940	54.5	100	1.6	7.2	0.8	2.2	0.91	
30.0	225M-4/2G	1470	54	195	1.8	7.0	1.4	2.4	0.87	0.313
37.0		2945	65	120	1.7	8.0	0.7	2.5	0.91	
37.0	250M-4/2	1475	67	240	1.7	6.9	1.3	2.1	0.86	0.525
45.0		2955	82	145	1.7	7.8	0.5	2.1	0.91	
48.0	280S-4/2	1480	89	310	1.6	7.5	1.4	2.3	0.84	0.95
60.0		2965	106	193	1.3	8.1	0.8	2.5	0.91	
60.0	280M-4/2	1480	109	387	1.6	6.9	1.4	2.1	0.85	1.11
70.0		2965	122	225	1.2	8.2	0.8	2.2	0.92	

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.2 6/4 pole, 50 Hz, constant torque, Y/Y (separate windings)

Pn	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.10	71A-6/4G	925	0.57	1.0	1.2	2.4	1.2	1.8	0.69	0.00045
0.15		1440	0.57	1.0	1.2	3.2	1.2	1.8	0.70	
0.13	71B-6/4G	920	0.67	1.35	1.3	2.4	1.3	1.8	0.68	0.00060
0.20		1430	0.75	1.34	1.2	3.2	1.2	1.8	0.73	
0.20	80A-6/4G	940	0.86	2.0	1.5	2.8	1.5	2.0	0.69	0.00087
0.28		1440	1.05	1.86	1.3	3.5	1.3	2.0	0.69	
0.25	80B-6/4	950	0.93	2.5	1.6	2.8	1.6	2.1	0.66	0.00107
0.37		1450	1.05	2.4	1.4	3.9	1.4	2.1	0.73	
0.35	90S-6/4G	950	1.10	3.5	1.3	3.4	1.3	1.7	0.73	0.00325
0.60		1450	1.60	4.0	1.3	4.5	1.3	1.8	0.78	
0.50	90L-6/4G	945	1.55	5.	1.5	3.4	1.5	1.7	0.74	0.00425
0.90		1435	2.35	6.0	1.4	4.3	1.4	1.7	0.81	
0.80	100L-6/4G	960	2.20	8.0	1.4	4.1	1.4	1.9	0.73	0.00625
1.2		1445	2.80	7.9	1.2	4.9	1.2	1.8	0.83	
1.1	100LX-6/4G	965	3.00	10.9	1.3	4.1	1.3	2.0	0.74	0.0090
1.6		1450	3.80	10.5	1.3	4.9	1.3	1.8	0.83	
1.6	112M-6/4G	950	4.15	16.0	1.4	5.5	1.4	2.0	0.79	0.0123
2.4		1435	5.30	16.0	1.6	5.5	1.6	2.0	0.87	
1.5	132S-6/4G	970	3.7	14.8	1.4	5.3	1.3	2.5	0.79	0.0180
2.2		1445	4.7	14.5	1.1	5.4	1.0	2.2	0.91	
2.2	132M-6/4G	965	5.3	22	1.4	5.6	1.3	2.6	0.80	0.023
3.0		1450	6.2	19.8	1.4	6.1	1.0	2.4	0.90	
2.6	132MX-6/4	970	5.7	25.5	1.7	5.2	1.5	2.4	0.83	0.043
3.8		1460	7.5	25	1.4	5.2	1.1	2.2	0.90	
3.4	160M-6/4G	970	7.3	33	1.7	5.9	1.65	2.5	0.83	0.053
5.0		1460	9.7	33	1.4	5.8	1.0	2.2	0.91	
5.5	160L-6/4G	970	11.5	54	1.6	5.2	1.3	2.1	0.87	0.113
7.5		1455	14.5	50	1.3	5.2	1.3	2.2	0.91	
7.5	180L-6/4G	970	15	74	1.7	5.4	1.4	2.1	0.88	0.145
10.5		1460	20	69	1.5	5.6	1.0	2.0	0.91	
9.0	200L-6/4G	980	17	88	1.7	6.0	1.1	2.3	0.88	0.228
12.5		1470	24	81	1.5	5.8	0.7	2.4	0.90	
11.0	200LX-6/4G	980	21	107	2.1	7.2	1.5	2.7	0.88	0.268
15.0		1470	27.5	97	1.6	7.5	1.0	2.6	0.91	
15.0	225M-6/4G	980	27.5	146	2.3	7.3	1.7	2.8	0.90	0.443
20.0		1475	35.5	129	1.9	8.0	1.3	3.0	0.92	
18.0	250M-6/4	985	33	174	2.8	7.5	2.3	2.7	0.88	0.825
25.0		1475	45	162	1.7	6.3	1.1	2.3	0.91	
22.0	280S-6/4	990	41	212	2.5	7.8	1.9	2.6	0.88	1.28
30.0		1480	54	194	1.9	7.5	1.1	2.4	0.91	
27.0	280M-6/4	990	49	260	2.7	8.0	2.0	2.6	0.89	1.48
37.0		1475	65	239	1.6	6.1	0.8	1.9	0.82	

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.3 8/4 pole, 50 Hz, constant torque, D/YY (Dahlander)

Pn	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.09	71A-8/4G	660	0.66	1.3	2.0	2.0	2.0	2.1	0.64	0.00050
0.12		1445	0.48	0.79	2.4	4.0	2.4	3.0	0.59	
0.12	71B-8/4G	660	0.77	1.74	1.9	2.2	1.9	2.1	0.63	0.00060
0.20		1425	0.61	1.34	1.8	4.2	1.8	2.3	0.72	
0.18	80A-8/4G	685	0.85	2.5	1.6	2.5	1.6	2.0	0.70	0.00130
0.30		1400	0.74	2.0	1.4	3.8	1.4	1.6	0.87	
0.25	80B-8/4	670	1.17	3.6	1.3	2.4	1.3	1.7	0.69	0.00175
0.40		1400	0.94	2.7	1.3	4.1	1.3	1.8	0.84	
0.35	90S-8/4G	700	1.45	4.8	1.5	2.8	1.5	1.8	0.65	0.0030
0.55		1420	1.3	3.7	1.4	4.3	1.4	1.9	0.88	
0.44	90L-8/4G	695	1.89	6.0	1.5	2.8	1.5	1.8	0.60	0.00375
0.75		1410	1.74	5.1	1.3	4.2	1.3	1.7	0.86	
0.7	100L-8/4G	720	2.95	9.3	1.8	3.5	1.8	2.2	0.55	0.00625
1.1		1455	2.35	7.2	1.9	6.0	1.9	2.3	0.85	
1.0	100LX-8/4G	705	3.0	13.5	1.5	3.7	1.5	2.0	0.680	0090
1.5		1420	3.0	10	1.3	5.6	1.3	2.0	0.85	
1.4	112M-8/4G	705	4.4	19	1.8	4.0	1.8	2.3	0.66	0.0123
2.2		1435	4.5	14.6	1.3	5.8	1.3	2.2	0.90	
1.7	132S-8/4G	710	4.7	23	1.7	4.3	1.5	2.5	0.72	0.0180
2.6		1435	5.2	17.3	1.5	5.8	1.3	2.5	0.91	
2.2	132M-8/4G	715	6.2	29	1.8	4.4	1.7	2.6	0.71	0.023
3.7		1430	7.4	24.7	1.4	5.4	1.2	2.3	0.93	
3.1	132MX-8/4	725	8.4	41	1.6	4.1	1.5	2.2	0.70	0.043
4.8		1450	9.3	31.5	1.5	5.6	1.1	2.3	0.91	
4.3	160M-8/4G	720	11.5	57	1.7	4.3	1.6	2.4	0.71	0.053
6.5		1450	12.5	43	1.7	6.2	1.3	2.4	0.91	
6.2	160L-8/4G	725	14.5	82	1.8	4.7	1.6	2.2	0.82	0.113
9.0		1455	17	59	1.7	6.0	1.3	2.4	0.83	
8.5	180L-8/4G	720	18.5	113	1.7	4.3	1.5	2.0	0.83	0.145
12.5		1450	23.5	82	1.6	5.4	1.2	2.0	0.85	
11.0	200L-8/4G	730	23.5	144	1.8	5.0	1.5	2.1	0.78	0.228
16.0		1460	29.5	105	1.8	6.2	1.2	2.2	0.91	
13.0	200LX-8/4G	730	27.5	170	1.9	5.3	1.6	2.1	0.91	0.268
19.0		1460	34	124	1.6	6.9	1.2	2.2	0.79	
17.5	225M-8/4G	730	37	229	2.2	5.7	1.8	2.4	0.78	0.443
25.0		1470	44.5	162	2.1	7.4	1.0	2.6	0.92	
24.0	250M-8/4	730	48	314	2.0	5.6	1.6	2.2	0.81	0.825
30.0		1470	53	195	2.5	8.2	1.4	2.8	0.92	
28.0	280S-8/4	735	57.5	364	2.1	5.4	1.5	1.9	0.78	1.28
38.0		1475	68	246	2.1	7.2	1.2	2.4	0.90	
34.0	280M-8/4	735	68.5	442	2.1	5.5	1.5	2.1	0.79	1.48
45.0		1480	80	290	2.4	7.7	1.3	2.5	0.90	

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.4 8/6 pole, 50 Hz, constant torque, Y/Y (separate windings)

Pn	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
1.3	132S-8/6G	720	4.1	17.2	1.5	4.2		2.3	0.70	0.0180
1.8		970	4.7	17.7	1.7	6.0		2.5	0.73	
2.3	132M-8/6G	720	6.8	30.5	1.5	4.0		2.3	0.71	0.023
3.0		970	7.9	29.5	1.6	5.2		2.6	0.74	
2.8	132MX-8/6G	720	7.5	37.0	1.8	4.4		2.5	0.74	0.043
4.0		965	9.4	39.5	1.5	4.6		2.4	0.81	
4.0	160M-8/6G	715	10.5	53	1.7	4.3		2.4	0.76	0.053
5.5		975	12.5	54	1.5	4.8		2.4	0.81	
6.0	160L-8/6G	720	14.0	80	1.9	5.0		2.5	0.76	0.113
8.0		975	18.5	78	1.8	6.0		2.4	0.77	
8.0	180L-8/6G	720	17.5	106	2.0	5.2		2.5	0.81	0.145
10.5		970	21.5	103	1.7	5.1		2.2	0.85	
10.5	200L-8/6G	720	22.0	139	1.8	5.0		2.2	0.83	0.228
13.0		975	26.5	127	1.7	5.9		2.3	0.83	
11.0	200LX-8/6G	730	25.5	144	2.2	6.4		2.5	0.74	0.268
15.0		980	32.0	146	2.0	6.4		2.5	0.79	
14.0	225M-8/6G	735	29.0	182	2.0	6.5		2.6	0.81	0.443
18.5		985	37.5	179	3.0	7.0		3.0	0.83	
19.0	250M-8/6	735	Upon request							0.825
25.0		985								
24.0	280S-8/6	740	47.0	310	2.0	6.0		2.5	0.83	1.28
30.0		985	56.0	291	2.0	6.8		2.5	0.87	
30.0	280M-8/6	740	60.0	387	2.2	6.8		2.3	0.81	1.48
38.0		985	75.0	368	2.0	7.0		2.3	0.82	

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.5 8/2 pole, 50 Hz, constant torque, Y/Y (separate windings)

Pn	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _k /T _n		kg*m ²
0.025 0.09	71A-8/2G	720 2950	0.37 0.71	0.33 0.29	2.9 1.9	1.8 3.5		4.0 4.0	0.57 0.65	0.00040
0.04 0.16	71B-8/2G	705 2945	0.34 0.69	0.54 0.52	1.7 1.8	2.0 4.3		2.4 2.6	0.62 0.66	0.00050
0.075 0.30	80A-8/2G	670 2855	0.56 1.00	1.07 1.45	2.6 2.5	2.0 4.6		2.6 2.6	0.55 0.77	0.00087
0.11 0.45	80B-8/2G	660 2850	0.77 1.35	1.60 1.66	2.3 2.2	2.0 4.8		2.5 2.3	0.56 0.80	0.00107
0.16 0.75	90S-8/2G	675 2805	1.05 1.90	2.26 2.55	2.2 2.0	2.3 5.0		2.3 1.9	0.60 0.87	0.00207
0.25 1.00	90L-8/2G	665 2810	1.35 2.40	3.6 3.4	2.4 2.2	2.6 5.8		2.8 1.8	0.61 0.89	0.00260
0.33 1.30	100L-8/2G	685 2835	1.90 3.00	4.6 4.4	2.8 2.0	2.6 5.8		2.9 2.1	0.54 0.87	0.00400
0.55 2.20	100LX-8/2G	680 2840	2.45 5.00	7.7 7.4	1.9 2.4	2.8 6.1		2.3 2.5	0.61 0.87	0.00725
0.75 3.00	112M-8/2G	680 2840	3.15 6.45	10.5 10.0	1.9 2.0	3.0 6.1		2.4 2.0	0.60 0.90	0.0090
1.0 4.0	112MX-8/2G	665 2820	3.75 8.45	14.3 13.5	1.9 2.1	2.8 6.1		2.0 2.0	0.64 0.91	0.0011
1.1 4.5	132S-8/2G	725 2850	4.5 9.1	14.5 15.0	1.5 1.8	3.7 6.0		2.4 2.1	0.57 0.92	0.015
1.3 5.5	132M-8/2G	730 2910	5.9 11.5	17.0 18.0	1.5 1.6	3.6 6.3		2.6 2.4	0.50 0.85	0.028
1.8 7.5	160M-8/2G	730 2920	7.6 14.5	23.5 24.5	1.5 1.7	3.8 7.0		2.6 2.5	0.50 0.89	0.035
2.7 11.0	160L-8/2G	735 2930	9.3 21.5	35 36	1.7 1.8	4.6 7.2		2.8 2.6	0.65 0.87	0.078
3.7 15.0	180M-8/2G	735 2930	12.0 30.5	48 49	1.5 1.9	4.4 7.1		2.5 2.7	0.59 0.84	0.090
4.6 18.5	180L-8/2G	735 2935	15.5 34.5	60 60	1.4 1.5	4.3 6.9		2.5 2.4	0.55 0.90	0.138
5.5 22.0	200L-8/2G	735 2945	19.0 39.0	71 71	1.6 1.7	4.6 7.8		2.7 2.8	0.52 0.92	0.168
7.5 30.0	225S-8/2G	740 2950	28 55	97 97	1.6 1.7	4.6 7.8		2.8 2.6	0.47 0.90	0.275
9.2 37.0	225M-8/2G	740 2950	32 67	119 120	1.5 1.7	4.6 7.8		2.6 2.6	0.50 0.90	0.313
11.0 45.0	250M-8/2	740 2955	33 80	142 145	1.7 1.6	5.4 8.1		2.7 2.7	0.58 0.91	0.525
13.0 55.0	280S-8/2	740 2965	37 94	168 177	2.0 1.4	6.5 7.6		2.8 2.4	0.60 0.92	0.95
18.0 75.0	280M-8/2	740 2960	48 128	232 242	2.0 1.6	6.2 8.3		2.6 2.6	0.63 0.92	1.11

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.6 4/2 pole, 50 Hz, fan characteristic, Y/YY (Dahlander)

Pn	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.08 0.3	71A-4/2G	1415 2830	0.28	0.54 0.95	1.3 1.0	3.6 1.1	1.3 4.2	1.9 1.1	0.70 1.8	0.00040 0.82
0.12 0.48	71B-4/2G	1405 2795	0.34 1.21	0.82 1.64	1.5 1.6	3.1 4.2	1.5 1.6	1.8 1.9	0.77 0.88	0.00050
0.18 0.70	80A-4/2G	1415 2830	0.47 1.75	1.2 2.36	1.7 1.8	4.4 5.1	1.7 1.8	2.0 2.1	0.79 0.88	0.00087
0.25 0.90	80B-4/2G	1405 2840	0.63 2.19	1.7 3.0	1.5 2.0	4.6 5.8	1.5 2.0	2.0 2.1	0.79 0.86	0.00107
0.37 1.5	90S-4/2G	1440 2840	0.87 3.45	2.45 5.0	1.4 1.5	4.9 5.0	1.4 1.5	2.1 1.7	0.83 0.89	0.00207
0.5 2.0	90L-4/2G	1430 2840	1.12 4.45	3.3 6.7	1.5 1.5	4.6 5.5	1.5 1.5	2.2 1.8	0.80 0.90	0.00260
0.7 2.8	100L-4/2G	1435 2860	1.55 6.1	4.6 9.3	1.5 1.5	5.3 6.3	1.5 1.5	2.3 2.0	0.85 0.91	0.00400
0.9 3.6	100LX-4/2G	1455 2890	2.0 7.7	5.9 11.9	1.5 1.9	6.1 6.7	1.5 1.9	2.3 2.5	0.82 0.89	0.00725
1.2 4.8	112M-4/2G	1440 2870	2.5 10.2	8.0 16	1.5 1.5	5.3 7.0	1.5 1.5	2.2 2.1	0.85 0.92	0.0090
1.5 5.5	132S-4/2G	1450 2870	3 11	9.9 18	1.4 1.9	5.2 6.0	1.2 1.0	2.2 2.5	0.88 0.92	0.015
2.2 8.2	132M-4/2G	1460 2900	4.5 17.5	14.4 27	1.4 2.0	5.2 6.0	1.0 1.1	1.9 2.4	0.87 0.88	0.028
3.3 12	160M-4/2G	1450 2890	6.4 23.5	22 40	1.3 1.8	5.0 6.6	1.0 1.0	1.8 2.4	0.87 0.88	0.038
4.3 17	160L-4/2G	1460 2915	8.4 34.5	28 56	1.8 1.6	5.8 6.5	1.1 0.8	2.0 2.5	0.89 0.89	0.078
5.5 20	180M-4/2G	1470 2920	10.5 41	36 65	1.7 1.8	5.8 6.5	1.2 1.0	2.2 2.5	0.87 0.86	0.090
6.4 24	180L-4/2G	1480 2935	11.5 46.5	41 78	1.5 2.0	6.0 7.0	1.1 0.9	2.2 2.6	0.89 0.88	0.138
7.8 30.0	200L-4/2G	1475 2940	14 54.5	50 97	1.5 2.1	6.5 7.5	1.2 1.3	2.4 2.8	0.89 0.90	0.168
9.5 37.0	225S-4/2G	1485 2950	17.5 72	61 120	1.8 2.4	7.0 8.0	1.5 1.5	2.6 3.0	0.88 0.86	0.275
12.0 45.0	225M-4/2G	1480 2950	21.5 84	77 146	1.4 2.0	6.5 7.5	1.1 1.0	2.4 2.6	0.88 0.88	0.313
15.0 55.0	250M-4/2	1480 2950	28.5 103	97 178	1.5 2.2	6.2 7.5	0.9 0.7	1.8 2.4	0.85 0.88	0.525
20.0 75.0	280S-4/2	1485 2965	39 137	129 242	1.1 2.0	6.0 8.0	0.9 1.3	1.7 2.4	0.81 0.88	0.95
24.0 90.0	280M-4/2	1485 2965	46 157	154 290	1.1 2.0	6.1 8.0	0.9 1.3	1.7 2.4	0.82 0.91	1.10

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.7 6/4 pole, 50 Hz, fan characteristic, Y/Y (separate windings)

Pn	Type	n ₁	I _n	T _n	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.06 0.18	71A-6/4G	940 1415	0.35 0.58	0.61 1.2	1.3 1.4	2.3 3.4	1.3 1.4	1.7 1.8	0.69 0.73	0.00045
0.08 0.25	71B-6/4G	945 1405	0.46 0.76	0.81 1.7	1.4 1.3	2.4 3.2	1.4 1.3	1.8 1.7	0.67 0.78	0.00060
0.12 0.40	80A-6/4G	950 1410	0.52 1.25	1.2 2.7	1.3 1.4	2.5 3.8	1.3 1.4	1.8 1.8	0.69 0.77	0.00087
0.16 0.55	80B-6/4	945 1425	0.63 1.55	1.6 3.7	1.3 1.4	3.0 4.1	1.3 1.4	1.7 1.8	0.69 0.79	0.00107
0.25 0.75	90S-6/4G	950 1425	0.87 1.90	2.5 5.0	1.4 1.5	3.1 4.8	1.4 1.5	1.7 1.8	0.73 0.83	0.00325
0.37 1.10	90L-6/4G	955 1425	1.25 2.70	3.7 7.4	1.3 1.5	3.4 4.7	1.3 1.5	1.6 1.8	0.73 0.83	0.00425
0.50 1.50	100L-6/4G	955 1440	1.60 3.45	5.0 9.9	1.5 1.5	3.9 5.2	1.5 1.5	1.9 1.9	0.71 0.83	0.00625
0.75 2.00	100LX-6/4G	970 1440	2.35 4.55	7.4 13.3	1.4 1.8	4.4 6.1	1.4 1.8	2.0 2.4	0.69 0.85	0.0090
1.0 3.0	112M-6/4G	965 1440	2.85 6.85	9.9 19.9	1.2 1.8	4.0 6.0	1.2 1.8	1.7 2.5	0.77 0.82	0.0123
1.5 3.7	132S-6/4G	970 1445	4.0 8.5	14.8 24.5	1.2 1.2	4.3 5.1	1.1 1.1	2.2 2.3	0.80 0.86	0.0180
2.2 6.0	132MX-6/4G	975 1460	5.0 13.5	21.5 39.0	1.7 2.0	5.0 5.8	1.2 1.4	2.4 2.9	0.82 0.83	0.043
3.0 8.2	160M-6/4G	975 1445	6.7 17.0	29.0 54.0	1.4 1.6	4.6 5.4	1.1 1.1	2.0 2.1	0.84 0.88	0.053
4.4 13.0	160L-6/4G	975 1450	10.0 25.5	43 85	1.7 1.5	4.8 4.9	1.5 1.2	2.1 1.9	0.81 0.87	0.078
5.4 16.0	180M-6/4G	980 1450	13.0 0.5	53 105	1.9 1.5	5.2 4.9	1.6 1.2	2.5 1.9	0.78 0.88	0.090
6.7 20.0	180L-6/4G	980 1470	14.5 38.5	65 130	1.4 1.7	4.7 5.8	1.3 1.5	2.1 2.5	0.81 0.84	0.138
9.0 26.0	200L-6/4G	985 1470	19.5 49.0	87 169	1.4 1.6	5.0 6.4	1.3 1.5	2.1 2.5	0.79 0.85	0.168
12.0 34.0	225S-6/4G	980 1475	26 66	117 220	1.3 1.9	5.0 6.4	1.2 1.4	2.0 2.5	0.79 0.82	0.275
14.0 40.0	225M-6/4G	985 1475	30 74	136 259	1.8 1.9	5.4 6.5	1.5 1.6	2.3 2.5	0.78 0.86	0.313
18.0 50.0	250M-6/4	990 1480	41 93	174 333	1.7 1.9	5.5 7.0	1.5 1.3	2.0 2.3	0.75 0.85	0.525
23.0 68.0	280S-6/4	980 1480	52 127	224 439	1.5 1.8	5.4 7.0	1.1 1.6	1.8 2.4	0.74 0.84	0.95
28.0 80.0	280M-6/4	990 1485	63 148	270 514	1.6 2.0	5.5 7.0	1.4 1.8	1.9 2.6	0.73 0.84	1.11

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.8 8/4 pole, 50 Hz, fan characteristic, Y/YY (Dahlander)

Pn	Type	n1	In	Tn	DOL	DOL			cos φ	J ₂
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.05	71A-8/4G	680	0.30	0.7	1.4	1.9	1.4	1.7	0.62	0.00050
0.20		1430	0.71	1.33	1.7	3.8	1.7	2.2	0.67	
0.075	71B-8/4G	670	0.44	1.06	1.2	2.1	1.2	1.7	0.62	0.00060
0.30		1425	1.08	2.0	1.4	3.7	1.4	2.1	0.67	
0.12	80A-8/4G	695	0.49	1.65	1.2	2.6	1.2	2.0	0.70	0.00130
0.50		1400	1.31	3.4	1.3	3.8	1.3	2.0	0.85	
0.18	80B-8/4	685	0.70	2.5	1.5	2.6	1.5	1.8	0.66	0.00175
0.70		1405	1.79	4.8	1.6	4.2	1.6	2.0	0.83	
0.25	90S-4/2G	700	0.97	3.4	1.1	2.7	1.1	1.5	0.63	0.0030
1.0		1420	2.55	6.7	1.5	4.5	1.5	1.8	0.81	
0.37	90L-8/4G	690	1.33	5.1	1.2	2.6	1.2	1.4	0.64	0.00375
1.5		1400	3.7	10	1.7	4.6	1.7	1.9	0.84	
0.50	100L-8/4G	700	1.8	6.8	1.2	2.8	1.2	1.9	0.60	0.00625
2.0		1450	4.8	13.2	1.3	5.0	1.3	1.6	0.81	
0.65	100LX-8/4G	710	2.4	8.7	1.3	3.2	1.3	2.0	0.58	0.00725
2.5		1440	5.5	16.6	1.4	7.0	1.4	2.0	0.81	
0.90	112M-8/4G	710	3.3	12	1.7	3.3	1.7	2.3	0.57	0.009
3.6		1440	7.9	24	2.2	6.3	2.2	2.5	0.81	
1.1	132S-8/4G	715	3.8	14.7	1.4	4.0	1.2	2.0	0.58	0.015
4.5		1450	10.5	29.5	2.3	6.5	2.0	3.2	0.76	
1.8	132MX-8/4G	710	4.5	24	1.3	3.6	1.0	1.7	0.79	0.043
6.5		1440	13	43	2.0	5.8	1.0	2.2	0.91	
2.3	160M-8/4G	720	5.5	30	1.5	3.6	1.2	1.7	0.76	0.053
9.0		1445	18.5	59	1.8	5.4	1.2	2.3	0.88	
3.5	160L-8/4G	725	9.1	46	1.5	3.2	1.0	1.6	0.68	0.078
12.5		1465	25.5	81	2.4	7.0	1.9	2.9	0.83	
4.5	180M-8/4G	725	11.5	59	1.5	4.0	1.3	1.8	0.69	0.09
16.0		1470	32.5	104	2.4	7.5	1.8	3.0	0.82	
5.0	180L-8/4G	730	13	65	1.8	5.0	1.5	2.1	0.67	0.138
20.0		1475	40	129	1.8	6.2	1.2	2.2	0.82	
7.2	200L-8/4G	730	17.5	94	1.9	5.3	1.6	2.3	0.69	0.168
26.0		1470	51	169	1.6	6.9	1.2	2.7	0.83	
9.5	225S-8/4G	735	23.5	123	2.2	5.7	1.8	2.4	0.67	0.275
35.0		1480	73	226	2.1	7.4	1.0	2.6	0.78	
11.5	225M-8/4G	735	28	149	2.0	5.6	1.6	2.2	0.67	0.313
42.0		1480	87	271	2.5	8.2	1.4	2.8	0.78	
12.0	250M-8/4	740	31	155	2.1	5.4	1.5	1.9	0.63	0.53
48.0		1485	93	309	2.1	7.2	1.2	2.4	0.82	
14.0	280S-8/4	735	28	182	2.1	5.4	1.5	2.1	0.80	1.28
50.0		1480	98	323	2.4	7.7	1.3	2.5	0.86	
17.0	280M-8/4	735	33	221	1.6	5.7	1.3	2.0	0.82	1.48
60.0		1480	112	387	1.9	8.5	1.2	2.5	0.88	

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.9 8/6 pole, 50 Hz, fan characteristic, Y/Y (separate windings)

Pn	Type	n1	In	Tn	DOL	DOL			cos φ	J
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.05	71B-8/6G	685	0.37	0.7	1.7	1.9	1.7	2.0	0.65	0.00060
0.11		895	0.56	1.2	1.2	2.1	1.2	1.4	0.79	
0.09	80A-8/6G	715	0.60	1.2	1.7	2.3	1.7	2.4	0.64	0.00130
0.18		960	0.90	1.8	2.0	3.1	1.8	2.6	0.60	
0.12	80B-8/6G	700	0.58	1.6	1.5	2.4	1.5	1.9	0.68	0.00175
0.25		950	0.94	2.5	1.7	3.4	1.7	2.1	0.67	
0.24	90S-8/6G	710	1.05	3.2	1.1	2.4	1.0	1.5	0.70	0.00325
0.48		950	0.94	4.8	1.3	3.3	1.3	1.8	0.68	
0.33	90L-8/6G	705	1.05	4.5	1.3	2.6	1.3	1.8	0.66	0.00425
0.66		950	1.60	6.6	1.6	3.7	1.6	2.0	0.66	
0.45	100L-8/6G	710	1.50	6.0	1.5	2.8	1.5	1.7	0.68	0.00625
0.90		940	2.25	9.1	1.3	3.5	1.2	1.6	0.77	
0.60	100LX-8/6G	695	1.85	8.2	1.5	3.6	1.5	1.7	0.75	0.0090
1.20		910	2.55	12.6	1.3	3.5	1.2	1.6	0.83	
0.80	112M-8/6G	715	2.15	10.7	1.5	3.2	1.5	2.3	0.67	0.0123
1.60		955	2.95	16.0	1.5	4.7	1.5	2.3	0.76	
1.0	112MX-8/6G	700	2.90	13.6	1.2	4.0	1.1	1.6	0.75	0.0139
2.2		940	4.00	22.0	1.4	4.4	1.3	1.9	0.78	
1.0	132S-8/6G	710	3.05	13.6	1.1	3.6	1.0	1.9	0.79	0.018
2.2		955	5.45	22.0	1.4	5.0	1.3	2.5	0.81	
1.7	132M-8/6G	715	5.4	23.0	1.9	4.5	1.9	2.9	0.74	0.023
3.5		950	8.5	35.0	1.3	4.5	1.2	2.4	0.81	
2.2	132MX-8/6G	725	6.1	29	1.6	4.4	1.5	2.4	0.74	0.043
4.5		970	11.0	44	1.8	5.5	1.6	2.7	0.78	
2.5	160M-8/6G	730	6.7	33	1.7	4.5	1.7	2.4	0.75	0.053
5.5		965	12.0	54	1.6	5.1	1.4	2.3	0.83	
4.5	160L-8/6G	730	10.5	59	1.9	5.0	1.8	2.5	0.80	0.113
9.0		970	19.0	89	1.5	5.0	1.3	2.2	0.84	
6.0	180L-8/6G	730	13.5	78	1.7	4.6	1.5	2.1	0.83	0.145
12.0		970	24.0	118	1.6	5.5	1.3	2.3	0.86	
7.0	200L-8/6G	730	15.0	92	1.3	4.3	1.3	1.8	0.85	0.228
17.0		965	32.5	168	1.3	4.8	1.4	2.0	0.87	
10.0	200LX-8/6G	730	22	131	2.0	5.7	1.2	2.6	0.82	0.268
21.0		965	40	208	1.7	5.2	1.7	2.2	0.87	
12.0	225M-8/6G	735	25	156	2.0	6.3	1.7	2.7	0.85	0.443
26.0		980	51	283	2.2	6.9	1.7	3.0	0.85	
15.0	250M-8/6	725	30	198	2.6	4.4	1.4	1.7	0.85	0.825
35.0		975	65	343	1.6	5.4	1.3	2.0	0.87	
20.0	280S-8/6	740	41	258	2.1	6.5	1.6	2.6	0.82	1.28
45.0		985	87	436	2.1	6.5	1.4	2.6	0.83	
25.0	280M-8/6	740	51	323	1.8	5.2	1.6	2.1	0.82	1.48
55.0		985	102	533	1.8	5.7	1.4	2.1	0.86	

Key see Table 4 pole, 50 Hz

7. Technical Appendix

7.3.2.10 8/2 pole, 50 Hz, fan characteristic, Y/Y (separate windings)

Pn	Type	n1	In	Tn	DOL	DOL			cos φ	J
			400 V							
kW		min ⁻¹	A	Nm	T _A /T _n	I _A /I _n	T _S /T _n	T _K /T _n		kg*m ²
0.42	132S-8/2G	735	1.9	5.5	1.4	3.5		2.8	0.57	0.015
4.5		2870	8.4	15.0	4.4	6.6		2.4	0.94	
0.65	132M-8/2G	735	2.8	8.4	1.4	3.5		2.6	0.57	0.028
7.0		2830	12.5	25	1.7	6.2		2.2	0.93	
0.8	160M-8/2G	735	3.4	10	1.4	3.6		2.6	0.57	0.035
9.0		2900	16.0	30	1.8	6.5		2.3	0.93	
1.2	160L-8/2G	735	3.6	15.5	1.5	4.0		2.0	0.69	0.078
13.0		2925	25.5	42	1.8	6.2		2.3	0.87	
1.5	180M-8/2G	735	4.5	19.5	1.6	4.0		2.2	0.71	0.090
17.0		2910	31.0	56	1.6	6.0		2.0	0.92	
1.9	180L-8/2G	740	6.6	24.5	1.3	4.2		2.5	0.61	0.138
22.0		2925	38.0	72	2.0	7.0		2.4	0.93	
2.5	200L-8/2G	740	7.7	32	1.4	4.0		2.5	0.63	0.168
27.0		2920	47.0	88	1.8	6.7		2.2	0.93	
3.2	225S-8/2G	740	9.9	41	1.5	4.8		2.6	0.59	0.275
32.0		2950	55.0	104	1.9	7.8		2.6	0.93	
3.6	225M-8/2G	740	11.0	46	1.3	4.6		2.4	0.62	0.313
37.0		2950	64	120	1.9	7.7		2.5	0.93	
4.0	250M-8/2	740	11.0	52	1.8	5.5		2.5	0.66	0.525
45.0		2945	77	146	1.9	7.0		2.2	0.93	
5.2	280S-8/2	740	14.5	67	2.0	6.0		2.5	0.64	0.95
55.0		2965	94	177	1.5	7.5		2.5	0.93	
6.5	280M-8/2	740	17	84	1.7	5.4		2.3	0.66	1.11
75.0		2960	127	242	1.6	7.0		2.3	0.93	

Key see Table 4-pole, 50 Hz

7. Technical Appendix

7.3.3 Type of enclosure

The motors correspond to type of enclosure IP55 to IEC 34 - 5 as standard, i.e. they are protected against harmful penetration of dust and water.

The first code number IP5* identifies the protection against harmful dust accumulations inside the motor. The second code IP*5 identifies the protection against the penetration of jet water from all directions. Higher types of enclosure can be supplied upon request.

7.3.4 Insulation class

Proven insulation materials according to class F are used for all motors (limiting temperature 155 °C). However, the actual heating corresponds only to insulation class B (limiting temperature 130 °C). Exception: size 132MG-4G (9 kW).

This ensures high reliability and long service life. It is also possible to operate the motors under special conditions, such as an unfavorable electrical supply, an ambient temperature of 55 °C, or a permanently increased load of up to 110 % of the rated output.

7.3.5 Protection against tropical influences

All motors are designed in type of enclosure IP55 to IEC 34 - 5. They are suitable for use under dusty and humid environmental influences and, to a limited extent, in tropical environments.

If the environmental conditions promote the formation of mildew, algae or condensate, an additional tropical insulation should be provided.

If motors are exposed to humid or condensate-forming conditions for an extended period of time, an electrical space heater (option) is recommended to avoid moisture condensate inside the motor windings. A control device must ensure that the space heater is switched off during operation and switched on during standstill. The standard supply voltage is 230 V ± 10 %.

7.3.6 Protection of motors against non-permissible loads

Selecting the correct protective device largely determines the operational reliability and service life of the motor. Suitable overcurrent release devices (motor protecting switches) are placed in the supply line for direct protection against overload and blocking.

Motors with an output starting at 4 kW are equipped with thermistors (PTC thermistors) as standard. Motors with lower outputs can be supplied with thermistors or thermostats (thermal contacts) upon request (option). Standard motors can be retrofitted with thermostats.

Thermistors (PTC thermistors) are temperature-dependent resistors to IEC 34-11 and DIN 44081 / 44082. Technical data: see below.

Thermostats (thermo switches, thermal contacts) are temperature-dependent bimetal switches. The response temperature is 150 °C and cannot be adjusted. Technical data: see below.

Selecting the correct motor protection is dependent upon the application:

- Possible causes of a thermal overload in each specific application
- Value of product being manufactured
- Costs arising from loss of production
- Possible dangers due to a motor fault

7. Technical Appendix

7.3.7 Protective devices

Motor fault	Motor protecting switch		Built into the motor windings	
	Thermal	Magnetic	Thermostats	Thermistors
Continuous overload	G	G	G	G
High operating frequency, unsuitable operating mode	A	A	A	G
Continuous undervoltage or overvoltage or incorrect supply frequency	A	A	G	G
High ambient temperature at motor installation site	P	P	G	G
Insufficient ventilation, blockage of air flow	P	P	G	G
Failure of a supply phase	P	P	A	G
Blockage of rotor	G	G	A	G

Key	
G	Good
A	Acceptable
P	Poor or no protection
Thermistor	Response temperature 160 °C, design to IEC34-11 and DIN 44081 / 44082
Thermostat	Response temperature 150 °C, max. 250 VAC, 1.6 A, $\cos \varphi \geq 0.6$

7.3.8 Safe switching of high inductances

a) Switching of multi-pole motor windings

Switching a multi-pole motor winding in conjunction with unfavorable conductor routing may lead to voltage peaks that can damage or destroy the winding insulation. It is recommended to equip the supply lines with varistors.

b) Switching of brake coils

Varistors must be used to avoid damaging switching overvoltages when switching brake coils on the DC side. The brake rectifiers and brake controllers used by Rexnord-Stephan feature varistors as standard. On principle, special braking contactors or contacts of category AC3 according to IEC 158 must be used for the switching of brake coils.

7. Technical Appendix

7.3.9 50-Hz motors on a 60-Hz supply system

Motors dimensioned for 50 Hz can also be operated on 60-Hz supply networks without any problems. In this case, the rated speed increases by 20%. At the same time, current and power factor remain unchanged. The additional information can be found in the table.

Motor winding 50 Hz	Connection to 60 Hz	Power P	Torque T
400 V ± 10 %	380/400 V ± 5 % 50 Hz	0.90 x P(50 Hz)	0.75 x T(50 Hz)
400 V ± 10 %	400 V -10 % / + 25 %	1.00 x P(50 Hz)	0.83 x T(50 Hz)
400 V ± 10 %	440 V -10 % / +15 %	1.10 x P(50 Hz)	0.92 x T(50 Hz)
400 V ± 10 %	460 V ± 10 %	1.15 x P(50 Hz)	0.96 x T(50 Hz)
400 V ± 10 %	480 V - 10 % + 5%	1.20 x P(50 Hz)	1.00 x T(50 Hz)
500 V ± 10 %	500 V -10 % / + 25 %	1.00 x P(50 Hz)	0.83 x T(50 Hz)
500 V ± 10 %	575 V ± 10 %	1.15 x P(50 Hz)	0.96 x T(50 Hz)

7.3.10 Operation with inverter

The operation of three-phase AC induction motors with frequency inverter (variable voltage and frequency) causes stray losses in the motor. For this reason, it is generally required to reduce the rated torque of the motors so that the permissible winding temperature is not exceeded. An additional reduction of the output is required due to reduced motor speed and, therefore, reduced self-cooling. The output reduction is dependent upon the torque demand of the driven machine and the speed setting range.

For vertical versions with tubing (SCA, SFA, SCP), the output speed ranges according to chapter 7.4.7 must be taken into account. In case of doubt, a consultation with our plant is required.

High speeds

Standard motors can generally also be operated above their rated speed. If standard motors must be operated with frequencies above 60 Hz, please consult our plant.

Power tables

Rated powers of 4-pole motors from the Rexnord-Stephan series are listed for various applications. Data for other pole numbers are available upon request.

The powers apply to correctly installed frequency inverters with characteristics of column A or B.

	A	B
Complete harmonic distortion	< 2.5%	< 6%
Maximum peak voltage	1600 V	1400 V
Max. voltage rise du / dt	1.0 kV / s	5.6 kV / s
Max. carrier switching frequency	5 kHz	5 kHz
Max. motor to inverter cable length	30 m	60 M

7. Technical Appendix

Output powers and torques for inverter operation

Basic type of motor: 4 pole, 1500 min⁻¹, 50 Hz

Variable and constant torque

P(n)	Type	T ~ n ² 1)			T = constant					
		Sr 20/1 (50 - 2.5Hz)			Sr 2/1 (50 - 25Hz)			Sr 3/1 (50 -16.7Hz)		
Class B			Class F			Class F			Class F	
KW		P(kW)	T(Nm)	I _N (A)	P(kW)	T(Nm)	I _N (A)	P(kW)	T(Nm)	I _N (A)
0.12	63A-4G	0.13	0.91	0.51	0.12	0.76	0.47	0.1	0.68	0.40
0.18	63B-4G	0.19	1.21	0.69	0.18	1.15	0.65	0.15	0.96	0.56
0.25	71A-4G	0.27	1.71	0.86	0.25	1.59	0.80	0.20	1.27	0.69
0.37	71B-4G	0.4	2.55	1.24	0.37	2.36	1.15	0.30	1.9	1.0
0.55	80A-4G	0.6	3.93	1.71	0.55	3.5	1.57	0.45	2.85	1.35
0.75	80B-4G	0.8	5.1	2.13	0.75	4.8	2.0	0.62	4.0	1.72
1.1	90S-4G	1.2	7.6	3.38	1.1	7.0	3.1	0.90	5.7	2.7
1.5	90L-4G	1.6	10.2	3.95	1.5	9.6	3.7	1.25	8	3.2
2.2	100A-4G	2.4	15.3	5.4	2.2	14	5.1	1.80	11.5	4.4
3	100B-4G	3.2	20.4	7.15	3	19.1	6.7	2.5	16	5.8
4	112M-4G	4.3	27	9.4	4	25.5	8.7	3.3	21	7.5
5.5	132S-4G	6	38	12.8	5.5	35	11.7	4.5	29	10
7.5	132M-4G	8	51	16	7.5	47.8	15.1	6.2	40	13
9	132MG-4G	9.5	60	17.9	9	57	17	7.4	47	14.7
11	160M-4G	12	76	23	11	70	21	9	57	18.1
15	160L-4G	16	102	30	15	96	28	12.3	79	24
18.5	180M-4G	20	127	38	18.5	118	35	15.2	97	30
22	180L-4G	24	152	47	22	140	43	18	115	37
30	200L-4G	30	195	55	28	182	51	23	149	44
37	225S-4G	37	240	68	35	227	64	29	186	55
45	225M-4G	45	292	82	43	279	78	35	229	67
55	250M-4	55	358	100	52	338	95	43	277	82
75	280S-4	75	486	133	71	460	126	58	377	108
90	280M-4	90	582	159	85	550	150	70	451	130

1) Fan characteristic (T proportional to n²)

7. Technical Appendix

Constant torque

P(n)	Type	T = constant								
		S _r 5/1 (50 - 10Hz)			S _r 10/1 (50 - 5Hz)			S _r 20/1 (50 - 2.5Hz)		
Class B			Class F			Class F			Class F	
KW		P(kW)	T(Nm)	I _N (A)	P(kW)	T(Nm)	I _N (A)	P(kW)	T(Nm)	I _N (A)
0,18	63B-4G	0,13	0,87	0,50	0,12	0,75	0,46	0,10	0,67	0,41
0,25	71A-4G	0,18	1,23	0,62	0,16	1,04	0,57	0,15	0,92	0,51
0,37	71B-4G	0,27	1,84	0,9	0,24	1,53	0,81	0,22	1,37	0,73
0,55	80A-4G	0,40	2,83	1,22	0,36	2,3	11,1	0,32	2,0	1,0
0,75	80B-4G	0,54	3,7	1,56	0,49	3,1	1,4	0,44	2,8	1,3
1,1	90S-4G	0,79	5,5	2,4	0,72	4,6	2,2	0,64	4,1	2,0
1,5	90L-4G	1,1	7,3	2,9	0,98	6,2	2,6	0,87	5,6	2,4
2,2	100A-4G	1,6	11	4,0	1,4	9,1	3,6	1,3	8,1	3,3
3	100B-4G	2,2	14,7	5,2	2,0	12,4	4,7	1,75	11,1	4,3
4	112M-4G	2,9	19,4	6,8	2,6	16,6	6,2	2,3	14,8	5,6
5,5	132S-4G	4,0	27	9,1	3,6	23	8,3	3,2	20	7,5
7,5	132M-4G	5,4	37	11,7	4,9	31	10,7	4,4	28	9,6
9	132MG-4G	6,5	43	13,2	5,9	37	12	5,2	33	11
11	160M-4G	7,9	55	16,3	7,2	46	15	6,4	41	13,5
15	160L-4G	10,8	73	22	9,8	62	20	8,7	56	18
18,5	180M-4G	13,3	91	27	12	77	25	10,7	68	22,5
22	180L-4G	15,8	110	33	14	91	30	12,8	81	27,5
30	200L-4G	20	140	40	18	118	36	16,2	106	33
37	225S-4G	25	173	50	23	148	45	20	132	41
45	225M-4G	31	210	61	28	181	55	25	162	50
55	250M-4	37	258	74	34	220	67	30	196	61
75	280S-4	51	350	98	46	300	89	41	267	81
90	280M-4	61	420	117	55	358	106	49	320	96

7. Technical Appendix

7.3.11 Standard version

Our motors and geared motors correspond to the relevant standards. The most important ones are:

	IEC (CEI)	DIN	VDE
Rated output	IEC 34 - 1, IEC 85	DIN EN 60034 - 1	VDE 0530 - 1
Dimensions	IEC 72	DIN 42673 / 42677	
Mounting position	IEC 34 - 7	DIN EN 60034 - 7	VDE 0530 - 7
Cylindrical shaft ends	IEC 72	DIN 748 - 3	
Terminal designations	IEC 34 - 8	DIN VDE 0530 - 8	VDE 0530 - 8
Enclosure types (IP code)	IEC 34 - 5	DIN VDE 0530 - 5	VDE 0530 - 5
Cooling types (IC code)	IEC 34 - 6	DIN EN 60034 - 6	VDE 0530 - 6
Noise limits	IEC 34 - 9	DIN EN 60034 - 9	VDE 0530 - 9
Supply voltage	IEC 38	DIN IEC 38	

7.3.12 Explosion-protected motors

	IEC (CEI)	DIN
General	IEC 79 - 0	DIN EN 50014
Increased safety (EEx e)	IEC 79 - 7	DIN EN 50019
Flame-proof enclosure (EEx d)	IEC 34 - 1	DIN EN 50018
Non sparking (EEx n)		DIN EN 50021
Electrical equipment for use in areas with combustible dust		DIN EN 50281

7.3.13 Thermal standards

Three-phase AC squirrel-cage motors from Rexnord-Stephan correspond to the thermal regulations of the relevant national and international standards for permissible overtemperature.

Standard	Permissible ambient temperature	Permissible overtemperature in K (measured using the resistance method)	
		Insulation class	
	°C	B	F
DIN, VDE, IEC	40	80	105
British Standards (BS)	40	80	105
Canadian Standards (CSA)	40	80	105
USA (NEMA)	40	80	105
American Bureau of shipping (ABS)	50	75	95
Bureau Veritas (BV)	50	70	90
Det Norske Veritas	45	70	90
Germanischer Lloyd (GL)	45	75	95
Lloyds Register (LR)	45	70	90

7. Technical Appendix

7.3.14 Tolerances

The following tolerances apply to the performance specifications of electrical machines to DIN EN 60034:

- Efficiency η
 - 0.15 (1 - η) for rated outputs \leq 50 kW
 - 0.10 (1 - η) for rated outputs $>$ 50 kW
- Power factor $\cos \varphi$: - (1-cos φ) / 6
- Slip:
 - \pm 20 % for rated outputs $>$ 1 kW
 - \pm 30 % for rated outputs \leq 1 kW
- Starting current: + 20%
- Starting torque: - 15% ... + 25%
- Mass moment of inertia: \pm 10%
- Sound pressure level: + 3 dB(A)

7.3.15 Calculation of maximum permissible operating frequency of motors: Z

The maximum permissible operating frequency of a brake motor is dependent upon:

- the size of the accelerated mass moments of inertia
- the relative operating time
- the relative load, i.e. the ratio of actual output power and
- rated output of the motor
- load torque during acceleration

The no-load operating frequency listed in the tables can be converted to the actual application using the following formula:

$$Z = Z_0 \times F_Z \times F_b \times F_m$$

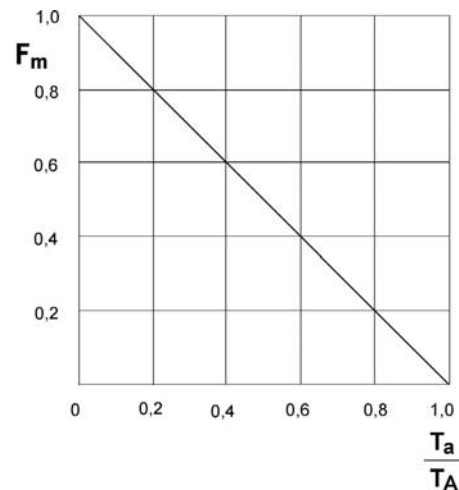
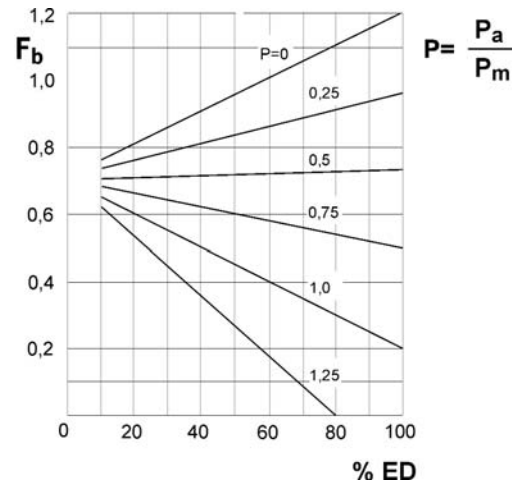
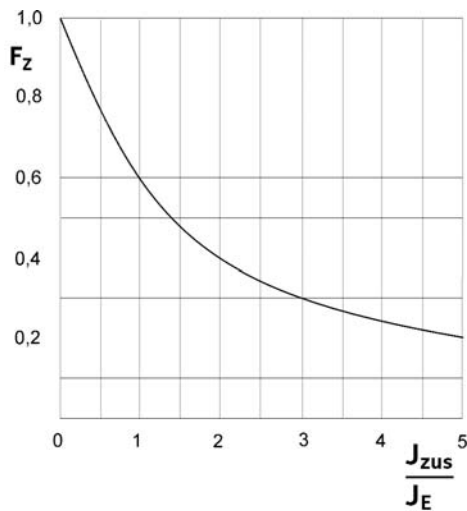
F_Z	Dependent upon additional mass moment of inertia
F_b	dependent upon output and operating time
F_m	dependent upon load torque
Z_0	no-load operating frequency at 60% operating time
JE	mass moment of inertia of the motor
J_{zus}	mass moment of inertia of driven machine referenced to the motor shaft
T_a	load torque
TA	acceleration torque (motor)
ED	operating time

$$\text{whereby } P = P_a / P_m$$

- P_a : power demand after completed acceleration
- P_m : rated motor output

7. Technical Appendix

Diagrams

**7.3.16 Spring-applied single-disk safety brake for direct current and dry run**

In the electromagnetic single-disk brake, the braking force is applied through springs and the brake is electrically released. In case of a power failure, the brake is applied. This allows it to meet the predetermined safety requirements. The brakes can be supplied with a manual release upon request.

The brakes are manufactured and tested according to VDE 0580 and correspond to CENELEC Memorandum no. 3, part 3, par. 2.3 of the EC safety directives.

Standard voltages:

102 VDC / 230 VAC for motor output up to 3 kW
178 VDC / 400 VAC for motor output starting at 4 kW

Other voltages can be supplied and must be specified when ordering.

Technical data:

The response times apply to normal operating temperatures and rated voltage with adjusted gap. The values listed are subject to the regular tolerances.

t_1 (operating time) is the time from switching on the voltage to the drop-off of the brake torque to 10% of the rated torque T_B .

t_2 or t_3 (breaktime) is the time from switching off the voltage to an increase of the brake torque to 90% of its rated value. t_2 applies to switching on the DC side, t_3 to switching on the AC side.

The brakes correspond to enclosure type IP55 and, therefore are protected against damaging dust accumulations and jet water.

7. Technical Appendix

P_R is the permissible braking energy in Joule per second. The permissible braking energy per braking W_{Rmax} is dependent upon the operating frequency. The listed values apply to a motor speed of 1500 min^{-1} .

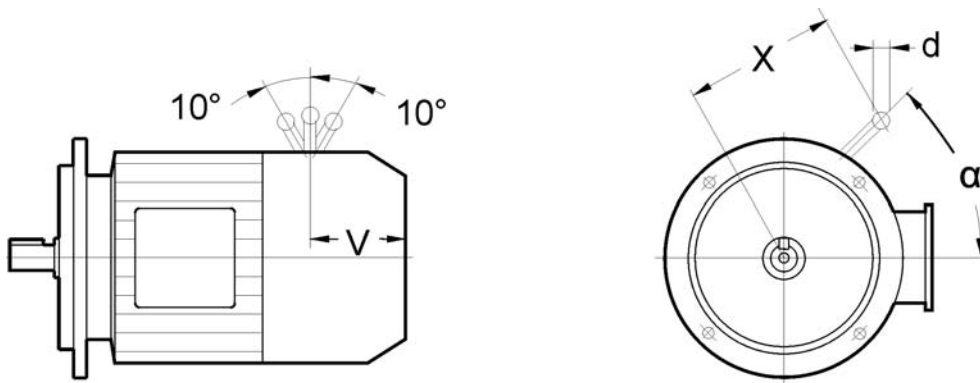
The dynamic braking torque T_B applies to dry run, run in brake and normal operating conditions. The braking torque decreases with increasing motor speed.

If the friction areas contain oil or grease, the braking torque is reduced down to 50%. If the brake is not run in, the braking torque may be 20% less than the rated torque.

7.3.17 Brake kit

Standard motors of size 63 to 180 can be converted to brake motors. *Brake kits* are available for this purpose. The brake hub is installed on the motor shaft to ensure an operationally reliable design. Only the plastic fan blade is driven by a screw-in shaft.

Position of the manual release lever



Motor Size	Brake Size	T_B Nm	α°	X mm	d mm	V mm
63	08	4	0	85	25	75
71	08	4	0	85	25	75
80	10	10	0	98	25	91
90	13	20	0	117	25	93
100	15	40	30	128	32	97
112	15	40	30	128	32	115
132	20	80	30	166	40	122
160	23	150	30	210	40	161
180	26	240	30	230	40	183
200 / 225	458-25	400	0	500	24	
250 / 280	Upon request					

7. Technical Appendix

7.3.18 Brake data

Motor Size	Brake Size	T _B Nm	n _{max.} min ⁻¹	P _R J/ s	W _{Rmax} J	W _{RN} J	P _{z0} W	t ₁ ms	t ₂ ms	t ₃ ms	J ₁ kg*cm ²	m kg
63	08	5	10000	80	3 x 10 ³	5 x 10 ⁷	22	35	30	70	0,15	0,8
71	08	5	10000	80	3 x 10 ³	5 x 10 ⁷	22	35	30	70	0,15	0,8
80	10	10	5400	100	6 x 10 ³	12 x 10 ⁷	28	45	45	95	0,45	1,4
90	13	20	5400	130	12 x 10 ³	20 x 10 ⁷	34	60	60	140	1,72	2,5
100	15	40	4000	160	25 x 10 ³	35 x 10 ⁷	42	80	75	175	4,5	4,0
112	15	40	4000	160	25 x 10 ³	35 x 10 ⁷	42	80	75	175	4,5	4,0
132	20	100	3500	250	50 x 10 ³	125 x 10 ⁷	100	160	120	280	12,2	10
160	23	150	3000	300	75 x 10 ³	200 x 10 ⁷	150	200	150	350	28,5	12.6
180	26	250	3000	350	105 x 10 ³	340 x 10 ⁷	250	220	180	500	66,5	19,5
200	458-25	400	3000	520	125 x 10 ³		110	110	375	950	200	29
225	458-25	400	3000	520	125 x 10 ³		110	110	375	950	200	29
250	Upon request											
280	Upon request											

T _B	Rated torque
n _{max.}	Max. speed
P _R	Max. friction power
W _{Rmax}	Max. friction energy per operation
W _{RN}	Friction energy until re-adjustment
P _{z0}	Coil power
t ₁	Operating time
t ₂	Break time (switching on DC side)
t ₃	Break time (switching on AC side)
J ₁	Moment of inertia of the brake
m	Weight

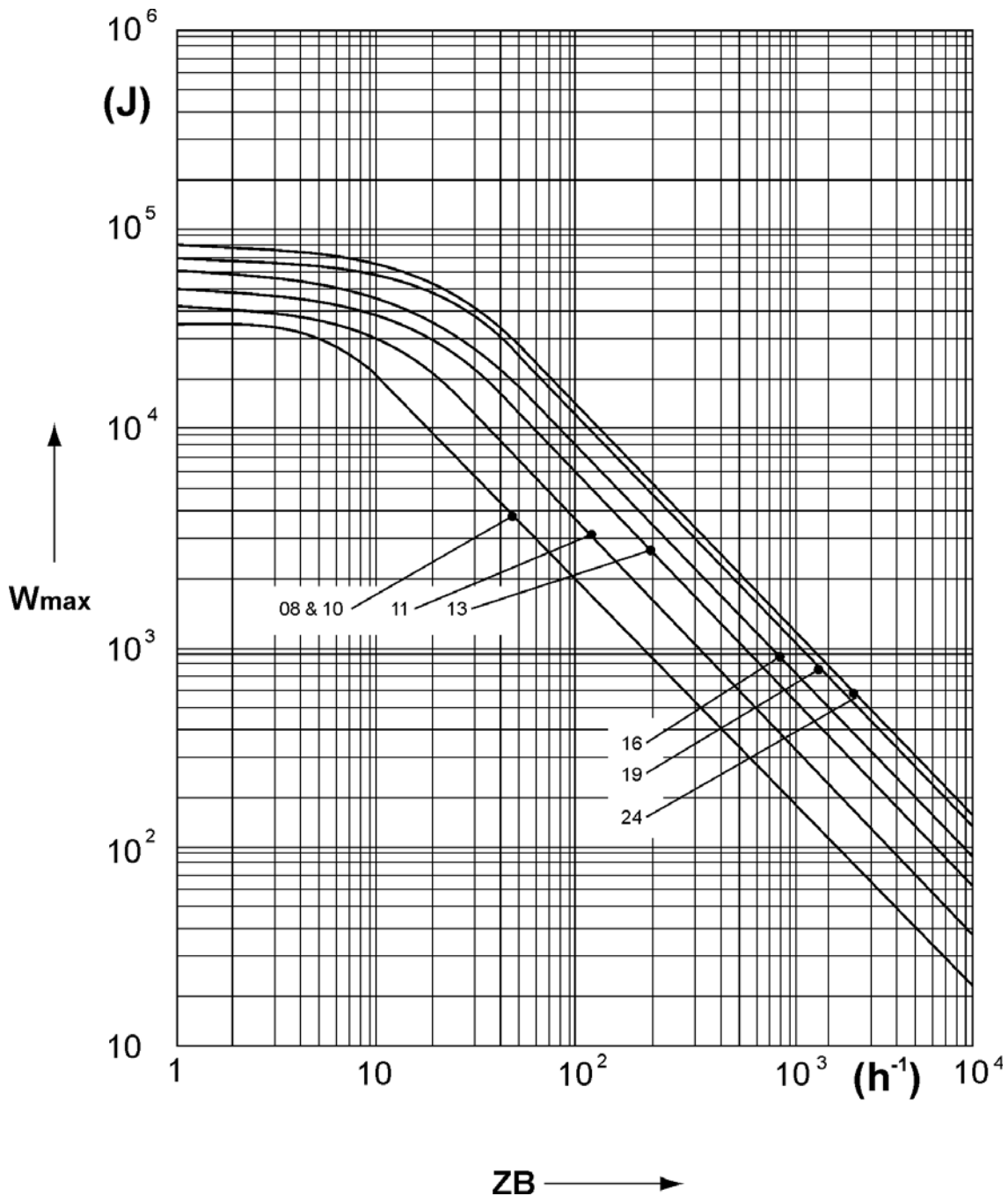
7. Technical Appendix

7.3.19 Power capability per braking

In general, the permissible operating frequency of a brake motor is limited by the heating of the motor. The brake output should be determined for each braking W for control purposes.

$$W = 0.0055 \times n_1^2 \times (J_{zus} + JE)$$

The permissible value W_{Rmax} can be found in the diagram.



7. Technical Appendix

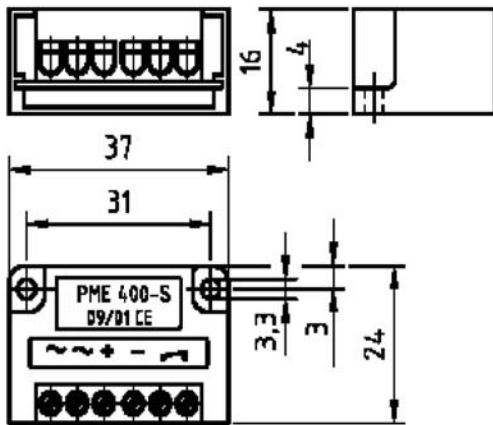
7.3.20 Brake rectifier

The brake rectifiers being used generate the necessary direct voltage (DC) for operating the brake from the AC supply voltage (AC).

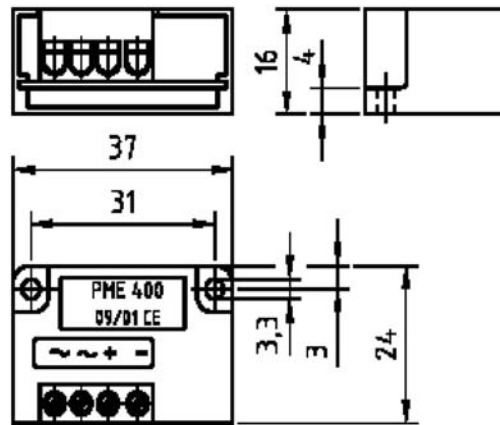
Dependent upon the voltage applied, one-way or bridge rectifiers are used.

The brakes are usually switched on the AC side. However, the brakes can also be switched on the DC side for short brake application times. For this purpose, the built-in switching bridge must be removed.

Rectifier for switching at the DC side or at the AC side

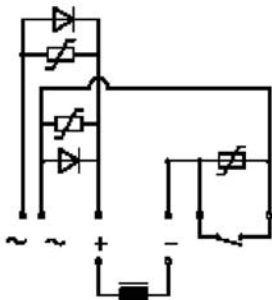


Rectifier for switching at the AC side



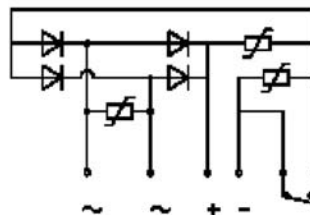
Half wave rectifier

Switching at the DC side
PME 400-S



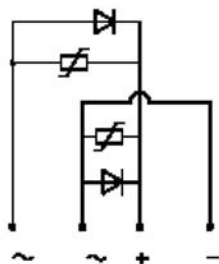
Full wave rectifier

Switching at the DC side
PMB 400 - S



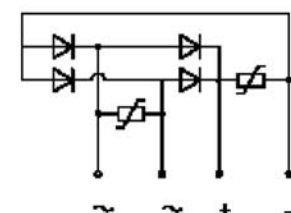
Half wave rectifier

Switching at the AC side
PME 400



Full wave rectifier

Switching at the AC side
PMB 400



7.3.21 Tachometer generator

If speed control or synchronous control is required, the motors can be equipped with tachometer generators or pulse generators.

7. Technical Appendix

7.3.22 Encoder

Technical data sheet:

Electrical data

Number of pulses	Z	100, 180, 200, 360, 500, 512, 720, 1.000, 1.024 pulses/revolution	XXXX
Execution of electronic (Output signals)	TTL	Line driver-output stage, supply voltage: $U_B = 5 \text{ VDC} \pm 5\%$ (poling error safe) output amplitude: $U_{\text{LOW}} \leq 0.5 \text{ V}$, $U_{\text{HIGH}} \geq 2.5 \text{ V}$	T
	HTL	Push pull-output stage (shortening proof), supply voltage: $U_B = 8\text{-}30 \text{ VDC}$ (poling error safe) output amplitude: $U_{\text{LOW}} \leq 1.5 \text{ V}$, $U_{\text{HIGH}} \geq U_B - 3 \text{ V}$	H
Output signals	A, B + Inv.	2 square wave pulse trains, electr. phase shifted $90^\circ \pm 10^\circ$ + signal inverting *	BI
Pulse ratio		pulse : pause = 1 : 1, $\pm 10\%$ at 30 kHz	
Flank steepness		$\geq 15 \text{ V}/\mu\text{s}$	
Frequency limit	f_G	120 kHz	
Output load current	I_{Load}	$\leq 70 \text{ mA}$	
Input current (without load)	I_{max}	$\leq 100 \text{ mA}$	
Permissible cable length		$\leq 100 \text{ m}$ (Thalheim-cable)	
Type of connection		cable, radial, 1.0 m (standard length)	KRI
Operating temperature range		-20°C to $+70^\circ \text{C}$	S
Permissible relativ humidity		$\leq 90\%$ (condensation not permitted)	

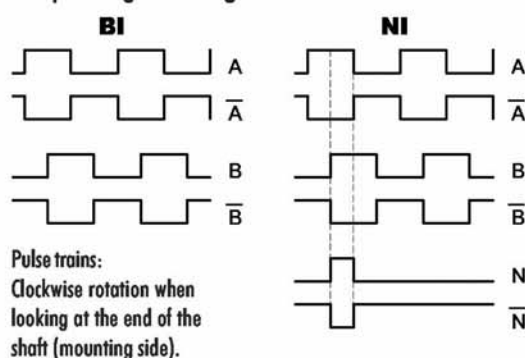
Options

Execution of electronic		TTL-Output signals, Line driver-output stage supply voltage: $U_B = 8\text{-}30 \text{ VDC}$ (poling error safe)	R
Output signals	A, B, N + Inv.	2 square wave pulse trains + zero pulse, electr. length $90^\circ \pm 9^\circ$ + signal inverting *	NI
Type of connection	cable connector	cable, axial, ... m performed at cable, (ref. datasheet »Type of performed cable«)	KA... ...
Operating temperature range		-20°C to $+100^\circ \text{C}$	E

Connection table

wire color	signals
brown	A
green	A inv.
grey	B
pink	B inv.
red	N
black	N inv.
brown 0.5 mm ²	+ U_B
white 0.5 mm ²	0 V
blue	+ U_{Sensor}
white	0 V _{Sensor}
transparent	shielding/housing

Output signal diagram



Mechanical data

Design style	A 4	A 4
Attachment kit	50	standard, (ref. datasheet »Attachment kit's ...«) 50
Housing	light-alloy metal, black, powder coated	
Protective class	IP 65	according to DIN EN 60 529 IP 65
Construction principle	OPSIC with slotdisc	
max. revolution (mechanical)	$n_{\text{max}} \leq 8.000 \text{ rpm}$	(observe frequency limit)
Permissible motor-shaft play	axial	$\leq 0.25 \text{ mm}$
	radial	$\leq 0.1 \text{ mm}$
Starting torque	at 20°C	$\leq 1.5 \text{ Ncm}$
Vibration	55... 2.000 Hz	$\leq 100 \text{ m/s}^2$ according to DIN IEC 60 068, part 2-6
Shock	11 ms	$\leq 1.000 \text{ m/s}^2$ according to DIN IEC 60 068, part 2-27
Hollow shaft diameter	d	15 mm (standard), 10 mm to 16 mm possible 15
Weight	approx. 550 g	

7. Technical Appendix

7.3.23 Tacho

Technical data sheet:

Mechanical data:

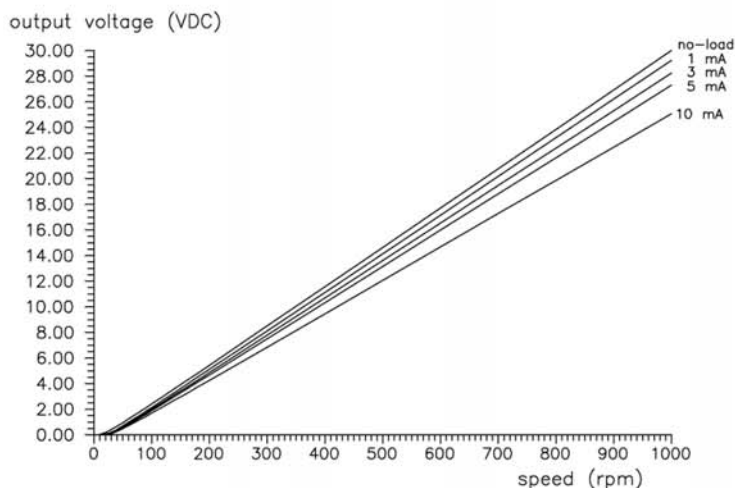
Housing		light - alloy metal, unpainted
Design class		A 4
Protective class		IP 66 <i>according to DIN 40 050, IEC 529</i>
Upper speed limit	n_{max}	≤ 12000 rpm
Rotor attachment		AM, KM, RM, SM
Hollow shaft diameter	d	14 mm, 15 mm (standard) (6 - 16 mm possible)
Mass moment of inertia	J	70 gcm ²
Weight	<i>housing</i>	approx. 270 g
	<i>rotor</i>	approx. 50 g

Electrical data:

Output voltage	(no - load)	U_0	30 VDC ± 3 %
Polarity			independent on rotational direction
max. output current		I_{max}	20 mA
Magnet			Al Ni Co, 8-pole, stabilized
Residual ripple			≤ 15 % peak - peak
Residual ripple frequency			400 Hz $f = 0,4 * n$
Linearity error		$F_{Regulation}$	≤ 1 %
Linearity error		$F_{Regression}$	$\pm 0,1$ % (100 rpm $< n \leq 1000$ rpm)
Regulation range lower limit		n_R	30 rpm
Temperature drift	(magnet)		- 0,2 % pro 10 K
Type of connection			terminal box, 2- pole
Isolation class			E
Operating temperature range			- 30 °C to + 120 °C
Maintenance			maintenance - free

Options:

• Output voltage	(no - load)		< 30 VDC
• Balancing to rated voltage			for example 30 VDC at 12 k Ω load (2,5 mA)
• Three phase output		DTD	with or without cable
• alternating current output		WTD	with or without cable
• Double winding			with or without cable
• Pole reverser for 4 - quadrant operation TD 3... P			max. 3000 rpm / only for KM and RM magnets
• Enhanced protective class			
• Hollow shaft diameter		d	10 mm, 11 mm, 12 mm, 16 mm

Load characteristic:

7. Technical Appendix

7.3.24 Motors with forced ventilation

With inverter operation or high operating frequency, the use of a separately-driven fan is frequently required. A fan driven by a separate motor ensures an effective cooling independent of the motor speed.

External fans are available for all motor sizes (option). The following voltage ranges are covered in the standard design:

Size	Supply voltage	
	50 Hz	60 Hz
63 - 132	1 x 230 - 277 V 3 x 220 - 290 V 3 x 380 - 500 V	1 x 230 - 277 V 3 x 220 - 330 V 3 x 380 - 575 V
160 - 200	1 x 230 - 277 V 3 x 220 - 290 V 3 x 380 - 500 V	3 x 220 - 330 V 3 x 380 - 575 V
225 - 280	Upon request	

All motors with external fan must be equipped with thermistors.

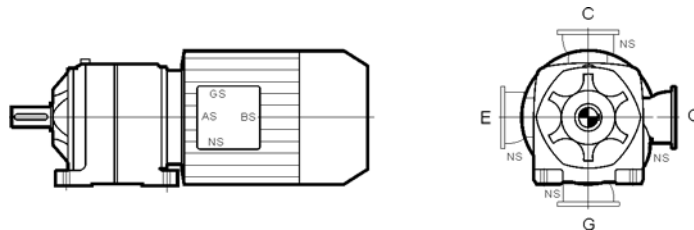
Increase of construction length due to external fan:

Motor Size	Δk mm
63	107
71	107
80	107
90	117
100	117
112	117
132	127
160	127
180	150
200	150
225 - 280	Upon request

7. Technical Appendix

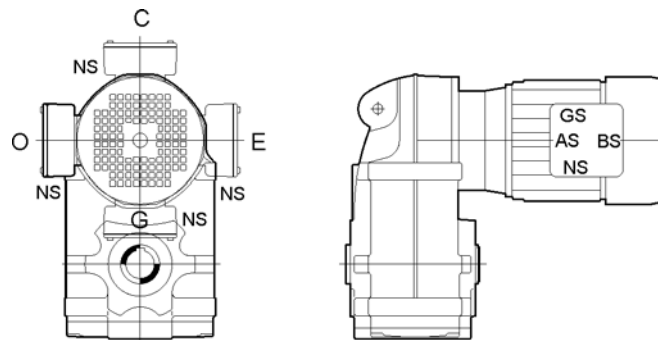
7.3.25 Terminal box position

SI4



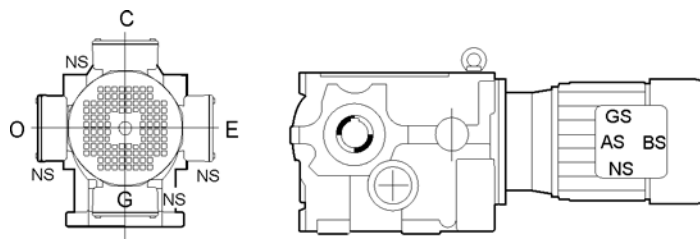
The terminal box position is independent of the mounting position. The normal position is "O". The cable entry is arranged in position "NS" as standard.

SP4



The terminal box position is independent of the mounting position. The normal position is "O". The cable entry is arranged in position "NS" as standard.

SK4



The terminal box position is independent of the mounting position. The normal position is "O". The cable entry is arranged in position "NS" as standard.

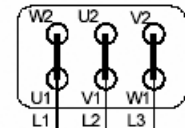
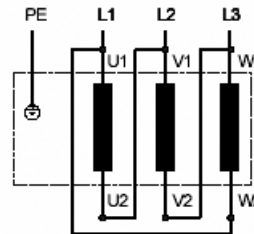
7. Technical Appendix

7.3.26 Connection diagrams

Motor connection diagrams

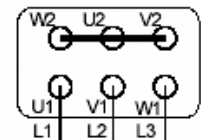
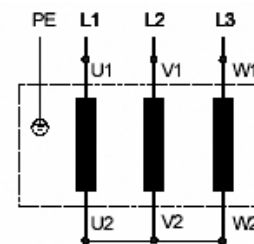
Delta connection

low voltage



Star connection

high voltage



Connection designations of add-on devices

	IEC standard	UK standard
PTC thermistor	10 - 11	TP1 - TP2
Thermal contacts (NC contact)	20 - 21	TB1 - TB2
Thermal contacts (NO contact)	30 - 31	
Magnetic brake	60 - 61	BR1 - BR2
Space heater	70 - 71	H1 - H2
Three-phase AC external fan	U - V - W	
Single-phase external fan	U1 - U2	

7.3.27 2nd shaft end

The motors can be supplied with a second shaft end upon request. Please contact us.

7.3.28 Plug connectors (Harting)

The motors can be supplied with plug connectors upon request. Please contact us.

7.3.29 Cast iron fan

The motors can be supplied with cast iron fan upon request. Please contact us.

7.3.30 Cable entries

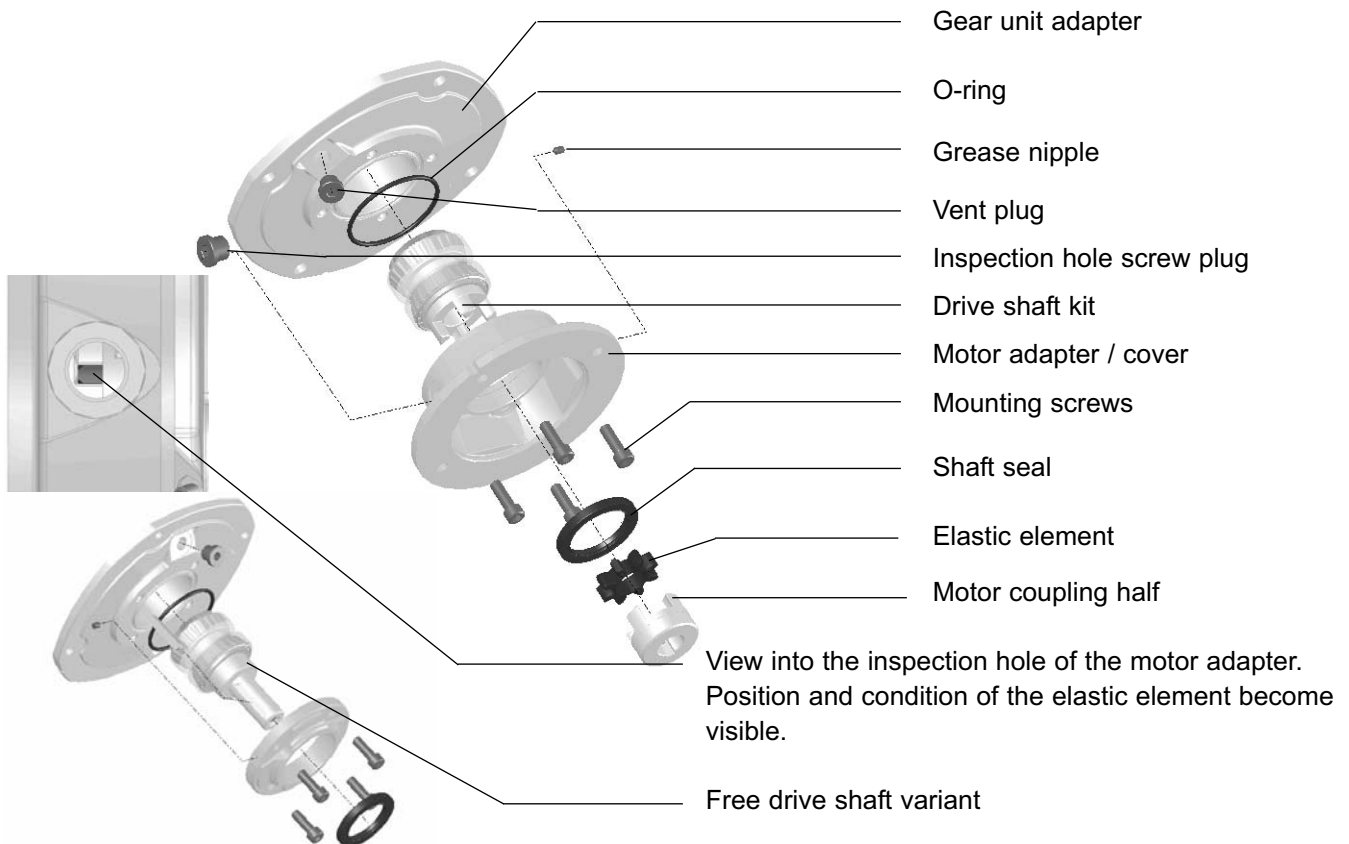
Size	Cable entry
63 to 90	1 x M20X1.5
100	1 x M20X1.5
112 to 132	1 x M25X1.5
160 to 180	2 x M32X1.5

Cable entries are closed during transport. Screwed cable glands are not part of the scope of delivery!

7. Technical Appendix

7.4 Technical Appendix, Mechanical

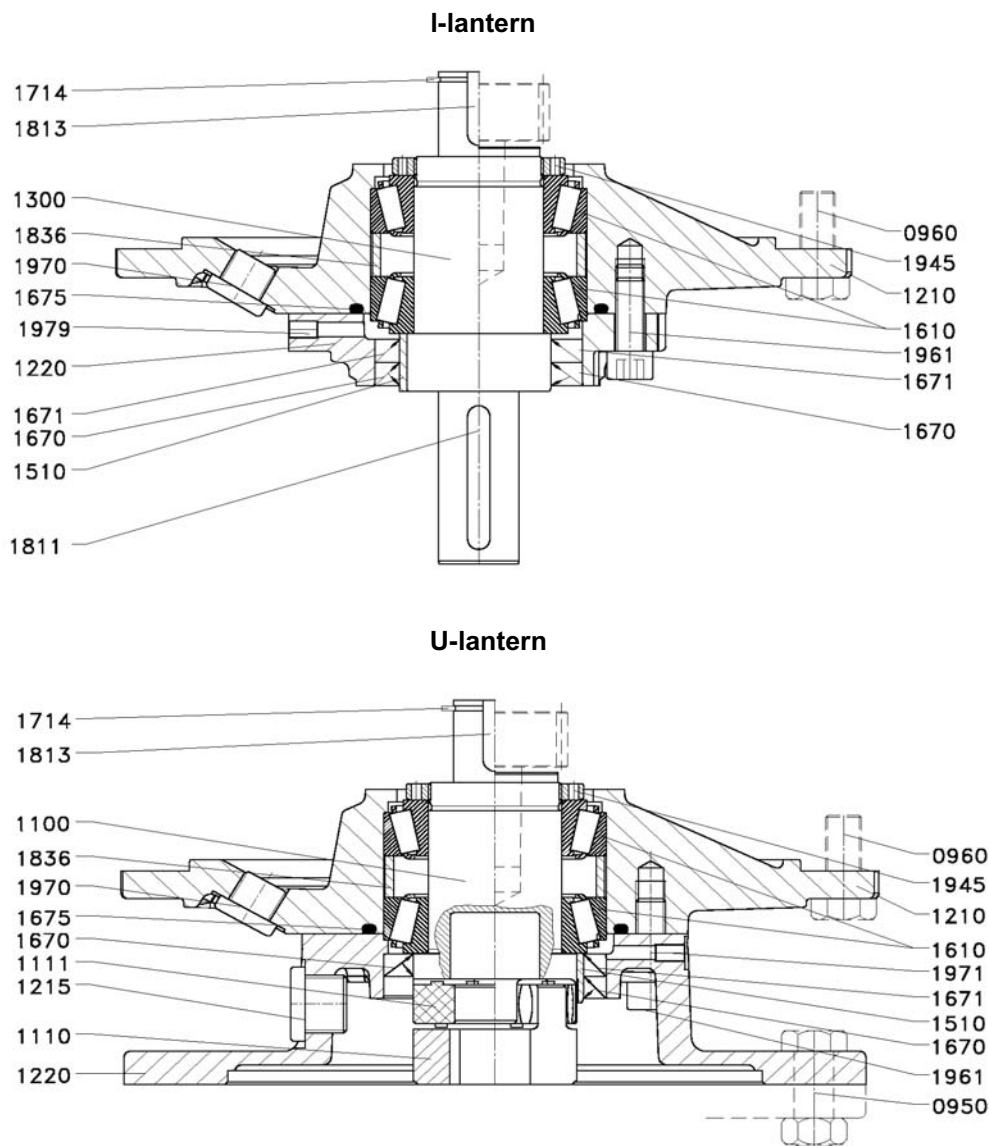
7.4.1 Principle design of U- and I-lantern



Component	Features
Gear unit adapter	Dependent upon the gear unit size and type, different gear unit adapters are available.
O-ring	Reliable seal between gear unit adapter and motor adapter or cover.
Grease nipple	Allows for optional regreasing of roller bearings for critical mounting positions.
Vent plug	Position of venting for vertical mounting positions.
Screw plug	Closes the inspection hole opening and allows for viewing the elastic element of the coupling after disassembly. Mounting and wear control is possible.
Drive shaft kit	This is a premounted unit of shaft and roller bearing. There are versions with different dimensioning dependent upon the gear unit size and the power to be transferred. A variant of the free drive shaft exists in addition to the coupling versions. Sufficiently large dimensioned tapered-roller bearings allow for high external loads. In addition, a backstop can be integrated in all versions.
Motor adapter / cover	A variety of motor adapters is available dependent upon the motor size to be mounted. Gear units with free drive shaft are closed by a cover at this point.
Mounting screws	They are used for mounting the motor.
Shaft seal	Different seal options are possible dependent upon the application conditions.
Elastic element	The elastic element provides a form fitted connection of the two coupling halves.
Motor coupling half	Dependent upon the size, it can be mounted directly on the motor shaft.

7. Technical Appendix

The following illustration shows the principle design of an I- or U-lantern. It is intended as a reference aid to the individual parts lists. Variations depending on the gear unit size and version are possible.



No.	Designation	No.	Designation
0950	Motor mounting screw	1671	Shaft seal drive shaft BA NBR
0960	Body mounting screw	1671	Shaft seal drive shaft BA Viton (option)
1100	Coupling kit	1675	O-ring flange NBR
1110	Coupling half on motor side	1714	Circlip pinion Z1
1111	Driver, flexible element	1811	Feather key drive shaft
1210	Dome/body	1813	Feather key pinion Z1
1215	Screw plug (inspection hole)	1836	Spacer ring shaft unit
1220	Cover/flange/adapter	1945	Shaft nut shaft unit
1300	Shaft kit	1961	Cover/flange bolt
1510	Drive shaft sleeve (option)	1970	Screw/vent plug
1610	Drive shaft bearing	1971	Grease nipple
1670	Shaft seal drive shaft BASL NBR (option)	1979	Grease nipple
1670	Shaft seal drive shaft BASL Viton (option)		

7. Technical Appendix

7.4.2 Backstops in the input lantern

Backstops are used to limit the direction of rotation to a freely selectable direction of rotation. In the opposite direction, backstops act as a blocker. Backstops are frequently used for conveyor drives that are operated in a tilt position or for fan drives. In both cases, there is only one free direction of rotation, whereby a spinning of the drive is desired for the opposite direction.

In certain applications, backstops can be an alternative to an electromagnetic brake on the motor.

The backstops are placed at the drive shaft (U/L-lantern) between the regular bearing and are mounted dependent upon the desired free direction of rotation according to the order. The free direction of rotation must be specified at ordering.

If speed-disengaging backstops are used, this safety component needs to be checked only every 6 000 operating hours or no later than every 3 years. The system operator must take all the necessary safety precautions to avoid failure of the backstop that may result in personal injuries and/or damages to the drive unit and/or the application.

It is necessary to replace the backstop under the following conditions:

- In the event of observing unusually high wear of the gear unit.
- When the oil in the gear unit is contaminated.
- In the event of unusually high load.

This may have had an adverse effect on the condition of the clamping elements and bearing races in the integrated backstop.

CAUTION!

Only authorized, qualified personnel is permitted to replace the backstop or change the direction of rotation of the backstop while complying with the operating instructions for the respective backstop.

Never loosen or release any part of the backstop facility while the drive is under load: This could affect the reversal action of the drive and load; the drive unit must be in a no-load condition and secured against inadvertent movements.

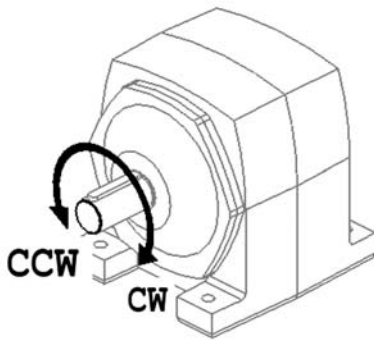
7.4.3 Backstop at the intermediate shaft for SK4 helical bevel geared motors

SK4 helical bevel geared motors offer a more cost-efficient option for mounting backstops at the intermediate shaft of the bevel gear stage. The additional use of a U-lantern (IEC adapter) does not apply, and the motors can be integrally mounted at the gear unit. The lubricant supply is then ensured via the normal gear unit oil (observe mounting positions!).

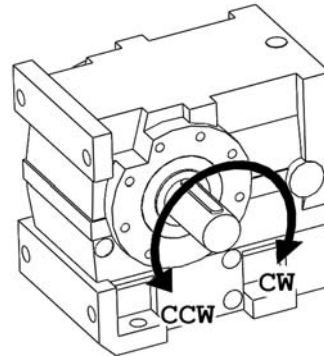
7. Technical Appendix

7.4.4 Indication of output rotating direction when using backstops

For the order of a gearbox with backstop you have to indicate the required direction of rotation, viewed at output shaft on output side of gearbox. For drives with left and right output shaft the direction of rotation is given viewed at side L. To avoid damage to the gearbox or the unit, the direction of rotation needs to be checked before operating.



CW = rotation right, CCW = rotation left

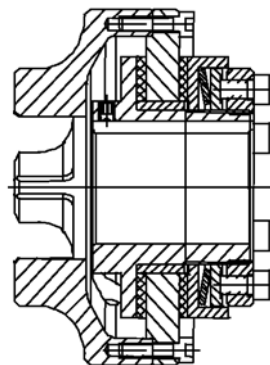


CW = rotation right, CCW = rotation left

7.4.5 Slip coupling in the input lantern

If an input lantern is used, it can be equipped with an additional slip coupling, if necessary, to mechanically limit the torque of the drives. In this case, the slip coupling is installed between motor and gear unit drive shaft. In the normal case, only the standard coupling half of the motor is replaced by the special slip coupling half.

A slip coupling is a component where the permissible torque is transferred frictionally engaged. For this purpose, two spring-loaded friction linings are pressed against each other. The spring force determines the amount of torque that can be transferred. The spring force and, subsequently, the transferable torque can be adjusted.



Slip coupling

7. Technical Appendix

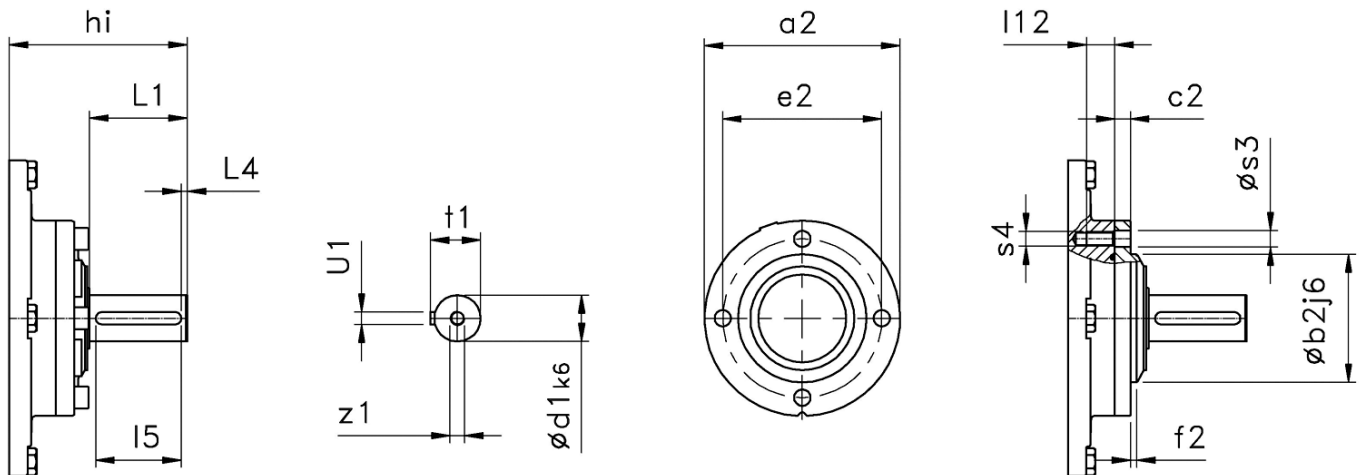
7.4.6 Motor base versions

Our motor base version is a special variant to connect or drive a gear unit with a motor by means of belt drive. This provides the following advantages:

- Compact version - an advantage, for example, if structural conditions do not allow for an integral mounting of the motor.
- After installing the drive in the machine or system, the total gear ratio can be adjusted using a simple change in the belt drive gear ratio.

7.4.7 Gear unit with free drive shaft

All gear units of the S4 family can also be designed with free drive shaft. In this case, there is a standard for the shaft dimensions of the drive shaft dependent upon the gear unit type (S14 / SP4 / SK4) and the gear unit size. This standard is also shown in the dimensioned drawings of the gear units. In addition to these standard dimensions, alternate dimensions are possible or even required, based on applied external loads. The following table provides an overview of the options in the design of the drive shafts. Lines with a light-gray background contain the values for our standard dimensions.



Mounting flange

Gear unit connection	Mounting dimensions							Mounting flange on the drive end								
	Ød ₁	L ₁	L ₄	l ₅	t ₁	U ₁	z ₁	h ₁	a ₂	b ₂	e ₂	f ₂	c ₂	l ₁₂	S ₄	s ₄
	mm	mm	mm	mm	mm	mm	mm	mm	mm	j6	mm	mm	mm	mm	mm	mm
S115	19	40	4	32	21.5	6	M6x16	110.5	130	85	105	14	11	19	11	M10
	28	60	5	50	31	8	M10x22	110.5	130	85	105	14	11	19	11	M10
S162	19	40	4	32	21.5	6	M6x16	101.5	130	85	105	14	11	19	11	M10
	28	60	5	50	31	8	M10x22	121.5	130	85	105	14	11	19	11	M10
	38	80	5	70	41	10	M12x28	158	160	105	130	13	13	23	13.5	M12
S235	28	60	5	50	31	8	M10x22	109.5	130	85	105	14	11	19	11	M10
	38	80	5	70	41	10	M12x28	146	160	105	130	13	13	23	13.5	M12
S300	38	80	5	70	41	10	M12x28	138	160	105	130	13	13	23	13.5	M12

For permissible loads at the drive shaft please contact *Rexnord-Stephan*.

7. Technical Appendix

Gear unit connection - Dimensional assignment

Gear unit connection	SI4	SP4	SK4
S115	SI..1.	SP..1 / SP..2	SK..2
S162	SI..2 / SI..3	SP..3	SK..3 / SK..4.
S235	SI..4 / SI..5	SP..4 / SP..5	SK..5 / SK..6.
S300	SI..6 / SI..7 SI..8 / SI..9	SP..6 / SP..7 SP..8	SK..7 / SK..8. SK..9

For permissible loads at the drive shaft please contact *Rexnord-Stephan*.

7.4.8 SI4 gear units SCA, SFA and SCP with integrated oil pump

Some types of construction of SI4 gear units offer the possibility of supplying an absolutely oil-proof version for vertical mounting positions (output shaft is down).

For some applications, particularly in chemistry, pharmacy, food processing technology and wastewater treatment and drinking water purification, it is desirable to use absolutely leak-free drives. Since radial shaft seal rings are always wear parts and will eventually leak dependent upon the loads that occur, the regular sealing system may cause danger of oil leakage via the shaft seal.

With our design, the output shaft is safely blocked from the oil supply by means of a tubing. To ensure sufficient lubrication of all relevant components, such as roller bearing and gearing, an additional oil pump (gear pump) is integrated at the intermediate shaft of the gear unit. Using a corresponding inner tubing system, the lubricant is distributed inside the gear unit.

To ensure a sufficient flow rate, the following speed ranges must be taken into account at the output shaft.

Version	B (2-stage)		C (3-stage)	
	n_{2min}	n_{2max}	n_{2min}	n_{2max}
	1/min	1/min	1/min	1/min
SCP	30	270	10	80
SCA	30	270	10	80
SFA	30	270	10	80

This version offers an additional advantage on top of the absolute oil-tightness. Due to the low oil level, no gearing moves directly in oil. This results in nearly no splash losses that could lead to a heating of the gear unit.

Particularly with low gear ratios, i.e. high output speeds, splash lubrications frequently lead to thermal limits due to occurring splash losses in vertical types of construction. This tubing version allows for largely eliminating the influence of splash losses. This, in turn, allows the drive to be used at relatively high output speeds. Expensive cooling systems can be eliminated.

7.4.9 Noise level

This chapter discusses the noise levels (sound pressure levels) of the S4 gear unit series of size 1 to 9. design index 6 and 7. Motor noises are not taken into account.

Table 1 listed below shows sound pressure level L_p' that can be expected with high probability for standardized conditions. Slight deviations are possible due to manufacturing tolerances.

To obtain values from other conditions, correcting factors must be added according to Tables 2-4.

$$L_p = L_p' + K_1 + K_2 + K_3$$

7. Technical Appendix

If the noise level must be guaranteed, 3 dBA must be added at the top tolerance limit. See also the attached examples.

The listed values refer only to the gear units and are intended for an initial orientation. Lower values are partially possible for the noise level. Please contact us.

Sound pressure under standardized conditions:

Table 1 shows values and tolerances for sound pressure L_p' in dBA at a distance of 1 meter from the gear unit (Input speed $n_1 = 1500$ 1/min gear ratio $i = 11.2$). The reference power is dependent upon the service factor SF.

Table 1:

Gear unit size	Consumed power in kW							
	for SF = 2:		Half the catalog power data, $\frac{1}{2} P$ in kW					
	1 kW	2 kW	5 kW	10 kW	20 kW	50 kW	75 kW	100 kW
1...4	58 +/- 1	62 +/- 1	66 +/- 1.5	69.5 +/- 1.5	73 +/- 2			
5...7	57 +/- 1	61 +/- 1	65 +/- 1.5	68.5 +/- 1.5	72 +/- 2	77 +/- 2	79 +/- 3	
8...9	56 +/- 1	60 +/- 1	64 +/- 1.5	68.5 +/- 1.5	71 +/- 2	76 +/- 2	78 +/- 3	80 +/- 3

Correcting factor for non-standard conditions:

Table 2: Correcting factor K_1 in dBA for distance from gear unit

Gear unit size	Distance from gear unit [m]					
	1 m	3 m	5 m	10 m	30 m	50 m
1...4	0	-6	-10	-16	-26	-30
5...7	0	-5	-9	-15	-25	-29
8...9	0	-4	-8	-14	-24	-28

Table 3: Correcting factor K_2 in dBA for input speed n_1

Gear unit size	Input speed n_1 [1/min]						
	500 RPM	750 RPM	1000 RPM	1500 RPM	1800 RPM	2400 RPM	3000 RPM
1...9	-7	-5	-3	0	+1.5	+5	+8

Table 4: Correcting factor K_3 in dBA for gear ratio

Gear unit size	Gear unit ratio i	
	2.8...10	≥ 11.2
1...9	+2	0

7. Technical Appendix

Examples

Example 1

SFN46C25-132M-4G, consumed power $P_a = 7.5$ kW
 Expected sound pressure level at 1 meter?
 Service factor $SF=1.2$ ' use consumed power according to Table 1 (interpolate and round the values)
 $L_p' = (67.8 \pm 1.5)$ dBA
 Distance = 1 m, $n_1 = 1500$ 1/min $i = 11.2$ ' $K_1=K_2=K_3 = 0$
 $L_p = L_p'$
 Guaranteed value = $(67.8 + 1.5 + 3)$ dBA = **72.3 dBA**

Example 2

SCF56B8-160M-4G, consumed power $P_a = 11$ kW
 Expected sound pressure level at 1 meter?
 Service factor $SF = 3.45$ ' Use half the catalog power data (see Gear unit selection tables)
 $P/2 = (39/2)$ kW = 19.5 kW $\rightarrow L_p' = (72 \pm 2)$ dBA
 Distance = 1 m, $n_1 = 1500$ 1/min, $i < 11.2$ ' $K_1 = K_2 = 0, K_3 = 2$ dBA
 $L_p = (L_p' + 2)$ dBA = (74 ± 2) dBA
 Guaranteed value = $(74 + 2 + 3)$ dBA = **79 dB**

7.4.10 Mass moments of inertia J (10^{-3} kgm²)

The listed values each refer to the drive shaft of the gear unit.

SI4

2/3-stage gear units J (10^{-3} kgm²)

i_N	Size															
	16B	16C	26B	26C	36B	36C	46B	46C	56B	56C	66B	66C	76B	76C	86C	96C
5											14.5		37			
5.6	0.085		0.22		0.81		1.85		6.1		12.5		30			
6.3	0.077		0.2		0.73		1.65		5.4		9.9		25.5			
7.1	0.069		0.18		0.64		1.5		4.7		9.1		21			
8	0.059		0.16		0.58		1.25		4.1		7.5		21.5			
9	0.055		0.135		0.53		1.15		3.7		6.5		15.5			
10	0.049		0.12		0.47		1.05		3.2		5.9		13.5			
11.2	0.045		0.11		0.44		0.89		2.8		5		11			
12.5	0.043		0.093		0.4		0.82		2.55		4.2		9.7		41	
14	0.04		0.085		0.37		0.71		2.35		3.8		8.1		34	
16	0.036		0.077		0.35		0.64		2		3.1		7		28	
18	0.033		0.069	0.21	0.32		0.58		1.8		2.6		5.9		23.5	
20	0.031		0.062	0.195	0.3		0.53		1.65		2.2	11	5	27.5	23	49
22.4	0.029		0.055	0.18	0.28	0.62	0.47		1.55		2	9.8	4.2	23	17	40

7. Technical Appendix

25	0.0275	0.065	0.048	0.17	0.26	0.59	0.42		1.4		1.7	7.8	3.4	19.5	15	33
28	0.0265	0.061	0.045	0.155	0.255	0.55	0.37	1.14	1.3	3.65	1.4	7.3	2.9	16.5	12	27
31.5	0.0255	0.057	0.041	0.14	0.235	0.52	0.35	1.08	1.15	3.45	1.2	6.1	1.3	17.5	10.5	26.5
35.5	0.0245	0.053	0.037	0.125	0.23	0.48	0.31	1.02	1.1	3.25	1	5.4	2	12.5	8.7	19.5
40	0.023	0.048	0.032	0.11	0.22	0.45	0.27	0.96	1	3	0.9	4.9	1.7	11	7.5	17
45		0.044	0.028	0.1	0.215	0.42	0.23	0.84	0.9	2.65	0.7	4.3	1.4	9.3	6.3	13.5
50		0.042	0.024	0.086	0.205	0.38	0.2	0.77		2.4	0.6	3.7		8.2	5.3	11.5
56		0.039		0.08		0.36		0.67		2.2	0.4	3.3		7	4.4	9.8
63		0.035		0.072		0.34		0.61		1.9		2.8		6	3.5	8.3
71		0.032		0.065		0.32		0.56		1.75		2.3		5.2	3.1	6.9
80		0.031		0.059		0.295		0.51		1.55		2		4.4	1.5	5.8
90		0.0285		0.052		0.275		0.45		1.5		1.8		3.7	2	4.8
100		0.0275		0.047		0.26		0.41		1.35		1.5		3	1.7	3.8
112		0.0265		0.044		0.255		0.36		1.3		1.3		2.6	1.4	3.3
125		0.0255		0.04		0.235		0.35		1.15		1.1		1.1		1.7
140				0.035		0.23		0.31		1.1		0.9		1.8		2.2
160				0.03				0.29		0.98		0.8		1.5		1.9
180								0.27				0.6		1.3		1.5
200												0.5				
224												0.4				

5-stage gear units J (10^{-3} kgm²)

i_N	Size							
	26C16B	36C16B	46C16B	56C16B	66C36B	76C36B	86C36B	96C36B
125							1.35	
140							1.3	
160		0.083			1.05		1.1	
180	0.086	0.074		0.12	1		0.93	
200	0.078	0.063	0.095	0.11	0.99	1.25	0.99	1.45
224	0.07	0.092	0.084	0.092	0.97	1.05	0.85	1.35
250	0.06	0.082	0.075	0.077	0.95	0.89	0.74	1.25
280	0.056	0.074	0.064	0.068	0.84	0.77	0.66	1.05
315	0.05	0.062	0.059	0.06	0.72	0.69	0.57	0.91
355	0.045	0.058	0.052	0.055	0.64	0.59	0.52	0.78
400	0.043	0.051	0.048	0.05	0.33	0.54	0.46	0.7
450	0.04	0.047	0.045	0.046	0.3	0.48	0.45	0.6
500	0.036	0.044	0.042	0.04	0.32	0.42	0.39	0.54
560	0.033	0.041	0.037	0.036	0.32	0.34	0.38	0.48
630	0.031	0.037	0.034	0.034	0.32	0.31	0.33	0.44
710	0.029	0.034	0.032	0.031	0.31	0.33	0.3	0.4
800	0.0275	0.032	0.03	0.0295	0.29	0.31	0.3	0.4
900	0.0265	0.029	0.028	0.028	0.31	0.28	0.27	0.34
1000	0.0255	0.028	0.027	0.027	0.29	0.27	0.265	0.31
1120	0.0245	0.027	0.026	0.0255	0.265	0.25	0.245	0.31
1250	0.023	0.026	0.0245	0.0235	0.26	0.23	0.225	0.275

7. Technical Appendix

SP4

2-stage gear units J (10^{-3} kgm²)

i _N	Size							
	16B	26B	36B	46B	56B	66B	76B	86B
3.15								
3.55								
4								
4.5								
5								
5.6	0.085	0.22	0.81	1.85	6.1			
6.3	0.077	0.2	0.73	1.65	5.4	9.9	20	32
7.1	0.069	0.18	0.64	1.5	4.7	8.5	17	27.2
8	0.059	0.16	0.58	1.25	4.1	7.4	14.5	23.2
9	0.055	0.135	0.53	1.15	3.7	6.4	13	21
10	0.049	0.12	0.47	1.05	3.2	5.8	11	17.5
11.2	0.045	0.11	0.44	0.89	2.8	4.9	10	12.75
12.5	0.043	0.093	0.4	0.82	2.55	4.5	8.9	11.25
14	0.04	0.085	0.37	0.71	2.35	4	7.9	8.75
16	0.036	0.077	0.35	0.64	2	3.4	6.4	
18	0.033	0.069	0.32	0.58	1.8	3	5.6	
20	0.031	0.062	0.3	0.53	1.65	2.75	4.8	
22.4	0.029	0.055	0.28	0.47	1.55	2.6	4.5	
25	0.0275	0.048	0.26	0.42	1.4	2.3	3.8	
28	0.0265	0.045	0.255	0.37	1.3	2.2	3.5	
31.5	0.0255	0.041	0.235	0.35	1.15	1.9	2.9	
35.5	0.0245	0.037	0.23	0.31	1.1			
40	0.023	0.032	0.22	0.27	1			
45	0.022	0.028	0.215	0.23	0.9			
50	0.021	0.024	0.205	0.2	0.85			
63	0.0175	0.036	0.17	0.17				
71	0.016	0.0325	0.16	0.15				
80	0.0155	0.0295	0.1475					
90	0.0142	0.026	0.1375					
100	0.0137	0.0235	0.13					

3-stage gear units J (10^{-3} kgm²)

i _N	Size				
	46C	56C	66C	76C	86C
35.5	1.02	3.25			11
40	0.96	3	3.4	3.8	9
45	0.84	2.65	2.95	3.3	7.4
50	0.77	2.4	2.7	3	6.4
56	0.67	2.2	2.5	2.75	5.1
63	0.61	1.9	2.2	2.4	4.1
71	0.56	1.75	2	2.15	3.3
80	0.51	1.55	1.85	1.95	2.95
90	0.45	1.5	1.75	1.85	2.5
100	0.41	1.35	1.6	1.65	2.05
112	0.36	1.3	1.55	1.6	1.75
125	0.35	1.15	1.4	1.45	1.4
140	0.31	1.1	1.35	1.35	1.2
160	0.29	0.98	1.25	1.25	0.90
180	0.27				0.76

7. Technical Appendix

SK4

3-stage gear units J (10^{-3} kgm²)

i_N	Size							
	26C	36C	46C	56C	66C	76C	86C	96C
7.1	0.232							
8	0.185	0.473	2	5.4				
9	0.165	0.403	1.55	4.9	8.2	18.5	42	90
10	0.133	0.313	1.3	4.1	7.3	15.5	35	72
11.2	0.106	0.267	1.05	3.3	6	12	25.5	58
12.5	0.24	0.225	0.88	2.6	4.7	9.7	22.5	46
14	0.202	0.535	1.7	4.8	3.7	8.3	17.5	40
16	0.187	0.475	1.35	4.4	3.1	6.7	14.5	32
18	0.161	0.398	1.1	3.7	6.3	15.5	35	79
20	0.139	0.359	0.891	2.95	5.6	13.5	29	63
22.4	0.129	0.322	0.768	2.35	4.7	10.5	21.5	51
25	0.12	0.307	0.609	2	3.7	8.4	19	41
28	0.105	0.26	0.52	1.6	2.95	7.2	15	35
31.5	0.0984	0.253	0.439	1.4	2.45	5.8	12.5	28.5
35.5	0.086	0.228	0.392	1.2	1.95	4.7	11	24.5
40	0.0827	0.208	0.305	0.984	1.65	4	9	19.5
45	0.0761	0.198	0.271	0.854	1.45	3.2	7.4	16.5
50	0.0717	0.183	0.218	0.675	1.15	2.95	6.4	13.5
56	0.0676	0.173	0.179	0.516	1	2.5	5.1	11.5
63	0.0646	0.165	0.154	0.48	0.792	1.9	4.1	9.3
71	0.0617	0.158	0.119	0.4	0.646	1.55	3.3	7.3
80	0.0586	0.151	0.108	0.33	0.598	1.3	2.95	6.1
90	0.0567	0.147	0.0819	0.3	0.504	1.15	2.5	4.8
100	0.0494	0.142	0.069	0.237	0.42	0.918	2.05	4.1
112	0.049	0.137	0.0591	0.211	0.383	0.809	1.75	3.6
125	0.0486	0.134	0.0498	0.159	0.31	0.608	1.4	2.7
140	0.0483	0.121	0.0137	0.137	0.28	0.523	1.2	2.3
160			0.0119		0.22	0.442	0.904	3.1
180			0.00895		0.195		0.764	
200							0.635	

7. Technical Appendix

4/5-stage gear units J (10^{-3} kgm²)

i_N	Size							
	26C16B	36C16B	46C16B	56C16B	66C16B	76C36B	86C36B	96C36B
160	0.0716	0.0847						
180	0.061	0.0751	0.099			0.996		1.7
200	0.0566	0.0638	0.0975	0.123	0.147	0.877		1.6
225	0.0503	0.0588	0.0869	0.116	0.138	0.756	1.1	1.4
250	0.046	0.0521	0.0768	0.112	0.107	0.671	0.958	1.2
280	0.0438	0.0474	0.0651	0.0985	0.102	0.602	0.819	1
315	0.0407	0.045	0.0598	0.0859	0.085	0.528	0.721	0.881
355	0.0365	0.0416	0.0529	0.0723	0.0647	0.486	0.642	0.768
400	0.0334	0.0372	0.052	0.0655	0.0657	0.437	0.56	0.663
450	0.0313	0.0339	0.0474	0.0575	0.0583	0.4	0.512	0.594
500	0.0293	0.0318	0.045	0.0518	0.0537	0.373	0.458	0.523
560	0.0277	0.0296	0.0416	0.0485	0.0485	0.318	0.416	0.468
630	0.0267	0.028	0.0342	0.0444	0.0372	0.315	0.385	0.425
710	0.0256	0.0269	0.0339	0.0393	0.0381	0.292	0.348	0.379
800	0.0246	0.0258	0.0318	0.0356	0.0352	0.269	0.323	0.348
900	0.0231	0.0247	0.0296	0.0331	0.0323	0.262	0.298	0.318
1000	0.0221	0.0232	0.028	0.0307	0.0302	0.241	0.274	0.291
1120	0.0221	0.0211	0.0269	0.0289	0.0286	0.235	0.267	0.28
1250	0.022	0.0221	0.0258	0.0276	0.0272	0.224	0.244	0.254

7.4.11 External loads at the output shaft

Calculation

Occurring radial load

The radial load exerted through a power transmission element is derived from the following formula:

$$F_r = \frac{9550 \times P_a \times f_r}{n_2 \times r} \quad \text{or} \quad F_r = \frac{T_a \times f_r}{r}$$

whereby

- F_r = calculated radial load (N)
- P_a = effective output (kW)
- T_a = output torque (Nm)
- n_2 = output speed (min⁻¹)
- r = pitch circle radius of power transmission element (m)
- f_r = factor for the radial load
 - = 1 for a sprocket (single string)
 - = 1.25 for a gear wheel or sprocket (double string)
 - = 1.5 for a V-belt pulley
 - = 2.5 for a flat belt pulley

7. Technical Appendix

Point of action of the radial load

The distance of the point of action to the shaft shoulder must be as small as possible.

The following tables provide the permissible rated external loads (F_{rN}) at four different points of action.

For other points of action, the values can be determined through interpolation.

Check:

Check whether	$F_{rN} = F_r \times SF_{min}$
----------------------	--

whereby

SF_{min} = required Service Factor

F_{rN} = permissible rated external load

Permissible rated external loads F_{rN}^* (N) at the output shaft for multi-stage gear units (entire S4 family).

Point of action A_r

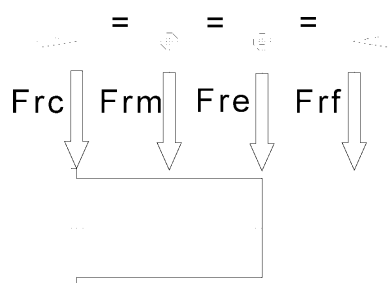
n_2	A_r	Size								
		16	26	36	46	56	66	76	86	96
≤ 20	A_{rc}	1.4	1.25	1.25	1.25	1.25	1.25	1.3	1.25	1.15
	A_{rm}	1	1	1	1	1	1	1	1	1
	A_{re}	0.55	0.5	0.5	0.8	0.85	0.65	0.6	0.6	0.65
	A_{rf}	0.4	0.3	0.3	0.55	0.6	0.45	0.45	0.45	0.45
45	A_{rc}	1.4	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.15
	A_{rm}	1	1	1	1	1	1	1	1	1
	A_{re}	0.55	0.5	0.5	0.8	0.85	0.75	0.8	0.6	0.65
	A_{rf}	0.4	0.3	0.3	0.55	0.6	0.5	0.55	0.45	0.45
60	A_{rc}	1.4	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.15
	A_{rm}	1	1	1	1	1	1	1	1	1
	A_{re}	0.55	0.5	0.5	0.8	0.85	0.8	0.85	0.7	0.65
	A_{rf}	0.4	0.3	0.3	0.55	0.6	0.55	0.55	0.5	0.45
75	A_{rc}	1.25	1.25	1.3	1.25	1.25	1.25	1.25	1.25	1.15
	A_{rm}	1	1	1	1	1	1	1	1	1
	A_{re}	0.6	0.75	0.55	0.85	0.85	0.85	0.85	0.8	0.7
	A_{rf}	0.4	0.45	0.35	0.6	0.7	0.6	0.6	0.55	0.45
95	A_{rc}	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.15
	A_{rm}	1	1	1	1	1	1	1	1	1
	A_{re}	0.6	0.8	0.6	0.8	0.85	0.85	0.8	0.8	0.7
	A_{rf}	0.45	0.5	0.4	0.6	0.7	0.65	0.65	0.55	0.45
150	A_{rc}	1.25	1.2	1.2	1.25	1.25	1.25	1.25	1.25	1.2
	A_{rm}	1	1	1	1	1	1	1	1	1
	A_{re}	0.65	0.85	0.7	0.85	0.85	0.85	0.85	0.85	0.7
	A_{rf}	0.45	0.65	0.45	0.6	0.7	0.7	0.7	0.6	0.45
240	A_{rc}	1.25	1.25	1.15	1.25	1.25	1.25	1.25	1.25	1.25
	A_{rm}	1	1	1	1	1	1	1	1	1
	A_{re}	0.65	0.85	0.8	0.85	0.85	0.85	0.85	0.8	0.75
	A_{rf}	0.45	0.75	0.55	0.7	0.7	0.7	0.7	0.65	0.5

$$F_{rc} = F_{rN} \times A_{rc}$$

$$F_{rm} = F_{rN} \times A_{rm}$$

$$F_{re} = F_{rN} \times A_{re}$$

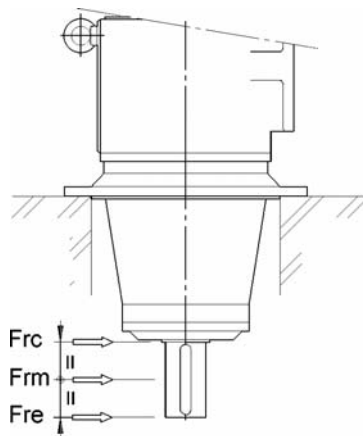
$$F_{rf} = F_{rN} \times A_{rf}$$



7. Technical Appendix

Permissible rated external loads F_{rN} (N) at the output shaft for multi-stage gear units with elongated bearing casing (SI4 only)

		Version SICL - SIFL - SICP - SIFP for SI4			
n_2	F_{rN}	Size			
min^{-1}	(N)	46B	46C	56B	56C
≤ 60	F_{rc}	32500	19000	54500	22900
	F_{rm}	15000	8900	26500	11000
	F_{re}	9900	5800	17500	7200
75	F_{rc}	32500	19000	54500	22900
	F_{rm}	15000	8900	26500	11000
	F_{re}	9900	5800	17500	7200
95	F_{rc}	28000	15500	54500	22900
	F_{rm}	13500	6500	26500	11000
	F_{re}	9000	5000	17500	7200
150	F_{rc}	26000	-	48000	-
	F_{rm}	13500	-	25000	-
	F_{re}	9000	-	16000	-
240	F_{rc}	26000	-	48000	-
	F_{rm}	13500	-	25000	-
	F_{re}	9000	-	16000	-



$$F_{rc} = FrN \times A_{rc}$$

$$F_{rm} = FrN \times A_{rm}$$

$$F_{re} = FrN \times A_{re}$$

7.4.12 Installation, General Conditions

The drive units must be installed or attached free of vibration or mounted on a flat, rigid and solid frame or foundation in order to avoid vibrations.

CAUTION!

The drive units must be aligned with utmost care! Stress and strain in the housing must be avoided.

To align the gear unit, place it on 3 of the 4 mounting points and use shims to match the fourth point to an accuracy of less than 0.2 mm.

7. Technical Appendix

After the gear unit has been aligned correctly and after the shims have been fitted, the gear unit must be firmly screwed down to the foundation. Screw class 8.8 in accordance with DIN 267. Screw size: see dimensional drawings. The screws must be tightened to the torque requirements as specified by the manufacturer. Trouble-free lubrication and ventilation are ensured only when the gear unit is mounted in the correct position.

It is necessary to correct the amount of lubricant and the position of the breather screw if the mounting position of the gear unit is changed.

Before start-up, check the position-dependent oil level by loosening the oil level plug of the drive unit.

CAUTION!

Sizes 1 and 2 are lubricated for life. In this case, the surface temperature and the noise level emitted by the gear unit must be constantly monitored during the procedure.

Intermediate inserts or pads made of plastic must be used if there is a risk of electrochemical corrosion between the gear unit and system. Gear unit casings must be grounded.

The cooling air intake of the motor must not be obstructed.

7.4.12 Mounting power transmission elements

Observe the operating instructions provided with the power transmission elements. Use elastic couplings for direct power transmission from gear unit to driven machine, while slip couplings are required in case of a blocking risk. Only use rigid couplings in connection with unsupported or overhanging shafts (e.g. with agitators or aerators). Due to the radial loads that occur, power transmission elements such as flat belts or V-belts, gearwheels and sprockets, cranks, eccentric cams etc. are to be arranged as close to the gear unit housing as possible. Consequently, the bearings and drive shaft are then subject to the lowest load. Refer to the technical sales documentation for the maximum permissible load values.

The protective coating on the end of the shaft must be removed by suitable means prior to mounting the transmission elements. The same procedure applies for transmitting the drive power to the gear unit in connection with a free drive shaft. Great care must be taken while fitting power transmission elements onto the ground output shaft of the gear unit, and can be carried out using the threaded hole provided for this purpose on the end face of the shaft. Preferably, the power transmission element should be heated to a temperature of approx. 100 C°. The hole is to be dimensioned in accordance with ISO H7. All parts must be thoroughly deburred, cleaned and the fit locations lightly greased. Avoid all knocks and impact to the end of the shaft.

7.4.13 Mounting coupling on output shaft

Observe the operating instructions from the coupling manufacturer. Accurate alignment and regular inspection are necessary.

The maximum permissible shaft extensions of the coupling used must be maintained and checked.

The specified distance between the coupling halves should be maintained.

Only adjust the radial offset after the angle offset and the distance between the shaft ends have been checked. Recheck the angle offset after correcting the radial offset.

7. Technical Appendix

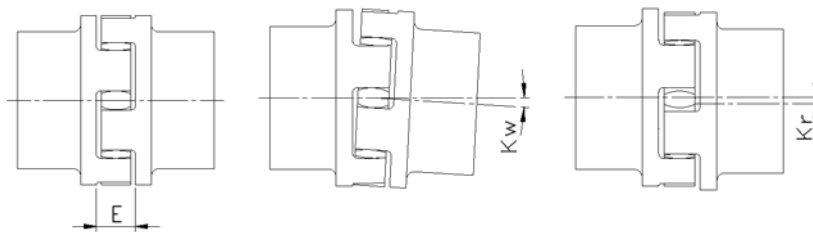
7.4.14 Mounting Coupling on Input Shaft to Install the Motor (I-lantern)



If the gear unit is supplied equipped with an I-lantern, particular care must be taken while fitting the motor to ensure the correct distance of the coupling half and to guarantee flush alignment of the motor shaft with respect to the input shaft of the gear unit.

Particular care must be taken when aligning the motor and mounting the coupling half supplied together with the gear unit to ensure that the following conditions (see graphic) are maintained as specified by the manufacturer. Avoid all impact and knocks during the mounting procedure.

Aligning the coupling halves of the motor and gear unit



7.4.15 Mounting a Flange Motor with Coupling

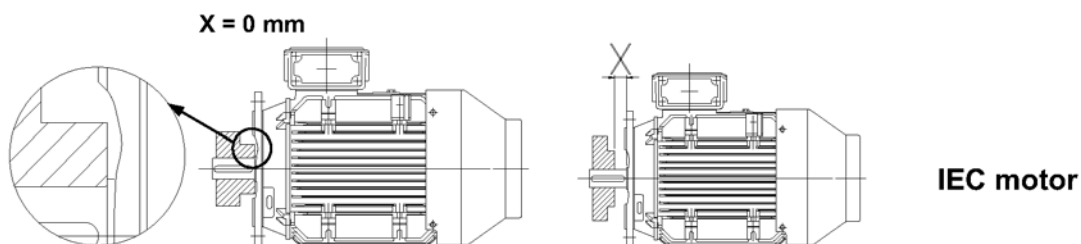


If the unit is supplied equipped with a U-lantern and without a motor, care must be taken while mounting the flange motor to ensure that the coupling half is fitted correctly. The connecting screws must be tightened to the torque specified by the screw manufacturer. Screw strength class 8.8 in accordance with DIN 267.

Particular care must be taken when mounting the coupling half supplied with the gear unit on the motor shaft to ensure that the distance "X" is maintained (see table below). With distance measure $X = 0$ mm, the coupling half is pushed up to the shaft shoulder of the IEC motor. The coupling fit must be checked by opening the screw plug item no. 1215. After a visual inspection, it must be firmly closed again.

Avoid all impact and knocks during the mounting procedure.

Mounting the coupling half on the IEC motor shaft



7. Technical Appendix

Gear unit size SI4	Motor size										
	63	71	80	90	100 112	132	160	180	200	225	250 280
SI16	0	0	0	0	0						
SI26											
SI36		0	0	0	0	0					
SI46											
SI56			0	0	0	0	65	65			
SI66, SI76 SI86, SI96					0	0	65	29.5*	54	84	75
Feather key Part of the scope of delivery	Standard	Standard	Standard	8x7x15	8x7x15	10x8x40	Standard	Standard *14x9x80	Standard	Standard	Standard
Distance measure X [mm]											

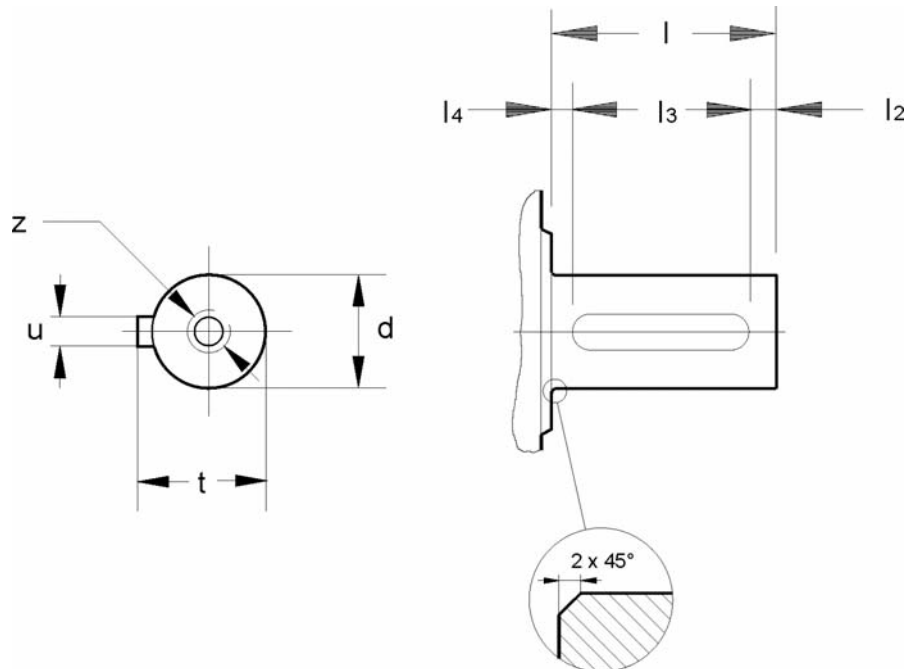
Gear unit size SP4	Motor size										
	63	71	80	90	100 112	132	160	180	200	225	250 280
SP16											
SP26	0	0	0	0	0						
SP36		0	0	0	0	0					
SP46											
SP56			0	0	0	0	65	65			
SP66, SP76 SP86					0	0	65	29.5*	54	84	75
Feather key Part of the scope of delivery	Standard	Standard	Standard	8x7x15	8x7x15	10x8x40	Standard	Standard * 14x9x80	Standard	Standard	Standard
Distance measure X [mm]											

Gear unit size SK4	Motor size										
	63	71	80	90	100 112	132	160	180	200	225	250 280
SK26	0	0	0	0	0						
SK36											
SK46		0	0	0	0	0					
SK56											
SK66			0	0	0	0	65	65			
SK76, SK86 SK96					0	0	65	29.5*	54	84	75
Feather key Part of the scope of delivery	Standard	Standard	Standard	8x7x15	8x7x15	10x8x40	Standard	Standard * 14x9x80	Standard	Standard	Standard
Distance measure X [mm]											

7. Technical Appendix

7.4.16 Mounting gear units with solid shaft

Shaft dimensions

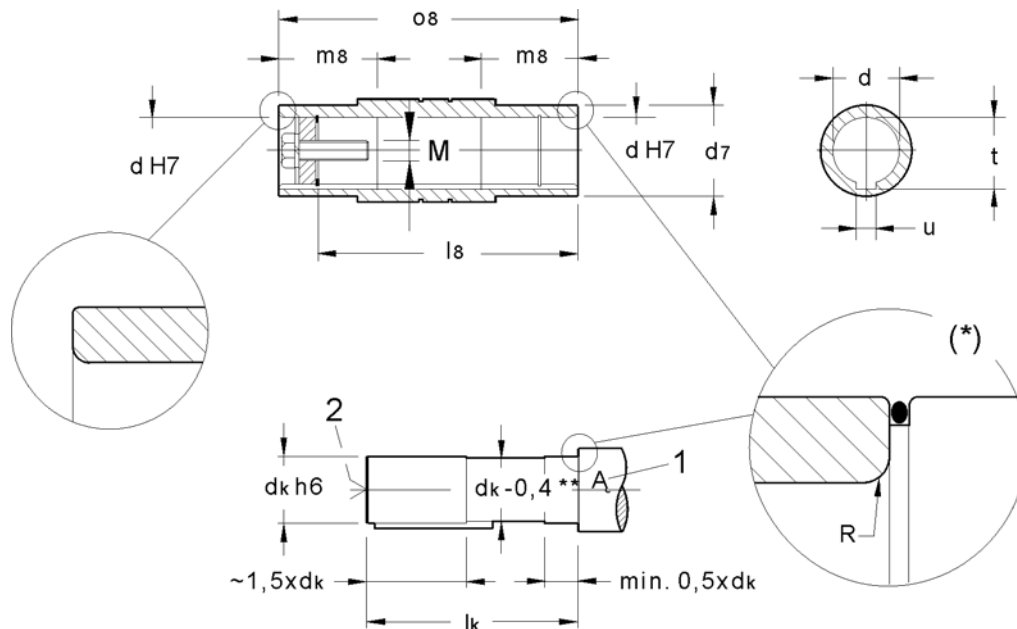


Size	d	L	l ₂	l ₃	l ₄	t	u	z
16	25k6	50	5	40	5	28	8	M10x22
26	30k6	60	3,5	50	6,5	33	8	M10x22
36	40k6	80	2	70	8	43	12	M16x36
46	50k6	100	10	80	10	53,5	14	M16x36
56	60m6	120	5	110	5	64	18	M20x42
66	70m6	140	4	125	11	74,5	20	M20x42
76	90m6	170	5	153	12	95	25	M24x50
86	110m6	210	5	193	12	116	28	M24x50
96	120m6	210	5	193	12	127	32	M24x50

Feather key to DIN 6885-T1-"Form A"

7. Technical Appendix

7.4.17 Mounting shaft-mounted geared motors with hollow shaft with keyway

Shaft dimensions

Size	d	d ₇	l ₈	M	m ₈	o ₈	R	t	u	d _k	L _k
16	30	45	105	M10	45	120	3	33.3	8	30	82
26	35	50	132	M12	50	150	3	38.3	10	35	109
36	40	55	156	M16	60	180	3	43.3	12	40	127
46	50	70	183	M16	65	210	4	53.8	14	50	154
56	60	85	210	M20	75	240	4	64.4	18	60	174
66	70	100	270	M20	80	300	4	74.9	20	70	234
76	90	120	313	M24	90	350	4	95.4	25	90	279
86	100	140	373	M24	100	410	4	106.4	28	100	330
96	120	160	460	M24	120	500	4	127.4	32	120	416

- 1: Driven machine drive shaft
 2: Centering to DIN 332 "Form D"

(*) An O-ring is recommended to provide increased protection against moisture.
 The dimensions apply to the hollow shaft.

** Recommended for simple mounting.

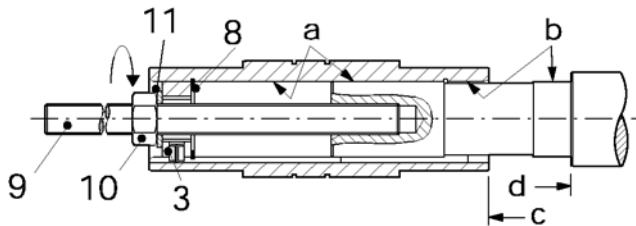
Keyways to DIN 6885-T1-"Form A"
 Feather key to DIN 6885-T1-"Form A"

Occurring loads must be considered for the selection of the material of the machine shaft.

7. Technical Appendix

Assembly

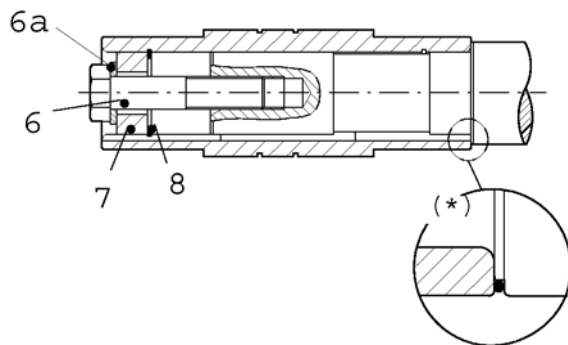
- Clean and degrease contact surfaces (a) and (b).
- Grease contact surfaces (a) and (b) with "Molykote D321R" or an equivalent lubricant.
- Slide the geared motor onto the driven shaft until the faces (c) and (d) are positioned opposite each other. Fit a threaded rod (9), nut (10), puller ring (11), thrust washer (3) and a retaining ring (8) as required.
- Remove tools (3, 9, 10, 11).



Mounting

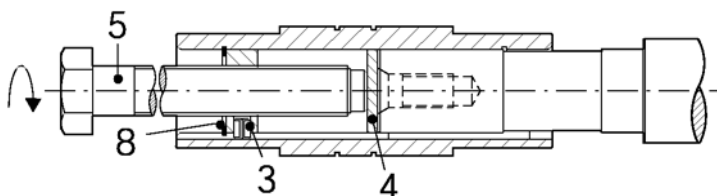
- Fit the mounting ring (7) against the retaining ring (8). Secure the machine shaft by means of mounting screw (6) and washer (6a).
- Fit protective cover.
- If the shaft is subject to external axial loads, follow the special guidelines provided on the dimensioned drawing.

(*) An O-ring is recommended to provide increased protection against moisture.



Disassembly

- Remove mounting screw (6), washer (6a), mounting ring (7) and retaining ring (8).
- Fit pulling washer (4) and thrust washer (3) and reinstall retaining ring (8).
- Fit pulling screw (5) in threaded center of thrust washer (3).
- Remove the geared motor from the drive shaft by tightening the screw (5).

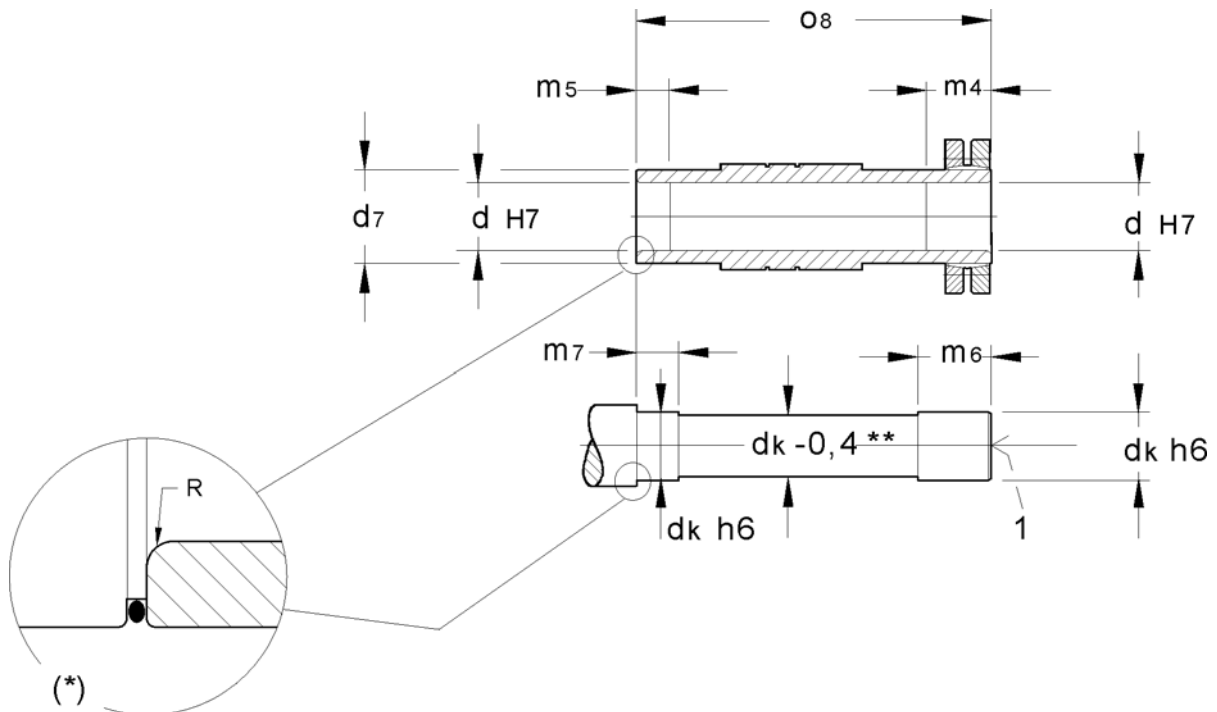


Note:

Items 3, 4, 5, 9, 10 and 11 do not belong to the standard scope of delivery, however, they are optionally available in the form of an assembly kit.

7. Technical Appendix

7.4.18 Mounting shaft-mounted geared motors with hollow shaft with shrink-fit ring

Shaft dimensions

Size	d	dk	d7	m4	m5	m6	m7	o8	R
16	30	30	45	31	20	36	25	146	3
26	35	35	50	32	20	37	25	177	3
36	40	40	55	38	20	43	25	208	3
46	50	50	70	36	25	41	30	241	4
56	65	65	85	41	40	46	30	281	4
66	75	75	100	55	50	60	55	345	4
76	95	95	120	65	60	75	70	405	4
86	105	105	140	85	70	95	80	485	4
96	125	125	160	90	80	100	90	580	4

1) Centering to DIN 332 "Form D" recommended for simple assembly/disassembly

(*) An O-ring is recommended to provide increased protection against moisture.
The dimensions apply to the hollow shaft.

** Recommended for simple mounting.

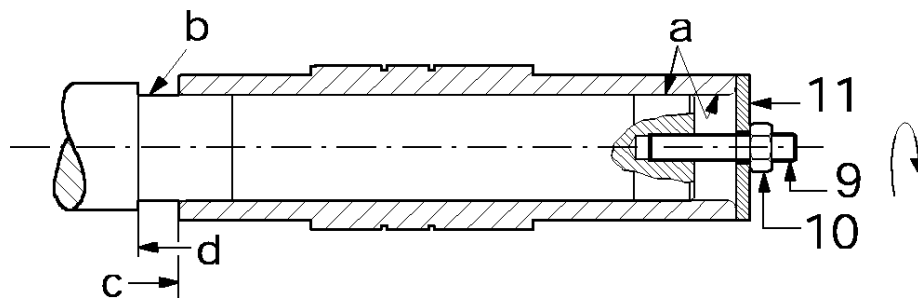
Occurring loads must be considered for the selection of the material of the machine shaft.

7. Technical Appendix

The shrink-fit ring supplied by Rexnord-Stephan is ready for installation.
Do not pull apart before initial assembly.

Assembly

- Clean and degrease contact surfaces (a) and (b).
- Grease contact surface (b) - BUT ON NO ACCOUNT contact surface (a) - with "Molykote D321R" or an equivalent lubricant.
- Slide the geared motor onto the driven shaft until the faces (c) and (d) are positioned opposite each other. If necessary, fit a threaded rod (9), nut (10) and a thrust washer (11).
- Remove tools (9, 10, 11).



To prevent the shaft slipping, the screws must be tightened to the torque specified in the table below in order to be able to transmit the output torque specified on the type identification plate.

Mounting

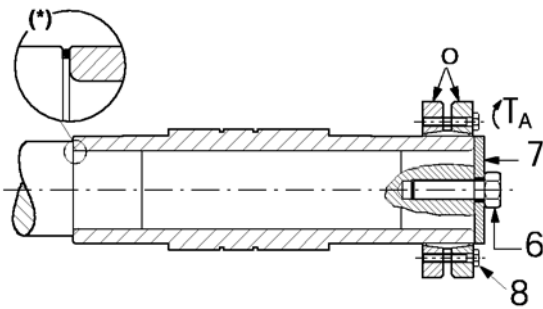
- Install shrink-fit ring. Remove the spacer rings fitted between the outer rings (o) for transportation purposes.
IMPORTANT: The two outer rings (o) must be arranged plane-parallel during the assembly procedure and while tightening the screws.
- Use a torque wrench to tighten the screws (8) in stages one after the other until the specified tightening torque TA (see table) is reached. Do not tighten the screws crosswise.
- Fit protective cover.

Size	TA (Nm)
1	12
2	12
3	12
4	12
5	30
6	35
7	59
8	120
9	250

CAUTION!

The screws for the shrink-fit ring must never be tightened if the shrink-fit ring is not fitted.

7. Technical Appendix



Securing in connection with axial load

A securing ring (7) and screw (6) must be fitted if the axial load is not taken up by the shoulder of the machine shaft.

Disassembly

- Release all screws (8) evenly by turning a quarter turn one after the other.
- Remove the shrink-fit ring from the hollow shaft.
- Remove the gear unit from the drive shaft.

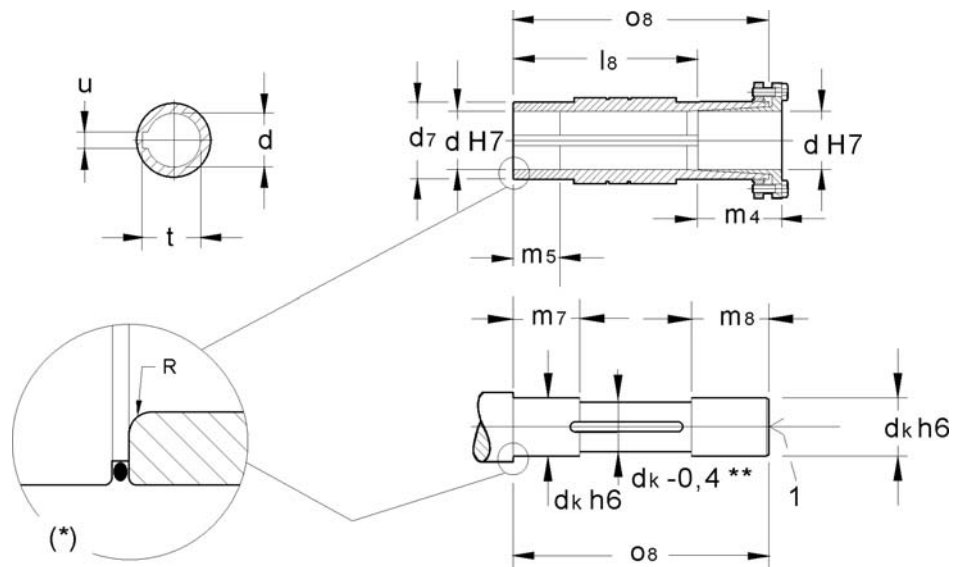
Note: Items 6, 7, 9, 10 and 11 do not belong to the standard scope of delivery, however, they are optionally available in the form of an assembly kit.

Cleaning and lubricating

If reused, the removed shrink-fit rings need not be disassembled into individual parts for cleaning and lubricating purposes unless they are heavily soiled. After cleaning, grease the conical surfaces with "Molykote D321R" (or an equivalent, solid lubricant with a coefficient of friction of $\mu = 0.04$).

7.4.19 Mounting shaft-mounted geared motors with hollow shaft with conical taper bush

Shaft dimensions



Size	d	dk	d7	l8	m4	m5	m7	m8	o8	R	T	u
46	50	50	70	174	66.5	30	40	70	228	4	53.8	14
56	60	60	85	191	85	40	50	90	261	4	64.4	18
66	70	70	100	243	91	70	80	80	322	4	74.9	20
76	90	90	120	309	75.5	90	100	65	372	4	95.4	25
86	100	100	140	365	88	100	110	95	437	4	106.4	28
96	120	120	160	444	102	120	130	105	530	4	127.4	32

1) Centering to DIN 332 "Form D"

(*) An O-ring is recommended to provide increased protection against moisture. The dimensions apply to the hollow shaft.

** Recommended for simple mounting.

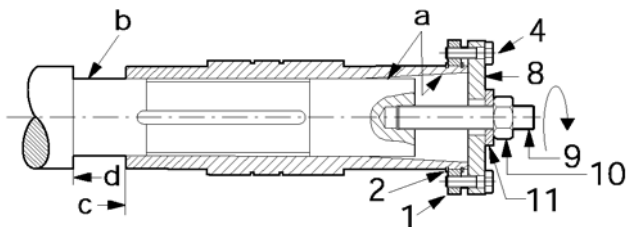
Occurring loads must be considered for the selection of the material of the machine shaft.

7. Technical Appendix

The Rexnord-Stephan taper bush system is supplied separately.

Assembly

- Clean and degrease contact surfaces (a) and (b).
- Grease contact surface (b) - BUT ON NO ACCOUNT contact surface (a) - with "Molykote D321R" or an equivalent lubricant.
- Fit support ring (1) either between the two shaft retaining rings (2) or between the shaft retaining ring (2) and the shoulder of the hollow shaft.
- Align the hollow shaft of the geared motor and the machine shaft. The feather key and keyway must be aligned opposite each other.
- Slide the geared motor onto the driven shaft until the faces (c) and (d) are positioned opposite each other. If necessary, fit a threaded rod (9), nut (10), washer (11) and a thrust washer (8). Secure the thrust washer with screws (4).
- Remove tools (8, 9, 10, 11).

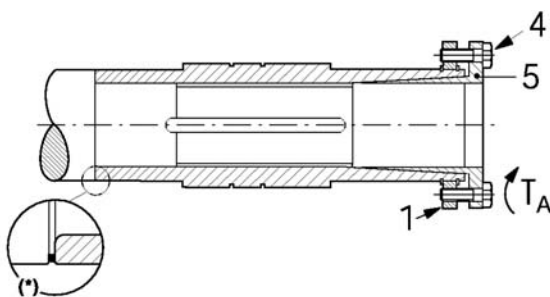


To prevent the shaft slipping, the screws must be tightened to the torque specified in the table below in order to be able to transmit the output torque specified on the type identification plate.

Mounting

- Fit conical clamping sleeve in hollow shaft without using force.
- Align through-holes in clamping sleeve with threaded holes in support ring (1), fit screws (4) and secure hand-tight.
- Use a torque wrench to tighten screws (4) in stages one after the other until the necessary tightening torque TA (see table) is reached.
- Retighten screws after 24 hours of operation.
- Fit protective cover.

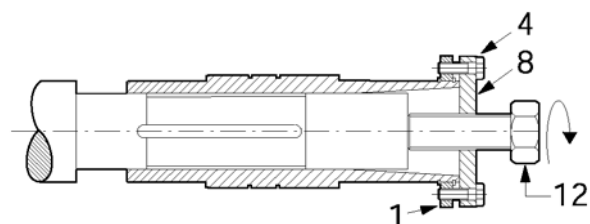
Size	TA (Nm)
4	15
5	30
6	30
7	30
8	60
9	60



Disassembly

- Release all screws (4) evenly by turning a quarter turn one after the other.
- Remove taper bushing (5). If the taper bushing (5) does not release of its own accord, fit two bolts in the tapped holes and tighten them against the support ring (1).
- Secure thrust washer (8) with pin (4).

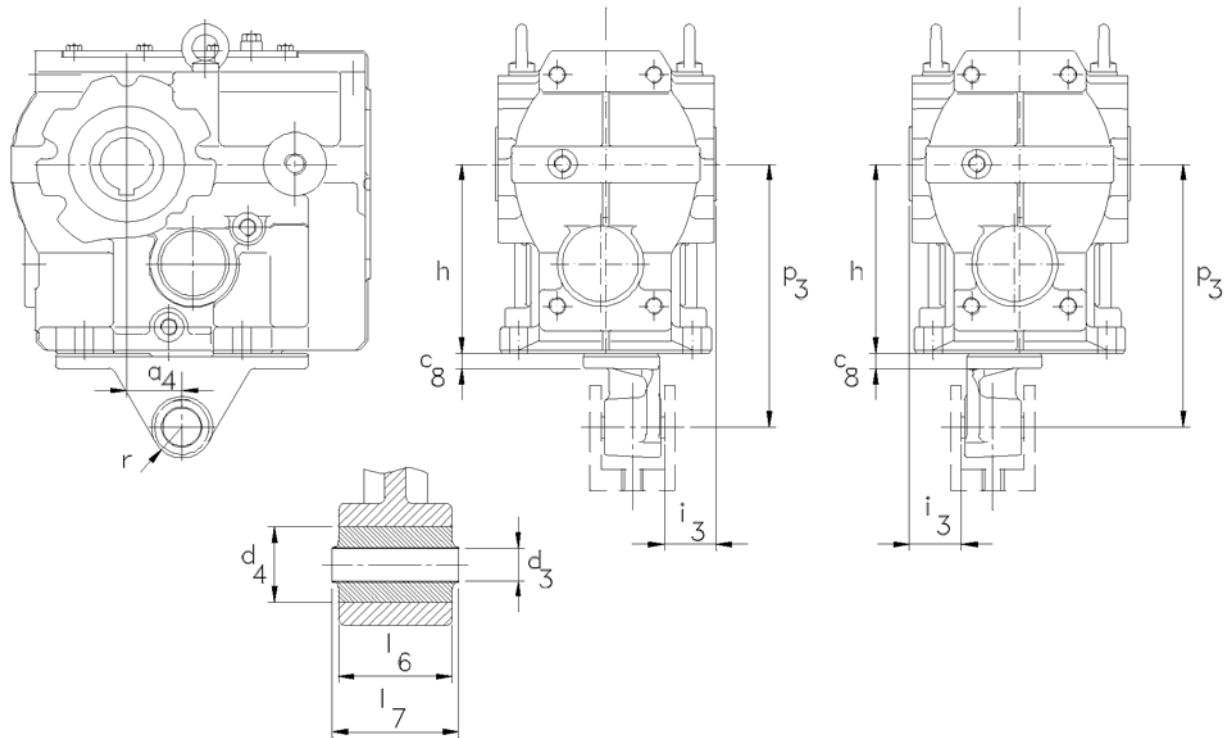
- Fit pulling screw (12) in threaded center of thrust washer (8).
- Tighten pulling screw (12) in order to remove the geared motor from the machine shaft.



7. Technical Appendix

7.4.20 Torque support SK4

The reaction forces in connection with helical bevel gear unit motors that are used as slip-on gear units must be taken up by a torque support (optionally available) or by a flexible element (no rigid connection).



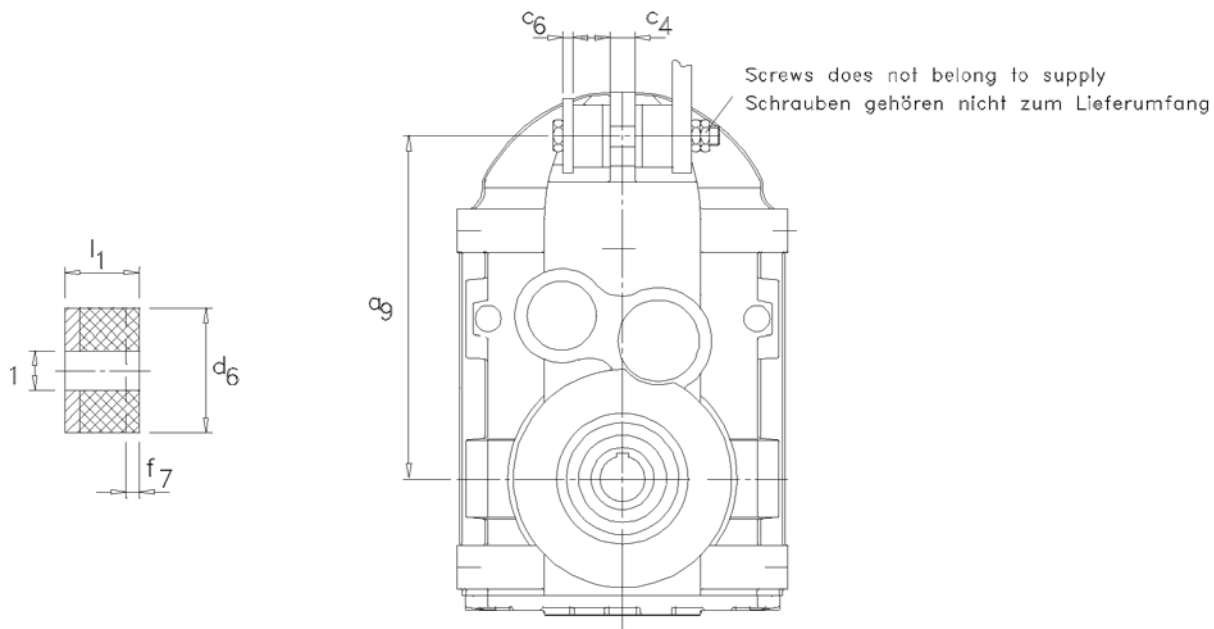
Size	a_4	r	c_8	h	i_3	p_3	d_3	d_4	l_6	l_7
SK26	30	22,5	12	112	20	160	10,4	26	31	36
SK36	45	29	13	140	25	200	16,4	36	54	60
SK46	52,5	29	14	180	25	250	16,4	36	54	60
SK56	60	41	16	212	30	300	25	52	72	80
SK66	70	41	17	265	40	350	25	52	92	100
SK76	74	41	20	315	45	450	25	52	92	100
SK86	60	70	45	375	7	550	40	103	110	126
SK96	50	70	45	450	2	700	40	103	110	126

Dimensions in mm

7. Technical Appendix

7.4.21 Torque support SP4

The reaction forces in connection with parallel shaft helical bevel geared motors that are used as slip-on gear units must be taken up by a torque support (optionally available) or by a flexible element (no rigid connection).

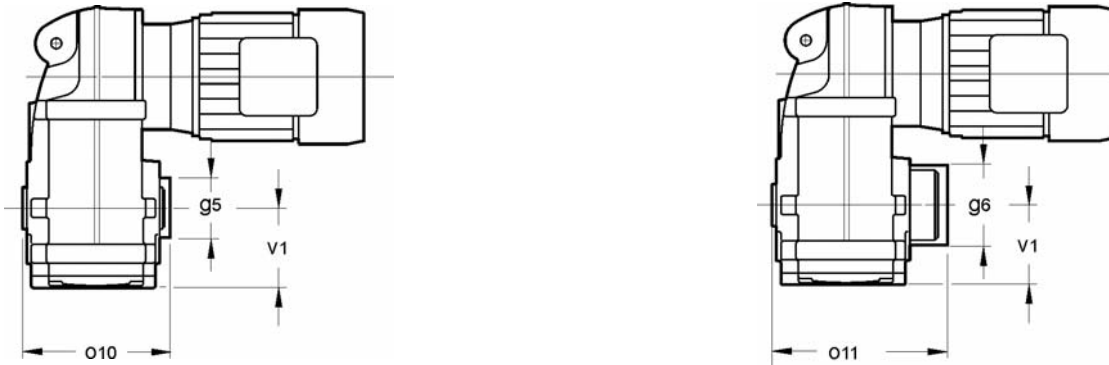


Size	a ₉	c ₄	c ₆ min	d ₁ + 0,5	d ₆	f ₇ *	l ₁
SP16	158	12	5	12.5	40	1.6	20
SP26	170	12	5	12.5	40	1.6	20
SP36	218	16	5	12.5	40	2.5	20
SP46	278	20	10	21	60	3.3	30
SP56	346	26	10	21	60	4.3	30
SP66	395	30	12	25	80	4	40
SP76	485	36	12	25	80	6.3	40
SP86	550	40	15	32	100	10.5	60

Dimensions in mm / *approx. spring excursion at Mamax

7. Technical Appendix

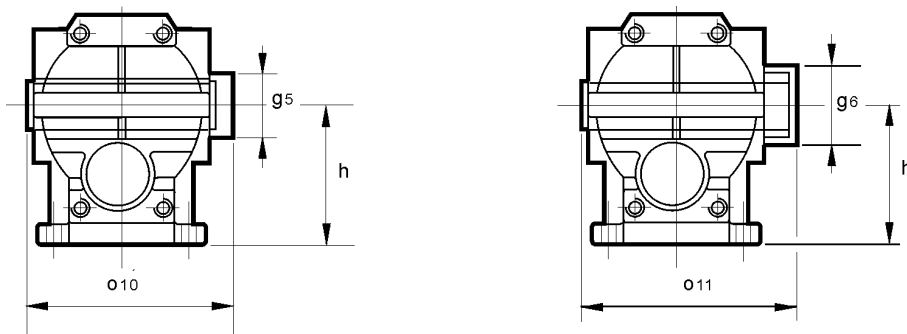
7.4.22 Protection covers for SP4 output shafts



Size	SP.H			SP.S / SP.B / SP.C		
	g_5	o_{10}	v_1	g_6	o_{11}	v_1
16	86	135	78	86	160	78
26	100	166	86	100	190	86
36	110	195	104.5	110	225	104.5
46	135	230	125	135	255	125
56	165	265	151.5	165	300	151.5
66	205	325	178	205	360	178
76	225	380	200	225	435	200
86						

The protection cover is not a part of the standard scope of delivery.

7.4.23 Protection covers for SK4 output shafts

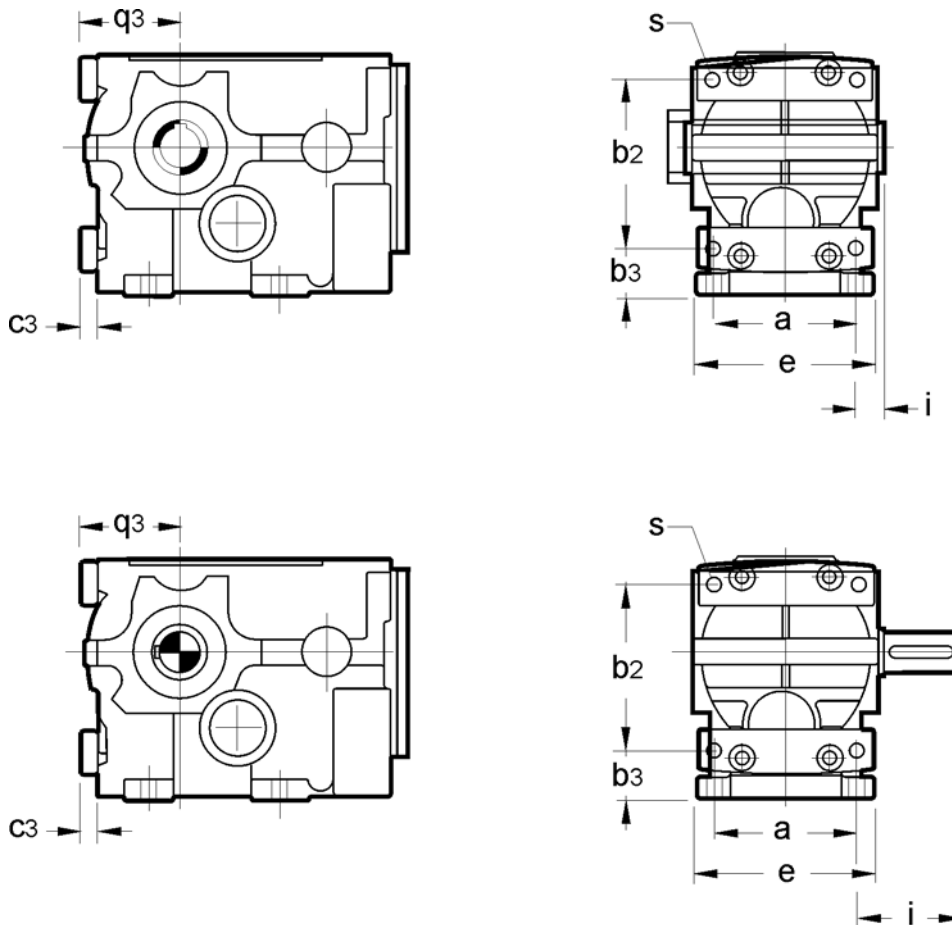


Size	SK.H			SK.S / SK.B / SK.C		
	g_5	o_{10}	h	g_6	o_{11}	h
26	100	166	112	100	190	112
36	110	195	140	110	221	140
46	135	230	180	135	255	180
56	170	262	212	170	290	212
66	200	332	265	200	360	265
76	230	395	315	230	420	315
86	250	445	375	250	515	375
96	310	535	450	310	610	450

The protection cover is not a part of the standard scope of delivery.

7. Technical Appendix

7.4.24 Foot plates for SK4 gear units size 2 to 5



Size	A	b ₂	b ₃	c ₃	e	i		q ₃	s
						SKZH/S/B	SKZN		
26	120	130	37	16	145	15	75	71	11
36	140	160	45	18	170	20	101	90	14
46	165	200	55	25	200	22.5	123.5	112	17.5
56	180	233	70	25	230	30	150	132	23

The foot plates are not a part of the standard scope of delivery.

Sizes 66 to 96 have cast-on feet, see dimensional drawings.

8. Starting up

8 Starting up

8.1 Checks

- The specified position-dependent oil level must be checked prior to start-up.
- The oil inspection and drain plugs as well as the breather screws and valves must be freely accessible.
- Check direction of rotation, especially in connection with backstops.
- Check all fastening elements.
- The check must be performed with the drive unit in the original mounting position.
- Screw plugs must be replaced by the supplied breather valves in the position-dependent positions in accordance with the section on "Positions of Lubricant Attachments".

8.2 Motor

Observe the motor operating instructions!

8.2.1 Electrical connection

- The cable type and cross sections must comply with regulations.
- The rated power and the connection method are specified on the motor ratings plate. A circuit diagram is provided in the motor terminal box.
- Installation must be performed in compliance with EN 60079-14.

8.2.2 Cable entry

- All cable entry fittings must be firmly secured.
- Power supply cables must be connected to the terminal box and secured with a nut and spring lock washer.
- The wiring must be connected by a qualified electrician.
- Grounding of the electrical system must comply with applicable safety regulations.
- With regard to motor protection, reference is made to the applicable regulations in accordance with DIN EN 60034 or IEC 34, VDE 0105 or IEC 364.
- Particular care must be taken when closing the terminal box to ensure that the seal is fitted correctly. Screwed cable glands that are not required must be securely closed off.

9. Maintenance

9. Maintenance

CAUTION!

The power supply to the motor must be disconnected before starting routine maintenance, cleaning or servicing work.

9.1 Oil level check and leak test

The oil level and all seals should be checked at regular intervals every 3 000 hours of operation or at least every 6 months. If the oil level is incorrect, either top up with the same type of oil or drain off and change the oil. Replace seals if leaking.

Note: If there are visible leaks, the drive should be shut down, even if the specified maintenance intervals are not reached, and the corresponding seals replaced.

9.2 Visual inspection

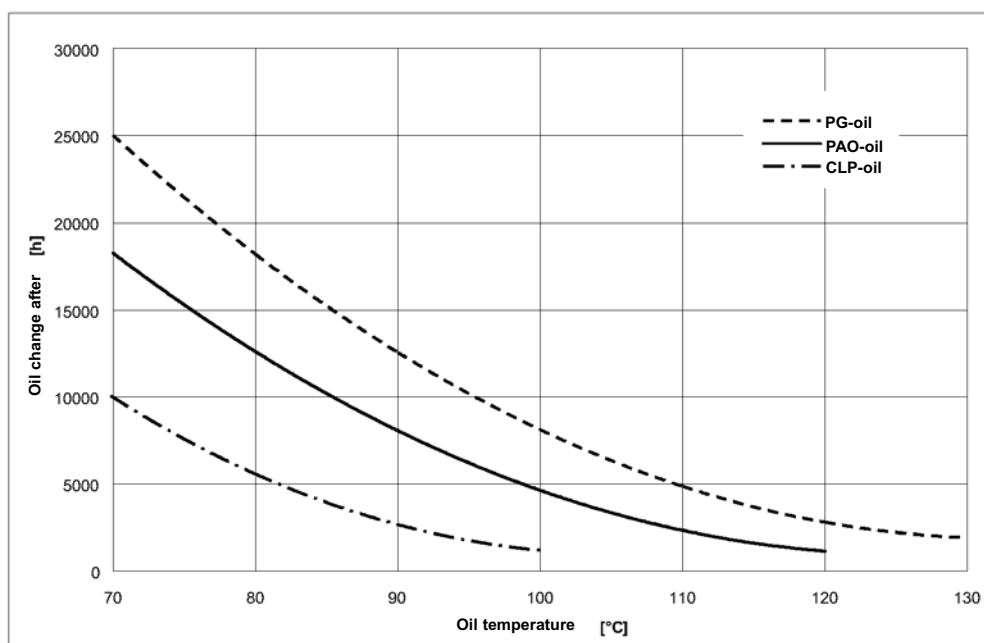
All surfaces are to be checked for damage to the paintwork and corrosion at regular intervals every 3 000 hours of operation and at least every 6 months. Any damage must be repaired or the protective coating renewed.

9.3 Oil change

The first oil change is recommended after 800 hours of operation. Further oil changes should be performed after 4 years at the latest depending on the type of oil and operating conditions (see the following graphic). Use clean, fresh oil from clean containers. Avoid abrasion and water entering the lubrication system. The water content must remain below 0.05 %.

During the oil change, clean out the inside of the housing using a suitable cleaner and remove old oil residues.

Exception: Sizes 1 - 2 feature life-long lubrication, no oil change is necessary.



9. Maintenance

9.4 Regreasing

On request, the drive unit can be equipped with regreasing facilities at the roller bearings that do not run in the oil bath. To achieve a longer service life, regreasing is necessary after 8 000 hours of operation or after 1 year at the latest.

9.5 Backstops

The standard backstops are integrated in the drive lantern. Backstops are wearing parts and must be replaced every 6 000 hours of operation or after 3 years at the latest. The system operator must take all the necessary safety precautions to avoid failure of the backstop that may result in personal injuries and/or damages to the drive unit and/or the application. It is necessary to replace the backstop under the following conditions:

- In the event of unusual wear of the gear unit or if the oil in the gear unit is contaminated as it could have had an adverse effect on the clamping elements and bearing races in the integrated backstop.
- In the event of unusual load (stress or strain) that may have had an adverse effect on the condition of the clamping elements and bearing races in the integrated backstop.

Note:

- Only authorized, qualified personnel are permitted to replace the backstop or change the direction of rotation of the backstop while complying with the operating instructions for the backstop.
- Never loosen any part of the backstop facility while the drive is under load. This could affect the reversal action of the drive and load; the drive unit must be in a no-load condition and secured against inadvertent movements.

9.6 General Maintenance

The drive unit should be subject to a general overhaul (Maintenance) after 25 000 hours of operation, but no later than every 5 years at the latest. All wearing parts must be checked and replaced as required. The general overhaul of the drive unit must be performed by an authorized Rexnord-Stephan service workshop.

9.7 Inspection and maintenance intervals (overview)

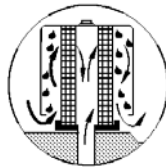
Time interval Operating hours / years		What should be done?	Measures!
3000 Hours	every 6 months	Check all surfaces for damage to the paintwork and corrosion.	<ul style="list-style-type: none"> ● Any damage must be repaired or the protective paint coating renewed.
3000 Hours	every 6 months	Check the oil level and all seals.	<ul style="list-style-type: none"> ● If necessary, top up with the same type of oil/drain or change oil. ● If leaking, change seals and roller bearing grease.
6000 Hours	every 3 years	Change backstop	<ul style="list-style-type: none"> ● Replace backstop.
see graphic in Chapter 9.3 between 10 000 and 25 000	every 4 years	Oil change	<ul style="list-style-type: none"> ● Only use oil approved by Rexnord-Stephan. Used oil must be disposed of in an environmentally acceptable manner.
8000 Hours	every year	Regrease	<ul style="list-style-type: none"> ● Regrease all roller bearings as required
25000 Hours	every 5 years	General overhaul	<ul style="list-style-type: none"> ● Send the drive unit to an authorized Rexnord-Stephan service workshop.

9. Maintenance / 10. Malfunctions

9.8 Extended periods of standstill

The protective oil film slowly dissipates from the untreated surfaces during extended standstill periods of the gear unit. Consequently, rust may form on the internal parts of the gear unit. The risk of rust forming depends to a great extent on the ambient conditions (moisture, maritime, tropical or chemically aggressive environment).

It is therefore necessary to turn the gear unit for a few minutes every two weeks (depending on the ambient conditions) in order to avoid corrosion forming and to renew the protective oil film. A special ventilation filter (marked with sticker) should be fitted in order to avoid the penetration of moisture into the gear unit.



If, despite the increased risk of corrosion, it is not possible to regularly turn the gear unit, the following protection measures are necessary during a prolonged standstill period:

- An oil-soluble concentrate with anticorrosion additives that are effective both in liquid as well as gaseous form should be added at a concentration of approx. 2 % to the oil. Refer to the manufacturer's specifications provided by the oil supplier for the effective duration, compatibility and exact concentration of the additive.
- All openings in the gear unit (oil drain plug, breather valve etc.) must be hermetically sealed.

9.9 Long-term preservation

Provided the unit is stored indoors, a 2-year protection period can be guaranteed if:

- The oil in the gear unit has been drained off and the unit has been completely filled with anticorrosive oil.
- All openings in the gear unit (oil drain plug, breather valve, etc.) are hermetically sealed.
- A well visible warning indicating "**No Operational Lubricant**" is displayed on the gear unit.

Note: The gear unit must not be started up with the storage oil. The drained oil must be stored or disposed of corresponding to environmental protection regulations.

10 Malfunctions

If any malfunctions of the drive unit occur that you cannot remedy yourself, please contact the nearest Rexnord-Stephan customer service with the following information about the drive.

- Nameplate data
- Type and extent of the malfunction
- Application purpose of the drive
- Time and circumstances of the malfunction

11. Lubrication

11 Lubrication

11.1 Selection of lubricants

The table below lists the lubricants approved by Rexnord-Stephan for bevel gear units.

mm2/S 40°C	ISO VG150 (1)	ISO VG220	ISO VG320	ISO VG460	ISO VG680	Wälzlagerfett	Rostbeständiges Öl (2)
AMOCO			Permagear EP 320	Permagear EP 460			
ARAL	Degol BG 150	Degol BG 220	Degol BG 320	Degol BG 460	Degol BG 680	Aralub HLP 2	Konit 20 W-20
ARAL		Degol BMB 220	Degol BMB 320	Degol BMB 460		Aralub HLP 2	Konit 20 W-20
BECHEM		Berugear GS 220 BM	Berugear GS 320 BM	Berugear GS 460 BM		Bechem-Rhus L474-3	Bechem Einfettöl KSP
BP	Energol GR-XP 150	Energol GR-XP 220	Energol GR-XP 320	Energol GR-XP 460	Energol GR-XP 680	Energrease LS-EP 2	BP Motorenschutzöl MEK 20W-20
CASTROL	Alpha SP 150	Alpha SP 22	Alpha SP 320	Alpha SP 460		Spheerol EPL 2	Alpha SP 220 S
CASTROL	Alphamax Premium Gear Oil 150	Alphamax Premium Gear Oil 220	Alphamax Premium Gear Oil 320	Alphamax Premium Gear Oil 460		Spheerol EPL 2	Alpha SP 220 S
CASTROL Syntheseöl			Alphasyn T320			Spheerol AP3	
CHEVRON			Gear compounds EP 320	Gear compounds EP 460		Dura-lith grease EP 3	Turbine oil GST 68
ESSON-EXXON	Spartan EP 150	Spartan EP 220	Spartan EP 320	Spartan EP 460	Spartan EP 680	Beacon EP 2	Rust-Ban 623 & 343
FUCHS-DEA		Falcon CLP 220				Renolit FEP2	
FUCHS-DEA	Renolin CLP 150 Plus	Renolin CLP 220 Plus	Renolin CLP Plus 320 Plus	Renolin CLP 460 Plus	Renolin CLP 680 Plus	Renolit FEP2	
FUCHS-DEA Syntheseöl				Renolin CLP 460 Unisyn			
KLÜBER			Klüberoil GEM 1-320	Klüberoil GEM 1-460		Centoplex 2EP	Contrakor A40
KLÜBER Syntheseöl			KLÜBERSYNTH GEM4-320	KLÜBERSYNTH GEM4-460		Marson	
Lubrication Engineers	Almasol 604	Almasol 607	Almasol 605	Almasol 608		Almagard 3752	300 Monolec
MOBIL			Mobilgear 632	Mobilgear 634		Mobilux EP 3	Mobilarma 524
MOBIL	Mobilgear XMP 150	Mobilgear XMP 220	Mobilgear XMP 320	Mobilgear XMP 460		Mobilux EP 3	Mobilarma 524
MOBIL Syntheseöl			Mobilgear SHC 320	Mobilgear SHC 460			
OPTIMOL			Optigear 320	Optigear 460		Olista Longtime 3EP	Korrosionsschutzöl 5028 LN 697
OPTIMOL	Optigear BM 150	Optigear BM 220	Optigear BM 320	Optigear BM 460		Olista Longtime 3EP	Korrosionsschutzöl 5028 LN 697
SHELL			Omala 320	Omala 460	Omala 680	Alvania EP 2	Ensis engine oil 30
SHELL	Omala F 150	Omala F 220	Omala F 320	Omala F 460		Alvania EP 2	Ensis engine oil 30
SHELL Syntheseöl	Omala HD 150	Omala HD 220	Omala HD 320	Omala HD 460			
SRS	Winthershall Ersolan G 150	Winthershall Ersolan G 220	Winthershall Ersolan G 320	Winthershall Ersolan G 460	Winthershall Ersolan G 680	Wiolub LFP 2	Antikorrol 30
STATOIL	LoadWay EP 150	LoadWay EP 220	LoadWay EP 320	LoadWay EP 460		Statoil UniWay LI 62	
TEXACO	Auriga EP 150	Auriga EP 220	Auriga EP 320	Auriga EP 460		Multifak EP 2	Auriga EP 100
TEXACO	Meropa WM 150	Meropa WM 220	Meropa WM 320	Meropa WM 460	Meropa WM 680	Multifak EP 2	Auriga EP 100
TEXACO Syntheseöl				DEA Intor HCLP460			
TOTAL		Carter VP/CS 220	Carter VP/CS 320	Carter VP/CS 460		Total Multis EP 3	Total Rubia R 30
TRIBOL			Tribol 1100/320	Tribol 1100/460		Tribol 3020/1000-2	

Lubricant suppliers are responsible for the selection and composition of their products.

- (1) For low temperatures only. Please contact us.
- (2) This storage oil is to be drained off in connection with gear units filled with anticorrosion oil. The gear units should be preferably flushed with the recommended gear oil. Consult the oil supplier if necessary.

11. Lubrication

11.2 Oil viscosity

The oil viscosity depends on the ambient temperature at the place of installation of the gear unit. The following table shows the oil viscosity to be used.

Application	Ambient temperature [°C]		Lubricant DIN		Viscosity ISO
S16 ... S96	30	40	Oil	*	VG 680
	0	40		CLP	VG 460
	0	30		(CC)	VG 320
	-20	10			VG 220
Special lubricant	-25	40		**	VG 460
	-25	40		PAO/SHC	VG 320
Roller bearing	-25	60	Grease	DIN 51818	2-3

* CLP: DIN 51517 T3 Mineral oil

** SHC / PAO: Polyalphaolefine-based synthetic lubricant

11.3 Oil quantity

Stated oil filling quantities are standard values. Check oil level with respective oil level screw or oil level indicator.

11.3.1 Oil-filling quantities for 2-stage and 3-stage SI4 gear units

2-stage	Mounting position														
	Foot mounting							Flange version							
Type	B3-B35	B6-B65	B7-B75	B8-B85	V5-V15	V15-SFA	V6-V36	B5	B5 I	B5 II	B5 III	V1	V1 SCA	V1 SCP	V3
SI26B	0.95	1.6	1.7	1.7	2.8	-	2.9	0.9	1.6	2.2	2.2	2.4	-	-	2.8
SI36B	1.6	2.8	3	3	4.6	-	4.8	1.4	2.7	4.0	2.7	4.5	-	-	4.9
SI46B	3.1	5.5	6	6	10.6	-	10.4	2.3	4.9	8.0	5.6	8	-	2.6	9.3
SI56B	4.1	10.1	9.2	9.2	16	-	16.9	3.1	9.0	12.3	8.6	12.1	-	4.2	15.4
SI66B	6	15	16	23	26.5	9	27	6	-	-	-	23	8	-	23
SI76B	11	24.5	24.5	37	41	14	43	11	-	-	-	35	12	-	35
SI86B	15	40	42.5	63	72	-	67.5	-	-	-	-	-	-	-	-

3-stage	Mounting position														
	Foot mounting							Flange version							
Type	B3-B35	B6-B65	B7-B75	B8-B85	V5-V15	V15-SFA	V6-V36	B5	B5 I	B5 II	B5 III	V1	V1 SCA	V1 SCP	V3
SI26C	0.9	1.6	1.6	1.6	2.8	-	2.6	0.85	1.5	2.1	2.1	2.6	-	-	2.7
SI36C	1.4	2.8	2.8	2.8	3.8	-	4.5	1.2	2.4	4.6	2.5	4	-	-	4.3
SI46C	2.8	5.5	5.5	5.5	10.1	-	9.9	2	4.5	7.4	5.2	9	-	2.6	8.5
SI56C	3.8	9.5	9.2	9.2	16.5	-	15.5	2.8	7.9	12.3	8.6	12.1	-	4.2	14.2
SI66C	6	15	16	23	26.5	9	27	6	-	-	-	23	8	-	23
SI76C	11	24.5	24.5	37	41	14	43	11	-	-	-	35	12	-	35
SI86C	15	40	42	66	73.5	25	70	15	-	-	-	63	22	-	63
SI96C	24	76.5	76.5	120.5	144.5	48	135.5	24	-	-	-	123	41	-	123

11. Lubrication

11.3.2 Oil-filling quantities of combined SI4 gear units

Combined gear units	Foot mounting					
	Type	B3-35	B6-B65	B7-B75	B8-B85	V5-V15
SI26C16B	0.9 + 0.45	1.6 + 0.8	1.6 + 0.85	1.6 + 0.85	2.8 + 1.2	2.6 + 1.4
SI36C16B	1.4 + 0.45	2.8 + 0.8	2.8 + 0.85	2.8 + 0.85	3.8 + 1.2	4.5 + 1.4
SI46C16B	2.8 + 0.45	5.45 + 0.8	5.45 + 0.85	5.45 + 0.85	10.1 + 1.2	9.9 + 1.4
SI56C16B	3.8 + 0.45	9.5 + 0.8	9.5 + 0.85	9.5 + 0.85	16.5 + 1.2	15.5 + 1.4
SI66C36B	8.5 + 1.4	15 + 2.8	16 + 3	23 + 3	26.5 + 4.6	27 + 4.9
SI76C36B	15.5 + 1.4	24.5 + 2.8	24.5 + 3	37 + 3	41 + 4.6	43 + 4.9
SI86C36B	21 + 1.4	40 + 2.8	42 + 3	66 + 3	73.5 + 4.6	70 + 4.9
SI96C36B	34 + 1.4	76.5 + 2.8	76.5 + 3	120.5 + 3	144.5 + 4.6	135.5 + 4.9

Combined gear units	Flange version					
	Type	B5	B5 I	B5 II	B5 III	V1
SI26C16B	0.85 + 0.45	1.5 + 0.8	2.1 + 0.85	2.1 + 0.85	2.6 + 1.2	2.7 + 1.4
SI36C16B	1.2 + 0.45	2.4 + 0.8	4.6 + 0.85	2.5 + 0.85	4.0 + 1.2	4.3 + 1.4
SI46C16B	2.0 + 0.45	4.5 + 0.8	7.4 + 0.85	5.2 + 0.85	7.4 + 1.2	8.5 + 1.4
SI56C16B	2.8 + 0.45	7.9 + 0.8	12.3 + 0.85	8.6 + 8.5	12.5 + 1.2	14.2 + 1.4
SI66C36B	8 + 1.4	-	-	-	23 + 4.5	23 + 4.9
SI76C36B	16 + 1.4	-	-	-	35 + 4.5	35 + 4.9
SI86C36B	24 + 1.4	-	-	-	63 + 4.5	63 + 4.9
SI96C36B	35 + 1.4	-	-	-	123 + 4.5	123 + 4.9

11.3.3 Oil filling quantities for 2-stage and 3-stage SP4 gear units

Type	Mounting position					
	1	2	3	4	5	6
	Liter	Liter	Liter	Liter	Liter	Liter
SP16	1.1	0.8	1.1	1.1	1.3	1.3
SP26	1.7	1.4	1.7	1.7	1.9	1.9
SP36	3.2	3.2	2.6	2.6	3	4
SP46	6.1	7.9	5.5	5.5	7	9.6
SP56	12.2	13	9.3	9.3	12.3	14.2
SP66	20	19	16	16	23	25
SP76	29.5	29	27	27	34	36.5
SP86	35	34	32	32	54	58

11. Lubrication

11.3.4 Oil-filling quantities of combined SP4 gear units

Type	Mounting position					
	1	2	3	4	5	6
	Liter	Liter	Liter	Liter	Liter	Liter
SP16..SI16..	1.1 + 0.45	0.8 + 0.85	1.1 + 0.85	1.1 + 0.80	1.3 + 1.2	1.3 + 1.4
SP26..SI16..	1.7 + 0.45	1.4 + 0.85	1.7 + 0.85	1.7 + 0.80	1.9 + 1.2	1.9 + 1.4
SP36..SI16..	3.2 + 0.45	3.2 + 0.85	2.6 + 0.85	2.6 + 0.80	3 + 1.2	4 + 1.4
SP46..SI16..	6.1 + 0.45	7.9 + 0.85	5.5 + 0.85	5.5 + 0.80	7 + 1.2	9.6 + 1.4
SP56..SI16..	12.2 + 0.45	13 + 0.85	9.3 + 0.85	9.3 + 0.80	12.3 + 1.2	14.2 + 1.4
SP66..SI36..	20 + 1.4	19 + 4.00	16 + 2.70	16 + 2.70	23 + 4.5	25 + 4.9
SP76..SI36..	29.5 + 1.4	29 + 4.00	27 + 2.70	27 + 2.70	34 + 4.5	36.5 + 4.9
SP86..SI36..	35 + 1.4	34.4 + 4.0	32 + 2.70	32 + 2.70	54 + 4.5	58 + 4.9

11.3.5 Oil-filling quantities for 3-stage helical bevel gear units

Type	Mounting position					
	1	2	3	4	5	6
	Liter	Liter	Liter	Liter	Liter	Liter
SK26	0.6	2.1	1.9	2	1.7	1.2
SK36	1.1	3.7	3.7	4	3.6	2.5
SK46	2.4	6.7	5.5	5	5.7	4
SK56	4	11.4	9	9	9	8
SK66	5.5	21	15	12	12	12
SK76	7.5	29	25	20	20	20
SK86	13.5	46	39	32	32	32
SK96	23	78	67	55	55	55

11.3.6 Oil-filling quantities of combined SK4 gear units

Type	Mounting position					
	1	2	3	4	5	6
	Liter	Liter	Liter	Liter	Liter	Liter
SK26..SI16..	0.6 + 0.45	2.1 + 1.2	1.9 + 0.85	2 + 1.4	1.7 + 0.8	1.2 + 0.85
SK36..SI16..	1.1 + 0.45	3.7 + 1.2	3.7 + 0.85	4 + 1.4	3.6 + 0.8	2.5 + 0.85
SK46..SI16..	2.4 + 0.45	6.7 + 1.2	5.5 + 0.85	5 + 1.4	5.7 + 0.8	4 + 0.85
SK56..SI16..	4 + 0.45	11.4 + 1.2	9 + 0.85	9 + 1.4	9 + 0.8	8 + 0.85
SK66..SI36..	5.5 + 0.45	21 + 1.2	15 + 0.85	12 + 1.4	12 + 0.8	12 + 0.85
SK76..SI36..	7.5 + 1.4	29 + 4.5	25 + 4	20 + 4.9	20 + 2.7	20 + 2.7
SK86..SI36..	13.5 + 1.4	46 + 4.5	39 + 4	32 + 4.9	32 + 2.7	32 + 2.7
SK96..SI36..	23 + 1.4	78 + 4.5	67 + 4	55 + 4.9	55 + 2.7	55 + 2.7

11. Lubrication

11.4 Regreasing quantities of roller bearing grease

A regreasing is only required for vertical mounting position of the gear unit with the motor at the top. The roller bearings are filled with Aral H grease at the factory. In case of a regreasing, only use roller bearing grease approved by Rexnord-Stephan. If a backstop is used, the lantern is filled with a life-long lubrication at the factory (Petamo GY 193 grease).

11.4.1 Regreasing quantities for SI4 U- and I-lanterns

The following tables provide the required regreasing quantities for the adapter (U or I lantern).

Gear unit size	Motor size									
	I	63	71	80/90	100/112	132	160	180	200/225	250/280
SI16	12	12	12	12	12					
SI26, SI36	15		12	12	12	15				
SI46, SI56	15			12	12	15	15	15		
SI66 to SI96	30				15	15	15	30	30	30
Regreasing quantity [g]										

11.4.2 Regreasing quantities for SP4 U- and I-lanterns

Gear unit size	Motor size									
	I	63	71	80/90	100/112	132	160	180	200/225	250/280
SP16, SP26	12	12	12	12	12					
SP36	15		12	12	12	15				
SP46, SP56	15			12	12	15	15	15		
SP66, SP76,					15	15	15	30		
SP86	30				15	15	15	30	30	30
Regreasing quantity [g]										

11.4.3 Regreasing quantities for SK4 U- and I-lanterns

Gear unit size	Motor size									
	I	63	71	80/90	100/112	132	160	180	200/225	250/280
SK26	12	12	12	12	12					
SK36, SK46	15		12	12	12	15				
SK56, SK66	15			12	12	15	15	15		
SK76, SK86, SK96	30				15	15	15	30	30	30
Regreasing quantity [g]										

11. Lubrication

11.4.4 Grease regreasing quantity for shaft bearings

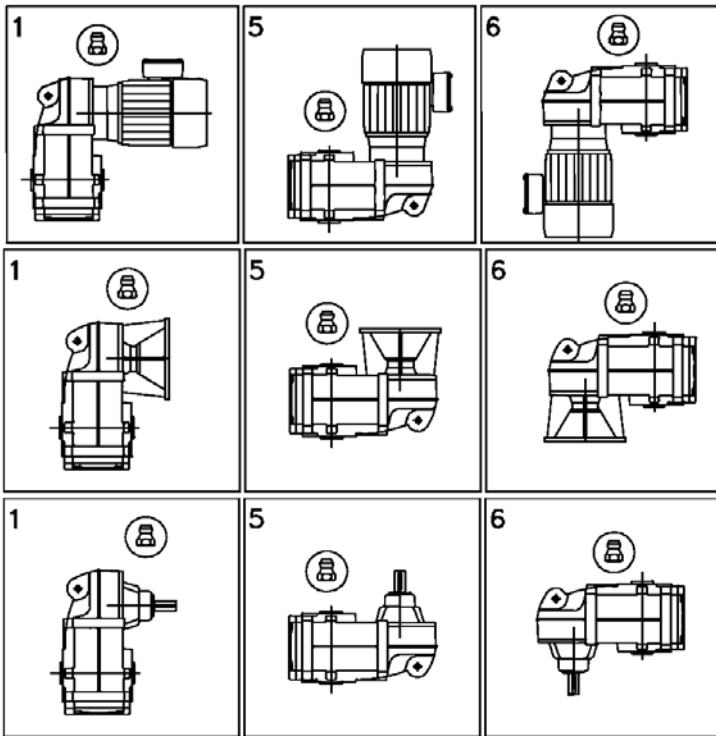
If the gear unit is equipped with a regreasing facility, it must be filled with the grease quantities listed in the following tables according to the regreasing intervals in "Chapter 4: Maintenance".

Type	2-stage intermediate shaft I	3-stage intermediate shaft II	Output shaft
SP16	3	--	6
SP26	4	--	6
SP36	5	--	8
SP46	5	6	11
SP56	5	9	14
SP66	7	11	24
SP76	9	15	34
SP86	22	30	47
Gear unit regreasing quantities [g]			

Type	3-stage intermediate shaft	Output shaft
SK26	3	6
SK36	4	8
SK46	5	11
SK56	8	14
SK66	15	18
SK76	22	25
SK86	30	35
SK96	38	46
Gear unit regreasing quantities [g]		

11. Lubrication

11.4.5 Regreasing facility for roller bearing grease

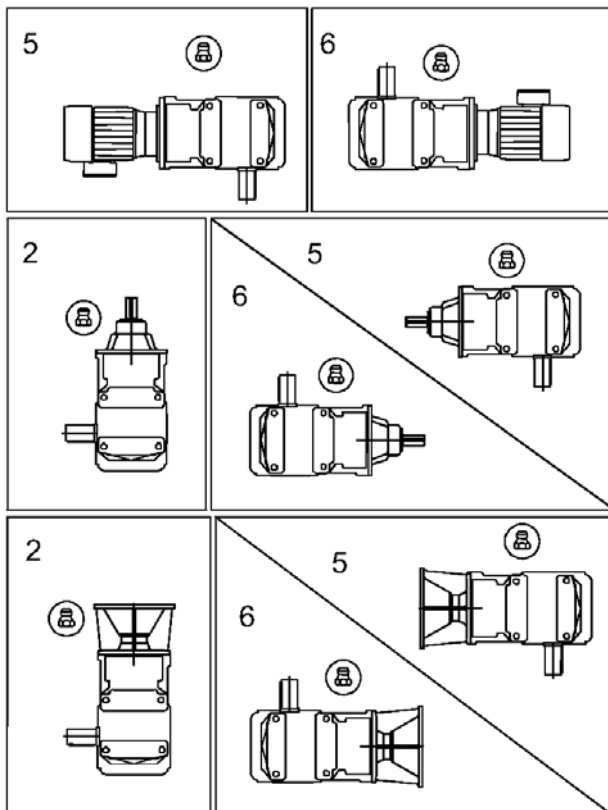



 Regreasing facility for roller bearing grease

Motor flanged on directly

Gear unit with U-lantern

Gear unit with I-lantern



 Regreasing facility for roller bearing grease

Motor flanged on directly

Gear unit with I-lantern

Gear unit with U-lantern

11. Lubrication

11.5 Lubricant cooling for SP4 gear units

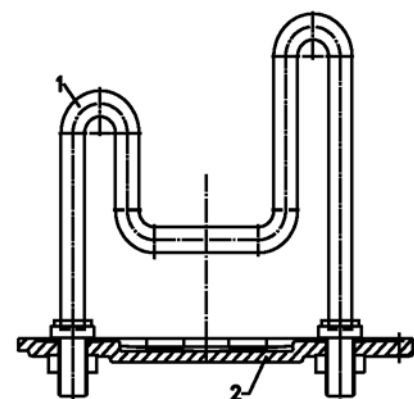
For lubricant cooling, the parallel shaft gear unit (SP4) can be supplied with an additional cooling coil for water cooling upon request, starting with size 4. The cooling coil (1) is screwed onto the casing cover (2). To fill or drain the coolant, the gear unit casing features pipe connections with 3/4" pipe thread. The hardness of the coolant should be in the range of 1 -15 ° dH (0.18 - 2.7 mmol/l) to avoid deposit formation in the cooling coil. The coolant may contain dissolved and undissolved matter, but only in the concentrations listed in the following table.

Contained substances		Concentration range (mg/l)
pH value		6 ÷ 9
Chloride	Cl ₋	0 ÷ 1000
Sulfate	SO ₄ ²⁻	0 ÷ 70
Nitrate	NO ₃ ⁻	0 ÷ 100
Free (aggressive) carbonic acid	CO ₂	0 ÷ 10
Ammonium	NH ₄ ⁺	0 ÷ 2
Iron (dissolved)	Fe ²⁺ / Fe ³⁺	0 ÷ 10
Manganese (dissolved)	Mn ²⁺ / Mn ₇₊	0 ÷ 1
Sulfide	S ²⁻	0
Free chlorine	Cl ₂	0 ÷ 5
Depositing (organic) substances		0

CAUTION! Do not use aggressive liquids for cooling.

The cooling performance listed in the following table refers to:
 20 °C water temperature; flow volume 6 l/min; oil bath temperature 85 °C

Gear unit size	Cooling performance	
	Mounting position 5, 6	Mounting position 1, 2, 3, 4
	[kW]	[kW]
SP46B	1.07	0.67
SP56B	1.85	1.07
SP66B	2.35	1.33
SP76B	3.09	1.85
SP86B	4.51	2.60
SP86C	3.33	1.85



11.5.1 Assembly of the pipe system

Attach the feed and drain line of the coolant to one threaded connection piece each. Ensure that the bolts and connection pieces are not twisted. For this purpose, a second open-end wrench must be used as counter wrench. Ensure tightness. All required connecting pipes, valves, control devices, etc. must be obtained and installed on-site by the operator.

The coolant temperature and flow volume must be checked and ensured by the operator. The drive may only be started up if the cooling coil is connected to the cooling circuit and operating. The operator is responsible for the timely addition of antifreeze if the coolant is at risk of freezing.

12. Positions of Lubricant Attachments

12 Positions of Lubricant Attachments

The positions of the lubricant attachments are dependent upon the mounting position and shown in the following illustrations.

12.1 Oil attachments sizes S...1 and S...2

These gear units feature lifetime lubrication and have no oil screw plugs.

12.2 Oil attachments S...3 to S...9

- Oil level screw plug
- Oil level screw plug, rear
- △ Oil drain plug
- ▲ Oil drain plug, rear
- ▼ Oil filler and breather valve
- ▽ Oil filler and breather valve, rear
- ∨ Breather valve (for size 4 and 5 only)
- ⊕ Oil filler and oil level screw plug
- ⊗ Oil filler and oil level screw plug, rear

12.3 SI4 arrangement

Type	SIFN			
B-C	B3	B6	B7	B8
Size 36-96				

Type	SIFN			V6
B-C	V5			
Size	36-56	66-76	86-96	
Size 36-96				

Type	SICF, SICD, SICR, SICM			
B-C	B5	B5 I	B5 II	B5 III
Size 36-96				

12. Positions of Lubricant Attachments

Type	SICF, SICD, SICE, SICR, SICM			
B-C	V1			V3
	Size			
	36-56	66-76	86-96	
Size 36-96				

Type	SIFE, SIFR, SIFM			
B-C	B35	B65	B75	B85
Size 36-96				

Type	SIFE, SIFR, SIFM			
B-C	V15			V36
	Size			
	36-56	66-76	86-96	
Size 36-96				

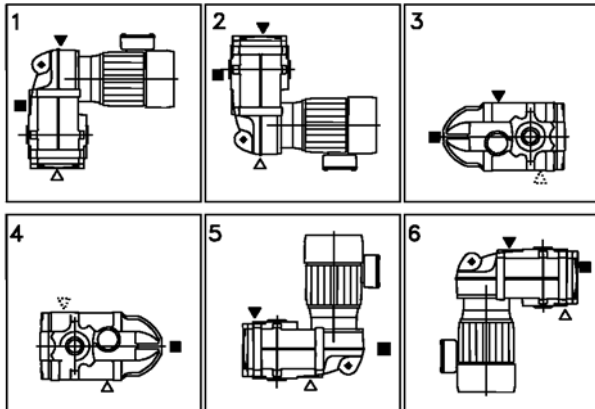
Type	SICL			SICP
B-C	B5	V1	V3	V1
Size 46-56				

Type	SICA	SIFA
B-C	V1	V15
Size 66-96		

12. Positions of Lubricant Attachments

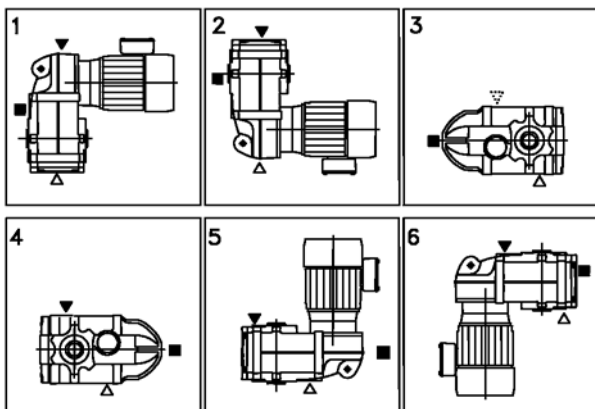
12.4 SP4 arrangement

12.4.1 SP..3 to SP..5

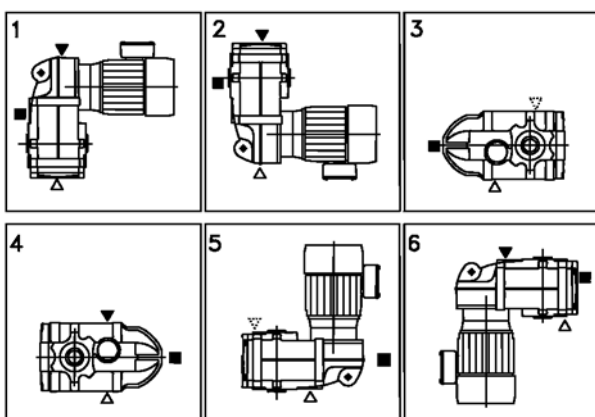


■	Oil level screw plug
□	Oil level screw plug, rear
△	Oil drain plug
△	Oil drain plug, rear
▼	Oil filler and breather valve
▼	Oil filler and breather valve, rear

12.4.2 SP..6 and SP..7

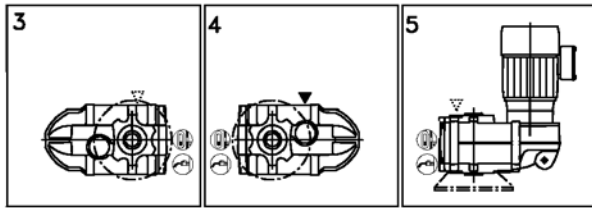


12.4.3 SP..8



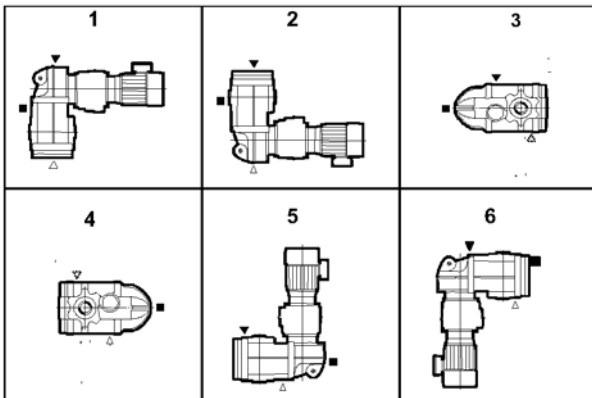
12. Positions of Lubricant Attachments

12.4.4 SP..8 agitator versions with oil-level indicator and drain cock



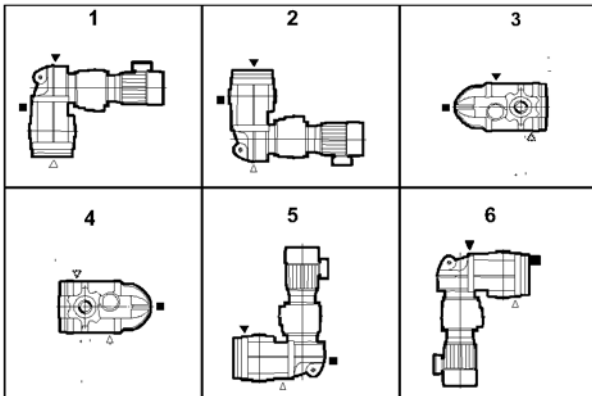
- | | |
|---|---|
| ■ | Oil level screw plug |
| □ | Oil level screw plug, rear |
| △ | Oil drain plug |
| ▽ | Oil drain plug, rear |
| ▼ | Oil filler and breather valve |
| ▽ | Oil filler and breather valve, rear |
| ✓ | Breather valve (for size 4 and 5 only) |
| ⊙ | Oil filler and oil level screw plug |
| ⊙ | Oil filler and oil level screw plug, rear |

12.4.5 SP..1 to SP..5 (SI4 preliminary stage)

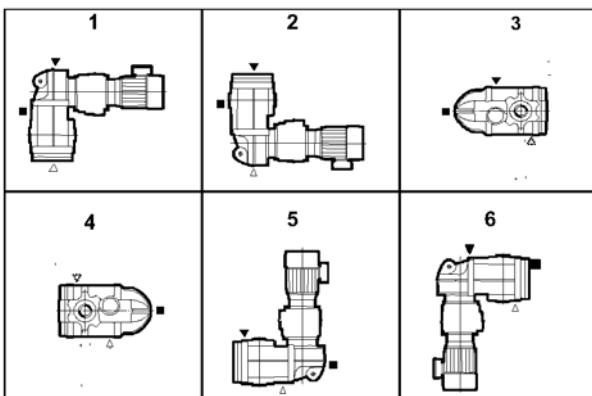


The prestage gear unit type SI1 does not have any oil drain plugs.
The gear unit is filled with lifetime lubricant.

12.4.6 SP..6 and SP..7 (SI4 preliminary stage)



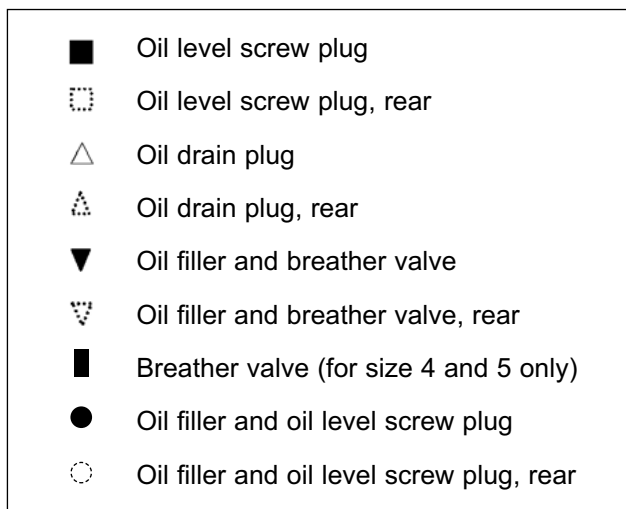
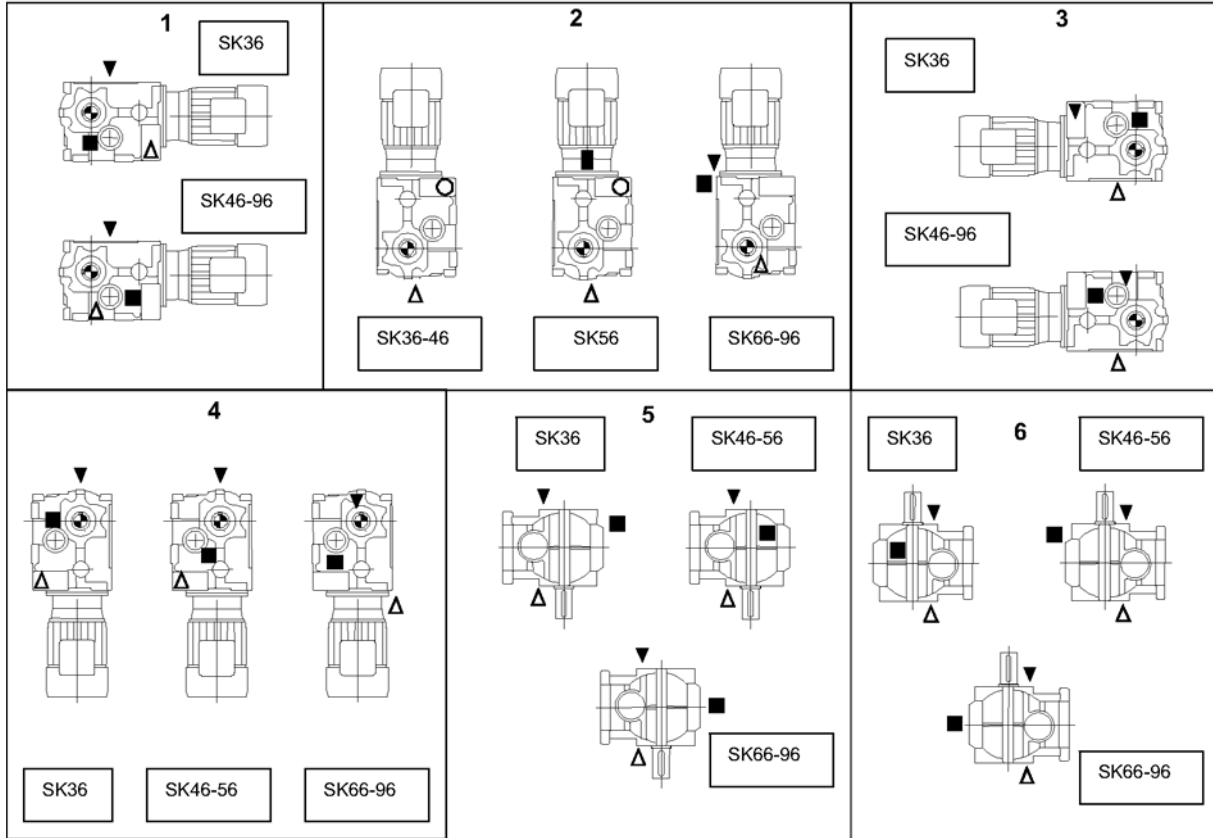
12.4.7 SP..8 (SI4 preliminary stage)



12. Positions of Lubricant Attachments

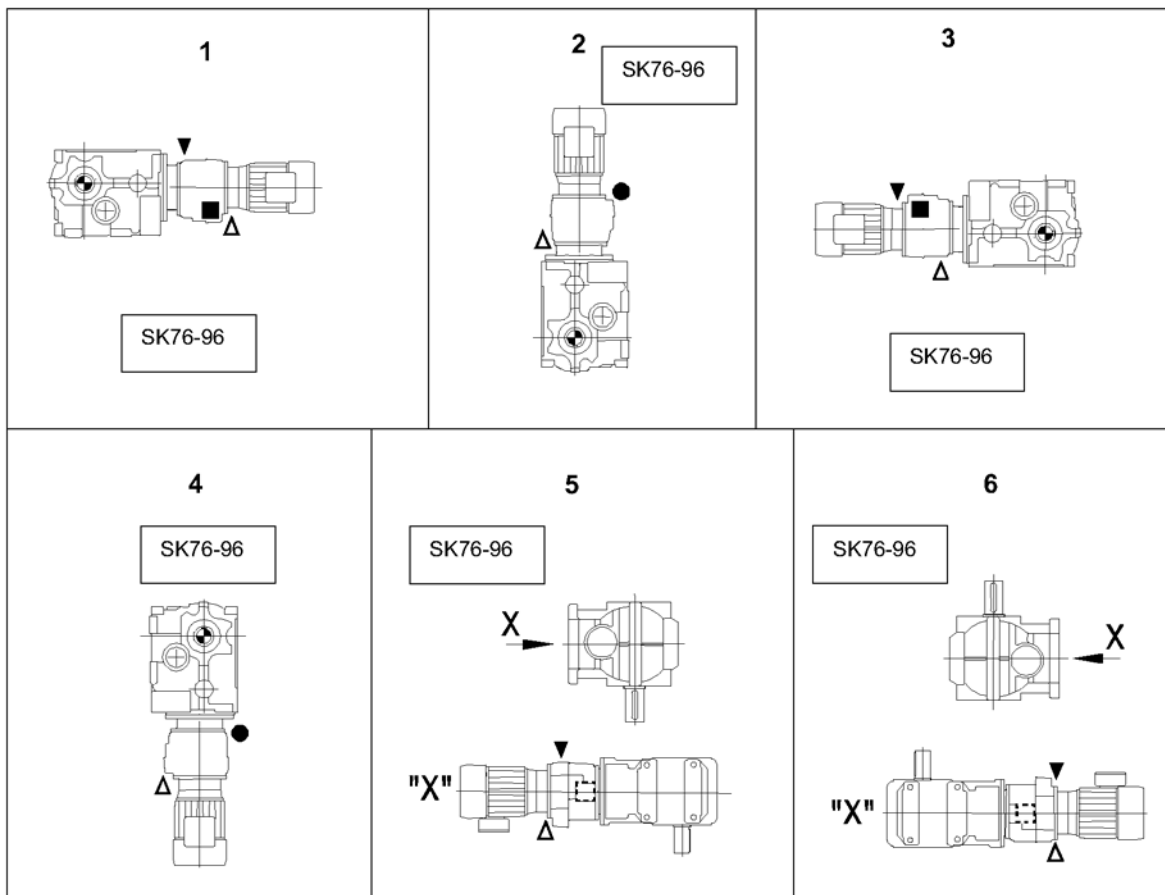
12.5 SK4 arrangement

12.5.1 SK..3 to SK..9



12. Positions of Lubricant Attachments

12.5.2 SK..7 to SK..9 with SI4 preliminary stage

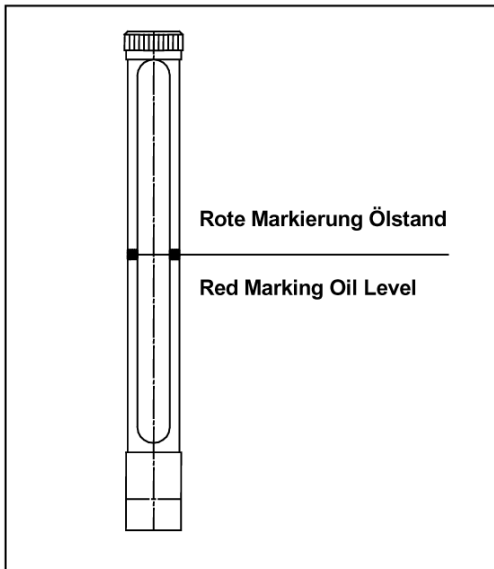


■	Oil level screw plug
⊖	Oil level screw plug, rear
△	Oil drain plug
▽	Oil drain plug, rear
▼	Oil filler and breather valve
▽	Oil filler and breather valve, rear
■	Breather valve (for size 4 and 5 only)
●	Oil filler and oil level screw plug
⊖	Oil filler and oil level screw plug, rear

12. Positions of Lubricant Attachments

12.6 Oil level indicator

Extended version for mounting position 3, 4, 5, or 6

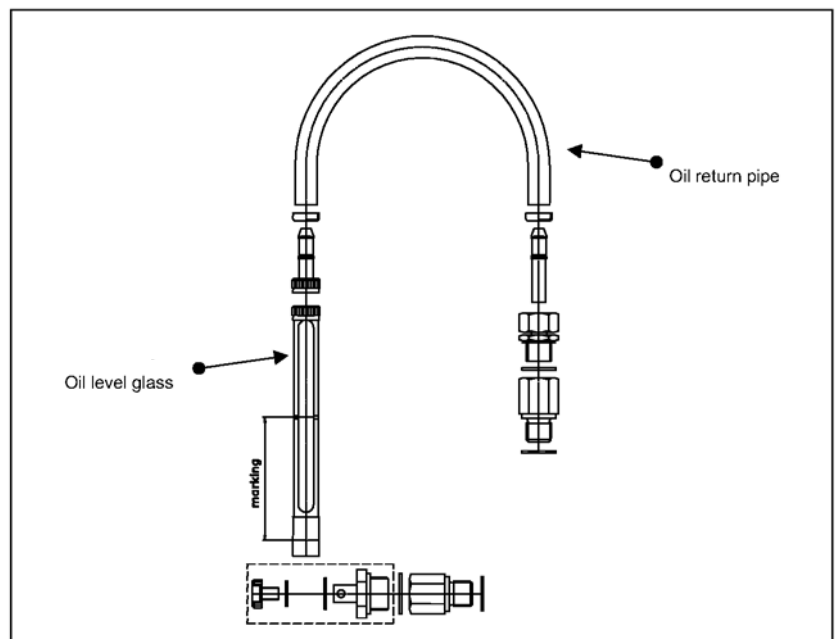


Starting with size 4, the gear unit can be equipped with an oil level indicator for the purpose of simply reading off the oil level. The drive unit must be switched off when reading the oil level.

The maximum deviation of the oil level from the oil level marking is specified in the table below.

Indicators equipped with capacitive sensors are also possible for the purpose of continuous oil level monitoring.

Size	Deviation from marking
S.46 ... S.66	± 3 mm
S.76 ... S.96	± 5 mm

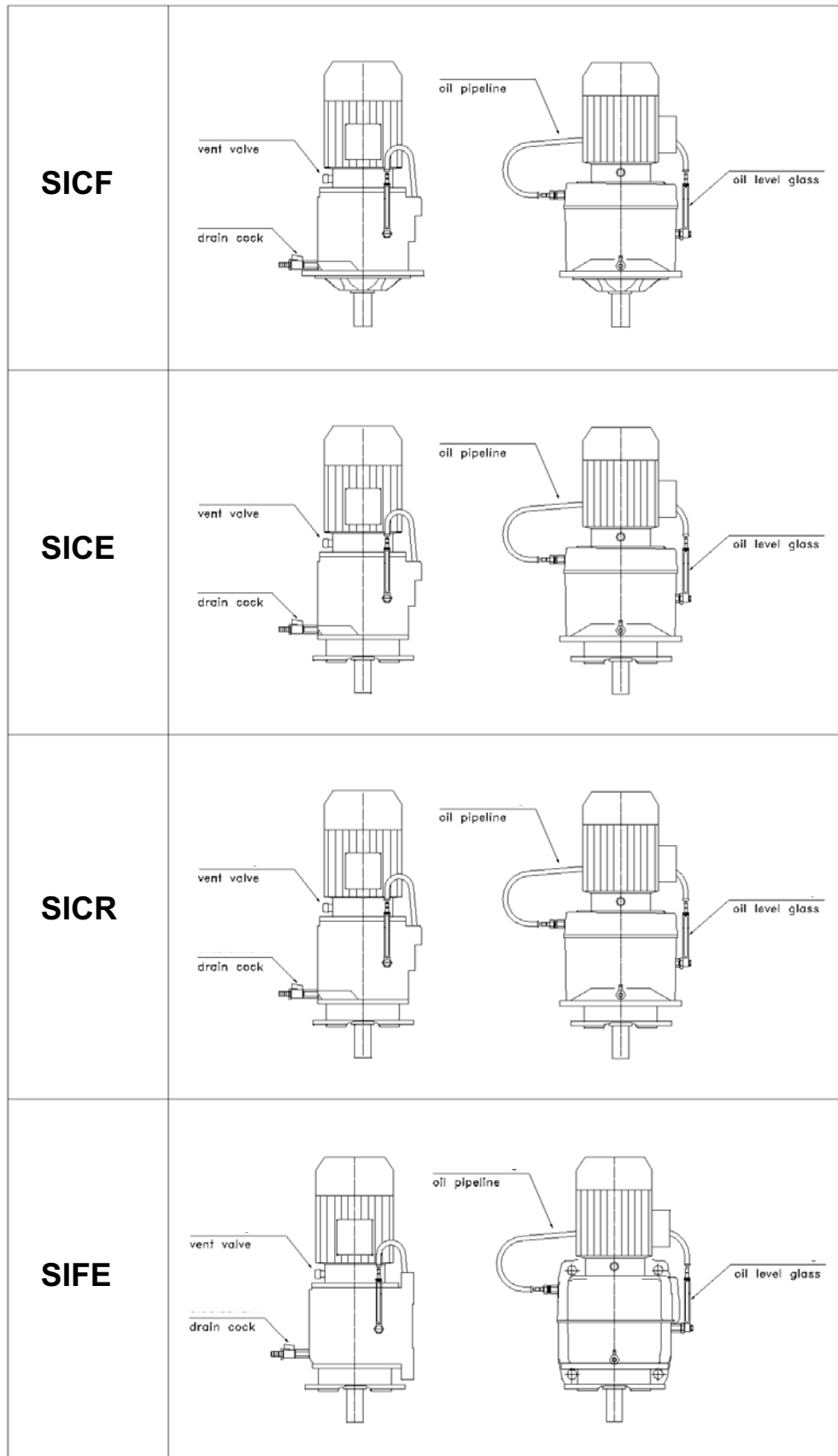


Attention:

The red marking for the oil level on the oil levelglass is subject to the geartype, application conditions / requirements and ordering designations. The oil level is mandatory!

12. Positions of Lubricant Attachments

12.6.1 Position of the oil level indicator for SI4



12. Positions of Lubricant Attachments

12.7 Oil filling

If gear units are supplied without an oil filling, do not fill the unit with oil before it has been installed in its final position. Always fill the gear unit up to the oil level screw plug or to the center of the oil inspection glass.

12.8 Oil drain

Drain off oil when warm, the breather screw should be removed beforehand. Take care when draining hot oil, use a suitable container. The drained oil must be disposed of corresponding to applicable environmental protection regulations.

12.9 Bleeding

Size 16 - 26: No bleeding necessary.

Size 36 - 96: Gear units are equipped with a breather valve to avoid overpressure. Check the valve regularly to ensure it is operating satisfactorily.

12.10 Oil expansion tank

The oil expansion tank serves the purpose of collecting the oil that has been foamed up by the gearing and expanded by the oil temperature to avoid it escaping from the gear unit.

The oil expansion tanks each have a capacity of one liter. One or several tanks must be installed corresponding to the required expansion volume.

It is necessary to check whether the oil expansion tank does not conflict with the connection sizes for the specific application. If in doubt, please contact Rexnord-Stephan.

The following tables provide an overview of the standard Rexnord-Stephan oil expansion tanks.

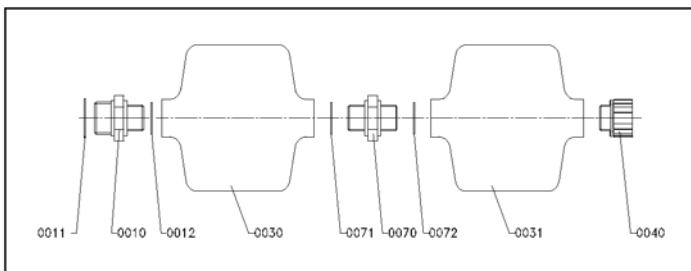
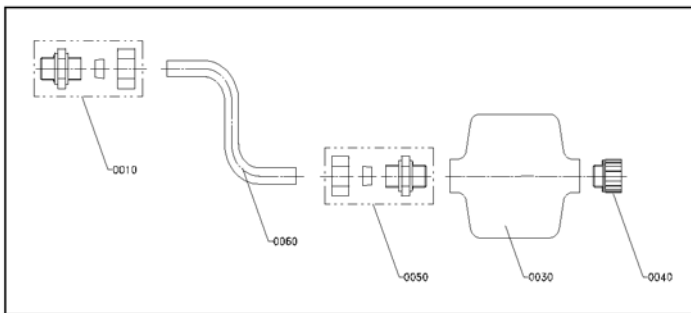
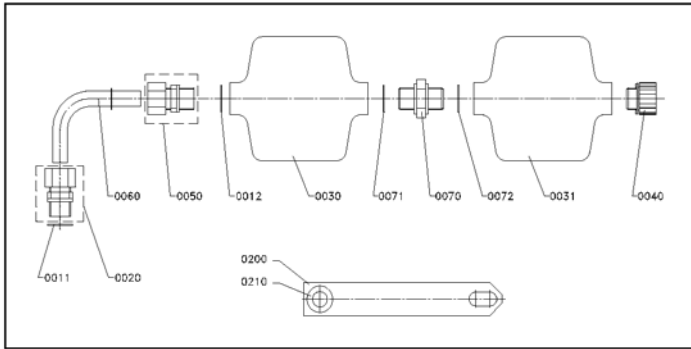
SI4			
Gear unit type	Mounting position	Speed [min ⁻¹]	Expansion volume [liters]
SI36 ... SI56	V5, V6, V15, V36, V1, V3	All	1
SI66 ... SI96	V5, V6, V15, V36, V1, V3	All	1
SI76 ... SI96	V5, V6, V15, V36, V1, V3	Only for n >1500 min ⁻¹	2

SP4			
Gear unit type	Mounting position	Speed [min ⁻¹]	Expansion volume [liters]
SP36 ... SP86	1, 2	Only for n >1500 min ⁻¹	1
SP76 ... SP86	5, 6	Only for n >1500 min ⁻¹	2

SK4			
Gear unit type	Mounting position	Speed [min ⁻¹]	Expansion volume [liters]
SK36 ... SK76	2	All	1
SK86 ... SK96	2	All	4
SK66 ... SK76	5, 6	All	1
SK86 ... SK96	5, 6	All	2
SK36 ... SK76	5, 6	Only for n > 1500 min ⁻¹	1
SK86 ... SK96	5, 6	Only for n > 1500 min ⁻¹	4

12. Positions of Lubricant Attachments

Oil expansion tank components



0010	Double nipple
0011	Seal
0012	Seal
0020	Pipe screw fitting
0030	Expansion tank
0031	Expansion tank
0040	Bleeder valve
0050	Pipe screw fitting
0060	Pipe
0070	Double nipple
0071	Seal
0072	Seal
0140	Sealing tape
0210	Lead-through grommet

13. Index

13 Index

	60-Hz supply	T24
A	Adapter, IEC motors	T39
	Application factor	S12
	Application factor	S17
	Application factor	S18
	ATEX	S14
	Axial Loads	S20
B	Backstop	T41
	Backstop	T69
	Bearings	S12
	Bleeding	T87
	Brake data	T31
	Brake kit	T30
	Brake motor	S13
	Brake rectifier	T33
	Brake, operation frequency	T28
	Brake, power capability	T32
	Breather	T70
	Breather	T87
C	Cable entries	S13
	Cable entries	T38
	Castings	S12
	Certificates	S9
	Coating	S14
	Coating systems	T6
	Connection diagrams	T38
	Cooling coil	T78
	Corrosion Protection	S14
	CSA	S13
D	Dimensional drawings	S20
	Drive Selection	S17
E	EFF 1, EFF 2	S13
	Efficiency	S12
	Efficiency class	S13
	Electrical motors, pole changing	T12
	Electrical motors, single speed	T8
	Enclosure, Types	S13
	Enclosure, Types	T22
	Encoder	T34
	Explosion-protected motors, standards	T27
	External loads	S20
	External loads	T50
F	Foot plates for SK4	T66
	Forced ventilation	T36
	Free drive shaft	T42
	Free Input shaft, I- Latern	T39
G	Gear wheels	S12
H	Harmonic distortion	T24
	Helical Bevel Gearboxes SK4, Dimensional Drawings	SK106

13. Index

H	Helical Bevel Gearboxes SK4, Selection Tables	SK96
	Helical Bevel Geared Motors SK4, Dimensional Drawings	SK48
	Helical Bevel Geared Motors SK4, Ordering Information	SK4
	Helical Bevel Geared Motors SK4, Selection Tables	SK6
	Helical Bevel Geared Motors SK4, Version Variants	SK1
	Helical Gearboxes SI4, Dimensional Drawings	SI141
	Helical Gearboxes SI4, Selection Tables	SI131
	Helical Geared Motors SI4, Dimensional Drawings	SI59
	Helical Geared Motors SI4, Ordering Information	SI4
	Helical Geared Motors SI4, Selection Tables	SI6
	Helical Geared Motors SI4, Version Variants	SI1
	Hollow shaft with shrink disc, dimensions	T59
	Hollow shaft with taper bush, dimensions	T61
	Hollow shaft, dimensions	T57
I	IEC motor, Mounting	T54
	Inertia	T46
	Installation	T52
	Insulation	S13
	Insulation class	T22
	Integrated oil pump	T44
	Inverter, Operation with inverter	T24
L	Load characteristics	S17
	Lubricant Attachments	T79
	Lubricant cooling for SP4	T78
	Lubrication	S12
	Lubrication	T71
M	Maintenance	T68
	Maintenance intervals	T69
	Moments of inertia	T46
	Motor Adapter, U-Lantern	T39
	Motor base	T43
	Motor Data pole, changing	T12
	Motor Data, single speed	T8
	Motor output and output torque	S12
	Mounting	T53
	Mounting Position SI4	SI5
	Mounting Position SK4	SK5
	Mounting Position SP4	Sp5
N	Noise level	T44
O	Oil	T72
	Oil attachments	T79
	Oil change	T68
	Oil drain	T87
	Oil expansion	T87
	Oil filling	T87
	Oil level	T68
	Oil level indicator	T85
	Oil pump, integrated	T44
	Oil quantity	T72
	Oil viscosity	T72
	Operating conditions	S13
	Operating frequency	T28
	Output speeds	S12

13. Index

P	Parallel Shaft Gearboxes SP4, Selection Tables	SP116
	Parallel Shaft Gearboxes SP4, Dimensional Drawings	SP126
	Parallel Shaft Geared Motors SP4, Dimensional Drawings	SP52
	Parallel Shaft Geared Motors SP4, Ordering Information	SP4
	Parallel Shaft Geared Motors SP4, Selection Tables	SP6
	Parallel Shaft Geared Motors SP4, Version Variants	SP1
	Peak voltage	T24
	Preservation, Long Term	T70
	Project Planning	T3
	Project Planning checklist	T3
	Protection covers	T65
	Protection for motors	S16
	Protective devices	T23
	PTC	T22
R	Radial loads	T50
	Regreasing	T69
	Regreasing quantities	T75
S	Seals	S12
	Selection of lubricants	T71
	Service factors	S17
	Shaft arrangements	S21
	Shaft dimensions	T56
	Shafts	S12
	Slip coupling	T42
	Solid shaft, dimensions	T56
	Sound pressure levels	T44
	Standards, relevant	T27
	Starting up	T67
	Symbols used	T1
T	Tacho	T35
	Tachometer generator	T33
	Terminal box	S14
	Terminal box position	T37
	Thermal break even performance	S20
	Thermal contacts	T38
	Thermal standards	T27
	Thermistors	T22
	Thermostats	T22
	Torque support SK4	T63
	Torque support SP4	T64
	Tropical environments	T22
U	U / I -Lantern	T39
	UL	S13
V	Valve	T87
	Ventilation filter	T70
	Voltages	S13
W	Weights	S12

Rexnord-Stephan GmbH & Co. KG

Ohsener Straße 79-83
D-31789 Hameln / Germany

Tel: +49 (0) 5151 / 780 0
Fax: +49 (0) 5151 / 780 441

info.stephan@rexnord.com
www.rexnord-stephan.de

Your world-wide partner

See our world-wide sales and service network at

www.rexnord.eu

We work closely together with around 45 sales, service and fitting centres in North America, Japan, China, Thailand, Malaysia, Australia, in the EU, eastern Europe and South Africa. This number is growing while at the same time we are ever more closely involved with our dealer network.



The Rexnord Group:

www.rexnord.com

Rexnord drive technology: Industrial couplings

www.rexnord.eu

Rexnord Kette: Industrial chains

www.rexnord.eu

Rexnord France: Power transmission and conveying components

www.rexnord.fr

