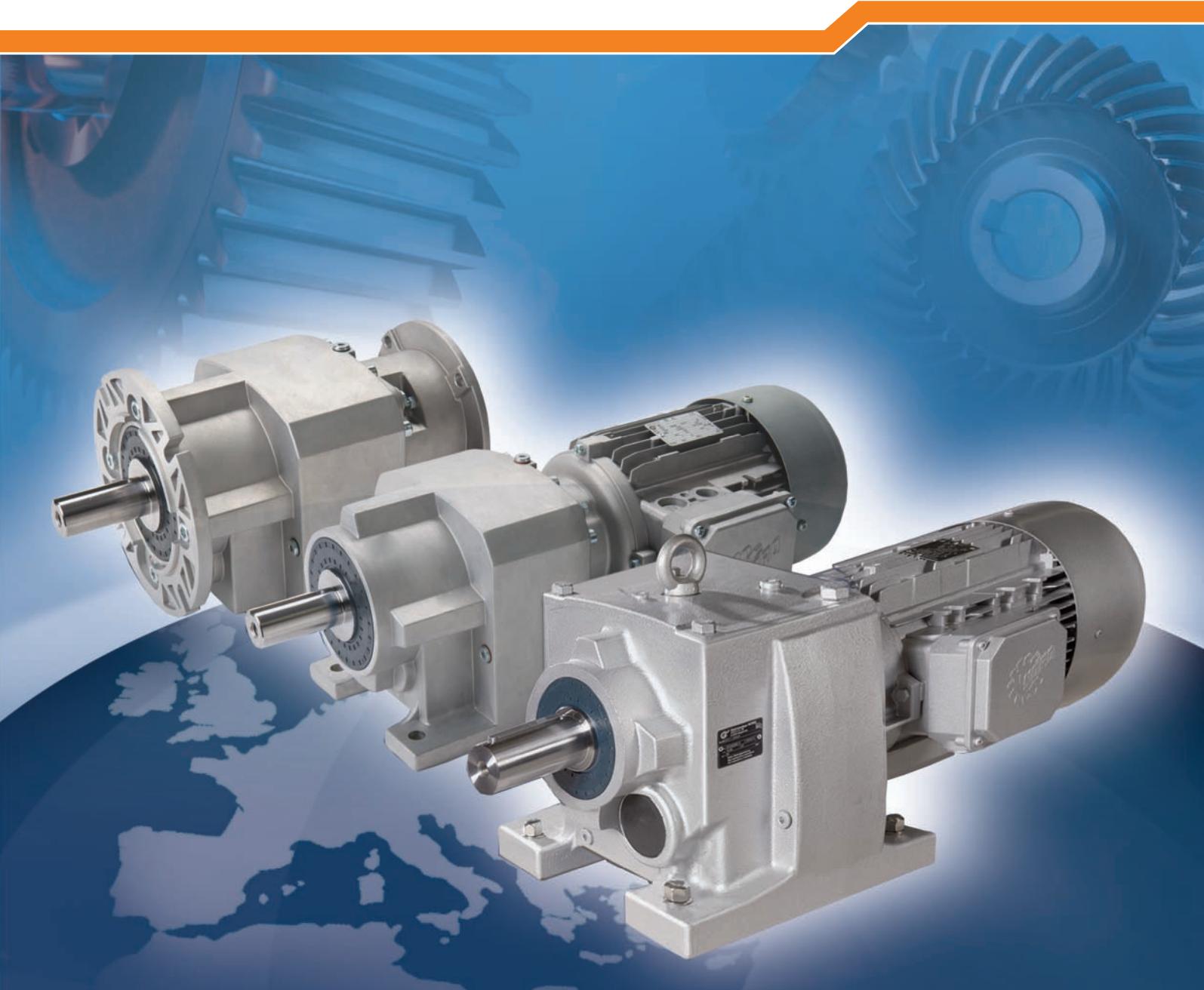


Intelligent Drivesystems, Worldwide Services



G1012

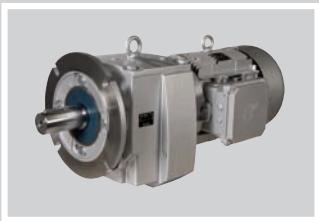
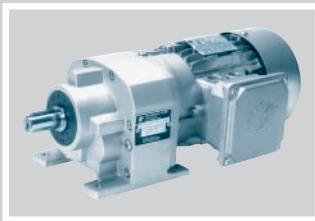


NORDBLOC SK 072.1 - SK 973.1

NORD
DRIVESYSTEMS

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NORD WORLDWIDE



Global presence

- **NORD** has subsidiaries in 35 countries
- Within its representatives **NORD** is present in over 69 countries
- Service and sales partner
- Technical support
- Support for installation and commissioning
- Spare parts management

NORD DRIVESYSTEMS with its headquarters in Bargteheide near Hamburg and subsidiaries in 35 countries is a global company with an extensive range of products and services for electrical, mechanical and electronic drive technology.

With a staff of approx. 2900 in its German factories and international production facilities, NORD produces and distributes drive technology for the global market.

The design of user-specific drive solutions with close customer support from the planning phase right up to commissioning is what makes NORD a strong and dependable partner.

We consider 24-hour service, fast availability and being close to our customers as both a responsibility and an obligation, just as you can expect from a leading drive manufacturer such as NORD.

PRODUCTION SITES



NORD headquarters
Bargteheide



NORD Electronic DRIVESYSTEMS
Aurich



NORD gear factory Glinde



NORD Production Technology in
Gadebusch

SOME OF OUR OVERSEAS PRODUCTION FACILITIES



Vieux Thann
France



Nowa Sol
Poland



Waunakee, Wisconsin
USA

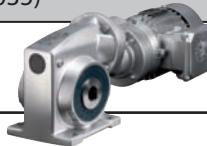


Suzhou
China

Product and catalogue overview

NORDBLOC helical gear units (Catalogue G1012)	
✓ Foot or flange mounted	
✓ Die-cast aluminium housing (5 sizes)	
✓ UNICASE	
✓ Dimensions compliant with industrial standards	
Sizes	8
kW	0.12 – 37
Nm	55 – 3,300
i	2.10:1 – 456.77:1

SI worm gear units (Catalogue G1035)	
✓ Modular	
✓ universal mounting	
✓ IEC versions	
✓ Die-cast aluminium housing	
Sizes	5
kW	0.12 – 4.0
Nm	21 – 427
i	5.00:1 – 10,000.00:1

SMI worm gear units (Catalogue G1035)	
✓ Smooth surfaces	
✓ Shaft, foot or flange mounted	
Sizes	5
kW	0.12 – 4.0
Nm	21 – 427
i	5.00:1 – 10,000.00:1

Helical worm gear units (Catalogue G1000)	
✓ Shaft, foot or flange mounted	
✓ Hollow or solid shaft	
✓ UNICASE	
Sizes	6
kW	0.12 – 15
Nm	46 – 3,090
i	4.40:1 – 7,095.12:1

3-stage bevel gear units (Catalogue G1000)	
✓ Up to 95 % efficiency	
✓ Shaft, foot or flange mounted	
✓ Hollow or solid shaft	
✓ UNICASE	
Sizes	11
kW	0.12 – 200
Nm	180 – 50,000
i	8.04:1 – 13,432.68:1

More power, less weight – the new bevel gear units from NORD DRIVESYSTEMS.

2-stage bevel gear units	
✓ Up to 97% efficiency	
✓ Shaft, foot or flange mounted	
✓ Hollow or solid shaft	
✓ UNICASE	
✓ Die-cast aluminium housing	
Sizes	5
kW	0.12 – 9.2
Nm	90 – 660
i	3.55:1 – 70:1

2-stage bevel gear units (Catalogue G1000)	
✓ Up to 97% efficiency	
✓ Shaft, foot or flange mounted	
✓ Hollow or solid shaft	
✓ Alternative to worm gear motors	
✓ UNICASE	
Sizes	5
kW	0.12 – 9.2
Nm	45 – 650
i	3.85:1 – 72.31:1

Helical gear units (Catalogue G1000)	
✓ Foot or flange mounted	
✓ UNICASE	
Sizes	11
kW	0.12 – 160
Nm	23 – 23,160
i	1.24:1 – 14,340.31:1

Parallel shaft gear units (Catalogue G1000)	
✓ Shaft, foot or flange mounted	
✓ Hollow or solid shaft	
✓ Compact design	
✓ UNICASE	
Sizes	15
kW	0.12 – 200
Nm	65 – 90,000
i	4.03:1 – 6,616.79:1



Product and catalogue overview



Industrial gear units (Catalogue G1050)

- ✓ All bearing points and sealing surfaces are machined in one operation
- ✓ No separating joints in the housing, no sealing surfaces subject to torque
- ✓ High-precision axis alignment, quiet running
- ✓ Long life, low maintenance service
- ✓ Short, compact design
- ✓ Gear ratios from 5.54 to 400: 1 with the same foot dimensions
- ✓ Parallel axis and right-angled gear units

Sizes	4
kW	2.2 – 1,000
kNm	60/90/135/200
i	5.54:1 – 1,600.00:1

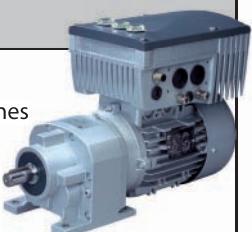


IE2/IE3 motors and components for decentralised drive control (Catalogue M7000)

Single and 3-phase electric motors up to 200 kW.
Further range of starters and components for decentralised drive control.

SK 200E (F3020)

- ✓ "Safe stop" as per EN 954-1
- ✓ Commissioning via integrated DIP switches and potentiometer possible
- ✓ Energy-saving function
- ✓ Ethernet-based BUS systems
- ✓ Performance grading according to application
- ✓ Decentralised modules combined as a system
- ✓ Integrated "Posicon" positioning control
- ✓ On board AS interface versions



Sizes	4
U[V]	1~100 ... 120 ± 10% 1~200 ... 240 ± 10% 3~200 ... 240 ± 10% 3~380 ... 500 -20% / +10%
P[kW]	0.25 – 22

SK 500E (F3050)

- ✓ Compact design
- ✓ Energy-saving function
- ✓ Performance grading according to application (e.g. "Posicon" positioning control)
- ✓ Plug-in modules for control and communication (field bus)
- ✓ Ethernet-based BUS systems



Sizes	10
U[V]	1~110 ... 120 ± 10% 1/3~200 ... 240 ± 10% 3~200 ... 240 ± 10% 3~380 ... 480 -20% / +10%
P[kW]	0.25 – 132 *

* from 3rd quarter 2012

SK 700E (F3070)

- ✓ Flexible due to interchangeable modular expansion cards (e.g. "Posicon" positioning control)
- ✓ Plug-in modules for control and communication (field bus)
- ✓ Self-detecting modules
- ✓ Various field bus systems



Sizes	8
U[V]	3~380 ... 480 – 20% / +10%
P[kW]	1.5 – 160

General Product Information



Description

Gear units

NORD has decisively refined the compact NORDBLOC gearedmotor. This provides our customers with a completely new gearbox design based on the well-proven UNICASE concept.

This catalogue presents the 8 gear unit sizes, SK 072.1 to SK 973.1, in the new design. Sizes SK 072.1 and SK 172.1 are available as 2 stage gear boxes. Sizes SK 372.1 to SK 973.1 have the option of 2 or 3 gear stages, contained in the same gear unit housing and with the same dimensions (⇒ AA18-19).

Gear sizes SK 572.1 or SK 573.1 are available with either a Ø35x70 mm output shaft (series) or a Ø30x60 mm output shaft. Please advise the required shaft diameter when ordering!

The housings of the new NORDBLOC design have a smooth surface and (up to and including gear unit size SK 673.1), made of die cast aluminium.

The housings of the new NORDBLOC range are made of aluminium die-cast and feature a smooth surface design. The new housing reduces the total drive weight considerably and enables a very cost-effective serial production. The smooth aluminium surfaces have a robust, natural corrosion protection (⇒ A26). A serial paint finish is not required but available on special request (surcharge).

The housing of the larger gear SK 772.1 to 973.1 SK consist of cast iron.

The new NORDBLOC design permits the integration of a higher capacity bearing system compared to the previous version. Stronger bearings result directly in a higher capacity for overhung- and thrust loads respectively a longer bearing lifetime.

As usual, is geared motors with the engine priced realize direct cultivation.

The new housings can be ventilated in all mounting positions. This prevents the build-up of harmful pressure inside the housing and clearly prolongs the lifetime of the gearbox seals.

The new NORDBLOC design continues the successful concept of the previous version. Our customers derive direct benefit from the innovative product improvements. Market common fitting dimensions and sizes allow the simple incorporation in the customer application. The new design housings and the previous design feature identical fitting dimensions and are easily interchangeable.

W and IEC adapters

For mounting IEC standard motors via an IEC adaptor the new NORDBLOC range now offers essential advantages.

A novel bearing arrangement enables the attachment of a very short IEC adaptor. This saves space and weight but still maintains the proven and reliable dual bearing system on the input shaft.

With type W gear units (with free input shafts), the maximum drive output listed in the output and gear ratio tables is valid. With type IEC gear units, the standard power of each size according to DIN EN 50347 applies, but with the maximum power listed in the output and gear ratio tables. With rotation speeds higher than those listed in the output and gear ratio tables, special measures may be required. Please enquire.

The IEC adapter coupling is not fail-safe. With hoists, lifts and other cases of operation with a danger of personal injury, special measures are required: we ask you to enquire about this.

Compared to the direct mounted motor, the IEC adapter has an additional shaft coupling and additional bearing seats. Compared to the direct mounted motor, there are higher no-load losses. We recommend to mount the motor **directly**, since it not only offers **technical advantages**, but also offers **price advantages**.

Maximum allowed motor weights

IEC-BG	63	71	80	90	100	112
kg	25	30	40	50	60	80
IEC-BG	132	160	180	200		
kg	100	200	250	350		



Generally

Selecting a gear unit presupposes NORD three-phase asynchronous AC-motors or single phase AC-motors and also applies for technically comparable motors. When using other motors, please consult with NORD.

If the following important guidelines for selecting a gear unit are not adhered to, an overload is likely. In this case, all warranties are inapplicable.

When in doubt, please contact the NORD sales office which is responsible for you so that we may work together to check the gear unit design. In our mutual interests, all problems caused by overloading the gear units should be avoided in every case.

Criteria

Selection criteria constitute:

1. The mechanically transferable power "P" – this is considered by the service factor f_B in the relevant table in the catalogue. The next chapter describes the determination of the required service factor.
2. The thermally transferable power (**thermal limit**) this should not be exceeded over a longer time period (3 hours) so that the gear unit does not overheat. We recommend that you consult with NORD and check the specific operational situation exactly when elevated ambient temperature $> 40^\circ\text{C}$

⚠ Special measures (oil cooler, etc.) are available against thermal overload; please enquire.

In general, we ask that you consult with us when there are special installation conditions, such as enclosing the gear unit, heat radiation, confined space, etc.

Input power and service factor

The required input power for each application is determined by measurement or calculation. The rated power of the motor "P1" is to be selected after this. It is normally slightly higher than the required power because safety factors for special operating conditions of the specific application are to be observed, and rated motor output levels are generally available in standard output level ranges. Short-term and infrequent torque impulses do not need to be accounted for when selecting the rated power of a three-phase AC-motor to be installed. When operating a three-phase AC-motor on a frequency inverter, additional factors influence the selection of the rated output; in this case, we ask for your detailed enquiry.

In contrast to the motor, short-term and infrequent torque impulses significantly influence the load and selection of the gear unit. The gear unit service factor f_B takes this and further effects on the gear unit into account with sufficient accuracy. Diagram 1 shows the required minimum service factor $f_{B\min}$ dependent on the daily operational time, the cycles per hour "Z", and the application load classification "A", "B", or "C".

* Run time hours/day

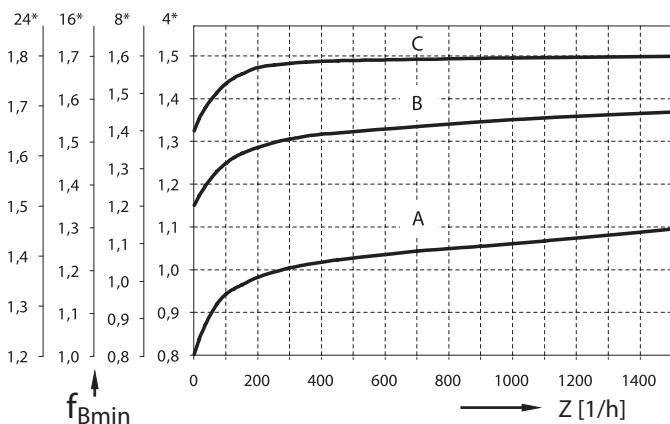


Diagram 1: Minimum service factor $f_{B\min}$



Input power and service factor

Depending on the uniformity of operation and the mass acceleration factor, three load classifications are differentiated. While impacts from the machine that is driven are described in the classification of the uniformity of the operation, the mass acceleration factor determines the load peaks upon activation. The following listing of typical application examples takes into account a long experience in the classification of the uniformity of operation.

Classification of an operation (of uniformity)

A) uniform operation

Light screw conveyors, fans, assembly belts, light conveyor belts, small agitators, elevators, cleaning machines, filling machines, testing machines and belt conveyors.

B) moderate shocks, non-uniform operation

Decoilers, feed drives for wood processing machines, hoists, balancing machines, tapping units, mid-sized stirrers and mixers, heavy conveyor belts, winches, sliding doors, stall duning machines, packaging machines, cement mixers, crane travelling mechanisms, mills, bending machines and gear pumps.

C) heavy shocks, extreme non-uniform operation

Heavy mixers, shears, presses, centrifuges, rolling stands, heavy winches and lifts, grinding mills, stone crushers, bucket elevators, punching machines, hammer mills, eccentric presses, folding machines, roller tables, tumbling barrels, choppers, shredders, vibrators

The load classification results from the uniformity of operation and from the mass acceleration factor "m_{af}" according to the following table. For reasons of safety, the next higher load classification from operation and mass acceleration factor applies.

Example: non-uniform operation and m_{af} = 0.2
→ results in load classification B

Load Classification

Load classification	Operation	Mass acceleration factor
A	uniform	m _{af} ≤ 0,25
B	non-uniform	0,25 < m _{af} ≤ 3
C	extreme non-uniform	3 < m _{af} ≤ 10

In which m_{af} is the mass acceleration factor :

$$m_{af} = \frac{J_{ex.red.}}{J_{Mot.}} = \frac{J_{ex.}}{J_{Mot.}} \cdot \left(\frac{1}{i_{ges}} \right)^2$$

J_{ex.} all external mass moments of inertia

J_{ex.red.} all external mass moments of inertia on the drive motor, reduced

J_{Mot.} mass moments of inertia of the motors

i_{ges} total gear unit ratio

The mass acceleration factor m_{af} represents the relationship between external output-side and high-speed input-side masses. The mass acceleration factor significantly influences the level of torque impulses in the gear unit upon start-up and braking procedures, and upon vibration. The external mass moments of inertia also include the load, such as the material transported on conveyor belts.

We ask you to consult with NORD if the m_{af} > 10, if there is large play in transfer elements, vibration in the system, unclarity regarding the load classification, or if you are in doubt.

The gear unit service factor f_B is given in the output and speed overview at the appropriate speed (⇒ A20-21). The service factor is the relation of the maximum gear unit output torque M_{2max} and the output torque M₂ resulting from the installed motor power P₁, the output speed n₂ and the gear unit efficiency η:

$$M_2 = \frac{9550 \cdot P_1 \cdot \eta}{n_2} \quad [\text{Nm}] \quad P_1[\text{kW}], n_2[\text{min}^{-1}]$$

$$f_B = \frac{M_{2max}}{M_2}$$

$$P_1 = \frac{M_2 \cdot n_2}{\eta \cdot 9550} \quad [\text{kW}] \quad M_2[\text{Nm}], n_2[\text{min}^{-1}]$$

When correctly selecting the gear unit, the service factor f_B, taken from the output and speed overview, is larger or the same as the minimum service factor f_{Bmin} according to diagram 1 (⇒ A5):

$$f_B \geq f_{Bmin}$$



Input power and service factor

Helical gear units have a very high level of efficiency (approx. 98% or $\eta = 0.98$ for each gear stage). Thus, the simplified gear unit efficiency $\eta = 1.0$ usually results in sufficiently accurate results

With type W gear units (with free drive shafts), the installed drive output P_1 may, at the most, be:

$$P_1 = \frac{M_{2\max} \cdot n_2}{9550 \cdot f_{B\min} \cdot \eta} \text{ [kW]} \quad M_{2\max} \text{ [Nm]}, n_2 \text{ [min}^{-1}\text{]}$$

Here, the maximum drive power $P_{1\max}$ may not be exceeded:

$$P_1 \leq P_{1\max}$$

The performance tables type W and IEC list for each output speed n_2 the maximum gear unit output torque $M_{2\max}$ and the maximum motor power $P_{1\max}$.

With brakes attached to the drive side, such as braking motors, the brake torque should also be considered in selecting a gear unit. For applications with relatively high external mass moments of inertia ($m_{af} > 2$) – such as is often the case with travel drives, slewing gears, rotary tables, gate drives, agitators and surface aerators – we recommend that a braking torque that does not exceed 1.2 times the rated motor torque is selected. If higher braking torques are to be used, this should be considered when selecting the gear unit. Please enquire.

Especially unusual applications

Especially unusual applications and extraordinarily extreme modes of operation, such as blockages, movements against solid limit stops, reversing while in motion, changing standstill loads, and gear ratios into fast speeds must be particularly considered when selecting a gear unit. Please enquire

Overhung and axial forces

The tables in the output and speed overviews list the permitted overhung forces FR and axial forces FA, which may be applied on the output shaft. (⇒ A20-21)

The overhung and axial forces listed apply for foot and flange mounted gear units with solid shafts. The forces given are based on the condition that overhung and axial forces are not present at the same time.

Furthermore, a service factor for the overhung and axial forces $f_{BF}=1$ forms the basis of the forces given in the tables in the output and speed overviews. With impulse-type forces and longer run times (> 8 hours/day), a corresponding service factor $f_{BF} > 1$ should also be considered for the overhung and axial forces. The permitted overhung forces F_R and axial forces F_A are reduced accordingly.

The overhung forces listed refer to a force acting on the middle of the shaft end. When determining the permitted overhung forces, the most unfavourable direction of force applied and direction of rotation were assumed. When determining the permitted axial forces, the most unfavourable direction of force and rotation were also assumed. Higher overhung and axial forces are potentially possible - for an exact calculation, please supply us with the details of the actual force and rotation direction as well as the required service life.

If transfer elements are attached to the output shaft, a corresponding factor (f_z) should be considered in determining the overhung force.

Corresponding Factor f_z

f_z	Transferelements	Notice
1,1	Gears	$z \leq 17$ teeth
1,4	Sprockets	$z \leq 13$ teeth
1,2	Sprockets	$z \leq 20$ teeth
1,7	Narrow V-belt pulleys	by pretensioning force
2,5	Flat belt pulleys	



Overhung and axial forces

The resulting overhung force on the gear unit shaft is determined as follows:

$$F_{Rvorh} = \frac{2 \cdot M_2}{d_o} \cdot f_z \leq F_R$$

F_{Rvorh}	overhung force on the gear unit shaft	[kN]
F_R	permitted overhung force from the speed and output tables	[kN]
M_2	gear unit output torque	[Nm]
f_z	factor from the table	
d_o	Wirkkreisdurchmesser	[mm]

If the force is not applied to the middle of the shaft, the permitted overhung force at any point "x" may be calculated using formulas I and II:

Formula I	$F_{RXL} = \frac{z}{y+x} \cdot F_R$	
Formula II	$F_{RXW} = \frac{c}{(f+x) \cdot 1000}$	
$F_{RXLzul.}$	permitted overhung hung load at point x - bearing service life	[kN]
$F_{RXWzul.}$	permitted overhung force at point x - shaft stability	[kN]
F_R	overhung force from the speed and output tables, force applied at shaft middle	[kN]
x	distance from the shaft collar to the point of force application	[mm]
c		[Nm]
c_{VL}		[Nm]
f	Factors to calculation of the overhung forces see tables Page \Rightarrow A9	[mm]
y		[mm]
z		[mm]

It should be noted that calculations should always be made according to formula I (service life) as well as formula II (shaft stability); in doing so, the smaller value should be taken as permitted.

⚠ The permitted overhung forces shown in the output and gear ratio table refer to gears in series design.

Information on special gear designs can be found on page \Rightarrow A11 !

Strengthened radial and axial drive shaft bearings (VL)

- **Gear Units Types SK 072.1 and SK 172.1**

The bearings integrated in the standard version have high radial and axial load capacity, therefore further strengthening of the bearings is not planned.

- **Gear Units Types SK 372.1 to SK 673.1**

The bearings integrated in the standard version have high radial and axial load capacity, therefore further strengthening of the is not planned.

The option VL allows for very higher transverse forces due to the output shaft being made from higher quality steel however utilising the standard bearing arrangement.

- **Gear Units Types SK 772.1 to SK 973.1**

All gear units of this type can be supplied with the VL option, this version allows for increased radial and axial loading on the output shaft. Higher load capacity roller bearings are used in place of the standard ball bearings together with the output shaft being made from higher quality steel.

The transmission forces can be obtained from the performance and speed tables (\Rightarrow B4).



Gear unit selection

Technical Data

M_{2max} SK ..2.1

	SK 072.1	SK 172.1	SK 372.1.	SK 572.1	SK 672.1	SK 772.1.	SK 872.1	SK 972.1
M _{2max} [Nm]	55	92	200	430	610	820	1600	2900

⇒ B34 - 47

M_{2max} SK ..3.1

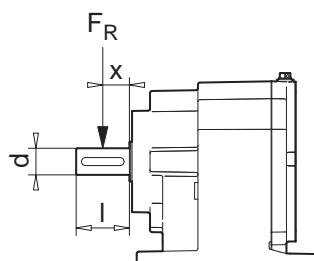
			SK 373.1.	SK 573.1	SK 673.1	SK 773.1.	SK 873.1	SK 973.1
M _{2max} [Nm]			220	450	640	870	1700	3300

⇒ B34 - 47

F_R SK ..2.1

	y [mm]	z [mm]	c [Nmm]	c _{VL} [Nmm]	f [mm]	d [mm]	l [mm]
SK 072.1	66,5	86,5	0,07·10 ⁶	-	0	20	40
SK 172.1	83,0	103,0	0,07·10 ⁶	-	0	20	40
SK 372.1	87,0	112,0	0,09·10 ⁶	0,16·10 ⁶	0	25	50
SK 572.1	110,0	145,0	0,23·10 ⁶	0,40·10 ⁶	0	35	70
SK 672.1	122,5	157,5	0,25·10 ⁶	0,42·10 ⁶	0	35	70
SK 772.1	113,0	153,0	0,37·10 ⁶	0,57·10 ⁶	0	40	80
SK 872.1	139,5	189,5	0,62·10 ⁶	1,02·10 ⁶	0	50	100
SK 972.1	177,0	237,0	1,21·10 ⁶	1,34·10 ⁶	0	60	120

⇒ A8



F_R SK ..3.1

	y [mm]	z [mm]	c [Nmm]	c _{VL} [Nmm]	f [mm]	d [mm]	l [mm]
SK 373.1	87,0	112,0	0,07·10 ⁶	0,16·10 ⁶	0	25	50
SK 573.1	110,0	145,0	0,22·10 ⁶	0,40·10 ⁶	0	35	70
SK 673.1	122,5	157,5	0,24·10 ⁶	0,41·10 ⁶	0	35	70
SK 773.1	113,0	153,0	0,34·10 ⁶	0,57·10 ⁶	0	40	80
SK 873.1	139,5	189,5	0,58·10 ⁶	1,00·10 ⁶	0	50	100
SK 973.1	177,0	237,0	1,10·10 ⁶	1,31·10 ⁶	0	60	120

⇒ A8

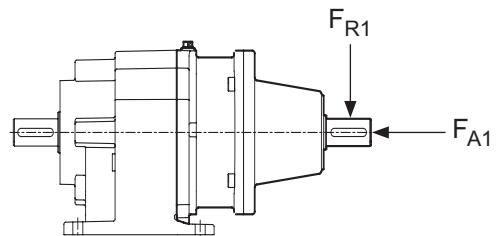
Gear unit selection



Technical Data

SK 172.1

P ₁ [kW]	0,12	0,18	0,25	0,37	0,55
F _{R1} [kN]	1,2				
F _{A1} [kN]	1,5				



SK 372.1 - SK 773.1

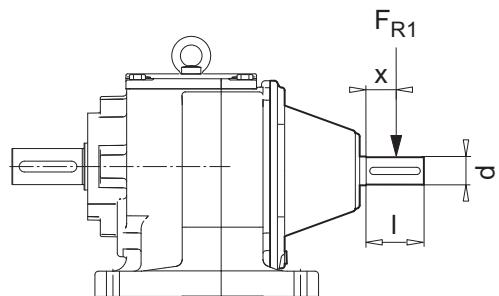
P ₁ [kW]	0,12	0,18	0,25	0,37	0,55	0,75	1,10	1,50	2,20	3,00	4,00	5,50	7,50	9,20
F _{R1} [kN]	3,7	3,6	3,5	3,4	3,3	3,2	3,1	3,0	2,5	2,4	2,3	2,2	2,1	1,3
F _{A1} [kN]	4,1	4,0	3,7	3,4	2,9	2,5	2,2	2,0	1,8	1,6	1,4	1,2	1,0	0,8

SK 872.1 - SK 973.1

P ₁ [kW]	1,10	1,50	2,20	3,00	4,00	5,50	7,50	9,20	11,0
F _{R1} [kN]	2,7	2,6	2,4	2,3	2,1	1,8	1,3	0,98	0,47
F _{A1} [kN]	3,5	3,3	2,7	2,5	2,3	1,6	1,4	1,0	0,59

F_{R1} SK 372.1 - SK 973.1

	y [mm]	z [mm]	c [Nm]	f [mm]	d [mm]	l [mm]
SK 372.1						
SK 373.1						
SK 572.1						
SK 573.1						
SK 672.1						
SK 673.1						
SK 772.1						
SK 773.1						
SK 872.1	110,5	140,5	2,10·10 ⁵	0	28	60
SK 873.1						
SK 972.1	110,5	150,5	4,70·10 ⁵	0	38	80
SK 973.1						





Information for special gear unit versions

Gear unit	Information
SK 372.1 / SK 373.1 ⇒ B50-51, B80	<p></p> <p>Gear unit size SK 372.1 or 373.1 is available with a B5 Ø120 mm drive flange. For this version, the gear unit is 28 mm longer. The permissible transverse force is reduced by 30%.</p>
SK 572.1 / SK 573.1 ⇒ B52-53, B81	<p></p> <p>Drive unit size SK 572.1 or 573.1 with Ø35mm drive shaft is available with a B5 Ø140 mm or Ø160 mm drive flange. For this version, the gear unit is 33 mm longer. The permissible transverse force is reduced by 30%.</p>
SK 572.1(*) / SK 573.1(*) ⇒ B54-55, B81-82	<p></p> <p>Gear unit size SK 572.1 or SK 573.1 is available with a Ø35x70 mm output shaft (standard) or with a Ø35x70 mm output shaft. The permissible transverse forces stated in the power and gear ratio tables refer to a Ø35x70 mm output shaft. For a Ø30x60* mm shaft the permissible transverse force is reduced by 30%.</p>

The desired version at order please specify!



Notes on Gear Units and Geared Motors

Vertical mounting position for gear units and gear motors

Gear units and gear motors may be mounted in positions with vertical shafts. (Exception: IEC adapters with certain sizes). For these mounting positions, the gear units are filled with increased amounts of lubricant. Some gearbox types are also equipped with specially sealed, grease lubricated bearings. These mounting positions show increased oil-splashing-losses, causing a higher temperature rise in operation.

For motors which are mounted vertically upwards (mounting position M4) and ratios < 20, we imperatively recommend oil expansion chambers in order to avoid leakage through the vent plug. Please contact us so that we can suggest an appropriate solution for the particular drive situation. (⇒ A16)

External installation, tropical use

When installed externally, in damp rooms, or used in the tropics, special seals and anti-corrosion measures are required. Please inform us of such upon ordering.

Special ambient conditions

Special ambient conditions are, for example:

- aggressive or corrosive materials (contaminated air, gases, acids, bases, salts, etc.) in the surroundings
- very high relative humidity or contact between the gear unit motor and liquids
- strong dirt, dust or sand deposits on the gear unit motor
- strong atmospheric pressure variations
- radiation
- extremely high or low ambient temperature or temperature changes
- vibrations, accelerations, shocks, impacts or other abnormal ambient conditions

If special ambient conditions exist, including those which occur during transport or storage before commissioning, these should be taken into account during the project planning phase. Please enquire.

Storage before commissioning

The gear units and gear unit motors should only be stored in a dry area before commissioning. Special measures are required for longer storage. Please request the "long-term storage" special instructions, which are available for download on the Internet at www.nord.com.

Vents

The gear units are normally equipped with a vent which compensates for air pressure differences between the inner space of the gear unit and the atmosphere. This vent is closed upon delivery in order to avoid oil leakage during transport. Before commissioning, the vent should be activated by removing the sealing plug. Pressure vents are optionally available.

Drives for aerators, agitators, mixers and fans

For drives for aerators, agitators and mixers in sewage treatment plants and in materials processing as well as in fan drives (e.g. in cooling towers), extremely harsh use conditions are normally present:

- continuous 24h-operation at the rated power torque or rated output
- high mass inertia on the output at lower gear unit ratios
- vibrations in the drive train as well as high flexural bending moments and forces on the output shaft when the mixer and/or fan shaft are positioned directly on the gear unit
- vertical alignment
- external installation, i.e. moisture and aggressive media as well as large temperature changes with condensation
- a high degree of environmental protection is required, e.g. fully leak-proof, safe oil maintenance and low noise level

Based on experience, NORD has developed a package of special measures in order to meet the needs of special operating conditions. NORD thus strongly recommends that you provide for these special measures; please enquire.



Backstops

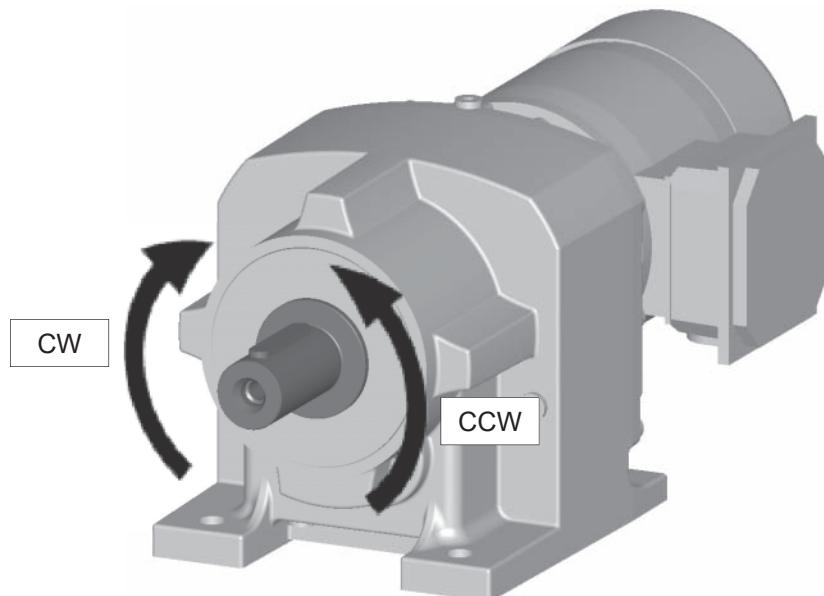
Backstops are available as an option. These allow rotation in only one direction; the other direction of rotation is stopped.

Three-phase AC-motors sized 80 and above may be equipped with a lubricated backstop. These backstops move out, controlled by centrifugal force, at a rotation speed $n_1 >$ approx. 900 min^{-1} and then run wear-free.

The direction of rotation of the gear output shaft must be given for gear units with backstops. The direction of rotation as given is determined by the output shaft:

CW = right → rotational direction clockwise

CCW = left → rotational direction counterclockwise



Caution: danger of breakage!

Check the motor and gear unit directions of rotation before commissioning the system. Arrows on the gear units show the direction of rotation.

Direction of rotation of the motor or input shaft

Direction of rotation of the motor *

Helical Gear Unit	Output shaft rotational direction: CW	Output shaft rotational direction: CCW
2-stage: SK 072.1 - SK 972.1	Motor rotational direction CCW	Motor rotational direction CW
3-stage: SK 373.1 - SK 973.1	Motor rotational direction CW	Motor rotational direction CCW

* by looking on the fan cover



Lubricants

Note:

This table shows comparable lubricants from various manufacturers. The manufacturer can be changed within a particular viscosity or lubricant type. We must be contacted in case of change of viscosity or lubricant type, as otherwise no warranty for the functionality of our gearboxes can be accepted.

Lubricant type	Details on type plate	Ambient temperature						
Mineral oil	CLP 680	Helical gear units ISO VG 680 0...40°C	Energol GR-XP 680	Alpha EP 680 Alpha SP 680 Optigear BM 680 Tribol 1100/680	Renolin CLP 680 CLP 680 Plus	Klüberoil GEM 1-680N	Mobilgear 600 XP 680	Omala S2 G 680
	CLP 220	ISO VG 220 -10...40°C Standard version	Energol GR-XP 220	Alpha EP 220 Alpha SP 220 Optigear BM 220 Tribol 1100/220	Renolin CLP 220 CLP 220 Plus	Klüberoil GEM 1-220N	Mobilgear 600 XP 220	Omala S2 G 220
	CLP 100	ISO VG 100 -15...25°C	Energol GR-XP 100	Alpha EP 100 Alpha SP 100 Optigear BM 100 Tribol 1100/100	Renolin CLP 100 CLP 100 Plus	Klüberoil GEM 1-100N	Mobilgear 600 XP 100	Omala S2 G 100
Synthetic oil (Polyglycol)	CLP PG 680	Helical gear units ISO VG 680 -20...40°C	-	Alphasyn GS 680 Tribol 800/680	Renolin PG 680	Klübersynth GH 6-680	Mobil Glygoyle HE220	Omala S4 WE 680
	CLP PG 220	ISO VG 220 -25...80°C	Enersyn SG-XP 220	Alphasyn GS 220 Alphasyn PG 220 Tribol 800/220	Renolin PG 220	Klübersynth GH 6-220	Mobil Glygoyle 220	Omala S4 WE 220
Synthetic oil (hydrocarbons)	CLP HC 460	Helical gear units ISO VG 460 * -30...80°C	-	Alphasyn EP 460 Tribol 1510/460 Optigear Synthetic X 460	Renolin Unisyn CLP 460	Klübersynth GEM 4-460N	Mobil SHC 634	Omala 460 S4 GX
	CLP HC 220	ISO VG 220 * -40...80°C	-	Alphasyn EP 220 Tribol 1510/220 Optigear Synthetic X 220	Renolin Unisyn CLP 220	Klübersynth GEM 4-220N	Mobil SHC 630	Omala S4 GX 220
Biodegradable oil	CLP E 680	Helical gear units ISO VG 680 -5...40°C	-	-	Plantogear 680 S	-	-	-
	CLP E 220	ISO VG 220 -5...40°C	-	Tribol Bio Top 1418/220	Plantogear 220 S	Klübersynth GEM 2-220	-	Naturelle Gear Fluid EP 220
Food compatible oil ¹⁾	CLP PG H1 680	Helical gear units ISO VG 680 -5...40°C	-	Tribol FoodPoof 1800/680	-	Klüberoil UH1-680N	Mobil Glygoyle 680	Cassida Fluid WG 680
	CLP PG H1 220	ISO VG 220 -25...40°C	-	Tribol FoodPoof 1800/220	-	Klübersynth UH1 6-220	Mobil Glygoyle 220	Cassida Fluid WG 220
	CLP PG H1 680	ISO VG 680 -5...40°C	-	Optileb GT680	Geralyn SF 680	Klüberoil 4 UH1-680N	-	Cassida Fluid GL 680
	CLP PG H1 220	ISO VG 220 -25...40°C	-	Optileb GT 220	Geralyn SF 220	Klüberoil 4 UH1-220N	Mobil SHC Cibus 220	Cassida Fluid GL 220
Gear unit liquid grease GP 00 K-30			Ener-grease LS-EP 00	Longtime PD 00 Tribol 3020/1000-00**	Renolit Duraplex EP00	Microlube GB 00 (-20...90/150°C)	Mobil Chassis Grease LBZ	Alvania EP(LF)2
Polyglycol-based GP PG 00 K-30			-	-	Renolit LST 00	Klübersynth GE 46-1200	Mobil Glygoyle Grease 00	
Polyalphaolefine-based GP HC 00 K-30			-	-	-	Klübersynth UH1 14-1600 1)	Mobilith SHC 007	Cassida RLS 00

* Above 60°C shaft sealing rings made from special materials must be used.

** At very low speeds

1) Food compatible oils and greases according to regulation H1 / FDA 178.3570



Lubricants

Bearing lubricant types

Lubricant type according to DIN 51502	Ambient temperature	Operating temperature	bp	Castrol	FUCHS	KLÖBER LUBRICATION	Mobil	Shell
Mineral oil-based grease								
K2K-20 or KP2K-20	-20 to 60°C	-20 ...120°C	Energearse LS2-EP2	Spheerol EPL 2	Renolit GP 2	-	-	Alvania EP(LF)2 Alvania RL2 (K2N-20)
K 2 K -30 or KP 2 K -30 Mineral oil based	-30 to 60°C (normal)	-30 ...120 °C	-	Longtime PD 2	Renolit GP 2 Renolit LZR 2H	-	Mobilux EP 2	-
K 2 G -50 or KP 2 G -50 Low temperature grease**	*-50 ... 40°C	-50 ...100 °C	-	-	Renocal FN 745/94	Isoflex Topas L152	-	-
KP 1 K -50	-	-50 ...120°C	-	-	Renolit JP 1619	-	-	-
K 2 K -50	-	-50 ...120°C	-	Optitemp LG2	-	-	-	-
Synthetic greases								
KP PG 2 N-30 Polyglycol-based	*-25...80SDgrC	-30 ...140°C	-	-	Renolit LST 2	-	-	-
KP HC 2 K-30	-	-30 ...120°C	-	-	-	Petamo GHY 133N (K HC 2P-30)	-	Cassida EPS2
KP HC 2 N-40 Polyalphaolefine-based	-25 ... 80°C	-40 ...140°C	-	Spheerol SY 2202	Renolit HLT 2	Isoflex Topas NCA 52 Klüberplex BEM 41-132	Mobilith SHC 220	-
KP HC 2 P-40		-40 ...160°C	Energearse SY2202	Tribol 4747	-	-	-	-
K HC 1 E-50	-50 ...80°C	-50 ...80°C	-	-	-	-	-	Cassida LTS1 (PAO, HSF H1)
Rapidly biodegradable grease								
KP E 2 K-30 or K E 2 K-30	-25...40SDgrC	-30 ...120°C	Biogrease EP 2	-	-	-	-	Naturelle Grease EP2
KP E 2 K-40		-40 ...120°C	-	-	Plantogel 2 S	-	Mobil SHC Grease 102 EAL	-
KP E 2 N -40		-40 ...140°C	-	-	-	Klüberbio M 72-82	-	-
Foodstuff compatible grease as per H1/FDA								
K 2 K -30 or KP 2 K -30	-25...40SDgrC	-30 ...120°C	-	Obeen UF2	-	Klübersynth UH1 14-151(222)	Mobilgrease FM 222	Cassida RLS 2
K 2 N -20 or KP 2 N -20		-20 ...140°C	-	-	Renolit G7 FG1	-	-	-
KP HC 2 K-30	-25...40SDgrC	-30 ...120°C	-	-	-	-	-	Cassida RLS 2 Cassida EPS 2

* For ambient temperatures below -30°C and above 60°C shaft sealing rings with special material qualities must be used.

** Greases based on mineral oil or basic oils which can be mixed with mineral oil (PAO, HC, ester)

Please note that some greases which have different soap bases may not be mixed. The lubricant supplier should be consulted if the type of grease is changed.



Lubricants

The closure of the vent plug should be removed before commissioning and longer storage to prevent increased pressure which could lead to leaks developing in the gear unit. Upon delivery, gear units and gear unit motors are factory-filled with lubricant. This first filling corresponds to a lubricant taken from the column for ambient temperature (standard version) in the lubricant table (\Rightarrow A14).

The corresponding lubricants for other ambient temperatures are available for an additional charge.

If the gear unit is filled with mineral oil, the lubricant should be changed after every 10,000 operating hours or after two years. These time periods are doubled when synthetic products are used. It is advantageous that you replace the lubricants more frequently if the unit is operated in extreme conditions, such as high humidity, aggressive environment and high temperature. We recommend that replacing the lubricants be combined with a thorough cleaning.

After changing the lubricant, and in particular after the initial filling, the oil level may change during the first few hours of operation, as the oil galleries and hollow spaces only fill gradually during operation. The oil level is still within the permissible tolerance.

Oil screws

Symbols for oil screw plugs in the mounting positions (\Rightarrow A24-25)

Vent	Oil level	Oil drain

Oil expansion chamber with the motor mounted vertically upright

Gear units with a motor or input shaft mounted vertically upright have a high oil level for lubricating the 1st gear unit stage. The use of an optional oil expansion chamber when the vertical mounting position M4 is used (\Rightarrow A23) prevents oil from possibly leaking out of the vent plug if the oil foams.

If at the express request of the customer, an oil inspection glass is installed at an additional charge, we recommend that the customer corrects the oil level after an operating period of approx. 2 hours, so that when the gear unit is at a standstill and has cooled down, the oil level is visible in the inspection glass. Only then, is it possible to check the oil level by means of the inspection glass.

The gear unit is normally filled with mineral oil. Synthetic oil is available at an additional charge.

Comment:

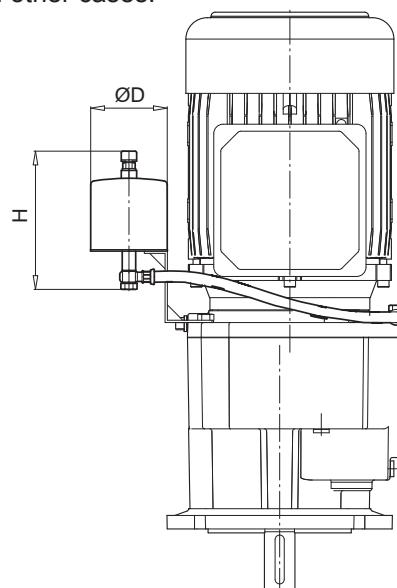
Do not mix synthetic and mineral lubricants! This also applies when they are disposed of.

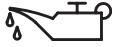
NOTICE:

The fill volumes shown are guideline amounts. The exact amount varies depending on the exact gear ratio. When filling, definitely pay attention to the oil level plug as an indicator of the exact oil volume.

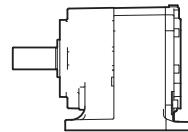
The table on page \Rightarrow A17 show guideline amounts for the oil fill volume in litres, depending on the mounting position or configuration (\Rightarrow A23-25).

	Typ	D	H	[kg]
SK 572.1 / SK 573.1				
SK 672.1 / SK 673.1				
SK 772.1 / SK 773.1	I	100	180	5
SK 872.1 / SK 873.1				
SK 972.1 / SK 973.1				





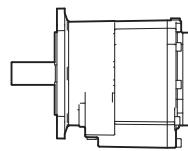
[L]



⇒ 15	M1	M2	M3	M4	M5	M6
SK 072.1	0,16	0,32	0,21	0,23	0,18	0,20
SK 172.1	0,27	0,59	0,42	0,45	0,32	0,39
SK 372.1	0,45	1,05	0,75	1,00	0,60	0,65
SK 572.1	0,75	1,90	1,50	2,00	1,10	1,15
SK 672.1	1,10	2,60	2,15	2,70	1,55	1,65
SK 772.1	1,35	3,65	2,25	3,15	1,35	2,15
SK 872.1	2,60	8,00	5,30	7,00	2,80	4,60
SK 972.1	4,50	12,90	8,10	12,70	4,60	7,80
SK 373.1	0,45	1,05	0,75	1,00	0,60	0,65
SK 573.1	0,75	1,90	1,50	2,00	1,10	1,15
SK 673.1	1,10	2,60	2,15	2,70	1,55	1,65
SK 773.1	1,95	3,50	3,20	2,90	2,25	2,95
SK 873.1	4,05	7,60	6,85	6,55	5,00	6,55
SK 973.1	7,40	12,20	11,10	11,60	8,00	10,90



[L]



⇒ 15	M1	M2	M3	M4	M5	M6
SK 072.1 F	0,16	0,32	0,21	0,23	0,18	0,20
SK 172.1 F	0,27	0,59	0,42	0,45	0,32	0,39
SK 372.1 F	0,45	1,05	0,75	1,00	0,60	0,65
SK 572.1 F	0,75	1,90	1,50	2,00	1,10	1,15
SK 672.1 F	1,10	2,60	2,15	2,70	1,55	1,65
SK 772.1 F	1,35	3,65	2,25	3,15	1,35	2,15
SK 872.1 F	2,60	8,00	5,30	7,00	2,80	4,60
SK 972.1 F	4,50	12,90	8,10	12,70	4,60	7,80
SK 373.1 F	0,45	1,05	0,75	1,00	0,60	0,65
SK 573.1 F	0,75	1,90	1,50	2,00	1,10	1,15
SK 673.1 F	1,10	2,60	2,15	2,70	1,55	1,65
SK 773.1 F	1,95	3,50	3,20	2,90	2,25	2,95
SK 873.1 F	4,05	7,60	6,85	6,55	5,00	6,55
SK 973.1 F	7,40	12,20	11,10	11,60	8,00	10,90

Standards Regulations Nomenclature



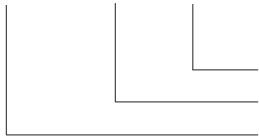
Nomenclature

Sizes of NORDBLOC - Helical Gear Units

2 - stage	SK 072.1	SK 172.1	SK 372.1	SK 572.1	SK 672.1
3 - stage			SK 373.1	SK 573.1	SK 673.1

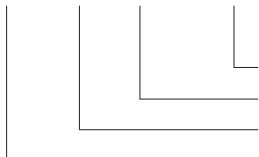
Sample Orders

SK 172.1 - 71 S /4



4-pole
3-phase ac motor 71 S (IE1 - Normal, efficiency class)
NORDBLOC - helical gear unit, 2-stage

SK 373.1 F - 80 LH /4



4-pole
3-phase ac motor 80 LH (IE2 - High, efficiency class)
Housing in flange mounted design B5
NORDBLOC- helical gear unit, 3-stage

SK 573.1 - W



Free input shaft
NORDBLOC- helical gear unit, 3-stage

SK 172.1 - IEC 80 - A160



IEC-Adapter for motor size 80
NORDBLOC- helical gear unit, 2-stage



Standards Regulations Nomenclature

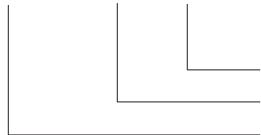
Nomenclature

Sizes of NORDBLOC - Helical Gear Units

2 - stage	SK 772.1	SK 872.1	SK 972.1
3 - stage	SK 773.1	SK 873.1	SK 973.1

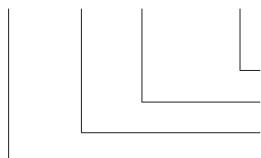
Sample Orders

SK 772.1 - 90 L /4



4-pole
3-phase ac motor 90 L
NORDBLOC - helical gear unit, 2-stage

SK 873.1 F - 90 SP /4



4-pole
3-phase ac motor 90 SP (IE3 - Premium, efficiency class)
Housing in flange mounted design B5
NORDBLOC- helical gear unit, 3-stage

SK 972.1 - W



Free input shaft
NORDBLOC- helical gear unit, 2-stage

SK 973.1 - IEC 90



IEC-Adapter for motor size 90
NORDBLOC- helical gear unit, 3-stage

Standards Regulations Nomenclature



Structure of power and speed tables - Type Gear unit motor

0,12 kW → Gear unit motor power

Rated motor power

Output speed at the rated motor speed

Output torque

Service factor

Total gear unit reduction ratio

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Gear unit motor			mm kg	mm kg
									IE1	IE2	IE3		
0,12	3,9	**238	0,8	343,92	4,9	10,2	7,6	10,2	SK 373.1 - 63S/4			11,0	75
:	4,4	260	0,8	303,08	4,3	10,2	7,5	10,2					
	5,0	231	1,0	269,67	4,9	10,2	7,7	10,2					
	5,2	220	0,9	256,50	5,1	10,2	7,8	10,2					
	5,8	196	1,1	228,22	5,3	10,2	7,9	10,2					
n₂ IE2													
0,55	21	247	0,8	64,70	4,5	10,2	7,6	10,2	SK 373.1 - 80S/4	SK 373.1 - 80SH/4		16,0	75
	23	230	0,9	60,22	4,9	10,2	7,7	10,2					
	25	206	1,0	54,00	5,2	10,2	7,9	10,2					

Maximum output torque with f_B = 0,8

Permitted overhung force, output end
Normal bearing

The listed values for F_R
are calculated with F_A = 0

Permitted axial force, output end
Normal bearing

The listed values for F_A
are calculated with F_R = 0

Dimension drawing
see page

Gear unit motor types

with standard efficiency level

with high efficiency level

IE1 IE2 IE3

Weight

According to the ecological design directive, known as EU Directive 2009/125/EU Ordinance No. 640/2009, at present only motors of at least efficiency class IE2 may be sold in the European Union for certain applications in the power range from 0.75 kW to 375 kW.

NORD already supplies motors with efficiency class IE2 from a power of 0.55 kW, even though this is only mandatory above a power of 0.75 kW. In addition, NORD already supplies highly efficient IE3 motors, which will only become mandatory from 2015 or 2017.

However, depending on the application, the previously used lower efficiency motors, e.g. with efficiency class IE1 may also be used.

The exempted applications are listed on page ⇒ A5 of the NORD motor catalogue M7000.

The power and speed ratio tables for gear units and geared motors apply for both geared motor types with the high efficiency levels IE2 and IE3 as well as for geared motor types with standard efficiency (IE1).

The output speeds n₂, output torques M₂ and operating factors f_B are based on motor powers of 0.55 kW and above for NORD motors with efficiency level IE2, and rated motor powers less than 0.55 kW are based on the nominal speeds of NORD motors with efficiency class IE1.

Regardless of the efficiency class which is actually selected, the output speeds n₂, output torques M₂ and operating factors f_B as listed in the power and speed tables always give sufficiently accurate results, as the deviation in speed due to the efficiency class is at the most 3% for IE1 and IE3.

Usually, other influences, e.g. the torque required by the application (idling, partial load, full load) have a greater effect on the precise speed.

Please contact us in case you have very high requirements for precise speed.

The NORD motor catalogue M7000 lists the motor data for the various efficiency classes IE1, IE2, IE3.



Standards Regulations Nomenclature

Structure of the Performance Tables: Type W and type IEC

SK 772.1 - IEC SK 772.1 - W Gear unit type

Operating factors f_B with the IEC version are identical to those of the same motor output with direct motor mounting. The f_B values are listed on the pages specified.

IEC motor sizes and IEC standard outputs as per DIN EN 50347

	i_{ges}	n_2 $n_1 = 1400 \text{ min}^{-1}$ [min $^{-1}$]	$M_{2\max}$ $f_B = 1$ [Nm]	W			$f_B \geq 1$	IEC					
				$P_{1\max}$ $n_1 = 1400 \text{ min}^{-1}$ [kW]	$P_{1\max}$ $n_1 = 930 \text{ min}^{-1}$ [kW]	$P_{1\max}$ $n_1 = 700 \text{ min}^{-1}$ [kW]		71	80	90	100	112	132
SK 772.1	26,86	52	820	4,46	2,95	2,23							
	24,41	57	820	4,89	3,23	2,45							
	20,31	69	820	5,92	3,91	2,96							*
⋮													
	3,59	390	490	15,00	9,90	7,50							
	3,12	449	485	15,00	9,90	7,50							

Gear unit

Reduction

Output speed

Max. output torque
type W with $f_B = 1$

italic indicates:
Max. drive power $P_{1\max}$
Typ W

non italic indicates:
with $P_{1\max}$ the operating
factor $f_B = 1$

italic indicates:
with $P_{1\max}$ the
operating factor $f_B > 1$

Asterisk indicates: **Caution**
do not exceed the max. driver
power $P_{1\max}$ (Type W column)

Shaded field indicates:
IEC adapter is available for this
IEC motor size and this reduction ratio

Standards Regulations Nomenclature



Tolerances

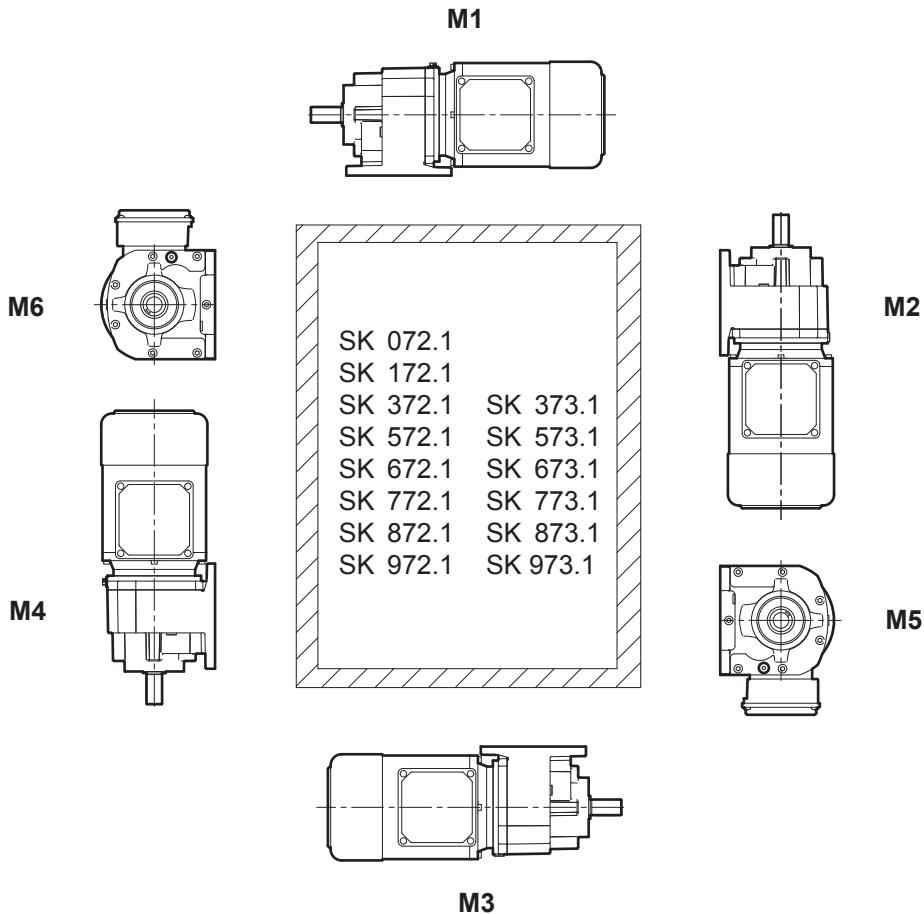
Kategorie	Information														
Output and input shafts	<p>Tolerance of the hole - Ø (DIN 478): $\varnothing 14 - \varnothing 50 \text{ mm} = \text{ISO k6}$</p> <p>Threaded holes:</p> <table> <tbody> <tr><td>= Ø 14 - Ø 16 mm</td><td>→ M5</td></tr> <tr><td>> Ø 16 - Ø 21 mm</td><td>→ M6</td></tr> <tr><td>> Ø 21 - Ø 24 mm</td><td>→ M8</td></tr> <tr><td>> Ø 24 - Ø 30 mm</td><td>→ M10</td></tr> <tr><td>> Ø 30 - Ø 38 mm</td><td>→ M12</td></tr> <tr><td>> Ø 38 - Ø 50 mm</td><td>→ M16</td></tr> <tr><td>> Ø 50 - Ø 85 mm</td><td>→ M20</td></tr> </tbody> </table> <p>Keys acc. DIN 6885, sheet 1</p>	= Ø 14 - Ø 16 mm	→ M5	> Ø 16 - Ø 21 mm	→ M6	> Ø 21 - Ø 24 mm	→ M8	> Ø 24 - Ø 30 mm	→ M10	> Ø 30 - Ø 38 mm	→ M12	> Ø 38 - Ø 50 mm	→ M16	> Ø 50 - Ø 85 mm	→ M20
= Ø 14 - Ø 16 mm	→ M5														
> Ø 16 - Ø 21 mm	→ M6														
> Ø 21 - Ø 24 mm	→ M8														
> Ø 24 - Ø 30 mm	→ M10														
> Ø 30 - Ø 38 mm	→ M12														
> Ø 38 - Ø 50 mm	→ M16														
> Ø 50 - Ø 85 mm	→ M20														
Output and input shafts	Shaft height "h" as per DIN 747														
Flanges	Tolerance of the hole - ø (DIN EN 50 347)														
IEC - Adapters	<p>Tolerance of the hole - ø (DIN EN 50 347) Tolerance of the flange centring as per ISO H7</p> <p>** IEC- Advantages row : In the dimension sheets blue set off.</p>														
Motors	<p>Dimensions of motors are subject to change.</p> <table> <tbody> <tr><td>g1Bre</td><td rowspan="6" style="vertical-align: middle;">}</td><td rowspan="6" style="vertical-align: middle;">Brake motor dimensions</td></tr> <tr><td>kBre</td></tr> <tr><td>oBre</td></tr> <tr><td>mBre</td></tr> <tr><td>nBre</td></tr> <tr><td>pBre</td></tr> </tbody> </table>	g1Bre	}	Brake motor dimensions	kBre	oBre	mBre	nBre	pBre						
g1Bre	}	Brake motor dimensions													
kBre															
oBre															
mBre															
nBre															
pBre															
Housings	The housings are made of cast materials. Thus, due to the manufacturing process, the dimensions of the un-machined housing surfaces may differ slightly from the nominal dimensions.														
Thread	Fastening threads in cast components for use by customers (housing /IEC attachment adapter) are produced as standard threads according to DIN 13-1.														



Mounting Positions

Getriebebau NORD differentiates between six mounting positions, M1 to M6, for gear units and gear motors. These are shown in the following figure.

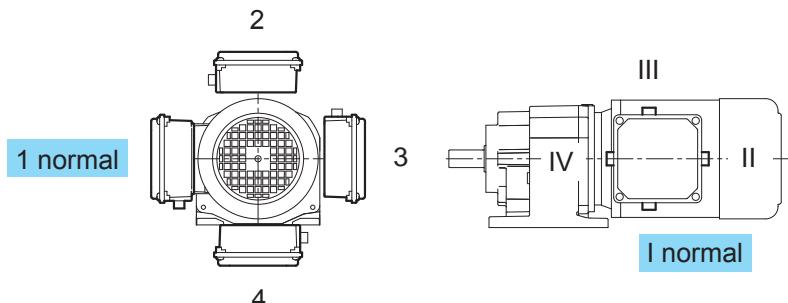
These mounting positions are valid also for flange mounted design B5, for flange mounted design B14 ..Z, and for foot-flange mounted design ..XF und ..XZ.



Position of terminal box and cable entry

Standard version: Terminal box at 1 and cable entry at I

If another layout is desired, please specifically note when ordering.
Please always enquire about terminal box at IV..



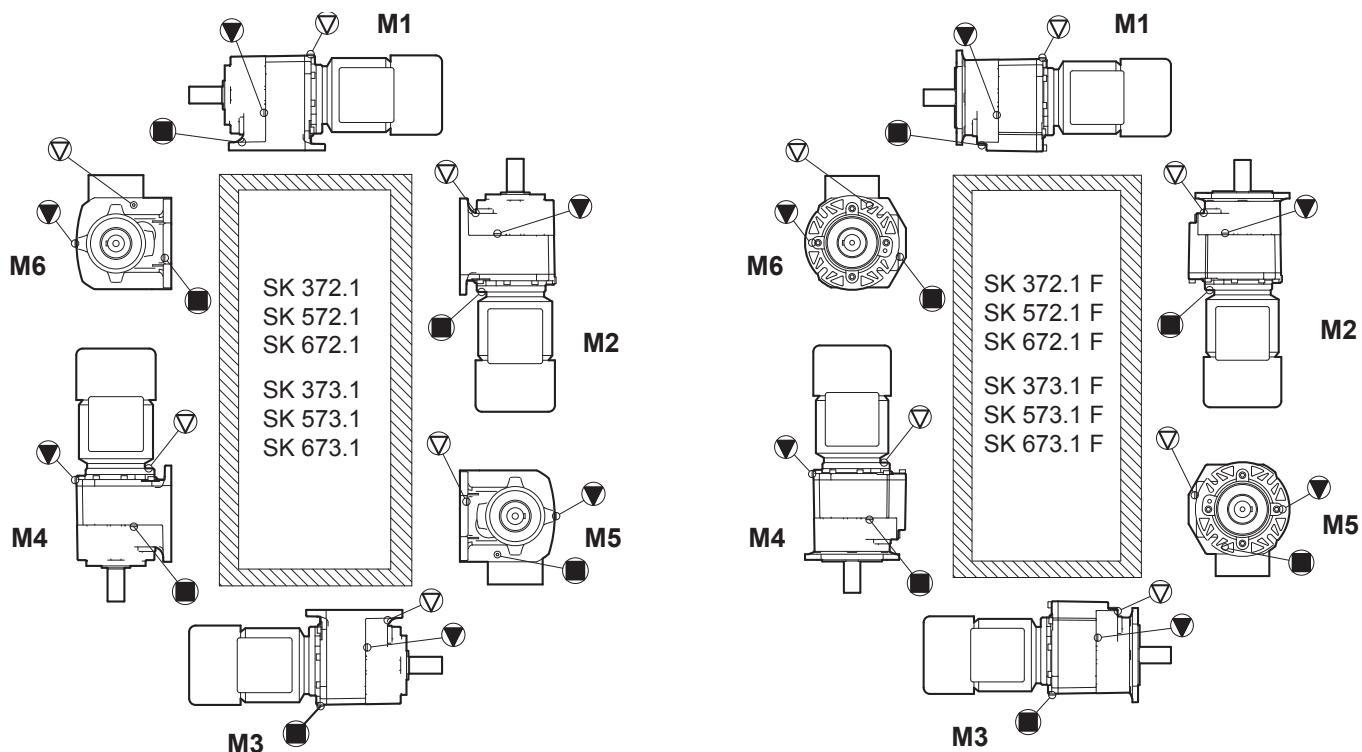
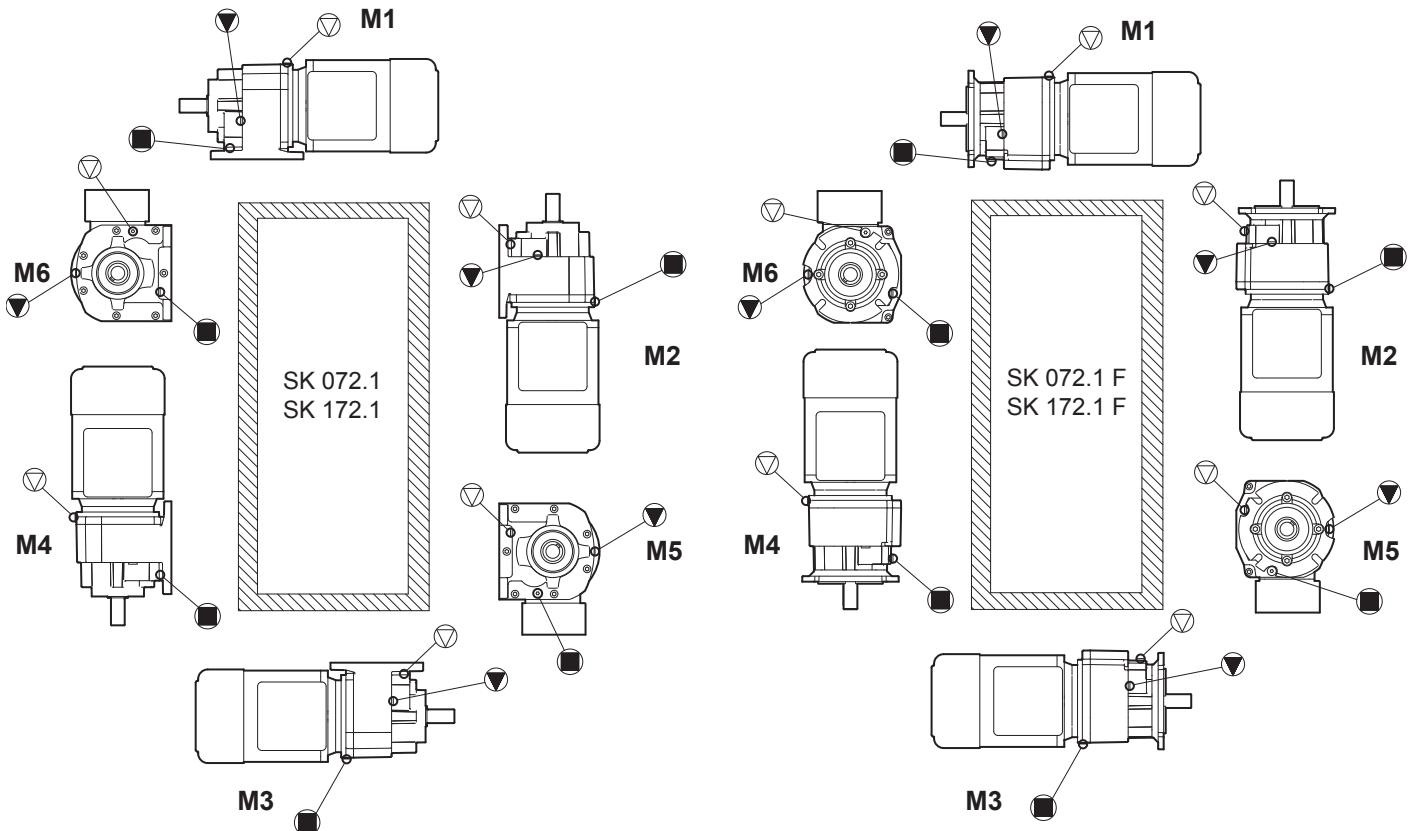
Cable entries at brake-motors only possible at pos. I and III.

Standards Regulations Nomenclature



Symbols for oil screw plugs in the mounting positions

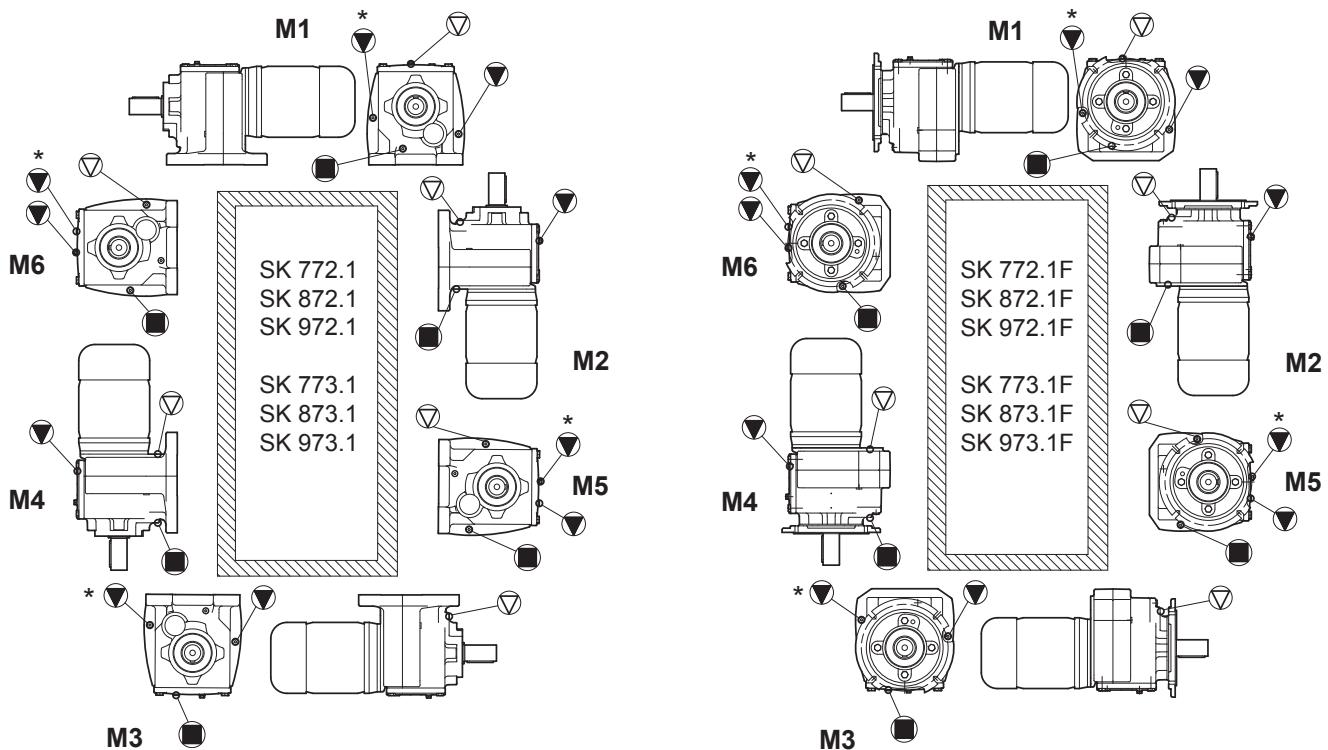
Vent	Oil level	Oil drain





Symbols for oil screw plugs in the mounting positions

Vent	Oil level	Oil drain



* SK 773.1(F) - SK 973.1(F)



Coating

The smooth aluminium surfaces have a highly resistant, natural corrosion protection. Usually, this corrosion protection is sufficient for installations indoors and outdoors if there is only slight environmental contamination. The natural oxide layer on the surface provides protection against corrosion in case of occasional wetting with neutral soft water. Painting is therefore not provided as standard.

For moderate to severe environmental contamination (e.g. contaminated air, aggressive gases and dust, acids, alkalis, salts, metal swarf, aggressive ions and biological decomposition products) and in case of special colour requirements, painting is available for an extra charge. Paint coatings as of Type F3.1 are the recommended

Gear unit sizes with cast iron or ductile cast iron housings have F2 paint as standard.

Information regarding the various optional paint coatings can be found in the following table.

Different paint specifications

Type	Finish	TFD [µm]	TFD total [µm]	EN 12944 Corr.-Cat.	Recommended use
F1	1 x 1K red-brown dip primer (cast iron parts) and 1 x 1K universal primer	30 40	30 - 70		Final coating by customer
F2	1 x 1K red-brown dip primer (cast iron parts) and 1 x top coating 2K polyurethane (2K PUR)HS	40 40	40 - 80	C2	For indoor use under normal climactic stress
F3.0	1 x 1K red-brown dip primer (cast iron parts) and 1 x 2K polyurethane filling primer (2K-PUR) and 1 x top coating 2K polyurethane (2K PUR)HS	40 70 40	110 - 150	C2	For internal and external installation under low environmental pollution
F3.1	1 x 1K red-brown dip primer (cast iron parts) and 2 x 2K polyurethane filling primer (2K-PUR) and 1 x top coating 2K polyurethane (2K PUR)HS	40 2 x 70 40	180 - 220	C3	For internal and external installation under medium environmental pollution
F3.2	1 x 1K red-brown dip primer (cast iron parts) and 2 x 2K polyurethane filling primer (2K-PUR) and 2 x top coating 2K polyurethane (2K PUR)HS	40 2 x 70 2 x 40	220 - 260	C4 / C5	For indoor and outdoor use under high climactic stress
F3.3	1 x 1K red-brown dip primer (cast iron parts) and 2 x 2K epoxy zinc phosphate primer and 2 x top coating 2K polyurethane (2K PUR)HS	40 2 x 70 2 x 40	220 - 260	C5	Coasts and off-shore areas
F3.4	1 x 1K red-brown dip primer (cast iron parts) and 1 x 2K epoxy zinc phosphate primer and 1 x epoxy EFDEDUR top coating, chemical resistant	40 70 40	110 - 150		For high chemical stress
F3.5	1 x 1K red-brown dip primer (cast iron parts) and 1 x 2K epoxy zinc phosphate primer and 1 x FREOPOX coating	40 70 40	110 - 150		Machines for the food packaging industry
Z	Level hollows and gaps with polyurethane-based joint filler				

1-K = One components, 2-K = Two components, TFD = Dry film thickness approx. [µm]

Helical Gear Units



AVAILABLE DESIGNS B - 2



GEAR UNIT MOTOR DATA

- Power and speed tables B - 4
Power and speed ratio tables
W and IEC adapters B - 34

DIMENSIONED DRAWINGS

- Gear unit motors B - 48
W and IEC adapters B - 64

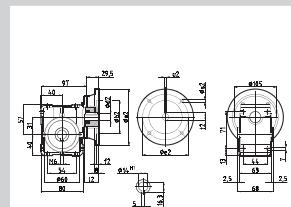


OPTIONS

- Z Flange mounted design with Flange B14 B - 77
XZ Foot mounted design with Flange B14 B - 78
XF Foot mounted design with Flange B5 B - 79
Further drive flanges B - 80
Adapter for mounting servomotors B - 83

Lieferbare Ausführungen	
Beispiele - lieferbare Ausführungen	
Baugrößen	SK 072.1 - 673.1
SK 072.1 - 66 84	Schmiedgetriebemotor, Fußfuß
SK 673.1 F - 112 M4	Schmiedgetriebemotor, Flansch
SK 172.1 - W	Schmiedgetriebe Fußbefestigung

P ₁ [kW]	n ₂ [min ⁻¹]	I _H [Nm]	M ₂ [Nm]	f _B	i _{ges}
0,12	3,7	311	2,1	362,43	
	4,0	285	2,2	332,23	
	4,4	261	2,4	304,61	
	4,8	240	2,7	279,23	
	5,4	213	3,0	248,20	
	3,3	346	1,1	402,80	
	3,5	323	1,3	376,20	
	4,2	271	1,5	316,18	
	4,4	260	1,7	302,91	
	5,0	231	1,9	269,26	
	5,9	194	2,3	226,30	
	6,6	173	2,6	201,16	
	7,1	162	2,8	1RR Q1	



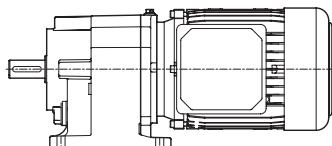
www.nord.com

Available Designs



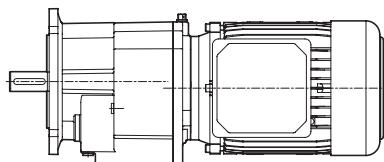
Examples - Available Designs

Sizes SK 072.1 - 673.1



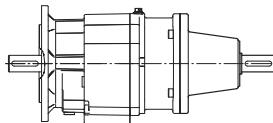
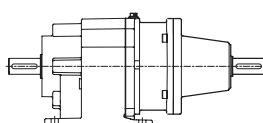
SK 572.1 - 90 SH/4

Helical gear unit motor
Housing in foot mounted design, two-stage



SK 673.1 F - 112 MH/4

Helical gear unit motor,
Housing in flange mounted design, three-stage

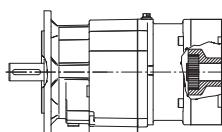
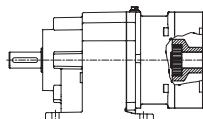


SK 172.1 - W

Helical gear unit
Housing in foot mounted design
Free input shaf

SK 172.1 F - W

Helical gear unit
Housing in flange mounted design
Free input shaf



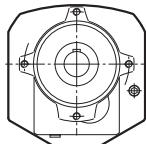
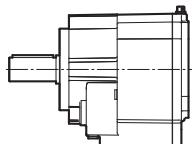
SK 072.1 - IEC 63 - C90

Helical gear unit
Housing in foot mounted design
IEC-Adapter

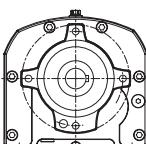
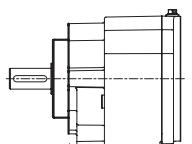
SK 072.1 F - IEC 63 - C90

Helical gear unit
Housing in flange mounted design
IEC-Adapter

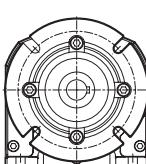
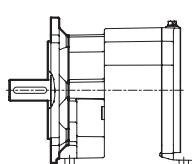
Housing - Options



Housing in flange mounted design with Flange B14
Type supplement **Z**



Housing in foot mounted design with Flange B14
Type supplement **XZ**



Housing in foot mounted design with Flange B5
Type supplement **XF**

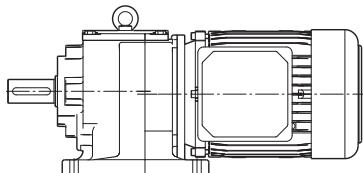
(SK 072.1 F)



Available Designs

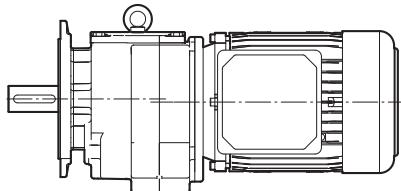
Examples - Available Designs

Sizes SK 772.1 - 973.1



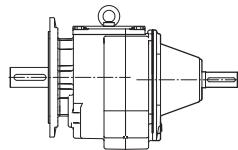
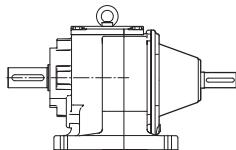
SK 772.1 - 100 LA/4

Helical gear unit motor
Housing in foot mounted design, two-stage



SK 873.1 F - 112 MP/4

Helical gear unit motor,
Housing in flange mounted design, three-stage

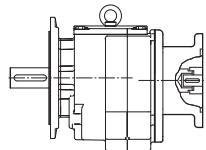
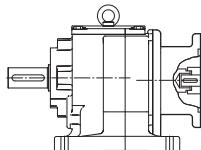


SK 972.1 - W

Helical gear unit
Housing in foot mounted design
Free input shaft

SK 972.1 F - W

Helical gear unit
Housing in flange mounted design
Free input shaft



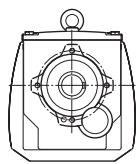
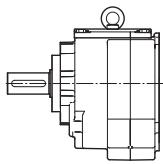
SK 973.1 - IEC

Helical gear unit
Housing in foot mounted design
IEC-Adapter

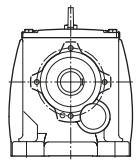
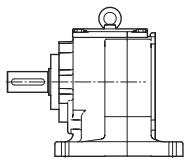
SK 973.1 F - IEC

Helical gear unit
Housing in flange mounted design
IEC-Adapter

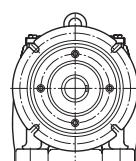
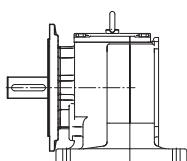
Housing - Options



Housing in flange mounted design with Flange B14
Type supplement **Z**



Housing in foot mounted design with Flange B14
Type supplement **XZ**



Housing in foot mounted design with Flange B5
Type supplement **XF**

O, 12 kW



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	I _{E1} kg	mm l-c
0,12	3,7	311	2,1	362,43	11,0	20,0	15,0	20,0	SK 673.1 - 63S/4			25,0	B57
	4,0	285	2,2	332,23	11,1	20,0	15,0	20,0					
	4,4	261	2,4	304,61	11,2	20,0	15,0	20,0					
	4,8	240	2,7	279,23	11,3	20,0	15,0	20,0					
	5,4	213	3,0	248,20	11,3	20,0	15,0	20,0					
	3,3	346	1,1	402,80	9,8	14,5	11,0	14,5	SK 573.1* - 63 S/4			19,0	B53, 55
	3,5	323	1,3	376,20	9,9	14,5	11,0	14,5					
	4,2	271	1,5	316,18	10,1	14,5	11,0	14,5					
	4,4	260	1,7	302,91	10,1	14,5	11,0	14,5					
	5,0	231	1,9	269,26	10,2	14,5	11,0	14,5					
	5,9	194	2,3	226,30	10,3	14,5	11,0	14,5					
	6,6	173	2,6	201,16	10,3	14,5	11,0	14,5					
	7,1	162	2,8	188,91	10,3	14,5	11,0	14,5					
	8,4	136	3,3	158,78	10,4	14,5	11,0	14,5					
	9,5	121	3,7	141,13	10,4	14,5	11,0	14,5					
	11	108	4,2	125,45	10,4	14,5	11,0	14,5					
	12	92	4,7	107,42	10,4	14,5	11,0	14,5					
	3,9	**238	0,8	343,92	4,9	10,2	7,6	10,2	SK 373.1 - 63S/4			11,0	B51
	4,4	260	0,8	303,08	4,3	10,2	7,5	10,2					
	5,0	231	1,0	269,67	4,9	10,2	7,7	10,2					
	5,2	220	0,9	256,50	5,1	10,2	7,8	10,2					
	5,8	196	1,1	228,22	5,3	10,2	7,9	10,2					
	6,4	179	1,1	207,98	5,5	10,2	8,0	10,2					
	6,8	168	1,2	196,07	5,6	10,2	8,0	10,2					
	7,2	159	1,3	185,05	5,6	10,2	8,0	10,2					
	8,0	142	1,5	165,94	5,7	10,2	8,0	10,2					
	9,2	124	1,7	145,00	5,8	10,2	8,0	10,2					
	10	112	1,8	130,87	5,9	10,2	8,0	10,2					
	11	103	1,9	120,54	5,9	10,2	8,0	10,2					
	13	88	2,3	102,01	6,0	10,2	8,0	10,2					
	15	79	2,7	91,48	6,0	10,2	8,0	10,2					
	16	71	3,0	82,57	6,0	10,2	8,0	10,2					
	18	62	2,4	72,38	6,1	10,2	8,0	10,2	SK 372.1 - 63S/4			11,0	B50
	21	55	2,9	64,06	6,1	10,2	8,0	10,2					
	22	52	2,9	60,83	6,1	10,2	8,0	10,2					
	25	46	3,5	53,84	6,1	10,2	8,0	10,2					
	16	70	1,2	81,45	2,8	3,9	-	-	SK 172.1 - 63S/4			8,0	B49
	19	60	1,2	70,00	2,8	3,9	-	-					
	21	54	1,2	62,36	2,8	3,9	-	-					
	25	46	1,8	54,03	2,8	3,9	-	-					
	29	40	2,1	46,43	2,8	3,9	-	-					
	32	36	2,4	41,36	2,8	3,9	-	-					
	34	33	2,6	38,75	2,8	3,9	-	-					
	39	30	2,9	34,52	2,8	3,9	-	-					
	21	55	0,9	63,56	2,5	2,9	-	-	SK 072.1 - 63S/4			6,0	B48
	24	47	1,1	55,00	2,5	2,9	-	-					
	27	42	1,1	49,00	2,5	2,9	-	-					
	32	36	1,4	42,10	2,5	2,9	-	-					
	37	31	1,7	36,43	2,5	2,9	-	-					
	41	28	2,0	32,45	2,5	2,9	-	-					
	48	24	2,3	27,78	2,5	2,9	-	-					
	54	21	2,6	24,75	2,5	2,9	-	-					

** ⇒ A20

* ⇒ A11

O, 18 kW



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
0,18	17	103	0,8	81,45	2,8	3,9	-	-	SK 172.1 - 63L/4			8,0 B49
	19	88	0,8	70,00	2,8	3,9	-	-				
	22	79	0,8	62,36	2,8	3,9	-	-				
	25	68	1,2	54,03	2,8	3,9	-	-				
	29	59	1,4	46,43	2,8	3,9	-	-				
	33	52	1,6	41,36	2,8	3,9	-	-				
	35	49	1,7	38,75	2,8	3,9	-	-				
	39	44	2,0	34,52	2,8	3,9	-	-				
	44	39	2,3	31,00	2,8	3,9	-	-				
	49	35	2,6	27,62	2,8	3,9	-	-				
	55	31	2,9	24,80	2,8	3,9	-	-				
	32	53	0,9	42,10	2,5	2,9	-	-	SK 072.1 - 63L/4			7,0 B48
	37	46	1,2	36,43	2,5	2,9	-	-				
	42	41	1,3	32,45	2,5	2,9	-	-				
	49	35	1,5	27,78	2,5	2,9	-	-				
	55	31	1,8	24,75	2,5	2,9	-	-				
	61	28	2,0	22,22	2,5	2,9	-	-				
	64	27	2,0	21,38	2,5	2,9	-	-				
	71	24	2,3	19,20	2,5	2,9	-	-				
	78	22	2,5	17,35	2,5	2,9	-	-				
	86	20	2,8	15,77	2,5	2,9	-	-				
	94	18	2,8	14,40	2,5	2,9	-	-				
	103	17	2,8	13,20	2,5	2,9	-	-				
	118	15	3,4	11,56	2,5	2,9	-	-				
	136	13	4,4	10,00	2,5	2,9	-	-				
	153	11	4,9	8,91	2,5	2,9	-	-				
	170	10	5,4	8,00	2,5	2,9	-	-				
	188	9	6,0	7,23	2,4	2,9	-	-				
	207	8	6,4	6,57	2,4	2,9	-	-				
	228	8	7,3	5,96	2,3	2,9	-	-				
	247	7	7,9	5,50	2,2	2,9	-	-				
	256	7	8,2	5,31	2,2	2,9	-	-				
	285	6	8,8	4,77	2,1	2,9	-	-				
	315	5	9,2	4,31	2,1	2,9	-	-				
	347	5	9,1	3,92	2,0	2,9	-	-				
	380	5	10,6	3,58	2,0	2,9	-	-				
	415	4	11,3	3,28	1,9	2,9	-	-				
	460	4	12,3	2,95	1,8	2,9	-	-				
	477	4	12,5	2,85	1,8	2,9	-	-				
	530	3	12,6	2,57	1,8	2,9	-	-				
	584	3	13,3	2,33	1,7	2,9	-	-				
	649	3	13,6	2,10	1,6	2,9	-	-				

0,25 kW
0,37 kW



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
0,25	26	93	0,9	54,03	2,8	3,9	-	-	SK 172.1 - 71S/4			10,0 B49
	30	80	1,1	46,43	2,8	3,9	-	-				
	33	72	1,2	41,36	2,8	3,9	-	-				
	36	67	1,3	38,75	2,8	3,9	-	-				
	40	60	1,4	34,52	2,8	3,9	-	-				
	45	54	1,7	31,00	2,8	3,9	-	-				
	50	48	1,9	27,62	2,8	3,9	-	-				
	56	43	2,1	24,80	2,8	3,9	-	-				
	62	39	2,4	22,42	2,8	3,9	-	-				
	68	35	2,4	20,37	2,8	3,9	-	-				
	74	32	2,6	18,60	2,8	3,9	-	-				
	49	49	1,1	27,78	2,5	2,9	-	-	SK 072.1 - 63LA/4			7,0 B48
	55	44	1,3	24,75	2,5	2,9	-	-				
	61	39	1,4	22,22	2,5	2,9	-	-				
	63	38	1,5	21,38	2,5	2,9	-	-				
	70	34	1,6	19,20	2,5	2,9	-	-				
	78	31	1,8	17,35	2,5	2,9	-	-				
	86	28	2,0	15,77	2,5	2,9	-	-				
	94	25	2,0	14,40	2,5	2,9	-	-				
	102	23	2,0	13,20	2,5	2,9	-	-				
	117	20	2,4	11,56	2,5	2,9	-	-				
	135	18	3,1	10,00	2,5	2,9	-	-				
	152	16	3,5	8,91	2,5	2,9	-	-				
	169	14	3,9	8,00	2,5	2,9	-	-				
	187	13	4,3	7,23	2,4	2,9	-	-				
	205	12	4,6	6,57	2,3	2,9	-	-				
	226	11	5,2	5,96	2,3	2,9	-	-				
	245	10	5,7	5,50	2,2	2,9	-	-				
	254	9	5,9	5,31	2,2	2,9	-	-				
	283	8	6,3	4,77	2,1	2,9	-	-				
	313	8	6,6	4,31	2,1	2,9	-	-				
	345	7	6,5	3,92	2,0	2,9	-	-				
	377	6	7,6	3,58	1,9	2,9	-	-				
	412	6	8,1	3,28	1,9	2,9	-	-				
	457	5	8,8	2,95	1,8	2,9	-	-				
	474	5	8,9	2,85	1,8	2,9	-	-				
	526	5	9,0	2,57	1,7	2,9	-	-				
	580	4	9,5	2,33	1,7	2,9	-	-				
	644	4	9,7	2,10	1,6	2,9	-	-				
0,37	3,5	1013	0,8	395,46	9,5	9,0	15,8	25,0	SK 773.1 - 71L/4			40,0 B59
	4,0	874	1,0	341,21	11,0	9,0	16,6	25,0				
	4,1	857	1,0	334,70	11,1	9,0	16,7	25,0				
	4,5	787	1,1	307,42	11,9	9,0	17,0	25,0				
	4,8	739	1,1	288,78	12,3	9,0	17,0	25,0				
	5,2	679	1,3	265,24	12,9	9,0	17,0	25,0				
	5,3	666	1,3	260,18	12,9	9,0	17,0	25,0				
	5,7	624	1,4	243,53	13,3	9,0	17,0	25,0				
	6,1	575	1,5	224,49	13,5	9,0	17,0	25,0				
	6,7	528	1,6	206,11	13,7	9,0	17,0	25,0				
	7,3	485	1,8	189,31	13,8	9,0	17,0	25,0				
	7,7	457	1,9	178,53	13,9	9,0	17,0	25,0				
	8,6	410	2,1	160,22	14,0	9,0	17,0	25,0				
	9,1	387	1,8	151,10	14,1	9,0	17,0	25,0				
	9,9	355	2,4	138,78	14,2	9,0	17,0	25,0				



0,37 kW

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm [c-c] kg
0,37	4,2	851	0,8	332,23	6,4	20,0	13,0	20,0	SK 673.1 - 71L/4			27,0 B57
	4,5	780	0,8	304,61	7,5	20,0	13,5	20,0				
	4,9	715	0,9	279,23	8,3	20,0	14,0	20,0				
	5,6	635	1,0	248,20	9,1	20,0	14,5	20,0				
	6,3	564	1,1	220,32	9,7	20,0	14,8	20,0				
	7,1	497	1,3	194,11	10,1	20,0	15,0	20,0				
	7,6	466	1,4	181,88	10,3	20,0	15,0	20,0				
	7,8	456	1,4	177,94	10,4	20,0	15,0	20,0				
	8,5	413	1,5	161,45	10,6	20,0	15,0	20,0				
	9,6	367	1,7	143,30	10,8	20,0	15,0	20,0				
	11	334	1,9	130,55	11,0	20,0	15,0	20,0				
	12	297	2,2	115,89	11,1	20,0	15,0	20,0				
	13	265	2,4	103,48	11,2	20,0	15,0	20,0				
	15	243	2,6	94,86	11,3	20,0	15,0	20,0				
	6,1	579	0,8	226,30	7,2	14,5	11,0	14,5	SK 573.1* - 71L/4			21,0 B53, 55
	6,9	515	0,9	201,16	8,2	14,5	11,0	14,5				
	7,3	484	0,9	188,91	8,8	14,5	11,0	14,5				
	7,7	457	1,0	178,56	9,1	14,5	11,0	14,5				
	8,7	407	1,1	158,78	9,5	14,5	11,0	14,5				
	9,8	361	1,2	141,13	9,7	14,5	11,0	14,5				
	11	321	1,4	125,45	9,9	14,5	11,0	14,5				
	12	285	1,6	111,36	10,0	14,5	11,0	14,5				
	13	275	1,6	107,42	10,1	14,5	11,0	14,5				
	15	242	1,9	94,50	10,2	14,5	11,0	14,5				
	16	218	2,1	85,18	10,2	14,5	11,0	14,5				
	18	197	2,3	76,88	10,3	14,5	11,0	14,5				
	20	173	2,6	67,64	10,3	14,5	11,0	14,5				
	23	156	2,9	60,97	10,4	14,5	11,0	14,5				
	25	139	2,7	54,41	10,4	15,0	11,0	15,0	SK 572.1* - 71L/4			21,0 B52, 54
	30	117	2,7	45,77	10,4	15,0	11,0	15,0				
	14	261	0,8	102,01	4,1	10,2	7,4	10,2	SK 373.1 - 71L/4			14,0 B51
	15	234	0,9	91,48	4,7	10,2	7,7	10,2				
	17	211	1,0	82,57	5,2	10,2	7,8	10,2				
	19	190	1,1	74,27	5,4	10,2	8,0	10,2				
	21	166	1,2	64,70	5,6	10,2	8,0	10,2				
	23	154	1,3	60,22	5,7	10,2	8,0	10,2				
	26	138	1,5	54,00	5,8	10,2	8,0	10,2				
	29	120	1,7	47,05	5,9	10,2	8,0	10,2				
	32	109	1,8	42,46	5,9	10,2	8,0	10,2				
	37	95	2,1	37,23	6,0	10,2	8,0	10,2				
	19	185	0,8	72,38	5,4	10,2	8,0	10,2	SK 372.1 - 71L/4			13,0 B50
	22	164	1,0	64,06	5,6	10,2	8,0	10,2				
	23	156	1,0	60,83	5,6	10,2	8,0	10,2				
	26	138	1,2	53,84	5,8	10,2	8,0	10,2				
	32	111	1,5	43,26	5,9	10,2	8,0	10,2				
	36	98	1,8	38,12	6,0	10,2	8,0	10,2				
	41	87	2,2	33,84	6,0	10,2	8,0	10,2				
	46	77	2,3	30,11	6,0	10,2	8,0	10,2				
	36	99	0,9	38,75	2,8	3,9	-	-	SK 172.1 - 71L/4			10,0 B49
	40	88	1,0	34,52	2,8	3,9	-	-				
	45	79	1,2	31,00	2,8	3,9	-	-				
	50	71	1,3	27,62	2,8	3,9	-	-				
	56	63	1,4	24,80	2,8	3,9	-	-				
	62	57	1,6	22,42	2,8	3,9	-	-				
	68	52	1,6	20,37	2,8	3,9	-	-				
	74	48	1,8	18,60	2,8	3,9	-	-				
	88	40	2,1	15,76	2,8	3,9	-	-				

* ⇒ A11

0,37 kW



P ₁ [kW]	n ₂ [min ⁻¹] <small>IE1 Standard</small>	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type <small>IE1 Standard</small>	Type <small>IE2</small>	Type <small>IE3</small>	mm [L x W x H] kg
0,37	102	35	2,5	13,54	2,8	3,9	-	-	SK 172.1 - 71L/4			10,0 B49
	114	31	2,8	12,06	2,8	3,9	-	-				
	121	29	2,9	11,39	2,8	3,9	-	-				
	127	28	3,1	10,83	2,8	3,9	-	-				
	50	71	0,8	27,78	2,5	2,9	-	-	SK 072.1 - 71L/4			9,0 B48
	56	63	0,9	24,75	2,5	2,9	-	-				
	62	57	1,0	22,22	2,5	2,9	-	-				
	65	55	1,0	21,38	2,5	2,9	-	-				
	72	49	1,1	19,20	2,5	2,9	-	-				
	80	44	1,2	17,35	2,5	2,9	-	-				
	88	40	1,4	15,77	2,5	2,9	-	-				
	96	37	1,4	14,40	2,5	2,9	-	-				
	105	34	1,4	13,20	2,5	2,9	-	-				
	119	30	1,7	11,56	2,5	2,9	-	-				
	138	26	2,1	10,00	2,5	2,9	-	-				
	155	23	2,4	8,91	2,4	2,9	-	-				
	172	20	2,7	8,00	2,4	2,9	-	-				
	191	19	3,0	7,23	2,3	2,9	-	-				
	210	17	3,2	6,57	2,2	2,9	-	-				
	231	15	3,6	5,96	2,2	2,9	-	-				
	251	14	3,9	5,50	2,1	2,9	-	-				
	260	14	4,0	5,31	2,1	2,9	-	-				
	289	12	4,3	4,77	2,0	2,9	-	-				
	320	11	4,5	4,31	2,0	2,9	-	-				
	352	10	4,5	3,92	1,9	2,9	-	-				
	386	9	5,2	3,58	1,9	2,9	-	-				
	421	8	5,6	3,28	1,8	2,9	-	-				
	467	8	6,1	2,95	1,8	2,9	-	-				
	485	7	6,2	2,85	1,8	2,9	-	-				
	538	7	6,2	2,57	1,7	2,9	-	-				
	593	6	6,5	2,33	1,6	2,9	-	-				
	658	5	6,7	2,10	1,6	2,8	-	-				

0,55 kW



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
0,55	26	199	0,8	53,84	5,3	10,2	7,9	10,2	SK 372.1 - 80S/4	SK 372.1 - 80SH/4		16,0 B50
	33	160	1,1	43,26	5,6	10,2	8,0	10,2				
	37	141	1,3	38,12	5,7	10,2	8,0	10,2				
	42	125	1,5	33,84	5,8	10,2	8,0	10,2				
	47	111	1,6	30,11	5,9	10,2	8,0	10,2				
	55	96	2,0	25,85	6,0	10,2	8,0	10,2				
	62	85	2,4	23,00	6,0	10,2	8,0	10,2				
	69	76	2,5	20,62	6,0	10,2	8,0	10,2				
	77	68	2,9	18,40	6,1	10,2	8,0	10,2				
	86	61	3,1	16,50	6,0	10,2	8,0	10,2				
	97	54	3,5	14,57	6,0	10,2	7,9	10,2				
	110	48	4,2	12,96	5,8	10,2	7,6	10,2				
	123	43	4,4	11,55	5,7	10,2	7,3	10,2				
	51	102	0,9	27,62	2,8	3,9	-	-	SK 172.1 - 80S/4	SK 172.1 - 80SH/4		13,0 B49
	57	92	1,0	24,80	2,8	3,9	-	-				
	63	83	1,1	22,42	2,8	3,9	-	-				
	70	75	1,1	20,37	2,8	3,9	-	-				
	76	69	1,2	18,60	2,8	3,9	-	-				
	90	58	1,5	15,76	2,8	3,9	-	-				
	105	50	1,7	13,54	2,8	3,9	-	-				
	118	45	1,9	12,06	2,8	3,9	-	-				
	125	42	2,0	11,39	2,8	3,9	-	-				
	131	40	2,1	10,83	2,8	3,9	-	-				
	145	36	2,3	9,79	2,8	3,9	-	-				
	163	32	2,7	8,72	2,8	3,9	-	-				
	181	29	2,8	7,83	2,8	3,9	-	-				
	78	67	0,8	17,35	2,5	2,9	-	-	SK 072.1 - 71LA/4			9,0 B48
	86	61	0,9	15,77	2,5	2,9	-	-				
	94	56	0,9	14,40	2,4	2,9	-	-				
	103	51	0,9	13,20	2,4	2,9	-	-				
	118	45	1,1	11,56	2,4	2,9	-	-				
	136	39	1,4	10,00	2,4	2,9	-	-				
	153	34	1,6	8,91	2,3	2,9	-	-				
	170	31	1,8	8,00	2,2	2,9	-	-				
	188	28	2,0	7,23	2,2	2,9	-	-				
	207	25	2,1	6,57	2,1	2,9	-	-				
	228	23	2,4	5,96	2,1	2,9	-	-				
	247	21	2,6	5,50	2,0	2,9	-	-				
	256	21	2,7	5,31	2,0	2,9	-	-				
	285	18	2,9	4,77	2,0	2,9	-	-				
	315	17	3,0	4,31	1,9	2,9	-	-				
	347	15	3,0	3,92	1,9	2,9	-	-				
	380	14	3,5	3,58	1,8	2,9	-	-				
	415	13	3,7	3,28	1,8	2,9	-	-				
	460	11	4,0	2,95	1,7	2,9	-	-				
	477	11	4,1	2,85	1,7	2,9	-	-				
	530	10	4,1	2,57	1,7	2,9	-	-				
	584	9	4,3	2,33	1,6	2,8	-	-				
	649	8	4,4	2,10	1,6	2,7	-	-				

**0,75 kW
1,10 kW**



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
0,75												
33	219	0,8	43,26		5,0	10,2	7,8	10,2	SK 372.1 - 80L/4	SK 372.1 - 80LH/4	SK 372.1 - 80LP/4	17,0 B50
37	193	0,9	38,12		5,1	10,2	7,9	10,2				
42	171	1,1	33,84		5,3	10,2	8,0	10,2				
47	152	1,2	30,11		5,3	10,2	8,0	10,2				
55	131	1,5	25,85		5,5	10,2	8,0	10,2				
62	116	1,7	23,00		5,5	10,2	8,0	10,2				
69	104	1,8	20,62		5,4	10,2	8,0	10,2				
77	93	2,1	18,40		5,5	10,2	8,0	10,2				
86	84	2,3	16,50		5,4	10,2	8,0	10,2				
97	74	2,6	14,57		5,4	10,2	7,8	10,2				
109	66	3,0	12,96		5,3	10,2	7,5	10,2				
122	58	3,2	11,55		5,3	10,2	7,2	10,2				
138	52	3,7	10,28		5,2	10,2	7,0	10,2				
151	48	4,0	9,40		5,1	10,2	6,8	10,2				
63	113	0,8	22,42		2,8	3,9	-	-	SK 172.1 - 80L/4	SK 172.1 - 80LH/4	SK 172.1 - 80LP/4	14,0 B49
69	103	0,8	20,37		2,8	3,9	-	-				
76	94	0,9	18,60		2,8	3,9	-	-				
90	80	1,1	15,76		2,8	3,9	-	-				
104	69	1,2	13,54		2,8	3,9	-	-				
117	61	1,4	12,06		2,8	3,9	-	-				
124	58	1,5	11,39		2,8	3,9	-	-				
131	55	1,6	10,83		2,8	3,9	-	-				
145	50	1,7	9,79		2,8	3,9	-	-				
162	44	2,0	8,72		2,8	3,9	-	-				
181	40	2,1	7,83		2,8	3,9	-	-				
200	36	2,3	7,08		2,8	3,9	-	-				
220	33	2,5	6,43		2,8	3,9	-	-				
245	29	2,6	5,77		2,8	3,9	-	-				
275	26	3,2	5,14		2,8	3,9	-	-				
307	23	3,1	4,62		2,8	3,9	-	-				
339	21	3,1	4,17		2,8	3,9	-	-				
373	19	3,1	3,79		2,8	3,9	-	-				
409	18	3,1	3,46		2,8	3,9	-	-				
439	16	3,3	3,22		2,8	3,9	-	-				
485	15	3,4	2,92		2,8	3,9	-	-				
521	14	3,3	2,72		2,8	3,9	-	-				
568	13	3,4	2,49		2,8	3,9	-	-				
611	12	3,7	2,32		2,8	3,9	-	-				
1,10												
3,1	3344	1,0	456,77		23,3	22,0	29,7	40,0	SK 973.1 - 90S/4	SK 973.1 - 90SH/4	SK 973.1 - 90SP/4	123 B63
3,5	3036	1,1	414,73		24,1	22,0	30,2	40,0				
4,0	2656	1,2	362,89		25,0	22,0	30,7	40,0				
4,4	2382	1,4	325,47		25,6	22,0	31,0	40,0				
4,9	2163	1,5	295,50		26,0	22,0	31,2	40,0				
5,5	1893	1,7	258,57		26,5	22,0	31,5	40,0				
6,1	1719	1,9	234,77		26,8	22,0	31,6	40,0				
7,3	1446	2,3	197,50		27,3	22,0	31,9	40,0				
8,0	1313	2,5	179,32		27,5	22,0	32,0	40,0				
8,3	1271	2,4	173,58		27,5	22,0	32,0	40,0				
9,1	1154	2,6	157,60		27,7	22,0	32,1	40,0				
11	970	3,4	132,45		28,0	22,0	32,2	40,0				
5,0	2084	0,8	284,73		12,8	18,0	22,9	30,0	SK 873.1 - 90S/4	SK 873.1 - 90SH/4	SK 873.1 - 90SP/4	84,0 B61
5,6	1886	0,9	257,61		14,4	18,0	23,8	30,0				
6,2	1699	1,0	232,16		15,6	18,0	24,6	30,0				
6,8	1544	1,1	210,95		16,5	18,0	25,0	30,0				
7,5	1397	1,2	190,86		17,2	18,0	25,0	30,0				
8,7	1211	1,4	165,42		18,0	18,0	25,0	30,0				
9,5	1100	1,5	150,31		18,3	18,0	25,0	30,0				



1,10 kW

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
1,10	11	933	1,8	127,52	18,9	18,0	25,0	30,0	SK 873.1 - 90S/4	SK 873.1 - 90SH/4	SK 873.1 - 90SP/4	84,0 B61
	12	848	2,0	115,88	19,1	18,0	25,0	30,0				
	14	739	2,3	101,02	19,3	18,0	25,0	30,0				
	16	669	2,5	91,43	19,5	18,0	25,0	30,0				
	17	608	2,8	83,08	19,6	18,0	25,0	30,0				
	19	544	3,1	74,29	19,7	18,0	25,0	30,0				
	21	494	3,4	67,50	19,8	18,0	25,0	30,0				
	23	447	3,8	61,07	19,8	18,0	25,0	30,0				
	10	1016	0,8	138,78	9,4	9,0	15,8	25,0	SK 773.1 - 90S/4	SK 773.1 - 90SH/4	SK 773.1 - 90SP/4	49,0 B59
	12	860	1,0	117,46	11,0	9,0	16,7	25,0				
	13	819	1,0	111,92	11,5	9,0	16,9	25,0				
	15	707	1,2	96,57	12,6	9,0	17,0	25,0				
	17	610	1,4	83,32	12,2	9,0	17,0	25,0				
	18	580	1,5	79,23	12,0	9,0	17,0	25,0				
	20	526	1,6	71,89	11,8	9,0	17,0	24,9				
	21	505	1,7	68,92	11,7	9,0	17,0	24,8				
	23	464	1,8	63,42	11,5	9,0	17,0	24,4				
	25	422	2,0	57,64	11,2	9,0	17,0	24,0				
	28	376	2,3	51,31	10,9	9,0	17,0	23,5				
	30	348	2,5	47,61	10,7	9,0	17,0	23,0				
	33	318	2,7	43,43	10,5	9,0	17,0	22,6				
	12	848	0,8	115,89	6,4	20,0	13,0	20,0	SK 673.1 - 90S/4	SK 673.1 - 90SH/4	SK 673.1 - 90SP/4	36,0 B57
	14	758	0,8	103,48	7,8	20,0	13,7	20,0				
	15	694	0,9	94,86	8,5	20,0	14,1	20,0				
	17	613	1,0	83,70	9,3	20,0	14,6	20,0				
	19	539	1,2	73,64	9,8	20,0	15,0	20,0				
	22	483	1,3	65,95	10,2	20,0	15,0	20,0				
	24	442	1,4	60,45	10,4	20,0	15,0	20,0				
	26	404	1,6	55,12	10,6	20,0	15,0	20,0				
	29	362	1,8	49,50	10,8	20,0	15,0	20,0				
	32	328	1,9	44,85	11,0	20,0	15,0	20,0				
	35	304	2,1	41,54	11,1	20,0	15,0	20,0				
	39	273	2,3	37,23	11,2	20,0	15,0	20,0				
	25	415	1,0	56,65	10,6	20,0	15,0	20,0	SK 672.1 - 90S/4	SK 672.1 - 90SH/4	SK 672.1 - 90SP/4	35,0 B56
	32	326	1,4	44,55	11,0	20,0	15,0	20,0				
	40	262	2,1	35,75	11,2	20,0	15,0	20,0				
	44	238	2,6	32,58	11,3	20,0	15,0	20,0				
	49	213	2,6	29,08	11,3	20,0	15,0	20,0				
	19	563	0,8	76,88	7,5	14,5	11,0	14,5	SK 573.1* - 90S/4	SK 573.1* - 90SH/4	SK 573.1* - 90SP/4	30,0 B53, 55
	21	495	0,9	67,64	8,5	14,5	11,0	14,5				
	24	446	1,0	60,97	9,2	14,5	11,0	14,5				
	26	408	1,1	55,80	9,5	14,5	11,0	14,5				
	29	363	1,2	49,60	9,7	14,5	11,0	14,5				
	30	351	1,3	47,95	9,8	14,5	11,0	14,5				
	33	318	1,4	43,40	9,9	14,5	11,0	14,5				
	34	309	1,5	42,18	9,9	14,5	11,0	14,5				
	38	278	1,6	38,02	10,0	14,5	11,0	14,5				
	41	255	1,7	34,80	10,1	14,5	11,0	14,5				
	46	226	1,9	30,93	10,2	14,5	11,0	14,5				

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1,10 kW



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
1,10	26	398	0,9	54,41	9,6	15,0	11,0	15,0	SK 572.1* - 90S/4	SK 572.1* - 90SH/4	SK 572.1* - 90SP/4	30,0 B52, 54
	31	335	1,0	45,77	9,8	15,0	11,0	15,0				
	34	310	1,2	42,38	9,9	15,0	11,0	15,0				
	40	261	1,4	35,65	10,1	15,0	11,0	15,0				
	46	229	1,6	31,28	10,2	15,0	11,0	15,0				
	50	212	1,8	28,91	10,2	15,0	11,0	15,0				
	53	198	2,0	27,00	10,3	15,0	11,0	15,0				
	58	180	2,4	24,58	10,3	15,0	11,0	15,0				
	66	160	2,6	21,85	10,4	15,0	11,0	15,0				
	73	143	2,8	19,57	10,4	15,0	11,0	15,0				
	87	121	3,3	16,46	10,4	15,0	11,0	15,0				
	93	113	3,8	15,38	10,4	15,0	11,0	15,0				
	105	100	4,1	13,67	10,2	15,0	11,0	15,0				
	43	243	0,8	33,20	3,2	10,2	7,6	10,2	SK 373.1 - 90S/4	SK 373.1 - 90SH/4	SK 373.1 - 90SP/4	23,0 B51
	48	218	1,0	29,77	3,4	10,2	7,8	10,2				
	55	190	1,1	25,94	3,7	10,2	8,0	10,2				
	61	171	1,2	23,41	3,8	10,2	8,0	10,2				
	63	166	1,3	22,74	4,0	10,2	8,0	10,2				
	70	150	1,4	20,52	4,1	10,2	8,0	10,2				
	77	136	1,4	18,63	4,1	10,2	8,0	10,2				
	42	248	0,8	33,84	3,2	10,2	7,6	10,2	SK 372.1 - 90S/4	SK 372.1 - 90SH/4	SK 372.1 - 90SP/4	22,0 B50
	48	220	0,8	30,11	3,5	10,2	7,8	10,2				
	56	189	1,0	25,85	3,9	10,2	8,0	10,2				
	62	168	1,2	23,00	4,1	10,2	8,0	10,2				
	70	151	1,3	20,62	4,1	10,2	8,0	10,2				
	78	135	1,5	18,40	4,3	10,2	8,0	10,2				
	87	121	1,6	16,50	4,4	10,2	7,8	10,2				
	98	107	1,8	14,57	4,6	10,2	7,5	10,2				
	111	95	2,1	12,96	4,5	10,2	7,3	10,2				
	124	85	2,2	11,55	4,6	10,2	7,0	10,2				
	140	75	2,5	10,28	4,5	10,2	6,8	10,2				
	153	69	2,8	9,40	4,5	10,2	6,6	10,2				
	174	60	3,0	8,22	4,5	10,2	6,4	10,2				
	198	53	3,2	7,23	4,4	10,2	6,1	10,2				
	208	50	3,4	6,89	4,4	10,2	6,1	10,2				
	218	48	3,3	6,58	4,4	10,2	6,0	10,2				
	241	44	3,7	5,95	4,3	10,2	5,8	10,2				
	274	38	4,2	5,24	4,2	10,2	5,6	10,2				
	126	83	1,0	11,39	2,8	3,9	-	-	SK 172.1 - 90S/4	SK 172.1 - 90SH/4	SK 172.1 - 90SP/4	19,0 B49
	147	72	1,2	9,79	2,8	3,9	-	-				
	164	64	1,4	8,72	2,8	3,9	-	-				
	183	57	1,4	7,83	2,8	3,9	-	-				
	203	52	1,6	7,08	2,8	3,9	-	-				
	223	47	1,7	6,43	2,8	3,9	-	-				
	249	42	1,8	5,77	2,8	3,9	-	-				
	279	38	2,2	5,14	2,8	3,9	-	-				
	311	34	2,1	4,62	2,8	3,9	-	-				
	344	31	2,1	4,17	2,8	3,9	-	-				
	379	28	2,1	3,79	2,8	3,9	-	-				
	415	25	2,1	3,46	2,8	3,9	-	-				
	445	24	2,3	3,22	2,8	3,9	-	-				
	492	21	2,3	2,92	2,8	3,9	-	-				
	528	20	2,3	2,72	2,8	3,9	-	-				
	576	18	2,4	2,49	2,8	3,9	-	-				
	619	17	2,5	2,32	2,8	3,8	-	-				

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1,50 kW



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
1,50	32	451	1,0	44,55	10,4	20,0	15,0	20,0	SK 672.1 - 90L/4	SK 672.1 - 90LH/4	SK 672.1 - 90LP/4	37,0 B56
	40	362	1,5	35,75	10,8	20,0	15,0	20,0				
	43	330	1,8	32,58	11,0	20,0	15,0	20,0				
	49	294	1,9	29,08	11,1	20,0	15,0	20,0				
	25	565	0,8	55,80	7,5	14,5	11,0	14,5	SK 573.1* - 90L/4	SK 573.1* - 90LH/4	SK 573.1* - 90LP/4	32,0 B53, 55
	29	502	0,9	49,60	8,2	14,5	11,0	14,5				
	30	485	0,9	47,95	8,4	14,5	11,0	14,5				
	33	439	1,0	43,40	8,8	14,5	11,0	14,5				
	34	427	1,1	42,18	8,9	14,5	11,0	14,5				
	37	385	1,2	38,02	9,2	14,5	11,0	14,5				
	41	352	1,2	34,80	9,5	14,5	11,0	14,5				
	46	313	1,4	30,93	9,6	14,5	11,0	14,5				
	53	271	1,6	26,77	9,8	14,5	11,0	14,5				
	59	241	1,8	23,79	9,8	14,5	11,0	14,5				
	66	216	2,0	21,32	9,7	14,5	11,0	14,5				
	33	429	0,9	42,38	9,4	15,0	11,0	15,0	SK 572.1* - 90L/4	SK 572.1* - 90LH/4	SK 572.1* - 90LP/4	31,0 B52, 54
	40	361	1,0	35,65	9,7	15,0	11,0	15,0				
	45	317	1,2	31,28	9,9	15,0	11,0	15,0				
	49	293	1,3	28,91	9,9	15,0	11,0	15,0				
	52	273	1,5	27,00	9,8	15,0	11,0	15,0				
	58	249	1,7	24,58	9,9	15,0	11,0	15,0				
	65	221	1,9	21,85	9,8	15,0	11,0	15,0				
	72	198	2,0	19,57	10,0	15,0	11,0	15,0				
	86	167	2,4	16,46	9,8	15,0	11,0	15,0				
	92	156	2,8	15,38	9,6	15,0	11,0	15,0				
	104	138	3,0	13,67	9,5	15,0	11,0	15,0				
	112	128	3,3	12,68	9,4	15,0	11,0	15,0				
	126	114	3,6	11,25	9,3	15,0	11,0	15,0				
	141	102	3,9	10,04	9,1	15,0	11,0	15,0				
	55	263	0,8	25,94	1,8	10,2	7,4	10,2	SK 373.1 - 90L/4	SK 373.1 - 90LH/4	SK 373.1 - 90LP/4	24,0 B51
	60	237	0,9	23,41	2,1	10,2	7,6	10,2				
	62	230	0,9	22,74	2,3	10,2	7,7	10,2				
	69	208	1,0	20,52	2,5	10,2	7,8	10,2				
	76	189	1,0	18,63	2,7	10,2	7,7	10,2				
	62	233	0,9	23,00	2,4	10,2	7,7	10,2	SK 372.1 - 90L/4	SK 372.1 - 90LH/4	SK 372.1 - 90LP/4	24,0 B50
	69	209	0,9	20,62	2,6	10,2	7,8	10,2				
	77	186	1,1	18,40	3,0	10,2	7,7	10,2				
	86	167	1,1	16,50	3,1	10,2	7,5	10,2				
	97	147	1,3	14,57	3,5	10,2	7,3	10,2				
	109	131	1,5	12,96	3,6	10,2	7,1	10,2				
	122	117	1,6	11,55	3,8	10,2	6,9	10,2				
	138	104	1,8	10,28	3,8	10,2	6,7	10,2				
	151	95	2,0	9,40	3,9	10,2	6,5	10,2				
	172	83	2,2	8,22	3,9	10,2	6,3	10,2				
	196	73	2,3	7,23	3,9	10,2	6,1	10,2				
	205	70	2,4	6,89	4,0	10,2	6,0	10,2				
	215	67	2,4	6,58	4,0	10,2	5,9	10,2				
	238	60	2,7	5,95	3,9	10,2	5,7	10,2				
	270	53	3,0	5,24	3,9	10,1	5,5	10,1				
	303	47	3,0	4,66	3,8	9,7	5,3	9,7				
	338	42	3,1	4,18	3,7	9,4	5,1	9,4				
	375	38	3,1	3,78	3,6	9,1	5,0	9,1				
	413	35	3,2	3,43	3,6	8,8	4,8	8,8				
	453	32	3,2	3,12	3,5	8,6	4,7	8,6				
	495	29	3,1	2,86	3,4	8,3	4,6	8,3				
	539	27	3,4	2,62	3,4	8,0	4,4	8,0				

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P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
3,00	7,2	3970	0,8	197,50	20,5	22,0	28,8	40,0	SK 973.1 - 100LA/4	SK 973.1 - 100AH/4	SK 973.1 - 100AP/4	133 B63
	7,9	3605	0,9	179,32	22,5	22,0	29,3	40,0				
	8,2	3490	0,9	173,58	22,9	22,0	29,5	40,0				
	9,0	3168	0,9	157,60	23,7	22,0	30,0	40,0				
	11	2663	1,2	132,45	25,0	22,0	30,6	40,0				
	12	2418	1,4	120,26	25,5	22,0	30,9	40,0				
	14	2116	1,5	105,23	26,1	22,0	31,3	40,0				
	15	1909	1,7	94,96	26,5	22,0	31,5	40,0				
	17	1733	1,9	86,22	26,8	22,0	31,6	40,0				
	18	1551	2,1	77,16	27,1	22,0	31,8	40,0				
	19	1517	2,2	75,44	27,2	22,0	31,8	40,0				
	21	1377	2,4	68,50	27,4	22,0	31,9	40,0				
	22	1327	2,4	65,98	27,5	22,0	32,0	40,0				
	24	1204	2,7	59,91	27,6	22,0	32,0	40,0				
	26	1119	2,9	55,66	27,7	22,0	32,1	40,0				
	27	1052	3,0	52,32	27,8	22,0	32,1	40,0				
	30	957	3,3	47,60	28,0	22,0	32,2	40,0				
	34	855	3,7	42,51	28,1	22,0	32,3	40,0				
	14	2108	0,8	104,84	12,5	18,0	22,8	30,0	SK 873.1 - 100LA/4	SK 873.1 - 100AH/4	SK 873.1 - 100AP/4	94,0 B61
	16	1838	0,9	91,43	14,7	18,0	24,0	30,0				
	17	1670	1,0	83,08	15,8	18,0	24,7	30,0				
	19	1493	1,1	74,29	16,7	18,0	25,0	30,0				
	21	1357	1,3	67,50	17,4	18,0	25,0	30,0				
	23	1228	1,4	61,07	17,9	18,0	25,0	30,0				
	26	1113	1,5	55,35	17,9	18,0	25,0	30,0				
	28	1012	1,7	50,32	17,5	18,0	25,0	30,0				
	31	915	1,9	45,53	17,1	18,0	25,0	30,0				
	36	798	2,1	39,68	16,6	18,0	25,0	30,0				
	40	716	2,4	35,63	16,2	18,0	25,0	30,0				
	44	648	2,6	32,24	15,8	18,0	25,0	30,0				
	47	613	2,7	30,47	15,6	18,0	25,0	30,0				
	52	554	3,0	27,57	15,2	18,0	25,0	30,0				
	55	522	3,2	25,69	15,0	18,0	25,0	30,0				
	61	472	3,5	23,49	14,6	18,0	25,0	30,0				
	33	858	1,6	42,67	16,9	18,0	25,0	30,0	SK 872.1 - 100LA/4	SK 872.1 - 100AH/4	SK 872.1 - 100AP/4	92,0 B60
	37	779	1,7	38,77	16,5	18,0	25,0	30,0				
	41	705	1,7	35,08	16,1	18,0	25,0	30,0				
	28	1032	0,8	51,31	6,9	8,2	14,4	17,4	SK 773.1 - 100LA/4	SK 773.1 - 100AH/4	SK 773.1 - 100AP/4	59,0 B59
	30	957	0,9	47,61	7,1	8,3	14,3	17,3				
	33	873	1,0	43,43	7,6	8,6	14,4	17,4				
	36	785	1,1	39,06	8,3	9,0	14,5	17,6				
	40	719	1,1	35,77	8,2	9,0	14,4	17,4				
	45	640	1,3	31,83	8,1	9,0	14,3	17,3				
	50	576	1,4	28,63	8,0	9,0	14,3	17,3				
	56	510	1,6	25,39	7,9	9,0	14,1	17,1				
	59	487	1,6	24,23	7,8	9,0	14,0	16,9				
	66	432	1,7	21,49	7,6	9,0	13,8	16,7				
	53	540	1,5	26,86	8,0	9,0	14,3	17,3	SK 772.1 - 100LA/4	SK 772.1 - 100AH/4	SK 772.1 - 100AP/4	57,0 B58
	58	491	1,7	24,41	7,8	9,0	14,1	17,1				
	70	408	2,0	20,31	7,6	9,0	13,8	16,7				
	77	371	2,1	18,46	7,4	9,0	13,6	16,4				
	86	335	2,3	16,66	7,2	9,0	13,3	16,2				
	91	314	2,4	15,62	7,1	9,0	13,1	15,9				



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	kg	mm			
												IE1 Standard	IE2 Standard	IE3 Standard	kg	mm
4,00	11	3513	0,9	132,45	22,8	22,0	29,5	40,0	SK 973.1 - 112M/4	SK 973.1 - 112MH/4	SK 973.1 - 112MP/4	143	B63			
	12	3190	1,0	120,26	23,7	22,0	30,0	40,0								
	14	2791	1,1	105,23	24,7	22,0	30,5	40,0								
	15	2519	1,3	94,96	25,3	22,0	30,8	40,0								
	17	2287	1,4	86,22	25,7	22,0	31,1	40,0								
	19	2047	1,6	77,16	26,2	22,0	31,3	40,0								
	21	1817	1,8	68,50	26,6	22,0	31,5	40,0								
	22	1750	1,8	65,98	26,8	22,0	31,6	40,0								
	24	1589	2,0	59,91	27,0	22,0	31,7	40,0								
	26	1476	2,2	55,66	27,2	22,0	31,8	40,0								
	28	1388	2,3	52,32	27,3	22,0	31,9	40,0								
	30	1263	2,5	47,60	27,5	22,0	32,0	40,0								
	34	1134	2,6	42,76	27,8	22,0	32,1	40,0	SK 972.1 - 112M/4	SK 972.1 - 112MH/4	SK 972.1 - 112MP/4	141	B62			
	17	2204	0,8	83,08	11,6	18,0	22,3	30,0	SK 873.1 - 112M/4	SK 873.1 - 112MH/4	SK 873.1 - 112MP/4	104	B61			
	19	1970	0,9	74,29	13,7	18,0	23,4	30,0								
	21	1790	0,9	67,50	15,0	18,0	24,2	30,0								
	24	1620	1,0	61,07	16,1	18,0	24,9	30,0								
	26	1468	1,2	55,35	16,7	18,0	25,0	30,0								
	29	1335	1,3	50,32	16,4	18,0	25,0	30,0								
	32	1208	1,4	45,53	16,1	18,0	25,0	30,0								
	36	1053	1,6	39,68	15,7	18,0	25,0	30,0								
	40	945	1,8	35,63	15,4	18,0	25,0	30,0								
	45	855	2,0	32,24	15,1	18,0	25,0	30,0								
	47	808	2,1	30,47	14,9	18,0	25,0	30,0								
	34	1132	1,2	42,67	16,0	18,0	25,0	30,0	SK 872.1 - 112M/4	SK 872.1 - 112MH/4	SK 872.1 - 112MP/4	102	B60			
	37	1028	1,3	38,77	15,7	18,0	25,0	30,0								
	41	930	1,3	35,08	15,4	18,0	25,0	30,0								
	45	849	1,9	32,00	15,1	18,0	25,0	30,0								
	50	771	2,0	29,08	14,8	18,0	25,0	30,0								
	77	495	3,1	18,67	13,3	18,0	23,6	30,0								
	85	450	3,4	16,96	12,9	18,0	23,0	30,0								
	95	403	3,7	15,18	12,6	18,0	22,3	30,0								
	104	366	4,0	13,79	12,2	18,0	21,8	30,0								
	33	1152	0,8	43,43	4,0	5,5	12,1	14,7	SK 773.1 - 112M/4	SK 773.1 - 112MH/4	SK 773.1 - 112MP/4	69,0	B59			
	37	1036	0,8	39,06	5,1	6,4	12,5	15,2								
	40	949	0,9	35,77	5,4	6,6	12,5	15,2								
	45	844	1,0	31,83	6,1	7,1	12,7	15,3								
	50	759	1,1	28,63	6,8	7,6	12,8	15,5								
	57	674	1,2	25,39	7,2	8,0	12,8	15,5								
	59	643	1,2	24,23	7,1	7,9	12,7	15,4								
	67	570	1,3	21,49	7,0	8,1	12,7	15,3								
	54	712	1,2	26,86	7,1	7,9	12,9	15,6	SK 772.1 - 112M/4	SK 772.1 - 112MH/4	SK 772.1 - 112MP/4	68,0	B58			
	59	648	1,3	24,41	7,2	8,0	12,8	15,5								
	71	539	1,5	20,31	7,0	8,4	12,8	15,4								
	78	490	1,6	18,46	6,9	8,4	12,6	15,3								
	86	442	1,7	16,66	6,8	8,5	12,5	15,1								
	92	414	1,8	15,62	6,7	8,4	12,3	14,9								
	100	381	1,9	14,38	6,6	8,6	12,3	14,9								
	110	347	2,0	13,07	6,5	8,5	12,1	14,6								
	123	309	2,2	11,67	6,4	8,5	11,9	14,4								
	130	293	2,4	11,06	6,3	8,3	11,7	14,2								
	136	281	2,4	10,60	6,2	8,4	11,7	14,2								

15,0 kW
18,5 kW



P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
15,0	130	1099	1,3	11,24	9,0	11,0	18,2	22,4	SK 872.1 - 160L/4	SK 872.1 - 160LH/4	SK 872.1 - 160LP/4	188 B60
	140	1020	1,4	10,44	8,8	10,6	17,8	22,0				
	159	903	1,5	9,24	8,8	11,1	17,6	22,0				
	165	868	1,5	8,87	8,6	10,4	17,4	21,5				
	190	755	1,7	7,73	8,5	10,8	16,9	21,5				
	223	642	1,9	6,57	8,3	10,5	16,3	20,9				
	259	553	2,1	5,66	8,0	10,2	15,7	20,3				
	266	538	2,1	5,50	8,1	10,6	15,7	20,6				
	313	457	2,4	4,68	7,8	10,2	15,1	19,9				
	364	394	2,3	4,03	7,5	9,8	14,5	19,3				
	396	361	2,4	3,69	7,4	9,7	14,2	19,1				
	461	311	2,7	3,18	7,1	9,3	13,7	18,4				
	163	877	0,8	8,97	0	0	6,2	7,6	SK 772.1 - 160L/4	SK 772.1 - 160LH/4	SK 772.1 - 160LP/4	154 B58
	180	794	0,8	8,12	0,3	0,6	6,4	7,8				
	192	746	0,8	7,63	0,2	0,4	6,2	7,5				
	221	649	0,9	6,63	1,2	2,1	7,4	8,9				
	237	605	1,0	6,19	1,4	1,5	6,6	8,0				
	272	526	1,1	5,38	2,2	2,8	7,5	9,1				
	311	461	1,2	4,71	2,9	2,7	7,1	8,6				
	332	432	1,3	4,42	2,8	2,6	7,0	8,4				
	382	375	1,4	3,84	3,2	3,4	7,5	9,1				
	408	351	1,4	3,59	3,3	3,0	7,0	8,5				
	469	306	1,6	3,12	3,6	3,6	7,4	8,9				
18,5	42	4215	0,8	35,19	2,6	5,8	28,3	31,5	SK 973.1 - 180MX/4	SK 973.1 - 180MH/4	SK 973.1 - 180MP/4	244 B63
	46	3827	0,8	31,95	4,1	7,2	29,0	31,9				
	48	3710	0,8	30,97	4,7	7,7	29,2	32,1				
	54	3260	0,9	27,22	6,9	9,8	29,9	32,7				
	58	3055	1,0	25,51	7,8	10,6	30,1	33,0				
	66	2685	1,0	22,42	9,4	11,8	30,6	33,3				
	67	2633	1,1	21,99	10,5	12,8	30,7	33,9	SK 972.1 - 180MX/4	SK 972.1 - 180MH/4	SK 972.1 - 180MP/4	242 B62
	75	2362	1,2	19,72	11,0	13,1	31,0	33,6				
	84	2114	1,3	17,65	12,3	14,2	31,2	33,8				
	93	1897	1,4	15,84	12,6	14,3	30,8	33,3				
	104	1696	1,6	14,16	13,2	14,7	30,5	33,1				
	109	1624	1,6	13,56	13,7	15,1	30,6	33,2				
	115	1540	1,7	12,86	13,5	14,8	30,1	32,6				
	128	1382	1,8	11,54	14,2	15,4	30,1	32,6				
	143	1239	2,0	10,35	14,2	15,3	29,5	31,9				
	157	1125	2,2	9,40	14,3	15,1	29,0	31,4				
	174	1013	2,3	8,45	14,0	14,5	28,3	30,6				
	205	861	2,6	7,19	14,1	14,2	27,5	29,8				
	221	801	2,8	6,68	14,4	14,4	27,4	29,6				
	239	739	2,8	6,17	13,6	13,4	26,5	28,7				
	281	629	3,2	5,25	13,6	13,0	25,7	27,8				
	324	546	3,7	4,56	13,8	13,0	25,2	27,3				
	395	447	4,1	3,74	13,2	12,1	24,0	26,0				
	97	1818	0,8	15,18	5,6	6,1	16,1	19,8	SK 872.1 - 180MX/4	SK 872.1 - 180MH/4	SK 872.1 - 180MP/4	204 B60
	107	1652	0,9	13,79	6,3	6,7	16,2	19,9				
	118	1495	1,0	12,48	7,2	7,3	16,4	20,1				
	131	1346	1,0	11,24	8,2	8,2	16,6	20,5				
	141	1250	1,1	10,44	8,0	7,9	16,3	20,1				
	160	1107	1,2	9,24	8,1	8,7	16,6	20,4				
	166	1063	1,3	8,87	8,0	8,1	16,1	19,9				
	191	925	1,4	7,73	8,0	8,9	16,3	20,1				
	225	787	1,6	6,57	7,8	8,8	15,8	19,7				
	261	677	1,7	5,66	7,6	8,7	15,3	19,2				
	268	659	1,7	5,50	7,7	9,2	15,3	19,5				
	315	560	2,0	4,68	7,4	9,0	14,7	19,0				
	366	482	1,9	4,03	7,2	8,7	14,2	18,5				
	399	443	2,0	3,69	7,1	8,8	14,0	18,4				
	464	381	2,2	3,18	6,9	8,5	13,4	17,8				



**22,0 kW
30,0 kW
37,0 kW**

P ₁ [kW]	n ₂ [min ⁻¹] IE2	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R VL} [kN]	F _{A VL} [kN]	Type IE1	Type IE2	Type IE3	mm kg
22,0	54	3877	0,8	27,22	1,8	4,1	26,7	29,0	SK 973.1 - 180LX/4	SK 973.1 - 180LH/4	SK 973.1 - 180LP/4	262 B63
	58	3633	0,8	25,51	3,1	5,3	27,2	29,4				
	66	3193	0,9	22,42	5,3	7,3	27,8	30,2				
	67	3132	0,9	21,99	6,6	8,7	28,6	31,0	SK 972.1 - 180LX/4	SK 972.1 - 180LH/4	SK 972.1 - 180LP/4	260 B62
	75	2809	1,0	19,72	7,4	9,3	28,5	30,9				
	84	2514	1,1	17,65	9,2	11,1	29,0	31,4				
	93	2256	1,2	15,84	9,8	11,3	28,8	31,2				
	104	2017	1,3	14,16	10,7	12,0	28,7	31,1				
	109	1931	1,4	13,56	11,3	12,7	28,9	31,4				
	115	1831	1,4	12,86	11,1	12,3	28,5	30,8				
	128	1643	1,5	11,54	12,2	13,3	28,6	31,0				
	143	1474	1,7	10,35	12,4	13,1	28,2	30,5				
	157	1338	1,9	9,40	12,5	13,1	27,8	30,1				
	174	1204	2,0	8,45	12,4	12,6	27,1	29,4				
	205	1024	2,2	7,19	12,7	12,7	26,6	28,8				
	221	952	2,4	6,68	13,2	13,0	26,5	28,7				
	239	879	2,4	6,17	12,4	12,0	25,6	27,7				
	281	748	2,7	5,25	12,5	11,9	24,9	27,0				
	324	649	3,1	4,56	12,9	12,1	24,6	26,7				
	395	532	3,4	3,74	12,4	11,3	23,4	25,4				
	443	474	3,6	3,33	12,3	11,1	22,9	24,8				
	118	1777	0,8	12,48	4,2	4,4	14,6	17,9	SK 872.1 - 180LX/4	SK 872.1 - 180LH/4	SK 872.1 - 180LP/4	222 B60
	131	1601	0,9	11,24	5,5	5,6	15,1	18,5				
	141	1486	0,9	10,44	5,4	5,4	14,8	18,2				
	160	1316	1,0	9,24	6,9	6,6	15,3	18,8				
	166	1264	1,1	8,87	6,3	5,9	14,8	18,2				
	191	1100	1,2	7,73	7,4	7,0	15,2	18,7				
	225	936	1,3	6,57	7,3	7,2	15,0	18,4				
	261	806	1,4	5,66	7,1	7,3	14,7	18,1				
	268	783	1,5	5,50	7,3	7,9	15,0	18,5				
	315	666	1,7	4,68	7,1	7,9	14,4	18,1				
	366	573	1,6	4,03	6,9	7,7	13,9	17,7				
	399	526	1,7	3,69	6,8	8,0	13,7	17,7				
	464	453	1,9	3,18	6,6	7,8	13,2	17,2				
30,0	104	2760	1,0	14,16	4,7	5,7	24,6	26,7	SK 972.1 - 200LX/4	SK 972.1 - 200XH/4		260 B62
	108	2643	1,0	13,56	5,8	6,7	25,1	27,2				
	114	2506	1,0	12,86	5,6	6,4	24,7	26,8				
	127	2248	1,1	11,54	7,5	8,1	25,4	27,5				
	142	2017	1,2	10,35	8,0	8,4	25,2	27,3				
	156	1831	1,4	9,40	8,5	8,8	25,0	27,1				
	174	1648	1,4	8,45	8,7	8,7	24,6	26,6				
	204	1402	1,6	7,19	9,5	9,3	24,4	26,4				
	220	1303	1,7	6,68	10,3	10,0	24,6	26,6				
	238	1203	1,7	6,17	9,5	9,0	23,6	25,5				
	280	1023	2,0	5,25	10,0	9,4	23,2	25,2				
	322	889	2,3	4,56	10,9	10,1	23,2	25,2				
	394	728	2,5	3,74	10,6	9,6	22,2	24,1				
	442	649	2,6	3,33	10,7	9,6	21,8	23,6				
37,0	104	3404	0,8	14,16	0	0	21,1	22,8	SK 972.1 - 225S/4			324 B62
	108	3259	0,8	13,56	1,0	2,1	21,8	23,6				
	114	3090	0,8	12,86	0,9	1,9	21,4	23,2				
	127	2773	0,9	11,54	3,4	4,1	22,5	24,4				
	142	2487	1,0	10,35	4,3	4,7	22,6	24,4				
	156	2258	1,1	9,40	5,1	5,4	22,6	24,5				
	174	2032	1,2	8,45	5,4	5,5	22,3	24,1				
	204	1729	1,3	7,19	6,8	6,6	22,5	24,3				
	220	1607	1,4	6,68	7,9	7,6	22,9	24,8				
	238	1483	1,4	6,17	6,9	6,5	21,8	23,6				
	280	1262	1,6	5,25	7,9	7,3	21,7	23,5				
	322	1096	1,8	4,56	9,1	8,4	22,0	23,8				
	394	898	2,0	3,74	9,1	8,1	21,2	22,9				
	442	800	2,1	3,33	9,3	8,3	20,9	22,6				

SK 072.1



i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	IEC			IEC f _B ⇒ B4-12		
			P _{1max}		f _B ≥ 1			
			n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	[kW]	[kW]	[kW]
SK 072.1	63,56	22	50	0,12	0,08	0,06	*	*
	55,00	25	50	0,13	0,09	0,07	*	*
	49,00	29	46	0,14	0,09	0,07	*	*
	42,10	33	50	0,17	0,11	0,09	*	*
	36,43	38	54	0,21	0,14	0,11	*	
	32,45	43	55	0,25	0,16	0,12	*	
	27,78	50	54	0,28	0,19	0,14	*	
	24,75	57	55	0,33	0,22	0,16	*	
	22,22	63	55	0,36	0,24	0,18	*	
	21,38	65	55	0,37	0,25	0,19		
	19,20	73	55	0,42	0,28	0,21		
	17,35	81	55	0,47	0,31	0,23		
	15,77	89	55	0,51	0,34	0,26		
	14,40	97	51	0,52	0,34	0,26		
	13,20	106	47	0,52	0,34	0,26		
IEC	11,56	121	50	0,55	0,36	0,28		
	10,00	140	55	0,55	0,36	0,28		
↳ B66	8,91	157	55	0,55	0,36	0,28		
	8,00	175	55	0,55	0,36	0,28		
	7,23	194	55	0,55	0,36	0,28		
	6,57	213	53	0,55	0,36	0,28		
	5,96	235	55	0,55	0,36	0,28		
	5,50	255	55	0,55	0,36	0,28		
	5,31	264	55	0,55	0,36	0,28		
	4,77	294	53	0,55	0,36	0,28		
	4,31	325	50	0,55	0,36	0,28		
	3,92	357	45	0,55	0,36	0,28		
	3,58	391	48	0,55	0,36	0,28		
	3,28	427	47	0,55	0,36	0,28		
	2,95	475	46	0,55	0,36	0,28		
	2,85	491	45	0,55	0,36	0,28		
	2,57	545	41	0,55	0,36	0,28		
	2,33	601	39	0,55	0,36	0,28		
	2,10	667	36	0,55	0,36	0,28		

* ⇒ A21

kg	IEC...
SK 072.1	4



i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC				
			P _{1max}		f _B ≥ 1	f _B ⇒ B4--19				
			n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	56	63	71	80	90
SK 172.1	81,45	17	83	0,15	0,10	0,07	*	*	*	*
	70,00	20	72	0,15	0,10	0,08	*	*	*	*
	62,36	22	64	0,15	0,10	0,07	*	*	*	*
	54,03	26	85	0,23	0,15	0,12	*	*	*	*
	46,43	30	85	0,27	0,18	0,13	*	*	*	*
	41,36	34	85	0,30	0,20	0,15	*	*	*	*
	38,75	36	85	0,32	0,21	0,16	*	*	*	*
	34,52	41	86	0,37	0,24	0,18	*	*	*	*
	31,00	45	92	0,43	0,29	0,22	*	*	*	*
	27,62	51	92	0,49	0,32	0,25	*	*	*	*
	24,80	56	92	0,54	0,36	0,27	*	*	*	*
	22,42	62	92	0,60	0,39	0,30	*	*	*	*
W	mm	20,37	69	85	0,61	0,41	0,31	*	*	*
⇒ B65		18,60	75	84	0,66	0,44	0,33	*	*	*
		15,76	89	85	0,79	0,52	0,40			*
		13,54	103	85	0,92	0,61	0,46			*
		12,06	116	87	1,06	0,70	0,53			*
IEC		11,39	123	85	1,09	0,72	0,55			*
		10,83	129	86	1,16	0,77	0,58			*
		9,79	143	85	1,27	0,84	0,64			*
⇒ B67	mm	8,72	161	88	1,48	0,98	0,74			*
		7,83	179	82	1,50	0,99	0,75			
		7,08	198	82	1,50	0,99	0,75			
		6,43	218	82	1,50	0,99	0,75			
		5,77	243	77	1,50	0,99	0,75			
		5,14	272	83	1,50	0,99	0,75			
		4,62	303	72	1,50	0,99	0,75			
		4,17	336	65	1,50	0,99	0,75			
		3,79	369	59	1,50	0,99	0,75			
		3,46	405	54	1,50	0,99	0,75			
		3,22	435	54	1,50	0,99	0,75			
		2,92	479	50	1,50	0,99	0,75			
		2,72	515	46	1,50	0,99	0,75			
		2,49	562	43	1,50	0,99	0,75			
		2,32	603	43	1,50	0,99	0,75			

* ⇒ A21

kg	W	IEC...
SK 172.1	7	7

SK 372.1



	i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC				
				P _{1max}		f _B ≥ 1	f _B ⇒ B4-22				
				n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	63	71	80	90	100
SK 372.1	72,38	19	150	0,30	0,20	0,15		*	*	*	
	64,06	22	160	0,37	0,24	0,18		*	*	*	
	60,83	23	150	0,36	0,24	0,18		*	*	*	
	53,84	26	160	0,44	0,29	0,22		*	*	*	
	43,26	32	170	0,57	0,38	0,28		*	*	*	
	38,12	37	180	0,70	0,46	0,35		*	*	*	
	33,84	41	190	0,82	0,54	0,41		*	*	*	
	30,11	46	180	0,87	0,57	0,43		*	*	*	
	25,85	54	190	1,07	0,71	0,54		*	*	*	
	23,00	61	200	1,28	0,84	0,64		*	*	*	
	20,62	68	190	1,35	0,89	0,68		*	*	*	
	18,40	76	200	1,59	1,05	0,80					
W	16,50	85	190	1,69	1,12	0,85					
⇒ B65	14,57	96	190	1,91	1,26	0,95					
	12,96	108	200	2,26	1,49	1,13					
	11,55	121	190	2,41	1,59	1,20				*	
	10,28	136	190	2,71	1,79	1,35				*	
IEC	9,40	149	190	2,96	1,96	1,48				*	
	8,22	170	180	3,00	1,98	1,50					
⇒ B68	7,23	194	170	3,00	1,98	1,50					
	6,89	203	170	3,00	1,98	1,50					
	6,58	213	160	3,00	1,98	1,50					
	5,95	235	160	3,00	1,98	1,50					
	5,24	267	160	3,00	1,98	1,50					
	4,66	300	140	3,00	1,98	1,50					
	4,18	335	130	3,00	1,98	1,50					
	3,78	370	120	3,00	1,98	1,50					
	3,43	408	110	3,00	1,98	1,50					
	3,12	449	100	3,00	1,98	1,50					
	2,86	490	90	3,00	1,98	1,50					
	2,62	534	90	3,00	1,98	1,50					

* ⇒ A21

kg	W	IEC 63	IEC 71	IEC 80	IEC 90	IEC 100
SK 372.1	11	10	10	10	10	11



	i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC					
				P _{1max}		f _B ≥ 1	f _B ⇒ B4-18					
				n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	63	71	80	90		
SK 373.1	343,92	4,1	190	0,08	0,05	0,04	*	*	*	*		
	303,08	4,6	210	0,10	0,07	0,05	*	*	*	*		
	269,67	5,2	220	0,12	0,08	0,06	*	*	*	*		
	256,50	5,5	200	0,12	0,08	0,06	*	*	*	*		
	228,22	6,1	220	0,14	0,09	0,07	*	*	*	*		
	207,98	6,7	200	0,14	0,09	0,07	*	*	*	*		
	196,07	7,1	210	0,16	0,10	0,08	*	*	*	*		
	185,05	7,6	210	0,17	0,11	0,08	*	*	*	*		
	165,94	8,4	210	0,18	0,12	0,09	*	*	*	*		
W	145,00	9,7	210	0,21	0,14	0,11	*	*	*	*		
	130,87	11	200	0,23	0,15	0,12	*	*	*	*		
	120,54	12	200	0,25	0,17	0,13	*	*	*	*		
↔ mm B65	102,01	14	200	0,29	0,19	0,15	*	*	*	*		
	91,48	15	210	0,33	0,22	0,16	*	*	*	*		
	82,57	17	210	0,37	0,25	0,19	*	*	*	*		
	74,27	19	200	0,40	0,26	0,20	*	*	*	*		
	64,70	22	200	0,46	0,30	0,23	*	*	*	*		
IEC	60,22	23	200	0,48	0,32	0,24	*	*	*	*		
	54,00	26	210	0,57	0,38	0,29	*	*	*	*		
↔ mm B69	47,05	30	210	0,66	0,44	0,33	*	*	*	*		
	42,46	33	200	0,69	0,46	0,35	*	*	*	*		
	37,23	38	200	0,80	0,53	0,40	*	*	*	*		
	33,20	42	200	0,88	0,58	0,44	*	*	*	*		
	29,77	47	210	1,03	0,68	0,52	*	*	*	*		
	25,94	54	210	1,19	0,78	0,59	*	*	*	*		
	23,41	60	210	1,32	0,87	0,66	*	*	*	*		
	22,74	62	210	1,36	0,90	0,68	*	*	*	*		
	20,52	68	210	1,50	0,99	0,75	*	*	*	*		
	18,63	75	190	1,49	0,98	0,75	*	*	*	*		

* → A21

kg	W	IEC 63	IEC 71	IEC 80	IEC 90
SK 373.1	12	11	11	11	11

SK 572.1



i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC					
			P _{1max}		f _B ≥ 1	f _B ⇒ A7-28					
			n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	63	71	80	90	100	112
SK 572.1*	54,41	26	370	1,01	0,66	0,50			*		
	45,77	31	320	1,04	0,69	0,52			*		
	42,38	33	370	1,28	0,84	0,64			*		
	35,65	39	370	1,51	1,00	0,76					
	31,28	45	370	1,74	1,15	0,87				*	*
	28,91	48	380	1,91	1,26	0,95					
	27,00	52	400	2,18	1,44	1,09					
	24,58	57	430	2,57	1,69	1,28			*	*	
	21,85	64	420	2,81	1,86	1,41			*	*	
W	19,57	72	400	3,02	1,99	1,51			*		
	16,46	85	400	3,56	2,35	1,78			*		
	15,38	91	430	4,10	2,70	2,05					
⇒ B65	13,67	102	410	4,38	2,89	2,19					
	12,68	110	430	4,95	3,27	2,48					
	11,25	124	410	5,32	3,51	2,66					
	10,04	139	400	5,50	3,63	2,75					
	8,92	157	370	5,50	3,63	2,75					
IEC	8,15	172	360	5,50	3,63	2,75					
	7,49	187	350	5,50	3,63	2,75					
⇒ B70	6,30	222	320	5,50	3,63	2,75					
	5,88	238	300	5,50	3,63	2,75					
	5,23	268	270	5,50	3,63	2,75					
	4,69	299	250	5,50	3,63	2,75					
	4,22	332	230	5,50	3,63	2,75					
	3,83	366	220	5,50	3,63	2,75					
	3,27	428	190	5,50	3,63	2,75					
	2,92	479	170	5,50	3,63	2,75					

* ⇒ A21

kg	W	IEC 63	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112
SK 572.1*	18	18	18	18	18	19	19

SK 572.1* → A11


SK 573.1

i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC f _B ⇒ A B4-24					
			P _{1max}		f _B ≥ 1						
			n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹						
	[min ⁻¹]	[Nm]	[kW]	[kW]	[kW]	63	71	80	90	100	112
SK 573.1*	402,80	3,5	370	0,14	0,09	0,07	*	*	*	*	
	376,20	3,7	410	0,16	0,10	0,08	*	*	*	*	
	316,18	4,4	420	0,19	0,13	0,10	*	*	*	*	
	302,91	4,6	440	0,21	0,14	0,11	*	*	*	*	
	269,26	5,2	450	0,25	0,16	0,12	*	*	*	*	
	226,30	6,2	450	0,29	0,19	0,15	*	*	*	*	
	201,16	7,0	450	0,33	0,22	0,16	*	*	*	*	
	188,91	7,4	450	0,35	0,23	0,17	*	*	*	*	
	178,56	7,8	450	0,37	0,24	0,18		*	*		
	158,78	8,8	450	0,41	0,27	0,21		*	*		
	141,13	9,9	450	0,47	0,31	0,23		*	*		
	136,40	10	450	0,47	0,31	0,24		*	*		
W	125,45	11	450	0,52	0,34	0,26		*	*		
	111,36	13	450	0,61	0,40	0,31		*	*		
	109,12	13	450	0,61	0,40	0,31		*	*		
	107,42	13	430	0,59	0,39	0,29		*	*		
	94,50	15	450	0,71	0,47	0,35		*	*		
IEC	85,18	16	450	0,75	0,50	0,38			*		
	76,88	18	450	0,85	0,56	0,42			*		
	67,64	21	450	0,99	0,65	0,49			*		
mm	60,97	23	450	1,08	0,72	0,54			*		
⇒ A B65	55,80	25	450	1,18	0,78	0,59			*		
	49,60	28	450	1,32	0,87	0,66			*		
	47,95	29	450	1,37	0,90	0,68			*		
	43,40	32	450	1,51	1,00	0,75			*		
	42,18	33	450	1,55	1,03	0,78			*		
	38,02	37	450	1,74	1,15	0,87			*	*	
	34,80	40	440	1,84	1,22	0,92			*	*	
	30,93	45	440	2,07	1,37	1,04			*	*	
	26,77	52	430	2,34	1,55	1,17			*	*	
	23,79	59	430	2,66	1,75	1,33			*	*	
	21,32	66	430	2,97	1,96	1,49			*	*	
	19,22	73	430	3,29	2,17	1,64				*	
	17,42	80	430	3,60	2,38	1,80				*	

* ⇒ A21

kg	W	IEC 63	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112
SK 573.1*	19	19	19	19	19	20	20

SK 573.1* → A11

SK 672.1



i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC						
			P _{1max}		f _B ≥ 1	f _B ⇒ B13-27						
			n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	63	71	80	90	100	112	132
SK 672.1	56,65	25	400	1,05	0,69	0,52			*			
	44,55	31	450	1,46	0,96	0,73			*			
	35,75	39	550	2,25	1,48	1,12						
	32,58	43	610	2,75	1,81	1,37			*	*		
	29,08	48	550	2,76	1,82	1,38			*	*		
	26,23	53	610	3,39	2,23	1,69			*	*		
	23,41	60	610	3,83	2,53	1,92			*			
	20,62	68	610	4,34	2,87	2,17						
	18,41	76	610	4,85	3,20	2,43						
	17,25	81	610	5,17	3,41	2,59						
	15,35	91	610	5,81	3,84	2,91						*
	13,70	102	580	6,19	4,09	3,10						*
	12,56	111	570	6,63	4,37	3,31						*
⇒ B65	11,38	123	570	7,34	4,85	3,67						*
	10,37	135	570	8,06	5,32	4,03						*
	9,25	151	530	8,38	5,53	4,19						*
	8,66	162	530	8,99	5,93	4,50						*
IEC	8,48	165	530	9,16	6,04	4,58						*
	7,68	182	530	9,20	6,07	4,60						
⇒ B72	6,75	207	520	9,20	6,07	4,60						
	6,12	229	510	9,20	6,07	4,60						
	5,59	250	490	9,20	6,07	4,60						
	5,06	277	480	9,20	6,07	4,60						
	4,61	304	450	9,20	6,07	4,60						
	4,22	332	420	9,20	6,07	4,60						
	3,88	361	400	9,20	6,07	4,60						
	3,58	391	360	9,20	6,07	4,60						
	3,31	423	340	9,20	6,07	4,60						
	3,07	456	320	9,20	6,07	4,60						
	2,86	490	300	9,20	6,07	4,60						
	2,66	526	280	9,20	6,07	4,60						

* ⇒ A21

kg	W	IEC 63	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132
SK 672.1	24	23	23	23	23	24	24	26


SK 673.1

i _{ges}		n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC f _B ⇒ B4-22						
				P _{1max} n ₁ = 1400min ⁻¹	f _B ≥ 1 n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	63	71	80	90	100	112	132
SK 673.1	362,43	3,9	640	0,26	0,17	0,13		*	*	*			
	332,23	4,2	640	0,28	0,19	0,14		*	*	*			
	304,61	4,6	640	0,31	0,20	0,15		*	*	*			
	279,23	5,0	640	0,34	0,22	0,17		*	*	*			
	248,20	5,6	640	0,38	0,25	0,19		*	*	*			
	220,32	6,4	640	0,43	0,28	0,21		*	*	*			
	219,00	6,4	640	0,43	0,28	0,21		*	*	*			
	194,11	7,2	640	0,48	0,32	0,24		*	*	*			
	181,88	7,7	640	0,52	0,34	0,26		*	*	*			
	177,94	7,9	640	0,53	0,35	0,26		*	*	*			
	161,45	8,7	640	0,58	0,38	0,29		*	*	*			
	146,88	9,5	640	0,64	0,42	0,32		*	*	*			
	143,30	9,8	640	0,66	0,43	0,33		*	*	*			
	134,64	10	640	0,67	0,44	0,34		*	*	*			
	130,55	11	640	0,74	0,49	0,37		*	*	*			
	123,33	11	640	0,74	0,49	0,37		*	*	*			
	115,89	12	640	0,80	0,53	0,40				*			
	IEC	103,48	14	640	0,94	0,62	0,47				*		
		94,86	15	640	1,01	0,66	0,50				*		
		83,70	17	640	1,14	0,75	0,57				*		
		73,64	19	640	1,27	0,84	0,64				*		
		65,95	21	640	1,41	0,93	0,70				*		
		60,45	23	640	1,54	1,02	0,77				*	*	
		55,12	25	640	1,68	1,11	0,84				*	*	
		49,50	28	640	1,88	1,24	0,94				*	*	
		44,85	31	640	2,08	1,37	1,04				*	*	
		41,54	34	640	2,28	1,50	1,14				*	*	*
		37,23	38	640	2,55	1,68	1,27				*	*	*
		34,12	41	600	2,58	1,70	1,29				*	*	*
		30,92	45	530	2,50	1,65	1,25				*	*	*
		27,61	51	520	2,78	1,83	1,39				*	*	*
		25,19	56	500	2,93	1,94	1,47				*	*	*
		22,82	61	450	2,87	1,90	1,44				*	*	*

* ⇒ A21

kg	W	IEC 63	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132
SK 673.1	25	24	24	24	24	25	25	27

SK 772.1



	i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC						
				P _{1max}		f _B ≥ 1	f _B ⇒ B17-31						
				n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	71	80	90	100	112	132	
SK 772.1	26,86	52	820	4,46	2,95	2,23							
	24,41	57	820	4,89	3,23	2,45							
	20,31	69	820	5,92	3,91	2,96							*
	18,46	76	780	6,21	4,10	3,10							*
W	16,66	84	770	6,77	4,47	3,39							*
	15,62	90	760	7,16	4,73	3,58							*
	14,38	97	720	7,31	4,83	3,66							*
⇒ B65	13,07	107	700	7,84	5,18	3,92							*
	11,67	120	690	8,67	5,72	4,34							*
	11,06	127	690	9,18	6,06	4,59							*
	10,60	132	680	9,40	6,20	4,70							*
IEC	10,00	140	680	9,97	6,58	4,98							
	8,97	156	660	10,78	7,12	5,39							
	8,12	172	640	11,53	7,61	5,76							
⇒ B74	7,63	183	620	11,88	7,84	5,94							
	6,63	211	600	13,26	8,75	6,63							
	6,19	226	580	13,73	9,06	6,86							
	5,38	260	570	15,00	9,90	7,50							
	4,71	297	560	15,00	9,90	7,50							
	4,42	317	540	15,00	9,90	7,50							
	3,84	365	530	15,00	9,90	7,50							
	3,59	390	490	15,00	9,90	7,50							
	3,12	449	485	15,00	9,90	7,50							

* ⇒ A21

kg	W	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132
SK 772.1	42	40	44	44	48	48	57



i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC					
			P _{1max}		f _B ≥ 1	f _B ⇒ B7-25					
			n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	71	80	90	100	112	132
SK 773.1	395,46	3,5	850	0,31	0,21	0,16	*	*			
	341,21	4,1	850	0,36	0,24	0,18	*	*			
	334,70	4,2	870	0,38	0,25	0,19	*				
	307,42	4,6	850	0,41	0,27	0,20	*	*			
	288,78	4,8	850	0,43	0,28	0,21	*				
	265,24	5,3	850	0,47	0,31	0,24	*	*			
	260,18	5,4	870	0,49	0,32	0,25	*	*			
	243,53	5,7	850	0,51	0,33	0,25	*				
	224,49	6,2	850	0,55	0,36	0,28	*	*			
W	206,11	6,8	870	0,62	0,41	0,31	*				
	189,31	7,4	850	0,66	0,43	0,33	*	*			
	178,53	7,8	850	0,69	0,46	0,35	*				
↔ mm	160,22	8,7	870	0,79	0,52	0,40		*			
⇒ B65	151,10	9,3	700	0,68	0,45	0,34					
	138,78	10	850	0,89	0,59	0,45		*			
	117,46	12	870	1,09	0,72	0,55		*			
	111,92	13	850	1,16	0,76	0,58		*	*	*	
IEC	96,57	14	850	1,25	0,82	0,62		*	*	*	
	93,61	15	850	1,34	0,88	0,67		*	*	*	
↔ mm	83,32	17	850	1,51	1,00	0,76		*	*	*	
⇒ B74	79,23	18	870	1,64	1,08	0,82		*	*		
	71,89	19	850	1,69	1,12	0,85		*	*	*	
	68,92	20	850	1,78	1,17	0,89		*	*		
	63,42	22	850	1,96	1,29	0,98		*	*	*	
	57,64	24	850	2,14	1,41	1,07		*	*		
	51,31	27	850	2,40	1,59	1,20		*	*	*	
	47,61	29	870	2,64	1,74	1,32		*	*	*	
	43,43	32	870	2,92	1,92	1,46		*	*	*	
	39,06	36	850	3,20	2,11	1,60		*	*		
	35,77	39	820	3,35	2,21	1,67		*			
	31,83	44	820	3,78	2,49	1,89		*	*		
	28,63	49	820	4,21	2,78	2,10					
	25,39	55	820	4,72	3,12	2,36				*	
	24,23	58	760	4,62	3,05	2,31				*	
	21,49	65	750	5,10	3,37	2,55				*	

* ⇒ A21

kg	W	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132
SK 773.1	44	42	46	46	50	50	59

SK 872.1



	i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC					
				P _{1max}		f _B ≥ 1	f _B ⇒ B19-33					
				n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	90	100	112	132	160	180
SK 872.1	42,67	33	1400	4,84	3,19	2,42				*		
	38,77	36	1300	4,90	3,23	2,45				*		
	35,08	40	1200	5,03	3,32	2,51				*		
	32,00	44	1600	7,37	4,87	3,69				*		
	29,08	48	1560	7,84	5,17	3,92				*		
	28,00	50	1600	8,38	5,53	4,19				*	*	
	25,44	55	1600	9,21	6,08	4,61				*		
	23,02	61	1560	9,96	6,58	4,98				*		
	18,67	75	1540	12,09	7,98	6,05				*		
	16,96	83	1540	13,38	8,83	6,69				*		
	15,18	92	1470	14,16	9,35	7,08				*	*	
	13,79	102	1470	15,70	10,36	7,85				*		
IEC	12,48	112	1470	17,24	11,38	8,62				*		
	11,24	125	1400	18,32	12,09	9,16				*		
	10,44	134	1400	19,64	12,97	9,82				*		
	9,24	152	1380	21,96	14,50	10,98				*		
	8,87	158	1340	22,00	14,52	11,00						
	7,73	181	1300	22,00	14,52	11,00						
	6,57	213	1230	22,00	14,52	11,00						
	5,66	247	1150	22,00	14,52	11,00						
	5,50	255	1150	22,00	14,52	11,00						
	4,68	299	1100	22,00	14,52	11,00						
	4,03	347	900	22,00	14,52	11,00						
	3,69	379	880	22,00	14,52	11,00						
	3,18	440	840	22,00	14,52	11,00						

* ⇒ A21

	kg	W	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180
SK 872.1		87	82	89	89	103	113	113



W	i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC					
				P _{1max}		f _B ≥ 1	f _B ⇒ B14-31					
				n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	90	100	112	132	160	180
SK 873.1	439,77	3,2	1700	0,57	0,38	0,28	*					
	399,60	3,5	1700	0,62	0,41	0,31	*					
	383,39	3,7	1700	0,66	0,43	0,33	*					
	348,37	4,0	1700	0,71	0,47	0,36	*					
	315,19	4,4	1700	0,78	0,52	0,39	*					
	284,73	4,9	1700	0,87	0,58	0,44	*	*	*			
	257,61	5,4	1700	0,96	0,63	0,48	*	*	*			
	232,16	6,0	1700	1,07	0,70	0,53	*					
	210,95	6,6	1700	1,17	0,78	0,59	*					
	190,86	7,3	1700	1,30	0,86	0,65	*					
	165,42	8,5	1700	1,51	1,00	0,76		*	*			
	150,31	9,3	1700	1,66	1,09	0,83		*	*			
	135,99	10	1700	1,78	1,17	0,89		*	*			
	127,52	11	1700	1,96	1,29	0,98		*	*	*		
	115,88	12	1700	2,14	1,41	1,07		*	*	*		
	104,84	13	1700	2,31	1,53	1,16		*	*	*		
	101,02	14	1700	2,49	1,64	1,25		*	*	*		
	91,43	15	1700	2,67	1,76	1,34		*	*	*	*	
	83,08	17	1700	3,03	2,00	1,51			*	*	*	
	74,29	19	1700	3,38	2,23	1,69			*	*	*	*
	67,50	21	1700	3,74	2,47	1,87			*	*	*	*
	61,07	23	1700	4,09	2,70	2,05			*	*	*	*
	55,35	25	1700	4,45	2,94	2,23			*			
	50,32	28	1700	4,98	3,29	2,49			*	*	*	*
	45,53	31	1700	5,52	3,64	2,76			*	*	*	*
	39,68	35	1700	6,23	4,11	3,12			*	*		
	35,63	39	1700	6,94	4,58	3,47			*	*	*	
	32,24	43	1700	7,65	5,05	3,83			*	*	*	
	30,47	46	1680	8,09	5,34	4,05			*	*	*	
	27,57	51	1650	8,81	5,82	4,41			*	*	*	
	25,69	54	1650	9,33	6,16	4,66			*	*		
	23,49	60	1650	10,37	6,84	5,18			*	*		
	21,38	65	1600	10,89	7,19	5,45				*	*	
	19,34	72	1600	12,06	7,96	6,03				*	*	

* ⇒ A21

kg	W	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180
SK 873.1	89	84	91	91	105	115	115

SK 972.1



	i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC						
				P _{1max}		f _B ≥ 1	f _B ⇔ B23-33						
				n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	90	100	112	132	160	180	200
SK 972.1	42,76	33	2900	10,02	6,61	5,01							
	37,19	38	2900	11,54	7,62	5,77				*			
	33,36	42	2900	12,75	8,42	6,38				*			
	30,29	46	2800	13,49	8,90	6,74				*			
W	27,66	51	2600	13,88	9,16	6,94				*			
	23,19	60	2300	14,45	9,54	7,23				*			
↔ B65	21,99	64	2800	18,76	12,38	9,38				*			
	19,72	71	2800	20,82	13,74	10,41				*			
	17,65	79	2800	23,16	15,29	11,58							
	15,84	88	2740	25,25	16,66	12,62							
	14,16	99	2670	27,68	18,27	13,84					*		
IEC	13,56	103	2610	28,15	18,58	14,07					*		
	12,86	109	2610	29,79	19,66	14,89					*		
	11,54	121	2520	31,93	21,07	15,96							
↔ B76	10,35	135	2480	35,06	23,14	17,53							
	9,40	149	2480	37,00	24,42	18,50							
	8,45	166	2350	37,00	24,42	18,50							
	7,19	195	2250	37,00	24,42	18,50							
	6,68	210	2240	37,00	24,42	18,50							
	6,17	227	2080	37,00	24,42	18,50							
	5,25	267	2000	37,00	24,42	18,50							
	4,56	307	2000	37,00	24,42	18,50							
	3,74	374	1825	37,00	24,42	18,50							
	3,33	420	1700	37,00	24,42	18,50							

* ⇒ A21

kg	W	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180	IEC 200
SK 972.1	126	121	128	128	142	152	152	173


SK 973.1

i _{ges}	n ₂ n ₁ = 1400min ⁻¹	M _{2max} f _B = 1	W			IEC					
			P _{1max}		f _B ≥ 1	f _B ⇒ B14-32					
			n ₁ = 1400min ⁻¹	n ₁ = 930min ⁻¹	n ₁ = 700min ⁻¹	90	100	112	132	160	180
SK 973.1	456,77	3,1	3300	1,07	0,71	0,54	*				
	414,73	3,4	3300	1,17	0,78	0,59	*				
	362,89	3,9	3300	1,35	0,89	0,67	*				
	325,47	4,3	3300	1,49	0,98	0,74	*	*	*		
	295,50	4,7	3300	1,62	1,07	0,81		*	*		
	258,57	5,4	3300	1,87	1,23	0,93		*	*		
	234,77	6,0	3300	2,07	1,37	1,04		*	*		
	197,50	7,1	3300	2,45	1,62	1,23		*	*		
	179,32	7,8	3300	2,70	1,78	1,35		*	*		
W	173,58	8,1	3000	2,54	1,68	1,27		*	*		
	157,60	8,9	3000	2,80	1,85	1,40		*	*		
mm	132,45	11	3300	3,80	2,51	1,90		*	*		
⇒ B65	120,26	12	3300	4,15	2,74	2,07			*		
	105,23	13	3200	4,36	2,87	2,18			*		
	94,96	15	3300	5,18	3,42	2,59			*	*	
	86,22	16	3300	5,53	3,65	2,76			*	*	
	77,16	18	3300	6,22	4,11	3,11			*	*	*
IEC	75,44	19	3300	6,57	4,33	3,28			*	*	
	68,50	20	3300	6,91	4,56	3,46			*	*	
mm	65,98	21	3200	7,04	4,64	3,52			*	*	*
⇒ B76	59,91	23	3200	7,71	5,09	3,85			*	*	*
	55,66	25	3200	8,38	5,53	4,19			*	*	*
	52,32	27	3200	9,05	5,97	4,52			*	*	
	47,60	29	3200	9,72	6,41	4,86			*	*	
	42,51	33	3200	11,06	7,30	5,53			*	*	
	37,36	37	3200	12,40	8,18	6,20			*	*	
	35,19	40	3200	13,40	8,85	6,70			*	*	
	31,95	44	3200	14,74	9,73	7,37			*	*	
	30,97	45	3100	14,61	9,64	7,30			*	*	
	27,22	51	3000	16,02	10,57	8,01				*	
	25,51	55	3000	17,28	11,40	8,64				*	
	22,42	62	2800	18,18	12,00	9,09				*	

* ⇒ A21

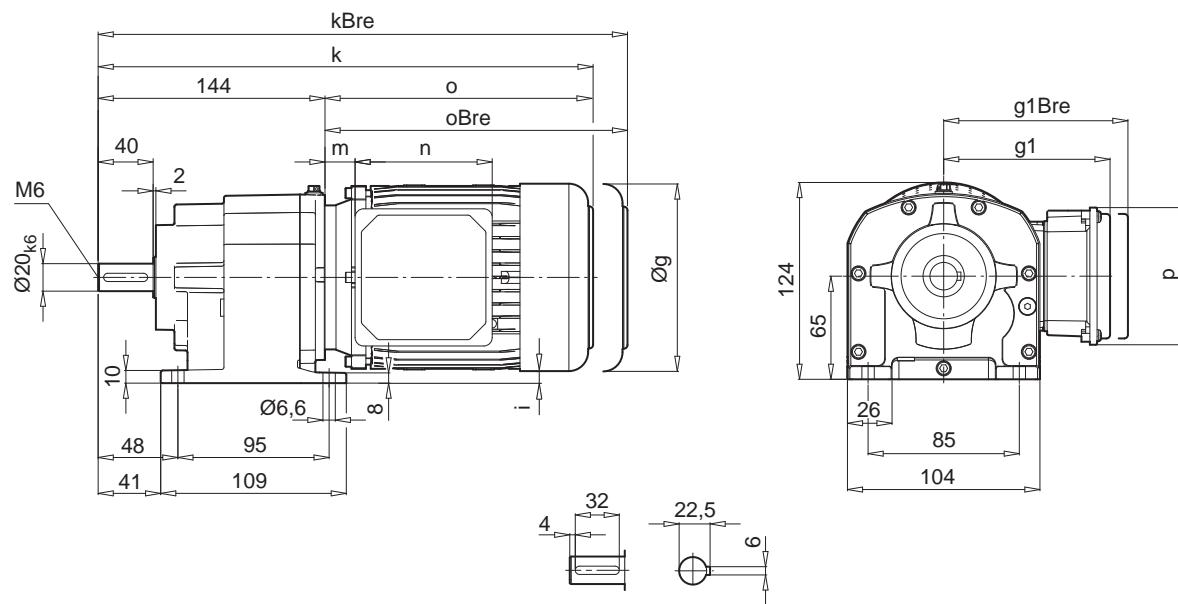
kg	W	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180
SK 973.1	121	116	123	123	137	147	147

SK 072.1

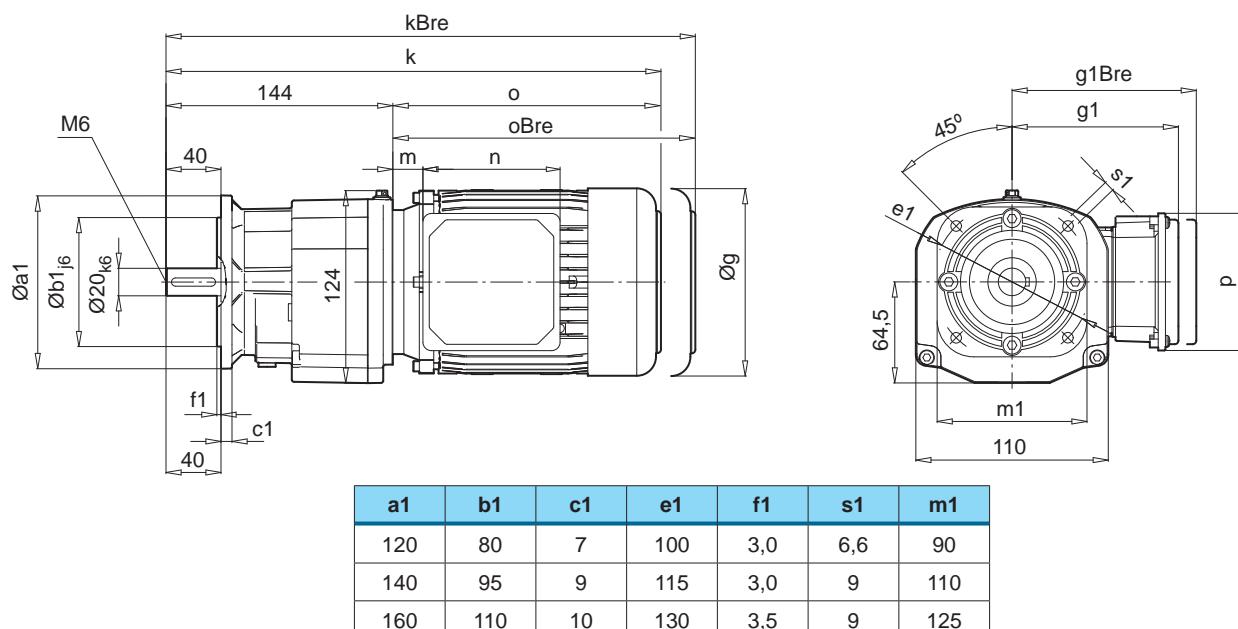
SK 072.1F



SK 072.1



SK 072.1F



IE1	63 S / L	63 LA	71 S / L	71 LA			
IE2	-	-	-	-			
IE3	-	-	-	-			
g	130	130	145	145			
g1 / g1Bre	115 / 123	115 / 123	124 / 133	124 / 133			
k / kBre	336 / 392	336 / 392	358 / 416	358 / 416			
o / oBre	192 / 248	192 / 248	214 / 272	214 / 272			
m / mBre	12 / 19	12 / 19	20 / 27	20 / 27			
n / nBre	100 / 134	100 / 134	100 / 134	100 / 134			
p / pBre	100 / 89	100 / 89	100 / 89	100 / 89			
i	-	-	-7,5	-7,5			

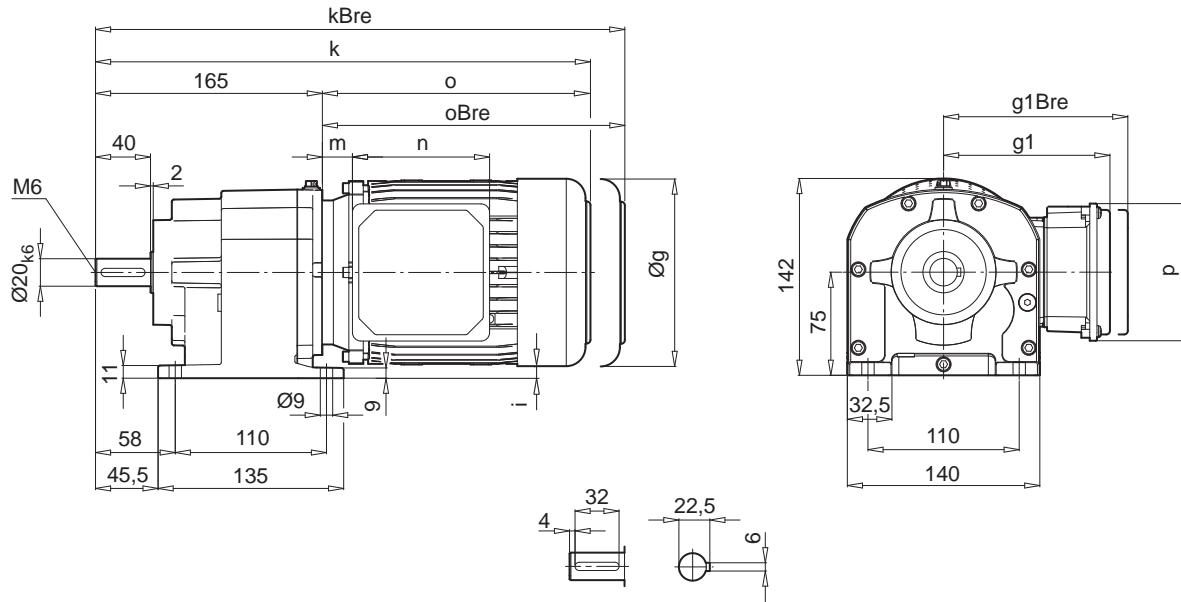


IEC 56 - 71 ⇒ B66

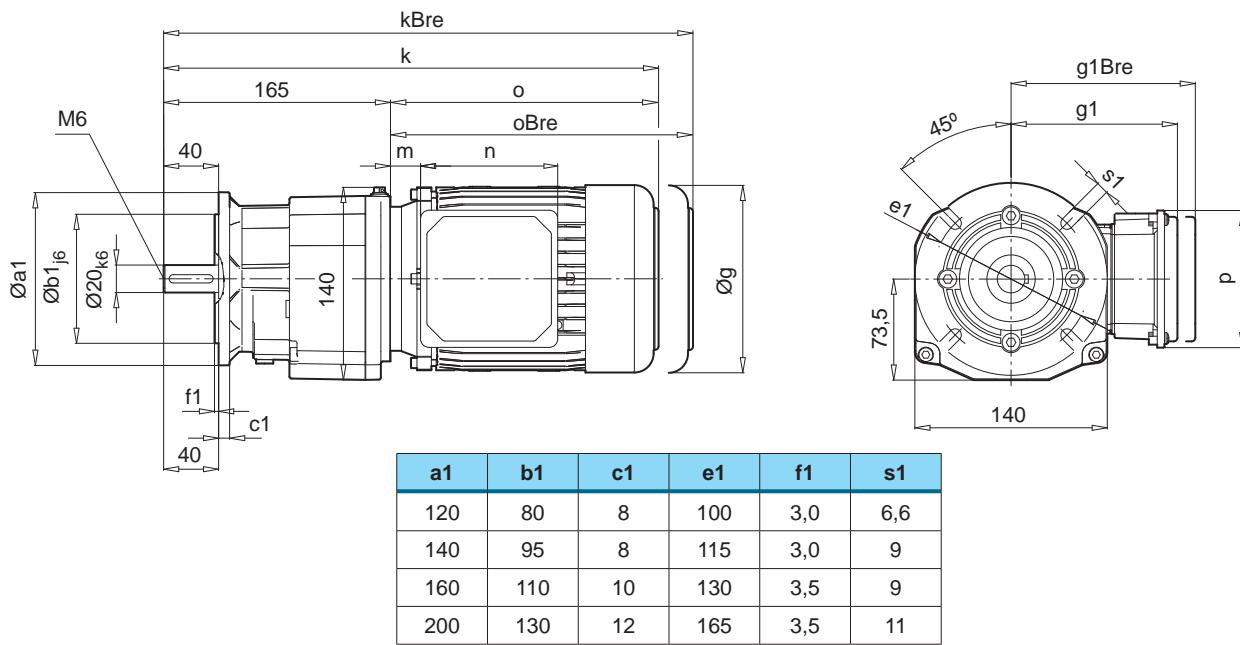


SK 172.1
SK 172.1F

SK 172.1



SK 172.1F



IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP			
IE2	-	-					
IE3	-	-					
g	130	145	165	183			
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147			
k / kBre	357 / 413	379 / 437	401 / 465	441 / 516			
o / oBre	192 / 248	214 / 272	236 / 300	276 / 351			
m / mBre	12 / 19	20 / 27	22 / 26	26 / 30			
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153			
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108			
i	10	2,5	-7,5	-16,5			

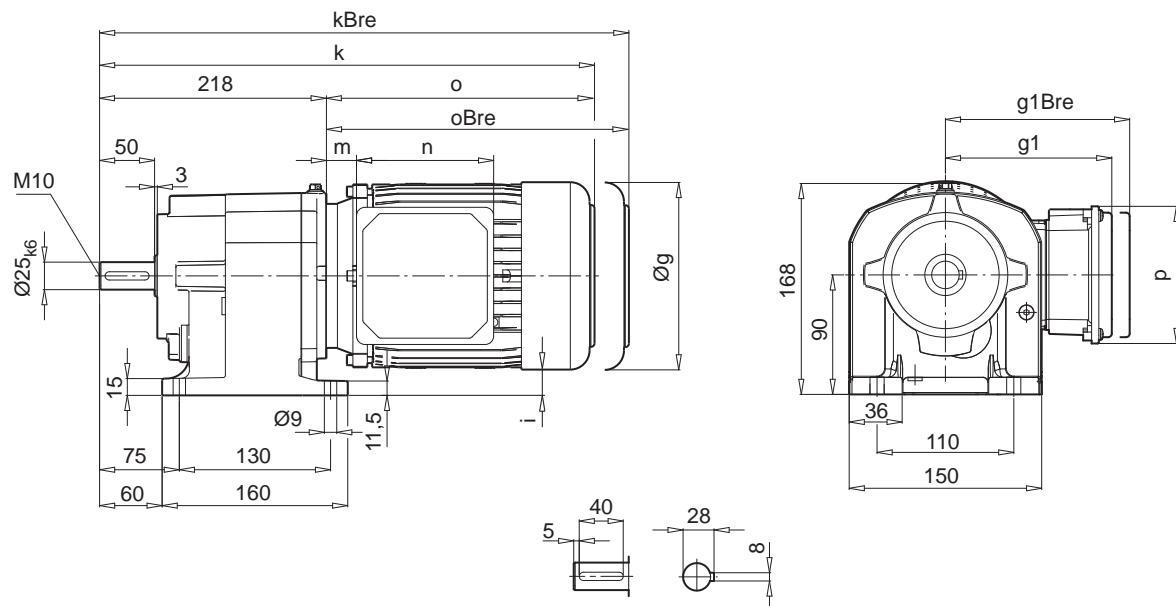


SK 372.1

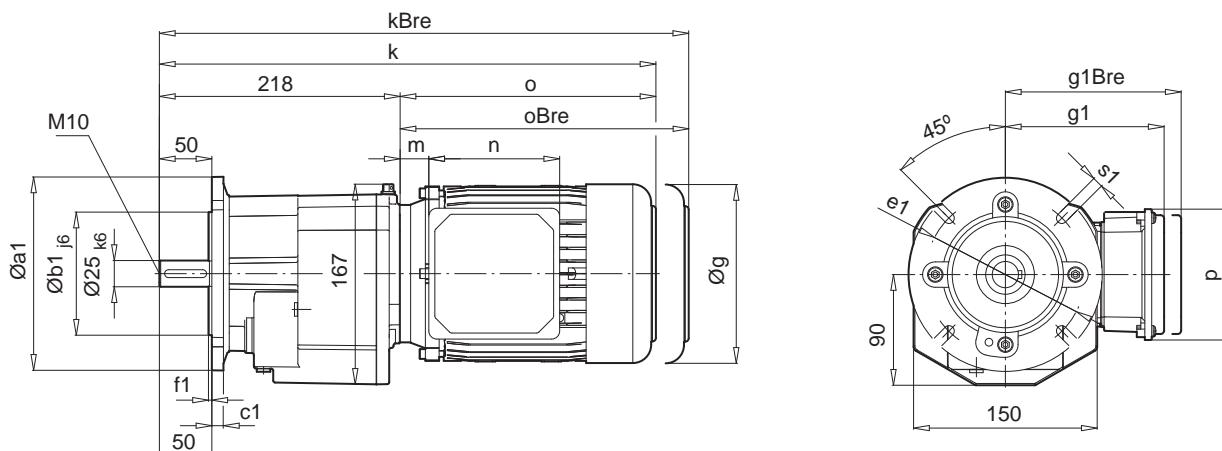
SK 372.1F



SK 372.1



SK 372.1F



a1	b1	c1	e1	f1	s1
120	⇒ A11, B80				
140	95	9	115	3,0	8,6
160	110	10	130	3,5	8,6
200	130	12	165	3,5	11
250	180	15	215	4,0	13,5

IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L LH LP		
IE2	-	-					
IE3	-	-					
g	130	145	165	183	201		
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147	169 / 172		
k / kBre	414 / 470	454 / 512	479 / 543	520 / 595	550 / 641		
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377	332 / 423		
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56	58 / 62		
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153	114 / 153		
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108	114 / 108		
i	25	17,5	7,5	-1,5	-10,5		

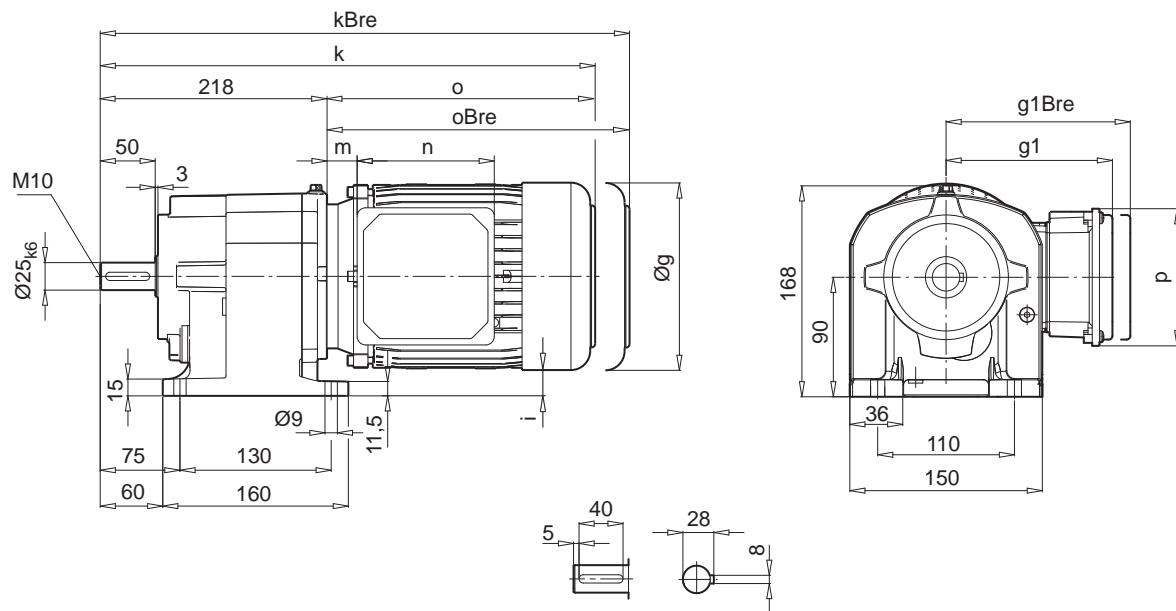
W ⇒ B65

IEC 63 - 100 ⇒ B68

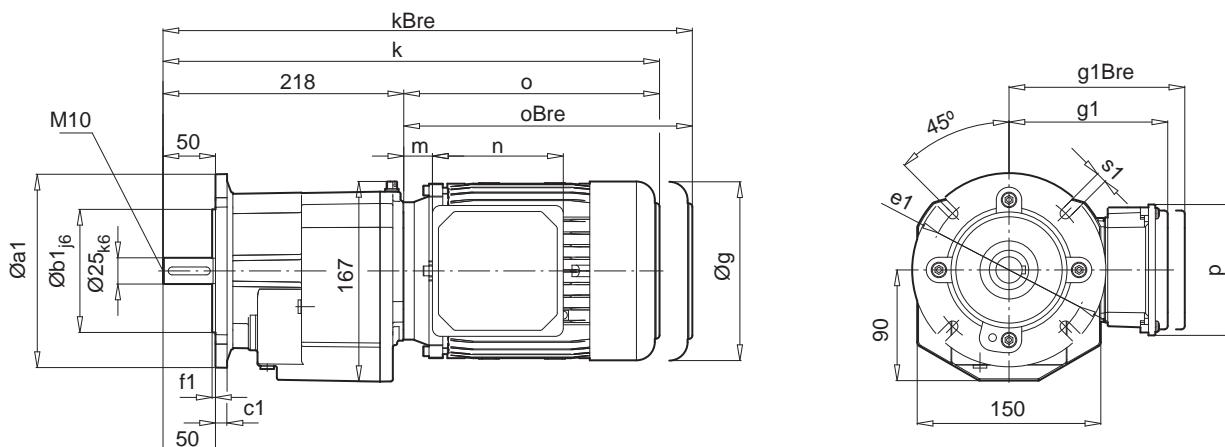


SK 373.1
SK 373.1F

SK 373.1



SK 373.1F



a1	b1	c1	e1	f1	s1
120	⇒ A11, B80				
140	95	9	115	3,0	8,6
160	110	10	130	3,5	8,6
200	130	12	165	3,5	11
250	180	15	215	4,0	13,5

IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP			
IE2	-	-					
IE3	-	-					
g	130	145	165	183			
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147			
k / kBre	414 / 470	454 / 512	479 / 543	520 / 595			
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377			
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56			
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153			
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108			
i	25	17,5	7,5	-1,5			

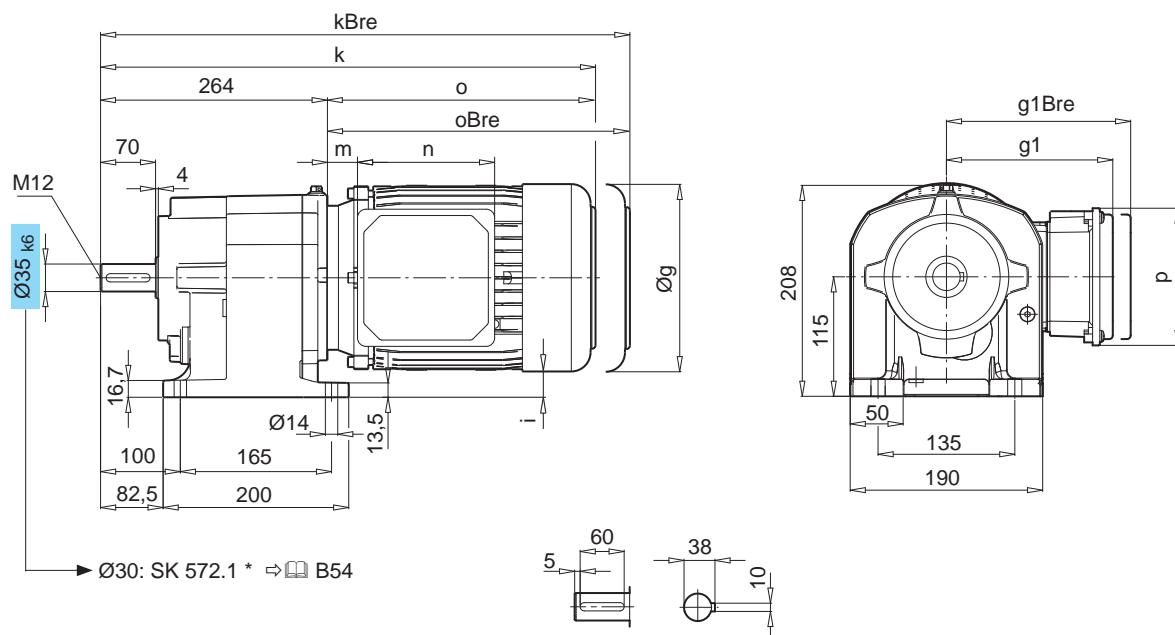


SK 572.1

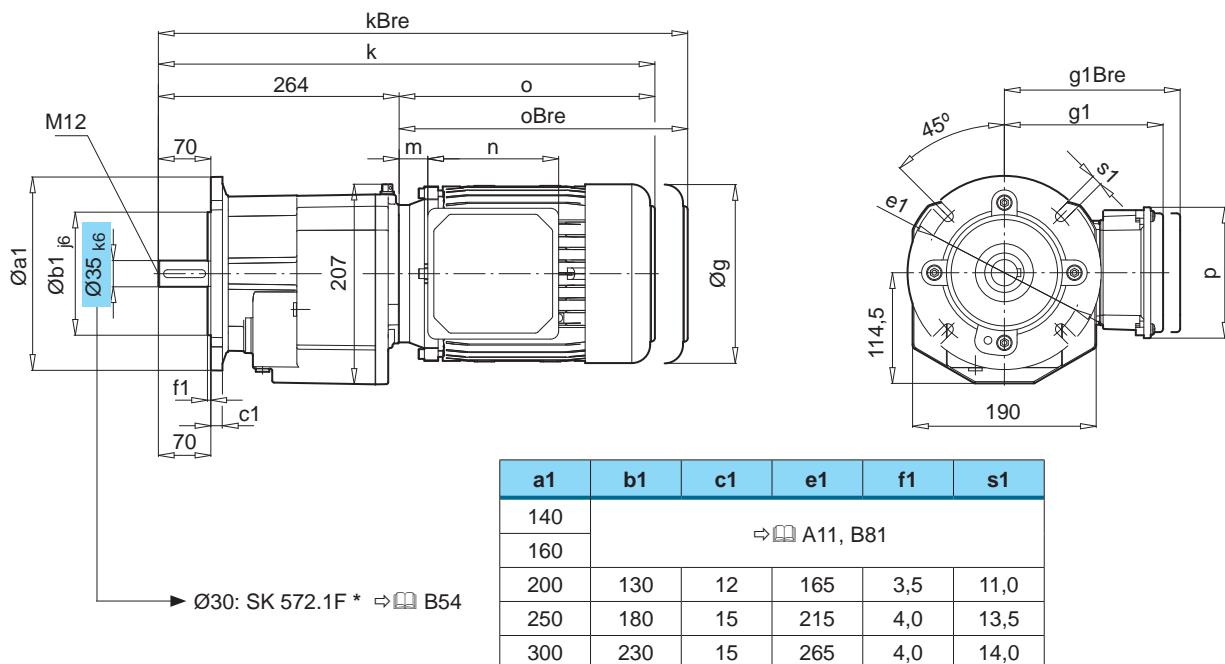
SK 572.1F



SK 572.1



SK 572.1F



IE1	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M - -	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -	
g	145	165	183	201	228	228	266	
g1 / g1Bre	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	
k / kBre	500 / 558	525 / 589	566 / 641	596 / 687	619 / 712	644 / 737	689 / 796	
o / oBre	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	435 / 542	
m / mBre	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	65 / 58	
n / nBre	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	
p / pBre	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139	
i	42,5	32,5	23,5	14,5	1	1	-18	

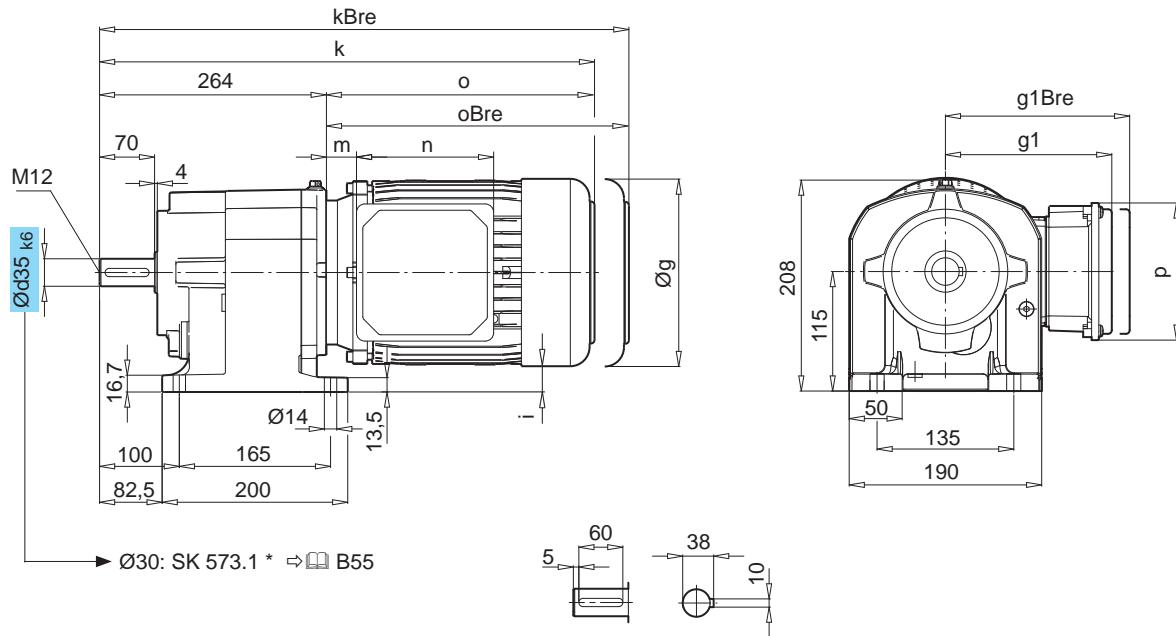
W ⇒ B65

 IEC 63 - 112 ⇒ B70

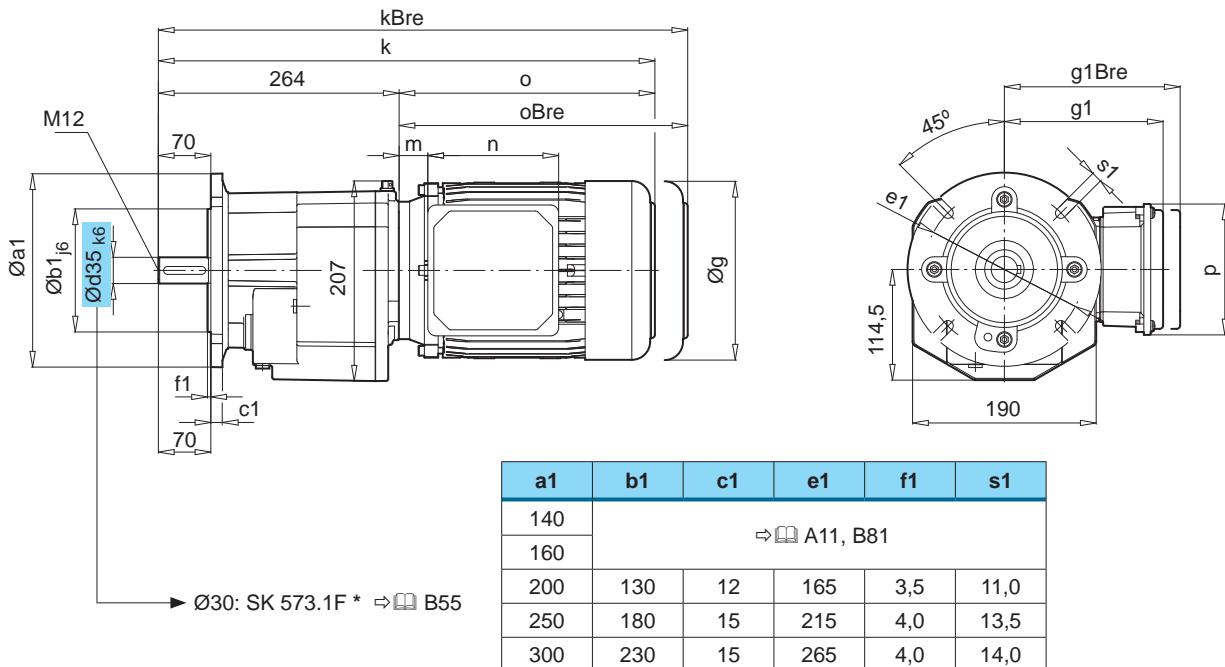


SK 573.1
SK 573.1F

SK 573.1



SK 573.1F



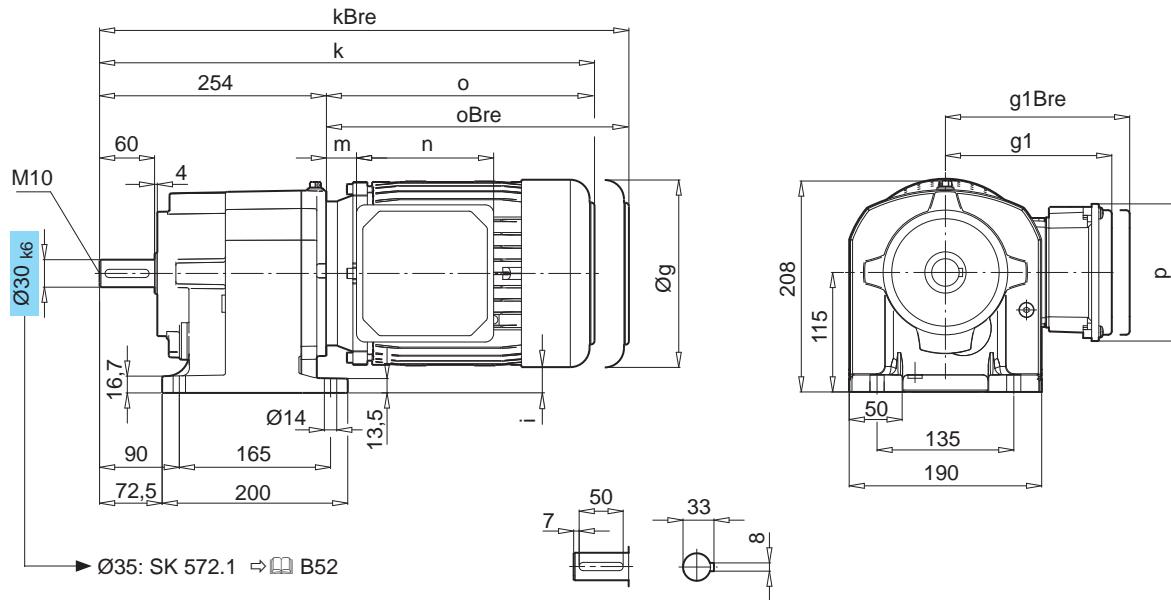
IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M - -	112 - MH MP	W ⇒ B65 IEC 63 - 112 ⇒ B71
IE2	-	-						
IE3	-	-						
g	130	145	165	183	201	228	228	
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	
k / kBre	460 / 516	500 / 558	525 / 589	566 / 641	596 / 687	619 / 712	644 / 737	
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	
i	50	42,5	32,5	23,5	14,5	1	1	

SK 572.1

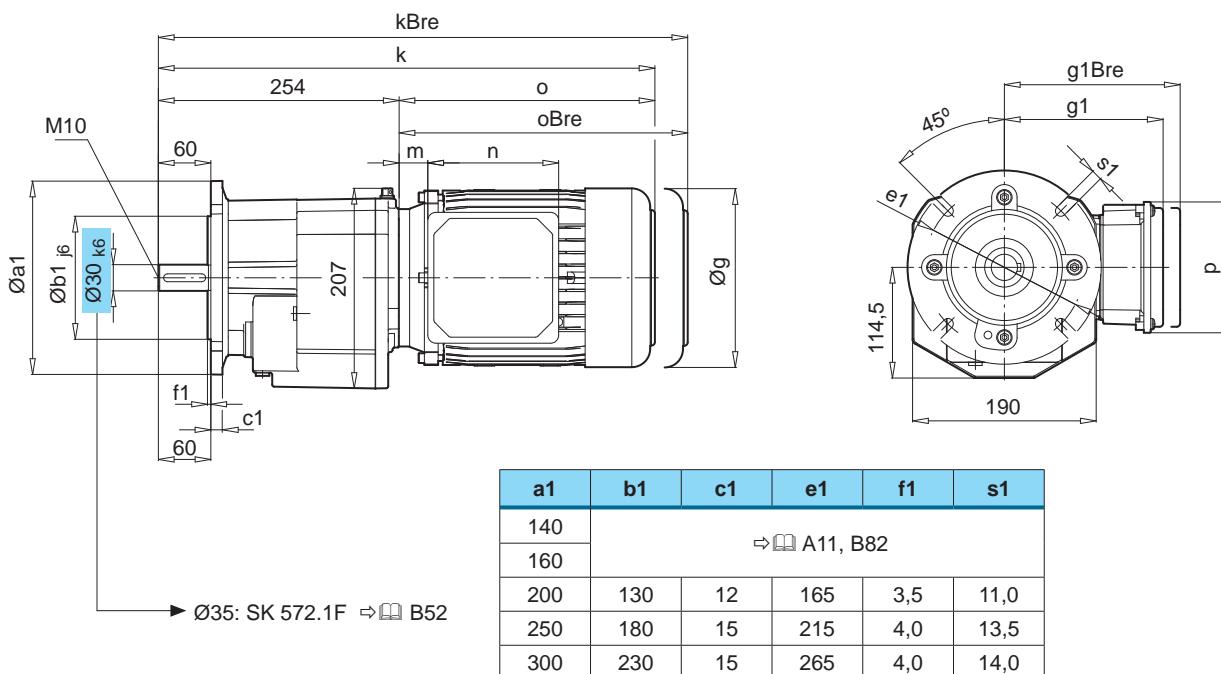
SK 572.1F



SK 572.1 *



SK 572.1F *

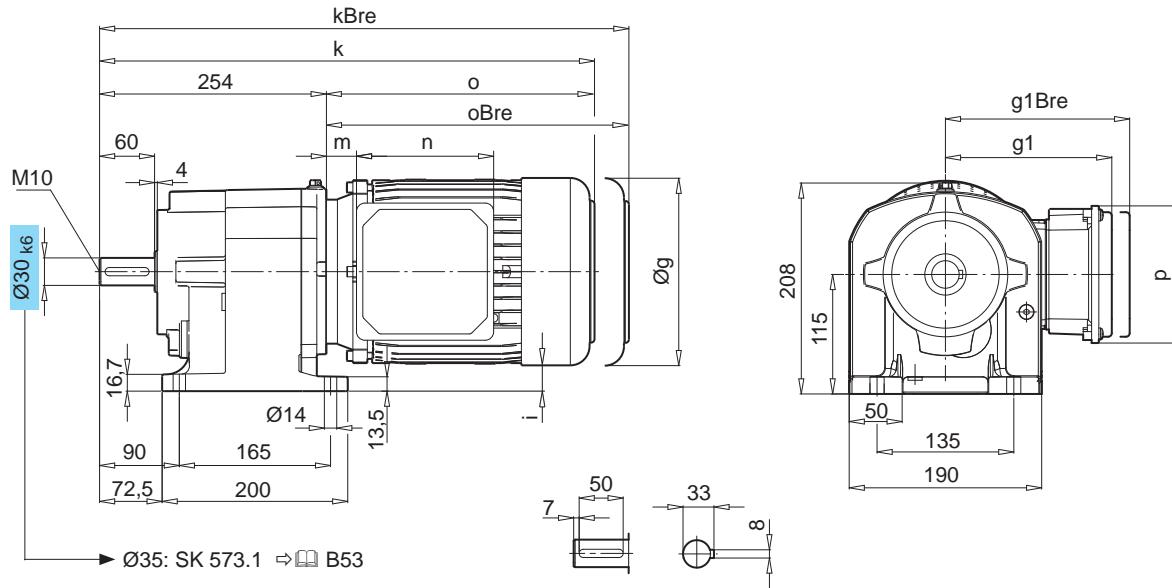


IE1	71 S / L	80 S / L SH / LH	90 S / L SH / LH	100 L / LA LH / AH	112 M -	112 - MH MP	132 S / M / - SH / MH / LH	SP / MP / -
IE2	-							
IE3	-							
g	145	165	183	201	228	228	266	
g1 / g1Bre	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	
k / kBre	500 / 558	525 / 589	566 / 641	596 / 687	619 / 712	644 / 737	689 / 796	
o / oBre	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	435 / 542	
m / mBre	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	65 / 58	
n / nBre	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	
p / pBre	100 / 89	114 / 108	114 / 108	114 / 108	144 / 108	114 / 108	122 / 139	
i	42,5	32,5	23,5	14,5	1	1	-18	

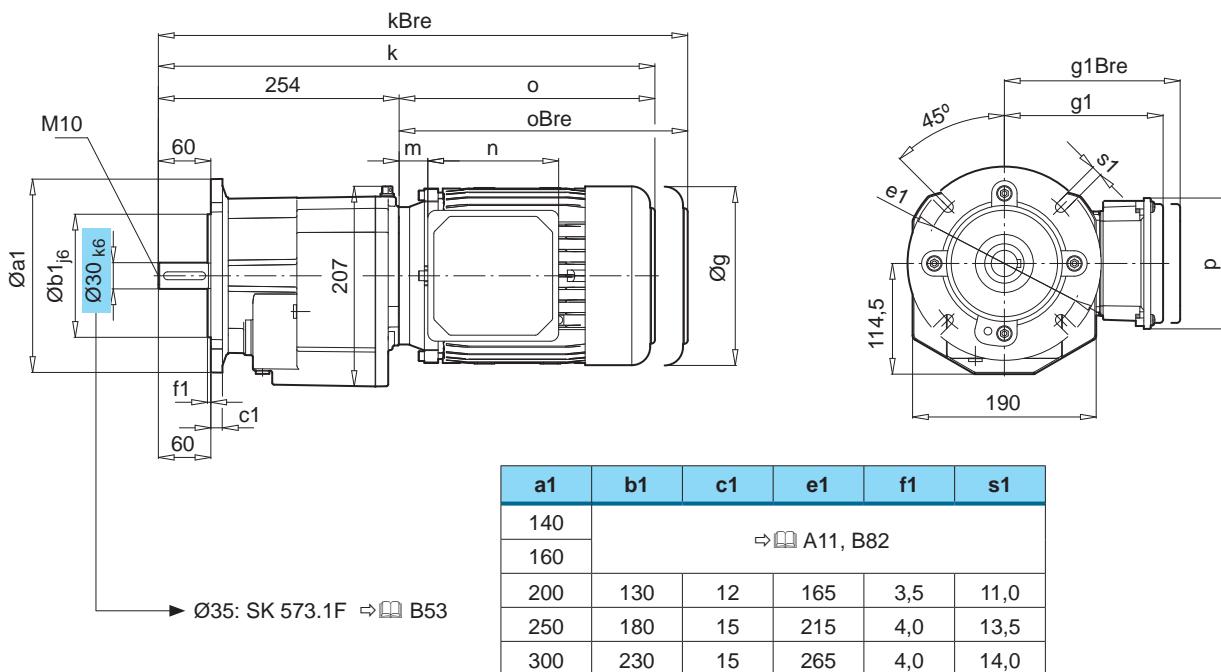


SK 573.1
SK 573.1F

SK 573.1 *



SK 573.1F *



IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M -	112 - MH MP	
IE2	-	-						
IE3	-	-						
g	130	145	165	183	201	228	228	
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	
k / kBre	460 / 516	500 / 558	525 / 589	566 / 641	596 / 687	619 / 712	644 / 737	
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	
i	50	42,5	32,5	23,5	14,5	1	1	



W ⇒ B65



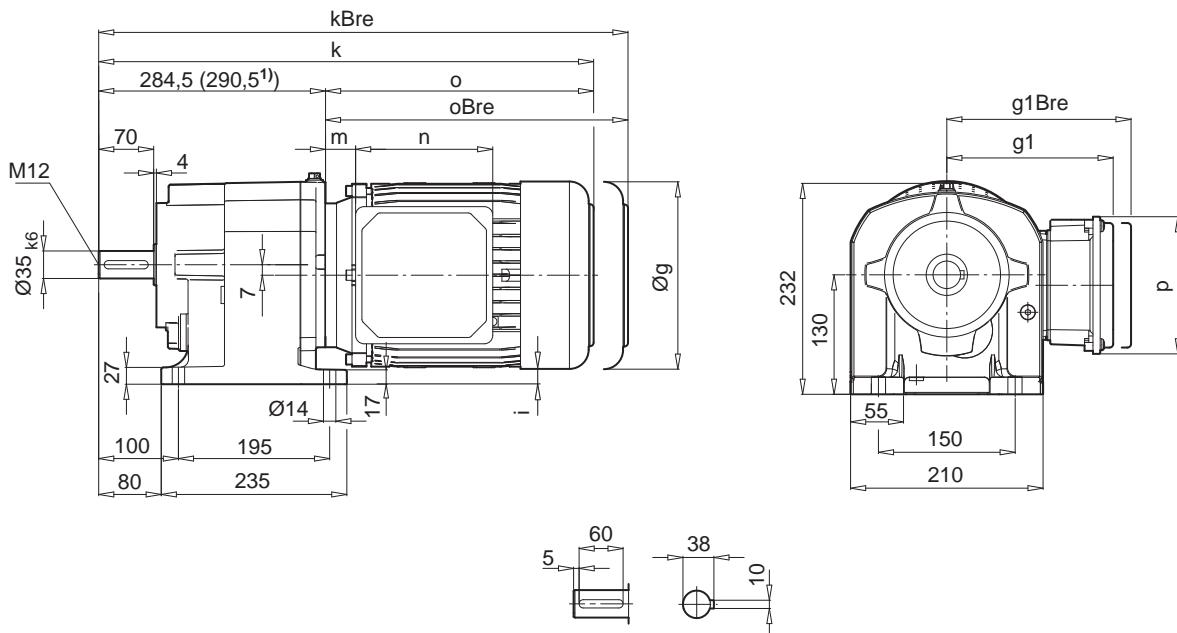
IEC 63-112
⇒ B71

SK 672.1

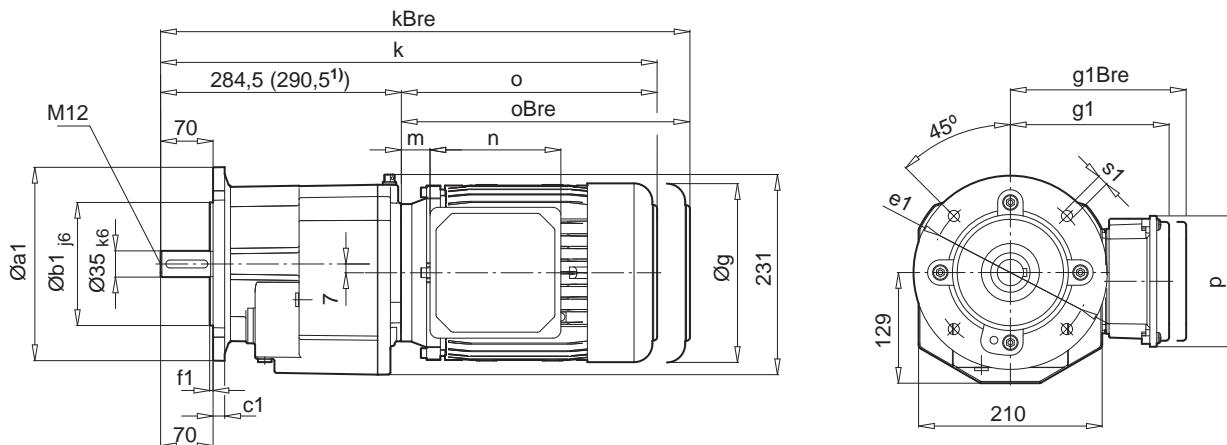
SK 672.1F



SK 672.1



SK 672.1F



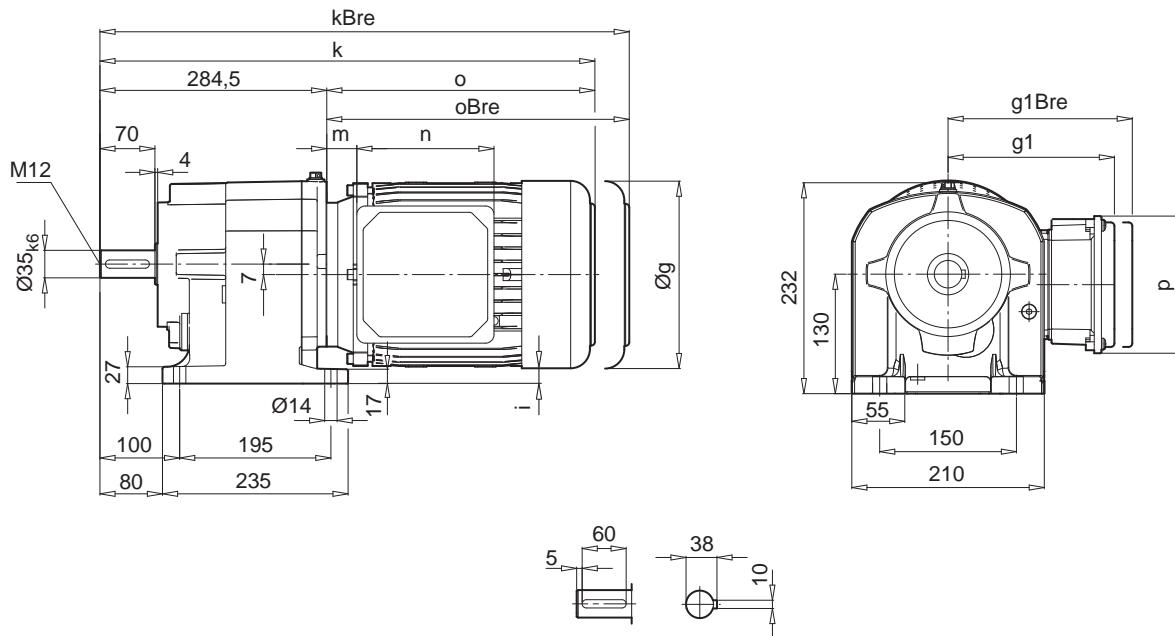
a1	b1	c1	e1	f1	s1
200	130	12	165	3,5	11
250	180	16	215	4	14

IE1 IE2 IE3	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M - -	112 - MH MP	132¹ S / M / - SH / MH / LH SP / MP / -	W ⇒ B65 IEC 63 - 132 ⇒ B72
g	165	183	201	228	228	266	
g1 / g1Bre	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	
k / kBre	546 / 610	587 / 662	617 / 708	640 / 733	665 / 758	725,5 / 832,5	
o / oBre	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	435 / 542	
m / mBre	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	65 / 58	
n / nBre	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	
p / pBre	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139	
i	40,5	31,5	22,5	9	9	-10	

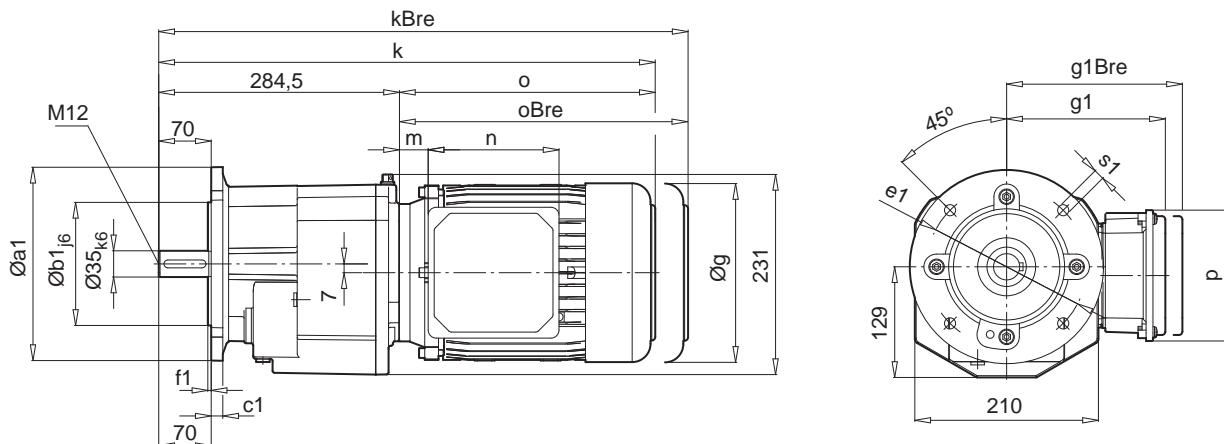


SK 673.1
SK 673.1F

SK 673.1



SK 673.1F



a1	b1	c1	e1	f1	s1
200	130	12	165	3,5	11
250	180	16	215	4	14

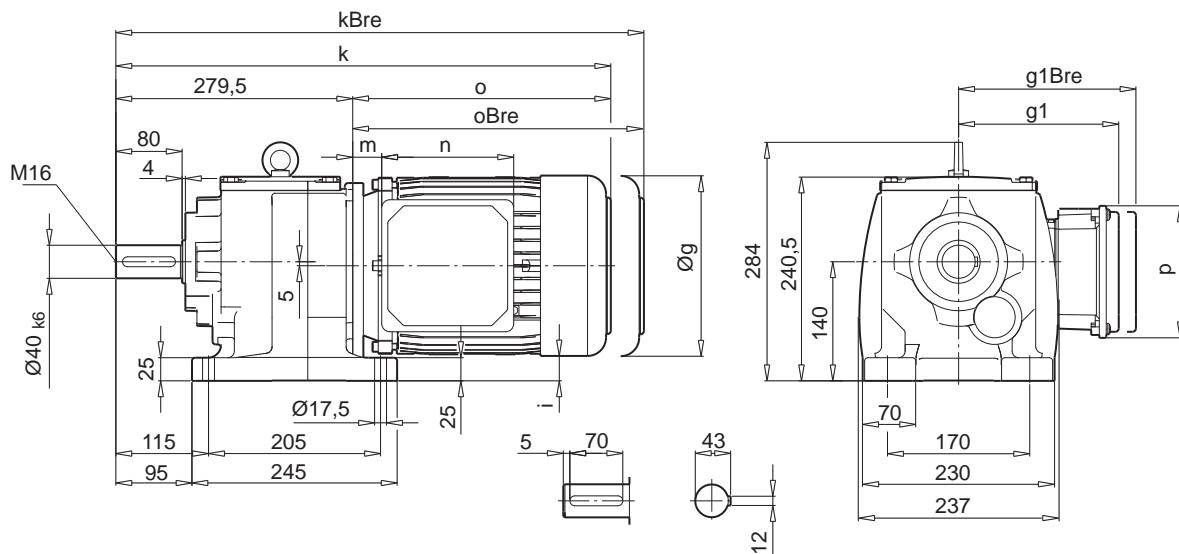
IE1 IE2 IE3	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M -	112 - MH MP	
g	130	145	165	183	201	228	228	
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	W ⇒ B65
k / kBre	481 / 537	521 / 579	546 / 610	587 / 662	617 / 708	640 / 733	665 / 758	
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	IEC 63 - 132 ⇒ B73
i	58	50,5	40,5	31,5	22,5	9	9	

SK 772.1

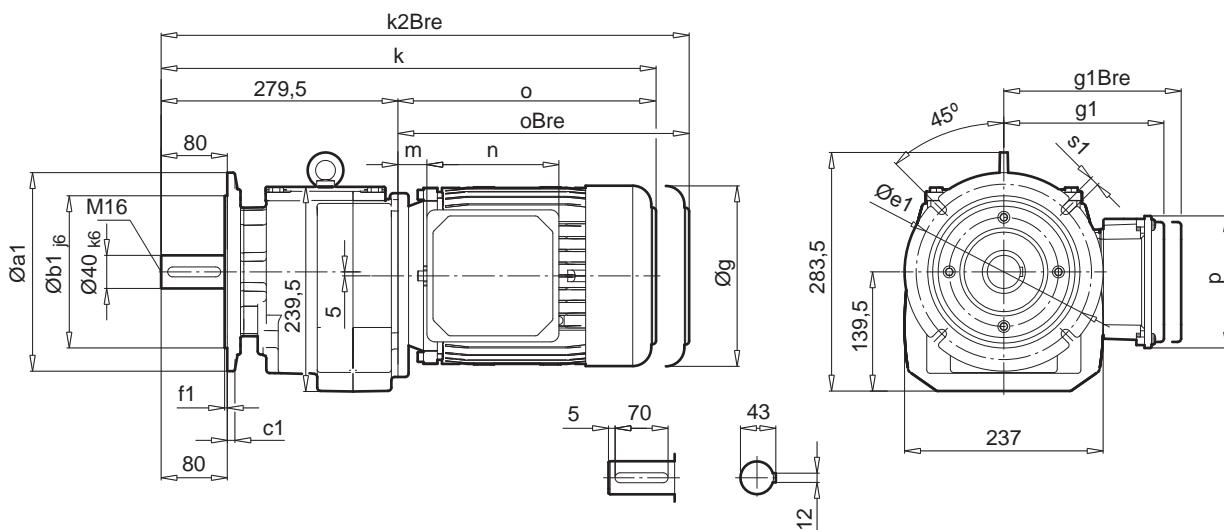
SK 772.1F



SK 772.1



SK 772.1F



a1	b1	c1	e1	f1	s1
200	130	12	165	4	11
250	180	15	215	4	13,5
300	230	18	265	4	13,5

IE1 IE2 IE3	90 L LH LP	100 L LH LP	112 M -	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -	160 M MH MP	
g	183	201	228	228	266	320	
g1 / g1Bre	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	242 / 242	
k / kBre	575,5 / 650,5	605,5 / 696,5	628,5 / 721,5	653,5 / 746,5	714,5 / 821,5	791,5 / 926,5	
o / oBre	296 / 371	326 / 417	349 / 442	374 / 467	435 / 542	512 / 647	
m / mBre	46 / 50	52 / 56	68 / 72	68 / 72	71 / 64	52 / 52	
n / nBre	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	186 / 186	
p / pBre	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139	186 / 186	
i	43,5	34,5	21	21	2	-25	



W ⇒ B65

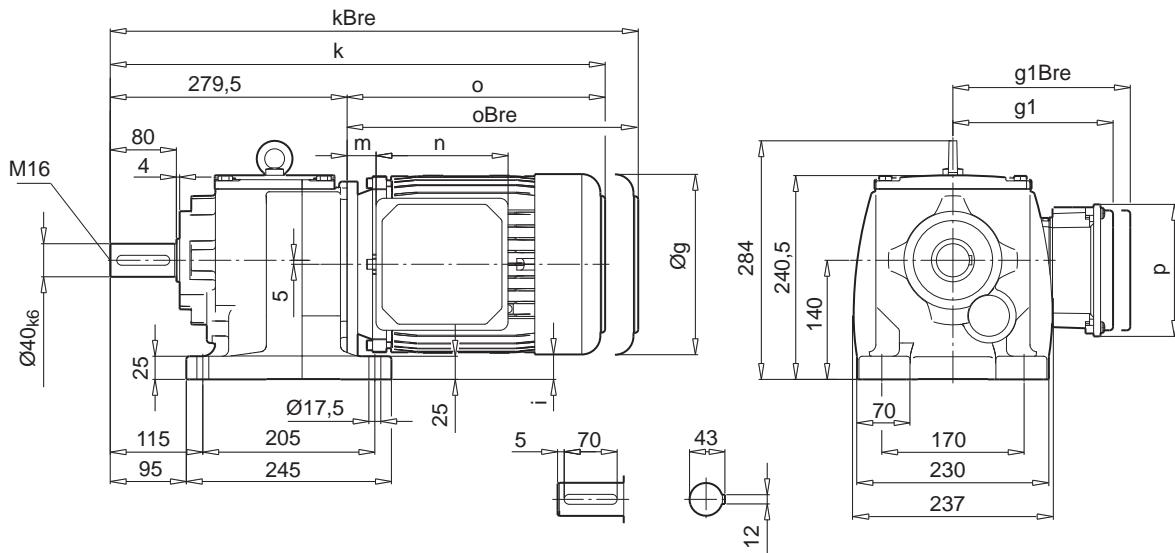


IEC 71 - 132 ⇒ B74

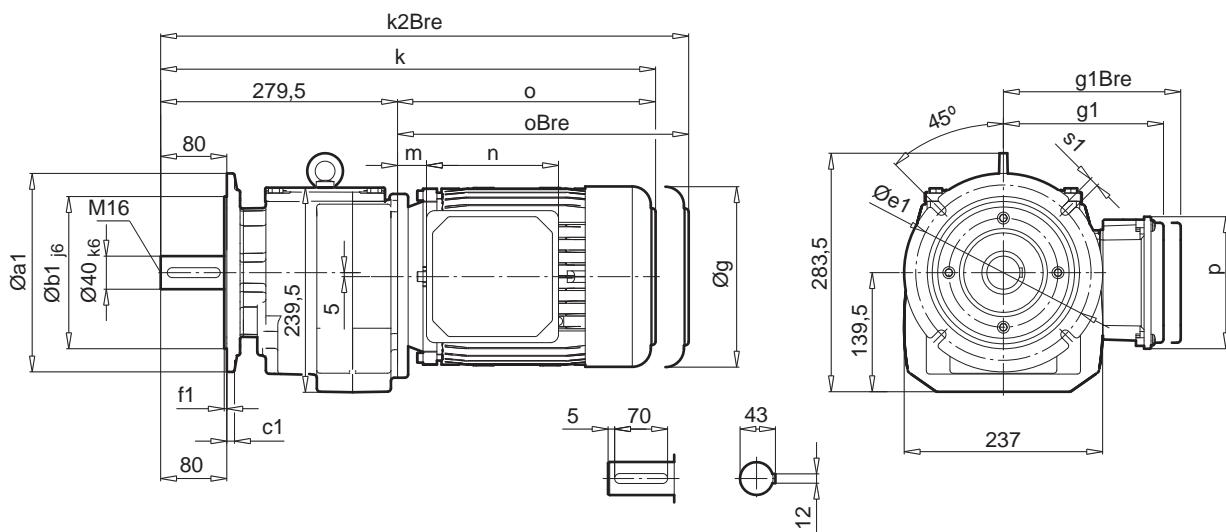


SK 773.1
SK 773.1F

SK 773.1



SK 773.1F



a1	b1	c1	e1	f1	s1
200	130	12	165	4	11
250	180	15	215	4	13,5
300	230	18	265	4	13,5

IE1	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L LH LP	112 M	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -	
g	145	165	183	201	228	228	266	
g1 / g1Bre	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	
k / kBre	509,5 / 567,5	534,5 / 598,5	575,5 / 650,5	605,5 / 696,5	628,5 / 721,5	653,5 / 746,5	714,5 / 821,5	
o / oBre	230 / 288	255 / 319	296 / 371	326 / 417	349 / 442	374 / 467	435 / 542	
m / mBre	36 / 43	41 / 45	46 / 50	52 / 56	68 / 72	68 / 72	71 / 51	
n / nBre	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	
p / pBre	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139	
i	62,5	52,5	43,5	34,5	21	21	2	

W ⇒ B65

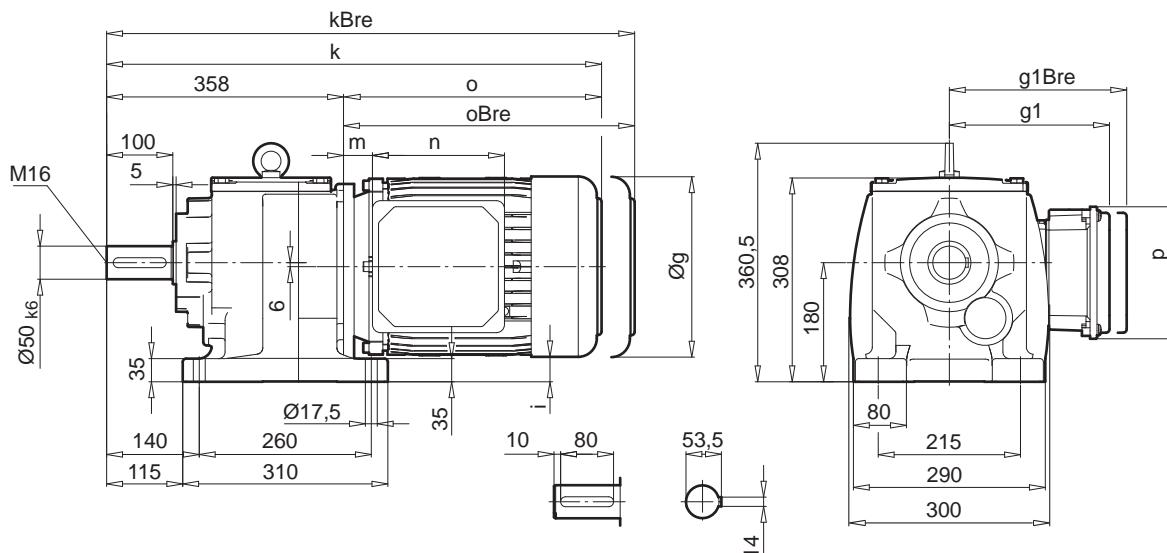
 IEC 71 - 132
 ⇒ B74

SK 872.1

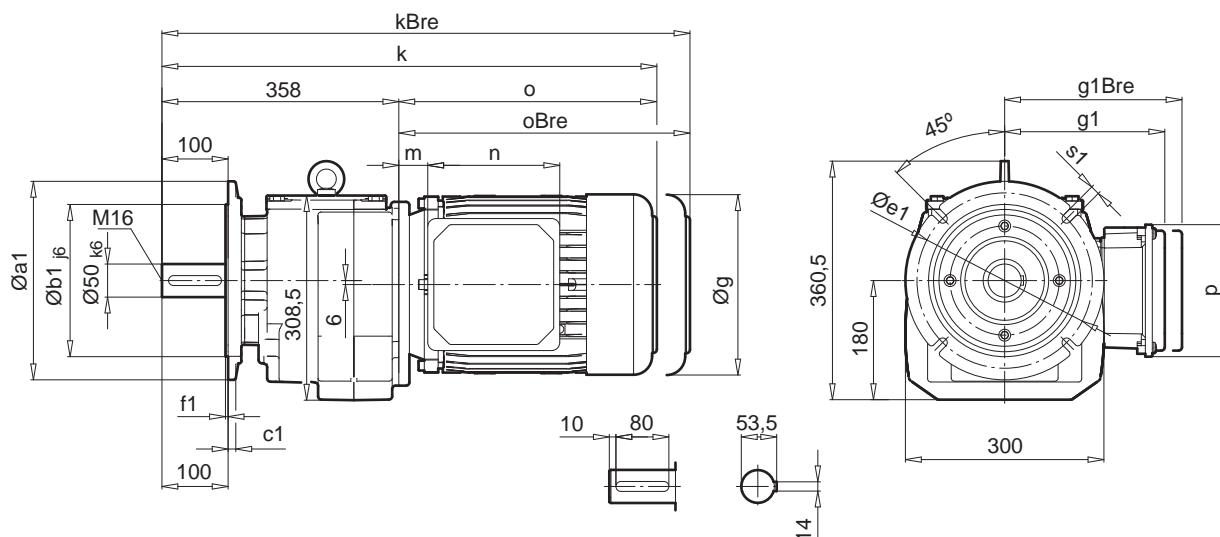
SK 872.1F



SK 872.1



SK 872.1F



a1	b1	c1	e1	f1	s1
250	180	16	215	4	13,5
300	230	20	265	4	13,5
350	250	20	300	5	17,5

IE1 IE2 IE3	100 L LH LP	112 M - -	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -	160 M / L MH / LH MP / LP	180 - MH / LH MP / LP	
g	201	228	228	266	320	358	
g1 / g1Bre	169 / 172	179 / 182	179 / 182	204 / 201	242 / 242	259 / 259	
k / kBre	664 / 755	687 / 780	712 / 805	773 / 880	850 / 985	980 / 1085	
o / oBre	306 / 397	329 / 422	354 / 447	415 / 522	492 / 627	622 / 727	
m / mBre	32 / 36	48 / 52	48 / 52	51 / 44	52 / 52	54 / 54	
n / nBre	114 / 153	114 / 153	114 / 153	122 / 185	186 / 186	186 / 186	
p / pBre	114 / 108	114 / 108	114 / 108	122 / 139	186 / 186	186 / 186	
i	73,5	60	60	41	14	-5	



W ⇒ B65

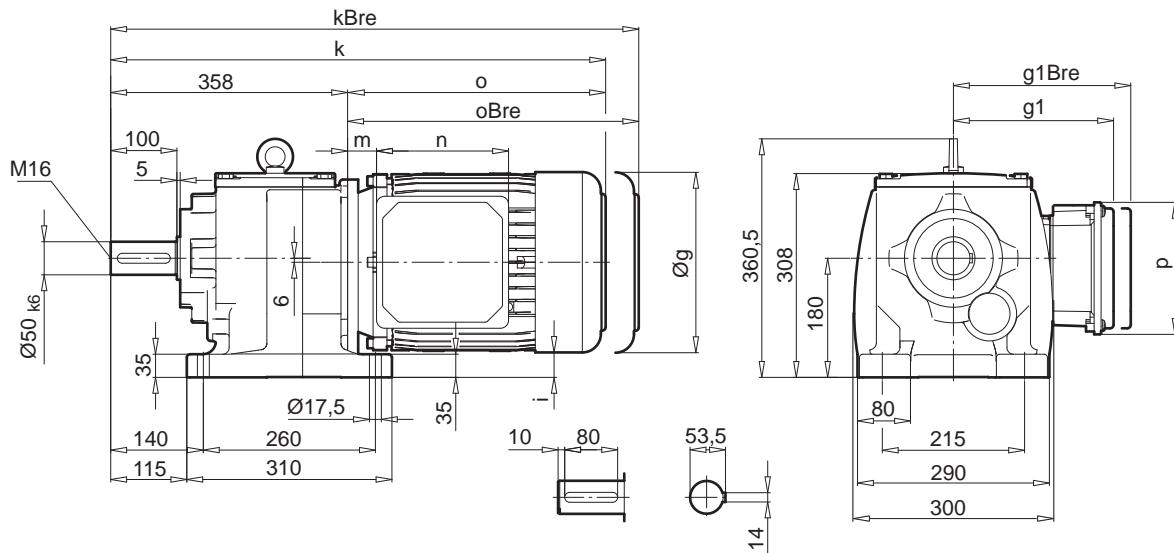


IEC 90-180
⇒ B75

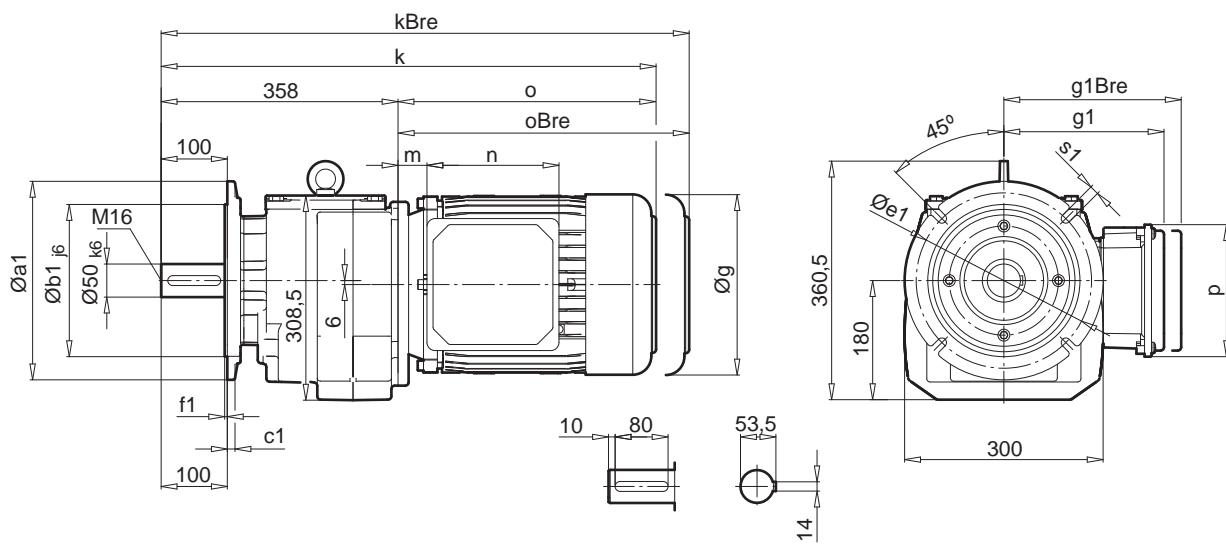


SK 873.1
SK 873.1F

SK 873.1



SK 873.1F



a1	b1	c1	e1	f1	s1
250	180	16	215	4	13,5
300	230	20	265	4	13,5
350	250	20	300	5	17,5

IE1	90 S / L SH / LH SP / LP	100 L LH LP	112 M -	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -	160 M / L MH / LH MP / LP	
g	183	201	228	228	266	320	
g1 / g1Bre	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	242 / 242	
k / kBre	634 / 709	664 / 755	687 / 780	712 / 805	773 / 880	850 / 985	
o / oBre	276 / 351	306 / 397	329 / 422	354 / 447	415 / 522	492 / 627	
m / mBre	26 / 30	32 / 36	48 / 52	48 / 52	51 / 44	52 / 52	
n / nBre	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	186 / 186	
p / pBre	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139	186 / 186	
i	82,5	73,5	60	60	41	14	



⇒ B65



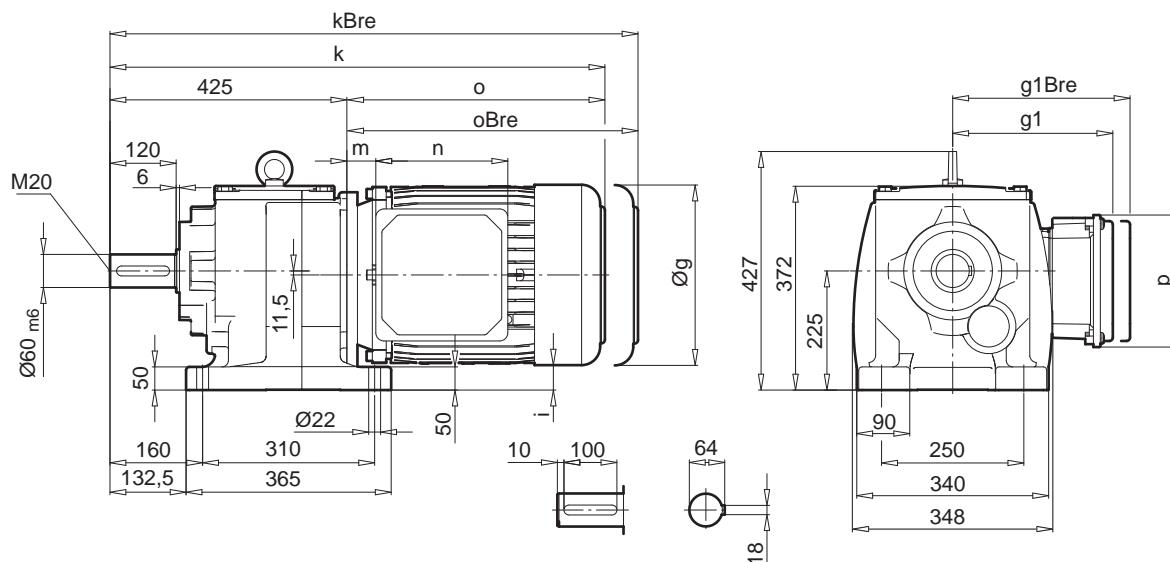
⇒ B75

SK 972.1

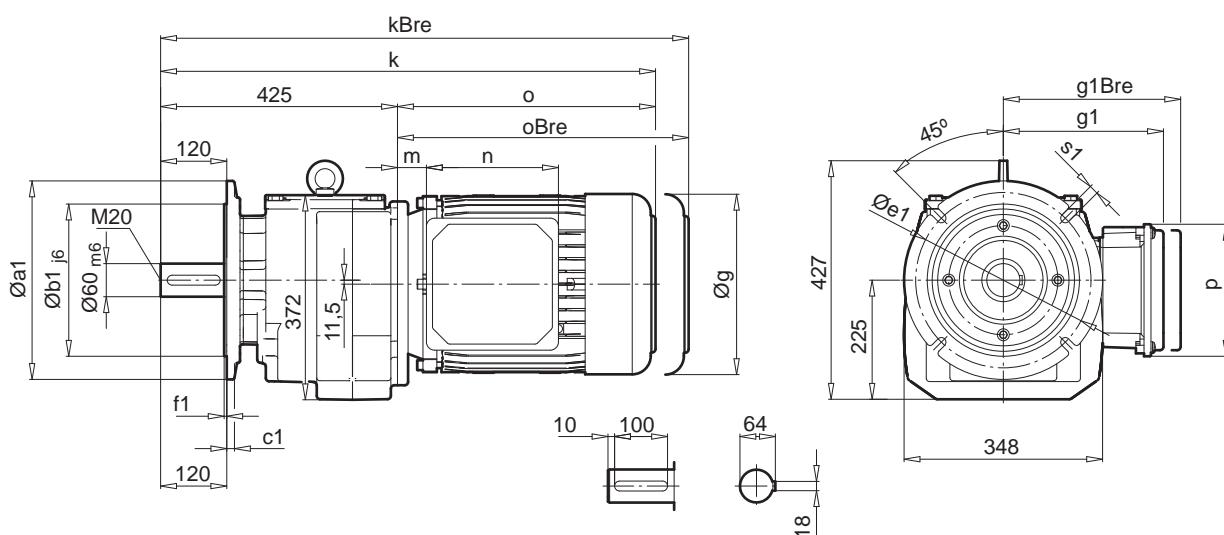
SK 972.1F



SK 972.1



SK 972.1F



a1	b1	c1	e1	f1	s1
300	230	20	265	4	13,5
350	250	20	300	5	17,5
450	350	20	400	5	17,5

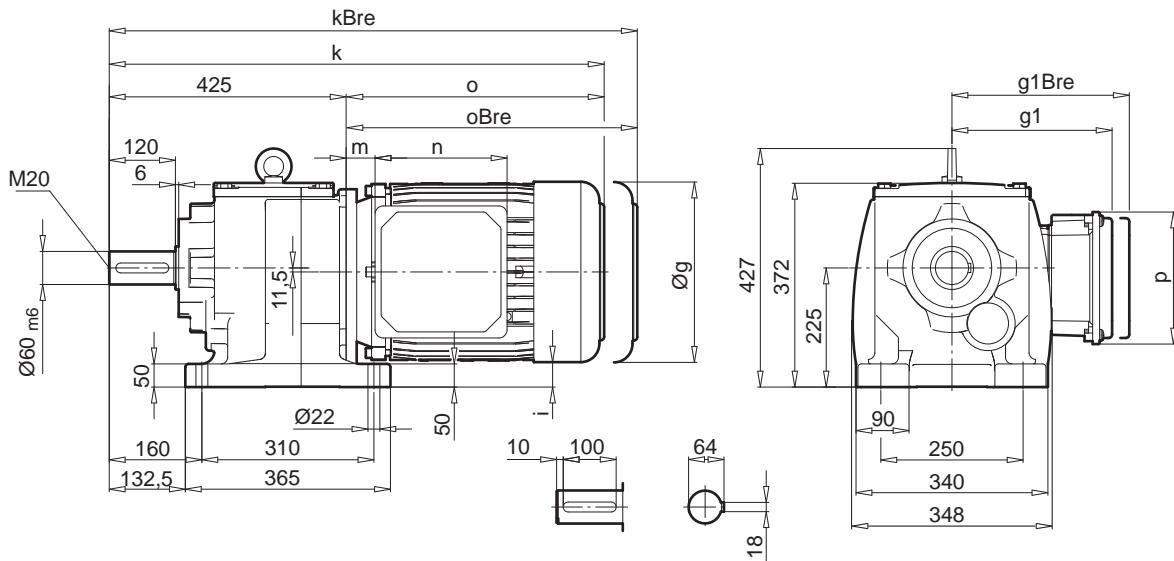
IE1	112 M	112 -	132 S / M / -	160 M / L	180 -	200 LX	225 S	
IE2	-	MH	SH / MH / LH	MH / LH	MH / LH	XH	-	
IE3	-	MP	SP / MP / -	MP / LP	MP / LP	-	-	
g	228	228	266	320	358	358	442	
g1 / g1Bre	179 / 182	179 / 182	204 / 201	242 / 242	259 / 259	259 / 259	325 / 325	
k / kBre	754 / 847	779 / 872	840 / 947	917 / 1052	1047 / 1152	1047 / 1152	1063 / 1243	
o / oBre	329 / 422	354 / 447	415 / 522	492 / 627	622 / 727	622 / 727	1313 / 1493	
m / mBre	48 / 52	48 / 52	51 / 44	52 / 52	54 / 54	54 / 54	145 / 145	
n / nBre	114 / 153	114 / 153	122 / 185	186 / 186	186 / 186	186 / 186	192 / 192	
p / pBre	114 / 108	114 / 108	122 / 139	186 / 186	186 / 186	186 / 186	260 / 260	
i	99,5	99,5	80,5	53,5	34,5	34,5	14,4	



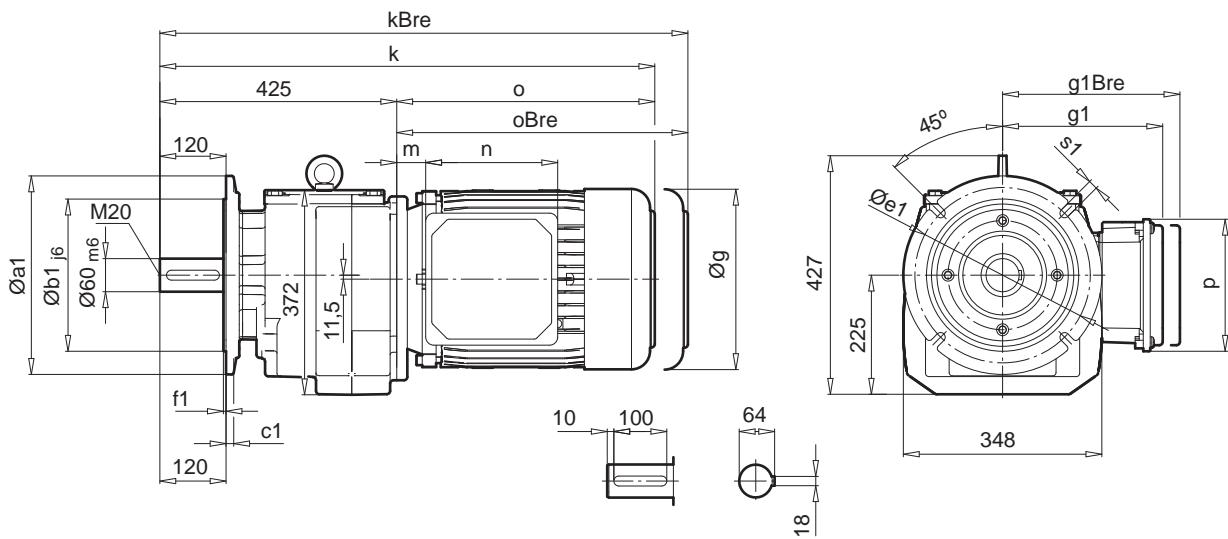


SK 973.1
SK 973.1F

SK 973.1



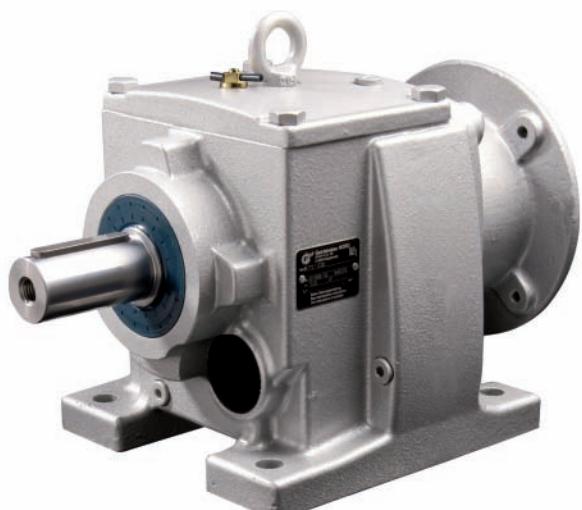
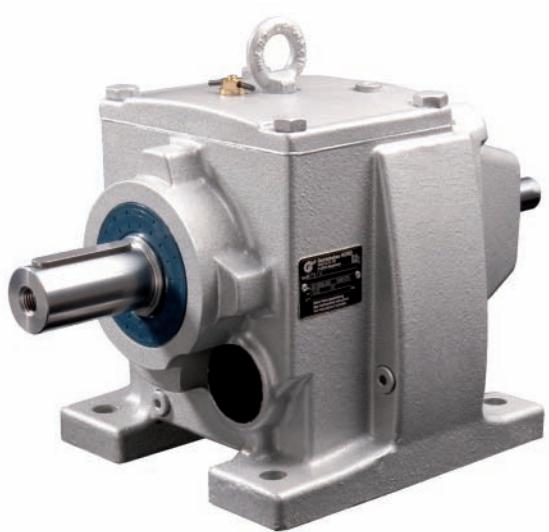
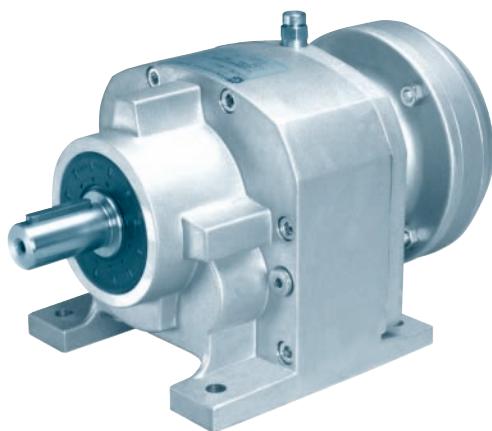
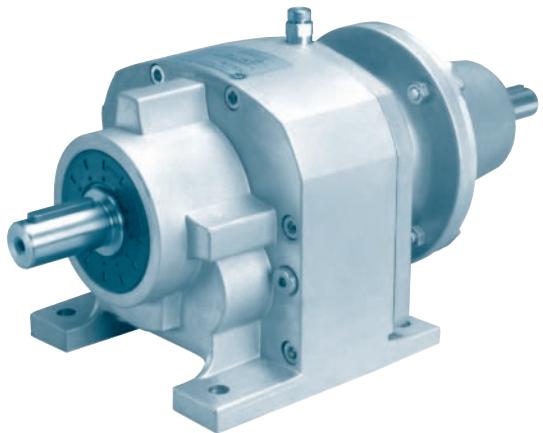
SK 973.1F



a1	b1	c1	e1	f1	s1
300	230	20	265	4	13,5
350	250	20	300	5	17,5
450	350	20	400	5	17,5

IE1	90 S / L SH / LH SP / LP	100 L LH LP	112 M -	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -	160 M / L MH / LH MP / LP	180 - MH / LH MP / LP	
g	183	201	228	228	266	320	358	
g1 / g1Bre	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	242 / 242	259 / 259	
k / kBre	701 / 776	731 / 822	754 / 847	779 / 872	840 / 947	917 / 1052	1047 / 1152	
o / oBre	276 / 351	306 / 397	329 / 422	354 / 447	415 / 522	492 / 627	622 / 727	
m / mBre	26 / 30	32 / 36	48 / 52	48 / 52	51 / 44	52 / 52	54 / 54	
n / nBre	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	186 / 186	186 / 186	
p / pBre	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139	186 / 186	186 / 186	
i	122	113	99,5	99,5	80,5	53,5	34,5	

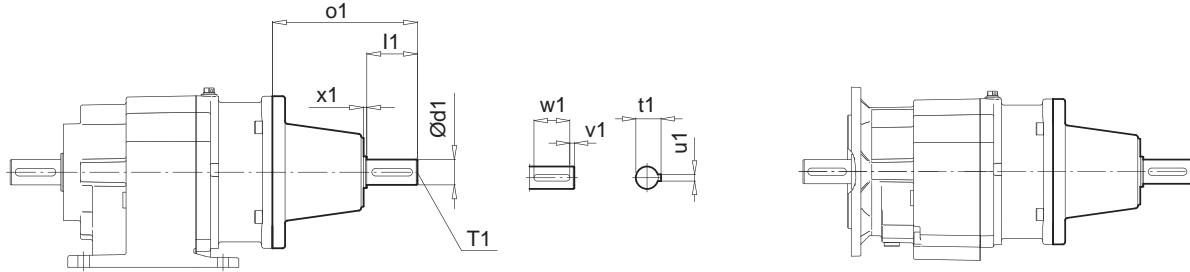
W \Rightarrow B65
 IEC 90-200 \Rightarrow B76





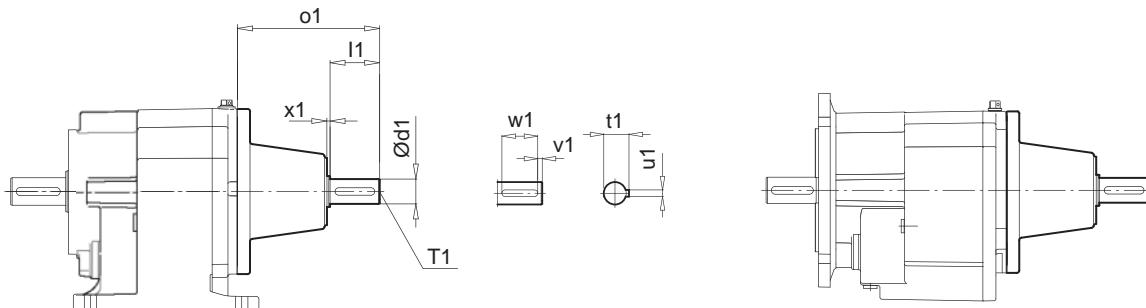
SK 172.1 - W

SK 172.1F - W



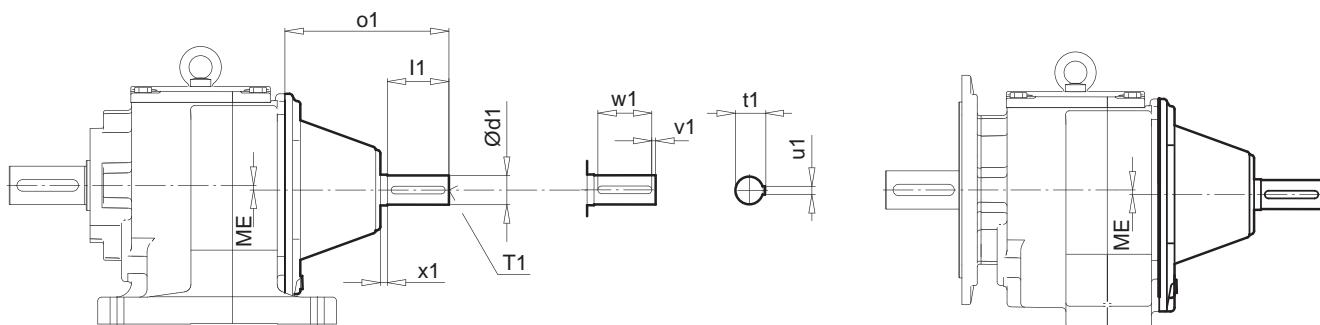
SK 372.1 SK 373.1 SK572.1 SK 573.1 SK 672.1 SK 673.1 - W

SK 372.1F SK 373.1F SK572.1F SK 573.1F SK 672.1F SK 673.1F - W



SK 772.1 SK 773.1 SK872.1 SK 873.1 SK 972.1 SK 973.1 - W

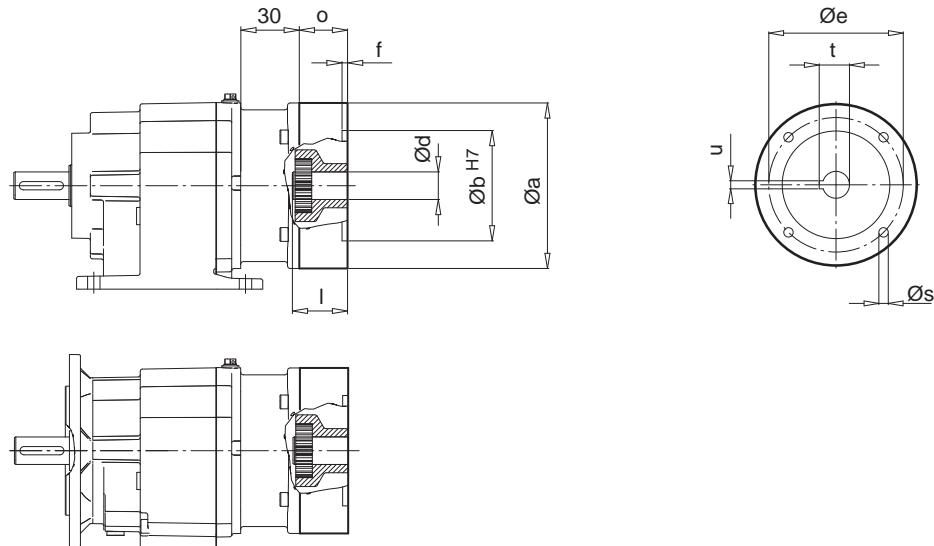
SK 772.1F SK 773.1F SK872.1F SK 873.1F SK 972.1F SK 973.1F - W



Type	ME	d1	l1	o1	x1	u1	t1	v1	w1	T1
SK 172.1 / SK 172.1 F	-	16	40	114,5	2,5	5	18	4	32	M6
SK 372.1 / SK 372.1 F SK 373.1 / SK 373.1 F	-	24	50	177,5	8	8	27	5	40	M8
SK 572.1 / SK 572.1 F SK 573.1 / SK 573.1 F	-	24	50	177,5	8	8	27	5	40	M8
SK 672.1 / SK 672.1 F SK 673.1 / SK 673.1 F	7	24	50	177,5	8	8	27	5	40	M8
SK 772.1 / SK 772.1 F SK 773.1 / SK 773.1 F	5	24	50	172	8	8	27	5	40	M8
SK 872.1 / SK 872.1 F SK 873.1 / SK 873.1 F	6	28	60	213	8	8	31	5	50	M10
SK 972.1 / SK 972.1 F SK 973.1 / SK 973.1 F	11,5	38	80	213	8	10	41	5	70	M12



SK 072.1 - IEC 56..71
SK 072.1F - IEC 56..71

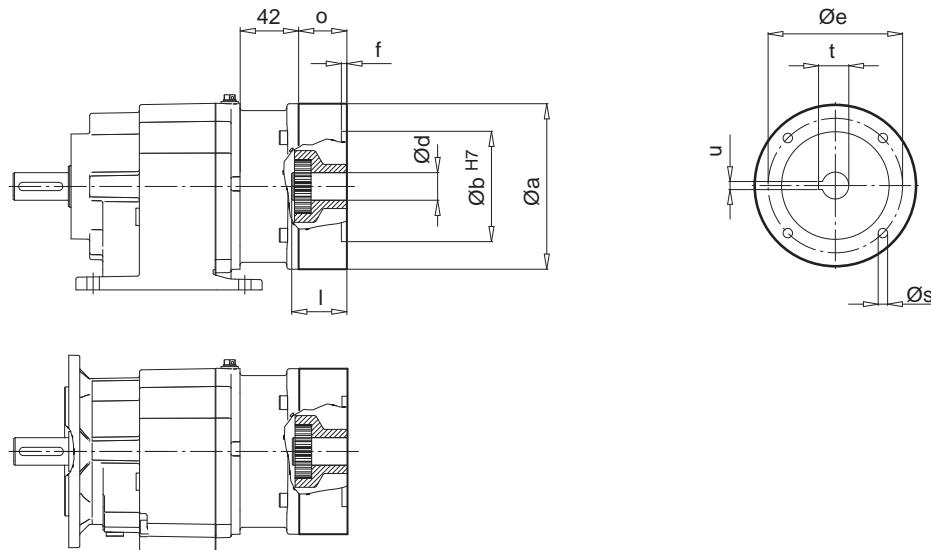


	a	b	e	f	s	o	d	I	t	u
IEC 56 - C105	105	70	85	3	7	29,5	9	20	11,4	3
IEC 56 - A120	120	80	100	3,5	7	29,5				
IEC 63 - C90 **	90	60	75	3	6	29,5	11	23	12,8	4
IEC 63 - C120	120	80	100	3,5	7	29,5				
IEC 63 - A140	140	95	115	3,5	9	29,5				
IEC 71 - C105 **	105	70	85	3	7	29,5	14	30	16,3	5
IEC 71 - C140	140	95	115	3,5	9	29,5				

** ⇒ A22



**SK 172.1 - IEC 56..90
SK 172.1F - IEC 56..90**



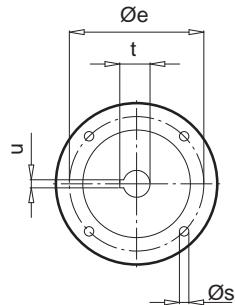
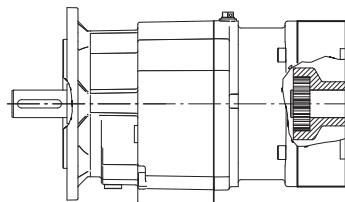
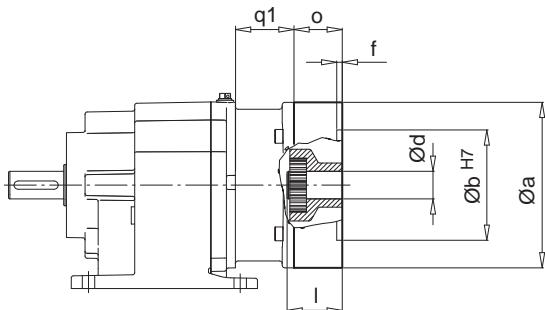
	a	b	e	f	s	o	d	I	t	u
IEC 56 - C105	105	70	85	3	7	32,5	9	20	11,4	3
IEC 56 - A120	120	80	100	3,5	7	32,5				
IEC 63 - C90 **	90	60	75	3	6	32,5	11	23	12,8	4
IEC 63 - C120	120	80	100	3,5	7	32,5				
IEC 63 - A140	140	95	115	3,5	9	32,5				
IEC 71 - C105 **	105	70	85	3	7	32,5	14	30	16,3	5
IEC 71 - C140	140	95	115	3,5	9	32,5				
IEC 71 - A160	160	110	130	4	9	32,5				
IEC 80 - C120 **	120	80	100	3,5	7	32,5	19	40	21,8	6
IEC 80 - C160	160	110	130	4	9	32,5				
IEC 80 - A200	200	130	165	4	M10x20	32,5				
IEC 90 - C140 **	140	95	115	3,5	9	45,5	24	50	27,3	8
IEC 90 - C160	160	110	130	4	9	45,5				
IEC 90 - A200	200	130	165	4	M10x20	45,5				

** ⇒ A22



SK 372.1 - IEC 63..90

SK 372.1F - IEC 63..90



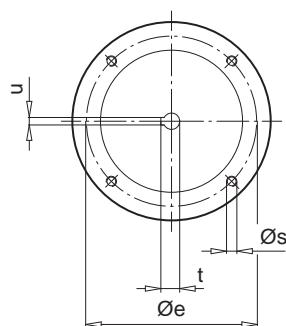
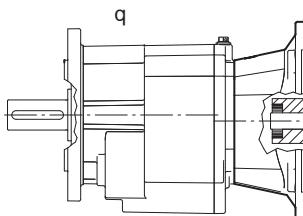
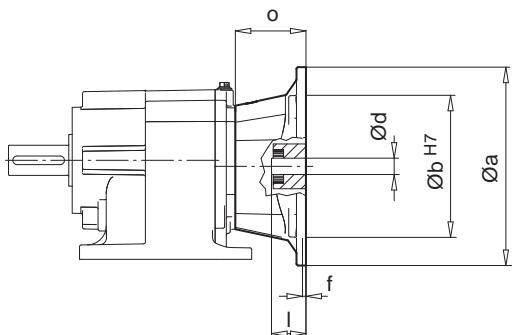
$i_{ges} \rightarrow \square B36$	q_1
$\geq 16,50$	56
$< 16,50$	40

	a	b	e	f	s	o	d	l	t	u
IEC 63 - C90 **	90	60	75	3	6	32,5				
IEC 63 - C120	120	80	100	3,5	7	32,5	11	23	12,8	4
IEC 63 - A140	140	95	115	3,5	9	32,5				
IEC 71 - C105 **	105	70	85	3	7	32,5				
IEC 71 - C140	140	95	115	3,5	9	32,5	14	30	16,3	5
IEC 71 - A160	160	110	130	4	9	32,5				
IEC 80 - C120 **	120	80	100	3,5	7	32,5				
IEC 80 - C160	160	110	130	4	9	32,5	19	40	21,8	6
IEC 80 - A200	200	130	165	4	M10x20	32,5				
IEC 90 - C140 **	140	95	115	3,5	9	45,5				
IEC 90 - C160	160	110	130	4	9	45,5	24	50	27,3	8
IEC 90 - A200	200	130	165	4	M10x20	45,5				

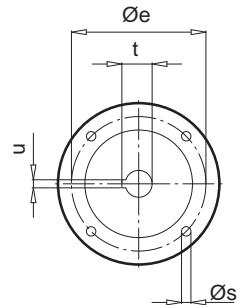
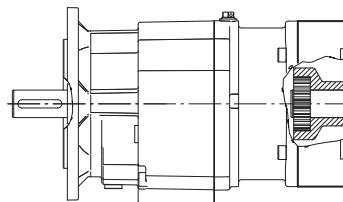
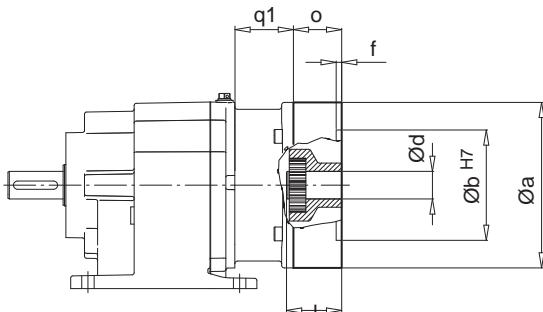
** $\Rightarrow \square A22$

SK 372.1 - IEC 100

SK 372.1F - IEC 100



	q	a	b	e	f	s	o	d	l	t	u
IEC 100	218	250	180	215	5	M12	82	28	60	31,3	8


**SK 373.1 - IEC 63..90
SK 373.1F - IEC 63..90**


$i_{ges} \rightarrow \square B37$	q1
$\geq 82,57$	56
$< 82,57$	40

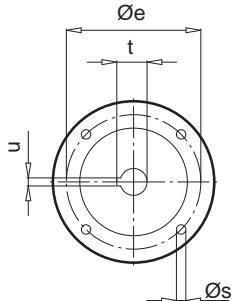
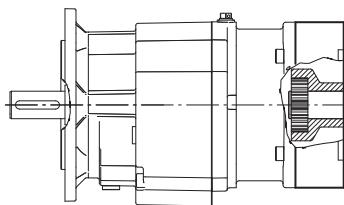
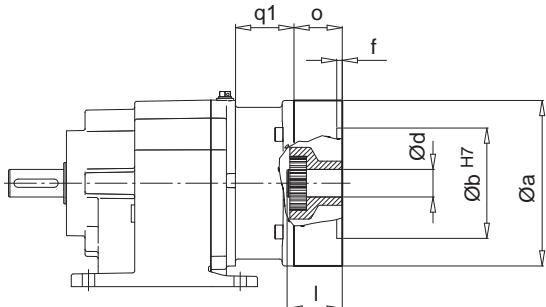
	a	b	e	f	s	o	d	I	t	u
IEC 63 - C90 **	90	60	75	3	6	32,5				
IEC 63 - C120	120	80	100	3,5	7	32,5	11	23	12,8	4
IEC 63 - A140	140	95	115	3,5	9	32,5				
IEC 71 - C105 **	105	70	85	3	7	32,5				
IEC 71 - C140	140	95	115	3,5	9	32,5	14	30	16,3	5
IEC 71 - A160	160	110	130	4	9	32,5				
IEC 80 - C120 **	120	80	100	3,5	7	32,5				
IEC 80 - A160	160	110	130	4	9	32,5	19	40	21,8	6
IEC 80 - A200	200	130	165	4	M10x20	32,5				
IEC 90 - C140 **	140	95	115	3,5	9	45,5				
IEC 90 - C160	160	110	130	4	9	45,5	24	50	27,3	8
IEC 90 - A200	200	130	165	4	M10x20	45,5				

** $\Rightarrow \square A22$



SK 572.1 * - IEC 63..90

SK 572.1F * - IEC 63..90



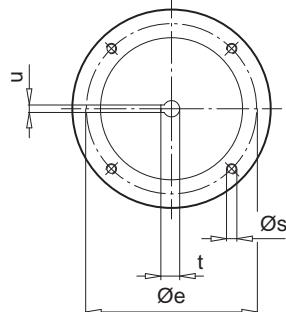
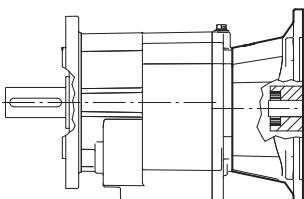
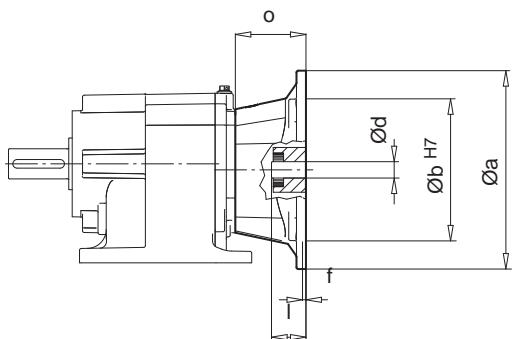
$i_{ges} \rightarrow$	B38	q1
$\geq 21,85$	56	
$< 21,85$	40	

	a	b	e	f	s	o	d	l	t	u
IEC 63 - C90 **	90	60	75	3	6	32,5				
IEC 63 - C120	120	80	100	3,5	7	32,5	11	23	12,8	4
IEC 63 - A140	140	95	115	3,5	9	32,5				
IEC 71 - C105 **	105	70	85	3	7	32,5				
IEC 71 - C140	140	95	115	3,5	9	32,5	14	30	16,3	5
IEC 71 - A160	160	110	130	4	9	32,5				
IEC 80 - C120 **	120	80	100	3,5	7	32,5				
IEC 80 - C160	160	110	130	4	9	32,5	19	40	21,8	6
IEC 80 - A200	200	130	165	4	M10x20	32,5				
IEC 90 - C140 **	140	95	115	3,5	9	45,5				
IEC 90 - C160	160	110	130	4	9	45,5	24	50	27,3	8
IEC 90 - A200	200	130	165	4	M10x20	45,5				

** \Rightarrow A22

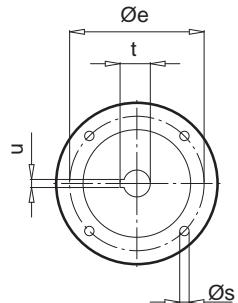
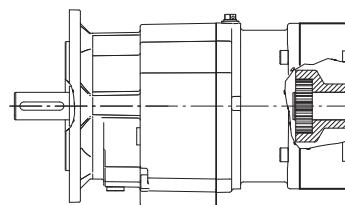
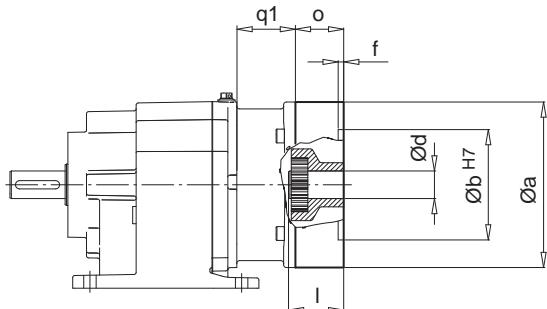
SK 572.1 * - IEC 100..112

SK 572.1F * - IEC 100..112



	a	b	e	f	s	o	d	l	t	u
IEC 100	250	180	215	5	M12	82	28	60	31,3	8
IEC 112	250	180	215	5	M12	82	28	60	31,3	8

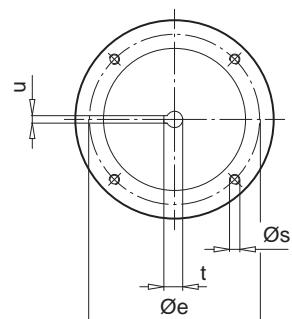
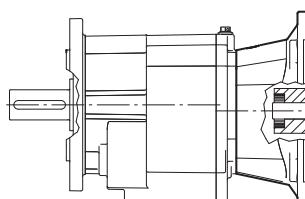
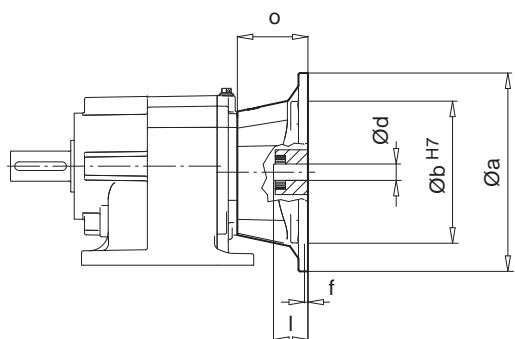
* \Rightarrow A11


SK 573.1 * - IEC 63..90
SK 573.1F * - IEC 63..90


$i_{ges} \rightarrow$ B39	q1
$\geq 109,12$	56
$< 109,12$	40

	a	b	e	f	s	o	d	l	t	u
IEC 63 - C90 **	90	60	75	3	6	32,5				
IEC 63 - C120	120	80	100	3,5	7	32,5	11	23	12,8	4
IEC 63 - A140	140	95	115	3,5	9	32,5				
IEC 71 - C105 **	105	70	85	3	7	32,5				
IEC 71 - C140	140	95	115	3,5	9	32,5	14	30	16,3	5
IEC 71 - A160	160	110	130	4	9	32,5				
IEC 80 - C120 **	120	80	100	3,5	7	32,5				
IEC 80 - C160	160	110	130	4	9	32,5	19	40	21,8	6
IEC 80 - A200	200	130	165	4	M10x20	32,5				
IEC 90 - C140 **	140	95	115	3,5	9	45,5				
IEC 90 - C160	160	110	130	4	9	45,5	24	50	27,3	8
IEC 90 - A200	200	130	165	4	M10x20	45,5				

** \Rightarrow A22

SK 573.1 * - IEC 100..112
SK 573.1F * - IEC 100..112


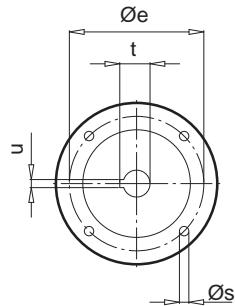
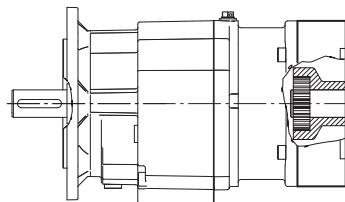
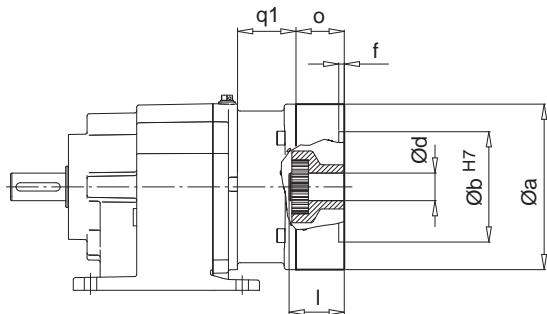
	a	b	e	f	s	o	d	l	t	u
IEC 100	250	180	215	5	M12	82	28	60	31,3	8
IEC 112	250	180	215	5	M12	82	28	60	31,3	8

* \Rightarrow A11



SK 672.1 - IEC 63..90

SK 672.1F - IEC 63..90



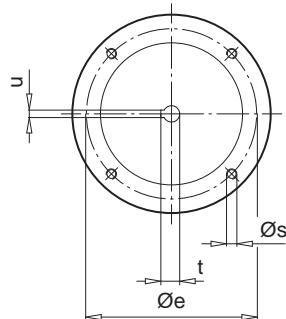
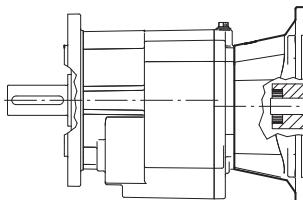
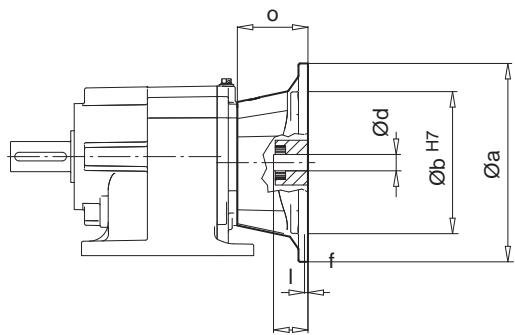
$i_{ges} \rightarrow \square B40$	q1
$\geq 23,41$	56
$< 23,41$	40

	a	b	e	f	s	o	d	l	t	u
IEC 63 - C90 **	90	60	75	3	6	32,5				
IEC 63 - C120	120	80	100	3,5	7	32,5	11	23	12,8	4
IEC 63 - A140	140	95	115	3,5	9	32,5				
IEC 71 - C105 **	105	70	85	3	7	32,5				
IEC 71 - C140	140	95	115	3,5	9	32,5	14	30	16,3	5
IEC 71 - A160	160	110	130	4	9	32,5				
IEC 80 - C120 **	120	80	100	3,5	7	32,5				
IEC 80 - C160	160	110	130	4	9	32,5	19	40	21,8	6
IEC 80 - A200	200	130	165	4	M10x20	32,5				
IEC 90 - C140 **	140	95	115	3,5	9	45,5				
IEC 90 - C160	160	110	130	4	9	45,5	24	50	27,3	8
IEC 90 - A200	200	130	165	4	M10x20	45,5				

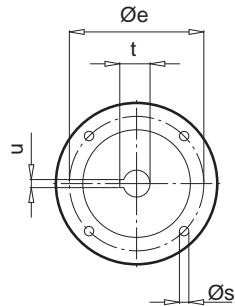
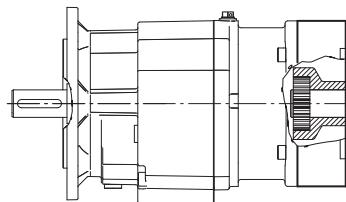
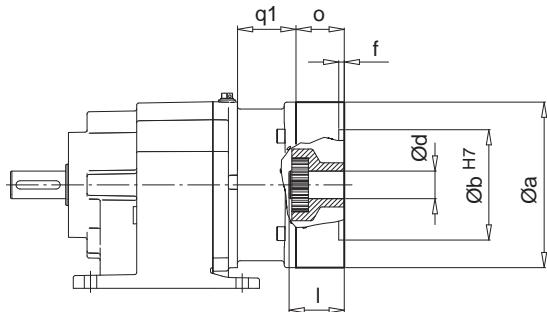
** $\Rightarrow \square A22$

SK 672.1 - IEC 100..132

SK 672.1F - IEC 100..132



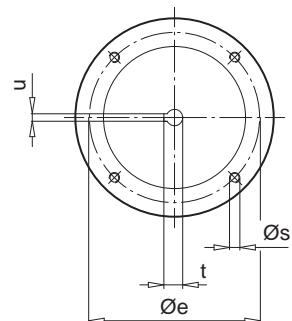
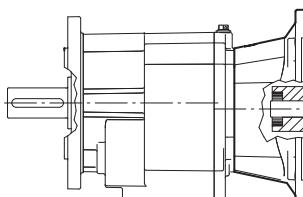
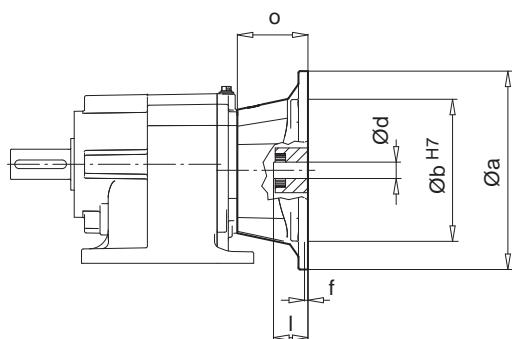
	a	b	e	f	s	o	d	l	t	u
IEC 100	250	180	215	5	M12	82	28	60	31,3	8
IEC 112	250	180	215	5	M12	82	28	60	31,3	8
IEC 132	300	230	265	5	M12	106	38	80	41,3	10


SK 673.1 - IEC 63..90
SK 673.1F - IEC 63..90


$i_{ges} \rightarrow$ B41	q1
$\geq 115,89$	56
$< 115,89$	40

	a	b	e	f	s	o	d	I	t	u
IEC 63 - C90 **	90	60	75	3	6	32,5				
IEC 63 - C120	120	80	100	3,5	7	32,5	11	23	12,8	4
IEC 63 - A140	140	95	115	3,5	9	32,5				
IEC 71 - C105 **	105	70	85	3	7	32,5				
IEC 71 - C140	140	95	115	3,5	9	32,5	14	30	16,3	5
IEC 71 - A160	160	110	130	4	9	32,5				
IEC 80 - C120 **	120	80	100	3,5	7	32,5				
IEC 80 - C160	160	110	130	4	9	32,5	19	40	21,8	6
IEC 80 - A200	200	130	165	4	M10x20	32,5				
IEC 90 - C140 **	140	95	115	3,5	9	45,5				
IEC 90 - C160	160	110	130	4	9	45,5	24	50	27,3	8
IEC 90 - A200	200	130	165	4	M10x20	45,5				

** \Rightarrow A22

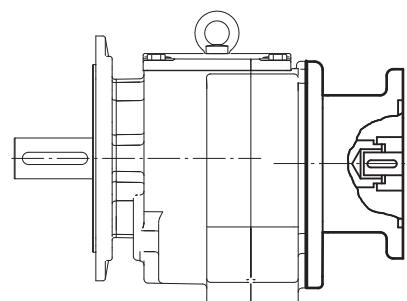
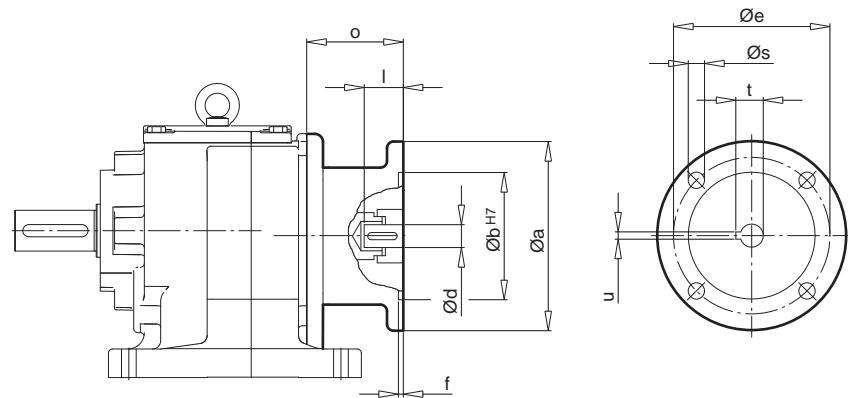
SK 673.1 - IEC 100..132
SK 673.1F - IEC 100..132


	a	b	e	f	s	o	d	I	t	u
IEC 100	250	180	215	5	M12	82	28	60	31,3	8
IEC 112	250	180	215	5	M12	82	28	60	31,3	8
IEC 132	300	230	265	5	M12	106	38	80	41,3	10

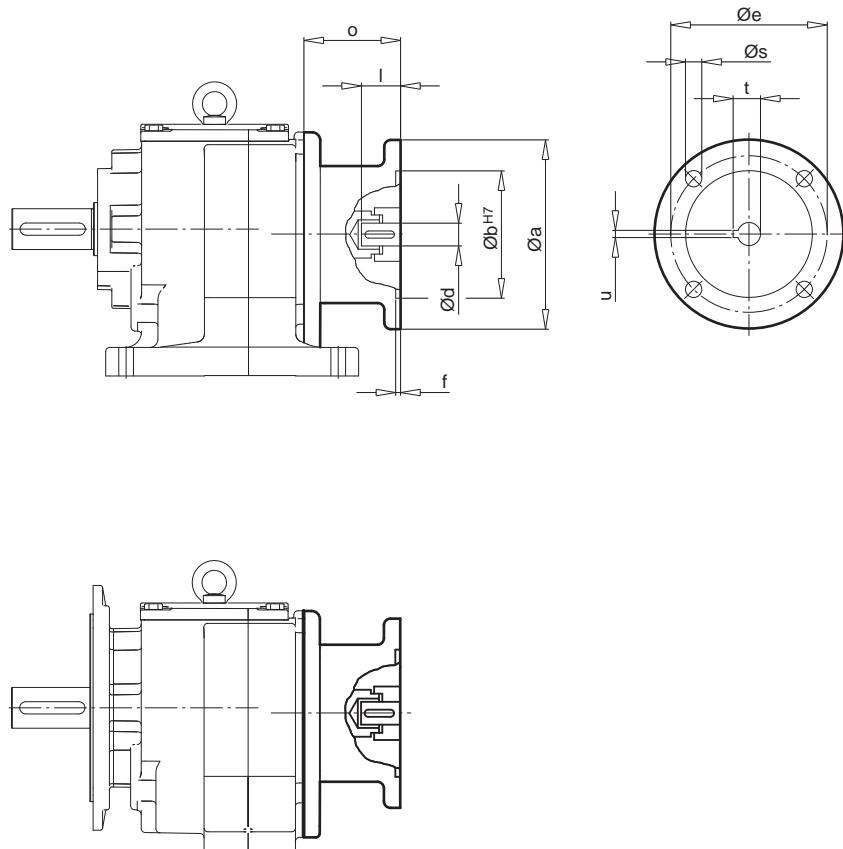


SK 772.1 / 773.1 - IEC 71...132

SK 772.1F / 773.1F - IEC 71...132



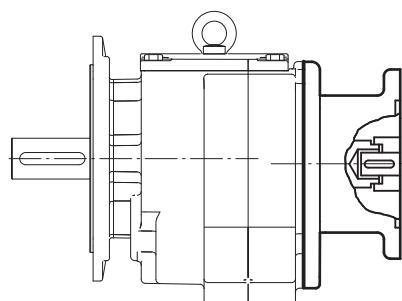
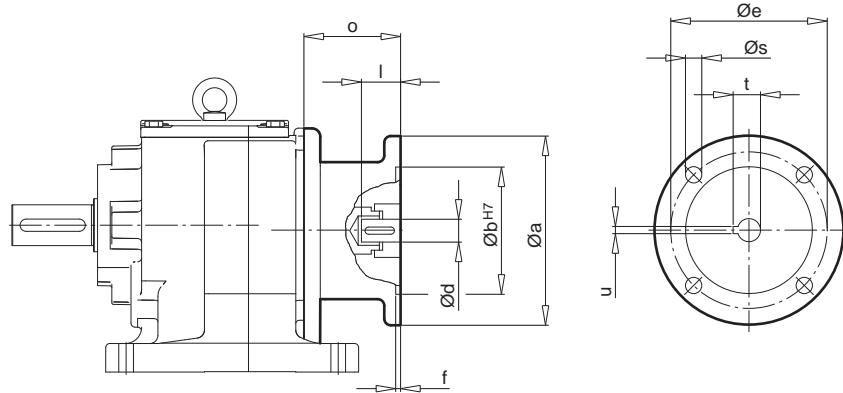
IEC	a	b	d	e	f	l	o	s	t	u
71	160	110	14	130	4	30	88	M8	16,3	5
80	200	130	19	165	4	40	108	M10	21,8	6
90	200	130	24	165	4	50	108	M10	27,3	8
100	250	180	28	215	5	60	125	M12	31,3	8
112	250	180	28	215	5	60	125	M12	31,3	8
132	300	230	38	265	5	80	156	M12	41,3	10


SK 872.1 / 873.1 - IEC 90...180
SK 872.1F / 873.1F - IEC 90...180


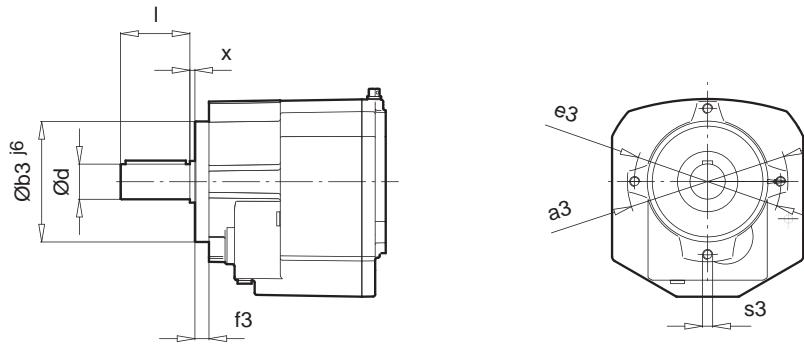
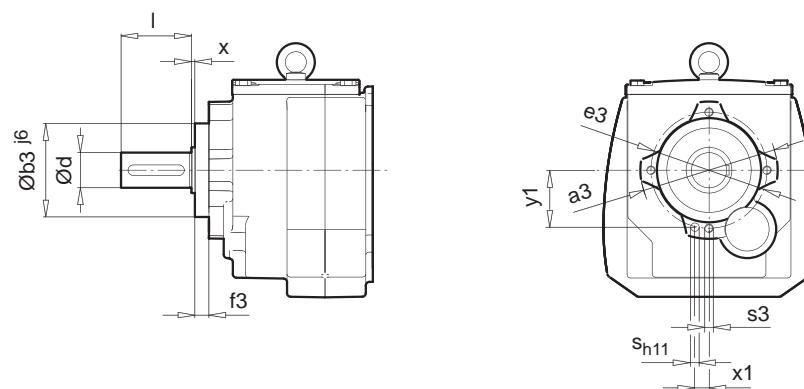
IEC	a	b	d	e	f	l	o	s	t	u
90	200	130	24	165	4	50	109	M10	27,3	8
100	250	180	28	215	5	60	133	M12	31,3	8
112	250	180	28	215	5	60	133	M12	31,3	8
132	300	230	38	265	5	80	190	M12	41,3	10
160	350	250	42	300	6	110	194	M16	45,3	12
180	350	250	48	300	6	110	194	M16	51,8	14



SK 972.1 / 973.1 - IEC 90...200
SK 972.1F / 973.1F - IEC 90...200

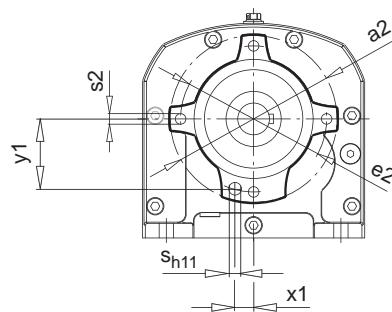
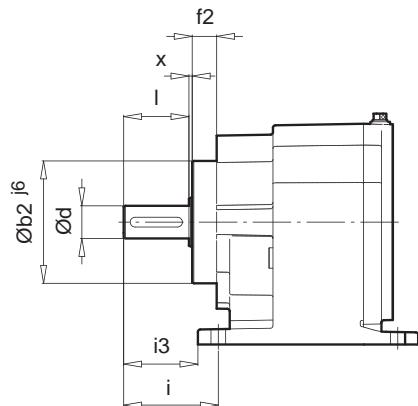
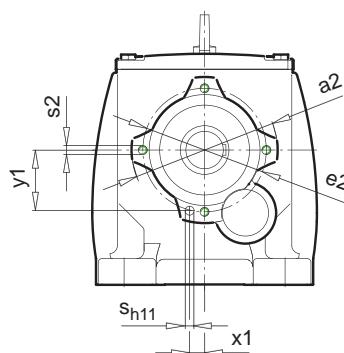
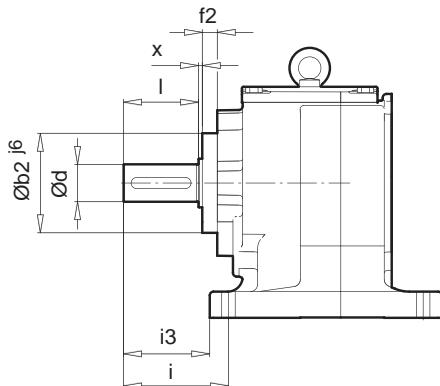


IEC	a	b	d	e	f	l	o	s	t	u
90	200	130	24	165	4	50	109	M10	27,3	8
100	250	180	28	215	5	60	133	M12	31,3	8
112	250	180	28	215	5	60	133	M12	31,3	8
132	300	230	38	265	5	80	190	M12	41,3	10
160	350	250	42	300	6	110	194	M16	45,3	12
180	350	250	48	300	6	110	194	M16	51,8	14
200	400	300	55	350	6	110	245	M16	59,3	16


SK 072.1 Z / SK 172.1 Z
SK 372.1 Z - SK 672.1 Z
SK 373.1 Z - SK 673.1 Z

SK 772.1 Z - SK 972.1 Z
SK 773.1 Z - SK 973.1 Z


Type	a3	b3	e3	f3	s3	d	I	x	x1	y1	s _{h11}
SK 072.1 Z	80	56	68	12,5	M6x12	20	40	2	8,8	32,84	Ø5x16
SK 172.1 Z	107	75	92	15	M8x18	20	40	2	12	44	Ø8x14,5
SK 372.1 Z SK 373.1 Z	131	95	110	20	M8x16	25	50	3	10,49	53,99	Ø6x20
SK 572.1 Z * SK 573.1 Z *	160	120	145	14	M10x17	35	70	4	17	70	Ø8x20
SK 572.1 Z * SK 573.1 Z *	160	120	145	14	M10x17	30	60	4	17	70	Ø8x20
SK 672.1 Z SK 673.1 Z	180	135	160	14	M10x20	35	70	4	20	77,5	Ø10x20
SK 772.1 Z SK 773.1 Z	152	105	130	16	M12x15	40	80	4	20	61,85	Ø12x20
SK 872.1 Z SK 873.1 Z	194	135	165	20	M12x20	50	100	5	25	79	Ø12x30
SK 972.1 Z SK 973.1 Z	236	168	200	25	M16x25	60	120	6	28	96	Ø16x35

* → A11

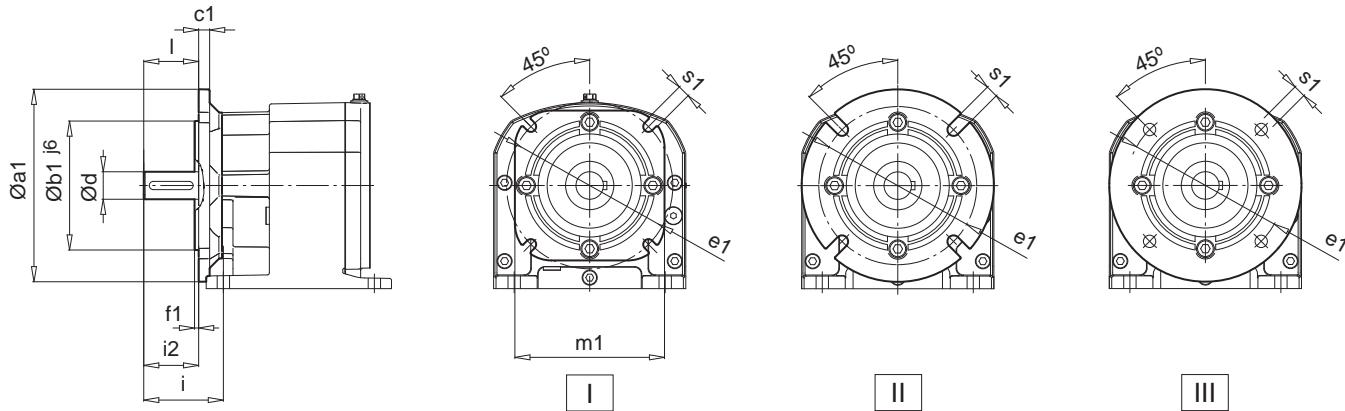
XZ**SK 072.1 Z / SK 172.1 XZ****SK 372.1 Z - SK 672.1 XZ****SK 373.1 Z - SK 673.1 XZ****SK 772.1 Z - SK 972.1 XZ****SK 773.1 Z - SK 973.1 XZ**

Type	a2	b2	e2	f2	s2	i	i3	d	l	x	x1	y1	s _{h11}
SK 072.1 XZ	85	56	68	12,5	M6x12	48	41	20	40	2	8,8	32,84	Ø5x16
SK 172.1 XZ	110	75	92	15	M8x18	40	58	20	40	2	12	44	Ø8x14,5
SK 372.1 XZ SK 373.1 XZ	130	95	110	20	M8x16	75	60	25	50	3	10,49	53,99	Ø6x20
SK 572.1 XZ * SK 573.1 XZ *	160	120	145	14	M10x25	100	82,5	35	70	4	17	70	Ø8x20
SK 572.1 XZ * SK 573.1 XZ *	160	120	145	14	M10x25	100	82,5	30	60	4	17	70	Ø8x20
SK 672.1 XZ SK 673.1 XZ	180	135	160	14	M10x20	100	80	35	70	4	20	77,5	Ø10x20
SK 772.1 XZ SK 773.1 XZ	152	105	130	16	M12x15	115	95	40	80	4	20	61,85	Ø12x20
SK 872.1 XZ SK 873.1 XZ	194	135	165	20	M12x20	140	115	50	100	5	25	79	Ø12x30
SK 972.1 XZ SK 973.1 XZ	236	168	200	25	M16x25	160	132,5	60	120	6	28	96	Ø16x35

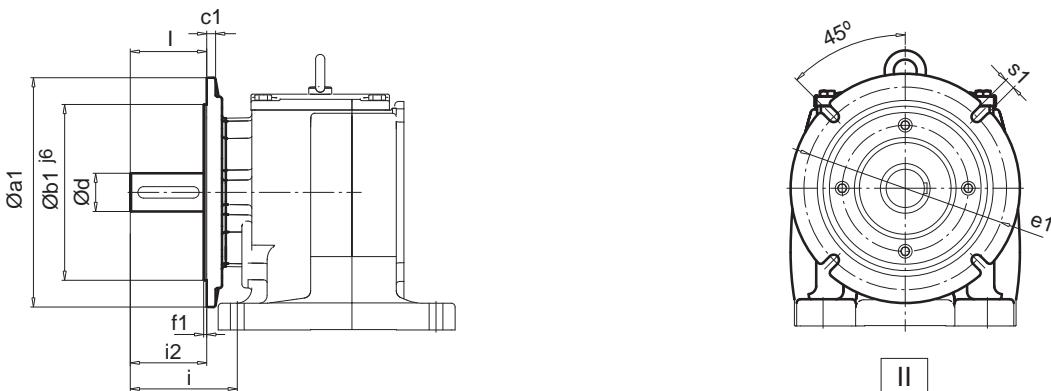
* ⇒ A11



**SK 072.1 Z / SK 172.1 XF
SK 372.1 Z - SK 672.1 XF
SK 373.1 Z - SK 673.1 XF**



**SK 772.1 Z - SK 972.1 XF
SK 773.1 Z - SK 973.1 XF**



Type		a1	b1	c1	e1	f1	m1	s1	i	i2	d	I
SK 072.1 XF	I	120	80	7	100	3	90	6,6	48	40	20	40
SK 172.1 XF	II	120 140	80 95	8 8	100 115	3 3	-	6,6 9,0	58 58	40 40	20	40
SK 372.1 XF SK 373.1 XF	II	140 160	95 110	9 10	110 130	3 3,5	-	8,6 8,6	75 75	50 50	25	50
SK 572.1 XF * SK 573.1 XF *	II	200	130	12	165	3,5	-	11	100	70	35	70
SK 572.1 XF * SK 573.1 XF *	II	200	130	12	165	3,5	-	11	100	70	30	60
SK 672.1 XF SK 673.1 XF	III	200	130	12	165	4	-	11	88	70	35	70
SK 772.1 XF SK 773.1 XF	II	200 250	180	15	215	4	-	13,5	115	80	40	80
SK 872.1 XF SK 873.1 XF	II	250 300	230	20	265	4	-	13,5	140	100	50	100
SK 972.1 XF SK 973.1 XF	II	300 350	250	20	300	5	-	17,5	160	120	60	120

* ⇒ A11

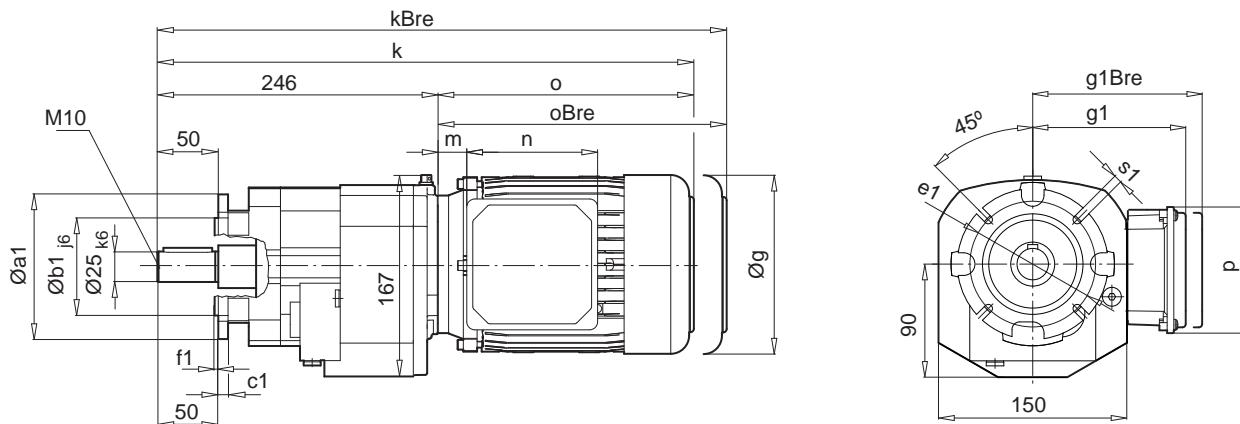
SK 372.1F

SK 373.1F



SK 372.1F

SK 373.1F

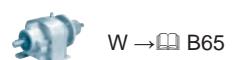


a1	b1	c1	e1	f1	s1
120	80	8	100	3	6,6

⇒ A11

SK 372.1F

IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L LH LP			
g	130	145	165	183	201			
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147	169 / 172			
k / kBre	442 / 498	482 / 540	507 / 571	548 / 623	578 / 669			
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377	332 / 423			
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56	58 / 62			
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153	114 / 153			
p / pBre	100 / 89	100 / 89	144 / 108	144 / 108	144 / 108			



W → B65



IEC 63 - 100 → B68

SK 373.1F

IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP				
g	130	145	165	183				
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147				
k / kBre	442 / 498	482 / 540	507 / 571	548 / 623				
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377				
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56				
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153				
p / pBre	100 / 89	100 / 89	144 / 108	144 / 108				



W → B65

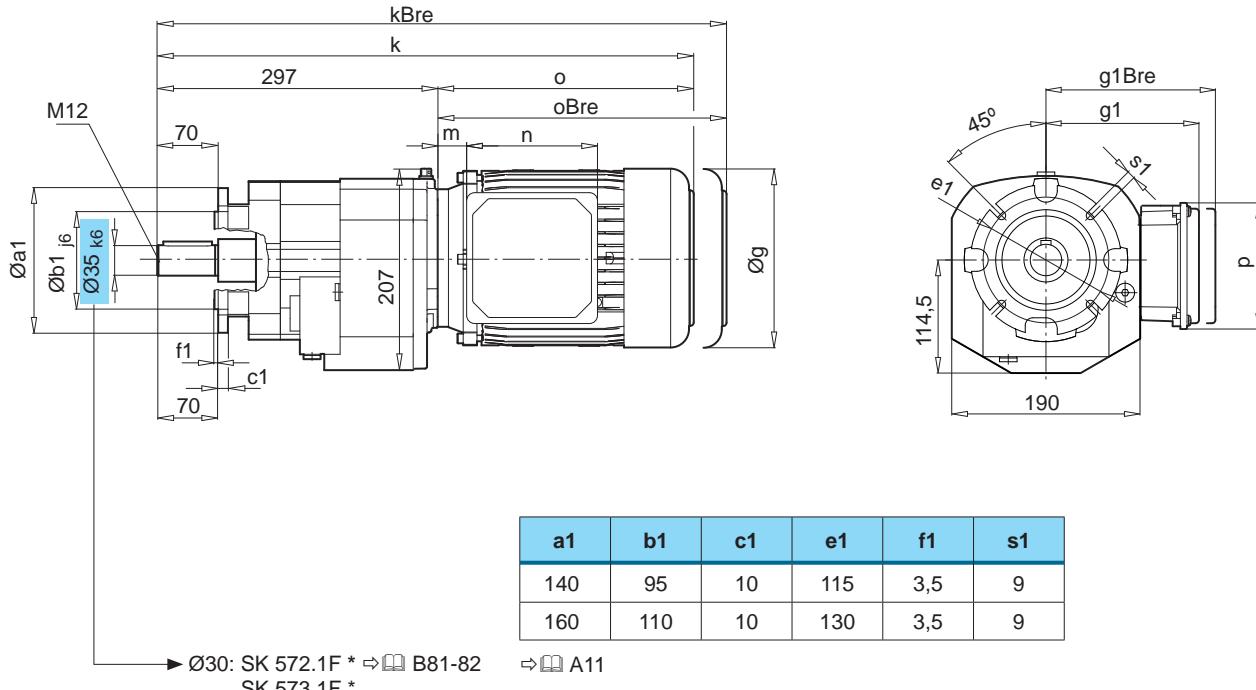


IEC 63 - 90 → B69



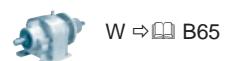
SK 572.1F
SK 573.1F

SK 572.1F
SK 573.1F



SK 572.1F

IE1	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M - -	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -
g	145	165	183	201	228	228	266
g1 / g1Bre	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201
k / kBre	533 / 591	558 / 622	599 / 674	629 / 720	652 / 745	677 / 770	689 / 796
o / oBre	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	435 / 542
m / mBre	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	65 / 58
n / nBre	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185
p / pBre	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139



SK 573.1F

IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M - -	112 - MH MP
g	130	145	165	183	201	228	228
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182
k / kBre	493 / 549	533 / 591	558 / 622	599 / 674	629 / 720	652 / 745	677 / 770
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108



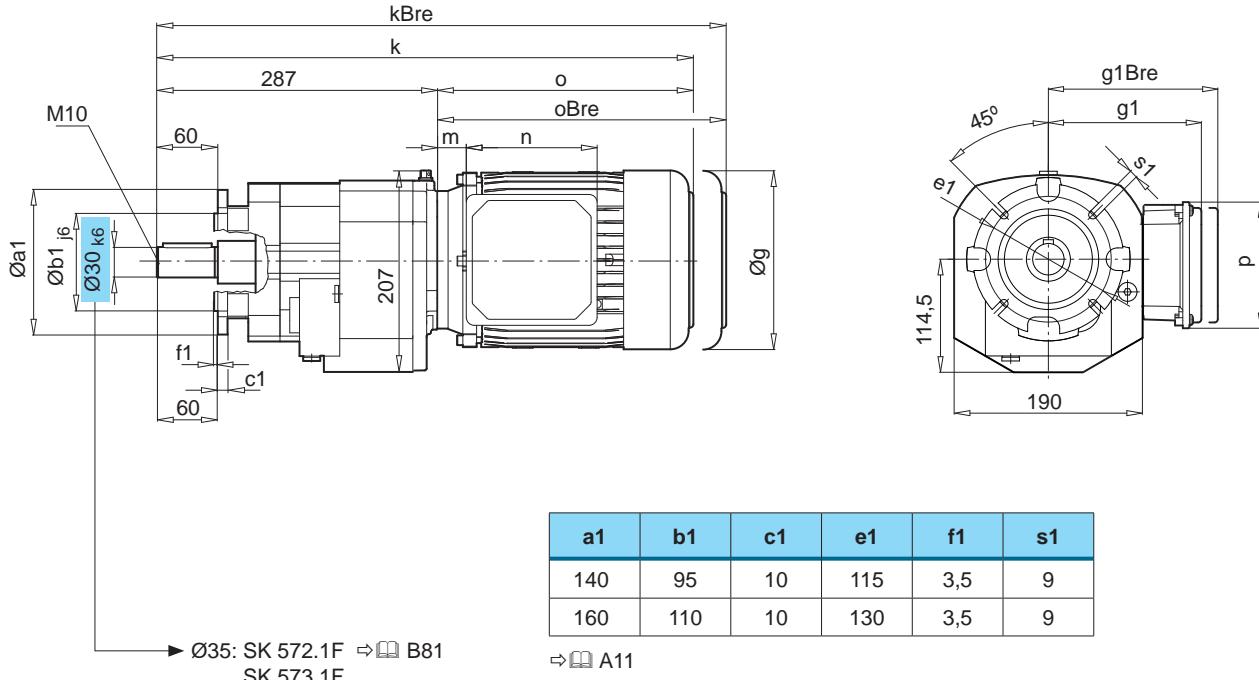
SK 572.1F *

SK 573.1F *



SK 572.1F *

SK 573.1F *



SK 572.1F *

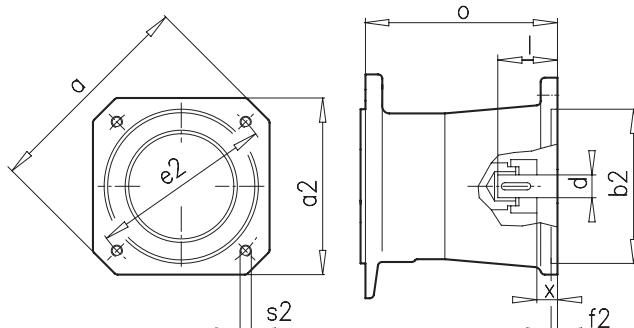
IE1	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M -	112 - MH MP	132 S / M / - SH / MH / LH SP / MP / -	W → B65 IEC 63 - 112 → B70
g	145	165	183	201	228	228	266	
g1 / g1Bre	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	204 / 201	
k / kBre	523 / 581	548 / 612	589 / 664	619 / 710	642 / 735	667 / 760	689 / 796	
o / oBre	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	435 / 542	
m / mBre	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	65 / 58	
n / nBre	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	122 / 185	
p / pBre	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	122 / 139	

SK 573.1F *

IE1	63 S / L	71 S / L	80 S / L SH / LH - / LP	90 S / L SH / LH SP / LP	100 L / LA LH / AH LP / AP	112 M -	112 - MH MP	W → B65 IEC 63 - 112 → B71
g	130	145	165	183	201	228	228	
g1 / g1Bre	115 / 123	124 / 133	142 / 142	147 / 147	169 / 172	179 / 182	179 / 182	
k / kBre	483 / 539	523 / 581	548 / 612	589 / 664	619 / 710	642 / 735	667 / 760	
o / oBre	196 / 252	236 / 294	261 / 325	302 / 377	332 / 423	355 / 448	380 / 473	
m / mBre	16 / 23	42 / 49	47 / 51	52 / 56	58 / 62	74 / 78	74 / 78	
n / nBre	100 / 134	100 / 134	114 / 153	114 / 153	114 / 153	114 / 153	114 / 153	
p / pBre	100 / 89	100 / 89	114 / 108	114 / 108	114 / 108	114 / 108	114 / 108	



Adapter for mounting servo motors



Type SEP...

The adapter for mounting servo motors are made of cast iron.

The maximum permissible servo motor speed is 4000 min^{-1} . The correct selection of the gear unit which is driven by a servo motor requires specific knowledge about the application.

Please contact us, so that we can select the gear unit together.

Available adapter

Gear unit type	Motor size							Shaft size		Cylinder	Motortype	M _{kenn}	Adaptertype
	a	a2	b2	e2	f2	s2	x	d	I	o	E.g.:	[Nm]	
372.1 373.1 572.1 573.1 672.1 673.1	120	96	80	100	4	M6	15	19	40	125	HJ96 1 FK6 04 1 FK7 04	10	Servo 100 / 160 S
372.1 373.1 572.1 573.1 672.1 673.1	165	126	110	130	4	M8	20	24	50	137	HJ116 1 FK6 06 1 FK7 06	35	Servo 130 / 160 S
772.1 773.1	155	126	110	130	4	M8	20	24	50	151	HJ116 1 FK6 06 1 FK7 06	35	Servo 130 / 250 S
372.1 373.1 572.1 573.1 672.1 673.1	186	155	130	165	5	M10	23	32	58	152	MSK070 MSK071 1 FK6 08 1 FK7 08 HJ 155	95	Servo 165 / 160 S
772.1 773.1	186	155	130	165	5	M10	23	32	58	167	MSK070 MSK071 1 FK6 08 1 FK7 08 HJ155	95	Servo 165 / 250 S
772.1 773.1	240	192	180	215	5	M12	45	38	80	188	MSK101 1 FK6 10 1 FK7 10	95	Servo 215 / 250 S
872.1 873.1 972.1 973.1	240	192	180	215	5	M12	24	38	80	230	MSK101 1 FK6 10 1 FK7 10	310	Servo 215 / 300 S
872.1 873.1 972.1 973.1	350	260	250	300	5	M16	26	48	82	232	1 FT6 13 1 FK7 10	310	Servo 300 / 300 S
872.1 873.1 972.1 973.1	350	260	250	300	5	M16	26	48	82	250	1 FT6 13 1 FK7 10	310	Servo 300 / 350

The coupling for servo motors is equipped with parallel keys for the servo adapter type SEP shown above. For servo motors without parallel keys, the servo adapter type SEK is available with a clamp coupling sleeve.

It is possible to mount a large number of other servo motor types on the IEC adapter using an intermediate flange. We will be pleased to process your enquiry.

An overview of the NORD range

G1000 Fixed speeds

UNICASE housing 50 Hz, 60 Hz

- Helical geared motors
- Parallel geared motors
- Bevel geared motors
- Helical worm geared motors



G1035 UNIVERSAL Worm gear units

- SI and SMI



G1050 Industrial gear units



G1001 Explosion protected drive units

- Category 2G, Zone 1, Gas



G1022 Explosion protected drive units

- Category 3D, Zone 22, Dust



F3020 frequency inverter SK200E

F3050 frequency inverter SK500E

F3070 frequency inverter NORD SK700E





мультибрендова компанія

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