STROJNA® is a company with tradition. The company's beginnings go back into the year of 1906, when manufacturer Eylert established a workshop to repair textile machines. At that time, the company has already been producing gears and worm pairs.

During the World War II the company moved from Melje to 11 Linhartova street, where it is still located today. Until 1959, the company officiated under the name Remont, and later under the name Strojna.

Under the new name, it has begun a new period for the company. In 1962, Strojna started its own production program has began with serial production of helical and later with worm gear units.

During the years we developed a complete program of drive technique, which includes: helical gear units, worm gear units, helical worm gear units, planetary gear units, variable speed drives, Screw Jack, TA-STA gear units, modified gear units, flexible couplings and other elements of drive technique.

Our production capacities include modern high productive machines, which enable us to achieve high quality production with large series. Highly qualified staff, constant equipment updating, technology and quality improvement by using up to date technology, achievements and modern materials, make us recognizable and competitive in drive technique market.

Our research and development department is constantly working on new products of drive technique, closely cooperating with institutes, foreign partners and faculties. We are constantly looking in the future in order to offer modern and efficient gear units to our customers, in order to ensure us a leading position along with the biggest world manufacturers of drive technique.

Regardless of whether we mass-produce for you, deliver popular models on short-term notice, or manufacture individualized single components according to your specifications - we are consistently working on optimizing our customer-oriented service.

STROJNA® ist eine Firma mit Tradition. Der Anfang der Firma reicht ins Jahr 1906 zurück, als der Fabrikant Eylert eine Werkstatt zur Reparatur von Textilmaschinen gründete. Schon damals hat die Firma Zahnräder und Schneckenpaare hergestellt.

Im zweiten Weltkrieg zog die Firma von Melje zum neuen Standort Linhartova 11, wo sie sich noch heute befindet. Nach 1959 arbeitete die Firma unter dem Namen Remont und später unter dem Namen Strojna. Mit dem Wechsel des Namens begann für unsere Firma eine neue Ära. Im Jahre 1962 begann unsere eigene Produktion, die Herstellung von Stirnradgetrieben und später auch Schneckengetrieben.

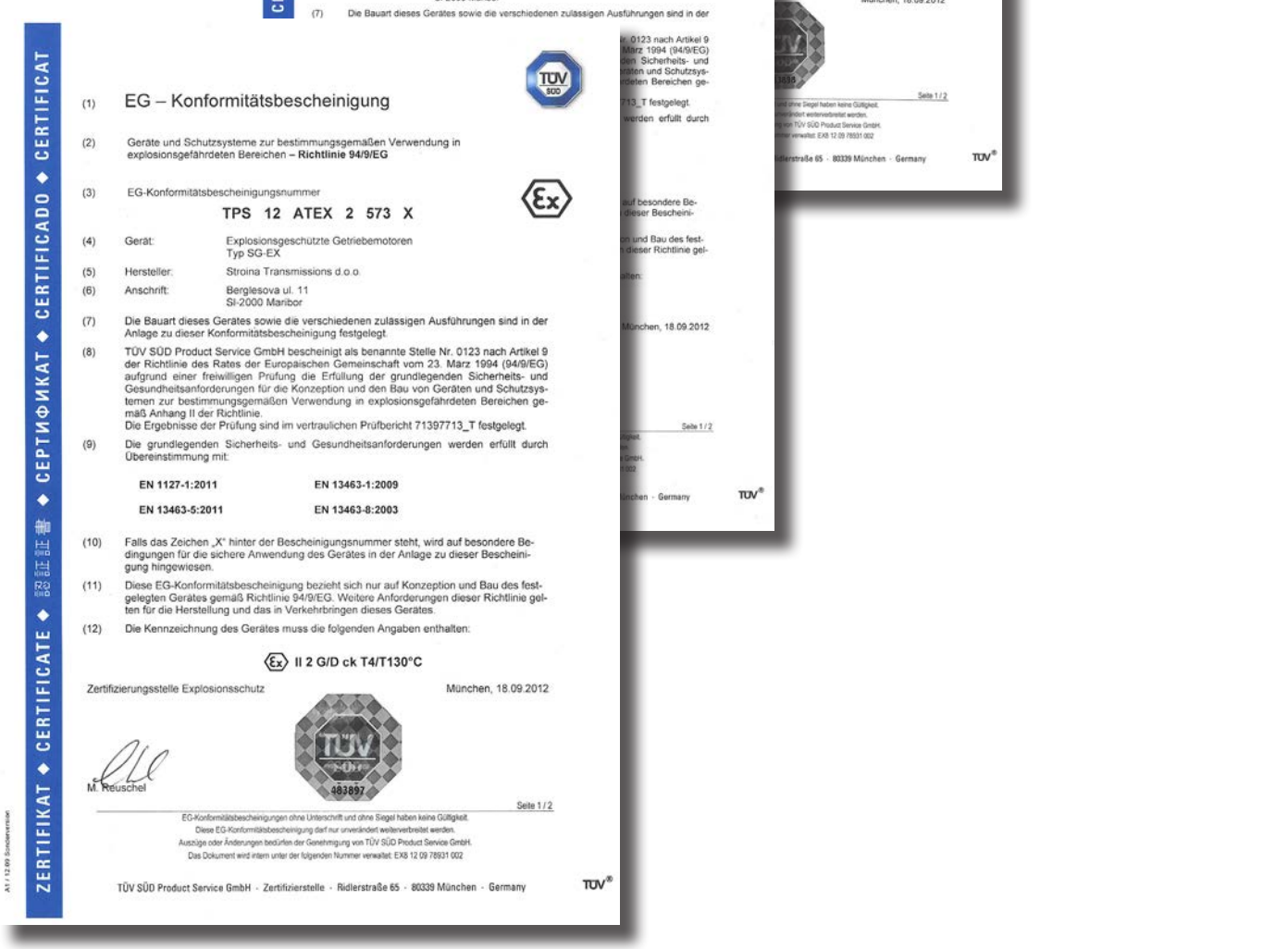
Durch die Jahre haben wir ein komplettes Program für Antriebstechnik entwickelt, dass Stirnradgetriebe, Schneckengetriebe, Stirnschneckenradgetriebe, Planetengetriebe, Variatoren, Hubspindelgetriebe, TA-STA Getriebe, modifizierte Getriebe, elastische Kupplungen und Elemente für die Antriebstechnik beinhaltet.

Unsere Produktionskapazitäten enthalten moderne, hochproduktive Einheiten, die uns sowohl eine hochqualitative Produktion als auch Massenproduktion erlauben. Durch die ständigen Erneuerungen des Maschinenparks und dem Gebrauch von allerneuster Technologie in der Produktion und der Kontrolle von Stirn-, Schneckenradgetrieben, sowie der Gehäusebearbeitung, können wir auf dem Weltmarkt und der Konkurenz mithalten. In unserer Entwicklungsabteilung entwickeln wir, im Bereich Antriebstechnik, in Zusammenarbeit mit der Marburger Fakultät für Maschienenbau und verschiedenen ausländischen Partnern, ständig neue Produkte. Wir wollen unseren Kunden einen Service anbieten, der auf dem letzten Stand der Technik ist und uns so neben anderen Herstellern einen ebenbürdigen Platz auf dem Markt sichert.

Unser Auftrag ist, den Kunden mit unserer Qualität, die Kundenorientiert ist und dessen hohen Erwartungen entspricht, zu überzeugen. Der moderne Maschinenpark, die Qualitätskontrolle durch den ganzen Fertigungsprozess und die optimale Technologie machen es möglich, schnell, präzise und billig zu produzieren.

Wir bearbeiten nur hochwertige Materiale, setzen modernste Technologie ein, haben hochqualifizierten Mitarbeiter, Kontrollen und Testläufe, Dies Alles bedeutet Qualität, für die, die Firma Strojna bekannt.

Was auch immer wir für sie herstellen, sei es reguläre Produktion oder Teile nach ihrer Anfrage, bemühen wir uns die Arbeit ständig zu optimalisieren und Kundenorientiert zu sein.



ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

(1) EG – Konformitätsbescheinigung

(2) Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen – **Richtlinie 94/9/EG**

(3) EG-Konformitätsbescheinigungsnummer

TPS 12 ATEX 2 573 X

(4) Gerät: Explosionsgeschützte Getriebemotoren Typ SG-EX

(5) Hersteller: Stroina Transmissions d.o.o.

(6) Anschrift: Berglesova ul. 11 SI-2000 Maribor

(7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Konformitätsbescheinigung festgelegt.

(8) TÜV SÜD Product Service GmbH bescheinigt als benannte Stelle Nr. 0123 nach Artikel 9 der Richtlinie des Rates der Europäischen Gemeinschaft vom 23. März 1994 (94/9/EG) aufgrund einer freiwilligen Prüfung die Erfüllung der grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie.
Die Ergebnisse der Prüfung sind im vertraulichen Prüfbericht 71397713_T festgelegt.

(9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit:

EN 1127-1:2011 **EN 13463-1:2009**

EN 13463-5:2011 **EN 13463-8:2003**

(10) Falls das Zeichen „X" hinter der Bescheinigungsnummer steht, wird auf besondere Bedingungen für die sichere Anwendung des Gerätes in der Anlage zu dieser Bescheinigung hingewiesen.

(11) Diese EG-Konformitätsbescheinigung bezieht sich nur auf Konzeption und Bau des festgelegten Gerätes gemäß Richtlinie 94/9/EG. Weitere Anforderungen dieser Richtlinie gelten für die Herstellung und das in Verkehrbringen dieses Gerätes.

(12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

Ex II 2 G/D ck T4/T130°C

Zertifizierungsstelle Explosionsschutz — München, 18.09.2012

M. Reuschel

Seite 1 / 2

EG-Konformitätsbescheinigungen ohne Unterschrift und ohne Siegel haben keine Gültigkeit.
Diese EG-Konformitätsbescheinigung darf nur unverändert weiterverbreitet werden.
Auszüge oder Änderungen bedürfen der Genehmigung von TÜV SÜD Product Service GmbH.
Das Dokument wird intern unter der folgenden Nummer verwaltet: EX8 12 09 78931 002

TÜV SÜD Product Service GmbH · Zertifizierstelle · Ridlerstraße 65 · 80339 München · Germany

A1 / 12.00 Sonderversion

WORLD INTELLECTUAL PROPERTY ORGANIZATION

THE HAGUE AGREEMENT CONCERNING THE INTERNATIONAL REGISTRATION OF INDUSTRIAL DESIGNS

INTERNATIONAL REGISTRATION CERTIFICATE

The International Bureau of the World Intellectual Property Organization (WIPO) hereby certifies that the particulars given below correspond to the recording made in the International Register of Industrial Designs, at the date of the international registration, under the Hague Agreement Concerning the International Registration of Industrial Designs.

Patrick CARTANT
Head, Examination Section
International Designs Registry
Sector of Trademarks, Industrial Designs and Geographical indications

Geneva, November 4, 2009

DM/072 414 **16.09.2009**

NANOTEHNOLOGIJA D.O.O.
Pohorska ulica 13A,
SI-2000 Maribor
(Slovenia).

Filing date: 16.09.2009
Contracting Party of whic
European Community.
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commercial establishment
Applicant's Contracting P
Name and address of th
D.O.O. Čopova 14, POB 1
Number of designs: 1.
Locarno Classification: C
Indication of products: 1.
Contracting Parties desig
gro, Serbia.
Contracting Parties desig
and Herzegovina, Croatia
Macedonia.
Data relating to priority a
for designs No(s) 1: 21.05
munity.

URAD - ZA USKLAJEVANJE NA NOTRANJEM TRGU
BLAGOVNE ZNAMKE IN MODELI

OHIM – OFFICE FOR HARMONIZATION IN THE INTERNAL MARKET
TRADE MARKS AND DESIGNS

(21) 001520115-0001
(25) SL - EN
(22) 21/05/2009
(15) 21/05/2009
(45) 31/08/2009
(11) 001520115-0001
(73) Nanotehnologija d.o.o.
Pohorska ulica 13A
SI-2000 Maribor
SLOVENIA
(74) PATENTNA PISARNA d.o.o. Ljubljana
Čopova 14
SI-1001 Ljubljana
SLOVENIA
(51) 15 - 01
(54) BG - Редуктори (Калъфи за -)
ES - Reductores (Estuches para -)
CS - Reduktory (Pouzdra na -)
DA - Reduktionsenheder (Etuier til -)
DE - Untersetzungsgetriebe (Etuis für -)
ET - Reduktorid (Karbid -)
EL - Μειωτήρες (Θήκες για -)
EN - Reducers (Cases for -)
FR - Réducteurs (Etuis pour -)
IT - Riduttori (Astucci per -)
LV - Pārnesumkārbas (Kārbas -)
LT - Riboluvai (Dažuiės -/ Dėtiuiu
HU - Redukторok (Tásкák -/ Tokok
MT - Attrazzatura li tghaqqad żew
differenti (Kaxxelli ghal -)
NL - Reducerinrichtingen (Etuis voo
PL - Ograniczniki (Etui na -)
PT - Redutores (Estojos para -)
RU - Редукторы (Кассеты для -)
SK - Znižovače (Puzdrá na -)
SL - Reduktorji (Etuiji za -)
FI - Pienennyskoneet (Kotelot -)
SV - Reducerväxlar (Fodral för -)

0001.1

BUREAU VERITAS Certification

Certificate

Awarded to

STROJNA MARIBOR d.o.o.

LINHARTOVA ULICA 11, 2000 MARIBOR, SLOVENIJA

Bureau Veritas Certification certify that the Management System of the above organization has been audited and found to be in accordance with the requirements of the management system standard detailed below

STANDARD

ISO 9001:2008

SCOPE OF CERTIFICATION

RESEARCH, DEVELOPMENT, TRADING AND PRODUCTION OF HELICAL SHAFT MOUNTED, HELICAL BEVEL, HELICAL WORM, PLANETARY GEARBOXES AND OTHER PARTS OF DRIVING TECHNOLOGY

Certification cycle start date: **25/07/2013**

Subject to the continued satisfactory operation of the organisation's Management System, this certificate expires on: **25/07/2016**

Original certification date: **11/09/2007**

Certificate number: **SL20174Q** *Version number:* **02** *Revision date:* **11/07/2014**

Certification Authority

Certification body address: Brandon House, 180 Borough High Street, London SE1 1LB, United Kingdom
Local office: Linhartova cesta 49a, 1000 Ljubljana, Slovenia

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organization.

To check this certificate validity please call: + 386 1 47 57 670.

Page 1 of 1

UKAS MANAGEMENT SYSTEMS
008

1. Data for drive selection

When gear unit is going to work in:
- dusty atmosphere,
- chemically aggressive atmosphere,
- at increased temperatures,
- at extremely low temperatures,
- and the specific requirements for upgrading an changing at the input or output,
- other... ,

the following information in this questionnaire is important, for selecting the right gear unit:

Required information	simbol	units / dimension	value / description
Type designation			
Geometric shape			
Mounting position			
Output speed (min max)	n_2	min^{-1}	
Gear ratio	i		
Output torque (min max)	Mt_2	Nm	
Braking torque	Tk	Nm	
Minimal operating coefficient of machine	f_{BR}		
Radial loads at output shaft	F_{rr}	N	
Axial loads at output shaft	F_{ar}	N	
Rated power of motor	P	kW	
Motor rated voltage	U	V	
Brake rated voltage	U_K	V	
Frequency	f	Hz	
Type of motor , EN 60034	S1, S2,.		
Ambient temperature			
Altitude of installation location	H	m	
*Type of load	I, II, III		
*Relative cyclic duration factor	ED	%	
*Duration of work	T	h/dan	
*Number of starts per hour	Z	1/h	
*Shaft execution			

The gear units are made in according to the valid DIN, ISO and AGMA standards. The technical data and details about allowed working conditions are written on a name plate and accompanying documents.

When ordering gear units it is necessary to indicate the form of mounting (the position of terminal box of the motor) that is chosen from appropriate scheme. All later changes of mounting are possible only with consultation and written binding confirmation.

2. Type designation geared units

FG	4	2			-	50	VS	SMB		71B4	K1	N3	0	0
1	2	3	4	4a		5	6	7	8	9	10	11	12	13
FG	1	2	-	L / D		50	GO	SMB	B14	63A	K2	B3	0	0
ZG	2	3	V			50	VS	SMR	B5	...	EN	...	1	1
KG	3	4	Z			50	ZP	B1		250M	PH	N3	2	2
SG	4		D				ZD	...				...	3	3
	5		P			300/50		...				V1		
	6		P/V			300/50		B7				...		
	7		P/D			300		A63						
	8		P/Z			300/50		...						
	...		M					...						
	13		S					A250						

LEGEND:

1. Gear unit type
2. Size of gear unit
3. Gear stages code
4. Shaft execution
   - `-` hollow shaft
   - V output shaft
   - FV output shaft
   - D hollow shaft whit shrink disc
   - Z with outputshaft on both sides
   - P hollow shaft with bolt-on flange
   - P/V output shaft with bolt-on flange
   - P/D hollow shaft with bolt-on flange and shrink disc
   - P/Z with output shaft on both sides and with flange
   - FP/V outfut shaft whit bolt-on flange
   - M mixer
   - S separator

4a. Shaft position
   - L left side from electric motor point of view
   - D right side from electric motor point of view

5. Dimensions output shafts, see dimensioned drawing
   - Whitout mark, hole diameter in hollow shaft in mm
   - Variant V, diameter of output shaft in mm
   - Variant Z, diameter of shaft in mm
   - Variant P, diameter of flange in mm / hole diameter in hollow shaft in mm
   - Variant P/V, diameter of flange in mm / diameter of shaft in mm
   - Variant P/D, diameter of flange in mm
   - Variant P/Z, diameter of flange in mm / diameter of shaft in mm

6. Additional elements
   - MR -torque arm
   - VS -link circuit
   - ZP -protective lid
   - ZD -protective lid for shrink disc

7. Input connector
   - SMB STROJNA motor type B
   - SMR STROJNA motor type R
   - B with input shaft from size 1 - 7
   - A IEC adapter for motors with axle height 63 - 250 mm

8. Motor flange according to IEC
9. Motor size and number of poles
10. Additional marking motor
    - K1 brake without arm
    - K2 brake with arm
    - EN encoder
    - PH forced cooling
11. Basic mounting position
12. Position of the terminal box
13. Position of the cable entry

General tehnical data:

Case

Material	Cast iron

Solid shaft

Shaft diameter	to D = 50 mm in ISO k6 (DIN 748 Page1) as of D = 50 mm in ISO m6 (DIN 748 Page 1)
Keyway	ISO P9 (DIN 6885 Page 1)
Key, height	ISO h9 (DIN 6885 Page 1 and DIN 6880)
Bore - customer	ISO H7

Cirucal error of the shaft ends DIN EN 50347

Material	42CrMo4 or C45E

Hollow shaft with keyway

Bore diameter	ISO H7 (DIN 748)
Keyway	ISO JS9 (DIN 6885 Page 1)
Key, height	ISO h9 (DIN 6885 Page 1 and DIN 6880)
Customer shaft	ISO h6
Material	42CrMo4 or C45E

Hollow shaft for shrink-on disc coupling

Outside diameter	ISO f7
Inside diameter	ISO H7
Customer shaft	ISO h6

Flanges

Outside diameter	to D = 230 mm ISO j6 as of D = 230 mm ISO h6

Coaxial error and axial run out of the fixing flanges DIN 42955-N

Gears

Material	16MnCr5, 20MnCr5 or 18CrNiMo7-6

Shaft seals

Type	with dust lip according to DIN3760 AS
Material	NBR/FPM

Bearing

Type	ball bearings or tapered roller bearings

3. Drive selection

The gear units are made in according to the valid DIN, ISO and AGMA standards. The technical data and details about allowed working conditions are written on a name plate and accompanying documents.

When ordering gear units it is necessary to indicate the form of mounting (the position of terminal box of the motor) that is chosen from appropriate scheme. All later changes of mounting are possible only with consultation and written binding confirmation.

The efficiency of gear units is mainly determined by the gearing and bearing friction. Keep in mind that the starting efficiency of a gear unit is always less than its efficiency at operating speed. This factor is especially pronounced in the case of helical-worm gear units.

In order to choose correct gearbox and driving electric motor it is necessary to know the following data:
- required output torque Mt_2,
- gearbox output speed n_2,
- way of gearbox load and corresponding operational factor f_B.

Based on these input values, it is possible to determine the size, box power output and gear ratio i as well.

Determination of service factor

The gear unit reliable performs its function by required working conditions. The value of service factor f_B in table of gear units is given for the way of load I – continuous, smooth running without rocking up to 8 hours/daily.

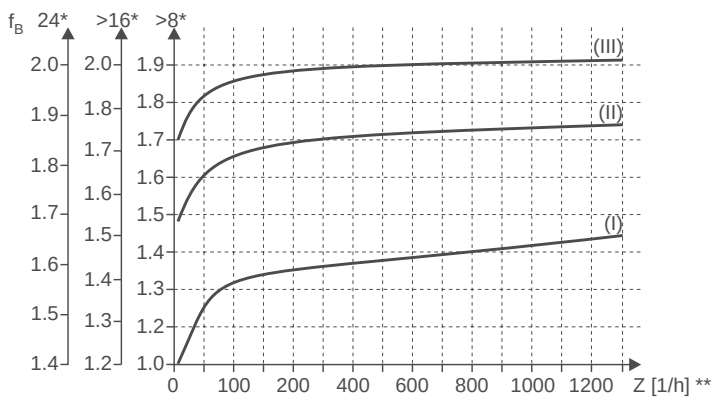
The way of determining the service factor f_B is not standardized. The gear units with electro motor's SMR or SMB have got f_B=1.0, and it is satisfied then, when by long-term load with output torque does not come to permanent damage of the gear (or / and pitting).

The chosen service factor must be multiply with:

- At least 1.2, when the gear is running with internal combustion engine, hydraulic motor,... , the way of rotation is changing and hard start - if occasionally comes to torque fluctuations at the input of the gear unit,
- At least 1.5, when for driving the gear is used electro-break motor,
- At least 1.6, when for driving the gear is used servomotor,
- At least 1.7, when using frequency regulator.

It is recommended to determine the service factor f_B of the gear, because the influence of the provided environment temperature is important. The service factor is f_{Bmin}≥0.8, according to AGMA standards. The gear unit made by ATEX requirements has to have the service factor f_{Bmin}≥1.25.

The factor of the driven machine on the gear unit is taken into account to a sufficient level of accuracy useing the service factor f_B. The service factor is determined according to the daily operating time and the starting frequency. Three load classifications are considered depending on load factor. You can read off the service factor applicable to your application in graph. The service factor determined using this diagram must be less than or equal to the service factor as given in the selection tables.



* Operating hours
** Starts per hour

Load factor

Class I:
A gearmotor can operate with steady loads not exceeding the normal rating and 8 - 10 hours of running time per day.

As for instance : fans, gear pumps, mounting belts, conveyer worms, liquid mixers, filling and packing machines.

Class II:
A gearmotor can operate with steady loads not exceeding the normal rating and 24 hours of running time per day.

or

A gearmotor can operate with moderate shock loads not exceeding 1.25 x rated load torque
and 8 - 10 hours of running time per day.

As for instance: conveyer belts, lifts, winches, masticating mills, textile and printing machines, wood-working machines.

Class III:
A gearmotor can operate with moderate shock loads which are a maximum 1.25 x rated load torque and 24 hours of running time per day.

or

A gearmotor can operate with heavy shock loads in excess 1.25 x rated load torque and 8 - 10 hours of running time per day.

As for instance: concrete mixing machine, suction pumps, compressors, power hammers, roll stand, conveyers of heavy goods, bending and pressing machines, machines with alternating movement.

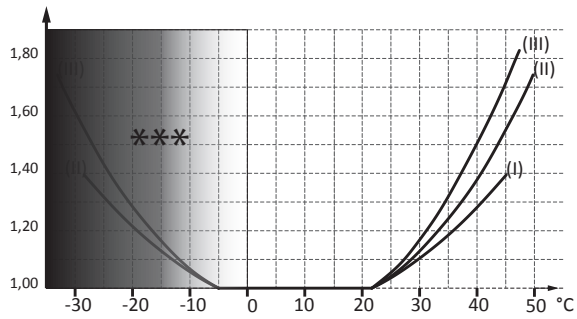
The method for determining the maximum permitted continuous torque M_a max and using this value to derive the service factor $f_B = M_a max/M$ is not defined in a standard and varies greatly from manufacturer to manufacturer. Under certain circumstances, the service factor may not be comparable with the information given by other gear unit manufacturers. If in doubt, please contact Strojna to find out more detailed information for your specific drive.

Operating time h/day	4 h			8 h			16 h			24 h		
Number of starts/h	<10	10...200	>200	<10	10...200	>200	>10	10...200	>200	<10	10...200	>200
Load type I	0,9	1,15	1,2	1,0	1,30	1,35	1,2	1,35	1,4	1,4	1,55	1,6
Load type II	1,4	1,55	1,6	1,45	1,65	1,7	1,55	1,70	1,75	1,7	1,8	1,85
Load type III	1,6	1,75	1,8	1,7	1,85	1,9	1,75	1,85	2,0	1,85	1,95	2,0

In case that gear unit is not operating in enclosed environment 20°C, additional service factor will have to be taken into consideration besides service factor f_B derived:

- f_{B1} = Service factor from the ambient temperature

The additional service factor f_{B1} can be determined by referring to the diagram. The load classification is taken into consideration in f_{B1} in the same way as in f_B.



Total service factor is calculated : $f_{BT}=f_B \times f_{B1}$

For special requests, demands or if you are in doubt please contact us with completed questionnaire.

****Contact Strojna / Stroina Transmissions in case of temperatures below -20°C.**

Output torque Mt_2

Torque Mt_2 is given by required load of gearbox. It can be expressed as a force of F_2, which acts at certain distance on arm r_2.

Mt2 [Nm] = F2 [N] x r2 [m]

Radial and axial loads

-acting on the shaft center, should always be less than or equal to the avaliable loads for the chosen type of gear unit.

$F_r \geq F_{rr}$ and $F_a \geq F_{ar}$

Actual radial force depends on the transmission element mounted.

$F_{rr} = ((2000 \times Mt_2) / d_0) \times f_z$ [N]

Mt_2 (Nm) - output torque
d_0 (mm) - middle diameter of transmission element

Transmission element	$f_=$	Note
Gear wheel	1,15	Z≤17
Sprocket	1,25	Z>13
Sprocket	1,4	Z≥13
V- belt	1,8	Influence of tensile force
Flat belt	2,5	Influence of tensile force

Thermal power limit

Thermal power limit represents maximal permissible power of gear unit surface temperature 80°C

Data in tables are valid for:
- standard gear unit with STROJNA motor
- mountig position B7, B6, B3, N1, N2, N3, N4, N5, V1, V2
- input speed ≤ 1700 min^{-1}
- operating mode: S1

FG	Thermal power limit P_t [kW]								
	Ambient temperature Θ [°C]								
	-20	-10	0	10	20	30	40	50	60
12	8,2	7,2	6,3	4,1	4,3	3,5	1,9	1,4	0,9
22	12	10,2	8,8	5,9	6,2	4,0	3,0	1,9	1,1
23	7,3	6,4	5,4	3,7	3,7	2,9	1,8	1,0	0,7
32	23,0	19,8	17,0	13,8	12,5	8,9	6,5	4,1	2,6
33	13,8	11,7	11,5	8,0	7,9	5,0	3,9	2,3	1,6
42	39,0	36,0	28,0	23,5	21	15,0	10,8	7,4	4,5
43	23,0	22,0	16,9	13,9	13,0	9,0	6,6	4,1	2,7
44	15,2	13,0	11,9	9,0	8,8	6,0	4,1	2,9	1,8
52	60,0	51,0	44,0	35,2	29	23,0	16,7	11,1	6,7
53	35,8	29,0	25,8	20,8	17	13,8	9,8	6,7	4,0
54	24,3	19,0	17,9	14,1	11,8	9,1	6,7	4,5	2,3
62	108	93,0	79,0	63,8	54,0	42,0	30,2	20,2	12,2
63	64,0	56,0	47,8	38,2	32,0	25,0	18,2	12,2	7,4
64	43,5	37,0	32,0	25,5	21,0	16,8	12,0	8,1	4,9
72	135	124	101	82,4	73	54,0	40,0	26,1	15,8
73	82	75	59,0	49,6	44,0	32,5	23,4	15,7	9,5
74	53	47	41,0	32,8	30,0	21,6	15,5	10,4	6,3
83	127	114	93,0	75,3	67,0	49,0	35,6	23,8	14,4
84	79,0	69,1	58,3	46,1	42,0	30,4	21,8	14,6	8,8
85	39	34,0	28,7	22,6	20,0	15,0	10,7	7,2	4,3

KG	Thermal power limit P_t [kW]								
	Ambient temperature Θ [°C]								
	-20	-10	0	10	20	30	40	50	60
12	7,7	6,4	5,3	4,5	3,6	2,8	2,3	1,9	1,2
22	12,1	10,5	9,1	7,6	6,3	5,0	3,7	2,5	1,6
23	6,1	5,2	4,4	3,7	3,2	2,9	2,1	1,6	1,2
32	20,5	17,8	14,8	12,6	10,7	9,0	7,0	5,5	3,0
33	9,6	8,0	7,1	6,4	5,4	4,7	3,8	2,5	1,5
42	31,5	26,3	26,9	22,3	18,7	15,0	9,0	6,7	4,1
43	19,0	16,0	13,3	11,3	9,4	8,1	6,2	5,2	3,2
44	12,8	10,9	9,1	7,7	6,5	5,4	4,5	3,2	2,2
53	25,3	21,5	18,2	15,6	13	9,7	8,1	5,5	3,5
54	15,5	12,7	10,8	9	7,8	6,5	4,8	3,2	1,7
55	10,7	8,7	7,4	6,2	5,2	3,8	2,8	2,0	1,4
63	37,2	32,4	27,3	22,0	19,2	15,3	11,3	7,2	4,8
64	22,8	18,9	16,0	13,5	11,5	9,1	5,9	4,5	2,8
65	16,0	13,2	11,0	9,3	7,7	5,2	4,0	3,4	2,0
73	60,0	52,9	44,6	37,8	32	25,2	18,3	12,1	7,2
74	39,0	33,0	28,0	23,0	19,2	16,0	12,3	8,3	5,2
75	30,0	26	21,9	16,0	12,8	11,3	8,5	5,8	3,6
83	82,6	70,0	58,0	48,0	41,5	33,0	25,5	15,2	9,6
84	50,0	42,0	35,5	30,0	24,9	21	17,3	10,5	7,2
85	38,0	31,5	26,2	21,0	16,6	14,2	11,5	8,2	5,3
93	135,0	114,0	91,0	77,0	62,3	51,0	42,0	30,0	15,5
94	72,0	61,0	52,0	44,0	37,3	31,5	25,9	18,0	9,8
95	51,0	41,0	34,7	29,4	24,9	21,0	15,8	10,9	7,2

ZG	Thermal power limit P_t [kW]								
	Ambient temperature Θ [°C]								
	-20	-10	0	10	20	30	40	50	60
12	3,4	2,6	2,2	1,8	1,6	1,4	1	0,8	0,6
22	5,6	4,9	4,2	3,6	3,2	2,8	2,4	1,9	1,1
23	5	4,3	3,5	3,1	2,8	2,5	2,2	1,3	0,8
32	7,7	6,8	5,9	5,3	4,6	3,6	3,1	2,4	1,6
33	6,6	5,9	5,1	4,2	3,9	3,1	2,8	1,9	1,4
42	10,2	8,9	8,2	6,8	5,8	5,1	4,3	3,6	2,5
43	8,9	7,3	6,8	5,7	5	4,6	3,8	2,9	1,8
52	14,7	12,2	10,3	9,3	7,9	7,1	6,3	5,4	4,3
53	12,4	11,3	9,2	8,6	7,1	6,5	5,3	4,7	3,1
62	18,2	16,3	14,5	13	12	11,2	10,3	9,2	8,4
63	16,5	14,2	13,2	12,3	10	8,9	7,2	6,5	5,6
64	14,2	13,2	11,8	9,3	8,3	8	6,8	5,6	4,7
72	26,6	24	22,3	20,8	19,3	18,6	17,4	16,1	14,2
73	25	23	20,1	18,5	17,4	16,8	15,2	14,3	11,8
74	22,6	19,2	17,5	16,2	15,3	13,1	12,2	10,6	9,1
82	36,7	32,4	28	26	24	22,2	20,4	18,3	16,3
83	32	29	25	23	19	17,5	16,2	15,3	14
84	29	26	19,8	18,3	17	16	14,2	13,2	12,7
92	51,5	47	42,8	38	35	33,5	30,6	28,2	24,3
93	48	43	39	31	29	27	25	23,1	20,7
94	45	39	31	29	26	23,8	20,2	18,4	17,5
102	58	54	47	44	42	39	34	28	22
103	53	49	44	41	39	36	31,5	24,8	18,5
104	50	46	39,1	35,5	34	32,5	28,4	23,1	16,8
112	92	86	78	67	62	55	51	47	38
113	85	79	68	61	57	51,5	48	43	36
114	80	76	63	57	51	48	44	39	34
122	110,5	106,6	98,8	94,9	91	84,5	79,3	74,1	68,9
123	106,6	97,5	91	88,4	84,5	78	71,5	65	58,5
124	96,2	91	88,4	83,2	78	71,5	65	58,5	52
132	193,8	182,4	174,8	167,2	161,5	153,9	140,6	131,1	121,6
133	186,2	178,6	171	163,4	157,7	148,2	140,6	133	123,5
134	180,5	172,9	169,1	159,6	152	138,7	127,3	114	102,6

SG	Permissible thermal power loss, P_g [kW]								
	Ambient temperature, Θ [°C]								
	-20	-10	0	10	20	30	40	50	60
1	0,25	0,23	0,20	0,18	0,15	0,12	0,09	0,06	0,04
2	0,40	0,35	0,32	0,28	0,23	0,18	0,15	0,11	0,07
3	0,61	0,56	0,50	0,42	0,35	0,30	0,22	0,17	0,11
4	0,76	0,70	0,60	0,53	0,43	0,38	0,30	0,22	0,13
5	0,95	0,87	0,77	0,68	0,57	0,48	0,36	0,25	0,15
6	1,21	1,10	0,96	0,80	0,70	0,60	0,40	0,32	0,21

For SG gear units we have to include additional formula for calculation. Shown in example:

The table above shows that Pg for the ambient temperature of 30 °C is 0,18kW; (Pg=0,18kW).

If we include this in formula Pt we get:

$$Pt = \frac{Pg}{1 - \frac{\eta}{100}} \; [kW] \qquad Pt = \frac{0,18}{1 - \frac{62}{100}} = 0,47 \; [kW]$$

The value Ptd according to the following formula represents maximum permissible input power of the gear unit:

$$Ptd = P_1 \times k_1 \times k_2 \times k_3 \times k_4 \times k_5$$

IEC adapter or input shaft		k1	0,70
Mounting position: N4, N5, N6		k2	0,75
Input speed > 1700 min^{-1}		k3	0,70
Duty on intermittent load S3...S6	40 min	k4	1,25
	25 min		1,50
	15 min		1,80
	10 min		2,00
Synthetic lubricant + FPM		k5	1,60

Thermal power limit represents maximal permissible power of gear unit surface temperature 80°C

Data in tables are valid for:
- standard gear unit with STROJNA motor
- mountig position B7, B6, B3, N1, N2, N3, N4, N5, V1, V2
- input speed ≤ 1700 min^{-1}
- operating mode: S1

4. Gear unit Mounting positions

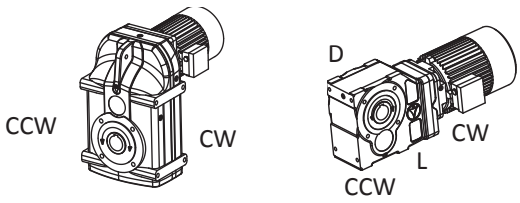
Stroina differentiates between six mounting positions for gear units and gearmotors.

Output direction of rotation with backstop.

If the drive has a backstop, you also have to indicate the direction of rotation of the output for the drive. The following definition applies:

As viewed at the output shaft:

- Clockwise (CW)
- Counterclockwise (CCW)



In the right-angle gear units, you also have to indicate whether the direction of rotation is given looking into the L or D end.

Position of the output shaft and output flange:

In right-angle gear units, you also have to indicate the position of the output shaft and the output flange:

- L or D or L+D (L is for Left-side, D is for Right-side)

<u>The position of the output shaft will be determined from the motor side</u>

Changing the mounting position:

It is important that you read the following information when you operate the gearmotor in a mounting position other then indicated in the order:

- Adjust the lubricant fill quantity to match new mounting position
- Adjust the position of the breather valve
- For helical-bevel gearmotors: contact Stroina customer service prior to changing to mounting position V1 to V2 or vice versa
- For helical-worm gearmotors: contact Stroina customer service when changing to mounting position N5 or N4

INFORMATION	
	Notes on the shafts illustrated on the mounting position sheets: -For gear units with solid shaft: The displayed shaft is always on the L end. -For shaft-mounted gear units: The shaft with dashed lines represents the customer shaft. the output end (shaft position) is always shown on the L end.

INFORMATION	
	Notes on the depicted motors. Motors are only represented symbolically on the mounting position sheets.

INFORMATION	
	When the terminal box is in the 3 position, check to see if the gearmotor has to be supported. Not all cable entry positions (0,1,2,3) and terminal box positions (0,1,2,3) can be selected. Some additional features for the motor require a connection inside the terminal box, wich means this terminal box is larger then the standard terminal box due to the normative air gaps. The dimension sheets only depic the standard terminal box.

5. Oil type and quantity

Type	Ambient °C	DIN (ISO)	ISO VG	ARAL	CASTROL	*SHELL	MOBIL
FG	-10°C ... +60°C	CLP	220	Degol BG 220	Alpha SP 220	Omala 220	Mobilgear 600 XP 220
	-20°C ... +80°C	CLP PG	460	Degol GS 460	Alphasyn PG 460	Tivela S 460	Glygoyle 460
ZG	-25°C ... +60°C	CLP PG	220	Degol GS 220	Alphasyn PG 220	Tivela S 220	Glygoyle 220
	-40°C ... +60°C	CLP HC	220	Degol PAS 220	Alphasyn T 220	Omala S4 GX 220	SHC 630
KG	-20°C ... +40°C	HCE	220	Eural gear 220	Optileb GT 220	Cassida GL 220	SHC Cibus 220
	-20°C ... +80°C	CLP PG	460	Degol GS 460	Alphasyn PG 460	Tivela S 460	Glygoyle 460
SG	-25°C ... +60°C	CLP PG	220	Degol GS 220	Alphasyn PG 220	Tivela S 220	Glygoyle 220
	-40°C ... +20°C	CLP-HC	220	Degol PAS 220	Alphasyn T 220	Omala 220 HD	SHC 630
	-20°C ... +40°C	HCE	460	-	-	-	Glygoyle 460

CLP -Mineral oil

CLP PG -Polyglycol oil

CLP HC -Polyalphaolefin oil

HCE -Lubricants for food processing industry

1) Standard lubrication according DIN 51517 - CLP ISO 220

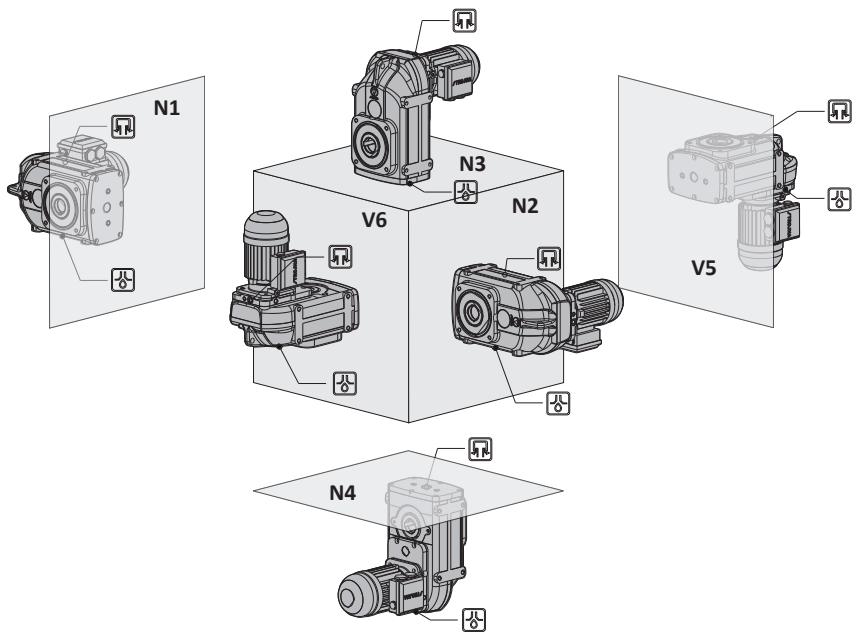
2) Standard lubrication according DIN 51517 - CLP ISO VG 460

3) Special starting procedure

Special lubricants on inquiry

***Standard**

FG	Mounting position					
	N1	N2	N3	N4	V5	V6
12	1,1	1,1	1,5	1,6	1,7	1,9
22	1,2	1,2	1,7	1,8	1,9	2,3
23	1,4	1,4	2,0	2,2	2,4	2,9
32	1,9	1,9	3,0	3,1	3,4	4,0
33	2,3	2,3	3,8	4,0	4,3	5,0
42	3,1	3,1	4,2	4,8	4,8	7,0
43	3,5	3,5	5,8	6,2	6,8	7,7
44	3,7	3,7	7,0	7,5	8,0	9,0
52	6,2	6,2	9	9,2	10	12
53	6,5	6,5	9,7	10	12	15
54	6,8	6,8	10	12	13	16
62	10	10	12	13	14	17
63	9,3	9,3	13	14	16	19
64	10	10	14	15	18	22
72	14	14	16	17	19	24
73	15	15	21	24	25	27
74	15,5	15,5	23,5	26	27	33
83	28	28	40	43	46	50
84	29,5	29,5	48	54	56	60
85	31	31	50	58	61	66

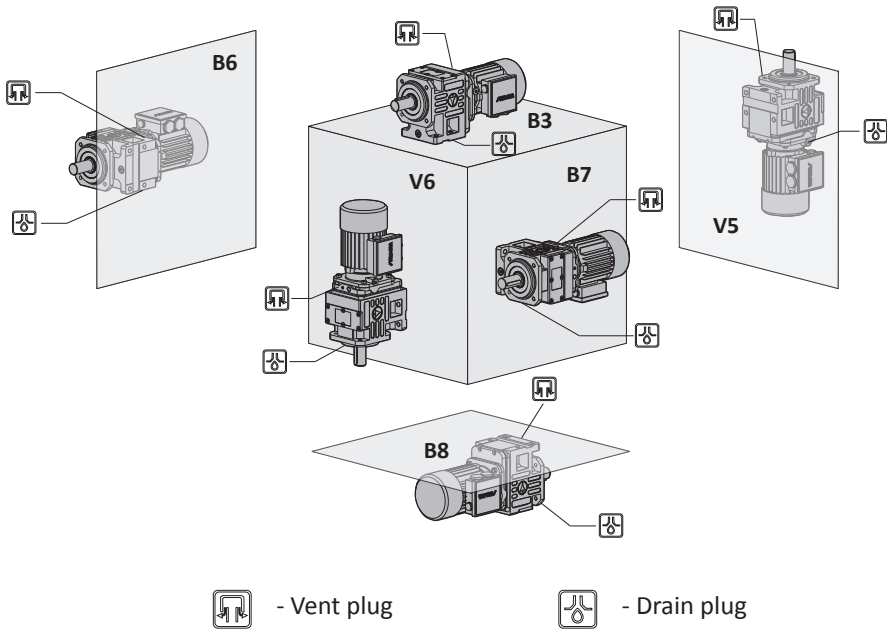


- Vent plug

- Drain plug

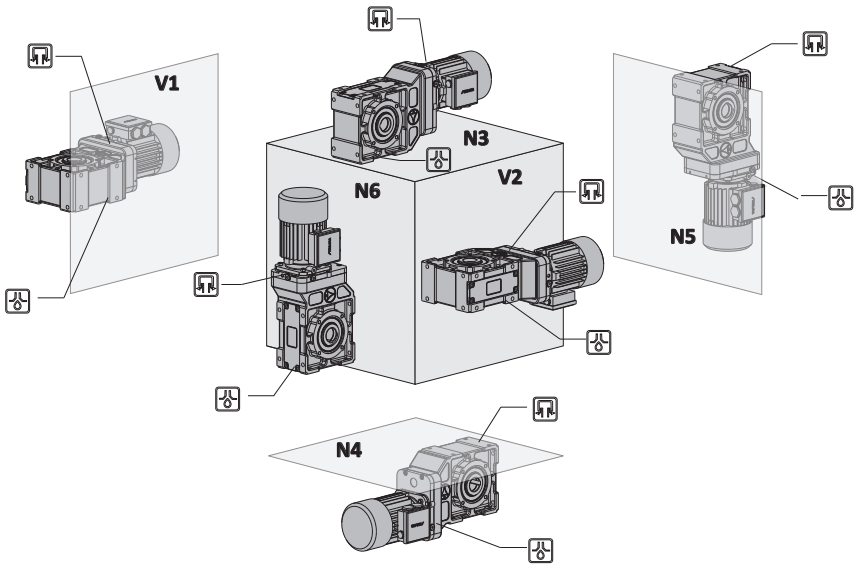
Gear units and geared motors are supplied ready for operation. Gear units sizes FG1, FG2, FG3 are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519). Sizes from FG4 to FG8 have standard filling with mineral gear oil labeling according to DIN51502 CLP ISO VG220 (acording to ISO viscosity grade VG 220 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F).

ZG	Mounting position					
	B7	B6	B3	B8	V6	V5
12	0,4	0,4	0,2	0,4	0,3	0,4
22	0,8	0,8	0,7	1,4	1,3	1,5
23	0,9	0,9	0,8	1,6	1,5	1,7
32	0,9	0,9	0,7	1,4	1,4	1,6
33	1	1	0,9	1,9	1,8	2
42	1,2	1,2	1	2,1	2	2,2
43	1,4	1,4	1,3	2,7	2,6	2,8
44	1,9	1,9	1,8	3,5	3,4	3,7
52	1,2	1,2	0,9	1,9	1,8	2,2
53	1,6	1,6	1,5	3,2	3,1	3,5
54	2,2	4,4	4,6	5,6	3,7	3,7
62	1,5	1,5	1,2	2,5	2,6	2,7
63	2,1	2,1	1,8	3,5	3,7	3,7
64	2,7	2,7	2,3	4,5	4,6	4,8
72	2,9	2,9	2,1	4,3	4,5	4,5
73	3,6	3,6	3,2	6,4	6,5	6,8
74	4,2	4,2	3,7	7,5	7,5	7,8
82	3,3	3,3	2,7	5,5	5,7	5,9
83	3,9	3,9	3,5	7,2	7,4	7,8
84	5,2	5	4,6	9,3	9,5	10,5
92	8,1	8,1	7	14,4	14,3	15
93	9,3	9,3	8,5	17,5	17,2	18,5
94	10,5	10,5	8,5	18,5	18,5	20
102	11	11,8	10,2	20,6	20,3	22
103	13,8	13,8	12,5	25,6	25,2	27
104	15,7	15,7	14,3	28,5	28,9	31
112	17	17	15,9	32	32,5	33
113	18,4	18,4	17,5	36	37	39
114	24	24	22	45	46	48
122	24	24	22	45	46	46
123	28	28	26	54	56	59
124	36	36	34	68	69	72
132	33	33	31	63	64	65
133	41	41	39	81	83	88
134	55	55	50	101	104	108



Gear units and geared motors are supplied ready for operation. Gear units sizes from ZG1 to ZG6 are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519). Sizes from ZG7 to ZG13 have standard filling with mineral gear oil labeling according to DIN51502 CLP ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F). Gear units and geared motors are supplied ready for operation. Gear units sizes from ZG1 to ZG6 are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519). Sizes from ZG7 to ZG13 have standard filling with mineral gear oil labeling according to DIN51502 CLP ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104°F).

KG	Mounting position					
	N3	N4	N5	N6	V1	V2
12	0,8	0,9	1,2	1,5	1,3	1,4
22	1	1	1,45	1,6	1,5	1,6
23	1	1,1	1,45	1,8	1,7	1,8
32	1,6	1,6	2,2	2,1	2,2	2,2
33	1,7	1,8	2,6	2,8	2,6	2,7
42	2,5	2,6	3,0	4,5	4,5	4,0
43	2,6	2,7	3,3	4,7	4,3	4,4
44	2,8	3,2	3,5	5,0	4,8	4,8
53	3,0	3,8	4,2	5,3	3,2	3,3
54	3,5	4,1	4,7	5,7	3,8	4
55	4,2	4,8	5,3	6,2	5,6	6,0
63	5,0	6,8	7,0	9,2	5,2	5,4
64	5,8	7,5	7,5	9,8	6,0	6,5
65	6,7	8,2	7,9	10,5	7,5	8,0
73	7,8	11	14	16	8	8,2
74	8,5	12	15	17	15	15
75	9,6	12,8	16,5	18,5	17	17
83	17	20	22	28	18	19
84	17	18,5	25	32	20	21
85	20	21,5	26,5	36	23	25
93	35	48	45	67	40	42
94	38	52	48	72	45	47
95	42	56	53	77	52	56

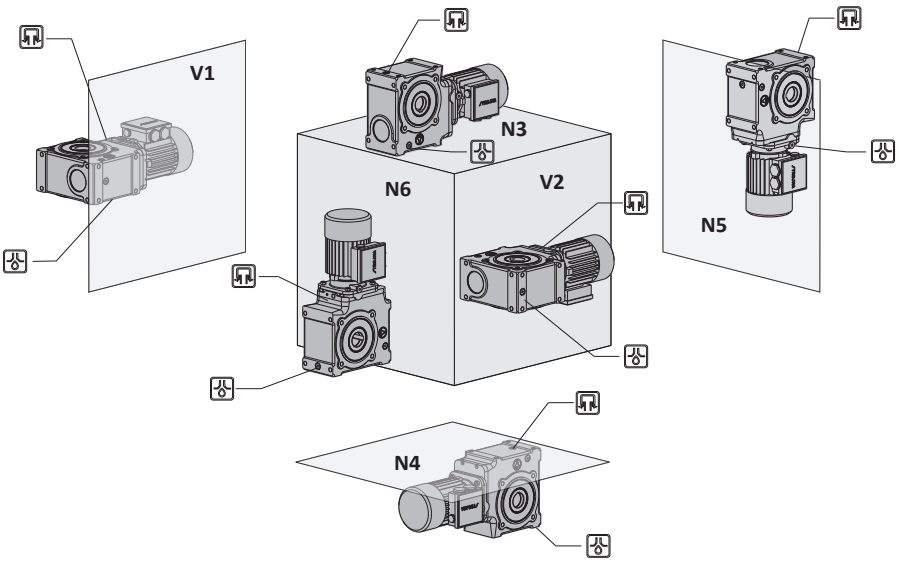


- Vent plug

- Drain plug

Gear units and geared motors are supplied ready for operation. Gear units sizes KG1 to KG4 are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519). Sizes from KG5 to KG9 have standard filling with mineral gear oil labeling according to DIN51502 CLP ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F).

SG	Mounting position					
	N1	N2	N3	N4	N5	N6
12	0,9	0,9	0,9	1,1	1,1	0,9
22	0,9	1,2	1,2	1,2	1,2	1,2
32	1,1	1,6	1,6	1,6	1,6	1,6
33	1,7	1,7	2,5	2,5	2,5	2,9
42	2	2	3,4	3,4	3,4	3,4
43	3,1	3	4,5	4,5	4,5	5,1
52	3,2	3,2	5,5	5,5	5,5	5,5
53	3,5	3,5	6,3	6,3	6,3	6,3
62	5,6	5,6	9	9	9	9,6
63	5,9	5,9	10,3	10,3	10,3	10,3
55	4,4	4,4	4,6	5,6	3,7	3,7
63	6,2	6,2	6,8	8,2	4,8	4,8



- Vent plug

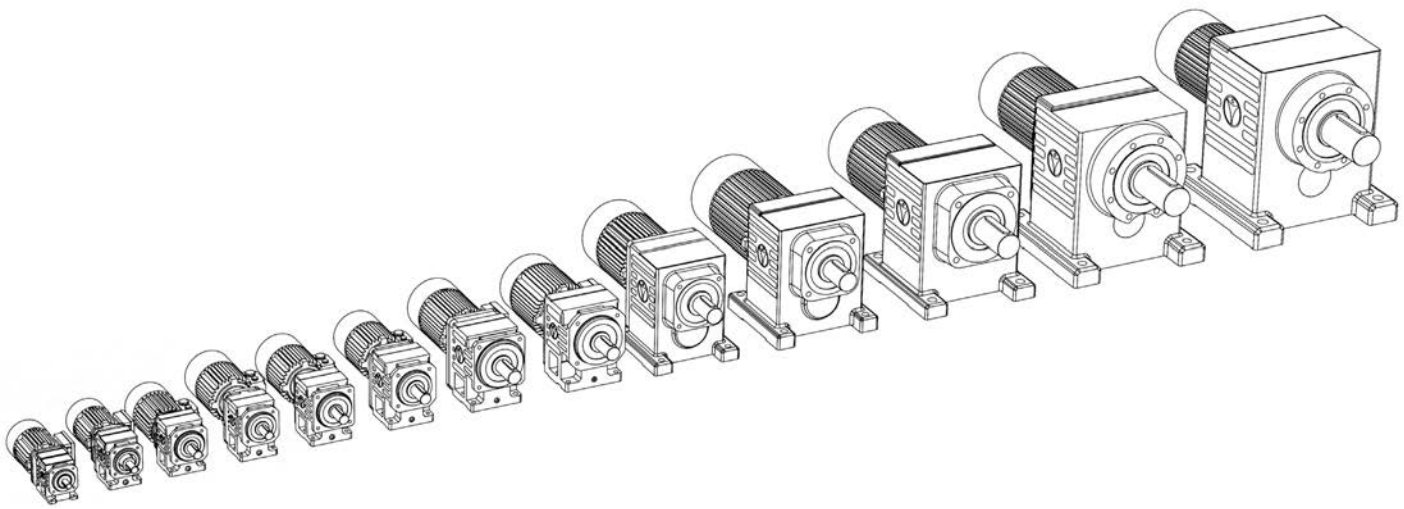
- Drain plug

Gear units and geared motors are supplied ready for operation. SG gear units are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG460 (according to ISO viscosity grade VG 460 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F).

ZG

HELICAL GEAR UNITS

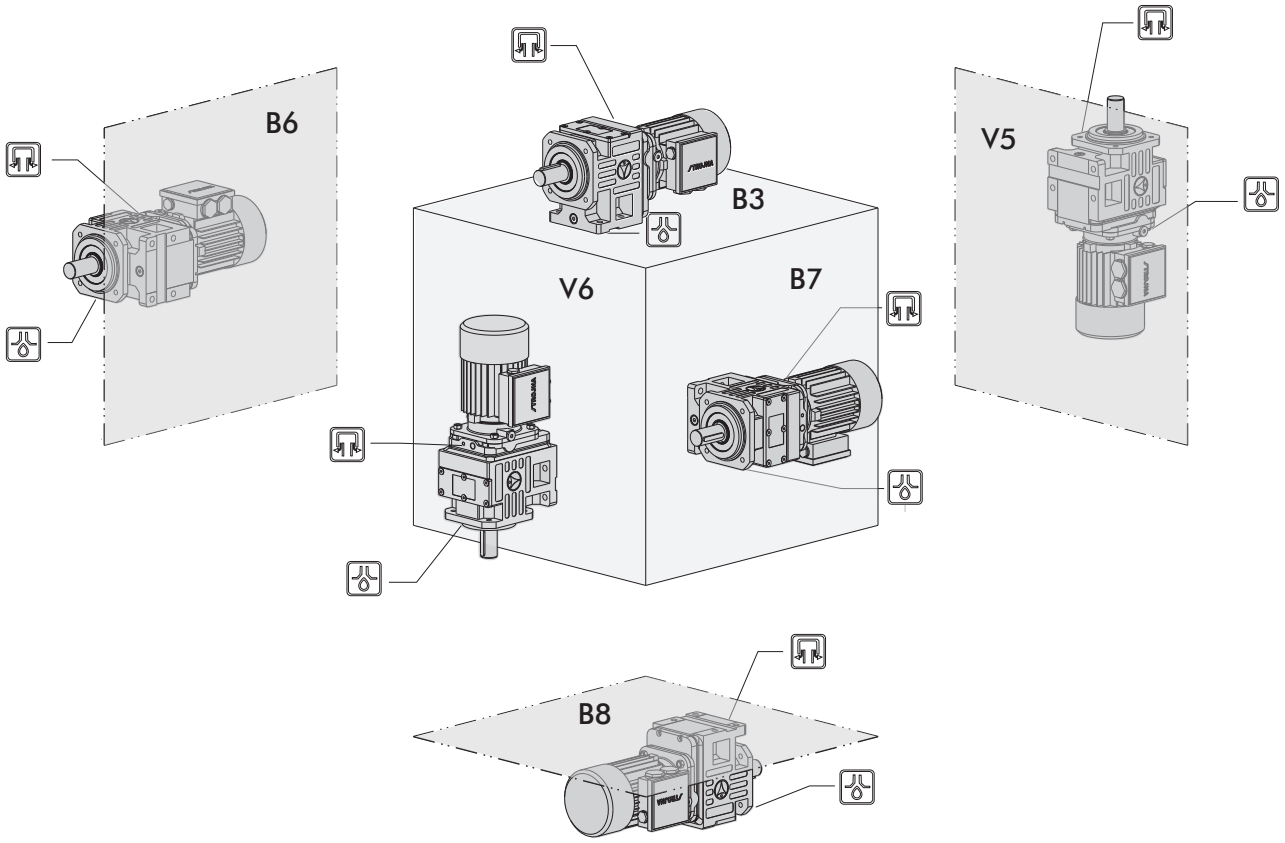
Power:	0,12 kW - 160 kW
Torque:	95 - 20.000 Nm
Ratio:	3,0 - 8700

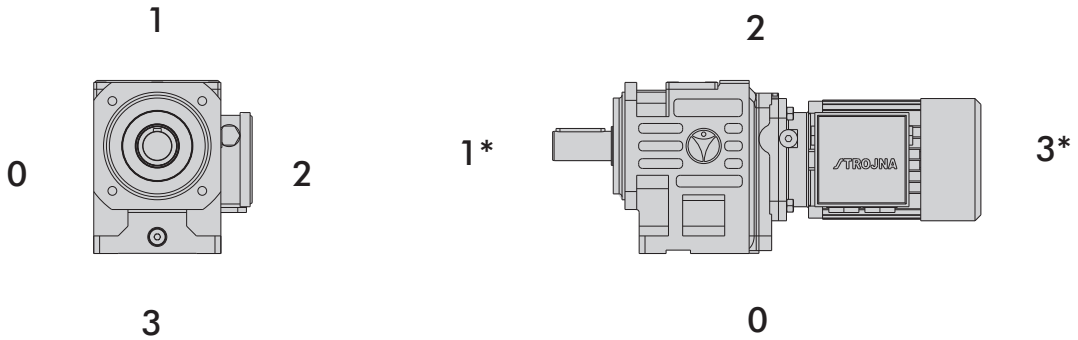


Mounting positions ZG

Vent plug

Drain plug

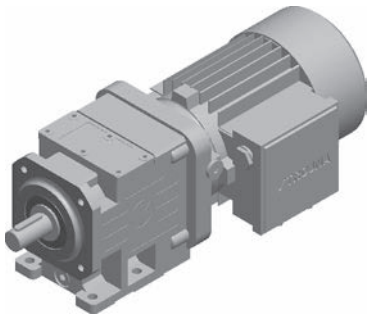


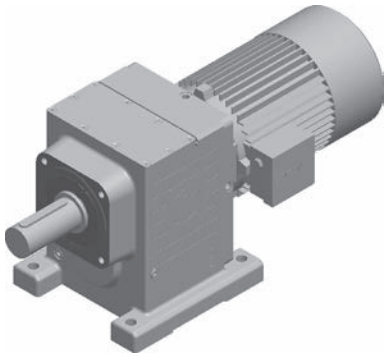


*Check for availability

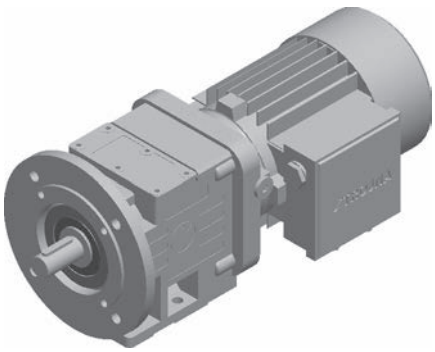
Gear unit design

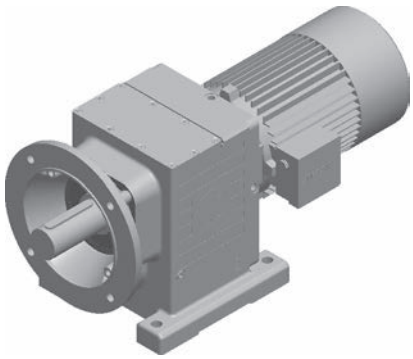
ZG...V...SMB/SMR



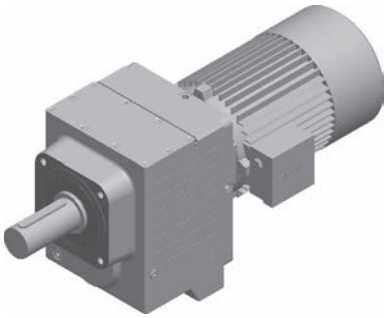


ZG...P/V...

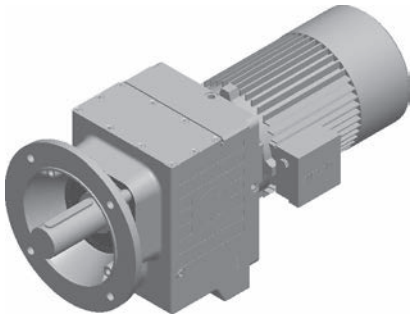


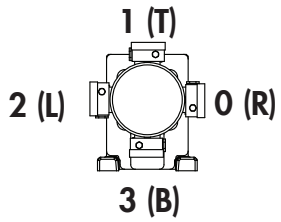


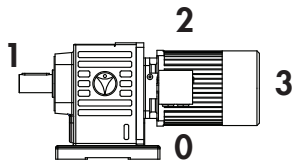
ZG...FV...



ZG...FP/V...

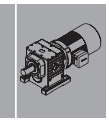


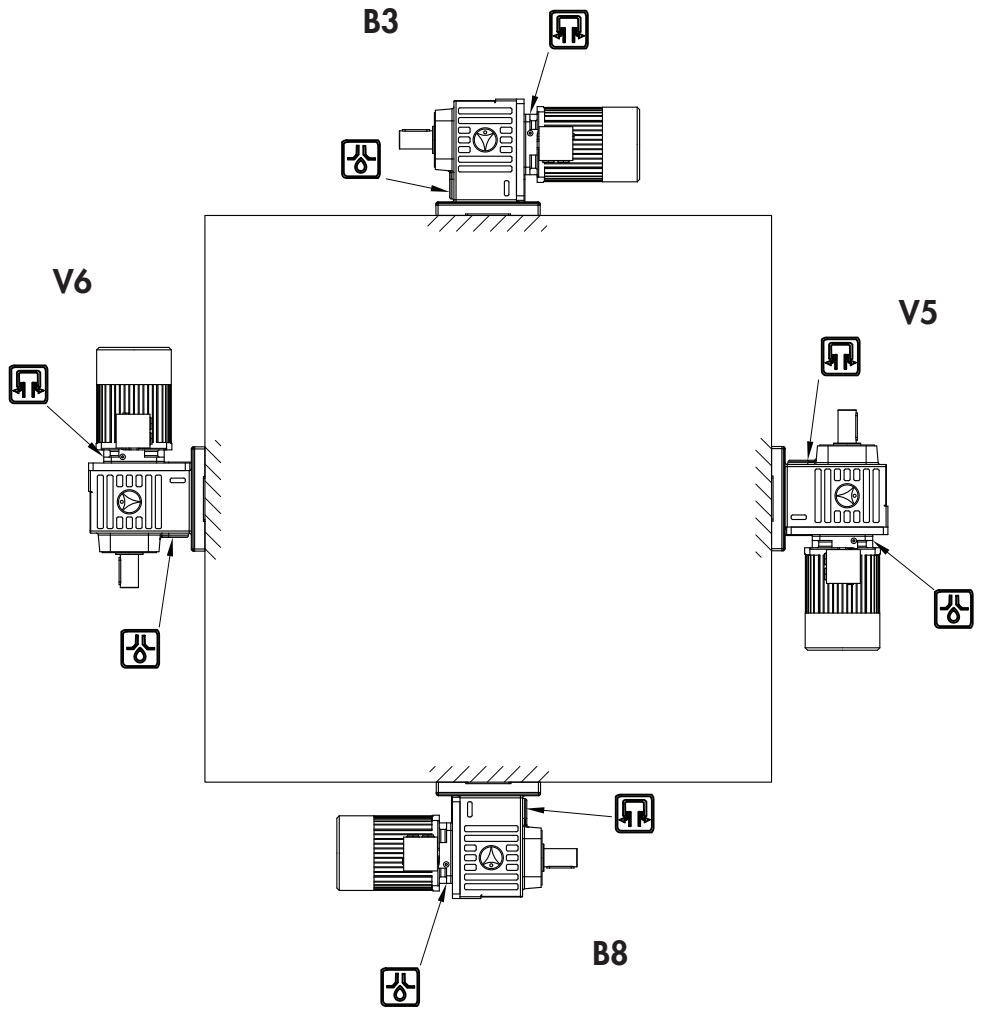


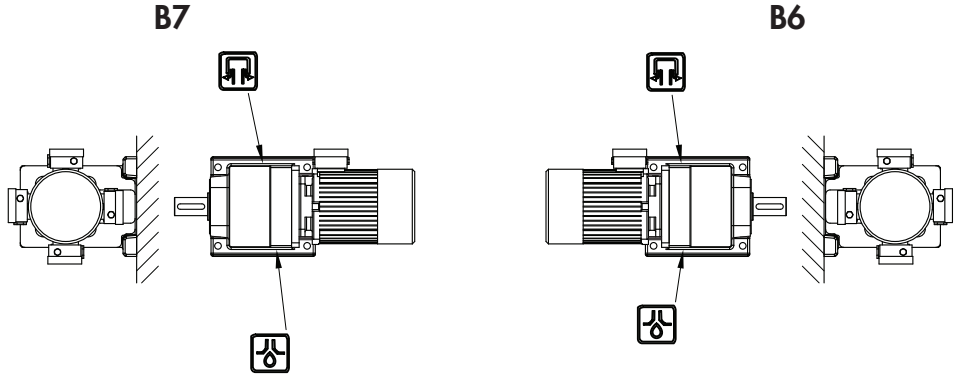


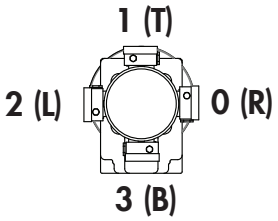
Vent plug

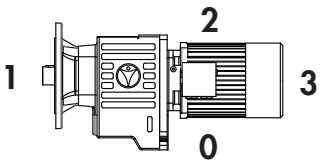
Drain plug





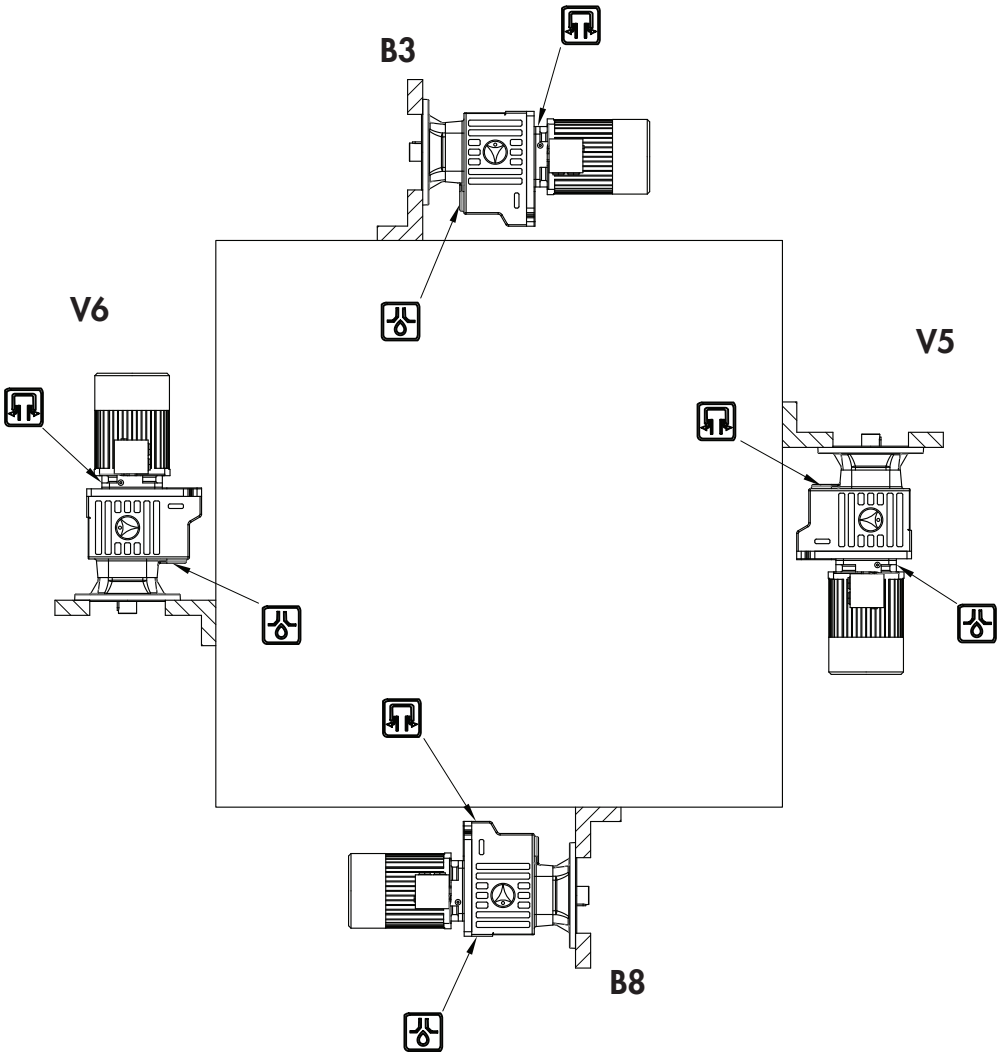


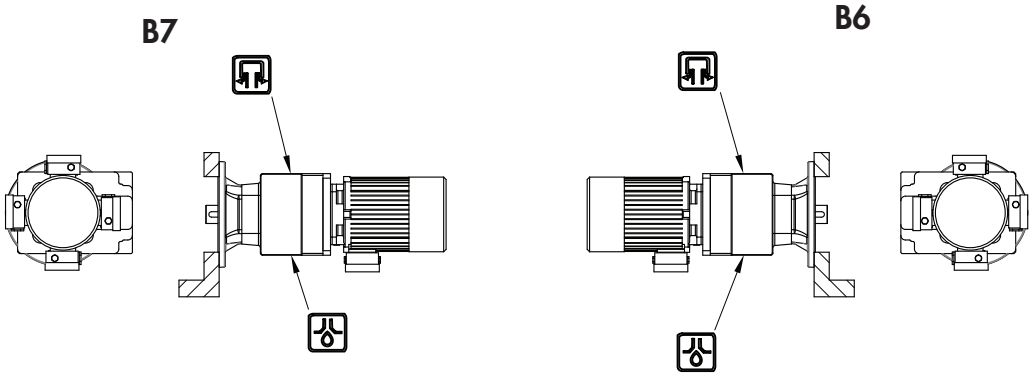


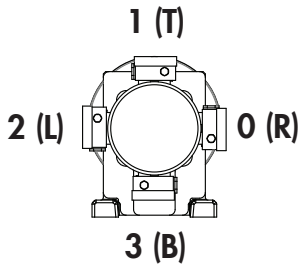


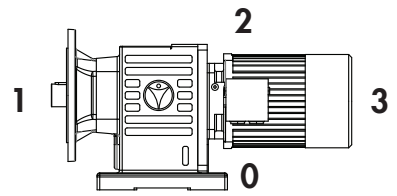
Vent plug

Drain plug



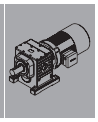


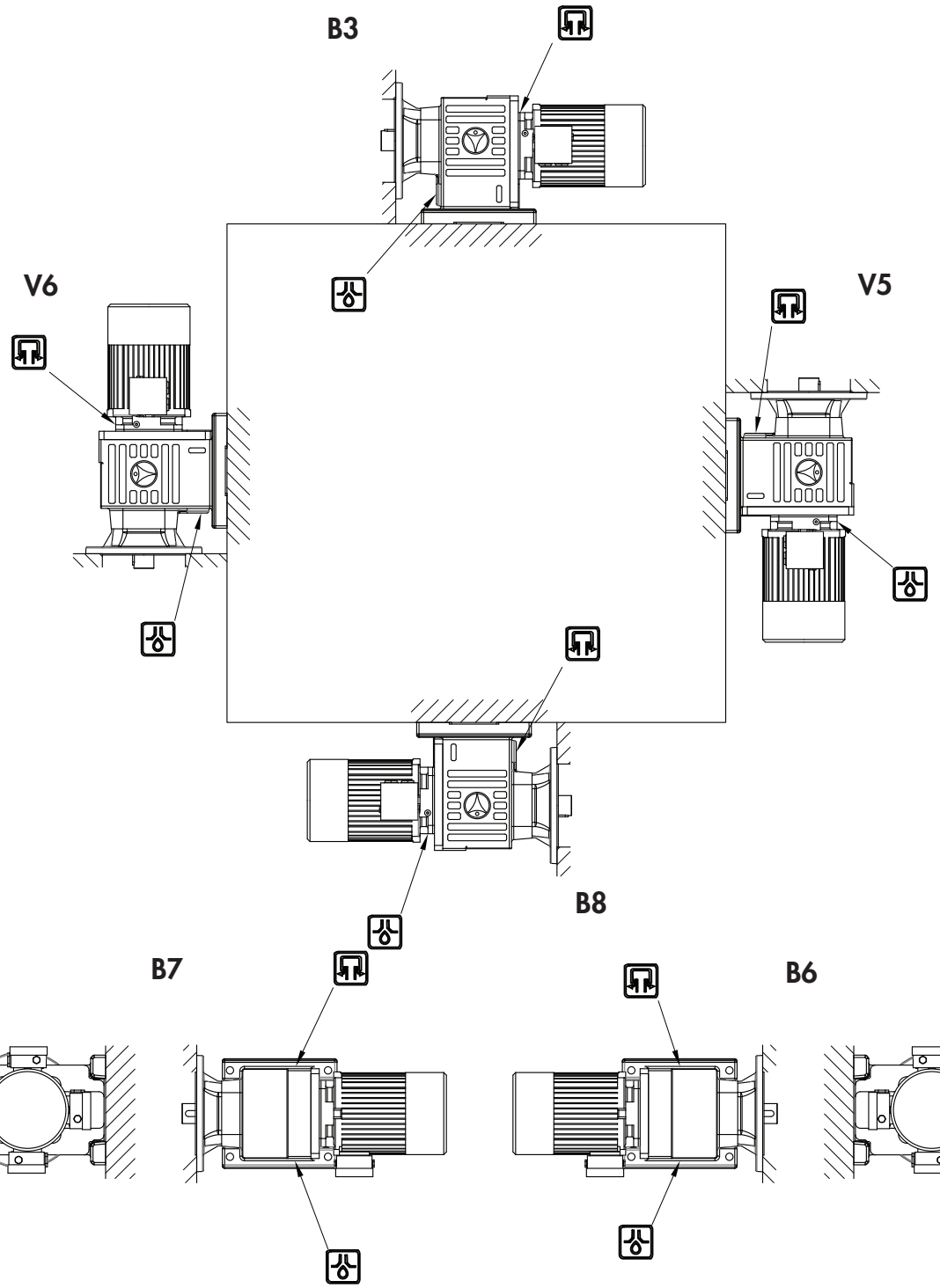




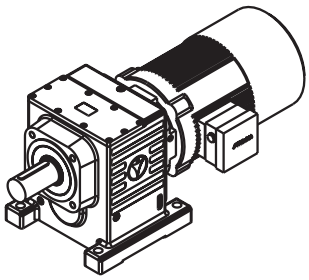
Vent plug

Drain plug





Structure of selection tables



ZG

HELICAL GEAR UNITS

Gear unit type

Motor frame size

ZG12																
Mt_{2max}	(F_r=0) Fa	(F_a=0) Fr	j_t	i	IEC/SMB/SMR											
[Nm]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200	225	250
210	7,1	7,3	8,9	94,16												

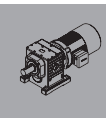
Total ratio

Backlash

Permissible radial load

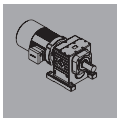
Permissible axial load

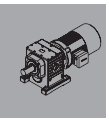
Permissible output torque



ZG12																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
95	2,15	3,30	*	*	13	61,44										
95	2,15	3,30	*	*	13	54,60										
95	2,15	3,30	*	*	13	50,27										
95	2,15	3,30	*	*	13	45,50										
95	2,09	3,20	*	*	13	40,38										
95	2,09	3,20	*	*	13	35,00										
95	2,09	3,20	*	*	13	31,50										
95	1,96	3,00	*	*	15	28,54										
95	1,96	3,00	*	*	15	26,00										
95	1,96	3,00	*	*	15	23,33										
95	1,96	3,00	*	*	15	22,08										
95	1,83	2,80	*	*	15	19,25										
91	1,83	2,80	*	*	15	16,63										
87	1,83	2,80	*	*	15	14,82										
84	1,70	2,60	*	*	15	13,22										
79	1,70	2,60	*	*	15	11,90										
76	1,70	2,60	*	*	16	11,04										
74	1,63	2,50	*	*	16	9,50										
68	1,63	2,50	*	*	16	7,90										
61	1,50	2,30	*	*	16	7,00										
95	2,02	3,10	*	*	12	41,38										
95	2,02	3,10	*	*	12	36,77										
95	2,02	3,10	*	*	12	33,86										
95	1,96	3,00	*	*	12	30,64										
95	1,96	3,00	*	*	12	27,20										
95	1,96	3,00	*	*	12	23,57										
95	1,89	2,90	*	*	12	21,21										
95	1,89	2,90	*	*	12	19,22										
94	1,89	2,90	*	*	12	17,51										
92	1,89	2,90	*	*	12	15,71										
88	1,83	2,80	*	*	12	14,87										
82	1,76	2,70	*	*	12	12,96										
77	1,76	2,70	*	*	13	11,20										
74	1,76	2,70	*	*	13	9,98										
71	1,76	2,70	*	*	13	8,90										
65	1,70	2,60	*	*	13	8,01										
61	1,70	2,60	*	*	13	7,43										
54	1,63	2,50	*	*	13	6,40										
48	1,63	2,50	*	*	13	5,32										
43	1,63	2,50	*	*	13	4,71										

ZG23																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[‘]		63	71	80	90	100	112	132	160	180	200
170	2,59	4,08	*	*	12	207,92										
170	2,59	4,08	*	*	12	180,20										
170	2,59	4,08	*	*	12	162,18										
170	2,43	3,82	*	*	12	146,93										
170	2,43	3,82	*	*	12	133,86										
170	2,43	3,82	*	*	12	120,13										
170	2,43	3,82	*	*	12	113,66										
170	2,27	3,57	*	*	12	99,11										
170	2,27	3,57	*	*	13	85,60										
170	2,27	3,57	*	*	13	76,32										
170	2,10	3,31	*	*	13	68,08										
170	2,10	3,31	*	*	13	61,27										
170	2,10	3,31	*	*	13	56,83										
170	2,02	3,19	*	*	13	48,91										
170	2,02	3,19	*	*	13	40,69										
170	1,86	2,93	*	*	13	36,04										





ZG22																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
180	2,84	4,62	*	*	13	74,80										
180	2,84	4,62	*	*	13	66,64										
180	2,84	4,62	*	*	13	59,96										
180	2,84	4,62	*	*	13	55,53										
180	2,76	4,48	*	*	13	50,74										
180	2,76	4,48	*	*	13	43,27										
180	2,76	4,48	*	*	13	39,10										
180	2,58	4,20	*	*	13	35,57										
180	2,58	4,20	*	*	13	32,54										
180	2,58	4,20	*	*	13	30,60										
180	2,58	4,20	*	*	13	27,72										
180	2,41	3,92	*	*	13	24,37										
180	2,41	3,92	*	*	13	21,25										
180	2,41	3,92	*	*	14	19,60										
179	2,24	3,64	*	*	14	18,13										
169	2,24	3,64	*	*	14	15,64										
166	2,24	3,64	*	*	14	14,91										
164	2,15	3,50	*	*	14	13,36										
154	2,15	3,50	*	*	14	11,41										
148	1,98	3,22	*	*	14	9,80										
141	1,97	3,20	*	*	14	8,45										
134	1,97	3,20	*	*	14	6,97										
101	2,67	4,34	*	*	12	39,47										
141	2,58	4,20	*	*	12	35,16										
171	2,58	4,20	*	*	12	31,64										
178	2,58	4,20	*	*	12	29,30										
180	2,50	4,06	*	*	12	26,77										
180	2,50	4,06	*	*	12	22,83										
180	2,50	4,06	*	*	12	20,63										
180	2,50	4,06	*	*	12	18,77										
177	2,41	3,92	*	*	12	17,17										
174	2,32	3,78	*	*	12	16,15										
166	2,32	3,78	*	*	12	14,63										
160	2,32	3,78	*	*	12	12,86										
154	2,32	3,78	*	*	12	11,21										
152	2,24	3,64	*	*	13	10,34										
148	2,24	3,64	*	*	13	9,57										
141	2,15	3,50	*	*	13	8,25										
137	2,15	3,50	*	*	13	7,87										
134	2,09	3,40	*	*	13	7,05										
132	2,03	3,30	*	*	13	6,02										
128	2,03	3,30	*	*	13	5,17										
119	2,03	3,30	*	*	13	4,46										
112	2,03	3,30	*	*	13	3,68										

ZG33

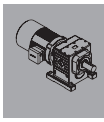
Mt_{2max} [Nm]	$(F_r=0)$ F_a [kN]	$(F_a=0)$ F_r [kN]	$(F_{rp}=0)$ F_{ap} [kN]	$(F_{ap}=0)$ F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR									
							63	71	80	90	100	112	132	160	180	200
280	4,39	6,27	*	*	11	338,34										
280	4,39	6,27	*	*	11	300,65										
280	4,39	6,27	*	*	11	276,83										
280	4,39	6,27	*	*	11	250,55										
280	4,26	6,08	*	*	11	222,38										
280	4,26	6,08	*	*	11	192,73										
280	4,26	6,08	*	*	11	173,45										
280	3,99	5,70	*	*	11	157,15										
280	3,99	5,70	*	*	11	143,17										
280	3,99	5,70	*	*	11	128,48										
280	3,99	5,70	*	*	11	121,57										
280	3,73	5,32	*	*	11	106,00										
280	3,73	5,32	*	*	11	91,55										
280	3,73	5,32	*	*	12	81,63										
280	3,46	4,94	*	*	12	72,81										
280	3,46	4,94	*	*	12	65,53										
280	3,46	4,94	*	*	12	60,78										
280	3,33	4,75	*	*	12	52,31										
280	3,33	4,75	*	*	12	43,52										
280	3,06	4,37	*	*	12	38,55										

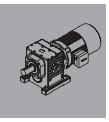
ZG32

Mt_{2max} [Nm]	$(F_r=0)$ F_a [kN]	$(F_a=0)$ F_r [kN]	$(F_{rp}=0)$ F_{ap} [kN]	$(F_{ap}=0)$ F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR									
							63	71	80	90	100	112	132	160	180	200
196	4,80	6,75	*	*	12	80,00										
260	4,80	6,75	*	*	12	71,27										
278	4,80	6,75	*	*	12	64,13										
280	4,80	6,75	*	*	12	59,39										
280	4,66	6,54	*	*	12	54,27										
280	4,66	6,54	*	*	12	46,28										
280	4,66	6,54	*	*	12	41,82										
280	4,37	6,13	*	*	12	38,04										
280	4,37	6,13	*	*	12	34,81										
280	4,37	6,13	*	*	12	32,73										
280	4,37	6,13	*	*	12	29,65										
280	4,07	5,72	*	*	12	26,06										
280	4,07	5,72	*	*	12	22,73										
280	4,07	5,72	*	*	12	20,96										
280	3,78	5,31	*	*	12	19,39										
267	3,78	5,31	*	*	12	16,73										
261	3,78	5,31	*	*	13	15,94										
255	3,64	5,11	*	*	13	14,29										
240	3,64	5,11	*	*	13	12,20										
231	3,35	4,70	*	*	13	10,48										
220	3,33	4,67	*	*	13	9,04										
208	3,33	4,67	*	*	13	7,45										

ZG43																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
420	5,04	7,33	*	*	10	468,02										
420	5,04	7,33	*	*	10	415,88										
420	5,04	7,33	*	*	10	382,92										
420	5,04	7,33	*	*	10	346,57										
420	4,89	7,11	*	*	10	307,60										
420	4,89	7,11	*	*	10	266,59										
420	4,89	7,11	*	*	10	239,93										
420	4,58	6,66	*	*	10	217,37										
420	4,58	6,66	*	*	10	198,04										
420	4,58	6,66	*	*	10	177,73										
420	4,58	6,66	*	*	10	168,16										
420	4,28	6,22	*	*	10	146,63										
420	4,28	6,22	*	*	10	126,63										
420	4,28	6,22	*	*	10	112,91										
420	3,97	5,77	*	*	10	100,71										
420	3,97	5,77	*	*	10	90,64										
420	3,97	5,77	*	*	11	84,08										
420	3,82	5,55	*	*	11	72,36										
420	3,82	5,55	*	*	11	60,20										
420	3,51	5,11	*	*	11	53,32										

ZG42																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
420	5,52	7,72	*	*	11	72,99										
420	5,52	7,72	*	*	11	66,39										
420	5,52	7,72	*	*	11	61,76										
420	5,52	7,72	*	*	11	53,03										
420	5,35	7,48	*	*	11	48,09										
420	5,35	7,48	*	*	11	44,87										
420	5,35	7,48	*	*	11	40,77										
420	5,02	7,01	*	*	11	37,11										
420	5,02	7,01	*	*	11	33,78										
420	5,02	7,01	*	*	11	29,80										
420	5,02	7,01	*	*	11	27,05										
420	4,68	6,55	*	*	11	24,72										
420	4,68	6,55	*	*	11	23,35										
420	4,68	6,55	*	*	11	20,39										
420	4,35	6,08	*	*	11	18,12										
420	4,35	6,08	*	*	12	16,51										
402	4,35	6,08	*	*	12	14,34										
388	4,18	5,85	*	*	12	12,55										
369	4,18	5,85	*	*	12	10,37										
351	3,85	5,38	*	*	12	8,65										
333	3,82	5,34	*	*	12	7,25										
324	3,82	5,34	*	*	12	6,45										
206	5,19	7,25	*	*	12	40,08										
274	5,02	7,01	*	*	10	36,45										
300	5,02	7,01	*	*	10	33,91										
339	5,02	7,01	*	*	10	29,12										
371	4,85	6,78	*	*	10	26,41										
397	4,85	6,78	*	*	10	24,64										
399	4,85	6,78	*	*	10	22,39										
400	4,85	6,78	*	*	10	20,38										
400	4,68	6,55	*	*	10	18,55										
400	4,52	6,31	*	*	10	16,36										
400	4,52	6,31	*	*	10	14,85										
400	4,52	6,31	*	*	10	13,58										
400	4,52	6,31	*	*	10	12,82										
400	4,35	6,08	*	*	10	11,19										
396	4,35	6,08	*	*	10	9,95										
393	4,18	5,85	*	*	12	9,06										
386	4,18	5,85	*	*	12	7,87										
378	4,06	5,68	*	*	12	6,89										
365	3,94	5,51	*	*	12	5,70										
351	3,79	5,30	*	*	12	4,75										
336	3,79	5,30	*	*	12	3,98										
320	3,79	5,30	*	*	12	3,54										





ZG53

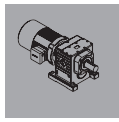
Mt_{2max} [Nm]	$(F_r=0)$ F_a [kN]	$(F_a=0)$ F_r [kN]	$(F_{rp}=0)$ F_{ap} [kN]	$(F_{ap}=0)$ F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR 63	71	80	90	100	112	132	160	180	200
550	9,08	12,22	18,16	24,44	9	478,75										
550	9,08	12,22	18,16	24,44	9	425,43										
550	9,08	12,22	18,16	24,44	9	391,71										
550	9,08	12,22	18,16	24,44	9	354,52										
550	8,81	11,85	17,61	23,70	9	314,66										
550	8,81	11,85	17,61	23,70	9	272,71										
550	8,81	11,85	17,61	23,70	9	245,44										
550	8,25	11,11	16,51	22,22	9	222,36										
550	8,25	11,11	16,51	22,22	9	202,58										
550	8,25	11,11	16,51	22,22	9	181,81										
550	8,25	11,11	16,51	22,22	9	172,02										
550	7,70	10,37	15,41	20,74	9	149,99										
550	7,70	10,37	15,41	20,74	9	129,54										
550	7,70	10,37	15,41	20,74	9	115,50										
550	7,15	9,63	14,31	19,26	9	103,02										
550	7,15	9,63	14,31	19,26	9	92,72										
550	7,15	9,63	14,31	19,26	9	86,01										
550	6,88	9,26	13,76	18,52	9	74,02										
550	6,88	9,26	13,76	18,52	9	61,58										
550	6,33	8,52	12,66	17,04	9	54,54										

ZG52

Mt_{2max} [Nm]	$(F_r=0)$ F_a [kN]	$(F_a=0)$ F_r [kN]	$(F_{rp}=0)$ F_{ap} [kN]	$(F_{ap}=0)$ F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR 63	71	80	90	100	112	132	160	180	200
412	10,48	12,73	20,95	25,46	10	74,67										
523	10,48	12,73	20,95	25,46	10	67,91										
539	10,48	12,73	20,95	25,46	10	63,18										
548	10,48	12,73	20,95	25,46	10	54,25										
550	10,16	12,34	20,32	24,69	10	49,19										
550	10,16	12,34	20,32	24,69	10	45,90										
550	10,16	12,34	20,32	24,69	10	41,71										
550	9,52	11,57	19,05	23,15	10	37,97										
550	9,52	11,57	19,05	23,15	10	34,55										
550	9,52	11,57	19,05	23,15	10	30,48										
550	9,52	11,57	19,05	23,15	10	27,67										
550	8,89	10,80	17,78	21,60	10	25,29										
550	8,89	10,80	17,78	21,60	11	23,88										
550	8,89	10,80	17,78	21,60	11	20,85										
550	8,25	10,03	16,51	20,06	11	18,54										
550	8,25	10,03	16,51	20,06	11	16,89										
526	8,25	10,03	16,51	20,06	11	14,67										
508	7,94	9,64	15,87	19,29	11	12,83										
483	7,94	9,64	15,87	19,29	11	10,61										
460	7,30	8,87	14,60	17,75	11	8,85										
436	7,26	8,82	14,51	17,64	11	7,42										
424	7,26	8,82	14,51	17,64	11	6,60										

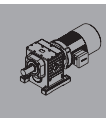
ZG64

Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
820	10,12	13,28	20,23	26,55	9	958,04										
820	10,12	13,28	20,23	26,55	9	859,78										
820	10,12	13,28	20,23	26,55	9	813,48										
820	9,44	12,39	18,88	24,78	9	709,32										
820	9,44	12,39	18,88	24,78	9	612,59										
820	9,44	12,39	18,88	24,78	9	546,21										
820	8,77	11,51	17,53	23,01	9	487,21										
820	8,77	11,51	17,53	23,01	9	438,49										
820	8,77	11,51	17,53	23,01	9	406,74										
820	8,43	11,06	16,86	22,13	9	350,05										
820	8,43	11,06	16,86	22,13	9	291,22										
820	8,40	11,03	16,80	22,05	9	257,93										



ZG63

Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
820	11,27	13,91	22,53	27,82	9	535,33										
820	11,27	13,91	22,53	27,82	9	476,93										
820	11,27	13,91	22,53	27,82	9	429,15										
820	11,27	13,91	22,53	27,82	9	397,44										
820	10,92	13,49	21,85	26,97	9	363,13										
820	10,70	13,21	21,39	26,41	9	309,70										
820	10,54	13,02	21,08	26,03	9	279,83										
820	10,24	12,64	20,48	25,29	9	254,56										
820	10,24	12,64	20,48	25,29	9	232,90										
820	10,24	12,64	20,48	25,29	9	219,00										
820	10,24	12,64	20,48	25,29	9	198,41										
820	9,56	11,80	19,12	23,60	9	174,39										
820	9,56	11,80	19,12	23,60	9	152,08										
820	9,56	11,80	19,12	23,60	9	140,27										
820	8,88	10,96	17,75	21,92	9	129,78										
820	8,88	10,96	17,75	21,92	9	111,93										
820	8,88	10,96	17,75	21,92	10	106,69										
820	8,53	10,54	17,07	21,07	10	95,60										
820	8,53	10,54	17,07	21,07	10	81,63										
820	8,51	10,50	17,01	21,00	10	70,14										
820	8,51	10,50	17,01	21,00	10	60,50										
820	8,51	10,50	17,01	21,00	10	49,85										



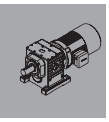
ZG62																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
820	12,00	14,64	24,01	29,28	11	65,26										
820	12,00	14,64	24,01	29,28	11	59,31										
820	12,00	14,64	24,01	29,28	11	54,28										
820	12,00	14,64	24,01	29,28	11	49,97										
820	11,64	14,20	23,28	28,39	11	45,63										
820	11,40	13,90	22,80	27,80	11	41,65										
814	11,23	13,70	22,47	27,40	11	37,51										
805	10,91	13,31	21,83	26,62	11	32,70										
797	10,91	13,31	21,83	26,62	11	30,77										
784	10,91	13,31	21,83	26,62	11	28,39										
761	10,91	13,31	21,83	26,62	11	25,55										
739	10,19	12,42	20,37	24,84	11	22,98										
720	10,19	12,42	20,37	24,84	11	21,45										
688	10,19	12,42	20,37	24,84	10	18,83										
661	9,46	11,53	18,92	23,07	10	16,66										
635	9,46	11,53	18,92	23,07	10	14,04										
612	9,46	11,53	18,92	23,07	10	11,96										
589	9,09	11,09	18,19	22,18	10	10,27										
566	9,09	11,09	18,19	22,18	10	8,86										
540	8,37	10,20	16,73	20,41	10	7,68										
525	8,31	10,14	16,63	20,28	10	6,37										
541	11,64	14,20	23,29	28,40	11	39,93										
622	11,64	14,20	23,29	28,40	11	36,29										
671	11,64	14,20	23,29	28,40	11	33,21										
717	11,48	14,00	22,96	28,00	11	30,58										
756	11,07	13,50	22,14	27,00	11	27,92										
800	11,07	13,50	22,14	27,00	11	25,48										
820	10,66	13,00	21,32	26,00	11	22,95										
820	10,25	12,50	20,50	25,00	11	20,01										
810	10,25	12,50	20,50	25,00	11	18,83										
800	9,68	11,80	19,35	23,60	11	17,37										
795	9,51	11,60	19,02	23,20	11	15,63										
782	9,51	11,60	19,02	23,20	11	14,06										
773	9,51	11,60	19,02	23,20	11	13,13										
761	9,18	11,20	18,37	22,40	11	11,52										
751	9,18	11,20	18,37	22,40	12	10,20										
735	9,18	11,20	18,37	22,40	12	8,59										
715	9,18	11,20	18,37	22,40	12	7,32										
688	9,10	11,10	18,20	22,20	12	6,28										
660	9,10	11,10	18,20	22,20	12	5,42										
635	9,02	11,00	18,04	22,00	12	4,70										
612	9,02	11,00	18,04	22,00	12	3,90										

ZG74

Mt_{2max} [Nm]	(F_r=0) F_a [kN]	(F_a=0) F_r [kN]	(F_{rp}=0) F_{ap} [kN]	(F_{ap}=0) F_{rp} [kN]	j_t [‘]	i	IEC/SMB/SMR 63	71	80	90	100	112	132	160	180	200
1450	12,37	16,10	24,74	32,21	8	1812,60										
1450	11,99	15,62	23,99	31,23	8	1608,82										
1450	11,74	15,29	23,49	30,58	8	1394,31										
1450	11,57	15,07	23,15	30,14	8	1254,88										
1450	11,24	14,64	22,49	29,28	8	1136,90										
1450	11,24	14,64	22,49	29,28	8	1035,77										
1450	11,24	14,64	22,49	29,28	8	929,54										
1450	11,81	15,37	23,61	30,74	8	879,49										
1450	12,40	16,14	24,79	32,28	8	766,87										
1450	13,02	16,95	26,03	33,90	8	662,30										
1450	13,67	17,79	27,33	35,59	8	590,53										
1450	14,35	18,68	28,70	37,37	8	526,74										
1450	15,07	19,62	30,13	39,24	8	474,06										
1450	15,82	20,60	31,64	41,20	8	439,74										
1450	16,61	21,63	33,22	43,26	8	378,45										
1450	17,44	22,71	34,88	45,42	8	314,84										
1450	18,31	23,85	36,63	47,69	8	278,86										

ZG73

Mt_{2max} [Nm]	(F_r=0) F_a [kN]	(F_a=0) F_r [kN]	(F_{rp}=0) F_{ap} [kN]	(F_{ap}=0) F_{rp} [kN]	j_t [‘]	i	IEC/SMB/SMR 63	71	80	90	100	112	132	160	180	200
1450	14,38	17,58	28,75	35,15	8	578,77										
1450	14,38	17,58	28,75	35,15	8	515,63										
1450	14,76	18,05	29,53	36,10	8	463,97										
1450	14,76	18,05	29,53	36,10	8	429,69										
1450	16,55	20,23	33,10	40,46	8	392,59										
1450	16,20	19,81	32,41	39,62	8	334,83										
1450	15,97	19,52	31,94	39,05	8	302,54										
1450	15,51	18,97	31,03	37,93	8	275,22										
1450	15,51	18,97	31,03	37,93	8	251,80										
1450	15,51	18,97	31,03	37,93	8	236,77										
1450	15,51	18,97	31,03	37,93	8	214,51										
1450	14,48	17,70	28,96	35,40	8	188,54										
1450	14,48	17,70	28,96	35,40	8	164,42										
1450	14,48	17,70	28,96	35,40	8	151,66										
1450	13,45	16,44	26,89	32,87	8	140,31										
1450	13,45	16,44	26,89	32,87	8	121,02										
1450	13,45	16,44	26,89	32,87	8	115,35										
1450	12,93	15,80	25,86	31,61	9	103,35										
1450	12,93	15,80	25,86	31,61	9	88,26										
1450	12,90	15,77	25,80	31,54	9	75,83										
1450	12,90	15,77	25,80	31,54	9	65,41										
1450	11,78	14,40	23,56	28,80	9	53,90										



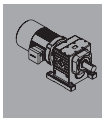
ZG72

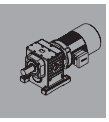
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
1400	14,43	18,50	28,86	37,00	9	60,26										
1425	14,43	18,50	28,86	37,00	9	51,64										
1450	14,82	19,00	29,64	38,00	9	47,22										
1450	14,82	19,00	29,64	38,00	9	41,90										
1450	16,61	21,29	33,22	42,59	9	37,27										
1450	16,26	20,85	32,53	41,70	9	35,08										
1450	16,03	20,55	32,06	41,10	9	31,93										
1450	15,57	19,96	31,14	39,93	9	28,65										
1450	15,57	19,96	31,14	39,93	9	25,98										
1450	15,57	19,96	31,14	39,93	9	24,00										
1424	15,57	19,96	31,14	39,93	9	21,16										
1374	14,53	18,63	29,07	37,27	9	18,81										
1332	14,53	18,63	29,07	37,27	10	16,74										
1320	14,53	18,63	29,07	37,27	10	15,96										
1277	13,50	17,30	26,99	34,60	10	13,71										
1231	13,50	17,30	26,99	34,60	10	11,88										
1197	13,50	17,30	26,99	34,60	10	10,69										
1160	12,98	16,64	25,95	33,27	10	9,08										
1112	12,98	16,64	25,95	33,27	10	7,66										
1060	12,95	16,60	25,90	33,20	10	6,74										
1021	12,95	16,60	25,90	33,20	10	5,97										

ZG84

Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
1900	14,71	19,61	29,42	39,22	7	2626,39										
1900	14,71	19,61	29,42	39,22	7	2333,83										
1900	15,11	20,14	30,21	40,28	7	2148,87										
1900	15,11	20,14	30,21	40,28	7	1944,86										
1900	16,93	22,57	33,86	45,14	7	1726,21										
1900	16,58	22,10	33,15	44,20	7	1496,05										
1900	16,34	21,78	32,67	43,57	7	1346,44										
1900	15,87	21,16	31,74	42,32	7	1219,85										
1900	15,87	21,16	31,74	42,32	7	1111,35										
1900	15,87	21,16	31,74	42,32	7	997,36										
1900	15,87	21,16	31,74	42,32	7	943,66										
1900	14,81	19,75	29,63	39,50	7	822,83										
1900	14,81	19,75	29,63	39,50	7	710,62										
1900	14,81	19,75	29,63	39,50	7	633,62										
1900	13,75	18,34	27,51	36,68	7	565,17										
1900	13,75	18,34	27,51	36,68	7	508,66										
1900	13,75	18,34	27,51	36,68	7	471,83										
1900	13,73	18,30	27,45	36,60	7	406,07										
1900	13,73	18,30	27,45	36,60	7	337,82										
1900	13,73	18,30	27,45	36,60	7	299,21										

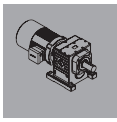
ZG83																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[‘]		63	71	80	90	100	112	132	160	180	200
1900	16,76	22,55	33,51	45,10	7	621,00										
1900	16,76	22,55	33,51	45,10	7	553,25										
1900	17,21	23,16	34,42	46,32	7	497,83										
1900	17,21	23,16	34,42	46,32	7	461,05										
1900	17,46	23,50	34,92	47,00	7	421,24										
1900	18,65	25,10	37,30	50,20	7	359,26										
1900	18,61	25,05	37,22	50,10	7	324,61										
1900	18,08	24,34	36,16	48,67	7	295,30										
1900	18,08	24,34	36,16	48,67	7	270,18										
1900	18,08	24,34	36,16	48,67	7	254,05										
1900	18,08	24,34	36,16	48,67	7	230,16										
1900	16,88	22,71	33,75	45,43	7	202,30										
1900	16,88	22,71	33,75	45,43	7	176,42										
1900	16,88	22,71	33,75	45,43	7	162,72										
1900	15,67	21,09	31,34	42,18	7	150,55										
1900	15,67	21,09	31,34	42,18	7	129,85										
1900	15,67	21,09	31,34	42,18	8	123,77										
1900	15,75	21,20	31,50	42,40	8	110,89										
1900	15,75	21,20	31,50	42,40	8	94,70										
1900	15,75	21,20	31,50	42,40	8	81,36										
1900	15,75	21,20	31,50	42,40	8	70,19										
1900	15,75	21,20	31,50	42,40	8	57,83										

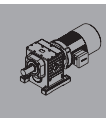




ZG82																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
1900	21,24	25,90	42,48	51,80	8	64,66										
1900	21,24	25,90	42,48	51,80	8	55,41										
1900	21,81	26,60	43,62	53,20	8	50,66										
1900	21,81	26,60	43,62	53,20	8	44,95										
1900	24,45	29,81	48,89	59,62	8	39,99										
1900	23,94	29,19	47,87	58,38	8	37,64										
1900	23,59	28,77	47,18	57,54	8	34,26										
1900	22,92	27,95	45,84	55,90	8	30,74										
1900	22,92	27,95	45,84	55,90	8	27,88										
1900	22,92	27,95	45,84	55,90	8	25,75										
1857	22,92	27,95	45,84	55,90	8	22,70										
1808	21,39	26,09	42,78	52,17	8	20,18										
1780	21,39	26,09	42,78	52,17	8	17,96										
1764	21,39	26,09	42,78	52,17	8	17,13										
1720	19,86	24,22	39,72	48,44	8	14,71										
1675	19,86	24,22	39,72	48,44	8	12,74										
1644	19,86	24,22	39,72	48,44	8	11,47										
1608	19,10	23,29	38,20	46,58	8	9,74										
1563	19,10	23,29	38,20	46,58	9	8,21										
1520	19,06	23,24	38,11	46,48	9	7,23										
1464	19,06	23,24	38,11	46,48	9	6,40										
1720	23,70	28,90	47,40	57,80	8	38,20										
1763	23,70	28,90	47,40	57,80	8	32,74										
1784	23,70	28,90	47,40	57,80	8	29,93										
1810	22,14	27,00	44,28	54,00	8	26,56										
1830	22,14	27,00	44,28	54,00	8	23,63										
1832	22,14	27,00	44,28	54,00	8	22,24										
1808	21,32	26,00	42,64	52,00	8	20,24										
1786	21,32	26,00	42,64	52,00	8	18,16										
1756	21,32	26,00	42,64	52,00	8	16,47										
1716	20,66	25,20	41,33	50,40	8	15,21										
1682	20,66	25,20	41,33	50,40	8	13,41										
1655	19,93	24,30	39,85	48,60	9	11,92										
1627	19,93	24,30	39,85	48,60	9	10,61										
1619	19,27	23,50	38,54	47,00	9	10,12										
1581	19,27	23,50	38,54	47,00	9	8,69										
1541	18,86	23,00	37,72	46,00	9	7,53										
1499	18,86	23,00	37,72	46,00	9	6,78										
1480	18,08	22,05	36,16	44,10	9	5,75										
1460	17,88	21,80	35,75	43,60	9	4,85										
1440	17,88	21,80	35,75	43,60	9	4,27										
1407	17,88	21,80	35,75	43,60	9	3,78										

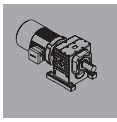
ZG94																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
3100	23,47	30,56	46,94	61,12	6	3086,81										
3100	23,47	30,56	46,94	61,12	6	2750,07										
3100	24,11	31,39	48,21	62,78	6	2474,55										
3100	24,11	31,39	48,21	62,78	6	2291,72										
3100	26,42	34,40	52,84	68,80	6	2093,85										
3100	26,45	34,44	52,91	68,89	6	1785,76										
3100	26,07	33,95	52,15	67,90	6	1613,56										
3100	25,96	33,80	51,92	67,60	6	1467,85										
3100	22,89	29,80	45,77	59,60	6	1342,96										
3100	22,89	29,80	45,77	59,60	6	1262,79										
3100	22,89	29,80	45,77	59,60	6	1144,06										
3100	23,64	30,78	47,28	61,56	6	1005,55										
3100	23,64	30,78	47,28	61,56	6	876,93										
3100	23,64	30,78	47,28	61,56	6	808,84										
3100	21,95	28,58	43,90	57,17	6	748,32										
3100	21,95	28,58	43,90	57,17	6	645,42										
3100	21,95	28,58	43,90	57,17	6	615,20										
3100	21,20	27,60	42,39	55,20	6	551,22										
3100	21,20	27,60	42,39	55,20	6	470,72										
3100	21,20	27,60	42,39	55,20	6	404,42										
3100	21,06	27,42	42,12	54,85	6	348,88										
3100	20,97	27,30	41,93	54,60	6	287,46										

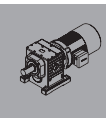




ZG93																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
3100	23,58	30,70	47,16	61,40	6	376,28										
3100	23,58	30,70	47,16	61,40	6	342,00										
3100	23,58	30,70	47,16	61,40	6	313,00										
3100	24,27	31,60	48,54	63,20	6	288,14										
3100	27,49	35,80	54,99	71,60	6	263,08										
3100	27,49	35,80	54,99	71,60	6	240,15										
3100	27,90	36,33	55,80	72,65	6	216,31										
3100	27,78	36,17	55,55	72,33	6	188,54										
3100	24,49	31,89	48,98	63,77	6	177,45										
3100	24,49	31,89	48,98	63,77	6	163,69										
3100	24,49	31,89	48,98	63,77	6	147,33										
3100	25,29	32,94	50,59	65,87	6	132,51										
3100	25,29	32,94	50,59	65,87	6	123,69										
3100	25,29	32,94	50,59	65,87	6	108,57										
3100	23,49	30,58	46,98	61,17	6	96,08										
3100	23,49	30,58	46,98	61,17	6	80,95										
3100	23,49	30,58	46,98	61,17	6	68,95										
3100	22,68	29,53	45,36	59,06	6	59,19										
3100	22,68	29,53	45,36	59,06	6	51,11										
3100	22,68	29,53	45,36	59,06	6	44,31										
3100	22,54	29,34	45,07	58,69	6	36,75										

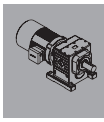
ZG92																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		80	90	100	112	132	160	180	200	225	250
3100	24,33	31,60	48,66	63,20	7	70,09										
3100	24,33	31,60	48,66	63,20	7	62,62										
3100	24,99	32,45	49,98	64,90	7	52,76										
3100	24,99	32,45	49,98	64,90	7	48,24										
3100	28,01	36,37	56,01	72,74	7	43,19										
3100	27,42	35,61	54,84	71,22	7	38,73										
3100	27,03	35,10	54,05	70,20	7	35,01										
3100	26,26	34,10	52,51	68,20	7	31,86										
3100	26,26	34,10	52,51	68,20	7	29,16										
3100	26,26	34,10	52,51	68,20	7	24,78										
3081	26,26	34,10	52,51	68,20	7	22,97										
3040	24,50	31,82	49,01	63,65	7	21,37										
2905	24,50	31,82	49,01	63,65	7	18,64										
2790	24,50	31,82	49,01	63,65	7	16,41										
2680	22,75	29,55	45,51	59,10	7	14,55										
2596	22,75	29,55	45,51	59,10	7	12,97										
2520	22,75	29,55	45,51	59,10	7	11,62										
2428	21,88	28,41	43,76	56,83	7	10,45										
2370	21,88	28,41	43,76	56,83	8	9,92										
2250	21,83	28,35	43,66	56,71	8	8,53										
2150	21,83	28,35	43,66	56,71	8	7,36										
2020	27,15	35,26	54,30	70,52	8	6,36										
1246	27,15	35,26	54,30	70,52	7	29,12										
1528	27,15	35,26	54,30	70,52	7	26,02										
1831	25,36	32,94	50,73	65,88	7	21,92										
1944	25,36	32,94	50,73	65,88	7	20,04										
2071	25,36	32,94	50,73	65,88	7	17,95										
2305	24,42	31,72	48,85	63,44	7	16,09										
2501	24,42	31,72	48,85	63,44	7	14,55										
2629	24,42	31,72	48,85	63,44	7	13,24										
2770	23,67	30,74	47,35	61,49	7	12,12										
2855	23,67	30,74	47,35	61,49	7	10,29										
2855	22,83	29,65	45,65	59,29	7	9,54										
2818	22,83	29,65	45,65	59,29	8	8,88										
2767	22,08	28,67	44,15	57,34	8	7,74										
2702	22,08	28,67	44,15	57,34	8	6,82										
2618	21,61	28,06	43,21	56,12	8	6,04										
2554	21,61	28,06	43,21	56,12	8	5,39										
2473	20,71	26,90	41,43	53,80	8	4,83										
2400	20,48	26,60	40,96	53,19	8	4,34										
2352	20,48	26,60	40,96	53,19	8	4,12										
2151	20,48	26,60	40,96	53,19	8	3,54										
1868	20,48	26,60	40,96	53,19	8	3,06										
1625	20,48	26,60	40,96	53,19	8	2,64										

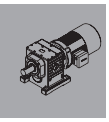




ZG104																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
4900	26,04	32,55	52,07	65,09	5	2893,14										
4900	26,04	32,55	52,07	65,09	5	2577,53										
4900	26,74	33,43	53,48	66,85	5	2319,30										
4900	26,74	33,43	53,48	66,85	5	2147,94										
4900	29,97	37,46	59,94	74,92	5	1962,48										
4900	29,34	36,68	58,69	73,36	5	1673,72										
4900	28,92	36,15	57,84	72,30	5	1512,32										
4900	28,10	35,12	56,19	70,24	5	1375,76										
4900	28,10	35,12	56,19	70,24	5	1258,71										
4900	28,10	35,12	56,19	70,24	5	1183,56										
4900	28,10	35,12	56,19	70,24	5	1072,28										
4900	26,22	32,78	52,45	65,56	5	942,46										
4900	26,22	32,78	52,45	65,56	5	821,92										
4900	26,22	32,78	52,45	65,56	5	758,10										
4900	24,35	30,44	48,70	60,88	5	701,37										
4900	24,35	30,44	48,70	60,88	5	604,93										
4900	24,35	30,44	48,70	60,88	5	576,61										
4900	23,41	29,27	46,83	58,53	5	516,63										
4900	23,41	29,27	46,83	58,53	5	441,18										
4900	23,36	29,20	46,73	58,41	5	379,05										
4900	23,36	29,20	46,73	58,41	5	326,99										
4900	25,20	31,50	50,40	63,00	5	269,43										

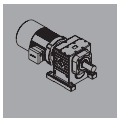
ZG103																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
4900	27,59	33,85	55,17	67,70	5	352,68										
4900	27,59	33,85	55,17	67,70	5	320,55										
4900	28,33	34,76	56,66	69,53	5	293,36										
4900	28,33	34,76	56,66	69,53	5	270,06										
4900	31,75	38,96	63,51	77,92	5	246,57										
4900	31,09	38,15	62,18	76,29	5	225,08										
4900	30,64	37,60	61,29	75,20	5	202,74										
4900	29,77	36,53	59,54	73,05	5	176,71										
4900	29,77	36,53	59,54	73,05	5	166,32										
4900	29,77	36,53	59,54	73,05	5	153,42										
4900	29,77	36,53	59,54	73,05	5	138,08										
4900	27,78	34,09	55,57	68,18	5	124,20										
4900	27,78	34,09	55,57	68,18	5	115,93										
4900	27,78	34,09	55,57	68,18	5	101,76										
4900	25,80	31,66	51,60	63,31	5	90,05										
4900	25,80	31,66	51,60	63,31	5	75,87										
4900	25,80	31,66	51,60	63,31	5	64,62										
4900	24,81	30,44	49,61	60,88	5	55,48										
4900	24,81	30,44	49,61	60,88	5	47,91										
4900	24,75	30,37	49,51	60,74	5	41,53										
4900	24,75	30,37	49,51	60,74	5	34,44										





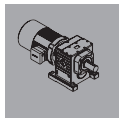
ZG102																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		71	80	90	100	112	132	160	180	200	225
4900	31,60	40,62	63,20	81,23	6	65,69										
4900	31,60	40,62	63,20	81,23	6	58,69										
4900	32,45	41,72	64,91	83,43	6	49,45										
4900	32,45	41,72	64,91	83,43	6	45,22										
4900	36,37	46,75	72,75	93,51	6	40,48										
4900	35,61	45,78	71,23	91,55	6	36,30										
4900	35,10	45,12	70,20	90,24	6	32,81										
4900	34,10	43,83	68,20	87,66	6	29,86										
4900	34,10	43,83	68,20	87,66	6	27,33										
4900	34,10	43,83	68,20	87,66	6	23,22										
4900	34,10	43,83	68,20	87,66	6	21,53										
4900	31,83	40,91	63,65	81,82	6	20,03										
4618	31,83	40,91	63,65	81,82	6	17,47										
4540	31,83	40,91	63,65	81,82	6	15,38										
4470	29,55	37,99	59,11	75,97	6	13,63										
4413	29,55	37,99	59,11	75,97	6	12,16										
4350	29,55	37,99	59,11	75,97	6	10,89										
4280	28,42	36,53	56,83	73,05	7	9,80										
4227	28,42	36,53	56,83	73,05	7	9,30										
4135	28,35	36,45	56,71	72,89	7	7,99										
4036	28,35	36,45	56,71	72,89	7	6,89										
3937	28,01	36,00	56,02	72,00	7	5,96										
2360	28,01	36,00	56,02	72,00	7	28,77										
2524	34,23	44,00	68,46	88,00	7	25,70										
3119	34,85	44,80	69,71	89,60	7	21,65										
3540	38,34	49,28	76,68	98,56	7	19,80										
3877	34,51	44,35	69,01	88,70	7	17,73										
4126	31,06	39,92	62,11	79,83	7	15,90										
4365	27,95	35,93	55,90	71,85	7	14,37										
4410	25,15	32,33	50,31	64,67	7	13,08										
4465	22,64	29,10	45,28	58,20	7	11,97										
4434	20,38	26,19	40,75	52,38	7	10,17										
4400	18,34	23,57	36,68	47,14	7	9,43										
4352	16,50	21,21	33,01	42,43	7	8,77										
4268	14,85	19,09	29,71	38,18	7	7,65										
4082	14,39	18,50	28,79	37,00	7	6,73										
3777	14,08	18,10	28,16	36,20	7	5,97										
3371	13,93	17,90	27,85	35,80	7	5,32										
3021	13,23	17,00	26,45	34,00	7	4,77										
2721	12,68	16,30	25,36	32,60	7	4,29										
2585	11,98	15,40	23,96	30,80	7	4,07										
2222	11,51	14,80	23,03	29,60	7	3,50										
1918	11,13	14,30	22,25	28,60	7	3,02										
1659	10,43	13,40	20,85	26,80	7	2,61										

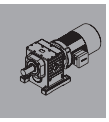
ZG114																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
7952	35,03	46,71	*	*	5	3168,00										
8126	35,03	46,71	*	*	5	2822,40										
8196	35,98	47,97	*	*	5	2539,64										
8200	35,98	47,97	*	*	5	2352,00										
8200	40,32	53,77	*	*	5	2148,92										
8200	39,48	52,64	*	*	5	1832,73										
8200	38,91	51,89	*	*	5	1656,00										
8200	37,80	50,41	*	*	5	1506,46										
8200	37,80	50,41	*	*	5	1378,29										
8200	37,80	50,41	*	*	5	1296,00										
8200	37,80	50,41	*	*	5	1174,15										
8200	35,28	47,04	*	*	5	1032,00										
8200	35,28	47,04	*	*	5	900,00										
8200	35,28	47,04	*	*	5	830,12										
8200	32,76	43,68	*	*	5	768,00										
8200	32,76	43,68	*	*	5	662,40										
8200	32,76	43,68	*	*	5	631,38										
8200	31,50	42,00	*	*	5	565,71										
8200	31,50	42,00	*	*	5	483,10										
8200	31,43	41,91	*	*	5	415,06										
8200	31,43	41,91	*	*	5	358,05										
8200	31,05	41,40	*	*	5	295,02										



ZG113																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
8200	39,05	51,38	*	*	5	329,85										
8200	39,05	51,38	*	*	5	282,67										
8200	40,10	52,77	*	*	5	258,46										
8200	40,10	52,77	*	*	5	229,33										
8200	44,95	59,14	*	*	5	204,00										
8200	44,01	57,91	*	*	5	192,00										
8200	43,38	57,07	*	*	5	174,77										
8200	42,14	55,45	*	*	5	156,80										
8200	42,14	55,45	*	*	5	142,22										
8200	42,14	55,45	*	*	5	131,37										
8200	42,14	55,45	*	*	5	115,81										
8200	39,33	51,75	*	*	5	102,96										
8200	39,33	51,75	*	*	5	91,64										
8200	39,33	51,75	*	*	5	87,38										
8200	36,52	48,05	*	*	5	75,03										
8200	36,52	48,05	*	*	5	65,00										
8200	36,52	48,05	*	*	5	58,51										
8200	35,12	46,20	*	*	5	49,68										
8200	35,12	46,20	*	*	5	41,90										
8200	35,04	46,10	*	*	5	36,87										
8200	35,04	46,10	*	*	5	32,67										

ZG112																
Mt_{2max}	$(F_r=0)$ F_a	$(F_a=0)$ F_r	$(F_{rp}=0)$ F_{ap}	$(F_{ap}=0)$ F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		80	90	100	112	132	160	180	200	225	250
5920	43,61	54,51	*	*	6	63,50										
6920	43,61	54,51	*	*	6	58,15										
7413	44,79	55,98	*	*	6	52,20										
7890	44,79	55,98	*	*	6	46,91										
7992	46,64	58,30	*	*	6	42,50										
8050	46,64	58,30	*	*	6	38,77										
8160	47,60	59,50	*	*	6	35,57										
8200	47,06	58,82	*	*	6	30,38										
8200	47,06	58,82	*	*	6	28,24										
8200	47,06	58,82	*	*	6	26,33										
8200	47,06	58,82	*	*	6	23,10										
8200	43,92	54,90	*	*	6	20,45										
8200	43,92	54,90	*	*	6	18,25										
8200	43,92	54,90	*	*	6	16,38										
8160	40,78	50,98	*	*	6	14,79										
8100	40,78	50,98	*	*	6	13,40										
8000	40,78	50,98	*	*	6	12,77										
7376	39,21	49,02	*	*	6	11,12										
6537	39,21	49,02	*	*	7	9,73										
5814	39,13	48,91	*	*	7	8,55										
4992	39,13	48,91	*	*	7	7,23										
4295	38,65	48,31	*	*	7	6,13										
3637	38,65	48,31	*	*	7	38,81										
4248	47,24	59,05	*	*	7	35,54										
4550	48,10	60,12	*	*	7	31,90										
5205	52,91	66,13	*	*	7	28,67										
5720	47,62	59,52	*	*	7	25,97										
6203	42,85	53,57	*	*	7	23,69										
6516	38,57	48,21	*	*	7	21,74										
6764	34,71	43,39	*	*	7	18,56										
6777	31,24	39,05	*	*	7	17,25										
6794	28,12	35,15	*	*	7	16,09										
6777	25,31	31,63	*	*	7	14,12										
6722	22,77	28,47	*	*	7	12,50										
6606	20,50	25,62	*	*	6	11,15										
6425	19,86	24,83	*	*	6	10,01										
5890	19,43	24,29	*	*	6	9,04										
5470	19,44	24,30	*	*	6	8,19										
5250	19,44	24,30	*	*	6	7,81										
4645	19,44	24,30	*	*	6	6,79										
4081	19,12	23,90	*	*	6	5,95										
3601	19,12	23,90	*	*	6	5,23										
3063	19,92	24,90	*	*	6	4,42										
2601	20,72	25,90	*	*	6	3,74										





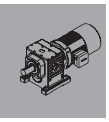
ZG124																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
13500	59,56	67,73	*	*	5	1547,69										
13500	59,56	67,73	*	*	5	1406,69										
13500	61,16	69,56	*	*	5	1287,38										
13500	61,16	69,56	*	*	5	1185,12										
13500	68,55	77,96	*	*	5	1082,07										
13500	67,12	76,33	*	*	5	987,73										
13500	66,15	75,23	*	*	5	889,70										
13500	64,27	73,09	*	*	5	775,48										
13500	64,27	73,09	*	*	5	729,87										
13500	64,27	73,09	*	*	5	673,29										
13500	64,27	73,09	*	*	5	605,96										
13500	59,98	68,22	*	*	5	545,04										
13500	59,98	68,22	*	*	5	508,76										
13500	59,98	68,22	*	*	5	446,57										
13500	55,70	63,34	*	*	5	395,19										
13500	55,00	63,00	*	*	5	332,94										
13500	54,80	62,80	*	*	5	283,58										
13500	54,50	62,50	*	*	5	243,47										
13500	54,00	62,40	*	*	5	210,23										
13500	54,00	62,00	*	*	5	182,24										
13500	53,80	60,00	*	*	5	151,15										

ZG123

Mt_{2max} [Nm]	(F_r=0) F_a [kN]	(F_a=0) F_r [kN]	(F_{rp}=0) F_{ap} [kN]	(F_{ap}=0) F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR									
							80	90	100	112	132	160	180	200	225	250
13500	66,38	60,16	*	*	6	288,28										
13500	68,18	60,16	*	*	6	257,55										
13500	68,18	67,42	*	*	6	216,99										
13500	76,41	66,01	*	*	6	198,43										
13500	74,82	65,06	*	*	6	177,65										
13500	73,74	63,21	*	*	6	159,29										
13500	71,64	63,21	*	*	6	143,99										
13500	71,64	63,21	*	*	6	131,04										
13500	71,64	63,21	*	*	6	119,94										
13500	71,64	58,99	*	*	6	101,91										
13500	66,86	58,99	*	*	6	94,48										
13500	66,86	58,99	*	*	6	87,88										
13500	66,86	54,78	*	*	6	76,66										
13500	62,08	54,78	*	*	6	67,48										
13410	62,08	54,78	*	*	6	59,83										
13331	62,08	52,67	*	*	6	53,35										
13199	59,70	52,67	*	*	6	47,80										
13000	59,70	52,56	*	*	6	42,99										
12752	59,57	52,56	*	*	6	40,82										
12200	59,57	52,40	*	*	6	35,07										
11756	59,40	52,10	*	*	6	30,26										
11096	59,20	51,80	*	*	6	26,16										

ZG122

Mt_{2max} [Nm]	(F_r=0) F_a [kN]	(F_a=0) F_r [kN]	(F_{rp}=0) F_{ap} [kN]	(F_{ap}=0) F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR									
							100	112	132	160	180	200	225	250	280	315
13500	67,59	70,86	*	*	7	36,23										
13500	67,59	70,86	*	*	7	31,02										
13500	69,42	72,78	*	*	7	28,88										
13000	69,42	72,78	*	*	7	26,97										
12380	72,29	75,79	*	*	7	23,73										
12190	72,29	75,79	*	*	7	21,07										
12000	73,78	77,35	*	*	7	18,86										
11857	72,94	76,47	*	*	7	16,99										
11710	72,94	76,47	*	*	7	15,39										
11522	72,94	76,47	*	*	7	14,00										
11439	72,94	76,47	*	*	7	13,37										
11228	68,08	71,37	*	*	7	11,71										
11002	68,08	71,37	*	*	7	10,32										
9741	68,08	71,37	*	*	7	9,14										
8326	63,21	66,27	*	*	7	7,81										
7148	63,21	66,27	*	*	7	6,70										
6151	63,21	66,27	*	*	7	5,77										



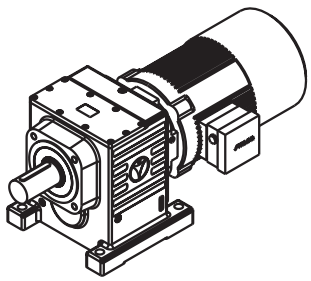
ZG134																
Mt_{2max}	(F_r=0) F_a	(F_a=0) F_r	(F_{rp}=0) F_{ap}	(F_{ap}=0) F_{rp}	j_t	i	IEC/SMB/SMR									
[Nm]	[kN]	[kN]	[kN]	[kN]	[']		63	71	80	90	100	112	132	160	180	200
20000	101,24	91,43	*	*	5	1536,94										
20000	101,24	91,43	*	*	5	1396,92										
20000	103,98	93,91	*	*	5	1278,44										
20000	103,98	93,91	*	*	5	1176,89										
20000	108,50	105,25	*	*	5	1074,55										
20000	107,10	103,05	*	*	5	980,87										
20000	106,50	101,57	*	*	5	883,52										
20000	104,10	98,67	*	*	5	770,10										
20000	104,00	98,67	*	*	5	724,80										
20000	103,80	98,67	*	*	5	668,61										
20000	103,50	98,67	*	*	5	601,75										
20000	101,97	92,09	*	*	5	541,26										
20000	101,97	92,09	*	*	5	505,23										
20000	101,97	92,09	*	*	5	443,47										
20000	94,69	85,51	*	*	5	392,45										
20000	93,50	85,05	*	*	5	330,63										
20000	93,16	84,78	*	*	5	281,61										
20000	92,65	84,38	*	*	5	241,77										
20000	91,80	84,24	*	*	5	208,77										
20000	91,80	83,70	*	*	5	180,98										
20000	91,46	81,00	*	*	5	150,10										

ZG133

Mt_{2max} [Nm]	$(F_r=0)$ F_a [kN]	$(F_a=0)$ F_r [kN]	$(F_{rp}=0)$ F_{ap} [kN]	$(F_{ap}=0)$ F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR									
							90	100	112	132	160	180	200	225	250	280
20000	96,26	84,22	*	*	6	286,28										
20000	98,86	84,22	*	*	6	255,76										
20000	98,86	94,39	*	*	6	215,49										
20000	102,80	92,42	*	*	6	197,05										
20000	98,50	91,09	*	*	6	176,42										
20000	97,90	88,49	*	*	6	158,18										
20000	97,90	88,49	*	*	6	142,99										
20000	97,90	88,49	*	*	6	130,13										
20000	97,90	88,49	*	*	6	119,11										
20000	97,90	82,59	*	*	6	101,20										
20000	96,95	82,59	*	*	6	93,82										
19783	96,95	82,59	*	*	6	87,27										
19512	96,95	76,69	*	*	6	76,13										
19200	90,02	76,69	*	*	6	67,01										
18860	90,02	76,69	*	*	6	59,41										
18550	90,02	73,74	*	*	6	52,98										
18300	86,56	73,74	*	*	6	47,47										
18010	86,56	73,58	*	*	6	42,69										
17880	86,37	73,58	*	*	6	40,54										
17530	86,37	73,36	*	*	6	34,83										
17150	86,13	72,94	*	*	6	30,05										
16802	85,84	72,52	*	*	6	25,98										

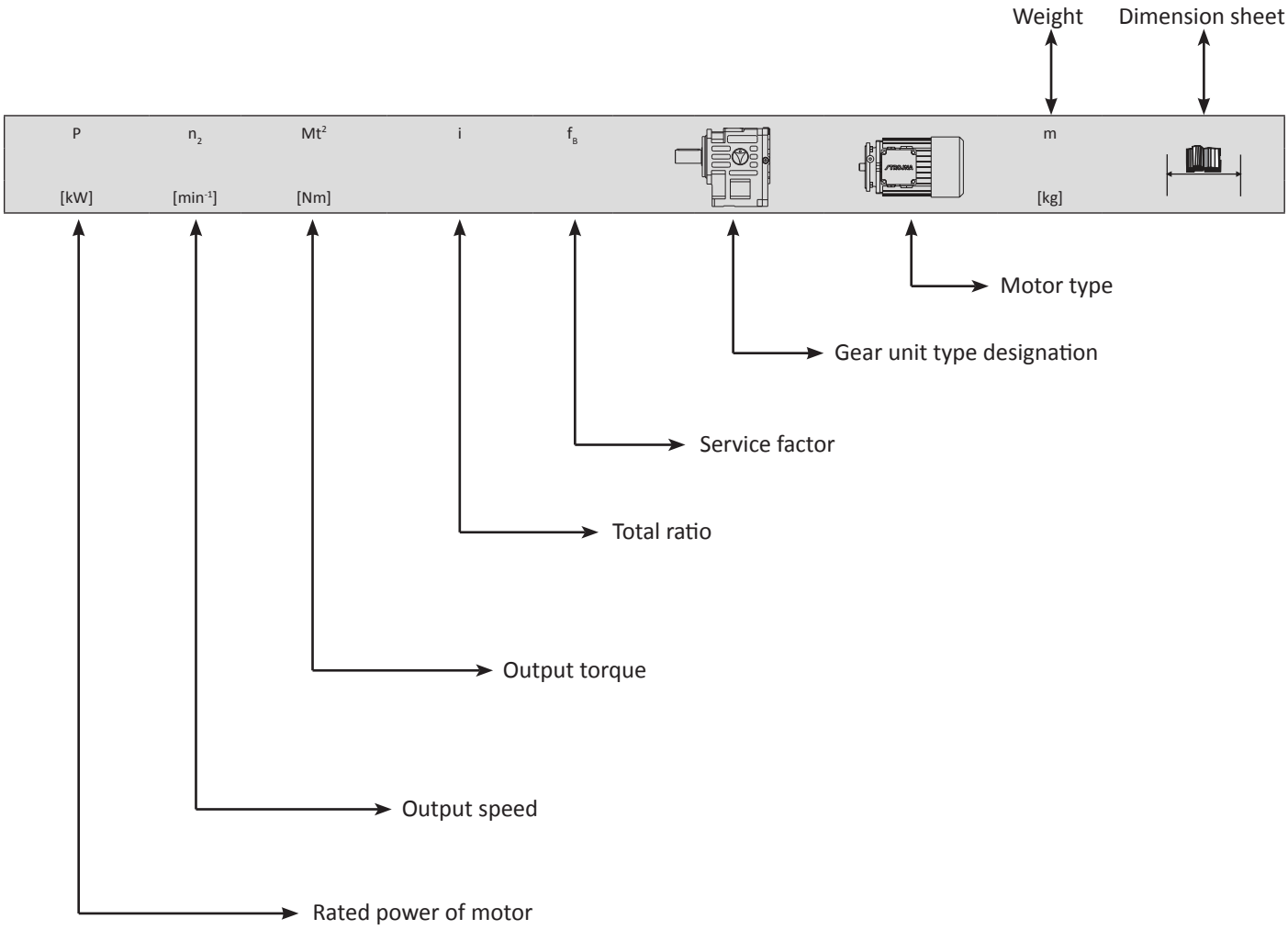
ZG132

Mt_{2max} [Nm]	$(F_r=0)$ F_a [kN]	$(F_a=0)$ F_r [kN]	$(F_{rp}=0)$ F_{ap} [kN]	$(F_{ap}=0)$ F_{rp} [kN]	j_t [']	i	IEC/SMB/SMR									
							100	112	132	160	180	200	225	250	280	315
17426	91,25	88,58	*	*	7	35,98										
16813	91,25	88,58	*	*	7	30,81										
16431	93,71	90,97	*	*	7	28,68										
16060	93,71	90,97	*	*	7	26,78										
15807	97,59	94,74	*	*	7	23,56										
15491	97,59	94,74	*	*	7	20,93										
15314	99,60	96,69	*	*	7	18,73										
14992	98,47	95,58	*	*	7	16,88										
14652	98,47	95,58	*	*	7	15,28										
14421	98,47	95,58	*	*	7	13,90										
14359	98,47	95,58	*	*	7	13,28										
14159	91,90	89,21	*	*	7	11,63										
13693	91,90	89,21	*	*	7	10,25										
13447	91,90	89,21	*	*	7	9,07										
13234	85,34	82,84	*	*	7	7,76										
13123	85,34	82,84	*	*	7	6,66										
12822	85,34	82,84	*	*	7	5,73										

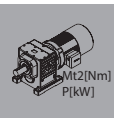


ZG

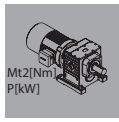
HELICAL GEAR UNITS



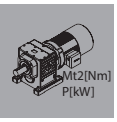
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,12	0,41	2578	3168,00	3,08	ZG114	SMB	63A4		
	0,46	2298	2822,40	3,54	ZG114	SMB	63A4		
	0,52	2033	2539,64	4,03	ZG114	SMB	63A4		
	0,56	1888	2352,00	4,34	ZG114	SMB	63A4		
	0,61	1733	2148,92	4,73	ZG114	SMB	63A4		
	0,71	1489	1832,73	5,51	ZG114	SMB	63A4		
	0,79	1338	1656,00	6,13	ZG114	SMB	63A4		
	0,87	1215	1506,46	6,75	ZG114	SMB	63A4	344	318
	0,95	1113	1378,29	7,37	ZG114	SMB	63A4		
	1,00	1057	1296,00	7,76	ZG114	SMB	63A4		
	1,10	961	1174,15	8,53	ZG114	SMB	63A4		
	1,30	813	1032,00	10,08	ZG114	SMB	63A4		
	1,50	705	900,00	11,64	ZG114	SMR	63A4		
	1,60	661	830,12	12,41	ZG114	SMR	63A4		
	1,70	622	768,00	13,19	ZG114	SMR	63A4		
	0,45	2349	2893,14	2,09	ZG104	SMB	63A4		
	0,51	2073	2577,53	2,36	ZG104	SMB	63A4		
	0,56	1888	2319,30	2,60	ZG104	SMB	63A4		
	0,61	1733	2147,94	2,83	ZG104	SMB	63A4		
	0,67	1578	1962,48	3,11	ZG104	SMB	63A4		
	0,78	1355	1673,72	3,62	ZG104	SMB	63A4		
	0,87	1215	1512,32	4,03	ZG104	SMB	63A4		
	0,95	1113	1375,76	4,40	ZG104	SMB	63A4		
	1,00	1057	1258,71	4,64	ZG104	SMB	63A4		
	1,10	961	1183,56	5,10	ZG104	SMB	63A4	229	312
	1,20	881	1072,28	5,56	ZG104	SMB	63A4		
	1,40	755	942,46	6,49	ZG104	SMB	63A4		
	1,60	661	821,92	7,42	ZG104	SMR	63A4		
	1,70	622	758,10	7,88	ZG104	SMR	63A4		
	1,90	556	701,37	8,81	ZG104	SMR	63A4		
	2,20	480	604,93	10,20	ZG104	SMR	63A4		
	2,30	460	576,61	10,66	ZG104	SMR	63A4		
	2,50	423	516,63	11,59	ZG104	SMR	63A4		
	3,00	352	441,18	13,91	ZG104	SMR	63A4		
	0,42	2517	3086,81	1,23	ZG94	SMB	63A4		
	0,48	2202	2750,07	1,41	ZG94	SMB	63A4		
	0,53	1994	2474,55	1,55	ZG94	SMB	63A4		
	0,57	1854	2291,72	1,67	ZG94	SMB	63A4		
	0,63	1678	2093,85	1,85	ZG94	SMB	63A4		
	0,73	1448	1785,76	2,14	ZG94	SMB	63A4		
	0,81	1305	1613,56	2,38	ZG94	SMB	63A4	166	306
	0,89	1188	1467,85	2,61	ZG94	SMB	63A4		
	0,98	1079	1342,96	2,87	ZG94	SMB	63A4		
	1,00	1057	1262,79	2,93	ZG94	SMB	63A4		
	1,10	961	1144,06	3,23	ZG94	SMB	63A4		
	1,30	813	1005,55	3,81	ZG94	SMB	63A4		
	1,50	705	876,93	4,40	ZG94	SMR	63A4		
	0,56	1888	2333,83	1,01	ZG84	SMB	63A4	71	301



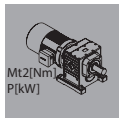
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,12	0,61	1733	2148,87	1,10	ZG84	SMB	63A4		
	0,67	1578	1944,86	1,20	ZG84	SMB	63A4		
	0,76	1391	1726,21	1,37	ZG84	SMB	63A4		
	0,88	1201	1496,05	1,58	ZG84	SMB	63A4		
	0,97	1090	1346,44	1,74	ZG84	SMB	63A4		
	1,10	961	1219,85	1,98	ZG84	SMB	63A4		
	1,20	881	1111,35	2,16	ZG84	SMB	63A4	71	301
	1,30	813	997,36	2,34	ZG84	SMB	63A4		
	1,40	755	943,66	2,52	ZG84	SMB	63A4		
	1,60	661	822,83	2,88	ZG84	SMB	63A4		
	1,80	587	710,62	3,24	ZG84	SMR	63A4		
	2,10	503	633,62	3,77	ZG84	SMR	63A4		
	2,30	460	565,17	4,13	ZG84	SMR	63A4		
	2,10	514	621,00	3,70	ZG83	SMB	63A4	69	300
	2,40	449	553,25	4,23	ZG83	SMB	63A4		
	0,72	1468	1812,60	0,99	ZG74	SMB	63A4		
	0,81	1305	1608,82	1,11	ZG74	SMB	63A4		
	0,94	1125	1394,31	1,29	ZG74	SMB	63A4		
	1,00	1057	1254,88	1,37	ZG74	SMB	63A4		
	1,20	881	1136,90	1,65	ZG74	SMB	63A4		
	1,30	813	1035,77	1,78	ZG74	SMB	63A4		
	1,40	755	929,54	1,92	ZG74	SMB	63A4	61	298
	1,50	705	879,49	2,06	ZG74	SMB	63A4		
	1,70	622	766,87	2,33	ZG74	SMB	63A4		
	2,00	529	662,30	2,74	ZG74	SMR	63A4		
	2,20	480	590,53	3,02	ZG74	SMR	63A4		
	2,50	423	526,74	3,43	ZG74	SMR	63A4		
	2,80	378	474,06	3,84	ZG74	SMR	63A4		
	3,00	352	439,74	4,12	ZG74	SMR	63A4		
	2,30	469	578,77	3,09	ZG73	SMB	63A4		
	2,50	431	515,63	3,36	ZG73	SMB	63A4		
	2,80	385	463,97	3,76	ZG73	SMB	63A4	59	297
	3,00	360	429,69	4,03	ZG73	SMB	63A4		
	3,30	327	392,59	4,44	ZG73	SMB	63A4		
	1,40	755	958,04	1,09	ZG64	SMB	63A4		
	1,50	705	859,78	1,16	ZG64	SMB	63A4		
	1,60	661	813,48	1,24	ZG64	SMB	63A4		
	1,80	587	709,32	1,40	ZG64	SMB	63A4		
	2,10	503	612,59	1,63	ZG64	SMR	63A4		
	2,40	440	546,21	1,86	ZG64	SMR	63A4	43	295
	2,70	391	487,21	2,09	ZG64	SMR	63A4		
	3,00	352	438,49	2,33	ZG64	SMR	63A4		
	3,20	330	406,74	2,48	ZG64	SMR	63A4		
	3,70	286	350,05	2,87	ZG64	SMR	63A4		
	4,50	235	291,22	3,49	ZG64	SMR	63A4		
	5,10	207	257,93	3,96	ZG64	SMR	63A4		
	2,40	449	535,33	1,82	ZG63	SMB	63A4	40	294
	2,70	399	476,93	2,05	ZG63	SMB	63A4		



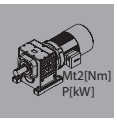
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,12	3,10	348	429,15	2,36	ZG63	SMB	63A4		
	3,30	327	397,44	2,51	ZG63	SMB	63A4		
	3,60	300	363,13	2,74	ZG63	SMB	63A4		
	4,20	257	309,70	3,19	ZG63	SMB	63A4	40	294
	4,70	229	279,83	3,57	ZG63	SMB	63A4		
	5,10	211	254,56	3,88	ZG63	SMB	63A4		
	5,60	193	232,90	4,26	ZG63	SMB	63A4		
	2,70	399	478,75	1,38	ZG53	SMB	63A4		
	3,10	348	425,43	1,58	ZG53	SMB	63A4		
	3,30	327	391,71	1,68	ZG53	SMB	63A4		
	3,70	292	354,52	1,89	ZG53	SMB	63A4		
	4,20	257	314,66	2,14	ZG53	SMB	63A4		
	4,80	225	272,71	2,45	ZG53	SMB	63A4	34	292
	5,30	204	245,44	2,70	ZG53	SMB	63A4		
	5,90	183	222,36	3,01	ZG53	SMB	63A4		
	6,50	166	202,58	3,31	ZG53	SMB	63A4		
	7,20	150	181,81	3,67	ZG53	SMB	63A4		
	7,60	142	172,02	3,88	ZG53	SMB	63A4		
	8,70	124	149,99	4,44	ZG53	SMB	63A4		
	2,80	385	468,02	1,09	ZG43	SMB	63A4		
	3,10	348	415,88	1,21	ZG43	SMB	63A4		
	3,40	317	382,92	1,32	ZG43	SMB	63A4		
	3,80	284	346,57	1,48	ZG43	SMB	63A4		
	4,30	251	307,60	1,67	ZG43	SMB	63A4		
	4,90	220	266,59	1,91	ZG43	SMB	63A4		
	5,50	196	239,93	2,14	ZG43	SMB	63A4	26	290
	6,00	180	217,37	2,34	ZG43	SMB	63A4		
	6,60	163	198,04	2,57	ZG43	SMB	63A4		
	7,40	146	177,73	2,88	ZG43	SMB	63A4		
	7,80	138	168,16	3,04	ZG43	SMB	63A4		
	8,90	121	146,63	3,47	ZG43	SMB	63A4		
	10,00	108	126,63	3,89	ZG43	SMR	63A4		
	3,90	277	338,34	1,01	ZG33	SMB	63A4		
	4,40	245	300,65	1,14	ZG33	SMB	63A4		
	4,70	229	276,83	1,22	ZG33	SMB	63A4		
	5,20	207	250,55	1,35	ZG33	SMB	63A4		
	5,90	183	222,38	1,53	ZG33	SMB	63A4		
	6,80	159	192,73	1,77	ZG33	SMB	63A4		
	7,60	142	173,45	1,97	ZG33	SMB	63A4	23	288
	8,30	130	157,15	2,15	ZG33	SMB	63A4		
	9,20	117	143,17	2,39	ZG33	SMB	63A4		
	10,00	108	128,48	2,60	ZG33	SMB	63A4		
	11,00	98	121,57	2,86	ZG33	SMB	63A4		
	12,00	90	106,00	3,12	ZG33	SMB	63A4		
	14,00	77	91,55	3,63	ZG33	SMR	63A4		
	16,00	67	81,63	4,15	ZG33	SMR	63A4		
	16,00	69	80,00	2,85	ZG32	SMB	63A4	21	286
	18,00	61	71,27	4,25	ZG32	SMB	63A4		



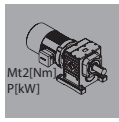
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,12	6,30	171	207,92	1,05		ZG23	SMB	63A4		
	7,30	148	180,20	1,22		ZG23	SMB	63A4		
	8,10	133	162,18	1,35		ZG23	SMB	63A4		
	8,90	121	146,93	1,49		ZG23	SMB	63A4		
	9,80	110	133,86	1,64		ZG23	SMB	63A4		
	11,00	98	120,13	1,84		ZG23	SMB	63A4		
	12,00	90	113,66	2,00		ZG23	SMB	63A4		
	13,00	83	99,11	2,17		ZG23	SMB	63A4	18	286
	15,00	72	85,60	2,50		ZG23	SMR	63A4		
	17,00	63	76,32	2,84		ZG23	SMR	63A4		
	19,00	57	68,08	3,17		ZG23	SMR	63A4		
	21,00	51	61,27	3,50		ZG23	SMR	63A4		
	23,00	47	56,83	3,84		ZG23	SMR	63A4		
	27,00	40	48,91	4,51		ZG23	SMR	63A4		
	32,00	34	40,69	5,34		ZG23	SMR	63A4		
	36,00	30	36,04	6,01		ZG23	SMR	63A4		
	18,00	61	74,80	2,94		ZG22	SMB	63A4		
	20,00	55	66,64	3,27		ZG22	SMB	63A4		
	22,00	50	59,96	3,60		ZG22	SMB	63A4		
	24,00	46	55,53	3,93		ZG22	SMB	63A4		
	26,00	42	50,74	4,25		ZG22	SMB	63A4		
	30,00	37	43,27	4,91		ZG22	SMB	63A4		
	34,00	32	39,10	5,56		ZG22	SMB	63A4		
	37,00	30	35,57	6,05		ZG22	SMB	63A4		
	40,00	28	32,54	6,54		ZG22	SMB	63A4		
	43,00	26	30,60	7,03		ZG22	SMB	63A4		
	47,00	23	27,72	7,69		ZG22	SMB	63A4		
	54,00	20	24,37	8,83		ZG22	SMB	63A4		
	62,00	18	21,25	10,14		ZG22	SMR	63A4		
	67,00	16	19,60	10,96		ZG22	SMR	63A4		
	72,00	15	18,13	11,71		ZG22	SMR	63A4	16	285
	84,00	13	15,64	12,90		ZG22	SMR	63A4		
	88,00	13	14,91	13,27		ZG22	SMR	63A4		
	98,00	11	13,36	14,60		ZG22	SMR	63A4		
	33,00	33	39,47	3,03		ZG22	SMB	63A4		
	37,00	30	35,16	4,74		ZG22	SMB	63A4		
	41,00	27	31,64	6,37		ZG22	SMB	63A4		
	45,00	24	29,30	7,28		ZG22	SMB	63A4		
	49,00	22	26,77	8,01		ZG22	SMB	63A4		
	57,00	19	22,83	9,32		ZG22	SMB	63A4		
	63,00	17	20,63	10,30		ZG22	SMB	63A4		
	70,00	16	18,77	11,45		ZG22	SMB	63A4		
	76,00	14	17,17	12,22		ZG22	SMB	63A4		
	81,00	14	16,15	12,81		ZG22	SMB	63A4		
	90,00	12	14,63	13,57		ZG22	SMB	63A4		
	102,00	11	12,86	14,83		ZG22	SMB	63A4		
	21,00	52	61,44	1,91		ZG12	SMB	63A4	12	284
	24,00	46	54,60	2,18		ZG12	SMB	63A4		



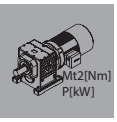
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B					m [kg]	
0,12	26,00	42	50,27	2,36		ZG12	SMB	63A4		
	29,00	38	45,50	2,63		ZG12	SMB	63A4		
	32,00	34	41,38	2,91		ZG12	SMB	63A4		
	36,00	31	36,77	3,27		ZG12	SMB	63A4		
	39,00	28	33,86	3,54		ZG12	SMB	63A4		
	43,00	26	30,64	3,91		ZG12	SMB	63A4		
	48,00	23	27,20	4,36		ZG12	SMB	63A4		
	56,00	20	23,57	5,09		ZG12	SMB	63A4		
	62,00	18	21,21	5,63		ZG12	SMB	63A4		
	68,00	16	19,22	5,93		ZG12	SMB	63A4		
	75,00	15	17,51	6,41		ZG12	SMB	63A4	12	284
	83,00	13	15,71	6,94		ZG12	SMB	63A4		
	88,00	13	14,87	7,04		ZG12	SMB	63A4		
	101,00	11	12,96	7,52		ZG12	SMB	63A4		
	117,00	9	11,20	8,19		ZG12	SMR	63A4		
	131,00	8	9,98	8,81		ZG12	SMR	63A4		
	147,00	7	8,90	9,48		ZG12	SMR	63A4		
	163,00	7	8,01	9,63		ZG12	SMR	63A4		
	176,00	6	7,43	9,75		ZG12	SMR	63A4		
	205,00	5	6,40	10,06		ZG12	SMR	63A4		
	246,00	4	5,32	10,73		ZG12	SMR	63A4		
	278,00	4	4,71	10,86		ZG12	SMR	63A4		
0,18	0,42	3775	3168,00	2,11		ZG114	SMB	63B4		
	0,47	3374	2822,40	2,41		ZG114	SMB	63B4		
	0,52	3049	2539,64	2,69		ZG114	SMB	63B4		
	0,57	2782	2352,00	2,95		ZG114	SMB	63B4		
	0,62	2557	2148,92	3,21		ZG114	SMB	63B4		
	0,73	2172	1832,73	3,78		ZG114	SMB	63B4		
	0,80	1982	1656,00	4,14		ZG114	SMB	63B4		
	0,88	1802	1506,46	4,55		ZG114	SMB	63B4		
	0,96	1652	1378,29	4,96		ZG114	SMB	63B4		
	1,00	1586	1296,00	5,17		ZG114	SMB	63B4	345	318
	1,10	1441	1174,15	5,69		ZG114	SMB	63B4		
	1,30	1220	1032,00	6,72		ZG114	SMB	63B4		
	1,50	1057	900,00	7,76		ZG114	SMR	63B4		
	1,60	991	830,12	8,27		ZG114	SMR	63B4		
	1,70	933	768,00	8,79		ZG114	SMR	63B4		
	2,00	793	662,40	10,34		ZG114	SMR	63B4		
	2,10	755	631,38	10,86		ZG114	SMR	63B4		
	2,40	661	565,71	12,41		ZG114	SMR	63B4		
	2,80	566	483,10	14,48		ZG114	SMR	63B4		
	0,46	3447	2893,14	1,42		ZG104	SMB	63B4		
	0,52	3049	2577,53	1,61		ZG104	SMB	63B4		
	0,57	2782	2319,30	1,76		ZG104	SMB	63B4		
	0,62	2557	2147,94	1,92		ZG104	SMB	63B4	230	312
	0,68	2332	1962,48	2,10		ZG104	SMB	63B4		
	0,79	2007	1673,72	2,44		ZG104	SMB	63B4		
	0,88	1802	1512,32	2,72		ZG104	SMB	63B4		



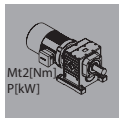
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,18	0,97	1635	1375,76	3,00	ZG104	SMB	63B4		
	1,10	1441	1258,71	3,40	ZG104	SMB	63B4		
	1,10	1441	1183,56	3,40	ZG104	SMB	63B4		
	1,20	1321	1072,28	3,71	ZG104	SMB	63B4		
	1,40	1133	942,46	4,33	ZG104	SMB	63B4		
	1,60	991	821,92	4,94	ZG104	SMR	63B4		
	1,80	881	758,10	5,56	ZG104	SMR	63B4		
	1,90	835	701,37	5,87	ZG104	SMR	63B4	230	312
	2,20	721	604,93	6,80	ZG104	SMR	63B4		
	2,30	689	576,61	7,11	ZG104	SMR	63B4		
	2,60	610	516,63	8,04	ZG104	SMR	63B4		
	3,00	529	441,18	9,27	ZG104	SMR	63B4		
	3,50	453	379,05	10,82	ZG104	SMR	63B4		
	4,10	387	326,99	12,67	ZG104	SMR	63B4		
	3,80	426	352,68	11,51	ZG103	SMB	63B4		
	4,10	395	320,55	12,42	ZG103	SMB	63B4		
	4,50	360	293,36	13,63	ZG103	SMB	63B4	227	310
	4,90	330	270,06	14,84	ZG103	SMB	63B4		
	0,54	2936	2474,55	1,06	ZG94	SMB	63B4		
	0,58	2734	2291,72	1,13	ZG94	SMB	63B4		
	0,64	2477	2093,85	1,25	ZG94	SMB	63B4		
	0,74	2143	1785,76	1,45	ZG94	SMB	63B4		
	0,82	1934	1613,56	1,60	ZG94	SMB	63B4		
	0,91	1742	1467,85	1,78	ZG94	SMB	63B4		
	0,99	1602	1342,96	1,94	ZG94	SMB	63B4		
	1,10	1441	1262,79	2,15	ZG94	SMB	63B4	167	302
	1,20	1321	1144,06	2,35	ZG94	SMB	63B4		
	1,30	1220	1005,55	2,54	ZG94	SMB	63B4		
	1,50	1057	876,93	2,93	ZG94	SMR	63B4		
	1,60	991	808,84	3,13	ZG94	SMR	63B4		
	1,80	881	748,32	3,52	ZG94	SMR	63B4		
	2,10	755	645,42	4,11	ZG94	SMR	63B4		
	2,20	721	615,20	4,30	ZG94	SMR	63B4		
	0,89	1782	1496,05	1,07	ZG84	SMB	63B4		
	0,99	1602	1346,44	1,19	ZG84	SMB	63B4		
	1,10	1441	1219,85	1,32	ZG84	SMB	63B4		
	1,20	1321	1111,35	1,44	ZG84	SMB	63B4		
	1,30	1220	997,36	1,56	ZG84	SMB	63B4		
	1,40	1133	943,66	1,68	ZG84	SMB	63B4		
	1,60	991	822,83	1,92	ZG84	SMB	63B4	72	301
	1,90	835	710,62	2,28	ZG84	SMR	63B4		
	2,10	755	633,62	2,52	ZG84	SMR	63B4		
	2,40	661	565,17	2,88	ZG84	SMR	63B4		
	2,60	610	508,66	3,12	ZG84	SMR	63B4		
	2,80	566	471,83	3,36	ZG84	SMR	63B4		
	3,30	480	406,07	3,95	ZG84	SMR	63B4		
	2,10	770	621,00	2,47	ZG83	SMB	63B4	70	300
	2,40	674	553,25	2,82	ZG83	SMB	63B4		



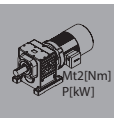
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,18	2,70	599	497,83	3,17		ZG83	SMB	63B4		
	2,90	558	461,05	3,41		ZG83	SMB	63B4	70	300
	3,20	506	421,24	3,76		ZG83	SMB	63B4		
	3,70	437	359,26	4,35		ZG83	SMB	63B4		
	1,10	1441	1254,88	1,01		ZG74	SMB	63B4		
	1,20	1321	1136,90	1,10		ZG74	SMB	63B4		
	1,30	1220	1035,77	1,19		ZG74	SMB	63B4		
	1,40	1133	929,54	1,28		ZG74	SMB	63B4		
	1,50	1057	879,49	1,37		ZG74	SMB	63B4		
	1,70	933	766,87	1,55		ZG74	SMB	63B4		
	2,00	793	662,30	1,83		ZG74	SMR	63B4		
	2,30	689	590,53	2,10		ZG74	SMR	63B4	62	298
	2,50	634	526,74	2,29		ZG74	SMR	63B4		
	2,80	566	474,06	2,56		ZG74	SMR	63B4		
	3,00	529	439,74	2,74		ZG74	SMR	63B4		
	3,50	453	378,45	3,20		ZG74	SMR	63B4		
	4,20	378	314,84	3,84		ZG74	SMR	63B4		
	4,80	330	278,86	4,39		ZG74	SMR	63B4		
	2,30	703	578,77	2,06		ZG73	SMB	63B4		
	2,60	622	515,63	2,33		ZG73	SMB	63B4		
	2,90	558	463,97	2,60		ZG73	SMB	63B4		
	3,10	522	429,69	2,78		ZG73	SMB	63B4		
	3,40	476	392,59	3,05		ZG73	SMB	63B4	60	297
	4,00	404	334,83	3,58		ZG73	SMB	63B4		
	4,40	368	302,54	3,94		ZG73	SMB	63B4		
	4,80	337	275,22	4,30		ZG73	SMB	63B4		
	1,90	835	709,32	0,98		ZG64	SMB	63B4		
	2,20	721	612,59	1,14		ZG64	SMR	63B4		
	2,40	661	546,21	1,24		ZG64	SMR	63B4		
	2,70	587	487,21	1,40		ZG64	SMR	63B4		
	3,00	529	438,49	1,55		ZG64	SMR	63B4	43	295
	3,30	480	406,74	1,71		ZG64	SMR	63B4		
	3,80	417	350,05	1,97		ZG64	SMR	63B4		
	4,60	345	291,22	2,38		ZG64	SMR	63B4		
	5,20	305	257,93	2,69		ZG64	SMR	63B4		
	2,50	647	535,33	1,27		ZG63	SMB	63B4		
	2,80	578	476,93	1,42		ZG63	SMB	63B4		
	3,10	522	429,15	1,57		ZG63	SMB	63B4		
	3,30	490	397,44	1,67		ZG63	SMB	63B4		
	3,70	437	363,13	1,88		ZG63	SMB	63B4		
	4,30	376	309,70	2,18		ZG63	SMB	63B4		
	4,80	337	279,83	2,43		ZG63	SMB	63B4	40	294
	5,20	311	254,56	2,64		ZG63	SMB	63B4		
	5,70	284	232,90	2,89		ZG63	SMB	63B4		
	6,10	265	219,00	3,09		ZG63	SMB	63B4		
	6,70	241	198,41	3,40		ZG63	SMB	63B4		
	7,60	213	174,39	3,85		ZG63	SMB	63B4		
	8,70	186	152,08	4,41		ZG63	SMR	63B4		



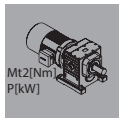
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,18	2,80	578	478,75	0,95	ZG53	SMB	63B4		
	3,10	522	425,43	1,05	ZG53	SMB	63B4		
	3,40	476	391,71	1,16	ZG53	SMB	63B4		
	3,80	426	354,52	1,29	ZG53	SMB	63B4		
	4,20	385	314,66	1,43	ZG53	SMB	63B4		
	4,90	330	272,71	1,67	ZG53	SMB	63B4		
	5,40	300	245,44	1,84	ZG53	SMB	63B4		
	6,00	270	222,36	2,04	ZG53	SMB	63B4	35	292
	6,60	245	202,58	2,24	ZG53	SMB	63B4		
	7,30	222	181,81	2,48	ZG53	SMB	63B4		
	7,70	210	172,02	2,62	ZG53	SMB	63B4		
	8,90	182	149,99	3,03	ZG53	SMB	63B4		
	10,00	162	129,54	3,40	ZG53	SMR	63B4		
	12,00	135	115,50	4,08	ZG53	SMR	63B4		
	13,00	124	103,02	4,42	ZG53	SMR	63B4		
	18,00	92	74,67	4,49	ZG52	SMB	63B4	32	291
	3,80	426	346,57	0,99	ZG43	SMB	63B4		
	4,30	376	307,60	1,12	ZG43	SMB	63B4		
	5,00	324	266,59	1,30	ZG43	SMB	63B4		
	5,50	294	239,93	1,43	ZG43	SMB	63B4		
	6,10	265	217,37	1,58	ZG43	SMB	63B4		
	6,70	241	198,04	1,74	ZG43	SMB	63B4		
	7,50	216	177,73	1,95	ZG43	SMB	63B4	27	290
	7,90	205	168,16	2,05	ZG43	SMB	63B4		
	9,10	178	146,63	2,36	ZG43	SMB	63B4		
	11,00	147	126,63	2,86	ZG43	SMR	63B4		
	12,00	135	112,91	3,12	ZG43	SMR	63B4		
	13,00	124	100,71	3,37	ZG43	SMR	63B4		
	15,00	108	90,64	3,89	ZG43	SMR	63B4		
	16,00	101	84,08	4,15	ZG43	SMR	63B4		
	33,00	50	40,08	4,12	ZG42	SMB	63B4	24	289
	6,00	270	222,38	1,04	ZG33	SMB	63B4		
	6,90	234	192,73	1,19	ZG33	SMB	63B4		
	7,70	210	173,45	1,33	ZG33	SMB	63B4		
	8,50	190	157,15	1,47	ZG33	SMB	63B4		
	9,30	174	143,17	1,61	ZG33	SMB	63B4		
	10,00	162	128,48	1,73	ZG33	SMB	63B4		
	11,00	147	121,57	1,90	ZG33	SMB	63B4	23	288
	13,00	124	106,00	2,25	ZG33	SMB	63B4		
	15,00	108	91,55	2,60	ZG33	SMR	63B4		
	16,00	101	81,63	2,77	ZG33	SMR	63B4		
	18,00	90	72,81	3,12	ZG33	SMR	63B4		
	20,00	81	65,53	3,46	ZG33	SMR	63B4		
	22,00	74	60,78	3,81	ZG33	SMR	63B4		
	25,00	65	52,31	4,33	ZG33	SMR	63B4		
	17,00	97	80,00	2,02	ZG32	SMB	63B4		
	19,00	87	71,27	2,99	ZG32	SMB	63B4	21	287
	21,00	79	64,13	3,54	ZG32	SMB	63B4		



P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,18	22,00	75	59,39	3,73	ZG32	SMB	63B4	21	287
	25,00	66	54,27	4,24	ZG32	SMB	63B4		
	9,10	178	146,93	1,01	ZG23	SMB	63B4		
	9,90	163	133,86	1,10	ZG23	SMB	63B4		
	11,00	147	120,13	1,22	ZG23	SMB	63B4		
	12,00	135	113,66	1,34	ZG23	SMB	63B4		
	13,00	124	99,11	1,45	ZG23	SMB	63B4		
	16,00	101	85,60	1,78	ZG23	SMR	63B4		
	17,00	95	76,32	1,89	ZG23	SMR	63B4	18	286
	20,00	81	68,08	2,23	ZG23	SMR	63B4		
	22,00	74	61,27	2,45	ZG23	SMR	63B4		
	23,00	70	56,83	2,56	ZG23	SMR	63B4		
	27,00	60	48,91	3,00	ZG23	SMR	63B4		
	33,00	49	40,69	3,67	ZG23	SMR	63B4		
	37,00	44	36,04	4,12	ZG23	SMR	63B4		
	18,00	92	74,80	1,96	ZG22	SMB	63B4		
	20,00	83	66,64	2,18	ZG22	SMB	63B4		
	22,00	75	59,96	2,40	ZG22	SMB	63B4		
	24,00	69	55,53	2,62	ZG22	SMB	63B4		
	26,00	63	50,74	2,83	ZG22	SMB	63B4		
	31,00	53	43,27	3,38	ZG22	SMB	63B4		
	34,00	49	39,10	3,71	ZG22	SMB	63B4		
	37,00	45	35,57	4,03	ZG22	SMB	63B4		
	41,00	40	32,54	4,47	ZG22	SMB	63B4		
	43,00	38	30,60	4,69	ZG22	SMB	63B4		
	48,00	34	27,72	5,23	ZG22	SMB	63B4		
	55,00	30	24,37	6,00	ZG22	SMB	63B4		
	63,00	26	21,25	6,87	ZG22	SMR	63B4		
	68,00	24	19,60	7,41	ZG22	SMR	63B4		
	73,00	23	18,13	7,91	ZG22	SMR	63B4		
	85,00	19	15,64	8,70	ZG22	SMR	63B4		
	89,00	19	14,91	8,95	ZG22	SMR	63B4	16	285
	100,00	17	13,36	9,93	ZG22	SMR	63B4		
	117,00	14	11,41	10,91	ZG22	SMR	63B4		
	136,00	12	9,80	12,19	ZG22	SMR	63B4		
	157,00	11	8,45	13,41	ZG22	SMR	63B4		
	34,00	49	39,47	2,08	ZG22	SMB	63B4		
	38,00	43	35,16	3,25	ZG22	SMB	63B4		
	42,00	39	31,64	4,35	ZG22	SMB	63B4		
	45,00	37	29,30	4,85	ZG22	SMB	63B4		
	50,00	33	26,77	5,45	ZG22	SMB	63B4		
	58,00	28	22,83	6,32	ZG22	SMB	63B4		
	64,00	26	20,63	6,98	ZG22	SMB	63B4		
	71,00	23	18,77	7,74	ZG22	SMB	63B4		
	77,00	21	17,17	8,26	ZG22	SMB	63B4		
	82,00	20	16,15	8,64	ZG22	SMB	63B4		
	91,00	18	14,63	9,15	ZG22	SMB	63B4		
	103,00	16	12,86	9,98	ZG22	SMB	63B4		

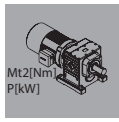


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,18	119,00	14	11,21	11,10	ZG22	SMR	63B4		
	129,00	13	10,34	11,88	ZG22	SMR	63B4		
	139,00	12	9,57	12,46	ZG22	SMR	63B4	16	285
	161,00	10	8,25	13,75	ZG22	SMR	63B4		
	169,00	10	7,87	14,02	ZG22	SMR	63B4		
	22,00	75	61,44	1,33	ZG12	SMB	63B4		
	24,00	69	54,60	1,45	ZG12	SMB	63B4		
	26,00	63	50,27	1,57	ZG12	SMB	63B4		
	29,00	57	45,50	1,76	ZG12	SMB	63B4		
	33,00	50	40,38	2,00	ZG12	SMB	63B4		
	38,00	43	35,00	2,30	ZG12	SMB	63B4		
	42,00	39	31,50	2,54	ZG12	SMB	63B4		
	47,00	35	28,54	2,85	ZG12	SMB	63B4		
	51,00	32	26,00	3,09	ZG12	SMB	63B4		
	57,00	29	23,33	3,45	ZG12	SMB	63B4		
	60,00	28	22,08	3,63	ZG12	SMB	63B4		
	69,00	24	19,25	4,01	ZG12	SMB	63B4		
	80,00	21	16,63	4,41	ZG12	SMR	63B4		
	90,00	18	14,82	4,74	ZG12	SMR	63B4		
	101,00	16	13,22	5,14	ZG12	SMR	63B4		
	112,00	15	11,90	5,36	ZG12	SMR	63B4		
	120,00	14	11,04	5,52	ZG12	SMR	63B4		
	140,00	12	9,50	6,28	ZG12	SMR	63B4		
	168,00	10	7,90	6,92	ZG12	SMR	63B4		
	190,00	9	7,00	7,02	ZG12	SMR	63B4	12	284
	32,00	52	41,38	1,94	ZG12	SMB	63B4		
	36,00	46	36,77	2,18	ZG12	SMB	63B4		
	39,00	42	33,86	2,36	ZG12	SMB	63B4		
	43,00	38	30,64	2,60	ZG12	SMB	63B4		
	49,00	34	27,20	2,97	ZG12	SMB	63B4		
	56,00	29	23,57	3,39	ZG12	SMB	63B4		
	63,00	26	21,21	3,82	ZG12	SMB	63B4		
	69,00	24	19,22	4,01	ZG12	SMB	63B4		
	76,00	22	17,51	4,33	ZG12	SMB	63B4		
	85,00	19	15,71	4,74	ZG12	SMB	63B4		
	89,00	19	14,87	4,74	ZG12	SMB	63B4		
	103,00	16	12,96	5,12	ZG12	SMB	63B4		
	119,00	14	11,20	5,55	ZG12	SMR	63B4		
	133,00	12	9,98	5,96	ZG12	SMR	63B4		
	149,00	11	8,90	6,41	ZG12	SMR	63B4		
	166,00	10	8,01	6,54	ZG12	SMR	63B4		
	179,00	9	7,43	6,61	ZG12	SMR	63B4		
	208,00	8	6,40	6,80	ZG12	SMR	63B4		
	250,00	7	5,32	7,27	ZG12	SMR	63B4		
	282,00	6	4,71	7,34	ZG12	SMR	63B4		
0,25	0,42	5243	3168,00	1,52	ZG114	SMB	71A4		
	0,47	4685	2822,40	1,73	ZG114	SMB	71A4	345	318
	0,53	4155	2539,64	1,97	ZG114	SMB	71A4		

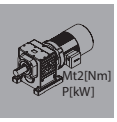


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,25	0,57	3863	2352,00	2,12	ZG114	SMB	71A4		
	0,62	3552	2148,92	2,31	ZG114	SMB	71A4		
	0,73	3017	1832,73	2,72	ZG114	SMB	71A4		
	0,81	2719	1656,00	3,02	ZG114	SMB	71A4		
	0,89	2474	1506,46	3,31	ZG114	SMB	71A4		
	0,97	2270	1378,29	3,61	ZG114	SMB	71A4		
	1,00	2202	1296,00	3,72	ZG114	SMB	71A4		
	1,10	2002	1174,15	4,10	ZG114	SMB	71A4		
	1,30	1694	1032,00	4,84	ZG114	SMB	71A4	345	318
	1,50	1468	900,00	5,59	ZG114	SMB	71A4		
	1,60	1376	830,12	5,96	ZG114	SMB	71A4		
	1,70	1295	768,00	6,33	ZG114	SMB	71A4		
	2,00	1101	662,40	7,45	ZG114	SMB	71A4		
	2,10	1049	631,38	7,82	ZG114	SMB	71A4		
	2,40	918	565,71	8,94	ZG114	SMB	71A4		
	2,80	786	483,10	10,43	ZG114	SMB	71A4		
	3,20	688	415,06	11,92	ZG114	SMB	71A4		
	3,70	595	358,05	13,78	ZG114	SMB	71A4		
	0,46	4787	2893,14	1,02	ZG104	SMB	71A4		
	0,52	4235	2577,53	1,16	ZG104	SMB	71A4		
	0,58	3797	2319,30	1,29	ZG104	SMB	71A4		
	0,62	3552	2147,94	1,38	ZG104	SMB	71A4		
	0,68	3238	1962,48	1,51	ZG104	SMB	71A4		
	0,80	2753	1673,72	1,78	ZG104	SMB	71A4		
	0,89	2474	1512,32	1,98	ZG104	SMB	71A4		
	0,97	2270	1375,76	2,16	ZG104	SMB	71A4		
	1,10	2002	1258,71	2,45	ZG104	SMB	71A4		
	1,20	1835	1072,28	2,67	ZG104	SMB	71A4	230	312
	1,40	1573	942,46	3,12	ZG104	SMB	71A4		
	1,60	1376	821,92	3,56	ZG104	SMB	71A4		
	1,80	1223	758,10	4,01	ZG104	SMB	71A4		
	1,90	1159	701,37	4,23	ZG104	SMB	71A4		
	2,20	1001	604,93	4,90	ZG104	SMB	71A4		
	2,30	957	576,61	5,12	ZG104	SMB	71A4		
	2,60	847	516,63	5,79	ZG104	SMB	71A4		
	3,00	734	441,18	6,68	ZG104	SMB	71A4		
	3,50	629	379,05	7,79	ZG104	SMB	71A4		
	4,10	537	326,99	9,12	ZG104	SMB	71A4		
	3,80	591	352,68	8,29	ZG103	SMB	71A4		
	4,20	535	320,55	9,16	ZG103	SMB	71A4		
	4,60	488	293,36	10,03	ZG103	SMB	71A4		
	5,00	449	270,06	10,90	ZG103	SMB	71A4	227	310
	5,40	416	246,57	11,78	ZG103	SMB	71A4		
	6,00	375	225,08	13,08	ZG103	SMB	71A4		
	6,60	340	202,74	14,39	ZG103	SMB	71A4		
	0,75	2936	1785,76	1,06	ZG94	SMB	71A4		
	0,83	2653	1613,56	1,17	ZG94	SMB	71A4	167	306
	0,91	2420	1467,85	1,28	ZG94	SMB	71A4		

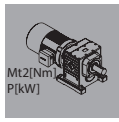
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,25	1,00	2202	1342,96	1,41	ZG94	SMB	71A4		
	1,10	2002	1262,79	1,55	ZG94	SMB	71A4		
	1,20	1835	1144,06	1,69	ZG94	SMB	71A4		
	1,30	1694	1005,55	1,83	ZG94	SMB	71A4		
	1,50	1468	876,93	2,11	ZG94	SMB	71A4		
	1,70	1295	808,84	2,39	ZG94	SMB	71A4	167	306
	1,80	1223	748,32	2,53	ZG94	SMB	71A4		
	2,10	1049	645,42	2,96	ZG94	SMB	71A4		
	2,20	1001	615,20	3,10	ZG94	SMB	71A4		
	2,40	918	551,22	3,38	ZG94	SMB	71A4		
	2,80	786	470,72	3,94	ZG94	SMB	71A4		
	1,20	1835	1111,35	1,04	ZG84	SMB	71A4		
	1,30	1694	997,36	1,12	ZG84	SMB	71A4		
	1,40	1573	943,66	1,21	ZG84	SMB	71A4		
	1,60	1376	822,83	1,38	ZG84	SMB	71A4		
	1,90	1159	710,62	1,64	ZG84	SMB	71A4		
	2,10	1049	633,62	1,81	ZG84	SMB	71A4	72	301
	2,40	918	565,17	2,07	ZG84	SMB	71A4		
	2,60	847	508,66	2,24	ZG84	SMB	71A4		
	2,80	786	471,83	2,42	ZG84	SMB	71A4		
	3,30	667	406,07	2,85	ZG84	SMB	71A4		
	4,00	551	337,82	3,45	ZG84	SMB	71A4		
	4,50	489	299,21	3,88	ZG84	SMB	71A4		
	2,20	1021	621,00	1,86	ZG83	SMB	71A4		
	2,40	936	553,25	2,03	ZG83	SMB	71A4		
	2,70	832	497,83	2,28	ZG83	SMB	71A4		
	2,90	775	461,05	2,45	ZG83	SMB	71A4		
	3,20	702	421,24	2,71	ZG83	SMB	71A4	70	300
	3,70	607	359,26	3,13	ZG83	SMB	71A4		
	4,10	548	324,61	3,47	ZG83	SMB	71A4		
	4,50	499	295,30	3,80	ZG83	SMB	71A4		
	5,00	449	270,18	4,23	ZG83	SMB	71A4		
	5,30	424	254,05	4,48	ZG83	SMB	71A4		
	1,50	1468	879,49	0,99	ZG74	SMB	71A4		
	1,70	1295	766,87	1,12	ZG74	SMB	71A4		
	2,00	1101	662,30	1,32	ZG74	SMB	71A4		
	2,30	957	590,53	1,51	ZG74	SMB	71A4		
	2,50	881	526,74	1,65	ZG74	SMB	71A4	62	298
	2,80	786	474,06	1,84	ZG74	SMB	71A4		
	3,00	734	439,74	1,98	ZG74	SMB	71A4		
	3,50	629	378,45	2,30	ZG74	SMB	71A4		
	4,30	512	314,84	2,83	ZG74	SMB	71A4		
	4,80	459	278,86	3,16	ZG74	SMB	71A4		
	2,30	977	578,77	1,48	ZG73	SMB	71A4		
	2,60	864	515,63	1,68	ZG73	SMB	71A4		
	2,90	775	463,97	1,87	ZG73	SMB	71A4	60	297
	3,10	725	429,69	2,00	ZG73	SMB	71A4		
	3,40	661	392,59	2,19	ZG73	SMB	71A4		



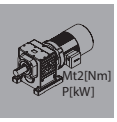
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,25	4,00	562	334,83	2,58	ZG73	SMB	71A4		
	4,40	511	302,54	2,84	ZG73	SMB	71A4		
	4,90	459	275,22	3,16	ZG73	SMB	71A4		
	5,30	424	251,80	3,42	ZG73	SMB	71A4	60	297
	5,70	394	236,77	3,68	ZG73	SMB	71A4		
	6,20	362	214,51	4,00	ZG73	SMB	71A4		
	2,80	786	487,21	1,04	ZG64	SMB	71A4		
	3,10	710	438,49	1,15	ZG64	SMB	71A4		
	3,30	667	406,74	1,23	ZG64	SMB	71A4		
	3,80	580	350,05	1,41	ZG64	SMB	71A4	44	295
	4,60	479	291,22	1,71	ZG64	SMB	71A4		
	5,20	423	257,93	1,94	ZG64	SMB	71A4		
	2,80	803	476,93	1,02	ZG63	SMB	71A4		
	3,10	725	429,15	1,13	ZG63	SMB	71A4		
	3,40	661	397,44	1,24	ZG63	SMB	71A4		
	3,70	607	363,13	1,35	ZG63	SMB	71A4		
	4,30	523	309,70	1,57	ZG63	SMB	71A4		
	4,80	468	279,83	1,75	ZG63	SMB	71A4		
	5,30	424	254,56	1,93	ZG63	SMB	71A4		
	5,80	387	232,90	2,12	ZG63	SMB	71A4	41	294
	6,10	368	219,00	2,23	ZG63	SMB	71A4		
	6,80	330	198,41	2,48	ZG63	SMB	71A4		
	7,70	292	174,39	2,81	ZG63	SMB	71A4		
	8,80	255	152,08	3,21	ZG63	SMB	71A4		
	9,60	234	140,27	3,50	ZG63	SMB	71A4		
	10,00	225	129,78	3,65	ZG63	SMB	71A4		
	12,00	187	111,93	4,38	ZG63	SMB	71A4		
	4,30	523	314,66	1,05	ZG53	SMB	71A4		
	4,90	459	272,71	1,20	ZG53	SMB	71A4		
	5,50	409	245,44	1,35	ZG53	SMB	71A4		
	6,00	375	222,36	1,47	ZG53	SMB	71A4		
	6,60	340	202,58	1,62	ZG53	SMB	71A4		
	7,40	304	181,81	1,81	ZG53	SMB	71A4		
	7,80	288	172,02	1,91	ZG53	SMB	71A4	35	292
	8,90	252	149,99	2,18	ZG53	SMB	71A4		
	10,00	225	129,54	2,45	ZG53	SMB	71A4		
	12,00	187	115,50	2,94	ZG53	SMB	71A4		
	13,00	173	103,02	3,18	ZG53	SMB	71A4		
	14,00	161	92,72	3,43	ZG53	SMB	71A4		
	16,00	140	86,01	3,92	ZG53	SMB	71A4		
	18,00	125	74,02	4,41	ZG53	SMB	71A4		
	18,00	127	74,67	3,23	ZG52	SMB	71A4	32	291
	5,60	401	239,93	1,05	ZG43	SMB	71A4		
	6,20	362	217,37	1,16	ZG43	SMB	71A4		
	6,80	330	198,04	1,27	ZG43	SMB	71A4		
	7,50	300	177,73	1,40	ZG43	SMB	71A4	27	290
	8,00	281	168,16	1,50	ZG43	SMB	71A4		
	9,10	247	146,63	1,70	ZG43	SMB	71A4		



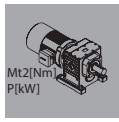
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,25	11,00	204	126,63	2,06	ZG43	SMB	71A4		
	12,00	187	112,91	2,24	ZG43	SMB	71A4		
	13,00	173	100,71	2,43	ZG43	SMB	71A4		
	15,00	150	90,64	2,80	ZG43	SMB	71A4	27	290
	16,00	140	84,08	2,99	ZG43	SMB	71A4		
	19,00	118	72,36	3,55	ZG43	SMB	71A4		
	22,00	102	60,20	4,11	ZG43	SMB	71A4		
	18,00	127	72,99	3,30	ZG42	SMB	71A4		
	20,00	115	66,39	3,66	ZG42	SMB	71A4		
	22,00	104	61,76	4,03	ZG42	SMB	71A4	24	289
	33,00	69	40,08	2,96	ZG42	SMB	71A4		
	37,00	62	36,45	4,42	ZG42	SMB	71A4		
	7,70	292	173,45	0,96	ZG33	SMB	71A4		
	8,50	264	157,15	1,06	ZG33	SMB	71A4		
	9,40	239	143,17	1,17	ZG33	SMB	71A4		
	10,00	225	128,48	1,25	ZG33	SMB	71A4		
	11,00	204	121,57	1,37	ZG33	SMB	71A4		
	13,00	173	106,00	1,62	ZG33	SMB	71A4		
	15,00	150	91,55	1,87	ZG33	SMB	71A4	23	288
	16,00	140	81,63	1,99	ZG33	SMB	71A4		
	18,00	125	72,81	2,24	ZG33	SMB	71A4		
	20,00	112	65,53	2,49	ZG33	SMB	71A4		
	22,00	102	60,78	2,74	ZG33	SMB	71A4		
	26,00	86	52,31	3,24	ZG33	SMB	71A4		
	31,00	72	43,52	3,86	ZG33	SMB	71A4		
	35,00	64	38,55	4,36	ZG33	SMB	71A4		
	17,00	135	80,00	1,45	ZG32	SMB	71A4		
	19,00	121	71,27	2,15	ZG32	SMB	71A4		
	21,00	109	64,13	2,55	ZG32	SMB	71A4		
	23,00	100	59,39	2,81	ZG32	SMB	71A4	22	287
	25,00	92	54,27	3,05	ZG32	SMB	71A4		
	29,00	79	46,28	3,54	ZG32	SMB	71A4		
	32,00	72	41,82	3,91	ZG32	SMB	71A4		
	35,00	66	38,04	4,27	ZG32	SMB	71A4		
	12,00	187	113,66	0,96	ZG23	SMB	71A4		
	14,00	161	99,11	1,12	ZG23	SMB	71A4		
	16,00	140	85,60	1,28	ZG23	SMB	71A4		
	18,00	125	76,32	1,44	ZG23	SMB	71A4		
	20,00	112	68,08	1,60	ZG23	SMB	71A4	19	286
	22,00	102	61,27	1,76	ZG23	SMB	71A4		
	24,00	94	56,83	1,92	ZG23	SMB	71A4		
	27,00	83	48,91	2,16	ZG23	SMB	71A4		
	33,00	68	40,69	2,64	ZG23	SMB	71A4		
	37,00	61	36,04	2,96	ZG23	SMB	71A4		
	18,00	127	74,80	1,41	ZG22	SMB	71A4		
	20,00	115	66,64	1,57	ZG22	SMB	71A4	17	285
	22,00	104	59,96	1,73	ZG22	SMB	71A4		
	24,00	96	55,53	1,88	ZG22	SMB	71A4		



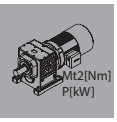
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,25	26,00	88	50,74	2,04	ZG22	SMB	71A4		
	31,00	74	43,27	2,43	ZG22	SMB	71A4		
	34,00	67	39,10	2,67	ZG22	SMB	71A4		
	38,00	60	35,57	2,98	ZG22	SMB	71A4		
	41,00	56	32,54	3,22	ZG22	SMB	71A4		
	44,00	52	30,60	3,45	ZG22	SMB	71A4		
	48,00	48	27,72	3,77	ZG22	SMB	71A4		
	55,00	42	24,37	4,32	ZG22	SMB	71A4		
	63,00	36	21,25	4,95	ZG22	SMB	71A4		
	68,00	34	19,60	5,34	ZG22	SMB	71A4		
	74,00	31	18,13	5,78	ZG22	SMB	71A4		
	86,00	27	15,64	6,34	ZG22	SMB	71A4		
	90,00	25	14,91	6,52	ZG22	SMB	71A4		
	100,00	23	13,36	7,15	ZG22	SMB	71A4		
	117,00	20	11,41	7,86	ZG22	SMB	71A4		
	137,00	17	9,80	8,84	ZG22	SMB	71A4		
	159,00	14	8,45	9,78	ZG22	SMB	71A4		
	34,00	67	39,47	1,50	ZG22	SMB	71A4		
	38,00	60	35,16	2,34	ZG22	SMB	71A4	17	285
	42,00	55	31,64	3,13	ZG22	SMB	71A4		
	46,00	50	29,30	3,57	ZG22	SMB	71A4		
	50,00	46	26,77	3,93	ZG22	SMB	71A4		
	59,00	39	22,83	4,63	ZG22	SMB	71A4		
	65,00	35	20,63	5,10	ZG22	SMB	71A4		
	71,00	32	18,77	5,57	ZG22	SMB	71A4		
	78,00	29	17,17	6,02	ZG22	SMB	71A4		
	83,00	28	16,15	6,30	ZG22	SMB	71A4		
	92,00	25	14,63	6,66	ZG22	SMB	71A4		
	104,00	22	12,86	7,26	ZG22	SMB	71A4		
	120,00	19	11,21	8,06	ZG22	SMB	71A4		
	130,00	18	10,34	8,62	ZG22	SMB	71A4		
	140,00	16	9,57	9,04	ZG22	SMB	71A4		
	162,00	14	8,25	9,96	ZG22	SMB	71A4		
	170,00	13	7,87	10,16	ZG22	SMB	71A4		
	190,00	12	7,05	11,10	ZG22	SMB	71A4		
	223,00	10	6,02	12,84	ZG22	SMB	71A4		
	259,00	9	5,17	14,46	ZG22	SMB	71A4		
	22,00	104	61,44	0,96	ZG12	SMB	71A4		
	25,00	92	54,60	1,09	ZG12	SMB	71A4		
	27,00	85	50,27	1,18	ZG12	SMB	71A4		
	29,00	79	45,50	1,26	ZG12	SMB	71A4		
	33,00	69	40,38	1,44	ZG12	SMB	71A4		
	38,00	60	35,00	1,66	ZG12	SMB	71A4	13	284
	43,00	53	31,50	1,88	ZG12	SMB	71A4		
	47,00	49	28,54	2,05	ZG12	SMB	71A4		
	52,00	44	26,00	2,27	ZG12	SMB	71A4		
	57,00	40	23,33	2,49	ZG12	SMB	71A4		
	61,00	38	22,08	2,66	ZG12	SMB	71A4		



P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,25	70,00	33	19,25	2,93	ZG12	SMB	71A4		
	81,00	28	16,63	3,21	ZG12	SMB	71A4		
	90,00	25	14,82	3,41	ZG12	SMB	71A4		
	101,00	23	13,22	3,70	ZG12	SMB	71A4		
	113,00	20	11,90	3,89	ZG12	SMB	71A4		
	121,00	19	11,04	4,01	ZG12	SMB	71A4		
	141,00	16	9,50	4,55	ZG12	SMB	71A4		
	170,00	13	7,90	5,04	ZG12	SMB	71A4		
	191,00	12	7,00	5,08	ZG12	SMB	71A4		
	32,00	72	41,38	1,40	ZG12	SMB	71A4		
	36,00	64	36,77	1,57	ZG12	SMB	71A4		
	40,00	57	33,86	1,74	ZG12	SMB	71A4		
	44,00	52	30,64	1,92	ZG12	SMB	71A4		
	49,00	47	27,20	2,14	ZG12	SMB	71A4		
	57,00	40	23,57	2,49	ZG12	SMB	71A4	13	284
	63,00	36	21,21	2,75	ZG12	SMB	71A4		
	70,00	33	19,22	2,93	ZG12	SMB	71A4		
	77,00	30	17,51	3,16	ZG12	SMB	71A4		
	85,00	27	15,71	3,41	ZG12	SMB	71A4		
	90,00	25	14,87	3,45	ZG12	SMB	71A4		
	103,00	22	12,96	3,68	ZG12	SMB	71A4		
	120,00	19	11,20	4,03	ZG12	SMB	71A4		
	134,00	17	9,98	4,32	ZG12	SMB	71A4		
	150,00	15	8,90	4,64	ZG12	SMB	71A4		
	167,00	14	8,01	4,73	ZG12	SMB	71A4		
	180,00	13	7,43	4,79	ZG12	SMB	71A4		
	209,00	11	6,40	4,92	ZG12	SMB	71A4		
	252,00	9	5,32	5,28	ZG12	SMB	71A4		
	284,00	8	4,71	5,33	ZG12	SMB	71A4		
0,37	0,42	7760	3168,00	1,02	ZG114	SMB	71B4		
	0,47	6934	2822,40	1,17	ZG114	SMB	71B4		
	0,53	6149	2539,64	1,33	ZG114	SMB	71B4		
	0,57	5718	2352,00	1,43	ZG114	SMB	71B4		
	0,62	5257	2148,92	1,56	ZG114	SMB	71B4		
	0,73	4465	1832,73	1,84	ZG114	SMB	71B4		
	0,81	4024	1656,00	2,04	ZG114	SMB	71B4		
	0,89	3662	1506,46	2,24	ZG114	SMB	71B4		
	0,97	3360	1378,29	2,44	ZG114	SMB	71B4		
	1,00	3259	1296,00	2,52	ZG114	SMB	71B4	346	318
	1,10	2963	1174,15	2,77	ZG114	SMB	71B4		
	1,30	2507	1032,00	3,27	ZG114	SMB	71B4		
	1,50	2173	900,00	3,77	ZG114	SMR	71B4		
	1,60	2037	830,12	4,03	ZG114	SMR	71B4		
	1,70	1917	768,00	4,28	ZG114	SMR	71B4		
	2,00	1630	662,40	5,03	ZG114	SMR	71B4		
	2,10	1552	631,38	5,28	ZG114	SMR	71B4		
	2,40	1358	565,71	6,04	ZG114	SMR	71B4		
	2,80	1164	483,10	7,04	ZG114	SMR	71B4		

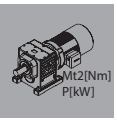


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,37	3,20	1018	415,06	8,05	ZG114	SMR	71B4	346	318
	3,70	881	358,05	9,31	ZG114	SMR	71B4		
	0,68	4793	1962,48	1,02	ZG104	SMB	71B4		
	0,80	4074	1673,72	1,20	ZG104	SMB	71B4		
	0,89	3662	1512,32	1,34	ZG104	SMB	71B4		
	0,97	3360	1375,76	1,46	ZG104	SMB	71B4		
	1,10	2963	1258,71	1,65	ZG104	SMB	71B4		
	1,20	2716	1072,28	1,80	ZG104	SMB	71B4		
	1,40	2328	942,46	2,10	ZG104	SMB	71B4		
	1,60	2037	821,92	2,41	ZG104	SMR	71B4	231	312
	1,80	1811	758,10	2,71	ZG104	SMR	71B4		
	1,90	1715	701,37	2,86	ZG104	SMR	71B4		
	2,20	1481	604,93	3,31	ZG104	SMR	71B4		
	2,30	1417	576,61	3,46	ZG104	SMR	71B4		
	2,60	1254	516,63	3,91	ZG104	SMR	71B4		
	3,00	1086	441,18	4,51	ZG104	SMR	71B4		
	3,50	931	379,05	5,26	ZG104	SMR	71B4		
	4,10	795	326,99	6,16	ZG104	SMR	71B4		
	3,80	875	352,68	5,60	ZG103	SMB	71B4		
	4,20	792	320,55	6,19	ZG103	SMB	71B4		
	4,60	723	293,36	6,78	ZG103	SMB	71B4		
	5,00	665	270,06	7,37	ZG103	SMB	71B4		
	5,40	616	246,57	7,96	ZG103	SMB	71B4		
	6,00	554	225,08	8,84	ZG103	SMB	71B4	228	310
	6,60	504	202,74	9,72	ZG103	SMB	71B4		
	7,60	438	176,71	11,20	ZG103	SMR	71B4		
	8,10	411	166,32	11,93	ZG103	SMR	71B4		
	8,70	382	153,42	12,82	ZG103	SMR	71B4		
	9,70	343	138,08	14,29	ZG103	SMR	71B4		
	1,00	3259	1342,96	0,95	ZG94	SMB	71B4		
	1,10	2963	1262,79	1,05	ZG94	SMB	71B4		
	1,20	2716	1144,06	1,14	ZG94	SMB	71B4		
	1,30	2507	1005,55	1,24	ZG94	SMB	71B4		
	1,50	2173	876,93	1,43	ZG94	SMR	71B4		
	1,70	1917	808,84	1,62	ZG94	SMR	71B4		
	1,80	1811	748,32	1,71	ZG94	SMR	71B4	168	306
	2,10	1552	645,42	2,00	ZG94	SMR	71B4		
	2,20	1481	615,20	2,09	ZG94	SMR	71B4		
	2,40	1358	551,22	2,28	ZG94	SMR	71B4		
	2,80	1164	470,72	2,66	ZG94	SMR	71B4		
	3,30	988	404,42	3,14	ZG94	SMR	71B4		
	3,80	858	348,88	3,61	ZG94	SMR	71B4		
	3,60	924	376,28	3,36	ZG93	SMB	71B4		
	3,90	853	342,00	3,64	ZG93	SMB	71B4	165	304
	4,30	773	313,00	4,01	ZG93	SMB	71B4		
	4,70	708	288,14	4,38	ZG93	SMB	71B4		
	1,90	1715	710,62	1,11	ZG84	SMR	71B4	73	301
	2,10	1552	633,62	1,22	ZG84	SMR	71B4		

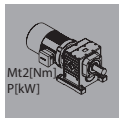


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,37	2,40	1358	565,17	1,40	ZG84	SMR	71B4		
	2,60	1254	508,66	1,52	ZG84	SMR	71B4		
	2,80	1164	471,83	1,63	ZG84	SMR	71B4		
	3,30	988	406,07	1,92	ZG84	SMR	71B4	73	301
	4,00	815	337,82	2,33	ZG84	SMR	71B4		
	4,50	724	299,21	2,62	ZG84	SMR	71B4		
	2,20	1512	621,00	1,26	ZG83	SMB	71B4		
	2,40	1386	553,25	1,37	ZG83	SMB	71B4		
	2,70	1232	497,83	1,54	ZG83	SMB	71B4		
	2,90	1147	461,05	1,66	ZG83	SMB	71B4		
	3,20	1039	421,24	1,83	ZG83	SMB	71B4		
	3,70	899	359,26	2,11	ZG83	SMB	71B4		
	4,10	811	324,61	2,34	ZG83	SMB	71B4	71	300
	4,50	739	295,30	2,57	ZG83	SMB	71B4		
	5,00	665	270,18	2,86	ZG83	SMB	71B4		
	5,30	627	254,05	3,03	ZG83	SMB	71B4		
	5,80	573	230,16	3,31	ZG83	SMB	71B4		
	6,60	504	202,30	3,77	ZG83	SMB	71B4		
	7,60	438	176,42	4,34	ZG83	SMR	71B4		
	2,30	1417	590,53	1,02	ZG74	SMR	71B4		
	2,50	1304	526,74	1,11	ZG74	SMR	71B4		
	2,80	1164	474,06	1,25	ZG74	SMR	71B4		
	3,00	1086	439,74	1,33	ZG74	SMR	71B4	63	298
	3,50	931	378,45	1,56	ZG74	SMR	71B4		
	4,30	758	314,84	1,91	ZG74	SMR	71B4		
	4,80	679	278,86	2,14	ZG74	SMR	71B4		
	2,30	1446	578,77	1,00	ZG73	SMB	71B4		
	2,60	1279	515,63	1,13	ZG73	SMB	71B4		
	2,90	1147	463,97	1,26	ZG73	SMB	71B4		
	3,10	1073	429,69	1,35	ZG73	SMB	71B4		
	3,40	978	392,59	1,48	ZG73	SMB	71B4		
	4,00	831	334,83	1,74	ZG73	SMB	71B4		
	4,40	756	302,54	1,92	ZG73	SMB	71B4		
	4,90	679	275,22	2,14	ZG73	SMB	71B4	61	297
	5,30	627	251,80	2,31	ZG73	SMB	71B4		
	5,70	583	236,77	2,49	ZG73	SMB	71B4		
	6,20	536	214,51	2,70	ZG73	SMB	71B4		
	7,10	468	188,54	3,10	ZG73	SMB	71B4		
	8,10	411	164,42	3,53	ZG73	SMR	71B4		
	8,80	378	151,66	3,84	ZG73	SMR	71B4		
	9,60	346	140,31	4,19	ZG73	SMR	71B4		
	3,80	858	350,05	0,96	ZG64	SMR	71B4		
	4,60	709	291,22	1,16	ZG64	SMR	71B4	44	295
	5,20	627	257,93	1,31	ZG64	SMR	71B4		
	4,30	773	309,70	1,06	ZG63	SMB	71B4		
	4,80	693	279,83	1,18	ZG63	SMB	71B4		
	5,30	627	254,56	1,31	ZG63	SMB	71B4	41	294
	5,80	573	232,90	1,43	ZG63	SMB	71B4		

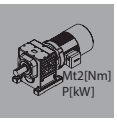
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,37	6,10	545	219,00	1,50		ZG63	SMB	71B4		
	6,80	489	198,41	1,68		ZG63	SMB	71B4		
	7,70	432	174,39	1,90		ZG63	SMB	71B4		
	8,80	378	152,08	2,17		ZG63	SMR	71B4		
	9,60	346	140,27	2,37		ZG63	SMR	71B4	41	295
	10,00	333	129,78	2,47		ZG63	SMR	71B4		
	12,00	277	111,93	2,96		ZG63	SMR	71B4		
	13,00	256	106,69	3,21		ZG63	SMR	71B4		
	14,00	238	95,60	3,45		ZG63	SMR	71B4		
	16,00	208	81,63	3,95		ZG63	SMR	71B4		
	6,00	554	222,36	0,99		ZG53	SMB	71B4		
	6,60	504	202,58	1,09		ZG53	SMB	71B4		
	7,40	449	181,81	1,22		ZG53	SMB	71B4		
	7,80	426	172,02	1,29		ZG53	SMB	71B4		
	8,90	374	149,99	1,47		ZG53	SMB	71B4		
	10,00	333	129,54	1,65		ZG53	SMR	71B4		
	12,00	277	115,50	1,98		ZG53	SMR	71B4	36	292
	13,00	256	103,02	2,15		ZG53	SMR	71B4		
	14,00	238	92,72	2,32		ZG53	SMR	71B4		
	16,00	208	86,01	2,65		ZG53	SMR	71B4		
	18,00	185	74,02	2,98		ZG53	SMR	71B4		
	22,00	151	61,58	3,64		ZG53	SMR	71B4		
	25,00	133	54,54	4,13		ZG53	SMR	71B4		
	18,00	189	74,67	2,19		ZG52	SMB	71B4		
	20,00	170	67,91	3,08		ZG52	SMB	71B4		
	21,00	162	63,18	3,34		ZG52	SMB	71B4	33	291
	25,00	136	54,25	4,04		ZG52	SMB	71B4		
	27,00	126	49,19	4,38		ZG52	SMB	71B4		
	8,00	416	168,16	1,01		ZG43	SMB	71B4		
	9,10	365	146,63	1,15		ZG43	SMB	71B4		
	11,00	302	126,63	1,39		ZG43	SMR	71B4		
	12,00	277	112,91	1,52		ZG43	SMR	71B4		
	13,00	256	100,71	1,64		ZG43	SMR	71B4	28	290
	15,00	222	90,64	1,89		ZG43	SMR	71B4		
	16,00	208	84,08	2,02		ZG43	SMR	71B4		
	19,00	175	72,36	2,40		ZG43	SMR	71B4		
	22,00	151	60,20	2,78		ZG43	SMR	71B4		
	25,00	133	53,32	3,16		ZG43	SMR	71B4		
	18,00	189	72,99	2,23		ZG42	SMB	71B4		
	20,00	170	66,39	2,48		ZG42	SMB	71B4		
	22,00	154	61,76	2,72		ZG42	SMB	71B4		
	25,00	136	53,03	3,09		ZG42	SMB	71B4		
	28,00	121	48,09	3,47		ZG42	SMB	71B4	25	289
	30,00	113	44,87	3,71		ZG42	SMB	71B4		
	33,00	103	40,77	4,08		ZG42	SMB	71B4		
	36,00	94	37,11	4,46		ZG42	SMB	71B4		
	33,00	103	40,08	2,00		ZG42	SMB	71B4		
	37,00	92	36,45	2,99		ZG42	SMB	71B4		



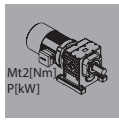
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,37	40,00	85	33,91	3,54	ZG42	SMB	71B4	25	289
	13,00	256	106,00	1,09	ZG33	SMB	71B4		
	15,00	222	91,55	1,26	ZG33	SMR	71B4		
	16,00	208	81,63	1,35	ZG33	SMR	71B4		
	18,00	185	72,81	1,52	ZG33	SMR	71B4		
	20,00	166	65,53	1,68	ZG33	SMR	71B4	25	288
	22,00	151	60,78	1,85	ZG33	SMR	71B4		
	26,00	128	52,31	2,19	ZG33	SMR	71B4		
	31,00	107	43,52	2,61	ZG33	SMR	71B4		
	35,00	95	38,55	2,95	ZG33	SMR	71B4		
	17,00	200	80,00	0,98	ZG32	SMB	71B4		
	19,00	179	71,27	1,46	ZG32	SMB	71B4		
	21,00	162	64,13	1,72	ZG32	SMB	71B4		
	23,00	148	59,39	1,90	ZG32	SMB	71B4		
	25,00	136	54,27	2,06	ZG32	SMB	71B4		
	29,00	117	46,28	2,39	ZG32	SMB	71B4	23	287
	32,00	106	41,82	2,64	ZG32	SMB	71B4		
	35,00	97	38,04	2,89	ZG32	SMB	71B4		
	39,00	87	34,81	3,22	ZG32	SMB	71B4		
	41,00	83	32,73	3,38	ZG32	SMB	71B4		
	45,00	75	29,65	3,71	ZG32	SMB	71B4		
	51,00	67	26,06	4,21	ZG32	SMB	71B4		
	18,00	185	76,32	0,97	ZG23	SMR	71B4		
	20,00	166	68,08	1,08	ZG23	SMR	71B4		
	22,00	151	61,27	1,19	ZG23	SMR	71B4		
	24,00	139	56,83	1,30	ZG23	SMR	71B4	20	286
	27,00	123	48,91	1,46	ZG23	SMR	71B4		
	33,00	101	40,69	1,79	ZG23	SMR	71B4		
	37,00	90	36,04	2,00	ZG23	SMR	71B4		
	18,00	189	74,80	0,95	ZG22	SMB	71B4		
	20,00	170	66,64	1,06	ZG22	SMB	71B4		
	22,00	154	59,96	1,17	ZG22	SMB	71B4		
	24,00	141	55,53	1,27	ZG22	SMB	71B4		
	26,00	131	50,74	1,38	ZG22	SMB	71B4		
	31,00	109	43,27	1,64	ZG22	SMB	71B4		
	34,00	100	39,10	1,80	ZG22	SMB	71B4		
	38,00	89	35,57	2,02	ZG22	SMB	71B4		
	41,00	83	32,54	2,17	ZG22	SMB	71B4		
	44,00	77	30,60	2,33	ZG22	SMB	71B4	17	285
	48,00	71	27,72	2,55	ZG22	SMB	71B4		
	55,00	62	24,37	2,92	ZG22	SMB	71B4		
	63,00	54	21,25	3,34	ZG22	SMR	71B4		
	68,00	50	19,60	3,61	ZG22	SMR	71B4		
	74,00	46	18,13	3,90	ZG22	SMR	71B4		
	86,00	39	15,64	4,28	ZG22	SMR	71B4		
	90,00	38	14,91	4,40	ZG22	SMR	71B4		
	100,00	34	13,36	4,83	ZG22	SMR	71B4		
	117,00	29	11,41	5,31	ZG22	SMR	71B4		



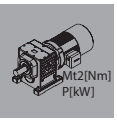
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,37	137,00	25	9,80	5,97	ZG22	SMR	71B4		
	159,00	21	8,45	6,61	ZG22	SMR	71B4		
	34,00	100	39,47	1,01	ZG22	SMB	71B4		
	38,00	89	35,16	1,58	ZG22	SMB	71B4		
	42,00	81	31,64	2,12	ZG22	SMB	71B4		
	46,00	74	29,30	2,41	ZG22	SMB	71B4		
	50,00	68	26,77	2,65	ZG22	SMB	71B4		
	59,00	58	22,83	3,13	ZG22	SMB	71B4		
	65,00	52	20,63	3,45	ZG22	SMB	71B4		
	71,00	48	18,77	3,77	ZG22	SMB	71B4		
	78,00	44	17,17	4,07	ZG22	SMB	71B4		
	83,00	41	16,15	4,26	ZG22	SMB	71B4	17	285
	92,00	37	14,63	4,50	ZG22	SMB	71B4		
	104,00	33	12,86	4,90	ZG22	SMB	71B4		
	120,00	28	11,21	5,45	ZG22	SMR	71B4		
	130,00	26	10,34	5,82	ZG22	SMR	71B4		
	140,00	24	9,57	6,11	ZG22	SMR	71B4		
	162,00	21	8,25	6,73	ZG22	SMR	71B4		
	170,00	20	7,87	6,86	ZG22	SMR	71B4		
	190,00	18	7,05	7,50	ZG22	SMR	71B4		
	223,00	15	6,02	8,67	ZG22	SMR	71B4		
	259,00	13	5,17	9,77	ZG22	SMR	71B4		
	300,00	11	4,46	10,52	ZG22	SMR	71B4		
	33,00	103	40,38	0,97	ZG12	SMB	71B4		
	38,00	89	35,00	1,12	ZG12	SMB	71B4		
	43,00	79	31,50	1,27	ZG12	SMB	71B4		
	47,00	72	28,54	1,38	ZG12	SMB	71B4		
	52,00	65	26,00	1,53	ZG12	SMB	71B4		
	57,00	60	23,33	1,68	ZG12	SMB	71B4		
	61,00	56	22,08	1,80	ZG12	SMB	71B4		
	70,00	48	19,25	1,98	ZG12	SMB	71B4		
	81,00	42	16,63	2,17	ZG12	SMR	71B4		
	90,00	38	14,82	2,31	ZG12	SMR	71B4		
	101,00	34	13,22	2,50	ZG12	SMR	71B4		
	113,00	30	11,90	2,63	ZG12	SMR	71B4		
	121,00	28	11,04	2,71	ZG12	SMR	71B4	14	284
	141,00	24	9,50	3,07	ZG12	SMR	71B4		
	170,00	20	7,90	3,41	ZG12	SMR	71B4		
	191,00	18	7,00	3,43	ZG12	SMR	71B4		
	36,00	94	36,77	1,06	ZG12	SMB	71B4		
	40,00	85	33,86	1,18	ZG12	SMB	71B4		
	44,00	77	30,64	1,30	ZG12	SMB	71B4		
	49,00	69	27,20	1,44	ZG12	SMB	71B4		
	57,00	60	23,57	1,68	ZG12	SMB	71B4		
	63,00	54	21,21	1,86	ZG12	SMB	71B4		
	70,00	48	19,22	1,98	ZG12	SMB	71B4		
	77,00	44	17,51	2,13	ZG12	SMB	71B4		
	85,00	40	15,71	2,30	ZG12	SMB	71B4		



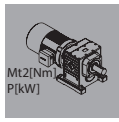
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,37	90,00	38	14,87	2,33		ZG12	SMB	71B4		
	103,00	33	12,96	2,49		ZG12	SMB	71B4		
	120,00	28	11,20	2,72		ZG12	SMR	71B4		
	134,00	25	9,98	2,92		ZG12	SMR	71B4		
	150,00	23	8,90	3,14		ZG12	SMR	71B4	14	284
	167,00	20	8,01	3,20		ZG12	SMR	71B4		
	180,00	19	7,43	3,24		ZG12	SMR	71B4		
	209,00	16	6,40	3,33		ZG12	SMR	71B4		
	252,00	13	5,32	3,56		ZG12	SMR	71B4		
	284,00	12	4,71	3,60		ZG12	SMR	71B4		
0,55	0,58	8353	2352,00	0,98		ZG114	SMB	80A4		
	0,64	7569	2148,92	1,08		ZG114	SMB	80A4		
	0,75	6459	1832,73	1,27		ZG114	SMB	80A4		
	0,83	5837	1656,00	1,40		ZG114	SMB	80A4		
	0,91	5323	1506,46	1,54		ZG114	SMB	80A4		
	1,00	4844	1378,29	1,69		ZG114	SMB	80A4		
	1,10	4404	1296,00	1,86		ZG114	SMB	80A4		
	1,20	4037	1174,15	2,03		ZG114	SMB	80A4	348	318
	1,30	3726	1032,00	2,20		ZG114	SMB	80A4		
	1,50	3229	900,00	2,54		ZG114	SMR	80A4		
	1,70	2849	830,12	2,88		ZG114	SMR	80A4		
	1,80	2691	768,00	3,05		ZG114	SMR	80A4		
	2,10	2307	662,40	3,55		ZG114	SMR	80A4		
	2,20	2202	631,38	3,72		ZG114	SMR	80A4		
	2,40	2018	565,71	4,06		ZG114	SMR	80A4		
	1,00	4844	1375,76	1,01		ZG104	SMB	80A4		
	1,10	4404	1258,71	1,11		ZG104	SMB	80A4		
	1,20	4037	1183,56	1,21		ZG104	SMB	80A4		
	1,30	3726	1072,28	1,31		ZG104	SMB	80A4		
	1,50	3229	942,46	1,52		ZG104	SMB	80A4		
	1,70	2849	821,92	1,72		ZG104	SMR	80A4		
	1,80	2691	758,10	1,82		ZG104	SMR	80A4	233	312
	2,00	2422	701,37	2,02		ZG104	SMR	80A4		
	2,30	2106	604,93	2,33		ZG104	SMR	80A4		
	2,40	2018	576,61	2,43		ZG104	SMR	80A4		
	2,70	1794	516,63	2,73		ZG104	SMR	80A4		
	3,10	1562	441,18	3,14		ZG104	SMR	80A4		
	3,60	1345	379,05	3,64		ZG104	SMR	80A4		
	4,20	1153	326,99	4,25		ZG104	SMR	80A4		
	3,90	1267	352,68	3,87		ZG103	SMB	80A4	230	310
	4,30	1149	320,55	4,26		ZG103	SMB	80A4		
	1,60	3027	876,93	1,02		ZG94	SMR	80A4		
	1,70	2849	808,84	1,09		ZG94	SMR	80A4		
	1,80	2691	748,32	1,15		ZG94	SMR	80A4		
	2,10	2307	645,42	1,34		ZG94	SMR	80A4	170	306
	2,20	2202	615,20	1,41		ZG94	SMR	80A4		
	2,50	1937	551,22	1,60		ZG94	SMR	80A4		
	2,90	1670	470,72	1,86		ZG94	SMR	80A4		



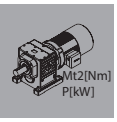
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,55	3,40	1424	404,42	2,18	ZG94	SMR	80A4		
	3,90	1242	348,88	2,50	ZG94	SMR	80A4	170	306
	4,80	1009	287,46	3,07	ZG94	SMR	80A4		
	3,70	1336	376,28	2,32	ZG93	SMB	80A4		
	4,00	1235	342,00	2,51	ZG93	SMB	80A4		
	4,40	1123	313,00	2,76	ZG93	SMB	80A4		
	4,80	1029	288,14	3,01	ZG93	SMB	80A4	167	304
	5,20	950	263,08	3,26	ZG93	SMB	80A4		
	5,70	867	240,15	3,57	ZG93	SMB	80A4		
	6,40	772	216,31	4,01	ZG93	SMB	80A4		
	2,70	1794	508,66	1,06	ZG84	SMR	80A4		
	2,90	1670	471,83	1,14	ZG84	SMR	80A4		
	3,40	1424	406,07	1,33	ZG84	SMR	80A4	75	301
	4,10	1181	337,82	1,61	ZG84	SMR	80A4		
	4,60	1053	299,21	1,80	ZG84	SMR	80A4		
	2,50	1977	553,25	0,96	ZG83	SMB	80A4		
	2,80	1765	497,83	1,08	ZG83	SMB	80A4		
	3,00	1647	461,05	1,15	ZG83	SMB	80A4		
	3,30	1498	421,24	1,27	ZG83	SMB	80A4		
	3,80	1300	359,26	1,46	ZG83	SMB	80A4		
	4,20	1177	324,61	1,61	ZG83	SMB	80A4		
	4,70	1051	295,30	1,81	ZG83	SMB	80A4		
	5,10	969	270,18	1,96	ZG83	SMB	80A4	73	300
	5,40	915	254,05	2,08	ZG83	SMB	80A4		
	6,00	823	230,16	2,31	ZG83	SMB	80A4		
	6,80	727	202,30	2,61	ZG83	SMB	80A4		
	7,80	633	176,42	3,00	ZG83	SMR	80A4		
	8,40	588	162,72	3,23	ZG83	SMR	80A4		
	9,10	543	150,55	3,50	ZG83	SMR	80A4		
	11,00	449	129,85	4,23	ZG83	SMR	80A4		
	3,60	1345	378,45	1,08	ZG74	SMR	80A4		
	4,40	1101	314,84	1,32	ZG74	SMR	80A4	65	298
	4,90	988	278,86	1,47	ZG74	SMR	80A4		
	3,50	1412	392,59	1,03	ZG73	SMB	80A4		
	4,10	1205	334,83	1,20	ZG73	SMB	80A4		
	4,50	1098	302,54	1,32	ZG73	SMB	80A4		
	5,00	988	275,22	1,47	ZG73	SMB	80A4		
	5,50	898	251,80	1,61	ZG73	SMB	80A4		
	5,80	852	236,77	1,70	ZG73	SMB	80A4		
	6,40	772	214,51	1,88	ZG73	SMB	80A4	63	297
	7,30	677	188,54	2,14	ZG73	SMB	80A4		
	8,40	588	164,42	2,46	ZG73	SMR	80A4		
	9,10	543	151,66	2,67	ZG73	SMR	80A4		
	9,80	504	140,31	2,87	ZG73	SMR	80A4		
	11,00	449	121,02	3,23	ZG73	SMR	80A4		
	12,00	411	115,35	3,52	ZG73	SMR	80A4		
	13,00	380	103,35	3,81	ZG73	SMR	80A4		
	5,90	837	232,90	0,98	ZG63	SMB	80A4	43	294



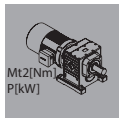
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,55	6,30	784	219,00	1,04	ZG63	SMB	80A4		
	6,90	716	198,41	1,14	ZG63	SMB	80A4		
	7,90	625	174,39	1,31	ZG63	SMB	80A4		
	9,00	549	152,08	1,49	ZG63	SMR	80A4		
	9,80	504	140,27	1,63	ZG63	SMR	80A4		
	11,00	449	129,78	1,82	ZG63	SMR	80A4	44	294
	12,00	412	111,93	1,99	ZG63	SMR	80A4		
	13,00	380	106,69	2,16	ZG63	SMR	80A4		
	14,00	353	95,60	2,32	ZG63	SMR	80A4		
	17,00	290	81,63	2,82	ZG63	SMR	80A4		
	20,00	247	70,14	3,32	ZG63	SMR	80A4		
	23,00	215	60,50	3,82	ZG63	SMR	80A4		
	21,00	240	65,26	3,41	ZG62	SMB	80A4		
	23,00	219	59,31	3,74	ZG62	SMB	80A4	42	293
	25,00	201	54,28	4,06	ZG62	SMB	80A4		
	34,00	148	39,93	3,65	ZG62	SMB	80A4		
	9,20	537	149,99	1,02	ZG53	SMB	80A4		
	11,00	449	129,54	1,22	ZG53	SMR	80A4		
	12,00	412	115,50	1,34	ZG53	SMR	80A4		
	13,00	380	103,02	1,45	ZG53	SMR	80A4		
	15,00	329	92,72	1,67	ZG53	SMR	80A4	38	292
	16,00	309	86,01	1,78	ZG53	SMR	80A4		
	19,00	260	74,02	2,11	ZG53	SMR	80A4		
	22,00	224	61,58	2,45	ZG53	SMR	80A4		
	25,00	197	54,54	2,78	ZG53	SMR	80A4		
	18,00	280	74,67	1,47	ZG52	SMB	80A4		
	20,00	252	67,91	2,07	ZG52	SMB	80A4		
	22,00	229	63,18	2,35	ZG52	SMB	80A4		
	25,00	201	54,25	2,72	ZG52	SMB	80A4		
	28,00	180	49,19	3,05	ZG52	SMB	80A4	35	291
	30,00	168	45,90	3,27	ZG52	SMB	80A4		
	33,00	152	41,71	3,60	ZG52	SMB	80A4		
	36,00	140	37,97	3,93	ZG52	SMB	80A4		
	40,00	126	34,55	4,36	ZG52	SMB	80A4		
	12,00	412	112,91	1,02	ZG43	SMR	80A4		
	14,00	353	100,71	1,19	ZG43	SMR	80A4		
	15,00	329	90,64	1,27	ZG43	SMR	80A4		
	16,00	308	84,08	1,36	ZG43	SMR	80A4	30	290
	19,00	260	72,36	1,61	ZG43	SMR	80A4		
	23,00	214	60,20	1,95	ZG43	SMR	80A4		
	26,00	190	53,32	2,21	ZG43	SMR	80A4		
	19,00	265	72,99	1,58	ZG42	SMB	80A4		
	21,00	240	66,39	1,75	ZG42	SMB	80A4		
	22,00	229	61,76	1,83	ZG42	SMB	80A4		
	26,00	194	53,03	2,16	ZG42	SMB	80A4	27	289
	29,00	173	48,09	2,41	ZG42	SMB	80A4		
	31,00	162	44,87	2,58	ZG42	SMB	80A4		
	34,00	148	40,77	2,83	ZG42	SMB	80A4		



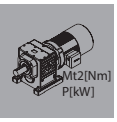
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,55	37,00	136	37,11	3,08	ZG42	SMB	80A4		
	41,00	123	33,78	3,41	ZG42	SMB	80A4		
	46,00	109	29,80	3,83	ZG42	SMB	80A4		
	51,00	99	27,05	4,25	ZG42	SMR	80A4		
	34,00	148	40,08	1,39	ZG42	SMB	80A4	27	289
	38,00	132	36,45	2,06	ZG42	SMB	80A4		
	41,00	123	33,91	2,44	ZG42	SMB	80A4		
	47,00	107	29,12	3,16	ZG42	SMB	80A4		
	52,00	97	26,41	3,82	ZG42	SMB	80A4		
	56,00	90	24,64	4,41	ZG42	SMB	80A4		
	17,00	290	81,63	0,96	ZG33	SMR	80A4		
	19,00	260	72,81	1,08	ZG33	SMR	80A4		
	21,00	235	65,53	1,19	ZG33	SMR	80A4		
	23,00	214	60,78	1,30	ZG33	SMR	80A4	26	288
	26,00	190	52,31	1,47	ZG33	SMR	80A4		
	32,00	154	43,52	1,81	ZG33	SMR	80A4		
	36,00	137	38,55	2,04	ZG33	SMR	80A4		
	19,00	265	71,27	0,98	ZG32	SMB	80A4		
	21,00	240	64,13	1,16	ZG32	SMB	80A4		
	23,00	219	59,39	1,28	ZG32	SMB	80A4		
	25,00	201	54,27	1,39	ZG32	SMB	80A4		
	30,00	168	46,28	1,67	ZG32	SMB	80A4		
	33,00	152	41,82	1,83	ZG32	SMB	80A4		
	36,00	140	38,04	2,00	ZG32	SMB	80A4		
	40,00	126	34,81	2,22	ZG32	SMB	80A4	25	287
	42,00	120	32,73	2,33	ZG32	SMB	80A4		
	46,00	109	29,65	2,55	ZG32	SMB	80A4		
	53,00	95	26,06	2,94	ZG32	SMB	80A4		
	61,00	82	22,73	3,39	ZG32	SMR	80A4		
	66,00	76	20,96	3,66	ZG32	SMR	80A4		
	71,00	71	19,39	3,94	ZG32	SMR	80A4		
	82,00	61	16,73	4,34	ZG32	SMR	80A4		
	86,00	58	15,94	4,45	ZG32	SMR	80A4		
	28,00	176	48,91	1,02	ZG23	SMR	80A4		
	34,00	145	40,69	1,24	ZG23	SMR	80A4	22	286
	38,00	130	36,04	1,38	ZG23	SMR	80A4		
	27,00	186	50,74	0,96	ZG22	SMB	80A4		
	32,00	157	43,27	1,14	ZG22	SMB	80A4		
	35,00	144	39,10	1,25	ZG22	SMB	80A4		
	39,00	129	35,57	1,39	ZG22	SMB	80A4		
	42,00	120	32,54	1,50	ZG22	SMB	80A4		
	45,00	112	30,60	1,61	ZG22	SMB	80A4	20	285
	50,00	100	27,72	1,78	ZG22	SMB	80A4		
	56,00	90	24,37	2,00	ZG22	SMB	80A4		
	65,00	77	21,25	2,32	ZG22	SMR	80A4		
	70,00	72	19,60	2,50	ZG22	SMR	80A4		
	76,00	66	18,13	2,70	ZG22	SMR	80A4		
	88,00	57	15,64	2,95	ZG22	SMR	80A4		



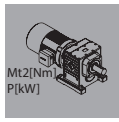
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,55	92,00	54	14,91	3,03	ZG22	SMR	80A4		
	103,00	49	13,36	3,35	ZG22	SMR	80A4		
	121,00	41	11,41	3,69	ZG22	SMR	80A4		
	140,00	36	9,80	4,11	ZG22	SMR	80A4		
	39,00	129	35,16	1,09	ZG22	SMB	80A4		
	43,00	117	31,64	1,46	ZG22	SMB	80A4		
	47,00	107	29,30	1,66	ZG22	SMB	80A4		
	51,00	98	26,77	1,82	ZG22	SMB	80A4		
	60,00	84	22,83	2,14	ZG22	SMB	80A4		
	67,00	75	20,63	2,39	ZG22	SMB	80A4	20	285
	73,00	69	18,77	2,60	ZG22	SMB	80A4		
	80,00	63	17,17	2,81	ZG22	SMB	80A4		
	85,00	59	16,15	2,93	ZG22	SMB	80A4		
	94,00	53	14,63	3,09	ZG22	SMB	80A4		
	107,00	47	12,86	3,39	ZG22	SMB	80A4		
	123,00	41	11,21	3,75	ZG22	SMR	80A4		
	133,00	37	10,34	4,01	ZG22	SMR	80A4		
	144,00	35	9,57	4,22	ZG22	SMR	80A4		
	48,00	105	28,54	0,95	ZG12	SMB	80A4		
	53,00	95	26,00	1,05	ZG12	SMB	80A4		
	59,00	85	23,33	1,17	ZG12	SMB	80A4		
	62,00	81	22,08	1,23	ZG12	SMB	80A4		
	71,00	71	19,25	1,35	ZG12	SMB	80A4		
	83,00	60	16,63	1,50	ZG12	SMR	80A4		
	93,00	54	14,82	1,60	ZG12	SMR	80A4		
	104,00	48	13,22	1,73	ZG12	SMR	80A4		
	116,00	43	11,90	1,82	ZG12	SMR	80A4		
	125,00	40	11,04	1,88	ZG12	SMR	80A4		
	145,00	34	9,50	2,13	ZG12	SMR	80A4		
	174,00	29	7,90	2,35	ZG12	SMR	80A4		
	196,00	25	7,00	2,37	ZG12	SMR	80A4		
	51,00	98	27,20	1,01	ZG12	SMB	80A4		
	58,00	87	23,57	1,15	ZG12	SMB	80A4	15	284
	65,00	77	21,21	1,29	ZG12	SMB	80A4		
	72,00	70	19,22	1,37	ZG12	SMB	80A4		
	79,00	63	17,51	1,47	ZG12	SMB	80A4		
	88,00	57	15,71	1,60	ZG12	SMB	80A4		
	92,00	54	14,87	1,60	ZG12	SMB	80A4		
	106,00	47	12,96	1,72	ZG12	SMB	80A4		
	123,00	41	11,20	1,88	ZG12	SMR	80A4		
	138,00	36	9,98	2,02	ZG12	SMR	80A4		
	154,00	32	8,90	2,17	ZG12	SMR	80A4		
	172,00	29	8,01	2,22	ZG12	SMR	80A4		
	185,00	27	7,43	2,24	ZG12	SMR	80A4		
	215,00	23	6,40	2,30	ZG12	SMR	80A4		
	258,00	19	5,32	2,45	ZG12	SMR	80A4		
	292,00	17	4,71	2,49	ZG12	SMR	80A4		
0,75	0,83	7959	1656,00	1,03	ZG114	SMB	80B4	349	318



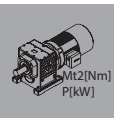
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,75	0,91	7259	1506,46	1,13	ZG114	SMB	80B4		
	1	6606	1378,29	1,24	ZG114	SMB	80B4		
	1,1	6005	1296,00	1,37	ZG114	SMB	80B4		
	1,2	5505	1174,15	1,49	ZG114	SMB	80B4		
	1,3	5082	1032,00	1,61	ZG114	SMB	80B4		
	1,5	4404	900,00	1,86	ZG114	SMR	80B4		
	1,7	3886	830,12	2,11	ZG114	SMR	80B4	349	318
	1,8	3670	768,00	2,23	ZG114	SMR	80B4		
	2,1	3146	662,40	2,61	ZG114	SMR	80B4		
	2,2	3003	631,38	2,73	ZG114	SMR	80B4		
	2,4	2752	565,71	2,98	ZG114	SMR	80B4		
	2,8	2359	483,10	3,48	ZG114	SMR	80B4		
	3,3	2001	415,06	4,10	ZG114	SMR	80B4		
	1,3	5081	1072,28	0,96	ZG104	SMB	80B4		
	1,5	4404	942,46	1,11	ZG104	SMB	80B4		
	1,7	3886	821,92	1,26	ZG104	SMR	80B4		
	1,8	3670	758,10	1,34	ZG104	SMR	80B4		
	2	3303	701,37	1,48	ZG104	SMR	80B4		
	2,3	2872	604,93	1,71	ZG104	SMR	80B4	234	312
	2,4	2752	576,61	1,78	ZG104	SMR	80B4		
	2,7	2446	516,63	2,00	ZG104	SMR	80B4		
	3,1	2131	441,18	2,30	ZG104	SMR	80B4		
	3,6	1835	379,05	2,67	ZG104	SMR	80B4		
	4,2	1573	326,99	3,12	ZG104	SMR	80B4		
	5,1	1295	269,43	3,78	ZG104	SMR	80B4		
	3,9	1728	352,68	2,83	ZG103	SMB	80B4		
	4,3	1567	320,55	3,13	ZG103	SMB	80B4		
	4,7	1434	293,36	3,42	ZG103	SMB	80B4	231	310
	5,1	1321	270,06	3,71	ZG103	SMB	80B4		
	5,6	1203	246,57	4,07	ZG103	SMB	80B4		
	6,1	1105	225,08	4,43	ZG103	SMB	80B4		
	2,1	3146	645,42	0,99	ZG94	SMR	80B4		
	2,2	3003	615,20	1,03	ZG94	SMR	80B4		
	2,5	2642	551,22	1,17	ZG94	SMR	80B4		
	2,9	2278	470,72	1,36	ZG94	SMR	80B4	171	306
	3,4	1943	404,42	1,60	ZG94	SMR	80B4		
	3,9	1694	348,88	1,83	ZG94	SMR	80B4		
	4,8	1376	287,46	2,25	ZG94	SMR	80B4		
	3,7	1822	376,28	1,70	ZG93	SMB	80B4		
	4	1685	342,00	1,84	ZG93	SMB	80B4		
	4,4	1532	313,00	2,02	ZG93	SMB	80B4		
	4,8	1404	288,14	2,21	ZG93	SMB	80B4		
	5,2	1296	263,08	2,39	ZG93	SMB	80B4	168	304
	5,7	1182	240,15	2,62	ZG93	SMB	80B4		
	6,4	1053	216,31	2,94	ZG93	SMB	80B4		
	7,3	923	188,54	3,36	ZG93	SMR	80B4		
	7,7	875	177,45	3,54	ZG93	SMR	80B4		
	8,4	802	163,69	3,86	ZG93	SMR	80B4		



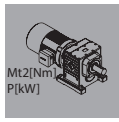
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,75	9,3	724	147,33	4,28	ZG93	SMR	80B4	168	304
	3,4	1943	406,07	0,98	ZG84	SMR	80B4		
	4,1	1611	337,82	1,18	ZG84	SMR	80B4	76	301
	4,6	1436	299,21	1,32	ZG84	SMR	80B4		
	3,8	1774	359,26	1,07	ZG83	SMB	80B4		
	4,2	1605	324,61	1,18	ZG83	SMB	80B4		
	4,7	1434	295,30	1,32	ZG83	SMB	80B4		
	5,1	1321	270,18	1,44	ZG83	SMB	80B4		
	5,4	1248	254,05	1,52	ZG83	SMB	80B4		
	6	1123	230,16	1,69	ZG83	SMB	80B4		
	6,8	991	202,30	1,92	ZG83	SMB	80B4	74	300
	7,8	864	176,42	2,20	ZG83	SMR	80B4		
	8,4	802	162,72	2,37	ZG83	SMR	80B4		
	9,1	740	150,55	2,56	ZG83	SMR	80B4		
	11	612	129,85	3,10	ZG83	SMR	80B4		
	12	561	110,89	3,38	ZG83	SMR	80B4		
	15	449	94,70	4,23	ZG83	SMR	80B4		
	4,4	1501	314,84	0,97	ZG74	SMR	80B4	66	298
	4,9	1348	278,86	1,08	ZG74	SMR	80B4		
	4,5	1498	302,54	0,97	ZG73	SMB	80B4		
	5	1348	275,22	1,08	ZG73	SMB	80B4		
	5,5	1225	251,80	1,18	ZG73	SMB	80B4		
	5,8	1162	236,77	1,25	ZG73	SMB	80B4		
	6,4	1053	214,51	1,38	ZG73	SMB	80B4		
	7,3	923	188,54	1,57	ZG73	SMB	80B4		
	8,4	802	164,42	1,81	ZG73	SMR	80B4	64	297
	9,1	740	151,66	1,96	ZG73	SMR	80B4		
	9,8	687	140,31	2,11	ZG73	SMR	80B4		
	11	612	121,02	2,37	ZG73	SMR	80B4		
	12	561	115,35	2,58	ZG73	SMR	80B4		
	13	518	103,35	2,80	ZG73	SMR	80B4		
	16	421	88,26	3,44	ZG73	SMR	80B4		
	18	374	75,83	3,87	ZG73	SMR	80B4		
	7,9	853	174,39	0,96	ZG63	SMB	80B4		
	9	749	152,08	1,09	ZG63	SMR	80B4		
	9,8	687	140,27	1,19	ZG63	SMR	80B4		
	11	612	129,78	1,34	ZG63	SMR	80B4		
	12	561	111,93	1,46	ZG63	SMR	80B4		
	13	518	106,69	1,58	ZG63	SMR	80B4	44	294
	14	481	95,60	1,70	ZG63	SMR	80B4		
	17	396	81,63	2,07	ZG63	SMR	80B4		
	20	337	70,14	2,43	ZG63	SMR	80B4		
	23	293	60,50	2,80	ZG63	SMR	80B4		
	28	240	49,85	3,41	ZG63	SMR	80B4		
	21	327	65,26	2,50	ZG53	SMB	80B4		
	23	299	59,31	2,74	ZG53	SMB	80B4	42	292
	25	275	54,28	2,98	ZG53	SMB	80B4		
	28	245	49,97	3,34	ZG53	SMB	80B4		



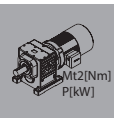
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,75	30	229	45,63	3,58	ZG53	SMB	80B4		
	33	208	41,65	3,93	ZG53	SMB	80B4		
	37	185	37,51	4,38	ZG53	SMB	80B4	42	292
	34	202	39,93	2,67	ZG53	SMB	80B4		
	38	181	36,29	3,44	ZG53	SMB	80B4		
	41	167	33,21	4,00	ZG53	SMB	80B4		
	12	561	115,50	0,98	ZG53	SMR	80B4		
	13	518	103,02	1,06	ZG53	SMR	80B4		
	15	449	92,72	1,22	ZG53	SMR	80B4		
	16	421	86,01	1,31	ZG53	SMR	80B4	38	292
	19	354	74,02	1,55	ZG53	SMR	80B4		
	22	306	61,58	1,79	ZG53	SMR	80B4		
	25	269	54,54	2,04	ZG53	SMR	80B4		
	18	382	74,67	1,08	ZG52	SMB	80B4		
	20	344	67,91	1,52	ZG52	SMB	80B4		
	22	312	63,18	1,72	ZG52	SMB	80B4		
	25	275	54,25	1,99	ZG52	SMB	80B4		
	28	245	49,19	2,24	ZG52	SMB	80B4		
	30	229	45,90	2,40	ZG52	SMB	80B4	35	291
	33	208	41,71	2,64	ZG52	SMB	80B4		
	36	191	37,97	2,88	ZG52	SMB	80B4		
	40	172	34,55	3,20	ZG52	SMB	80B4		
	45	152	30,48	3,60	ZG52	SMB	80B4		
	50	137	27,67	4,00	ZG52	SMR	80B4		
	54	127	25,29	4,32	ZG52	SMR	80B4		
	16	421	84,08	1,00	ZG43	SMR	80B4		
	19	354	72,36	1,18	ZG43	SMR	80B4	31	290
	23	293	60,20	1,43	ZG43	SMR	80B4		
	26	259	53,32	1,62	ZG43	SMR	80B4		
	19	362	72,99	1,16	ZG42	SMB	80B4		
	21	327	66,39	1,28	ZG42	SMB	80B4		
	22	312	61,76	1,34	ZG42	SMB	80B4		
	26	264	53,03	1,59	ZG42	SMB	80B4		
	29	237	48,09	1,77	ZG42	SMB	80B4		
	31	221	44,87	1,89	ZG42	SMB	80B4		
	34	202	40,77	2,08	ZG42	SMB	80B4		
	37	185	37,11	2,26	ZG42	SMB	80B4		
	41	167	33,78	2,50	ZG42	SMB	80B4		
	46	149	29,80	2,81	ZG42	SMB	80B4	28	289
	51	134	27,05	3,11	ZG42	SMR	80B4		
	56	122	24,72	3,42	ZG42	SMR	80B4		
	59	116	23,35	3,60	ZG42	SMR	80B4		
	67	102	20,39	4,09	ZG42	SMR	80B4		
	34	202	40,08	1,02	ZG42	SMB	80B4		
	38	181	36,45	1,51	ZG42	SMB	80B4		
	41	167	33,91	1,79	ZG42	SMB	80B4		
	47	146	29,12	2,32	ZG42	SMB	80B4		
	52	132	26,41	2,80	ZG42	SMB	80B4		



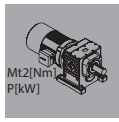
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,75	56	122	24,64	3,23		ZG42	SMB	80B4		
	61	112	22,39	3,54		ZG42	SMB	80B4	28	289
	67	102	20,38	3,90		ZG42	SMB	80B4		
	74	92	18,55	4,30		ZG42	SMB	80B4		
	23	293	60,78	0,96		ZG33	SMR	80B4		
	26	259	52,31	1,08		ZG33	SMR	80B4	27	288
	32	210	43,52	1,33		ZG33	SMR	80B4		
	36	187	38,55	1,50		ZG33	SMR	80B4		
	25	275	54,27	1,02		ZG32	SMB	80B4		
	30	229	46,28	1,22		ZG32	SMB	80B4		
	33	208	41,82	1,34		ZG32	SMB	80B4		
	36	191	38,04	1,47		ZG32	SMB	80B4		
	40	171	34,81	1,63		ZG32	SMB	80B4		
	42	163	32,73	1,71		ZG32	SMB	80B4		
	46	149	29,65	1,87		ZG32	SMB	80B4		
	53	129	26,06	2,16		ZG32	SMB	80B4		
	61	112	22,73	2,48		ZG32	SMR	80B4	25	287
	66	104	20,96	2,69		ZG32	SMR	80B4		
	71	96	19,39	2,89		ZG32	SMR	80B4		
	82	83	16,73	3,18		ZG32	SMR	80B4		
	86	80	15,94	3,26		ZG32	SMR	80B4		
	96	71	14,29	3,56		ZG32	SMR	80B4		
	113	60	12,20	3,94		ZG32	SMR	80B4		
	131	52	10,48	4,40		ZG32	SMR	80B4		
	38	177	36,04	1,01		ZG23	SMR	80B4	22	286
	39	176	35,57	1,02		ZG22	SMB	80B4		
	42	163	32,54	1,10		ZG22	SMB	80B4		
	45	152	30,60	1,18		ZG22	SMB	80B4		
	50	137	27,72	1,31		ZG22	SMB	80B4		
	56	122	24,37	1,47		ZG22	SMB	80B4		
	65	105	21,25	1,70		ZG22	SMR	80B4		
	70	98	19,60	1,83		ZG22	SMR	80B4		
	76	90	18,13	1,98		ZG22	SMR	80B4		
	88	78	15,64	2,16		ZG22	SMR	80B4		
	92	74	14,91	2,22		ZG22	SMR	80B4		
	103	67	13,36	2,46		ZG22	SMR	80B4		
	121	56	11,41	2,71		ZG22	SMR	80B4	20	285
	140	49	9,80	3,01		ZG22	SMR	80B4		
	163	42	8,45	3,34		ZG22	SMR	80B4		
	197	35	6,97	3,84		ZG22	SMR	80B4		
	43	160	31,64	1,07		ZG22	SMB	80B4		
	47	146	29,30	1,22		ZG22	SMB	80B4		
	51	134	26,77	1,33		ZG22	SMB	80B4		
	60	114	22,83	1,57		ZG22	SMB	80B4		
	67	102	20,63	1,75		ZG22	SMB	80B4		
	73	94	18,77	1,91		ZG22	SMB	80B4		
	80	86	17,17	2,06		ZG22	SMB	80B4		
	85	81	16,15	2,15		ZG22	SMB	80B4		



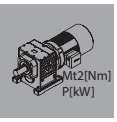
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
0,75	94	73	14,63	2,27	ZG22	SMB	80B4		
	107	64	12,86	2,49	ZG22	SMB	80B4		
	123	55	11,21	2,75	ZG22	SMR	80B4		
	133	51	10,34	2,94	ZG22	SMR	80B4		
	144	47	9,57	3,10	ZG22	SMR	80B4	20	285
	167	41	8,25	3,42	ZG22	SMR	80B4		
	175	39	7,87	3,49	ZG22	SMR	80B4		
	195	35	7,05	3,80	ZG22	SMR	80B4		
	228	30	6,02	4,38	ZG22	SMR	80B4		
	71	96	19,25	0,99	ZG12	SMB	80B4		
	83	82	16,63	1,10	ZG12	SMR	80B4		
	93	74	14,82	1,18	ZG12	SMR	80B4		
	104	66	13,22	1,27	ZG12	SMR	80B4		
	116	59	11,90	1,33	ZG12	SMR	80B4		
	125	55	11,04	1,38	ZG12	SMR	80B4		
	145	47	9,50	1,56	ZG12	SMR	80B4		
	174	39	7,90	1,72	ZG12	SMR	80B4		
	196	35	7,00	1,74	ZG12	SMR	80B4		
	72	95	19,22	1,00	ZG12	SMB	80B4		
	79	87	17,51	1,08	ZG12	SMB	80B4		
	88	78	15,71	1,18	ZG12	SMB	80B4	16	284
	92	74	14,87	1,18	ZG12	SMB	80B4		
	106	65	12,96	1,26	ZG12	SMB	80B4		
	123	56	11,20	1,38	ZG12	SMR	80B4		
	138	49	9,98	1,48	ZG12	SMR	80B4		
	154	44	8,90	1,59	ZG12	SMR	80B4		
	172	40	8,01	1,63	ZG12	SMR	80B4		
	185	37	7,43	1,64	ZG12	SMR	80B4		
	215	32	6,40	1,69	ZG12	SMR	80B4		
	258	26	5,32	1,80	ZG12	SMR	80B4		
	292	23	4,71	1,83	ZG12	SMR	80B4		
1,10	0,92	10532	1536,94	1,90	ZG134	SMB	90S4		
	1	9689	1396,92	2,06	ZG134	SMB	90S4		
	1,1	8808	1278,44	2,27	ZG134	SMB	90S4		
	1,2	8074	1176,89	2,48	ZG134	SMB	90S4		
	1,3	7453	1074,55	2,68	ZG134	SMB	90S4		
	1,4	6921	980,87	2,89	ZG134	SMB	90S4	715	330
	1,6	6055	883,52	3,30	ZG134	SMB	90S4		
	1,8	5383	770,10	3,72	ZG134	SMB	90S4		
	1,9	5099	724,80	3,92	ZG134	SMB	90S4		
	2,1	4614	668,61	4,33	ZG134	SMR	90S4		
	0,91	10647	1547,69	1,27	ZG124	SMB	90S4		
	1	9689	1406,69	1,39	ZG124	SMB	90S4		
	1,1	8808	1287,38	1,53	ZG124	SMB	90S4		
	1,2	8074	1185,12	1,67	ZG124	SMB	90S4	503	124
	1,3	7453	1082,07	1,81	ZG124	SMB	90S4		
	1,4	6921	987,73	1,95	ZG124	SMB	90S4		
	1,6	6055	889,70	2,23	ZG124	SMB	90S4		



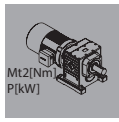
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
1,10	1,8	5383	775,48	2,51	ZG124	SMB	90S4		
	1,9	5099	729,87	2,65	ZG124	SMB	90S4		
	2,1	4614	673,29	2,93	ZG124	SMR	90S4		
	2,3	4212	605,96	3,20	ZG124	SMR	90S4	503	324
	2,6	3726	545,04	3,62	ZG124	SMR	90S4		
	2,8	3460	508,76	3,90	ZG124	SMR	90S4		
	3,2	3028	446,57	4,46	ZG124	SMR	90S4		
	1,2	8074	1174,15	1,02	ZG114	SMB	90S4		
	1,4	6921	1032,00	1,18	ZG114	SMB	90S4		
	1,6	6056	900,00	1,35	ZG114	SMB	90S4		
	1,7	5699	830,12	1,44	ZG114	SMB	90S4		
	1,8	5383	768,00	1,52	ZG114	SMR	90S4		
	2,1	4614	662,40	1,78	ZG114	SMR	90S4		
	2,2	4404	631,38	1,86	ZG114	SMR	90S4	353	318
	2,5	3875	565,71	2,12	ZG114	SMR	90S4		
	2,9	3341	483,10	2,45	ZG114	SMR	90S4		
	3,4	2849	415,06	2,88	ZG114	SMR	90S4		
	3,9	2484	358,05	3,30	ZG114	SMR	90S4		
	4,8	2018	295,02	4,06	ZG114	SMR	90S4		
	1,9	5099	758,10	0,96	ZG104	SMB	90S4		
	2	4844	701,37	1,01	ZG104	SMR	90S4		
	2,3	4212	604,93	1,16	ZG104	SMR	90S4		
	2,4	4037	576,61	1,21	ZG104	SMR	90S4		
	2,7	3588	516,63	1,37	ZG104	SMR	90S4	238	312
	3,2	3028	441,18	1,62	ZG104	SMR	90S4		
	3,7	2618	379,05	1,87	ZG104	SMR	90S4		
	4,3	2253	326,99	2,17	ZG104	SMR	90S4		
	5,2	1863	269,43	2,63	ZG104	SMR	90S4		
	4	2471	352,68	1,98	ZG103	SMB	90S4		
	4,4	2247	320,55	2,18	ZG103	SMB	90S4		
	4,8	2059	293,36	2,38	ZG103	SMB	90S4		
	5,2	1901	270,06	2,58	ZG103	SMB	90S4		
	5,7	1734	246,57	2,82	ZG103	SMB	90S4	235	310
	6,3	1569	225,08	3,12	ZG103	SMB	90S4		
	7	1412	202,74	3,47	ZG103	SMB	90S4		
	8	1235	176,71	3,96	ZG103	SMB	90S4		
	8,5	1163	166,32	4,21	ZG103	SMB	90S4		
	3	3229	470,72	0,96	ZG94	SMR	90S4		
	3,5	2768	404,42	1,12	ZG94	SMR	90S4	175	306
	4	2422	348,88	1,28	ZG94	SMR	90S4		
	4,9	1977	287,46	1,57	ZG94	SMR	90S4		
	3,7	2672	376,28	1,16	ZG93	SMB	90S4		
	4,1	2411	342,00	1,29	ZG93	SMB	90S4		
	4,5	2197	313,00	1,41	ZG93	SMB	90S4		
	4,9	2017	288,14	1,54	ZG93	SMB	90S4	172	304
	5,4	1831	263,08	1,69	ZG93	SMB	90S4		
	5,9	1675	240,15	1,85	ZG93	SMB	90S4		
	6,5	1521	216,31	2,04	ZG93	SMB	90S4		



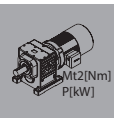
P	n_2	Mt_2	i	f_B				m	
[kW]	[min^{-1}]	[Nm]						[kg]	
1,10	7,5	1318	188,54	2,35	ZG93	SMB	90S4	172	304
	7,9	1251	177,45	2,48	ZG93	SMB	90S4		
	8,6	1149	163,69	2,70	ZG93	SMR	90S4		
	9,6	1029	147,33	3,01	ZG93	SMR	90S4		
	11	898	132,51	3,45	ZG93	SMR	90S4		
	13	760	108,57	4,08	ZG93	SMR	90S4		
	5,2	1901	270,18	1,00	ZG83	SMB	90S4	78	300
	5,6	1765	254,05	1,08	ZG83	SMB	90S4		
	6,1	1620	230,16	1,17	ZG83	SMB	90S4		
	7	1412	202,30	1,35	ZG83	SMB	90S4		
	8	1235	176,42	1,54	ZG83	SMB	90S4		
	8,7	1136	162,72	1,67	ZG83	SMB	90S4		
	9,4	1051	150,55	1,81	ZG83	SMR	90S4		
	11	898	129,85	2,11	ZG83	SMR	90S4		
	13	760	110,89	2,50	ZG83	SMR	90S4		
	15	659	94,70	2,88	ZG83	SMR	90S4		
	17	581	81,36	3,27	ZG83	SMR	90S4		
	20	494	70,19	3,84	ZG83	SMR	90S4		
	6,6	1498	214,51	0,97	ZG73	SMB	90S4	68	297
	7,5	1318	188,54	1,10	ZG73	SMB	90S4		
	8,6	1149	164,42	1,26	ZG73	SMB	90S4		
	9,3	1063	151,66	1,36	ZG73	SMB	90S4		
	10	988	140,31	1,47	ZG73	SMR	90S4		
	12	823	121,02	1,76	ZG73	SMR	90S4		
	14	706	103,35	2,05	ZG73	SMR	90S4		
	16	617	88,26	2,35	ZG73	SMR	90S4		
	19	520	75,83	2,79	ZG73	SMR	90S4		
	22	449	65,41	3,23	ZG73	SMR	90S4		
	26	380	53,90	3,81	ZG73	SMR	90S4		
	13	760	111,93	1,08	ZG63	SMR	90S4	48	294
	15	659	95,60	1,24	ZG63	SMR	90S4		
	17	581	81,63	1,41	ZG63	SMR	90S4		
	20	494	70,14	1,66	ZG63	SMR	90S4		
	23	429	60,50	1,91	ZG63	SMR	90S4		
	28	353	49,85	2,32	ZG63	SMR	90S4		
	22	458	65,26	1,79	ZG62	SMB	90S4	46	293
	24	420	59,31	1,95	ZG62	SMB	90S4		
	26	388	54,28	2,11	ZG62	SMB	90S4		
	28	360	49,97	2,28	ZG62	SMB	90S4		
	31	325	45,63	2,52	ZG62	SMB	90S4		
	34	296	41,65	2,76	ZG62	SMB	90S4		
	38	265	37,51	3,07	ZG62	SMB	90S4		
	43	234	32,70	3,43	ZG62	SMB	90S4		
	46	219	30,77	3,63	ZG62	SMB	90S4		
	50	201	28,39	3,89	ZG62	SMR	90S4		
	55	183	25,55	4,15	ZG62	SMR	90S4		
	61	165	22,98	4,47	ZG62	SMR	90S4		
	35	288	39,93	1,88	ZG62	SMB	90S4		



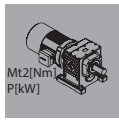
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
1,10	39	258	36,29	2,40	ZG62	SMB	90S4		
	42	240	33,21	2,79	ZG62	SMB	90S4		
	46	219	30,58	3,27	ZG62	SMB	90S4	46	293
	51	197	27,92	3,82	ZG62	SMB	90S4		
	55	183	25,48	4,36	ZG62	SMB	90S4		
	19	520	74,02	1,06	ZG53	SMR	90S4		
	23	429	61,58	1,28	ZG53	SMR	90S4	43	292
	26	380	54,54	1,45	ZG53	SMR	90S4		
	21	480	67,91	1,09	ZG52	SMB	90S4		
	22	458	63,18	1,18	ZG52	SMB	90S4		
	26	388	54,25	1,41	ZG52	SMB	90S4		
	29	347	49,19	1,58	ZG52	SMB	90S4		
	31	325	45,90	1,69	ZG52	SMB	90S4		
	34	296	41,71	1,85	ZG52	SMB	90S4		
	37	272	37,97	2,02	ZG52	SMB	90S4	40	291
	41	246	34,55	2,24	ZG52	SMB	90S4		
	46	219	30,48	2,51	ZG52	SMB	90S4		
	51	197	27,67	2,78	ZG52	SMB	90S4		
	56	180	25,29	3,05	ZG52	SMB	90S4		
	59	171	23,88	3,22	ZG52	SMR	90S4		
	68	148	20,85	3,71	ZG52	SMR	90S4		
	76	132	18,54	4,14	ZG52	SMR	90S4		
	23	429	60,20	0,98	ZG43	SMR	90S4	35	290
	26	380	53,32	1,10	ZG43	SMR	90S4		
	23	438	61,76	0,96	ZG42	SMB	90S4		
	27	373	53,03	1,12	ZG42	SMB	90S4		
	29	347	48,09	1,21	ZG42	SMB	90S4		
	31	325	44,87	1,29	ZG42	SMB	90S4		
	35	288	40,77	1,46	ZG42	SMB	90S4		
	38	265	37,11	1,58	ZG42	SMB	90S4		
	42	240	33,78	1,75	ZG42	SMB	90S4		
	47	214	29,80	1,96	ZG42	SMB	90S4		
	52	194	27,05	2,16	ZG42	SMB	90S4		
	57	177	24,72	2,37	ZG42	SMB	90S4		
	60	168	23,35	2,50	ZG42	SMR	90S4		
	69	146	20,39	2,87	ZG42	SMR	90S4	32	289
	78	129	18,12	3,25	ZG42	SMR	90S4		
	85	118	16,51	3,54	ZG42	SMR	90S4		
	98	102	14,34	3,90	ZG42	SMR	90S4		
	112	90	12,55	4,31	ZG42	SMR	90S4		
	39	258	36,45	1,06	ZG42	SMB	90S4		
	42	240	33,91	1,25	ZG42	SMB	90S4		
	48	210	29,12	1,61	ZG42	SMB	90S4		
	53	190	26,41	1,95	ZG42	SMB	90S4		
	57	177	24,64	2,24	ZG42	SMB	90S4		
	63	160	22,39	2,49	ZG42	SMB	90S4		
	69	146	20,38	2,74	ZG42	SMB	90S4		
	76	132	18,55	3,01	ZG42	SMB	90S4		



P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
1,10	86	117	16,36	3,41		ZG42	SMB	90S4		
	95	106	14,85	3,77		ZG42	SMB	90S4	32	289
	104	97	13,58	4,12		ZG42	SMB	90S4		
	110	91	12,82	4,36		ZG42	SMR	90S4		
	37	267	38,55	1,05		ZG33	SMR	90S4	31	288
	37	272	38,04	1,03		ZG32	SMB	90S4		
	41	246	34,81	1,14		ZG32	SMB	90S4		
	43	234	32,73	1,19		ZG32	SMB	90S4		
	48	210	29,65	1,33		ZG32	SMB	90S4		
	54	186	26,06	1,50		ZG32	SMB	90S4		
	62	162	22,73	1,72		ZG32	SMB	90S4		
	67	150	20,96	1,86		ZG32	SMB	90S4		
	73	138	19,39	2,03		ZG32	SMR	90S4	30	287
	84	120	16,73	2,22		ZG32	SMR	90S4		
	88	114	15,94	2,28		ZG32	SMR	90S4		
	99	101	14,29	2,50		ZG32	SMR	90S4		
	116	86	12,20	2,76		ZG32	SMR	90S4		
	135	74	10,48	3,09		ZG32	SMR	90S4		
	156	64	9,04	3,40		ZG32	SMR	90S4		
	189	53	7,45	3,90		ZG32	SMR	90S4		
	58	173	24,37	1,03		ZG22	SMB	90S4		
	66	152	21,25	1,18		ZG22	SMB	90S4		
	72	140	19,60	1,28		ZG22	SMB	90S4		
	78	129	18,13	1,38		ZG22	SMR	90S4		
	90	112	15,64	1,51		ZG22	SMR	90S4		
	95	106	14,91	1,56		ZG22	SMR	90S4		
	106	95	13,36	1,72		ZG22	SMR	90S4		
	124	81	11,41	1,89		ZG22	SMR	90S4		
	144	70	9,80	2,11		ZG22	SMR	90S4		
	167	60	8,45	2,33		ZG22	SMR	90S4		
	202	50	6,97	2,68		ZG22	SMR	90S4		
	62	162	22,83	1,11		ZG22	SMB	90S4		
	68	148	20,63	1,21		ZG22	SMB	90S4		
	75	134	18,77	1,34		ZG22	SMB	90S4	24	285
	82	123	17,17	1,44		ZG22	SMB	90S4		
	87	116	16,15	1,50		ZG22	SMB	90S4		
	96	105	14,63	1,58		ZG22	SMB	90S4		
	110	91	12,86	1,74		ZG22	SMB	90S4		
	126	80	11,21	1,92		ZG22	SMB	90S4		
	136	74	10,34	2,05		ZG22	SMB	90S4		
	147	68	9,57	2,16		ZG22	SMR	90S4		
	171	59	8,25	2,39		ZG22	SMR	90S4		
	179	56	7,87	2,43		ZG22	SMR	90S4		
	200	50	7,05	2,66		ZG22	SMR	90S4		
	234	43	6,02	3,06		ZG22	SMR	90S4		
	273	37	5,17	3,46		ZG22	SMR	90S4		
	316	32	4,46	3,73		ZG22	SMR	90S4		
	384	26	3,68	4,26		ZG22	SMR	90S4		



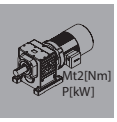
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
1,10	128	78	11,04	0,96		ZG12	SMR	90S4		
	148	68	9,50	1,09		ZG12	SMR	90S4		
	178	56	7,90	1,20		ZG12	SMR	90S4		
	201	50	7,00	1,22		ZG12	SMR	90S4		
	126	80	11,20	0,96		ZG12	SMB	90S4		
	141	71	9,98	1,03		ZG12	SMB	90S4	20	284
	158	63	8,90	1,11		ZG12	SMR	90S4		
	176	57	8,01	1,13		ZG12	SMR	90S4		
	190	53	7,43	1,15		ZG12	SMR	90S4		
	220	45	6,40	1,18		ZG12	SMR	90S4		
	265	38	5,32	1,26		ZG12	SMR	90S4		
	299	33	4,71	1,27		ZG12	SMR	90S4		
1,50	0,91	14519	1536,94	1,38		ZG134	SMB	90L4		
	1	13212	1396,92	1,51		ZG134	SMB	90L4		
	1,1	12011	1278,44	1,67		ZG134	SMB	90L4		
	1,2	11010	1176,89	1,82		ZG134	SMB	90L4		
	1,3	10163	1074,55	1,97		ZG134	SMB	90L4		
	1,4	9437	980,87	2,12		ZG134	SMB	90L4		
	1,6	8258	883,52	2,42		ZG134	SMB	90L4	717	330
	1,8	7340	770,10	2,72		ZG134	SMB	90L4		
	1,9	6954	724,80	2,88		ZG134	SMB	90L4		
	2,1	6291	668,61	3,18		ZG134	SMR	90L4		
	2,3	5744	601,75	3,48		ZG134	SMR	90L4		
	2,6	5081	541,26	3,94		ZG134	SMR	90L4		
	2,8	4718	505,23	4,24		ZG134	SMR	90L4		
	1	13212	1406,69	1,02		ZG124	SMB	90L4		
	1,1	12011	1287,38	1,12		ZG124	SMB	90L4		
	1,2	11010	1185,12	1,23		ZG124	SMB	90L4		
	1,3	10163	1082,07	1,33		ZG124	SMB	90L4		
	1,4	9437	987,73	1,43		ZG124	SMB	90L4		
	1,6	8258	889,70	1,63		ZG124	SMB	90L4		
	1,8	7340	775,48	1,84		ZG124	SMB	90L4	506	324
	1,9	6954	729,87	1,94		ZG124	SMB	90L4		
	2,1	6291	673,29	2,15		ZG124	SMR	90L4		
	2,3	5744	605,96	2,35		ZG124	SMR	90L4		
	2,6	5082	545,04	2,66		ZG124	SMR	90L4		
	2,8	4718	508,76	2,86		ZG124	SMR	90L4		
	3,1	4262	446,57	3,17		ZG124	SMR	90L4		
	3,6	3670	395,19	3,68		ZG124	SMR	90L4		
	1,6	8258	900,00	0,99		ZG114	SMB	90L4		
	1,7	7772	830,12	1,06		ZG114	SMB	90L4		
	1,8	7340	768,00	1,12		ZG114	SMR	90L4		
	2,1	6291	662,40	1,30		ZG114	SMR	90L4		
	2,2	6005	631,38	1,37		ZG114	SMR	90L4	356	318
	2,5	5285	565,71	1,55		ZG114	SMR	90L4		
	2,9	4556	483,10	1,80		ZG114	SMR	90L4		
	3,4	3886	415,06	2,11		ZG114	SMR	90L4		
	3,9	3388	358,05	2,42		ZG114	SMR	90L4		



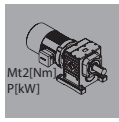
P	n_2	Mt_2	i	f_B				m	
[kW]	[min^{-1}]	[Nm]						[kg]	
1,50	4,8	2752	295,02	2,98	ZG114	SMR	90L4	356	318
	2,7	4893	516,63	1,00	ZG104	SMR	90L4		
	3,2	4129	441,18	1,19	ZG104	SMR	90L4		
	3,7	3571	379,05	1,37	ZG104	SMR	90L4	240	312
	4,3	3072	326,99	1,59	ZG104	SMR	90L4		
	5,2	2540	269,43	1,93	ZG104	SMR	90L4		
	4	3370	352,68	1,45	ZG103	SMB	90L4		
	4,4	3064	320,55	1,60	ZG103	SMB	90L4		
	4,8	2808	293,36	1,74	ZG103	SMB	90L4		
	5,2	2592	270,06	1,89	ZG103	SMB	90L4		
	5,7	2365	246,57	2,07	ZG103	SMB	90L4		
	6,2	2174	225,08	2,25	ZG103	SMB	90L4		
	6,9	1954	202,74	2,51	ZG103	SMB	90L4	238	310
	8	1685	176,71	2,91	ZG103	SMB	90L4		
	8,4	1605	166,32	3,05	ZG103	SMB	90L4		
	9,2	1465	153,42	3,34	ZG103	SMR	90L4		
	10	1348	138,08	3,63	ZG103	SMR	90L4		
	11	1225	124,20	4,00	ZG103	SMR	90L4		
	12	1123	115,93	4,36	ZG103	SMR	90L4		
	4,9	2696	287,46	1,15	ZG94	SMR	90L4	177	306
	4,5	2996	313,00	1,03	ZG93	SMB	90L4		
	4,9	2751	288,14	1,13	ZG93	SMB	90L4		
	5,3	2543	263,08	1,22	ZG93	SMB	90L4		
	5,9	2285	240,15	1,36	ZG93	SMB	90L4		
	6,5	2074	216,31	1,49	ZG93	SMB	90L4		
	7,5	1797	188,54	1,72	ZG93	SMB	90L4	175	304
	7,9	1706	177,45	1,82	ZG93	SMB	90L4		
	8,6	1567	163,69	1,98	ZG93	SMR	90L4		
	9,5	1419	147,33	2,18	ZG93	SMR	90L4		
	11	1225	132,51	2,53	ZG93	SMR	90L4		
	13	1037	108,57	2,99	ZG93	SMR	90L4		
	15	898	96,08	3,45	ZG93	SMR	90L4		
	6,9	1954	202,30	0,97	ZG83	SMB	90L4		
	8	1685	176,42	1,13	ZG83	SMB	90L4		
	8,6	1567	162,72	1,21	ZG83	SMB	90L4		
	9,3	1449	150,55	1,31	ZG83	SMR	90L4		
	11	1225	129,85	1,55	ZG83	SMR	90L4	81	300
	13	1037	110,89	1,83	ZG83	SMR	90L4		
	15	898	94,70	2,11	ZG83	SMR	90L4		
	17	793	81,36	2,40	ZG83	SMR	90L4		
	20	674	70,19	2,82	ZG83	SMR	90L4		
	24	561	57,83	3,38	ZG83	SMR	90L4		
	9,3	1449	151,66	1,00	ZG73	SMB	90L4		
	10	1348	140,31	1,08	ZG73	SMR	90L4		
	12	1123	121,02	1,29	ZG73	SMR	90L4	71	297
	14	963	103,35	1,51	ZG73	SMR	90L4		
	16	842	88,26	1,72	ZG73	SMR	90L4		
	19	709	75,83	2,04	ZG73	SMR	90L4		

P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
1,50	21	642	65,41	2,26	ZG73	SMR	90L4	71	297
	26	518	53,90	2,80	ZG73	SMR	90L4		
	17	793	81,63	1,03	ZG63	SMR	90L4	52	294
	20	674	70,14	1,22	ZG63	SMR	90L4		
	23	586	60,50	1,40	ZG63	SMR	90L4		
	28	481	49,85	1,70	ZG63	SMR	90L4		
	22	625	65,26	1,31	ZG62	SMB	90L4	50	293
	24	573	59,31	1,43	ZG62	SMB	90L4		
	26	529	54,28	1,55	ZG62	SMB	90L4		
	28	491	49,97	1,67	ZG62	SMB	90L4		
	31	443	45,63	1,85	ZG62	SMB	90L4		
	34	404	41,65	2,03	ZG62	SMB	90L4		
	37	371	37,51	2,19	ZG62	SMB	90L4		
	43	319	32,70	2,52	ZG62	SMB	90L4		
	46	300	30,77	2,66	ZG62	SMB	90L4		
	49	280	28,39	2,79	ZG62	SMR	90L4		
	55	250	25,55	3,04	ZG62	SMR	90L4		
	61	225	22,98	3,28	ZG62	SMR	90L4		
	65	211	21,45	3,40	ZG62	SMR	90L4		
	75	183	18,83	3,75	ZG62	SMR	90L4		
	84	163	16,66	4,04	ZG62	SMR	90L4		
	35	393	39,93	1,38	ZG62	SMB	90L4		
	39	352	36,29	1,76	ZG62	SMB	90L4		
	42	327	33,21	2,05	ZG62	SMB	90L4		
	46	300	30,58	2,40	ZG62	SMB	90L4		
	50	275	27,92	2,75	ZG62	SMB	90L4		
	55	250	25,48	3,20	ZG62	SMB	90L4		
	61	225	22,95	3,64	ZG62	SMB	90L4		
	70	196	20,01	4,17	ZG62	SMB	90L4		
	75	183	18,83	4,42	ZG62	SMB	90L4		
	26	518	54,54	1,06	ZG53	SMR	90L4	45	292
	26	529	54,25	1,04	ZG52	SMB	90L4	42	291
	29	474	49,19	1,16	ZG52	SMB	90L4		
	31	443	45,90	1,24	ZG52	SMB	90L4		
	34	404	41,71	1,36	ZG52	SMB	90L4		
	37	371	37,97	1,48	ZG52	SMB	90L4		
	41	335	34,55	1,64	ZG52	SMB	90L4		
	46	299	30,48	1,84	ZG52	SMB	90L4		
	51	269	27,67	2,04	ZG52	SMB	90L4		
	56	245	25,29	2,24	ZG52	SMB	90L4		
	59	233	23,88	2,36	ZG52	SMR	90L4		
	67	205	20,85	2,68	ZG52	SMR	90L4		
	76	181	18,54	3,04	ZG52	SMR	90L4		
	83	165	16,89	3,32	ZG52	SMR	90L4		
	96	143	14,67	3,67	ZG52	SMR	90L4		
	109	126	12,83	4,02	ZG52	SMR	90L4		
	34	404	40,77	1,04	ZG42	SMB	90L4	35	289
	38	362	37,11	1,16	ZG42	SMB	90L4		

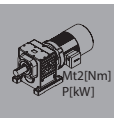
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
1,50	42	327	33,78	1,28		ZG42	SMB	90L4		
	47	292	29,80	1,43		ZG42	SMB	90L4		
	52	264	27,05	1,59		ZG42	SMB	90L4		
	57	241	24,72	1,74		ZG42	SMB	90L4		
	60	229	23,35	1,83		ZG42	SMR	90L4		
	69	199	20,39	2,11		ZG42	SMR	90L4		
	78	176	18,12	2,38		ZG42	SMR	90L4		
	85	161	16,51	2,59		ZG42	SMR	90L4		
	98	140	14,34	2,86		ZG42	SMR	90L4		
	112	122	12,55	3,16		ZG42	SMR	90L4		
	48	286	29,12	1,18		ZG42	SMB	90L4		
	53	259	26,41	1,43		ZG42	SMB	90L4	35	289
	57	241	24,64	1,64		ZG42	SMB	90L4		
	63	218	22,39	1,83		ZG42	SMB	90L4		
	69	199	20,38	2,01		ZG42	SMB	90L4		
	76	181	18,55	2,21		ZG42	SMB	90L4		
	86	160	16,36	2,50		ZG42	SMB	90L4		
	95	144	14,85	2,76		ZG42	SMB	90L4		
	103	133	13,58	2,99		ZG42	SMB	90L4		
	110	125	12,82	3,20		ZG42	SMR	90L4		
	126	109	11,19	3,66		ZG42	SMR	90L4		
	141	97	9,95	4,06		ZG42	SMR	90L4		
	155	88	9,06	4,43		ZG42	SMR	90L4		
	47	292	29,65	0,96		ZG32	SMB	90L4		
	54	254	26,06	1,10		ZG32	SMB	90L4		
	62	221	22,73	1,26		ZG32	SMB	90L4		
	67	205	20,96	1,36		ZG32	SMB	90L4		
	72	191	19,39	1,47		ZG32	SMR	90L4		
	84	163	16,73	1,63		ZG32	SMR	90L4	32	287
	88	156	15,94	1,67		ZG32	SMR	90L4		
	98	140	14,29	1,82		ZG32	SMR	90L4		
	115	119	12,20	2,01		ZG32	SMR	90L4		
	134	102	10,48	2,25		ZG32	SMR	90L4		
	155	88	9,04	2,48		ZG32	SMR	90L4		
	189	72	7,45	2,86		ZG32	SMR	90L4		
	77	178	18,13	1,00		ZG22	SMR	90L4		
	90	152	15,64	1,11		ZG22	SMR	90L4		
	94	146	14,91	1,13		ZG22	SMR	90L4		
	105	131	13,36	1,25		ZG22	SMR	90L4		
	123	111	11,41	1,38		ZG22	SMR	90L4		
	143	96	9,80	1,54		ZG22	SMR	90L4		
	166	82	8,45	1,70		ZG22	SMR	90L4	27	285
	202	68	6,97	1,97		ZG22	SMR	90L4		
	75	183	18,77	0,98		ZG22	SMB	90L4		
	82	167	17,17	1,05		ZG22	SMB	90L4		
	87	158	16,15	1,10		ZG22	SMB	90L4		
	96	143	14,63	1,16		ZG22	SMB	90L4		
	109	126	12,86	1,27		ZG22	SMB	90L4		



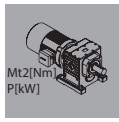
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
2,20	7,3	2708	192,00	3,03	ZG113	SMB	100L4	356	316
	8,1	2441	174,77	3,36	ZG113	SMB	100L4		
	9	2197	156,80	3,73	ZG113	SMR	100L4		
	9,9	1997	142,22	4,11	ZG113	SMR	100L4		
	4,3	4506	326,99	1,09	ZG104	SMR	100L4	245	312
	5,2	3726	269,43	1,31	ZG104	SMR	100L4		
	4,4	4494	320,55	1,09	ZG103	SMB	100L4	242	310
	4,8	4119	293,36	1,19	ZG103	SMB	100L4		
	5,2	3802	270,06	1,29	ZG103	SMB	100L4		
	5,7	3469	246,57	1,41	ZG103	SMB	100L4		
	6,3	3138	225,08	1,56	ZG103	SMB	100L4		
	7	2824	202,74	1,73	ZG103	SMB	100L4		
	8	2471	176,71	1,98	ZG103	SMB	100L4		
	8,5	2326	166,32	2,11	ZG103	SMB	100L4		
	9,2	2149	153,42	2,28	ZG103	SMB	100L4		
	10	1977	138,08	2,48	ZG103	SMR	100L4		
	11	1797	124,20	2,73	ZG103	SMR	100L4		
	12	1647	115,93	2,97	ZG103	SMR	100L4		
	14	1412	101,76	3,47	ZG103	SMR	100L4		
	16	1235	90,05	3,96	ZG103	SMR	100L4		
	6,5	3042	216,31	1,02	ZG93	SMB	100L4	180	304
	7,5	2636	188,54	1,18	ZG93	SMB	100L4		
	7,9	2503	177,45	1,24	ZG93	SMB	100L4		
	8,6	2299	163,69	1,35	ZG93	SMB	100L4		
	9,6	2059	147,33	1,50	ZG93	SMR	100L4		
	11	1797	132,51	1,72	ZG93	SMR	100L4		
	13	1521	108,57	2,04	ZG93	SMR	100L4		
	15	1318	96,08	2,35	ZG93	SMR	100L4		
	17	1163	80,95	2,67	ZG93	SMR	100L4		
	20	988	68,95	3,14	ZG93	SMR	100L4		
	24	823	59,19	3,76	ZG93	SMR	100L4		
	28	706	51,11	4,39	ZG93	SMR	100L4		
	11	1797	129,85	1,06	ZG83	SMR	100L4	86	300
	13	1521	110,89	1,25	ZG83	SMR	100L4		
	15	1318	94,70	1,44	ZG83	SMR	100L4		
	17	1163	81,36	1,63	ZG83	SMR	100L4		
	20	988	70,19	1,92	ZG83	SMR	100L4		
	24	823	57,83	2,31	ZG83	SMR	100L4		
	22	917	64,66	2,07	ZG82	SMB	100L4	85	299
	25	807	55,41	2,35	ZG82	SMB	100L4		
	28	720	50,66	2,64	ZG82	SMB	100L4		
	31	650	44,95	2,92	ZG82	SMB	100L4		
	35	576	39,99	3,30	ZG82	SMB	100L4		
	37	545	37,64	3,48	ZG82	SMB	100L4		
	41	492	34,26	3,86	ZG82	SMB	100L4		
	46	438	30,74	4,33	ZG82	SMR	100L4		
	37	545	38,20	3,15	ZG82	SMB	100L4		
	43	469	32,74	3,76	ZG82	SMB	100L4		



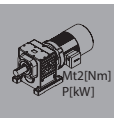
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
2,20	47	429	29,93	4,16	ZG82	SMB	100L4	85	299
	14	1412	103,35	1,03	ZG73	SMR	100L4		
	16	1235	88,26	1,17	ZG73	SMR	100L4		
	19	1040	75,83	1,39	ZG73	SMR	100L4	75	297
	22	898	65,41	1,61	ZG73	SMR	100L4		
	26	760	53,90	1,91	ZG73	SMR	100L4		
	23	877	60,26	1,60	ZG72	SMB	100L4		
	27	747	51,64	1,91	ZG72	SMB	100L4		
	30	672	47,22	2,16	ZG72	SMB	100L4		
	34	593	41,90	2,44	ZG72	SMB	100L4		
	38	531	37,27	2,73	ZG72	SMB	100L4	74	296
	40	504	35,08	2,87	ZG72	SMB	100L4		
	44	458	31,93	3,16	ZG72	SMB	100L4		
	49	411	28,65	3,52	ZG72	SMR	100L4		
	54	373	25,98	3,88	ZG72	SMR	100L4		
	59	342	24,00	4,24	ZG72	SMR	100L4		
	23	859	60,50	0,95	ZG63	SMR	100L4	56	294
	28	706	49,85	1,16	ZG63	SMR	100L4		
	24	840	59,31	0,98	ZG62	SMB	100L4		
	26	776	54,28	1,06	ZG62	SMB	100L4		
	28	720	49,97	1,14	ZG62	SMB	100L4		
	31	650	45,63	1,26	ZG62	SMB	100L4		
	34	593	41,65	1,38	ZG62	SMB	100L4		
	38	531	37,51	1,53	ZG62	SMB	100L4		
	43	469	32,70	1,72	ZG62	SMB	100L4		
	46	438	30,77	1,82	ZG62	SMB	100L4		
	50	403	28,39	1,94	ZG62	SMB	100L4		
	55	366	25,55	2,07	ZG62	SMR	100L4		
	61	330	22,98	2,23	ZG62	SMR	100L4		
	66	305	21,45	2,36	ZG62	SMR	100L4		
	75	269	18,83	2,56	ZG62	SMR	100L4		
	85	237	16,66	2,78	ZG62	SMR	100L4		
	100	201	14,04	3,15	ZG62	SMR	100L4	54	293
	118	171	11,96	3,58	ZG62	SMR	100L4		
	137	147	10,27	4,00	ZG62	SMR	100L4		
	159	126	8,86	4,46	ZG62	SMR	100L4		
	39	517	36,29	1,20	ZG62	SMB	100L4		
	42	480	33,21	1,40	ZG62	SMB	100L4		
	46	438	30,58	1,63	ZG62	SMB	100L4		
	51	395	27,92	1,91	ZG62	SMB	100L4		
	55	366	25,48	2,18	ZG62	SMB	100L4		
	61	330	22,95	2,48	ZG62	SMB	100L4		
	70	288	20,01	2,84	ZG62	SMB	100L4		
	75	269	18,83	3,01	ZG62	SMB	100L4		
	81	249	17,37	3,21	ZG62	SMB	100L4		
	90	224	15,63	3,55	ZG62	SMR	100L4		
	100	201	14,06	3,88	ZG62	SMR	100L4		
	107	188	13,13	4,10	ZG62	SMR	100L4		



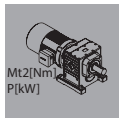
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
2,20	37	545	37,97	1,01	ZG52	SMB	100L4		
	41	492	34,55	1,12	ZG52	SMB	100L4		
	46	438	30,48	1,25	ZG52	SMB	100L4		
	51	395	27,67	1,39	ZG52	SMB	100L4		
	56	360	25,29	1,53	ZG52	SMB	100L4		
	59	342	23,88	1,61	ZG52	SMB	100L4		
	68	296	20,85	1,85	ZG52	SMR	100L4		
	76	265	18,54	2,07	ZG52	SMR	100L4	47	291
	84	240	16,89	2,29	ZG52	SMR	100L4		
	96	210	14,67	2,50	ZG52	SMR	100L4		
	110	183	12,83	2,77	ZG52	SMR	100L4		
	133	151	10,61	3,18	ZG52	SMR	100L4		
	159	126	8,85	3,62	ZG52	SMR	100L4		
	190	106	7,42	4,11	ZG52	SMR	100L4		
	214	94	6,60	4,50	ZG52	SMR	100L4		
	47	429	29,80	0,98	ZG42	SMB	100L4		
	52	388	27,05	1,08	ZG42	SMB	100L4		
	57	354	24,72	1,19	ZG42	SMB	100L4		
	60	336	23,35	1,25	ZG42	SMB	100L4		
	69	292	20,39	1,44	ZG42	SMR	100L4		
	78	258	18,12	1,62	ZG42	SMR	100L4		
	85	237	16,51	1,77	ZG42	SMR	100L4		
	98	205	14,34	1,95	ZG42	SMR	100L4		
	112	180	12,55	2,15	ZG42	SMR	100L4		
	136	148	10,37	2,49	ZG42	SMR	100L4		
	163	123	8,65	2,84	ZG42	SMR	100L4		
	194	104	7,25	3,20	ZG42	SMR	100L4		
	219	92	6,45	3,52	ZG42	SMR	100L4		
	53	380	26,41	0,97	ZG42	SMB	100L4	40	289
	57	354	24,64	1,12	ZG42	SMB	100L4		
	63	320	22,39	1,25	ZG42	SMB	100L4		
	69	292	20,38	1,37	ZG42	SMB	100L4		
	76	265	18,55	1,51	ZG42	SMB	100L4		
	86	234	16,36	1,70	ZG42	SMB	100L4		
	95	212	14,85	1,88	ZG42	SMB	100L4		
	104	194	13,58	2,06	ZG42	SMB	100L4		
	110	183	12,82	2,18	ZG42	SMB	100L4		
	126	160	11,19	2,50	ZG42	SMR	100L4		
	142	142	9,95	2,79	ZG42	SMR	100L4		
	156	129	9,06	3,04	ZG42	SMR	100L4		
	179	112	7,87	3,42	ZG42	SMR	100L4		
	205	98	6,89	3,84	ZG42	SMR	100L4		
	248	81	5,70	4,49	ZG42	SMR	100L4		
	73	276	19,39	1,01	ZG32	SMB	100L4		
	84	240	16,73	1,11	ZG32	SMR	100L4		
	88	229	15,94	1,14	ZG32	SMR	100L4	37	287
	99	203	14,29	1,25	ZG32	SMR	100L4		
	116	173	12,20	1,38	ZG32	SMR	100L4		



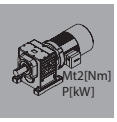
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
2,20	135	149	10,48	1,55		ZG32	SMR	100L4		
	156	129	9,04	1,70		ZG32	SMR	100L4	37	287
	189	106	7,45	1,95		ZG32	SMR	100L4		
	126	160	11,21	0,96		ZG22	SMB	100L4		
	136	148	10,34	1,02		ZG22	SMB	100L4		
	147	137	9,57	1,08		ZG22	SMB	100L4		
	171	118	8,25	1,19		ZG22	SMR	100L4		
	179	112	7,87	1,22		ZG22	SMR	100L4	32	285
	200	100	7,05	1,33		ZG22	SMR	100L4		
	234	86	6,02	1,53		ZG22	SMR	100L4		
	273	74	5,17	1,73		ZG22	SMR	100L4		
	316	63	4,46	1,86		ZG22	SMR	100L4		
	384	52	3,68	2,13		ZG22	SMR	100L4		
3,00	1,3	20327	1074,55	0,98		ZG134	SMB	100Ld4		
	1,4	18875	980,87	1,06		ZG134	SMB	100Ld4		
	1,6	16516	883,52	1,21		ZG134	SMB	100Ld4		
	1,8	14681	770,10	1,36		ZG134	SMB	100Ld4		
	1,9	13908	724,80	1,44		ZG134	SMB	100Ld4		
	2,1	12583	668,61	1,59		ZG134	SMB	100Ld4		
	2,3	11489	601,75	1,74		ZG134	SMR	100Ld4		
	2,6	10163	541,26	1,97		ZG134	SMR	100Ld4	725	330
	2,8	9437	505,23	2,12		ZG134	SMR	100Ld4		
	3,2	8258	443,47	2,42		ZG134	SMR	100Ld4		
	3,6	7340	392,45	2,72		ZG134	SMR	100Ld4		
	4,3	6145	330,63	3,25		ZG134	SMR	100Ld4		
	5	5285	281,61	3,78		ZG134	SMR	100Ld4		
	5,8	4556	241,77	4,39		ZG134	SMR	100Ld4		
	1,9	13908	729,87	0,97		ZG124	SMB	100Ld4		
	2,1	12583	673,29	1,07		ZG124	SMB	100Ld4		
	2,3	11489	605,96	1,17		ZG124	SMR	100Ld4		
	2,6	10163	545,04	1,33		ZG124	SMR	100Ld4		
	2,8	9437	508,76	1,43		ZG124	SMR	100Ld4		
	3,2	8258	446,57	1,63		ZG124	SMR	100Ld4		
	3,6	7340	395,19	1,84		ZG124	SMR	100Ld4	513	324
	4,2	6291	332,94	2,15		ZG124	SMR	100Ld4		
	5	5285	283,58	2,55		ZG124	SMR	100Ld4		
	5,8	4556	243,47	2,96		ZG124	SMR	100Ld4		
	6,7	3944	210,23	3,42		ZG124	SMR	100Ld4		
	7,7	3431	182,24	3,93		ZG124	SMR	100Ld4		
	3,4	7772	415,06	1,06		ZG114	SMR	100Ld4		
	3,9	6775	358,05	1,21		ZG114	SMR	100Ld4	363	318
	4,8	5505	295,02	1,49		ZG114	SMR	100Ld4		
	4,3	6270	329,85	1,31		ZG113	SMB	100Ld4		
	5	5393	282,67	1,52		ZG113	SMB	100Ld4		
	5,5	4902	258,46	1,67		ZG113	SMB	100Ld4		
	6,1	4420	229,33	1,85		ZG113	SMB	100Ld4	358	316
	6,9	3908	204,00	2,10		ZG113	SMB	100Ld4		
	7,3	3693	192,00	2,22		ZG113	SMB	100Ld4		



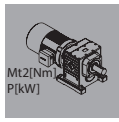
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
3,00	8,1	3329	174,77	2,46	ZG113	SMB	100Ld4		
	9	2996	156,80	2,74	ZG113	SMR	100Ld4		
	9,9	2723	142,22	3,01	ZG113	SMR	100Ld4	358	316
	11	2451	131,37	3,35	ZG113	SMR	100Ld4		
	12	2247	115,81	3,65	ZG113	SMR	100Ld4		
	14	1926	102,96	4,26	ZG113	SMR	100Ld4		
	5,2	5082	269,43	0,96	ZG104	SMR	100Ld4	247	312
	5,7	4730	246,57	1,04	ZG103	SMB	100Ld4		
	6,3	4280	225,08	1,14	ZG103	SMB	100Ld4		
	7	3852	202,74	1,27	ZG103	SMB	100Ld4		
	8	3370	176,71	1,45	ZG103	SMB	100Ld4		
	8,5	3172	166,32	1,54	ZG103	SMB	100Ld4		
	9,2	2931	153,42	1,67	ZG103	SMB	100Ld4		
	10	2696	138,08	1,82	ZG103	SMR	100Ld4	244	310
	11	2451	124,20	2,00	ZG103	SMR	100Ld4		
	12	2247	115,93	2,18	ZG103	SMR	100Ld4		
	14	1926	101,76	2,54	ZG103	SMR	100Ld4		
	16	1685	90,05	2,91	ZG103	SMR	100Ld4		
	19	1419	75,87	3,45	ZG103	SMR	100Ld4		
	22	1225	64,62	4,00	ZG103	SMR	100Ld4		
	8,6	3135	163,69	0,99	ZG93	SMB	100Ld4		
	9,6	2808	147,33	1,10	ZG93	SMR	100Ld4		
	11	2451	132,51	1,26	ZG93	SMR	100Ld4		
	13	2074	108,57	1,49	ZG93	SMR	100Ld4		
	15	1797	96,08	1,72	ZG93	SMR	100Ld4	181	304
	17	1586	80,95	1,95	ZG93	SMR	100Ld4		
	20	1348	68,95	2,30	ZG93	SMR	100Ld4		
	24	1123	59,19	2,76	ZG93	SMR	100Ld4		
	28	963	51,11	3,22	ZG93	SMR	100Ld4		
	32	842	44,31	3,68	ZG93	SMR	100Ld4		
	15	1797	94,70	1,06	ZG83	SMR	100Ld4		
	17	1586	81,36	1,20	ZG83	SMR	100Ld4	87	300
	20	1348	70,19	1,41	ZG83	SMR	100Ld4		
	24	1123	57,83	1,69	ZG83	SMR	100Ld4		
	22	1250	64,66	1,52	ZG82	SMB	100Ld4		
	25	1100	55,41	1,73	ZG82	SMB	100Ld4		
	28	982	50,66	1,93	ZG82	SMB	100Ld4		
	31	887	44,95	2,14	ZG82	SMB	100Ld4		
	35	786	39,99	2,42	ZG82	SMB	100Ld4		
	37	743	37,64	2,55	ZG82	SMB	100Ld4		
	41	671	34,26	2,83	ZG82	SMB	100Ld4	86	299
	46	598	30,74	3,18	ZG82	SMR	100Ld4		
	51	539	27,88	3,52	ZG82	SMR	100Ld4		
	55	500	25,75	3,80	ZG82	SMR	100Ld4		
	62	443	22,70	4,18	ZG82	SMR	100Ld4		
	37	743	38,20	2,31	ZG82	SMB	100Ld4		
	43	640	32,74	2,76	ZG82	SMB	100Ld4		
	47	585	29,93	3,05	ZG82	SMB	100Ld4		



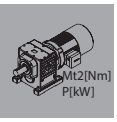
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
3,00	53	519	26,56	3,49	ZG82	SMB	100Ld4		
	60	458	23,63	3,99	ZG82	SMB	100Ld4	86	299
	63	436	22,24	4,19	ZG82	SMB	100Ld4		
	19	1419	75,83	1,02	ZG73	SMR	100Ld4		
	22	1225	65,41	1,18	ZG73	SMR	100Ld4	77	297
	26	1037	53,90	1,40	ZG73	SMR	100Ld4		
	23	1196	60,26	1,17	ZG72	SMB	100Ld4		
	27	1019	51,64	1,40	ZG72	SMB	100Ld4		
	30	917	47,22	1,58	ZG72	SMB	100Ld4		
	34	809	41,90	1,79	ZG72	SMB	100Ld4		
	38	724	37,27	2,00	ZG72	SMB	100Ld4		
	40	687	35,08	2,11	ZG72	SMB	100Ld4		
	44	625	31,93	2,32	ZG72	SMB	100Ld4		
	49	561	28,65	2,58	ZG72	SMR	100Ld4	76	296
	54	509	25,98	2,85	ZG72	SMR	100Ld4		
	59	466	24,00	3,11	ZG72	SMR	100Ld4		
	67	410	21,16	3,47	ZG72	SMR	100Ld4		
	75	366	18,81	3,75	ZG72	SMR	100Ld4		
	84	327	16,74	4,07	ZG72	SMR	100Ld4		
	88	312	15,96	4,22	ZG72	SMR	100Ld4		
	34	809	41,65	1,01	ZG62	SMB	100Ld4		
	38	724	37,51	1,12	ZG62	SMB	100Ld4		
	43	639	32,70	1,26	ZG62	SMB	100Ld4		
	46	598	30,77	1,33	ZG62	SMB	100Ld4		
	50	550	28,39	1,42	ZG62	SMB	100Ld4		
	55	500	25,55	1,52	ZG62	SMR	100Ld4		
	61	451	22,98	1,64	ZG62	SMR	100Ld4		
	66	416	21,45	1,73	ZG62	SMR	100Ld4		
	75	366	18,83	1,88	ZG62	SMR	100Ld4		
	85	323	16,66	2,04	ZG62	SMR	100Ld4		
	100	275	14,04	2,31	ZG62	SMR	100Ld4		
	118	233	11,96	2,62	ZG62	SMR	100Ld4		
	137	200	10,27	2,93	ZG62	SMR	100Ld4		
	159	173	8,86	3,27	ZG62	SMR	100Ld4	56	293
	183	150	7,68	3,59	ZG62	SMR	100Ld4		
	42	655	33,21	1,02	ZG62	SMB	100Ld4		
	46	598	30,58	1,20	ZG62	SMB	100Ld4		
	51	539	27,92	1,40	ZG62	SMB	100Ld4		
	55	500	25,48	1,60	ZG62	SMB	100Ld4		
	61	451	22,95	1,82	ZG62	SMB	100Ld4		
	70	393	20,01	2,09	ZG62	SMB	100Ld4		
	75	366	18,83	2,21	ZG62	SMB	100Ld4		
	81	339	17,37	2,36	ZG62	SMB	100Ld4		
	90	305	15,63	2,60	ZG62	SMR	100Ld4		
	100	275	14,06	2,84	ZG62	SMR	100Ld4		
	107	257	13,13	3,01	ZG62	SMR	100Ld4		
	122	225	11,52	3,37	ZG62	SMR	100Ld4		
	138	199	10,20	3,77	ZG62	SMR	100Ld4		



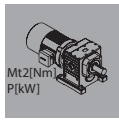
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
3,00	164	167	8,59	4,38	ZG62	SMR	100Ld4	56	293
	51	539	27,67	1,02	ZG52	SMB	100Ld4		
	56	491	25,29	1,12	ZG52	SMB	100Ld4		
	59	466	23,88	1,18	ZG52	SMB	100Ld4		
	68	404	20,85	1,36	ZG52	SMR	100Ld4		
	76	362	18,54	1,52	ZG52	SMR	100Ld4		
	84	327	16,89	1,68	ZG52	SMR	100Ld4	49	291
	96	286	14,67	1,84	ZG52	SMR	100Ld4		
	110	250	12,83	2,03	ZG52	SMR	100Ld4		
	133	206	10,61	2,33	ZG52	SMR	100Ld4		
	159	173	8,85	2,66	ZG52	SMR	100Ld4		
	190	144	7,42	3,01	ZG52	SMR	100Ld4		
	214	128	6,60	3,30	ZG52	SMR	100Ld4		
	69	398	20,39	1,05	ZG42	SMR	100Ld4		
	78	352	18,12	1,19	ZG42	SMR	100Ld4		
	85	323	16,51	1,30	ZG42	SMR	100Ld4		
	98	280	14,34	1,43	ZG42	SMR	100Ld4		
	112	245	12,55	1,58	ZG42	SMR	100Ld4		
	136	202	10,37	1,82	ZG42	SMR	100Ld4		
	163	168	8,65	2,08	ZG42	SMR	100Ld4		
	194	141	7,25	2,35	ZG42	SMR	100Ld4		
	219	125	6,45	2,58	ZG42	SMR	100Ld4		
	69	398	20,38	1,00	ZG42	SMB	100Ld4		
	76	362	18,55	1,10	ZG42	SMB	100Ld4		
	86	319	16,36	1,25	ZG42	SMB	100Ld4	41	289
	95	289	14,85	1,38	ZG42	SMB	100Ld4		
	104	264	13,58	1,51	ZG42	SMB	100Ld4		
	110	250	12,82	1,60	ZG42	SMB	100Ld4		
	126	218	11,19	1,83	ZG42	SMR	100Ld4		
	142	193	9,95	2,04	ZG42	SMR	100Ld4		
	156	176	9,06	2,23	ZG42	SMR	100Ld4		
	179	153	7,87	2,51	ZG42	SMR	100Ld4		
	205	134	6,89	2,82	ZG42	SMR	100Ld4		
	248	110	5,70	3,29	ZG42	SMR	100Ld4		
	297	92	4,75	3,79	ZG42	SMR	100Ld4		
	354	77	3,98	4,32	ZG42	SMR	100Ld4		
	116	237	12,20	1,01	ZG32	SMR	100Ld4		
	135	203	10,48	1,13	ZG32	SMR	100Ld4	39	287
	156	176	9,04	1,25	ZG32	SMR	100Ld4		
	189	145	7,45	1,43	ZG32	SMR	100Ld4		
4,00	1,8	19574	770,10	1,02	ZG134	SMB	112M4		
	2	17617	724,80	1,14	ZG134	SMB	112M4		
	2,1	16778	668,61	1,19	ZG134	SMB	112M4		
	2,4	14681	601,75	1,36	ZG134	SMR	112M4	730	330
	2,6	13551	541,26	1,48	ZG134	SMR	112M4		
	2,8	12583	505,23	1,59	ZG134	SMR	112M4		
	3,2	11010	443,47	1,82	ZG134	SMR	112M4		
	3,6	9787	392,45	2,04	ZG134	SMR	112M4		



P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
4,00	4,3	8194	330,63	2,44	ZG134	SMR	112M4		
	5	7046	281,61	2,84	ZG134	SMR	112M4		
	5,9	5971	241,77	3,35	ZG134	SMR	112M4	730	330
	6,8	5181	208,77	3,86	ZG134	SMR	112M4		
	7,8	4517	180,98	4,43	ZG134	SMR	112M4		
	2,6	13551	545,04	1,00	ZG124	SMR	112M4		
	2,8	12583	508,76	1,07	ZG124	SMR	112M4		
	3,2	11010	446,57	1,23	ZG124	SMR	112M4		
	3,6	9787	395,19	1,38	ZG124	SMR	112M4		
	4,3	8194	332,94	1,65	ZG124	SMR	112M4	518	324
	5	7046	283,58	1,92	ZG124	SMR	112M4		
	5,8	6074	243,47	2,22	ZG124	SMR	112M4		
	6,8	5181	210,23	2,61	ZG124	SMR	112M4		
	7,8	4517	182,24	2,99	ZG124	SMR	112M4		
	9,4	3748	151,15	3,60	ZG124	SMR	112M4		
	4,8	7340	295,02	1,12	ZG114	SMR	112M4	368	318
	4,3	8361	329,85	0,98	ZG113	SMB	112M4		
	5	7190	282,67	1,14	ZG113	SMB	112M4		
	5,5	6537	258,46	1,25	ZG113	SMB	112M4		
	6,2	5799	229,33	1,41	ZG113	SMB	112M4		
	7	5136	204,00	1,60	ZG113	SMB	112M4		
	7,4	4858	192,00	1,69	ZG113	SMB	112M4		
	8,1	4438	174,77	1,85	ZG113	SMB	112M4		
	9,1	3950,	156,80	2,08	ZG113	SMR	112M4	364	316
	10	3595	142,22	2,28	ZG113	SMR	112M4		
	11	3268	131,37	2,51	ZG113	SMR	112M4		
	12	2996	115,81	2,74	ZG113	SMR	112M4		
	14	2568	102,96	3,19	ZG113	SMR	112M4		
	15	2396	91,64	3,42	ZG113	SMR	112M4		
	16	2247	87,38	3,65	ZG113	SMR	112M4		
	19	1892	75,03	4,33	ZG113	SMR	112M4		
	7	5136	202,74	0,95	ZG103	SMB	112M4		
	8	4494	176,71	1,09	ZG103	SMB	112M4		
	8,5	4229	166,32	1,16	ZG103	SMB	112M4		
	9,3	3866	153,42	1,27	ZG103	SMB	112M4		
	10	3595	138,08	1,36	ZG103	SMR	112M4		
	11	3268	124,20	1,50	ZG103	SMR	112M4		
	12	2996	115,93	1,64	ZG103	SMR	112M4	250	310
	14	2568	101,76	1,91	ZG103	SMR	112M4		
	16	2247	90,05	2,18	ZG103	SMR	112M4		
	19	1892	75,87	2,59	ZG103	SMR	112M4		
	22	1634	64,62	3,00	ZG103	SMR	112M4		
	26	1382	55,48	3,54	ZG103	SMR	112M4		
	30	1198	47,91	4,09	ZG103	SMR	112M4		
	13	2765	108,57	1,12	ZG93	SMR	112M4		
	15	2396	96,08	1,29	ZG93	SMR	112M4	187	304
	18	1997	80,95	1,55	ZG93	SMR	112M4		
	21	1712	68,95	1,81	ZG93	SMR	112M4		

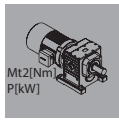


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
4,00	24	1498	59,19	2,07	ZG93	SMR	112M4		
	28	1284	51,11	2,41	ZG93	SMR	112M4	187	304
	32	1123	44,31	2,76	ZG93	SMR	112M4		
	39	921	36,75	3,36	ZG93	SMR	112M4		
	20	1797	70,19	1,06	ZG83	SMR	112M4	93	300
	25	1438	57,83	1,32	ZG83	SMR	112M4		
	22	1667	64,66	1,14	ZG82	SMB	112M4		
	26	1411	55,41	1,35	ZG82	SMB	112M4		
	28	1310	50,66	1,45	ZG82	SMB	112M4		
	32	1146	44,95	1,66	ZG82	SMB	112M4		
	36	1019	39,99	1,86	ZG82	SMB	112M4		
	38	965	37,64	1,97	ZG82	SMB	112M4		
	41	894	34,26	2,12	ZG82	SMB	112M4		
	46	797	30,74	2,38	ZG82	SMR	112M4		
	51	719	27,88	2,64	ZG82	SMR	112M4		
	55	667	25,75	2,85	ZG82	SMR	112M4		
	63	582	22,70	3,19	ZG82	SMR	112M4		
	70	524	20,18	3,45	ZG82	SMR	112M4	92	299
	79	464	17,96	3,83	ZG82	SMR	112M4		
	83	442	17,13	3,99	ZG82	SMR	112M4		
	37	991	38,20	1,73	ZG82	SMB	112M4		
	43	853	32,74	2,07	ZG82	SMB	112M4		
	47	780	29,93	2,29	ZG82	SMB	112M4		
	53	692	26,56	2,61	ZG82	SMB	112M4		
	60	611	23,63	2,99	ZG82	SMB	112M4		
	64	573	22,24	3,20	ZG82	SMB	112M4		
	70	524	20,24	3,45	ZG82	SMB	112M4		
	78	470	18,16	3,80	ZG82	SMR	112M4		
	86	426	16,47	4,12	ZG82	SMR	112M4		
	93	394	15,21	4,35	ZG82	SMR	112M4		
	26	1382	53,90	1,05	ZG73	SMR	112M4	83	297
	27	1358	51,64	1,05	ZG72	SMB	112M4		
	30	1222	47,22	1,19	ZG72	SMB	112M4		
	34	1079	41,90	1,34	ZG72	SMB	112M4		
	38	965	37,27	1,50	ZG72	SMB	112M4		
	40	917	35,08	1,58	ZG72	SMB	112M4		
	44	833	31,93	1,74	ZG72	SMB	112M4		
	50	733	28,65	1,98	ZG72	SMR	112M4		
	55	667	25,98	2,17	ZG72	SMR	112M4	82	296
	59	621	24,00	2,33	ZG72	SMR	112M4		
	67	547	21,16	2,60	ZG72	SMR	112M4		
	75	489	18,81	2,81	ZG72	SMR	112M4		
	85	431	16,74	3,09	ZG72	SMR	112M4		
	89	412	15,96	3,20	ZG72	SMR	112M4		
	104	352	13,71	3,62	ZG72	SMR	112M4		
	120	305	11,88	4,03	ZG72	SMR	112M4		
	133	275	10,69	4,34	ZG72	SMR	112M4		
	46	797	30,77	1,00	ZG62	SMB	112M4	61	293

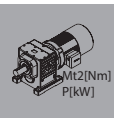


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
4,00	50	733	28,39	1,07		ZG62	SMB	112M4		
	56	655	25,55	1,16		ZG62	SMR	112M4		
	62	591	22,98	1,25		ZG62	SMR	112M4		
	66	556	21,45	1,30		ZG62	SMR	112M4		
	75	489	18,83	1,41		ZG62	SMR	112M4		
	85	431	16,66	1,53		ZG62	SMR	112M4		
	101	363	14,04	1,75		ZG62	SMR	112M4		
	119	308	11,96	1,99		ZG62	SMR	112M4		
	138	265	10,27	2,22		ZG62	SMR	112M4		
	160	229	8,86	2,47		ZG62	SMR	112M4		
	185	198	7,68	2,72		ZG62	SMR	112M4		
	223	164	6,37	3,19		ZG62	SMR	112M4		
	51	719	27,92	1,05		ZG62	SMB	112M4	61	293
	56	655	25,48	1,22		ZG62	SMB	112M4		
	62	591	22,95	1,39		ZG62	SMB	112M4		
	71	516	20,01	1,59		ZG62	SMB	112M4		
	75	489	18,83	1,66		ZG62	SMB	112M4		
	82	447	17,37	1,79		ZG62	SMB	112M4		
	91	403	15,63	1,97		ZG62	SMR	112M4		
	101	363	14,06	2,15		ZG62	SMR	112M4		
	108	339	13,13	2,28		ZG62	SMR	112M4		
	123	298	11,52	2,55		ZG62	SMR	112M4		
	139	264	10,20	2,85		ZG62	SMR	112M4		
	165	222	8,59	3,31		ZG62	SMR	112M4		
	194	189	7,32	3,78		ZG62	SMR	112M4		
	226	162	6,28	4,24		ZG62	SMR	112M4		
	68	539	20,85	1,02		ZG52	SMR	112M4		
	77	476	18,54	1,15		ZG52	SMR	112M4		
	84	436	16,89	1,26		ZG52	SMR	112M4		
	97	378	14,67	1,39		ZG52	SMR	112M4		
	111	330	12,83	1,54		ZG52	SMR	112M4	55	291
	134	273	10,61	1,76		ZG52	SMR	112M4		
	160	229	8,85	2,01		ZG52	SMR	112M4		
	191	192	7,42	2,27		ZG52	SMR	112M4		
	215	170	6,60	2,48		ZG52	SMR	112M4		
	96	382	14,85	1,05		ZG42	SMB	112M4		
	105	349	13,58	1,14		ZG42	SMB	112M4		
	111	330	12,82	1,21		ZG42	SMB	112M4		
	127	288	11,19	1,38		ZG42	SMR	112M4		
	143	256	9,95	1,54		ZG42	SMR	112M4		
	157	233	9,06	1,68		ZG42	SMR	112M4	47	289
	180	203	7,87	1,89		ZG42	SMR	112M4		
	206	178	6,89	2,12		ZG42	SMR	112M4		
	249	147	5,70	2,48		ZG42	SMR	112M4		
	299	122	4,75	2,86		ZG42	SMR	112M4		
	357	102	3,98	3,27		ZG42	SMR	112M4		
	401	91	3,54	3,50		ZG42	SMR	112M4		
5,50	2,4	20186	601,75	0,99		ZG134	SMB	132S4	755	330

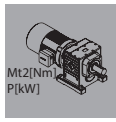
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
5,50	2,7	17943	541,26	1,11	ZG134	SMB	132S4		
	2,9	16706	505,23	1,20	ZG134	SMB	132S4		
	3,3	14681	443,47	1,36	ZG134	SMR	132S4		
	3,7	13093	392,45	1,53	ZG134	SMR	132S4		
	4,4	11010	330,63	1,82	ZG134	SMR	132S4	755	330
	5,1	9500	281,61	2,11	ZG134	SMR	132S4		
	6	8074	241,77	2,48	ZG134	SMR	132S4		
	6,9	7021	208,77	2,85	ZG134	SMR	132S4		
	8	6055	180,98	3,30	ZG134	SMR	132S4		
	9,7	4994	150,10	4,00	ZG134	SMR	132S4		
	5,1	9693	286,28	2,06	ZG133	SMB	132S4		
	5,7	8673	255,76	2,31	ZG133	SMB	132S4		
	6,7	7378	215,49	2,71	ZG133	SMB	132S4		
	7,4	6680	197,05	2,99	ZG133	SMB	132S4	696	328
	8,2	6028	176,42	3,32	ZG133	SMB	132S4		
	9,2	5373	158,18	3,72	ZG133	SMB	132S4		
	10	4943	142,99	4,05	ZG133	SMB	132S4		
	11	4494	130,13	4,45	ZG133	SMB	132S4		
	3,7	13093	395,19	1,03	ZG124	SMR	132S4		
	4,4	11010	332,94	1,23	ZG124	SMR	132S4		
	5,1	9500	283,58	1,42	ZG124	SMR	132S4		
	6	8074	243,47	1,67	ZG124	SMR	132S4	543	324
	6,9	7021	210,23	1,92	ZG124	SMR	132S4		
	8	6055	182,24	2,23	ZG124	SMR	132S4		
	9,6	5046	151,15	2,68	ZG124	SMR	132S4		
	5	9887	288,28	1,37	ZG123	SMB	132S4		
	5,6	8827	257,55	1,53	ZG123	SMB	132S4		
	6,7	7378	216,99	1,83	ZG123	SMB	132S4		
	7,3	6772	198,43	1,99	ZG123	SMB	132S4		
	8,2	6028	177,65	2,24	ZG123	SMB	132S4		
	9,1	5432	159,29	2,49	ZG123	SMB	132S4	503	322
	10	4943	143,99	2,73	ZG123	SMB	132S4		
	11	4494	131,04	3,00	ZG123	SMB	132S4		
	12	4119	119,94	3,28	ZG123	SMB	132S4		
	14	3531	101,91	3,82	ZG123	SMR	132S4		
	15	3295	94,48	4,10	ZG123	SMR	132S4		
	6,3	7847	229,33	1,04	ZG113	SMB	132S4		
	7,1	6962	204,00	1,18	ZG113	SMB	132S4		
	7,6	6504	192,00	1,26	ZG113	SMB	132S4		
	8,3	5956	174,77	1,38	ZG113	SMB	132S4		
	9,2	5373	156,80	1,53	ZG113	SMB	132S4		
	10	4943	142,22	1,66	ZG113	SMB	132S4	389	316
	11	4494	131,37	1,82	ZG113	SMB	132S4		
	13	3802	115,81	2,16	ZG113	SMR	132S4		
	14	3531	102,96	2,32	ZG113	SMR	132S4		
	16	3089	91,64	2,65	ZG113	SMR	132S4		
	17	2908	87,38	2,82	ZG113	SMR	132S4		
	19	2601	75,03	3,15	ZG113	SMR	132S4		



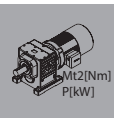
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
5,50	22	2247	65,00	3,65	ZG113	SMR	132S4	389	316
	25	1977	58,51	4,15	ZG113	SMR	132S4		
	23	2193	63,50	2,70	ZG112	SMB	132S4	362	314
	25	2017	58,15	3,43	ZG112	SMB	132S4		
	28	1801	52,20	4,11	ZG112	SMB	132S4		
	37	1363	38,81	2,67	ZG112	SMB	132S4		
	41	1230	35,54	3,45	ZG112	SMB	132S4		
	45	1121	31,90	4,06	ZG112	SMB	132S4		
	11	4494	138,08	1,09	ZG103	SMB	132S4	275	310
	12	4119	124,20	1,19	ZG103	SMB	132S4		
	13	3802	115,93	1,29	ZG103	SMB	132S4		
	14	3531	101,76	1,39	ZG103	SMR	132S4		
	16	3089	90,05	1,59	ZG103	SMR	132S4		
	19	2601	75,87	1,88	ZG103	SMR	132S4		
	22	2247	64,62	2,18	ZG103	SMR	132S4		
	26	1901	55,48	2,58	ZG103	SMR	132S4		
	30	1647	47,91	2,97	ZG103	SMR	132S4		
	35	1412	41,53	3,47	ZG103	SMR	132S4		
	42	1177	34,44	4,16	ZG103	SMR	132S4		
	22	2292	65,69	2,14	ZG102	SMB	132S4	248	308
	25	2017	58,69	2,43	ZG102	SMB	132S4		
	29	1739	49,45	2,82	ZG102	SMB	132S4		
	32	1576	45,22	3,11	ZG102	SMB	132S4		
	36	1401	40,48	3,50	ZG102	SMB	132S4		
	40	1261	36,30	3,89	ZG102	SMB	132S4		
	44	1146	32,81	4,27	ZG102	SMB	132S4		
	50	1009	28,77	2,34	ZG102	SMB	132S4		
	56	900	25,70	2,80	ZG102	SMB	132S4		
	67	752	21,65	4,14	ZG102	SMB	132S4		
	18	2746	80,95	1,13	ZG93	SMR	132S4	212	304
	21	2354	68,95	1,32	ZG93	SMR	132S4		
	24	2059	59,19	1,50	ZG93	SMR	132S4		
	28	1765	51,11	1,76	ZG93	SMR	132S4		
	33	1498	44,31	2,07	ZG93	SMR	132S4		
	39	1267	36,75	2,45	ZG93	SMR	132S4		
	21	2402	70,09	1,29	ZG92	SMB	132S4	185	302
	23	2193	62,62	1,41	ZG92	SMB	132S4		
	27	1868	52,76	1,66	ZG92	SMB	132S4		
	30	1681	48,24	1,84	ZG92	SMB	132S4		
	34	1483	43,19	2,09	ZG92	SMB	132S4		
	37	1363	38,73	2,27	ZG92	SMB	132S4		
	41	1230	35,01	2,52	ZG92	SMB	132S4		
	46	1096	31,86	2,83	ZG92	SMB	132S4		
	50	1008	29,16	3,07	ZG92	SMB	132S4		
	59	855	24,78	3,63	ZG92	SMR	132S4		
	63	800	22,97	3,85	ZG92	SMR	132S4		
	68	741	21,37	4,10	ZG92	SMR	132S4		
	78	646	18,64	4,49	ZG92	SMR	132S4		



P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
5,50	50	1008	29,12	1,24		ZG92	SMB	132S4		
	56	900	26,02	1,70		ZG92	SMB	132S4		
	66	764	21,92	2,40		ZG92	SMB	132S4		
	72	700	20,04	2,77		ZG92	SMB	132S4	185	302
	81	622	17,95	3,33		ZG92	SMB	132S4		
	90	560	16,09	4,11		ZG92	SMB	132S4		
	26	1940	55,41	0,98		ZG82	SMB	132S4		
	29	1739	50,66	1,09		ZG82	SMB	132S4		
	32	1576	44,95	1,21		ZG82	SMB	132S4		
	36	1401	39,99	1,36		ZG82	SMB	132S4		
	39	1293	37,64	1,47		ZG82	SMB	132S4		
	42	1201	34,26	1,58		ZG82	SMB	132S4		
	47	1073	30,74	1,77		ZG82	SMB	132S4		
	52	970	27,88	1,96		ZG82	SMB	132S4		
	56	900	25,75	2,11		ZG82	SMB	132S4		
	64	788	22,70	2,36		ZG82	SMR	132S4		
	72	700	20,18	2,58		ZG82	SMR	132S4		
	81	622	17,96	2,86		ZG82	SMR	132S4		
	85	593	17,13	2,97		ZG82	SMR	132S4		
	99	509	14,71	3,38		ZG82	SMR	132S4		
	114	442	12,74	3,79		ZG82	SMR	132S4	117	299
	126	400	11,47	4,11		ZG82	SMR	132S4		
	44	1146	32,74	1,54		ZG82	SMB	132S4		
	48	1051	29,93	1,70		ZG82	SMB	132S4		
	55	917	26,56	1,97		ZG82	SMB	132S4		
	61	826	23,63	2,21		ZG82	SMB	132S4		
	65	776	22,24	2,36		ZG82	SMB	132S4		
	72	700	20,24	2,58		ZG82	SMB	132S4		
	80	630	18,16	2,83		ZG82	SMB	132S4		
	88	573	16,47	3,06		ZG82	SMB	132S4		
	95	531	15,21	3,23		ZG82	SMB	132S4		
	108	467	13,41	3,60		ZG82	SMR	132S4		
	122	413	11,92	4,00		ZG82	SMR	132S4		
	137	368	10,61	4,42		ZG82	SMR	132S4		
	35	1441	41,90	1,01		ZG72	SMB	132S4		
	39	1293	37,27	1,12		ZG72	SMB	132S4		
	41	1230	35,08	1,18		ZG72	SMB	132S4		
	45	1121	31,93	1,29		ZG72	SMB	132S4		
	51	989	28,65	1,47		ZG72	SMB	132S4		
	56	900	25,98	1,61		ZG72	SMB	132S4		
	60	840	24,00	1,72		ZG72	SMB	132S4		
	69	731	21,16	1,95		ZG72	SMR	132S4	107	296
	77	655	18,81	2,10		ZG72	SMR	132S4		
	87	579	16,74	2,30		ZG72	SMR	132S4		
	91	554	15,96	2,38		ZG72	SMR	132S4		
	106	475	13,71	2,68		ZG72	SMR	132S4		
	122	413	11,88	2,98		ZG72	SMR	132S4		
	136	370	10,69	3,23		ZG72	SMR	132S4		

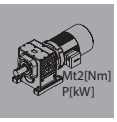


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
5,50	160	315	9,08	3,68	ZG72	SMR	132S4	107	296
	189	266	7,66	4,17	ZG72	SMR	132S4		
	68	741	21,45	0,97	ZG62	SMB	132S4		
	77	655	18,83	1,05	ZG62	SMR	132S4		
	87	579	16,66	1,14	ZG62	SMR	132S4		
	103	489	14,04	1,30	ZG62	SMR	132S4		
	121	416	11,96	1,47	ZG62	SMR	132S4		
	141	357	10,27	1,65	ZG62	SMR	132S4		
	164	307	8,86	1,84	ZG62	SMR	132S4		
	189	266	7,68	2,02	ZG62	SMR	132S4		
	228	221	6,37	2,37	ZG62	SMR	132S4		
	63	800	22,95	1,02	ZG62	SMB	132S4		
	72	700	20,01	1,17	ZG62	SMB	132S4		
	77	655	18,83	1,24	ZG62	SMB	132S4	86	293
	83	607	17,37	1,32	ZG62	SMB	132S4		
	93	542	15,63	1,47	ZG62	SMB	132S4		
	103	489	14,06	1,60	ZG62	SMB	132S4		
	110	458	13,13	1,69	ZG62	SMB	132S4		
	126	400	11,52	1,90	ZG62	SMR	132S4		
	142	355	10,20	2,11	ZG62	SMR	132S4		
	169	298	8,59	2,46	ZG62	SMR	132S4		
	198	254	7,32	2,81	ZG62	SMR	132S4		
	231	218	6,28	3,15	ZG62	SMR	132S4		
	267	188	5,42	3,49	ZG62	SMR	132S4		
	308	163	4,70	3,88	ZG62	SMR	132S4		
	99	509	14,67	1,03	ZG52	SMR	132S4		
	113	446	12,83	1,14	ZG52	SMR	132S4		
	137	368	10,61	1,31	ZG52	SMR	132S4	79	291
	164	307	8,85	1,50	ZG52	SMR	132S4		
	195	258	7,42	1,69	ZG52	SMR	132S4		
	220	229	6,60	1,85	ZG52	SMR	132S4		
7,50	3,3	20019	443,47	1,00	ZG134	SMR	132M4		
	3,7	17855	392,45	1,12	ZG134	SMR	132M4		
	4,4	15014	330,63	1,33	ZG134	SMR	132M4		
	5,1	12953	281,61	1,54	ZG134	SMR	132M4	766	330
	6	11010	241,77	1,82	ZG134	SMR	132M4		
	6,9	9574	208,77	2,09	ZG134	SMR	132M4		
	8	8258	180,98	2,42	ZG134	SMR	132M4		
	9,7	6810	150,10	2,94	ZG134	SMR	132M4		
	5,1	13218	286,28	1,51	ZG133	SMB	132M4		
	5,7	11826	255,76	1,69	ZG133	SMB	132M4		
	6,7	10061	215,49	1,99	ZG133	SMB	132M4		
	7,4	9109	197,05	2,20	ZG133	SMB	132M4		
	8,2	8221	176,42	2,43	ZG133	SMB	132M4	707	328
	9,2	7327	158,18	2,73	ZG133	SMB	132M4		
	10	6741	142,99	2,97	ZG133	SMB	132M4		
	11	6128	130,13	3,26	ZG133	SMB	132M4		
	12	5617	119,11	3,56	ZG133	SMB	132M4		

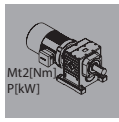


P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
7,50	14	4815	101,20	4,15	ZG133	SMR	132M4	707	328
	15	4494	93,82	4,45	ZG133	SMR	132M4		
	5,1	12953	283,58	1,04	ZG124	SMR	132M4		
	6	11010	243,47	1,23	ZG124	SMR	132M4		
	6,9	9574	210,23	1,41	ZG124	SMR	132M4	554	324
	8	8258	182,24	1,63	ZG124	SMR	132M4		
	9,6	6881	151,15	1,96	ZG124	SMR	132M4		
	5	13482	288,28	1,00	ZG123	SMB	132M4		
	5,6	12038	257,55	1,12	ZG123	SMB	132M4		
	6,7	10061	216,99	1,34	ZG123	SMB	132M4		
	7,3	9234	198,43	1,46	ZG123	SMB	132M4		
	8,2	8221	177,65	1,64	ZG123	SMB	132M4		
	9,1	7408	159,29	1,82	ZG123	SMB	132M4		
	10	6741	143,99	2,00	ZG123	SMB	132M4	514	322
	11	6128	131,04	2,20	ZG123	SMB	132M4		
	12	5617	119,94	2,40	ZG123	SMB	132M4		
	14	4815	101,91	2,80	ZG123	SMR	132M4		
	15	4494	94,48	3,00	ZG123	SMR	132M4		
	17	3965	87,88	3,40	ZG123	SMR	132M4		
	19	3548	76,66	3,80	ZG123	SMR	132M4		
	21	3210	67,48	4,21	ZG123	SMR	132M4		
	8,3	8122	174,77	1,01	ZG113	SMB	132M4		
	9,2	7327	156,80	1,12	ZG113	SMB	132M4		
	10	6741	142,22	1,22	ZG113	SMB	132M4		
	11	6128	131,37	1,34	ZG113	SMB	132M4		
	13	5185	115,81	1,58	ZG113	SMR	132M4		
	14	4815	102,96	1,70	ZG113	SMR	132M4		
	16	4213	91,64	1,95	ZG113	SMR	132M4	400	316
	17	3965	87,38	2,07	ZG113	SMR	132M4		
	19	3548	75,03	2,31	ZG113	SMR	132M4		
	22	3064	65,00	2,68	ZG113	SMR	132M4		
	25	2696	58,51	3,04	ZG113	SMR	132M4		
	29	2324	49,68	3,53	ZG113	SMR	132M4		
	35	1926	41,90	4,26	ZG113	SMR	132M4		
	23	2990	63,50	1,98	ZG112	SMB	132M4		
	25	2751	58,15	2,51	ZG112	SMB	132M4		
	28	2456	52,20	3,02	ZG112	SMB	132M4		
	31	2218	46,91	3,56	ZG112	SMB	132M4		
	34	2023	42,50	3,95	ZG112	SMB	132M4	373	314
	37	1859	38,77	4,33	ZG112	SMB	132M4		
	41	1677	35,54	2,53	ZG112	SMB	132M4		
	45	1528	31,90	2,98	ZG112	SMB	132M4		
	51	1348	28,67	3,86	ZG112	SMB	132M4		
	14	4815	101,76	1,02	ZG103	SMR	132M4		
	16	4213	90,05	1,16	ZG103	SMR	132M4		
	19	3548	75,87	1,38	ZG103	SMR	132M4	286	310
	22	3064	64,62	1,60	ZG103	SMR	132M4		
	26	2592	55,48	1,89	ZG103	SMR	132M4		

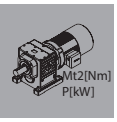
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
7,50	30	2247	47,91	2,18	ZG103	SMR	132M4		
	35	1926	41,53	2,54	ZG103	SMR	132M4	286	310
	42	1605	34,44	3,05	ZG103	SMR	132M4		
	22	3126	65,69	1,57	ZG102	SMB	132M4		
	25	2751	58,69	1,78	ZG102	SMB	132M4		
	29	2372	49,45	2,07	ZG102	SMB	132M4		
	32	2149	45,22	2,28	ZG102	SMB	132M4		
	36	1910	40,48	2,56	ZG102	SMB	132M4		
	40	1719	36,30	2,85	ZG102	SMB	132M4		
	44	1563	32,81	3,13	ZG102	SMB	132M4	259	308
	49	1403	29,86	3,49	ZG102	SMB	132M4		
	53	1297	27,33	3,78	ZG102	SMB	132M4		
	62	1109	23,22	4,42	ZG102	SMR	132M4		
	50	1375	28,77	1,72	ZG102	SMB	132M4		
	56	1228	25,70	2,05	ZG102	SMB	132M4		
	67	1026	21,65	3,04	ZG102	SMB	132M4		
	73	942	19,80	3,76	ZG102	SMB	132M4		
	21	3210	68,95	0,97	ZG93	SMR	132M4		
	24	2808	59,19	1,10	ZG93	SMR	132M4		
	28	2407	51,11	1,29	ZG93	SMR	132M4	223	304
	33	2042	44,31	1,52	ZG93	SMR	132M4		
	39	1728	36,75	1,79	ZG93	SMR	132M4		
	23	2990	62,62	1,04	ZG92	SMB	132M4		
	27	2547	52,76	1,22	ZG92	SMB	132M4		
	30	2292	48,24	1,35	ZG92	SMB	132M4		
	34	2023	43,19	1,53	ZG92	SMB	132M4		
	37	1859	38,73	1,67	ZG92	SMB	132M4		
	41	1677	35,01	1,85	ZG92	SMB	132M4		
	46	1495	31,86	2,07	ZG92	SMB	132M4		
	50	1375	29,16	2,25	ZG92	SMB	132M4		
	59	1165	24,78	2,66	ZG92	SMR	132M4		
	63	1091	22,97	2,82	ZG92	SMR	132M4		
	68	1011	21,37	3,01	ZG92	SMR	132M4	196	302
	78	881	18,64	3,29	ZG92	SMR	132M4		
	88	781	16,41	3,57	ZG92	SMR	132M4		
	100	687	14,55	3,90	ZG92	SMR	132M4		
	56	1228	26,02	1,24	ZG92	SMB	132M4		
	66	1042	21,92	1,76	ZG92	SMB	132M4		
	72	955	20,04	2,03	ZG92	SMB	132M4		
	81	849	17,95	2,44	ZG92	SMB	132M4		
	90	764	16,09	3,02	ZG92	SMB	132M4		
	100	687	14,55	3,64	ZG92	SMR	132M4		
	110	625	13,24	4,20	ZG92	SMB	132M4		
	36	1910	39,99	0,99	ZG82	SMB	132M4		
	39	1763	37,64	1,08	ZG82	SMB	132M4		
	42	1637	34,26	1,16	ZG82	SMB	132M4	128	299
	47	1463	30,74	1,30	ZG82	SMB	132M4		
	52	1322	27,88	1,44	ZG82	SMB	132M4		



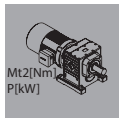
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
7,50	56	1228	25,75	1,55	ZG82	SMB	132M4		
	64	1074	22,70	1,73	ZG82	SMR	132M4		
	72	955	20,18	1,89	ZG82	SMR	132M4		
	81	849	17,96	2,10	ZG82	SMR	132M4		
	85	809	17,13	2,18	ZG82	SMR	132M4		
	99	694	14,71	2,48	ZG82	SMR	132M4		
	114	603	12,74	2,78	ZG82	SMR	132M4		
	126	545	11,47	3,01	ZG82	SMR	132M4		
	149	461	9,74	3,48	ZG82	SMR	132M4		
	177	388	8,21	4,02	ZG82	SMR	132M4		
	44	1563	32,74	1,13	ZG82	SMB	132M4		
	48	1433	29,93	1,24	ZG82	SMB	132M4		
	55	1250	26,56	1,45	ZG82	SMB	132M4	128	299
	61	1127	23,63	1,62	ZG82	SMB	132M4		
	65	1058	22,24	1,73	ZG82	SMB	132M4		
	72	955	20,24	1,89	ZG82	SMB	132M4		
	80	859	18,16	2,08	ZG82	SMB	132M4		
	88	781	16,47	2,25	ZG82	SMB	132M4		
	95	724	15,21	2,37	ZG82	SMB	132M4		
	108	636	13,41	2,64	ZG82	SMR	132M4		
	122	563	11,92	2,94	ZG82	SMR	132M4		
	137	502	10,61	3,24	ZG82	SMR	132M4		
	143	481	10,12	3,37	ZG82	SMR	132M4		
	167	411	8,69	3,84	ZG82	SMR	132M4		
	193	356	7,53	4,32	ZG82	SMR	132M4		
	51	1348	28,65	1,08	ZG72	SMB	132M4		
	56	1228	25,98	1,18	ZG72	SMB	132M4		
	60	1146	24,00	1,26	ZG72	SMB	132M4		
	69	996	21,16	1,43	ZG72	SMR	132M4		
	77	893	18,81	1,54	ZG72	SMR	132M4		
	87	790	16,74	1,68	ZG72	SMR	132M4		
	91	755	15,96	1,75	ZG72	SMR	132M4	118	296
	106	648	13,71	1,97	ZG72	SMR	132M4		
	122	563	11,88	2,18	ZG72	SMR	132M4		
	136	505	10,69	2,37	ZG72	SMR	132M4		
	160	429	9,08	2,70	ZG72	SMR	132M4		
	189	363	7,66	3,06	ZG72	SMR	132M4		
	215	319	6,74	3,31	ZG72	SMR	132M4		
	243	283	5,97	3,61	ZG72	SMR	132M4		
	103	667	14,04	0,95	ZG62	SMR	132M4		
	121	568	11,96	1,08	ZG62	SMR	132M4		
	141	487	10,27	1,21	ZG62	SMR	132M4		
	164	419	8,86	1,35	ZG62	SMR	132M4		
	189	363	7,68	1,48	ZG62	SMR	132M4	97	293
	228	301	6,37	1,74	ZG62	SMR	132M4		
	83	828	17,37	0,97	ZG62	SMB	132M4		
	93	739	15,63	1,07	ZG62	SMB	132M4		
	103	667	14,06	1,17	ZG62	SMB	132M4		



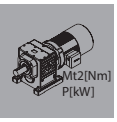
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
7,50	110	625	13,13	1,24	ZG62	SMB	132M4		
	126	545	11,52	1,39	ZG62	SMR	132M4		
	142	484	10,20	1,55	ZG62	SMR	132M4		
	169	407	8,59	1,81	ZG62	SMR	132M4		
	198	347	7,32	2,06	ZG62	SMR	132M4	97	293
	231	297	6,28	2,31	ZG62	SMR	132M4		
	267	257	5,42	2,56	ZG62	SMR	132M4		
	308	223	4,70	2,84	ZG62	SMR	132M4		
	372	184	3,90	3,31	ZG62	SMR	132M4		
9,20	4,4	18418	330,63	1,09	ZG134	SMR	132Ma4		
	5,1	15890	281,61	1,26	ZG134	SMR	132Ma4		
	6	13506	241,77	1,48	ZG134	SMR	132Ma4	777	330
	6,9	11744	208,77	1,70	ZG134	SMR	132Ma4		
	8	10129	180,98	1,97	ZG134	SMR	132Ma4		
	9,6	8441	150,10	2,37	ZG134	SMR	132Ma4		
	5	16538	286,28	1,21	ZG133	SMB	132Ma4		
	5,6	14766	255,76	1,35	ZG133	SMB	132Ma4		
	6,7	12342	215,49	1,62	ZG133	SMB	132Ma4		
	7,3	11327	197,05	1,77	ZG133	SMB	132Ma4		
	8,2	10084	176,42	1,98	ZG133	SMB	132Ma4		
	9,1	9087	158,18	2,20	ZG133	SMB	132Ma4		
	10	8269	142,99	2,42	ZG133	SMB	132Ma4	718	328
	11	7517	130,13	2,66	ZG133	SMB	132Ma4		
	12	6891	119,11	2,90	ZG133	SMB	132Ma4		
	14	5906	101,20	3,39	ZG133	SMR	132Ma4		
	15	5512	93,82	3,63	ZG133	SMR	132Ma4		
	17	4864	87,27	4,07	ZG133	SMR	132Ma4		
	19	4352	76,13	4,48	ZG133	SMR	132Ma4		
	5,9	13735	243,47	0,98	ZG124	SMR	132Ma4		
	6,8	11917	210,23	1,13	ZG124	SMR	132Ma4	565	324
	7,9	10258	182,24	1,32	ZG124	SMR	132Ma4		
	9,5	8530	151,15	1,58	ZG124	SMR	132Ma4		
	6,6	12529	216,99	1,08	ZG123	SMB	132Ma4		
	7,3	11327	198,43	1,19	ZG123	SMB	132Ma4		
	8,1	10209	177,65	1,32	ZG123	SMB	132Ma4		
	9	9188	159,29	1,47	ZG123	SMB	132Ma4		
	10	8269	143,99	1,63	ZG123	SMB	132Ma4		
	11	7517	131,04	1,80	ZG123	SMB	132Ma4		
	12	6891	119,94	1,96	ZG123	SMB	132Ma4	525	322
	14	5906	101,91	2,29	ZG123	SMR	132Ma4		
	15	5512	94,48	2,45	ZG123	SMR	132Ma4		
	16	5168	87,88	2,61	ZG123	SMR	132Ma4		
	19	4352	76,66	3,10	ZG123	SMR	132Ma4		
	21	3937	67,48	3,43	ZG123	SMR	132Ma4		
	24	3445	59,83	3,89	ZG123	SMR	132Ma4		
	10	8269	142,22	0,99	ZG113	SMB	132Ma4		
	11	7517	131,37	1,09	ZG113	SMB	132Ma4	411	316
	12	6891	115,81	1,19	ZG113	SMR	132Ma4		



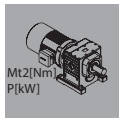
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
9,20	14	5906	102,96	1,39	ZG113	SMR	132Ma4		
	16	5168	91,64	1,59	ZG113	SMR	132Ma4		
	16	5168	87,38	1,59	ZG113	SMR	132Ma4		
	19	4352	75,03	1,88	ZG113	SMR	132Ma4		
	22	3758	65,00	2,18	ZG113	SMR	132Ma4	411	316
	25	3307	58,51	2,48	ZG113	SMR	132Ma4		
	29	2851	49,68	2,88	ZG113	SMR	132Ma4		
	34	2432	41,90	3,37	ZG113	SMR	132Ma4		
	39	2120	36,87	3,87	ZG113	SMR	132Ma4		
	44	1879	32,67	4,36	ZG113	SMR	132Ma4		
	23	3668	63,50	1,61	ZG112	SMB	132Ma4		
	25	3375	58,15	2,05	ZG112	SMB	132Ma4		
	28	3013	52,20	2,46	ZG112	SMB	132Ma4		
	31	2721	46,91	2,90	ZG112	SMB	132Ma4		
	34	2481	42,50	3,22	ZG112	SMB	132Ma4		
	37	2280	38,77	3,53	ZG112	SMB	132Ma4		
	40	2109	35,57	3,87	ZG112	SMB	132Ma4	384	314
	37	2280	38,81	1,59	ZG112	SMB	132Ma4		
	41	2058	35,54	2,06	ZG112	SMB	132Ma4		
	45	1875	31,90	2,43	ZG112	SMB	132Ma4		
	50	1687	28,67	3,08	ZG112	SMB	132Ma4		
	55	1534	25,97	3,73	ZG112	SMB	132Ma4		
	61	1383	23,69	4,48	ZG112	SMB	132Ma4		
	19	4352	75,87	1,13	ZG103	SMR	132Ma4		
	22	3758	64,62	1,30	ZG103	SMR	132Ma4		
	26	3180	55,48	1,54	ZG103	SMR	132Ma4	297	310
	30	2756	47,91	1,78	ZG103	SMR	132Ma4		
	35	2362	41,53	2,07	ZG103	SMR	132Ma4		
	42	1968	34,44	2,49	ZG103	SMR	132Ma4		
	22	3835	65,69	1,28	ZG102	SMB	132Ma4		
	25	3375	58,69	1,45	ZG102	SMB	132Ma4		
	29	2909	49,45	1,68	ZG102	SMB	132Ma4		
	32	2636	45,22	1,86	ZG102	SMB	132Ma4		
	36	2343	40,48	2,09	ZG102	SMB	132Ma4		
	40	2109	36,30	2,32	ZG102	SMB	132Ma4		
	44	1917	32,81	2,56	ZG102	SMB	132Ma4		
	48	1757	29,86	2,79	ZG102	SMB	132Ma4		
	53	1592	27,33	3,08	ZG102	SMB	132Ma4		
	62	1360	23,22	3,60	ZG102	SMR	132Ma4	270	308
	67	1259	21,53	3,89	ZG102	SMR	132Ma4		
	72	1171	20,03	4,18	ZG102	SMR	132Ma4		
	82	1029	17,47	4,49	ZG102	SMR	132Ma4		
	50	1687	28,77	1,40	ZG102	SMB	132Ma4		
	56	1506	25,70	1,68	ZG102	SMB	132Ma4		
	66	1278	21,65	2,44	ZG102	SMB	132Ma4		
	73	1155	19,80	3,06	ZG102	SMB	132Ma4		
	81	1041	17,73	3,72	ZG102	SMB	132Ma4		
	91	927	15,90	4,45	ZG102	SMB	132Ma4		



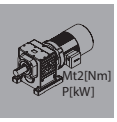
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
9,20	28	2953	51,11	1,05		ZG93	SMR	132Ma4		
	32	2584	44,31	1,20		ZG93	SMR	132Ma4	234	304
	39	2120	36,75	1,46		ZG93	SMR	132Ma4		
	27	3125	52,76	0,99		ZG92	SMB	132Ma4		
	30	2812	48,24	1,10		ZG92	SMB	132Ma4		
	33	2556	43,19	1,21		ZG92	SMB	132Ma4		
	37	2280	38,73	1,36		ZG92	SMB	132Ma4		
	41	2058	35,01	1,51		ZG92	SMB	132Ma4		
	45	1875	31,86	1,65		ZG92	SMB	132Ma4		
	49	1722	29,16	1,80		ZG92	SMB	132Ma4		
	58	1454	24,78	2,13		ZG92	SMR	132Ma4		
	63	1339	22,97	2,30		ZG92	SMR	132Ma4		
	67	1259	21,37	2,41		ZG92	SMR	132Ma4		
	77	1095	18,64	2,65		ZG92	SMR	132Ma4	207	302
	88	958	16,41	2,91		ZG92	SMR	132Ma4		
	99	852	14,55	3,14		ZG92	SMR	132Ma4		
	55	1534	26,02	1,00		ZG92	SMB	132Ma4		
	66	1278	21,92	1,43		ZG92	SMB	132Ma4		
	72	1171	20,04	1,66		ZG92	SMB	132Ma4		
	80	1054	17,95	1,96		ZG92	SMB	132Ma4		
	89	948	16,09	2,43		ZG92	SMB	132Ma4		
	99	852	14,55	2,93		ZG92	SMR	132Ma4		
	109	774	13,24	3,40		ZG92	SMB	132Ma4		
	119	709	12,12	3,91		ZG92	SMB	132Ma4		
	47	1795	30,74	1,06		ZG82	SMB	132Ma4		
	52	1622	27,88	1,17		ZG82	SMB	132Ma4		
	56	1506	25,75	1,26		ZG82	SMB	132Ma4		
	63	1339	22,70	1,39		ZG82	SMR	132Ma4		
	71	1188	20,18	1,52		ZG82	SMR	132Ma4		
	80	1054	17,96	1,69		ZG82	SMR	132Ma4		
	84	1004	17,13	1,76		ZG82	SMR	132Ma4		
	98	861	14,71	2,00		ZG82	SMR	132Ma4		
	113	746	12,74	2,24		ZG82	SMR	132Ma4		
	126	669	11,47	2,45		ZG82	SMR	132Ma4		
	148	570	9,74	2,82		ZG82	SMR	132Ma4		
	175	482	8,21	3,24		ZG82	SMR	132Ma4	139	299
	225	375	6,40	3,90		ZG82	SMR	132Ma4		
	48	1757	29,93	1,01		ZG82	SMB	132Ma4		
	54	1562	26,56	1,16		ZG82	SMB	132Ma4		
	61	1383	23,63	1,32		ZG82	SMB	132Ma4		
	65	1298	22,24	1,41		ZG82	SMB	132Ma4		
	71	1188	20,24	1,52		ZG82	SMB	132Ma4		
	79	1068	18,16	1,67		ZG82	SMB	132Ma4		
	87	969	16,47	1,81		ZG82	SMB	132Ma4		
	95	888	15,21	1,93		ZG82	SMB	132Ma4		
	107	788	13,41	2,13		ZG82	SMR	132Ma4		
	121	697	11,92	2,37		ZG82	SMR	132Ma4		
	136	620	10,61	2,62		ZG82	SMR	132Ma4		



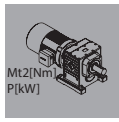
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
9,20	142	594	10,12	2,72	ZG82	SMR	132Ma4		
	166	508	8,69	3,11	ZG82	SMR	132Ma4		
	191	441	7,53	3,49	ZG82	SMR	132Ma4	139	299
	213	396	6,78	3,78	ZG82	SMR	132Ma4		
	250	337	5,75	4,38	ZG82	SMR	132Ma4		
	60	1406	24,00	1,03	ZG72	SMB	132Ma4		
	68	1240	21,16	1,15	ZG72	SMR	132Ma4		
	77	1095	18,81	1,25	ZG72	SMR	132Ma4		
	86	981	16,74	1,36	ZG72	SMR	132Ma4		
	90	937	15,96	1,41	ZG72	SMR	132Ma4		
	105	803	13,71	1,59	ZG72	SMR	132Ma4	129	296
	121	697	11,88	1,77	ZG72	SMR	132Ma4		
	135	625	10,69	1,92	ZG72	SMR	132Ma4		
	159	530	9,08	2,19	ZG72	SMR	132Ma4		
	188	448	7,66	2,48	ZG72	SMR	132Ma4		
	214	394	6,74	2,69	ZG72	SMR	132Ma4		
	241	350	5,97	2,92	ZG72	SMR	132Ma4		
11,00	5,1	18998	281,61	1,05	ZG134	SMR	160M4		
	6	16149	241,77	1,24	ZG134	SMR	160M4		
	6,9	14042	208,77	1,42	ZG134	SMR	160M4	791	330
	8	12111	180,98	1,65	ZG134	SMR	160M4		
	9,6	10093	150,10	1,98	ZG134	SMR	160M4		
	6,7	14757	215,49	1,36	ZG133	SMB	160M4		
	7,3	13544	197,05	1,48	ZG133	SMB	160M4		
	8,2	12057	176,42	1,66	ZG133	SMB	160M4		
	9,1	10865	158,18	1,84	ZG133	SMB	160M4		
	10	9887	142,99	2,02	ZG133	SMB	160M4		
	11	8988	130,13	2,23	ZG133	SMB	160M4	732	316
	12	8239	119,11	2,43	ZG133	SMB	160M4		
	14	7062	101,20	2,83	ZG133	SMB	160M4		
	15	6591	93,82	3,03	ZG133	SMB	160M4		
	17	5816	87,27	3,40	ZG133	SMR	160M4		
	19	5203	76,13	3,75	ZG133	SMR	160M4		
	21	4708	67,01	4,08	ZG133	SMR	160M4		
	7,9	12265	182,24	1,10	ZG124	SMR	160M4	579	324
	9,5	10199	151,15	1,32	ZG124	SMR	160M4		
	7,3	13544	198,43	1,00	ZG123	SMB	160M4		
	8,1	12206	177,65	1,11	ZG123	SMB	160M4		
	9	10985	159,29	1,23	ZG123	SMB	160M4		
	10	9887	143,99	1,37	ZG123	SMB	160M4		
	11	8988	131,04	1,50	ZG123	SMB	160M4		
	12	8239	119,94	1,64	ZG123	SMB	160M4	539	322
	14	7062	101,91	1,91	ZG123	SMB	160M4		
	15	6591	94,48	2,05	ZG123	SMB	160M4		
	16	6179	87,88	2,18	ZG123	SMR	160M4		
	19	5203	76,66	2,59	ZG123	SMR	160M4		
	21	4708	67,48	2,87	ZG123	SMR	160M4		
	24	4119	59,83	3,26	ZG123	SMR	160M4		



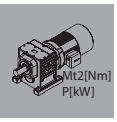
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
11,00	27	3661	53,35	3,64	ZG123	SMR	160M4		
	30	3295	47,80	4,00	ZG123	SMR	160M4	539	322
	33	2996	42,99	4,34	ZG123	SMR	160M4		
	12	8239	115,81	1,00	ZG113	SMB	160M4		
	14	7062	102,96	1,16	ZG113	SMB	160M4		
	16	6179	91,64	1,33	ZG113	SMB	160M4		
	19	5203	75,03	1,58	ZG113	SMR	160M4		
	22	4494	65,00	1,82	ZG113	SMR	160M4		
	25	3954	58,51	2,07	ZG113	SMR	160M4	425	316
	29	3409	49,68	2,41	ZG113	SMR	160M4		
	34	2908	41,90	2,82	ZG113	SMR	160M4		
	39	2535	36,87	3,23	ZG113	SMR	160M4		
	44	2247	32,67	3,65	ZG113	SMR	160M4		
	23	4386	63,50	1,35	ZG112	SMB	160M4		
	25	4035	58,15	1,71	ZG112	SMB	160M4		
	28	3603	52,20	2,06	ZG112	SMB	160M4		
	31	3254	46,91	2,42	ZG112	SMB	160M4		
	34	2967	42,50	2,69	ZG112	SMB	160M4		
	37	2726	38,77	2,95	ZG112	SMB	160M4		
	40	2522	35,57	3,24	ZG112	SMB	160M4		
	47	2146	30,38	3,82	ZG112	SMB	160M4		
	51	1978	28,24	4,15	ZG112	SMB	160M4	398	314
	55	1834	26,33	4,47	ZG112	SMR	160M4		
	37	2726	38,81	1,33	ZG112	SMB	160M4		
	41	2460	35,54	1,73	ZG112	SMB	160M4		
	45	2242	31,90	2,03	ZG112	SMB	160M4		
	50	2017	28,67	2,58	ZG112	SMB	160M4		
	55	1834	25,97	3,12	ZG112	SMB	160M4		
	61	1653	23,69	3,75	ZG112	SMB	160M4		
	66	1528	21,74	4,26	ZG112	SMB	160M4		
	22	4494	64,62	1,09	ZG103	SMR	160M4		
	26	3802	55,48	1,29	ZG103	SMR	160M4		
	30	3295	47,91	1,49	ZG103	SMR	160M4	311	310
	35	2824	41,53	1,73	ZG103	SMR	160M4		
	42	2354	34,44	2,08	ZG103	SMR	160M4		
	29	3478	49,45	1,41	ZG102	SMB	160M4		
	32	3152	45,22	1,55	ZG102	SMB	160M4		
	36	2802	40,48	1,75	ZG102	SMB	160M4		
	40	2522	36,30	1,94	ZG102	SMB	160M4		
	44	2292	32,81	2,14	ZG102	SMB	160M4		
	48	2101	29,86	2,33	ZG102	SMB	160M4		
	53	1903	27,33	2,57	ZG102	SMB	160M4	284	308
	62	1627	23,22	3,01	ZG102	SMB	160M4		
	67	1505	21,53	3,25	ZG102	SMB	160M4		
	72	1401	20,03	3,50	ZG102	SMR	160M4		
	82	1230	17,47	3,75	ZG102	SMR	160M4		
	94	1073	15,38	4,23	ZG102	SMR	160M4		
	66	1528	21,65	2,04	ZG102	SMB	160M4		



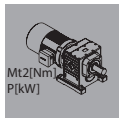
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
11,00	73	1382	19,80	2,56	ZG102	SMB	160M4		
	81	1245	17,73	3,11	ZG102	SMB	160M4	284	308
	91	1108	15,90	3,72	ZG102	SMB	160M4		
	100	1008	14,37	4,33	ZG102	SMB	160M4		
	32	3089	44,31	1,00	ZG93	SMR	160M4	248	304
	39	2535	36,75	1,22	ZG93	SMR	160M4		
	33	3057	43,19	1,01	ZG92	SMB	160M4		
	37	2726	38,73	1,14	ZG92	SMB	160M4		
	41	2460	35,01	1,26	ZG92	SMB	160M4		
	45	2242	31,86	1,38	ZG92	SMB	160M4		
	49	2058	29,16	1,51	ZG92	SMB	160M4		
	58	1739	24,78	1,78	ZG92	SMB	160M4		
	63	1601	22,97	1,92	ZG92	SMB	160M4		
	67	1505	21,37	2,02	ZG92	SMR	160M4		
	77	1310	18,64	2,22	ZG92	SMR	160M4		
	88	1146	16,41	2,43	ZG92	SMR	160M4		
	99	1019	14,55	2,63	ZG92	SMR	160M4		
	111	908	12,97	2,86	ZG92	SMR	160M4		
	124	813	11,62	3,10	ZG92	SMR	160M4	221	302
	138	731	10,45	3,32	ZG92	SMR	160M4		
	145	695	9,92	3,41	ZG92	SMR	160M4		
	169	596	8,53	3,77	ZG92	SMR	160M4		
	66	1528	21,92	1,20	ZG92	SMB	160M4		
	72	1401	20,04	1,39	ZG92	SMB	160M4		
	80	1261	17,95	1,64	ZG92	SMB	160M4		
	89	1133	16,09	2,03	ZG92	SMB	160M4		
	99	1019	14,55	2,45	ZG92	SMR	160M4		
	109	925	13,24	2,84	ZG92	SMB	160M4		
	119	847	12,12	3,27	ZG92	SMB	160M4		
	140	720	10,29	3,96	ZG92	SMB	160M4		
	151	668	9,54	4,27	ZG92	SMB	160M4		
	65	1552	22,24	1,18	ZG82	SMB	160M4		
	71	1420	20,24	1,27	ZG82	SMB	160M4		
	79	1277	18,16	1,40	ZG82	SMB	160M4		
	87	1159	16,47	1,51	ZG82	SMB	160M4		
	95	1062	15,21	1,62	ZG82	SMB	160M4		
	107	942	13,41	1,78	ZG82	SMB	160M4		
	121	833	11,92	1,98	ZG82	SMB	160M4	153	299
	136	741	10,61	2,19	ZG82	SMB	160M4		
	142	710	10,12	2,28	ZG82	SMR	160M4		
	166	607	8,69	2,60	ZG82	SMR	160M4		
	191	528	7,53	2,92	ZG82	SMR	160M4		
	213	473	6,78	3,16	ZG82	SMR	160M4		
	250	403	5,75	3,67	ZG82	SMR	160M4		
	297	339	4,85	4,30	ZG82	SMR	160M4		
	68	1483	21,16	0,96	ZG72	SMB	160M4		
	77	1310	18,81	1,05	ZG72	SMB	160M4	143	296
	86	1173	16,74	1,14	ZG72	SMB	160M4		



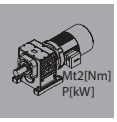
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
11,00	90	1121	15,96	1,18	ZG72	SMR	160M4		
	105	960	13,71	1,33	ZG72	SMR	160M4		
	121	833	11,88	1,48	ZG72	SMR	160M4		
	135	747	10,69	1,60	ZG72	SMR	160M4	143	296
	159	634	9,08	1,83	ZG72	SMR	160M4		
	188	536	7,66	2,07	ZG72	SMR	160M4		
	214	471	6,74	2,25	ZG72	SMR	160M4		
	241	418	5,97	2,44	ZG72	SMR	160M4		
15,00	6,9	19149	208,77	1,04	ZG134	SMR	160L4		
	8	16516	180,98	1,21	ZG134	SMR	160L4	820	330
	9,6	13763	150,10	1,45	ZG134	SMR	160L4		
	6,7	20123	215,49	0,99	ZG133	SMB	160L4		
	7,3	18469	197,05	1,08	ZG133	SMB	160L4		
	8,2	16442	176,42	1,22	ZG133	SMB	160L4		
	9,1	14816	158,18	1,35	ZG133	SMB	160L4		
	10	13482	142,99	1,48	ZG133	SMB	160L4		
	11	12256	130,13	1,63	ZG133	SMB	160L4		
	12	11235	119,11	1,78	ZG133	SMB	160L4		
	14	9630	101,20	2,08	ZG133	SMB	160L4	761	328
	15	8988	93,82	2,23	ZG133	SMB	160L4		
	17	7930	87,27	2,49	ZG133	SMR	160L4		
	19	7096	76,13	2,75	ZG133	SMR	160L4		
	21	6420	67,01	2,99	ZG133	SMR	160L4		
	24	5617	59,41	3,36	ZG133	SMR	160L4		
	27	4993	52,98	3,71	ZG133	SMR	160L4		
	30	4494	47,47	4,07	ZG133	SMR	160L4		
	9,5	13908	151,15	0,97	ZG124	SMR	160L4	608	324
	10	13482	143,99	1,00	ZG123	SMB	160L4		
	11	12256	131,04	1,10	ZG123	SMB	160L4		
	12	11235	119,94	1,20	ZG123	SMB	160L4		
	14	9630	101,91	1,40	ZG123	SMB	160L4		
	15	8988	94,48	1,50	ZG123	SMB	160L4		
	16	8426	87,88	1,60	ZG123	SMR	160L4		
	19	7096	76,66	1,90	ZG123	SMR	160L4	568	322
	21	6420	67,48	2,10	ZG123	SMR	160L4		
	24	5617	59,83	2,39	ZG123	SMR	160L4		
	27	4993	53,35	2,67	ZG123	SMR	160L4		
	30	4494	47,80	2,94	ZG123	SMR	160L4		
	33	4085	42,99	3,18	ZG123	SMR	160L4		
	35	3852	40,82	3,31	ZG123	SMR	160L4		
	41	3288	35,07	3,71	ZG123	SMR	160L4		
	40	3439	36,23	3,93	ZG122	SMB	160L4	523	320
	16	8426	91,64	0,97	ZG113	SMB	160L4		
	16	8426	87,38	0,97	ZG113	SMR	160L4		
	19	7096	75,03	1,16	ZG113	SMR	160L4	454	316
	22	6128	65,00	1,34	ZG113	SMR	160L4		
	25	5393	58,51	1,52	ZG113	SMR	160L4		
	29	4649	49,68	1,76	ZG113	SMR	160L4		



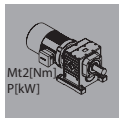
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
15,00	34	3965	41,90	2,07	ZG113	SMR	160L4		
	39	3457	36,87	2,37	ZG113	SMR	160L4	454	316
	44	3064	32,67	2,68	ZG113	SMR	160L4		
	23	5981	63,50	0,99	ZG112	SMB	160L4		
	25	5503	58,15	1,26	ZG112	SMB	160L4		
	28	4913	52,20	1,51	ZG112	SMB	160L4		
	31	4437	46,91	1,78	ZG112	SMB	160L4		
	34	4046	42,50	1,98	ZG112	SMB	160L4		
	37	3718	38,77	2,16	ZG112	SMB	160L4		
	40	3439	35,57	2,37	ZG112	SMB	160L4		
	47	2927	30,38	2,80	ZG112	SMB	160L4		
	51	2697	28,24	3,04	ZG112	SMB	160L4		
	55	2501	26,33	3,28	ZG112	SMR	160L4		
	62	2218	23,10	3,70	ZG112	SMR	160L4	427	314
	70	1965	20,45	4,17	ZG112	SMR	160L4		
	37	3718	38,81	0,98	ZG112	SMB	160L4		
	41	3355	35,54	1,27	ZG112	SMB	160L4		
	45	3057	31,90	1,49	ZG112	SMB	160L4		
	50	2751	28,67	1,89	ZG112	SMB	160L4		
	55	2501	25,97	2,29	ZG112	SMB	160L4		
	61	2255	23,69	2,75	ZG112	SMB	160L4		
	66	2084	21,74	3,13	ZG112	SMB	160L4		
	78	1763	18,56	3,83	ZG112	SMB	160L4		
	83	1657	17,25	4,09	ZG112	SMB	160L4		
	89	1545	16,09	4,40	ZG112	SMR	160L4		
	30	4494	47,91	1,09	ZG103	SMR	160L4		
	35	3852	41,53	1,27	ZG103	SMR	160L4	340	310
	42	3210	34,44	1,53	ZG103	SMR	160L4		
	29	4744	49,45	1,03	ZG102	SMB	160L4		
	32	4299	45,22	1,14	ZG102	SMB	160L4		
	36	3821	40,48	1,28	ZG102	SMB	160L4		
	40	3439	36,30	1,42	ZG102	SMB	160L4		
	44	3126	32,81	1,57	ZG102	SMB	160L4		
	48	2866	29,86	1,71	ZG102	SMB	160L4		
	53	2595	27,33	1,89	ZG102	SMB	160L4		
	62	2218	23,22	2,21	ZG102	SMB	160L4		
	67	2053	21,53	2,39	ZG102	SMB	160L4		
	72	1910	20,03	2,56	ZG102	SMR	160L4	313	308
	82	1677	17,47	2,75	ZG102	SMR	160L4		
	94	1463	15,38	3,10	ZG102	SMR	160L4		
	106	1297	13,63	3,44	ZG102	SMR	160L4		
	118	1165	12,16	3,79	ZG102	SMR	160L4		
	132	1042	10,89	4,17	ZG102	SMR	160L4		
	66	2084	21,65	1,50	ZG102	SMB	160L4		
	73	1884	19,80	1,88	ZG102	SMB	160L4		
	81	1698	17,73	2,28	ZG102	SMB	160L4		
	91	1511	15,90	2,73	ZG102	SMB	160L4		
	100	1375	14,37	3,17	ZG102	SMB	160L4		



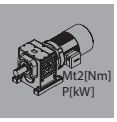
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
15,00	110	1250	13,08	3,53	ZG102	SMB	160L4	313	308
	120	1146	11,97	3,89	ZG102	SMB	160L4		
	45	3057	31,86	1,01	ZG92	SMB	160L4		
	49	2807	29,16	1,10	ZG92	SMB	160L4		
	58	2372	24,78	1,31	ZG92	SMB	160L4		
	63	2183	22,97	1,41	ZG92	SMB	160L4		
	67	2053	21,37	1,48	ZG92	SMR	160L4		
	77	1786	18,64	1,63	ZG92	SMR	160L4		
	88	1563	16,41	1,78	ZG92	SMR	160L4		
	99	1389	14,55	1,93	ZG92	SMR	160L4		
	111	1239	12,97	2,09	ZG92	SMR	160L4		
	124	1109	11,62	2,27	ZG92	SMR	160L4		
	138	996	10,45	2,44	ZG92	SMR	160L4		
	145	948	9,92	2,50	ZG92	SMR	160L4	250	302
	169	814	8,53	2,76	ZG92	SMR	160L4		
	72	1910	20,04	1,02	ZG92	SMB	160L4		
	80	1719	17,95	1,20	ZG92	SMB	160L4		
	89	1545	16,09	1,49	ZG92	SMB	160L4		
	99	1389	14,55	1,80	ZG92	SMR	160L4		
	109	1262	13,24	2,08	ZG92	SMB	160L4		
	119	1156	12,12	2,40	ZG92	SMB	160L4		
	140	982	10,29	2,91	ZG92	SMB	160L4		
	151	911	9,54	3,13	ZG92	SMB	160L4		
	162	849	8,88	3,32	ZG92	SMR	160L4		
	186	739	7,74	3,74	ZG92	SMR	160L4		
	211	652	6,82	4,14	ZG92	SMR	160L4		
	80	1719	17,96	1,04	ZG82	SMB	160L4		
	84	1637	17,13	1,08	ZG82	SMR	160L4		
	98	1403	14,71	1,23	ZG82	SMR	160L4		
	113	1217	12,74	1,38	ZG82	SMR	160L4		
	126	1091	11,47	1,51	ZG82	SMR	160L4		
	148	929	9,74	1,73	ZG82	SMR	160L4		
	175	786	8,21	1,99	ZG82	SMR	160L4		
	225	611	6,40	2,39	ZG82	SMR	160L4		
	79	1741	18,16	1,03	ZG82	SMB	160L4		
	87	1581	16,47	1,11	ZG82	SMB	160L4		
	95	1448	15,21	1,18	ZG82	SMB	160L4	182	299
	107	1285	13,41	1,31	ZG82	SMB	160L4		
	121	1137	11,92	1,46	ZG82	SMB	160L4		
	136	1011	10,61	1,61	ZG82	SMB	160L4		
	142	968	10,12	1,67	ZG82	SMR	160L4		
	166	828	8,69	1,91	ZG82	SMR	160L4		
	191	720	7,53	2,14	ZG82	SMR	160L4		
	213	645	6,78	2,32	ZG82	SMR	160L4		
	250	550	5,75	2,69	ZG82	SMR	160L4		
	297	463	4,85	3,15	ZG82	SMR	160L4		
	337	408	4,27	3,53	ZG82	SMR	160L4		
	381	361	3,78	3,90	ZG82	SMR	160L4		



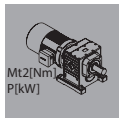
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
18,50	8,1	20118	180,98	0,99	ZG134	SMR	180M4	842	330
	9,7	16799	150,10	1,19	ZG134	SMR	180M4		
	8,3	20034	176,42	1,00	ZG133	SMB	180M4		
	9,2	18074	158,18	1,11	ZG133	SMB	180M4		
	10	16628	142,99	1,20	ZG133	SMB	180M4		
	11	15116	130,13	1,32	ZG133	SMB	180M4		
	12	13857	119,11	1,44	ZG133	SMB	180M4		
	14	11877	101,20	1,68	ZG133	SMB	180M4		
	16	10392	93,82	1,92	ZG133	SMB	180M4		
	17	9781	87,27	2,02	ZG133	SMB	180M4	783	328
	19	8751	76,13	2,23	ZG133	SMR	180M4		
	22	7558	67,01	2,54	ZG133	SMR	180M4		
	25	6651	59,41	2,84	ZG133	SMR	180M4		
	28	5938	52,98	3,12	ZG133	SMR	180M4		
	31	5364	47,47	3,41	ZG133	SMR	180M4		
	34	4890	42,69	3,68	ZG133	SMR	180M4		
	36	4619	40,54	3,87	ZG133	SMR	180M4		
	42	3959	34,83	4,43	ZG133	SMR	180M4		
	41	4138	35,98	4,21	ZG132	SMB	180M4	741	326
	12	13857	119,94	0,97	ZG123	SMB	180M4		
	14	11877	101,91	1,14	ZG123	SMB	180M4		
	15	11085	94,48	1,22	ZG123	SMB	180M4		
	17	9781	87,88	1,38	ZG123	SMB	180M4		
	19	8751	76,66	1,54	ZG123	SMR	180M4		
	22	7558	67,48	1,79	ZG123	SMR	180M4		
	24	6928	59,83	1,94	ZG123	SMR	180M4	590	322
	27	6158	53,35	2,16	ZG123	SMR	180M4		
	31	5364	47,80	2,46	ZG123	SMR	180M4		
	34	4890	42,99	2,66	ZG123	SMR	180M4		
	36	4619	40,82	2,76	ZG123	SMR	180M4		
	42	3959	35,07	3,08	ZG123	SMR	180M4		
	48	3464	30,26	3,39	ZG123	SMR	180M4		
	56	2969	26,16	3,74	ZG123	SMR	180M4		
	40	4241	36,23	3,18	ZG122	SMB	180M4		
	47	3610	31,02	3,74	ZG122	SMB	180M4	545	320
	51	3327	28,88	4,06	ZG122	SMB	180M4		
	54	3142	26,97	4,14	ZG122	SMR	180M4		
	22	7558	65,00	1,08	ZG113	SMR	180M4		
	25	6651	58,51	1,23	ZG113	SMR	180M4		
	29	5733	49,68	1,43	ZG113	SMR	180M4	476	316
	35	4751	41,90	1,73	ZG113	SMR	180M4		
	40	4157	36,87	1,97	ZG113	SMR	180M4		
	45	3695	32,67	2,22	ZG113	SMR	180M4		
	25	6787	58,15	1,02	ZG112	SMB	180M4		
	28	6059	52,20	1,22	ZG112	SMB	180M4		
	31	5473	46,91	1,44	ZG112	SMB	180M4	449	314
	34	4990	42,50	1,60	ZG112	SMB	180M4		
	38	4465	38,77	1,80	ZG112	SMB	180M4		



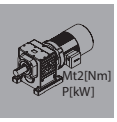
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
18,50	41	4138	35,57	1,97	ZG112	SMB	180M4		
	48	3534	30,38	2,32	ZG112	SMB	180M4		
	52	3263	28,24	2,51	ZG112	SMB	180M4		
	55	3085	26,33	2,66	ZG112	SMB	180M4		
	63	2693	23,10	3,04	ZG112	SMR	180M4		
	71	2389	20,45	3,43	ZG112	SMR	180M4		
	80	2120	18,25	3,87	ZG112	SMR	180M4		
	89	1906	16,38	4,30	ZG112	SMR	180M4		
	41	4138	35,54	1,03	ZG112	SMB	180M4	449	314
	46	3688	31,90	1,23	ZG112	SMB	180M4		
	51	3327	28,67	1,56	ZG112	SMB	180M4		
	56	3029	25,97	1,89	ZG112	SMB	180M4		
	62	2736	23,69	2,27	ZG112	SMB	180M4		
	67	2532	21,74	2,57	ZG112	SMB	180M4		
	79	2147	18,56	3,15	ZG112	SMB	180M4		
	85	1996	17,25	3,39	ZG112	SMB	180M4		
	91	1864	16,09	3,64	ZG112	SMB	180M4		
	103	1647	14,12	4,11	ZG112	SMR	180M4		
	35	4751	41,53	1,03	ZG103	SMR	180M4	362	310
	42	3959	34,44	1,24	ZG103	SMR	180M4		
	36	4713	40,48	1,04	ZG102	SMB	180M4		
	40	4241	36,30	1,16	ZG102	SMB	180M4		
	44	3856	32,81	1,27	ZG102	SMB	180M4		
	49	3462	29,86	1,42	ZG102	SMB	180M4		
	53	3201	27,33	1,53	ZG102	SMB	180M4		
	63	2693	23,22	1,82	ZG102	SMB	180M4		
	68	2495	21,53	1,96	ZG102	SMB	180M4		
	73	2324	20,03	2,11	ZG102	SMB	180M4		
	84	2019	17,47	2,29	ZG102	SMR	180M4		
	95	1786	15,38	2,54	ZG102	SMR	180M4		
	107	1585	13,63	2,82	ZG102	SMR	180M4		
	120	1413	12,16	3,12	ZG102	SMR	180M4		
	134	1266	10,89	3,44	ZG102	SMR	180M4	335	308
	149	1138	9,80	3,76	ZG102	SMR	180M4		
	157	1080	9,30	3,91	ZG102	SMR	180M4		
	183	927	7,99	4,46	ZG102	SMR	180M4		
	74	2292	19,80	1,54	ZG102	SMB	180M4		
	82	2069	17,73	1,87	ZG102	SMB	180M4		
	92	1844	15,90	2,24	ZG102	SMB	180M4		
	102	1663	14,37	2,62	ZG102	SMB	180M4		
	112	1514	13,08	2,91	ZG102	SMB	180M4		
	122	1390	11,97	3,21	ZG102	SMB	180M4		
	144	1178	10,17	3,76	ZG102	SMB	180M4		
	155	1094	9,43	4,02	ZG102	SMB	180M4		
	166	1022	8,77	4,26	ZG102	SMB	180M4		
	59	2875	24,78	1,08	ZG92	SMB	180M4		
	64	2651	22,97	1,16	ZG92	SMB	180M4	272	302
	68	2495	21,37	1,22	ZG92	SMB	180M4		



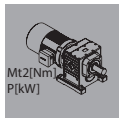
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
18,50	78	2175	18,64	1,34	ZG92	SMR	180M4		
	89	1906	16,41	1,46	ZG92	SMR	180M4		
	100	1696	14,55	1,58	ZG92	SMR	180M4		
	113	1501	12,97	1,73	ZG92	SMR	180M4		
	126	1346	11,62	1,87	ZG92	SMR	180M4		
	140	1211	10,45	2,00	ZG92	SMR	180M4		
	147	1154	9,92	2,05	ZG92	SMR	180M4		
	171	992	8,53	2,27	ZG92	SMR	180M4		
	198	856	7,36	2,51	ZG92	SMR	180M4		
	230	737	6,36	2,74	ZG92	SMR	180M4		
	81	2094	17,95	0,99	ZG92	SMB	180M4		
	91	1864	16,09	1,24	ZG92	SMB	180M4	272	302
	100	1696	14,55	1,47	ZG92	SMR	180M4		
	110	1542	13,24	1,70	ZG92	SMB	180M4		
	121	1402	12,12	1,98	ZG92	SMB	180M4		
	142	1194	10,29	2,39	ZG92	SMB	180M4		
	153	1109	9,54	2,57	ZG92	SMB	180M4		
	164	1034	8,88	2,72	ZG92	SMB	180M4		
	189	897	7,74	3,08	ZG92	SMR	180M4		
	214	792	6,82	3,41	ZG92	SMR	180M4		
	242	701	6,04	3,73	ZG92	SMR	180M4		
	271	626	5,39	4,08	ZG92	SMR	180M4		
	302	561	4,83	4,40	ZG92	SMR	180M4		
	122	1390	11,92	1,19	ZG82	SMB	180M4		
	138	1229	10,61	1,32	ZG82	SMB	180M4		
	144	1178	10,12	1,37	ZG82	SMB	180M4		
	168	1009	8,69	1,57	ZG82	SMR	180M4		
	194	874	7,53	1,76	ZG82	SMR	180M4	204	299
	215	789	6,78	1,90	ZG82	SMR	180M4		
	254	668	5,75	2,22	ZG82	SMR	180M4		
	301	563	4,85	2,59	ZG82	SMR	180M4		
	342	496	4,27	2,90	ZG82	SMR	180M4		
	386	439	3,78	3,20	ZG82	SMR	180M4		
22,00	9,7	19978	150,10	1,00	ZG134	SMR	180L4	857	330
	10	19774	142,99	1,01	ZG133	SMB	180L4		
	11	17976	130,13	1,11	ZG133	SMB	180L4		
	12	16478	119,11	1,21	ZG133	SMB	180L4		
	14	14124	101,20	1,42	ZG133	SMB	180L4		
	16	12359	93,82	1,62	ZG133	SMB	180L4		
	17	11632	87,27	1,70	ZG133	SMB	180L4		
	19	10407	76,13	1,87	ZG133	SMR	180L4	798	328
	22	8988	67,01	2,14	ZG133	SMR	180L4		
	25	7909	59,41	2,38	ZG133	SMR	180L4		
	28	7062	52,98	2,63	ZG133	SMR	180L4		
	31	6378	47,47	2,87	ZG133	SMR	180L4		
	34	5816	42,69	3,10	ZG133	SMR	180L4		
	36	5492	40,54	3,26	ZG133	SMR	180L4		
	42	4708	34,83	3,72	ZG133	SMR	180L4		



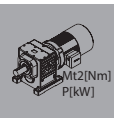
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
22,00	49	4035	30,05	4,25		ZG133	SMR	180L4	798	328
	41	4921	35,98	3,54		ZG132	SMB	180L4		
	47	4293	30,81	3,92		ZG132	SMB	180L4	756	326
	51	3956	28,68	4,15		ZG132	SMB	180L4		
	55	3668	26,78	4,38		ZG132	SMR	180L4		
	14	14124	101,91	0,96		ZG123	SMB	180L4		
	15	13182	94,48	1,02		ZG123	SMB	180L4		
	17	11632	87,88	1,16		ZG123	SMB	180L4		
	19	10407	76,66	1,30		ZG123	SMR	180L4		
	22	8988	67,48	1,50		ZG123	SMR	180L4		
	24	8239	59,83	1,63		ZG123	SMR	180L4		
	27	7323	53,35	1,82		ZG123	SMR	180L4	605	322
	31	6378	47,80	2,07		ZG123	SMR	180L4		
	34	5816	42,99	2,24		ZG123	SMR	180L4		
	36	5492	40,82	2,32		ZG123	SMR	180L4		
	42	4708	35,07	2,59		ZG123	SMR	180L4		
	48	4119	30,26	2,85		ZG123	SMR	180L4		
	56	3531	26,16	3,14		ZG123	SMR	180L4		
	40	5044	36,23	2,68		ZG122	SMB	180L4		
	47	4293	31,02	3,14		ZG122	SMB	180L4		
	51	3956	28,88	3,41		ZG122	SMB	180L4	560	320
	54	3736	26,97	3,48		ZG122	SMR	180L4		
	62	3254	23,73	3,80		ZG122	SMR	180L4		
	69	2924	21,07	4,17		ZG122	SMR	180L4		
	25	7909	58,51	1,04		ZG113	SMR	180L4		
	29	6818	49,68	1,20		ZG113	SMR	180L4		
	35	5649	41,90	1,45		ZG113	SMR	180L4	491	316
	40	4943	36,87	1,66		ZG113	SMR	180L4		
	45	4394	32,67	1,87		ZG113	SMR	180L4		
	28	7206	52,20	1,03		ZG112	SMB	180L4		
	31	6509	46,91	1,21		ZG112	SMB	180L4		
	34	5934	42,50	1,35		ZG112	SMB	180L4		
	38	5310	38,77	1,52		ZG112	SMB	180L4		
	41	4921	35,57	1,66		ZG112	SMB	180L4		
	48	4203	30,38	1,95		ZG112	SMB	180L4		
	52	3880	28,24	2,11		ZG112	SMB	180L4		
	55	3668	26,33	2,24		ZG112	SMB	180L4		
	63	3202	23,10	2,56		ZG112	SMR	180L4		
	71	2841	20,45	2,89		ZG112	SMR	180L4	464	314
	80	2522	18,25	3,25		ZG112	SMR	180L4		
	89	2267	16,38	3,62		ZG112	SMR	180L4		
	99	2038	14,79	4,00		ZG112	SMR	180L4		
	109	1851	13,40	4,38		ZG112	SMR	180L4		
	46	4386	31,90	1,04		ZG112	SMB	180L4		
	51	3956	28,67	1,32		ZG112	SMB	180L4		
	56	3603	25,97	1,59		ZG112	SMB	180L4		
	62	3254	23,69	1,91		ZG112	SMB	180L4		
	67	3011	21,74	2,16		ZG112	SMB	180L4		



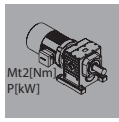
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
22,00	79	2554	18,56	2,65	ZG112	SMB	180L4		
	85	2373	17,25	2,85	ZG112	SMB	180L4		
	91	2217	16,09	3,06	ZG112	SMB	180L4		
	103	1959	14,12	3,46	ZG112	SMR	180L4	464	314
	117	1724	12,50	3,90	ZG112	SMR	180L4		
	131	1540	11,15	4,29	ZG112	SMR	180L4		
	42	4708	34,44	1,04	ZG103	SMR	180L4	377	310
	40	5044	36,30	0,97	ZG102	SMB	180L4		
	44	4585	32,81	1,07	ZG102	SMB	180L4		
	49	4117	29,86	1,19	ZG102	SMB	180L4		
	53	3807	27,33	1,29	ZG102	SMB	180L4		
	63	3202	23,22	1,53	ZG102	SMB	180L4		
	68	2967	21,53	1,65	ZG102	SMB	180L4		
	73	2764	20,03	1,77	ZG102	SMB	180L4		
	84	2402	17,47	1,92	ZG102	SMR	180L4		
	95	2124	15,38	2,14	ZG102	SMR	180L4		
	107	1885	13,63	2,37	ZG102	SMR	180L4		
	120	1681	12,16	2,62	ZG102	SMR	180L4		
	134	1505	10,89	2,89	ZG102	SMR	180L4		
	149	1354	9,80	3,16	ZG102	SMR	180L4		
	157	1285	9,30	3,29	ZG102	SMR	180L4	350	308
	183	1102	7,99	3,75	ZG102	SMR	180L4		
	212	951	6,89	4,24	ZG102	SMR	180L4		
	74	2726	19,80	1,30	ZG102	SMB	180L4		
	82	2460	17,73	1,58	ZG102	SMB	180L4		
	92	2193	15,90	1,88	ZG102	SMB	180L4		
	102	1978	14,37	2,21	ZG102	SMB	180L4		
	112	1801	13,08	2,45	ZG102	SMB	180L4		
	122	1653	11,97	2,70	ZG102	SMB	180L4		
	144	1401	10,17	3,16	ZG102	SMB	180L4		
	155	1301	9,43	3,38	ZG102	SMB	180L4		
	166	1215	8,77	3,58	ZG102	SMB	180L4		
	191	1056	7,65	4,04	ZG102	SMR	180L4		
	217	929	6,73	4,39	ZG102	SMR	180L4		
	64	3152	22,97	0,98	ZG92	SMB	180L4		
	68	2967	21,37	1,02	ZG92	SMB	180L4		
	78	2586	18,64	1,12	ZG92	SMR	180L4		
	89	2267	16,41	1,23	ZG92	SMR	180L4		
	100	2017	14,55	1,33	ZG92	SMR	180L4		
	113	1785	12,97	1,45	ZG92	SMR	180L4		
	126	1601	11,62	1,57	ZG92	SMR	180L4	287	302
	140	1441	10,45	1,68	ZG92	SMR	180L4		
	147	1372	9,92	1,73	ZG92	SMR	180L4		
	171	1180	8,53	1,91	ZG92	SMR	180L4		
	198	1019	7,36	2,11	ZG92	SMR	180L4		
	230	877	6,36	2,30	ZG92	SMR	180L4		
	91	2217	16,09	1,04	ZG92	SMB	180L4		
	100	2017	14,55	1,24	ZG92	SMR	180L4		



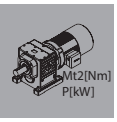
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
22,00	110	1834	13,24	1,43	ZG92	SMB	180L4		
	121	1667	12,12	1,66	ZG92	SMB	180L4		
	142	1421	10,29	2,01	ZG92	SMB	180L4		
	153	1318	9,54	2,16	ZG92	SMB	180L4		
	164	1230	8,88	2,29	ZG92	SMB	180L4		
	189	1067	7,74	2,59	ZG92	SMR	180L4		
	214	942	6,82	2,87	ZG92	SMR	180L4		
	242	833	6,04	3,14	ZG92	SMR	180L4	287	302
	271	744	5,39	3,43	ZG92	SMR	180L4		
	302	668	4,83	3,70	ZG92	SMR	180L4		
	336	600	4,34	4,00	ZG92	SMR	180L4		
	354	570	4,12	4,13	ZG92	SMR	180L4		
	412	489	3,54	4,39	ZG92	SMR	180L4		
	478	422	3,06	4,43	ZG92	SMR	180L4		
	552	365	2,64	4,45	ZG92	SMR	180L4		
30,00	15	17976	101,20	1,11	ZG133	SMB	200L4		
	16	16853	93,82	1,19	ZG133	SMB	200L4		
	17	15861	87,27	1,25	ZG133	SMB	200L4		
	19	14192	76,13	1,37	ZG133	SMR	200L4		
	22	12256	67,01	1,57	ZG133	SMR	200L4		
	25	10786	59,41	1,75	ZG133	SMR	200L4		
	28	9630	52,98	1,93	ZG133	SMR	200L4	873	328
	31	8698	47,47	2,10	ZG133	SMR	200L4		
	34	7930	42,69	2,27	ZG133	SMR	200L4		
	36	7490	40,54	2,39	ZG133	SMR	200L4		
	42	6420	34,83	2,73	ZG133	SMR	200L4		
	49	5503	30,05	3,12	ZG133	SMR	200L4		
	57	4730	25,98	3,55	ZG133	SMR	200L4		
	41	6711	35,98	2,60	ZG132	SMB	200L4		
	48	5732	30,81	2,93	ZG132	SMB	200L4		
	51	5395	28,68	3,05	ZG132	SMB	200L4		
	55	5002	26,78	3,21	ZG132	SMR	200L4	831	326
	62	4437	23,56	3,56	ZG132	SMR	200L4		
	70	3930	20,93	3,94	ZG132	SMR	200L4		
	78	3527	18,73	4,34	ZG132	SMR	200L4		
	19	14192	76,66	0,95	ZG123	SMR	200L4		
	22	12256	67,48	1,10	ZG123	SMR	200L4		
	25	10786	59,83	1,24	ZG123	SMR	200L4		
	28	9630	53,35	1,38	ZG123	SMR	200L4		
	31	8698	47,80	1,52	ZG123	SMR	200L4	680	322
	34	7930	42,99	1,64	ZG123	SMR	200L4		
	36	7490	40,82	1,70	ZG123	SMR	200L4		
	42	6420	35,07	1,90	ZG123	SMR	200L4		
	49	5503	30,26	2,14	ZG123	SMR	200L4		
	56	4815	26,16	2,30	ZG123	SMR	200L4		
	41	6711	36,23	2,01	ZG122	SMB	200L4		
	47	5854	31,02	2,31	ZG122	SMB	200L4	635	320
	51	5395	28,88	2,50	ZG122	SMB	200L4		



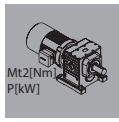
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
30,00	55	5002	26,97	2,60	ZG122	SMR	200L4		
	62	4438	23,73	2,79	ZG122	SMR	200L4		
	70	3930	21,07	3,10	ZG122	SMR	200L4		
	78	3527	18,86	3,40	ZG122	SMR	200L4	635	320
	87	3162	16,99	3,75	ZG122	SMR	200L4		
	96	2866	15,39	4,09	ZG122	SMR	200L4		
	105	2620	14,00	4,40	ZG122	SMR	200L4		
	35	7861	42,50	1,02	ZG112	SMB	200L4		
	38	7240	38,77	1,11	ZG112	SMB	200L4		
	41	6711	35,57	1,22	ZG112	SMB	200L4		
	48	5732	30,38	1,43	ZG112	SMB	200L4		
	52	5291	28,24	1,55	ZG112	SMB	200L4		
	56	4913	26,33	1,67	ZG112	SMB	200L4		
	64	4299	23,10	1,91	ZG112	SMR	200L4		
	72	3821	20,45	2,15	ZG112	SMR	200L4		
	81	3396	18,25	2,41	ZG112	SMR	200L4		
	90	3057	16,38	2,68	ZG112	SMR	200L4		
	99	2779	14,79	2,94	ZG112	SMR	200L4		
	110	2501	13,40	3,24	ZG112	SMR	200L4		
	115	2392	12,77	3,34	ZG112	SMR	200L4		
	132	2084	11,12	3,54	ZG112	SMR	200L4		
	151	1822	9,73	3,59	ZG112	SMR	200L4		
	172	1600	8,55	3,63	ZG112	SMR	200L4		
	203	1355	7,23	3,68	ZG112	SMR	200L4		
	240	1146	6,13	3,75	ZG112	SMR	200L4		
	51	5395	28,67	0,96	ZG112	SMB	200L4	539	314
	57	4827	25,97	1,18	ZG112	SMB	200L4		
	62	4438	23,69	1,40	ZG112	SMB	200L4		
	68	4046	21,74	1,61	ZG112	SMB	200L4		
	79	3483	18,56	1,94	ZG112	SMB	200L4		
	85	3237	17,25	2,09	ZG112	SMB	200L4		
	91	3023	16,09	2,25	ZG112	SMB	200L4		
	104	2645	14,12	2,56	ZG112	SMR	200L4		
	118	2331	12,50	2,88	ZG112	SMR	200L4		
	132	2084	11,15	3,17	ZG112	SMR	200L4		
	147	1871	10,01	3,43	ZG112	SMR	200L4		
	163	1688	9,04	3,49	ZG112	SMR	200L4		
	180	1528	8,19	3,58	ZG112	SMR	200L4		
	188	1463	7,81	3,59	ZG112	SMR	200L4		
	216	1273	6,79	3,65	ZG112	SMR	200L4		
	247	1114	5,95	3,66	ZG112	SMR	200L4		
	281	979	5,23	3,68	ZG112	SMR	200L4		
	333	826	4,42	3,71	ZG112	SMR	200L4		
	393	700	3,74	3,71	ZG112	SMR	200L4		
	54	5095	27,33	0,96	ZG102	SMB	200L4		
	63	4367	23,22	1,12	ZG102	SMB	200L4	425	308
	68	4046	21,53	1,21	ZG102	SMB	200L4		
	73	3769	20,03	1,30	ZG102	SMB	200L4		



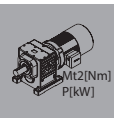
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
30,00	84	3275	17,47	1,41	ZG102	SMR	200L4		
	96	2866	15,38	1,58	ZG102	SMR	200L4		
	108	2547	13,63	1,75	ZG102	SMR	200L4		
	121	2274	12,16	1,94	ZG102	SMR	200L4		
	135	2038	10,89	2,13	ZG102	SMR	200L4		
	150	1834	9,80	2,33	ZG102	SMR	200L4		
	158	1741	9,30	2,43	ZG102	SMR	200L4		
	184	1495	7,99	2,77	ZG102	SMR	200L4		
	213	1291	6,89	3,12	ZG102	SMR	200L4		
	247	1114	5,96	3,53	ZG102	SMR	200L4		
	74	3718	19,80	0,95	ZG102	SMB	200L4		
	83	3315	17,73	1,17	ZG102	SMB	200L4		
	92	2990	15,90	1,38	ZG102	SMB	200L4		
	102	2697	14,37	1,62	ZG102	SMB	200L4		
	112	2456	13,08	1,80	ZG102	SMB	200L4	425	308
	123	2237	11,97	2,00	ZG102	SMB	200L4		
	145	1897	10,17	2,34	ZG102	SMB	200L4		
	156	1763	9,43	2,49	ZG102	SMB	200L4		
	168	1637	8,77	2,66	ZG102	SMB	200L4		
	192	1433	7,65	2,98	ZG102	SMR	200L4		
	218	1262	6,73	3,23	ZG102	SMR	200L4		
	246	1118	5,97	3,38	ZG102	SMR	200L4		
	276	996	5,32	3,38	ZG102	SMR	200L4		
	308	893	4,77	3,38	ZG102	SMR	200L4		
	343	802	4,29	3,39	ZG102	SMR	200L4		
	361	762	4,07	3,39	ZG102	SMR	200L4		
	420	655	3,50	3,39	ZG102	SMR	200L4		
	487	565	3,02	3,39	ZG102	SMR	200L4		
	563	488	2,61	3,39	ZG102	SMR	200L4		
	101	2724	14,55	0,98	ZG92	SMR	200L4		
	113	2435	12,97	1,07	ZG92	SMR	200L4		
	126	2183	11,62	1,15	ZG92	SMR	200L4		
	141	1951	10,45	1,24	ZG92	SMR	200L4		
	148	1859	9,92	1,27	ZG92	SMR	200L4		
	172	1599	8,53	1,41	ZG92	SMR	200L4		
	200	1375	7,36	1,56	ZG92	SMR	200L4		
	231	1191	6,36	1,70	ZG92	SMR	200L4		
	111	2478	13,24	1,06	ZG92	SMB	200L4		
	121	2274	12,12	1,22	ZG92	SMB	200L4	362	302
	143	1924	10,29	1,48	ZG92	SMB	200L4		
	154	1786	9,54	1,60	ZG92	SMB	200L4		
	166	1657	8,88	1,70	ZG92	SMB	200L4		
	190	1448	7,74	1,91	ZG92	SMR	200L4		
	216	1273	6,82	2,12	ZG92	SMR	200L4		
	243	1132	6,04	2,31	ZG92	SMR	200L4		
	273	1007	5,39	2,53	ZG92	SMR	200L4		
	304	905	4,83	2,73	ZG92	SMR	200L4		
	338	814	4,34	2,95	ZG92	SMR	200L4		



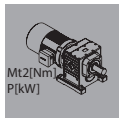
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
30,00	356	773	4,12	3,04		ZG92	SMR	200L4		
	415	663	3,54	3,24		ZG92	SMR	200L4	362	302
	481	572	3,06	3,27		ZG92	SMR	200L4		
	556	495	2,64	3,28		ZG92	SMR	200L4		
37,00	16	20785	93,82	0,96		ZG133	SMB	225S4		
	17	19563	87,27	1,01		ZG133	SMB	225S4		
	19	17503	76,13	1,11		ZG133	SMB	225S4		
	22	15116	67,01	1,27		ZG133	SMR	225S4		
	25	13303	59,41	1,42		ZG133	SMR	225S4		
	28	11877	52,98	1,56		ZG133	SMR	225S4	938	328
	31	10728	47,47	1,71		ZG133	SMR	225S4		
	34	9781	42,69	1,84		ZG133	SMR	225S4		
	36	9238	40,54	1,94		ZG133	SMR	225S4		
	42	7918	34,83	2,21		ZG133	SMR	225S4		
	49	6787	30,05	2,53		ZG133	SMR	225S4		
	57	5834	25,98	2,88		ZG133	SMR	225S4		
	41	8277	35,98	2,11		ZG132	SMB	225S4		
	48	7070	30,81	2,38		ZG132	SMB	225S4		
	51	6654	28,68	2,47		ZG132	SMB	225S4		
	55	6170	26,78	2,60		ZG132	SMB	225S4		
	62	5473	23,56	2,89		ZG132	SMR	225S4	896	326
	70	4848	20,93	3,20		ZG132	SMR	225S4		
	78	4350	18,73	3,52		ZG132	SMR	225S4		
	87	3900	16,88	3,84		ZG132	SMR	225S4		
	96	3535	15,28	4,14		ZG132	SMR	225S4		
	25	13302	59,83	1,01		ZG123	SMR	225S4		
	28	11877	53,35	1,12		ZG123	SMR	225S4		
	31	10728	47,80	1,23		ZG123	SMR	225S4		
	34	9781	42,99	1,33		ZG123	SMR	225S4		
	36	9238	40,82	1,38		ZG123	SMR	225S4		
	42	7918	35,07	1,54		ZG123	SMR	225S4	745	322
	49	6787	30,26	1,73		ZG123	SMR	225S4		
	56	5938	26,16	1,87		ZG123	SMR	225S4		
	41	8277	36,23	1,63		ZG123	SMB	225S4		
	47	7220	31,02	1,87		ZG123	SMB	225S4		
	51	6654	28,88	2,03		ZG122	SMB	225S4		
	55	6170	26,97	2,11		ZG122	SMB	225S4		
	62	5473	23,73	2,26		ZG122	SMR	225S4		
	70	4848	21,07	2,51		ZG122	SMR	225S4		
	78	4350	18,86	2,76		ZG122	SMR	225S4	700	320
	87	3900	16,99	3,04		ZG122	SMR	225S4		
	96	3535	15,39	3,31		ZG122	SMR	225S4		
	105	3232	14,00	3,57		ZG122	SMR	225S4		
	110	3085	13,37	3,71		ZG122	SMR	225S4		
	126	2693	11,71	4,17		ZG122	SMR	225S4		
	41	8277	35,57	0,99		ZG112	SMB	225S4		
	48	7070	30,38	1,16		ZG112	SMB	225S4	604	314
	52	6526	28,24	1,26		ZG112	SMB	225S4		



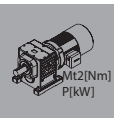
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
37,00	56	6060	26,33	1,35	ZG112	SMB	225S4		
	64	5302	23,10	1,55	ZG112	SMB	225S4		
	72	4713	20,45	1,74	ZG112	SMR	225S4		
	81	4189	18,25	1,96	ZG112	SMR	225S4		
	90	3770	16,38	2,17	ZG112	SMR	225S4		
	99	3427	14,79	2,38	ZG112	SMR	225S4		
	110	3085	13,40	2,63	ZG112	SMR	225S4		
	115	2950	12,77	2,71	ZG112	SMR	225S4		
	132	2570	11,12	2,87	ZG112	SMR	225S4		
	151	2247	9,73	2,91	ZG112	SMR	225S4		
	172	1973	8,55	2,95	ZG112	SMR	225S4		
	203	1671	7,23	2,99	ZG112	SMR	225S4		
	240	1414	6,13	3,04	ZG112	SMR	225S4		
	57	5953	25,97	0,96	ZG112	SMB	225S4		
	62	5473	23,69	1,13	ZG112	SMB	225S4		
	68	4990	21,74	1,31	ZG112	SMB	225S4	604	314
	79	4295	18,56	1,57	ZG112	SMB	225S4		
	85	3992	17,25	1,70	ZG112	SMB	225S4		
	91	3729	16,09	1,82	ZG112	SMB	225S4		
	104	3263	14,12	2,08	ZG112	SMB	225S4		
	118	2875	12,50	2,34	ZG112	SMR	225S4		
	132	2570	11,15	2,57	ZG112	SMR	225S4		
	147	2308	10,01	2,78	ZG112	SMR	225S4		
	163	2081	9,04	2,83	ZG112	SMR	225S4		
	180	1885	8,19	2,90	ZG112	SMR	225S4		
	188	1805	7,81	2,91	ZG112	SMR	225S4		
	216	1571	6,79	2,96	ZG112	SMR	225S4		
	247	1373	5,95	2,97	ZG112	SMR	225S4		
	281	1207	5,23	2,98	ZG112	SMR	225S4		
	333	1019	4,42	3,01	ZG112	SMR	225S4		
	393	863	3,74	3,01	ZG112	SMR	225S4		
	68	4990	21,53	0,98	ZG102	SMB	225S4		
	73	4648	20,03	1,05	ZG102	SMB	225S4		
	84	4040	17,47	1,14	ZG102	SMB	225S4		
	96	3535	15,38	1,28	ZG102	SMR	225S4		
	108	3142	13,63	1,42	ZG102	SMR	225S4		
	121	2804	12,16	1,57	ZG102	SMR	225S4		
	135	2513	10,89	1,73	ZG102	SMR	225S4		
	150	2262	9,80	1,89	ZG102	SMR	225S4		
	158	2147	9,30	1,97	ZG102	SMR	225S4	490	308
	184	1844	7,99	2,24	ZG102	SMR	225S4		
	213	1593	6,89	2,53	ZG102	SMR	225S4		
	247	1373	5,96	2,87	ZG102	SMR	225S4		
	102	3327	14,37	1,31	ZG102	SMB	225S4		
	112	3029	13,08	1,46	ZG102	SMB	225S4		
	123	2759	11,97	1,62	ZG102	SMB	225S4		
	145	2340	10,17	1,89	ZG102	SMB	225S4		
	156	2175	9,43	2,02	ZG102	SMB	225S4		



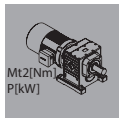
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
37,00	168	2020	8,77	2,15	ZG102	SMB	225S4		
	192	1767	7,65	2,41	ZG102	SMB	225S4		
	218	1556	6,73	2,62	ZG102	SMR	225S4		
	246	1379	5,97	2,74	ZG102	SMR	225S4		
	276	1229	5,32	2,74	ZG102	SMR	225S4		
	308	1101	4,77	2,74	ZG102	SMR	225S4	490	308
	343	989	4,29	2,75	ZG102	SMR	225S4		
	361	940	4,07	2,75	ZG102	SMR	225S4		
	420	808	3,50	2,75	ZG102	SMR	225S4		
	487	696	3,02	2,75	ZG102	SMR	225S4		
	563	602	2,61	2,75	ZG102	SMR	225S4		
45,00	22	18385	67,01	1,04	ZG133	SMR	225M4		
	25	16179	59,41	1,17	ZG133	SMR	225M4		
	28	14445	52,98	1,28	ZG133	SMR	225M4		
	31	13047	47,47	1,40	ZG133	SMR	225M4		
	34	11896	42,69	1,51	ZG133	SMR	225M4		
	36	11235	40,54	1,59	ZG133	SMR	225M4		
	42	9630	34,83	1,82	ZG133	SMR	225M4	970	328
	49	8254	30,05	2,08	ZG133	SMR	225M4		
	57	7096	25,98	2,37	ZG133	SMR	225M4		
	41	10066	35,98	1,73	ZG133	SMB	225M4		
	48	8598	30,81	1,96	ZG133	SMB	225M4		
	51	8092	28,68	2,03	ZG133	SMB	225M4		
	55	7504	26,78	2,14	ZG133	SMB	225M4		
	62	6657	23,56	2,37	ZG133	SMR	225M4		
	70	5896	20,93	2,63	ZG132	SMR	225M4		
	78	5291	18,73	2,89	ZG132	SMR	225M4		
	87	4744	16,88	3,16	ZG132	SMR	225M4		
	96	4299	15,28	3,41	ZG132	SMR	225M4	928	326
	106	3893	13,90	3,70	ZG132	SMR	225M4		
	111	3718	13,28	3,86	ZG132	SMR	225M4		
	126	3275	11,63	4,32	ZG132	SMR	225M4		
	31	13047	47,80	1,01	ZG123	SMR	225M4		
	34	11896	42,99	1,09	ZG123	SMR	225M4		
	36	11235	40,82	1,13	ZG123	SMR	225M4	777	322
	42	9630	35,07	1,27	ZG123	SMR	225M4		
	49	8254	30,26	1,42	ZG123	SMR	225M4		
	56	7222	26,16	1,54	ZG123	SMR	225M4		
	41	10066	36,23	1,34	ZG122	SMB	225M4		
	47	8781	31,02	1,54	ZG122	SMB	225M4		
	51	8092	28,88	1,67	ZG122	SMB	225M4		
	55	7504	26,97	1,73	ZG122	SMB	225M4		
	62	6657	23,73	1,86	ZG122	SMR	225M4	732	320
	70	5896	21,07	2,07	ZG122	SMR	225M4		
	78	5291	18,86	2,27	ZG122	SMR	225M4		
	87	4744	16,99	2,50	ZG122	SMR	225M4		
	96	4299	15,39	2,72	ZG122	SMR	225M4		
	105	3930	14,00	2,93	ZG122	SMR	225M4		



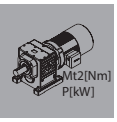
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
45,00	110	3752	13,37	3,05	ZG122	SMR	225M4		
	126	3275	11,71	3,43	ZG122	SMR	225M4	732	314
	142	2906	10,32	3,79	ZG122	SMR	225M4		
	161	2563	9,14	3,80	ZG122	SMR	225M4		
	188	2195	7,81	3,79	ZG112	SMR	225M4		
	219	1884	6,70	3,79	ZG112	SMR	225M4		
	255	1618	5,77	3,80	ZG112	SMR	225M4		
	48	8598	30,38	0,95	ZG112	SMB	225M4		
	52	7937	28,24	1,03	ZG112	SMB	225M4		
	56	7370	26,33	1,11	ZG112	SMB	225M4		
	64	6448	23,10	1,27	ZG112	SMB	225M4		
	72	5732	20,45	1,43	ZG112	SMR	225M4		
	81	5095	18,25	1,61	ZG112	SMR	225M4		
	90	4586	16,38	1,79	ZG112	SMR	225M4		
	99	4169	14,79	1,96	ZG112	SMR	225M4		
	110	3752	13,40	2,16	ZG112	SMR	225M4		
	115	3589	12,77	2,23	ZG112	SMR	225M4		
	132	3126	11,12	2,36	ZG112	SMR	225M4		
	151	2733	9,73	2,39	ZG112	SMR	225M4		
	172	2399	8,55	2,42	ZG112	SMR	225M4		
	203	2033	7,23	2,46	ZG112	SMR	225M4	636	314
	240	1719	6,13	2,50	ZG112	SMR	225M4		
	68	6069	21,74	1,07	ZG112	SMB	225M4		
	79	5224	18,56	1,29	ZG112	SMB	225M4		
	85	4855	17,25	1,40	ZG112	SMB	225M4		
	91	4535	16,09	1,50	ZG112	SMB	225M4		
	104	3968	14,12	1,71	ZG112	SMB	225M4		
	118	3497	12,50	1,92	ZG112	SMR	225M4		
	132	3126	11,15	2,11	ZG112	SMR	225M4		
	147	2807	10,01	2,29	ZG112	SMR	225M4		
	163	2532	9,04	2,33	ZG112	SMR	225M4		
	180	2292	8,19	2,39	ZG112	SMR	225M4		
	188	2195	7,81	2,39	ZG112	SMR	225M4		
	216	1910	6,79	2,43	ZG112	SMR	225M4		
	247	1670	5,95	2,44	ZG112	SMR	225M4		
	281	1468	5,23	2,45	ZG112	SMR	225M4		
	333	1239	4,42	2,47	ZG112	SMR	225M4		
	393	1050	3,74	2,48	ZG112	SMR	225M4		
55,00	25	19774	59,41	0,95	ZG133	SMB	250M4		
	28	17655	52,98	1,05	ZG133	SMR	250M4		
	31	15947	47,47	1,15	ZG133	SMR	250M4		
	35	14124	42,69	1,28	ZG133	SMR	250M4	1053	328
	37	13361	40,54	1,34	ZG133	SMR	250M4		
	42	11770	34,83	1,49	ZG133	SMR	250M4		
	49	10089	30,05	1,70	ZG133	SMR	250M4		
	57	8673	25,98	1,94	ZG133	SMR	250M4		
	41	12303	35,98	1,42	ZG132	SMB	250M4	1011	326
	48	10509	30,81	1,60	ZG132	SMB	250M4		



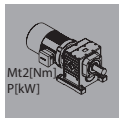
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
55,00	52	9700	28,68	1,69	ZG132	SMB	250M4		
	55	9171	26,78	1,75	ZG132	SMB	250M4		
	63	8007	23,56	1,97	ZG132	SMB	250M4		
	71	7104	20,93	2,18	ZG132	SMR	250M4		
	79	6385	18,73	2,40	ZG132	SMR	250M4		
	88	5732	16,88	2,62	ZG132	SMR	250M4	1011	326
	97	5200	15,28	2,82	ZG132	SMR	250M4		
	106	4759	13,90	3,03	ZG132	SMR	250M4		
	111	4544	13,28	3,16	ZG132	SMR	250M4		
	127	3972	11,63	3,56	ZG132	SMR	250M4		
	144	3503	10,25	3,91	ZG132	SMR	250M4		
	163	3094	9,07	4,35	ZG132	SMR	250M4		
	42	11770	35,07	1,04	ZG123	SMR	250M4		
	49	10089	30,26	1,17	ZG123	SMR	250M4	860	322
	57	8673	26,16	1,28	ZG123	SMR	250M4		
	41	12303	36,23	1,10	ZG122	SMB	250M4		
	48	10509	31,02	1,28	ZG122	SMB	250M4		
	51	9891	28,88	1,36	ZG122	SMB	250M4		
	55	9171	26,97	1,42	ZG122	SMB	250M4		
	62	8136	23,73	1,52	ZG122	SMB	250M4		
	70	7206	21,07	1,69	ZG122	SMR	250M4		
	78	6467	18,86	1,86	ZG122	SMR	250M4		
	87	5798	16,99	2,04	ZG122	SMR	250M4		
	96	5254	15,39	2,23	ZG122	SMR	250M4	815	320
	106	4759	14,00	2,42	ZG122	SMR	250M4		
	111	4544	13,37	2,52	ZG122	SMR	250M4		
	126	4003	11,71	2,80	ZG122	SMR	250M4		
	143	3527	10,32	3,12	ZG122	SMR	250M4		
	162	3114	9,14	3,13	ZG122	SMR	250M4		
	190	2655	7,81	3,14	ZG122	SMR	250M4		
	221	2282	6,70	3,13	ZG122	SMR	250M4		
	257	1962	5,77	3,13	ZG122	SMR	250M4		
	64	7882	23,10	1,04	ZG112	SMB	250M4		
	72	7006	20,45	1,17	ZG112	SMB	250M4		
	81	6227	18,25	1,32	ZG112	SMB	250M4		
	90	5605	16,38	1,46	ZG112	SMR	250M4		
	100	5044	14,79	1,62	ZG112	SMR	250M4		
	110	4586	13,40	1,77	ZG112	SMR	250M4		
	116	4348	12,77	1,84	ZG112	SMR	250M4		
	133	3792	11,12	1,94	ZG112	SMR	250M4	719	314
	152	3318	9,73	1,97	ZG112	SMR	250M4		
	173	2916	8,55	1,99	ZG112	SMR	250M4		
	205	2460	7,23	2,03	ZG112	SMR	250M4		
	242	2084	6,13	2,06	ZG112	SMR	250M4		
	80	6305	18,56	1,07	ZG112	SMB	250M4		
	86	5865	17,25	1,16	ZG112	SMB	250M4		
	92	5483	16,09	1,24	ZG112	SMB	250M4		
	105	4804	14,12	1,41	ZG112	SMB	250M4		



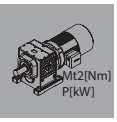
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
55,00	118	4275	12,50	1,57	ZG112	SMB	250M4		
	133	3792	11,15	1,74	ZG112	SMB	250M4		
	148	3408	10,01	1,89	ZG112	SMR	250M4		
	164	3076	9,04	1,91	ZG112	SMR	250M4		
	181	2787	8,19	1,96	ZG112	SMR	250M4		
	190	2655	7,81	1,98	ZG112	SMR	250M4	719	314
	218	2314	6,79	2,01	ZG112	SMR	250M4		
	249	2026	5,95	2,01	ZG112	SMR	250M4		
	283	1782	5,23	2,02	ZG112	SMR	250M4		
	335	1505	4,42	2,03	ZG112	SMR	250M4		
	395	1277	3,74	2,04	ZG112	SMR	250M4		
	109	4627	13,63	0,97	ZG102	SMB	250M4		
	122	4134	12,16	1,07	ZG102	SMR	250M4		
	136	3709	10,89	1,17	ZG102	SMR	250M4		
	151	3340	9,80	1,28	ZG102	SMR	250M4		
	159	3172	9,30	1,33	ZG102	SMR	250M4		
	185	2726	7,99	1,52	ZG102	SMR	250M4		
	215	2346	6,89	1,72	ZG102	SMR	250M4		
	248	2034	5,96	1,94	ZG102	SMR	250M4		
	146	3455	10,17	1,28	ZG102	SMB	250M4		
	157	3213	9,43	1,37	ZG102	SMB	250M4		
	169	2985	8,77	1,46	ZG102	SMB	250M4	605	308
	193	2613	7,65	1,63	ZG102	SMB	250M4		
	220	2293	6,73	1,78	ZG102	SMB	250M4		
	248	2034	5,97	1,86	ZG102	SMB	250M4		
	278	1814	5,32	1,86	ZG102	SMR	250M4		
	310	1627	4,77	1,86	ZG102	SMR	250M4		
	345	1462	4,29	1,86	ZG102	SMR	250M4		
	363	1389	4,07	1,86	ZG102	SMR	250M4		
	423	1192	3,50	1,86	ZG102	SMR	250M4		
	490	1030	3,02	1,86	ZG102	SMR	250M4		
	567	889	2,61	1,86	ZG102	SMR	250M4		
75,00	37	18219	40,54	0,98	ZG133	SMR	280S4		
	42	16050	34,83	1,09	ZG133	SMR	280S4	1188	328
	49	13757	30,05	1,25	ZG133	SMR	280S4		
	57	11826	25,98	1,42	ZG133	SMR	280S4		
	71	9688	20,93	1,60	ZG132	SMR	280S4		
	79	8707	18,73	1,76	ZG132	SMR	280S4		
	88	7816	16,88	1,92	ZG132	SMR	280S4		
	97	7091	15,28	2,07	ZG132	SMR	280S4		
	106	6489	13,90	2,22	ZG132	SMR	280S4		
	111	6197	13,28	2,32	ZG132	SMR	280S4	1146	326
	127	5416	11,63	2,61	ZG132	SMR	280S4		
	144	4777	10,25	2,87	ZG132	SMR	280S4		
	163	4220	9,07	3,19	ZG132	SMR	280S4		
	191	3601	7,76	3,67	ZG132	SMR	280S4		
	222	3098	6,66	4,24	ZG132	SMR	280S4		
	70	9826	21,07	1,24	ZG122	SMR	280S4	950	320



P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
75,00	78	8819	18,86	1,36	ZG122	SMR	280S4		
	87	7906	16,99	1,50	ZG122	SMR	280S4		
	96	7165	15,39	1,63	ZG122	SMR	280S4		
	106	6489	14,00	1,78	ZG122	SMR	280S4		
	111	6197	13,37	1,85	ZG122	SMR	280S4		
	126	5459	11,71	2,06	ZG122	SMR	280S4	950	320
	143	4810	10,32	2,29	ZG122	SMR	280S4		
	162	4246	9,14	2,29	ZG122	SMR	280S4		
	190	3620	7,81	2,30	ZG122	SMR	280S4		
	221	3112	6,70	2,30	ZG122	SMR	280S4		
	257	2676	5,77	2,30	ZG122	SMR	280S4		
90,00	49	16509	30,05	1,04	ZG133	SMR	280M4	1246	328
	57	14192	25,98	1,18	ZG133	SMR	280M4		
	71	11626	20,93	1,33	ZG132	SMR	280M4		
	79	10449	18,73	1,47	ZG132	SMR	280M4		
	88	9380	16,88	1,60	ZG132	SMR	280M4		
	97	8510	15,28	1,72	ZG132	SMR	280M4		
	106	7787	13,90	1,85	ZG132	SMR	280M4		
	111	7436	13,28	1,93	ZG132	SMR	280M4	1204	326
	127	6500	11,63	2,18	ZG132	SMR	280M4		
	144	5732	10,25	2,39	ZG132	SMR	280M4		
	163	5064	9,07	2,66	ZG132	SMR	280M4		
	191	4321	7,76	3,06	ZG132	SMR	280M4		
	222	3718	6,66	3,53	ZG132	SMR	280M4		
	258	3199	5,73	4,01	ZG132	SMR	280M4		
	70	11792	21,07	1,03	ZG122	SMR	280M4		
	78	10582	18,86	1,13	ZG122	SMR	280M4		
	87	9488	16,99	1,25	ZG122	SMR	280M4		
	96	8598	15,39	1,36	ZG122	SMR	280M4		
	106	7787	14,00	1,48	ZG122	SMR	280M4		
	111	7436	13,37	1,54	ZG122	SMR	280M4	1008	320
	126	6551	11,71	1,71	ZG122	SMR	280M4		
	143	5772	10,32	1,91	ZG122	SMR	280M4		
	162	5095	9,14	1,91	ZG122	SMR	280M4		
	190	4344	7,81	1,92	ZG122	SMR	280M4		
	221	3735	6,70	1,91	ZG122	SMR	280M4		
	257	3211	5,77	1,92	ZG122	SMR	280M4		
110,00	79	12770	18,73	1,20	ZG132	SMR	315S4		
	88	11464	16,88	1,31	ZG132	SMR	315S4		
	97	10401	15,28	1,41	ZG132	SMR	315S4		
	107	9429	13,90	1,53	ZG132	SMR	315S4		
	112	9008	13,28	1,59	ZG132	SMR	315S4		
	127	7944	11,63	1,78	ZG132	SMR	315S4	1351	326
	145	6957	10,25	1,97	ZG132	SMR	315S4		
	163	6189	9,07	2,17	ZG132	SMR	315S4		
	191	5282	7,76	2,51	ZG132	SMR	315S4		
	223	4524	6,66	2,90	ZG132	SMR	315S4		
	259	3895	5,73	3,29	ZG132	SMR	315S4		



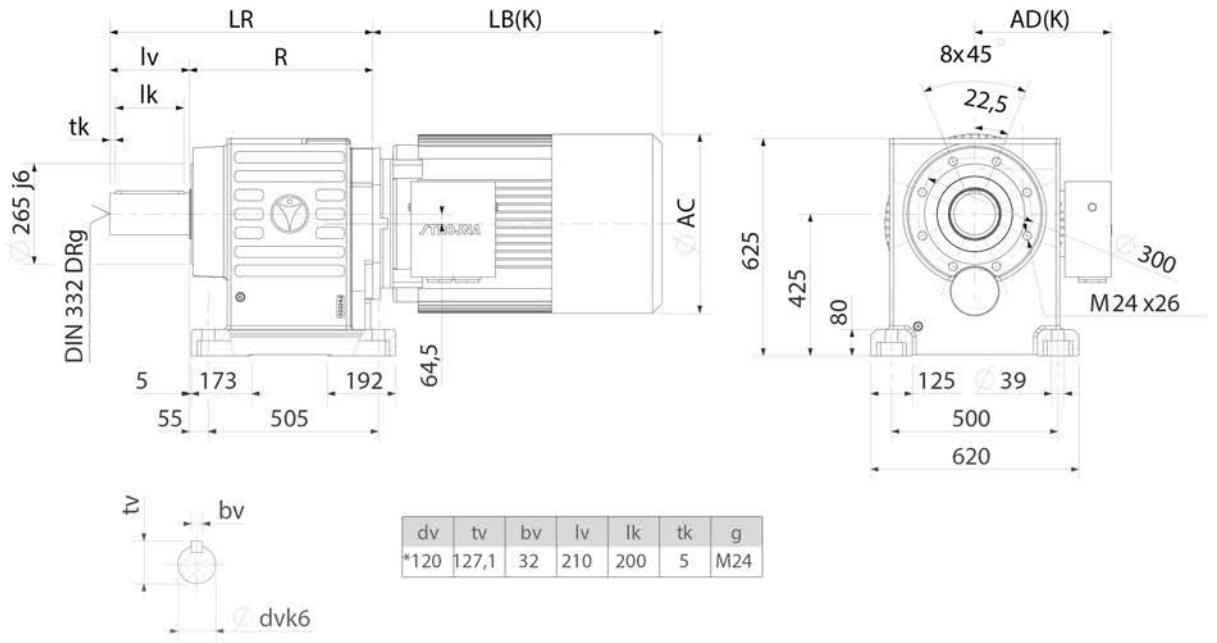
P [kW]	n_2 [min^{-1}]	Mt_2 [Nm]	i	f_B				m [kg]	
110,00	87	11596	16,99	1,02	ZG122	SMR	315S4		
	96	10509	15,39	1,11	ZG122	SMR	315S4		
	106	9517	14,00	1,21	ZG122	SMR	315S4		
	111	9089	13,37	1,26	ZG122	SMR	315S4		
	127	7944	11,71	1,41	ZG122	SMR	315S4	1155	320
	144	7006	10,32	1,57	ZG122	SMR	315S4		
	162	6227	9,14	1,56	ZG122	SMR	315S4		
	190	5310	7,81	1,57	ZG122	SMR	315S4		
	221	4565	6,70	1,57	ZG122	SMR	315S4		
	257	3925	5,77	1,57	ZG122	SMR	315S4		
132,00	79	15325	18,73	1,00	ZG132	SMR	315M4		
	88	13757	16,88	1,09	ZG132	SMR	315M4		
	97	12481	15,28	1,17	ZG132	SMR	315M4		
	106	11421	13,90	1,26	ZG132	SMR	315M4		
	111	10907	13,28	1,32	ZG132	SMR	315M4		
	127	9532	11,63	1,49	ZG132	SMR	315M4	1451	326
	144	8407	10,25	1,63	ZG132	SMR	315M4		
	163	7427	9,07	1,81	ZG132	SMR	315M4		
	190	6372	7,76	2,08	ZG132	SMR	315M4		
	222	5453	6,66	2,41	ZG132	SMR	315M4		
	258	4692	5,73	2,73	ZG132	SMR	315M4		
	106	11421	14,00	1,01	ZG122	SMR	315M4		
	110	11006	13,37	1,04	ZG122	SMR	315M4		
	126	9608	11,71	1,17	ZG122	SMR	315M4		
	143	8466	10,32	1,30	ZG122	SMR	315M4	1255	320
	162	7473	9,14	1,30	ZG122	SMR	315M4		
	189	6405	7,81	1,30	ZG122	SMR	315M4		
	220	5503	6,70	1,30	ZG122	SMR	315M4		
	256	4729	5,77	1,30	ZG122	SMR	315M4		
160,00	97	15128	15,28	0,97	ZG132	SMR	315Mk4		
	107	13714	13,90	1,05	ZG132	SMR	315Mk4		
	112	13102	13,28	1,10	ZG132	SMR	315Mk4		
	128	11464	11,63	1,24	ZG132	SMR	315Mk4		
	145	10120	10,25	1,35	ZG132	SMR	315Mk4	1688	326
	164	8948	9,07	1,50	ZG132	SMR	315Mk4		
	192	7643	7,76	1,73	ZG132	SMR	315Mk4		
	223	6580	6,66	1,99	ZG132	SMR	315Mk4		
	259	5666	5,73	2,26	ZG132	SMR	315Mk4		
	127	11555	11,71	0,97	ZG122	SMR	315Mk4		
	144	10190	10,32	1,08	ZG122	SMR	315Mk4		
	163	9003	9,14	1,08	ZG122	SMR	315Mk4	1492	320
	190	7723	7,81	1,08	ZG122	SMR	315Mk4		
	222	6610	6,70	1,08	ZG122	SMR	315Mk4		
	258	5687	5,77	1,08	ZG122	SMR	315Mk4		



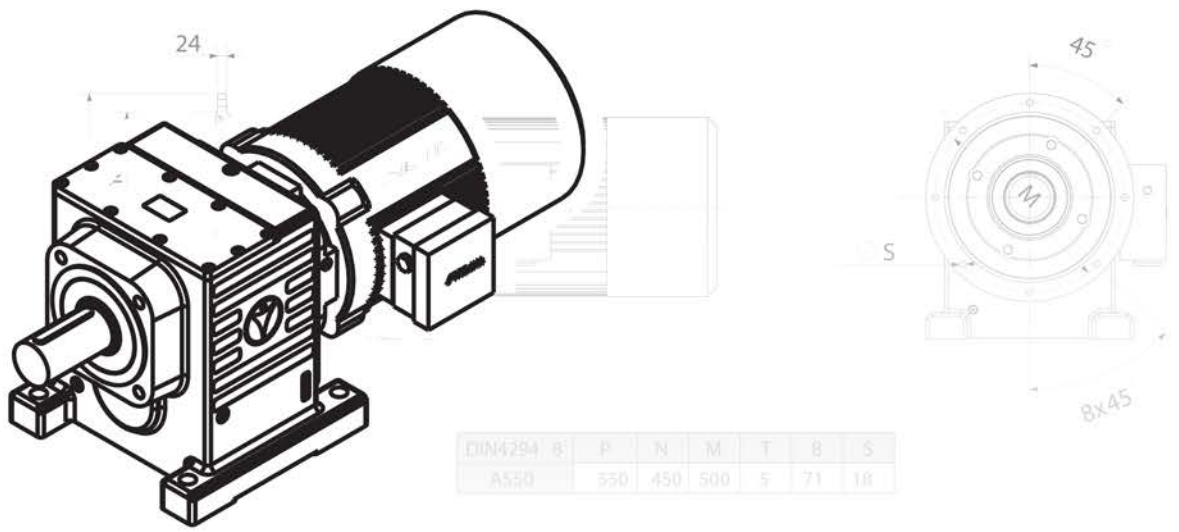
ZG

HELICAL GEAR UNITS

Dimension sheets - Geared motors



dv	tv	bv	lv	lk	tk	g
*120	127,1	32	210	200	5	M24

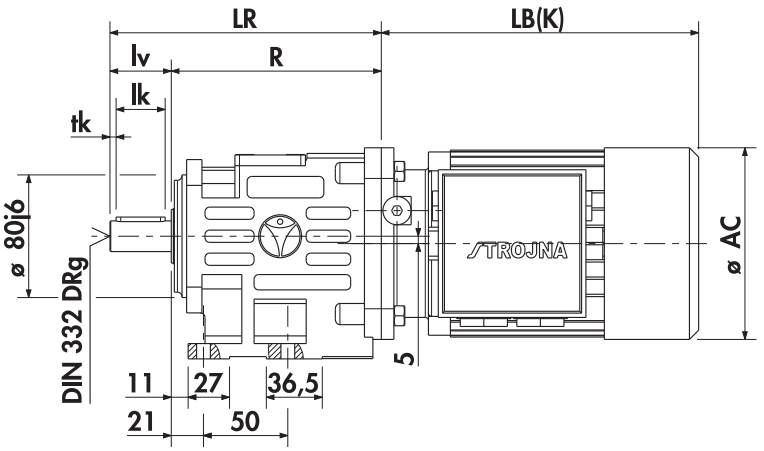


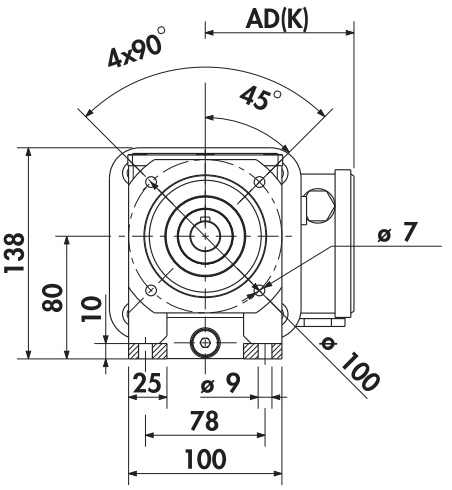
DIN4294	B	P	N	M	T	B	S
A550		550	450	500	5	71	18

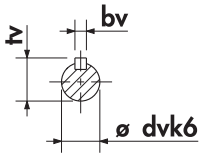
Drawings are for reference dimensions only and subject to change.

We reserve the right to change tehnical data or dimensions due to modifications.

ZG12V...SMB/SMR

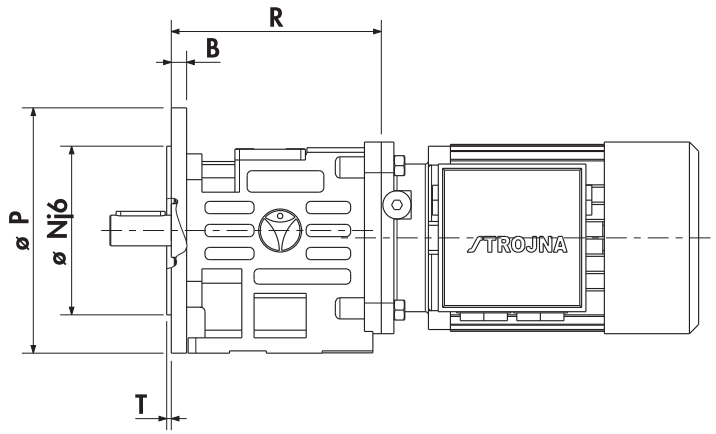


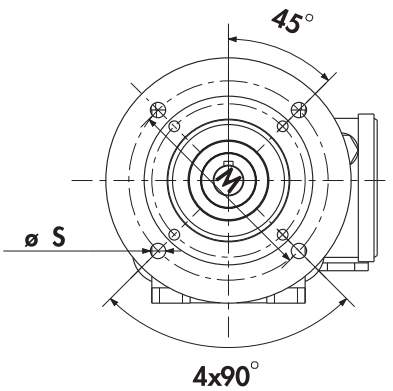




dv	tv	bv	lv	lk	tk	g
*20	22.5	6	40	30	5	M6
25	28	8	50	40	5	M10

ZG12P/V...SMB/SMR



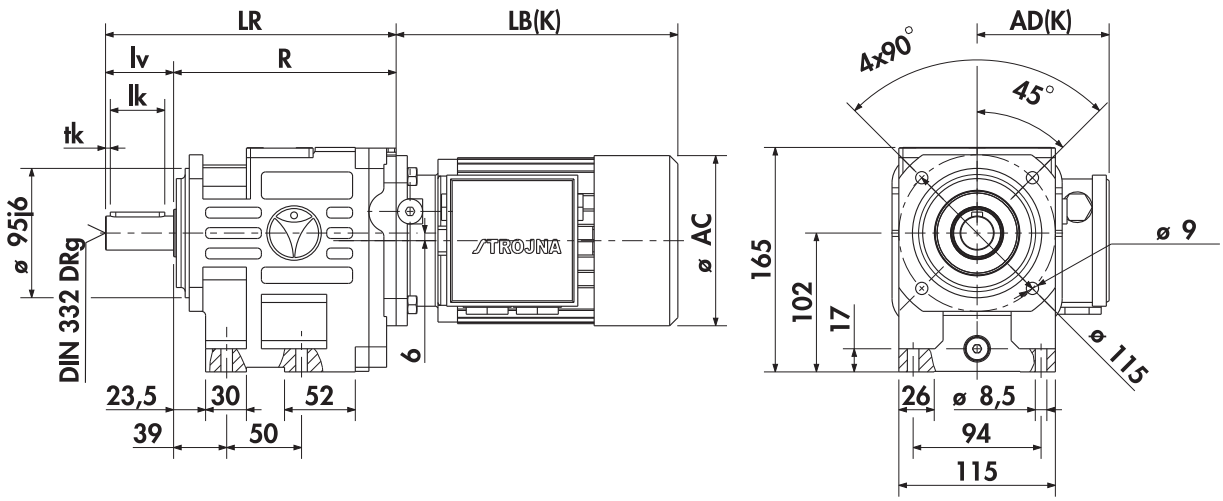


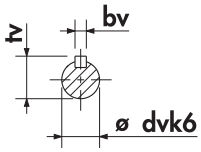
DIN42948	P	N	M	T	B	S
A160	160	110	130	3,5	10	10

SMB/ SMR	63	71	80	90S	90L
LB	207	223	251	276	301
AD	97	105	110	121	121
LBK	260	280	311	360	385
ADK	125	137	147	164	164
AC	125	140	154	170	170
R	137	137	137	137	137
LR	177	177	177	177	177

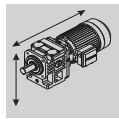
* Standard

ZG22V...SMB/SMR

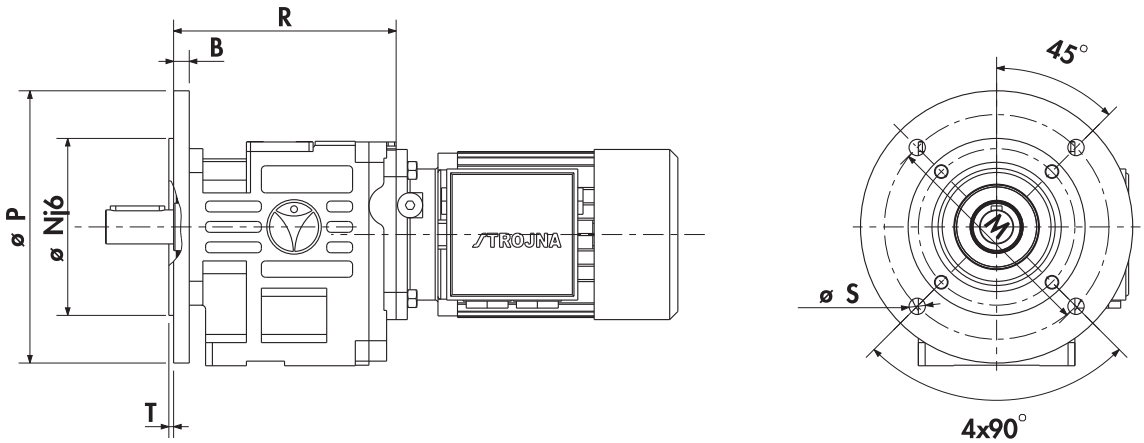




dv	tv	bv	lv	lk	tk	g
*25	28	8	50	40	5	M10
30	33	8	60	50	5	M10



ZG22P/V...SMB/SMR

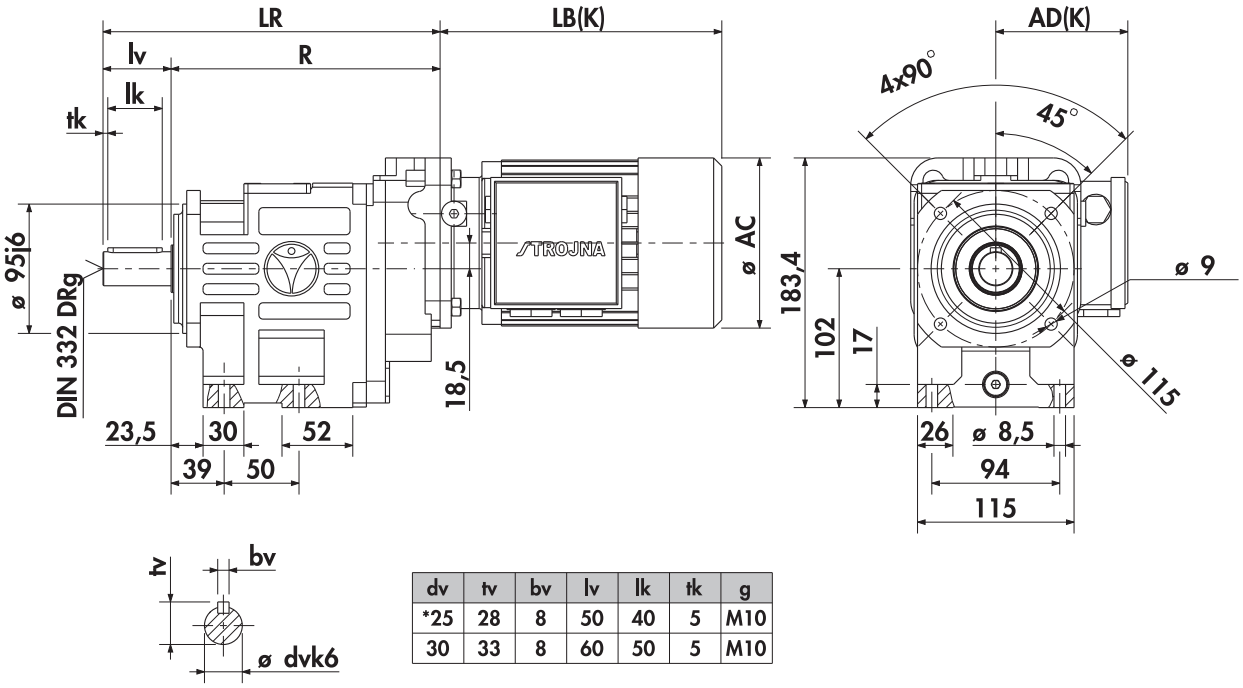


DIN42948	P	N	M	T	B	S
A200	200	130	165	3,5	11,5	12

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	163	163	163	163	163	167	167											
LR	213	213	213	213	213	217	217											

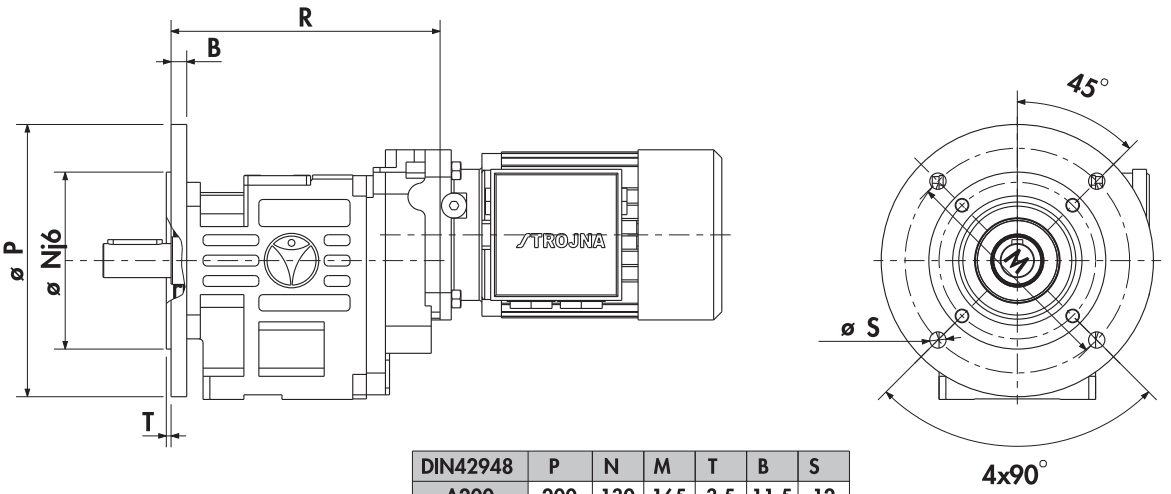
* Standard

ZG23V...SMB/SMR



dv	tv	bv	lv	lk	tk	g
*25	28	8	50	40	5	M10
30	33	8	60	50	5	M10

ZG23P/V...SMB/SMR

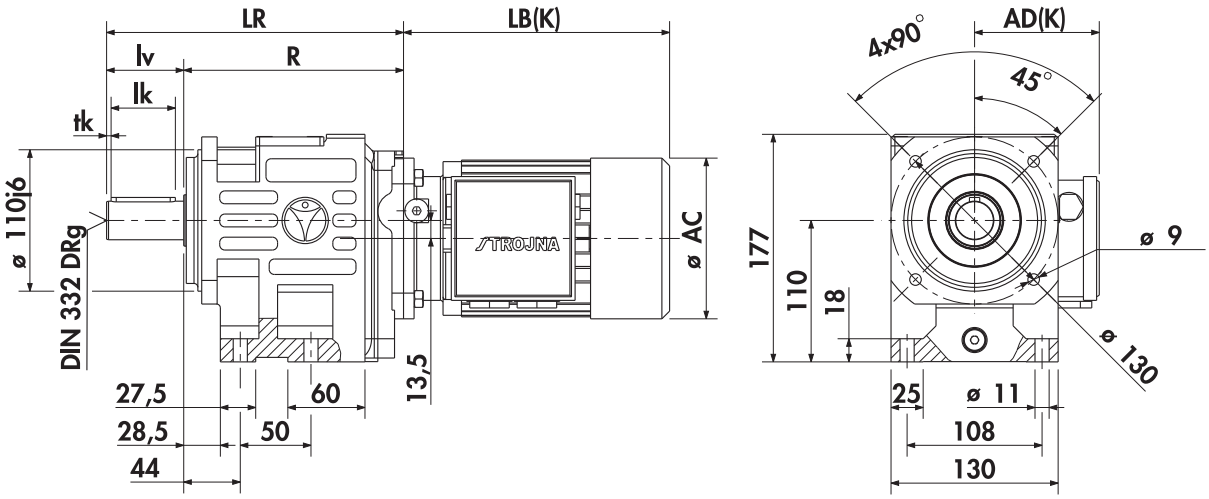


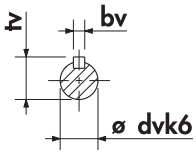
DIN42948	P	N	M	T	B	S
A200	200	130	165	3,5	11,5	12

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301													
AD	97	105	110	121	121													
LBK	260	280	311	360	385													
ADK	125	137	147	164	164													
AC	125	140	154	170	170													
R	198	198	198	198	198													
LR	248	248	248	248	248													

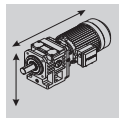
* Standard

ZG32V...SMB/SMR

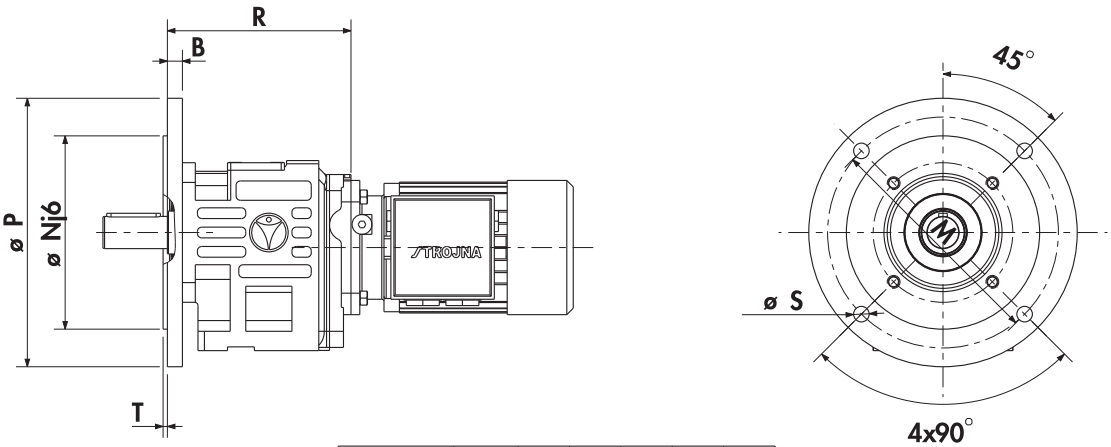




dv	tv	bv	lv	lk	tk	g
*30	33	8	60	50	5	M10
35	38	10	70	60	5	M12



ZG32P/V...SMB/SMR

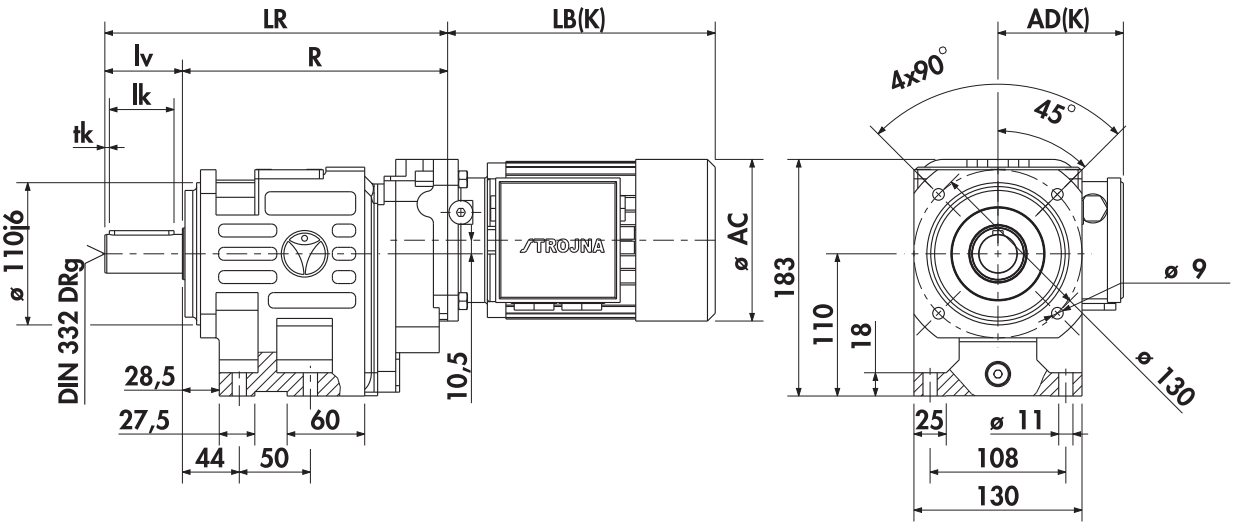


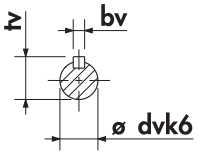
DIN42948	P	N	M	T	B	S
A250	250	180	215	4	14	14,5

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	170	170	170	170	170	174	174											
LR	231	231	231	231	231	235	235											

* Standard

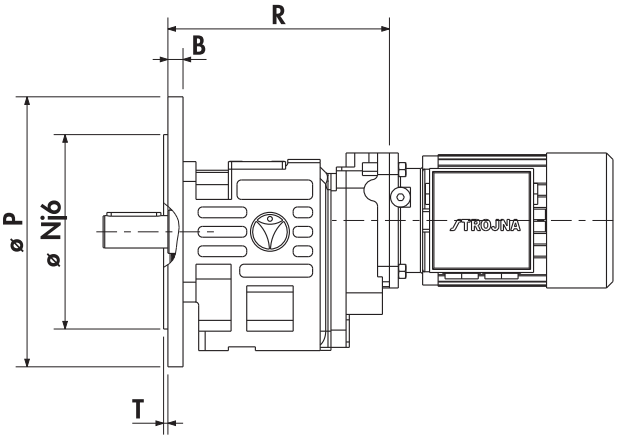
ZG33V...SMB/SMR

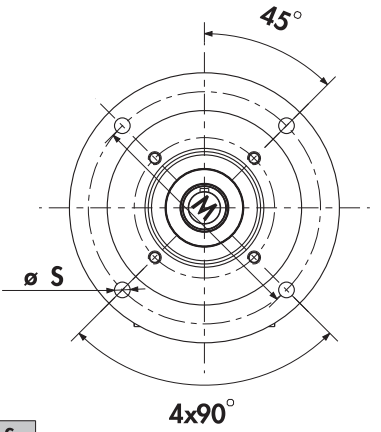




dv	tv	bv	lv	lk	tk	g
*30	33	8	60	50	5	M10
35	38	10	70	60	5	M12

ZG33P/V...SMB/SMR



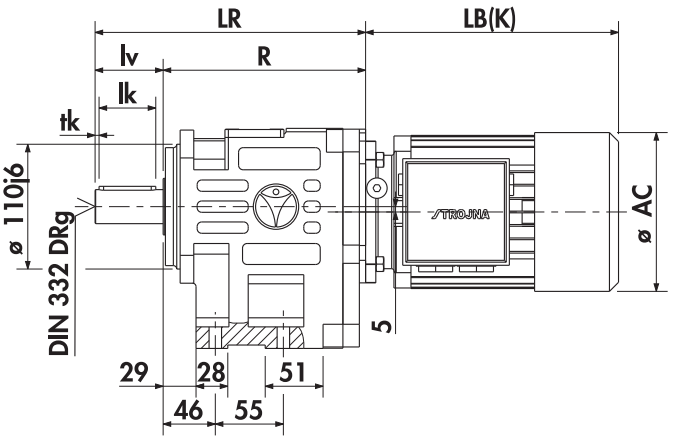


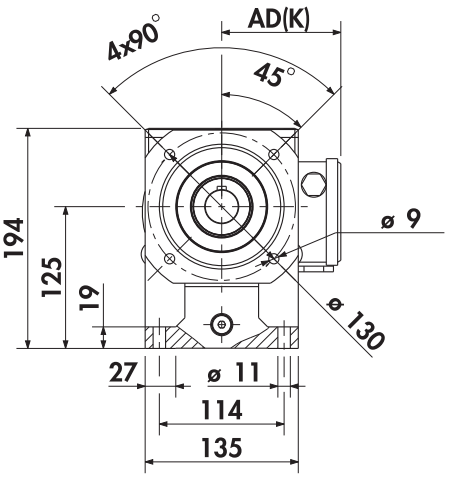
DIN4294 8	P	N	M	T	B	S
A250	250	180	215	4	11	14,5

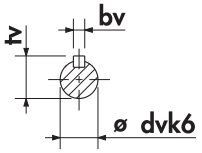
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301													
AD	97	105	110	121	121													
LBK	260	280	311	360	385													
ADK	125	137	147	164	164													
AC	125	140	154	170	170													
R	206	206	206	206	206													
LR	265	265	265	265	265													

* Standard

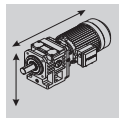
ZG42V...SMB/SMR



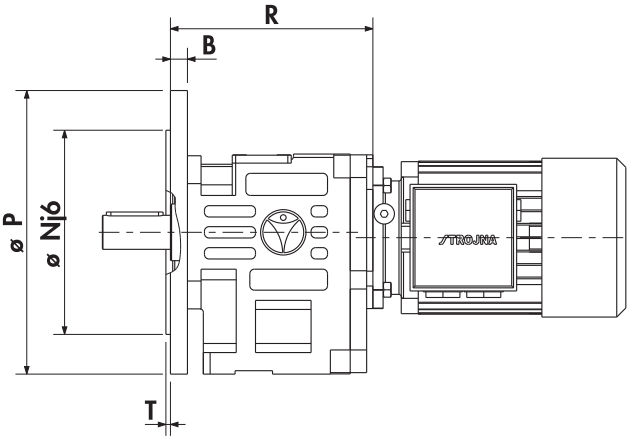


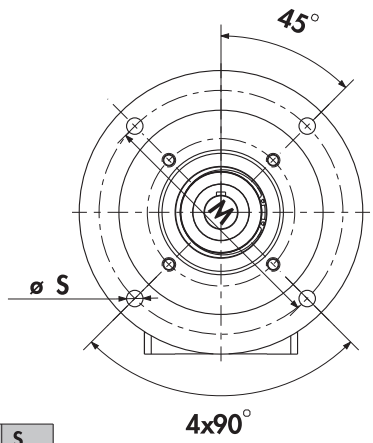


dv	tv	bv	lv	lk	tk	g
30	33	8	60	50	5	M10
*35	38	10	70	60	5	M12



ZG42P/V...SMB/SMR



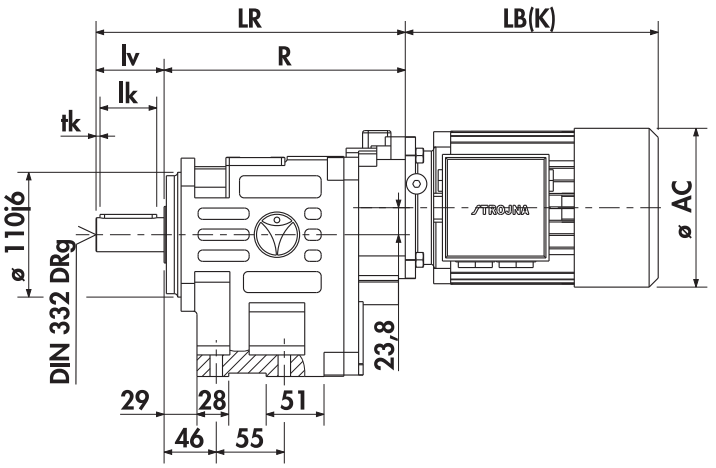


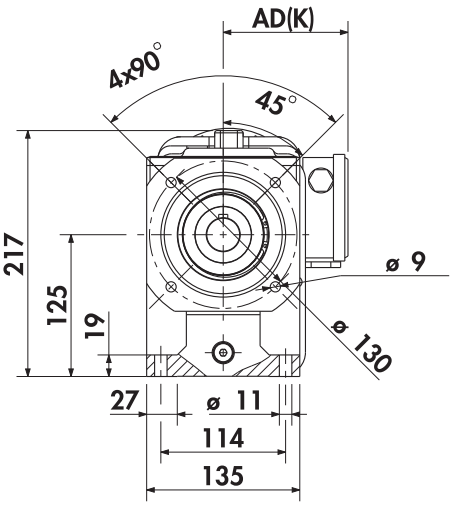
DIN42948	P	N	M	T	B	S
A250	250	180	215	4	15	14,5

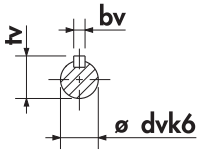
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334	337	415	415								
AD	97	105	110	121	121	157	169	190	190	190								
LBK	260	280	311	360	385	418	434	492	532	532								
ADK	125	137	147	164	164	174	199	183	183	183								
AC	125	140	154	170	170	193	216	247	247	247								
R	179	179	179	179	179	183	183	196	196	196								
LR	248	248	248	248	248	253	253	266	266	266								

* Standard

ZG43V...SMB/SMR

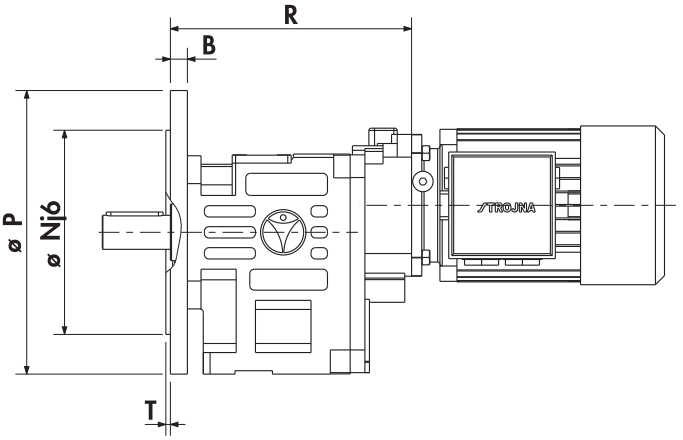


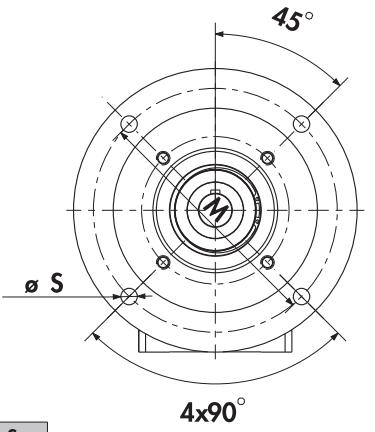




dv	tv	bv	lv	lk	tk	g
30	33	8	60	50	5	M10
*35	38	10	70	60	5	M12

ZG43P/V...SMB/SMR



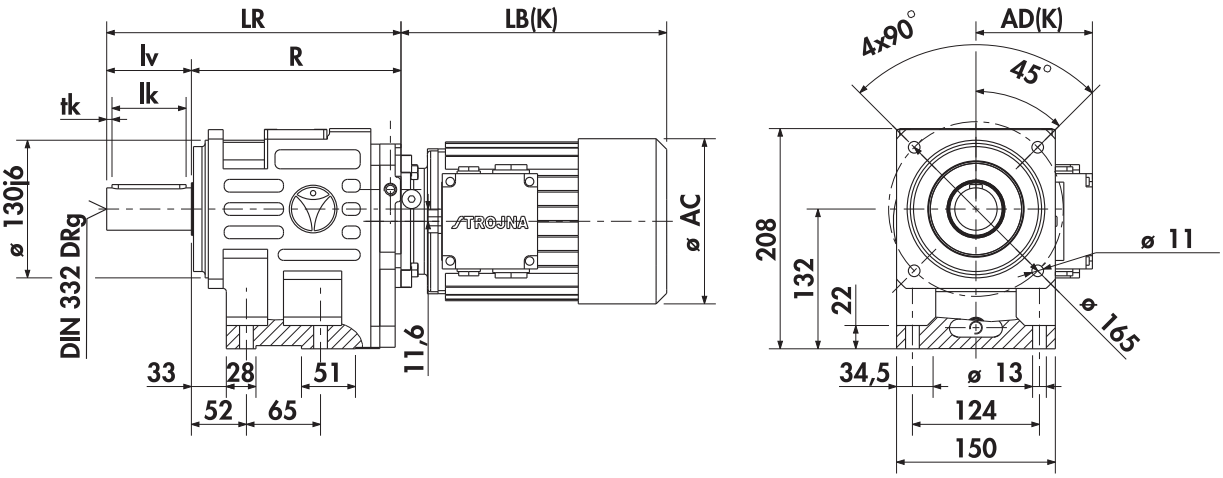


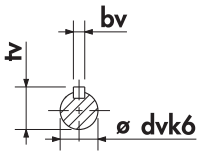
DIN42948	P	N	M	T	B	S
A250	250	180	215	4	15	14,5

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301													
AD	97	105	110	121	121													
LBK	260	280	311	360	385													
ADK	125	137	147	164	164													
AC	125	140	154	170	170													
R	213	213	213	213	213													
LR	283	283	283	283	283													

* Standard

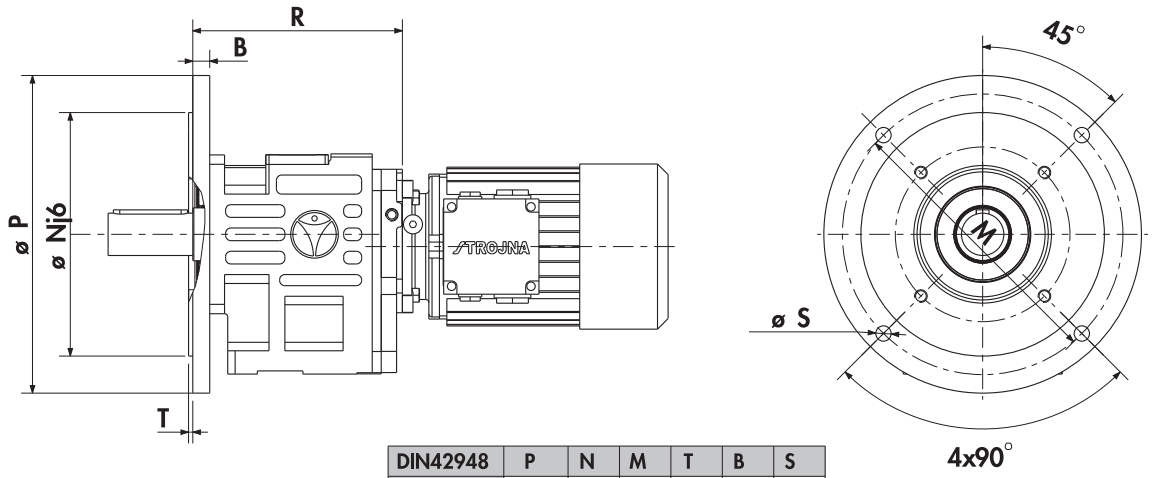
ZG52V...SMB/SMR





dv	tv	bv	lv	lk	tk	g
35	38	10	70	60	5	M12
*40	43	12	80	70	5	M16

ZG52P/V...SMB/SMR

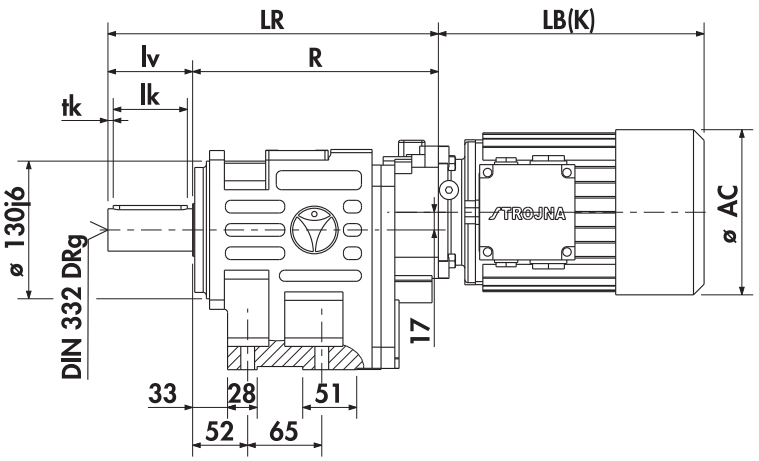


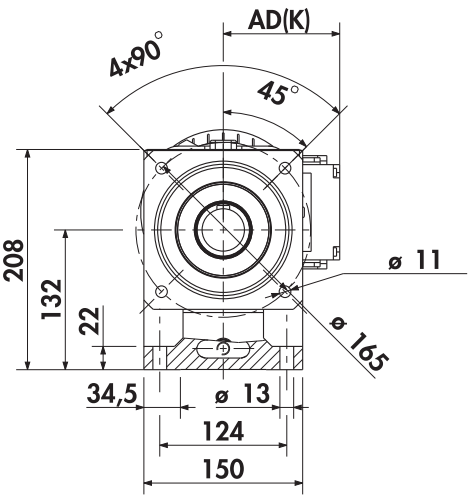
DIN42948	P	N	M	T	B	S
A300	300	230	265	4	16	14,5

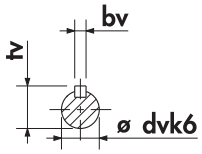
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334	377	415	415								
AD	97	105	110	121	121	157	169	190	190	190								
LBK	260	280	311	360	385	418	434	492	532	532								
ADK	125	137	147	164	164	174	199	183	183	183								
AC	125	140	154	170	170	193	216	247	247	247								
R	197	197	197	197	197	201	201	214	214	214								
LR	278	278	278	278	278	282	282	295	295	295								

* Standard

ZG53V...SMB/SMR

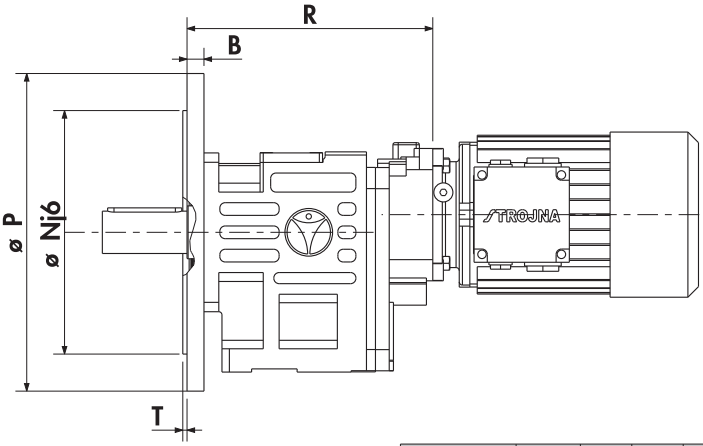


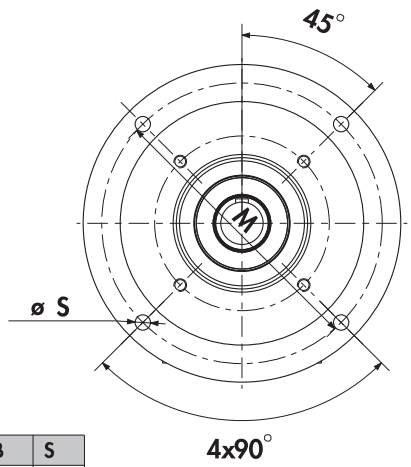




dv	tv	bv	lv	lk	tk	g
35	38	10	70	60	5	M12
*40	43	12	80	70	5	M16

ZG53P/V...SMB/SMR



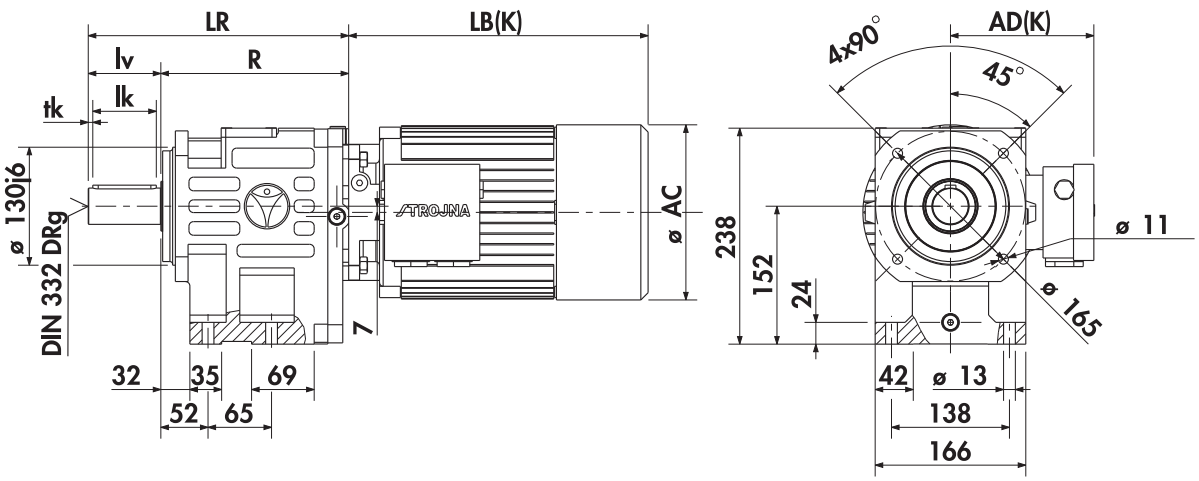


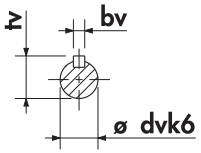
DIN42948	P	N	M	T	B	S
A300	300	230	265	4	16	14,5

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301													
AD	97	105	110	121	121													
LBK	260	280	311	360	385													
ADK	125	137	147	164	164													
AC	125	140	154	170	170													
R	233	233	233	233	233													
LR	312	312	312	312	312													

* Standard

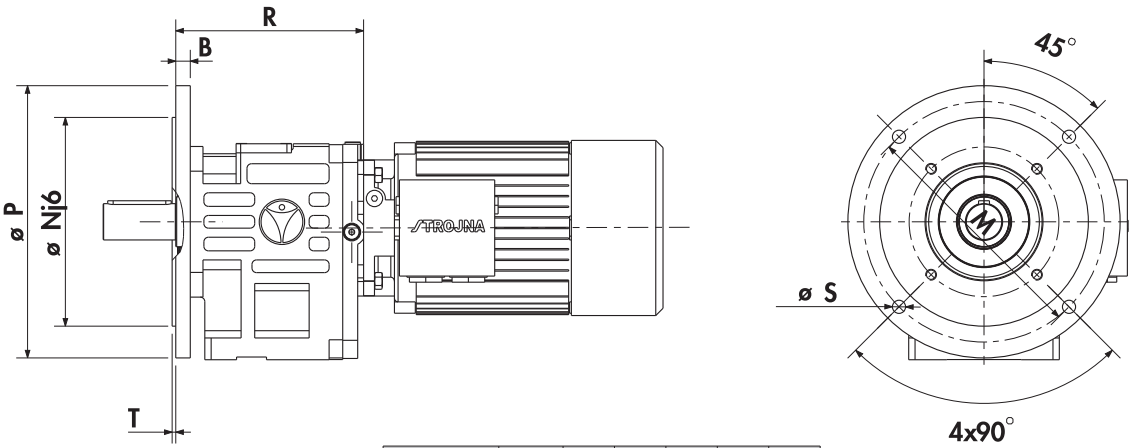
ZG62V...SMB/SMR





dv	tv	bv	lv	lk	tk	g
*40	43	12	80	70	5	M16
45	48,5	14	90	80	5	M16

ZG62P/V...SMB/SMR

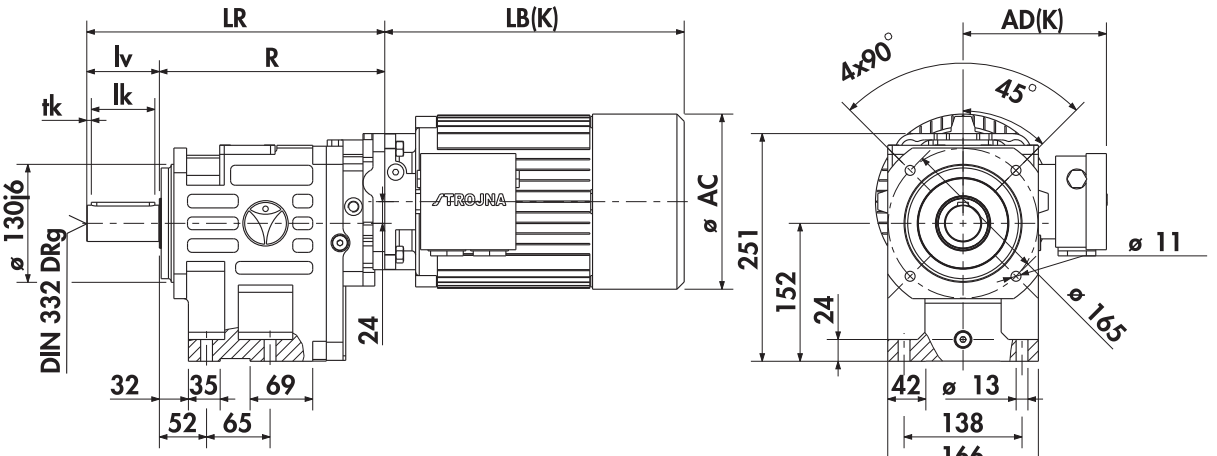


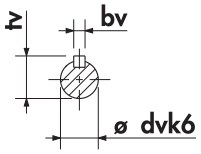
DIN42948	P	N	M	T	B	S
A300	300	230	265	4	16	14,5

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334	377	415	415	489	533	554	592				
AD	97	105	110	121	121	157	169	190	190	190	246	246	260	260				
LBK	260	280	311	360	385	418	434	492	532	532	613	657	739	777				
ADK	125	137	147	164	164	174	199	183	183	183	246	246	260	260				
AC	125	140	154	170	170	193	216	247	247	247	285	285	323	323				
R	203	203	203	203	203	207	207	220	220	220	229	229	229	229				
LR	283	283	283	283	283	287	287	300	300	300	309	309	309	309				

* Standard

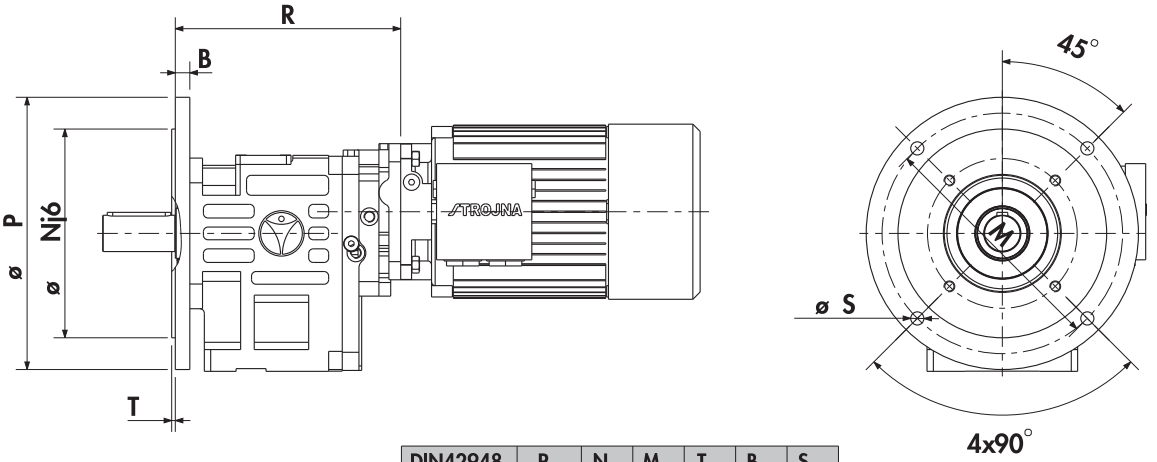
ZG63V...SMB/SMR





dv	tv	bv	lv	lk	tk	g
*40	43	12	80	70	5	M16
45	48,5	14	90	80	5	M16

ZG63P/V...SMB/SMR

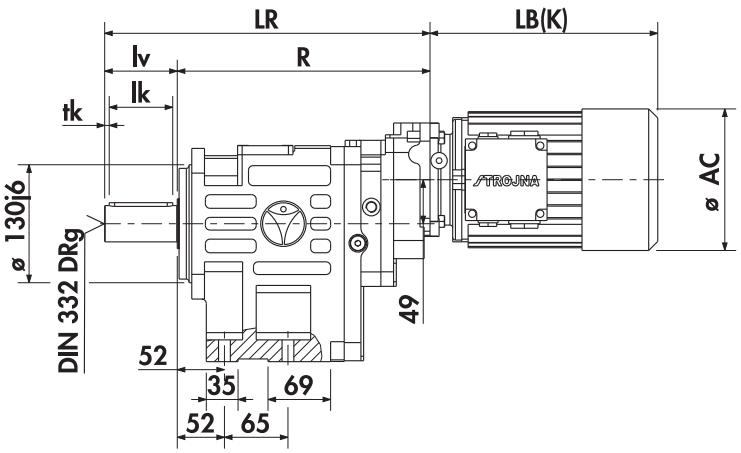


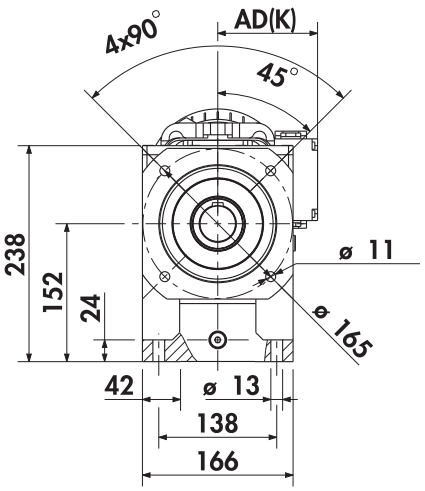
DIN42948	P	N	M	T	B	S
A300	300	230	265	4	16	14,5

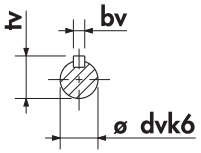
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	244	244	244	244	244	248	248											
LR	324	324	324	324	324	328	328											

* Standard

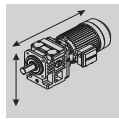
ZG64V...SMB/SMR



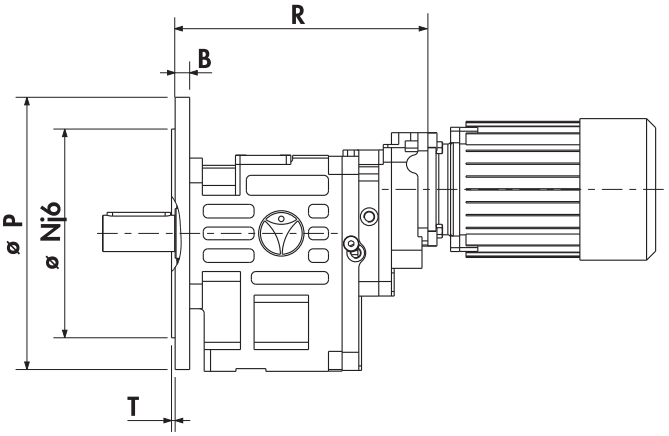


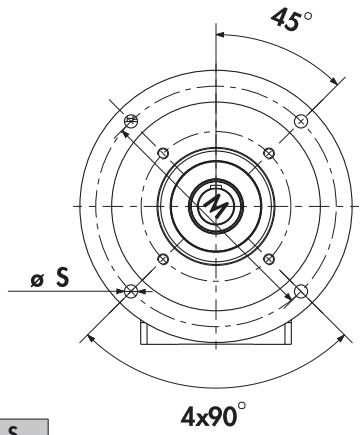


dv	tv	bv	lv	lk	tk	g
*40	43	12	80	70	5	M16
45	48,5	14	90	80	5	M16



ZG64P/V...SMB/SMR



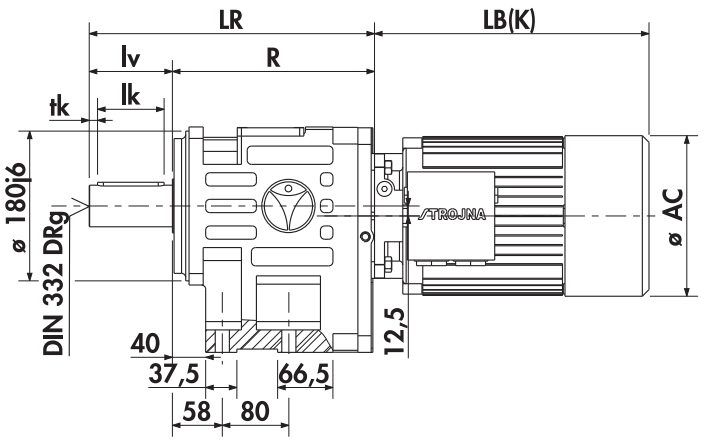


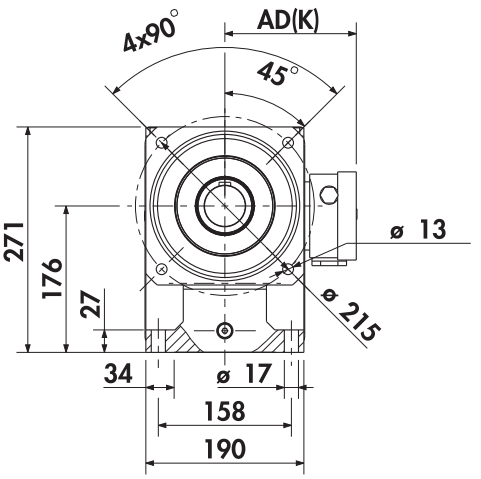
DIN42948	P	N	M	T	B	S
A300	300	230	265	4	16	14,5

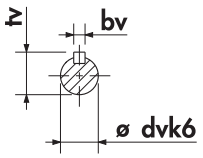
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301													
AD	97	105	110	121	121													
LBK	260	280	311	360	385													
ADK	125	137	147	164	164													
AC	125	140	154	170	170													
R	279	279	279	279	279													
LR	359	359	359	359	359													

* Standard

ZG72V...SMB/SMR

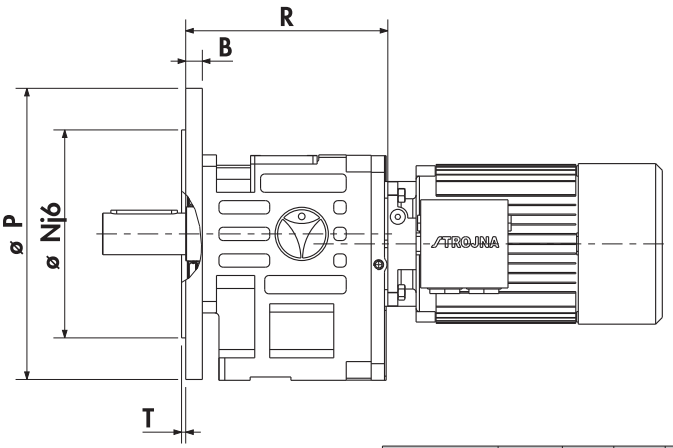


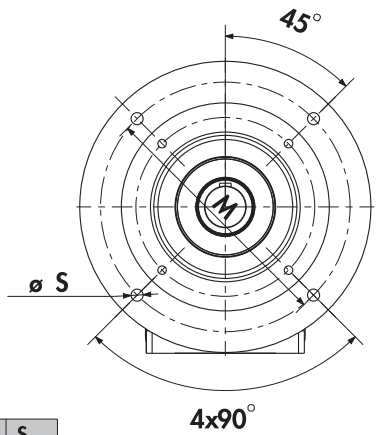




dv	tv	bv	lv	lk	tk	g
*50	53,5	14	100	80	10	M16
60	64	18	110	100	5	M20

ZG72P/V...SMB/SMR



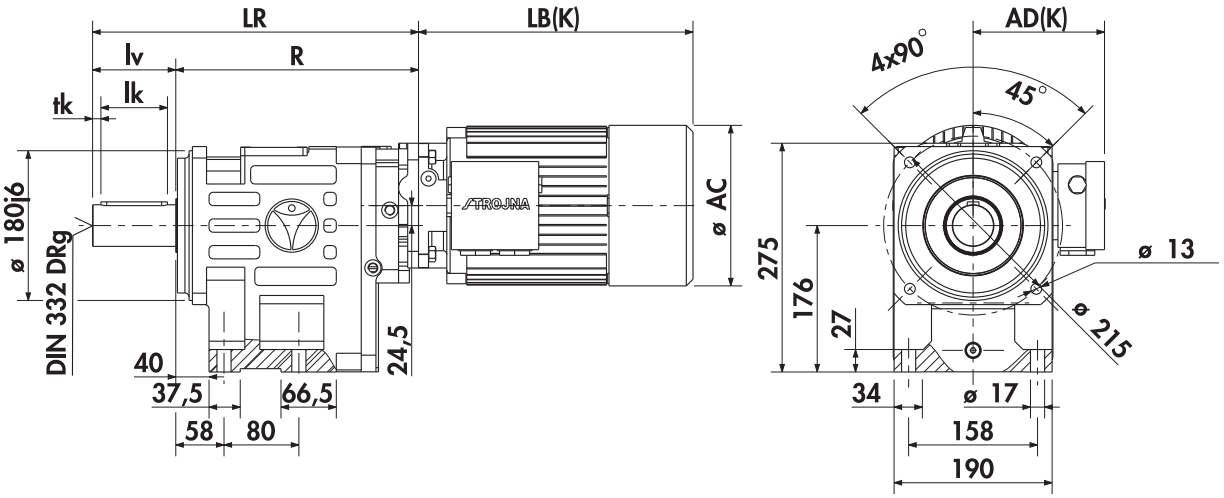


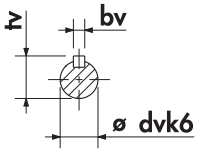
DIN42948	P	N	M	T	B	S
A350	350	250	300	5	20	18,5

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB						329	334	377	415	415	489	533	554	592				
AD						157	169	190	190	190	246	246	260	260				
LBK						418	434	492	532	532	611	655	739	777				
ADK						174	199	183	183	183	246	246	260	260				
AC						193	216	247	247	247	285	285	323	323				
R						243	243	256	256	256	264	264	264	264				
LR						343	343	356	356	356	364	364	364	364				

* Standard

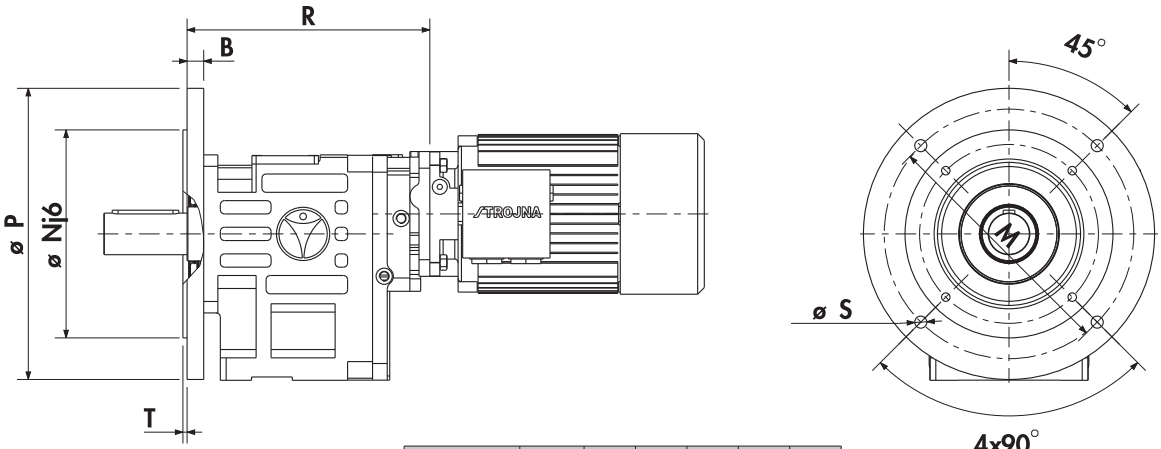
ZG73V...SMB/SMR





dv	tv	bv	lv	lk	tk	g
*50	53,5	14	100	80	10	M16
60	64	18	110	100	5	M20

ZG73P/V...SMB/SMR

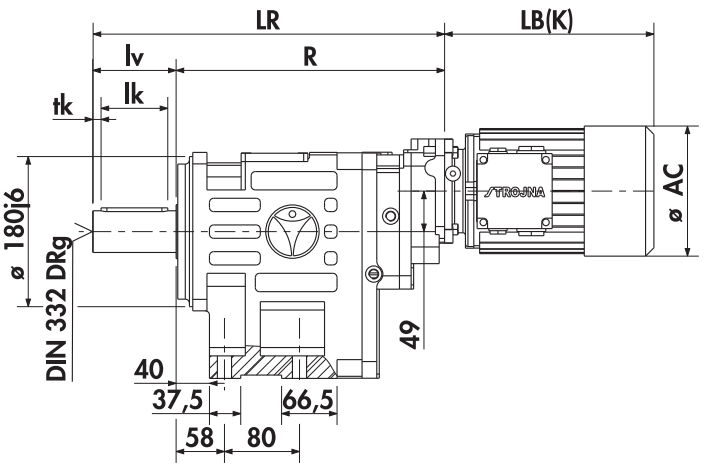


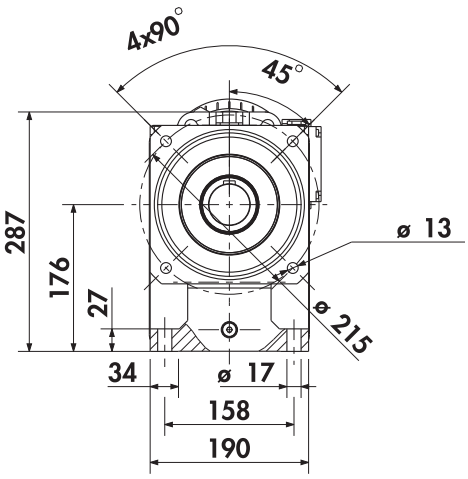
DIN42948	P	N	M	T	B	S
A350	350	250	300	5	20	18,5

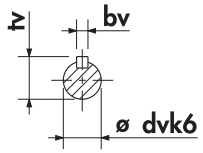
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	288	288	288	288	288	292	292											
LR	388	388	388	388	388	392	392											

* Standard

ZG74V...SMB/SMR

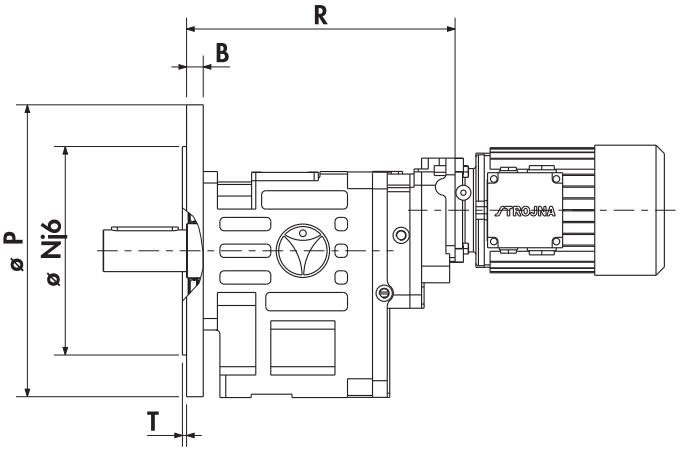


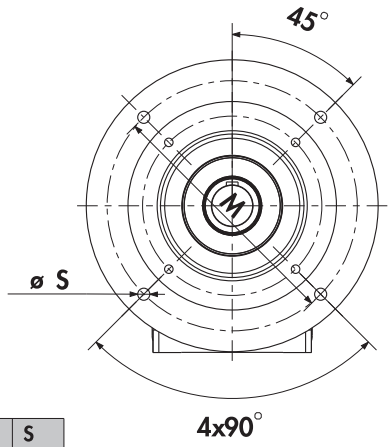




dv	tv	bv	lv	lk	tk	g
*50	53,5	14	100	80	10	M16
60	64	18	110	100	5	M20

ZG74P/V...SMB/SMR



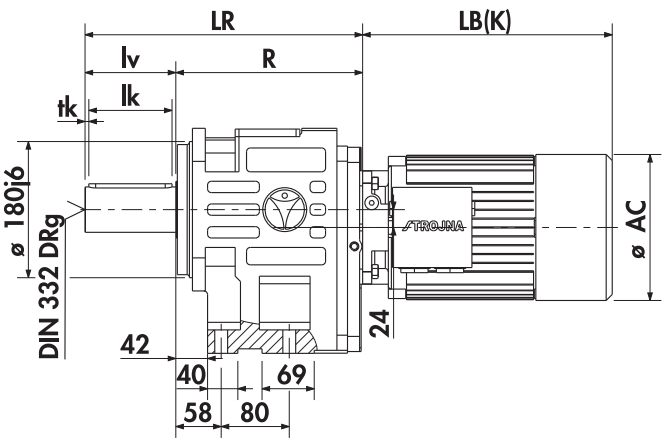


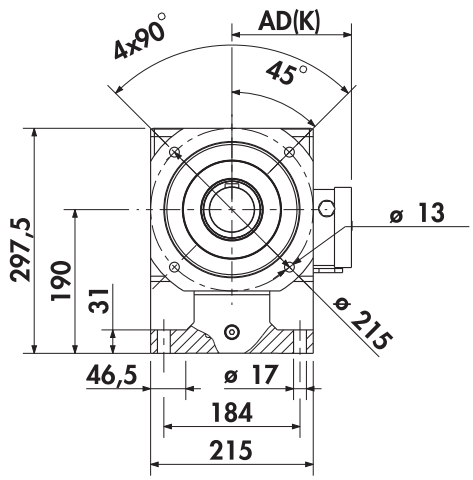
DIN42948	P	N	M	T	B	S
A350	350	250	300	5	20	18,5

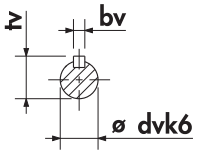
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301													
AD	97	105	110	121	121													
LBK	260	280	311	360	385													
ADK	125	137	147	164	164													
AC	125	140	154	170	170													
R	322	322	322	322	322													
LR	422	422	422	422	422													

* Standard

ZG82V...SMB/SMR

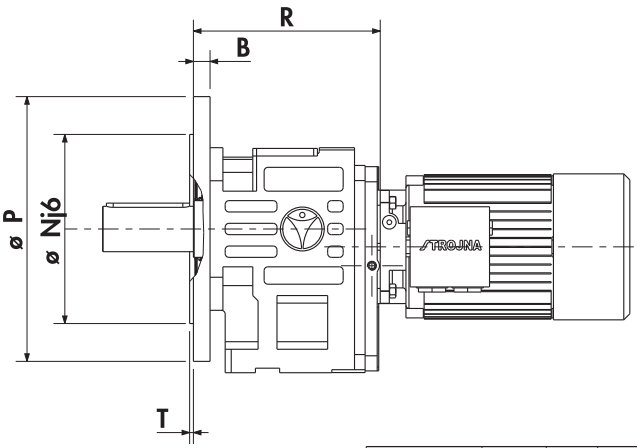


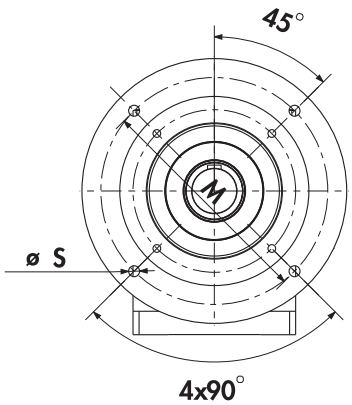




dv	tv	bv	lv	lk	tk	g
50	53,5	14	100	80	10	M16
*60	64	18	110	100	5	M20

ZG82P/V...SMB/SMR



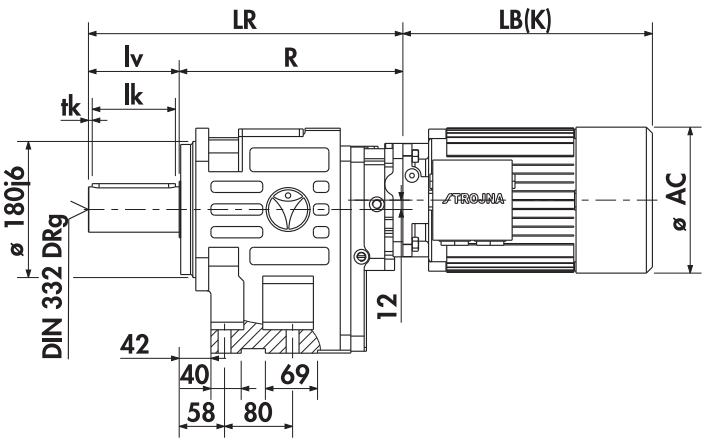


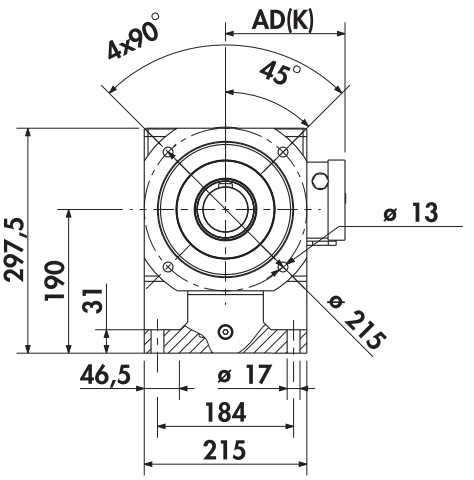
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	22	18,5

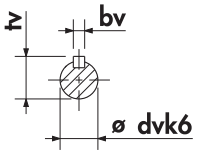
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB						329	334	377	415	415	489	533	554	592				
AD						157	169	190	190	190	246	246	260	260				
LBK						418	434	492	532	532	611	655	739	777				
ADK						174	199	183	183	183	246	246	260	260				
AC						193	216	247	247	247	285	285	323	323				
R						247	247	260	260	260	268	268	268	268				
LR						357	357	370	370	370	378	378	378	378				

* Standard

ZG83V...SMB/SMR

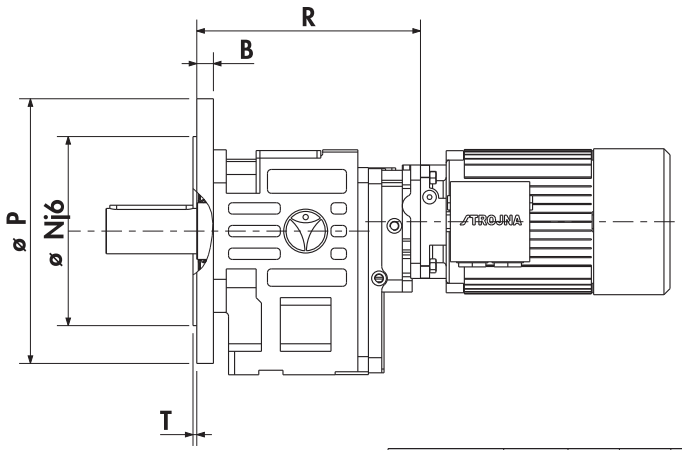


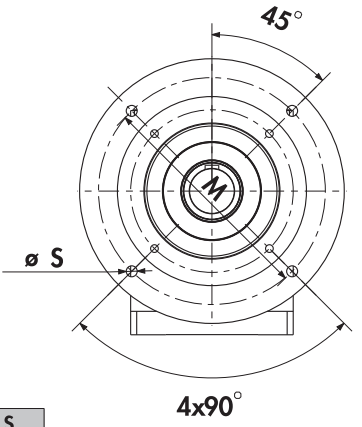




dv	tv	bv	lv	lk	tk	g
50	53,5	14	100	80	10	M16
*60	64	18	110	100	5	M20

ZG83P/V...SMB/SMR



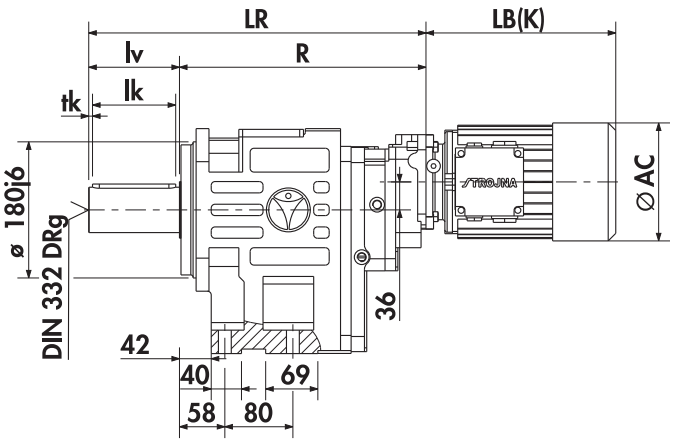


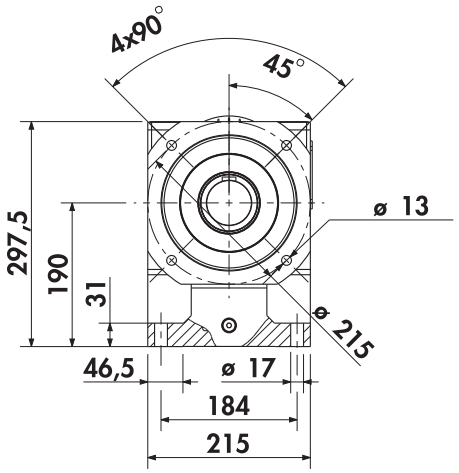
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	20	18,5

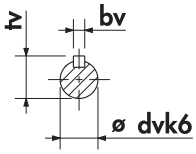
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	292	292	292	292	292	296	296											
LR	402	402	402	402	402	406	406											

* Standard

ZG84V...SMB/SMR

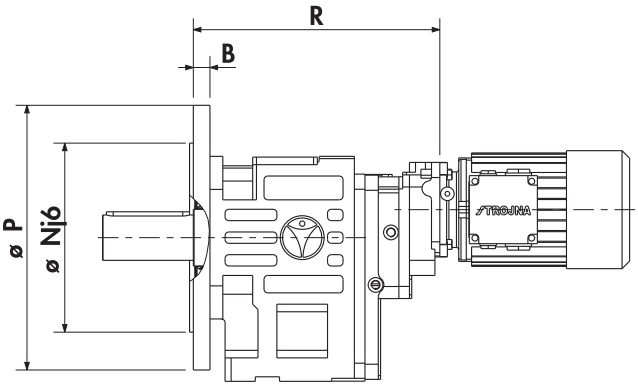


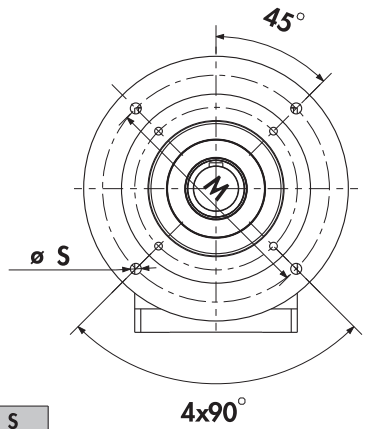




dv	tv	bv	lv	lk	tk	g
50	53,5	14	100	80	10	M16
*60	64	18	110	100	5	M20

ZG84P/V...SMB/SMR



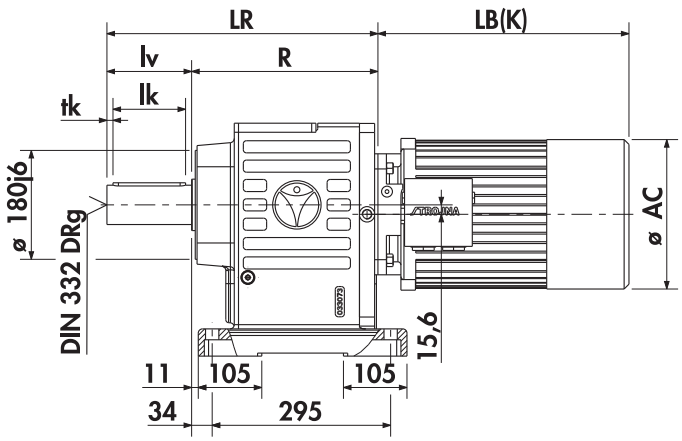


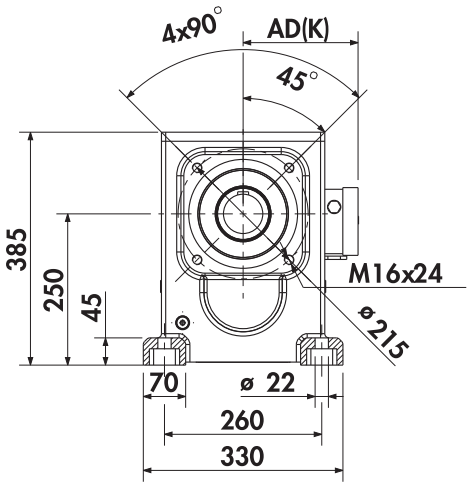
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	20	18,5

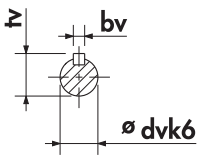
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301													
AD	97	105	110	121	121													
LBK	260	280	311	360	385													
ADK	125	137	147	164	164													
AC	125	140	154	170	170													
R	326	326	326	326	326													
LR	436	436	436	436	436													

* Standard

ZG92V...SMB/SMR

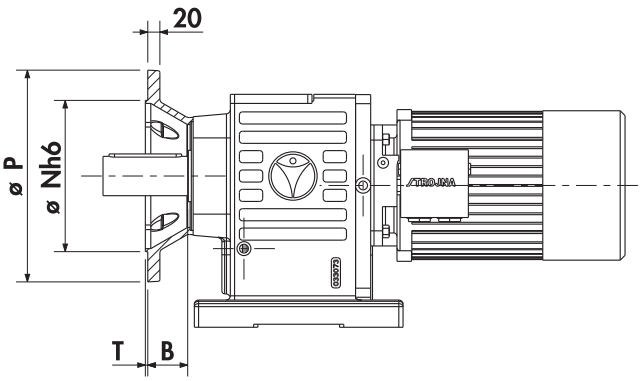


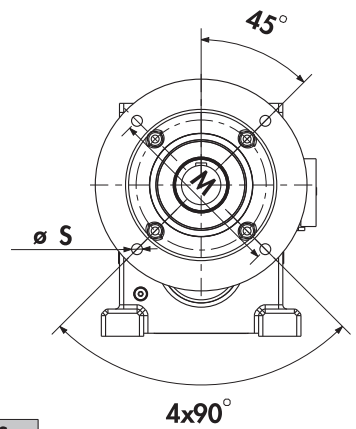




dv	tv	bv	lv	lk	tk	g
*60	64	18	110	100	5	M20
70	74,5	20	120	100	10	M20

ZG92P/V...SMB/SMR



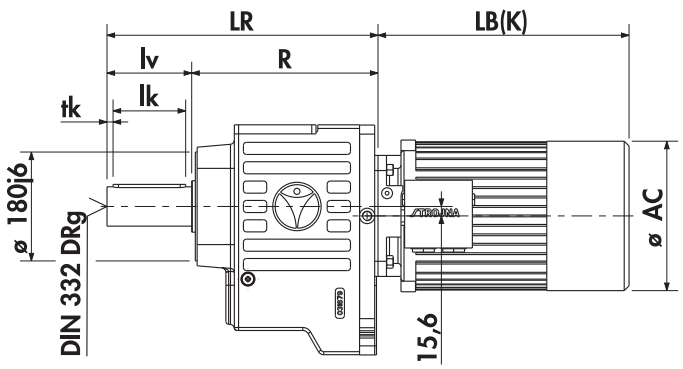


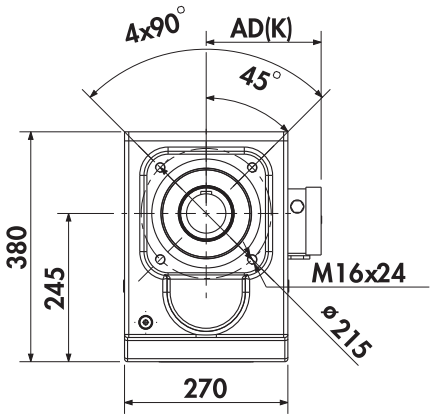
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	66	18

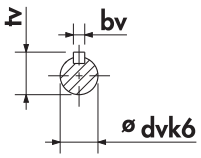
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB								377	415	415	489	533	554	592	658	667	702	
AD								190	190	190	246	246	260	260	299	337	337	
LBK								492	532	532	611	655	739	777	828	848	873	
ADK								183	183	183	246	246	260	260	299	337	337	
AC								247	247	247	285	285	323	323	369	418	418	
R								308	308	308	317	317	317	317	332	332	332	
LR								418	418	418	427	427	427	427	442	442	442	

* Standard

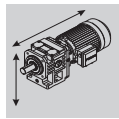
ZG92FV...SMB/SMR



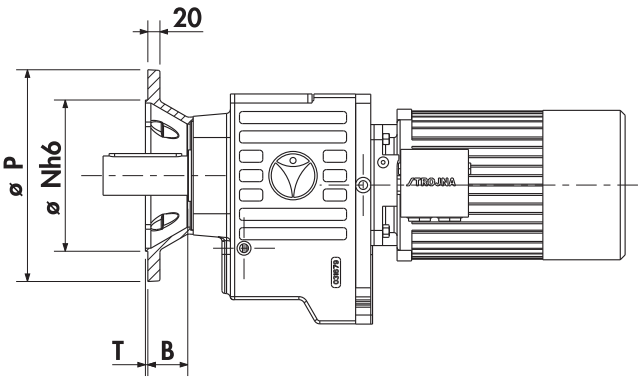


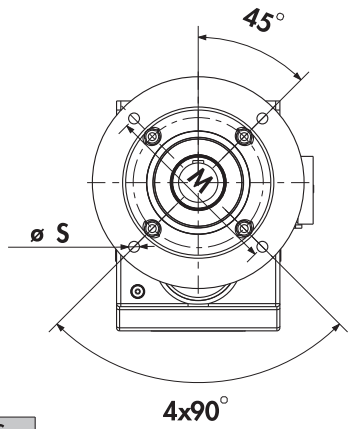


dv	tv	bv	lv	lk	tk	g
*60	64	18	110	100	5	M20
70	74,5	20	120	100	10	M20



ZG92FP/V...SMB/SMR



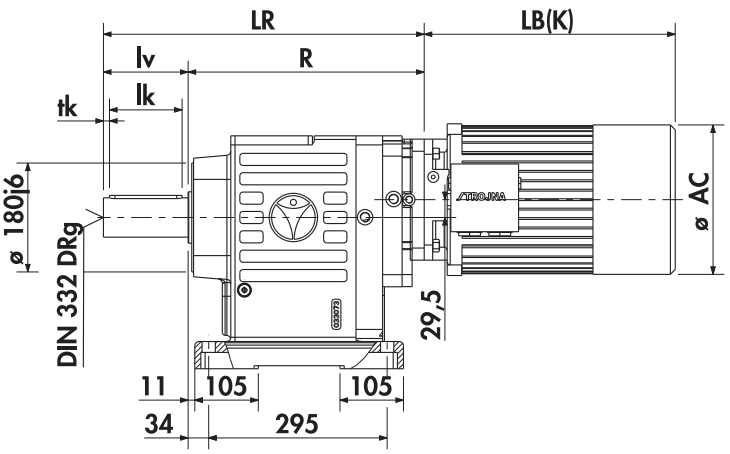


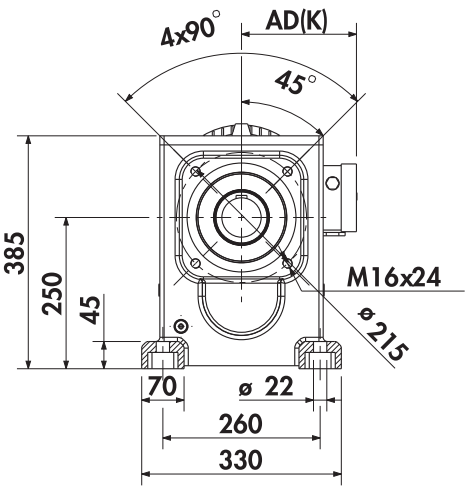
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	66	18

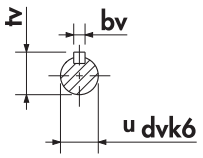
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB								377	415	415	489	533	554	592	658	667	702	
AD								190	190	190	246	246	260	260	299	337	337	
LBK								492	532	532	611	655	739	777	828	848	873	
ADK								183	183	183	246	246	260	260	299	337	337	
AC								247	247	247	285	285	323	323	369	418	418	
R								308	308	308	317	317	317	317	332	332	332	
LR								418	418	418	427	427	427	427	442	442	442	

* Standard

ZG93V...SMB/SMR

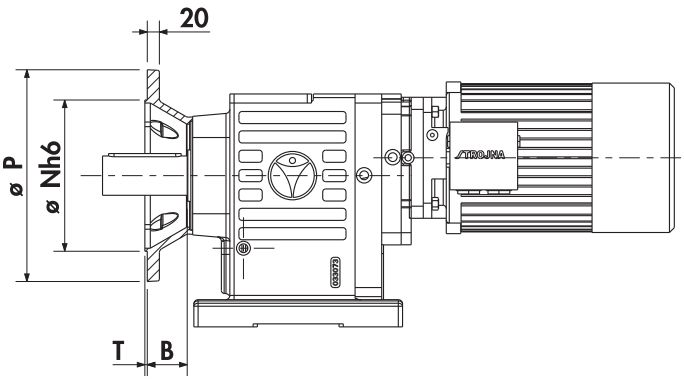


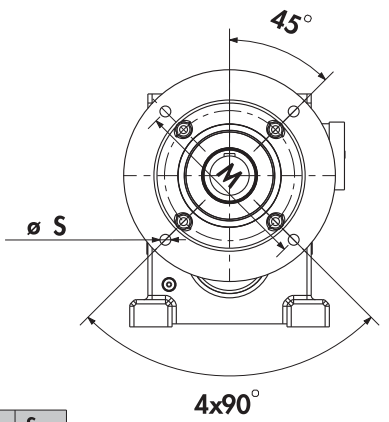




dv	tv	bv	lv	lk	tk	g
*60	64	18	110	100	5	M20
70	74,5	20	120	100	10	M20

ZG93P/V...SMB/SMR



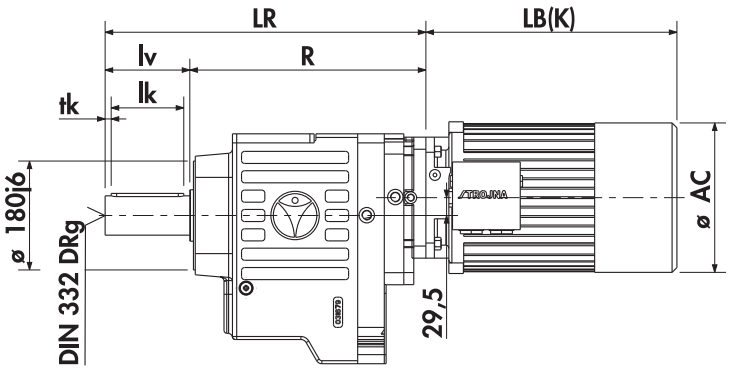


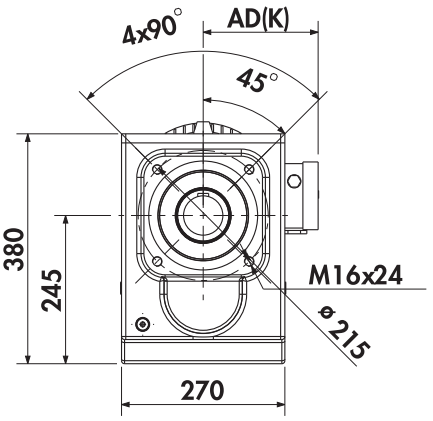
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	66	18

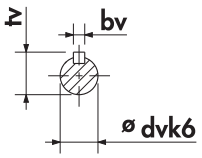
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334	377	415	415	489	533	554	592				
AD	97	105	110	121	121	157	169	190	190	190	246	246	260	260				
LBK	260	280	311	360	385	418	434	492	532	532	611	655	739	777				
ADK	125	137	147	164	164	174	199	183	183	183	246	246	260	260				
AC	125	140	154	170	170	193	216	247	247	247	285	285	323	323				
R	374	374	374	374	374	378	378	390	390	390	399	399	399	399				
LR	484	484	484	484	484	488	488	500	500	500	509	509	509	509				

* Standard

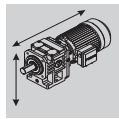
ZG93FV...SMB/SMR



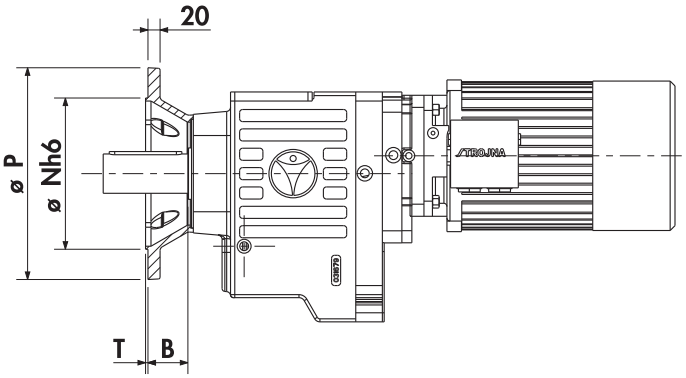


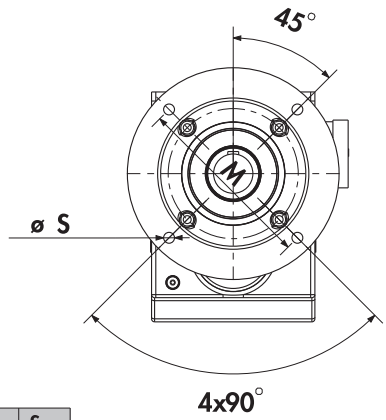


dv	tv	bv	lv	lk	tk	g
*60	64	18	110	100	5	M20
70	74,5	20	120	100	10	M20



ZG93FP/V...SMB/SMR



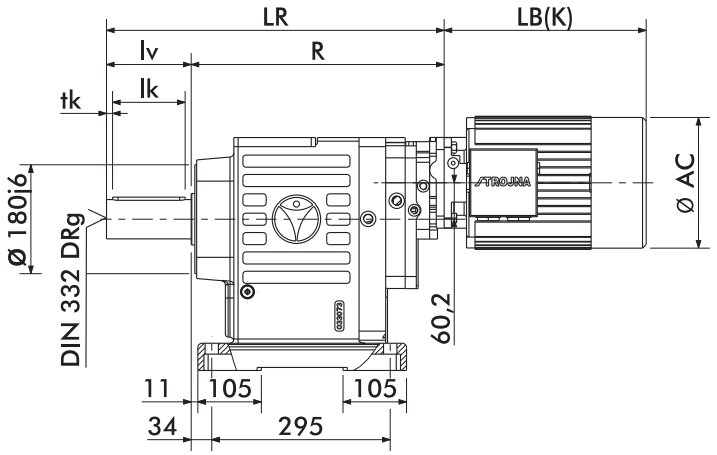


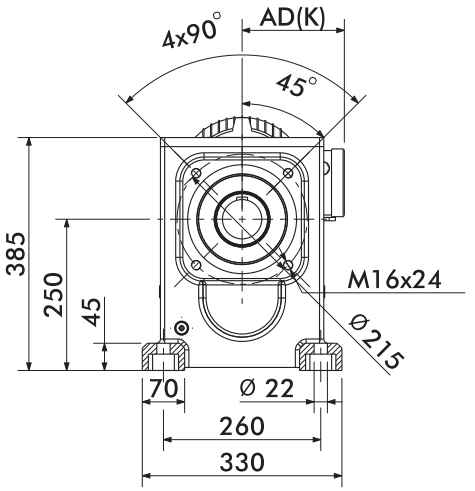
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	66	18

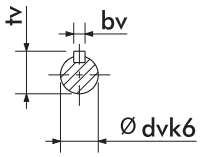
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334	377	415	415	489	533	554	592				
AD	97	105	110	121	121	157	169	190	190	190	246	246	260	260				
LBK	260	280	311	360	385	418	434	492	532	532	611	655	739	777				
ADK	125	137	147	164	164	174	199	183	183	183	246	246	260	260				
AC	125	140	154	170	170	193	216	247	247	247	285	285	323	323				
R	374	374	374	374	374	378	378	390	390	390	399	399	399	399				
LR	484	484	484	484	484	488	488	500	500	500	509	509	509	509				

* Standard

ZG94V...SMB/SMR

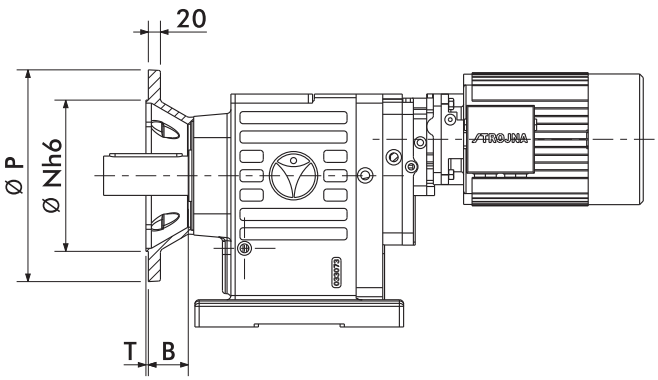


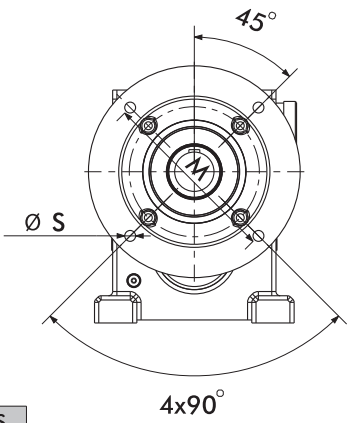




dv	tv	bv	lv	lk	tk	g
*60	64	18	110	100	5	M20
70	74,5	20	120	100	10	M20

ZG94P/V...SMB/SMR



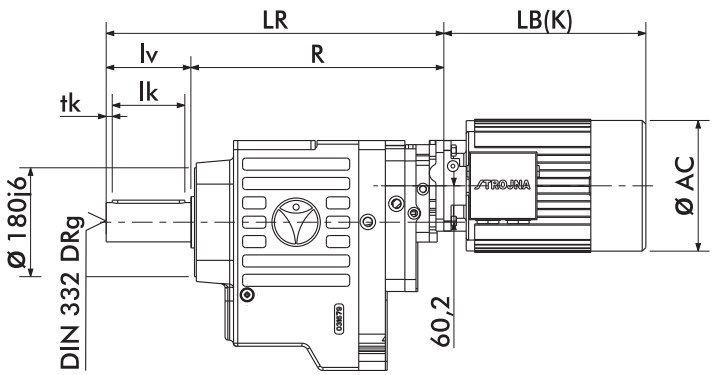


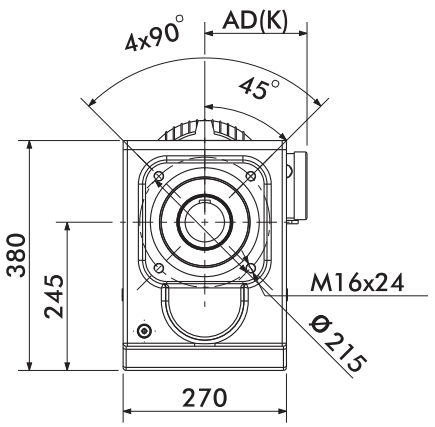
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	66	18

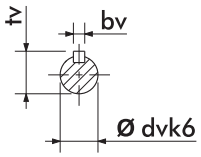
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	414	414	414	414	414	418	418											
LR	524	524	524	524	524	528	528											

* Standard

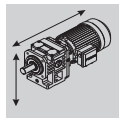
ZG94FV...SMB/SMR



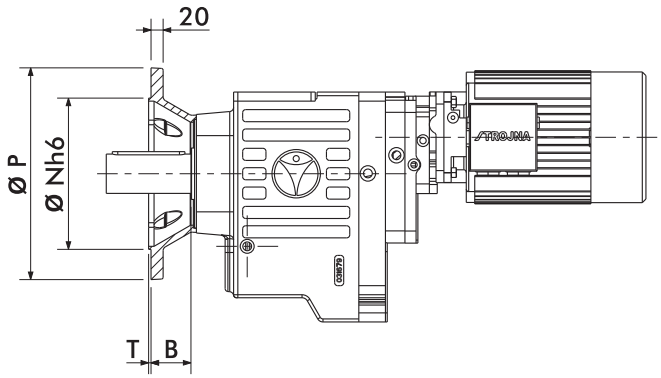


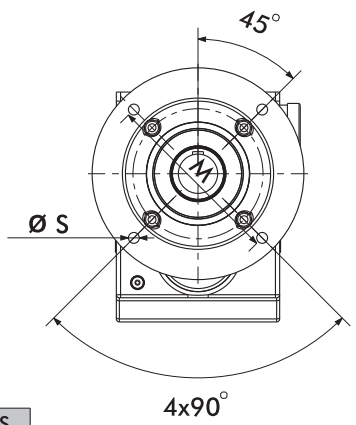


dv	tv	bv	lv	lk	tk	g
*60	64	18	110	100	5	M20
70	74,5	20	120	100	10	M20



ZG94FP/V...SMB/SMR



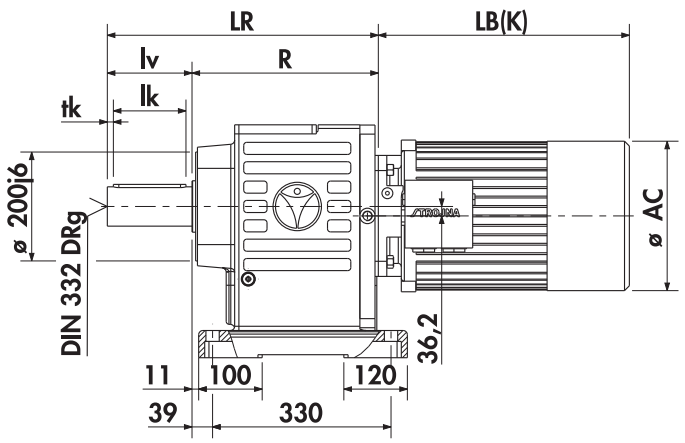


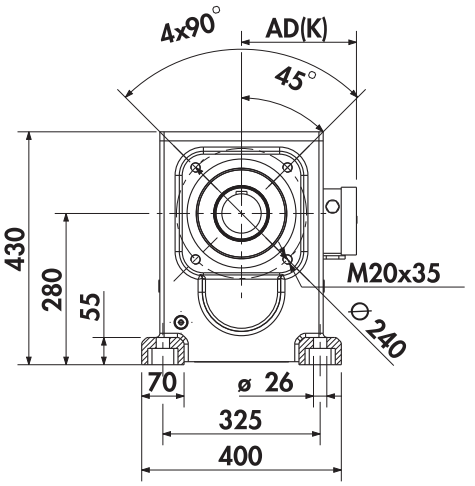
DIN42948	P	N	M	T	B	S
A350	350	250	300	4	66	18

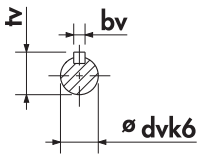
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	414	414	414	414	414	418	418											
LR	524	524	524	524	524	528	528											

* Standard

ZG102V...SMB/SMR

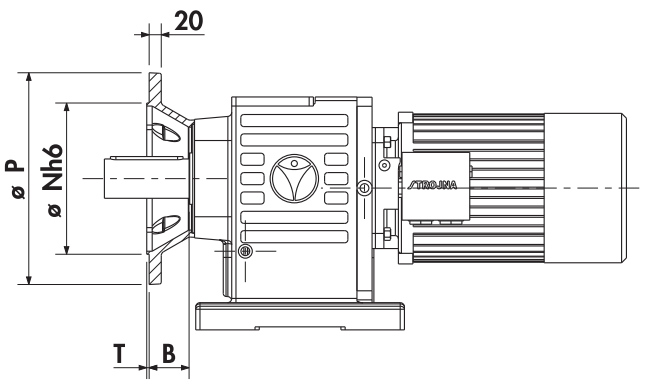


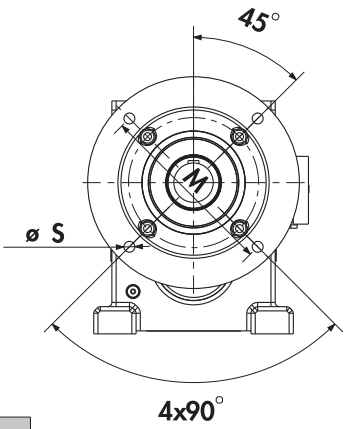




dv	tv	bv	lv	lk	tk	g
*70	74,5	20	120	100	10	M20

ZG102P/V...SMB/SMR



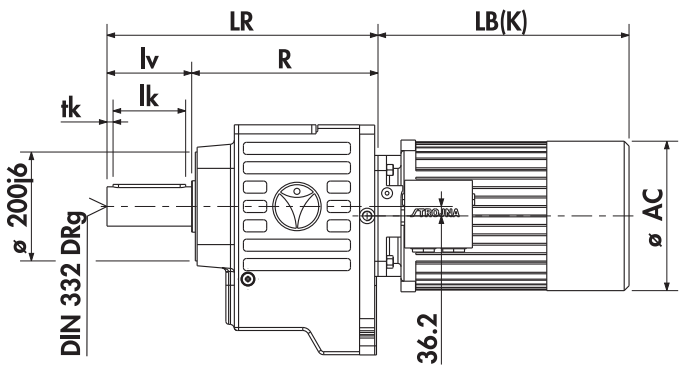


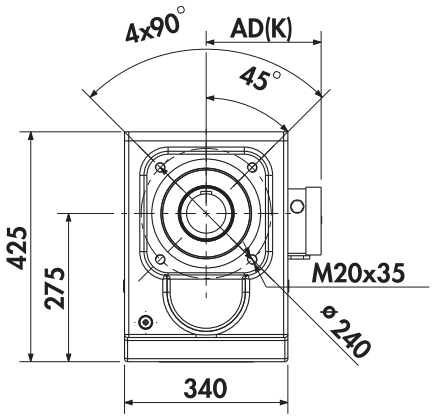
DIN42948	P	N	M	T	B	S
A400	400	300	350	5	73	18

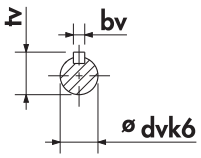
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB								377	415	415	489	533	554	592	658	667	702	
AD								190	190	190	246	246	260	260	299	337	337	
LBK								492	532	532	611	655	739	777	828	848	873	
ADK								183	183	183	246	246	260	260	299	337	337	
AC								247	247	247	285	285	323	323	369	418	418	
R								351	351	351	360	360	360	360	375	375	375	
LR								471	471	471	480	480	480	480	495	495	495	

* Standard

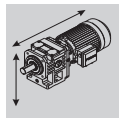
ZG102FV...SMB/SMR



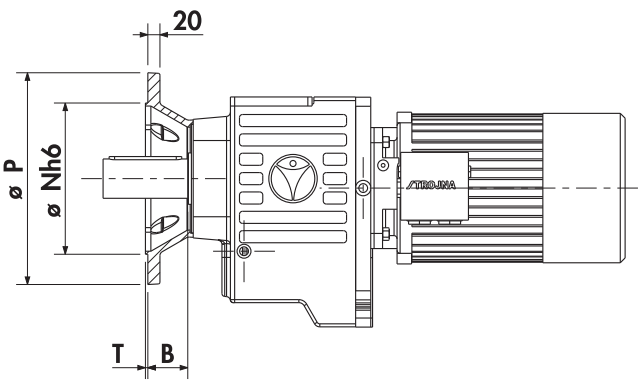


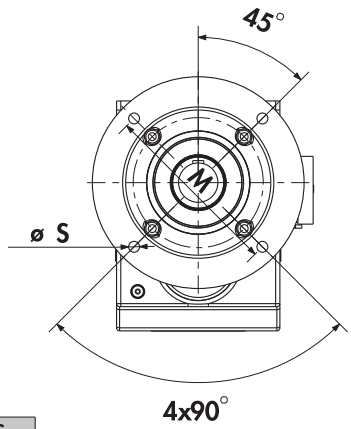


dv	tv	bv	lv	lk	tk	g
*70	74,5	20	120	100	10	M20



ZG102FP/V...SMB/SMR



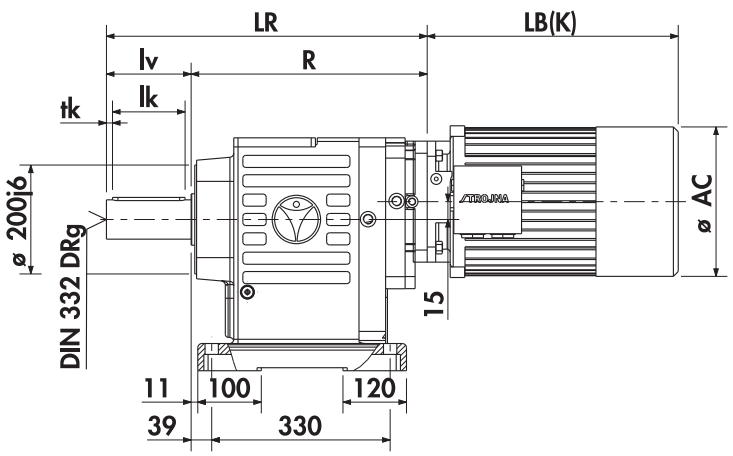


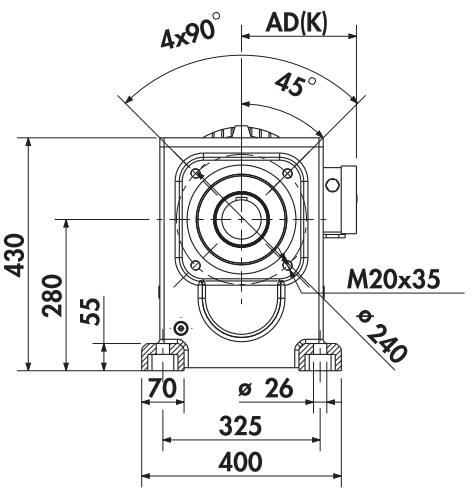
DIN42948	P	N	M	T	B	S
A400	400	300	350	5	73	18

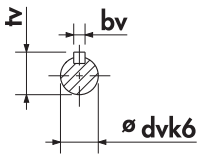
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB								377	415	415	489	533	554	592	658	667	702	
AD								190	190	190	246	246	260	260	299	337	337	
LBK								492	532	532	611	655	739	777	828	848	873	
ADK								183	183	183	246	246	260	260	299	337	337	
AC								247	247	247	285	285	323	323	369	418	418	
R								351	351	351	360	360	360	360	375	375	375	
LR								471	471	471	480	480	480	480	495	495	495	

* Standard

ZG103V...SMB/SMR

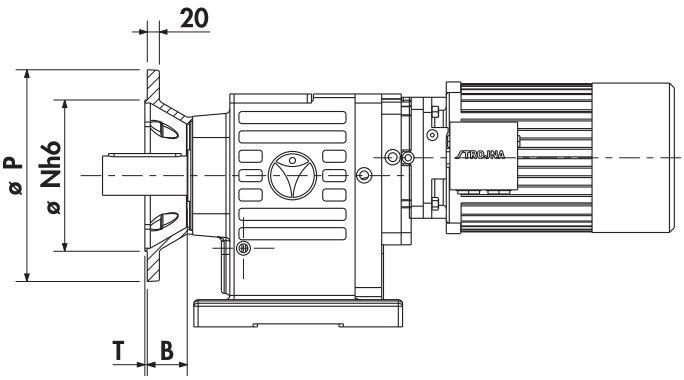


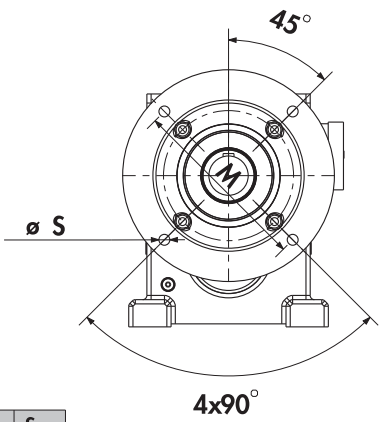




dv	tv	bv	lv	lk	tk	g
*70	74,5	20	120	100	10	M20

ZG103P/V...SMB/SMR



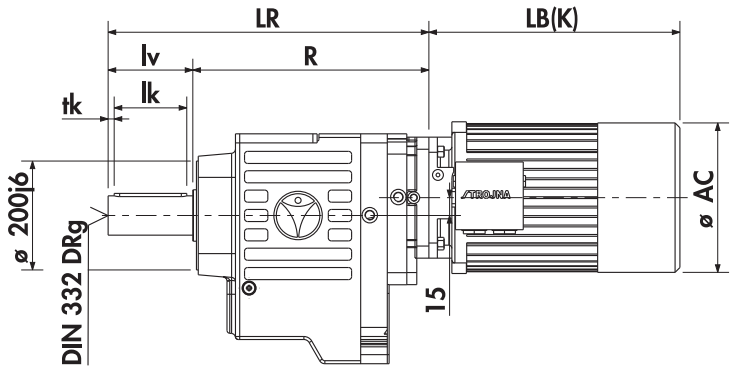


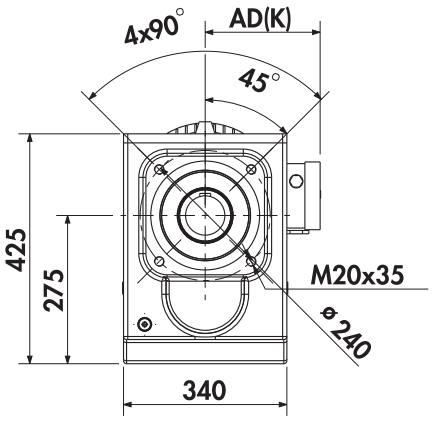
DIN42948	P	N	M	T	B	S
A400	400	300	350	5	73	18

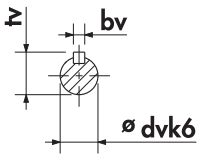
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334	377	415	415	489	533	554	592				
AD	97	105	110	121	121	157	169	190	190	190	246	246	260	260				
LBK	260	280	311	360	385	418	434	492	532	532	611	655	739	777				
ADK	125	137	147	164	164	174	199	183	183	183	246	246	260	260				
AC	125	140	154	170	170	193	216	247	247	247	285	285	323	323				
R	416	416	416	416	416	420	420	432	432	432	441	441	441	441				
LR	536	536	536	536	536	540	540	552	552	552	561	561	561	561				

* Standard

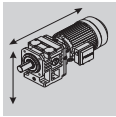
ZG103FV...SMB/SMR



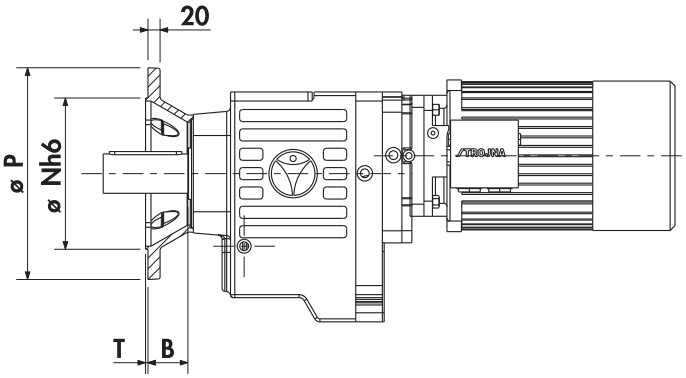


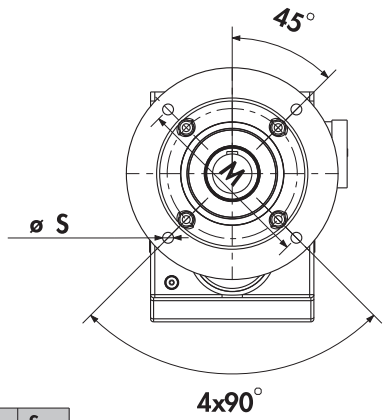


dv	tv	bv	lv	lk	tk	g
*70	74,5	20	120	100	10	M20



ZG103FP/V...SMB/SMR



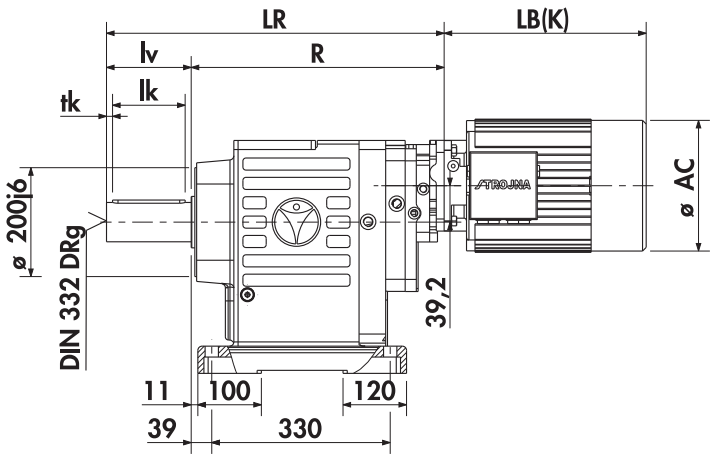


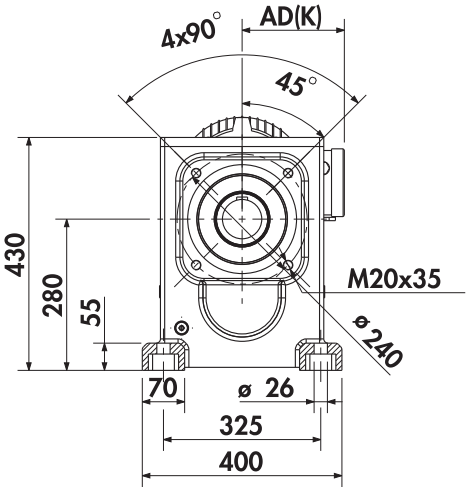
DIN42948	P	N	M	T	B	S
A400	400	300	350	5	73	18

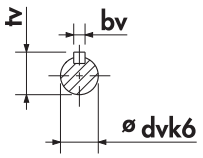
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334	377	415	415	489	533	554	592				
AD	97	105	110	121	121	157	169	190	190	190	246	246	260	260				
LBK	260	280	311	360	385	418	434	492	532	532	611	655	739	777				
ADK	125	137	147	164	164	174	199	183	183	183	246	246	260	260				
AC	125	140	154	170	170	193	216	247	247	247	285	285	323	323				
R	416	416	416	416	416	420	420	432	432	432	441	441	441	441				
LR	536	536	536	536	536	540	540	552	552	552	561	561	561	561				

* Standard

ZG104V...SMB/SMR

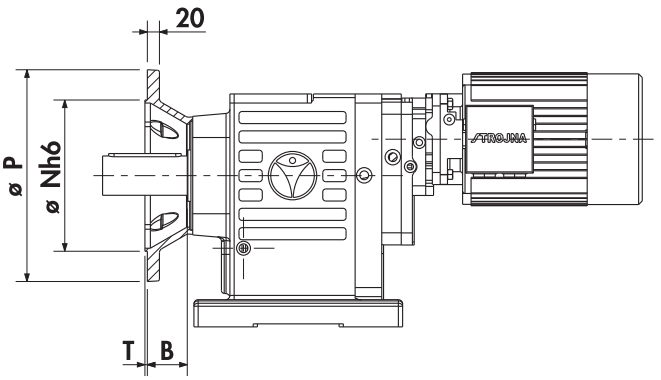


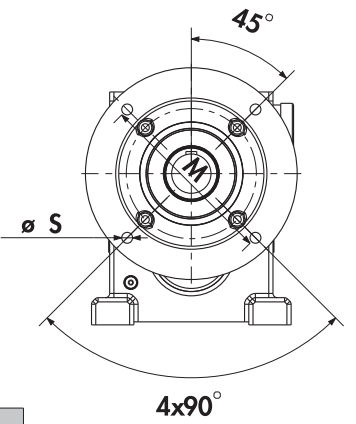




dv	tv	bv	lv	lk	tk	g
*70	74,5	20	120	100	10	M20

ZG104P/V...SMB/SMR



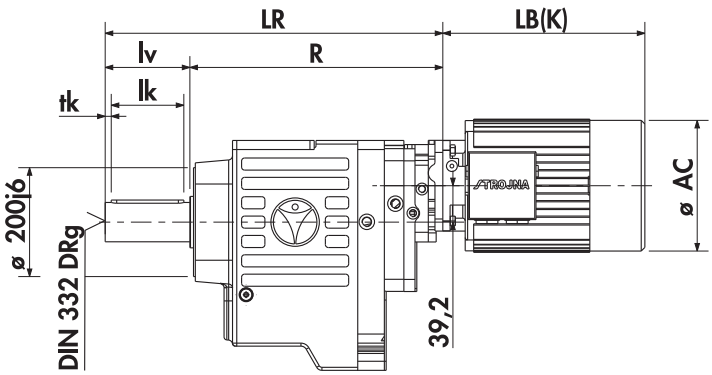


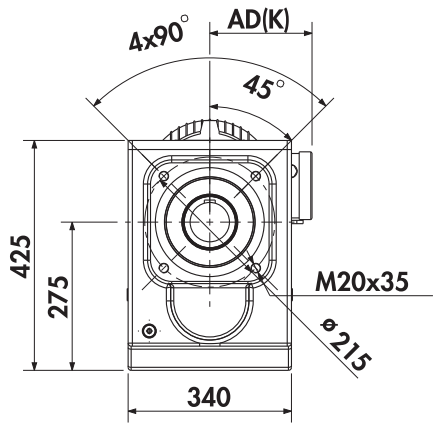
DIN42948	P	N	M	T	B	S
A400	400	300	350	5	73	18

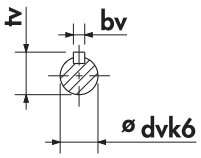
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	458	458	458	458	458	462	462											
LR	578	578	578	578	578	582	582											

* Standard

ZG104FV...SMB/SMR

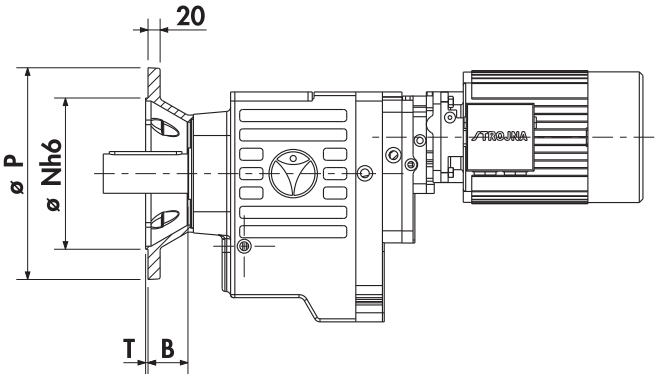


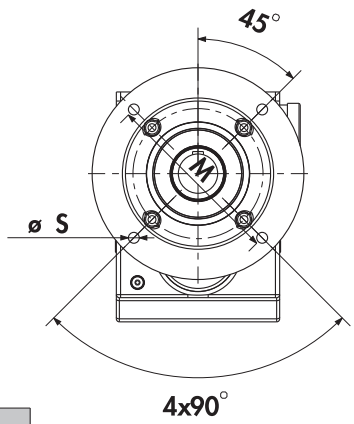




dv	tv	bv	lv	lk	tk	g
*70	74,5	20	120	100	10	M20

ZG104FP/V...SMB/SMR



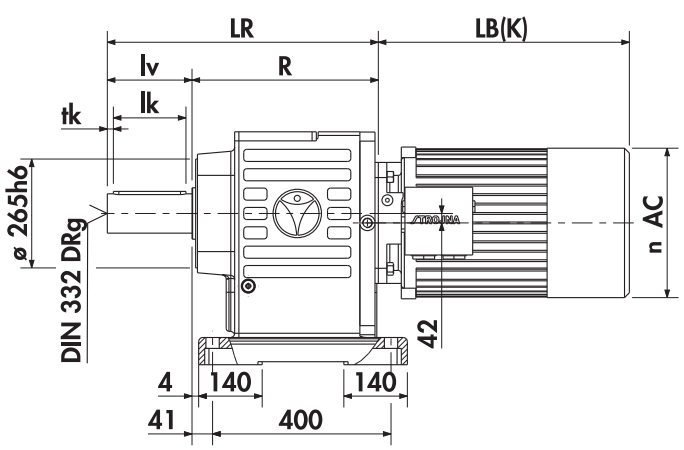


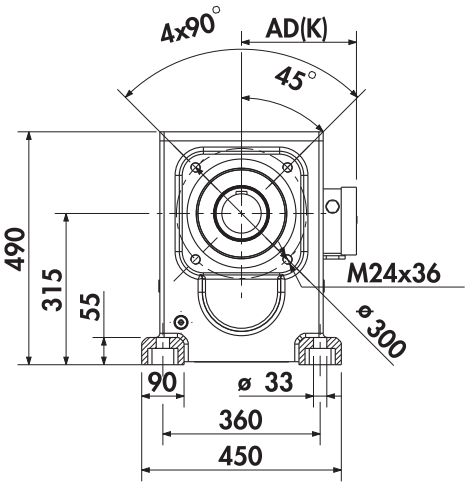
DIN42948	P	N	M	T	B	S
A400	400	300	350	5	73	18

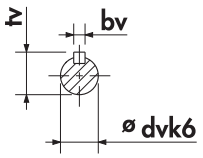
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	458	458	458	458	458	462	462											
LR	578	578	578	578	578	582	582											

* Standard

ZG112V...SMB/SMR

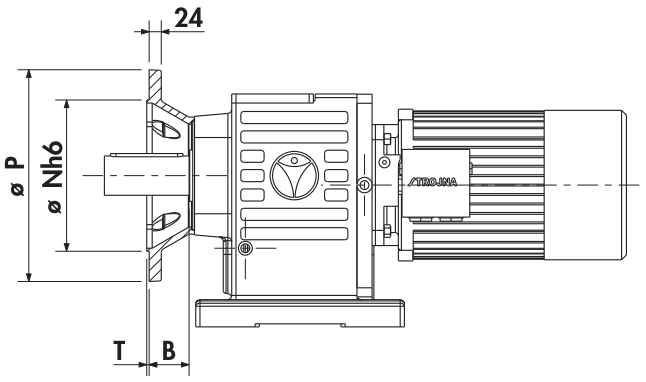


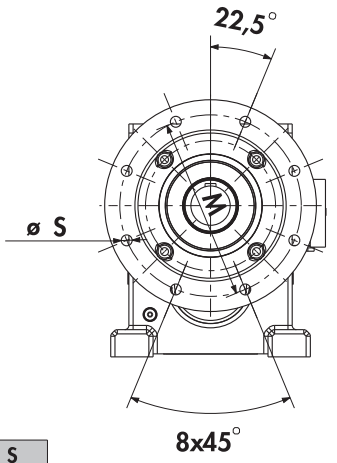




dv	tv	bv	lv	lk	tk	g
*90	95	25	170	160	5	M24

ZG112P/V...SMB/SMR



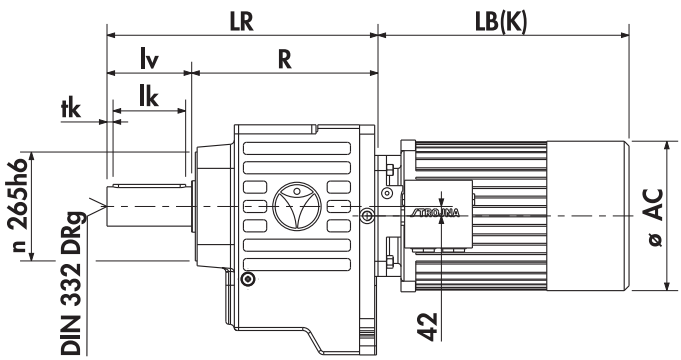


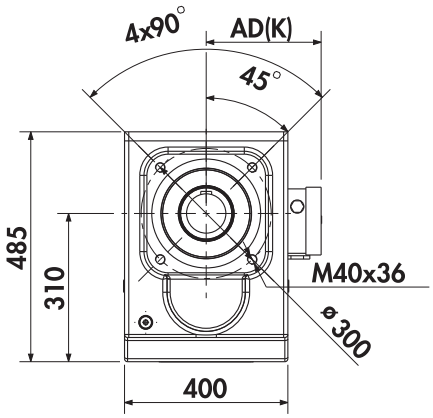
DIN42948	P	N	M	T	B	S
A550	550	450	500	5	71	18

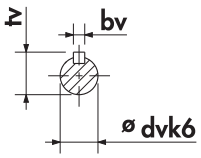
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB								377	415	415	489	533	554	592	658	667	702	778
AD								190	190	190	246	246	260	260	299	337	337	360
LBK								492	532	532	611	655	739	777	828	848	873	968
ADK								183	183	183	246	246	260	260	299	337	337	400
AC								247	247	247	285	285	323	323	369	418	418	471
R								415	415	415	424	424	424	424	429	429	429	441
LR								585	585	585	594	594	594	594	603	603	603	611

* Standard

ZG112FV...SMB/SMR

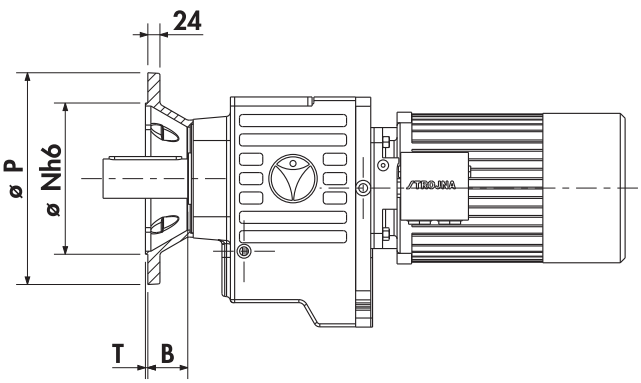


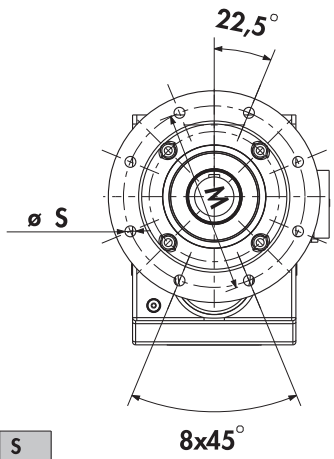




dv	tv	bv	lv	lk	tk	g
*90	95	25	170	160	5	M24

ZG112FP/V...SMB/SMR



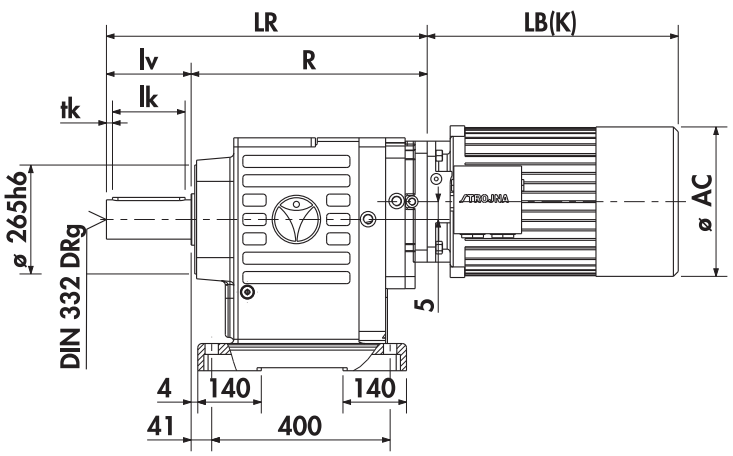


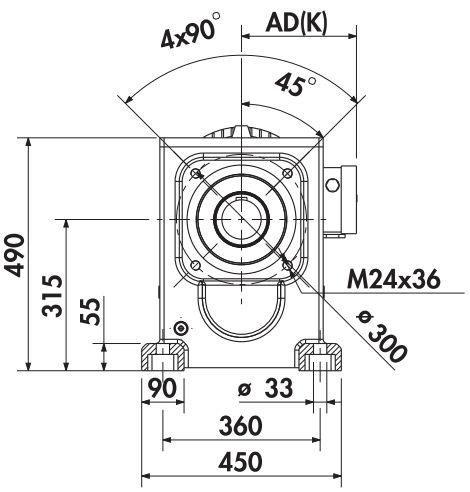
DIN42948	P	N	M	T	B	S
A550	550	450	500	5	71	18

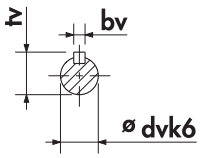
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB								377	415	415	489	533	554	592	658	667	702	778
AD								190	190	190	246	246	260	260	299	337	337	360
LBK								492	532	532	611	655	739	777	828	848	873	968
ADK								183	183	183	246	246	260	260	299	337	337	400
AC								247	247	247	285	285	323	323	369	418	418	471
R								415	415	415	424	424	424	424	429	429	429	441
LR								585	585	585	594	594	594	594	603	603	603	611

* Standard

ZG113V...SMB/SMR

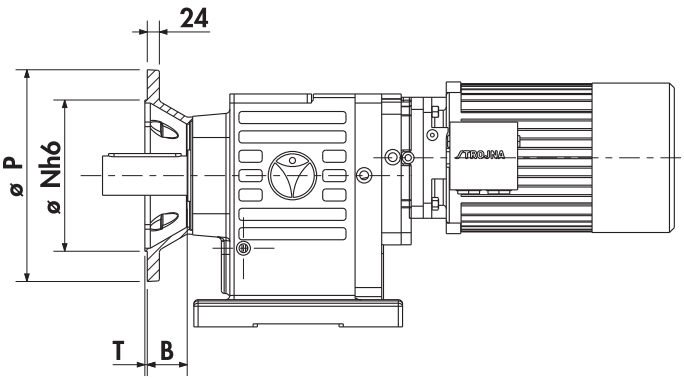


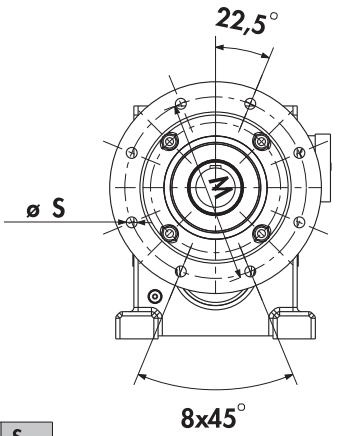




dv	tv	bv	lv	lk	tk	g
*90	95	25	170	160	5	M24

ZG113P/V...SMB/SMR



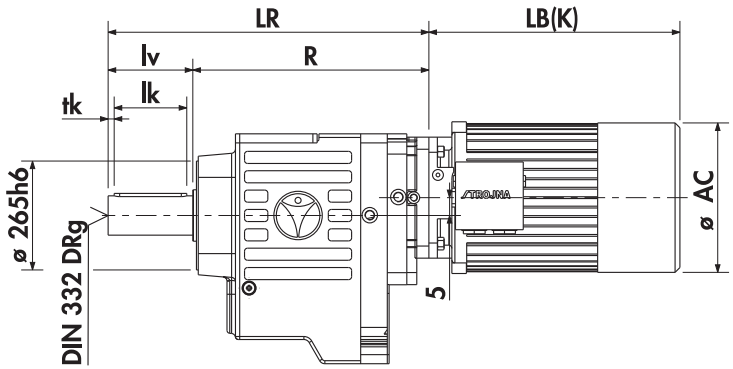


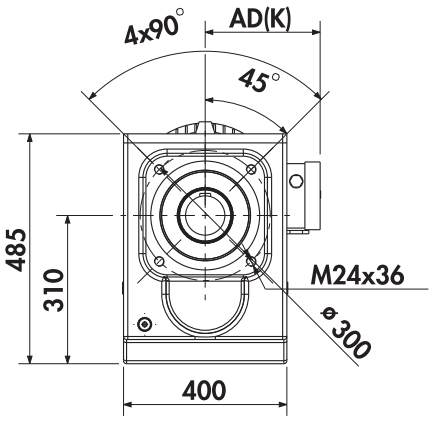
DIN42948	P	N	M	T	B	S
A550	550	450	500	5	71	18

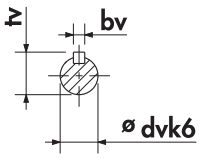
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB						329	334	377	415	415	489	533	554	592				
AD						157	169	190	190	190	246	246	260	260				
LBK						418	434	492	532	532	611	655	739	777				
ADK						174	199	183	183	183	246	246	260	260				
AC						193	216	247	247	247	285	285	323	323				
R						499	499	511	511	511	520	520	520	520				
LR						669	669	681	681	681	690	690	690	690				

* Standard

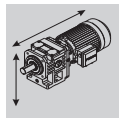
ZG113FV...SMB/SMR



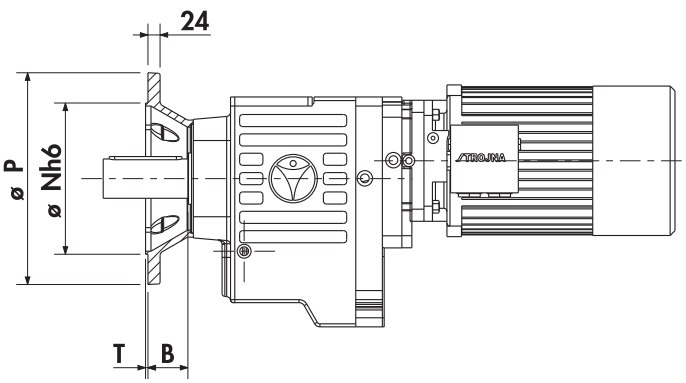


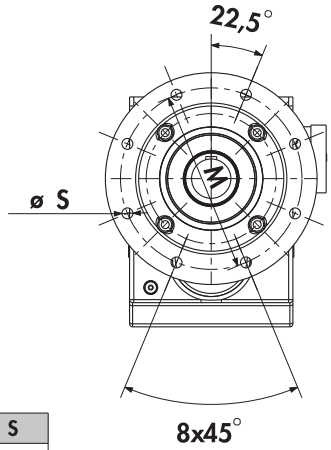


dv	tv	bv	lv	lk	tk	g
*90	95	25	170	160	5	M24



ZG113FP/V...SMB/SMR



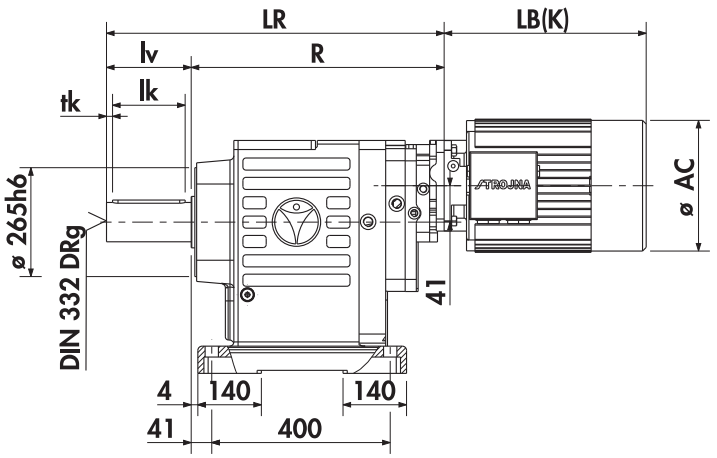


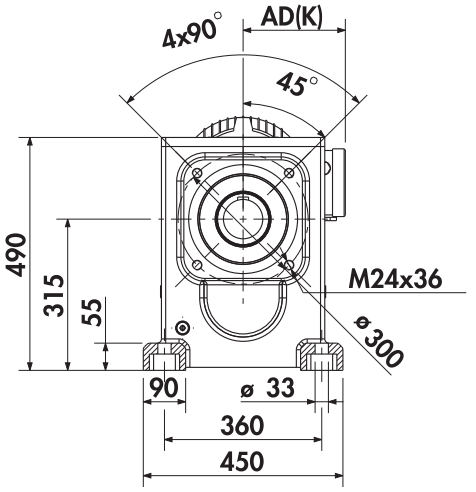
DIN42948	P	N	M	T	B	S
A550	550	450	500	5	71	18

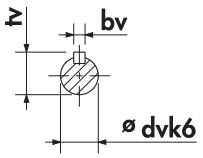
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB						329	334	377	415	415	489	533	554	592				
AD						157	169	190	190	190	246	246	260	260				
LBK						418	434	492	532	532	611	655	739	777				
ADK						174	199	183	183	183	246	246	260	260				
AC						193	216	247	247	247	285	285	323	323				
R						499	499	511	511	511	520	520	520	520				
LR						669	669	681	681	681	690	690	690	690				

* Standard

ZG114V...SMB/SMR

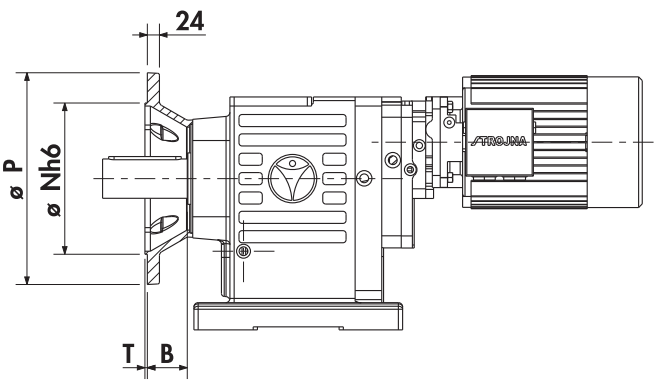


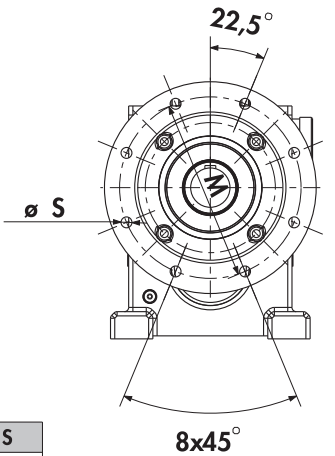




dv	tv	bv	lv	lk	tk	g
*90	95	25	170	160	5	M24

ZG114P/V...SMB/SMR



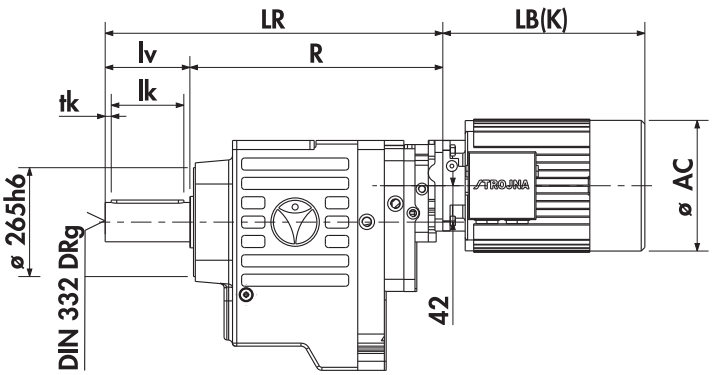


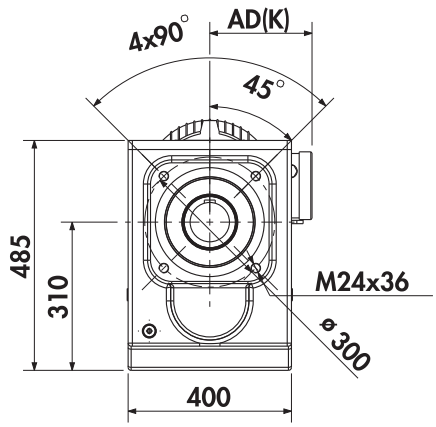
DIN42948	P	N	M	T	B	S
A550	550	450	500	5	71	18

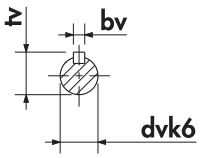
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	543	543	543	543	543	547	547											
LR	713	713	713	713	713	717	717											

* Standard

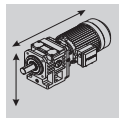
ZG114FV...SMB/SMR



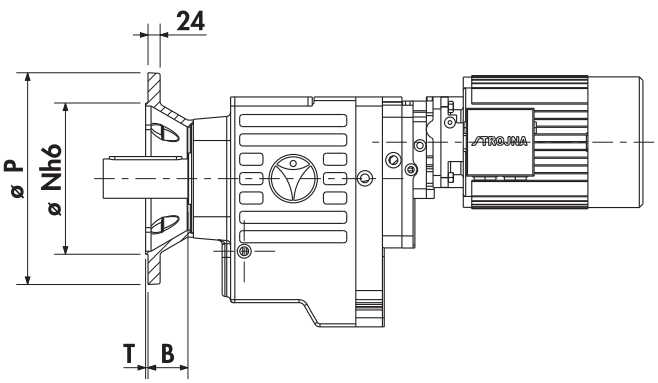


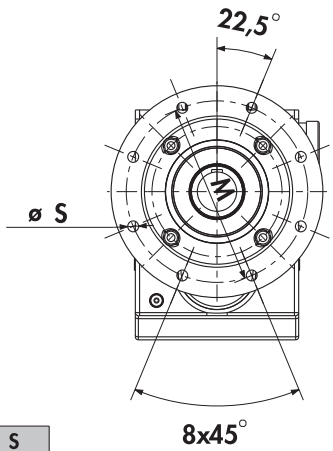


dv	tv	bv	lv	lk	tk	g
*90	95	25	170	160	5	M24



ZG114FP/V...SMB/SMR



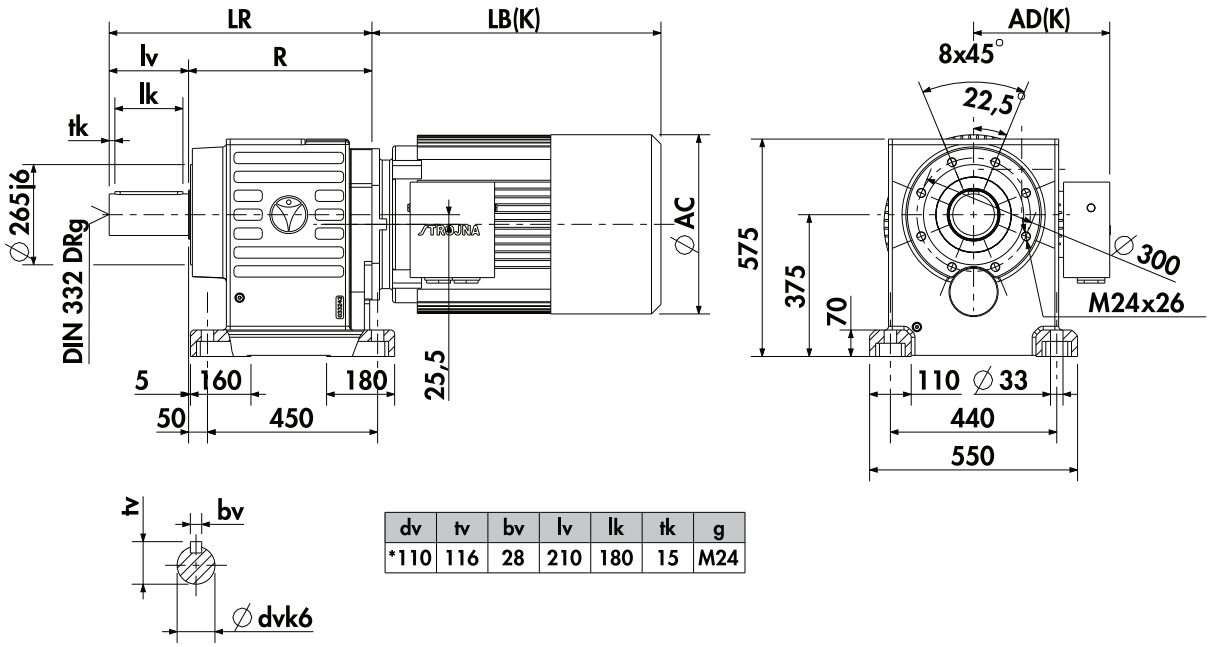


DIN42948	P	N	M	T	B	S
A550	550	450	500	5	71	18

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M
LB	207	223	251	276	301	329	334											
AD	97	105	110	121	121	157	169											
LBK	260	280	311	360	385	418	434											
ADK	125	137	147	164	164	174	199											
AC	125	140	154	170	170	193	216											
R	543	543	543	543	543	547	547											
LR	713	713	713	713	713	717	717											

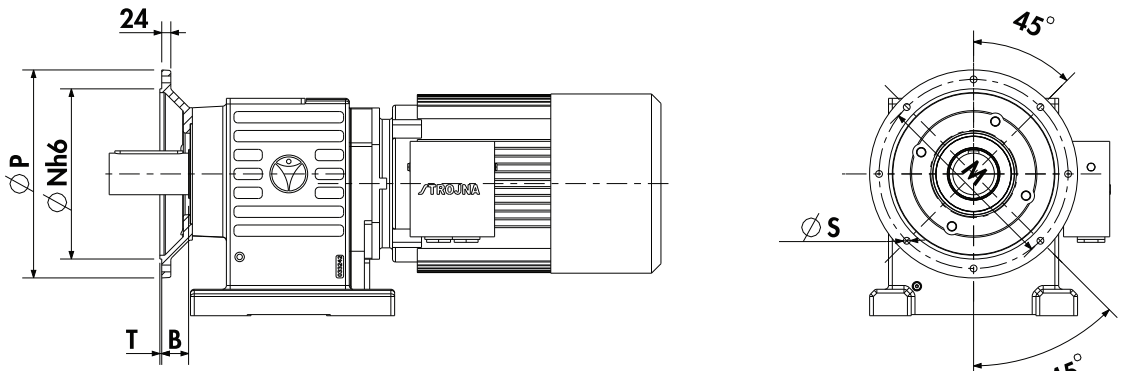
* Standard

ZG122V...SMB/SMR



dv	tv	bv	lv	lk	tk	g
*110	116	28	210	180	15	M24

ZG122P/V...SMB/SMR

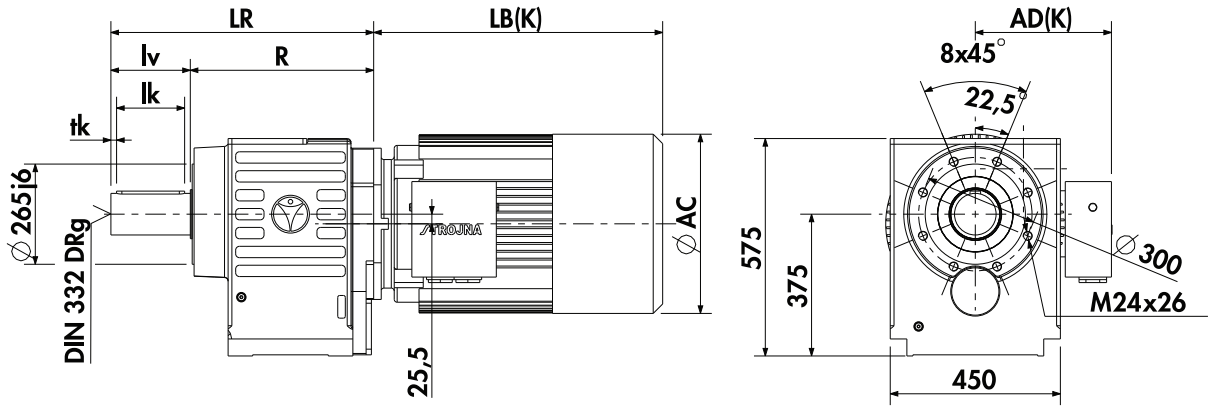


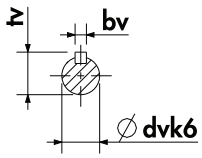
DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB											489	533	554	592	658	667	702	778		
AD											246	246	260	260	299	337	337	360		
LBK											611	655	739	777	828	848	873	968		
ADK											246	246	260	260	299	337	337	400		
AC											285	285	323	323	369	418	418	474		
R											480	480	480	480	480	480	480	485		
LR											690	690	690	690	690	690	690	695		

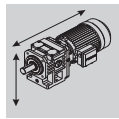
*** Standard**

ZG122FV...SMB/SMR

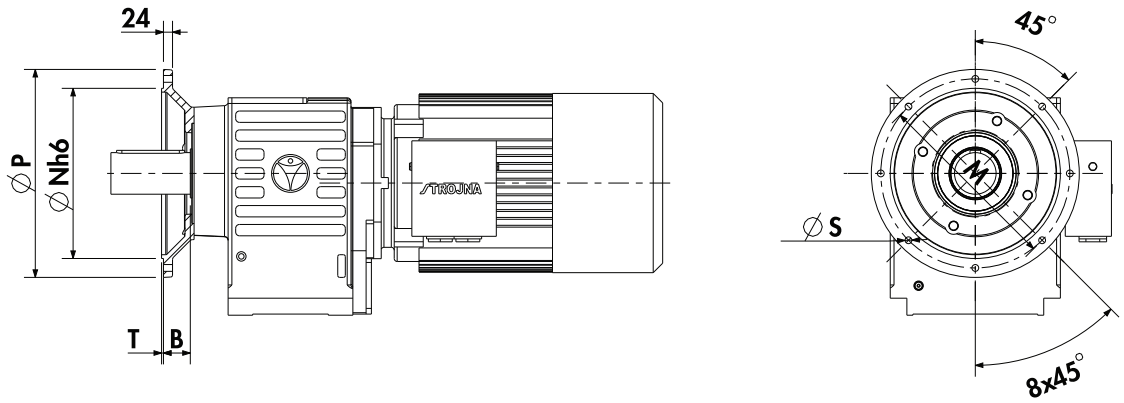




dv	tv	bv	lv	lk	tk	g
*110	116	28	210	180	15	M24



ZG122FP/V...SMB/SMR

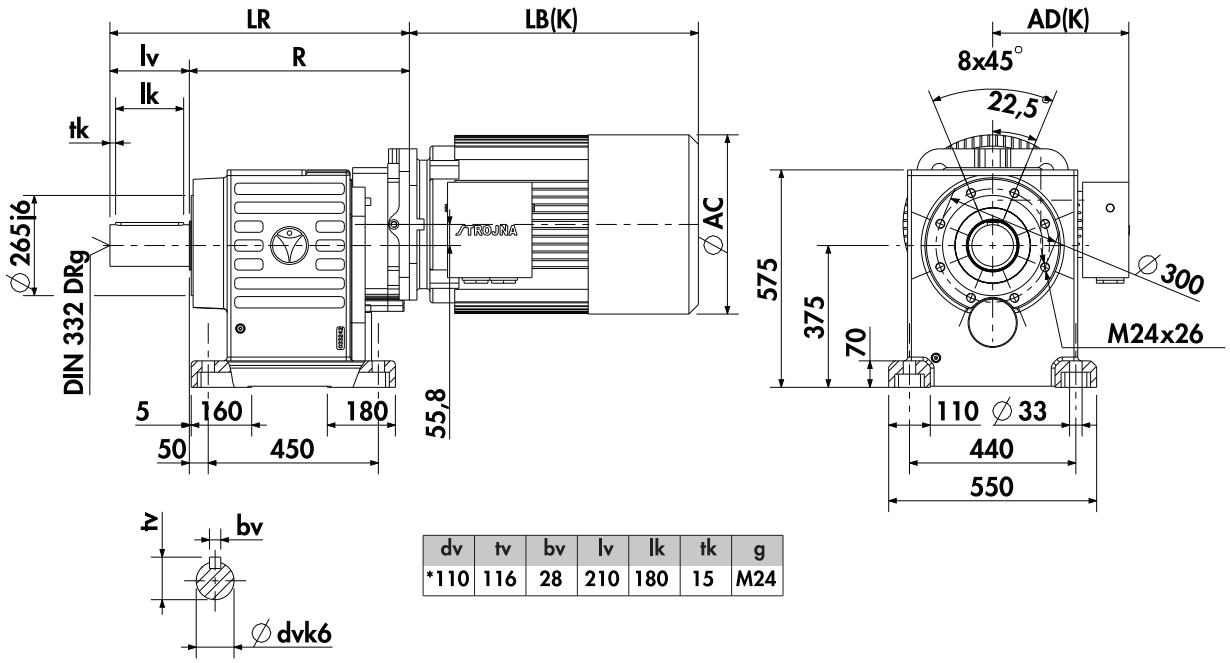


DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB											489	533	554	592	658	667	702	778		
AD											246	246	260	260	299	337	337	360		
LBK											611	655	739	777	828	848	873	968		
ADK											246	246	260	260	299	337	337	400		
AC											285	285	323	323	369	418	418	474		
R											480	480	480	480	480	480	480	485		
LR											690	690	690	690	690	690	690	695		

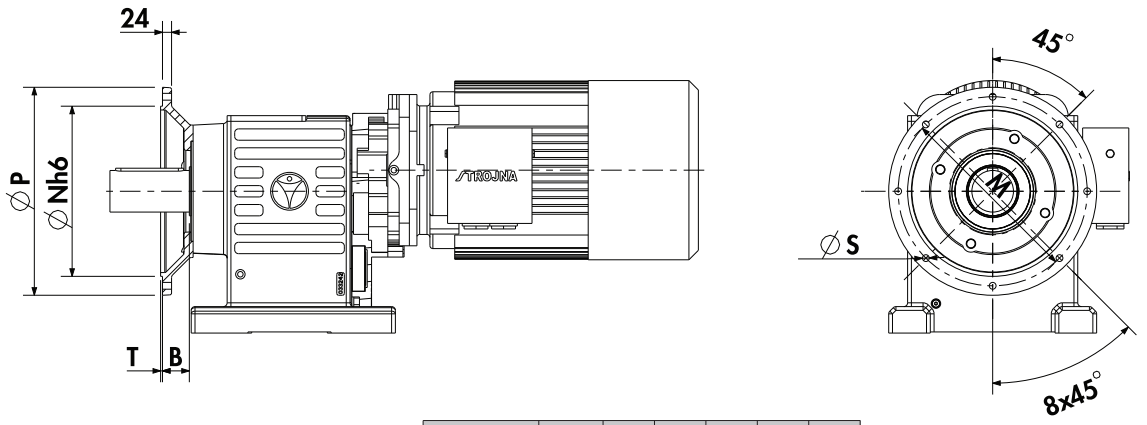
*** Standard**

ZG123V...SMB/SMR



dv	tv	bv	lv	lk	tk	g
*110	116	28	210	180	15	M24

ZG123P/V...SMB/SMR

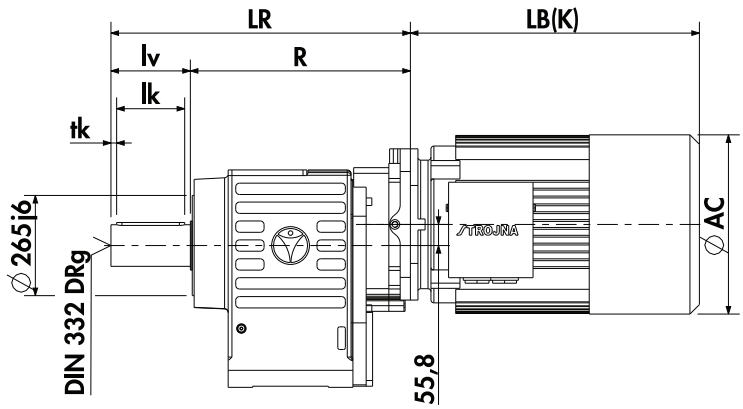


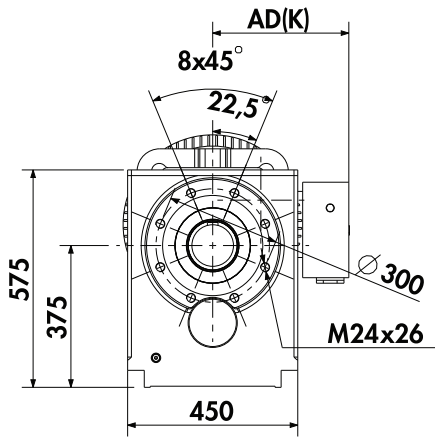
DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

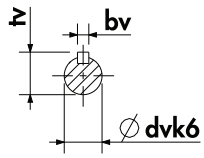
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB								377	415	415	489	533	554	592	658	667	702	778		
AD								190	190	190	246	246	260	260	299	337	337	360		
LBK								492	532	532	611	655	739	777	828	848	873	968		
ADK								183	183	183	246	246	260	260	299	337	337	400		
AC								247	247	247	285	285	323	323	369	418	418	474		
R								556	556	556	567	567	567	567	580	580	580	582		
LR								766	766	766	775	775	775	775	790	790	790	792		

*** Standard**

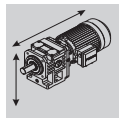
ZG123FV...SMB/SMR



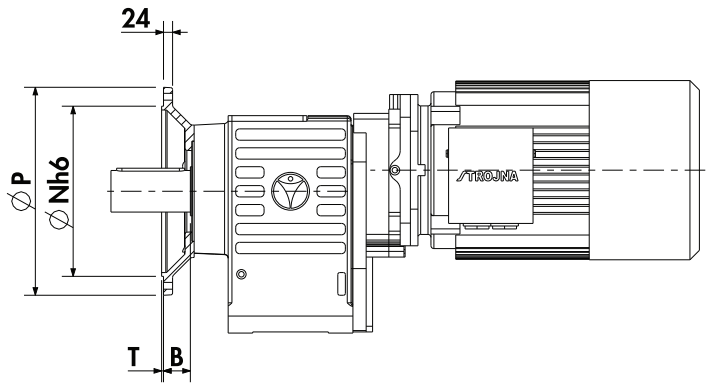


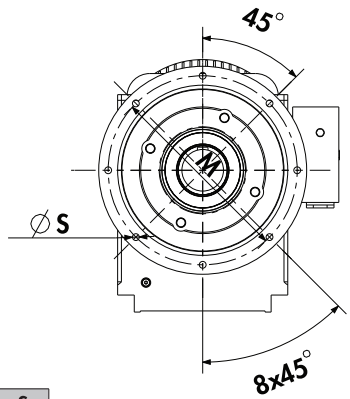


dv	tv	bv	lv	lk	tk	g
*110	116	28	210	180	15	M24



ZG123FP/V...SMB/SMR



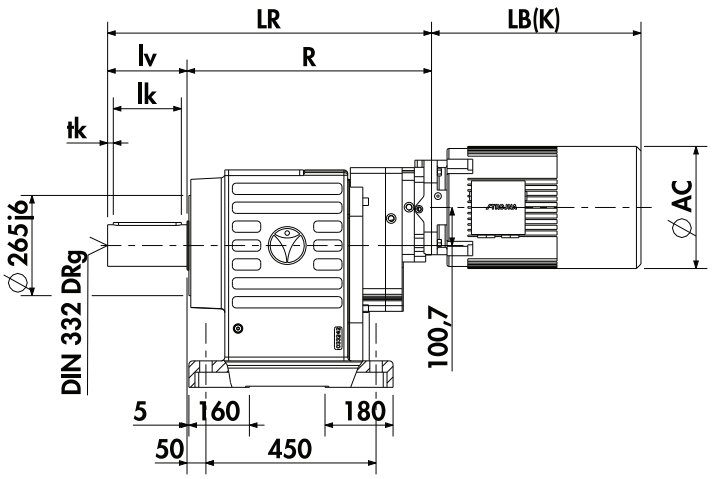


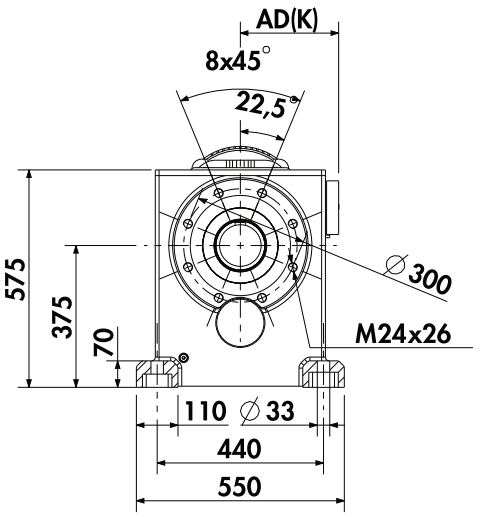
DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

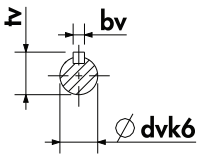
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB								377	415	415	489	533	554	592	658	667	702	778		
AD								190	190	190	246	246	260	260	299	337	337	360		
LBK								492	532	532	611	655	739	777	828	848	873	968		
ADK								183	183	183	246	246	260	260	299	337	337	400		
AC								247	247	247	285	285	323	323	369	418	418	474		
R								556	556	556	567	567	567	567	580	580	580	582		
LR								766	766	766	775	775	775	775	790	790	790	792		

* Standard

ZG124V...SMB/SMR

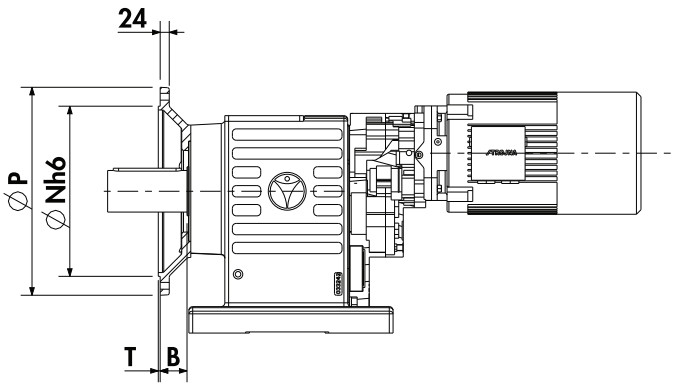


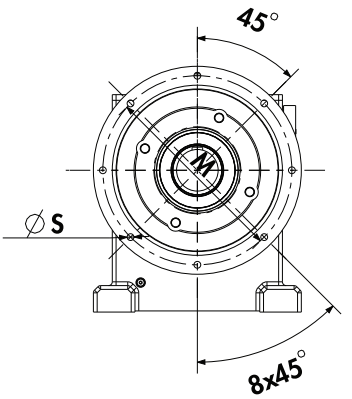




dv	tv	bv	lv	lk	tk	g
*110	116	28	210	180	15	M24

ZG124P/V...SMB/SMR



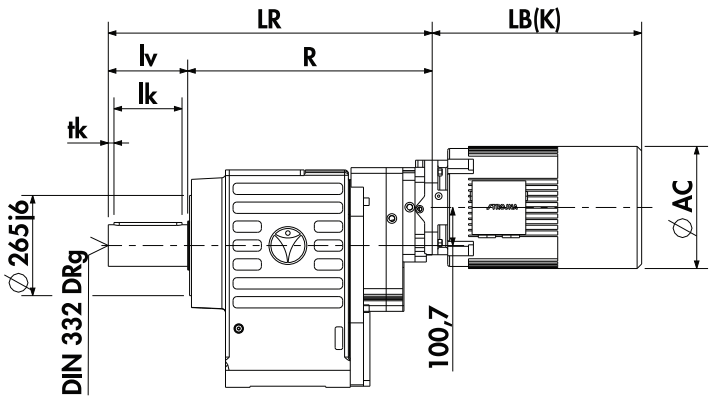


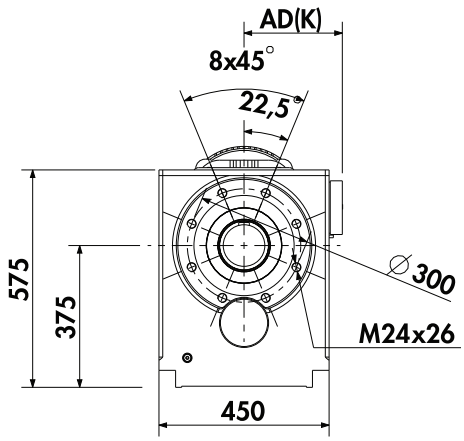
DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

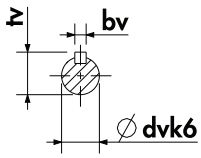
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB				276	301	329	334	377	415	415	489	533	554	592						
AD				121	121	157	169	190	190	190	246	246	260	260						
LBK				360	385	418	434	492	532	532	611	655	739	777						
ADK				164	164	174	199	183	183	183	246	246	260	260						
AC				170	170	193	216	247	247	247	285	285	323	323						
R				621	621	625	625	638	638	638	647	647	647	647						
LR				831	831	835	835	848	848	848	857	857	857	857						

*** Standard**

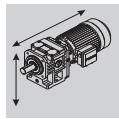
ZG124FV...SMB/SMR



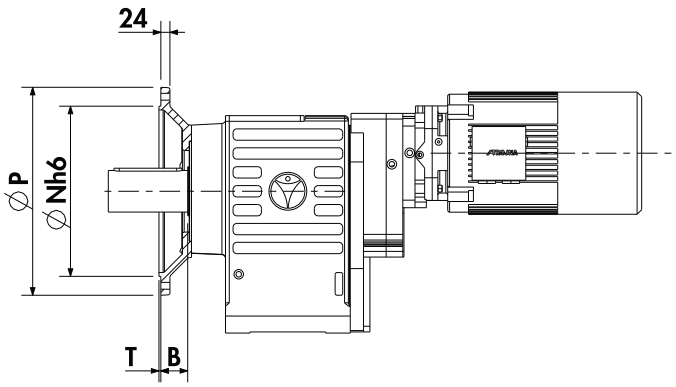


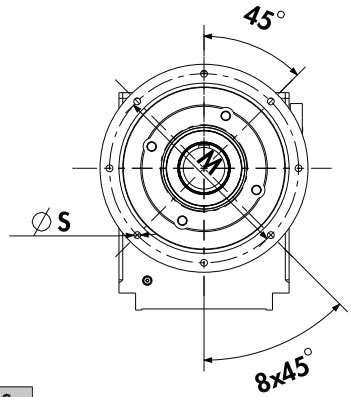


dv	tv	bv	lv	lk	tk	g
*110	116	28	210	180	15	M24



ZG124FP/V...SMB/SMR



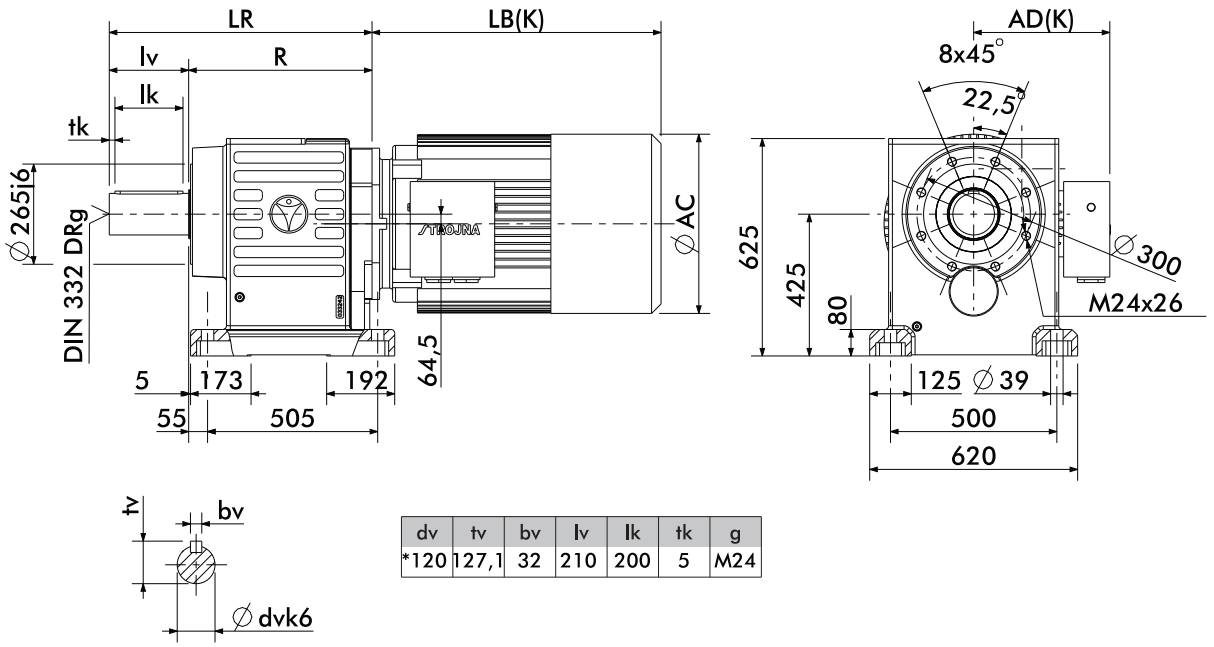


DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB				276	301	329	334	377	415	415	489	533	554	592						
AD				121	121	157	169	190	190	190	246	246	260	260						
LBK				360	385	418	434	492	532	532	611	655	739	777						
ADK				164	164	174	199	183	183	183	246	246	260	260						
AC				170	170	193	216	247	247	247	285	285	323	323						
R				621	621	625	625	638	638	638	647	647	647	647						
LR				831	831	835	835	848	848	848	857	857	857	857						

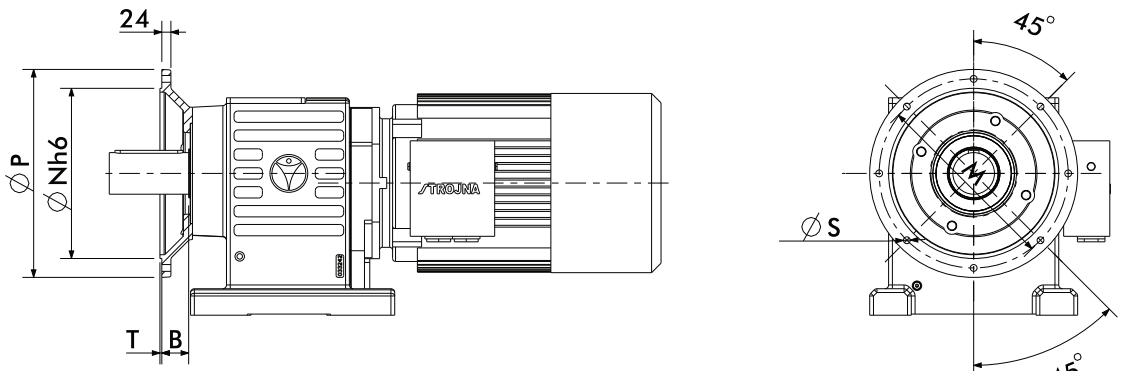
* Standard

ZG132V...SMB/SMR



dv	tv	bv	lv	lk	tk	g
*120	127,1	32	210	200	5	M24

ZG132P/V...SMB/SMR

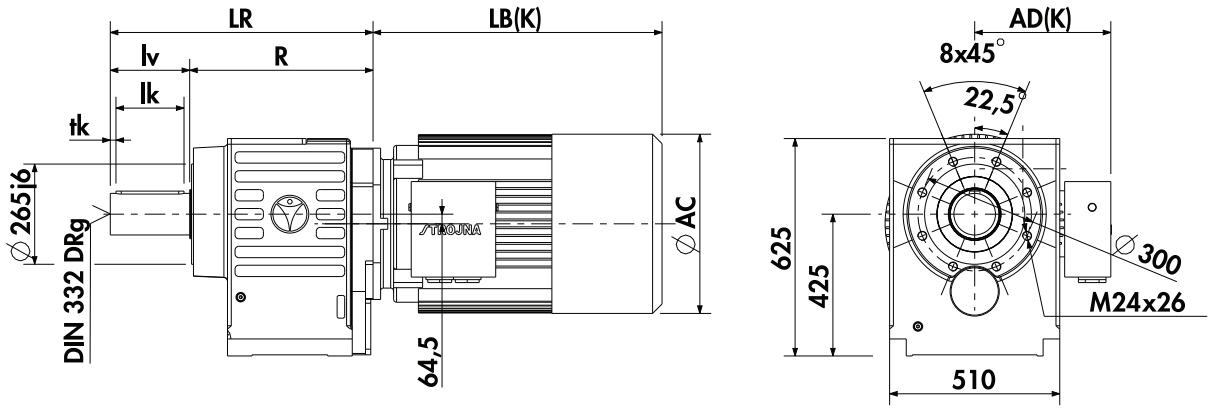


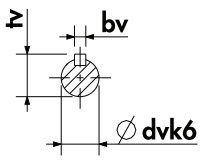
DIN42948	P	N	M	T	B	S
A550	550	450	500	5	71	18

SMB/SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB											489	533	554	592	658	667	702	778		
AD											246	246	260	260	299	337	337	360		
LBK											611	655	739	777	828	848	873	968		
ADK											246	246	260	260	299	337	337	400		
AC											285	285	323	323	369	418	418	474		
R											544	544	544	544	544	544	544	549		
LR											754	754	754	754	754	754	754	759		

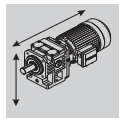
* Standard

ZG132FV...SMB/SMR

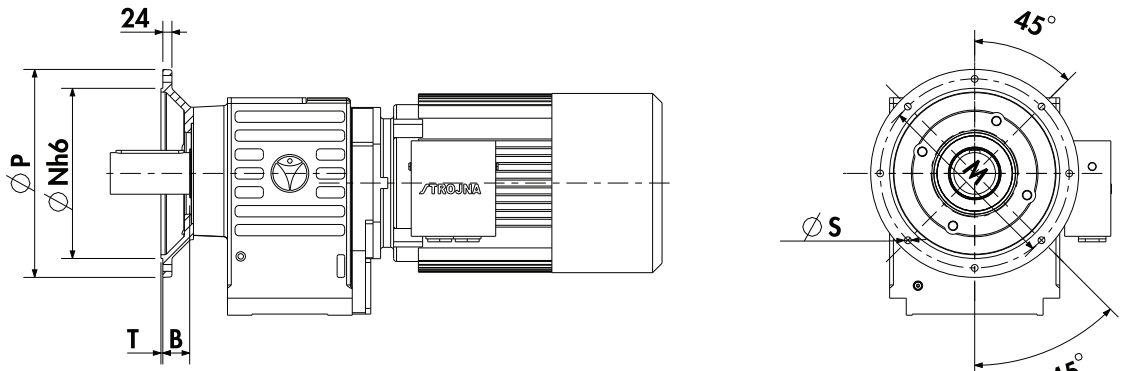




dv	tv	bv	lv	lk	tk	g
*120	127,1	32	210	200	5	M24



ZG132FP/V...SMB/SMR

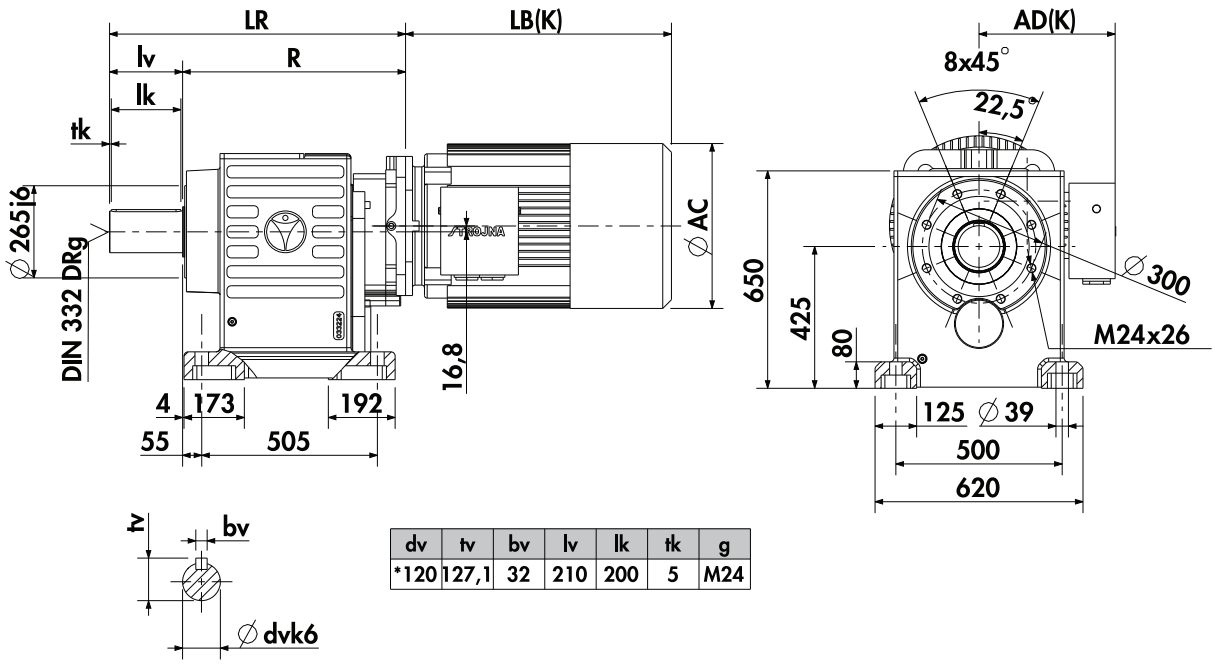


DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB											489	533	554	592	658	667	702	778		
AD											246	246	260	260	299	337	337	360		
LBK											611	655	739	777	828	848	873	968		
ADK											246	246	260	260	299	337	337	400		
AC											285	285	323	323	369	418	418	474		
R											544	544	544	544	544	544	544	549		
LR											754	754	754	754	754	754	754	759		

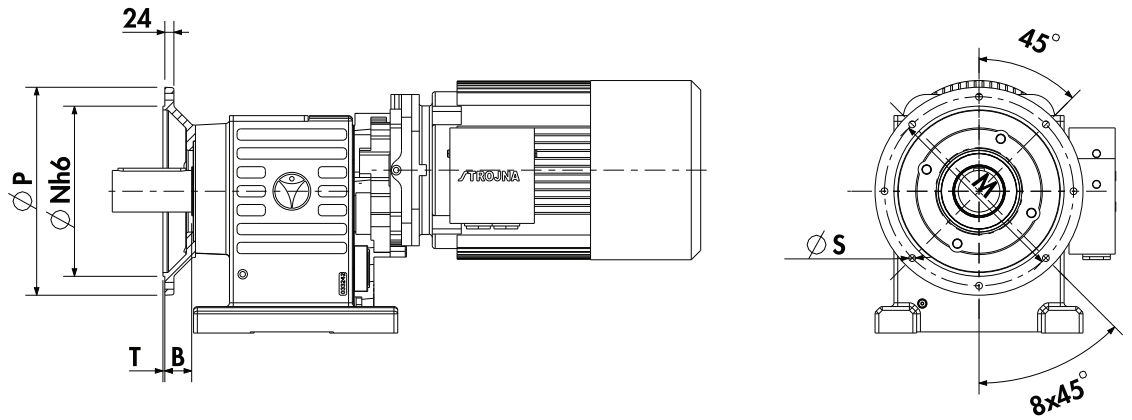
* Standard

ZG133V...SMB/SMR



dv	tv	bv	lv	lk	tk	g
*120	127,1	32	210	200	5	M24

ZG133P/V...SMB/SMR

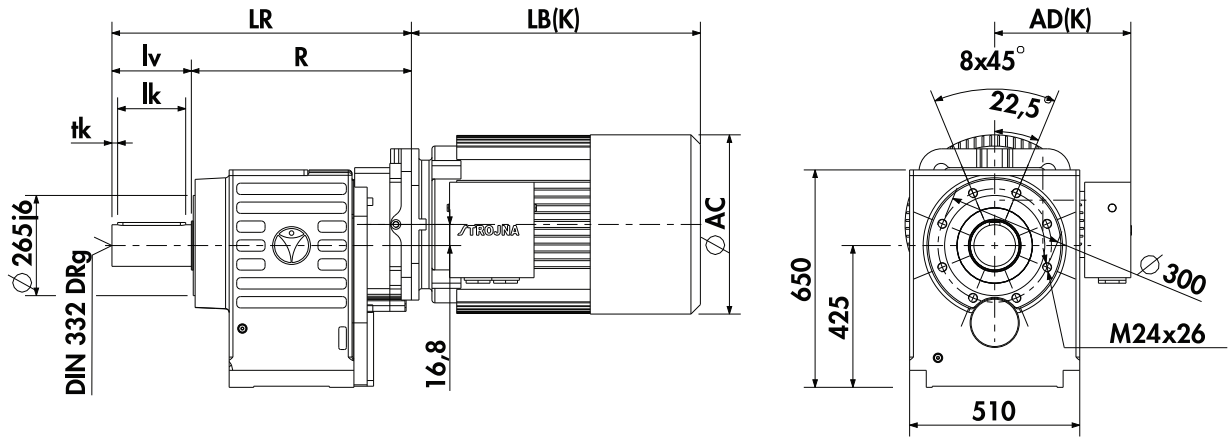


DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

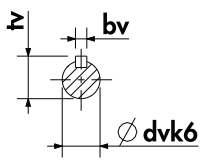
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB								377	415	415	489	533	554	592	658	667	702	778		
AD								190	190	190	246	246	260	260	299	337	337	360		
LBK								492	532	532	611	655	739	777	828	848	873	968		
ADK								183	183	183	246	246	260	260	299	337	337	400		
AC								247	247	247	285	285	323	323	369	418	418	474		
R								617	617	617	626	626	626	626	641	641	641	643		
LR								827	827	827	836	836	836	836	851	851	851	853		

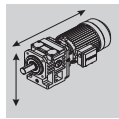
* Standard

ZG133FV...SMB/SMR

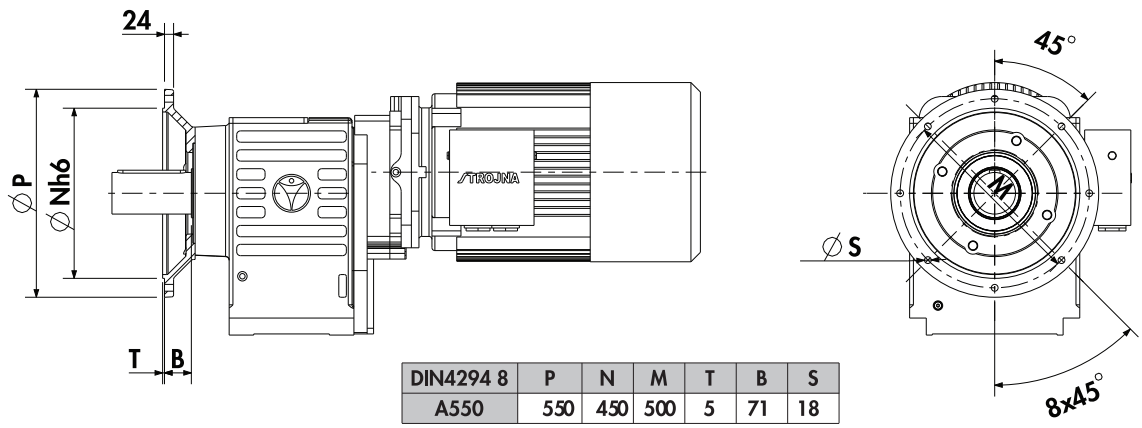


dv	tv	bv	lv	lk	tk	g
*120	127,1	32	210	200	5	M24





ZG133FP/V...SMB/SMR

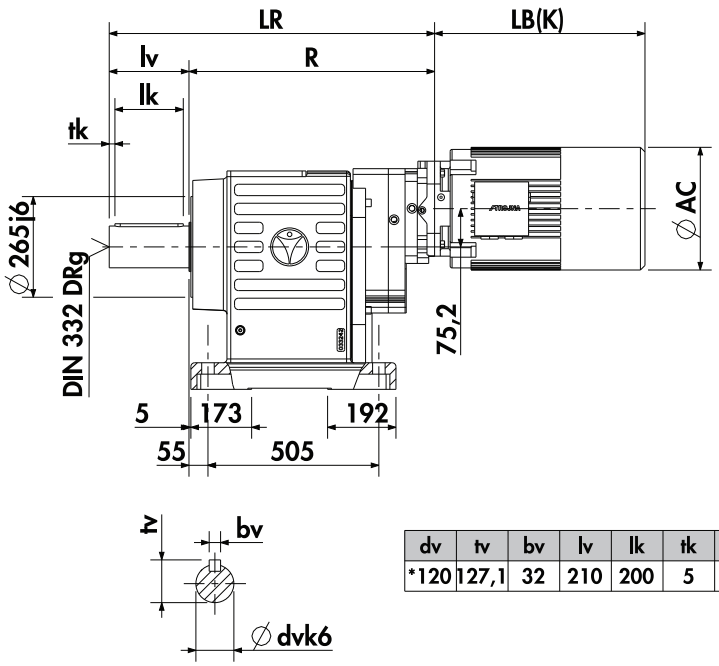


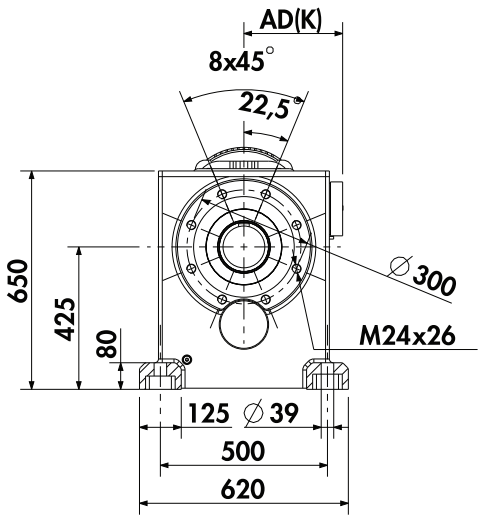
DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB								377	415	415	489	533	554	592	658	667	702	778		
AD								190	190	190	246	246	260	260	299	337	337	360		
LBK								492	532	532	611	655	739	777	828	848	873	968		
ADK								183	183	183	246	246	260	260	299	337	337	400		
AC								247	247	247	285	285	323	323	369	418	418	474		
R								617	617	617	626	626	626	626	641	641	641	643		
LR								827	827	827	836	836	836	836	851	851	851	853		

*** Standard**

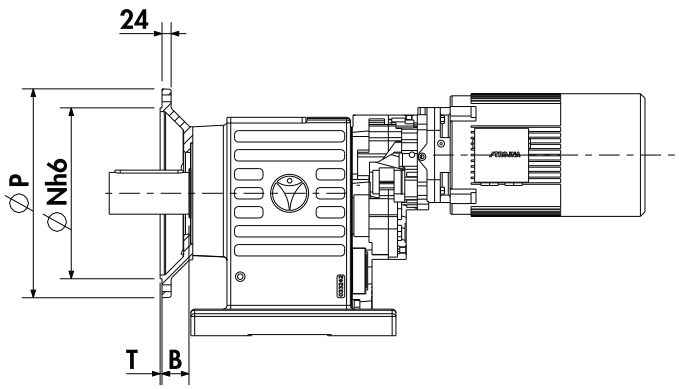
ZG134V...SMB/SMR

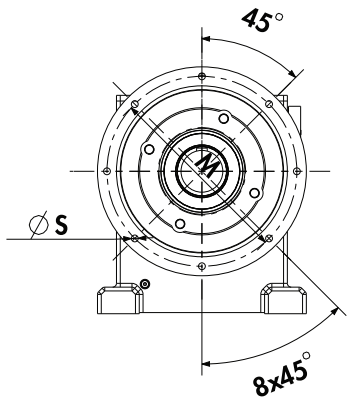




dv	tv	bv	lv	lk	tk	g
*120	127,1	32	210	200	5	M24

ZG134P/V...SMB/SMR



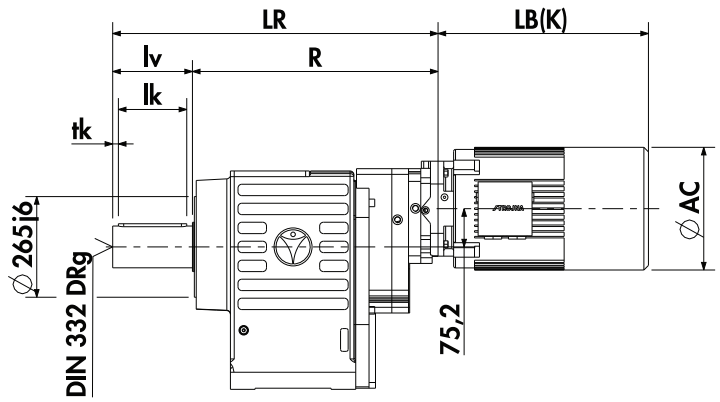


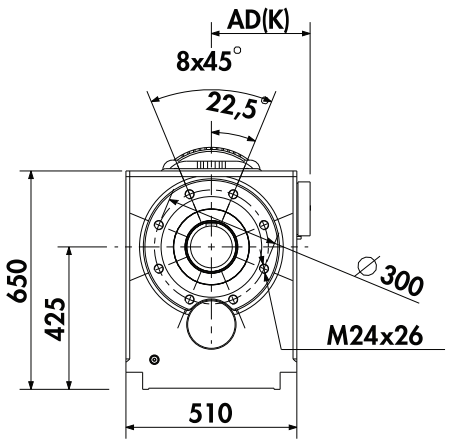
DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

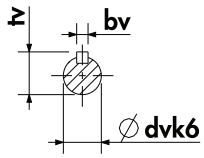
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB				276	301	329	334	377	415	415	489	533	554	592						
AD				121	121	157	169	190	190	190	246	246	260	260						
LBK				360	385	418	434	492	532	532	611	655	739	777						
ADK				164	164	174	199	183	183	183	246	246	260	260						
AC				170	170	193	216	247	247	247	285	285	323	323						
R				679	679	683	683	696	696	696	705	705	705	705						
LR				889	889	893	893	906	906	906	915	915	915	915						

* Standard

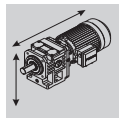
ZG134FV...SMB/SMR



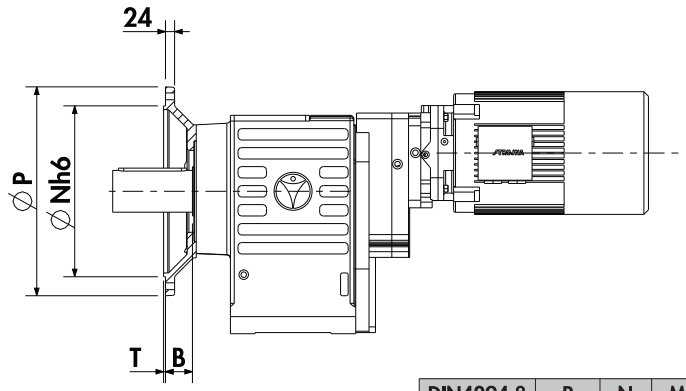


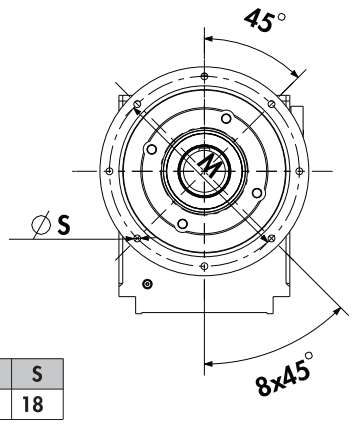


dv	tv	bv	lv	lk	tk	g
*120	127,1	32	210	200	5	M24



ZG134FP/V...SMB/SMR



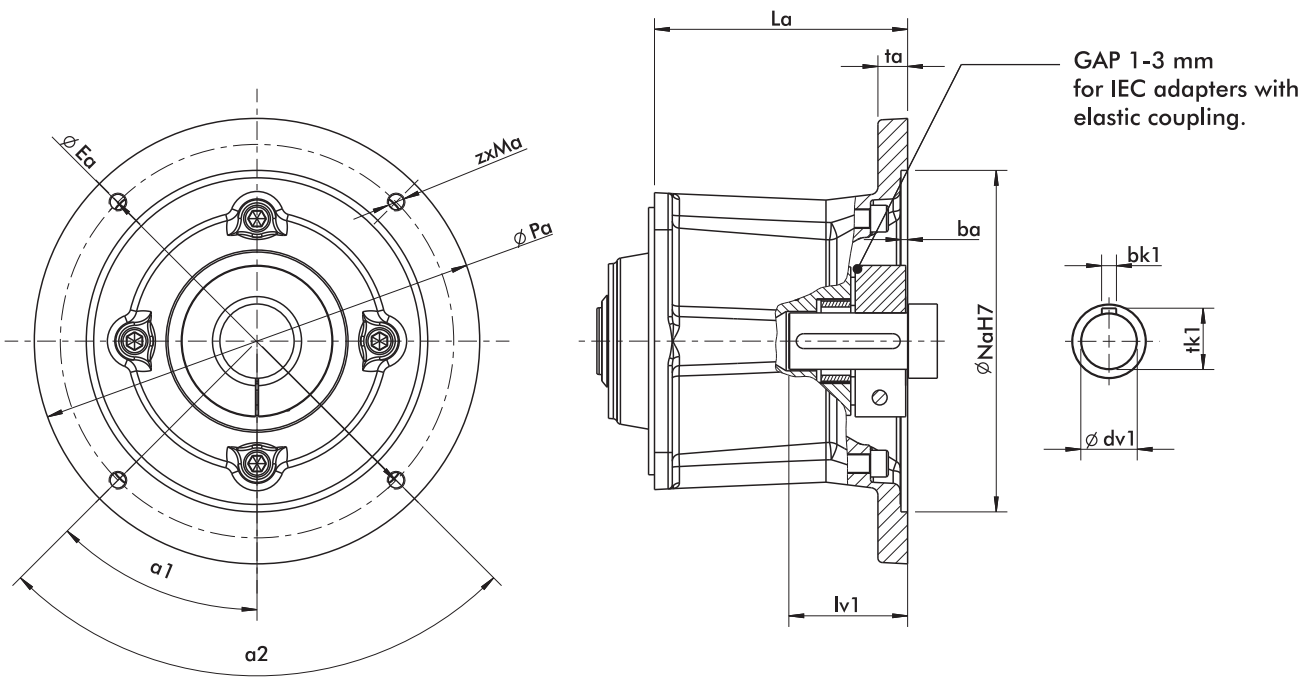


DIN4294 8	P	N	M	T	B	S
A550	550	450	500	5	71	18

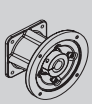
SMB/ SMR	63	71	80	90S	90L	100	112M	132S	132M	132Ma	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
LB				276	301	329	334	377	415	415	489	533	554	592						
AD				121	121	157	169	190	190	190	246	246	260	260						
LBK				360	385	418	434	492	532	532	611	655	739	777						
ADK				164	164	174	199	183	183	183	246	246	260	260						
AC				170	170	193	216	247	247	247	285	285	323	323						
R				679	679	683	683	696	696	696	705	705	705	705						
LR				889	889	893	893	906	906	906	915	915	915	915						

* Standard

Dimensions - IEC adapter



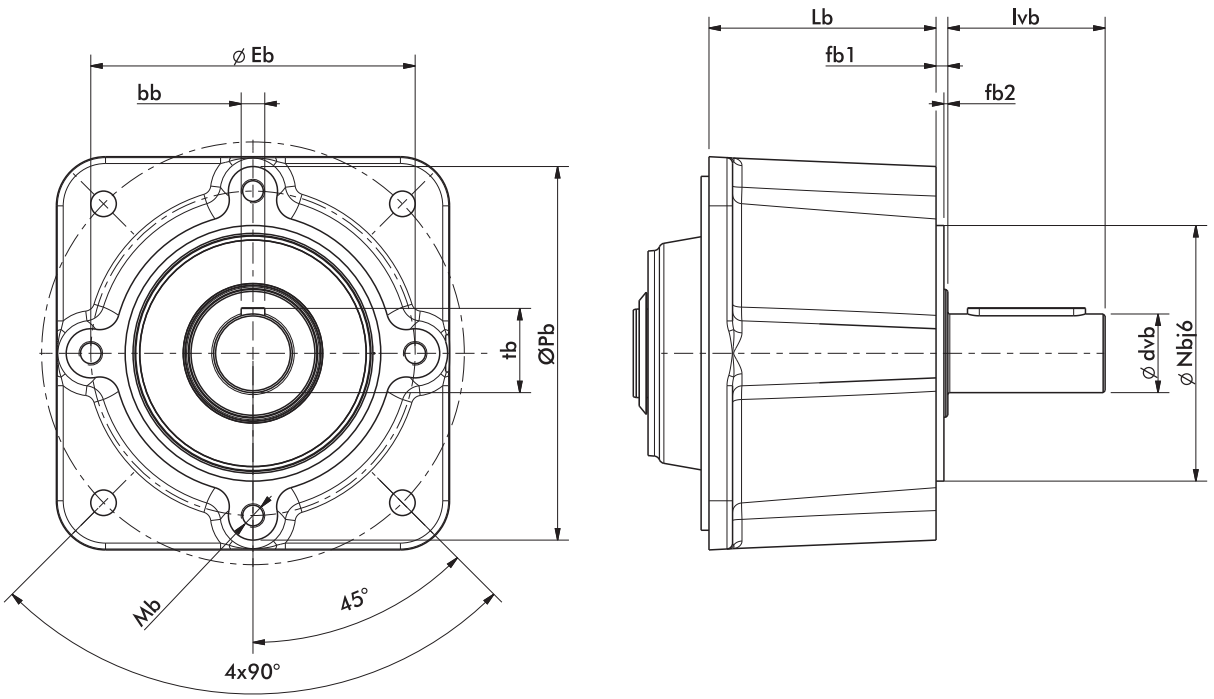
IEC-B5	Pa	Na	ba	Ea	zxMa	a1	a2	La	ta	dv1	lv1	tk1	bk1	m (kg)
A63	140	95	3,5	115	4xM8	45°	90°	68	10	11j6	23	12,5	4	3
A71	160	110	4	130	4xM8	45°	90°	68	10	14j6	30	16	5	3
A80	200	130	4	165	4xM10	45°	90°	96	14	19j6	40	21,5	6	6
A90	200	130	4	165	4xM10	45°	90°	96	14	24j6	50	27	8	6
A100	250	180	4,5	215	4xM12	45°	90°	113	18	28j6	60	31	8	13
A112	250	180	4,5	215	4xM12	45°	90°	113	18	28j6	60	31	8	13
A132	300	230	4,5	265	4xM12	45°	90°	170,5	20	38k6	80	41	10	26
A160	350	250	4,5	300	4xM16	45°	90°	233	20	42k6	110	45	12	52
A180	350	250	5,5	300	4xM16	45°	90°	233	20	48k6	110	51,5	14	52
A200	400	300	6	350	4xM16	45°	90°	239	24	55m6	110	59	14	75
A225	450	350	6	400	8xM16	22,5°	45°	239	24	60m6	140	64	18	80
A250	550	450	6	500	8xM16	22,5°	45°	245	24	65m6	140	69	18	140
A280	550	450	6	500	8xM16	22,5°	45°	245	24	65m6	140	69	18	160
A315	660	550	7	600	8xM20	22,5°	45°	381	26	80m6	170	85,4	22	250



IEC-B14	Pa	Na	ba	Ea	zxMa	a1	a2	La	ta	dv1	lv1	tk1	bk1	m (kg)
A63	120	80	3,5	100	4xØ 7	45°	90°	68	8	11j6	23	12,5	4	2,5
A71	140	95	3,5	115	4xØ 9	45°	90°	68	10	14j6	30	16	5	3
A80	160	110	4	130	4xØ 9	45°	90°	96	14	19j6	40	21,5	6	5
A90	160	110	4	130	4xØ 9	45°	90°	96	14	24j6	50	27	8	5
A100	200	130	4	165	4xØ 11	45°	90°	113	18	28j6	60	31	8	11
A112	200	130	4	165	4x Ø 11	45°	90°	113	18	28j6	60	31	8	11
A132	250	180	4,5	215	4XØ13	45°	90°	140	20	38j6	80	41	10	23

IEC adapters are delivered by standard without elastic coupling with direct mounting.
For IEC adapter with elastic coupling please specify request in order.
NOTICE: Please check with Stroina on using 2-pole IEC motors

Dimensions Input shaft



Input shaft													
Type		Lb	lvb	fb1	fb2	dvb	tb	bb	Nb	Eb	Mb	Pb	m (kg)
B1	(63-71)	48,5	40	5	2	20j6	22,5	6	55	68	M6X10	80	2,5
B2	(80-90)	61	50	5	2	25j6	28	8	80	100	M8X14	116	4
B3	(100-112)	78	60	5	2	30k6	33	8	110	130	M10X17	150	8
B4	(132)	116	80	6	2	40k6	43	12	130	165	M12x20	190	17
B5	(160-180)	158	110	6	2	60m6	64	18	180	215	M16X24	245	38
B6	(200-225)	156	120	9	4	70m6	74,5	20	200	240	M20X35	280	60
B7	(250-280)	164	140	9	4	80m6	85	22	265	300	M24x36	350	110
B8	(315)	177	170	10	5	90m6	95	25	300	350	M24x36	450	200

Intruduction on IEC motors:

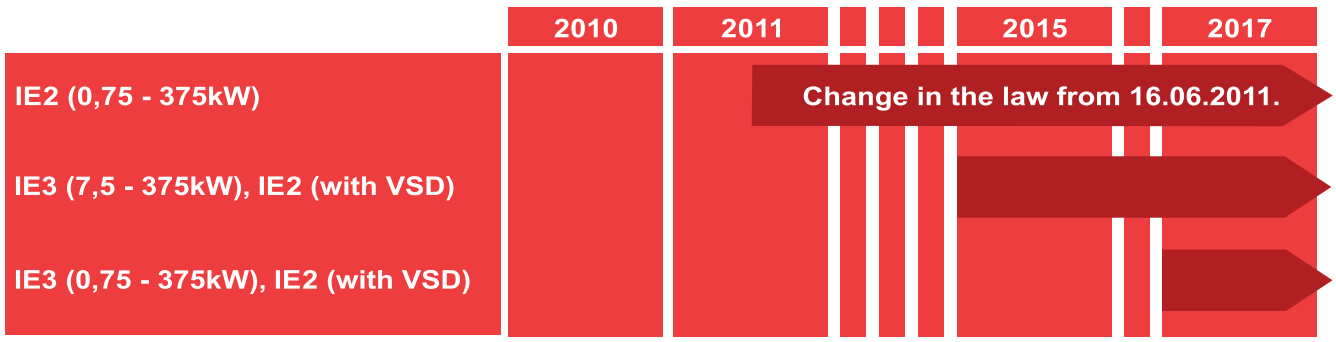
New efficiency classes for the low-voltage three-phase motors (IE = International Efficiency)

Along with the international discussion on the energy efficiency a worldwide harmonized energy efficiency classification system has been established for low-voltage three-phase asynchronous motors.
For many years low-voltage three-phase motors in the European Union have been sold in three efficiency classes EFF3, EFF2 and EFF1. Aside from this, many different efficiency classification systems have been introduced and well-proven in many countries all over the world.

This was the reason for the International Electrotehnical Commission IEC to develop and publish an energy efficiency standard which replaces all previous national issues. In parallel IEC developed and issued a new standard for determining motor efficiency. The new standard IEC 60034-30 defines and harmonizes worldwide the efficiency classes IE1, IE2 and IE3 for low-voltage three--phase motors in the power range from 0.75 kW to 375 kW (2p=2, 4, 6):

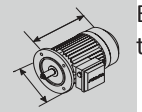
IE1 = Standard Efficiency
IE2 = High Efficiency
IE3 = Premium Efficiency

From now motors can be offered and sold with the new classes IE1, IE2 and IE3.
In that case the efficiency has to be determined according to the new requirements given in the IEC 60034-2-1 standard.

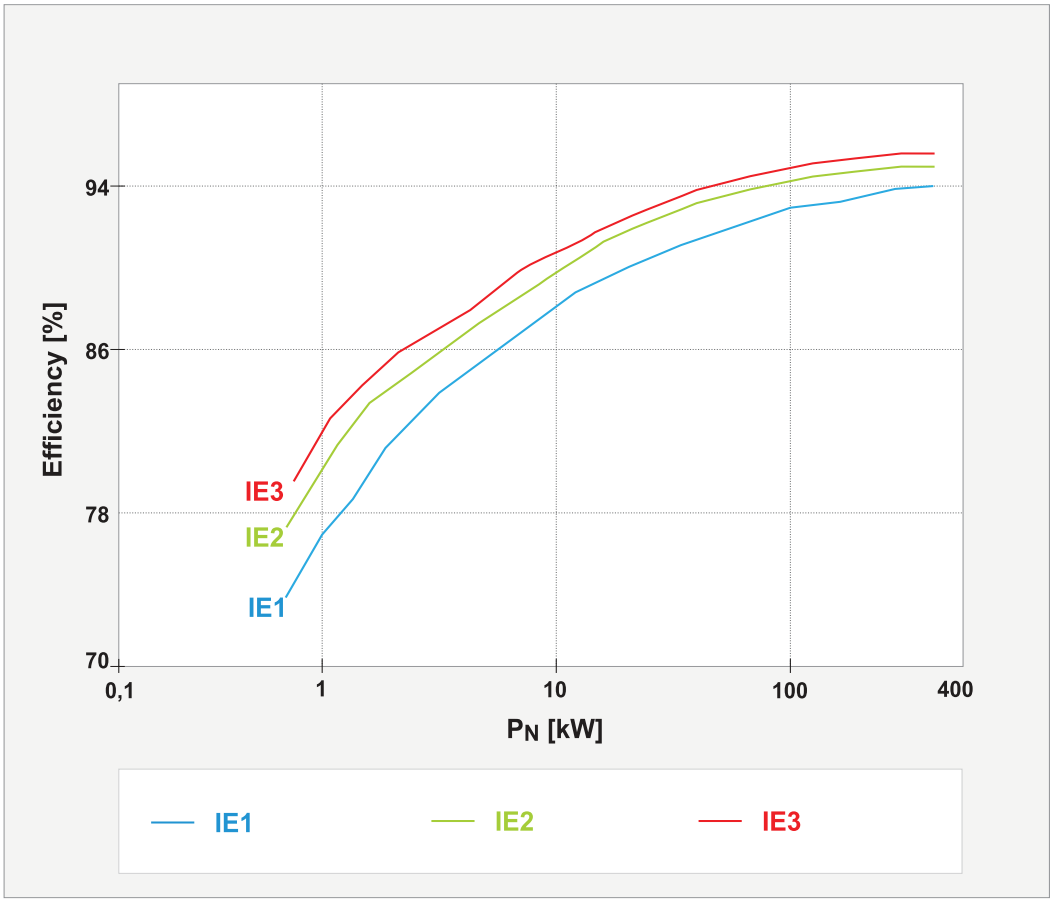


According to the Comission Regulation (EC) No 640/2009 (introduced in July 2009) the required efficiency class of general--purpose motors (introduced to the market in future) will be as follows:

- From 16 June 2011, motors placed for the first-time on the market shall have a minimum efficency class of IE2.
- From 1 January 2015, motors with a rated output between 7.5 - 375 kW shall have a minimum efficiency class of IE3, or IE2 if they are operated / equipped with electronic speed control (VSD).
- From 1 January 2017, motors with a rated output between 0.75 - 375 kW shall have a minimum efficiency class of IE3, or IE2 if they are operated / equipped with electronic speed control (VSD).



Electronic speed control is carried out using frequency converter (VSD) that adjusts the speed of the motor - and therefore the torque produced - based on the energy needed.



The efficiency class system specified under IEC 60034-30 is valid for low voltage three phase squirrel cage induction motors with the following specifications:

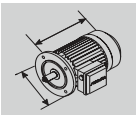
- Rated voltage up to 1000V
- Rated output between 0,75kW and 375kW
- Either 2,4 or 6 poles
- Rated on the basis of continous duty (S1) or intermittent periodic duty (S3) with cyclic duration factor of 80% or higher
- Capable of operating direct on-line
- Rated for operation conditions in accordance with IEC 60034-1 (temperature, installation altitude, etc.)

In accordance with IEC34-1 the normal climate is characterized by:

- Environment temperature: -16°C ÷ +40°C
- Altitude: up to 1000m
- Atmospheric pressure: 1050mbar
- Relative humidity: 60% ÷90%

This regulation shall not apply to:

- Motors specified to operate wholly immersed in a liquid
- Motors completly integrated into a product (for example pump, fan or compressor) of wich the energy performance cannot be tested independently from the product
- At altitudes exceeding 4000 meters above sea level
- Where ambient air temperatures exceed 60°C
- Where ambient air temperatures are less than -30°C for any motor or less then 0°C for a motor with water cooling
- In potentially explosive atmosheres as defined in Directive 94/4EC of the European Parliament
- Break motors



Construction of the motors

1. Housing:
The housing of the frame sizes 63 to 112 is made of Aluminium.

The feet for the motors:
- frame size 63 to 112 - Aluminium - screwed
- frame size 132 - Cast iron - screwed or integrated
- frame size 160 to 280 - Cast iron - integrated
- frame size 315 - Cast iron - screwed or integrated

Cable glands:

Frame size 63-100 : M20 / 112 and 132: M25 / 160 and 180: M40 / 200 and 255: M50 / 250 and 280 : M63 / 315 and 355ML : M76

2. End-shields:
End-shields for motors of the frame sizes 63 to 100 are made of Aluminium (flange B5 and B14 are made of cast iron). End-shields and flanges for motors of the frame sizes 112 to 355 are made of cast iron. Motors of frame 80, 90 and 100 : on request end shields may be made of cast iron.

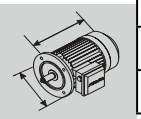
3.Rotor:
The winding of the rotor is made of die-casted aluminium. The rotor together with the shaft is dynamically balanced with half key according to DIN ISO 8821.

4.Terminal boxes located on top
For request, the position of the terminal box can be located at the right or left side looking from the shaft end, for frame size 80 to 315. The terminal box can be rotated in steps of 180° at frame size 63 to 180. The terminal box can be rotated in steps of 90° at frame size 200 to 355.

5.Cooling
The motors are air cooled by means of external surface ventilation (standard IEC 60034-6; cooling according to IC 411). Standard motors have a radial flow centrifugal fan allowing fully reversible rotation. Please chek the minimum distance between cover and wall by mounting the motor.

6.Degree of protection:
All motors of this catalogue are manufactured with the degree of protection IP 55 (IP - International Protection). On request the motors are available with a higher degree of protection.

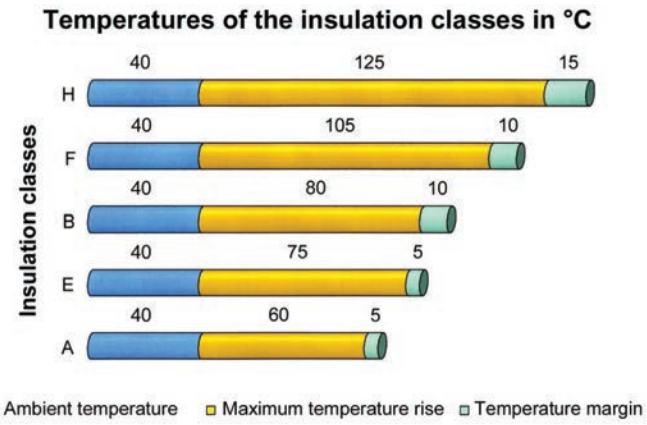
IP	Protection of work equipment	Protection of people	**IP**	Protection of work equipment
First prefix	Against penetrate of solid foreign bodies	Against access of dangerous parts with	**Second prefix**	Against penetrate of water with detrimental action
0.	(no protection)	(no protection)	**.0**	(no protection)
1.	≥50 mm diameter	back of hand	**.1**	drip - proof vertical
2.	≥12,5 mm diameter	finger	**.2**	drip - proof (15° inclination)
3.	≥2,5 mm diameter	tool	**.3**	spray - proof
4.	≥1,0 mm diameter	wire	**.4**	splash - proof
5.	dustproof	wire	**.5**	jet - proof
6.	dust - tight	wire	**.6**	strong jet - proof
			.7	short-time immersion
			.8	permanent immersion



7.Nominal voltage and frequency
The nominal voltage of three phase motors is 400 V at the nominal frequency of 50Hz. Motors for another nominal voltage and / or another nominal frequency are available on request.

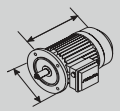
8.Nominal output
The motors will properly operate with the nominal output at continuous duty (S1) when the following conditions are observed:
- Motor is supplied with nominal voltage and frequency
- Ambient temperature is not higher than +40°C
- Altitude of site is up to 1000m above sea level

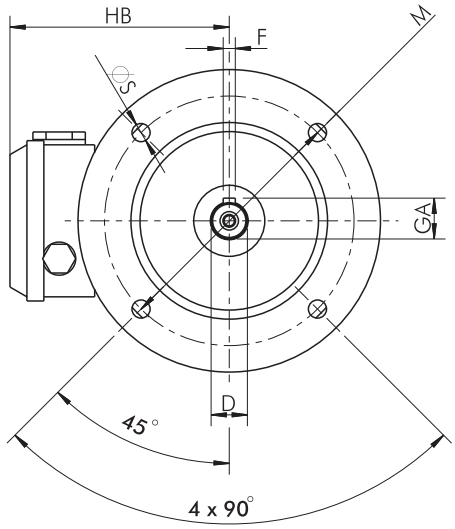
9.Insulation
Standard motors are manufactured in the insulation class F.

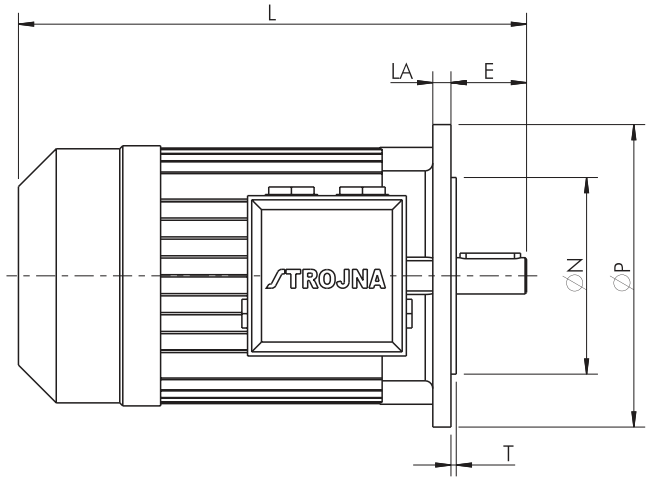


10.Options
The motors can be equipped with optional accessories (e.g. PTC, Pt100, anti-condensation heater, external fan).

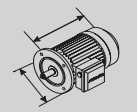
11.Ordering
When ordering motors please specify the following information:
- Quantitiy
- Motor size
- Nominal output, kW
- Rated speed
- Type of mounting
- Nominal voltage and frequency
- Any special features or options

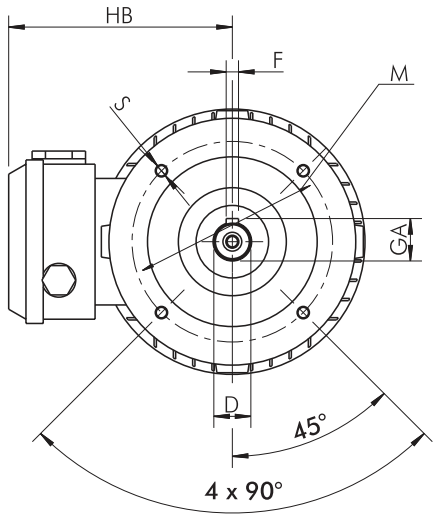


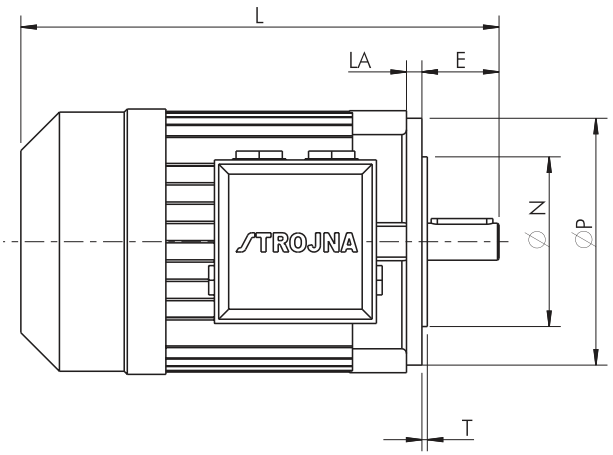




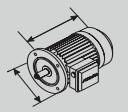
Type		D	E	F	GA	M	N	P	LA	T	S	HB	L	Pole
63	A	11j6	23	4h9	12,5	115	95j6	140	9	3	10	102	200	2, 4, 6, 8
	B												210	2, 4, 6, 8
71	A	14j6	30	5h9	16	130	110j6	160	9	3,5	10	111	223	2, 4, 6, 8
	B												245	2, 4, 6, 8
80	A	19j6	40	6h9	21,5	165	130j6	200	10	3,5	12	120	266	2, 4, 6, 8
	B													2, 4, 6, 8
90	S	24j6	50	8h9	27	165	130j6	200	8	3,5	12	130	330	2, 4, 6
													305	8
	L												330	2, 8
													355	4, 6
100	LA	28j6	60	8h9	31	215	180j6	250	11	4	15	140	420	2, 4
	LB												440	4
	L												376	6, 8
112	M	28j6	60	8h9	31	215	180j6	250	12	4	15	164	384	2, 6, 8
													411	4
132	S	38k6	80	10h9	41	265	230j6	300	12	4	15	178	463	2, 6, 8
													501	2, 4
	M												501	4, 6, 8
160	M	42k6	110	12h9	45	300	250j6	350	13	5	19	210	612	2, 4, 6, 8
	L	42k6	110	12h9	45	300	250j6	350	13	5	19	210	612	2, 4, 6, 8
180	M	48k6	110	14h9	51,5	300	250j6	350	13	5	19	228	705	2, 4
	L	48k6	110	14h9	51,5	300	250j6	350	13	5	19	228	705	4, 6, 8
200	L	55	110	16	59	350	300	400	16,5	5	19	320	850	2, 4, 6, 8
225	S	60	140	18	64	400	350	450	18	5	19	345	960	4, 8
	M	55	110	16	59	400	350	450	18	5	19	345	930	2
		60	140	18	64	400	350	450	18	5	19	345	960	4, 6, 8
250	M	60	140	18	64	500	450	550	23	5	19	385	1010	2
		65	140	18	64	500	450	550	23	5	19	385	1040	4, 6, 8



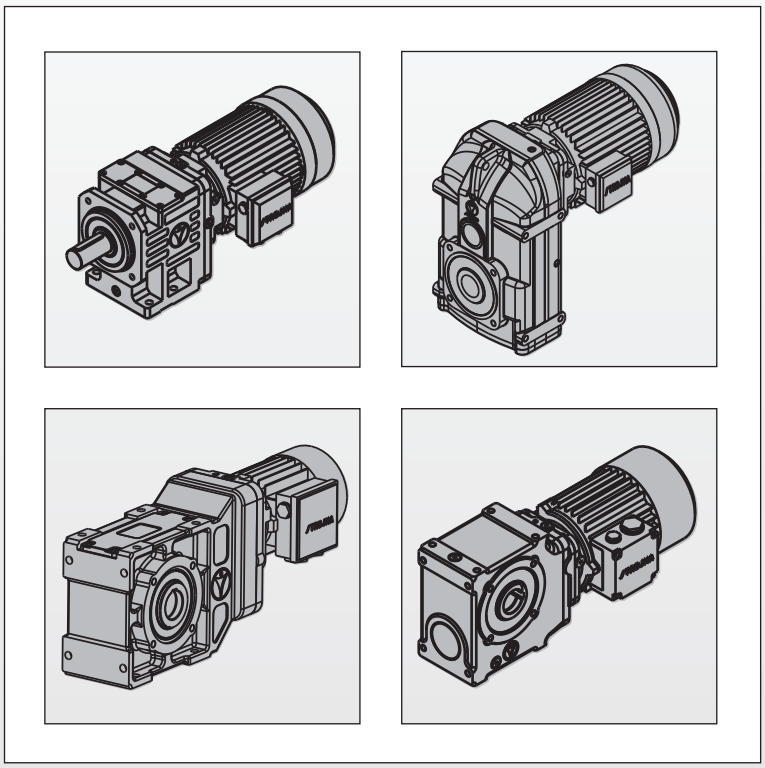




Type		D	E	F	GA	M	N	P	S	T	LE	HB	L	Pole
63	A	11j6	23	4h9	12,5	100	80j6	120	M5	3	14	102	210	2, 4, 6, 8
	B												210	2, 4, 6, 8
71	A	14j6	30	5h9	16	115	95j6	140	M8	3	14	111	223	2, 4, 6, 8
	B												245	2, 4, 6, 8
80	A	19j6	40	6h9	21,5	130	110j6	160	M8	3,5	14	120	266	2, 4, 6, 8
	B												278	2, 4, 6, 8
90	S	24j6	50	8h9	27	130	110j6	160	M8	3,5	10	130	330	2, 4, 6, 8
	L												330	2, 4, 6, 8
100	LA	28j6	60	8h9	31	165	130j6	200	M10	3,5	12	140	420	2, 4
	LB												440	4
	L												376	6, 8
112	M	28j6	60	8h9	31	165	130j6	200	M10	3,5	12	164	384	2, 6, 8
													411	4



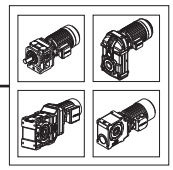
STROINA TRANSMISSIONS



OPERATING AND MAINTENANCE MANUAL

ZG FG
KG SG

GEAR UNITS



1. INFORMATION

1.1 General information

These Operating manual (OM) is part of the gear unit as supplied, and you must read them before you work with the gear unit. The instructions in the OM must be followed. Keep the OM close to the gear unit.

Warning! We assume no liability for damages or disruptions of operations resulting from the failure to observe this OM

1.2 Safety and information markings

- After being delivered, the unit must be inspected for any damage that may have occurred during transport. If the unit's condition warrants, it may be necessary to take action to prevent the unit from being put into operation.
- The customer is responsible for setting up the drive in accordance with good engineering practices. The instructions in these Operation Manual must be followed to achieve the confirmed characteristics of the drive units and if any warranty claims are to be met.
- Make certain that you never put damaged products into operation!
- Read these Operating Manual carefully before you begin any setup, installation, or maintenance work. Installation, startup, maintenance and repair work on the gear unit / gear motor as well as on electrical accessory equipment may only be performed by qualified technical personnel, taking the following items into account:
  - operating manual, information labels/tags on the gear unit / geared motor,
  - all other project documents, setup manuals, operating manuals,
  - the applicable regional and national regulations on safety and accident prevention.

2. STORAGE

The following items must be taken into account when storing the gear units:

- In general, the storage of drive units must be done in closed rooms.
- Ambient temperature max. 25 °C (77 °F)
- Relative humidity max. 80%.
- The drive units are to be protected from exposure to the sun or UV light.
- No aggressive or corrosive materials are to be stored in the vicinity of the unit.
- The gear units are to be stored in the same position that is intended for a later use.
- The gear units are to be rotated 1-2 revolutions on the output side every 6 months to ensure that the interior parts are wetted with lubricant.
- The units are to be protected from mechanical loads and exposure to outside forces.

2.1 Long-term storage:

- When the gear units are to be stored for longer than 12 months, they must be completely filled with lubricant per the nameplate or lubricant plate.
- Unfinished, bare-metal parts on the outside of the unit are to be protected with a corrosion protection product (inspection every 6 months is recommended). The corrosion protection must be replaced after one year.
- Before starting the gear unit, drain the lubricant from it. If more than one lubricant chamber is present, make certain that all of the lubricant chambers have been drained out.
- If the gear units are stored for longer than 24 months before being put into service, they must be checked for leaks. If there are any visible cracks on the surfaces of sealing elements, such parts must be replaced.

3. MECHANICAL INSTALLATION - PREPARATIONS

The gear unit must not be put into operation unless:

- The information on the gear unit specifications plate matches the permissible local usage conditions.
- No damage caused, for example, by storage or transport, is apparent.
- And in particular, the shaft seals, cover caps, and guard hoods are not damaged.
- No leaks or loss of oil are visible.
- No corrosion or other indication of improper storage or storage under damp conditions is present.
- All of the packaging materials were removed.

As a general rule, drive shafts and flange surfaces must have all corrosion protection products and dirt cleaned from them, standard commercial solvents can be used.

IMPORTANT! The sealing lips on the shaft seals must not be allowed to come in contact with the solvent. Material can be damaged!

3.1 Bleeding the gear unit

Case 1: Gear drives lacking a vent plug: Sealed-design gear drives are supplied without a vent plug.
Case 2: The vent plug with transport locking device is installed at the proper position for the mounting position. The rubber strip must be completely turned off before the unit is put into operation.

The rubber strip must be completely turned off!
Gear units that are ordered without oil filling are supplied with internal rust proofing consisting of anti-corrosion oil. The anti--corrosion oil can however be mixed with the recommended lubricant indicated on the nameplate. This means that the unit does not have to be flushed before filling with oil.

4. SETTING UP THE GEAR UNIT

The proper oil level for the mounting position is designed by the plant.
When installing please ensure that the unit is not exposed to any shocks or vibrations in order to avoid noise during operation. The mounting surface should be even and torsionally rigid. Distortion of the gear case should also be avoided. The cooling air for gear unit motors must be able to flow unhindered around the gear unit.
Reduce reaction torque with a torque arm or a rubber buffer kit (no rigid joints!).

4.1 Installation and removal of hollow-shaft gear units

The customer-side machine shaft must be carefully cleaned and checked for any damage such as grooves or compressed areas before the hollow-shaft gear unit is installed.

The hollow-shaft are manufactured with tolerance ISO H7 class.

Before tightening the hallow-shaft gear unit on to the machine shaft, paint the surface of the machine shaft with lubricating pastesuch as Klüber Paste 46MR401.

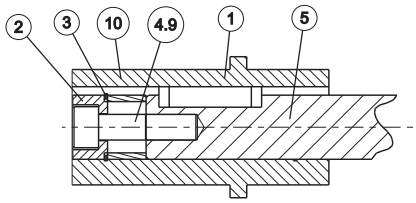


Figure 1
Mounting the customer shaft with a shoulder

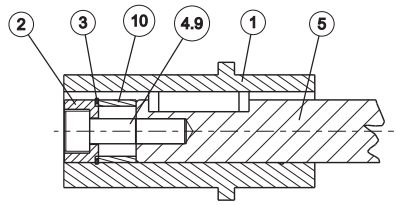


Figure 2
Mounting the customer shaft without a shoulder

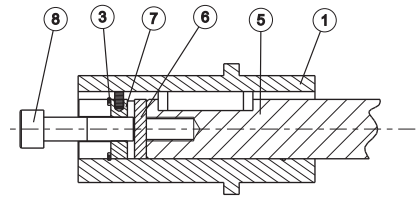


Figure 3
Removing the customer shaft with or without shoulder

4.1.1 Installation: (Figure 1 and Figure 2)

Draw the gear unit with hollow shaft onto the machine shaft. Insert the spacer ring, item 10, with there is a customer shaft without a shoulder, the circlip, item 3, and washer, item 2, into the hollow shaft and attach using the bolt, item 4.

4.1.2 Removal: (Figure 3)

Remove the screw (4), disc (2) and circlip (3), place the thrust washer (6) and jack nut (7) in the hollow shaft, insert the circlip and remove the gear unit from the shaft with jack screw (8).

Parts 4, 6, 7, 8 and 10 are not supplied with the gear unit. Parts 2, 3 and 9 are included in fixing kit.

1. Hollow shaft
2. Disc
3. Circlip DIN 472
4. Socket head screw DIN 6912 (to customer specification, length according to machine shaft length)
5. Customer's shaft with centering thread DIN332.2, Form DR
6. Thrust washer
7. Jack nut
8. Jack screw
9. Socket head screw DIN 6912
10. Spacer tube

5. LUBRICATION, INSPECTION AND MAINTENANCE

5.1 Lubrication

5.1.1 ZG gear units

Gear units and geared motors are supplied ready for operation. Gear units sizes from ZG1 to ZG6 are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519). Sizes from ZG7 to ZG13 have standard filling with mineral gear oil labeling according to DIN51502 CLP ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F).

5.1.2 FG gear units

Gear units and geared motors are supplied ready for operation. Gear units sizes FG1, FG2, FG3 are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519). Sizes from FG4 to FG8 have standard filling with mineral gear oil labeling according to DIN51502 CLP ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F).

5.1.3 KG gear units

Gear units and geared motors are supplied ready for operation. Gear units sizes KG1 to KG4 are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519). Sizes from KG5 to KG9 have standard filling with mineral gear oil labeling according to DIN51502 CLP ISO VG220 (according to ISO viscosity grade VG 220 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F).

5.1.4 SG gear units

Gear units and geared motors are supplied ready for operation. SG gear units are filled with synthetic gear oil labeling according to DIN51502 CLP PG ISO VG460 (according to ISO viscosity grade VG 460 from DIN51519) for ambient temperature -10 °C (14 °F) to +40 °C (104 °F).

5.2 Inspection and maintenance

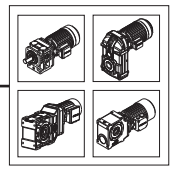
Gear units of the model range sizes ZG sizes ZG1 to ZG6; model range FG sizes FG1 to FG3; model range KG sizes KG1 to KG4, model range SG; are maintenance-free, and oil change is not necessary. The gear units are executed without breather plug, there are no oil drain, oil level respectively oil filling screws.

In the case of gear units of the model range ZG sizes ZG7 to ZG13; model range FG sizes FG4 to FG8; model range KG sizes KG5 to KG9, an oil change has to be executed corresponding to the maintenance periods. The gear units are executed with oil drain, respectively oil filling screws for the main mounting positions.

For special applications under difficult / aggressive ambient conditions, an oil change has to be done frequently! The exact quantities of oil are signs on the oil table.

5.3 Inspection and maintenance intervals

Time interval	Inspection and maintenance work
monthly	• Gear units must be checked for noise changes (running noise of the gearing and rolling bearings) • Check the housing temperature (max. 90 °C, 194 °F) • Visible inspection of seals for leakage • Remove dust deposit
every 3 months	• Clean the exterior of the vent plug
every half year	• Check the rubber buffer set • Check the fixing bolts to make certain they are tight
every 5.000 service hours, no later than every 4 years	• Visual check of the shaft seals; if applicable replace the shaft seals
every 10.000 service hours, no later than every 5 years	• Oil change: ZG7 to ZG13 • Oil change: FG4 to FG8 • Oil change: KG5 to KG9
every 10 years	• General overhaul



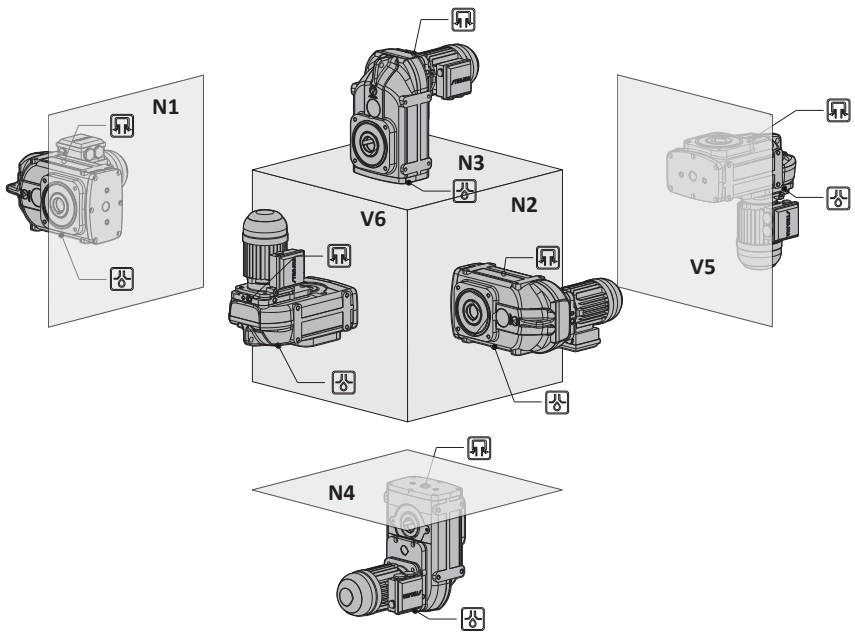
5.4 Oil quantity (in liters)

Tip	Ambijent °C	DIN (ISO)	ISO VG	ARAL	CASTROL	SHELL	MOBIL
FG	-10°C ... +60°C	CLP	220	Degol BG 220	Alpha SP 220	Omala 220	Mobilgear 600 XP 220
	-20°C ... +80°C	CLP PG	460	Degol GS 460	Alphasyn PG 460	Tivela S 460	Glygoyle 460
ZG	-25°C ... +60°C	CLP PG	220	Degol GS 220	Alphasyn PG 220	Tivela S 220	Glygoyle 220
	-40°C ... +60°C	CLP HC	220	Degol PAS 220	Alphasyn T 220	Omala S4 GX 220	SHC 630
KG	-20°C ... +40°C	HCE	220	Eural gear 220	Optileb GT 220	Cassida GL 220	SHC Cibus 220
	-20°C ... +80°C	CLP PG	460	Degol GS 460	Alphasyn PG 460	Tivela S 460	Glygoyle 460
SG	-25°C ... +60°C	CLP PG	220	Degol GS 220	Alphasyn PG 220	Tivela S 220	Glygoyle 220
	-40°C ... +20°C	CLP-HC	220	Degol PAS 220	Alphasyn T 220	Omala 220 HD	SHC 630
	-20°C ... +40°C	HCE	460	-	-	-	Glygoyle 460

CLP	-Mineral oil	1) Standard lubrication according DIN 51517 - CLP ISO 220
CLP PG	-Polyglycol oil	2) Standard lubrication according DIN 51517 - CLP ISO VG 460
CLP HC	-Polyalphaolefin oil	3) Special starting procedure
HCE	-Lubricants for food processing industry	Special lubricants on inquiry

5.4.1 FG gear units

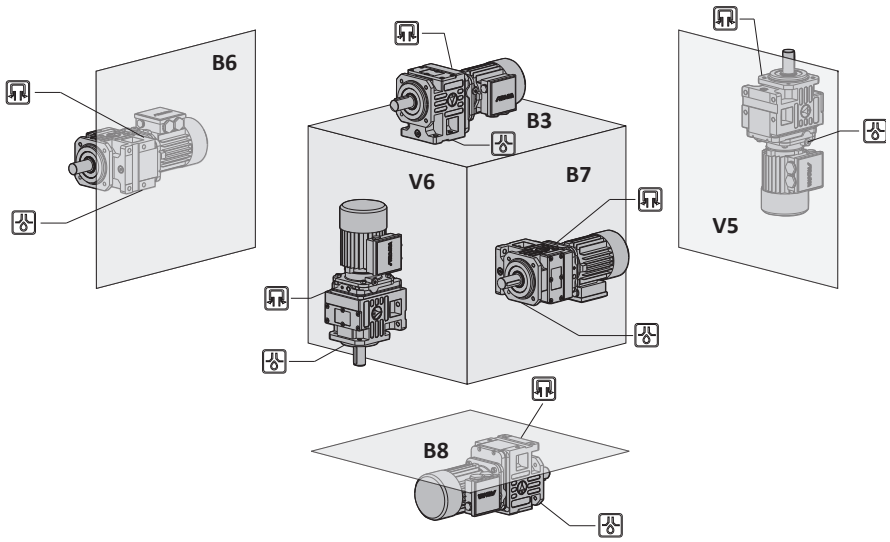
FG	Mounting position					
	N1	N2	N3	N4	V5	V6
12	1,1	1,1	1,5	1,6	1,7	1,9
22	1,2	1,2	1,7	1,8	1,9	2,3
23	1,4	1,4	2,0	2,2	2,4	2,9
32	1,9	1,9	3,0	3,1	3,4	4,0
33	2,3	2,3	3,8	4,0	4,3	5,0
42	3,1	3,1	4,2	4,8	4,8	7,0
43	3,5	3,5	5,8	6,2	6,8	7,7
44	3,7	3,7	7,0	7,5	8,0	9,0
52	6,2	6,2	9	9,2	10	12
53	6,5	6,5	9,7	10	12	15
54	6,8	6,8	10	12	13	16
62	10	10	12	13	14	17
63	9,3	9,3	13	14	16	19
64	10	10	14	15	18	22
72	14	14	16	17	19	24
73	15	15	21	24	25	27
74	15,5	15,5	23,5	26	27	33
83	28	28	40	43	46	50
84	29,5	29,5	48	54	56	60
85	31	31	50	58	61	66



- Vent plug
- Drain plug

5.4.2 ZG gear units

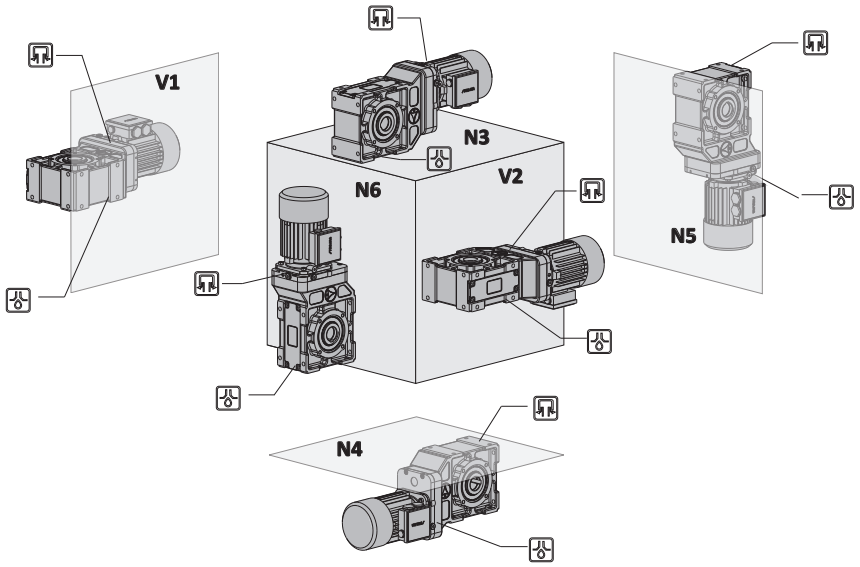
ZG	Mounting position					
	B7	B6	B3	B8	V6	V5
12	0,4	0,4	0,2	0,4	0,3	0,4
22	0,8	0,8	0,7	1,4	1,3	1,5
23	0,9	0,9	0,8	1,6	1,5	1,7
32	0,9	0,9	0,7	1,4	1,4	1,6
33	1	1	0,9	1,9	1,8	2
42	1,2	1,2	1	2,1	2	2,2
43	1,4	1,4	1,3	2,7	2,6	2,8
44	1,9	1,9	1,8	3,5	3,4	3,7
52	1,2	1,2	0,9	1,9	1,8	2,2
53	1,6	1,6	1,5	3,2	3,1	3,5
54	2,2	4,4	4,6	5,6	3,7	3,7
62	1,5	1,5	1,2	2,5	2,6	2,7
63	2,1	2,1	1,8	3,5	3,7	3,7
64	2,7	2,7	2,3	4,5	4,6	4,8
72	2,9	2,9	2,1	4,3	4,5	4,5
73	3,6	3,6	3,2	6,4	6,5	6,8
74	4,2	4,2	3,7	7,5	7,5	7,8
82	3,3	3,3	2,7	5,5	5,7	5,9
83	3,9	3,9	3,5	7,2	7,4	7,8
84	5,2	5	4,6	9,3	9,5	10,5
92	8,1	8,1	7	14,4	14,3	15
93	9,3	9,3	8,5	17,5	17,2	18,5
94	10,5	10,5	8,5	18,5	18,5	20
102	11	11,8	10,2	20,6	20,3	22
103	13,8	13,8	12,5	25,6	25,2	27
104	15,7	15,7	14,3	28,5	28,9	31
112	17	17	15,9	32	32,5	33
113	18,4	18,4	17,5	36	37	39
114	24	24	22	45	46	48
122	24	24	22	45	46	46
123	28	28	26	54	56	59
124	36	36	34	68	69	72
132	33	33	31	63	64	65
133	41	41	39	81	83	88
134	55	55	50	101	104	108



- Vent plug - Drain plug

5.4.3 KG gear units

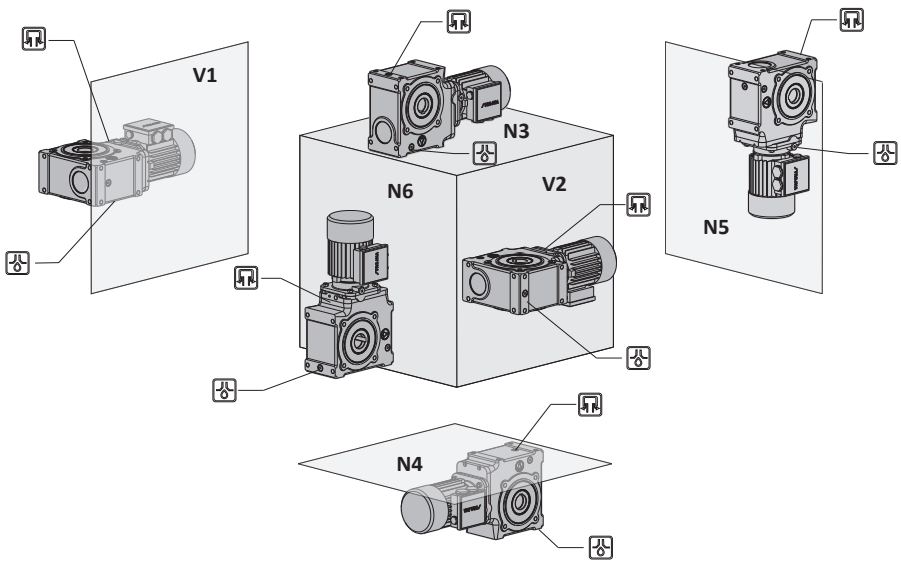
KG	Mounting position					
	N3	N4	N5	N6	V1	V2
12	0,8	0,9	1,2	1,5	1,3	1,4
22	1	1	1,45	1,6	1,5	1,6
23	1	1,1	1,45	1,8	1,7	1,8
32	1,6	1,6	2,2	2,1	2,2	2,2
33	1,7	1,8	2,6	2,8	2,6	2,7
42	2,5	2,6	3,0	4,5	4,5	4,0
43	2,6	2,7	3,3	4,7	4,3	4,4
44	2,8	3,2	3,5	5,0	4,8	4,8
53	3,0	3,8	4,2	5,3	3,2	3,3
54	3,5	4,1	4,7	5,7	3,8	4
55	4,2	4,8	5,3	6,2	5,6	6,0
63	5,0	6,8	7,0	9,2	5,2	5,4
64	5,8	7,5	7,5	9,8	6,0	6,5
65	6,7	8,2	7,9	10,5	7,5	8,0
73	7,8	11	14	16	8	8,2
74	8,5	12	15	17	15	15
75	9,6	12,8	16,5	18,5	17	17
83	17	20	22	28	18	19
84	17	18,5	25	32	20	21
85	20	21,5	26,5	36	23	25
93	35	48	45	67	40	42
94	38	52	48	72	45	47
95	42	56	53	77	52	56



- Vent plug - Drain plug

5.4.4 SG gear units

SG	Mounting position					
	N1	N2	N3	N4	N5	N6
12	0,9	0,9	0,9	1,1	1,1	0,9
22	0,9	1,2	1,2	1,2	1,2	1,2
32	1,1	1,6	1,6	1,6	1,6	1,6
33	1,7	1,7	2,5	2,5	2,5	2,9
42	2	2	3,4	3,4	3,4	3,4
43	3,1	3	4,5	4,5	4,5	5,1
52	3,2	3,2	5,5	5,5	5,5	5,5
53	3,5	3,5	6,3	6,3	6,3	6,3
62	5,6	5,6	9	9	9	9,6
63	5,9	5,9	10,3	10,3	10,3	10,3
55	4,4	4,4	4,6	5,6	3,7	3,7
63	6,2	6,2	6,8	8,2	4,8	4,8



- Vent plug
- Drain plug

6. ELECTRICAL CONNECTION

Work is only permitted to be carried out by qualified specialists on the stationary motor while disconnected and prevented form being switched on again. This also applies for the auxiliary power circuits (e.g. optional anti-condensation heaters).

Before starting work, make sure that a protective conductor is securely connected! Check for isolation from supply! Observe the rules of electrical engineering and electronics in the applicable rules and regulations, particularly with regard to protective measures. Observe requirements of the national or local energy companies.

- check that the mains voltage and frequency correspond to the data on the motor rating plate;
- connect the motor only as shown in the wiring diagram included in the terminal box of the motor;
- implement safe installation;
- correct the direction of rotation by replacing 2 phases;
- terminal box must be dust and watertight;
- protect phases with the safety switch;
- the insulation resistance needs to be checked prior to start-up and again after any extended periods of storage; Exceeding the tolerances in EN 60034-1/IEC 34-1 – voltage + 5 %, frequency +2 %, curve shape, symmetry – increases the temperature and influences electromagnetic compatibility. Observe nameplate data and the wiring diagram in the terminal box. Connections must be made in such a way as to ensure that a permanently safe electrical connection is maintained (no protruding wire ends); use the corresponding cable end pieces.

Air clearances between bare live parts themselves and between bare live parts and earth must be 5.5 mm (0.2 inch) (Un = 690 V).

6.1 Preparation for connecting the electrical motor

Attention! Wear safety glasses - danger of injury from fragments!

- Put on the terminal box cover and fasten with screws.
- Determine which cable entries to open.
- Open the cable entries:
    - o with a chisel or similar (hold at angle),
    - o by a light tap with a hammer

Caution! Do not penetrate inside the terminal box!

- Open the terminal box, remove blasted lid
- With provided lock nuts fix the cable entry,
- Seal the cable entry.

Terminal box should be free of any foreign objects, dirt and moisture. Unused cable entries and terminal box seal tightly. For a test run, secure electrical motor shaft key. For the break motors, please ensure that brake is functioning properly before putting electrical motor in to the operation.

Caution! It is mandatory to install protective switch with for an over current protection for windings of electrical motor. Voltage fuses does not protect the motor against overload, only the supply system leads or switching devices.

6.2 Connecting the motor

Use the circuit diagrams in the terminal box and the motor nameplate data to connect a motor on electrical grid.
For electric motor with Y/Δ starting it is necessary to remove all bridging (connecting sheets), and connect all six terminal strips according to motor circuit diagram. For electrical motors with direct start (Y or Δ) it is necessary to connect all bridging according to circuit diagram.

6.3 Direction of rotation

The standard motors are suitable for clockwise and counter-clockwise rotation. Connection of the power cables in the phase sequence L1, L2, L3 to U1, V1, W1 results in clockwise rotation (looking at the shaft end on the drive side). If two connections are interchanged, this results in counterclockwise rotation

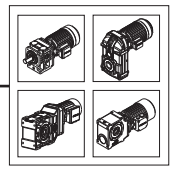
6.4 Motor installation

Standard motors are designed for use at temperatures of -20°C (-4 °F) to +40 °C (104 °F) and altitudes of 1,000 m (3280 ft) above sea level. When installing the motor, ensure that the intake is not obstructed and air can circulate freely. Do not remove the fan blade or cowl, or enclose the motor with a casing because in both cases there would not be enough air for cooling and the motor could overheat.

6.5 Operation

Vibration levels of Veff = 3,5 mm/s for Pn ≤ 15 kW (Veff = 0,14 inch/sec for Pn ≤ 20 HP) or. Veff = 4,5 mm/s for Pn > 15 kW (Veff = 0,18 inch/sec for Pn > 20 HP) are quiet acceptable in the coupled state. Whenever changes occur in relation to normal operation, such as increased temperatures, noise, oscillation, determine the cause and contact the manufacturer, if required. Never bypass or disable protection devices, not even in test mode. If you are in doubt, switch off the motor. Regularly clean air ducts in dusty or dirty environments. Remove the optionally condensation water plug to drain from time to time and reinsert the plug!

For motors without re-lubrication facility: change the bearings or grease but no later than every 3 years (see manufacturer's specifications).
For motors without re-lubrication facility: see time interval!
Switch on forced cooling every time when you start the motor (if you have that option).

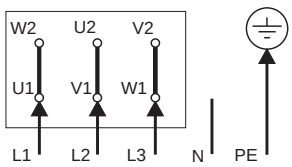


7. MOTOR CIRCUIT DIAGRAM

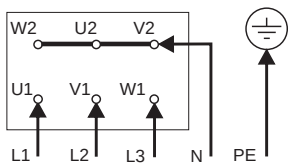
7.1 Three-phase single-speed induction motors type:

- numbers of poles: 2p = 2, 2p = 4, 2p = 6, 2p = 8

Δ CONNECTION



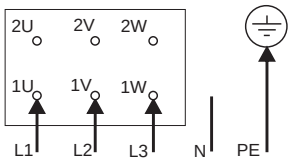
Y CONNECTION



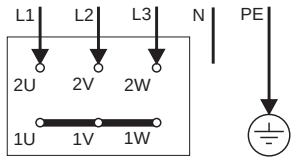
7.2 Three-phase two-speed induction motors type:

- numbers of poles: 2p = 4/2 and 2p = 8/4 (single-winding)

Δ CONNECTION

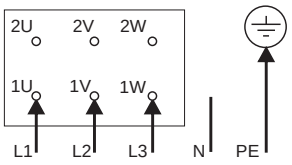


YY CONNECTION

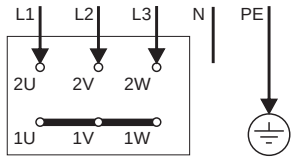


- number of poles 2p = 4/2 and 2p = 8/4 (single-winding , for ventilator drive)

2p = 4(8)
Y CONNECTION

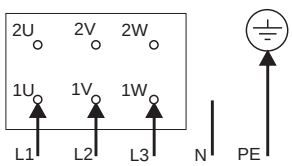


2p = 2(4)
YY CONNECTION

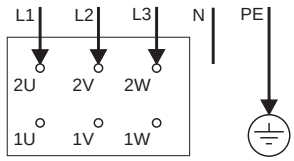


- number of poles 2p = 6/4 and 2p = 8/6 (double-winding)

2p = 6(8)
Y CONNECTION



2p = 4(6)
Y CONNECTION



8. MOTOR INSTALLATION ON IEC ADAPTER

For IEC adapters with elastic coupling.

8.1 Pay attention before assembly:

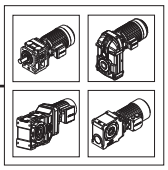
- **Danger of injuries!**
- **Disconnect the drive before carrying out any work on the coupling!**
- **Seccure the drive against unintetional re-start rotation!**
- **Incorrectly tighten bolts can cause serius personal injuries and property damages!**
- **In compliance with accident prevention regulations, you are obligated to protect all freely rotating parts by means of permanetly installed guards/ covers against unintentional contact and falling down objects.**
- **To avoid sparts, the covers for coupling used in explosive atmospheres should be made of stainless steel!**
- **As a minimum, the covers have to fulfil the requirements of protection type IP2X.**
- **The covers have to be designed to prevent dust from depositing on the coupling.**
- **The cover must not contact the coupling or impair the proper function of the coupling.**
- Make sure that the speeds, torques and ambient temperatures as stated in Tehnical Data are not exceeded.
- The maximum permissible bore diameters must not be exceeded.
- Check whether the shaft-hub connections safely transmit the occurring operating torques.
- The standard tolerance of STROJNA for finish bores is fit H7.
- Standard keyways comply with DIN 6885.
- Check the dimensions and tolerances of shafts, hub bores, keys and keyways.
- Set screws as required.

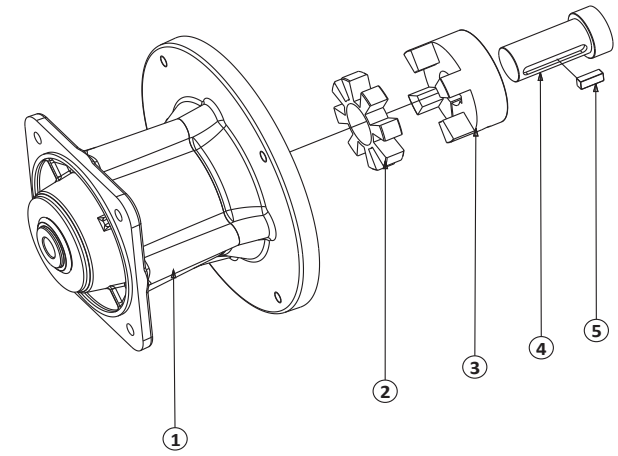
Tehnical table:

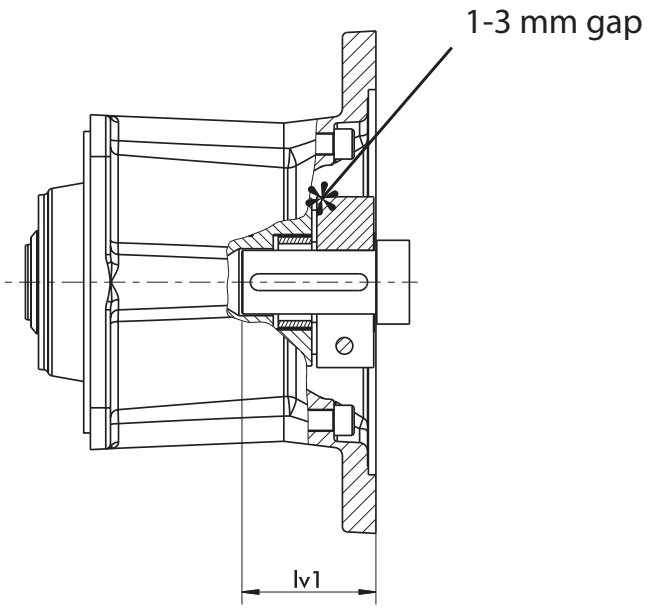
IEC Size				63-71 10	80-90 60	100-112 150	132-180 450	200-250 800
Nominal torque		(Nm)	T_{kn}	12,5	60	160	530	950
Maximal torque		(Nm)	T_{kmax}	25	120	320	1060	1900
Distance A		(mm)	A	11,5	18	20	26	31
Radial displacement		(mm)	Max. Values	0,1	0,12	0,15	0,2	0,25
Angular misalignment		(Grad)		1	1	1	1	1
Axial displacement		(mm)		±1	±2	±2	±2	±2
Moment of inertia per hub			J1/J2	0,003	0,04	0,08	0,66	8

Type	Shore hardness	Color	Material	Temperature range	Features
A*	98 Sh A	Red	TPU	-30°C to +100°C	good damping
B	64 Sh D	Green	TPU	-30°C to +120°C	high torsion
C	80 Sh A	Yellow	TPU	-30°C to +100°C	very good damping
D	64 Sh D	Beige	Hytrel	-50°C to +150°C	temperature resistant

*** Standard Strojna**







IEC adapter (1) is delivered with following parts:
- Elastic insert (2)
- Jaw (3)

8.2 Installation

To mount your IEC motor on IEC adapter it is necessary to follow following procedure:
1.Remove the jaw (3) from IEC adapter.
2.Remove key from the motor shaft keyway (4).
3.Reduce the key length to fit jaw length.
4.Clear motor shaft (4) from dirt and grease.
5.Put reduced key (5) on the motor shaft keyway.
6.Lose mounting screw on the jaw (3), put the jaw on the motor shaft (4), up to the motor shaft shoulder.
7.Tighten the mounting screw using tightening torque given in the table.
8.Assemble the motor with the jaw with elastic insert (2). Ensure that foreign objects do not come to the junction between the jaw (3) and elastic insert (2).
9.Use the screws to tighten the motor on the IEC adapter Flange.

	A63/71	A80/90	A100/112	A132	A160/180	A200/225	A250/280
Mounting screw (ISO 4762/12.9)	M4	M6	M8	M12	M12	M16	M16
Tightening torque of the mounting screw (Nm)	4	15	35	120	120	290	290

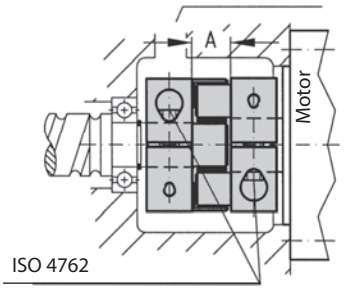
8.3 Adjusting coupling

- **Injury hazard!**
- **Switch-off the drive before all work on the coupling!**
- **Secure the drive against unintentional switching on and rotating!**
- **Reference:**
- **An exact alignment of the coupling increases the service life of the elastic intermediate.**
- **Do not exceed the maximum permissible displacement values. The overstepping of these values results in coupling damage and breakdown!**

- When aligning the cold equipment take into account the expected thermal growth of the components, so that the permissible misalignment values for the coupling are not exceeded in operation.
- Be aware that the coupling under misalignment imposes restoring forces on the adjacent shafts and bearings. Take into account that the larger the misalignment, the greater the restoring forces will be.
- The displacements values indicated in the tables are maximum permissible guide numbers. We recommend not to fully utilise these values during the alignment, so that in operation sufficient reserves remain for thermal expansions, foundation settlements etc.
- In special cases with high demands on quiet running or high rotating speeds it is possible that, in the three displacement levels, an alignment accuracy of ≤0,1 mm is necessary.
- If the coupling is mounted in a closed housing / casing so that a subsequent alignment is not possible any more, it must be guaranteed that the geometry and fit accuracy of the contact surfaces in operation aligns the shafts exactly within the mentioned tolerances.

8.4 Axial displacement ΔA:

- Calculate the axial gap measurement. Simbolic image for reference.
- Keep, when aligning the gap measurment A , to the maximum permissible tolerance according to table.



ISO 4762

ATTENTION!

If greater axial displacements are expected in operation, consultation with STROJNA is necessary.

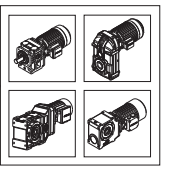
8.5 Radial displacement:

- Measure a complete rotation (360°) between coupling and flange.
- The values of the table are valid for reference rotation speed of 1500 min^{-1}

8.6 Angular misalignment:

- Measure the face of flange and coupling on complete rotation (360°)
- The values of the table are valid for reference rotation speed of 1500 min^{-1}

IEC			63-71	80-90	100-112	132-180	200-250
Size			10	60	150	450	800
Distance A	(mm)	A	11,5	18	20	26	31
Radial displacement	(mm)	Max. Values	0,1	0,12	0,15	0,2	0,25
Angular misalignment	(Grad)		1	1	1	1	1
Axial displacement	(mm)		±1	±2	±2	±2	±2



8.3 Operation and maintenance

IEC adapter is delivered filled with grease, so there is no additional maintenance.

Daily check: housing temperature and oil leakage.
Monthly check: clear IEC adapter from dirt and dust to ensure appropriate cooling.
Every 10 years or 10 000 working hours (whatever comes first) general overhaul the IEC adapter.

On the occasion of routine inspection or maintenance work on the drive equipment, or after 3 year at least:

- Replace the elastic buffer ring.
- If the wear limit has been reached or exceeded, replace the buffer ring immediately, irrespective of the inspection intervals of the equipment.
- Check the alignment of the coupling.
- Remove dust deposits from the coupling components and buffer ring.

ATTENTION! Risk of burns! During operation IEC adapter housing temperature can arise up to to 90 °C (194 °F)!

In case there is a strange noise or the housing temperature oversize 90 °C (194 °F), switch of the motor and disconnect it from the electrical power supply. Inform your dealer about the improper work of the IEC adapter.

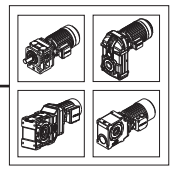
8.8 Operating faults and their possible causes

Trouble	Cause	Risk Warning	Correction
Irregular running noises / vibration	Alignment fault	Considerable increase in coupling temperature. Premature wear of elastic buffers. Increased reaction forces act on connected machines.	-Disconnect drive
			-Remove cause for alignment fault
			-Re-align coupling
			-Inspect elastomer for wear
	Elastomer worn out	Coupling claws strike against each other. Spark formation, claw fracture, increased reaction forces.	-Disconnect drive
			-Check coupling components for damages and replace parts, if necessary
			-Replace elastomer
	Unbalance	Considerable increase in coupling temperature. Premature wear of elastic buffers. Increased reaction forces act on connected machines.	-Disconnect drive
			-Verify balance state of plant components and correct it, if necessary
			-Inspect elastomer for wear
	Loose screw connections	Flying off parts can cause serius injuries and considerable damages.	-Disconnect drive
			-Check coupling parts for damages, replace parts, if necessary
			-Verify alignment of coupling
			-Tighten screws to the specified tightening torque and secure them against working loose, if necessary
			-Inspect elastomer for wear

Trouble	Cause	Risk Warning	Correction
Premature wear of elastomer	Alignment fault	Considerable increase in coupling temperature. Premature wear of elastic buffers. Increased reaction forces act on connected machines.	-Disconnect drive
			-Remove cause for alignment fault
			-Re-align coupling
			-Inspect elastomer for wear
	Unacceptable temperatures	Material properties of elastic buffers change. The torque transmission capability s adversely affected	-Disconnect drive
			-Replace elastomer
			-Re-align coupling
			-Adjust ambient temperature
	Torsional vibrations in the drive line	Considerable increase in coupling temperature. Premature wear of elastic buffers. Increased reaction forces act on connected machines.	-Disconnect drive
			-Analyse and eliminate cause for torsional vibrations
			-Check coupling parts for damages, replace parts, if necessary
			-Replace elastomer and consult STROJNA concerning eventual use of another Shore-hardness*
Claw breakage	Wear limit of elastomer exceeded = contact of claws	Coupling is destroyed. Conected machines can be affected, too.	-Disconnect drive
			- Connect STROJNA for replace parts
			- inspect the elastomer for wear at shorter intervals
	Overload due to too high torque	Coupling is destroyed. Conected machines can be affected, too.	-Disconnect drive
			- Connect STROJNA for assistance

* Default Strojna Type A - 98 Sh A

When using accessories and spare parts which were not originally manufactured or supplied by STROJNA, no liability or guarantee for any damages will be accepted.



9. INSTALLATION AND REMOVAL INSTRUCTION FOR SHRINK DISCS

Shrink discs are supplied ready for installation. However, prior to tightening of locking screws it is necessary to remove wooden spacers that may have been used during shipping.

9.1 Installation

Important! Never tighten locking screws prior to shaft installation, as inner ring of shrink disc and/or hub can be permanently contracted even at relatively low tightening torques.

1.Clean hub OD and shrink disc bore. Lightly lubricate hub OD before assembling shrink disc on hub.

2.Carefully solvent clean and dry shaft and hub bore of any lubricant prior to mounting hub onto shaft. This step is critical, as any lubricant on the shaft/hub bore interface will greatly reduce the torque transmitting capacity of the shrink disc connection.

3.Insert shaft into hub, then position shrink disc onto hub. After confirming correct position of hub and shrink disc, handtighten three (3) or four (4) evenly spaced locking screws and make sure that outer collars of shrink disc are parallel. Handtighten remaining locking screws.

4.Use torque wrench and set it approximately 5% higher than specified locking screw tightening torque Mp. Tighten locking screws in either a clockwise or counterclockwise sequence, using approx. ¼ (i.e., 90°) turns (even if initially some locking screws require a very low tightening torque to achieve ¼ turns) for several passes until ¼ turns can no longer be achieved.

5.Continue to apply overtorque for 1 or 2 more passes. This is required to compensate for a system-related relaxation of locking screws since tightening of a given screw will always relax adjacent screws. Without overtorquing, an infinite number of passes would be needed to reach specified tightening torque.

6.Reset torque wrench to specified torque (Mp) and check all locking screws. No screw should turn at this point, otherwise repeat Step 5 for 1 or 2 more passes. Once the screws are tightened, check the parallelism of the outer collars, considering that the maximum allowed error is 0.35% of the outer diameter of shrink disc. A larger error could cause a loss of pressure and, as a consequence, reduced performances.

It is not necessary to re-check tightening torque after equipment has been in operation.

9.2 Removal

Prior to initiating the following removal procedure, check to ensure that no torque or thrust loads are acting on the shrink disc, shaft or any mounted components.

Loosen all locking screws in several stages by using approx. ½ turns, following either a clockwise or counterclockwise sequence, until shrink disc can be moved on hub. The shrink disc, hub and shaft will return to their original fit clearances.

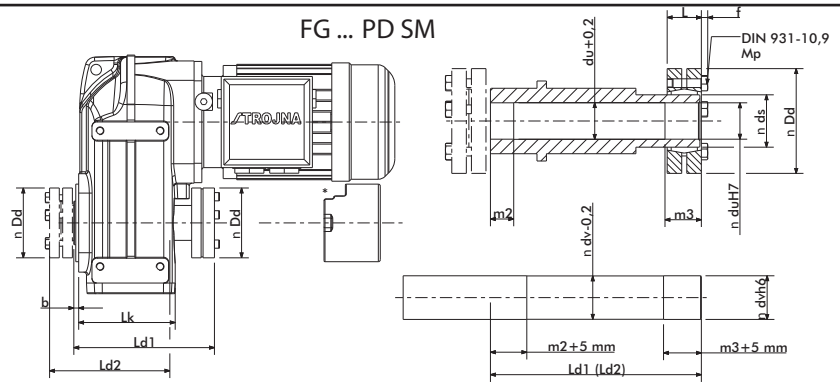
WARNING! DO NOT completely remove locking screws before locking rings are disengaged. As sudden separation of locking rings could involve high separation forces that may result in permanent injury or death. Be certain that locking rings are disengaged before completely removing locking screws.

9.3 Reinstallation of shrink discs

In relatively clean operating conditions, shrink discs may be reused without prior cleaning. In all other cases, shrink discs require thorough cleaning a re – lubrication as follows:

- Dow Corning® Molykote BR 2 Plus (or equivalent) on locking screw threads and under screw heads;
- Dow Corning® Molykote G-Rapid Plus (or equivalent) on inner and outer ring tapers.

FG ... PD SM

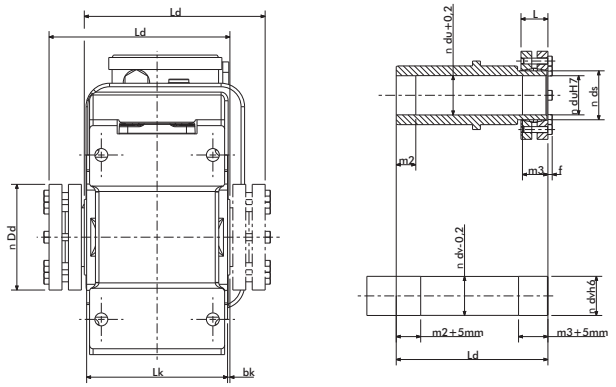


	SMB/SMR		m2	m3	Lk	b	Ld1	Ld2	du/dv	ds	Dd	L	f	Msmax	Famax	Mp
	max	max*												[Nm] [Lb-Ft]	[kN] [Lbf]	[Nm] [Lb-Ft]
FG1		63	20	21	99,5	5	150	130	30	36	72	23.5	4	570 (420)	58 (13000)	12 (9)
FG2	80	71	20	24	112	5	169	143	35	44	80	25.5	4	780 (575)	74 (16600)	12 (9)
FG3	112	100	20	27	141	5	205	180	40	50	90	27.5	4	1160 (855)	86 (19300)	12 (9)
FG4	132	112	30	28	149	5	221	192	50	62	110	30.5	4	2200 (1623)	111 (25000)	12 (9)
FG5	160	132	30	29	177	5	247	220	65	75	138	32.5	5.3	3200 (2360)	137 (30800)	30 (22)
FG6	200	200	50	40	247	5	323	280	75	90	155	39	5.3	7250 (5350)	210 (47200)	30 (22)
FG7	225	225	60	45	269	5	365	330	90	110	185	49	6.4	13600 (10030)	302 (67900)	59 (44)
FG8	250	250	60	50	343	6	415	415	100	125	215	53	10	21300 (15710)	395 (88800)	59 (44)

* Maximum possible motor frame size when using shrink disc protective lid.

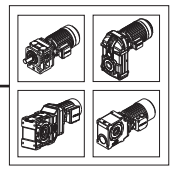
All other units in mm!

KG...(P)D SM

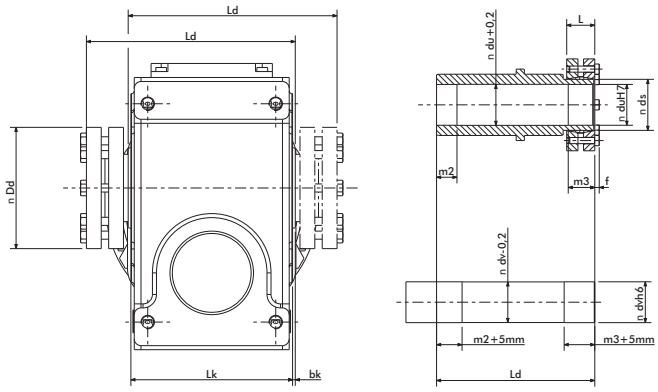


	SMB/SMR		m2	m3	Lk	b	Ld1	Ld2	du/dv	ds	Dd	L	f	Msmax	Famax	Mp
	max	max*												[Nm] [Lb-Ft]	[kN] [Lbf]	[Nm] [Lb-Ft]
KG1			20	20	95	5	130	130	30	36	72	23.5	4	570 (420)	58 (13000)	12 (9)
KG2			20	20	105	5	140	140	30	36	72	23.5	4	570 (420)	58 (13000)	12 (9)
KG3			20	25	120	5	160	160	35	44	80	25.5	4	780 (575)	74 (16600)	12 (9)
KG4			30	25	140	5	180	180	40	50	90	27.5	4	1160 (855)	86 (19300)	12 (9)
KG5			30	30	154	3	192	192	50	62	110	30.5	4	2200 (1623)	111 (25000)	12 (9)
KG6			30	30	176	7	195	195	65	75	138	32.5	5.3	3200 (2360)	137 (30800)	30 (22)
KG7			50	40	206	7	260	260	75	90	155	39	5.3	7250 (5350)	210 (47200)	30 (22)
KG8			60	45	252	8	320	320	90	110	185	49	6.4	13600 (10030	302 (67900)	59 (44)
KG9			60	50	340	10	415	415	100	125	215	53	10	21300 (15710)	395 (88800)	59 (44)

All other units in mm!



SG...(P)D SM



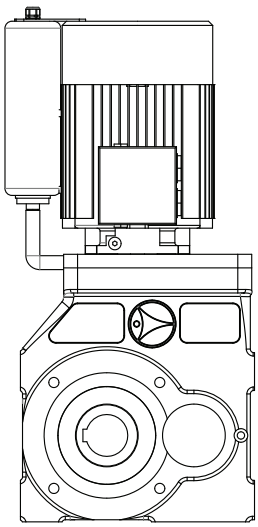
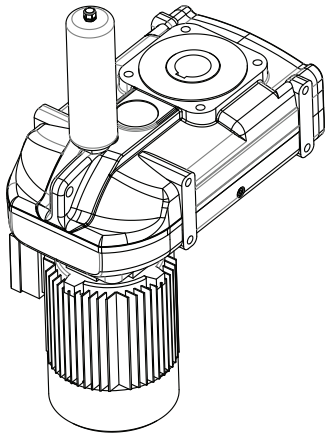
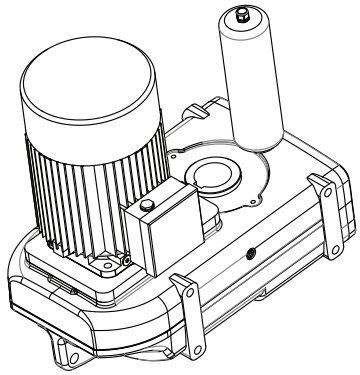
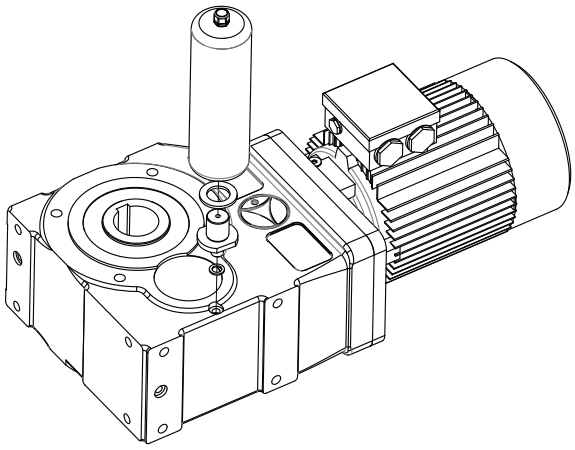
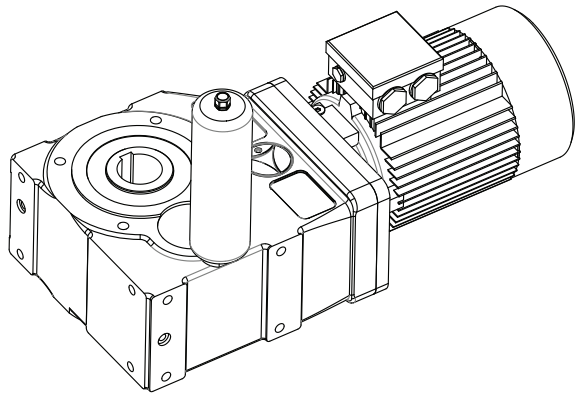
	SMB/SMR		m2	m3	Lk	b	Ld1	Ld2	du/dv	ds	Dd	L	f	Msmax [Nm] [Lb-Ft]	Famax [kN] [Lbf]	Mp [Nm] [Lb-Ft]
	max	max*														
SG1			20	20	95	5	130	130	30	36	72	23.5	4	570 (420)	58 (13000)	12 (9)
SG2			20	25	105	5	140	140	35	44	80	25.5	4	780 (575)	74 (16600)	12 (9)
SG3			30	25	124	3	160	160	40	50	90	27.5	4	1160 (855)	86 (19300)	12 (9)
SG4			30	25	120	5	160	160	40	50	90	27.5	4	1160 (855)	86 (19300)	12 (9)
SG5			30	30	140	5	180	180	50	62	110	30.5	4	2200 (1623)	111 (25000)	12 (9)
SG6			30	30	150	5	192	192	50	62	110	30.5	4	2200 (1623)	111 (25000)	12 (9)

All other units in mm!

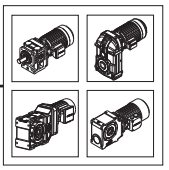
10. OIL COMPENSATOR

Oil compensator allows the lubricant/air space in gear unit to expand. This means lowering pressure inside gear unit at high operation temperatures and preventing lubrication to escape into breather valve.

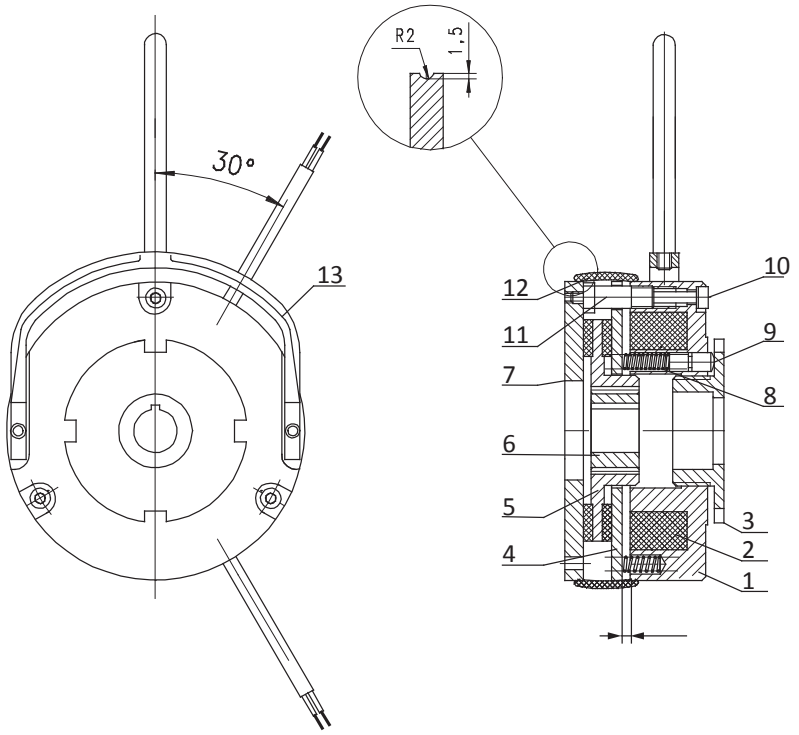
The oil compensator is supplied as assembly kit. It is intended for mounting onto the highest point of gear unit. however, if installation space is limited, there are many variations how to mount oil compensator. And on request and order-specific dimension from STROJNA can be made.

Variations and kits are adjusted to customer demands.



11. OPERATING INSTRUCTION OF DIRECT CURRENT ELECTROMAGNETIC BRAKE



1. Electromagnet body
2. Coil
3. Nut
4. Armature
5. Brake disk
6. Gear wheel
7. Spring
8. Spring
9. Thrust pin
10. Mounting bolt
11. Adjusting bolt
12. Brake casing
13. manual release lever

11.1 Construction and operating principle

The brake design is presented in the drawing. When coil (2) is not energized, the brake disk (5) with the friction linings is pressed by armature (4) to the mounting disk (7) or directly to the friction surface of the given equipment with force of springs (8), the brake then being in the on state (braking). The braking torque is transferred via the brake disk (5) onto the gear wheel (6) mounted on the shaft of the motor or equipment cooperating with the brake, secured against axial displacement by circlip. The amount of torque can be regulated by screwing in the nut (3) or reducing the number of springs.

The direct current fed to the electromagnetic winding (2), through its induction causes attraction of the armature |a=0| simultaneously eliminating the pressure of springs on the armature and brake disk (5). The brake is released. In case of voltage faliure or damaged electromagnet, in brakes with release lever - it is possible to release the brake by shifting the lever. Releasing the pressure on the lever causes its return and re-braking.

The distance between electromagnet and disc brake (5) that is, a width of air gap, is adjusted by manes of adjusting bolts (11). Type HPS brake in mounted to motor bearing cover with mounting bolts (19). The air gap »a« is set in factory for its nominal value which is later reduced by screwing in the adjusting bolts (11) to compensate for the progressive wear of brake disc lining.

11.2 Mounting and dismounting of brake

Mounting procedur of brake is very simple. The gear (6) is mounted to the shaft and protected with circlip against axial movement. Then couple the brake disc (5) with gear (6) and fix the brake using mounting bolts (10) to the motor bearing cover or to the wall of device to be braked. When the brake is provided with locking elements (14), these should be removed after the brake is installed. Check the value of air gap width as instructed in 10.3. Install the brake casing.
To disassembly, reverse the above procedure.

Type	HPS06	HPS08	HPS10	HPS12	HPS14	HPS16	HPS18	HPS20	HPS25
a nom.	$0,2^{+/- 0,05}$	$0,2^{+/- 0,05}$	$0,3^{+/-0,05}$	$0,3^{+/-0,05}$	$0,3^{+/-0,05}$	$0,3^{+/-0,05}$	$0,4^{+/-0,05}$	$0,4^{+/-0,05}$	$0,5^{+/-0,05}$
a max.	0,5	0,5	0,5	0,7	0,8	1,0	1,0	1,2	1,4

11.3 Adjustment of air gap

The air gap »a« grows gradually larger in consequence of wear of brake disc lining (5). The nominal value of the air gap »a nom« may be restored by screwing in the adjusting bolts (11). Prior to adjustment, slacken mounting bolts (10) and then set the nominal value of air gap using the feeler guage inserted between armature (4) and body and screwing in the adjusting bolts (11). Tighten the mounting (10) and secure the position by screwing out the adjusting bolts as far as they go.

11.4 Wiring system

When the DC brake is to be connected to the AC source, a rectifying circuit must be used. The solenoid of in electro-magnet circuit may be disconnected either on DC side or on AC side.

DISCONNECTION ON AC SIDE

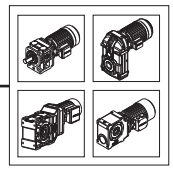
The coil current is broken between the coil and the supply (rectifying) system. The magnetic field reduces gradually causing extension of brake acuating time and simultaneous delay in rise of braking torque. If actuation times are not of significance, the brake on the alterantig current side should be actuated since no protection facilities are then required for the coil and contacts. While switching off, the supply systems operate as unidirectional diodes.

DISCONECTION ON DC SIDE

The coil current is broken between the coil and the supply (rectifying) system. The magnetic field is reduced very rapidly, short brake actuation time, resulting in rapid rise in braking torque. While switching off on direct current side, high peak voltage is formed in the coil causing rapid wear of contacts due to sparking.

11.5 Maintenance

The brakes do not require special maintenance procedures, however during regular intervals of time depending on intensity of brake operation, perform inspections and regulation of air gap »a«. When the brake disk reaches maximum wear, replace it with a new one.
While replacing the brake disk, take care that the friction surface of the disk, armature and elements cooperating with the friction linings are free from grease and oil. Remove all dirt accumulated from the brake interior. If in spite of correct mounting and proper regulation, the brake does not operate, failure is due to:
-electromagnet : burnt coil, daqmaged supply cable
-rectifier system (installed in the motor terminal box)
-electrical connections : check for correctness and quality of connections
-damaged elements - replace them with new ones.

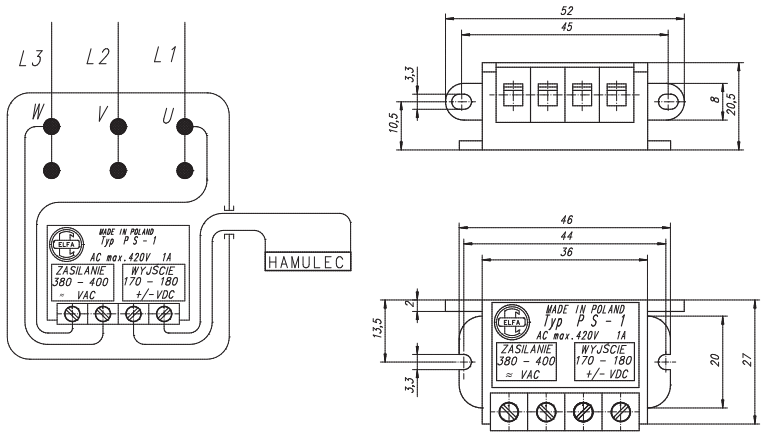


12. DC BRAKE SUPPLY CIRCUITS

12.1 Circuit PS 1

Circuit PS 1 is built on the basis of MOSFET type semiconductor technique which enabled achieving effects not available in traditional designs. the brake electromagnet energized through circuit of this construction enables the brake to achieve connection and disconnection time parameters analogous to breaking of circuit on direct current side. The parameters obtained are not however gained through utilization of additional electrical circuits and switches.
Simplicity of installation and parameters achieved enable very wide application, particularly in cases requiring positioning of drives, operation with high frequency of actuations compounded with repeatability of brake connecting and disconnecting times.
Supply circuit PS1 forms a complete unit for direct installation. Provided with a four-terminal strip, it enables unhindered adaptation in every cooperating circuit.
the circuit is adapted for supply from alternating current source of 380-400 VAC max. 420 VAC which after rectification and appropriate formation enables obtaining direct voltage of 170V-180 VDC for brake supply.

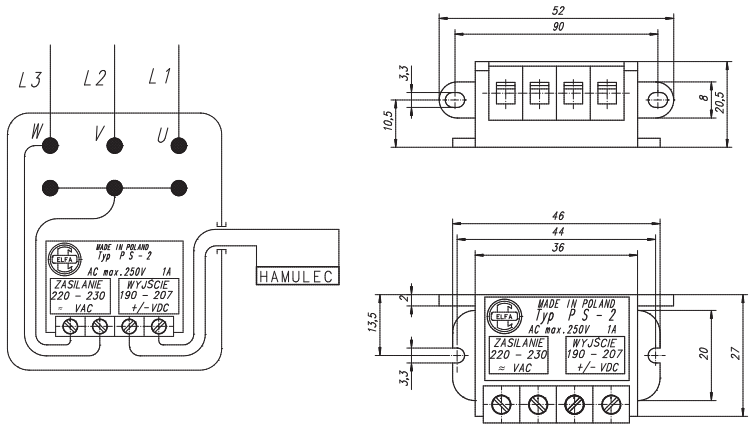
The diagram below shows the method of connecting the circuit PS 1 into supply circuit of brake cooperating with 3x400 VAC electric motor with star-connected winding.



12.2 Circuit PS 2

Circuit PS 2 is built on the basis of MOSFET type semiconductor technique which enabled achieving effects not available in traditional designs. the brake electromagnet energized through circuit of this construction enables the brake to achieve connection and disconnection time parameters analogous to breaking of circuit on direct current side. The parameters obtained are not however gained through utilization of additional electrical circuits and switches.
Simplicity of installation and parameters achieved enable very wide application, particularly in cases requiring positioning of drives, operation with high frequency of actuations compounded with repeatability of brake connecting and disconnecting times.
Supply circuit PS2 forms a complete unit for direct installation. Provided with a four-terminal strip, it enables unhindered adaptation in every cooperating circuit.
the circuit is adapted for supply from alternating current source of 220-230 VAC max. 250 VAC which after rectification and appropriate formation enables obtaining direct voltage of 190V-207 VDC for brake supply.

The diagram below shows the method of connecting the circuit PS 2 into supply circuit of brake cooperating with 3x400 VAC electric motor with star-connected winding.



SINGLE ELECTROMAGNETIC BRAKES:
Disk brake HPS

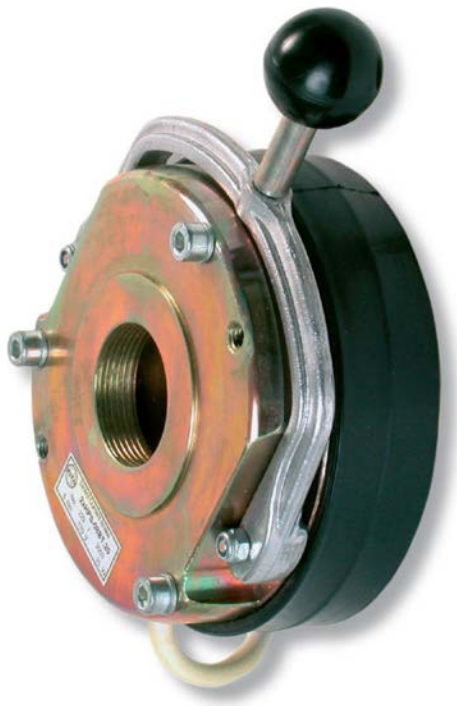
Spring actuated and electromagnetically released disk brake type HPS by direct current. Designed for braking rotating machine parts and their precision positioning. Utilized as safety brake. High repeatability even with large number of actuations. The brake characterizes relatively simple construction, facility for regulating brake parameters such as braking torque, braking time and also possibility of supply from alternating current source after connecting up a rectifier circuit delivered at customer's request along with the brake. An additional feature is quiet operation, particularly important when the equipment is operated by a number of drives operating additionally with high frequency of actuations. Braking trque can be accurately set by means of regulation nut. Brake design guarantees simple and problem -free installation. Various options of executions are at disposal with respect to fittings/acessories, brake supply, climatic conditions of utilization, enabling selection of appropriate option for definite utilization conditions.

Parameters			Unit	Brake type									
				HPS 04	HPS 06	HPS 08	HPS 10	HPS 12	HPS 14	HPS 16	HPS 18	HPS 20	HPS 25
Supply voltage Un			V	24, 104, 180, 207 VDC									
Power drawn P_{20}			W	16	20	25	30	40	50	55	65	75	100
Power drawn n_{max}			min^{-1}	3000									
Braking torque M_h			Nm	4	4	8	16	32	60	80	150	240	360
Weight			kg	0,5	0,7	1,8	3,2	6,6	7,5	11,2	17,0	24,8	29,0
Ambient temperature			°C	– 25 – + 40									
Operating time	on direct voltage side	t_{01}	ms	20	35	65	90	120	150	180	300	400	500
		t_{09}		10	17	35	40	50	65	90	110	200	270
	on alternating voltage side	t_{01}	ms	20	35	65	90	120	150	180	300	400	500
		t_{09}		Brake disconnection on alternating current side causes about five-times growth in braking time t_{09} with respect to disconnection on direct current side									

$t_{0,1}$ - releasing time (from switching on current to drop in braking torque to 10% M_{nom})
$t_{0,9}$- braking time (from switching off current to attaining 90% M_{nom})

Values of releasing and braking times are given as approximations, since they depend on mode of assembly/installation, temperature and power supply.

SINGLE ELECTROMAGNETIC BRAKES WITH HANDREALEASE:
Disk brake HPS ...AT



Spring actuated and electromagnetically released disk brake type HPS ...AT forms a variation of HPS brake. Designed for braking rotating machine parts and their precision positioning, in all applications where the drive is required to have limited level of noise. The specifics of this type of drive has made us draw up a brake version whose crucial units are so designed that the »quiet operation« requirement demanded by the user is fulfilled. Drives fitted with brake series HPS ...AT can be used in objects where limited level of noise has huge significance, e.g. theatres, concert halls, etc. where, as stage equipment drives, they meet strict safety requirements. Brake configuration is analogous to variant HPS, and the diagram below facilitates selection of appropriate option.

HPS [ ] **AT** [ ] [ ] • [ ] **V DC** [ ] **Nm** [ ]

Mechanical size
04, 06, 08, 10, 12, 14, 16, 18, 20, 25

without fittings/accesories	1
lever for manual release	2
securing disk "A"	3
lever for manual release + securing disk "A"	4
securing disk "B"	8
lever for manual release + securing disk "B"	9
securing disk "C"	10
lever for manual release + securing disk "C"	11

Operating voltage
24, 104, 180, 207 VDC

Climatic version according to standard: e.g. MT, TH

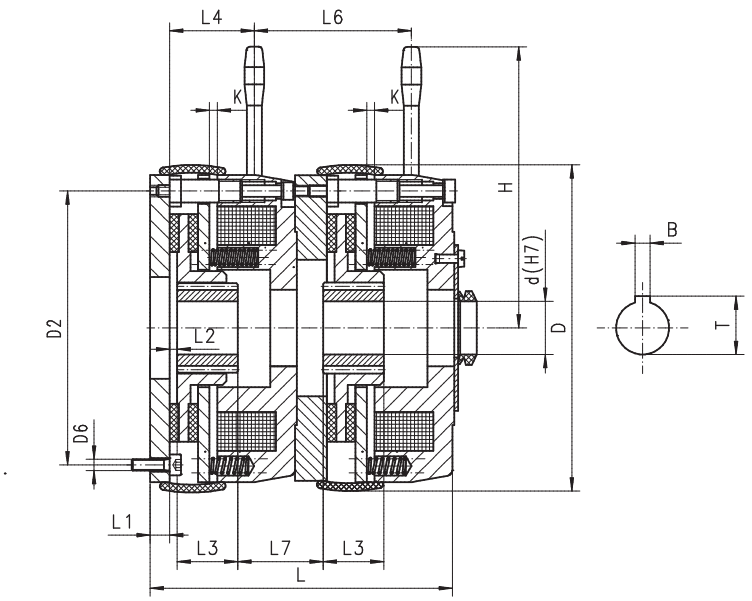
Nominal braking torque Nm								
HPS 06AT	HPS 08AT	HPS 10AT	HPS 12AT	HPS 14AT	HPS 16AT	HPS 18AT	HPS 20AT	HPS 25AT
4	8	20	32	60	80	150	240	360
	6	16	24	45	60	120	180	270
	3	12	16	30	40	75	120	180
		5						
		4						

Protection rating	
basic version – nut with hole	0
version IP 54 – nut without hole	1
version IP 54 – nut with hole + sealing V-ring	2
version IP 55 – nut without hole	3
version IP 55 – nut with hole + sealing V-ring	4

Ordering example:
HPS 12AT 20. 180 V DC 2x32 Nm

DOUBLE ELECTROMAGNETIC BRAKES WITH OR WITHOUT HANDRELEASE:
Disk brake 2HPS

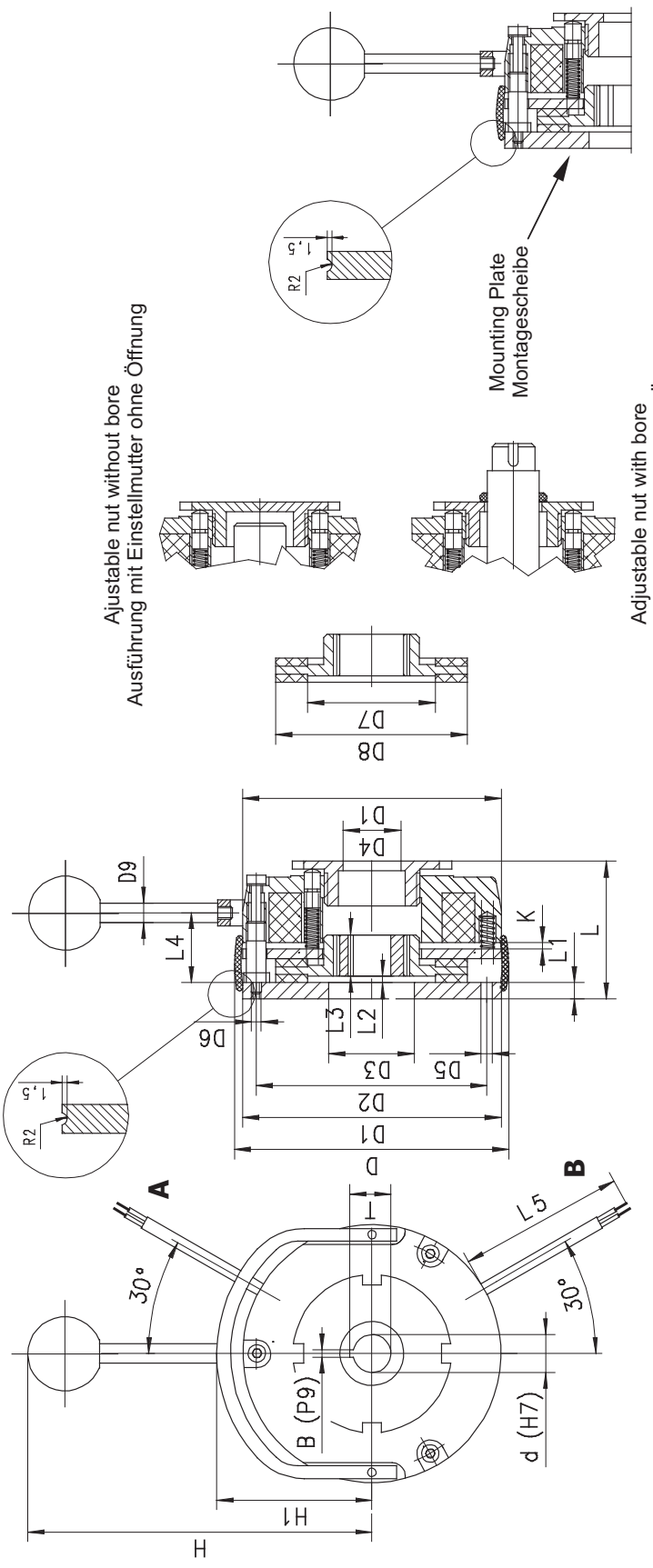
Overall dimensions



Type	d	D	D2	D6	L	L7	L3	L1	L2	L4	L6	H	K	B	T
2HPS06	15	87	72	3xM4	76	14	24	6	1,8	25	40	100	0,2	5	17,3
2HPS08	15	106	90	3xM6	90	18	27	7	2,5	28	48	115	0,2	5	17,3
2HPS10	19	132	112	3xM6	110	25	28	9	3,5	34	61	170	0,2	8	27,3
2HPS12	25	157	132	3xM6	128	25	34	9	3,0	37	69	184	0,3	8	28,3
2HPS14	30	169	145	3xM8	145	25	42	11	3,0	40	74	191	0,3	8	33,3
2HPS16	35	195	170	3xM8	160	33	42	11	3,0	40	88	204	0,3	8	38,3
2HPS18	40	221	196	4xM8	180	48	45	11	4,5	52	98	230	0,3	12	43,3
2HPS20	42	257	230	6xM10	215	45	55	11	5	62	115	270	0,3	12	45,3
2HPS25	42	308	278	6xM10	230	42	65	12,5	6	80	123	360	0,4	12	45,3

Used in lifting mechanisms are mechanical brakes, electrically released spring actuated disk brakes, designed on the basis of brake HPS. This brake immobilizes the weight during damage, incorrect manoeuvre or breakdown. The brake must transfer all forces occurring in such situations. To meet such requirements while maintaining the drive as simple as possible in the mechanical part and definite in operation, simple asynchronous motor is used controlled by frequency converters, provided with electromagnetic disk brake of design specific for hoisting system. Safety considerations have required designing a braking mechanism with dual safety circuit and maximum reduction of noise level during dynamic operation of brake unit. Drive system fitted whit brake 2HPS operates very quietly in spite of maintaining all electrical and mechanical parameters. This brake is characterized by two brake disks being mounted on common motor shaft, with independent electromagnetic circuits while maintaining required braking torque for proper operation of the drive. The simple and compact construction enables utillization in motors for driving lifting mechanisms required of which is smooth operation along with dual safety circuit. Brake of such design has the mechanical parameters indispensable for functioning of the drive, whereas assembly and mounting dimensions analogous as for traditional brake enabling mounting within dimensions of the drive motor. Applications: drives of passenger lifts, cranes, hoists and whereever compliance with rigorous regulations of Technical Inspection Office in the scope of lifting equipment is essential.

DIMENSION OF BRAKES:



Typ	D	D1	D2	D3	D4	D5	D6	D7	D8	D9	L	L1	L2	L3	L4	L5	K	H	H1	d	d max	d * smax	B	T
HPS04	80	74	62	25	13	4,3x3	M4x3	30	50	6	40	6	1,8	18	22	450	0,2	90	45	11	11		4	12,8
HPS06	87	84	72	25	17	4,5x3	M4x3	47	62	8	46	6	1,8	18	25	450	0,2	100	56	15	15		5	17,3
HPS08	106	102	90	30	17	5,5x3	M5x3	59	76	8	53	7	2,5	20	28	450	0,2	115	66	15	15		5	17,3
HPS10	132	125	112	40	26	6,4x3	M6x3	61	95	10	63	9	3,5	20	34	450	0,2	170	82	24	25		6	21,8
HPS12	157	148	132	45	27	6,4x3	M6x3	74	114	10	72	9	3	25	37	450	0,3	184	92	25	25		8	28,3
HPS14	169	162	145	55	27	8,4x3	M8x3	90	124	12	83	11	3	30	40	450	0,3	191	102	25	25		8	28,3
HPS16	195	188	170	65	38	8,4x3	M8x3	100	154	12	89	11	3	30	40	450	0,3	204	115	35	35		8	38,3
HPS18	221	215	196	75	43	9,0x4	M8x4	130	176	12	104	11	4,5	35	52	450	0,3	230	125	40	45	50	12	43,3
HPS20	257	252	230	90	45	11x6	M10x6	176	207	14	122	11	5	40	62	450	0,3	270	152	42	45	50	12	45,3
HPS25	308	302	278	120	45	11x6	M10x6	198	255	14	135	12,5	6	50	80	450	0,4	360	176	42	45	75	12	45,3

SYSTEMS OF FOREIGN VENTILATION - SINGLE PHASE SUPPLY

Application :

- System of foreign ventilation should be used in case adjusting speed under 60% rated speed of motor,
- System of foreign ventilation can be assembled on standard motors after removing the fan cover and fan without necessity of cutting the shaft.

Features on request:

- Factory produces various types of system ventilation but constructional details and delivery time are to be individual agreed.

SPECIFICATION OF COOLING FAN

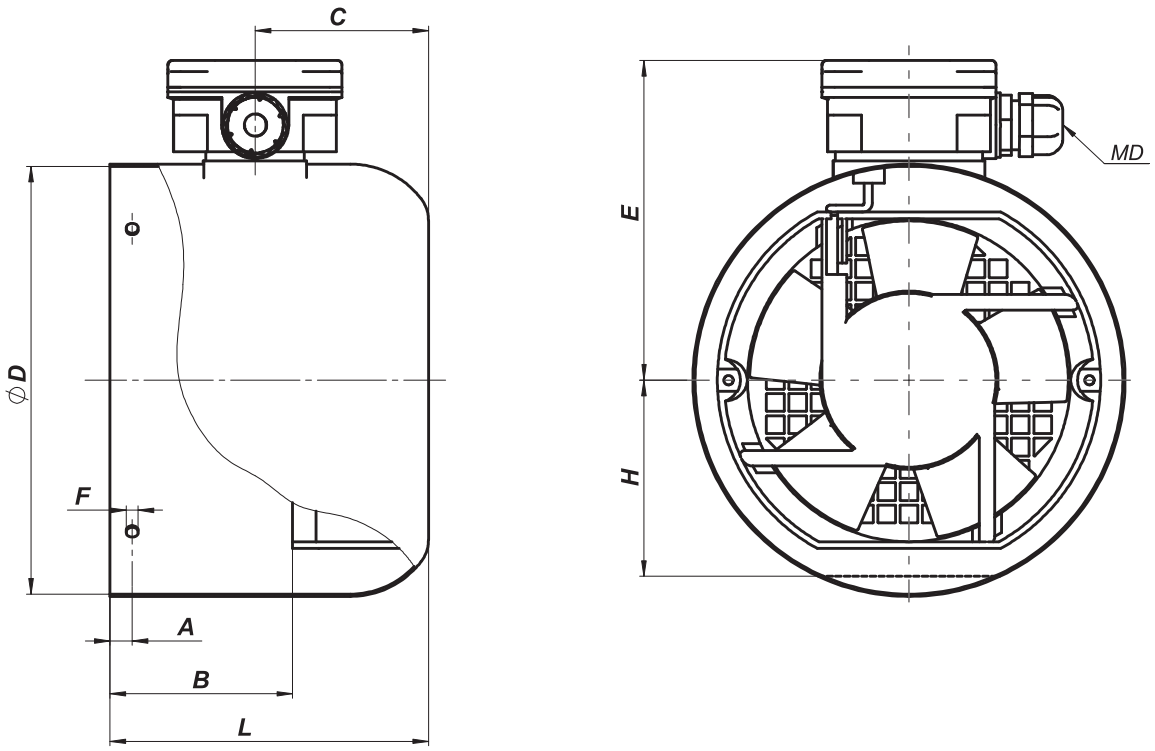
Motor size	Rated voltage	Frequency	Rated current	Input power	Speed	Air flow	Nosie level	Thermal protection
	[V]	[Hz]	[A]	[W]	[min-1]	[m3/min]	[dB]	
90/100/112	1 x 230	50/60	0,23/0,21	32/31	2800/3100	5,40/6,60	50/55	Impedance protection
132/160/180	1 x 230	50/60	0,24/0,27	56/60	2100/1900	24,0/21,8	57/55	Thermally protection

- environment temperature -20 to +80[°C]
- altitude up to 1000 [m] above sea level,
- life – 50 000 h at temperature 30°C,
- insulation class B,
- motor safety protection:
  – thermally protection - auto power off after motor coil winding temperature reaches 110°C, restart at temperature down to 70°C,

  – impedance protection – the motor withstands work even, in abnormal situations such as a lockedrotor condition,
- protection degree IP 55,
- ball bearing.

The manufacturer reserves the right to modify the performances of the products shown in this catalogue.

Dimensions



Typ / Type	A	B	C	D	E	F	H	L	MD
	[mm]								
FVS 90S	5	75	105	174	134	φ4,6	-	150	M20 x 1,5
FVS 90L	5	100	105	174	134	φ4,6	-	175	M20 x 1,5
FVS 100	5,5	80	75	192	145	φ6,0	-	153	M20 x 1,5
FVS 112	13	93	75	231	163	φ7,0	108	156	M20 x 1,5
FVS 132	18	121	80	264	180	φ7,0	127	237	M20 x 1,5
FVS 160	23	158	80	313	204	φ7,0	-	271	M20 x 1,5
FVS 180	21	143	80	348	221	φ7,0	-	246	M20 x 1,5