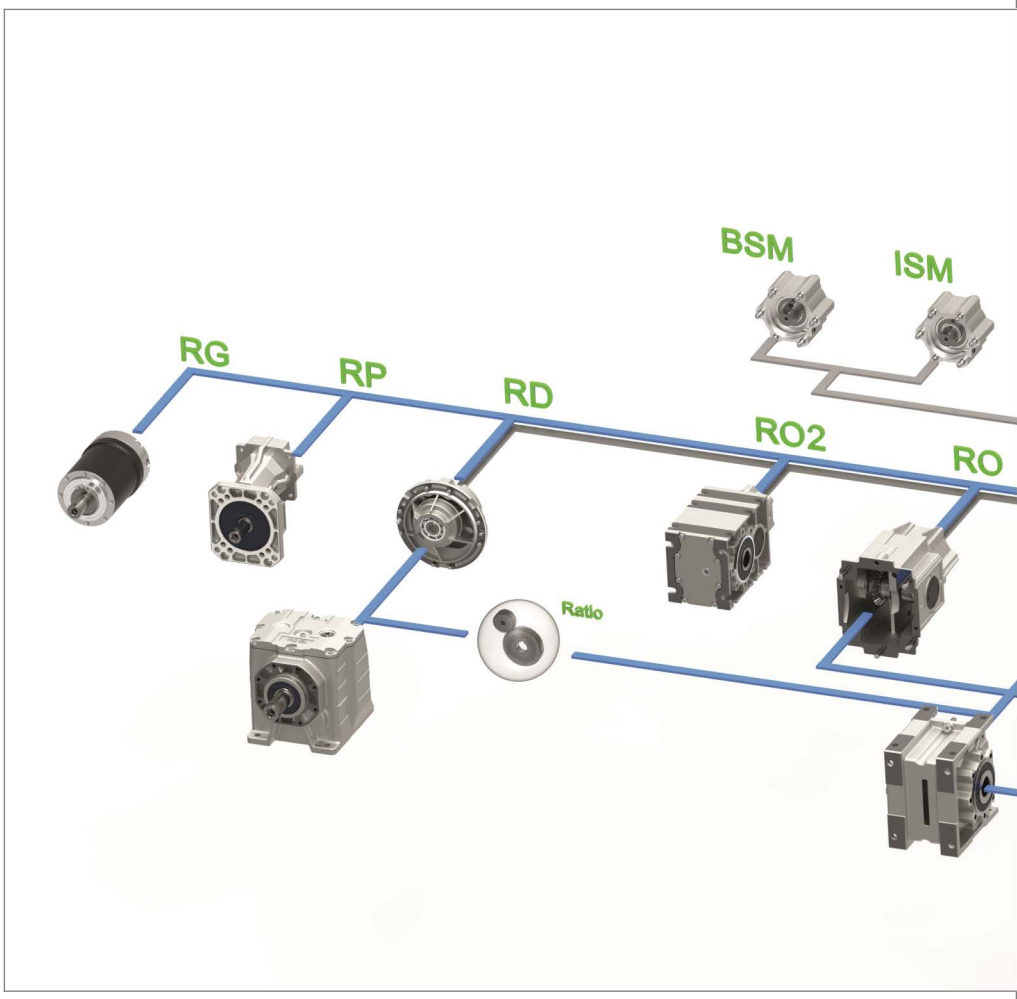
RO - RV

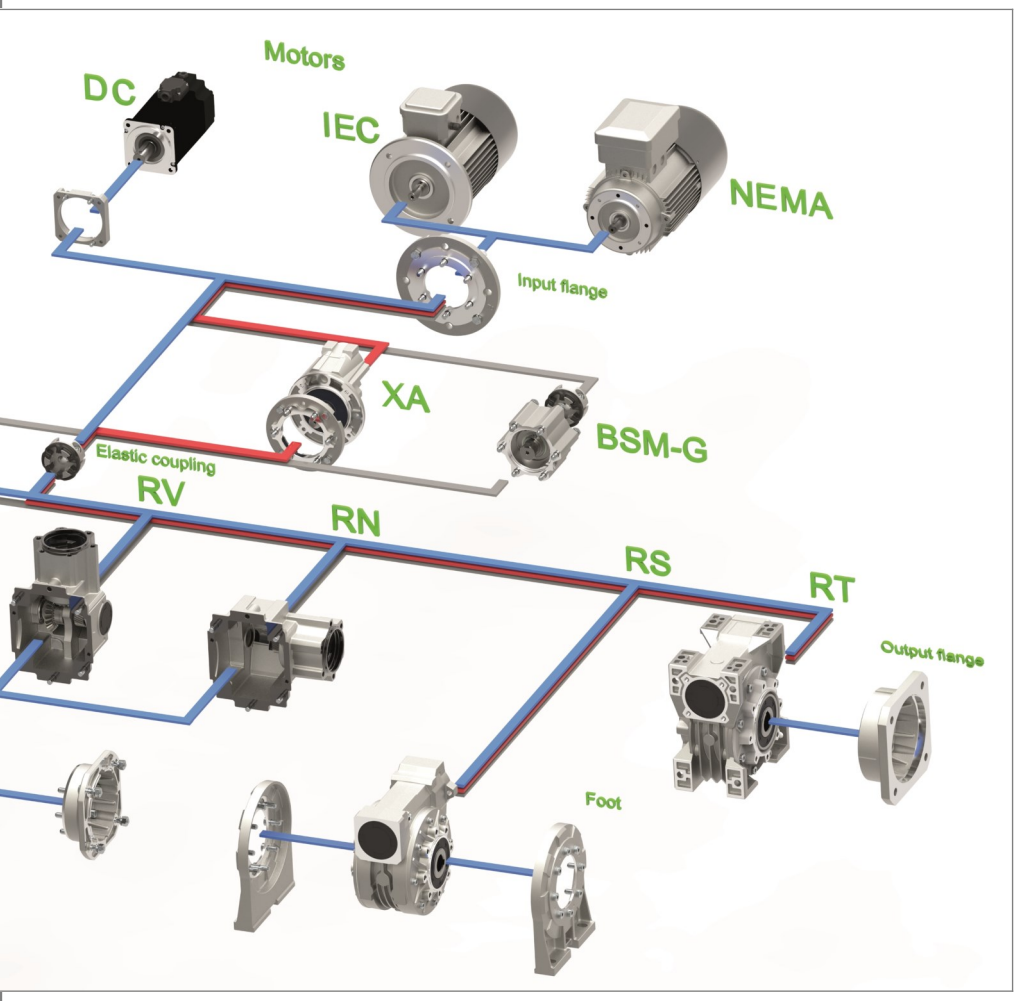
BEVEL HELICAL GEARBOXES

- three gear trains
- in-line and right angle versions
- IEC and NEMA motors

CONTENTS



Modularity
Modularity and flexibility have been leading the VARVEL product design since the 2000s, allowing our sales net the assembly of gearboxes in kit form in a few minutes and with a normal equipment. The kit-form mounting allows maximum flexibility to VARVEL distributors and resellers who, thanks to the availability of a limited kit number in stock, can instantly configure the product requested.



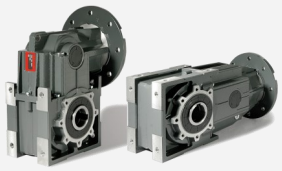
Selection wizard

VARsize® selection program, available from our site
www.varvel.com
allows a friendly sizing of VARVEL product range.

2D/3D Drawings
A guided selection lets 2D/3D models downloaded for the most popular CAD systems.

Guided selection
VARsize returns
- the gearboxes matching the required operation parameters (power, output torque, rpm, service factor etc.),
- a data sheet featuring performance data of the selected gearbox;
- the 2D dimensional drawings,
- the 3D model.

Description



The gearboxes Series RO-RV are designed according to latest ISO engineering specifications with the help of computer aided structural analysis for displacement and stress field.

The monolithic framework does not deflect under the effect of torque and external loads with effective results on sealing surfaces.

The gearboxes of Series RO-RV are manufactured of aluminium pressure die cast for the first 3 sizes and of cast iron for the others. The shaft mount version allows the flange mount B5 conversion by simply fitting one of the many output flanges available.

Various dimensions and types of output shafts (hollow with through keyway, hollow without keyway and with shrink disk, hollow splined and solid with single or double end) are available for the majority of applications.

The series RO and RV are made of 6 sizes, 30 reduction ratios and output torques between 180 and 3400 Nm.

The gearboxes series RO-RV consist of bevel/helical gearboxes with one bevel and two helical trains, and hollow output shaft as standard.

Service factor
Selection data are meant for service factor SF1.0, i.e. for
- 8 running hours per day,
- uniform load,
- 6 start/stops per hour and
- room temperature from 15 to 35 °C

Thermal power
Rated power is the power that can be applied at the gearbox input, on continuous operation, max. temperature of 40 °C, max. altitude of 1000 m and air speed of 1.25 m/s, without exceeding the oil temperature of about 85 °C.
Thermal power can limit the rated P_1 (shaded area on page 16) depending on the cooling system, input speed, ambient temperature and service factor.

Oil seals
- NBR - fitted on input and output shafts as standard.
- FKM - (Viton) for operation with 2-pole AC, DC and servo motors, on demand.
- Silicone - for low temperature operation, on demand.

Lubricant
Gearboxes are delivered filled with synthetic long-life oil (ISO VG 320 Grade) for temperature -15/+35 °C as standard.
Oil quantities vary according to working positions (see page 10-11).
Oil, drain or vent plugs on demand (see page 9).

Dimensions
Dimensions and units of measurement are referred to the metric system or imperial when stated.

Directive ATEX
The gearboxes VARVEL-ATEX. supplied on demand. are designed and manufactured according to Directive 2014/34/CE “ATEX” and therefore, they are qualified for installation in potentially explosive atmospheres.

Detailed information at pages 84-87.

Useful formulae

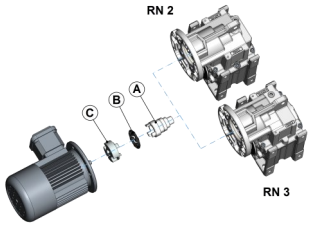
Input power [kW]	Output torque [Nm]	Duty factor [FU]	
$P_1 = \frac{M_2 * n_2}{9550 * \eta}$	$M_2 = \frac{9550 * P_1 * \eta}{n_2}$	$FU = \frac{M_2}{M_{(app)}}$	

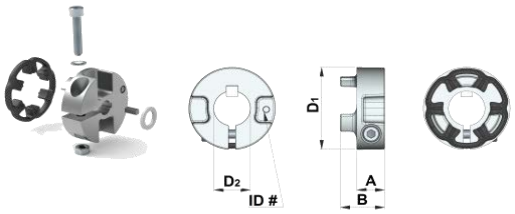
Description
Symbols

	General specifications
Range	6 sizes 40 ratios in 2 and 3 stages 3300 Nm max. output torque
Sizing	According to ISO6336/DIN3990.
Housing, Covers	Pressure die cast aluminium up to size 3 and cast iron from size 4
Coupling G input	Pressure die cast aluminium for sizes G3, G5, G6 and alloyed steel from size G8
Toothed parts	Steel case hardened - Tooth profile ground or shaved - Run-in bevel gears
Output shafts	Hollow, of ductile cast iron
Shafts & Keys	Steel - Tolerances: Shafts h6, Bores E8 - Keys according to DIN6885 B1
Bearings	Ball- or roller-types according to sizes and technical requirements
Oil seals	NBR - Nitril-Butadiene Rubber with additional anti-dust lip according to DIN 3760 FKM - (Viton) Fluorinated rubber on demand SIL - Silicone rubber on demand
Lubricant	Synthetic long-life oil - Grade ISO VG 320
VPainting	Aluminium until size 3 and from size 4 Epoxy powder paint Standard colour RAL 7012
Protection grade	IP66 - Gearbox body IP20 - Gearbox with flanges and adapters: Increased grades on demand
ATEX	On demand.

		Symbols
D	[mm]	PCD of transmission element k_T
F_{r1}, F_{r2}, F_r	[N]	Catalogue radial load (input, output, application)
SF		Service factor
i, i_r		Reduction ratio (nominal, real)
J_1, J_2, J_m	[kgm^2]	Moment of inertia of the gearbox (input, output) and of motor
k_a, k_L, k_T, k_{S3}		Factor (acceleration, length, type, S3 intermittence)
Lub H, V	[l]	Lubricant (litres) Mounting (horizontal, vertical)
M_2 , $M_{(app)}$	[Nm]	Maximum output torque (gearbox, application)
n_1, n_2	[rpm]	Speed (input, output)
P_1	[kW]	Power (input)
Peso	[kg]	Catalogue weights: worked out for B3H mounting and average reduction ratio
η		Efficiency - 0.94 (3-gear trains)

Coupling





Friction clamped coupling on motor shaft
- IEC/NEMA adapters and couplings fitted on already assembled gearbox
- Elimination of fretting corrosion between bore and key
- Zero backlash in gearbox/motor connection
- High torsional rigidity

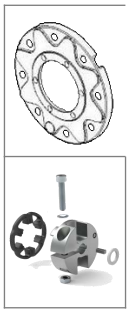
Type	Kit Part No.	RO - RV	Mt [Nm]	Mt_1 [Nm]	Mt_2 [Nm]	A [mm]	B [mm]	D_1 [mm]	D_2 [mm]	ID#
G5	KG5.009 KG5.011 KG5.014 KG5.019 KG5.024	13	8.9 - 10	14 15 30 40 70	8 - 10 8 - 10 12 - 17 20 - 25 30 - 40	14.5	23	45 45 45 45 52	9 11 14 19 24	509 511 514 519 524
G6	KG6.014 KG6.019 KG6.024 KG6.028 KGS6.038	23 - 33 - 43	15.3 - 18	60 90 130 180 500	30 - 40 50 - 65 85 - 100 100 - 120 - - -	19.5	31.5	58	14 19 24 28 38	614 619 624 628 - - -
* GS8	KGS8.019 KGS8.024 KGS8.028 KGS8.038 KGS8.042 KGS8.048	53 - 63	15	150 250 350 500 500 500	- - - - - - - - - - - - - - - - - -	35	51	79	19 24 28 38 42 48	- - - - - - - - - - - - - - - - - -

Type	Kit Part No.	RO - RV	Mt [in-lb]	Mt_1 [in-lb]	Mt_2 [in-lb]	A [in]	B [in]	D_1 [in]	D_2 [in]	ID#
G5	KG5.N56 KG5.N140	13	80 - 90	400 530	265 - 310 355 - 400	0.57	0.91	1.77 2.05	1/2" 5/8" 7/8"	5N48 5N56 5N140
G6	KG6.N56 KG6.N140 KG6.N180	23 - 33 - 43 23 - 33 - 43 43	135 - 160	440 750 1770	- - - - - - - - -	0.77	1.24	2.28	5/8" 7/8" 1-1/8"	6N56 6N140 6N180
* GS8	KGS8.N056 KGS8.N140 KGS8.N180 KGS8.N210 KGS8N250	53 - 63 53 - 63 53 - 63 53 - 63 63	135	1240 1770 2665 4425 4425	- - - - - - - - - - - -	1.38	2.01	3.11	5/8" 7/8" 1-1/8" 1-3/8" 1-5/8"	- - - - - - - - - - - - - - -

Mt - Screw locking torque
Mt_1 - Transmissible torque with key
Mt_2 - Transmissible torque without key
(*) - Coupling GS8: steel, key and locking grub screw
Note - No ID# marked on Coupling GS8

Flanges & Coupling

Type	Flange				Coupling	
		IEC	Part No. . Kit B5	Kit B14	Type	Kit Part No.
RO13 RV13	FM 50	56 63 71 80 90	K532.206.120 K532.206.140 K532.206.160 K532.206.200 K532.206.200	- - - K532.206.090 K532.206.105 K532.206.120 K532.206.140	G5 ø9 G5 ø11 G5 ø14 G5 ø19 G5 ø24	KG5.009 KG5.011 KG5.014 KG5.019 KG5.024
RO23 RV23	FM 70	71 80 90 100/112	K533.206.160 K533.206.200 K533.206.200 K533.206.250	K533.206.105 K533.206.120 K533.206.140 K533.206.160	G6 ø14 G6 ø19 G6 ø24 G6 ø28	KG6.014 KG6.019 KG6.024 KG6.028
RO33 RV33	FM 85	71 80 90 100/112	K534.206.160 K534.206.200 K534.206.200 K534.206.250	- - - K534.206.120 K534.206.140 K534.206.160	G6 ø14 G6 ø19 G6 ø24 G6 ø28	KG6.014 KG6.019 KG6.024 KG6.028
RO43 RV43	FM 110	71 80 90 100/112 132	K535.206.160 K535.206.200 K535.206.200 K535.206.250 K535.206.300	- - - - - - - - - K535.206.160 K535.206.200	G6 ø14 G6 ø19 G6 ø24 G6 ø28 * GS6 ø38	KG6.014 KG6.019 KG6.024 KG6.028 KGS6.038
RO53 RV53	FM 130 & FM 150	80 90 100/112 132 160 180	K536.206.200 K536.206.200 K536.206.250 K537.206.300 K565.206.350 K565.206.350	- - - - - - - - - K536.206.200 - - - - - -	* GS8 ø19 * GS8 ø24 * GS8 ø28 * GS8 ø38 * GS8 ø42 * GS8 ø48	KGS8.019 KGS8.024 KGS8.028 KGS8.038 KGS8.042 KGS8.048
RO63 RV63	FM 130 & FM 150	80 90 100/112 132 160 180	K536.206.200 K536.206.200 K536.206.250 K537.206.300 K565.206.350 K565.206.350	- - - - - - - - - K536.206.200 - - - - - -	* GS8 ø19 * GS8 ø24 * GS8 ø28 * GS8 ø38 * GS8 ø42 * GS8 ø48	KGS8.019 KGS8.024 KGS8.028 KGS8.038 KGS8.042 KGS8.048



Type	Flange			Coupling	
		NEMA	Kit Part No.	Type	Kit Part No.
RO13 RV13	FM 50	56 C 140 TC	K532.227.N56 K532.227.N56	G5 ø 5/8” G5 ø 7/8”	KG5.N56 KG5.N140
RO23 RV23	FM 70	56 C 140 C	K533.227.N56 K533.227.N56	G6 ø 5/8” G6 ø 7/8”	KG6.N56 KG6.N140
RO33 RV33	FM 85	56 C 140 TC	K534.227.N56 K534.227.N56	G6 ø 5/8” G6 ø 7/8”	KG6.N56 KG6.N140
RO43 RV43	FM 110	56 C 140 TC 180 TC	K535.227.N56 K535.227.N56 K535.227.N180	G6 ø 5/8” G6 ø 7/8” G6 ø 1-1/8”	KG6.N56 KG6.N140 KG6.N180
RO53 RV53	FM 150	56 C 140 TC 180 TC	K537.227.N56 K537.227.N56 K537.227.N180	* GS8 ø 5/8” * GS8 ø 7/8” * GS8 ø 1-1/8”	KGS8.N56 KGS8.N140 KGS8.N180
RO63 RV63	FM 150	56 C 140 TC 180 TC 210 TC	K537.227.N56 K537.227.N56 K537.227.N180 K537.227.N180	* GS8 ø 5/8” * GS8 ø 7/8” * GS8 ø 1-1/8” * GS8 ø 1-3/8”	KGS8.N56 KGS8.N140 KGS8.N180 KGS8.N210

(*) - Coupling: steel, key and locking grub screw

Designation

Gearbox

F	RO	-G ---	33	/B3	H	31.5	IEC80	-B5	AU30	DFU200

- DFU200 = Output flange
- AU30 = Output shaft ø
- -B5 = B5. B14 = Motor form
- IEC80 = Electric motor frame
- 31.5 = Reduction ratio
- H = H. V = Gearbox mounting position
- /B3 = B3. B5. B3/B5 = Gearbox form
- 33 = Gearbox size and stages
- -G = Input with G-type coupling
- --- = Input with bore and keyway
- RO = RO, RV = Gearbox type

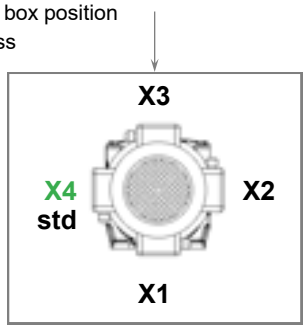
M = Geared motor
F = Gearbox with input flange
S = Gearbox without input flange
… = (nothing) Gearbox with input free shaft

Electric motor

MT	0.75 kW	80 A	4	B14	230/400/50	IP55	F	X4

- X4 = Terminal box position
- F = Insulation class
- IP55 = Protection class
- 230/400/50 = Voltage/frequency
- B14 = Mounting form
- 4 = Number of poles
- 80 A = IEC motor frame
- 0.75 kW = Motor power

MT = Three-phase motor
MM = Single-phase motor
MA = Brake motor



Lubrication

ISO	ARAL	bp	Castrol	EXXON	KLÜBER LUBRICATION	Mobil	TEXACO	TOTAL	Shell
VG320*	Degol GS 320	Enersyn SG-XP320	Alphasyn PG 320	Glycolube 320	Klübersynth GH-6-320	Glygoyle HE 320	Synlube CLP 320	Carter SY 320	Omala S4 WE 320
VG320**	Eural Gear 320	- - -	Vitalube GS 320	Gear Oil FM 320	Klübersynth UH1-6-320	Mobil DTE FM 320	---	Nevastane EP 320	---

* - Synthetic base oil
** - Food Industry Approved Synthetic Oil

Apparent oil leakages

Oil seal lips are safeguarded with an adequate grease amount against oil seal dry running-in and shaft oxidation at gear-box assembly .

Oil seal lip-temperature increases during operation; the grease laid on the outer side of the oil seal becomes then more and more fluid and the grease oily component may be misread as oil coming from inside the gearbox.

Apparently, this oiliness and also the lubricant film, that must always exist between oil seal lip and shaft seat to avoid the oil seal lip is quickly damaged, might be wrongly considered as lubricant leakages.

Breather plugs

Breather plug installation is recommended when internal pressure exceeds 0.25-0.3 bar to avoid possible lubricant leakages from the oil seal.

Internal pressure increase is due to lubricant volume variation caused by temperature increase because of
- external conditions (sloped working position, environment over 35°C), or
- internal conditions (input speed over 2000 rpm; frequent start/stops, continuous service over 8 hours a day).

Breather plug standard calibration is 0.25-0.3 bar.
Other calibrations on demand.

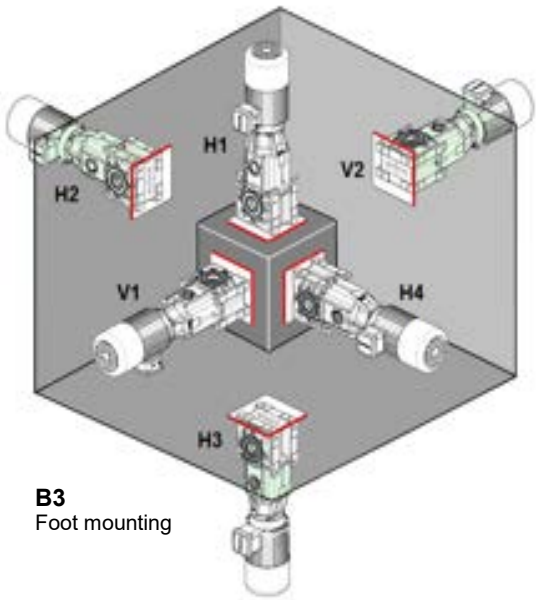
Ask for breather plug installation feasibility as not all the sizes allow it.

Weights
Lubricants
Mounting positions

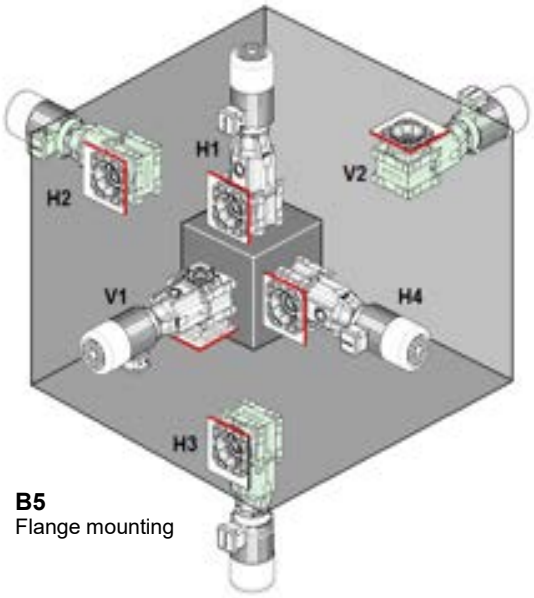
FRO	Weight	ISO VG320 Oil [litres]					
	kg	H1	H2	H3	H4	V1	V2
13	6.4	0.5	0.45	0.4	0.45	0.35	0.45
23	10.6	0.8	0.7	0.75	0.7	0.85	0.85
33	12.5	1.5	1.2	1.4	1.2	1.5	1.7
42	39	2.8	2.0	1.6	2.0	2.0	2.5
53	73	5.1	3.6	2.9	3.5	5.0	5.0
63	121	9.2	6.5	5.2	6.5	9.0	9.0

RO

All units are delivered pre-filled with long-life synthetic base oil.



B3
Foot mounting



B5
Flange mounting

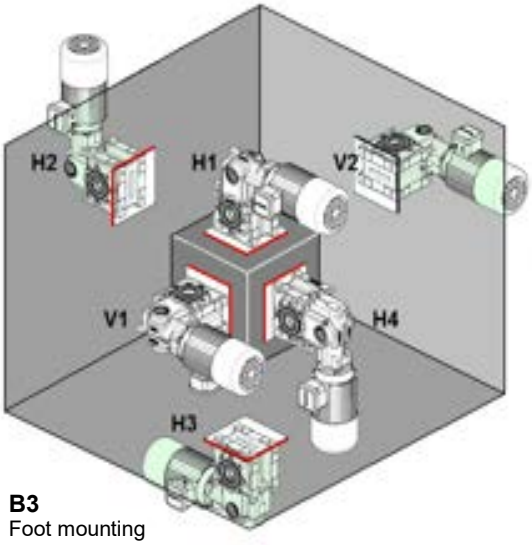
Mounting position (H or V) is referred to the output shaft position and not to foot or flange fixing position.

Weights
Lubricants
Mounting positions

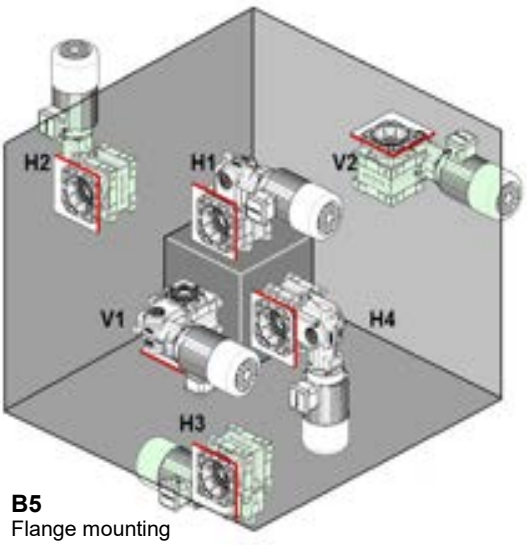
FRV	Weight	ISO VG320 Oil [litres]					
	kg	H1	H2	H3	H4	V1	V2
13	6.1	0.5	0.35	0.25	0.35	0.4	0.3
23	10.1	0.65	0.6	0.5	0.6	0.7	0.56
33	13.0	1.5	1.0	0.8	1.0	1.2	0.8
42	36.5	2.9	1.9	1.2	1.8	2.6	1.7
53	68	5.2	3.4	2.1	3.2	4.7	4.7
63	117	9.4	6.1	3.8	5.8	8.5	8.5

RV

All units are delivered pre-filled with long-life synthetic base oil.



B3
Foot mounting



B5
Flange mounting

Mounting position (H or V) is referred to the output shaft position and not to foot or flange fixing position.

Duty factor
Service factor
Acceleration factor

Duty Factor [FU] is defined as the ratio between gearbox maximum output torque M_2 and application torque M_{app}.
The ratio must be bigger than or equal to SF or $k_{(a)}$ factors here defined.

$$FU = \frac{M_2}{M_{app}}$$

$$FU \geq SF$$

$$FU \geq k_{(a)}$$

Service factor [SF1.0] is meant as typical operation of 8 hours/day, with uniform load, starts/ stops lower than 6 per hour and ambient temperature between 15 and 35 Celsius.
For other operation conditions, select SF according to tables SF_1 and SF_2

$$SF = SF_1 \times SF_2$$

SF_1	Load type		
hours	uniform	variable	with shocks
8	1.0	1.2	1.4
16	1.2	1.4	1.6
24	1.4	1.6	1.8

SF_2	Start-Stops / hour		
number	**RD-RN RO RV**	number	**RS-RT**
6	1.0	6	1.0
240	1.25	60	1.1
1200	.35	120	1.2

Mass acceleration factor [$k_{(a)} \leq 0.2$] is meant as typical operation of 8 hours/day for Load class A.
For other working conditions, select $k_{(a)}$ from the graphs at pages 3 and 4 of 'FS Catalogue'.

$$k_{(a)} = \frac{\frac{J_2}{i_r^2} + J_1}{J_m}$$

	$k_{(a)}$	Load type
A	$k_{(a)} \leq 0.2$	uniform
B	$0.2 < k_{(a)} \leq 3$	moderate shocks
C	$3 < k_{(a)} \leq 10$	severe shocks

A, B, C - Load class
J_1, J_2 - Moment of inertia of the gearbox (input, output)
J_m - Moment of inertia of the motor
i_r - Real reduction ratio

Duty type

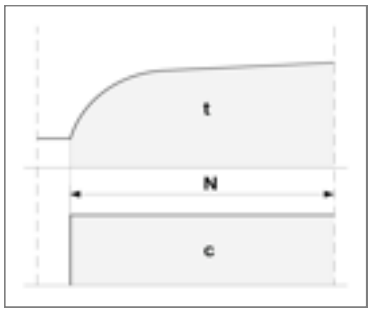
Duty types are defined by CEI EN 60034-1/ IEC34-1 Standard.

S1 - Continuous duty

Operation

- steady load (c)
- indefinite period of time (N)
- period long enough to achieve thermal balancing (t)

On continuous duty, select the gearbox with service factor SF1.0 or higher



c = Load
N = Operation time
t = Temperature

S3 - Periodic intermittent duty

Operation

- steady load (c)
- according to a cycle (C)
- including a steady load time (N)
- and a rest time (R)

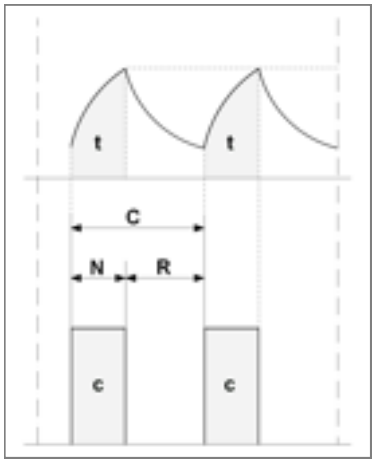
Starts/stops do not affect temperature (t).

Reference cycle (C) is 10 minutes overall.

On periodic intermittent duty, select the gearbox with the appropriate multiplier k_{S3} or higher.

Intermittence ratio is calculated according the following formula..

$$\frac{N}{(N+R)} \cdot 100 = \begin{cases} 60\% & k_{S3}\ \mathbf{0.9} \\ 40\% & k_{S3}\ \mathbf{0.85} \\ 25\% & k_{S3}\ \mathbf{0.75} \\ 15\% & k_{S3}\ \mathbf{0.7} \end{cases}$$



c = Load
C = Duty cycle
N = Operation time
R = Rest time
t = Temperature

External Loads

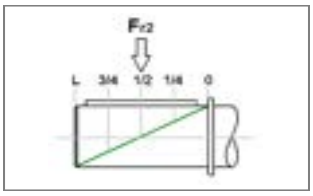
Catalogue radial (overhung) load should be checked according to output speed, mounting position, the transmission element fitted on the gearbox output shaft and then rectified by the appropriate k_L and k_T rating factors.

Gearbox radial load F_{r2} must be greater than or equal to application radial load F_r.

The axial load is included in the catalogue radial load as 20% of F_{r2} value and is valid for both tensile and compressive axial stress.

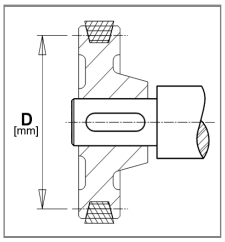
Application point
The radial load is considered as applied at the output shaft mid-point.
Other positions origin loads to be adjusted by the appropriate factor k_L.
Examples of the distance from the shaft shoulder:

k_L	L [mm]
1.1	1/4 * L
1.0	1/2 * L
0.9	3/4 * L
0.8	L



Transmission element

k_T	Element type
	Gear
1,15	tooth No. < 17
	Chain sprocket
1,40	tooth No. < 13
1,25	tooth No. < 20
1,00	tooth No. > 20
	Pulley for
1,75	V-belt
2,50	flat-belt
2,25	toothed-belt



Radial load

$F_{r2} = (2000 \times M_2) : D \times k_L \times k_T$
$F_{r2} \geq F_r$

Axial load

$F_{a2} = F_{r2} \times 0.2$

where
F_{a2} = Permissible axial load
F_r = Radial load of application
F_{r2} = Radial load of gearbox
M_2 = Output torque of gearbox

Versions

MRO - MRV
Geared motors
- three gear sets
- foot-, flange-, and shaft-mounting

FRO - FRV
Gearboxes with input motor flange
- quill input and coupling
- three gear sets
- foot-, flange-, and shaft-mounting

SRO - SRV
Gearboxes without input motor flange
- quill input and coupling
- three gear sets
- foot-, flange-, and shaft-mounting

RO - RV
Gearboxes with input solid shaft
- three gear sets
- foot-, flange-, and shaft-mounting

RO Series - In-line version
RV Series - Right angle version

Thermal power

[kW] / i_n	RO-RV 13		RO-RV 23		RO-RV 33		RO-RV 43		RO-RV 53		RO-RV 63	
	P_1	Pt_1	P_1	Pt_1	P_1	Pt_1	P_1	Pt_1	P_1	Pt_1	P_1	Pt_1
6,3	- - -	- - -	4,70	5,40	10,20	7,04	11,10	9,49	22,40	16,43	40,30	22,32
7,1	2,70	3,08	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
8	- - -	- - -	4,10	5,11	8,50	6,68	9,90	9,01	20,00	15,40	31,90	21,56
9,0	2,20	3,11	3,90	4,28	6,50	6,22	11,60	7,07	- - -	- - -	- - -	- - -
10,0	2,30	3,01	3,70	4,85	7,70	6,33	9,10	8,51	17,60	14,37	28,50	20,46
11,2	2,00	2,90	3,10	4,12	5,10	5,98	9,20	6,68	- - -	- - -	- - -	- - -
12,5	- - -	- - -	3,30	4,56	6,60	5,98	7,90	7,98	16,60	13,45	25,70	19,19
14,0	1,50	2,92	2,50	3,93	5,30	5,26	5,80	7,99	12,00	12,43	18,90	17,80
16,0	1,70	2,68	2,90	4,20	5,20	5,53	7,00	7,53	14,10	12,65	22,60	17,91
18,0	1,20	2,70	2,20	3,89	4,60	5,07	5,40	7,64	10,80	11,87	17,00	17,01
20,0	1,40	2,47	2,40	3,95	3,20	4,84	6,00	6,97	12,20	11,48	19,40	16,44
22,4	1,10	2,27	1,90	3,72	4,00	4,93	4,90	7,30	9,70	11,30	15,40	16,36
25,0	0,96	2,27	1,90	3,41	3,30	4,63	5,00	6,21	9,70	10,20	14,10	15,21
28,0	0,91	2,06	1,80	3,54	2,20	4,15	4,30	6,83	8,80	10,76	13,90	15,57
31,5	0,81	2,13	1,20	3,22	2,60	4,23	4,30	5,81	8,30	10,13	14,00	14,11
35,5	0,66	1,75	1,40	3,32	2,50	4,35	3,90	6,45	7,70	10,14	12,40	14,77
40	0,68	2,00	1,20	3,08	2,20	4,01	- - -	- - -	6,40	9,41	10,80	13,62
45	0,55	1,87	1,10	3,18	2,00	3,97	3,10	6,00	6,20	9,26	9,20	11,88
50	0,56	1,84	0,92	2,89	1,80	3,79	3,00	6,12	5,20	8,95	10,30	12,88
56	0,37	1,85	0,88	2,80	1,70	3,72	2,80	5,40	4,80	8,38	9,30	12,13
63	0,43	1,69	0,74	2,77	1,00	3,70	2,40	5,67	4,20	8,27	8,10	12,01
71	0,36	1,64	0,60	2,57	1,30	3,48	2,10	5,10	3,60	8,05	6,90	11,36
80	0,30	1,59	0,59	2,48	1,10	3,29	1,90	5,10	2,50	8,25	6,20	10,88
90	0,30	1,51	0,53	2,48	0,70	3,08	1,60	5,39	3,00	6,83	5,80	10,67
100	0,27	1,48	0,39	2,36	0,86	3,11	1,40	4,83	2,80	7,54	5,20	10,66
112	0,21	1,51	0,42	2,23	0,80	2,92	1,40	4,85	2,40	7,25	4,40	9,73
125	0,22	1,38	0,33	2,16	0,60	2,88	1,00	3,68	2,30	6,73	3,00	9,84
140	0,18	1,26	0,28	2,13	0,61	2,77	1,00	4,58	2,00	6,74	3,70	9,55
160	0,16	1,21	0,26	1,97	0,41	2,59	0,71	3,65	1,80	6,49	3,40	9,19
180	0,13	1,15	0,24	1,90	0,43	2,58	0,67	3,49	1,20	6,03	2,20	8,40
200	0,12	1,21	0,20	1,88	0,32	2,63	0,61	3,75	1,00	6,07	- - -	- - -
224	0,10	1,15	0,17	1,74	- - -	- - -	0,51	3,48	0,92	5,62	1,80	8,54
250	0,09	1,10	0,16	1,65	0,27	2,45	0,46	3,32	0,82	5,66	- - -	- - -
280	- - -	- - -	- - -	- - -	0,25	2,36	0,41	3,14	- - -	- - -	1,50	7,85
315	0,06	0,99	0,13	1,55	0,20	2,14	- - -	- - -	0,66	5,12	1,30	7,36

The **thermal power** P_{t1} limits the rated power P_1 in shaded areas.
However, a maximum operation of 3 hours may be accepted if followed by a sufficiently long rest period (approx. 2-4 hours) to restore the reducer to room temperature.

RO1 / RV1 - 180 Nm - 1400 rpm
Speed reducer

	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	J_1 (x 10^{-4}) [kgm^2]	56 B5	63 B*	71 B*	80 B*	90 B*
FRO13 FRV13 3c	7.1	7.58	185	130	2.7	1550	3310	1.1700	⊙	⊙	⊙	⊙	⊙
	9.0	9.14	153	130	2.2	1580	3740	1.0754	⊙	⊙	⊙	⊙	⊙
	10.0	9.57	146	140	2.3	1580	3600	1.0469	⊙	⊙	⊙	⊙	⊙
	11.2	11.63	120	150	2.0	1590	3570	0.9761	⊙	⊙	⊙	⊙	⊙
	14.0	14.02	100	130	1.5	1600	4040	0.9358	⊙	⊙	⊙	⊙	⊙
	16.0	15.14	92.5	165	1.7	1600	3550	0.9105	⊙	⊙	⊙	⊙	⊙
	18.0	18.25	76.7	135	1.2	1610	4240	0.8868	⊙	⊙	⊙	⊙	⊙
	20.0	19.15	73.1	170	1.4	1610	3670	0.8712	⊙	⊙	⊙	⊙	⊙
	22.4	23.33	60.0	170	1.1	1610	3820	0.8476	⊙	⊙	⊙	⊙	⊙
	25.0	24.44	57.3	150	0.96	1600	4150	0.3567	⊙	⊙	⊙	⊙	⊙
	28.0	29.18	48.0	170	0.91	1610	3960	0.8281	⊙	⊙	⊙	⊙	⊙
	31.5	31.82	44.0	165	0.81	1600	4120	0.3418	⊙	⊙	⊙	⊙	
	35.5	37.95	36.9	160	0.66	1610	4430	0.8125	⊙	⊙	⊙	⊙	
	40	40.24	34.8	175	0.68	1610	4100	0.3329	⊙	⊙	⊙	⊙	
	45	47.88	29.2	170	0.55	1600	4300	0.2717	⊙	⊙	⊙	⊙	
	50	49.02	28.6	175	0.56	1610	4100	0.3276	⊙	⊙	⊙	⊙	
	56	59.10	23.7	140	0.37	1610	4820	0.3253	⊙	⊙	⊙	⊙	
	63	61.31	22.8	170	0.43	1610	4000	0.3231	⊙	⊙	⊙		
	71	73.77	19.0	170	0.36	1610	4000	0.2654	⊙	⊙	⊙		
	80	84.93	16.5	165	0.30	1610	4400	0.2441	⊙	⊙	⊙		
	90	92.26	15.2	180	0.30	1610	4000	0.2634	⊙	⊙	⊙		
	100	103.46	13.5	180	0.27	1610	4000	0.2429	⊙	⊙	⊙		
	112	111.22	12.6	150	0.21	1610	4800	0.2628	⊙	⊙	⊙		
	125	129.39	10.8	180	0.22	1610	4000	0.2419	⊙	⊙	⊙		
	140	132.61	10.6	150	0.18	1610	4700	0.2614	⊙	⊙			
	160	168.30	8.3	175	0.16	1610	4100	0.2411	⊙	⊙			
	180	185.98	7.5	150	0.13	1610	4700	0.2409	⊙	⊙			
	200	202.90	6.9	150	0.12	1610	4800	0.2408	⊙	⊙			
	224	224.22	6.2	150	0.10	1610	4800	0.2407	⊙	⊙			
	250	249.80	5.6	150	0.09	1610	4800	0.2405	⊙				
	315	320.51	4.4	130	0.06	1360	4800	0.2320	⊙				

B* = B5 & B14
3c = Number of reduction stages

RO2 / RV2 - 310 Nm - 1400 rpm
Speed reducer

	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	J_1 (x 10^{-4}) [kgm^2]	71 B*	80 B*	90 B*	100 B*	112 B*
FRO23 **FRV23** 3c	6.3	6.62	211.4	200	4.7	2900	3350	3.7230	⊙	⊙	⊙	⊙	⊙
	8.0	8.47	165.3	220	4.1	2900	3620	3.4225	⊙	⊙	⊙	⊙	⊙
	9.0	8.97	156.0	225	3.9	2900	3710	3.4623	⊙	⊙	⊙	⊙	⊙
	10.0	10.43	134.3	245	3.7	2900	3870	3.2499	⊙	⊙	⊙	⊙	⊙
	11.2	11.48	122.0	230	3.1	3000	4040	3.2632	⊙	⊙	⊙	⊙	⊙
	12.5	13.03	107.4	275	3.3	3000	3920	3.1175	⊙	⊙	⊙	⊙	⊙
	14.0	14.13	99.1	230	2.5	3000	4340	3.1448	⊙	⊙	⊙	⊙	
	16.0	16.68	83.9	305	2.9	3000	3620	3.0140	⊙	⊙	⊙	⊙	
	18.0	17.80	78.6	250	2.2	3000	4480	1.3623	⊙	⊙	⊙	⊙	
	20.0	20.55	68.1	310	2.4	3000	3720	2.9511	⊙	⊙	⊙	⊙	
	22.4	21.91	63.9	270	1.9	3000	4420	1.3232	⊙	⊙	⊙	⊙	
	25.0	26.07	53.7	310	1.9	3000	3930	2.8990	⊙	⊙	⊙	⊙	
	28.0	27.39	51.1	310	1.8	3000	4180	1.2932	⊙	⊙	⊙	⊙	
	31.5	32.97	42.5	260	1.2	3000	4960	1.0795	⊙	⊙	⊙		
	35.5	35.06	39.9	310	1.4	3000	4220	1.2698	⊙	⊙	⊙		
	40	41.21	34.0	310	1.2	3000	4600	1.0662	⊙	⊙	⊙		
	45	43.18	32.4	310	1.1	3000	4450	1.2555	⊙	⊙	⊙		
	50	52.75	26.5	310	0.92	3000	4680	1.0559	⊙	⊙	⊙		
	56	54.78	25.6	310	0.88	3000	4720	1.2437	⊙	⊙	⊙		
	63	64.97	21.5	310	0.74	3000	4930	1.0496	⊙	⊙			
	71	73.98	18.9	285	0.60	3000	5510	0.9764	⊙	⊙			
	80	82.42	17.0	310	0.59	3000	5100	1.0444	⊙	⊙			
	90	91.12	15.4	310	0.53	3000	5100	0.9732	⊙	⊙			
	100	106.60	13.1	270	0.39	3000	6000	1.0405	⊙	⊙			
	112	115.60	12.1	310	0.42	3000	5100	0.9706	⊙	⊙			
	125	123.47	11.34	260	0.33	3000	6200	0.9721	⊙				
	140	149.51	9.36	270	0.28	3000	6000	0.9686	⊙				
	160	156.64	8.94	260	0.26	3000	6200	0.9699	⊙				
	180	170.11	8.23	260	0.24	3000	6200	1.0381	⊙				
	200	202.59	6.91	260	0.20	3000	6200	0.9682	⊙				
	224	238.58	5.87	260	0.17	3000	6200	0.9674	(⊙)				
	250	261.07	5.363	260	0.16	3000	6200	0.9670	(⊙)				
	315	319.55	4.381	260	0.13	3000	6200	0.9664	(⊙)				

B* = B5 & B14
3c = Number of reduction stages
(⊙) = Max. available power ≤ P_1

RO3 / RV3- 580 Nm - 1400 rpm
Speed reducer

	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	J_1 (x 10^{-4}) [kgm^2]	71 B5	80 B*	90 B*	100 B*	112 B*
FRO33 **FRV33** 3c	6.3	6.43	217.6	420	10.2	4550	4990	7.8449	⊙	⊙	⊙	⊙	⊙
	8.0	8.25	169.7	450	8.5	5540	5430	7.0546	⊙	⊙	⊙	⊙	⊙
	9.0	9.09	154.0	380	6.5	5710	5680	7.1141	⊙	⊙	⊙	⊙	⊙
	10.0	10.17	137.7	500	7.7	5630	4980	6.5966	⊙	⊙	⊙	⊙	⊙
	11.2	11.65	120.2	380	5.1	5730	6180	6.6099	⊙	⊙	⊙	⊙	⊙
	12.5	12.72	110.0	540	6.6	5710	4640	6.2405	⊙	⊙	⊙	⊙	⊙
	14.0	13.52	103.5	460	5.3	5520	5970	2.2602	⊙	⊙	⊙	⊙	⊙
	16.0	16.30	85.9	540	5.2	5730	4800	5.9573	⊙	⊙	⊙	⊙	⊙
	18.0	17.33	80.8	510	4.6	5680	5460	2.0812	⊙	⊙	⊙	⊙	⊙
	20.0	19.10	73.3	390	3.2	5730	7310	2.0993	⊙	⊙	⊙	⊙	⊙
	22.4	21.67	64.6	550	4.0	5740	4970	5.7302	⊙	⊙	⊙	⊙	⊙
	25.0	26.73	52.4	560	3.3	5730	5130	1.8969	⊙	⊙	⊙	⊙	⊙
	28.0	28.74	48.7	400	2.2	5740	7800	1.4638	⊙	⊙	⊙	⊙	
	31.5	33.27	42.1	550	2.6	5740	4800	5.5211	⊙	⊙	⊙	⊙	
	35.5	34.26	40.9	560	2.5	5740	5370	1.8327	⊙	⊙	⊙	⊙	
	40	40.23	34.8	570	2.2	5740	5500	1.3744	⊙	⊙	⊙	⊙	
	45	45.54	30.7	570	2.0	5740	5580	1.7813	⊙	⊙	⊙	⊙	
	50	51.55	27.2	580	1.8	5740	5600	1.3460	⊙	⊙	⊙	⊙	
	56	53.60	26.1	580	1.7	5740	5600	1.7597	⊙	⊙	⊙	⊙	
	63	64.33	21.8	410	1.0	5740	8950	1.7667	⊙	⊙	⊙		
	71	68.52	20.4	580	1.3	5740	5500	1.3233	⊙	⊙	⊙		
	80	80.65	17.4	580	1.1	5740	5500	1.3138	⊙	⊙	⊙		
	90	91.94	15.2	410	0.70	5740	9580	1.7158	⊙	⊙	⊙		
	100	105.20	13.3	580	0.86	5750	5500	1.3024	⊙	⊙	⊙		
	112	113.11	12.4	580	0.80	5740	5500	1.1546	⊙	⊙			
	125	125.46	11.2	480	0.60	5740	8500	1.2969	⊙	⊙			
	140	147.54	9.5	580	0.61	5740	5500	1.1488	⊙	⊙			
	160	162.17	8.6	430	0.41	5740	9400	1.7036	⊙	⊙			
	180	175.95	8.0	490	0.43	5740	8200	1.1460	⊙				
	200	208.42	6.7	430	0.32	5740	9400	1.1474	⊙				
	250	248.56	5.6	430	0.27	5740	9400	1.1450	⊙				
	280	274.11	5.1	430	0.25	5740	9400	1.1439	⊙				
	315	342.23	4.1	430	0.20	5740	9400	1.1420	(⊙)				

B* = B5 & B14
3c = Number of reduction stages
(⊙) = Max. available power ≤ P_1

RO4 / RV4 - 1000 Nm - 1400 rpm
Speed reducer

	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	J_1 (x 10^{-4}) [kgm^2]	71 B5	80 B5	90 B5	100 B*	112 B*	132 B*
FRO43 **FRV43** 3c	6.3	6.60	212.1	470	11.1	5670	5570	18.0401	⊙	⊙	⊙	⊙	⊙	⊙
	8.0	8.35	167.6	530	9.9	5740	6000	16.3029	⊙	⊙	⊙	⊙	⊙	⊙
	9.0	8.72	160.6	650	11.6	5560	5980	16.5334	⊙	⊙	⊙	⊙	⊙	⊙
	10.0	10.43	134.2	610	9.1	5770	6430	15.1392	⊙	⊙	⊙	⊙	⊙	⊙
	11.2	11.04	126.8	650	9.2	5740	6520	15.3615	⊙	⊙	⊙	⊙	⊙	⊙
	12.5	13.29	105.4	670	7.9	5780	6950	14.2633	⊙	⊙	⊙	⊙	⊙	⊙
	14.0	13.87	100.9	515	5.8	5630	7190	6.3637	⊙	⊙	⊙	⊙	⊙	⊙
	16.0	16.21	86.4	730	7.0	5780	7420	13.7425	⊙	⊙	⊙	⊙	⊙	⊙
	18.0	17.55	79.8	610	5.4	5700	7740	5.9704	⊙	⊙	⊙	⊙	⊙	⊙
	20.0	20.22	69.2	780	6.0	5780	7980	13.3129	⊙	⊙	⊙	⊙	⊙	⊙
	22.4	21.94	63.8	690	4.9	5740	8310	5.7069	⊙	⊙	⊙	⊙	⊙	⊙
	25.0	26.10	53.6	840	5.0	5780	8690	12.9609	⊙	⊙	⊙	⊙	⊙	⊙
	28.0	27.92	50.1	770	4.3	5780	8990	5.5085	⊙	⊙	⊙	⊙	⊙	
	31.5	32.52	43.1	890	4.3	5790	9390	12.7520	⊙	⊙	⊙	⊙	⊙	
	35.5	34.06	41.1	840	3.9	5780	9580	5.3906	⊙	⊙	⊙	⊙		
	45	42.50	32.9	840	3.1	5780	10020	5.2933	⊙	⊙	⊙	⊙		
	50	51.25	27.3	980	3.0	5780	9720	4.3723	⊙	⊙	⊙	⊙		
	56	54.84	25.5	980	2.8	5790	9800	5.2136	⊙	⊙	⊙	⊙		
	63	63.95	21.9	990	2.4	5780	10090	4.3293	⊙	⊙	⊙	⊙		
	71	68.34	20.5	920	2.1	5790	10970	5.1663	⊙	⊙	⊙	⊙		
	80	82.52	17.0	1000	1.9	5790	10510	4.2941	⊙	⊙	⊙	⊙		
	90	89.69	15.6	890	1.6	5790	11880	3.9791	⊙	⊙	⊙			
	100	102.83	13.6	940	1.4	5790	11740	4.2732	⊙	⊙	⊙			
	112	115.73	12.1	1020	1.4	5790	11130	3.9612	⊙	⊙	⊙			
	125	121.80	11.5	780	1.0	5790	13730	5.1136	⊙	⊙	⊙			
	140	144.22	9.7	950	1.0	5790	12410	3.9506	⊙	⊙	⊙			
	160	164.63	8.5	750	0.71	5790	14400	4.2552	⊙	⊙				
	180	183.27	7.6	790	0.67	5790	14710	4.2500	⊙	⊙				
	200	190.66	7.3	750	0.61	5790	14830	3.9474	⊙	⊙				
	224	230.89	6.1	750	0.51	5790	15400	3.9414	⊙	⊙				
	250	257.04	5.5	750	0.46	5790	16500	3.9388	⊙	⊙				
	280	289.00	4.8	750	0.41	5790	16470	3.9363	⊙					

B* = B5 & B14
3c = Number of reduction stages

RO5 / RV5 - 1800 Nm - 1400 rpm
Speed reducer

	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	J_1 (x 10^{-4}) [kgm^2]	80-90 B5	100 B5	112 B5	132 B*	160 B5	180 B5
FRO53 **FRV53** 3c	6.3	6.48	215.9	930	22.4	8200	8020	57.2158	⊙	⊙	⊙	⊙	⊙	⊙
	8.0	8.57	163.3	1100	20.0	8290	8770	52.4172	⊙	⊙	⊙	⊙	⊙	⊙
	10.0	10.87	128.8	1230	17.6	8350	9470	49.6847	⊙	⊙	⊙	⊙	⊙	⊙
	12.5	13.17	106.3	1400	16.6	8350	10050	48.0516	⊙	⊙	⊙	⊙	⊙	⊙
	14.0	13.63	102.7	1050	12.0	8110	10340	20.5375	⊙	⊙	⊙	⊙	⊙	
	16.0	16.24	86.2	1470	14.1	8360	10150	46.6813	⊙	⊙	⊙	⊙	⊙	⊙
	18.0	18.02	77.7	1250	10.8	8260	11300	19.4509	⊙	⊙	⊙	⊙	⊙	
	20.0	20.53	68.2	1600	12.2	8360	8650	45.5253	⊙	⊙	⊙	⊙	⊙	
	22.4	22.85	61.3	1420	9.7	8310	11180	18.8321	⊙	⊙	⊙	⊙	⊙	
	25.0	26.97	51.9	1670	9.7	8360	8140	44.5592	⊙	⊙	⊙	⊙	⊙	
	28.0	27.68	50.6	1560	8.8	8350	9800	18.4623	⊙	⊙	⊙	⊙	⊙	
	31.5	31.69	44.2	1680	8.3	8360	8230	44.1495	⊙	⊙	⊙	⊙	⊙	
	35.5	34.12	41.0	1690	7.7	8360	8340	18.1520	⊙	⊙	⊙	⊙		
	40	41.65	33.6	1700	6.4	8330	8510	14.8941	⊙	⊙	⊙	⊙		
	45	43.14	32.5	1700	6.2	8360	8540	17.8902	⊙	⊙	⊙	⊙		
	50	51.34	27.3	1720	5.2	8360	8720	14.7570	⊙	⊙	⊙	⊙		
	56	56.67	24.7	1730	4.8	8360	8820	17.6715	⊙	⊙	⊙	⊙		
	63	64.91	21.6	1740	4.2	8360	8950	14.6414	⊙	⊙	⊙	⊙		
	71	72.56	19.3	1660	3.6	8360	10800	17.5356	⊙	⊙	⊙			
	80	79.37	17.6	1280	2.5	8360	16160	13.5189	⊙	⊙	⊙			
	90	91.04	15.4	1770	3.0	8360	8400	13.4434	⊙	⊙	⊙			
	100	100.20	14.0	1780	2.8	8360	8000	14.5038	⊙	⊙				
	112	109.18	12.8	1700	2.4	8360	11200	14.4848	⊙	⊙				
	125	119.59	11.7	1790	2.3	8360	7200	13.3942	⊙	⊙				
	140	140.53	10.0	1790	2.0	8360	7200	13.3734	⊙	⊙				
	160	153.12	9.1	1720	1.8	8360	10100	13.3637	⊙	⊙				
	180	185.17	7.7	1420	1.2	8360	17640	13.3462	⊙					
	200	208.05	6.7	1330	1.0	8360	19060	13.3560	⊙					
	224	224.24	6.2	1330	0.92	8360	19100	14.4140	⊙					
	250	251.60	5.6	1330	0.82	8360	19100	13.3409	⊙					
	315	314.50	4.5	1330	0.66	8360	19100	13.3277	(⊙)					

B* = B5 & B14
3c = Number of reduction stages
(⊙) = Max. available power ≤ P_1

RO6 / RV6 - 3400 Nm - 1400 rpm
Speed reducer

	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	J_1 (x 10^{-4}) [kgm^2]	80-90 B5	100 B5	112 B5	132 B*	160 B5	180 B5
FRO63 FRV63 3c	6.3	6.43	217.7	1660	40.3	6670	10740	102.1187	⊙	⊙	⊙	⊙	⊙	⊙
	8.0	8.50	164.7	1740	31.9	7570	11850	89.9906	⊙	⊙	⊙	⊙	⊙	⊙
	10.0	10.78	129.9	1970	28.5	7820	12750	81.543	⊙	⊙	⊙	⊙	⊙	⊙
	12.5	13.06	107.2	2150	25.7	8010	13550	76.4873	⊙	⊙	⊙	⊙	⊙	⊙
	14.0	13.51	103.6	1640	18.9	7530	14110	40.9607	⊙	⊙	⊙	⊙	⊙	⊙
	16.0	16.10	87.0	2330	22.6	8190	14450	72.2401	⊙	⊙	⊙	⊙	⊙	⊙
	18.0	17.87	78.4	1950	17.0	7880	15380	38.2144	⊙	⊙	⊙	⊙	⊙	⊙
	20.0	20.36	68.8	2530	19.4	8310	14100	68.6529	⊙	⊙	⊙	⊙	⊙	⊙
	22.4	22.66	61.8	2230	15.4	8090	16460	36.3014	⊙	⊙	⊙	⊙	⊙	⊙
	25.0	25.48	55.0	2300	14.1	8230	16820	36.6126	⊙	⊙	⊙	⊙	⊙	⊙
	28.0	27.45	51.0	2450	13.9	8240	15700	35.1566	⊙	⊙	⊙	⊙	⊙	⊙
	31.5	31.85	44.0	2860	14.0	8360	11540	64.3060	⊙	⊙	⊙	⊙	⊙	⊙
	35.5	33.83	41.4	2690	12.4	8310	13920	34.1949	⊙	⊙	⊙	⊙	⊙	
	40	42.78	32.7	2950	10.8	8360	11390	33.3825	⊙	⊙	⊙	⊙	⊙	
	45	42.95	32.6	2540	9.2	8360	16450	62.5533	⊙	⊙	⊙	⊙	⊙	
	50	50.91	27.5	3360	10.3	8120	9810	25.1536	⊙	⊙	⊙	⊙	⊙	
	56	56.19	24.9	3360	9.3	8360	9970	32.7029	⊙	⊙	⊙	⊙	⊙	
	63	64.36	21.8	3360	8.1	8330	10200	24.7949	⊙	⊙	⊙	⊙		
	71	73.41	19.1	3250	6.9	8360	11430	32.2564	⊙	⊙	⊙	⊙		
	80	84.55	16.6	3360	6.2	8360	11400	24.4947	⊙	⊙	⊙	⊙		
	90	90.27	15.5	3360	5.8	8340	11400	21.7196	⊙	⊙	⊙	⊙		
	100	100.70	13.9	3360	5.2	8360	9800	24.3601	⊙	⊙	⊙	⊙		
	112	118.58	11.8	3360	4.4	8360	9800	21.5670	⊙	⊙	⊙	⊙		
	125	128.72	10.9	2490	3.0	8360	22060	21.6569	⊙	⊙	⊙			
	140	141.23	9.9	3360	3.7	8360	9800	21.4986	⊙	⊙	⊙			
	160	154.91	9.0	3360	3.4	8360	9800	21.4668	⊙	⊙	⊙			
	180	190.49	7.5	2730	2.2	8360	19400	21.4095	⊙	⊙				
	224	220.89	6.3	2550	1.8	8360	22500	21.4455	⊙	⊙				
	280	271.62	5.2	2550	1.5	8360	22500	21.3954	⊙					
	315	305.43	4.6	2550	1.3	8360	22500	21.3730	⊙					

B* = B5 & B14
3c = Number of reduction stages

MRO / MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,06	7,1	7,58	185,0	2,9	44,6	MRO 13 - 56A4	9,3	6,4	3310	1,50	0,9150
	9,0	9,14	153,0	3,5	37,0	MRO 13 - 56A4	9,3	6,4	3740	1,50	0,8480
	10,0	9,57	146,0	3,7	38,0	MRO 13 - 56A4	9,3	6,4	3600	1,50	0,7740
	11,2	11,60	120,0	4,5	33,5	MRO 13 - 56A4	9,3	6,4	3570	1,50	0,6940
	14,0	14,00	99,9	5,4	24,1	MRO 13 - 56A4	9,3	6,4	4040	1,50	0,6660
	16,0	15,10	92,5	5,8	28,3	MRO 13 - 56A4	9,3	6,4	3550	1,50	0,6210
	18,0	18,30	76,7	7,0	19,2	MRO 13 - 56A4	9,3	6,4	4240	1,50	0,6040
	20,0	19,20	73,1	7,4	23,1	MRO 13 - 56A4	9,3	6,4	3670	1,50	0,5770
	22,4	23,30	60,0	9,0	18,9	MRO 13 - 56A4	9,3	6,4	3820	1,50	0,5510
	25,0	24,40	57,3	9,4	16,0	MRO 13 - 56A4	9,3	6,4	4150	1,50	0,4940
	28,0	29,20	48,0	11,2	15,1	MRO 13 - 56A4	9,3	6,4	3960	1,50	0,5290
	31,5	31,80	44,0	12,2	13,5	MRO 13 - 56A4	9,3	6,4	4120	1,50	0,4770
	35,5	38,00	36,9	14,6	11,0	MRO 13 - 56A4	9,3	6,4	4430	1,50	0,5120
	40,0	40,30	34,8	15,5	11,3	MRO 13 - 56A4	9,3	6,4	4100	1,50	0,4670
	45,0	47,90	29,2	18,4	9,2	MRO 13 - 56A4	9,3	6,4	4300	1,50	0,4540
	50,0	49,00	28,6	18,9	9,3	MRO 13 - 56A4	9,3	6,4	4100	1,50	0,4610
	56,0	59,10	23,7	22,7	6,2	MRO 13 - 56A4	9,3	6,4	4820	1,50	0,4600
	63,0	61,30	22,8	23,6	7,2	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4560
	71,0	73,80	19,0	28,4	6,0	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4470
	80,0	84,90	16,5	32,7	5,1	MRO 13 - 56A4	9,3	6,4	4400	1,50	0,4420
	90,0	92,30	15,2	35,5	5,1	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4450
	100,0	103,00	13,5	39,8	4,5	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4410
	112,0	111,00	12,6	42,8	3,5	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4440
	125,0	129,00	10,8	49,8	3,6	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4400
	140,0	133,00	10,6	51,0	2,9	MRO 13 - 56A4	9,3	6,4	4700	1,50	0,4420
	160,0	168,00	8,3	64,7	2,7	MRO 13 - 56A4	9,3	6,4	4100	1,50	0,4390
	180,0	186,00	7,5	71,5	2,1	MRO 13 - 56A4	9,3	6,4	4700	1,50	0,4390
	200,0	203,00	6,9	78,1	1,9	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4390
	224,0	224,00	6,2	86,3	1,7	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4390
	250,0	250,00	5,6	96,1	1,6	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4380
	315,0	321,00	4,4	123,0	1,1	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4380
0,09	7,1	7,58	185,0	4,4	29,7	MRO 13 - 56B4	9,6	6,4	3310	2,00	0,9150
	9,0	9,14	153,0	5,3	24,6	MRO 13 - 56B4	9,6	6,4	3740	2,00	0,8480
	10,0	9,57	146,0	5,5	25,4	MRO 13 - 56B4	9,6	6,4	3600	2,00	0,7740
	11,2	11,60	120,0	6,7	22,4	MRO 13 - 56B4	9,6	6,4	3570	2,00	0,6940
	14,0	14,00	99,9	8,1	16,1	MRO 13 - 56B4	9,6	6,4	4040	2,00	0,6660
	16,0	15,10	92,5	8,7	18,9	MRO 13 - 56B4	9,6	6,4	3550	2,00	0,6210
	18,0	18,30	76,7	10,5	12,8	MRO 13 - 56B4	9,6	6,4	4240	2,00	0,6040
	20,0	19,20	73,1	11,1	15,4	MRO 13 - 56B4	9,6	6,4	3670	2,00	0,5770
	22,4	23,30	60,0	13,5	12,6	MRO 13 - 56B4	9,6	6,4	3820	2,00	0,5510
	25,0	24,40	57,3	14,1	10,6	MRO 13 - 56B4	9,6	6,4	4150	2,00	0,4940
	28,0	29,20	48,0	16,8	10,1	MRO 13 - 56B4	9,6	6,4	3960	2,00	0,5290
	31,5	31,80	44,0	18,4	9,0	MRO 13 - 56B4	9,6	6,4	4120	2,00	0,4770
	35,5	38,00	36,9	21,9	7,3	MRO 13 - 56B4	9,6	6,4	4430	2,00	0,5120
	40,0	40,30	34,8	23,2	7,5	MRO 13 - 56B4	9,6	6,4	4100	2,00	0,4670
	45,0	47,90	29,2	27,6	6,2	MRO 13 - 56B4	9,6	6,4	4300	2,00	0,4540
	50,0	49,00	28,6	28,3	6,2	MRO 13 - 56B4	9,6	6,4	4100	2,00	0,4610
	56,0	59,10	23,7	34,1	4,1	MRO 13 - 56B4	9,6	6,4	4820	2,00	0,4600
	63,0	61,30	22,8	35,4	4,8	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4560
	71,0	73,80	19,0	42,6	4,0	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4470

MRO / MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,09	80,0	84,90	16,5	49,0	3,4	MRO 13 - 56B4	9,6	6,4	4400	2,00	0,4420
	90,0	92,30	15,2	53,2	3,4	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4450
	100,0	103,00	13,5	59,7	3,0	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4410
	112,0	111,00	12,6	64,2	2,3	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4440
	125,0	129,00	10,8	74,7	2,4	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4400
	140,0	133,00	10,6	76,5	2,0	MRO 13 - 56B4	9,6	6,4	4700	2,00	0,4420
	160,0	168,00	8,3	97,1	1,8	MRO 13 - 56B4	9,6	6,4	4100	2,00	0,4390
	180,0	186,00	7,5	107,0	1,4	MRO 13 - 56B4	9,6	6,4	4700	2,00	0,4390
	200,0	203,00	6,9	117,0	1,3	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4390
	224,0	224,00	6,2	129,0	1,2	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4390
	250,0	250,00	5,6	144,0	1,0	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4380
0,12	7,1	7,58	185,0	5,8	22,3	MRO 13 - 63A4	10,1	6,4	3310	2,80	0,9150
	9,0	9,14	153,0	7,0	18,5	MRO 13 - 63A4	10,1	6,4	3740	2,80	0,8480
	10,0	9,57	146,0	7,4	19,0	MRO 13 - 63A4	10,1	6,4	3600	2,80	0,7740
	11,2	11,60	120,0	8,9	16,8	MRO 13 - 63A4	10,1	6,4	3570	2,80	0,6940
	14,0	14,00	99,9	10,8	12,1	MRO 13 - 63A4	10,1	6,4	4040	2,80	0,6660
	16,0	15,10	92,5	11,6	14,2	MRO 13 - 63A4	10,1	6,4	3550	2,80	0,6210
	18,0	18,30	76,7	14,0	9,6	MRO 13 - 63A4	10,1	6,4	4240	2,80	0,6040
	20,0	19,20	73,1	14,7	11,5	MRO 13 - 63A4	10,1	6,4	3670	2,80	0,5770
	22,4	23,30	60,0	18,0	9,5	MRO 13 - 63A4	10,1	6,4	3820	2,80	0,5510
	25,0	24,40	57,3	18,8	8,0	MRO 13 - 63A4	10,1	6,4	4150	2,80	0,4940
	28,0	29,20	48,0	22,5	7,6	MRO 13 - 63A4	10,1	6,4	3960	2,80	0,5290
	31,5	31,80	44,0	24,5	6,7	MRO 13 - 63A4	10,1	6,4	4120	2,80	0,4770
	35,5	38,00	36,9	29,2	5,5	MRO 13 - 63A4	10,1	6,4	4430	2,80	0,5120
	40,0	40,30	34,8	31,0	5,7	MRO 13 - 63A4	10,1	6,4	4100	2,80	0,4670
	45,0	47,90	29,2	36,8	4,6	MRO 13 - 63A4	10,1	6,4	4300	2,80	0,4540
	50,0	49,00	28,6	37,7	4,6	MRO 13 - 63A4	10,1	6,4	4100	2,80	0,4610
	56,0	59,10	23,7	45,5	3,1	MRO 13 - 63A4	10,1	6,4	4820	2,80	0,4600
	63,0	61,30	22,8	47,2	3,6	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4560
	71,0	73,80	19,0	56,8	3,0	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4470
	80,0	84,90	16,5	65,3	2,5	MRO 13 - 63A4	10,1	6,4	4400	2,80	0,4420
	90,0	92,30	15,2	71,0	2,5	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4450
	100,0	103,00	13,5	79,6	2,3	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4410
	112,0	111,00	12,6	85,6	1,8	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4440
	125,0	129,00	10,8	99,6	1,8	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4400
	140,0	133,00	10,6	102,0	1,5	MRO 13 - 63A4	10,1	6,4	4700	2,80	0,4420
	160,0	168,00	8,3	129,0	1,4	MRO 13 - 63A4	10,1	6,4	4100	2,80	0,4390
	180,0	186,00	7,5	143,0	1,0	MRO 13 - 63A4	10,1	6,4	4700	2,80	0,4390
	200,0	203,00	6,9	156,0	1,0	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4390
	224,0	224,00	6,2	173,0	0,9	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4390
	250,0	250,00	5,6	192,0	0,8	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4380
0,18	7,1	7,58	185,0	8,7	14,9	MRO 13 - 63B4	10,6	6,4	3310	4,00	0,9150
	9,0	9,14	153,0	10,5	12,3	MRO 13 - 63B4	10,6	6,4	3740	4,00	0,8480
	10,0	9,57	146,0	11,0	12,7	MRO 13 - 63B4	10,6	6,4	3600	4,00	0,7740
	11,2	11,60	120,0	13,4	11,2	MRO 13 - 63B4	10,6	6,4	3570	4,00	0,6940
	14,0	14,00	99,9	16,2	8,0	MRO 13 - 63B4	10,6	6,4	4040	4,00	0,6660
	16,0	15,10	92,5	17,5	9,4	MRO 13 - 63B4	10,6	6,4	3550	4,00	0,6210
	18,0	18,30	76,7	21,1	6,4	MRO 13 - 63B4	10,6	6,4	4240	4,00	0,6040
	20,0	19,20	73,1	22,1	7,7	MRO 13 - 63B4	10,6	6,4	3670	4,00	0,5770
	22,4	23,30	60,0	26,9	6,3	MRO 13 - 63B4	10,6	6,4	3820	4,00	0,5510

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,18	25,0	24,40	57,3	28,2	5,3	MRO 13 - 63B4	10,6	6,4	4150	4,00	0,4940
	28,0	29,20	48,0	33,7	5,0	MRO 13 - 63B4	10,6	6,4	3960	4,00	0,5290
	31,5	31,80	44,0	36,7	4,5	MRO 13 - 63B4	10,6	6,4	4120	4,00	0,4770
	35,5	38,00	36,9	43,8	3,7	MRO 13 - 63B4	10,6	6,4	4430	4,00	0,5120
	40,0	40,30	34,8	46,5	3,8	MRO 13 - 63B4	10,6	6,4	4100	4,00	0,4670
	45,0	47,90	29,2	55,3	3,1	MRO 13 - 63B4	10,6	6,4	4300	4,00	0,4540
	50,0	49,00	28,6	56,6	3,1	MRO 13 - 63B4	10,6	6,4	4100	4,00	0,4610
	56,0	59,10	23,7	68,2	2,1	MRO 13 - 63B4	10,6	6,4	4820	4,00	0,4600
	63,0	61,30	22,8	70,8	2,4	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4560
	71,0	73,80	19,0	85,1	2,0	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4470
	80,0	84,90	16,5	98,0	1,7	MRO 13 - 63B4	10,6	6,4	4400	4,00	0,4420
	90,0	92,30	15,2	106,0	1,7	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4450
	100,0	103,00	13,5	119,0	1,5	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4410
	112,0	111,00	12,6	128,0	1,2	MRO 13 - 63B4	10,6	6,4	4800	4,00	0,4440
	125,0	129,00	10,8	149,0	1,2	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4400
	140,0	133,00	10,6	153,0	1,0	MRO 13 - 63B4	10,6	6,4	4700	4,00	0,4420
	160,0	168,00	8,3	194,0	0,9	MRO 13 - 63B4	10,6	6,4	4100	4,00	0,4390
0,25	6,3	6,62	211,0	10,6	18,8	MRO 23 - 71A4	15,6	10,6	3350	5,00	1,7940
	7,1	7,58	185,0	12,2	10,7	MRO 13 - 71A4	11,4	6,4	3310	5,00	0,9150
	7,1	7,58	185,0	12,2	10,7	MRO 13 - 63C4	11,4	6,4	3310	4,00	0,9150
	8,0	8,47	165,0	13,6	16,2	MRO 23 - 71A4	15,6	10,6	3620	5,00	1,3930
	9,0	9,14	153,0	14,7	8,9	MRO 13 - 71A4	11,4	6,4	3740	5,00	0,8480
	9,0	9,14	153,0	14,7	8,9	MRO 13 - 63C4	11,4	6,4	3740	4,00	0,8480
	10,0	9,57	146,0	15,3	9,1	MRO 13 - 71A4	11,4	6,4	3600	5,00	0,7740
	10,0	9,57	146,0	15,3	9,1	MRO 13 - 63C4	11,4	6,4	3600	4,00	0,7740
	11,2	11,60	120,0	18,6	8,0	MRO 13 - 71A4	11,4	6,4	3570	5,00	0,6940
	11,2	11,60	120,0	18,6	8,0	MRO 13 - 63C4	11,4	6,4	3570	4,00	0,6940
	12,5	13,00	107,0	20,9	13,2	MRO 23 - 71A4	15,6	10,6	3920	5,00	0,9900
	14,0	14,00	99,9	22,5	5,8	MRO 13 - 71A4	11,4	6,4	4040	5,00	0,6660
	14,0	14,00	99,9	22,5	5,8	MRO 13 - 63C4	11,4	6,4	4040	4,00	0,6660
	16,0	15,10	92,5	24,3	6,8	MRO 13 - 71A4	11,4	6,4	3550	5,00	0,6210
	16,0	15,10	92,5	24,3	6,8	MRO 13 - 63C4	11,4	6,4	3550	4,00	0,6210
	18,0	18,30	76,7	29,3	4,6	MRO 13 - 71A4	11,4	6,4	4240	5,00	0,6040
	18,0	18,30	76,7	29,3	4,6	MRO 13 - 63C4	11,4	6,4	4240	4,00	0,6040
	20,0	19,20	73,1	30,7	5,5	MRO 13 - 71A4	11,4	6,4	3670	5,00	0,5770
	20,0	19,20	73,1	30,7	5,5	MRO 13 - 63C4	11,4	6,4	3670	4,00	0,5770
	22,4	23,30	60,0	37,4	4,5	MRO 13 - 71A4	11,4	6,4	3820	5,00	0,5510
	22,4	23,30	60,0	37,4	4,5	MRO 13 - 63C4	11,4	6,4	3820	4,00	0,5510
	25,0	24,40	57,3	39,2	3,8	MRO 13 - 71A4	11,4	6,4	4150	5,00	0,4940
	25,0	24,40	57,3	39,2	3,8	MRO 13 - 63C4	11,4	6,4	4150	4,00	0,4940
	28,0	29,20	48,0	46,8	3,6	MRO 13 - 71A4	11,4	6,4	3960	5,00	0,5290
	28,0	29,20	48,0	46,8	3,6	MRO 13 - 63C4	11,4	6,4	3960	4,00	0,5290
	31,5	33,00	42,5	52,8	4,9	MRO 23 - 71A4	15,6	10,6	4960	5,00	0,5440
	31,5	31,80	44,0	51,0	3,2	MRO 13 - 71A4	11,4	6,4	4120	5,00	0,4770
	31,5	31,80	44,0	51,0	3,2	MRO 13 - 63C4	11,4	6,4	4120	4,00	0,4770
	35,5	38,00	36,9	60,8	2,6	MRO 13 - 71A4	11,4	6,4	4430	5,00	0,5120
	35,5	38,00	36,9	60,8	2,6	MRO 13 - 63C4	11,4	6,4	4430	4,00	0,5120
	40,0	41,20	34,0	66,1	4,7	MRO 23 - 71A4	15,6	10,6	4600	5,00	0,5270
	40,0	40,30	34,8	64,5	2,7	MRO 13 - 71A4	11,4	6,4	4100	5,00	0,4670
	40,0	40,30	34,8	64,5	2,7	MRO 13 - 63C4	11,4	6,4	4100	4,00	0,4670

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,25	45,0	43,20	32,4	69,2	4,5	MRO 23 - 71A4	15,6	10,6	4450	5,00	0,5440
	45,0	47,90	29,2	76,7	2,2	MRO 13 - 71A4	11,4	6,4	4300	5,00	0,4540
	45,0	47,90	29,2	76,7	2,2	MRO 13 - 63C4	11,4	6,4	4300	4,00	0,4540
	50,0	52,80	26,5	84,6	3,7	MRO 23 - 71A4	15,6	10,6	4680	5,00	0,5130
	50,0	49,00	28,6	78,6	2,2	MRO 13 - 71A4	11,4	6,4	4100	5,00	0,4610
	50,0	49,00	28,6	78,6	2,2	MRO 13 - 63C4	11,4	6,4	4100	4,00	0,4610
	56,0	54,80	25,6	87,8	3,5	MRO 23 - 71A4	15,6	10,6	4720	5,00	0,5290
	56,0	59,10	23,7	94,7	1,5	MRO 13 - 71A4	11,4	6,4	4820	5,00	0,4600
	56,0	59,10	23,7	94,7	1,5	MRO 13 - 63C4	11,4	6,4	4820	4,00	0,4600
	63,0	64,30	21,8	103,0	4,0	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,8750
	63,0	65,00	21,5	104,0	3,0	MRO 23 - 71A4	15,6	10,6	4930	5,00	0,5050
	63,0	61,30	22,8	98,3	1,7	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4560
	63,0	61,30	22,8	98,3	1,7	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4560
	71,0	74,00	18,9	119,0	2,4	MRO 23 - 71A4	15,6	10,6	5510	5,00	0,4950
	71,0	73,80	19,0	118,0	1,4	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4470
	71,0	73,80	19,0	118,0	1,4	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4470
	80,0	80,70	17,4	129,0	4,5	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7720
	80,0	82,40	17,0	132,0	2,3	MRO 23 - 71A4	15,6	10,6	5100	5,00	0,4990
	80,0	84,90	16,5	136,0	1,2	MRO 13 - 71A4	11,4	6,4	4400	5,00	0,4420
	80,0	84,90	16,5	136,0	1,2	MRO 13 - 63C4	11,4	6,4	4400	4,00	0,4420
	90,0	91,90	15,2	147,0	2,8	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,8090
	90,0	91,10	15,4	146,0	2,1	MRO 23 - 71A4	15,6	10,6	5100	5,00	0,4900
	90,0	92,30	15,2	148,0	1,2	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4450
	90,0	92,30	15,2	148,0	1,2	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4450
	100,0	105,00	13,3	169,0	3,4	MRO 33 - 71A4	17,5	12,5	5750	5,00	1,7580
	100,0	107,00	13,1	171,0	1,6	MRO 23 - 71A4	15,6	10,6	6000	5,00	0,4940
	100,0	103,00	13,5	166,0	1,1	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4410
	100,0	103,00	13,5	166,0	1,1	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4410
	112,0	113,00	12,4	181,0	3,2	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7370
	112,0	116,00	12,1	185,0	1,7	MRO 23 - 71A4	15,6	10,6	5100	5,00	0,4870
	112,0	111,00	12,6	178,0	0,8	MRO 13 - 63C4	11,4	6,4	4800	4,00	0,4440
	112,0	111,00	12,6	178,0	0,8	MRO 13 - 71A4	11,4	6,4	4800	5,00	0,4440
	125,0	122,00	11,5	195,0	4,0	MRO 43 - 71A4	44	39	13730	5,00	3,9785
	125,0	125,00	11,2	201,0	2,4	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7510
	125,0	123,00	11,3	198,0	1,3	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4890
	125,0	129,00	10,8	207,0	0,9	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4400
	125,0	129,00	10,8	207,0	0,9	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4400
	140,0	144,00	9,7	231,0	4,1	MRO 43 - 71A4	44	39	12410	5,00	3,8506
	140,0	148,00	9,5	236,0	2,5	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7300
	140,0	150,00	9,4	240,0	1,1	MRO 23 - 71A4	15,6	10,6	6000	5,00	0,4850
	160,0	165,00	8,5	264,0	2,8	MRO 43 - 71A4	44	39	14400	5,00	3,8831
	160,0	162,00	8,6	260,0	1,7	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7940
	160,0	157,00	8,9	251,0	1,0	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4860
	180,0	183,00	7,6	294,0	2,7	MRO 43 - 71A4	44	39	14710	5,00	3,8768
	180,0	176,00	8,0	282,0	1,7	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7260
	180,0	170,00	8,2	273,0	1,0	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4910
	200,0	191,00	7,3	306,0	2,5	MRO 43 - 71A4	44	39	14830	5,00	3,8477
	200,0	208,00	6,7	334,0	1,3	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7280
	200,0	203,00	6,9	325,0	0,8	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4840
	224,0	231,00	6,1	370,0	2,0	MRO 43 - 71A4	44	39	15400	5,00	3,8405

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,25	250,0	257,00	5,5	412,0	1,8	MRO 43 - 71A4	44	39	16500	5,00	3,8372
	250,0	249,00	5,6	398,0	1,1	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7250
	280,0	289,00	4,8	463,0	1,6	MRO 43 - 71A4	44	39	16470	5,00	3,8343
	280,0	274,00	5,1	439,0	1,0	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7240
	315,0	342,00	4,1	549,0	0,8	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7210
0,37	6,3	6,62	211,0	15,7	12,7	MRO 23 - 71B4	16,4	10,6	3350	8,00	1,7940
	7,1	7,58	185,0	18,0	7,2	MRO 13 - 71B4	12,2	6,4	3310	8,00	0,9150
	8,0	8,47	165,0	20,1	10,9	MRO 23 - 71B4	16,4	10,6	3620	8,00	1,3930
	9,0	9,14	153,0	21,7	6,0	MRO 13 - 71B4	12,2	6,4	3740	8,00	0,8480
	10,0	9,57	146,0	22,7	6,2	MRO 13 - 71B4	12,2	6,4	3600	8,00	0,7740
	11,2	11,60	120,0	27,6	5,4	MRO 13 - 71B4	12,2	6,4	3570	8,00	0,6940
	12,5	13,00	107,0	30,9	8,9	MRO 23 - 71B4	16,4	10,6	3920	8,00	0,9900
	14,0	14,00	99,9	33,3	3,9	MRO 13 - 71B4	12,2	6,4	4040	8,00	0,6660
	16,0	15,10	92,5	35,9	4,6	MRO 13 - 71B4	12,2	6,4	3550	8,00	0,6210
	18,0	18,30	76,7	43,3	3,1	MRO 13 - 71B4	12,2	6,4	4240	8,00	0,6040
	20,0	19,20	73,1	45,4	3,7	MRO 13 - 71B4	12,2	6,4	3670	8,00	0,5770
	22,4	23,30	60,0	55,3	3,1	MRO 13 - 71B4	12,2	6,4	3820	8,00	0,5510
	25,0	24,40	57,3	58,0	2,6	MRO 13 - 71B4	12,2	6,4	4150	8,00	0,4940
	28,0	27,40	51,1	65,0	4,8	MRO 23 - 71B4	16,4	10,6	4180	8,00	0,5920
	28,0	29,20	48,0	69,2	2,5	MRO 13 - 71B4	12,2	6,4	3960	8,00	0,5290
	31,5	33,00	42,5	78,2	3,3	MRO 23 - 71B4	16,4	10,6	4960	8,00	0,5440
	31,5	31,80	44,0	75,5	2,2	MRO 13 - 71B4	12,2	6,4	4120	8,00	0,4770
	35,5	35,10	39,9	83,2	3,7	MRO 23 - 71B4	16,4	10,6	4220	8,00	0,5620
	35,5	38,00	36,9	90,0	1,8	MRO 13 - 71B4	12,2	6,4	4430	8,00	0,5120
	40,0	41,20	34,0	97,8	3,2	MRO 23 - 71B4	16,4	10,6	4600	8,00	0,5270
	40,0	40,30	34,8	95,5	1,8	MRO 13 - 71B4	12,2	6,4	4100	8,00	0,4670
	45,0	43,20	32,4	102,0	3,0	MRO 23 - 71B4	16,4	10,6	4450	8,00	0,5440
	45,0	47,90	29,2	114,0	1,5	MRO 13 - 71B4	12,2	6,4	4300	8,00	0,4540
	50,0	51,60	27,2	122,0	4,7	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8120
	50,0	52,80	26,5	125,0	2,5	MRO 23 - 71B4	16,4	10,6	4680	8,00	0,5130
	50,0	49,00	28,6	116,0	1,5	MRO 13 - 71B4	12,2	6,4	4100	8,00	0,4610
	56,0	53,60	26,1	127,0	4,6	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8620
	56,0	54,80	25,6	130,0	2,4	MRO 23 - 71B4	16,4	10,6	4720	8,00	0,5290
	56,0	59,10	23,7	140,0	1,0	MRO 13 - 71B4	12,2	6,4	4820	8,00	0,4600
	63,0	64,30	21,8	153,0	2,7	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8750
	63,0	65,00	21,5	154,0	2,0	MRO 23 - 71B4	16,4	10,6	4930	8,00	0,5050
	63,0	61,30	22,8	145,0	1,2	MRO 13 - 71B4	12,2	6,4	4000	8,00	0,4560
	71,0	68,50	20,4	163,0	3,6	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7840
	71,0	74,00	18,9	176,0	1,6	MRO 23 - 71B4	16,4	10,6	5510	8,00	0,4950
	71,0	73,80	19,0	175,0	1,0	MRO 13 - 71B4	12,2	6,4	4000	8,00	0,4470
	80,0	80,70	17,4	191,0	3,0	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7720
	80,0	82,40	17,0	196,0	1,6	MRO 23 - 71B4	16,4	10,6	5100	8,00	0,4990
	80,0	84,90	16,5	201,0	0,8	MRO 13 - 71B4	12,2	6,4	4400	8,00	0,4420
	90,0	89,70	15,6	213,0	4,2	MRO 43 - 71B4	44,8	39	11880	8,00	3,8846
	90,0	91,90	15,2	218,0	1,9	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8090
	90,0	91,10	15,4	216,0	1,4	MRO 23 - 71B4	16,4	10,6	5100	8,00	0,4900
	90,0	92,30	15,2	219,0	0,8	MRO 13 - 71B4	12,2	6,4	4000	8,00	0,4450
	100,0	103,00	13,6	244,0	3,9	MRO 43 - 71B4	44,8	39	11740	8,00	3,9031
	100,0	105,00	13,3	250,0	2,3	MRO 33 - 71B4	18,3	12,5	5750	8,00	1,7580
	100,0	107,00	13,1	253,0	1,1	MRO 23 - 71B4	16,4	10,6	6000	8,00	0,4940

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,37	112,0	116,00	12,1	275,0	3,7	MRO 43 - 71B4	44,8	39	11130	8,00	3,8632
	112,0	113,00	12,4	268,0	2,2	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7370
	112,0	116,00	12,1	274,0	1,1	MRO 23 - 71B4	16,4	10,6	5100	8,00	0,4870
	125,0	122,00	11,5	289,0	2,7	MRO 43 - 71B4	44,8	39	13730	8,00	3,9785
	125,0	125,00	11,2	298,0	1,6	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7510
	125,0	123,00	11,3	293,0	0,9	MRO 23 - 71B4	16,4	10,6	6200	8,00	0,4890
	140,0	144,00	9,7	342,0	2,8	MRO 43 - 71B4	44,8	39	12410	8,00	3,8506
	140,0	148,00	9,5	350,0	1,7	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7300
	140,0	150,00	9,4	355,0	0,8	MRO 23 - 71B4	16,4	10,6	6000	8,00	0,4850
	160,0	165,00	8,5	391,0	1,9	MRO 43 - 71B4	44,8	39	14400	8,00	3,8831
	160,0	162,00	8,6	385,0	1,1	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7940
	180,0	183,00	7,6	435,0	1,8	MRO 43 - 71B4	44,8	39	14710	8,00	3,8768
	180,0	176,00	8,0	417,0	1,2	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7260
	200,0	191,00	7,3	452,0	1,7	MRO 43 - 71B4	44,8	39	14830	8,00	3,8477
	200,0	208,00	6,7	494,0	0,9	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7280
	224,0	231,00	6,1	548,0	1,4	MRO 43 - 71B4	44,8	39	15400	8,00	3,8405
	250,0	257,00	5,5	610,0	1,2	MRO 43 - 71B4	44,8	39	16500	8,00	3,8372
	280,0	289,00	4,8	686,0	1,1	MRO 43 - 71B4	44,8	39	16470	8,00	3,8343
0,55	6,3	6,62	211,0	23,3	8,6	MRO 23 - 80A4	18,7	10,6	3350	14,00	1,7940
	6,3	6,62	211,0	23,3	8,6	MRO 23 - 71C4	17,1	10,6	3350	9,00	1,7940
	7,1	7,58	185,0	26,7	4,9	MRO 13 - 80A4	14,5	6,4	3310	14,00	0,9150
	7,1	7,58	185,0	26,7	4,9	MRO 13 - 71C4	12,9	6,4	3310	9,00	0,9150
	8,0	8,47	165,0	29,9	7,4	MRO 23 - 80A4	18,7	10,6	3620	14,00	1,3930
	8,0	8,47	165,0	29,9	7,4	MRO 23 - 71C4	17,1	10,6	3620	9,00	1,3930
	9,0	9,14	153,0	32,2	4,0	MRO 13 - 80A4	14,5	6,4	3740	14,00	0,8480
	9,0	9,14	153,0	32,2	4,0	MRO 13 - 71C4	12,9	6,4	3740	9,00	0,8480
	10,0	9,57	146,0	33,7	4,1	MRO 13 - 80A4	14,5	6,4	3600	14,00	0,7740
	10,0	9,57	146,0	33,7	4,1	MRO 13 - 71C4	12,9	6,4	3600	9,00	0,7740
	11,2	11,60	120,0	41,0	3,7	MRO 13 - 80A4	14,5	6,4	3570	14,00	0,6940
	11,2	11,60	120,0	41,0	3,7	MRO 13 - 71C4	12,9	6,4	3570	9,00	0,6940
	12,5	13,00	107,0	45,9	6,0	MRO 23 - 80A4	18,7	10,6	3920	14,00	0,9900
	12,5	13,00	107,0	45,9	6,0	MRO 23 - 71C4	17,1	10,6	3920	9,00	0,9900
	14,0	14,10	99,1	49,8	4,6	MRO 23 - 80A4	18,7	10,6	4340	14,00	1,0580
	14,0	14,10	99,1	49,8	4,6	MRO 23 - 71C4	17,1	10,6	4340	9,00	1,0580
	14,0	14,00	99,9	49,4	2,6	MRO 13 - 80A4	14,5	6,4	4040	14,00	0,6660
	14,0	14,00	99,9	49,4	2,6	MRO 13 - 71C4	12,9	6,4	4040	9,00	0,6660
	16,0	15,10	92,5	53,4	3,1	MRO 13 - 80A4	14,5	6,4	3550	14,00	0,6210
	16,0	15,10	92,5	53,4	3,1	MRO 13 - 71C4	12,9	6,4	3550	9,00	0,6210
	18,0	17,80	78,7	62,8	4,0	MRO 23 - 80A4	18,7	10,6	4480	14,00	0,6830
	18,0	17,80	78,7	62,8	4,0	MRO 23 - 71C4	17,1	10,6	4480	9,00	0,6830
	18,0	18,30	76,7	64,4	2,1	MRO 13 - 80A4	14,5	6,4	4240	14,00	0,6040
	18,0	18,30	76,7	64,4	2,1	MRO 13 - 71C4	12,9	6,4	4240	9,00	0,6040
	20,0	20,60	68,1	72,5	4,3	MRO 23 - 80A4	18,7	10,6	3720	14,00	0,7790
	20,0	20,60	68,1	72,5	4,3	MRO 23 - 71C4	17,1	10,6	3720	9,00	0,7790
	20,0	19,20	73,1	67,5	2,5	MRO 13 - 80A4	14,5	6,4	3670	14,00	0,5770
	20,0	19,20	73,1	67,5	2,5	MRO 13 - 71C4	12,9	6,4	3670	9,00	0,5770
	22,4	21,90	63,9	77,3	3,5	MRO 23 - 80A4	18,7	10,6	4420	14,00	0,6310
	22,4	21,90	63,9	77,3	3,5	MRO 23 - 71C4	17,1	10,6	4420	9,00	0,6310
	22,4	23,30	60,0	82,3	2,1	MRO 13 - 80A4	14,5	6,4	3820	14,00	0,5510
	22,4	23,30	60,0	82,3	2,1	MRO 13 - 71C4	12,9	6,4	3820	9,00	0,5510

MRO-MRV - 1400 rpm
Motoriduttore

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,55	25,0	26,10	53,7	91,9	3,4	MRO 23 - 80A4	18,7	10,6	3930	14,00	0,7150
	25,0	26,10	53,7	91,9	3,4	MRO 23 - 71C4	17,1	10,6	3930	9,00	0,7150
	25,0	24,40	57,3	86,2	1,7	MRO 13 - 80A4	14,5	6,4	4150	14,00	0,4940
	25,0	24,40	57,3	86,2	1,7	MRO 13 - 71C4	12,9	6,4	4150	9,00	0,4940
	28,0	28,70	48,7	101,0	3,9	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,9940
	28,0	28,70	48,7	101,0	3,9	MRO 33 - 71C4	19	12,5	5740	9,00	1,9940
	28,0	27,40	51,1	96,6	3,2	MRO 23 - 80A4	18,7	10,6	4180	14,00	0,5920
	28,0	27,40	51,1	96,6	3,2	MRO 23 - 71C4	17,1	10,6	4180	9,00	0,5920
	28,0	29,20	48,0	103,0	1,7	MRO 13 - 80A4	14,5	6,4	3960	14,00	0,5290
	28,0	29,20	48,0	103,0	1,7	MRO 13 - 71C4	12,9	6,4	3960	9,00	0,5290
	31,5	33,30	42,1	117,0	4,7	MRO 33 - 80A4	20,6	12,5	5740	14,00	2,2750
	31,5	33,30	42,1	117,0	4,7	MRO 33 - 71C4	19	12,5	5740	9,00	2,2750
	31,5	33,00	42,5	116,0	2,2	MRO 23 - 80A4	18,7	10,6	4960	14,00	0,5440
	31,5	33,00	42,5	116,0	2,2	MRO 23 - 71C4	17,1	10,6	4960	9,00	0,5440
	31,5	31,80	44,0	112,0	1,5	MRO 13 - 80A4	14,5	6,4	4120	14,00	0,4770
	31,5	31,80	44,0	112,0	1,5	MRO 13 - 71C4	12,9	6,4	4120	9,00	0,4770
	35,5	34,30	40,9	121,0	4,6	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,9540
	35,5	34,30	40,9	121,0	4,6	MRO 33 - 71C4	19	12,5	5740	9,00	1,9540
	35,5	35,10	39,9	124,0	2,5	MRO 23 - 80A4	18,7	10,6	4220	14,00	0,5620
	35,5	35,10	39,9	124,0	2,5	MRO 23 - 71C4	17,1	10,6	4220	9,00	0,5620
	35,5	38,00	36,9	134,0	1,2	MRO 13 - 80A4	14,5	6,4	4430	14,00	0,5120
	35,5	38,00	36,9	134,0	1,2	MRO 13 - 71C4	12,9	6,4	4430	9,00	0,5120
	40,0	40,20	34,8	142,0	4,0	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8490
	40,0	40,20	34,8	142,0	4,0	MRO 33 - 71C4	19	12,5	5740	9,00	1,8490
	40,0	41,20	34,0	145,0	2,1	MRO 23 - 80A4	18,7	10,6	4600	14,00	0,5270
	40,0	41,20	34,0	145,0	2,1	MRO 23 - 71C4	17,1	10,6	4600	9,00	0,5270
	40,0	40,30	34,8	142,0	1,2	MRO 13 - 80A4	14,5	6,4	4100	14,00	0,4670
	40,0	40,30	34,8	142,0	1,2	MRO 13 - 71C4	12,9	6,4	4100	9,00	0,4670
	45,0	45,50	30,7	161,0	3,5	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8890
	45,0	45,50	30,7	161,0	3,5	MRO 33 - 71C4	19	12,5	5740	9,00	1,8890
	45,0	43,20	32,4	152,0	2,0	MRO 23 - 80A4	18,7	10,6	4450	14,00	0,5440
	45,0	43,20	32,4	152,0	2,0	MRO 23 - 71C4	17,1	10,6	4450	9,00	0,5440
	45,0	47,90	29,2	169,0	1,0	MRO 13 - 80A4	14,5	6,4	4300	14,00	0,4540
	45,0	47,90	29,2	169,0	1,0	MRO 13 - 71C4	12,9	6,4	4300	9,00	0,4540
	50,0	51,60	27,2	182,0	3,2	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8120
	50,0	51,60	27,2	182,0	3,2	MRO 33 - 71C4	19	12,5	5740	9,00	1,8120
	50,0	52,80	26,5	186,0	1,7	MRO 23 - 80A4	18,7	10,6	4680	14,00	0,5130
	50,0	52,80	26,5	186,0	1,7	MRO 23 - 71C4	17,1	10,6	4680	9,00	0,5130
	50,0	49,00	28,6	173,0	1,0	MRO 13 - 80A4	14,5	6,4	4100	14,00	0,4610
	50,0	49,00	28,6	173,0	1,0	MRO 13 - 71C4	12,9	6,4	4100	9,00	0,4610
	56,0	53,60	26,1	189,0	3,1	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8620
	56,0	53,60	26,1	189,0	3,1	MRO 33 - 71C4	19	12,5	5740	9,00	1,8620
	56,0	54,80	25,6	193,0	1,6	MRO 23 - 80A4	18,7	10,6	4720	14,00	0,5290
	56,0	54,80	25,6	193,0	1,6	MRO 23 - 71C4	17,1	10,6	4720	9,00	0,5290
	63,0	64,00	21,9	226,0	4,4	MRO 43 - 80A4	47,1	39	10090	14,00	3,9699
	63,0	64,00	21,9	226,0	4,4	MRO 43 - 71C4	45,5	39	10090	9,00	3,9699
	63,0	64,30	21,8	227,0	1,8	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8750
	63,0	64,30	21,8	227,0	1,8	MRO 33 - 71C4	19	12,5	5740	9,00	1,8750
	63,0	65,00	21,5	229,0	1,4	MRO 23 - 80A4	18,7	10,6	4930	14,00	0,5050
	63,0	65,00	21,5	229,0	1,4	MRO 23 - 71C4	17,1	10,6	4930	9,00	0,5050

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,55	63,0	61,30	22,8	216,0	0,8	MRO 13 - 71C4	12,9	6,4	4000	9,00	0,4560
	63,0	61,30	22,8	216,0	0,8	MRO 13 - 80A4	14,5	6,4	4000	14,00	0,4560
	71,0	68,30	20,5	241,0	3,8	MRO 43 - 80A4	47,1	39	10970	14,00	4,0382
	71,0	68,30	20,5	241,0	3,8	MRO 43 - 71C4	45,5	39	10970	9,00	4,0382
	71,0	68,50	20,4	242,0	2,4	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7840
	71,0	68,50	20,4	242,0	2,4	MRO 33 - 71C4	19	12,5	5740	9,00	1,7840
	71,0	74,00	18,9	261,0	1,1	MRO 23 - 80A4	18,7	10,6	5510	14,00	0,4950
	71,0	74,00	18,9	261,0	1,1	MRO 23 - 71C4	17,1	10,6	5510	9,00	0,4950
	80,0	79,40	17,6	280,0	4,6	MRO 53 - 80A4	81,1	73	16160	14,00	2,5012
	80,0	82,50	17,0	291,0	3,4	MRO 43 - 80A4	47,1	39	10510	14,00	3,9279
	80,0	82,50	17,0	291,0	3,4	MRO 43 - 71C4	45,5	39	10510	9,00	3,9279
	80,0	80,70	17,4	284,0	2,0	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7720
	80,0	80,70	17,4	284,0	2,0	MRO 33 - 71C4	19	12,5	5740	9,00	1,7720
	80,0	82,40	17,0	291,0	1,1	MRO 23 - 80A4	18,7	10,6	5100	14,00	0,4990
	80,0	82,40	17,0	291,0	1,1	MRO 23 - 71C4	17,1	10,6	5100	9,00	0,4990
	90,0	89,70	15,6	316,0	2,8	MRO 43 - 80A4	47,1	39	11880	14,00	3,8846
	90,0	89,70	15,6	316,0	2,8	MRO 43 - 71C4	45,5	39	11880	9,00	3,8846
	90,0	91,90	15,2	324,0	1,3	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8090
	90,0	91,90	15,2	324,0	1,3	MRO 33 - 71C4	19	12,5	5740	9,00	1,8090
	90,0	91,10	15,4	321,0	1,0	MRO 23 - 71C4	17,1	10,6	5100	9,00	0,4900
	90,0	91,10	15,4	321,0	1,0	MRO 23 - 80A4	18,7	10,6	5100	14,00	0,4900
	100,0	103,00	13,6	363,0	2,6	MRO 43 - 80A4	47,1	39	11740	14,00	3,9031
	100,0	103,00	13,6	363,0	2,6	MRO 43 - 71C4	45,5	39	11740	9,00	3,9031
	100,0	105,00	13,3	371,0	1,6	MRO 33 - 80A4	20,6	12,5	5750	14,00	1,7580
	100,0	105,00	13,3	371,0	1,6	MRO 33 - 71C4	19	12,5	5750	9,00	1,7580
	112,0	109,00	12,8	385,0	4,4	MRO 53 - 80A4	81,1	73	11200	14,00	24,8595
	112,0	116,00	12,1	408,0	2,5	MRO 43 - 80A4	47,1	39	11130	14,00	3,8632
	112,0	116,00	12,1	408,0	2,5	MRO 43 - 71C4	45,5	39	11130	9,00	3,8632
	112,0	113,00	12,4	399,0	1,5	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7370
	112,0	113,00	12,4	399,0	1,5	MRO 33 - 71C4	19	12,5	5740	9,00	1,7370
	112,0	116,00	12,1	408,0	0,8	MRO 23 - 71C4	17,1	10,6	5100	9,00	0,4870
	112,0	116,00	12,1	408,0	0,8	MRO 23 - 80A4	18,7	10,6	5100	14,00	0,4870
	125,0	120,00	11,7	422,0	4,2	MRO 53 - 80A4	81,1	73	7200	14,00	24,7730
	125,0	122,00	11,5	430,0	1,8	MRO 43 - 80A4	47,1	39	13730	14,00	3,9785
	125,0	122,00	11,5	430,0	1,8	MRO 43 - 71C4	45,5	39	13730	9,00	3,9785
	125,0	125,00	11,2	442,0	1,1	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7510
	125,0	125,00	11,2	442,0	1,1	MRO 33 - 71C4	19	12,5	5740	9,00	1,7510
	140,0	141,00	10,0	496,0	3,6	MRO 53 - 80A4	81,1	73	7200	14,00	24,7467
	140,0	144,00	9,7	509,0	1,9	MRO 43 - 80A4	47,1	39	12410	14,00	3,8506
	140,0	144,00	9,7	509,0	1,9	MRO 43 - 71C4	45,5	39	12410	9,00	3,8506
	140,0	148,00	9,5	520,0	1,1	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7300
	140,0	148,00	9,5	520,0	1,1	MRO 33 - 71C4	19	12,5	5740	9,00	1,7300
	160,0	153,00	9,1	540,0	3,2	MRO 53 - 80A4	81,1	73	10100	14,00	24,7344
	160,0	165,00	8,5	581,0	1,3	MRO 43 - 80A4	47,1	39	14400	14,00	3,8831
	160,0	165,00	8,5	581,0	1,3	MRO 43 - 71C4	45,5	39	14400	9,00	3,8831
	160,0	162,00	8,6	572,0	0,8	MRO 33 - 71C4	19	12,5	5740	9,00	1,7940
	160,0	162,00	8,6	572,0	0,8	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7940
	180,0	190,00	7,4	672,0	4,1	MRO 63 - 80A4	129,1	121	19400	14,00	1,7431
	180,0	185,00	7,6	653,0	2,2	MRO 53 - 80A4	81,1	73	17640	14,00	24,7124
	180,0	183,00	7,6	646,0	1,2	MRO 43 - 80A4	47,1	39	14710	14,00	3,8768

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,55	180,0	183,00	7,6	646,0	1,2	MRO 43 - 71C4	45,5	39	14710	9,00	3,8768
	180,0	176,00	8,0	620,0	0,8	MRO 33 - 71C4	19	12,5	5740	9,00	1,7260
	180,0	176,00	8,0	620,0	0,8	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7260
	200,0	208,00	6,7	734,0	1,8	MRO 53 - 80A4	81,1	73	19060	14,00	24,7277
	200,0	191,00	7,3	672,0	1,1	MRO 43 - 80A4	47,1	39	14830	14,00	3,8477
	200,0	191,00	7,3	672,0	1,1	MRO 43 - 71C4	45,5	39	14830	9,00	3,8477
	224,0	221,00	6,3	779,0	3,3	MRO 63 - 80A4	129,1	121	22500	14,00	17,4800
	224,0	224,00	6,2	791,0	1,7	MRO 53 - 80A4	81,1	73	19100	14,00	24,7733
	224,0	231,00	6,1	814,0	0,9	MRO 43 - 71C4	45,5	39	15400	9,00	3,8405
	224,0	231,00	6,1	814,0	0,9	MRO 43 - 80A4	47,1	39	15400	14,00	3,8405
	250,0	252,00	5,6	887,0	1,5	MRO 53 - 80A4	81,1	73	19100	14,00	24,7078
	250,0	257,00	5,5	906,0	0,8	MRO 43 - 71C4	45,5	39	16500	9,00	3,8372
	250,0	257,00	5,5	906,0	0,8	MRO 43 - 80A4	47,1	39	16500	14,00	3,8372
	280,0	272,00	5,2	958,0	2,7	MRO 63 - 80A4	129,1	121	22500	14,00	17,4170
	315,0	305,00	4,6	1077,0	2,4	MRO 63 - 80A4	129,1	121	22500	14,00	17,3880
	315,0	315,00	4,5	1109,0	1,2	MRO 53 - 80A4	81,1	73	19100	14,00	24,6906
0,75	6,3	6,62	211,0	31,8	6,3	MRO 23 - 80B4	19,7	10,6	3350	17,00	1,7940
	7,1	7,58	185,0	36,5	3,6	MRO 13 - 80B4	15,5	6,4	3310	17,00	0,9150
	9,0	9,14	153,0	44,0	3,0	MRO 13 - 80B4	15,5	6,4	3740	17,00	0,8480
	10,0	10,40	134,0	50,2	4,9	MRO 23 - 80B4	19,7	10,6	3870	17,00	1,1640
	10,0	9,57	146,0	46,0	3,0	MRO 13 - 80B4	15,5	6,4	3600	17,00	0,7740
	11,2	11,50	122,0	55,2	4,2	MRO 23 - 80B4	19,7	10,6	4040	17,00	1,2320
	11,2	11,60	120,0	55,9	2,7	MRO 13 - 80B4	15,5	6,4	3570	17,00	0,6940
	12,5	13,00	107,0	62,7	4,4	MRO 23 - 80B4	19,7	10,6	3920	17,00	0,9900
	14,0	14,10	99,1	67,9	3,4	MRO 23 - 80B4	19,7	10,6	4340	17,00	1,0580
	14,0	14,00	99,9	67,4	1,9	MRO 13 - 80B4	15,5	6,4	4040	17,00	0,6660
	16,0	16,70	83,9	80,2	3,8	MRO 23 - 80B4	19,7	10,6	3620	17,00	0,8580
	16,0	15,10	92,5	72,8	2,3	MRO 13 - 80B4	15,5	6,4	3550	17,00	0,6210
	18,0	17,80	78,7	85,6	2,9	MRO 23 - 80B4	19,7	10,6	4480	17,00	0,6830
	18,0	18,30	76,7	87,8	1,5	MRO 13 - 80B4	15,5	6,4	4240	17,00	0,6040
	20,0	19,10	73,3	91,8	4,2	MRO 33 - 80B4	21,6	12,5	5730	17,00	2,3640
	20,0	20,60	68,1	98,8	3,1	MRO 23 - 80B4	19,7	10,6	3720	17,00	0,7790
	20,0	19,20	73,1	92,1	1,8	MRO 13 - 80B4	15,5	6,4	3670	17,00	0,5770
	22,4	21,90	63,9	105,0	2,6	MRO 23 - 80B4	19,7	10,6	4420	17,00	0,6310
	22,4	23,30	60,0	112,0	1,5	MRO 13 - 80B4	15,5	6,4	3820	17,00	0,5510
	25,0	26,70	52,4	129,0	4,4	MRO 33 - 80B4	21,6	12,5	5730	17,00	2,0370
	25,0	26,10	53,7	125,0	2,5	MRO 23 - 80B4	19,7	10,6	3930	17,00	0,7150
	25,0	24,40	57,3	118,0	1,3	MRO 13 - 80B4	15,5	6,4	4150	17,00	0,4940
	28,0	28,70	48,7	138,0	2,9	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,9940
	28,0	27,40	51,1	132,0	2,4	MRO 23 - 80B4	19,7	10,6	4180	17,00	0,5920
	28,0	29,20	48,0	140,0	1,2	MRO 13 - 80B4	15,5	6,4	3960	17,00	0,5290
	31,5	33,30	42,1	160,0	3,4	MRO 33 - 80B4	21,6	12,5	5740	17,00	2,2750
	31,5	33,00	42,5	159,0	1,6	MRO 23 - 80B4	19,7	10,6	4960	17,00	0,5440
	31,5	31,80	44,0	153,0	1,1	MRO 13 - 80B4	15,5	6,4	4120	17,00	0,4770
	35,5	34,30	40,9	165,0	3,4	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,9540
	35,5	35,10	39,9	169,0	1,8	MRO 23 - 80B4	19,7	10,6	4220	17,00	0,5620
	35,5	38,00	36,9	182,0	0,9	MRO 13 - 80B4	15,5	6,4	4430	17,00	0,5120
	40,0	40,20	34,8	193,0	2,9	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8490
	40,0	41,20	34,0	198,0	1,6	MRO 23 - 80B4	19,7	10,6	4600	17,00	0,5270
	40,0	40,30	34,8	194,0	0,9	MRO 13 - 80B4	15,5	6,4	4100	17,00	0,4670

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,75	45,0	42,50	32,9	204,0	4,1	MRO 43 - 80B4	48,1	39	10020	17,00	4,1893
	45,0	45,50	30,7	219,0	2,6	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8890
	45,0	43,20	32,4	208,0	1,5	MRO 23 - 80B4	19,7	10,6	4450	17,00	0,5440
	50,0	51,30	27,3	246,0	4,0	MRO 43 - 80B4	48,1	39	9720	17,00	4,0217
	50,0	51,60	27,2	248,0	2,3	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8120
	50,0	52,80	26,5	254,0	1,2	MRO 23 - 80B4	19,7	10,6	4680	17,00	0,5130
	56,0	54,80	25,5	264,0	3,7	MRO 43 - 80B4	48,1	39	9800	17,00	4,0943
	56,0	53,60	26,1	258,0	2,3	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8620
	56,0	54,80	25,6	263,0	1,2	MRO 23 - 80B4	19,7	10,6	4720	17,00	0,5290
	63,0	64,00	21,9	308,0	3,2	MRO 43 - 80B4	48,1	39	10090	17,00	3,9699
	63,0	64,30	21,8	309,0	1,3	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8750
	63,0	65,00	21,5	312,0	1,0	MRO 23 - 80B4	19,7	10,6	4930	17,00	0,5050
	71,0	72,60	19,3	349,0	4,8	MRO 53 - 80B4	82,1	73	10800	17,00	25,1812
	71,0	68,30	20,5	329,0	2,8	MRO 43 - 80B4	48,1	39	10970	17,00	4,0382
	71,0	68,50	20,4	329,0	1,8	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7840
	71,0	74,00	18,9	356,0	0,8	MRO 23 - 80B4	19,7	10,6	5510	17,00	0,4950
	80,0	79,40	17,6	382,0	3,4	MRO 53 - 80B4	82,1	73	16160	17,00	25,0122
	80,0	82,50	17,0	397,0	2,5	MRO 43 - 80B4	48,1	39	10510	17,00	3,9279
	80,0	80,70	17,4	388,0	1,5	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7720
	80,0	82,40	17,0	396,0	0,8	MRO 23 - 80B4	19,7	10,6	5100	17,00	0,4990
	90,0	91,00	15,4	438,0	4,0	MRO 53 - 80B4	82,1	73	8400	17,00	24,8176
	90,0	89,70	15,6	431,0	2,1	MRO 43 - 80B4	48,1	39	11880	17,00	3,8846
	90,0	91,90	15,2	442,0	0,9	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8090
	100,0	100,00	14,0	482,0	3,7	MRO 53 - 80B4	82,1	73	8000	17,00	24,8837
	100,0	103,00	13,6	494,0	1,9	MRO 43 - 80B4	48,1	39	11740	17,00	3,9031
	100,0	105,00	13,3	506,0	1,1	MRO 33 - 80B4	21,6	12,5	5750	17,00	1,7580
	112,0	109,00	12,8	525,0	3,2	MRO 53 - 80B4	82,1	73	11200	17,00	24,8595
	112,0	116,00	12,1	557,0	1,8	MRO 43 - 80B4	48,1	39	11130	17,00	3,8632
	112,0	113,00	12,4	544,0	1,1	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7370
	125,0	129,00	10,9	619,0	4,0	MRO 63 - 80B4	130,1	121	22060	17,00	17,7600
	125,0	120,00	11,7	575,0	3,1	MRO 53 - 80B4	82,1	73	7200	17,00	24,7730
	125,0	122,00	11,5	586,0	1,3	MRO 43 - 80B4	48,1	39	13730	17,00	3,9785
	125,0	125,00	11,2	603,0	0,8	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7510
	140,0	141,00	9,9	679,0	4,9	MRO 63 - 80B4	130,1	121	9800	17,00	17,5400
	140,0	141,00	10,0	676,0	2,6	MRO 53 - 80B4	82,1	73	7200	17,00	24,7467
	140,0	144,00	9,7	694,0	1,4	MRO 43 - 80B4	48,1	39	12410	17,00	3,8506
	140,0	148,00	9,5	709,0	0,8	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7300
	160,0	155,00	9,0	745,0	4,5	MRO 63 - 80B4	130,1	121	9800	17,00	17,5010
	160,0	153,00	9,1	736,0	2,3	MRO 53 - 80B4	82,1	73	10100	17,00	24,7344
	160,0	165,00	8,5	792,0	0,9	MRO 43 - 80B4	48,1	39	14400	17,00	3,8831
	180,0	190,00	7,4	916,0	3,0	MRO 63 - 80B4	130,1	121	19400	17,00	17,4310
	180,0	185,00	7,6	890,0	1,6	MRO 53 - 80B4	82,1	73	17640	17,00	24,7124
	180,0	183,00	7,6	881,0	0,9	MRO 43 - 80B4	48,1	39	14710	17,00	3,8768
	200,0	208,00	6,7	1000,0	1,3	MRO 53 - 80B4	82,1	73	19060	17,00	24,7277
	200,0	191,00	7,3	917,0	0,8	MRO 43 - 80B4	48,1	39	14830	17,00	3,8477
	224,0	221,00	6,3	1062,0	2,4	MRO 63 - 80B4	130,1	121	22500	17,00	17,4800
	224,0	224,00	6,2	1078,0	1,2	MRO 53 - 80B4	82,1	73	19100	17,00	24,7733
	250,0	252,00	5,6	1210,0	1,1	MRO 53 - 80B4	82,1	73	19100	17,00	24,7078
	280,0	272,00	5,2	1306,0	2,0	MRO 63 - 80B4	130,1	121	22500	17,00	17,4170
	315,0	305,00	4,6	1469,0	1,7	MRO 63 - 80B4	130,1	121	22500	17,00	17,3880

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	**Size**	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
0,75	315,0	315,00	4,5	1512,0	0,9	MRO 53 - 80B4	82,1	73	19100	17,00	24,6906
1,1	6,3	6,62	211,0	46,7	4,3	MRO 23 - 90S4	22,3	10,6	3350	33,00	1,7940
	6,3	6,62	211,0	46,7	4,3	MRO 23 - 80C4	21,6	10,6	3350	23,00	1,7940
	7,1	7,58	185,0	53,5	2,4	MRO 13 - 90S4	18,1	6,4	3310	33,00	0,9150
	7,1	7,58	185,0	53,5	2,4	MRO 13 - 80C4	17,4	6,4	3310	23,00	0,9150
	8,0	8,47	165,0	59,7	3,7	MRO 23 - 90S4	22,3	10,6	3620	33,00	1,3930
	8,0	8,47	165,0	59,7	3,7	MRO 23 - 80C4	21,6	10,6	3620	23,00	1,3930
	9,0	8,97	156,0	63,3	3,6	MRO 23 - 90S4	22,3	10,6	3710	33,00	1,5320
	9,0	8,97	156,0	63,3	3,6	MRO 23 - 80C4	21,6	10,6	3710	23,00	1,5320
	9,0	9,14	153,0	64,5	2,0	MRO 13 - 90S4	18,1	6,4	3740	33,00	0,8480
	9,0	9,14	153,0	64,5	2,0	MRO 13 - 80C4	17,4	6,4	3740	23,00	0,8480
	10,0	10,40	134,0	73,6	3,3	MRO 23 - 90S4	22,3	10,6	3870	33,00	1,1640
	10,0	10,40	134,0	73,6	3,3	MRO 23 - 80C4	21,6	10,6	6430	23,00	7,7706
	10,0	9,57	146,0	67,5	2,1	MRO 13 - 90S4	18,1	6,4	3600	33,00	0,7740
	10,0	9,57	146,0	67,5	2,1	MRO 13 - 80C4	17,4	6,4	3600	23,00	0,7740
	11,2	11,70	120,0	82,2	4,6	MRO 33 - 90S4	24,2	12,5	5730	33,00	3,8410
	11,2	11,70	120,0	82,2	4,6	MRO 33 - 80C4	23,5	12,5	5730	23,00	3,8410
	11,2	11,50	122,0	81,0	2,8	MRO 23 - 90S4	22,3	10,6	4040	33,00	1,2320
	11,2	11,50	122,0	81,0	2,8	MRO 23 - 80C4	21,6	10,6	4040	23,00	1,2320
	11,2	11,60	120,0	82,0	1,8	MRO 13 - 90S4	18,1	6,4	3570	33,00	0,6940
	11,2	11,60	120,0	82,0	1,8	MRO 13 - 80C4	17,4	6,4	3570	23,00	0,6940
	12,5	13,00	107,0	91,9	3,0	MRO 23 - 90S4	22,3	10,6	3920	33,00	0,9900
	12,5	13,00	107,0	91,9	3,0	MRO 23 - 80C4	21,6	10,6	3920	23,00	0,9900
	14,0	13,50	104,0	95,4	4,8	MRO 33 - 90S4	24,2	12,5	5520	33,00	2,5250
	14,0	13,50	104,0	95,4	4,8	MRO 33 - 80C4	23,5	12,5	5520	23,00	2,5250
	14,0	14,10	99,1	99,7	2,3	MRO 23 - 90S4	22,3	10,6	4340	33,00	1,0580
	14,0	14,10	99,1	99,7	2,3	MRO 23 - 80C4	21,6	10,6	4340	23,00	1,0580
	14,0	14,00	99,9	98,9	1,3	MRO 13 - 90S4	18,1	6,4	4040	33,00	0,6660
	14,0	14,00	99,9	98,9	1,3	MRO 13 - 80C4	17,4	6,4	4040	23,00	0,6660
	16,0	16,30	85,9	115,0	4,7	MRO 33 - 90S4	24,2	12,5	5730	33,00	2,8190
	16,0	16,30	85,9	115,0	4,7	MRO 33 - 80C4	23,5	12,5	5730	23,00	2,8190
	16,0	16,70	83,9	118,0	2,6	MRO 23 - 90S4	22,3	10,6	3620	33,00	0,8580
	16,0	16,70	83,9	118,0	2,6	MRO 23 - 80C4	21,6	10,6	3620	23,00	0,8580
	16,0	15,10	92,5	107,0	1,5	MRO 13 - 90S4	18,1	6,4	3550	33,00	0,6210
	16,0	15,10	92,5	107,0	1,5	MRO 13 - 80C4	17,4	6,4	3550	23,00	0,6210
	18,0	17,60	79,8	124,0	4,9	MRO 43 - 90S4	50,7	39	7740	33,00	5,0261
	18,0	17,60	79,8	124,0	4,9	MRO 43 - 80C4	50	39	7740	23,00	5,0261
	18,0	17,30	80,8	122,0	4,2	MRO 33 - 90S4	24,2	12,5	5680	33,00	2,2830
	18,0	17,30	80,8	122,0	4,2	MRO 33 - 80C4	23,5	12,5	5680	23,00	2,2830
	18,0	17,80	78,7	126,0	2,0	MRO 23 - 90S4	22,3	10,6	4480	33,00	0,6830
	18,0	17,80	78,7	126,0	2,0	MRO 23 - 80C4	21,6	10,6	4480	23,00	0,6830
	18,0	18,30	76,7	129,0	1,0	MRO 13 - 90S4	18,1	6,4	4240	33,00	0,6040
	18,0	18,30	76,7	129,0	1,0	MRO 13 - 80C4	17,4	6,4	4240	23,00	0,6040
	20,0	19,10	73,3	135,0	2,9	MRO 33 - 90S4	24,2	12,5	5730	33,00	2,3640
	20,0	19,10	73,3	135,0	2,9	MRO 33 - 80C4	23,5	12,5	5730	23,00	2,3640
	20,0	20,60	68,1	145,0	2,1	MRO 23 - 90S4	22,3	10,6	3720	33,00	0,7790
	20,0	20,60	68,1	145,0	2,1	MRO 23 - 80C4	21,6	10,6	3720	23,00	0,7790
	20,0	19,20	73,1	135,0	1,3	MRO 13 - 90S4	18,1	6,4	3670	33,00	0,5770
	20,0	19,20	73,1	135,0	1,3	MRO 13 - 80C4	17,4	6,4	3670	23,00	0,5770
	22,4	21,90	63,8	155,0	4,5	MRO 43 - 90S4	50,7	39	8310	33,00	4,6963

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
1,1	22,4	21,90	63,8	155,0	4,5	MRO 43 - 80C4	50	39	8310	23,00	4,6963
	22,4	21,70	64,6	153,0	3,6	MRO 33 - 90S4	24,2	12,5	5740	33,00	2,5320
	22,4	21,70	64,6	153,0	3,6	MRO 33 - 80C4	23,5	12,5	5740	23,00	2,3200
	22,4	21,90	63,9	155,0	1,7	MRO 23 - 90S4	22,3	10,6	4420	33,00	0,6310
	22,4	21,90	63,9	155,0	1,7	MRO 23 - 80C4	21,6	10,6	4420	23,00	0,6310
	22,4	23,30	60,0	165,0	1,0	MRO 13 - 90S4	18,1	6,4	3820	33,00	0,5510
	22,4	23,30	60,0	165,0	1,0	MRO 13 - 80C4	17,4	6,4	3820	23,00	0,5510
	25,0	26,10	53,6	184,0	4,6	MRO 43 - 90S4	50,7	39	8690	33,00	5,1123
	25,0	26,10	53,6	184,0	4,6	MRO 43 - 80C4	50	39	8690	23,00	5,1123
	25,0	26,70	52,4	189,0	3,0	MRO 33 - 90S4	24,2	12,5	5730	33,00	2,0370
	25,0	26,70	52,4	189,0	3,0	MRO 33 - 80C4	23,5	12,5	5730	23,00	2,0370
	25,0	26,10	53,7	184,0	1,7	MRO 23 - 90S4	22,3	10,6	3930	33,00	0,7150
	25,0	26,10	53,7	184,0	1,7	MRO 23 - 80C4	21,6	10,6	3930	23,00	0,7150
	25,0	24,40	57,3	172,0	0,9	MRO 13 - 80C4	17,4	6,4	4150	23,00	0,4940
	25,0	24,40	57,3	172,0	0,9	MRO 13 - 90S4	18,1	6,4	4150	33,00	0,4940
	28,0	27,90	50,1	197,0	3,9	MRO 43 - 90S4	50,7	39	8990	33,00	4,4508
	28,0	27,90	50,1	197,0	3,9	MRO 43 - 80C4	50	39	8990	23,00	4,4508
	28,0	28,70	48,7	203,0	2,0	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,9940
	28,0	28,70	48,7	203,0	2,0	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,9940
	28,0	27,40	51,1	193,0	1,6	MRO 23 - 90S4	22,3	10,6	4180	33,00	0,5920
	28,0	27,40	51,1	193,0	1,6	MRO 23 - 80C4	21,6	10,6	4180	23,00	0,5920
	28,0	29,20	48,0	206,0	0,8	MRO 13 - 80C4	17,4	6,4	3960	23,00	0,5290
	28,0	29,20	48,0	206,0	0,8	MRO 13 - 90S4	18,1	6,4	3960	33,00	0,5290
	31,5	32,50	43,1	229,0	3,9	MRO 43 - 90S4	50,7	39	9390	33,00	4,8644
	31,5	32,50	43,1	229,0	3,9	MRO 43 - 80C4	50	39	9390	23,00	4,8644
	31,5	33,30	42,1	235,0	2,3	MRO 33 - 90S4	24,2	12,5	5740	33,00	2,2750
	31,5	33,30	42,1	235,0	2,3	MRO 33 - 80C4	23,5	12,5	5740	23,00	2,2750
	31,5	33,00	42,5	233,0	1,1	MRO 23 - 90S4	22,3	10,6	4960	33,00	0,5440
	31,5	33,00	42,5	233,0	1,1	MRO 23 - 80C4	21,6	10,6	4960	23,00	0,5440
	35,5	34,10	41,1	240,0	3,5	MRO 43 - 90S4	50,7	39	9580	33,00	4,3066
	35,5	34,10	41,1	240,0	3,5	MRO 43 - 80C4	50	39	9580	23,00	4,3066
	35,5	34,30	40,9	242,0	2,3	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,9540
	35,5	34,30	40,9	242,0	2,3	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,9540
	35,5	35,10	39,9	247,0	1,3	MRO 23 - 90S4	22,3	10,6	4220	33,00	0,5620
	35,5	35,10	39,9	247,0	1,3	MRO 23 - 80C4	21,6	10,6	4220	23,00	0,5620
	40,0	40,20	34,8	284,0	2,0	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8490
	40,0	40,20	34,8	284,0	2,0	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8490
	40,0	41,20	34,0	291,0	1,1	MRO 23 - 90S4	22,3	10,6	4600	33,00	0,5270
	40,0	41,20	34,0	291,0	1,1	MRO 23 - 80C4	21,6	10,6	4600	23,00	0,5270
	45,0	42,50	32,9	300,0	2,8	MRO 43 - 90S4	50,7	39	10020	33,00	4,1893
	45,0	42,50	32,9	300,0	2,8	MRO 43 - 80C4	50	39	10020	23,00	4,1893
	45,0	45,50	30,7	321,0	1,8	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8890
	45,0	45,50	30,7	321,0	1,8	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8890
	45,0	43,20	32,4	305,0	1,0	MRO 23 - 90S4	22,3	10,6	4450	33,00	0,5440
	45,0	43,20	32,4	305,0	1,0	MRO 23 - 80C4	21,6	10,6	4450	23,00	0,5440
	50,0	51,30	27,3	362,0	4,8	MRO 53 - 90S4	84,7	73	8720	33,00	25,2163
	50,0	51,30	27,3	362,0	4,8	MRO 53 - 80C4	84	73	8720	23,00	25,2163
	50,0	51,30	27,3	361,0	2,7	MRO 43 - 90S4	50,7	39	9720	33,00	4,0217
	50,0	51,30	27,3	361,0	2,7	MRO 43 - 80C4	50	39	9720	23,00	4,0217
	50,0	51,60	27,2	364,0	1,6	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8120

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
1,1	50,0	51,60	27,2	364,0	1,6	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8120
	50,0	52,80	26,5	372,0	0,8	MRO 23 - 80C4	21,6	10,6	4680	23,00	0,5130
	50,0	52,80	26,5	372,0	0,8	MRO 23 - 90S4	22,3	10,6	4680	33,00	0,5130
	56,0	56,70	24,7	400,0	4,3	MRO 53 - 90S4	84,7	73	8820	33,00	25,3529
	56,0	56,70	24,7	400,0	4,3	MRO 53 - 80C4	84	73	8820	23,00	25,3529
	56,0	54,80	25,5	387,0	2,5	MRO 43 - 90S4	50,7	39	9800	33,00	4,0943
	56,0	54,80	25,5	387,0	2,5	MRO 43 - 80C4	50	39	9800	23,00	4,0943
	56,0	53,60	26,1	378,0	1,5	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8620
	56,0	53,60	26,1	378,0	1,5	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8620
	56,0	54,80	25,6	386,0	0,8	MRO 23 - 80C4	21,6	10,6	4720	23,00	0,5290
	56,0	54,80	25,6	386,0	0,8	MRO 23 - 90S4	22,3	10,6	4720	33,00	0,5290
	63,0	64,90	21,6	458,0	3,8	MRO 53 - 90S4	84,7	73	8950	33,00	25,0608
	63,0	64,90	21,6	458,0	3,8	MRO 53 - 80C4	84	73	8950	23,00	25,0608
	63,0	64,00	21,9	451,0	2,2	MRO 43 - 90S4	50,7	39	10090	33,00	3,9699
	63,0	64,00	21,9	451,0	2,2	MRO 43 - 80C4	50	39	10090	23,00	3,9699
	63,0	64,30	21,8	454,0	0,9	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8750
	63,0	64,30	21,8	454,0	0,9	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8750
	71,0	72,60	19,3	512,0	3,2	MRO 53 - 90S4	84,7	73	10800	33,00	25,1812
	71,0	72,60	19,3	512,0	3,2	MRO 53 - 80C4	84	73	10800	23,00	25,1812
	71,0	68,30	20,5	482,0	1,9	MRO 43 - 90S4	50,7	39	10970	33,00	4,0382
	71,0	68,30	20,5	482,0	1,9	MRO 43 - 80C4	50	39	10970	23,00	4,0382
	71,0	68,50	20,4	483,0	1,2	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,7840
	71,0	68,50	20,4	483,0	1,2	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,7840
	80,0	79,40	17,6	560,0	2,3	MRO 53 - 90S4	84,7	73	16160	33,00	25,0122
	80,0	79,40	17,6	560,0	2,3	MRO 53 - 80C4	84	73	16160	23,00	2,5012
	80,0	82,50	17,0	582,0	1,7	MRO 43 - 90S4	50,7	39	10510	33,00	3,9279
	80,0	82,50	17,0	582,0	1,7	MRO 43 - 80C4	50	39	10510	23,00	3,9279
	80,0	80,70	17,4	569,0	1,0	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,7720
	80,0	80,70	17,4	569,0	1,0	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,7720
	90,0	91,00	15,4	642,0	2,8	MRO 53 - 90S4	84,7	73	8400	33,00	24,8176
	90,0	91,00	15,4	642,0	2,8	MRO 53 - 80C4	84	73	8400	23,00	24,8176
	90,0	89,70	15,6	633,0	1,4	MRO 43 - 90S4	50,7	39	11880	33,00	3,8846
	90,0	89,70	15,6	633,0	1,4	MRO 43 - 80C4	50	39	11880	23,00	3,8846
	100,0	101,00	13,9	710,0	4,7	MRO 63 - 90S4	132,7	121	9800	33,00	17,9540
	100,0	101,00	13,9	710,0	4,7	MRO 63 - 80C4	132	121	9800	23,00	17,9540
	100,0	100,00	14,0	707,0	2,5	MRO 53 - 90S4	84,7	73	8000	33,00	24,8837
	100,0	100,00	14,0	707,0	2,5	MRO 53 - 80C4	84	73	8000	23,00	24,8837
	100,0	103,00	13,6	725,0	1,3	MRO 43 - 90S4	50,7	39	11740	33,00	3,9031
	100,0	103,00	13,6	725,0	1,3	MRO 43 - 80C4	50	39	11740	23,00	3,9031
	100,0	105,00	13,3	742,0	0,8	MRO 33 - 80C4	23,5	12,5	5750	23,00	1,7580
	100,0	105,00	13,3	742,0	0,8	MRO 33 - 90S4	24,2	12,5	5750	33,00	1,7580
	112,0	119,00	11,8	836,0	4,0	MRO 63 - 90S4	132,7	121	9800	33,00	17,6270
	112,0	119,00	11,8	836,0	4,0	MRO 63 - 80C4	132	121	9800	23,00	17,6270
	112,0	109,00	12,8	770,0	2,2	MRO 53 - 90S4	84,7	73	11200	33,00	24,8595
	112,0	109,00	12,8	770,0	2,2	MRO 53 - 80C4	84	73	11200	23,00	24,8595
	112,0	116,00	12,1	816,0	1,2	MRO 43 - 90S4	50,7	39	11130	33,00	3,8632
	112,0	116,00	12,1	816,0	1,2	MRO 43 - 80C4	50	39	11130	23,00	3,8632
	125,0	129,00	10,9	908,0	2,7	MRO 63 - 90S4	132,7	121	22060	33,00	17,7600
	125,0	129,00	10,9	908,0	2,7	MRO 63 - 80C4	132	121	22060	23,00	17,7600
	125,0	120,00	11,7	843,0	2,1	MRO 53 - 90S4	84,7	73	7200	33,00	24,7730

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
1,1	125,0	120,00	11,7	843,0	2,1	MRO 53 - 80C4	84	73	7200	23,00	24,7730
	125,0	122,00	11,5	859,0	0,9	MRO 43 - 80C4	50	39	13730	23,00	3,9785
	125,0	122,00	11,5	859,0	0,9	MRO 43 - 90S4	50,7	39	13730	33,00	3,9785
	140,0	141,00	9,9	996,0	3,4	MRO 63 - 90S4	132,7	121	9800	33,00	17,5400
	140,0	141,00	9,9	996,0	3,4	MRO 63 - 80C4	132	121	9800	23,00	17,5400
	140,0	141,00	10,0	991,0	1,8	MRO 53 - 90S4	84,7	73	7200	33,00	24,7467
	140,0	141,00	10,0	991,0	1,8	MRO 53 - 80C4	84	73	7200	23,00	24,7467
	140,0	144,00	9,7	1017,0	0,9	MRO 43 - 80C4	50	39	12410	23,00	3,8506
	140,0	144,00	9,7	1017,0	0,9	MRO 43 - 90S4	50,7	39	12410	33,00	3,8506
	160,0	155,00	9,0	1093,0	3,1	MRO 63 - 90S4	132,7	121	9800	33,00	17,5010
	160,0	155,00	9,0	1093,0	3,1	MRO 63 - 80C4	132	121	9800	23,00	17,5010
	160,0	153,00	9,1	1080,0	1,6	MRO 53 - 90S4	84,7	73	10100	33,00	24,7344
	160,0	153,00	9,1	1080,0	1,6	MRO 53 - 80C4	84	73	10100	23,00	24,7344
	180,0	190,00	7,4	1343,0	2,0	MRO 63 - 90S4	132,7	121	19400	33,00	17,4310
	180,0	190,00	7,4	1343,0	2,0	MRO 63 - 80C4	132	121	19400	23,00	17,4310
	180,0	185,00	7,6	1306,0	1,1	MRO 53 - 90S4	84,7	73	17640	33,00	24,7124
	180,0	185,00	7,6	1306,0	1,1	MRO 53 - 80C4	84	73	17640	23,00	24,7124
	200,0	208,00	6,7	1467,0	0,9	MRO 53 - 90S4	84,7	73	19060	33,00	24,7277
	200,0	208,00	6,7	1467,0	0,9	MRO 53 - 80C4	84	73	19060	23,00	24,7277
	224,0	221,00	6,3	1558,0	1,6	MRO 63 - 90S4	132,7	121	22500	33,00	17,4800
	224,0	221,00	6,3	1558,0	1,6	MRO 63 - 80C4	132	121	22500	23,00	17,4800
	224,0	224,00	6,2	1582,0	0,8	MRO 53 - 90S4	84,7	73	19100	33,00	24,7733
	224,0	224,00	6,2	1582,0	0,8	MRO 53 - 80C4	84	73	19100	23,00	24,7733
	280,0	272,00	5,2	1916,0	1,3	MRO 63 - 90S4	132,7	121	22500	33,00	17,4170
	280,0	272,00	5,2	1916,0	1,3	MRO 63 - 80C4	132	121	22500	23,00	17,4170
	315,0	305,00	4,6	2154,0	1,2	MRO 63 - 90S4	132,7	121	22500	33,00	17,3880
	315,0	305,00	4,6	2154,0	1,2	MRO 63 - 80C4	132	121	22500	23,00	17,3880
1,5	6,3	6,62	211,0	63,7	3,1	MRO 23 - 90L4	25	10,6	3350	40,00	17,9400
	7,1	7,58	185,0	72,9	1,8	MRO 13 - 90L4	20,8	6,4	3310	40,00	0,9150
	8,0	8,47	165,0	81,5	2,7	MRO 23 - 90L4	25	10,6	3620	40,00	1,3930
	9,0	9,09	154,0	87,4	4,3	MRO 33 - 90L4	26,9	12,5	5710	40,00	4,6310
	9,0	8,97	156,0	86,3	2,6	MRO 23 - 90L4	25	10,6	3710	40,00	1,5320
	9,0	9,14	153,0	87,9	1,5	MRO 13 - 90L4	20,8	6,4	3740	40,00	0,8480
	10,0	10,40	134,0	100,0	2,4	MRO 23 - 90L4	25	10,6	3870	40,00	1,1640
	10,0	9,57	146,0	92,0	1,5	MRO 13 - 90L4	20,8	6,4	3600	40,00	0,7740
	11,2	11,70	120,0	112,0	3,4	MRO 33 - 90L4	26,9	12,5	5730	40,00	3,8410
	11,2	11,50	122,0	110,0	2,1	MRO 23 - 90L4	25	10,6	4040	40,00	1,2320
	11,2	11,60	120,0	112,0	1,3	MRO 13 - 90L4	20,8	6,4	3570	40,00	0,6940
	12,5	12,70	110,0	122,0	4,4	MRO 33 - 90L4	26,9	12,5	5710	40,00	3,1860
	12,5	13,00	107,0	125,0	2,2	MRO 23 - 90L4	25	10,6	3920	40,00	0,9900
	14,0	13,90	101,0	133,0	3,9	MRO 43 - 90L4	53,4	39	7190	40,00	5,5410
	14,0	13,50	104,0	130,0	3,5	MRO 33 - 90L4	26,9	12,5	5520	40,00	2,5250
	14,0	14,10	99,1	136,0	1,7	MRO 23 - 90L4	25	10,6	4340	40,00	1,0580
	14,0	14,00	99,9	135,0	1,0	MRO 13 - 90L4	20,8	6,4	4040	40,00	0,6660
	16,0	16,20	86,4	156,0	4,7	MRO 43 - 90L4	53,4	39	7420	40,00	6,0497
	16,0	16,30	85,9	157,0	3,4	MRO 33 - 90L4	26,9	12,5	5730	40,00	2,8190
	16,0	16,70	83,9	160,0	1,9	MRO 23 - 90L4	25	10,6	3620	40,00	0,8580
	16,0	15,10	92,5	146,0	1,1	MRO 13 - 90L4	20,8	6,4	3550	40,00	0,6210
	18,0	17,60	79,8	169,0	3,6	MRO 43 - 90L4	53,4	39	7740	40,00	5,0261
	18,0	17,30	80,8	167,0	3,1	MRO 33 - 90L4	26,9	12,5	5680	40,00	2,2830

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
1,5	18,0	17,80	78,7	171,0	1,5	MRO 23 - 90L4	25	10,6	4480	40,00	0,6830
	18,0	18,30	76,7	176,0	0,8	MRO 13 - 90L4	20,8	6,4	4240	40,00	0,6040
	20,0	20,20	69,2	194,0	4,0	MRO 43 - 90L4	53,4	39	7980	40,00	5,5318
	20,0	19,10	73,3	184,0	2,1	MRO 33 - 90L4	26,9	12,5	5730	40,00	2,3640
	20,0	20,60	68,1	198,0	1,6	MRO 23 - 90L4	25	10,6	3720	40,00	0,7790
	20,0	19,20	73,1	184,0	0,9	MRO 13 - 90L4	20,8	6,4	3670	40,00	0,5770
	22,4	21,90	63,8	211,0	3,3	MRO 43 - 90L4	53,4	39	8310	40,00	4,6963
	22,4	21,70	64,6	208,0	2,6	MRO 33 - 90L4	26,9	12,5	5740	40,00	2,5320
	22,4	21,90	63,9	211,0	1,3	MRO 23 - 90L4	25	10,6	4420	40,00	0,6310
	22,4	23,30	60,0	224,0	0,8	MRO 13 - 90L4	20,8	6,4	3820	40,00	0,5510
	25,0	26,10	53,6	251,0	3,3	MRO 43 - 90L4	53,4	39	8690	40,00	5,1123
	25,0	26,70	52,4	257,0	2,2	MRO 33 - 90L4	26,9	12,5	5730	40,00	2,0370
	25,0	26,10	53,7	251,0	1,2	MRO 23 - 90L4	25	10,6	3930	40,00	0,7150
	28,0	27,90	50,1	269,0	2,9	MRO 43 - 90L4	53,4	39	8990	40,00	4,4508
	28,0	28,70	48,7	276,0	1,4	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,9940
	28,0	27,40	51,1	263,0	1,2	MRO 23 - 90L4	25	10,6	4180	40,00	0,5920
	31,5	32,50	43,1	313,0	2,8	MRO 43 - 90L4	53,4	39	9390	40,00	4,8644
	31,5	33,30	42,1	320,0	1,7	MRO 33 - 90L4	26,9	12,5	5740	40,00	2,2750
	31,5	33,00	42,5	317,0	0,8	MRO 23 - 90L4	25	10,6	4960	40,00	0,5440
	35,5	34,10	41,1	328,0	2,6	MRO 43 - 90L4	53,4	39	9580	40,00	4,3066
	35,5	34,30	40,9	329,0	1,7	MRO 33 - 90L4	26,9	12,5	5740	40,00	0,1954
	35,5	35,10	39,9	337,0	0,9	MRO 23 - 90L4	25	10,6	4220	40,00	0,5620
	40,0	41,70	33,6	401,0	4,2	MRO 53 - 90L4	87,4	73	8510	40,00	25,4059
	40,0	40,20	34,8	387,0	1,5	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8490
	40,0	41,20	34,0	396,0	0,8	MRO 23 - 90L4	25	10,6	4600	40,00	0,5270
	45,0	43,10	32,5	415,0	4,1	MRO 53 - 90L4	87,4	73	8540	40,00	25,6370
	45,0	42,50	32,9	409,0	2,1	MRO 43 - 90L4	53,4	39	10020	40,00	4,1893
	45,0	45,50	30,7	438,0	1,3	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8890
	50,0	51,30	27,3	494,0	3,5	MRO 53 - 90L4	87,4	73	8720	40,00	25,2163
	50,0	51,30	27,3	493,0	2,0	MRO 43 - 90L4	53,4	39	9720	40,00	4,0217
	50,0	51,60	27,2	496,0	1,2	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8120
	56,0	56,70	24,7	545,0	3,2	MRO 53 - 90L4	87,4	73	8820	40,00	25,3529
	56,0	54,80	25,5	527,0	1,9	MRO 43 - 90L4	53,4	39	9800	40,00	4,0943
	56,0	53,60	26,1	515,0	1,1	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8620
	63,0	64,90	21,6	624,0	2,8	MRO 53 - 90L4	87,4	73	8950	40,00	25,0608
	63,0	64,00	21,9	615,0	1,6	MRO 43 - 90L4	53,4	39	10090	40,00	3,9699
	71,0	73,40	19,1	706,0	4,6	MRO 63 - 90L4	135,4	121	11430	40,00	18,8420
	71,0	72,60	19,3	698,0	2,4	MRO 53 - 90L4	87,4	73	10800	40,00	25,1812
	71,0	68,30	20,5	657,0	1,4	MRO 43 - 90L4	53,4	39	10970	40,00	4,0382
	71,0	68,50	20,4	659,0	0,9	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,7840
	80,0	84,60	16,6	813,0	4,1	MRO 63 - 90L4	135,4	121	11400	40,00	18,1240
	80,0	79,40	17,6	763,0	1,7	MRO 53 - 90L4	87,4	73	16160	40,00	25,0122
	80,0	82,50	17,0	794,0	1,3	MRO 43 - 90L4	53,4	39	10510	40,00	3,9279
	90,0	90,30	15,5	868,0	3,9	MRO 63 - 90L4	135,4	121	11400	40,00	17,8220
	90,0	91,00	15,4	876,0	2,0	MRO 53 - 90L4	87,4	73	8400	40,00	24,8176
	90,0	89,70	15,6	863,0	1,0	MRO 43 - 90L4	53,4	39	11880	40,00	3,8846
	100,0	101,00	13,9	968,0	3,5	MRO 63 - 90L4	135,4	121	9800	40,00	17,9540
	100,0	100,00	14,0	964,0	1,8	MRO 53 - 90L4	87,4	73	8000	40,00	24,8837
	100,0	103,00	13,6	989,0	1,0	MRO 43 - 90L4	53,4	39	11740	40,00	3,9031
	112,0	119,00	11,8	1140,0	2,9	MRO 63 - 90L4	135,4	121	9800	40,00	17,6270

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
1,5	112,0	109,00	12,8	1050,0	1,6	MRO 53 - 90L4	87,4	73	11200	40,00	24,8595
	112,0	116,00	12,1	1113,0	0,9	MRO 43 - 90L4	53,4	39	11130	40,00	3,8632
	125,0	129,00	10,9	1238,0	2,0	MRO 63 - 90L4	135,4	121	22060	40,00	17,7600
	125,0	120,00	11,7	1150,0	1,6	MRO 53 - 90L4	87,4	73	7200	40,00	24,7730
	140,0	141,00	9,9	1358,0	2,5	MRO 63 - 90L4	135,4	121	9800	40,00	17,5400
	140,0	141,00	10,0	1352,0	1,3	MRO 53 - 90L4	87,4	73	7200	40,00	24,7467
	160,0	155,00	9,0	1490,0	2,3	MRO 63 - 90L4	135,4	121	9800	40,00	17,5010
	160,0	153,00	9,1	1473,0	1,2	MRO 53 - 90L4	87,4	73	10100	40,00	24,7344
	180,0	190,00	7,4	1832,0	1,5	MRO 63 - 90L4	135,4	121	19400	40,00	17,4310
	180,0	185,00	7,6	1781,0	0,8	MRO 53 - 90L4	87,4	73	17640	40,00	24,7124
	224,0	221,00	6,3	2124,0	1,2	MRO 63 - 90L4	135,4	121	22500	40,00	17,4800
	280,0	272,00	5,2	2612,0	1,0	MRO 63 - 90L4	135,4	121	22500	40,00	17,4170
	315,0	305,00	4,6	2937,0	0,9	MRO 63 - 90L4	135,4	121	22500	40,00	17,3880
2,2	6,3	6,43	218,0	90,7	4,6	MRO 33 - 100A4	31,7	12,5	4550	75,00	5,3400
	6,3	6,43	218,0	90,7	4,6	MRO 33 - 90LC4	30,1	12,5	4550	60,00	5,3400
	6,3	6,62	211,0	93,4	2,1	MRO 23 - 100A4	29,8	10,6	3350	75,00	1,7940
	6,3	6,62	211,0	93,4	2,1	MRO 23 - 90LC4	28,2	10,6	3350	60,00	1,7940
	7,1	7,58	185,0	107,0	1,2	MRO 13 - 90LC4	24	6,4	3310	60,00	0,9150
	8,0	8,35	168,0	118,0	4,5	MRO 43 - 100A4	58,2	39	6000	75,00	9,2271
	8,0	8,35	168,0	118,0	4,5	MRO 43 - 90LC4	56,6	39	6000	60,00	9,2271
	8,0	8,25	170,0	116,0	3,9	MRO 33 - 100A4	31,7	12,5	5540	75,00	4,2720
	8,0	8,25	170,0	116,0	3,9	MRO 33 - 90LC4	30,1	12,5	5540	60,00	4,2720
	8,0	8,47	165,0	119,0	1,8	MRO 23 - 100A4	29,8	10,6	3620	75,00	1,3930
	8,0	8,47	165,0	119,0	1,8	MRO 23 - 90LC4	28,2	10,6	3620	60,00	1,3930
	9,0	9,09	154,0	128,0	3,0	MRO 33 - 100A4	31,7	12,5	5710	75,00	4,6310
	9,0	9,09	154,0	128,0	3,0	MRO 33 - 90LC4	30,1	12,5	5710	60,00	4,6310
	9,0	8,97	156,0	127,0	1,8	MRO 23 - 100A4	29,8	10,6	3710	75,00	1,5320
	9,0	8,97	156,0	127,0	1,8	MRO 23 - 90LC4	28,2	10,6	3710	60,00	1,5320
	9,0	9,14	153,0	129,0	1,0	MRO 13 - 90LC4	24	6,4	3740	60,00	0,8480
	10,0	10,40	134,0	147,0	4,1	MRO 43 - 100A4	58,2	39	3870	75,00	1,1640
	10,0	10,40	134,0	147,0	4,1	MRO 43 - 90LC4	56,6	39	3870	60,00	1,1640
	10,0	10,20	138,0	143,0	3,5	MRO 33 - 100A4	31,7	12,5	5630	75,00	3,6570
	10,0	10,20	138,0	143,0	3,5	MRO 33 - 90LC4	30,1	12,5	5630	60,00	3,6570
	10,0	10,40	134,0	147,0	1,7	MRO 23 - 100A4	29,8	10,6	3870	75,00	1,1640
	10,0	10,40	134,0	147,0	1,7	MRO 23 - 90LC4	28,2	10,6	6430	60,00	7,7706
	10,0	9,57	146,0	135,0	1,0	MRO 13 - 90LC4	24	6,4	3600	60,00	0,7740
	11,2	11,00	127,0	156,0	4,2	MRO 43 - 100A4	58,2	39	6520	75,00	8,3593
	11,2	11,00	127,0	156,0	4,2	MRO 43 - 90LC4	56,6	39	6520	60,00	8,3593
	11,2	11,70	120,0	164,0	2,3	MRO 33 - 100A4	31,7	12,5	5730	75,00	3,8410
	11,2	11,70	120,0	164,0	2,3	MRO 33 - 90LC4	30,1	12,5	5730	60,00	3,8410
	11,2	11,50	122,0	162,0	1,4	MRO 23 - 100A4	29,8	10,6	4040	75,00	1,2320
	11,2	11,50	122,0	162,0	1,4	MRO 23 - 90LC4	28,2	10,6	4040	60,00	1,2320
	11,2	11,60	120,0	164,0	0,9	MRO 13 - 90LC4	24	6,4	3570	60,00	0,6940
	12,5	13,30	105,0	187,0	3,6	MRO 43 - 100A4	58,2	39	6950	75,00	6,6865
	12,5	13,30	105,0	187,0	3,6	MRO 43 - 90LC4	56,6	39	6950	60,00	6,6865
	12,5	12,70	110,0	179,0	3,0	MRO 33 - 100A4	31,7	12,5	5710	75,00	3,1860
	12,5	12,70	110,0	179,0	3,0	MRO 33 - 90LC4	30,1	12,5	5710	60,00	3,1860
	12,5	13,00	107,0	184,0	1,5	MRO 23 - 100A4	29,8	10,6	3920	75,00	0,9900
	12,5	13,00	107,0	184,0	1,5	MRO 23 - 90LC4	28,2	10,6	3920	60,00	0,9900
	14,0	13,90	101,0	196,0	2,6	MRO 43 - 100A4	58,2	39	7190	75,00	5,5410

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
2,2	14,0	13,90	101,0	196,0	2,6	MRO 43 - 90LC4	56,6	39	7190	60,00	5,5410
	14,0	13,50	104,0	191,0	2,4	MRO 33 - 100A4	31,7	12,5	5520	75,00	2,5250
	14,0	13,50	104,0	191,0	2,4	MRO 33 - 90LC4	30,1	12,5	5520	60,00	2,5250
	14,0	14,10	99,1	199,0	1,2	MRO 23 - 100A4	29,8	10,6	4340	75,00	1,0580
	14,0	14,10	99,1	199,0	1,2	MRO 23 - 90LC4	28,2	10,6	4340	60,00	1,0580
	16,0	16,20	86,4	229,0	3,2	MRO 43 - 100A4	58,2	39	7420	75,00	6,0497
	16,0	16,20	86,4	229,0	3,2	MRO 43 - 90LC4	56,6	39	7420	60,00	6,0497
	16,0	16,30	85,9	230,0	2,3	MRO 33 - 100A4	31,7	12,5	5730	75,00	2,8190
	16,0	16,30	85,9	230,0	2,3	MRO 33 - 90LC4	30,1	12,5	5730	60,00	2,8190
	16,0	16,70	83,9	235,0	1,3	MRO 23 - 100A4	29,8	10,6	3620	75,00	0,8580
	16,0	16,70	83,9	235,0	1,3	MRO 23 - 90LC4	28,2	10,6	3620	60,00	0,8580
	16,0	15,10	92,5	214,0	0,8	MRO 13 - 90LC4	24	6,4	3550	60,00	0,6210
	18,0	18,00	77,7	254,0	4,9	MRO 53 - 100A4	92,2	73	11300	75,00	27,8473
	18,0	18,00	77,7	254,0	4,9	MRO 53 - 90LC4	90,6	73	11300	60,00	27,8473
	18,0	17,60	79,8	248,0	2,5	MRO 43 - 100A4	58,2	39	7740	75,00	5,0261
	18,0	17,60	79,8	248,0	2,5	MRO 43 - 90LC4	56,6	39	7740	60,00	5,0261
	18,0	17,30	80,8	244,0	2,1	MRO 33 - 100A4	31,7	12,5	5680	75,00	2,2830
	18,0	17,30	80,8	244,0	2,1	MRO 33 - 90LC4	30,1	12,5	5680	60,00	2,2830
	18,0	17,80	78,7	251,0	1,0	MRO 23 - 100A4	29,8	10,6	4480	75,00	0,6830
	18,0	17,80	78,7	251,0	1,0	MRO 23 - 90LC4	28,2	10,6	4480	60,00	0,6830
	20,0	20,20	69,2	285,0	2,7	MRO 43 - 100A4	58,2	39	7980	75,00	5,5318
	20,0	20,20	69,2	285,0	2,7	MRO 43 - 90LC4	56,6	39	7980	60,00	5,5318
	20,0	19,10	73,3	269,0	1,4	MRO 33 - 100A4	31,7	12,5	5730	75,00	2,3640
	20,0	19,10	73,3	269,0	1,4	MRO 33 - 90LC4	30,1	12,5	5730	60,00	2,3640
	20,0	20,60	68,1	290,0	1,1	MRO 23 - 100A4	29,8	10,6	3720	75,00	0,7790
	20,0	20,60	68,1	290,0	1,1	MRO 23 - 90LC4	28,2	10,6	3720	60,00	0,7790
	22,4	22,90	61,3	322,0	4,4	MRO 53 - 100A4	92,2	73	11180	75,00	26,9452
	22,4	22,90	61,3	322,0	4,4	MRO 53 - 90LC4	90,6	73	11180	60,00	26,9452
	22,4	21,90	63,8	309,0	2,2	MRO 43 - 100A4	58,2	39	8310	75,00	4,6963
	22,4	21,90	63,8	309,0	2,2	MRO 43 - 90LC4	56,6	39	8310	60,00	4,6963
	22,4	21,70	64,6	306,0	1,8	MRO 33 - 100A4	31,7	12,5	5740	75,00	2,5320
	22,4	21,70	64,6	306,0	1,8	MRO 33 - 90LC4	30,1	12,5	5740	60,00	2,5320
	22,4	21,90	63,9	309,0	0,9	MRO 23 - 90LC4	28,2	10,6	4420	60,00	0,6310
	22,4	21,90	63,9	309,0	0,9	MRO 23 - 100A4	29,8	10,6	4420	75,00	0,6310
	25,0	27,00	51,9	380,0	4,4	MRO 53 - 100A4	92,2	73	8140	75,00	27,9078
	25,0	27,00	51,9	380,0	4,4	MRO 53 - 90LC4	90,6	73	8140	60,00	27,9078
	25,0	26,10	53,6	368,0	2,3	MRO 43 - 100A4	58,2	39	8690	75,00	5,1123
	25,0	26,10	53,6	368,0	2,3	MRO 43 - 90LC4	56,6	39	8690	60,00	5,1123
	25,0	26,70	52,4	377,0	1,5	MRO 33 - 100A4	31,7	12,5	5730	75,00	2,0370
	25,0	26,70	52,4	377,0	1,5	MRO 33 - 90LC4	30,1	12,5	5730	60,00	2,0370
	25,0	26,10	53,7	368,0	0,8	MRO 23 - 90LC4	28,2	10,6	3930	60,00	0,7150
	25,0	26,10	53,7	368,0	0,8	MRO 23 - 100A4	29,8	10,6	3930	75,00	0,7150
	28,0	27,70	50,6	390,0	4,0	MRO 53 - 100A4	92,2	73	9800	75,00	26,4183
	28,0	27,70	50,6	390,0	4,0	MRO 53 - 90LC4	90,6	73	9800	60,00	26,4183
	28,0	27,90	50,1	394,0	2,0	MRO 43 - 100A4	58,2	39	8990	75,00	4,4508
	28,0	27,90	50,1	394,0	2,0	MRO 43 - 90LC4	56,6	39	8990	60,00	4,4508
	28,0	28,70	48,7	405,0	1,0	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,9940
	28,0	28,70	48,7	405,0	1,0	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,9940
	28,0	27,40	51,1	386,0	0,8	MRO 23 - 90LC4	28,2	10,6	4180	60,00	0,5920
	28,0	27,40	51,1	386,0	0,8	MRO 23 - 100A4	29,8	10,6	4180	75,00	0,5920

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
2,2	31,5	31,70	44,2	447,0	3,8	MRO 53 - 100A4	92,2	73	8230	75,00	27,3913
	31,5	31,70	44,2	447,0	3,8	MRO 53 - 90LC4	90,6	73	8230	60,00	27,3913
	31,5	32,50	43,1	459,0	1,9	MRO 43 - 100A4	58,2	39	9390	75,00	48644,0
	31,5	32,50	43,1	459,0	1,9	MRO 43 - 90LC4	56,6	39	9390	60,00	4,8644
	31,5	33,30	42,1	469,0	1,2	MRO 33 - 100A4	31,7	12,5	5740	75,00	2,2750
	31,5	33,30	42,1	469,0	1,2	MRO 33 - 90LC4	30,1	12,5	5740	60,00	2,2750
	35,5	34,10	41,0	481,0	3,5	MRO 53 - 100A4	92,2	73	8340	75,00	25,9891
	35,5	34,10	41,0	481,0	3,5	MRO 53 - 90LC4	90,6	73	8340	60,00	25,9891
	35,5	34,10	41,1	480,0	1,7	MRO 43 - 100A4	58,2	39	9580	75,00	4,3066
	35,5	34,10	41,1	480,0	1,7	MRO 43 - 90LC4	56,6	39	9580	60,00	4,3066
	35,5	34,30	40,9	483,0	1,2	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,9540
	35,5	34,30	40,9	483,0	1,2	MRO 33 - 90LC4	30,1	12,5	5740	60,00	19540,0
	40,0	42,80	32,7	603,0	4,9	MRO 63 - 100A4	140,2	121	11390	75,00	20,2710
	40,0	42,80	32,7	603,0	4,9	MRO 63 - 90LC4	138,6	121	11390	60,00	20,2710
	40,0	41,70	33,6	588,0	2,9	MRO 53 - 100A4	92,2	73	8510	75,00	25,4059
	40,0	41,70	33,6	588,0	2,9	MRO 53 - 90LC4	90,6	73	8510	60,00	25,4059
	40,0	40,20	34,8	567,0	1,0	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8490
	40,0	40,20	34,8	567,0	1,0	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8490
	45,0	43,00	32,6	606,0	4,2	MRO 63 - 100A4	140,2	121	16450	75,00	23,3660
	45,0	43,00	32,6	606,0	4,2	MRO 63 - 90LC4	138,6	121	16450	60,00	23,3660
	45,0	43,10	32,5	609,0	2,8	MRO 53 - 100A4	92,2	73	8540	75,00	25,6370
	45,0	43,10	32,5	609,0	2,8	MRO 53 - 90LC4	90,6	73	8540	60,00	25,6370
	45,0	42,50	32,9	599,0	1,4	MRO 43 - 100A4	58,2	39	10020	75,00	4,1893
	45,0	42,50	32,9	599,0	1,4	MRO 43 - 90LC4	56,6	39	10020	60,00	4,1893
	45,0	45,50	30,7	642,0	0,9	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8890
	45,0	45,50	30,7	642,0	0,9	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8890
	50,0	50,90	27,5	718,0	4,7	MRO 63 - 100A4	140,2	121	9810	75,00	18,9780
	50,0	50,90	27,5	718,0	4,7	MRO 63 - 90LC4	138,6	121	9810	60,00	18,9780
	50,0	51,30	27,3	724,0	2,4	MRO 53 - 100A4	92,2	73	8720	75,00	25,2163
	50,0	51,30	27,3	724,0	2,4	MRO 53 - 90LC4	90,6	73	8720	60,00	25,2163
	50,0	51,30	27,3	723,0	1,4	MRO 43 - 100A4	58,2	39	9720	75,00	4,0217
	50,0	51,30	27,3	723,0	1,4	MRO 43 - 90LC4	56,6	39	9720	60,00	4,0217
	50,0	51,60	27,2	727,0	0,8	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8120
	50,0	51,60	27,2	727,0	0,8	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8120
	56,0	56,20	24,9	793,0	4,2	MRO 63 - 100A4	140,2	121	9970	75,00	19,4030
	56,0	56,20	24,9	793,0	4,2	MRO 63 - 90LC4	138,6	121	9970	60,00	19,4030
	56,0	56,70	24,7	799,0	2,2	MRO 53 - 100A4	92,2	73	8820	75,00	25,3529
	56,0	56,70	24,7	799,0	2,2	MRO 53 - 90LC4	90,6	73	8820	60,00	25,3529
	56,0	54,80	25,5	774,0	1,3	MRO 43 - 100A4	58,2	39	9800	75,00	4,0943
	56,0	54,80	25,5	774,0	1,3	MRO 43 - 90LC4	56,6	39	9800	60,00	4,0943
	56,0	53,60	26,1	756,0	0,8	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8620
	56,0	53,60	26,1	756,0	0,8	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8620
	63,0	64,40	21,8	908,0	3,7	MRO 63 - 100A4	140,2	121	10200	75,00	18,5080
	63,0	64,40	21,8	908,0	3,7	MRO 63 - 90LC4	138,6	121	10200	60,00	18,5080
	63,0	64,90	21,6	916,0	1,9	MRO 53 - 100A4	92,2	73	8950	75,00	25,0608
	63,0	64,90	21,6	916,0	1,9	MRO 53 - 90LC4	90,6	73	8950	60,00	25,0608
	63,0	64,00	21,9	902,0	1,1	MRO 43 - 100A4	58,2	39	10090	75,00	3,9699
	63,0	64,00	21,9	902,0	1,1	MRO 43 - 90LC4	56,6	39	10090	60,00	3,9699
	71,0	73,40	19,1	1035,0	3,1	MRO 63 - 100A4	140,2	121	11430	75,00	18,8420
	71,0	73,40	19,1	1035,0	3,1	MRO 63 - 90LC4	138,6	121	11430	60,00	18,8420

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
2,2	71,0	72,60	19,3	1024,0	1,6	MRO 53 - 100A4	92,2	73	10800	75,00	25,1812
	71,0	72,60	19,3	1024,0	1,6	MRO 53 - 90LC4	90,6	73	10800	60,00	25,1812
	71,0	68,30	20,5	964,0	1,0	MRO 43 - 90LC4	56,6	39	10970	60,00	4,0382
	71,0	68,30	20,5	964,0	1,0	MRO 43 - 100A4	58,2	39	10970	75,00	4,0382
	80,0	84,60	16,6	1193,0	2,8	MRO 63 - 100A4	140,2	121	11400	75,00	18,1240
	80,0	84,60	16,6	1193,0	2,8	MRO 63 - 90LC4	138,6	121	11400	60,00	18,1240
	80,0	79,40	17,6	1120,0	1,1	MRO 53 - 100A4	92,2	73	16160	75,00	25,0122
	80,0	79,40	17,6	1120,0	1,1	MRO 53 - 90LC4	90,6	73	16160	60,00	25,0122
	80,0	82,50	17,0	1164,0	0,9	MRO 43 - 90LC4	56,6	39	10510	60,00	3,9279
	80,0	82,50	17,0	1164,0	0,9	MRO 43 - 100A4	58,2	39	10510	75,00	3,9279
	90,0	90,30	15,5	1273,0	2,6	MRO 63 - 100A4	140,2	121	11400	75,00	17,8220
	90,0	90,30	15,5	1273,0	2,6	MRO 63 - 90LC4	138,6	121	11400	60,00	17,8220
	90,0	91,00	15,4	1284,0	1,4	MRO 53 - 100A4	92,2	73	8400	75,00	24,8176
	90,0	91,00	15,4	1284,0	1,4	MRO 53 - 90LC4	90,6	73	8400	60,00	24,8176
	100,0	101,00	13,9	1420,0	2,4	MRO 63 - 100A4	140,2	121	9800	75,00	17,9540
	100,0	101,00	13,9	1420,0	2,4	MRO 63 - 90LC4	138,6	121	9800	60,00	17,9540
	100,0	100,00	14,0	1413,0	1,3	MRO 53 - 100A4	92,2	73	8000	75,00	24,8837
	100,0	100,00	14,0	1413,0	1,3	MRO 53 - 90LC4	90,6	73	8000	60,00	24,8837
	112,0	119,00	11,8	1673,0	2,0	MRO 63 - 100A4	140,2	121	9800	75,00	17,6270
	112,0	119,00	11,8	1673,0	2,0	MRO 63 - 90LC4	138,6	121	9800	60,00	17,6270
	112,0	109,00	12,8	1540,0	1,1	MRO 53 - 100A4	92,2	73	11200	75,00	24,8595
	112,0	109,00	12,8	1540,0	1,1	MRO 53 - 90LC4	90,6	73	11200	60,00	24,8595
	125,0	129,00	10,9	1816,0	1,4	MRO 63 - 100A4	140,2	121	22060	75,00	17,7600
	125,0	129,00	10,9	1816,0	1,4	MRO 63 - 90LC4	138,6	121	22060	60,00	17,7600
	125,0	120,00	11,7	1687,0	1,1	MRO 53 - 100A4	92,2	73	7200	75,00	24,7730
	125,0	120,00	11,7	1687,0	1,1	MRO 53 - 90LC4	90,6	73	7200	60,00	24,7730
	140,0	141,00	9,9	1992,0	1,7	MRO 63 - 100A4	140,2	121	9800	75,00	17,5400
	140,0	141,00	9,9	1992,0	1,7	MRO 63 - 90LC4	138,6	121	9800	60,00	17,5400
	140,0	141,00	10,0	1982,0	0,9	MRO 53 - 90LC4	90,6	73	7200	60,00	24,7467
	140,0	141,00	10,0	1982,0	0,9	MRO 53 - 100A4	92,2	73	7200	75,00	24,7467
	160,0	155,00	9,0	2185,0	1,5	MRO 63 - 100A4	140,2	121	9800	75,00	17,5010
	160,0	155,00	9,0	2185,0	1,5	MRO 63 - 90LC4	138,6	121	9800	60,00	17,5010
	160,0	153,00	9,1	2160,0	0,8	MRO 53 - 90LC4	90,6	73	10100	60,00	24,7344
	160,0	153,00	9,1	2160,0	0,8	MRO 53 - 100A4	92,2	73	10100	75,00	24,7344
	180,0	190,00	7,4	2687,0	1,0	MRO 63 - 100A4	140,2	121	19400	75,00	17,4310
	180,0	190,00	7,4	2687,0	1,0	MRO 63 - 90LC4	138,6	121	19400	60,00	17,4310
	224,0	221,00	6,3	3116,0	0,8	MRO 63 - 90LC4	138,6	121	22500	60,00	17,4800
	224,0	221,00	6,3	3116,0	0,8	MRO 63 - 100A4	140,2	121	22500	75,00	17,4800
3	6,3	6,60	212,0	127,0	3,7	MRO 43 - 100B4	61,9	39	5570	85,00	11,5009
	6,3	6,43	218,0	124,0	3,4	MRO 33 - 100B4	35,4	12,5	4550	85,00	5,3400
	6,3	6,62	211,0	127,0	1,6	MRO 23 - 100B4	33,5	10,6	3350	85,00	1,7940
	8,0	8,35	168,0	161,0	3,3	MRO 43 - 100B4	61,9	39	6000	85,00	9,2271
	8,0	8,25	170,0	159,0	2,8	MRO 33 - 100B4	35,4	12,5	5540	85,00	4,2720
	8,0	8,47	165,0	163,0	1,4	MRO 23 - 100B4	33,5	10,6	3620	85,00	1,3930
	9,0	8,72	161,0	168,0	3,9	MRO 43 - 100B4	61,9	39	5980	85,00	10,1119
	9,0	9,09	154,0	175,0	2,2	MRO 33 - 100B4	35,4	12,5	5710	85,00	4,6310
	9,0	8,97	156,0	173,0	1,3	MRO 23 - 100B4	33,5	10,6	3710	85,00	1,5320
	10,0	10,40	134,0	201,0	3,0	MRO 43 - 100B4	61,9	39	3870	85,00	1,1640
	10,0	10,20	138,0	196,0	2,6	MRO 33 - 100B4	35,4	12,5	5630	85,00	3,6570
	10,0	10,40	134,0	201,0	1,2	MRO 23 - 100B4	33,5	10,6	3870	85,00	1,1640

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
3	11,2	11,00	127,0	212,0	3,1	MRO 43 - 100B4	61,9	39	6520	85,00	8,3593
	11,2	11,70	120,0	224,0	1,7	MRO 33 - 100B4	35,4	12,5	5730	85,00	3,8410
	11,2	11,50	122,0	221,0	1,0	MRO 23 - 100B4	33,5	10,6	4040	85,00	1,2320
	12,5	13,30	105,0	256,0	2,6	MRO 43 - 100B4	61,9	39	6950	85,00	6,6865
	12,5	12,70	110,0	245,0	2,2	MRO 33 - 100B4	35,4	12,5	5710	85,00	3,1860
	12,5	13,00	107,0	251,0	1,1	MRO 23 - 100B4	33,5	10,6	3920	85,00	0,9900
	14,0	13,60	103,0	262,0	4,0	MRO 53 - 100B4	95,9	73	10340	85,00	29,4533
	14,0	13,90	101,0	267,0	1,9	MRO 43 - 100B4	61,9	39	7190	85,00	5,5410
	14,0	13,50	104,0	260,0	1,8	MRO 33 - 100B4	35,4	12,5	5520	85,00	2,5250
	14,0	14,10	99,1	272,0	0,8	MRO 23 - 100B4	33,5	10,6	4340	85,00	1,0580
	16,0	16,20	86,2	312,0	4,7	MRO 53 - 100B4	95,9	73	10150	85,00	30,7169
	16,0	16,20	86,4	312,0	2,3	MRO 43 - 100B4	61,9	39	7420	85,00	6,0497
	16,0	16,30	85,9	314,0	1,7	MRO 33 - 100B4	35,4	12,5	5730	85,00	2,8190
	16,0	16,70	83,9	321,0	1,0	MRO 23 - 100B4	33,5	10,6	3620	85,00	0,8580
	18,0	18,00	77,7	347,0	3,6	MRO 53 - 100B4	95,9	73	11300	85,00	27,8473
	18,0	17,60	79,8	338,0	1,8	MRO 43 - 100B4	61,9	39	7740	85,00	5,0261
	18,0	17,30	80,8	333,0	1,5	MRO 33 - 100B4	35,4	12,5	5680	85,00	2,2830
	20,0	20,50	68,2	395,0	4,1	MRO 53 - 100B4	95,9	73	8650	85,00	29,1621
	20,0	20,20	69,2	389,0	2,0	MRO 43 - 100B4	61,9	39	7980	85,00	5,5318
	20,0	19,10	73,3	367,0	1,1	MRO 33 - 100B4	35,4	12,5	5730	85,00	2,3640
	20,0	20,60	68,1	395,0	0,8	MRO 23 - 100B4	33,5	10,6	3720	85,00	0,7790
	22,4	22,90	61,3	440,0	3,2	MRO 53 - 100B4	95,9	73	11180	85,00	26,9452
	22,4	21,90	63,8	422,0	1,6	MRO 43 - 100B4	61,9	39	8310	85,00	4,6963
	22,4	21,70	64,6	417,0	1,3	MRO 33 - 100B4	35,4	12,5	5740	85,00	2,5320
	25,0	25,50	54,9	490,0	4,7	MRO 63 - 100B4	143,9	121	16820	85,00	25,3770
	25,0	27,00	51,9	519,0	3,2	MRO 53 - 100B4	95,9	73	8140	85,00	27,9078
	25,0	26,10	53,6	502,0	1,7	MRO 43 - 100B4	61,9	39	8690	85,00	5,1123
	25,0	26,70	52,4	514,0	1,1	MRO 33 - 100B4	35,4	12,5	5730	85,00	2,0370
	28,0	27,50	51,0	528,0	4,6	MRO 63 - 100B4	143,9	121	15700	85,00	22,6360
	28,0	27,70	50,6	532,0	2,9	MRO 53 - 100B4	95,9	73	9800	85,00	26,4183
	28,0	27,90	50,1	537,0	1,4	MRO 43 - 100B4	61,9	39	8990	85,00	4,4508
	31,5	31,90	44,0	613,0	4,7	MRO 63 - 100B4	143,9	121	11540	85,00	25,5240
	31,5	31,70	44,2	610,0	2,8	MRO 53 - 100B4	95,9	73	8230	85,00	27,3913
	31,5	32,50	43,1	626,0	1,4	MRO 43 - 100B4	61,9	39	9390	85,00	4,8644
	31,5	33,30	42,1	640,0	0,9	MRO 33 - 100B4	35,4	12,5	5740	85,00	2,2750
	35,5	33,80	41,4	651,0	4,1	MRO 63 - 100B4	143,9	121	13920	85,00	21,3370
	35,5	34,10	41,0	656,0	2,6	MRO 53 - 100B4	95,9	73	8340	85,00	25,9891
	35,5	34,10	41,1	655,0	1,3	MRO 43 - 100B4	61,9	39	9580	85,00	4,3066
	35,5	34,30	40,9	659,0	0,8	MRO 33 - 100B4	35,4	12,5	5740	85,00	1,9540
	40,0	42,80	32,7	823,0	3,6	MRO 63 - 100B4	143,9	121	11390	85,00	20,2710
	40,0	41,70	33,6	801,0	2,1	MRO 53 - 100B4	95,9	73	8510	85,00	25,4059
	45,0	43,00	32,6	826,0	3,1	MRO 63 - 100B4	143,9	121	16450	85,00	23,3660
	45,0	43,10	32,5	830,0	2,0	MRO 53 - 100B4	95,9	73	8540	85,00	25,6370
	45,0	42,50	32,9	817,0	1,0	MRO 43 - 100B4	61,9	39	10020	85,00	4,1893
	50,0	50,90	27,5	979,0	3,4	MRO 63 - 100B4	143,9	121	9810	85,00	18,9780
	50,0	51,30	27,3	988,0	1,7	MRO 53 - 100B4	95,9	73	8720	85,00	25,2163
	50,0	51,30	27,3	986,0	1,0	MRO 43 - 100B4	61,9	39	9720	85,00	4,0217
	56,0	56,20	24,9	1081,0	3,1	MRO 63 - 100B4	143,9	121	9970	85,00	19,4030
	56,0	56,70	24,7	1090,0	1,6	MRO 53 - 100B4	95,9	73	8820	85,00	25,3529
	56,0	54,80	25,5	1055,0	0,9	MRO 43 - 100B4	61,9	39	9800	85,00	4,0943

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
3	63,0	64,40	21,8	1238,0	2,7	MRO 63 - 100B4	143,9	121	10200	85,00	18,5080
	63,0	64,90	21,6	1249,0	1,4	MRO 53 - 100B4	95,9	73	8950	85,00	25,0608
	63,0	64,00	21,9	1230,0	0,8	MRO 43 - 100B4	61,9	39	10090	85,00	3,9699
	71,0	73,40	19,1	1412,0	2,3	MRO 63 - 100B4	143,9	121	11430	85,00	18,8420
	71,0	72,60	19,3	1396,0	1,2	MRO 53 - 100B4	95,9	73	10800	85,00	25,1812
	80,0	84,60	16,6	1626,0	2,1	MRO 63 - 100B4	143,9	121	11400	85,00	18,1240
	80,0	79,40	17,6	1527,0	0,8	MRO 53 - 100B4	95,9	73	16160	85,00	25,0122
	90,0	90,30	15,5	1736,0	1,9	MRO 63 - 100B4	143,9	121	11400	85,00	17,8220
	90,0	91,00	15,4	1751,0	1,0	MRO 53 - 100B4	95,9	73	8400	85,00	24,8176
	100,0	101,00	13,9	1937,0	1,7	MRO 63 - 100B4	143,9	121	9800	85,00	17,9540
	100,0	100,00	14,0	1927,0	0,9	MRO 53 - 100B4	95,9	73	8000	85,00	24,8837
	112,0	119,00	11,8	2281,0	1,5	MRO 63 - 100B4	143,9	121	9800	85,00	17,6270
	112,0	109,00	12,8	2100,0	0,8	MRO 53 - 100B4	95,9	73	11200	85,00	24,8595
	125,0	129,00	10,9	2476,0	1,0	MRO 63 - 100B4	143,9	121	22060	85,00	17,7600
	125,0	120,00	11,7	2300,0	0,8	MRO 53 - 100B4	95,9	73	7200	85,00	24,7730
	140,0	141,00	9,9	2717,0	1,2	MRO 63 - 100B4	143,9	121	9800	85,00	17,5400
	160,0	155,00	9,0	2980,0	1,1	MRO 63 - 100B4	143,9	121	9800	85,00	17,5010
4	6,3	6,60	212,0	169,0	2,8	MRO 43 - 112A4	68	39	5570	130,00	11,5009
	6,3	6,43	218,0	165,0	2,5	MRO 33 - 112A4	41,5	12,5	4550	130,00	5,3400
	6,3	6,62	211,0	170,0	1,2	MRO 23 - 112A4	39,6	10,6	3350	130,00	1,7940
	8,0	8,35	168,0	214,0	2,5	MRO 43 - 112A4	68	39	6000	130,00	9,2271
	8,0	8,25	170,0	212,0	2,1	MRO 33 - 112A4	41,5	12,5	5540	130,00	4,2720
	8,0	8,47	165,0	217,0	1,0	MRO 23 - 112A4	39,6	10,6	3620	130,00	1,3930
	9,0	8,72	161,0	224,0	2,9	MRO 43 - 112A4	68	39	5980	130,00	10,1119
	9,0	9,09	154,0	233,0	1,6	MRO 33 - 112A4	41,5	12,5	5710	130,00	4,6310
	9,0	8,97	156,0	230,0	1,0	MRO 23 - 112A4	39,6	10,6	3710	130,00	1,5320
	10,0	10,90	129,0	279,0	4,4	MRO 53 - 112A4	102	73	9470	130,00	34,9392
	10,0	10,40	134,0	267,0	2,3	MRO 43 - 112A4	68	39	3870	130,00	1,1640
	10,0	10,20	138,0	261,0	1,9	MRO 33 - 112A4	41,5	12,5	5630	130,00	3,6570
	10,0	10,40	134,0	267,0	0,9	MRO 23 - 112A4	39,6	10,6	6430	130,00	7,7706
	11,2	11,00	127,0	283,0	2,3	MRO 43 - 112A4	68	39	6520	130,00	8,3593
	11,2	11,70	120,0	299,0	1,3	MRO 33 - 112A4	41,5	12,5	5730	130,00	3,8410
	11,2	11,50	122,0	294,0	0,8	MRO 23 - 112A4	39,6	10,6	4040	130,00	1,2320
	12,5	13,20	106,0	338,0	4,1	MRO 53 - 112A4	102	73	10050	130,00	32,6124
	12,5	13,30	105,0	341,0	2,0	MRO 43 - 112A4	68	39	6950	130,00	6,6865
	12,5	12,70	110,0	326,0	1,7	MRO 33 - 112A4	41,5	12,5	5710	130,00	3,1860
	12,5	13,00	107,0	334,0	0,8	MRO 23 - 112A4	39,6	10,6	3920	130,00	0,9900
	14,0	13,50	104,0	346,0	4,7	MRO 63 - 112A4	150	121	14110	130,00	30,9420
	14,0	13,60	103,0	350,0	3,0	MRO 53 - 112A4	102	73	10340	130,00	29,4533
	14,0	13,90	101,0	356,0	1,4	MRO 43 - 112A4	68	39	7190	130,00	5,5410
	14,0	13,50	104,0	347,0	1,3	MRO 33 - 112A4	41,5	12,5	5520	130,00	2,5250
	16,0	16,20	86,2	417,0	3,5	MRO 53 - 112A4	102	73	10150	130,00	30,7169
	16,0	16,20	86,4	416,0	1,8	MRO 43 - 112A4	68	39	7420	130,00	6,0497
	16,0	16,30	85,9	418,0	1,3	MRO 33 - 112A4	41,5	12,5	5730	130,00	2,8190
	18,0	17,90	78,3	458,0	4,3	MRO 63 - 112A4	150	121	15380	130,00	26,9670
	18,0	18,00	77,7	462,0	2,7	MRO 53 - 112A4	102	73	11300	130,00	27,8473
	18,0	17,60	79,8	450,0	1,4	MRO 43 - 112A4	68	39	7740	130,00	5,0261
	18,0	17,30	80,8	444,0	1,1	MRO 33 - 112A4	41,5	12,5	5680	130,00	2,2830
	20,0	20,40	68,8	522,0	4,8	MRO 63 - 112A4	150	121	14100	130,00	31,0610
	20,0	20,50	68,2	527,0	3,0	MRO 53 - 112A4	102	73	8650	130,00	29,1621

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
4	20,0	20,20	69,2	519,0	1,5	MRO 43 - 112A4	68	39	7980	130,00	55,3180
	20,0	19,10	73,3	490,0	0,8	MRO 33 - 112A4	41,5	12,5	5730	130,00	2,3640
	22,4	22,70	61,8	581,0	3,8	MRO 63 - 112A4	150	121	16460	130,00	24,2220
	22,4	22,90	61,3	586,0	2,4	MRO 53 - 112A4	102	73	11180	130,00	26,9452
	22,4	21,90	63,8	563,0	1,2	MRO 43 - 112A4	68	39	8310	130,00	4,6963
	22,4	21,70	64,6	556,0	1,0	MRO 33 - 112A4	41,5	12,5	5740	130,00	2,5320
	25,0	25,50	54,9	653,0	3,5	MRO 63 - 112A4	150	121	16820	130,00	25,3770
	25,0	27,00	51,9	692,0	2,4	MRO 53 - 112A4	102	73	8140	130,00	27,9078
	25,0	26,10	53,6	669,0	1,3	MRO 43 - 112A4	68	39	8690	130,00	5,1123
	25,0	26,70	52,4	686,0	0,8	MRO 33 - 112A4	41,5	12,5	5730	130,00	2,0370
	28,0	27,50	51,0	704,0	3,5	MRO 63 - 112A4	150	121	15700	130,00	22,6360
	28,0	27,70	50,6	710,0	2,2	MRO 53 - 112A4	102	73	9800	130,00	26,4183
	28,0	27,90	50,1	716,0	1,1	MRO 43 - 112A4	68	39	8990	130,00	4,4508
	31,5	31,90	44,0	817,0	3,5	MRO 63 - 112A4	150	121	11540	130,00	25,5240
	31,5	31,70	44,2	813,0	2,1	MRO 53 - 112A4	102	73	8230	130,00	27,3913
	31,5	32,50	43,1	834,0	1,1	MRO 43 - 112A4	68	39	9390	130,00	4,8644
	35,5	33,80	41,4	868,0	3,1	MRO 63 - 112A4	150	121	13920	130,00	21,3370
	35,5	34,10	41,0	875,0	1,9	MRO 53 - 112A4	102	73	8340	130,00	25,9891
	35,5	34,10	41,1	874,0	1,0	MRO 43 - 112A4	68	39	9580	130,00	4,3066
	40,0	42,80	32,7	1097,0	2,7	MRO 63 - 112A4	150	121	11390	130,00	20,2710
	40,0	41,70	33,6	1068,0	1,6	MRO 53 - 112A4	102	73	8510	130,00	25,4059
	45,0	43,00	32,6	1102,0	2,3	MRO 63 - 112A4	150	121	16450	130,00	23,3660
	45,0	43,10	32,5	1106,0	1,5	MRO 53 - 112A4	102	73	8540	130,00	25,6370
	45,0	42,50	32,9	1090,0	0,8	MRO 43 - 112A4	68	39	10020	130,00	4,1893
	50,0	50,90	27,5	1306,0	2,6	MRO 63 - 112A4	150	121	9810	130,00	18,9780
	50,0	51,30	27,3	1317,0	1,3	MRO 53 - 112A4	102	73	8720	130,00	25,2163
	56,0	56,20	24,9	1441,0	2,3	MRO 63 - 112A4	150	121	9970	130,00	19,4030
	56,0	56,70	24,7	1453,0	1,2	MRO 53 - 112A4	102	73	8820	130,00	25,3529
	63,0	64,40	21,8	1651,0	2,0	MRO 63 - 112A4	150	121	10200	130,00	18,5080
	63,0	64,90	21,6	1665,0	1,0	MRO 53 - 112A4	102	73	8950	130,00	25,0608
	71,0	73,40	19,1	1883,0	1,7	MRO 63 - 112A4	150	121	11430	130,00	18,8420
	71,0	72,60	19,3	1861,0	0,9	MRO 53 - 112A4	102	73	10800	130,00	25,1812
	80,0	84,60	16,6	2168,0	1,5	MRO 63 - 112A4	150	121	11400	130,00	18,1240
	90,0	90,30	15,5	2315,0	1,5	MRO 63 - 112A4	150	121	11400	130,00	17,8220
	90,0	91,00	15,4	2335,0	0,8	MRO 53 - 112A4	102	73	8400	130,00	24,8176
	100,0	101,00	13,9	2583,0	1,3	MRO 63 - 112A4	150	121	9800	130,00	17,9540
	112,0	119,00	11,8	3041,0	1,1	MRO 63 - 112A4	150	121	9800	130,00	17,6270
	125,0	129,00	10,9	3301,0	0,8	MRO 63 - 112A4	150	121	22060	130,00	17,7600
	140,0	141,00	9,9	3622,0	0,9	MRO 63 - 112A4	150	121	9800	130,00	17,5400
	160,0	155,00	9,0	3973,0	0,8	MRO 63 - 112A4	150	121	9800	130,00	17,5010
5,5	6,3	6,48	216,0	229,0	4,1	MRO 53 - 132S4	112	73	8020	240,00	46,0154
	6,3	6,48	216,0	229,0	4,1	MRO 53 - 112MC4	108,7	73	8020	160,00	46,0154
	6,3	6,60	212,0	233,0	2,0	MRO 43 - 112MC4	74,7	39	5570	160,00	11,5009
	6,3	6,60	212,0	233,0	2,0	MRO 43 - 132S4	78	39	5570	240,00	11,5009
	6,3	6,43	218,0	227,0	1,9	MRO 33 - 112MC4	48,2	12,5	4550	160,00	5,3400
	6,3	6,62	211,0	233,0	0,9	MRO 23 - 112MC4	46,3	10,6	3350	160,00	1,7940
	8,0	8,57	163,0	302,0	3,6	MRO 53 - 132S4	112	73	8770	240,00	38,9230
	8,0	8,57	163,0	302,0	3,6	MRO 53 - 112MC4	108,7	73	8770	160,00	38,9230
	8,0	8,35	168,0	294,0	1,8	MRO 43 - 112MC4	74,7	39	6000	160,00	9,2271
	8,0	8,35	168,0	294,0	1,8	MRO 43 - 132S4	78	39	6000	240,00	9,2271

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
5,5	8,0	8,25	170,0	291,0	1,5	MRO 33 - 112MC4	48,2	12,5	5540	160,00	4,2720
	9,0	8,72	161,0	308,0	2,1	MRO 43 - 112MC4	74,7	39	5980	160,00	10,1119
	9,0	8,72	161,0	308,0	2,1	MRO 43 - 132S4	78	39	5980	240,00	10,1119
	9,0	9,09	154,0	321,0	1,2	MRO 33 - 112MC4	48,2	12,5	5710	160,00	4,6310
	10,0	10,90	129,0	383,0	3,2	MRO 53 - 132S4	112	73	9470	240,00	34,9392
	10,0	10,90	129,0	383,0	3,2	MRO 53 - 112MC4	108,7	73	9470	160,00	34,9392
	10,0	10,40	134,0	368,0	1,7	MRO 43 - 112MC4	74,7	39	3870	160,00	11,6400
	10,0	10,40	134,0	368,0	1,7	MRO 43 - 132S4	78	39	3870	240,00	11,6400
	10,0	10,20	138,0	359,0	1,4	MRO 33 - 112MC4	48,2	12,5	5630	160,00	3,6570
	11,2	11,00	127,0	389,0	1,7	MRO 43 - 112MC4	74,7	39	6520	160,00	8,3593
	11,2	11,00	127,0	389,0	1,7	MRO 43 - 132S4	78	39	6520	240,00	8,3593
	11,2	11,70	120,0	411,0	0,9	MRO 33 - 112MC4	48,2	12,5	5730	160,00	3,8410
	12,5	13,10	107,0	461,0	4,7	MRO 63 - 132S4	160	121	13550	240,00	41,5040
	12,5	13,10	107,0	461,0	4,7	MRO 63 - 112MC4	156,7	121	13550	160,00	41,5040
	12,5	13,20	106,0	464,0	3,0	MRO 53 - 132S4	112	73	10050	240,00	32,6124
	12,5	13,20	106,0	464,0	3,0	MRO 53 - 112MC4	108,7	73	10050	160,00	32,6124
	12,5	13,30	105,0	469,0	1,4	MRO 43 - 112MC4	74,7	39	6950	160,00	6,6865
	12,5	13,30	105,0	469,0	1,4	MRO 43 - 132S4	78	39	6950	240,00	6,6865
	12,5	12,70	110,0	449,0	1,2	MRO 33 - 112MC4	48,2	12,5	5710	160,00	3,1860
	14,0	13,50	104,0	476,0	3,4	MRO 63 - 132S4	160	121	14110	240,00	30,9420
	14,0	13,50	104,0	476,0	3,4	MRO 63 - 112MC4	156,7	121	14110	160,00	30,9420
	14,0	13,60	103,0	481,0	2,2	MRO 53 - 132S4	112	73	10340	240,00	29,4533
	14,0	13,60	103,0	481,0	2,2	MRO 53 - 112MC4	108,7	73	10340	160,00	29,4533
	14,0	13,90	101,0	489,0	1,1	MRO 43 - 112MC4	74,7	39	7190	160,00	5,5410
	14,0	13,90	101,0	489,0	1,1	MRO 43 - 132S4	78	39	7190	240,00	5,5410
	14,0	13,50	104,0	477,0	1,0	MRO 33 - 112MC4	48,2	12,5	5520	160,00	25,2500
	16,0	16,10	87,0	568,0	4,1	MRO 63 - 132S4	160	121	14450	240,00	35,7680
	16,0	16,10	87,0	568,0	4,1	MRO 63 - 112MC4	156,7	121	14450	160,00	35,7680
	16,0	16,20	86,2	573,0	2,6	MRO 53 - 132S4	112	73	10150	240,00	30,7169
	16,0	16,20	86,2	573,0	2,6	MRO 53 - 112MC4	108,7	73	10150	160,00	30,7169
	16,0	16,20	86,4	572,0	1,3	MRO 43 - 112MC4	74,7	39	7420	160,00	6,0497
	16,0	16,20	86,4	572,0	1,3	MRO 43 - 132S4	78	39	7420	240,00	6,0497
	16,0	16,30	85,9	575,0	0,9	MRO 33 - 112MC4	48,2	12,5	5730	160,00	2,8190
	18,0	17,90	78,3	630,0	3,1	MRO 63 - 132S4	160	121	15380	240,00	26,9670
	18,0	17,90	78,3	630,0	3,1	MRO 63 - 112MC4	156,7	121	15380	160,00	26,9670
	18,0	18,00	77,7	635,0	2,0	MRO 53 - 132S4	112	73	11300	240,00	27,8473
	18,0	18,00	77,7	635,0	2,0	MRO 53 - 112MC4	108,7	73	11300	160,00	27,8473
	18,0	17,60	79,8	619,0	1,0	MRO 43 - 112MC4	74,7	39	7740	160,00	5,0261
	18,0	17,60	79,8	619,0	1,0	MRO 43 - 132S4	78	39	7740	240,00	5,0261
	18,0	17,30	80,8	611,0	0,8	MRO 33 - 112MC4	48,2	12,5	5680	160,00	2,2830
	20,0	20,40	68,8	718,0	3,5	MRO 63 - 132S4	160	121	14100	240,00	31,0610
	20,0	20,40	68,8	718,0	3,5	MRO 63 - 112MC4	156,7	121	14100	160,00	31,0610
	20,0	20,50	68,2	724,0	2,2	MRO 53 - 132S4	112	73	8650	240,00	29,1621
	20,0	20,50	68,2	724,0	2,2	MRO 53 - 112MC4	108,7	73	8650	160,00	29,1621
	20,0	20,20	69,2	713,0	1,1	MRO 43 - 112MC4	74,7	39	7980	160,00	5,5318
	20,0	20,20	69,2	713,0	1,1	MRO 43 - 132S4	78	39	7980	240,00	5,5318
	22,4	22,70	61,8	799,0	2,8	MRO 63 - 132S4	160	121	16460	240,00	24,2220
	22,4	22,70	61,8	799,0	2,8	MRO 63 - 112MC4	156,7	121	16460	160,00	24,2220
	22,4	22,90	61,3	806,0	1,8	MRO 53 - 132S4	112	73	11180	240,00	26,9452
	22,4	22,90	61,3	806,0	1,8	MRO 53 - 112MC4	108,7	73	11180	160,00	26,9452

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
5,5	22,4	21,90	63,8	774,0	0,9	MRO 43 - 112MC4	74,7	39	8310	160,00	4,6963
	22,4	21,90	63,8	774,0	0,9	MRO 43 - 132S4	78	39	8310	240,00	4,6963
	25,0	25,50	54,9	899,0	2,6	MRO 63 - 132S4	160	121	16820	240,00	25,3770
	25,0	25,50	54,9	899,0	2,6	MRO 63 - 112MC4	156,7	121	16820	160,00	25,3770
	25,0	27,00	51,9	951,0	1,8	MRO 53 - 132S4	112	73	8140	240,00	27,9078
	25,0	27,00	51,9	951,0	1,8	MRO 53 - 112MC4	108,7	73	8140	160,00	27,9078
	25,0	26,10	53,6	920,0	0,9	MRO 43 - 112MC4	74,7	39	8690	160,00	5,1123
	25,0	26,10	53,6	920,0	0,9	MRO 43 - 132S4	78	39	8690	240,00	5,1123
	28,0	27,50	51,0	968,0	2,5	MRO 63 - 132S4	160	121	15700	240,00	22,6360
	28,0	27,50	51,0	968,0	2,5	MRO 63 - 112MC4	156,7	121	15700	160,00	22,6360
	28,0	27,70	50,6	976,0	1,6	MRO 53 - 132S4	112	73	9800	240,00	26,4183
	28,0	27,70	50,6	976,0	1,6	MRO 53 - 112MC4	108,7	73	9800	160,00	26,4183
	28,0	27,90	50,1	985,0	0,8	MRO 43 - 112MC4	74,7	39	8990	160,00	4,4508
	28,0	27,90	50,1	985,0	0,8	MRO 43 - 132S4	78	39	8990	240,00	4,4508
	31,5	31,90	44,0	1123,0	2,5	MRO 63 - 132S4	160	121	11540	240,00	25,5240
	31,5	31,90	44,0	1123,0	2,5	MRO 63 - 112MC4	156,7	121	11540	160,00	25,5240
	31,5	31,70	44,2	1118,0	1,5	MRO 53 - 132S4	112	73	8230	240,00	27,3913
	31,5	31,70	44,2	1118,0	1,5	MRO 53 - 112MC4	108,7	73	8230	160,00	27,3913
	31,5	32,50	43,1	1147,0	0,8	MRO 43 - 112MC4	74,7	39	9390	160,00	4,8644
	31,5	32,50	43,1	1147,0	0,8	MRO 43 - 132S4	78	39	9390	240,00	4,8644
	35,5	33,80	41,4	1193,0	2,3	MRO 63 - 132S4	160	121	13920	240,00	21,3370
	35,5	33,80	41,4	1193,0	2,3	MRO 63 - 112MC4	156,7	121	13920	160,00	21,3370
	35,5	34,10	41,0	1203,0	1,4	MRO 53 - 132S4	112	73	8340	240,00	25,9891
	35,5	34,10	41,0	1203,0	1,4	MRO 53 - 112MC4	108,7	73	8340	160,00	25,9891
	40,0	42,80	32,7	1509,0	2,0	MRO 63 - 132S4	160	121	11390	240,00	20,2710
	40,0	42,80	32,7	1509,0	2,0	MRO 63 - 112MC4	156,7	121	11390	160,00	20,2710
	40,0	41,70	33,6	1469,0	1,2	MRO 53 - 132S4	112	73	8510	240,00	25,4059
	40,0	41,70	33,6	1469,0	1,2	MRO 53 - 112MC4	108,7	73	8510	160,00	25,4059
	45,0	43,00	32,6	1515,0	1,7	MRO 63 - 132S4	160	121	16450	240,00	23,3660
	45,0	43,00	32,6	1515,0	1,7	MRO 63 - 112MC4	156,7	121	16450	160,00	23,3660
	45,0	43,10	32,5	1521,0	1,1	MRO 53 - 132S4	112	73	8540	240,00	25,6370
	45,0	43,10	32,5	1521,0	1,1	MRO 53 - 112MC4	108,7	73	8540	160,00	25,6370
	50,0	50,90	27,5	1795,0	1,9	MRO 63 - 132S4	160	121	9810	240,00	18,9780
	50,0	50,90	27,5	1795,0	1,9	MRO 63 - 112MC4	156,7	121	9810	160,00	18,9780
	50,0	51,30	27,3	1810,0	1,0	MRO 53 - 112MC4	108,7	73	8720	160,00	25,2163
	50,0	51,30	27,3	1810,0	1,0	MRO 53 - 132S4	112	73	8720	240,00	25,2163
	56,0	56,20	24,9	1981,0	1,7	MRO 63 - 132S4	160	121	9970	240,00	19,4030
	56,0	56,20	24,9	1981,0	1,7	MRO 63 - 112MC4	156,7	121	9970	160,00	19,4030
	56,0	56,70	24,7	1998,0	0,9	MRO 53 - 112MC4	108,7	73	8820	160,00	25,3529
	56,0	56,70	24,7	1998,0	0,9	MRO 53 - 132S4	112	73	8820	240,00	25,3529
	63,0	64,40	21,8	2270,0	1,5	MRO 63 - 132S4	160	121	10200	240,00	18,5080
	63,0	64,40	21,8	2270,0	1,5	MRO 63 - 112MC4	156,7	121	10200	160,00	18,5080
	63,0	64,90	21,6	2289,0	0,8	MRO 53 - 112MC4	108,7	73	8950	160,00	25,0608
	63,0	64,90	21,6	2289,0	0,8	MRO 53 - 132S4	112	73	8950	240,00	25,0608
	71,0	73,40	19,1	2589,0	1,3	MRO 63 - 132S4	160	121	11430	240,00	18,8420
	71,0	73,40	19,1	2589,0	1,3	MRO 63 - 112MC4	156,7	121	11430	160,00	18,8420
	80,0	84,60	16,6	2982,0	1,1	MRO 63 - 132S4	160	121	11400	240,00	18,1240
	80,0	84,60	16,6	2982,0	1,1	MRO 63 - 112MC4	156,7	121	11400	160,00	18,1240
	90,0	90,30	15,5	3183,0	1,1	MRO 63 - 132S4	160	121	11400	240,00	17,8220
	90,0	90,30	15,5	3183,0	1,1	MRO 63 - 112MC4	156,7	121	11400	160,00	17,8220

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
5,5	100,0	101,00	13,9	3551,0	0,9	MRO 63 - 112MC4	156,7	121	9800	160,00	17,9540
	100,0	101,00	13,9	3551,0	0,9	MRO 63 - 132S4	160	121	9800	240,00	17,9540
	112,0	119,00	11,8	4182,0	0,8	MRO 63 - 112MC4	156,7	121	9800	160,00	17,6270
	112,0	119,00	11,8	4182,0	0,8	MRO 63 - 132S4	160	121	9800	240,00	17,6270
7,5	6,3	6,48	216,0	312,0	3,0	MRO 53 - 132M4	121,5	73	8020	330,00	46,0154
	6,3	6,60	212,0	317,0	1,5	MRO 43 - 132M4	87,5	39	5570	330,00	11,5009
	8,0	8,50	165,0	409,0	4,3	MRO 63 - 132M4	169,5	121	11850	330,00	60,6320
	8,0	8,57	163,0	412,0	2,7	MRO 53 - 132M4	121,5	73	8770	330,00	38,9230
	8,0	8,35	168,0	402,0	1,3	MRO 43 - 132M4	87,5	39	6000	330,00	9,2271
	9,0	8,72	161,0	419,0	1,6	MRO 43 - 132M4	87,5	39	5980	330,00	10,1119
	10,0	10,80	130,0	518,0	3,8	MRO 63 - 132M4	169,5	121	12750	330,00	48,5070
	10,0	10,90	129,0	523,0	2,4	MRO 53 - 132M4	121,5	73	9470	330,00	34,9392
	10,0	10,40	134,0	502,0	1,2	MRO 43 - 132M4	87,5	39	3870	330,00	1,1640
	11,2	11,00	127,0	531,0	1,2	MRO 43 - 132M4	87,5	39	6520	330,00	8,3593
	12,5	13,10	107,0	628,0	3,4	MRO 63 - 132M4	169,5	121	13550	330,00	41,5040
	12,5	13,20	106,0	633,0	2,2	MRO 53 - 132M4	121,5	73	10050	330,00	32,6124
	12,5	13,30	105,0	639,0	1,0	MRO 43 - 132M4	87,5	39	6950	330,00	6,6865
	14,0	13,50	104,0	650,0	2,5	MRO 63 - 132M4	169,5	121	14110	330,00	30,9420
	14,0	13,60	103,0	655,0	1,6	MRO 53 - 132M4	121,5	73	10340	330,00	29,4533
	14,0	13,90	101,0	667,0	0,8	MRO 43 - 132M4	87,5	39	7190	330,00	55,4100
	16,0	16,10	87,0	774,0	3,0	MRO 63 - 132M4	169,5	121	14450	330,00	35,7680
	16,0	16,20	86,2	781,0	1,9	MRO 53 - 132M4	121,5	73	10150	330,00	30,7169
	16,0	16,20	86,4	779,0	0,9	MRO 43 - 132M4	87,5	39	7420	330,00	6,0497
	18,0	17,90	78,3	859,0	2,3	MRO 63 - 132M4	169,5	121	15380	330,00	26,9670
	18,0	18,00	77,7	867,0	1,4	MRO 53 - 132M4	121,5	73	11300	330,00	27,8473
	20,0	20,40	68,8	979,0	2,6	MRO 63 - 132M4	169,5	121	14100	330,00	31,0610
	20,0	20,50	68,2	987,0	1,6	MRO 53 - 132M4	121,5	73	8650	330,00	29,1621
	20,0	20,20	69,2	972,0	0,8	MRO 43 - 132M4	87,5	39	7980	330,00	5,5318
	22,4	22,70	61,8	1090,0	2,0	MRO 63 - 132M4	169,5	121	16460	330,00	24,2220
	22,4	22,90	61,3	1099,0	1,3	MRO 53 - 132M4	121,5	73	11180	330,00	26,9452
	25,0	25,50	54,9	1225,0	1,9	MRO 63 - 132M4	169,5	121	16820	330,00	25,3770
	25,0	27,00	51,9	1297,0	1,3	MRO 53 - 132M4	121,5	73	8140	330,00	27,9078
	28,0	27,50	51,0	1320,0	1,9	MRO 63 - 132M4	169,5	121	15700	330,00	22,6360
	28,0	27,70	50,6	1331,0	1,2	MRO 53 - 132M4	121,5	73	9800	330,00	26,4183
	31,5	31,90	44,0	1532,0	1,9	MRO 63 - 132M4	169,5	121	11540	330,00	25,5240
	31,5	31,70	44,2	1524,0	1,1	MRO 53 - 132M4	121,5	73	8230	330,00	27,3913
	35,5	33,80	41,4	1627,0	1,7	MRO 63 - 132M4	169,5	121	13920	330,00	21,3370
	35,5	34,10	41,0	1641,0	1,0	MRO 53 - 132M4	121,5	73	8340	330,00	25,9891
	40,0	42,80	32,7	2057,0	1,4	MRO 63 - 132M4	169,5	121	11390	330,00	20,2710
	40,0	41,70	33,6	2003,0	0,8	MRO 53 - 132M4	121,5	73	8510	330,00	25,4059
	45,0	43,00	32,6	2065,0	1,2	MRO 63 - 132M4	169,5	121	16450	330,00	23,3660
	45,0	43,10	32,5	2074,0	0,8	MRO 53 - 132M4	121,5	73	8540	330,00	25,6370
	50,0	50,90	27,5	2448,0	1,4	MRO 63 - 132M4	169,5	121	9810	330,00	18,9780
	56,0	56,20	24,9	2702,0	1,2	MRO 63 - 132M4	169,5	121	9970	330,00	19,4030
	63,0	64,40	21,8	3095,0	1,1	MRO 63 - 132M4	169,5	121	10200	330,00	18,5080
	71,0	73,40	19,1	3530,0	0,9	MRO 63 - 132M4	169,5	121	11430	330,00	18,8420
	80,0	84,60	16,6	4066,0	0,8	MRO 63 - 132M4	169,5	121	11400	330,00	18,1240
	90,0	90,30	15,5	4341,0	0,8	MRO 63 - 132M4	169,5	121	11400	330,00	17,8220
9,2	6,3	6,43	218,0	379,0	4,4	MRO 63 - 132ML4	177,5	121	10740	340,00	78,1860
	6,3	6,48	216,0	382,0	2,4	MRO 53 - 132ML4	129,5	73	8020	340,00	46,0154

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
9,2	6,3	6,60	212,0	389,0	1,2	MRO 43 - 132ML4	95,5	39	5570	340,00	11,5009
	8,0	8,50	165,0	501,0	3,5	MRO 63 - 132ML4	177,5	121	11850	340,00	60,6320
	8,0	8,57	163,0	506,0	2,2	MRO 53 - 132ML4	129,5	73	8770	340,00	38,9230
	8,0	8,35	168,0	493,0	1,1	MRO 43 - 132ML4	95,5	39	6000	340,00	9,2271
	9,0	8,72	161,0	514,0	1,3	MRO 43 - 132ML4	95,5	39	5980	340,00	10,1119
	10,0	10,80	130,0	636,0	3,1	MRO 63 - 132ML4	177,5	121	12750	340,00	48,5070
	10,0	10,90	129,0	641,0	1,9	MRO 53 - 132ML4	129,5	73	9470	340,00	34,9392
	10,0	10,40	134,0	615,0	1,0	MRO 43 - 132ML4	95,5	39	3870	340,00	11,6400
	11,2	11,00	127,0	651,0	1,0	MRO 43 - 132ML4	95,5	39	6520	340,00	8,3593
	12,5	13,10	107,0	770,0	2,8	MRO 63 - 132ML4	177,5	121	13550	340,00	41,5040
	12,5	13,20	106,0	777,0	1,8	MRO 53 - 132ML4	129,5	73	10050	340,00	32,6124
	12,5	13,30	105,0	784,0	0,9	MRO 43 - 132ML4	95,5	39	6950	340,00	6,6865
	14,0	13,50	104,0	797,0	2,1	MRO 63 - 132ML4	177,5	121	14110	340,00	30,9420
	14,0	13,60	103,0	804,0	1,3	MRO 53 - 132ML4	129,5	73	10340	340,00	29,4533
	16,0	16,10	87,0	950,0	2,5	MRO 63 - 132ML4	177,5	121	14450	340,00	35,7680
	16,0	16,20	86,2	958,0	1,5	MRO 53 - 132ML4	129,5	73	10150	340,00	30,7169
	16,0	16,20	86,4	956,0	0,8	MRO 43 - 132ML4	95,5	39	7420	340,00	6,0497
	18,0	17,90	78,3	1054,0	1,8	MRO 63 - 132ML4	177,5	121	15380	340,00	26,9670
	18,0	18,00	77,7	1063,0	1,2	MRO 53 - 132ML4	129,5	73	11300	340,00	27,8473
	20,0	20,40	68,8	1201,0	2,1	MRO 63 - 132ML4	177,5	121	14100	340,00	31,0610
	20,0	20,50	68,2	1211,0	1,3	MRO 53 - 132ML4	129,5	73	8650	340,00	29,1621
	22,4	22,70	61,8	1337,0	1,7	MRO 63 - 132ML4	177,5	121	16460	340,00	24,2220
	22,4	22,90	61,3	1348,0	1,1	MRO 53 - 132ML4	129,5	73	11180	340,00	26,9452
	25,0	25,50	54,9	1503,0	1,5	MRO 63 - 132ML4	177,5	121	16820	340,00	25,3770
	25,0	27,00	51,9	1591,0	1,0	MRO 53 - 132ML4	129,5	73	8140	340,00	27,9078
	28,0	27,50	51,0	1619,0	1,5	MRO 63 - 132ML4	177,5	121	15700	340,00	22,6360
	28,0	27,70	50,6	1633,0	1,0	MRO 53 - 132ML4	129,5	73	9800	340,00	26,4183
	31,5	31,90	44,0	1879,0	1,5	MRO 63 - 132ML4	177,5	121	11540	340,00	25,5240
	31,5	31,70	44,2	1869,0	0,9	MRO 53 - 132ML4	129,5	73	8230	340,00	27,3913
	35,5	33,80	41,4	1996,0	1,3	MRO 63 - 132ML4	177,5	121	13920	340,00	21,3370
	35,5	34,10	41,0	2013,0	0,8	MRO 53 - 132ML4	129,5	73	8340	340,00	25,9891
	40,0	42,80	32,7	2523,0	1,2	MRO 63 - 132ML4	177,5	121	11390	340,00	20,2710
	45,0	43,00	32,6	2534,0	1,0	MRO 63 - 132ML4	177,5	121	16450	340,00	23,3660
	50,0	50,90	27,5	3003,0	1,1	MRO 63 - 132ML4	177,5	121	9810	340,00	18,9780
	56,0	56,20	24,9	3315,0	1,0	MRO 63 - 132ML4	177,5	121	9970	340,00	19,4030
	63,0	64,40	21,8	3796,0	0,9	MRO 63 - 132ML4	177,5	121	10200	340,00	18,5080
	71,0	73,40	19,1	4330,0	0,8	MRO 63 - 132ML4	177,5	121	11430	340,00	18,8420
11	6,3	6,43	218,0	453,0	3,7	MRO 63 - 160M4	194	121	10740	620,00	78,1860
	6,3	6,43	218,0	453,0	3,7	MRO 63 - 132MC4	185	121	10740	500,00	78,1860
	6,3	6,48	216,0	457,0	2,0	MRO 53 - 160M4	146	73	8020	620,00	46,0154
	6,3	6,48	216,0	457,0	2,0	MRO 53 - 132MC4	137	73	8020	500,00	46,0154
	6,3	6,60	212,0	465,0	1,0	MRO 43 - 132MC4	103	39	5570	500,00	11,5009
	8,0	8,50	165,0	599,0	2,9	MRO 63 - 160M4	194	121	11850	620,00	60,6320
	8,0	8,50	165,0	599,0	2,9	MRO 63 - 132MC4	185	121	11850	500,00	60,6320
	8,0	8,57	163,0	604,0	1,8	MRO 53 - 160M4	146	73	8770	620,00	38,9230
	8,0	8,57	163,0	604,0	1,8	MRO 53 - 132MC4	137	73	8770	500,00	38,9230
	8,0	8,35	168,0	589,0	0,9	MRO 43 - 132MC4	103	39	6000	500,00	9,2271
	9,0	8,72	161,0	615,0	1,1	MRO 43 - 132MC4	103	39	5980	500,00	10,1119
	10,0	10,80	130,0	760,0	2,6	MRO 63 - 160M4	194	121	12750	620,00	48,5070
	10,0	10,80	130,0	760,0	2,6	MRO 63 - 132MC4	185	121	12750	500,00	48,5070

MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	**Size**	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
11	10,0	10,90	129,0	767,0	1,6	MRO 53 - 160M4	146	73	9470	620,00	34,9392
	10,0	10,90	129,0	767,0	1,6	MRO 53 - 132MC4	137	73	9470	500,00	34,9392
	10,0	10,40	134,0	736,0	0,8	MRO 43 - 132MC4	103	39	3870	500,00	1,1640
	11,2	11,00	127,0	779,0	0,8	MRO 43 - 132MC4	103	39	6520	500,00	8,3593
	12,5	13,10	107,0	921,0	2,3	MRO 63 - 160M4	194	121	13550	620,00	41,5040
	12,5	13,10	107,0	921,0	2,3	MRO 63 - 132MC4	185	121	13550	500,00	41,5040
	12,5	13,20	106,0	929,0	1,5	MRO 53 - 160M4	146	73	10050	620,00	32,6124
	12,5	13,20	106,0	929,0	1,5	MRO 53 - 132MC4	137	73	10050	500,00	32,6124
	14,0	13,50	104,0	953,0	1,7	MRO 63 - 160M4	194	121	14110	620,00	30,9420
	14,0	13,50	104,0	953,0	1,7	MRO 63 - 132MC4	185	121	14110	500,00	30,9420
	14,0	13,60	103,0	961,0	1,1	MRO 53 - 160M4	146	73	10340	620,00	29,4533
	14,0	13,60	103,0	961,0	1,1	MRO 53 - 132MC4	137	73	10340	500,00	29,4533
	16,0	16,10	87,0	1136,0	2,1	MRO 63 - 160M4	194	121	14450	620,00	35,7680
	16,0	16,10	87,0	1136,0	2,1	MRO 63 - 132MC4	185	121	14450	500,00	35,7680
	16,0	16,20	86,2	1145,0	1,3	MRO 53 - 160M4	146	73	10150	620,00	30,7169
	16,0	16,20	86,2	1145,0	1,3	MRO 53 - 132MC4	137	73	10150	500,00	30,7169
	18,0	17,90	78,3	1260,0	1,5	MRO 63 - 160M4	194	121	15380	620,00	26,9670
	18,0	17,90	78,3	1260,0	1,5	MRO 63 - 132MC4	185	121	15380	500,00	26,9670
	18,0	18,00	77,7	1271,0	1,0	MRO 53 - 160M4	146	73	11300	620,00	27,8473
	18,0	18,00	77,7	1271,0	1,0	MRO 53 - 132MC4	137	73	11300	500,00	27,8473
	20,0	20,40	68,8	1436,0	1,8	MRO 63 - 160M4	194	121	14100	620,00	31,0610
	20,0	20,40	68,8	1436,0	1,8	MRO 63 - 132MC4	185	121	14100	500,00	31,0610
	20,0	20,50	68,2	1448,0	1,1	MRO 53 - 160M4	146	73	8650	620,00	29,1621
	20,0	20,50	68,2	1448,0	1,1	MRO 53 - 132MC4	137	73	8650	500,00	29,1621
	22,4	22,70	61,8	1598,0	1,4	MRO 63 - 160M4	194	121	16460	620,00	24,2220
	22,4	22,70	61,8	1598,0	1,4	MRO 63 - 132MC4	185	121	16460	500,00	24,2220
	22,4	22,90	61,3	1612,0	0,9	MRO 53 - 132MC4	137	73	11180	500,00	26,9452
	22,4	22,90	61,3	1612,0	0,9	MRO 53 - 160M4	146	73	11180	620,00	26,9452
	25,0	25,50	54,9	1797,0	1,3	MRO 63 - 160M4	194	121	16820	620,00	25,3770
	25,0	25,50	54,9	1797,0	1,3	MRO 63 - 132MC4	185	121	16820	500,00	25,3770
	25,0	27,00	51,9	1902,0	0,9	MRO 53 - 132MC4	137	73	8140	500,00	27,9078
	25,0	27,00	51,9	1902,0	0,9	MRO 53 - 160M4	146	73	8140	620,00	27,9078
	28,0	27,50	51,0	1936,0	1,3	MRO 63 - 160M4	194	121	15700	620,00	22,6360
	28,0	27,50	51,0	1936,0	1,3	MRO 63 - 132MC4	185	121	15700	500,00	22,6360
	28,0	27,70	50,6	1952,0	0,8	MRO 53 - 132MC4	137	73	9800	500,00	26,4183
	28,0	27,70	50,6	1952,0	0,8	MRO 53 - 160M4	146	73	9800	620,00	26,4183
	31,5	31,90	44,0	2246,0	1,3	MRO 63 - 160M4	194	121	11540	620,00	25,5240
	31,5	31,90	44,0	2246,0	1,3	MRO 63 - 132MC4	185	121	11540	500,00	25,5240
	31,5	31,70	44,2	2235,0	0,8	MRO 53 - 132MC4	137	73	8230	500,00	27,3913
	31,5	31,70	44,2	2235,0	0,8	MRO 53 - 160M4	146	73	8230	620,00	27,3913
	35,5	33,80	41,4	2386,0	1,1	MRO 63 - 160M4	194	121	13920	620,00	21,3370
	35,5	33,80	41,4	2386,0	1,1	MRO 63 - 132MC4	185	121	13920	500,00	21,3370
	40,0	42,80	32,7	3017,0	1,0	MRO 63 - 132MC4	185	121	11390	500,00	20,2710
	40,0	42,80	32,7	3017,0	1,0	MRO 63 - 160M4	194	121	11390	620,00	20,2710
	45,0	43,00	32,6	3029,0	0,8	MRO 63 - 132MC4	185	121	16450	500,00	23,3660
	45,0	43,00	32,6	3029,0	0,8	MRO 63 - 160M4	194	121	16450	620,00	23,3660
	50,0	50,90	27,5	3591,0	0,9	MRO 63 - 132MC4	185	121	9810	500,00	18,9780
	50,0	50,90	27,5	3591,0	0,9	MRO 63 - 160M4	194	121	9810	620,00	18,9780
	56,0	56,20	24,9	3963,0	0,8	MRO 63 - 132MC4	185	121	9970	500,00	19,4030
	56,0	56,20	24,9	3963,0	0,8	MRO 63 - 160M4	194	121	9970	620,00	19,4030

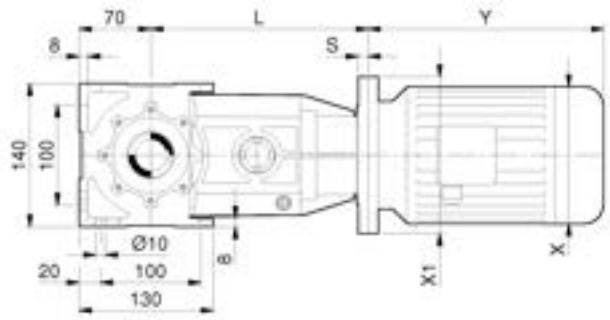
MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
15	6,3	6,43	218,0	618,0	2,7	MRO 63 - 160L4	221	121	10740	740,00	78,1860
	6,3	6,48	216,0	623,0	1,5	MRO 53 - 160L4	173	73	8020	740,00	46,0154
	8,0	8,50	165,0	817,0	2,1	MRO 63 - 160L4	221	121	11850	740,00	60,6320
	8,0	8,57	163,0	824,0	1,3	MRO 53 - 160L4	173	73	8770	740,00	38,9230
	10,0	10,80	130,0	1037,0	1,9	MRO 63 - 160L4	221	121	12750	740,00	48,5070
	10,0	10,90	129,0	1045,0	1,2	MRO 53 - 160L4	173	73	9470	740,00	34,9392
	12,5	13,10	107,0	1256,0	1,7	MRO 63 - 160L4	221	121	13550	740,00	41,5040
	12,5	13,20	106,0	1267,0	1,1	MRO 53 - 160L4	173	73	10050	740,00	32,6124
	14,0	13,50	104,0	1299,0	1,3	MRO 63 - 160L4	221	121	14110	740,00	30,9420
	14,0	13,60	103,0	1311,0	0,8	MRO 53 - 160L4	173	73	10340	740,00	29,4533
	16,0	16,10	87,0	1548,0	1,5	MRO 63 - 160L4	221	121	14450	740,00	35,7680
	16,0	16,20	86,2	1562,0	0,9	MRO 53 - 160L4	173	73	10150	740,00	30,7169
	18,0	17,90	78,3	1719,0	1,1	MRO 63 - 160L4	221	121	15380	740,00	26,9670
	20,0	20,40	68,8	1958,0	1,3	MRO 63 - 160L4	221	121	14100	740,00	31,0610
	20,0	20,50	68,2	1974,0	0,8	MRO 53 - 160L4	173	73	8650	740,00	29,1621
	22,4	22,70	61,8	2179,0	1,0	MRO 63 - 160L4	221	121	16460	740,00	24,2220
	25,0	25,50	54,9	2451,0	0,9	MRO 63 - 160L4	221	121	16820	740,00	25,3770
	28,0	27,50	51,0	2640,0	0,9	MRO 63 - 160L4	221	121	15700	740,00	22,6360
	31,5	31,90	44,0	3063,0	0,9	MRO 63 - 160L4	221	121	11540	740,00	25,5240
	35,5	33,80	41,4	3254,0	0,8	MRO 63 - 160L4	221	121	13920	740,00	21,3370
18,5	6,3	6,43	218,0	763,0	2,2	MRO 63 - 180M4	239	121	10740	1300,00	78,1860
	6,3	6,43	218,0	763,0	2,2	MRO 63 - 160MC4	218,5	121	10740	800,00	78,1860
	6,3	6,48	216,0	769,0	1,2	MRO 53 - 180M4	191	73	8020	1300,00	46,0154
	6,3	6,48	216,0	769,0	1,2	MRO 53 - 160MC4	170,5	73	8020	800,00	46,0154
	8,0	8,50	165,0	1008,0	1,7	MRO 63 - 180M4	239	121	11850	1300,00	60,6320
	8,0	8,50	165,0	1008,0	1,7	MRO 63 - 160MC4	218,5	121	11850	800,00	60,6320
	8,0	8,57	163,0	1017,0	1,1	MRO 53 - 180M4	191	73	8770	1300,00	38,9230
	8,0	8,57	163,0	1017,0	1,1	MRO 53 - 160MC4	170,5	73	8770	800,00	38,9230
	10,0	10,80	130,0	1279,0	1,5	MRO 63 - 180M4	239	121	12750	1300,00	48,5070
	10,0	10,80	130,0	1279,0	1,5	MRO 63 - 160MC4	218,5	121	12750	800,00	48,5070
	10,0	10,90	129,0	1289,0	1,0	MRO 53 - 180M4	191	73	9470	1300,00	34,9392
	10,0	10,90	129,0	1289,0	1,0	MRO 53 - 160MC4	170,5	73	9470	800,00	34,9392
	12,5	13,10	107,0	1549,0	1,4	MRO 63 - 180M4	239	121	13550	1300,00	41,5040
	12,5	13,10	107,0	1549,0	1,4	MRO 63 - 160MC4	218,5	121	13550	800,00	41,5040
	12,5	13,20	106,0	1562,0	0,9	MRO 53 - 180M4	191	73	10050	1300,00	32,6124
	12,5	13,20	106,0	1562,0	0,9	MRO 53 - 160MC4	170,5	73	10050	800,00	32,6124
	14,0	13,50	104,0	1603,0	1,0	MRO 63 - 180M4	239	121	14110	1300,00	30,9420
	14,0	13,50	104,0	1603,0	1,0	MRO 63 - 160MC4	218,5	121	14110	800,00	30,9420
	16,0	16,10	87,0	1910,0	1,2	MRO 63 - 180M4	239	121	14450	1300,00	35,7680
	16,0	16,10	87,0	1910,0	1,2	MRO 63 - 160MC4	218,5	121	14450	800,00	35,7680
	16,0	16,20	86,2	1926,0	0,8	MRO 53 - 160MC4	170,5	73	10150	800,00	30,7169
	16,0	16,20	86,2	1926,0	0,8	MRO 53 - 180M4	191	73	10150	1300,00	30,7169
	18,0	17,90	78,3	2120,0	0,9	MRO 63 - 180M4	239	121	15380	1300,00	26,9670
	18,0	17,90	78,3	2120,0	0,9	MRO 63 - 160MC4	218,5	121	15380	800,00	2,6967
	20,0	20,40	68,8	2415,0	1,0	MRO 63 - 180M4	239	121	14100	1300,00	31,0610
	20,0	20,40	68,8	2415,0	1,0	MRO 63 - 160MC4	218,5	121	14100	800,00	31,0610
	22,4	22,70	61,8	2688,0	0,8	MRO 63 - 180M4	239	121	16460	1300,00	24,2220
	22,4	22,70	61,8	2688,0	0,8	MRO 63 - 160MC4	218,5	121	16460	800,00	24,2220
	25,0	25,50	54,9	3022,0	0,8	MRO 63 - 160MC4	218,5	121	16820	800,00	25,3770
	25,0	25,50	54,9	3022,0	0,8	MRO 63 - 180M4	239	121	16820	1300,00	25,3770

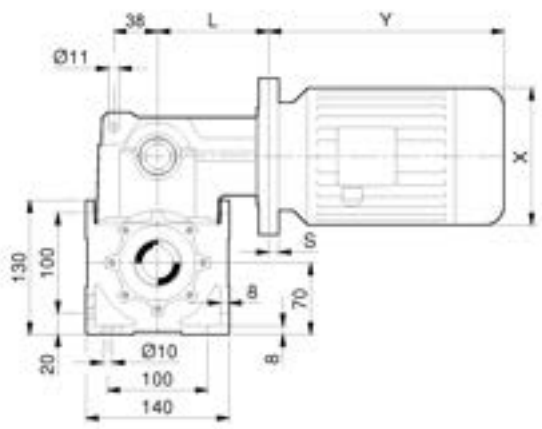
MRO-MRV - 1400 rpm
Geared motor

P_1 [kW]	i_n	i_r	n_2 [rpm]	M_2 [Nm]	FS	Size	MRN [kg]	FRN [kg]	F_{r2} [N]	J_m × 10^{-4}	J_1 × 10^{-4}
18,5	28,0	27,50	51,0	3256,0	0,8	MRO 63 - 160MC4	218,5	121	15700	800,00	22,6360
	28,0	27,50	51,0	3256,0	0,8	MRO 63 - 180M4	239	121	15700	1300,00	22,6360
	31,5	31,90	44,0	3778,0	0,8	MRO 63 - 160MC4	218,5	121	11540	800,00	25,5240
	31,5	31,90	44,0	3778,0	0,8	MRO 63 - 180M4	239	121	11540	1300,00	25,5240
22	6,3	6,43	218,0	907,0	1,8	MRO 63 - 180L4	249	121	10740	1500,00	78,1860
	6,3	6,48	216,0	914,0	1,0	MRO 53 - 180L4	201	73	8020	1500,00	46,0154
	8,0	8,50	165,0	1199,0	1,5	MRO 63 - 180L4	249	121	11850	1500,00	60,6320
	8,0	8,57	163,0	1209,0	0,9	MRO 53 - 180L4	201	73	8770	1500,00	38,9230
	10,0	10,80	130,0	1521,0	1,3	MRO 63 - 180L4	249	121	12750	1500,00	48,5070
	10,0	10,90	129,0	1533,0	0,8	MRO 53 - 180L4	201	73	9470	1500,00	34,9392
	12,5	13,10	107,0	1842,0	1,2	MRO 63 - 180L4	249	121	13550	1500,00	41,5040
	12,5	13,20	106,0	1858,0	0,8	MRO 53 - 180L4	201	73	10050	1500,00	32,6124
	14,0	13,50	104,0	1906,0	0,9	MRO 63 - 180L4	249	121	14110	1500,00	30,9420
	16,0	16,10	87,0	2271,0	1,0	MRO 63 - 180L4	249	121	14450	1500,00	35,7680
	18,0	17,90	78,3	2521,0	0,8	MRO 63 - 180L4	249	121	15380	1500,00	26,9670
	20,0	20,40	68,8	2872,0	0,9	MRO 63 - 180L4	249	121	14100	1500,00	31,0610

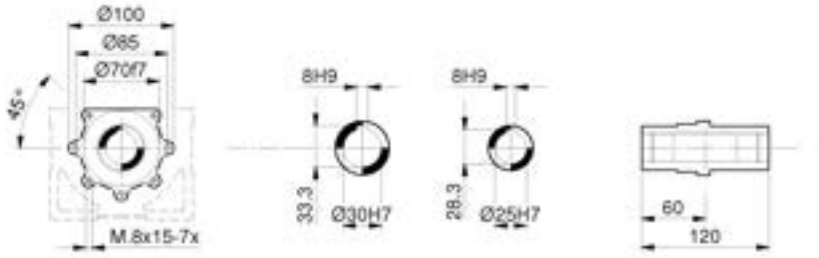
RO13 - RV13



MRO13
FRO13



MRV13
FRV13



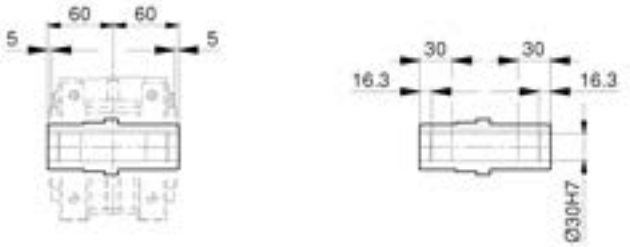
AC30
AC25

IEC	56	63	71	80	90 S	90 L	
X / Y / Z1	110/168/108	123/185/110	140/220/121	159/238/138	176/255/149	176/280/149	
X1 (B5) / S	120/13	140/13	160/13.5	200/13.5	- - -	- - -	
X1 (B14) / S	- - -	90/13	105/18.5	120/13.5	140/13.5	140/13.5	
L (RO13)	197	197	197.5 (202.5)	197.5	197.5	197.5	
L (RV13)	107	107	107.5 (112.5)	107.5	107.5	107.5	

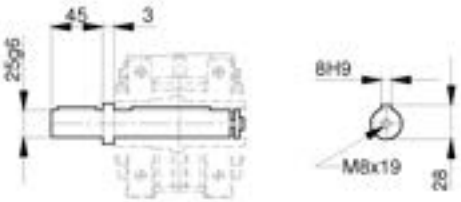
Not binding dimensions and weights

RO13 - RV13
Output shafts

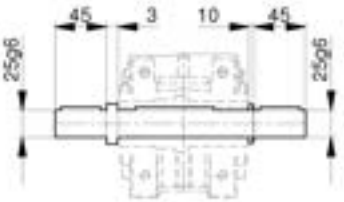
AC



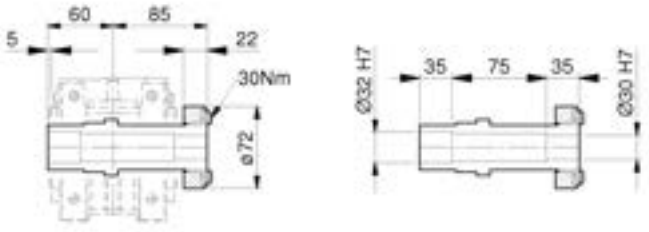
AS



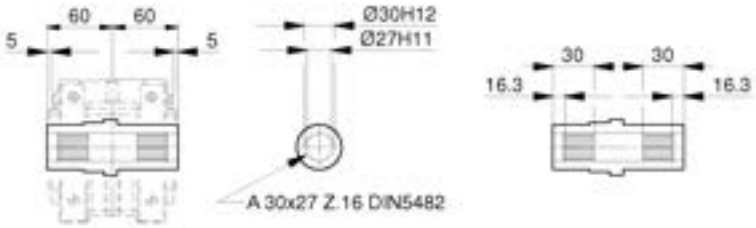
AD



ACC



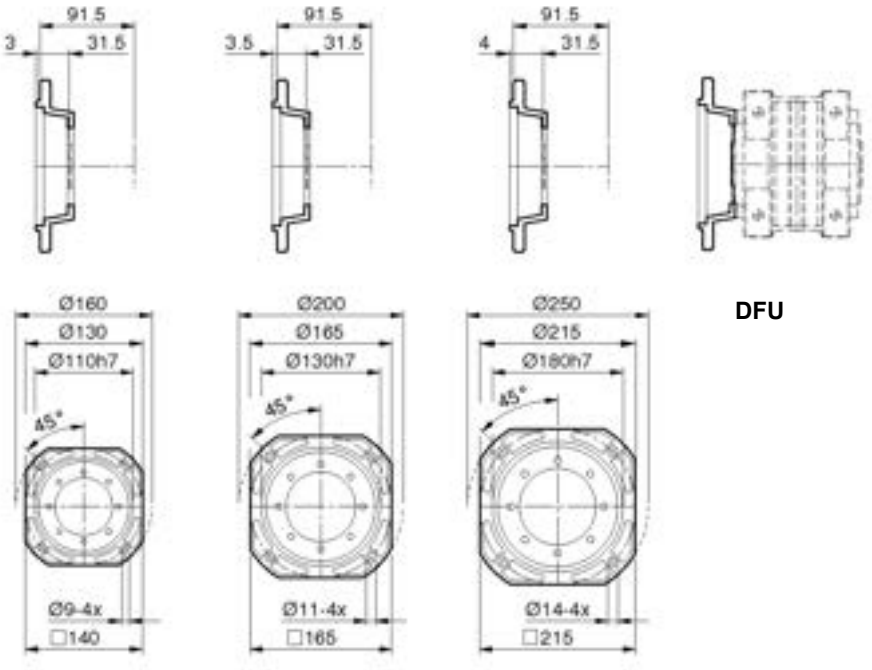
*** ACS**



(*) ACS version on demand
Machine shaft dimensions: pages 77-79

Not binding dimensions and weights

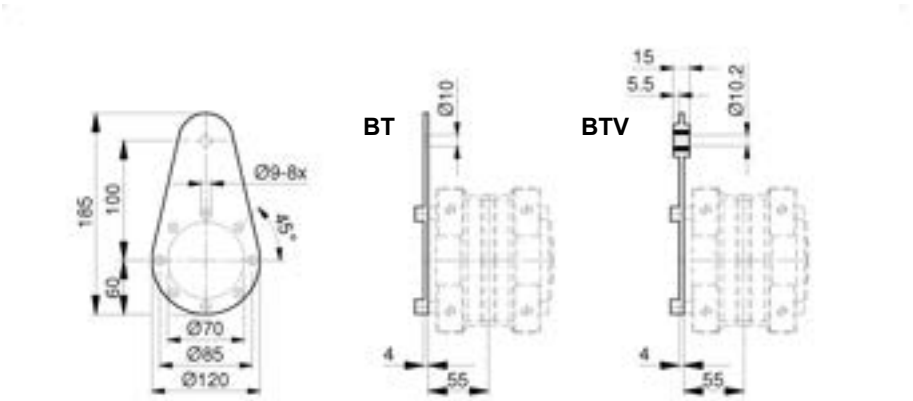
RO13 - RV13
Output flanges

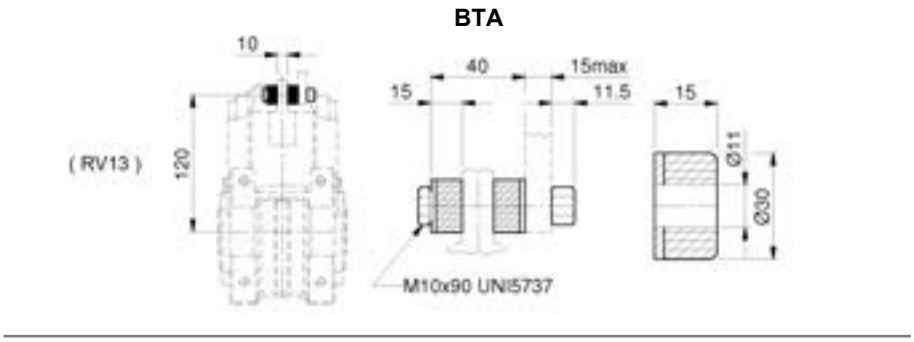


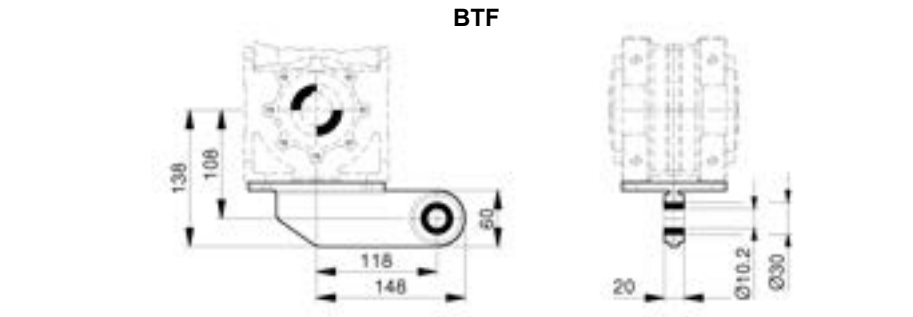
DFU

Not binding dimensions and weights

RO13 - RV13
Torque arms

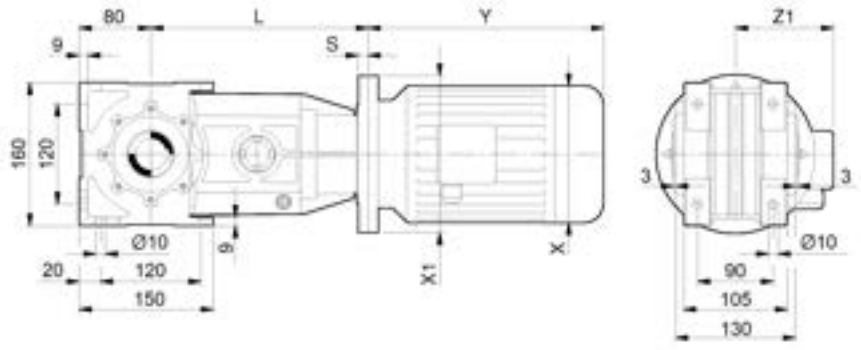




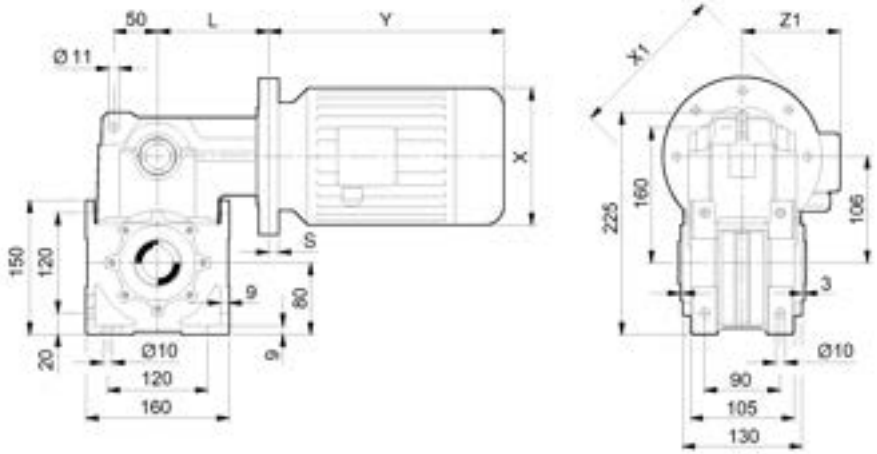


Not binding dimensions and weights

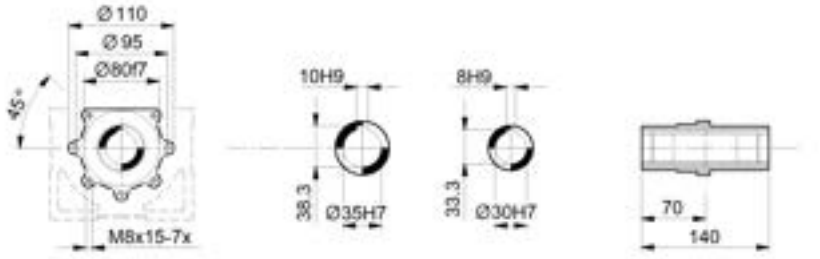
RO23 - RV23



MRO23
FRO23



MRV23
FRV23



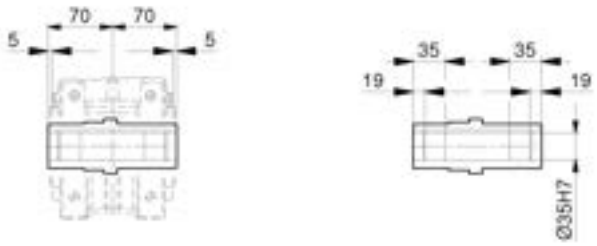
AC35
AC30

IEC	56	63	71	80	90 S	90 L	
X / Y / Z1	110/168/108	123/185/110	140/220/121	159/238/138	176/255/149	176/280/149	
X1 (B5) / S	120/13	140/13	160/13.5	200/13.5	- - -	- - -	
X1 (B14) / S	- - -	90/13	105/18.5	120/13.5	140/13.5	140/13.5	
L (RO13)	197	197	197.5 (202.5)	197.5	197.5	197.5	
L (RV13)	107	107	107.5 (112.5)	107.5	107.5	107.5	

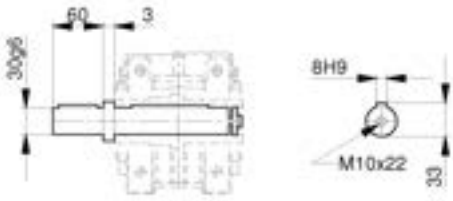
Not binding dimensions and weights

RO23 - RV23
Output shafts

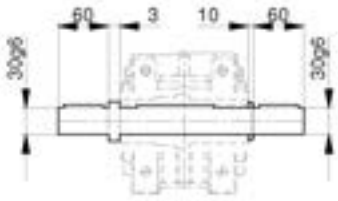
AC



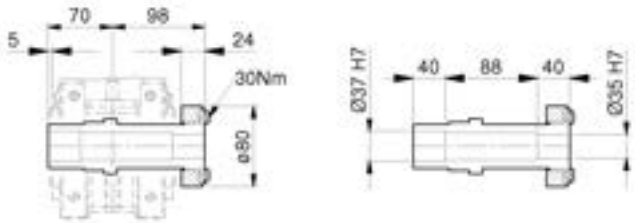
AS



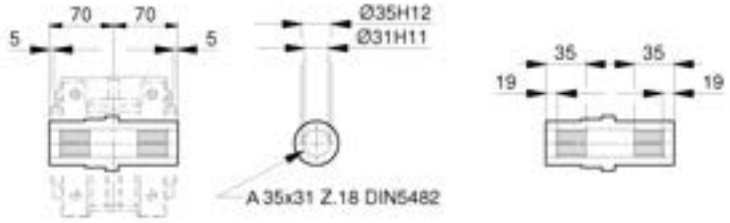
AD



ACC



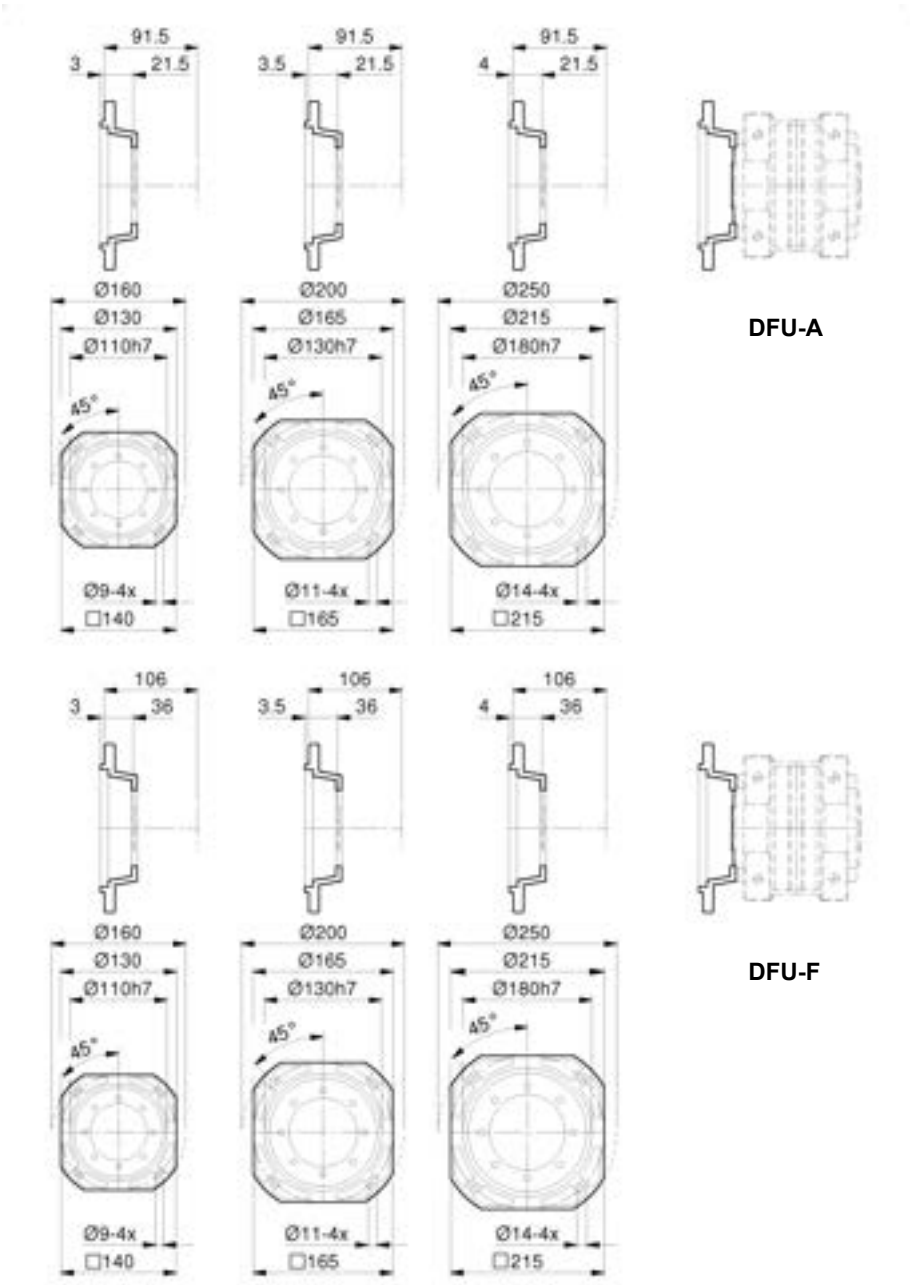
*** ACS**



(*) ACS version on demand
Machine shaft dimensions: pages 77-79

Not binding dimensions and weights

RO23 - RV23
Output flanges

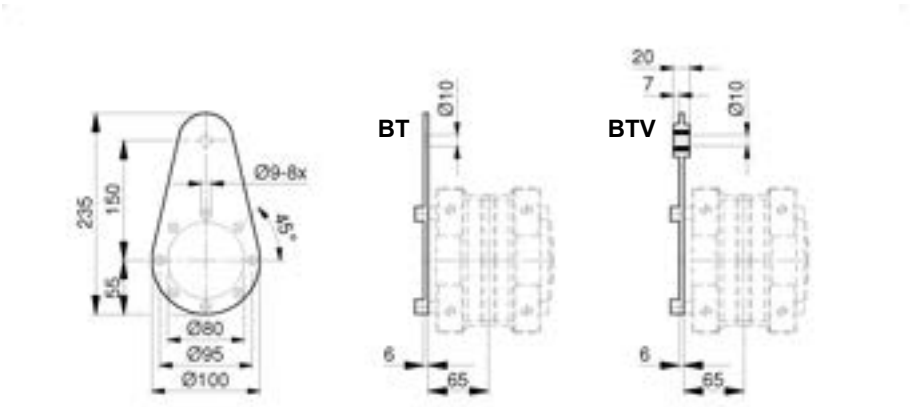


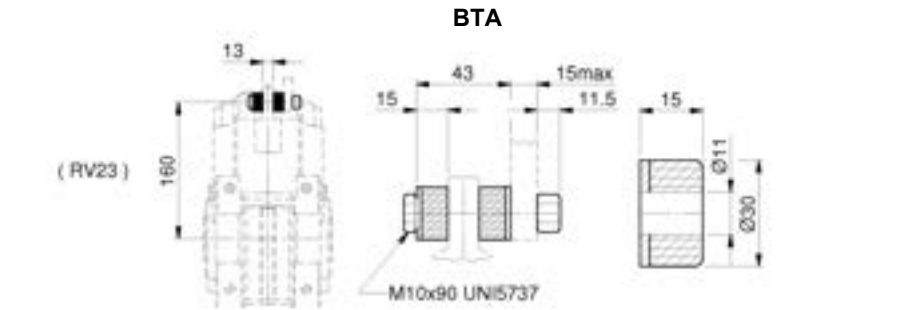
DFU-A

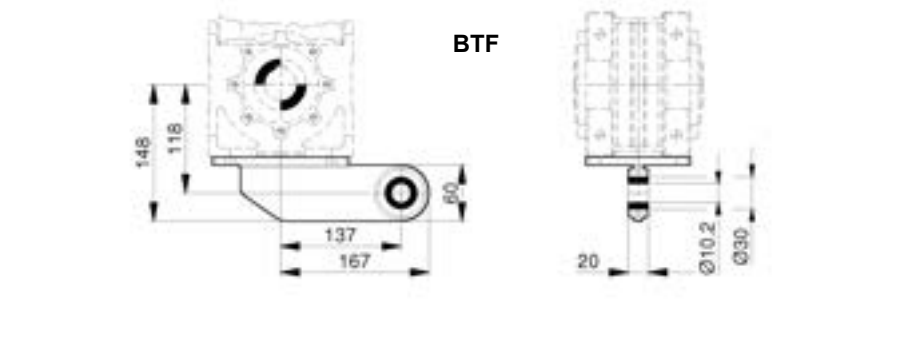
DFU-F

Not binding dimensions and weights

RO23 - RV23
Torque arms

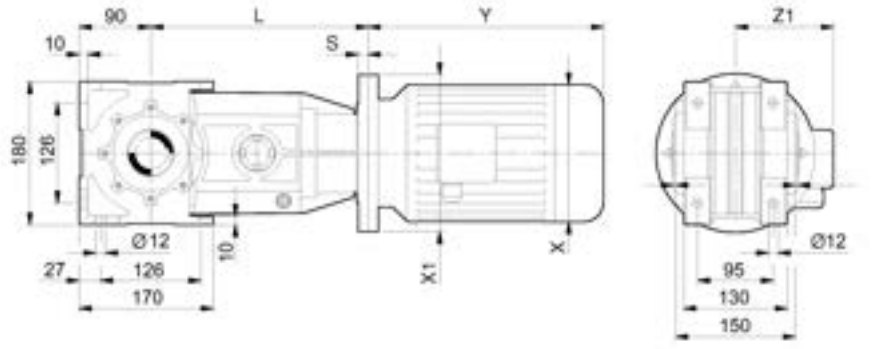




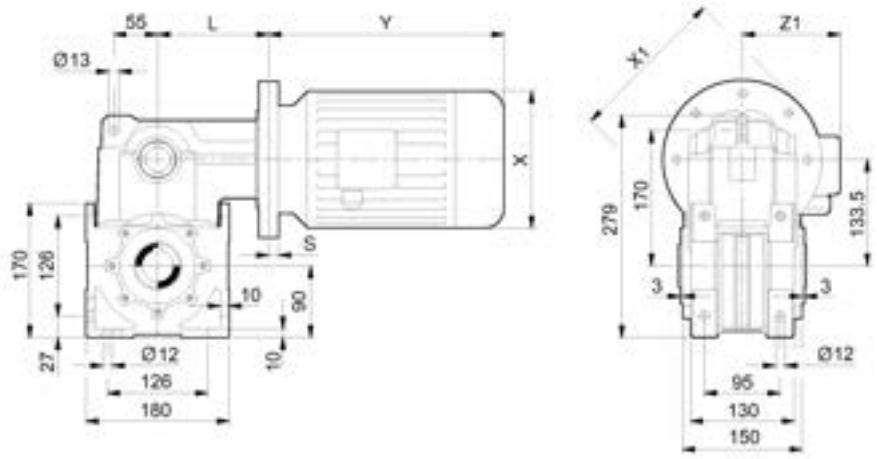


Not binding dimensions and weights

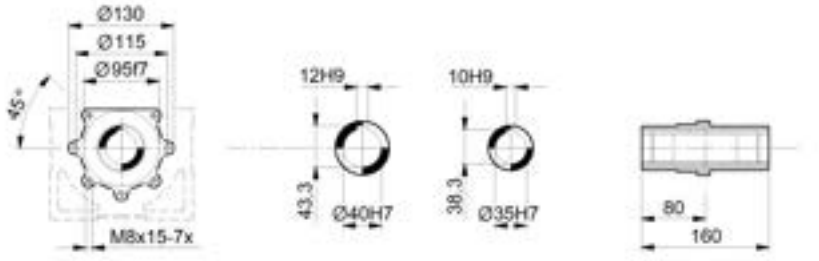
RO33 - RV33



MRO33
FRO33



MRV33
FRV33



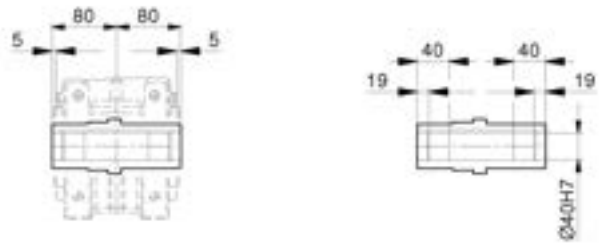
AC40
AC35

IEC	71	80	90 S	90 L	100	112	
X / Y / Z1	140/220/121	159/238/138	176/255/149	176/280/149	195/314/160	219/328/172	
X1 (B5) / S	160/15,5	200/15,5	200/18,5	200/18,5	250/16,5	250/16,5	
X1 (B14) / S	- - -	120/15,5	140/15,5	140/15,5	160/15,5	160/15,5	
L (RO33)	272	272	275 (272)	275 (272)	273 (272)	273 (272)	
L (RV33)	138.5	144.5	138.5 (141.5)	138.5 (141.5)	139.5 (138.5)	139.5 (138.5)	

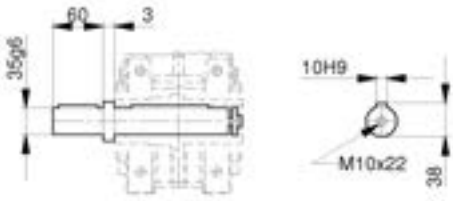
Not binding dimensions and weights

RO33 - RV33
Output shafts

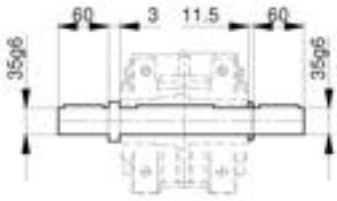
AC



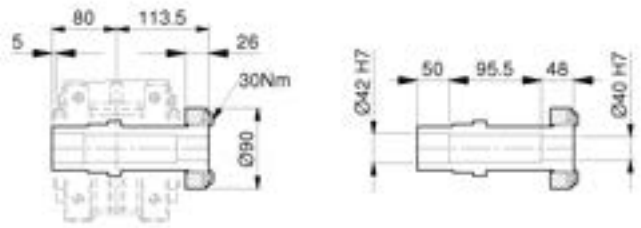
AS



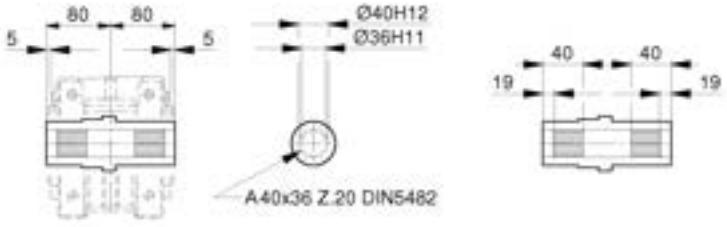
AD



ACC



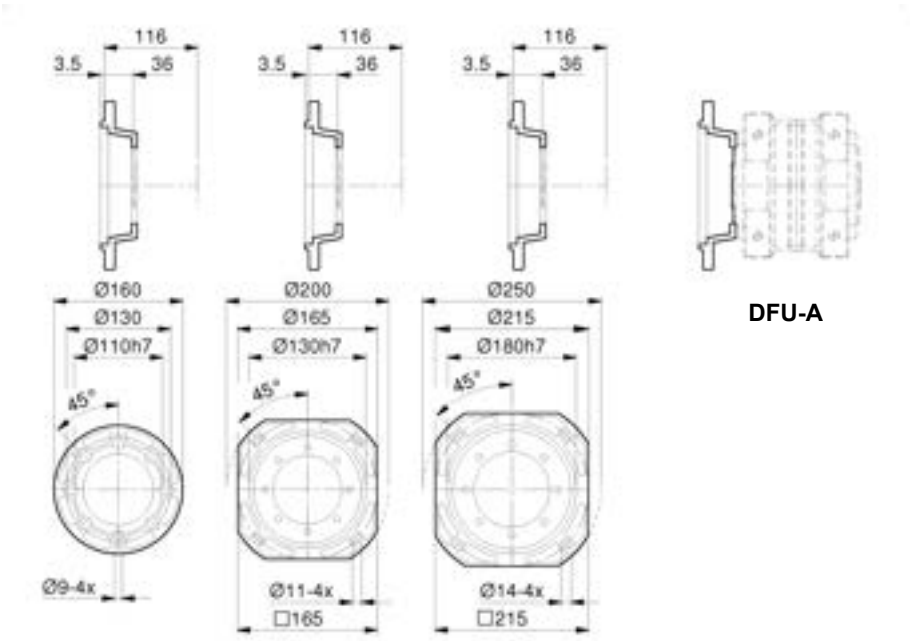
*** ACS**



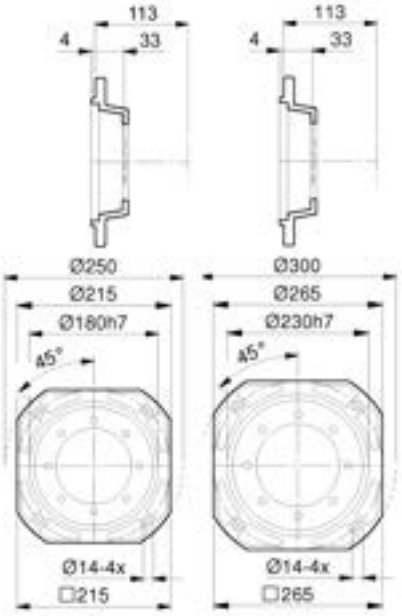
(*) ACS version on demand
Machine shaft dimensions: pages 77-79

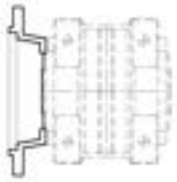
Not binding dimensions and weights

RO33 - RV33
Output flanges



DFU-A

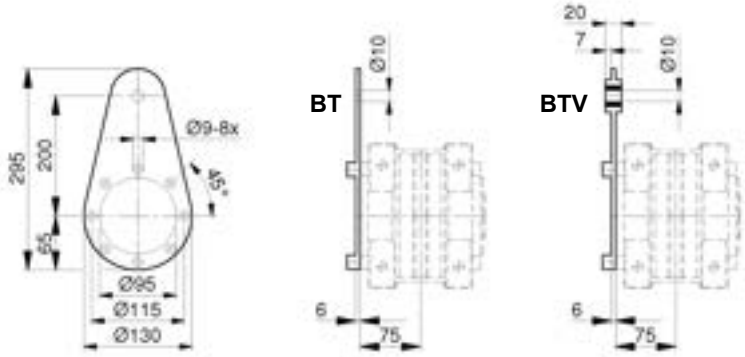




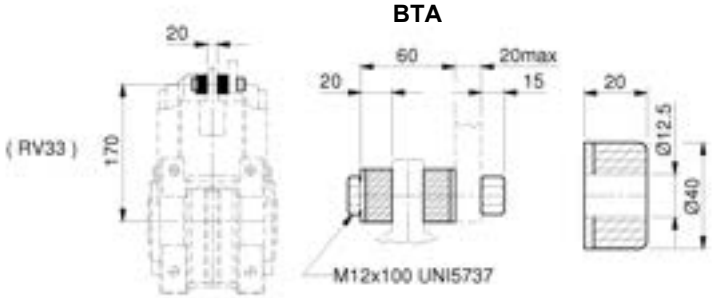
DFU-F

Not binding dimensions and weights

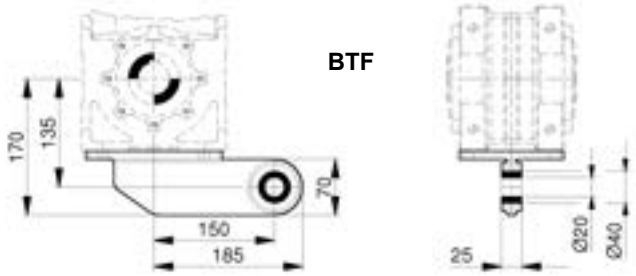
RO33 - RV33
Torque arms



BTA

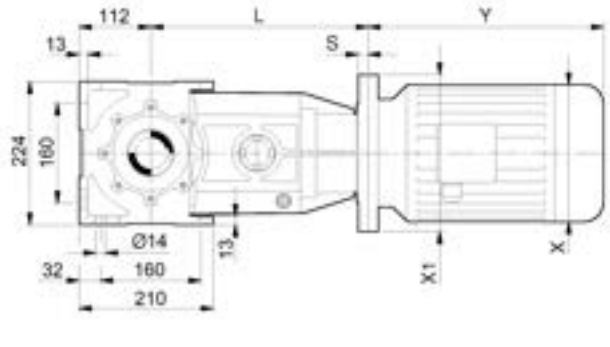


BTF

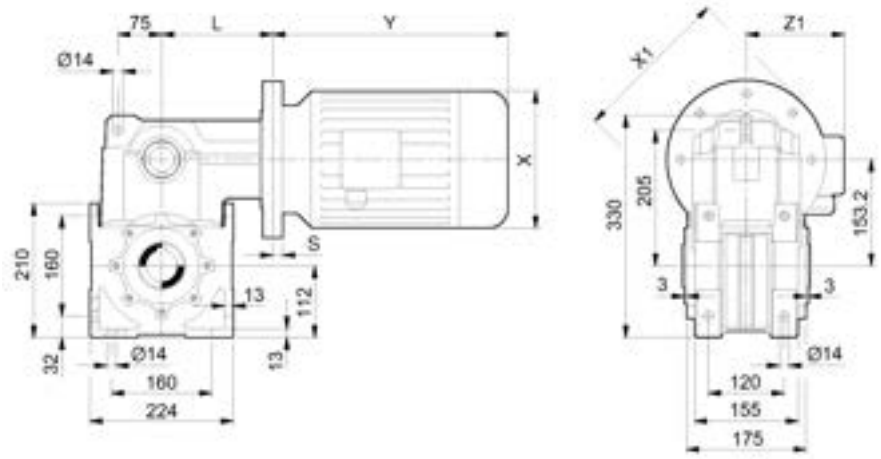


Not binding dimensions and weights

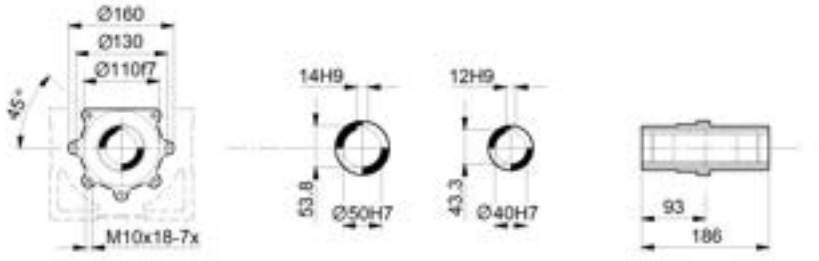
RO43 - RV43



MRO43
FRO43



MRV43
FRV43



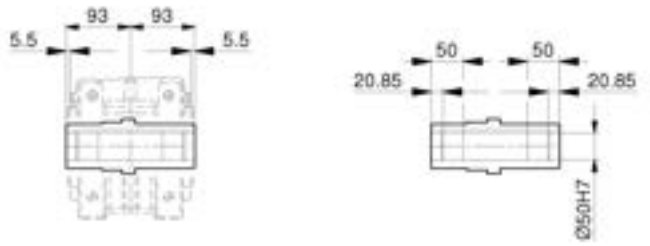
AC50
AC40

IEC	71	80	90 S	90 L	100	112	
X / Y / Z1	140/220/121	159/238/138	176/255/149	176/280/149	195/314/160	219/328/172	
X1 (B5) / S	160/18	200/18	200/18	200/18	250/18.5	250/18.5	
X1 (B14) / S	- - -	- - -	- - -	- - -	160/18	160/18	
L (RO43)	308	308	308 (310)	308 (310)	308.5 (308)	308.5 (308)	
L (RV43)	155	155	155 (157)	155 (157)	155.5 (155)	155.5 (155)	

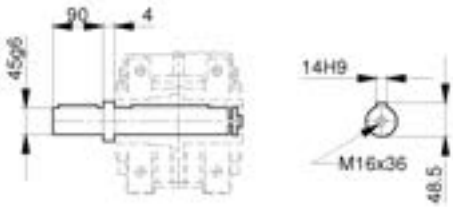
Not binding dimensions and weights

RO43 - RV43
Output shafts

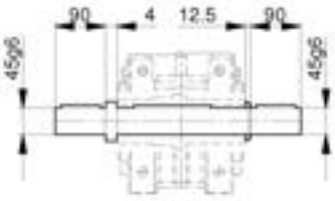
AC



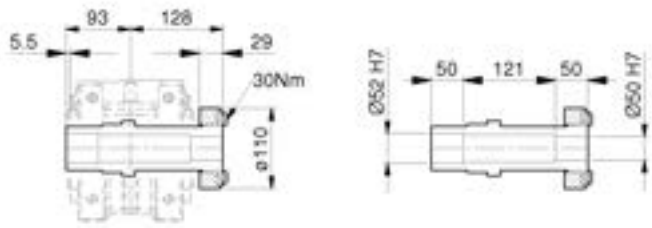
AS



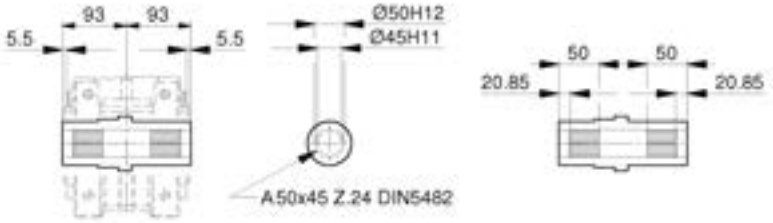
AD



ACC



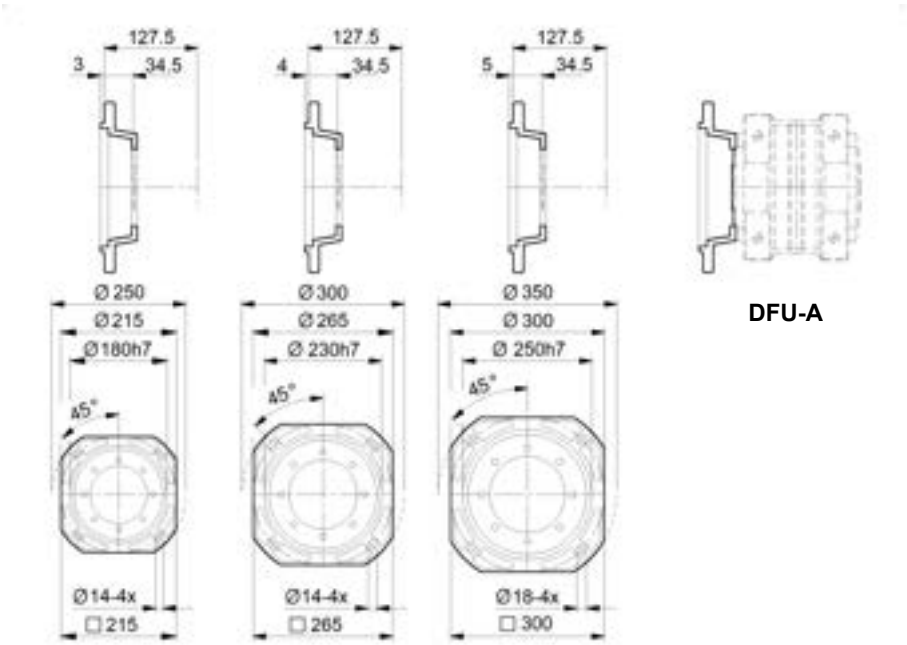
*** ACS**



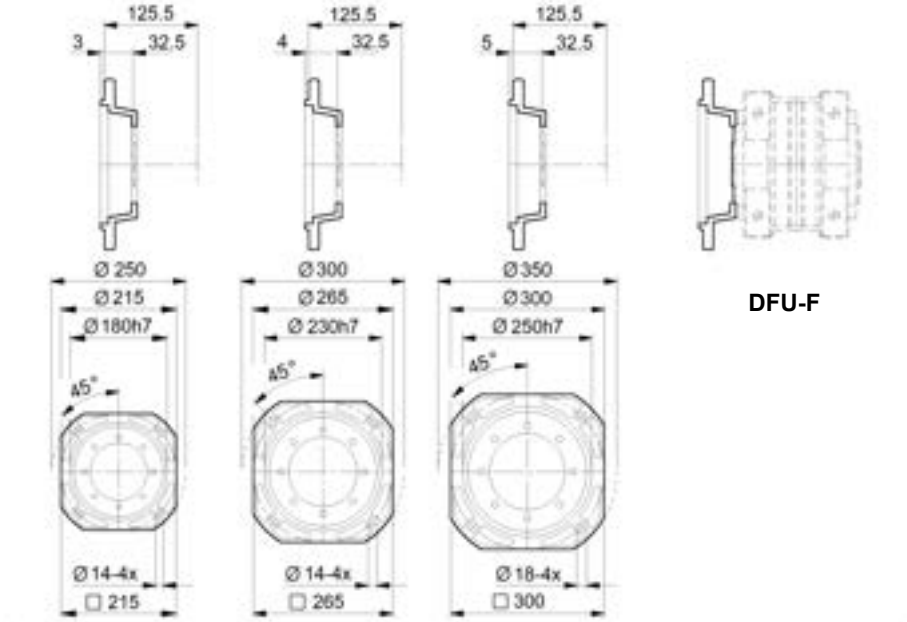
(*) ACS version on demand
Machine shaft dimensions: pages 77-79

Not binding dimensions and weights

RO43 - RV43
Output flanges



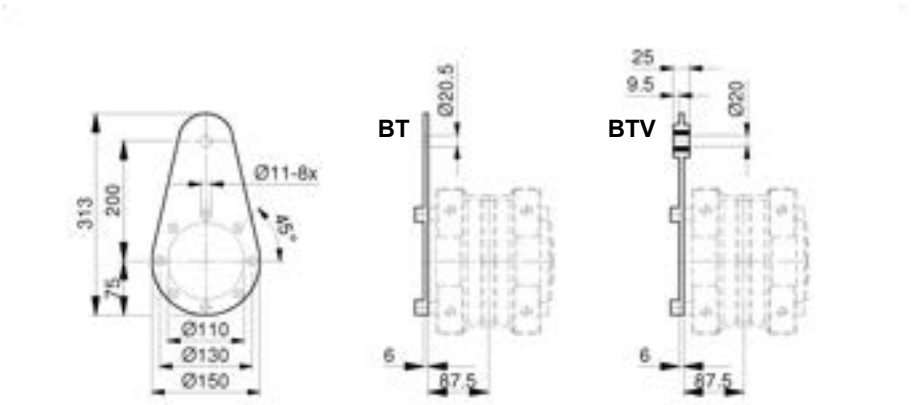
DFU-A



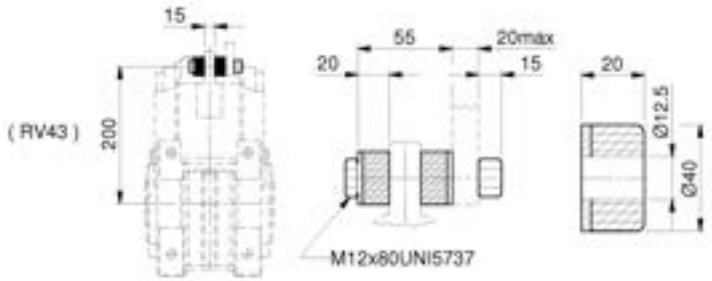
DFU-F

Not binding dimensions and weights

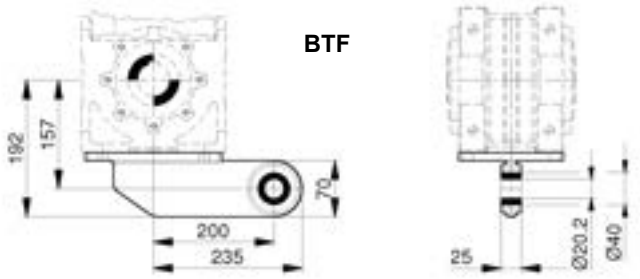
RO43 - RV43
Torque arms



BTA

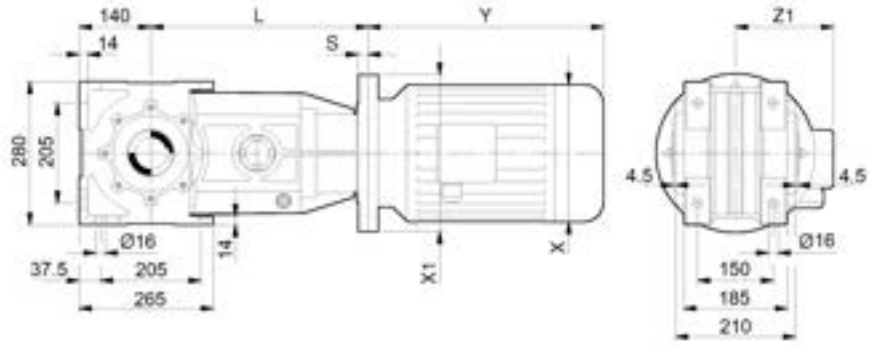


BTF

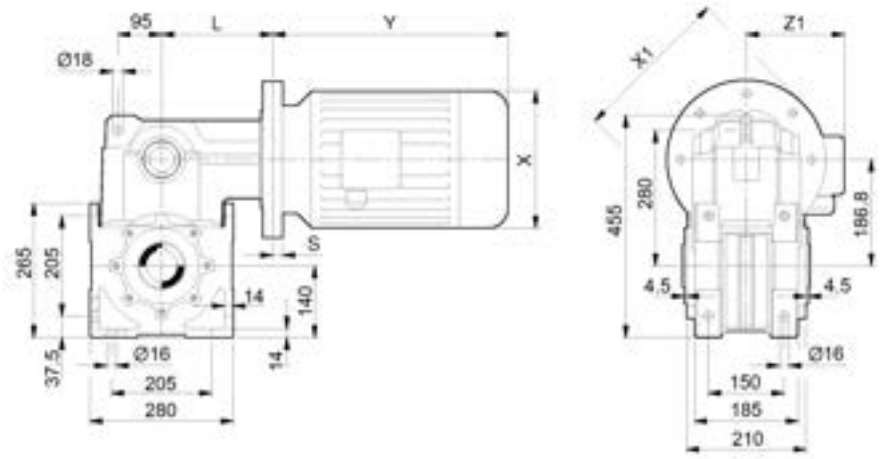


Not binding dimensions and weights

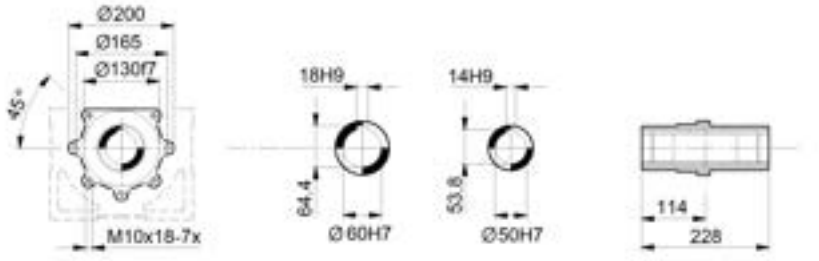
RO53 - RV53



MRO53
FRO53



MRV53
FRV53



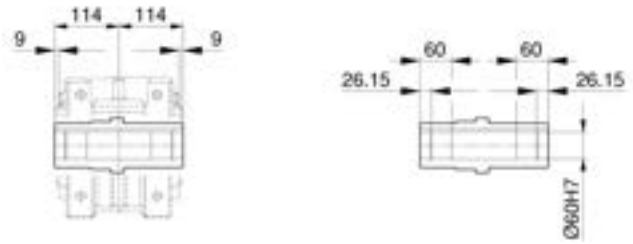
AC70
AC60

IEC	80	90 S / L	100	112	132 S / M	160	180
X / Y / Z1	159/238/138	176/255-280/149	195/314/160	219/328/172	258/368-410/192	310/486/235	320/580/245
X1 (B5) / S	200/22	200/22	250/22	250/22	300/22	350/35	350/35
X1 (B14) / S	- - -	- - -	- - -	- - -	200/22	250/22	300/22
L (RO53)	379	379	379	379	379	392 (379)	392 (379)
L (RV53)	190.5	190.5	190.5	190.5	190.5	203.5 (190.5)	203.5 (190.5)

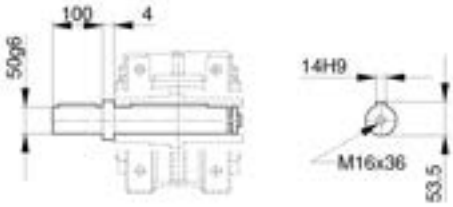
Not binding dimensions and weights

RO53 - RV53
Output shafts

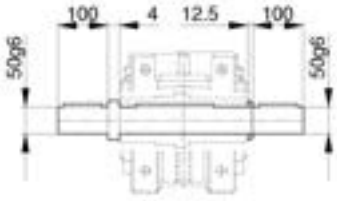
AC



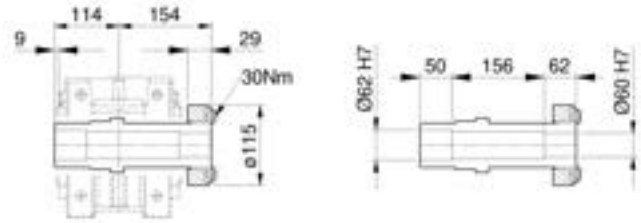
AS



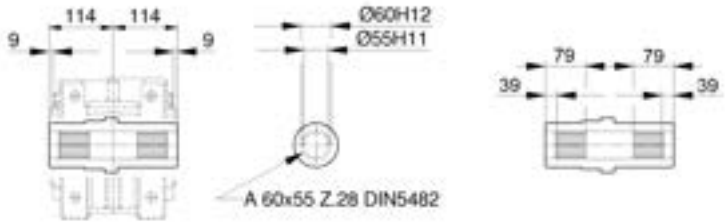
AD



ACC



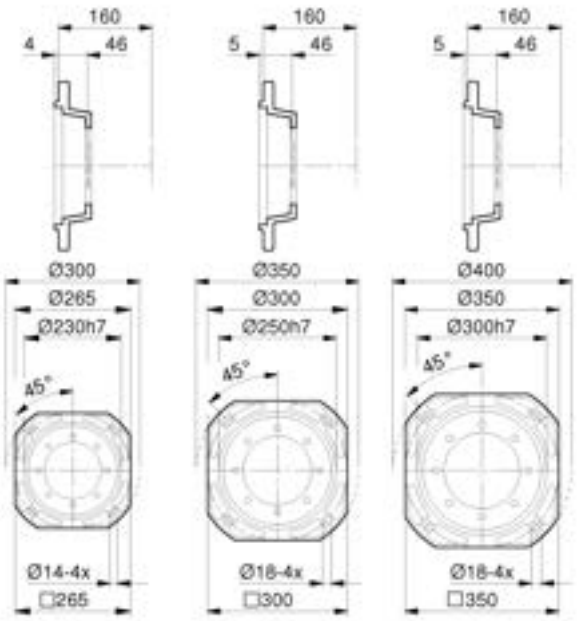
*** ACS**

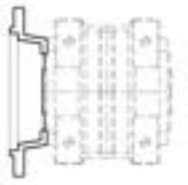


(*) ACS version on demand
Machine shaft dimensions: pages 77-79

Not binding dimensions and weights

RO53 - RV53
Output flanges

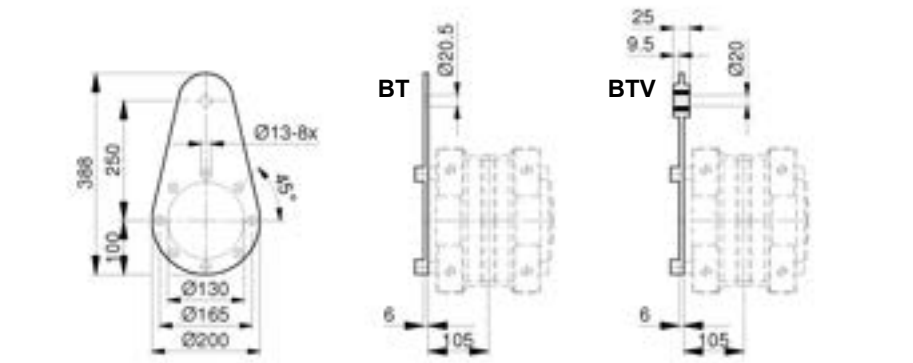




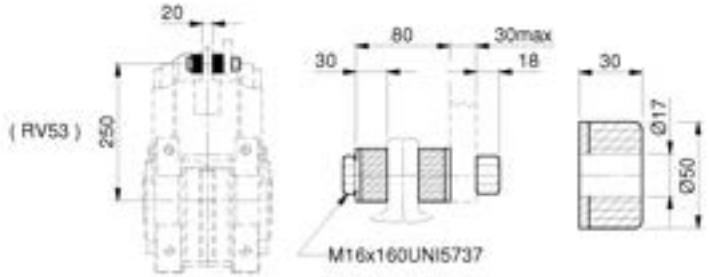
DFU

Not binding dimensions and weights

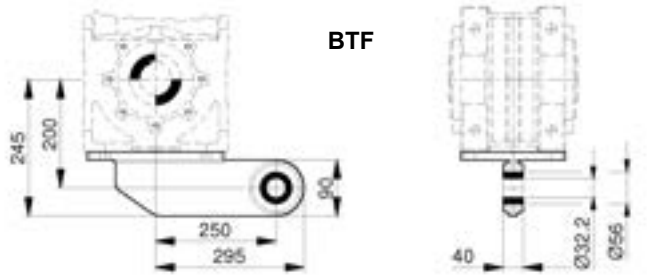
RO53 - RV53
Torque arms



BTA



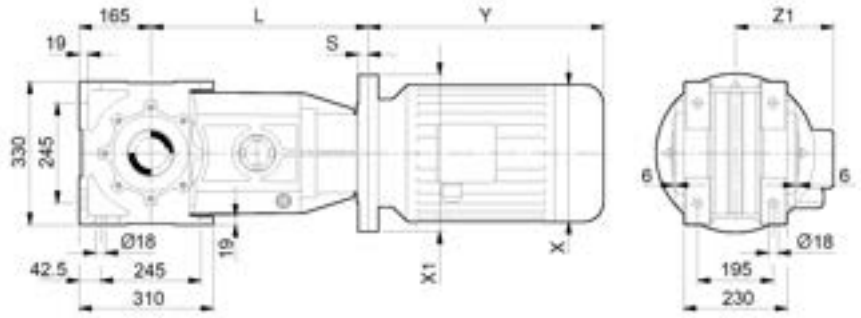
BTF



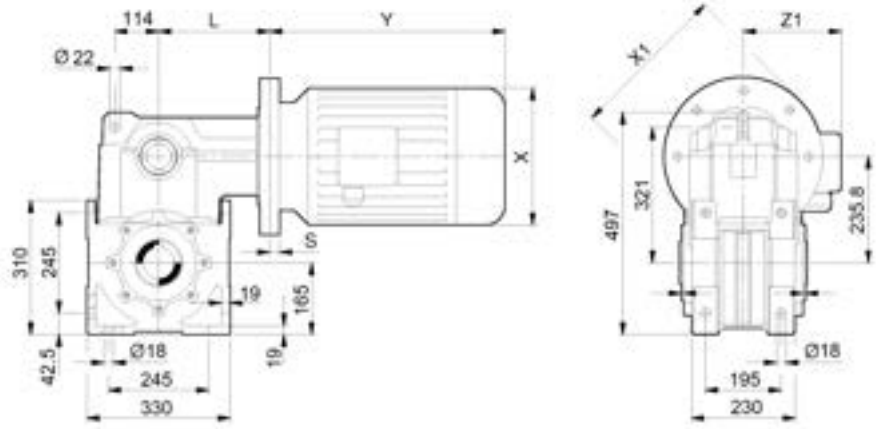
N.B. - BT and BTV versions are available for M_2 ≤1200 Nm.
For higher torques, please contact the Sales Technical Service.

Not binding dimensions and weights

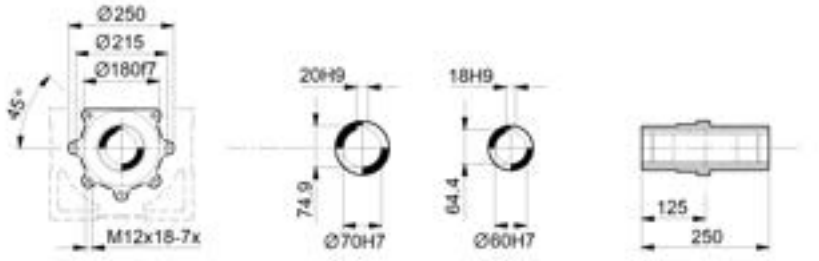
RO63 - RV63



MRO63
FRO6



MRV63
FRV63



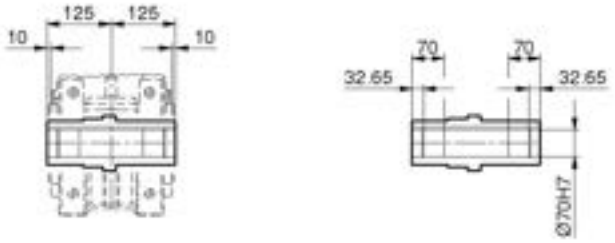
AC70
AC60

IEC	80	90 S / L	100	112	132 S / M	160	180
X / Y / Z1	159/238/138	176/255-280/149	195/314/160	219/328/172	258/368-410/192	310/486/235	320/580/245
X1 (B5) / S	200/22	200/22	250/22	250/22	300/22	350/35	350/35
X1 (B14) / S	- - -	- - -	- - -	- - -	200/22	250/22	300/22
L (RO63)	449.5	449.5	449.5	449.5	449.5	462.5	462.5
L (RV63)	205.5	205.5	205.5	205.5	205.5	218.5 (205.5)	218.5 (205.5)

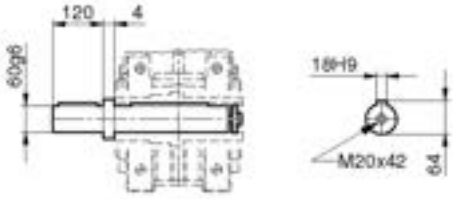
Not binding dimensions and weights

RN 62-63
Output shafts

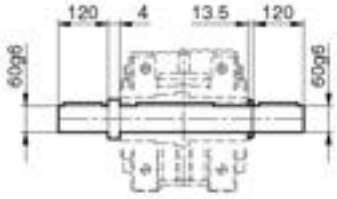
AC



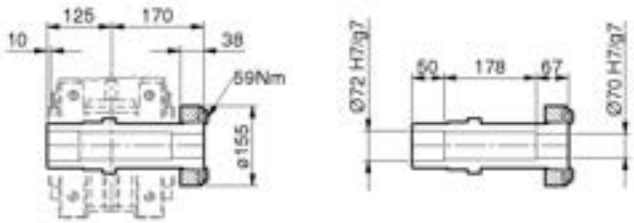
AS



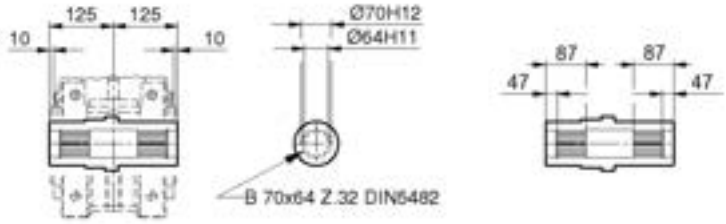
AD



ACC



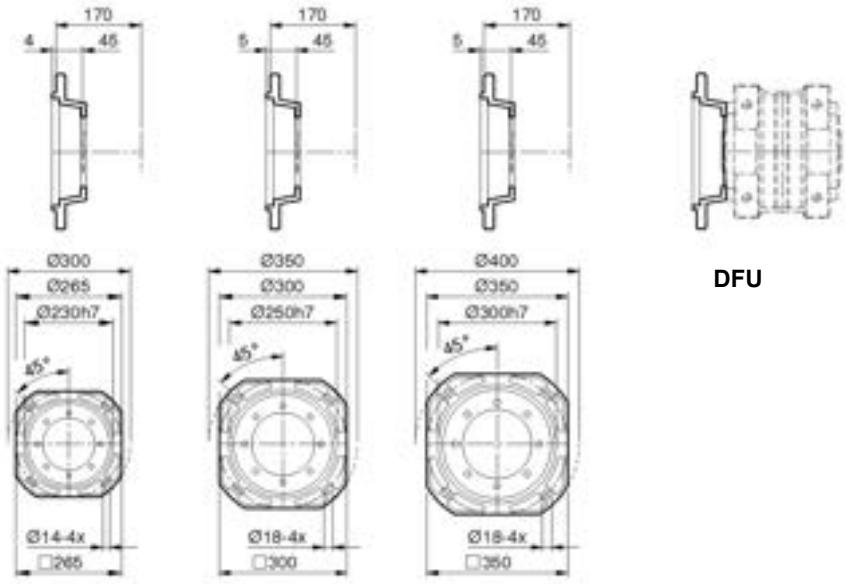
*** ACS**



(*) ACS version on demand
Machine shaft dimensions: pages 77-79

Not binding dimensions and weights

RO63 - RV63
Output flanges

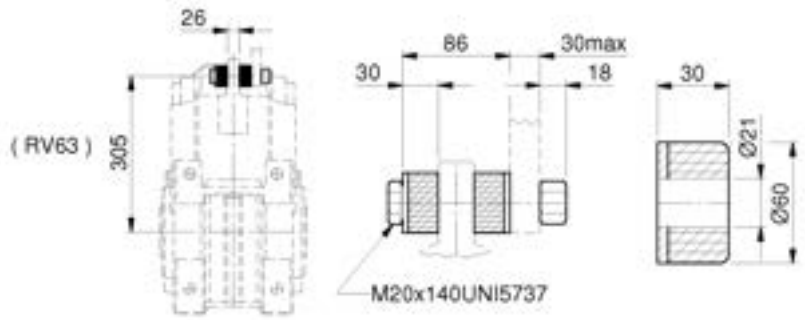


DFU

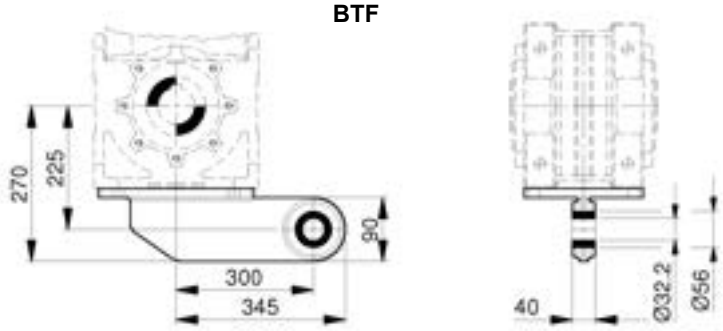
Not binding dimensions and weights

RO63 - RV63
Torque arms

BTA

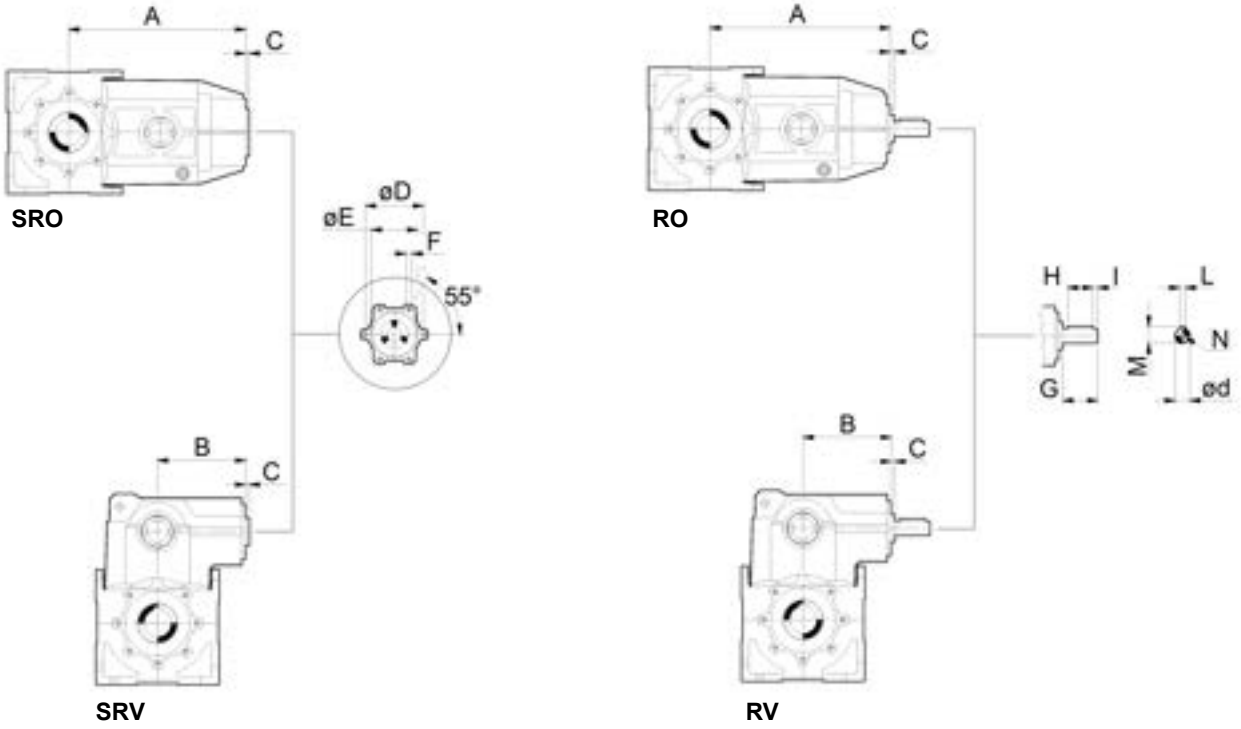


BTF



Not binding dimensions and weights

SRO - RO
SRV - RV
Input details

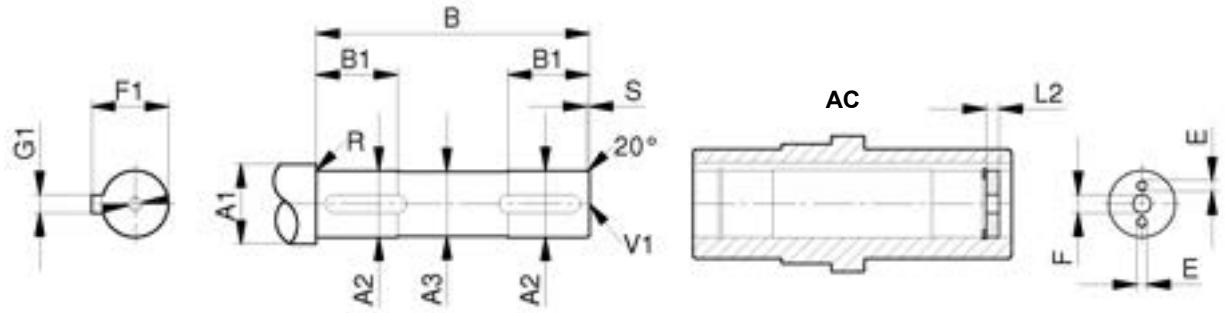


Size	Coupling	A	B	C	D	d h6	E g6	F	G	H	I	L H9	M	N
13	G5	184	94	3.5	70	16	60	M6x10 6x	40	35	2.5	5	18	M8x19
23	G6	224	116	5	85	19	70	M8x18 6x	40	35	2.5	6	21.5	M8x19
33	G6	256.5	123	5.5	100	24	80	M8x25 6x	50	40	5	8	27	M8x19
43	G6	290	137	6	106	28	90	M8x18 6x	60	50	5	8	31	M10x22
53	* GS8	357	168.5	5	140	38	120	M10x20 6x	80	70	5	10	43	M10x22
63	* GS8	427.5	191.5	5	140	48	120	M10x20 6x	100	90	5	14	51.5	M10x22

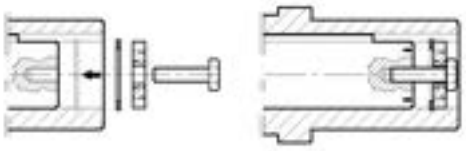
(*) - Coupling GS8: steel, key and locking grub screw

Not binding dimensions and weights

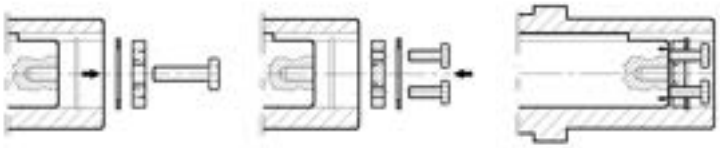
AC
Standard hollow output shaft



- Mounting



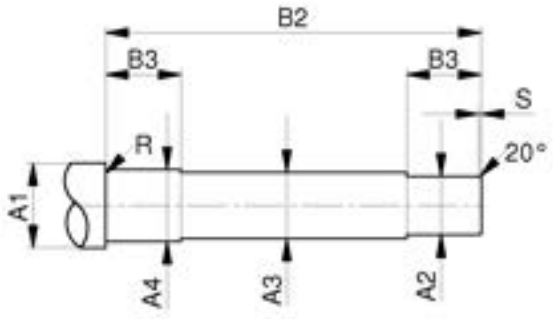
- Disassembly



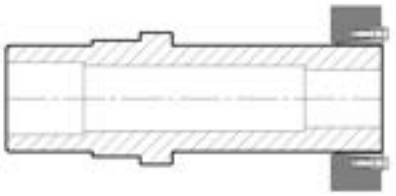
Size	A1	A2	A3	B	B1	E	F	F1	G1	L2	R	S	V1
RO13 - RV13	40	**30**	29	98	35	M6	11	33	8	5,5	1	2	M10x22
	35	**25**	24	98	35	M6	9	28	8	4,5	1	2	M8x19
RO22 - RV23	45	**35**	34	113,5	40	M8	11	38	10	7	1	2	M10x22
	40	**30**	29	113,5	40	M6	11	33	8	7	1	2	M10x22
RO32 - RV33	50	**40**	39	133,5	45	M8	13	43	12	7	1	2	M12x28
	45	**35**	34	133,5	45	M8	11	38	10	7	1	2	M10x22
RO42 - RV43	60	**50**	49	155,5	55	M10	17	53,5	14	8	1,5	3	M16x36
	55	**45**	44	155,5	55	M10	17	48,5	14	8	1,5	3	M16x36
	50	**40**	39	155,5	55	M8	13	43	12	8	1,5	3	M12x28
RO52 - RV53	75	**60**	59	185	65	M12	17	64	18	12,5	2	4	M16x36
	70	**55**	54	185	65	M12	17	59	16	12,5	2	4	M16x36
	65	**50**	49	185	65	M10	17	53,5	14	12,5	2	4	M16x36
RO62 - RV63	85	**70**	69	205	70	M12	21	74,5	20	12,5	2	4	M20x42
	80	**65**	64	205	70	M12	21	69	18	12,5	2	4	M20x42
	75	**60**	59	205	70	M12	21	64	18	12,5	2	4	M16x36

Not binding dimensions and weights

ACC
Hollow output shaft with shrink-disk



ACC



Size	A1	A2	A3	A4	B2	B3	R	S
RO13 - RV13	40	30	29	32	144	34	1	2
RO23 - RV23	45	35	34	37	167	39	1	2
RO33 - RV33	50	40	39	42	189	49	1	2
RO43 - RV43	60	50	49	52	220	49	1,5	3
RO53 - RV53	75	60	59	62	267	49	2	4
RO63 - RV63	85	70	69	72	294	49	2	4

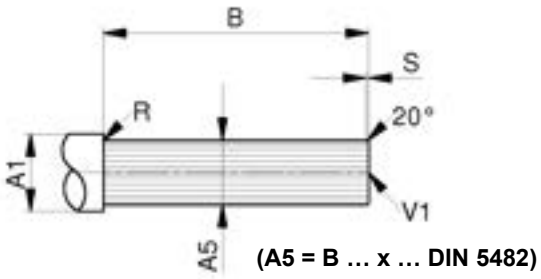
The shrink-disk fit relies upon the proven wedge principle to create a keyless mechanical interference fit.
Screw axial locking tension is converted into radial contact pressure on the shaft/hub connection, making the shrink fit steady.

Assembly
Carefully clean the shaft/hub contact surfaces and grease with a fine layer of oil. Tighten the screws gradually and evenly until the locking torque is reached.
Do not use lubricants containing molybdenum bisulphite that origins notable lowering of the friction coefficient. No axial hub shifting occurs as regards the shaft when are tightening the screws.

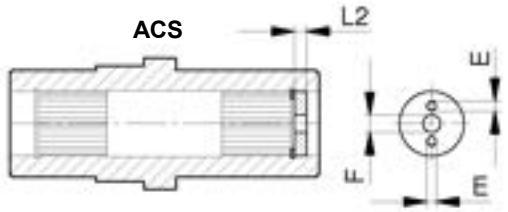
Disassembly
Loose the screws in a continuous and even way without removing the screws.
In case of further assembly, apply a lubricant paste on screws and tapered surfaces to guarantee a friction coefficient of 0.04.
Locking torques, tolerances and roughness according to manufacturer's specifications..

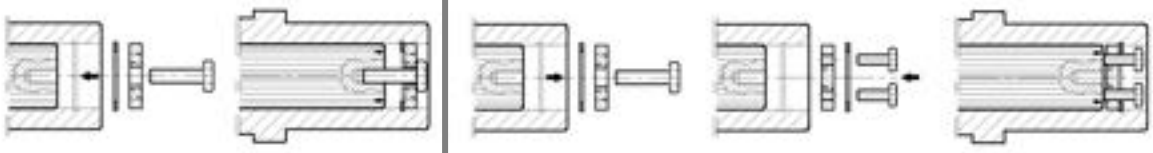
Not binding dimensions and weights

ACS
Spline hollow output shaft (on demand)



(A5 = B … x … DIN 5482)





Mounting

Disassembly

Size	A1	A5	B	E	F	L2	R	S	V1
RO13 - RV13	40	30x27	98	M6	11	5,5	1	2	M8x19
RO23 - RV23	45	35x31	113,5	M8	11	7	1	2	M10x22
RO33 - RV33	50	40x36	133,5	M8	13	7	1	2	M10x22
RO43 - RV43	60	50x45	155,5	M10	17	8	1,5	3	M16x36
RO53 - RV53	75	60x55	185	M12	17	12,5	2	4	M16x36
RO63 - RV63	85	70x64	205	M12	21	12,5	2	4	M20x42

Spline shafts have teeth that mesh with grooves in a mating piece and transfer torque to it, maintaining the angular correspondence between them.
As alternative to key/keyway connection, splines provide higher torque and longer fatigue lifetime.

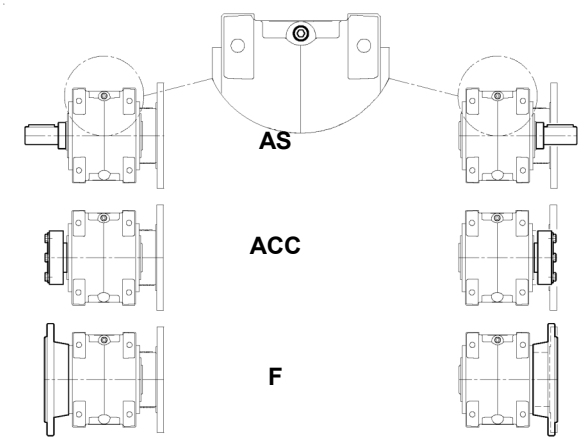
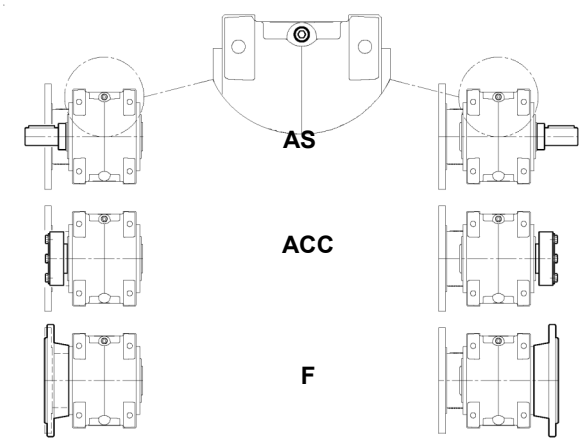
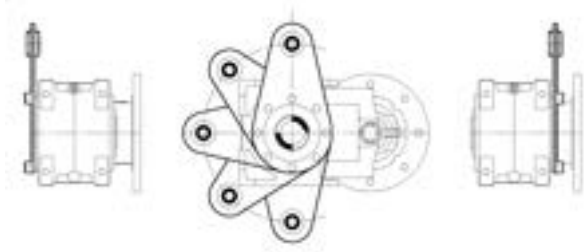
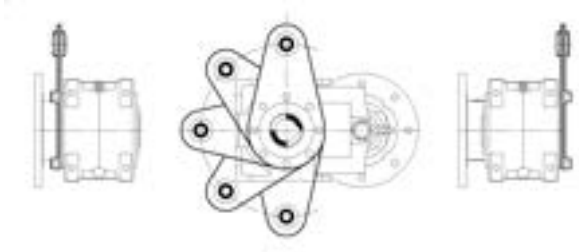
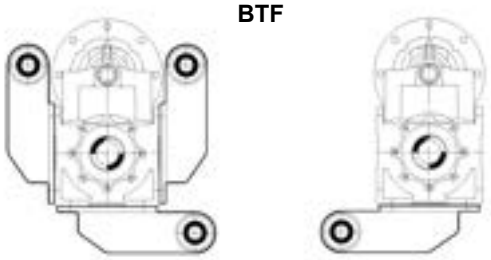
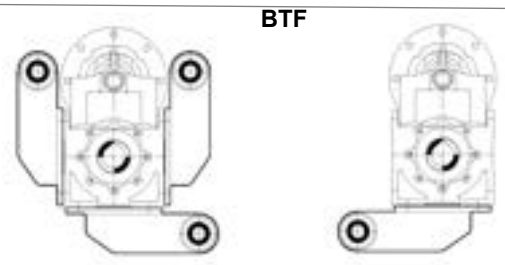
Not binding dimensions and weights

AS - ACC - F - BT - BTV - BTF
Accessory position

Accessory positions, here defined as RH and LH, refer to H1 mounting position at page 14 and are seen from the bottom side of the gearbox RN2 or RN3 accordingly.

The housing side with the screw as shown is the right identification of the reference side.

If the accessory is requested in-house assembled, the order is held-on until RH or LH side is defined.
For other mounting positions, please refer to the Customer Service.

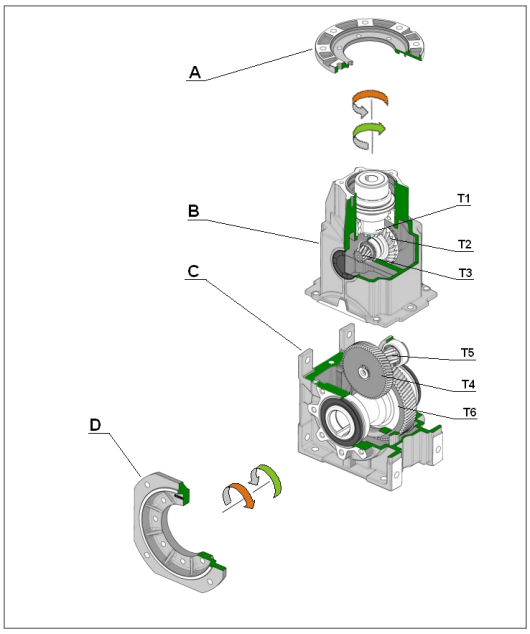
LH	RN 2	RH	LH	RN 3	RH
	AS ACC F			AS ACC F	
BT/BTV			BT/BTV		
					
BTF			BTF		
					

Component Parts
Rotation

RO - In-line version

A - Motor flange adapter
B - 3-stage input cover + T1, T 2, T3 gears
C - Housing + T4, T5, T6 gears
D - Output flange

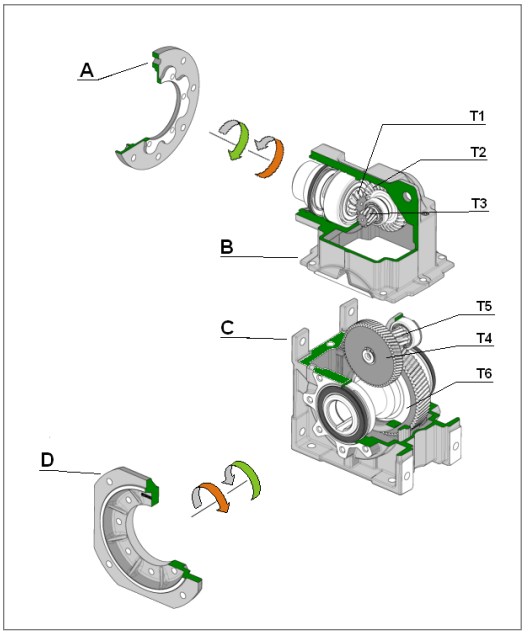
 - Input/output rotation



RV - Right angle version

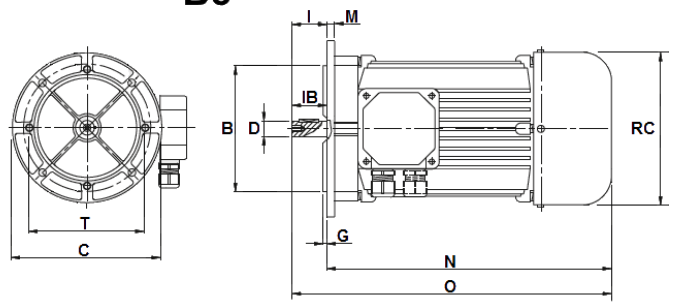
A - Motor flange adapter
B - 3-stage input cover + T1, T 2, T3 gears
C - Housing + T4, T5, T6 gears
D - Output flange

 - Input/output rotation

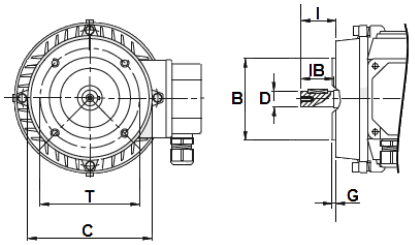


Motors

B5



B14



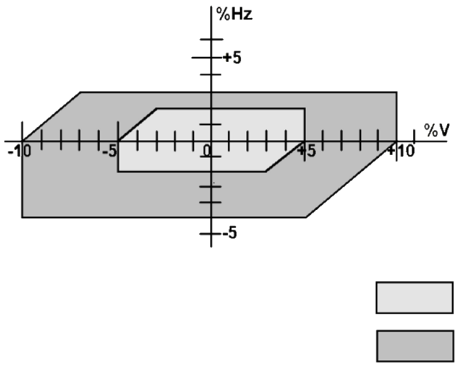
IEC

Size	2 - poles 2800 rpm		4 - poles 1400 rpm		6 - poles 900 rpm		Flange	Shaft	G	IB	N	O
	kW	kg	kW	kg	kW	kg	B / C / T	D x l				
T56A	0.09	2.6	0.06	2.9	- - -	- - -	B5 - 120 / 100 / 80	9 x 20	3.0	20	176	196
T56B	0,12	3.0	0.09	3.2	- - -	- - -	B14 - 80 / 65 / 50		2.5			
T63A	0.18	4.0	0.12	3.7	0.09	4.2	B5 - 140 / 115 / 95	11 x 23	3.0	23	197	220
T63B	0.25	4.2	0.18	4.2	0.12	4.5	B14 - 90 / 75 / 60		2.5			
T63C	0.37	4.7	0.25	4.7	- - -	- - -						
T71A	0.37	5.2	0.25	5.0	0.18	5.6	B5 - 160 / 130 / 110	14 x 30	3.5	30	211	241
T71B	0.55	6.0	0.37	5.8	0.25	6.0	B14 - 105 / 85/ 70		2.5			
T71C	0.75	7.0	0.55	6.5	0.37	6.5						
T80A	0.75	8.7	0.55	8.1	0.37	6.8	B5 - 200 / 165 / 130	19 x 40	3.5	40	250	290
T80B	1.1	10	0.75	9.1	0.55	9.6	B14 - 120 / 100 / 80		3.0			
T80C	1.5	11.2	1.1	11	0.75	10						
T90S	1.5	12	1.1	11.7	0.75	11.3	B5 - 200 / 165 / 130	24 x 50	3.5	50	262	312
T90L	2.2	14.5	1.5	14.4	1.1	14.4	B14 - 140 / 115 / 95		3.0		287	337
T90LC	3	15	2.2	17.6	1.5	15.5						
T100A	3	20	2.2	17.6	1.5	18.8	B5 - 250 / 215 / 180	28 x 60	4.0	60	309	369
T100B	4	24	3	22.5	2.2	19.8	B14 - 160 / 130 / 110		3.5			
T112A	5.5	29.3	4	29	3	30	B5 - 250 / 215 / 180	28 x 60	4.0	60	335	395
T112MC	7.5	34	5.5	35.7	- - -	- - -	B14 - 160 / 130 / 110		3.5			
T132S	7.5	38.4	5.5	39	4 5.	47.6	B5 - 300 / 265 / 230	38 x 80	4.0	80	357	437
T132M	9.2	48.2	7.5	48.5	5	50.7	B14 - 200 / 165 / 130		4.0		395	475
T132ML	11	52.5	9.2	56.5	7.5	47			---		421	501
T132MC	- - -	- - -	11	64	- - -	- - -						
T132S	7.5	38.4	5.5	39	4 5.	47.6	B5 - 300 / 265 / 230	38 x 80	4.0	80	357	437
T132M	9.2	48.2	7.5	48.5	5	50.7	B14 - 200 / 165 / 130		4.0		395	475
T132ML	11	52.5	9.2	56.5	7.5	47			---		421	501
T132MC	- - -	- - -	11	64	- - -	- - -						
T160M	15	77.5	11	73	7.5	70.0	B5 - 350 / 300 / 250	42 x 110	5.0	110	530	640
T160L	18.5	92	15	88.5	11	87.0	B14 - 250 / 215 / 180		4.0			
T160MC	22	107	18.5	97.5	15	124						
T180M	22	121	18.5	118	15	124	B5 - 350 / 300 / 250	48 x 110	5.0	110	620	730
T180L	- - -	- - -	22	128	- - -	- - -						

Not binding dimensions and weights

Electric motor specifications

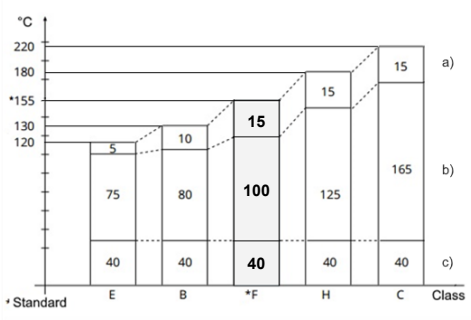
Voltage and frequency



Rated values	Usable values
230/400V 50Hz	240/415V 50Hz 220/380V 50Hz
277/480V 60 Hz	265/460V 60Hz 260/440V 60Hz

Duty
normal
heavy but limited

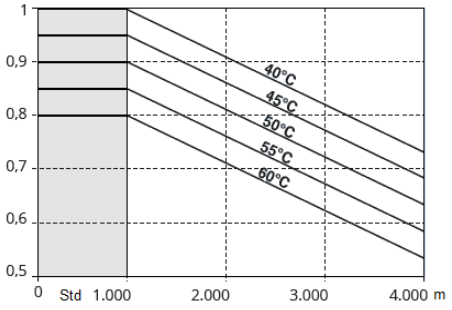
Insulation class



Temperatures

a) - safety margin
b) - admissible temperature
c) - conventional ambient temperature

Factors of Altitude and Temperature



Conventional environment

1000 m - altitude above sea level
40 °C - ambient temperature
-15 °C - min. ambient air temperature
≤ 60% - relative humidity

2014/34/EU ATEX

The European Directive 2014/34/EC-ATEX relates not only to electric devices but to all the machines and driving units destined, alone or combined, to operate in potentially explosive environments within European Community territory.

The gearboxes are identified as «components» in the Directive and therefore, deprived of their autonomous function but essential for the operation of equipment and protective systems intended for production, transport, storage, measurement, adjustment and conversion of energy and transformation of materials that, due to their own flammability potential, are likely to trigger an explosion.

The gearboxes VARVEL-ATEX are manufactured
- with metallic housings and covers, containing the driving gears fitted on ball or roller bearings;
- FKM-Fluor-elastomer (Viton) oil seals on input and output shafts;
- the needed oil quantity to ensure the unit operation;
- sealed thread screws with sealing paste.

VARVEL RD Series conforms to design directions required for
- Group II
- Category 2 and 3
  - zones 1 and 2 for operation in zones with risk of explosion in presence of gas
  - zones 21 and 22 for operation in zones with risk of explosion in presence of combustible dust

The VARVEL-ATEX products are marked for the
- key/keyway input version

CE Ex **II 2 G Ex h IIC T4 Gb IP66 T_{amb}** -20 /+55°C
II 2 D Ex h IIIC T135°C Db IP66 T_{amb} -20 /+55°C

key to ATEX Code

II	- Group II (surface industries)
2, 3	- Category (2, 3)
G, D	- Explosive environment (gas, dust)
Ex h	- Mode of protection
IIC, IIIC	- Group of explosion (gas, dust)
T4	- Class of temperature (gas)
T 135°C	- Max. temperature of surface (dust)
Gb, Db	- EPL - Explosion Protection Level (gas, dust)
IP66	- Protection of gearbox
T_{amb}	- Ambient temperature -20 /+55 °C

Note - Gases with ignition temperature higher than or equal to Class T4=135 °C are listed on the following page 86.

Warning !

VARVEL-ATEX gearboxes
are not certified for operation in **hatched areas**

2014/34/EU ATEX
Substances, Zones, Categories, EPL

Substances	Zones	Categories			EPL (Equipment Protection Level)		
Gas, Vapours, Cloud	0	1G			Ga		
	1		2G			Gb	
	2			3G			Gc
Dust	20	1D			Da		
	21		2D			Db	
	22			3D			Dc

Key code		
Zona	0	Continuous occurrence of explosive gas
	1	Occasional occurrence of explosive gas
	2	Unlikely occurrence of explosive gas
	20	Continuous occurrence of explosive dust
	21	Occasional occurrence of explosive dust
	22	Unlikely occurrence of explosive
Categoria	1	Equipment with very high protection level (1G, 1D)
	2	Equipment with high protection level (2G, 2D)
	3	Equipment with normal protection level (3G, 3D)
EPL	a	Very high level of protection (Ga, Da)
	b	High level of protection (Gb, Db)
	c	Normal level of protection (Gc, Dc)

2014/34/EU ATEX
Gas Groups - Temperature Class

Temperature / Group	T1 450 °C	T2 300 °C	T3 200 °C	T4 135 °C	T5 100 °C	T6 85 °C
I	*Natural gas (Firedamp)					
II A	Ethyl acetate Methyl acetate Acetone Acetic acid Methyl acid Ammonia Benzene Benzol Chlorine methylene Chlorine ethylene Ethane Methane Methanol Carbon monoxide Naphthalene Propane Toluene Xylene	Butyl acetate Propyl acetate Amyl alcohol Ethyl alcohol Isobutyl alcohol Methyl alcohol n-butyl alcohol Acetic anhydride Cyclohexanone Liquefied petroleum gas Natural gas Isopropanol Mono amyl acetate n-Butane	Cyclohexane Cyclohexane Decane Heptane Hexane Gasoil Kerosene Naphtha Pentane Oil **	Acetaldehyde Ethylic ether		
II B	Coke gas Water gas	1.3-butadiene Ethyl benzene Ethylene Ethylene oxide	Hydrogen sulphide Isoprene Oil **	Ethylic ether		
II C	Hydrogen	Acetylene				Ethyl nitrate Carbon sulphide

** - According to chemical composition

2014/34/EU ATEX
Declaration of Conformity

VARVEL SpA
Via 2 Agosto 1980, 9
I-40053 - Crespellano-Valsamoggia BO
Italy

dichiara sotto la propria responsabilità che il prodotto *declares on his own responsibility that the product*	**Riduttori** / ***Gearboxes*** **Serie/s RS, RT, RD, RP, XA, RN, RO-RV, RO2C**
al quale questa dichiarazione si riferisce, è conforme alla Direttiva *to which this declaration relates to, complies with the Directive*	**2014/34/EU (ATEX).**
La conformità è stata verificata sulla base dei requisiti delle norme o dei documenti normativi *The conformity is under observance of the standard documents*	**EN 1127-1: 2011** **EN ISO 80079-36:2016** **EN ISO 80079-37:2016**
Modo di protezione: *Type of protection:*	**II 2 G Ex h IIC T4 Gb** **II 2 D Ex h IIIC T135°C Db IP66** T_{amb} -20 / +55°C
I File Tecnici sono depositati presso l'Organismo Notificato di deposito del fascicolo tecnico *The Technical Files are deposited at the Notified Body of Technical File Deposit*	**ATEX 19 RS-RT** **ATEX 19 RD-XA-RP,** **ATEX 19 RN-RO-RV-RO2C** **0080 INERIS, F-60550 Verneuil-en-Halatte, France**

Firma autorizzata
Authorized Signature .....

(Funzione - *Function*) .....

Luogo e data dell'emissione
Place and Date of Issue **Crespellano-Valsamoggia, ../../....**

Under the terms of the Machine Directive 2006/42/EC and relevant Guidelines, the speed gearboxes and variators are considered as “machines’ separate elements not having a specific application and meant for being incorporated onto the machine. The complete machine and equipped with such components must comply with the essential and relevant requisites for safety and health preservation” of the mentioned Directive.

Installation
Check if the unit to be installed, is properly se-lected to perform the required function and that its mounting position complies with the order.
The nameplate reports such information.
Check mounting stability to ensure the unit runs without vibrations or overloads.

Running
The unit may be connected for clockwise or counter-clockwise rotation.
The unit must be stopped as soon as defective running or unexpected noise occur, remove the faulty part or return the unit to the factory for checking.
If the faulty part is not replaced, other parts can also be affected, causing more severe damage and making the identification of initial cause more difficult.

Maintenance
Although the units are no-load run tested in the factory before despatch, it is recommended not to run them at maximum load for the first 20-30 running hours to allow the proper running in.
The gearboxes are delivered already filled with long-life synthetic oil and, in case of replacement or topping, do not mix with mineral lubri-cants.

Handling
When hoisting, use relevant housing locations or eyebolts if provided, or foot or flange holes
Never hoist on any moving part.

Painting
Carefully protect oil seals, coupling faces and shafts when units are repainted.

Long-term storage
For storages longer than three months, apply anti-oxidants onto shafts and machined surfaces, and protective grease on oil seal lips.

Product’s Environmental Management
In conformity with Environmental Certification ISO 14001, we recommend the following to dispose of our products:
- scraped components of the units to be delivered to authorized centres for metal object collection;
- oils and lubricants drained from the units to be delivered to Exhausted Oil Unions;
- packages (pallets, carton boxes, paper, plastic, etc.) to lead into regeneration/recycling circuits as far as possible, by delivering separate waste classes to authorized companies.