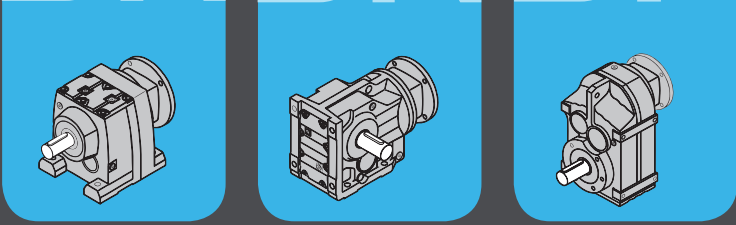
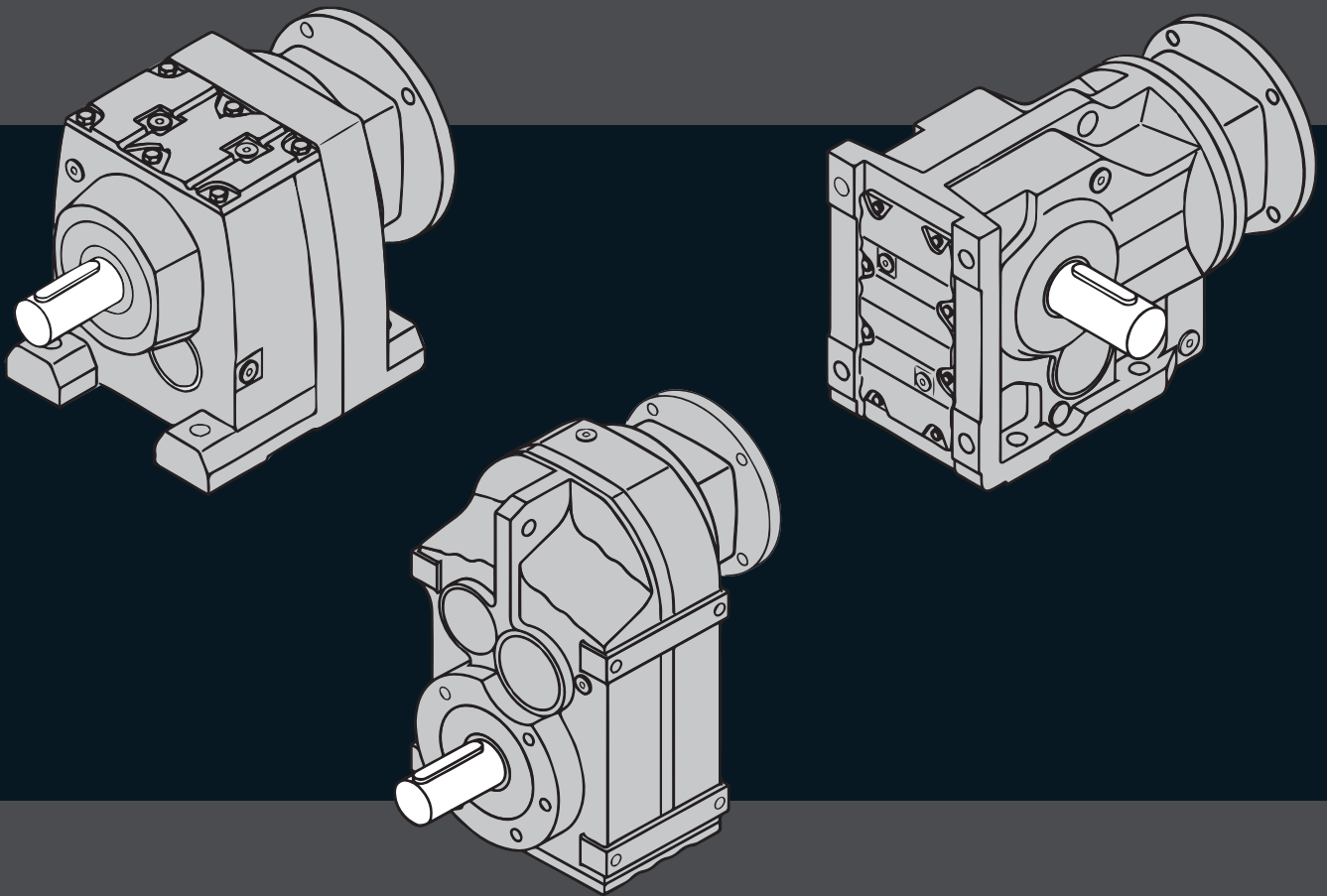


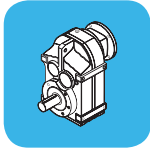
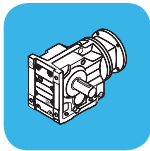
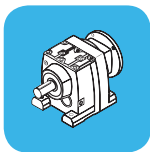
BR BK BF

BONVARIO



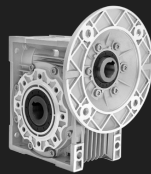
BEVEL & HELICAL GEARBOXES



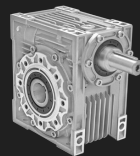


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WORM GEARBOXES



BL SERIES



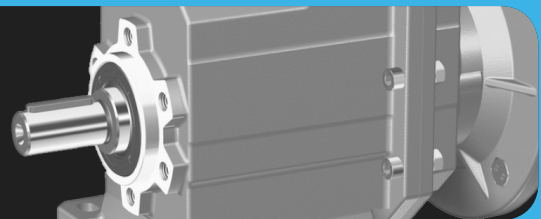
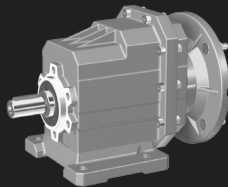
BVF SERIES



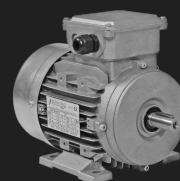
BW SERIES

HELICAL GEARBOXES

BON SERIES



ELECTRIC MOTORS



BM SERIES

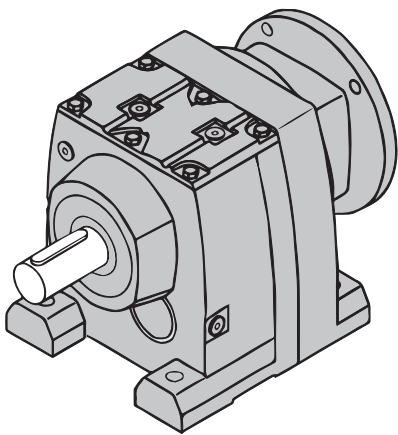
BONVARIO offers a wide range of power transmission solutions to satisfy all important industries: Helical, Bevel-Helical, Parallel Shaft Gearboxes and Geared Motors moreover, the range is completed with Worm Gearboxes, Variators and Electric Motors. **BONVARIO** solutions are reliable, robust and flexible, the experienced answers to requests of a more and more challenging global market.

BONVARIO BR/BK/BF series Gearboxes have been designed to be highly reliable even under heavy working conditions, and are particularly suited for applications involving high radial loads. The technological content of these gearboxes allows for an remarkable performance/lifespan ratio. These highly versatile gear units are successfully used in a vast number of industrial and civil applications. These Gear units offer excellent value for money and output torque/weight ratio, especially considering that they need very limited servicing.

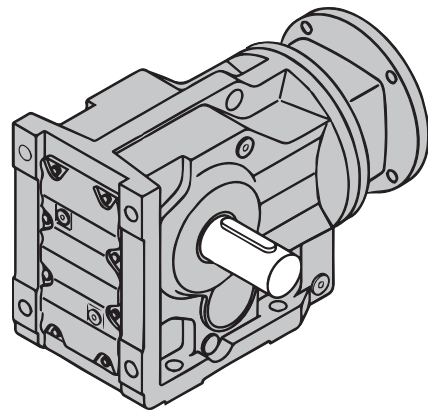
TECHNICAL FEATURES

- Gear hardened and tempered with shaved or ground profile
- Load capacity calculated to ISO6336 and verified according to AGMA 2001
- Excellent mechanical strength, particularly suitable to support high axial loads
- Gearing with 2 and 3 reduction stages suitable for power up to 200KW
- Cases in G200 cast iron for high strength and optimized with FEM analysis
- Low energy consumption, superior gearbox efficiency as high as 96%

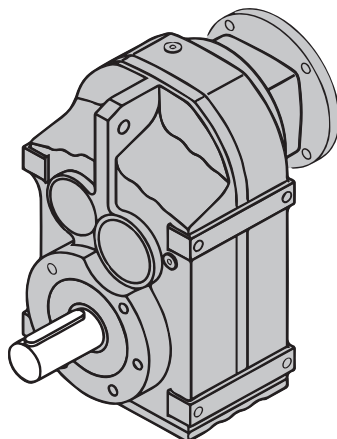
GEAR TYPE



HELICAL - BR Series



BEVEL HELICAL - BK Series



PARALLEL SHAFT HELICAL - BF Series

GENERAL INFORMATION

AMBIENT TEMPERATURE

Gear units and gearmotors from BONVARIO can be operated in a wide ambient temperature range. The following standard temperature ranges are permitted for filling the gear units according to the lubricant table:

Gear unit	Filled with	Permitted standard temperature range
B-R, B-K and B-F	CLP(CC) VG220	-15°C ... +40°C

The rated data of the gear units and gearmotors specified in BONVARIO catalogs refer to an ambient temperature of +35°C.

With proper selection, gear units and gearmotors from BONVARIO can operate from -40°C to +60°C. Selection must consider special operating conditions and use appropriate lubricants and seals. It is especially important for the following gear units:

- B-R, B-K, B-F gear units > size 87 with small ratios

ALTITUDE

Due to the low air density at high altitudes, heat dissipation on the surface of motors and gear units decreases. The rated data listed in the catalog applies to an installation altitude of maximum 1000 meter above sea level, while selecting a gear unit one must consider installation altitudes of more than 1000 meter feet to ensure proper cooling.

POWER AND TORQUE

The power and torque ratings listed in the catalogs refer to mounting position M1 and similar mounting positions in which the input stage is not completely submerged in oil. In addition, the gear units are assumed to be standard versions with standard lubrication and normal ambient conditions.

NOISE

The noise levels of all BONVARIO gear units are well within the maximum permitted noise levels set forth in the VDI guideline 2159 for gear units.

AMBIENT AIR FLOW

Gear units and gearmotors must be mounted on the driven machine in such a way that both axially and radially there is enough space left for unimpeded air flow.

COMPOUND GEAR UNITS

Particularly low output speeds are possible by using a multi-stage gear unit. These units contain an additional helical gear unit (B-RF) on the input in order to achieve much higher ratios than those in a single gear unit.

It may be necessary to limit the motor power or to provide torque overload protection to ensure that the maximum permissible output torque of the gear unit is not exceeded.

SELECTION OF GEAR UNITS

LIST OF APPLICATION VARIABLES

Selection should be performed for all gear units. The data specified in this catalog applies only if selection was completed correctly. It is particularly important for gear units under the following conditions:

- Increased ambient temperatures
- Altitudes > 3280 feet (less convection)
- Gear units > size 87 with small ratios (more heat from oil churning)

Your application data is required in order to precisely define the correct gear unit. The abbreviations used for selection are summarized in the following table:

Designation	Meaning	Unit
n_{amin}	Minimum output speed	[rpm]
n_{amax}	Maximum output speed	[rpm]
P_a at n_{amin}	Output power at minimum output speed	[kW]
P_a at n_{amax}	Output power at maximum output speed	[kW]
M_a at n_{amin}	Output torque at minimum output speed	[Nm]
M_a at n_{amax}	Output torque at maximum output speed	[Nm]
F_{Ra}	Overhung load on output shaft of gear unit. Assumes force application is in the center of shaft end. If not, please specify the exact application point indicating the application angle and direction of rotation of the shaft for a calculation check.	[N]
F_{Aa}	Axial load on output shaft of gear unit	[N]
J_{load}	Mass moment of inertia to be driven	[10^{-4} kgm ²]
B-R/F/K M1-M6	Required gear unit type and mounting position (See chapter, "Mounting positions")	–
IP..	Required degree of protection	–
U_{env}	Ambient temperature	[°C]
H	Altitude	[m above sea level]
S.., ..%cdf	Operating mode and intermittency factor cdf; alternatively, exact load cycle can be specified.	–
Z	Starting frequency; alternatively, exact load cycle can be specified	[n.per h]
f_{mains}	Supply frequency	[HZ]
V_{mot} V_{brake}	Operating voltage of motor and brake	[V]
M_B	Required braking torque	[Nm]
n_e	Input speed	[rpm]
n_a	Output speed	[rpm]
i	Ratio	–
M_{amax}	Maximum allowed output Torque	–
T_a	Geared Motor output Torque	–

EFFICIENCY OF BONVARIO GEAR UNITS

The efficiency of the gear units is mainly determined by the gearing and bearing friction. Please note that the starting efficiency of a gear unit is always less than its efficiency at operating speed.

B-R/F/K gear units

The efficiency of helical, parallel shaft and helical-bevel gear units varies according to the number of gear stages between 94% (3 stage) & 97% (2 stage).

SAFETY FACTOR

Determining of the safety factor

Gear unit selection needs to consider a certain factor which we use f_b to express. The safety factor is determined by the daily operating time and the starting frequency. Three load classifications are also considered to depend on the mass acceleration factor. You can read the different safety factor from the figure as follows. The safety factor determined using this diagram must be less than or equal to the BONVARIO safety factor as given in the selection tables.

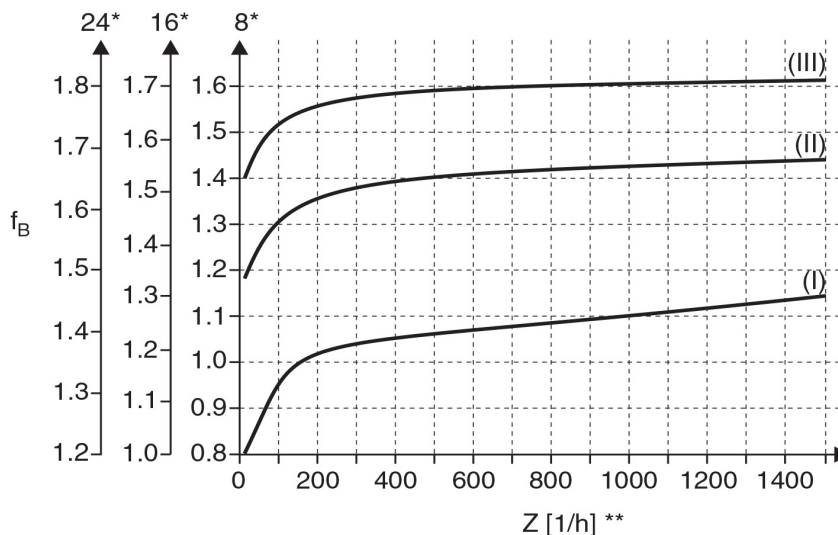


Figure: Safety factor f_b

* Daily operating time in hours/day

** Starting frequency Z: The cycles include all starting and braking procedures as well as changes from low to high and high to low speed.

Load Classification

Three load classifications are differentiated:

- (I) Uniform, permitted mass acceleration factor ≤ 0.2
- (II) Moderate shock load, permitted mass acceleration factor ≤ 3
- (III) Severe shock load, permitted mass acceleration foactor ≤ 10

Mass acceleration factor

The mass acceleration factor is calculated as follows

$$\text{Mass acceleration factor} = \frac{\text{All external mass moments of inertia}}{\text{Mass moments of inertia on the motor end}}$$

“All external mass moments of inertia” are the mass moments of inertia of the driven machine and the gear unit, scaled down to the motor speed.

The calculation for scaling down to the motor speed is performed using the following formula:

$$J_x = J \cdot \left(\frac{n}{n_m} \right)^2$$

- J_x = Reduced mass moment of inertia on the motor shaft
- J = Mass moment of inertia referenced to the output speed of the gear unit
- n = Output speed of the gear unit
- n_m = Motor speed

Mass moment of inertia at the Motor end “is the mass moment of inertia of the motor and if installed, the brake and the flywheel fan (Z fan). Safety factor $f_B > 1.8$ may occur with large acceleration factors (>10), high levels of backlash in the transmission elements or large overhung loads. Please contact BONVARIO in such cases.

Safety factor: BONVARIO f_B

The method for determining the maximum approved continuous torque M_{amax} and then deriving the safety factor $f_B = M_{amax} / M_a$ is not defined in a standard and varies greatly from manufacturer to manufacturer. Even at a safety factor of $f_B=1$, BONVARIO drives afford an extremely high level of safety and reliability in the fatigue strength range. Under a certain circumstances, the BONVARIO safety factor may not be comparable to the information given by other manufacturers. If there is any questions, please contact BONVARIO to get the special drive information in detail.

Example

Mass acceleration factor 2.5 (load classification II), 14 hours/day operating time (check the figure at 16h/d) and 300 cycles/hour result in a safety factor $f_B=1.51$ as shown in Figure. According to the selection table, the selected motor must have an BONVARIO f_B Value of 1.51 or greater.

OVERHUNG LOAD AND AXIAL FORCES

Determining overhung load

When determining the overhung load, the type of transmission element mounted on the shaft end must be considered. The transmission element factors f_z are listed as follows:

Transmission element	Transmission element factor f_z	Comments
Gears	1.15	<17teeth
Chain sprockets	1.40	<13teeth
Chain sprockets	1.25	<20teeth
Narrow V-belt pulleys	1.75	Pre-tensioning influence
Flat belt pulleys	2.50	Pre-tensioning influence
Toothed belt pulleys	2.50	Pre-tensioning influence

The overhung load exerted on the motor or gear shaft is then calculated as follows:

$$F_R = \frac{M_d \times 2000}{d_0} \times f_z$$

- F_R Overhung load in N
- M_d Torque in Nm
- d_0 Mean diameter of the mounted transmission element in MM
- f_z Transmission element factor

Permitted Overhung Load

The computation of the rated service life L_{H10} of the anti-friction bearings are the basis for determining the permitted overhung loads. For the special operating conditions, the permitted overhung loads can be determined by the modified service life L_{na} .

The permitted overhung loads F_{Ra} for the output shafts of foot-mounted gear units with a solid shaft are listed in the selection tables for geared motors.

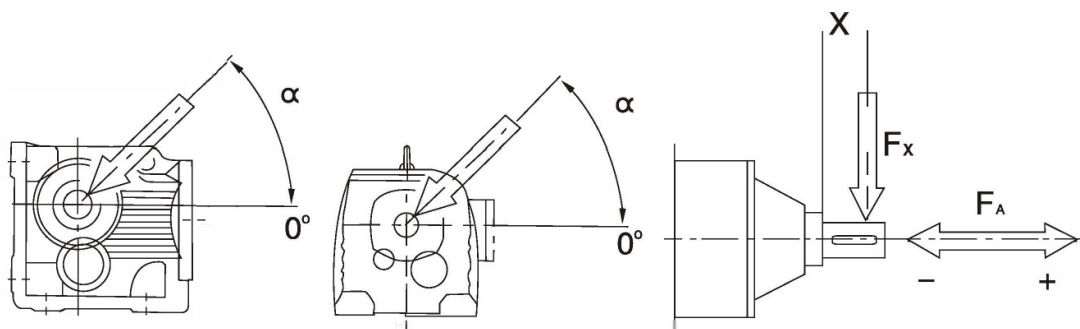
The data refer to the radial force acting midway on the shaft end (with right-angle gear units on the A-side Output). Worst case conditions have been assumed for the force application angle α and the direction of rotation.

- Only 50% of the F_{Ra} value specified in the selection tables is permitted in mounting position M1 with wall attachment on the front face for B-K series gear units.
- Helical-bevel geared motors B-K167 and B-K187 in mounting positions M1 to M4: If the mounting position is different from the position we offered (M1-M4), a maximum of 50% of the overhung load F_{Ra} specified in the selection tables is permitted.
- Foot and flange-mounted helical geared motors: A maximum of 50% of the overhung load F_{Ra} specified in the selection tables in the case of torque transmission via the flange mounting. It means that when the torque transmission is via flange mounting the overhung load F_{Ra} will only be 50% compared with F_{Ra} stated in the selection tables.

Higher approved overhung loads

It is possible to achieve a higher overhung load by considering the force application angle α and the direction of rotation. In addition, higher output shaft loads are permitted if heavy duty bearings are installed, especially with B-R, B-F and B-K gear units. Please contact BONVARIO in this case.

Definition of force application



Force application is defined according to the following diagram:

- F_x = Approved overhung load at point X in N
- F_A = Approved axial load in N
- α = Force application angle

Approved Axial Loads

If there is no overhung load, then an axial load F_A (tension or compression) equal to 50% of the overhung load given in the selection tables is approved. This applied to the following geared motors:

- Helical geared motors except for B-R..137 to B-R..167
- Parallel shaft and helical-bevel geared motors with solid shaft except for B-F..97

Please contact BONVARIO for all other types of gear units and in the event of significantly greater axial loads or combinations of overhung load and axial load.

Overhung load conversion for off-center force application

The approved overhung loads given in the selection tables must be calculated using the following formula in the event of force application not in the center of the shaft end. The smaller of the two values F_{XL} (according to bearing service life) and F_{xw} (according to shaft strength) is the approved value for the overhung load at point x. Note that the calculation apply to M_{amax} .

$$F_{XL} \text{ acc. to bearing service life} \quad F_{XL} = F_{Ra} \cdot \frac{a}{b+x} \text{ [N]}$$

$$F_{xw} \text{ from the shaft strength} \quad F_{xw} = \frac{C}{f+x} \text{ [N]}$$

- F_{Ra} = Approved overhung load ($x=1/2$) for foot-mounted gear units according to the selection tables in [N]
- X = Distance from the shaft shoulder to the force application point in [mm]
- a, b, f = Gear unit constants for overhung load conversion [mm]
- C = Gear unit constants for overhung load conversion [Nmm]

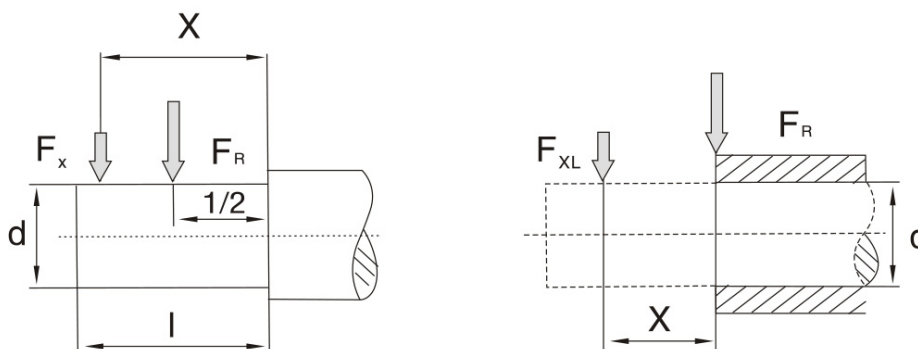


Fig: Overhung load F_x for off-center force application

GEAR UNIT CONSTANTS FOR OVERHUNG LOAD CONVERSION

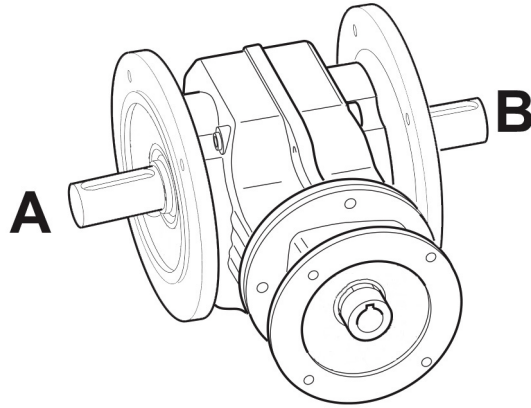
Model	a [mm]	b [mm]	c [Nmm]	f [mm]	d [mm]	l [mm]
B-R17	88.5	68.5	$6.527 \cdot 10^4$	17	20	40
B-R27	106.5	81.5	$1.56 \cdot 10^5$	11.8	25	50
B-R37	118	93	$1.24 \cdot 10^5$	0	25	50
B-R47	137	107	$2.44 \cdot 10^5$	15	20	60
B-R57	147.5	112.5	$3.77 \cdot 10^5$	18	35	70
B-R67	168.5	133.5	$2.51 \cdot 10^5$	0	35	70
B-R77	173.7	133.7	$3.97 \cdot 10^5$	0	40	80
B-R87	216.7	166.7	$8.47 \cdot 10^5$	0	50	100
B-R97	255.5	195.5	$1.19 \cdot 10^6$	0	60	120
B-R107	285.5	215.5	$2.06 \cdot 10^6$	0	70	140
B-R137	343.5	258.5	$6.14 \cdot 10^6$	30	90	170
B-R147	402	297	$8.65 \cdot 10^6$	33	110	210
B-R167	450	345	$1.26 \cdot 10^7$	0	120	210
B-F37	123.5	98.5	$1.07 \cdot 10^5$	0	25	50
B-F47	153.5	123.5	$1.78 \cdot 10^5$	0	30	60
B-F57	170.7	135.7	$5.49 \cdot 10^5$	32	35	70
B-F67	181.3	141.3	$4.12 \cdot 10^5$	0	40	80
B-F77	215.8	165.8	$7.87 \cdot 10^5$	0	50	100
B-F87	263	203	$1.19 \cdot 10^6$	0	60	120
B-F97	350	280	$2.09 \cdot 10^6$	0	70	140
B-F107	373.5	288.5	$4.23 \cdot 10^6$	0	90	170
B-F127	442.5	337.5	$9.49 \cdot 10^6$	0	110	210
B-F157	512	407	$1.05 \cdot 10^7$	0	120	210
B-K37	123.5	98.5	$1.41 \cdot 10^5$	0	25	50
B-K47	153.5	123.5	$1.78 \cdot 10^5$	0	30	60
B-K57	169.7	134.7	$6.8 \cdot 10^5$	31	35	70
B-K67	181.3	141.3	$4.12 \cdot 10^5$	0	40	80
B-K77	215.8	165.8	$7.69 \cdot 10^5$	0	50	100
B-K87	252	192	$1.64 \cdot 10^6$	0	60	120
B-K97	319	249	$2.8 \cdot 10^6$	0	70	140
B-K107	373.5	288.5	$5.53 \cdot 10^6$	0	90	170
B-K127	443.5	338.5	$8.31 \cdot 10^6$	0	110	210
B-K157	509	404	$1.18 \cdot 10^7$	0	120	210
B-K167	621.5	496.5	$1.88 \cdot 10^7$	0	160	250
B-K187	720.5	560.5	$3.04 \cdot 10^7$	0	190	320

IMPORTANT ORDERING INFORMATION

POSITION OF THE OUTPUT SHAFT AND FLANGE

For right-angle gear units, the position of the output shaft and the output flange must also be specified:

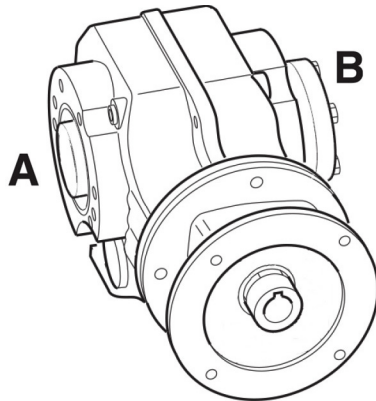
- A or B
- AB = flange and/or shaft on both sides



POSITION OF SHAFT ENTRY SIDE FOR RIGHT-ANGLE GEAR UNITS

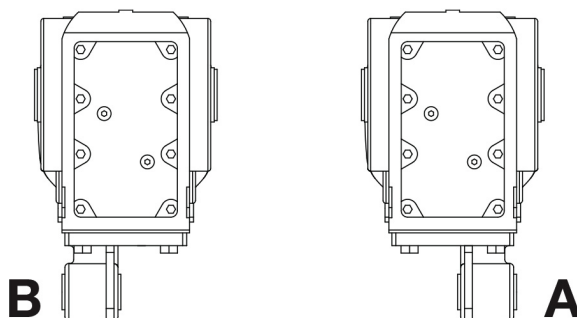
For shaft mounted right-angle gear units with either a shrink disc (B-KH), you must indicate whether A or B is the entry. The entry is the side that the customer's solid shaft first enters during installation. Therefore, it is the side closest to the customer's machine.

NOTE: The shrink disk is always located opposite the entry side. Thus, in the figure below, the entry side is A and the shrink disk side is B.



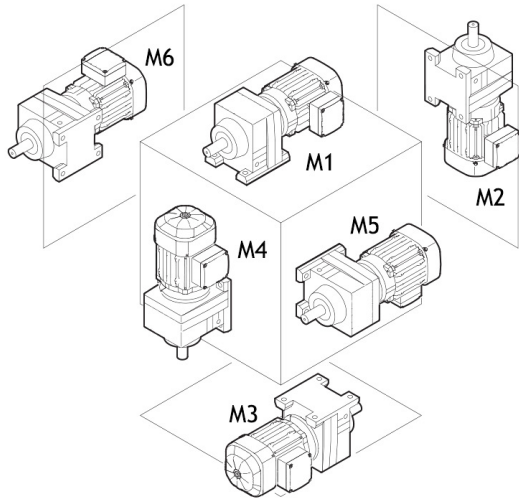
POSITION OF TORQUE ARM FOR RIGHT-ANGLE GEAR UNITS

BK-series: The figure below shows the side locations of the torque arm on BK-series when looking from the front end of the gear unit, not when looking from the motor or input side

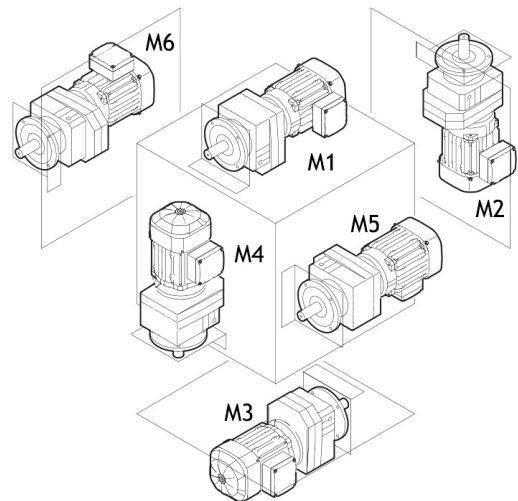


MOUNTING POSITIONS

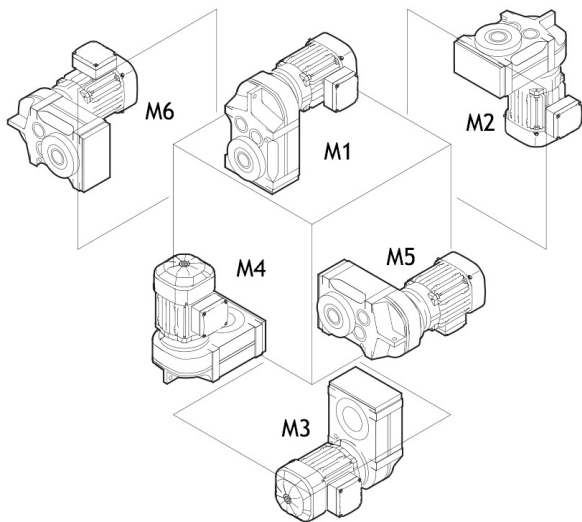
The following figure shows the position of the gear unit in mounting positions M1 to M6:



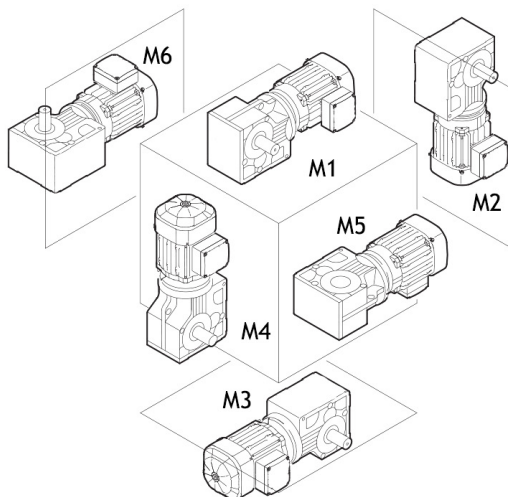
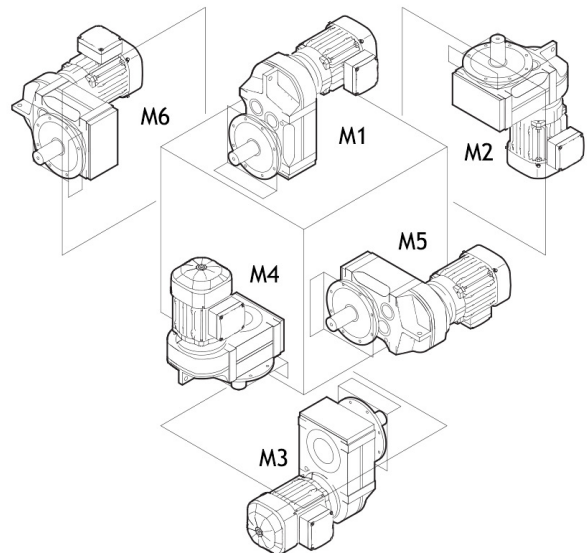
B-R..



B-F..








B-K..



LUBRICATION

LUBRICATION TABLE

Type	Ambient temperature				DIN (ISO)	ISO	Mobil	Shell	KLOBER LUBRICATION	ARAL	BP	Tribol	Optimal	
	-50°C	0°C	+50°C	+100°C										
 B-R		-10	Standard +40		Lubricant oil	VG 220	Mobilgear 630	Shell Omala 220	Klüberoil GEM 1–225	Aral Degol Bg220	BP Energol GR-Xp220	Tribol 1100/220	Optigear Bm220	
		-25		+80		CLP PG	VG 220	Mobil Glygoyle 30	Shell Tivela WB	Klübersynth GH 6–220	Aral Degol Gs220	BP Energol SR-Xp220	Tribol 800/220	Optiflex A 220
		-40		+80		CLP HC	VG 220	Mobil SHC 630	Shell Omala 220 HD	Klübersynth GEM 4–220	Aral Degol PAS220		Tribol 1510/200	Optigear Synthetic A220
		-40	+40				VG 150	Mobil SHC 629		Klübersynth GEM 4–150				
 B-K		-20	+25		Lubricant oil	VG 150 VG 100	Mobil gear 629	Shell Omala 100	Klüberoil GEM 1–150	Aral Degol Bg 100	BP Energol GR-Xp100	Tribol 1100/100	Optigear BM 100	
		-30	+10			CLP (CC)	VG 68–46	Mobil D.T.E 15M	Shell Tellus T32	Klüberoil GEM 1–68	Aral Degol Bg 46		Tribol 1100/68	Optigear 32
		-40	+10			CLP HC	VG 32	Mobil SHC 624		Klübersynth GEM 4–32				
 B-F		-40	-20		HLP (HM)	VG 22 VG 15	Mobil D.T.E 11M	Shell Tellus T15	ISOFLEX MT 30 ROT		BP Energol HLP-HM10			

 Synthetic lubricant
 Mineral lubricant

CLP (CC) = Mineral oil CLP HC = Synthetic : Hydrocarbons
 CLP PG = Synthetic: Polyglycol HLP = Hydraulic pressure oil

LUBRICANT FILL QUANTITIES

HELICAL GEAR UNIT (B-R..)

The specified fill quantities are recommended values. The precise values vary depending on the number of stages and gear ratio. When filling, it is essential to check the oil level plug since it indicates the precise oil volume.

The following tables show referenced values for lubricant fill quantities in relation to the Mounting position M1 - M6.

Model	Fill Quantity (L)					
	M1 ¹⁾	M2 ¹⁾	M3	M4	M5	M6
B-R..17	0.25	0.6	0.35	0.6	0.35	0.35
B-R..27	0.25/0.4	0.7	0.4	0.7	0.4	0.4
B-R..37	0.3/1	0.9	1	1.1	0.8	1
B-R..47	0.7/1.5	1.6	1.5	1.7	1.5	1.5
B-R..57	0.8/1.7	1.9	1.7	2.1	1.7	1.7
B-R..67	1.1/2.3	2.6/3.5	2.8	3.2	1.8	2
B-R..77	1.2/3	3.8/4.3	3.6	4.3	2.5	3.4
B-R..87	2.3/6	6.7/8.4	7.2	7.7	6.3	6.5
B-R..97	4.6/9.8	11.7/14	11.7	13.4	11.3	11.7
B-R..107	6/13.7	16.3	16.9	19.2	13.2	15.9
B-R..137	10/25	28	29.5	31.5	25	25
B-R..147	15.4/40	46.5	48	52	39.5	41
B-R..167	27/70	82	78	88	66	69

Model	Fill Quantity (L)					
	M1 ¹⁾	M2 ¹⁾	M3	M4	M5	M6
B-RF..17	0.25	0.6	0.35	0.6	0.35	0.4
B-RF..27	0.25/0.4	0.7	0.5	0.7	0.5	0.5
B-RF..37	0.4/1	0.9	1	1.1	0.8	1
B-RF..47	0.7/1.5	1.6	1.5	1.7	1.5	1.5
B-RF..57	0.8/1.7	1.8	1.7	2	1.7	1.7
B-RF..67	1.2/2.5	2.7/3.6	2.7	3.1	1.9	2.1
B-RF..77	1.2/2.6	3.8/4.1	3.3	4.1	2.4	3
B-RF..87	2.4/6	6.8/7.9	7.1	7.7	6.3	6.4
B-RF..97	5.1/10.2	11.9/14	11.2	14	11.2	11.8
B-RF..107	6.3/14.9	15.9	17	19.2	13.1	15.9
B-RF..137	9.5/25	27	29	32.5	25	25
B-RF..147	16.4/42	47	48	52	42	42
B-RF..167	26/70	82	78	88	65	71

¹⁾ The larger gear unit requires a large volume when there is multi-stage gear unit.

HELICAL-BEVEL GEAR UNIT (B-K..)

B-K.., B-KA..B, B-KV..B, B-KH..B

Model	Fill Quantity (L)					
	M1	M2	M3	M4	M5	M6
B-K..37	0.5	1	1	1.3	1	1
B-K..47	0.8	1.3	1.5	2	1.6	1.6
B-K..57	1.2	2.3	2.5	3	2.6	2.4
B-K..67	1.2	2.4	2.6	3.4	2.6	2.6
B-K..77	2.2	4.1	4.4	5.9	4.2	4.4
B-K..87	3.7	8	8.7	10.9	7.8	8
B-K..97	7	14	15.7	20	15.7	15.5
B-K..107	10	21	25.5	33.5	24	24
B-K..127	21	41.5	44	54	40	41
B-K..157	31	62	65	90	58	62
B-K..167	35	100	100	125	85	85
B-K..187	60	170	170	205	130	130

B-KF..

Model	Fill Quantity (L)					
	M1	M2	M3	M4	M5	M6
B-KF..37	0.5	1.1	1.1	1.5	1	1
B-KF..47	0.8	1.3	1.7	2.2	1.6	1.6
B-KF..57	1.3	2.3	2.7	3	2.9	2.7
B-KF..67	1.2	2.4	2.8	3.6	2.7	2.7
B-KF..77	2.1	4.1	4.4	6	4.5	4.5
B-KF..87	3.7	8.2	9	11.9	8.4	8.4
B-KF..97	7	14.7	17.3	21.5	15.7	16.5
B-KF..107	10	22	26	35	25	25
B-KF..127	21	41.5	46	55	41	41
B-KF..157	31	66	69	92	62	62

B-KAF.., B-KVF.., B-KAZ.., B-KVZ.., B-KA..

Model	Fill Quantity (L)					
	M1	M2	M3	M4	M5	M6
B-K..37	0.5	1	1	1.4	1	1
B-K..47	0.8	1.3	1.6	2.1	1.6	1.6
B-K..57	1.3	2.3	2.7	3	2.9	2.7
B-K..67	1.2	2.4	2.7	3.6	2.6	2.6
B-K..77	2.1	4.1	4.6	6	4.4	4.4
B-K..87	3.7	8.2	8.8	11.1	8	8
B-K..97	7	14.7	15.7	20	15.7	15.7
B-K..107	10	20.5	24	32	24	24
B-K..127	21	41.5	43	52	40	40
B-K..157	31	66	67	87	62	62
B-K..167	35	100	100	125	85	85
B-K..187	60	170	170	205	130	130

PARALLEL SHAFT HELICAL GEAR UNIT (B-F..)

B-F., B-FA..B, B-FV..B, B-FH..B

Model	Fill Quantity (L)					
	M1	M2	M3	M4	M5	M6
B-F..37	1	1.2	0.7	1.2	1	1.1
B-F..47	1.5	1.8	1.1	1.9	1.5	1.7
B-F..57	2.6	3.7	2.1	3.5	2.8	2.9
B-F..67	2.7	3.8	1.9	3.8	2.9	3.2
B-F..77	5	7.3	4.3	8	6	6.3
B-F..87	10	13.0	7.7	13.8	10.8	11
B-F..97	18.5	22.5	12.6	25.2	18.5	20
B-F..107	24.5	32	19.5	37.5	27	27
B-F..127	40.5	55	34	61	46.5	47
B-F..157	69	104	63	105	86	78

B-FF..

Model	Fill Quantity (L)					
	M1	M2	M3	M4	M5	M6
B-FF..37	1	1.2	0.7	1.3	1	1.1
B-FF..47	1.6	1.9	1.1	1.9	1.5	1.7
B-FF..57	2.8	3.8	2.1	3.7	2.9	3
B-FF..67	2.7	3.8	1.9	3.8	2.9	3.2
B-FF..77	5.1	7.3	4.3	8.1	6	6.3
B-FF..87	10.3	13.2	7.8	14.1	11	11.2
B-FF..97	19	22.5	12.6	25.5	18.9	20.5
B-FF..107	25.5	32	19.5	38.5	27.5	28
B-FF..127	41.5	56	34	63	46.5	49
B-FF..157	72	105	64	106	87	79

B-FAF.., B-FVF.., B-FAZ.., B-FVZ.., B-FA..

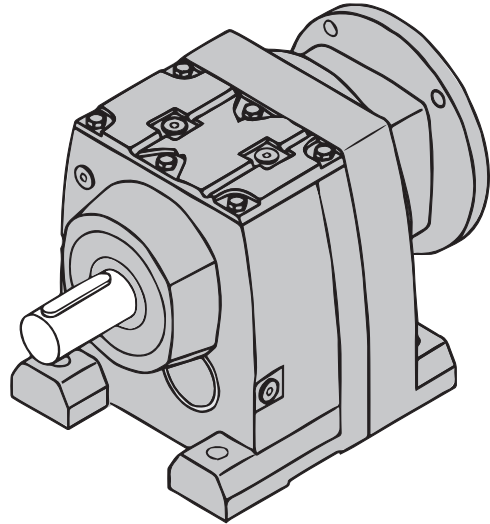
Model	Fill Quantity (L)					
	M1	M2	M3	M4	M5	M6
B-F..37	1	1.2	0.7	1.2	1	1.1
B-F..47	1.5	1.8	1.1	1.9	1.5	1.7
B-F..57	2.7	3.8	2.1	3.6	2.9	3
B-F..67	2.7	3.8	1.9	3.8	2.9	3.2
B-F..77	5	7.3	4.3	8	6	6.3
B-F..87	10	13	7.7	13.8	10.8	11
B-F..97	18.5	22.5	12.6	25.0	18.5	20
B-F..107	24.5	32	19.5	37.5	27	27
B-F..127	39	55	34	61	45	46.5
B-F..157	68	103	62	104	85	77

B-R SERIES


B-R series gear units have been designed to be highly reliable even under heavy working conditions and are particularly suited for application involving high axial loads. The B-R Series includes a large number of extremely versatile models, available in robust one piece casing of the main housing from size 17 to 167.

The main features of B-R Series are:

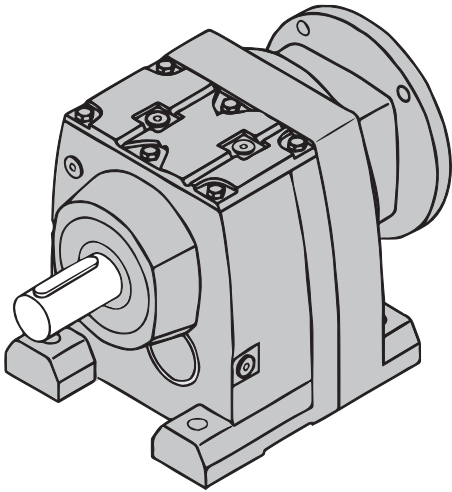
- Robust G200 cast iron housings & Gearing with 2 & 3 stage reduction
- Gears hardened and tempered with shaved or ground profile
- Load capacity calculated to ISO6336 and verified according to AGMA 2001
- Excellent mechanical strength, particularly suitable to support high axial loads
- High Efficiency gear units



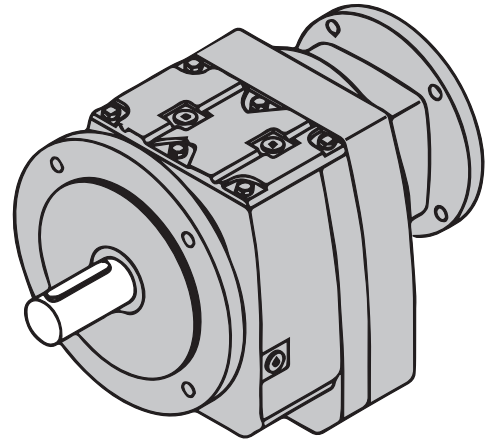
Classification

GEARBOX							
TYPE	SIZE	STAGES	VERSION	RATIO	OUTPUT SHAFT	INPUT MOTOR FLANGE	MOUNTING POSITION
B-R.. AM..	17	2	B-R.. AM..	see tables	see tables	 63 - 250	M1 M2 M3 M4 M5 M6
	27						
	37						
	47						
	57						
	67	3	B-RF.. AM..				
	77						
	87						
	97						
	107						
	137						
147							
167							

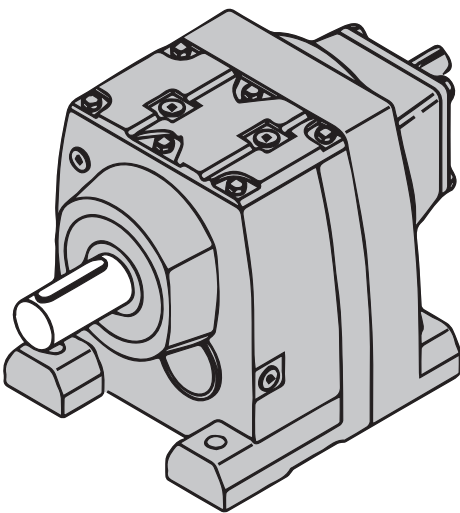
GEARBOX							
TYPE	SIZE	STAGES	VERSION	RATIO	OUTPUT SHAFT	INPUT SHAFT	MOUNTING POSITION
B-R.. AD..	17	2	B-R.. AD..	see tables	see tables	see tables	M1 M2 M3 M4 M5 M6
	27						
	37						
	47						
	57						
	67	3	B-RF.. AD..				
	77						
	87						
	97						
	107						
	137						
147							
167							



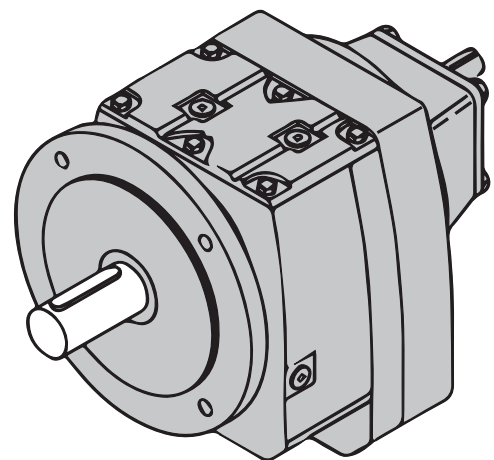
B-R.. AM..
Foot Mounted



B-RF.. AM..
Flange Mounted



B-R.. AD..
Foot Mounted



B-RF.. AD..
Flange Mounted

TECHNICAL DATA

B-R..AD..

B-R..17-37 $n_e=1400$ rpm

B-R..17				85Nm	B-R..27					130Nm	B-R..37					200Nm
i	n_a	M_{amax}	F_{Ra}		i	n_a	M_{amax}	F_{Ra}	AD	i	n_a	M_{amax}	F_{Ra}	AD		
[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]			
3-stage					3-stage						3-stage					
81.64	17	85	1890		135.09	10	130	4230		134.82	10	200	4950			
70.39	20	85	1890		123.91	11	130	4230		123.66	11	200	4950			
65.61	21	85	1890		105.49	13	130	4230	AD ₁	105.28	13	200	4950			
57.35	24	85	1890		90.96	15	130	4230		90.77	15	200	4950			
53.76	26	85	1890		84.78	17	130	4230		84.61	17	200	4950		AD ₁	
47.44	30	85	1890		74.11	19	130	4230		73.96	19	200	4950			
44.18	32	85	1890		69.47	20	130	4180		69.33	20	200	4950			
38.61	36	85	1890		61.30	23	130	3980		61.18	23	200	4950			
36.20	39	85	1890		55.87	25	130	3840		55.76	25	200	4950			
31.94	44	85	1870		48.17	29	130	3630		48.08	29	200	4950			
28.32	49	85	1780		44.90	31	130	3530	AD ₂	44.81	31	200	4950			
24.07	58	85	1650		39.25	36	130	3350		39.17	36	200	4760			
2-stage					36.79	38	130	3260		36.72	38	200	4540		AD ₂	
25.23	55	85	1690		32.47	43	130	3100		32.40	43	200	4120			
23.15	60	85	1620		28.78	49	130	2950		28.73	49	200	3740			
19.71	71	85	1500		24.47	57	130	2770		24.42	57	200	3240			
16.99	82	85	1400		2-stage					2-stage						
15.84	88	85	1350		28.37	49	130	2940		28.32	49	200	3690			
13.84	101	85	1270		26.09	54	130	2840		26.03	54	185	3860			
12.98	108	85	1230		22.32	63	130	2660		22.27	63	200	2970			
11.45	122	81	1180		19.35	72	130	2510		19.31	73	200	2570			
10.15	138	77	1140		18.08	77	130	2440		18.05	78	200	2390			
8.63	162	72	1090		15.63	90	130	2290		15.60	90	200	2010			
7.55	185	56	1040		13.28	105	130	2240		13.25	106	190	1880			
7.04	199	55	1010		11.86	118	129	1990		11.83	118	183	1810			
6.15	228	54	950		10.13	138	122	1890		10.11	138	170	1820		AD ₂	
5.76	243	53	930		9.41	149	122	900	AD ₂	9.47	148	167	1760			
5.09	275	51	890		8.16	172	116	870		7.97	176	156	1720			
4.51	310	48	870		7.63	183	112	900		6.67	210	144	1000			
3.83	366	45	830		6.59	212	106	880		5.67	247	142	760			
					5.60	250	99	880		5.06	277	135	790			
					5.00	280	95	860		4.32	324	126	820			
					4.27	328	87	920		4.05	346	122	850			
					4.00	350	85	910		3.41	411	112	900			
					3.37	415	79	900								

B-R..47-67 $n_e=1400$ rpm

B-R..47 300Nm					B-R..57 450Nm					B-R..67 600 Nm				
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD
3-stage					3-stage					3-stage				
176.88	7.9	300	5420	AD ₂	186.89	7.5	450	7110	AD ₂	199.81	7.0	600	7170	AD ₂
162.94	8.6	300	5420		172.17	8.1	450	7110		184.07	7.6	600	7170	
139.99	10	300	5420		147.92	9.5	450	7110		158.14	8.9	600	7170	
121.87	11	300	5420		128.77	11	450	7110		137.67	10	600	7170	
114.17	12	300	5420		120.63	12	450	7110		128.97	11	600	7170	
100.86	14	300	5420		106.58	13	450	7110		113.94	12	600	7170	
93.68	15	300	5420		98.99	14	450	7110		105.83	13	600	7170	
84.90	16	300	5420		89.71	16	450	7110		95.91	15	600	7170	
76.23	18	300	5420		80.55	17	450	7110		86.11	16	600	7170	
68.54	20	300	5420		69.23	20	450	7110		74.17	19	600	7170	
64.21	22	300	5420		64.85	22	450	6980		69.75	20	600	7170	
56.73	25	300	5420		57.29	24	450	6630		61.26	23	600	7170	
52.69	27	300	5420		53.22	26	450	6430		56.89	25	600	7170	
47.75	29	300	5150		48.23	29	450	6170		51.56	27	600	7170	
42.87	33	300	4930		43.30	32	450	5900		46.29	30	600	7170	
36.93	38	300	4630		37.30	38	450	5530		39.88	35	580	7410	
34.73	40	300	4520		35.07	40	450	5390		37.50	37	570	7530	
29.88	47	300	4240		30.18	46	450	5050		32.27	43	540	7850	
26.70	52	300	4050		26.97	52	450	4800		28.83	49	520	8050	
23.59	59	300	3840											
2-stage					2-stage					2-stage				
33.79	41	240	4690	AD ₂	26.31	53	450	4750	AD ₂	28.13	50	540	7850	AD ₃
31.12	45	220	4610		24.99	56	450	4640		26.72	52	540	7850	
26.74	52	300	4050		21.93	64	450	4370		23.44	60	560	7640	
23.28	60	300	3820		18.60	75	450	4050		19.89	70	600	7170	
21.81	64	300	3710		16.79	83	450	3860		17.95	78	590	7290	
19.27	73	295	3530		14.77	95	450	3690		15.79	89	560	7130	
17.89	78	290	3390		13.95	100	430	3610		14.91	94	550	6980	
16.22	86	275	3350		11.88	118	405	3430		12.70	110	520	6650	
14.56	96	265	3230		10.79	130	390	3330		11.54	121	500	6500	
12.54	112	250	3080		9.35	150	370	3180		10.00	140	470	6220	
11.79	119	245	3020		9.06	155	375	3010		8.70	161	440	5960	
10.15	138	230	2890		7.97	176	355	3020		7.79	180	380	5830	
9.07	154	220	2780		7.53	186	350	2950		7.36	190	370	5790	
8.01	175	205	2690		6.41	218	335	2770		6.27	223	330	5590	
7.76	180	163	2720		5.82	241	320	2820		5.70	246	310	5450	
6.96	201	159	2620		5.05	277	305	2730		4.93	284	290	5210	
6.00	233	156	2740		4.39	319	280	2900		4.29	326	270	5000	
5.64	248	155	2410											
4.85	289	150	2280											
4.34	323	146	2190											
3.83	366	144	2090	AD ₃										

B-R..77-97 $n_e=1400$ rpm

B-R..77 820Nm					B-R..87 1550Nm					B-R..97 3000Nm				
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD
3-stage					3-stage					3-stage				
195.24	7.2	820	9920		246.54	5.7	1550	16900		289.74	4.8	3000	19800	
166.59	8.4	820	9920		216.54	6.5	1550	16900		255.71	5.5	3000	19800	
145.67	9.6	820	9920		205.71	6.8	1550	16900		241.25	5.8	3000	19800	
138.39	10	820	9920		181.77	7.7	1550	16900		216.28	6.5	3000	19800	
121.42	12	820	9920		155.34	9.0	1550	16900		186.30	7.5	3000	19800	
102.99	14	820	9920		142.41	9.8	1550	16900		170.02	8.2	3000	19800	
92.97	15	820	9920		124.97	11	1550	16900		150.78	9.3	3000	19800	
81.80	17	820	9920		118.43	12	1550	16900		126.75	11	3000	19800	
77.24	18	820	9920		103.65	14	1550	16900	AD ₂	116.48	12	3000	19800	AD ₃
65.77	21	820	9920	AD ₂	93.38	15	1550	16900		103.44	14	3000	19800	
57.68	24	820	9920		81.92	17	1550	16900		92.48	15	3000	19800	
52.07	27	820	9920		72.57	19	1550	16900		83.15	17	3000	19800	
45.81	31	820	9920		63.68	22	1550	15800		72.17	19	3000	19800	
43.26	32	820	9920		60.35	23	1550	15200		65.21	21	3000	19800	
36.83	38	820	9920		52.82	27	1550	13500		59.92	23	3000	19800	
33.47	42	820	9920		47.58	29	1550	16900		53.21	26	3000	19800	
29.00	48	820	9920											
25.23	55	780	10100		41.74	34	1550	16900		47.58	29	3000	19800	
2-stage					36.84	38	1550	16800	AD ₃	42.78	33	3000	19800	
23.37	60	820	8870		32.66	43	1550	16000		37.13	28	3000	18600	AD ₄
21.43	65	820	8250		27.88	50	1550	15100		33.25	42	2890	17900	
18.80	74	780	7980		2-stage					27.58	51	2670	16900	
17.82	79	780	7620		34.40	41	1550	9480	AD ₃	2-stage				
15.60	90	740	7390	AD ₃	31.40	45	1550	7820	AD ₃	32.05	44	2560	10600	AD ₄
14.05	100	720	7050							27.19	51	2560	8380	AD ₄
12.33	114	690	6740		27.84	50	1550	15000						
10.88	129	660	6490		23.40	60	1550	13900		25.03	56	2830	15900	
9.64	145	630	6300		21.51	65	1550	13600		22.37	63	2720	15300	
					19.10	73	1440	13000		20.14	70	2610	14800	
8.59	163	630	4110		17.08	82	1390	12600	AD ₄	18.24	77	2500	14400	
7.74	181	610	3940		15.35	91	1340	12100		16.17	87	2400	13800	
6.79	206	580	3850	AD ₄	13.33	101	1280	11600		14.62	96	2300	13400	AD ₅
5.99	234	540	3990		11.93	117	1230	11200		12.39	113	2190	12700	
5.31	264	510	3990		9.90	141	1180	10400		10.83	129	2090	12100	
										9.29	151	2030	12200	
					9.14	153	1210	10500		8.39	167	2030	11700	
					8.22	170	1160	10200		7.12	197	2000	10900	
					7.13	196	1070	9780	AD ₅	6.21	225	1890	10500	
					6.39	218	1020	9450						
					5.30	254	910	8980		5.20	269	1780	9850	AD ₆
										4.50	311	1630	9500	

B-R..107-147 $n_e=1400$ rpm

B-R..107 4300Nm					B-R..137 8000Nm					B-R..147 13000Nm																																																																																																																																																																																																																																																																																																																																																																			
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD																																																																																																																																																																																																																																																																																																																																																															
3-stage					3-stage					3-stage																																																																																																																																																																																																																																																																																																																																																																			
251.15	5.6	4300	29500	AD ₃	222.60	6.3	8000	53400	AD ₄	163.31	8.6	13000	62700	AD ₄																																																																																																																																																																																																																																																																																																																																																															
229.95	6.1	4300	29500		203.16	6.9	4300	29500		172.34	8.1	4300	29500		158.68	8.8	4300	29500	141.83	9.9	4300	29500	127.68	10	4300	29500	115.63	12	4300	29500	102.53	14	4300	29500	92.70	15	4300	29500	78.57	18	4300	29500	72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000	53400	AD ₅	72.09	19	13000	62700	AD ₅	59.41	24	4300	28000	52.68	27	4300	26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆	35.64	39	13000	62700	AD ₆	37.65	37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900	AD ₇	29.95	47	13000	62700	AD ₇	24.12	58	8000	49400	22.00	64	8000	47100	AD ₇	24.19	58	11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44	68	12000	64600	AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62	62	4300	18300	20.07	70	4300	17300	18.21	77	4300	16600	15.65	89	4300	15400	18.04	78	10500	67000	15.64	90	13000	62700	AD ₆	15.64	90	13000	62700	AD ₈	13.66	102	4300	14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970	13800	6.66	210	2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																																								
203.16	6.9	4300	29500		172.34	8.1	4300	29500		158.68	8.8	4300	29500		141.83	9.9	4300	29500	127.68	10	4300	29500	115.63	12	4300	29500	102.53	14	4300	29500	92.70	15	4300	29500	78.57	18	4300	29500	72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09	19		13000	62700	AD ₅	59.41		24	4300	28000	52.68	27	4300	26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆		35.64	39	13000	62700		AD ₆	37.65	37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780		53900	AD ₇	29.95	47		13000	62700	AD ₇	24.12	58	8000	49400	22.00		64	8000	47100	AD ₇		24.19	58	11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77	45	4300	21100		AD ₅	20.44	68	12000		64600	AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62	62	4300	18300	20.07	70	4300	17300	18.21	77	4300	16600	15.65	89	4300	15400	18.04		78	10500	67000	15.64		90	13000	62700	AD ₆	15.64	90	13000	62700	AD ₈	13.66	102	4300	14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970	13800	6.66	210	2970	12800	5.82	241	2970		12100	4.92	285	2900		11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																													
172.34	8.1	4300	29500		158.68	8.8	4300	29500		141.83	9.9	4300	29500		127.68	10	4300	29500	115.63	12	4300	29500	102.53	14	4300	29500	92.70	15	4300	29500	78.57	18	4300	29500	72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000	62700		AD ₅	59.41		24		4300	28000	52.68	27	4300	26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆			35.64	39	13000	62700			AD ₆	37.65	37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900		AD ₇	29.95	47	13000	62700		AD ₇	24.12	58	8000	49400		22.00	64	8000			47100	AD ₇	24.19	58		11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77			45	4300	21100		AD ₅		20.44	68	12000	64600		AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62	62	4300	18300	20.07	70	4300	17300	18.21	77	4300		16600	15.65	89	4300		15400	18.04	78		10500	67000	15.64	90		13000	62700	AD ₆	15.64	90	13000	62700	AD ₈	13.66	102	4300	14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970		13800	6.66	210	2970		12800	5.82	241	2970	12100		4.92	285	2900	11300		13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																			
158.68	8.8	4300	29500		141.83	9.9	4300	29500		127.68	10	4300	29500		115.63	12	4300	29500	102.53	14	4300	29500	92.70	15	4300	29500	78.57	18	4300	29500	72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000		62700		AD ₅	59.41			24		4300		28000	52.68	27	4300	26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆				35.64	39	13000	62700				AD ₆	37.65	37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900		AD ₇	29.95	47	13000	62700		AD ₇	24.12	58	8000		49400	22.00	64			8000		47100	AD ₇		24.19	58		11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77	45	4300				21100	AD ₅	20.44	68			12000	64600	AD ₈	20.44		68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62	62	4300	18300	20.07	70	4300		17300	18.21	77	4300		16600	15.65	89		4300	15400	18.04	78		10500	67000		15.64	90	13000	62700		AD ₆	15.64	90	13000	62700	AD ₈	13.66	102	4300	14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56		164	4300	11300	7.86		178	2970	13800	6.66	210		2970	12800	5.82	241		2970	12100	4.92	285		2900	11300	13.91	101		12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																											
141.83	9.9	4300	29500		127.68	10	4300	29500		115.63	12	4300	29500		102.53	14	4300	29500	92.70	15	4300	29500	78.57	18	4300	29500	72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000		62700		AD ₅		59.41			24			4300		28000		52.68	27	4300	26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆					35.64	39	13000	62700					AD ₆	37.65	37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900		AD ₇	29.95	47	13000	62700		AD ₇	24.12	58		8000	49400	22.00			64		8000			47100	AD ₇		24.19	58		11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage						2-stage						2-stage						30.77		45	4300			21100	AD ₅		20.44		68	12000	64600		AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62		62	4300	18300	20.07		70	4300	17300		18.21	77	4300	16600		15.65	89		4300	15400	18.04	78			10500	67000	15.64	90		13000	62700	AD ₆	15.64	90	13000	62700	AD ₈	13.66	102	4300	14400	11.59		121	4300	13300	10.13		138	4300	12400	8.56	164		4300	11300	7.86	178		2970	13800	6.66	210		2970	12800	5.82	241		2970	12100		4.92	285	2900	11300		13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																	
127.68	10	4300	29500		115.63	12	4300	29500		102.53	14	4300	29500		92.70	15	4300	29500	78.57	18	4300	29500	72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000		62700		AD ₅		59.41				24			4300			28000		52.68		27	4300	26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆						35.64	39	13000	62700						AD ₆	37.65	37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900		AD ₇	29.95	47	13000	62700		AD ₇	24.12		58	8000	49400			22.00		64			8000			47100	AD ₇		24.19	58		11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77		45	4300			21100			AD ₅		20.44	68	12000			64600	AD ₈	20.44	68		12000	64600	AD ₈	27.58	51	4300	20100	24.90	56		4300	19200	22.62	62		4300	18300	20.07		70	4300	17300	18.21		77	4300		16600	15.65	89	4300			15400	18.04	78	10500		67000	15.64		90	13000	62700	AD ₆		15.64	90	13000	62700	AD ₈		13.66	102	4300	14400		11.59	121	4300	13300	10.13		138	4300	12400	8.56		164	4300	11300	7.86		178	2970	13800	6.66		210	2970		12800	5.82	241	2970		12100	4.92	285	2900		11300	13.91	101	12600		63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900										
115.63	12	4300	29500		102.53	14	4300	29500		92.70	15	4300	29500		78.57	18	4300	29500	72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000		62700		AD ₅		59.41				24				4300			28000			52.68		27		4300	26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆						35.64	39	13000	62700	AD ₆	37.65						37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900	AD ₇	29.95		47	13000	62700	AD ₇	24.12		58		8000	49400	22.00			64		8000			47100			AD ₇			24.19	58		11900	64700		AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage						30.77	45			4300					21100	AD ₅	20.44			68		12000	64600		AD ₈	20.44		68	12000	64600	AD ₈	27.58	51		4300	20100	24.90	56		4300	19200	22.62		62	4300	18300	20.07		70	4300		17300	18.21	77	4300			16600	15.65	89	4300		15400	18.04		78	10500	67000			15.64	90	13000	62700			AD ₆	15.64	90	13000		62700	AD ₈	13.66	102	4300		14400	11.59	121	4300		13300	10.13	138	4300		12400	8.56	164	4300		11300	7.86		178	2970	13800	6.66		210	2970	12800	5.82		241	2970	12100	4.92		285		2900	11300	13.91	101		12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900		
102.53	14	4300	29500		92.70	15	4300	29500		78.57	18	4300	29500		72.88	19	4300	29500	65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000		62700		AD ₅		59.41				24				4300				28000			52.68			27		4300		26600	47.63	29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆						35.64	39	13000	62700	AD ₆		37.65	37					8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900	AD ₇		29.95	47	13000	62700	AD ₇		24.12	58	8000		49400	22.00	64			8000		47100			AD ₇						24.19	58		11900	64700			AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500		2-stage						2-stage						2-stage						30.77					45		4300			21100		AD ₅	20.44			68		12000	64600	AD ₈		20.44	68		12000	64600	AD ₈	27.58		51	4300	20100		24.90	56	4300	19200		22.62	62		4300	18300	20.07	70			4300	17300	18.21	77		4300	16600		15.65	89	4300			15400	18.04	78	10500				67000	15.64	90		13000		62700	AD ₆	15.64		90	13000	62700	AD ₈		13.66	102	4300	14400		11.59	121	4300	13300		10.13	138		4300	12400	8.56	164		4300	11300	7.86	178		2970	13800	6.66	210		2970		12800	5.82	241	2970		12100	4.92		285	2900	11300	13.91		101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00
92.70	15	4300	29500		78.57	18	4300	29500		72.88	19	4300	29500		65.60	21	4300	29200	AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000		62700		AD ₅		59.41				24				4300				28000			52.68	27			4300	26600		47.63		29	4300	25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆	35.64	39	13000						62700	AD ₆	37.65	37	8000			53400	32.91	43				8000	53400	27.83	50	7680	54100	29.57	47	7780	53900	AD ₇	29.95	47	13000		62700	AD ₇	24.12	58	8000		49400	22.00	64	8000		47100	AD ₇	24.19			58		11900									64700	AD ₈		19.04	74				8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77		45	4300			21100					AD ₅		20.44			68			12000			64600		AD ₈	20.44			68	12000	64600	AD ₈	27.58		51	4300	20100	24.90	56		4300	19200	22.62	62		4300	18300		20.07	70	4300	17300			18.21	77	4300	16600		15.65	89		4300	15400	18.04			78	10500	67000	15.64		90		13000	62700	AD ₆	15.64	90		13000		62700		AD ₈	13.66	102			4300	14400	11.59	121		4300	13300	10.13	138		4300	12400		8.56	164	4300	11300		7.86	178	2970	13800		6.66	210	2970	12800		5.82		241	2970	12100	4.92		285	2900		11300	13.91	101	12600		63400	AD ₆	13.91		101	12600	63400	AD ₈		11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00
78.57	18	4300	29500		72.88	19	4300	29500		65.60	21	4300	29200		AD ₄	59.17	24	8000		53400	AD ₅	72.09		19		13000		62700		AD ₅		59.41				24				4300				28000			52.68	27			4300	26600	47.63		29	4300		25500	40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆	35.64	39	13000		62700	AD ₆	37.65					37	8000		53400	32.91	43			8000	53400	27.83	50			7680	54100	29.57	47	7780	53900	AD ₇	29.95	47	13000		62700	AD ₇	24.12	58	8000		49400	22.00	64	8000	47100	AD ₇	24.19	58		11900		64700			AD ₈		19.04									74			8000	43500				16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage						30.77	45		4300	21100	AD ₅		20.44							68			12000			64600			AD ₈			20.44			68	12000	64600		AD ₈		27.58	51	4300	20100	24.90	56	4300	19200	22.62	62	4300	18300	20.07		70	4300	17300	18.21			77	4300	16600	15.65		89	4300		15400	18.04	78			10500	67000	15.64	90		13000		62700	AD ₆		15.64	90		13000		62700	AD ₈		13.66	102		4300	14400	11.59	121	4300		13300	10.13	138	4300		12400	8.56		164	4300	11300	7.86		178	2970	13800	6.66		210	2970	12800	5.82		241		2970	12100	4.92	285		2900	11300		13.91	101	12600	63400		AD ₆		13.91		101	12600	63400			AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200
72.88	19	4300	29500		65.60	21	4300	29200		AD ₄	59.17	24	8000			53400	AD ₅	72.09		19		13000		62700		AD ₅		59.41				24				4300				28000			52.68	27			4300	26600	47.63		29	4300	25500		40.37	35	4300	23800	35.26	40	4300	22400	29.49	47	4300	20700	50.86	28	8000	53400	44.39	32	8000	53400	AD ₆	35.64	39	13000		62700	AD ₆	37.65		37		8000				53400	32.91	43		8000	53400	27.83			50	7680	54100	29.57	47		7780	53900	AD ₇	29.95	47	13000		62700	AD ₇	24.12	58	8000		49400	22.00	64	8000	47100	AD ₇	24.19	58	11900		64700	AD ₈	19.04	74		8000		43500			16.80									83			8000	40600				14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44	68		12000	64600		AD ₈	20.44				68			12000			64600			AD ₈						27.58			51	4300	20100				24.90	56	4300	19200	22.62	62	4300	18300	20.07	70	4300	17300	18.21	77	4300	16600	15.65	89	4300		15400	18.04	78	10500		67000	15.64		90	13000	62700			AD ₆	15.64	90	13000		62700		AD ₈			13.66	102		4300		14400			11.59	121		4300	13300	10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970		13800	6.66	210	2970		12800	5.82	241	2970		12100	4.92	285	2900		11300		13.91	101	12600	63400		AD ₆	13.91		101	12600	63400	AD ₈				11.99		117	13000	60400				9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300
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59.41	24	4300	28000		52.68	27	4300	26600			47.63	29	4300	25500				40.37		35		4300		23800				35.26				40			4300	22400			29.49	47	4300		20700	50.86	28		8000	53400	44.39	32	8000	53400	AD ₆	35.64	39	13000	62700	AD ₆	37.65	37	8000	53400	32.91	43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900		AD ₇	29.95	47		13000		62700		AD ₇		24.12		58	8000	49400	22.00	64		8000	47100	AD ₇		24.19	58	11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100		8.71	161	7840		27600		7.59	184		5110	39000	6.38		219	5110		35900			5.15				272			4600	34500				2-stage					2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44	68	12000	64600	AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62	62	4300	18300	20.07	70	4300	17300	18.21		77	4300	16600	15.65	89			4300	15400	18.04		78			10500	67000	15.64	90				13000					62700			AD ₆	15.64	90				13000	62700	AD ₈	13.66	102	4300	14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970	13800	6.66	210	2970	12800	5.82	241	2970	12100		4.92		285	2900	11300		13.91					101	12600		63400		AD ₆			13.91	101		12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000		49900																																										
52.68	27	4300	26600		47.63	29	4300	25500			40.37	35	4300	23800				35.26		40		4300		22400				29.49			47	4300			20700	50.86	28		8000	53400	44.39		32	8000	53400	AD ₆	35.64	39	13000	62700	AD ₆	37.65		37	8000	53400	32.91		43	8000	53400	27.83	50	7680	54100	29.57	47	7780	53900	AD ₇	29.95	47	13000	62700			AD ₇	24.12		58		8000				49400	22.00	64	8000	47100	AD ₇	24.19		58	11900		64700	AD ₈	19.04	74	8000		43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840		27600	7.59	184		5110		39000	6.38		219	5110	35900		5.15	272	4600	34500			2-stage							2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44	68	12000	64600	AD ₈	20.44	68	12000	64600		AD ₈	27.58	51	4300		20100	24.90	56	4300		19200	22.62	62	4300	18300	20.07	70	4300	17300	18.21	77	4300	16600	15.65	89	4300	15400		18.04	78	10500	67000	15.64			90	13000	62700	AD ₆	15.64			90	13000	62700	AD ₈	13.66			102			4300		14400				11.59	121				4300	13300		10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970	13800	6.66	210	2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91		101	12600	63400	AD ₈	11.99					117	13000		60400					9.74	144		13000	54400		8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																																			
47.63	29	4300	25500		40.37	35	4300	23800			35.26	40	4300	22400				29.49		47		4300		20700			50.86	28			8000	53400	44.39		32	8000	53400		AD ₆	35.64	39	13000	62700	AD ₆	37.65		37	8000	53400	32.91		43		8000	53400	27.83	50		7680	54100	29.57	47	7780	53900	AD ₇	29.95	47	13000	62700		AD ₇	24.12	58	8000		49400		22.00		64		8000	47100	AD ₇		24.19	58	11900	64700	AD ₈		19.04	74	8000	43500		16.80		83	8000	40600		14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000		6.38	219	5110		35900		5.15	272		4600	34500	2-stage					2-stage						2-stage					30.77				45	4300	21100	AD ₅	20.44	68	12000	64600	AD ₈		20.44	68	12000	64600		AD ₈	27.58	51	4300			20100	24.90	56		4300	19200	22.62	62		4300	18300	20.07	70	4300	17300	18.21	77	4300	16600	15.65	89	4300	15400	18.04	78	10500		67000	15.64	90	13000	62700			AD ₆	15.64	90		13000		62700	AD ₈	13.66	102		4300			14400	11.59		121		4300		13300		10.13	138				4300	12400		8.56	164	4300	11300	7.86	178	2970	13800	6.66	210	2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600		63400		AD ₈	11.99	117		13000	60400				9.74	144	13000	54400					8.26	169		13000	49900		7.25	193	8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																																							
40.37	35	4300	23800		35.26	40	4300	22400			29.49	47	4300	20700				50.86		28		8000	53400	44.39			32	8000	53400		AD ₆	35.64	39		13000	62700	AD ₆	37.65		37	8000	53400	32.91		43		8000	53400	27.83	50		7680		54100	29.57	47	7780		53900	AD ₇	29.95	47	13000	62700		AD ₇	24.12	58	8000	49400		22.00	64	8000		47100	AD ₇	24.19	58	11900		64700	AD ₈		19.04	74	8000	43500	16.80			83	8000	40600	14.51		96		8000	37300	12.83		109	8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15		272	4600	34500		2-stage					2-stage					2-stage					30.77		45	4300	21100		AD ₅	20.44	68	12000			64600	AD ₈	20.44		68	12000	64600	AD ₈			27.58	51	4300	20100			24.90	56	4300			19200	22.62	62		4300	18300	20.07	70		4300	17300	18.21	77	4300	16600	15.65	89	4300	15400	18.04	78	10500	67000	15.64	90	13000		62700	AD ₆	15.64	90	13000				62700	AD ₈		13.66		102		4300	14400		11.59	121		4300	13300		10.13		138	4300	12400		8.56	164			4300	11300	7.86		178	2970	13800	6.66	210	2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400		AD ₈	11.99	117		13000			60400	9.74		144	13000				54400	8.26	169	13000	49900				7.25	193	8670	58400	5.89		238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																																												
35.26	40	4300	22400		29.49	47	4300	20700			50.86	28	8000	53400				44.39	32	8000		53400	AD ₆	35.64	39		13000	62700	AD ₆			37.65	37	8000	53400	32.91		43		8000	53400	27.83	50		7680		54100	29.57	47	7780		53900		AD ₇	29.95	47	13000		62700		AD ₇	24.12	58	8000	49400		22.00	64	8000	47100	AD ₇	24.19	58	11900	64700	AD ₈		19.04	74	8000	43500	16.80			83	8000	40600	14.51	96			8000	37300	12.83	109		8000		34700	10.79	130		8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage						30.77	45	4300	21100		AD ₅	20.44	68	12000	64600	AD ₈			20.44	68	12000	64600		AD ₈		27.58		51	4300	20100				24.90	56	4300	19200			22.62	62	4300			18300	20.07	70		4300	17300	18.21	77		4300	16600	15.65	89	4300	15400	18.04	78	10500	67000	15.64	90	13000	62700	AD ₆	15.64	90		13000		62700	AD ₈	13.66				102			4300	14400	11.59		121	4300		13300	10.13		138	4300		12400	8.56	164	4300	11300		7.86	178	2970		13800	6.66	210		2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400		AD ₈	11.99	117	13000			60400	9.74		144			13000	54400		8.26	169			13000	49900	7.25	193	8670	58400			5.89	238	8670	53200	5.00	280		8670	49300	8.26	169	13000	49900																																																																	
29.49	47	4300	20700		50.86	28	8000	53400			44.39	32	8000	53400	AD ₆			35.64	39	13000	62700	AD ₆		37.65	37		8000	53400		32.91		43	8000	53400	27.83	50		7680		54100	29.57	47	7780		53900		AD ₇	29.95	47	13000		62700			AD ₇	24.12	58		8000	49400		22.00	64	8000	47100	AD ₇	24.19	58	11900	64700		AD ₈	19.04	74	8000			43500	16.80	83	8000	40600			14.51	96	8000	37300	12.83			109	8000	34700	10.79		130		8000	31100	8.71		161	7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage						2-stage						2-stage					30.77		45	4300	21100	AD ₅	20.44		68	12000	64600	AD ₈				20.44	68	12000	64600	AD ₈			27.58		51	4300	20100				24.90	56	4300	19200			22.62	62	4300			18300	20.07	70		4300	17300	18.21	77		4300	16600	15.65	89	4300	15400	18.04	78	10500	67000	15.64	90	13000	62700		AD ₆	15.64		90		13000		62700	AD ₈			13.66			102	4300	14400		11.59	121		4300	13300		10.13	138	4300	12400	8.56	164	4300	11300		7.86	178	2970	13800	6.66	210	2970		12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆		13.91	101	12600	63400			AD ₈	11.99	117			13000	60400		9.74			144	13000		54400	8.26		169	13000	49900	7.25	193	8670	58400		5.89	238	8670	53200	5.00	280	8670		49300	8.26	169	13000	49900																																																																		
50.86	28	8000	53400		44.39	32	8000	53400		AD ₆	35.64	39	13000	62700			AD ₆	37.65	37	8000	53400			32.91	43	8000	53400	27.83		50		7680	54100	29.57	47	7780		53900		AD ₇	29.95	47	13000		62700			AD ₇	24.12	58		8000	49400	22.00		64	8000	47100	AD ₇	24.19	58	11900	64700	AD ₈	19.04		74	8000	43500	16.80			83	8000	40600			14.51	96	8000	37300	12.83			109	8000	34700	10.79	130			8000	31100	8.71	161		7840		27600	7.59	184		5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage						2-stage						30.77	45	4300	21100	AD ₅	20.44		68	12000	64600		AD ₈		20.44	68	12000			64600		AD ₈	27.58	51	4300				20100		24.90	56	4300				19200	22.62	62	4300			18300	20.07	70			4300	17300	18.21		77	4300	16600	15.65		89	4300	15400	18.04	78	10500	67000	15.64	90	13000	62700	AD ₆	15.64	90			13000	62700	AD ₈		13.66		102		4300		14400			11.59	121	4300		13300	10.13		138	4300	12400	8.56	164	4300	11300	7.86	178	2970	13800		6.66	210	2970	12800	5.82	241	2970		12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600			63400	AD ₈	11.99	117				13000	60400			9.74	144		13000	54400		8.26	169		13000	49900	7.25	193	8670	58400	5.89	238	8670	53200		5.00	280	8670	49300	8.26	169	13000		49900																																																																						
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37.65	37	8000	53400		32.91	43	8000	53400			27.83	50	7680	54100		29.57		47	7780	53900	AD ₇			29.95	47	13000	62700	AD ₇		24.12		58	8000	49400	22.00	64		8000	47100	AD ₇	24.19	58	11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83		109	8000	34700	10.79		130		8000	31100	8.71	161			7840	27600	7.59			184	5110	39000	6.38	219			5110	35900	5.15	272	4600			34500	2-stage						2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44	68	12000	64600	AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62	62		4300	18300	20.07	70	4300				17300	18.21	77			4300			16600	15.65	89				4300		15400	18.04	78				10500	67000	15.64	90			13000	62700	AD ₆	15.64		90	13000	62700	AD ₈	13.66	102	4300	14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56	164	4300	11300		7.86	178			2970	13800			6.66		210		2970		12800			5.82	241	2970		12100	4.92		285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99	117	13000	60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400		5.89	238	8670			53200		5.00	280				8670	49300			8.26	169		13000	49900																																																																																														
32.91	43	8000	53400		27.83	50	7680	54100			29.57	47	7780	53900		AD ₇		29.95	47	13000				62700	AD ₇	24.12	58			8000	49400	22.00	64	8000	47100	AD ₇	24.19	58	11900		64700	AD ₈	19.04	74		8000	43500	16.80	83	8000	40600	14.51	96	8000	37300	12.83	109	8000		34700	10.79	130	8000		31100		8.71	161	7840	27600			7.59	184	5110			39000	6.38	219	5110	35900			5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44	68	12000	64600		AD ₈	20.44	68	12000		64600	AD ₈	27.58	51		4300	20100	24.90	56	4300	19200	22.62	62	4300	18300		20.07	70	4300	17300	18.21				77	4300	16600			15.65			89	4300	15400				18.04		78	10500	67000			15.64	90	13000	62700	AD ₆	15.64		90	13000		62700	AD ₈	13.66	102	4300		14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970		13800	6.66			210	2970			12800		5.82		241		2970		12100	4.92	285	2900		11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400		AD ₈	11.99	117	13000		60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670		53200	5.00	280			8670		49300	8.26				169	13000			49900																																																																																																		
27.83	50	7680	54100		29.57	47	7780	53900			AD ₇	29.95	47	13000				62700	AD ₇	24.12	58		8000	49400		22.00	64	8000	47100	AD ₇	24.19	58	11900	64700	AD ₈		19.04	74	8000		43500		16.80	83		8000	40600	14.51	96	8000	37300	12.83	109	8000	34700	10.79	130	8000		31100	8.71	161	7840		27600		7.59	184	5110	39000			6.38	219	5110			35900	5.15	272	4600	34500			2-stage							2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44		68	12000	64600	AD ₈			20.44	68	12000		64600		AD ₈	27.58		51	4300	20100	24.90	56	4300	19200	22.62	62	4300		18300	20.07	70	4300	17300				18.21	77	4300			16600			15.65	89	4300				15400	18.04	78	10500	67000		15.64	90	13000	62700	AD ₆		15.64	90	13000	62700		AD ₈		13.66	102	4300		14400	11.59	121	4300	13300	10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970		13800	6.66			210	2970			12800		5.82		241	2970	12100		4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91		101	12600	63400	AD ₈			11.99	117	13000		60400	9.74	144	13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670		53200	5.00	280			8670		49300	8.26				169	13000	49900																																																																																																				
29.57	47	7780	53900		AD ₇	29.95	47	13000				62700	AD ₇																																																																																																																																																																																																																																																																																																																																																																
24.12	58	8000	49400			22.00	64	8000		47100	AD ₇	24.19		58	11900	64700	AD ₈	19.04	74	8000	43500	16.80	83	8000	40600	14.51	96	8000	37300		12.83	109	8000	34700			10.79	130	8000		31100		8.71	161		7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272	4600		34500	2-stage						2-stage						2-stage					30.77	45	4300	21100	AD ₅		20.44	68	12000	64600	AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300	20100	24.90	56	4300	19200	22.62	62	4300	18300		20.07		70	4300	17300				18.21	77	4300		16600			15.65		89	4300	15400	18.04	78	10500	67000	15.64	90	13000		62700	AD ₆	15.64	90	13000			62700	AD ₈	13.66	102		4300	14400	11.59		121	4300	13300		10.13	138	4300	12400	8.56	164	4300	11300	7.86	178	2970	13800			6.66	210	2970	12800				5.82	241	2970		12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈	11.99		117	13000	60400		9.74	144		13000	54400	8.26	169		13000	49900	7.25	193	8670	58400	5.89	238	8670	53200	5.00	280		8670		49300	8.26	169				13000	49900																																																																																																																																						
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19.04	74	8000	43500		16.80	83	8000	40600		14.51		96	8000	37300	12.83	109		8000	34700	10.79	130	8000	31100	8.71	161	7840	27600	7.59	184		5110	39000	6.38	219			5110	35900	5.15		272		4600	34500		2-stage					2-stage					2-stage					30.77	45	4300		21100		AD ₅	20.44	68	12000	64600		AD ₈	20.44	68	12000	64600	AD ₈	27.58	51	4300		20100	24.90	56	4300	19200		22.62	62	4300	18300		20.07	70	4300	17300	18.21	77	4300	16600	15.65	89	4300	15400		18.04		78	10500	67000				15.64	90	13000		62700			AD ₆		15.64	90	13000	62700	AD ₈	13.66	102	4300	14400	11.59	121	4300		13300	10.13	138	4300	12400	8.56		164	4300	11300	7.86	178	2970	13800	6.66	210	2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400			AD ₆	13.91	101	12600				63400	AD ₈	11.99		117	13000	60400	9.74	144	13000	54400	8.26	169		13000	49900	7.25	193		8670	58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																																																																																																																																													
16.80	83	8000	40600		14.51	96	8000	37300		12.83		109	8000	34700	10.79	130		8000	31100	8.71	161	7840	27600	7.59	184	5110	39000	6.38	219		5110	35900	5.15	272			4600	34500	2-stage					2-stage					2-stage					30.77	45	4300	21100	AD ₅		20.44	68	12000	64600		AD ₈	20.44		68	12000	64600	AD ₈	27.58		51	4300	20100	24.90		56	4300	19200		22.62	62	4300	18300	20.07		70	4300	17300	18.21		77	4300	16600	15.65	89	4300	15400	18.04	78	10500	67000	15.64		90		13000	62700	AD ₆				15.64	90	13000		62700					AD ₈	13.66	102	4300		14400	11.59	121	4300	13300	10.13	138		4300	12400	8.56	164	4300	11300		7.86	178	2970	13800	6.66	210	2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101				12600	63400	AD ₈				11.99		117		13000	60400	9.74	144	13000	54400	8.26	169	13000		49900	7.25	193	8670		58400	5.89	238	8670	53200	5.00	280	8670	49300	8.26	169	13000	49900																																																																																																																																																														
14.51	96	8000	37300		12.83	109	8000	34700		10.79		130	8000	31100	8.71	161		7840	27600	7.59	184	5110	39000	6.38	219	5110	35900	5.15	272		4600	34500	2-stage					2-stage					2-stage					30.77	45	4300	21100	AD ₅	20.44	68	12000	64600	AD ₈		20.44	68	12000	64600	AD ₈	27.58		51		4300	20100	24.90		56		4300	19200	22.62	62		4300	18300	20.07		70	4300	17300	18.21	77		4300	16600	15.65	89		4300	15400	18.04	78	10500	67000	15.64	90	13000	62700	AD ₆	15.64		90		13000	62700			AD ₈		13.66	102	4300	14400	11.59				121		4300	13300	10.13		138	4300	12400	8.56	164	4300	11300		7.86	178	2970	13800	6.66	210		2970	12800	5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈		11.99	117				13000	60400		9.74			144		13000	54400	8.26	169	13000	49900	7.25	193	8670	58400	5.89		238	8670	53200	5.00		280	8670	49300	8.26	169	13000	49900																																																																																																																																																																				
12.83	109	8000	34700		10.79	130	8000	31100		8.71		161	7840	27600	7.59	184		5110	39000	6.38	219	5110	35900	5.15	272	4600	34500	2-stage					2-stage					2-stage					30.77	45		4300	21100	AD ₅	20.44	68	12000		64600	AD ₈	20.44	68			12000	64600	AD ₈	27.58		51		4300		20100	24.90	56		4300		19200	22.62	62	4300		18300	20.07	70		4300	17300	18.21	77	4300		16600	15.65	89	4300		15400	18.04	78	10500	67000	15.64	90	13000	62700	AD ₆		15.64		90	13000	62700	AD ₈				13.66	102	4300	14400	11.59	121	4300			13300		10.13	138	4300		12400	8.56	164	4300	11300	7.86	178		2970	13800	6.66	210	2970	12800		5.82	241	2970	12100	4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91		101	12600	63400	AD ₈			11.99	117		13000		60400	9.74		144		13000	54400		8.26	169	13000	49900	7.25	193	8670	58400	5.89	238	8670		53200	5.00	280	8670		49300	8.26	169	13000	49900																																																																																																																																																																						
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7.86	178	2970	13800		6.66	210	2970	12800			5.82	241	2970	12100		4.92		285	2900	11300		13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈		11.99	117	13000	60400			9.74	144	13000	54400			8.26	169	13000	49900			7.25	193	8670	58400		5.89	238	8670	53200	5.00	280	8670	49300	8.26		169		13000	49900																																																																																																																																																																																																																																																																																																								
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5.82	241	2970	12100		4.92	285	2900	11300		13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈		11.99	117	13000	60400			9.74	144	13000	54400			8.26	169	13000	49900			7.25	193	8670	58400			5.89	238	8670	53200			5.00	280	8670	49300		8.26	169	13000	49900																																																																																																																																																																																																																																																																																																																		
4.92	285	2900	11300	13.91	101	12600	63400	AD ₆	13.91	101	12600	63400	AD ₈		11.99	117	13000	60400			9.74	144	13000	54400			8.26	169	13000	49900			7.25	193	8670	58400			5.89	238	8670	53200			5.00	280	8670	49300			8.26	169	13000	49900																																																																																																																																																																																																																																																																																																																							
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B-R..167 $n_e=1400$ rpm

B-R..167		18000Nm		
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD
3-stage				
229.71	6.1	18000	120000	AD ₅
186.93	7.5	18000	120000	
153.07	9.1	18000	120000	
139.98	10	18000	120000	
121.81	11	18000	120000	
107.49	13	18000	120000	
93.19	15	18000	120000	
82.91	17	18000	120000	
73.70	19	18000	120000	
67.40	21	18000	120000	AD ₆
58.65	24	18000	120000	
51.76	27	18000	120000	
44.87	31	18000	120000	AD ₇
39.92	35	18000	120000	
34.41	41	18000	120000	
27.96	50	18000	120000	AD ₈
23.71	59	18000	116500	
2-stage				
46.00	30	7000	120000	AD ₆
37.74	37	9000	120000	AD ₇
30.71	46	10000	120000	
24.57	57	14000	120000	AD ₈
21.85	64	13000	120000	
19.03	74	16000	111400	
16.98	82	15000	108900	
14.48	97	18000	93800	
11.99	117	17000	88700	
10.24	137	17000	82500	

TECHNICAL DATA

B-R.. AM..

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
0.09	15500	14075	43800	0.85		
0.11	12900	12344	62800	1.00		
0.12	11600	11143	65300	1.10		
0.14	10200	9743	67500	1.25		
0.16	8590	8443	69600	1.50		
0.18	7430	7307	70900	1.75	B-R 147 R77	4P
0.20	6560	6447	71700	2.0	B-RF 147 R77	4P
0.24	5660	5568	72500	2.3		
0.27	5120	4926	72900	2.5		
0.31	4430	4325	73300	2.9		
0.35	3900	3754	73600	3.3		
0.40	3380	3302	73800	3.8		
0.15	8930	8784	49900	0.90	B-R 137 R77	4P
0.18	7490	7479	54400	1.05	B-RF 137 R77	4P
0.20	6880	6559	55600	1.15		
0.23	5840	5834	57300	1.35		
0.26	5370	5116	57900	1.50	B-R 137 R77	4P
0.30	4540	4464	58900	1.75	B-RF 137 R77	4P
0.34	4000	3928	59500	2.0		
0.28	5260	4709	58100	1.50		
0.33	4450	4018	59000	1.80	B-R 137 R77	4P
0.38	3850	3514	59600	2.1	B-RF 137 R77	4P
0.40	3640	3338	59800	2.2		
0.45	3160	2929	60200	2.5		
0.30	4510	4435	28300	0.95	B-R 107 R77	4P
0.34	3990	3896	31100	1.10	B-RF 107 R77	4P
0.43	3190	3039	34300	1.35		
0.34	4380	3918	29000	1.00		
0.39	3700	3343	32400	1.15		
0.44	3360	3034	33700	1.30	B-R 107 R77	4P
0.50	2910	2653	35200	1.50	B-RF 107 R77	4P
0.58	2500	2280	36200	1.70		
0.64	2200	2067	36500	1.95		
0.66	2050	1987	36700	2.1		
0.72	1840	1827	36900	2.3	B-R 107 R77	4P
0.83	1580	1599	37200	2.7	B-RF 107 R77	4P
0.94	1410	1400	37300	3.1		
1.1	1210	1226	37400	3.6		
0.49	2920	2668	21500	1.05		
0.59	2420	2245	24500	1.25		
0.65	2160	2016	25700	1.40		
0.76	1920	1733	26700	1.55		
0.81	1790	1623	27200	1.70	B-R 97 R57	4P
0.92	1570	1434	27600	1.90	B-RF 97 R57	4P
1.1	1300	1207	27900	2.3		
1.2	1160	1084	28100	2.6		
1.4	990	934	28200	3.0		
1.5	920	878	28300	3.2		
1.8	785	755	28400	3.8		
0.49	2980	2722	20400	1.00	B-R 97 R57	4P
0.57	2520	2311	24000	1.20	B-RF 97 R57	4P
0.64	2270	2078	25200	1.30		
0.76	1850	1737	10800	0.85		
0.89	1650	1489	16200	0.95		
0.95	1540	1395	17000	1.00		
1.1	1350	1232	18200	1.15	B-R 87 R57	4P
1.1	1250	1145	18700	1.25	B-RF 87 R57	4P
1.3	1120	1037	19300	1.40		
1.4	1000	931	19800	1.55		
1.6	850	802	20000	1.85		
0.76	1850	1737	11200	0.85		
0.87	1620	1524	16400	0.95		
1.0	1350	1303	18200	1.15	B-R 87 R57	4P
1.2	1180	1143	19100	1.30	B-RF 87 R57	4P
1.5	940	885	20000	1.65		
1.7	830	776	20000	1.90		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
1.5	950	858	8100	0.85		
1.7	830	757	9800	1.00	B-R 77 R37	4P
2.0	735	671	10700	1.10	B-RF 77 R37	4P
2.3	620	571	11400	1.35		
1.6	870	821	9480	0.95		
1.8	780	731	10300	1.05		
2.0	720	646	10800	1.15		
2.4	625	560	11400	1.30	B-R 77 R37	4P
2.7	530	488	11900	1.55	B-RF 77 R37	4P
3.0	470	436	12200	1.75		
3.5	405	373	12500	2.0		
4.0	355	327	12600	2.3		
4.6	320	289	12800	2.6		
2.3	625	571	7260	0.95	B-R 67 R37	4P
2.7	525	486	8350	1.15	B-RF 67 R37	4P
2.3	635	574	7140	0.95		
2.7	545	495	8160	1.10		
3.0	465	438	8860	1.30	B-R 67 R37	4P
3.4	415	388	9250	1.45	B-RF 67 R37	4P
3.8	380	344	9470	1.60		
4.5	310	294	9840	1.95		
5.1	280	261	9960	2.1		
2.9	490	454	6910	0.90	B-R 57 R37	4P
3.2	445	410	7130	1.00	B-RF 57 R37	4P
2.8	520	471	6000	0.85		
3.7	390	357	7350	1.15		
4.1	345	319	7500	1.30	B-R 57 R37	4P
4.8	290	273	7650	1.55	B-RF 57 R37	4P
5.5	255	241	7750	1.75		
6.1	225	215	7800	2.0		
3.7	405	359	7280	1.10		
4.1	365	324	7430	1.25		
4.6	325	290	7560	1.40		
5.0	295	262	7650	1.55	B-R 57 R37	4P
5.3	275	246	7700	1.65	B-RF 57 R37	4P
6.0	240	220	7770	1.85		
7.0	205	188	7840	2.2		
8.3	172	159	7900	2.6		
4.4	335	301	4780	0.90		
5.2	285	255	5510	1.05	B-R 47 R37	4P
5.8	250	228	5660	1.20	B-RF 47 R37	4P
6.8	210	195	5810	1.40		
6.6	220	199	4650	0.90	B-R 37 R17	4P
7.7	192	172	5040	1.05	B-RF 37 R17	4P
8.8	167	150	5320	1.20		
5.8	250	226	2090	0.80		
6.5	230	202	4560	0.90	B-R 37 R17	4P
7.4	200	179	4950	1.10	B-RF 37 R17	4P
8.5	171	156	5270	1.15		
9.4	153	141	4120	0.85		
11	135	124	4210	0.95	B-R 27 R17	4P
12	121	110	4280	1.10	B-RF 27 R17	4P
14	102	94	4350	1.30		
9.8	148	135	4150	0.90		
11	134	118	4210	0.95	B-R 27 R17	4P
13	117	104	4290	1.10	B-RF 27 R17	4P
15	101	90	4350	1.30		
4.5	385	195.24	12500	2.1	B-R 77	6P
5.2	330	166.59	12700	2.5	B-RF 77	6P
6.0	290	145.67	12800	2.8	B-R 77	6P
6.3	275	138.39	12900	3.0	B-RF 77	6P
7.2	240	121.42	12900	3.4		
6.8	255	195.24	12900	3.2		
7.9	215	166.59	13000	3.8	B-R 77	4P
9.7	190	145.67	13000	4.3	B-RF 77	4P
9.5	180	138.39	13000	4.6		





HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
4.3	395	199.81	9370	1.50		
4.7	365	184.07	9560	1.65		
5.5	310	158.14	9830	1.90		
6.3	270	137.67	10000	2.2		
6.8	255	128.97	10100	2.3		
7.6	225	113.94	10200	2.7	B-R 67	6P
8.2	210	105.83	10200	2.9	B-RF 67	6P
9.1	190	95.91	10300	3.2		
10	170	86.11	10300	3.5		
12	147	74.17	10400	4.1		
13	138	69.75	10400	4.3		
6.6	260	199.81	10100	2.3		
7.2	240	184.07	10100	2.5		
8.4	205	158.14	10200	2.9		
9.6	179	137.67	10300	3.3	B-R 67	4P
10	168	128.97	10300	3.6	B-RF 67	4P
12	148	113.94	10400	4.0		
13	138	105.83	10400	4.3		
4.7	370	186.89	7420	1.20		
5.1	340	172.17	7510	1.30		
5.9	290	147.92	7650	1.55	B-R 57	6P
6.8	255	128.77	7740	1.75	B-RF 57	6P
7.2	240	120.63	7780	1.90		
7.1	245	186.89	7770	1.85		
7.7	225	172.17	7810	2.0		
8.9	193	147.92	7870	2.3		
10	168	128.77	7900	2.7	B-R 57	4P
11	157	120.63	7920	2.9	B-RF 57	4P
12	139	106.58	7940	3.2		
13	129	98.99	7950	3.5		
15	117	89.71	7970	3.8		
7.5	230	176.88	5740	1.30		
8.1	210	162.94	5810	1.40		
9.4	182	139.99	5910	1.65		
11	159	121.87	5980	1.90		
12	149	114.17	6000	2.0	B-R 47	4P
13	131	100.86	6040	2.3	B-RF 47	4P
14	122	93.68	6060	2.5		
16	111	84.90	6080	2.7		
17	99	76.23	6100	3.0		
7.0	245	123.66	3060	0.80		
8.3	210	105.28	4840	0.95	B-R 37	6P
9.6	179	90.77	5190	1.10	B-RF 37	6P
10	167	84.61	5310	1.20		
9.8	176	134.82	5230	1.15		
11	161	123.66	5370	1.25		
13	137	105.28	5580	1.45		
15	118	90.77	5710	1.70		
16	110	84.61	5760	1.80	B-R 37	4P
18	96	73.96	5840	2.1	B-RF 37	4P
19	90	69.33	5870	2.2		
22	80	61.18	5920	2.5		
24	73	55.76	5940	2.8		
27	63	48.08	5960	3.2		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
11	161	123.91	4070	0.80		
13	137	105.49	4200	0.95		
15	118	90.96	4280	1.10		
16	110	84.78	4320	1.20		
18	97	74.11	4370	1.35		
19	91	69.47	4380	1.45		
22	80	61.30	4320	1.65		
24	73	55.87	4210	1.80	B-R 27	4P
27	63	48.17	4040	2.1	B-RF 27	4P
29	59	44.90	3960	2.2		
34	51	39.25	3810	2.5		
36	48	36.79	3740	2.7		
41	42	32.47	3610	3.1		
46	38	28.78	3480	3.5		
54	32	24.47	3310	4.1		
47	37	28.37	3470	3.5		
51	34	26.09	3380	3.8		
59	29	22.32	3220	4.5		
68	25	19.35	3090	5.2	B-R 27	4P
73	24	18.08	3020	5.5	B-RF 27	4P
84	20	15.63	2890	6.4		
99	17	13.28	2750	7.5		
16	106	81.64	1260	0.80		
19	92	70.39	1330	0.95		
20	85	65.61	1740	1.00		
23	75	57.35	2350	1.15		
25	70	53.76	2500	1.20		
28	62	47.44	2450	1.40	B-R 17	4P
30	58	44.18	2410	1.50	B-RF 17	4P
34	50	38.61	2340	1.70		
36	47	36.20	2300	1.80		
41	42	31.94	2240	2.0		
47	37	28.32	2170	2.3		
55	31	24.07	2080	2.7		
34	50	25.23	2330	1.70	B-R 17	6P
38	46	23.15	2290	1.85	B-RF 17	6P
44	39	19.71	2200	2.2		
52	33	25.23	2110	2.6		
57	30	23.15	2060	2.8		
67	26	19.71	1970	3.3		
78	22	16.99	1890	3.8		
83	21	15.84	1860	4.1		
95	18	13.84	1790	4.7		
102	17	12.98	1760	5.0		
115	15	11.45	1690	5.4		
130	13	10.15	1640	5.8	B-R 17	4P
153	11	8.63	1560	6.4	B-RF 17	4P
175	9.8	7.55	1480	5.7		
188	9.2	7.04	1450	6.0		
215	8.0	6.15	1390	6.8		
229	7.5	5.76	1370	7.1		
259	6.6	5.09	1320	7.7		
293	5.9	4.51	1270	8.1		
344	5.0	3.83	1210	9.0		
268	6.4	10.15	1310	12		
315	5.5	8.63	1250	13		
360	4.8	7.55	1190	12		
387	4.4	7.04	1160	13		
442	3.9	6.15	1120	14	B-R 17	2P
472	3.6	5.76	1090	15	B-RF 17	2P
535	3.2	5.09	1050	16		
603	2.8	4.51	1010	17		
710	2.4	3.83	960	19		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.37kW						
0.19	15800	7307	39000	0.80		
0.21	14000	6447	60600	0.95		
0.25	12100	5568	64400	1.10		
0.28	10800	4926	66600	1.20	B-R 147 R77	4P
0.32	9400	4325	68600	1.40	B-RF 147 R77	4P
0.37	8210	3754	70100	1.60		
0.42	7180	3302	71200	1.80		
0.48	6280	2898	72000	2.1		
0.31	9670	4464	40700	0.85	B-R 137 R77	4P
0.35	8510	3928	51800	0.95	B-RF 137 R77	4P
0.34	9140	4018	48900	0.90		
0.39	7950	3514	53500	1.00		
0.41	7540	3338	54300	1.05	B-R 137 R77	4P
0.47	6580	2929	56100	1.20	B-RF 137 R77	4P
0.56	5540	2484	57700	1.45		
0.62	4980	2242	58400	1.60		
0.52	5880	2658	57200	1.35		
0.57	5330	2412	58000	1.50		
0.67	4580	2073	58900	1.75		
0.75	3990	1839	59500	2.0	B-R 137 R77	4P
0.99	3070	1397	60300	2.6	B-RF 137 R77	4P
1.1	2670	1226	60600	3.0		
1.3	2400	1090	60700	3.3		
1.5	2090	951	60900	3.8		
0.67	4610	2067	27700	0.95		
0.82	3760	1693	32100	1.15		
0.89	3410	1550	33500	1.25	B-R 107 R77	4P
0.98	3090	1407	34600	1.40	B-RF 107 R77	4P
1.1	2660	1209	35900	1.60		
1.3	2320	1055	36400	1.85		
0.69	4370	1987	29100	1.00		
0.76	3970	1827	31100	1.10		
0.86	3440	1599	33400	1.25	B-R 107 R77	4P
0.99	3040	1400	34800	1.40	B-RF 107 R77	4P
1.1	2640	1226	36000	1.65		
1.5	2040	939	36700	2.1		
1.7	1770	822	37000	2.4		
0.96	3240	1434	21300	0.95	B-R 97 R57	4P
1.1	2710	1207	22900	1.10	B-RF 97 R57	4P
1.3	2430	1084	24500	1.25		
0.99	3100	1396	15400	0.95		
1.1	2710	1228	22900	1.10		
1.3	2410	1069	24500	1.25		
1.5	2110	938	25900	1.40		
1.7	1820	824	27100	1.65	B-R 97 R57	4P
1.9	1630	737	27500	1.85	B-RF 97 R57	4P
2.2	1390	632	27800	2.2		
3.2	960	431	28300	3.1		
3.6	840	379	28400	3.6		
4.1	745	336	28400	4.0		
1.7	1780	802	15100	0.85	B-R 87 R57	4P
1.8	1670	754	16000	0.95	B-RF 87 R57	4P
2.1	1430	649	17700	1.10		
1.8	1730	776	15500	0.90		
2.0	1530	685	17100	1.00		
2.3	1310	599	18400	1.20	B-R 87 R57	4P
2.6	1150	525	19200	1.35	B-RF 87 R57	4P
3.0	1000	456	19800	1.55		
5.2	585	268	20000	2.7		
5.8	515	236	20000	3.0		
2.6	1230	538	18800	1.25		
2.9	1080	472	19500	1.45	B-R 87 R57	4P
3.5	910	400	20000	1.70	B-RF 87 R57	4P
3.8	810	361	20000	1.90		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.37kW						
3.2	980	436	8390	0.85		
3.7	840	373	9720	0.95		
4.2	740	327	10600	1.10		
4.8	655	289	11200	1.25		
5.3	585	260	11600	1.40	B-R 77 R37	4P
6.2	500	224	12100	1.65	B-RF 77 R37	4P
7.0	435	197	12400	1.90		
8.1	380	169	12600	2.2		
9.3	335	149	12700	2.5		
4.7	650	294	6230	0.90		
5.3	585	261	7710	1.00	B-R 67 R37	4P
5.9	525	234	8340	1.15	B-RF 67 R37	4P
6.9	450	200	9010	1.35		
2.7	1330	255.71	27900	2.3		
2.8	1250	241.25	28000	2.4	B-R 97	8P
3.1	1120	216.28	28100	2.7	B-RF 97	8P
3.7	970	186.30	28300	3.1		
3.1	1140	289.74	28100	2.6		
3.5	1000	255.71	28200	3.0	B-R 97	6P
3.7	950	241.25	28300	3.2	B-RF 97	6P
4.2	850	216.28	28400	3.5		
3.1	1130	216.54	19300	1.40	B-R 87	8P
3.3	1070	205.71	19600	1.45	B-RF 87	8P
3.7	940	181.77	20000	1.65		
3.7	970	246.54	20000	1.60		
4.2	850	216.54	20000	1.80		
4.4	810	205.71	20000	1.90	B-R 87	6P
4.9	715	181.77	20000	2.2	B-RF 87	6P
5.8	610	155.34	20000	2.5		
6.3	560	142.41	20000	2.8		
4.7	755	145.67	10500	1.10		
4.9	720	138.39	10800	1.15	B-R 77	8P
5.6	630	121.42	11400	1.30	B-RF 77	8P
5.4	655	166.59	11200	1.25	B-R 77	6P
6.2	570	145.67	11700	1.45	B-RF 77	6P
6.5	545	138.39	11900	1.50		
7.1	500	195.24	12100	1.65		
8.3	425	166.59	12400	1.90		
9.5	375	145.67	12600	2.2		
10	355	138.39	12800	2.3	B-R 77	4P
11	310	121.42	12900	2.6	B-RF 77	4P
13	265	102.99	12900	3.1		
15	240	92.97	12900	3.5		
5.7	620	158.14	7300	0.95		
6.5	540	137.67	8210	1.10	B-R 67	6P
7.0	505	128.97	8530	1.20	B-RF 67	6P
7.9	445	113.94	9010	1.35		
6.9	510	199.81	8480	1.15		
7.5	470	184.07	8820	1.25		
8.7	405	158.14	9310	1.50		
10	355	137.67	9620	1.70		
11	330	128.97	9740	1.80		
12	290	113.94	9920	2.1		
13	270	105.83	10000	2.2	B-R 67	4P
14	245	95.91	10100	2.4	B-RF 67	4P
16	220	86.11	10200	2.7		
19	190	74.17	10300	3.2		
20	179	69.75	10400	3.4		
23	157	61.26	10400	3.8		
24	146	56.89	10400	4.1		
7.0	505	128.77	6510	0.90		
7.5	475	120.63	7000	0.95	B-R 57	6P
8.4	420	106.58	7240	1.10	B-RF 57	6P
9.1	390	98.99	7350	1.15		





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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.37kW						
7.4	480	186.89	6980	0.95		
8.0	440	172.17	7140	1.00		
9.3	380	147.92	7390	1.20		
11	330	128.77	7550	1.35		
12	310	120.63	7610	1.45		
13	275	106.58	7700	1.65		
14	255	98.99	7750	1.80	B-R 57	4P
15	230	89.71	7800	1.95	B-RF 57	4P
17	205	80.55	7840	2.2		
20	177	69.23	7890	2.5		
21	166	64.85	7910	2.7		
24	147	57.29	7760	3.1		
26	136	53.22	7600	3.3		
29	124	48.23	7380	3.6		
9.9	360	139.99	3490	0.85		
11	310	121.87	5350	0.95		
12	290	114.17	5460	1.05		
14	260	100.86	5630	1.15		
15	240	93.68	5700	1.25		
16	215	84.90	5790	1.40		
18	195	76.23	5870	1.55	B-R 47	4P
20	176	68.54	5930	1.70	B-RF 47	4P
21	164	64.21	5960	1.80		
24	145	56.73	6010	2.1		
26	135	52.69	5990	2.2		
29	122	47.75	5820	2.5		
32	110	42.87	5650	2.7		
37	95	36.93	5410	3.2		
40	89	34.73	5310	3.4		
41	87	33.79	5270	2.8		
44	80	31.12	5150	2.8	B-R 47	4P
52	69	26.74	4920	4.4	B-RF 47	4P
59	60	23.28	4720	5.0		
63	56	21.81	4620	5.4		
15	230	90.77	4250	0.85	B-R 37	4P
16	215	84.61	4720	0.90	B-RF 37	4P
19	189	73.96	5070	1.05		
20	178	69.33	5210	1.15		
23	157	61.18	5410	1.30		
25	143	55.76	5530	1.40		
29	123	48.08	5590	1.60		
31	115	44.81	5480	1.75	B-R 37	4P
35	100	39.17	5290	2.0	B-RF 37	4P
38	94	36.72	5190	2.1		
43	83	32.40	5010	2.4		
48	74	28.73	4850	2.7		
57	63	24.42	4620	3.2		
49	73	28.32	4830	2.8		
53	67	26.03	4710	2.8	B-R 37	4P
62	57	22.27	4500	3.5	B-RF 37	4P
71	49	19.31	4320	4.1		
76	46	18.05	4230	4.3		
88	40	15.60	4050	5.0	B-R 37	4P
104	34	13.25	3850	5.6	B-RF 37	4P
117	30	11.83	3720	6.0		
23	157	61.30	3870	0.85		
25	143	55.87	3800	0.90		
29	123	48.17	3680	1.05		
31	115	44.90	3620	1.15	B-R 27	4P
35	101	39.25	3510	1.30	B-RF 27	4P
38	94	36.79	3460	1.40		
43	83	32.47	3350	1.55		
49	74	28.78	3250	1.75		
57	63	24.47	3110	2.1		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.37kW						
49	73	28.37	3240	1.80		
53	67	26.09	3170	1.95		
62	57	22.32	3040	2.3	B-R 27	4P
71	50	19.35	2920	2.6	B-RF 27	4P
76	46	18.08	2860	2.8		
88	40	15.63	2750	3.2		
104	34	13.28	2620	3.8		
36	99	38.61	770	0.85		
38	93	36.20	1260	0.90	B-R 17	4P
43	82	31.94	1910	1.05	B-RF 17	4P
49	73	28.32	1880	1.15		
57	62	24.07	1830	1.40		
55	65	25.23	1840	1.30		
60	59	23.15	1820	1.45		
70	51	19.71	1760	1.70		
81	44	16.99	1710	1.95		
87	41	15.84	1680	2.1		
100	35	13.84	1630	2.4		
106	33	12.98	1610	2.6		
121	29	11.45	1560	2.8	B-R 17	4P
136	26	10.15	1520	3.0	B-RF 17	4P
160	22	8.63	1460	3.3		
183	19	7.55	1370	2.9		
196	18	7.04	1350	3.1		
224	16	6.15	1300	3.4		
239	15	5.76	1280	3.6		
271	13	5.09	1240	3.9		
306	12	4.51	1200	4.2		
360	9.8	3.83	1150	4.6		
191	19	13.84	1390	4.6		
204	17	12.98	1360	4.9		
231	15	11.45	1320	5.3		
261	14	10.15	1270	5.7		
307	12	8.63	1220	6.3		
351	10	7.55	1150	5.5	B-R 17	2P
377	9.4	7.04	1130	5.8	B-RF 17	2P
431	8.2	6.15	1090	6.6		
460	7.7	5.76	1070	6.9		
521	6.8	5.09	1030	7.5		
588	6.0	4.51	990	8.0		
691	5.1	3.83	950	8.8		
0.55kW						
0.22	19800	6077	120000	0.90		
0.25	17600	5407	120000	1.00	B-R 167 R97	4P
0.29	15100	4650	120000	1.20	B-RF 167 R97	4P
0.33	13300	4129	120000	1.35		
0.28	16600	4926	26300	0.80		
0.31	14500	4325	55900	0.90	B-R 147 R77	4P
0.36	12700	3754	63300	1.05	B-RF 147 R77	4P
0.41	11100	3302	66100	1.15		
0.47	9720	2898	68200	1.35		
0.53	8730	2555	69500	1.50		
0.62	7560	2211	70800	1.70		
0.70	6670	1951	71600	1.95	B-R 147 R77	4P
0.80	5730	1705	72400	2.3	B-RF 147 R77	4P
0.89	5140	1536	72900	2.5		
1.0	4450	1329	73300	2.9		
1.2	3880	1166	73600	3.3		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.55kW						
0.55	8540	2484	51700	0.95	B-R 137 R77 B-RF 137 R77	4P 4P
0.51	9080	2658	49200	0.90		
0.56	8240	2412	52900	0.95		
0.66	7090	2073	55200	1.15		
0.74	6210	1839	56700	1.30		
0.85	5350	1598	58000	1.50	B-R 137 R77	4P
0.97	4760	1397	58700	1.70	B-RF 137 R77	4P
1.1	4150	1226	59400	1.95		
1.2	3710	1090	59800	2.2		
1.4	3240	951	60200	2.5		
1.6	2780	831	60500	2.9		
0.97	4790	1407	23400	0.90		
1.1	4120	1209	30400	1.05		
1.3	3590	1055	32800	1.20	B-R 107 R77	4P
1.5	3140	919	34500	1.35	B-RF 107 R77	4P
1.7	2790	815	35600	1.55		
1.9	2450	717	36200	1.75		
2.2	2140	626	36600	2.0		
0.97	4730	1400	25600	0.90		
1.1	4120	1226	30400	1.05	B-R 107 R77	4P
1.2	3690	1104	32400	1.15	B-RF 107 R77	4P
1.5	3170	939	34400	1.35		
1.7	2760	822	35700	1.55		
1.5	3240	938	21600	0.95		
1.6	2810	824	22200	1.05		
1.8	2520	737	24000	1.20		
2.2	2160	632	25700	1.40		
2.4	1880	560	26800	1.60	B-R 97 R57	4P
2.8	1640	484	27400	1.85	B-RF 97 R57	4P
3.2	1480	431	27700	2.0		
3.6	1290	379	27900	2.3		
4.0	1150	336	28100	2.6		
4.6	1010	296	28200	3.0		
5.5	840	249	28400	3.6		
2.6	1780	525	15100	0.85		
3.0	1550	456	16900	1.00	B-R 87 R57	4P
3.4	1340	398	18200	1.15	B-RF 87 R57	4P
3.9	1190	352	19000	1.30		
4.4	1030	305	19700	1.50		
2.9	1650	472	16200	0.95	B-R 87 R57	4P
3.4	1400	400	17900	1.10	B-RF 87 R57	4P
3.8	1260	361	18700	1.25		
4.9	970	276	6420	0.85		
5.8	830	236	9860	1.00	B-R 77 R37	4P
6.5	775	221	10300	1.05	B-RF 77 R37	4P
7.3	650	186	11300	1.25		
2.7	1980	255.71	26500	1.50		
2.8	1860	241.25	26900	1.60	B-R 97	8P
3.1	1670	216.28	27400	1.80	B-RF 97	8P
3.1	1690	289.74	27400	1.75		
3.5	1490	255.71	27700	2.0	B-R 97	6P
3.7	1410	241.25	27800	2.1	B-RF 97	6P
4.2	1260	216.28	28000	2.4		
4.7	1120	289.74	28100	2.7		
5.3	990	255.71	28200	3.0	B-R 97	4P
5.6	930	241.25	28300	3.2	B-RF 97	4P
6.3	840	216.28	28400	3.6		
3.7	1440	246.54	17700	1.10		
4.2	1260	216.54	18700	1.25	B-R 87	6P
4.4	1200	205.71	19000	1.30	B-RF 87	6P
4.9	1060	181.77	19600	1.45		
5.8	910	155.34	20000	1.70		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.55kW						
5.5	950	246.54	20000	1.65		
6.3	840	216.54	20000	1.85		
6.6	795	205.71	20000	1.95		
7.5	700	181.77	20000	2.2		
8.8	600	155.34	20000	2.6	B-R 87	4P
9.6	550	142.41	20000	2.8	B-RF 87	4P
11	485	124.97	20000	3.2		
12	455	118.43	20000	3.4		
13	400	103.65	20000	3.9		
8.2	645	166.59	11300	1.25		
9.3	565	145.67	11800	1.45		
9.8	535	138.39	11900	1.55		
11	470	121.42	12200	1.75		
13	400	102.99	12500	2.1	B-R 77	4P
15	360	92.97	12600	2.3	B-RF 77	4P
17	315	81.80	12800	2.6		
18	300	77.24	12800	2.8		
21	255	65.77	12900	3.2		
8.6	610	158.14	7430	1.00		
9.9	530	137.67	8290	1.15		
11	500	128.97	8600	1.20		
12	440	113.94	9060	1.35		
13	410	105.83	9280	1.45		
14	370	95.91	9520	1.60	B-R 67	4P
16	335	86.11	9730	1.80	B-RF 67	4P
18	285	74.17	9940	2.1		
20	270	69.75	10000	2.2		
22	235	61.26	10100	2.5		
24	220	56.89	10200	2.7		
11	465	120.63	7030	0.95		
13	410	106.58	7260	1.10		
14	380	98.99	7370	1.20		
15	345	89.71	7490	1.30		
17	310	80.55	7600	1.45		
20	265	69.23	7710	1.70		
21	250	64.85	7750	1.80	B-R 57	4P
24	220	57.29	7530	2.0	B-RF 57	4P
26	205	53.22	7390	2.2		
28	186	48.23	7190	2.4		
31	167	43.30	6980	2.7		
36	144	37.30	6700	3.1		
39	136	35.07	6580	3.3		
52	102	26.31	6060	4.4		
54	97	24.99	5970	4.7	B-R 57	4P
62	85	21.93	5740	5.3	B-RF 57	4P
73	72	18.60	5460	6.3		
15	360	93.68	3280	0.85		
16	330	84.90	5230	0.90		
18	295	76.23	5450	1.00		
20	265	68.54	5600	1.15		
21	250	64.21	5670	1.20		
24	220	56.73	5790	1.35	B-R 47	4P
26	205	52.69	5770	1.45	B-RF 47	4P
28	184	47.75	5630	1.65		
32	166	42.87	5470	1.80		
37	143	36.93	5260	2.1		
39	134	34.73	5180	2.2		
46	115	29.88	4970	2.6		
51	103	26.74	4820	2.9		
58	90	23.28	4630	3.3	B-R 47	4P
62	84	21.81	4550	3.6	B-RF 47	4P



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.55kW						
22	235	61.18	3910	0.85		
24	215	55.76	4740	0.95		
28	186	48.08	5120	1.10		
30	173	44.81	5230	1.15		
35	151	39.17	5070	1.30	B-R 37	4P
37	142	36.72	4990	1.40	B-RF 37	4P
42	125	32.40	4840	1.60		
47	111	28.73	4700	1.80		
56	94	24.42	4500	2.1		
61	86	22.27	4390	2.3		
70	75	19.31	4220	2.7		
75	70	18.05	4140	2.9	B-R 37	4P
87	60	15.60	3970	3.3	B-RF 37	4P
103	51	13.25	3790	3.7		
115	46	11.83	3670	4.0		
35	152	39.25	3280	0.85		
37	142	36.79	3240	0.90		
42	125	32.47	3160	1.05	B-R 27	4P
47	111	28.78	3080	1.15	B-RF 27	4P
56	95	24.47	2970	1.40		
61	86	22.32	2910	1.50		
70	75	19.35	2810	1.75		
75	70	18.08	2760	1.85		
87	60	15.63	2660	2.2		
102	51	13.28	2550	2.5		
115	46	11.86	2470	2.5		
134	39	10.13	2370	3.1		
145	36	9.41	2290	3.4	B-R 27	4P
167	32	8.16	2200	3.7	B-RF 27	4P
178	29	7.63	2160	3.8		
206	26	6.59	2070	4.2		
243	22	5.60	1980	4.6		
272	19	5.00	1910	4.9		
318	17	4.27	1830	5.3		
340	15	4.00	1790	5.5		
404	13	3.37	1700	6.1		
50	105	53.76	1235	0.80		
57	92	47.44	1280	0.90	B-R 17	2P
61	86	44.18	1610	1.00	B-RF 17	2P
70	75	38.61	1590	1.15		
69	76	19.71	1590	1.10		
80	66	16.99	1560	1.30		
86	61	15.84	1550	1.40		
98	54	13.84	1510	1.60		
105	50	12.98	1500	1.70		
119	44	11.45	1460	1.85		
134	39	10.15	1430	1.95		
158	33	8.63	1380	2.2	B-R 17	4P
180	29	7.55	1290	1.90	B-RF 17	4P
193	27	7.04	1270	2.0		
221	24	6.15	1240	2.3		
236	22	5.76	1220	2.4		
267	20	5.09	1190	2.6		
302	17	4.51	1150	2.8		
355	15	3.83	1110	3.0		
313	17	8.63	1170	4.3		
358	15	7.55	1100	3.8		
384	14	7.04	1080	4.0		
439	12	6.15	1050	4.5	B-R 17	2P
468	11	5.76	1030	4.7	B-RF 17	2P
531	9.9	5.09	990	5.2		
599	8.8	4.51	960	5.2		
704	7.5	3.83	920	6.0		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.75kW						
0.30	20700	4650	120000	0.85		
0.33	18300	4129	120000	1.00		
0.52	12000	2657	120000	1.50	B-R 167 R97	4P
0.59	10400	2333	120000	1.75	B-RF 167 R97	4P
0.66	8230	2085	120000	1.95		
0.96	6510	1438	120000	2.8		
0.42	15100	3302	49000	0.85	B-R 147 R77	4P
0.48	13200	2898	62000	1.00	B-RF 147 R77	4P
0.54	11900	2555	64800	1.10		
0.62	10300	2211	67400	1.25		
0.71	9070	1951	69000	1.45	B-R 147 R77	4P
0.81	7830	1705	70500	1.65	B-RF 147 R77	4P
0.90	7030	1536	71300	1.85		
1.1	6080	1329	72100	2.1		
1.2	5310	1166	72700	2.5		
0.74	8640	1863	51200	0.95		
0.87	7330	1586	54700	1.10	B-R 137 R77	4P
0.99	6500	1391	56200	1.25	B-RF 137 R77	4P
1.1	5850	1256	57300	1.35		
0.67	9640	2073	41400	0.85		
0.75	8480	1839	51900	0.95		
0.86	7310	1598	54800	1.10		
0.99	6480	1397	56300	1.25		
1.1	5660	1226	57500	1.40	B-R 137 R77	4P
1.3	5050	1090	58300	1.60	B-RF 137 R77	4P
1.5	4410	951	59100	1.80		
1.7	3810	831	59700	2.1		
1.9	3320	730	60100	2.4		
1.3	4890	1055	19000	0.90		
1.5	4270	919	29600	1.00	B-R 107 R77	4P
1.7	3800	815	31900	1.15	B-RF 107 R77	4P
1.2	5050	1104	27700	0.85		
1.5	4330	939	29300	1.00		
1.7	3770	822	32000	1.15	B-R 107 R77	4P
3.7	1690	369	37100	2.5	B-RF 107 R77	4P
4.3	1470	323	37300	2.9		
2.2	2940	632	21400	1.00		
2.5	2570	560	23700	1.15		
2.8	2230	484	25400	1.35		
3.2	2010	431	26400	1.50	E-R 97 R57	4P
3.6	1760	379	27200	1.70	E-RF 97 R57	4P
4.1	1570	336	27600	1.90		
4.7	1370	296	27800	2.2		
5.5	1150	249	28100	2.6		
3.5	1830	398	12400	0.85		
3.9	1630	352	16400	0.95		
4.5	1400	305	17900	1.10	B-R 87 R57	4P
5.2	1240	268	18800	1.25	B-RF 87 R57	4P
5.8	1090	236	19500	1.40		
3.8	1710	361	15700	0.90		
4.6	1410	300	17800	1.10	B-R 87 R57	4P
5.4	1200	256	19000	1.30	B-RF 87 R57	4P
2.8	2610	251.15	36000	1.65		
3.0	2390	229.95	36300	1.80	B-R 107	8P
3.4	2110	203.16	36700	2.0	B-RF 107	8P



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.75kW						
3.2	2240	216.28	25300	1.35	B-R 97	8P
3.7	1930	186.30	26600	1.55	B-RF 97	8P
4.1	1760	170.02	27200	1.75		
3.5	2030	255.71	26200	1.45	B-R 97	6P
3.7	1920	241.25	26700	1.55	B-RF 97	6P
4.2	1720	216.28	27300	1.75		
4.8	1500	289.74	27600	2.0		
5.4	1330	255.71	27900	2.3		
5.7	1250	241.25	28000	2.4	B-R 97	4P
6.4	1120	216.28	28100	2.7	B-RF 97	4P
7.4	970	186.30	28300	3.1		
8.1	880	170.02	28300	3.4		
4.2	1720	216.54	15600	0.90	B-R 87	6P
4.4	1640	205.71	16300	0.95	B-RF 87	6P
4.9	1450	181.77	17600	1.05		
5.8	1240	155.34	18800	1.25	B-R 87	6P
6.3	1130	142.41	19300	1.35	B-RF 87	6P
5.6	1280	246.54	18600	1.20		
6.4	1120	216.54	19300	1.40		
6.7	1070	205.71	19600	1.45		
7.6	940	181.77	20000	1.65		
8.9	810	155.34	20000	1.90	B-R 87	4P
9.7	740	142.41	20000	2.1	B-RF 87	4P
11	650	124.97	20000	2.4		
12	615	118.43	20000	2.5		
13	540	103.65	20000	2.9		
15	480	93.38	20000	3.2		
8.3	860	166.59	9490	0.95	B-R 77	4P
9.5	755	145.67	10500	1.10	B-RF 77	4P
10	720	138.39	10800	1.15		
11	630	121.42	11400	1.30		
13	535	102.99	11900	1.55		
15	485	92.97	12200	1.70		
17	425	81.80	12400	1.95		
18	400	77.24	12500	2.0	B-R 77	4P
21	340	65.77	12700	2.4	B-RF 77	4P
24	300	57.68	12800	2.7		
27	270	52.07	12900	3.0		
30	240	45.81	12900	3.5		
32	225	43.26	13000	3.7		
11	670	128.97	4040	0.90		
12	590	113.94	7660	1.00		
13	550	105.83	8120	1.10		
14	500	95.91	8600	1.20		
16	445	86.11	9010	1.35	B-R 67	4P
19	385	74.17	9430	1.55	B-RF 67	4P
20	360	69.75	9570	1.65		
23	320	61.26	9800	1.90		
24	295	56.89	9910	2.0		
27	270	51.56	10000	2.2		
30	240	46.29	10100	2.5		
13	555	106.58	4610	0.80		
14	515	98.99	6200	0.90		
15	465	89.71	7040	0.95		
17	520	80.55	7240	1.10	B-R 57	4P
20	360	69.23	7450	1.25	B-RF 57	4P
21	335	64.85	7430	1.35		
24	295	57.29	7220	1.50		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.75kW						
26	275	53.22	7090	1.65		
29	250	48.23	6930	1.80		
32	225	43.30	6740	2.0	B-R 57	4P
37	194	37.30	6490	2.3	B-RF 57	4P
39	182	35.07	6380	2.5		
46	157	30.18	6130	2.9		
51	140	26.97	5940	3.2		
52	137	26.31	5900	3.3		
55	130	24.99	5820	3.5	B-R 57	4P
63	114	21.93	5610	4.0	B-RF 57	4P
74	97	18.60	5350	4.7		
20	355	68.54	3660	0.85	B-R 47	4P
21	335	64.21	4950	0.90	B-RF 47	4P
24	295	56.73	5450	1.00		
26	275	52.69	5480	1.10		
29	250	47.75	5370	1.20		
32	225	42.87	5240	1.35		
37	192	36.93	5060	1.55	B-R 47	4P
40	180	34.73	4980	1.65	B-RF 47	4P
46	155	29.88	4800	1.95		
52	139	26.70	4660	2.2		
58	122	23.59	4510	2.5		
52	139	26.74	4660	2.2		
59	121	23.28	4490	2.5		
63	113	21.81	4420	2.7	B-R 47	4P
72	100	19.27	4270	3.0	B-RF 47	4P
77	93	17.89	4180	3.1		
85	84	16.22	4070	3.3		
29	250	48.08	2330	0.80	B-R 37	4P
31	235	44.81	4230	0.85	B-RF 37	4P
35	205	39.17	4720	1.00		
38	191	36.72	4740	1.05		
43	168	32.40	4610	1.20	B-R 37	4P
48	149	28.73	4490	1.35	B-RF 37	4P
57	127	24.42	4320	1.60		
62	116	22.27	4230	1.75		
71	100	19.31	4080	2.0		
76	94	18.05	4010	2.1		
88	81	15.60	3850	2.5	B-R 37	4P
104	69	13.25	3690	2.8	B-RF 37	4P
117	61	11.83	3570	3.0		
137	53	10.11	3420	3.2		
146	49	9.47	3360	3.4		
48	149	28.78	2880	0.85	B-R 27	4P
56	127	24.47	2800	1.00	B-RF 27	4P
62	116	22.32	2750	1.10		
71	100	19.35	2670	1.30		
76	94	18.08	2630	1.40		
88	81	15.63	2550	1.60		
104	69	13.28	2450	1.90		
116	62	11.86	2380	2.1		
138	53	10.13	2290	2.3	B-R 27	4P
147	49	9.41	2210	2.5	B-RF 27	4P
169	42	8.16	2130	2.7		
181	40	7.63	2090	2.8		
209	34	6.59	2010	3.1		
246	29	5.60	1930	3.4		
276	26	5.00	1870	3.7		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.75kW						
70	102	19.71	1465	0.85		
81	88	16.99	1390	0.95		
87	82	15.84	1380	1.05		
100	72	13.84	1370	1.20		
106	67	12.98	1360	1.25		
121	59	11.45	1350	1.35		
136	53	10.15	1320	1.45	B-R 17	4P
160	45	8.63	1290	1.60	B-RF 17	4P
183	39	7.55	1200	1.45		
196	37	7.04	1180	1.50		
224	32	6.15	1160	1.70		
239	30	5.76	1150	1.75		
271	26	5.09	1120	1.95		
306	23	4.51	1090	2.0		
360	20	3.83	1060	2.3		
236	30	11.45	1200	2.7		
266	27	10.15	1170	2.9		
313	23	8.63	1130	3.1		
358	20	7.55	1060	2.8		
384	19	7.04	1040	2.9	B-R 17	2P
439	16	6.15	1010	3.3	B-RF 17	2P
468	15	5.76	990	3.5		
531	14	5.09	960	3.8		
599	12	4.51	930	4.0		
704	10	3.83	890	4.4		
1.1kW						
0.53	17700	2657	120000	1.00		
0.60	15400	2333	120000	1.15		
0.67	13700	2085	120000	1.30		
0.75	12300	1877	120000	1.45	B-R 167 R97	4P
0.84	10900	1670	120000	1.65	B-RF 167 R97	4P
0.97	9600	1438	120000	1.90		
1.1	8540	1279	120000	2.1		
1.2	7420	1123	120000	2.4		
0.63	15000	2211	50100	0.85	B-R 147 R77	4P
0.72	13300	1951	62100	1.00	B-RF 147 R77	4P
0.82	11500	1705	65500	1.15		
0.91	10300	1536	67300	1.25		
1.0	8940	1329	69200	1.45		
1.2	7810	1166	70500	1.65	B-R 147 R77	4P
1.4	6870	1029	71500	1.90	B-RF 147 R77	4P
1.6	5950	889	72200	2.2		
1.8	5240	784	72800	2.5		
2.0	4630	695	73200	2.8		
1.0	9480	1391	44400	0.85		
1.1	8550	1256	51600	0.95	B-R 137 R77	4P
1.3	7500	1105	54400	1.05	B-RF 137 R77	4P
1.3	7080	1043	55200	1.15		
1.6	6010	888	57000	1.35		
1.0	9470	1397	44600	0.85		
1.1	8290	1226	52700	0.95		
1.3	7390	1090	54600	1.10		
1.5	6450	951	56300	1.25	B-R 137 R77	4P
1.7	5590	831	56700	1.45	B-RF 137 R77	4P
1.9	4890	730	58500	1.65		
2.2	4190	629	59300	1.90		
2.5	3770	560	59700	2.1		
2.8	3270	490	60100	2.5		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.1kW						
2.0	4870	717	20200	0.90	B-R 107 R77	4P
					B-RF 107 R77	4P
2.3	4100	614	30500	1.05		
2.6	3630	544	32700	1.20		
2.8	3280	492	34000	1.30		
3.3	2780	417	35600	1.55	B-R 107 R77	4P
3.8	2480	369	36200	1.75	B-RF 107 R77	4P
4.3	2170	323	36600	2.0		
4.9	1910	285	36900	2.2		
5.5	1690	253	37100	2.5		
3.2	2930	431	21400	1.00		
3.7	2580	379	23700	1.15		
4.2	2290	336	25100	1.30	B-R 97 R57	4P
4.7	2010	296	26300	1.50	B-RF 97 R57	4P
5.6	1680	249	27400	1.80		
6.0	1570	234	27500	1.90		
6.7	1400	209	27800	2.1		
5.2	1810	268	13900	0.85	B-R 87 R57	4P
5.9	1600	236	16600	0.95	B-RF 87 R57	4P
6.7	1400	209	17900	1.10		
5.5	1760	256	15300	0.90	B-R 87 R57	4P
6.0	1590	232	16600	0.95	B-RF 87 R57	4P
7.2	1350	195	18200	1.15		
2.7	3880	251.15	31600	1.10		
3.0	3550	229.95	33000	1.20	B-R 107	8P
3.3	3140	203.16	34500	1.35	B-RF 107	8P
4.0	2660	172.34	35900	1.60		
3.6	2920	255.71	21500	1.05		
3.8	2750	241.25	22600	1.10	B-R 97	8P
4.2	2470	216.28	24200	1.20	B-RF 97	8P
4.9	2130	186.30	25900	1.40		
5.5	1920	255.71	26700	1.55		
5.8	1810	241.25	27100	1.65		
6.5	1620	216.28	27500	1.85		
7.5	1400	186.30	27800	2.2	B-R 97	4P
8.2	1280	170.02	27900	2.3	B-RF 97	4P
9.3	1130	150.78	28100	2.7		
11	950	126.75	28300	3.2		
12	870	116.48	28300	3.4		
6.5	1620	216.54	16400	0.95	B-R 87	4P
6.8	1540	205.71	17000	1.00	B-RF 87	4P
7.7	1360	181.77	18100	1.15		
9.0	1170	155.34	19100	1.35		
9.8	1070	142.41	19600	1.45		
11	940	124.97	20000	1.65		
12	890	118.43	20000	1.75		
14	780	103.65	20000	2.0	B-R 87	4P
15	700	93.38	20000	2.2	B-RF 87	4P
17	615	81.92	20000	2.5		
19	545	72.57	20000	2.8		
22	480	63.68	20000	3.2		
23	455	60.35	20000	3.4		
27	395	52.82	20000	3.9		
12	910	121.42	8990	0.90	B-R 77	4P
14	775	102.99	10300	1.05	B-RF 77	4P
15	700	92.97	10900	1.20		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.1kW						
17	615	81.80	11500	1.35		
18	580	77.24	11700	1.40		
21	495	65.77	12100	1.65		
24	435	57.68	12400	1.90	B-R 77	4P
27	390	52.07	12500	2.1	B-RF 77	4P
31	345	45.81	12700	2.4		
32	325	43.26	12700	2.5		
38	275	36.83	12900	3.0		
42	250	33.47	12900	3.3		
16	645	86.11	6820	0.95		
19	555	74.17	8040	1.10		
20	525	69.75	8370	1.15		
23	460	61.26	8920	1.30		
25	425	56.89	9160	1.40	B-R 67	4P
27	385	51.56	9420	1.55	B-RF 67	4P
30	345	46.29	9650	1.75		
35	300	39.88	9890	1.95		
37	280	37.50	9970	2.0		
43	240	32.27	10100	2.2		
49	215	28.83	10200	2.4		
50	210	28.13	10200	2.6		
52	200	26.72	10100	2.7	B-R 67	4P
60	176	23.44	9730	3.2	B-RF 67	4P
70	149	19.89	9270	4.0		
20	520	69.23	5990	0.85	B-R 57	4P
22	485	64.85	6850	0.90	B-RF 57	4P
24	430	57.29	6700	1.05		
26	400	53.22	6610	1.15		
29	360	48.23	6490	1.25		
32	325	43.30	6350	1.40	B-R 57	4P
38	280	37.30	6140	1.60	B-RF 57	4P
40	265	35.07	6060	1.70		
46	225	30.18	5850	2.0		
52	200	26.97	5690	2.2		
53	197	26.31	5650	2.3		
56	188	24.99	5580	2.4	B-R 57	4P
64	165	21.93	5400	2.7	B-RF 57	4P
75	140	18.60	5170	3.2		
83	126	16.79	5030	3.6		
29	360	47.75	3500	0.85		
33	320	42.87	4850	0.95		
38	275	36.93	4720	1.10	B-R 47	4P
40	260	34.73	4660	1.15	B-RF 47	4P
47	225	29.88	4520	1.35		
52	200	26.70	4410	1.50		
59	177	23.59	4290	1.70		
60	175	23.28	4270	1.70		
64	164	21.81	4210	1.85		
73	145	19.27	4080	2.0		
78	134	17.89	4010	2.2		
86	122	16.22	3910	2.3	B-R 47	4P
96	109	14.56	3800	2.4	B-RF 47	4P
112	94	12.54	3650	2.7		
119	89	11.79	3590	2.8		
138	76	10.15	3450	3.0		
154	68	9.07	3340	3.2		
43	245	32.40	2900	0.80	B-R 37	4P
49	215	28.73	3300	0.95	B-RF 37	4P
57	183	24.42	3720	1.10		
73	145	19.31	3840	1.40	B-R 37	4P
78	135	18.05	3790	1.50	B-RF 37	4P
90	117	15.60	3660	1.70		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.1kW						
106	99	13.25	3520	1.90		
118	89	11.83	3430	2.1		
139	76	10.11	3290	2.2		
148	71	9.47	3230	2.3	B-R 37	4P
176	60	7.97	3090	2.6	B-RF 37	4P
210	50	6.67	2920	2.9		
247	43	5.67	2790	3.3		
277	38	5.06	2700	3.5		
72	145	19.35	2430	0.90		
77	136	18.08	2410	0.95		
90	117	15.63	2360	1.10		
105	100	13.28	2290	1.30		
118	89	11.86	2240	1.45		
138	76	10.13	2160	1.60		
172	61	8.16	2010	1.90	B-R 27	4P
184	57	7.63	1980	1.95	B-RF 27	4P
212	50	6.59	1920	2.1		
250	42	5.60	1840	2.4		
280	38	5.00	1790	2.5		
328	32	4.27	1720	2.7		
350	30	4.00	1690	2.8		
415	25	3.37	1610	3.1		
203	52	13.28	1980	2.5		
228	46	11.86	1920	2.8		
267	39	10.13	1840	3.1		
287	37	9.41	1780	3.3		
331	32	8.16	1720	3.7		
354	30	7.63	1690	3.8	B-R 27	2P
410	26	6.59	1620	4.1	B-RF 27	2P
482	22	5.60	1550	4.5		
540	20	5.00	1500	4.9		
632	17	4.27	1430	5.2		
675	16	4.00	1410	5.4		
801	13	3.37	1340	6.0		
137	77	19.71	1150	1.10		
159	66	16.99	1140	1.30		
170	62	15.84	1140	1.40		
195	54	13.84	1120	1.60		
208	51	12.98	1120	1.70		
236	45	11.45	1100	1.80		
266	40	10.15	1080	1.95		
313	34	8.63	1050	2.1	B-R 17	2P
358	29	7.55	970	1.90	B-RF 17	2P
384	27	7.04	960	2.0		
439	24	6.15	940	2.3		
468	22	5.76	930	2.4		
531	20	5.09	910	2.6		
599	18	4.51	880	2.7		
704	15	3.83	850	3.0		
1.5kW						
0.60	21200	2333	120000	0.85		
0.68	18800	2085	120000	0.95		
0.75	16900	1877	120000	1.05		
0.84	15000	1670	120000	1.20	B-R 167 R97	4P
0.98	13100	1438	120000	1.35	B-RF 167 R97	4P
1.1	11700	1279	120000	1.55		
1.3	10200	1123	120000	1.75		
1.4	9060	999	120000	2.0		
3.3	3870	426	73600	3.4	B-R 147 R87	4P
3.8	3340	368	73900	3.9	B-RF 147 R87	4P
0.83	15700	1705	41200	0.85		
0.92	14100	1536	60300	0.95		
1.1	12200	1329	64200	1.05		
1.2	10700	1166	66800	1.20		
1.4	9410	1029	68600	1.40	B-R 147 R77	4P
1.6	8140	899	70100	1.60	B-RF 147 R77	4P
1.8	7170	784	71200	1.80		
2.0	6340	695	71900	2.0		
2.3	5700	619	72400	2.3		
2.5	5130	558	72900	2.5		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
1.5kW						
1.4	9650	1043	41200	0.85		
1.6	8200	888	52900	1.00	B-R	137 R77 4P
2.0	6440	699	56300	1.25	B-RF	137 R77 4P
2.3	5590	609	57600	1.45		
1.3	10100	1090	32300	0.80		
1.5	8790	951	50600	0.90		
1.7	7640	831	54100	1.05		
1.9	6680	730	55900	1.20		
2.2	5740	629	57400	1.40	B-R	137 R77 4P
2.5	5150	560	58200	1.55	B-RF	137 R77 4P
2.9	4470	490	59000	1.80		
3.3	3910	428	59600	2.0		
3.7	3510	381	59900	2.3		
4.4	2980	323	60400	2.7		
2.7	4860	528	20600	0.90	B-R B-RF	107 R77 4P 107 R77 4P
2.6	4970	544	14800	0.85		
2.9	4490	492	28400	0.95	B-R	107 R77 4P
3.4	3810	417	31900	1.15	B-RF	107 R77 4P
3.8	3390	369	33600	1.25		
4.4	2960	323	35100	1.45		
3.0	4410	469	28900	1.00	B-R B-RF	107 R77 4P 107 R77 4P
4.2	3120	336	14600	0.95		
4.8	2740	296	22700	1.10	B-R	97 R57 4P
5.7	2300	249	25100	1.30	B-RF	97 R57 4P
6.0	2150	234	25800	1.40		
6.8	1920	209	26700	1.55		
3.0	4710	229.95	26500	0.90		
3.5	4160	203.16	30200	1.05	B-R	107 8P
4.1	3530	172.34	33100	1.20	B-RF	107 8P
4.4	3250	158.68	34100	1.30		
3.7	3910	251.15	31400	1.10		
4.0	3580	229.95	32900	1.20		
4.5	3610	203.16	34400	1.35	B-R	107 6P
5.3	2680	172.34	35900	1.60	B-RF	107 6P
5.8	2470	158.68	36200	1.75		
6.5	2210	141.83	36500	1.95		
5.5	2600	255.71	23500	1.15		
5.8	2450	241.25	24300	1.20		
6.5	2200	216.28	25600	1.35		
7.6	1890	186.30	26800	1.60		
8.3	1730	170.02	27300	1.75	B-R	97 4P
9.4	1530	150.78	27600	1.95	B-RF	97 4P
11	1290	126.75	27900	2.3		
12	1180	116.48	28000	2.5		
14	1050	103.44	28200	2.8		
15	940	92.48	28300	3.2		
7.8	1850	181.77	11400	0.85		
9.1	1580	155.34	16700	1.00		
9.9	1450	142.41	17600	1.05	B-R	87 4P
11	1270	124.97	18600	1.20	B-RF	87 4P
12	1200	118.43	19000	1.30		
14	1050	103.65	19600	1.45		
15	950	93.38	20000	1.65		
17	830	81.92	20000	1.85		
19	735	72.57	20000	2.1		
22	645	63.68	20000	2.4	B-R	87 4P
23	615	60.35	20000	2.5	B-RF	87 4P
27	535	52.82	20000	2.9		
30	485	47.58	20000	3.2		
34	425	41.74	20000	3.7		
38	375	36.84	19600	4.1		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
1.5kW						
15	940	92.97	8500	0.85		
17	830	81.80	9820	1.00	B-R	77 4P
18	785	77.24	10200	1.05	B-RF	77 4P
21	670	65.77	11100	1.25		
24	585	57.68	11600	1.40		
27	530	52.07	11900	1.55		
31	465	45.81	12200	1.75		
33	440	43.26	12300	1.85	B-R	77 4P
38	375	36.83	12600	2.2	B-RF	77 4P
42	340	33.47	12700	2.4		
49	295	29.00	12500	2.8		
56	255	25.23	12000	3.0		
60	240	23.37	11800	3.5	B-R	77 4P
66	220	21.43	11500	3.8	B-RF	77 4P
75	191	18.80	11000	4.1		
23	620	61.26	7280	0.95		
25	580	56.89	7810	1.05		
27	525	51.56	8370	1.15		
30	470	46.29	8830	1.30	B-R	67 4P
35	405	39.88	9300	1.45	B-RF	67 4P
38	380	37.50	9460	1.50		
44	330	32.27	9750	1.65		
49	295	28.83	9920	1.80		
50	285	28.13	9950	1.90		
53	270	26.72	9850	2.0	B-R	67 4P
60	240	23.44	9500	2.3	B-RF	67 4P
71	200	19.89	9070	3.0		
79	182	17.95	8810	3.2		
27	540	53.22	5140	0.85	B-R	57 4P
29	490	48.23	6010	0.90	B-RF	57 4P
33	440	43.30	5920	1.00		
38	380	37.30	5770	1.20		
40	355	35.07	5710	1.25	B-R	57 4P
47	305	30.18	5540	1.45	B-RF	57 4P
52	275	26.97	5420	1.65		
54	265	26.31	5390	1.70		
56	255	24.99	5330	1.75		
64	225	21.93	5170	2.0		
76	189	18.60	4980	2.4	B-R	57 4P
84	171	16.79	4850	2.6	B-RF	57 4P
95	150	14.77	4700	2.9		
101	142	13.95	4630	3.0		
119	121	11.88	4440	3.4		
38	375	36.93	2380	0.80		
41	355	34.73	3840	0.85		
47	305	29.88	4200	1.00	B-R	47 4P
53	270	26.70	4140	1.10	B-RF	47 4P
60	240	23.59	4050	1.25		
61	235	23.28	4040	1.25		
65	220	21.81	3990	1.35		
73	196	19.27	3890	1.50		
79	182	17.89	3830	1.60		
87	165	16.22	3740	1.65		
97	148	14.56	3650	1.80		
112	127	12.54	3520	1.95		
120	120	11.79	3470	2.0		
139	103	10.15	3340	2.2	B-R	47 4P
155	92	9.07	3240	2.4	B-RF	47 4P
176	81	8.01	3140	2.5		
182	79	7.76	3060	2.1		
203	71	6.96	2980	2.2		
235	61	6.00	2860	2.6		
250	57	5.64	2810	2.7		
291	49	4.85	2700	3.0		
325	44	4.34	2610	3.3		
368	39	3.83	2520	3.7		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
1.5kW						
73	196	19.31	2660	1.00	B-R 37	4P
78	183	18.05	2840	1.10	B-RF 37	4P
90	159	15.60	3160	1.25		
106	135	13.25	3350	1.40		
119	120	11.83	3270	1.50		
140	103	10.11	3160	1.65		
149	96	9.47	3110	1.75		
177	81	7.97	2980	1.95	B-R 37	4P
211	68	6.67	2820	2.1	B-RF 37	4P
249	58	5.67	2710	2.5		
279	51	5.06	2630	2.6		
326	44	4.32	2520	2.9		
348	41	4.05	2470	3.0		
414	35	3.41	2360	3.2		
204	70	13.25	2880	2.7	B-R 37	2P
228	63	11.83	2790	2.9	B-RF 37	2P
267	54	10.11	2680	3.2		
285	50	9.47	2630	3.3		
339	42	7.97	2510	3.7		
90	159	15.63	1700	0.80		
106	135	13.28	2020	0.95		
119	121	11.86	2080	1.05		
139	103	10.13	2030	1.20		
173	83	8.16	1880	1.40		
185	78	7.63	1860	1.45	B-R 27	4P
214	67	6.59	1810	1.60	B-RF 27	4P
252	57	5.60	1750	1.75		
282	51	5.00	1710	1.85		
330	43	4.27	1650	2.0		
353	41	4.00	1630	2.1		
418	34	3.37	1560	2.3		
228	63	11.86	1840	2.1		
267	54	10.13	1770	2.3		
331	43	8.16	1650	2.7		
354	41	7.63	1620	2.8		
410	35	6.59	1570	3.0	B-R 27	2P
482	30	5.60	1500	3.3	B-RF 27	2P
540	27	5.00	1460	3.6		
632	23	4.27	1400	3.8		
675	21	4.00	1370	4.0		
801	18	3.37	1310	4.4		
2.2kW						
0.84	22400	1670	120000	0.80		
0.98	19500	1438	120000	0.95		
1.1	17200	1279	120000	1.05		
1.3	15100	1123	120000	1.20	B-R 167 R97	4P
1.4	13500	999	120000	1.35	B-RF 167 R97	4P
1.6	11600	861	120000	1.55		
1.9	10300	760	120000	1.75		
2.2	8710	656	120000	2.1		
2.6	7130	533	71200	1.80		
3.0	6150	462	72100	2.1	B-R 147 R87	4P
3.3	5740	426	72400	2.3	B-RF 147 R87	4P
3.8	4960	368	73000	2.6		
4.3	4390	326	73300	3.0		
1.2	15800	1166	49400	0.80		
1.4	13900	1029	60700	0.95		
1.6	12000	889	64500	1.10		
1.8	10600	784	66900	1.20	B-R 147 R77	4P
2.0	9400	695	68600	1.40	B-RF 147 R77	4P
2.3	8420	619	69800	1.55		
2.5	7580	558	70800	1.70		
2.9	6640	489	71700	1.95		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
2.2kW						
2.0	9510	699	43900	0.85	B-R 137 R77	4P
2.3	8270	609	52800	0.95	B-RF 137 R77	4P
1.9	9890	730	36300	0.80		
2.2	8500	629	51800	0.95		
2.5	7620	560	54200	1.05		
2.9	6630	490	56000	1.20		
3.3	5790	428	57400	1.40	B-R 137 R77	4P
3.7	5190	381	58200	1.55	B-RF 137 R77	4P
4.4	4400	323	59100	1.80		
4.8	3960	291	59500	2.0		
5.5	3460	255	60000	2.3		
6.3	3030	223	60300	2.6		
3.8	5010	369	21100	0.85		
4.4	4390	323	29000	1.00	B-R 107 R77	4P
4.9	3860	285	31600	1.10	B-RF 107 R77	4P
5.6	3420	253	33500	1.25		
6.6	2900	214	35300	1.50		
4.3	4480	325	28400	0.95	B-R 107 R77	4P
					B-RF 107 R77	4P
6.0	3170	234	11300	0.95	B-R 97 R57	4P
6.8	2840	209	22100	1.05	B-RF 97 R57	4P
3.1	6680	222.60	55900	1.20		
3.7	5660	188.45	57500	1.40	B-R 137	8P
4.0	5230	174.40	58100	1.55	B-RF 137	8P
4.5	4690	156.31	58800	1.70		
5.0	4240	141.12	59300	1.90		
5.5	3850	128.18	59600	2.1	B-R 137	8P
6.2	3410	113.72	60000	2.3	B-RF 137	8P
6.8	3100	103.20	60300	2.6		
4.6	4540	203.16	28100	0.95		
6.4	3850	172.34	31700	1.10	B-R 107	6P
5.9	3550	158.68	33000	1.20	B-RF 107	6P
6.6	3170	141.83	34400	1.35		
5.6	3740	251.15	32200	1.15	B-R 107	4P
6.1	3430	229.95	33500	1.25	B-RF 107	4P
6.9	3030	203.16	34900	1.40		
8.2	2570	172.34	36100	1.65		
8.9	2360	158.68	36300	1.80		
9.9	2110	141.83	36600	2.0	B-R 107	4P
11	1900	127.68	36900	2.3	B-RF 107	4P
12	1720	115.63	37000	2.5		
14	1530	102.53	37200	2.8		
15	1380	92.70	37300	3.1		
6.5	3220	216.28	20300	0.95	B-R 97	4P
7.6	2780	186.30	22500	1.10	B-RF 97	4P
8.3	2530	170.02	23900	1.20		
9.4	2250	150.78	25300	1.35		
11	1890	126.75	26800	1.60		
12	1740	116.48	27300	1.75		
14	1540	103.44	27600	1.95		
15	1380	92.48	27800	2.2	B-R 97	4P
17	1240	83.15	28000	2.4	B-RF 97	4P
20	1080	72.17	28200	2.8		
22	970	65.21	27700	3.1		
24	890	59.92	27000	3.4		
27	795	53.21	26100	3.8		
30	710	47.58	25300	4.2		
11	1060	124.97	10100	0.85		
12	1760	118.43	15200	0.90	B-R 87	4P
14	1540	103.65	17000	1.00	B-RF 87	4P
15	1390	93.38	17900	1.10		
17	1220	81.92	18900	1.25		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
2.2kW						
19	1080	72.57	19500	1.45		
22	950	63.68	20000	1.65		
23	900	60.35	20000	1.70		
27	785	52.82	20000	1.95	B-R 87	4P
30	710	47.58	20000	2.2	B-RF 87	4P
34	620	41.74	19900	2.5		
38	550	36.84	19200	2.8		
43	405	32.66	18500	3.2		
41	515	34.40	18800	2.9		
45	470	31.40	18300	3.3	B-R 87	4P
51	415	27.84	17700	3.7	B-RF 87	4P
60	350	23.40	16800	4.4		
66	320	21.51	16400	4.7		
21	980	65.77	8470	0.85		
24	860	57.68	9540	0.95	B-R 77	4P
27	775	52.07	10300	1.05	B-RF 77	4P
31	685	45.81	11000	1.20		
33	645	43.26	11300	1.25		
38	550	36.83	11800	1.50	B-R 77	4P
42	500	33.47	12100	1.65	B-RF 77	4P
49	430	29.00	12100	1.90		
56	375	25.23	11700	2.1		
60	350	23.37	11400	2.3		
66	320	21.43	11200	2.6		
75	280	18.80	10800	2.8	B-R 77	4P
79	265	17.82	10600	2.9	B-RF 77	4P
90	230	15.60	10200	3.2		
100	210	14.05	9910	3.4		
35	595	39.88	7630	1.00		
38	560	37.50	8020	1.00	B-R 67	4P
44	480	32.27	8750	1.10	B-RF 67	4P
49	430	28.83	9140	1.20		
60	350	23.44	9140	1.60		
71	295	19.89	8760	2.0		
79	270	17.95	8530	2.2		
89	235	15.79	8240	2.4		
95	220	14.91	8110	2.5	B-R 67	4P
111	189	12.70	7760	2.8	B-RF 67	4P
122	172	11.54	7560	2.9		
141	149	10.00	7250	3.2		
162	130	8.70	6960	3.4		
181	116	7.79	6760	3.3		
38	555	37.30	4490	0.80		
40	525	35.07	5110	0.85	B-R 57	4P
47	450	30.18	5030	1.00	B-RF 57	4P
52	400	26.97	4960	1.10		
64	325	21.93	4800	1.40		
76	375	18.60	4660	1.60		
84	250	16.79	4570	1.80		
95	220	14.77	4450	2.0		
101	210	13.95	4390	2.1	B-R 57	4P
119	177	11.88	4230	2.3	B-RF 57	4P
131	161	10.79	4140	2.4		
151	139	9.35	4000	2.7		
156	135	9.06	3980	2.8		
177	119	7.97	3850	3.0		
104	205	26.31	4370	2.2		
109	192	24.99	4320	2.3		
124	169	21.93	4190	2.7		
147	143	18.60	4020	3.1	B-R 57	2P
163	129	16.79	3920	3.5	B-RF 57	2P
185	114	14.77	3790	3.8		
196	107	13.95	3740	4.0		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
2.2kW						
73	285	19.27	3550	1.05		
87	240	16.22	3460	1.15		
97	215	14.56	3400	1.20		
112	187	12.54	3310	1.35		
120	176	11.79	3270	1.40		
139	151	10.15	3160	1.50		
155	135	9.07	3090	1.65		
176	119	8.01	3000	1.70	B-R 47	4P
182	116	7.76	2910	1.40	B-RF 47	4P
203	104	6.96	2840	1.55		
235	89	6.00	2740	1.75		
250	84	5.64	2700	1.85		
291	72	4.85	2600	2.1		
325	65	4.34	2530	2.3		
368	57	3.83	2440	2.5		
117	179	23.28	3280	1.70		
125	168	21.81	3230	1.80		
142	148	19.27	3150	2.0		
153	138	17.89	3100	2.1		
168	125	16.22	3030	2.2		
187	112	14.56	2950	2.4	B-R 47	2P
218	97	12.54	2850	2.6	B-RF 47	2P
231	91	11.97	2800	2.7		
269	78	10.15	2700	2.9		
301	70	9.07	2620	3.2		
341	62	8.01	2530	3.3		
90	230	15.60	1070	0.85	B-R 37	4P
106	198	13.25	1660	0.95	B-RF 37	4P
119	176	11.83	1990	1.05		
140	151	10.11	2360	1.15		
149	141	9.47	2480	1.20		
177	119	7.97	2750	1.30		
211	99	6.67	2470	1.45		
249	84	5.67	2570	1.70	B-R 37	4P
279	75	5.06	2500	1.80	B-RF 37	4P
326	64	4.32	2410	1.95		
348	60	4.05	2370	2.0		
414	51	3.41	2270	2.2		
141	149	19.31	2380	1.35		
151	139	18.05	2510	1.45	B-R 37	2P
175	120	15.60	2740	1.65	B-RF 37	2P
206	102	13.25	2720	1.85		
231	91	11.83	2650	2.0		
270	78	10.11	2550	2.2		
288	73	9.47	2510	2.3		
342	61	7.97	2410	2.5		
409	51	6.67	2280	2.8	B-R 37	2P
482	44	5.67	2180	3.3	B-RF 37	2P
540	39	5.06	2120	3.5		
632	33	4.32	2030	3.8		
675	31	4.05	1990	3.9		
801	26	3.41	1900	4.3		
139	151	10.13	1120	0.80		
214	98	6.59	1130	1.10		
252	83	5.60	1390	1.20		
282	75	5.00	1540	1.30	B-R 27	4P
330	64	4.27	1540	1.35	B-RF 27	4P
353	60	4.00	1520	1.45		
418	50	3.37	1470	1.55		
206	102	13.28	1720	1.25		
230	91	11.86	1690	1.40		
270	78	10.13	1650	1.55		
335	63	8.16	1530	1.85		
358	59	7.63	1510	1.90		
414	51	6.59	1470	2.1	B-R 27	2P
488	43	5.60	1420	2.3	B-RF 27	2P
546	39	5.00	1390	2.5		
639	33	4.27	1340	2.6		
683	31	4.00	1310	2.8		
810	26	3.37	1260	3.0		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
1.2	20900	1123	120000	0.85		
1.4	18600	999	120000	0.95		
1.6	16000	861	120000	1.10	B-R	167 R97
1.8	14200	760	120000	1.25	B-RF	167 R97
2.1	12100	656	120000	1.50		
2.8	9280	503	120000	1.95		
2.6	9880	533	68000	1.30		
3.0	8540	462	69700	1.50		
3.3	7940	426	70400	1.65	B-R	147 R87
3.8	6860	368	71500	1.90	B-RF	147 R87
4.3	6070	326	72200	2.1		
5.0	5180	280	72800	2.5		
1.6	16600	889	46300	0.80		
1.8	14700	784	54500	0.90	B-R	147 R77
2.0	13000	695	62700	1.00	B-RF	147 R77
2.3	11600	619	65200	1.10		
2.5	10500	558	67100	1.25		
2.8	9160	490	48800	0.85		
3.3	7990	428	53400	1.00		
3.7	7150	381	55100	1.10	B-R	137 R77
4.3	6070	323	56900	1.30	B-RF	137 R77
4.8	5460	291	57800	1.45		
5.5	4770	255	58700	1.70		
6.3	4180	223	59300	1.90		
2.7	9870	517	46800	0.80	B-R	137 R77
3.1	8650	453	51200	0.95	B-RF	137 R77
5.5	4730	253	25800	0.90	B-R	107 R77
6.5	4010	214	31000	1.05	B-RF	107 R77
7.5	3500	187	33200	1.25		
5.5	4870	256	20200	0.90	B-R	107 R77
					B-RF	107 R77
3.2	8860	222.60	50300	0.90		
3.8	7500	188.45	54400	1.05	B-R	137
4.1	6940	174.40	55500	1.15	B-RF	137
4.6	6220	156.31	56700	1.30		
5.1	5620	141.12	57600	1.40		
5.6	5100	128.18	58300	1.55		
6.3	4520	113.72	59000	1.75	B-R	137
7.0	4110	103.20	59400	1.95	B-RF	137
8.1	3530	88.70	59900	2.3		
4.2	6700	222.60	55800	1.20		
5.0	5740	188.45	57400	1.40	B-R	137
5.4	5320	174.40	58000	1.50	B-RF	137
6.0	4760	156.31	58700	1.70		
6.7	4300	141.12	59200	1.85		
7.3	3910	128.18	59600	2.0	B-R	137
8.3	3470	113.72	60000	2.3	B-RF	137
9.1	3150	103.20	60200	2.5		
5.9	4840	158.68	21600	0.90	B-R	107
6.6	4320	141.83	29300	1.00	B-RF	107
7.4	3890	127.68	31500	1.10		
6.1	4710	229.95	26500	0.90		
6.9	4160	203.16	30200	1.05		
8.1	3530	172.34	33100	1.20		
8.8	3250	158.68	34100	1.30		
9.9	2900	141.83	35300	1.50		
11	2610	127.68	36000	1.65	B-R	107
12	2370	115.63	36300	1.80	B-RF	107
14	2100	102.53	36700	2.0		
15	1900	92.70	36900	2.3		
18	1610	78.57	35900	2.7		
19	1490	72.88	35200	2.9		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
9.3	3090	150.78	16200	0.95		
11	2590	126.75	23600	1.15		
12	2380	116.48	24700	1.25		
14	2120	103.44	25900	1.40		
15	1890	92.48	26800	1.60		
17	1700	83.15	27300	1.75		
19	1480	72.17	27700	2.0	B-R	97
21	1330	65.21	27000	2.2	B-RF	97
23	1230	59.92	26400	2.5		
26	1090	53.21	25600	2.8		
29	970	47.58	24800	3.1		
33	880	42.78	24000	3.4		
38	760	37.13	23100	4.0		
42	680	33.25	22400	4.2		
15	1910	93.38	13600	0.80		
17	1680	81.92	16000	0.90	B-R	87
19	1490	72.57	17400	1.05	B-RF	87
22	1300	63.68	18400	1.20		
23	1230	60.35	18800	1.25		
27	1080	52.82	19500	1.45		
29	970	47.58	19900	1.60		
34	850	41.74	19400	1.80	B-R	87
38	755	36.84	18700	2.1	B-RF	87
43	670	32.66	18100	2.3		
50	570	27.88	17400	2.6		
41	705	34.40	18400	2.1		
45	640	31.40	17900	2.4		
50	570	27.84	17400	2.7		
60	480	23.40	16500	3.2	B-R	87
65	440	21.51	16100	3.4	B-RF	87
73	390	19.10	15600	3.7		
82	350	17.08	15100	4.0		
91	315	15.35	14600	4.3		
31	940	45.81	8670	0.85		
32	890	43.26	9270	0.95	B-R	77
38	755	36.83	10500	1.10	B-RF	77
42	685	33.47	11000	1.20		
48	595	29.00	11600	1.40	B-R	77
55	515	25.23	11300	1.50	B-RF	77
60	480	23.37	11100	1.70		
65	440	21.43	10800	1.85		
74	385	18.80	10500	2.0		
79	365	17.82	10300	2.1		
90	320	15.60	9980	2.3		
100	290	14.05	9700	2.5	B-R	77
114	250	12.33	9350	2.7	B-RF	77
129	225	10.88	9030	3.0		
145	197	9.64	8720	3.2		
163	176	8.59	8500	3.6		
181	158	7.74	8240	3.8		
206	139	6.79	7920	4.2		
60	480	23.44	8730	1.15		
70	405	19.89	8420	1.45		
78	365	17.95	8230	1.60		
89	325	15.79	7980	1.75	B-R	67
94	305	14.91	7860	1.80	B-RF	67
110	260	12.70	7550	2.0		
121	235	11.54	7360	2.1		
140	205	10.00	7090	2.3		
52	550	26.97	4330	0.80	B-R	57
					B-RF	57



HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
64	450	21.93	4380	1.00	B-R 57	4P
75	380	18.60	4300	1.20	B-RF 57	4P
83	345	16.79	4250	1.30		
95	300	14.77	4160	1.45		
100	285	13.95	4130	1.50		
118	245	11.88	4010	1.65		
130	220	10.79	3940	1.75		
150	191	9.35	3820	1.95		
155	185	9.06	3810	2.0	B-R 57	4P
176	163	7.97	3700	2.2	B-RF 57	4P
186	154	7.53	3650	2.3		
218	131	6.41	3520	2.6		
240	119	5.82	3430	2.7		
277	103	5.05	3310	3.0		
319	90	4.39	3190	3.1		
128	225	21.93	3950	2.0		
151	190	18.60	3820	2.4		
167	172	16.79	3730	2.6		
190	151	14.77	3620	2.9	B-R 57	2P
201	143	13.95	3570	3.0	B-RF 57	2P
236	122	11.88	3440	3.3		
259	110	10.79	3360	3.5		
86	330	16.22	2030	0.85	B-R 47	4P
96	300	14.56	2500	0.90	B-RF 47	4P
112	255	12.54	3040	0.95		
119	240	11.79	3040	1.00		
138	210	10.15	2970	1.10		
154	186	9.07	2910	1.20		
175	164	8.01	2840	1.25		
181	159	7.76	2740	1.05		
201	143	6.96	2680	1.10	B-R 47	4P
233	123	6.00	2610	1.25	B-RF 47	4P
248	115	5.64	2580	1.35		
288	99	4.85	2490	1.50		
323	89	4.34	2430	1.65		
365	78	3.83	2360	1.85		
237	121	11.79	2670	2.0		
270	104	10.15	2580	2.2		
309	93	9.07	2510	2.4		
349	82	8.01	2430	2.5		
361	79	7.76	2370	2.5		
402	71	6.96	2310	2.5	B-R 47	2P
467	61	6.00	2220	2.5	B-RF 47	2P
496	58	5.64	2190	2.7		
577	50	4.85	2100	3.0		
646	44	4.34	2040	3.3		
731	39	3.83	1970	3.7		
139	205	10.11	780	0.80	B-R 37	4P
148	194	9.47	1010	0.85	B-RF 37	4P
176	163	7.97	1510	0.95		
210	137	6.67	1250	1.05		
247	116	5.67	1630	1.25		
277	104	5.06	1830	1.30	B-R 37	4P
324	88	4.32	2070	1.45	B-RF 37	4P
346	83	4.05	2140	1.45		
411	70	3.41	2180	1.60		
277	103	10.11	2340	1.65		
296	97	9.47	2380	1.70		
351	82	7.97	2290	1.90		
420	68	6.67	2170	2.1		
494	58	5.67	2090	2.5	B-R 37	2P
553	52	5.06	2030	2.6	B-RF 37	2P
648	44	4.32	1950	2.8		
692	41	4.05	1920	3.0		
821	35	3.41	1840	3.2		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
250	115	5.60	360	0.85		
280	102	5.00	615	0.95	B-R 27	4P
328	87	4.27	910	1.00	B-RF 27	4P
350	82	4.00	1010	1.05		
415	69	3.37	1230	1.15		
425	67	6.59	1260	1.55		
500	57	5.60	1330	1.75		
560	51	5.00	1300	1.85	B-R 27	2P
656	44	4.27	1260	2.0	B-RF 27	2P
700	41	4.00	1240	2.1		
831	35	3.37	1200	2.3		
4.0kW						
1.6	21200	861	120000	0.85		
1.9	18700	760	120000	0.95		
2.2	16000	656	120000	1.10	B-R 167 R97	4P
2.8	12300	503	120000	1.45	B-RF 167 R97	4P
3.8	9190	376	120000	1.95		
4.2	8180	335	120000	2.2		
2.7	13100	533	62500	1.00		
3.1	11300	462	65800	1.15		
3.3	10500	426	67100	1.25		
3.8	9060	368	69100	1.45		
4.4	8010	326	70300	1.60	B-R 147 R87	4P
5.1	6850	280	71500	1.90	B-RF 147 R87	4P
5.7	6050	247	72200	2.2		
6.7	5220	214	72800	2.5		
7.5	4620	189	73200	2.8		
8.9	3880	159	73600	3.3		
2.3	15300	619	46300	0.85		
2.5	13800	558	61000	0.95	B-R 147 R77	4P
2.9	12100	489	64400	1.10	B-RF 147 R77	4P
3.4	10200	415	67400	1.25		
3.7	9430	381	45400	0.85		
4.4	8000	323	53400	1.00	B-R 137 R77	4P
4.9	7200	291	55000	1.10	B-RF 137 R77	4P
5.6	6290	255	56600	1.25		
6.3	5520	223	57700	1.45		
3.8	9440	376	45200	0.85	B-R 137 R77	4P
4.2	8500	339	51800	0.95	B-RF 137 R77	4P
4.8	7450	297	54500	1.05		
7.6	4620	187	27600	0.95	B-R 107 R77	4P
					B-RF 107 R77	4P
7.3	4840	193	21400	0.90	B-R 107 R77	4P
8.2	4330	172	29300	1.00	B-RF 107 R77	4P
4.4	8660	163.31	69500	1.50		
4.9	7790	146.91	70500	1.65	B-R 147	8P
6.0	6360	119.86	71900	2.0	B-RF 147	8P
6.6	5800	109.31	72400	2.2		
4.1	9250	174.40	48400	0.85		
4.6	8290	156.31	52700	0.95		
5.1	7490	141.12	54400	1.05	B-R 137	8P
5.6	6800	128.18	55700	1.20	B-RF 137	8P
6.3	6030	113.72	57000	1.35		
7.0	5470	103.20	57800	1.45		
4.3	8860	222.60	50300	0.90		
5.1	7500	188.45	54400	1.05		
5.5	6940	174.40	55500	1.15	B-R 137	6P
6.1	6220	156.31	56700	1.30	B-RF 137	6P
6.8	5620	141.12	57600	1.40		
7.5	5100	128.18	58300	1.55		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
4.0kW						
8.4	4520	113.72	59000	1.75	B-R	137
9.3	4110	103.20	59400	1.95	B-RF	137
11	3530	88.70	59900	2.3		
8.2	4640	172.34	27500	0.95		
8.9	4270	158.68	29600	1.05		
10	3820	141.83	31900	1.15		
11	3430	127.68	33400	1.25		
12	3110	115.63	34600	1.40		
14	2760	102.53	35700	1.55	B-R	107
15	2490	92.70	36200	1.70	B-RF	107
18	2110	78.57	34900	2.0		
19	1960	72.88	34200	2.2		
22	1760	65.60	33200	2.4		
24	1600	59.41	32300	2.7		
27	1420	52.68	31300	3.0		
12	3130	116.48	18800	0.95		
14	2780	103.44	22400	1.10		
15	2490	92.48	24100	1.20		
17	2240	83.15	25400	1.35		
20	1940	72.17	26600	1.55		
22	1750	65.21	26000	1.70	B-R	97
24	1610	59.92	25500	1.85	B-RF	97
27	1430	53.21	24700	2.1		
30	1280	47.58	24000	2.3		
33	1150	42.78	23400	2.6		
38	1000	37.13	22500	3.0		
43	890	33.25	21800	3.2		
44	860	32.05	21600	3.0		
52	730	27.19	20600	3.5	B-R	97
57	675	25.03	20100	4.2	B-RF	97
63	600	22.37	19500	4.5		
71	540	20.14	18900	4.8		
22	1710	63.68	13300	0.90	B-R	87
24	1620	60.35	13900	0.95	B-RF	87
27	1420	52.82	15200	1.10		
30	1280	47.58	16000	1.20		
34	1120	41.74	16800	1.40	B-R	87
39	990	36.84	17400	1.55	B-RF	87
43	880	32.66	17500	1.75		
51	750	27.88	16800	2.0		
41	930	34.40	17600	1.60		
45	840	31.40	17400	1.85		
51	750	27.84	16800	2.1		
61	630	23.40	16100	2.5	B-R	87
66	580	21.51	15700	2.6	B-RF	87
74	515	19.10	15200	2.8		
83	460	17.08	14700	3.0		
92	415	15.35	14300	3.2		
107	360	13.33	13700	3.6		
119	320	11.93	13300	3.8		
39	990	36.83	8070	0.85		
42	900	33.47	9100	0.90	B-R	77
49	780	29.00	10300	1.05	B-RF	77
56	680	25.23	10800	1.15		
61	630	23.37	10600	1.30		
66	575	21.43	10400	1.40		
76	505	18.80	10100	1.55		
80	480	17.82	9950	1.65		
91	420	15.60	9630	1.75		
101	380	14.05	9380	1.90		
115	330	12.33	9070	2.1	B-R	77
131	295	10.88	8780	2.3	B-RF	77
147	260	9.64	8500	2.4		
165	230	8.59	8320	2.7		
183	210	7.74	8070	2.9		
209	183	6.79	7770	3.2		
237	161	5.99	7490	3.3		
267	143	5.31	7230	3.6		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
4.0kW						
71	535	19.89	7960	1.10		
79	485	17.95	7800	1.20		
90	425	15.79	7600	1.30		
95	400	14.91	7510	1.35		
112	340	12.70	7240	1.50		
123	310	11.54	7080	1.60		
142	270	10.00	6840	1.75	B-R	67
163	235	8.70	6600	1.90	B-RF	67
182	210	7.79	6440	1.80		
193	198	7.36	6340	1.85		
227	169	6.27	6070	1.95		
249	153	5.70	5920	2.0		
288	133	4.93	5680	2.2		
331	116	4.29	5460	2.3		
76	500	18.60	3520	0.90	B-R	57
85	450	16.79	3830	1.00	B-RF	57
96	395	14.77	3800	1.10		
102	375	13.95	3780	1.15		
120	320	11.88	3710	1.25		
132	290	10.79	3660	1.35		
152	250	9.35	3580	1.45		
157	245	9.06	3590	1.55		
178	215	7.97	3500	1.65	B-R	57
189	205	7.53	3470	1.75	B-RF	57
222	172	6.41	3350	1.95		
244	157	5.82	3280	2.0		
284	136	5.05	3180	2.2		
323	118	4.39	3070	2.4		
140	275	10.15	1960	0.85		
157	245	9.07	2350	0.90		
177	215	8.01	2640	0.95		
204	187	6.96	2480	0.85		
237	161	6.00	2430	0.95	B-R	47
252	152	5.64	2410	1.00	B-RF	47
293	131	4.85	2350	1.15		
327	117	4.34	2300	1.25		
371	103	3.83	2250	1.40		
176	215	16.22	2640	1.25		
196	195	14.56	2600	1.35		
228	168	12.54	2540	1.50		
242	158	11.79	2510	1.55		
282	136	10.15	2440	1.70		
315	121	9.07	2390	1.80		
357	107	8.01	2320	1.90	B-R	47
369	104	7.76	2250	1.55	B-RF	47
411	93	6.96	2200	1.70		
477	80	6.00	2130	1.95		
507	75	5.64	2100	2.1		
589	65	4.85	2020	2.3		
660	58	4.34	1970	2.5		
746	51	3.83	1910	2.8		
5.5kW						
2.2	22000	656	120000	0.80		
2.5	19300	579	120000	0.95		
2.8	16900	503	120000	1.05		
3.3	14400	432	120000	1.25	B-R	167 R97
3.8	12600	376	120000	1.45	B-RF	167 R97
4.3	11200	335	120000	1.60		
4.7	10100	303	120000	1.80		
5.1	9310	279	120000	1.95		
3.1	15500	462	43700	0.85		
3.3	14400	426	57800	0.90		
3.9	12400	368	63800	1.05		
4.4	11000	326	66300	1.20	B-R	147 R87
5.1	9410	280	68600	1.40	B-RF	147 R87
5.8	8300	247	70000	1.55		
6.7	7170	214	71200	1.80		
7.6	6340	189	71900	2.0		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
5.5kW						
3.1	17000	229.71	120000	1.05		
3.8	13800	186.93	120000	1.30		
4.6	11300	153.07	120000	1.60	B-R 167	8P
5.1	10400	139.98	120000	1.75	B-RF 167	8P
5.8	9010	121.81	120000	2.0		
4.3	12100	163.31	64400	1.10		
4.8	10900	146.91	66500	1.20	B-R 147	8P
5.9	8870	119.86	69300	1.45	B-RF 147	8P
6.5	8090	109.31	70200	1.60		
5.9	8930	163.31	69200	1.45	B-R 147	6P
6.5	8040	146.91	70300	1.60	B-RF 147	6P
8.0	6560	119.86	71700	2.0		
8.8	5980	109.31	72200	2.2	B-R 147	6P
10	5180	94.60	72800	2.5	B-RF 147	6P
12	4570	83.47	73200	2.8		
5.5	9480	128.18	44400	0.85		
6.2	8410	113.72	52200	0.95	B-R 137	8P
6.9	7630	103.20	54200	1.05	B-RF 137	8P
8.0	6560	88.70	56100	1.20		
5.5	9540	174.40	43300	0.85		
6.1	8550	156.31	51600	0.95		
6.8	7720	141.12	54000	1.05	B-R 137	6P
7.5	7010	128.18	55300	1.15	B-RF 137	6P
8.4	6220	113.72	56700	1.30		
9.3	5650	103.20	57600	1.40		
6.4	8180	222.60	53000	1.00		
7.6	6920	188.45	55500	1.15	B-R 137	4P
8.2	6410	174.40	56400	1.25	B-RF 137	4P
9.1	5740	156.31	57400	1.40		
10	5180	141.12	58200	1.55		
11	4710	128.18	58800	1.70		
13	4180	113.72	59300	1.90		
14	3790	103.20	59700	2.1		
16	3260	88.70	60200	2.5	B-R 137	4P
18	2970	80.91	60400	2.7	B-RF 137	4P
19	2700	73.49	60500	3.0		
22	2390	65.20	60700	3.3		
24	2170	59.17	60900	3.7		
28	1870	50.86	61000	4.3		
11	4690	127.68	27100	0.90		
12	4250	115.63	29800	1.00		
14	3770	102.53	32100	1.15		
15	3400	92.70	33500	1.25		
18	2980	78.57	33500	1.50	B-R 107	4P
20	2680	72.88	32900	1.60	B-RF 107	4P
22	2410	65.60	32100	1.80		
24	2180	59.41	31300	1.95		
27	1930	52.68	30300	2.2		
30	1750	47.63	29500	2.5		
35	1480	40.37	28200	2.9		
17	3050	83.15	17600	1.00		
20	2650	72.17	21800	1.15		
22	2390	65.21	24600	1.25		
24	2200	59.92	24200	1.35		
27	1950	53.21	23600	1.55	B-R 97	4P
30	1750	47.58	23000	1.70	B-RF 97	4P
33	1570	42.78	22500	1.90		
39	1360	37.13	21700	2.2		
43	1220	33.25	21100	2.4		
52	1010	27.58	20100	2.6		
45	1180	32.05	20900	2.2		
53	1000	27.19	20000	2.6		
57	920	25.03	19600	3.1	B-R 97	4P
64	820	22.37	19000	3.3	B-RF 97	4P
71	740	20.14	18400	3.5		
78	670	18.24	17900	3.7		
88	595	16.17	17300	4.0		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
5.5kW						
30	1750	47.58	15400	0.90		
34	1530	41.74	17000	1.00		
39	1350	36.84	17200	1.15	B-R 87	4P
44	1200	32.66	16700	1.30	B-RF 87	4P
51	1020	27.88	16100	1.45		
51	1020	27.84	16100	1.50		
61	860	23.40	15500	1.80		
66	790	21.51	15200	1.90		
75	700	19.10	14700	2.0		
84	625	17.08	14300	2.2		
93	565	15.35	13900	2.4	B-R 87	4P
107	490	13.33	13400	2.6	B-RF 87	4P
120	440	11.93	13000	2.8		
144	365	9.90	12300	3.2		
156	335	9.14	12200	3.6		
174	300	8.22	11800	3.8		
200	260	7.13	11300	4.1		
76	690	18.80	9240	1.15	B-R 77	4P
80	655	17.82	9400	1.50	B-RF 77	4P
92	575	15.60	9150	1.30		
102	515	14.05	8950	1.40		
116	455	12.33	8690	1.50		
131	400	10.88	8440	1.65		
148	355	9.64	8190	1.80	B-R 77	4P
166	315	8.59	8080	2.0	B-RF 77	4P
185	285	7.74	7860	2.2		
211	250	6.79	7580	2.3		
239	220	5.99	7320	2.5		
269	195	5.31	7070	2.6		
91	580	15.79	6610	0.95		
96	550	14.91	6900	1.00		
113	465	12.70	6810	1.10		
124	425	11.54	6690	1.20		
143	365	10.00	6500	1.30		
164	320	8.70	6310	1.40	B-R 67	4P
183	285	7.79	6180	1.35	B-RF 67	4P
194	270	7.36	6100	1.35		
228	230	6.27	5860	1.45		
251	210	5.70	5720	1.50		
290	181	4.93	5510	1.60		
333	158	4.29	5310	1.70		
331	159	8.70	5300	2.8		
369	142	7.79	5160	2.7		
391	134	7.36	5080	2.8	B-R 67	2P
460	114	6.27	4860	2.9	B-RF 67	2P
506	104	5.70	4730	3.0		
584	90	4.93	4540	3.2		
671	78	4.29	4350	3.5		
97	545	14.77	1730	0.80		
103	510	13.95	2070	0.85	B-R 57	4P
120	435	11.88	2900	0.95	B-RF 57	4P
132	395	10.79	3270	1.00		
153	345	9.35	3240	1.10		
179	295	7.97	3220	1.20		
190	275	7.53	3200	1.25	B-R 57	4P
223	235	6.41	3120	1.40	B-RF 57	4P
246	215	5.82	3080	1.50		
283	185	5.05	3000	1.65		
326	161	4.39	2920	1.75		
308	171	9.35	2930	2.2		
361	145	7.97	2850	2.4		
383	137	7.53	2820	2.5	B-R 57	2P
449	117	6.41	2720	2.9	B-RF 57	2P
494	106	5.82	2660	3.0		
571	92	5.05	2560	3.3		
658	80	4.39	2470	3.5		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
5.5kW						
295	178	4.85	1870	0.85	B-R 47	4P
330	159	4.34	2110	0.90	B-RF 47	4P
373	141	3.83	2080	1.00		
230	230	12.54	1730	1.10		
244	215	11.79	1910	1.15		
284	185	10.15	2250	1.25		
318	165	9.07	2220	1.35		
359	146	8.01	2170	1.40	B-R 47	2P
480	109	6.00	2000	1.45	B-RF 47	2P
511	103	5.64	1970	1.50		
593	89	4.85	1920	1.70		
664	79	4.34	1870	1.85		
752	70	3.83	1820	2.1		
7.5kW						
2.8	23100	503	120000	0.80		
3.3	19800	432	120000	0.90		
3.8	17300	376	120000	1.05	B-R 167 R97	4P
4.3	15400	335	120000	1.15	B-RF 167 R97	4P
4.7	13900	303	120000	1.30		
5.1	12800	279	120000	1.40		
4.4	15000	326	50100	0.85		
5.1	12900	280	62900	1.00		
5.8	11400	247	65700	1.15	B-R 147 R87	4P
6.7	9810	214	68000	1.30	B-RF 147 R87	4P
7.6	8680	189	69500	1.50		
9.0	7290	159	71000	1.80		
3.1	22900	229.71	120000	0.80		
3.8	18600	186.93	120000	0.95	B-R 167	8P
4.7	15200	153.07	120000	1.20	B-RF 167	8P
5.1	13900	139.98	120000	1.30		
5.9	12100	121.81	120000	1.50		
4.2	17100	229.71	120000	1.05	B-R 167	6P
5.1	13900	186.93	120000	1.30	B-RF 167	6P
6.3	11400	153.07	120000	1.60		
6.9	10400	139.98	120000	1.70		
7.9	9090	121.81	120000	2.0		
8.9	8020	107.49	120000	2.2	B-R 167	6P
10	6950	93.19	120000	2.6	B-RF 167	6P
12	6190	82.91	120000	2.9		
13	5500	73.70	120000	3.3		
14	5030	67.40	120000	3.6		
4.4	16200	163.31	32800	0.80		
4.9	14600	146.91	55100	0.90	B-R 147	8P
6.0	11900	119.86	64700	1.10	B-RF 147	8P
6.6	10900	109.31	66500	1.20		
5.9	12200	163.31	64200	1.05		
6.5	11000	146.91	66300	1.20	B-R 147	6P
8.0	8940	119.86	69200	1.45	B-RF 147	6P
8.8	8150	109.31	70100	1.60	B-R 147	6P
10	7000	94.60	71300	1.85	B-RF 147	6P
12	6230	83.47	72000	2.1		
7.6	9440	188.45	45300	0.85		
8.2	8730	174.40	50800	0.90	B-R 137	4P
9.1	7830	156.31	53700	1.00	B-RF 137	4P
10	7070	141.12	55200	1.15		
11	6420	128.18	56400	1.25		
13	5700	113.72	57500	1.40		
14	5170	103.20	58200	1.55		
16	4440	88.70	59100	1.80		
18	4050	80.91	59500	1.95	B-R 137	4P
19	3680	73.49	59800	2.2	B-RF 137	4P
22	3270	65.20	60100	2.5		
24	2960	59.17	60400	2.7		
28	2550	50.86	60600	3.1		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
7.5kW						
15	4640	92.70	27500	0.95		
18	3940	78.57	31300	1.10		
20	3650	72.88	31300	1.20		
22	3290	65.60	30600	1.30		
24	2980	59.41	30000	1.45	B-R 107	4P
27	2640	52.68	29200	1.65	B-RF 107	4P
30	2390	47.63	28500	1.80		
35	2020	40.37	27300	2.1		
41	1770	35.26	26400	2.4		
48	1480	29.49	25200	2.9		
46	1540	30.77	25500	2.8		
52	1380	27.58	24700	3.1	B-R 107	4P
57	1250	24.90	24100	3.5	B-RF 107	4P
63	1130	22.62	23400	3.8		
24	3000	59.92	19700	1.00		
27	2670	53.21	22200	1.15	B-R 97	4P
30	2380	47.58	21800	1.25	B-RF 97	4P
33	2140	42.78	21300	1.40		
39	1860	37.13	20700	1.60		
43	1670	33.25	20200	1.75	B-R 97	4P
52	1380	27.58	19400	1.95	B-RF 97	4P
45	1610	32.05	20000	1.60		
53	1360	27.19	19300	1.90		
57	1250	25.03	18900	2.3	B-R 97	4P
64	1120	22.37	18400	2.4	B-RF 97	4P
71	1010	20.14	17900	2.6		
78	910	18.24	17500	2.7		
39	1840	36.84	11500	0.85	B-R 87	4P
44	1640	32.66	15700	0.95	B-RF 87	4P
51	1400	27.88	15200	1.05		
51	1390	27.84	15200	1.10		
61	1170	23.40	14700	1.30		
66	1080	21.51	14500	1.40		
75	960	19.10	14100	1.50		
84	860	17.08	13700	1.65		
93	770	15.35	12500	1.75		
107	670	13.33	12900	1.90	B-R 87	4P
120	600	11.93	12600	2.1	B-RF 87	4P
144	495	9.90	12000	2.4		
156	460	9.14	11900	2.6		
174	410	8.22	11600	2.8		
200	355	7.13	11100	3.0		
224	320	6.39	10800	3.2		
270	265	5.30	10200	3.4		
76	940	18.80	5310	0.85		
80	890	17.82	5720	0.85		
92	780	15.60	6610	0.95		
102	705	14.05	7180	1.00		
116	615	12.33	7750	1.10		
131	545	10.88	8010	1.20	B-R 77	4P
148	485	9.64	7810	1.30	B-RF 77	4P
166	430	8.59	7620	1.45		
185	390	7.74	7590	1.55		
211	340	6.79	7340	1.70		
239	300	5.99	7110	1.80		
269	265	5.31	6890	1.90		
113	635	12.70	4240	0.80		
124	580	11.54	4860	0.85		
143	500	10.00	5620	0.95		
164	435	8.70	5930	1.00		
183	390	7.79	5500	0.95	B-R 67	4P
194	370	7.36	5720	1.00	B-RF 67	4P
228	315	6.27	5600	1.05		
251	285	5.70	5480	1.10		
290	245	4.93	5300	1.15		
333	215	4.29	5130	1.25		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
7.5kW						
179	400	7.97	980	0.90		
190	375	7.53	1280	0.95		
223	320	6.41	2020	1.05	B-R 57	4P
246	290	5.82	2380	1.10	B-RF 57	4P
283	255	5.05	2760	1.20		
326	220	4.39	2710	1.25		
196	365	14.77	2580	1.20		
208	345	13.95	2780	1.25		
244	295	11.88	2780	1.40		
269	265	10.79	2750	1.45		
310	230	9.35	2710	1.60	B-R 57	2P
364	197	7.97	2670	1.80	B-RF 57	2P
385	186	7.53	2640	1.90		
452	158	6.41	2570	2.1		
498	144	5.82	2520	2.2		
575	125	5.05	2440	2.5		
660	108	4.39	2370	2.6		
9.2kW						
3.8	21100	376	120000	0.85		
4.3	18800	335	120000	0.95	B-R 167 R97	4P
4.8	16900	303	120000	1.05	B-RF 167 R97	4P
5.2	15600	279	120000	1.15		
5.1	15700	280	40800	0.85		
5.8	13900	247	60800	0.95	B-R 147 R87	4P
6.7	12000	214	64600	1.10	B-RF 147 R87	4P
7.6	10600	189	66900	1.25		
9.1	8900	159	69300	1.45		
8.8	9960	163.31	67800	1.30	B-R 147	4P
9.8	8960	146.91	69200	1.45	B-RF 147	4P
12	7310	119.86	71000	1.80		
13	6670	109.31	71600	1.95		
15	5770	94.60	72400	2.2	B-R 147	4P
17	5090	83.47	72900	2.5	B-RF 147	4P
20	4400	72.09	73300	3.0		
22	4090	66.99	73500	3.2		
9.2	9540	156.31	43400	0.85	B-R 137	4P
10	8610	141.12	51400	0.95	B-RF 137	4P
11	7020	128.18	53800	1.00		
13	6940	113.72	55500	1.15		
14	6300	103.20	56600	1.25		
16	5410	88.70	57900	1.50		
18	4940	80.91	58500	1.60		
20	4480	73.49	59000	1.80	B-R 137	4P
22	3980	65.20	59500	2.0	B-RF 137	4P
24	3610	59.17	59900	2.2		
28	3100	50.86	60300	2.6		
32	2710	44.39	60500	3.0		
18	4790	78.57	23300	0.90		
20	4450	72.88	28600	0.95		
22	4000	65.60	29400	1.05		
24	3620	59.41	28800	1.20	B-R 107	4P
27	3210	52.68	28100	1.35	B-RF 107	4P
30	2910	47.63	27500	1.50		
36	2460	40.37	26500	1.75		
41	2150	35.26	25700	2.0		
49	1800	29.49	24600	2.4		
47	1880	30.77	24900	2.3		
52	1680	27.58	24200	2.6	B-R 107	4P
58	1520	24.90	23500	2.8	B-RF 107	4P
64	1380	22.62	23000	3.1		
72	1220	20.07	22200	3.5		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
9.2kW						
27	3250	53.21	20800	0.90	B-R 97	4P
30	2900	47.58	20600	1.05	B-RF 97	4P
34	2610	42.78	20300	1.15		
39	2270	37.13	19800	1.30	B-R 97	4P
43	2030	33.25	19400	1.40	B-RF 97	4P
52	1680	27.58	18700	1.60		
58	1530	25.03	18300	1.85		
64	1370	22.37	17900	2.0		
71	1230	20.14	17400	2.1	B-R 97	4P
79	1110	18.24	17000	2.2	B-RF 97	4P
89	990	16.17	16500	2.4		
98	890	14.62	16100	2.6		
116	755	12.39	15400	2.9		
67	1310	21.51	13900	1.15		
75	1170	19.10	13600	1.25		
84	1040	17.08	13200	1.35		
94	940	15.35	13000	1.45		
108	810	13.33	12600	1.55	B-R 87	4P
121	730	11.93	12200	1.70	B-RF 87	4P
145	605	9.90	11700	1.95		
158	560	9.14	11700	2.2		
175	500	8.22	11400	2.3		
202	435	7.13	10900	2.5		
225	390	6.39	10600	2.6		
102	860	14.05	4740	0.85		
117	750	12.33	5610	0.90	B-R 77	4P
132	665	10.88	6280	1.00	B-RF 77	4P
149	590	9.64	6800	1.05		
186	470	7.74	6300	1.30		
212	415	6.79	6720	1.40	B-R 77	4P
240	365	5.99	6820	1.50	B-RF 77	4P
271	325	5.31	6720	1.55		
11.0kW						
4.9	19600	295	120000	0.90		
5.3	18100	270	120000	1.00	B-R 167 R107	4P
6.3	15300	229	120000	1.20	B-RF 167 R107	4P
7.2	13400	200	120000	1.35		
8.5	11300	169	120000	1.60		
5.0	19800	291	120000	0.90	B-R 167 R107	4P
					B-RF 167 R107	4P
4.3	22500	335	120000	0.80	B-R 167 R97	4P
4.8	20300	303	120000	0.90	B-RF 167 R97	4P
5.2	18700	279	120000	0.85		
5.8	16600	247	46800	0.80		
6.7	14300	214	58300	0.90	B-R 147 R87	4P
7.6	12700	189	63300	1.05	B-RF 147 R87	4P
9.1	10700	159	66800	1.20		
5.1	20500	186.93	120000	0.90		
6.3	16700	153.07	120000	1.05	B-R 167	6P
6.9	15300	139.98	120000	1.20	B-RF 167	6P
7.9	13300	121.81	120000	1.35		
6.3	16800	229.71	120000	1.05	B-R 167	4P
7.7	13600	186.93	120000	1.30	B-RF 167	4P
9.4	11200	153.07	120000	1.60		
10	10200	139.98	120000	1.75		
12	8890	121.81	120000	2.0	B-R 167	4P
13	7840	107.49	120000	2.3	B-RF 167	4P
15	6800	93.19	120000	2.7		
17	6050	82.91	120000	3.0		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
11.0kW						
6.5	16100	146.91	35400	0.80		
8.0	13100	119.86	62400	1.00		
8.8	12000	109.31	64600	1.10	B-R 147	6P
10	10400	94.60	67300	1.25	B-RF 147	6P
12	9130	83.47	39000	1.40		
8.8	11900	163.31	64700	1.10	B-R 147	4P
9.8	10700	146.91	66700	1.20	B-RF 147	4P
12	8740	119.86	69400	1.50		
13	7970	109.31	70300	1.65		
15	6900	94.60	71400	1.90		
17	6090	83.47	72100	2.1	B-R 147	4P
20	5260	72.09	72800	2.5	B-RF 147	4P
22	4890	66.99	73000	2.7		
24	4460	61.09	73300	2.9		
27	3860	52.87	73600	3.4		
10	10300	141.12	23300	0.80		
11	9350	128.18	46900	0.85		
13	8300	113.72	52700	0.95		
14	7530	103.20	54400	1.05		
16	6470	88.70	56300	1.25		
18	5900	80.91	57200	1.35	B-R 137	4P
20	5360	73.49	57900	1.50	B-RF 137	4P
22	4760	65.20	58700	1.70		
24	4320	59.17	59200	1.85		
28	3710	50.86	59800	2.2		
32	3240	44.39	60200	2.5		
38	2750	37.65	60500	2.9		
44	2400	32.91	60700	3.3		
22	4790	65.60	23700	0.90		
24	4330	59.41	27800	1.00		
27	3840	52.68	27100	1.10	B-R 107	4P
30	3470	47.63	26600	1.25	B-RF 107	4P
36	2940	40.37	25700	1.45		
41	2570	35.26	25000	1.65		
49	2150	29.49	24000	2.0		
47	2240	30.77	24200	1.90		
52	2010	27.58	23600	2.1	B-R 107	4P
56	1820	24.90	23100	2.4	B-RF 107	4P
64	1650	22.62	22500	2.6		
72	1460	20.07	21800	2.9		
79	1330	18.21	21300	3.2		
34	3120	42.78	14500	0.95		
39	2710	37.13	18900	1.10	B-R 97	4P
43	2430	33.25	18600	1.20	B-RF 97	4P
52	2010	27.58	18000	1.35		
58	1830	25.03	17700	1.55	B-R 97	4P
64	1630	22.37	17300	1.65	B-RF 97	4P
71	1470	20.14	16900	1.80		
79	1330	18.24	16600	1.90		
89	1180	16.17	16100	2.0		
98	1070	14.62	15700	2.2		
116	900	12.39	15100	2.4		
133	790	10.83	14600	2.7	B-R 97	4P
155	675	9.29	14300	3.0	B-RF 97	4P
172	610	8.39	13900	3.3		
202	520	7.12	13200	3.0		
232	455	6.21	12700	4.2		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
11.0kW						
67	1570	21.51	13200	0.95		
75	1390	19.10	13000	1.05	B-R 87	4P
84	1250	17.08	12800	1.10	B-RF 87	4P
94	1120	15.35	12500	1.20		
108	970	13.33	12200	1.30		
121	870	11.93	11900	1.40		
145	720	9.90	11400	1.65	B-R 87	4P
158	665	9.14	11500	1.80	B-RF 87	4P
175	600	8.22	11200	1.95		
202	520	7.13	10800	2.1		
225	465	6.39	10400	2.2		
272	385	5.30	9910	2.3		
132	795	10.88	4250	0.85	B-R 77	4P
149	705	9.64	5000	0.90	B-RF 77	4P
186	565	7.74	4630	1.10		
212	495	6.79	5250	1.15	B-R 77	4P
240	435	5.99	5720	1.25	B-RF 77	4P
271	390	5.31	6090	1.30		
15.0kW						
6.4	20700	229	120000	0.85	B-R 167 R107	4P
7.3	18100	200	120000	1.00	B-RF 167 R107	4P
8.6	15200	169	120000	1.20		
6.4	20800	227	120000	0.85	B-R 167 R107	4P
7.4	18100	198	120000	1.00	B-RF 167 R107	4P
6.3	22600	153.07	120000	0.80		
6.9	20700	139.98	120000	0.85	B-R 167	6P
8.0	18000	121.81	120000	1.00	B-RF 167	6P
9.0	15900	107.49	120000	1.15		
6.4	22500	229.71	120000	0.80	B-R 167	4P
7.8	18300	186.93	120000	1.00	B-RF 167	4P
9.5	15000	153.07	120000	1.20		
10	13700	139.98	120000	1.30		
12	12000	121.81	120000	1.50		
14	10500	107.49	120000	1.70	B-R 167	4P
16	9140	93.19	120000	1.95	B-RF 167	4P
18	8130	82.91	120000	2.2		
20	7230	73.70	120000	2.5		
22	6610	67.40	120000	2.7		
8.9	16100	109.31	54400	0.80		
10	14000	94.60	60600	0.95	B-R 147	6P
12	12300	83.47	64000	1.05	B-RF 147	6P
13	10600	72.09	66800	1.20		
14	9890	66.99	67900	1.30		
8.9	16000	163.31	46200	0.80		
9.9	14400	146.91	57400	0.90	B-R 147	4P
12	11800	119.86	65000	1.10	B-RF 147	4P
13	10700	109.31	66700	1.20		
15	9280	94.60	68800	1.40		
17	8190	83.47	70100	1.60		
20	7070	72.09	71300	1.85	B-R 147	4P
22	6570	66.99	71700	2.0	B-RF 147	4P
24	5990	61.09	72200	2.2		
28	5190	52.87	72800	2.5		
31	4580	46.65	73200	2.8		
14	10100	103.20	40700	0.80		
16	8700	88.70	51000	0.90	B-R 137	4P
18	7940	80.91	53500	1.00	B-RF 137	4P
20	7210	73.49	55000	1.10		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
15.0kW						
22	6400	65.20	56400	1.25		
25	5800	59.17	57300	1.40		
29	4990	50.86	58400	1.60		
33	4380	44.39	59100	1.85	B-R 137	4P
39	3690	37.65	59800	2.2	B-RF 137	4P
44	3230	32.91	60200	2.5		
52	2730	27.83	60500	2.8		
31	4670	47.63	24500	0.90		
36	3980	40.37	23900	1.10	B-R 107	4P
41	3460	35.26	23400	1.25	B-RF 107	4P
50	2890	29.49	22600	1.50		
47	3020	30.77	22800	1.40		
53	2710	27.58	22400	1.60		
59	2440	24.90	21900	1.75		
65	2220	22.62	21400	1.95	B-R 107	4P
73	1970	20.07	20900	2.2	B-RF 107	4P
80	1790	18.21	20400	2.4		
93	1540	15.65	19700	2.8		
107	1340	13.66	19000	3.2		
53	2710	27.58	16500	1.00	B-R 97 B-RF 97	4P 4P
58	2460	25.03	16300	1.15		
65	2200	22.37	16100	1.25		
72	1980	20.14	15800	1.30		
80	1790	18.24	15800	1.40		
90	1590	16.17	15200	1.50		
100	1430	14.62	14900	1.60	B-R 97	4P
118	1220	12.39	14400	1.80	B-RF 97	4P
135	1060	10.83	14000	1.95		
157	910	9.29	13800	2.2		
174	820	8.39	13400	2.5		
205	700	7.12	12800	2.9		
235	610	6.21	12400	3.1		
85	1680	17.08	11600	0.85		
95	1510	15.35	11500	0.90	B-R 87	4P
110	1310	13.33	11300	1.00	B-RF 87	4P
122	1170	11.93	11100	1.05		
147	970	9.90	10700	1.20		
160	900	9.14	11000	1.35		
178	810	8.22	10700	1.45	B-R 87	4P
205	700	7.13	10300	1.55	B-RF 87	4P
229	625	6.39	10100	1.65		
275	520	5.30	9600	1.75		
18.5kW						
7.8	22500	186.93	120000	0.80		
9.6	18500	153.07	120000	1.00	B-R 167	4P
10	16900	139.98	120000	1.05	B-RF 167	4P
12	14700	121.81	120000	1.25		
14	13000	107.49	120000	1.40		
16	11200	93.19	120000	1.60		
18	10000	82.91	120000	1.80	B-R 167	4P
20	8890	73.70	120000	2.0	B-RF 167	4P
22	8130	67.40	120000	2.2		
25	7070	58.65	120000	2.5		
12	14500	119.86	56900	0.90	B-R 147	4P
13	13200	109.31	62300	1.00	B-RF 147	4P
15	11400	94.60	65600	1.15		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
18.5kW						
18	10100	83.47	67700	1.30		
20	8690	72.09	69500	1.50		
22	8080	66.99	70200	1.60		
24	7370	61.09	71000	1.75	B-R 147	4P
28	6380	52.87	71900	2.0	B-RF 147	4P
31	5630	46.65	72500	2.3		
36	4860	40.29	73000	2.7		
18	9760	80.91	39000	0.80		
20	8860	73.49	50200	0.90	B-R 137	4P
22	7860	65.20	53700	1.00	B-RF 137	4P
25	7140	59.17	55100	1.10		
29	6130	50.86	56800	1.30		
33	5350	44.39	58000	1.50	B-R 137	4P
39	4540	37.65	58900	1.75	B-RF 137	4P
45	3970	32.91	59500	2.0		
53	3360	27.83	60100	2.3		
50	3570	29.57	59900	2.2		
61	2910	24.12	60400	2.8	B-R 137	4P
67	2650	22.00	60600	3.0	B-RF 137	4P
77	2300	19.04	60800	3.5		
87	2030	16.80	60900	4.0		
36	4870	40.37	20200	0.90	B-R 107	4P
42	4250	35.26	22000	1.00	B-RF 107	4P
50	3560	29.49	21500	1.20		
59	3000	24.90	20900	1.45		
65	2730	22.62	20800	1.60		
73	2420	20.07	20100	1.80		
80	2200	18.21	19700	1.95		
84	1890	15.65	19100	2.3	B-R 107	4P
107	1650	13.66	18500	2.6	B-RF 107	4P
126	1400	11.59	17800	3.1		
145	1220	10.13	17200	3.5		
186	950	7.86	16300	3.6		
220	800	6.66	15600	3.7		
73	2430	20.14	14900	1.05		
80	2200	18.24	14700	1.15		
91	1950	16.17	14500	1.25		
100	1760	14.62	14200	1.30		
118	1490	12.39	13800	1.45		
135	1310	10.83	13500	1.60	B-R 97	4P
158	1120	9.29	13400	1.80	B-RF 97	4P
175	1010	8.39	13100	2.0		
206	660	7.12	12600	2.3		
236	750	6.21	12100	2.5		
282	625	5.20	11600	2.8		
326	545	4.50	11100	3.0		
110	1610	13.33	10600	0.80		
123	1440	11.93	10400	0.85		
148	1190	9.90	10200	1.00		
160	1100	9.14	10600	1.10	B-R 87	4P
178	990	8.22	10300	1.15	B-RF 87	4P
205	860	7.13	10000	1.25		
229	770	6.39	9770	1.30		
276	640	5.30	9350	1.40		
22kW						
22	9350	65.20	46900	0.85		
25	8480	59.17	51900	0.95	B-R 137	4P
29	7290	50.86	54800	1.10	B-RF 137	4P
33	6370	44.39	56500	1.25		
39	5400	37.65	57900	1.50	B-R 137	4P
45	4720	32.91	58700	1.70	B-RF 137	4P
53	3990	27.83	59500	1.90		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
22kW						
50	4240	29.57	59300	1.85		
61	3460	24.12	60000	2.3	B-R 137	4P
67	3150	22.00	60200	2.5	B-RF 137	4P
77	2730	19.04	60500	2.9		
87	2410	16.80	60700	3.3	B-R 137	4P
101	2080	14.51	60900	3.6	B-RF 137	4P
114	1840	12.83	61000	4.3		
42	5060	35.26	18200	0.85	B-R 107	4P
50	4230	29.49	20400	1.00	B-RF 107	4P
59	3570	24.90	20000	1.20	B-R 107	4P
65	3240	22.62	19700	1.35	B-RF 107	4P
73	2880	20.07	19300	1.50		
80	2610	18.21	19000	1.65		
94	2240	15.65	18500	1.90		
107	1960	13.66	18000	2.2		
126	1660	11.59	17300	2.6	B-R 107	4P
145	1450	10.13	16800	3.0	B-RF 107	4P
171	1230	8.56	16100	3.5		
186	1130	7.86	16100	3.5		
220	960	6.66	15400	3.6		
252	840	5.82	14800	3.6		
73	2890	20.14	14000	0.90		
80	2620	18.24	13900	0.95	B-R 97	4P
91	2320	16.17	13700	1.05	B-RF 97	4P
100	2100	14.62	13600	1.10		
118	1780	12.39	13200	1.25		
135	1550	10.83	13000	1.35		
158	1330	9.29	13100	1.50		
175	1200	8.39	12800	1.70	B-R 97	4P
206	1020	7.12	12300	1.95	B-RF 97	4P
236	890	6.21	11900	2.1		
282	745	5.20	11400	2.4		
326	645	4.50	10900	2.5		
148	1420	9.90	9640	0.85		
160	1310	9.14	10100	0.90		
178	1180	8.22	9960	1.00	B-R 87	4P
205	1020	7.13	9700	1.05	B-RF 87	4P
229	920	6.39	9490	1.10		
276	760	5.30	9110	1.20		
30kW						
14	20900	107.49	120000	0.85	B-R 167	4P
16	18200	93.19	120000	1.00	B-RF 167	4P
18	16200	82.91	120000	1.10		
20	14400	73.70	120000	1.25		
22	13100	67.40	120000	1.35		
25	11400	58.65	120000	1.55		
28	10100	51.76	120000	1.80		
33	8740	44.87	120000	2.1	B-R 167	4P
37	7780	39.92	120000	2.3	B-RF 167	4P
43	6710	34.41	120000	2.7		
53	5450	27.96	120000	3.3		
62	4620	23.71	120000	3.9		
18	16300	83.47	52400	0.80		
20	14000	72.09	60400	0.95	B-R 147	4P
22	13100	66.99	62500	1.00	B-RF 147	4P
24	11900	61.09	64700	1.10		
28	10300	52.87	67300	1.25		
32	9090	46.65	69000	1.45		
36	7850	40.29	70500	1.65	B-R 147	4P
41	6950	35.64	71400	1.85	B-RF 147	4P
49	5840	29.95	72300	2.2		
61	4710	24.19	73100	2.5		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
30kW						
72	3980	20.44	73600	3.0	B-R 147	4P
62	3510	18.04	73800	3.0	B-RF 147	4P
94	3050	15.64	74000	4.3		
29	9910	50.86	45800	0.80		
33	8650	44.39	51200	0.90	B-R 137	4P
39	7340	37.65	54700	1.10	B-RF 137	4P
45	6410	32.91	56400	1.25		
53	5420	27.83	57900	1.40		
61	4700	24.12	58800	1.70		
67	4290	22.00	59200	1.85	B-R 137	4P
77	3710	19.04	59800	2.2	B-RF 137	4P
88	3270	16.80	60100	2.4		
101	2830	14.51	59500	2.8		
115	2500	12.83	58400	3.2	B-R 137	4P
136	2100	10.79	56600	3.8	B-RF 137	4P
194	1480	7.59	53300	3.5		
230	1240	6.38	51300	4.1		
73	3910	20.07	17600	1.10		
81	3550	18.21	17400	1.20		
94	3050	15.65	17100	1.40		
108	2660	13.66	16800	1.60		
127	2260	11.59	16300	1.90		
145	1970	10.13	15900	2.2	B-R 107	4P
172	1670	8.56	15400	2.6	B-RF 107	4P
187	1530	7.86	15500	1.95		
221	1300	6.66	14900	2.3		
252	1140	5.82	14400	2.6		
299	960	4.92	13700	3.0		
101	2850	14.62	12000	0.80		
119	2420	12.39	11900	0.90	B-R 97	4P
136	2110	10.83	11800	1.00	B-RF 97	4P
158	1810	9.29	12300	1.10		
175	1640	8.39	12100	1.25		
207	1390	7.12	11700	1.45		
237	1210	6.21	11400	1.55	B-R 97	4P
283	1010	5.20	10900	1.75	B-RF 97	4P
327	880	4.50	10500	1.85		
37kW						
16	22400	93.19	120000	0.80		
18	19900	82.91	120000	0.90		
20	17700	73.70	120000	1.00		
22	16200	67.40	120000	1.10		
25	14100	58.65	120000	1.30	B-R 167	4P
28	12400	51.76	120000	1.45	B-RF 167	4P
33	10800	44.87	120000	1.65		
37	9600	39.92	120000	1.90		
43	8270	34.41	120000	2.2		
53	6720	27.96	120000	2.7		
48	7380	30.71	120000	1.35		
60	5900	24.57	120000	2.4		
67	5250	21.85	120000	2.5	B-R 167	4P
77	4580	19.03	120000	3.5	B-RF 167	4P
87	4080	16.98	120000	3.7		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole	
37kW							
22	16100	66.99	35000	0.80	B-R 147 B-RF 147	4P	
24	14700	61.09	54200	0.90		4P	
28	12700	52.87	53200	1.00			
32	11200	46.65	65900	1.15	B-R 147 B-RF 147	4P	
36	9880	40.29	68200	1.35		4P	
41	8570	35.64	69700	1.50		4P	
49	7200	29.95	71100	1.80		4P	
61	5810	24.19	72400	2.0			
72	4910	20.44	73000	2.4	B-R 147 B-RF 147	4P	
82	4340	18.04	73400	2.4		4P	
94	3760	15.64	73700	3.5		4P	
106	3340	13.91	73900	3.8	B-R 147 B-RF 147	4P 4P	
39	9050	37.65	49400	0.80	B-R 137 B-RF 137	4P	
45	7910	32.91	53600	1.00		4P	
53	6690	27.83	55900	1.15		4P	
61	5800	24.12	57300	1.40	B-R 137 B-RF 137	4P	
67	5290	22.00	58000	1.50		4P	
77	4580	19.04	57800	1.75		4P	
88	4040	16.80	57300	2.0		4P	
101	3490	14.51	56600	2.3		B-R 137 B-RF 137	4P
115	3080	12.83	55800	2.6			4P
136	2590	10.79	54400	3.1	4P		
169	2090	8.71	52600	3.5	4P		
194	1820	7.59	51900	3.6	4P		
230	1530	6.38	50100	3.6	4P		
285	1240	5.15	47900	3.7			
73	4820	20.07	16100	0.90	B-R 107 B-RF 107	4P	
81	4380	18.21	16100	1.00		4P	
94	3760	15.65	15900	1.15		4P	
108	3280	13.66	15700	1.30		4P	
127	2790	11.59	15400	1.55		4P	
145	2430	10.13	15100	1.75		4P	
172	2060	8.56	14700	2.1		4P	
187	1890	7.86	15000	1.55		4P	
221	1600	6.66	14400	1.85		4P	
252	1400	5.82	14000	2.1		4P	
299	1180	4.92	13400	2.5		4P	
45kW							
20	21500	73.70	120000	0.85	B-R 167 B-RF 167	4P	
22	19700	67.40	120000	0.90		4P	
25	17100	58.65	120000	1.05		4P	
28	15100	51.76	120000	1.20		4P	
33	13100	44.87	120000	1.35	B-R 167 B-RF 167	4P	
37	11700	39.92	120000	1.55		4P	
43	10100	34.41	120000	1.80		4P	
53	8170	27.96	120000	2.2		4P	
62	6930	23.71	120000	2.6		4P	
87	4960	16.98	120000	3.0			
60	7180	24.57	120000	1.95	B-R 167 B-RF 167	4P	
67	6390	21.85	120000	2.0		4P	
77	5560	19.03	120000	2.9		4P	
87	4960	16.98	120000	3.0		4P	

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole	
45kW							
38	15500	52.87	44400	0.85	B-R 147 B-RF 147	4P	
32	13600	46.65	6130	0.95		4P	
36	11800	40.29	65000	1.10		4P	
41	10400	35.64	67200	1.25		4P	
49	8760	29.95	69400	1.50		4P	
61	7070	24.19	71300	1.70		4P	
72	5970	20.44	72200	2.0	B-R 147 B-RF 147	4P	
82	5270	18.04	72800	2.0		4P	
94	4570	15.64	73200	2.8		4P	
106	4070	13.91	73500	3.1		4P	
123	3510	11.99	73800	3.7		4P	
203	2120	7.25	74300	4.1		4P	
45	9620	32.91	41700	0.95	B-R 137 B-RF 137	4P	
53	8130	27.83	51200	0.95		4P	
61	7050	24.12	52400	1.15	B-R 137 B-RF 137	4P	
67	6430	22.00	52900	1.25		4P	
77	5570	19.04	53300	1.45		4P	
88	4910	16.80	53400	1.65		4P	
101	4240	14.51	53200	1.90	B-R 137 B-RF 137	4P	
115	3750	12.83	52800	2.1		4P	
136	3150	10.79	51900	2.5		4P	
169	2550	8.71	50500	3.1		4P	
194	2220	7.59	50200	2.3		4P	
230	1860	6.38	48700	2.7		4P	
285	1510	5.15	48700	3.0		4P	
94	4580	15.65	14600	0.95		B-R 107 B-RF 107	4P
108	3990	13.66	14600	1.10			4P
127	3390	11.59	14400	1.25			4P
145	2960	10.13	14300	1.45	4P		
172	2500	8.56	14000	1.70	4P		
187	2300	7.86	14400	1.30	4P		
221	1950	6.66	14000	1.50	4P		
252	1700	5.82	13600	1.75	4P		
299	1440	4.92	13100	2.0	4P		
55kW							
25	20900	58.65	120000	0.85	B-R 167 B-RF 167	4P	
29	18400	51.76	120000	1.00		4P	
33	16000	44.87	120000	1.15		4P	
37	14200	39.92	120000	1.25		4P	
43	12300	34.41	120000	1.45		4P	
53	9960	27.96	120000	1.80		4P	
62	8440	23.71	120000	2.1		4P	
60	8750	24.57	120000	1.60		B-R 167 B-RF 167	4P
68	7780	21.85	120000	1.65			4P
77	6780	19.03	120000	2.4			4P
87	6050	16.98	120000	2.5	B-R 167 B-RF 167	4P	
102	5150	14.48	120000	3.5		4P	
123	4270	11.99	120000	4.0		4P	
32	16600	46.65	46600	0.80	B-R 147 B-RF 147	4P	
37	14300	40.29	58200	0.90		4P	
41	12700	35.64	63300	1.00		4P	
49	10700	29.95	66800	1.20		4P	
61	8610	24.19	69600	1.40		4P	
72	7280	20.44	71100	1.65		4P	
82	6420	18.04	71900	1.65	B-R 147 B-RF 147	4P	
94	5570	15.64	72500	2.3		4P	
106	4950	13.91	73000	2.5		4P	
123	4270	11.99	73400	3.0	B-R 147 B-RF 147	4P	
151	3470	9.74	73800	3.8		4P	
203	2580	7.25	74200	3.4		4P	
250	2100	5.89	72500	4.1		4P	

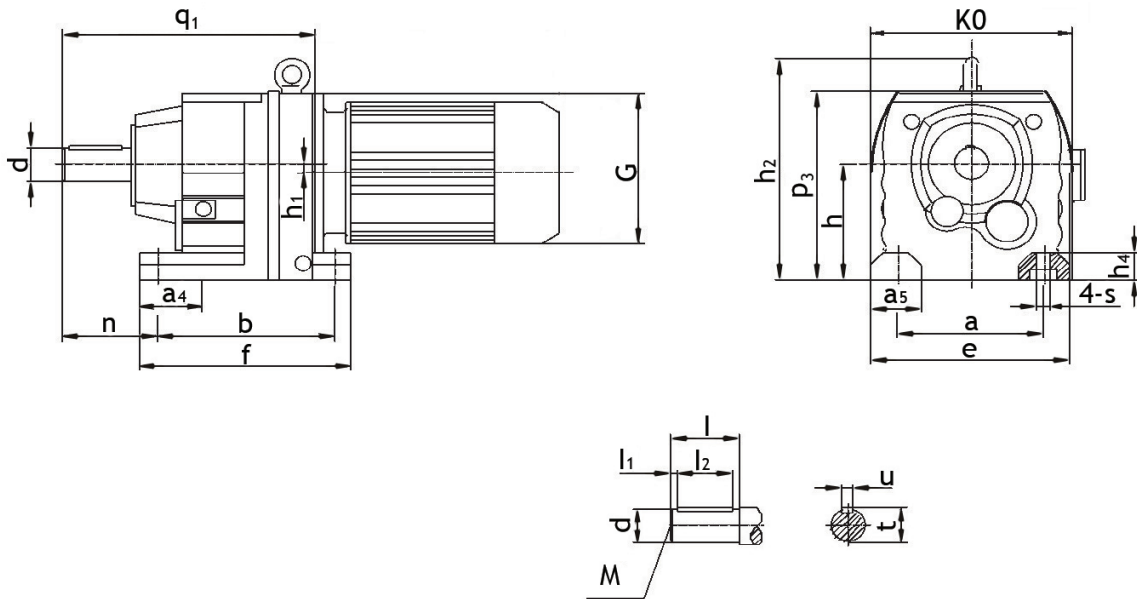


Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
55kW						
77	6780	19.04	47800	1.20	B-R 137	4P
88	5980	16.80	48500	1.35	B-RF 137	4P
102	5170	14.51	46900	1.55		
115	4570	12.83	49000	1.75		
137	3840	10.79	48800	2.1		
169	3100	8.71	48000	2.5	B-R 137	4P
194	2700	7.59	48100	1.90	B-RF 137	4P
231	2270	6.38	46900	2.2		
286	1830	5.15	45200	2.5		
75kW						
33	21700	44.87	120000	0.85		
37	19300	39.92	120000	0.95	B-R 167	4P
43	16700	34.41	120000	1.10	B-RF 167	4P
53	13500	27.96	120000	1.35		
62	11500	23.71	120000	1.55		
60	11900	24.57	120000	1.20	B-R 167	4P
68	10600	21.85	120000	1.25	B-RF 167	4P
78	8210	19.03	120000	1.75		
87	8220	16.98	120000	1.85		
102	7000	14.48	120000	2.6	B-R 167	4P
123	5800	11.99	116800	2.9	B-RF 167	4P
145	4950	10.24	112800	3.4		
49	14500	29.95	56500	0.90	B-R 147	4P
61	11700	24.19	65100	1.00	B-RF 147	4P
72	9890	20.44	67900	1.20		
82	8730	18.04	69500	1.20	B-R 147	4P
95	7570	15.64	70800	1.70	B-RF 147	4P
106	6730	13.91	71600	1.85		
123	5800	11.99	72400	2.2		
152	4710	9.74	73100	2.8		
179	4000	8.26	73500	3.2	B-R 147	4P
204	3510	7.25	73100	2.5	B-RF 147	4P
251	2850	5.89	70100	3.0		
296	2240	5.00	67600	3.6		
90kW						
37	23200	39.92	120000	0.80		
43	20000	34.41	120000	0.90	B-R 167	4P
53	16200	27.96	120000	1.10	B-RF 167	4P
62	13800	23.71	120000	1.30		
60	14300	24.57	120000	1.00	B-R 167	4P
68	12700	21.85	120000	1.00	B-RF 167	4P
78	11100	19.03	120000	1.45		
87	9860	16.98	120000	1.50		
102	8410	14.48	117300	2.1	B-R 167	4P
123	6960	11.99	113500	2.4	B-RF 167	4P
145	5940	10.24	101000	2.9		
72	11900	20.44	64800	1.00		
82	10500	18.04	67100	1.00	B-R 147	4P
95	9080	15.64	69000	1.45	B-RF 147	4P
108	8080	13.91	70200	1.55		
123	6960	11.99	71400	1.85		
152	5660	9.74	72500	2.3		
179	4800	8.26	73000	2.7	B-R 147	4P
204	4210	7.25	70900	2.1	B-RF 147	4P
251	3420	5.89	68300	2.5		
296	2900	5.00	66100	3.0		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
110kW						
53	19800	27.96	117100	0.90	B-R 167	4P
63	16800	23.71	116900	1.05	B-RF 167	4P
78	13500	19.03	115500	1.20		
87	12000	16.98	114300	1.25	B-R 167	4P
103	10200	14.48	112000	1.75	B-RF 167	4P
124	8480	11.99	109300	2.0		
145	7240	10.24	106500	2.3		
132kW						
63	20100	23.71	107900	0.90	B-R 167	4P
					B-RF 167	4P
78	16200	19.03	108300	1.00		
87	14400	16.98	107000	1.05	B-R 167	4P
103	12300	14.48	106700	1.45	B-RF 167	4P
124	10200	11.99	104700	1.65		
145	8690	10.24	102600	1.85		
160kW						
103	14900	14.48	99700	1.20	B-R 167	4P
124	12300	11.99	98900	1.40	B-RF 167	4P
145	10500	10.24	97600	1.60		

MOUNTING DIMENSIONS

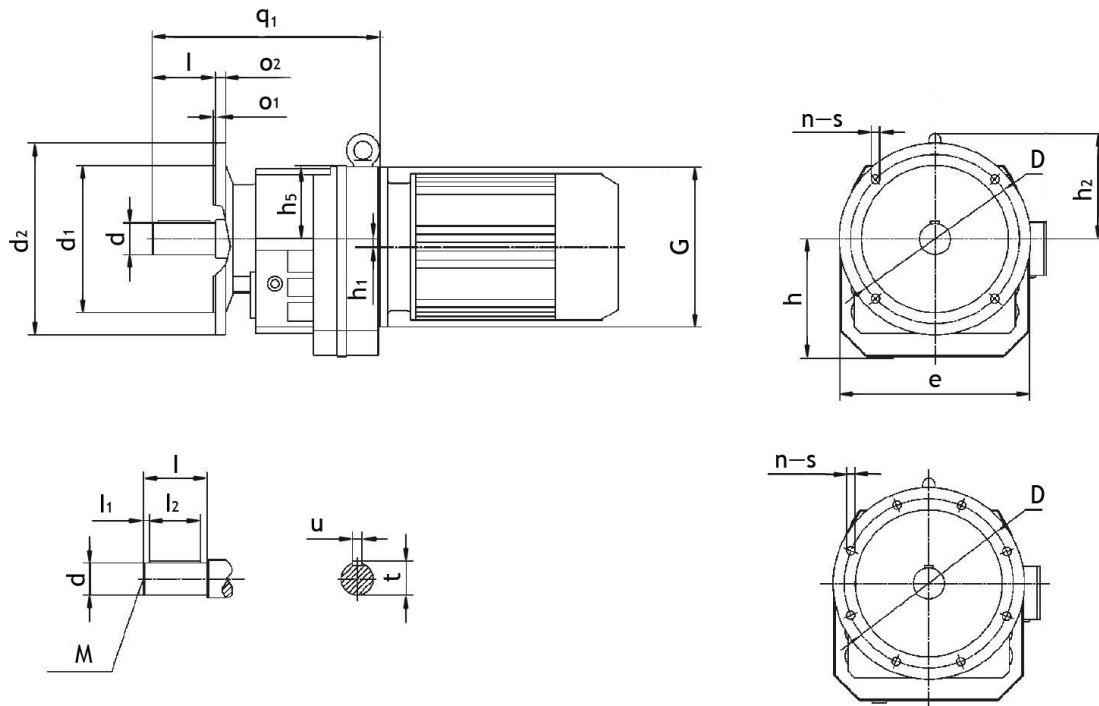
B-R..17~167



Model	q_1 e	d s	n h_4	a_4 K0	b l	f l_1	h_1 l_2	p_3 M	h u	a_5 t	a h_2	G
B-R..17	162 135	Ø 20k6 Ø 9	58 12	28 140	110 40	131 4	0 32	134 M6	$75_{-0.5}$ 6	25 22.5	110 /	Ø 120
B-R..27	193 145	Ø 25k6 Ø 9	75 18	27 151	130 50	152 3.5	3.4 40	147 M10	$90_{-0.5}$ 8	32 28	110 /	Ø 120
B-R..37	201 145	Ø 25k6 Ø 9	75 18	40 161	130 50	160 3.5	10.1 40	151 M10	$90_{-0.5}$ 8	35 28	110 /	Ø 120
B-R..47	235 170	Ø 30k6 Ø 13.5	90 24	50 178	165 60	195 3.5	14 50	187 M10	$115_{-0.5}$ 8	42 33	135 /	Ø 160
B-R..57	257 190	Ø 35k6 Ø 13.5	100 24	60 202	165 70	200 7	11.2 56	187 M12	$115_{-0.5}$ 10	55 38	135 /	Ø 160
B-R..67	280 210	Ø 35k6 Ø 14	100 30	60 215	195 70	235 7	20.7 56	212 M12	$130_{-0.5}$ 10	60 38	150 243	Ø 160
B-R..77	300 230	Ø 40k6 Ø 17.5	115 30	60 235	205 80	245 5	15.9 70	228 M16	$140_{-0.5}$ 12	60 43	170 269	Ø 200
B-R..87	372 290	Ø 50k6 Ø 17.5	140 45	90 297	260 100	310 10	12.6 80	295 M16	$180_{-0.5}$ 14	75 53.5	215 345	Ø 250
B-R..97	440 340	Ø 60m6 Ø 22	160 55	100 348	310 120	365 5	10.2 110	368 M20	$225_{-0.5}$ 18	90 64	250 418	Ø 300
B-R..107	495 400	Ø 70m6 Ø 26	185 65	125 409	370 140	440 7.5	20.4 125	408 M20	$250_{-0.5}$ 20	110 74.5	290 475	Ø 350
B-R..137	589 450	Ø 90m6 Ø 33	220 70	130 458	410 170	490 5	25.1 160	495 M24	315_{-1} 25	110 95	340 562	Ø 400
B-R..147	695 530	Ø 110m6 Ø 39	260 80	150 540	500 210	590 15	33.4 180	565 M24	355_{-1} 28	150 116	380 637	Ø 450
B-R..167	790 660	Ø 120m6 Ø 39	270 100	160 670	580 210	670 5	59.9 200	675 M24	425_{-1} 32	160 127	500 749	Ø 550

MOUNTING DIMENSIONS

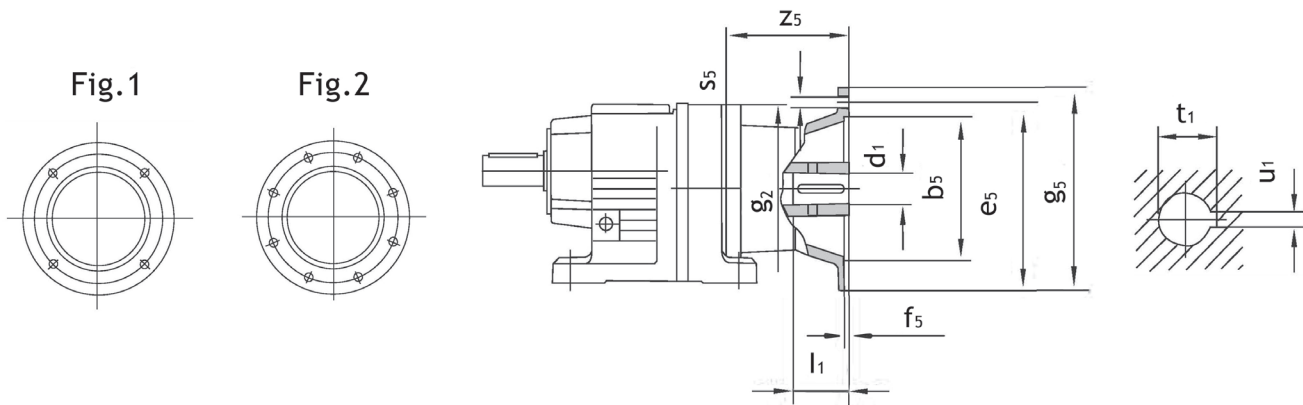
B-RF..17~167



Model	d	d ₂	o ₂	o ₁	s	d ₁	D	n	q ₁ l	h ₅ l ₁	h ₁ l ₂	h M	e u	h ₂ t	G
B-RF..17	Ø 20k6	Ø 120 Ø 140	8 9	3 3	Ø 6.5 Ø 8.5	Ø 80j6 Ø 95j6	Ø 100 Ø 115	4 4	170 40	59 4	/ 32	76 M6	130 6	/ 22.5	Ø 120
B-RF..27	Ø 25k6	Ø 120 Ø 140 Ø 160	8 8 10	3 3 3.5	Ø 6.5 Ø 8.5 Ø 8.5	Ø 80j6 Ø 95j6 Ø 110j6	Ø 100 Ø 115 Ø 130	4 4 4	199 50	57 3.5	3.4 40	92 M10	142 8	/ 28	Ø 120
B-RF..37	Ø 25k6	Ø 120 Ø 160 Ø 200	8 10 12	3 3.5 3.5	Ø 6.5 Ø 9 Ø 11	Ø 80j6 Ø 110j6 Ø 130j6	Ø 100 Ø 130 Ø 165	4 4 4	207 50	61 3.5	10.1 40	94 M10	161 8	/ 28	Ø 120
B-RF..47	Ø 30k6	Ø 140 Ø 160 Ø 200	10 10 12	3 3.5 3.5	Ø 9 Ø 9 Ø 11	Ø 95j6 Ø 110j6 Ø 130j6	Ø 115 Ø 130 Ø 165	4 4 4	235 60	72 3.5	14 50	118 M10	178 8	/ 33	Ø 160
B-RF..57	Ø 35k6	Ø 160 Ø 200 Ø 250	10 12 15	3.5 3.5 4	Ø 9 Ø 11 Ø 13.5	Ø 110j6 Ø 130j6 Ø 180j6	Ø 130 Ø 165 Ø 215	4 4 4	257 70	72 7	11.2 56	121 M12	202 10	/ 38	Ø 160
B-RF..67	Ø 35k6	Ø 200 Ø 250	12 15	3.5 4	Ø 11 Ø 13.5	Ø 130j6 Ø 180j6	Ø 165 Ø 215	4 4	280 70	82 7	20.7 56	134 M12	215 10	113 38	Ø 160
B-RF..77	Ø 40k6	Ø 250 Ø 300	15 18.5	4 4	Ø 13.5 Ø 13.5	Ø 180j6 Ø 230j6	Ø 215 Ø 265	4 4	300 80	88 5	15.9 70	144 M16	235 12	129 43	Ø 200
B-RF..87	Ø 50k6	Ø 300 Ø 350	16 18	4 5	Ø 13.5 Ø 17.5	Ø 230j6 Ø 250h6	Ø 265 Ø 300	4 4	372 100	115 10	12.6 80	184 M16	297 14	165 53.5	Ø 250
B-RF..97	Ø 60m6	Ø 350 Ø 450	18 22	5 5	Ø 17.5 Ø 17.5	Ø 250h6 Ø 350h6	Ø 300 Ø 400	4 8	440 120	144 5	10.2 110	230 M20	348 18	193 64	Ø 300
B-RF..107	Ø 70m6	Ø 350 Ø 450	20 22	5 5	Ø 17.5 Ø 17.5	Ø 250h6 Ø 350h6	Ø 300 Ø 400	4 8	495 140	158 7.5	20.4 125	255 M20	409 20	224 74.5	Ø 350
B-RF..137	Ø 90m6	Ø 450 Ø 550	22 25	5 5	Ø 17.5 Ø 17.5	Ø 350h6 Ø 450h6	Ø 400 Ø 500	8 8	589 170	180 5	25.1 160	320 M24	458 25	247 95	Ø 400
B-RF..147	Ø 110m6	Ø 450 Ø 550	22 25	5 5	Ø 17.5 Ø 17.5	Ø 350h6 Ø 450h6	Ø 400 Ø 500	8 8	695 210	210 15	33.4 180	361 M24	540 28	285 116	Ø 450
B-RF..167	Ø 120m6	Ø 550 Ø 660	25 28	5 6	Ø 17.5 Ø 22	Ø 450h6 Ø 550h6	Ø 500 Ø 600	8 8	790 210	250 5	59.9 200	430 M24	670 32	324 127	Ø 550

MOUNTING DIMENSIONS

B-R..AM..

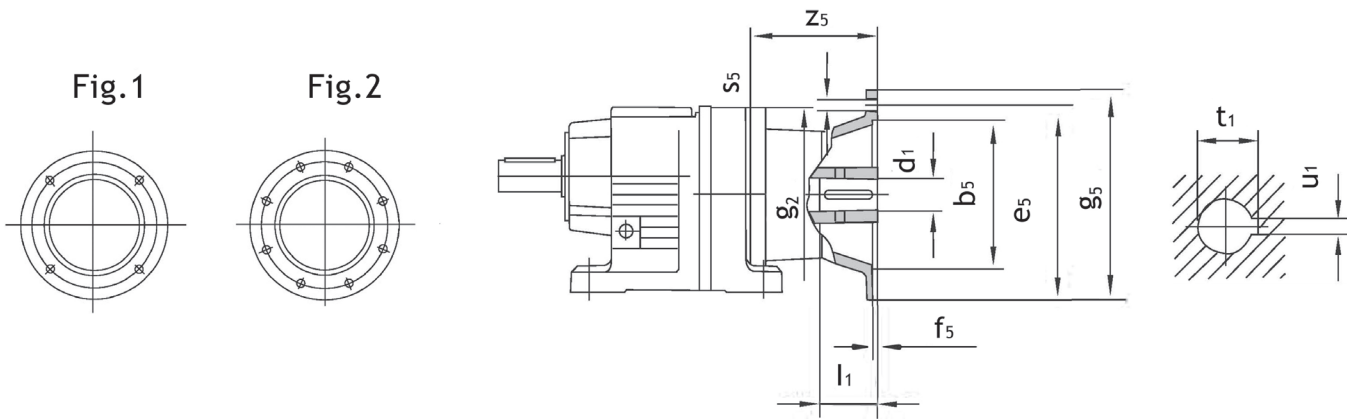


Model	Input	Fig	b_5	e_5	f_5	g_2	g_5	s_5	z_5	d_1	l_1	t_1	u_1
B-R..27 B-R..37	AM 63	1	95	115	3.5	120	140	M8	72	11	23	12.8	4
	AM 71 ¹⁾		110	130			14			30	16.3	5	
	AM 80 ¹⁾		130	165	4.5		200	M10	106	19	40	21.8	6
	AM 90 ¹⁾						24			50	27.3	8	
B-R..47 B-R..57 B-R..67	AM 63	1	95	115	3.5	160	140	M8	66	11	23	12.8	4
	AM 71		110	130			14			30	16.3	5	
	AM 80		130	165	4.5		200	M10	99	19	40	21.8	6
	AM 90						24			50	27.3	8	
	AM 100 ¹⁾		180	215	5		250	M12	134	28	60	31.3	8
	AM 112 ¹⁾						28			60	31.3	8	
B-R..77	AM 63	1	95	115	3.5	200	140	M8	60	11	23	12.8	4
	AM 71		110	130			14			30	16.3	5	
	AM 80		130	165	4.5		200	M10	92	19	40	21.8	6
	AM 90						24			50	27.3	8	
	AM 100 ¹⁾		180	215	5		250	M12	126	28	60	31.3	8
	AM 112 ¹⁾						28			60	31.3	8	
	AM 132S ¹⁾		230	265	5		300	M12	179	38	80	41.3	10
	AM 132M ¹⁾						38			80	41.3	10	
	AM 132L ¹⁾		38	80	41.3		10						
B-R..87	AM 80	1	130	165	4.5	250	200	M10	87	19	40	21.8	6
	AM 90						24			50	27.3	8	
	AM 100		180	215	5		250	M12	121	28	60	31.3	8
	AM 112						28			60	31.3	8	
	AM 132S		230	265	5		300	M12	174	38	80	41.3	10
	AM 132M						38			80	41.3	10	
	AM 132L		250	300	6		350	M16	232	42	110	45.3	12
	AM 160 ¹⁾						48			51.8		14	
	AM 180 ¹⁾		48	51.8	14								
B-R..97	AM 100	1	180	215	5	300	250	M12	116	28	60	31.3	8
	AM 112						28			60	31.3	8	
	AM 132S		230	265	5		300	M12	169	38	80	41.3	10
	AM 132M						38			80	41.3	10	
	AM 132L	250	300	6	350		M16	227	42	110	45.3	12	
	AM 160				48				51.8		14		
	AM 180	300	350	7	400		M16	268	55	140	59.3	16	
	AM 200				55				59.3		16		
	AM 225 ¹⁾	2	350	400	7		450	M16	283	60	140	64.4	18

1) Input Flange dai g_5 may protude below foot mounting level in foot-mounted gear units.

MOUNTING DIMENSIONS

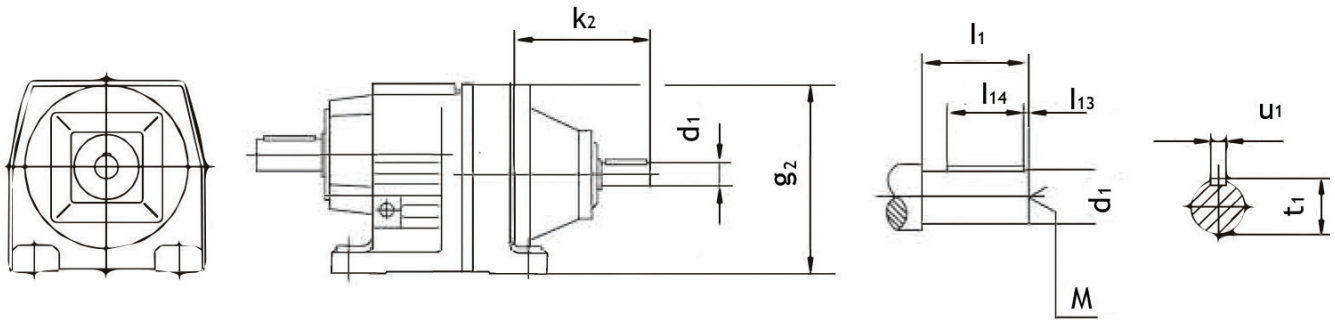
B-R..AM..



Model	Input	Fig	b_5	e_5	f_5	g_2	g_5	s_5	z_5	d_1	l_1	t_1	u_1	
B-R..107	AM 100	1	180	215	5	350	250	M12	110	28	60	31.3	8	
	AM 112													
	AM 132S		230	265			300	163	38	80	41.3	10		
	AM 132M													
	AM 160	250	300	6	350		M16	221	42	110	45.3	12		
	AM 180								48		51.8	14		
	AM 200	300	350	7	400		262	55	59.3	16				
	AM 225										277	60	140	64.4
B-R..137	AM 132S	1	230	265	5	400	300	M12	156	38	80	41.3	10	
	AM 132M													
	AM 132L		250	300			6	350	M16	214	42	110	45.3	12
	AM 160										48		51.8	14
	AM 180	300	350	7	400		255	55	59.3	16				
	AM 200										270	60	140	64.4
	B-R..147	AM 132S	1	230	265		5	450	300	M12	148	38	80	41.3
AM 132M														
AM 132L		250		300	6	350			M16	206	42	110	45.3	12
AM 160											48		51.8	14
AM 180		300	350	7	400	247	55		59.3	16				
AM 200											262	60	140	64.4
AM 225		350	400	7	450	336	65		69.4	18				
AM 250											75	140	79.9	20
B-R..167	AM 160	1	250	300	6	550	350	M16	198	42	110	45.3	12	
	AM 180									48		51.8	14	
	AM 200	300	350	7	400		239	55	59.3	16				
	AM 225										254	60	140	64.4
	AM 250	450	500	7	550		328	65	69.4	18				
	AM 280										75	140	79.9	20

MOUNTING DIMENSIONS

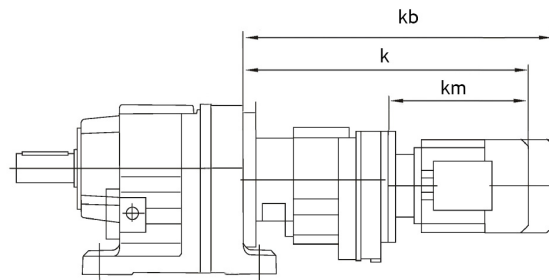
B-R..AD..



Model	Input	g ₂	k ₂	d ₁	l ₁	l ₁₃	l ₁₄	t ₁	u ₁	M
B-R..27 B-R..37	AD1	120	102	16	40	4	32	18	5	M5
	AD2		130	19	40	4	32	21.5	6	M6
B-R..47 B-R..57 B-R..67	AD2	160	123	19	40	4	32	21.5	6	M6
	AD3		159	24	50	5	40	27	8	M8
B-R..77	AD2	200	116	19	40	4	32	21.5	6	M6
	AD3		151	24	50	5	40	27	8	M8
	AD4		224	38	80	5	70	41	10	M12
B-R..87	AD2	250	111	19	40	4	32	21.5	6	M6
	AD3		156	28	60	5	50	31	8	M10
	AD4		219	38	80	5	70	41	10	M12
	AD5		292	42	110	10	70	45	12	M16
B-R..97	AD3	300	151	28	60	5	50	31	8	M10
	AD4		214	38	80	5	70	41	10	M12
	AD5		287	42	110	10	70	45	12	M16
	AD6		327	48	110	10	80	51.5	14	M16
B-R..107	AD3	350	145	28	80	5	50	31	8	M10
	AD4		208	38	80	5	70	41	10	M12
	AD5		281	42	110	10	70	45	12	M16
	AD6		321	48	110	10	80	51.5	14	M16
B-R..137	AD4	400	201	38	80	5	70	41	10	M12
	AD5		274	42	110	10	70	45	12	M16
	AD6		314	48	110	10	80	51.5	14	M16
	AD7		308	55	110	10	90	59	16	M20
B-R..147	AD4	450	193	38	80	5	70	41	10	M12
	AD5		266	42	110	10	70	45	12	M16
	AD6		306	48	110	10	80	51.5	14	M16
	AD7		300	55	110	10	90	59	16	M20
	AD8		383	70	140	15	110	74.5	20	M20
B-R..167	AD5	550	258	42	110	10	70	45	12	M16
	AD6		298	48	110	10	80	51.5	14	M16
	AD7		292	55	110	10	90	59	16	M20
	AD8		374	70	140	15	110	74.5	20	M20

MOUNTING DIMENSIONS

B-R..R..



Model	Input	k	kb	km	Model	Input	k	kb	km
B-R..27 R17 B-R..37 R17	63	368	425	193	B-R..147 R77	63	455	512	223
	71	369	433	194		71	455	519	223
	80	419	483	244		80	505	569	273
B-R..47 R37 B-R..57 R37 B-R..67 R37	63	400	457	235		90	503	588	271
	71	401	465	236		100M	553	638	321
	80	451	515	286		100L	573	658	341
B-R..77 R37	63	392	449	235		112M	587	687	355
	71	393	457	236		132S	632	712	400
	80	443	507	286		132M	684	796	452
	90	443	528	288		132L	704	818	472
B-R..87 R57	63	445	502	229		160M	734	848	502
	71	445	509	229		90	547	832	267
	80	495	559	279		100M	597	692	317
B-R..97 R57	90	495	580	279		100L	617	702	337
	63	440	497	229	112M	630	710	350	
	71	440	504	229	132S	675	755	395	
	80	490	504	279	132M	727	839	447	
	90	490	575	279	132L	747	859	467	
	100M	540	625	329	160M	777	889	497	
B-R..107 R77	100L	560	645	349	B-R..147 R87	160L	824	980	544
	63	470	527	223		180	896	1052	616
	71	470	534	223		80	586	650	261
	80	520	584	273		90	586	671	261
	90	518	603	271		100M	636	721	311
	100M	568	653	321		100L	656	741	331
	100L	588	673	341		112M	670	750	345
	112M	602	682	355		132S	715	795	390
	132S	647	727	400		132M	767	879	442
	132M	699	811	452		132L	787	899	462
B-R..137 R77	132L	719	831	472	B-R..167 R97	160M	817	929	492
	160M	749	861	502		160L	884	1020	539
	63	463	520	223		180	936	1082	611
	71	463	527	223		100M	687	772	305
	80	513	577	273		100L	707	792	325
	90	511	596	271		112M	721	801	339
	100M	561	646	321		132S	766	846	384
	100L	581	666	341		132M	818	930	438
	112M	595	675	355		132L	838	950	458
	132S	640	720	400		160M	868	980	486
	132M	692	804	452		160L	915	1071	533
	132L	712	824	472		180	988	1143	605
	160M	742	854	502		200	1075	1231	693
B-R..147 R77	225	1107	1263	725	B-R..167 R107	100M	687	772	305
	63	455	512	223		100L	707	792	325
	71	455	519	223		112M	721	801	339
	80	505	569	273		132S	766	846	384
	90	503	588	271		132M	818	930	438
	100M	553	638	321		132L	838	950	458
	100L	573	658	341		160M	868	980	486
	112M	587	687	355		160L	915	1071	533
	132S	632	712	400		180	988	1143	605
	132M	684	796	452		200	1075	1231	693
	132L	704	818	472		225	1107	1263	725

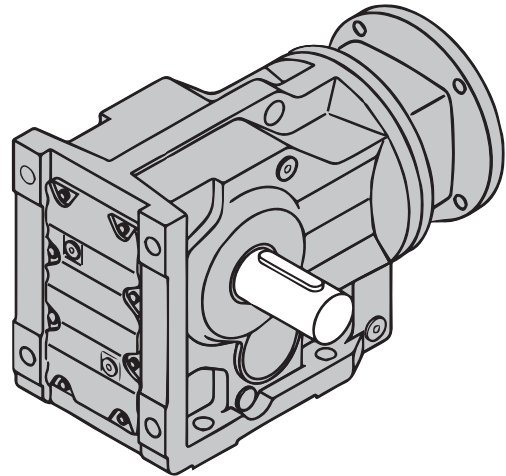
k = Total length of geared Motor
kb = Total length of geared Motor including brake
km = Length of the Motor

B-K SERIES


The technological design of B-K Series gear units allows for an extra-ordinary load capacity/lifespan ratio. These highly versatile gear units are successfully used in a vast number of industrial applications and offer excellent value for money and output torque/weight ratio. The B-K Series includes a large number of models, available in robust housing from size 37 to 187.

The main features of B-K series are:

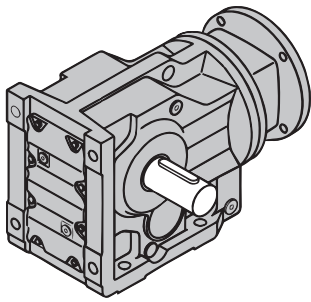
- High-strength casings optimized with FEM analysis & Gearing with 3 stage reduction
- Gears hardened and tempered with shaved or ground profile
- Load capacity calculated to ISO6336 and verified according to AGMA 2001
- Excellent mechanical strength
- High efficiency gear units



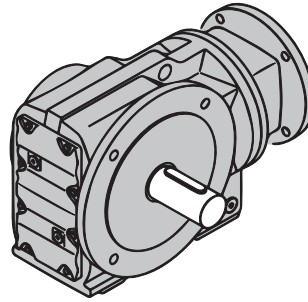
Classification

GEARBOX							
TYPE	SIZE	STAGES	VERSION	RATIO	OUTPUT SHAFT	INPUT MOTOR FLANGE	MOUNTING POSITION
B-K.. AM..	37 47 57 67 77 87 97 107 127 157 167 187	3	B-K.. AM.. B-KA..B AM.. B-KV..B AM.. B-KH..B AM.. B-KF.. AM.. B-KAF.. AM.. B-KVF.. AM.. B-KA../T AM.. B-KV../T AM.. B-KAZ.. AM.. B-KVZ AM..	see tables	see tables	 63 - 280	M1 M2 M3 M4 M5 M6

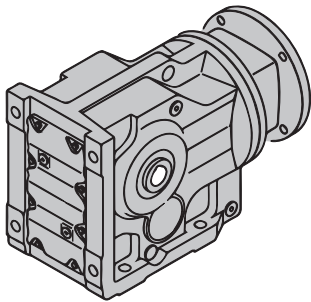
GEARBOX							
TYPE	SIZE	STAGES	VERSION	RATIO	OUTPUT SHAFT	INPUT SHAFT	MOUNTING POSITION
B-K.. AD..	37 47 57 67 77 87 97 107 127 157 167 187	3	B-K.. AD.. B-KA..B AD.. B-KV..B AD.. B-KH..B AD.. B-KF.. AD.. B-KAF.. AD.. B-KVF.. AD.. B-KA../T AD.. B-KV../T AD.. B-KAZ.. AD.. B-KVZ AD..	see tables	see tables	see tables	M1 M2 M3 M4 M5 M6



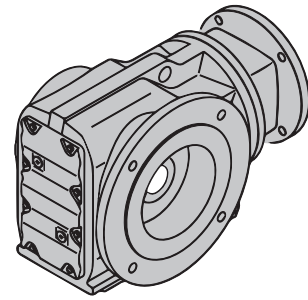
B-K.. AM..
Foot Mounted



B-KF.. AM..
Flange Mounted

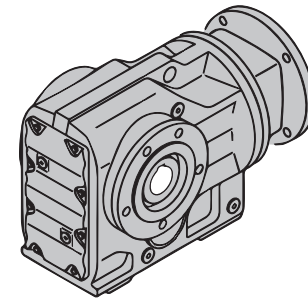


B-KA..B AM..
Foot Mounted + Hollow shaft



B-KAF.. AM..
B5 flange mounted + Hollow shaft

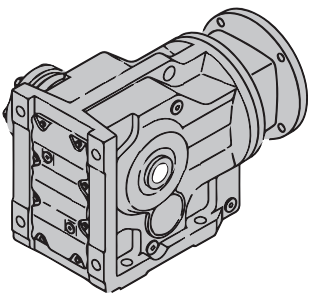
B-KV..B AM..
Foot Mounted + Hollow Shaft with DIN 5482 Slpne



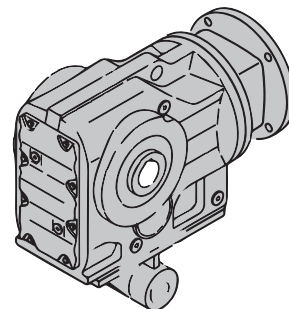
B-KVF.. AM..
B5 flange mounted + Hollow Shaft with DIN 5480 Slpne

B-KAZ.. AM..
B14 Flange Mounted + Hollow Shaft

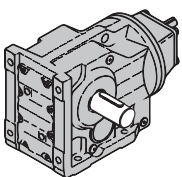
B-KVZ.. AM..
B14 Flange Mounted + Hollow Shaft with DIN 5480 Slpne



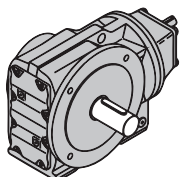
B-KH..B AM..
Foot Mounted + Hollow Shaft with shrink Disc



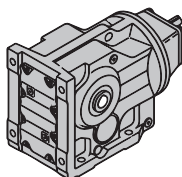
B-KA../T AM..
Hollow Shaft + Torque Arm



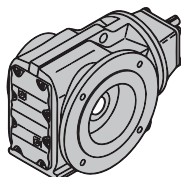
B-K..AD..



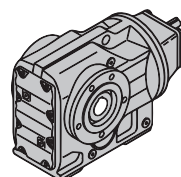
B-KF..AD..



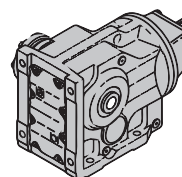
B-KA..B AD..



B-KAF..AD..



B-KAZ..AD..

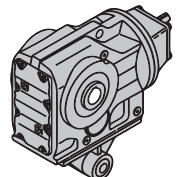


B-KV..B AD..

B-KVF..AD..

B-KVZ..AD..

B-KH..B AD..



B-KA../T AD..

TECHNICAL DATA B-K.. AD..

B-K..37-57 $n_e=1400$ rpm

B-K..37 200Nm					B-K..47 400Nm					B-K..57 600Nm				
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD
106.38	13	200	5640	AD ₁	131.87	11	400	5920	AD ₂	145.14	9.6	600	7470	AD ₂
97.81	14	200	5640		121.48	12	400	5920		123.85	11	600	7470	
83.69	17	200	5640		104.37	13	400	5920		108.29	13	600	7470	
72.54	19	200	5520		90.86	15	400	5920		102.88	14	600	7470	
67.80	21	200	5360		85.12	16	400	5920		90.26	16	600	7470	
58.60	24	200	5020		75.20	19	400	5920		76.56	18	600	7470	
49.79	28	200	4660		69.84	20	400	5920		69.12	20	600	7470	
44.46	31	200	4420		63.30	22	400	5920		60.81	23	600	7470	
37.97	37	200	4100		56.83	25	400	5920		57.42	24	600	7470	
35.57	39	200	3970		48.95	29	400	5920		48.89	29	600	7470	
					46.03	30	400	5920	44.43	32	600	7470		
					39.61	35	400	5920	38.49	38	600	7470		
					35.39	40	400	5920	35.70	39	600	7470		
29.96	47	200	3650	31.30	45	400	5700	30.28	48	600	7310			
28.83	49	200	3580	29.32	48	400	5520	27.34	51	600	6930			
24.99	56	200	3330	25.91	54	400	5170	24.05	58	600	6480			
23.36	60	195	3260	24.08	58	400	4970	22.71	82	600	6280			
20.19	69	185	3110	21.81	64	400	4710	19.34	72	575	5910			
17.15	82	180	2900	19.58	72	400	4440	17.57	80	555	5740			
15.31	91	175	2780	16.86	83	380	4230							
13.08	107	165	2650	15.86	88	380	4080	15.22	92	535	5430			
12.14	115	160	2600	13.65	103	360	3890	13.25	106	510	5190			
10.49	133	160	2410	12.19	115	350	3720	11.92	117	415	5150			
8.91	157	160	2200	11.77	119	280	4080	11.26	124	415	4900			
7.96	176	155	2110	10.56	133	280	3830	9.59	146	405	4850			
6.80	206	150	1980	9.10	154	280	3540	8.71	161	390	4520			
6.37	220	145	1680					7.55	185	365	4360			
5.36	261	140	1810					6.57	213	345	4190			
					8.56	164	270	3500						
					7.36	190	250	3390						
					6.58	213	240	3270						
					5.81	241	230	3140						

B-K..67-87 $n_e=1400$ rpm

B-K..67		820Nm			
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
144.79	9.7	820	10300	AD ₂	
123.54	11	820	10300		
108.03	13	820	10300		
102.62	14	820	10300		
90.04	16	820	10300		
76.37	18	820	10300		
68.95	20	820	10300		
60.66	23	820	10300		
57.28	24	820	10300		
48.77	29	820	10300		
44.32	32	820	10300		
38.39	36	820	10500		
35.62	39	820	10300		
30.22	46	820	10300		AD ₃
27.28	51	820	10300		
24.00	58	800	10500		
22.66	62	730	10700		
19.30	73	760	10800		
17.54	80	740	11000		
15.19	92	700	11300		
13.22	108	870	11500		
12.48	112	630	12300		
10.63	132	600	11800		
9.66	145	480	11500		
8.37	167	440	11100		
7.28	192	420	10700		

B-K..77		1550Nm			
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
192.18	7.3	1550	16100	AD ₂	
179.37	7.8	1550	16100		
154.02	9.1	1550	15400		
135.28	10	1550	15400		
128.52	11	1550	15400		
113.56	12	1550	15400		
97.05	14	1550	15400		
88.97	16	1550	15400		
78.07	18	1550	15400		
73.99	19	1550	15400		
64.75	22	1550	15400		
58.34	24	1550	15400		
51.18	27	1550	15400		
45.16	31	1550	15400		
40.04	35	1550	15400		AD ₃
38.39	36	1550	15700		
35.20	40	1550	15400		
30.89	45	1550	15400		AD ₄
29.27	46	1550	15400		
25.62	55	1550	15400		
23.08	61	1550	15400		
20.25	69	1500	15700		
17.87	78	1450	16100		
15.84	88	1400	15500		
13.52	104	1340	14800		
12.36	113	1000	15100		
10.84	129	990	14400		
9.56	146	940	13900		
8.48	165	890	13500		
7.24	193	820	13100		

B-K..87		2700Nm			
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
197.37	7.1	2700	27300	AD ₂	
174.19	8.0	2700	27300		
164.34	8.5	2700	27300		
147.32	9.5	2700	27300		
126.91	11	2700	27300		
115.82	12	2700	27300		
102.71	14	2700	27300		
86.34	16	2700	27300		
79.34	18	2700	27300		AD ₃
70.46	20	2700	27300		
63.00	22	2700	26200		
56.64	25	2700	25000		
49.16	28	2700	23500		
44.02	32	2600	22800		
36.52	38	2500	21400	AD ₄	
31.39	45	2700	19200		
27.88	50	2600	18500		
24.92	56	2500	18000		
22.41	62	2300	17900		
19.45	72	2300	18800		
17.42	80	2200	18300		
16.00	87	1600	18000		
14.45	97	2100	15300		
12.56	111	2000	14800		
11.17	125	1500	14900	AD ₅	
10.00	140	1500	14200		
8.29	169	1400	13500		
7.21	184	1300	13200		

B-K..97-127 $n_e=1400$ rpm

B-K..97		4300Nm			
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
176.05	8.0	4300	40000	AD ₃	
153.21	9.1	4300	40000		
140.28	10	4300	40000		
123.93	11	4300	40000		
105.13	13	4300	40000		
96.80	14	4300	40000		
86.52	16	4300	38800		
77.89	18	4300	37100		
70.54	20	4300	35600		
62.55	22	4300	33800	AD ₄	
56.55	25	4300	32300		
47.93	29	4300	30000		
41.87	33	4300	28300		
38.30	37	4300	27100	AD ₅	
34.23	41	4300	25700		
30.82	45	4300	24500		
27.91	50	4300	23300		
24.75	57	4300	22000		
22.37	63	4300	20900		
18.96	74	4300	19100		
16.56	85	4300	17800		
13.85	101	4300	18100	AD ₆	
11.99	117	3880	16200		
10.41	134	2870	16400		
8.71	161	2880	15800		

B-K..107		8000Nm			
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
143.47	9.8	8000	65000	AD ₄	
121.46	12	8000	61700		
112.41	13	8000	59700		
100.75	14	8000	57000		
90.96	15	8000	54600		
82.61	17	8000	52400		
73.30	19	8000	46700		
66.52	21	8000	47600		
57.17	24	8000	44400	AD ₅	
49.90	28	7840	42200		
42.33	33	7380	40500		
37.00	38	7200	38500		
32.69	43	7200	38300	AD ₆	
31.28	45	6800	36700		
29.00	48	7200	34000		
26.32	53	7200	32000		
22.62	62	7200	28900		
19.74	71	7200	28100		
16.75	84	7050	23600		
14.64	98	6890	21900		
13.43	104	5300	29200	AD ₈	
11.73	119	4300	27600		
9.94	141	4190	25800		
8.69	161	4070	24600		

B-K..127		13000Nm			
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
146.07	9.8	13000	79200	AD ₄	
136.14	10	13000	79200		
122.48	11	13000	79200		
110.18	13	13000	79200		
89.89	16	13000	75100	AD ₅	
81.98	17	13000	72100		
70.95	20	13000	67700		
62.60	22	13000	64000		
54.07	26	13000	59900		
47.82	29	13000	56500		
40.19	35	13000	52000	AD ₆	
36.25	39	13000	49400	AD ₇	
31.37	45	13000	45900		
27.68	51	13000	43000		
23.91	59	13000	39800		
21.15	66	13000	37200	AD ₈	
17.77	79	13000	33800		
14.35	98	12100	31800		
12.79	109	8530	35400		
10.74	130	8000	33900		
8.68	161	7230	32500		

B-K..157-187 $n_e=1400$ rpm

B-K..157				18000Nm	
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
150.41	9.3	18000	112200	AD ₅	
122.39	11	18000	106500		
100.22	14	18000	98000		
91.65	15	18000	94400		
79.75	18	18000	88900		
70.38	20	18000	84200		
61.02	23	18000	78000		
54.29	26	18000	74900		AD ₆
46.79	30	18000	70000	AD ₇	
38.02	37	18000	63300		
31.30	45	18000	57500	AD ₈	
27.62	51	18000	54000		
23.95	58	18000	50000		
21.31	66	18000	47000		
18.37	78	18000	43200		
14.92	94	18000	38200		
12.65	111	17000	38700		

B-K..167				32000Nm	
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
164.50	8.5	32000	15000	AD ₅	
134.99	10	32000	15000	AD ₆	
109.83	13	32000	15000		
87.86	16	32000	147200	AD ₇	
78.14	18	32000	140100		
68.07	21	32000	132000		
60.74	23	32000	125600		
51.77	27	32000	117000		
42.89	33	32000	107400	AD ₈	
36.61	38	32000	99700		
32.25	43	32000	93700		
28.77	49	32000	88600		
24.52	57	32000	81700		
20.32	69	32000	74000		
17.34	81	32000	87800		

B-K..187				50000Nm	
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD	
179.86	7.8	50000	190000	AD ₆	
165.21	8.5	50000	190000		
144.59	9.7	50000	190000		
129.69	11	50000	188200	AD ₇	
112.60	12	50000	177200		
102.16	14	50000	189900		
88.00	16	50000	159000	AD ₈	
73.96	19	50000	147000		
64.04	22	50000	137500		
53.36	26	50000	126000		
45.50	31	50000	116600		
42.51	33	50000	112700		
38.57	36	50000	107200		
33.23	42	50000	89100		
27.92	50	50000	90200		
24.18	58	47600	86800		
20.15	69	43900	84000		
17.18	81	41400	80800		



BEVEL HELICAL GEARBOXES

TECHNICAL DATA

B-K.. AM..

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
0.09	16300	14975	73200	0.80		
0.11	13400	12440	79000	0.95		
0.12	11600	10915	79900	1.10		
0.13	10500	9819	80400	1.25		
0.16	8850	8443	81100	1.45	B-K 127 R77	4P
0.18	8040	7482	81400	1.60	B-KF 127 R77	4P
0.20	8990	6565	81800	1.85	B-KA 127 R77	4P
0.23	5940	5804	82100	2.2	B-KAF 127 R77	4P
0.26	5220	5027	82300	2.5		
0.30	4530	4423	82400	2.9		
0.34	3960	3889	82500	3.3		
0.40	3310	3311	82600	3.9		
0.18	8990	8328	65000	0.90		
0.18	7850	7270	65000	1.00		
0.21	6420	6184	65000	1.25		
0.23	5760	5662	65000	1.40	B-K 107 R77	4P
0.28	5230	5138	65000	1.55	B-KF 107 R77	4P
0.30	4570	4359	65000	1.75	B-KA 107 R77	4P
0.35	4000	3810	65000	2.0	B-KAF 107 R77	4P
0.39	3440	3358	65000	2.3		
0.44	3090	2977	65000	2.6		
0.51	2700	2599	65000	3.0		
0.58	2340	2286	65000	3.4		
0.28	4960	4669	39900	0.85	B-K 97 R57	4P
0.32	4390	4082	40000	1.00	B-KF 97 R57	4P
0.37	3860	3583	40000	1.10	B-KA 97 R57	4P
0.42	3370	3108	40000	1.25	B-KAF 97 R57	4P
0.48	2910	2757	40000	1.50		
0.55	2640	2419	40000	1.65		
0.62	2290	2123	40000	1.90		
0.71	2030	1856	40000	2.1		
0.81	1710	1625	40000	2.5	B-K 97 R57	4P
0.92	1490	1430	40000	2.9	B-KF 97 R57	4P
1.0	1380	1261	40000	3.1	B-KA 97 R57	4P
1.2	1210	1102	40000	3.6	B-KAF 97 R57	4P
1.4	1040	957	40000	4.1		
1.5	930	855	40000	4.6		
1.8	755	743	40000	5.7		
2.0	675	652	40000	6.4		
0.42	3330	3107	26400	0.80	B-K 87 R57	4P
0.48	2880	2728	27100	0.95	B-KF 87 R57	4P
0.56	2520	2371	27500	1.05	B-KA 87 R57	4P
					B-KAF 87 R57	4P
0.63	2290	2088	27800	1.20		
0.71	2030	1854	28000	1.35		
0.80	1820	1657	28200	1.50	B-K 87 R57	4P
0.93	1540	1415	28400	1.75	B-KF 87 R57	4P
1.1	1340	1229	28600	2.0	B-KA 87 R57	4P
1.2	1160	1078	28700	2.3	B-KAF 87 R57	4P
1.4	1000	951	28800	2.7		
1.6	870	837	28800	3.1		
1.8	755	726	28900	3.6		
0.87	1670	1514	14500	0.95		
0.95	1530	1388	15500	1.00		
1.1	1340	1218	16700	1.15		
1.2	1170	1053	17600	1.34		
1.4	1030	924	18200	1.50	B-K 77 R37	4P
1.6	910	815	18700	1.70	B-KF 77 R37	4P
1.9	750	709	19100	2.1	B-KA 77 R37	4P
2.1	655	622	19400	2.4	B-KAF 77 R37	4P
2.4	590	552	19500	2.6		
2.7	515	485	19700	3.0		
3.1	455	428	19800	3.4		
3.6	400	367	19900	3.9		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
1.5	980	903	5660	0.85		
1.7	890	793	9620	0.90		
1.9	745	697	10900	1.10		
2.2	655	613	11600	1.25	B-K 67 R37	4P
2.4	580	542	12000	1.40	B-KF 67 R37	4P
2.8	520	471	12300	1.60	B-KA 67 R37	4P
3.2	445	420	12600	1.85	B-KAF 67 R37	4P
3.7	395	361	12800	2.1		
4.1	350	323	13000	2.3		
4.7	295	279	13000	2.8		
2.2	660	615	5580	0.90		
2.4	580	544	7800	1.05		
2.8	515	473	8300	1.15		
3.1	450	421	8870	1.35	B-K 57 R37	4P
3.6	395	362	8800	1.50	B-KF 57 R37	4P
4.1	350	319	8100	1.75	B-KA 57 R37	4P
4.7	300	280	9290	2.0	B-KAF 57 R37	4P
5.4	280	246	9420	2.3		
6.1	230	215	9540	2.6		
6.9	205	192	9810	2.9		
7.9	178	166	9700	3.4		
3.5	400	375	5930	1.00		
4.0	360	327	6440	1.10		
4.6	315	289	6920	1.25	B-K 47 R37	4P
5.2	275	256	7290	1.45	B-KF 47 R37	4P
5.9	245	225	7500	1.65	B-KA 47 R37	4P
6.7	210	198	7710	1.90	B-KAF 47 R37	4P
7.7	183	171	7860	2.2		
8.6	164	153	7950	2.4		
10	142	131	8040	2.8		
6.4	225	205	5300	0.90	B-K 37 R17	4P
7.3	199	181	5650	1.00	B-KF 37 R17	4P
8.2	175	160	5900	1.15	B-KA 37 R17	4P
9.7	148	136	6410	1.35	B-KAF 37 R17	4P
10	140	127	6200	1.45		
6.0	285	144.79	13000	2.9	B-K 67	6P
7.0	245	123.54	13000	3.4	B-KF 67	6P
8.1	215	108.03	13000	3.8	B-KA 67	6P
8.5	205	102.62	13000	4.0	B-KAF 67	6P
9.1	189	144.79	13000	4.3	B-K 67	4P
11	161	123.54	13000	5.1	B-KF 67	4P
12	141	108.03	13000	5.8	B-KA 67	4P
					B-KAF 67	4P
6.0	285	145.14	9340	2.1	B-K 57	6P
7.0	245	123.85	9480	2.5	B-KF 57	6P
8.0	215	108.29	9590	2.8	B-KA 57	6P
8.5	205	102.88	9620	3.0	B-KAF 57	6P
9.6	178	90.28	9700	3.4		
9.1	189	145.14	9670	3.2		
11	181	123.85	9750	3.7	B-K 57	4P
12	141	108.29	9810	4.3	B-KF 57	4P
13	134	102.88	9830	4.5	B-KA 57	4P
15	118	90.26	9880	5.1	B-KAF 57	4P
17	100	76.56	9920	6.0		
6.6	260	131.87	7380	1.55	B-K 47	6P
7.2	240	121.48	7530	1.65	B-KF 47	6P
8.3	205	104.37	7740	1.95	B-KA 47	6P
9.6	180	90.86	7880	2.2	B-KAF 47	6P
10	168	85.12	7930	2.4		





Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
10	172	131.87	7910	2.3	B-K 47	4P
11	158	121.48	7910	2.5	B-KF 47	4P
13	138	104.37	8080	2.9	B-KA 47	4P
15	118	90.86	8120	3.4	B-KAF 47	4P
16	111	85.12	8140	3.8		
8.2	210	106.38	5520	0.95	B-K 37	6P
8.9	193	97.81	5710	1.05	B-KF 37	6P
10	165	83.69	5990	1.20	B-KA 37	6P
12	143	72.54	6170	1.40	B-KAF 37	6P
12	139	106.38	6210	1.45		
14	127	97.81	6280	1.55		
16	109	83.69	6400	1.65		
18	95	72.54	6470	2.1		
19	88	67.80	6500	2.3		
23	78	58.60	6280	2.6		
27	65	49.79	6010	3.1		
30	58	44.46	5830	3.5		
35	49	37.97	5580	4.1		
37	48	35.57	5480	4.3	B-K 37	4P
44	39	29.96	5220	5.1	B-KF 37	4P
46	38	28.83	5180	5.3	B-KA 37	4P
53	33	24.99	4950	6.2	B-KAF 37	4P
57	30	23.36	4850	6.4		
65	28	20.19	4650	7.0		
77	22	17.15	4430	8.1		
86	20	15.31	4280	8.8		
101	17	13.08	4080	9.7		
109	16	12.14	3980	10		
128	14	10.49	3810	12		
148	12	8.91	3620	14		
186	10	7.96	3490	15		
0.37kW						
0.18	16600	7482	72600	0.80		
0.21	14500	6565	76900	0.90	B-K 127 R77	4P
0.24	12600	5804	79400	1.05	B-KF 127 R77	4P
0.27	11000	5027	80200	1.20	B-KA 127 R77	4P
0.31	9610	4423	80800	1.35	B-KAF 127 R77	4P
0.35	8430	3889	81300	1.55		
0.42	7120	3311	81700	1.85		
0.72	4230	1926	82500	3.1	B-K 127 R77	4P
0.79	3860	1757	82500	3.4	B-KF 127 R77	4P
0.90	3360	1541	82600	3.9	B-KA 127 R77	4P
					B-KAF 127 R77	4P
0.36	8380	3810	65000	0.95		
0.41	7300	3358	65000	1.10	B-K 107 R77	4P
0.46	6510	2977	65000	1.25	B-KF 107 R77	4P
0.53	5690	2599	65000	1.40	B-KA 107 R77	4P
0.60	4970	2286	65000	1.60	B-KAF 107 R77	4P
0.71	4210	1939	65000	1.90		
0.81	3790	1713	65000	2.1	B-K 107 R77	4P
0.89	3440	1554	65000	2.3	B-KF 107 R77	4P
1.0	2950	1336	65000	2.7	B-KA 107 R77	4P
1.2	2580	1166	65000	3.1	B-KAF 107 R77	4P

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.37kW						
0.65	4770	2123	40000	0.90		
0.74	4200	1856	40000	1.00		
0.85	3610	1625	40000	1.20		
0.96	3160	1430	40000	1.35	B-K 97 R57	4P
1.1	2850	1261	40000	1.50	B-KF 97 R57	4P
1.2	2490	1102	40000	1.70	B-KA 97 R57	4P
1.4	2160	957	40000	2.0	B-KAF 97 R57	4P
1.6	1930	855	40000	2.2		
1.9	1620	743	40000	2.7		
2.1	1430	652	40000	3.0		
2.4	1280	573	40000	3.4		
0.97	3200	1415	26600	0.85		
1.1	2770	1229	27200	0.95		
1.3	2420	1078	27600	1.10		
1.5	2110	951	27900	1.30	B-K 87 R57	4P
1.6	1850	837	28200	1.45	B-KF 87 R57	4P
1.9	1600	726	28400	1.70	B-KA 87 R57	4P
2.2	1420	638	28500	1.90	B-KAF 87 R57	4P
2.5	1240	562	28600	2.2		
2.9	1040	474	28800	2.6		
3.2	940	426	28800	2.9		
3.7	810	373	28900	3.3		
1.7	1880	815	10600	0.85		
2.0	1580	709	15200	1.00		
2.2	1380	622	16500	1.10		
2.5	1230	552	17300	1.25		
2.8	1080	485	18000	1.45		
3.2	950	428	18500	1.60	B-K 77 R37	4P
3.8	830	367	18900	1.85	B-KF 77 R37	4P
4.2	735	328	19200	2.1	B-KA 77 R37	4P
4.8	655	290	19400	2.4	B-KAF 77 R37	4P
5.5	685	252	19800	2.8		
6.2	495	221	19700	3.1		
7.1	435	195	19800	3.5		
7.9	390	175	19900	4.0		
9.0	340	154	19900	4.5		
3.3	940	420	9000	0.90		
3.8	820	361	10300	1.00		
4.3	725	323	11100	1.15		
4.9	825	279	11800	1.30	B-K 67 R37	4P
5.6	550	246	12200	1.50	B-KF 67 R37	4P
6.3	485	217	12500	1.70	B-KA 67 R37	4P
7.2	430	191	12700	1.90	B-KAF 67 R37	4P
8.3	370	166	12900	2.2		
9.6	320	144	13000	2.5		
11	275	122	13000	3.0		
4.9	625	280	7430	0.95		
5.6	550	246	8040	1.10		
6.4	480	215	8520	1.25	B-K 57 R37	4P
7.2	430	192	8750	1.40	B-KF 57 R37	4P
8.3	370	166	9000	1.60	B-KA 57 R37	4P
9.6	325	145	9200	1.65	B-KAF 57 R37	4P
11	290	129	9320	2.1		
12	245	111	9480	2.4		
14	215	97	9580	2.8		
3.9	910	174.19	28800	3.0	B-K 87	8P
4.1	850	164.34	28900	3.2	B-KF 87	8P
4.6	765	147.32	28900	3.5	B-KA 87	8P
					B-KAF 87	8P
4.6	775	197.37	28900	3.5	B-K 87	6P
5.2	685	174.19	28900	4.0	B-KF 87	6P
					B-KA 87	6P
					B-KAF 87	6P





BEVEL HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.37kW						
5.0	705	135.28	19300	2.2	B-K 77	8P
5.3	670	128.52	19300	2.3	B-KF 77	8P
6.0	590	113.56	19500	2.6	B-KA 77	8P
7.0	505	97.05	19700	3.1	B-KAF 77	8P
5.8	605	154.02	19500	2.6	B-K 77	6P
6.7	530	135.28	19600	2.9	B-KF 77	6P
7.0	505	128.52	19700	3.1	B-KA 77	6P
7.9	445	113.56	19800	3.5	B-KAF 77	6P
7.2	490	192.18	19700	3.0	B-K 77	4P
7.7	460	179.37	19800	3.2	B-KF 77	4P
9.0	395	154.02	19900	3.9	B-KA 77	4P
					B-KAF 77	4P
6.3	580	108.03	12100	1.45	B-K 67	8P
6.6	535	102.62	12300	1.55	B-KF 67	8P
7.6	470	90.04	12600	1.75	B-KA 67	8P
					B-KAF 67	8P
7.3	485	123.54	12500	1.70	B-K 67	6P
8.3	425	108.03	12700	1.95	B-KF 67	6P
8.8	405	102.62	12800	2.0	B-KA 67	6P
10	355	90.04	13000	2.3	B-KAF 67	6P
9.5	370	144.79	12900	2.2	B-K 67	4P
11	315	123.54	13000	2.6	B-KF 67	4P
14	275	108.03	13000	3.0	B-KA 67	4P
15	230	90.04	13000	3.6	B-KAF 67	4P
18	196	76.37	13000	4.2		
7.3	485	123.85	8490	1.25		
8.3	425	108.29	8770	1.40	B-K 57	6P
8.8	405	102.88	8870	1.50	B-KF 57	6P
10	355	90.26	9070	1.70	B-KA 57	6P
12	300	76.56	8280	2.0	B-KAF 57	6P
13	270	69.12	9390	2.2		
9.5	370	145.14	9000	1.60		
11	315	123.85	9220	1.90	B-K 57	4P
13	275	108.29	9370	2.2	B-KF 57	4P
14	285	102.88	9420	2.3	B-KA 57	4P
15	230	90.26	9530	2.6	B-KAF 57	4P
18	196	76.56	9650	3.1		
20	177	69.12	9700	3.4		
8.6	410	104.37	5490	1.00	B-K 47	6P
9.9	355	90.86	6480	1.10	B-KF 47	6P
11	335	85.12	6730	1.20	B-KA 47	6P
12	295	75.20	7100	1.35	B-KAF 47	6P
10	340	131.87	6680	1.20	B-K 47	4P
11	310	121.48	6980	1.30	B-KF 47	4P
13	285	104.37	7330	1.50	B-KA 47	4P
					B-KAF 47	4P
15	235	90.86	7580	1.70	B-K 47	4P
16	220	85.12	7670	1.85	B-KF 47	4P
16	193	75.20	7810	2.1	B-KA 47	4P
20	179	69.84	7880	2.2	B-KAF 47	4P
22	162	63.30	7980	2.5		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.37kW						
14	250	97.81	2520	0.80		
16	215	83.69	5470	0.95		
19	188	72.54	5690	1.10		
20	174	67.80	8630	1.15		
24	150	58.60	5510	1.35		
28	128	49.79	5350	1.55		
31	114	44.46	5230	1.75		
36	97	37.97	5060	2.1		
39	91	35.57	4990	2.2		
46	77	29.96	4800	2.6		
48	74	28.83	4750	2.7	B-K 37	4P
55	64	24.99	4590	3.1	B-KF 37	4P
59	60	23.36	4510	3.3	B-KA 37	4P
68	52	20.19	4350	3.6	B-KAF 37	4P
80	44	17.15	4160	4.1		
90	39	15.31	4040	4.5		
105	34	13.08	3880	4.9		
114	31	12.14	3780	5.1		
132	27	10.49	3630	5.9		
155	23	8.91	3460	7.0		
173	20	7.96	3350	7.6		
203	17	6.80	3190	8.6		
217	16	6.37	3130	8.9		
257	14	5.36	2970	10		
0.55kW						
0.08	55900	16978	179800	0.90		
0.10	46500	14272	190000	1.10		
0.10	42500	13116	190000	1.20	B-K 187 R97	4P
0.12	37400	11647	190000	1.35		
0.19	23900	7343	190000	2.1		
0.12	38400	11573	150000	0.85		
0.13	33800	10264	150000	0.95		
0.16	28100	8628	150000	1.15	B-K 167 R97	4P
0.21	21400	6562	150000	1.50		
0.25	17200	5355	150000	1.85		
0.33	13200	4079	150000	2.4		
0.20	22400	6881	109700	0.80	B-K 157 R97	4P
0.23	19300	5931	111500	0.95	B-KF 157 R97	4P
0.34	13000	3979	114400	1.40	B-KA 157 R97	4P
0.45	9940	3051	115300	1.80	B-KAF 157 R97	4P
0.31	14900	4423	76200	0.85	B-K 127 R77	4P
0.35	13000	3889	79200	1.00	B-KF 127 R77	4P
0.41	11100	3311	80200	1.20	B-KA 127 R77	4P
0.45	10000	3009	80700	1.30	B-KAF 127 R77	4P
0.52	8830	2607	81200	1.50		
0.71	6560	1926	81900	2.0		
0.77	5980	1757	82100	2.2	B-K 127 R77	4P
0.88	5220	1541	82300	2.5	B-KF 127 R77	4P
1.0	4570	1342	82400	2.8	B-KA 127 R77	4P
1.2	3990	1177	82500	3.3	B-KAF 127 R77	4P
1.3	3490	1025	82500	3.7		
0.46	10100	2977	65000	0.80	B-K 107 R77	4P
0.52	8770	2599	65000	0.90	B-KF 107 R77	4P
0.59	7690	2286	65000	1.05	B-KA 107 R77	4P
0.70	6520	1939	65000	1.25	B-KAF 107 R77	4P
0.79	5850	1713	65000	1.35		
0.87	5310	1554	65000	1.50		
1.0	4570	1336	65000	1.75		
1.2	3990	1166	65000	2.0	B-K 107 R77	4P
1.3	3450	1030	65000	2.3	B-KF 107 R77	4P
1.5	3000	904	65000	2.7	B-KA 107 R77	4P
1.7	2700	793	65000	3.0	B-KAF 107 R77	4P
2.0	2360	696	65000	3.4		
2.2	2050	615	65000	3.9		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.55kW						
0.95	4880	1430	40000	0.90		
1.1	4380	1261	40000	1.00		
1.2	3820	1102	40000	1.15		
1.4	3320	957	40000	1.30		
1.6	2960	855	40000	1.45	B-K 97 R57	4P
1.8	2520	743	40000	1.70	B-KF 97 R57	4P
2.1	2200	652	40000	1.95	B-KA 97 R57	4P
2.4	1970	573	40000	2.2	B-KAF 97 R57	4P
2.7	1700	504	40000	2.5		
3.1	1470	437	40000	2.9		
3.6	1300	382	40000	3.3		
4.5	1040	305	40000	4.1		
1.4	3260	951	28500	0.85		
1.6	2860	837	27100	0.95		
1.9	2480	726	27600	1.10		
2.1	2190	638	27900	1.25		
2.4	1920	562	28100	1.40		
2.9	1620	474	28400	1.65	B-K 87 R57	4P
3.2	1450	426	28500	1.85	B-KF 87 R57	4P
3.7	1260	373	28600	2.1	B-KA 87 R57	4P
4.1	1100	330	28700	2.4	B-KAF 87 R57	4P
4.6	990	294	28800	2.7		
5.4	850	250	28900	3.2		
5.8	800	236	28900	3.4		
6.8	680	201	28900	4.0		
2.5	1900	552	15780	0.80		
2.8	1670	485	14500	0.95		
3.2	1470	428	15900	1.05		
3.7	1270	367	17100	1.20		
4.2	1130	328	17800	1.35	B-K 77 R37	4P
4.7	1000	290	18300	1.55	B-KF 77 R37	4P
5.4	870	252	18800	1.80	B-KA 77 R37	4P
6.2	760	221	19100	2.0	B-KAF 77 R37	4P
7.0	670	195	19300	2.3		
7.8	600	175	19500	2.6		
8.8	530	154	19600	2.9		
4.9	960	279	9360	0.85		
5.5	840	246	10100	0.95		
6.2	745	217	10900	1.10	B-K 67 R37	4P
7.1	660	191	11500	1.25	B-KF 67 R37	4P
8.2	570	166	12100	1.45	B-KA 67 R37	4P
9.4	495	144	12400	1.65	B-KAF 67 R37	4P
11	420	122	12700	1.95		
7.1	660	192	5180	0.90		
8.2	575	166	7850	1.05	B-K 57 R37	4P
9.4	495	145	8430	1.20	B-KF 57 R37	4P
11	445	129	8680	1.35	B-KA 57 R37	4P
12	380	111	8970	1.60	B-KAF 57 R37	4P
14	335	97	9150	1.80		
3.9	1350	174.19	28800	2.0	B-K 87	8P
4.1	1270	164.34	28600	2.1	B-KF 87	8P
4.6	1140	147.32	28700	2.4	B-KA 87	8P
					B-KAF 87	8P
4.6	1150	197.37	28700	2.3	B-K 87	6P
5.2	1020	174.19	28800	2.7	B-KF 87	6P
5.5	960	164.34	28800	2.8	B-KA 87	6P
6.1	860	147.32	28900	3.1	B-KAF 87	6P
5.0	1040	135.28	18100	1.50	B-K 77	8P
5.3	990	128.52	18300	1.55	B-KF 77	8P
6.0	880	113.56	18700	1.75	B-KA 77	8P
7.0	750	97.05	19100	2.1	B-KAF 77	8P
5.8	900	154.02	18700	1.70	B-K 77	6P
6.7	790	135.28	19000	1.95	B-KF 77	6P
7.0	750	128.52	19100	2.1	B-KA 77	6P
7.9	665	113.56	19400	2.3	B-KAF 77	6P

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.55kW						
8.8	595	154.02	19500	2.6	B-K 77	4P
10	520	135.28	19700	3.0	B-KF 77	4P
11	495	128.52	19700	3.1	B-KA 77	4P
12	440	113.56	19800	3.5	B-KAF 77	4P
14	375	97.05	19900	4.1		
7.3	720	123.54	11100	1.15		
8.3	630	108.03	11700	1.30	B-K 67	6P
8.8	600	102.62	11900	1.35	B-KF 67	6P
10	525	90.04	12300	1.55	B-KA 67	6P
12	445	76.37	12600	1.85	B-KAF 67	6P
11	475	123.54	12500	1.70	B-K 67	4P
13	415	108.03	12800	1.95	B-KF 67	4P
15	350	90.04	13000	2.4	B-KA 67	4P
18	295	76.37	13000	2.8	B-KAF 67	4P
8.3	630	108.29	7360	0.95		
8.8	600	102.88	7630	1.00		
10	525	90.26	8220	1.15	B-K 57	6P
12	445	76.56	8670	1.35	B-KF 57	6P
13	405	69.12	8870	1.50	B-KA 57	6P
15	355	60.81	9070	1.70	B-KAF 57	6P
16	335	57.42	9150	1.80		
11	480	123.85	8520	1.25		
13	420	108.29	8800	1.45		
14	395	102.88	8890	1.50	B-K 57	4P
15	350	90.26	9100	1.70	B-KF 57	4P
18	295	76.56	9300	2.0	B-KA 57	4P
20	285	69.12	9410	2.2	B-KAF 57	4P
22	235	60.81	9520	2.6		
24	220	57.42	9560	2.7		
13	405	104.37	5880	1.00		
15	350	90.86	6550	1.15	B-K 47	4P
16	330	85.12	6790	1.20	B-KF 47	4P
18	290	75.20	7150	1.40	B-KA 47	4P
19	270	69.84	7310	1.50	B-KAF 47	4P
21	245	63.30	7500	1.65	B-K 47	4P
24	220	56.83	7600	1.80	B-KF 47	4P
28	189	48.95	7830	2.1	B-KA 47	4P
30	178	46.03	7880	2.2	B-KAF 47	4P
23	225	58.60	4850	0.90		
27	192	49.79	4790	1.05		
31	172	44.46	4740	1.15		
36	147	37.97	4840	1.35		
38	137	35.57	4600	1.45		
45	116	29.96	4470	1.75		
47	111	28.83	4440	1.80		
54	97	24.99	4320	2.1		
58	90	23.36	4260	2.2	B-K 37	4P
67	78	20.19	4130	2.4	B-KF 37	4P
79	66	17.15	3980	2.7	B-KA 37	4P
89	59	15.31	3880	3.0	B-KAF 37	4P
104	51	13.08	3730	3.3		
112	47	12.14	3660	3.4		
130	41	10.49	3520	4.0		
153	34	8.91	3370	4.7		
171	31	7.96	3270	5.1		
200	26	6.80	3130	5.7		
214	25	6.37	3070	5.9		
254	21	5.36	2920	8.8		



BEVEL HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.75kW						
0.11	58400	13116	175300	0.85		
0.12	51500	11647	187300	0.95		
0.19	32800	7343	190000	1.50	B-K 187 R97	4P
0.20	30000	6747	190000	1.65		
0.23	28500	5991	190000	1.90		
0.16	38600	8628	150000	0.85		
0.21	29300	6562	150000	1.10		
0.26	23700	5355	150000	1.35	B-K 167 R97	4P
0.34	16200	4079	150000	1.75		
0.41	15100	3376	150000	2.1		
0.35	17300	3979	112300	1.00	B-K 157 R97 B-KF 157 R97	4P 4P
0.45	13600	3051	114100	1.30	B-KA 157 R97 B-KAF 157 R97	4P 4P
0.83	7440	1859	115900	2.4	B-K 157 R97 B-KF 157 R97	4P 4P
1.0	6040	1365	116200	3.0	B-KA 157 R97 B-KAF 157 R97	4P 4P
0.42	15100	3311	75800	0.85	B-K 127 R77	4P
0.46	13700	3009	78800	0.95	B-KF 127 R77	4P
0.53	11800	2607	79800	1.10	B-KA 127 R77 B-KAF 127 R77	4P 4P
0.72	8930	1926	81100	1.45		
0.79	8150	1757	81400	1.60	B-K 127 R77	4P
0.90	7120	1541	81700	1.85	B-KF 127 R77	4P
1.0	6220	1342	82000	2.1	B-KA 127 R77	4P
1.2	5440	1177	82200	2.4	B-KAF 127 R77	4P
1.4	4750	1025	82400	2.7		
1.5	4150	899	82500	3.1		
0.81	7960	1713	65000	1.00		
0.89	7230	1554	65000	1.10		
1.0	8210	1336	65000	1.30	B-K 107 R77	4P
1.2	5420	1166	65000	1.50	B-KF 107 R77	4P
1.3	4710	1030	65000	1.70	B-KA 107 R77	4P
1.5	4120	904	65000	1.95	B-KAF 107 R77	4P
1.7	3880	793	65000	2.2		
2.0	3210	696	65000	2.5		
2.2	2800	615	65000	2.8		
1.2	5180	1102	39700	0.85		
1.4	4490	957	40000	0.95		
1.6	4020	855	40000	1.05		
1.9	3430	743	40000	1.25		
2.1	3020	652	40000	1.40	B-K 97 R57	4P
2.4	2660	573	40000	1.60	B-KF 97 R57	4P
2.7	2320	504	40000	1.85	B-KA 97 R57	4P
3.2	2010	437	40000	2.1	B-KAF 97 R57	4P
3.6	1770	382	40000	2.4		
4.5	1420	305	40000	3.0		
5.4	1190	258	40000	3.6		
5.9	1080	232	40000	4.0		
6.9	920	199	40000	4.7		
1.9	3370	726	26300	0.80		
2.2	2970	638	26900	0.90		
2.5	2610	562	27400	1.05		
2.9	2200	474	27900	1.25	B-K 87 R57	4P
3.2	1980	426	28100	1.35	B-KF 87 R57	4P
3.7	1720	373	28300	1.55	B-KA 87 R57	4P
4.2	1520	330	28500	1.80	B-KAF 87 R57	4P
4.7	1350	294	28800	2.0		
5.5	1160	250	28700	2.3		
5.8	1100	236	28700	2.5		
6.9	930	201	28800	2.9		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.75kW						
3.8	1720	367	14000	0.90	B-K 77 R37	4P
4.2	1540	328	15500	1.00	B-KF 77 R37	4P
4.8	1360	290	16600	1.15	B-KA 77 R37	4P
5.5	1180	252	17500	1.30	B-KAF 77 R37	4P
6.2	1030	221	18200	1.50		
3.9	1830	176.05	40000	2.3	B-K 97	8P
4.5	1590	153.21	40000	2.7	B-KF 97	8P
4.9	1480	140.28	40000	3.0	B-KA 97 B-KAF 97	8P 8P
4.7	1530	147.32	28500	1.75	B-K 87	8P
5.4	1320	126.91	28600	2.0	B-KF 87	8P
6.0	1200	115.82	28700	2.2	B-KA 87	8P
6.7	1070	102.71	28700	2.5	B-KAF 87	8P
5.2	1390	174.19	28600	1.95	B-K 87	6P
5.5	1310	164.34	28600	2.1	B-KF 87	6P
6.1	1170	147.32	28700	2.3	B-KA 87	6P
7.1	1010	126.91	28800	2.7	B-KAF 87	6P
7.0	1020	197.37	28800	2.6	B-K 87	4P
7.9	900	174.19	28800	3.0	B-KF 87	4P
8.4	850	164.34	28900	3.2	B-KA 87	4P
9.4	765	147.32	28900	3.5	B-KAF 87	4P
6.7	1080	135.28	18000	1.45	B-K 77	6P
7.0	1020	128.52	18200	1.50	B-KF 77	6P
7.9	900	113.56	18700	1.70	B-KA 77	6P
9.3	770	97.05	19100	2.0	B-KAF 77	6P
10	710	88.97	19200	2.2		
9.0	800	154.02	19000	1.95	B-K 77	4P
10	700	135.28	19300	2.2	B-KF 77	4P
11	685	128.52	19300	2.3	B-KA 77	4P
12	590	113.56	19500	2.6	B-KAF 77	4P
14	505	97.05	19700	3.1		
11	640	123.54	11700	1.30	B-K 67	4P
13	560	108.03	12100	1.45	B-KF 67	4P
15	465	90.04	12600	1.75	B-KA 67 B-KAF 67	4P 4P
18	395	76.37	12800	2.1	B-K 67	4P
20	360	68.95	13000	2.3	B-KF 67	4P
23	315	60.66	13000	2.6	B-KA 67	4P
24	295	57.28	13000	2.8	B-KAF 67	4P
11	645	123.85	7130	0.95		
13	560	108.29	7940	1.05		
14	535	102.88	8160	1.10		
15	470	90.26	8570	1.30	B-K 57	4P
18	395	76.56	8890	1.50	B-KF 57	4P
20	380	69.12	9080	1.65	B-KA 57	4P
23	315	60.81	9230	1.90	B-KAF 57	4P
24	300	57.42	9230	2.0		
28	255	48.89	9450	2.4		
31	230	44.43	9530	2.6		
18	390	75.20	6060	1.00	B-K 47	4P
20	385	69.84	6410	1.10	B-KF 47	4P
22	330	63.30	6790	1.20	B-KA 47 B-KAF 47	4P 4P
24	295	56.83	7110	1.35		
28	255	48.95	7430	1.55	B-K 47	4P
30	240	46.03	7540	1.65	B-KF 47	4P
35	205	39.61	7740	1.95	B-KA 47	4P
39	184	35.39	7780	2.2	B-KAF 47	4P
44	162	31.30	7550	2.5		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.75kW						
31	230	44.46	4170	0.85		
36	197	37.97	4150	1.00		
39	185	35.57	4140	1.10		
46	156	29.96	4080	1.30		
48	150	28.83	4080	1.35		
55	130	24.99	3990	1.55		
59	121	23.36	3950	1.60		
68	105	20.19	3880	1.75	B-K 37	4P
80	89	17.15	3750	2.0	B-KF 37	4P
90	80	15.31	3670	2.2	B-KA 37	4P
105	68	13.08	3550	2.4	B-KAF 37	4P
114	63	12.14	3550	2.6		
132	54	10.49	3380	2.9		
155	46	8.91	3250	3.5		
173	41	7.96	3180	3.8		
203	35	6.80	3030	4.2		
217	33	6.37	2980	4.4		
257	28	5.36	2840	5.0		
1.1kW						
0.15	60700	9363	171000	0.80		
0.17	52400	8126	185900	0.95		
0.19	48300	7343	190000	1.05		
0.21	44300	6747	190000	1.15	B-K 187 R97	4P
0.23	39200	5991	190000	1.30		
0.26	34900	5358	190000	1.45		
0.29	31200	4817	190000	1.60		
0.32	28300	4370	190000	1.75		
0.26	35000	5355	150000	0.90		
0.29	31200	4788	150000	1.05		
0.34	28800	4079	150000	1.20	B-K 167 R97	4P
0.41	22200	3376	150000	1.45		
0.51	18000	2755	150000	1.80		
0.64	14600	2182	150000	2.2		
0.82	11300	1704	150000	2.8	B-K 167 R97	4P
0.99	9330	1408	150000	3.4		
1.1	8560	1296	150000	3.7		
0.40	22900	3516	109300	0.80	B-K 157 R97	4P
0.46	20100	3051	111100	0.90	B-KF 157 R97	4P
0.54	16900	2610	112700	1.05	B-KA 157 R97	4P
0.60	15100	2322	113500	1.20	B-KAF 157 R97	4P
0.84	11000	1659	115000	1.65		
1.0	8970	1365	115800	2.0	B-K 157 R97	4P
1.1	6030	1229	115800	2.2	B-KF 157 R97	4P
1.3	7150	1093	116000	2.5	B-KA 157 R97	4P
1.5	6160	942	116100	2.9	B-KAF 157 R97	4P
1.6	5550	854	116200	3.2		
0.73	13100	1926	79100	1.00		
0.80	11900	1757	79800	1.10		
0.91	10400	1541	80500	1.25		
1.0	9100	1342	81100	1.45		
1.2	7960	1177	81500	1.65	B-K 127 R77	4P
1.4	6950	1025	81800	1.85	B-KF 127 R77	4P
1.6	6080	899	82000	2.1	B-KA 127 R77	4P
1.8	5270	790	82200	2.5	B-KAF 127 R77	4P
2.0	4740	704	82400	2.7		
2.3	4090	610	82500	3.2		
2.5	3690	549	82500	3.5		
2.9	3180	477	82600	4.1		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.1kW						
1.2	7920	1166	85000	1.00		
1.4	6920	1030	85000	1.15		
1.5	6050	904	85000	1.30		
1.8	5380	793	85000	1.50		
2.0	4700	696	85000	1.70	B-K 107 R77	4P
2.3	4120	615	85000	1.95	B-KF 107 R77	4P
2.7	3500	522	85000	2.3	B-KA 107 R77	4P
3.0	3080	461	85000	2.6	B-KAF 107 R77	4P
3.4	2720	408	85000	2.9		
3.8	2450	364	85000	3.3		
4.4	2140	318	85000	3.7		
1.9	5030	743	39900	0.85		
2.2	4420	652	40000	0.95	B-K 97 R57	4P
2.4	3910	573	40000	1.10	B-KF 97 R57	4P
2.8	3400	504	40000	1.25	B-KA 97 R57	4P
3.2	2940	437	40000	1.45	B-KAF 97 R57	4P
3.7	2590	382	40000	1.65		
4.1	2300	342	40000	1.85		
3.0	3220	474	26600	0.85		
3.3	2890	426	27000	0.95		
3.8	2520	373	27500	1.05	B-K 87 R57	4P
4.2	2230	330	27800	1.20	B-KF 87 R57	4P
4.8	1980	294	28100	1.35	B-KA 87 R57	4P
5.6	1700	250	28300	1.60	B-KAF 87 R57	4P
5.9	1600	236	28400	1.70		
7.0	1980	201	28800	2.0		
3.9	2720	176.05	40000	1.60	B-K 97	8P
4.4	2370	153.21	40000	1.80	B-KF 97	8P
4.8	2170	140.28	40000	2.0	B-KA 97	8P
5.5	1910	123.93	40000	2.2	B-KAF 97	8P
5.2	2010	176.05	40000	2.1	B-K 97	6P
6.0	1750	153.21	40000	2.5	B-KF 97	6P
6.6	1600	140.28	40000	2.7	B-KA 97	6P
7.4	1420	123.93	40000	3.0	B-KAF 97	6P
7.9	1320	176.05	40000	3.3	B-K 97	4P
9.1	1150	153.21	40000	3.7	B-KF 97	4P
10	1050	140.28	40000	4.1	B-KA 97	4P
					B-KAF 97	4P
5.3	1990	174.19	28100	1.35	B-K 87	6P
5.6	1880	164.34	28200	1.45	B-KF 87	6P
6.2	1680	147.32	28300	1.60	B-KA 87	6P
7.2	1450	126.91	28500	1.85	B-KAF 87	6P
8.0	1310	174.19	28600	2.1	B-K 87	4P
8.5	1230	164.34	28700	2.2	B-KF 87	4P
9.5	1110	147.32	28700	2.4	B-KA 87	4P
11	950	126.91	28800	2.8	B-KAF 87	4P
12	870	115.82	28800	3.1		
9.8	1540	135.28	15400	1.00	B-K 77	6P
7.2	1470	128.52	15900	1.05	B-KF 77	6P
8.1	1300	113.56	17000	1.20	B-KA 77	6P
9.5	1110	97.05	17900	1.40	B-KAF 77	6P
10	1020	135.28	18800	1.55	B-K 77	4P
11	960	128.52	18400	1.60	B-KF 77	4P
12	850	113.56	18800	1.80	B-KA 77	4P
					B-KAF 77	4P
14	730	97.05	19200	2.1	B-K 77	4P
16	670	88.97	19300	2.3	B-KF 77	4P
18	585	78.07	19500	2.7	B-KA 77	4P
19	555	73.99	19800	2.8	B-KAF 77	4P



BEVEL HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.1kW						
13	610	108.03	10400	1.00		
14	770	102.62	10700	1.05	B-K 67	4P
16	675	90.04	11400	1.20	B-KF 67	4P
18	575	76.37	12000	1.45	B-KA 67	4P
20	515	68.95	12300	1.60	B-KAF 67	4P
23	455	60.66	12800	1.80	B-K 67	4P
24	430	57.28	12700	1.90	B-KF 67	4P
29	365	48.77	12900	2.2	B-KA 67	4P
32	335	44.32	13000	2.5	B-KAF 67	4P
36	290	38.39	13000	2.8		
16	675	90.26	7410	0.90		
18	575	76.56	7840	1.05		
20	520	69.12	8280	1.15		
23	455	60.81	8630	1.30	B-K 57	4P
24	430	57.42	8750	1.40	B-KF 57	4P
29	365	48.89	9020	1.65	B-KA 57	4P
32	335	44.43	9160	1.80	B-KAF 57	4P
36	290	38.49	9330	2.1		
39	270	35.70	9400	2.2		
46	225	30.28	9540	2.6		
51	205	27.34	9510	2.9		
58	181	24.05	9220	3.3		
62	170	22.71	9090	3.5		
72	145	19.34	8720	4.0		
80	132	17.57	8510	4.2		
92	114	15.22	8180	4.7	B-K 57	4P
106	99	13.25	7880	5.1	B-KF 57	4P
117	90	11.92	7570	4.6	B-KA 57	4P
124	85	11.26	7450	4.9	B-KAF 57	4P
148	72	9.59	7120	5.6		
161	65	8.71	6930	6.0		
188	57	7.55	6650	6.4		
213	49	6.57	6380	7.0		
25	425	56.83	5310	0.95	B-K 47	4P
29	365	48.95	6380	1.10	B-KF 47	4P
30	345	46.03	6810	1.15	B-KA 47	4P
					B-KAF 47	4P
35	295	39.61	7090	1.35		
40	265	35.39	7090	1.50	B-K 47	4P
45	235	31.30	6960	1.70	B-KF 47	4P
48	220	29.32	6890	1.80	B-KA 47	4P
54	194	25.91	6730	2.1	B-KAF 47	4P
64	164	21.81	6510	2.4		
72	147	19.58	6380	2.7		
47	225	29.96	3420	0.90		
56	188	24.99	3440	1.05		
60	175	23.36	3440	1.10		
69	152	20.19	3420	1.20		
82	129	17.15	3370	1.40		
91	115	15.31	3330	1.50	B-K 37	4P
107	98	13.08	3200	1.70	B-KF 37	4P
115	91	12.14	3220	1.75	B-KA 37	4P
133	79	10.49	3140	2.0	B-KAF 37	4P
157	67	8.91	3040	2.4		
178	60	7.96	2970	2.6		
208	51	6.80	2870	2.9		
220	48	6.37	2830	3.0		
261	40	5.36	2720	3.5		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.5kW						
0.21	60700	6747	171100	0.80		
0.24	53700	5991	183600	0.90		
0.26	47900	5358	190000	1.05	B-K 187 R97	4P
0.29	42900	4817	190000	1.15		
0.32	38900	4370	190000	1.30		
0.39	33000	3609	190000	1.50		
0.46	27800	3062	190000	1.80	B-K 187 R97	4P
0.56	22800	2519	190000	2.2		
0.62	20400	2268	190000	2.5		
0.35	36700	4079	150000	0.85		
0.42	30400	3376	150000	1.05	B-K 167 R97	4P
0.51	24700	2755	150000	1.30		
0.65	19900	2182	150000	1.60		
0.83	15500	1704	150000	2.1	B-K 167 R97	4P
1.0	12800	1408	150000	2.5		
1.1	11800	1296	150000	2.7		
0.61	20700	2322	110700	1.85	B-K 157 R97	4P
					B-KF 157 R97	4P
					B-KA 157 R97	4P
					B-KAF 157 R97	4P
0.85	15100	1659	113500	1.20		
1.0	12300	1365	114600	1.45		
1.1	11100	1229	115000	1.65	B-K 157 R97	4P
1.3	9840	1093	115300	1.85	B-KF 157 R97	4P
1.5	8480	942	115700	2.1	B-KA 157 R97	4P
1.6	7650	854	115900	2.3	B-KAF 157 R97	4P
2.5	5050	567	116300	3.6		
2.8	4490	504	116400	4.0		
2.6	4820	536	82300	2.7	B-K 127 R87	4P
3.4	3770	418	82500	3.5	B-KF 127 R87	4P
3.8	3330	367	82600	3.9	B-KA 127 R87	4P
					B-KAF 127 R87	4P
0.80	16200	1757	73400	0.80		
0.91	14200	1541	77500	0.90		
1.0	12400	1342	79500	1.05		
1.2	10900	1177	80300	1.20		
1.4	9470	1025	80900	1.35	B-K 127 R77	4P
1.6	8300	899	81400	1.55	B-KF 127 R77	4P
1.8	7210	790	81700	1.80	B-KA 127 R77	4P
2.0	6480	704	81900	2.0	B-KAF 127 R77	4P
2.3	5590	610	82200	2.3		
2.6	5040	549	82300	2.6		
3.0	4360	477	82400	3.0		
3.4	3640	418	82500	3.4		
1.4	9460	1030	65000	0.85		
1.6	8280	904	65000	0.95		
1.8	7330	793	65000	1.10		
2.0	6420	696	65000	1.25	B-K 107 R77	4P
2.3	5640	615	65000	1.40	B-KF 107 R77	4P
2.7	4780	522	65000	1.65	B-KA 107 R77	4P
3.1	4210	461	65000	1.90	B-KAF 107 R77	4P
3.5	3720	408	65000	2.2		
3.9	3350	364	65000	2.4		
4.4	2920	318	65000	2.7		





Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
1.5kW						
2.5	5320	573	38500	0.80		
2.8	4650	504	40000	0.95		
3.2	4020	437	40000	1.05		
3.7	3540	382	40000	1.20	B-K 97 R57	4P
4.1	3140	342	40000	1.35	B-KF 97 R57	4P
4.6	2820	305	40000	1.50	B-KA 97 R57	4P
5.5	2380	258	40000	1.80	B-KAF 97 R57	4P
6.1	2140	232	40000	2.0		
7.1	1840	199	40000	2.3		
4.3	3040	330	26800	0.90		
4.8	2700	294	27300	1.00	B-K 87 R57	4P
5.6	2310	250	27700	1.15	B-KF 87 R57	4P
6.0	2180	236	27900	1.25	B-KA 87 R57	4P
7.0	1880	201	28200	1.45	B-KAF 87 R57	4P
7.7	1690	183	28300	1.60		
4.9	2940	143.47	65000	2.7	B-K 107	8P
5.8	2490	121.46	65000	3.2	B-KF 107	8P
6.2	2300	112.41	65000	3.5	B-KA 107	8P
					B-KAF 107	8P
4.6	3140	153.21	40000	1.35	B-K 97	8P
5.0	2870	140.28	40000	1.50	B-KF 97	8P
5.7	2540	123.93	40000	1.70	B-KA 97	8P
					B-KAF 97	8P
5.2	2740	176.05	40000	1.55	B-K 97	6P
6.0	2390	153.21	40000	1.80	B-KF 97	6P
6.6	2180	140.28	40000	1.95	B-KA 97	6P
7.4	1930	123.93	40000	2.2	B-KAF 97	6P
8.0	1790	176.05	40000	2.4	B-K 97	4P
9.2	1560	153.21	40000	2.8	B-KF 97	4P
10	1430	140.28	40000	3.0	B-KA 97	4P
11	1260	123.93	40000	3.4	B-KAF 97	4P
6.2	2290	147.32	27800	1.20	B-K 87	6P
7.2	1980	126.91	28100	1.35	B-KF 87	6P
7.9	1800	115.82	28200	1.50	B-KA 87	6P
9.0	1600	102.71	28400	1.70	B-KAF 87	6P
8.1	1770	174.19	28300	1.55		
8.6	1670	164.34	28300	1.60	B-K 87	4P
9.6	1500	147.32	28500	1.80	B-KF 87	4P
11	1290	126.91	28800	2.1	B-KA 87	4P
12	1180	115.82	28700	2.3	B-KAF 87	4P
14	1040	102.71	28800	2.6		
16	880	86.34	28800	3.1		
8.1	1770	113.56	13600	0.90	B-K 77	6P
9.5	1510	97.05	15700	1.05	B-KF 77	6P
10	1390	88.97	16400	1.10	B-KA 77	6P
12	1220	78.07	17400	1.30	B-KAF 77	6P
10	1370	135.28	16500	1.15	B-K 77	4P
11	1310	128.52	16900	1.20	B-KF 77	4P
12	1150	113.56	17700	1.35	B-KA 77	4P
15	990	97.05	18400	1.55	B-KAF 77	4P
16	900	88.97	18700	1.70		
18	795	78.07	19000	1.95		
19	750	73.99	19100	2.1	B-K 77	4P
22	660	64.75	19400	2.4	B-KF 77	4P
24	595	58.34	19500	2.6	B-KA 77	4P
28	520	51.18	19700	3.0	B-KAF 77	4P
31	460	45.16	19800	3.4		
35	405	40.04	19800	3.8		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
1.5kW						
16	910	90.04	9370	0.90		
18	775	76.37	10700	1.05	B-K 67	4P
20	700	68.95	11300	1.15	B-KF 67	4P
23	615	60.66	11800	1.35	B-KA 67	4P
25	580	57.28	12000	1.40	B-KAF 67	4P
29	495	48.77	12400	1.65		
32	450	44.32	12600	1.80		
37	390	38.39	12800	2.0	B-K 67	4P
40	360	35.62	12900	2.3	B-KF 67	4P
47	305	30.22	13000	2.7	B-KA 67	4P
52	275	27.28	13000	3.0	B-KAF 67	4P
59	245	24.00	13000	3.3		
23	620	60.81	7480	0.95	B-K 57	4P
25	685	57.42	7770	1.05	B-KF 57	4P
29	495	48.89	8430	1.20	B-KA 57	4P
32	450	44.43	8650	1.35	B-KAF 57	4P
37	390	38.49	8920	1.55		
39	365	35.70	9040	1.65	B-K 57	4P
47	310	30.28	9190	1.95	B-KF 57	4P
52	280	27.34	9010	2.2	B-KA 57	4P
59	245	24.05	8750	2.5	B-KAF 57	4P
62	230	22.71	8670	2.6		
73	196	19.34	8360	2.9		
36	400	39.61	5890	1.00	B-K 47	4P
40	360	35.39	6360	1.10	B-KF 47	4P
45	320	31.30	6310	1.25	B-KA 47	4P
					B-KAF 47	4P
48	300	29.32	6270	1.35		
54	265	25.91	6190	1.50		
65	220	21.81	6050	1.80	B-K 47	4P
72	199	19.58	5950	2.0	B-KF 47	4P
84	171	16.86	5800	2.2	B-KA 47	4P
89	161	15.86	5730	2.4	B-KAF 47	4P
103	139	13.65	5560	2.6		
116	124	12.19	5430	2.8		
120	120	11.17	5340	2.3		
60	235	23.36	2860	0.80		
70	205	20.19	2920	0.90		
82	174	17.15	2940	1.05		
92	156	15.31	2950	1.10		
108	133	13.08	2930	1.25	B-K 37	4P
118	123	12.14	2920	1.30	B-KF 37	4P
134	107	10.49	2880	1.50	B-KA 37	4P
158	91	8.91	2820	1.75	B-KAF 37	4P
177	81	7.96	2770	1.90		
207	69	6.80	2700	2.2		
221	65	6.37	2670	2.2		
263	55	5.36	2580	2.6		
2.2kW						
0.32	57900	4370	176200	0.85		
0.50	37000	2818	190000	1.35		
0.39	48800	3609	190000	1.00		
0.46	41300	3062	190000	1.20		
0.56	33600	2519	190000	1.50	B-K 187 R97	4P
0.62	30400	2268	190000	1.65		
0.69	27400	2054	190000	1.80		
0.77	24200	1821	190000	2.1		
0.88	21400	1605	190000	2.3		
0.51	36600	2755	150000	0.85		
0.62	29800	2263	150000	1.05		
0.65	29500	2182	150000	1.10		
0.83	22900	1704	150000	1.40	B-K 167 R97	4P
1.0	19000	1408	150000	1.70		
1.1	17400	1296	150000	1.85		
1.3	14700	1101	150000	2.2		
1.5	12600	944	150000	2.5		





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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
2.2kW						
0.85	22400	1659	109700	0.80		
1.0	18300	1365	112000	1.00		
1.1	16500	1229	112900	1.10	B-K 157 R97	4P
1.3	14600	1093	113700	1.25	B-KF 157 R97	4P
1.5	12600	942	114500	1.45	B-KA 157 R97	4P
1.8	11400	854	114900	1.80	B-KAF 157 R97	4P
1.9	9990	758	115300	1.80		
2.6	7180	536	81700	1.80		
3.0	6310	473	82000	2.1	B-K 127 R87	4P
3.4	5800	418	82200	2.3	B-KF 127 R87	4P
3.8	4950	367	82300	2.6	B-KA 127 R87	4P
4.3	4440	330	82400	2.9	B-KAF 127 R87	4P
1.4	14000	1025	78000	0.95		
1.6	12200	899	78600	1.05		
1.8	10700	790	80400	1.20	B-K 127 R77	4P
2.0	9580	704	80900	1.35	B-KF 127 R77	4P
2.3	8280	610	81400	1.55	B-KA 127 R77	4P
2.6	7460	549	81600	1.75	B-KAF 127 R77	4P
3.0	6460	477	81900	2.0		
3.4	5880	418	82100	2.3		
2.3	8340	615	65000	0.95		
2.7	7070	522	65000	1.15		
3.1	6230	461	65000	1.30	B-K 107 R77	4P
3.5	5520	408	65000	1.45	B-KF 107 R77	4P
3.9	4940	364	65000	1.60	B-KA 107 R77	4P
4.4	4320	318	65000	1.85	B-KAF 107 R77	4P
4.9	3890	286	65000	2.1		
5.6	3410	251	65000	2.3		
3.7	5210	382	39700	0.80		
4.1	4840	342	40000	0.95	B-K 97 R57	4P
4.6	4170	305	40000	1.05	B-KF 97 R57	4P
5.5	3510	258	40000	1.20	B-KA 97 R57	4P
6.1	3160	232	40000	1.35	B-KAF 97 R57	4P
7.1	2710	199	40000	1.60		
4.9	4310	143.47	65000	1.85	B-K 107	8P
5.8	3850	121.46	65000	2.2	B-KF 107	8P
6.2	3370	112.41	65000	2.4	B-KA 107	8P
6.9	3020	100.75	65000	2.7	B-KAF 107	8P
6.1	3420	153.21	40000	1.25	B-K 97	6P
6.7	3140	140.28	40000	1.35	B-KF 97	6P
7.6	2770	123.93	40000	1.55	B-KA 97	6P
8.9	2350	105.13	40000	1.85	B-KAF 97	6P
8.0	2820	176.05	40000	1.85	B-K 97	4P
9.2	2280	153.21	40000	1.90	B-KF 97	4P
10	2090	140.28	40000	2.1	B-KA 97	4P
11	1850	123.93	40000	2.3	B-KAF 97	4P
					B-K 97	4P
13	1570	105.13	40000	2.8	B-KF 97	4P
15	1440	96.80	40000	3.0	B-KA 97	4P
					B-KAF 97	4P
9.6	2200	147.32	27900	1.25	B-K 87	4P
11	1890	126.91	28200	1.45	B-KF 87	4P
12	1730	115.82	28300	1.55	B-KA 87	4P
					B-KAF 87	4P
14	1530	102.71	28500	1.75	B-K 87	4P
16	1290	86.34	28800	2.1	B-KF 87	4P
18	1180	79.34	28700	2.3	B-KA 87	4P
20	1060	70.46	28800	2.6	B-KAF 87	4P
22	940	63.00	28800	2.9		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
2.2kW						
12	1890	113.56	14300	0.90		
15	1450	97.05	16100	1.05	B-K 77	4P
16	1330	88.97	16800	1.15	B-KF 77	4P
18	1160	78.07	17800	1.35	B-KA 77	4P
19	1100	73.99	17900	1.40	B-KAF 77	4P
22	980	64.75	18400	1.60		
24	870	58.34	18800	1.80		
28	765	51.18	19100	2.0		
31	675	45.16	19300	2.3	B-K 77	4P
35	595	40.04	19500	2.6	B-KF 77	4P
40	525	35.20	19700	3.0	B-KA 77	4P
46	480	30.89	19800	3.4	B-KAF 77	4P
48	435	29.27	19800	3.6		
55	380	25.62	19900	4.1		
23	900	60.66	9490	0.90		
25	850	57.28	10000	0.95	B-K 67	4P
29	725	48.77	11100	1.15	B-KF 67	4P
32	660	44.32	11500	1.25	B-KA 67	4P
37	570	38.39	12100	1.40	B-KAF 67	4P
40	530	35.62	12300	1.55		
47	450	30.22	12800	1.80		
52	405	27.28	12800	2.0		
59	360	24.00	13000	2.2		
62	340	22.66	13000	2.3		
73	285	19.30	13000	2.6		
80	260	17.54	13000	2.8	B-K 67	4P
93	225	15.19	13000	3.1	B-KF 67	4P
107	197	13.22	13000	3.4	B-KA 67	4P
115	186	12.48	13000	2.8	B-KAF 67	4P
133	158	10.63	13000	3.2		
146	144	9.66	13000	3.3		
189	125	8.37	13000	3.5		
194	109	7.28	12700	3.9		
32	660	44.43	5100	0.90	B-K 57	4P
37	575	38.49	7850	1.05	B-KF 57	4P
39	530	35.70	8080	1.15	B-KA 57	4P
47	450	30.28	8250	1.35	B-KAF 57	4P
52	405	27.34	8180	1.45		
59	360	24.05	8030	1.65		
82	340	22.71	7970	1.75		
73	290	19.34	7780	2.0	B-K 57	4P
80	260	17.57	7630	2.1	B-KF 57	4P
93	225	15.22	7430	2.4	B-KA 57	4P
106	197	13.25	7220	2.6	B-KAF 57	4P
118	178	11.92	6890	2.3		
125	168	11.26	6810	2.5		
54	385	25.91	5280	1.05	B-K 47	4P
65	325	21.81	5260	1.25	B-KF 47	4P
72	290	19.58	5240	1.35	B-KA 47	4P
					B-KAF 47	4P
84	250	16.86	5190	1.50		
89	235	15.86	5160	1.60		
103	205	13.65	5070	1.75	B-K 47	4P
116	182	12.19	4990	1.95	B-KF 47	4P
120	175	11.77	4890	1.60	B-KA 47	4P
133	157	10.56	4810	1.80	B-KAF 47	4P
155	136	9.10	4690	2.1		
108	195	13.08	2370	0.85		
134	156	10.49	2430	1.00		
158	133	8.91	2440	1.20	B-K 37	4P
177	119	7.96	2430	1.30	B-KF 37	4P
207	101	6.80	2410	1.50	B-KA 37	4P
221	95	6.37	2400	1.55	B-KAF 37	4P
263	80	5.36	2350	1.75		





Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
0.46	57100	3062	177600	0.90		
0.50	51300	2818	187700	0.95		
0.56	46800	2519	190000	1.05		
0.62	42100	2268	190000	1.20		
0.68	38000	2054	190000	1.30	B-K 187 R97	4P
0.77	33600	1821	190000	1.50		
0.87	29700	1605	190000	1.70		
1.0	25600	1395	190000	1.95		
1.2	22100	1196	190000	2.3		
0.82	31700	1704	150000	1.00		
0.99	26200	1408	150000	1.20		
1.1	24100	1296	150000	1.35		
1.3	20300	1101	150000	1.55	B-K 167 R97	4P
1.5	17500	944	150000	1.85		
1.7	15500	843	150000	2.1		
1.9	14000	757	150000	2.3		
1.1	22800	1229	109400	0.80		
1.3	20300	1093	111000	0.90	B-K 157 R97	4P
1.5	17500	942	112400	1.05	B-KF 157 R97	4P
1.6	15800	854	113200	1.15	B-KA 157 R97	4P
1.9	13900	758	114000	1.30	B-KAF 157 R97	4P
2.5	10500	567	115200	1.70		
2.8	9310	504	115500	1.95		
2.6	9940	536	80700	1.30		
3.0	8750	473	81200	1.50	B-K 127 R87	4P
3.3	7760	418	81500	1.70	B-KF 127 R87	4P
3.8	6840	367	81800	1.90	B-KA 127 R87	4P
4.2	6140	330	82000	2.1	B-KAF 127 R87	4P
4.9	5300	287	82200	2.5		
1.8	14800	790	76500	0.90		
2.0	13200	704	79100	1.00	B-K 127 R77	4P
2.3	11400	610	80000	1.15	B-KF 127 R77	4P
2.5	10300	549	80800	1.25	B-KA 127 R77	4P
2.9	8920	477	81100	1.45	B-KAF 127 R77	4P
3.3	7840	418	81500	1.65		
3.0	8610	461	65000	0.95		
3.4	7620	408	65000	1.05		
3.8	6820	364	65000	1.15		
4.4	5960	318	65000	1.35	B-K 107 R77	4P
4.9	5370	286	65000	1.50	B-KF 107 R77	4P
5.6	4700	251	65000	1.70	B-KA 107 R77	4P
6.3	4150	222	65000	1.95	B-KAF 107 R77	4P
7.1	3670	196	65000	2.2		
8.1	3250	174	65000	2.2		
9.1	2880	154	65000	2.5		
10	2610	140	65000	2.8		
5.4	4840	258	40000	0.90	B-K 97 R57	4P
6.0	4360	232	40000	1.00	B-KF 97 R57	4P
7.0	3740	199	40000	1.15	B-KA 97 R57	4P
					B-KAF 97 R57	4P
5.0	5710	143.47	65000	1.40	B-K 107	8P
5.9	4630	121.46	65000	1.65	B-KF 107	8P
6.4	4470	112.41	65000	1.80	B-KA 107	8P
7.2	4010	100.75	65000	2.0	B-KAF 107	8P
7.9	3620	90.96	65000	2.2		
6.6	4370	143.47	65000	1.85	B-K 107	6P
7.7	3700	121.46	65000	2.2	B-KF 107	6P
8.4	3430	112.41	65000	2.3	B-KA 107	6P
9.3	3070	100.75	65000	2.6	B-KAF 107	6P
					B-K 107	4P
9.8	2940	143.47	65000	2.7	B-KF 107	4P
12	2490	121.46	65000	3.2	B-KA 107	4P
					B-KAF 107	4P
7.6	3780	123.93	40000	1.15	B-K 97	6P
8.9	3200	105.13	40000	1.35	B-KF 97	6P
9.7	2950	96.80	40000	1.45	B-KA 97	6P
11	2640	86.52	40000	1.65	B-KAF 97	6P

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
7.9	3600	176.05	40000	1.20	B-K 97	4P
9.1	3140	153.21	40000	1.35	B-KF 97	4P
10	2870	140.28	40000	1.50	B-KA 97	4P
11	2540	123.93	40000	1.70	B-KAF 97	4P
13	2150	105.13	40000	2.0		
14	1980	96.80	40000	2.2	B-K 97	4P
16	1770	86.52	40000	2.4	B-KF 97	4P
18	1590	77.89	40000	2.7	B-KA 97	4P
20	1440	70.54	40000	3.0	B-KAF 97	4P
22	1280	62.55	40000	3.4		
25	1160	56.55	40000	3.7		
9.5	3010	147.32	28900	0.90	B-K 87	4P
11	2600	126.91	27400	1.05	B-KF 87	4P
12	2370	115.82	27700	1.15	B-KA 87	4P
14	2100	102.71	28000	1.30	B-KAF 87	4P
16	1770	86.34	28300	1.55		
18	1620	79.34	28400	1.65		
20	1440	70.46	28500	1.85	B-K 87	4P
22	1290	63.00	28600	2.1	B-KF 87	4P
25	1160	56.64	28700	2.3	B-KA 87	4P
28	1010	49.16	28800	2.7	B-KAF 87	4P
32	900	44.02	28800	2.9		
38	745	36.52	28400	3.3		
16	1820	88.97	13100	0.85		
18	1600	78.07	15000	0.95	B-K 77	4P
19	1510	73.99	15600	1.00	B-KF 77	4P
22	1330	64.75	16800	1.15	B-KA 77	4P
24	1190	58.34	17500	1.30	B-KAF 77	4P
27	1050	51.18	18100	1.50		
31	820	45.16	18600	1.70	B-K 77	4P
35	820	40.04	18900	1.90	B-KF 77	4P
40	720	35.20	19200	2.2	B-KA 77	4P
45	630	30.89	19400	2.5	B-KAF 77	4P
32	910	44.32	9450	0.90		
36	785	38.39	10600	1.00	B-K 67	4P
39	730	35.62	11100	1.15	B-KF 67	4P
46	620	30.22	11800	1.35	B-KA 67	4P
51	560	27.28	12100	1.45	B-KAF 67	4P
58	490	24.00	12500	1.65		
62	465	22.66	12600	1.70		
73	395	19.30	12800	1.95		
80	360	17.54	13000	2.1	B-K 67	4P
92	310	15.19	13000	2.2	B-KF 67	4P
106	270	13.22	13000	2.5	B-KA 67	4P
112	255	12.48	13000	2.1	B-KAF 67	4P
132	220	10.63	13000	2.3		
145	198	9.66	13000	2.4		
46	820	30.28	7180	0.95	B-K 57	4P
51	560	27.34	7190	1.05	B-KF 57	4P
58	490	24.05	7180	1.20	B-KA 57	4P
					B-KAF 57	4P
62	465	22.71	7160	1.30		
72	395	19.34	7080	1.45		
80	360	17.57	7020	1.55		
92	310	15.22	8890	1.70		
106	270	13.25	6750	1.90	B-K 57	4P
117	245	11.92	6420	1.70	B-KF 57	4P
124	230	11.26	6370	1.80	B-KA 57	4P
146	196	9.59	6200	2.1	B-KAF 57	4P
161	178	8.71	6090	2.2		
188	154	7.55	5920	2.4		
213	134	6.57	5750	2.6		
72	400	19.58	4430	1.00	B-K 47	4P
83	345	16.86	4490	1.10	B-KF 47	4P
88	325	15.86	4500	1.15	B-KA 47	4P
					B-KAF 47	4P





BEVEL HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
3.0kW						
103	280	13.65	4510	1.30		
115	250	12.19	4490	1.40		
119	240	11.77	4370	1.15	B-K 47	4P
133	215	10.56	4350	1.30	B-KF 47	4P
154	186	9.10	4290	1.50	B-KA 47	4P
164	175	8.56	4270	1.55	B-KAF 47	4P
180	151	7.36	4190	1.65		
213	135	6.58	4120	1.80		
241	119	5.81	4030	1.95		
157	182	8.91	2000	0.90	B-K 37	4P
176	163	7.96	2040	0.95	B-KF 37	4P
206	139	6.80	2080	1.10	B-KA 37	4P
220	130	6.37	2080	1.10	B-KAF 37	4P
261	110	5.36	2090	1.30		
4.0kW						
1.7	20300	835	190000	2.5	B-K 187 R107	4P
2.7	12600	520	190000	4.0		
0.56	61900	2519	188800	0.80		
0.63	55600	2268	180200	0.90		
0.69	50300	2054	189400	1.00		
0.78	44500	1821	190000	1.10		
0.88	39300	1605	190000	1.25	B-K 187 R97	4P
1.0	34000	1395	190000	1.45		
1.2	29200	1196	190000	1.70		
1.4	25600	1046	190000	1.95		
1.5	23100	945	190000	2.2		
1.0	34600	1408	150000	0.90		
1.1	31900	1296	150000	1.00		
1.3	26900	1101	150000	1.20		
1.5	23100	944	150000	1.40	B-K 167 R97	4P
1.7	20500	843	150000	1.55		
1.9	18500	757	150000	1.75		
2.2	15400	632	150000	2.1		
1.7	20900	854	110600	0.85	B-K 157 R97	4P
1.9	18400	756	112000	1.00	B-KF 157 R97	4P
2.5	13800	567	114000	1.30	B-KA 157 R97	4P
2.8	12300	504	114600	1.45	B-KAF 157 R97	4P
3.3	10600	434	115100	1.70		
2.7	13100	536	79100	1.00		
3.0	11600	473	79900	1.10	B-K 127 R87	4P
3.4	10300	418	80600	1.25	B-KF 127 R87	4P
3.9	9040	367	81100	1.45	B-KA 127 R87	4P
4.3	8120	330	81400	1.60	B-KAF 127 R87	4P
5.0	7010	287	81800	1.85		
5.6	6200	253	82000	2.1		
2.3	15100	610	75800	0.85	B-K 127 R77	4P
2.6	13600	549	78800	0.95	B-KF 127 R77	4P
3.0	11800	477	79800	1.10	B-KA 127 R77	4P
3.4	10300	418	80500	1.25	B-KAF 127 R77	4P
3.9	8990	364	65000	0.90		
4.5	7660	318	65000	1.00		
5.0	7080	286	65000	1.15	B-K 107 R77	4P
5.7	6200	251	65000	1.30	B-KF 107 R77	4P
6.4	5470	222	65000	1.45	B-KA 107 R77	4P
7.2	4840	196	65000	1.85	B-KAF 107 R77	4P
8.2	4290	174	65000	1.70		
9.2	3800	154	65000	1.90		
10	3440	140	65000	2.1		
7.1	4930	199	40000	0.85	B-K 97 R57	4P
					B-KF 97 R57	4P
					B-KA 97 R57	4P
					B-KAF 97 R57	4P
5.3	7220	136.14	81700	1.80	B-K 127	8P
5.9	6500	122.48	81900	2.0	B-KF 127	8P
8.5	5850	110.18	82100	2.2	B-KA 127	8P
					B-KAF 127	8P

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
4.0kW						
6.6	5810	146.07	82100	2.2	B-K 127	6P
7.1	5420	136.14	82200	2.4	B-KF 127	6P
7.8	4870	122.48	82300	2.7	B-KA 127	6P
8.7	4380	110.18	82400	3.0	B-KAF 127	6P
6.4	5960	112.41	65000	1.35	B-K 107	8P
7.2	5340	100.75	65000	1.50	B-KF 107	8P
7.9	4830	90.96	65000	1.65	B-KA 107	8P
8.7	4380	82.61	65000	1.85	B-KAF 107	8P
6.7	5710	143.47	65000	1.40	B-K 107	6P
7.9	4830	121.46	65000	1.65	B-KF 107	6P
8.5	4470	112.41	65000	1.80	B-KA 107	6P
9.5	4010	100.75	65000	2.0	B-KAF 107	6P
11	3620	90.96	65000	2.2		
9.9	3860	143.47	65000	2.1		
12	3270	121.46	65000	2.5	B-K 107	4P
13	3020	112.41	65000	2.7	B-KF 107	4P
14	2710	100.75	65000	3.0	B-KA 107	4P
16	2450	90.96	65000	3.3	B-KAF 107	4P
17	2220	82.61	65000	3.6		
19	1970	73.30	65000	4.1		
9.3	4120	153.21	40000	1.05	B-K 97	4P
10	3770	140.28	40000	1.15	B-KF 97	4P
11	3330	123.93	40000	1.30	B-KA 97	4P
					B-KAF 97	4P
14	2830	105.13	40000	1.50	B-K 97	4P
15	2600	96.80	40000	1.65	B-KF 97	4P
16	2330	86.52	40000	1.85	B-KA 97	4P
18	2100	77.89	40000	2.0	B-KAF 97	4P
20	1900	70.54	40000	2.3		
12	3120	115.82	26700	0.85	B-K 87	4P
14	2760	102.71	27200	1.00	B-KF 87	4P
16	2320	86.34	27700	1.15	B-KA 87	4P
18	2130	79.34	27900	1.25	B-KAF 87	4P
20	1900	70.46	28200	1.40		
23	1690	63.00	28300	1.60	B-K 87	4P
25	1520	56.64	28500	1.75	B-KF 87	4P
29	1320	49.16	28600	2.0	B-KA 87	4P
32	1180	44.02	28300	2.2	B-KAF 87	4P
39	980	36.52	27300	2.5		
22	1740	64.75	13900	0.90		
24	1570	58.34	15200	1.00	B-K 77	4P
28	1380	51.18	16500	1.15	B-KF 77	4P
31	1210	45.16	17400	1.30	B-KA 77	4P
35	1080	40.04	18000	1.45	B-KAF 77	4P
37	1030	38.39	18200	1.45		
40	950	35.20	18500	1.65		
46	830	30.89	18900	1.85	B-K 77	4P
49	785	29.27	19000	1.95	B-KF 77	4P
55	690	25.62	19300	2.2	B-KA 77	4P
62	620	23.08	19500	2.5	B-KAF 77	4P
70	545	20.25	19800	2.8		
47	810	30.22	10400	1.00	B-K 67	4P
52	735	27.28	11000	1.10	B-KF 67	4P
59	845	24.00	11800	1.25	B-KA 67	4P
83	610	22.66	11800	1.30	B-KAF 67	4P
74	520	19.30	12300	1.45		
81	470	17.54	12500	1.55		
94	410	15.19	12800	1.70		
107	355	13.22	13000	1.90	B-K 67	4P
114	335	12.48	13000	1.80	B-KF 67	4P
134	285	10.63	13000	1.75	B-KA 67	4P
147	260	9.66	12900	1.85	B-KAF 67	4P
170	225	8.37	12500	1.95		
195	196	7.28	12100	2.1		



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
4.0kW						
59	645	24.05	6120	0.95		
63	610	22.71	6160	1.00		
73	520	19.34	6220	1.10		
81	475	17.57	6230	1.15		
93	410	15.22	6210	1.30	B-K 57	4P
107	355	13.25	6150	1.45	B-KF 57	4P
119	320	11.92	5810	1.30	B-KA 57	4P
126	305	11.26	5790	1.35	B-KAF 57	4P
148	260	9.59	5700	1.55		
163	235	8.71	5640	1.85		
188	205	7.55	5530	1.80		
216	177	6.57	5400	1.95		
5.5kW						
0.79	61100	1821	170200	0.80		
0.89	53900	1605	183200	0.95		
1.0	46700	1395	190000	1.05		
1.2	40100	1196	190000	1.25	B-K 187 R97	4P
1.4	35100	1046	190000	1.45		
1.5	31700	945	190000	1.60		
1.9	24800	738	190000	2.0		
2.9	20800	621	190000	2.4		
1.3	36900	1101	150000	0.85		
1.5	31700	944	150000	1.00		
1.7	28200	843	150000	1.15		
1.9	25400	757	150000	1.25	B-K 167 R97	4P
2.3	21200	632	150000	1.50		
2.5	18700	561	150000	1.70		
3.0	16100	481	150000	2.0		
3.4	14100	423	150000	2.3		
2.2	22100	661	109900	0.80		
2.5	19000	567	111700	0.95	B-K 157 R97	4P
2.8	16900	504	112700	1.05	B-KF 157 R97	4P
3.3	14500	434	113800	1.25	B-KA 157 R97	4P
3.8	12700	379	114500	1.40	B-KAF 157 R97	4P
4.3	11100	333	115000	1.60		
3.4	14100	418	77800	0.90		
3.9	12400	367	79500	1.05		
4.3	11100	330	80200	1.15	B-K 127 R87	4P
5.0	9620	287	80800	1.35	B-KF 127 R87	4P
5.8	8510	253	81300	1.55	B-KA 127 R87	4P
6.7	7150	213	81700	1.80	B-KAF 127 R87	4P
7.1	6740	200	81900	1.80		
8.6	5560	166	82200	2.2		
9.8	4920	147	82300	2.4		
6.4	7490	222	65000	1.05	B-K 107 R77	4P
7.3	6640	196	65000	1.20	B-KF 107 R77	4P
8.2	5870	174	65000	1.25	B-KA 107 R77	4P
9.3	5200	154	65000	1.40	B-KAF 107 R77	4P
10	4720	140	65000	1.55		
4.7	11100	150.41	115000	1.60	B-K 157	8P
5.8	9050	122.39	115500	2.0	B-KF 157	8P
7.1	7410	100.22	115900	2.4	B-KA 157	8P
7.8	6780	91.65	116000	2.7	B-KAF 157	8P
5.2	10100	136.14	80700	1.30	B-K 127	8P
5.8	9060	122.48	81100	1.45	B-KF 127	8P
6.4	8150	110.18	81400	1.60	B-KA 127	8P
7.9	6650	89.89	81900	1.95	B-KAF 127	8P
7.1	7450	136.14	81600	1.75	B-K 127	6P
7.8	6700	122.48	81900	1.95	B-KF 127	6P
8.7	6030	110.18	82100	2.2	B-KA 127	6P
11	4920	89.89	82300	2.6	B-KAF 127	6P
8.5	6150	112.41	65000	1.30	B-K 107	6P
9.5	5510	100.75	65000	1.45	B-KF 107	6P
11	4980	90.96	65000	1.60	B-KA 107	6P
12	4520	82.61	65000	1.75	B-KAF 107	6P

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
5.5kW						
10	5270	143.47	65000	1.50		
12	4480	121.46	65000	1.80	B-K 107	4P
13	4130	112.41	65000	1.95	B-KF 107	4P
14	3700	100.75	65000	2.2	B-KA 107	4P
16	3340	90.96	65000	2.4	B-KAF 107	4P
17	3030	82.61	65000	2.6		
12	4550	123.93	40000	0.95	B-K 97	4P
14	3860	105.13	40000	1.10	B-KF 97	4P
15	3580	96.80	40000	1.20	B-KA 97	4P
17	3180	88.52	40000	1.35	B-KAF 97	4P
18	2860	77.89	40000	1.50	B-K 97	4P
20	2590	70.54	40000	1.65	B-KF 97	4P
23	2300	62.55	40000	1.85	B-KA 97	4P
25	2080	56.55	39700	2.1	B-KAF 97	4P
30	1760	47.93	38800	2.4		
17	3170	86.34	25600	0.85	B-K 87	4P
18	2910	79.34	27000	0.95	B-KF 87	4P
20	2590	70.46	27400	1.05	B-KA 87	4P
23	2310	63.00	27500	1.15	B-KAF 87	4P
25	2080	56.64	27300	1.30		
29	1810	49.16	26900	1.50	B-K 87	4P
32	1620	44.02	26500	1.60	B-KF 87	4P
39	1340	36.52	25800	1.85	B-KA 87	4P
46	1150	31.39	25200	2.3	B-KAF 87	4P
51	1020	27.88	24700	2.5		
32	1660	45.16	14600	0.95	B-K 77	4P
36	1470	40.04	15900	1.05	B-KF 77	4P
46	1130	30.89	17800	1.35	B-KA 77	4P
49	1070	29.27	18000	1.45	B-KAF 77	4P
56	940	25.62	18500	1.65		
62	850	23.08	18800	1.85		
71	745	20.25	19100	2.0	B-K 77	4P
80	655	17.87	19400	2.2	B-KF 77	4P
90	580	15.84	19200	2.4	B-KA 77	4P
106	495	13.52	18600	2.7	B-KAF 77	4P
116	455	12.36	17900	2.2		
132	400	10.84	17400	2.5		
60	880	24.00	9720	0.90		
63	830	22.66	10200	0.95	B-K 67	4P
74	710	19.30	11200	1.05	B-KF 67	4P
82	645	17.54	11600	1.15	B-KA 67	4P
94	580	15.19	12100	1.25	B-KAF 67	4P
108	485	13.22	12500	1.40		
115	460	12.48	12600	1.15	B-K 67	4P
135	390	10.63	12400	1.30	B-KF 67	4P
145	355	9.66	12200	1.35	B-KA 67	4P
171	305	8.37	11900	1.45	B-KAF 67	4P
196	265	7.28	11600	1.55		
81	645	17.57	5080	0.85		
94	560	15.22	5210	0.95		
108	485	13.25	5280	1.05	B-K 57	4P
120	440	11.92	4920	0.95	B-KF 57	4P
127	415	11.26	4950	1.00	B-KA 57	4P
149	350	9.59	4990	1.15	B-KAF 57	4P
164	320	8.71	4990	1.20		
190	275	7.55	4960	1.30		
218	240	6.57	4910	1.45		
7.5kW						
1.7	38200	835	190000	1.30		
2.0	33300	729	190000	1.50	B-K 187 R107	4P
2.3	28400	622	190000	1.75		



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Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
7.5kW						
1.2	55000	1196	181400	0.90	B-K 187 R97	4P
1.4	48000	1046	190000	1.05		
1.5	43400	945	190000	1.15		
1.9	33900	738	190000	1.45		
2.3	28500	621	190000	1.75		
2.7	24100	527	190000	2.1		
1.7	38700	843	150000	0.85	B-K 167 R97	4P
1.9	34700	757	150000	0.90		
2.3	29000	632	150000	1.10		
2.5	25700	561	150000	1.25		
3.0	22100	481	150000	1.45		
3.4	19400	423	150000	1.65		
3.9	16900	369	150000	1.90		
3.3	19900	434	111200	0.90	B-K 157 R97	4P
3.8	17400	379	112500	1.05	B-KF 157 R97	4P
4.3	15300	333	113500	1.20	B-KA 157 R97	4P
4.9	13300	291	114200	1.35	B-KAF 157 R97	4P
4.3	15200	330	75500	0.85	B-K 127 R87	4P
5.0	13200	287	79100	1.00		
5.6	11600	253	79900	1.10		
6.7	9790	213	80800	1.35		
7.1	9220	200	81000	1.30		
8.6	7640	166	81600	1.55		
9.8	6740	147	81900	1.80		
4.4	16400	164.50	150000	1.95	B-K 167	8P
5.3	13400	134.99	150000	2.4		
5.8	12300	164.50	150000	2.6	B-K 167	6P
7.1	10100	134.99	150000	3.2		
6.4	11200	150.41	114900	1.60	B-K 157	6P
7.8	9130	122.39	115000	1.95	B-KF 157	6P
9.6	7100	100.22	115900	2.4	B-KA 157	6P
10	6840	91.65	116000	2.6	B-KAF 157	6P
12	5950	79.75	116200	3.0		
7.1	10200	136.14	80600	1.30	B-K 127	6P
7.8	9140	122.48	81000	1.40	B-KF 127	6P
8.7	8220	110.18	81400	1.60	B-KA 127	6P
11	6710	89.89	81900	1.95	B-KAF 127	6P
9.8	7320	146.07	81700	1.80	B-K 127	4P
11	6820	136.14	81800	1.90		
12	6130	122.48	82000	2.1		
13	5520	110.18	82200	2.4		
16	4500	89.89	82400	2.9		
17	4110	81.98	82500	3.2		
20	3550	70.95	82600	3.7		
10	7180	143.47	65000	1.10	B-K 107	4P
12	6080	121.46	65000	1.30	B-KF 107	4P
13	5630	112.41	65000	1.40	B-KA 107	4P
					B-KAF 107	4P
14	5050	100.75	65000	1.60	B-K 107	4P
16	4560	90.96	64200	1.75		
17	4140	82.61	63200	1.95		
20	3670	73.30	61900	2.2		
22	3330	66.52	60900	2.4		
25	2860	57.17	59100	2.8		
29	2500	49.90	57500	3.1		
34	2120	42.33	55500	3.5		
39	1850	37.00	53800	3.9		
15	4850	96.80	38300	0.90		
17	4330	86.52	38300	1.00	B-KF 97	4P
18	3900	77.89	38100	1.10	B-KA 97	4P
20	3530	70.54	37900	1.20	B-KAF 97	4P
23	3130	62.55	37500	1.35		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole		
7.5kW								
25	2830	56.55	37100	1.50	B-K 97	4P		
30	2400	47.93	36400	1.80				
34	2100	41.87	35600	2.0				
37	1920	38.30	35100	2.2				
42	1710	34.23	34400	2.5				
23	3160	63.00	24100	0.85	B-K 87	4P		
25	2840	56.64	24200	0.95				
29	2460	49.16	24200	1.10				
32	2200	44.02	24200	1.20				
39	1830	36.52	23900	1.35				
46	1570	31.39	23500	1.70	B-K 87	4P		
51	1400	27.88	23200	1.85				
57	1250	24.92	22800	2.0				
64	1120	22.41	22500	2.0				
74	970	19.45	21900	2.4				
82	870	17.42	21500	2.5				
69	800	16.00	20600	2.2				
99	725	14.45	20700	2.9				
48	1550	30.89	15400	1.00			B-K 77	4P
49	1470	29.27	16000	1.05				
56	1280	25.62	17000	1.20				
62	1160	23.08	17700	1.35				
71	1010	20.25	18300	1.50				
80	890	17.87	18600	1.60	B-K 77	4P		
90	795	15.84	18200	1.75				
106	675	13.52	17800	2.0				
116	620	12.36	17000	1.60				
132	545	10.84	16700	1.80				
150	480	9.56	16300	1.95				
168	425	8.48	15900	2.1				
198	365	7.24	15400	2.3				
9.2kW								
1.7	46700	835	190000	1.05			B-K 187 R107	4P
2.0	40700	729	190000	1.25				
2.3	34700	622	190000	1.45				
2.8	29100	520	190000	1.70				
3.2	25300	454	190000	1.95				
1.4	58600	1046	174800	0.85	B-K 187 R97	4P		
1.5	53000	945	184900	0.95				
2.0	41400	738	190000	1.20				
2.3	34800	621	190000	1.45				
2.7	29500	527	190000	1.70				
4.5	17800	318	150000	1.80	B-K 167 R107	4P		
5.2	15500	278	150000	2.1				
5.9	13600	244	150000	2.3				
6.8	11900	213	150000	2.7				
7.0	11500	206	150000	2.8				
2.3	35400	632	150000	0.90	B-K 167 R97	4P		
2.6	31300	561	150000	1.00				
3.0	27000	481	150000	1.20				
3.4	23700	423	150000	1.35				
3.9	20600	369	150000	1.55				
3.7	21400	385	110300	0.85			B-K 157 R107	4P
4.4	18100	325	112100	1.00				
4.8	16700	299	112800	1.10				
5.7	14100	253	113900	1.25				
6.2	12800	230	114400	1.40				
3.8	21200	379	110400	0.85	B-K 157 R97	4P		
4.3	18600	333	111900	0.95				
4.9	16300	291	113000	1.10				
5.7	14200	253	77500	0.90	B-K 127 R87	4P		
6.8	11900	213	79800	1.10				
7.2	11200	200	80100	1.05				
8.7	9320	166	81000	1.30				
9.8	8230	147	81400	1.45				





Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
9.2kW						
11	8310	136.14	81300	1.55	B-K 127	4P
12	7470	122.48	81600	1.75	B-KF 127	4P
13	6720	110.18	81900	1.95	B-KA 127	4P
16	5480	89.89	82200	2.4	B-KAF 127	4P
18	5000	81.98	82300	2.6		
13	6860	112.41	62400	1.15	B-K 107	4P
14	6150	100.75	61800	1.30	B-KF 107	4P
16	5550	90.96	61100	1.45	B-KA 107	4P
					B-KAF 107	4P
17	5040	82.61	60400	1.60		
20	4470	73.30	59400	1.80	B-K 107	4P
22	4060	66.52	58600	1.95	B-KF 107	4P
25	3490	57.17	57100	2.3	B-KA 107	4P
29	3040	49.90	55700	2.6	B-KAF 107	4P
34	2580	42.33	54000	2.8		
18	4750	77.89	35100	0.90	B-K 97	4P
20	4300	70.54	35100	1.00	B-KF 97	4P
23	3820	62.55	35100	1.15	B-KA 97	4P
25	3450	56.55	34900	1.25	B-KAF 97	4P
30	2920	47.93	34400	1.45		
34	2550	41.87	34000	1.70		
38	2340	38.30	33600	1.85	B-K 97	4P
42	2090	34.23	33100	2.1	B-KF 97	4P
47	1880	30.82	32500	2.3	B-KA 97	4P
52	1700	27.91	32000	2.5	B-KAF 97	4P
58	1510	24.75	31300	2.8		
29	3000	49.16	22000	0.90	B-K 87	4P
33	2630	44.02	22200	0.95	B-KF 87	4P
39	2230	36.52	22200	1.10	B-KA 87	4P
46	1910	31.39	22100	1.40	B-KAF 87	4P
52	1700	27.88	21900	1.55		
58	1520	24.92	21700	1.65		
64	1370	22.41	21400	1.70		
74	1190	19.45	21000	1.95	B-K 87	4P
83	1060	17.42	20700	2.1	B-KF 87	4P
90	980	16.00	19700	1.85	B-KA 87	4P
100	880	14.45	20000	2.4	B-KAF 87	4P
115	765	12.56	19500	2.6		
129	880	11.17	18600	2.2		
144	610	10.00	18200	2.5		
62	1410	23.08	16300	1.10	B-K 77	4P
71	1240	20.25	17300	1.20	B-KF 77	4P
81	1090	17.87	17600	1.35	B-KA 77	4P
91	970	15.84	17400	1.45	B-KAF 77	4P
107	820	13.52	17000	1.60		
117	755	12.36	16300	1.35	B-K 77	4P
133	660	10.84	16000	1.50	B-KF 77	4P
151	585	9.56	15700	1.60	B-KA 77	4P
170	515	8.48	15400	1.70	B-KAF 77	4P
199	440	7.24	14900	1.85		
11.0kW						
1.7	55900	835	179700	0.90		
2.0	48800	729	190000	1.05		
2.3	41600	622	190000	1.20	B-K 187 R107	4P
2.8	34800	520	190000	1.45		
3.2	30400	454	190000	1.65		
4.1	23800	355	190000	2.1		
2.0	49600	738	190000	1.00		
2.3	41700	621	190000	1.20	B-K 187 R97	4P
2.7	35300	527	190000	1.40		
4.5	21300	318	150000	1.50		
5.2	18600	278	150000	1.70		
5.9	16300	244	150000	1.95	B-K 167 R107	4P
6.8	14200	213	150000	2.2		
7.0	13700	206	150000	2.3		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
11.0kW						
2.6	37500	561	150000	0.85		
3.0	32300	481	150000	1.00	B-K 167 R97	4P
3.4	28300	423	150000	1.15		
3.9	24700	369	150000	1.30		
4.3	22300	333	109700	0.80	B-K 157 R97	4P
4.9	19500	291	111400	0.90	B-KF 157 R97	4P
					B-KA 157 R97	4P
					B-KAF 157 R97	4P
6.8	14300	213	77400	0.90	B-K 127 R87	4P
7.2	13500	200	78900	0.90	B-KF 127 R87	4P
8.7	11200	166	80100	1.10	B-KA 127 R87	4P
9.8	9850	147	80700	1.20	B-KAF 127 R87	4P
5.3	19700	134.99	150000	1.60	B-K 167	8P
6.6	16000	109.83	150000	2.0		
5.8	18000	164.50	150000	1.80	B-K 167	6P
7.1	14800	134.99	150000	2.2		
8.8	12000	164.50	150000	2.7		
11	9850	134.99	150000	3.2	B-K 167	4P
5.9	17900	122.39	112300	1.00	B-K 157	8P
7.2	14600	100.22	113700	1.25	B-KF 157	8P
7.9	13400	91.65	114200	1.35	B-KA 157	8P
9.0	11600	79.75	114800	1.55	B-KAF 157	8P
6.4	16500	150.41	112900	1.10		
7.8	13400	122.39	114200	1.35	B-K 157	6P
9.6	11000	100.22	115000	1.65	B-KF 157	6P
10	10000	91.65	115300	1.80	B-KA 157	6P
12	8730	79.75	115600	2.1	B-KAF 157	6P
9.6	11000	150.41	115000	1.65	B-K 157	4P
12	8930	122.39	115600	2.0	B-KF 157	4P
14	7310	100.22	115900	2.5	B-KA 157	4P
16	6690	91.65	116000	2.7	B-KAF 157	4P
11	9930	136.14	80700	1.30		
12	8930	122.48	81100	1.45	B-K 127	4P
13	8040	110.18	81400	1.60	B-KF 127	4P
16	6560	89.89	81900	2.0	B-KA 127	4P
18	5980	81.98	82100	2.2	B-KAF 127	4P
20	5180	70.95	82300	2.5		
13	8200	112.41	58400	1.00	B-K 107	4P
14	7350	100.75	58300	1.10	B-KF 107	4P
16	6630	90.96	58000	1.20	B-KA 107	4P
17	6030	82.61	57500	1.35	B-KAF 107	4P
20	5350	73.30	56900	1.50		
22	4850	66.52	56200	1.65	B-K 107	4P
25	4170	57.17	55100	1.90	B-KF 107	4P
29	3640	49.90	54000	2.2	B-KA 107	4P
34	3090	42.33	52500	2.4	B-KAF 107	4P
39	2700	37.00	51200	2.7		
20	5150	70.54	32200	0.85	B-K 97	4P
23	4560	62.55	32500	0.95	B-KF 97	4P
25	4130	56.55	32500	1.05	B-KA 97	4P
30	3500	47.93	32500	1.25	B-KAF 97	4P
34	3050	41.87	32200	1.40		
38	2790	38.30	32000	1.55		
42	2500	34.23	31600	1.70	B-K 97	4P
47	2250	30.82	31300	1.90	B-KF 97	4P
52	2040	27.91	30800	2.1	B-KA 97	4P
58	1800	24.75	30300	2.4	B-KAF 97	4P
64	1630	22.37	29800	2.6		





BEVEL HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
11.0kW						
33	3210	44.02	20000	0.80	B-K 87	4P
39	2660	36.52	20400	0.95	B-KF 87	4P
46	2290	31.39	20600	1.20	B-KA 87	4P
52	2030	27.88	20600	1.30	B-KAF 87	4P
58	1820	24.92	20500	1.40		
64	1630	22.41	20300	1.40		
74	1420	19.45	20100	1.60		
83	1270	17.42	19800	1.75		
90	1170	16.00	18800	1.55	B-K 87	4P
100	1050	14.45	19400	2.0	B-KF 87	4P
115	920	12.56	18900	2.2	B-KA 87	4P
129	810	11.17	18000	1.85	B-KAF 87	4P
144	730	10.00	17700	2.1		
174	605	8.29	17100	2.3		
200	525	7.21	16700	2.5		
62	1680	23.08	14400	0.90		
71	1480	20.25	15900	1.00		
81	1300	17.87	16600	1.10		
91	1160	15.84	16500	1.20	B-K 77	4P
107	990	13.52	16300	1.35	B-KF 77	4P
117	900	12.36	15500	1.10	B-KA 77	4P
139	790	10.84	15300	1.25	B-KAF 77	4P
151	700	9.56	15100	1.35		
170	620	8.48	14800	1.45		
199	530	7.24	14500	1.55		
15.0kW						
2.3	56100	622	179400	0.90		
2.8	47000	520	190000	1.05		
3.2	41000	454	190000	1.20	B-K 187 R107	4P
4.1	32100	355	190000	1.55		
5.6	23600	261	190000	2.1		
4.6	28700	318	150000	1.10		
5.3	25000	278	150000	1.30		
6.0	22000	244	150000	1.45		
6.8	19200	213	150000	1.65	B-K 167 R107	4P
7.1	18500	206	150000	1.75		
8.1	16200	180	150000	1.95		
9.1	14400	160	150000	2.2		
6.3	20700	230	110700	0.85		
6.9	19200	213	116000	0.95	B-K 157 R107	4P
7.8	16800	187	112800	1.05	B-KF 157 R107	4P
9.3	14200	157	113900	1.25	B-KA 157 R107	4P
12	11000	122	115000	1.65	B-KAF 157 R107	4P
14	9630	107	115400	1.85		
5.4	26600	179.86	190000	1.90	B-K 187	6P
5.9	24400	165.21	190000	2.0		
7.2	19900	134.99	150000	1.60	B-K 167	6P
8.8	16200	109.83	150000	1.95		
8.9	16100	164.50	150000	2.0	B-K 167	4P
11	13200	134.99	150000	2.4		
7.9	18100	122.39	112200	1.00	B-K 157	6P
9.7	14800	100.22	113700	1.20	B-KF 157	6P
11	13500	91.65	114100	1.35	B-KA 157	6P
12	11800	79.75	114800	1.55	B-KAF 157	6P
14	10400	70.38	115200	1.75		
9.7	14800	150.41	113700	1.20	B-K 157	4P
12	12000	122.39	114700	1.50	B-KF 157	4P
15	9830	100.22	114200	1.85	B-KA 157	4P
16	8990	91.65	112500	2.0	B-KAF 157	4P
18	7820	79.75	109600	2.3		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
15.0kW						
11	13400	136.14	79000	0.95	B-K 127	4P
12	12000	122.48	79700	1.10	B-KF 127	4P
13	10800	110.18	80300	1.20	B-KA 127	4P
					B-KAF 127	4P
16	8820	89.89	81200	1.45		
18	8040	81.98	81400	1.60	B-K 127	4P
21	6960	70.95	81600	1.85	B-KF 127	4P
23	6140	62.60	80000	2.1	B-KA 127	4P
27	5300	54.07	78000	2.5	B-KAF 127	4P
31	4690	47.82	76200	2.8		
16	8920	90.96	50900	0.90	B-K 107	4P
18	8110	82.61	51100	1.00	B-KF 107	4P
20	7190	73.30	51200	1.10	B-KA 107	4P
22	6530	66.52	51000	1.25	B-KAF 107	4P
26	5610	57.17	50600	1.45		
29	4900	49.90	50000	1.60	B-K 107	4P
34	4150	42.33	49100	1.75	B-KF 107	4P
39	3630	37.00	48200	2.0	B-KA 107	4P
45	3210	32.69	47300	2.2	B-KAF 107	4P
47	3070	31.28	47000	2.2		
50	2840	29.00	46400	2.5		
30	4700	47.93	28100	0.90	B-K 97	4P
35	4110	41.87	28400	1.05	B-KF 97	4P
38	3760	38.30	28500	1.15	B-KA 97	4P
43	3360	34.23	28500	1.30	B-KAF 97	4P
47	3020	30.82	28400	1.40		
52	2740	27.91	28300	1.55	B-K 97	4P
59	2430	24.75	28000	1.75	B-KF 97	4P
65	2190	22.37	27700	1.95	B-KA 97	4P
77	1860	18.96	27200	2.3	B-KAF 97	4P
88	1620	16.56	26600	2.7		
47	3080	31.39	17300	0.90		
52	2730	27.88	17600	0.95	B-K 87	4P
59	2440	24.92	17800	1.00	B-KF 87	4P
65	2200	22.41	18000	1.05	B-KA 87	4P
75	1910	19.45	18000	1.20	B-KAF 87	4P
84	1710	17.42	18000	1.30		
91	1570	16.00	16800	1.15		
101	1420	14.45	17800	1.50	B-K 87	4P
116	1230	12.56	17600	1.60	B-KF 87	4P
131	1100	11.17	16600	1.35	B-KA 87	4P
146	980	10.00	16400	1.55	B-KAF 87	4P
176	810	8.29	16000	1.70		
202	705	7.21	15700	1.85		
18.5kW						
2.8	57800	520	176300	0.85		
3.2	50400	454	189200	1.00		
4.1	39500	355	190000	1.25	B-K 187 R107	4P
5.6	29000	261	190000	1.70		
6.6	24600	221	190000	2.0		
4.6	35300	318	150000	0.90		
5.3	30800	278	150000	1.05		
6.0	27100	244	150000	1.20		
6.9	23600	213	150000	1.35		
7.1	22800	206	150000	1.40	B-K 167 R107	4P
8.1	20000	180	150000	1.60		
9.2	17700	160	150000	1.80		
11	15000	135	150000	2.1		
12	13100	118	150000	2.4		
7.8	20700	187	110700	0.85	B-K 157 R107	4P
9.3	17400	157	112500	1.05	B-KF 157 R107	4P
12	13600	122	114100	1.35	B-KA 157 R107	4P
14	11900	107	112300	1.50	B-KAF 157 R107	4P
5.4	32800	179.86	190000	1.55	B-K 187	
5.9	30100	165.21	190000	1.65	B-KF 187	
6.7	26300	144.59	190000	1.90	B-KA 187	6P
7.5	23600	129.69	190000	2.1	B-KAF 187	



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
18.5kW						
8.1	21700	179.86	190000	2.3		
8.9	19900	165.21	190000	2.5	B-K 187	4P
10	17400	144.59	190000	2.9		
11	15600	129.69	190000	3.2		
11	16300	134.99	150000	1.95		
13	13200	109.83	150000	2.4	B-K 167	4P
17	10600	87.86	150000	3.0		
9.7	18300	100.22	112100	1.00	B-K 157	6P
11	16700	91.65	112800	1.10	B-KF 157	6P
12	14500	79.75	111500	1.25	B-KA 157	6P
14	12800	70.38	109900	1.40	B-KAF 157	6P
12	14800	122.39	111600	1.20		
15	12100	100.22	109100	1.50		
16	11100	91.65	107800	1.65	B-K 157	4P
18	9620	79.75	105600	1.85	B-KF 157	4P
21	8490	70.38	103400	2.1	B-KA 157	4P
24	7360	61.02	100700	2.5	B-KAF 157	4P
27	6550	54.29	98500	2.8		
31	5640	46.79	95500	3.2		
39	4580	38.02	91300	3.9		
13	13300	110.18	79000	1.00	B-K 127	4P
16	10800	89.89	79000	1.20	B-KF 127	4P
18	9890	81.98	78500	1.30	B-KA 127	4P
					B-KAF 127	4P
21	8560	70.95	77500	1.50		
23	7550	62.60	76400	1.70		
27	6520	54.07	74800	2.0	B-K 127	4P
31	5770	47.82	73400	2.2	B-KF 127	4P
36	4850	40.19	71300	2.7	B-KA 127	4P
40	4370	36.25	69900	3.0	B-KAF 127	4P
47	3780	31.37	68000	3.4		
53	3340	27.68	66200	3.9		
20	8840	73.30	46300	0.90	B-K 107	4P
22	8020	66.52	46600	1.00	B-KF 107	4P
26	6890	57.17	46800	1.15	B-KA 107	4P
29	6020	49.90	46700	1.30	B-KAF 107	4P
35	5100	42.33	46300	1.45		
40	4460	37.00	45700	1.60		
45	3940	32.69	45100	1.85	B-K 107	4P
47	3770	31.28	44900	1.80	B-KF 107	4P
51	3500	29.00	44400	2.1	B-KA 107	4P
56	3170	26.32	43800	2.3	B-KAF 107	4P
65	2730	22.62	42700	2.6		
74	2380	19.74	41700	3.0		
88	2020	16.75	40400	3.5		
35	5050	41.87	25100	0.85	B-K 97	4P
48	3720	30.82	26000	1.15	B-KF 97	4P
53	3360	27.91	26000	1.30	B-KA 97	4P
59	2980	24.75	26000	1.45	B-KAF 97	4P
65	2700	22.37	25900	1.60		
77	2290	18.96	25700	1.90	B-K 97	4P
88	2000	16.56	25300	2.2	B-KF 97	4P
106	1670	13.85	24800	2.6	B-KA 97	4P
122	1450	11.99	24300	2.7	B-KAF 97	4P
59	3000	24.92	15600	0.85		
65	2700	22.41	15900	0.85		
75	2340	19.45	16200	1.00		
84	2100	17.42	16400	1.05	B-K 87	4P
101	1740	14.45	16500	1.20	B-KF 87	4P
117	1510	12.56	16400	1.30	B-KA 87	4P
131	1350	11.17	15400	1.10	B-KAF 87	4P
147	1210	10.00	15300	1.25		
177	1000	8.29	15100	1.40		
203	870	7.21	14900	1.50		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
22kW						
3.2	60000	454	172300	0.85		
4.1	47000	355	190000	1.05		
5.6	34500	261	190000	1.45	B-K 187 R107	4P
6.6	29300	221	190000	1.70		
7.6	25600	193	190000	1.95		
8.9	21600	163	190000	2.3		
5.3	36700	278	150000	0.85		
6.0	32200	244	150000	1.00		
6.9	28200	213	150000	1.15		
7.1	27200	206	150000	1.20		
8.1	23800	180	150000	1.35	B-K 167 R107	4P
9.2	21100	160	150000	1.50		
11	17900	135	150000	1.80		
12	15600	118	150000	2.0		
9.3	20800	157	109800	0.85	B-K 157 R107	4P
12	16200	122	108600	1.10	B-KF 157 R107	4P
14	14100	107	107300	1.25	B-KA 157 R107	4P
					B-KAF 157 R107	4P
5.4	39000	179.86	190000	1.30		
5.9	35800	165.21	190000	1.40		
6.7	31300	144.59	190000	1.60	B-K 187	6P
7.5	28100	129.69	190000	1.80		
8.6	24400	112.60	190000	2.0		
8.1	25800	179.86	190000	1.95		
8.9	23700	165.21	190000	2.1	B-K 187	4P
10	20700	144.59	190000	2.4		
11	18600	129.69	190000	2.7		
11	19400	134.99	150000	1.65		
13	15700	109.83	150000	2.0	B-K 167	4P
17	12600	87.86	150000	2.5		
19	11200	78.14	150000	2.9		
9.7	21700	100.22	105900	0.85	B-K 157	6P
11	19900	91.65	105900	0.90	B-KF 157	6P
12	17300	79.75	105500	1.05	B-KA 157	6P
14	15200	70.38	104600	1.20	B-KAF 157	6P
16	13200	61.02	103300	1.35		
12	17600	122.39	105500	1.05		
15	14400	100.22	104100	1.25		
16	13100	91.65	103200	1.35	B-K 157	4P
18	11400	79.75	101600	1.55	B-KF 157	4P
21	10100	70.38	99800	1.80	B-KA 157	4P
24	8750	61.02	97700	2.1	B-KAF 157	4P
27	7790	54.29	95800	2.3		
31	6710	46.79	93200	2.7		
39	5450	38.02	89400	3.3		
16	12900	89.89	73900	1.00	B-K 127	4P
18	11800	81.98	73800	1.10	B-KF 127	4P
21	10200	70.95	73400	1.30	B-KA 127	4P
23	8980	62.60	72800	1.45	B-KAF 127	4P
27	7750	54.07	71700	1.70		
31	6860	47.82	70700	1.90		
36	5760	40.19	69000	2.3	B-K 127	4P
40	5200	36.25	67800	2.5	B-KF 127	4P
47	4500	31.37	66200	2.9	B-KA 127	4P
53	3970	27.68	64600	3.3	B-KAF 127	4P
61	3430	23.91	62800	3.8		
69	3030	21.15	61200	4.3		
26	8200	57.17	43000	1.00	B-K 107	4P
29	7160	49.90	43300	1.10	B-KF 107	4P
35	6070	42.33	43400	1.20	B-KA 107	4P
					B-KAF 107	4P



BEVEL HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
22kW						
40	5310	37.00	43200	1.35		
45	4690	32.69	42900	1.55		
47	4490	31.28	42800	1.50		
51	4160	29.00	42500	1.75		
56	3770	26.32	42000	1.90	B-K 107	4P
65	3240	22.62	41200	2.2	B-KF 107	4P
74	2830	19.74	40400	2.5	B-KA 107	4P
88	2400	16.75	39300	2.9	B-KAF 107	4P
100	2100	14.64	38400	3.3		
109	1930	13.43	36800	2.2		
125	1680	11.73	35800	2.6		
147	1430	9.94	34800	2.9		
48	4420	30.82	23500	0.95	B-K 97	4P
53	4000	27.91	23800	1.05	B-KF 97	4P
59	3550	24.75	24100	1.20	B-KA 97	4P
65	3210	22.37	24200	1.35	B-KAF 97	4P
77	2720	18.96	24100	1.60		
88	2370	16.56	24000	1.80	B-K 97	4P
106	1990	13.85	23700	2.2	B-KF 97	4P
122	1720	11.99	23300	2.3	B-KA 97	4P
141	1490	10.41	21800	1.90	B-KAF 97	4P
168	1250	8.71	21300	2.1		
75	2790	19.45	14400	0.80		
84	2500	17.42	14800	0.90		
101	2070	14.45	15100	1.00	B-K 87	4P
117	1800	12.56	15300	1.10	B-KF 87	4P
131	1600	11.17	14200	0.95	B-KA 87	4P
147	1430	10.00	14200	1.05	B-KAF 87	4P
177	1190	8.29	14300	1.20		
203	1030	7.21	14200	1.25		
30kW						
5.6	47000	261	190000	1.05		
6.6	39800	221	190000	1.25	B-K 187 R107	4P
7.6	34800	193	190000	1.45		
9.0	29400	163	190000	1.70		
6.9	38300	213	150000	0.85		
7.1	37000	206	150000	0.85		
8.1	32400	180	150000	1.00	B-K 167 R107	4P
9.2	28700	160	150000	1.10		
11	24400	135	150000	1.30		
12	21300	118	150000	1.50		
8.2	35100	179.86	190000	1.45		
8.9	32200	165.21	190000	1.55		
10	28200	144.59	190000	1.75		
11	25300	129.69	190000	2.0	B-K 187	4P
13	21900	112.60	190000	2.3		
14	19900	102.16	190000	2.5		
17	17200	88.00	190000	2.9		
13	21400	109.83	150000	1.50		
17	17100	87.86	150000	1.85		
19	15200	78.14	150000	2.1	B-K 167	4P
22	13300	68.07	150000	2.4		
24	11800	60.74	150000	2.7		
15	19500	100.22	92700	0.90		
16	17900	91.65	92800	1.00		
18	15500	79.75	92400	1.15	B-K 157	4P
21	13700	70.38	91800	1.30	B-KF 157	4P
24	11900	61.02	90700	1.50	B-KA 157	4P
27	10600	54.29	89500	1.70	B-KAF 157	4P
31	9120	46.79	87800	1.95		
39	7410	38.02	85100	2.4		
47	6100	31.30	82200	3.0		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
30kW						
21	13800	70.95	64200	0.95		
23	12200	62.60	64600	1.05		
27	10500	54.07	64700	1.25	B-K 127	4P
31	9320	47.82	64400	1.40	B-KF 127	4P
37	7830	40.19	63700	1.65	B-KA 127	4P
41	7060	36.25	63100	1.65	B-KAF 127	4P
47	6110	31.37	62000	2.1		
53	5390	27.68	61000	2.4		
62	4660	23.91	59600	2.8		
35	8250	42.33	36100	0.90	B-K 107	4P
40	7210	37.00	37600	1.00	B-KF 107	4P
47	6100	31.28	38000	1.10	B-KA 107	4P
51	5650	29.00	38000	1.25		
56	5130	26.32	38000	1.40		
65	4410	22.62	37700	1.65		
74	3050	19.74	37400	1.85	B-K 107	4P
88	3260	16.75	36700	2.2	B-KF 107	4P
100	2850	14.64	36100	2.4	B-KA 107	4P
109	2620	13.43	34400	1.65	B-KAF 107	4P
125	2280	11.73	33800	1.90		
148	1940	9.94	33000	2.2		
169	1690	8.69	32200	2.4		
59	4820	24.75	19600	0.90		
66	4360	22.37	20100	1.00		
78	3690	18.96	20700	1.15	B-K 97	4P
89	3230	16.56	21000	1.35	B-KF 97	4P
106	2700	13.85	21200	1.60	B-KA 97	4P
123	2340	11.99	21100	1.65	B-KAF 97	4P
141	2030	10.41	19500	1.40		
169	1700	8.71	19400	1.55		
37kW						
5.6	58000	261	176000	0.85		
6.6	49200	221	190000	1.00		
7.6	43000	193	190000	1.15	B-K 187 R107	4P
9.0	36300	163	190000	1.40		
8.1	40000	180	150000	0.80		
9.2	35500	160	150000	0.90		
11	30100	135	150000	1.05	B-K 167 R107	4P
12	26300	118	150000	1.20		
8.2	43200	179.86	190000	1.15		
8.9	39700	165.21	190000	1.25		
10	34800	144.59	190000	1.45		
11	31200	129.69	190000	1.60	B-K 187	4P
13	27100	112.60	190000	1.85		
14	24600	102.16	190000	2.0		
17	21200	88.00	190000	2.4		
13	26400	109.83	150000	1.20		
17	21100	87.86	150000	1.50		
19	10800	78.14	150000	1.70	B-K 167	4P
22	16400	68.07	150000	1.85		
24	14600	60.74	150000	2.2		
28	12400	51.77	150000	2.6		
16	22000	91.65	83600	0.80	B-K 157	4P
18	19200	79.75	84500	0.95	B-KF 157	4P
					B-KA 157	4P
					B-KAF 157	4P
21	16900	70.38	84800	1.05		
24	14700	61.02	84600	1.25	B-K 157	4P
27	13000	54.29	84100	1.40	B-KF 157	4P
31	11200	46.79	83200	1.80	B-KA 157	4P
39	9140	38.02	81300	1.95	B-KAF 157	4P
47	7520	31.30	79100	2.4		
23	15000	62.60	57500	0.85	B-K 127	4P
27	13000	54.07	58500	1.00	B-KF 127	4P
31	11500	47.82	59000	1.15	B-KA 127	4P
37	9660	40.19	59100	1.35	B-KAF 127	4P



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
37kW						
41	8710	36.25	59000	1.50		
47	7540	31.37	58500	1.70		
53	6650	27.68	57800	1.95		
62	5740	23.91	56900	2.3	B-K 127	4P
70	5080	21.15	56000	2.6	B-KF 127	4P
83	4270	17.77	54500	3.0	B-KA 127	4P
102	3450	14.35	52500	3.5	B-KAF 127	4P
115	3070	12.79	50200	2.8		
137	2580	10.74	48600	3.1		
169	2090	8.68	46600	3.5		
40	8890	37.00	29000	0.80		
47	7520	31.28	33000	0.90		
51	6970	29.00	34200	1.05		
56	6320	26.32	34500	1.15		
65	5440	22.62	34700	1.30	B-K 107	4P
74	4740	19.74	34700	1.50	B-KF 107	4P
88	4020	16.75	34500	1.75	B-KA 107	4P
100	3520	14.64	34200	1.95	B-KAF 107	4P
109	3230	13.43	32300	1.35		
125	2820	11.73	32000	1.55		
148	2390	9.94	31400	1.75		
169	2090	8.69	30900	1.95		
45kW						
6.6	59800	221	172600	0.85		
7.6	52300	193	186100	1.95	B-K 187 R107	4P
9.0	44200	163	190000	1.15		
11	36600	135	150000	0.85	B-K 167 R107	4P
12	32000	118	150000	1.00		
8.2	52600	179.86	185500	0.95		
8.9	48300	165.21	190000	1.05		
10	42300	144.59	190000	1.20		
11	37900	129.69	190000	1.30	B-K 187	4P
13	32900	112.60	190000	1.50		
14	29900	102.16	190000	1.65		
17	25700	88.00	190000	1.95		
20	21600	73.96	187700	2.3		
13	32100	109.83	150000	1.00		
17	25700	87.86	150000	1.25		
19	22800	78.14	150000	1.40		
22	19900	68.07	150000	1.60	B-K 167	4P
24	17800	60.74	149000	1.80		
28	15100	51.77	145600	2.1		
34	12500	42.89	140600	2.5		
21	20600	70.38	76800	0.85		
24	17800	61.02	77700	1.00		
27	15900	54.29	77900	1.15		
31	13700	46.79	77000	1.30	B-K 157	4P
39	11100	38.02	76900	1.60	B-KF 157	4P
47	9150	31.30	75500	1.95	B-KA 157	4P
53	8080	27.62	74300	2.2	B-KAF 157	4P
61	7000	23.95	72800	2.6		
69	6230	21.31	71500	2.9		
80	5370	18.37	69700	3.3		
31	14000	47.82	52800	0.95	B-K 127	4P
37	11700	40.19	53900	1.10	B-KF 127	4P
41	10600	36.25	54200	1.25	B-KA 127	4P
					B-KAF 127	4P
47	9170	31.37	54400	1.40		
53	8090	27.68	54200	1.60		
62	6990	23.91	53000	1.85		
70	6180	21.15	53200	2.1	B-K 127	4P
83	5190	17.77	52200	2.5	B-KF 127	4P
102	4190	14.35	50700	2.9	B-KA 127	4P
115	3740	12.79	48300	2.3	B-KAF 127	4P
137	3140	10.74	47000	2.5		
169	2540	8.68	45300	2.8		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
45kW						
51	8400	29.00	25600	0.85	B-K 107	4P
56	7690	26.32	28300	0.95	B-KF 107	4P
65	6610	22.62	31000	1.10	B-KA 107	4P
74	5770	19.74	31700	1.25	B-KAF 107	4P
88	4890	16.75	31900	1.45		
100	4200	14.64	31900	1.60	B-K 107	4P
109	3930	13.43	29900	1.10	B-KF 107	4P
125	3430	11.73	29900	1.25	B-KA 107	4P
148	2910	9.94	29600	1.45	B-KAF 107	4P
169	2540	8.69	29300	1.60		
55kW						
10	51500	144.59	187400	0.95		
11	46200	129.69	180000	1.10		
13	40100	112.60	188500	1.25		
14	36400	102.16	187100	1.35	B-K 187	4P
17	31300	88.00	184200	1.60		
20	26300	73.96	180200	1.90		
23	22800	64.04	176300	2.2		
17	31300	87.86	145300	1.00		
19	27800	78.14	144600	1.15		
22	24200	68.07	143300	1.30		
24	21600	60.74	141700	1.50	B-K 167	4P
28	18400	51.77	139100	1.75		
34	15300	42.89	135400	2.1		
40	13000	36.61	131900	2.5		
24	21700	61.02	69000	0.85		
27	19300	54.29	70200	0.95		
32	16700	46.79	71200	1.10		
39	13500	38.02	71500	1.35	B-K 157	4P
47	11100	31.30	71000	1.60	B-KF 157	4P
53	9840	27.62	70400	1.85	B-KA 157	4P
62	8530	23.95	69400	2.1	B-KAF 157	4P
69	7590	21.31	68400	2.4		
80	6540	18.37	67000	2.8		
99	5310	14.92	64800	3.4		
117	4510	12.65	62900	3.8		
37	14300	40.19	47400	0.90	B-K 127	4P
47	11200	31.37	49300	1.15	B-KF 127	4P
53	8850	27.68	49700	1.30	B-KA 127	4P
					B-KAF 127	4P
62	8510	23.91	49900	1.55		
70	7530	21.15	49600	1.75	B-K 127	4P
83	6330	17.77	49300	2.0	B-KF 127	4P
103	5110	14.35	48300	2.4	B-KA 127	4P
115	4550	12.79	45900	1.85	B-KAF 127	4P
137	3830	10.74	45000	2.1		
170	3090	8.68	43600	2.3		
75kW						
11	62800	129.69	164100	0.80		
13	45400	112.60	166100	0.90		
14	49400	102.16	166600	1.00		
17	42600	88.00	166600	1.15	B-K 187	4P
20	35800	73.96	165300	1.40		
23	31000	64.04	163400	1.60		
28	25800	53.36	160100	1.95		
33	22000	45.50	156700	2.3		
19	37800	78.14	128100	0.85		
22	32900	68.07	127100	0.95		
24	29400	60.74	127300	1.10		
29	25100	51.77	126800	1.30		
35	20800	42.89	125200	1.55	B-K 167	4P
40	17700	36.61	123200	1.80		
46	15600	32.25	121300	2.0		
51	13900	28.77	119300	2.3		
60	11900	24.52	116300	2.7		



BEVEL HELICAL GEARBOXES

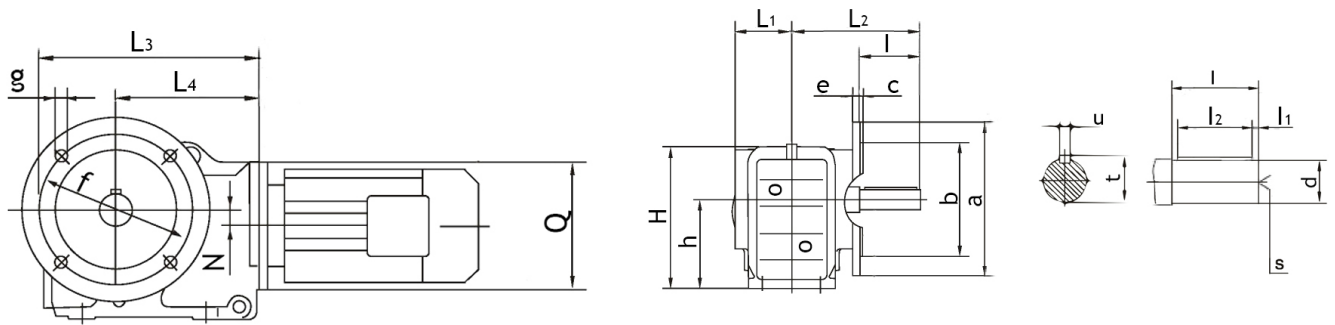
Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
75kW						
39	18400	38.02	60800	1.00		
47	15100	31.30	62200	1.20		
54	13400	27.62	62600	1.35	B-K 157	4P
62	11600	23.95	62600	1.55	B-KF 157	4P
69	10300	21.31	62400	1.75	B-KA 157	4P
81	8890	18.37	61800	2.0	B-KAF 157	4P
99	7220	14.92	60500	2.5		
117	6120	12.65	59300	2.8		
47	15200	31.37	39200	0.85		
53	13400	27.68	40800	0.95		
62	11600	23.91	42200	1.10	B-K 127	4P
70	10200	21.15	42900	1.25	B-KF 127	4P
83	8600	17.77	43500	1.50	B-KA 127	4P
103	6940	14.35	43700	1.75	B-KAF 127	4P
116	6190	12.79	41100	1.40		
138	5200	10.74	41000	1.55		
171	4200	8.68	40400	1.70		
90kW						
14	59300	102.16	151300	0.85		
17	51100	88.00	153400	1.00		
20	42900	73.96	154200	1.15		
23	37200	64.04	153800	1.35	B-K 187	4P
28	31000	53.36	152200	1.60		
33	28400	45.50	149900	1.90		
35	24700	42.51	148700	2.0		
38	22400	38.57	146900	2.2		
22	39500	68.07	115100	0.80		
24	35300	60.74	116600	0.90		
29	30100	51.77	117600	1.05		
35	24900	42.89	117600	1.30		
40	21300	36.61	116700	1.50	B-K 167	4P
46	18700	32.25	115500	1.70		
51	16700	28.77	114200	1.90		
60	14200	24.52	111900	2.2		
73	11800	20.32	108800	2.7		
85	10100	17.34	106000	3.2		
39	22100	38.02	52700	0.80		
47	18200	31.30	55500	1.00		
54	18000	27.62	56700	1.10	B-K 157	4P
62	13900	23.95	57500	1.30	B-KF 157	4P
69	12400	21.31	57900	1.45	B-KA 157	4P
81	10700	18.37	57900	1.70	B-KAF 157	4P
99	8670	14.92	57400	2.1		
117	7350	12.65	56600	2.3		
62	13900	23.91	36400	0.95		
70	12300	21.15	37800	1.05	B-K 127	4P
83	10300	17.77	39200	1.25	B-KF 127	4P
103	8330	14.35	40200	1.45	B-KA 127	4P
116	7420	12.79	37600	1.15	B-KAF 127	4P
138	6240	10.74	38000	1.30		
171	5040	8.68	38000	1.45		
110kW						
17	62300	88.00	136000	0.80		
20	52300	73.96	139500	0.95		
23	45300	64.04	141000	1.10		
28	37700	53.36	141500	1.30		
33	32200	45.50	140800	1.55	B-K 187	4P
35	30100	42.51	140200	1.65		
39	27300	38.57	139100	1.85		
45	23500	33.23	137000	2.1		
53	19800	27.92	134000	2.5		
29	36600	51.77	105500	0.85		
35	30300	42.89	107500	1.05		
41	25900	36.61	108100	1.25		
46	22800	32.25	107900	1.40		
52	20400	28.77	107400	1.55	B-K 167	4P
61	17300	24.52	106100	1.85		
73	14400	20.32	104000	2.2		
86	12300	17.34	101800	2.6		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
110kW						
62	16900	23.95	50800	1.05	B-K 157	4P
70	15100	21.31	51900	1.20	B-KF 157	4P
81	13000	18.37	52700	1.40	B-KA 157	4P
100	10600	14.92	53100	1.70	B-KAF 157	4P
117	8950	12.65	53000	1.90		
132kW						
20	62800	73.96	123300	0.80		
23	54400	64.04	127000	0.90		
28	45300	53.36	129800	1.10		
33	38600	45.50	130800	1.30		
35	36100	42.51	130900	1.40		
39	32700	38.57	130700	1.55	B-K 187	4P
45	28200	33.23	129800	1.75		
53	23700	27.92	127900	2.1		
61	20500	24.18	125900	2.3		
74	17100	20.15	122800	2.6		
86	14600	17.18	119700	2.8		
35	36400	42.89	96400	0.90		
41	31100	36.61	98600	1.05		
46	27400	32.25	99600	1.15		
52	24400	28.77	99900	1.30	B-K 167	4P
61	20800	24.52	99800	1.55		
73	17200	20.32	98700	1.85		
86	14700	17.34	97300	2.2		
62	20300	23.95	43400	0.90	B-K 157	4P
70	18100	21.31	45300	1.00	B-KF 157	4P
81	15600	18.37	47000	1.15	B-KA 157	4P
100	12700	14.92	48500	1.40	B-KAF 157	4P
117	10700	12.65	49100	1.60		
160kW						
28	54900	53.36	114900	0.90		
33	46800	45.50	118100	1.05		
45	34200	33.23	120500	1.45		
53	28700	27.92	120100	1.75	B-K 187	4P
61	24900	24.18	119100	1.90		
74	20700	20.15	117200	2.1		
86	17700	17.18	114900	2.3		
41	37700	36.61	86500	0.85		
61	25200	24.52	91700	1.25	B-K 167	4P
73	20900	20.32	82000	1.55		
86	17800	17.34	91600	1.80		
81	18900	18.37	39800	0.95	B-K 157	4P
100	15400	14.92	42600	1.15	B-KF 157	4P
117	13000	12.65	44100	1.30	B-KA 157	4P
					B-KAF 157	4P
200kW						
33	58500	45.50	100000	0.85		
45	42700	33.23	107300	1.15		
53	35900	27.92	109000	1.40	B-K 187	4P
61	31100	24.18	109500	1.55		
74	25900	20.15	109100	1.70		
86	22100	17.18	108100	1.85		
61	31500	24.52	80100	1.00		
73	26100	20.32	82400	1.20	B-K 167	4P
86	22300	17.34	83400	1.45		
100	19200	14.92	34200	0.95	B-K 157	4P
117	16300	12.65	36900	1.05	B-KF 157	4P
					B-KA 157	4P
					B-KAF 157	4P

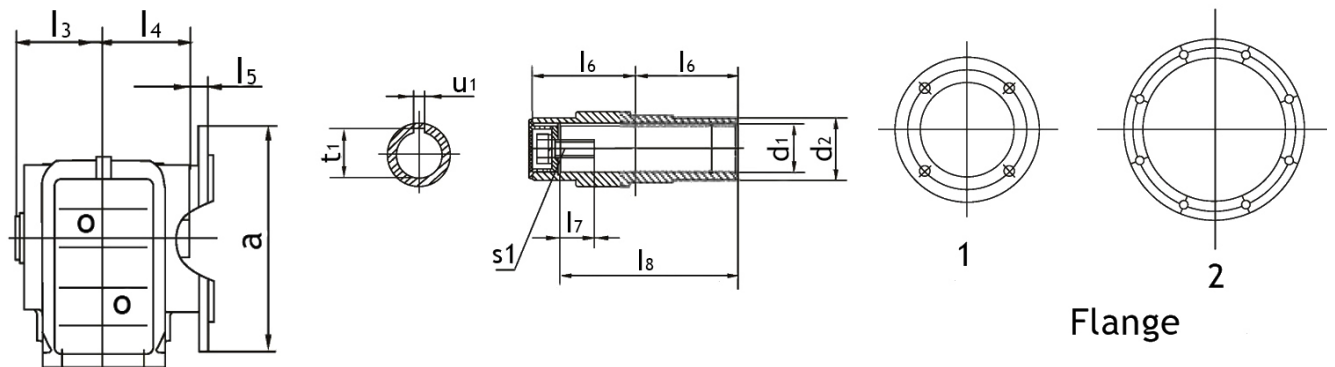


MOUNTING DIMENSIONS

B-KF..37~157



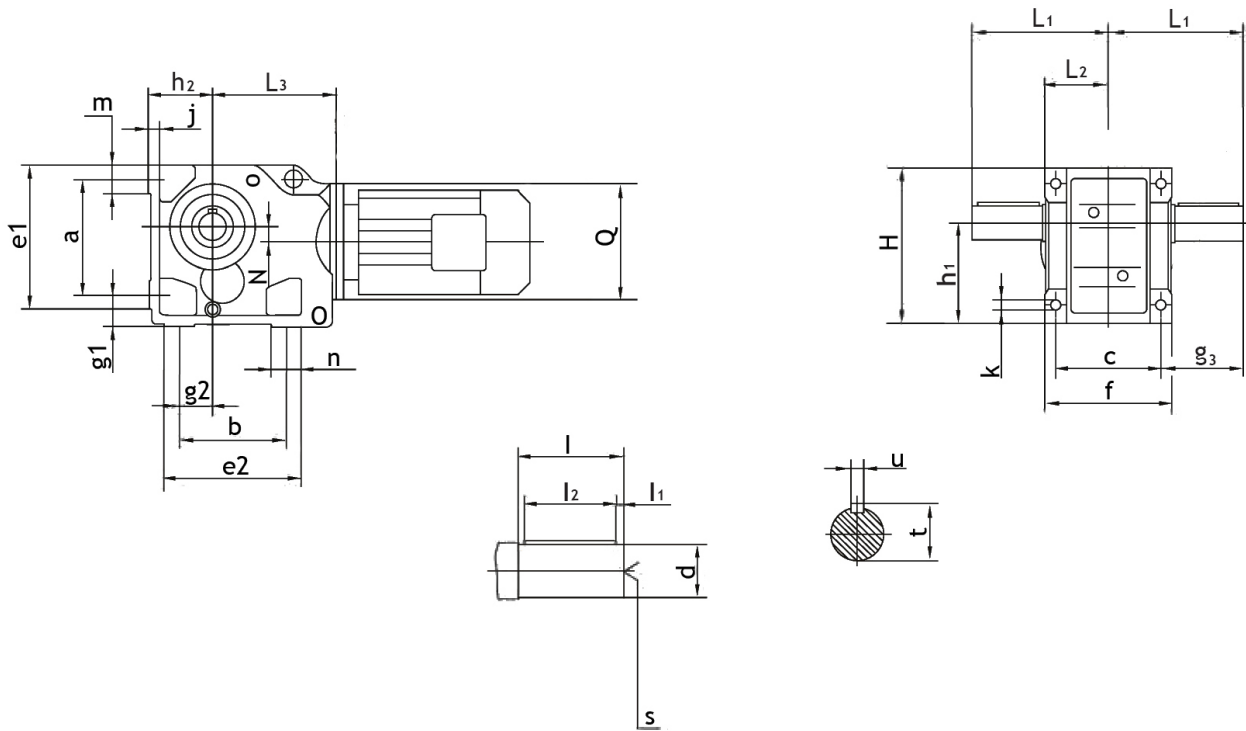
B-KAF..37~157



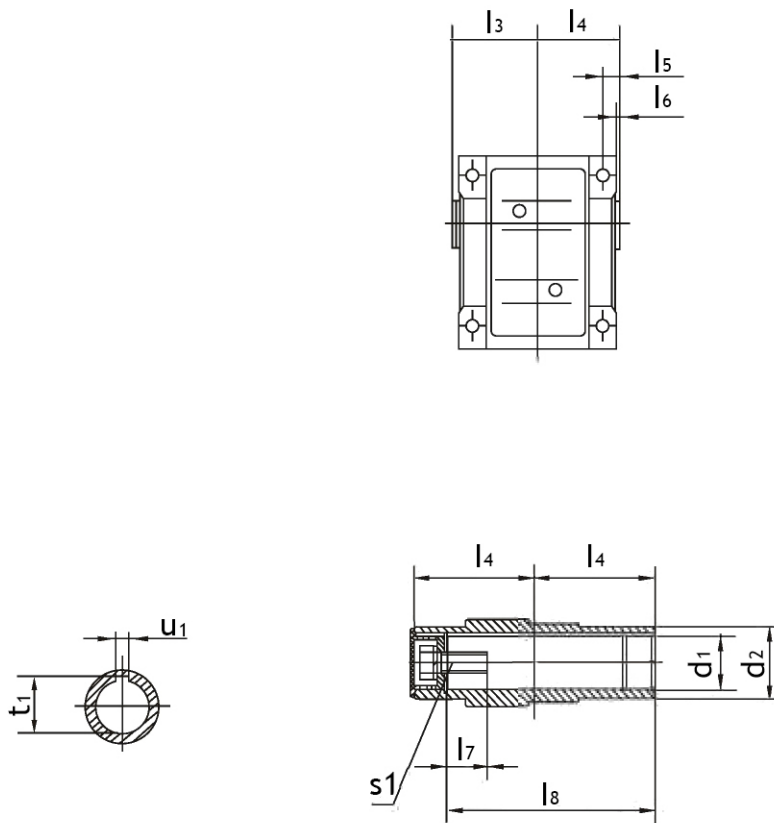
Model	Flange	a b	c e	f g h	Shaft dimension				Hollow shaft dimension				H	L ₁ L ₂ L ₃	L ₄ N Q	
					d l	l ₁ l ₂	S	t u	d ₁ d ₂	l ₃ l ₄ l ₅	l ₆ l ₇ l ₈	S ₁				t ₁ u ₁
B-KF..37 B-KAF..37	1	160 110j6	3.5 10	130 9 100	25k6 50	5 40	M10	28 8	30H7 45	63 60 24	60 17 105	M10x25	33.3 8	164	57.5 134 210	139 8.5 120
B-KF..47 B-KAF..47	1	200 130j6	3.5 10	165 11 112	30k6 60	3.5 50	M10	33 8	35H7 50	78 75 25	75 22 132	M12x30	38.3 10	185	72 160 243	166 7.2 160
B-K..57 B-KAF..57	1	250 180j6	4 15	215 13.5 132	35k6 70	7 56	M12	38 10	40H7 55	86 83 23.5	83 29 142	M16x40	43.3 12	215	80 177 269	173 13.1 160
B-K..67 B-KAF..67	1	250 180j6	4 15	215 13.5 140	40k6 80	5 70	M16	43 12	40H7 55	94 90 23	90 29 156	M16x40	43.3 12	226	86.5 193 274	179 20 160
B-KF..77 B-KAF..77	1	300 230j6	4 15	265 13.5 180	50k6 100	80 10	M16	53.5 14	50H7 70	108 105 37	105 32 183	M16x45	53.8 14	286	101 242 312	202 31.3 200
B-KF..87 B-KAF..87	1	350 250h6	5 18	300 17.5 212	60m6 120	5 110	M20	64 18	60H7 85	123 120 30	120 36 210	M20x50	64.4 18	338	138 270 390	257 25.9 250
B-KF..97 B-KAF..97	2	450 350h6	5 22	400 17.5 265	70m6 140	7.5 125	M20	74.5 20	70H7 95	153 150 41.5	150 34 270	M20x50	74.9 20	414	171 332 435	277 32.3 300
B-KF..107 B-KAF..107	2	450 350h6	5 25	400 17.5 315	90m6 170	5 160	M24	95 25	90H7 118	178 175 41	175 40 313	M24x60	95.4 25	500	175 386 537	341 52 350
B-KF..127 B-KAF..127	2	550 450h6	5 22	500 17.5 375-1	110m6 210	15 180	M24	116 28	100H7 135	208 205 51	205 38 373	M24x60	106.4 28	592	203 466 615	390 53 450
B-KF..157 B-KAF..157	2	660 550h6	6 28	600 22 450-1	120m6 210	5 200	M24	127 32	120H7 155	253 250 60	250 36 460	M24x60	127.4 32	705	253 520 706	705 71.7 550

MOUNTING DIMENSIONS

B-K..37~157



B-KA..37B~157B

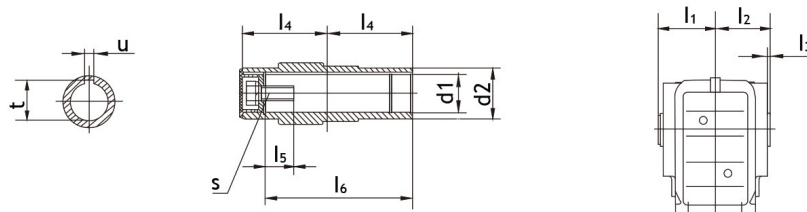
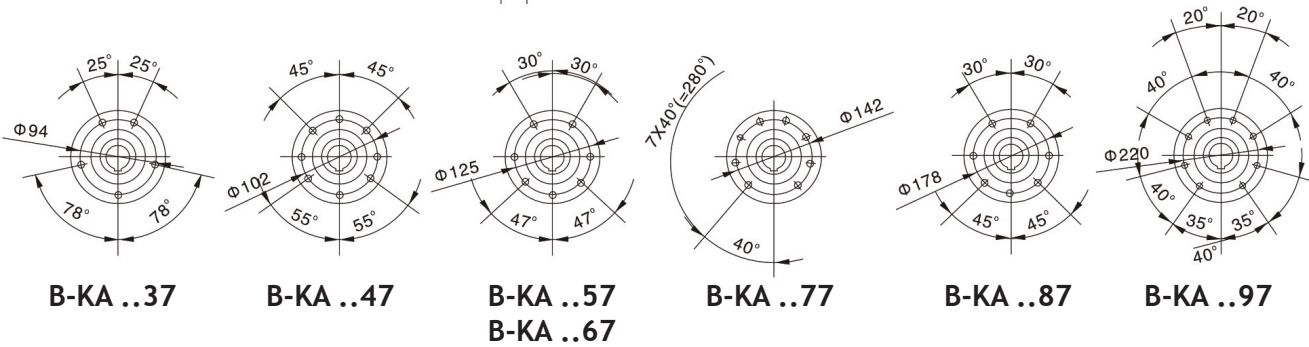
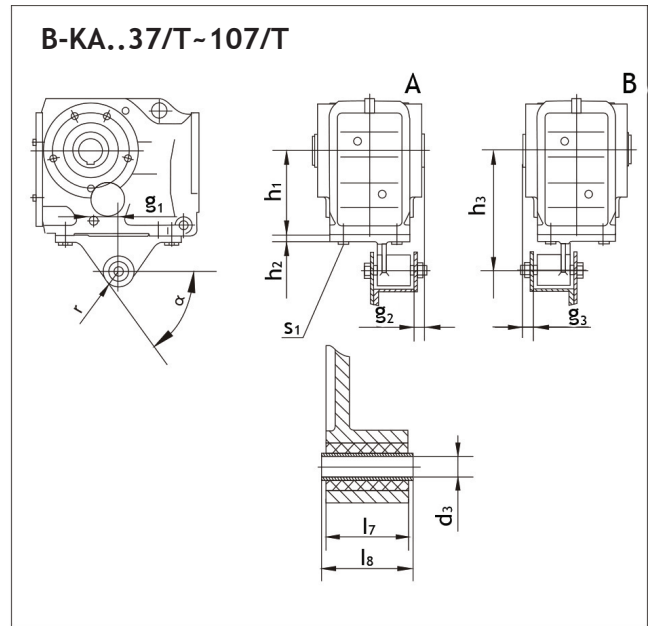
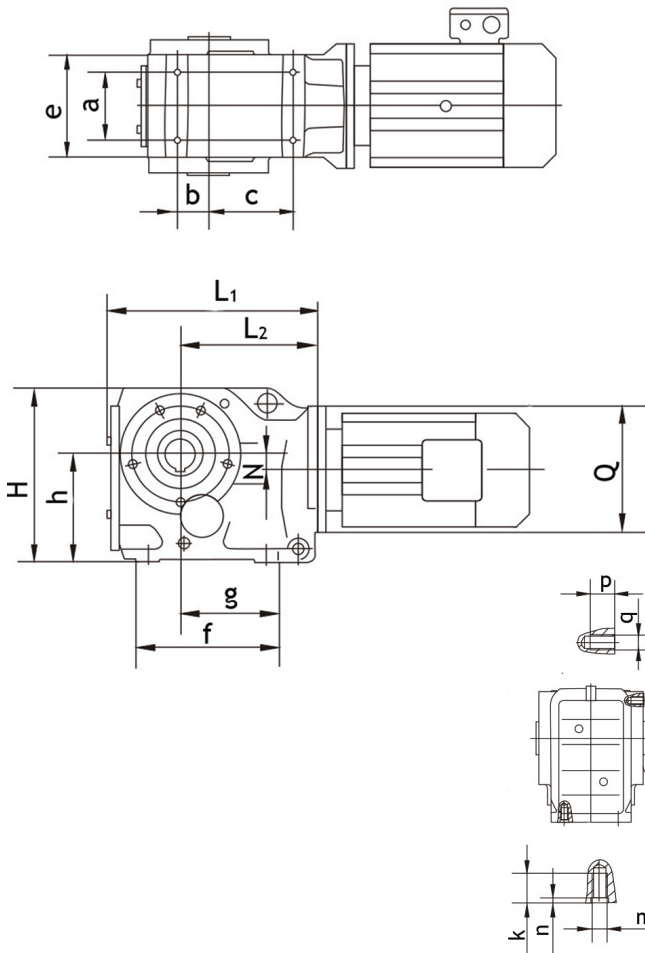


Model	a b c	e1 e2 f	g1 g2 g3	h ₁ h ₂	J	K	m n	Shaft dimension				
								d	l	l ₁ l ₂	s	t u
B-K..37	115 110 100	150 143 120	32 26 60	100 ^{-0.5} 63 ^{-0.5}	16	11	37 38	25k6	50	5 40	M10	28 8
B-K..47 B-KA..47B	130 130 120	170 162 145	37 35 75	112 ^{-0.5} 71 ^{-0.5}	18	11	37 32	30k6	60	3.5 50	M10	33 8
B-K..57 B-KA..57B	150 130 130	190 172 157	45 30 66	132 ^{-0.5} 80 ^{-0.5}	21	13.5	43 40	35k6	70	7 56	M12	38 10
B-K67.. B-KA..67B	160 120 140	203 170 170	45 30 101	140 ^{-0.5} 90 ^{-0.5}	24	13.5	43 45	40k6	80	8 70	M16	43 12
B-K..77 B-KA..77B	200 150 165	263 208 200	55 40 123.5	180 ^{-0.5} 112 ^{-0.5}	27	17.5	55 55	50k6	100	10 80	M16	53.5 14
B-K..87 B-KA..87B	233 180 180	305 260 230	70 55 150	212 ^{-0.5} 132 ^{-0.5}	32	22	67 75	60m6	120	5 110	M20	64 18
B-K..97 B-KA..97B	295 240 240	372 294 290	75 75 171	265 ⁻¹ 160 ^{-0.5}	36	26	82 60	70m6	140	7.5 125	M20	74.5 20
B-K..107 B-KA..107B	360 280 270	448 380 340	95 95 212	315 ⁻¹ 200 ^{-0.5}	40	33	98 100	90m6	170	5 160	M24	95 25
B-K..127 B-KA..127B	420 350 330	526 440 400	110 115 253	375 ⁻¹ 225 ^{-0.5}	45	39	111 100	110m6	210	15 180	M24	116 28
B-K..157 B-KA..157B	500 380 420	634 480 500	130 140 247	450 ⁻¹ 280 ⁻¹	50	39	130 100	120m6	210	5 200	M24	127 32

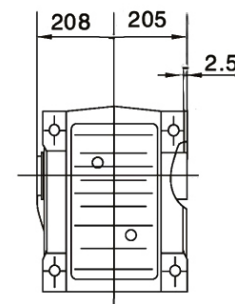
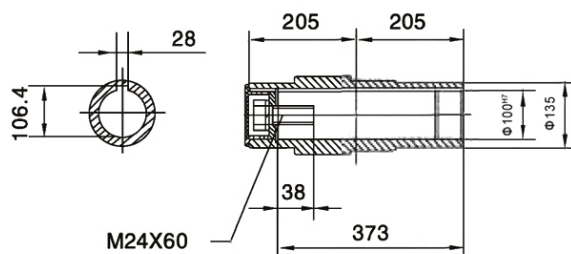
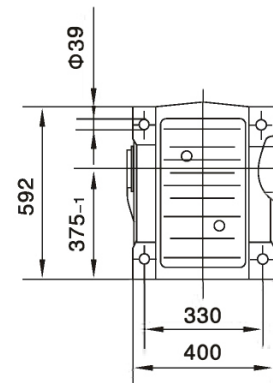
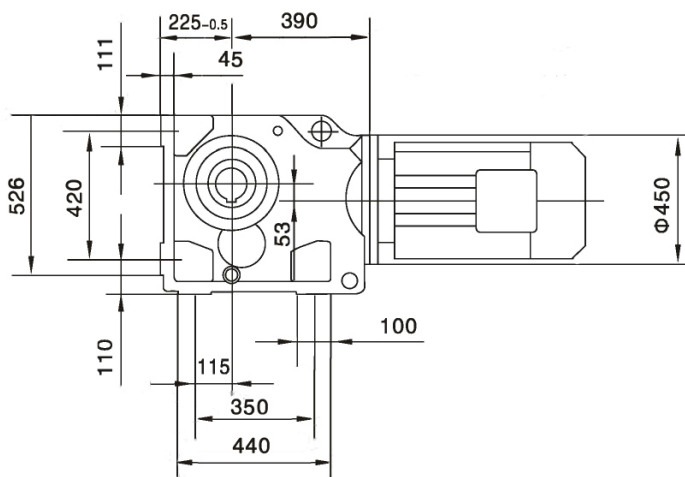
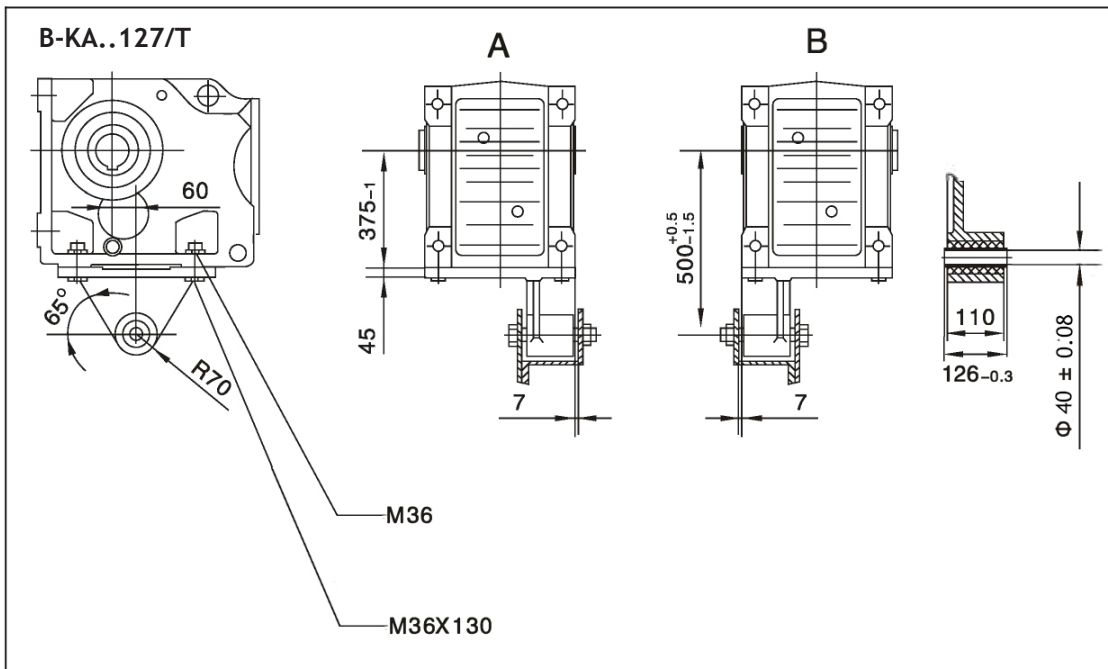
Model	Hollow shaft dimension							H	L ₁ L ₂	L ₃	N	Q
	d ₁	d ₂	l ₃ l ₄	l ₅ l ₆	l ₇ l ₈	s ₁	t ₁ u ₁					
B-K..37	-	-	-	-	-	-	-	165	110 60	139	8.5	120
B-K..47 B-KA..47B	35H7	50	78 75	15 3	22 132	M12x30	38.3 10	185	135 72	166	7.2	160
B-K..57 B-KA..57B	40H7	55	86 83	18 3	29 142	M16x40	43.3 12	217	153 80	173	13.1	160
B-K..67 B-KA..67B	40H7	55	93 90	20 3.5	29 156	M16x40	43.2 12	228	171 86.5	179	20	160
B-K..77 B-KA..77B	50H7	70	108 105	22.5 4	32 183	M16x45	53.8 14	288	206 101	202	31.3	200
B-K..87 B-KA..87B	60H7	85	123 120	30 4	36 210	M20x50	64.4 18	340	240 116	257	25.9	250
B-K..97 B-KA..97B	70H7	95	153 150	30 4	34 270	M20x50	74.9 20	417	291 146	277	32.3	300
B-K..107 B-KA..107B	90H7	118	178 175	40 2.5	40 313	M24x60	95.4 25	503	347 175	341	52	350
B-K..127 B-KA..127B	100H7	135	208 205	40 2.5	38 373	M24x60	106.4 28	592	418 203	390	53	450
B-K..157 B-KA..157B	120H7	155	253 250	40	36 460	M24x60	127.4 32	705	457 250	426	71.7	550

MOUNTING DIMENSIONS

B-KA..37~107

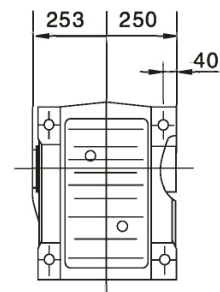
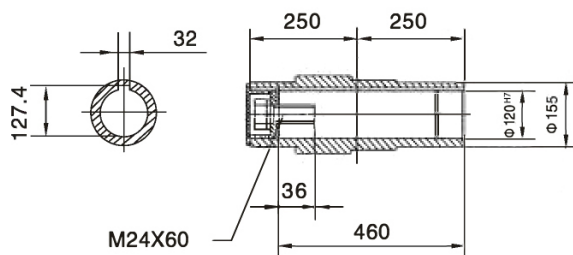
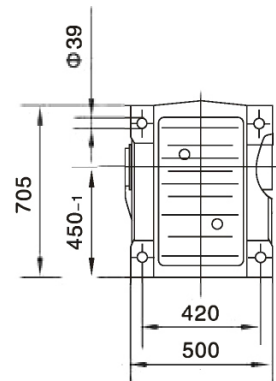
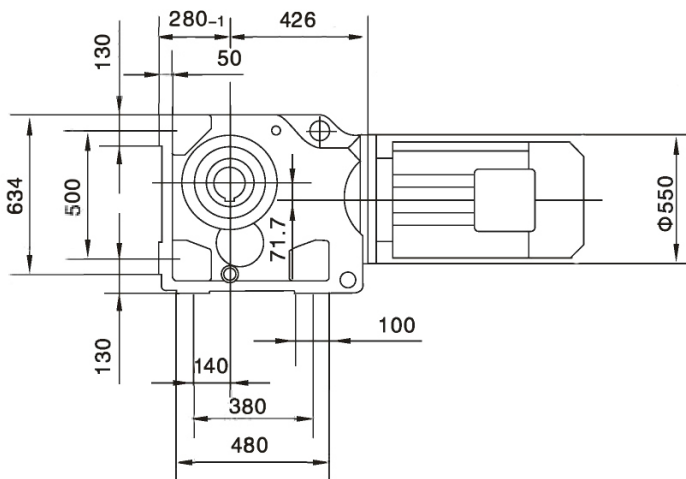
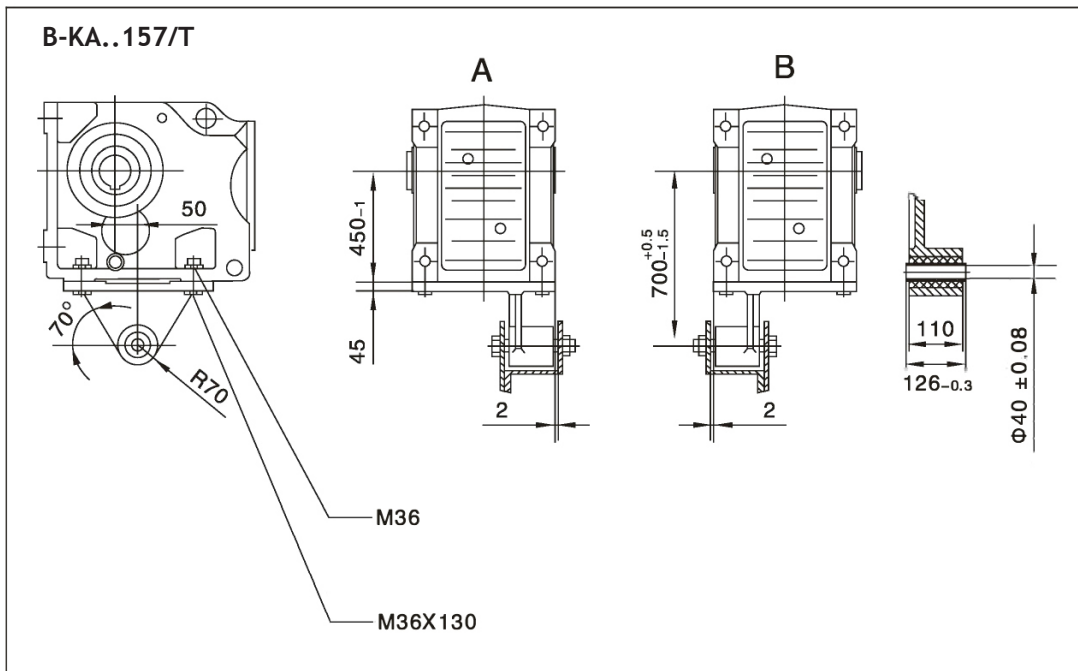


Model	a b c	e f g	h	k m n	P Q	Hollow shaft dimension				Torque arm				H L ₁ L ₂	N Q
						d ₁ d ₂	l ₁ l ₂ l ₃	l ₄ l ₅ l ₆	s t u	g ₁ g ₂ g ₃	h ₁ h ₂ h ₃	d ₃ l ₇ l ₈	r s ₁ α		
B-KA..37 B-KA..37/T	60 35 82	100 147 97	100 ^{-0.5}	20 M10 4	12 M8	30 ^{H7} 45	63 60 2.5	60 17 105	M10 33.3 8	23.5 20 20	100 ^{-0.5} 10 140 ^{+0.2} _{-0.7}	10.4 ^{+0.1} 31 36 ^{-0.3}	22.5 M10x25 60°	164 210 139	8.5 120
B-KA..47 B-KA..47/T	70 70 100	110 170 115	112 ^{-0.5}	20 M10 4	12 M8	35 ^{H7} 50	78 75 3	75 22 132	M12 38.3 10	30 20 20	11 2 ^{-0.5} 12 160 ^{+0.2} _{-0.7}	10.4 ^{+0.1} 31 36 ^{-0.3}	22.5 M10x30 55°	185 243 166	7.2 160
B-KA..57 B-KA..57/T	88 47 105	122 182 120	132 ^{-0.5}	25 M12 5	20 M12	40 ^{H7} 55	86 83 3	83 29 142	M16 43.3 12	40 18 18	132 ^{-0.5} 13 192 ^{+0.2} _{-0.7}	16.4 ^{+0.08} 54 60 ^{-0.3}	29 M12x35 55°	215 269 173	13.1 160
B-KA..67 B-KA..67/T	88 42 110	130 182 125	140 ^{-0.5}	25 M12 5	20 M12	40 ^{H7} 55	94 90 3.5	90 29 156	M16 43.3 12	45 25 25	140 ^{-0.5} 13 200 ^{+0.2} _{-0.7}	16.4 ^{+0.08} 54 60 ^{-0.3}	29 M12x35 55°	226 274 179	20 160
B-KA..77 B-KA..77/T	102 48 122	154 204 139	180 ^{-0.5}	32 M16 6	20 M12	50 ^{H7} 70	108 105 4	105 32 186	M16 53.8 14	52.5 25 25	180 ^{-0.5} 14 250 ^{+0.2} _{-0.7}	16.4 ^{+0.08} 54 60 ^{-0.3}	29 M16x40 60°	286 312 202	31.3 200
B-KA..87 B-KA..87/T	118 65 160	170 280 190	212 ^{-0.5}	32 M16 6	26 M16	60 ^{H7} 85	123 120 4	120 36 210	M20 64.4 18	60 30 30	212 ^{-0.5} 16 300 ^{+0.2} _{-0.7}	25 ^{+0.08} 72 80 ^{-0.3}	41 M16x45 60°	338 390 257	25.9 250
B-KA..97 B-KA..97/T	160 83 165	226 298 190	265 ⁻¹	36 M20 6	26 M16	70 ^{H7} 95	153 150 4	150 34 270	M20 74.9 20	70 40 40	265 ⁻¹ 17 350 ^{+0.2} _{-1.2}	25 ^{+0.08} 92 100 ^{-0.3}	41 M20x50 50°	414 435 277	32.3 300
B-KA..107 B-KA..107/T	190 100 190	266 370 230	315 ⁻¹	44 M24 8	— —	90 ^{H7} 118	178 175 2.5	175 40 313	M24 95.4 25	74 45 45	315 ⁻¹ 20 450 ^{+0.5} _{-1.5}	25 ^{+0.08} 92 100 ^{-0.3}	41 M24x60 55°	500 537 341	52 350



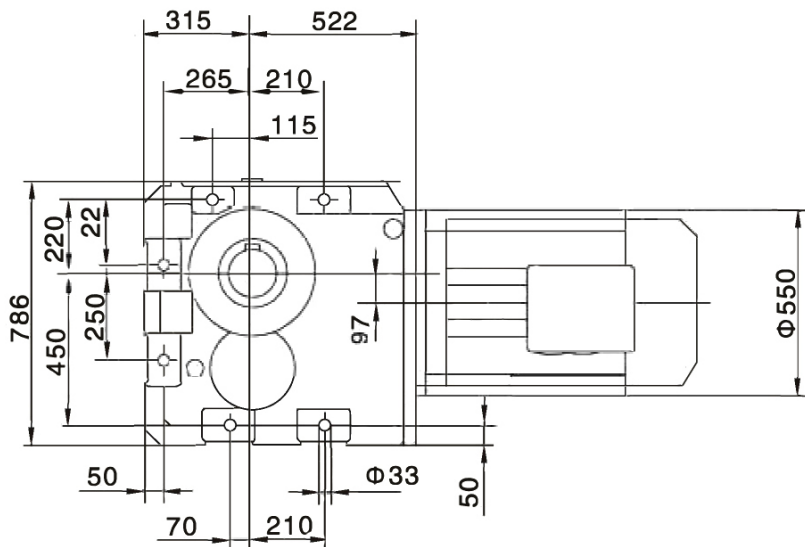
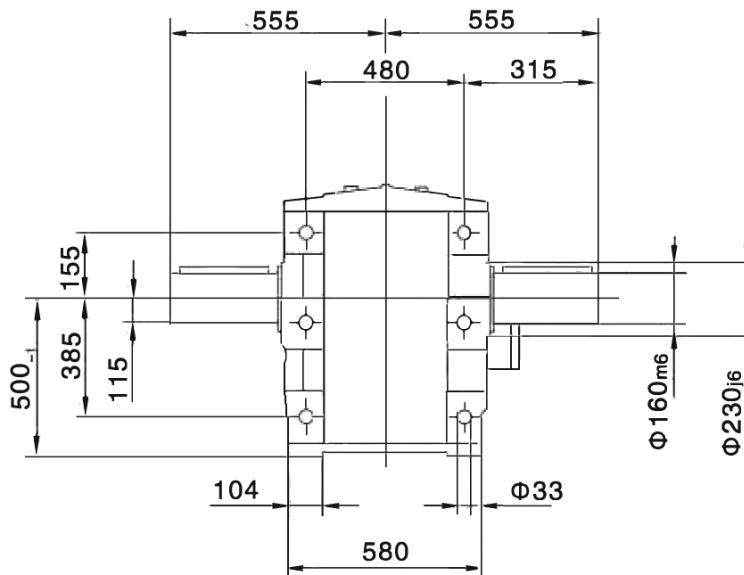
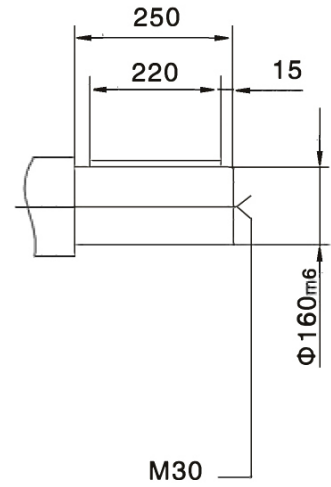
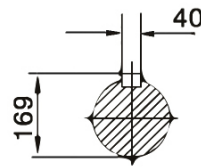
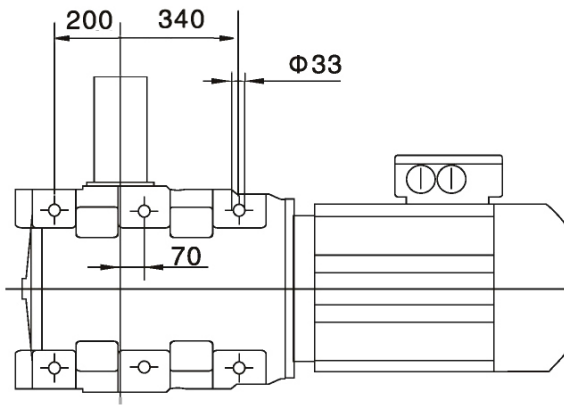
MOUNTING DIMENSIONS

B-KA..157



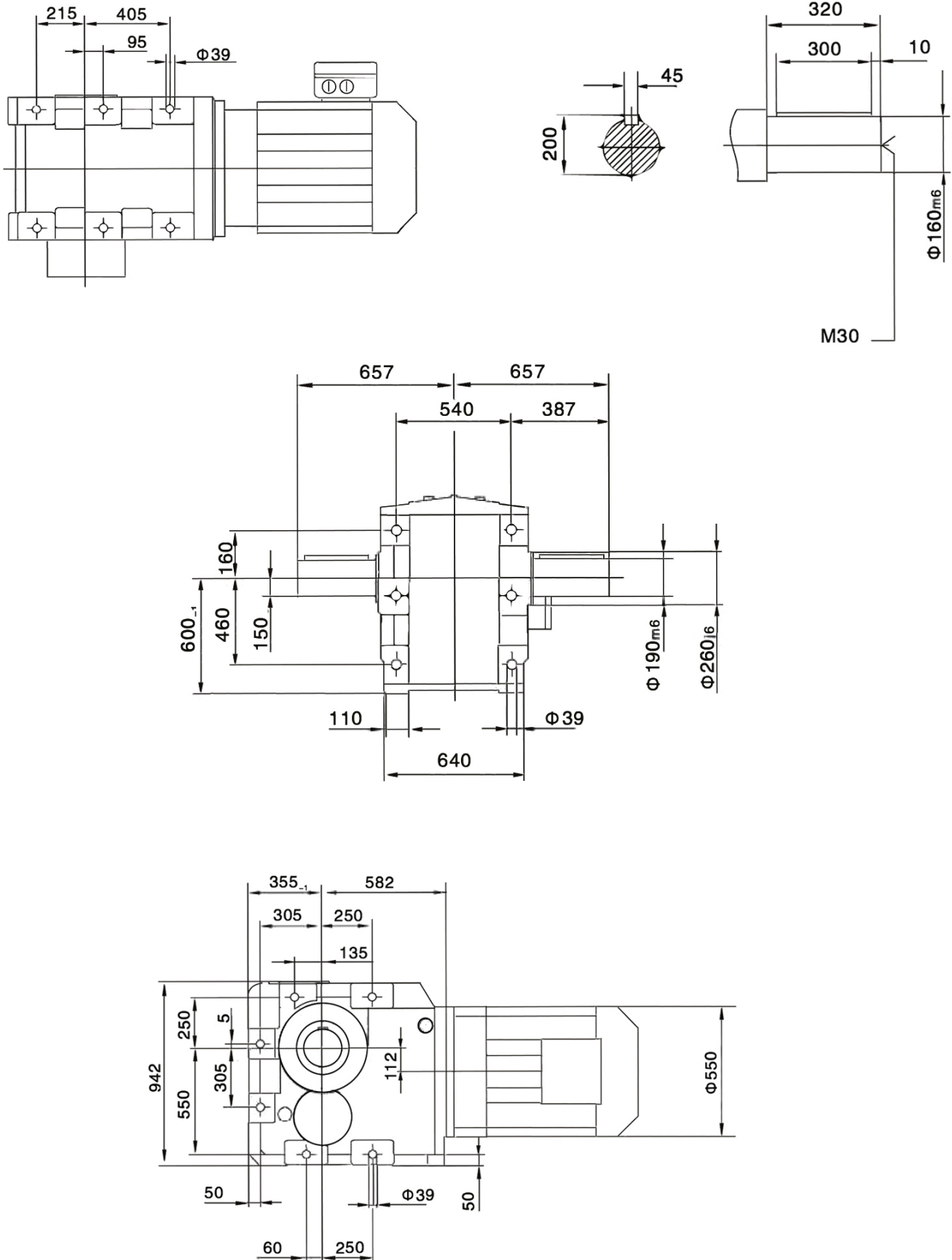
MOUNTING DIMENSIONS

B-K..167



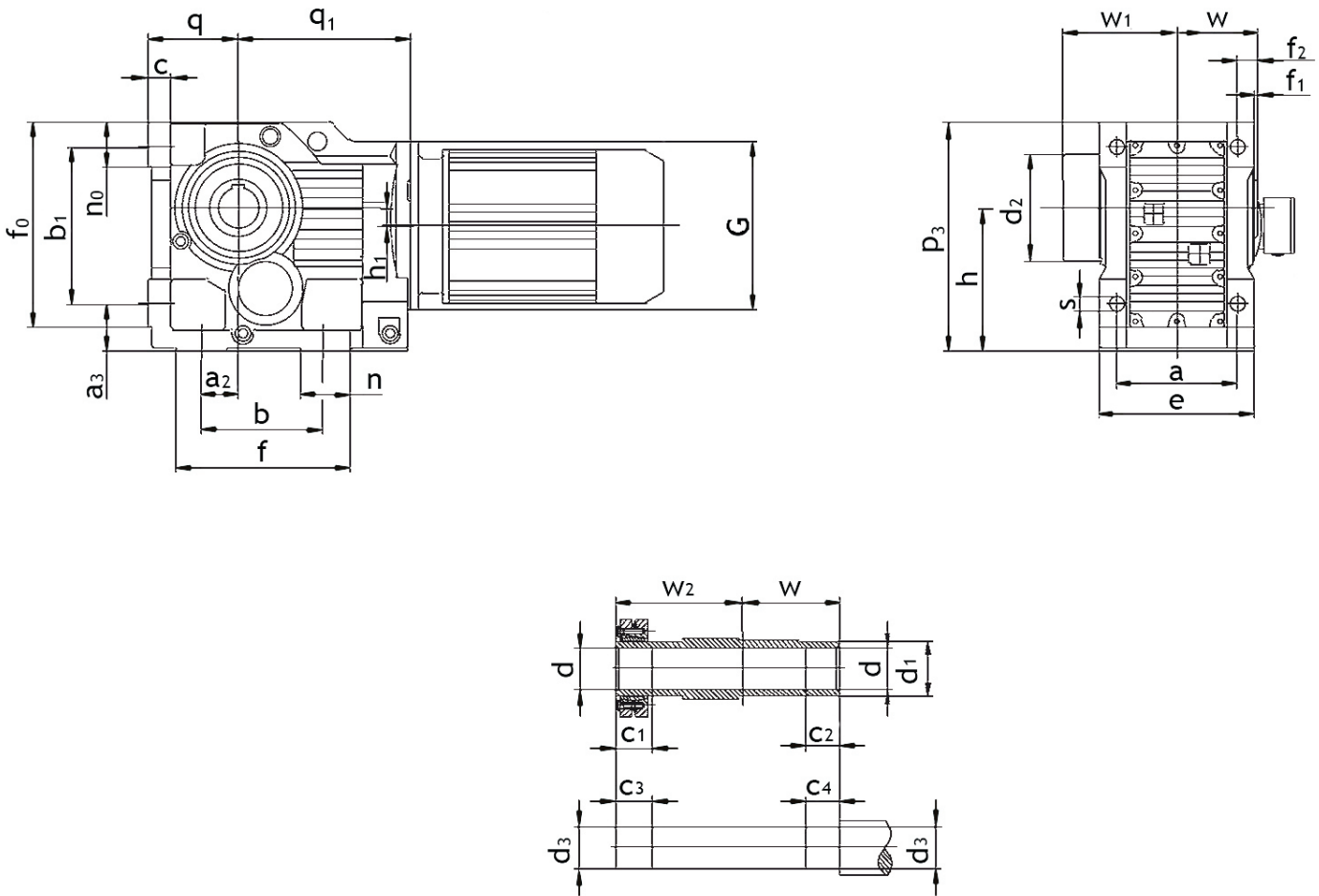
MOUNTING DIMENSIONS

B-K..187



MOUNTING DIMENSIONS

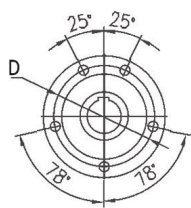
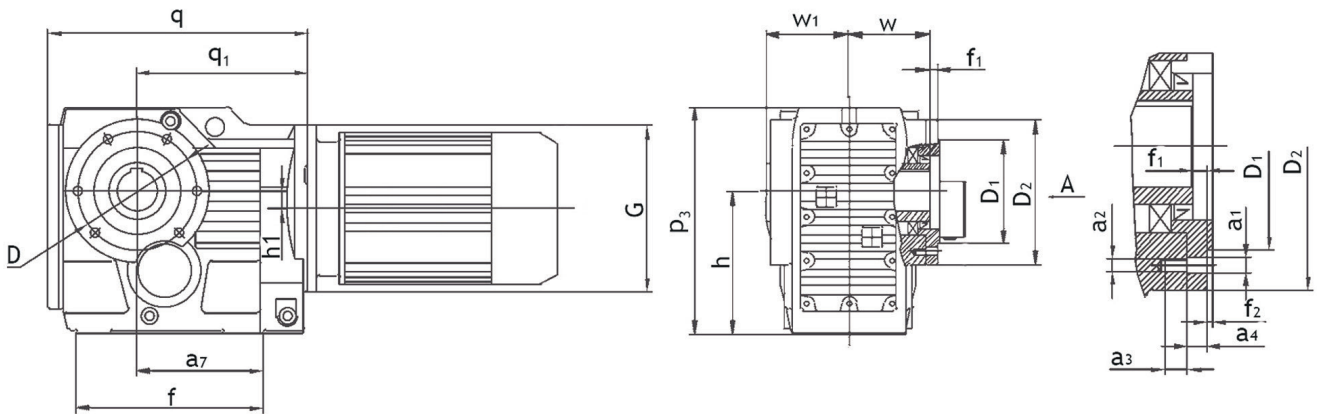
B-KH..47B~107B



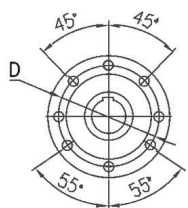
Model	q q_1	s b	p_3 a_2	h n	a b_1	e a_3	f_0 f_1	w n_0	d d_3	c h_1	d_1 d_2	f f_2	c_1 c_2	c_3 c_4	w_1 w_2	G
B-KH..47B	71 ^{-0.5} 166	∅ 11 130	185 35	112 ^{-0.5} 32	120 130	145 37	170 3	75 37	∅ 35H7 ∅ 35h6	18 7.2	∅ 50 ∅ 83	162 15	32 20	37 25	110 102	∅ 160
B-KH..57B	80 ^{-0.5} 173	∅ 13.5 130	217 30	132 ^{-0.5} 40	130 150	157 45	190 3	83 43	∅ 40H7 ∅ 40h6	21 13.1	∅ 55 ∅ 83	172 18	26 20	31 25	117 112	∅ 160
B-KH..67B	90 ^{-0.5} 179	∅ 13.5 120	228 30	140 ^{-0.5} 45	140 160	170 45	203 3.5	90 43	∅ 40H7 ∅ 40h6	24 20	∅ 55 ∅ 93	170 20	38 20	43 25	126 118	∅ 160
B-KH..77B	112 ^{-0.5} 202	∅ 17.5 150	288 40	180 ^{-0.5} 55	165 200	200 55	263 4	105 55	∅ 50H7 ∅ 50h6	27 31.3	∅ 70 ∅ 114	208 22.5	36 30	41 35	146 136	∅ 200
B-KH..87B	132 ^{-0.5} 257	∅ 22 180	340 55	212 ^{-0.5} 75	180 233	230 70	305 4	120 67	∅ 65H7 ∅ 65h6	32 25.9	∅ 85 ∅ 159	260 30	41 40	46 45	170 161	∅ 250
B-KH..97B	160 ^{-0.5} 277	∅ 26 240	417 75	265 ⁻¹ 60	240 295	290 75	372 4	150 82	∅ 75H7 ∅ 75h6	36 32.3	∅ 95 ∅ 174	294 30	55 50	60 55	206 195	∅ 300
B-KH..107B	200 ^{-0.5} 341	∅ 33 280	503 95	315 ⁻¹ 100	270 360	340 95	448 2.5	175 98	∅ 95H7 ∅ 95h6	40 52	∅ 118 ∅ 200	380 40	65 60	75 70	245 230	∅ 350

MOUNTING DIMENSIONS

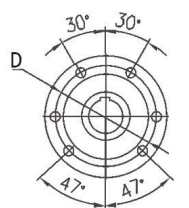
B-KAZ..37~157



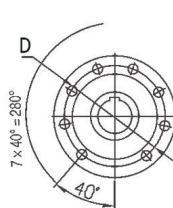
B-KAZ..37



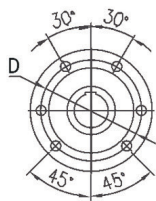
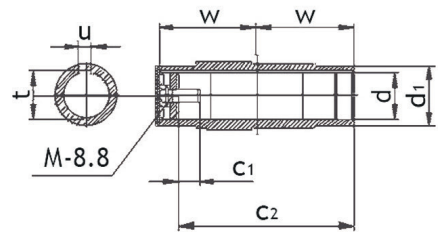
B-KAZ..47



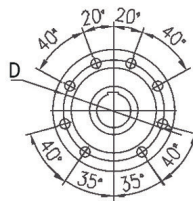
B-KAZ..57 & 67



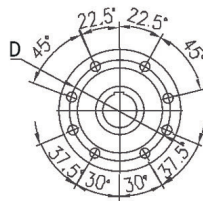
B-KAZ..77



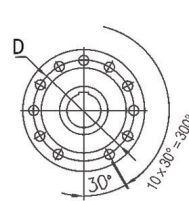
B-KAZ..87



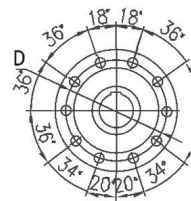
B-KAZ..97



B-KAZ..107



B-KAZ..127



B-KAZ..157

Model	q q ₁	D ₁ D ₂	h h ₁	p ₃ a ₇	f f ₁	w w ₁	d d ₁	c ₂ c ₁	t u	a ₃ a ₄	f ₂ a ₂	a ₁ D	G M
B-KAZ..37	210 139	Ø 80j6 Ø 110	100 ^{-0.5} 8.5	164 97	147 9	60 63	Ø 30H7 Ø 45	105 17	33.3 8	12 11.5	3 M8	Ø 9 Ø 94	Ø 120 M10x25
B-KAZ..47	243 166	Ø 80j6 Ø 120	112 ^{-0.5} 7.2	185 115	170 8.5	75 78	Ø 35H7 Ø 50	132 22	38.3 10	12 11	3 M8	Ø 9 Ø 102	Ø 160 M12x30
B-KAZ..57	269 173	Ø 105j6 Ø 155	132 ^{-0.5} 13.1	215 120	182 9	83 86	Ø 40H7 Ø 55	142 29	43.3 12	20 12	3.5 M12	Ø 13.5 Ø 125	Ø 160 M16x40
B-KAZ..67	274 179	Ø 105j6 Ø 155	140 ^{-0.5} 20	226 125	182 8.5	90 94	Ø 40H7 Ø 55	156 29	43.3 12	20 12	3.5 M12	Ø 13.5 Ø 125	Ø 160 M16x40
B-KAZ..77	312 202	Ø 125j6 Ø 170	180 ^{-0.5} 31.3	286 139	204 10	105 108	Ø 50H7 Ø 70	183 32	53.8 14	20 14	3.5 M12	Ø 13.5 Ø 142	Ø 200 M16x45
B-KAZ..87	390 257	Ø 155j6 Ø 215	212 ^{-0.5} 25.9	338 190	280 11	120 123	Ø 60H7 Ø 85	210 36	64.4 18	26 15	4 M16	Ø 17.5 Ø 178	Ø 250 M20x50
B-KAZ..97	435 277	Ø 180j6 Ø 260	265 ^{-1.0} 32.3	414 190	298 14	150 153	Ø 70H7 Ø 95	270 34	74.9 20	26 18	4 M16	Ø 17.5 Ø 220	Ø 300 M20x50
B-KAZ..107	537 341	Ø 210j6 Ø 304	315 ^{-1.0} 52	500 230	370 -8	175 178	Ø 90H7 Ø 118	313 40	95.4 25	30 22	4 M20	Ø 22 Ø 260	Ø 350 M24x60
B-KAZ..127	615 390	Ø 250h6 Ø 350	375 ^{-1.0} 53	592 288	440 0	205 208	Ø 100H7 Ø 135	373 38	106.4 28	28 30	5 M20	Ø 22 Ø 300	Ø 450 M24x60
B-KAZ..157	706 426	Ø 290h6 Ø 400	450 ^{-1.0} 71.7	705 298	480 -14	250 253	Ø 120H7 Ø 155	460 36	127.4 32	36 28	5 M24	Ø 26 Ø 340	Ø 550 M24x60

MOUNTING DIMENSIONS

B-K..AM..

Fig.1

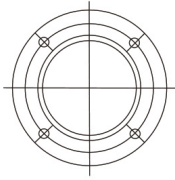
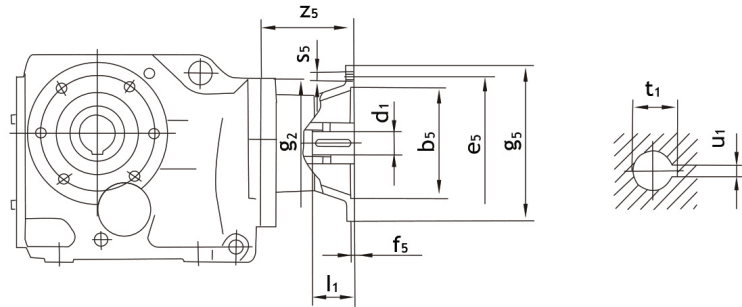
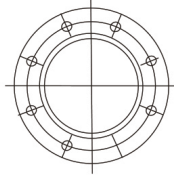


Fig.2

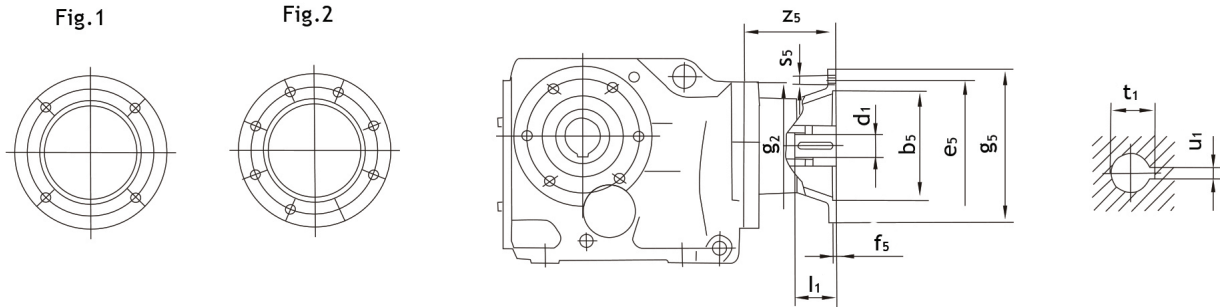


Model	Input	Fig	b_5	e_5	f_5	g_2	g_5	s_5	z_5	d_1	l_1	t_1	u_1					
B-K..37	AM 63	1	95	115	3.5	120	140	M8	72	11	23	12.8	4					
	AM 71 ¹⁾		110	130			160			14	30	16.3	5					
	AM 80 ¹⁾		130	165	4.5		200	M10	106	19	40	21.8	6					
	AM 90 ¹⁾									24	50	27.3	8					
B-K..47 B-K..57 B-K..67	AM 63	1	95	115	3.5	160	140	M8	66	11	23	12.8	4					
	AM 71		110	130			160			14	30	16.3	5					
	AM 80		130	165	4.5		200	M10	99	19	40	21.8	6					
	AM 90									24	50	27.3	8					
	AM 100 ¹⁾		180	215	5		250	M12	134	28	60	31.3	8					
	AM 112 ¹⁾																	
B-K..77	AM 63	1	95	115	3.5	200	140	M8	60	11	23	12.8	4					
	AM 71		110	130			160			14	30	16.3	5					
	AM 80		130	165	4.5		200	M10	92	19	40	21.8	6					
	AM 90									24	50	27.3	8					
	AM 100 ¹⁾		180	215	5		250	M12	126	28	60	31.3	8					
	AM 112 ¹⁾																	
	AM 132S ¹⁾		230	265	5		300							179	38	80	41.3	10
	AM 132M ¹⁾																	
AM 132L ¹⁾																		
B-K..87	AM 80	1	130	165	4.5	250	200	M10	87	19	40	21.8	6					
	AM 90									24	50	27.3	8					
	AM 100		180	215			250		121	28	60	31.3	8					
	AM 112																	
	AM 132S		230	265	5		300	M12	174	38	80	41.3	10					
	AM 132M																	
	AM 132L																	
	AM 160 ¹⁾		250	300	6		350	M16	232	42	110	45.3	12					
	AM 180 ¹⁾									48		51.8	14					

1) Input Flange d_{a1} may protude below foot mounting level in foot-mounted gear units.

MOUNTING DIMENSIONS

B-K..AM..

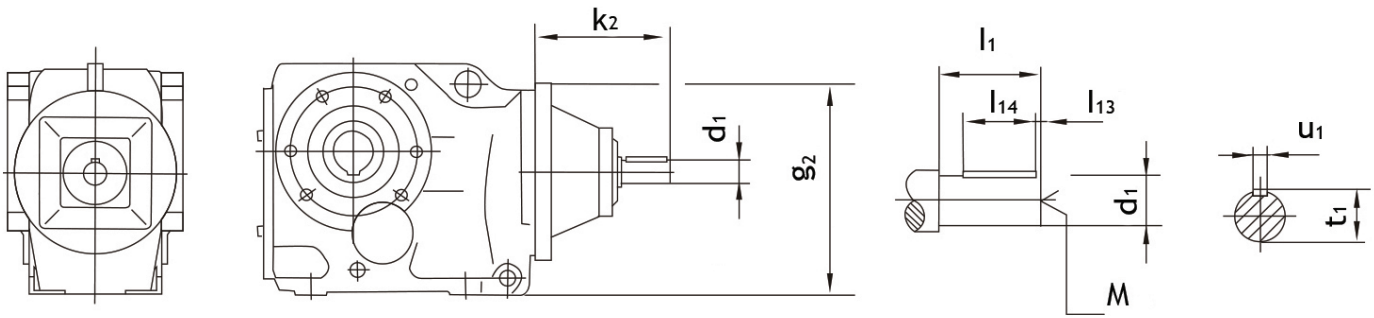


Model	Input	Fig	b_5	e_5	f_5	g_2	g_5	s_5	z_5	d_1	l_1	t_1	u_1	
B-K..97	AM 100	1	180	215	5	300	250	M12	116	28	60	31.3	8	
	AM 112													
	AM 132S													
	AM 132M													
	AM 132L													
	AM 160	2	230	265	6		350	M16	227	42	110	45.3	12	
	AM 180													
	AM 200 ¹⁾		300	350			7		400	268		55	59.3	16
	AM 225 ¹⁾													
B-K..107	AM 100	1	180	215	5	350	250	M12	110	28	60	31.3	8	
	AM 112													
	AM 132S													
	AM 132M													
	AM 132L													
	AM 160	2	230	265	6		350	M16	221	42	110	45.3	12	
	AM 180													
	AM 200		300	350			7		400	262		55	59.3	16
	AM 225													
B-K..127	AM 132S	1	230	265	5	450	300	M12	148	38	80	41.3	10	
	AM 132M													
	AM 132L													
	AM 160	2	250	300	6		350	M16	206	42	110	45.3	12	
	AM 180													
	AM 200		300	350			7		400	247		55	59.3	16
	AM 225													
	AM 250	2	450	500	7		550	336	65	140	69.4	18		
	AM 280												450	500
B-K..157 B-K..167 B-K..187	AM 160	1	250	300	6	550	350	M16	198	42	110	45.3	12	
	AM 180													
	AM 200													
	AM 225	2	350	400	7		450		239	55	140	59.3	16	
	AM 250													
	AM 280													350
AM 250	2	450	500	7	550	328	65	140	69.4	18				
AM 280											450	500	7	550

1) Input Flange d_{a1} may protrude below foot mounting level in foot-mounted gear units.

MOUNTING DIMENSIONS

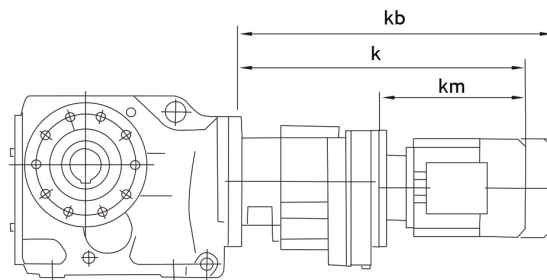
B-K..AD..



Model	Input	g_2	k_2	d_1	l_1	l_{13}	l_{14}	t_1	u_1	M
B-K..37	AD1	120	102	16	40	4	32	18	5	M5
	AD2		130	19	40	4	32	21.5	6	M6
B-K..47 B-K..57 B-K..67	AD2	160	123	19	40	4	32	21.5	6	M6
	AD3		159	24	50	5	40	27	8	M8
			AD4	224	38	80	5	70	41	10
B-K..77	AD2	200	116	19	40	4	32	21.5	6	M6
	AD3		151	24	50	5	40	27	8	M8
	AD4		224	38	80	5	70	41	10	M12
B-K..87	AD2	250	111	19	40	4	32	21.5	6	M6
	AD3		156	28	60	5	50	31	8	M10
	AD4		219	38	80	5	70	41	10	M12
	AD5		292	42	110	10	70	45	12	M16
B-K..97	AD3	300	151	28	60	5	50	31	8	M10
	AD4		214	38	80	5	70	41	10	M12
	AD5		287	42	110	10	70	45	12	M16
	AD6		327	48	110	10	80	51.5	14	M16
B-K..107	AD3	350	145	28	60	5	50	31	8	M10
	AD4		308	38	80	5	70	41	10	M12
	AD5		281	42	110	10	70	45	12	M16
	AD6		321	48	110	10	80	51.5	14	M16
B-K..127	AD4	450	193	38	80	5	70	41	10	M12
	AD5		266	42	110	10	70	45	12	M16
	AD6		306	48	110	10	80	51.5	14	M16
	AD7		300	55	110	10	90	59	16	M20
	AD8		383	70	140	15	110	74.5	20	M20
B-K..157 B-K..167 B-K..187	AD5	550	258	42	110	10	70	45	12	M16
	AD6		298	48	110	10	80	51.5	14	M16
	AD7		292	55	110	10	90	59	16	M20
	AD8		374	70	140	15	110	74.5	20	M20

MOUNTING DIMENSIONS

B-K..R..



Model	Input	k	kb	km
B-K..37 R17	63	368	425	193
	71	369	433	194
	80	419	483	244
B-K..47 R37 B-K..57 R37	63	400	457	235
	71	401	465	236
	80	451	515	286
B-K..67 R37	63	410	457	235
	71	401	465	236
	80	451	515	286
	90	451	538	286
B-K..77 R37	63	392	449	235
	71	393	457	236
	80	443	507	286
	90	443	528	286
B-K..87 R57	63	445	502	229
	71	445	509	229
	80	495	559	279
	90	495	580	279
	100M	545	630	329
	100L	565	650	349
B-K..97 R57	63	440	497	229
	71	440	504	229
	80	490	554	279
	90	490	575	279
	100M	540	625	329
	100L	560	645	349
	112M	575	655	364
B-K..107 R77	63	470	527	223
	71	470	534	223
	80	520	584	273
	90	518	603	271
	100M	568	653	321
	100L	588	673	341
	112M	602	682	355
	132S	647	727	400
	132M	699	811	452
	132L	719	831	472
	160M	749	861	512

Model	Input	k	kb	km
B-K..127 R77	63	455	512	223
	71	455	519	223
	80	505	569	273
	90	503	588	271
	100M	553	638	321
	100L	573	658	341
	112M	587	667	355
	132S	632	712	400
	132M	684	796	452
	132L	704	816	472
B-K..127 R87	160M	734	846	502
	90	547	632	267
	100M	597	682	317
	100L	617	702	337
	112M	630	710	350
	132S	675	755	395
	132M	727	839	447
	132L	747	859	467
	160M	777	889	497
	160L	824	980	544
B-K..157 R97	180	896	1052	616
	80	586	650	261
	90	586	671	261
	100M	636	721	311
	100L	658	741	331
	112M	670	750	345
	132S	715	795	339
	132M	767	879	442
	132L	787	899	482
	160M	817	929	492
B-K..167 R97	160L	864	1020	539
	180	936	1092	611
	200	1024	1180	699
	100M	687	772	305
	100L	707	792	325
	112M	721	801	339
	132S	768	846	384
	132M	818	930	436
	132L	838	950	456
	160M	868	980	486
B-K..187 R97	160L	915	1071	533
	180	987	1143	605
	200	1075	1231	693
	225	1107	1263	725
	100M	687	772	305
	100L	707	792	325
	112M	721	801	339
	132S	768	846	384
	132M	818	930	436
	132L	838	950	456
B-K..157 R107	160M	868	980	486
	160L	915	1071	533
	180	987	1143	605
	200	1075	1231	693
	225	1107	1263	725
	100M	687	772	305
	100L	707	792	325
	112M	721	801	339
	132S	768	846	384
	132M	818	930	436
B-K..167 R107	132L	838	950	456
	160M	868	980	486
	160L	915	1071	533
	180	987	1143	605
	200	1075	1231	693
	225	1107	1263	725
	100M	687	772	305
	100L	707	792	325
	112M	721	801	339
	132S	768	846	384
B-K..187 R107	132M	818	930	436
	132L	838	950	456
	160M	868	980	486
	160L	915	1071	533
	180	987	1143	605
	200	1075	1231	693
	225	1107	1263	725
	100M	687	772	305
	100L	707	792	325
	112M	721	801	339

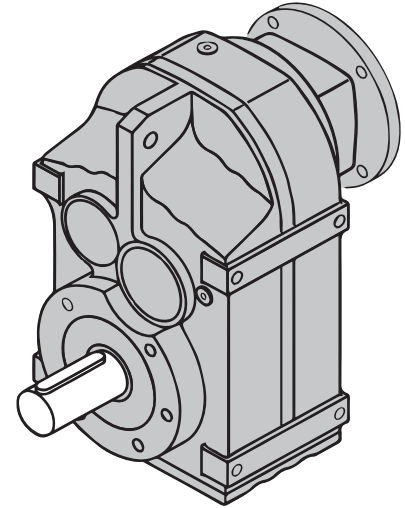
k = Total length of geared Motor
 kb = Total length of geared Motor including brake
 km = Length of the Motor

B-F SERIES


B-F Series Gear Units are suitable for a wide variety of industrial fields and are specially designed for heavy duty applications. B-F Series shaft-mounted gear units are available in cast iron casing only, sizes from 37 to 157, offer a large range of reduction ratios and are fully efficient in any working conditions.

The main features of B-F range are:

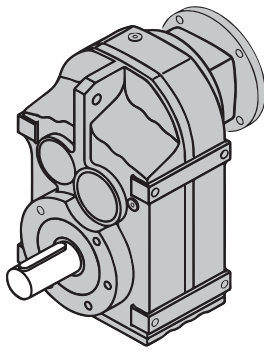
- High-strength casings optimized with FEM analysis & Gearing with 2 & 3 stage reduction
- Gears hardened and tempered with shaved or ground profile
- Load capacity calculated to ISO6336 and verified according to AGMA 2001
- Universal Mounting with excellent mechanical strength
- High efficiency gear units



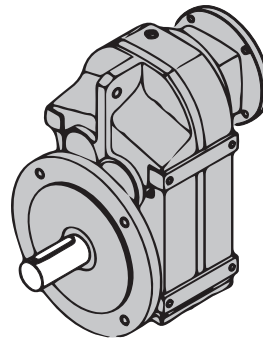
Classification

GEARBOX							
TYPE	SIZE	STAGES	VERSION	RATIO	OUTPUT SHAFT	INPUT MOTOR FLANGE	MOUNTING POSITION
B-F.. AM..	37	2	B-F.. AM..	see tables	see tables	 63 - 280	M1 M2 M3 M4 M5 M6
	47		B-FA..B AM..				
	57		B-FV..B AM..				
	67	3	B-FH..B AM..				
	77		B-FF.. AM..				
	87		B-FAF.. AM..				
	97		B-FVF.. AM..				
	107		B-FA../T AM..				
	127		B-FV../T AM..				
	157		B-FAZ.. AM..				
			B-FVZ AM..				

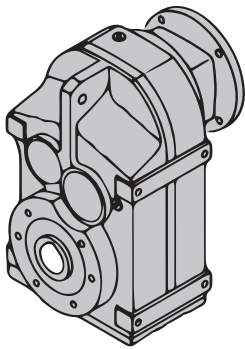
GEARBOX							
TYPE	SIZE	STAGES	VERSION	RATIO	OUTPUT SHAFT	INPUT SHAFT	MOUNTING POSITION
B-F.. AD..	37	2	B-F.. AD..	see tables	see tables	see tables	M1 M2 M3 M4 M5 M6
	47		B-FA..B AD..				
	57		B-FV..B AD..				
	67	3	B-FH..B AD..				
	77		B-FF.. AD..				
	87		B-FAF.. AD..				
	97		B-FVF.. AD..				
	107		B-FA../T AD..				
	127		B-FV../T AD..				
	157		B-FAZ.. AD..				
			B-FVZ AD..				



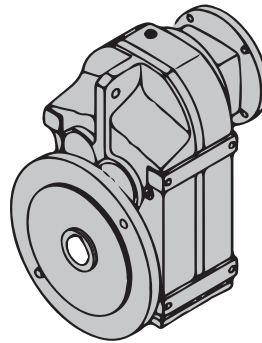
B-F.. AM..
Foot Mounted



B-FF.. AM..
Flange Mounted



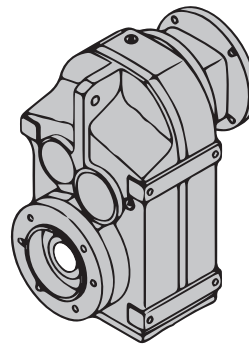
B-FA..B AM..
Foot Mounted + Hollow shaft



B-FAF.. AM..
B5 flange mounted + Hollow shaft

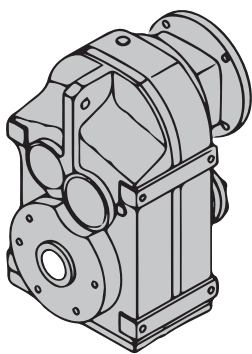
B-FV..B AM..
Foot Mounted + Hollow Shaft
with DIN 5482 Spline

B-FVF.. AM..
B5 flange mounted + Hollow Shaft
with DIN 5480 Spline

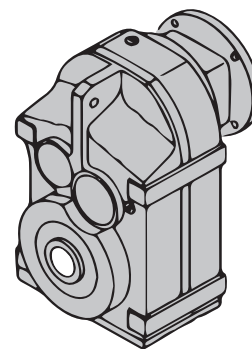


B-FAZ.. AM..
B14 Flange Mounted + Hollow Shaft

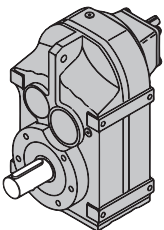
B-FVZ.. AM..
B14 Flange Mounted + Hollow Shaft
with DIN 5480 Spline



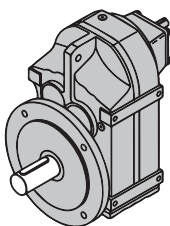
B-FH..B AM..
Foot Mounted + Hollow
Shaft with shrink Disc



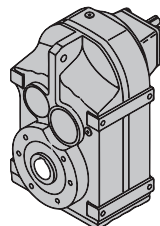
B-FA.. AM..
Hollow Shaft



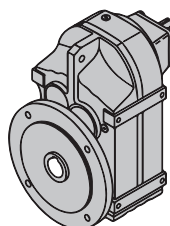
B-F.. AD..



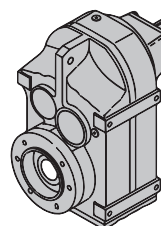
B-FF.. AD..



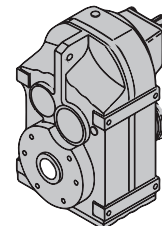
B-FA..B AD..
B-FV..B AD..



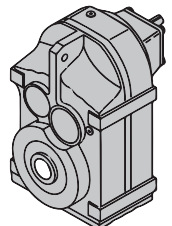
B-FAF.. AD..
B-FVF.. AD..



B-FAZ.. AD..
B-FVZ.. AD..



B-FH..B AD..



B-FA.. AD..

TECHNICAL DATA

B-F.. AD..

B-F..37-57, $n_e=1400$ rpm

B-F..37 200Nm					B-F..47 400Nm					B-F..57 600Nm																																																																																																																																																																																																																																																		
i	n_a	M_{amax}	F_{Ra}	AD	i	n_a	M_{amax}	F_{Ra}	AD	i	n_a	M_{amax}	F_{Ra}	AD																																																																																																																																																																																																																																														
[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]																																																																																																																																																																																																																																															
3-stage					3-stage					3-stage																																																																																																																																																																																																																																																		
128.51	11	200	4290	AD ₁	190.76	7.3	400	5920	AD ₁	199.70	7.0	600	8200	AD ₂																																																																																																																																																																																																																																														
117.88	12	200	4290		100.36	14	200	4290		86.53	16	200	4290		80.65	17	200	4290	70.50	20	200	4290	66.09	21	200	4290	58.32	24	200	4290	54.54	26	200	4290	51.70	27	200	4290	47.02	30	200	4290	AD ₂	65.36	21	400	5920	AD ₂	183.60	7.6	600	8200	43.83	32	200	4290	38.31	37	200	4290	35.91	39	200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86	45	400	5920	AD ₂	40.13	35	590	9710	AD ₂	20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460									
100.36	14	200	4290		86.53	16	200	4290		80.65	17	200	4290		70.50	20	200	4290	66.09	21	200	4290	58.32	24	200	4290	54.54	26	200	4290	51.70	27	200	4290	47.02	30	200	4290	AD ₂	65.36	21	400		5920	AD ₂	183.60	7.6		600	8200	43.83	32	200	4290	38.31	37	200	4290	35.91	39	200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86		45	400	5920	AD ₂		40.13	35	590	9710		AD ₂	20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600		6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460							
86.53	16	200	4290		80.65	17	200	4290		70.50	20	200	4290		66.09	21	200	4290	58.32	24	200	4290	54.54	26	200	4290	51.70	27	200	4290	47.02	30	200	4290	AD ₂	65.36	21	400		5920	AD ₂	183.60		7.6		600	8200		43.83	32	200	4290	38.31	37	200	4290	35.91	39	200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86		45		400	5920	AD ₂			40.13	35	590	9710			AD ₂	20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66		600		6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460					
80.65	17	200	4290		70.50	20	200	4290		66.09	21	200	4290		58.32	24	200	4290	54.54	26	200	4290	51.70	27	200	4290	47.02	30	200	4290	AD ₂	65.36	21	400		5920	AD ₂	183.60		7.6		600		8200		43.83	32		200	4290	38.31	37	200	4290	35.91	39	200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86		45		400		5920	AD ₂				40.13	35	590	9710				AD ₂	20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17		66		600		6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460			
70.50	20	200	4290		66.09	21	200	4290		58.32	24	200	4290		54.54	26	200	4290	51.70	27	200	4290	47.02	30	200	4290	AD ₂	65.36	21	400		5920	AD ₂	183.60		7.6		600		8200		43.83		32		200	4290		38.31	37	200	4290	35.91	39	200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86		45		400		5920		AD ₂					40.13	35	590	9710					AD ₂	20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080		21.17		66		600		6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460	
66.09	21	200	4290		58.32	24	200	4290		54.54	26	200	4290		51.70	27	200	4290	47.02	30	200	4290	AD ₂	65.36	21	400		5920	AD ₂	183.60		7.6		600		8200		43.83		32		200		4290		38.31	37		200	4290	35.91	39	200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86		45		400		5920		AD ₂							40.13	35	590	9710	AD ₂					20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080		21.17		66		600		6350		AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460
58.32	24	200	4290		54.54	26	200	4290		51.70	27	200	4290		47.02	30	200	4290	AD ₂	65.36	21	400		5920	AD ₂	183.60		7.6		600		8200		43.83		32		200		4290		38.31		37		200	4290		35.91	39	200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86		45		400		5920		AD ₂									40.13	35	590	9710		AD ₂				20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080		21.17		66		600		6350			AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415
54.54	26	200	4290		51.70	27	200	4290		47.02	30	200	4290		AD ₂	65.36	21	400		5920	AD ₂	183.60		7.6		600		8200		43.83		32		200		4290		38.31		37		200		4290		35.91	39		200	4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86		45		400		5920		AD ₂											40.13	35	590	9710			AD ₂			20.57	68	200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080		21.17		66		600		6350				AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270
51.70	27	200	4290		47.02	30	200	4290		AD ₂	65.36	21	400			5920	AD ₂	183.60		7.6		600		8200		43.83		32		200		4290		38.31		37		200		4290		35.91	39	200		4290	31.69	44	200	4290	28.09	50	200	4060	23.88	59	200	3760	28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86	45	400		5920		AD ₂		40.13		35													590	9710	AD ₂	20.57				68		200	3500	19.27	73	200	3390	17.03	82	200	3180	15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66		600		6350		AD ₃		17.33					81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415
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43.83	32	200	4290		38.31	37	200	4290			35.91	39	200	4290		31.69		44		200		4290		28.09		50		200		4060		23.88		59	200	3760		28.88	48	400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86	45	400	5920	AD ₂	40.13	35	590	9710	AD ₂	20.57	68	200	3500	19.27	73	200	3390	17.03	82		200	3180	15.81		89				200		3070													14.33	98		200	2910			12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52		104		600				4990					12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																		
38.31	37	200	4290		35.91	39	200	4290			31.69	44	200	4290		28.09		50		200		4060		23.88		59		200		3760	28.88	48		400	5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86	45	400	5920	AD ₂		40.13	35	590	9710		AD ₂	20.57	68	200		3500	19.27	73	200	3390	17.03	82	200	3180	15.81		89	200	3070		14.33				98		200													2910	12.87		109	200	2750		11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400		4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990		12.29		114				600					4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																					
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31.69	44	200	4290		28.09	50	200	4060			23.88	59	200	3760		28.88		48		400		5790	2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86	45	400	5920	AD ₂	40.13		35	590	9710	AD ₂			20.57	68	200	3500				19.27	73	200			3390	17.03	82		200	3180	15.81	89	200	3070	14.33	98	200	2910		12.87	109	200		2750				11.08		125													190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400	4450		19.11	73	600		6020	16.81	83		600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600		4320		9.31				150					420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																												
28.09	50	200	4060		23.88	59	200	3760			28.88	48	400	5790		2-stage						2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86	45	400	5920	AD ₂		40.13	35	590	9710		AD ₂		20.57	68	200				3500	19.27	73	200				3390	17.03	82			200	3180	15.81		89	200	3070	14.33	98	200	2910	12.87	109	200		2750	11.08	125		190				2620		10.42													134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81		400	4450	19.11	73		600	6020	16.81		83	600	5820		15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31		150		420				4760					8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																														
23.88	59	200	3760		28.88	48	400	5790			2-stage					2-stage					2-stage					23.63	59	200	3740	AD ₂	30.86	45	400	5920	AD ₂		40.13	35	590	9710			AD ₂	20.57	68	200				3500	19.27	73				200	3390	17.03	82				200	3180	15.81			89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190		2620	10.42	134		185				2580		8.97													156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400		4450	19.11		73	600	6020	16.81		83	600	5820		15.88	88	600		5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171		420				4450					7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																																		
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23.63	59	200	3740	AD ₂	30.86	45	400	5920	AD ₂	40.13	35	590	9710	AD ₂																																																																																																																																																																																																																																														
20.57	68	200	3500		19.27	73	200	3390		17.03	82	200	3180		15.81	89	200	3070	14.33	98	200	2910	12.87	109	200	2750	11.08	125	190		2620	10.42	134	185			2580	8.97	156	175				2460	8.01	175		170		2360	7.44	188	145			2350	6.74	208	140			2270	6.05	231	135		2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372		105	1970	4.99		281				320		2310													24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181		420	4310	6.58		213	420		3940	5.98	234	420		3730	5.18	270		415	3460																																																																																	
19.27	73	200	3390		17.03	82	200	3180		15.81	89	200	3070		14.33	98	200	2910	12.87	109	200	2750	11.08	125	190	2620	10.42	134	185		2580	8.97	156	175			2460	8.01	175	170			2360	7.44	188	145		2350		6.74	208	140	2270			6.05	231	135	2190			5.21	269	125	2120		4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320		2310	24.96	58		575				7080		21.17							66					600	6350	AD ₃	17.33	81	400	4450	19.11	73		600	6020	16.81	83	600	5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940		5.98	234	420		3730	5.18		270	415	3460																																																																																									
17.03	82	200	3180		15.81	89	200	3070		14.33	98	200	2910		12.87	109	200	2750	11.08	125	190	2620	10.42	134	185	2580	8.97	156	175		2460	8.01	175	170			2360	7.44	188	145			2350	6.74	208	140		2270		6.05	231	135	2190			5.21	269	125	2120			4.90	286	120	2100		4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575		7080	21.17	66		600				6350		AD ₃					17.33		81				400	4450	19.11		73	600	6020	16.81	83	600		5820	15.88	88	600	5450	13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18		270	415	3460																																																																																																
15.81	89	200	3070		14.33	98	200	2910		12.87	109	200	2750		11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170		2360	7.44	188	145			2350	6.74	208	140			2270	6.05	231	135		2190		5.21	269	125	2120			4.90	286	120	2100			4.22	332	110	2030		3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600		6350	AD ₃	17.33		81				400					4450		19.11		73			600	6020	16.81	83		600	5820	15.88	88	600	5450		13.52	104	600	4990	12.29	114	600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																																																																																																						
14.33	98	200	2910		12.87	109	200	2750		11.08	125	190	2620	10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350		6.74	208	140	2270			6.05	231	135	2190			5.21	269	125	2120		4.90		286	120	2100	4.22			332	110	2030	3.77			372	105	1970	4.99		281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400		4450		19.11		73				600			6020		16.81		83		600		5820	15.88	88	600	5450		13.52	104	600	4990	12.29	114		600	4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																																																																																																												
12.87	109	200	2750		11.08	125	190	2620		10.42	134	185	2580	8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270		6.05	231	135	2190			5.21	269	125	2120			4.90	286	120	2100		4.22		332	110	2030	3.77			372	105	1970	4.99			281	320	2310	24.96		58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400		4450	19.11	73		600		6020		16.81				83	600		5820		15.88		88		600	5450	13.52	104	600	4990	12.29		114	600	4710	10.64	132	600		4320	9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																																																																																																																	
11.08	125	190	2620		10.42	134	185	2580		8.97	156	175	2460	8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190		5.21	269	125	2120			4.90	286	120	2100			4.22	332	110	2030		3.77		372	105	1970	4.99			281	320	2310	24.96			58	575	7080	21.17		66	600	6350	AD ₃	17.33	81	400		4450	19.11	73		600	6020	16.81		83		600		5820			15.88	88	600		5450		13.52		104	600	4990	12.29	114	600	4710	10.64	132		600	4320	9.31	150	420	4760		8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																																																																																																																						
10.42	134	185	2580		8.97	156	175	2460		8.01	175	170	2360	7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120		4.90	286	120	2100			4.22	332	110	2030			3.77	372	105	1970		4.99		281	320	2310	24.96			58	575	7080	21.17			66	600	6350	AD ₃		17.33	81	400		4450	19.11	73		600	6020	16.81		83	600	5820		15.88		88		600	5450		13.52	104	600		4990		12.29	114	600	4710	10.64	132	600	4320	9.31	150	420		4760	8.19	171	420	4450	7.73		181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18	270	415	3460																																																																																																																											
8.97	156	175	2460		8.01	175	170	2360		7.44	188	145	2350	6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100		4.22	332	110	2030			3.77	372	105	1970			4.99	281	320	2310		24.96		58	575	7080	21.17			66	600	6350	AD ₃			17.33	81	400			4450	19.11	73		600	6020	16.81		83	600	5820		15.88	88	600		5450		13.52	104	600	4990		12.29	114	600		4710	10.64	132	600	4320	9.31	150	420	4760	8.19	171	420	4450		7.73	181	420	4310	6.58	213		420	3940	5.98	234	420	3730	5.18	270	415	3460																																																																																																																																
8.01	175	170	2360		7.44	188	145	2350		6.74	208	140	2270	6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030		3.77	372	105	1970			4.99	281	320	2310			24.96	58	575	7080		21.17		66	600	6350	AD ₃			17.33	81	400				4450	19.11	73			600	6020	16.81		83	600	5820		15.88	88	600		5450	13.52	104	600	4990		12.29	114	600	4710	10.64	132	600	4320		9.31	150	420	4760	8.19	171	420	4450	7.73	181	420	4310	6.58		213	420	3940	5.98	234	420		3730	5.18	270	415	3460																																																																																																																																					
7.44	188	145	2350		6.74	208	140	2270		6.05	231	135	2190	5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970		4.99	281	320	2310			24.96	58	575	7080			21.17	66	600	6350		AD ₃		17.33	81	400				4450	19.11	73				600	6020	16.81			83	600	5820		15.88	88	600		5450	13.52	104		600	4990	12.29	114	600		4710	10.64	132	600	4320	9.31	150	420		4760	8.19	171	420	4450	7.73	181	420	4310	6.58	213	420	3940		5.98	234	420	3730	5.18	270		415	3460																																																																																																																																								
6.74	208	140	2270		6.05	231	135	2190		5.21	269	125	2120	4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310		24.96	58	575	7080			21.17	66	600	6350			AD ₃	17.33	81	400				4450	19.11	73				600	6020	16.81			83	600	5820	15.88		88	600	5450	13.52		104	600	4990		12.29	114	600		4710	10.64	132	600	4320		9.31	150	420	4760	8.19	171	420	4450		7.73	181	420	4310	6.58	213	420	3940	5.98	234	420	3730	5.18		270	415	3460																																																																																																																																														
6.05	231	135	2190		5.21	269	125	2120		4.90	286	120	2100	4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080		21.17	66	600	6350			AD ₃	17.33	81	400				4450	19.11	73				600	6020	16.81			83	600	5820	15.88		88	600	5450	13.52	104		600	4990	12.29	114		600	4710	10.64		132	600	4320		9.31	150	420	4760	8.19		171	420	4450	7.73	181	420	4310	6.58		213	420	3940	5.98	234	420	3730	5.18	270	415	3460																																																																																																																																																				
5.21	269	125	2120		4.90	286	120	2100		4.22	332	110	2030	3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350		AD ₃	17.33	81	400				4450	19.11	73				600	6020	16.81			83	600	5820	15.88		88	600	5450	13.52	104		600	4990	12.29	114	600		4710	10.64	132	600		4320	9.31	150		420	4760	8.19		171	420	4450	7.73	181		420	4310	6.58	213	420	3940	5.98	234		420	3730	5.18	270	415	3460																																																																																																																																																									
4.90	286	120	2100		4.22	332	110	2030		3.77	372	105	1970	4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400			4450	19.11	73				600	6020	16.81		83		600	5820	15.88	88		600	5450	13.52	104		600	4990	12.29	114	600		4710	10.64	132	600	4320		9.31	150	420	4760		8.19	171	420		4450	7.73	181		420	4310	6.58	213	420		3940	5.98	234	420	3730	5.18	270	415		3460																																																																																																																																																														
4.22	332	110	2030		3.77	372	105	1970		4.99	281	320	2310	24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400		4450	19.11	73			600	6020	16.81		83		600	5820	15.88	88	600		5450	13.52	104	600		4990	12.29	114	600		4710	10.64	132	600	4320		9.31	150	420	4760	8.19		171	420	4450	7.73		181	420	4310		6.58	213	420		3940	5.98	234	420	3730		5.18	270	415	3460																																																																																																																																																																				
3.77	372	105	1970		4.99	281	320	2310		24.96	58	575	7080	21.17	66	600	6350	AD ₃	17.33	81	400		4450	19.11	73		600	6020	16.81	83		600	5820	15.88	88	600		5450	13.52	104	600	4990		12.29	114	600	4710		10.64	132	600	4320		9.31	150	420	4760	8.19		171	420	4450	7.73	181		420	4310	6.58	213		420	3940	5.98		234	420	3730		5.18	270	415	3460																																																																																																																																																																										
4.99	281	320	2310		24.96	58	575	7080		21.17	66	600	6350	AD ₃	17.33	81	400		4450	19.11	73		600	6020	16.81		83	600	5820	15.88		88	600	5450	13.52	104		600	4990	12.29	114	600		4710	10.64	132	600		4320	9.31	150	420		4760	8.19	171	420	4450		7.73	181	420	4310	6.58		213	420	3940	5.98		234	420	3730		5.18	270	415		3460																																																																																																																																																																													
24.96	58	575	7080																																																																																																																																																																																																																																																									
21.17	66	600	6350	AD ₃	17.33	81	400	4450	19.11	73	600	6020	16.81		83	600	5820		15.88	88	600		5450	13.52	104		600	4990	12.29	114		600	4710	10.64	132	600		4320	9.31	150	420	4760		8.19	171	420	4450		7.73	181	420	4310		6.58	213	420	3940	5.98		234	420	3730	5.18	270		415	3460																																																																																																																																																																																									
19.11	73	600	6020		16.81	83	600	5820	15.88	88	600	5450	13.52		104	600	4990		12.29	114	600		4710	10.64	132		600	4320	9.31	150		420	4760	8.19	171	420		4450	7.73	181	420	4310		6.58	213	420	3940		5.98	234	420	3730		5.18	270	415	3460																																																																																																																																																																																																			
16.81	83	600	5820		15.88	88	600	5450	13.52	104	600	4990	12.29		114	600	4710		10.64	132	600		4320	9.31	150		420	4760	8.19	171		420	4450	7.73	181	420		4310	6.58	213	420	3940		5.98	234	420	3730		5.18	270	415	3460																																																																																																																																																																																																								
15.88	88	600	5450		13.52	104	600	4990	12.29	114	600	4710	10.64		132	600	4320		9.31	150	420		4760	8.19	171		420	4450	7.73	181		420	4310	6.58	213	420		3940	5.98	234	420	3730		5.18	270	415	3460																																																																																																																																																																																																													
13.52	104	600	4990		12.29	114	600	4710	10.64	132	600	4320	9.31		150	420	4760		8.19	171	420		4450	7.73	181		420	4310	6.58	213		420	3940	5.98	234	420		3730	5.18	270	415	3460																																																																																																																																																																																																																		
12.29	114	600	4710		10.64	132	600	4320	9.31	150	420	4760	8.19		171	420	4450		7.73	181	420		4310	6.58	213		420	3940	5.98	234		420	3730	5.18	270	415		3460																																																																																																																																																																																																																						
10.64	132	600	4320		9.31	150	420	4760	8.19	171	420	4450	7.73		181	420	4310		6.58	213	420		3940	5.98	234		420	3730	5.18	270		415	3460																																																																																																																																																																																																																											
9.31	150	420	4760		8.19	171	420	4450	7.73	181	420	4310	6.58		213	420	3940		5.98	234	420		3730	5.18	270		415	3460																																																																																																																																																																																																																																
8.19	171	420	4450		7.73	181	420	4310	6.58	213	420	3940	5.98		234	420	3730		5.18	270	415		3460																																																																																																																																																																																																																																					
7.73	181	420	4310		6.58	213	420	3940	5.98	234	420	3730	5.18		270	415	3460																																																																																																																																																																																																																																											
6.58	213	420	3940		5.98	234	420	3730	5.18	270	415	3460																																																																																																																																																																																																																																																
5.98	234	420	3730		5.18	270	415	3460																																																																																																																																																																																																																																																				
5.18	270	415	3460																																																																																																																																																																																																																																																									

B-F..67-87, $n_e=1400$ rpm

B-F..67 820Nm					B-F..77 1500Nm					B-F..87 3000Nm									
i	n_a	M_{amax}	F_{Ra}	AD	i	n_a	M_{amax}	F_{Ra}	AD	i	n_a	M_{amax}	F_{Ra}	AD					
[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]						
3-stage					3-stage					3-stage									
228.99	6.1	820	10300	AD ₂	281.71	5.0	1500	15700	AD ₂	270.68	5.2	3000	19800	AD ₂					
195.39	7.2	820	10300		262.93	5.3	1500	15700		255.37	5.5	3000	19800						
170.85	8.2	820	10300		225.79	6.2	1500	15700		228.93	6.1	3000	19800						
162.31	8.6	820	10300		198.31	7.1	1500	15700		197.20	7.1	3000	19800						
142.40	9.8	820	10300		188.40	7.4	1500	15700		179.97	7.8	3000	19800						
120.79	12	820	10300		166.47	8.4	1500	15700		159.61	8.8	3000	19800						
109.04	13	820	10300		142.27	9.8	1500	15700		134.16	10	3000	19800						
95.94	15	820	10300		130.42	11	1500	15700		123.29	11	3000	19800						
90.59	16	820	10300		114.45	12	1500	15700		109.49	13	3000	19800						
79.76	18	820	10300		108.46	13	1500	15700		97.89	14	3000	19800						
67.65	21	820	10300		94.93	15	1500	15700		88.01	16	3000	19800						
61.07	23	820	10300		85.52	16	1500	15700		76.39	18	3000	19800						
53.73	26	820	10300		75.02	19	1500	15700		2-stage									
50.74	28	820	10300		72.50	20	1500	15700											
43.20	32	820	10300		66.46	21	1500	15700											
39.26	38	780	10700		58.32	24	1500	15700											
34.01	41	740	11000		55.27	25	1500	15700											
2-stage					2-stage					2-stage									
36.30	39	820	10300		AD ₂	43.58	32	1500		15700	AD ₃	68.40	20		3000	19800	AD ₃		
					38.23	37	1500	15700		56.75		25	3000		17700				
				33.74	41	1500	15700	50.36	28	2940		16800							
				29.91	47	1500	15700	45.28	31	2920		16200							
				25.54	55	1450	16100	39.30	36	2720		15400							
32.08	44	820	10300	AD ₃	2-stage					35.19	40	2810	14800	AD ₄					
27.41	51	820	10300							29.20	48	2510	13800						
25.13	56	820	10300							2-stage					2-stage				
22.05	63	820	10300																
20.90	67	820	10300																
18.29	77	820	10300																
16.48	85	820	10300																
14.46	97	820	10300		36.58	38	1210	17900	AD ₃	33.92	41	2610	14800	AD ₄					
12.76	110	820	10300		31.51	44	1380	16500		28.78	49	2450	13900						
11.31	124	820	10300		28.75	49	1430	16200		2-stage									
9.66	145	820	10300		2-stage														
9.08	154	530	11400																
8.60	163	570	10900																
7.53	188	610	10100																
6.78	206	620	9660																
5.95	235	610	9200																
5.25	267	590	8850																
4.66	300	560	8590																
3.97	353	500	8390																
										25.50	55	1500	15700	AD ₄	26.50	53	3000	11100	AD ₅
				21.43	65	1500	15700	23.68	59	3000	10300								
				19.70	71	1500	15700	21.32	66	3000	9530								
				17.49	80	1500	15700	19.31	73	3000	8840								
				15.64	90	1500	15700	17.12	82	3000	8040								
				14.06	100	1500	15700	15.48	90	3000	7390								
				12.20	115	1500	14900	13.12	107	3000	6370								
				10.93	128	1500	14200	11.46	122	3000	5580								
				9.30	151	1080	13800	9.58	148	2880	5050								
				8.26	169	1080	13100	8.29	169	1530	8890								
				7.39	189	1080	12500	7.35	190	1530	8280								
				6.64	211	1080	12000	6.65	211	1530	7790								
				5.76	243	1080	11300	5.63	248	1530	7020								
				5.16	271	1080	10700	4.92	284	1530	6430								
				4.28	327	1010	10200	4.12	340	1460	5980								

B-F..97~127, $n_e=1400$ rpm

B-F..97 4300Nm					B-F..107 7840Nm					B-F..127 12000Nm																		
i	n_a	M_{amax}	F_{Ra}	AD	i	n_a	M_{amax}	F_{Ra}	AD	i	n_a	M_{amax}	F_{Ra}	AD														
[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]		[ratio]	[rpm]	[Nm]	[N]															
3-stage					3-stage					3-stage																		
276.77	5.1	4300	29900	AD ₃	254.40	5.5	7840	49800	AD ₃	170.83	8.2	12000	90000	AD ₄														
253.41	5.5	4300	29900		215.37	6.5	7840	49800		153.67	9.1	12000	90000															
223.88	6.3	4300	29900		199.31	7.0	7840	49800		125.37	11	12000	90000															
189.92	7.4	4300	29900		178.64	7.8	7840	49800		114.34	12	12000	88000															
174.87	8.0	4300	29900		161.28	8.7	7840	49800		98.95	14	12000	83000															
156.30	9.0	4300	29900		146.49	9.6	7840	49800		87.31	18	12000	78900															
140.71	9.9	4300	29900		129.97	11	7840	49800		75.41	19	12000	74300															
127.42	11	4300	29900		117.94	12	7840	49800		AD ₅																		
112.99	12	4300	29900		AD ₄																							
102.16	14	4300	29900																									
97.58	14	4300	29900																									
89.85	16	4300	29900							101.38	14	7840	49800															
86.59	16	4300	29900		92.47	15	7840	49800	70.07	20	12000	72100																
80.31	17	4300	29900		88.49	18	7840	49800	63.91	22	12000	69400																
75.63	19	4300	29900		83.99	17	7840	49800	55.31	25	12000	65300																
72.29	19	4300	29900	74.52	19	7840	49800	48.80	29	12000	61800																	
AD ₄					67.62	21	7840	49800	42.15	33	12000	57900																
					58.12	24	7840	47800	AD ₆																			
					50.73	28	7840	45100																				
					43.03	33	7840	42000	37.28	38	12000	54800																
AD ₅					37.61	37	7840	39500	AD ₇																			
					31.80	44	7840	38500																				
					2-stage					2-stage					2-stage													
43.28	32	3070	27600	33.79																41	7400	38300	26.86	52	8500	55300		
36.64	38	3070	25500	27.57	51	7840	33700	24.57	57	8500	53300																	
AD ₅					AD ₆					AD ₇																		
															33.91	41	4300	20300	25.14	56	7840	32200	21.38	85	12000	42000		
															30.39	46	4300	19000	21.76	64	7840	30000	18.87	74	11000	41900		
															27.44	51	4300	17900	19.20	73	7840	28100	16.36	86	11000	39000		
															24.92	58	4300	18800	16.58	84	7840	28000	14.55	96	11000	36200		
															22.11	63	4300	15600	14.67	95	7680	24700	12.54	112	10000	36400		
															20.07	70	4300	14600	12.33	114	7500	24300	10.19	137	9500	34000		
															17.25	81	4300	13200	9.96	141	7500	22900	8.86	158	7000	36400		
15.06	93	4300	11900	9.69	144	6910	25400	7.88	178	6000	37000																	
AD ₆					AD ₆					AD ₈																		
															12.77	110	4300	10500	8.37	167	5800	24000	6.80	208	7000	32200		
															11.16	125	4100	10000	7.40	189	5600	23200	5.52	254	6000	31700		
															9.06	154	2380	13600	6.22	225	5600	21100	4.68	299	6000	29500		
															8.22	170	2360	12800										
															7.07	198	2360	11700										
6.17	227	2250	11200																									
5.23	268	2150	10600																									
4.57	306	2050	10100																									

B-F..157 $n_e=1400$ rpm

B-F..157		18000Nm		
i [ratio]	n_a [rpm]	M_{amax} [Nm]	F_{Ra} [N]	AD
3-stage				
267.43	5.2	18000	100300	AD ₅
217.62	6.4	18000	100300	
178.20	7.9	18000	100300	
162.96	8.8	18000	100300	
141.80	9.9	18000	100300	
125.14	11	18000	100300	
108.49	13	18000	100300	
96.53	15	18000	100300	
85.80	18	18000	95700	
78.46	18	18000	82300	
68.28	21	18000	87000	
60.25	23	18000	82500	
52.24	27	18000	77500	AD ₆
46.48	30	18000	73600	AD ₇
40.06	35	18000	88900	
32.55	43	18000	62500	
27.60	51	18000	57800	AD ₈
2-stage				
53.55	26	8000	98300	AD ₅
43.94	32	10000	87800	AD ₆
35.75	39	11000	79300	
28.60	49	17000	60800	AD ₈
25.43	55	15000	61500	
22.16	63	18000	51800	
19.77	71	17000	50000	
16.85	83	18000	44800	
13.96	100	17000	42500	
11.92	117	18000	40900	

TECHNICAL DATA

B-F.. AM..

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.18kW						
0.10	13500	12912	87500	0.90		
0.11	12100	11656	90000	1.00	B-FA 127 R77	4P
0.13	10700	10191	90000	1.10	B-FAF 127 R77	4P
0.15	8980	8831	90000	1.35	B-F 127 R77	4P
0.17	7770	7643	90000	1.55	B-FF 127 R77	4P
0.20	7150	6715	90000	1.70		
0.15	8560	8548	47400	0.90		
0.17	8050	7674	48800	0.95		
0.20	7030	6767	51500	1.10		
0.22	6090	5954	53800	1.25	B-FA 107 R77	4P
0.25	5310	5223	55600	1.45	B-FAF 107 R77	4P
0.29	4860	4567	56600	1.60	B-F 107 R77	4P
0.37	3660	3521	59100	2.1	B-FF 107 R77	4P
0.43	3170	3037	60100	2.4		
0.48	2880	2758	60600	2.7		
0.56	2470	2369	61400	3.1		
0.64	2160	2068	61900	3.6		
0.30	4660	4333	27900	0.90		
0.34	4260	3906	30000	1.00		
0.39	3870	3352	31600	1.15		
0.45	3100	2907	33100	1.40	B-FA 97 R57	4P
0.52	2790	2553	33600	1.55	B-FAF 97 R57	4P
0.59	2450	2245	34500	1.75	B-F 97 R57	4P
0.67	2130	1970	35200	2.0	B-FF 97 R57	4P
0.77	1890	1722	35600	2.3		
0.86	1670	1527	36000	2.6		
0.99	1380	1327	36500	3.1		
1.1	1280	1171	36600	3.3		
0.46	3160	2881	22300	0.95		
0.51	2820	2576	23600	1.05		
0.60	2400	2199	25200	1.25		
0.68	2080	1930	26200	1.45	B-FA 87 R57	4P
0.77	1860	1709	26800	1.80	B-FAF 87 R57	4P
0.88	1640	1493	27500	1.85	B-F 87 R57	4P
1.0	1350	1300	28200	2.2	B-FF 87 R57	4P
1.1	1210	1148	28500	2.5		
1.3	1050	1010	28900	2.6		
1.5	940	887	29100	3.2		
1.7	810	780	29400	3.7		
0.76	1880	1728	12810	0.80		
0.88	1710	1544	14100	0.90		
0.98	1500	1354	15700	1.00	B-FA 77 R37	4P
1.1	1330	1200	16800	1.15	B-FAF 77 R37	4P
1.2	1170	1053	17600	1.30	B-F 77 R37	4P
1.5	1000	910	18300	1.50	B-FF 77 R37	4P
1.6	860	810	18800	1.75		
1.9	755	710	19100	2.0		
2.2	670	615	19300	2.2		
1.5	910	858	9370	0.90		
1.8	800	755	10400	1.00	B-FA 67 R37	4P
2.1	685	641	11400	1.20	B-FAF 67 R37	4P
2.3	625	572	11800	1.30	B-F 67 R37	4P
2.6	540	509	12200	1.50	B-FF 67 R37	4P
3.0	470	437	12600	1.75		
3.4	420	384	12700	1.95		
2.8	560	500	12100	1.45		
2.9	510	454	12400	1.60		
3.4	440	392	12700	1.85	B-FA 67 R37	4P
4.0	370	333	12900	2.2	B-FAF 67 R37	4P
4.4	325	297	13000	2.5	B-F 67 R37	4P
5.1	285	261	13000	2.9	B-FF 67 R37	4P
5.6	260	238	13000	3.2		
6.6	215	200	13000	3.8		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor fB	Model	Pole
0.18kW						
2.4	615	558	9080	1.00		
2.6	550	506	9580	1.10	B-FA 57 R37	4P
2.9	485	452	10000	1.25	B-FAF 57 R37	4P
3.4	415	386	10500	1.45	B-F 57 R37	4P
3.9	360	338	10800	1.65	B-FF 57 R37	4P
3.1	485	426	10000	1.25		
3.5	430	382	10400	1.40	B-FA 57 R37	4P
4.0	370	330	10700	1.60	B-FAF 57 R37	4P
4.4	335	298	11000	1.80	B-F 57 R37	4P
5.0	295	262	11200	2.0	B-FF 57 R37	4P
5.8	250	226	11400	2.4		
6.6	215	200	11500	2.8		
3.6	400	370	5920	1.00	B-FA 47 R17	4P
4.4	365	324	6410	1.10	B-FAF 47 R17	4P
4.6	315	288	6910	1.25	B-F 47 R17	4P
5.3	270	249	7310	1.50	B-FF 47 R17	4P
4.0	375	334	6260	1.05		
4.5	330	295	6780	1.20	B-FA 47 R17	4P
5.2	280	253	7250	1.45	B-FAF 47 R17	4P
6.1	245	217	7490	1.60	B-F 47 R17	4P
7.0	215	190	7690	1.85	B-FF 47 R17	4P
7.4	200	178	7770	2.0		
7.1	210	186	4160	0.95	B-FA 37 R17	4P
7.9	188	168	4460	1.05	B-FAF 37 R17	4P
9.1	166	145	4720	1.20	B-F 37 R17	4P
10	148	129	4910	1.35	B-FF 37 R17	4P
3.1	555	281.71	19600	2.7	B-FA 77	6P
3.3	520	262.93	19700	2.9	B-FAF 77	6P
3.8	445	225.79	19800	3.4	B-F 77	6P
					B-FF 77	6P
3.8	450	228.99	12600	1.80	B-FA 67	6P
4.4	385	195.39	12900	2.1	B-FAF 67	6P
5.1	340	170.85	13000	2.4	B-F 67	6P
					B-FF 67	6P
5.8	300	228.99	13000	2.8	B-FA 67	4P
6.8	255	195.39	13000	3.2	B-FAF 67	4P
7.7	225	170.85	13000	3.7	B-F 67	4P
					B-FF 67	4P
4.4	395	199.70	10600	1.50		
4.7	365	183.60	10800	1.65	B-FA 57	6P
5.5	310	157.09	11100	1.95	B-FAF 57	6P
6.4	270	136.16	11300	2.2	B-F 57	6P
6.8	250	127.27	11400	2.4	B-FF 57	6P
7.9	215	110.01	11500	2.8		
6.6	260	199.70	11300	2.3	B-FA 57	4P
7.2	240	183.60	11500	2.5	B-FAF 57	4P
8.4	205	157.09	11500	2.9	B-F 57	4P
9.7	177	136.16	11500	3.4	B-FF 57	4P
10	166	127.27	11500	3.6		
4.6	375	190.76	6240	1.05		
5.0	345	175.38	6600	1.15	B-FA 47	6P
5.8	295	150.06	7090	1.35	B-FAF 47	6P
6.7	255	130.07	7410	1.55	B-F 47	6P
7.2	240	121.57	7530	1.65	B-FF 47	6P
6.9	250	190.76	7490	1.60	B-FA 47	4P
7.5	230	175.38	7610	1.75	B-FAF 47	4P
8.8	195	150.06	7800	2.0	B-F 47	4P
10	169	130.07	7920	2.4	B-FF 47	4P
11	158	121.57	7920	2.5		
7.4	235	117.88	3750	0.85	B-FA 37	6P
8.7	198	100.36	4320	1.00	B-FAF 37	6P
10	171	86.53	4660	1.15	B-F 37	6P
11	159	80.65	4790	1.25	B-FF 37	6P
12	139	70.50	4970	1.45		

PARALLEL SHAFT HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.18kW						
10	167	128.51	4700	1.20		
11	154	117.88	4850	1.30		
13	131	100.36	5050	1.55		
15	113	86.53	5180	1.75		
16	105	80.65	5230	1.90		
19	92	70.50	5300	2.2		
20	86	66.09	5330	2.3	B-FA 37	4P
23	76	58.32	5380	2.6	B-FAF 37	4P
24	71	54.54	5400	2.8	B-F 37	4P
26	67	51.70	5410	3.0	B-FF 37	4P
28	61	47.02	5440	3.3		
30	57	43.83	5450	3.5		
34	50	38.31	5470	4.0		
37	47	35.91	5480	4.3		
42	41	31.69	5490	4.8		
47	37	28.09	5500	5.5		
55	31	23.88	5260	6.4		
56	31	23.63	5240	8.5		
64	27	20.57	5030	7.5		
69	25	19.27	5930	8.0		
78	22	17.03	5740	9.0		
83	21	15.81	4640	9.7		
92	19	14.33	4500	11		
103	17	12.87	4350	12	B-FA 37	4P
119	14	11.08	4150	13	B-FAF 37	4P
127	14	10.42	4070	14	B-F 37	4P
147	12	8.97	3880	15	B-FF 37	4P
178	9.7	7.44	3650	15		
196	8.8	6.74	3540	16		
218	7.9	6.05	3420	17		
253	8.8	5.21	3260	18		
269	6.4	4.90	3190	19		
313	5.5	4.22	3040	20		
0.37kW						
0.21	14900	6715	84800	0.80		
0.23	13100	5925	88300	0.90	B-FA 127 R77	4P
0.27	11300	5153	90000	1.05	B-FAF 127 R77	4P
0.30	9850	4533	90000	1.20	B-F 127 R77	4P
0.35	8590	3926	90000	1.40	B-FF 127 R77	4P
0.40	7510	3454	90000	1.60		
0.46	6570	3031	90000	1.85		
0.45	6720	3037	52300	1.15	B-FA 107 R77	4P
0.50	6090	2756	53800	1.25	B-FAF 107 R77	4P
0.58	5240	2369	55800	1.45	B-F 107 R77	4P
0.67	4570	2068	57200	1.70	B-FF 107 R77	4P
0.86	3510	1597	59400	2.2		
0.61	5070	2245	25160	0.85		
0.70	4450	1970	29500	0.95		
0.80	3900	1722	31000	1.10	B-FA 97 R57	4P
0.90	3460	1527	32200	1.25	B-FAF 97 R57	4P
1.0	2930	1327	33500	1.45	B-F 97 R57	4P
1.2	2650	1171	34100	1.60	B-FF 97 R57	4P
1.4	2310	1022	34800	1.85		
1.5	1960	898	35500	2.2		
1.1	2870	1300	23400	1.05		
1.2	2550	1148	24600	1.20		
1.4	2230	1010	25700	1.35	B-FA 87 R57	4P
1.6	1970	887	26500	1.50	B-FAF 87 R57	4P
1.8	1720	780	27200	1.75	B-F 87 R57	4P
2.0	1470	674	27900	2.0	B-FF 87 R57	4P
2.3	1340	609	28200	2.2		
2.7	1150	515	28700	2.7		
3.0	1000	452	29000	3.0		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.37kW						
1.7	1810	810	13300	0.85		
1.9	1590	710	15100	0.95		
2.2	1390	615	16400	1.10	B-FA 77 R37	4P
2.6	1210	538	17400	1.25	B-FAF 77 R37	4P
2.9	1080	480	18000	1.40	B-F 77 R37	4P
3.3	920	413	18600	1.65	B-FF 77 R37	4P
3.8	830	367	18900	1.80		
4.3	730	323	19200	2.0		
3.2	980	437	8750	0.85		
3.6	870	384	9880	0.95	B-FA 67 R37	4P
4.1	770	338	10800	1.05	B-FAF 67 R37	4P
4.5	685	305	11400	1.20	B-F 67 R37	4P
5.4	575	257	12000	1.40	B-FF 67 R37	4P
6.0	510	231	12400	1.60		
5.4	570	255	9420	1.05	B-FA 57 R37	4P
6.9	445	201	10300	1.35	B-FAF 57 R37	4P
7.6	405	181	10500	1.50	B-F 57 R37	4P
					B-FF 57 R37	4P
5.3	605	262	9170	1.00		
6.1	515	226	9810	1.15	B-FA 57 R37	4P
6.9	455	200	10200	1.30	B-FAF 57 R37	4P
8.1	385	170	10700	1.55	B-F 57 R37	4P
9.1	345	152	10900	1.75	B-FF 57 R37	4P
10	300	134	11100	2.0		
7.9	395	175	5990	1.00	B-FA 47 R17	4P
9.4	335	147	6740	1.20	B-FAF 47 R17	4P
11	295	130	7110	1.35	B-F 47 R17	4P
					B-FF 47 R17	4P
2.5	1410	270.68	28100	2.1	B-FA 87	8P
2.7	1330	255.37	28200	2.3	B-FAF 87	8P
3.0	1190	228.93	28600	2.5	B-F 87	8P
3.5	1020	197.20	28900	2.9	B-FF 87	8P
3.3	1060	270.68	28800	2.8	B-FA 87	6P
3.5	1000	255.37	29000	3.0	B-FAF 87	6P
3.9	900	228.93	29200	3.3	B-F 87	6P
					B-FF 87	6P
4.0	890	225.79	18700	1.70	B-FA 77	6P
4.5	760	198.31	19100	1.95	B-FAF 77	6P
4.8	740	188.40	19200	2.0	B-F 77	6P
5.4	655	166.47	19400	2.3	B-FF 77	6P
6.3	560	142.27	19600	2.7		
4.9	720	281.71	19200	2.1	B-FA 77	4P
5.2	675	262.93	19300	2.2	B-FAF 77	4P
6.1	580	225.79	19500	2.6	B-F 77	4P
7.0	510	198.31	19700	3.0	B-FF 77	4P
4.6	765	195.39	10800	1.05	B-FA 67	6P
5.3	670	170.85	11500	1.20	B-FAF 67	6P
5.6	635	162.31	11700	1.30	B-F 67	6P
6.3	560	142.40	12100	1.45	B-FF 67	6P
7.4	475	120.79	12500	1.75		
6.0	585	228.99	12000	1.40		
7.1	500	195.39	12400	1.65	B-FA 67	4P
8.1	435	170.85	12700	1.85	B-FAF 67	4P
8.5	415	162.31	12800	1.95	B-F 67	4P
9.7	365	142.40	12900	2.2	B-FF 67	4P
11	310	120.79	13000	2.7		
5.7	615	157.09	9070	0.95	B-FA 57	6P
6.6	535	136.16	9680	1.10	B-FAF 57	6P
7.1	500	127.27	9930	1.20	B-F 57	6P
8.2	430	110.01	10400	1.40	B-FF 57	6P

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.37kW						
6.9	510	199.70	9850	1.15		
7.5	470	183.60	10100	1.30		
8.8	400	157.09	10600	1.50	B-FA 57	4P
10	350	136.16	10900	1.70	B-FAF 57	4P
11	325	127.27	11000	1.85	B-F 57	4P
13	280	110.01	11200	2.1	B-FF 57	4P
15	240	93.47	11500	2.5		
17	215	83.46	11500	2.8		
9.2	385	150.06	6140	1.05		
11	335	130.07	6740	1.20	B-FA 47	4P
13	270	105.09	7320	1.50	B-FAF 47	4P
15	230	89.29	7600	1.75	B-F 47	4P
17	205	79.72	7750	1.95	B-FF 47	4P
20	174	68.09	7900	2.3		
21	167	65.36	7930	2.4		
16	220	86.53	3960	0.90		
17	205	80.65	4200	0.95		
20	181	70.50	4550	1.10		
21	169	66.09	4680	1.20		
24	149	58.32	4890	1.35		
25	140	54.54	4970	1.45	B-FA 37	4P
27	132	51.70	5030	1.50	B-FAF 37	4P
29	120	47.02	5120	1.65	B-F 37	4P
31	112	43.83	5180	1.80	B-FF 37	4P
36	98	38.31	5270	2.0		
38	92	35.91	5300	2.2		
44	81	31.69	5300	2.5		
49	72	28.09	5140	2.8		
58	61	23.88	4930	3.3		
56	61	23.63	4920	3.3		
67	53	20.57	4740	3.8		
72	49	19.27	4650	4.1		
81	44	17.03	4500	4.6		
87	41	15.81	4400	4.9		
96	37	14.33	4280	5.4		
107	33	12.87	4150	6.1	B-FA 37	4P
125	28	11.08	3970	6.7	B-FAF 37	4P
132	27	10.42	3900	6.9	B-F 37	4P
154	23	8.97	3730	7.6	B-FF 37	4P
186	19	7.44	3510	7.6		
205	17	6.74	3410	8.1		
228	16	6.05	3300	8.7		
265	13	5.21	3150	9.4		
282	13	4.90	3090	9.6		
327	11	4.22	3050	9.8		
0.55kW						
0.22	20500	6295	92000	0.90	B-FA 157 R97	4P
0.25	17400	5404	102100	1.05	B-FAF 157 R97	4P
0.49	8930	2780	118700	2.0	B-F 157 R97	4P
					B-FF 157 R97	4P
0.56	7760	2427	120000	2.3	B-FA 157 R97	4P
0.81	5520	1674	120000	3.3	B-FAF 157 R97	4P
1.0	4220	1308	120000	4.3	B-F 157 R97	4P
1.2	3730	1169	120000	4.8	B-FF 157 R97	4P
0.35	13300	3926	86000	0.90	B-FA 127 R77	4P
0.39	11600	3454	90000	1.05	B-FAF 127 R77	4P
0.45	10200	3031	90000	1.20	B-F 127 R77	4P
					B-FF 127 R77	4P
0.57	8100	2369	48700	0.95		
0.66	7070	2068	51400	1.10		
0.74	6110	1826	43800	1.25		
0.86	5440	1597	55300	1.40	B-FA 107 R77	4P
0.97	4750	1401	56900	1.60	B-FAF 107 R77	4P
1.1	4160	1243	58100	1.85	B-F 107 R77	4P
1.2	3700	1087	59000	2.1	B-FF 107 R77	4P
1.4	3180	950	60000	2.4		
1.6	2770	834	60800	2.8		
2.1	2150	640	61900	3.6		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.55kW						
1.0	4530	1327	29200	0.95		
1.2	4060	1171	30800	1.05		
1.3	3550	1022	32000	1.20		
1.5	3050	898	33200	1.40		
1.7	2690	784	34000	1.60	B-FA 97 R57	4P
2.0	2340	690	34700	1.85	B-FAF 97 R57	4P
2.2	2060	605	35300	2.1	B-F 97 R57	4P
2.6	1790	529	35800	2.4	B-FF 97 R57	4P
2.9	1580	467	36100	2.7		
3.4	1360	406	36500	3.2		
3.7	1220	363	36700	3.5		
1.5	3040	887	18200	1.00		
1.7	2660	780	24200	1.15		
2.0	2290	674	25500	1.30	B-FA 87 R57	4P
2.2	2080	609	26200	1.45	B-FAF 87 R57	4P
2.6	1750	515	27100	1.70	B-F 87 R57	4P
3.0	1540	452	27700	1.95	B-FF 87 R57	4P
3.9	1160	345	28600	2.6		
2.5	1860	538	9980	0.80	B-FA 77 R37	4P
2.8	1660	480	14600	0.90	B-FAF 77 R37	4P
3.3	1420	413	16200	1.05	B-F 77 R37	4P
3.7	1270	367	17100	1.20	B-FF 77 R37	4P
4.2	1120	323	17800	1.35		
5.3	890	257	9660	0.90	B-FA 67 R37	4P
5.9	790	231	10600	1.05	B-FAF 67 R37	4P
6.6	705	205	11200	1.15	B-F 67 R37	4P
7.8	600	175	11900	1.35	B-FF 67 R37	4P
2.5	2140	276.77	35100	2.0	B-FA 97	8P
2.7	1960	253.41	35500	2.2	B-FAF 97	8P
3.0	1730	223.88	35900	2.5	B-F 97	8P
					B-FF 97	8P
2.5	2090	270.68	26200	1.45	B-FA 87	8P
2.7	1970	255.37	26500	1.50	B-FAF 87	8P
3.0	1770	228.93	27100	1.70	B-F 87	8P
3.5	1520	197.20	27800	1.95	B-FF 87	8P
3.3	1580	270.68	27600	1.90		
3.5	1490	255.37	27800	2.0	B-FA 87	6P
3.9	1340	228.93	28200	2.2	B-FAF 87	6P
4.6	1150	197.20	28700	2.6	B-F 87	6P
5.0	1050	179.97	28900	2.9	B-FF 87	6P
4.0	1320	225.79	16800	1.15		
4.5	1160	198.31	17600	1.30	B-FA 77	6P
4.8	1100	188.40	17900	1.35	B-FAF 77	6P
5.4	970	166.47	18400	1.55	B-F 77	6P
6.3	830	142.27	18900	1.80	B-FF 77	6P
6.9	760	130.42	19100	1.95		
6.0	870	225.79	18800	1.70		
6.9	765	198.31	19100	1.95		
7.2	730	188.40	19200	2.1		
8.2	645	166.47	19400	2.3	B-FA 77	4P
9.6	550	142.27	19600	2.7	B-FAF 77	4P
10	505	130.42	19700	3.0	B-F 77	4P
12	440	114.45	19800	3.4	B-FF 77	4P
13	420	108.46	19800	3.6		
14	365	94.93	19900	4.1		
7.0	755	195.39	10900	1.10		
8.0	660	170.85	11500	1.25		
8.4	625	162.31	11700	1.30		
9.6	550	142.40	12200	1.50	B-FA 67	4P
11	465	120.79	12600	1.75	B-FAF 67	4P
12	420	109.04	12700	1.95	B-F 67	4P
14	370	95.94	12900	2.2	B-FF 67	4P
15	350	90.59	13000	2.3		
17	310	79.76	13000	2.7		

PARALLEL SHAFT HELICAL GEARBOXES



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole	Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.55kW							0.75kW						
8.7	605	157.09	9150	1.00			0.76	8360	1826	48000	0.90		
10	525	136.16	9750	1.15			0.86	7400	1597	50500	1.05		
11	490	127.27	9980	1.20	B-FA	57	0.98	6470	1401	52900	1.20	B-FA	107 R77
12	425	110.01	10400	1.40	B-FAF	57	1.1	5690	1243	54800	1.35	B-FAF	107 R77
15	360	93.47	10800	1.65	B-F	57	1.3	5040	1087	56200	1.50	B-F	107 R77
16	320	83.46	11000	1.85	B-F	57	1.5	4350	950	57700	1.75	B-F	107 R77
19	280	72.98	11200	2.1	B-FF	57	1.7	3800	834	58800	2.0	B-FF	107 R77
20	265	68.22	11300	2.3			2.2	2940	640	60500	2.6		
23	230	58.97	11500	2.6			3.2	2000	436	62200	3.8		
13	405	105.09	5840	1.00			1.4	4810	1022	22800	0.90		
15	345	89.29	6620	1.15			1.5	4150	898	30300	1.05		
17	310	79.72	6990	1.30	B-FA	47	1.8	3660	784	31700	1.20	B-FA	97 R57
20	265	68.09	7370	1.50	B-FAF	47	2.0	3190	690	32900	1.35	B-FAF	97 R57
21	250	65.36	7440	1.60	B-F	47	2.3	2800	605	33800	1.55	B-F	97 R57
24	220	56.49	7670	1.85	B-FF	47	2.6	2440	529	34500	1.75	B-FF	97 R57
28	185	48.00	7850	2.2			3.0	2160	467	35100	2.0		
32	166	42.86	7940	2.4			3.4	1860	406	35600	2.3		
23	225	58.32	3890	0.90			3.8	1670	363	36000	2.6		
25	210	54.54	4140	0.95			2.0	3120	674	22700	0.95	B-FA	87 R57
26	200	51.70	4300	1.00			2.3	2830	609	23600	1.05	B-FAF	87 R57
29	182	47.02	4540	1.10	B-FA	37	2.7	2390	515	25200	1.25	B-F	87 R57
31	169	43.83	4680	1.20	B-FAF	37	3.0	2100	452	26100	1.45	B-F	87 R57
36	148	38.31	4900	1.35	B-F	37	4.0	1590	345	27600	1.90	B-FF	87 R57
38	139	35.91	4980	1.45	B-FF	37	3.8	1720	367	14100	0.85	B-FA	77 R37
43	122	31.69	4990	1.65			4.3	1520	323	15600	1.00	B-FAF	77 R37
48	109	28.09	4870	1.85			4.9	1310	280	16900	1.15	B-F	77 R37
57	92	23.88	4700	2.2			4.9	1310	280	16900	1.15	B-FF	77 R37
58	91	23.63	4690	2.2			2.7	2640	254.40	61100	2.90	B-FA	107
66	79	20.57	4540	2.5								B-FAF	107
71	74	19.27	4470	2.7								B-F	107
80	66	17.03	4340	3.0								B-FF	107
95	55	14.33	4150	3.6			2.5	2870	276.77	33600	1.50	B-FA	97
106	50	12.87	4030	4.0			2.7	2630	253.41	34100	1.65	B-FAF	97
123	43	11.08	3870	4.4	B-FA	37	3.1	2320	223.88	34800	1.85	B-F	97
130	40	10.42	3810	4.6	B-FAF	37						B-FF	97
152	35	8.97	3650	5.1	B-F	37	3.2	2200	276.77	35000	1.95	B-FA	97
170	31	8.01	3540	5.5	B-FF	37	3.5	2020	253.41	35400	2.1	B-FAF	97
183	29	7.44	3440	5.1			4.0	1780	223.88	35800	2.4	B-F	97
202	26	6.74	3340	5.4			4.0	1780	223.88	35800	2.4	B-FF	97
225	23	6.05	3240	5.8			3.3	2150	270.68	26000	1.40		
261	20	5.21	3100	6.2			3.5	2030	255.37	26300	1.50	B-FA	87
277	19	4.90	3050	6.3			3.9	1820	228.93	27000	1.65	B-FAF	87
322	16	4.22	2920	6.8			4.6	1570	197.20	27600	1.90	B-F	87
361	15	3.77	2820	7.2			5.0	1430	179.97	28000	2.1	B-FF	87
361	15	3.77	2820	7.2			5.6	1270	159.61	28400	2.4		
0.75kW							0.75kW						
0.50	12300	2780	113600	1.45	B-FA	157 R97	5.1	1400	270.68	28100	2.1	B-FA	87
					B-FAF	157 R97	5.4	1330	255.37	28200	2.3	B-FAF	87
					B-F	157 R97	6.0	1190	228.93	28600	2.5	B-F	87
					B-FF	157 R97	6.0	1190	228.93	28600	2.5	B-FF	87
0.57	10700	2427	116200	1.70	B-FA	157 R97	4.5	1580	198.31	15200	0.95	B-FA	77
0.82	7580	1674	120000	2.4	B-FAF	157 R97	4.8	1500	188.40	15700	1.00	B-FAF	77
1.1	5830	1308	120000	3.1	B-F	157 R97	5.4	1320	166.47	16800	1.15	B-F	77
1.2	5170	1169	120000	3.5	B-FF	157 R97	6.3	1130	142.27	17800	1.30	B-FF	77
							6.9	1040	130.42	18200	1.45		
0.46	13800	3031	86900	0.85	B-FA	127 R77	6.1	1170	225.79	17600	1.30	B-FA	77
					B-FAF	127 R77	7.0	1030	198.31	18200	1.45	B-FAF	77
					B-F	127 R77	7.3	980	188.40	18400	1.55	B-F	77
					B-FF	127 R77	7.3	980	188.40	18400	1.55	B-FF	77
0.52	12400	2672	89600	0.95	B-FA	127 R77	8.3	860	166.47	18800	1.75	B-FA	77
0.59	10900	2357	90000	1.10	B-FAF	127 R77	9.7	740	142.27	19200	2.0	B-FAF	77
0.68	9390	2038	90000	1.30	B-F	127 R77	11	675	130.42	19300	2.2	B-F	77
0.77	8190	1784	90000	1.45	B-FF	127 R77	12	595	114.45	19500	2.5	B-F	77
0.86	7350	1606	90000	1.65	B-FF	127 R77	13	565	108.46	19600	2.7	B-FF	77



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
0.75kW						
8.1	890	170.85	9670	0.90	B-FA 67	4P
8.5	840	162.31	10100	0.95	B-FAF 67	4P
9.7	740	142.40	11000	1.10	B-F 67	4P
11	625	120.79	11700	1.30	B-FF 67	4P
13	565	109.04	12100	1.45		
14	500	95.94	12400	1.65	B-FA 67	4P
15	470	90.59	12500	1.75	B-FAF 67	4P
17	415	79.76	12800	2.0	B-F 67	4P
20	350	67.65	13000	2.3	B-FF 67	4P
23	315	61.07	13000	2.6		
11	660	127.27	8290	0.90		
13	570	110.01	9420	1.05		
15	485	93.47	10000	1.25	B-FA 57	4P
17	435	83.46	10400	1.40	B-FAF 57	4P
19	380	72.98	10700	1.60	B-F 57	4P
20	355	68.22	10800	1.70	B-FF 57	4P
23	305	58.97	11100	1.95		
28	260	50.10	11300	2.3		
31	230	44.73	11400	2.6		
17	415	79.72	5060	0.95	B-FA 47	4P
20	355	68.09	6520	1.15	B-FAF 47	4P
21	340	65.36	6680	1.20	B-F 47	4P
					B-FF 47	4P
24	295	56.49	7120	1.35		
29	250	48.00	7470	1.60	B-FA 47	4P
32	220	42.86	7640	1.80	B-FAF 47	4P
38	190	36.61	7820	2.1	B-F 47	4P
40	178	34.29	7850	2.2	B-FF 47	4P
48	150	28.88	7540	2.7		
29	245	47.02	3530	0.80		
31	230	43.83	3850	0.90	B-FA 37	4P
36	199	38.31	4310	1.00	B-FAF 37	4P
38	186	35.91	4480	1.05	B-F 37	4P
44	165	31.69	4620	1.20	B-FF 37	4P
49	146	28.09	4540	1.35		
58	124	23.88	4410	1.60		
58	123	23.63	4400	1.65		
67	107	20.57	4290	1.85		
72	100	19.27	4240	2.0		
81	88	17.03	4130	2.3		
96	74	14.33	3970	2.7		
107	67	12.87	3870	3.0	B-FA 37	4P
125	58	11.08	3730	3.3	B-FAF 37	4P
132	54	10.42	3680	3.4	B-F 37	4P
154	47	8.97	3540	3.8	B-FF 37	4P
205	35	6.74	3250	4.0		
228	31	6.05	3150	4.3		
265	27	5.21	3030	4.6		
282	25	4.90	2970	4.7		
327	22	4.22	2850	5.0		
366	20	3.77	2760	5.4		
1.1kW						
0.50	18200	2780	99800	1.00	B-FA 157 R97	4P
					B-FAF 157 R97	4P
					B-F 157 R97	4P
					B-FF 157 R97	4P
0.58	16000	2427	105800	1.15		
0.64	14300	2185	109700	1.25		
0.72	12700	1944	112900	1.40		
0.84	11200	1674	115500	1.60	B-FA 157 R97	4P
1.1	8640	1308	119000	2.1	B-FAF 157 R97	4P
1.2	7680	1169	120000	2.3	B-F 157 R97	4P
1.5	6190	953	120000	2.9	B-FF 157 R97	4P
1.7	5450	845	120000	3.3		
3.1	2880	446	120000	6.2		
4.6	1950	302	120000	9.2		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.1kW						
0.69	13800	2038	87000	0.85		
0.79	12000	1784	90000	1.00	B-FA 127 R77	4P
0.87	10800	1606	90000	1.10	B-FAF 127 R77	4P
1.0	9350	1390	90000	1.30	B-F 127 R77	4P
1.1	8170	1220	90000	1.45	B-FF 127 R77	4P
1.3	7260	1077	90000	1.65		
1.1	8360	1243	48000	0.90		
1.3	7370	1087	50600	1.05	B-FA 107 R77	4P
1.5	6390	950	53100	1.20	B-FAF 107 R77	4P
1.7	5590	834	55000	1.35	B-F 107 R77	4P
1.9	4910	736	56500	1.55	B-FF 107 R77	4P
2.2	4310	640	57800	1.80		
2.0	4670	690	27800	0.90		
2.3	4100	605	30500	1.05	B-FA 97 R57	4P
2.7	3580	529	31900	1.20	B-FAF 97 R57	4P
3.0	3160	467	32900	1.35	B-F 97 R57	4P
3.5	2730	406	33900	1.55	B-FF 97 R57	4P
3.8	2450	363	34500	1.75		
3.1	3070	452	16900	1.00	B-FA 87	4P
4.1	2330	345	25400	1.30	B-FAF 87	4P
4.7	2020	300	26400	1.50	B-F 87	4P
5.6	1670	249	27400	1.80	B-FF 87	4P
2.7	3930	254.40	58600	1.95	B-FA 107	8P
3.2	3330	215.37	59800	2.3	B-FAF 107	8P
3.4	3080	199.31	60200	2.5	B-F 107	8P
3.8	2760	178.64	60800	2.8	B-FF 107	8P
3.3	3160	276.77	32900	1.35	B-FA 97	6P
3.6	2890	253.41	33600	1.50	B-FAF 97	6P
4.1	2560	223.88	34300	1.70	B-F 97	6P
4.8	2170	189.92	35100	2.0	B-FF 97	6P
5.3	2000	174.87	35400	2.2		
5.1	2080	276.77	35200	2.1	B-FA 97	4P
5.5	1900	253.41	35600	2.3	B-FAF 97	4P
6.2	1680	223.88	36000	2.6	B-F 97	4P
					B-FF 97	4P
3.4	3090	270.68	16000	0.95		
3.6	2920	255.37	22700	1.05	B-FA 87	6P
4.0	2610	228.93	24400	1.15	B-FAF 87	6P
4.7	2250	197.20	25700	1.35	B-F 87	6P
5.1	2050	179.97	26300	1.45	B-FF 87	6P
5.8	1820	159.61	27000	1.65		
5.2	2030	270.68	26300	1.50	B-FA 87	4P
5.5	1920	255.37	26700	1.55	B-FAF 87	4P
6.1	1720	228.93	27200	1.75	B-F 87	4P
7.1	1480	197.20	27900	2.0	B-FF 87	4P
7.8	1350	179.97	28200	2.2	B-FA 87	4P
8.8	1200	159.61	28500	2.5	B-FAF 87	4P
10	1010	134.16	29000	3.0	B-F 87	4P
11	930	123.29	29100	3.2	B-FF 87	4P
7.1	1490	198.31	15800	1.00	B-FA 77	4P
7.4	1410	188.40	16300	1.05	B-FAF 77	4P
8.4	1250	166.47	17200	1.20	B-F 77	4P
9.8	1070	142.27	18000	1.40	B-FF 77	4P
11	980	130.42	18400	1.55		
12	860	114.45	18800	1.75	B-FA 77	4P
13	810	108.46	18900	1.85	B-FAF 77	4P
15	710	94.93	19200	2.1	B-F 77	4P
16	640	85.52	19400	2.3	B-FF 77	4P
19	565	75.02	19600	2.7		

PARALLEL SHAFT HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.1kW						
12	910	120.79	9460	0.90		
13	820	109.04	10300	1.00		
15	720	95.94	11100	1.15		
16	680	90.59	11400	1.20		
18	600	79.76	11900	1.35	B-FA 67	4P
21	510	67.65	12400	1.60	B-FAF 67	4P
23	460	61.07	12600	1.80	B-F 67	4P
26	405	53.73	12800	2.0	B-FF 67	4P
28	380	50.74	12900	2.2		
32	325	43.20	13000	2.5		
36	295	39.26	13000	2.7		
41	255	34.01	13000	2.9		
17	625	83.46	8470	0.95		
19	550	72.98	9590	1.10		
21	510	68.22	9840	1.15	B-FA 57	4P
24	440	58.97	10300	1.35	B-FAF 57	4P
28	375	50.10	10700	1.60	B-F 57	4P
31	335	44.73	10700	1.80	B-FF 57	4P
37	285	38.21	10400	2.1		
39	270	35.79	10200	2.2		
46	225	30.15	9810	2.6		
25	425	56.49	3730	0.95	B-FA 47	4P
28	360	48.00	6440	1.10	B-FAF 47	4P
					B-F 47	4P
					B-FF 47	4P
33	320	42.86	6860	1.25	B-FA 47	4P
38	275	36.61	7280	1.45	B-FAF 47	4P
41	255	34.29	7260	1.55	B-F 47	4P
48	215	28.88	7040	1.85	B-FF 47	4P
45	230	30.86	7130	1.75	B-FA 47	4P
48	220	29.32	7060	1.80	B-FAF 47	4P
54	193	25.72	6880	2.1	B-F 47	4P
64	164	21.82	6640	2.4	B-FF 47	4P
71	148	19.70	6490	2.7		
44	240	31.69	3660	0.85	B-FA 37	4P
50	210	28.09	3970	0.95	B-FAF 37	4P
59	179	23.88	3930	1.10	B-F 37	4P
					B-FF 37	4P
68	154	20.57	3870	1.30		
73	145	19.27	3740	1.40		
82	128	17.03	3780	1.55		
98	108	14.33	3680	1.85		
109	97	12.87	3610	2.1		
126	83	11.08	3500	2.3	B-FA 37	4P
134	78	10.42	3460	2.4	B-FAF 37	4P
156	67	8.97	3350	2.6	B-F 37	4P
175	60	8.01	3260	2.8	B-FF 37	4P
208	51	6.74	3090	2.8		
231	45	6.05	3010	3.0		
269	39	5.21	2900	3.2		
286	37	4.90	2860	3.3		
332	32	4.22	2750	3.5		
372	28	3.77	2670	3.7		
1.5kW						
0.58	21900	2427	86400	0.80		
0.65	19700	2185	95000	0.90		
0.73	17500	1944	101700	1.05		
0.84	15300	1674	107400	1.20	B-FA 157 R97	4P
1.1	11944	1308	114400	1.50	B-FAF 157 R97	4P
1.2	10600	1169	116400	1.70	B-F 157 R97	4P
1.5	8540	953	119100	2.1	B-FF 157 R97	4P
1.7	7530	845	120000	2.4		
3.2	3980	446	120000	4.5		
4.7	2690	302	120000	6.7		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.5kW						
0.88	14800	1606	85000	0.80		
1.0	12800	1390	89000	0.95		
1.2	11200	1220	90000	1.05	B-FA 127 R77	4P
1.3	9910	1077	90000	1.20	B-FAF 127 R77	4P
1.5	8520	930	90000	1.40	B-F 127 R77	4P
1.7	7500	820	90000	1.60	B-FF 127 R77	4P
1.9	6630	727	90000	1.80		
2.2	5960	648	90000	2.0		
1.5	8730	950	46900	0.90		
1.7	7640	834	49900	1.00		
1.9	6730	736	52300	1.15	B-FA 107 R77	4P
2.2	5890	640	54300	1.30	B-FAF 107 R77	4P
2.5	5110	560	56100	1.50	B-F 107 R77	4P
2.9	4460	489	57500	1.70	B-FF 107 R77	4P
3.2	4010	436	56400	1.90		
3.8	3400	370	59600	2.3		
2.7	4880	529	19800	0.90	B-FA 97 R57	4P
3.0	4310	467	29900	1.00	B-FAF 97 R57	4P
3.5	3730	406	31500	1.15	B-F 97 R57	4P
3.9	3340	363	32500	1.30	B-FF 97 R57	4P
4.1	3180	345	11100	0.95	B-FA 87 R57	4P
4.7	2760	300	23900	1.10	B-FAF 87 R57	4P
5.7	2290	249	25500	1.30	B-F 87 R57	4P
					B-FF 87 R57	4P
2.8	5210	254.40	55900	1.50	B-FA 107	8P
3.2	4410	215.37	57600	1.75	B-FAF 107	8P
3.5	4080	199.31	58300	1.90	B-F 107	8P
3.9	3660	178.64	59100	2.1	B-FF 107	8P
3.6	3960	254.40	58500	1.95	B-FA 107	6P
4.3	3350	215.37	59700	2.3	B-FAF 107	6P
4.6	3100	199.31	60200	2.5	B-F 107	6P
5.2	2780	178.64	60800	2.8	B-FF 107	6P
3.3	4310	276.77	29900	1.00	B-FA 97	6P
3.6	3950	253.41	30900	1.10	B-FAF 97	6P
4.1	3490	223.88	32100	1.25	B-F 97	6P
4.8	2960	189.92	33400	1.45	B-FF 97	6P
5.3	2720	174.87	33900	1.60		
5.1	2810	276.77	33700	1.55	B-FA 97	4P
5.6	2570	253.41	34300	1.65	B-FAF 97	4P
6.3	2270	223.88	34900	1.90	B-F 97	4P
7.4	1930	189.92	35500	2.2	B-FF 97	4P
8.1	1780	174.87	35800	2.4		
5.2	2750	270.68	23900	1.10	B-FA 87	4P
5.5	2590	255.37	24500	1.15	B-FAF 87	4P
6.2	2330	228.93	24600	1.30	B-F 87	4P
7.2	2000	197.20	24600	1.50	B-FF 87	4P
7.8	1830	179.97	26900	1.65	B-FA 87	4P
8.8	1620	159.61	27500	1.85	B-FAF 87	4P
11	1360	134.16	28200	2.2	B-F 87	4P
13	1110	109.49	28700	2.7	B-FF 87	4P
14	990	97.89	29000	3.0		
8.5	1690	166.47	14300	0.90	B-FA 77	4P
9.9	1450	142.27	16100	1.05	B-FAF 77	4P
11	1320	130.42	16800	1.15	B-F 77	4P
12	1160	114.45	17600	1.30	B-FF 77	4P
13	1100	108.46	17900	1.35		
15	960	94.93	18400	1.55		
16	870	85.52	18600	1.75		
18	760	75.02	19100	1.95	B-FA 77	4P
19	735	72.50	19200	2.0	B-FAF 77	4P
21	675	66.46	19300	2.2	B-F 77	4P
24	595	58.32	19500	2.5	B-FF 77	4P
26	560	55.27	19600	2.7		
29	490	48.37	19700	3.0		
32	445	43.58	19800	3.4		
37	390	38.23	19900	3.9		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
1.5kW						
39	370	36.58	19900	3.0	B-FA 77	4P
45	320	31.51	20000	4.3	B-FAF 77	4P
					B-F 77	4P
					B-FF 77	4P
16	920	90.59	9300	0.90		
18	810	79.76	10400	1.00		
21	685	67.65	11400	1.20	B-FA 67	4P
23	620	61.07	11800	1.30	B-FAF 67	4P
26	545	53.73	12200	1.50	B-F 67	4P
28	515	50.74	12300	1.60	B-FF 67	4P
33	440	43.20	12700	1.85		
36	400	39.26	12800	1.95		
39	370	36.30	12900	2.2	B-FA 67	4P
44	325	32.08	13000	2.5	B-FAF 67	4P
51	280	27.41	13000	2.9	B-F 67	4P
56	255	25.13	13000	3.2	B-FF 67	4P
24	600	58.97	9210	1.00		
26	510	50.10	9860	1.20	B-FA 57	4P
32	455	44.73	9990	1.30	B-FAF 57	4P
37	390	38.21	9740	1.55	B-F 57	4P
39	365	35.79	9620	1.65	B-FF 57	4P
47	305	30.15	9310	1.95		
33	435	42.86	5750	0.90	B-FA 47	4P
39	370	36.61	6300	1.10	B-FAF 47	4P
41	350	34.29	6580	1.15	B-F 47	4P
49	295	28.88	6500	1.35	B-FF 47	4P
46	315	30.86	6550	1.30		
48	300	29.32	6510	1.35		
55	260	25.72	6390	1.55	B-FA 47	4P
65	220	21.82	6230	1.80	B-FAF 47	4P
72	200	19.70	6110	2.0	B-F 47	4P
81	176	17.33	5970	2.3	B-FF 47	4P
86	166	16.36	5900	2.4		
101	142	13.93	5700	2.8		
69	210	20.57	3410	0.95		
73	196	19.27	3410	1.00		
83	173	17.03	3400	1.15		
98	146	14.33	3350	1.35		
110	131	12.87	3310	1.55		
127	113	11.08	3250	1.70	B-FA 37	4P
135	106	10.42	3220	1.75	B-FAF 37	4P
157	91	8.97	3140	1.90	B-F 37	4P
176	81	8.01	3080	2.1	B-FF 37	4P
209	69	6.74	2920	2.0		
233	62	6.05	2850	2.5		
271	53	5.21	2770	2.4		
288	50	4.90	2730	2.4		
334	43	4.22	2640	2.6		
374	38	3.77	2570	2.7		
2.2kW						
0.98	18900	1441	97500	0.95	B-FA 157 R97	4P
					B-FAF 157 R97	4P
					B-F 157 R97	4P
					B-FF 157 R97	4P
1.1	17600	1308	101400	1.00		
1.2	15700	1169	106500	1.15		
1.5	12700	953	112800	1.40		
1.7	11200	845	115400	1.60		
1.9	10100	764	117100	1.80	B-FA 157 R97	4P
2.1	9020	680	118600	2.0	B-FAF 157 R97	4P
2.5	7610	576	120000	2.4	B-F 157 R97	4P
3.2	5940	446	120000	3.0	B-FF 157 R97	4P
4.7	4020	302	120000	4.5		
5.2	3630	273	120000	5.0		
6.1	3060	232	120000	5.9		
7.2	2590	197	120000	6.9		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
2.2kW						
1.3	14600	1077	85300	0.80		
1.5	12600	930	89300	0.95		
1.7	11100	820	90000	1.10	B-FA 127 R77	4P
1.9	9830	727	90000	1.20	B-FAF 127 R77	4P
2.2	8810	648	90000	1.35	B-F 127 R77	4P
2.6	7460	549	90000	1.60	B-FF 127 R77	4P
2.8	6720	495	90000	1.80		
3.3	5810	428	90000	2.1		
2.2	8700	640	47000	0.90		
2.5	7580	560	50100	1.00	B-FA 107 R77	4P
2.9	6610	489	52500	1.15	B-FAF 107 R77	4P
3.2	5930	436	54200	1.30	B-F 107 R77	4P
3.8	5030	370	56300	1.55	B-FF 107 R77	4P
4.2	4520	333	57300	1.70		
3.9	4940	363	16500	0.85	B-FA 97 R57	4P
4.9	3890	285	31100	1.10	B-FAF 97 R57	4P
5.8	3340	245	32500	1.30	B-F 97 R57	4P
					B-FF 97 R57	4P
2.8	7640	254.40	49900	1.00	B-FA 107	8P
3.2	6460	215.37	52900	1.20	B-FAF 107	8P
3.5	5980	199.31	54100	1.30	B-F 107	8P
3.9	5360	178.64	55500	1.45	B-FF 107	8P
3.7	5690	254.40	54800	1.35	B-FA 107	6P
4.4	4810	215.37	56700	1.60	B-FAF 107	6P
4.7	4450	199.31	57500	1.70	B-F 107	6P
5.3	3990	178.64	58400	1.90	B-FF 107	6P
5.5	3790	254.40	58900	2.0	B-FA 107	4P
6.6	3210	215.37	80000	2.4	B-FAF 107	4P
7.1	2970	199.31	60400	2.6	B-F 107	4P
7.9	2660	178.64	61000	2.9	B-FF 107	4P
4.2	5000	223.88	22400	0.85	B-FA 97	6P
4.9	4240	189.92	30100	1.00	B-FAF 97	6P
5.4	3910	174.87	31000	1.10	B-F 97	6P
6.0	3490	156.30	32100	1.25	B-FF 97	6P
5.1	4120	276.77	30400	1.05		
5.6	3780	253.41	31400	1.15		
6.3	3340	223.88	32500	1.30	B-FA 97	4P
7.4	2830	189.92	33700	1.50	B-FAF 97	4P
8.1	2610	174.87	34200	1.65	B-F 97	4P
9.0	2330	156.30	34800	1.85	B-FF 97	4P
10	2100	140.71	35200	2.0		
11	1900	127.42	35600	2.3		
7.2	2940	197.20	22000	1.00	B-FA 87	4P
7.8	2680	179.97	24200	1.10	B-FAF 87	4P
8.8	2380	159.61	25200	1.25	B-F 87	4P
11	2000	134.16	26400	1.50	B-FF 87	4P
11	1840	123.29	26900	1.65		
13	1630	109.49	27500	1.85		
14	1460	97.89	27900	2.1		
16	1310	88.01	28300	2.3	B-FA 87	4P
18	1140	76.39	27800	2.6	B-FAF 87	4P
21	1020	68.40	27100	2.9	B-F 87	4P
25	850	56.75	25900	3.5	B-FF 87	4P
28	750	50.36	25200	3.9		
31	675	45.28	24500	4.2		
12	1710	114.45	14200	0.90	B-FA 77	4P
13	1620	108.46	14900	0.95	B-FAF 77	4P
15	1410	94.93	16300	1.05	B-F 77	4P
16	1270	85.52	17100	1.20	B-FF 77	4P
19	1120	75.02	17800	1.35		
21	990	66.46	18300	1.50	B-FA 77	4P
24	870	58.32	18800	1.75	B-FAF 77	4P
26	820	55.27	18900	1.80	B-F 77	4P
29	720	48.37	19200	2.1	B-FF 77	4P
32	650	43.58	19400	2.3		

PARALLEL SHAFT HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
2.2kW						
39	545	36.58	19600	2.0	B-FA 77	4P
45	470	31.51	19700	2.9	B-FAF 77	4P
49	430	28.75	19800	3.3	B-F 77	4P
55	380	25.50	19900	4.0	B-FF 77	4P
23	910	61.07	9420	0.90		
26	800	53.73	10500	1.00	B-FA 67	4P
28	755	50.74	10800	1.10	B-FAF 67	4P
33	645	43.20	11600	1.25	B-F 67	4P
36	585	39.26	12000	1.35	B-FF 67	4P
41	505	34.01	12400	1.45		
44	480	32.08	12500	1.70		
51	410	27.41	12800	2.0	B-FA 67	4P
56	375	25.13	12900	2.2	B-FAF 67	4P
64	330	22.05	13000	2.5	B-F 67	4P
67	310	20.90	13000	2.6	B-FF 67	4P
77	275	18.29	13000	3.0		
32	665	44.73	6480	0.90	B-FA 57	4P
37	570	38.21	8660	1.05	B-FAF 57	4P
39	535	35.79	8620	1.15	B-F 57	4P
47	450	30.15	8460	1.30	B-FF 57	4P
56	370	24.96	8240	1.55	B-FA 57	4P
67	315	21.17	8020	1.90	B-FAF 57	4P
74	285	19.11	7870	2.1	B-F 57	4P
84	250	16.81	7670	2.4	B-FF 57	4P
89	235	15.88	7580	2.5		
55	385	25.72	5560	1.05		
65	325	21.82	5520	1.25		
72	295	19.70	5480	1.35	B-FA 47	4P
81	260	17.33	5410	1.55	B-FAF 47	4P
86	245	16.36	5370	1.65	B-F 47	4P
101	210	13.93	5250	1.95	B-FF 47	4P
111	189	12.66	5170	2.1		
129	163	10.97	5040	2.5		
157	133	8.96	4740	2.5		
98	215	14.33	2790	0.95		
110	192	12.87	2810	1.05		
127	165	11.08	2820	1.15		
135	155	10.42	2810	1.20		
157	134	8.97	2790	1.30	B-FA 37	4P
176	119	8.01	2770	1.40	B-FAF 37	4P
209	100	6.74	2630	1.40	B-F 37	4P
233	90	6.05	2590	1.50	B-FF 37	4P
271	78	5.21	2540	1.60		
288	73	4.90	2520	1.65		
334	63	4.22	2460	1.75		
374	56	3.77	2400	1.85		
3.0kW						
1.2	21700	1169	87200	0.85		
1.5	17600	953	101200	1.00		
1.7	15600	845	106700	1.15		
1.8	14100	764	110100	1.30	B-FA 157 R97	4P
2.1	12500	680	113200	1.45	B-FAF 157 R97	4P
2.4	10600	576	116400	1.70	B-F 157 R97	4P
3.1	8250	446	119500	2.2	B-FF 157 R97	4P
4.6	5580	302	120000	3.2		
5.1	5040	273	120000	3.6		
6.1	4250	232	120000	4.2		
7.1	3610	197	120000	5.0		
1.9	13600	727	87400	0.90	B-FA 127 R77	4P
2.2	12200	648	90000	1.00	B-FAF 127 R77	4P
2.5	10300	549	90000	1.15	B-F 127 R77	4P
2.8	9270	495	90000	1.30	B-FF 127 R77	4P
3.2	8170	436	48500	0.95	B-FA 107 R77	4P
3.8	6930	370	51800	1.10	B-FAF 107 R77	4P
4.2	6240	333	53500	1.25	B-F 107 R77	4P
4.8	5460	291	55300	1.40	B-FF 107 R77	4P

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
3.7	7750	254.40	49600	1.00	B-FA 107	6P
4.4	6560	215.37	52700	1.15	B-FAF 107	6P
4.7	6070	199.31	53900	1.25	B-F 107	6P
5.3	5440	178.64	55300	1.40	B-FF 107	6P
5.5	5210	254.40	55900	1.50	B-FA 107	4P
6.5	4410	215.37	57600	1.75	B-FAF 107	4P
7.0	4080	199.31	58300	1.90	B-F 107	4P
7.8	3660	178.64	59100	2.1	B-FF 107	4P
8.7	3300	161.28	59800	2.3		
6.2	4580	223.88	29000	0.95	B-FA 97	4P
7.4	3890	189.92	31100	1.10	B-FAF 97	4P
8.0	3580	174.87	31900	1.20	B-F 97	4P
					B-FF 97	4P
9.0	3200	156.30	32800	1.35		
9.9	2880	140.71	33600	1.50	B-FA 97	4P
11	2610	127.42	34200	1.65	B-FAF 97	4P
12	2310	112.99	34800	1.85	B-F 97	4P
14	2090	102.16	35200	2.1	B-FF 97	4P
16	1840	89.85	35700	2.3		
10	2750	134.16	23900	1.10	B-FA 87	4P
11	2520	123.29	24700	1.20	B-FAF 87	4P
13	2240	109.49	25700	1.35	B-F 87	4P
					B-FF 87	4P
14	2000	97.89	26400	1.50		
16	1800	88.01	26900	1.65	B-FA 87	4P
18	1560	76.39	26300	1.90	B-FAF 87	4P
20	1400	68.40	25700	2.1	B-F 87	4P
25	1160	56.75	24800	2.6	B-FF 87	4P
28	1030	50.36	24100	2.8		
16	1750	85.52	13800	0.85	B-FA 77	4P
19	1540	75.02	15500	1.00	B-FAF 77	4P
21	1360	66.46	16600	1.10	B-F 77	4P
24	1190	58.32	17500	1.25	B-FF 77	4P
25	1130	55.27	17800	1.35	B-FA 77	4P
29	990	48.37	18300	1.50	B-FAF 77	4P
32	890	43.58	18700	1.70	B-F 77	4P
37	780	38.23	19000	1.90	B-FF 77	4P
38	750	36.58	19100	1.50	B-FA 77	4P
44	645	31.51	19400	2.1	B-FAF 77	4P
49	590	28.75	19500	2.4	B-F 77	4P
55	520	25.50	19700	2.9	B-FF 77	4P
65	440	21.43	19800	3.4		
32	880	43.20	9690	0.95	B-FA 67	4P
36	800	39.26	10500	0.95	B-FAF 67	4P
41	695	34.01	11300	1.05	B-F 67	4P
					B-FF 67	4P
44	655	32.08	11600	1.25		
51	560	27.41	12100	1.45		
56	515	25.13	12300	1.60	B-FA 67	4P
63	450	22.05	12600	1.80	B-FAF 67	4P
67	430	20.90	12700	1.90	B-F 67	4P
77	375	18.29	12900	2.2	B-FF 67	4P
85	335	16.48	13000	2.4		
97	295	14.46	13000	2.8		
56	510	24.96	7440	1.15		
66	435	21.17	7340	1.40		
73	390	19.11	7260	1.55	B-FA 57	4P
83	345	16.81	7140	1.75	B-FAF 57	4P
88	325	15.88	7080	1.85	B-F 57	4P
104	275	13.52	6690	2.2	B-FF 57	4P
114	250	12.29	6780	2.4		
132	220	10.64	6590	2.8		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
3.0kW						
71	405	19.70	4750	1.00		
81	355	17.33	4760	1.15	B-FA 47	4P
86	335	16.36	4760	1.20	B-FAF 47	4P
100	285	13.93	4740	1.40	B-F 47	4P
111	260	12.66	4700	1.55	B-FF 47	4P
128	225	10.97	4640	1.80		
156	183	8.96	4370	1.80		
126	225	11.08	2320	0.85		
134	215	10.42	2350	0.85		
156	184	8.97	2390	0.95		
175	164	8.01	2410	1.05	B-FA 37	4P
208	138	6.74	2290	1.00	B-FAF 37	4P
231	124	6.05	2300	1.10	B-F 37	4P
269	107	5.21	2290	1.15	B-FF 37	4P
286	100	4.90	2280	1.20		
332	86	4.22	2250	1.25		
372	77	3.77	2220	1.35		
4.0kW						
1.7	20600	845	91500	0.85		
1.9	18600	764	98300	0.95		
2.1	16600	680	104200	1.10	B-FA 157 R97	4P
2.5	14000	576	110300	1.30	B-FAF 157 R97	4P
3.2	10900	446	115900	1.65	B-F 157 R97	4P
4.7	7390	302	120000	2.4	B-FF 157 R97	4P
5.2	6670	273	120000	2.7		
6.1	5640	232	120000	3.2		
7.2	4780	197	120000	3.8		
2.6	13600	549	87400	0.90	B-FA 127 R77	4P
2.9	12200	495	90000	1.00	B-FAF 127 R77	4P
3.3	10600	428	90000	1.15	B-F 127 R77	4P
3.8	8270	376	90000	1.30	B-FF 127 R77	4P
4.3	6230	333	48300	0.95	B-FA 107 R77	4P
4.9	7190	291	51100	1.05	B-FAF 107 R77	4P
5.6	6310	255	53300	1.20	B-F 107 R77	4P
					B-FF 107 R77	4P
4.2	9060	170.83	90000	1.30	B-FA 127	8P
4.7	6150	153.67	90000	1.45	B-FAF 127	8P
5.7	6650	125.37	90000	1.80	B-F 127	8P
					B-FF 127	8P
5.6	6840	254.40	52000	1.10		
6.6	5790	215.37	54500	1.35		
7.1	5360	199.31	55500	1.45		
7.9	4810	178.64	56700	1.60	B-FA 107	4P
8.8	4340	161.28	57700	1.75	B-FAF 107	4P
9.7	3940	146.49	58500	1.95	B-F 107	4P
11	3500	129.97	59400	2.2	B-FF 107	4P
12	3170	117.94	60100	2.4		
14	2730	101.38	60900	2.8		
8.1	4700	174.87	26600	0.90	B-FA 97	4P
9.1	4200	156.30	30200	1.00	B-FAF 97	4P
10	3780	140.71	31400	1.15	B-F 97	4P
11	3430	127.42	32300	1.25	B-FF 97	4P
13	3040	112.99	33200	1.40		
14	2750	102.16	33900	1.55	B-FA 97	4P
15	2620	97.58	34100	1.65	B-FAF 97	4P
16	2420	89.85	34600	1.80	B-F 97	4P
18	2160	80.31	35100	2.0	B-FF 97	4P
20	1940	72.29	35500	2.2		
22	1760	65.47	35800	2.4		
13	2950	109.49	21700	1.00	B-FA 87	4P
15	2630	97.89	24300	1.15	B-FAF 87	4P
16	2370	88.01	24600	1.25	B-F 87	4P
					B-FF 87	4P
19	2050	76.39	24200	1.45	B-FA 87	4P
21	1840	68.40	23900	1.65	B-FAF 87	4P
25	1530	56.75	23200	1.95	B-F 87	4P
28	1350	50.36	22800	2.2	B-FF 87	4P
31	1220	45.28	22300	2.3		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
4.0kW						
21	1790	66.46	13400	0.85	B-FA 77	4P
24	1570	58.32	15200	0.95	B-FAF 77	4P
26	1490	55.27	15800	1.00	B-F 77	4P
29	1300	48.37	16900	1.15	B-FF 77	4P
33	1170	43.58	17600	1.30		
37	1030	38.23	18200	1.45	B-FA 77	4P
42	910	33.74	18600	1.65	B-FAF 77	4P
47	800	29.91	19000	1.85	B-F 77	4P
56	685	25.54	19300	2.1	B-FF 77	4P
45	850	31.51	18800	1.65		
49	775	28.75	19100	1.85	B-FA 77	4P
56	685	25.50	19300	2.2	B-FAF 77	4P
66	575	21.43	19500	2.6	B-F 77	4P
72	530	19.70	19600	2.8	B-FF 77	4P
62	735	27.41	11000	1.10		
57	675	25.13	11400	1.20		
64	595	22.05	11900	1.40		
68	560	20.90	12100	1.45		
78	490	18.29	12400	1.65		
86	445	16.48	12700	1.85		
98	390	14.46	12900	2.1		
111	345	12.76	13000	2.4	B-FA 67	4P
126	305	11.31	13000	2.7	B-FAF 67	4P
147	260	9.66	13000	3.2	B-F 67	4P
156	245	9.08	13000	2.2	B-FF 67	4P
165	230	8.60	12800	2.5		
189	205	7.53	12400	3.0		
209	183	6.78	12100	3.4		
239	160	5.95	11700	3.8		
270	141	5.25	11400	4.2		
305	125	4.66	11000	4.5		
357	107	3.97	10600	4.7		
67	570	21.17	6490	1.05		
74	515	19.11	6490	1.15		
84	450	16.81	6450	1.35		
89	425	15.88	6430	1.40		
105	365	13.52	6340	1.65		
116	330	12.29	6270	1.80	B-FA 57	4P
133	285	10.64	6150	2.1	B-FAF 57	4P
153	250	9.31	5850	1.70	B-F 57	4P
173	220	8.19	5730	1.90	B-FF 57	4P
184	210	7.73	5680	2.0		
216	177	6.58	5510	2.4		
237	161	5.98	5410	2.6		
274	139	5.18	5250	3.0		
5.5kW						
2.5	19300	576	96300	0.95		
2.8	16800	503	103600	1.05		
3.2	15000	446	108200	1.20		
4.1	11600	353	114500	1.55	B-FA 157 R97	4P
4.7	10100	302	117100	1.80	B-FAF 157 R97	4P
5.2	9160	273	118400	1.95	B-F 157 R97	4P
6.2	7750	232	120000	2.3	B-FF 157 R97	4P
7.1	6750	202	120000	2.7		
7.3	6570	197	120000	2.7		
3.4	14000	418	86500	0.85		
3.8	12600	374	89400	0.95	B-FA 127 R87	4P
4.6	10500	312	90000	1.15	B-FAF 127 R87	4P
4.9	9840	293	90000	1.20	B-F 127 R87	4P
5.5	8680	259	90000	1.40	B-FF 127 R87	4P
6.4	7500	223	90000	1.60		
					B-FA 127 R77	4P
3.3	14500	428	85600	0.85	B-FAF 127 R77	4P
3.8	12700	376	89100	0.95	B-F 127 R77	4P
					B-FF 127 R77	4P

PARALLEL SHAFT HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole	Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
5.5kW							5.5kW						
2.7	19800	267.43	94600	0.90			65	810	22.05	10400	1.00		
3.3	16100	217.62	105500	1.10			68	770	20.90	10800	1.05		
4.0	13200	178.20	111900	1.35			78	670	18.29	11500	1.20		
4.4	12100	162.96	114000	1.50	B-FA	157	87	605	16.48	11900	1.35		
5.0	10500	141.80	116600	1.70	B-FAF	157	99	530	14.46	12300	1.55		
5.7	9260	125.14	118300	1.95	B-F	157	112	470	12.76	12500	1.75		
6.5	8030	108.49	119700	2.2	B-FF	157	126	415	11.31	12800	1.95	B-FA	67
7.4	7140	96.53	120000	2.5			148	355	9.66	12900	2.3	B-FAF	67
8.3	5800	85.80	120000	2.8			158	335	9.08	12400	1.60	B-F	67
9.1	5800	78.46	120000	3.1			166	315	8.60	12300	1.80	B-FF	67
10	5050	68.28	120000	3.6			190	275	7.53	12000	2.2		
4.2	12600	170.83	89200	0.95	B-FA	127	211	250	6.78	11700	2.5		
4.6	11400	153.67	90000	1.05	B-FAF	127	240	220	5.95	11400	2.8		
5.7	9270	125.37	90000	1.30	B-F	127	272	193	5.25	11100	3.1		
6.2	8460	114.34	90000	1.40	B-FF	127	307	171	4.66	10700	3.3		
6.6	7910	215.37	49200	0.95	B-FA	107	360	146	3.97	10300	3.4		
7.2	7320	199.31	50800	1.05	B-FAF	107	85	620	16.81	5450	0.95		
8.0	6560	178.64	52700	1.15	B-F	107	90	585	15.88	5480	1.05		
8.9	5920	161.28	54200	1.30	B-FF	107	106	495	13.52	5530	1.20		
9.8	5380	146.49	55500	1.45			116	450	12.29	5530	1.35	B-FA	57
11	4770	129.97	56800	1.60	B-FA	107	134	390	10.64	5510	1.55	B-FAF	57
12	4330	117.94	57700	1.75	B-FAF	107	175	300	8.19	5190	1.40	B-F	57
14	3720	101.38	59000	2.1	B-F	107	185	285	7.73	5160	1.50	B-FF	57
15	3400	92.47	59600	2.3	B-FF	107	217	240	6.58	5070	1.75		
16	3250	88.49	59900	2.4			239	220	5.98	5010	1.90		
17	3080	83.99	60200	2.5			276	190	5.18	4900	2.2		
11	4680	127.42	27400	0.90	B-FA	97	7.5kW						
13	4150	112.99	30300	1.05	B-FAF	97	4.6	14300	312	85900	0.85	B-FA	127 R87
14	3750	102.16	31400	1.15	B-F	97	4.9	13500	293	87600	0.90	B-FAF	127 R87
					B-FF	97	5.5	11900	259	90000	1.00	B-F	127 R87
15	3580	97.58	31900	1.20			6.4	10300	223	90000	1.15	B-FF	127 R87
16	3300	89.85	32600	1.30			7.2	9080	198	90000	1.30		
17	3180	86.59	32900	1.35	B-FA	97	3.3	21600	217.62	87600	0.85		
18	2950	80.31	33400	1.45	B-FAF	97	4.0	17700	178.20	101100	1.00		
19	2780	75.63	33800	1.55	B-F	97	4.4	16200	162.96	105200	1.10		
20	2660	72.29	34100	1.60	B-FF	97	5.1	14100	141.80	110100	1.30		
22	2400	65.47	34600	1.80			5.8	12400	125.14	113300	1.45		
25	2130	58.06	34500	2.0			5.6	10800	108.49	116100	1.65	B-FA	157
27	1930	52.49	33900	2.2			7.5	9600	96.53	117800	1.85	B-FAF	157
16	3230	88.01	21200	0.95	B-FA	87	8.4	8530	85.80	119200	2.1	B-F	157
19	2810	76.39	21200	1.05	B-FAF	87	9.2	7810	78.46	120000	2.3	B-FF	157
21	2510	68.40	21200	1.20	B-F	87	11	6790	68.28	120000	2.7		
25	2080	56.75	21000	1.45	B-FF	87	12	5990	60.25	120000	3.0		
28	1850	50.36	20800	1.60			14	5200	52.24	120000	3.5		
32	1660	45.28	20500	1.70	B-FA	87	15	4620	46.48	120000	3.9		
36	1440	39.30	20100	1.80	B-FAF	87	18	3980	40.08	120000	4.5		
41	1290	35.19	19800	2.0	B-F	87	3.6	20000	267.43	94000	0.90		
49	1070	29.20	19100	2.3	B-FF	87	4.4	16200	217.62	105100	1.10		
42	1250	33.92	19700	2.1	B-FA	87	5.4	13300	178.20	111700	1.35		
50	1060	28.78	19100	2.3	B-FAF	87	5.9	12200	162.96	113800	1.50		
54	970	26.50	18800	3.1	B-F	87	6.8	10600	141.80	116400	1.70	B-FA	157
60	870	23.68	18400	3.5	B-FF	87	7.7	9340	125.14	118200	1.95	B-FAF	157
30	1780	48.37	13500	0.85			8.9	8090	108.49	119700	2.2	B-F	157
33	1600	43.58	15000	0.95	B-FA	77	9.9	7200	96.53	120000	2.5	B-FF	157
37	1400	38.23	16300	1.05	B-FAF	77	11	6400	85.80	120000	2.8		
42	1240	33.74	17300	1.20	B-F	77	12	5850	78.46	120000	3.1		
48	1100	29.91	17900	1.35	B-FF	77	14	5090	68.28	120000	3.5		
56	940	25.54	18500	1.55			16	4500	60.25	120000	4.0		
56	940	25.50	18500	1.60			18	3900	52.24	123000	4.6		
67	785	21.43	19000	1.80			5.7	12500	125.37	89500	0.95	B-FA	127
73	725	19.70	19200	2.1	B-FA	77	6.3	11400	114.34	90000	1.05	B-FAF	127
82	645	17.49	19400	2.3	B-FAF	77	7.3	9840	98.95	90000	1.20	B-F	127
91	575	15.64	19600	2.6	B-F	77	8.2	8690	87.31	90000	1.40	B-FF	127
102	515	14.06	19300	2.9	B-FF	77	5.6	12700	170.83	89000	0.95	B-FA	127
117	450	12.20	18600	3.3			6.2	11500	153.67	90000	1.05	B-FAF	127
							7.7	9350	125.37	90000	1.30	B-F	127
							8.4	8530	114.34	90000	1.40	B-FF	127

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
7.5kW						
8.4	8560	170.83	90000	1.40	B-FA 127	4P
9.3	7700	153.67	90000	1.55	B-FAF 127	4P
11	6280	125.37	90000	1.90	B-F 127	4P
					B-FF 127	4P
8.0	8950	178.64	46300	0.85	B-FA 107	4P
8.9	8080	161.28	48700	0.95	B-FAF 107	4P
9.8	7340	146.49	50700	1.05	B-F 107	4P
11	6510	129.97	52800	1.20	B-FF 107	4P
12	5910	117.94	54200	1.30		
14	5080	101.38	56100	1.50		
15	4630	92.47	57100	1.65	B-FA 107	4P
16	4430	88.49	57500	1.75	B-FAF 107	4P
17	4210	83.99	58000	1.85	B-F 107	4P
19	3730	74.52	59000	2.1	B-FF 107	4P
21	3390	67.62	59600	2.3		
15	4890	97.58	19300	0.90		
16	4500	89.85	29300	0.95	B-FA 97	4P
17	4340	86.59	29800	1.00	B-FAF 97	4P
18	4020	80.31	30700	1.05	B-F 97	4P
19	3790	75.63	31300	1.15	B-FF 97	4P
20	3620	72.29	31800	1.20		
22	3280	65.47	32200	1.30		
25	2910	58.06	31800	1.50	B-FA 97	4P
27	2630	52.49	31400	1.65	B-FAF 97	4P
32	2230	44.49	30600	1.95	B-F 97	4P
37	1950	38.86	29900	2.2	B-FF 97	4P
44	1630	32.50	28900	2.6		
33	2170	43.28	30500	1.40	B-FA 97	4P
39	1840	36.64	29600	1.65	B-FAF 97	4P
42	1700	33.91	29200	2.5	B-F 97	4P
47	1520	30.39	28500	2.8	B-FF 97	4P
25	2840	56.75	18100	1.05		
28	2520	50.36	18200	1.15	B-FA 87	4P
32	2270	45.28	18200	1.25	B-FAF 87	4P
36	1970	39.30	18100	1.40	B-F 87	4P
41	1760	35.19	18000	1.50	B-FF 87	4P
49	1460	29.20	17600	1.70		
50	1440	28.78	17600	1.70		
54	1330	26.50	17400	2.3	B-FA 87	4P
60	1190	23.68	17100	2.5	B-FAF 87	4P
67	1070	21.32	16800	2.8	B-F 87	4P
74	970	19.31	16500	3.1	B-FF 87	4P
84	860	17.12	16200	3.5		
92	775	15.48	15900	3.9		
42	1690	33.74	14300	0.90	B-FA 77	4P
48	1500	29.91	15700	1.00	B-FAF 77	4P
56	1280	25.54	17000	1.15	B-F 77	4P
					B-FF 77	4P
56	1280	25.50	17100	1.15		
67	1070	21.43	18000	1.40		
73	990	19.70	18400	1.50		
82	860	17.49	18800	1.70		
91	785	15.64	19000	1.90		
102	705	14.06	18600	2.1	B-FA 77	4P
117	610	12.20	18000	2.5	B-FAF 77	4P
131	545	10.93	17600	2.7	B-F 77	4P
154	465	9.30	16500	2.3	B-FF 77	4P
173	415	8.26	16100	2.6		
194	370	7.39	15700	2.9		
215	335	6.64	15300	3.2		
248	290	5.76	14800	3.7		
277	260	5.16	14500	4.2		
334	215	4.28	13800	4.7		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
9.2kW						
4.1	19700	353	94800	0.90		
4.8	15900	302	103300	1.05	B-FA 157 R97	4P
5.3	15300	273	107400	1.20	B-FAF 157 R97	4P
6.2	13000	232	112400	1.40	B-F 157 R97	4P
7.1	11300	202	115300	1.60	B-FF 157 R97	4P
7.3	11000	197	115800	1.65		
5.6	14500	259	85600	0.85	B-FA 127 R87	4P
6.4	12500	223	89400	0.95	B-FAF 127 R87	4P
7.3	11100	198	90000	1.10	B-F 127 R87	4P
					B-FF 127 R87	4P
8.4	10400	170.83	90000	1.15	B-FA 127	4P
9.4	9380	153.67	90000	1.30	B-FAF 127	4P
11	7650	125.37	90000	1.55	B-F 127	4P
13	6980	114.34	90000	1.70	B-FF 127	4P
15	6040	98.95	90000	2.0		
9.8	8940	146.49	46300	0.85	B-FA 107	4P
11	7930	129.97	49100	0.95	B-FAF 107	4P
12	7200	117.94	51100	1.05	B-F 107	4P
14	6180	101.38	53600	1.25	B-FF 107	4P
16	5640	92.47	54900	1.35		
17	5120	83.99	56000	1.50	B-FA 107	4P
19	4550	74.52	57300	1.70	B-FAF 107	4P
21	4130	67.62	58200	1.85	B-F 107	4P
25	3550	58.12	58300	2.2	B-FF 107	4P
28	3100	50.73	56800	2.5		
18	4900	80.31	18700	0.90	B-FA 97	4P
19	4610	75.63	28900	0.95	B-FAF 97	4P
20	4410	72.29	29600	0.95	B-F 97	4P
22	3990	65.47	29600	1.10	B-FF 97	4P
25	3540	58.06	29500	1.20		
27	3200	52.49	29300	1.35	B-FA 97	4P
32	2710	44.49	28800	1.60	B-FAF 97	4P
37	2370	38.86	28400	1.80	B-F 97	4P
44	1980	32.5	27600	2.2	B-FF 97	4P
42	2070	33.91	27800	2.1	B-FA 97	4P
47	1850	30.39	27300	2.3	B-FAF 97	4P
52	1670	27.44	26800	2.6	B-F 97	4P
58	1520	24.92	26300	2.8	B-FF 97	4P
29	3070	50.36	16000	0.95	B-FA 87	4P
32	2760	45.28	16200	1.00	B-FAF 87	4P
37	2700	39.30	16400	1.15	B-F 87	4P
41	2150	35.19	16400	1.20	B-FF 87	4P
49	1780	29.20	16300	1.40		
54	1620	26.50	16200	1.85		
61	1440	23.68	16100	2.1	B-FA 87	4P
68	1300	21.32	15900	2.3	B-FAF 87	4P
75	1180	19.31	15700	2.5	B-F 87	4P
84	1040	17.12	15400	2.9	B-FF 87	4P
93	940	15.48	15200	3.2		
110	800	13.12	14700	3.8		

PARALLEL SHAFT HELICAL GEARBOXES

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
9.2kW						
73	1200	19.70	17400	1.25		
82	1070	17.49	18000	1.40		
92	950	15.64	18300	1.55		
102	860	14.06	18000	1.75		
118	745	12.20	17500	2.0	B-FA 77	4P
132	665	10.93	17100	2.2	B-FAF 77	4P
155	570	9.30	16000	1.90	B-F 77	4P
174	505	8.26	15600	2.1	B-FF 77	4P
195	450	7.39	15300	2.4		
217	405	6.64	15000	2.7		
250	350	5.76	14500	3.1		
279	315	5.16	14200	3.4		
336	260	4.28	13600	3.8		
11.0kW						
4.8	20300	302	92800	0.90	B-FA 157 R97	4P
5.3	18300	273	99300	1.00	B-FAF 157 R97	4P
6.2	15500	232	106900	1.15	B-F 157 R97	4P
7.1	13500	202	111200	1.35	B-FF 157 R97	4P
7.3	13200	197	112000	1.35		
6.4	15000	223	84500	0.80	B-FA 127 R87	4P
7.3	13300	198	88000	0.90	B-FAF 127 R87	4P
8.7	11100	166	90000	1.00	B-F 127 R87	4P
					B-FF 127 R87	4P
5.1	20700	141.80	91300	0.85	B-FA 157	8P
5.8	18300	125.14	99500	1.00	B-FAF 157	8P
6.6	15800	108.49	106100	1.15	B-F 157	8P
7.5	14100	96.53	110100	1.30	B-FF 157	8P
5.4	19500	178.20	95500	0.90		
5.9	17800	162.96	100800	1.00		
6.8	15500	141.80	106900	1.15	B-FA 157	6P
7.7	13700	125.14	110900	1.30	B-FAF 157	6P
8.9	11900	108.49	114300	1.50	B-F 157	6P
9.9	10600	96.53	116400	1.70	B-FF 157	6P
11	9390	85.80	118100	1.90		
12	8590	78.46	119100	2.1		
5.4	19500	267.43	95500	0.90		
6.6	15900	217.62	106000	1.15		
8.1	13000	178.20	112300	1.40		
8.8	11900	162.96	114300	1.50	B-FA 157	4P
10	10300	141.80	116800	1.75	B-FAF 157	4P
12	9130	125.14	118400	1.95	B-F 157	4P
13	7910	108.49	119900	2.3	B-FF 157	4P
15	7040	96.53	120000	2.6		
17	6260	85.80	118100	2.9		
18	5720	78.46	115700	3.1		
21	4980	68.28	112000	3.6		
7.7	13700	125.37	87100	0.85	B-FA 127	6P
8.4	12500	114.34	89500	0.95	B-FAF 127	6P
9.7	10800	98.95	90000	1.10	B-F 127	6P
11	9550	87.31	90000	1.25	B-FF 127	6P
13	8250	75.41	90000	1.45		
8.4	12500	170.83	89500	0.95		
9.4	11200	153.67	90000	1.05	B-FA 127	4P
11	9150	125.37	90000	1.30	B-FAF 127	4P
13	8340	114.34	90000	1.45	B-F 127	4P
15	7220	98.95	90000	1.65	B-FF 127	4P
16	6370	87.31	90000	1.90		
19	5500	75.41	88600	2.2		
12	8600	117.94	47300	0.90	B-FA 107	4P
14	7400	101.38	50600	1.05	B-FAF 107	4P
16	6750	92.47	52200	1.15	B-F 107	4P
					B-FF 107	4P
11.0kW						
17	6130	83.99	53700	1.25		
19	5440	74.52	55300	1.40	B-FA 107	4P
21	4930	67.62	56500	1.55	B-FAF 107	4P
25	4240	58.12	65400	1.80	B-F 107	4P
26	3700	50.73	55100	2.1	B-FF 107	4P
33	3140	43.03	53500	2.5		
43	2470	33.79	51000	3.0	B-FA 107	4P
52	2010	27.57	48800	3.9	B-FAF 107	4P
57	1830	25.14	47800	4.3	B-F 107	4P
					B-FF 107	4P
22	4780	65.47	20400	0.90	B-FA 97	4P
25	4240	58.06	27100	1.00	B-FAF 97	4P
27	3830	52.49	27100	1.10	B-F 97	4P
					B-FF 97	4P
32	3250	44.49	27000	1.30	B-FA 97	4P
37	2830	38.86	26700	1.50	B-FAF 97	4P
44	2370	32.50	26200	1.80	B-F 97	4P
					B-FF 97	4P
42	2470	33.91	26400	1.75	B-FA 97	4P
47	2220	30.39	26000	1.95	B-FAF 97	4P
52	2000	27.44	25600	2.2	B-F 97	4P
58	1820	24.92	25200	2.4	B-FF 97	4P
65	1610	22.11	24700	2.7		
37	2870	39.30	14600	0.95	B-FA 87	4P
41	2570	35.19	14800	1.00	B-FAF 87	4P
49	2130	29.20	15000	1.20	B-F 87	4P
					B-FF 87	4P
54	1930	26.50	15000	1.55		
61	1730	23.68	15000	1.75	B-FA 87	4P
68	1560	21.32	14900	1.95	B-FAF 87	4P
75	1410	19.31	14600	2.1	B-F 87	4P
84	1250	17.12	14600	2.4	B-FF 87	4P
93	1130	15.48	14400	2.7		
110	960	13.12	14100	3.1		
73	1440	19.70	16100	1.05		
82	1280	17.49	17100	1.20		
92	1140	15.64	17600	1.30		
102	1030	14.06	17400	1.45		
118	890	12.20	17000	1.70	B-FA 77	4P
132	795	10.93	16700	1.90	B-FAF 77	4P
155	680	9.30	15500	1.60	B-F 77	4P
174	605	8.26	15200	1.80	B-FF 77	4P
195	540	7.39	14900	2.0		
217	485	6.64	14600	2.2		
250	420	5.76	14200	2.6		
279	375	5.16	13900	2.9		
336	310	4.28	13300	3.2		
15.0kW						
6.3	20900	232	90400	0.85	B-FA 157 R97	4P
7.2	18300	202	99500	1.00	B-FAF 157 R97	4P
7.4	17700	197	101000	1.00	B-F 157 R97	4P
					B-FF 157 R97	4P
6.8	20900	141.80	90400	0.85	B-FA 157	6P
7.8	18500	125.14	98800	0.95	B-FAF 157	6P
8.9	16000	108.49	105700	1.10	B-F 157	6P
10	14300	96.53	109800	1.25	B-FF 157	6P
11	12700	85.80	112900	1.40		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
15.0kW						
6.7	21400	217.62	88800	0.85		
8.2	17500	178.20	101800	1.05		
9.0	16000	162.96	105700	1.15		
10	13900	141.80	110500	1.30	B-FA 157	4P
12	12300	125.14	113800	1.45	B-FAF 157	4P
13	10600	108.49	116300	1.70	B-F 157	4P
15	9470	96.53	115800	1.90	B-FF 157	4P
17	8420	85.80	113200	2.1		
19	7700	78.46	111200	2.3		
21	6700	68.28	108000	2.7		
24	5910	60.25	105100	3.0		
9.8	14600	98.95	85300	0.80	B-FA 127	6P
11	12900	87.31	88700	0.95	B-FAF 127	6P
13	11100	75.41	88300	1.10	B-F 127	6P
14	10300	70.07	87600	1.15	B-FF 127	6P
15	9440	63.91	86700	1.25		
12	12300	125.37	89000	1.00		
13	11200	114.34	88300	1.05	B-FA 127	4P
15	9710	98.95	87000	1.25	B-FAF 127	4P
17	8570	87.31	85600	1.40	B-F 127	4P
19	7400	75.41	83800	1.60	B-FF 127	4P
21	6870	70.07	82800	1.75		
16	9070	92.47	45900	0.85	B-FA 107	4P
17	8680	88.49	47100	0.90	B-FAF 107	4P
17	8240	83.99	48300	0.95	B-F 107	4P
20	7310	74.52	50800	1.05	B-FF 107	4P
22	6630	67.62	52500	1.15		
25	5700	58.12	52200	1.35	B-FA 107	4P
29	4980	50.73	51500	1.55	B-FAF 107	4P
34	4220	43.03	50400	1.80	B-F 107	4P
39	3690	37.61	49300	2.1	B-FF 107	4P
46	3120	31.80	48000	2.5		
43	3320	33.79	48500	2.2	B-FA 107	4P
56	2700	27.57	46700	2.9	B-FAF 107	4P
58	2400	25.14	45900	3.2	B-F 107	4P
67	2130	21.76	44500	3.7	B-FF 107	4P
33	4360	44.49	22900	1.00	B-FA 97	4P
38	3810	38.86	23100	1.15	B-FAF 97	4P
45	3190	32.50	23200	1.35	B-F 97	4P
					B-FF 97	4P
43	3330	33.91	23200	1.30		
48	2980	30.39	23200	1.45		
53	2690	27.44	23100	1.60		
59	2450	24.92	22900	1.75	B-FA 97	4P
66	2170	22.11	22600	2.0	B-FAF 97	4P
73	1970	20.07	22400	2.2	B-F 97	4P
85	1690	17.25	21900	2.5	B-FF 97	4P
97	1480	15.06	21400	2.9		
114	1250	12.77	20800	3.4		
131	1100	11.16	20200	3.7		
55	2600	26.50	12300	1.15		
62	2320	23.68	12600	1.30		
68	2090	21.32	12700	1.45		
76	1890	19.31	12800	1.60		
85	1680	17.12	12900	1.80		
94	1520	15.48	12800	2.0		
111	1290	13.12	12700	2.3	B-FA 87	4P
127	1120	11.46	12600	2.7	B-FAF 87	4P
152	940	9.58	12300	3.1	B-F 87	4P
176	810	8.29	11700	1.90	B-FF 87	4P
199	720	7.35	11500	2.1		
220	650	6.65	11300	2.3		
259	555	5.63	11000	2.8		
297	485	4.92	10700	3.2		
355	405	4.12	10300	3.6		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
18.5kW						
7.2	22500	202	76400	0.80	B-FA 157 R97	4P
7.5	21800	197	86800	0.80	B-FAF 157 R97	4P
					B-F 157 R97	4P
					B-FF 157 R97	4P
8.2	21500	178.20	88200	0.85		
9.0	19700	162.96	95000	0.90		
10	17100	141.80	102800	1.05		
12	15100	125.14	107900	1.20	B-FA 157	4P
14	13100	108.49	112100	1.40	B-FAF 157	4P
15	11600	96.53	111300	1.55	B-F 157	4P
17	10300	85.80	109300	1.75	B-FF 157	4P
19	9460	78.46	107600	1.90		
21	8230	68.28	104900	2.2		
24	7270	60.25	102300	2.5		
28	6300	52.24	99300	2.9		
13	13800	114.34	82200	0.85		
15	11900	98.95	81700	1.00		
17	10500	87.31	80900	1.15	B-FA 127	4P
19	9090	75.41	79700	1.30	B-FAF 127	4P
21	8450	70.07	79000	1.40	B-F 127	4P
23	7710	63.91	78100	1.55	B-FF 127	4P
26	6670	55.31	76400	1.80		
30	5880	48.80	74900	2.0		
20	8990	74.52	46200	0.85	B-FA 107	4P
22	8150	67.62	48500	0.95	B-FAF 107	4P
25	7010	58.12	48700	1.10	B-F 107	4P
29	6120	50.73	48400	1.25	B-FF 107	4P
34	5190	43.03	47700	1.50	B-FA 107	4P
39	4540	37.61	47000	1.70	B-FAF 107	4P
46	3830	31.80	46000	2.0	B-F 107	4P
					B-FF 107	4P
43	4070	33.79	46400	1.80	B-FA 107	4P
53	3320	27.57	45000	2.4	B-FAF 107	4P
58	3030	25.14	44300	2.6	B-F 107	4P
67	2620	21.76	43200	3.0	B-FF 107	4P
38	4690	38.86	20000		B-FA 97	4P
45	3920	32.50	20600	0.90	B-FAF 97	4P
				1.10	B-F 97	4P
					B-FF 97	4P
53	3310	27.44	20900	1.30		
59	3010	24.92	20900	1.45		
66	2670	22.11	20900	1.60	B-FA 97	4P
73	2420	20.07	20800	1.80	B-FAF 97	4P
85	2080	17.25	20500	2.1	B-F 97	4P
97	1820	15.06	20200	2.4	B-FF 97	4P
115	1540	12.77	19800	2.8		
131	1350	11.16	19300	3.0		
69	2570	21.32	10900	1.15		
76	2330	19.31	11100	1.30		
86	2060	17.12	11400	1.45		
95	1870	15.48	11500	1.60		
112	1580	13.12	11600	1.90		
128	1380	11.46	11600	2.2	B-FA 87	4P
153	1160	9.58	11500	2.5	B-FAF 87	4P
177	1000	8.29	10900	1.55	B-F 87	4P
199	890	7.35	10800	1.75	B-FF 87	4P
220	800	6.65	10700	1.90		
260	680	5.63	10400	2.2		
298	595	4.92	10200	2.6		
356	495	4.12	9900	2.9		

PARALLEL SHAFT HELICAL GEARBOXES



Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
22kW						
10	20900	96.53	90500	0.85	B-FA 157	6P
11	18600	85.50	98500	0.95	B-FAF 157	6P
12	17000	78.46	103100	1.05	B-F 157	6P
14	14800	68.28	107700	1.20	B-FF 157	6P
10	20300	141.80	92600	0.90		
12	17900	125.14	100400	1.00		
14	15600	108.49	106800	1.15		
15	13800	96.53	106900	1.30		
17	12300	85.80	105400	1.45	B-FA 157	4P
19	11300	78.46	104000	1.60	B-FAF 157	4P
21	9790	68.28	101700	1.85	B-F 157	4P
24	8640	60.25	99600	2.1	B-FF 157	4P
28	7490	52.24	97000	2.4		
32	6660	46.48	94800	2.7		
37	5740	40.06	91900	3.1		
45	4670	32.55	97800	3.9		
15	14200	98.95	76400	0.85		
17	12500	87.31	76300	0.95		
19	10800	75.41	75700	1.10	B-FA 127	4P
21	10000	70.07	75300	1.20	B-FAF 127	4P
23	9160	63.91	74700	1.30	B-F 127	4P
26	7930	55.31	73500	1.50	B-FF 127	4P
30	7000	48.80	72300	1.70		
35	6040	42.15	70700	2.0		
25	8330	58.12	45200	0.90	B-FA 107	4P
29	7280	50.73	45300	1.05	B-FAF 107	4P
34	6170	43.03	45100	1.25	B-F 107	4P
					B-FF 107	4P
39	5390	37.61	44800	1.40	B-FA 107	4P
46	4560	31.80	44100	1.70	B-FAF 107	4P
					B-F 107	4P
					B-FF 107	4P
43	4850	33.79	44300	1.55		
53	3950	27.57	43300	2.0	B-FA 107	4P
58	3610	25.14	42800	2.2	B-FAF 107	4P
67	3120	21.76	41900	2.5	B-F 107	4P
76	2750	19.20	41000	2.8	B-FF 107	4P
53	3940	27.44	18700	1.10		
59	3570	24.92	18900	1.20		
66	3170	22.11	19100	1.35	B-FA 97	4P
73	2880	20.07	19200	1.50	B-FAF 97	4P
85	2470	17.25	19100	1.75	B-F 97	4P
97	2160	15.06	19000	2.0	B-FF 97	4P
115	1830	12.77	18700	2.3		
131	1600	11.16	18400	2.6		
69	3060	21.32	8990	1.00		
76	2770	19.31	9430	1.10		
86	2460	17.12	9850	1.20		
95	2220	15.48	10100	1.35		
112	1880	13.12	10400	1.60		
128	1640	11.46	10600	1.85	B-FA 87	4P
153	1370	9.58	10600	2.1	B-FAF 87	4P
177	1190	8.29	10100	1.30	B-F 87	4P
199	1050	7.35	10100	1.45	B-FF 87	4P
220	950	6.65	10000	1.60		
260	810	5.63	9900	1.90		
298	705	4.92	9750	2.2		
356	590	4.12	9500	2.5		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
30kW						
14	21100	108.49	89600	0.85		
15	18800	96.53	96900	0.95		
17	16700	85.80	96400	1.10		
19	15300	78.46	95800	1.20	B-FA 157	4P
22	13300	68.28	94600	1.35	B-FAF 157	4P
24	11700	60.25	93300	1.55	B-F 157	4P
29	10200	52.24	91500	1.75	B-FF 157	4P
32	9060	46.48	89900	2.0		
37	7810	40.06	87700	2.3		
19	14700	75.41	66600	0.80		
21	13700	70.07	66800	0.90		
23	12500	63.91	66900	0.95	B-FA 127	4P
27	10800	55.31	66700	1.10	B-FAF 127	4P
30	9510	48.80	66300	1.25	B-F 127	4P
35	8210	42.15	65500	1.45	B-FF 127	4P
39	7270	37.28	64700	1.65		
47	6110	31.33	63200	1.95		
58	4930	25.30	61200	2.4		
55	5240	26.86	61800	1.60	B-FA 127	4P
60	4790	24.57	60900	1.80	B-FAF 127	4P
69	4170	21.38	59400	2.9	B-F 127	4P
78	3680	18.87	58000	3.0	B-FF 127	4P
34	8390	43.03	39200	0.90	B-FA 107	4P
39	7330	37.61	39600	1.05	B-FAF 107	4P
46	6200	31.80	39700	1.25	B-F 107	4P
					B-FF 107	4P
53	5370	27.57	39500	1.45		
58	4900	25.14	39300	1.60		
68	4240	21.76	38800	1.85	B-FA 107	4P
77	3730	19.20	38300	2.1	B-FAF 107	4P
89	3230	16.58	37600	2.4	B-F 107	4P
100	2860	14.67	36900	2.7	B-FF 107	4P
119	2400	12.33	35900	2.9		
148	1940	9.96	34500	3.3		
66	4310	22.11	15100	1.00		
73	3910	20.07	15500	1.10		
85	3360	17.25	16000	1.30		
98	2930	15.06	16300	1.45		
115	2490	12.77	16400	1.75	B-FA 97	4P
132	2180	11.16	16400	1.90	B-FAF 97	4P
162	1770	9.06	15400	1.35	B-F 97	4P
179	1600	8.22	15300	1.45	B-FF 97	4P
208	1380	7.07	15100	1.70		
238	1200	6.17	14900	1.85		
281	1020	5.23	14600	2.1		
321	890	4.57	14300	2.3		
37kW						
17	20600	85.80	88600	0.85		
19	18900	78.46	88700	0.95		
22	16400	68.28	88400	1.10		
24	14500	60.25	87800	1.25	B-FA 157	4P
28	12600	52.24	86800	1.45	B-FAF 157	4P
32	11200	46.48	85700	1.60	B-F 157	4P
34	8630	40.06	84000	1.85	B-FF 157	4P
45	7820	32.55	81400	2.3		
53	6630	27.60	79100	2.7		



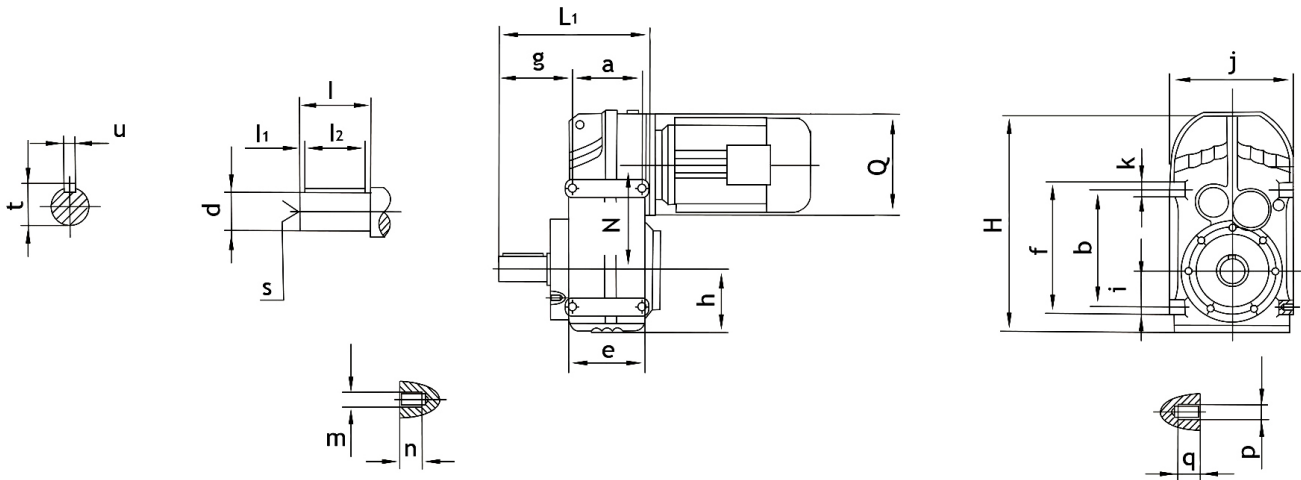
Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
37kW						
27	13300	55.31	60900	0.90		
30	11700	48.80	61100	1.00	B-FA 127	4P
35	10100	42.15	61100	1.20	B-FAF 127	4P
39	8960	37.28	60700	1.35	B-F 127	4P
47	7530	31.33	59900	1.60	B-FF 127	4P
58	6080	25.30	58500	1.90		
55	6460	26.86	58900	1.30		
60	5910	24.57	58300	1.45		
69	5140	21.38	57100	2.3		
78	4530	18.87	56000	2.4	B-FA 127	4P
90	3930	16.36	54600	2.6	B-FAF 127	4P
101	3500	14.55	53400	3.1	B-F 127	4P
117	3010	12.54	51900	3.3	B-FF 127	4P
144	2450	10.19	49600	3.9		
166	2130	8.86	47700	3.3		
188	1890	7.88	46500	3.2		
53	6630	27.57	36200	1.20		
58	6040	25.14	36200	1.30		
68	5230	21.76	36200	1.50		
77	4610	19.20	36000	1.70		
89	3990	16.58	35600	1.95	B-FA 107	4P
100	3530	14.67	35100	2.2	B-FAF 107	4P
119	2960	12.33	34400	2.4	B-F 107	4P
148	2390	9.96	33300	2.7	B-FF 107	4P
152	2330	9.69	32400	2.1		
176	2010	8.37	31700	2.4		
199	1780	7.40	31000	2.6		
236	1500	6.22	30000	3.1		
45kW						
22	20000	68.28	81300	0.90		
24	17600	60.25	81600	1.00	B-FA 157	4P
28	15300	52.24	81300	1.20	B-FAF 157	4P
32	13600	46.48	80900	1.30	B-F 157	4P
37	11700	40.06	79900	1.55	B-FF 157	4P
45	9510	32.55	76000	1.90		
53	8070	27.60	76200	2.2		
30	14300	48.80	55200	0.85	B-FA 127	4P
35	12300	42.15	56000	0.95	B-FAF 127	4P
39	10900	37.28	56200	1.10	B-F 127	4P
47	9160	31.33	56100	1.30	B-FF 127	4P
58	7400	25.30	55400	1.60		
55	7850	26.86	55700	1.10		
60	7180	24.57	55300	1.20		
69	6250	21.38	54500	1.90		
78	5520	18.87	53700	2.0		
90	4780	16.36	52600	2.3	B-FA 127	4P
101	4250	14.55	51600	2.6	B-FAF 127	4P
117	3670	12.54	50300	2.7	B-F 127	4P
144	2980	10.19	48400	3.2	B-FF 127	4P
166	2590	8.86	46600	2.7		
186	2300	7.88	45500	2.6		
216	1990	6.80	44000	3.5		
266	1610	5.52	42000	3.7		
53	8060	27.57	32400	0.95		
58	7350	25.14	32800	1.05		
68	6360	21.76	33200	1.25		
77	5610	19.20	33300	1.40		
89	4850	16.58	33300	1.60	B-FA 107	4P
100	4290	14.67	33100	1.80	B-FAF 107	4P
119	3600	12.33	32700	1.95	B-F 107	4P
148	2910	9.96	31900	2.2	B-FF 107	4P
152	2830	9.69	31000	1.75		
176	2450	8.37	30400	1.95		
199	2160	7.40	29900	2.1		
236	1820	6.22	29100	2.5		

Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
55kW						
24	21500	60.25	73800	0.85		
28	18600	52.24	74600	0.95	B-FA 157	4P
32	16500	46.48	74800	1.10	B-FAF 157	4P
37	14300	40.06	74700	1.25	B-F 157	4P
45	11600	32.55	73800	1.55	B-FF 157	4P
53	9830	27.60	72600	1.85		
52	10200	28.60	72900	1.65	B-FA 157	4P
58	9060	25.43	71600	1.65	B-FAF 157	4P
67	7890	22.16	70400	2.3	B-F 157	4P
75	7040	19.77	69400	2.4	B-FF 157	4P
88	6000	16.85	67600	3.0		
40	13300	37.28	50600	0.90	B-FA 127	4P
47	11200	31.33	51400	1.10	B-FAF 127	4P
58	9010	25.30	51600	1.35	B-F 127	4P
					B-FF 127	4P
69	7610	21.38	51300	1.60		
78	6720	18.87	50800	1.65		
90	5820	16.36	50100	1.90		
101	5180	14.55	49400	2.1	B-FA 127	4P
118	4470	12.54	48400	2.2	B-FAF 127	4P
145	3630	10.19	46800	2.6	B-F 127	4P
166	3160	8.86	45100	2.2	B-FF 127	4P
187	2810	7.88	44200	2.1		
217	2420	6.80	42900	2.9		
267	1970	5.52	41100	3.0		
315	1670	4.68	39600	3.6		
75kW						
32	22500	46.48	62900	0.80	B-FA 157	4P
37	19400	40.06	64400	0.95	B-FAF 157	4P
45	15800	32.55	65400	1.15	B-F 157	4P
54	13400	27.60	65500	1.35	B-FF 157	4P
52	13800	28.60	65500	1.25		
58	12300	25.43	65400	1.20	B-FA 157	4P
67	10700	22.16	64900	1.70	B-FAF 157	4P
75	9570	19.77	64300	1.80	B-F 157	4P
88	8150	16.85	63200	2.2	B-FF 157	4P
106	6760	13.96	61600	2.5		
124	5770	11.92	60100	2.8		
58	12200	25.30	44000	1.00	B-FA 127	4P
					B-FAF 127	4P
					B-F 127	4P
					B-FF 127	4P
69	10300	21.38	44800	1.15		
78	9130	18.87	45100	1.20		
90	7920	16.36	45200	1.40		
102	7040	14.55	45000	1.55	B-FA 127	4P
118	6070	12.54	44600	1.65	B-FAF 127	4P
145	4930	10.19	43700	1.95	B-F 127	4P
164	4290	8.86	42200	1.65	B-FF 127	4P
188	3810	7.88	41600	1.55		
218	3290	6.80	40700	2.1		
268	2670	5.52	39300	2.2		
316	2270	4.68	38100	2.7		

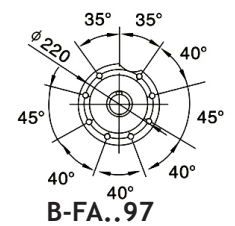
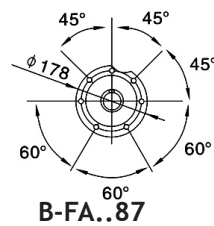
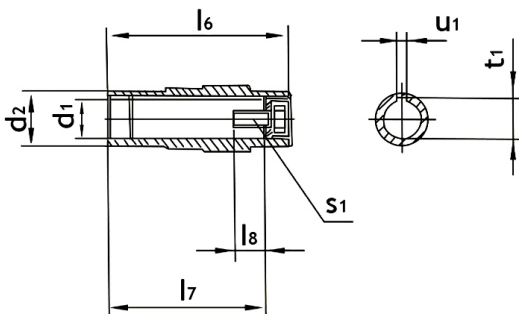
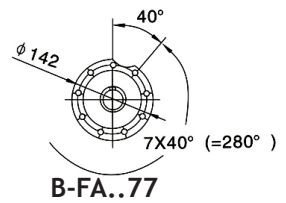
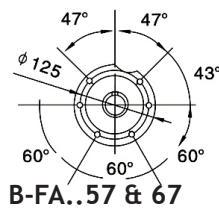
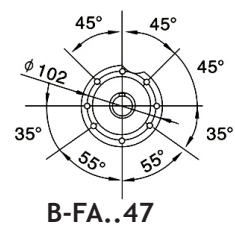
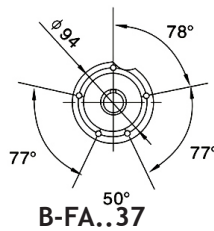
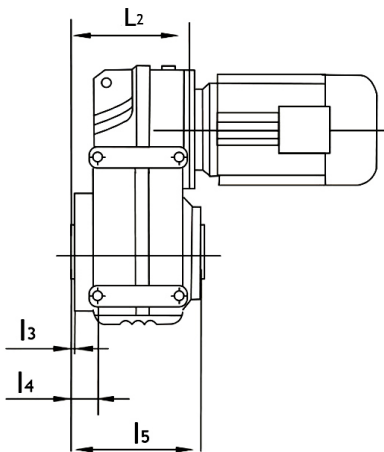
Output speed n_a [rpm]	Output torque T_a [Nm]	Ratio i	Permitted overhung load F_{Ra} [N]	Safety factor f_B	Model	Pole
90kW						
45	18900	32.55	59100	0.95	B-FA 157	4P
54	16000	27.60	60200	1.10	B-FAF 157	4P
					B-F 157	4P
					B-FF 157	4P
52	16600	28.60	60000	1.00		
58	14800	25.43	60400	1.00	B-FA 157	4P
67	12900	22.16	60600	1.40	B-FAF 157	4P
75	11500	19.77	60500	1.50	B-F 157	4P
88	9790	16.85	59900	1.85	B-FF 157	4P
106	8110	13.96	58900	2.1		
124	6920	11.92	57800	2.3		
58	14700	25.30	33100	0.80	B-FA 127	4P
					B-FAF 127	4P
					B-F 127	4P
					B-FF 127	4P
69	12400	21.38	38600	0.95		
78	11000	18.87	40900	1.00		
90	9500	16.36	41500	1.15		
102	8450	14.55	41700	1.30	B-FA 127	4P
116	7280	12.54	41800	1.35	B-FAF 127	4P
145	5920	10.19	41400	1.60	B-F 127	4P
167	5150	8.86	40100	1.35	B-FF 127	4P
188	4580	7.88	39700	1.30		
218	3950	6.80	39000	1.75		
268	3210	5.52	37900	1.85		
316	2720	4.68	36900	2.2		
110kW						
54	19500	27.60	53100	0.90	B-FA 157	4P
					B-FAF 157	4P
					B-F 157	4P
					B-FF 157	4P
67	15700	22.16	54900	1.15	B-FA 157	4P
75	14000	19.77	55400	1.20	B-FAF 157	4P
88	11900	16.85	55600	1.50	B-F 157	4P
106	9880	13.96	55300	1.70	B-FF 157	4P
125	8430	11.92	54700	1.90		
132kW						
67	18800	22.16	48700	0.95	B-FA 157	4P
75	16800	19.77	49800	1.00	B-FAF 157	4P
88	14300	16.85	50900	1.25	B-F 157	4P
106	11900	13.96	51400	1.45	B-FF 157	4P
125	10100	11.92	51400	1.60		
160kW						
88	17300	16.85	44800	1.05	B-FA 157	4P
106	14400	13.96	46400	1.20	B-FAF 157	4P
125	12300	11.92	47100	1.30	B-F 157	4P
					B-FF 157	4P
200kW						
88	21700	16.85	36100	0.85	B-FA 157	4P
106	18000	13.96	39200	0.95	B-FAF 157	4P
125	15300	11.92	41000	1.05	B-F 157	4P
					B-FF 157	4P

MOUNTING DIMENSIONS

B-F..37~157



B-FA..37B~157B



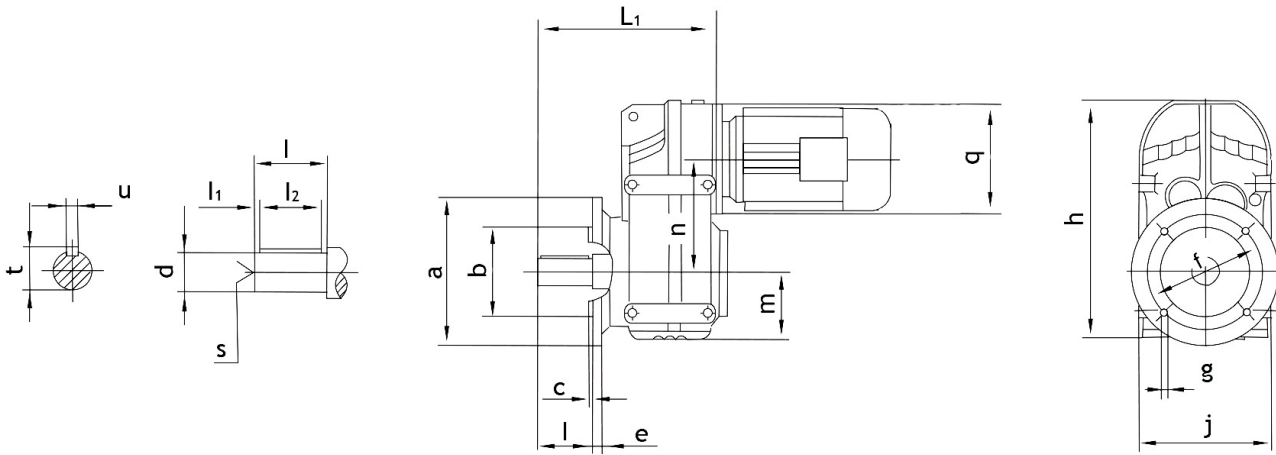
PARALLEL SHAFT HELICAL GEARBOXES

Model	a b	e f	g	h	i	k	m n	p q	Shaft dimension				
									d	l	l_1 l_2	s	t u
B-F..37 B-FA..37B	77 115	95 135	72.5	76	31	20	M8 11	M8 11	25k6	50	5 40	M10	28 8
B-F..47 B-FA..47B	93 145	109 165	91	77	43	20	M8 11	M10 15	30k6	60	3.5 50	M12	33 8
B-F..57 B-FA..57B	102 170	126 195	104.5	93	55	25	M12 17	M12 17	35k6	70	7 56	M12	38 10
B-F..67 B-FA..67B	112 190	131 215	118.5	97	60	25	M12 17	M12 17	40k6	80	5 70	M16	43 12
B-F..77 B-FA..77B	140 240	165 275	137.5	121	70	35	M12 17	M16 26	50k6	100	10 80	M16	53.5 14
B-F..87 B-FA..87B	165 310	195 350	163	152	100	40	M16 26	M16 26	60m6	120	5 110	M20	64 18
B-F..97 B-FA..97B	205 350	240 400	190.5	178	120	50	M16 26	M20 28	70m6	140	7.5 125	M20	74.5 20
B-F..107 B-FA..107B	220 400	260 460	241.5	200	125	60	/ /	M24 36	90m6	170	5 160	M24	95 25
B-F..127 B-FA..127B	270 450	316 520	291	236	142	70	/ /	M30 45	110m6	210	15 180	M24	116 28
B-F..157 B-FA..157B	310 540	364 620	325	286	170	80	/ /	M36 55	120m6	210	5 200	M24	127 32

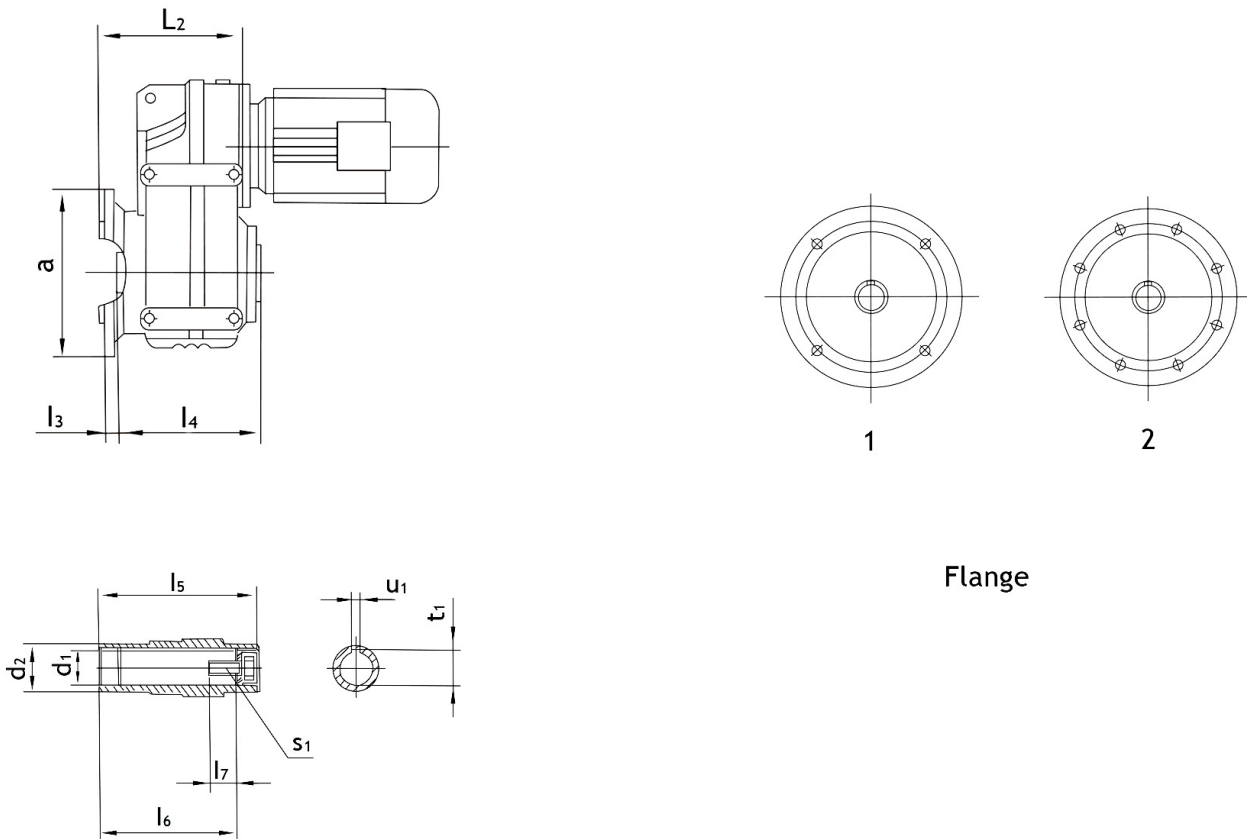
Model	Hollow shaft dimension								H j	L ₁	L ₂	N	Q
	d ₁	d ₂	l_3 l_4	l ₅	l_6 l_7	l ₈	s ₁	t ₁ u ₁					
B-F..37 B-FA..37B	30H7	45	2.5 22.5	123	120 105	17	M10X25	33.3 8	252 165	160	110	112	120
B-F..47 B-FA..47B	35H7	50	3 31	153	150 132	22	M10X25	38.3 10	269 180	193	133	128.1	120
B-F..57 B-FA..57B	40H7	55	3 33.5	170	166 142	29	M16X40	43.3 12	317 200	221	150	136	160
B-F..67 B-FA..67B	40H7	55	3.5 37	184	180 156	29	M16X40	43.3 12	343 212	242	161	159.5	160
B-F..77 B-FA..77B	50H7	70	4 36.5	213	210 183	32	M16X45	53.8 14	426 270	294	193	200	200
B-F..87 B-FA..87B	60H7	85	4 43	243	240 210	36	M20X50	64.4 18	531 330	344	224	246.7	250
B-F..97 B-FA..97B	70H7	95	4 48.5	303	300 270	34	M20X50	74.9 20	623 400	416	274	285	300
B-F..107 B-FA..107B	90H7	118	2.5 69.5	353	350 313	40	M24X60	95.4 25	717 450	484	312	332.4	350
B-F..127 B-FA..127B	100H7	135	2.5 79.25	413	410 373	38	M24X60	106.4 28	856 530	585	373	382.6	450
B-F..157 B-FA..157B	120H7	155	7 118	503	500 460	36	M24X60	127.4 32	1021 660	662	455	447	550

MOUNTING DIMENSIONS

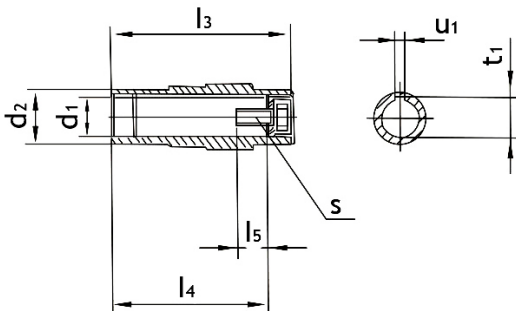
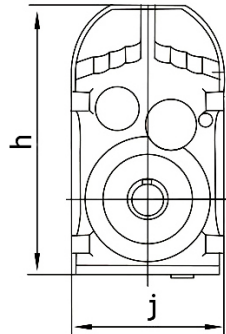
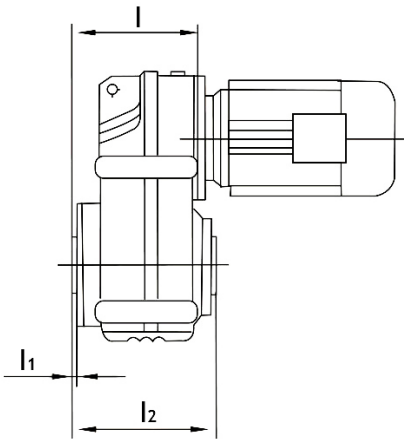
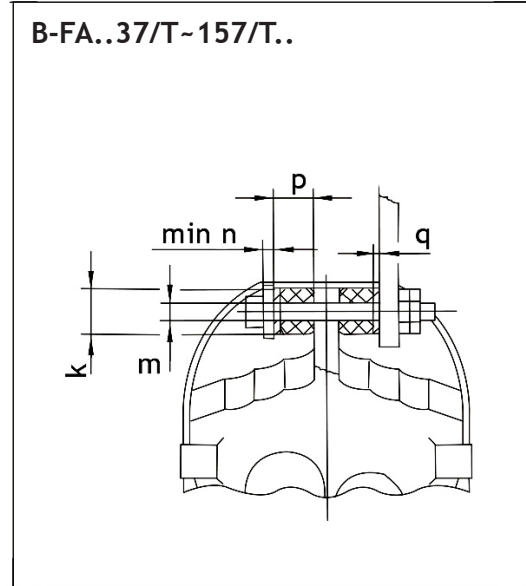
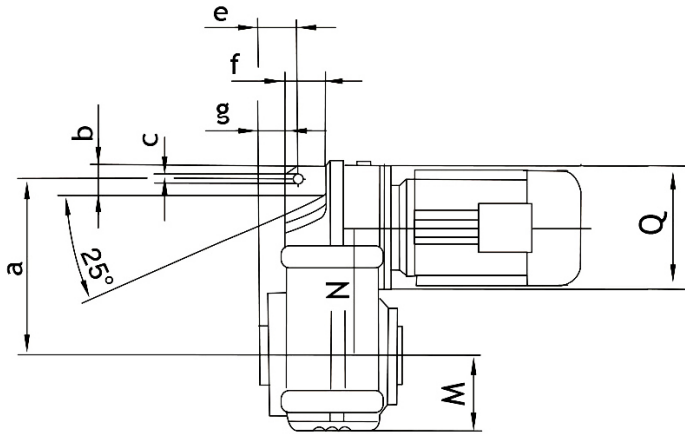
B-FF..37~157



B-FAF..37~157



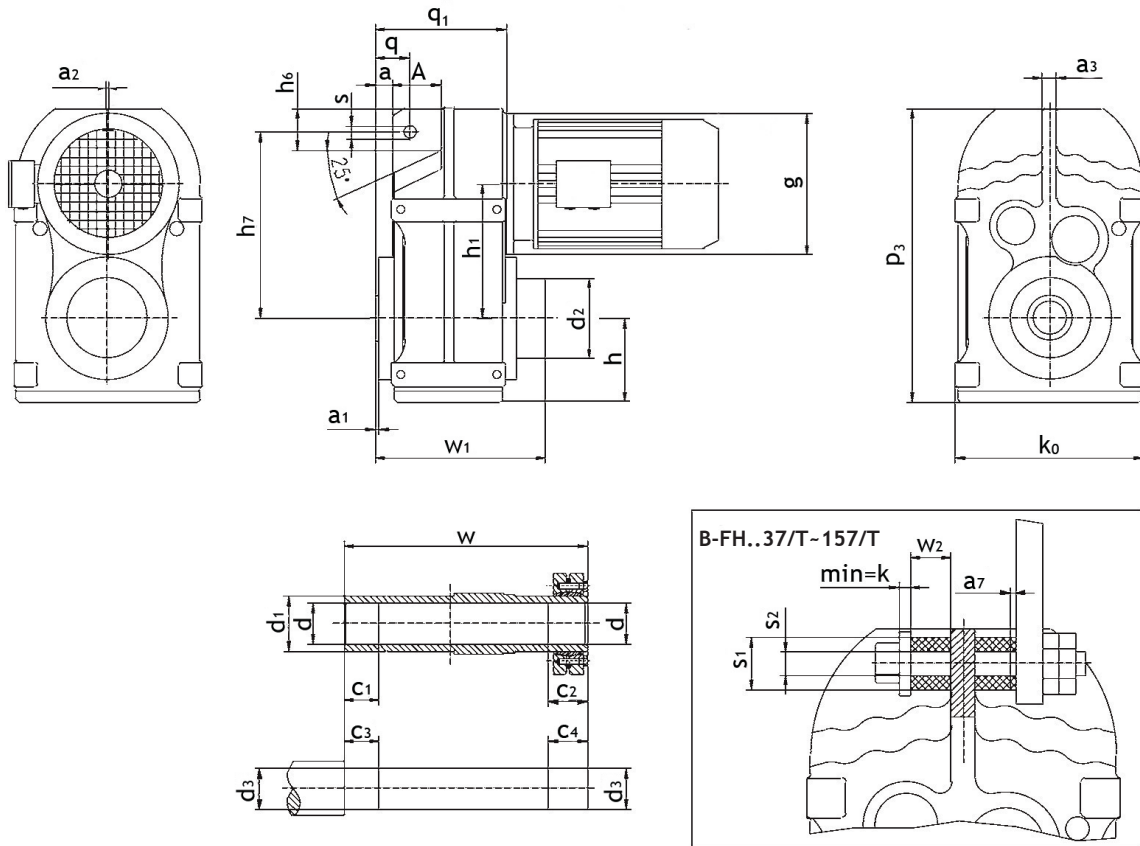
Model	Flange	a b	c e	f g	Shaft dimension				Hollow shaft dimension					h j	L ₁ L ₂	m n q
					d l	l ₁ l ₂	s	t u	d ₁ d ₂	l ₃ l ₄	l ₅ l ₆	l ₇ l ₈	t ₁ u ₁			
B-FF..37 B-FAF..37	1	160 110j6	3.5 10	130 9	25k6 50	5 40	M10	28 8	30H7 45	24 123	120 105	17 M10X25	33.3 8	252 165	184 138	76 112 120
B-FF..47 B-FAF..47	1	200 130j6	3.5 12	165 11	30k6 60	3.5 50	M10	33 8	35H7 50	25 153	150 132	22 M10X25	38.3 10	269 180	218 162	77 128.1 120
B-FF..57 B-FAF..57	1	250 180j6	4 15	215 13.5	35k6 70	7 56	M12	38 10	40H7 55	23.5 170	166 142	29 M16X40	43.3 12	317 200	243 177	93 136 160
B-FF..67 B-FAF..67	1	250 180j6	4 15	215 13.5	40k6 80	5 70	M16	43 12	40H7 55	23 184	180 156	29 M16X40	43.3 12	343 212	264 188	97 159.5 160
B-FF..77 B-FAF..77	1	300 230h6	4 16	265 13.5	50k6 100	10 80	M16	53.5 14	50H7 70	37 213	210 183	32 M16X45	53.8 14	426 270	330 234	121 200 200
B-FF..87 B-FAF..87	1	350 250h6	5 18	300 17.5	60m6 120	5 110	M20	64 18	60H7 85	30 243	240 210	36 M20X50	64.4 18	531 330	374 259	152 246.7 250
B-FF..97 B-FAF..97	2	450 350h6	5 22	400 17.5	70m6 140	7.5 125	M20	74.5 20	70H7 95	41.5 303	300 270	34 M20X50	74.9 20	623 400	456 321	178 285 300
B-FF..107 B-FAF..107	2	450 350h6	5 22	400 17.5	90m6 170	5 160	M24	95 25	90H7 118	41 353	350 313	40 M24X60	95.4 25	717 450	523 358	200 332.4 350
B-FF..127 B-FAF..127	2	550 450h6	5 25	500 17.5	110m6 210	15 180	M24	116 28	100H7 135	51 413	410 373	38 M24X60	106.4 28	856 530	643 426	236 362.6 450
B-FF..157 B-FAF..157	2	660 550h6	6 28	600 22	210m6 210	5 200	M24	127 32	120H7 155	60 503	500 460	36 M24X60	127.4 32	1021 660	725 521	286 447 550



Model	a b	c e	f g	Hollow shaft dimension					Torque arm form		h j	l	M	N Q
				d ₁ d ₂	l ₁ l ₂	l ₃ l ₄	l ₅ s	t ₁ u ₁	k m n	p q				
B-FA..37 B-FA..37/T	158 30	14 31.5	46 15	30h7 45	0.5 123	120 105	17 M10X25	33.3 8	40 12.5 5	20 1	252 172	110	76	112 120
B-FA..47 B-FA..47/T	170 22	14 32	64 12	35h7 50	1 153	150 132	22 M10X25	38.3 10	40 12.5 5	20 1.8	269 189	133	77	128.1 120
B-FA..57 B-FA..57/T	198 31	14 40.5	60 19.5	40h7 55	1 170	166 142	29 M16X40	43.3 12	40 12.5 5	20 2.4	317 210	150	83	136 160
B-FA..67 B-FA..67/T	218 40	14 41	65 21	40h7 55	1 184	180 156	29 M16X40	43.3 12	40 12.5 5	20 3	343 223	161	97	159.5 160
B-FA..77 B-FA..77/T	278 49	22 50	69 28	50h7 70	1 213	210 183	32 M16X45	53.8 14	60 21 10	30 3.2	426 282	193	121	200 200
B-FA..87 B-FA..87/T	348 57	22 62	79 32	60h7 85	1 243	240 210	36 M20X50	64.4 18	60 21 10	30 4.5	531 336	224	152	246.7 250
B-FA..97 B-FA..97/T	395 88	28 70	104 34	70h7 95	1 303	300 270	34 M20X50	74.9 20	80 25 12	40 5.8	623 414	274	178	285 300
B-FA..107 B-FA..107/T	485 108	26 88	100 57	90h7 118	2.5 353	350 313	40 M24X60	95.4 25	80 25 12	40 6	717 456	312	200	332.4 350
B-FA..127 B-FA..127/T	550 138	33 110	125 66	100h7 135	2.5 413	410 373	38 M24X60	106.4 28	100 32 15	60 9	856 530	373	236	362.6 450
B-FA..157 B-FA..157/T	660 170	33 150	140 98	120h7 155	7 503	500 460	36 M24X60	127.4 32	120 32 15	60 9	1021 660	455	286	447 550

MOUNTING DIMENSIONS

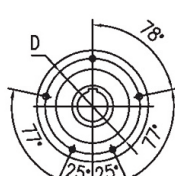
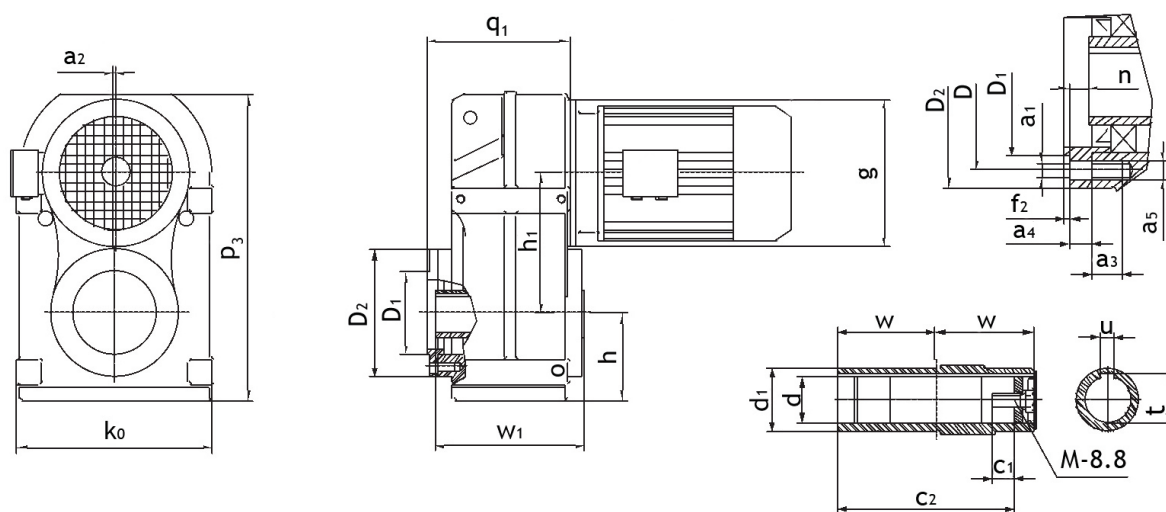
B-FH..37~157



Model	q_1	h	h_7	w	c_2	c_3	q	d_2	d	a	s	a_3	s_1	k	a_7
	P_3	h_1	h_6	w_1	c_1	c_4	A	d_1	d_3	a_1	a_2	k_0	s_2	w_2	g
B-FH..37	110 252	76 112	158 30	146 155	31 20	25 36	31.5 46	Ø 75 Ø 45	Ø 30H7 Ø 30h6	15 0.5	Ø 14 /	12 165	Ø 40 Ø 12.5 ^{+0.5}	5 20	1 Ø 120
B-FH..47	133 269	77 128.1	170 22	177 184	32 20	25 37	32 64	Ø 83 Ø 50	Ø 35H7 Ø 35h6	12 1	Ø 14 /	12 180	Ø 40 Ø 12.5 ^{+0.5}	5 20	1.8 Ø 120
B-FH..57	150 317	93 136	198 31	195 200	26 20	25 31	40.5 60	Ø 83 Ø 55	Ø 40H7 Ø 40h6	19.5 1	Ø 14 /	14 200	Ø 40 Ø 12.5 ^{+0.5}	5 20	2.4 Ø 160
B-FH..67	161 343	97 159.5	218 40	208 215.5	38 20	25 43	41 65	Ø 93 Ø 55	Ø 40H7 Ø 40h6	21 1	Ø 14 /	16 212	Ø 40 Ø 12.5 ^{+0.5}	5 20	3 Ø 160
B-FH..77	193 426	121 200	278 49	241 249	36 30	35 41	50 69	Ø 114 Ø 70	Ø 50H7 Ø 50h6	28 1	Ø 22 /	20 270	Ø 60 Ø 21 ^{+0.5}	10 30	3.2 Ø 200
B-FH..87	224 531	152 246.7	346 57	281 291	41 40	45 46	62 79	Ø 159 Ø 85	Ø 65H7 Ø 65h6	32 1	Ø 22 /	26 330	Ø 60 Ø 21 ^{+0.5}	10 30	4.5 Ø 250
B-FH..97	274 623	178 285	395 88	345 357	55 50	55 60	70 104	Ø 174 Ø 95	Ø 75H7 Ø 75h6	34 1	Ø 26 /	30 400	Ø 80 Ø 25 ^{+0.5}	12 40	5 Ø 300
B-FH..107	312 717	200 332.4	485 108	405 420	65 60	70 75	88 100	Ø 200 Ø 118	Ø 95H7 Ø 95h6	57 2.5	Ø 26 /	36 450	Ø 80 Ø 25 ^{+0.5}	12 40	6 Ø 350
B-FH..127	373 856	236 382.6	550 108	485 502	85 70	80 95	110 125	Ø 233 Ø 135	Ø 105H7 Ø 105h6	66 2.5	Ø 33 10	40 530	Ø 100 Ø 32 ^{+0.5}	15 60	9 Ø 450
B-FH..157	455 1021	286 447	660 170	580 598	90 80	90 100	150 140	Ø 275 Ø 155	Ø 125H7 Ø 125h6	98 7	Ø 33 15	45 660	Ø 120 Ø 32 ^{+0.5}	15 60	9 Ø 550

MOUNTING DIMENSIONS

B-FAZ..37~157



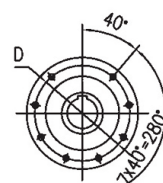
B-FAZ..37



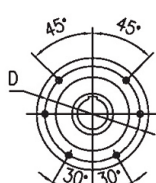
B-FAZ..47



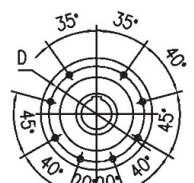
B-FAZ..57-67



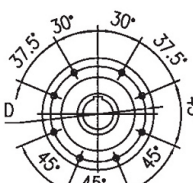
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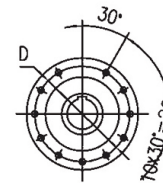
B-FAZ..87



B-FAZ..97



B-FAZ..107



B-FAZ..127

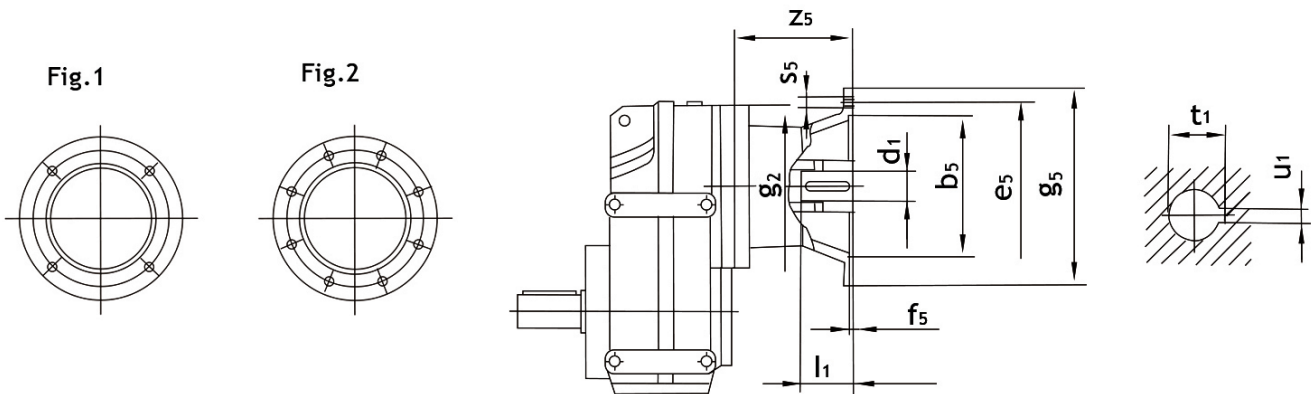


B-FAZ..157

Model	q_1 k_0	h h_1	t D	D_2 D_1	p_3 n	a_4 a_3	a_5 w_1	w c_1	c_2 u	d_1 d	a_2 f_2	a_1 M	g
B-FAZ..37	122 165	76 112	33.3 Ø 94	Ø 110 Ø 80j6	252 9	11.5 12	M8 123	60 17	105 8	Ø 45 Ø 30H7	/ 3	Ø 9 M10× 25	Ø 120
B-FAZ..47	144 180	77 128.1	38.3 Ø 102	Ø 120 Ø 80j6	269 8	11 12	M8 153	75 22	132 10	Ø 50 Ø 35H7	/ 3	Ø 9 M12× 30	Ø 120
B-FAZ..57	162 200	93 136	43.3 Ø 125	Ø 155 Ø 105j6	317 9	12 20	M12 170	83 29	142 12	Ø 55 Ø 40H7	/ 3.5	Ø 13.5 M16× 40	Ø 160
B-FAZ..67	173 212	97 159.5	43.3 Ø 125	Ø 155 Ø 105j6	343 8.5	12 20	M12 184	90 29	156 12	Ø 55 Ø 40H7	/ 3.5	Ø 13.5 M16× 40	Ø 160
B-FAZ..77	206 270	121 200	53.8 Ø 142	Ø 170 Ø 125j6	426 10	14 20	M12 213	105 32	183 14	Ø 70 Ø 50H7	/ 3.5	Ø 13.5 M16× 45	Ø 200
B-FAZ..87	239 330	152 246.7	64.4 Ø 178	Ø 215 Ø 155j6	531 11	15 26	M16 243	120 36	210 18	Ø 85 Ø 60H7	/ 4	Ø 17.5 M20× 50	Ø 250
B-FAZ..97	292 400	178 285	74.9 Ø 220	Ø 260 Ø 180j6	623 14	18 26	M16 303	150 34	270 20	Ø 95 Ø 70H7	/ 4	Ø 17.5 M20× 50	Ø 300
B-FAZ..107	312 450	200 332.4	95.4 Ø 260	Ø 304 Ø 210j6	717 -8	22 28	M20 353	175 40	313 25	Ø 118 Ø 90H7	/ 4	Ø 22 M24× 60	Ø 350
B-FAZ..127	377.5 530	236 382.6	106.4 Ø 300	Ø 350 Ø 250h6	856 0	30 28	M20 413	205 38	373 28	Ø 135 Ø 100H7	10 5	Ø 22 M24× 60	Ø 450
B-FAZ..157	455 660	286 447	127.4 Ø 340	Ø 400 Ø 290h6	1021 -14	28 36	M24 503	250 36	460 32	Ø 155 Ø 120H7	15 5	Ø 26 M24× 60	Ø 550

MOUNTING DIMENSIONS

B-F..AM..



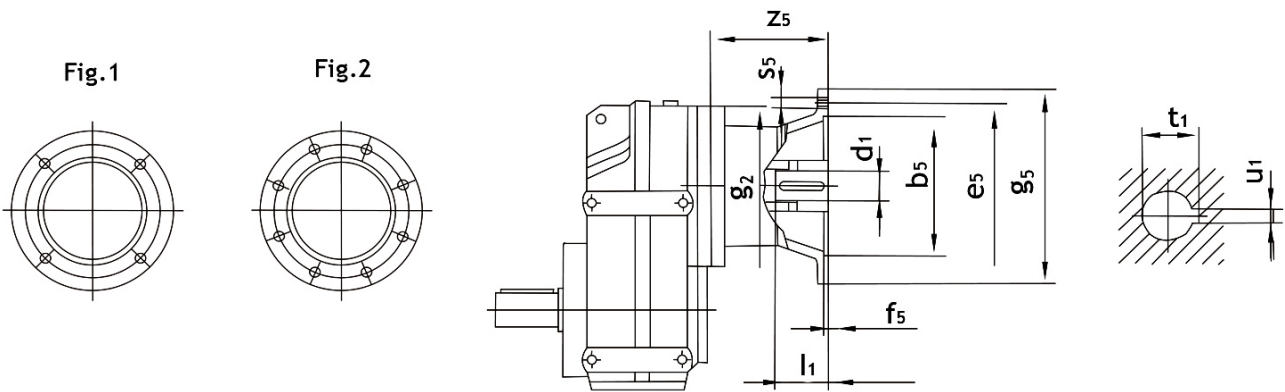
Model	Input	Fig	b ₅	e ₅	f ₅	g ₂	g ₅	s ₅	z ₅	d ₁	l ₁	t ₁	u ₁
B-F..37 B-F..47	AM 63	1	95	115	3.5	120	140	M8	72	11	23	12.8	4
	AM 71 ¹⁾		110	130			14			30	16.3	5	
	AM 80 ¹⁾		130	165	4.5		200	M10	106	19	40	21.8	6
	AM 90 ¹⁾									24	50	27.3	8
B-F..57 B-F..67	AM 63	1	95	115	3.5	160	140	M8	66	11	23	12.8	4
	AM 71		110	130			14			30	16.3	5	
	AM 80		130	165	4.5		200	M10	99	19	40	21.8	6
	AM 90									24	50	27.3	8
	AM 100 ¹⁾		180	215	5		250	M12	134	28	60	31.3	8
	AM 112 ¹⁾												
B-F..77	AM 63	1	95	115	3.5	200	140	M8	60	11	23	12.8	4
	AM 71		110	130			14			30	16.3	5	
	AM 80		130	165	4.5		200	M10	92	19	40	21.8	6
	AM 90									24	50	27.3	8
	AM 100 ¹⁾		180	215	5		250	M12	126	28	60	31.3	8
	AM 112 ¹⁾												
	AM 132S ¹⁾		230	265	5		300	M12	179	38	80	41.3	10
	AM 132M ¹⁾												
AM 132L ¹⁾													
B-F..87	AM 80	1	130	165	4.5	250	200	M10	87	19	40	21.8	6
	AM 90									24	50	27.3	8
	AM 100		180	215	5		250	M12	121	28	60	31.3	8
	AM 112												
	AM 132S		230	265	5		300	M12	174	38	80	41.3	10
	AM 132M												
	AM 132L		250	300	6		350	M16	232	42	110	45.3	12
	AM 160 ¹⁾									48		51.8	14
	AM 180 ¹⁾												

1) Input Flange dai g₅ may protude below foot mounting level in foot-mounted gear units.



MOUNTING DIMENSIONS

B-F..AM..

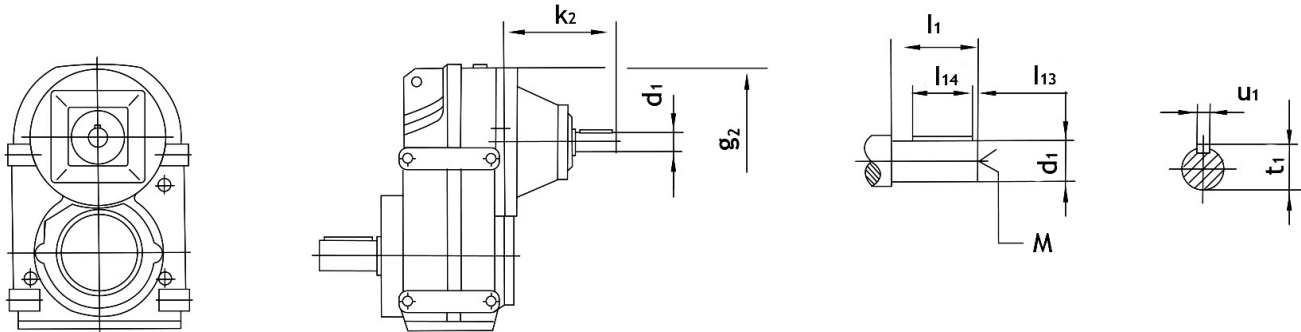


Model	Input	Fig	b_5	e_5	f_5	g_2	g_5	s_5	z_5	d_1	l_1	t_1	u_1
B-F..97	AM 100	1	180	215	5	300	250	M12	116	28	60	31.3	8
	AM 112												
	AM 132S		230	265			6	350	M16	227	42	110	45.3
	AM 132M				48						51.8		
	AM 132L		250	300	7		400	M16	268	55	140	59.3	16
	AM 160									60		64.4	
	AM 180		300	350	7		450	M16	283	60	140	64.4	18
	AM 200	60								64.4			
AM 225 ¹⁾	2	350	400	7	450	M16	283	60	140	64.4	18		
B-F..107	AM 100	1	180	215	5	350	250	M12	110	28	60	31.3	8
	AM 112												
	AM 132S		230	265			6	350	M16	221	42	110	45.3
	AM 132M				48						51.8		
	AM 132L		300	350	7		400	M16	262	55	140	59.3	16
	AM 160									60		64.4	
	AM 180		300	350	7		450	M16	277	60	140	64.4	18
	AM 200	60								64.4			
AM 225	2	350	400	7	450	M16	277	60	140	64.4	18		
B-F..127	AM 132S	1	230	265	5	450	300	M12	148	38	80	41.3	10
	AM 132M												
	AM 132L		250	300			6	350	M16	206	42	110	45.3
	AM 160	48			51.8								
	AM 180	300	350	7	400		M16	247	55	140	59.3	16	
	AM 200								60		64.4		
	AM 225	2	350	400	7		450	M16	262	60	140	64.4	18
	AM 250									65		69.4	
AM 280	450	500	7	550	M16	336	75	140	79.9	20			
AM 280							75		79.9				
B-F..157	AM 160	1	250	300	6	550	350	M16	198	42	110	45.3	12
	AM 180									48		51.8	
	AM 200		300	350			7	400	M16	239	55	59.3	16
	AM 225	2	350	400	7		450	M16	254	60	140	64.4	18
	AM 250									65		69.4	
	AM 280		450	500			7	550	M16	328	75	79.9	20

1) Input Flange d_{ai} may protrude below foot mounting level in foot-mounted gear units.

MOUNTING DIMENSIONS

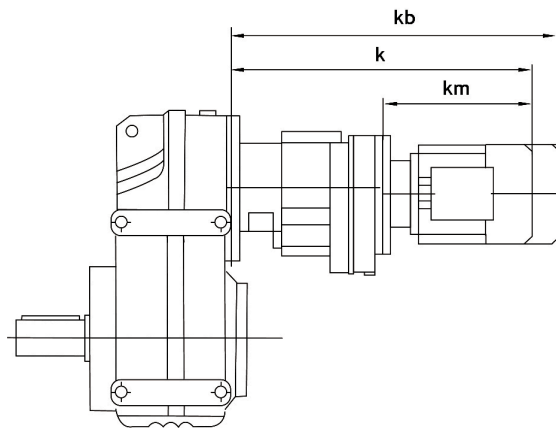
B-F..AD..



Model	Input	g_2	k_2	d_1	l_1	l_{13}	l_{14}	t_1	u_1	M
B-F..27 B-F..37 B-F..47	AD1	120	102	16	40	4	32	18	5	M5
	AD2		130	19	40	4	32	21.5	6	M6
	AD3		159	24	50	5	40	27	8	M8
B-F..57 B-F..67	AD2	160	123	19	40	4	32	21.5	6	M6
	AD3		159	24	50	5	40	27	8	M8
	AD4		224	38	80	5	70	41	10	M12
B-F..77	AD2	200	116	19	40	4	32	21.5	6	M6
	AD3		151	24	50	5	40	27	8	M8
	AD4		224	38	80	5	70	41	10	M12
B-F..87	AD2	250	111	19	40	4	32	21.5	6	M6
	AD3		156	28	60	5	50	31	8	M10
	AD4		219	38	80	5	70	41	10	M12
	AD5		292	42	110	10	70	45	12	M16
B-F..97	AD3	300	151	28	60	5	50	31	8	M10
	AD4		214	38	80	5	70	41	10	M12
	AD5		287	42	110	10	70	45	12	M16
	AD6		327	48	110	10	80	51.5	14	M16
B-F..107	AD3	350	145	28	80	5	50	31	8	M10
	AD4		208	38	80	5	70	41	10	M12
	AD5		281	42	110	10	70	45	12	M16
	AD6		321	48	110	10	80	51.5	14	M16
B-F..127	AD4	450	193	38	80	5	70	41	10	M12
	AD5		266	42	110	10	70	45	12	M16
	AD6		306	48	110	10	80	51.5	14	M16
	AD7		300	55	110	10	90	59	16	M20
	AD8		383	70	140	15	110	74.5	20	M20
B-F..157	AD5	550	258	42	110	10	70	45	12	M16
	AD6		298	48	110	10	80	51.5	14	M16
	AD7		292	55	110	10	90	59	16	M20
	AD8		374	70	140	15	110	74.5	20	M20

MOUNTING DIMENSIONS

B-F..R..



Model	Input	k	kb	km
B-F..37 R17 B-F..47 R17	63	368	425	193
	71	369	433	194
	80	419	483	244
B-F..57 R37	63	400	457	235
	71	401	485	236
	80	451	515	286
B-F..67 R37	63	410	457	235
	71	401	465	236
	80	451	515	286
	90	451	536	286
B-F..77 R37	63	392	449	235
	71	393	457	236
	80	443	507	286
	90	443	528	286
B-F..87 R57	63	445	502	229
	71	445	509	229
	80	495	559	279
	90	495	580	279
	100M	646	630	329
	100L	585	650	349
B-F..97 R57	63	440	497	229
	71	440	504	229
	80	490	554	279
	90	510	595	299
	100M	540	625	329
	100L	560	645	349
B-F..107 R77	63	470	527	223
	71	470	534	223
	80	520	584	273
	90	518	603	271
	100M	568	653	321
	100L	588	673	341
	112M	602	682	355
	132S	647	727	400
	132M	699	811	452
	132L	719	831	472
	160M	749	871	512

Model	Input	k	kb	km
B-F..127 R77	63	455	512	223
	71	455	519	223
	80	505	569	273
	90	503	588	271
	100M	553	638	321
	100L	573	658	341
	112M	587	667	355
	132S	632	712	400
	132M	684	798	452
	132L	704	816	472
B-F..127 R87	160M	734	846	502
	90	547	632	287
	100M	597	682	317
	100L	617	702	337
	112M	630	710	350
	132S	675	755	395
	132M	727	839	447
	132L	747	859	467
	160M	777	889	497
	160L	824	980	544
B-F..157 R97	180	896	1052	616
	80	586	650	261
	90	586	671	261
	100M	636	721	311
	100L	656	741	331
	112M	670	760	345
	132S	715	795	390
	132M	767	879	442
	132L	787	899	462
	160M	817	929	492
	160L	884	1020	539
180	936	1092	611	
200	1024	1180	699	

k = Total length of geared Motor
 kb = Total length of geared Motor including brake
 km = Length of the Motor

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