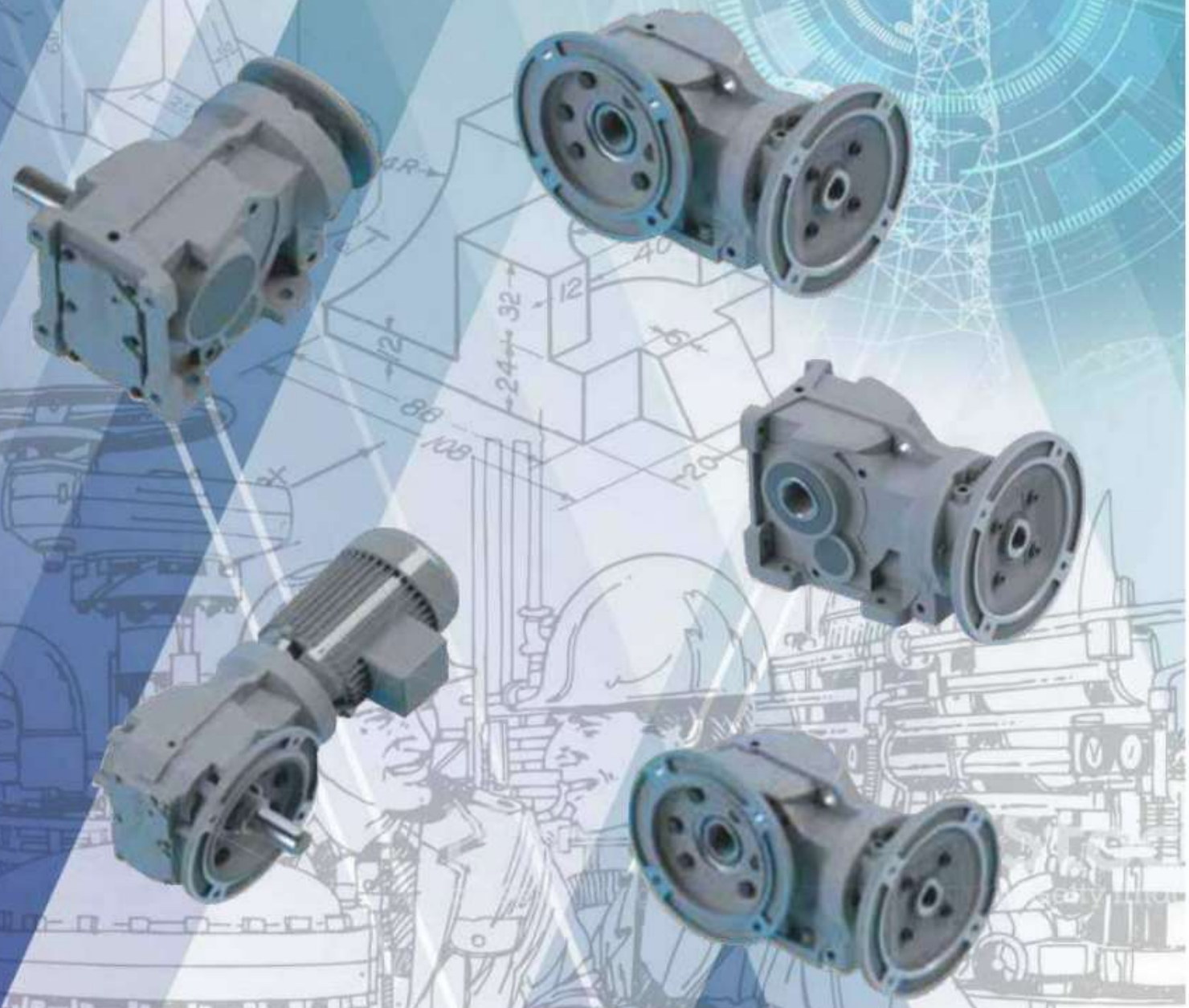
tough nut GEAR

JK Fenner

Powered by innovation, Driven by excellence

## Smart Integrated Engineering Solutions



# Bevel Helical Gear Reducers

## Engineering Business

Smart Integrated Engineering Solutions

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## Bevel Helical Gear Unit - FK Series

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## 1.1 J.K. Fenner Company Profile

1

For over 150 years the name JK Fenner has been synonymous with the best in Mechanical Power Transmission, Sealing and Fluid Transfer Solutions. JK Fenner products, such as Transmission Belts, Oil Seals, Hoses, Pulleys, Couplings, Gear Boxes, Geared Motors, Aerators, Rubber Rolls, Belt Tensioners, Control Cables & Engine Mounts have been trusted for performance and reliability, efficiency and economy.

Today J.K, Fenner (India) Ltd is a member of the multi-crore JK Group, one of the leading industrial houses of India. This association since 1987 has put JK Fenner on the speedy growth and consolidated its position as dominant market leader. JK Fenner commenced operation in India in 1929 and put up their first manufacturing unit at Madurai in Tamilnadu in the year 1956. Currently there are 5 state-of-the-art manufacturing and 3 R&D units, situated over 5 different locations. 12 branches, and two Textile units in Karur & Salem in TN. JK Fenner has a large network of 900 Channel Partners and over 100 Application & Design engineers. JK Fenner exports to more than 50 countries globally.

JK Fenner has been maintaining highest quality standards by using the best materials available and state-of-the-art manufacturing process. JK Fenner's manufacturing facilities are ISO 9001, TS 16949 for quality, OHSAS 18001 for Health and Safety 6, ISO 14001 for Environmental protection certified.

## 1.2 Helical - Bevel Gear Reducers

Advantages

1 Design Concepts: The combination of standardization and modularization allowed interchangeability with international leading brands, while keeping structure rigidity and compactness.

2 Noise Level: Leveraging the advantage of high efficiency of helical gears and smooth transmission of worm gears, the reducers performs with higher stability and produces less noise when compared with regular helical gear units.

3 Ratios Selections: The ratio ranges between 8:1 - 215:1, providing more accommodation to ratio requirements than worm gear speed reducers.

4 Loading Capacity: Available with power ranges from 1/4HP up to 30HP, depending on different requirements and applications.

5 Tensile Strength: Pinion, gears and worm shafts are made with 20CrMo alloy steel plus carbonized treatment. The aluminum bronze worm wheel offers higher strength and endurance.

6 Space Efficiency: Provides 90 degree angle transmission similar to that of worm gear units to minimize space needed for installation.

7 Installation Flexibility: All models are designed for various mounting position (M1-M6) specified by customers.

8 Appearance Aesthetics: The reducers are designed with modern exterior while maintained high rigidity.

## 1.3 OPERATION MANUAL

This operation manual is to help you install and operate speed reducer correctly. To avoid damages to the speed reducers, proper installation and operation is very crucial. This manual also includes official recommendations on maintenance for an extended lifespan of speed reducers. Every FENNER speed reducer passed strict inspection and testing before being properly packaged for shipping. Upon receipt of the speed reducer, please check for any shortage or damage of parts during transit. Please be sure to contact Fenner for identification of responsible carrier and made record of the issue. We are committed to excellence in quality and devoted to solving problems for our clients.

**I. INSTALLATION**

1. Flexible couplings are preferred when input shaft connects directly to the motor; gear couplings are preferred on the output shafts connection to the application.
2. Install on a stable base with good air ventilation; the accessibility of oil filling / draining should be considered.
3. The input shaft of the reducer and the motor shaft should be in alignment within the tolerance allowance.
4. After installation, please turn the input shaft manually first to check for any locking.
5. No-load running test should be performed first; any abnormality should be corrected prior to regular operation.

**II. Lubrication**

1. The first oil change should be performed after 500 hrs of operation; subsequent oil change is needed every 2,500 hrs of operation. Nevertheless, a regular check on oil level and conditions are recommended.
2. Please fill only with compatible specifications of oil and do not mix oil of different specifications in a single unit.
3. The interior of the reducer should be flushed and drained before filling with fresh oil.
4. Please shut the reducer immediately for inspection if the temperature rises above 80°C or any abnormal noise occurred. Restart only after the issues identified and cleared.
5. Lubricant recommendation: MOBIL Gear 632, SHELL Omala 320, MOBIL Mobilube HD8OW-90, SHELL Spirax E.P 90.
6. Unless specified otherwise by the customer, every FENNER speed reducer is supplied with appropriate amount of lubrication according to different installation position before shipping. If customer prefers to fill in the lubricant oil post shipment, please follow the instruction section of this catalog.

**III. Storage**

1. If the speed reducer is not for immediate installation, please keep the unit away from humidity and heat sources. After extended period of storage, please contact our service personnel for instruction on restoring the original performance prior to installation.

1

**IV. Attachments the parts on reducer's shaft**

1. Notice: Avoid heavy impact on shafts! It may cause bearing damages and undermines bearing performances. If bearings are to be replaced, we recommend heating method, which heats the bearing above 80°C , that would allow a clear fit on the shafts and reduce the damage to the bearing. For the tolerance of shafts diameter, please refer to the specification in catalog.
2. While installing the coupling, make sure to check the alignment of coupling and shaft of speed reducer properly to eliminate the damage on bearings and reduce to vibration frequency and abnormal wear.
3. To avoid overload on the bearings of output shaft, please refer to the OHL (overhung loading) in catalog. For exceeding axial load, please contact our service engineer for consultation.
4. The actual application of following factors such as input and output speed, direction of rotation, installation site and over axial and radial loading should be carefully examined.

**V. Installation & Operation**

1. The underlying factors should be taken into consideration:

   * Ambient temperature below 40°C

   * Location with good air ventilation

   * Proper positions for oil plug and drain plug

   * Sufficient space for periodical inspection, maintenance, and replacement

2. It is necessary for the unit to be installed on a flat, stable and rigid base for accurate alignment to prevent damages to the reducer's housing.
3. The suggested tolerance of flatness on base:

   * For size 50 or smaller, < 0.1mm/m

   * For size 60 or bigger, <0.2mm/m

4. To avoid the lubricant splash out during the transportation, breather plug with red pin inserted into air breathing hole. Please remove the red pin before start-up.
5. Before installation, please check the input horsepower and ratio to be the same as the punched name plate of reducer.

**VI. Caution**

Caution! The power should be turned off before removal or replacement of the reducer. 1. Oil level and quality lubricant is key point of daily maintenance. Please refer to our suggestion to change the lubricant periodically according to operation frequency site situation. 2. Check the alignment of coupling, the tightness of chain, and nuts and keep the reducer away from excessive dust and grease externally .

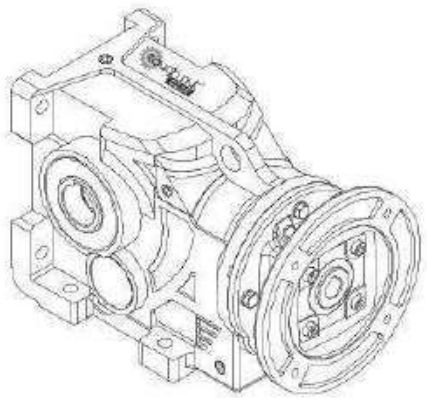
## General Problems & Improvements

The following lists are general problem situations. In case that other problems happen, please contact us directly to get more information.

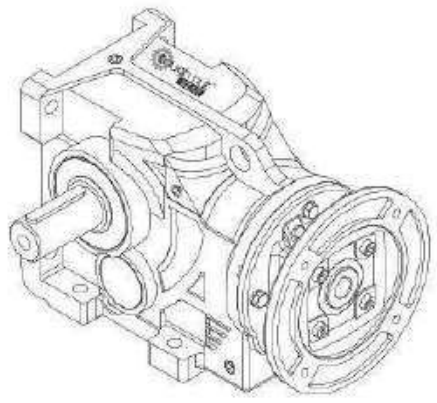
| CAUSE | REASON | IMPROVEMENT |
|---|---|---|
| I. Overheat | 1. Overload<br>2. Lubricant oil overfill or shortage<br>3. Improper lubricant oil<br>4. Extra friction on oil seal(lack of lubricant) | 1. Adjust to proper loading<br>2. Add lubricant to the level of oil gauge<br>3. Chang proper lubricant oil<br>4. Lip lubricant at oil seal |
| II. Noise | 1. Consistent noise { improper gears contact; bearing damaged<br>2. Screaming noise { bearing gap too small; lubricant oil shortage<br>3. Inconsistent noise { some object insert; bearing damaged | 1. { Repair gears; Replace bearing<br>2. { Replace bearing; Fill in lubricant oil<br>3. { Remove debris & replace lubricant oil: Replace bearing |
| III. Vibration | 1. Gear wear<br>2. Debris inside<br>3. Bearing worn-out or damaged<br>4. Bolt loose | 1. Replace gear<br>2. Remove debris & replace lubricant oil<br>3. Replace bearing<br>4. Tighten bolt |
| IV. Oil Leakage | 1. Oil seal damage<br>2. Gasket damage<br>3. Loose drain plug<br>4. Loose covers or flange | 1. Replace oil seal<br>2. Replace gasket<br>3. Tighten drain plug<br>4. Tighten the bolts |
| V. Input and Output Shaft Fail | 1. Gear-bound caused by overheat<br>2. Bearing damage<br>3. Debris between gears | 1. Adjust or replace gears<br>2. Replace bearing<br>3. Remove debris; clean inside then replace lubricant oil |
| VI. Input shaft fail to drive output shaft | 1. Gear wear<br>2. Damage to key connecting gear and output shaft<br>3. Input shaft rupture<br>4. Output shaft rupture | 1. Replace gears<br>2. Replace key<br>3. Replace input shaft<br>4. Replace output shaft |
| VII. Gear Worn-out | 1. Overload<br>2. Improper lubricant oil<br>3. Lubricant oil shortage<br>4. Excessive ambient temperature | 1. Adjust to proper loading<br>2. Change proper lubricant oil<br>3. Refill lubricant oil<br>4. Ventilation improvement |

## 2.1 Variants

Input Flange

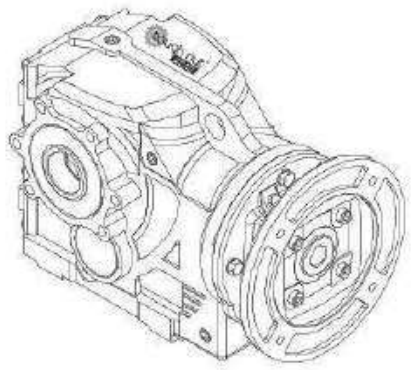


FKHF

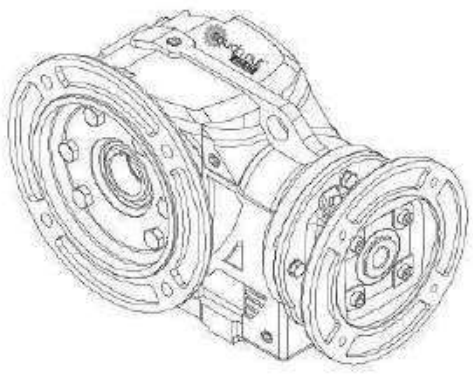


FKSF

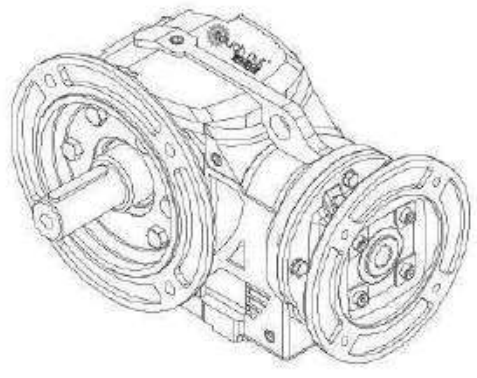




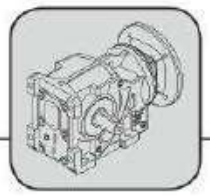
FKAF



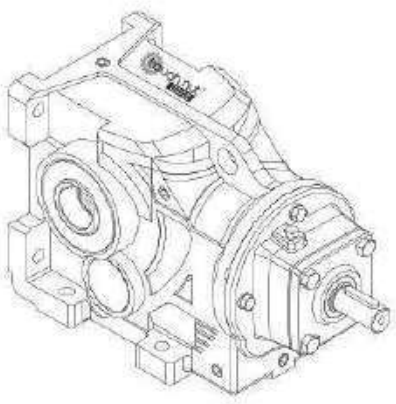
FKMF



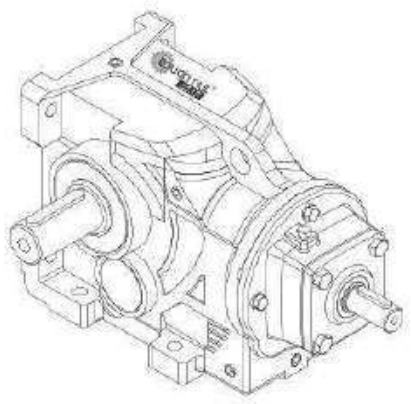
FKNF



## Solid Input Shaft

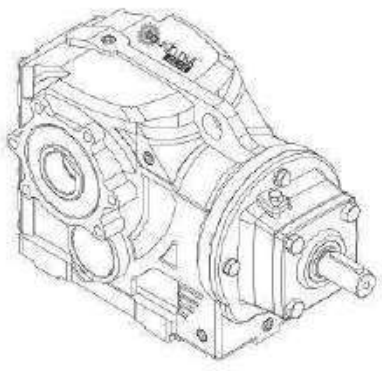


FKHS

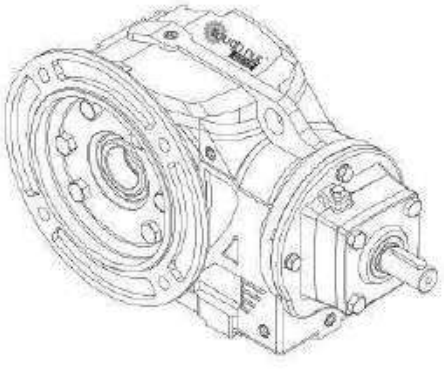


FKSS

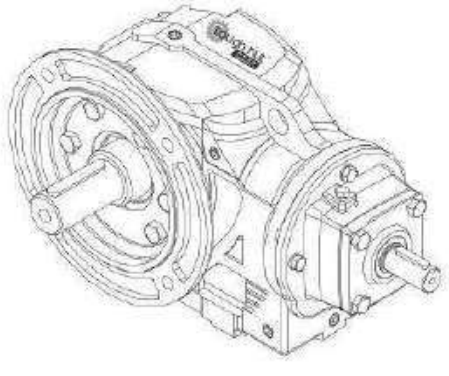




FKAS

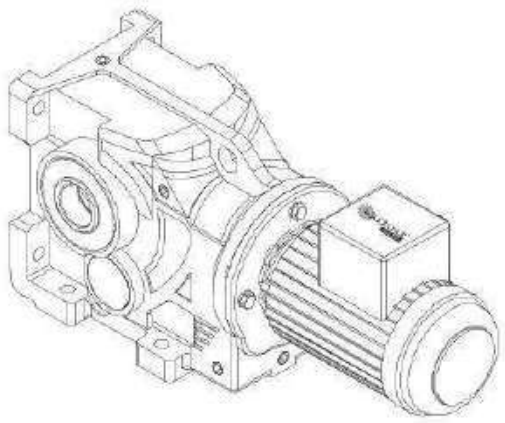


FKMS

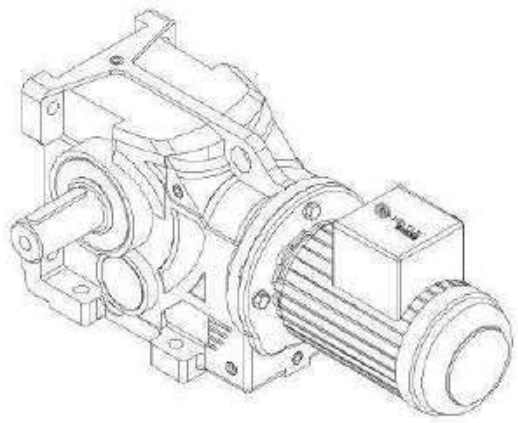


FKNS

## Couple with Motor

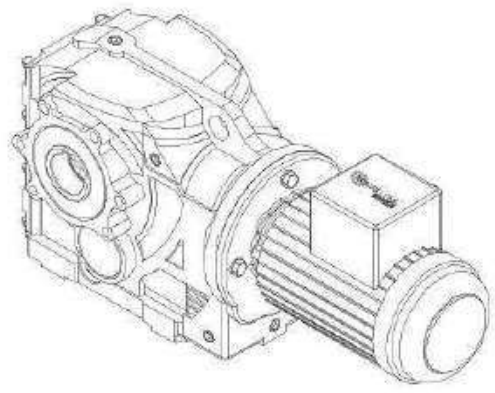


FKHM

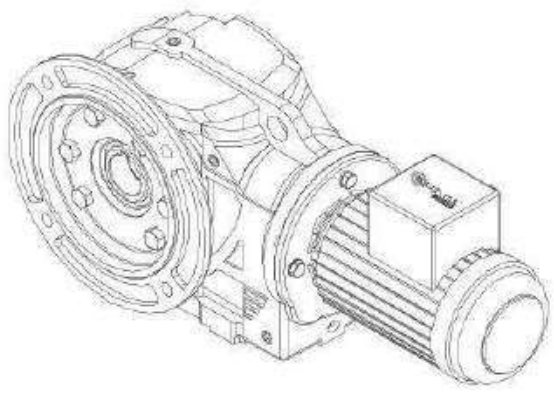


FKSM

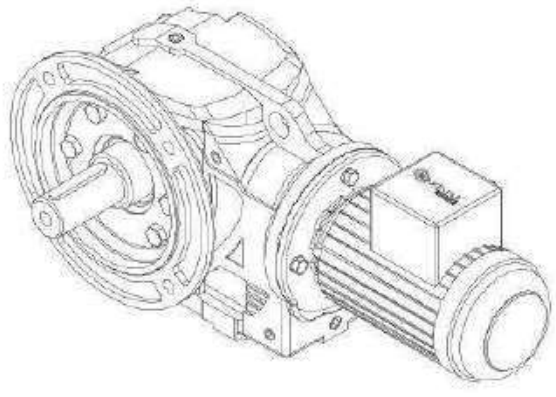
2



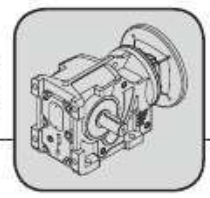
FKAM



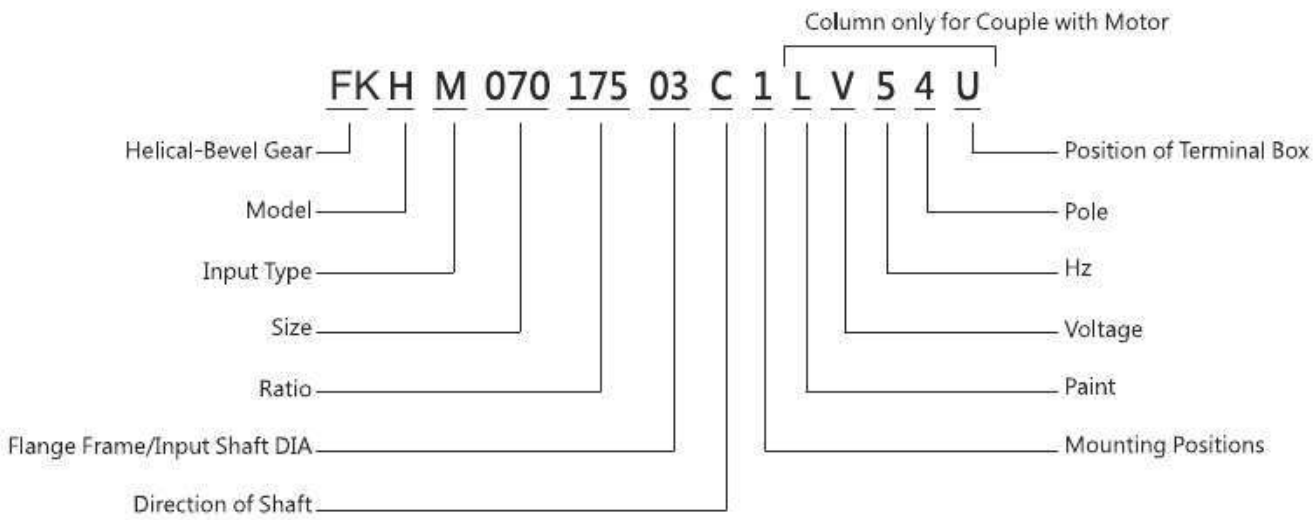
FKMM



FKNM



## 2.2 Order Code




### Model

S Solid Output Shaft(Foot Mounting)
H Hollow Output Shaft(Foot Mounting)
N Solid Output Shaft With Mounting Flange
A Hollow Output Shaft
M Hollow Output Shaft With Mounting Flang

### Input Type

F Input Flange IEC B5
B Input Flange IEC B14
N Input Flange NEMA
S Solid Input Shaft
M Couple With Motor

### Size

30
35
40
40*
50
60
70
90

### Ratio

005 : 1/5
⌇
215 : 1/215

### Flange Frame/ Input Shaft DIA

| IEC Standard 4-Pole | Input Shaft DIA |
|---|---|
| QQ : 1/4HP | 16 : Ø 16 |
| HH : 1/2HP | 19 : Ø 24 |
| 01 : 1HP | 24 : Ø 24 |
| 02 : 2HP | 28 : Ø 28 |
| 03 : 3HP | 38 : Ø 38 |
| 05 : 5HP | 42 : Ø 42 |
| 07 : 7.5HP | |
| 10 : 10HP | |
| 15 : 15HP | |
| 20 : 20HP | |

### Direction of Shaft

A、B、C

### Mounting Positions

M1、M2、M3、M4、M5、M6

### Paint

L : Blue

### Voltage

| | | |
|---|---|---|
| 2 : 220/380 | C : 220/400 | H : 200/346 |
| 4 : 240/415 | D : 230/400 | K : 208/220 |
| 5 : 220/440 | E : 230/440 | M : 208/240 |
| A : 220/230 | F : 240/480 | N : 380/660 |
| B : 220/240 | G : 120/208 | V : 208~480 |

### Hz

5 : 50Hz

### Pole

2 : 2P
4 : 4P
6 : 6P
8 : 8P

### Position of Terminal Box

U、D、L、R

## 2.3 Permitted Combinations

| FK90 , ne=1400 1/min | | | | | | | | | | | | 8000 Nm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 100L | 112M | 132S | 132M | 160M | 160L | 180MC | 180LC | 200LC | Input shaft mm |
| 9.8 | 8000 | 59170 | 143.55 | | | | | | | | | | Ø28 |
| 11 | 8000 | 55370 | 121.95 | | | | | | | | | | |
| 13 | 8000 | 52460 | 107.04 | | | | | | | | | | Ø38 |
| 14 | 8000 | 51090 | 100.47 | | | | | | | | | | |
| 15 | 8000 | 50000 | 95.48 | | | | | | | | | | |
| 15 | 8000 | 48930 | 90.70 | | | | | | | | | | Ø42 |
| 17 | 8000 | 46960 | 82.38 | | | | | | | | | | |
| 19 | 8000 | 45110 | 75.12 | | | | | | | | | | |

Gear unit reduction ratio

Permitted overhung load at maximum output torque

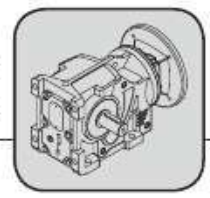
Maximum output torque

Output speed

Standard

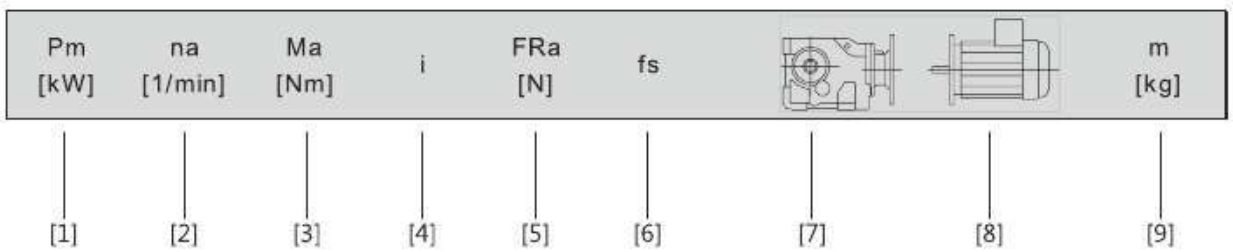
Input Flange / Solid Input Shaft - Standard

Couple with motor - Customization accepted
Please contact our customer service



## 2.4 Selection Tables

FK..F/..M




[1] Rated power driving motor

[2] Output speed

[3] Output torque

[4] Gear unit reduction ratio

[5] Permissible overhung load output side

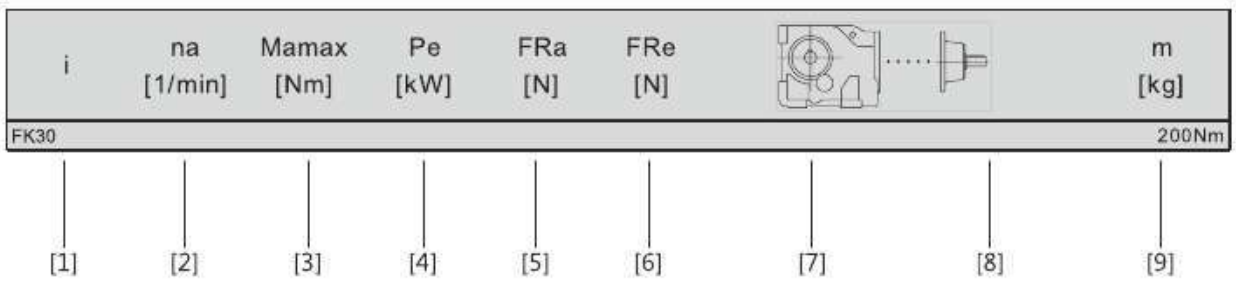
[6] Service factor

[7] Gear unit size

[8] Motor type

[9] Weight

FK..S




[1] Gear unit reduction ratio

[2] Output speed

[3] Maximum permitted output torque

[4] Calculated drive power of the gear unit

[5] Permitted overhung load at maximum output torque

[6] Permitted overhung load on the input side

[7] Gear unit size

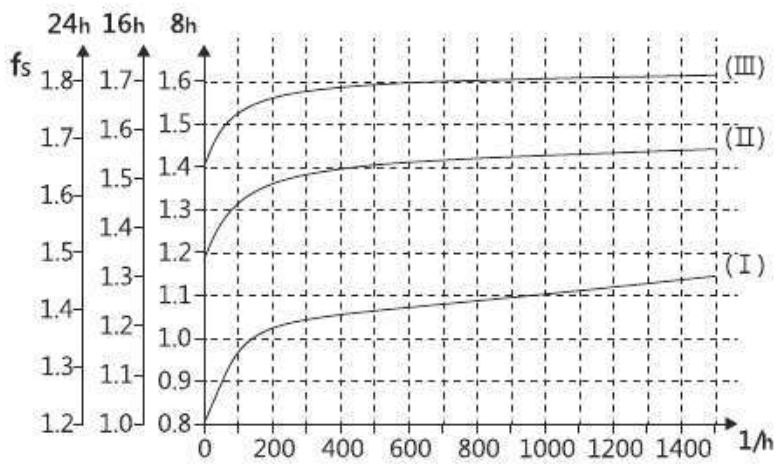
[8] Input shaft diameter

[9] Weight

## 2.5 Determining The Service Factor

The service factor is determined along with the daily operating time (hours/day), operating condition (continuous or intermittent) and level of load; for a proper gear selection, please determine the service factor accordingly.

**Ma × fs ≦ Mamax**




**Service Factor**

**Load Classification**

I Light shock: mass acceleration factor ≦0.2

II Moderate shock: mass acceleration factor ≦3

III Heavy shock: mass acceleration factor ≦10

$$\text{Mass acceleration factor} = \frac{\text{all exterior moments of inertia}}{\text{moments of inertia drive motors}}$$



**[All exterior moments of inertia]** - recalculated to motor speed, formula

$$J_X = J \times \left(\frac{n}{n_M}\right)^2$$

$J_X$ : mass moment of inertia scaled down to the motor shaft

$J$ : mass moment of inertia with reference to the output speed of the gear unit

$n$ : output speed of the gear unit

$n_M$ : motor speed



**Calculation of service factor**

$$fs = \frac{Mamax}{Ma}$$

**Mamax** : the maximum permitted continuous torque

**Ma** : output torque of the gear unit

**EX**

If the mass acceleration factor is 2.5 (Moderate shocks Ⅱ), the operating time is 14 hours per day in an intermittent condition by 300 times per hour. We can acquire fs=1.51 from the fs chart; according to selection tables, we will know to select the gear unit with fs ≧ 1.51.

## 2.6 Tolerances

**Shaft heights**

The following tolerances apply to the indicated dimensions:

| | | |
|---|---|---|
| h | ≦ 250 mm | → -0.5 mm |
| h | > 250 mm | → -1 mm |

**Foot-mounted gear units:** Check the mounted motor because it may project below the mounting surface.

**Shaft ends**

Diameter tolerance:

| | | |
|---|---|---|
| Ø | ≦ 50 mm | → k6 |
| Ø | > 50 mm | → m6 |

Center bores

| | | | | | |
|---|---|---|---|---|---|
| Ø | > 24...30 mm | → M10 | Ø | > 50...85 mm | → M20 |
| Ø | > 30...38 mm | → M12 | Ø | > 85...130 mm | → M24 |
| Ø | > 38...50 mm | → M16 | | | |

**Hollow shafts**

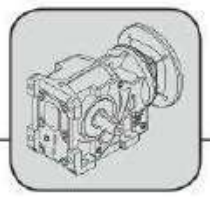
Diameter tolerance:

| | |
|---|---|
| Ø | H7 |

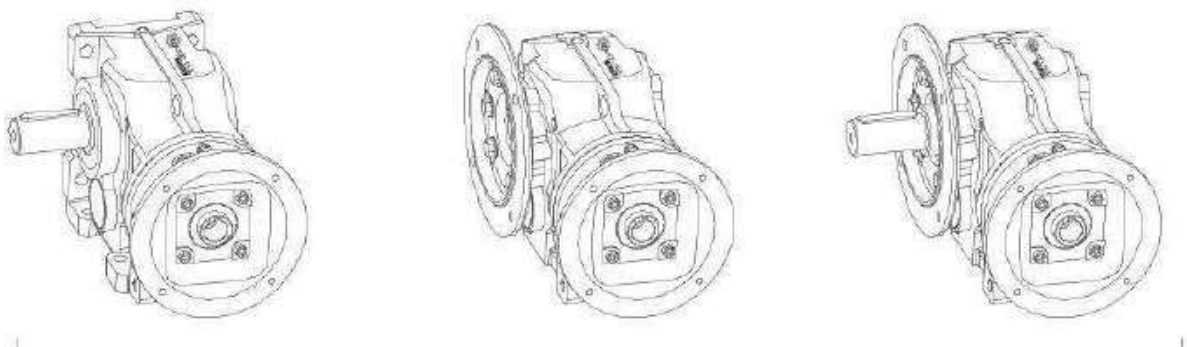
**Output Flanges**

Centering shoulder tolerance:

| | | |
|---|---|---|
| Ø | ≦ 230 mm | → j6 |
| Ø | > 230 mm | → h6 |



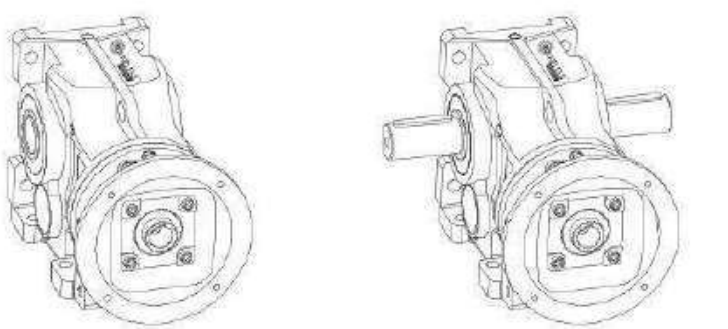
## 2.7 Direction of Shaft



A



B



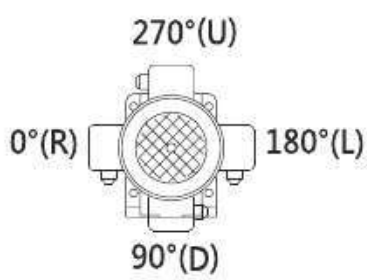
C

## 2.8 Mounting Positions

### FKS../FHK..30-90

Position of Terminal Box

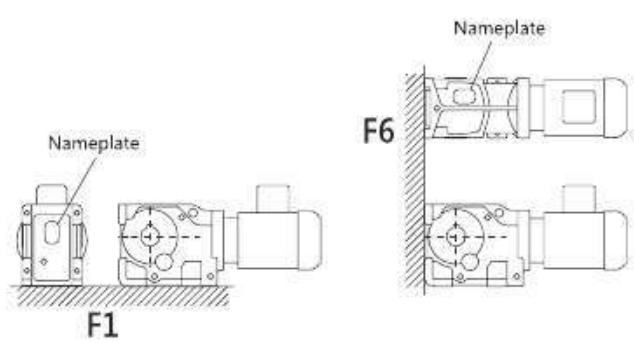
Standard position "U", unless specific requirements

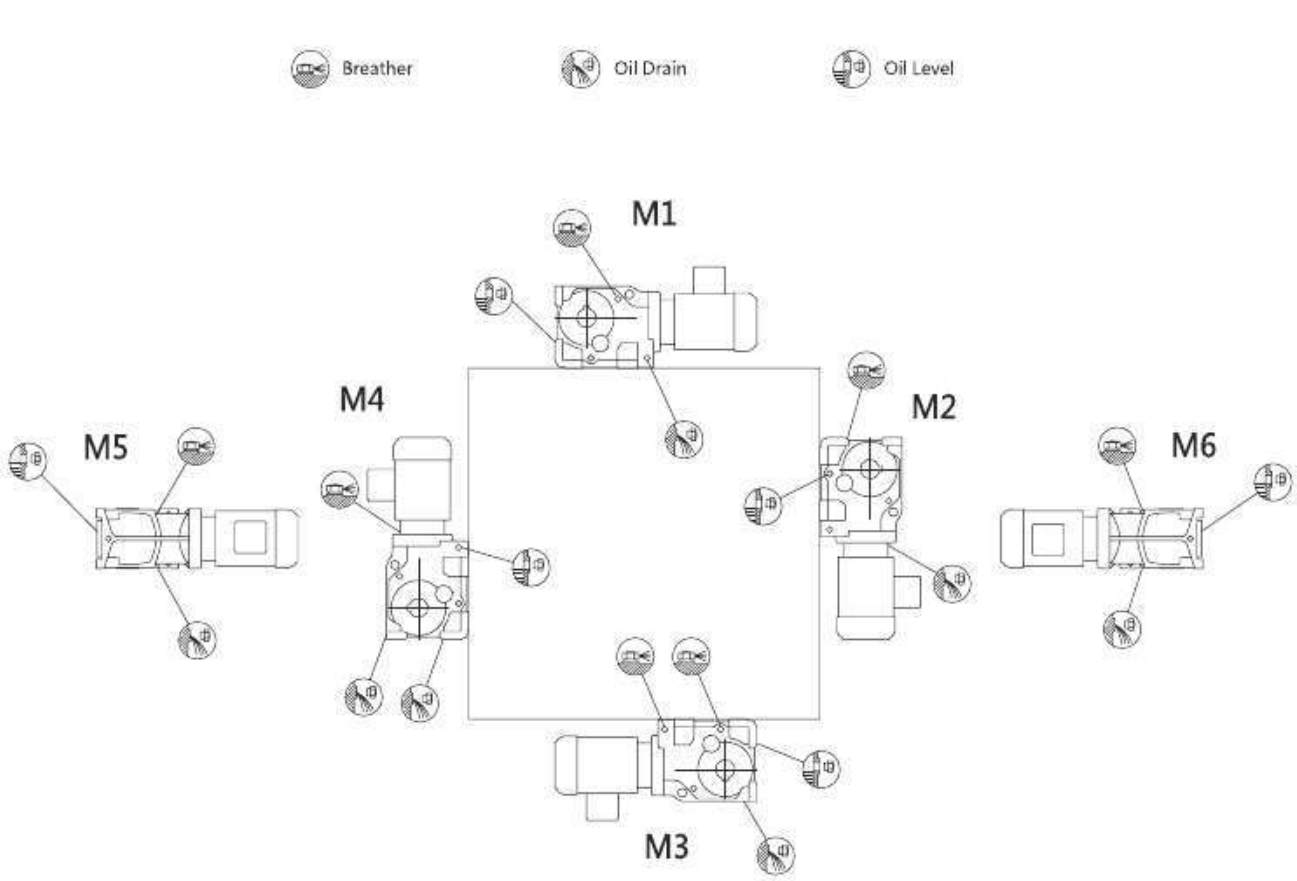


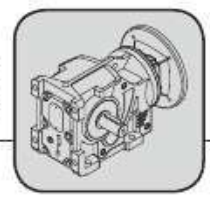

Mounting Surface

Standard mounting surface F1, unless specific requirements

The position of plug and nameplate might vary depanding on the mounting surface



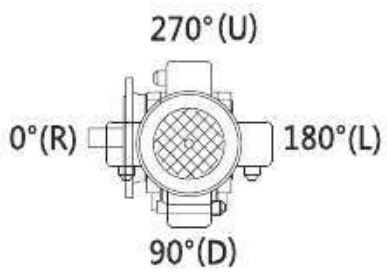





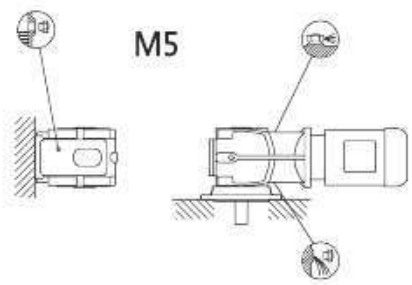
## FKA../FKN../FKM../FKT..30-90

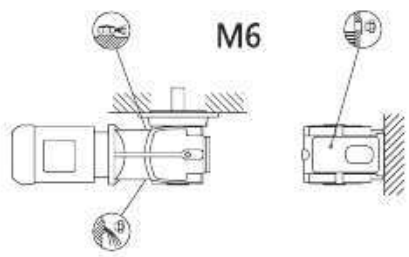
Position of Terminal Box

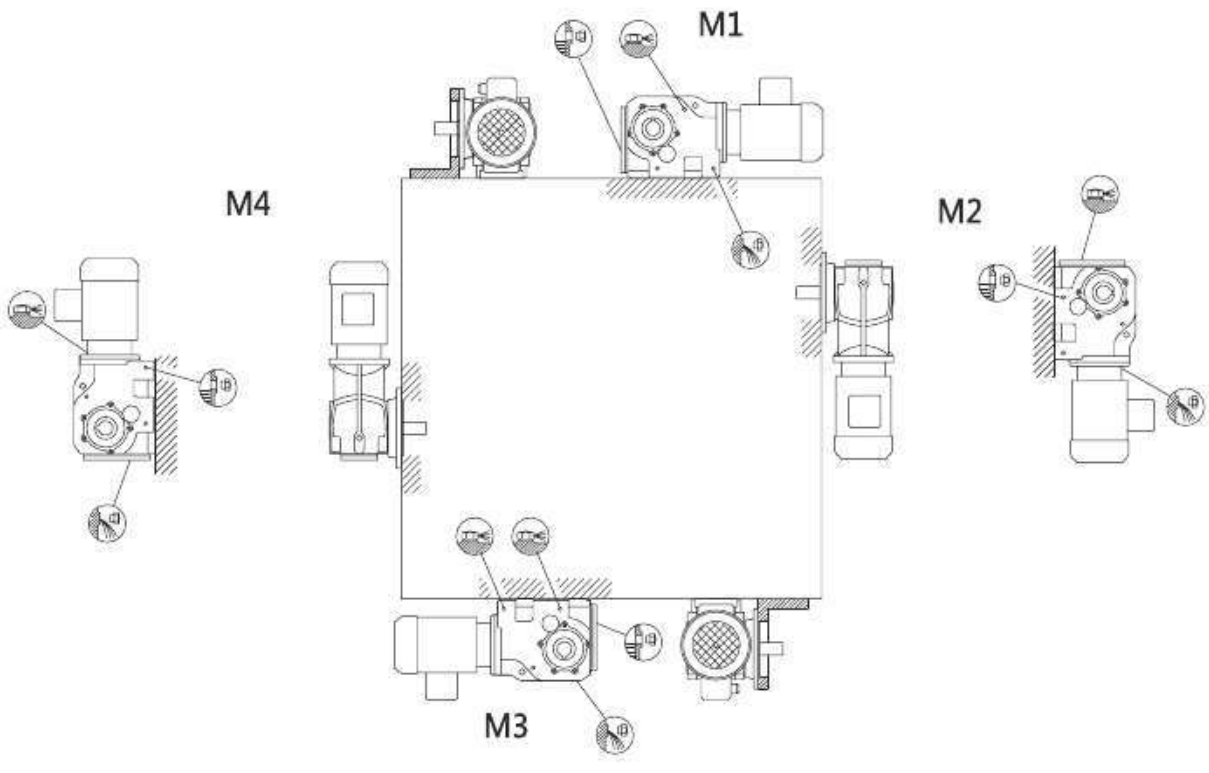
Standard position "U", unless specific requirements




Breather Oil Drain Oil Level



## 2.9 Lubricant Volume

### Lubricant Volume & Lubricant Selection

| Standard Load, Input 600 RPM or more. | | | | |
|---|---|---|---|---|
| Temperature(C°) | CPC | ISO VG | Mobil | Shell |
| -30～-15 | HD 100 | VG 100 | Mobilgear 627 | Omala 100 |
| -15～-3 | HD 150 | VG 150 | Mobilgear 629 | Omala 150 |
| -3～23 | HD 220 | VG 220 | Mobilgear 630 | Omala 220 |
| 23～40 | HD 320 | VG 320 | Mobilgear 632 | Omala 320 |
| 40～80 | HD 460 | VG 460 | Mobilgear 634 | Omala 460 |

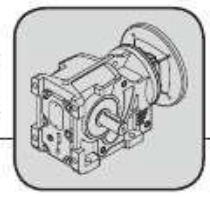
| | | Heavy Load, Input 600 RPM or more. | | |
|---|---|---|---|---|
| Temperature(C°) | CPC | ISO VG | Mobil | Shell |
| -30～-15 | HD 150 | VG 150 | Mobilgear 629 | Omala 150 |
| -15～-3 | HD 220 | VG 220 | Mobilgear 630 | Omala 220 |
| -3～23 | HD 320 | VG 320 | Mobilgear 632 | Omala 320 |
| 23～40 | HD 460 | VG 460 | Mobilgear 634 | Omala 460 |
| 40～80 | HD 680 | VG 680 | Mobilgear 636 | Omala 680 |

output RPM<100R.P.M, please use CPC HD-220 E.P. lubricant or equivalent

output PRM<100R.P.M, please use CPC HD-320 E.P. lubricant or equivalent

| Lubricant Volume (L) | | | | | | |
|---|---|---|---|---|---|---|
| Gear unit | M1 | M2 | M3 | M4 | M5 | M6 |
| FK30 | 0.50 | 1.00 | 1.00 | 1.40 | 1.00 | 1.00 |
| FK35 | 0.80 | 1.30 | 1.60 | 2.15 | 1.60 | 1.60 |
| FK40 | 1.30 | 2.30 | 2.70 | 3.15 | 2.90 | 2.70 |
| FK40* | 1.10 | 2.40 | 2.70 | 3.70 | 2.60 | 2.60 |
| FK50 | 2.10 | 4.10 | 4.60 | 5.90 | 4.40 | 4.40 |
| FK60 | 3.70 | 8.20 | 8.80 | 11.1 | 8.00 | 8.00 |
| FK70 | 7.00 | 14.7 | 15.7 | 20.0 | 15.7 | 15.7 |
| FK90 | 10.0 | 20.5 | 24.0 | 32.4 | 24.0 | 24.0 |

*RECOMMENDATIONS*



## 3.1 1400Rpm Permitted Combinations

| FK30 , ne=1400 1/min | | | | | | | 200 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L | |
| 9.3 | 200 | 5530 | 150.47 | | | | | Ø16 |
| 10 | 200 | 5300 | 134.96 | | | | | |
| 12 | 200 | 5000 | 116.28 | | | | | |
| 13 | 200 | 4830 | 106.21 | | | | | |
| 15 | 200 | 4580 | 92.84 | | | | | |
| 17 | 200 | 4400 | 83.69 | | | | | |
| 19 | 200 | 4220 | 75.58 | | | | | |
| 21 | 200 | 4040 | 67.80 | | | | | |
| 23 | 200 | 3830 | 59.67 | | | | | |
| 28 | 200 | 3550 | 49.51 | | | | | |
| 31 | 200 | 3390 | 44.46 | | | | | |
| 37 | 200 | 3170 | 37.97 | | | | | Ø19 |
| 43 | 197 | 2960 | 32.19 | | | | | |
| 53 | 190 | 2740 | 26.40 | | | | | |
| 54 | 187 | 2530 | 25.73 | | | | | |
| 61 | 187 | 2400 | 23.10 | | | | | |
| 71 | 186 | 2220 | 19.73 | | | | | |
| 84 | 185 | 2040 | 16.73 | | | | | |
| 91 | 177 | 2200 | 15.32 | | | | | |
| 107 | 177 | 2040 | 13.08 | | | | | |
| 126 | 177 | 1880 | 11.09 | | | | | |
| 154 | 176 | 1700 | 9.09 | | | | | |
| 176 | 176 | 1380 | 7.96 | | | | | |
| 206 | 167 | 1310 | 6.80 | | | | | |
| 243 | 158 | 1230 | 5.76 | | | | | |
| 296 | 148 | 1140 | 4.73 | | | | | |

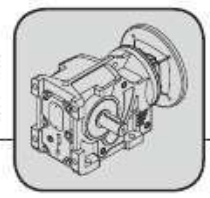
| FK35 , ne=1400 1/min | | | | | | | | | 400 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L | 100L | 112M | |
| 11 | 400 | 5630 | 130.79 | | | | | | | Ø16 |
| 12 | 400 | 5350 | 116.81 | | | | | | | |
| 13 | 400 | 5180 | 108.86 | | | | | | | |
| 14 | 400 | 4910 | 96.90 | | | | | | | |
| 16 | 400 | 4660 | 86.89 | | | | | | | Ø19 |
| 18 | 400 | 4380 | 76.33 | | | | | | | |
| 20 | 400 | 4250 | 71.78 | | | | | | | |
| 24 | 400 | 3890 | 58.99 | | | | | | | |
| 26 | 388 | 3710 | 53.29 | | | | | | | |
| 30 | 384 | 3530 | 47.08 | | | | | | | |
| 34 | 381 | 3310 | 41.36 | | | | | | | |
| 36 | 373 | 3240 | 38.89 | | | | | | | |
| 45 | 351 | 2970 | 31.35 | | | | | | | |
| 48 | 338 | 2940 | 28.88 | | | | | | | |
| 53 | 337 | 2770 | 26.30 | | | | | | | |
| 57 | 335 | 2680 | 24.73 | | | | | | | |
| 68 | 302 | 2620 | 20.65 | | | | | | | |
| 76 | 300 | 2450 | 18.36 | | | | | | | |
| 82 | 283 | 2460 | 16.99 | | | | | | | |
| 107 | 275 | 2150 | 13.13 | | | | | | | |
| 130 | 256 | 2030 | 10.80 | | | | | | | |
| 141 | 237 | 2060 | 9.95 | | | | | | | |
| 197 | 212 | 1840 | 7.11 | | | | | | | |
| 239 | 199 | 1720 | 5.85 | | | | | | | |





| FK40 , ne=1400 1/mi | | | | | | | | | 600 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L | 100L | 112M | |
| 9.3 | 600 | 7470 | 149.93 | | | | | | | Ø19 |
| 11 | 600 | 7010 | 130.88 | | | | | | | |
| 12 | 600 | 6650 | 118.43 | | | | | | | |
| 13 | 600 | 6360 | 108.29 | | | | | | | |
| 15 | 600 | 5960 | 95.70 | | | | | | | |
| 17 | 600 | 5580 | 84.31 | | | | | | | |
| 20 | 600 | 4990 | 69.12 | | | | | | | |
| 21 | 600 | 4820 | 65.13 | | | | | | | |
| 25 | 600 | 4400 | 56.22 | | | | | | | |
| 30 | 600 | 4410 | 47.35 | | | | | | | |
| 32 | 580 | 3790 | 44.43 | | | | | | | |
| 34 | 577 | 4220 | 41.71 | | | | | | | |
| 41 | 575 | 3730 | 34.20 | | | | | | | |
| 43 | 572 | 3610 | 32.22 | | | | | | | |
| 50 | 500 | 3710 | 27.82 | | | | | | | |
| 54 | 470 | 3170 | 25.76 | | | | | | | |
| 63 | 444 | 3000 | 22.24 | | | | | | | |
| 80 | 406 | 2760 | 17.57 | | | | | | | Ø24 |
| 110 | 397 | 2790 | 12.75 | | | | | | | |
| 127 | 385 | 2610 | 11.00 | | | | | | | |
| 161 | 370 | 2330 | 8.69 | | | | | | | |

| FK40* , ne=1400 1/min | | | | | | | | | 820 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L | 100L | 112M | |
| 9.4 | 820 | 9560 | 149.56 | | | | | | | Ø19 |
| 11 | 820 | 8840 | 130.56 | | | | | | | |
| 12 | 820 | 8330 | 118.14 | | | | | | | |
| 13 | 820 | 7360 | 108.03 | | | | | | | |
| 15 | 793 | 6930 | 95.46 | | | | | | | |
| 17 | 764 | 6660 | 84.10 | | | | | | | |
| 20 | 720 | 6280 | 68.95 | | | | | | | |
| 22 | 707 | 6170 | 64.97 | | | | | | | |
| 25 | 676 | 5910 | 56.09 | | | | | | | |
| 30 | 687 | 5430 | 46.33 | | | | | | | |
| 32 | 630 | 5500 | 44.32 | | | | | | | |
| 37 | 648 | 5110 | 37.98 | | | | | | | |
| 39 | 636 | 5020 | 35.79 | | | | | | | |
| 42 | 578 | 5040 | 33.26 | | | | | | | |
| 45 | 609 | 4810 | 30.90 | | | | | | | |
| 51 | 545 | 4750 | 27.27 | | | | | | | |
| 54 | 535 | 4670 | 25.70 | | | | | | | |
| 57 | 567 | 4480 | 24.42 | | | | | | | Ø24 |
| 63 | 512 | 4460 | 22.18 | | | | | | | |
| 80 | 477 | 4160 | 17.53 | | | | | | | |
| 99 | 482 | 3800 | 14.16 | | | | | | | |
| 115 | 461 | 3640 | 12.22 | | | | | | | |
| 145 | 429 | 3390 | 9.66 | | | | | | | |



## 1400 Input Rpm

| FK50 , ne=1400 1/min | | | | | | | | 1550 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 80 | 90L | 100L | 112M | 132S | |
| 7.2 | 1451 | 16730 | 194.36 | | | | | | Ø16 |
| 7.8 | 1345 | 16080 | 180.17 | | | | | | |
| 8.7 | 1200 | 15120 | 160.76 | | | | | | |
| 9.7 | 1076 | 14240 | 144.13 | | | | | | |
| 11 | 918 | 13000 | 122.94 | | | | | | |
| 13 | 816 | 12120 | 109.30 | | | | | | |
| 14 | 1550 | 11520 | 100.66 | | | | | | |
| 16 | 1550 | 10740 | 90.08 | | | | | | |
| 18 | 1550 | 9760 | 78.07 | | | | | | |
| 22 | 1550 | 8490 | 64.06 | | | | | | Ø24 |
| 25 | 1506 | 8130 | 57.05 | | | | | | |
| 27 | 1457 | 7870 | 51.18 | | | | | | |
| 30 | 1422 | 7680 | 47.12 | | | | | | |
| 35 | 1351 | 7300 | 39.76 | | | | | | Ø38 |
| 46 | 1233 | 6050 | 30.48 | | | | | | |
| 51 | 1194 | 5860 | 27.34 | | | | | | |
| 56 | 1165 | 5710 | 25.17 | | | | | | |
| 62 | 1140 | 6150 | 22.57 | | | | | | |
| 66 | 1107 | 5430 | 21.24 | | | | | | |
| 69 | 1103 | 5960 | 20.24 | | | | | | |
| 75 | 1076 | 5810 | 18.64 | | | | | | |
| 89 | 1023 | 5520 | 15.73 | | | | | | |
| 116 | 934 | 4580 | 12.06 | | | | | | |
| 129 | 904 | 4430 | 10.81 | | | | | | |
| 141 | 882 | 4330 | 9.96 | | | | | | |
| 167 | 838 | 4110 | 8.40 | | | | | | |

| FK60 , ne=1400 1/min | | | | | | | | | | 2700 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 80 | 90L | 100L | 112M | 132S | 132M | 160M | |
| 6.5 | 1602 | 23400 | 214.50 | | | | | | | | Ø19 |
| 7.4 | 1422 | 22030 | 190.38 | | | | | | | | |
| 7.8 | 1346 | 21420 | 180.32 | | | | | | | | |
| 9.2 | 1132 | 19540 | 151.59 | | | | | | | | |
| 11 | 2700 | 17900 | 129.25 | | | | | | | | |
| 12 | 2700 | 16960 | 117.56 | | | | | | | | |
| 13 | 2700 | 16140 | 108.00 | | | | | | | | |
| 15 | 2700 | 14830 | 93.84 | | | | | | | | Ø28 |
| 17 | 2663 | 13930 | 82.86 | | | | | | | | |
| 19 | 2595 | 13150 | 72.35 | | | | | | | | Ø38 |
| 23 | 2517 | 12250 | 61.42 | | | | | | | | |
| 26 | 2454 | 11550 | 53.63 | | | | | | | | |
| 28 | 2426 | 11240 | 50.45 | | | | | | | | |
| 32 | 2358 | 10500 | 43.31 | | | | | | | | |
| 35 | 2319 | 8620 | 39.60 | | | | | | | | |
| 43 | 2275 | 7530 | 32.41 | | | | | | | | Ø42 |
| 49 | 2184 | 7230 | 28.30 | | | | | | | | |
| 53 | 2145 | 7100 | 26.63 | | | | | | | | |
| 61 | 2049 | 6780 | 22.86 | | | | | | | | |
| 67 | 1994 | 6600 | 20.90 | | | | | | | | |
| 89 | 1829 | 6050 | 15.66 | | | | | | | | |
| 109 | 1722 | 5700 | 12.82 | | | | | | | | |
| 125 | 1654 | 5470 | 11.19 | | | | | | | | |
| 133 | 1624 | 5370 | 10.53 | | | | | | | | |
| 155 | 1551 | 5130 | 9.04 | | | | | | | | |
| 169 | 1510 | 5000 | 8.27 | | | | | | | | |



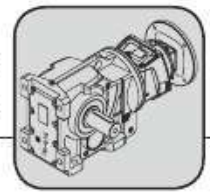
## Helical-Bevel Gear Units

Permitted Combinations

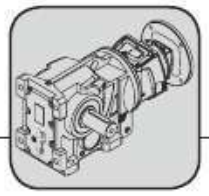
1400 Input Rpm

| FK70 , ne=1400 1/min | | | | | | | | | | 4300 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 100L | 112M | 132S | 132M | 160M | 160L | 180M | |
| 8.0 | 4300 | 38060 | 174.75 | | | | | | | | Ø28 |
| 9.1 | 4300 | 35890 | 154.10 | | | | | | | | |
| 10 | 4300 | 34370 | 140.71 | | | | | | | | |
| 12 | 4300 | 31800 | 119.87 | | | | | | | | Ø38 |
| 12 | 4300 | 30800 | 112.43 | | | | | | | | |
| 14 | 4300 | 29230 | 101.37 | | | | | | | | |
| 16 | 4300 | 27450 | 89.79 | | | | | | | | |
| 17 | 4300 | 25830 | 80.07 | | | | | | | | |
| 20 | 4300 | 24330 | 71.78 | | | | | | | | |
| 22 | 4300 | 22960 | 64.72 | | | | | | | | |
| 26 | 4300 | 20420 | 52.96 | | | | | | | | Ø42 |
| 30 | 3266 | 21880 | 47.16 | | | | | | | | |
| 33 | 3274 | 20560 | 42.28 | | | | | | | | |
| 37 | 3280 | 19360 | 38.12 | | | | | | | | |
| 45 | 3295 | 17110 | 31.19 | | | | | | | | |
| 59 | 3948 | 13410 | 23.92 | | | | | | | | Ø48 |
| 66 | 3814 | 12960 | 21.33 | | | | | | | | |
| 73 | 3692 | 12540 | 19.12 | | | | | | | | |
| 81 | 3579 | 12160 | 17.24 | | | | | | | | |
| 99 | 3369 | 11450 | 14.11 | | | | | | | | |
| 111 | 2826 | 11310 | 12.56 | | | | | | | | |
| 124 | 2735 | 10950 | 11.26 | | | | | | | | |
| 138 | 2651 | 10610 | 10.16 | | | | | | | | |
| 168 | 2496 | 9990 | 8.31 | | | | | | | | |

| FK90 , ne=1400 1/min | | | | | | | | | | | | | | 8000 Nm | Input shaft mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 100L | 112M | 132S | 132M | 160M | 160L | 180M | 180L | 200L | 225S | 225M | |
| 9.8 | 8000 | 59170 | 143.55 | | | | | | | | | | | | Ø28 |
| 11 | 8000 | 55370 | 121.95 | | | | | | | | | | | | |
| 13 | 8000 | 52460 | 107.04 | | | | | | | | | | | | Ø38 |
| 14 | 8000 | 51090 | 100.47 | | | | | | | | | | | | |
| 15 | 8000 | 50000 | 95.48 | | | | | | | | | | | | |
| 15 | 8000 | 48930 | 90.70 | | | | | | | | | | | | Ø42 |
| 17 | 8000 | 46960 | 82.38 | | | | | | | | | | | | |
| 19 | 8000 | 45110 | 75.12 | | | | | | | | | | | | |
| 21 | 8000 | 42710 | 66.33 | | | | | | | | | | | | Ø48 |
| 24 | 8000 | 40150 | 57.78 | | | | | | | | | | | | |
| 31 | 7700 | 36840 | 45.81 | | | | | | | | | | | | |
| 33 | 7600 | 35630 | 41.96 | | | | | | | | | | | | |
| 37 | 7400 | 34510 | 37.96 | | | | | | | | | | | | |
| 43 | 7200 | 32630 | 32.59 | | | | | | | | | | | | |
| 47 | 7100 | 31490 | 29.71 | | | | | | | | | | | | |
| 61 | 6800 | 28500 | 22.86 | | | | | | | | | | | | |
| 71 | 6600 | 27100 | 19.84 | | | | | | | | | | | | |
| 87 | 6450 | 24840 | 16.13 | | | | | | | | | | | | |
| 96 | 6400 | 23740 | 14.59 | | | | | | | | | | | | |
| 130 | 5900 | 19890 | 10.77 | | | | | | | | | | | | |
| 161 | 5400 | 19010 | 8.67 | | | | | | | | | | | | |

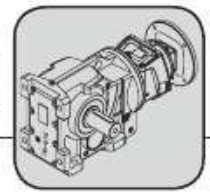


| FK35FH25 , ne=1400 1/min | | | | | | | 400 Nm |
|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L |
| | | 3 | 3 | | | | |
| 0.14 | 400 | 5590 | 10364 | | | | |
| 0.16 | 400 | 5590 | 8561 | | | | |
| 0.18 | 400 | 5590 | 7672 | | | | |
| 0.20 | 400 | 5590 | 6987 | | | | |
| 0.24 | 400 | 5590 | 5929 | | | | |
| 0.28 | 400 | 5590 | 5011 | | | | |
| 0.30 | 400 | 5590 | 4644 | | | | |
| 0.34 | 400 | 5590 | 4085 | | | | |
| 0.39 | 400 | 5590 | 3589 | | | | |
| 0.45 | 400 | 5590 | 3081 | | | | |
| 0.50 | 400 | 5590 | 2784 | | | | |
| 0.59 | 400 | 5590 | 2366 | | | | |
| 0.68 | 400 | 5590 | 2072 | | | | |
| 0.77 | 400 | 5590 | 1821 | | | | |
| 0.85 | 400 | 5590 | 1645 | | | | |
| 0.97 | 400 | 5590 | 1445 | | | | |
| | | 3 | 2 | | | | |
| 1.1 | 400 | 5590 | 1306 | | | | |
| 1.2 | 400 | 5590 | 1177 | | | | |
| 1.3 | 400 | 5590 | 1063 | | | | |
| 1.5 | 400 | 5590 | 953 | | | | |
| 1.7 | 400 | 5590 | 842 | | | | |
| 2.0 | 400 | 5590 | 707 | | | | |
| 2.1 | 400 | 5590 | 651 | | | | |
| 2.5 | 400 | 5590 | 552 | | | | |
| 2.8 | 400 | 5590 | 508 | | | | |
| 3.1 | 400 | 5590 | 456 | | | | |
| 3.6 | 400 | 5590 | 390 | | | | |
| 4.0 | 400 | 5590 | 351 | | | | |
| 4.8 | 400 | 5590 | 289 | | | | |
| 5.7 | 400 | 5590 | 245 | | | | |
| 6.3 | 400 | 5590 | 223 | | | | |
| 6.9 | 400 | 5590 | 202 | | | | |
| 8.0 | 400 | 5590 | 175 | | | | |
| 9.3 | 400 | 5590 | 151 | | | | |
| 11 | 400 | 5590 | 128 | | | | |
| 13 | 400 | 5590 | 106 | | | | |
| 14 | 400 | 5590 | 98 | | | | |

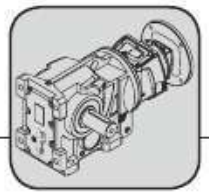




| FK40FH25 , ne=1400 1/min | | | | | | | 600 Nm |
|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L |
| | | 3 | 3 | | | | |
| 0.12 | 600 | 7500 | 11665 | | | | |
| 0.14 | 600 | 7500 | 10056 | | | | |
| 0.15 | 600 | 7500 | 9563 | | | | |
| 0.17 | 600 | 7500 | 8473 | | | | |
| 0.18 | 600 | 7500 | 7634 | | | | |
| 0.21 | 600 | 7500 | 6725 | | | | |
| 0.25 | 600 | 7500 | 5513 | | | | |
| 0.28 | 600 | 7500 | 4993 | | | | |
| 0.31 | 600 | 7500 | 4547 | | | | |
| 0.36 | 600 | 7500 | 3925 | | | | |
| 0.41 | 600 | 7500 | 3421 | | | | |
| 0.46 | 600 | 7500 | 3038 | | | | |
| 0.48 | 600 | 7500 | 2937 | | | | |
| 0.55 | 600 | 7500 | 2558 | | | | |
| 0.62 | 600 | 7500 | 2253 | | | | |
| 0.67 | 600 | 7500 | 2084 | | | | |
| 0.76 | 600 | 7500 | 1836 | | | | |
| | | 3 | 2 | | | | |
| 0.83 | 600 | 7500 | 1693 | | | | |
| 0.92 | 600 | 7500 | 1527 | | | | |
| 1.0 | 600 | 7500 | 1378 | | | | |
| 1.1 | 600 | 7500 | 1242 | | | | |
| 1.4 | 600 | 7500 | 1022 | | | | |
| 1.6 | 600 | 7500 | 903 | | | | |
| 1.8 | 600 | 7500 | 795 | | | | |
| 2.0 | 600 | 7500 | 700 | | | | |
| 2.3 | 600 | 7500 | 621 | | | | |
| 2.5 | 600 | 7500 | 556 | | | | |
| 2.9 | 600 | 7500 | 489 | | | | |
| 3.3 | 600 | 7500 | 421 | | | | |
| 3.9 | 600 | 7500 | 363 | | | | |
| 4.4 | 600 | 7500 | 319 | | | | |
| 5.0 | 600 | 7500 | 281 | | | | |
| 5.8 | 600 | 7500 | 240 | | | | |
| 6.4 | 600 | 7500 | 217 | | | | |
| 7.1 | 600 | 7500 | 197 | | | | |
| 8.4 | 600 | 7500 | 167 | | | | |
| 9.7 | 600 | 7500 | 144 | | | | |
| 11 | 600 | 7500 | 128 | | | | |
| 13 | 600 | 7500 | 111 | | | | |
| 15 | 600 | 7500 | 93 | | | | |

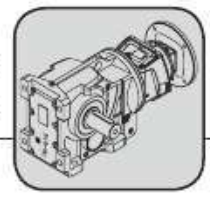


| FK40*FH25 , ne=1400 1/min | | | | | | | 820 Nm |
|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L |
| | | 3 | 3 | | | | |
| 0.12 | 820 | 9500 | 11636 | | | | |
| 0.14 | 820 | 9500 | 10031 | | | | |
| 0.15 | 820 | 9500 | 9539 | | | | |
| 0.17 | 820 | 9500 | 8224 | | | | |
| 0.19 | 820 | 9500 | 7318 | | | | |
| 0.22 | 820 | 9500 | 6447 | | | | |
| 0.25 | 820 | 9500 | 5500 | | | | |
| 0.29 | 820 | 9500 | 4813 | | | | |
| 0.33 | 820 | 9500 | 4299 | | | | |
| 0.38 | 820 | 9500 | 3725 | | | | |
| 0.43 | 820 | 9500 | 3235 | | | | |
| 0.48 | 820 | 9500 | 2930 | | | | |
| 0.56 | 820 | 9500 | 2503 | | | | |
| 0.62 | 820 | 9500 | 2248 | | | | |
| 0.71 | 820 | 9500 | 1959 | | | | |
| | | 3 | 2 | | | | |
| 0.77 | 820 | 9500 | 1858 | | | | |
| 0.82 | 820 | 9500 | 1708 | | | | |
| 0.92 | 820 | 9500 | 1523 | | | | |
| 1.0 | 820 | 9500 | 1374 | | | | |
| 1.2 | 820 | 9500 | 1135 | | | | |
| 1.4 | 820 | 9500 | 1023 | | | | |
| 1.6 | 820 | 9500 | 901 | | | | |
| 1.7 | 820 | 9500 | 809 | | | | |
| 2.0 | 820 | 9500 | 691 | | | | |
| 2.3 | 820 | 9500 | 605 | | | | |
| 2.6 | 820 | 9500 | 544 | | | | |
| 2.8 | 820 | 9500 | 496 | | | | |
| 3.2 | 820 | 9500 | 444 | | | | |
| 3.6 | 820 | 9500 | 394 | | | | |
| 3.9 | 820 | 9500 | 359 | | | | |
| 4.3 | 820 | 9500 | 323 | | | | |
| 5.1 | 820 | 9500 | 273 | | | | |
| 5.7 | 820 | 9500 | 245 | | | | |
| 6.3 | 820 | 9500 | 222 | | | | |
| 7.3 | 820 | 9500 | 191 | | | | |
| 8.5 | 820 | 9500 | 165 | | | | |
| 9.9 | 820 | 9500 | 142 | | | | |
| 11 | 820 | 9500 | 124 | | | | |





| FK50FH25 , ne=1400 1/min | | | | | | | 1550 Nm |
|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L |
| | | 3 | 3 | | | | |
| 0.09 | 1550 | 13720 | 15123 | | | | |
| 0.10 | 1550 | 13720 | 13928 | | | | |
| 0.12 | 1550 | 13720 | 12007 | | | | |
| 0.14 | 1550 | 13720 | 10117 | | | | |
| 0.15 | 1550 | 13720 | 9054 | | | | |
| 0.17 | 1550 | 13720 | 8245 | | | | |
| 0.22 | 1550 | 13720 | 6438 | | | | |
| 0.24 | 1550 | 13720 | 5863 | | | | |
| 0.27 | 1550 | 13720 | 5110 | | | | |
| 0.31 | 1550 | 13720 | 4472 | | | | |
| 0.35 | 1550 | 13720 | 3983 | | | | |
| 0.39 | 1550 | 13720 | 3573 | | | | |
| 0.45 | 1550 | 13720 | 3082 | | | | |
| 0.51 | 1550 | 13720 | 2765 | | | | |
| 0.57 | 1550 | 13720 | 2461 | | | | |
| | | 3 | 2 | | | | |
| 0.63 | 1550 | 13720 | 2207 | | | | |
| 0.70 | 1550 | 13720 | 2008 | | | | |
| 0.81 | 1550 | 13720 | 1724 | | | | |
| 0.90 | 1550 | 13720 | 1557 | | | | |
| 1.0 | 1550 | 13720 | 1398 | | | | |
| 1.1 | 1550 | 13720 | 1254 | | | | |
| 1.3 | 1550 | 13720 | 1041 | | | | |
| 1.5 | 1550 | 13720 | 916 | | | | |
| 1.7 | 1550 | 13720 | 806 | | | | |
| 1.9 | 1550 | 13720 | 746 | | | | |
| 2.3 | 1550 | 13720 | 616 | | | | |
| 2.5 | 1550 | 13720 | 553 | | | | |
| 2.9 | 1550 | 13720 | 485 | | | | |
| 3.2 | 1550 | 13720 | 435 | | | | |
| 3.8 | 1550 | 13720 | 369 | | | | |
| 4.3 | 1550 | 13720 | 328 | | | | |
| 4.8 | 1550 | 13720 | 294 | | | | |
| 5.5 | 1550 | 13720 | 252 | | | | |
| 6.2 | 1550 | 13720 | 226 | | | | |
| 7.2 | 1550 | 13720 | 194 | | | | |
| 8.0 | 1550 | 13720 | 175 | | | | |
| 9.2 | 1550 | 13720 | 152 | | | | |

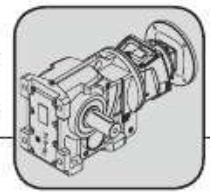


| FK60FH25 , ne=1400 1/min | | | | | | | | | 2700 Nm |
|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L | 100L | 112M |
| | | 3 | 3 | | | | | | |
| 0.09 | 2700 | 23422 | 14839 | | | | | | |
| 0.11 | 2700 | 23422 | 12971 | | | | | | |
| 0.12 | 2700 | 23422 | 11916 | | | | | | |
| 0.14 | 2700 | 23422 | 10354 | | | | | | |
| 0.15 | 2700 | 23422 | 9142 | | | | | | |
| 0.18 | 2700 | 23422 | 7982 | | | | | | |
| 0.20 | 2700 | 23422 | 6917 | | | | | | |
| 0.24 | 2700 | 23422 | 5947 | | | | | | |
| 0.27 | 2700 | 23422 | 5251 | | | | | | |
| 0.31 | 2700 | 23422 | 4585 | | | | | | |
| 0.33 | 2700 | 23422 | 4257 | | | | | | |
| 0.39 | 2700 | 23422 | 3614 | | | | | | |
| 0.44 | 2700 | 23422 | 3155 | | | | | | |
| 0.51 | 2700 | 23422 | 2772 | | | | | | |
| 0.58 | 2700 | 23422 | 2420 | | | | | | |
| 0.63 | 2700 | 23422 | 2226 | | | | | | |
| | | 3 | 2 | | | | | | |
| 0.68 | 2700 | 23422 | 2047 | | | | | | |
| 0.78 | 2700 | 23422 | 1787 | | | | | | |
| 0.84 | 2700 | 23422 | 1665 | | | | | | |
| 0.99 | 2700 | 23422 | 1414 | | | | | | |
| 1.1 | 2700 | 23422 | 1234 | | | | | | |
| 1.3 | 2700 | 23422 | 1070 | | | | | | |
| 1.4 | 2700 | 23422 | 978 | | | | | | |
| 1.7 | 2700 | 23422 | 811 | | | | | | |
| 1.9 | 2700 | 23422 | 728 | | | | | | |
| 2.1 | 2700 | 23422 | 657 | | | | | | |
| 2.5 | 2700 | 23422 | 562 | | | | | | |
| 2.9 | 2700 | 23422 | 488 | | | | | | |
| 3.2 | 2700 | 23422 | 432 | | | | | | |
| 3.7 | 2700 | 23422 | 375 | | | | | | |
| 4.2 | 2700 | 23422 | 331 | | | | | | |
| 4.8 | 2700 | 23422 | 294 | | | | | | |
| 5.7 | 2700 | 23422 | 245 | | | | | | |
| 6.1 | 2700 | 23422 | 228 | | | | | | |
| 6.9 | 2700 | 23422 | 201 | | | | | | |
| 7.7 | 2700 | 23422 | 181 | | | | | | |
| 8.9 | 2700 | 23422 | 158 | | | | | | |
| 9.9 | 2700 | 23422 | 142 | | | | | | |





| FK70FH25 , ne=1400 1/min | | | | | | | | | 4300 Nm |
|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 63 | 71 | 80 | 90L | 100L | 112M |
| | | 3 | 3 | | | | | | |
| 0.08 | 4300 | 38063 | 18129 | | | | | | |
| 0.09 | 4300 | 38063 | 16260 | | | | | | |
| 0.09 | 4300 | 38063 | 15130 | | | | | | |
| 0.10 | 4300 | 38063 | 14191 | | | | | | |
| 0.11 | 4300 | 38063 | 13226 | | | | | | |
| 0.13 | 4300 | 38063 | 11185 | | | | | | |
| 0.14 | 4300 | 38063 | 10106 | | | | | | |
| 0.15 | 4300 | 38063 | 9061 | | | | | | |
| 0.17 | 4300 | 38063 | 8169 | | | | | | |
| 0.20 | 4300 | 38063 | 6990 | | | | | | |
| 0.24 | 4300 | 38063 | 5953 | | | | | | |
| 0.26 | 4300 | 38063 | 5337 | | | | | | |
| 0.30 | 4300 | 38063 | 4665 | | | | | | |
| 0.35 | 4300 | 38063 | 4053 | | | | | | |
| 0.41 | 4300 | 38063 | 3420 | | | | | | |
| 0.43 | 4300 | 38063 | 3239 | | | | | | |
| 0.50 | 4300 | 38063 | 2775 | | | | | | |
| | | 3 | 2 | | | | | | |
| 0.57 | 4300 | 38063 | 2457 | | | | | | |
| 0.67 | 4300 | 38063 | 2078 | | | | | | |
| 0.76 | 4300 | 38063 | 1843 | | | | | | |
| 0.85 | 4300 | 38063 | 1640 | | | | | | |
| 0.95 | 4300 | 38063 | 1471 | | | | | | |
| 1.15 | 4300 | 38063 | 1219 | | | | | | |
| 1.2 | 4300 | 38063 | 1165 | | | | | | |
| 1.3 | 4300 | 38063 | 1044 | | | | | | |
| 1.6 | 4300 | 38063 | 878 | | | | | | |
| 1.8 | 4300 | 38063 | 770 | | | | | | |
| 2.2 | 4300 | 38063 | 642 | | | | | | |
| 2.4 | 4300 | 38063 | 579 | | | | | | |
| 2.9 | 4300 | 38063 | 487 | | | | | | |
| 3.7 | 4300 | 38063 | 380 | | | | | | |
| 4.1 | 4300 | 38063 | 341 | | | | | | |
| 4.6 | 4300 | 38063 | 307 | | | | | | |
| 5.4 | 4300 | 38063 | 259 | | | | | | |
| 6.1 | 4300 | 38063 | 229 | | | | | | |
| 6.8 | 4300 | 38063 | 205 | | | | | | |



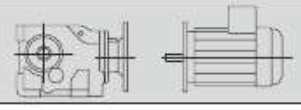
| FK90FH25 , ne=1400 1/min | | | | | | | | | 8000 Nm |
|---|---|---|---|---|---|---|---|---|---|
| na [1/min] | Mamax [Nm] | FRa [N] | i | 71 | 80 | 90L | 100L | 112M | 132S |
| | | 3 | 3 | | | | | | |
| 0.10 | 8000 | 59170 | 14135 | | | | | | |
| 0.11 | 8000 | 59170 | 12492 | | | | | | |
| 0.13 | 8000 | 59170 | 10569 | | | | | | |
| 0.15 | 8000 | 59170 | 9340 | | | | | | |
| 0.17 | 8000 | 59170 | 8287 | | | | | | |
| 0.19 | 8000 | 59170 | 7339 | | | | | | |
| 0.23 | 8000 | 59170 | 6179 | | | | | | |
| 0.25 | 8000 | 59170 | 5642 | | | | | | |
| 0.28 | 8000 | 59170 | 5020 | | | | | | |
| 0.31 | 8000 | 59170 | 4478 | | | | | | |
| 0.36 | 8000 | 59170 | 3899 | | | | | | |
| 0.41 | 8000 | 59170 | 3423 | | | | | | |
| 0.46 | 8000 | 59170 | 3053 | | | | | | |
| 0.53 | 8000 | 59170 | 2634 | | | | | | |
| 0.61 | 8000 | 59170 | 2292 | | | | | | |
| 0.67 | 8000 | 59170 | 2082 | | | | | | |
| | | 3 | 2 | | | | | | |
| 0.77 | 8000 | 59170 | 1809 | | | | | | |
| 0.87 | 8000 | 59170 | 1611 | | | | | | |
| 0.99 | 8000 | 59170 | 1414 | | | | | | |
| 1.2 | 8000 | 59170 | 1198 | | | | | | |
| 1.4 | 8000 | 59170 | 992 | | | | | | |
| 1.8 | 8000 | 59170 | 786 | | | | | | |
| 2.0 | 8000 | 59170 | 685 | | | | | | |
| 2.3 | 8000 | 59170 | 605 | | | | | | |
| 2.7 | 8000 | 59170 | 524 | | | | | | |
| 3.1 | 8000 | 59170 | 458 | | | | | | |
| 3.6 | 8000 | 59170 | 393 | | | | | | |
| 3.9 | 8000 | 59170 | 359 | | | | | | |
| 4.4 | 8000 | 59170 | 317 | | | | | | |
| 5.1 | 8000 | 59170 | 276 | | | | | | |
| 5.6 | 8000 | 59170 | 249 | | | | | | |
| 6.5 | 8000 | 59170 | 216 | | | | | | |
| 7.3 | 8000 | 59170 | 193 | | | | | | |
| 8.1 | 8000 | 59170 | 173 | | | | | | |
| 9.0 | 8000 | 59170 | 156 | | | | | | |
| 9.9 | 8000 | 59170 | 142 | | | | | | |

# 3.2 1400Rpm Selection Tables

## FK..F/..M

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 0.12 (0.16HP) | 0.20 | 4763 | 6990 | 38063 | 0.81 | | | |
| | 0.24 | 4057 | 5953 | 38063 | 0.95 | | | |
| | 0.26 | 3637 | 5337 | 38063 | 1.06 | | | |
| | 0.30 | 3179 | 4665 | 38063 | 1.22 | | | |
| | 0.35 | 2762 | 4053 | 38063 | 1.40 | | | |
| | 0.41 | 2331 | 3420 | 38063 | 1.66 | | | 174.4 |
| | 0.43 | 2219 | 3239 | 38063 | 1.69 | | | 164.4 |
| | 0.50 | 1891 | 2775 | 38063 | 2.05 | FK70 FH30 | 63 | 154.2 |
| | 0.57 | 1726 | 2457 | 38063 | 2.23 | | | 185.7 |
| | 0.67 | 1468 | 2078 | 38063 | 2.64 | | | 171.7 |
| | 0.76 | 1295 | 1843 | 38063 | 3.08 | | | |
| | 0.85 | 1153 | 1640 | 38063 | 3.46 | | | |
| | 0.95 | 1035 | 1471 | 38063 | 3.73 | | | |
| | 1.15 | 855 | 1219 | 38063 | 4.50 | | | |
| | 1.20 | 818 | 1165 | 38063 | 4.87 | | | |
| | 1.34 | 734 | 1044 | 38063 | 5.25 | | | |
| | 0.34 | 2770 | 4257 | 23422 | 0.81 | | | |
| | 0.39 | 2463 | 3614 | 23422 | 0.99 | | | |
| | 0.44 | 2150 | 3155 | 23422 | 1.13 | | | |
| | 0.51 | 1889 | 2772 | 23422 | 1.29 | | | |
| | 0.58 | 1649 | 2420 | 23422 | 1.47 | | | |
| | 0.63 | 1517 | 2226 | 23422 | 1.60 | | | 115.8 |
| | 0.68 | 1438 | 2047 | 23422 | 1.74 | | | 105.6 |
| | 0.78 | 1255 | 1787 | 23422 | 2.00 | KF60 FH30 | 63 | 101.6 |
| | 0.84 | 1171 | 1665 | 23422 | 2.07 | | | 123.8 |
| | 0.99 | 995 | 1414 | 23422 | 2.44 | | | 109.9 |
| | 1.13 | 867 | 1234 | 23422 | 2.89 | | | |
| | 1.31 | 752 | 1070 | 23422 | 3.33 | | | |
| | 1.43 | 687 | 978 | 23422 | 3.64 | | | |
| | 1.73 | 569 | 811 | 23422 | 4.24 | | | |
| | 1.92 | 511 | 728 | 23422 | 4.90 | | | |
| | 2.13 | 462 | 657 | 23422 | 5.42 | | | |
| | 0.57 | 1677 | 2461 | 13720 | 0.83 | | | |
| | 0.63 | 1551 | 2207 | 13720 | 0.93 | | | |
| | 0.70 | 1411 | 2008 | 13720 | 1.02 | | | |
| | 0.81 | 1211 | 1724 | 13720 | 1.19 | | | |
| | 0.90 | 1094 | 1557 | 13720 | 1.31 | | | |
| | 1.00 | 982 | 1398 | 13720 | 1.46 | | | 67.2 |
| | 1.12 | 881 | 1254 | 13720 | 1.63 | | | 63.1 |
| | 1.35 | 731 | 1041 | 13720 | 1.97 | | | 63.2 |
| | 1.53 | 643 | 916 | 13720 | 2.23 | FK50 FH25 | 63 | 75.1 |
| | 1.74 | 566 | 806 | 13720 | 2.54 | | | 70 |
| | 1.97 | 500 | 746 | 13720 | 2.65 | | | |
| | 2.27 | 433 | 616 | 13720 | 3.32 | | | |
| | 2.53 | 388 | 553 | 13720 | 3.70 | | | |
| | 2.89 | 341 | 485 | 13720 | 4.22 | | | |
| | 3.22 | 306 | 435 | 13720 | 4.70 | | | |
| | 3.80 | 259 | 369 | 13720 | 5.55 | | | |
| | 1.23 | 798 | 1135 | 9500 | 0.95 | | | |
| | 1.37 | 718 | 1023 | 9500 | 1.02 | | | |
| | 1.55 | 633 | 901 | 9500 | 1.20 | | | |
| | 1.73 | 568 | 809 | 9500 | 1.34 | | | |
| | 2.03 | 485 | 691 | 9500 | 1.57 | FK40* FH25 | | |
| | 2.31 | 425 | 605 | 9500 | 1.79 | | | 40.5 |
| | 2.58 | 382 | 544 | 9500 | 1.99 | | | 38.4 |
| | 2.82 | 349 | 496 | 9500 | 2.18 | | 63 | 37.8 |
| | 3.15 | 312 | 444 | 9500 | 2.44 | | | 43.8 |
| | 3.56 | 277 | 394 | 9500 | 2.75 | | | 41.2 |



| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 0.12 (0.16HP) | 3.90 | 252 | 359 | 9500 | 3.02 | | |
| | 4.34 | 227 | 323 | 9500 | 3.35 | | |
| | 5.12 | 192 | 273 | 9500 | 3.96 | | |
| | 5.72 | 172 | 245 | 9500 | 4.42 | | |
| | 6.30 | 156 | 222 | 9500 | 4.87 | | |
| | 7.31 | 134 | 191 | 9500 | 5.65 | | |
| | 1.55 | 635 | 903 | 7500 | 0.88 | | |
| | 1.76 | 559 | 795 | 7500 | 1.00 | | |
| | 2.00 | 492 | 700 | 7500 | 1.13 | | |
| | 2.25 | 437 | 621 | 7500 | 1.24 | | |
| | 2.52 | 390 | 556 | 7500 | 1.43 | | |
| | 2.86 | 344 | 489 | 7500 | 1.62 | | 36.9 |
| | 3.33 | 296 | 421 | 7500 | 1.88 | | 35.2 |
| | 3.85 | 255 | 363 | 7500 | 2.18 | FK40 FH25 63 | 34.5 |
| | 4.39 | 224 | 319 | 7500 | 2.48 | | 40 |
| | 4.98 | 197 | 281 | 7500 | 2.82 | | 38.1 |
| | 5.83 | 169 | 240 | 7500 | 3.30 | | |
| | 6.45 | 153 | 217 | 7500 | 3.65 | | |
| | 7.11 | 138 | 197 | 7500 | 4.02 | | |
| | 8.39 | 117 | 167 | 7500 | 4.75 | | |
| | 9.74 | 101 | 144 | 7500 | 5.51 | | |
| | 2.50 | 394 | 552 | 5590 | 0.92 | | |
| | 2.75 | 357 | 508 | 5590 | 1.00 | | |
| | 3.07 | 321 | 456 | 5590 | 1.12 | | |
| | 3.59 | 274 | 390 | 5590 | 1.31 | | |
| | 3.98 | 247 | 351 | 5590 | 1.45 | | 29.9 |
| | 4.84 | 203 | 289 | 5590 | 1.76 | | 29.2 |
| | 5.71 | 172 | 245 | 5590 | 2.08 | FK35 FH25 63 | 28.8 |
| | 6.27 | 157 | 223 | 5590 | 2.28 | | 33.2 |
| | 6.94 | 142 | 202 | 5590 | 2.53 | | 31.2 |
| | 7.98 | 123 | 175 | 5590 | 2.91 | | |
| | 9.25 | 106 | 151 | 5590 | 3.37 | | |
| | 10.91 | 90 | 128 | 5590 | 3.97 | | |
| | 13.25 | 74 | 106 | 5590 | 4.83 | | |
| | 14.58 | 67 | 96 | 5590 | 5.31 | | |
| | 9.36 | 112 | 150 | 16880 | 7.39 | | 31.9 |
| | | | | | | | 30.4 |
| | | | | | | FK40* 63 | 29.1 |
| | | | | | | | 35.1 |
| | | | | | | | 32.6 |
| | 9.34 | 112 | 150 | 9890 | 5.41 | | 27.9 |
| | | | | | | | 26.2 |
| | | | | | | FK40 63 | 25.5 |
| | | | | | | | 30.9 |
| | | | | | | | 28.9 |
| | 10.70 | 98 | 131 | 6940 | 4.12 | | 21 |
| | 11.99 | 87 | 117 | 6700 | 4.62 | | 20.2 |
| | 12.86 | 81 | 109 | 6560 | 4.96 | FK35 63 | 19.6 |
| | 14.45 | 72 | 97 | 6330 | 5.57 | | 23.8 |
| | | | | | | | 22.3 |
| | 9.30 | 112 | 150 | 5880 | 1.79 | | |
| | 10.37 | 101 | 135 | 5690 | 2.00 | | |
| | 12.04 | 87 | 116 | 5450 | 2.32 | | 14.4 |
| | 13.18 | 79 | 106 | 5310 | 2.54 | | 13.8 |
| | 15.08 | 69 | 93 | 5100 | 2.91 | FK30 63 | 13.1 |
| | 16.73 | 62 | 84 | 4940 | 3.22 | | 15.5 |
| | 18.52 | 56 | 76 | 4790 | 3.57 | | 14.7 |
| | 20.65 | 51 | 68 | 4630 | 3.98 | | |





| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 0.12 | 23.46 | 45 | 60 | 4450 | 4.52 | | | |
| (0.16HP) | 28.28 | 37 | 50 | 4200 | 5.45 | | | |
| 0.18 | 0.30 | 4769 | 4665 | 38063 | 0.81 | | | |
| (0.25HP) | 0.35 | 4143 | 4053 | 38063 | 0.93 | | | |
| | 0.41 | 3496 | 3420 | 38063 | 1.11 | | | |
| | 0.43 | 3328 | 3239 | 38063 | 1.13 | | | |
| | 0.50 | 2837 | 2775 | 38063 | 1.36 | | | |
| | 0.57 | 2588 | 2457 | 38063 | 1.49 | | | 174.4 |
| | 0.67 | 2202 | 2078 | 38063 | 1.76 | | | 164.4 |
| | 0.76 | 1942 | 1843 | 38063 | 2.05 | FK70 FH30 | 63 | 154.2 |
| | 0.85 | 1729 | 1640 | 38063 | 2.31 | | | 185.7 |
| | 0.95 | 1543 | 1471 | 38063 | 2.49 | | | 171.7 |
| | 1.15 | 1313 | 1219 | 38063 | 3.00 | | | |
| | 1.20 | 1228 | 1165 | 38063 | 3.25 | | | |
| | 1.34 | 1101 | 1044 | 38063 | 3.50 | | | |
| | 1.60 | 925 | 878 | 38063 | 4.31 | | | |
| | 1.82 | 812 | 770 | 38063 | 4.91 | | | |
| | 2.18 | 676 | 642 | 38063 | 5.90 | | | |
| | 0.51 | 2834 | 2772 | 23422 | 0.86 | | | |
| | 0.58 | 2474 | 2420 | 23422 | 0.98 | | | |
| | 0.63 | 2276 | 2226 | 23422 | 1.07 | | | |
| | 0.68 | 2157 | 2047 | 23422 | 1.16 | | | |
| | 0.78 | 1883 | 1787 | 23422 | 1.33 | | | |
| | 0.84 | 1756 | 1665 | 23422 | 0.99 | | | 115.8 |
| | 0.99 | 1492 | 1414 | 23422 | 1.17 | | | 105.6 |
| | 1.13 | 1301 | 1234 | 23422 | 1.93 | FK30 FH30 | 63 | 101.6 |
| | 1.31 | 1127 | 1070 | 23422 | 2.22 | | | 123.8 |
| | 1.43 | 1031 | 978 | 23422 | 2.43 | | | 109.9 |
| | 1.73 | 853 | 811 | 23422 | 2.83 | | | |
| | 1.92 | 767 | 728 | 23422 | 3.27 | | | |
| | 2.13 | 693 | 657 | 23422 | 3.62 | | | |
| | 2.49 | 593 | 562 | 23422 | 4.23 | | | |
| | 2.87 | 514 | 488 | 23422 | 4.87 | | | |
| | 3.24 | 455 | 432 | 23422 | 5.50 | | | |
| | 0.90 | 1641 | 1557 | 13720 | 0.88 | | | |
| | 1.00 | 1473 | 1398 | 13720 | 0.98 | | | |
| | 1.12 | 1322 | 1254 | 13720 | 1.09 | | | |
| | 1.35 | 1097 | 1041 | 13720 | 1.31 | | | |
| | 1.53 | 965 | 916 | 13720 | 1.49 | | | |
| | 1.74 | 849 | 806 | 13720 | 1.69 | | | 67.2 |
| | 1.88 | 750 | 746 | 13720 | 1.77 | | | 63.1 |
| | 2.27 | 649 | 616 | 13720 | 2.22 | FK50 FH25 | 63 | 63.2 |
| | 2.53 | 583 | 553 | 13720 | 2.47 | | | 75.1 |
| | 2.89 | 511 | 485 | 13720 | 2.81 | | | 70 |
| | 3.22 | 458 | 435 | 13720 | 3.14 | | | |
| | 3.80 | 388 | 369 | 13720 | 3.70 | | | |
| | 4.26 | 346 | 328 | 13720 | 4.15 | | | |
| | 4.75 | 310 | 294 | 13720 | 4.63 | | | |
| | 5.55 | 266 | 252 | 13720 | 5.41 | | | |
| | 1.55 | 949 | 901 | 9500 | 0.80 | | | |
| | 1.73 | 853 | 809 | 9500 | 0.89 | | | |
| | 2.03 | 728 | 691 | 9500 | 1.04 | | | |
| | 2.31 | 638 | 605 | 9500 | 1.19 | | | |
| | 2.58 | 573 | 544 | 9500 | 1.33 | | | |
| | 2.82 | 523 | 496 | 9500 | 1.45 | | | |
| | 3.15 | 468 | 444 | 9500 | 1.62 | | | 40.5 |
| | 3.56 | 415 | 394 | 9500 | 1.83 | | | 38.4 |
| | 3.90 | 378 | 359 | 9500 | 2.01 | FK40* FH25 | 63 | 37.8 |

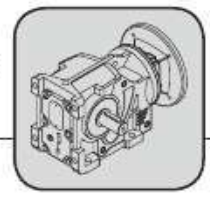


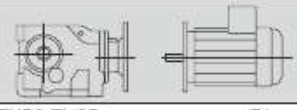
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 0.18 | 4.34 | 340 | 323 | 9500 | 2.23 | FK40* FG25 | | 43.8 |
| (0.25HP) | 5.12 | 288 | 273 | 9500 | 2.64 | | | 41.2 |
| | 5.72 | 258 | 245 | 9500 | 2.95 | | | |
| | 6.30 | 234 | 222 | 9500 | 3.24 | | | |
| | 7.31 | 202 | 191 | 9500 | 3.77 | | | |
| | 8.51 | 173 | 165 | 9500 | 4.38 | | | |
| | 9.87 | 150 | 142 | 9500 | 5.08 | | | |
| | 11.33 | 130 | 124 | 9500 | 5.84 | | | |
| | 2.25 | 656 | 621 | 7500 | 0.82 | | | |
| | 2.52 | 585 | 556 | 7500 | 0.95 | | | |
| | 2.86 | 516 | 489 | 7500 | 1.08 | | | |
| | 3.33 | 444 | 421 | 7500 | 1.25 | | | |
| | 3.85 | 383 | 363 | 7500 | 1.45 | | | |
| | 4.39 | 336 | 319 | 7500 | 1.66 | | | 36.9 |
| | 4.98 | 296 | 281 | 7500 | 1.88 | | | 35.2 |
| | 5.83 | 253 | 240 | 7500 | 2.20 | FK40 FH25 | 63 | 34.5 |
| | 6.45 | 229 | 217 | 7500 | 2.43 | | | 40 |
| | 7.11 | 207 | 197 | 7500 | 2.68 | | | 38.1 |
| | 8.39 | 176 | 167 | 7500 | 3.16 | | | |
| | 9.74 | 152 | 144 | 7500 | 3.67 | | | |
| | 10.96 | 135 | 128 | 7500 | 4.13 | | | |
| | 12.58 | 117 | 111 | 7500 | 4.74 | | | |
| | 14.98 | 99 | 93 | 7500 | 5.65 | | | |
| | 3.59 | 411 | 390 | 5590 | 0.87 | | | |
| | 3.98 | 370 | 351 | 5590 | 0.97 | | | |
| | 4.84 | 305 | 289 | 5590 | 1.17 | | | 29.9 |
| | 5.71 | 259 | 245 | 5590 | 1.39 | | | 29.2 |
| | 6.27 | 235 | 223 | 5590 | 1.52 | FK35 FH25 | 63 | 28.8 |
| | 6.94 | 213 | 202 | 5590 | 1.68 | | | 33.2 |
| | 7.98 | 185 | 175 | 5590 | 1.94 | | | 31.2 |
| | 9.25 | 159 | 151 | 5590 | 2.25 | | | |
| | 10.91 | 135 | 128 | 5590 | 2.65 | | | |
| | 13.25 | 111 | 106 | 5590 | 3.22 | | | |
| | 14.58 | 101 | 96 | 5590 | 3.54 | | | |
| | 9.36 | 168 | 150 | 16300 | 4.93 | | | 31.9 |
| | 10.72 | 146 | 131 | 15800 | 5.65 | | | 30.4 |
| | | | | | | FK40* | 63 | 29.1 |
| | | | | | | | | 35.1 |
| | | | | | | | | 32.6 |
| | 9.34 | 168 | 150 | 9630 | 3.61 | | | 27.9 |
| | 10.70 | 147 | 131 | 9270 | 4.10 | | | 26.2 |
| | 11.82 | 133 | 118 | 9010 | 4.56 | FK40 | 63 | 25.5 |
| | 12.93 | 121 | 108 | 8770 | 4.97 | | | 30.9 |
| | 14.63 | 107 | 96 | 8460 | 5.64 | | | 28.9 |
| | 10.70 | 147 | 131 | 6740 | 2.75 | | | |
| | 11.99 | 131 | 117 | 6530 | 3.08 | | | 21 |
| | 12.86 | 122 | 109 | 6400 | 3.30 | | | 20.2 |
| | 14.45 | 109 | 97 | 6190 | 3.71 | FK35 | 63 | 19.6 |
| | 16.11 | 97 | 87 | 6000 | 4.14 | | | 23.8 |
| | 18.34 | 86 | 76 | 5780 | 4.71 | | | 22.3 |
| | 19.51 | 80 | 72 | 5670 | 5.01 | | | |
| | 9.30 | 169 | 150 | 5660 | 1.20 | | | |
| | 10.37 | 151 | 135 | 5500 | 1.33 | | | |
| | 12.04 | 130 | 116 | 5280 | 1.55 | | | |
| | 13.18 | 119 | 106 | 5160 | 1.69 | | | |
| | 15.08 | 104 | 93 | 4970 | 1.94 | | | 14.4 |
| | 16.73 | 94 | 84 | 4820 | 2.15 | | | 13.8 |
| | 18.52 | 85 | 76 | 4680 | 2.38 | FK30 | 63 | 13.1 |





| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 0.18 | 20.65 | 76 | 68 | 4540 | 2.65 | FK30 | | 15.5 |
| (0.25HP) | 23.46 | 67 | 60 | 4370 | 3.01 | | | 14.7 |
| | 28.28 | 56 | 50 | 4130 | 3.63 | | | |
| | 31.49 | 50 | 44 | 4000 | 4.04 | | | |
| | 36.87 | 43 | 38 | 3810 | 4.74 | | | |
| | 43.49 | 36 | 32 | 3620 | 5.51 | | | |
| 0.25 | 0.25 | 8011 | 5642 | 59172 | 0.87 | | | |
| (0.34HP) | 0.28 | 7128 | 5020 | 59172 | 0.98 | | | |
| | 0.31 | 6358 | 4478 | 59172 | 1.09 | | | |
| | 0.36 | 5536 | 3899 | 59172 | 1.26 | | | |
| | 0.41 | 4859 | 3423 | 59172 | 1.43 | | | 298 |
| | 0.46 | 4334 | 3053 | 59172 | 1.60 | | | 264 |
| | 0.53 | 3740 | 2634 | 59172 | 1.86 | FK90 FH40 | 71 | 245 |
| | 0.61 | 3254 | 2292 | 59172 | 2.14 | | | 288 |
| | 0.67 | 2956 | 2082 | 59172 | 2.35 | | | 261 |
| | 0.77 | 2648 | 1809 | 59172 | 2.71 | | | |
| | 0.87 | 2358 | 1611 | 59172 | 3.04 | | | |
| | 0.99 | 2070 | 1414 | 59172 | 3.46 | | | |
| | 1.17 | 1754 | 1198 | 59172 | 4.09 | | | |
| | 0.41 | 4855 | 3420 | 38063 | 0.80 | | | |
| | 0.43 | 4623 | 3239 | 38063 | 0.81 | | | |
| | 0.50 | 3940 | 2775 | 38063 | 0.98 | | | |
| | 0.57 | 3595 | 2457 | 38063 | 1.07 | | | |
| | 0.67 | 3059 | 2078 | 38063 | 1.27 | | | |
| | 0.76 | 2698 | 1843 | 38063 | 1.48 | | | 174.4 |
| | 0.85 | 2401 | 1640 | 38063 | 1.66 | | | 164.4 |
| | 0.95 | 2157 | 1471 | 38063 | 1.79 | FH70 FH30 | 71 | 154.2 |
| | 1.15 | 1782 | 1219 | 38063 | 2.16 | | | 185.7 |
| | 1.20 | 1705 | 1165 | 38063 | 2.34 | | | 171.7 |
| | 1.34 | 1529 | 1044 | 38063 | 2.52 | | | |
| | 1.60 | 1284 | 878 | 38063 | 3.11 | | | |
| | 1.82 | 1128 | 770 | 38063 | 3.54 | | | |
| | 2.18 | 939 | 642 | 38063 | 4.25 | | | |
| | 2.42 | 847 | 579 | 38063 | 4.71 | | | |
| | 2.87 | 713 | 487 | 38063 | 5.59 | | | |
| | 0.68 | 2996 | 2047 | 23422 | 0.84 | | | |
| | 0.78 | 2615 | 1787 | 23422 | 0.96 | | | |
| | 0.84 | 2440 | 1665 | 23422 | 0.99 | | | |
| | 0.99 | 2072 | 1414 | 23422 | 1.17 | | | |
| | 1.13 | 1807 | 1234 | 23422 | 1.39 | | | |
| | 1.31 | 1566 | 1070 | 23422 | 1.60 | | | |
| | 1.43 | 1432 | 978 | 23422 | 1.75 | | | 115.8 |
| | 1.73 | 1185 | 811 | 23422 | 2.04 | | | 105.6 |
| | 1.92 | 1065 | 728 | 23422 | 2.35 | FK60 FH30 | 71 | 101.6 |
| | 2.13 | 962 | 657 | 23422 | 2.60 | | | 123.8 |
| | 2.49 | 823 | 562 | 23422 | 3.04 | | | 109.9 |
| | 2.87 | 714 | 488 | 23422 | 3.51 | | | |
| | 3.24 | 632 | 432 | 23422 | 3.96 | | | |
| | 3.74 | 549 | 375 | 23422 | 4.57 | | | |
| | 4.23 | 484 | 331 | 23422 | 5.17 | | | |
| | 4.76 | 430 | 294 | 23422 | 5.82 | | | |
| | 1.35 | 1523 | 1041 | 13720 | 0.94 | | | |
| | 1.53 | 1340 | 916 | 13720 | 1.07 | | | |
| | 1.74 | 1180 | 806 | 13720 | 1.22 | | | |
| | 1.88 | 1041 | 746 | 13720 | 1.27 | | | |
| | 2.27 | 901 | 616 | 13720 | 1.59 | | | |
| | 2.53 | 809 | 553 | 13720 | 1.78 | | | 57.2 |
| | 2.89 | 710 | 485 | 13720 | 2.03 | FK50 FH25 | | 63.1 |



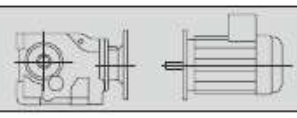
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 0.25 (0.34HP) | 3.22 | 636 | 435 | 13720 | 2.26 | FK50 FH25 71 | 63.2 |
| | 3.80 | 540 | 369 | 13720 | 2.66 | | 75.1 |
| | 4.26 | 481 | 328 | 13720 | 2.99 | | 70 |
| | 4.75 | 431 | 294 | 13720 | 3.33 | | |
| | 5.55 | 369 | 252 | 13720 | 3.89 | | |
| | 6.19 | 331 | 226 | 13720 | 4.34 | | |
| | 7.22 | 284 | 194 | 13720 | 5.06 | | |
| | 7.98 | 257 | 175 | 13720 | 5.60 | | |
| | 2.31 | 886 | 605 | 9500 | 0.86 | | |
| | 2.58 | 796 | 544 | 9500 | 0.96 | | |
| | 2.82 | 726 | 496 | 9500 | 1.05 | | |
| | 3.15 | 650 | 444 | 9500 | 1.17 | | |
| | 3.56 | 576 | 394 | 9500 | 1.32 | | |
| | 3.90 | 525 | 359 | 9500 | 1.45 | | 40.5 |
| | 4.34 | 472 | 323 | 9500 | 1.61 | | 38.4 |
| | 5.12 | 400 | 273 | 9500 | 1.90 | FK40* FH25 71 | 37.8 |
| | 5.72 | 358 | 245 | 9500 | 2.12 | | 43.8 |
| | 6.30 | 325 | 222 | 9500 | 2.34 | | 41.2 |
| | 7.31 | 280 | 191 | 9500 | 2.71 | | |
| | 8.51 | 241 | 165 | 9500 | 3.16 | | |
| | 9.87 | 208 | 142 | 9500 | 3.66 | | |
| | 11.33 | 181 | 124 | 9500 | 4.20 | | |
| | 3.33 | 616 | 421 | 7500 | 0.90 | | |
| | 3.85 | 532 | 363 | 7500 | 1.05 | | |
| | 4.39 | 467 | 319 | 7500 | 1.19 | | |
| | 4.98 | 411 | 281 | 7500 | 1.35 | | |
| | 5.83 | 351 | 240 | 7500 | 1.58 | | 36.9 |
| | 6.45 | 318 | 217 | 7500 | 1.75 | | 35.2 |
| | 7.11 | 288 | 197 | 7500 | 1.93 | FK40 FH25 71 | 34.5 |
| | 8.39 | 244 | 167 | 7500 | 2.28 | | 40 |
| | 9.74 | 210 | 144 | 7500 | 2.64 | | 38.1 |
| | 10.96 | 187 | 128 | 7500 | 2.98 | | |
| | 12.58 | 163 | 111 | 7500 | 3.42 | | |
| | 14.98 | 137 | 93 | 7500 | 4.07 | | |
| | 4.84 | 424 | 289 | 5590 | 0.85 | | |
| | 5.71 | 359 | 245 | 5590 | 1.00 | | |
| | 6.27 | 327 | 223 | 5590 | 1.10 | | 29.9 |
| | 6.94 | 295 | 202 | 5590 | 1.21 | | 29.2 |
| | 7.98 | 257 | 175 | 5590 | 1.39 | FK35 FH25 71 | 28.8 |
| | 9.25 | 221 | 151 | 5590 | 1.62 | | 33.2 |
| | 10.91 | 188 | 128 | 5590 | 1.91 | | 31.2 |
| | 13.25 | 155 | 106 | 5590 | 2.32 | | |
| | 14.58 | 141 | 96 | 5590 | 2.55 | | |
| | 9.36 | 233 | 150 | 15630 | 3.55 | | 31.9 |
| | 10.72 | 203 | 131 | 15210 | 4.07 | | 30.4 |
| | 11.85 | 184 | 118 | 14900 | 4.49 | FH40* 71 | 29.1 |
| | 12.96 | 168 | 108 | 14620 | 4.91 | | 35.1 |
| | 14.67 | 149 | 95 | 14220 | 5.38 | | 32.6 |
| | 16.65 | 131 | 84 | 13820 | 5.88 | | |
| | 9.34 | 233 | 150 | 9340 | 2.60 | | |
| | 10.70 | 204 | 131 | 9010 | 2.95 | | 27.9 |
| | 11.82 | 184 | 118 | 8770 | 3.28 | | 26.2 |
| | 12.93 | 169 | 108 | 8560 | 3.58 | FH40 71 | 25.5 |
| | 14.63 | 149 | 96 | 8270 | 4.06 | | 30.9 |
| | 16.61 | 131 | 84 | 7980 | 4.60 | | 28.9 |
| | 20.26 | 108 | 69 | 7540 | 5.61 | | |
| | 21.50 | 101 | 65 | 7410 | 5.97 | | |
| | 10.70 | 204 | 131 | 6510 | 1.98 | | |





| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 0.25 | 11.99 | 182 | 117 | 6330 | 2.22 | | | |
| (0.34HP) | 12.86 | 169 | 109 | 6220 | 2.38 | | | |
| | 14.45 | 151 | 97 | 6030 | 2.67 | | | 21 |
| | 16.11 | 135 | 87 | 5850 | 2.98 | | | 20.2 |
| | 18.34 | 119 | 76 | 5650 | 3.39 | FK35 | 71 | 19.6 |
| | 19.51 | 112 | 72 | 5550 | 3.61 | | | 23.8 |
| | 23.73 | 92 | 59 | 5280 | 4.39 | | | 22.3 |
| | 26.27 | 83 | 53 | 5100 | 4.71 | | | |
| | 29.74 | 73 | 47 | 4940 | 5.28 | | | |
| | 33.85 | 64 | 41 | 4750 | 5.96 | | | |
| | 9.30 | 234 | 150 | 5660 | 0.86 | | | |
| | 10.37 | 210 | 135 | 5500 | 0.96 | | | |
| | 12.04 | 181 | 116 | 5280 | 1.11 | | | |
| | 13.18 | 165 | 106 | 5160 | 1.22 | | | |
| | 15.08 | 144 | 93 | 4970 | 1.39 | | | |
| | 16.73 | 130 | 84 | 4820 | 1.55 | | | 14.4 |
| | 18.52 | 118 | 76 | 4680 | 1.71 | | | 13.8 |
| | 20.65 | 106 | 68 | 4540 | 1.91 | FK30 | 71 | 13.1 |
| | 23.46 | 93 | 60 | 4370 | 2.17 | | | 15.5 |
| | 28.28 | 77 | 50 | 4130 | 2.62 | | | 14.7 |
| | 31.49 | 69 | 44 | 4000 | 2.91 | | | |
| | 36.87 | 59 | 38 | 3810 | 3.41 | | | |
| | 43.49 | 50 | 32 | 3620 | 3.97 | | | |
| | 53.04 | 41 | 26 | 3400 | 4.66 | | | |
| | 54.42 | 40 | 26 | 3350 | 4.71 | | | |
| | 60.61 | 36 | 23 | 3240 | 5.25 | | | |
| 0.37 | 0.36 | 8194 | 3899 | 59172 | 0.85 | | | |
| (0.5HP) | 0.41 | 7192 | 3423 | 59172 | 0.97 | | | |
| | 0.46 | 6415 | 3053 | 59172 | 1.08 | | | |
| | 0.53 | 5535 | 2634 | 59172 | 1.26 | | | 298 |
| | 0.61 | 4816 | 2292 | 59172 | 1.44 | | | 264 |
| | 0.67 | 4374 | 2082 | 59172 | 1.59 | FK90 FH40 | 71 | 245 |
| | 0.77 | 3919 | 1809 | 59172 | 1.83 | | | 288 |
| | 0.87 | 3490 | 1611 | 59172 | 2.05 | | | 261 |
| | 0.99 | 3063 | 1414 | 59172 | 2.34 | | | |
| | 1.17 | 2596 | 1198 | 59172 | 2.76 | | | |
| | 1.41 | 2150 | 992 | 59172 | 3.33 | | | |
| | 1.78 | 1703 | 786 | 59172 | 4.21 | | | |
| | 0.67 | 4527 | 2078 | 38063 | 0.86 | | | |
| | 0.76 | 3992 | 1843 | 38063 | 1.00 | | | |
| | 0.85 | 3554 | 1640 | 38063 | 1.12 | | | |
| | 0.95 | 3192 | 1471 | 38063 | 1.21 | | | |
| | 1.15 | 2637 | 1219 | 38063 | 1.46 | | | |
| | 1.20 | 2523 | 1165 | 38063 | 1.58 | | | 174.4 |
| | 1.34 | 2263 | 1044 | 38063 | 1.70 | | | 164.4 |
| | 1.60 | 1901 | 878 | 38063 | 2.10 | FK80 FH30 | 71 | 154.2 |
| | 1.82 | 1669 | 770 | 38063 | 2.39 | | | 185.7 |
| | 2.18 | 1390 | 642 | 38063 | 2.87 | | | 171.9 |
| | 2.42 | 1253 | 579 | 38063 | 3.18 | | | |
| | 2.87 | 1056 | 487 | 38063 | 3.78 | | | |
| | 3.68 | 823 | 380 | 38063 | 4.85 | | | |
| | 4.11 | 738 | 341 | 38063 | 5.41 | | | |
| | 4.56 | 665 | 307 | 38063 | 6.00 | | | |
| | 1.13 | 2674 | 1234 | 23422 | 0.94 | | | |
| | 1.31 | 2317 | 1070 | 23422 | 1.08 | | | |
| | 1.43 | 2119 | 978 | 23422 | 1.18 | | | |
| | 1.73 | 1753 | 811 | 23422 | 1.38 | | | |
| | 1.92 | 1576 | 728 | 23422 | 1.59 | FK60 FH30 | | 115.8 |



| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 0.37 | 2.13 | 1424 | 657 | 23422 | 1.76 | | 105.6 |
| (0.5HP) | 2.49 | 1218 | 562 | 23422 | 2.06 | FK60 FH30 71 | 101.6 |
| | 2.87 | 1057 | 488 | 23422 | 2.37 | | 123.8 |
| | 3.24 | 936 | 432 | 23422 | 2.68 | | 109.9 |
| | 3.74 | 812 | 375 | 23422 | 3.09 | | |
| | 4.23 | 717 | 331 | 23422 | 3.49 | | |
| | 4.76 | 637 | 294 | 23422 | 3.93 | | |
| | 5.71 | 531 | 245 | 23422 | 4.71 | | |
| | 6.14 | 494 | 228 | 23422 | 5.07 | | |
| | 6.95 | 436 | 201 | 23422 | 5.74 | | |
| | 1.74 | 1746 | 806 | 13720 | 0.82 | | |
| | 1.88 | 1541 | 746 | 13720 | 0.86 | | |
| | 2.27 | 1334 | 616 | 13720 | 1.08 | | |
| | 2.53 | 1198 | 553 | 13720 | 1.20 | | |
| | 2.89 | 1050 | 485 | 13720 | 1.37 | | 67.2 |
| | 3.22 | 942 | 435 | 13720 | 1.53 | | 63.7 |
| | 3.80 | 799 | 369 | 13720 | 1.80 | FK50 FH25 71 | 64.2 |
| | 4.26 | 711 | 328 | 13720 | 2.02 | | 75.1 |
| | 4.75 | 638 | 294 | 13720 | 2.25 | | 70 |
| | 5.55 | 547 | 252 | 13720 | 2.63 | | |
| | 6.19 | 490 | 226 | 13720 | 2.93 | | |
| | 7.22 | 420 | 194 | 13720 | 3.42 | | |
| | 7.98 | 380 | 175 | 13720 | 3.78 | | |
| | 9.21 | 329 | 152 | 13720 | 4.36 | | |
| | 3.56 | 853 | 394 | 9500 | 0.89 | | |
| | 3.90 | 777 | 359 | 9500 | 0.98 | | |
| | 4.34 | 699 | 323 | 9500 | 1.09 | | 40.4 |
| | 5.12 | 592 | 273 | 9500 | 1.28 | | 38.4 |
| | 5.72 | 530 | 245 | 9500 | 1.43 | FK40* FH25 71 | 37.8 |
| | 6.30 | 482 | 222 | 9500 | 1.58 | | 43.8 |
| | 7.31 | 415 | 191 | 9500 | 1.83 | | 41.2 |
| | 8.51 | 356 | 165 | 9500 | 2.13 | | |
| | 9.87 | 307 | 142 | 9500 | 2.47 | | |
| | 11.33 | 268 | 124 | 9500 | 2.84 | | |
| | 4.39 | 691 | 319 | 7500 | 0.81 | | |
| | 4.98 | 609 | 281 | 7500 | 0.91 | | |
| | 5.83 | 520 | 240 | 7500 | 1.07 | | 36.9 |
| | 6.45 | 470 | 217 | 7500 | 1.18 | | 35.2 |
| | 7.11 | 426 | 197 | 7500 | 1.31 | FK40 FH25 71 | 34.5 |
| | 8.39 | 361 | 167 | 7500 | 1.54 | | 40 |
| | 9.74 | 311 | 144 | 7500 | 1.79 | | 38.1 |
| | 10.96 | 277 | 128 | 7500 | 2.01 | | |
| | 12.58 | 241 | 111 | 7500 | 2.31 | | |
| | 14.98 | 203 | 93 | 7500 | 2.75 | | |
| | 6.94 | 437 | 202 | 5590 | 0.82 | | 29.9 |
| | 7.98 | 380 | 175 | 5590 | 0.94 | | 29.2 |
| | 9.25 | 328 | 151 | 5590 | 1.09 | FK35 FH25 71 | 28.8 |
| | 10.91 | 278 | 128 | 5590 | 1.29 | | 33.2 |
| | 13.25 | 229 | 106 | 5590 | 1.57 | | 31.2 |
| | 14.58 | 208 | 96 | 5590 | 1.72 | | |
| | 9.36 | 344 | 150 | 14470 | 2.40 | | |
| | 10.72 | 301 | 131 | 14200 | 2.75 | | |
| | 11.85 | 272 | 118 | 13990 | 3.04 | | 31.9 |
| | 12.96 | 249 | 108 | 13780 | 3.32 | | 30.4 |
| | 14.67 | 220 | 95 | 13490 | 3.63 | FK40* 71 | 29.1 |
| | 16.65 | 194 | 84 | 13170 | 3.97 | | 35.1 |
| | 20.31 | 159 | 69 | 12650 | 4.57 | | 32.6 |
| | 21.55 | 150 | 65 | 12490 | 4.76 | | |

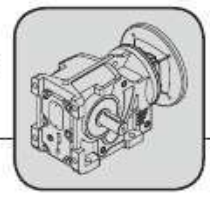


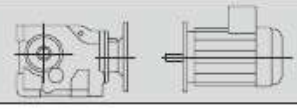
## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 0.37 | 24.96 | 129 | 56 | 12100 | 5.27 | | | |
| (0.5HP) | 9.34 | 345 | 150 | 8800 | 1.75 | | | |
| | 10.70 | 301 | 131 | 8550 | 2.00 | | | |
| | 11.82 | 273 | 118 | 8360 | 2.22 | | | |
| | 12.93 | 249 | 108 | 8190 | 2.42 | | | 27.9 |
| | 14.63 | 220 | 96 | 7950 | 2.74 | | | 26.2 |
| | 16.61 | 194 | 84 | 7700 | 3.10 | FK40 | 71 | 25.5 |
| | 20.26 | 159 | 69 | 7310 | 3.79 | | | 30.9 |
| | 21.50 | 150 | 65 | 7190 | 4.03 | | | 28.9 |
| | 24.90 | 129 | 56 | 6910 | 4.68 | | | |
| | 29.57 | 109 | 47 | 6690 | 5.54 | | | |
| | 31.51 | 102 | 44 | 6460 | 5.71 | | | |
| | 10.70 | 301 | 131 | 6090 | 1.32 | | | |
| | 11.99 | 269 | 117 | 5960 | 1.48 | | | |
| | 12.86 | 251 | 109 | 5870 | 1.59 | | | |
| | 14.45 | 223 | 97 | 5730 | 1.78 | | | |
| | 16.11 | 200 | 87 | 5590 | 1.99 | | | |
| | 18.34 | 176 | 76 | 5420 | 2.26 | | | 21 |
| | 19.51 | 165 | 72 | 5340 | 2.41 | | | 20.2 |
| | 23.73 | 136 | 59 | 5110 | 2.93 | FK35 | 71 | 19.6 |
| | 26.27 | 123 | 53 | 4940 | 3.14 | | | 23.8 |
| | 29.74 | 108 | 47 | 4810 | 3.52 | | | 22.3 |
| | 33.85 | 95 | 41 | 4640 | 3.97 | | | |
| | 36.00 | 90 | 39 | 4560 | 4.14 | | | |
| | 44.66 | 72 | 31 | 4260 | 4.83 | | | |
| | 48.48 | 67 | 29 | 4180 | 5.05 | | | |
| | 53.24 | 61 | 26 | 4050 | 5.53 | | | |
| | 56.62 | 57 | 25 | 3970 | 5.86 | | | |
| | 16.73 | 193 | 84 | 4430 | 1.05 | | | |
| | 18.52 | 174 | 76 | 4330 | 1.16 | | | |
| | 20.65 | 156 | 68 | 4220 | 1.29 | | | |
| | 23.46 | 137 | 60 | 4100 | 1.47 | | | |
| | 28.28 | 114 | 50 | 3910 | 1.77 | | | |
| | 31.49 | 102 | 44 | 3800 | 1.97 | | | 14.5 |
| | 36.87 | 87 | 38 | 3650 | 2.30 | | | 13.8 |
| | 43.49 | 74 | 32 | 3480 | 2.68 | FK30 | 71 | 3.1 |
| | 53.04 | 61 | 26 | 3290 | 3.15 | | | 15.5 |
| | 54.42 | 59 | 26 | 3220 | 3.19 | | | 14.7 |
| | 60.61 | 53 | 23 | 3120 | 3.55 | | | |
| | 70.95 | 45 | 20 | 2980 | 4.13 | | | |
| | 83.69 | 39 | 17 | 2840 | 4.84 | | | |
| | 91.41 | 35 | 15 | 2800 | 5.06 | | | |
| | 107.02 | 30 | 13 | 2670 | 5.93 | | | |
| 0.55 | 0.61 | 7159 | 2292 | 59172 | 0.97 | | | |
| (0.74HP) | 0.67 | 6502 | 2082 | 59172 | 1.07 | | | |
| | 0.77 | 5825 | 1809 | 59172 | 1.23 | | | |
| | 0.87 | 5188 | 1611 | 59172 | 1.38 | | | 298 |
| | 0.99 | 4554 | 1414 | 59172 | 1.57 | | | 264 |
| | 1.17 | 3859 | 1198 | 59172 | 1.86 | FK90 FH40 | 80 | 245 |
| | 1.41 | 3196 | 992 | 59172 | 2.24 | | | 288 |
| | 1.78 | 2531 | 786 | 59172 | 2.83 | | | 261 |
| | 2.04 | 2205 | 685 | 59172 | 3.25 | | | |
| | 2.31 | 1949 | 605 | 59172 | 3.68 | | | |
| | 2.67 | 1689 | 524 | 59172 | 4.24 | | | |
| | 0.95 | 4746 | 1471 | 38063 | 0.81 | | | |
| | 1.15 | 3920 | 1219 | 38063 | 0.98 | | | |
| | 1.20 | 3751 | 1165 | 38063 | 1.06 | | | |
| | 1.34 | 3364 | 1044 | 38063 | 1.14 | | | |



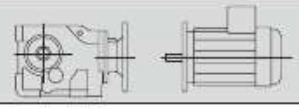
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 0.55 | 1.60 | 2826 | 878 | 38063 | 1.41 | | 174.4 |
| (0.74HP) | 1.82 | 2481 | 770 | 38063 | 1.61 | | 164.4 |
| | 2.18 | 2066 | 642 | 38063 | 1.93 | FK80 FH30 80 | 154.2 |
| | 2.42 | 1863 | 579 | 38063 | 2.14 | | 185.7 |
| | 2.87 | 1569 | 487 | 38063 | 2.54 | | 171.9 |
| | 3.68 | 1224 | 380 | 38063 | 3.26 | | |
| | 4.11 | 1097 | 341 | 38063 | 3.64 | | |
| | 4.56 | 989 | 307 | 38063 | 4.03 | | |
| | 5.41 | 833 | 259 | 38063 | 4.79 | | |
| | 6.12 | 737 | 229 | 38063 | 5.41 | | |
| | 1.43 | 3150 | 978 | 23422 | 0.80 | | |
| | 1.73 | 2606 | 811 | 23422 | 0.93 | | |
| | 1.92 | 2343 | 728 | 23422 | 1.07 | | |
| | 2.13 | 2117 | 657 | 23422 | 1.18 | | |
| | 2.49 | 1811 | 562 | 23422 | 1.38 | | |
| | 2.87 | 1572 | 488 | 23422 | 1.59 | | |
| | 3.24 | 1391 | 432 | 23422 | 1.80 | | 115.8 |
| | 3.74 | 1207 | 375 | 23422 | 2.08 | | 105.6 |
| | 4.23 | 1066 | 331 | 23422 | 2.35 | FK60 FH30 80 | 101.6 |
| | 4.76 | 947 | 294 | 23422 | 2.65 | | 123.8 |
| | 5.71 | 790 | 245 | 23422 | 3.17 | | 109.9 |
| | 6.14 | 734 | 228 | 23422 | 3.41 | | |
| | 6.95 | 649 | 201 | 23422 | 3.86 | | |
| | 7.75 | 582 | 181 | 23422 | 4.30 | | |
| | 8.85 | 509 | 158 | 23422 | 4.92 | | |
| | 9.87 | 457 | 142 | 23422 | 5.48 | | |
| | 2.53 | 1780 | 553 | 13720 | 0.81 | | |
| | 2.89 | 1561 | 485 | 13720 | 0.92 | | |
| | 3.22 | 1400 | 435 | 13720 | 1.03 | | |
| | 3.80 | 1187 | 369 | 13720 | 1.21 | | 67.2 |
| | 4.26 | 1057 | 328 | 13720 | 1.36 | | 63.7 |
| | 4.75 | 948 | 294 | 13720 | 1.52 | FK50 FH25 80 | 64.2 |
| | 5.55 | 812 | 252 | 13720 | 1.77 | | 75.1 |
| | 6.19 | 728 | 226 | 13720 | 1.97 | | 70 |
| | 7.22 | 625 | 194 | 13720 | 2.30 | | |
| | 7.98 | 565 | 175 | 13720 | 2.55 | | |
| | 9.21 | 490 | 152 | 13720 | 2.94 | | |
| | 5.12 | 880 | 273 | 9500 | 0.86 | | |
| | 5.72 | 788 | 245 | 9500 | 0.96 | | 40.4 |
| | 6.30 | 716 | 222 | 9500 | 1.06 | | 38.4 |
| | 7.31 | 616 | 191 | 9500 | 1.23 | FK40* FH25 80 | 37.8 |
| | 8.51 | 530 | 165 | 9500 | 1.43 | | 43.8 |
| | 9.87 | 457 | 142 | 9500 | 1.66 | | 41.2 |
| | 11.33 | 398 | 124 | 9500 | 1.91 | | |
| | 6.45 | 880 | 217 | 7500 | 0.80 | | |
| | 7.11 | 788 | 197 | 7500 | 0.88 | | 36.9 |
| | 8.39 | 716 | 167 | 7500 | 1.04 | | 35.2 |
| | 9.74 | 616 | 144 | 7500 | 1.20 | FK40 FH25 80 | 34.5 |
| | 10.96 | 530 | 128 | 7500 | 1.35 | | 40 |
| | 12.58 | 457 | 111 | 7500 | 1.55 | | 38.1 |
| | 14.98 | 398 | 93 | 7500 | 1.85 | | |
| | 10.91 | 413 | 128 | 5590 | 0.87 | | 29.9 |
| | 13.25 | 340 | 106 | 5590 | 1.05 | | 29.2 |
| | 14.58 | 309 | 96 | 5590 | 1.16 | FK35 FH25 80 | 28.8 |
| | | | | | | | 33.2 |
| | | | | | | | 31.2 |
| | 9.36 | 512 | 150 | 12750 | 1.61 | | |
| | 10.72 | 447 | 131 | 12700 | 1.85 | | |



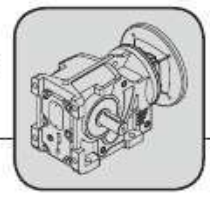
## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 0.55 | 11.85 | 404 | 118 | 12620 | 2.04 | | |
| (0.74HP) | 12.96 | 370 | 108 | 12540 | 2.23 | | |
| | 14.67 | 327 | 95 | 12380 | 2.44 | | |
| | 16.65 | 288 | 84 | 12200 | 2.67 | | 31.9 |
| | 20.31 | 236 | 69 | 11860 | 3.07 | | 30.4 |
| | 21.55 | 222 | 65 | 11740 | 3.20 | FK40* 80 | 29.1 |
| | 24.96 | 192 | 56 | 11450 | 3.55 | | 35.1 |
| | 30.22 | 159 | 46 | 11010 | 4.36 | | 32.6 |
| | 31.59 | 152 | 44 | 10950 | 4.18 | | |
| | 36.86 | 130 | 38 | 10580 | 5.02 | | |
| | 39.11 | 123 | 36 | 10450 | 5.23 | | |
| | 42.09 | 114 | 33 | 10310 | 5.12 | | |
| | 45.31 | 106 | 31 | 10120 | 5.80 | | |
| | 51.34 | 93 | 27 | 9860 | 5.88 | | |
| | 9.34 | 513 | 150 | 7940 | 1.18 | | |
| | 10.70 | 448 | 131 | 7820 | 1.34 | | |
| | 11.82 | 405 | 118 | 7700 | 1.49 | | |
| | 12.93 | 371 | 108 | 7590 | 1.63 | | |
| | 14.63 | 328 | 96 | 7430 | 1.84 | | |
| | 16.61 | 289 | 84 | 7250 | 2.09 | | |
| | 20.26 | 237 | 69 | 6940 | 2.55 | | 27.9 |
| | 21.50 | 223 | 65 | 6850 | 2.71 | | 26.2 |
| | 24.90 | 192 | 56 | 6620 | 3.15 | FK40 80 | 25.5 |
| | 29.57 | 162 | 47 | 6500 | 3.73 | | 30.9 |
| | 31.51 | 152 | 44 | 6240 | 3.84 | | 28.9 |
| | 33.56 | 143 | 42 | 6280 | 4.07 | | |
| | 40.94 | 117 | 34 | 5930 | 4.95 | | |
| | 43.45 | 110 | 32 | 5830 | 5.22 | | |
| | 50.33 | 95 | 28 | 5590 | 5.29 | | |
| | 54.35 | 88 | 26 | 5380 | 5.37 | | |
| | 62.95 | 76 | 22 | 5150 | 5.88 | | |
| | 10.70 | 448 | 131 | 5400 | 0.90 | | |
| | 11.99 | 400 | 117 | 5350 | 1.01 | | |
| | 12.86 | 373 | 109 | 5320 | 1.08 | | |
| | 14.45 | 332 | 97 | 5240 | 1.21 | | |
| | 16.11 | 297 | 87 | 5160 | 1.35 | | |
| | 18.34 | 261 | 76 | 5050 | 1.54 | | |
| | 19.51 | 246 | 72 | 4990 | 1.64 | | |
| | 23.73 | 202 | 59 | 4840 | 2.00 | | 21 |
| | 26.27 | 182 | 53 | 4690 | 2.14 | | 20.2 |
| | 29.74 | 161 | 47 | 4600 | 2.40 | FK35 80 | 19.6 |
| | 33.85 | 142 | 41 | 4460 | 2.71 | | 23.8 |
| | 36.00 | 133 | 39 | 4390 | 2.82 | | 22.3 |
| | 44.66 | 107 | 31 | 4120 | 3.29 | | |
| | 48.48 | 99 | 29 | 4060 | 3.44 | | |
| | 53.24 | 90 | 26 | 3930 | 3.77 | | |
| | 56.62 | 85 | 25 | 3870 | 3.99 | | |
| | 67.81 | 71 | 21 | 3700 | 4.31 | | |
| | 76.26 | 63 | 18 | 3550 | 4.82 | | |
| | 82.41 | 58 | 17 | 3490 | 4.91 | | |
| | 20.65 | 232 | 68 | 3890 | 0.87 | | |
| | 23.46 | 204 | 60 | 3810 | 0.99 | | |
| | 28.28 | 169 | 50 | 3680 | 1.19 | | |
| | 31.49 | 152 | 44 | 3600 | 1.32 | | |
| | 36.87 | 130 | 38 | 3480 | 1.55 | | 14.5 |
| | 43.49 | 110 | 32 | 3340 | 1.80 | | 13.8 |
| | 53.04 | 90 | 26 | 3180 | 2.12 | FK30 80 | 13.1 |
| | 54.42 | 88 | 26 | 3080 | 2.14 | | 15.5 |

3

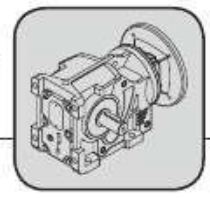


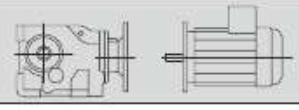
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 0.55 | 60.61 | 79 | 23 | 3000 | 2.39 | FK30 | | 14.7 |
| (0.74HP) | 70.95 | 68 | 20 | 2880 | 2.78 | | | |
| | 83.69 | 57 | 17 | 2760 | 3.26 | | | |
| | 91.41 | 52 | 15 | 2740 | 3.40 | | | |
| | 107.02 | 45 | 13 | 2620 | 3.99 | | | |
| | 126.23 | 38 | 11 | 2490 | 4.69 | | | |
| | 153.95 | 31 | 9 | 2350 | 5.71 | | | |
| 0.75 | 0.77 | 7943 | 1809 | 59172 | 0.90 | | | |
| (1HP) | 0.87 | 7075 | 1611 | 59172 | 1.01 | | | |
| | 0.99 | 6209 | 1414 | 59172 | 1.15 | | | |
| | 1.17 | 5262 | 1198 | 59172 | 1.36 | | | 300 |
| | 1.41 | 4358 | 992 | 59172 | 1.64 | | | 266 |
| | 1.78 | 3452 | 786 | 59172 | 2.08 | FK90 FH40 | 80 | 247 |
| | 2.04 | 3007 | 685 | 59172 | 2.38 | | | 290 |
| | 2.31 | 2657 | 605 | 59172 | 2.70 | | | 263 |
| | 2.67 | 2303 | 524 | 59172 | 3.11 | | | |
| | 3.06 | 2010 | 458 | 59172 | 3.56 | | | |
| | 3.56 | 1728 | 393 | 59172 | 4.15 | | | |
| | 1.34 | 4588 | 1044 | 38063 | 0.84 | | | |
| | 1.60 | 3853 | 878 | 38063 | 1.04 | | | |
| | 1.82 | 3383 | 770 | 38063 | 1.18 | | | |
| | 2.16 | 2818 | 642 | 38063 | 1.42 | | | 176.2 |
| | 2.42 | 2541 | 579 | 38063 | 1.57 | | | 166.2 |
| | 2.87 | 2140 | 487 | 38063 | 1.86 | FK80 FH30 | 80 | 155.9 |
| | 3.68 | 1669 | 380 | 38063 | 2.39 | | | 187.5 |
| | 4.11 | 1496 | 341 | 38063 | 2.67 | | | 173.7 |
| | 4.56 | 1349 | 307 | 38063 | 2.96 | | | |
| | 5.41 | 1136 | 259 | 38063 | 3.51 | | | |
| | 6.12 | 1005 | 229 | 38063 | 3.97 | | | |
| | 6.82 | 901 | 205 | 38063 | 4.43 | | | |
| | 2.13 | 2886 | 657 | 23422 | 0.87 | | | |
| | 2.49 | 2470 | 562 | 23422 | 1.01 | | | |
| | 2.87 | 2143 | 488 | 23422 | 1.17 | | | |
| | 3.24 | 1897 | 432 | 23422 | 1.32 | | | |
| | 3.74 | 1646 | 375 | 23422 | 1.52 | | | 117.6 |
| | 4.23 | 1453 | 331 | 23422 | 1.72 | | | 107.4 |
| | 4.76 | 1291 | 294 | 23422 | 1.94 | FK60 FH30 | 80 | 104.7 |
| | 5.71 | 1077 | 245 | 23422 | 2.33 | | | 126.9 |
| | 6.14 | 1001 | 228 | 23422 | 2.50 | | | 112.5 |
| | 6.95 | 885 | 201 | 23422 | 2.83 | | | |
| | 7.75 | 794 | 181 | 23422 | 3.16 | | | |
| | 8.85 | 694 | 158 | 23422 | 3.61 | | | |
| | 9.87 | 623 | 142 | 23422 | 4.02 | | | |
| | 3.80 | 1619 | 369 | 13720 | 0.89 | | | |
| | 4.26 | 1442 | 328 | 13720 | 1.00 | | | 68.9 |
| | 4.75 | 1293 | 294 | 13720 | 1.11 | | | 64.4 |
| | 5.55 | 1108 | 252 | 13720 | 1.30 | FK50 FH25 | 80 | 65.2 |
| | 6.19 | 993 | 226 | 13720 | 1.45 | | | 76.9 |
| | 7.22 | 852 | 194 | 13720 | 1.69 | | | 71.7 |
| | 7.98 | 770 | 175 | 13720 | 1.87 | | | |
| | 9.21 | 668 | 152 | 13720 | 2.15 | | | |
| | 7.31 | 841 | 191 | 9500 | 0.90 | | | 42.2 |
| | 8.51 | 722 | 165 | 9500 | 1.05 | | | 40 |
| | 9.87 | 623 | 142 | 9500 | 1.22 | FK40* FH25 | 80 | 39.1 |
| | 11.33 | 543 | 124 | 9500 | 1.40 | | | 45.5 |
| | | | | | | | | 42.9 |
| | 9.74 | 631 | 144 | 7500 | 0.88 | | | 38.6 |
| | 10.96 | 561 | 128 | 7500 | 0.99 | FK40 FH25 | | 35.9 |





| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] | |
|---|---|---|---|---|---|---|---|---|---|
| 0.75 | 12.58 | 489 | 111 | 7500 | 1.14 | | 80 | 36.2 | |
| (1HP) | 14.98 | 410 | 93 | 7500 | 1.36 | FK40 FH25 | | 41.7 | |
| | | | | | | | | 39.7 | |
| | 14.58 | 422 | 96 | 5590 | 0.85 | | 80 | 31.5 | |
| | | | | | | | | 30.9 | |
| | | | | | | FK35 FH25 | | 30.5 | |
| | | | | | | | | 34.9 | |
| | | | | | | | | 32.9 | |
| | 6.53 | 1001 | 215 | 33240 | 1.60 | | 80 | | |
| | 7.35 | 889 | 190 | 32520 | 1.60 | | | 98.1 | |
| | 7.76 | 842 | 180 | 32180 | 1.60 | | | 91.2 | |
| | 9.24 | 708 | 152 | 31080 | 1.60 | FK60 | | 87 | |
| | 10.83 | 603 | 129 | 30040 | 4.51 | | | 104 | |
| | 11.91 | 549 | 118 | 29410 | 4.96 | | | 95.3 | ▲ |
| | 12.96 | 504 | 108 | 28850 | 5.39 | | | | ▲ |
| | 7.20 | 907 | 194 | 18530 | 1.60 | | 80 | | |
| | 7.77 | 841 | 180 | 18480 | 1.60 | | | | |
| | 8.71 | 750 | 161 | 18360 | 1.60 | | | | |
| | 9.71 | 673 | 144 | 18190 | 1.60 | | | 59.9 | |
| | 11.39 | 574 | 123 | 17890 | 1.60 | | | 55.7 | |
| | 12.81 | 510 | 109 | 17610 | 1.60 | FK50 | | 56.6 | |
| | 13.91 | 470 | 101 | 17410 | 3.32 | | | 57.2 | |
| | 15.54 | 420 | 90 | 17110 | 3.71 | | | 63 | |
| | 17.93 | 364 | 78 | 16700 | 4.28 | | | | |
| | 21.85 | 299 | 64 | 16090 | 5.22 | | | | ▲ |
| | 24.54 | 266 | 57 | 15720 | 5.86 | | | | ▲ |
| | 9.36 | 698 | 150 | 10820 | 1.18 | | | | |
| | 10.72 | 609 | 131 | 11020 | 1.36 | | | | |
| | 11.85 | 551 | 118 | 11110 | 1.50 | | | | |
| | 12.96 | 504 | 108 | 11150 | 1.64 | | | | |
| | 14.67 | 446 | 95 | 11160 | 1.79 | | | | |
| | 16.65 | 393 | 84 | 11120 | 1.96 | | | | |
| | 20.31 | 322 | 69 | 10970 | 2.25 | | | | |
| | 21.55 | 303 | 65 | 10910 | 2.35 | | | 33.6 | |
| | 24.96 | 262 | 56 | 10730 | 2.60 | | | 31 | |
| | 30.22 | 216 | 46 | 10400 | 3.20 | FK40* | 80 | 30.6 | |
| | 31.59 | 207 | 44 | 10380 | 3.07 | | | 36.6 | |
| | 36.86 | 177 | 38 | 10080 | 3.68 | | | 34.1 | |
| | 39.11 | 167 | 36 | 9980 | 3.84 | | | | |
| | 42.09 | 155 | 33 | 9880 | 3.75 | | | | |
| | 45.31 | 144 | 31 | 9710 | 4.25 | | | | |
| | 51.34 | 127 | 27 | 9500 | 4.31 | | | | |
| | 54.48 | 120 | 26 | 9390 | 4.49 | | | | |
| | 57.33 | 114 | 24 | 9260 | 5.01 | | | | |
| | 63.11 | 104 | 22 | 9100 | 4.98 | | | | |
| | 79.86 | 82 | 18 | 8630 | 5.87 | | | | |
| | 11.82 | 553 | 118 | 6930 | 1.09 | | | | |
| | 12.93 | 505 | 108 | 6890 | 1.19 | | | | |
| | 14.63 | 447 | 96 | 6820 | 1.35 | | | | |
| | 16.61 | 394 | 84 | 6720 | 1.53 | | | | |
| | 20.26 | 323 | 69 | 6520 | 1.87 | | | | |
| | 21.50 | 304 | 65 | 6460 | 1.99 | | | 30.2 | |
| | 24.90 | 262 | 56 | 6280 | 2.31 | | | 28.6 | |
| | 29.57 | 221 | 47 | 6270 | 2.74 | FK40 | 80 | 27.5 | |
| | 31.51 | 207 | 44 | 5980 | 2.81 | | | 32.9 | |
| | 33.56 | 195 | 42 | 6080 | 2.98 | | | 30.9 | |
| | 40.94 | 160 | 34 | 5780 | 3.63 | | | | |
| | 43.45 | 150 | 32 | 5690 | 3.83 | | | | |



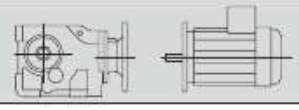
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 0.75 (1HP) | 50.33 | 130 | 28 | 5460 | 3.88 | | |
| | 54.35 | 120 | 26 | 5230 | 3.93 | | |
| | 62.95 | 104 | 22 | 5030 | 4.31 | | |
| | 79.66 | 82 | 18 | 4710 | 4.98 | | |
| | 16.11 | 406 | 87 | 4640 | 0.99 | | |
| | 18.34 | 356 | 76 | 4600 | 1.13 | | |
| | 19.51 | 335 | 72 | 4580 | 1.20 | | |
| | 23.73 | 275 | 59 | 4520 | 1.46 | | |
| | 26.27 | 249 | 53 | 4400 | 1.57 | | |
| | 29.74 | 220 | 47 | 4360 | 1.76 | | |
| | 33.85 | 193 | 41 | 4250 | 1.99 | | 22.8 |
| | 36.00 | 182 | 39 | 4190 | 2.07 | | 21.9 |
| | 44.66 | 146 | 31 | 3960 | 2.41 | FK35 80 | 21.3 |
| | 48.48 | 135 | 29 | 3920 | 2.53 | | 25.5 |
| | 53.24 | 123 | 26 | 3800 | 2.77 | | 24 |
| | 56.62 | 115 | 25 | 3740 | 2.93 | | |
| | 67.81 | 96 | 21 | 3600 | 3.16 | | |
| | 76.26 | 86 | 18 | 3460 | 3.53 | | |
| | 82.41 | 79 | 17 | 3410 | 3.60 | | |
| | 106.66 | 61 | 13 | 3160 | 4.52 | | |
| | 129.63 | 50 | 11 | 2990 | 5.11 | | |
| | 140.74 | 46 | 10 | 2930 | 5.14 | | |
| | 36.87 | 177 | 38 | 3280 | 1.14 | | |
| | 43.49 | 150 | 32 | 3180 | 1.32 | | |
| | 53.04 | 123 | 26 | 3050 | 1.55 | | |
| | 54.42 | 120 | 26 | 2920 | 1.57 | | |
| | 60.61 | 108 | 23 | 2860 | 1.75 | | 16.2 |
| | 70.95 | 92 | 20 | 2760 | 2.04 | | 15.6 |
| | 83.69 | 78 | 17 | 2660 | 2.39 | FK30 80 | 14.9 |
| | 91.41 | 72 | 15 | 2670 | 2.50 | | 17.3 |
| | 107.02 | 61 | 13 | 2560 | 2.92 | | 16.4 |
| | 126.23 | 52 | 11 | 2440 | 3.44 | | |
| | 153.95 | 42 | 9 | 2310 | 4.19 | | |
| | 175.93 | 37 | 8 | 2190 | 4.78 | | |
| | 205.96 | 32 | 7 | 2090 | 5.31 | | |
| | 242.95 | 27 | 6 | 1990 | 5.92 | | |
| 1.1 (1.5HP) | 1.17 | 7717 | 1198 | 59172 | 0.93 | | |
| | 1.41 | 6391 | 992 | 59172 | 1.12 | | |
| | 1.78 | 5062 | 786 | 59172 | 1.42 | | |
| | 2.04 | 4410 | 685 | 59172 | 1.62 | | 300 |
| | 2.31 | 3898 | 605 | 59172 | 1.84 | | 266 |
| | 2.67 | 3378 | 524 | 59172 | 2.12 | FK90 FH40 90 | 247 |
| | 3.06 | 2948 | 458 | 59172 | 2.43 | | 290 |
| | 3.56 | 2534 | 393 | 59172 | 2.83 | | 263 |
| | 3.90 | 2310 | 359 | 59172 | 3.10 | | |
| | 4.42 | 2040 | 317 | 59172 | 3.51 | | |
| | 5.07 | 1777 | 276 | 59172 | 4.03 | | |
| | 1.82 | 4962 | 770 | 38063 | 0.80 | | |
| | 2.18 | 4133 | 642 | 38063 | 0.97 | | |
| | 2.42 | 3726 | 579 | 38063 | 1.07 | | 176.2 |
| | 2.87 | 3138 | 487 | 38063 | 1.27 | | 166.2 |
| | 3.68 | 2447 | 380 | 38063 | 1.63 | FK80 FH30 90 | 155.9 |
| | 4.11 | 2194 | 341 | 38063 | 1.82 | | 187.5 |
| | 4.56 | 1978 | 307 | 38063 | 2.02 | | 173.7 |
| | 5.41 | 1667 | 259 | 38063 | 2.39 | | |
| | 6.12 | 1474 | 229 | 38063 | 2.71 | | |
| | 6.82 | 1322 | 205 | 38063 | 3.02 | | |
| | 2.87 | 3143 | 488 | 23422 | 0.80 | | |



## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] | |
|---|---|---|---|---|---|---|---|---|
| 1.1 | 3.24 | 2782 | 432 | 23422 | 0.90 | | | |
| (1.5HP) | 3.74 | 2414 | 375 | 23422 | 1.04 | | | |
| | 4.23 | 2131 | 331 | 23422 | 1.18 | | 117.6 | |
| | 4.76 | 1893 | 294 | 23422 | 1.32 | | 107.4 | |
| | 5.71 | 1580 | 245 | 23422 | 1.59 | FK60 FH30 90 | 104.7 | |
| | 6.14 | 1469 | 228 | 23422 | 1.71 | | 126.9 | |
| | 6.95 | 1298 | 201 | 23422 | 1.93 | | 112.5 | |
| | 7.75 | 1164 | 181 | 23422 | 2.15 | | | |
| | 8.85 | 1018 | 158 | 23422 | 2.46 | | | |
| | 9.87 | 914 | 142 | 23422 | 2.74 | | | |
| | 5.55 | 1625 | 252 | 13720 | 0.88 | | 68.9 | |
| | 6.19 | 1457 | 226 | 13720 | 0.99 | | 64.4 | |
| | 7.22 | 1249 | 194 | 13720 | 1.15 | FK50 FH25 90 | 65.2 | |
| | 7.98 | 1130 | 175 | 13720 | 1.27 | | 76.9 | |
| | 9.21 | 979 | 152 | 13720 | 1.47 | | 71.7 | |
| | 9.87 | 914 | 142 | 9500 | 0.83 | | 42.2 | |
| | 11.33 | 796 | 124 | 9500 | 0.95 | | 40 | |
| | | | | | | FK40* FH25 90 | 39.1 | |
| | | | | | | | 45.5 | |
| | | | | | | | 42.9 | |
| | 14.98 | 602 | 93 | 7500 | 0.92 | | 38.6 | |
| | | | | | | | 35.9 | |
| | | | | | | FK40 FH25 90 | 36.2 | |
| | | | | | | | 41.7 | |
| | | | | | | | 39.7 | |
| | 6.53 | 1468 | 215 | 30530 | 1.10 | | | |
| | 7.35 | 1303 | 190 | 30120 | 1.10 | | | |
| | 7.76 | 1234 | 180 | 29910 | 1.10 | | 98.1 | |
| | 9.24 | 1038 | 152 | 29170 | 1.10 | | 91.2 | |
| | 10.83 | 885 | 129 | 28410 | 3.07 | FK60 90 | 87 | |
| | 11.91 | 805 | 118 | 27930 | 3.38 | | 104 | ▲ |
| | 12.96 | 739 | 108 | 27490 | 3.68 | | 95.3 | ▲ |
| | 14.92 | 642 | 94 | 26740 | 4.23 | | | ▲ |
| | 16.90 | 567 | 83 | 26060 | 4.73 | | | ▲ |
| | 19.35 | 495 | 72 | 25300 | 5.28 | | | ▲ |
| | 7.20 | 1330 | 194 | 15150 | 1.10 | | | |
| | 7.77 | 1233 | 180 | 15350 | 1.10 | | | |
| | 8.71 | 1100 | 161 | 15560 | 1.10 | | | |
| | 9.71 | 987 | 144 | 15690 | 1.10 | | | |
| | 11.39 | 842 | 123 | 15750 | 1.10 | | 59.9 | |
| | 12.81 | 748 | 109 | 15710 | 1.10 | | 55.7 | |
| | 13.91 | 689 | 101 | 15660 | 2.27 | FK50 90 | 56.6 | |
| | 15.54 | 617 | 90 | 15540 | 2.53 | | 67.2 | |
| | 17.93 | 534 | 78 | 15340 | 2.92 | | 63 | |
| | 21.85 | 439 | 64 | 14970 | 3.56 | | | ▲ |
| | 24.54 | 391 | 57 | 14730 | 4.00 | | | ▲ |
| | 27.36 | 350 | 51 | 14470 | 4.46 | | | ▲ |
| | 29.71 | 323 | 47 | 14270 | 4.84 | | | ▲ |
| | 35.21 | 272 | 40 | 13840 | 5.53 | | | ▲ |
| | 9.36 | 1024 | 150 | 1820 | 0.81 | | | |
| | 10.72 | 894 | 131 | 6440 | 0.92 | | | |
| | 11.85 | 809 | 118 | 8450 | 1.02 | | | |
| | 12.96 | 739 | 108 | 8720 | 1.12 | | | |
| | 14.67 | 653 | 95 | 9010 | 1.22 | | | |
| | 16.65 | 576 | 84 | 9230 | 1.34 | | | |
| | 20.31 | 472 | 69 | 9420 | 1.54 | | | |
| | 21.55 | 445 | 65 | 9450 | 1.60 | | | |
| | 24.96 | 384 | 56 | 9470 | 1.77 | FK40* | 33.6 | |

3



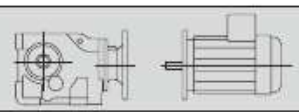
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 1.1 | 30.22 | 317 | 46 | 9340 | 2.18 | FK40* | | 31 |
| (1.5HP) | 31.59 | 303 | 44 | 9380 | 2.09 | | 90 | 30.6 |
| | 36.86 | 260 | 38 | 9200 | 2.51 | | | 36.6 |
| | 39.11 | 245 | 36 | 9150 | 2.62 | | | 34.1 |
| | 42.09 | 228 | 33 | 9130 | 2.56 | | | |
| | 45.31 | 212 | 31 | 9000 | 2.90 | | | |
| | 51.34 | 187 | 27 | 8890 | 2.94 | | | |
| | 54.48 | 176 | 26 | 8810 | 3.06 | | | |
| | 57.33 | 167 | 24 | 8700 | 3.42 | | | |
| | 63.11 | 152 | 22 | 8600 | 3.39 | | | |
| | 79.86 | 120 | 18 | 8240 | 4.00 | | | |
| | 98.89 | 97 | 14 | 7860 | 5.01 | | | |
| | 114.55 | 84 | 12 | 7620 | 5.55 | | | |
| | 12.93 | 741 | 108 | 5520 | 0.81 | | | |
| | 14.63 | 655 | 96 | 5640 | 0.92 | | | |
| | 16.61 | 577 | 84 | 5710 | 1.04 | | | |
| | 20.26 | 473 | 69 | 5720 | 1.27 | | | |
| | 21.50 | 446 | 65 | 5710 | 1.36 | | | |
| | 24.90 | 385 | 56 | 5650 | 1.57 | | | |
| | 29.57 | 324 | 47 | 5830 | 1.87 | | | 30.2 |
| | 31.51 | 304 | 44 | 5490 | 1.92 | | | 28.6 |
| | 33.56 | 286 | 42 | 5700 | 2.03 | FK40 | 90 | 27.5 |
| | 40.94 | 234 | 34 | 5480 | 2.48 | | | 32.9 |
| | 43.45 | 221 | 32 | 5410 | 2.61 | | | 30.9 |
| | 50.33 | 190 | 28 | 5230 | 2.64 | | | |
| | 54.35 | 176 | 26 | 4970 | 2.68 | | | |
| | 62.95 | 152 | 22 | 4800 | 2.94 | | | |
| | 79.66 | 120 | 18 | 4540 | 3.40 | | | |
| | 109.84 | 87 | 13 | 4260 | 4.58 | | | |
| | 127.24 | 75 | 11 | 4080 | 5.15 | | | |
| | 19.51 | 491 | 72 | 3760 | 0.82 | | | |
| | 23.73 | 404 | 59 | 3870 | 1.00 | | | |
| | 26.27 | 365 | 53 | 3830 | 1.07 | | | |
| | 29.74 | 322 | 47 | 3860 | 1.20 | | | |
| | 33.85 | 283 | 41 | 3830 | 1.36 | | | |
| | 36.00 | 266 | 39 | 3810 | 1.41 | | | |
| | 44.66 | 215 | 31 | 3660 | 1.65 | | | 22.8 |
| | 48.48 | 198 | 29 | 3650 | 1.72 | | | 21.9 |
| | 53.24 | 180 | 26 | 3550 | 1.89 | FK35 | 90 | 21.3 |
| | 56.62 | 169 | 25 | 3510 | 2.00 | | | 25.5 |
| | 67.81 | 141 | 21 | 3420 | 2.15 | | | 24 |
| | 76.26 | 126 | 18 | 3300 | 2.41 | | | |
| | 82.41 | 116 | 17 | 3270 | 2.45 | | | |
| | 106.66 | 90 | 13 | 3040 | 3.08 | | | |
| | 129.63 | 74 | 11 | 2890 | 3.48 | | | |
| | 140.74 | 68 | 10 | 2850 | 3.50 | | | |
| | 196.83 | 49 | 7 | 2590 | 4.38 | | | |
| | 239.23 | 40 | 6 | 2450 | 4.99 | | | |
| | 43.49 | 220 | 32 | 2840 | 0.90 | | | |
| | 53.04 | 181 | 26 | 2790 | 1.06 | | | |
| | 54.42 | 176 | 26 | 2590 | 1.07 | | | |
| | 60.61 | 158 | 23 | 2570 | 1.19 | | | |
| | 70.95 | 135 | 20 | 2530 | 1.39 | | | 16.2 |
| | 83.69 | 115 | 17 | 2460 | 1.63 | | | 15.6 |
| | 91.41 | 105 | 15 | 2530 | 1.70 | FK30 | 90 | 14.9 |
| | 107.02 | 90 | 13 | 2440 | 1.99 | | | 17.3 |
| | 126.23 | 76 | 11 | 2350 | 2.35 | | | 16.4 |
| | 153.95 | 62 | 9 | 2230 | 2.86 | | | |



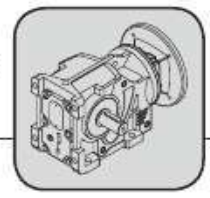
## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 1.1 | 175.93 | 55 | 8 | 2100 | 3.26 | | | |
| (1.5HP) | 205.96 | 47 | 7 | 2020 | 3.62 | | | |
| | 242.95 | 39 | 6 | 1930 | 4.04 | | | |
| | 296.30 | 32 | 5 | 1830 | 4.61 | | | |
| 1.5 | 1.41 | 8715 | 992 | 59172 | 0.82 | | | |
| (2HP) | 1.78 | 6903 | 786 | 59172 | 1.04 | | | |
| | 2.04 | 6014 | 685 | 59172 | 1.19 | | | |
| | 2.31 | 5315 | 605 | 59172 | 1.35 | | | |
| | 2.67 | 4606 | 524 | 59172 | 1.56 | | | 300 |
| | 3.06 | 4020 | 458 | 59172 | 1.78 | | | 266 |
| | 3.56 | 3455 | 393 | 59172 | 2.07 | FK90 FH40 | 90 | 247 |
| | 3.90 | 3151 | 359 | 59172 | 2.27 | | | 290 |
| | 4.42 | 2782 | 317 | 59172 | 2.58 | | | 263 |
| | 5.07 | 2424 | 276 | 59172 | 2.96 | | | |
| | 5.61 | 2190 | 249 | 59172 | 3.27 | | | |
| | 6.47 | 1901 | 216 | 59172 | 3.77 | | | |
| | 7.26 | 1693 | 193 | 59172 | 4.23 | | | |
| | 2.87 | 4279 | 487 | 38063 | 0.93 | | | |
| | 3.68 | 3337 | 380 | 38063 | 1.20 | | | 176.2 |
| | 4.11 | 2992 | 341 | 38063 | 1.33 | | | 166.2 |
| | 4.56 | 2697 | 307 | 38063 | 1.48 | FK80 FH30 | 90 | 155.9 |
| | 5.41 | 2273 | 259 | 38063 | 1.76 | | | 187.5 |
| | 6.12 | 2010 | 229 | 38063 | 1.98 | | | 173.7 |
| | 6.82 | 1802 | 205 | 38063 | 2.21 | | | |
| | 4.23 | 2906 | 331 | 23422 | 0.86 | | | |
| | 4.76 | 2582 | 294 | 23422 | 0.97 | | | 117.6 |
| | 5.71 | 2154 | 245 | 23422 | 1.16 | | | 107.4 |
| | 6.14 | 2003 | 228 | 23422 | 1.25 | FK60 FH30 | 90 | 104.7 |
| | 6.95 | 1769 | 201 | 23422 | 1.42 | | | 126.9 |
| | 7.75 | 1587 | 181 | 23422 | 1.58 | | | 112.5 |
| | 8.85 | 1389 | 158 | 23422 | 1.80 | | | |
| | 9.87 | 1246 | 142 | 23422 | 2.01 | | | |
| | 7.22 | 1703 | 194 | 13720 | 0.84 | | | 68.9 |
| | 7.98 | 1540 | 175 | 13720 | 0.93 | | | 64.4 |
| | 9.21 | 1335 | 152 | 13720 | 1.08 | FK50 FH25 | 90 | 65.8 |
| | | | | | | | | 76.9 |
| | | | | | | | | 71.8 |
| | 10.83 | 1206 | 129 | 26550 | 2.25 | | | |
| | 11.91 | 1097 | 118 | 26240 | 2.48 | | | |
| | 12.96 | 1008 | 108 | 25930 | 2.70 | | | 98.1 |
| | 14.92 | 876 | 94 | 25390 | 3.10 | | | 91.2 |
| | 16.90 | 773 | 83 | 24860 | 3.47 | FK60 | 90 | 87.1 |
| | 19.35 | 675 | 72 | 24260 | 3.87 | | | 104 |
| | 22.80 | 573 | 61 | 23500 | 4.42 | | | 95.4 |
| | 26.11 | 501 | 54 | 22850 | 4.94 | | | |
| | 27.75 | 471 | 50 | 22560 | 5.19 | | | |
| | 32.32 | 404 | 43 | 21810 | 5.87 | | | |
| | 13.91 | 940 | 101 | 13660 | 1.66 | | | |
| | 15.54 | 841 | 90 | 13750 | 1.86 | | | |
| | 17.93 | 729 | 78 | 13790 | 2.14 | | | |
| | 21.85 | 598 | 64 | 13700 | 2.61 | | | 59.9 |
| | 24.54 | 533 | 57 | 13590 | 2.93 | | | 55.8 |
| | 27.36 | 478 | 51 | 13460 | 3.27 | FK50 | 90 | 56.7 |
| | 29.71 | 440 | 47 | 13340 | 3.55 | | | 67.7 |
| | 35.21 | 371 | 40 | 13050 | 4.06 | | | 63.1 |
| | 45.93 | 285 | 30 | 12330 | 4.60 | | | |
| | 51.21 | 255 | 27 | 12110 | 5.14 | | | |
| | 55.61 | 235 | 25 | 11930 | 5.52 | | | |

3



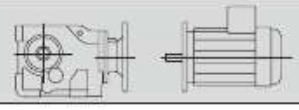
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 1.5 | 20.31 | 644 | 69 | 7650 | 1.13 | | | |
| (2HP) | 21.55 | 606 | 65 | 7780 | 1.17 | | | |
| | 24.96 | 524 | 56 | 8030 | 1.30 | | | |
| | 30.22 | 433 | 46 | 8120 | 1.60 | | | |
| | 31.59 | 414 | 44 | 8250 | 1.53 | | | |
| | 36.86 | 355 | 38 | 8210 | 1.84 | | | |
| | 39.11 | 334 | 36 | 8210 | 1.92 | | | 33.7 |
| | 42.09 | 311 | 33 | 8280 | 1.88 | | | 31.1 |
| | 45.31 | 288 | 31 | 8190 | 2.13 | FK40* | 90 | 30.7 |
| | 51.34 | 255 | 27 | 8190 | 2.16 | | | 36.7 |
| | 54.48 | 240 | 26 | 8150 | 2.25 | | | 34.2 |
| | 57.33 | 228 | 24 | 8060 | 2.51 | | | |
| | 63.11 | 207 | 22 | 8030 | 2.49 | | | |
| | 79.86 | 164 | 18 | 7780 | 2.93 | | | |
| | 98.89 | 132 | 14 | 7490 | 3.67 | | | |
| | 114.55 | 114 | 12 | 7300 | 4.07 | | | |
| | 144.95 | 90 | 10 | 6970 | 4.80 | | | |
| | 21.50 | 608 | 65 | 4770 | 0.99 | | | |
| | 24.90 | 525 | 56 | 4860 | 1.15 | | | |
| | 29.57 | 442 | 47 | 5270 | 1.37 | | | |
| | 31.51 | 415 | 44 | 4900 | 1.41 | | | |
| | 33.56 | 389 | 42 | 5220 | 1.49 | | | 30.2 |
| | 40.94 | 319 | 34 | 5100 | 1.82 | | | 28.6 |
| | 43.45 | 301 | 32 | 5060 | 1.91 | FK40 | 90 | 27.5 |
| | 50.33 | 260 | 28 | 4940 | 1.94 | | | 32.9 |
| | 54.35 | 240 | 26 | 4650 | 1.97 | | | 30.9 |
| | 62.95 | 208 | 22 | 4530 | 2.15 | | | |
| | 79.66 | 164 | 18 | 4330 | 2.49 | | | |
| | 109.84 | 119 | 13 | 4140 | 3.36 | | | |
| | 127.24 | 103 | 11 | 3980 | 3.78 | | | |
| | 161.01 | 81 | 9 | 3730 | 4.59 | | | |
| | 33.85 | 386 | 41 | 3280 | 0.99 | | | |
| | 36.00 | 363 | 39 | 3300 | 1.04 | | | |
| | 44.66 | 293 | 31 | 3280 | 1.21 | | | |
| | 48.48 | 270 | 29 | 3300 | 1.26 | | | |
| | 53.24 | 245 | 26 | 3240 | 1.38 | | | 22.8 |
| | 56.62 | 231 | 25 | 3230 | 1.46 | | | 21.9 |
| | 67.81 | 193 | 21 | 3190 | 1.58 | FK35 | 90 | 21.3 |
| | 76.26 | 171 | 18 | 3100 | 1.77 | | | 25.5 |
| | 82.41 | 159 | 17 | 3090 | 1.80 | | | 24 |
| | 106.66 | 123 | 13 | 2910 | 2.26 | | | |
| | 129.63 | 101 | 11 | 2780 | 2.55 | | | |
| | 140.74 | 93 | 10 | 2750 | 2.57 | | | |
| | 196.83 | 66 | 7 | 2530 | 3.21 | | | |
| | 239.23 | 55 | 6 | 2400 | 3.66 | | | |
| | 70.95 | 184 | 20 | 2250 | 1.02 | | | |
| | 83.69 | 156 | 17 | 2240 | 1.19 | | | |
| | 91.41 | 143 | 15 | 2370 | 1.25 | | | 16.3 |
| | 107.02 | 122 | 13 | 2310 | 1.46 | | | 15.6 |
| | 126.23 | 104 | 11 | 2240 | 1.72 | FK30 | 90 | 14.9 |
| | 153.95 | 85 | 9 | 2140 | 2.09 | | | 17.3 |
| | 175.93 | 74 | 8 | 2010 | 2.39 | | | 16.5 |
| | 205.96 | 63 | 7 | 1940 | 2.65 | | | |
| | 242.95 | 54 | 6 | 1870 | 2.96 | | | |
| | 296.30 | 44 | 5 | 1780 | 3.38 | | | |
| 2.2 | 2.31 | 7795 | 605 | 59172 | 0.92 | | | |
| (3HP) | 2.67 | 6756 | 524 | 59172 | 1.06 | | | |
| | 3.06 | 5897 | 458 | 59172 | 1.22 | | | |



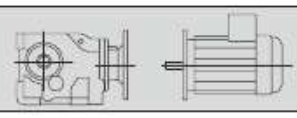
## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] | |
|---|---|---|---|---|---|---|---|---|
| 2.2 | 3.56 | 5068 | 393 | 59172 | 1.41 | | | |
| (3HP) | 3.90 | 4621 | 359 | 59172 | 1.55 | | | 307 |
| | 4.42 | 4080 | 317 | 59172 | 1.76 | | | 273 |
| | 5.07 | 3555 | 276 | 59172 | 2.02 | FK90 FH40 | 100 | 254 |
| | 5.61 | 3212 | 249 | 59172 | 2.23 | | | 297 |
| | 6.47 | 2788 | 216 | 59172 | 2.57 | | | 270 |
| | 7.26 | 2483 | 193 | 59172 | 2.89 | | | |
| | 8.10 | 2227 | 173 | 59172 | 3.22 | | | |
| | 9.00 | 2005 | 156 | 59172 | 3.57 | | | |
| | 9.87 | 1828 | 142 | 59172 | 3.92 | | | |
| | 3.68 | 4894 | 380 | 38063 | 0.82 | | | 179.2 |
| | 4.11 | 4388 | 341 | 38063 | 0.91 | | | 168.7 |
| | 4.56 | 3956 | 307 | 38063 | 1.01 | FK70 FH30 | 100 | 159.2 |
| | 5.41 | 3333 | 259 | 38063 | 1.20 | | | 190.4 |
| | 6.12 | 2948 | 229 | 38063 | 1.35 | | | 176.7 |
| | 6.82 | 2643 | 205 | 38063 | 1.51 | | | |
| | 6.14 | 2937 | 228 | 23422 | 0.85 | | | 117.6 |
| | 6.95 | 2595 | 201 | 23422 | 0.97 | | | 107.4 |
| | 7.75 | 2328 | 181 | 23422 | 1.08 | FK60 FH30 | 100 | 104.7 |
| | 8.85 | 2037 | 158 | 23422 | 1.23 | | | 126.9 |
| | 9.87 | 1827 | 142 | 23422 | 1.37 | | | 112.5 |
| | 9.75 | 1951 | 144 | 74590 | 4.10 | | | 276 |
| | | | | | | | | 243 |
| | | | | | | FK90 | 100 | 223 |
| | | | | | | | | 266 |
| | | | | | | | | 239 |
| | 8.01 | 2392 | 175 | 47170 | 1.81 | | | |
| | 9.08 | 2110 | 154 | 46350 | 2.05 | | | |
| | 9.95 | 1926 | 141 | 45710 | 2.25 | | | |
| | 11.68 | 1641 | 120 | 44490 | 2.64 | | | ▲ |
| | 12.45 | 1539 | 112 | 43980 | 2.81 | | | 157 ▲ |
| | 13.81 | 1388 | 101 | 43140 | 3.12 | | | 153 ▲ |
| | 15.59 | 1229 | 90 | 42110 | 3.52 | FK70 | 100 | 142.7 ▲ |
| | 17.48 | 1096 | 80 | 41130 | 3.95 | | | 173.4 ▲ |
| | 19.50 | 983 | 72 | 40170 | 4.41 | | | 159.4 ▲ |
| | 21.63 | 886 | 65 | 39260 | 4.89 | | | ▲ |
| | 26.44 | 725 | 53 | 37490 | 5.97 | | | ▲ |
| | 29.68 | 646 | 47 | 36060 | 5.10 | | | ▲ |
| | 33.11 | 579 | 42 | 35150 | 5.70 | | | ▲ |
| | 11.91 | 1609 | 118 | 23270 | 1.69 | | | |
| | 12.96 | 1479 | 108 | 23210 | 1.84 | | | |
| | 14.92 | 1285 | 94 | 23020 | 2.12 | | | |
| | 16.90 | 1134 | 83 | 22780 | 2.36 | | | |
| | 19.35 | 990 | 72 | 22440 | 2.64 | | | 101.1 |
| | 22.80 | 841 | 61 | 21950 | 3.01 | | | 90.1 |
| | 26.11 | 734 | 54 | 21500 | 3.37 | FK60 | | 90.3 |
| | 27.75 | 691 | 50 | 21290 | 3.54 | | | 106.9 |
| | 32.32 | 593 | 43 | 20720 | 4.00 | | | 98.6 |
| | 35.35 | 542 | 40 | 20030 | 4.31 | | | ▲ |
| | 43.19 | 444 | 32 | 19290 | 5.16 | | | |
| | 49.47 | 387 | 28 | 18770 | 5.68 | | | |
| | 52.58 | 365 | 27 | 18530 | 5.92 | | | |
| | 13.91 | 1378 | 101 | 13660 | 1.13 | | | |
| | 17.93 | 1069 | 78 | 13790 | 1.46 | | | |
| | 21.85 | 877 | 64 | 13700 | 1.78 | | | |
| | 24.54 | 781 | 57 | 13590 | 2.00 | | | |
| | 27.36 | 701 | 51 | 13460 | 2.23 | | | |
| | 29.71 | 645 | 47 | 13340 | 2.42 | FK50 | | 62.4 |



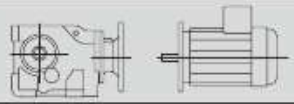
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 2.2 | 35.21 | 544 | 40 | 13050 | 2.77 | | 58.3 |
| (3HP) | 45.93 | 417 | 30 | 12330 | 3.14 | FK50 100 | 59.2 |
| | 51.21 | 374 | 27 | 12110 | 3.51 | | 70.6 |
| | 55.61 | 345 | 25 | 11930 | 3.76 | | 65.6 |
| | 62.04 | 309 | 23 | 11830 | 4.11 | | |
| | 65.91 | 291 | 21 | 11550 | 4.24 | | |
| | 69.16 | 277 | 20 | 11570 | 4.44 | | |
| | 75.12 | 255 | 19 | 11370 | 4.70 | | |
| | 89.02 | 215 | 16 | 10950 | 5.29 | | |
| | 30.22 | 634 | 46 | 5990 | 1.09 | | |
| | 31.59 | 607 | 44 | 6250 | 1.05 | | |
| | 36.86 | 520 | 38 | 6460 | 1.25 | | |
| | 39.11 | 490 | 36 | 6560 | 1.31 | | |
| | 42.09 | 455 | 33 | 6780 | 1.28 | | 36.6 |
| | 45.31 | 423 | 31 | 6770 | 1.45 | | 35.1 |
| | 51.34 | 373 | 27 | 6960 | 1.47 | FK40* 100 | 33.6 |
| | 54.48 | 352 | 26 | 7000 | 1.53 | | 36.7 |
| | 57.33 | 334 | 24 | 6940 | 1.71 | | 37.1 |
| | 63.11 | 304 | 22 | 7030 | 1.70 | | |
| | 79.86 | 240 | 18 | 7000 | 2.00 | | |
| | 98.89 | 194 | 14 | 6840 | 2.50 | | |
| | 114.55 | 167 | 12 | 6740 | 2.77 | | |
| | 144.95 | 132 | 10 | 6530 | 3.27 | | |
| | 33.56 | 571 | 42 | 4250 | 1.02 | | |
| | 40.94 | 468 | 34 | 4360 | 1.24 | | |
| | 43.45 | 441 | 32 | 4370 | 1.31 | | 32.6 |
| | 50.33 | 381 | 28 | 4360 | 1.32 | | 30.9 |
| | 54.35 | 353 | 26 | 4050 | 1.34 | FK40 100 | 30.3 |
| | 62.95 | 304 | 22 | 4030 | 1.47 | | 35.7 |
| | 79.66 | 241 | 18 | 3940 | 1.70 | | 33.7 |
| | 109.84 | 175 | 13 | 3920 | 2.29 | | |
| | 127.24 | 151 | 11 | 3790 | 2.58 | | |
| | 161.01 | 119 | 9 | 3590 | 3.13 | | |
| | 67.81 | 283 | 21 | 2730 | 1.08 | | |
| | 76.26 | 251 | 18 | 2710 | 1.20 | | 25.6 |
| | 82.41 | 233 | 17 | 2730 | 1.23 | | 24.7 |
| | 106.66 | 180 | 13 | 2650 | 1.54 | FK35 100 | 24.1 |
| | 129.63 | 148 | 11 | 2570 | 1.74 | | 28.3 |
| | 140.74 | 136 | 10 | 2570 | 1.75 | | 26.8 |
| | 196.83 | 97 | 7 | 2400 | 2.19 | | |
| | 239.23 | 80 | 6 | 2300 | 2.50 | | |
| 3 | 3.06 | 8041 | 458 | 59172 | 0.89 | | |
| (4HP) | 3.56 | 6911 | 393 | 59172 | 1.04 | | |
| | 3.90 | 6301 | 359 | 59172 | 1.14 | | |
| | 4.42 | 5564 | 317 | 59172 | 1.29 | | 307 |
| | 5.07 | 4847 | 276 | 59172 | 1.48 | | 273 |
| | 5.61 | 4380 | 249 | 59172 | 1.64 | FK90 FH40 100 | 254 |
| | 6.47 | 3802 | 216 | 59172 | 1.88 | | 297 |
| | 7.26 | 3386 | 193 | 59172 | 2.12 | | 270 |
| | 8.10 | 3037 | 173 | 59172 | 2.36 | | |
| | 9.00 | 2733 | 156 | 59172 | 2.62 | | |
| | 9.87 | 2492 | 142 | 59172 | 2.88 | | |
| | 5.41 | 4545 | 259 | 38063 | 0.88 | | 179.2 |
| | 6.12 | 4021 | 229 | 38063 | 0.99 | | 168.7 |
| | 6.82 | 3605 | 205 | 38063 | 1.11 | FK70 FH30 100 | 159.2 |
| | | | | | | | 190.4 |
| | | | | | | | 176.7 |
| | 9.75 | 2661 | 144 | 72770 | 3.01 | FK90 | 276 |



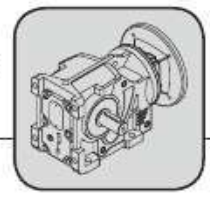
## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | | m [kg] | |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 11.48 | 2261 | 122 | 70000 | 3.54 | | | 243 | |
| (4HP) | 13.08 | 1984 | 107 | 67800 | 4.03 | FK90 | 100 | 223 | |
| | | | | | | | | 266 | |
| | | | | | | | | 239 | |
| | 8.01 | 3262 | 175 | 43020 | 1.33 | | | | |
| | 9.08 | 2877 | 154 | 42690 | 1.51 | | | | |
| | 9.95 | 2627 | 141 | 42360 | 1.65 | | | | |
| | 11.68 | 2238 | 120 | 41640 | 1.94 | | | | ▲ |
| | 12.45 | 2099 | 112 | 41310 | 2.06 | | | | ▲ |
| | 13.81 | 1892 | 101 | 40730 | 2.29 | | | 157 | ▲ |
| | 15.59 | 1676 | 90 | 39980 | 2.58 | | | 153 | ▲ |
| | 17.48 | 1495 | 80 | 39220 | 2.90 | FK70 | 100 | 142.7 | ▲ |
| | 19.50 | 1340 | 72 | 38470 | 3.23 | | | 173.4 | ▲ |
| | 21.63 | 1208 | 65 | 37720 | 3.58 | | | 159.4 | ▲ |
| | 26.44 | 989 | 53 | 36230 | 4.38 | | | | ▲ |
| | 29.68 | 880 | 47 | 34790 | 3.74 | | | | ▲ |
| | 33.11 | 789 | 42 | 34010 | 4.18 | | | | ▲ |
| | 36.72 | 712 | 38 | 33260 | 4.64 | | | | ▲ |
| | 44.88 | 582 | 31 | 31790 | 5.70 | | | | ▲ |
| | 11.91 | 2195 | 118 | 19880 | 1.24 | | | | |
| | 12.96 | 2016 | 108 | 20100 | 1.35 | | | | |
| | 14.92 | 1752 | 94 | 20320 | 1.55 | | | | |
| | 16.90 | 1547 | 83 | 20390 | 1.73 | | | | |
| | 19.35 | 1351 | 72 | 20350 | 1.94 | | | | |
| | 22.80 | 1147 | 61 | 20180 | 2.21 | | | 101.1 | |
| | 26.11 | 1001 | 54 | 19960 | 2.47 | | | 90.1 | |
| | 27.75 | 942 | 50 | 19830 | 2.59 | FK60 | 100 | 90.3 | |
| | 32.32 | 809 | 43 | 19470 | 2.94 | | | 106.9 | |
| | 35.35 | 739 | 40 | 18760 | 3.16 | | | 98.6 | ▲ |
| | 43.19 | 605 | 32 | 18250 | 3.79 | | | | |
| | 49.47 | 528 | 28 | 17860 | 4.16 | | | | |
| | 52.58 | 497 | 27 | 17680 | 4.34 | | | | |
| | 61.24 | 427 | 23 | 17200 | 4.83 | | | | |
| | 66.99 | 390 | 21 | 16900 | 5.15 | | | | ▲ |
| | 13.91 | 1879 | 101 | 6150 | 0.83 | | | | |
| | 17.93 | 1457 | 78 | 7970 | 1.07 | | | | |
| | 21.85 | 1196 | 64 | 8930 | 1.31 | | | | |
| | 24.54 | 1065 | 57 | 9340 | 1.47 | | | | |
| | 27.36 | 955 | 51 | 9640 | 1.63 | | | | |
| | 29.71 | 880 | 47 | 9820 | 1.77 | | | | |
| | 35.21 | 742 | 40 | 10080 | 2.03 | | | 62.4 | |
| | 45.93 | 569 | 30 | 9870 | 2.30 | | | 58.3 | |
| | 51.21 | 510 | 27 | 9900 | 2.57 | FK50 | 100 | 59.2 | |
| | 55.61 | 470 | 25 | 9900 | 2.76 | | | 70.6 | |
| | 62.04 | 421 | 23 | 10140 | 3.01 | | | 65.6 | |
| | 65.91 | 397 | 21 | 9840 | 3.11 | | | | |
| | 69.16 | 378 | 20 | 10060 | 3.25 | | | | |
| | 75.12 | 348 | 19 | 9980 | 3.45 | | | | |
| | 89.02 | 294 | 16 | 9780 | 3.88 | | | | |
| | 116.13 | 225 | 12 | 9250 | 4.62 | | | | |
| | 129.46 | 202 | 11 | 9090 | 4.99 | | | | |
| | 140.61 | 186 | 10 | 8960 | 5.28 | | | | |
| | 166.63 | 157 | 8 | 8690 | 5.95 | | | | |
| | 36.86 | 709 | 38 | 2240 | 0.92 | | | | |
| | 39.11 | 668 | 36 | 3590 | 0.96 | | | | |
| | 42.09 | 621 | 33 | 2790 | 0.94 | | | | |
| | 45.31 | 577 | 31 | 5140 | 1.06 | FK40* | | 36.6 | |
| | 51.34 | 509 | 27 | 5560 | 1.08 | | | 35.1 | |

3



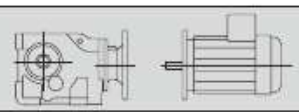
| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] | |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 54.48 | 480 | 26 | 5670 | 1.12 | | | 33.6 | |
| (4HP) | 57.33 | 456 | 24 | 5650 | 1.25 | FK40* | 100 | 39.6 | |
| | 63.11 | 414 | 22 | 5890 | 1.24 | | | 37.1 | |
| | 79.86 | 327 | 18 | 6090 | 1.47 | | | | |
| | 98.89 | 264 | 14 | 6100 | 1.84 | | | | |
| | 114.55 | 228 | 12 | 6090 | 2.03 | | | | |
| | 144.95 | 180 | 10 | 6020 | 2.40 | | | | |
| | 40.94 | 638 | 34 | 3330 | 0.91 | | | | |
| | 43.45 | 602 | 32 | 3430 | 0.96 | | | | |
| | 50.33 | 519 | 28 | 3590 | 0.97 | | | 32.6 | |
| | 54.35 | 481 | 26 | 3000 | 0.98 | | | 30.9 | |
| | 62.95 | 415 | 22 | 3420 | 1.08 | FK40 | 100 | 30.3 | |
| | 79.66 | 328 | 18 | 3460 | 1.25 | | | 35.7 | |
| | 109.84 | 238 | 13 | 3630 | 1.68 | | | 33.7 | |
| | 127.24 | 205 | 11 | 3560 | 1.89 | | | | |
| | 161.01 | 162 | 9 | 3410 | 2.29 | | | | |
| 4 | 3.90 | 8402 | 359 | 59172 | 0.85 | | | | |
| (5.4HP) | 4.42 | 7419 | 317 | 59172 | 0.97 | | | | |
| | 5.07 | 6463 | 276 | 59172 | 1.11 | | | 307 | |
| | 5.61 | 5840 | 249 | 59172 | 1.23 | | | 273 | |
| | 6.47 | 5069 | 216 | 59172 | 1.41 | FK90 FH40 | 112 | 254 | |
| | 7.26 | 4515 | 193 | 59172 | 1.59 | | | 297 | |
| | 8.10 | 4050 | 173 | 59172 | 1.77 | | | 270 | |
| | 9.00 | 3645 | 156 | 59172 | 1.97 | | | | |
| | 9.87 | 3323 | 142 | 59172 | 2.16 | | | | |
| | 6.82 | 4806 | 205 | 38063 | 0.83 | | | 179.2 | |
| | | | | | | | | 168.7 | |
| | | | | | | FK80 FH30 | 112 | 159.2 | |
| | | | | | | | | 190.4 | |
| | | | | | | | | 176.7 | |
| | 11.48 | 3014 | 122 | 68060 | 2.65 | | | 276 | |
| | 13.08 | 2646 | 107 | 66100 | 3.02 | | | 243 | |
| | | | | | | FK90 | 112 | 223 | |
| | | | | | | | | 266 | |
| | | | | | | | | 239 | |
| | 8.01 | 4350 | 175 | 37820 | 1.00 | | | | |
| | 9.08 | 3836 | 154 | 38110 | 1.13 | | | | |
| | 9.95 | 3502 | 141 | 38180 | 1.24 | | | | |
| | 11.68 | 2984 | 120 | 38080 | 1.45 | | | | |
| | 12.45 | 2798 | 112 | 37970 | 1.55 | | | | |
| | 13.81 | 2523 | 101 | 37710 | 1.72 | | | 157 | |
| | 15.59 | 2235 | 90 | 37310 | 1.94 | | | 153 | |
| | 17.48 | 1993 | 80 | 36840 | 2.17 | FK70 | 112 | 142.7 | |
| | 19.50 | 1787 | 72 | 36330 | 2.42 | | | 173.4 | |
| | 21.63 | 1611 | 65 | 35800 | 2.69 | | | 159.4 | |
| | 26.44 | 1318 | 53 | 34660 | 3.29 | | | | ▲ |
| | 29.68 | 1174 | 47 | 33200 | 2.80 | | | | |
| | 33.11 | 1052 | 42 | 32580 | 3.13 | | | | |
| | 36.72 | 949 | 38 | 31970 | 3.48 | | | | |
| | 44.88 | 776 | 31 | 30740 | 4.27 | | | | ▲ |
| | 14.92 | 2336 | 94 | 16940 | 1.16 | | | | |
| | 16.90 | 2062 | 83 | 17400 | 1.30 | | | | |
| | 19.35 | 1801 | 72 | 17750 | 1.45 | | | | |
| | 22.80 | 1529 | 61 | 17970 | 1.66 | | | | |
| | 26.11 | 1335 | 54 | 18020 | 1.85 | | | | |
| | 27.75 | 1256 | 50 | 18010 | 1.95 | | | 101.1 | |
| | 32.32 | 1078 | 43 | 17910 | 2.20 | | | 90.1 | |
| | 35.35 | 986 | 40 | 17180 | 2.37 | FK60 | 112 | 90.3 | |



## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs |  | m [kg] |
|---|---|---|---|---|---|---|---|
| 4 | 43.19 | 807 | 32 | 16960 | 2.84 | | 106.9 |
| (5.4HP) | 49.47 | 705 | 28 | 16730 | 3.12 | FK60 | 98.6 |
| | 52.58 | 663 | 27 | 16620 | 3.26 | | |
| | 61.24 | 569 | 23 | 16280 | 3.63 | | |
| | 66.99 | 520 | 21 | 16070 | 3.86 | | |
| | 89.38 | 390 | 16 | 15300 | 4.72 | | |
| | 109.20 | 319 | 13 | 14710 | 5.44 | | |
| | 125.06 | 279 | 11 | 14300 | 5.98 | | |
| | 21.85 | 1595 | 64 | 5740 | 0.98 | | |
| | 24.54 | 1420 | 57 | 6500 | 1.10 | | |
| | 27.36 | 1274 | 51 | 7100 | 1.23 | | |
| | 29.71 | 1173 | 47 | 7480 | 1.33 | | |
| | 35.21 | 990 | 40 | 8110 | 1.52 | | |
| | 45.93 | 759 | 30 | 8240 | 1.73 | | 62.4 |
| | 51.21 | 681 | 27 | 8440 | 1.93 | | 58.3 |
| | 55.61 | 627 | 25 | 8550 | 2.07 | FK50 | 59.2 |
| | 62.04 | 562 | 23 | 9020 | 2.26 | 112 | 70.6 |
| | 65.91 | 529 | 21 | 8700 | 2.33 | | 65.6 |
| | 69.16 | 504 | 20 | 9050 | 2.44 | | |
| | 75.12 | 464 | 19 | 9050 | 2.58 | | |
| | 89.02 | 391 | 16 | 9000 | 2.91 | | |
| | 116.13 | 300 | 12 | 8600 | 3.47 | | |
| | 129.46 | 269 | 11 | 8510 | 3.74 | | |
| | 140.61 | 248 | 10 | 8430 | 3.96 | | |
| | 166.63 | 209 | 8 | 8240 | 4.46 | | |
| | 57.33 | 608 | 24 | 2610 | 0.94 | | 36.6 |
| | 63.11 | 552 | 22 | 2330 | 0.93 | | 35.1 |
| | 79.86 | 436 | 18 | 4970 | 1.10 | FK40* | 33.6 |
| | 98.89 | 352 | 14 | 5170 | 1.38 | | 39.6 |
| | 114.55 | 304 | 12 | 5290 | 1.53 | | 37.1 |
| | 144.95 | 240 | 10 | 5380 | 1.80 | | |
| | 62.95 | 554 | 22 | 1250 | 0.81 | | 32.6 |
| | 79.66 | 437 | 18 | 2280 | 0.93 | | 30.9 |
| | 109.84 | 317 | 13 | 3240 | 1.26 | FK40 112 | 30.3 |
| | 127.24 | 274 | 11 | 3230 | 1.42 | | 35.7 |
| | 161.01 | 216 | 9 | 3160 | 1.72 | | 33.7 |
| 5.5 | 5.61 | 8030 | 249 | 59172 | 0.89 | | 310 |
| (7.4HP) | 6.47 | 6971 | 216 | 59172 | 1.03 | | 276 |
| | 7.26 | 6208 | 193 | 59172 | 1.15 | FK90 FH40 132S | 257 |
| | 8.10 | 5569 | 173 | 59172 | 1.29 | | 300 |
| | 9.00 | 5011 | 156 | 59172 | 1.43 | | 273 |
| | 9.87 | 4569 | 142 | 59172 | 1.57 | | |
| | 13.08 | 3638 | 107 | 63540 | 2.20 | | |
| | 13.94 | 3414 | 100 | 62740 | 2.34 | | 280 |
| | 14.66 | 3245 | 95 | 62100 | 2.47 | | 247 |
| | 15.44 | 3082 | 91 | 61440 | 2.60 | FK90 132S | 227 |
| | 16.99 | 2800 | 82 | 60190 | 2.86 | | 270 |
| | 18.64 | 2553 | 75 | 58990 | 3.13 | | 243 |
| | 21.11 | 2254 | 66 | 57350 | 3.55 | | |
| | 24.23 | 1964 | 58 | 55540 | 4.07 | | |
| | 11.68 | 4103 | 120 | 32740 | 1.06 | | |
| | 12.45 | 3848 | 112 | 32960 | 1.13 | | |
| | 13.81 | 3469 | 101 | 33200 | 1.25 | | |
| | 15.59 | 3073 | 90 | 33310 | 1.41 | | |
| | 17.48 | 2740 | 80 | 33280 | 1.58 | | |
| | 19.50 | 2457 | 72 | 33140 | 1.76 | | 163 |
| | 21.63 | 2215 | 65 | 32920 | 1.95 | | 158 |
| | 26.44 | 1812 | 53 | 32300 | 2.39 | FK70 132S | 148.5 |

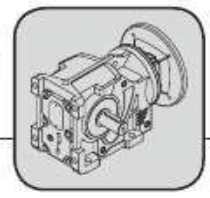


| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 5.5 | 29.68 | 1614 | 47 | 30820 | 2.04 | FK70 | | 180.1 |
| (7.4HP) | 33.11 | 1447 | 42 | 30450 | 2.28 | | | 166.3 |
| | 36.72 | 1305 | 38 | 30050 | 2.53 | | | |
| | 44.88 | 1068 | 31 | 29160 | 3.11 | | | |
| | 58.53 | 819 | 24 | 28360 | 4.86 | | | |
| | 65.64 | 730 | 21 | 27690 | 5.26 | | | |
| | 73.21 | 654 | 19 | 27040 | 5.68 | | | |
| | 19.35 | 2476 | 72 | 13840 | 1.06 | | | |
| | 22.80 | 2102 | 61 | 14650 | 1.21 | | | |
| | 26.11 | 1835 | 54 | 15130 | 1.35 | | | |
| | 27.75 | 1727 | 50 | 15290 | 1.41 | | | |
| | 32.32 | 1482 | 43 | 15570 | 1.60 | | | |
| | 35.35 | 1355 | 40 | 14810 | 1.72 | | | |
| | 43.19 | 1109 | 32 | 15020 | 2.07 | | | 106.9 |
| | 49.47 | 969 | 28 | 15040 | 2.27 | | | 99.9 |
| | 52.58 | 911 | 27 | 15020 | 2.37 | FK60 | 132S | 96 |
| | 61.24 | 782 | 23 | 14910 | 2.64 | | | 112.7 |
| | 66.99 | 715 | 21 | 14810 | 2.81 | | | 104.3 |
| | 89.38 | 536 | 16 | 14360 | 3.44 | | | |
| | 109.20 | 439 | 13 | 13940 | 3.95 | | | |
| | 125.06 | 383 | 11 | 13630 | 4.35 | | | |
| | 132.93 | 361 | 11 | 13490 | 4.54 | | | |
| | 154.84 | 309 | 9 | 13110 | 5.05 | | | |
| | 169.35 | 283 | 8 | 12880 | 5.37 | | | |
| | 35.21 | 1361 | 40 | 5150 | 1.11 | | | |
| | 45.93 | 1043 | 30 | 5780 | 1.25 | | | |
| | 51.21 | 936 | 27 | 6230 | 1.40 | | | |
| | 55.61 | 862 | 25 | 6520 | 1.51 | | | |
| | 62.04 | 772 | 23 | 7340 | 1.64 | | | 69.6 |
| | 65.91 | 727 | 21 | 6990 | 1.70 | | | 65 |
| | 69.16 | 693 | 20 | 7540 | 1.77 | FK50 | 132S | 66 |
| | 75.12 | 638 | 19 | 7660 | 1.88 | | | 76.6 |
| | 89.02 | 538 | 16 | 7820 | 2.12 | | | 72.4 |
| | 116.13 | 413 | 12 | 7630 | 2.52 | | | |
| | 129.46 | 370 | 11 | 7640 | 2.72 | | | |
| | 140.61 | 341 | 10 | 7630 | 2.88 | | | |
| | 166.63 | 288 | 8 | 7560 | 3.25 | | | |
| 7.5 | 13.08 | 4960 | 107 | 60140 | 1.61 | | | |
| (10HP) | 13.94 | 4656 | 100 | 59550 | 1.72 | | | |
| | 14.66 | 4424 | 95 | 59060 | 1.81 | | | 280 |
| | 15.44 | 4203 | 91 | 58550 | 1.90 | | | 247 |
| | 16.99 | 3818 | 82 | 57570 | 2.10 | FK90 | 132M | 227 |
| | 18.64 | 3481 | 75 | 56600 | 2.30 | | | 270 |
| | 21.11 | 3074 | 66 | 55240 | 2.60 | | | 243 |
| | 24.23 | 2678 | 58 | 53700 | 2.99 | | | |
| | 30.56 | 2161 | 46 | 51050 | 3.63 | | | |
| | 15.59 | 4191 | 90 | 27970 | 1.03 | | | |
| | 17.48 | 3737 | 80 | 28520 | 1.16 | | | |
| | 19.50 | 3350 | 72 | 28870 | 1.29 | | | |
| | 21.63 | 3021 | 65 | 29070 | 1.43 | | | |
| | 26.44 | 2471 | 53 | 29150 | 1.75 | | | |
| | 29.68 | 2201 | 47 | 27640 | 1.49 | | | |
| | 33.11 | 1973 | 42 | 27600 | 1.67 | | | 163 |
| | 36.72 | 1779 | 38 | 27480 | 1.86 | | | 158 |
| | 44.88 | 1456 | 31 | 27060 | 2.28 | FK70 | 132M | 148.5 |
| | 58.53 | 1116 | 24 | 26930 | 3.56 | | | 180.1 |
| | 65.64 | 995 | 21 | 26420 | 3.86 | | | 166.3 |
| | 73.21 | 892 | 19 | 25910 | 4.17 | | | |





| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 7.5 | 81.20 | 805 | 17 | 25400 | 4.48 | | | |
| (10HP) | 99.25 | 658 | 14 | 24390 | 5.15 | | | |
| | 111.44 | 586 | 13 | 23420 | 4.85 | | | |
| | 124.30 | 526 | 11 | 22900 | 5.24 | | | |
| | 137.86 | 474 | 10 | 22390 | 5.63 | | | |
| | 27.75 | 2355 | 50 | 11650 | 1.04 | | | |
| | 32.32 | 2021 | 43 | 12450 | 1.17 | | | |
| | 35.35 | 1848 | 40 | 11640 | 1.26 | | | |
| | 43.19 | 1513 | 32 | 12420 | 1.51 | | | |
| | 49.47 | 1321 | 28 | 12770 | 1.67 | | | 106.9 |
| | 52.58 | 1243 | 27 | 12890 | 1.74 | | | 99.9 |
| | 61.24 | 1067 | 23 | 13090 | 1.93 | FK60 | 132M | 96 |
| | 66.99 | 975 | 21 | 13140 | 2.06 | | | 112.7 |
| | 89.38 | 731 | 16 | 13100 | 2.52 | | | 104.3 |
| | 109.20 | 598 | 13 | 12920 | 2.90 | | | |
| | 125.06 | 522 | 11 | 12740 | 3.19 | | | |
| | 132.93 | 492 | 11 | 12640 | 3.33 | | | |
| | 154.84 | 422 | 9 | 12380 | 3.70 | | | |
| | 169.35 | 386 | 8 | 12220 | 3.94 | | | |
| 9.2 | 13.08 | 6085 | 107 | 57250 | 1.31 | | | |
| (12.4HP) | 13.94 | 5711 | 100 | 56830 | 1.40 | | | |
| | 14.66 | 5427 | 95 | 56480 | 1.47 | | | 280 |
| | 15.44 | 5156 | 91 | 56100 | 1.55 | | | 247 |
| | 16.99 | 4683 | 82 | 55350 | 1.71 | FK90 | 132M | 227 |
| | 18.64 | 4270 | 75 | 54570 | 1.87 | | | 270 |
| | 21.11 | 3770 | 66 | 53450 | 2.12 | | | 243 |
| | 24.23 | 3285 | 58 | 52140 | 2.44 | | | |
| | 30.56 | 2651 | 46 | 49810 | 2.96 | | | |
| | 15.59 | 5141 | 90 | 23440 | 0.84 | | | |
| | 17.48 | 4584 | 80 | 24470 | 0.94 | | | |
| | 19.50 | 4110 | 72 | 25240 | 1.05 | | | |
| | 21.63 | 3705 | 65 | 25800 | 1.17 | | | |
| | 26.44 | 3032 | 53 | 26480 | 1.43 | | | |
| | 29.68 | 2700 | 47 | 24940 | 1.22 | | | |
| | 33.11 | 2421 | 42 | 25180 | 1.36 | | | 163 |
| | 36.72 | 2183 | 38 | 25300 | 1.51 | | | 158 |
| | 44.88 | 1786 | 31 | 25280 | 1.86 | FK70 | 132M | 148.5 |
| | 58.53 | 1369 | 24 | 25730 | 2.90 | | | 180.1 |
| | 65.64 | 1221 | 21 | 25340 | 3.15 | | | 166.3 |
| | 73.21 | 1095 | 19 | 24940 | 3.40 | | | |
| | 81.20 | 987 | 17 | 24530 | 3.65 | | | |
| | 99.25 | 808 | 14 | 23680 | 4.20 | | | |
| | 111.44 | 719 | 13 | 22710 | 3.96 | | | |
| | 124.30 | 645 | 11 | 22250 | 4.27 | | | |
| | 137.86 | 581 | 10 | 21810 | 4.59 | | | |
| | 168.49 | 476 | 8 | 20920 | 5.29 | | | |
| | 27.75 | 2888 | 50 | 8560 | 0.85 | | | |
| | 32.32 | 2480 | 43 | 9800 | 0.96 | | | |
| | 35.35 | 2267 | 40 | 8950 | 1.03 | | | |
| | 43.19 | 1856 | 32 | 10220 | 1.23 | | | |
| | 49.47 | 1620 | 28 | 10850 | 1.36 | | | 106.9 |
| | 52.58 | 1524 | 27 | 11080 | 1.42 | | | 99.9 |
| | 61.24 | 1309 | 23 | 11530 | 1.58 | FK60 | 132M | 96 |
| | 66.99 | 1197 | 21 | 11720 | 1.68 | | | 112.7 |
| | 89.38 | 897 | 16 | 12040 | 2.05 | | | 104.3 |
| | 109.20 | 734 | 13 | 12050 | 2.36 | | | |
| | 125.06 | 641 | 11 | 11980 | 2.60 | | | |
| | 132.93 | 603 | 11 | 11930 | 2.71 | | | |



| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| 9.2 | 154.84 | 518 | 9 | 11770 | 3.02 | | | |
| (12.4HP) | 169.35 | 473 | 8 | 11650 | 3.21 | | | |
| 11 | 15.44 | 6165 | 91 | 53510 | 1.30 | | | |
| (15HP) | 16.99 | 5599 | 82 | 52990 | 1.43 | | | |
| | 18.64 | 5105 | 75 | 52420 | 1.57 | | | 293 |
| | 21.11 | 4508 | 66 | 51550 | 1.77 | | | 259 |
| | 24.23 | 3927 | 58 | 50490 | 2.04 | FK90 | 160M | 239 |
| | 30.56 | 3170 | 46 | 48500 | 2.47 | | | 282 |
| | 33.37 | 2762 | 42 | 47710 | 2.67 | | | 256 |
| | 36.88 | 2510 | 38 | 46780 | 2.87 | | | |
| | 42.96 | 2215 | 33 | 45330 | 3.25 | | | |
| | 47.12 | 1934 | 30 | 44430 | 3.52 | | | |
| | 26.44 | 3625 | 53 | 23640 | 1.19 | | | |
| | 29.68 | 3228 | 47 | 22080 | 1.02 | | | |
| | 33.11 | 2894 | 42 | 22620 | 1.14 | | | |
| | 36.72 | 2610 | 38 | 22990 | 1.27 | | | |
| | 44.88 | 2135 | 31 | 23390 | 1.55 | | | 173.8 |
| | 58.53 | 1637 | 24 | 24450 | 2.43 | | | 172 |
| | 65.64 | 1460 | 21 | 24200 | 2.63 | FK70 | 160M | 156.9 |
| | 73.21 | 1309 | 19 | 23920 | 2.84 | | | 190 |
| | 81.20 | 1180 | 17 | 23610 | 3.05 | | | 174.3 |
| | 99.25 | 966 | 14 | 22930 | 3.51 | | | |
| | 111.44 | 860 | 13 | 21950 | 3.31 | | | |
| | 124.30 | 771 | 11 | 21570 | 3.57 | | | |
| | 137.86 | 695 | 10 | 21190 | 3.84 | | | |
| | 168.49 | 569 | 8 | 20420 | 4.42 | | | |
| | 43.19 | 2219 | 32 | 7890 | 1.03 | | | |
| | 49.47 | 1937 | 28 | 8820 | 1.14 | | | |
| | 52.58 | 1823 | 27 | 9170 | 1.18 | | | |
| | 61.24 | 1565 | 23 | 9890 | 1.32 | | | 118.4 |
| | 66.99 | 1431 | 21 | 10220 | 1.40 | | | 111.5 |
| | 89.38 | 1072 | 16 | 10910 | 1.72 | FK60 | 160M | 107.4 |
| | 109.20 | 878 | 13 | 11130 | 1.98 | | | 124.1 |
| | 125.06 | 766 | 11 | 11170 | 2.17 | | | 115.7 |
| | 132.93 | 721 | 11 | 11170 | 2.27 | | | |
| | 154.84 | 619 | 9 | 11120 | 2.52 | | | |
| | 169.35 | 566 | 8 | 11060 | 2.69 | | | |
| 15 | 16.99 | 7635 | 82 | 47750 | 1.05 | | | |
| (20HP) | 18.64 | 6962 | 75 | 47640 | 1.15 | | | |
| | 21.11 | 6148 | 66 | 47330 | 1.30 | | | |
| | 24.23 | 5355 | 58 | 46810 | 1.49 | | | 293 |
| | 30.56 | 4323 | 46 | 45590 | 1.81 | | | 259 |
| | 33.37 | 3766 | 42 | 45040 | 1.95 | FK90 | 160L | 239 |
| | 36.88 | 3423 | 38 | 44360 | 2.10 | | | 282 |
| | 42.96 | 3020 | 33 | 43250 | 2.38 | | | 256 |
| | 47.12 | 2637 | 30 | 42540 | 2.58 | | | |
| | 61.26 | 2243 | 23 | 40420 | 3.21 | | | |
| | 70.57 | 2006 | 20 | 39230 | 3.59 | | | |
| | 86.77 | 1488 | 16 | 37470 | 4.31 | | | |
| | 44.88 | 2911 | 31 | 19180 | 1.14 | | | |
| | 58.53 | 2233 | 24 | 21600 | 1.78 | | | |
| | 65.64 | 1991 | 21 | 21670 | 1.93 | | | 173.8 |
| | 73.21 | 1785 | 19 | 21650 | 2.08 | | | 172 |
| | 81.20 | 1609 | 17 | 21560 | 2.24 | FK70 | 160L | 156.9 |
| | 99.25 | 1317 | 14 | 21250 | 2.58 | | | 190 |
| | 111.44 | 1173 | 13 | 20250 | 2.43 | | | 174.3 |
| | 124.30 | 1051 | 11 | 20050 | 2.62 | | | |
| | 137.86 | 948 | 10 | 19820 | 2.82 | | | |



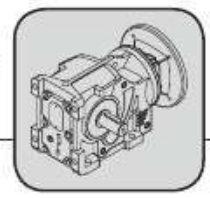
## Helical-Bevel Gear Units

Selection Tables [kW]

1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| | 168.49 | 776 | 8 | 19300 | 3.24 | | | |
| 18.5 | 21.11 | 7582 | 66 | 43640 | 1.06 | | | |
| (25HP) | 24.23 | 6605 | 58 | 43600 | 1.21 | | | |
| | 30.56 | 5331 | 46 | 43040 | 1.47 | | | |
| | 33.37 | 4644 | 42 | 42700 | 1.58 | | | 300 |
| | 36.88 | 4221 | 38 | 42250 | 1.71 | | | 267 |
| | 42.96 | 3725 | 33 | 41440 | 1.93 | FK90 | 180M | 247 |
| | 47.12 | 3252 | 30 | 40890 | 2.09 | | | 290 |
| | 61.26 | 2766 | 23 | 39150 | 2.60 | | | 264 |
| | 70.57 | 2474 | 20 | 38130 | 2.91 | | | |
| | 86.77 | 1835 | 16 | 36580 | 3.50 | | | |
| | 95.94 | 1564 | 15 | 35800 | 3.84 | | | |
| | 58.53 | 2754 | 24 | 19120 | 1.44 | | | |
| | 65.64 | 2455 | 21 | 19450 | 1.56 | | | |
| | 73.21 | 2201 | 19 | 19660 | 1.69 | | | 183.8 |
| | 81.20 | 1985 | 17 | 19770 | 1.82 | | | 176 |
| | 99.25 | 1624 | 14 | 19780 | 2.09 | FK70 | 180M | 168.8 |
| | 111.44 | 1446 | 13 | 18770 | 1.97 | | | 200.3 |
| | 124.30 | 1297 | 11 | 18730 | 2.12 | | | 178.7 |
| | 137.86 | 1169 | 10 | 18630 | 2.28 | | | |
| | 168.49 | 957 | 8 | 18320 | 2.63 | | | |
| 22 | 24.23 | 7855 | 58 | 40380 | 1.02 | | | |
| (30HP) | 30.56 | 6340 | 46 | 40490 | 1.24 | | | |
| | 33.37 | 5523 | 42 | 40370 | 1.33 | | | |
| | 36.88 | 5020 | 38 | 40140 | 1.43 | | | 300 |
| | 42.96 | 4429 | 33 | 39630 | 1.63 | | | 267 |
| | 47.12 | 3868 | 30 | 39240 | 1.76 | FK90 | 180L | 247 |
| | 61.26 | 3289 | 23 | 37880 | 2.19 | | | 290 |
| | 70.57 | 2942 | 20 | 37030 | 2.45 | | | 264 |
| | 86.77 | 2182 | 16 | 35680 | 2.94 | | | |
| | 95.94 | 1860 | 15 | 34990 | 3.23 | | | |
| | 130.02 | 1141 | 11 | 32430 | 4.03 | | | |
| | 58.53 | 3275 | 24 | 16630 | 1.21 | | | |
| | 65.64 | 2920 | 21 | 17230 | 1.32 | | | |
| | 73.21 | 2618 | 19 | 17670 | 1.42 | | | 183.8 |
| | 81.20 | 2360 | 17 | 17980 | 1.53 | | | 176 |
| | 99.25 | 1931 | 14 | 18320 | 1.76 | FK70 | 180L | 168.8 |
| | 111.44 | 1720 | 13 | 17290 | 1.65 | | | 200.3 |
| | 124.30 | 1542 | 11 | 17400 | 1.79 | | | 178.7 |
| | 137.86 | 1390 | 10 | 17430 | 1.92 | | | |
| | 168.49 | 1138 | 8 | 17340 | 2.21 | | | |
| 30 | 36.88 | 6845 | 38 | 35310 | 1.05 | | | |
| (40HP) | 42.96 | 6040 | 33 | 35480 | 1.19 | | | |
| | 47.12 | 5274 | 30 | 35460 | 1.29 | | | 300 |
| | 61.26 | 4486 | 23 | 34970 | 1.61 | | | 267 |
| | 70.57 | 4012 | 20 | 34500 | 1.79 | FK90 | 200L | 247 |
| | 86.77 | 2976 | 16 | 33630 | 2.16 | | | 290 |
| | 95.94 | 2536 | 15 | 33140 | 2.37 | | | 264 |
| | 130.02 | 1556 | 11 | 30910 | 2.96 | | | |
| | 161.45 | 1212 | 9 | 29710 | 3.36 | | | |
| | 58.53 | 4465 | 24 | 10940 | 0.89 | | | |
| | 65.64 | 3982 | 21 | 12160 | 0.96 | | | |
| | 73.21 | 3570 | 19 | 13120 | 1.04 | | | 183.8 |
| | 81.20 | 3219 | 17 | 13880 | 1.12 | | | 176 |
| | 99.25 | 2633 | 14 | 14960 | 1.29 | FK70 | 200L | 168.8 |
| | 111.44 | 2345 | 13 | 13910 | 1.21 | | | 200.3 |
| | 124.30 | 2103 | 11 | 14370 | 1.31 | | | 178.7 |
| | 137.86 | 1896 | 10 | 14700 | 1.41 | | | |

3



## 1400 Input Rpm

| Pm [kW] | na [1/min] | Ma [Nm] | i | FRa [N] | fs | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| | 168.49 | 1551 | 8 | 15100 | 1.62 | | | |
| 37 | 61.26 | 5532 | 23 | 32430 | 1.30 | | | 308 |
| (50HP) | 70.57 | 4948 | 20 | 32300 | 1.46 | | | 279 |
| | 86.77 | 3670 | 16 | 31830 | 1.75 | FK90 | 225S | 254 |
| | 95.94 | 3128 | 15 | 31510 | 1.92 | | | 297 |
| | 130.02 | 1919 | 11 | 29580 | 2.40 | | | 271 |
| | 161.45 | 1494 | 9 | 28640 | 2.72 | | | |
| 45 | 61.26 | 6728 | 23 | 29520 | 1.07 | | | 308 |
| (60HP) | 70.57 | 6018 | 20 | 29770 | 1.20 | | | 279 |
| | 86.77 | 4464 | 16 | 29780 | 1.44 | FK90 | 225M | 254 |
| | 95.94 | 3804 | 15 | 29660 | 1.58 | | | 297 |
| | 130.02 | 2334 | 11 | 28060 | 1.97 | | | 271 |
| | 161.45 | 1817 | 9 | 27420 | 2.24 | | | |

▲ Not available for K..M (direct couple) models.



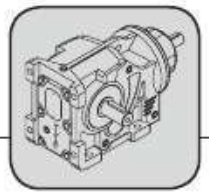


## FK..S

| i | na [1/min] | Mamax [Nm] | Pe [kW] | FRa [N] | FRe [N] | | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| FK30 | | | | | | | | 200Nm |
| 150.47 | 9.3 | 200 | 0.21 | 5530 | | | | |
| 134.96 | 10 | 200 | 0.24 | 5300 | | | | |
| 116.28 | 12 | 200 | 0.28 | 5000 | | | | |
| 106.21 | 13 | 200 | 0.30 | 4830 | | | | 13.4 |
| 92.84 | 15 | 200 | 0.35 | 4580 | | | | 12.7 |
| 83.69 | 17 | 200 | 0.38 | 4400 | | FK..S30 | Ø16 | 12 |
| 75.58 | 19 | 200 | 0.43 | 4220 | | | | 14.4 |
| 67.80 | 21 | 200 | 0.47 | 4040 | | | | 13.6 |
| 59.67 | 23 | 200 | 0.54 | 3830 | | | | |
| 49.51 | 28 | 200 | 0.65 | 3550 | | | | |
| 44.46 | 31 | 200 | 0.72 | 3390 | | | | |
| 37.97 | 37 | 200 | 0.85 | 3170 | | | | |
| 32.19 | 43 | 197 | 0.99 | 2960 | | | | |
| 26.40 | 53 | 190 | 1.2 | 2740 | | | | |
| 25.73 | 54 | 187 | 1.2 | 2530 | | | | |
| 23.10 | 61 | 187 | 1.3 | 2400 | | | | |
| 19.73 | 71 | 186 | 1.5 | 2220 | | | | 13.8 |
| 16.73 | 84 | 185 | 1.8 | 2040 | | | | 13.1 |
| 15.32 | 91 | 177 | 1.9 | 2200 | | FK..S30 | Ø19 | 12.4 |
| 13.08 | 107 | 177 | 2.2 | 2040 | | | | 14.8 |
| 11.09 | 126 | 177 | 2.6 | 1880 | | | | 14 |
| 9.09 | 154 | 176 | 3.1 | 1700 | | | | |
| 7.96 | 176 | 176 | 3.6 | 1380 | | | | |
| 6.80 | 206 | 167 | 4.0 | 1310 | | | | |
| 5.76 | 243 | 158 | 4.4 | 1230 | | | | |
| 4.73 | 296 | 148 | 5.0 | 1140 | | | | |
| FK35 | | | | | | | | 400Nm |
| 130.79 | 11 | 400 | 0.49 | 5630 | | | | 20.3 |
| 116.81 | 12 | 400 | 0.55 | 5350 | | | | 19.4 |
| 108.86 | 13 | 400 | 0.59 | 5180 | | FK..S35 | Ø16 | 18.8 |
| 96.90 | 14 | 400 | 0.66 | 4910 | | | | 23 |
| | | | | | | | | 21.5 |
| 86.89 | 16 | 400 | 0.74 | 4660 | | | | |
| 76.33 | 18 | 400 | 0.84 | 4380 | | | | |
| 71.78 | 20 | 400 | 0.90 | 4250 | | | | |
| 58.99 | 24 | 400 | 1.1 | 3890 | | | | |
| 53.29 | 26 | 388 | 1.2 | 3710 | | | | |
| 47.08 | 30 | 384 | 1.3 | 3530 | | | | |
| 41.36 | 34 | 381 | 1.5 | 3310 | | | | |
| 38.89 | 36 | 373 | 1.5 | 3240 | | | | 20.5 |
| 31.35 | 45 | 351 | 1.8 | 2970 | | | | 19.6 |
| 28.88 | 48 | 338 | 1.9 | 2940 | | FK..S35 | Ø19 | 19 |
| 26.30 | 53 | 337 | 2.1 | 2770 | | | | 23.2 |
| 24.73 | 57 | 335 | 2.2 | 2680 | | | | 21.7 |
| 20.65 | 68 | 302 | 2.4 | 2620 | | | | |
| 18.36 | 76 | 300 | 2.6 | 2450 | | | | |
| 16.99 | 82 | 283 | 2.7 | 2460 | | | | |
| 13.13 | 107 | 275 | 3.4 | 2150 | | | | |
| 10.80 | 130 | 256 | 3.8 | 2030 | | | | |
| 9.95 | 141 | 237 | 3.8 | 2060 | | | | |
| 7.11 | 197 | 212 | 4.8 | 1840 | | | | |
| 5.85 | 239 | 199 | 5.5 | 1720 | | | | |



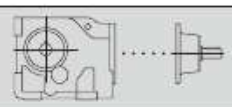
| i | na [1/min] | Mamax [Nm] | Pe [kW] | FRa [N] | FRe [N] |  | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| FK40 | | | | | | | | 600Nm |
| 149.93 | 9.3 | 600 | 0.64 | 7470 | | | | |
| 130.88 | 11 | 600 | 0.73 | 7010 | | | | |
| 118.43 | 12 | 600 | 0.81 | 6650 | | | | |
| 108.29 | 13 | 600 | 0.89 | 6360 | | | | |
| 95.70 | 15 | 600 | 1.0 | 5960 | | | | |
| 84.31 | 17 | 600 | 1.1 | 5580 | | | | |
| 69.12 | 20 | 600 | 1.4 | 4990 | | | | 29.6 |
| 65.13 | 21 | 600 | 1.5 | 4820 | | | | 28 |
| 56.22 | 25 | 600 | 1.7 | 4400 | | FK..S40 | Ø19 | 26.9 |
| 47.35 | 30 | 600 | 2.0 | 4410 | | | | 32.3 |
| 44.43 | 32 | 580 | 2.1 | 3790 | | | | 30.3 |
| 41.71 | 34 | 577 | 2.2 | 4220 | | | | |
| 34.20 | 41 | 575 | 2.7 | 3730 | | | | |
| 32.22 | 43 | 572 | 2.9 | 3610 | | | | |
| 27.82 | 50 | 500 | 2.9 | 3710 | | | | |
| 25.76 | 54 | 470 | 2.9 | 3170 | | | | |
| 22.24 | 63 | 444 | 3.2 | 3000 | | | | |
| 17.57 | 80 | 406 | 3.7 | 2760 | | | | 29.8 |
| 12.75 | 110 | 397 | 5.0 | 2790 | | | | 28.2 |
| 11.00 | 127 | 385 | 5.6 | 2610 | | FK..S40 | Ø24 | 27.1 |
| 8.69 | 161 | 370 | 6.8 | 2330 | | | | 32.5 |
| | | | | | | | | 30.5 |
| FK40 | | | | | | | | 820Nm |
| 149.56 | 9.4 | 820 | 0.88 | 9560 | | | | |
| 130.56 | 11 | 820 | 1.0 | 8840 | | | | |
| 118.14 | 12 | 820 | 1.1 | 8330 | | | | |
| 108.03 | 13 | 820 | 1.2 | 7360 | | | | |
| 95.46 | 15 | 793 | 1.3 | 6930 | | | | |
| 84.10 | 17 | 764 | 1.5 | 6660 | | | | |
| 68.95 | 20 | 720 | 1.7 | 6280 | | | | 33.3 |
| 64.97 | 22 | 707 | 1.7 | 6170 | | | | 31.6 |
| 56.09 | 25 | 676 | 1.9 | 5910 | | FK..S40* | Ø19 | 30.1 |
| 46.33 | 30 | 687 | 2.4 | 5430 | | | | 36.1 |
| 44.32 | 32 | 630 | 2.3 | 5500 | | | | 33.6 |
| 37.98 | 37 | 648 | 2.7 | 5110 | | | | |
| 35.79 | 39 | 636 | 2.9 | 5020 | | | | |
| 33.26 | 42 | 578 | 2.8 | 5040 | | | | |
| 30.90 | 45 | 609 | 3.2 | 4810 | | | | |
| 27.27 | 51 | 545 | 3.2 | 4750 | | | | |
| 25.70 | 54 | 535 | 3.3 | 4670 | | | | |
| 24.42 | 57 | 567 | 3.7 | 4480 | | | | 33.5 |
| 22.18 | 63 | 512 | 3.7 | 4460 | | | | 31.8 |
| 17.53 | 80 | 477 | 4.4 | 4160 | | FK..S40* | Ø24 | 30.3 |
| 14.16 | 99 | 482 | 5.5 | 3800 | | | | 36.3 |
| 12.22 | 115 | 461 | 6.1 | 3640 | | | | 33.8 |
| 9.66 | 145 | 429 | 7.1 | 3390 | | | | |



## Helical-Bevel Gear Units

Selection Tables [kW] K..S

1400 Input Rpm

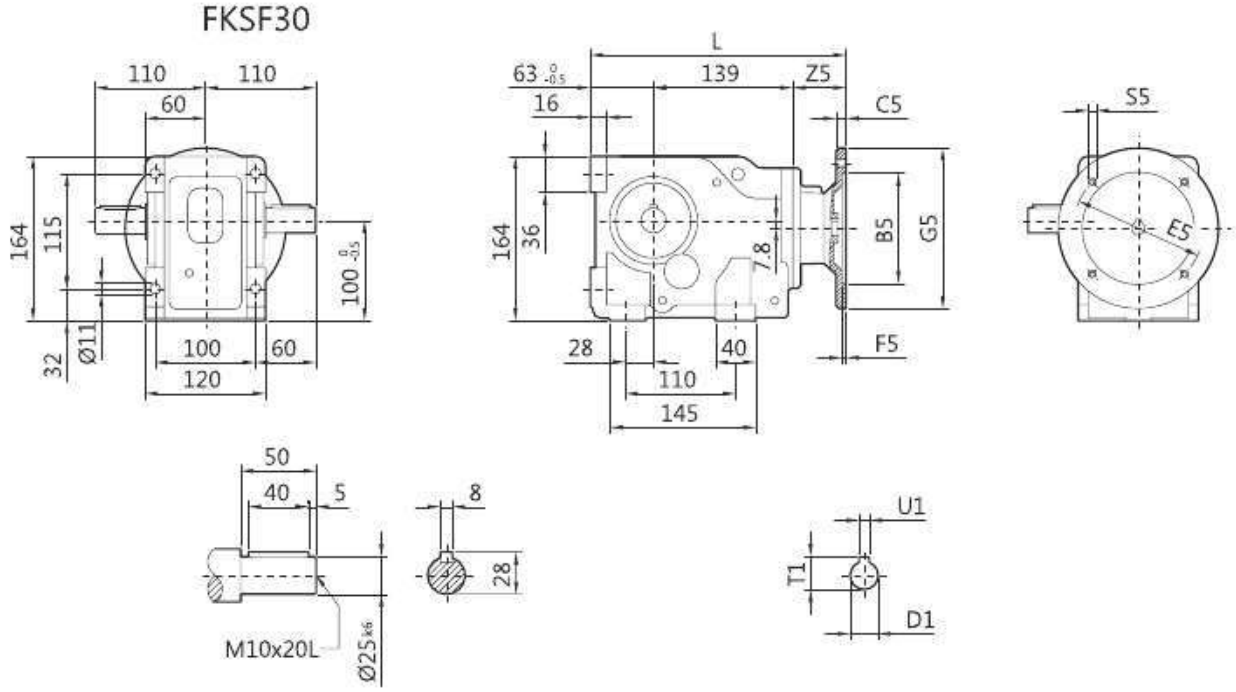
| i | na [1/min] | Mamax [Nm] | Pe [kW] | FRa [N] | FRe [N] |  | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| FK50 | | | | | | | | 1550Nm |
| 194.36 | 7.2 | 1451 | 1.2 | 16730 | | | | |
| 180.17 | 7.8 | 1345 | 1.2 | 16080 | | | | |
| 160.76 | 8.7 | 1200 | 1.2 | 15120 | | | | 59.7 |
| 144.13 | 9.7 | 1076 | 1.2 | 14240 | | | | 55.1 |
| 122.94 | 11 | 918 | 1.2 | 13000 | | FK..S50 | Ø19 | 56.1 |
| 109.30 | 13 | 816 | 1.2 | 12120 | | | | 66.7 |
| 100.66 | 14 | 1550 | 2.5 | 11520 | | | | 62.5 |
| 90.08 | 16 | 1550 | 2.8 | 10740 | | | | |
| 78.07 | 18 | 1550 | 3.2 | 9760 | | | | |
| 64.06 | 22 | 1550 | 3.9 | 8490 | | | | 59.9 |
| 57.05 | 25 | 1506 | 4.2 | 8130 | | | | 55.3 |
| 51.18 | 27 | 1457 | 4.6 | 7870 | | | Ø24 | 56.3 |
| 47.12 | 30 | 1422 | 4.8 | 7680 | | | | 66.9 |
| | | | | | | | | 62.7 |
| 39.76 | 35 | 1351 | 5.5 | 7300 | | | | |
| 30.48 | 46 | 1233 | 6.5 | 6050 | | | | |
| 27.34 | 51 | 1194 | 7.0 | 5860 | | | | |
| 25.17 | 56 | 1165 | 7.4 | 5710 | | | | |
| 22.57 | 62 | 1140 | 8.1 | 6150 | | | | 65.1 |
| 21.24 | 66 | 1107 | 8.4 | 5430 | | | | 60.5 |
| 20.24 | 69 | 1103 | 8.8 | 5960 | | | Ø38 | 61.5 |
| 18.64 | 75 | 1076 | 9.3 | 5810 | | | | 72.1 |
| 15.73 | 89 | 1023 | 10.5 | 5520 | | | | 67.9 |
| 12.06 | 116 | 934 | 12.4 | 4580 | | | | |
| 10.81 | 129 | 904 | 13.4 | 4430 | | | | |
| 9.96 | 141 | 882 | 14.2 | 4330 | | | | |
| 8.40 | 167 | 838 | 16.0 | 4110 | | | | |
| FK60 | | | | | | | | 2700Nm |
| 214.50 | 6.5 | 1602 | 1.2 | 23400 | | | | |
| 190.38 | 7.4 | 1422 | 1.2 | 22030 | | | | 97.7 |
| 180.32 | 7.8 | 1346 | 1.2 | 21420 | | | | 90.7 |
| 151.59 | 9.2 | 1132 | 1.2 | 19540 | | FK..S60 | Ø19 | 86.8 |
| 129.25 | 11 | 2700 | 3.4 | 17900 | | | | 103.5 |
| 117.56 | 12 | 2700 | 3.7 | 16960 | | | | 95.1 |
| 108.00 | 13 | 2700 | 4.0 | 16140 | | | | |
| 93.84 | 15 | 2700 | 4.6 | 14830 | | | | 98 |
| 82.86 | 17 | 2663 | 5.2 | 13930 | | | | 91 |
| | | | | | | | Ø28 | 87.1 |
| | | | | | | | | 103.8 |
| | | | | | | | | 95.4 |
| 72.35 | 19 | 2595 | 5.8 | 13150 | | | | 102.3 |
| 61.42 | 23 | 2517 | 6.6 | 12250 | | | | 95.3 |
| 53.63 | 26 | 2454 | 7.4 | 11550 | | | Ø38 | 91.4 |
| 50.45 | 28 | 2426 | 7.7 | 11240 | | | | 108.1 |
| 43.31 | 32 | 2358 | 8.7 | 10500 | | | | 99.7 |
| 39.60 | 35 | 2319 | 9.4 | 8620 | | | | |
| 32.41 | 43 | 2275 | 11.3 | 7530 | | | | |
| 28.30 | 49 | 2184 | 12.4 | 7230 | | | | |
| 26.63 | 53 | 2145 | 12.9 | 7100 | | | | |
| 22.86 | 61 | 2049 | 14.4 | 6780 | | | | 110.5 |
| 20.90 | 67 | 1994 | 15.3 | 6600 | | | | 103.5 |
| 15.66 | 89 | 1829 | 18.8 | 6050 | | | Ø42 | 99.6 |
| 12.82 | 109 | 1722 | 22 | 5700 | | | | 116.3 |
| 11.19 | 125 | 1654 | 24 | 5470 | | | | 107.9 |
| 10.53 | 133 | 1624 | 25 | 5370 | | | | |
| 9.04 | 155 | 1551 | 28 | 5130 | | | | |
| 8.27 | 169 | 1510 | 29 | 5000 | | | | |



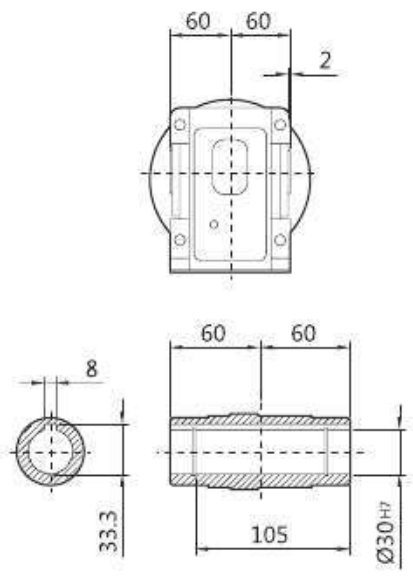
| i | na [1/min] | Mamax [Nm] | Pe [kW] | FRa [N] | FRe [N] |  | | m [kg] |
|---|---|---|---|---|---|---|---|---|
| FK70 | | | | | | | | 4300Nm |
| 174.75 | 8.0 | 4300 | 4.0 | 38060 | | | | 154.9 |
| 154.10 | 9.1 | 4300 | 4.5 | 35890 | | | | 147.1 |
| 140.71 | 10 | 4300 | 4.9 | 34370 | | FK..S70 | Ø28 | 140.4 |
| | | | | | | | | 171.4 |
| | | | | | | | | 149.8 |
| 119.87 | 12 | 4300 | 5.8 | 31800 | | | | |
| 112.43 | 12 | 4300 | 6.1 | 30800 | | | | 159.1 |
| 101.37 | 14 | 4300 | 6.8 | 29230 | | | | 151.3 |
| 89.79 | 16 | 4300 | 7.7 | 27450 | | | Ø38 | 144.6 |
| 80.07 | 17 | 4300 | 8.6 | 25830 | | | | 175.6 |
| 71.78 | 20 | 4300 | 9.6 | 24330 | | | | 154 |
| 64.72 | 22 | 4300 | 10.7 | 22960 | | | | |
| 52.96 | 26 | 4300 | 13.0 | 20420 | | | | 167.1 |
| 47.16 | 30 | 3266 | 11.1 | 21880 | | | | 159.3 |
| 42.28 | 33 | 3274 | 12.4 | 20560 | | | Ø42 | 152.6 |
| 38.12 | 37 | 3280 | 13.8 | 19360 | | | | 183.6 |
| 31.19 | 45 | 3295 | 17.0 | 17110 | | | | 162 |
| 23.92 | 59 | 3948 | 27 | 13410 | | | | |
| 21.33 | 66 | 3814 | 29 | 12960 | | | | |
| 19.12 | 73 | 3692 | 31 | 12540 | | | | 167.1 |
| 17.24 | 81 | 3579 | 33 | 12160 | | | | 166.3 |
| 14.11 | 99 | 3369 | 38 | 11450 | | | Ø48 | 159.6 |
| 12.56 | 111 | 2826 | 36 | 11310 | | | | 190.6 |
| 11.26 | 124 | 2735 | 39 | 10950 | | | | 169 |
| 10.16 | 138 | 2651 | 42 | 10610 | | | | |
| 8.31 | 168 | 2496 | 48 | 9990 | | | | |
| FK90 | | | | | | | | 8000Nm |
| 143.55 | 10 | 8000 | 9.0 | 59170 | | | | 273 |
| 121.95 | 11 | 8000 | 10.5 | 55370 | | | | 244 |
| | | | | | | FK..S90 | Ø28 | 219 |
| | | | | | | | | 262 |
| | | | | | | | | 236 |
| 107.04 | 13 | 8000 | 12.0 | 52460 | | | | 277 |
| 100.47 | 14 | 8000 | 12.8 | 51090 | | | | 248 |
| 95.48 | 15 | 8000 | 13.5 | 50000 | | | Ø38 | 223 |
| | | | | | | | | 266 |
| | | | | | | | | 240 |
| 90.70 | 15 | 8000 | 14.2 | 48930 | | | | 284 |
| 82.38 | 17 | 8000 | 15.6 | 46960 | | | | 255 |
| 75.12 | 19 | 8000 | 17.1 | 45110 | | | Ø42 | 230 |
| | | | | | | | | 273 |
| | | | | | | | | 247 |
| 66.33 | 21 | 8000 | 19.4 | 42710 | | | | |
| 57.78 | 24 | 8000 | 22 | 40150 | | | | |
| 45.81 | 31 | 7700 | 27 | 36840 | | | | |
| 41.96 | 33 | 7600 | 29 | 35630 | | | | |
| 37.96 | 37 | 7400 | 31 | 34510 | | | | 295 |
| 32.59 | 43 | 7200 | 36 | 32630 | | | | 266 |
| 29.71 | 47 | 7100 | 38 | 31490 | | | Ø48 | 241 |
| 22.86 | 61 | 6800 | 48 | 28500 | | | | 284 |
| 19.84 | 71 | 6600 | 53 | 27100 | | | | 258 |
| 16.13 | 87 | 6450 | 64 | 24840 | | | | |
| 14.59 | 96 | 6400 | 70 | 23740 | | | | |
| 10.77 | 130 | 5900 | 88 | 19890 | | | | |
| 8.67 | 161 | 5400 | 100 | 19010 | | | | |

## 3.3 Dimension Sheets

FKSF30



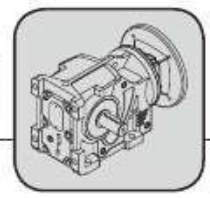

FKHF30



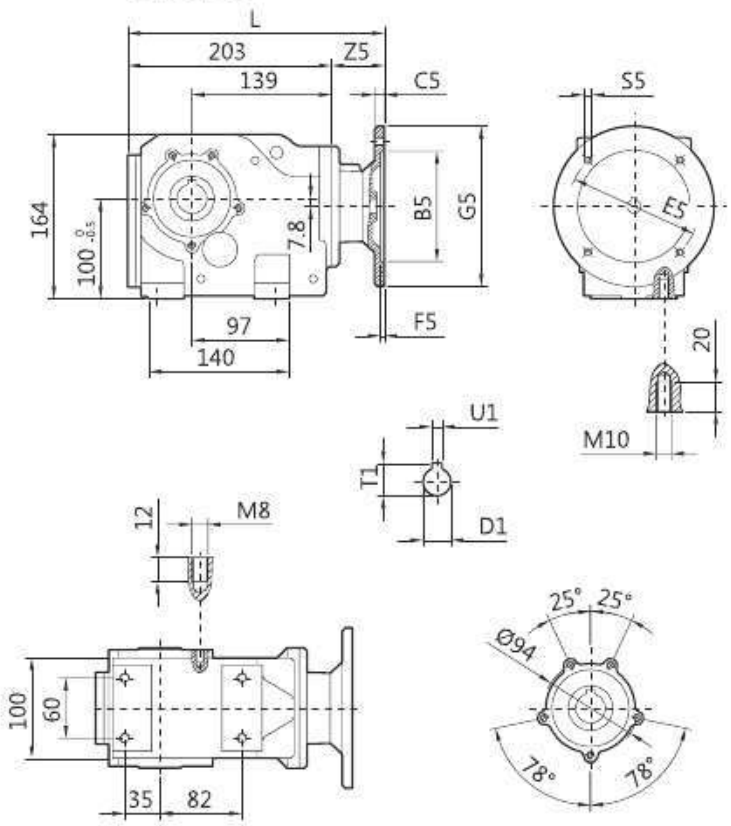

3

For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

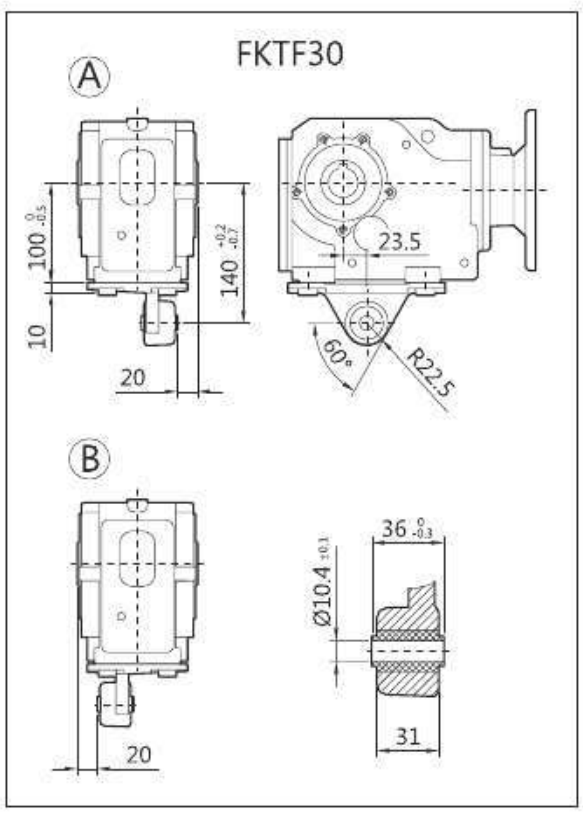
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 255 | M8 | 53 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 255 | M8 | 53 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 273 | M10 | 71 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 273 | M10 | 71 | 24 | 27.3 | 8 |



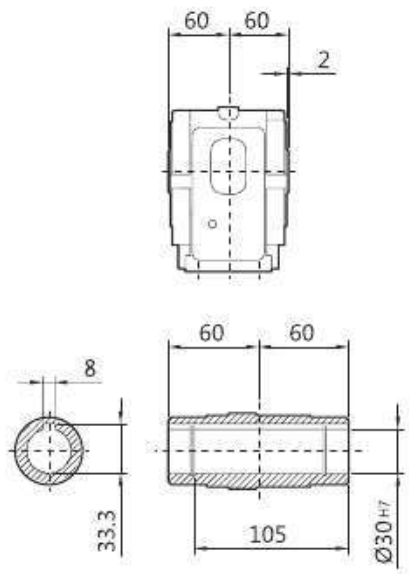
## FKAF30



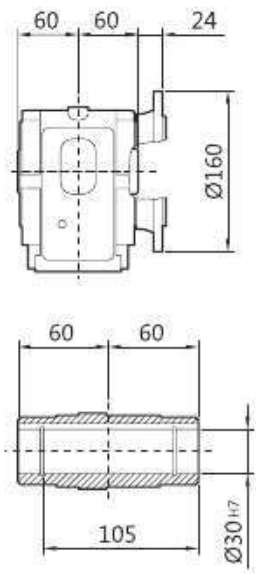

## FKTF30



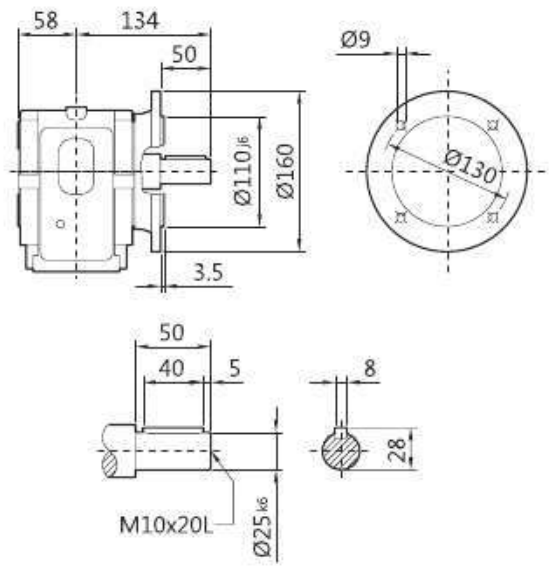

## FKAF30




## FKMF30

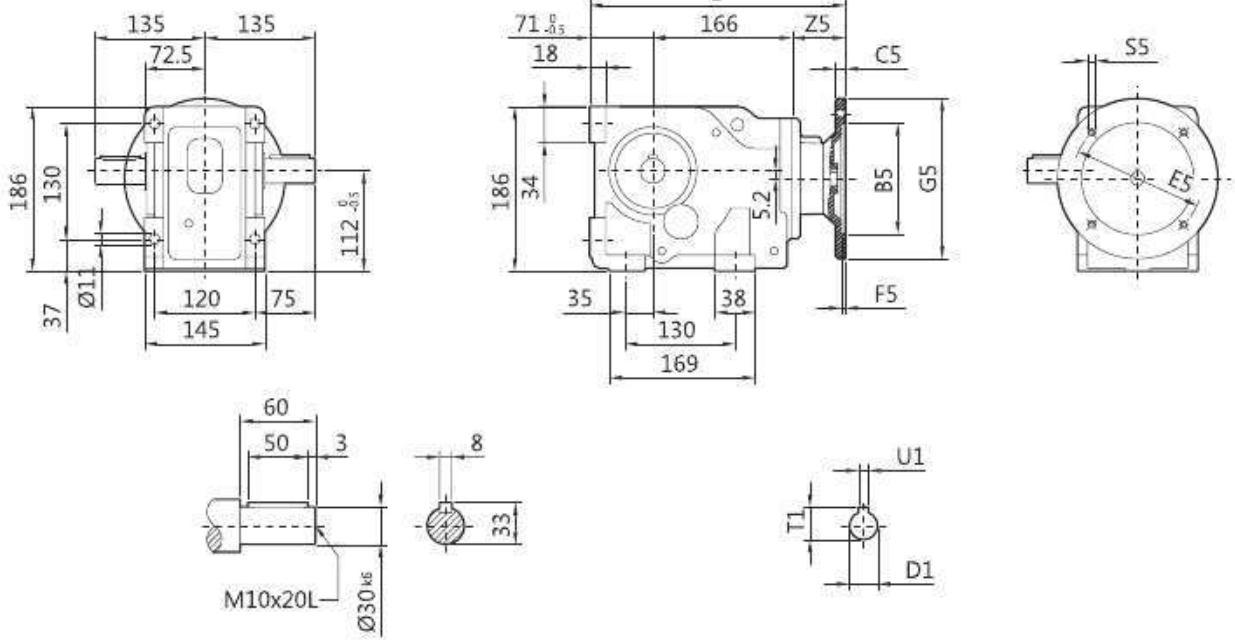



## FKNF30

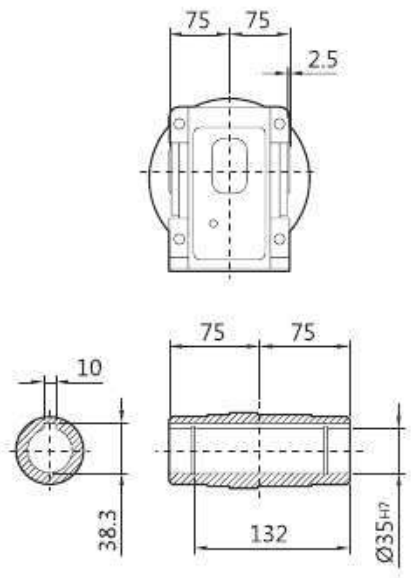



| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 256 | M8 | 53 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 256 | M8 | 53 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 274 | M10 | 71 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 274 | M10 | 71 | 24 | 27.3 | 8 |

## FKSF35



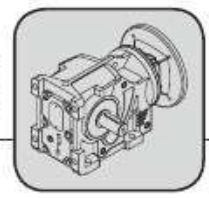

## FKHF35



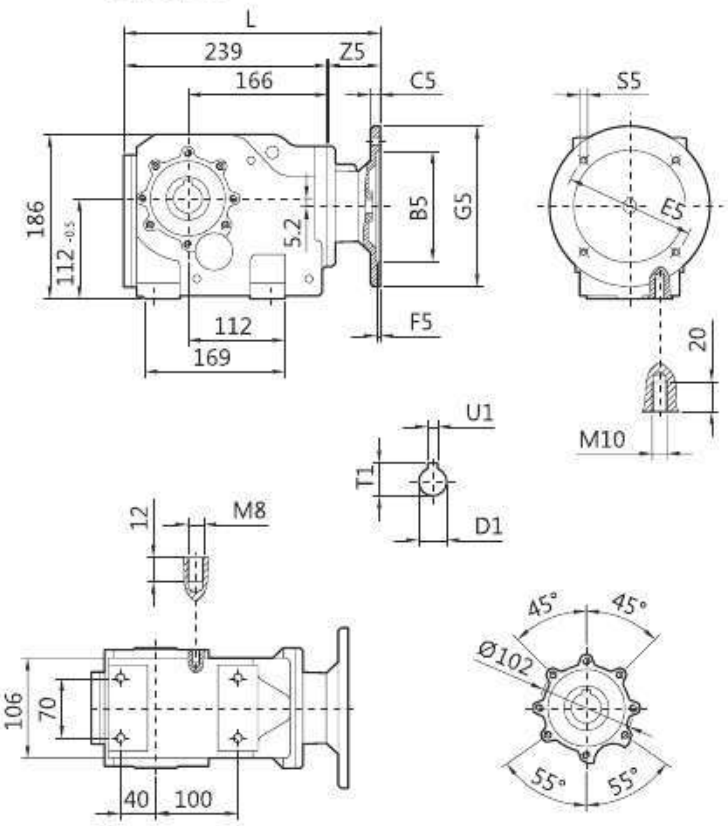

3

For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

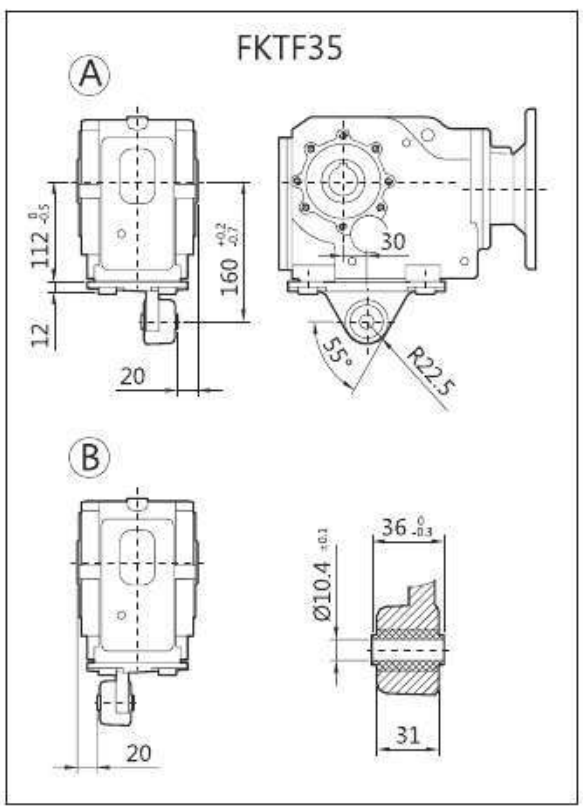
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 285.5 | M8 | 48.5 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 285.5 | M8 | 48.5 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 303.5 | M10 | 66.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 303.5 | M10 | 66.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 320 | M12 | 83 | 28 | 31.3 | 8 |



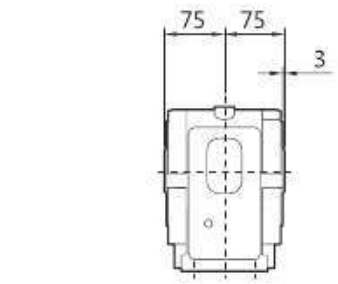
## FKAF35



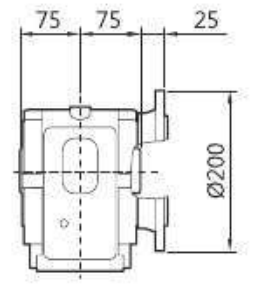

## FKTF35



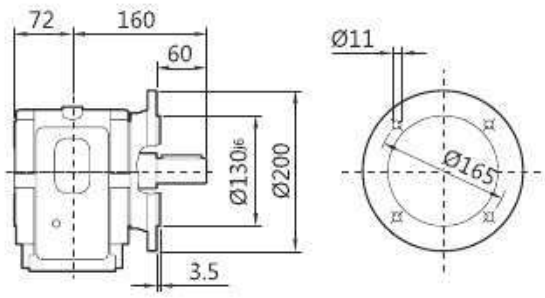

## FKAF35




## FKMF35

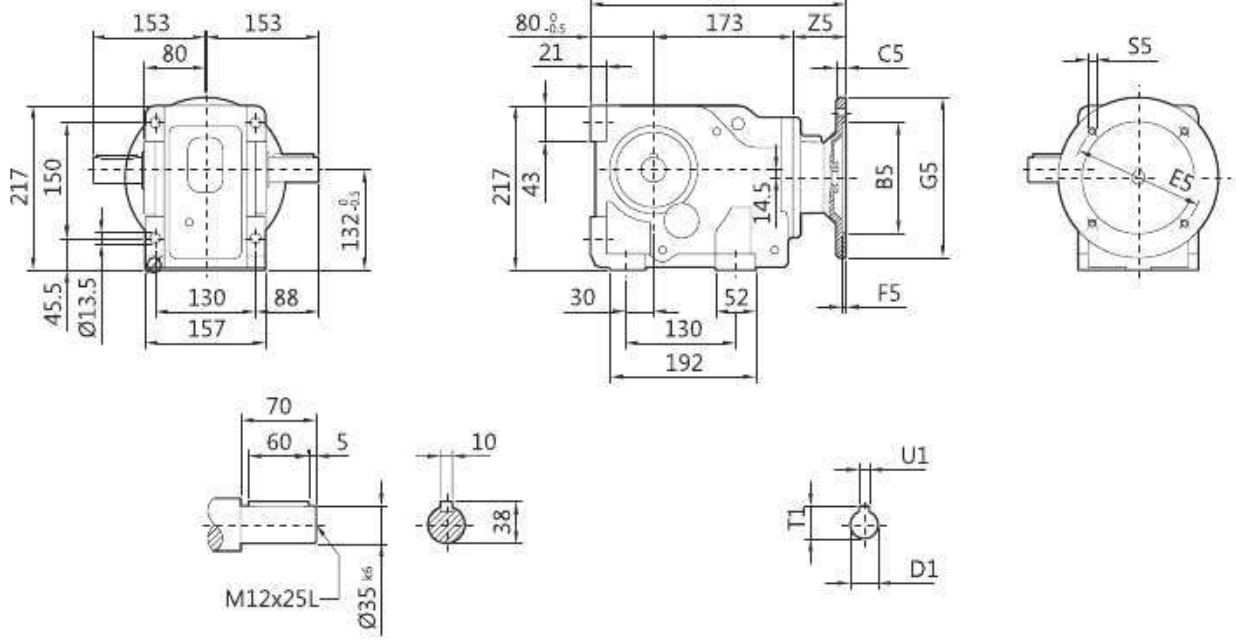



## FKNF35

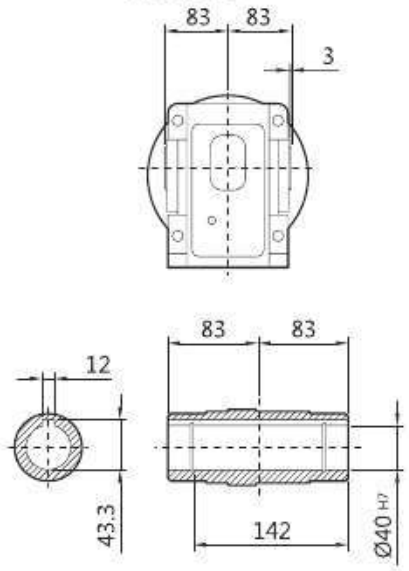



| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 287.5 | M8 | 48.5 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 287.5 | M8 | 48.5 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 305.5 | M10 | 66.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 305.5 | M10 | 66.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 323 | M12 | 83 | 28 | 31.3 | 8 |

## FKSF40




## FKHF40



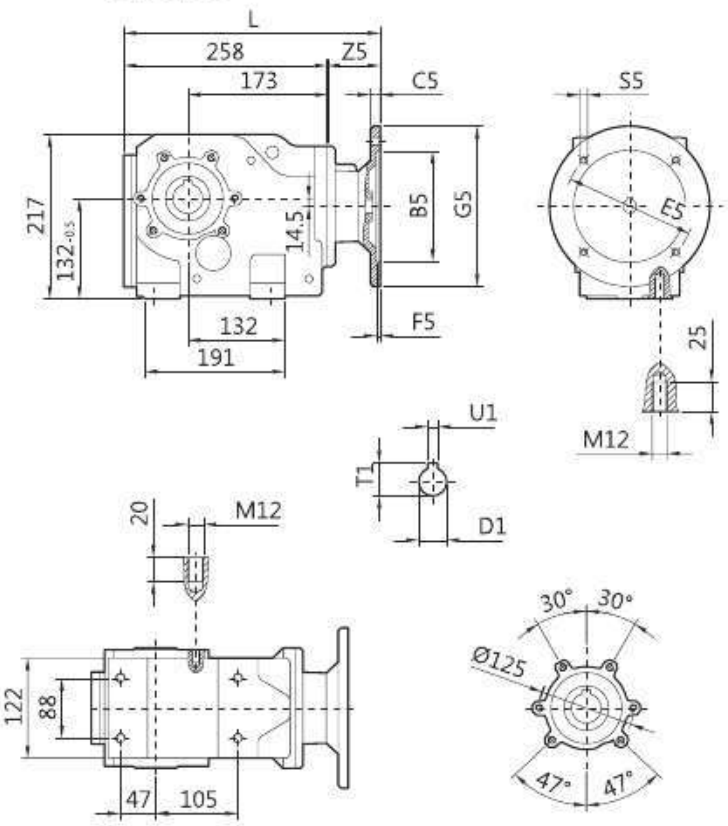



For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

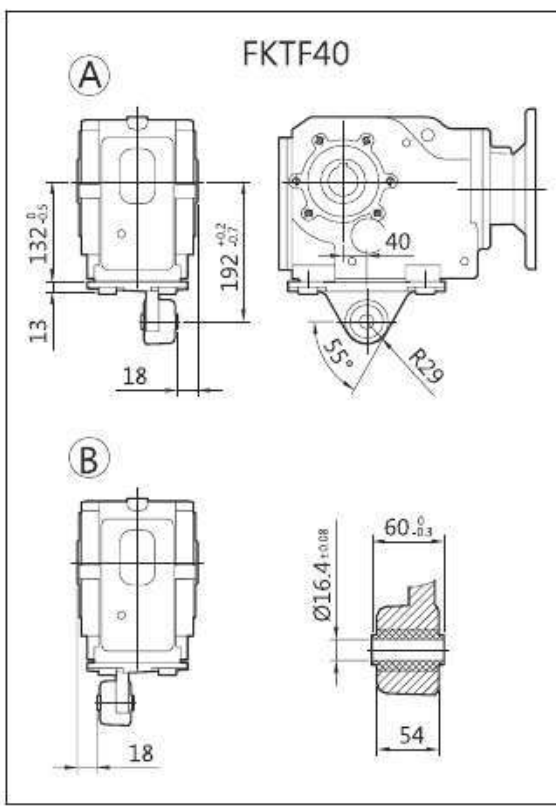
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 299.5 | M8 | 46.5 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 299.5 | M8 | 46.5 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 317.5 | M10 | 64.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 317.5 | M10 | 64.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 334 | M12 | 81 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 334 | M12 | 81 | 28 | 31.3 | 8 |



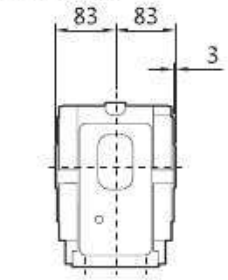
## FKAF40



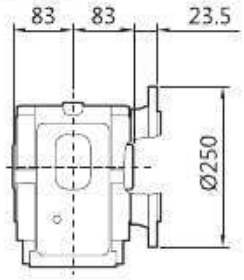

## FKTF40



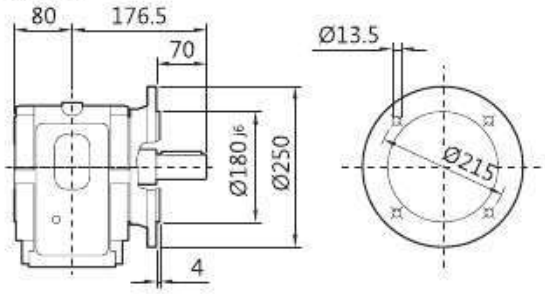

## FKAF40

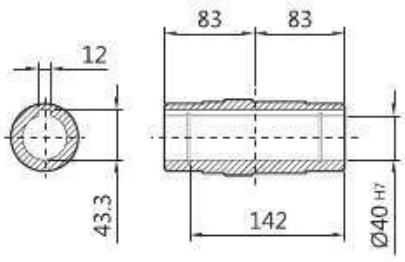


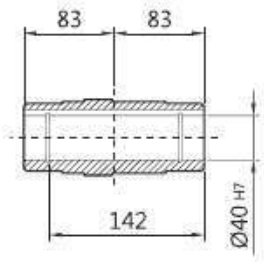

## FKMF40

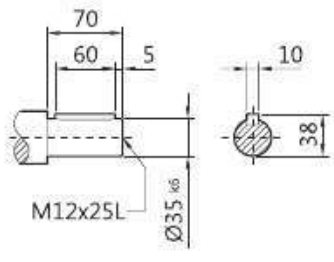



## FKNF40



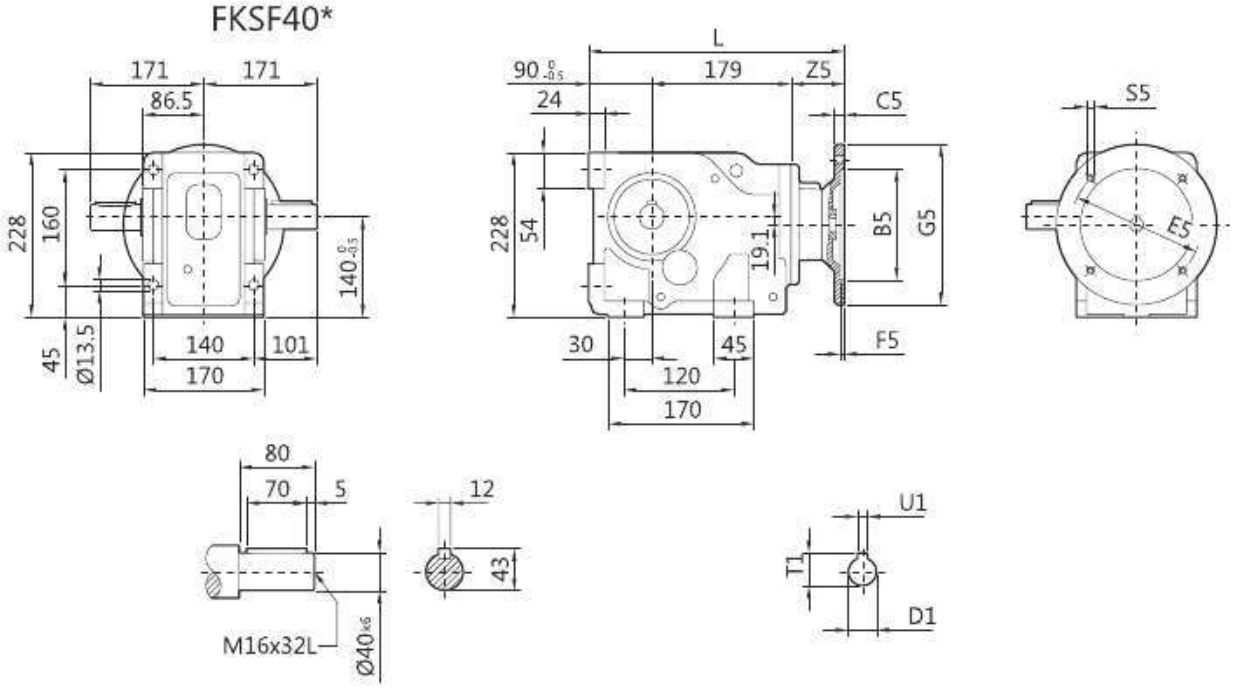



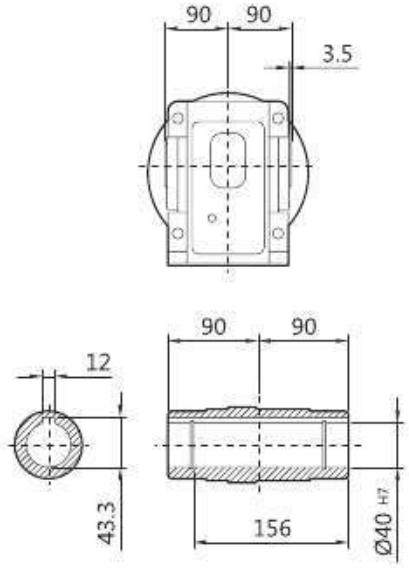




| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 304.5 | M8 | 46.5 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 304.5 | M8 | 46.5 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 322.5 | M10 | 64.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 322.5 | M10 | 64.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 339 | M12 | 81 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 339 | M12 | 81 | 28 | 31.3 | 8 |

## FKSF40*




## FKHF40*



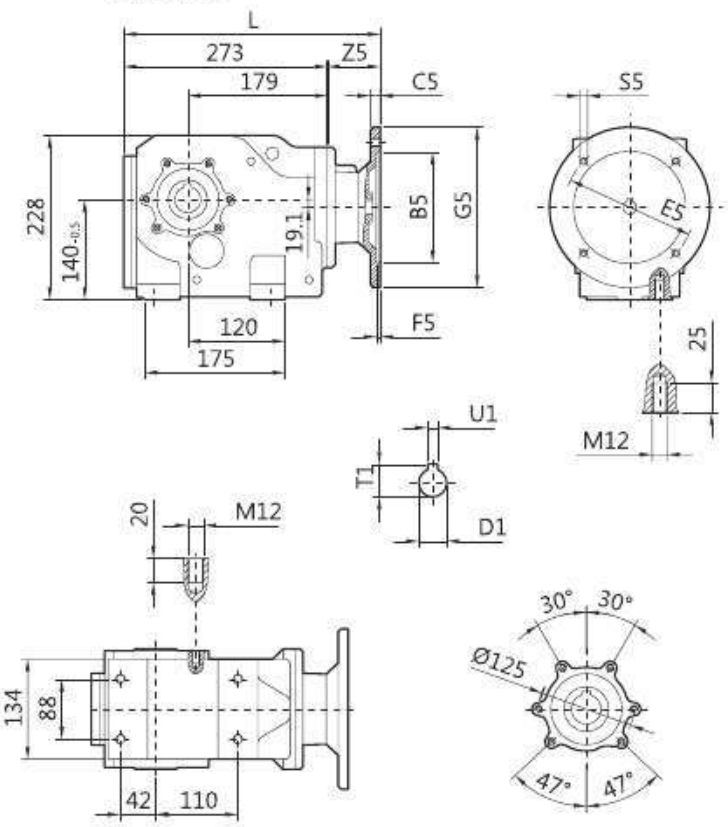

3

For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

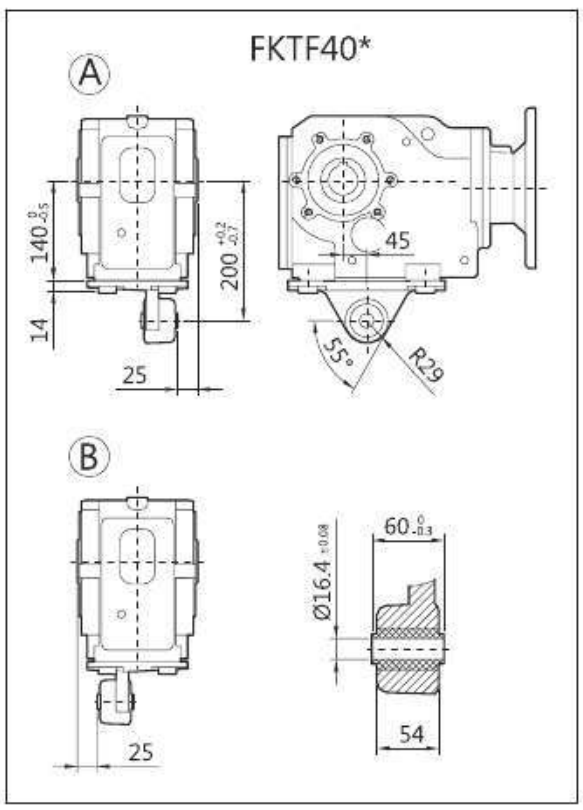
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 315.5 | M8 | 46.5 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 315.5 | M8 | 46.5 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 333.5 | M10 | 64.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 333.5 | M10 | 64.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 350 | M12 | 81 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 350 | M12 | 81 | 28 | 31.3 | 8 |



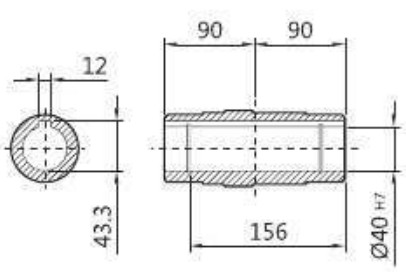
FKAF40*



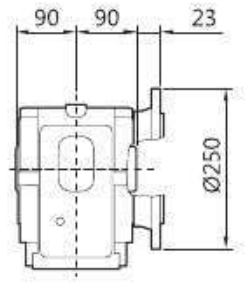

FKTF40*

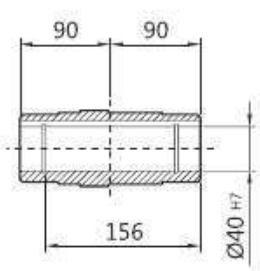



FKAF40*

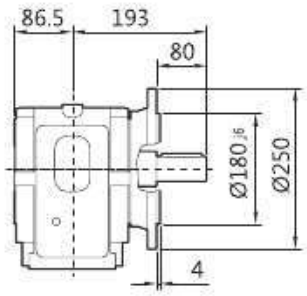


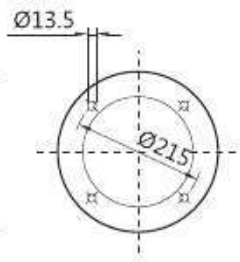

FKMF40*

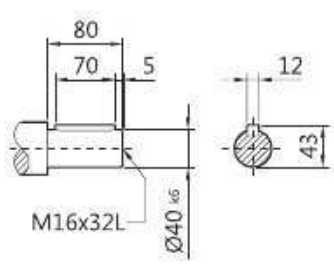



FKNF40*

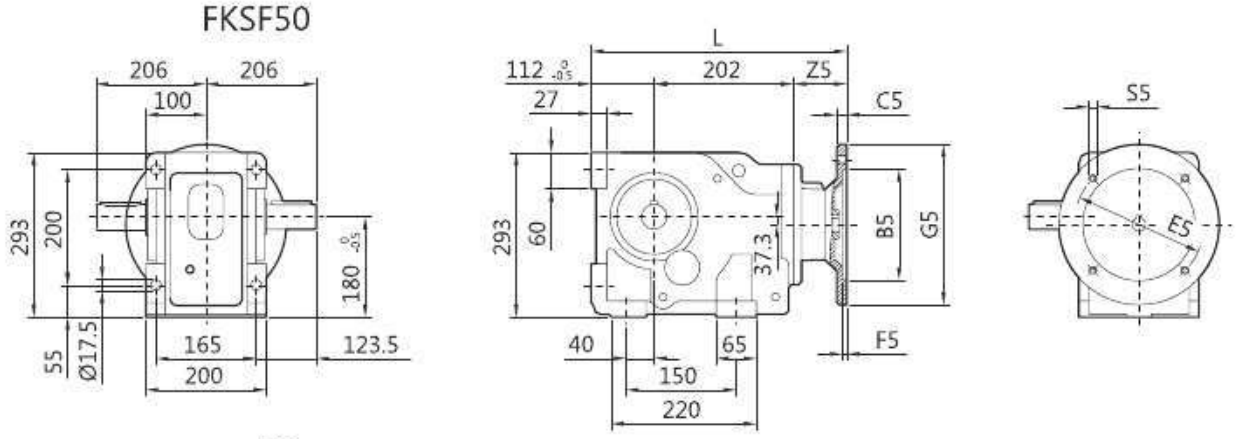


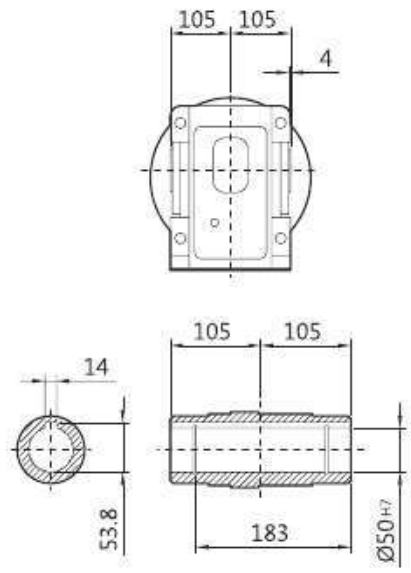




| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 63 * | 95 | 10 | 115 | 4 | 140 | 319.5 | M8 | 46.5 | 11 | 12.8 | 4 |
| IEC 71 | 110 | 10 | 130 | 4 | 160 | 319.5 | M8 | 46.5 | 14 | 16.3 | 5 |
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 337.5 | M10 | 64.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 337.5 | M10 | 64.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 354 | M12 | 81 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 354 | M12 | 81 | 28 | 31.3 | 8 |

## FKSF50




## FKHF50



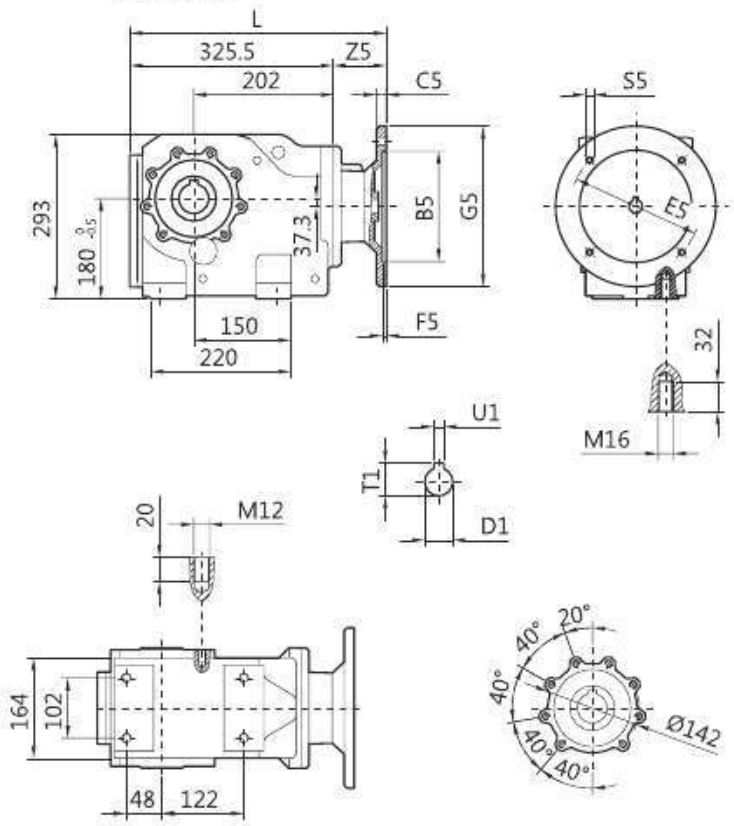

3

For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

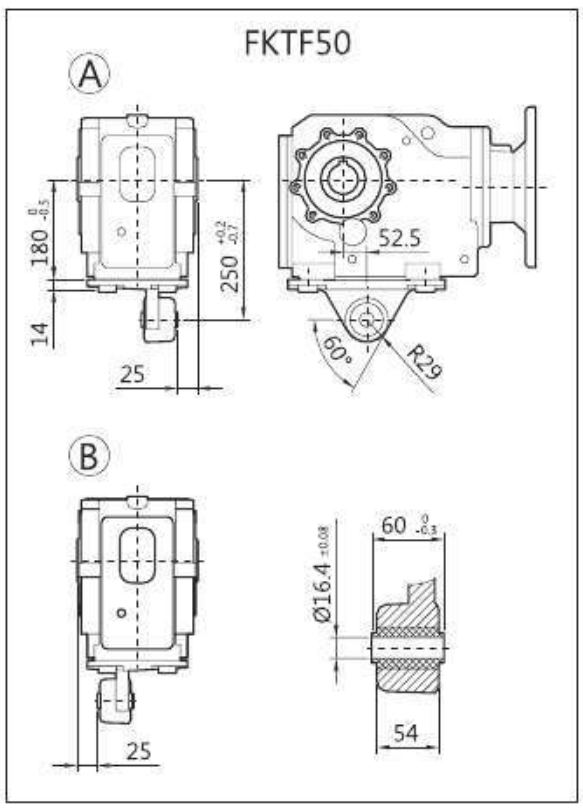
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 373 | M10 | 59 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 373 | M10 | 59 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 389.5 | M12 | 75.5 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 389.5 | M12 | 75.5 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 438 | M12 | 124 | 38 | 41.3 | 10 |



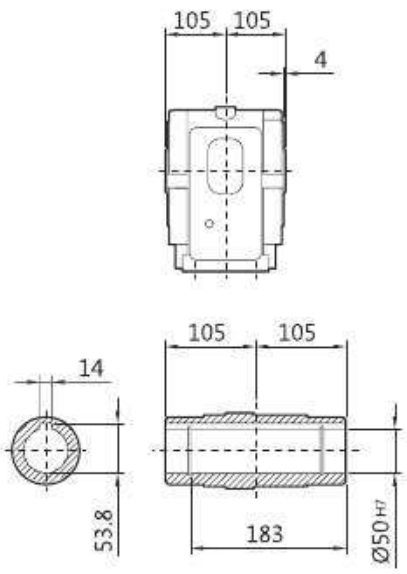
## FKAF50



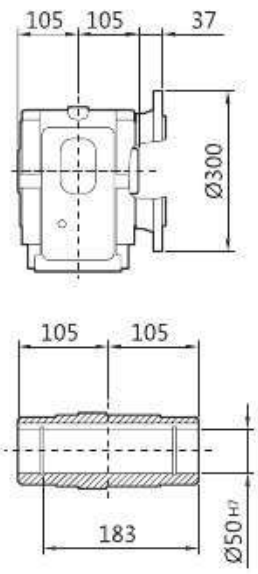

## FKTF50



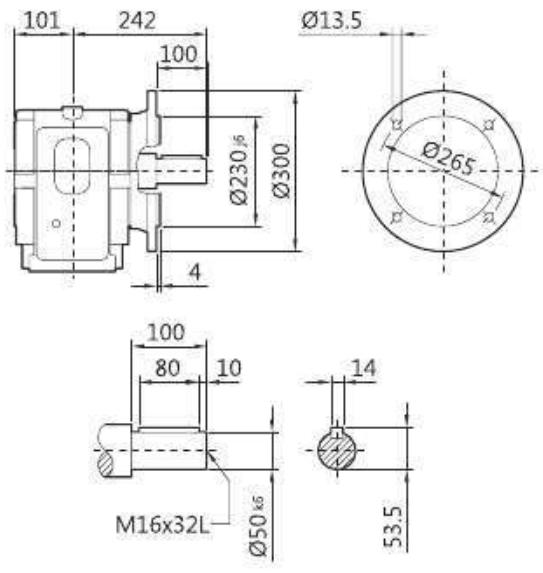

## FKAF50




## FKMF50

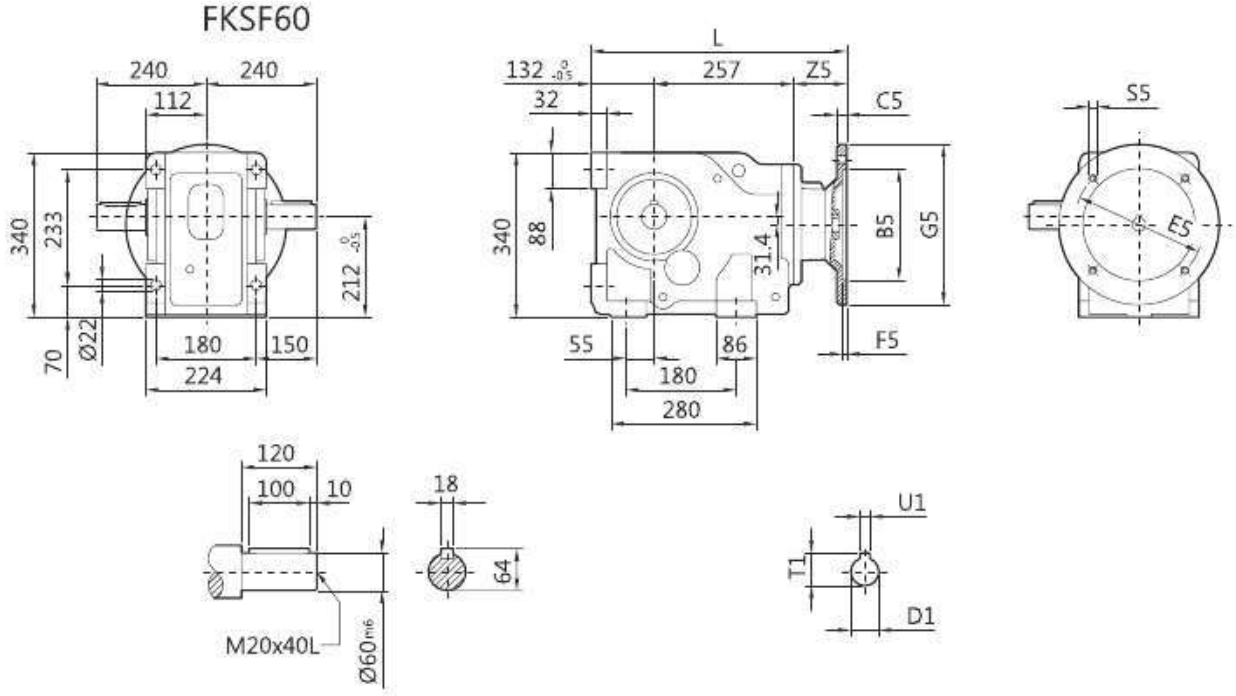



## FKNF50

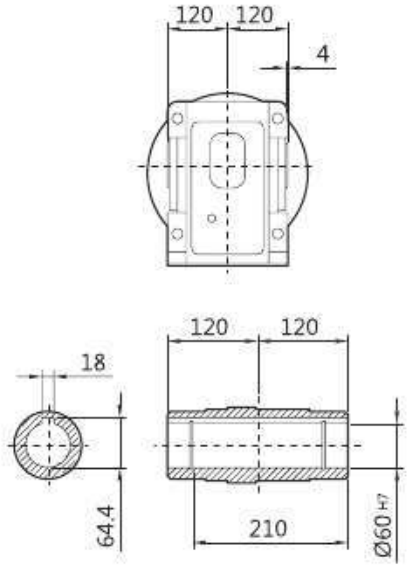



| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 384.5 | M10 | 59 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 384.5 | M10 | 59 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 401 | M12 | 75.5 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 401 | M12 | 75.5 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 449.5 | M12 | 124 | 38 | 41.3 | 10 |

## FKSF60




## FKHF60



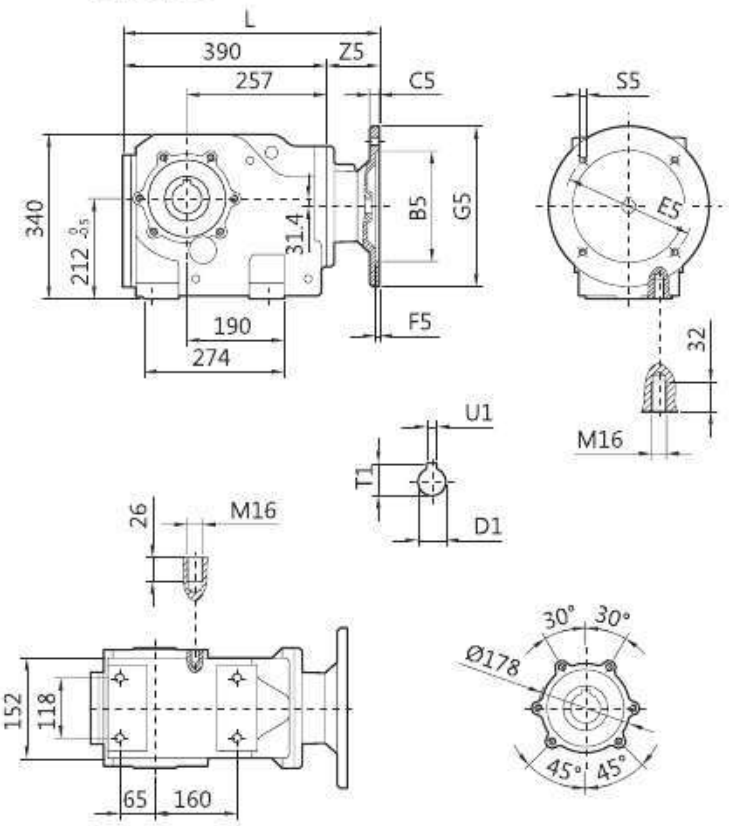

3

For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

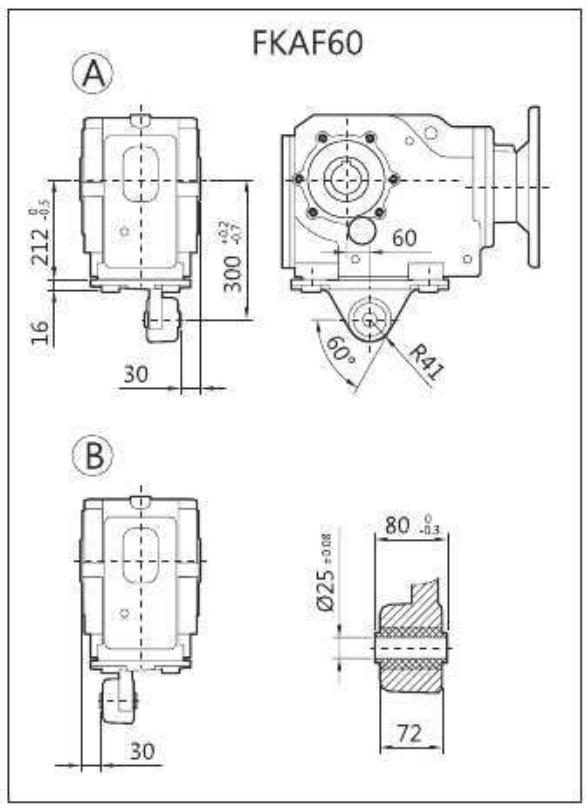
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 438.5 | M10 | 49.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 438.5 | M10 | 49.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 455 | M12 | 66 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 455 | M12 | 66 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 503.5 | M12 | 114.5 | 38 | 41.3 | 10 |
| IEC 160 | 250 | 20 | 300 | 6 | 350 | 539.5 | M16 | 150.5 | 42 | 45.3 | 12 |



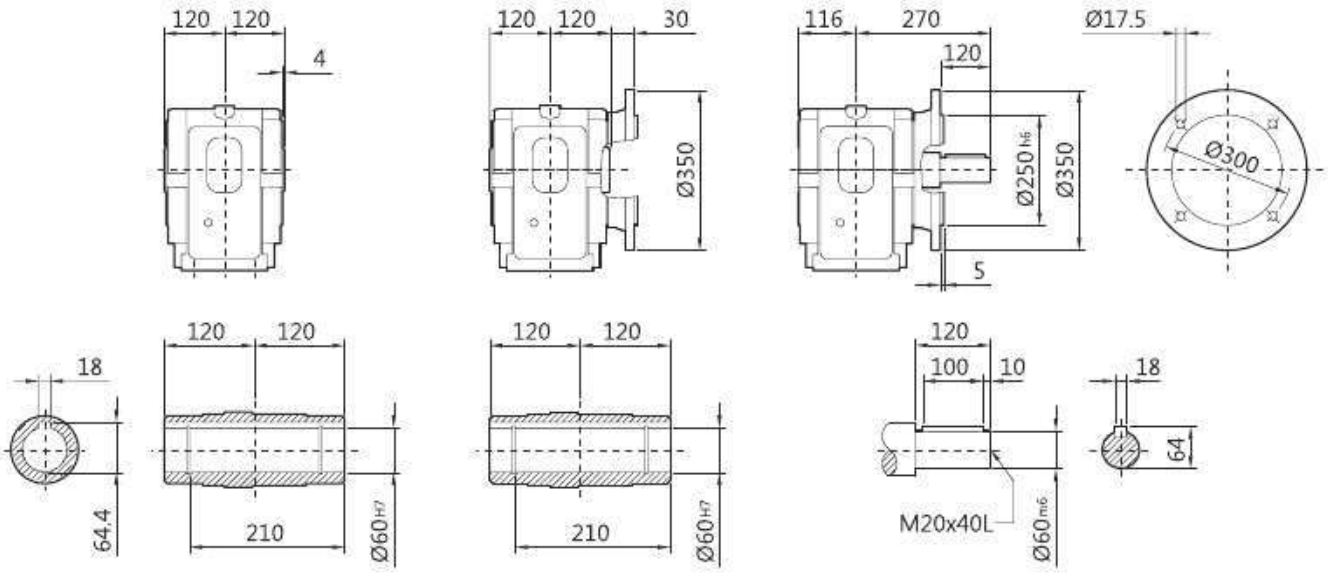
FKAF60




FKAF60

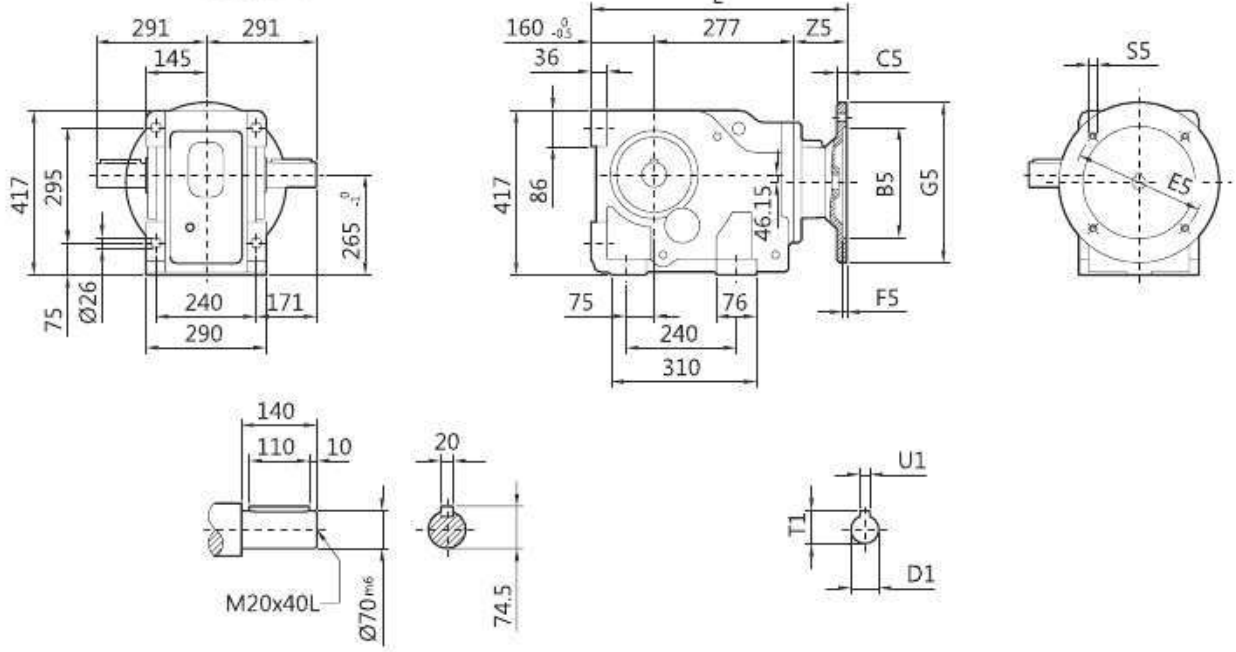



FKAF60 FKMF60 FKNF60

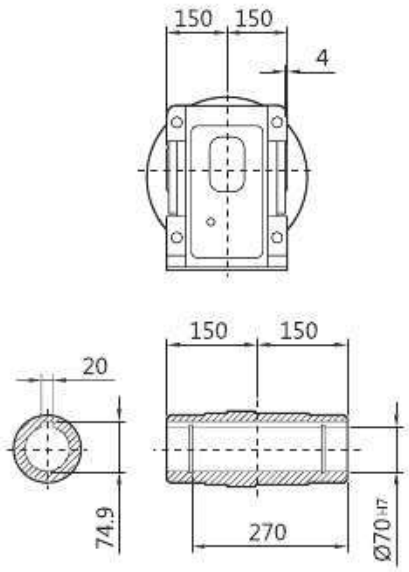



| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 80 | 130 | 12 | 165 | 5 | 200 | 439.5 | M10 | 49.5 | 19 | 21.8 | 6 |
| IEC 90 | 130 | 12 | 165 | 5 | 200 | 439.5 | M10 | 49.5 | 24 | 27.3 | 8 |
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 456 | M12 | 66 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 456 | M12 | 66 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 504.5 | M12 | 114.5 | 38 | 41.3 | 10 |
| IEC 160 | 250 | 20 | 300 | 6 | 350 | 540.5 | M16 | 150.5 | 42 | 45.3 | 12 |

## FKSF70



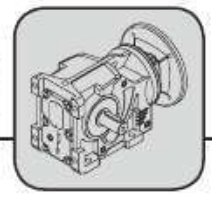

## FKHF70



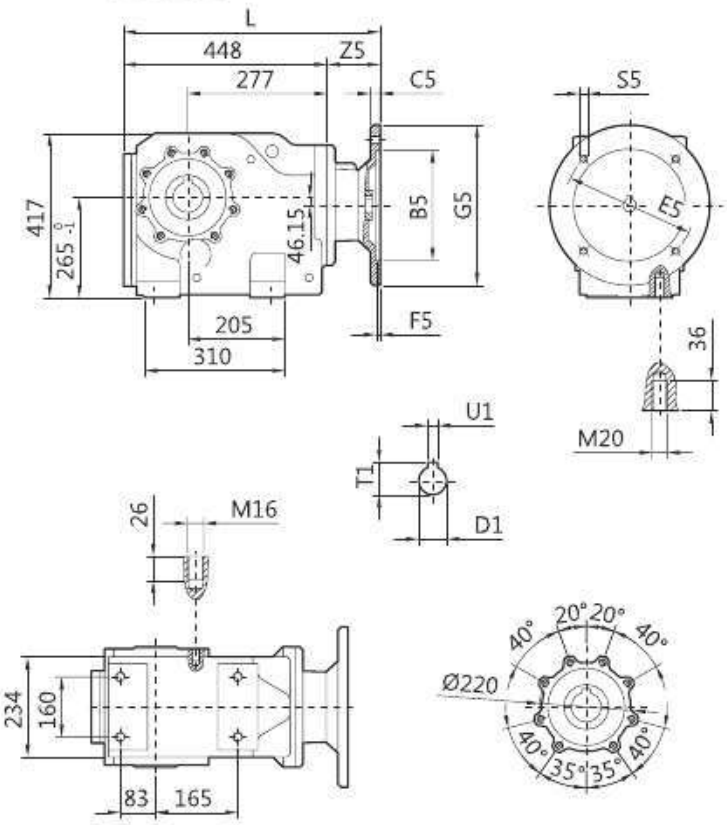

3

For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

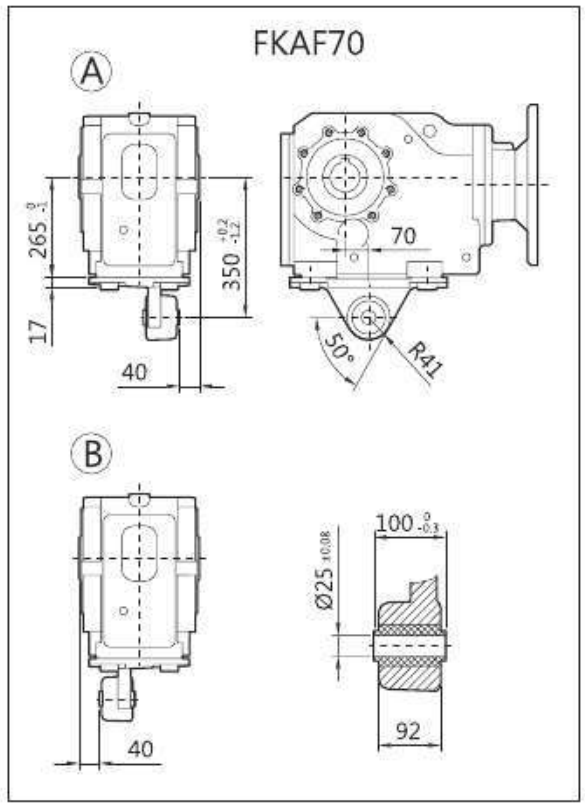
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 499 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 499 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 543.5 | M12 | 106.5 | 38 | 41.3 | 10 |
| IEC 160 | 250 | 20 | 300 | 6 | 350 | 579.5 | M16 | 142.5 | 42 | 45.3 | 12 |
| IEC 180 * | 250 | 20 | 300 | 6 | 350 | 588.5 | M16 | 151.5 | 48 | 51.8 | 14 |



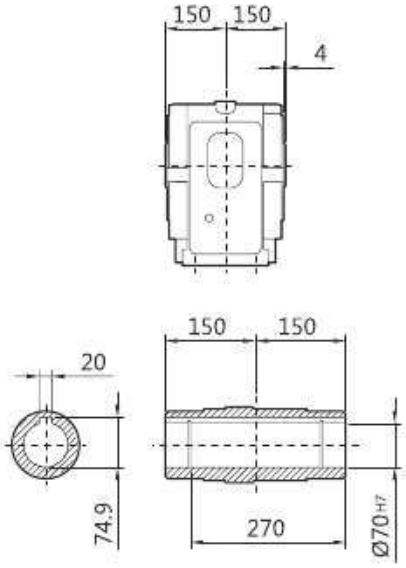
## FKAF70



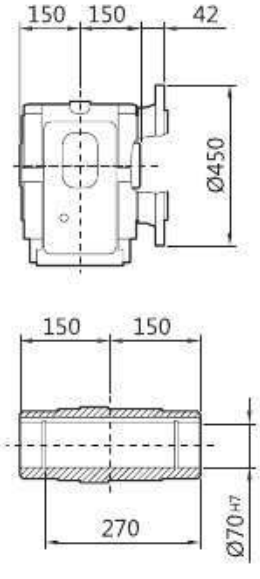

## FKAF70



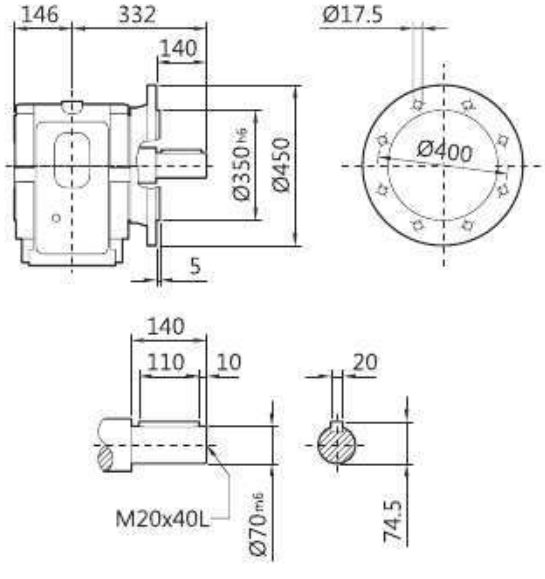

## FKAF70




## FKMF70

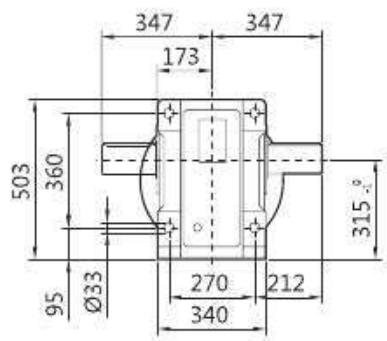


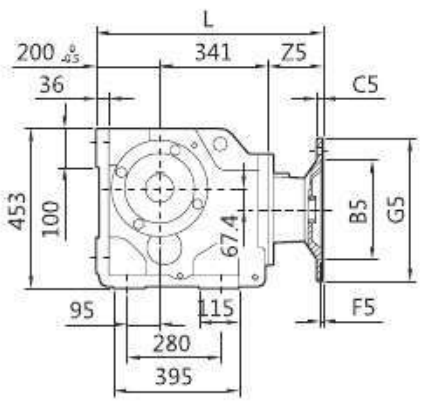

## FKNF70



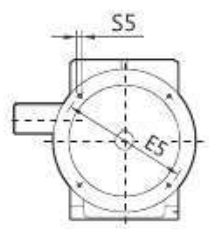

| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 510 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 510 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 554.5 | M12 | 106.5 | 38 | 41.3 | 10 |
| IEC 160 | 250 | 20 | 300 | 6 | 350 | 590.5 | M16 | 142.5 | 42 | 45.3 | 12 |
| IEC 180 * | 250 | 20 | 300 | 6 | 350 | 599.5 | M16 | 151.5 | 48 | 51.8 | 14 |

## FKSF90

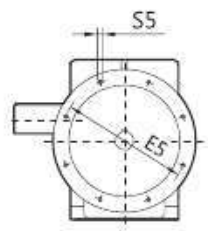


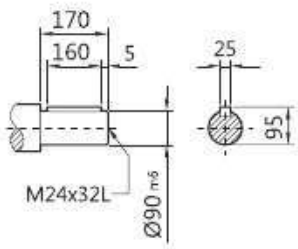



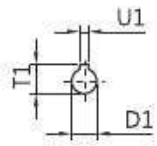

≦IEC 200



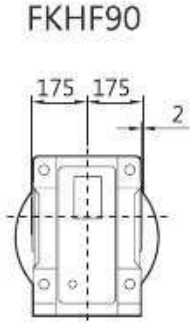

≧IEC 225

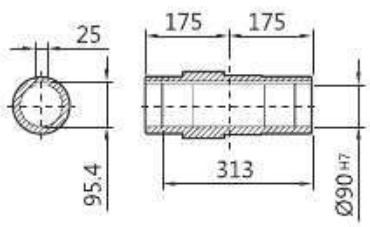



## FKHF90

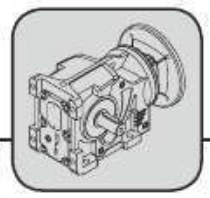


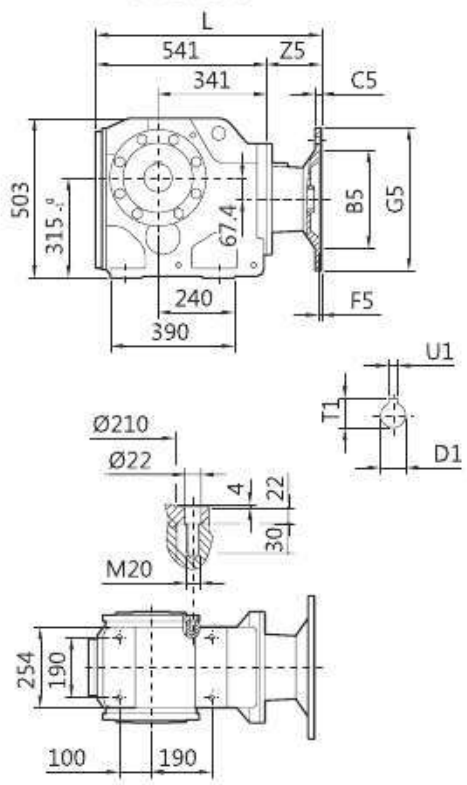

3

For the dimensions concerning the solid input shaft, please refer to the table shown at page 80.
For the dimensions concerning the motor input, please refer to the table shown at page 81.

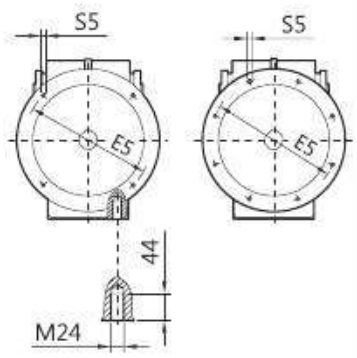
| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 603 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 603 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 638 | M12 | 97 | 38 | 41.3 | 10 |
| IEC 160 | 250 | 20 | 300 | 6 | 350 | 674 | M16 | 133 | 42 | 45.3 | 12 |
| IEC 180 * | 250 | 20 | 300 | 6 | 350 | 683 | M16 | 142 | 48 | 51.8 | 14 |
| IEC 200 * | 300 | 20 | 350 | 6 | 400 | 683 | M16 | 142 | 55 | 59.3 | 16 |
| IEC 225 * | 350 | 20 | 400 | 6 | 450 | 714 | M16 | 173 | 60 | 64.4 | 18 |

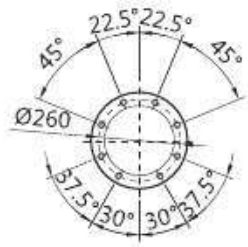


FKAF90

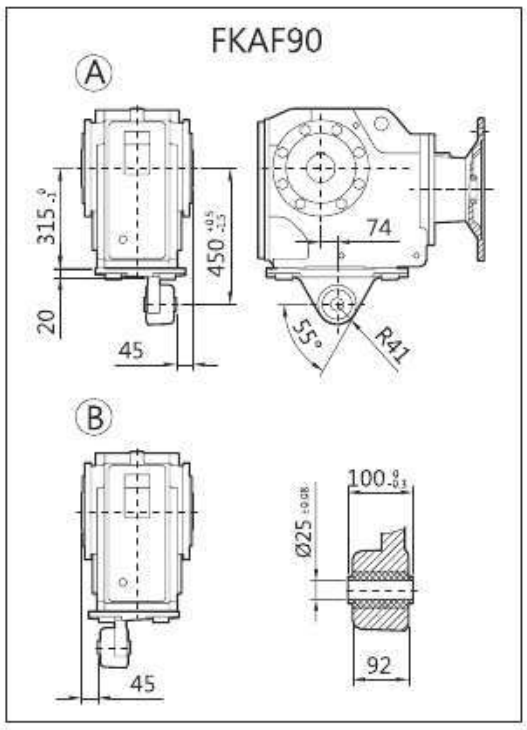



≦IEC 200 ≧IEC 225

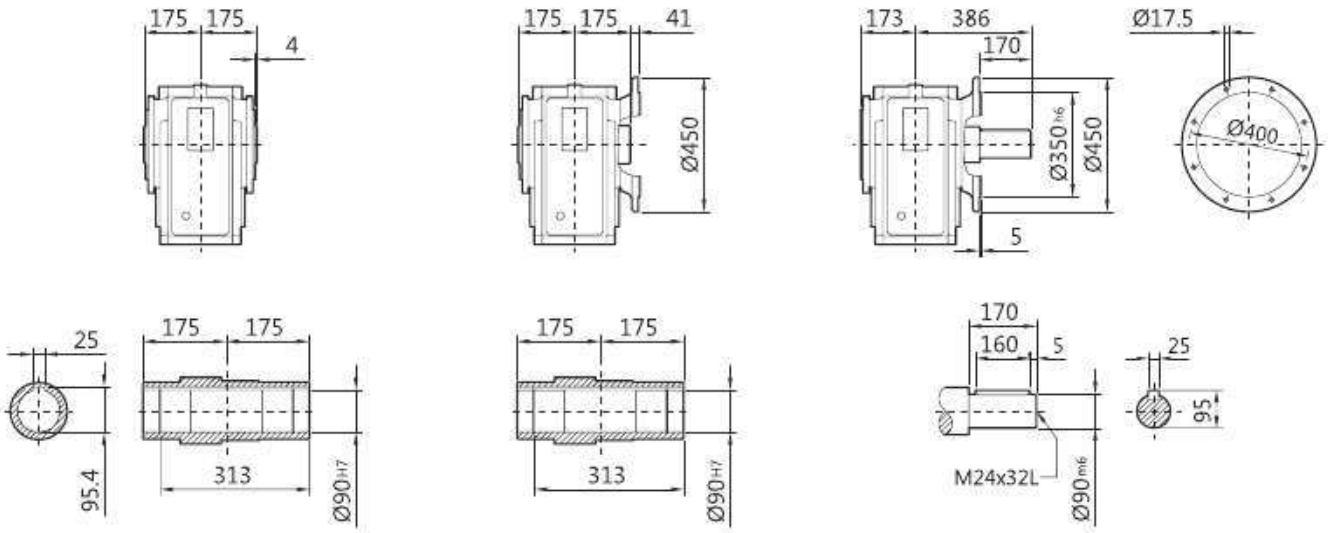



FKAF90




FKAF90 FKMF90 FKNF90




| | B5 | C5 | E5 | F5 | G5 | L | S5 | Z5 | D1 | T1 | U1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IEC 100 | 180 | 15 | 215 | 5 | 250 | 603 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 112 | 180 | 15 | 215 | 5 | 250 | 603 | M12 | 62 | 28 | 31.3 | 8 |
| IEC 132 | 230 | 16 | 265 | 6 | 300 | 638 | M12 | 97 | 38 | 41.3 | 10 |
| IEC 160 | 250 | 20 | 300 | 6 | 350 | 674 | M16 | 133 | 42 | 45.3 | 12 |
| IEC 180 * | 250 | 20 | 300 | 6 | 350 | 683 | M16 | 142 | 48 | 51.8 | 14 |
| IEC 200 * | 300 | 20 | 350 | 6 | 400 | 683 | M16 | 142 | 55 | 59.3 | 16 |
| IEC 225 * | 350 | 20 | 400 | 6 | 450 | 714 | M16 | 173 | 60 | 64.4 | 18 |

## Solid Input Shaft

### FK..S

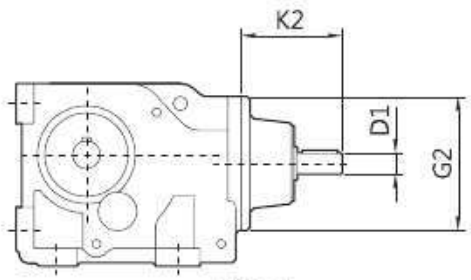
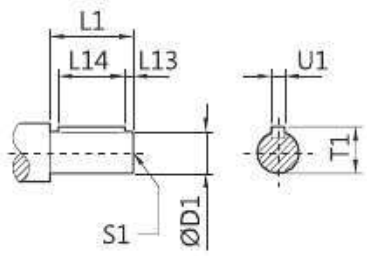



FIG 1



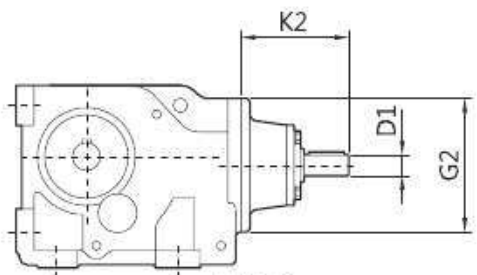
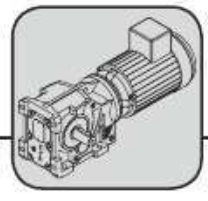



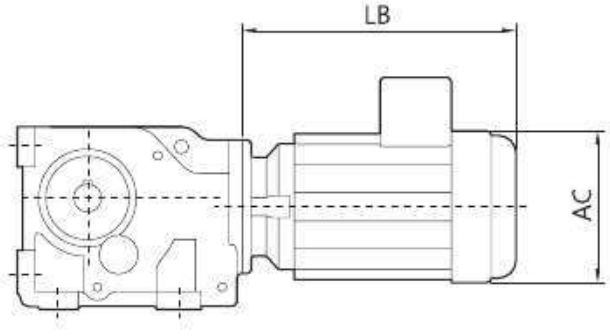

FIG 2

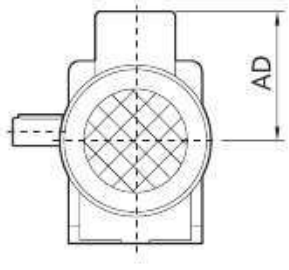
| | D1 | L1 | L13 | L14 | T1 | U1 | S1 | K2 | G2 | FIG |
|---|---|---|---|---|---|---|---|---|---|---|
| FK..30 | 16k6 | 40 | 4 | 32 | 18 | 5 | M5*10L | 88 | 120 | 1 |
| | 19k6 | 40 | 4 | 32 | 21.5 | 6 | M6*12L | 90.5 | 120 | 1 |
| FK..35 | 16k6 | 40 | 4 | 32 | 18 | 5 | M5*10L | 83.5 | 160 | 1 |
| | 19k6 | 40 | 4 | 32 | 21.5 | 6 | M6*12L | 86 | 160 | 1 |
| FK..40 | 19k6 | 40 | 4 | 32 | 21.5 | 6 | M6*12L | 95 | 160 | 2 |
| | 24k6 | 50 | 5 | 40 | 27 | 8 | M8*16L | 119.5 | 160 | 2 |
| FK..40* | 19k6 | 40 | 4 | 32 | 21.5 | 6 | M6*12L | 95 | 160 | 2 |
| | 24k6 | 50 | 5 | 40 | 27 | 8 | M8*16L | 119.5 | 160 | 2 |
| FK..50 | 19k6 | 40 | 4 | 32 | 21.5 | 6 | M6*12L | 89.5 | 200 | 2 |
| | 19k6 | 40 | 4 | 32 | 21.5 | 6 | M6*12L | 106 | 200 | 2 |
| | 24k6 | 50 | 5 | 40 | 27 | 8 | M8*16L | 114 | 200 | 2 |
| | 38k6 | 80 | 5 | 70 | 41 | 10 | M12*24L | 177 | 200 | 2 |
| FK..60 | 19k6 | 40 | 4 | 32 | 21.5 | 6 | M6*12L | 95.5 | 250 | 2 |
| | 28k6 | 60 | 5 | 50 | 31 | 8 | M8*16L | 114.5 | 250 | 2 |
| | 38k6 | 80 | 5 | 70 | 41 | 10 | M12*24L | 167.5 | 250 | 2 |
| | 42k6 | 110 | 10 | 70 | 45 | 12 | M16*32L | 240.5 | 250 | 2 |
| FK..70 | 28k6 | 60 | 5 | 50 | 31 | 8 | M8*16L | 110.5 | 300 | 2 |
| | 38k6 | 80 | 5 | 70 | 41 | 10 | M12*24L | 159.5 | 300 | 2 |
| | 42k6 | 110 | 10 | 70 | 45 | 12 | M16*32L | 232.5 | 300 | 2 |
| | 48k6 | 110 | 10 | 80 | 51.5 | 14 | M16*32L | 237.5 | 300 | 2 |
| FK..90 | 28k6 | 60 | 5 | 50 | 31 | 8 | M8*16L | 110.5 | 350 | 2 |
| | 38k6 | 80 | 5 | 70 | 41 | 10 | M12*24L | 150 | 350 | 2 |
| | 42k6 | 110 | 10 | 70 | 45 | 12 | M16*32L | 223 | 350 | 2 |
| | 48k6 | 110 | 10 | 80 | 51.5 | 14 | M16*32L | 228 | 350 | 2 |



## Couple With Motor

### FK..M



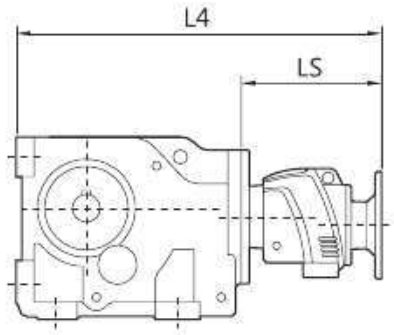




| | MOTOR | AC | AD | LB |
|---|---|---|---|---|
| FK..30 | 63 | 120 | 108 | 231.5 |
| | 71 | 136 | 116 | 247.5 |
| | 80 | 160 | 127 | 309 |
| | 90 | 176 | 139 | 354.5 |
| FK..35 | 63 | 120 | 108 | 227 |
| | 71 | 136 | 116 | 243 |
| | 80 | 160 | 127 | 304.5 |
| | 90 | 176 | 139 | 350 |
| | 100 | 198 | 149 | 398 |
| FK..40 | 63 | 120 | 108 | 225 |
| | 71 | 136 | 116 | 241 |
| | 80 | 160 | 127 | 302.5 |
| | 90 | 176 | 139 | 348 |
| | 100 | 198 | 149 | 396 |
| | 112 | 220 | 167 | 408 |
| FK..40* | 63 | 120 | 108 | 225 |
| | 71 | 136 | 116 | 241 |
| | 80 | 160 | 127 | 302.5 |
| | 90 | 176 | 139 | 348 |
| | 100 | 198 | 149 | 396 |
| | 112 | 220 | 167 | 408 |
| FK..50 | 80 | 160 | 127 | 297 |
| | 90 | 176 | 139 | 342.5 |
| | 100 | 198 | 149 | 390.5 |
| | 112 | 220 | 167 | 402.5 |
| | 132S | 258 | 184.5 | 441 |

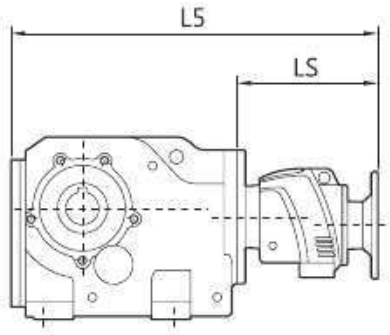
| | MOTOR | AC | AD | LB |
|---|---|---|---|---|
| FK..60 | 80 | 160 | 127 | 287.5 |
| | 90 | 176 | 139 | 333 |
| | 100 | 198 | 149 | 381 |
| | 112 | 220 | 167 | 393 |
| | 132S | 258 | 184.5 | 431.5 |
| | 132M | 258 | 184.5 | 469.5 |
| | 160M | 343 | 263 | 550 |
| FK..70 | 100 | 198 | 149 | 377 |
| | 112 | 220 | 167 | 389 |
| | 132S | 258 | 184.5 | 423.5 |
| | 132M | 258 | 184.5 | 461.5 |
| | 160M | 334 | 263 | 542 |
| | 160L | 334 | 286 | 586 |
| | 180MC | 382 | 305 | 607.5 |
| FK..90 | 100 | 198 | 149 | 369 |
| | 112 | 220 | 167 | 381 |
| | 132S | 258 | 184.5 | 414 |
| | 132M | 258 | 184.5 | 452 |
| | 160M | 334 | 263 | 532.5 |
| | 160L | 334 | 286 | 576.5 |
| | 180MC | 382 | 305 | 598 |
| | 180LC | 382 | 305 | 636 |
| | 200LC | 458 | 362 | 713 |

## Multi-Staged Gear Unit

FKSF/FKHF




FKAF/FKMF/FKNF




| | | LS | L4 | L5 |
|---|---|---|---|---|
| FK35 FH25 | IEC 63 | 219 | 456 | 458 |
| | IEC 71 | 219 | 456 | 458 |
| | IEC 80 | 237 | 474 | 476 |
| | IEC 90 | 237 | 474 | 476 |
| FK40 FH25 | IEC 63 | 217 | 470 | 475 |
| | IEC 71 | 217 | 470 | 475 |
| | IEC 80 | 235 | 488 | 493 |
| | IEC 90 | 235 | 488 | 493 |
| FK40* FH25 | IEC 63 | 217 | 486 | 490 |
| | IEC 71 | 217 | 486 | 490 |
| | IEC 80 | 235 | 504 | 508 |
| | IEC 90 | 235 | 504 | 508 |
| FK50 FH25 | IEC 63 | 211.5 | 525.5 | 537 |
| | IEC 71 | 211.5 | 525.5 | 537 |
| | IEC 80 | 229.5 | 543.5 | 555 |
| | IEC 90 | 229.5 | 543.5 | 555 |
| FK60 FH30 | IEC 63 | 241.5 | 630.5 | 631.5 |
| | IEC 71 | 241.5 | 630.5 | 631.5 |
| | IEC 80 | 259.5 | 648.5 | 649.5 |
| | IEC 90 | 259.5 | 648.5 | 649.5 |
| | IEC 100 | 276 | 665 | 666 |
| | IEC 112 | 276 | 665 | 666 |
| FK70 FH30 | IEC 63 | 233.5 | 670.5 | 681.5 |
| | IEC 71 | 233.5 | 670.5 | 681.5 |
| | IEC 80 | 251.5 | 688.5 | 699.5 |
| | IEC 90 | 215.5 | 688.5 | 699.5 |
| | IEC 100 | 268 | 705 | 716 |
| | IEC 112 | 268 | 705 | 716 |
| FK90 FH40 | IEC 71 | 290.5 | 831.5 | 831.5 |
| | IEC 80 | 298.5 | 839.5 | 839.5 |
| | IEC 90 | 298.5 | 839.5 | 839.5 |
| | IEC 100 | 315 | 856 | 856 |
| | IEC 112 | 315 | 856 | 856 |
| | IEC 132S | 363.5 | 904.5 | 904.5 |

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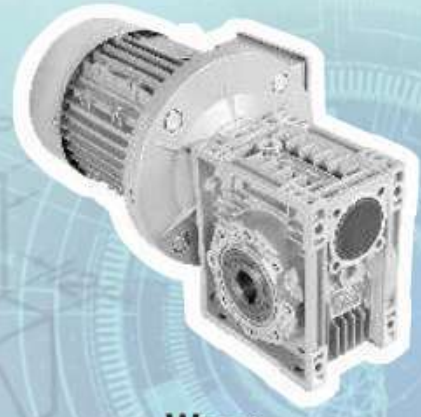
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