

斗式提升机用减速机 Bucket Elevator Drives

型号表示 主减速机型号/辅传减速机型号¹⁾

Designation of Types Main gear unit type/Auxiliary gear motor type¹⁾

例 Example: B3DH13-71-B-CW/KF107-Y18.5-28.59

主减速机型号说明 Explanation of main gear unit type

| 型号说明 | 上例说明 | Explanation of types | Explanation of the above example |
|--|----------------|--|---|
| 系列类型: B 直交轴系列 | 直交轴系列 | Types: B Bevel-helical | Bevel-helical |
| 传动级数: 3 三级 | 三级传动 | Number of stages: 3 3-stage | 3-stage |
| 输出轴结构形式: S 实心轴 H 空心轴 D 带胀紧盘空心轴 | 带胀紧盘 空心轴输出 | Output shaft design: S Solid shaft H Hollow shaft D Hollow shaft for shrink disk | Hollow shaft for shrink disk output |
| 安装方式: H 卧式带底脚 | 卧式带底脚安装 | Mouting positions: H Horizontal | Horizontal |
| 规格代号: 4~18 | 13机座号 | Size: sizes 4~18 | size 13 |
| 公称传动比: 公称传动比 i_N (见选型参数表) | 公称传动比 $i_N=71$ | Nominal ratio: Nominal ratio i_N (see selection table) | Nominal ratio $i_N=71$ |
| 装配布置形式: B、D (见256页) | 装配布置形式为B | Design for assemble: B, D (see page 256) | Design B |
| 输入轴旋转方向 (面向输入轴方向看): CW 顺时针 CCW 逆时针 | 输入轴为 顺时针方向 | Direction of rotation of input shaft: (viewing on input shaft) CW Clockwise, CCW Counter clockwise. | Direction of rotation of input shaft is clockwise |

辅传减速机型号说明²⁾ Explanation of anxilary gear motor type²⁾

| 型号说明 | 上例说明 | Explanation of types | Explanation of the above example |
|-----------------|------------|---|-----------------------------------|
| 减速机类型: 螺旋锥齿轮减速机 | 螺旋锥齿轮减速机 | Gear units type: Helical-bevel gear motor | Helical-bevel gear motor |
| 结构形式: F轴伸法兰式 | 轴伸法兰式 | Structure: F Flange mounted solid output shaft | Flange-mounted solid shaft output |
| 机座号: 37...167 | 107机座号 | Size: 37...167 | Size 107 |
| 电机: 电机功率 | 18.5kW普通电机 | Motor: motor power | 18.5kW Ordinary motor |
| 传动比: 见242页 | 传动比: 28.59 | Ratio: see page 242 | Ratio: 28.59 |

注: 1)使用国产及国外逆止器、超越离合器时, 尺寸略有不同(见247~254页减速机外形尺寸), 请特别说明。
2)主减速机规格确定后, 依据辅传驱动为空载和载荷不同工作情况, 辅传减速机型号基本确定, 见242页。

Note: 1) Please specially designate whether domestic or imported backstop and overrunning clutch are used, as the domensions are slightly different (see page 247~254 gear units monuting dimensions for detail).
2) Auxiliary gear motor type is basically determined depend on the auxiliary drive working under maintenance or under load condition after main gear unit has been selacted (see page 242).

注意事项

务必遵循以下原则：

样本中的附图只属范例，并不要求严格一致。所有尺寸可能改进。

所注重量仅为平均值，不要求严格一致。

为防止发生事故，所有旋转部件应按安全规定加罩防护。

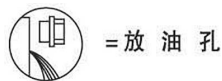
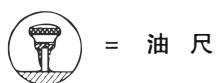
试车前，必须认真阅读操作说明。主减速机出厂时未加注润滑油。因此应按规定加注润滑油。

给出的加油量只作为参考值，实际油量应以油尺上的标记为准。

通常，辅传减速电机在出厂前已加注润滑油。

采用国产逆止器、超越离合器时，需给逆止器和联接法兰之内的超越离合器加注润滑脂（2号锂基润滑脂可满足要求），并定期更换。采用国外逆止器、超越离合器时，需向联接法兰内加注润滑油（采用与主减速机同样规格润滑油）以润滑超越离合器，油位以略低于连接法兰视孔即可。

有关外形尺寸图中的符号说明如下：



基础螺栓的性能等级为8.8级。

Attention

Following items are absolutely to be observed:

Illustrations are examples only and are not strictly bonding. Dimensions are subject to change.

The weights are mean values and not strictly binding.

To prevent accidents, all rotating parts should be guarded according to local and national safety regulations.

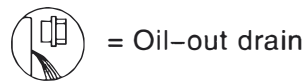
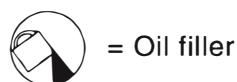
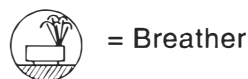
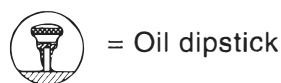
Prior to commissioning, the operating instructions must be observed. The gear units are delivered ready for operation but without oil filling. So specified oil should be filled.

Oil quantities given are guide values only. The exact quantity of oil depends on the marks on the dipstick.

Normally, auxiliary gear motors are filled with lubricant at the factory before dispatch.

If domestic backstop and overrunning clutch are used, please lubricate them with grease (No. 2lithium grease can meet requirement), and change periodically. If imported backstop and overrunning clutch are used, please fill lubrication into the connecting flange to lubricate the overrunning clutch, as the backstop is lubricated with splash oil.

Explanations of symbols used in the dimensioned drawings:



Foundation bolts of min. property class 8.8.

选型指南

1. 确定减速机规格

1.1 计算传动比

$$i_s = \frac{n_1}{n_2}$$

1.2 确定减速机的额定功率，应满足(原动机为电机，每小时启动次数≤5次)

$$P_N \geq P_2 \times f_1 \times f_3$$

1.3 校核最大转矩，如峰值工作转矩，启动转矩或制动转矩，应满足(单向载荷，每小时峰值负荷次数≤5次)

$$P_N \geq \frac{T_A \times n_1}{9550} \times 0.5$$

根据 i_N 和 P_N 在额定功率表中确定减速机规格。

1.4 检查实际传动比 i 是否满足要求，实际传动比 i 见226页。

2. 确定润滑方式

减速机采用浸油飞溅润滑。
可按客户要求提供强制润滑。

3. 确定热功率 P_G

3.1 减速机不带辅助冷却装置，应满足

$$P_2 \leq P_G = P_{G1} \times f_6 \times f_7$$

3.2 减速机带冷却风扇装置时，应满足

$$P_2 \leq P_G = P_{G2} \times f_6 \times f_7$$

3.3 更高的热功率，可按要求提供外部油冷却器冷却。

Guidelines for the Selection

1. Determination of gear unit type and size

1.1 Find the transmission ratio

$$i_s = \frac{n_1}{n_2}$$

1.2 Determine nominal power rating of the gear unit (driven by electric motor, and start less than five times per hour)

$$P_N \geq P_2 \times f_1 \times f_3$$

1.3 Check for maximum torque, e.g. peak operating-, starting- or braking torque (unilateral loading, and endure peak load less than five times per hour)

$$P_N \geq \frac{T_A \times n_1}{9550} \times 0.5$$

Gear unit sizes are given in rating tables depending on i_N and P_N .

1.4 Check whether the actual ratio i as per tables on page 226 is acceptable.

2. Determination of oil supply

All parts to be lubricated are lying in the oil or are splash lubricated. Forced lubrication on request.

3. Determination of required thermal capacity P_G

3.1 Gear unit without auxiliary cooling sufficient, if

$$P_2 \leq P_G = P_{G1} \times f_6 \times f_7$$

3.2 Gear unit with fan sufficient, if

$$P_2 \leq P_G = P_{G2} \times f_6 \times f_7$$

3.3 For higher thermal capacities, cooling by external oil cooler on request.

符号表

E_D = 每小时工作周期，以%表示，例如 $E_D=80\%$

f_1 = 工作机系数（表1），见241页

f_3 = 减速机安全系数（表3），见241页

f_6 = 环境温度系数（表6），见241页

f_7 = 海拔高度系数（表7），见241页

i = 实际传动比

i_N = 额定传动比

i_s = 要求传动比

n_1 = 输入转速 (min^{-1})

n_2 = 输出转速 (min^{-1})

n_3 = 辅传驱动 (50Hz; $n_1=1500\text{min}^{-1}$) 输入时的主减速机 (B3) 输出轴上的输出转速 (min^{-1})

P_G = 需要的热功率

P_{G1} = 无辅助冷却装置时的热功率，见244~246页

P_{G2} = 带冷却风扇装置时的热功率，见244~246页

P_N = 减速机的额定功率 (kW)，见选型表243页

P_2 = 工作机的额定功率 (kW)

t = 环境温度 ($^{\circ}\text{C}$)

T_A = 输入轴最大扭矩，例如峰值工作扭矩，起动扭矩或制动扭矩 (Nm)

T_{2N} = 额定输出扭矩 (kNm)，见185页

T_3 = 辅传驱动输入时的主减速机 (B3) 输出轴上有输出转矩 (kNm)，见242页

Key to Symbols

E_D = Operation cycle per hour in %, e.g. $E_D=80\%$

f_1 = Factor for driven machine (table 1), page 241

f_3 = Safety factor (table 3), page 241

f_6 = Factor for ambient temperature (table 6), page 241

f_7 = Factor for ambient (table 7), page 241

i = Actual ratio

i_N = Nominal ratio

i_s = Required ratio

n_1 = Input speed (min^{-1})

n_2 = Output speed (min^{-1})

n_3 = Output speed (min^{-1}) on main gear unit output shaft (B3), in case of input via auxiliary drive (50Hz; $n_1 = 1500\text{min}^{-1}$)

P_G = Required thermal capacity

P_{G1} = Thermal capacity for gear units without auxiliary cooling, page 244~246

P_{G2} = Thermal capacity for gear units with fan cooling, page 244~246

P_N = Nominal power rating of gear unit (kW), see rating table at page 243

P_2 = Power rating of driven machine (kW)

t = Ambient temperature ($^{\circ}\text{C}$)

T_A = Max. torque occurring on input shaft, e.g. peak operating-, starting- or braking torque (Nm)

T_{2N} = Nominal output torque (kNm), page 185

T_3 = Output torque (kNm) on main gear unit output shaft (B3), in case of input via auxiliary drive, page 242

计算实例

已知条件:

原动机

电动机: $P_1=75\text{kW}$

电机转速: $n_1=1500\text{min}^{-1}$

最大起动扭矩: $T_A=720\text{Nm}$

工作机

斗式提升机: $P_2=62\text{kW}$

转速: $n_2=26\text{min}^{-1}$

日工作小时数: 12小时/天

每小时起动次数: 7

辅传驱动: 载荷驱动

每小时工作周期: $E_D=100\%$

环境温度: 30°C

室外安装: 风速 $\geq 4\text{m/s}$

海拔高度: 海平面

减速机类型

直交轴减速机

安装方式: 水平安装

输出轴: 右面

输出轴的旋转方向: CCW

要求:

选择减速机类型和规格

1. 选择减速机类型和规格

1.1 确定传动比

$$i_s = \frac{n_1}{n_2} = \frac{1500}{26} = 57.7 \quad i_N = 56$$

1.2 确定减速机额定功率

$$P_N \geq P_2 \times f_1 \times f_3 = 62 \times 1.5 \times 1.25 \\ = 116.25\text{kW}$$

从功率表中选择: 类型B3, 规格10, 额定功率 $P_N=122\text{kW}$

带辅传驱动KF87-Y5.5-36.52,

$n_3=2.0\text{min}^{-1}$ 及 $T_3=25.1\text{kNm}$ 。

1.3 校核起动扭矩

$$P_N \geq \frac{T_A \times n_1}{9550} \times 0.5 = \frac{720 \times 1500}{9550} \times 0.5 \\ = 56.6\text{kW}$$

$$P_N = 122\text{kW} > 56.6\text{kW}$$

2. 确定热功率

2.1 按B3不带冷却装置时热功率计算:

$$P_G = P_{G1} \times f_6 \times f_7 = 72 \times 0.88 \times 1.0 = 63.36\text{kW}$$

$$P_2 = 62\text{kW} < P_G = 63.36\text{kW}$$

可选用不带冷却装置的减速机。

Calculation Example

Known criteria:

PRIME MOVER

Electric motor: $P_1=75\text{kW}$

Motor speed: $n_1=1500\text{min}^{-1}$

Max. starting torque: $T_A=720\text{Nm}$

DRIVEN MACHINE

Bucket elevator: $P_2=62\text{kW}$

Speed: $n_2=26\text{min}^{-1}$

Daily service hours: 12h/day

Starts per hour: 7

Auxiliary drive: operation under load

Operating cycle per hour: $E_D=100\%$

Ambient temperature: 30°C

Outdoor installation: wind velocity $\geq 4\text{m/s}$

Altitude: sea level

GEAR UNIT DESIGN

Bevel-helican gear unit

Mounting position: horizontal

Output shaft: right hand side

Rotate direction of of output shaft: CCW

Required

Type and size of gear unit

1. Selection of gear unit type and size

1.1 Calculation of transmission ratio

$$i_s = \frac{n_1}{n_2} = \frac{1500}{26} = 57.7 \quad i_N = 56$$

1.2 Determination of the gear unit nominal power rating

$$P_N \geq P_2 \times f_1 \times f_3 = 62 \times 1.5 \times 1.25 \\ = 116.25\text{kW}$$

Selected from power rating table: type B3, gear unit size 10, with $P_N=122\text{kW}$

With auxiliary drive KF87-Y5.5-36.52,

$n_3=2.0\text{min}^{-1}$ and $T_3=25.1\text{kNm}$.

1.3 Checking the starting torque

$$P_N \geq \frac{T_A \times n_1}{9550} \times 0.5 = \frac{720 \times 1500}{9550} \times 0.5 \\ = 56.6\text{kW}$$

$$P_N = 122\text{kW} > 56.6\text{kW}$$

2. Determination of thermal capacity

2.1 Thermal capacity for gear units without auxiliary cooling, acc. to table for type B3

$$P_G = P_{G1} \times f_6 \times f_7 = 72 \times 0.88 \times 1.0 = 63.36\text{kW}$$

$$P_2 = 62\text{kW} < P_G = 63.36\text{kW}$$

A GEAR UNIT WITHOUT AUXILIARY COOLING IS SUFFICIENT!

服务系数

Service Factors

| 工作机 Driven machines | 日工作小时数 Effective daily operating period under load in hours | | | 工作机 Driven machines | 日工作小时数 Effective daily operating period under load in hours | | |
|---------------------------------------|--|--------|-----|---------------------------|--|--------|-----|
| | ≤0.5 | 0.5~10 | >10 | | ≤0.5 | 0.5~10 | >10 |
| 输送机** Conveyors** | | | | 货用电梯* Goods lifts* | - | 1.2 | 1.5 |
| 斗式输送机 Bucket conveyors | - | 1.4 | 1.5 | 客用电梯* Passenger lifts* | - | 1.5 | 1.8 |
| 升降卷扬机 Hauling winches | 1.4 | 1.6 | 1.6 | 刮板式输送机 Apron conveyors | - | 1.2 | 1.5 |
| 提升机 Hoists | - | 1.5 | 1.8 | 自动扶梯 Escalators | 1.0 | 1.2 | 1.4 |
| 提式输送机 ≤150kW Belt conveyors ≤150kW | 1.0 | 1.2 | 1.3 | 轨道车辆 Railway Vehicles | - | 1.5 | - |
| 带式输送机 >150kW Belt conveyors >150kW | 1.1 | 1.3 | 1.4 | | | | |

注：*) 按最大扭矩确定额定功率；
**) 检验热功率是绝对有必要的。

Note:*) Designed power corresponding to max. torque;
**) A check for thermal capacity is absolutely essential.

| 重要性与安全要求 | 一般设备，减速器失效仅引起单机停产且易更换备件 | 重要设备，减速器失效引起起机组、生产线或全厂停产 | 高度安全要求，减速器失效引起设备、人身事故 |
|-------------------------------|--|---|---|
| Importance and safety request | Ordinary equipment, malfunction only cause accident of single machine and easily replaced. | Important equipment, malfunction cause the accident of assembling unit, production-line or whole factory. | Safety request highly, malfunction cause the accident of equipment and personal injury. |
| f_3 | 1.25-1.5 | 1.5-1.75 | 1.75-2.0 |

| 不带辅助冷却装置或仅带冷却风扇 Without auxiliary cooling or with fan cooling | | | | | |
|--|--|------|------|------|------|
| 环境温度 Ambient temperature | 每小时工作周期 (ED) 百分比 % Operating cycle per hour (ED) in % | | | | |
| | 100 | 80 | 60 | 40 | 20 |
| 10℃ | 1.11 | 1.31 | 1.60 | 2.14 | 3.64 |
| 20℃ | 1.00 | 1.18 | 1.44 | 1.93 | 3.28 |
| 30℃ | 0.88 | 1.04 | 1.27 | 1.70 | 2.89 |
| 40℃ | 0.75 | 0.89 | 1.08 | 1.45 | 2.46 |
| 50℃ | 0.63 | 0.74 | 0.91 | 1.22 | 2.07 |

| 不带辅助冷却装置或仅带冷却风扇 Without auxiliary cooling or with fan cooling | | | | | |
|--|-------------------------------|---------------|---------------|---------------|---------------|
| 系数 Factor | 海拔高度 (m) Altitude (meters) | | | | |
| | 高达 Up to 1000 | 高达 Up to 2000 | 高达 Up to 3000 | 高达 Up to 4000 | 高达 Up to 5000 |
| f_7 | 1.0 | 0.95 | 0.90 | 0.85 | 0.80 |

B

辅传驱动

类型B3...

规格4...18

依据不同的使用要求，每种规格的减速机有两种辅传驱动型式：

1) 空载驱动

斗式提升机空载(空斗)时，辅传减速机驱动斗式提升机以较低转速同向转动。

2) 载荷驱动

斗式提升机满载(满斗)时，辅传减速机驱动斗式提升机发较低转速同向转动。

辅传驱动结构设计

辅传减速机为KF系列带直联电机的锥齿轮减速电机，通过中间法兰与主减速机相联接，超越离合器与主减速机相连实现自动离合。超越离合器在中间法兰内部，有独立油润滑和加润滑脂润滑两种方式。KF锥齿轮减速电机也为独立油润滑方式，出厂前已加注润滑油。

Auxiliary Drive

Types B3...

Sizes 4...18

Dependent on the case of application, for each gear unit size two different auxiliary drives are available:

1) Maintenance Drive

The motor of the auxiliary drive is dimensioned in such a way that the bucket elevator can be operated with empty buckets at low speed in the same direction of rotation.

2) Operation under load

The motor of the auxiliary drive is dimensioned in such a way that the bucket elevator can be operated with full buckets at low speed in the same direction of rotation.

Design of auxiliary drives

The auxiliary drive is a bevel-helical gear motor type KF, which is flanged to the main gear unit by means of an intermediate flange and is coupled to the main gear units via an overrunning clutch. The overrunning clutch is located in the intermediate flange, and lubricated with its own oil or grease. The bevel-helical gear motor type KF has an own oil filling and is supplied filled with oil.

| 主减速机 Main gear Unit | 空载驱动 Maintenance drive | | | | | | 载荷驱动 Operation under load | | | | | |
|------------------------|----------------------------------|-------------------|---------------------------|------------------|-----------------------------|-------|----------------------------------|-------------------|---------------------------|----------------|-----------------------------|-------|
| | 1) n_3 [min ⁻¹] | 1) T_3 [kNm] | 2) 齿轮减速电机 Geared motor | P_M [kW] | 输出轴 $d \times l$ [mm] | i | 1) n_3 [min ⁻¹] | 1) T_3 [kNm] | 2) 齿轮减速电机 Geared motor | P_M [kW] | 输出轴 $d \times l$ [mm] | i |
| | 4 | 2.5 | 2.7 | KF47-Y0.75-35.39 | 0.75 | 30×60 | 35.39 | 2.5 | 3.9 | KF57-Y1.1-35.7 | 1.1 | 35×70 |
| 5 | 2.5 | 5.3 | KF57-Y1.5-35.7 | 1.5 | 35×70 | 35.7 | 3.3 | 6.5 | KF67-Y2.2-27.28 | 2.2 | 40×80 | 27.28 |
| 6 | 2.0 | 6.6 | KF57-Y1.5-35.7 | 1.5 | 35×70 | 35.7 | 2.7 | 8.1 | KF67-Y2.2-27.28 | 2.2 | 40×80 | 27.28 |
| 7 | 3.0 | 6.6 | KF67-Y2.2-30.22 | 2.2 | 40×80 | 30.22 | 3.1 | 11.5 | KF77-Y4-29.27 | 4 | 50×100 | 29.27 |
| 8 | 2.4 | 8.3 | KF67-Y2.2-30.22 | 2.2 | 40×80 | 30.22 | 2.5 | 14.5 | KF77-Y4-29.27 | 4 | 50×100 | 29.27 |
| 9 | 2.9 | 9.4 | KF77-Y3-30.89 | 3.0 | 50×100 | 30.89 | 2.5 | 20.0 | KF87-Y5.5-36.52 | 5.5 | 60×120 | 36.52 |
| 10 | 2.3 | 11.7 | KF77-Y3-30.89 | 3.0 | 50×100 | 30.89 | 2.0 | 25.1 | KF87-Y5.5-36.52 | 5.5 | 60×120 | 36.52 |
| 11 | 2.3 | 11.8 | KF77-Y3-40.04 | 3.0 | 50×100 | 40.04 | 2.7 | 36.0 | KF97-Y11-34.23 | 11 | 70×140 | 34.23 |
| 12 | 1.8 | 15.0 | KF77-Y3-40.04 | 3.0 | 50×100 | 40.04 | 2.2 | 45.8 | KF97-Y11-34.23 | 11 | 70×140 | 34.23 |
| 13 | 2.1 | 17.3 | KF87-Y4-44.02 | 4.0 | 60×120 | 44.02 | 3.3 | 51.0 | KF107-Y18.5-28.59 | 18.5 | 90×170 | 28.59 |
| 14 | 1.7 | 21.7 | KF87-Y4-44.02 | 4.0 | 60×120 | 44.02 | 2.6 | 63.9 | KF107-Y18.5-28.59 | 18.5 | 90×170 | 28.59 |
| 15 | 2.1 | 16.9 | KF87-Y4-44.02 | 4.0 | 60×120 | 44.02 | 3.5 | 78.0 | KF127-Y30-27.67 | 30 | 110×210 | 27.67 |
| 16 | 1.9 | 19.2 | KF87-Y4-44.02 | 4.0 | 60×120 | 44.02 | 3.0 | 88.5 | KF127-Y30-27.67 | 30 | 110×210 | 27.67 |
| 17 | 2.1 | 17.2 | KF87-Y4-44.02 | 4.0 | 60×120 | 44.02 | 3.4 | 97.5 | KF127-Y37-27.67 | 37 | 110×210 | 27.67 |
| 18 | 1.8 | 20.0 | KF87-Y4-44.02 | 4.0 | 60×120 | 44.02 | 2.9 | 113.2 | KF127-Y37-27.67 | 37 | 110×210 | 27.67 |

减速机布置形式 Design of gear units

主减速机B布置形式: D
Design of main gear unit B: D
齿轮减速电机KF输出轴方向: A
Output shaft direction of gear motor KF: A

主减速机B布置形式: B
Design of main gear unit B: B
齿轮减速电机KF输出轴方向: B
Output shaft direction of gear motor KF: B

注: 1) 辅传驱动输入时主减速机输出轴上转速、转矩 (50Hz, $n_1=1500\text{min}^{-1}$);
2) 齿轮减速电机KF规格。

Note: 1) Output speed and torque on main gear unit output shaft in case of input via auxiliary drive (50Hz, $n_1=1500\text{min}^{-1}$);
2) Gear motor KF size.

直交轴减速器

额定功率

类型 B3...

规格 4...18

Bevel-helical gear units

Nom.power ratings

Type B3...

Sizes 4...18

| i_N | 额定功率 P_N | | | | | | | | | Nominal power ratings P_N | | | | | | | |
|-------|----------------|----------------|------|----|----|-----|-----|-----|-------|-----------------------------|-----|-----|-----|-----|------|------|------|
| | n_1 r/min | n_2 r/min | 规格 | | | | | | Sizes | | | | | | kW | | |
| | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 25 | 1500 | 60 | 41 | 69 | 91 | 129 | 160 | 214 | 270 | 377 | 471 | 553 | 685 | 961 | 1087 | 1257 | 1508 |
| | 1000 | 40 | 28 | 46 | 61 | 86 | 107 | 142 | 180 | 251 | 314 | 369 | 457 | 641 | 725 | 838 | 1005 |
| | 750 | 30 | 21 | 35 | 46 | 64 | 80 | 107 | 135 | 188 | 236 | 276 | 342 | 481 | 543 | 628 | 754 |
| 28 | 1500 | 54 | 37 | 62 | 82 | 116 | 144 | 192 | 243 | 339 | 424 | 498 | 616 | 865 | 978 | 1131 | 1357 |
| | 1000 | 36 | 25 | 41 | 55 | 77 | 96 | 128 | 162 | 226 | 283 | 332 | 411 | 577 | 652 | 754 | 905 |
| | 750 | 27 | 19 | 31 | 41 | 58 | 72 | 96 | 122 | 170 | 212 | 249 | 308 | 433 | 489 | 565 | 679 |
| 31.5 | 1500 | 48 | 33 | 55 | 73 | 103 | 128 | 171 | 216 | 302 | 377 | 442 | 548 | 769 | 870 | 1005 | 1206 |
| | 1000 | 32 | 22 | 37 | 49 | 69 | 85 | 114 | 144 | 201 | 251 | 295 | 365 | 513 | 580 | 670 | 804 |
| | 750 | 24 | 17 | 28 | 36 | 52 | 64 | 85 | 108 | 151 | 188 | 221 | 274 | 385 | 435 | 503 | 603 |
| 35.5 | 1500 | 42 | 29 | 48 | 64 | 90 | 112 | 150 | 189 | 264 | 330 | 387 | 479 | 673 | 761 | 880 | 1055 |
| | 1000 | 28 | 19 | 32 | 43 | 60 | 75 | 100 | 126 | 176 | 220 | 258 | 320 | 449 | 507 | 586 | 704 |
| | 750 | 21 | 15 | 24 | 32 | 45 | 56 | 75 | 95 | 132 | 165 | 194 | 240 | 336 | 380 | 440 | 528 |
| 40 | 1500 | 38 | 26 | 44 | 58 | 82 | 101 | 135 | 171 | 239 | 298 | 350 | 434 | 609 | 688 | 796 | 955 |
| | 1000 | 25 | 17 | 29 | 38 | 54 | 67 | 89 | 113 | 157 | 196 | 230 | 285 | 401 | 453 | 524 | 628 |
| | 750 | 18.8 | 13 | 22 | 29 | 40 | 50 | 67 | 85 | 118 | 148 | 173 | 215 | 301 | 341 | 394 | 472 |
| 45 | 1500 | 33 | 23 | 38 | 50 | 71 | 88 | 117 | 149 | 207 | 259 | 304 | 377 | 529 | 598 | 691 | 829 |
| | 1000 | 22 | 15 | 25 | 33 | 47 | 59 | 78 | 99 | 138 | 173 | 203 | 251 | 352 | 399 | 461 | 553 |
| | 750 | 16.7 | 12 | 19 | 25 | 36 | 45 | 59 | 75 | 105 | 131 | 154 | 191 | 268 | 303 | 350 | 420 |
| 50 | 1500 | 30 | 21 | 35 | 46 | 64 | 80 | 107 | 135 | 188 | 236 | 276 | 342 | 481 | 543 | 628 | 754 |
| | 1000 | 20 | 14 | 23 | 30 | 43 | 53 | 71 | 90 | 126 | 157 | 184 | 228 | 320 | 362 | 419 | 503 |
| | 750 | 15 | 10.4 | 17 | 23 | 32 | 40 | 53 | 68 | 94 | 118 | 138 | 171 | 240 | 272 | 314 | 377 |
| 56 | 1500 | 27 | 19 | 31 | 41 | 58 | 72 | 96 | 122 | 170 | 212 | 249 | 308 | 433 | 489 | 565 | 679 |
| | 1000 | 17.9 | 12 | 21 | 27 | 38 | 48 | 64 | 81 | 112 | 141 | 165 | 204 | 287 | 324 | 375 | 450 |
| | 750 | 13.4 | 9.3 | 15 | 20 | 29 | 36 | 48 | 60 | 84 | 105 | 123 | 153 | 215 | 243 | 281 | 337 |
| 63 | 1500 | 24 | 17 | 28 | 36 | 50 | 64 | 85 | 108 | 151 | 188 | 221 | 274 | 385 | 435 | 503 | 603 |
| | 1000 | 15.9 | 11 | 18 | 24 | 33 | 42 | 57 | 72 | 100 | 125 | 147 | 181 | 255 | 288 | 333 | 400 |
| | 750 | 11.9 | 8.2 | 14 | 18 | 25 | 32 | 42 | 54 | 75 | 93 | 110 | 136 | 191 | 216 | 249 | 299 |
| 71 | 1500 | 21 | 14.5 | 24 | 32 | 44 | 56 | 75 | 95 | 132 | 165 | 194 | 240 | 336 | 380 | 440 | 528 |
| | 1000 | 14.1 | 9.7 | 16 | 21 | 30 | 38 | 50 | 63 | 89 | 111 | 130 | 161 | 226 | 255 | 295 | 354 |
| | 750 | 10.6 | 7.3 | 12 | 16 | 22 | 28 | 38 | 48 | 67 | 83 | 98 | 121 | 170 | 192 | 222 | 266 |

B



卧式安装减速器要求强制润滑



Forced lubrication required on horizontal gear units

直交轴减速器

热功率

类型 B3..

规格 4...18

$n_1=750\text{min}^{-1}$

Bevel-helical gear units

Thermal capacities

Type B3...

Sizes 4...18

$n_1=750\text{min}^{-1}$

| | | 热功率 P_G | | | | | | | | Thermal capacities P_G | | | | | | | | kW | |
|-------|----------|---|------|------|------|------|------|------|------|--------------------------|-----|-----|-----|-----|-----|-----|--|----|--|
| i_N | | 热功率取决于冷却方式 P_{G1} : 无辅助冷却装置; P_{G2} : 带冷却风扇 Thermal capacity dependent on kind of cooling: P_{G1} : without auxiliary cooling; P_{G2} : fan cooling; | | | | | | | | | | | | | | | | | |
| | | 规 格 | | | | | | | | S izes | | | | | | | | | |
| | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | | |
| 25 | P_{G1} | 28.1 | 39.4 | 45.9 | 61.7 | 71.2 | 83.7 | 90.9 | 115 | 144 | 151 | 179 | 216 | 237 | 254 | 276 | | | |
| | P_{G2} | 43.6 | 63.9 | 73.5 | 100 | 114 | 141 | 151 | 213 | 264 | 282 | 335 | 402 | 443 | 526 | 574 | | | |
| 28 | P_{G1} | 27 | 38.1 | 45.1 | 58.6 | 68.8 | 79.8 | 88.5 | 109 | 137 | 144 | 172 | 211 | 224 | 252 | 264 | | | |
| | P_{G2} | 41.7 | 61.4 | 72.2 | 94.8 | 110 | 133 | 147 | 202 | 251 | 266 | 318 | 389 | 412 | 513 | 536 | | | |
| 31.5 | P_{G1} | 25.5 | 36.1 | 42.6 | 55.6 | 66.3 | 76.3 | 84.6 | 104 | 129 | 136 | 163 | 198 | 219 | 238 | 260 | | | |
| | P_{G2} | 39.5 | 58 | 68.1 | 89.8 | 106 | 126 | 140 | 191 | 235 | 252 | 298 | 362 | 401 | 479 | 523 | | | |
| 35.5 | P_{G1} | 24 | 34 | 41.1 | 52.8 | 63 | 72.5 | 80.6 | 100 | 123 | 132 | 155 | 191 | 205 | 231 | 247 | | | |
| | P_{G2} | 36.9 | 54.3 | 65.4 | 84.8 | 100 | 120 | 132 | 182 | 222 | 241 | 283 | 348 | 372 | 460 | 488 | | | |
| 40 | P_{G1} | 21 | 29.5 | 39 | 46.2 | 60.1 | 67.8 | 76.9 | 94.9 | 117 | 124 | 148 | 181 | 198 | 221 | 239 | | | |
| | P_{G2} | 32.1 | 46.8 | 61.9 | 73.6 | 95.4 | 111 | 126 | 170 | 209 | 227 | 267 | 327 | 358 | 434 | 469 | | | |
| 45 | P_{G1} | 20.5 | 28.7 | 36.6 | 44.9 | 57 | 62.3 | 73 | 87 | 112 | 114 | 141 | 168 | 187 | 205 | 228 | | | |
| | P_{G2} | 31.3 | 45.6 | 57.8 | 71 | 90 | 101 | 119 | 156 | 200 | 207 | 256 | 300 | 336 | 401 | 444 | | | |
| 50 | P_{G1} | 20.7 | 28.6 | 31.9 | 44.2 | 49.9 | 61.2 | 68.3 | 87 | 106 | 116 | 134 | 172 | 173 | 213 | 211 | | | |
| | P_{G2} | 31.5 | 45 | 50.1 | 69.6 | 78.1 | 98.8 | 111 | 153 | 187 | 207 | 240 | 302 | 309 | 407 | 409 | | | |
| 56 | P_{G1} | 19.1 | 26.3 | 31.1 | 41 | 48.4 | 56.5 | 63 | 79.1 | 97.4 | 107 | 123 | 157 | 177 | 197 | 220 | | | |
| | P_{G2} | 28.9 | 41.5 | 48.7 | 64.7 | 75.6 | 91.4 | 101 | 139 | 171 | 189 | 218 | 275 | 310 | 372 | 414 | | | |
| 63 | P_{G1} | 18.3 | 25.3 | 30.9 | 39.7 | 47.8 | 54.5 | 61.8 | 76.3 | 96.6 | 103 | 125 | 150 | 162 | 189 | 202 | | | |
| | P_{G2} | 27.9 | 39.9 | 48.1 | 62.4 | 74.3 | 88.2 | 98.8 | 133 | 168 | 181 | 219 | 262 | 282 | 355 | 379 | | | |
| 71 | P_{G1} | 17 | 24.1 | 28.5 | 37.8 | 44.3 | 51 | 57.3 | 70.6 | 88.6 | 96 | 115 | 143 | 155 | 178 | 194 | | | |
| | P_{G2} | 25.9 | 37.9 | 44.3 | 59.5 | 68.9 | 82.5 | 91.7 | 123 | 152 | 169 | 199 | 247 | 269 | 333 | 361 | | | |

B

注：表中数值按：
每小时工作周期：100%
在室内大空间安装*
海拔高度至1000m

Note: Values refer to:
Operating cycle: 100%
Installation in a large hall*
Altitude up to 1000m

*)室内小空间 (风速 < 1.4 m/s) 和室外 (风速 ≥ 4 m/s) , 请垂询。

*)Calculation consult us when small confined space(wind velocity < 1.4 m/s) or in the open (wind velocity ≥ 4 m/s)

直交轴减速器

热功率

类型 B3...

规格 4...18

$n_1=1000\text{min}^{-1}$

Bevel-helical gear units

Thermal capacities

Type B3...

Sizes 4...18

$n_1=1000\text{min}^{-1}$

| | | 热功率 P_G | | | | | | | | Thermal capacities P_G | | | | | | | | kW | |
|-------|----------|---|------|------|------|------|------|------|------|--------------------------|-----|-----|-----|-----|-----|-----|--|----|--|
| i_N | | 热功率取决于冷却方式 P_{G1} : 无辅助冷却装置; P_{G2} : 带冷却风扇 Thermal capacity dependent on kind of cooling: P_{G1} : without auxiliary cooling; P_{G2} : fan cooling; | | | | | | | | | | | | | | | | | |
| | | 规格 | | | | | | | | Sizes | | | | | | | | | |
| | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | | |
| 25 | P_{G1} | 30.1 | 41.8 | 48.6 | 65 | 74.7 | 87.3 | 94.3 | 117 | 144 | 149 | 176 | 204 | 222 | 234 | 250 | | | |
| | P_{G2} | 51.7 | 75.5 | 86.9 | 119 | 134 | 166 | 178 | 250 | 309 | 329 | 390 | 466 | 513 | 607 | 661 | | | |
| 28 | P_{G1} | 29 | 40.6 | 48 | 62.1 | 72.7 | 83.9 | 92.7 | 113 | 140 | 144 | 172 | 205 | 216 | 239 | 248 | | | |
| | P_{G2} | 49.4 | 72.7 | 85.5 | 112 | 130 | 157 | 174 | 238 | 295 | 312 | 373 | 453 | 480 | 596 | 621 | | | |
| 31.5 | P_{G1} | 27.5 | 38.6 | 45.5 | 59.2 | 70.3 | 80.6 | 89.1 | 108 | 133 | 139 | 165 | 196 | 215 | 232 | 250 | | | |
| | P_{G2} | 46.8 | 68.7 | 80.6 | 106 | 125 | 149 | 165 | 225 | 276 | 296 | 350 | 423 | 468 | 557 | 608 | | | |
| 35.5 | P_{G1} | 25.9 | 36.4 | 44 | 56.4 | 67 | 76.9 | 85.3 | 105 | 128 | 135 | 159 | 192 | 205 | 228 | 241 | | | |
| | P_{G2} | 43.8 | 64.3 | 77.5 | 100 | 119 | 141 | 156 | 215 | 262 | 284 | 332 | 407 | 435 | 538 | 569 | | | |
| 40 | P_{G1} | 22.6 | 31.7 | 41.8 | 49.4 | 64.1 | 72.1 | 81.6 | 99.6 | 122 | 128 | 152 | 183 | 199 | 220 | 236 | | | |
| | P_{G2} | 38.1 | 55.5 | 73.3 | 87.1 | 112 | 131 | 149 | 201 | 246 | 267 | 315 | 383 | 419 | 508 | 548 | | | |
| 45 | P_{G1} | 22.1 | 30.9 | 39.3 | 48 | 60.9 | 66.4 | 77.7 | 91.6 | 117 | 119 | 147 | 171 | 190 | 206 | 228 | | | |
| | P_{G2} | 37.2 | 54 | 68.5 | 84.1 | 106 | 120 | 140 | 184 | 236 | 244 | 301 | 352 | 395 | 470 | 520 | | | |
| 50 | P_{G1} | 22.4 | 30.8 | 34.4 | 47.6 | 53.6 | 65.5 | 73.1 | 92.4 | 112 | 122 | 141 | 178 | 179 | 219 | 216 | | | |
| | P_{G2} | 37.4 | 53.3 | 59.4 | 82.5 | 92.5 | 117 | 131 | 181 | 221 | 244 | 283 | 356 | 363 | 478 | 481 | | | |
| 56 | P_{G1} | 20.7 | 28.5 | 33.6 | 44.3 | 52.1 | 60.7 | 67.7 | 84.5 | 103 | 113 | 131 | 165 | 186 | 205 | 228 | | | |
| | P_{G2} | 34.4 | 49.3 | 57.8 | 76.7 | 89.6 | 108 | 120 | 164 | 203 | 223 | 258 | 325 | 365 | 438 | 488 | | | |
| 63 | P_{G1} | 19.9 | 27.4 | 33.4 | 42.8 | 51.5 | 58.7 | 66.5 | 81.7 | 103 | 109 | 133 | 159 | 171 | 198 | 211 | | | |
| | P_{G2} | 33.1 | 47.3 | 57.1 | 74.1 | 88.1 | 104 | 117 | 158 | 198 | 214 | 259 | 309 | 333 | 419 | 447 | | | |
| 71 | P_{G1} | 18.4 | 26.1 | 30.8 | 40.8 | 47.8 | 55 | 61.7 | 75.7 | 94.8 | 103 | 122 | 151 | 164 | 187 | 204 | | | |
| | P_{G2} | 30.7 | 44.9 | 52.6 | 70.5 | 81.7 | 97.8 | 108 | 146 | 180 | 201 | 236 | 292 | 318 | 393 | 426 | | | |

注: 表中数值按:
每小时工作周期: 100%
在室内大空间安装*
海拔高度至1000m

Note: Values refer to:
Operating cycle: 100%
Installation in a large hall*
Altitude up to 1000m

*)室内小空间 (风速 < 1.4 m/s) 和室外 (风速 ≥ 4 m/s), 请垂询。

*)Calculation consult us when small confined space(wind velocity < 1.4 m/s) or in the open (wind velocity ≥ 4 m/s)

直交轴减速器

热功率

类型 B3..

规格 4...18

$n_1=1500\text{min}^{-1}$

Bevel-helical gear units

Thermal capacities

Type B3...

Sizes 4...18

$n_1=1500\text{min}^{-1}$

| | | 热功率 P_G | | | | | | | | | | Thermal capacities P_G | | | | | kW |
|-------|----------|--|------|------|------|------|------|------|------|------|-----|--------------------------|-----|-----|-----|-----|----|
| i_N | | 热功率取决于冷却方式: P_{G1} : 无辅助冷却装置; P_{G2} : 带冷却风扇 Thermal capacity dependent on kind of cooling: P_{G1} : without auxiliary cooling; P_{G2} : fan cooling; | | | | | | | | | | | | | | | |
| | | 规 格 | | | | | | | | | | S izes | | | | | |
| | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| 25 | P_{G1} | 31.9 | 43.3 | 50.1 | 66.2 | 75.2 | 86.9 | 92.8 | 109 | 130 | 128 | 150 | 153 | 160 | | | |
| | P_{G2} | 66.7 | 96.6 | 110 | 151 | 170 | 209 | 223 | 307 | 375 | 395 | 466 | 537 | 585 | 681 | 732 | |
| 28 | P_{G1} | 30.9 | 42.5 | 50 | 64.1 | 74.4 | 85 | 93.1 | 109 | 131 | 131 | 155 | 168 | 172 | 183 | 182 | |
| | P_{G2} | 63.9 | 93.3 | 109 | 143 | 165 | 199 | 220 | 296 | 363 | 380 | 452 | 535 | 562 | 689 | 711 | |
| 31.5 | P_{G1} | 29.4 | 40.7 | 47.8 | 61.7 | 72.7 | 82.7 | 90.7 | 106 | 129 | 131 | 154 | 170 | 183 | 190 | 199 | |
| | P_{G2} | 60.7 | 88.5 | 103 | 136 | 160 | 190 | 210 | 282 | 344 | 365 | 430 | 508 | 558 | 658 | 712 | |
| 35.5 | P_{G1} | 27.8 | 38.6 | 46.4 | 59.1 | 69.8 | 79.6 | 87.7 | 105 | 125 | 130 | 151 | 173 | 181 | 196 | 203 | |
| | P_{G2} | 56.8 | 83 | 99.8 | 129 | 152 | 181 | 199 | 271 | 328 | 353 | 412 | 495 | 526 | 644 | 677 | |
| 40 | P_{G1} | 24.3 | 33.7 | 44.3 | 52 | 67.1 | 75 | 84.4 | 100 | 121 | 125 | 147 | 168 | 180 | 194 | 204 | |
| | P_{G2} | 49.4 | 71.6 | 94.6 | 112 | 144 | 168 | 191 | 255 | 310 | 334 | 392 | 469 | 510 | 614 | 657 | |
| 45 | P_{G1} | 23.8 | 32.9 | 41.8 | 50.8 | 64 | 69.4 | 80.8 | 93.2 | 118 | 117 | 144 | 160 | 176 | 187 | 203 | |
| | P_{G2} | 48.3 | 69.8 | 88.5 | 108 | 137 | 154 | 180 | 234 | 298 | 306 | 377 | 434 | 484 | 572 | 629 | |
| 50 | P_{G1} | 24.2 | 33 | 36.8 | 50.7 | 56.9 | 69.3 | 77 | 95.8 | 115 | 124 | 142 | 174 | 174 | 210 | 204 | |
| | P_{G2} | 48.7 | 69.2 | 76.9 | 106 | 119 | 151 | 169 | 232 | 281 | 310 | 358 | 445 | 453 | 593 | 594 | |
| 56 | P_{G1} | 22.4 | 30.7 | 36.2 | 47.5 | 55.7 | 64.8 | 72 | 88.9 | 108 | 117 | 135 | 167 | 186 | 203 | 225 | |
| | P_{G2} | 44.8 | 64 | 75.1 | 99.5 | 116 | 140 | 155 | 211 | 260 | 285 | 330 | 411 | 461 | 552 | 612 | |
| 63 | P_{G1} | 21.6 | 29.5 | 36 | 46.1 | 55.2 | 62.8 | 71 | 86.3 | 108 | 114 | 138 | 162 | 173 | 199 | 211 | |
| | P_{G2} | 43.2 | 61.6 | 74.2 | 96.2 | 114 | 135 | 151 | 203 | 255 | 275 | 332 | 393 | 422 | 529 | 563 | |
| 71 | P_{G1} | 20 | 28.2 | 33.3 | 43.9 | 51.4 | 59 | 65.9 | 80.2 | 99.9 | 107 | 127 | 155 | 167 | 190 | 205 | |
| | P_{G2} | 40 | 58.5 | 68.4 | 91.7 | 106 | 126 | 140 | 189 | 232 | 258 | 302 | 372 | 404 | 498 | 539 | |

B

注: 表中数值按:
每小时工作周期: 100%
在室内大空间安装*
海拔高度至1000m

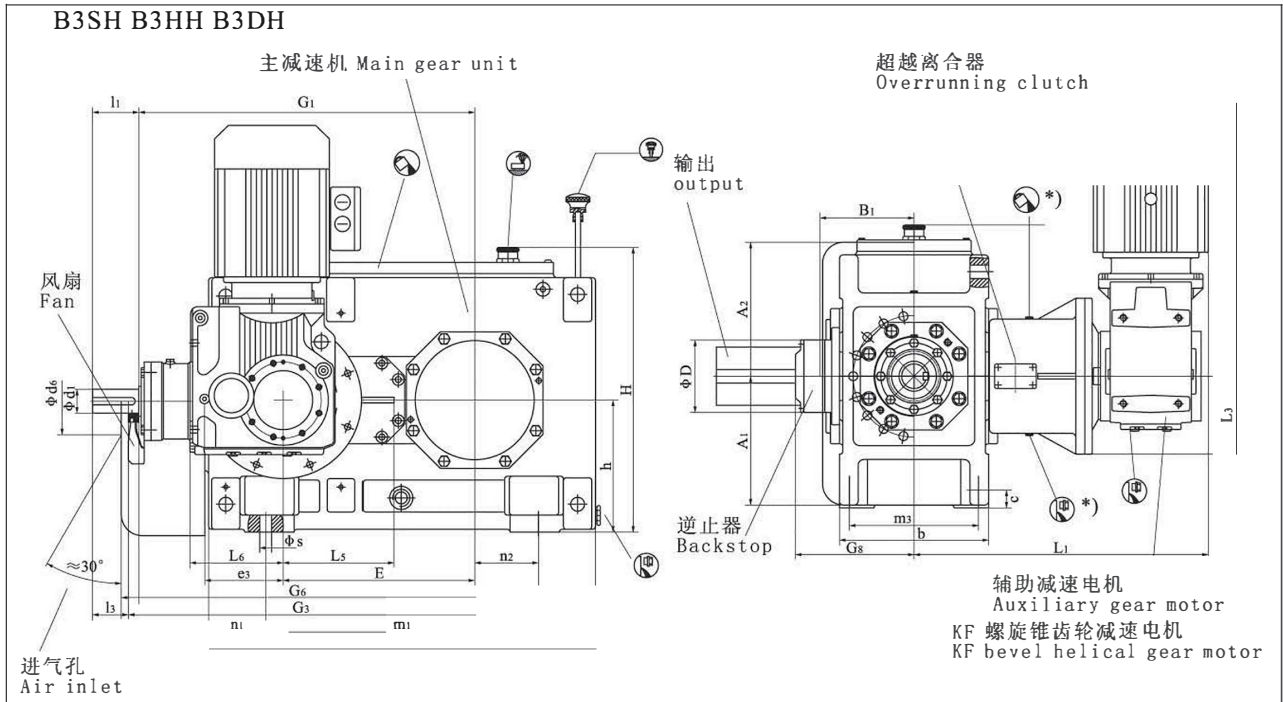
Note: Values refer to:
Operating cycle: 100%
Installation in a large hall*
Altitude up to 1000m

*)室内小空间 (风速 < 1.4 m/s) 和室外 (风速 ≥ 4 m/s), 请垂询。

*)Calculation consult us when small confined space(wind velocity < 1.4 m/s) or in the open (wind velocity ≥ 4 m/s)

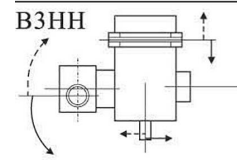
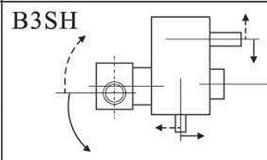
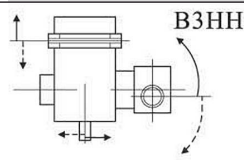
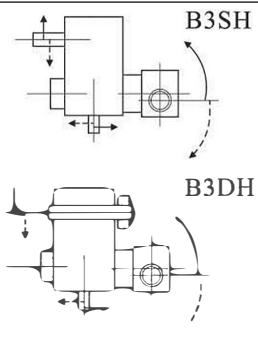
直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
空载驱动 Maintenance Drive

三级 Three Stage
类型 Type B3...
规格 Sizes 4...12



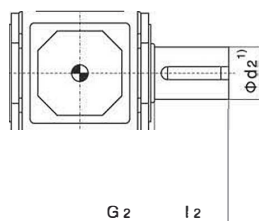
主减速机B布置形式: D
Design of main gear unit B: D
齿轮减速机KF输出轴方向: A
Output shaft direction of gear motor KF: A

主减速机B布置形式: B
Design of main gear unit B: B
齿轮减速机KF输出轴方向: B
Output shaft direction of gear motor KF: B

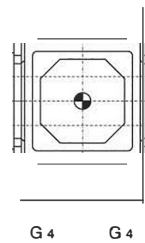


输出轴 Output Shaft

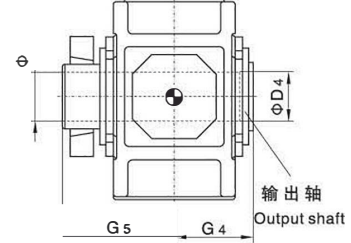
B3SH
实心轴
Solid shaft



B3HH
空心轴
Hollow shaft



B3DH
带胀紧盘的实心轴
Hollow shaft for shrink disk



1) $k6 \leq \phi 25$ $\phi 28 \leq k6 \leq \phi 100$ $n6 > \phi 100$
有关平键和中心孔, 参见第255页

1) $k6 \leq \phi 25$ $\phi 28 \leq k6 \leq \phi 100$ $n6 > \phi 100$
For parallel key and for center hole, see page 255

2) 键槽GB/T1095-1979

2) Keyway GB/T1095-1979

*) 仅当采用国外超越离合器时加注润滑油, 若采用国产逆止器、超越离合器时则加注润滑脂。

*) Fill lubrication only when selecting imported overrunning clutch, if domestic backstop and overrunning clutch are used please fill grease.

B

直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
空载驱动 Maintenance Drive

三级 Three Stage
类型 Type B3...
规格 Sizes 4...12

| 规格 Size | 辅传减速机 Auxiliary gear motor | 尺寸 mm Input shaft | | | | | | | | | | | G ₁ | G ₃ | |
|------------|----------------------------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|----------------|----------------|
| | | i _N =25-45 | | | i _N =25-56 | | | i _N =50-71 | | | i _N =63-71 | | | | |
| | | d ₁ ¹⁾ | l ₁ | l ₁ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | | | l ₃ |
| 4 | KF47-Y0.75-35.39 | 30 | 70 | 50 | | | 25 | 60 | 40 | | | | | 500 | 520 |
| 5 | KF57-Y1.5-35.7 | 35 | 80 | 60 | | | 28 | 60 | 40 | | | | | 575 | 595 |
| 6 | KF57-Y1.5-35.7 | | | | 35 | 80 | 60 | | | | 28 | 60 | 40 | 610 | 630 |
| 7 | KF67-Y2.2-30.22 | 45 | 100 | 80 | | | 35 | 80 | 60 | | | | | 690 | 710 |
| 8 | KF67-Y2.2-30.22 | | | | 45 | 100 | 80 | | | | 35 | 80 | 60 | 735 | 755 |
| 9 | KF77-Y3-30.89 | 55 | 110 | 80 | | | 40 | 100 | 70 | | | | | 800 | 830 |
| 10 | KF77-Y3-30.89 | | | | 55 | 110 | 80 | | | | 40 | 100 | 70 | 850 | 880 |
| 11 | KF77-Y3-40.04 | 70 | 135 | 105 | | | 50 | 110 | 80 | | | | | 960 | 990 |
| 12 | KF77-Y3-40.04 | | | | 70 | 135 | 105 | | | | 50 | 110 | 80 | 1030 | 1060 |

| 规格 Size | 尺寸 mm Gear units | | | | | | | | | | | | | |
|------------|---------------------|----------------|----------------|-----|----------------|----|----------------|----------------|-----|----------------|------------------------------|------|-----|-----|
| | a | A ₁ | A ₂ | b | B ₁ | c | d ₆ | e ₃ | E | G ₆ | G ₈ ⁵⁾ | | h | H |
| 4 | 565 | 195 | 200 | 215 | 143 | 28 | 110 | 110 | 270 | 530 | 193 | 188* | 200 | 445 |
| 5 | 640 | 220 | 235 | 255 | 168 | 28 | 130 | 130 | 315 | 605 | 218 | 213* | 230 | 512 |
| 6 | 720 | 220 | 235 | 255 | 168 | 28 | 130 | 130 | 350 | 640 | 218 | 213* | 230 | 512 |
| 7 | 785 | 275 | 275 | 300 | 193 | 35 | 165 | 160 | 385 | 720 | 273 | 266* | 280 | 602 |
| 8 | 890 | 275 | 275 | 300 | 193 | 35 | 165 | 160 | 430 | 765 | 273 | 266* | 280 | 617 |
| 9 | 925 | 315 | 325 | 370 | 231 | 40 | 175 | 185 | 450 | 845 | 347 | 327* | 320 | 697 |
| 10 | 1025 | 315 | 325 | 380 | 231 | 40 | 175 | 185 | 500 | 895 | 347 | 327* | 320 | 697 |
| 11 | 1105 | 370 | 385 | 430 | 263 | 50 | 190 | 225 | 545 | 1010 | 397 | 342* | 370 | 817 |
| 12 | 1260 | 370 | 385 | 430 | 263 | 50 | 190 | 225 | 615 | 1080 | 397 | 342* | 370 | 825 |

| 规格 Size | 尺寸 mm Gear units | | | | | | | | | | | | |
|------------|---------------------|----------------|----------------|----------------|----|------------------------------|------|----------------|----------------|----------------|----------------|-----------------|------|
| | m ₁ | m ₃ | n ₁ | n ₂ | s | L ₁ ⁵⁾ | | L ₃ | L ₄ | L ₅ | L ₆ | D ⁵⁾ | |
| 4 | 355 | 180 | 105 | 85 | 19 | 447 | 447* | 103 | 459 | 137 | 112 | 132 | 132* |
| 5 | 430 | 220 | 105 | 100 | 19 | 512 | 507* | 125 | 502 | 165 | 132 | 160 | 150* |
| 6 | 510 | 220 | 105 | 145 | 19 | 512 | 507* | 125 | 502 | 165 | 132 | 160 | 150* |
| 7 | 545 | 260 | 120 | 130 | 24 | 555 | 555* | 150 | 536 | 210 | 140 | 195 | 190* |
| 8 | 650 | 260 | 120 | 190 | 24 | 555 | 555* | 150 | 536 | 210 | 140 | 195 | 190* |
| 9 | 635 | 320 | 145 | 155 | 28 | 655 | 650* | 160 | 556 | 255 | 180 | 230 | 210* |
| 10 | 735 | 320 | 145 | 205 | 28 | 655 | 650* | 160 | 556 | 255 | 180 | 230 | 210* |
| 11 | 775 | 370 | 165 | 180 | 35 | 702 | 692* | 180 | 556 | 315 | 180 | 280 | 210* |
| 12 | 930 | 370 | 165 | 265 | 35 | 702 | 692* | 180 | 556 | 315 | 180 | 280 | 210* |

| 规格 Size | 尺寸 mm Output shaft | | | | | | | | | 润滑油 lubrication | | 重量 weight | |
|------------|------------------------------|----------------|----------------|------|----------------|----------------|------|----------------|----------------|--------------------|-----|------------------|---------------------|
| | B3SH | | | B3HH | | | B3DH | | | KF | B3 | KF ³⁾ | B3/KF ⁴⁾ |
| | d ₃ ¹⁾ | G ₂ | l ₂ | D | G ₄ | D ₃ | D | G ₄ | G ₅ | (L) | (L) | (kg) | (kg) |
| 4 | 80 | 140 | 170 | 80 | 140 | 85 | 85 | 140 | 205 | 2.2 | 10 | 36 | 262 |
| 5 | 100 | 165 | 210 | 95 | 165 | 100 | 100 | 165 | 240 | 3 | 16 | 52 | 402 |
| 6 | 110 | 165 | 210 | 105 | 165 | 110 | 110 | 165 | 240 | 3 | 17 | 52 | 457 |
| 7 | 120 | 195 | 210 | 115 | 195 | 120 | 120 | 195 | 280 | 3.6 | 30 | 66 | 649 |
| 8 | 130 | 195 | 250 | 125 | 195 | 130 | 130 | 195 | 285 | 3.6 | 33 | 66 | 734 |
| 9 | 140 | 235 | 250 | 135 | 235 | 140 | 145 | 235 | 330 | 6 | 45 | 92 | 1017 |
| 10 | 160 | 235 | 300 | 150 | 235 | 150 | 155 | 235 | 350 | 6 | 48 | 92 | 1147 |
| 11 | 170 | 270 | 300 | 165 | 270 | 165 | 170 | 270 | 400 | 6 | 79 | 92 | 1582 |
| 12 | 180 | 270 | 300 | 180 | 270 | 180 | 185 | 270 | 405 | 6 | 84 | 92 | 1857 |

3) KF减速机重量 (不含润滑油重量), 其余相关数据详见87页;

4) 主减速机与辅传减速机组合总重量 (不含润滑油重量);

5) 不带*列为采用国产逆止器、超越离合器时尺寸, 带*列为选用国外逆止器、超越离合器时尺寸。

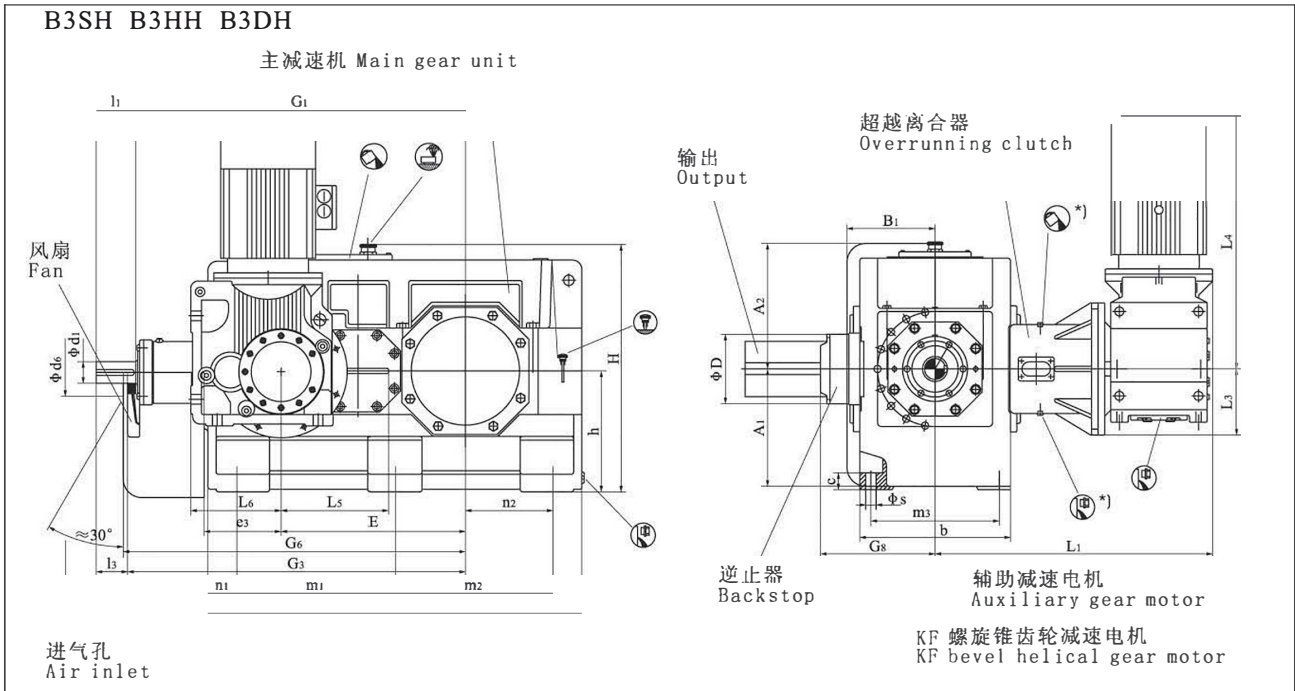
3) Weight of gear motor KF (oil weight not included), other detailed data refer to Page 87;

4) Gross weight of combination of main gear unit and auxiliary gear motor (oil weight not included).

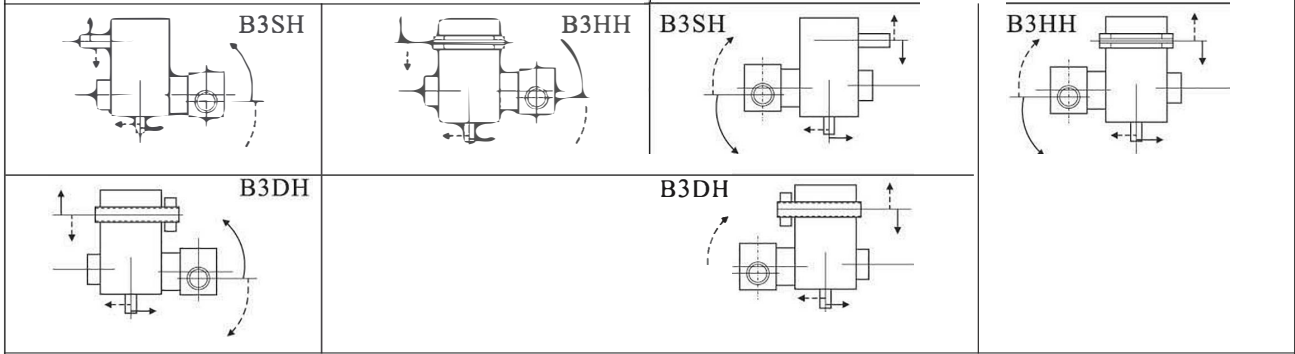
5) Without * is the dimension using domestic back stop and overrunning clutch and with * is the dimension using imported backstop and overrunning clutch.

直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
空载驱动 Maintenance Drive

三级 Three Stage
类型 Type B3...
规格 Sizes 13...18

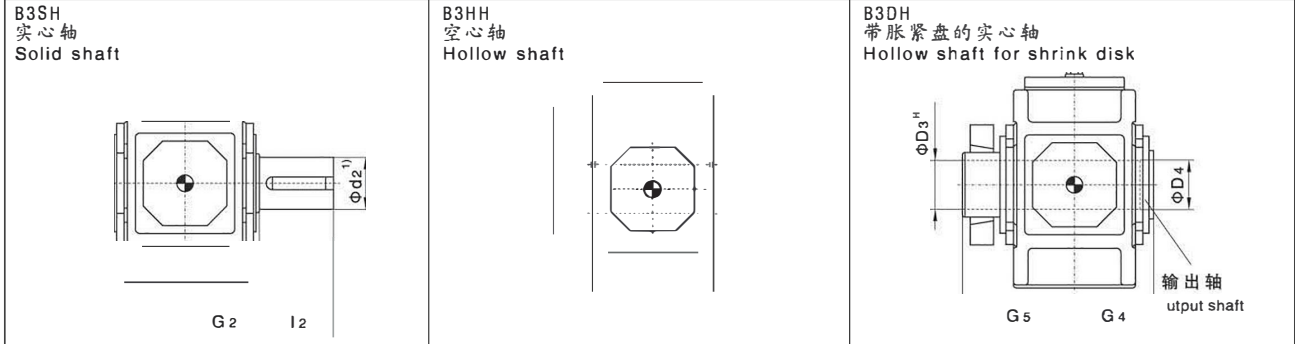


| | |
|--|--|
| <p>主减速机B布置形式: D Design of main gear unit B: D 齿轮减速机KF输出轴方向: A Output shaft direction of gear motor KF: A</p> | <p>主减速机B布置形式: B Design of main gear unit B: B 齿轮减速机KF输出轴方向: B Output shaft direction of gear motor KF: B</p> |
|--|--|



B

输出轴 Output Shaft



1) $k6 \leq \Phi 25$ $\Phi 28 \leq k6 \leq \Phi 100$ $n6 > \Phi 100$

有关平键和中心孔, 参见第255页

2) 键槽 GB/T1095-1979

*) 仅当采用国外超越离合器时加注润滑油, 若采用国产逆止器、超越离合器时则加注润滑脂。

*) Fill lubrication only when selecting imported overrunning clutch, if domestic backstop and overrunning clutch are used please fill grease.

直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
空载驱动 Maintenance Drive

三级 Three Stage
类型 Type B3...
规格 Sizes 13...18

| 规格 Size | 辅传减速电机 Auxiliary gear motor | 尺寸 mm 输入轴 Input shaft | | | | | | | | | | | | | | | | | | | |
|------------|-----------------------------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|----------------|----------------|
| | | i _N =25-45 | | | i _N =25-50 | | | i _N =25-56 | | | i _N =50-71 | | | i _N =56-71 | | | i _N =63-71 | | | G ₁ | G ₃ |
| | | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | | |
| 13 | KF87-Y4-44.02 | 80 | 165 | 130 | | | | | | 60 | 140 | 105 | | | | | | | | 1125 | 1160 |
| 14 | KF87-Y4-44.02 | | | | | | 80 | 165 | 130 | | | | | | | 60 | 140 | 105 | | 1195 | 1230 |
| 15 | KF87-Y4-44.02 | 90 | 165 | 130 | | | | | | 70 | 140 | 105 | | | | | | | | 1367 | 1402 |
| 16 | KF87-Y4-44.02 | | | | 90 | 165 | 130 | | | | | 70 | 140 | 105 | | | | | | 1413 | 1448 |
| 17 | KF87-Y4-44.02 | 110 | 205 | 165 | | | | | | 80 | 170 | 130 | | | | | | | | 1560 | 1600 |
| 18 | KF87-Y4-44.02 | | | | 110 | 205 | 165 | | | | | 80 | 170 | 130 | | | | | | 1620 | 1660 |

| 规格 Size | 尺寸 mm 减 速 器 Gear units | | | | | | | | | | | | | | |
|------------|------------------------------|----------------|----------------|-----|----------------|----|----------------|----------------|-----|----------------|------------------------------|------|-----|------|--|
| | a | A ₁ | A ₂ | b | B ₁ | c | d ₆ | e ₃ | E | G ₆ | G ₈ ⁵⁾ | h | H | | |
| 13 | 1290 | 425 | 475 | 550 | 325 | 60 | 210 | 265 | 635 | 1180 | 453 | 433* | 440 | 935 | |
| 14 | 1430 | 425 | 475 | 550 | 325 | 60 | 210 | 265 | 705 | 1250 | 453 | 433* | 440 | 935 | |
| 15 | 1550 | 485 | 520 | 625 | 365 | 70 | 210 | 320 | 762 | 1420 | 500 | 476* | 500 | 1035 | |
| 16 | 1640 | 485 | 520 | 625 | 365 | 70 | 210 | 320 | 808 | 1470 | 500 | 476* | 500 | 1035 | |
| 17 | 1740 | 535 | 570 | 690 | 395 | 80 | 230 | 370 | 860 | 1620 | 532 | 508* | 550 | 1145 | |
| 18 | 1860 | 535 | 570 | 690 | 395 | 80 | 230 | 370 | 920 | 1680 | 532 | 508* | 550 | 1145 | |

| 规格 Size | 尺寸 mm 减 速 器 Gear units | | | | | | | | | | | | | | |
|------------|------------------------------|----------------|----------------|----------------|----------------|----|------------------------------|----------------|----------------|----------------|----------------|-----------------|-----|------|--|
| | m ₁ | m ₂ | m ₃ | n ₁ | n ₂ | s | L ₁ ⁵⁾ | L ₃ | L ₄ | L ₅ | L ₆ | D ⁵⁾ | | | |
| 13 | 545 | 545 | 475 | 100 | 305 | 35 | 805 | 790* | 190 | 628 | 362 | 212 | 320 | 290* | |
| 14 | 545 | 685 | 475 | 100 | 375 | 35 | 805 | 790* | 190 | 628 | 362 | 212 | 320 | 290* | |
| 15 | 655 | 655 | 535 | 120 | 365 | 42 | 850 | 835* | 200 | 628 | 443 | 212 | 400 | 290* | |
| 16 | 655 | 745 | 535 | 120 | 410 | 42 | 850 | 835* | 200 | 628 | 443 | 212 | 400 | 290* | |
| 17 | 735 | 735 | 600 | 135 | 390 | 42 | 882 | 867* | 225 | 628 | 520 | 212 | 400 | 290* | |
| 18 | 735 | 855 | 600 | 135 | 450 | 42 | 882 | 867* | 225 | 628 | 520 | 212 | 400 | 290* | |

| 规格 Size | 尺寸 mm 输 出 轴 Output shaft | | | | | | | | | | 润滑油 lubrication | | 重量 weight | |
|------------|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|--------------------|------|------------------|---------------------|
| | B3SH | | | B3HH | | | B3DH | | | | KF | B3 | KF ³⁾ | B3/KF ⁴⁾ |
| | d ₂ ¹⁾ | G ₂ | l ₂ | D ₂ | G ₄ | D ₃ | D ₄ | G ₄ | G ₅ | (L) | (L) | (kg) | (kg) | |
| 13 | 200 | 335 | 350 | 190 | 335 | 190 | 195 | 335 | 480 | 11.9 | 145 | 126 | 2547 | |
| 14 | 210 | 335 | 350 | 210 | 335 | 210 | 215 | 335 | 480 | 11.9 | 155 | 126 | 2917 | |
| 15 | 230 | 380 | 410 | 230 | 380 | 230 | 235 | 380 | 550 | 11.9 | 230 | 126 | 3902 | |
| 16 | 240 | 380 | 410 | 240 | 380 | 240 | 245 | 380 | 550 | 11.9 | 240 | 126 | 4127 | |
| 17 | 250 | 415 | 410 | 250 | 415 | 250 | 260 | 415 | 600 | 11.9 | 315 | 126 | 5168 | |
| 18 | 270 | 415 | 470 | 275 | 415 | 280 | 285 | 415 | 600 | 11.9 | 325 | 126 | 5673 | |

3) KF减速电机重量(不含润滑油重量),其余相关数据详见87页;

4) 主减速机与辅传减速电机组合总重量(不含润滑油重量);

5) 不带*列为采用国产逆止器、超越离合器时尺寸,带*列为选用国外逆止器、超越离合器时尺寸。

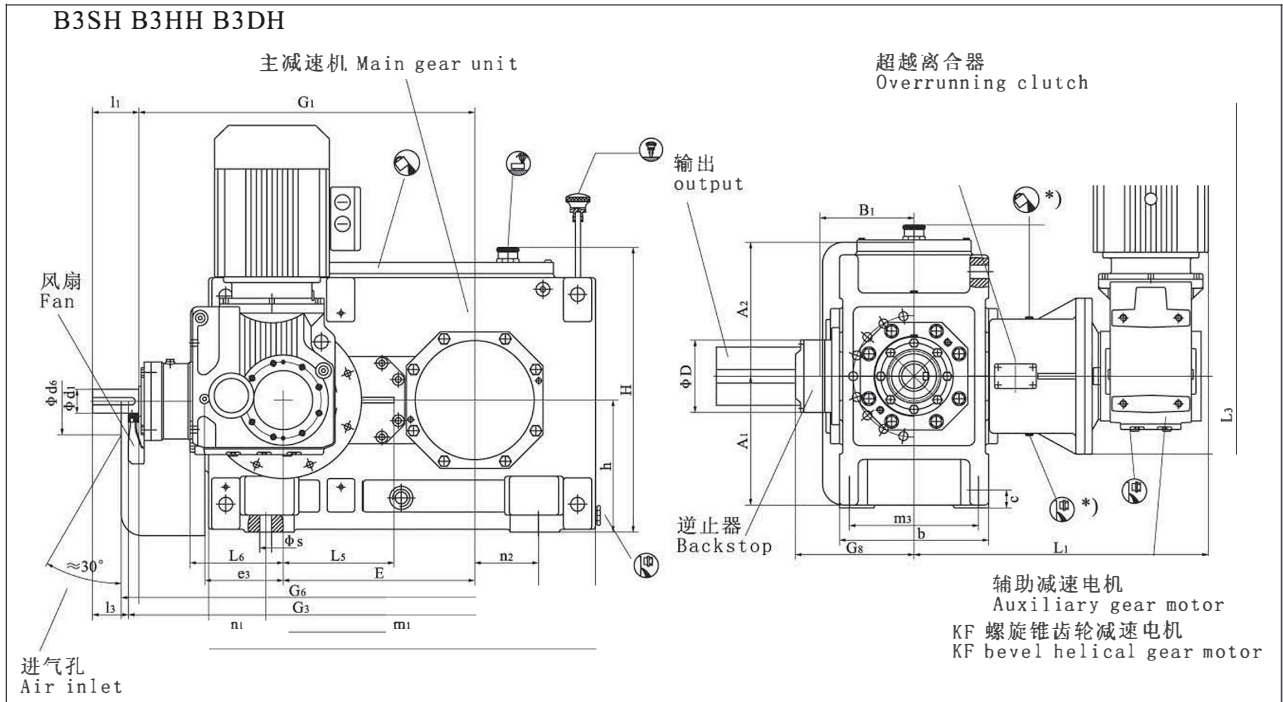
3) Weight of gear motor KF (oil weight not included), other detailed data refer to Page 87;

4) Gross weight of combination of main gear unit and auxiliary gear motor (oil weight not included).

5) Without * is the dimension using domestic back stop and overrunning clutch and with * is the dimension using imported backstop and overrunning clutch.

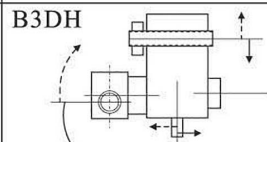
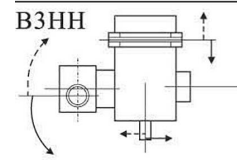
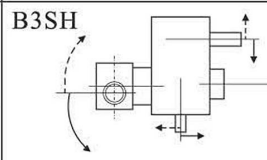
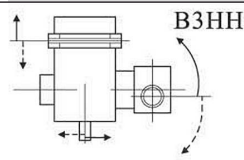
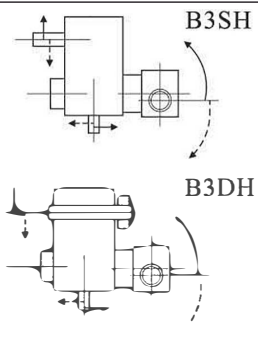
直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
载荷驱动 Operation under load

三级 Three Stage
类型 Type B3...
规格 Sizes 4...12



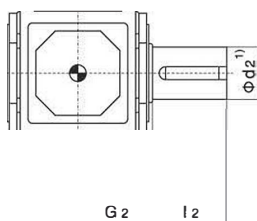
主减速机B布置形式: D
Design of main gear unit B: D
齿轮减速机KF输出轴方向: A
Output shaft direction of gear motor KF: A

主减速机B布置形式: B
Design of main gear unit B: B
齿轮减速机KF输出轴方向: B
Output shaft direction of gear motor KF: B

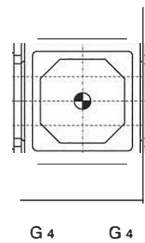


输出轴 Output Shaft

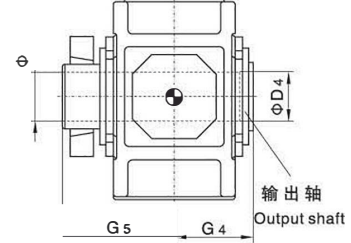
B3SH
实心轴
Solid shaft



B3HH
空心轴
Hollow shaft



B3DH
带胀紧盘的实心轴
Hollow shaft for shrink disk



1) $k6 \leq \phi 25$ $\phi 28 \leq k6 \leq \phi 100$ $n6 > \phi 100$
有关平键和中心孔, 参见第255页

1) $k6 \leq \phi 25$ $\phi 28 \leq k6 \leq \phi 100$ $n6 > \phi 100$
For parallel key and for center hole, see page 255

2) 键槽 GB/T1095-1979

2) Keyway GB/T1095-1979

*) 仅当采用国外超越离合器时加注润滑油, 若采用国产逆止器、超越离合器时则加注润滑脂。

*) Fill lubrication only when selecting imported overrunning clutch, if domestic backstop and overrunning clutch are used please fill grease.

B

直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
载荷驱动 Operation Under Load

三级 Three Stage
类型 Type B3...
规格 Sizes 4...12

| 规格 Size | 辅传减速机 Auxiliary gear motor | 尺寸 mm Input shaft | | | | | | | | | | | | G ₁ | G ₃ |
|------------|----------------------------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|----------------|----------------|
| | | i _N =25-45 | | | i _N =25-56 | | | i _N =50-71 | | | i _N =63-71 | | | | |
| | | d ₁ ¹⁾ | l ₁ | l ₁ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | | |
| 4 | KF57-Y1.1-35.7 | 30 | 70 | 50 | | | | 25 | 60 | 40 | | | | 500 | 520 |
| 5 | KF67-Y2.2-27.28 | 35 | 80 | 60 | | | | 28 | 60 | 40 | | | | 575 | 595 |
| 6 | KF67-Y2.2-27.28 | | | | 35 | 80 | 60 | | | | 28 | 60 | 40 | 610 | 630 |
| 7 | KF77-Y4-29.27 | 45 | 100 | 80 | | | | 35 | 80 | 60 | | | | 690 | 710 |
| 8 | KF77-Y4-29.27 | | | | 45 | 100 | 80 | | | | 35 | 80 | 60 | 735 | 755 |
| 9 | KF87-Y5.5-36.52 | 55 | 110 | 80 | | | | 40 | 100 | 70 | | | | 800 | 830 |
| 10 | KF87-Y5.5-36.52 | | | | 55 | 110 | 80 | | | | 40 | 100 | 70 | 850 | 880 |
| 11 | KF97-Y11-34.23 | 70 | 135 | 105 | | | | 50 | 110 | 80 | | | | 960 | 990 |
| 12 | KF97-Y11-34.23 | | | | 70 | 135 | 105 | | | | 50 | 110 | 80 | 1030 | 1060 |

| 规格 Size | 尺寸 mm Gear units | | | | | | | | | | | | | |
|------------|---------------------|----------------|----------------|-----|----------------|----|----------------|----------------|-----|----------------|------------------------------|------|-----|-----|
| | a | A ₁ | A ₂ | b | B ₁ | c | d ₆ | e ₃ | E | G ₆ | G ₈ ⁵⁾ | | h | H |
| 4 | 565 | 195 | 200 | 215 | 143 | 28 | 110 | 110 | 270 | 530 | 193 | 188* | 200 | 445 |
| 5 | 640 | 220 | 235 | 255 | 168 | 28 | 130 | 130 | 315 | 605 | 218 | 213* | 230 | 512 |
| 6 | 720 | 220 | 235 | 255 | 168 | 28 | 130 | 130 | 350 | 640 | 218 | 213* | 230 | 512 |
| 7 | 785 | 275 | 275 | 300 | 193 | 35 | 165 | 160 | 385 | 720 | 273 | 266* | 280 | 602 |
| 8 | 890 | 275 | 275 | 300 | 193 | 35 | 165 | 160 | 430 | 765 | 273 | 266* | 280 | 617 |
| 9 | 925 | 315 | 325 | 370 | 231 | 40 | 175 | 185 | 450 | 845 | 347 | 327* | 320 | 697 |
| 10 | 1025 | 315 | 325 | 380 | 231 | 40 | 175 | 185 | 500 | 895 | 347 | 327* | 320 | 697 |
| 11 | 1105 | 370 | 385 | 430 | 263 | 50 | 190 | 225 | 545 | 1010 | 397 | 342* | 380 | 817 |
| 12 | 1260 | 370 | 385 | 430 | 263 | 50 | 190 | 225 | 615 | 1080 | 397 | 342* | 380 | 825 |

| 规格 Size | 尺寸 mm Gear units | | | | | | | | | | | | |
|------------|---------------------|----------------|----------------|----------------|----|------------------------------|------|----------------|----------------|----------------|----------------|-----------------|------|
| | m ₁ | m ₃ | n ₁ | n ₂ | s | L ₁ ⁵⁾ | | L ₃ | L ₄ | L ₅ | L ₆ | D ⁵⁾ | |
| 4 | 355 | 180 | 105 | 85 | 19 | 479 | 474* | 125 | 447 | 137 | 132 | 132 | 132* |
| 5 | 430 | 220 | 105 | 100 | 19 | 528 | 523* | 125 | 536 | 165 | 140 | 160 | 150* |
| 6 | 510 | 220 | 105 | 145 | 19 | 528 | 523* | 125 | 536 | 165 | 140 | 160 | 150* |
| 7 | 545 | 260 | 120 | 130 | 24 | 636 | 636* | 125 | 693 | 210 | 180 | 195 | 190* |
| 8 | 650 | 260 | 120 | 190 | 24 | 636 | 636* | 125 | 693 | 210 | 180 | 195 | 190* |
| 9 | 635 | 320 | 145 | 155 | 28 | 743 | 723* | 175 | 674 | 255 | 212 | 230 | 210* |
| 10 | 735 | 320 | 145 | 205 | 28 | 743 | 723* | 175 | 674 | 255 | 212 | 230 | 210* |
| 11 | 775 | 370 | 165 | 180 | 35 | 869 | 849* | 225 | 806 | 315 | 265 | 280 | 210* |
| 12 | 930 | 370 | 165 | 265 | 35 | 869 | 849* | 225 | 806 | 315 | 265 | 280 | 210* |

| 规格 Size | 尺寸 mm Output shaft | | | | | | | | | 润滑油 lubrication | | 重量 weight | |
|------------|------------------------------|----------------|----------------|------|----------------|----------------|------|----------------|----------------|--------------------|-----|------------------|---------------------|
| | B3SH | | | B3HH | | | B3DH | | | KF | B3 | KF ³⁾ | B3/KF ⁴⁾ |
| | d ₃ ¹⁾ | G ₂ | l ₂ | D | G ₄ | D ₃ | D | G ₄ | G ₅ | (L) | (L) | (kg) | (kg) |
| 4 | 80 | 140 | 170 | 80 | 140 | 85 | 85 | 140 | 205 | 3 | 10 | 50 | 283 |
| 5 | 100 | 165 | 210 | 95 | 165 | 100 | 100 | 165 | 240 | 3.6 | 16 | 66 | 424 |
| 6 | 110 | 165 | 210 | 105 | 165 | 110 | 110 | 165 | 240 | 3.6 | 17 | 66 | 479 |
| 7 | 120 | 195 | 210 | 115 | 195 | 120 | 120 | 195 | 280 | 6 | 30 | 98 | 689 |
| 8 | 130 | 195 | 250 | 125 | 195 | 130 | 130 | 195 | 285 | 6 | 33 | 98 | 774 |
| 9 | 140 | 235 | 250 | 135 | 235 | 140 | 145 | 235 | 330 | 11.9 | 45 | 150 | 1105 |
| 10 | 160 | 235 | 300 | 150 | 235 | 150 | 155 | 235 | 350 | 11.9 | 48 | 150 | 1235 |
| 11 | 170 | 270 | 300 | 165 | 270 | 165 | 170 | 270 | 400 | 21.5 | 79 | 248 | 1821 |
| 12 | 180 | 270 | 300 | 180 | 270 | 180 | 185 | 270 | 405 | 21.5 | 84 | 248 | 2096 |

3) KF减速机重量 (不含润滑油重量), 其余相关数据详见87页;

4) 主减速机与辅传减速机组合总重量 (不含润滑油重量);

5) 不带*列为采用国产逆止器、超越离合器时尺寸, 带*列为选用国外逆止器、超越离合器时尺寸。

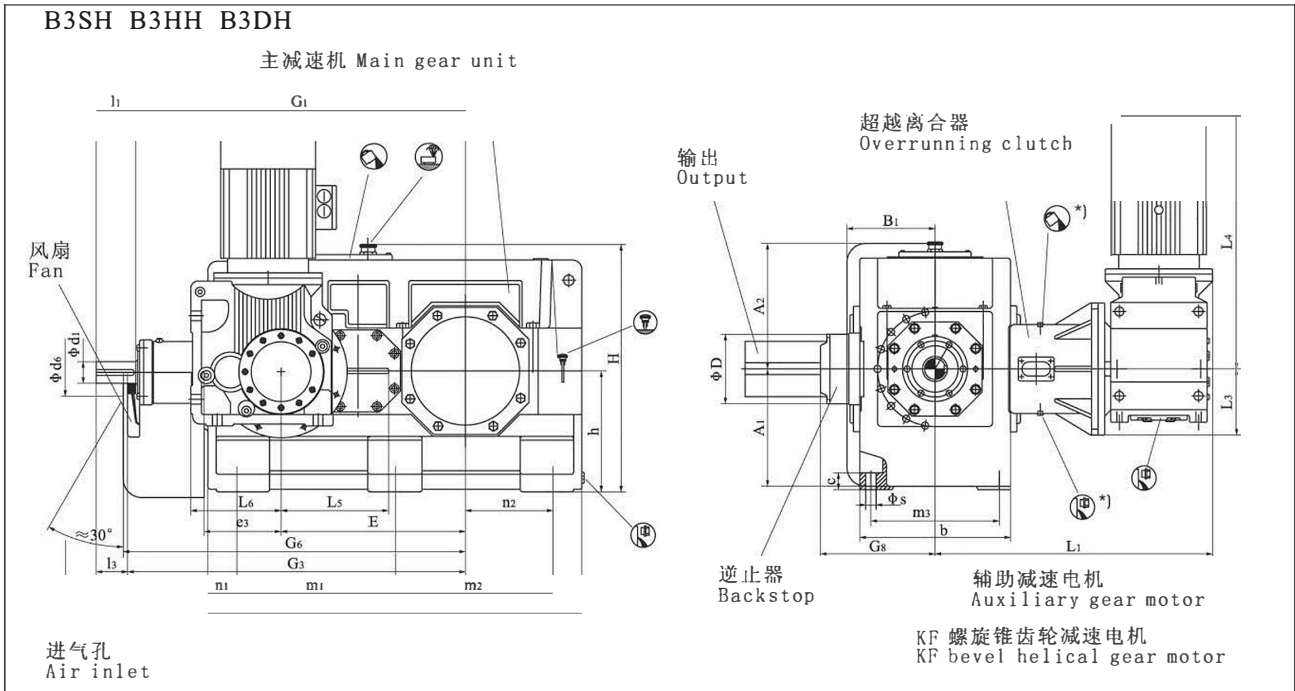
3) Weight of gear motor KF (oil weight not included), other detailed data refer to Page 87;

4) Gross weight of combination of main gear unit and auxiliary gear motor (oil weight not included).

5) Without * is the dimension using domestic back stop and overrunning clutch and with * is the dimension using imported backstop and overrunning clutch.

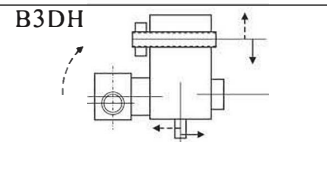
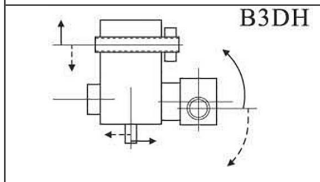
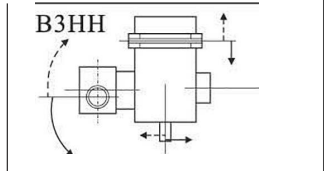
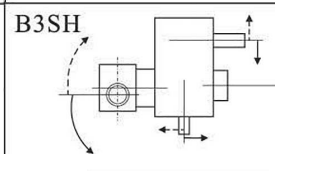
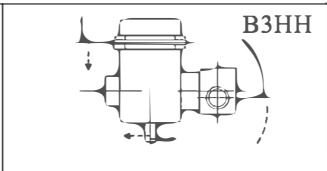
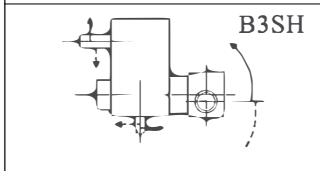
直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
载荷驱动 Operation under load

三级 Three Stage
类型 Type B3...
规格 Sizes 13...18

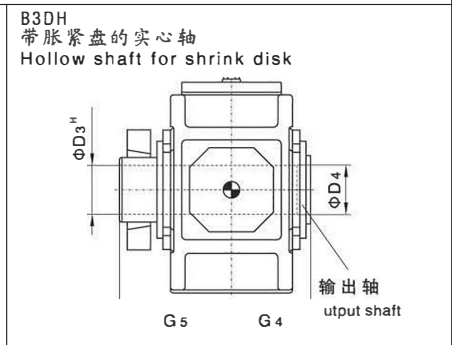
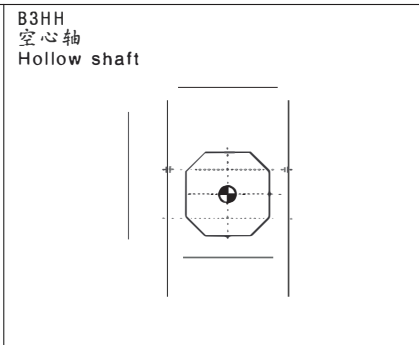
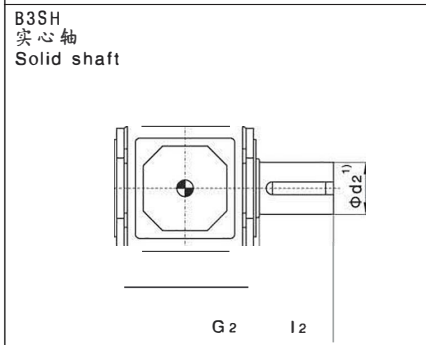


主减速机B布置形式: D
Design of main gear unit B: D
齿轮减速机KF输出轴方向: A
Output shaft direction of gear motor KF: A

主减速机B布置形式: B
Design of main gear unit B: B
齿轮减速机KF输出轴方向: B
Output shaft direction of gear motor KF: B



输出轴 Output Shaft



B

1) $k6 \leq \phi 25$ $\phi 28 \leq k6 \leq \phi 100$ $n6 > \phi 100$
有关平键和中心孔, 参见第255页

1) $k6 \leq \phi 25$ $\phi 28 \leq k6 \leq \phi 100$ $n6 > \phi 100$
For parallel key and for center hole, see page 255

2) 键槽 GB/T1095-1979

2) Keyway GB/T1095-1979

*) 仅当采用国外超越离合器时加注润滑油, 若采用国产逆止器、超越离合器时则加注润滑脂。

*) Fill lubrication only when selecting imported overrunning clutch, if domestic backstop and overrunning clutch are used please fill grease.

直交轴减速机 Bevel-helical Gear Units
带辅传 With Auxiliary Drive
载荷驱动 Operation Under Load

三级Three Stage
类型Type B3...
规格Sizes 13...18

| 规格 Size | 辅传减速机 Auxiliary gear motor | 尺寸 mm 输入轴 | | | | | | | | | | | | Dimensions in mm Input shaft | | | | | | | | |
|------------|----------------------------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|------------------------------|----------------|----------------|---------------------------------|----------------|----------------|------------------------------|----------------|----------------|----------------|----------------|------|
| | | i _N =25-45 | | | i _N =25-50 | | | i _N =25-56 | | | i _N =50-71 | | | i _N =56-71 | | | i _N =63-71 | | | G ₁ | G ₃ | |
| | | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | d ₁ ¹⁾ | l ₁ | l ₃ | | | |
| 13 | KF107-Y18.5-28.59 | 80 | 165 | 130 | | | | | | | | | 60 | 140 | 105 | | | | | | 1125 | 1160 |
| 14 | KF107-Y18.5-28.59 | | | | | | | 80 | 165 | 130 | | | | | | | | 60 | 140 | 105 | 1195 | 1230 |
| 15 | KF127-Y30-27.67 | 90 | 165 | 130 | | | | | | | | | 70 | 140 | 105 | | | | | | 1367 | 1402 |
| 16 | KF127-Y30-27.67 | | | | 90 | 165 | 130 | | | | | | | 70 | 140 | 105 | | | | | 1413 | 1448 |
| 17 | KF127-Y37-27.67 | 110 | 205 | 165 | | | | | | | | | 80 | 170 | 130 | | | | | | 1560 | 1600 |
| 18 | KF127-Y37-27.67 | | | | 110 | 205 | 165 | | | | | | | | 80 | 170 | 130 | | | | 1620 | 1660 |

| 规格 Size | 尺寸 mm 减速机 | | | | | | | | | | | | Dimensions in mm Gear units | | | |
|------------|--------------|----------------|----------------|-----|----------------|----|----------------|----------------|-----|----------------|------------------------------|------|--------------------------------|------|--|--|
| | a | A ₁ | A ₂ | b | B ₁ | c | d ₆ | e ₃ | E | G ₆ | G ₈ ⁵⁾ | h | H | | | |
| 13 | 1290 | 425 | 475 | 550 | 325 | 60 | 210 | 265 | 635 | 1180 | 453 | 433* | 440 | 900 | | |
| 14 | 1430 | 425 | 475 | 550 | 325 | 60 | 210 | 265 | 705 | 1250 | 453 | 433* | 440 | 900 | | |
| 15 | 1550 | 485 | 520 | 625 | 365 | 70 | 210 | 320 | 762 | 1420 | 500 | 476* | 500 | 1000 | | |
| 16 | 1640 | 485 | 520 | 625 | 365 | 70 | 210 | 320 | 808 | 1470 | 500 | 476* | 500 | 1000 | | |
| 17 | 1740 | 535 | 570 | 690 | 395 | 80 | 230 | 370 | 860 | 1620 | 532 | 508* | 550 | 1110 | | |
| 18 | 1860 | 535 | 570 | 690 | 395 | 80 | 230 | 370 | 920 | 1680 | 532 | 508* | 550 | 1110 | | |

| 规格 Size | 尺寸 mm 减速机 | | | | | | | Dimensions in mm Gear units | | | | | | |
|------------|----------------|----------------|----------------|----------------|----------------|----|------------------------------|--------------------------------|----------------|----------------|----------------|-----------------|-----|------|
| | m ₁ | m ₂ | m ₃ | n ₁ | n ₂ | s | L ₁ ⁵⁾ | L ₃ | L ₄ | L ₅ | L ₆ | D ⁵⁾ | | |
| 13 | 545 | 545 | 475 | 100 | 305 | 35 | 1024 | 986* | 225 | 934 | 362 | 315 | 320 | 290* |
| 14 | 545 | 685 | 475 | 100 | 375 | 35 | 1024 | 986* | 225 | 934 | 362 | 315 | 320 | 290* |
| 15 | 655 | 655 | 535 | 120 | 365 | 42 | 1181 | 1161* | 275 | 1048 | 443 | 375 | 400 | 290* |
| 16 | 655 | 745 | 535 | 120 | 410 | 42 | 1181 | 1161* | 275 | 1048 | 443 | 375 | 400 | 290* |
| 17 | 735 | 735 | 600 | 135 | 390 | 42 | 1223 | 1203* | 275 | 1068 | 513 | 375 | 400 | 290* |
| 18 | 735 | 855 | 600 | 135 | 450 | 42 | 1223 | 1203* | 275 | 1068 | 513 | 375 | 400 | 290* |

| 规格 Size | 尺寸 mm 输出轴 | | | | | | | | | Dimensions in mm Output shaft | | 润滑油 lubrication | | 重量 weight | |
|------------|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------------|-----|--------------------|---------------------|--------------|--|
| | B3SH | | | B3HH | | | B3DH | | | KF | B3 | KF ³⁾ | B3/KF ⁴⁾ | | |
| | d ₂ ¹⁾ | G ₂ | l ₂ | D ₂ | G ₄ | D ₃ | D ₄ | G ₄ | G ₅ | | | | | | |
| 13 | 200 | 335 | 350 | 190 | 335 | 190 | 190 | 335 | 205 | 11.9 | 145 | 126 | 2547 | | |
| 14 | 210 | 335 | 350 | 210 | 335 | 210 | 215 | 335 | 240 | 11.9 | 155 | 126 | 2917 | | |
| 15 | 230 | 380 | 410 | 230 | 380 | 230 | 235 | 380 | 240 | 11.9 | 230 | 126 | 3902 | | |
| 16 | 240 | 380 | 410 | 240 | 380 | 240 | 245 | 380 | 280 | 11.9 | 240 | 126 | 4127 | | |
| 17 | 250 | 415 | 410 | 250 | 415 | 250 | 260 | 415 | 285 | 11.9 | 315 | 126 | 5168 | | |
| 18 | 270 | 415 | 470 | 275 | 415 | 280 | 285 | 415 | 350 | 11.9 | 325 | 126 | 5673 | | |

3) KF减速机重量 (不含润滑油重量), 其余相关数据详见87页;

4) 主减速机与辅传减速机组合总重量 (不含润滑油重量);

5) 不带*列为采用国产逆止器、超越离合器时尺寸, 带*列为选用国外逆止器、超越离合器时尺寸。

3) Weight of gear motor KF (oil weight not included), other detailed data refer to Page 87;

4) Gross weight of combination of main gear unit and auxiliary gear motor (oil weight not included).

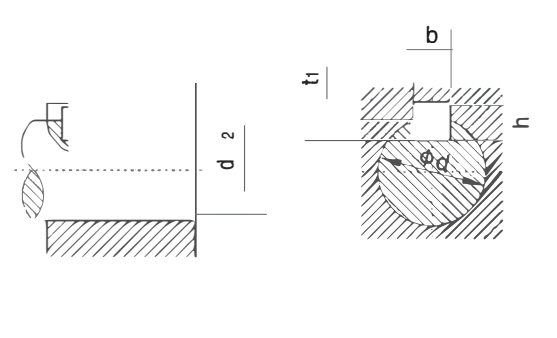
5) Without * is the dimension using domestic back stop and overrunning clutch and with * is the dimension using imported backstop and overrunning clutch.

轴端螺纹孔，配合公差，平键和槽键

Centre Holes in Shaft Ends, Fit tolerance and Parallel Key and Keyway

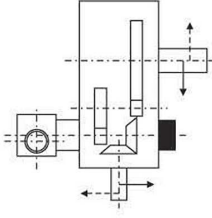
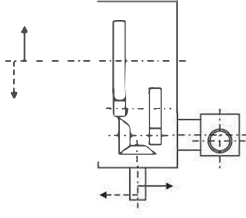
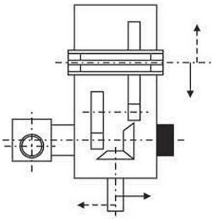
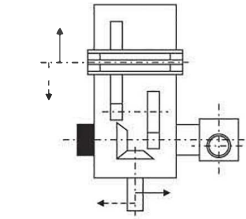
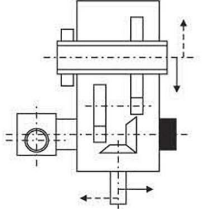
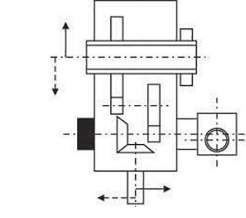
| 轴端螺纹孔 | | Centre holes in shaft end | | | | | | | | |
|-------------------------|--------------|---------------------------|-----------|-----------|-----------|-----------|------------|-------------|-------------|-------------|
| | | mm | | | | | | | | |
| 轴径 Φd Diameter | $\geq 16-21$ | $> 21-24$ | $> 24-30$ | $> 30-38$ | $> 38-50$ | $> 50-85$ | $> 85-130$ | $> 130-225$ | $> 225-320$ | $> 320-500$ |
| 螺孔尺寸 Screw | M6 | M8 | M10 | M12 | M16 | M20 | M24 | M30 | M36 | M42 |

| 配合公差 Selection of ISO Fits | | |
|----------------------------|-------------------------|-----------------------|
| 轴径 Shaft d/mm | 轴径公差 Shaft tolerance | 孔公差 Bore tolerance |
| | ≤ 25 | k6 / H7 |
| > 25 | ≤ 100 | m6 / H7 |
| > 100 | | n6 / H7 |

| 平键和键槽 | Parallel key and keyway | | | | |
|--|-------------------------|------------------|-------------------|---|--|
| | mm | | | | |
| <p>平键紧固采用无锥度联接 平键和键槽根据GB/T1095-1979标准确定 Drive type fastening without taper action. Parallel key and keyway acc. to GB/T1095-1979</p> <div style="display: flex; justify-content: space-around; align-items: center;">  </div> | 直径 Diameter d | 宽度 Width b | 高度 Height h | 轴键槽深度 Depth of keyway in shaft t_1 | 轮毂键槽深度 Depth of keyway in hub $d+t_2$ |
| | $> 8-10$ | 3 | 3 | 1.8 | $d+1.4$ |
| | $> 10-12$ | 4 | 4 | 2.5 | $d+1.8$ |
| | $> 12-17$ | 5 | 5 | 3 | $d+2.3$ |
| | $> 17-22$ | 6 | 6 | 3.5 | $d+2.8$ |
| | $> 22-30$ | 8 | 7 | 4 | $d+3.3$ |
| | $> 30-38$ | 10 | 8 | 5 | $d+3.3$ |
| | $> 38-44$ | 12 | 8 | 5 | $d+3.3$ |
| | $> 44-50$ | 14 | 9 | 5.5 | $d+3.8$ |
| | $> 50-58$ | 16 | 10 | 6 | $d+4.3$ |
| | $> 58-65$ | 18 | 11 | 7 | $d+4.4$ |
| | $> 65-75$ | 20 | 12 | 7.5 | $d+4.9$ |
| | $> 75-85$ | 22 | 14 | 9 | $d+5.4$ |
| | $> 85-95$ | 25 | 14 | 9 | $d+5.4$ |
| | $> 95-110$ | 28 | 16 | 10 | $d+6.4$ |
| | $> 110-130$ | 32 | 18 | 11 | $d+7.4$ |
| | $> 130-150$ | 36 | 20 | 12 | $d+8.4$ |
| | $> 150-170$ | 40 | 22 | 13 | $d+9.4$ |
| | $> 170-200$ | 45 | 25 | 15 | $d+10.4$ |
| | $> 200-230$ | 50 | 28 | 17 | $d+11.4$ |
| | $> 230-260$ | 56 | 32 | 20 | $d+12.4$ |
| | $> 260-290$ | 63 | 32 | 20 | $d+12.4$ |
| | $> 290-330$ | 70 | 36 | 22 | $d+14.4$ |
| | $> 330-380$ | 80 | 40 | 25 | $d+15.4$ |
| | $> 380-440$ | 90 | 45 | 28 | $d+17.4$ |
| | $> 440-500$ | 100 | 50 | 31 | $d+19.4$ |

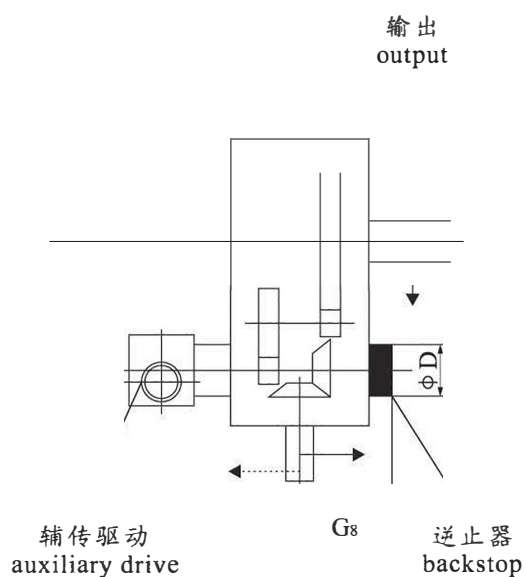
逆止器 Backstops

标准逆止器布置及输入输出转向关系
Standard backstop arrangement and dependence of direction of rotation

| 类型 Type | 布置形式 Design 规格 Sizes 4...18 | |
|------------|--|--|
| | B | D |
| B3SH |  |  |
| B3HH |  |  |
| B3DH |  |  |

B

| 型号 Type | | | | | |
|-------------|---------|----------------------|------|---------|------|
| 规格 Sizes | E mm | G ₈ mm | | D mm | |
| 4 | 270 | 193 | 188* | 132 | 132* |
| 5 | 315 | 218 | 213* | 150 | 160* |
| 6 | 350 | 218 | 213* | 150 | 160* |
| 7 | 385 | 273 | 266* | 190 | 195* |
| 8 | 430 | 273 | 266* | 190 | 195* |
| 9 | 450 | 347 | 327* | 210 | 230* |
| 10 | 500 | 347 | 327* | 210 | 230* |
| 11 | 545 | 397 | 342* | 210 | 280* |
| 12 | 615 | 397 | 342* | 210 | 280* |
| 13 | 635 | 453 | 433* | 290 | 320* |
| 14 | 705 | 453 | 433* | 290 | 320* |
| 15 | 762 | 500 | 476* | 290 | 400* |
| 16 | 808 | 500 | 476* | 290 | 400* |
| 17 | 860 | 532 | 508* | 290 | 400* |
| 18 | 920 | 532 | 508* | 290 | 400* |



注：不带*列为采用国产逆止器、超越离合器时尺寸，带*列为选用国外逆止器、超越离合器时尺寸。

Note: Without * is the dimension using domestic backstop and overrunning clutch and with * is the dimension using imported backstop and overrunning clutch.