

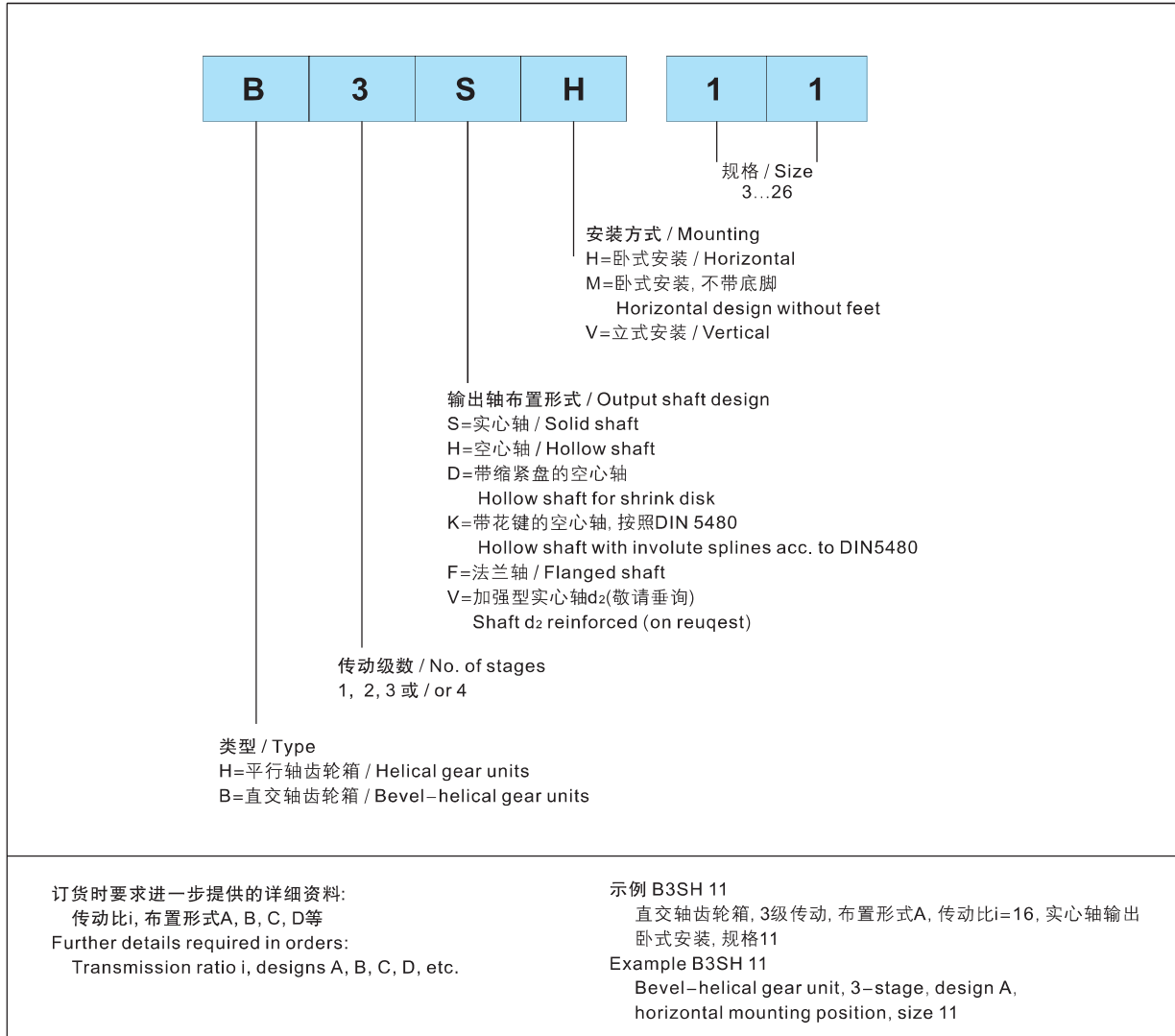


H·B系列 工业齿轮箱
H·B Series Industrial Gear Units

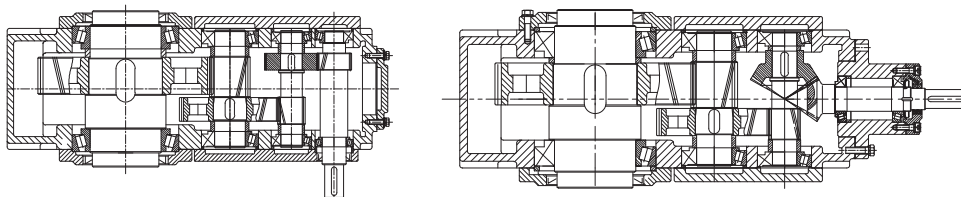
基本类型概述 / Summary of Basic Types

卧式安装			Horizontal mounting position		
平行轴齿轮箱 类型 H1..., H2..., H3..., H4.. 1-... 4-级, $i_N=1.25-450$			Helical gear units Types H1..., H2..., H3..., H4.. 1-... 4-stage, $i_N=1.25-450$		
H.SH	H.HH	H.DH	H.KH	H.FH	H.HM, H.DM, H.KM, H.FM
直交轴齿轮箱 类型 B2..., B3..., B4.. 2-... 4-级, $i_N=5-400$			Bevel-helical gear units Types B2..., B3..., B4.. 2-... 4-stage, $i_N=5-400$		
B.SH	B.HH	B.DH	B.KH	B.FH	B.HM, B.DM, B.KM, B.FM
立式安装			Vertical mounting position		
平行轴齿轮箱 类型 H2.V, H3.V, H4.V 2-... 4-级, $i_N=6.3-450$			Helical gear units Types H2.V, H3.V, H4.V 2-... 4-stage, $i_N=6.3-450$		
H.SV	H.HV	H.DV	H.KV	H.FV	
直交轴齿轮箱 类型 H2.V, H3.V, H4.V 2-... 4-级, $i_N=5-400$			Bevel-helical gear units Types H2.V, H3.V, H4.V 2-... 4-stage, $i_N=5-400$		
B.SV	B.HV	B.DV	B.KV	B.FV	

基本类型概述 / Summary of Basic Types



结构示意图 / Sectional Drawings



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性能特点 / Characteristic Features

设计

FLK 齿轮箱采用全新设计，其独特的创新在于：

- 零部件种类减少而规格数量增多；
- 传动功率增大，运转可靠性提高；
- 可以采用性能优异的非接触式和耐磨的迷宫式密封装置；
- 可以提供适于狭小空间安装的法兰轴（敬请垂询）

安装方式

可以提供卧式安装和立式安装的 FLK 齿轮箱，也可以提供其他安装形式，敬请垂询。

标准齿轮箱可以通过加带不同附件如电机安装法兰。齿轮箱浮动底座或逆止器等很好地满足客户需求。

噪音特性

采用最新设计理念并通过以下途径显著的改善了齿轮箱的噪音特性

- 圆锥齿轮磨削工艺；
- 利用 FLK 计算机程序设计吸收噪音的箱体结构；
- 实现特大的齿面接触比。

散热性能

FLK 齿轮箱不仅具有很高的传动效率，而且具有良好的散热性能，因为：

- 增大了箱体的表面积；
- 可以采用非接触式的的迷宫式密封装置；
- 采用大风扇和新型的导流风扇罩。

在齿轮箱选型方面，FLK 以较低的最大允许油温为依据。这样，不仅提高了运行可靠性，而且也因换油周期的延长而降低了维护费用。

Design

FLK gear units are a completely new design. Advantages are:

- more sizes with a reduced variety of parts;
- higher operational reliability combined with increased power capacity;
- predominantly non-contacting wear-resistant labyrinth seals are possible;
- flanged output shafts to facilitate assembly of gear units in confined spaces (on request).

Mounting position

FLK gear units can be supplied for either horizontal or vertical installation.

Other arrangements are also possible on request.

The basic gear unit can be optimally adapted to customer requirements by fitting different add-on pieces like motor bell housings, gear unit swing-bases or backstops.

Noise behaviour

New concepts were applied to clearly improve the noise emission of the gear units by

- grinding the bevel gears;
- designing noise-absorbing housings by means of the FLK computing program; and
- achieving exceptionally large contact ratios.

Thermal conduction

FLK gear units not only have a high efficiency but also a favourable thermal conduction

- through enlarged housing surfaces areas;
- because non-contacting labyrinth seals can be used; and
- because large fans incorporating a new type of air conduction fan cowl are being used.

The selection of MRD gear units is based on a lower maximum oil temperature. By that, the operational reliability will be increased and the cost of maintenance reduced due to longer oil change intervals.

FLK 直交轴齿轮箱 B3DH，
带液力耦合器和齿轮箱浮动底座

FLK bevel helical gear unit
type B3DH with fluid coupling and gear unit swing base



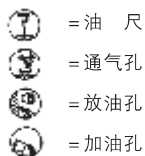
一般说明 / General Information

注意事项!

必须严格遵守以下各项!

- 样本中的附图只属范例，并不具有约束力。FLK保留变更尺寸的权利。
- 所注重量仅为平均值，并不具有约束力。
- 为防止意外情况发生，所有旋转部件均应按照使用者所在国家和地区的安全规范由购置方加罩保护。
- 试车之前必须认真阅读操作说明。齿轮箱在供货时已处于准运行状态，运行前需加注润滑油。
- 本样本中所示注油量只作为参考值，实际注油量应以油尺上的标记为准。
- 润滑油粘度应符合齿轮箱铭牌上的数据。
- 只能采用允许品牌的润滑油。最新的操作说明书以及润滑油选择表可以从我公司的网页上查询。
- 齿轮箱在供货时已配置了径向轴封。如果需要其他类型的轴封敬请垂询。
- 转动方向是指面向输出轴输出轴 d₂ 的转动方向。
- 当安装在室外时应避免阳光照射。应由购置方配备适当的防护设备。

在尺寸图上所使用的符号说明如下:



规格 13 以上的齿轮箱箱体地脚上配有调整顶丝，箱盖上配有调整平面。

地脚螺栓的最低强度等级为 8.8 级。

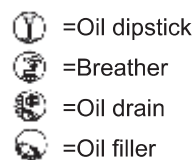
齿轮箱具有防腐性能，表面涂有油漆（兰色）。

Attention!

The following items are absolutely to be observed!

- Illustrations are examples only and are not strictly binding. 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.
- Oil quantities given are guide values only. The exact quantity of oil depends on the marks on the oil dipstick.
- The oil viscosity has to correspond to the data given on the name plate.
- Permitted lubricants may be used only. You will find current operating instructions and lubricant selection tables on our home page at:
- The gear units are supplied with radial shaft seals. Other sealing variants on request.
- Directions of rotation referring to output shaft d₂.
- In case of outdoor installation, insulation is to be avoided. The customer has to provide adequate protection.

Explanation of symbols used in the dimensioned drawings:



From size 13 up tjack screws in the housing feet, and leveling pads on the upper housing part.

Foundation bolts of min. property class 8.8.

The gear housings are protected against corrosion.

选型指南，恒定功率，机械计算

Guidelines for the Selection, Constant Mechanical Power, Rating

<p>1、确定齿轮箱类型和规格 Determination of gear unit type and size</p>	<p>1.1、确定传动比 / Find the transmission ratio</p> $i_s = \frac{n_1}{n_2}$ <p>1.2、确定齿轮箱额定功率 / Determine nominal power rating of the gear unit</p> $P_{2N} \geq P_2 \times f_1 \times f_2$ <p>如果不满足下列条件，请与我们联系 It is not necessary to consult us, if:</p> $3.33 \times P_2 \geq P_{2N}$ <p>1.3、校核最大扭矩，例如峰值工作扭矩，起动扭矩或制动扭矩： Check for maximum torque, e.g. peak operating-, starting- or braking torque</p> $P_{2N} \geq \frac{T_A \times n_1}{9550} \times f_3$ <p>根据i_N和P_{2N}在额定功率表中确定的齿轮箱的规格和传动级数 Gear unit sizes and number of reduction stages are given in rating tables depending on i_N and P_{2N}</p> <p>1.4、校核输出轴上允许附加作用力，见第42和43页 Check whether additional forces on the output shaft are permissible; see pages 42 and 43</p> <p>1.5、校核实际传动比见第38至41页 Check whether the actual ratio i as per tables on pages 38–41 is acceptable</p>					
<p>2、确定供油方式 Determination of oil supply</p>	<p style="text-align: center;">安装方式 / Mounting position</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">卧式安装 / Horizontal</th> <th style="width: 50%; text-align: center;">立式安装 / Vertical</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <p>可供选择润滑油供油方式： - 飞溅润滑 - 浸油润滑，所有需润滑的零部件均浸在润滑油中 - 强制润滑</p> <p>All parts to be lubricated are lying in the oil or are splash lubricated Forced lubrication on request</p> </td> <td style="vertical-align: top;"> <p>可供选择润滑油供油方式： - 浸油润滑 - 采用法兰泵或电动泵进行强制润滑 优选供油方式和选择标准见第120至141页</p> <p>Possible oil supply variations: - Dip lubrication - Forced lubrication by means of flanged-on pump or motor pump For preferred variants and criteria for selection, see pages 120–141</p> </td> </tr> </tbody> </table>		卧式安装 / Horizontal	立式安装 / Vertical	<p>可供选择润滑油供油方式： - 飞溅润滑 - 浸油润滑，所有需润滑的零部件均浸在润滑油中 - 强制润滑</p> <p>All parts to be lubricated are lying in the oil or are splash lubricated Forced lubrication on request</p>	<p>可供选择润滑油供油方式： - 浸油润滑 - 采用法兰泵或电动泵进行强制润滑 优选供油方式和选择标准见第120至141页</p> <p>Possible oil supply variations: - Dip lubrication - Forced lubrication by means of flanged-on pump or motor pump For preferred variants and criteria for selection, see pages 120–141</p>
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选型指南，恒定功率，热容量计算

Guidelines for the Selection, Constant Mechanical Power, Thermal Capacity

3. 确定所需的热容量 P_G

需要的数据:

- 类型
- 规格
- 额定传动比
- 环境温度
- 输入转速 (1000/1500 min⁻¹)

计算依据如下假设:

- 浸油方式 (浸油/强制润滑)
- 工作周期: 100%/h
- 室内大空间 **安装 (4m/s > 风速 ≥ 1.4m/s)
- 海拔高度至1000m
- 齿轮箱采用18#齿轮油润滑

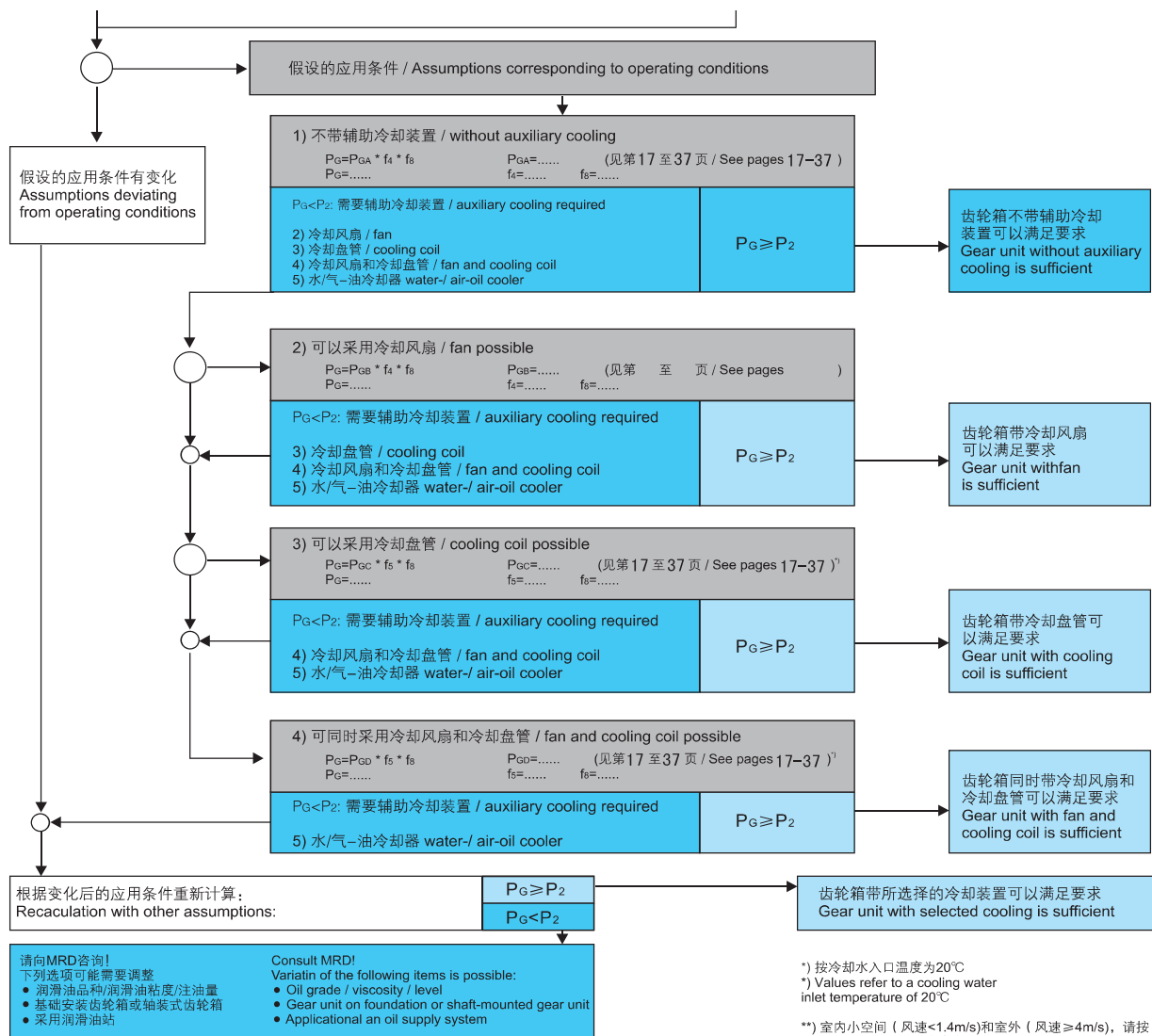
3. Determination of required thermal capacity P_G

Data required:

- Type
- Size
- Nominal ratio
- Ambient temperature
- Input speed (1000/1500 min⁻¹)

For the calculation below the following has been assumed:

- Lubrication (dip / forced lubrication)
- Operating cycle: 100%/h
- Installation in a large hall ** (4m/s > wind velocity ≥ 1.4m/s)
- altitude up to 1000m
- Gear unit with mineral oil 18#



可能需要的辅助冷却装置取决于用户处的工况条件 (如粉尘、冷却水源等)。
 The type of the possibly required additional cooling is dependent on the operating conditions at the customer's (dust, cooling water connection, etc.)

*) 按冷却水入口温度为20°C
 *) Values refer to a cooling water inlet temperature of 20°C

***) 室内小空间 (风速<1.4m/s)和室外 (风速≥4m/s), 请按MRD选型光盘e.CAT计算或垂询我们。

**) Calculation referring to MRD CD-ROM e.CAT or consult us when small confined spaces (wind velocity<1.4m/s) or in the open (wind velocity ≥ 4m/s)

选型指南，可变功率 / Guidelines for the Selection, Variable Power Rating

在以恒定转速和可变功率运行的工作机上，其齿轮箱是根据当量功率配置的，因此在一个工作周期中，其不同阶段I, II...n需要的功率分别为 $P_I, P_{II}...P_n$ ，这些功率分量与各自的时间分量： $X_I, X_{II}...X_n$ 相对应，根据这些数据按下列公式计算当量功率 P_{2aq} ：

For driven machines with constant speed and variable power ratings the gear unit can be designed according to the equivalent power rating. For this, a working cycle where phases I, II...n require power $P_I, P_{II}...P_n$ and the respective power ratings operate for time fractions $X_I, X_{II}...X_n$ is taken as a basis. The equivalent power rating can be calculated from these specifications with the following formula:

$$P_{2aq} = \sqrt[6.6]{P_I^{6.6} \times \frac{X_I}{100} + P_{II}^{6.6} \times \frac{X_{II}}{100} + \dots + P_n^{6.6} \times \frac{X_n}{100}}$$

然后按照第1.1...1.5项和第3项确定齿轮箱规格，需满足：

The size of the gear unit can then be determined analogously to points 1.1 ... 1.5 and 3. as follows:

$$P_{2N} \geq P_{2aq} \times f_1 \times f_2$$

然后，在 P_{2N} 确定后，按照以下条件检验各个时间分量 其相对应的功率分量：

- 1) 各个功率分量 $P_I, P_{II}...P_n$ 应大于 $0.4 \times P_{2N}$ 。
- 2) 各个功率分量 $P_I, P_{II}...P_n$ 不能超过 $1.4 \times P_{2N}$ 。
- 3) 功率分量 $P_I, P_{II}...P_n$ 中大于 P_{2N} 的分量所对应的时间分量 $X_I, X_{II}...X_n$ 总和不超过10%。

如果以上三个条件中的任何一项不满足，则必须重新计算 P_{2aq} 。

特别应加以注意的是在计算 P_{2aq} 时没有计入的短时峰值功率不能大于 $P_{max}=2 \times P_{2N}$ 。

在以可变扭矩和恒定转速运行的情况下，齿轮箱应按当量扭矩计算。

对某些特定应用，按有限寿命选择的齿轮箱就足以满足应用了，如偶尔动作（闸门锁定机构）或慢速输出（ $n_2 < 4 \text{ min}^{-1}$ ）等。

Then, when P_{2N} has been determined, the power and time fractions must be checked by applying the following requirements:

- 1) The individual power fractions $P_I, P_{II}...P_n$ must be greater than $0.4 \times P_{2N}$.
- 2) The individual power fractions $P_I, P_{II}...P_n$ must not exceed $1.4 \times P_{2N}$.
- 3) If power fractions $P_I, P_{II}...P_n$ are greater than P_{2N} , the sum of time fractions $X_I, X_{II}...X_n$ must not exceed 10%.

If any one of the three requirements is not met, P_{2aq} must be recalculated.

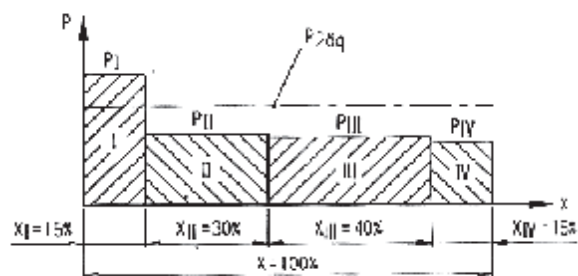
It must be borne in mind that a brief peak power rating not included in the calculation of P_{2aq} must not be greater than $P_{max}=2 \times P_{2N}$.

In applications where the torque is variable but the speed constant the gear unit can be designed on the basis of the so-called equivalent torque.

A gear unit design which is finite-life fatigue-resistant can be sufficient for certain applications, for example, sporadic operation (lock-gate drives) or slow output speeds ($n_2 < 4 \text{ min}^{-1}$)

示例：
载荷谱

Example:
Service classification



符号说明 / Key to Symbols

E_D = 每小时工作周期, 以%表示 (例如 $E_D=80\%/h$)	E_D = Operating cycle per hour in %, e.g. $E_D=80\%/h$
f_1 = 工作机系数(表1), 见第14页	f_1 = Factor for driven machine (table 1), page 14
f_2 = 原动机系数 (表2), 见第15页	f_2 = Factor for prime mover (table 2), page 15
f_3 = 峰值扭矩系数 (表3), 见第15页	f_3 = Peak torque factor (table 3), page 15
f_4 = 环境温度系数 (表4), 见第15页	f_4 = Thermal factors (table 4), page 15
f_5 = 环境温度系数 (表5), 见第15页	f_5 = Thermal factors (table 5), page 15
f_8 = 齿轮箱供油系数, 对于立式安装齿轮箱见第15页 (表8), 对于卧式安装齿轮箱: $f_8=1$	f_8 = Oil supply factor for vertical gear units (table 8), page 15. For horizontal gear units $f_8=1$
i = 实际传动比	i = Actual ration
i_N = 额定传动比	i_N = Nominal ratio
i_s = 要求传动比	i_s = Required ratio
n_1 = 输入转速 (min^{-1})	n_1 = Input speed (min^{-1})
n_2 = 输出转速 (min^{-1})	n_2 = Output speed (min^{-1})
P_G = 需要的热容量	P_G = Required thermal capacity
P_{GA} = 齿轮箱的基础热容量, 不带辅助冷却装置, 见第18-39页	P_{GA} = Thermal capacity for gear units without auciliary cooling, pages 18-39
P_{GB} = 齿轮箱的基础热容量, 带冷却风扇, 见第18-39页	P_{GB} = Thermal capacity for gear units with fan cooling, pages 18-39
P_{GC} = 齿轮箱的基础热容量, 同时带内置式冷却盘管, 见第18-39页	P_{GC} = Thermal capacity for gear units with built-in cooling coil, pages 18-39
P_{GD} = 齿轮箱的基础热容量, 同时带内置式冷却盘管和冷却风扇, 见第18-39页	P_{GD} = Thermal capacity for gear units with built-in cooling coil and fan, pages 18-39
P_{2N} = 齿轮箱的额定功率(kW), 见第16-36页选型表。	P_{2N} = Nominal power rating of gear unit (kW), see rating tables, pages 16-36
P_2 = 工作机的额定功率(kW)	P_2 = Power rating of driven machine (kW)
t = 环境温度 ($^{\circ}\text{C}$)	t = Ambient temperature ($^{\circ}\text{C}$)
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_A = Max. torque occurring on input shaft, e.g. peak operating-, starting- or braking torque (Nm)
T_{2N} = 额定输出扭矩 (kNm), 见第17-37页	T_{2N} = Nominal output torque (kNm), pages 17-37
.....	
$P_{2\dot{a}q}$ = 当量功率 (kW)	$P_{2\dot{a}q}$ = Equivalent power rating (kW)
P_I, P_{II}, P_n = 与载荷谱对应的功率分量(kW)	P_I, P_{II}, P_n = Fractions of power rating (kW) obtained from service classification
X_I, X_{II}, X_n = 与载荷谱对应的时间分量(%)	X_I, X_{II}, X_n = Fractions of time (%) obtained from service classification

选型指南，计算示例，在机械方面

Guidelines for the Selection, Calculation Example, Mechanical Power Rating

已知:		Known criteria:	
原动机		PRIME MOVER	
电机功率:	P1=75kW	Electric motor:	P1=75kW
电机转速:	n1=1500min ⁻¹	Motor speed:	n1=1500min ⁻¹
最大起动扭矩:	TA=720Nm	Max.starting torque:	TA=720Nm
工作机		DRIVEN MACHINE	
皮带输送机功率:	P2=66kW	Bell conveyor:	P2=66kW
转速:	n2=26min ⁻¹	Speed:	n2=26min ⁻¹
每天运行时间:	12h/日	Duly:	12h/day
每小时起动次数:	7	Starts per hour:	7
每小时工作周期:	Ed=100%/h	Operating cycle per hour:	Ed=100%/h
环境温度:	30°C	Ambient temperature:	30°C
室内大空间安装:	风速 ≥1.4m/s	Installation in a large hall:	wind velocity ≥1.4m/s
海拔高度:	海平面	Altitude:	see level
齿轮箱设计		GERT UNIT DESIGN	
直交轴齿轮箱		Bevel-helical gear unit	
安装方式:	卧式安装	Mounting position:	horizontal
输出轴d2	位于齿轮箱右侧,布置形式C 实心轴	Output shaft d2:	on right hand side design C, solid shaft
输出轴d2的 旋转方向:	逆时针旋转	Direction of rotation of output shaft d2	ccw

要求:

选择齿轮箱类型和规格

1.选择齿轮箱类型和规格

1.1确定传动比

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

Required:

Type and size of gear unit

1.selection of gear unit type and size

1.1 Calculation of transmission ratio

1.2确定齿轮箱额定功率

$$P_{2N} \geq P_2 \times f_1 \times f_2 = 66 \times 1.3 \times 1 = 85.8 \text{ kW}$$

1.2 Determination of the gear unit nominal power rating

从功率表中选择类型B3SH,齿轮箱规格9,

对应的额定功率P_{2N}=100kW

Selected from power rating table:type B3Sh,gear

unit size 9,with P_{2N}=100kW

$$3.33 \times P_2 \geq P_{2N} \quad 3.33 \times 66 = 219.8 \text{ kW} > P_{2N} \quad \text{满足要求} \quad \text{It is not necessary to consult us}$$

1.3起动扭矩校核

1.3 Checking the starting torque

$$P_{2N} \geq \frac{T_A \times n_1}{9550} \times f_3 = \frac{720 \times 1500}{9550} \times 0.65 = 73.5 \text{ kW} \quad P_{2N} = 100 \text{ kW} > 73.5 \text{ kW}$$

2.确定润滑油供油方式 齿轮箱采用浸油润滑

2. Determination of oil supply Gear unit with dip lubrication

选型指南，计算示例，热容量计算

Guidelines for the Selection, Calculation Example, Thermal Capacity

3. 确定所需的热容量 P_G

需要的数据:

- 类型: B3SH
- 规格: 09
- 额定传动比 $i_N=56$
- 环境温度 $t=30^\circ\text{C}$
- 输入转速 $n_1=1500\text{min}^{-1}$

计算依据如下假设:

- 齿轮箱采用浸油润滑
- 工作周期: 100%/h
- 室内大空间 **安装 ($4\text{m/s} > \text{风速} \geq 1.4\text{m/s}$)
- 海拔高度至1000m
- 齿轮箱采用矿物油ISO-VG 460润滑

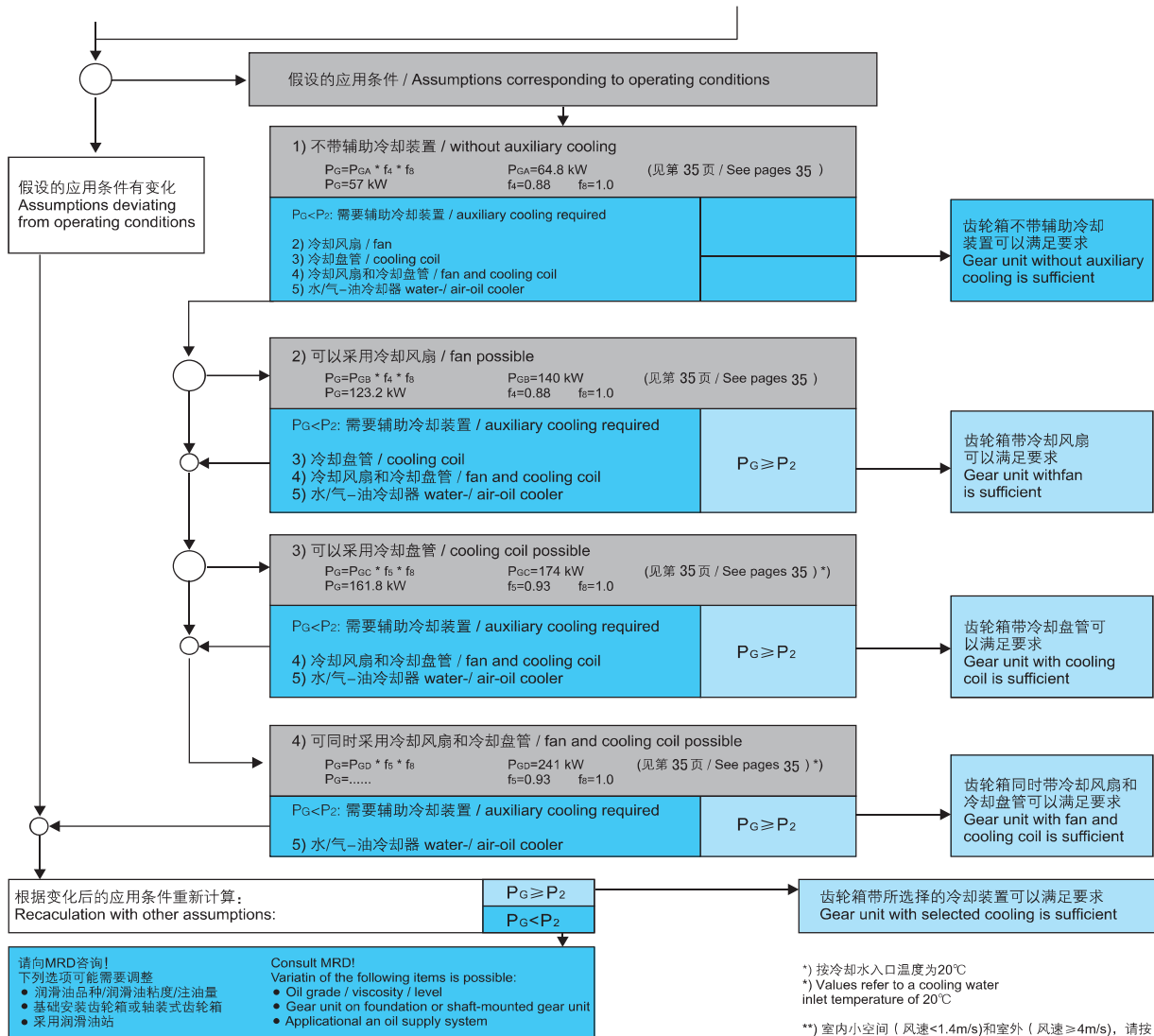
3. Determination of required thermal capacity P_G

Data required:

- Type: B3SH
- Size: 09
- Nominal ratio $i_N=56$
- Ambient temperature: $t=30^\circ\text{C}$
- Input speed: $n_1=1500\text{min}^{-1}$

For the calculation below the following has been assumed:

- Gear unit with dip lubrication
- Operating cycle: 100%/h
- Installation in a large hall ** ($4\text{m/s} > \text{wind velocity} \geq 1.4\text{m/s}$)
- altitude up to 1000m
- Gear unit with mineral oil ISO-VG 460



所选择的IN=56的齿轮箱B3SH 09应配备适当的辅助冷却装置, 根据用户不同的应用条件至少应配置一个冷却风扇或一个冷却盘管。
 For the selected gear unit B3SH 09 with $i_N=56$ suitable auxiliary cooling is to be provided. Dependent on the operating conditions at the customer's, at least a fan or a cooling coil is to be provided.

服务系数 / Service Factors

工作机 Driven machines		1)日带载运行时间, 以小时计算			工作机 Driven machines		1)日带载运行时间, 以小时计算		
		<0.5	>0.5-10	>10			<0.5	>0.5-10	>10
污水处理	Waste water treatment				输送机	Conveyors			
浓缩器(中心传动)	Thickeners(central drive)	-	-	1.2	斗式输送机	Bucket conveyors	-	1.4	1.5
压滤机	Filter presses	1.0	1.3	1.5	绞车	Hauling winches	1.4	1.6	1.6
絮凝器	Flocculation apparata	0.8	1.0	1.3	卷扬机	Hoists	-	1.5	1.8
曝气机	Aerators	-	1.8	2.0	皮带输送机≤150kW	Belt conveyors ≤150kW	1.0	1.2	1.3
捞集设备	Raking equipment	1.0	1.2	1.3	皮带输送机≥150kW	Belt conveyors ≥150kW	1.1	1.3	1.4
纵向、回转组合式捞集装置	Combined longitudinal and rotary rakes	1.0	1.3	1.5	货用电梯*	Goods lifts*	-	1.2	1.5
预浓缩器	Pre-thickeneders	-	1.1	1.3	客用电梯*	Passenger lifts*	-	1.5	1.8
螺杆泵	Screw pumps	-	1.3	1.5	刮板式输送机	Apron conveyors	-	1.2	1.5
水轮机	Water turbines	-	-	2.0	自动扶梯	Escalators	1.0	1.2	1.4
泵	Pumps				轨道行走机构	Rail travelling gears	-	1.5	-
离心泵	Centrifugal pumps	1.0	1.2	1.3	变频装置	Frequency converters	-	1.8	2.0
容积式泵	Positive-displacement pumps				柱塞式压缩机	Reciprocating Compressors	-	1.8	1.9
1个活塞	1 piston	1.3	1.4	1.8	起重机 **	Cranes**			
>1个活塞	>1 piston	1.2	1.4	1.5	回转机构*	Slewing gears*	1.0	1.4	1.8
挖泥机	Dredgers				俯仰机构	Luffing gears	1.0	1.1	1.4
斗式输送机	Bucket conveyors	-	1.6	1.6	行走机构	Travelling gears	1.1	1.6	2.0
倾卸装置	Dumping devices	-	1.3	1.5	起升机构	Hoisting gears	1.0	1.1	1.4
履带式行走机构	Caterpillar travelling gears	1.2	1.6	1.8	转臂式起重机	Derricking jib cranes	1.0	1.2	1.6
斗轮式挖掘机	Bucker wheel excavators				冷却塔	Cooling tower			
用于料堆捡拾	as pick-up	-	1.7	1.7	冷却塔风扇	Cooling tower fans	-	-	2.0
用于原生岩土	for primitive material	-	2.2	2.2	风机(轴流和离心式)	Blowers(axial and Radial)	-	1.4	1.5
采掘机机头	Cutter heads	-	2.2	2.2	食品工业	Food industry			
采掘臂回转*	Traversing gears*	-	1.4	1.8	蔗糖生产	Cane sugar production			
弯板机*	Plate bending machines*				甘蔗切碎机*	Cane knives*	-	-	1.7
化学工业	Chemical industry				甘蔗碾磨机	Cane mill	-	-	1.7
挤出机	Extruders	-	-	1.6	甜菜糖生产	Beet sugar production			
调浆机	Dough mills	-	1.8	1.8	甜菜绞碎机	Beet cossettes macerators,	-	-	1.2
橡胶研光机	Rubber calenders	-	1.5	1.5	榨取机	Extraction plants,	-	-	1.4
冷却圆筒	Cooling drums	-	1.3	1.4	机械制冷机	Mechanical refrigerators, Juice	-	-	1.5
混合机,用于均匀介质	Mixers for uniform media	1.0	1.3	1.4	甜菜清洗机	Sugar beet washing machines,			
非均匀介质	non-uniform media	1.4	1.6	1.7	甜菜切碎机	Sugar beet cutters			
搅拌机,用于均匀介质	Agitators for media with uniform density	1.0	1.3	1.5	造纸机	Paper machines			
不均匀介质	non-uniform density	1.2	1.4	1.6	各种类型***	of all kind***	-	1.8	2.0
不均匀气体吸收	non-uniform gas absorption	1.4	1.6	1.8	碎浆机驱动装置(敬请垂询)	Pulper drivers (on request)			
烘炉	Toasters	1.0	1.3	1.5	离心式压缩机	Centrifugal compressors	-	1.4	1.5
离心机	Centrifuges	1.0	1.2	1.3	索道缆车	Cableways			
金属加工设备	Metal working mills				运货索道	Material ropeways	-	1.3	1.4
翻板机	Plate tillers	1.0	1.0	1.2	往复式空中索道	To-and-fro system	-	1.6	1.8
推钢机	Ingot pushers	1.0	1.2	1.2	拖牵式索道	airial ropeways	-	1.3	1.4
绕线机	Winding machines	-	1.6	1.6	循环式索道	Continuous ropeways	-	1.4	1.6
冷床横移架	Cooling bed transfer frames	-	1.5	1.5	水泥工业	Cement industry			
辊式矫直机	Roller straighteners	-	1.6	1.6	混凝土搅拌机	Concrete mixers	-	1.5	1.5
轨道	Roller tables				破碎机*	Breakers*	-	1.2	1.4
连续式	continuous	-	1.5	1.5	回转窑	Rotary kilns	-	-	2.0
间歇式	intermittent	-	2.0	2.0	管式磨机	Tube mills	-	-	2.0
可逆式轧管机	Reversing tube mills	-	1.8	1.8	选粉机	Separators	-	1.6	1.6
剪切机	Shears				辊压机	Roll crushers	-	-	2.0
连续式*	continuous *	-	1.5	1.5					
曲柄式*	crank type *	1.0	1.0	1.0					
连铸机驱动装置*	Continuous casting drivers *	-	1.4	1.4					
轧机	Rolls								
可逆式开坯机	Reversing blooming mills	-	2.5	2.5					
可逆式板坯轧机	Reversing slabbing mills	-	2.5	2.5					
可逆式线材轧机	Reversing wire mills	-	1.8	1.8					
可逆式薄板轧机	Reversing sheet mills	-	2.0	2.0					
可逆式中厚板轧机	Reversing plate mills	-	1.8	1.8					
辊缝调节驱动装置	Roll adjustment drives	0.9	1.0	-					

服务系数 / Service Factors

工作机额定功率 P_2 的确定:

*)按最大扭矩确定额定功率

**)可将载荷准确地分类,例如根据FEM 1001进行分类

***)检验热容量是绝对必要的

所列各项系数均为经验值,使用这些系数的条件是所述机械设备应符合通常的设计规范和载荷条件,如遇特殊情况,请及时与我们取得联系,对于那些未列入此表的工作机械,请与我们联系。

1)日带载运行时间,以小时计算

Design for power rating of driven machine P_2

*)Designed power corresponding to max.torque

**)Load can be exactly classified,for instance, according to FEM 1001

***)A check for thermal capacity is absolutely essential

The listed factors are empirical values.Prerequisite for their application is that the machinery and equipment mentioned correspond to generally accepted design and load specifications.In case of deviations from standard conditions,please refer to us. For driven machines which are not listed in this table,please refer to us.

1)Effective daily operating period under load in hours

表2 原动机系数	f_2
电机,液压马达,气轮机	1.0
4-6缸活塞发动机 周期变化1:100至1:200	1.25
1-3缸,活塞发动机 周期变化最高达1:100	1.5

Table 2 Factor for prime mover	f_2
Electric motors,hydraulic motors, turbines	1.0
Piston engines 4-6cylinders, cyclic variation 1:100 to 1:200	1.25
Piston engines 4-6cylinders, cyclic variation up 1:100	1.5

表3 峰值扭矩系数	f_3			
	每小时峰值载荷次数			
	1-5	6-30	31-100	>100
单向载荷	0.5	0.65	0.7	0.85
交变载荷	0.7	0.95	1.10	1.25

Table 3 Peak torque factor	f_3			
	Load peaks per hour			
	1-5	6-30	31-100	>100
Steady direction of load	0.5	0.65	0.7	0.85
Alternating direction of load	0.7	0.95	1.10	1.25

表4 环境温度系数	(不带辅助冷却装置或仅带冷却风扇进行冷却)									f_4
Table 4 Thermal factor	(Gear units without auxiliary cooling or with fan)									
环境温度 / Ambient	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	
f_4	1.11	1.06	1.00	0.94	0.88	0.82	0.75	0.69	0.63	

表5 环境温度系数	(带冷却盘管或同时带冷却盘管和冷却风扇)									f_5
Table 5 Thermal factor	(For cooling with cooling coil, or with fan and cooling coil)									
环境温度 / Ambient	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	
f_5	1.05	1.03	1.00	0.97	0.93	0.90	0.87	0.84	0.81	

表8 立式安装齿轮箱供油系数, 对于卧式安装齿轮箱 $f_8=1.0$, 当采用强制润滑时 $f_8=1.05$	Oil supply factor for vertical gear units. For horizontal gear units $f_8=1.0$, and in case of forced lubrication $f_8=1.05$									f_8
齿轮箱类型 Gear unit type	供油方式 Oil supply	规格 / Size 4-12				规格 / Size 13-18				
		不带辅助冷却装置 without Auxiliary cooling	带冷却风扇 with Fan	带冷却盘管 with Cooling coil	带冷却风扇和冷却盘管 with Fan and cooling coil	不带辅助冷却装置 without Auxiliary cooling	带冷却风扇 with Fan	带冷却盘管 with Cooling coil	带冷却风扇和冷却盘管 with Fan and cooling coil	
H2.V, H3.V H4.V	浸油润滑 Dip lubrication	0.95	+	0.95	+	+	+	+	+	
	强制润滑 Forced lubrication	1.15	+	1.05	+	1.15	+	1.05	+	
B2.V, B3.V B4.V	浸油润滑 Dip lubrication	0.95	0.95	0.95	0.95	+	+	+	+	
	强制润滑 Forced lubrication	1.15	1.10	1.10	1.10	1.15	1.10	1.10	1.10	

+) 敬请垂询

+) On request

额定功率，类型 H3..，规格5-26
Nominal Power Ratings, Type H3.., Sizes 5-26

额定功率 P _{2N} (kW) / Nominal power ratings P _{2N} (kW)																											
i _N	n ₁	n ₂	齿轮箱规格 / Gear unit sizes																								
			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
22.4	1500	67											494		858		1122		1683		2357		3142				
	1000	45											331		576		754		1130		1583		2110			3015	
25	1500	60	58		109			179			318		442		769	869	1005	1206	1507	1734	2110	2362	2814	3216			
	1000	40	38		72			119			212		294		512	579	670	804	1005	1156	1407	1574	1876	2144	2680	3015	
28	1500	54	52		98			161			287		398	493	692	782	904	1086	1357	1560	1899	2126	2533	2894	3618		
	1000	36	34		65			107			191		265	328	461	522	602	723	904	1040	1266	1417	1688	1930	2412	2714	
31.5	1500	48	46	62	87	109	143	176	255	310	354	438	615	695	804	965	1206	1387	1688	1890	2251	2573	3216	3618			
	1000	32	30	41	58	73	95	117	170	206	235	292	410	463	536	643	804	925	1126	1259	1501	1715	2144	2412			
35.5	1500	42	41	54	76	95	126	154	223	271	310	383	538	608	703	844	1055	1214	1478	1654	1970	2251	2814	3166			
	1000	28	27	36	50	63	83	102	149	181	206	255	358	406	469	562	703	809	985	1102	1313	1501	1876	2110			
40	1500	38	37	49	69	86	114	139	202	246	280	346	486	550	636	763	954	1098	1337	1496	1782	2037	2546	2865			
	1000	25	24	32	45	57	74	91	133	162	184	228	320	362	418	502	628	722	879	984	1172	1340	1675	1885			
45	1500	33	32	42	59	74	98	121	175	213	243	301	422	478	553	663	829	954	1161	1299	1548	1769	2211	2487			
	1000	22	21	28	39	50	66	80	117	142	162	201	282	318	368	442	553	635	774	866	1032	1179	1474	1658			
50	1500	30	29	38	54	68	90	110	159	194	221	274	384	434	502	602	754	866	1055	1181	1407	1608	2010	2262			
	1000	20	19	26	36	45	59	73	106	129	147	182	256	290	334	402	502	578	703	787	938	1072	1340	1507			
58	1500	27	26	34	49	62	80	98	143	174	198	246	346	391	452	542	678	780	950	1062	1266	1447	1809	2035			
	1000	17.9	17	23	32	40	53	66	95	115	131	163	229	259	299	359	450	517	630	704	839	959	1199	1349			
63	1500	24	23	30	43	54	71	88	127	155	177	218	307	347	402	482	602	694	844	945	1126	1286	1608	1809			
	1000	15.9	15	20	29	36	47	58	84	102	117	145	203	230	266	319	399	459	559	626	746	852	1065	1198			
71	1500	21	20	27	38	47	62	77	111	135	154	191	269	304	351	422	527	606	738	826	985	1126	1407	1583			
	1000	14.1	14	18	26	32	42	51	74	90	103	128	180	204	236	283	354	407	496	554	661	755	945	1062			
80	1500	18.8	18	24	34	42	56	69	100	121	138	171	241	272	314	378	472	543	661	740	882	1007	1259	1417			
	1000	12.5	12	16	22	28	37	46	66	81	92	114	160	181	209	251	314	361	439	492	586	670	838	942			
90	1500	16.7	16	22	27	38	48	61	89	107	122	152	214	242	279	335	406	482	573	657	783	895	1118	1258			
	1000	11.1	10	14	18	25	32	40	58	71	82	101	142	161	186	222	270	320	381	437	520	594	743	837			
100	1500	15		18		34		54			97		137		217		283		421		584		804		1130		
	1000	10		12		22		36			64		91		145		189		280		389		536		754		
112	1500	13.4		17		28		48			86		122														
	1000	8.9		10		18		31			57		81														

■ 卧式安装齿轮箱应采用强制润滑
□ * 敬请垂询

■ Forced lubrication required on horizontal gear units
□ * Gear units only on request

额定输出扭矩，类型 H3..，规格 5–26
Nominal Output Torques, Type H3.., Sizes 5–26

额定输出扭矩 T _{2N} (kNm) / Nominal output torques T _{2N} (kNm)																						
iN	齿轮箱规格 / Gear unit sizes																					
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
22.4								88		153		200		300		420		560		800		
25	11.6		21.7		35.7		63.5		88		153	173	200	240	300	345	420	470	560	640	800	900
28	11.6		21.7		35.7		63.5		88	109	153	173	200	240	300	345	420	470	560	640	800	900
31.5	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
35.5	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
40	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
45	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
50	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
56	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
63	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
71	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
80	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
90	11.6	15.5	20	27.2	34.5	43.8	63.5	77.2	88	109	153	173	200	240	290	345	410	470	560	640	800	900
100		14.5		27.2		43.8		77.2		109		173		226		335		465		640		900
112		15		27.2		42.8		77.2		109												

额定功率，类型 H4..，规格7-26
Nominal Power Ratings, Type H4.., Sizes 7-26

额定功率 P _{2N} (kW) / Nominal power ratings P _{2N} (kW)																						
i _N	n ₁	n ₂	齿轮箱规格 / Gear unit sizes																			
			7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	1500	15	27		45		77		114		192		251		377		527		703		1005	
	1000	10	18		30		51		75		128		167		251		351		469		670	
112	1500	13.4	24		40		69		102		171	194	224	269	336	387	471	527	628	718	898	1010
	1000	8.9	16		26		46		67		114	129	149	178	223	257	313	350	417	477	596	670
125	1500	12	22	27	35	44	62	78	90	113	154	174	201	241	301	346	422	472	562	643	804	904
	1000	8	14	18	23	30	41	52	60	75	102	115	134	161	201	231	281	314	375	429	536	602
140	1500	10.7	19	24	31	39	55	70	81	101	137	154	179	214	269	309	376	421	502	574	717	806
	1000	7.1	13	16	21	26	36	46	54	67	90	102	118	142	178	205	250	279	333	380	475	535
160	1500	9.4	17	21	28	34	48	61	71	89	120	136	157	189	236	271	330	370	441	503	630	708
	1000	6.3	11	14	18	23	32	41	47	59	80	91	105	126	158	182	222	248	295	338	422	474
180	1500	8.3	14	18	25	30	42	54	62	78	106	120	138	166	208	239	292	326	389	445	556	626
	1000	5.6	10	12	16	20	29	36	42	53	71	81	94	112	140	162	197	220	262	300	375	422
200	1500	7.5	14	17	22	27	38	49	57	70	96	108	126	150	188	216	263	295	351	402	502	565
	1000	5	9	11	14	18	26	32	38	47	64	72	83	100	126	144	175	197	226	268	334	377
224	1500	6.7	12	15	20	25	34	43	50	63	86	97	112	134	168	194	235	263	314	359	449	505
	1000	4.5	8	10	13	16	23	29	34	42	58	65	75	90	113	130	158	177	210	241	301	339
250	1500	6	10	14	18	22	30	39	45	56	77	86	100	120	150	173	210	236	281	322	402	452
	1000	4	7	9	11	14	20	26	30	38	51	58	66	80	100	115	140	157	187	214	268	301
280	1500	5.4	10	12	16	19	27	35	41	50	69	78	90	108	135	156	190	212	253	289	362	406
	1000	3.6	6	8	10	13	18	23	27	34	46	52	60	72	90	104	126	142	169	193	241	271
315	1500	4.8	8	10	14	18	24	31	36	45	61	69	80	96	120	138	169	189	225	257	322	362
	1000	3.2	6	7	9	11	16	21	24	30	41	46	54	64	80	92	112	126	150	171	214	241
355	1500	4.2	7	9	12	15	22	27	31	39	49	61	67	84	102	121	144	165	197	225	281	316
	1000	2.8	5	6	8	10	14	18	21	26	33	40	45	56	68	81	96	110	131	150	187	210
400	1500	3.8		8		14		25		35		50		70		106		148		203		286
	1000	2.5		6		9		16		23		33		46		70		97		134		188
450	1500	3.3		7		11		21		31												
	1000	2.2		5		8		14		21												

■ 卧式安装齿轮箱应采用强制润滑
□ * 敬请垂询

■ Forced lubrication required on horizontal gear units
□ *Gear units only on request

额定输出扭矩，类型 H4..，规格 7-26
Nominal Output Torques, Type H4.., Sizes 7-26

额定输出扭矩 T _{2N} (kNm) / Nominal output torques T _{2N} (kNm)																				
i _N	齿轮箱规格 / Gear unit sizes																			
	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	21.7		35.7		61.6		90.7		153		200		300		420		560		800	
112	21.7		35.7		61.6		90.7		153		200		300		420		560		800	
125	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
150	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355	19.6	27.2	35.7	44.2	61.6	78	90.7	113	140	173	192	240	290	345	402	470	560	640	800	900
400		27.2		44.2		78		113		173		240		345		470		640		900
450		25.3		42.8		78		113		158		223		335		465		640		900

热容量, 类型 H4.., 规格 7-26, $n_1=1000 \text{ min}^{-1}$
 Thermal Capacities, Type H4.., Sizes 7-26, $n_1=1000 \text{ min}^{-1}$

热容量 P _G (kW) / Thermal capacities P _G (kW)																					
in		齿轮箱规格 / Gear unit sizes																			
		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	P _{GA}	43.6		60.8		90.1		120		161		180		253		346		*		*	
112	P _{GA}	42		58.2		89.4		117		154		173		245		340		*		*	
125	P _{GA}	40.8	46.8	56.4	61.1	85.8	99.7	114	128	149	166	167	185	235	260	330	350	*	*	*	*
140	P _{GA}	38.7	44.9	54.6	58.5	83	98.9	110	125	144	160	161	177	227	249	313	344	*	*	*	*
160	P _{GA}	37.2	43.6	51.6	56.7	79	95.3	104	121	138	153	154	171	218	241	301	334	*	*	*	*
180	P _{GA}	35.8	41.4	49.4	54.9	76.2	91.8	100	118	136	148	151	165	208	232	297	317	*	*	*	*
200	P _{GA}	34.4	39.9	47.8	51.8	72	87.6	98.2	111	132	142	146	158	201	224	280	304	*	*	*	*
224	P _{GA}	32.4	38.2	45.9	49.6	69	84.4	93.7	107	123	139	136	156	193	214	268	300	*	*	*	*
250	P _{GA}	31	37	43.8	48.2	65.6	79.7	89.1	104	117	136	130	151	183	206	253	283	*	*	*	*
280	P _{GA}	30.1	34.7	42.5	46.2	63.1	76.7	86.3	99.11	113	126	126	141	176	198	243	270	*	*	*	*
315	P _{GA}	29.4	33.3	40.5	44.1	61.6	72.7	82.8	95.5	108	120	121	133	172	188	233	255	*	*	*	*
355	P _{GA}	28.1	32.3	39.8	42.8	58.6	69.9	78.9	91.9	106	116	118	130	164	181	222	245	*	*	*	*
400	P _{GA}		31.6		40.8		68.3		88.3		111		124		177		236		*		*
450	P _{GA}		30.1		40.1		64.9		84.2		109		121		168		225		*		*

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

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

热容量 P _G (kW) / Thermal capacities P _G (kW)																					
in		齿轮箱规格 / Gear unit sizes																			
		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	P _{GA}	48.7		67.6		99.1		130		172		190		264		348		*		*	
112	P _{GA}	47.1		65.1		99.1		129		167		186		259		352		*		*	
125	P _{GA}	45.8	52.5	63.1	68.3	95.5	110	126	142	163	179	181	198	254	276	348	358	*	*	*	*
140	P _{GA}	43.5	50.5	61.3	65.5	92.8	110	123	139	158	174	176	192	248	268	336	359	*	*	*	*
160	P _{GA}	41.9	49.1	58	63.7	88.5	106	116	135	153	169	171	188	240	263	327	356	*	*	*	*
180	P _{GA}	40.4	46.7	55.8	61.9	85.8	103	113	132	152	164	169	182	232	255	329	342	*	*	*	*
200	P _{GA}	38.9	45.1	54	58.5	81.3	98.9	1100	126	149	159	164	177	226	249	314	335	*	*	*	*
224	P _{GA}	36.7	53.2	52	56.2	78.1	95.5	106	121	140	157	154	175	219	240	303	335	*	*	*	*
250	P _{GA}	35.1	41.9	49.6	54.5	74.2	90.2	1000	118	132	154	147	170	208	233	287	321	*	*	*	*
280	P _{GA}	34	39.3	48.2	52.3	71.4	86.8	97.7	112	128	143	143	159	199	224	276	305	*	*	*	*
315	P _{GA}	33.3	37.6	45.9	49.9	69.7	82.2	93.7	108	122	135	136	151	195	213	264	289	*	*	*	*
355	P _{GA}	31.8	36.5	45.1	48.5	66.3	79.2	89.4	104	120	131	133	147	186	204	252	278	*	*	*	*
400	P _{GA}		35.8		46.2		77.3		100		126		141		200		267		*		*
450	P _{GA}		34		45.4		73.5		95.3		123		138		190		255		*		*

☐ 敬请垂询
 P_G(kW) 齿轮箱不带辅助冷却装置**
 **) 表中数值按:
 每小时工作周期: 100%/h
 在室内大空间安装
 海拔高度至 1000m

☐ On request
 P_G(kW) Gear units without auxiliary cooling **)
 **) Values refer to:
 Operating cycle: 100%/h
 Installation in a large hall
 Altitude up to 1000 m

额定功率，类型 B2..，规格4-26

Nominal Power Ratings, Type B2.., Sizes 4-26

额定功率 P _{2N} (kW) / Nominal power ratings P _{2N} (kW)																										
iN	n ₁	n ₂	齿轮箱规格 / Gear unit sizes																							
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
5	1500	300	153	236		477		751		1156		1723		3066*												
	1000	200	102	157		318		501		770		1149		2043												
5.6	1500	268	138	210		426		671		1079		1562		2738*	3030*											
	1000	179	93	141		285		448		721		1043		1829	2024	2923										
6.3	1500	238	123	187	239	378	474	596	758	1001	1172	1471	1698	2591*	2810*	3887*										
	1000	159	82	125	159	253	317	398	506	668	782	982	1134	1731	1878	2597*										
7.1	1500	211	109	166	212	335	420	528	671	926	1076	1341	1542	2333*	2562*	3446*										
	1000	141	73	110	142	224	281	353	449	618	719	896	1030	1558	1712	2303										
8	1500	188	98	148	189	299	374	470	598	850	994	1259	1441	2078	2330*	3070*	2716*									
	1000	125	65	98	126	198	249	313	398	565	660	838	958	1382	1550	2042	3162*									
9	1500	167	86	131	167	266	333	418	531	755	912	1134	1323	1846	2070	2727*	2408									
	1000	111	58	87	111	176	221	278	353	502	606	754	879	1227	1376	1813	3217*									
10	1500	150	78	118	150	238	298	375	477	678	833	1018	1241	1658	1859	2450*	2138									
	1000	100	51	78	100	158	199	250	318	452	555	679	827	1106	1239	1633	2890*									
11.2	1500	134	69	105	134	213	266	335	426	606	745	910	1138	1482	1661	2189*	1926									
	1000	89	46	70	89	142	177	222	283	402	494	604	755	984	1103	1454	2582*									
12.5	1500	120			120		239		382		666		1019		1487		1714									
	1000	80			80		159		254		445		679		990		2312*									
14	1500	107			107		213		340		594		909				1541									
	1000	71			71		141		226		394		602													

卧式安装齿轮箱应采用强制润滑
 * 敬请垂询

Forced lubrication required on horizontal gear units
 *Gear units only on request

额定输出扭矩，类型 B2..，规格 4-26

Nominal Output Torques, Type B2.., Sizes 4-26

额定输出扭矩 T _{2N} (kNm) / Nominal output torques T _{2N} (kNm)																										
iN	齿轮箱规格 / Gear unit sizes																									
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
5	6.1	9.4.		19.0		29.9		46.0		68.6		122		195												
5.6	6.2	9.4		19.0		29.9		48.1		69.6		122	135	195												
6.3	6.2	9.4	12.0	19.0	23.8	29.9	38.0	50.2	58.8	73.8	85.2	122	141	195												
7.1	6.2	9.4.	12.0	19.0	23.8	29.9	38.0	52.4	60.9	75.9	87.3	122	145	195	230											
8	6.2	9.4	12.0	19.0	23.8	29.9	38.0	54.0	63.1	80.0	91.5	122	148	195	230											
9	6.2	9.4	12.0	19.0	23.8	29.9	38.0	54.0	65.2	81.1	94.6	122	148	195	230											
10	6.2	9.4.	12.0	19.0	23.8	29.9	38.0	54.0	66.3	81.1	98.8	122	148	195	230											
11.2	6.2	9.4	12.0	19.0	23.8	29.9	38.0	54.0	66.3	81.1	101	122	148		230											
12.5			12.0		23.8		38.0		66.3		101		148		230											
14			12.0		23.8		38.0		66.3		101															

热容量, 类型 B2., 规格 4-26, $n_1=1000 \text{ min}^{-1}$
 Thermal Capacities, Type B2., Sizes 4-26, $n_1=1000 \text{ min}^{-1}$

热容量 P _G (kW) / Thermal capacities P _G (kW)																										
in		齿轮箱规格 / Gear unit sizes																								
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
5	P _{GA}	48.3	58.6		77.4		87.1		*		*		*													
	P _{GB}	113	155		246		297		487		684		788													
	P _{GC}	137	206		319		398		677		1344		1821													
	P _{GD}	194	291		468		578		984		1838		2383													
5.6	P _{GA}	47.7	59.8		78.3		90.2		120		*		*		*											
	P _{GB}	109	153		232		282		481		688		804		859											
	P _{GC}	132	199		293		367		643		1289		1763		2055											
	P _{GD}	187	282		432		535		943		1789		2333		2689											
6.3	P _{GA}	47	58.7	68.3	75.8	89.9	89.4	98.3	122	142	*	*	*	*	*											
	P _{GB}	105	145	170	216	261	265	300	441	553	637	771	779	838	850											
	P _{GC}	126	185	264	266	388	333	460	566	976	1132	1411	1627	1782	1909											
	P _{GD}	179	263	359	393	548	489	643	834	1340	1574	1954	2168	2366	2530											
7.1	P _{GA}	45	57.2	69	74.3	88.9	89.1	99.3	132	158	151	176	*	*	*	*										
	P _{GB}	99	137	166	203	246	250	284	436	546	637	768	756	815	838	897										
	P _{GC}	116	171	257	244	357	306	422	545	931	1097	1352	1508	1645	1787	1919										
	P _{GD}	164	243	349	362	506	451	594	808	1278	1541	1895	2028	2204	2386	2558										
8	P _{GA}	42.8	54.8	67.2	72.1	86.1	87.4	97.7	129	155	154	181	*	*	*	*										
	P _{GB}	92.9	128	157	192	229	237	267	400	498	588	705	705	784	793	874										
	P _{GC}	107	157	237	226	323	283	383	482	817	978	1185	1356	1531	1621	1793										
	P _{GD}	152	225	324	336	459	419	541	719	1129	1375	1663	1830	2059	2174	2402										
9	P _{GA}	41	52.7	64.5	70.2	82.7	85.8	95.3	129	162	159	193	169	176	*	*										
	P _{GB}	87.8	121	148	182	215	226	251	383	490	565	699	684	730	774	823										
	P _{GC}	98.8	144	218	212	297	267	352	454	791	714	1152	1283	1368	1542	1624										
	P _{GD}	141	206	299	316	424	396	500	679	1094	1296	1625	1741	1853	2078	2188										
10	P _{GA}	34.6	49.3	61.1	66.4	79.2	81.9	91.7	125	153	157	188	172	182	175	*										
	P _{GB}	72.8	111	138	169	202	212	237	359	447	535	642	643	704	737	799										
	P _{GC}	78.9	129	200	192	274	244	325	417	700	846	1018	1170	1396	1431	1546										
	P _{GD}	112	185	276	288	392	363	462	626	972	1200	1444	1596	1760	1935	2085										
11.2	P _{GA}	33.5	44.4	58.4	59.8	76.1	74.5	89	114	150	145	185	162	181	169	187										
	P _{GB}	70.3	99.5	131	150	192	187	226	318	426	476	613	581	662	669	760										
	P _{GC}	75.4	113	183	168	257	212	307	361	659	734	952	1030	1182	1267	1439										
	P _{GD}	107	162	252	252	368	316	438	543	918	1046	1356	1411	1616	1720	1940										
12.5	P _{GA}			54.5		72.2		85.1		145		183		175		186										
	P _{GB}			119		179		212		400		579		598		691										
	P _{GC}			163		234		280		604		882		1039		1276										
	P _{GD}			225		337		401		845		1255		1430		1730										
14	P _{GA}			49		65.2		77		131		168														
	P _{GB}			106		159		189		353		514														
	P _{GC}			142		205		243		522		763														
	P _{GD}			196		293		348		733		1092														

□ 敬请垂询
 P_{GA}(kW) 齿轮箱不带辅助冷却装置 **)
 P_{GB}(kW) 齿轮箱带冷却风扇 **)
 P_{GC}(kW) 齿轮箱带内置冷却盘管 ***)
 P_{GD}(kW) 齿轮箱带冷却风扇和内置冷却盘管 ***)
 **) 表中数值按:
 每小时工作周期: 100%/h
 在室内大空间安装
 海拔高度至 1000m
 ***) 表中数值按冷却水入口温度 20°C

□ On request
 P_{GA}(kW) Gear units without auxiliary cooling **)
 P_{GB}(kW) Gear units with fan **)
 P_{GC}(kW) Gear units with built-in cooling coil ***)
 P_{GD}(kW) Gear units with fan and built-in cooling coil ***)
 **) Values refer to:
 Operating cycle: 100%/h
 Installation in a large hall
 Altitude up to 1000 m
 ***) Values refer to a cooling water inlet temperature of 20°C

热容量, 类型 B2., 规格 4-26, $n_1=1500 \text{ min}^{-1}$
 Thermal Capacities, Type B2., Sizes 4-26, $n_1=1500 \text{ min}^{-1}$

热容量 P_G (kW) / Thermal capacities P_G (kW)																										
in		齿轮箱规格 / Gear unit sizes																								
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
5	PGA	35.3	*		*		*		*		*		*		*		*		*		*		*		*	
	PGB	139	184		283		328		478		574		486													
	PGC	159	238		368		459		774		1524		2040													
	PGD	249	366		581		705		1144		2019		2386													
5.6	PGA	38.6	*		*		*		*		*		*		*		*		*		*		*		*	
	PGB	135	185		274		322		504		646		618		565											
	PGC	154	231		340		424		738		1470		1992		2307											
	PGD	241	359		543		662		1126		2044		2489		2739											
6.3	PGA	40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	PGB	132	178	206	259	308	310	345	479	581	633	753	664	684	646											
	PGC	147	215	306	308	449	385	531	651	1120	1295	1613	1847	2019	2155											
	PGD	231	336	456	497	690	612	799	1010	1596	1839	2267	2393	2574	2689											
7.1	PGA	40.6	44	50.6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	PGB	125	169	204	248	298	299	336	493	601	676	804	720	754	740	760										
	PGC	135	199	298	284	414	354	488	629	1072	1261	1552	1722	1875	2031	2177										
	PGD	213	313	447	462	642	570	747	996	1553	1848	2261	2331	2505	2666	2817										
8	PGA	39.9	45.1	53.4	53	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	PGB	117	160	195	236	280	287	321	463	564	646	768	713	775	756	808										
	PGC	124	182	276	263	375	328	444	557	942	1126	1364	1553	1751	1851	2043										
	PGD	198	290	417	430	586	533	686	896	1392	1674	2016	2152	2400	2499	2729										
9	PGA	39.3	45.7	54.4	55.8	61.6	59.6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	PGB	111	153	186	226	266	277	306	452	568	640	785	724	759	782	812										
	PGC	115	168	253	246	346	310	409	526	915	1055	1329	1474	1570	1766	1858										
	PGD	183	267	386	407	543	507	637	853	1363	1598	1996	2085	2204	2444	2549										
10	PGA	33.7	44	53.5	55.1	62.3	60.8	63.9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	PGB	92.8	140	174	211	251	261	291	429	525	616	734	689	753	770	818										
	PGC	91.9	150	233	224	318	284	377	483	810	978	1176	1347	1490	1642	1772										
	PGD	147	240	356	372	505	465	591	791	1218	1490	1787	1933	2118	2306	2464										
11.2	PGA	33	40.4	52.1	51	61.9	57.7	65.2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	PGB	89.8	125	165	188	240	232	279	382	506	555	709	641	721	714	797										
	PGC	87.9	131	213	195	298	246	356	418	764	849	1101	1186	1360	1457	1652										
	PGD	140	210	327	326	474	406	561	688	1156	1306	1688	1722	1960	2068	2315										
12.5	PGA					61.7		66.9		*		*		*		*		*		*		*		*		*
	PGB					224		264		481		681		669		749										
	PGC					272		326		701		1021		1198		1468										
	PGD					435		515		1070		1574		1754		2093										
14	PGA					57.4		63.1		*		*		*		*		*		*		*		*		*
	PGB					200		236		428		611														
	PGC					238		283		605		884														
	PGD					380		449		931		1377														

□ 敬请垂询
 P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)
 P_{GB} (kW) 齿轮箱带冷却风扇 **)
 P_{GC} (kW) 齿轮箱带内置冷却盘管 ***)
 P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 ***)
 **) 表中数值按:
 每小时工作周期: 100%/h
 在室内大空间安装
 海拔高度至 1000m
 ***) 表中数值按冷却水入口温度 20 °C

□ On request
 P_{GA} (kW) Gear units without auxiliary cooling **)
 P_{GB} (kW) Gear units with fan **)
 P_{GC} (kW) Gear units with built-in cooling coil ***)
 P_{GD} (kW) Gear units with fan and built-in cooling coil ***)
 **) Values refer to:
 Operating cycle: 100%/h
 Installation in a large hall
 Altitude up to 1000 m
 ***) Values refer to a cooling water inlet temperature of 20 °C

额定功率，类型 B3..，规格4-26

Nominal Power Ratings, Type B3.., Sizes 4-26

额定功率 P _{2N} (kW) / Nominal power ratings P _{2N} (kW)																									
i _n	n ₁	n ₂	齿轮箱规格 / Gear unit sizes																						
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12.5	1500	120	55	94		170		281		526		798		1326		1960		2513*		3418*					
	1000	80	37	62		114		187		350		532		884		1306		1675		2278					
14	1500	107	54	87		162		264		508		731		1227	1326	1747	2061	2348*	2644*	3226*	3486*				
	1000	71	35	58		108		175		337		485		814	880	1159	1367	1558	1754	2141	2408				
16	1500	94	51	82	94	155	169	244	280	471	522	659	782	1118	1212	1574	1810	2165*	2425*	2992*	3322*				
	1000	63	34	55	63	104	113	163	187	316	350	442	524	749	812	1055	1214	1451	1625	2005	2226				
18	1500	83	46	78	87	146	160	235	260	430	483	602	709	1029	1112	1390	1668	2002*	2225*	2781*	3045*				
	1000	56	31	53	58	98	108	158	175	290	326	406	471	694	750	938	1126	1350	1501	1876	2054				
20	1500	75	42	73	82	136	157	224	246	398	456	570	659	961	1049	1256	1507	1885*	2086*	2638*	2858*	3518*			
	1000	50	28	48	55	90	104	149	164	266	304	379	439	641	699	838	1005	1256	1390	1758	19060	2345		3350*	
22.4	1500	67	38	65	79	122	148	200	234	356	424	509	606	858	970	1122	1346	1683	1936*	2357*	2638*	3142*	3592*		
	1000	45	25	43	53	82	99	134	157	239	285	342	406	576	652	754	904	1130	1300	1583	1771	2110	2412	3015*	3392*
25	1500	60	34	58	78	109	136	179	220	318	388	455	567	769	869	1005	1206	1507	1734	2110*	2362*	2814*	3216*		
	1000	40	22	38	51	72	90	119	146	212	258	303	378	512	579	670	804	1005	1156	1407	1574	1876	2144	2680*	3015*
28	1500	54	30	52	70	98	122	161	198	287	349	410	510	692	782	904	1086	1357	1560	1899	2126*	2533*	2894*	3618*	
	1000	36	20	34	46	65	82	107	132	191	233	273	340	461	522	602	723	904	1040	1266	1417	1688	1930	1612	2714*
31.5	1500	48	26	46	62	87	109	143	176	255	310	364	454	631	695	804	965	1206	1387	1688	1890	2251	2573	3216*	3618*
	1000	32	18	30	41	58	73	95	117	170	206	242	302	410	463	536	643	804	925	1126	1259	1501	1715	2144	2412
35.5	1500	42	23	41	54	76	95	126	154	223	271	318	397	538	608	703	844	1055	1214	1478	1654	1970	2251*	2814*	3166*
	1000	28	15	27	36	50	63	83	102	149	181	212	265	358	406	469	562	703	809	985	1102	1313	1501	1876	2110
40	1500	38	21	37	49	69	86	114	139	202	246	288	359	486	550	636	763	954	1098	1337	1496	1782	2037	2546*	2865*
	1000	25	14	24	32	45	57	74	91	133	162	190	236	320	362	418	502	628	722	879	984	1172	1340	1675	1885
45	1500	33	18	32	42	59	74	98	121	175	213	250	312	422	478	553	663	829	954	1161	1299	1548	1769	2211	2487*
	1000	22	12	21	28	39	50	66	80	117	142	166	208	282	318	368	442	553	635	774	866	1032	1179	1474	1658
50	1500	30	17	29	38	54	68	90	110	159	194	227	283	384	434	502	602	754	866	1055	1181	1407	1608	2010	2262
	1000	20	11	19	26	36	45	59	73	106	129	151	189	256	290	334	402	502	578	703	787	938	1072	1340	1507
56	1500	27	14	26	34	49	61	80	98	143	174	205	255	346	391	452	542	678	780	950	1062	1266	1447	1809	2035
	1000	17.9	10	17	23	32	40	53	66	95	115	136	169	229	259	299	359	450	517	630	704	839	959	1199	1349
63	1500	24	13	22	30	42	54	71	88	127	155	182	226	307	347	402	482	602	694	844	945	1126	1286	1608	1809
	1000	15.9	8	14	20	28	36	47	58	84	102	121	150	203	230	266	319	399	459	559	626	746	852	1065	1197
71	1500	21	11	19	27	34	47	59	77	105	135	159	198	269	304	351	422	527	606	738	826	985	1126	1407	1583
	1000	14.1	8	13	18	23	32	40	51	70	90	106	133	181	204	236	283	354	407	496	554	661	755	945	1062
80	1500	18.8			22		42		69		121		178		272		378		543		740		1007		1417
	1000	12.5			14		28		46		81		118		181		251		361		492		670		942
90	1500	16.7			19		35		60		105		158												
	1000	11.1			13		23		39		70		105												

卧式安装齿轮箱应采用强制润滑
* 敬请垂询

Forced lubrication required on horizontal gear units
* Gear units only on request

额定输出扭矩，类型 B3..，规格 4–26
Nominal Output Torques, Type B3.., Sizes 4–26

额定输出扭矩 T _{2N} (kNm) / Nominal output torques T _{2N} (kNm)																							
i _N	齿轮箱规格 / Gear unit sizes																						
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12.5	5.5	9.4		17		28		52.4		79.5		132		195		250		340					
14	6	9.8		18.2		29.5		56.7		81.6		137	148	195	230	262	295	360	405				
16	6.6	10.5	12	19.8	21.5	31	35.6	59.9	66.3	83.8	99.4	142	154	200	230	275	308	380	422				
18	6.7	11.3	12.6	21.1	23.1	33.9	37.5	65	69.5	86.7	102	148	160	200	230	288	320	400	438			800	
20	6.7	11.6	13.2	21.7	25	35.7	39.3	63.5	72.7	90.7	105	153	167	200	240	300	332	420	455	560		800	
22.4	6.7	11.6	14.2	21.7	26.5	35.7	41.8	63.5	75.6	90.7	108	153	173	200	240	300	345	420	470	560	640	800	900
25	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
28	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
31.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
35.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
40	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
45	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
50	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
56	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
63	6.6	11.4	15.5	21.4	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
71	6.6	11	15.5	20	27.2	34	43.8	60	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
80			14		26.9		43.8		77.2		113		173		240		345		470		640		900
90			14		25.2		43		75		113												

热容量, 类型 B4.., 规格 5–26, n₁=1000 min⁻¹
Thermal Capacities, Types B4.., Sizes 5–26, n₁=1000 min⁻¹

热容量 P ₀ (kW) / Thermal capacities P ₀ (kW)																							
齿轮箱规格 / Gear unit sizes																							
i _n		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
80	PGA	28.6		42.4		60		90.6		121		162		189		250		351		*		*	
90	PGA	27.9		41		58.6		87.9		118		155	167	175	188	240	256	339	355	*	*	*	*
100	PGA	26.8	30.6	38.8	45.3	55.6	66.4	84.4	101	112	130	146	160	164	180	227	246	319	344	*	*	*	*
112	PGA	25.6	29.9	37.4	44	53.5	59	80.4	97.6	107	126	139	151	157	169	216	232	309	322	*	*	*	*
125	PGA	24.5	28.6	35.7	41.6	51	56	77	93.2	102	119	132	144	149	161	205	221	291	313	*	*	*	*
140	PGA	23.4	27.5	33.9	40.1	48.1	53.9	72.8	88.8	97.6	114	128	137	144	154	198	211	281	294	*	*	*	*
160	PGA	21.5	26.3	30.9	38.2	44	51.3	66.4	85.1	92.4	110	121	132	136	148	187	203	265	284	*	*	*	*
180	PGA	21.1	25.1	30.1	36.4	42.9	48.7	64.6	80.6	87.2	103	114	124	128	139	175	191	248	269	*	*	*	*
200	PGA	20.4	23.1	29.9	33.2	42	44.6	63.2	73.6	85.2	98.5	112	117	126	132	174	179	240	251	*	*	*	*
224	PGA	19	22.7	27.8	32.4	39.3	43.4	59.4	71.8	79.9	93.2	105	116	117	130	163	179	224	243	*	*	*	*
250	PGA	18.5	21.8	26.9	32.1	37.9	42.5	57.5	70.1	77.3	90.6	102	108	114	122	158	168	217	227	*	*	*	*
280	PGA	17.6	20.4	25.2	30	36.1	39.8	55	65.8	73	85.2	95	104	107	117	148	161	207	220	*	*	*	*
315	PGA	16.5	19.8	23.6	28.8	33.9	38.4	51.3	63.7	69.6	82.4	89.7	98.5	101	110	140	153	193	210	*	*	*	*
355	PGA		19		27.1		36.6		60.8		77.8		92.4		104		144		196		*		*
400	PGA		17.7		25.4		34.5		56.7		74.1										*		*

n₁=1500 min⁻¹

n₁=1500 min⁻¹

热容量 P ₀ (kW) / Thermal capacities P ₀ (kW)																							
齿轮箱规格 / Gear unit sizes																							
i _n		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
80	PGA	31.7		46.9		66.1		98.6		130		171		189		256		343		*		*	
90	PGA	31.1		45.5		64.7		95.9		128		164	175	183	195	248	264	337	345	*	*	*	*
100	PGA	29.6	34	43.1	50.2	61.5	66.7	92.4	110	121	140	156	169	173	188	236	255	321	339	*	*	*	*
112	PGA	28.6	33.3	41.5	48.8	59.2	65.3	88.3	106	116	137	149	161	167	179	227	243	315	323	*	*	*	*
125	PGA	27.4	31.8	39.7	46.2	56.6	62.1	84.8	102	112	130	143	155	159	172	218	234	300	318	*	*	*	*
140	PGA	26.1	30.7	37.8	44.6	53.5	59.9	80.4	97.8	107	125	139	148	155	165	211	225	294	304	*	*	*	*
160	PGA	24.1	29.4	34.5	42.7	49	57.2	73.6	94.1	101	121	132	143	147	160	202	218	281	298	*	*	*	*
180	PGA	23.6	28.1	33.7	40.7	47.9	54.3	71.8	89.3	96.5	114	125	136	140	152	190	208	266	286	*	*	*	*
200	PGA	22.8	25.9	33.5	37.2	47	49.8	70.5	81.9	94.7	109	124	130	139	146	191	196	260	271	*	*	*	*
224	PGA	21.3	25.4	31.2	36.4	44	48.6	66.5	80.2	89.1	104	117	128	131	144	181	198	246	266	*	*	*	*
250	PGA	20.8	24.5	30.2	36	42.5	47.8	64.5	78.6	86.6	101	114	120	127	136	176	187	241	252	*	*	*	*
280	PGA	19.8	22.9	28.4	33.7	40.6	44.8	61.8	74	82.1	95.9	106	117	120	132	167	182	233	247	*	*	*	*
315	PGA	18.6	22.3	26.6	32.4	38.2	43.2	57.8	71.6	78.4	92.7	100	110	113	124	158	172	217	236	*	*	*	*
355	PGA		21.3		30.4		41.2		68.4		87.6		103		117		162		220		*		*
400	PGA		19.9		28.6		38.9		63.8		83.4										*		*

* 敬请垂询
P₀(kW) 齿轮箱不带辅助冷却装置**)

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

* On request
P₀(kW) Gear units without auxiliary cooling**)

**) Values refer to:
Operating cycle: 100%/ and h
Installation in a large hall
Altitude up to 1000 m

实际传动比, 类型 B2.., B3.., B4.., 规格 4-14
Actual Ratios, Types B2.., B3.., B4.., H4.., Sizes 4-14

齿实际传动比 i / Actual ratios i											
i _n	齿轮箱规格 / Gear unit sizes										
	4	5	6	7	8	9	10	11	12	13	14
5.0	4.936	5.006	-	4.865	-	5.002	-	4.897	-	4.967	-
5.6	5.480	5.488	-	5.333	-	5.483	-	5.534	-	5.613	-
6.3	6.296	6.386	6.205	6.206	6.135	6.381	6.271	6.296	6.226	6.386	6.156
7.1	6.959	7.058	6.802	6.860	6.725	7.053	6.875	7.037	7.036	7.138	6.957
8.0	7.549	7.657	7.915	7.880	7.825	8.101	8.000	7.994	8.005	8.108	7.915
9.0	8.693	8.817	8.749	8.569	8.649	8.810	8.842	8.693	8.947	8.817	8.847
10	9.872	10.108	9.490	9.823	9.935	10.099	10.157	9.965	10.164	10.108	10.049
11.2	10.769	10.923	10.928	10.615	10.804	10.914	11.045	10.769	11.052	10.923	10.928
12.5	12.034	12.703	12.528	12.433	12.385	12.554	12.662	12.334	12.670	12.482	12.528
14	13.484	13.964	13.538	13.515	13.385	14.137	13.683	13.821	13.692	13.721	13.538
16	15.601	15.835	15.826	16.275	15.773	15.952	15.693	15.522	15.888	16.354	15.552
18	17.482	17.407	17.307	17.692	17.041	17.963	17.724	17.393	17.572	17.978	17.007
20	19.614	19.645	19.729	19.948	20.648	20.259	19.940	19.744	19.995	20.276	20.376
22.4	21.919	21.954	21.575	22.146	22.308	22.208	22.520	21.643	22.114	22.226	22.282
25	25.380	25.421	24.349	25.446	25.152	25.843	25.400	25.185	25.103	25.864	25.131
28	27.836	27.881	27.211	28.125	27.923	28.563	27.842	27.836	27.517	28.587	27.548
31.5	30.196	30.245	31.508	30.509	32.084	30.985	32.400	31.975	32.021	32.838	32.057
35.5	34.771	34.827	34.557	35.131	35.461	35.679	35.811	34.771	35.392	35.709	35.432
40	39.487	39.551	37.486	39.896	38.468	40.902	38.846	39.861	40.654	40.936	40.700
45	43.077	43.146	43.166	43.523	44.296	44.202	44.732	43.077	44.209	44.238	44.259
50	49.060	49.139	49.021	49.568	50.304	50.341	51.280	49.060	50.681	50.383	50.737
56	55.152	55.240	53.477	55.723	54.877	56.592	55.417	55.152	56.639	54.831	54.831
63	60.808	60.906	60.904	61.438	62.499	62.396	63.114	60.808	62.376	62.448	62.446
71	69.293	69.404	68.467	70.011	70.259	71.102	70.951	69.293	70.121	71.161	70.200
80	-	77.598	75.489	79.267	77.465	79.497	78.228	80.949	77.313	82.118	77.400
90	-	86.720	86.022	88.585	88.274	88.842	89.143	89.869	88.101	90.016	88.200
100	-	100.413	96.178	102.572	99.945	102.869	99.667	103.259	102.921	104.750	101.780
112	-	110.130	107.484	112.498	111.694	115.824	111.384	114.129	114.262	115.777	111.569
125	-	119.466	124.455	122.035	129.330	122.389	128.971	123.804	131.287	125.592	129.831
140	-	137.567	136.499	140.525	141.846	140.933	141.452	142.562	145.106	144.621	143.498
160	-	156.225	148.071	159.585	153.871	160.047	153.443	161.897	157.408	162.791	155.663
180	-	170.427	170.506	174.092	177.184	174.597	176.692	176.615	181.258	179.166	179.248
200	-	194.098	193.631	198.272	201.215	198.847	200.656	201.145	205.841	204.050	205.487
224	-	218.199	211.234	222.891	219.508	223.537	218.898	226.121	224.554	229.386	222.065
250	-	240.578	240.572	245.752	249.995	246.464	249.300	249.313	255.742	252.913	252.907
280	-	274.147	270.443	280.042	281.036	280.855	280.256	284.101	287.497	288.204	284.310
315	-	302.121	298.181	308.618	309.861	309.513	309.000	313.091	316.984	317.612	313.470
355	-	-	339.788	-	353.097	-	352.116	-	361.214	-	357.210
400	-	-	374.460	-	389.127	-	388.046	-	398.073	-	393.660

实际传动比，类型 B2.., B3.., B4.., 规格 15–26
Actual Ratios, Types B2.., B3.., B4.., Sizes 15–26

齿实际传动比 i / Actual ratios i												
齿轮箱规格 / Gear unit sizes												i _n
15	16	17	18	19	20	21	22	23	24	25	26	
4.963	-	-	-	-	-	-	-	-	-	-	-	5.0
5.609	5.630	5.514	-	-	-	-	-	-	-	-	-	5.6
6.340	6.362	6.234	-	-	-	-	-	-	-	-	-	6.3
7.132	7.192	7.012	7.239	-	-	-	-	-	-	-	-	7.1
8.101	8.090	7.965	8.143	-	-	-	-	-	-	-	-	8.0
8.810	9.190	8.662	9.250	-	-	-	-	-	-	-	-	9.0
10.099	9.993	9.930	10.059	-	-	-	-	-	-	-	-	10
10.914	11.456	10.731	11.531	-	-	-	-	-	-	-	-	11.2
12.172	12.380	12.770	12.462	12.062	-	12.256	-	-	-	-	-	12.5
13.810	13.832	13.790	14.654	13.709	13.698	13.902	13.719	-	-	-	-	14
15.215	15.665	16.226	16.014	15.192	15.640	15.436	15.538	-	-	-	-	16
17.262	17.290	17.522	18.620	17.267	17.252	17.510	17.279	-	-	-	-	18
19.379	19.581	19.762	20.348	19.607	19.698	19.883	19.570	19.591	-	19.284	-	20
21.900	21.982	22.333	22.950	22.158	22.368	22.470	22.222	22.139	21.930	21.793	22.206	22.4
24.916	24.842	25.409	25.936	25.048	25.278	25.400	25.113	25.027	24.783	24.635	25.095	25
27.847	28.263	28.398	29.507	28.175	28.576	28.571	28.389	28.151	28.015	27.711	28.368	28
31.634	31.588	32.259	32.979	32.005	32.143	32.456	31.933	31.979	31.513	31.478	31.909	31.5
34.400	35.883	35.080	37.463	34.804	36.513	35.294	36.275	34.775	35.797	34.231	36.248	35.5
39.435	39.021	40.215	40.738	39.899	39.706	40.461	39.446	39.866	38.927	39.241	39.417	40
42.617	44.732	43.460	46.702	43.117	45.518	43.725	45.221	43.082	44.626	42.407	45.187	45
48.536	48.341	49.496	50.469	49.106	49.190	49.798	48.869	49.065	48.226	48.297	48.833	50
54.562	55.055	55.641	57.479	55.203	56.022	55.981	55.656	55.158	54.924	54.294	55.615	56
60.158	61.892	61.348	64.616	60.865	62.978	61.722	62.567	60.815	61.744	59.863	62.520	63
68.553	68.239	69.909	71.243	69.358	69.438	70.335	68.984	69.301	68.076	68.216	68.933	71
78.131	77.761	76.506	81.184	79.977	79.127	77.639	78.610	76.497	77.575	78.100	78.551	80
85.645	88.626	83.865	88.846	87.670	91.242	87.739	86.772	86.448	85.631	88.260	89.933	90
99.664	97.150	97.593	97.391	102.020	100.017	99.821	98.061	98.353	96.770	100.414	101.633	100
110.155	113.052	107.865	113.333	112.759	116.389	111.565	111.565	109.924	110.097	112.228	115.629	112
126.535	124.952	123.904	125.263	129.526	128.641	126.733	124.690	124.870	123.049	127.487	129.232	125
137.599	143.532	134.739	143.889	140.851	147.769	137.815	141.643	135.788	139.780	138.634	146.803	140
157.741	156.082	154.462	156.471	161.470	160.690	157.989	154.029	155.665	152.002	158.928	159.639	160
170.467	178.930	166.923	179.375	174.496	184.212	170.735	176.576	168.224	174.252	171.749	183.008	180
194.143	193.365	190.107	193.846	198.732	199.073	194.448	190.821	191.588	188.310	195.603	197.772	200
218.249	220.222	213.712	220.769	223.408	226.722	218.592	217.324	215.377	214.464	219.891	225.240	224
240.634	247.566	235.631	248.182	246.322	254.874	241.012	244.309	237.467	241.094	242.444	253.208	250
274.210	272.957	268.510	273.636	280.692	281.015	274.641	269.366	270.602	265.822	276.274	279.178	280
302.191	311.045	295.909	311.818	309.334	320.226	302.666	306.952	298.215	302.913	304.465	318.133	315
-	342.784	-	343.636	-	352.902	-	338.273	-	333.823	-	350.596	355
-	-	-	-	-	-	-	-	-	-	-	-	400

在输出轴 d_2 上允许的, 附加径向力¹⁾, 实心轴 (S)
 Permissible Additional Radial, Forces on Output Shaft d_2 ¹⁾, Solid Shaft(s)

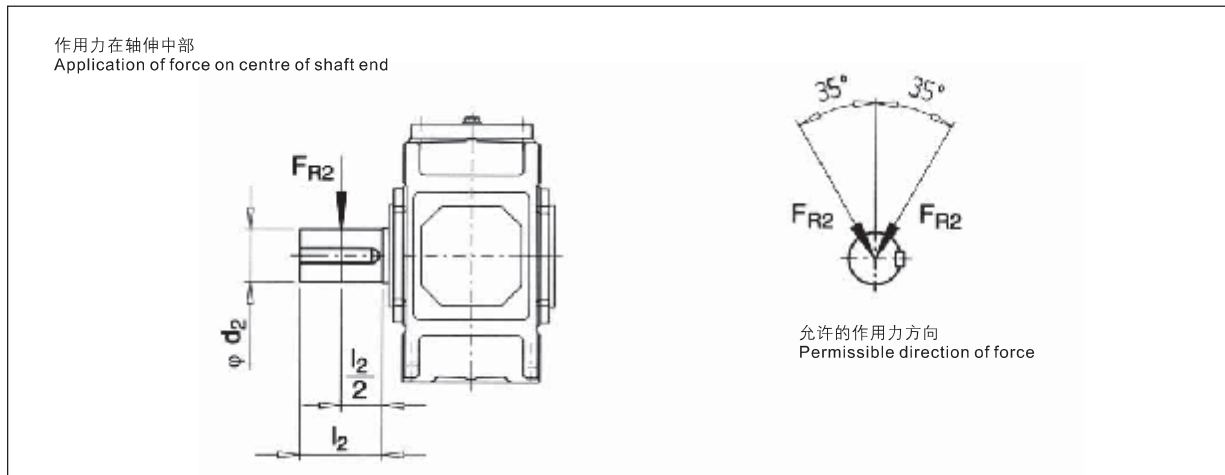


表 1 / Table 1																	
允许的附加径向力 F_{R22} (kN), 作用在输出轴轴伸中部 ³⁾																	
Permissible additional radial forces F_{R22} in kN with application of force on centre of shaft end ³⁾																	
齿轮箱规格 / Gear unit sizes ^{1) 4)}																	
类型 Type	布置形式 Design	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
H1SH	A/B	2)	-	2)	-	2)	-	2)	-	2)	-	2)	-	2)	-	2)	-
H2S.	A/S/G/H	-	10	22	22	30	30	30	45	64	64	150	150	140	205	205	205
	C/D	-	10	13	13	18	18	18	28	35	35	112	112	85	135	135	135
B2S.	A/C	-	13	27	27	37	37	37	55	78	78	160	160	150	210	210	210
	B/D	-	12	15	15	17	17	17	30	35	38	110	110	75	145	100	100
H3S.	A/B/G/H	-	-	29	29	40	40	40	60	85	86	190	190	185	265	265	265
H4S.	C/D	-	-	-	-												
B3S.	A/C	-	14	29	29												
B4S.	A/C	-	-														
H3S.	C/D	-	-	18	18	26	26	26	40	50	50	150	150	120	185	185	190
H4S.	A/B	-	-	-	-												
B3S.	B/D	-	9	18	18												
B4S.	B/D	-	-														

在输出轴 d_2 上允许的, 附加径向力¹⁾, 实心轴 (S)

Permissible Additional Radial, Forces on Output Shaft $d_2^{1)}$, Solid Shaft(s)

作用力不在轴伸中部
Application of force outside the
Centre of the shaft end

$F_{R22} = F_{R2} \times k$

F_{R22} 允许的外部径向力
Permissible external radial force

F_{R2} 允许的附加径向力, 根据第418页
Permissible external radial force
acc. to table 1 page 418

K 作用力系数根据下表确定
Factor of application of force acc.
To table

表 2 / Table 2

作用力系数 k / Factor of application of force k

规格 size	距离 z, mm / Distance z in mm														
	-200	-150	-100	-75	-50	-25	0	25	50	75	100	150	200	250	300
3					1.21	1.09	1.00	0.85	0.74	0.65	0.58	0.48			
4					1.17	1.08	1.00	0.86	.076	0.68	0.62	0.52	0.44		
4+6				1.22	1.14	1.06	1.00	0.88	0.79	0.72	0.66	0.56	0.49	0.43	
7+8				1.19	1.12	1.06	1.00	0.89	0.81	0.74	0.68	0.58	0.51	0.46	0.41
9+10			1.22	1.15	1.10	1.05	1.00	0.90	0.82	0.76	0.70	0.61	0.54	0.48	0.44
11+12			1.18	1.13	1.08	1.04	1.00	0.91	0.84	0.78	0.73	0.64	0.57	0.51	0.47
13+14		1.24	1.15	1.11	1.07	1.03	1.00	0.92	0.86	0.80	0.75	0.67	0.60	0.55	0.50
15+16		1.20	1.12	1.09	1.06	1.03	1.00	0.93	0.87	0.82	0.77	0.69	0.63	0.58	0.53
17+18	1.25	1.17	1.11	1.08	1.05	1.03	1.00	0.94	0.88	0.84	0.79	0.72	0.66	0.60	0.56

- 1) 表中数值为最小值, 在 $f_1 \geq 1.2$ 时可以满足要求。
如果给出了力的作用角和旋转方向, 则在绝大多数情况下可以承受较大的附加力。
请与我们联系。
在必要时可以采用一个加强型输出轴 (V)。
- 2) 敬请垂询
- 3) 当作用力不在轴伸中部时, 请参阅第 43 页。
- 4) 地脚螺栓的最低性能等级为 8.8。
基础必须干燥, 不得有油脂。

敬请垂询:

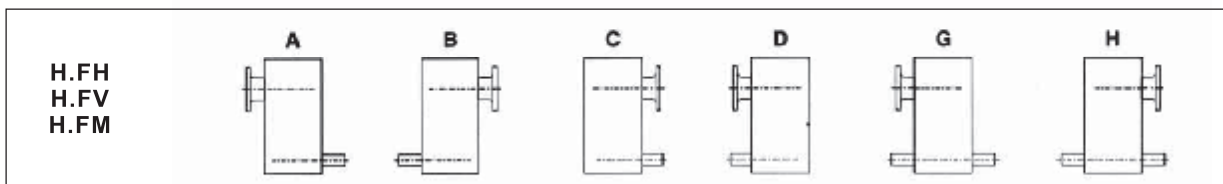
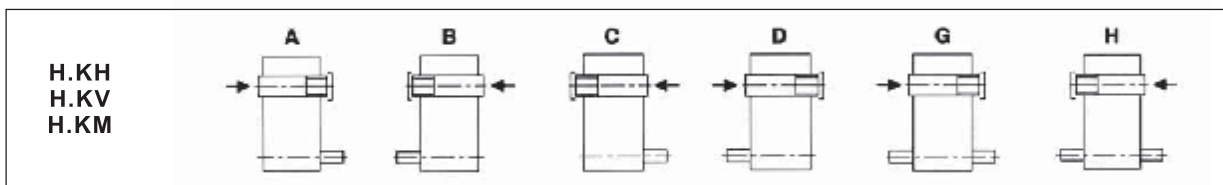
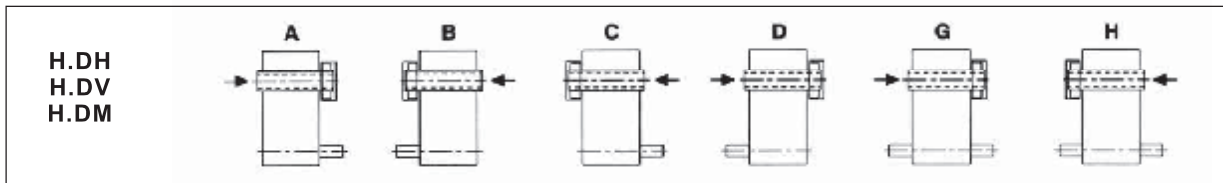
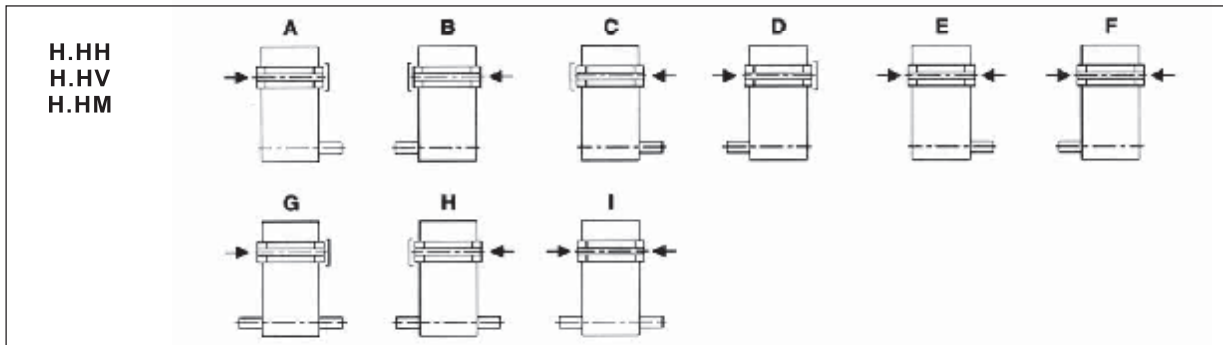
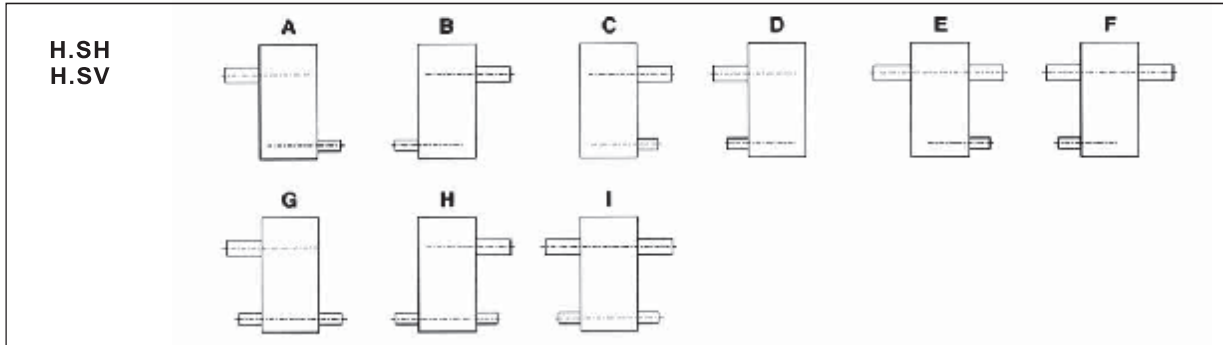
- 输入轴 d_1 上允许的附加径向力
- 双出轴实心轴上允许的附加径向力 (设计型式 E、F 和 I)。
- 19-26 号齿轮箱上允许的附加径向力。

- 1) Values in tables are minimum values. They are valid $f_1 \geq 1.2$. If the angle of application of force and the direction of rotation are given, significantly higher additional forces can Mostly be allowed.
Please consult us.
If necessary, a reinforced output shaft (V) can Be used.
- 2) on request
- 3) For application of force outside the centre of The shaft end, see page 43 .
- 4) Use foundaton bolts of min. Property class 8.8
Foundation must be dry and grease-free.

On reques1:

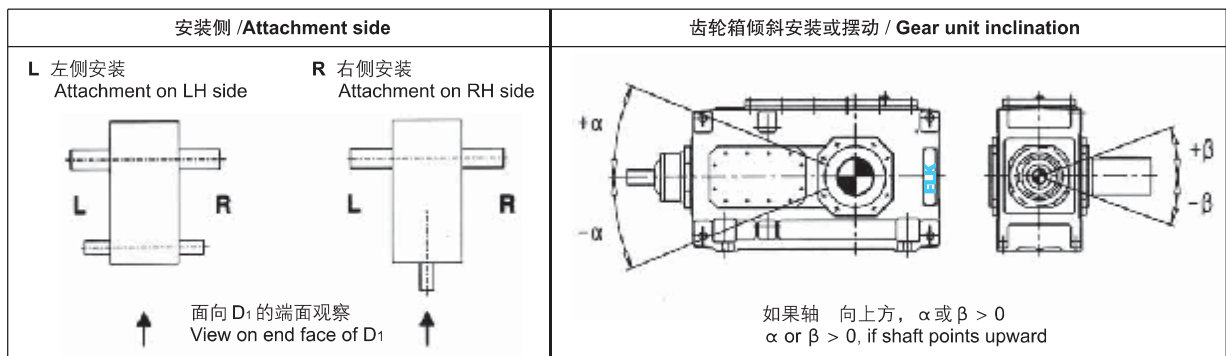
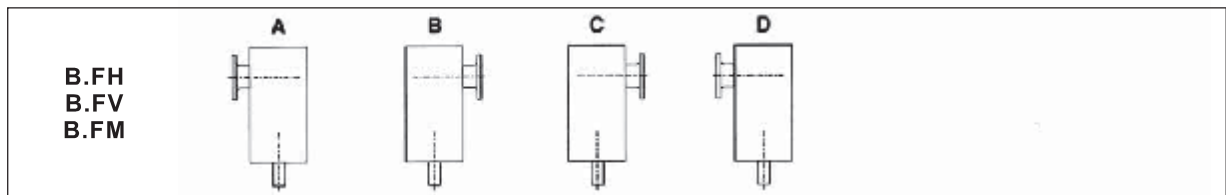
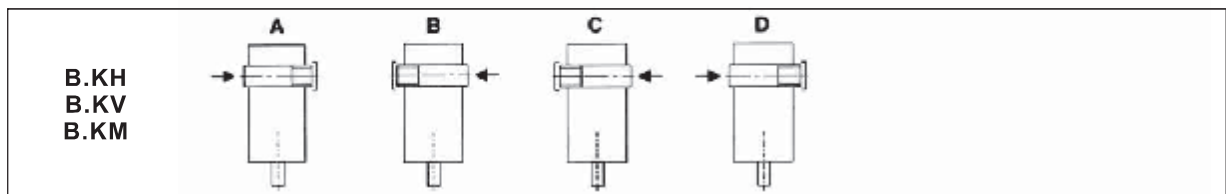
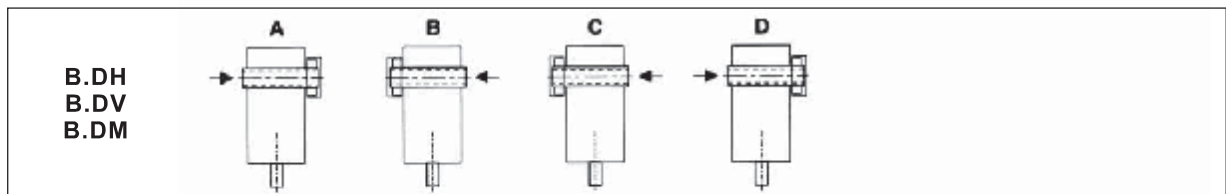
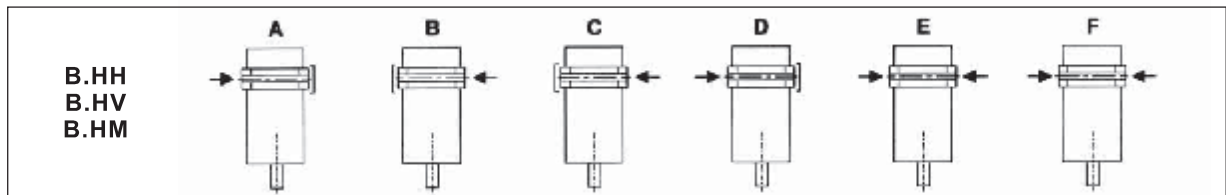
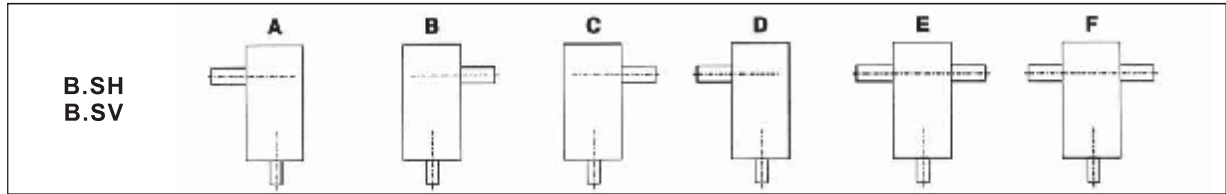
- Permissible additional radial forces on input Shaft d_1 .
- Permissible additional radial forces on solid Output shafts on both sides (assemblies E, F and I).
- Permissible assiitional radial forces for gear Unit sizes 19-26.

布置形式 / Assemblies

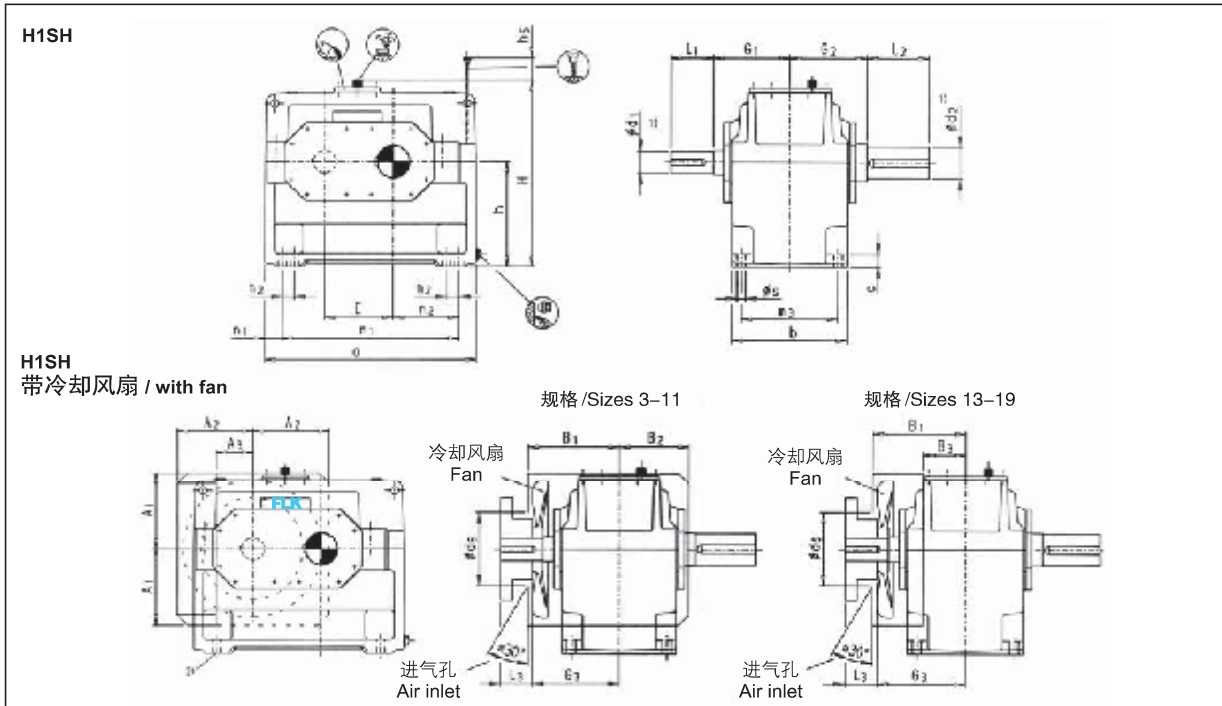


→ 箭头表示工作机驱动轴插入方向
The arrow indicates the direction of insertion of the driven machine shaft

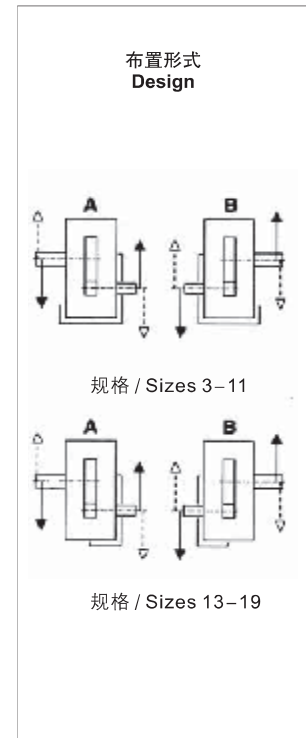
布置形式，安装侧，齿轮箱倾斜安装或摆动
Assemblies, Attachment Side, Gear Unit Inclination



单级传动, 卧式安装, 类型 H1SH, 规格 3-19
Single Stage, Horizontal, Type H1SH, Sizes 3-19

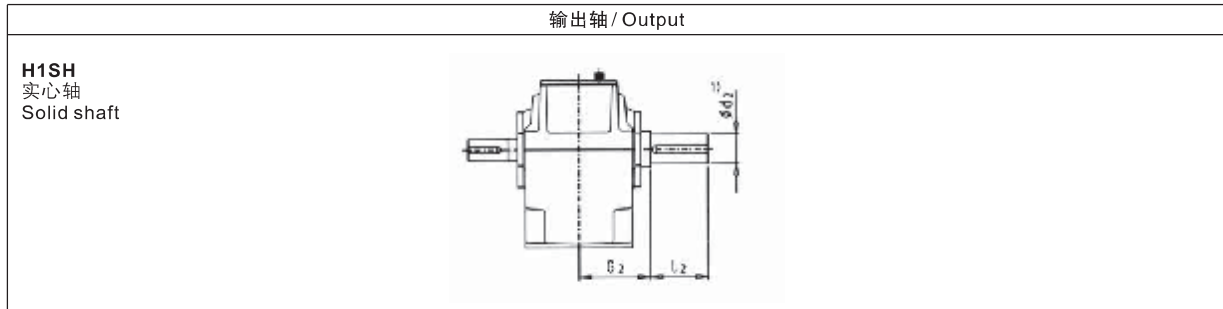


规格 Size	输入轴 / Input									冷却风扇 / Fan									
	in=1.25-2.8 in=1.6-2.8 ^{*)} in=2-2.8 ^{**)}			in=3.15-4			in=4.5-5.6			G ₁ G ₃			A ₁ A ₂ A ₃			B ₁ B ₂ B ₃			d ₆
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	G ₁	G ₃	A ₁	A ₂	A ₃	B ₁	B ₂	B ₃	d ₆	
3	60	125	105	45	100	80	32	80	60	170	190	150	145	80	205	130	-	130	
5	85	160	130	60	135	105	50	110	80	210	240	225	215	115	255	185	-	190	
7	100	200	165	75	140	105	60	140	105	250	285	255	250	120	300	230	-	245	
9	110	200	165	90	165	130	75	140	105	280	315	300	265	140	330	265	-	280	
11 ^{*)}	130	240	205	110	205	170	90	170	135	325	360	360	330	190	375	320	-	350	
13 ^{*)}	150	245	200	130	245	200	100	210	165	365	410	415	350	-	430	-	150	350	
15 ^{**)}	180	290	240	150	250	200	125	250	200	360	410	50	430	-	430	-	120	450	
17 ^{**)}	200	330	280	170	290	240	140	250	200	400	450	550	430	-	470	-	150	445	
19 ^{**)}	220	340	290	190	340	290	160	300	250	440	490	630	475	-	510	-	190	445	



规格 Size	齿轮箱 / Gear units													
	a	b	c	E	h ₋₁	h ₅	H	m ₁	m ₂	m ₃	n ₁	n ₂	s	
3	420	200	28	130	200	85	375	310	-	160	55	110	19	
5	580	285	35	185	290	100	525	440	-	240	70	160	24	
7	690	375	45	225	350	75	625	540	-	315	75	195	28	
9	805	425	50	265	420	50	735	625	-	350	90	225	35	
11	960	515	60	320	500	40	875	770	-	440	95	280	35	
13	1100	580	70	370	580	40	1020	870	-	490	115	315	42	
15	1295	545	80	442	600	10	1115	1025	-	450	135	370	48	
17	1410	615	80	490	670	-	1235	1170	130	530	120	425	42	
19	1590	690	90	555	760	-	1395	1290	150	590	150	465	48	

单级传动, 卧式安装, 类型 H1SH, 规格 3-19
Single Stage, Horizontal, Type H1SH, Sizes 3-19



规格 Size	H1SH		
	d ₂	l ₂	G ₂
3	60	125	170
5	85	160	210
7	105	200	250
9	125	210	270
11	150	240	320
13	180	310	360
15	220	350	360
17	240	400	400
19	270	450	440

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	冷却盘管 / Cooling coil				
	轴封 Shaft seal	迷宫式 密封 Laby- rinth seal		规格 Size	b ₁₀	e ₁₀	h ₁₀	L / min ^{x)}
3	7	5.5	128	3	48	205	74	4
5	22	19	302	5	88	270	90	4
7	42	36	547	7	124	310	135	4
9	68	60	862	9	116	365	110	8
11	120	106	1515	11	146	425	130	8
13	175	155	2395	13	152	480	150	8
15	190	156	3200	15	172	560	130	8
17	270	225	4250	17	202	600	145	8
19	390	330	5800	19	敬请垂询 / On request			

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

1) 轴:

- m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页
- 在安装地脚螺栓前应先拆下风扇罩。

2) 参考值: 准确的数据应根据与合同相关的文件确定

轴封见第 142-144 页

**) 未注油时

Dimensions in mm

1) Shafts:

- m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

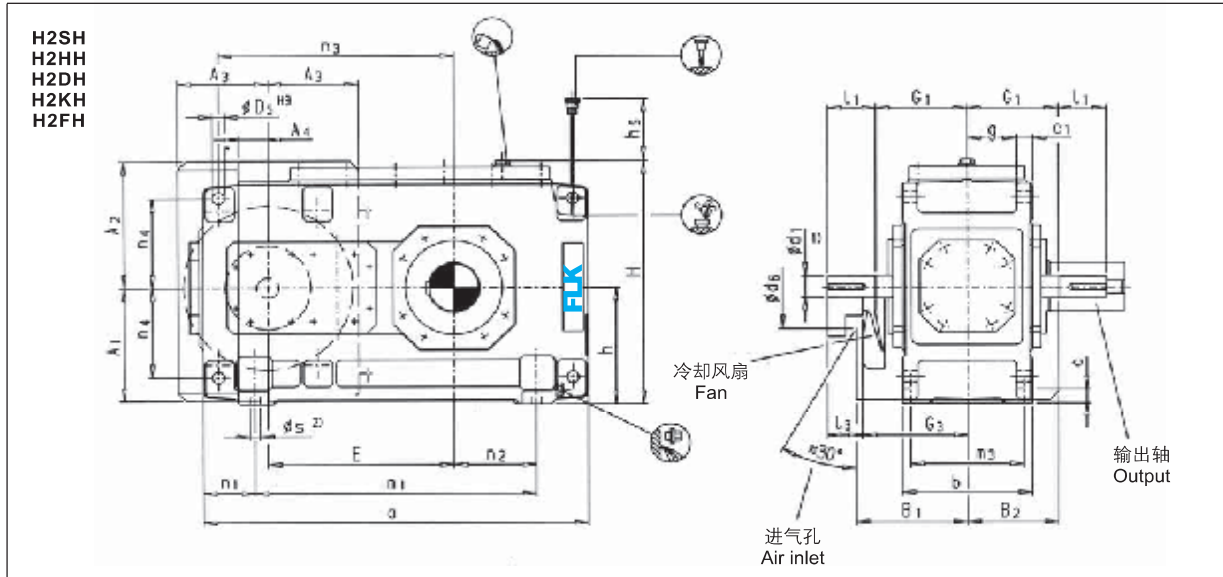
2) Remove air guide cover before fitting the foundation bolts.

*) Approximate values; exact data acc. to order-related documentation

For shaft seals, see pages 142-144

**) Without oil filling

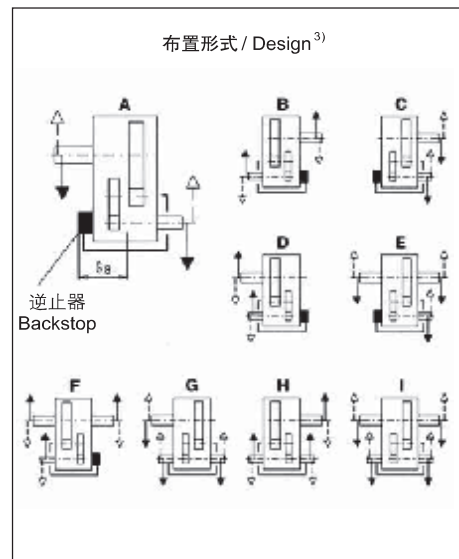
两级传动, 卧式安装, 类型 H2.H, 规格 4-12
Two Stage, Horizontal, Type H2.H, Sizes 4-12



规格 Size	输入轴 / Input						G ₁ G ₃		3) 布置形式 / Design G, H, I 仅用于 / only for in=		冷却风扇 / Fan						
	in=6.3-11.2			in=12.5-22.4							A ₁	A ₂	A ₃	A ₄	B ₁	B ₂	d ₆
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃											
4	45	100	80	32	80	60	170	190	6.3-18		195	225	150	30	205	158	136
5 + 6	50	100	80	38	80	60	195	215	6.3-18	8-22.4	225	260	175	55	230	178	150
7 + 8	60	135	105	50	110	80	210	240	6.3-16	8-20	272	305	210	70	255	210	200
9 + 10	75	140	110	60	140	110	240	270	6.3-16	8-20	312	355	240	100	285	245	200
11 + 12	90	165	130	70	140	105	275	310	6.3-18	8-22.4	372	420	285	135	325	285	210

规格 Size	齿轮箱 / Gear units									
	b	c	c ₁	D ₅	g	h ₋₁	m ₃	n ₁	n ₄	s
4	215	28	30+1	24	77.5	200	180	105	150	19
5 + 6	255	28	30+1	24	97.5	230	220	105	180	19
7 + 8	300	35	36+1	28	114	280	260	120	215	24
9 + 10	370	40	45+1.5	36	140	320	320	145	245	28
11 + 12	430	50	54+1.5	40	161	380	370	165	300	35

规格 Size	齿轮箱 / Gear units							逆止器 Backstop G ₈ ⁷
	a	E	h ₅	H	m ₁	n ₂	n ₃	
4	565	270	110	415	355	85	345	207
5	640	315	150	482	430	100	405	253
6	720	350	150	482	510	145	440	253
7	785	385	190	572	545	130	500	280
8	890	430	190	582	650	190	545	280
9	925	450	205	662	635	155	585	331
10	1025	500	215	662	735	205	635	331
11	1105	545	250	782	775	180	710	392
12	1260	615	250	790	930	265	780	392

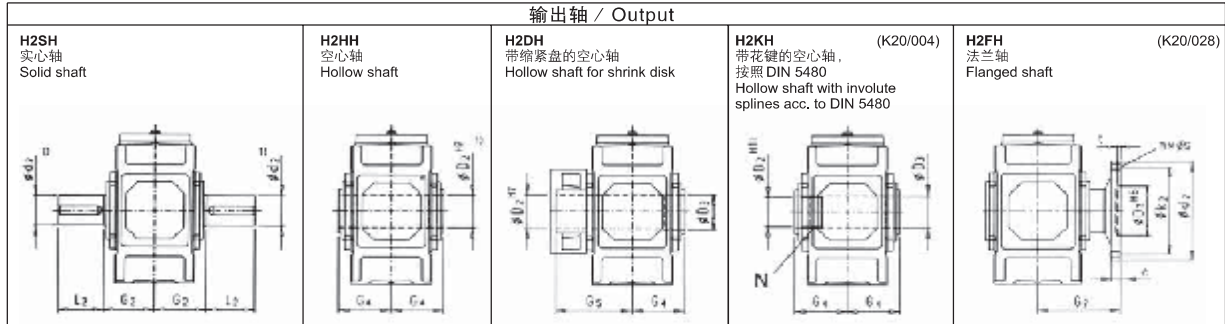


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

两级传动, 卧式安装, 类型 H2.H, 规格 4-12

Two Stage, Horizontal, Type H2.H, Sizes 4-12



规格 Size	H2SH			H2HH		H2DH				H2KH				H2FH							
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
4	80	170	140	80	140	85	85	140	205	-	-	-	-	-	-	-	-	-	-	-	-
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16x22	10	255	
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18x22	10	255	
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16x26	10	300	
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18x26	10	300	
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20x26	12	350	
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22x26	12	350	
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18x33	12	400	
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22x33	12	400	

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	轴封 Shaft seal	迷宫式 密封 Laby- rinth seal	H2SH H2HH H2DH H2KH	H2FH
4	10	7	190	-
5	15	11	300	335
6	16	12	355	395
7	27	21	505	555
8	30	23	590	645
9	42	33	830	915
10	45	34	960	1050
11	71	58	1335	1465
12	76	60	1615	1755

冷却盘管 / Cooling coil

规格 Size	b ₁₀	e ₁₀	h ₁₀	x) L / min
4	34	155	60	4
5	68	170	64	4
6	70	215	68	4
7	100	210	83	4
8	100	270	83	4
9	140	245	110	8
10	100	295	95	8
11	110	275	95	8
12	200	360	109	8

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

1) 轴:

- m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第110-119页

2) 在安装地脚螺栓前应先拆下风扇罩。

3) 方案:

- 逆止器不能与布置形式 G、H 和 I 组合。

*) 参考值; 准确的数据应根据与合同相关的文件确定

轴封见第142-144页

**) 未注油时

Dimensions in mm

1) Shafts:

- m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

2) Remove air guide cover before fitting the foundation bolts.

3) Variants:

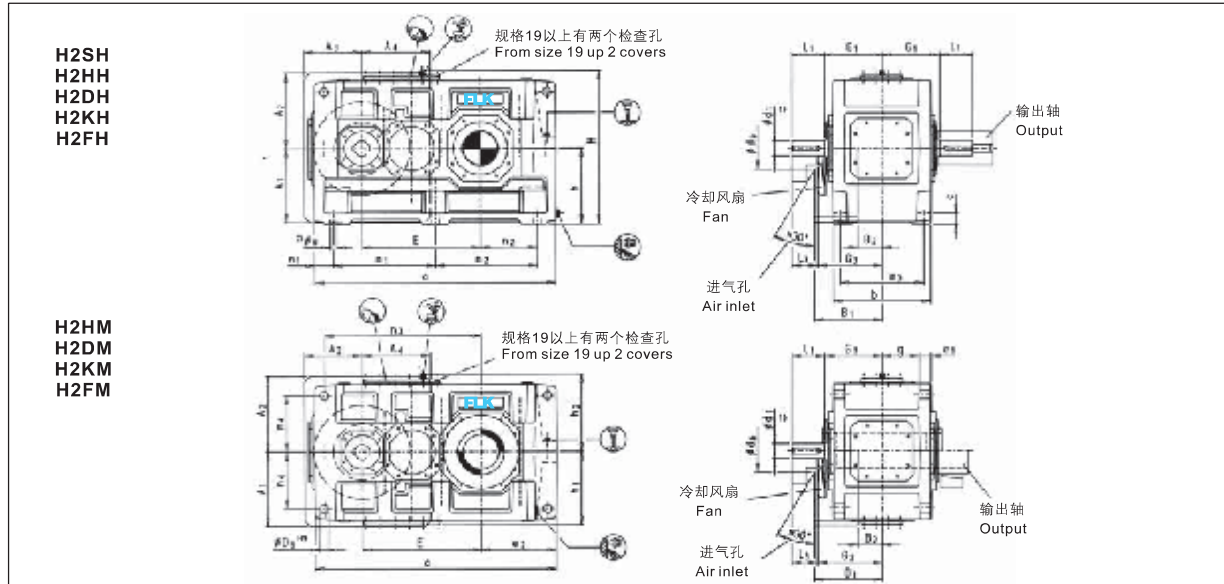
- Backstop not possible with G, H and I designs.

*) Approximate values; exact data acc. to order-related documentation

For shaft seals, see pages 142-144

**) Without oil filling

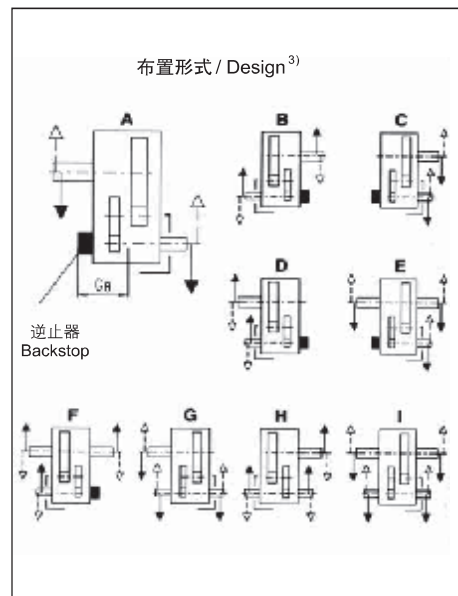
两级传动, 卧式安装, 类型 H2.H, H2.M, 规格 13-22
Two Stage, Horizontal, Type H2.H, H2.M, Sizes 13-22



规格 Size	输入轴 / Input								布置形式 ³⁾ Design G, H, I 仅用于 / only for i _N =		冷却风扇 / Fan						
	i _N =6.3-11			i _N =12.5-20			G ₁	G ₃			A ₁	A ₂	A ₃	A ₄	B ₁	B ₂	d ₆
	i _N =7.1-12.5			i _N =14-22.5													
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	6.3-16				7.1-18		6.3-16		7.1-18		
13 + 14	100	205	170	85	170	135	330	365	6.3-16	8-20	430	460	330	365	385	135	250
15 + 16	120	210	165	100	210	165	365	410	6.3-16	7.1-18	490	500	370	440	430	155	280
17 + 18	125	245	200	110	210	165	420	465	6.3-16	7.1-18	540	565	435	505	485	140	280
19 + 20	150	245	200	120	210	165	475	520	敬请垂询 On request		600	600	500	450	540	190	310
21 + 22	170	290	240	140	250	200	495	545	敬请垂询 On request		680	680	500	610	565	200	450

规格 Size	齿轮箱 / Gear units												
	b	c	c ₁	D ₅	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
13 + 14	550	60	61+2	48	211.5	440	450	460	475	100	340	35	
15 + 16	625	70	72+2	55	238	500	490	500	535	120	375	42	
17 + 18	690	80	81+2	55	259	550	555	560	600	135	425	42	
19 + 20	790	90	91+2	65	299	620	615	620	690	155	475	48	
21 + 22	830	100	100+2	75	310	700	685	690	720	170	520	56	

规格 Size	齿轮箱 / Gear units								逆止器 Backstop G ₈
	a	e ₂	E	H	m ₁	m ₂	n ₂	n ₃	
13	1290	405	635	900	545	545	305	835	448
14	1430	475	705	900	545	685	375	905	448
15	1550	485	762	1000	655	655	365	1005	527
16	1640	530	808	1000	655	745	410	1050	527
17	1740	525	860	1110	735	735	390	1145	576
18	1860	585	920	1110	735	855	450	1205	576
19	2010	590	997	1240	850	850	435	1345	670
20	2130	650	1057	1240	850	970	495	1405	670
21	2140	655	1067	1390	900	900	485	1400	690
22	2250	710	1122	1390	900	1010	540	1455	690

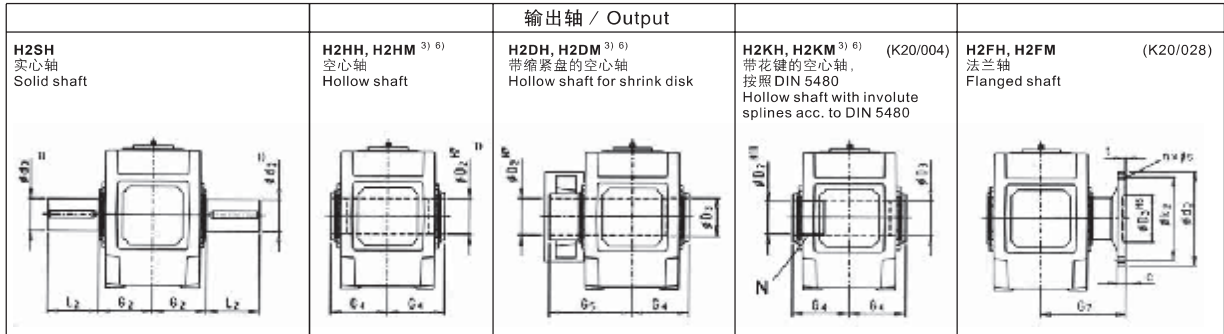


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

两级传动, 卧式安装, 类型 H2.H, H2.M, 规格 13-22

Two Stage, Horizontal, Types H2.H, H2.M, Sizes 13-22



规格 Size	H2SH			H2HH, H2HM		H2DH, H2DM				H2KH, H2KM				H2FH, H2FM						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26x39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30x39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32x39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28x45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28x45	20	710

规格 Size	润滑油量 Oil quantity (l) ¹⁾		重量 Weight (kg) ²⁾				
	H2.H 轴封 Shaft seal	H2.M 迷宫式 密封 Laby- rinth seal	H2SH H2HH H2DH H2KH	H2HM H2KM H2DM	H2FH H2FM		
13	135	120	110	2000	1880	2160	2040
14	140	130	115	2570	2430	2740	2600
15	210	190	160	3430	3240	3670	3480
16	215	200	165	3655	3465	3910	3720
17	290	260	230	4650	4420	4950	4720
18	300	270	240	5125	4870	5475	5220
19	320	-	300	6600	6300	敬请垂询 On request	
20	340	-	320	7500	7200		
21	320	-	350	8900	8400		
22	340	-	370	9600	9200		

冷却盘管 / Cooling coil

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

规格 Size	b ₁₀	e ₁₀	e ₁₁	h ₁₀	h ₁₁	x) L/min
13	252	455	335	116	300	8
14	252	525	405	116	300	8
15	290	535	395	119	335	8
16	290	580	440	119	335	8
17	340	575	425	134	380	8
18	340	635	485	134	380	8
19	敬请垂询 On request					
20						
21						
22						

尺寸以 mm 为单位

1) 轴:

- $m_s \leq \phi 100$; $n_s > \phi 100$
- 平键槽按照 DIN 6885/1
- 轮毂槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

2) 在安装地脚螺栓前应先拆下风扇罩。

3) 方案:

- 逆止器不能与布置形式 G、H 和 I 组合。
- 轴装式齿轮箱 (H2.M) 不能配置迷宫式密封。

6) 规格 13 和 15: 仅用于 $iN=6.3-18$; 规格 17 和 19: 仅用于 $iN=6.3-16$

*) 参考值; 准确的数据应根据与合同相关的文件确定, 轴封见第 142-144 页

***) 未注油时

Dimensions in mm

1) Shafts:

- $m_s \leq \phi 100$; $n_s > \phi 100$
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

2) Remove air guide cover before fitting the foundation bolts.

3) Variants:

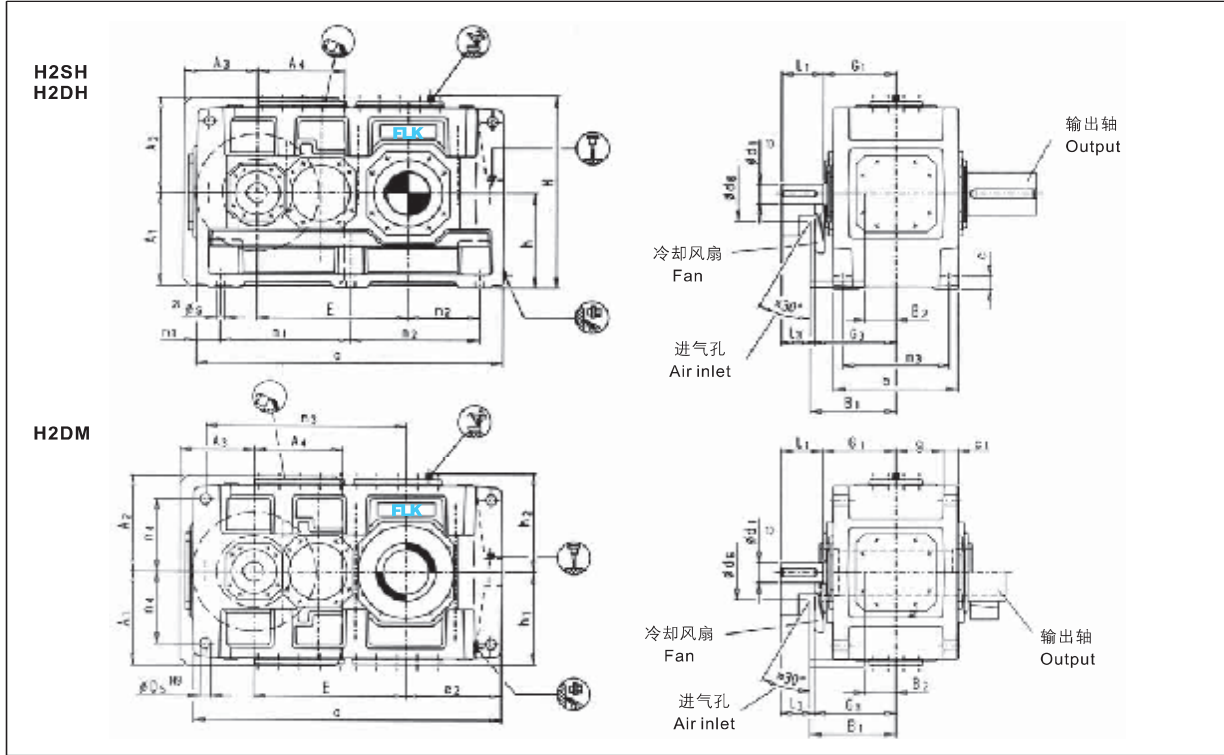
- Backstop not possible with G, H and I designs.
- Shaft-mounted gear unit (H2.M) not with laby-rinth seal.

6) Sizes 13 and 15: only $iN=6.3-18$, Sizes 17 and 19: only $iN=6.3-16$

*) Approximate values; exact data acc. to order-related documentation. For shaft seals, see pages 142-144

**) Without oil filling

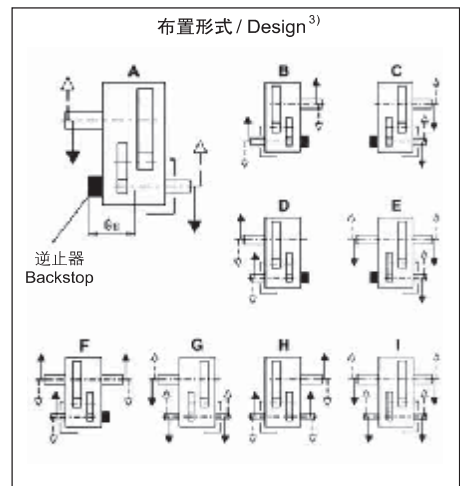
两级传动, 卧式安装, 类型 H2.H, H2DM, 规格 23-26
 Two Stage, Horizontal, Types H2.H, H2DM, Sizes 23-26



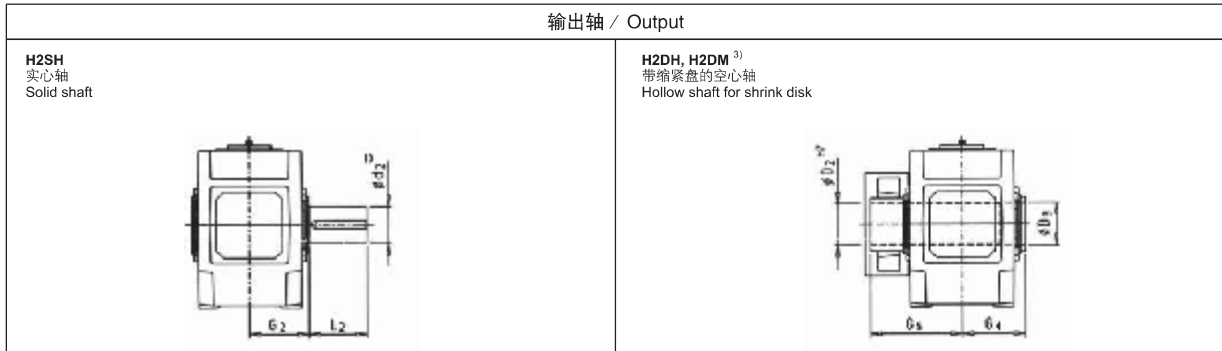
规格 Size	输入轴 / Input								布置形式 / Design G, H, I 仅用于 / only for $i_N =$	冷却风扇 / Fan						
	$i_N = 6.3 - 11.2$			$i_N = 12.5 - 20$			G_1	G_3		A ₁	A ₂	A ₃	A ₄	B ₁	B ₂	d ₆
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃										
23 + 24	190	330	280	150	250	200	560	610	敬请垂询 On request	770	770	550	550	630	220	450
25 + 26	200	340	290	170	300	250	600	650	敬请垂询 On request	845	865	550	550	670	240	450

规格 Size	齿轮箱 / Gear units												
	b	c	c ₁	D ₅	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
23 + 24	930	115	120	2	80	342	780	770	770	810	180	580	56
25 + 26	1045	130	120	2	90	400	860	860	860	910	200	660	66

规格 Size	齿轮箱 / Gear units								逆止器 Backstop G ₃
	a	e ₂	E	H	m ₁	m ₂	n ₂	n ₃	
23	2380	730	1185	1550	1010	1010	550	1560	敬请垂询 On request
24	2510	795	1250	1550	1010	1140	615	1625	
25	2580	790	1325	1720	1090	1090	590	1685	
26	2760	880	1415	1720	1090	1270	680	1775	



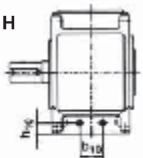
两级传动, 卧式安装, 类型 H2.H, H2DM, 规格 23–26
Two Stage, Horizontal, Types H2.H, H2DM, Sizes 23–26



规格 Size	H2SH			H2DH, H2DM			
	d ₂	l ₂	G ₂	D ₂	D ₃	G ₄	G ₅
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

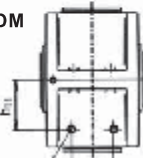
规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{*)}		冷却盘管 / Cooling coil	<table border="1" style="font-size: small;"> <thead> <tr style="background-color: #00AEEF; color: white;"> <th>规格 Size</th> <th>b₁₀</th> <th>e₁₀</th> <th>e₁₁</th> <th>h₁₀</th> <th>h₁₁</th> <th>x) L/min</th> </tr> </thead> <tbody> <tr> <td>23</td> <td colspan="6" rowspan="4" style="text-align: center; vertical-align: middle;"> 敬请垂询 On request </td> </tr> <tr><td>24</td></tr> <tr><td>25</td></tr> <tr><td>26</td></tr> </tbody> </table>	规格 Size	b ₁₀	e ₁₀	e ₁₁	h ₁₀	h ₁₁	x) L/min	23	敬请垂询 On request						24	25	26
	规格 Size	b ₁₀	e ₁₀	e ₁₁			h ₁₀	h ₁₁	x) L/min														
23	敬请垂询 On request																						
24																							
25																							
26																							
	H2SH	H2DH	H2SH H2DH	H2DM																			
23	430	470	11600	11000	冷却盘管适用于淡水、海水和稍有咸味的水 Cooling coil suitable for fresh, sea and brackish water																		
24	450	500	13000	12300																			
25	600	660	15500	14700																			
26	640	700	17200	16200																			

H2.H



输出轴
Output

H2DM



输出轴
Output

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

Dimensions in mm

1) 轴:

- n_s > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110–119 页

1) Shafts:

- n_s > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110–119

2) 在安装地脚螺栓前应先拆下风扇罩。

2) Remove air guide cover before fitting the foundation bolts.

3) 方案:

- 逆止器不能与布置形式 G、H 和 I 组合。
- 轴装式齿轮箱 (H2DM) 不能配置迷宫式密封。

3) Variants:

- Backstop not possible with G, H and I designs.
- Shaft-mounted gear unit (H2DM) not with laby-rinsh seal.

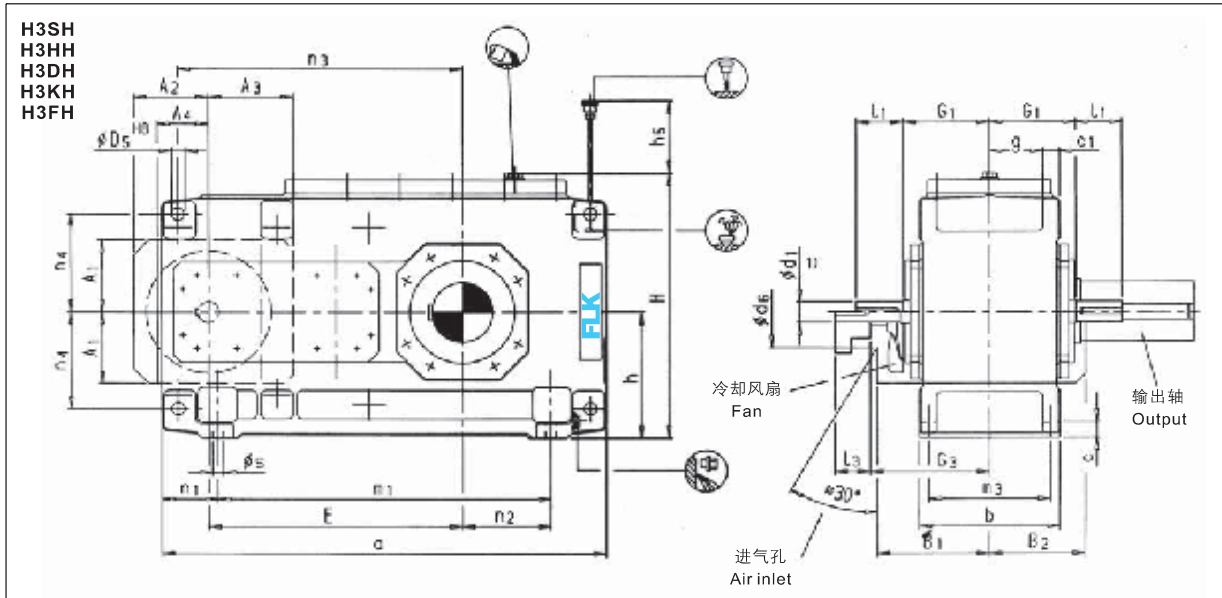
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

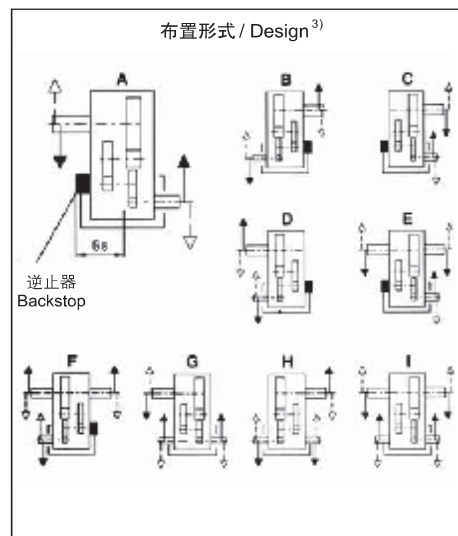
三级传动, 卧式安装, 类型 H3.H, 规格 5-12
 Three Stage, Horizontal, Type H3.H, Sizes 5-12



规格 Size	输入轴 / Input										布置形式 / Design G, H, I 仅用于 / only for $i_N =$		冷却风扇 / Fan							
	$i_N=25-45$			$i_N=50-63$			$i_N=71-90$			G_1			G_3	A_1	A_2	A_3	A_4	B_1	B_2	d_6
	d_1	l_1	l_3	d_1	l_1	l_3	d_1	l_1	l_3											
5 + 6	40	70	70	30	50	50	24	40	40	160	220	25-90	31.5-112	137	135	140	140	215	175	60
7 + 8	45	80	80	35	60	60	28	50	50	185	250	25-90	31.5-112	157	160	180	180	245	205	75
9 + 10	60	125	105	45	100	80	32	80	60	230	300	25-90	31.5-112	182	190	205	205	295	240	90
11 + 12	70	120	120	50	80	80	42	70	70	255	330	25-90	31.5-112	218	220	255	255	325	280	100

规格 Size	齿轮箱 / Gear units										
	b	c	c_1	D_5	g	h_{-1}	m_3	n_1	n_4	s	
5 + 6	255	28	30	1	24	97.5	230	220	105	180	19
7 + 8	300	35	36	1	28	114	280	260	120	215	24
9 + 10	370	40	45	1.5	36	140	320	320	145	245	28
11 + 12	430	50	54	1.5	40	161	380	370	165	300	35

规格 Size	齿轮箱 / Gear units							
	a	E	h_5	H	m_1	n_2	n_3	逆止器 Backstop G_8
5	690	405	130	482	480	100	455	234
6	770	440	130	482	560	145	490	234
7	845	495	170	572	605	130	560	287
8	950	540	160	582	710	190	605	287
9	1000	580	185	662	710	155	660	317
10	1100	630	185	662	810	205	710	317
11	1200	705	180	782	870	180	805	369
12	1355	775	170	790	1025	265	875	369

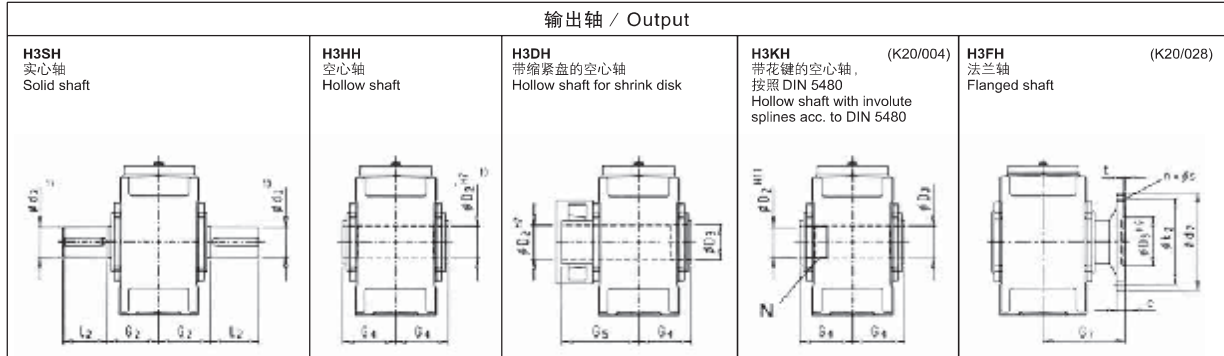


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 卧式安装, 类型 H3.H, 规格 5-12

Three Stage, Horizontal, Type H3.H, Sizes 5-12



规格 Size	H3SH			H3HH		H3DH				H3KH				H3FH									
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480				c	d ₂	D ₃	k ₂	n x s	t	G ₇			
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H				89	100	165	25	300	150	260	16x22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H				89	110	165	25	320	160	280	18x22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H				114	120	195	30	370	180	320	16x26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H				114	130	195	30	390	190	340	18x26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H				134	145	235	38	430	220	380	20x26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H				134	155	235	38	470	240	420	22x26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H				160	170	270	42	510	260	450	18x33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H				160	185	270	42	540	280	480	22x33	12	400

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{**)}		冷却盘管 / Cooling coil		规格 Size	b ₁₀	e ₁₀	h ₁₀	x) L/min
		H3SH H3HH H3DH H3KH	H3FH	输出轴 Output	冷却盘管接口尺寸 G1/2' Water connection for cooling coil G 1/2'					
5	15	320	355			5	70	175	60	4
6	17	365	405			6	70	220	69	4
7	28	540	590			7	80	210	86	4
8	30	625	675			8	80	270	86	4
9	45	875	960			9	150	245	107	4
10	46	1020	1110			10	90	295	95	4
11	85	1400	1530			11	200	275	115	8
12	90	1675	1815			12	200	360	115	8

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

Dimensions in mm

1) 轴:

- k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

1) Shafts:

- k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

3) 方案:

- 逆止器不能与布置形式 G、H 和 I 组合

3) Variants:

- Backstop not possible with G, H and I designs.

*) 参考值; 准确的数据应根据与合同相关的文件确定

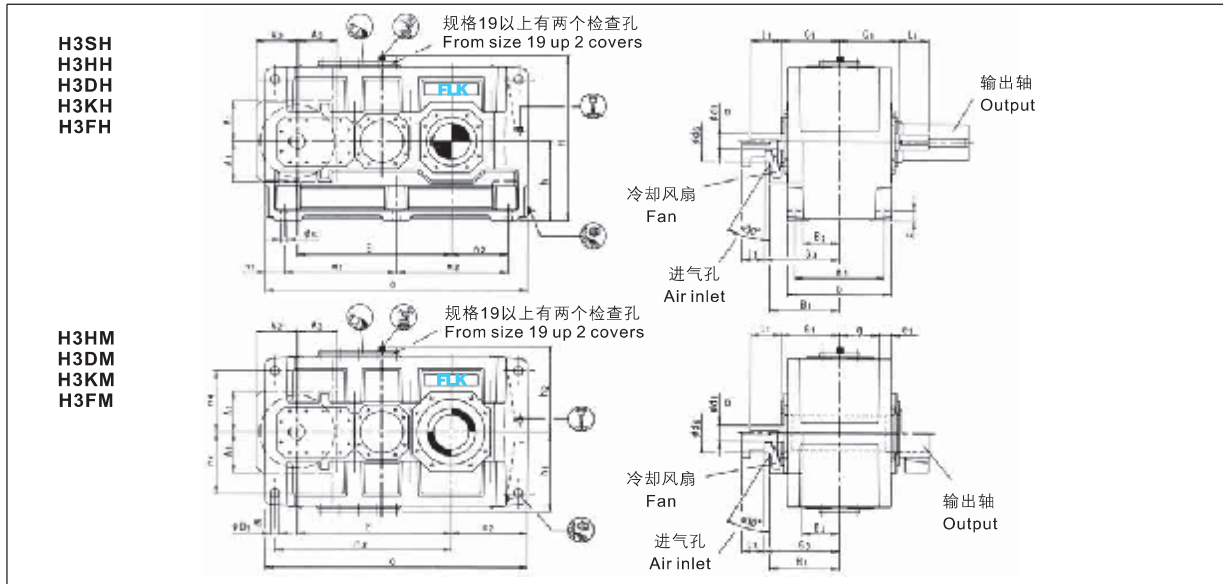
*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

三级传动, 卧式安装, 类型 H3.H, H3.M, 规格 13-22

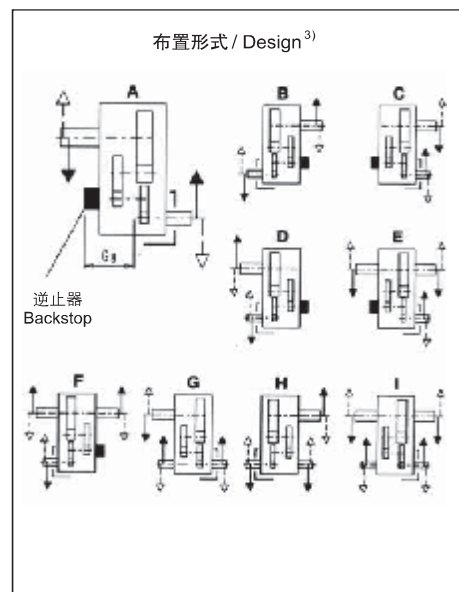
Three Stage, Horizontal, Types H3.H, H3.M, Sizes 13-22



规格 Size	输入轴 / Input											布置形式 / Design G, H, I 仅用于 / only for in=		冷却风扇 / Fan					
	in=22.4-45			in=50-63			in=71-90			G ₁	G ₃			A ₁	A ₂	A ₃	B ₁	B ₂	d ₆
	in=25-50			in=56-71			in=80-100												
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	敬请垂询 / On request									
13 + 14	85	160	130	60	135	105	50	110	80	310	385	22.4-90	28-112	225	225	212	380	195	120
15 + 16	100	200	165	75	140	105	60	140	105	350	420	22.4-90	25-100	270	265	252	415	205	150
17 + 18	100	200	165	75	140	105	60	140	105	380	450	22.4-90	25-100	270	265	252	455	235	150
19 + 20	110	200	-	90	165	-	75	140	-	430	-	敬请垂询 / On request							
21 + 22	130	240	-	110	205	-	90	170	-	470	-								

规格 Size	齿轮箱 / Gear units												
	b	c	c ₁	D ₅	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
13 + 14	550	60	61	2	48	211.5	440	450	460	475	100	340	35
15 + 16	625	70	72	2	55	238	500	490	500	535	120	375	42
17 + 18	690	80	81	2	55	259	550	555	560	600	135	425	42
19 + 20	790	90	91	2	65	299	620	615	620	690	155	475	48
21 + 22	830	100	100	2	75	310	700	685	690	720	170	520	56

规格 Size	齿轮箱 / Gear units									逆止器 Backstop G ₃
	a	e ₂	E	H	m ₁	m ₂	n ₂	n ₃		
13	1395	405	820	900	597.5	597.5	305	940		457
14	1535	475	890	900	597.5	737.5	375	1010		457
15	1680	485	987	1000	720	720	365	1135		522
16	1770	530	1033	1000	720	810	410	1180		522
17	1770	525	1035	1110	750	750	390	1175		534
18	1890	585	1095	1110	750	870	450	1235		534
19	2030	590	1190	1240	860	860	435	1365		614
20	2150	650	1250	1240	860	980	495	1425		614
21	2340	655	1387	1390	1000	1000	485	1600		635
22	2450	710	1442	1390	1000	1110	540	1655		635

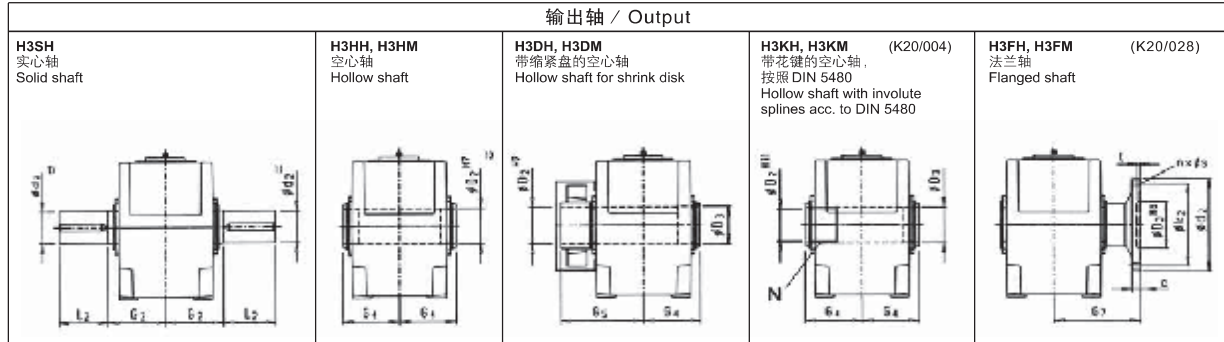


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 卧式安装, 类型 H3.H, H3.M, 规格 13-22

Three Stage, Horizontal, Types H3.H, H3.M, Sizes 13-22



规格 Size	H3SH			H3HH,H3HM		H3DH,H3DM				H3KH,H3KM				H3FH,H3FM						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26x39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request	65	860	460	770	30x39	18	670			
20	300	500	465	-	-	310	315	465	670		65	930	460	830	32x39	18	670			
21	320	500	490	-	-	330	335	490	715		75	950	520	850	28x45	20	710			
22	340	550	490	-	-	340	345	490	725		75	1040	520	940	28x45	20	710			

规格 Size	润滑油量 Oil quantity (l) ¹⁾		重量 Weight (kg) ²⁾			
	H3.H	H3.M	H3SH H3HH H3DH H3KH	H3HM H3KM H3DM	H3FH	H3FM
13	160	125	2295	2155	2455	2305
14	165	130	2625	2490	2795	2660
15	235	190	3475	3260	3715	3500
16	245	195	3875	3625	4130	3880
17	305	240	4560	4250	4860	4550
18	315	250	5030	4740	5380	5090
19	420	390	6700	6200	敬请垂询 On request	
20	450	415	8100	7600		
21	470	515	9100	8500		
22	490	540	9800	9300		

冷却盘管 / Cooling coil		规格 Size					
H3.H	H3.M	b ₁₀	e ₁₀	e ₁₁	h ₁₀	h ₁₁	x)
13	14	252	460	335	116	300	8
15	16	252	530	405	116	300	8
17	18	290	540	395	119	335	8
19	20	290	585	440	119	335	8
21	22	300	580	425	134	380	8
							敬请垂询 On request

冷却盘管接口尺寸 G 1/2"
Water connection for cooling coil G 1/2"

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

1) 轴:

- m_s ≤ φ 100; n_s > φ 100
- 平键槽按照 DIN 6885/1
轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

3) 方案:

- 逆止器不能与布置形式 G、H 和 I 组合

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

- m_s ≤ φ 100; n_s > φ 100
- Keyway acc. to DIN 6885/1
Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

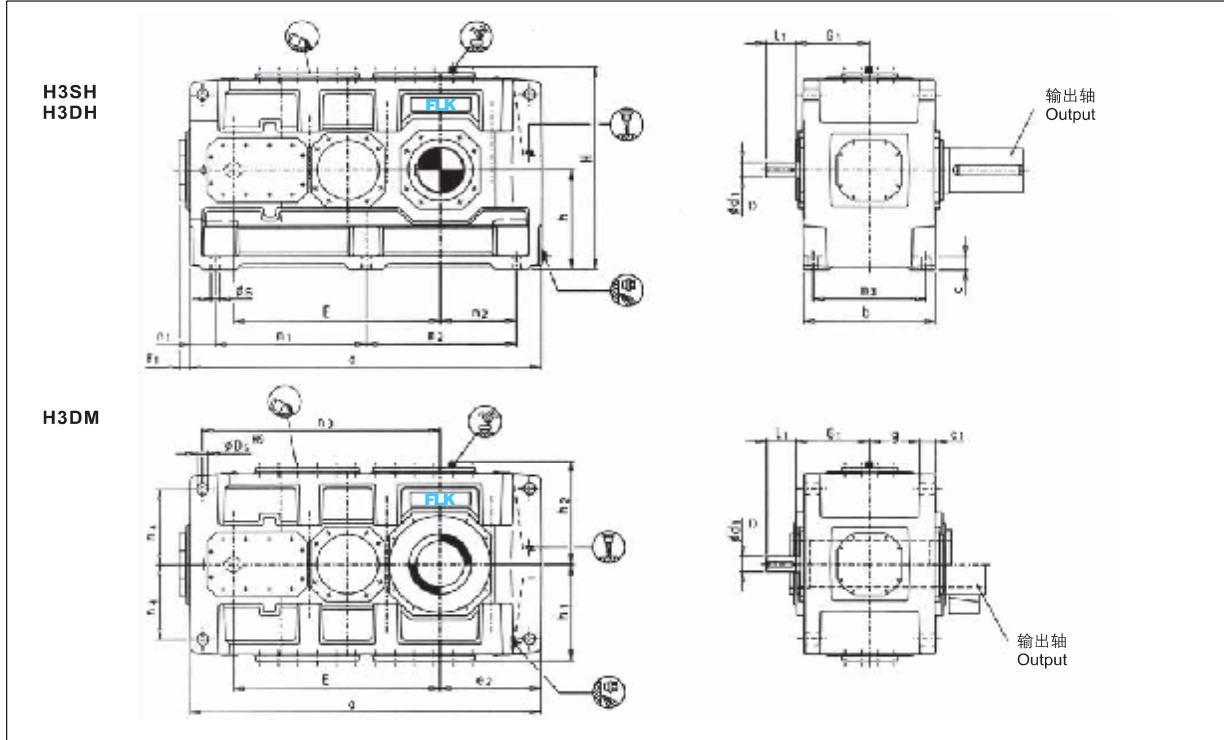
3) Variants:

- Backstop not possible with G, H and I designs.

*) Approximate values; exact data acc. to order-related documentation

**) Without oil filling

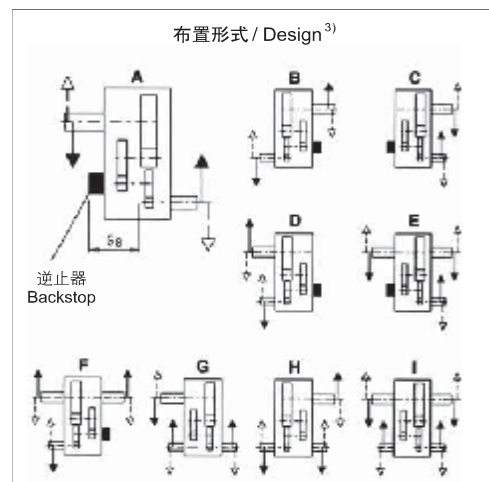
三级传动, 卧式安装, 类型 H3.H, H3DM, 规格 23-26
 Three Stage, Horizontal, Types H3.H, H3DM, Sizes 23-26



规格 Size	输入轴 / Input							G ₁	布置形式 / Design G, H, I 仅用于 / only for i _N =
	i _N =22.4-45		i _N =50-63		i _N =71-90				
	d ₁	l ₁	d ₁	l ₁	d ₁	l ₁			
23 + 24	130	240	110	205	90	170	510	敬请垂询 / On request	
25 + 26	150	245	130	245	100	210	570		

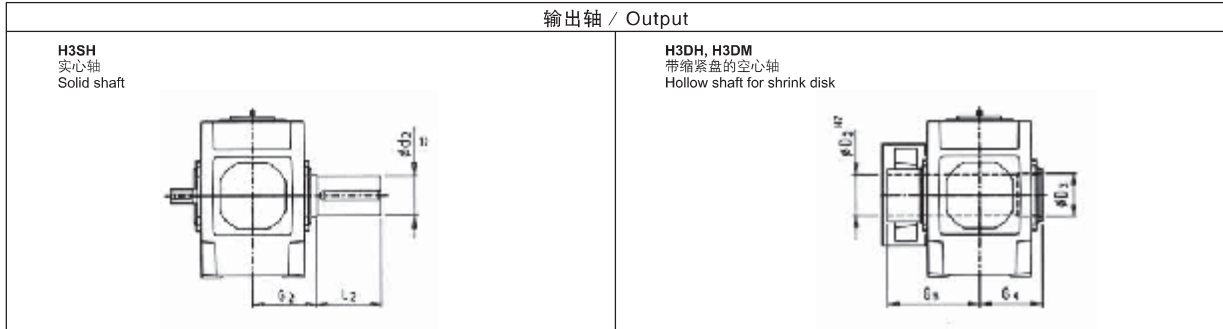
规格 Size	齿轮箱 / Gear units												
	b	c	c ₁	D ₅	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
23+24	930	115	120	2	80	342	780	770	790	810	180	580	56
25+26	1045	130	120	2	90	400	860	860	860	910	200	660	66

规格 Size	齿轮箱 / Gear units										逆止器 Backstop G ₆
	a	e ₂	E	f ₁	H	m ₁	m ₂	n ₂	n ₃		
23	2530	730	1505	35	1570	1085	1085	550	1725	敬请垂询 相关尺寸 Dimensions On request	
24	2660	795	1570	35	1570	1085	1215	615	1790		
25	2830	790	1695	65	1720	1215	1215	590	1965		
26	3010	880	1785	65	1720	1215	1395	680	2055		



三级传动, 卧式安装, 类型 H3.H, H3DM, 规格 23-26

Three Stage, Horizontal, Types H3.H, H3DM, Sizes 23-26



规格 Size	H3SH			H3DH, H3DM			
	d ₂	l ₂	G ₂	D ₂	D ₃	G ₄	G ₅
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	H3SH	H3DM	H3SH H3DH	H3DM
23	620	690	11500	10600
24	650	725	13400	12500
25	880	970	16100	15200
26	935	1030	17600	16500

冷却盘管 / Cooling coil

H3.H

输出轴
Output

H3DM

输出轴
Output

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

规格 Size	b ₁₀	e ₁₀	e ₁₁	h ₁₀	h ₁₁	x) L/min
23	敬请垂询 On request					
24						
25						
26						

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量
Required cooling water quantity

尺寸以 mm 为单位

Dimensions in mm

1) 轴:

- m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

1) Shafts:

- m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

3) 方案:

- 逆止器不能与布置形式 G、H 和 I 组合

3) Variants:

- Backstop not possible with G, H and I designs.

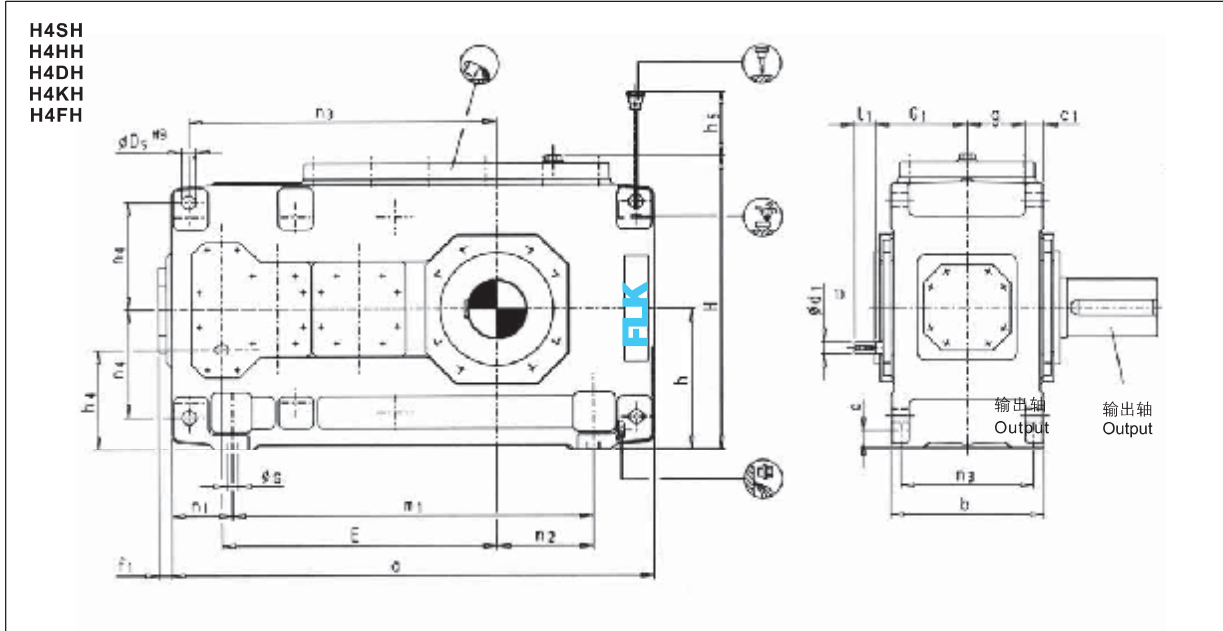
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

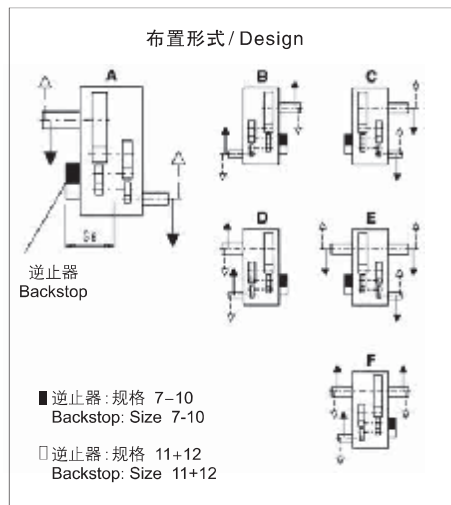
四级传动, 卧式安装, 类型 H4.H, 规格 7-12
 Four Stage, Horizontal, Type H4.H, Sizes 7-12



规格 Size	输入轴 / Input				
	iN=100-180 iN=125-224		iN=200-355 iN=250-450		G ₁
	d ₁	l ₁	d ₁	l ₁	
7 + 8	30	50	24	40	180
9 + 10	35	60	28	50	215
11 + 12	45	100	32	80	250

规格 Size	齿轮箱 / Gear units											
	b	c	c ₁	D ₅	g	h ₋₁	h ₄	m ₃	n ₁	n ₄	s	
7 + 8	300	35	36	1	28	114	280	200	260	120	215	24
9 + 10	370	40	45	1.5	36	140	320	230	320	145	245	28
11 + 12	430	50	54	1.5	40	161	380	270	370	165	300	35

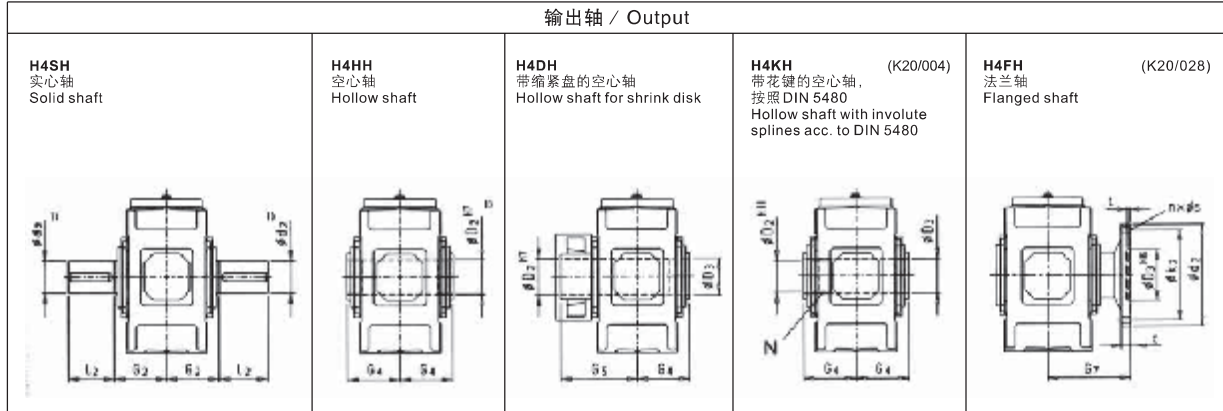
规格 Size	齿轮箱 / Gear units								逆止器 Backstop Ga ^{*)}
	a	E	f ₁	h ₅	H	m ₁	n ₂	n ₃	
7	845	495	37	140	572	605	130	560	286
8	950	540	37	140	582	710	190	605	286
9	1000	580	43	150	662	710	155	660	317
10	1100	630	43	150	662	810	205	710	317
11	1200	705	47	165	782	870	180	805	333
12	1355	775	47	165	790	1025	265	875	333



+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

四级传动, 卧式安装, 类型 H4.H, 规格 7-12
 Four Stage, Horizontal, Type H4.H, Sizes 7-12



规格 Size	H4SH				H4HH		H4DH				H4KH				H4FH								
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480				D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H				114	120	195	30	370	180	320	16x26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H				114	130	195	30	390	190	340	18x26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H				134	145	235	38	430	220	380	20x26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H				134	155	235	38	470	240	420	22x26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H				160	170	270	42	510	260	450	18x33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H				160	185	270	42	540	280	480	22x33	12	400

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{**)}	
		H4SH H4HH H4DH H4KH	H4FH
7	25	550	600
8	27	645	700
9	48	875	960
10	50	1010	1100
11	80	1460	1590
12	87	1725	1865

尺寸以 mm 为单位

Dimensions in mm

1) 轴:

- k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

1) Shafts:

- k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

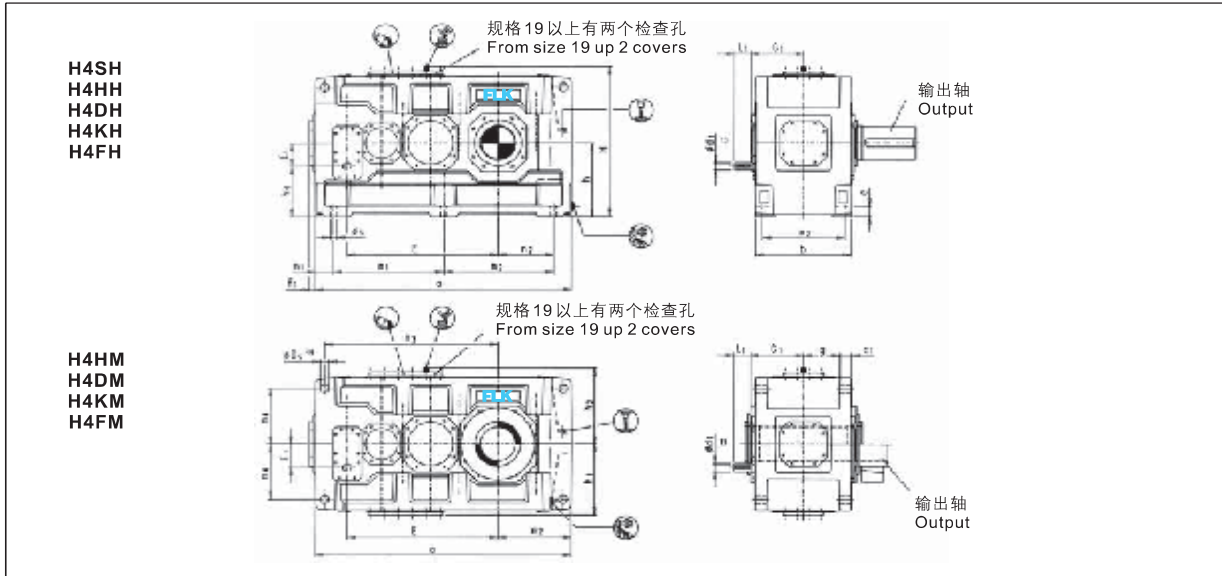
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

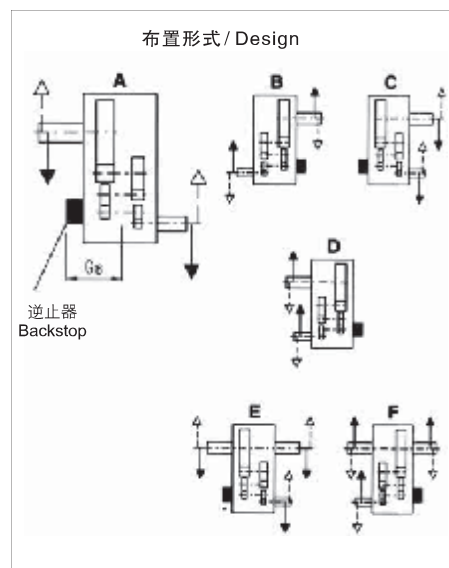
四级传动, 卧式安装, 类型 H4.H, H4.M, 规格 13-22
 Four Stage, Horizontal, Types H4.H, H4.M, Sizes 13-22



规格 Size	输入轴 / Input				G ₁
	i _N =100-180		i _N =200-355		
	i _N =112-200		i _N =224-400		
	d ₁	l ₁	d ₁	l ₁	
13 +14	50	100	38	80	305
15 +16	60	135	50	110	345
17 +18	60	105	50	80	380
19 +20	75	105	60	105	440
21 +22	90	165	70	140	460

规格 Size	齿轮箱 / Gear units												
	b	c	c ₁	D ₅	g	h ₋₁	h ₁	h ₄	h ₂	m ₃	n ₁	n ₄	s
13 +14	550	60	61+2	48	211.5	440	450	310	460	475	100	340	35
15 +16	625	70	72+2	55	238	500	490	340	500	535	120	375	42
17 +18	690	80	81+2	55	259	550	555	390	560	600	135	425	42
19 +20	790	90	91+2	65	299	620	615	435	620	690	155	475	48
21 +22	830	100	100+2	75	310	700	685	475	690	720	170	520	56

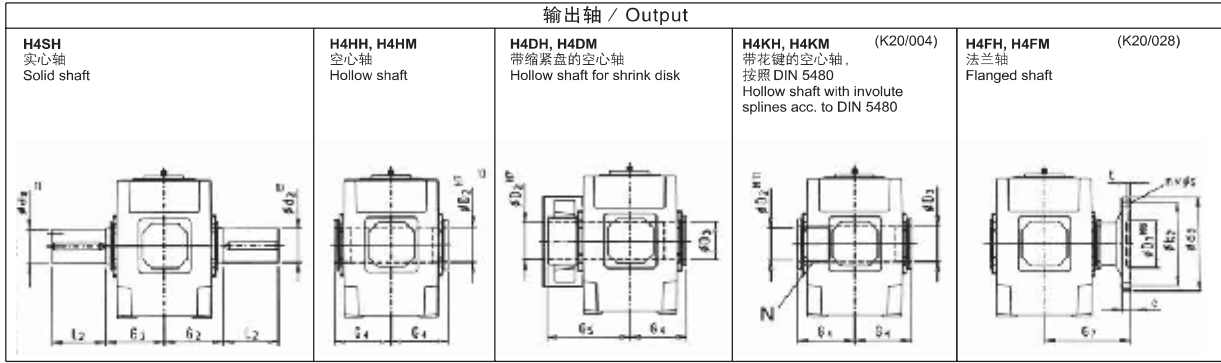
规格 Size	齿轮箱 / Gear units										逆止器 Backstop G ₃ +)
	a	e ₂	E	E ₁	f ₁	H	m ₁	m ₂	n ₂	n ₃	
13	1395	405	820	130	47	900	597.5	597.5	305	940	391
14	1535	475	890	130	47	900	597.5	737.5	375	1010	391
15	1680	485	987	160	56	1000	720	720	365	1135	487
16	1770	530	1033	160	56	1000	720	810	410	1180	487
17	1770	525	1035	160	53	1110	750	750	390	1175	487
18	1890	585	1095	160	53	1110	750	870	450	1235	487
19	2030	590	1190	185	53	1240	860	860	435	1365	590
20	2150	650	1250	185	53	1240	860	980	495	1425	590
21	2340	655	1387	225	62	1390	1000	1000	485	1600	610
22	2450	710	1442	225	62	1390	1000	1110	540	1655	610



+) 最大尺寸: 细节应根据与合同相关的文件确定。

+) Max. dimensions: details acc. to order-related documentation.

四级传动, 卧式安装, 类型 H4.H, H4.M, 规格 13-22
 Four Stage, Horizontal, Types H4.H, H4.M, Sizes 13-22



规格 Size	H4SH			H4HH, H4HM		H4DH, H4DM				H4KH, H4KM				H4FH, H4FM								
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480			D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H			180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H			180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H			210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H			210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H			240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H			240	285	415	60	800	410	710	26x39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request			65	860	460	770	30x39	18	670			
20	300	500	465	-	-	310	315	465	670				65	930	460	830	32x39	18	670			
21	320	500	490	-	-	330	335	490	715				75	950	520	850	28x45	20	710			
22	340	550	490	-	-	340	345	490	725				75	1040	520	940	28x45	20	710			

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}			
	H4.H	H4.M	H4SH H4HH H4DH H4KH	H4HM H4KM H4DM	H4FH	H4FM
13	130	120	2390	2270	2550	2430
14	140	125	2730	2600	2900	2770
15	230	170	3635	3440	3875	3680
16	235	175	3965	3740	4220	3995
17	290	225	4680	4445	4980	4745
18	305	230	5185	4915	5535	5265
19	430	310	6800	6300	敬请垂询 On request	
20	380	330	8200	7700		
21	395	430	9200	8600		
22	420	450	9900	9400		

尺寸以mm为单位

Dimensions in mm

- 1) 轴:
- $m_s \leq \phi 100$; $n_s > \phi 100$
 - 平键槽按照 DIN 6885/1
 - 轮毂键槽宽度按照 ISO JS9
 - 平键按照 DIN 6885/1 B型
 - 有关细节见第 110-119 页

- 1) Shafts:
- $m_s \leq \phi 100$; $n_s > \phi 100$
 - Keyway acc. to DIN 6885/1
 - Hub keyway width acc. to ISO JS9
 - Parallel key acc. to DIN 6885/1 form B
 - For details, see pages 110-119

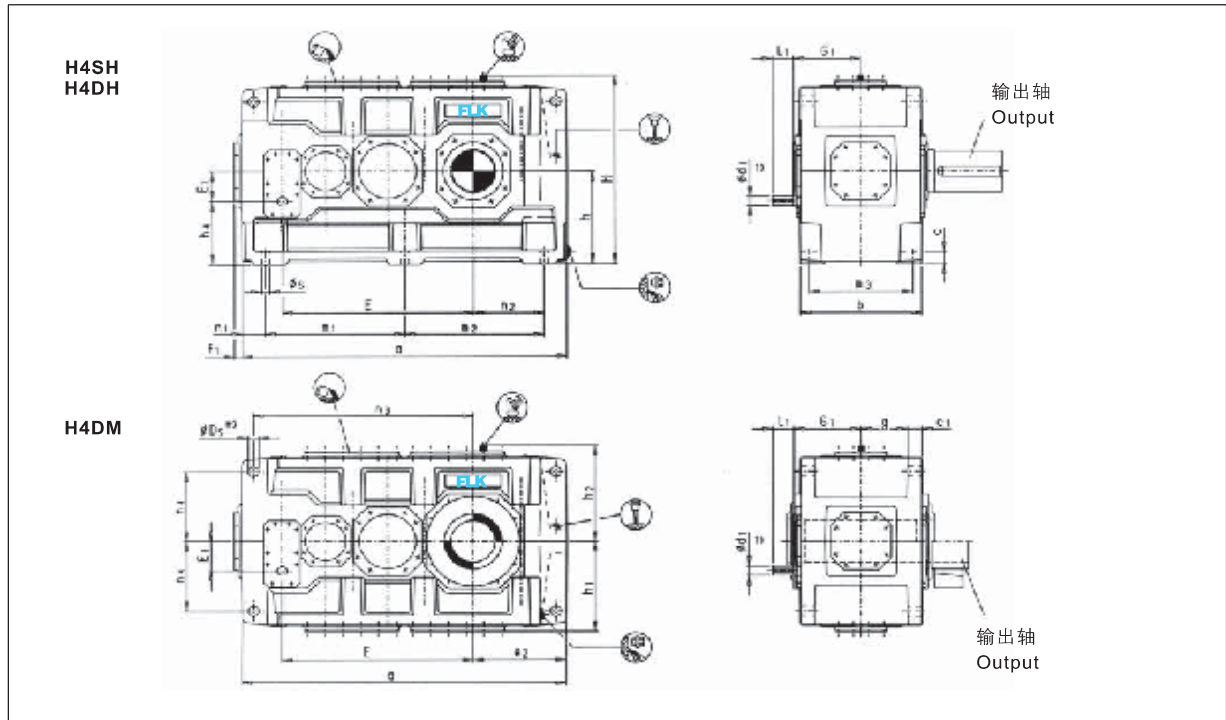
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

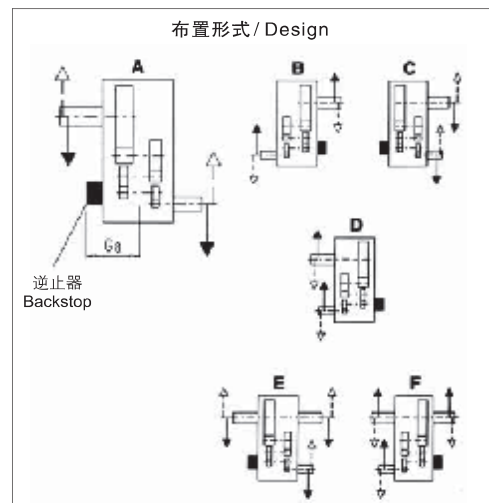
四级传动, 卧式安装, 类型 H4.H, H4DM, 规格 23-26
 Four Stage, Horizontal, Types H4.H, H4DM, Sizes 23-26



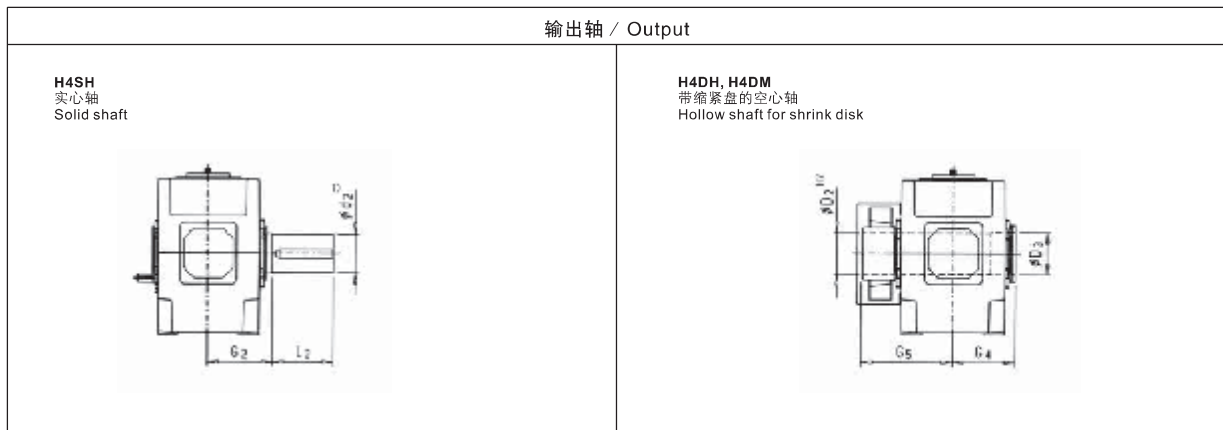
规格 Size	输入轴 / Input				
	iN=100-180		iN=200-355		G ₁
	iN=112-200		iN=224-400		
	d ₁	l ₁	d ₁	l ₁	
23 + 24	90	130	70	105	505
25 + 26	100	205	85	170	565

规格 Size	齿轮箱 / Gear units													
	b	c	c ₁	D ₅	g	h ₋₁	h ₁	h ₂	h ₄	m ₃	n ₁	n ₄	s	
23+24	930	115	120	2	80	342	780	770	790	555	810	180	580	56
25+26	1045	130	120	2	90	400	860	860	860	595	910	200	660	66

规格 Size	齿轮箱 / Gear units										逆止器 Backstop G ₈
	a	e ₂	E	E ₁	f ₁	H	m ₁	m ₂	n ₂	n ₃	
23	2530	730	1505	225	35	1570	1085	1085	550	1725	敬请垂询 相关尺寸 Dimensions On request
24	2660	795	1570	225	35	1570	1085	1215	615	1790	
25	2830	790	1695	265	65	1720	1215	1215	590	1965	
26	3010	880	1785	265	65	1720	1215	1395	680	2055	



四级传动, 卧式安装, 类型 H4.H, H4DM, 规格 23-26
 Four Stage, Horizontal, Types H4.H, H4DM, Sizes 23-26



规格 Size	H4SH			H4DH, H4DM			
	d ₂	l ₂	G ₂	D ₂	D ₃	G ₄	G ₅
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	H4SH	H4DM	H4SH H4DH	H4DM
23	520	500	11600	10700
24	550	600	13500	12600
25	735	800	16100	15200
26	780	850	17600	16500

尺寸以 mm 为单位

1) 轴:

- m_s ≤ φ 100; n_s > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

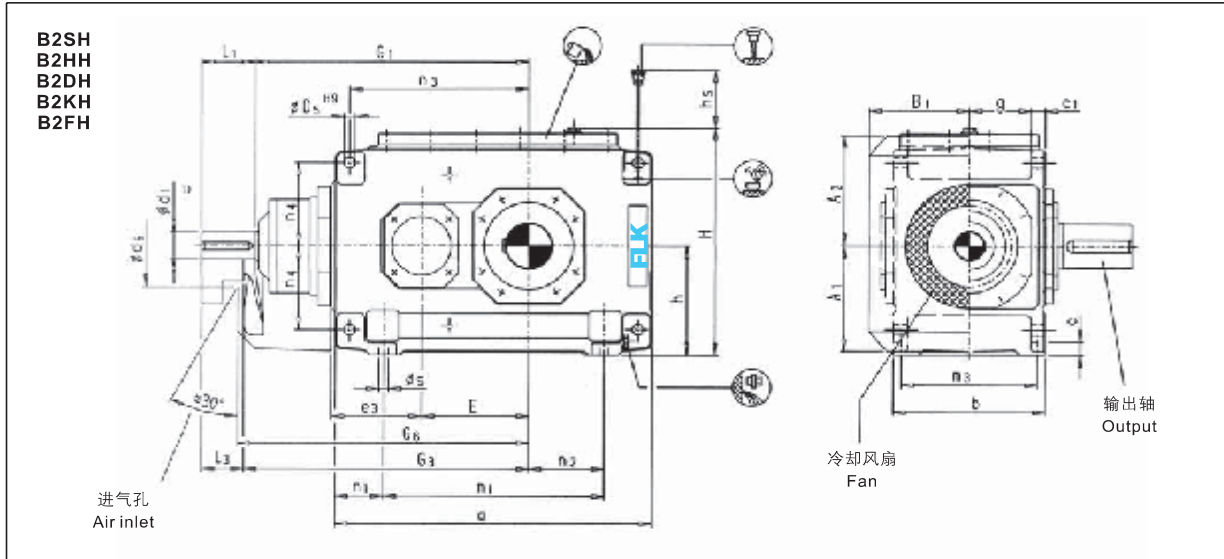
1) Shafts:

- m_s ≤ φ 100; n_s > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

*) Approximate values; exact data acc. to order-related documentation

**) Without oil filling

两级传动, 卧式安装, 类型 B2.H, 规格 4-12
Two Stage, Horizontal, Type B2.H, Sizes 4-12



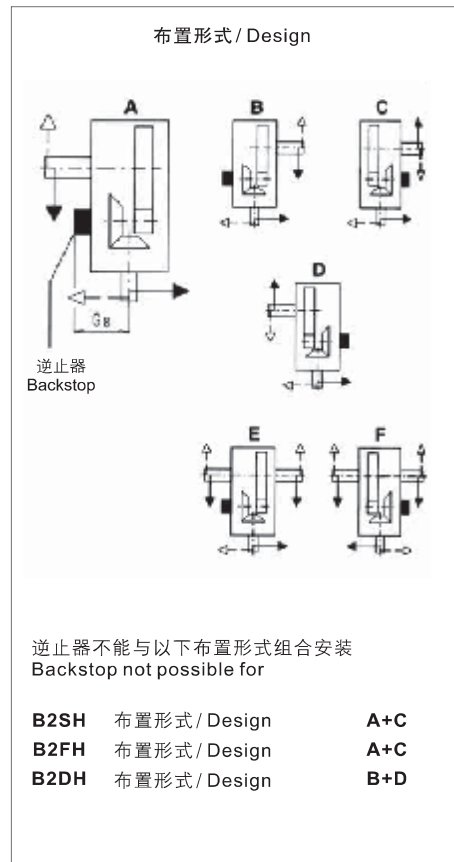
规格 Size	输入轴 / Input							冷却风扇 / Fan			
	i _N =5-11.2										
	i _N =6.3-14										
	d ₁	l ₁	l ₃	G ₁	G ₃	G ₁	G ₃	A ₁	A ₂	B ₁	d ₆
4	45	100	80	465	485	-	-	195	200	188	150
5 + 6	55	110	80	535	565	570	600	220	235	215	160
7 + 8	70	135	105	640	670	685	715	270	285	250	210
9 + 10	80	165	130	755	790	805	840	310	325	270	195
11 + 12	90	165	130	925	960	995	1030	370	385	328	210

规格 Size	齿轮箱 / Gear units											
	b	c	c ₁	D ₅	e ₃	g	h ₋₁	m ₃	n ₁	n ₄	s	
4	270	28	30	1	24	160	105	200	235	105	150	19
5 + 6	320	28	30	1	24	185	130	230	285	105	180	19
7 + 8	380	35	36	1	28	225	154	280	340	120	215	24
9 + 10	440	40	48	1.5	36	265	172	320	390	145	245	28
11 + 12	530	50	54	1.5	40	320	211	380	470	165	300	35

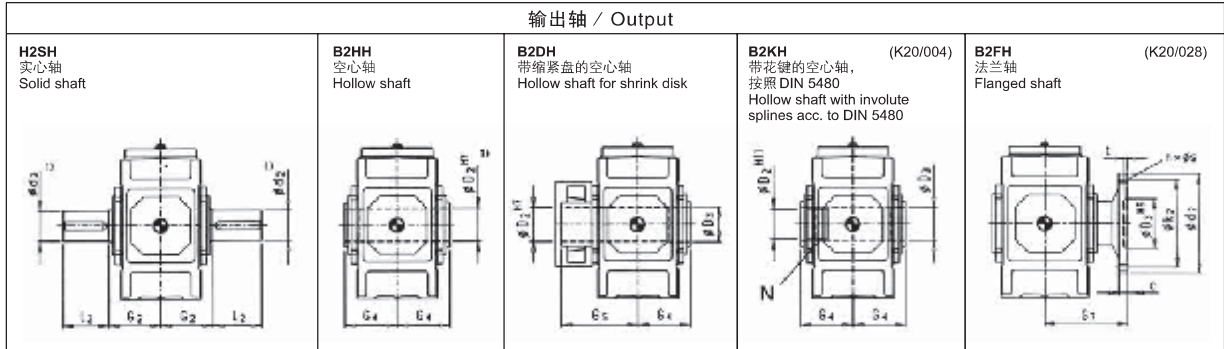
规格 Size	齿轮箱 / Gear units								逆止器 Backstop G _B ^{*)}
	a	E	G ₅	h ₅	H	m ₁	n ₂	n ₃	
4	505	160	495	80	415	295	85	285	284
5	565	185	575	150	482	355	100	330	323
6	645	220	610	150	482	435	145	365	323
7	690	225	685	180	582	450	130	405	375
8	795	270	730	190	582	555	190	450	375
9	820	265	805	205	662	530	155	480	452
10	920	315	855	215	662	630	205	530	452
11	975	320	980	240	790	645	180	580	497
12	1130	390	1050	250	790	800	265	650	497

+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.



两级传动, 卧式安装, 类型 B2.H, 规格 4-12
Two Stage, Horizontal, Type B2.H, Sizes 4-12



规格 Size	B2SH			B2HH		B2DH				B2KH				B2FH							
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
4	80	170	170	80	170	85	85	170	235	-	-	-	-	-	-	-	-	-	-	-	-
5	100	210	200	95	200	100	100	200	275	N 95x3x30x30x9H	89	100	200	25	300	150	260	16x22	10	290	
6	110	210	200	105	200	110	110	200	275	N 95x3x30x30x9H	89	110	200	25	320	160	280	18x22	10	290	
7	120	210	235	115	235	120	120	235	320	N 120x3x30x38x9H	114	120	235	30	370	180	320	16x26	10	340	
8	130	250	235	125	235	130	130	235	325	N 120x3x30x38x9H	114	130	235	30	390	190	340	18x26	10	340	
9	140	250	270	135	270	140	145	270	365	N 140x3x30x45x9H	134	145	270	38	430	220	380	20x26	12	385	
10	160	300	270	150	270	150	155	270	385	N 140x3x30x45x9H	134	155	270	38	470	240	420	22x26	12	385	
11	170	300	320	165	320	165	170	320	450	N 170x5x30x32x9H	160	170	320	42	510	260	450	18x33	12	450	
12	180	300	320	180	320	180	185	320	455	N 170x5x30x32x9H	160	185	320	42	540	280	480	22x33	12	450	

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{*)}	
		轴封 Shaft seal	B2SH B2HH B2DH B2KH
4	10	235	-
5	16	360	400
6	19	410	455
7	31	615	670
8	34	700	760
9	48	1000	1090
10	50	1155	1250
11	80	1640	1775
12	95	1910	2060

冷却盘管 / Cooling coil

	b ₁₀	e ₁₀	h ₁₀	x) L/min
4	74	160	54	4
5	130	175	62	8
6	120	220	68	4
7	140	210	80	8
8	140	270	80	4
9	232	245	110	8
10	150	295	90	8
11	312	275	115	8
12	300	360	115	8

冷却盘管接口尺寸 G1/2'
Water connection for cooling coil G 1/2'

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

Dimensions in mm

- 1) 轴:
- m_e ≤ φ 100; n_e > φ 100
 - 平键槽按照 DIN 6885/1
 - 轮毂键槽宽度按照 ISO JS9
 - 平键按照 DIN 6885/1 B型
 - 有关细节见第110-119页

- 1) Shafts:
- m_e ≤ φ 100; n_e > φ 100
 - Keyway acc. to DIN 6885/1
 - Hub keyway width acc. to ISO JS9
 - Parallel key acc. to DIN 6885/1 form B
 - For details, see pages 110-119

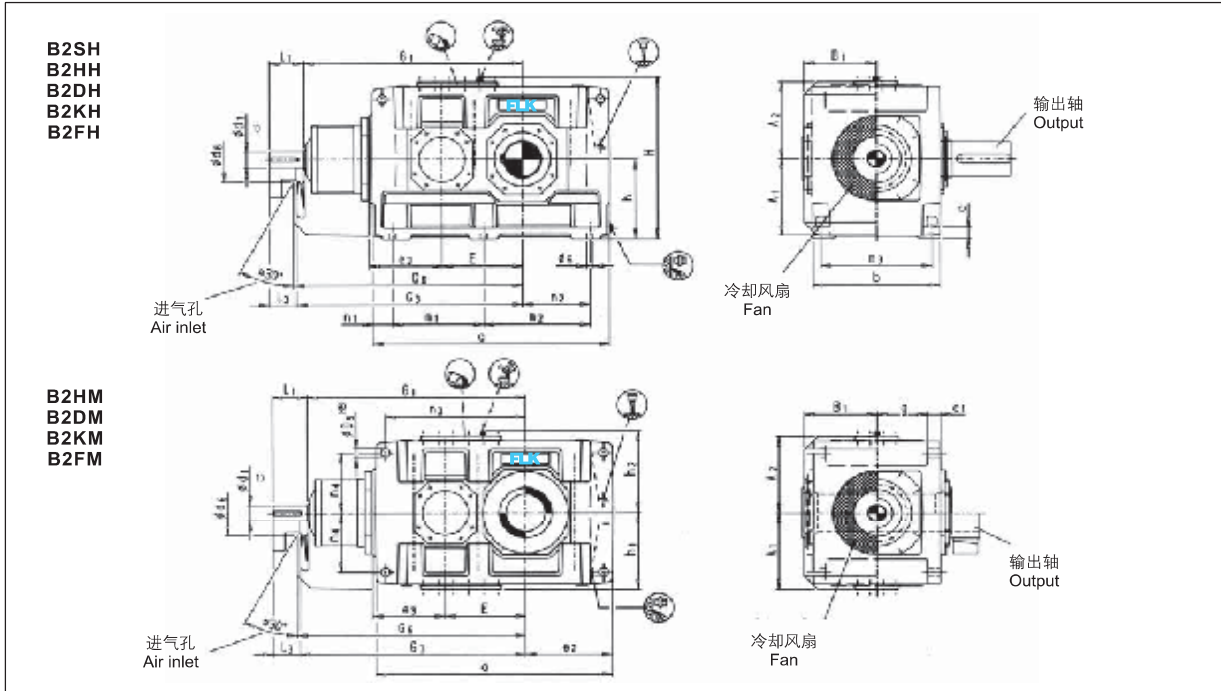
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

两级传动, 卧式安装, 类型 B2.H, B2.M, 规格 13-18
Two Stage, Horizontal, Types B2.H, B2.M, Sizes 13-18



规格 Size	输入轴 / Input						冷却风扇 / Fan																	
	i _n =5-11.2			i _n =5.6-11.2																				
	i _n =6.3-14			i _n =5.6-12.5																				
	i _n =7.1-12.5																							
d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	G ₁	G ₃	G ₁	G ₃	A ₁	A ₂	B ₁	d ₆											
13+14	110	205	165				1070	1110	1140	1180	430	450	375	245										
15	130	245	200				1277	1322			490	495	435	280										
16				130	245	200			1323	1368	490	495	435	280										
17				150	245	200	1435	1480			540	555	505	380										
18	150	245	200				1495	1540			540	555	505	380										

规格 Size	齿轮箱 / Gear units													
	b	c	c ₁	D ₅	e ₃	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
13 + 14	655	60	61	2	48	380	264	440	450	460	580	100	340	35
15 + 16	765	70	72	2	55	450	308	500	490	500	670	120	375	42
17 + 18	885	80	81	2	65	510	356	550	555	560	780	135	420	48

规格 Size	齿轮箱 / Gear units										逆止器 Backstop G _a "
	a	e ₂	E	G ₆	H	m ₁	m ₂	n ₂	n ₃		
13	1130	405	370	1130	900	465	465	305	675	559	
14	1270	475	440	1200	900	465	605	375	745	559	
15	1350	485	442	1340	1000	555	555	365	805	585	
16	1440	530	488	1385	1000	555	645	410	850	585	
17	1490	525	490	1500	1110	610	610	390	895	703	
18	1610	585	550	1560	1110	610	730	450	955	703	

+) 最大尺寸; 细节应根据与合同相关的文件确定
+) Max. dimensions; details acc. to order-related documentation.

布置形式 / Design

逆止器
Backstop

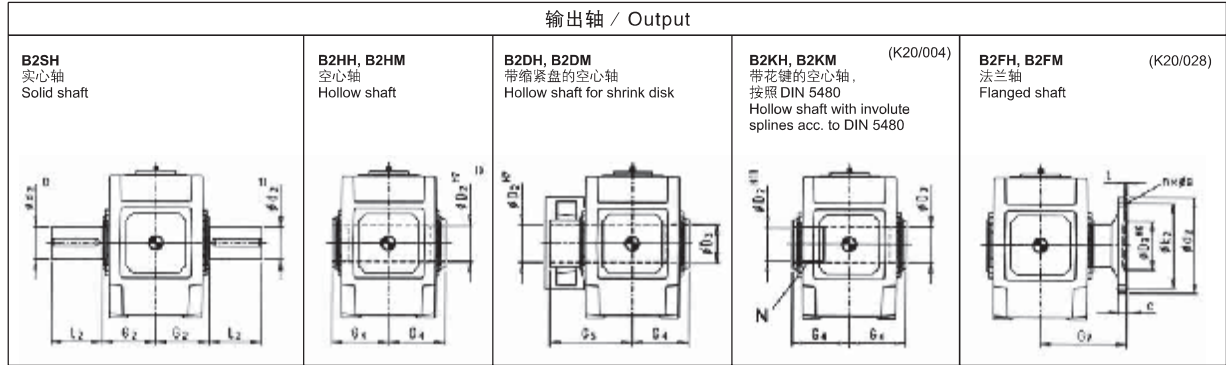
■ 逆止器: 规格 13-14
Backstop: Size 13-14

□ 逆止器: 规格 15-18
Backstop: Size 15-18

逆止器不能与以下规格和布置形式组合安装
Backstop not possible for

B2SH 规格 / Size 13 + 14 布置形式 / Design	A+C
B2SH 规格 / Size 15-18 布置形式 / Design	B+D
B2FH 规格 / Size 13 + 14 布置形式 / Design	A+C
B2FH 规格 / Size 15-18 布置形式 / Design	B+D
B2DH 规格 / Size 14 布置形式 / Design	B+D
B2DH 规格 / Size 16 + 18 布置形式 / Design	A+C

两级传动, 卧式安装, 类型 B2.H, B2.M, 规格 13-18
Two Stage, Horizontal, Types B2.H, B2.M, Sizes 13-18



规格 Size	B2SH			B2HH, B2HM		B2DH, B2DM				B2KH, B2KM				B2FH, B2FM								
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480			D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	390	-	-	-	-	-	-	-	-	-	-	-	-	48	580	310	500	20x33	14	525
14	210	350	390	210	390	210	215	390	535	N 190x5x30x36x9H	180	215	390	48	620	310	540	24x33	14	525		
15	230	410	460	-	-	-	-	-	-	-	-	-	-	-	55	710	360	630	28x33	17	625	
16	240	410	460	240	450	240	245	450	620	N 220x5x30x42x9H	210	245	450	55	740	360	660	30x33	17	625		
17	250	410	540	-	-	-	-	-	-	-	-	-	-	60	750	410	660	24x39	18	695		
18	270	470	540	275	510	280	285	510	700	N 250x5x30x48x9H	240	285	510	60	800	410	710	26x39	18	695		

规格 Size	润滑油量 Oil quantity (l) ¹⁾		重量 Weight (kg) ^{1**)}				冷却盘管 / Cooling coil							规格 Size						
	B2.H	B2.M	B2SH B2HH B2DH B2KH	B2HM B2KM B2DM	B2FH	B2FM	B2.H	B2.M	输出轴 Output		输出轴 Output		b ₁₀	b ₁₁	e ₁₀	e ₁₁	h ₁₀	h ₁₁	L/min	x)
13	140	120	2450	2350	2620	2520							324	324	460	335	116	300	8	
14	155	130	2825	2725	3005	2905							324	324	530	405	116	300	8	
15	220	180	3990	3795	4245	4050							396	396	540	395	119	335	8	
16	230	190	4345	4160	4615	4430							396	396	585	440	119	335	8	
17	320	260	5620	5320	5940	5640							468	324	580	425	134	380	8	
18	335	275	6150	5860	6520	6230							468	324	640	485	134	380	8	

冷却盘管接口尺寸 G1/2'
Water connection for cooling coil G 1/2'

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

Dimensions in mm

1) 轴:

- n_e > φ 100
- 平键槽按照 DIN 6885/1
轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

*) 参考值; 准确的数据应根据与合同相关的文件确定

***) 未注油时

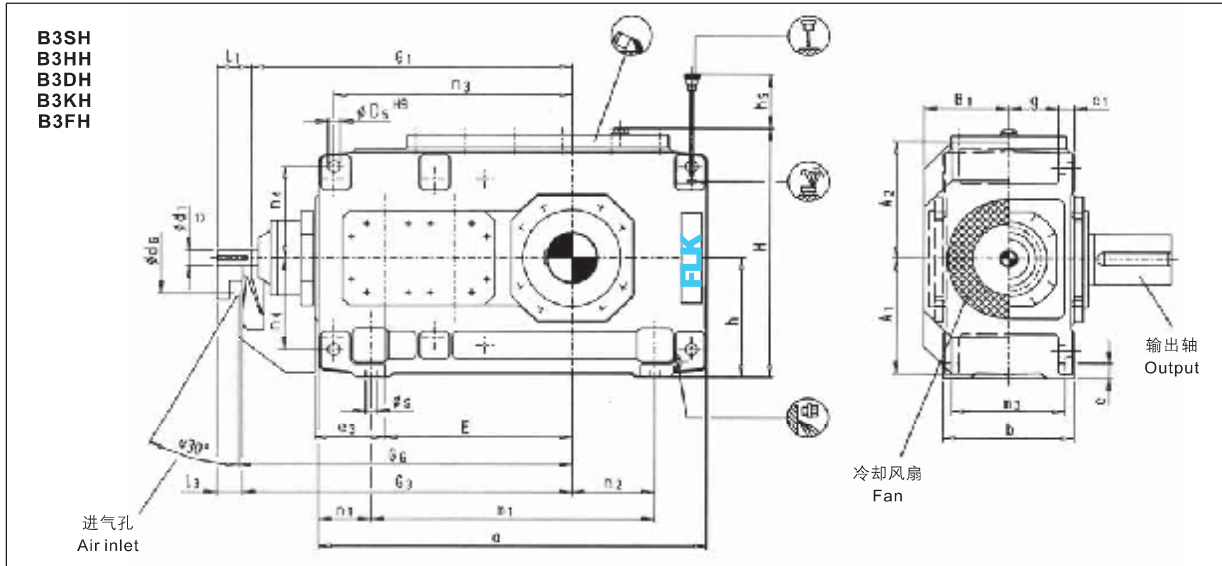
1) Shafts:

- n_e > φ 100
- Keyway acc. to DIN 6885/1
Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

*) Approximate values; exact data acc. to order-related documentation

***) Without oil filling

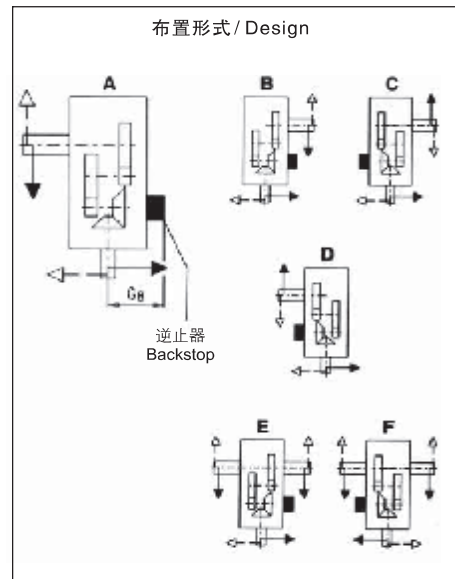
三级传动, 卧式安装, 类型 B3.H, 规格 4-12
 Three Stage, Horizontal, Type B3.H, Sizes 4-12



规格 Size	输入轴 / Input										冷却风扇 / Fan			
	iN=12.5-45			iN=50-71			G ₁	G ₃	G ₁	G ₃	A ₁	A ₂	B ₁	d ₆
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃								
4	30	70	50	25	60	40	500	520	-	-	195	200	143	110
5 + 6	35	80	60	28	60	40	575	595	610	630	220	235	168	130
7 + 8	45	100	80	35	80	60	690	710	735	755	275	275	193	165
9 + 10	55	110	80	40	100	70	800	830	850	880	315	325	231	175
11 + 12	70	135	105	50	110	80	960	990	1030	1060	370	385	263	190

规格 Size	齿轮箱 / Gear units											
	b	c	c ₁	D ₅	e ₃	g	h ₋₁	m ₃	n ₁	n ₄	s	
4	215	28	30	1	24	110	77.5	200	180	105	150	19
5 + 6	255	28	30	1	24	130	97.5	230	220	105	180	19
7 + 8	300	35	36	1	28	160	114	280	260	120	215	24
9 + 10	370	40	45	1.5	36	185	140	320	320	145	245	28
11 + 12	430	50	54	1.5	40	225	161	380	370	165	300	35

规格 Size	齿轮箱 / Gear units									逆止器 Backstop G ₃ '1
	a	E	G ₆	h ₅	H	m ₁	n ₂	n ₃		
4	565	270	530	100	415	355	85	345	204	
5	640	315	605	130	482	430	100	405	223	
6	720	350	640	130	482	510	145	440	223	
7	785	385	720	170	572	545	130	500	281	
8	890	430	765	160	582	650	190	545	281	
9	925	450	845	175	662	635	155	585	317	
10	1025	500	895	175	662	735	205	635	317	
11	1105	545	1010	220	782	775	180	710	368	
12	1260	615	1080	210	790	930	265	780	368	

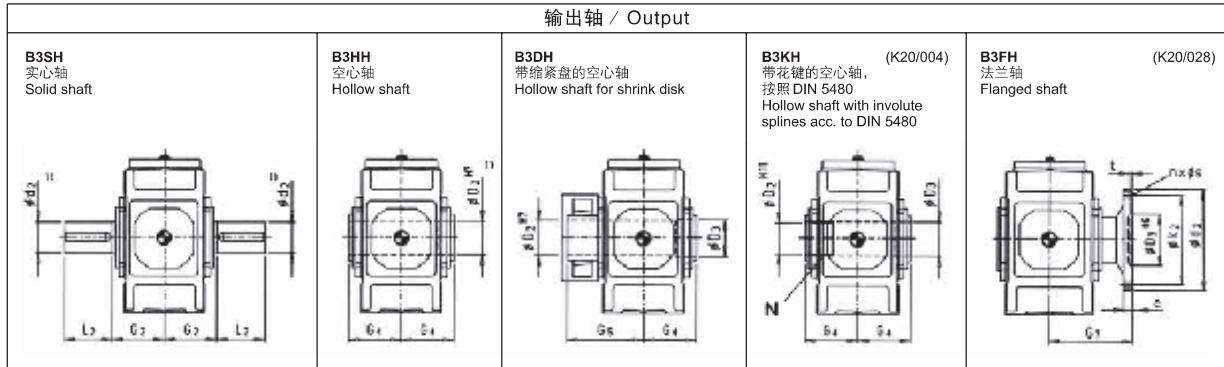


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 卧式安装, 类型 B3.H, 规格 4-12

Three Stage, Horizontal, Type B3.H, Sizes 4-12



规格 Size	B3SH			B3HH		B3DH				B3KH				B3FH							
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
4	80	170	140	80	140	85	85	140	205	-	-	-	-	-	-	-	-	-	-	-	-
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16x22	10	255	
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18x22	10	255	
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16x26	10	300	
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18x26	10	300	
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20x26	12	350	
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22x26	12	350	
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18x33	12	400	
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22x33	12	400	

规格 Size	润滑油量 Oil quantity (l) ¹⁾	重量 Weight (kg) ²⁾	
		B3SH B3HH B3DH B3KH	B3FH
4	9	210	-
5	14	325	360
6	15	380	420
7	25	550	600
8	28	635	690
9	40	890	975
10	42	1020	1110
11	66	1455	1585
12	72	1730	1870

冷却盘管 / Cooling coil

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

规格 Size	b ₁₀	e ₁₀	h ₁₀	x)
4	34	155	60	4
5	68	170	64	4
6	70	220	69	4
7	100	210	83	4
8	100	270	83	4
9	140	245	110	8
10	100	295	95	8
11	110	275	95	8
12	200	360	109	8

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

Dimensions in mm

1) 轴:

- k_e = φ 25; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

1) Shafts:

- k_e = φ 25; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

*) 参考值; 准确的数据应根据与合同相关的文件确定

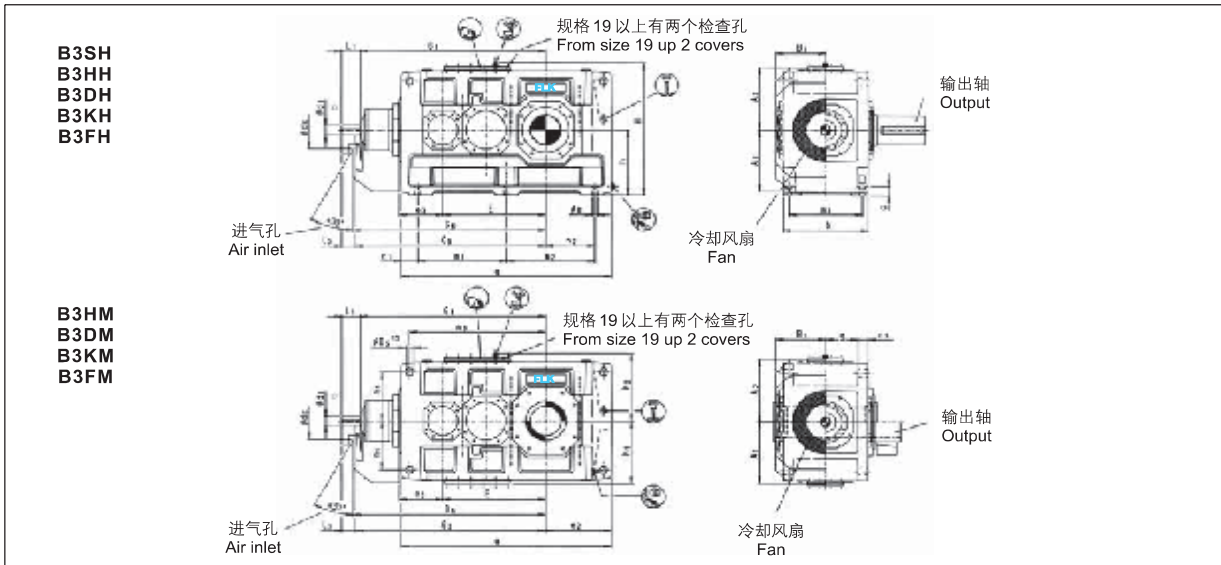
*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

三级传动, 卧式安装, 类型 B3.H, B3.M, 规格 13-22

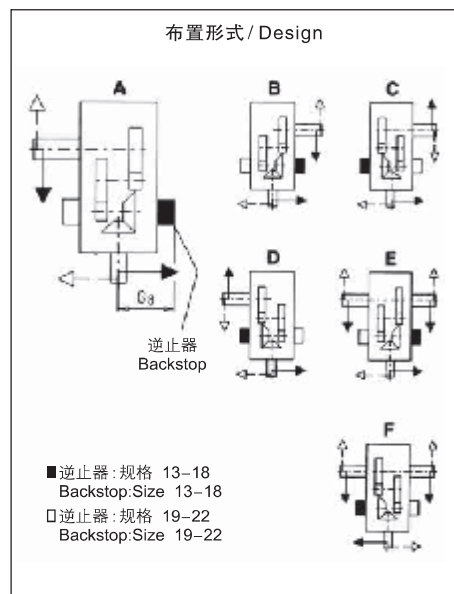
Three Stage, Horizontal, Types B3.H, B3.M, Sizes 13-22



规格 Size	输入轴 / Input							冷却风扇 / Fan							
	i _N =12.5-45			i _N =50-71				G ₁	G ₃	G ₁	G ₃	A ₁	A ₂	B ₁	d ₆
	i _N =14-50			i _N =56-80											
	i _N =16-56			i _N =63-90											
d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	G ₁	G ₃	G ₁	G ₃	A ₁	A ₂	B ₁	d ₆		
13 + 14	80	165	130	60	140	105	1125	1160	1195	1230	425	435	325	210	
15 + 16	90	165	130	70	140	105	1367	1402	1413	1448	485	520	365	210	
17 + 18	110	205	165	80	170	130	1560	1600	1620	1660	535	570	395	230	
19 + 20	130	245	200	100	210	165	1832	1877	1892	1937	610	630	448	245	
21 + 22	130	245	200	100	210	165	1902	1947	1957	2002	690	690	473	280	

规格 Size	齿轮箱 / Gear units													
	b	c	c ₁	D ₅	e ₃	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
13 + 14	550	60	61	2	48	265	211.5	440	450	460	475	100	340	35
15 + 16	625	70	72	2	55	320	238	500	490	500	535	120	375	42
17 + 18	690	80	81	2	55	370	259	550	555	560	600	135	425	42
19 + 20	790	90	91	2	65	420	299	620	615	620	690	155	475	48
21 + 22	830	100	100	2	75	450	310	700	685	690	720	170	520	56

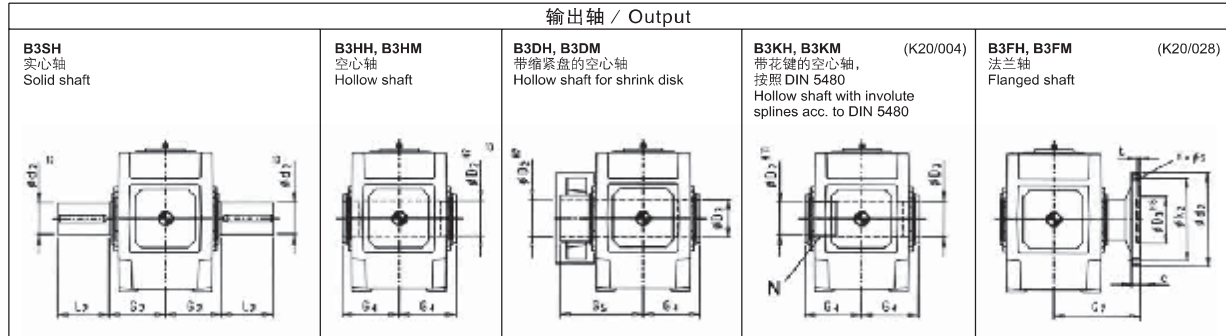
规格 Size	齿轮箱 / Gear units									逆止器 Backstop G ₆
	a	e ₂	E	G ₆	H	m ₁	m ₂	n ₂	n ₃	
13	1290	405	635	1180	900	545	545	305	835	451
14	1430	475	705	1250	900	545	685	375	905	451
15	1550	485	762	1420	1000	655	655	365	1005	497
16	1640	530	808	1470	1000	655	745	410	1050	497
17	1740	525	860	1620	1110	735	735	390	1145	564
18	1860	585	920	1680	1110	735	855	450	1205	564
19	2010	590	997	1900	1240	850	850	435	1345	621
20	2130	650	1057	1960	1240	850	970	495	1405	621
21	2140	655	1067	1970	1390	900	900	485	1400	640
22	2250	710	1122	2025	1390	900	1010	540	1455	640



+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 卧式安装, 类型 B3.H, B3.M, 规格 13-22
 Three Stage, Horizontal, Types B3.H, B3.M, Sizes 13-22



规格 Size	B3SH			B3HH, B3HM		B3DH, B3DM				B3KH, B3KM				B3FH, B3FM						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26x39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30x39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32x39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28x45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28x45	20	710

规格 Size	润滑油量 Oil quantity (l) ¹⁾		重量 Weight (kg) ²⁾			
	B3.H	B3.M	B3SH B3HH B3DH B3KH	B3HM B3KM B3DM	B3FH	B3FM
13	130	110	2380	2260	2540	2420
14	140	115	2750	2615	2920	2785
15	210	160	3730	3540	3970	3780
16	220	165	3955	3765	4250	4020
17	290	230	4990	4760	5290	5060
18	300	235	5495	5240	6045	5590
19	380	360	7000	6500	敬请垂询 On request	
20	440	420	8100	7600		
21	370	420	9200	8600		
22	430	490	9900	9400		

冷却盘管 / Cooling coil

规格 Size	b ₁₀	e ₁₀	e ₁₁	h ₁₀	h ₁₁	L / min ^{x)}
13	252	455	335	116	300	8
14	252	525	405	116	300	8
15	290	535	395	119	335	8
16	290	580	440	119	335	8
17	340	575	425	134	380	8
18	340	635	485	134	380	8
19	敬请垂询 On request					
20						
21						
22						

冷却盘管接口尺寸 G 1/2"
 Water connection for cooling coil G 1/2"

冷却盘管适用于淡水、海水和稍有咸味的水
 Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

Dimensions in mm

- 1) 轴:
- ms ≤ φ 100; ns > φ 100
 - 平键槽按照 DIN 6885/1
 - 轮毂键槽宽度按照 ISO JS9
 - 平键按照 DIN 6885/1 B 型
 - 有关细节见第 110-119 页

- 1) Shafts:
- ms ≤ φ 100; ns > φ 100
 - Keyway acc. to DIN 6885/1
 - Hub keyway width acc. to ISO JS9
 - Parallel key acc. to DIN 6885/1 form B
 - For details, see pages 110-119

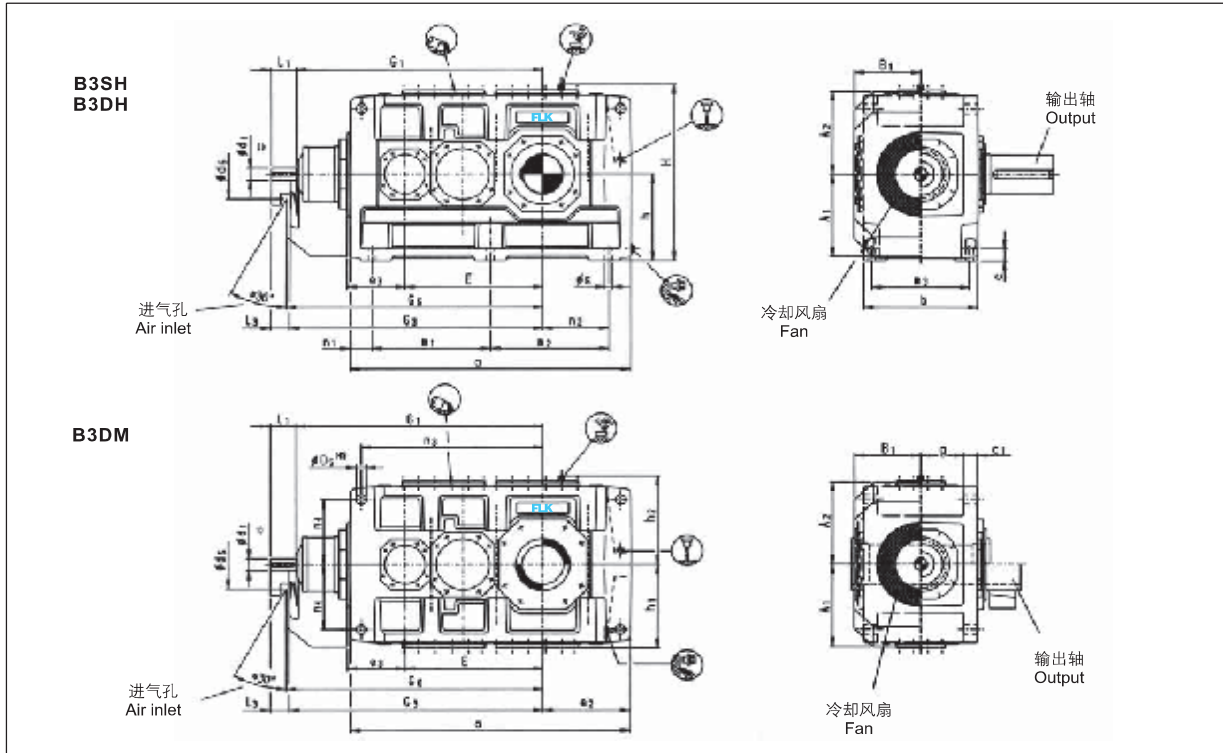
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

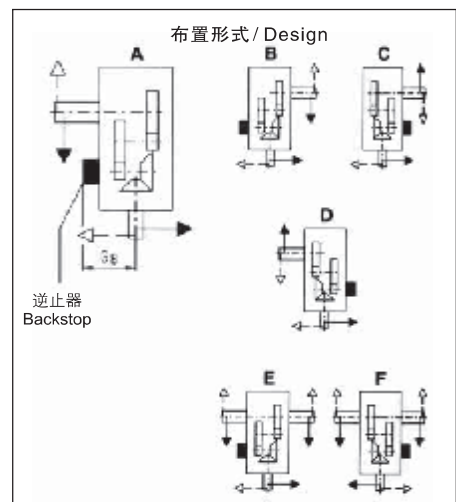
三级传动, 卧式安装, 类型 B3.H, B3DM, 规格 23-26
 Three Stage, Horizontal, Types B3.H, B3DM, Sizes 23-26



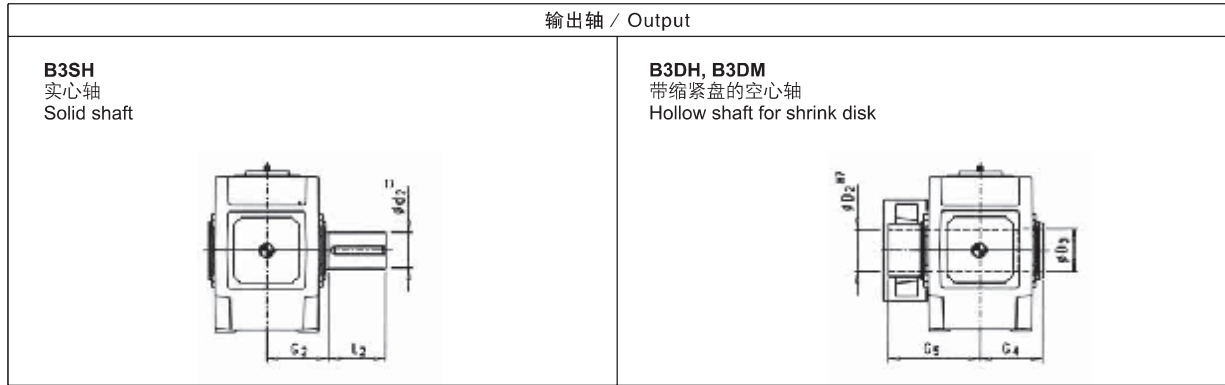
规格 Size	输入轴 / Input											冷却风扇 / Fan			
	i _N =20-45 i _N =22.4-50			i _N =50-71 i _N =56-80			G ₁	G ₃	G ₁	G ₃	冷却风扇 / Fan				
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃					A ₁	A ₂	B ₁	d ₆	
23 + 24	150	245	200	110	210	165	2130	2175	2195	2240	770	770	528	350	
25 + 26	150	245	200	110	210	165	2270	2315	2360	2405	845	865	585	380	

规格 Size	齿轮箱 / Gear units													
	b	c	c ₁	D ₅	e ₃	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
23 + 24	930	115	120	2	80	490	342	780	770	790	810	180	580	56
25 + 26	1045	130	120	2	90	490	400	860	860	860	910	200	660	66

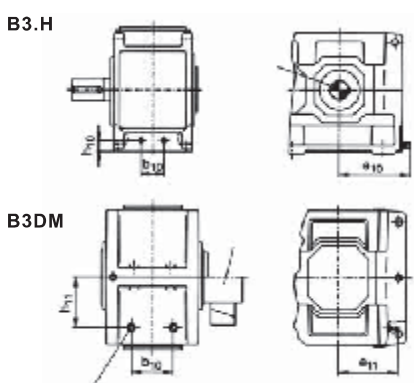
规格 Size	齿轮箱 / Gear units										逆止器 Backstop G ₈
	a	e ₂	E	G ₆	H	m ₁	m ₂	n ₂	n ₃		
23	2380	730	1185	2200	1570	1010	1010	550	1560		敬请垂询 相关尺寸 Dimensions On request
24	2510	795	1250	2265	1570	1010	1140	615	1625		
25	2580	790	1325	2315	1720	1090	1090	590	1685		
26	2760	880	1415	2430	1720	1090	1270	680	1775		



三级传动, 卧式安装, 类型 B3.H, B3DM, 规格 23-26
 Three Stage, Horizontal, Types B3.H, B3DM, Sizes 23-26



规格 Size	B3SH			B3DH, B3DM			
	d ₂	l ₂	G ₂	D ₂	D ₃	G ₄	G ₅
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

规格 Size	润滑油量 Oil quantity (l) ¹⁾		重量 Weight (kg) ²⁾		冷却盘管 / Cooling coil						
	B3SH	B3DM	B3SH	B3DM	规格 Size	b ₁₀	e ₁₀	e ₁₁	h ₁₀	h ₁₁	x) L/min
23	520	560	11500	10600	 <p>冷却盘管适用于淡水、海水和稍有咸味的水 Cooling coil suitable for fresh, sea and brackish water</p>						
24	600	650	13400	12500							
25	720	790	16000	15100							
26	840	920	17500	16400							

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

x) 所需冷却水量
Required cooling water quantity

尺寸以mm为单位

1) 轴:

- n_e > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

¹⁾ 参考值; 准确的数据应根据与合同相关的文件确定

²⁾ 未注油时

Dimensions in mm

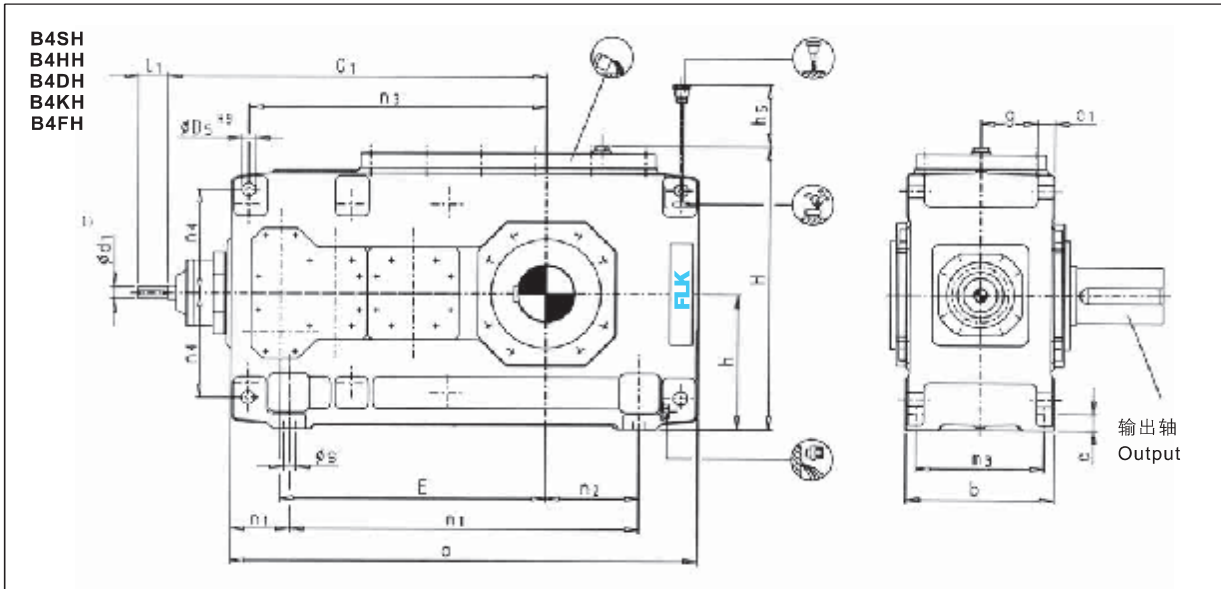
1) Shafts:

- n_e > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

¹⁾ Approximate values; exact data acc. to order-related documentation

²⁾ Without oil filling

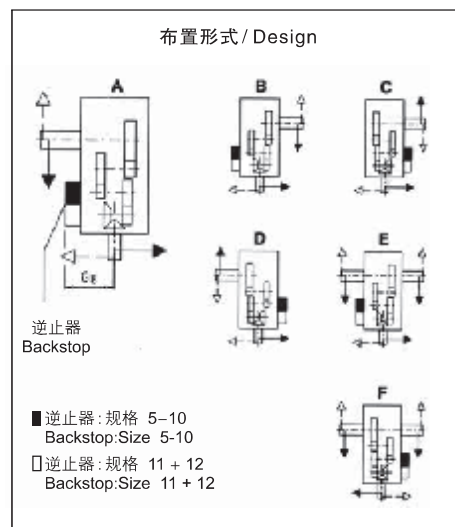
四级传动, 卧式安装, 类型 B4.H, 规格 5-12
 Four Stage, Horizontal, Type B4.H, Sizes 5-12



规格 Size	输入轴 / Input					
	$i_N=80-180$		$i_N=200-315$		G_1	G_1
	d_1	l_1	d_1	l_1		
5 + 6	28	55	20	50	615	650
7 + 8	30	70	25	60	725	770
9 + 10	35	80	28	60	840	890
11 + 12	45	100	35	80	1010	1080

规格 Size	齿轮箱 / Gear units										
	b	c	c_1	D_5	g	h_{-1}	m_3	n_1	n_4	s	
5 + 6	255	28	30	1	24	97.5	230	220	105	180	19
7 + 8	300	35	36	1	28	114	280	260	120	215	24
9 + 10	370	40	45	1.5	36	140	320	320	145	245	28
11 + 12	430	50	54	1.5	40	161	380	370	165	300	35

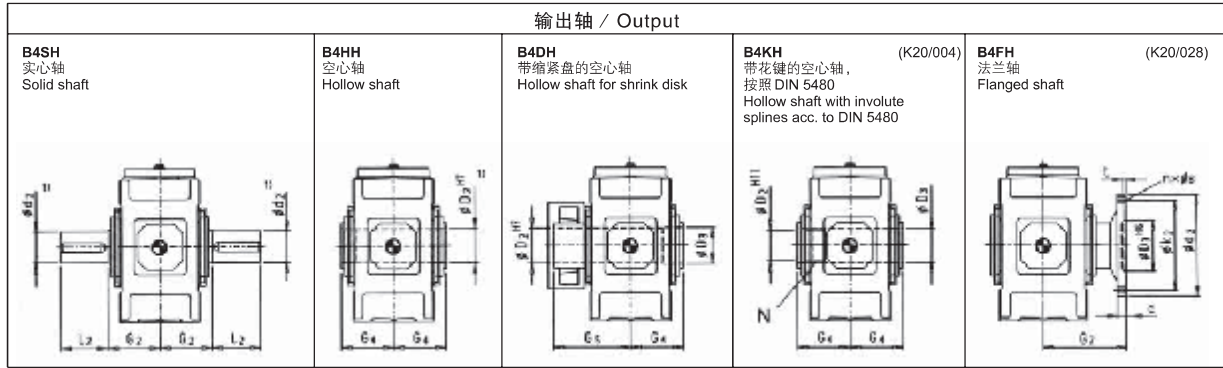
规格 Size	齿轮箱 / Gear units								逆止器 Backstop G_{a-1}
	a	E	h_5	H	m_1	n_2	n_3		
5	690	405	100	482	480	100	455	236	
6	770	440	100	482	560	145	490	236	
7	845	495	140	572	605	130	560	286	
8	950	540	130	582	710	190	605	286	
9	1000	580	135	662	710	155	660	317	
10	1100	630	135	662	810	205	710	317	
11	1200	705	170	782	870	180	805	333	
12	1355	775	160	790	1025	265	875	333	



+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

四级传动, 卧式安装, 类型 B4.H, 规格 5-12
Four Stage, Horizontal, Type B4.H, Sizes 5-12



规格 Size	B4SH			B4HH		B4DH				B4KH				B4FH						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16x22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18x22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16x26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18x26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20x26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22x26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18x33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22x33	12	400

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight / Poids (kg) ^{*)}	
		B4SH B4HH B4DH B4KH	B4FH
5	16	335	370
6	18	385	425
7	30	555	605
8	33	655	710
9	48	890	975
10	50	1025	1115
11	80	1485	1615
12	90	1750	1890

尺寸以 mm 为单位

Dimensions in mm

1) 轴:

- k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

1) Shafts:

- k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

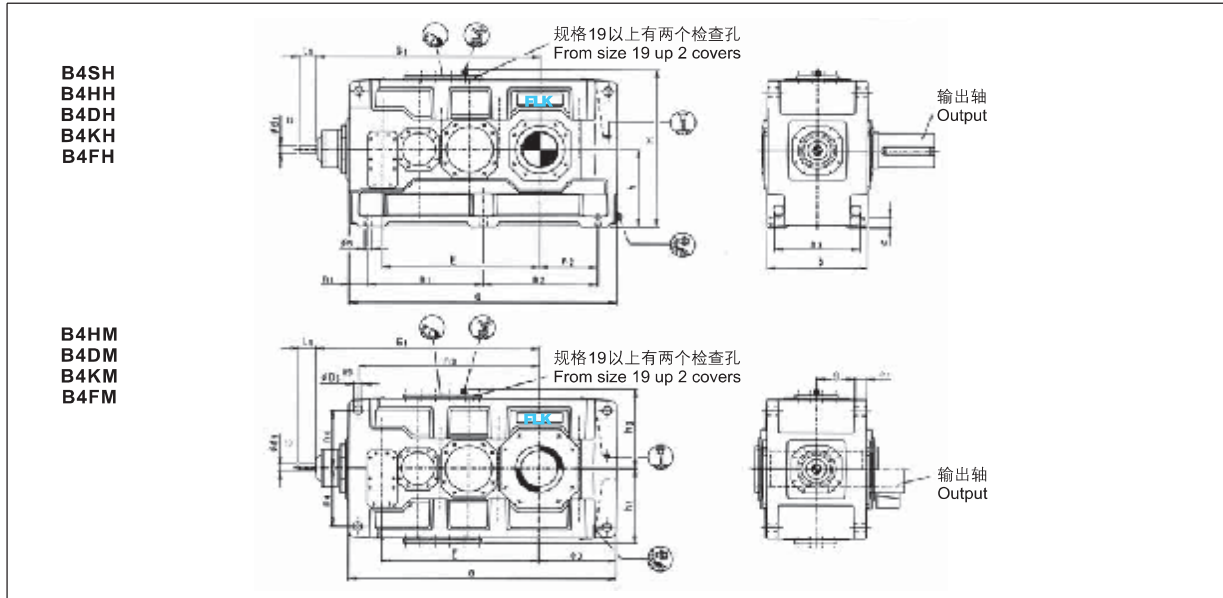
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

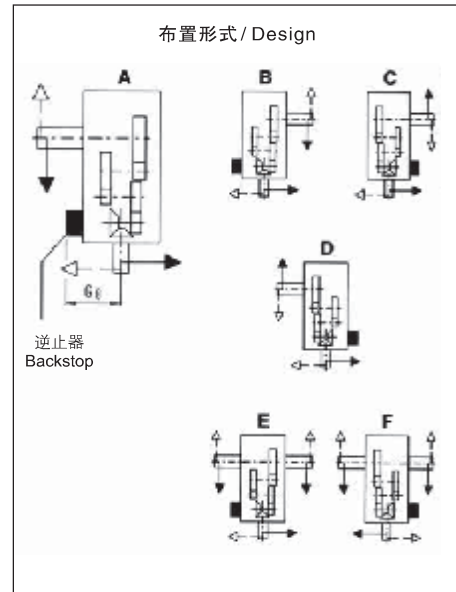
四级传动, 卧式安装, 类型 B4.H, B4.M, 规格 13-22
 Four Stage, Horizontal, Types B4.H, B4.M, Sizes 13-22



规格 Size	输入轴 / Input					
	in=80-180		in=200-315		G ₁	G ₁
	in=90-200		in=224-355			
	in=100-224		in=250-400			
	d ₁	l ₁	d ₁	l ₁		
13 + 14	55	110	40	100	1170	1240
15 + 16	70	135	50	110	1402	1448
17 + 18	70	135	50	110	1450	1510
19 + 20	80	165	60	140	1680	1740
21 + 22	90	165	70	140	1992	2047

规格 Size	齿轮箱 / Gear units												
	b	c	c ₁	D ₅	g	h ₋₁	h ₁	h ₂	m ₃	n ₁	n ₄	s	
13 + 14	550	60	61	2	48	211.5	440	450	460	475	100	340	35
15 + 16	625	70	72	2	55	238	500	490	500	535	120	375	42
17 + 18	690	80	81	2	55	259	550	555	560	600	135	425	42
19 + 20	790	90	91	2	65	299	620	615	620	690	155	475	48
21 + 22	830	100	100	2	75	310	700	685	690	720	170	520	56

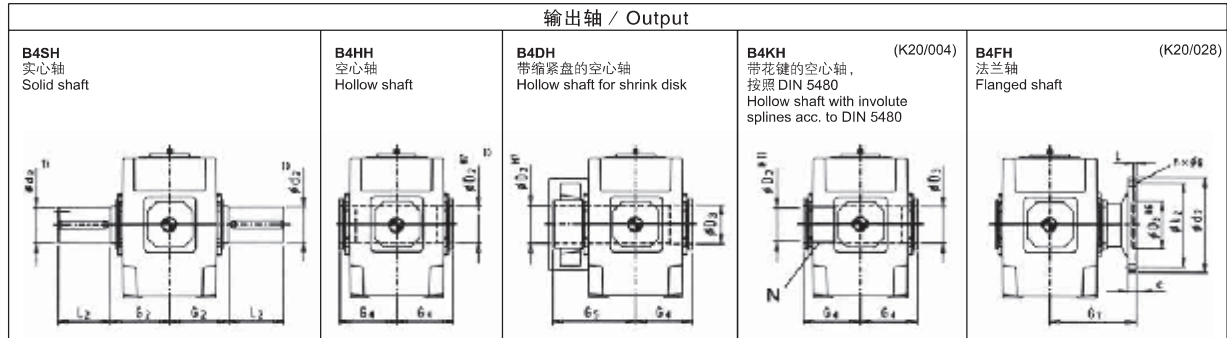
规格 Size	齿轮箱 / Gear units								
	a	e ₂	E	H	m ₁	m ₂	n ₂	n ₃	逆止器 Backstop Gs ¹⁾
13	1395	405	820	900	597.5	597.5	305	940	391
14	1535	475	890	900	597.5	737.5	375	1010	391
15	1680	485	987	1000	720	720	365	1135	487
16	1770	530	1033	1000	810	810	410	1180	487
17	1770	525	1035	1110	750	750	390	1175	487
18	1890	585	1095	1110	870	870	450	1235	487
19	2030	590	1190	1240	860	860	435	1365	561
20	2150	650	1250	1240	980	980	495	1425	561
21	2340	655	1387	1390	1000	1000	485	1600	580
22	2450	710	1442	1390	1000	1110	540	1655	580



+) 最大尺寸: 细节应根据与合同相关的文件确定。

+) Max. dimensions: details acc. to order-related documentation.

四级传动, 卧式安装, 类型 B4.H, B4.M, 规格 13-22
 Four Stage, Horizontal, Types B4.H, B4.M, Sizes 13-22



规格 Size	B4SH			B4HH, B4HM		B4DH, B4DM				B4KH, B4KM				B4FH, B4FM						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26x39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30x39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32x39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28x45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28x45	20	710

规格 Size	润滑油量 Oil quantity (l) ¹⁾		重量 Weight (kg) ²⁾			
	B4.H	B4.M	B4SH B4HH B4DH B4KH	B4HM B4DM B4KM	B4FH	B4FM
13	145	120	2395	2280	2555	2440
14	150	125	2735	2605	2905	2775
15	230	170	3630	3435	3870	3675
16	235	175	3985	3765	4240	4020
17	295	230	4695	4460	4995	4760
18	305	235	5200	4930	5550	5280
19	480	440	6800	6300	敬请垂询 On request	
20	550	510	8200	7700		
21	540	590	9200	8600		
22	620	680	9900	9400		

尺寸以 mm 为单位

Dimensions in mm

1) 轴:

- $m_e \leq \phi 100$; $n_e > \phi 100$
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

1) Shafts:

- $m_e \leq \phi 100$; $n_e > \phi 100$
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

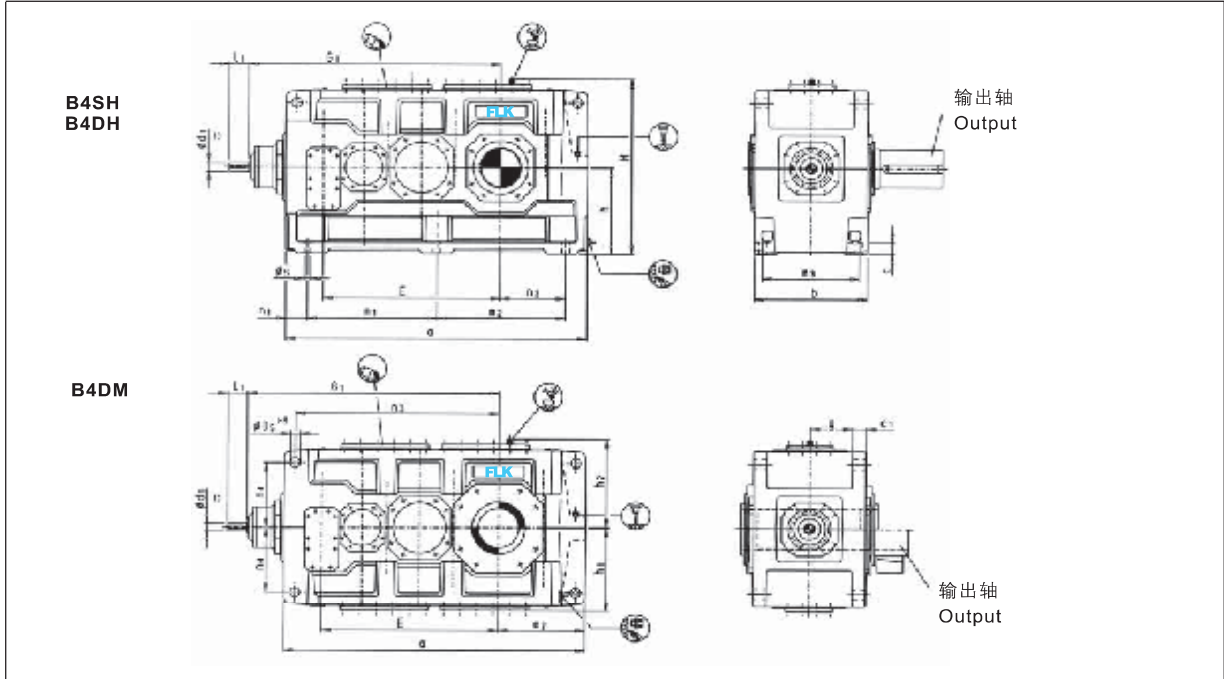
*) 参考值; 准确的数据应根据与合同相关的文件确定

*) Approximate values; exact data acc. to order-related documentation

**) 未注油时

**) Without oil filling

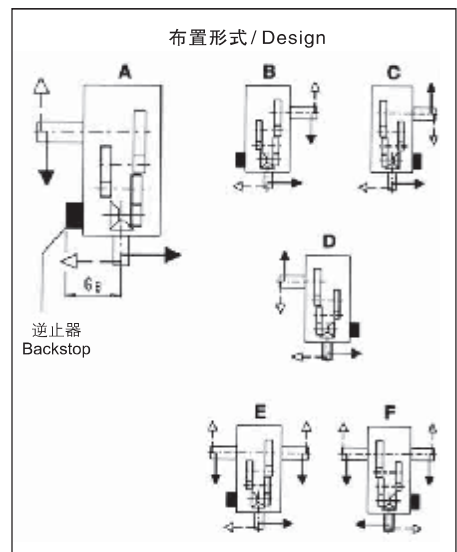
四级传动, 卧式安装, 类型 B4.H, B4DM, 规格 23-26
 Four Stage, Horizontal, Types B4.H, B4DM, Sizes 23-26



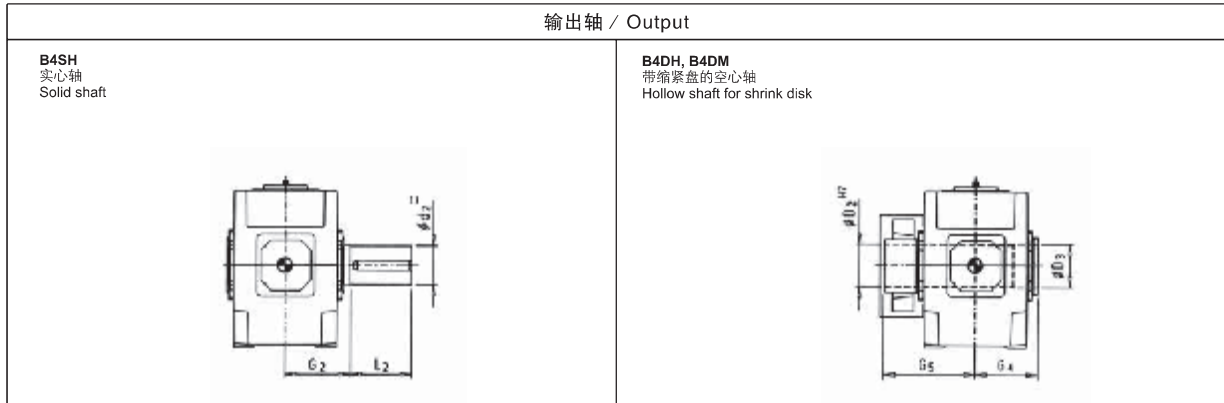
规格 Size	输入轴 / Input						
	$i_N=100-180$ $i_N=112-200$			$i_N=200-355$ $i_N=224-400$		G_1	G_1
	d_1	l_1	d_1	l_1			
23 + 24	90	165	70	140	2110	2175	
25 + 26	110	205	80	170	2395	2485	

规格 Size	齿轮箱 / Gear units												
	b	c	c_1	D_5	g	h_{-1}	h_1	h_2	m_3	n_1	n_4	s	
23 + 24	930	115	120	2	80	342	780	770	790	810	180	580	56
25 + 26	1045	130	120	2	90	400	860	860	860	910	200	660	66

规格 Size	齿轮箱 / Gear units								逆止器 Backstop G_8
	a	e_2	E	H	m_1	m_2	n_2	n_3	
23	2530	730	1505	1570	1085	1085	550	1725	敬请垂询 On request
24	2660	795	1570	1570	1085	1215	615	1790	
25	2830	790	1695	1720	1215	1215	590	1965	
26	3010	880	1785	1720	1215	1395	680	2055	



四级传动, 卧式安装, 类型 B4.H, B4DM, 规格 23–26
 Four Stage, Horizontal, Types B4.H, B4DM, Sizes 23–26



规格 Size	B4SH			B4DH, B4DM			
	d ₂	l ₂	G ₂	D ₂	D ₃	G ₄	G ₅
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	B4SH	B4DM	B4SH B4DH	B4DM
	23	710	790	11600
24	810	910	13500	12600
25	1000	1110	16100	15200
26	1100	1200	17600	16500

尺寸以mm为单位

1) 轴:

- $m_6 \leq \phi 100; n_6 > \phi 100$
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110–119 页

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

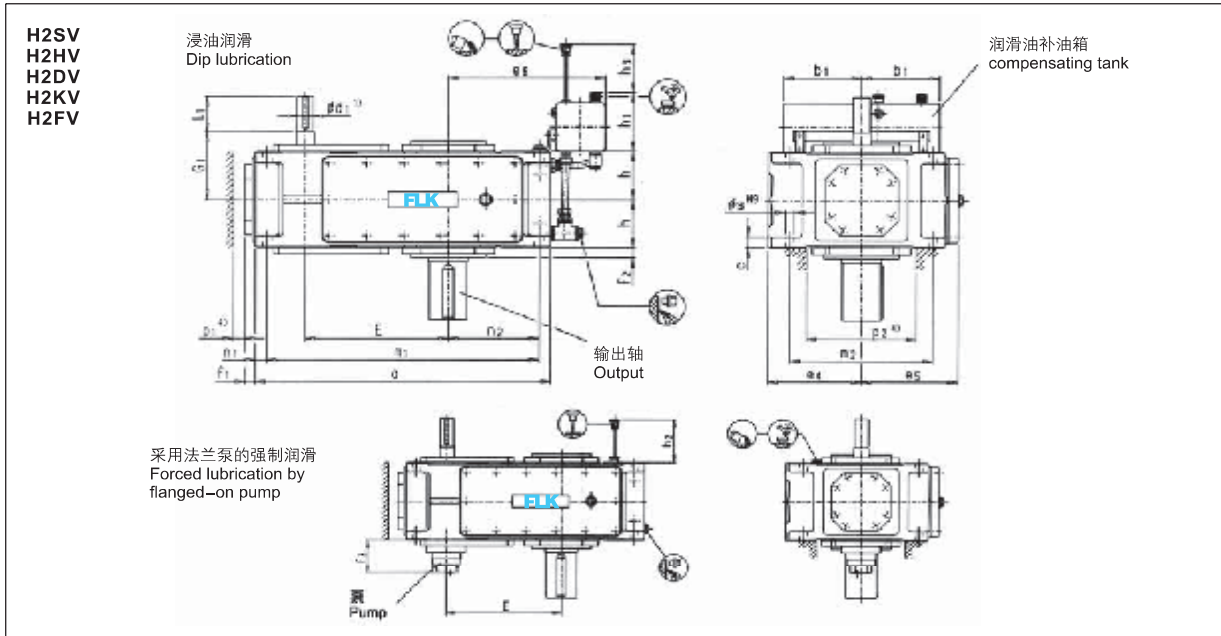
1) Shafts:

- $m_6 \leq \phi 100; n_6 > \phi 100$
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110–119

*) Approximate values; exact data acc. to order-related documentation

**) Without oil filling

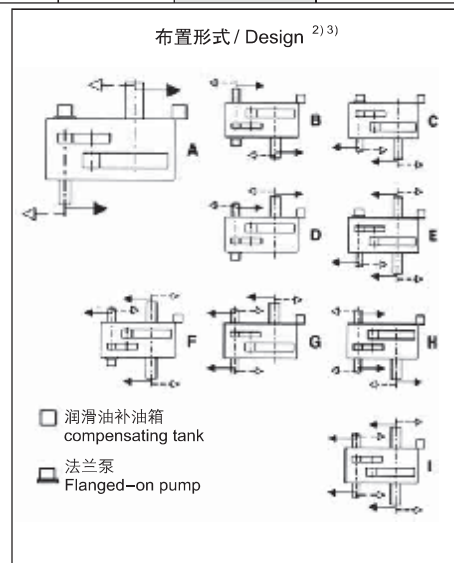
两级传动, 立式安装, 类型 H2.V, 规格 4-12
Two Stage, Vertical, Type H2.V, Sizes 4-12



规格 Size	输入轴 / Input							G ₁	布置形式 / Design G, H, I 仅用于 / only for i _N =	
	i _N =6.3-11.2 i _N =8-14			i _N =12.5-22.4 i _N =16-28			2)			
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃	i _N =			
4	45	100	80	32	80	60	170	6.3-18		
5 + 6	50	100	80	38	80	60	195	6.3-18	8-22.4	
7 + 8	60	135	105	50	110	80	210	6.3-16	8-20	
9 + 10	75	140	110	60	140	110	240	6.3-16	8-20	
11 + 12	90	165	130	70	140	105	275	6.3-18	8-22.4	

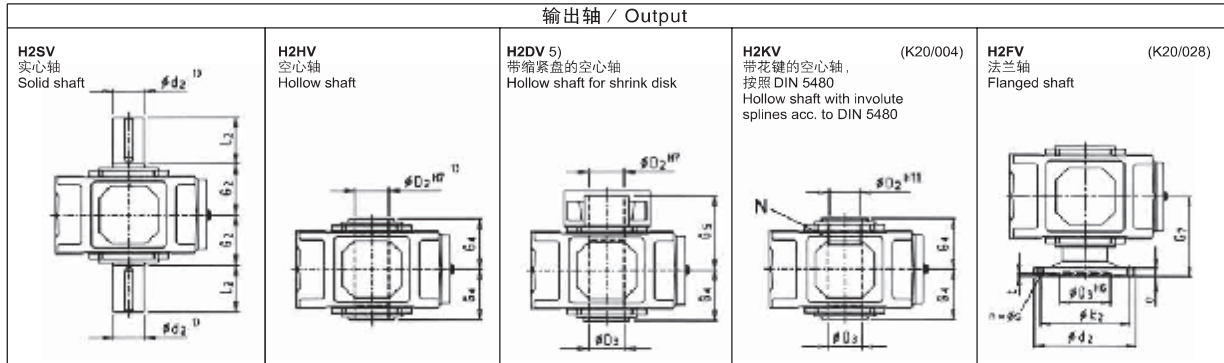
规格 Size	齿轮箱 / Gear units											
	b ₁	c	e ₄	f ₁	h	h ₁	h ₂	h ₃	m ₂	n ₁	s	
4	150	30	1	200	28	107.5	165	-	180	300	30	24
5 + 6	240	30	1	230	38	127.5	205	190	240	360	30	24
7 + 8	240	36	1	280	42	150	205	165	250	430	35	28
9 + 10	330	45	1.5	320	42	185	275	205	330	490	40	36
11 + 12	330	54	1.5	380	48	215	275	240	340	600	50	40

规格 Size	齿轮箱 / Gear units										泵 Pump f _{3,2}
	a	e ₅	e ₆	E	f ₂	m ₁	n ₂	p ₁	p ₂		
4	565	215	320	270	22	505	160	35	220	-	
5	640	252	385	315	28	580	175	35	270	150	
6	720	252	425	350	28	660	220	35	270	150	
7	785	292	425	385	30	715	215	35	330	145	
8	890	302	485	430	32	820	275	35	330	145	
9	925	342	560	450	32	845	260	40	370	135	
10	1025	342	610	500	32	945	310	40	370	135	
11	1105	402	595	545	35	1005	295	50	440	145	
12	1260	410	680	615	35	1160	380	50	440	145	



两级传动, 立式安装, 类型 H2.V, 规格 4-12

Two Stage, Vertical, Type H2.V, Sizes 4-12



规格 Size	H2SV			H2HV		H2DV				H2KV					H2FV						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
4	80	170	140	80	140	85	85	140	205	-	-	-	-	-	-	-	-	-	-	-	-
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16x22	10	255	
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18x22	10	255	
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16x26	10	300	
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18x26	10	300	
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20x26	12	350	
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22x26	12	350	
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18x33	12	400	
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22x33	12	400	

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{*)}	
	浸油润滑 Dip lubrication	强制润滑 Forced lubrication	H2SV H2HV H2DV H2KV	H2FV
4	25	-	190	-
5	23	10	300	335
6	27	11	355	395
7	58	22	505	555
8	62	25	590	645
9	100	42	830	915
10	110	46	960	1050
11	160	60	1335	1465
12	180	70	1615	1755

冷却盘管 / Cooling coil³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
4	34	140	155	4
5	68	166	170	4
6	70	162	215	4
7	100	197	210	4
8	100	197	270	4
9	140	210	245	8
10	100	225	295	8
11	110	285	275	8
12	200	271	360	8

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

1) 轴:

- m_s ≤ φ 100; n_s > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

2) 方案:

- 布置形式 G, H 和 I 不能采用法兰泵强制润滑。

3) 采用冷却盘管时:

- 布置形式 A, C 和 E 不能采用法兰泵强制润滑。
- 4) 油泵、油管和护盖所需的尺寸, 欲了解精确尺寸, 请与我们联系。
- 5) 对布置形式 A, D 和 G 请征询。

*) 参考值: 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

- m_s ≤ φ 100; n_s > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

2) Variants:

- Flanged-on pump not possible with G, H and I designs.

3) Cooling coil:

- For A, C and E designs, forced lubrication by flanged-on pump not possible.

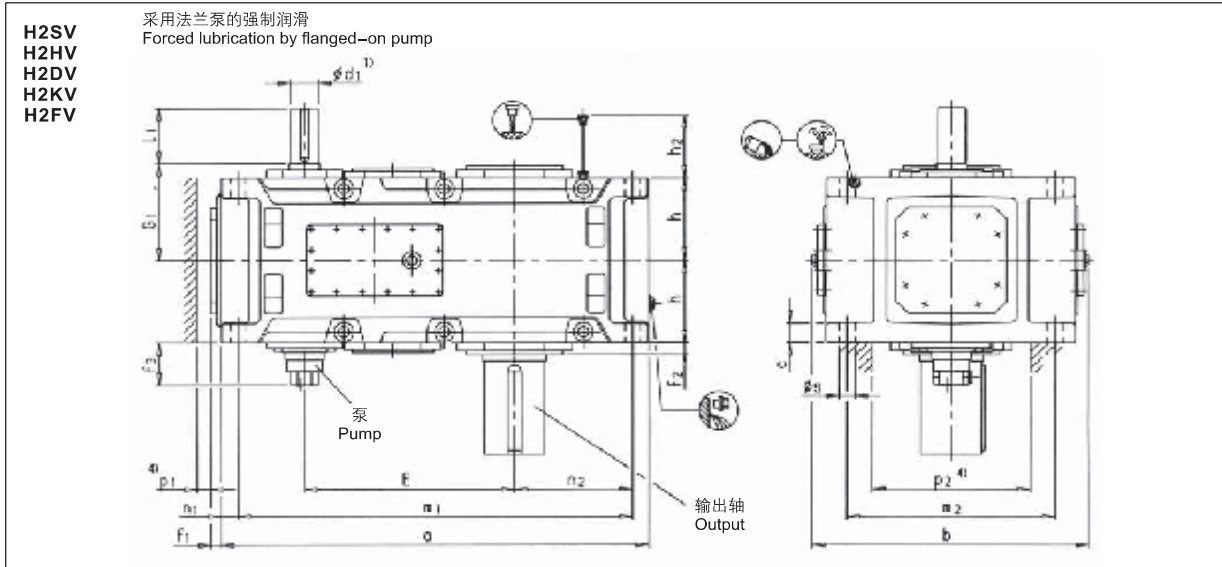
4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

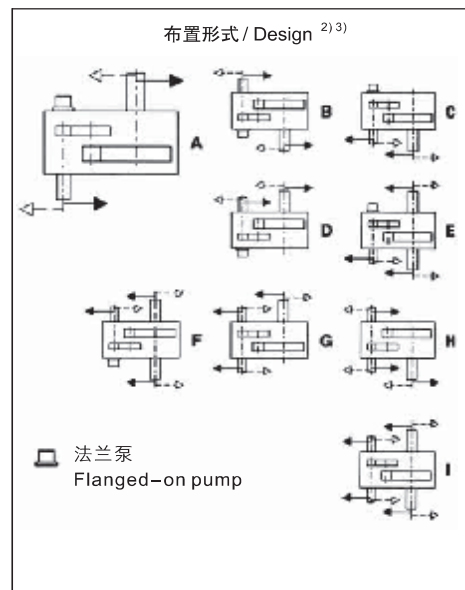
两级传动, 立式安装, 类型 H2.V, 规格 13-22
Two Stage, Vertical, Types H2.V, Sizes 13-22



规格 Size	输入轴 / Input				G ₁	布置形式 / Design G, H, I 仅用于 / only for in=	
	in=6.3-11.2		in=12.5-20			6.3-16	8-20
	in=7.1-12.5		in=14-22.5				
	d ₁	l ₁	d ₁	l ₁			
13 + 14	100	205	85	170	330		
15 + 16	120	210	100	210	365		
17 + 18	125	245	110	210	420		
19 + 20	敬请垂询 / On request						
21 + 22	敬请垂询 / On request						

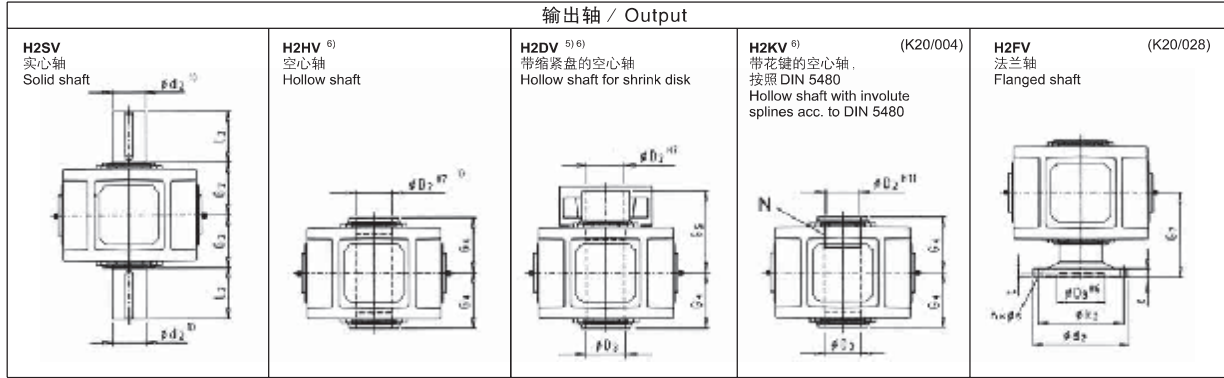
规格 Size	齿轮箱 / Gear units							
	b	c ₁	f ₁	h	h ₂	m ₂	n ₁	s
13 + 14	900	61	2	53	272.5	300	680	48
15 + 16	980	72	2	63	310	340	750	55
17 + 18	1110	81	2	60	340	374	850	55
19 + 20	敬请垂询 / On request							
21 + 22	敬请垂询 / On request							

规格 Size	齿轮箱 / Gear units							泵 Pump f _{3/2}
	a	E	f ₂	m ₁	n ₂	p ₁	p ₂	
13	1290	635	35	1195	360	50	500	130
14	1430	705	35	1335	430	50	500	130
15	1550	762	42	1435	430	50	570	130
16	1640	808	42	1525	475	50	570	130
17	1740	860	42	1610	465	70	630	170
18	1860	920	42	1730	525	70	630	170
19	敬请垂询							
20	敬请垂询							
21	敬请垂询							
22	敬请垂询							



两级传动, 立式安装, 类型 H2.V, 规格 13-22

Two Stage, Vertical, Type H2.V, Sizes 13-22



规格 Size	H2SV				H2HV		H2DV				H2KV				H2FV								
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480				D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H				180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H				180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H				210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H				210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H				240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H				240	285	415	60	800	410	710	26x39	18	600
19-22	敬请垂询 / On request																						

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{**)}	
		H2SV H2HV H2DV H2KV	H2FV
13	80	1880	2040
14	90	2430	2600
15	140	3240	3480
16	150	3465	3720
17	175	4420	4720
18	185	4870	5220
19-22	敬请垂询 / On request		

冷却盘管 / Cooling coil ³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
13	252	300	335	8
14	252	300	405	8
15	290	335	395	8
16	290	335	440	8
17	340	380	425	8
18	340	380	485	8
19-22	敬请垂询 / On request			

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

1) 轴:

- ms ≤ φ 100; ns > φ 100
- 平键槽按照 DIN 6885/1
 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

2) 方案:

- 布置形式 G, H 和 I 不能采用法兰泵强制润滑。

3) 采用冷却盘管时:

- 布置形式 A, C 和 E 不能采用法兰泵强制润滑。

4) 油泵、油管和护盖所需的空尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请征询。

6) 规格 13 和 15: 仅有 in=6.3-18; 规格 17 和 19: 仅有 in=6.3-16

*) 参考值: 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

- ms ≤ φ 100; ns > φ 100
- Keyway acc. to DIN 6885/1
 Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

2) Variants:

- Flanged-on pump not possible with G, H and I designs.

3) Cooling coil:

- For A, C and E designs, forced lubrication by flanged-on pump not possible.

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

5) A, D and G designs on request.

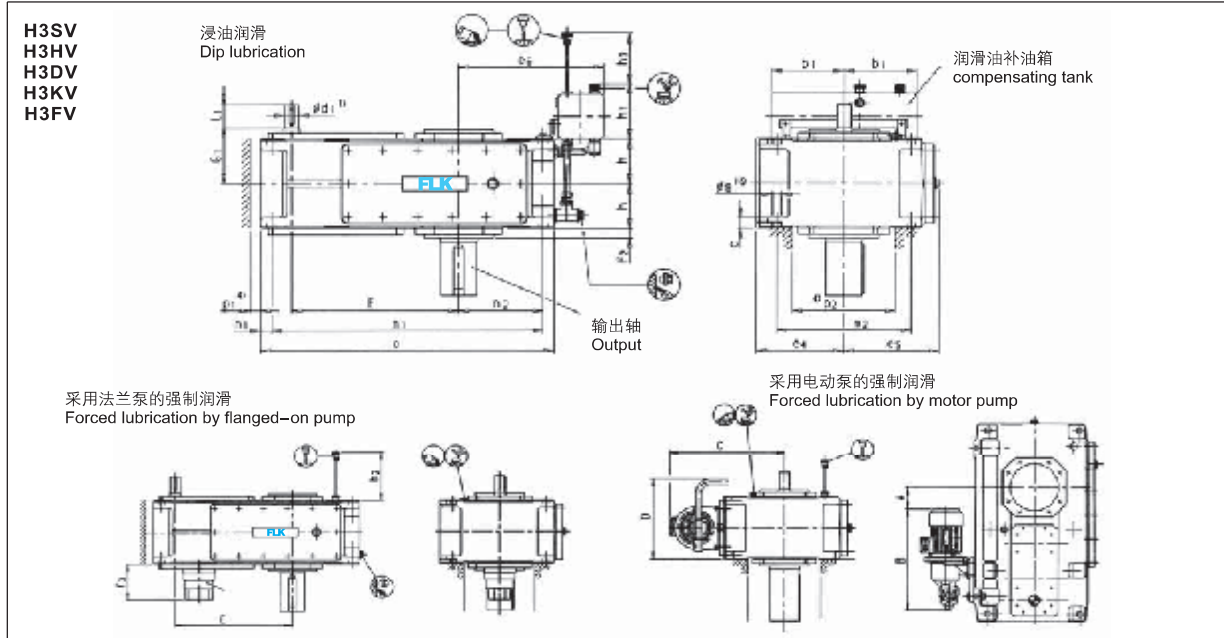
6) Sizes 13 and 15: only in=6.3-18; Sizes 17 and 19: only in=6.3-16;

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

三级传动, 立式安装, 类型 H3.V, 规格 5-12

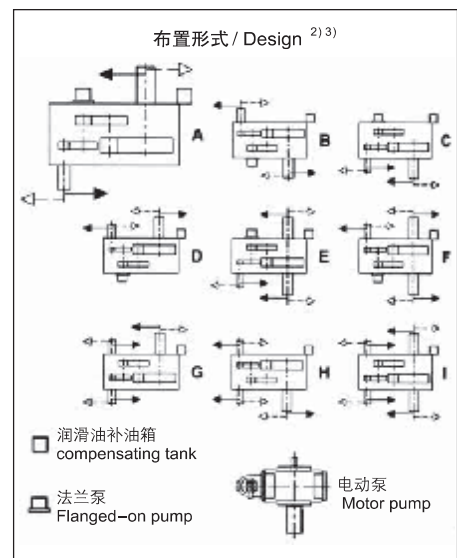
Three Stage, Vertical, Type H3.V, Sizes 5-12



规格 Size	输入轴 / Input						G ₁	2) 布置形式 / Design G, H, I 仅用于 / only for in=	
	in=25-45		in=50-63		in=71-90			25-90	31.5-112
	d ₁	l ₁	d ₁	l ₁	d ₁	l ₁			
5 + 6	40	70	30	50	24	40	160	25-90	31.5-112
7 + 8	45	80	35	60	28	50	185	25-90	31.5-112
9 + 10	60	125	45	100	32	80	230	25-90	31.5-112
11 + 12	70	120	50	80	42	70	255	25-90	31.5-112

规格 Size	齿轮箱 / Gear units												
	b ₁	c	e ₄	h	h ₁	h ₂	h ₃	m ₂	n ₁	p ₁	p ₂	s	
5 + 6	240	30	1	230	127.5	205	190	240	360	30	35	270	24
7 + 8	240	36	1	280	150	205	165	250	430	35	35	330	28
9 + 10	330	45	1.5	320	185	275	205	330	490	40	40	370	36
11 + 12	330	54	1.5	380	215	275	240	340	600	50	50	440	40

规格 Size	齿轮箱 / Gear units							泵 / Motor pump				
	a	e ₅	e ₆	E	f ₂	m ₁	n ₂	泵 f ₃ ²⁾	A ¹⁾	B ¹⁾	C ¹⁾	D ¹⁾
5	690	252	385	405	28	630	175	190	-35	490	480	360
6	770	252	425	440	28	710	220	190	0	490	480	360
7	845	292	425	495	30	775	215	185	60	490	530	420
8	950	302	485	540	32	880	275	185	105	490	530	420
9	1000	342	560	580	32	920	260	170	-5	490	570	480
10	1100	342	610	630	32	1020	310	170	45	490	570	480
11	1200	402	595	705	35	1100	295	170	80	490	630	550
12	1355	410	680	775	35	1255	380	170	150	490	630	550

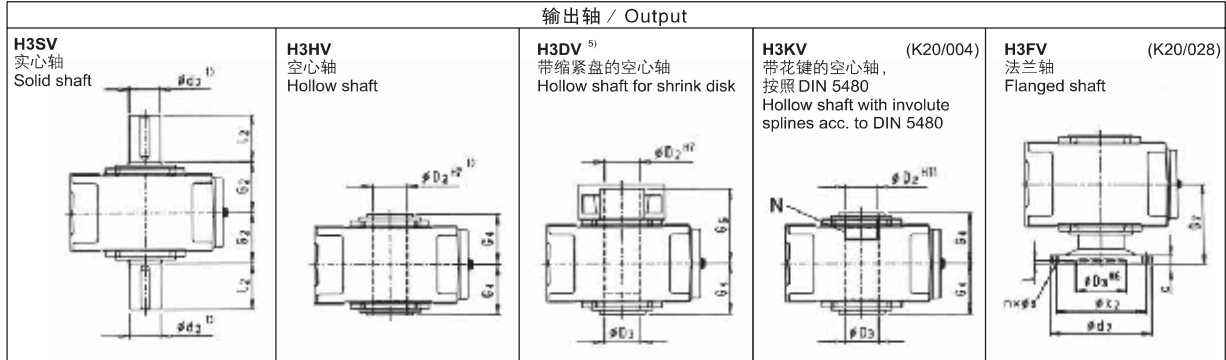


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 立式安装, 类型 H3.V, 规格 5-12

Three Stage, Vertical, Type H3.V, Sizes 5-12



规格 Size	H3SV			H3HV		H3DV				H3KV				H3FV						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16x22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18x22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16x26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18x26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20x26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22x26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18x33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22x33	12	400

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	浸油润滑 Dip lubrication	强制润滑 Forced lubrication	H3SV H3HV H3DV H3KV	H3FV
5	35	13	320	355
6	37	15	365	405
7	60	25	540	590
8	72	30	625	680
9	100	40	875	960
10	110	45	1020	1110
11	170	66	1400	1530
12	190	75	1675	1815

冷却盘管 / Cooling coil³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G 1/2"

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
5	70	170	175	4
6	70	161	220	4
7	80	197	210	4
8	80	197	270	4
9	150	213	245	4
10	90	225	295	4
11	200	265	275	8

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

1) 轴:

• k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100

• 平键槽按照 DIN 6885/1

• 轮毂键槽宽度按照 ISO JS9

• 平键按照 DIN 6885/1 B 型

• 有关细节见第 110-119 页

2) 方案:

• 布置形式 G, H 和 I 不能采用法兰泵强制润滑。

3) 采用冷却盘管时:

• 布置形式 A, C 和 E 不能采用法兰泵强制润滑。

• 与采用电动泵的强制润滑的组合请垂询。

4) 油泵、油管和护盖所需的尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

• k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100

• Keyway acc. to DIN 6885/1

• Hub keyway width acc. to ISO JS9

• Parallel key acc. to DIN 6885/1 form B

• For details, see pages 110-119

2) Variants:

• Flanged-on pump not possible with G, H and I designs.

3) Cooling coil:

• For A, C and E designs, forced lubrication by flanged-on pump not possible.

Combination with forced lubrication by motor pump on request.

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

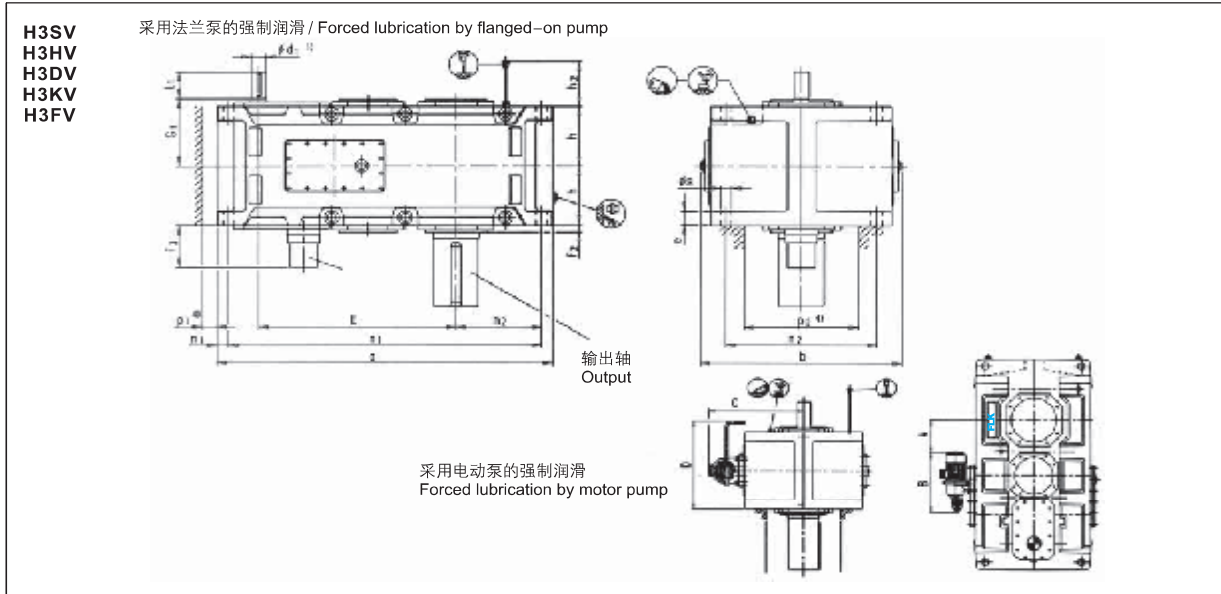
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

三级传动, 立式安装, 类型 H3.V, 规格 13-22

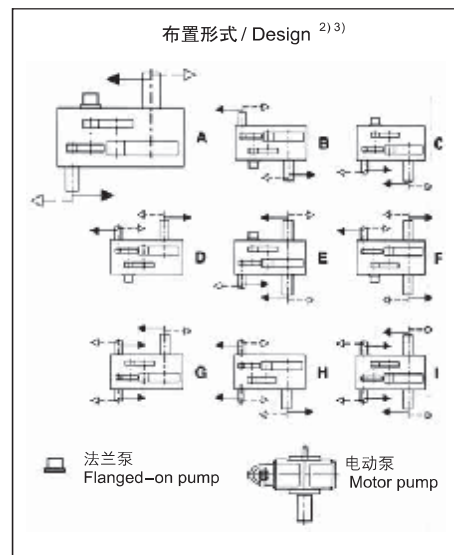
Three Stage, Vertical, Type H3.V, Sizes 13-22



规格 Size	输入轴 / Input						G ₁	布置形式 / Design G, H, I 仅用于 / only for in=	
	i _N =22.4-45		i _N =50-63		i _N =71-90			22.4-90	28-112
	i _N =25-50		i _N =56-71		i _N =80-100				
	i _N =28-56		i _N =63-80		i _N =90-112				
d ₁	l ₁	d ₁	l ₁	d ₁	l ₁				
13 + 14	85	160	60	135	50	110	310		
15 + 16	100	200	75	140	60	140	350	22.4-90	25-100
17 + 18	100	200	75	140	60	140	380	22.4-90	25-100
19 + 20	敬请垂询 / On request								
21 + 22	敬请垂询 / On request								

规格 Size	齿轮箱 / Gear units									
	b	c	h	h ₂	m ₂	n ₁	p ₁	p ₂	s	
13 + 14	900	61	2	272.5	300	680	50	50	500	48
15 + 16	980	72	2	310	340	750	60	50	570	55
17 + 18	1110	81	2	340	374	850	70	70	630	55
19 + 20	敬请垂询 / On request									
21 + 22	敬请垂询 / On request									

规格 Size	齿轮箱 / Gear units						电动泵 / Motor pump			
	a	E	f ₂	m ₁	n ₂	泵 Pump f _s ⁺⁾	A ⁺⁾	B ⁺⁾	C ⁺⁾	D ⁺⁾
13	1395	820	35	1300	360	170	115	580		700
14	1535	890	35	1440	430	170	185	580	685	700
15	1680	987	42	1565	430	170	260	580	730	780
16	1770	1033	42	1655	475	170	305	580	730	780
17	1770	1035	42	1640	465	210	235	580	790	840
18	1890	1095	42	1760	525	210	295	580	790	840
19+20	敬请垂询 / On request									
21+22	敬请垂询 / On request									

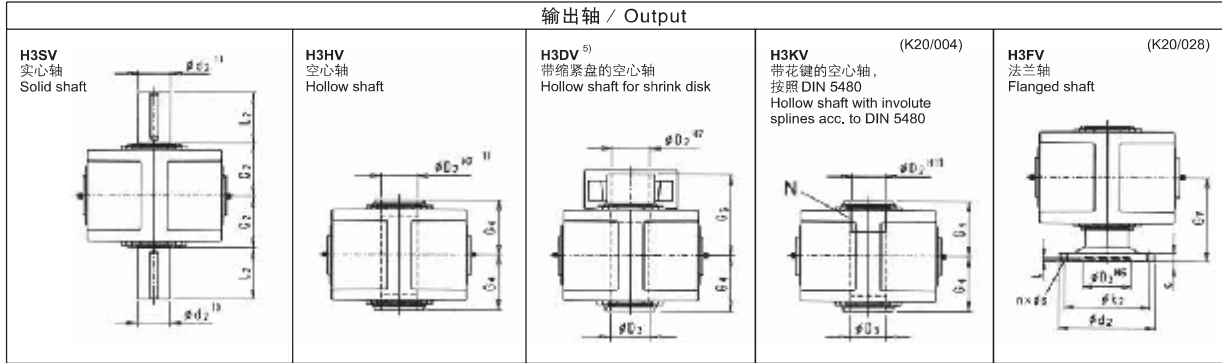


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 立式安装, 类型 H3.V, 规格 13-22

Three Stage, Vertical, Type H3.V, Sizes 13-22



规格 Size	H3SV			H3HV		H3DV				H3KV				H3FV							
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20x33	14	480	
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24x33	14	480	
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28x33	17	550	
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30x33	17	550	
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24x39	18	600	
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26x39	18	600	
19-22	敬请垂询 / On request																				

规格 Size	润滑油量 Oil quantity (l) *)	重量 Weight (kg) **)	
		H3SV H3HV H3DV H3KV	H3FV
13	115	2155	2315
14	126	2490	2660
15	180	3260	3500
16	190	3625	3880
17	190	4250	4550
18	200	4740	5090
19-22	敬请垂询 / On request		

冷却盘管 / Cooling coil ³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G1/2"

输出轴
Output

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
13	252	300	335	8
14	252	300	405	8
15	290	340	395	8
16	290	340	440	8
17	300	380	425	8
18	300	380	485	8
19-22	敬请垂询 / On request			

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

1) 轴:

- k_e = φ 24: φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

2) 方案:

- 布置形式 G, H 和 I 不能采用法兰泵强制润滑。

3) 采用冷却盘管时:

- 布置形式 A, C 和 E 不能采用法兰泵强制润滑。
- 与采用电动泵的强制润滑的组合请垂询。

4) 油泵、油管和护盖所需的空间尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

- k_e = φ 24: φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

2) Variants:

- Flanged-on pump not possible with G, H and I designs.

3) Cooling coil:

- For A, C and E designs, forced lubrication by flanged-on pump not possible.
- Combination with forced lubrication by motor pump on request.

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

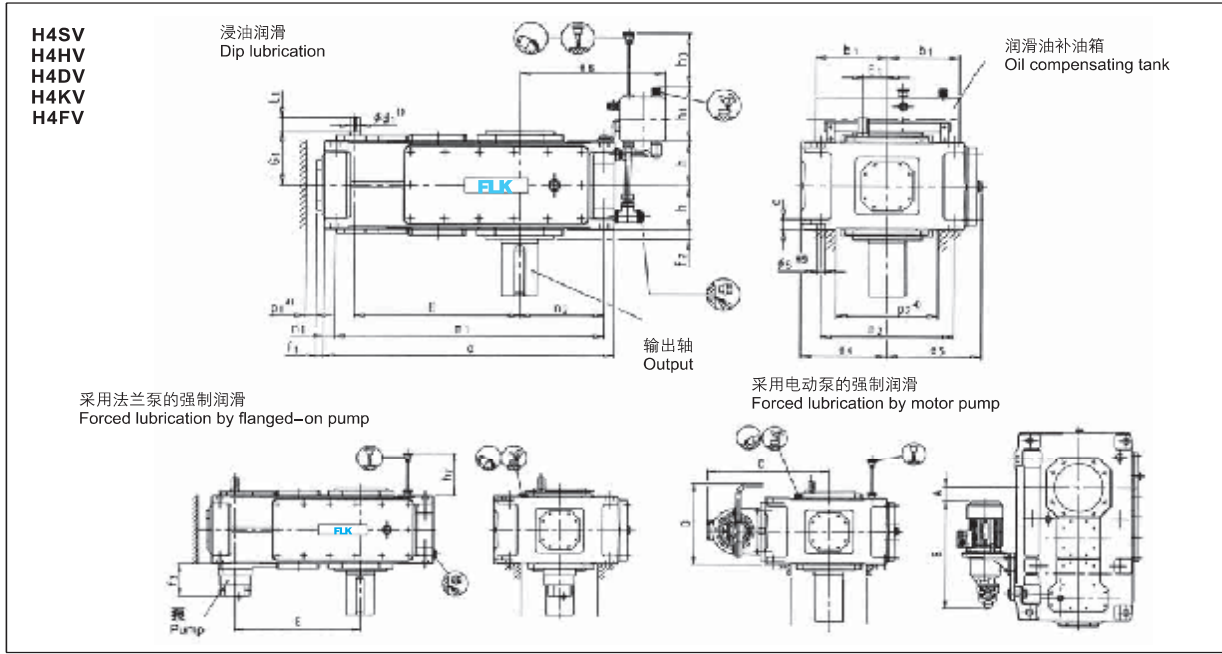
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

四级传动, 立式安装, 类型 H4.V, 规格 7-12

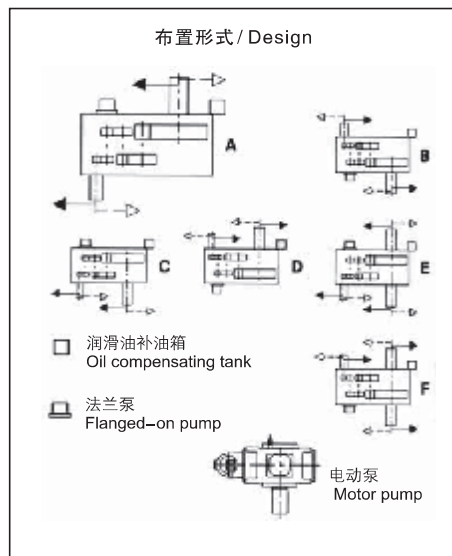
Four Stage, Vertical, Type H4.V, Sizes 7-12



规格 Size	输入轴 / Input				
	i _N =100-180 i _N =125-224		i _N =200-355 i _N =250-450		G ₁
	d ₁	l ₁	d ₁	l ₁	
7 + 8	30	50	24	40	180
9 + 10	35	60	28	50	215
11 + 12	45	100	32	80	250

规格 Size	齿轮箱 / Gear units														
	b ₁	c	e ₄	E ₁	f ₁	h	h ₁	h ₂	h ₃	m ₂	n ₁	p ₁	p ₂	s	
7 + 8	240	36	1	280	80	37	150	205	165	250	430	35	35	330	28
9 + 10	330	45	1.5	320	90	43	185	275	205	330	490	40	40	370	36
11 + 12	330	54	1.5	380	110	47	215	275	240	340	600	50	50	440	40

规格 Size	齿轮箱 / Gear units										泵 电动机 / Motor pump			
	a	e ₅	e ₆	E	f ₂	m ₁	n ₂	f ₃	A ⁺⁾	B ⁺⁾	C ⁺⁾	D ⁺⁾		
7	845	292	425	495	30	775	215	160	10	580	540	410		
8	950	302	485	540	32	880	275	160	55	580	540	410		
9	1000	342	560	580	32	920	260	170	-55	580	580	480		
10	1100	342	610	630	32	1020	310	170	-5	580	580	480		
11	1200	402	595	705	35	1100	295	170	30	580	640	550		
12	1355	410	680	775	35	1255	380	170	100	580	640	550		

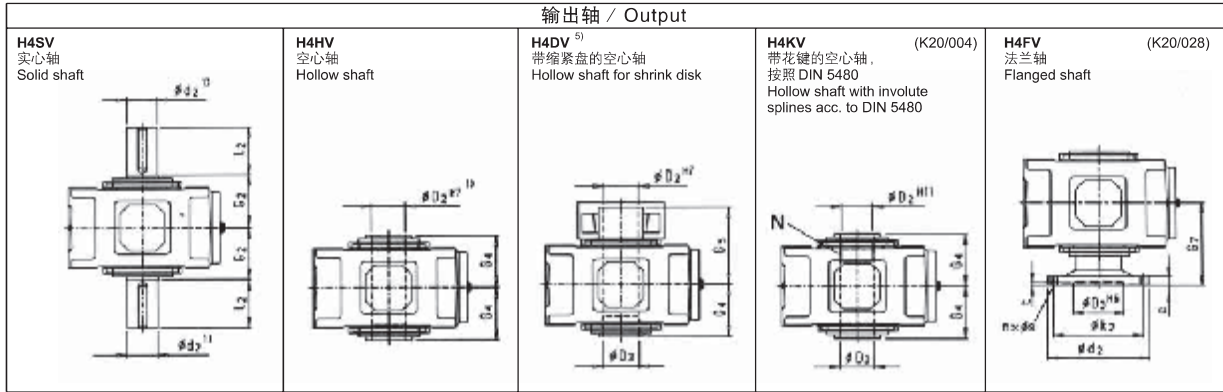


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

四级传动, 立式安装, 类型 H4.V, 规格 7-12

Four Stage, Vertical, Type H4.V, Sizes 7-12



规格 Size	H4SV			H4HV		H4DV				H4KV				H4FV							
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480		D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H		114	120	195	30	370	180	320	16x26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H		114	130	195	30	390	190	340	18x26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H		134	145	235	38	430	220	380	20x26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H		134	155	235	38	470	240	420	22x26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H		160	170	270	42	510	260	450	18x33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H		160	185	270	42	540	280	480	22x33	12	400

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	浸油润滑 Dip lubrication	强制润滑 Forced lubrication	H4SV H4HV H4DV H4KV	H4FV
7	50	20	550	600
8	60	25	645	700
9	95	38	875	960
10	110	45	1010	1100
11	165	65	1460	1590
12	180	75	1725	1865

尺寸以mm为单位

1) 轴:

• k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100

• 平键槽按照 DIN 6885/1

• 轮毂键槽宽度按照 ISO JS9

• 平键按照 DIN 6885/1 B型

• 有关细节见第 110-119 页

4) 油泵、油管和护盖所需的空尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A、D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

• k₆ = φ 24; φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100

• Keyway acc. to DIN 6885/1

• Hub keyway width acc. to ISO JS9

• Parallel key acc. to DIN 6885/1 form B

• For details, see pages 110-119

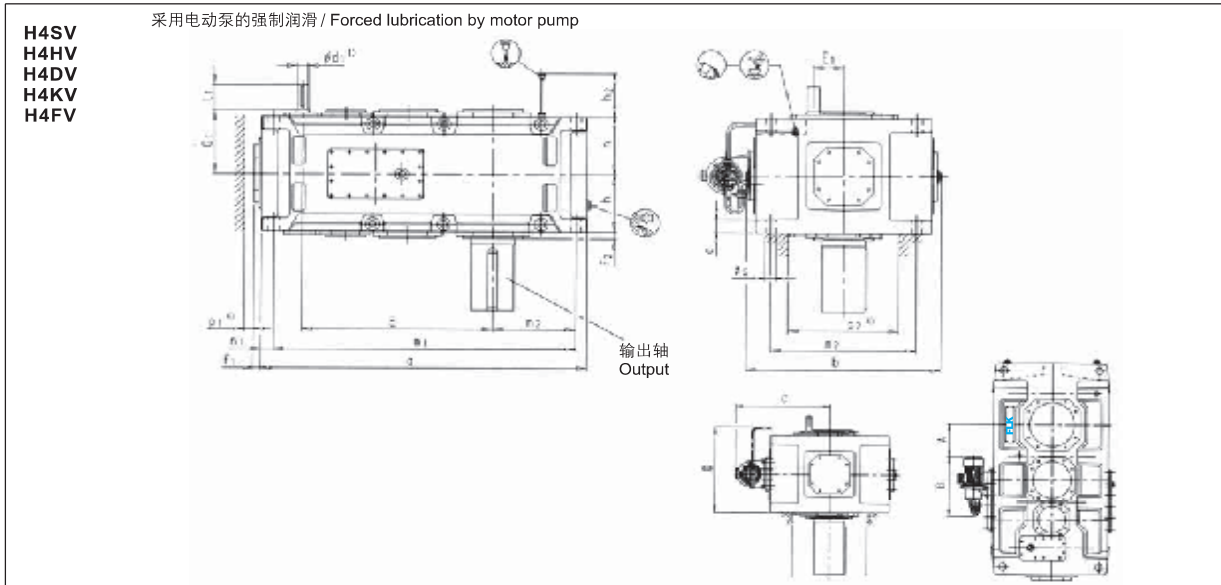
4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

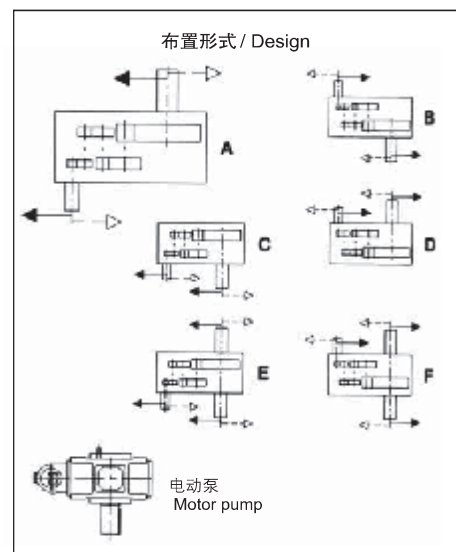
四级传动, 立式安装, 类型 H4.V, 规格 13-22
 Four Stage, Vertical, Type H4.V, Sizes 13-22



规格 Size	输入轴 / Input				
	i _N =100-180		i _N =200-355		G ₁
	i _N =112-200		i _N =224-400		
	i _N =125-224		i _N =250-450		
d ₁	l ₁	d ₁	l ₁		
13 + 14	50	100	38	80	305
15 + 16	60	135	50	110	345
17 + 18	60	105	50	80	380
19 + 20	敬请垂询 / On request				
21 + 22					

规格 Size	齿轮箱 / Gear units										
	b	c	E ₁	h	h ₂	m ₂	n ₁	p ₁	p ₂	s	
13 + 14	900	61	2	130	272.5	300	680	50	50	500	48
15 + 16	980	72	2	160	310	340	750	60	60	570	55
17 + 18	1110	81	2	160	340	374	850	70	70	630	55
19 + 20	敬请垂询 / On request										
21 + 22											

规格 Size	齿轮箱 / Gear units						电动泵 / Motor pump			
	a	E	f ₁	f ₂	m ₁	n ₂	A ⁺⁾	B ⁺⁾	C ⁺⁾	D ⁺⁾
13	1395	820	47	35	1300	360	70	580	690	705
14	1535	890	47	35	1440	430	140	580	690	705
15	1680	987	56	42	1565	430	210	580	730	780
16	1770	1033	56	42	1655	475	260	580	730	780
17	1770	1035	53	42	1640	465	190	580	790	840
18	1890	1095	53	42	1760	525	250	580	790	840
19+20	敬请垂询 / On request									
21+22										

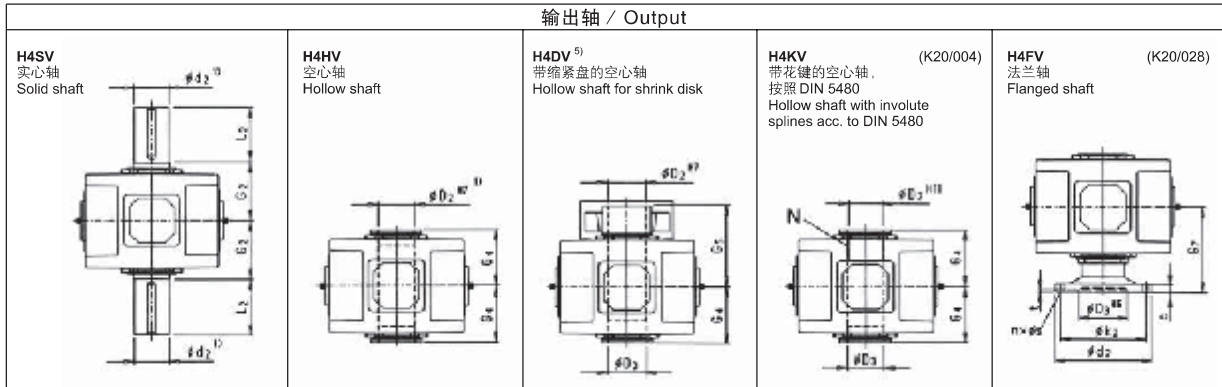


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

四级传动, 立式安装, 类型 H4.V, 规格 13-22

Four Stage, Vertical, Type H4.V, Sizes 13-22



规格 Size	H4SV			H4HV		H4DV				H4KV				H4FV									
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480				c	d ₂	D ₃	k ₂	n x s	t	G ₇			
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H				180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H				180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H				210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H				210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H				240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H				240	285	415	60	800	410	710	26x39	18	600
19-22	敬请垂询 / On request																						

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{*)}	
		H4SV H4HV H4DV H4KV	H4FV
13	95	2270	2430
14	105	2600	2770
15	150	3440	3680
16	160	3740	3995
17	190	4445	4745
18	200	4915	5265
19-22	敬请垂询 / On request		

尺寸以 mm 为单位

1) 轴:

- m_e ≤ φ 100; n_e > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

4) 油泵、油管和护盖所需的尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定。

**) 未注油时

Dimensions in mm

1) Shafts:

- m_e ≤ φ 100; n_e > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

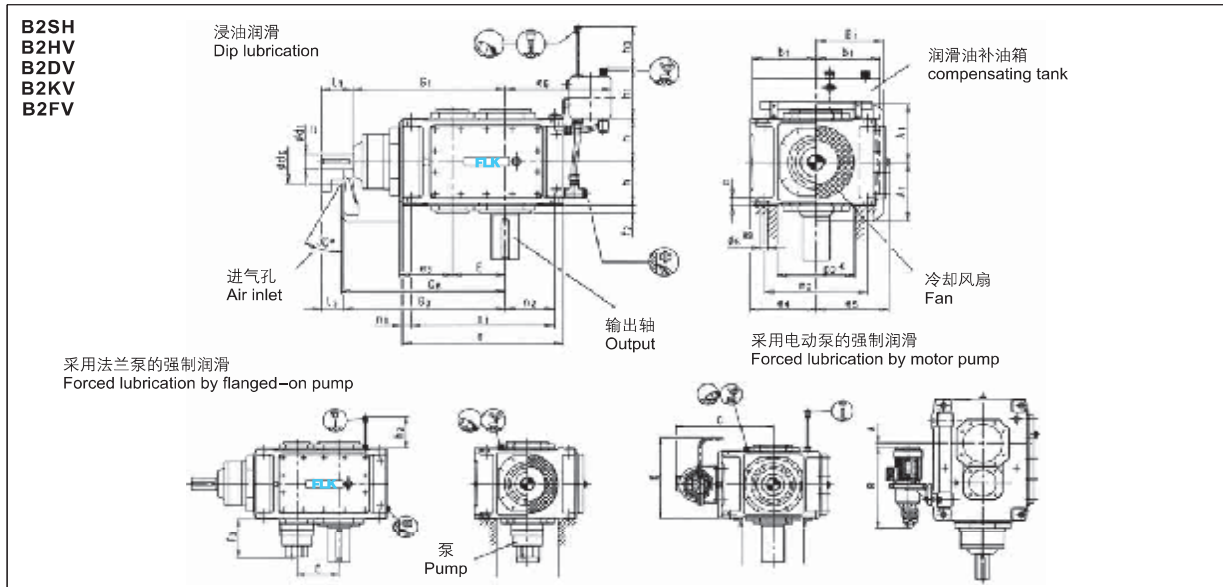
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

两级传动, 立式安装, 类型 B2.V, 规格 4-12

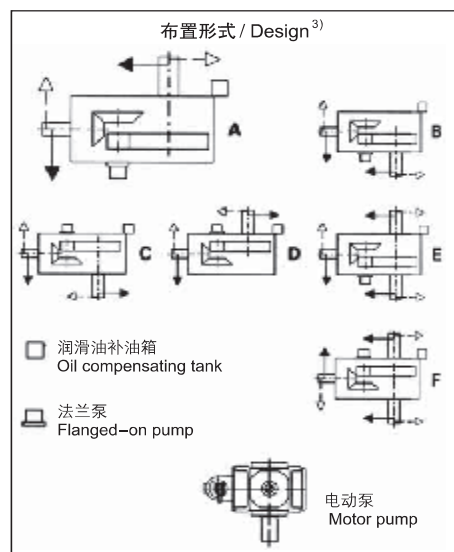
Two Stage, Vertical, Type B2.V, Sizes 4-12



规格 Size	输入轴 / Input							冷却风扇 / Fan		
	i _N =5-11.2			i _N =6.3-14				A ₁	B ₁	d ₆
	d ₁	l ₁	l ₃	G ₁	G ₃	G ₁	G ₃			
4	45	100	80	465	485	-	-	188	200	150
5 + 6	55	110	80	535	565	570	600	215	235	160
7 + 8	70	135	105	640	670	685	715	250	285	210
9 + 10	80	165	130	755	790	805	840	270	325	195
11 + 12	90	165	130	925	960	995	1030	328	385	210

规格 Size	齿轮箱 / Gear units													
	b ₁	c	e ₃	e ₄	e ₅	f ₂	h	h ₁	h ₂	h ₃	m ₂	n ₁	s	
4	150	30	1	100	200	215	26	135	165	-	180	300	30	24
5 + 6	240	30	1	185	230	252	30	160	205	245	240	360	30	24
7 + 8	240	36	1	225	280	302	32	190	205	220	250	430	35	28
9 + 10	330	45	1.5	265	320	342	45	220	275	250	330	490	40	36
11 + 12	330	54	1.5	320	380	410	47	265	275	300	340	600	50	40

规格 Size	齿轮箱 / Gear units								电动泵 / Motor pump			
	a	e ₆	E	G ₆	m ₁	n ₂	p ₂	泵 Pump f ₃	A ⁺⁾	B ⁺⁾	C ⁺⁾	D ⁺⁾
4	505	320	160	495	445	160	220	-	-	-	-	-
5	565	385	185	575	505	175	270	190	-130	490	480	420
6	645	425	220	610	585	220	270	190	-90	490	480	420
7	690	425	225	685	620	215	330	200	0	490	530	470
8	795	485	270	730	725	275	330	200	45	490	530	470
9	820	560	265	805	740	260	370	200	5	490	570	530
10	920	610	315	855	840	310	370	200	55	490	570	530
11	975	595	320	980	875	295	440	200	145	489	630	630
12	1130	680	390	1050	1030	380	440	200	215	490	630	630

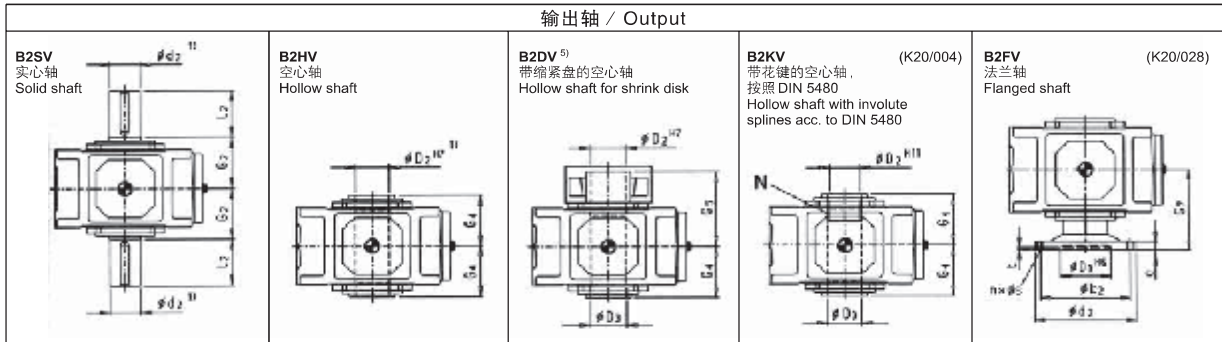


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

两级传动, 立式安装, 类型 B2.V, 规格 4-12

Two Stage, Vertical, Type B2.V, Sizes 4-12



规格 Size	B2SV		B2HV		B2DV					B2KV				B2FV							
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
4	80	170	170	80	170	85	85	170	235	-	-	-	-	-	-	-	-	-	-	-	-
5	100	210	200	95	200	100	100	200	275	N 95x3x30x30x9H	89	100	200	25	300	150	260	16x22	10	290	
6	110	210	200	105	200	110	110	200	275	N 95x3x30x30x9H	89	110	200	25	320	160	280	18x22	10	290	
7	120	210	235	115	235	120	120	235	320	N 120x3x30x38x9H	114	120	235	30	370	180	320	16x26	10	340	
8	130	250	235	125	235	130	130	235	325	N 120x3x30x38x9H	114	130	235	30	390	190	340	18x26	10	340	
9	140	250	270	135	270	140	145	270	365	N 140x3x30x45x9H	134	145	270	38	430	220	380	20x26	12	385	
10	160	300	270	150	270	150	155	270	385	N 140x3x30x45x9H	134	155	270	38	470	240	420	22x26	12	385	
11	170	300	320	165	320	165	170	320	450	N 170x5x30x32x9H	160	170	320	42	510	260	450	18x33	12	450	
12	180	300	320	180	320	180	185	320	455	N 170x5x30x32x9H	160	185	320	42	540	280	480	22x33	12	450	

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	浸油润滑 Dip lubrication	强制润滑 Forced lubrication	B2SH B2HV B2DV B2KV	B2FV
4	28	-	235	-
5	41	20	360	400
6	50	23	410	455
7	75	35	615	670
8	90	38	700	760
9	115	53	1000	1090
10	135	60	1155	1250
11	190	86	1640	1775
12	215	95	1910	2060

冷却盘管 / Cooling coil³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G1/2"

输出轴
Output

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
4	74	146	160	4
5	130	168	175	8
6	120	162	220	4
7	140	200	210	8
8	140	200	270	4
9	232	210	245	8
10	150	230	295	8
11	312	265	275	8
12	300	265	360	8

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

1) 轴:

- m₆ ≤ φ 100; n₆ > φ 100
- 平键按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第110-119页

3) 采用冷却盘管时:

- 布置形式 C, D 和 F 不能采用法兰泵强制润滑。
- 与采用电动泵的强制润滑的组合请垂询。

4) 油泵、油管和护盖所需的空间尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

- m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

3) Cooling coil:

- For A, C and E designs, forced lubrication by flanged-on pump not possible.
- Combination with forced lubrication by motor pump on request.

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

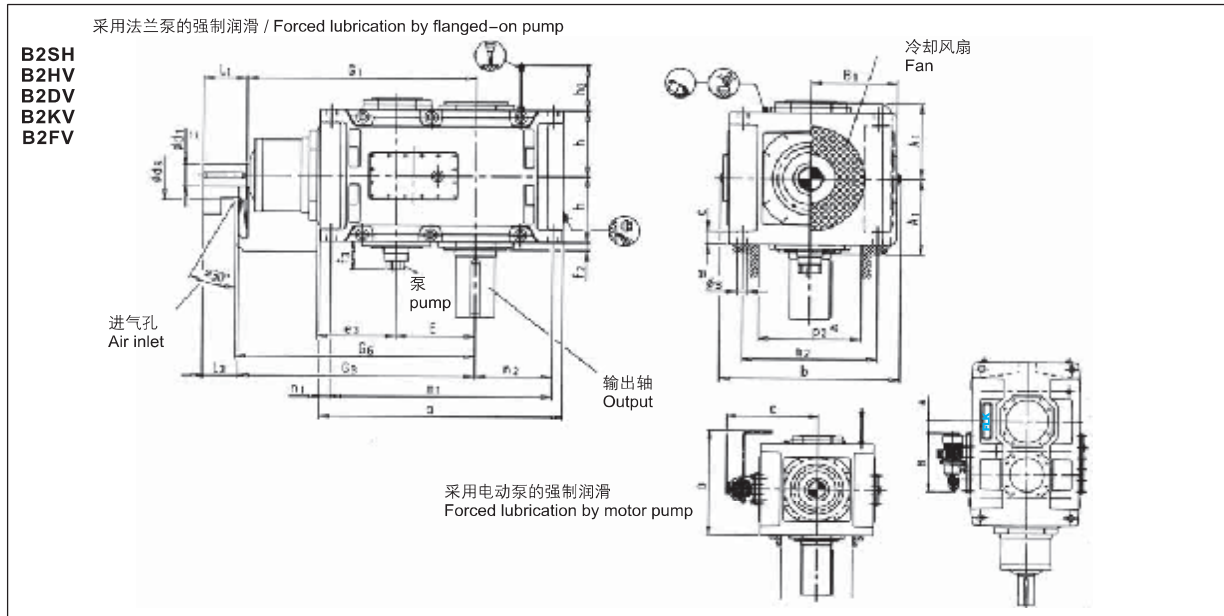
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

两级传动, 立式安装, 类型 B2.V, 规格 13-18

Two Stage, Vertical, Type B2.V, Sizes 13-18



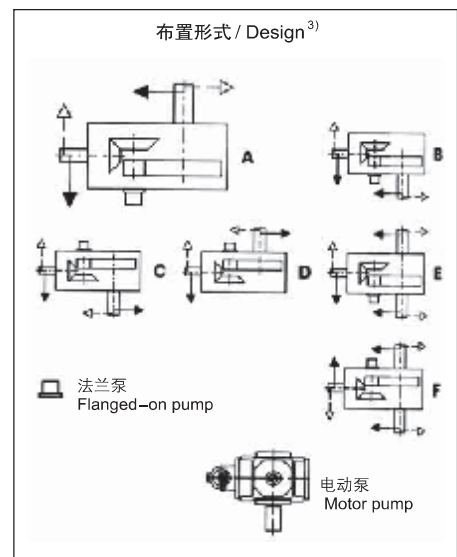
规格 Size	输入轴 / Input										冷却风扇 / Fan		
	iN=5-11.2			iN=5.6-11.2			G ₁	G ₃	G ₁	G ₃	A ₁	B ₁	d ₆
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃							
13 + 14	110	205	165				1070	1110	1140	1180	375	450	245
15	130	245	200	130	245	200	1277	1322			435	495	280
16				150	245	200			1323	1368	435	495	280
17							1435	1480			505	555	380
18	150	245	200				1495	1540			505	555	380

规格 Size	齿轮箱 / Gear units									
	b	c	e ₃	h	h ₂	m ₂	n ₁	p ₂	s	
13 + 14	900	61	2	380	325	350	680	50	500	48
15 + 16	980	72	2	450	380	430	750	60	570	55
17 + 18	1110	81	2	510	437.5	480	850	70	630	55

规格 Size	齿轮箱 / Gear units						电动机 / Motor pump				
	a	E	f ₂	G ₆	m ₁	n ₂	泵 f ₃	A ¹⁾	B ¹⁾	C ¹⁾	D ¹⁾
13	1130	370	38	1130	1035	360	200	-110	490	680	810
14	1270	440	45	1200	1175	430	200	-40	490	680	810
15	1350	442	75	1340	1235	430	200	0	490	730	920
16	1440	488	75	1385	1325	475	200	45	490	730	920
17	1490	490	98	1500	1360	465	200	-20	490	780	1030
18	1610	550	98	1560	1480	525	200	40	490	780	1030

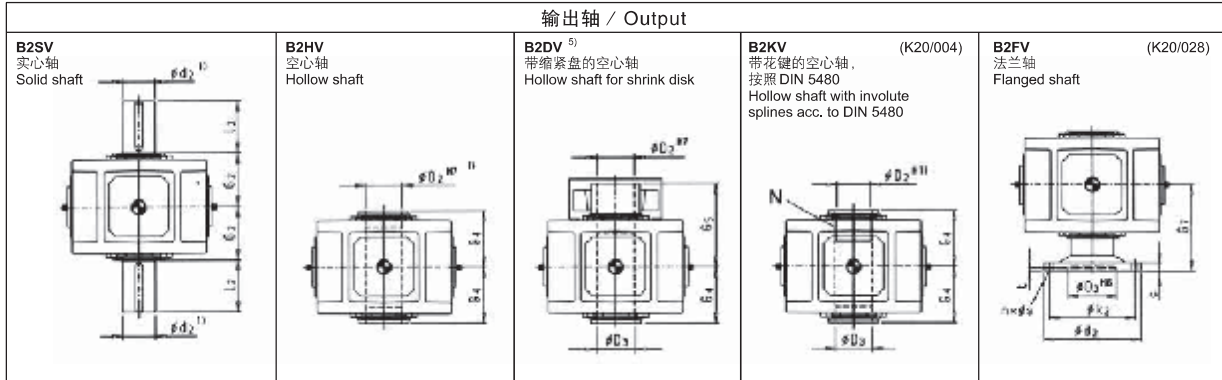
+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.



两级传动, 立式安装, 类型 B2.V, 规格 13-18

Two Stage, Vertical, Type B2.V, Sizes 13-18

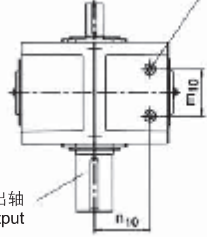
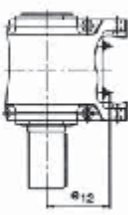


规格 Size	B2SV				B2HV		B2DV				B2KV				B2FV							
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480			D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H			180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H			180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H			210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H			210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H			240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H			240	285	415	60	800	410	710	26x39	18	600

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{*)}	
		B2SV B2HV B2DV B2KV	B2FV
13	100	2350	2520
14	110	2725	2905
15	145	3795	4050
16	160	4160	4430
17	210	5320	5640
18	220	5860	6230

冷却盘管 / Cooling coil³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G1/2"

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
13	324	300	335	8
14	324	300	405	8
15	396	345	390	8
16	396	345	435	8
17	324	395	425	8
18	324	395	485	8

x) 所需冷却水量 / Required cooling water quantity

尺寸以 mm 为单位

1) 轴:

- n_s > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

3) 采用冷却盘管时:

- 布置形式 C, D 和 F 不能采用法兰泵强制润滑。
- 与采用电动泵的强制润滑的组合请垂询。

4) 油泵、油管和护盖所需的空间尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

***) 未注油时

Dimensions in mm

1) Shafts:

- n_s > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

3) Cooling coil:

- For A, C and E designs, forced lubrication by flanged-on pump not possible.
- Combination with forced lubrication by motor pump on request.

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

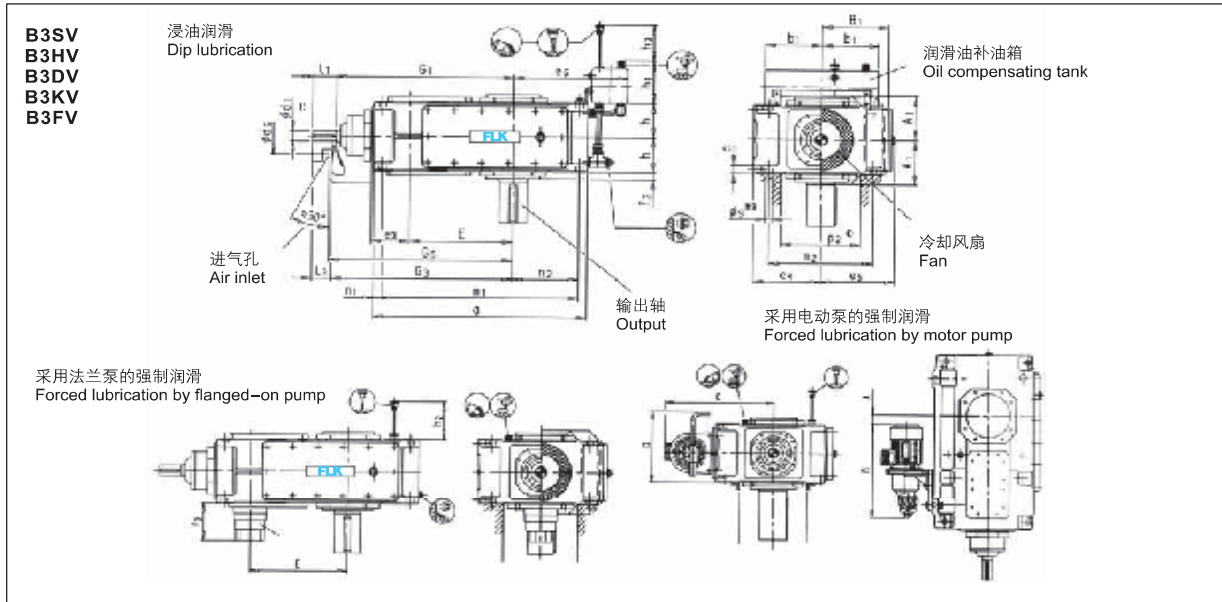
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

三级传动, 立式安装, 类型 B3.V, 规格 4-12

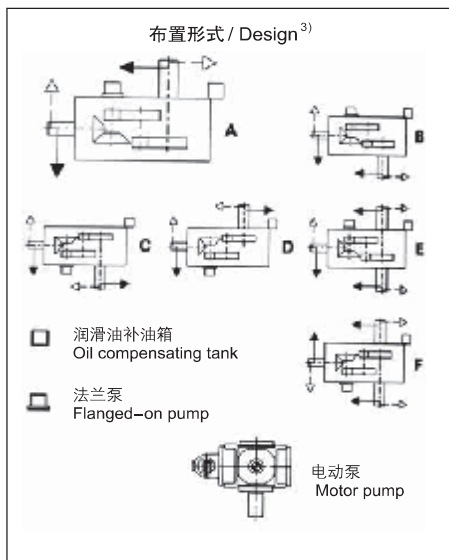
Three Stage, Vertical, Type B3.V, Sizes 4-12



规格 Size	输入轴 / Input										冷却风扇 / Fan		
	in=12.5-45			in=50-71			G ₁	G ₃	G ₁	G ₃			
	d ₁	l ₁	l ₃	d ₁	l ₁	l ₃					A ₁	B ₁	d ₆
4	30	70	50	25	60	40	500	520	-	-	143	200	110
5 + 6	35	80	60	28	60	40	575	595	610	630	168	235	130
7 + 8	45	100	80	35	80	60	690	710	735	755	193	275	165
9 + 10	55	110	80	40	100	70	800	830	850	880	231	325	175
11 + 12	70	135	105	50	110	80	960	990	1030	1060	263	385	190

规格 Size	齿轮箱 / Gear units												
	b ₁	c	e ₃	e ₄	h	h ₁	h ₂	h ₃	m ₂	n ₁	p ₂	s	
4	150	30	1	110	200	107.5	165	-	180	300	30	220	24
5 + 6	240	30	1	130	230	127.5	205	180	240	360	30	270	24
7 + 8	240	36	1	160	280	150	205	165	250	430	35	330	28
9 + 10	330	45	1.5	185	320	185	275	205	330	490	40	370	36
11 + 12	330	54	1.5	225	380	215	275	240	340	600	50	440	40

规格 Size	齿轮箱 / Gear units										电动泵 / Motor pump			
	a	e ₅	e ₆	E	f ₂	G ₆	m ₁	n ₂	泵 Pump f ₃	A ^{*)}	B ^{*)}	C ^{*)}	D ^{*)}	
4	565	215	320	270	22	530	505	160	-	-	-	-	-	
5	640	252	385	315	28	605	580	175	190	-85	490	480	390	
6	720	252	425	350	28	640	660	220	190	-50	490	480	390	
7	785	292	425	385	30	720	715	215	190	0	490	530	420	
8	890	302	485	430	32	765	820	275	190	45	490	530	420	
9	925	342	560	450	32	845	845	260	180	-80	490	570	490	
10	1025	342	610	500	32	895	945	310	180	-30	490	570	490	
11	1105	402	595	545	35	1010	1005	295	180	-15	490	630	570	
12	1260	410	680	615	35	1080	1160	380	180	55	490	630	570	

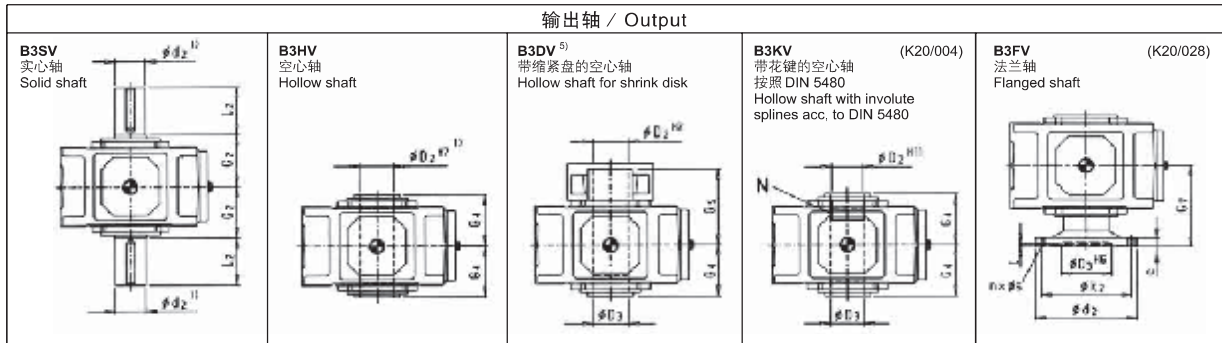


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 立式安装, 类型 B3.V, 规格 4-12

Three Stage, Vertical, Type B3.V, Sizes 4-12



规格 Size	B3SV			B3HV		B3DV				B3KV				B3FV										
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480				D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
4	80	170	140	80	140	85	85	140	205	-				-	-	-	-	-	-	-	-	-	-10	-
5	100	210	165	90	165	100	100	165	240	N 95x3x30x30x9H				89	100	165	25	300	150	260	16x22	10	255	
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H				89	110	165	25	320	160	280	18x22	10	255	
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H				114	120	195	30	370	180	320	16x26	10	300	
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H				114	130	195	30	390	190	340	18x26	10	300	
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H				134	145	235	38	430	220	380	20x26	12	350	
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H				134	155	235	38	470	240	420	22x26	12	350	
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H				160	170	270	42	510	260	450	18x33	12	400	
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H				160	185	270	42	540	280	480	22x33	12	400	

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	浸油润滑 Dip lubrication	强制润滑 Forced lubrication	B3SV B3HV B3DV B3KV	B3FV
4	28	-	210	-
5	32	12	325	360
6	35	13	380	420
7	52	22	550	600
8	67	28	635	690
9	115	48	890	975
10	125	52	1020	1110
11	180	75	1455	1585
12	200	85	1730	1870

冷却盘管 / Cooling coil³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G1/2"

输出轴
Output

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
4	34	140	155	4
5	68	168	170	4
6	70	162	215	4
7	100	197	210	4
8	100	197	270	4
9	140	210	245	8
10	100	225	295	8
11	110	285	275	8
12	200	271	360	8

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

1) 轴:

- k_e = φ 24: φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

3) 采用冷却盘管时:

- 布置形式 A、C 和 E 不能采用法兰泵强制润滑。
- 与采用电动泵的强制润滑的组合请垂询。

4) 油泵、油管和护盖所需的空间尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A、D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

- k_e = φ 24: φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

3) Cooling coil:

- For A, C and E designs, forced lubrication by flanged-on pump not possible.
- Combination with forced lubrication by motor pump on request.

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

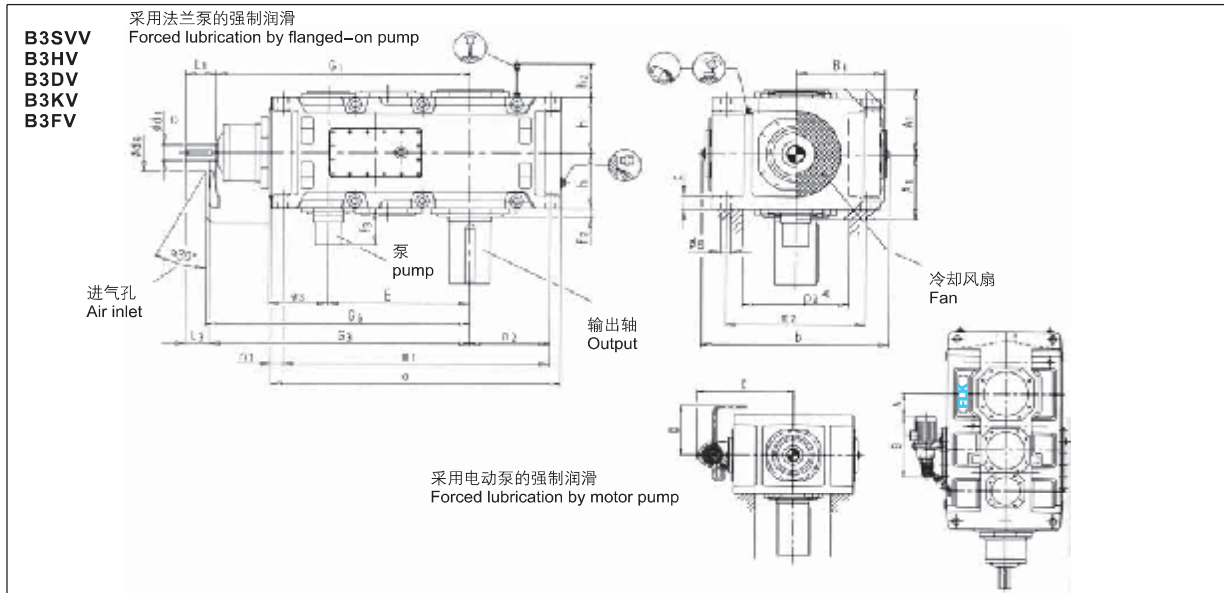
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

三级传动, 立式安装, 类型 B3.V, 规格 13-22

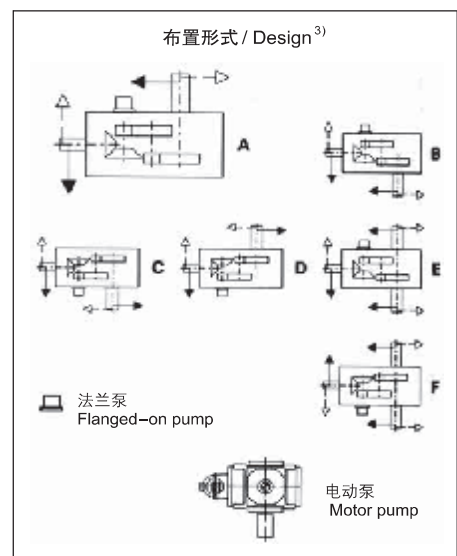
Three Stage, Vertical, Type B3.V, Sizes 13-22



规格 Size	输入轴 / Input						冷却风扇 / Fan						
	i _N =12.5-45			i _N =50-71			G ₁	G ₃	G ₁	G ₃	A ₁	B ₁	d ₆
	i _N =14-50			i _N =56-80									
	i _N =16-56			i _N =63-90									
d ₁	l ₁	l ₃	d ₁	l ₁	l ₃								
13 + 14	80	165	130	60	140	105	1125	1160	1195	1230	325	475	210
15 + 16	90	165	130	70	140	105	1367	1402	1413	1448	365	520	210
17 + 18	110	205	165	80	170	130	1560	1600	1620	1660	395	570	230
19 + 20	敬请垂询 / On request												
21 + 22	敬请垂询 / On request												

规格 Size	齿轮箱 / Gear units										
	b	c	e ₃	f ₂	h	h ₂	m ₂	n ₁	p ₂	s	
13 + 14	900	61	2	265	35	272.5	300	680	50	500	48
15 + 16	980	72	2	320	42	310	340	750	60	570	55
17 + 18	1110	81	2	370	42	340	380	850	70	630	55
19 + 20	敬请垂询 / On request										
21 + 22	敬请垂询 / On request										

规格 Size	齿轮箱 / Gear units						电动泵 / Motor pump			
	a	E	G ₆	m ₁	n ₂	泵 Pump f ₃	A ^{*)}	B ^{*)}	C ^{*)}	D ^{*)}
13	1290	635	1180	1195	360	170	5	580	690	760
14	1430	705	1250	1335	430	170	75	580	690	760
15	1550	762	1420	1435	430	170	110	580	730	850
16	1640	808	1470	1525	475	170	160	580	730	850
17	1740	860	1620	1610	465	170	160	580	790	930
18	1860	920	1680	1730	525	170	220	580	790	930
19+20	敬请垂询 / On request									
21+22	敬请垂询 / On request									

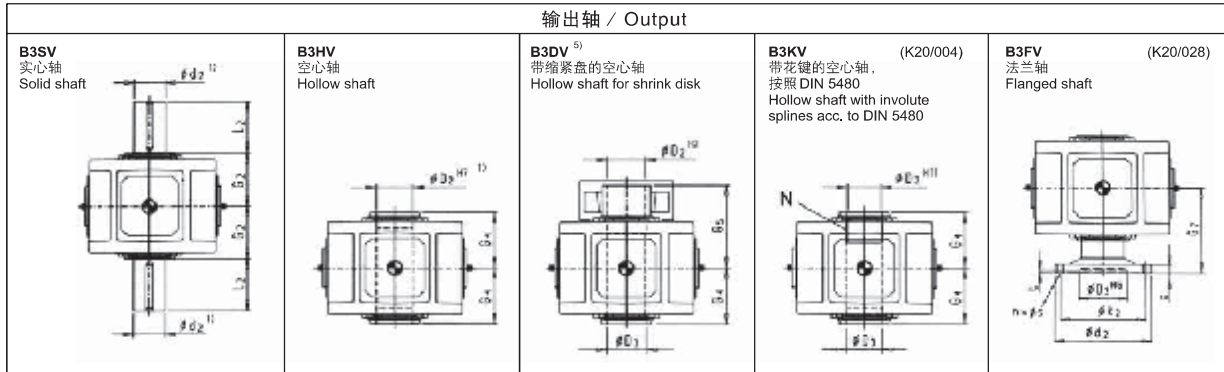


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

三级传动, 立式安装, 类型 B3.V, 规格 13-22

Three Stage, Vertical, Type B3.V, Sizes 13-22



规格 Size	B3SV			B3HV		B3DV				B3KV				B3FV						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26x39	18	600
19-22	敬请垂询 / On request																			

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{*)}	
		B3SV B3HV B3DV B3KV	B3FV
13	95	2260	2420
14	110	2615	2785
15	165	3540	3780
16	190	3765	4020
17	210	4760	5060
18	240	5240	5590
19-22	敬请垂询 / On request		

冷却盘管 / Cooling coil³⁾

冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G1/2"

规格 Size	m ₁₀	n ₁₀	e ₁₂	x)
13	324	300	335	8
14	324	300	405	8
15	396	345	390	8
16	396	345	435	8
17	324	395	425	8
18	324	395	485	8
19-22	敬请垂询 / On request			

冷却盘管适用于淡水、海水和稍有咸味的水
Cooling coil suitable for fresh, sea and brackish water

x) 所需冷却水量 / Required cooling water quantity

尺寸以mm为单位

1) 轴:

- m_e ≤ φ 100; n_e > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

3) 采用冷却盘管时:

- 布置形式 A, C 和 E 不能采用法兰泵强制润滑。
- 与采用电动泵的强制润滑的组合请垂询。

4) 油泵、油管和护盖所需的空间尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

***) 未注油时

Dimensions in mm

1) Shafts:

- m_e ≤ φ 100; n_e > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

3) Cooling coil:

- For A, C and E designs, forced lubrication by flanged-on pump not possible.
- Combination with forced lubrication by motor pump on request.

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

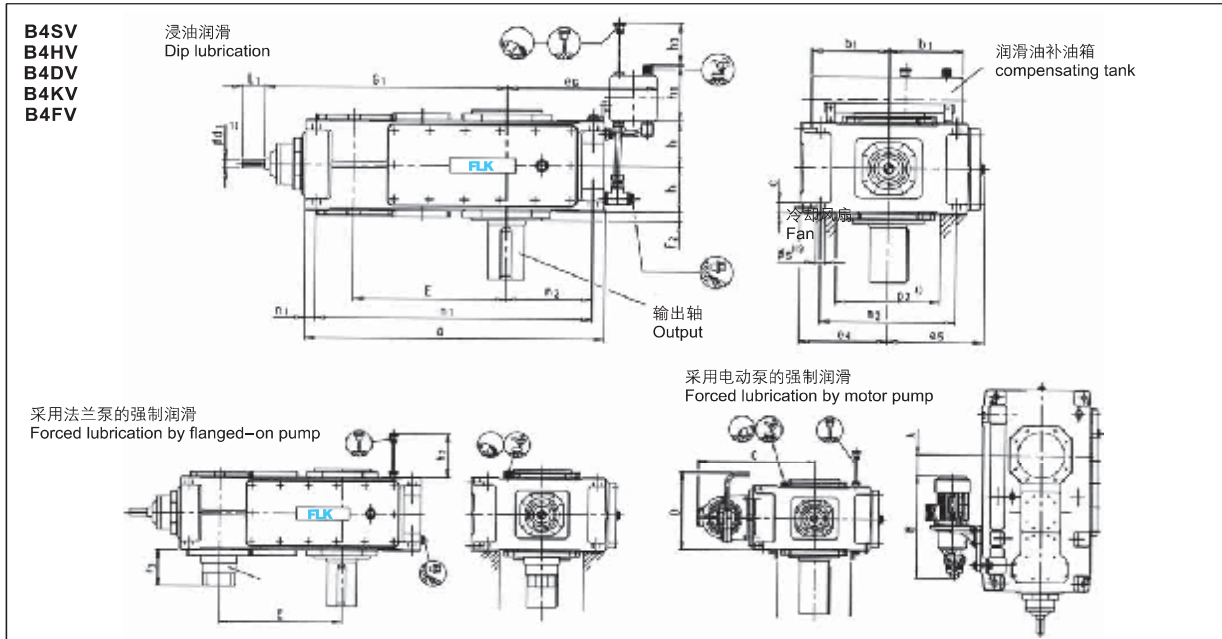
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

四级传动, 立式安装, 类型 B4.V, 规格 5-12

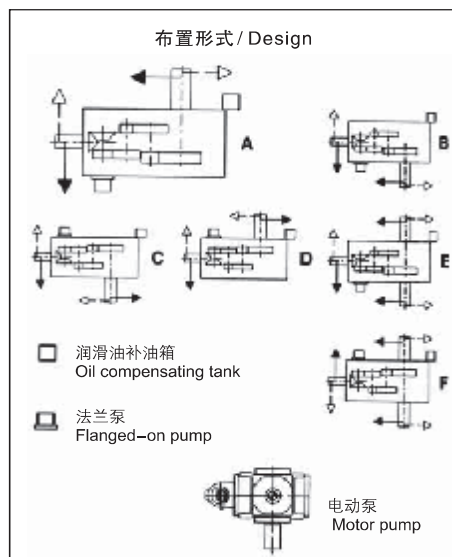
Four Stage, Vertical, Type B4.V, Sizes 5-12



规格 Size	输入轴 / Input					
	i _N =80-180 i _N =100-224		i _N =200-315 i _N =250-400		G ₁	G ₁
	d ₁	l ₁	d ₁	l ₁		
5 + 6	28	55	20	50	615	650
7 + 8	30	70	25	60	725	770
9 + 10	35	80	28	60	840	890
11 + 12	45	100	35	80	1010	1080

规格 Size	齿轮箱 / Gear units												
	b ₁	c	e ₄	h	h ₁	h ₂	h ₃	m ₂	n ₁	p ₁	p ₂	s	
5 + 6	240	30-1	230	127.5	205	190	240	360	30	35	270	19	
7 + 8	240	36-1	280	150	205	165	250	430	35	35	330	24	
9 + 10	330	45-1.5	320	185	275	205	330	490	40	40	370	28	
11 + 12	330	54-1.5	380	215	275	240	340	600	50	50	440	35	

规格 Size	齿轮箱 / Gear units										泵 / Motor pump		
	a	e ₅	e ₆	E	f ₂	m ₁	n ₂	泵 f ₃	电动泵 / Motor pump A ^{*)} B ^{*)} C ^{*)} D ^{*)}				
5	690	252	385	405	28	630	175	200	-35	490	480	360	
6	770	252	425	440	28	710	220	200	0	490	480	360	
7	845	292	425	495	30	775	215	120	60	490	530	420	
8	950	302	485	540	32	880	275	120	105	490	530	420	
9	1000	342	560	580	32	920	260	120	-5	490	570	480	
10	1100	342	610	630	32	1020	310	120	45	490	570	480	
11	1200	402	595	705	35	1100	295	130	80	490	630	550	
12	1355	410	680	775	35	1255	380	130	150	490	630	550	

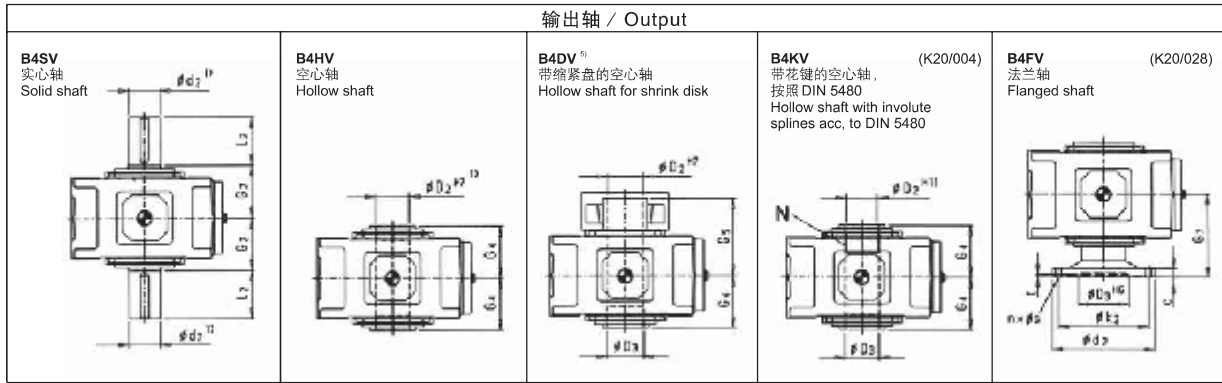


+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

四级传动, 立式安装, 类型 B4.V, 规格 5-12

Four Stage, Vertical, Type B4.V, Sizes 5-12



规格 Size	B4SV				B4HV		B4DV				B4KV				B4FV						
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480	D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇	
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16x22	10	255	
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18x22	10	255	
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16x26	10	300	
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18x26	10	300	
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20x26	12	350	
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22x26	12	350	
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18x33	12	400	
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22x33	12	400	

规格 Size	润滑油量 Oil quantity (l) ^{*)}		重量 Weight (kg) ^{**)}	
	浸油润滑 Dip lubrication	强制润滑 Forced lubrication	B4SV B4HV B4DV B4KV	B4FV
5	36	15	335	370
6	40	16	385	425
7	60	30	555	605
8	70	35	655	710
9	110	60	890	975
10	130	67	1025	1115
11	180	75	1485	1615
12	195	85	1750	1890

尺寸以mm为单位

1) 轴:

- k₆ = φ 24: φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B型
- 有关细节见第 110-119 页

4) 油泵、油管和护盖所需的空间尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定

**) 未注油时

Dimensions in mm

1) Shafts:

- k₆ = φ 24: φ 28 ≤ m₆ ≤ φ 100; n₆ > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

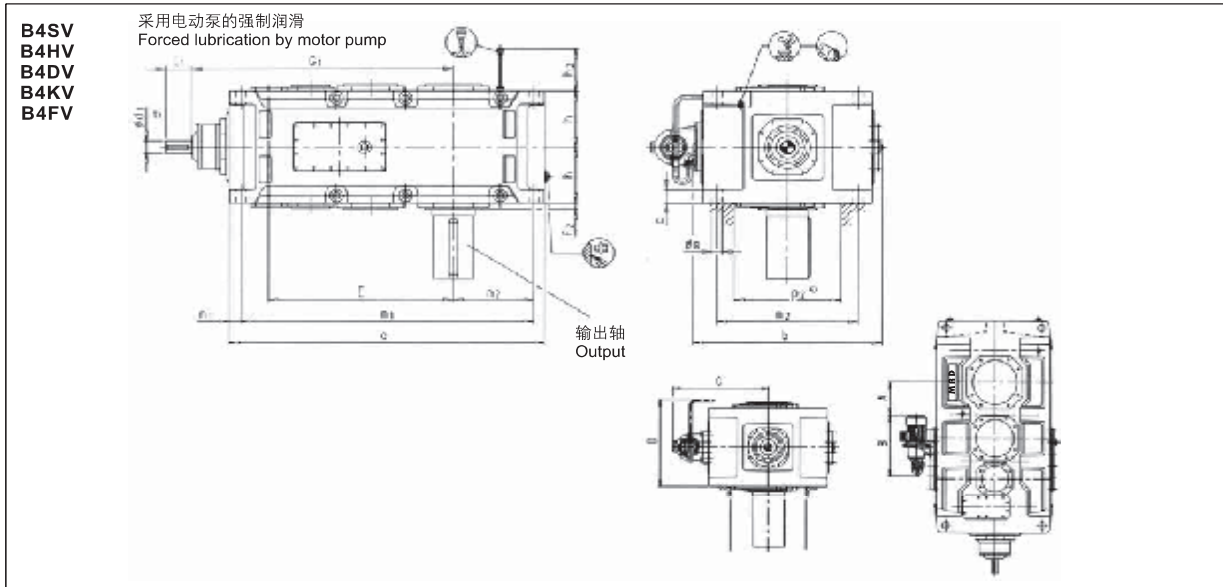
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

四级传动, 立式安装, 类型 B4.V, 规格 13-22

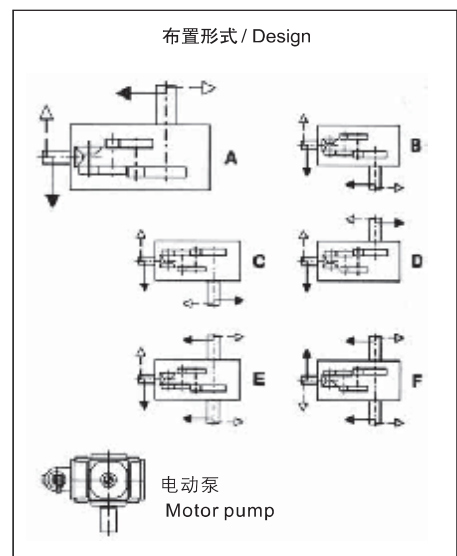
Four Stage, Vertical, Type B4.V, Sizes 13-22



规格 Size	输入轴 / Input					
	i _N =80-180			i _N =200-315		
	i _N =90-200			i _N =224-355		
	i _N =100-224			i _N =250-400		
	d ₁	l ₁	d ₂	l ₂	G ₁	G ₂
13 + 14	55	110	40	100	1170	1240
15 + 16	70	135	50	110	1402	1448
17 + 18	70	135	50	110	1450	1510
19 + 20	敬请垂询 / On request					
21 + 22						

规格 Size	齿轮箱 / Gear units								
	b	c	h	h ₂	m ₂	n ₁	p ₂	s	
13 + 14	900	61	2	272.5	300	680	50	500	48
15 + 16	980	72	2	310	340	750	60	570	55
17 + 18	1110	81	2	340	374	850	70	630	55
19 + 20	敬请垂询 / On request								
21 + 22									

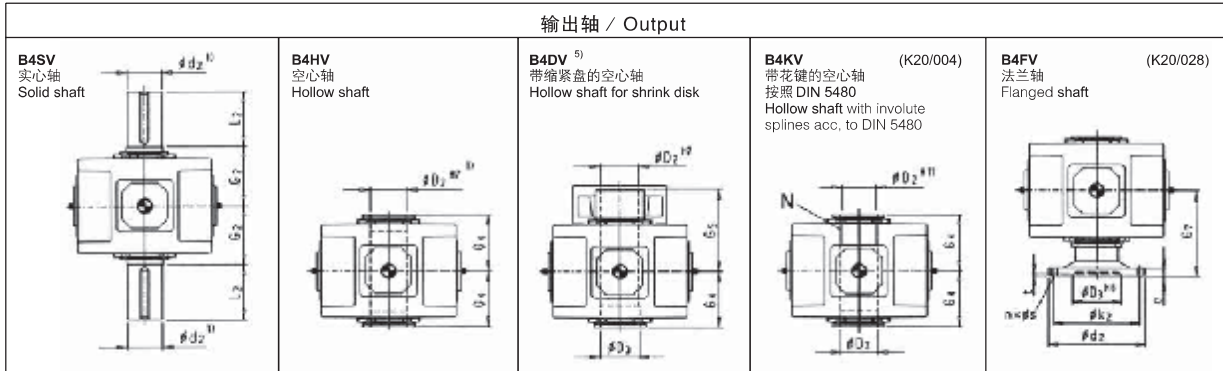
规格 Size	齿轮箱 / Gear units								
	电动泵 / Motor pump								
	a	E	f ₂	m ₁	n ₂	A ⁺⁾	B ⁺⁾	C ⁺⁾	D ⁺⁾
13	1395	820	35	1300	360	70	580	690	705
14	1535	890	35	1440	430	140	580	690	705
15	1680	987	42	1565	430	210	580	730	780
16	1770	1033	42	1655	475	260	580	730	780
17	1770	1035	42	1640	465	190	580	790	840
18	1890	1095	42	1760	525	250	580	790	840
19+20	敬请垂询 / On request								
21+22									



+) 最大尺寸; 细节应根据与合同相关的文件确定。

+) Max. dimensions; details acc. to order-related documentation.

四级传动, 立式安装, 类型 B4.V, 规格 13-12
 Four Stage, Vertical, Type B4.V, Sizes 13-12



规格 Size	B4SV			B4HV		B4DV				B4KV				B4FV								
	d ₂	l ₂	G ₂	D ₂	G ₄	D ₂	D ₃	G ₄	G ₅	N / DIN5480			D ₂	D ₃	G ₄	c	d ₂	D ₃	k ₂	n x s	t	G ₇
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H			180	195	335	48	580	310	500	20x33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H			180	215	335	48	620	310	540	24x33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H			210	235	380	55	710	360	630	28x33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H			210	245	380	55	740	360	660	30x33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H			240	260	415	60	750	410	660	24x39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H			240	285	415	60	800	410	710	26x39	18	600
19-22	敬请垂询 / On request																					

规格 Size	润滑油量 Oil quantity (l) ^{*)}	重量 Weight (kg) ^{*)}	
		B4SV B4HV B4DV B4KV	B4FV
13	130	2280	2440
14	150	2605	2775
15	200	3435	3675
16	235	3765	4020
17	215	4460	4760
18	250	4930	5280
19-22	敬请垂询 / On request		

尺寸以 mm 为单位

1) 轴:

- m_e ≤ φ 100; n_e > φ 100
- 平键槽按照 DIN 6885/1
- 轮毂键槽宽度按照 ISO JS9
- 平键按照 DIN 6885/1 B 型
- 有关细节见第 110-119 页

4) 油泵、油管和护盖所需的尺寸, 欲了解精确尺寸, 请与我们联系。

5) 对布置形式 A, D 和 G 请垂询。

*) 参考值; 准确的数据应根据与合同相关的文件确定。

**) 未注油时

Dimensions in mm

1) Shafts:

- m_e ≤ φ 100; n_e > φ 100
- Keyway acc. to DIN 6885/1
- Hub keyway width acc. to ISO JS9
- Parallel key acc. to DIN 6885/1 form B
- For details, see pages 110-119

4) Space for pump, pipes and cover; for exact dimensions, please refer to us.

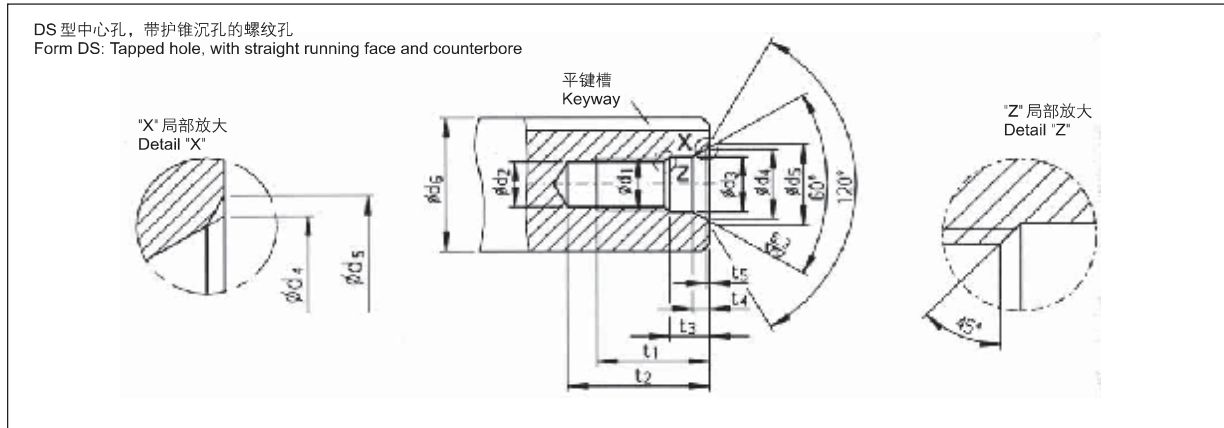
5) A, D and G designs on request.

*) Approximate values; exact data acc. to order-related documentation.

**) Without oil filling

DS 型轴伸中心孔，按照 DIN 332/1

Centre Holes, Form DS, in Shaft Ends DIN 332/1



推荐直径范围 Recommended diameters d_s ¹⁾		DS 型 / Form DS												
大于 above	至 to	DS 型 中心孔 Centering	d_1	d_2 ²⁾	d_3	d_4	d_5	t_1 +2	t_2 min. max.	t_3 +1	t_4 ≈	t_5 ≈		
mm		mm												
16	21	DS 6	M 6	5	6.4	9.6	10.5	16	20 22	5	2.8	0.4		
21	24	DS 8	M 8	6.8	8.4	12.2	13.2	19	25 28	6	3.3	0.4		
24	30	DS 10	M 10	8.5	10.5	14.9	16.3	22	30 34	7.5	3.8	0.6		
30	38	DS 12	M 12	10.2	13	18.1	19.8	28	37 42	9.5	4.4	0.7		
38	50	DS 16	M 16	14	17	23	25.3	36	45 50	12	5.2	1.0		
50	85	DS 20	M 20	17.5	21	28.4	31.3	42	53 59	15	6.4	1.3		
85	130	DS 24	M 24	21	25	34.2	38	50	63 68	18	8	1.6		
130*	225*	DS 30	M 30*	26.5	31	44	48	60	77 83	17	11	1.9		
225*	320*	DS 36	M 36*	32	37	55	60	74	93 99	22	15	2.3		
320*	500*	DS 42	M 42*	37.5	43	65	71	84	105 111	26	19	2.7		

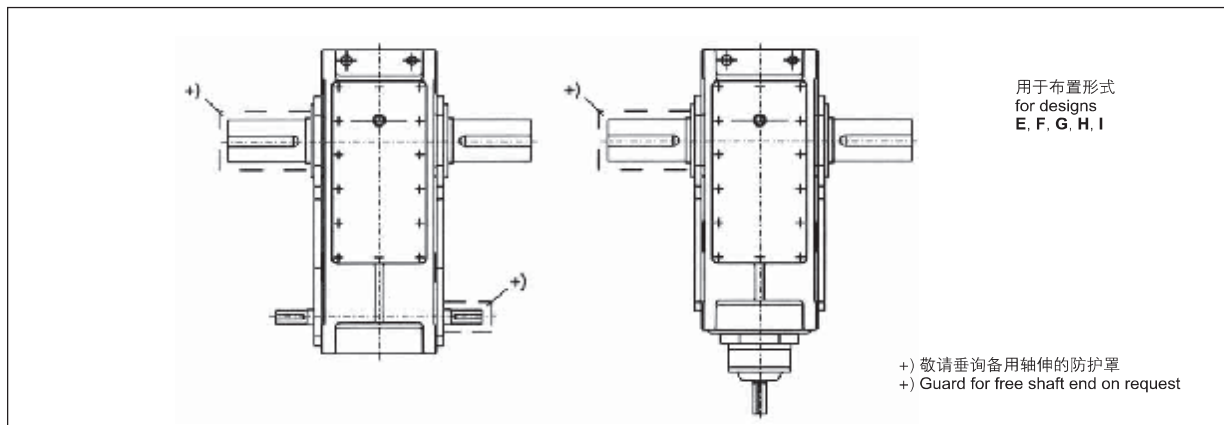
- 1) 工件加工后最终直径
2) 螺孔攻丝钻头直径按照 DIN 336 第 1 部分确定

- 1) Diameter of the finished work piece
2) Drill diameters for tapping-size holes acc. to DIN 336 Pt. 1

*) 不是按照 DIN 332 确定的尺寸

*) Dimensions not acc. to DIN 332

防护罩 / Guards



ISO 配合精度的选择，平键和平键槽

Selection of ISO Fits, Parallel Keys and Keyways

ISO 配合精度的选择 / Selection of ISO fits				
ISO 配合精度的选择 Selection of ISO Fits	轴 / Shaft d		轴公差 Shaft tolerance	孔公差 Bore tolerance
	大于 above mm	至 to mm		
轴公差按照 MRD 标准 Shaft tolerance acc. to MRD standard		25	k6	H7
	25	100	m6	
	100		n6	

对于重载工作条件，如带载反向回转，建议采用比较紧密的配合，轮毂键槽宽度亦应选择 ISO P9 公差等级。

为此，用户应给出相关信息。

For heavy-duty operating conditions, e.g. reversing under load, it is recommended that a tighter fit and for the hub keyway width the ISO P9 tolerance is selected.

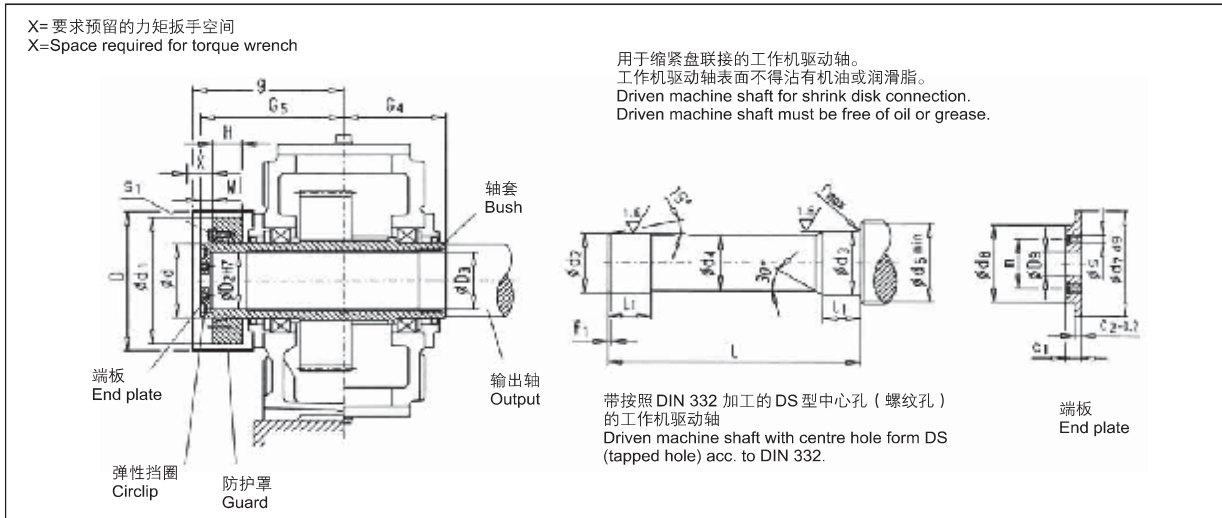
In this case, the customer should give the relevant information.

平键 / Parallel keys						
平键紧固方式，采用无锥度连接 Drive type fastening without taper action	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
	大于 above mm	至 to mm				
				b ¹⁾ mm	h mm	t ₁ mm
	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

平键和平键槽
按照 DIN 6885/1
Parallel key and
keyway acc. to
DIN 6885/1

1) 轮毂平键键槽宽度 b 的公差带应按 ISO JS9 确定，重载条件下应按 ISO P9 确定。
1) The tolerance zone for the hub keyway width b for parallel keys is ISO JS9, or ISO P9 for heavy-duty operating conditions.

带缩紧盘的空心轴，类型：H2, H3, H4, B3, B4，规格 4–26 Hollow Shafts for Shrink Disks, Types H2, H3, H4, B3, B4, Sizes 4–26



类型 / Types H2D., H3D., H4D., B3D., B4D.																															
齿轮箱规格 Gear unit size	工作机驱动轴 ²⁾ Driven machine shaft													弹性挡圈 Circlip	空心轴 Hollow shaft				缩紧盘 Shrink disk ¹⁾				螺钉 Screw	防护罩 Guard							
	d ₂	d ₃	d ₄	d ₅	f ₁	l	l ₁	r	c ₁	c ₂	d ₇	d ₈	D ₉		m	s	数量 Qty.	DIN 472	D ₂	D ₃	G ₄	G ₅		类型 Type	d	d ₁	H	W	s ₁	D	g
	mm														mm																
4	85 g6	85 h6	84.5	95	4	326	48	2	17	7	90	70	22	50	M 8	2	90x3	85	85	140	205	110-32	110	185	49	20	M12	235	220		
5	100 g6	100 h6	99.5	114	5	383	53	2	20	8	105	80	26	55	M 10	2	105x4	100	100	165	240	125-32	125	215	53	20	M12	275	255		
6	110 g6	110 h6	109.5	124	5	383	56	3	20	8	115	85	26	60	M 10	2	115x4	110	110	165	240	140-32	140	230	58	20	M14	285	255		
7	120 g6	120 h6	119.5	134	5	453	68	3	20	8	125	90	26	65	M 12	2	125x4	120	120	195	280	155-32	155	263	62	23	M14	330	295		
8	130 g6	130 h6	129.5	145	6	458	73	3	20	8	135	100	26	70	M 12	2	135x4	130	130	195	285	165-32	165	290	68	23	M16	340	300		
9	140 g6	145 m6	139.5	160	6	539	82	4	23	10	150	110	33	80	M 12	2	150x4	140	145	235	330	175-32	175	300	68	28	M16	360	345		
10	150 g6	155 m6	149.5	170	6	559	92	4	23	10	160	120	33	90	M 12	2	160x4	150	155	235	350	200-32	200	340	85	28	M16	395	365		
11	165 f6	170 m6	164.5	185	7	644	112	4	23	10	175	130	33	90	M 12	2	175x4	165	170	270	400	220-32	220	370	103	30	M20	435	420		
12	180 f6	185 m6	179.5	200	7	649	122	4	23	10	190	140	33	100	M 16	2	190x4	180	185	270	405	240-32	240	405	107	30	M20	450	420		
13	190 f6	195 m6	189.5	213	7	789	137	5	23	10	200	150	33	110	M 16	2	200x4	190	195	335	480	260-32	260	430	119	30	M20	500	505		
14	210 f6	215 m6	209.5	233	8	784	147	5	28	14	220	170	33	130	M 16	2	220x5	210	215	335	480	280-32	280	460	132	30	M20	525	505		
15	230 f6	235 m6	229.5	253	8	899	157	5	28	14	240	180	39	140	M 16	2	240x5	230	235	380	550	300-32	300	485	140	35	M24	575	575		
16	240 f6	245 m6	239.5	263	8	899	157	5	28	14	250	190	39	150	M 20	2	250x5	240	245	380	550	320-32	320	520	140	35	M24	595	575		
17	250 f6	260 m6	249.5	278	8	982	177	5	30	14	265	200	39	150	M 20	2	265x5	250	260	415	600	340-32	340	570	155	35	M24	615	630		
18	280 f6	285 m6	279.5	306	9	982	177	5	30	14	290	210	39	160	M 20	2	290x5	280	285	415	600	360-32	360	590	162	35	M24	635	625		
19	285 f6	295 m6	284.5	316	9	1100	187	5	32	15	300	220	39	170	M 24	2	300x5	285	295	465	670	380-32	380	640	166	40	M27	-	-		
20	310 f6	315 m6	309.5	336	9	1100	187	5	32	15	320	230	39	180	M 24	2	320x6	310	315	465	670	390-32	390	650	166	40	M27	-	-		
21	330 f6	335 m6	329	358	9	1160	205	5	40	20	340	250	45	190	M 24	2	340x6	330	335	490	715	420-32	420	670	186	45	M27	-	-		
22	340 f6	345 m6	339	368	9	1170	215	5	40	20	350	260	45	200	M 24	2	350x6	340	345	490	725	440-32	440	720	194	45	M27	-	-		
23-26	敬请垂询 / On request																														

1) 缩紧盘不在供货范围之内，如果需要请另行订购，在订货时缩紧盘以散件形式提供。

2) 工作机驱动轴材质为 C60N 或强度更高的钢材。

在工作机侧的缩紧盘请垂询。

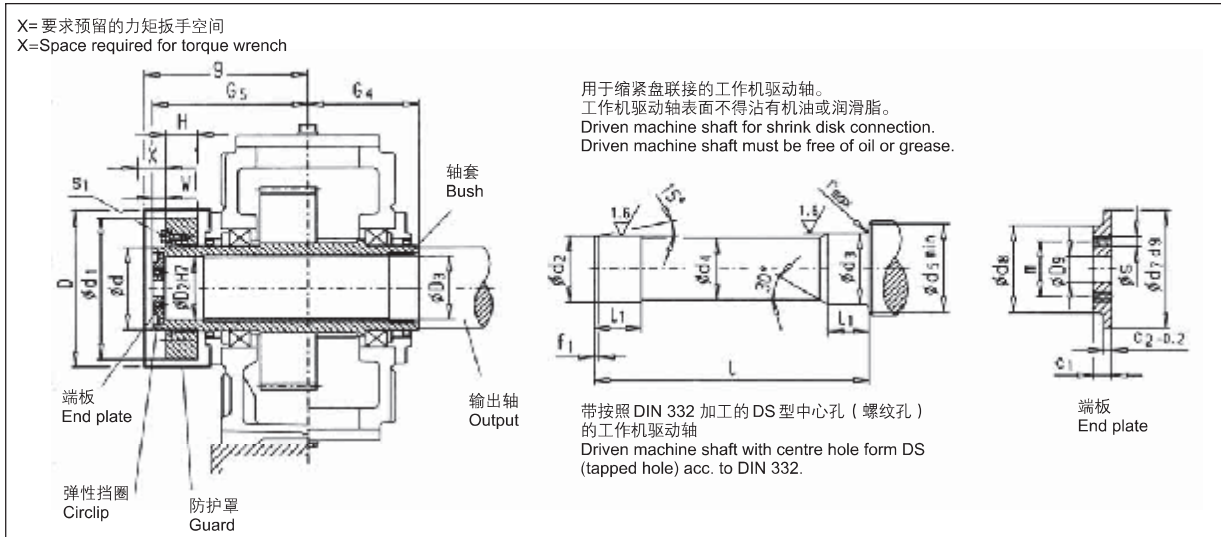
1) Shrink disk does not belong to our scope of supply. Please order separately, if required. In case of order, shrink disk will be supplied as loose item.

2) Material of driven machine shaft: C60N or higher strength.

Shrink disk on machine side on request.

带缩紧盘的空心轴，类型：B2，规格4-18

Hollow Shafts for Shrink Disks, Type B2, Sizes 4-18



类型 / Types B2D.																													
齿轮箱规格 Gear unit size	工作机驱动轴 ²⁾ Driven machine shaft														弹性挡圈 ring Circlip	空心轴 Hollow shaft				缩紧盘 Shrink disk 1)				螺钉 Screw	防护罩 Guard				
	d2	d3	d4	d5	f1	l	l1	r	c1	c2	d7	d8	D9	m		s	D2	D3	G4	G5	类型 Type	d	d1		H	W	s1	D	g
	mm																			mm									
4	85 g6	85 h6	84.5	95	4	386	48	2	17	7	90	70	22	50	M 8	2	90x3	85	85	170	235	110-32	110	185	49	20	M12	235	250
5	100 g6	100 h6	99.5	114	5	453	53	2	20	8	105	80	26	55	M 10	2	105x4	100	100	200	275	125-32	125	215	53	20	M12	275	285
6	110 g6	110 h6	109.5	124	5	453	56	3	20	8	115	85	26	60	M 10	2	115x4	110	110	200	275	140-32	140	230	58	20	M14	285	285
7	120 g6	120h6	119.5	134	5	533	68	3	20	8	125	90	26	65	M 12	2	125x4	120	120	235	320	155-32	155	263	62	23	M14	330	335
8	130 g6	130 h6	129.5	145	6	538	73	3	20	8	135	100	26	70	M 12	2	135x4	130	130	235	325	165-32	165	290	68	23	M16	340	340
9	140 g6	145 m6	139.5	160	6	609	82	4	23	10	150	110	33	80	M 12	2	150x4	140	145	270	365	175-32	175	300	68	28	M16	360	380
10	150 g6	155 m6	149.5	170	6	629	92	4	23	10	160	120	33	90	M 12	2	160x4	150	155	270	385	200-32	200	340	85	28	M16	395	400
11	165 f6	170 m6	164.5	185	7	744	112	4	23	10	175	130	33	90	M 12	2	175x4	165	170	320	450	220-32	220	370	103	30	M20	435	470
12	180 f6	185 m6	179.5	200	7	749	122	4	23	10	190	140	33	100	M 16	2	190x4	180	185	320	455	240-32	240	405	107	30	M20	450	470
14	210 f6	215 m6	209.5	233	8	894	147	5	28	14	220	170	33	130	M 16	2	220x5	210	215	390	535	280-32	280	460	132	30	M20	525	555
16	240 f6	245 m6	239.5	263	8	1039	157	5	28	14	250	190	39	150	M 20	2	250x5	240	245	450	620	320-32	320	520	140	35	M24	595	645
18	280 f6	285 m6	279.5	306	9	1177	177	5	30	14	290	210	39	160	M 20	2	290x5	280	285	510	700	360-32	360	590	162	35	M24	635	725

1) 缩紧盘不在供货范围之内，如果需要请另行订购，在订货时缩紧盘以散件形式提供。

2) 工作机驱动轴材质为 C60N 或强度更高的钢材。

在工作机侧的缩紧盘请垂询。

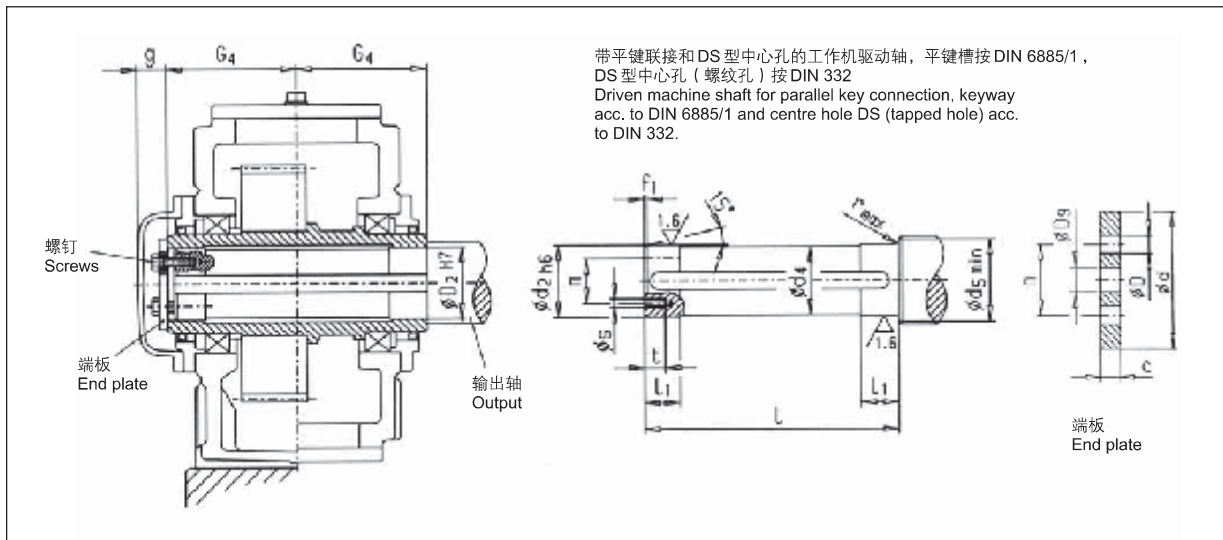
1) Shrink disk does not belong to our scope of supply. Please order separately, if required. In case of order, shrink disk will be supplied as loose item.

2) Material of driven machine shaft: C60N or higher strength.

Shrink disk on machine side on request.

带平键联接的空心轴，类型：H2, H3, H4, B3, B4，规格4-18

Hollow Shafts for Parallel Key Connections, Types H2, H3, H4, B3, B4, Sizes 4-18



类型 / Types H2H., H3H., H4H., B3H., B4H.																			
齿轮箱规格 Gear unit size	工作机驱动轴 1) Driven machine shaft									端板 End plate					螺钉 Screw		空心轴 Hollow shaft		
	d_2	d_4	d_5	f_1	l	l_1	r	s	t	c	D	D_9	d	m	规格 Size	数量 Qty.	D_2	G_4	g
	mm																mm		
4	80	79.5	88	4	278	35	1.2	M 10	18	10	11	22	100	60	M 10x25	2	80	140	35
5	95	94.5	105	5	328	40	1.6	M 10	18	10	11	26	120	70	M 10x25	2	95	165	40
6	105	104.5	116	5	328	45	1.6	M 10	18	10	11	26	120	70	M 10x25	2	105	165	40
7	115	114.5	126	5	388	50	1.6	M 12	20	12	13.5	26	140	80	M 12x30	2	115	195	40
8	125	124.5	136	6	388	55	2.5	M 12	20	12	13.5	26	150	85	M 12x30	2	125	195	40
9	135	134.5	147	6	467	60	2.5	M 12	20	12	13.5	33	160	90	M 12x30	2	135	235	45
10	150	149.5	162	6	467	65	2.5	M 12	20	12	13.5	33	185	110	M 12x30	2	150	235	45
11	165	164.5	177	7	537	70	2.5	M 16	28	15	17.5	33	195	120	M 16x40	2	165	270	45
12	180	179.5	192	7	537	75	2.5	M 16	28	15	17.5	33	220	130	M 16x40	2	180	270	45
13	190	189.5	206	7	667	80	3	M 16	28	18	17.5	33	230	140	M 16x40	2	190	335	45
14	210	209.5	226	8	667	85	3	M 16	28	18	17.5	33	250	160	M 16x40	2	210	335	45
15	230	229.5	248	8	756	100	3	M 20	38	25	22	39	270	180	M 20x55	4	230	380	60
16	240	239.5	258	8	756	100	3	M 20	38	25	22	39	280	180	M 20x55	4	240	380	60
17	250	249.5	270	8	826	110	4	M 20	38	25	22	39	300	190	M 20x55	4	250	415	60
18	275	274.5	295	9	826	120	4	M 20	38	25	22	39	330	210	M 20x55	4	275	415	60

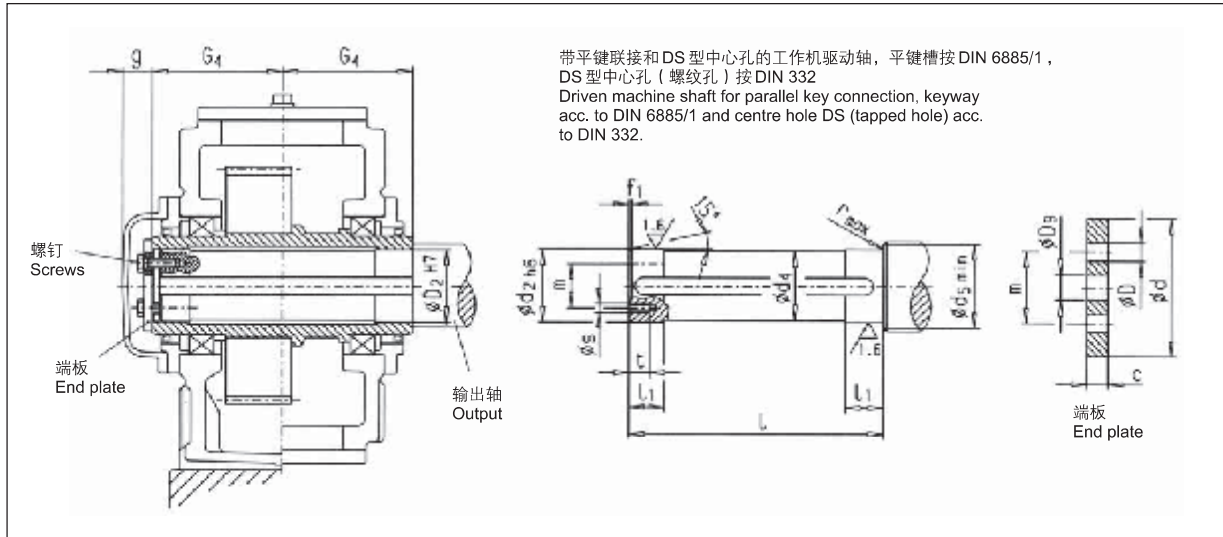
1) 工作机驱动轴材质为C60N或强度更高的钢材。

1) Material of driven machine shaft: C60N or higher strength.

平键不在供货范围之内，如果需要请另行订购。

Parallel key does not belong to our scope of supply. Please order separately, if required.

带平键联接的空心轴，类型：B2，规格4-18 Hollow Shafts for Parallel Key Connections, Type B2, Sizes 4-18



类型 / Type B2H.																			
齿轮箱规格 Gear unit size	工作机驱动轴 1) Driven machine shaft									端板 End plate					螺钉 Screw		空心轴 Hollow shaft		
	d ₂	d ₄	d ₅	f ₁	l	h	r	s	t	c	D	D ₉	d	m	规格 Size	数量 Qty.	D ₂	G ₄	g
	mm																mm		
4	80	79.5	88	4	338	35	1.2	M 10	18	10	11	22	100	60	M 10x25	2	80	170	35
5	95	94.5	105	5	398	40	1.6	M 10	18	10	11	26	120	70	M 10x25	2	95	200	40
6	105	104.5	116	5	398	45	1.6	M 10	18	10	11	26	120	70	M 10x25	2	105	200	40
7	115	114.5	126	5	468	50	1.6	M 12	20	12	13.5	26	140	80	M 12x30	2	115	235	40
8	125	124.5	136	6	468	55	2.5	M 12	20	12	13.5	26	150	85	M 12x30	2	125	235	40
9	135	134.5	147	6	537	60	2.5	M 12	20	12	13.5	33	160	90	M 12x30	2	135	270	45
10	150	149.5	162	6	537	65	2.5	M 12	20	12	13.5	33	185	110	M 12x30	2	150	270	45
11	165	164.5	177	7	637	70	2.5	M 16	28	15	17.5	33	195	120	M 16x40	2	165	320	45
12	180	179.5	192	7	637	75	2.5	M 16	28	15	17.5	33	220	130	M 16x40	2	180	320	45
14	210	209.5	226	8	777	85	3	M 16	28	18	17.5	33	250	160	M 16x40	2	210	390	45
16	240	239.5	258	8	896	100	3	M 20	38	25	22	39	280	180	M 20x55	4	240	450	60
18	275	274.5	295	9	1016	120	4	M 20	38	25	22	39	330	210	M 20x55	4	275	510	60

1) 工作机驱动轴材质为C60N或强度更高的钢材。

1) Material of driven machine shaft: C60N or higher strength.

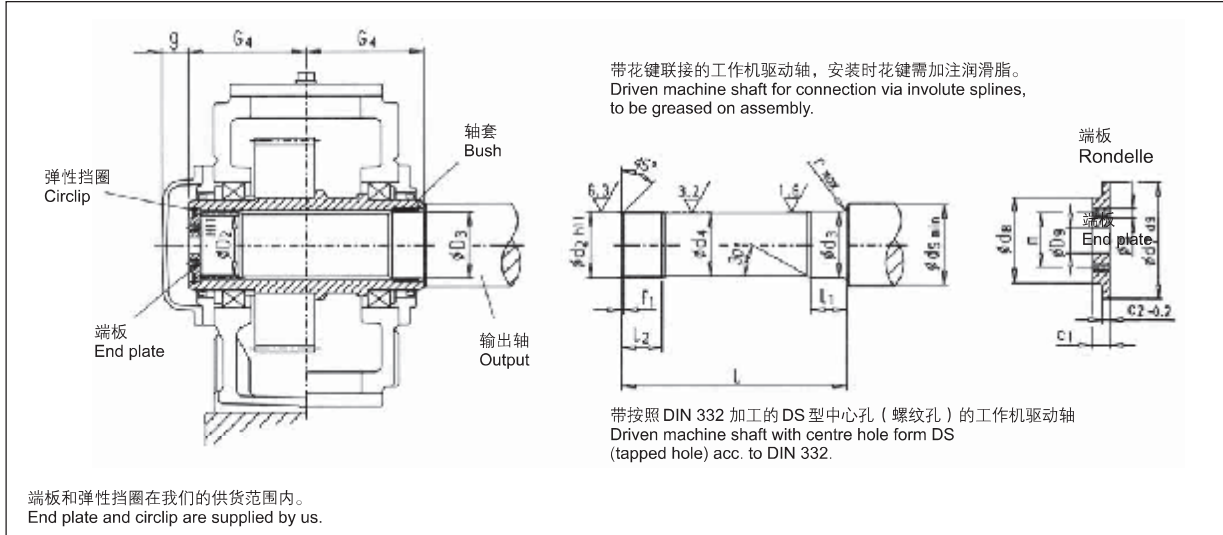
平键不在供货范围之内，如果需要请另行订购。

Parallel key does not belong to our scope of supply. Please order separately, if required.

带花键 (按照DIN 5480) 的空心轴, 类型: H2, H3, H4, B3, B4, 规格5-26

Hollow Shafts With Involute Splines acc. to DIN 5480, Type H2, H3, H4, B3, B4, Sizes 5-26

K20/004



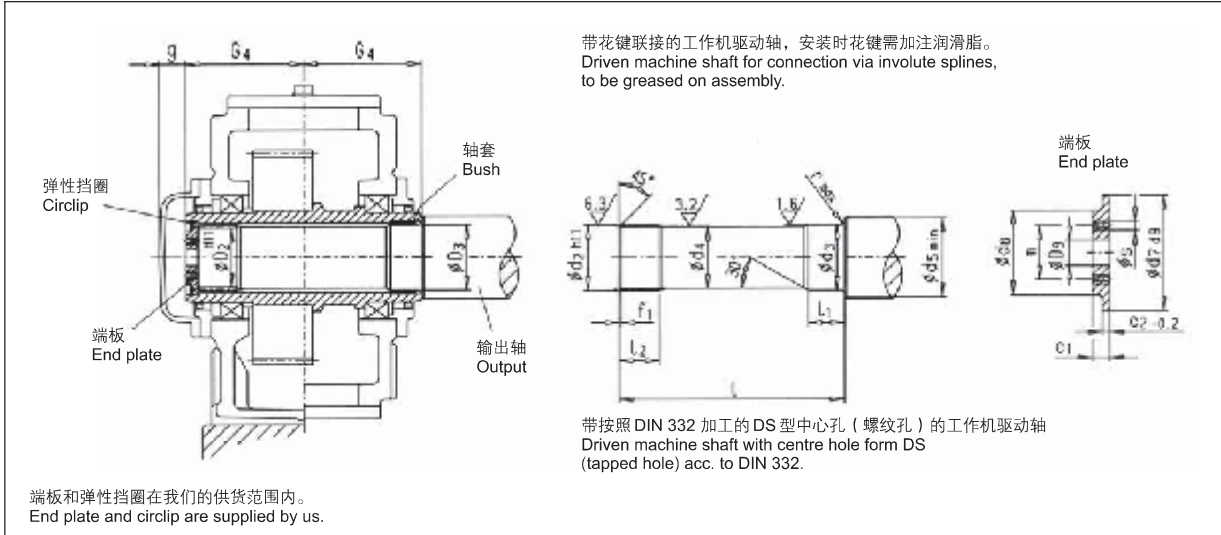
类型 / Types H2K., H3K., H4K., B3K., B4K.																									
齿轮箱规格 Gear unit size	渐开线花键 Involute splines DIN 5480	工作机驱动轴 1) Driven machine shaft										端板 End plate						弹性挡圈 Circlip	空心轴 Hollow shaft				螺钉 Screw		
		d ₂	d ₃	d ₄	d ₅	f ₁	l	l ₁	l ₂	r	c ₁	c ₂	d ₇	d ₈	D ₉	m	s		数量 Qty.	DIN 472	D ₂	D ₃		G ₄	g
		mm										mm													
5	W95x3x30x30x8f	94.4	100 h6	93	114	3	308	53	90	2	20	8	105	80	26	55	M 10	2	105x4	89	100	165	40	M24	
6	W95x3x30x30x8f	94.4	110 h6	93	124	3	308	58	90	3	20	8	105	80	26	55	M 10	2	105x4	89	110	165	40	M24	
7	W120x3x30x38x8f	119.4	120h6	118	134	3	368	68	105	3	20	8	125	90	26	65	M 12	2	125x4	114	120	195	40	M24	
8	W120x3x30x38x8f	119.4	130 h6	118	145	3	368	73	105	3	20	8	125	90	26	65	M 12	2	125x4	114	130	195	40	M24	
9	W140x3x30x45x8f	139.4	145 m6	138	160	3	444	82	125	4	23	10	150	110	33	80	M 12	2	150x4	134	145	235	45	M30	
10	W140x3x30x45x8f	139.4	155 m6	138	170	3	444	92	125	4	23	10	150	110	33	80	M 12	2	150x4	134	155	235	45	M30	
11	W170x5x30x32x8f	169	170 m6	168	185	5	514	112	150	4	23	10	175	130	33	90	M 12	2	175x4	160	170	270	45	M30	
12	W170x5x30x32x8f	169	185 m6	168	200	5	514	122	150	4	23	10	175	130	33	90	M 12	2	175x4	160	185	270	45	M30	
13	W190x5x30x36x8f	189	195 m6	188	213	5	644	137	180	5	23	10	200	150	33	110	M 16	2	200x4	180	195	335	45	M30	
14	W190x5x30x36x8f	189	215 m6	188	233	5	644	147	180	5	23	10	200	150	33	110	M 16	2	200x4	180	215	335	45	M30	
15	W220x5x30x42x8f	219	235 m6	218	253	5	728	157	200	5	28	14	240	180	39	140	M 16	2	240x5	210	235	380	60	M36	
16	W220x5x30x42x8f	219	245 m6	218	263	5	728	157	200	5	28	14	240	180	39	140	M 16	2	240x5	210	245	380	60	M36	
17	W250x5x30x48x8f	249	260 m6	248	278	5	796	177	215	5	30	14	265	200	39	150	M 20	2	265x5	240	260	415	60	M36	
18	W250x5x30x48x8f	249	285 m6	248	306	5	796	177	215	5	30	14	265	200	39	150	M 20	2	265x5	240	285	415	60	M36	
19-26		敬请垂询 / On request																							

1) 工作机驱动轴材质为 C60N 或强度更高的钢材。

1) Material of driven machine shaft: C60N or higher strength.

带花键 (按照DIN 5480) 的空心轴, 类型: B2, 规格5-18
Hollow Shafts With Involute Splines acc. to DIN 5480, Type B2, Sizes 5-18

KZD_004



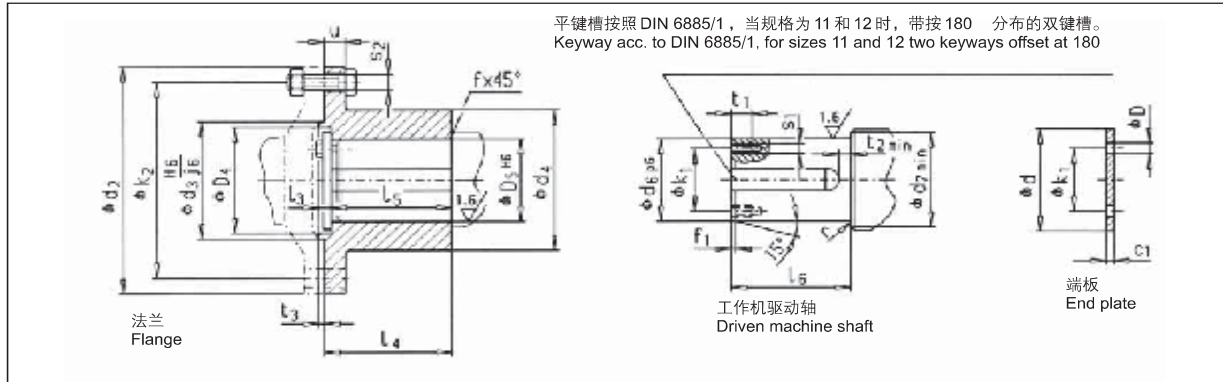
类型 / Type B2K.																									
齿轮箱规格 Gear unit size	渐开线花键 Involute splines DIN 5480	工作机驱动轴 1) Driven machine shaft										端板 End plate						弹性挡圈 Circlip	空心轴 Hollow shaft				螺钉 Screw		
		d2	d3	d4	d5	f1	l	l1	l2	r	c1	c2	d7	d8	D9	m	s		数量 Qty.	DIN 472	D2	D3		G4	g
		mm										mm													
5	W95x3x30x30x8f	94.4	100 h6	93	114	3	378	53	90	2	20	8	105	80	26	55	M 10	2	105x4	89	100	200	40	M24	
6	W95x3x30x30x8f	94.4	110 h6	93	124	3	378	58	90	3	20	8	105	80	26	55	M 10	2	105x4	89	110	200	40	M24	
7	W120x3x30x38x8f	119.4	120h6	118	134	3	448	68	105	3	20	8	125	90	26	65	M 12	2	125x4	114	120	235	40	M24	
8	W120x3x30x38x8f	119.4	130 h6	118	145	3	448	73	105	3	20	8	125	90	26	65	M 12	2	125x4	114	130	235	40	M24	
9	W140x3x30x45x8f	139.4	145 m6	138	160	3	514	82	125	4	23	10	150	110	33	80	M 12	2	150x4	134	145	270	45	M30	
10	W140x3x30x45x8f	139.4	155 m6	138	170	3	514	92	125	4	23	10	150	110	33	80	M 12	2	150x4	134	155	270	45	M30	
11	W170x5x30x32x8f	169	170 m6	168	185	5	614	112	150	4	23	10	175	130	33	90	M 12	2	175x4	160	170	320	45	M30	
12	W170x5x30x32x8f	169	185 m6	168	200	5	614	122	150	4	23	10	175	130	33	90	M 12	2	175x4	160	185	320	45	M30	
14	W190x5x30x36x8f	189	215 m6	188	233	5	754	147	180	5	23	10	200	150	33	110	M 16	2	200x4	180	215	390	45	M30	
16	W220x5x30x42x8f	219	245 m6	218	263	5	868	157	200	5	28	14	240	180	39	140	M 16	2	240x5	210	245	450	60	M36	
18	W250x5x30x48x8f	249	285 m6	248	306	5	986	177	215	5	30	14	265	200	39	150	M 20	2	265x5	240	285	510	60	M36	

1) 工作机驱动轴材质为 C60N 或强度更高的钢材。

1) Material of driven machine shaft: C60N or higher strength.

与法兰轴联接的对接法兰，类型：H2, H3, H4, B2, B3, B4，规格 5-12 Counterflanges for Flanged Shafts, Types H2, H3, H4, B2, B3, B4, Sizes 5-12

K20 028



类型 / Types H2F., H3F., H4F., B2F., B3F., B4F.																
齿轮箱规格 Gear unit size	法兰 / Flange													螺栓 1) Bolt		
	d ₂	d ₃	d ₄	D ₄	D ₅	f	k ₂	l ₃	l ₄	l ₅	s ₂	t ₃	u	规格 size	数量 Qty.	T _A 2)
	mm															Nm
5	300	150	190	135	110	2.5	260	16	175	167	M20	8	25	M 20x70	16	610
6	320	160	210	145	120	2.5	280	22	185	171	M20	8	25	M 20x70	18	610
7	370	180	230	160	135	2.5	320	21	220	207	M24	8	30	M 24x90	16	1050
8	390	190	270	175	150	2.5	340	22	220	206	M24	8	30	M 24x90	18	1050
9	430	220	290	195	160	4.0	380	22	250	238	M24	10	38	M 24x100	20	1050
10	470	240	310	220	180	4.0	420	22	250	238	M24	10	38	M 24x100	22	1050
11	510	260	340	235	200	4.0	450	22	290	278	M30	10	42	M 30x120	18	2100
12	540	280	360	255	210	4.0	480	22	290	278	M30	10	42	M 30x120	22	2100

齿轮箱规格 Gear unit size	工作机驱动轴 Driven machine shaft									端板 End plate				螺栓 Bolt		重量 Weight kg
	d ₆	d ₇	f ₁	k ₁	l ₆	r	s ₁	t ₁	t ₂	c ₁	d	D	k ₁	规格 size	数量 Qty.	
	mm									mm						
5	110	122	2.5	80	165	2	M 12	28	7.5	10	130	13.5	80	M 12x35	4	35
6	120	132	2.5	95	169	2	M 16	32	7.5	14	140	17.5	95	M 16x45	4	45
7	135	147	2.5	95	205	2	M 16	32	16	14	155	17.5	95	M 16x45	4	65
8	150	162	2.5	110	204	2	M 16	32	16	16	170	17.5	110	M 16x45	4	85
9	160	176	4.0	110	235	3	M16	32	16	16	190	17.5	110	M 16x45	4	115
10	180	196	4.0	145	235	3	M 20	38	16	18	215	22	145	M 20x55	4	130
11	200	216	4.0	145	275	3	M 20	38	16	18	230	22	145	M 20x55	4	175
12	210	230	4.0	160	275	3	M 20	38	16	18	250	22	160	M 20x55	4	200

平键不在供货范围之内，如果需要请另行订购。

1) 螺栓按照 DIN 931, 性能等级为 10.9 级;

螺母按照 DIN 934, 性能等级为 10 级;

2) 法兰联接螺栓的拧紧力矩。

法兰和工作机驱动轴材质为 C60N 或强度更高的钢材。

Parallel key does not belong to our scope of supply. Please order separately, if required.

1) Bolts acc. to DIN 931, material 10.9;

Nuts acc. to DIN934, material 10

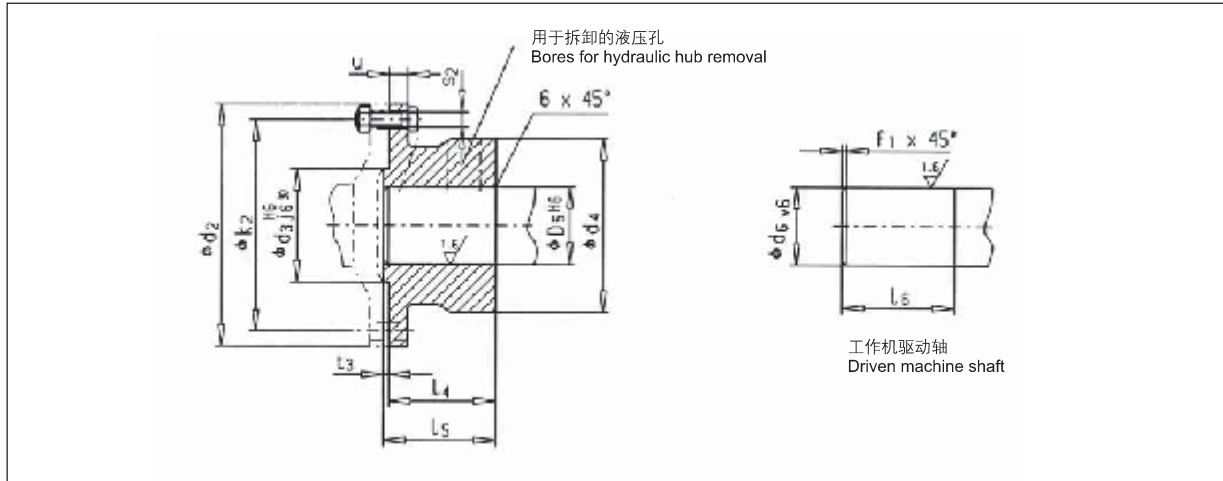
2) Tightening torque of flange connection bolts.

Material of flanges and driven machine shafts: C60N or higher strength.

与法兰轴联接的对接法兰，类型：H2, H3, H4, B2, B3, B4，规格 13–26

Counterflanges for Flanged Shafts, Types H2, H3, H4, B2, B3, B4, Sizes 13–26

K20/028



类型 / Types H2F., H3F., H4F., B2F., B3F., B4F.																	
齿轮箱规格 Gear unit size	法兰 / Flange										螺栓 ¹⁾ Bolt			工作机驱动轴 Driven machine shaft			重量 Weight kg
	d2	d3	d4	²⁾ D5	k2	l4	l5	s2	t3	u	规格 size	数量 Qty.	Ta	d6	f1	l6	
	mm										Nm			mm			
13	580	310	390	240	500	310	322	M30	12	48	M 30x130	20	2100	240	3	322	235
14	620	310	425	260	540	345	357	M30	12	48	M 30x130	24	2100	260	3	357	300
15	710	360	460	280	630	365	380	M30	15	55	M 30x140	28	2100	280	3	380	400
16	740	360	480	300	660	395	410	M30	15	55	M 30x140	30	2100	300	4	410	450
17	750	410	520	320	660	420	436	M36	16	60	M 36x160	24	3560	320	4	436	540
18	800	410	550	340	710	450	466	M36	16	60	M 36x160	26	3560	340	4	466	650
29-26	敬请垂询 / On request																

1) 螺栓按照 DIN 931, 性能等级为 10.9 级;

螺母按照 DIN 934, 性能等级为 10 级;

2) 需要其它尺寸请垂询 (如地脚安装就可以采用较小的 D5 尺寸)。

3) 在热压冷缩配合后为尺寸 d3j6。

带键槽的对接法兰请垂询。

法兰和工作机驱动轴材质为 C60N 或强度更高的钢材。

对接法兰在装配时应加热至 190 °C, 工作机驱动轴应在 20 °C。

1) Bolts acc. to DIN 931, material 10.9;

Nuts acc. to DIN934, material 10

2) Other diameters on request. (For foot-mounted design, smaller bores D5 are possible).

3) Dimension d3 j6 after shrink fitting.

Counterflange with keyway on request.

Material of flanges and driven machine shafts: C60N or higher strength.

For assembly, heat counterflange to 190 °C, and driven machine shaft to 20 °C.

润滑油选择和防腐保存

Selection of Oil and Preservation

FLK 齿轮箱可以加注 FLK 认可厂家生产的润滑油，润滑油生产厂家或润滑油供应商对其产品的质量负责。在选择润滑油品种和润滑油粘度时请注意在表 1 中注明的所允许的最低临界温度。

表 2 给出了相应齿轮箱类型和规格的润滑油供给方式可选方案。

最低工作粘度不得小于 25cSt。

FLK gear units may be filled with oils from producers authorized by FLK, the oil producer or supplier being responsible for the quality of his product. For the selection of oil grade and viscosity, the limits of application given in table 1 are to be taken into consideration.

In table 2 a survey of the possible oil supply variants is given for the respective types and sizes.

A minimum operating viscosity of 25 cST must be ensured.

表 1 / Table 1				
40 °C 温度下的 ISO-VG 粘度 mm ² /s(cSt) Viscosity ISO-VG at 40 °C in mm ² /s(cSt)	允许的最低临界温度 °C Minimum temperature limit in °C for			
	浸油润滑 Dip lubrication		强制润滑 Forced lubrication	
	矿物油 Mineral oil	合成油 Synthetic oil	矿物油 Mineral oil	合成油 Synthetic oil
VG 220	-15	-25	10	0
VG 320	-12	-25	15	5
VG 460	-9	-25	20	10

浸油润滑:

当采用浸油润滑时，所有需要润滑的零部件均需浸在润滑油液中。

附带的补油箱用于存储溢出的润滑油。

选择依据参见第 122 页。

如果油温低于表中给出的温度值，则必须对润滑油进行加热。

但采用浸油润滑时，油温不得低于润滑油的倾点。

Dip lubrication:

In case of dip lubrication, all parts to be lubricated are lying in the oil. An oil compensating tank has been fitted for oil expansion.

For criteria for selection, see page 122.

If the temperatures are below the values as listed in the table, the oil must be heated.

In case of dip lubrication, the oil temperature must not drop below the pour point of the selected oil.

强制润滑:

当采用强制润滑时，所有未浸在油液中的零部件均通过一个与齿轮箱轴相连的法兰泵或独立运行的电动泵进行飞溅润滑。

选择依据参见第 123 至 126 页。

当采用强制润滑时，在启动时的工作粘度不得超过 1800 cST。

如果油温低于表 1 中给出的最低极限温度，则应采用浸油润滑方式或者必须对润滑油进行加热。

Forced lubrication:

In case of forced lubrication, all parts not lying in oil are splash lubricated by means of a flanged-on pump or by a separate motor pump.

For criteria for selection, see pages 123-126.

In case of forced lubrication, the operating viscosity 1800 cST must not be exceeded during start-up.

If the temperatures are below the values as listed in table 1, dip lubrication has to be provided or the oil must be heated.

防腐保存:

FLK 齿轮箱内部的防腐与所使用的润滑油密切相关。

已做过防腐处理的齿轮箱可能的存储时间如下:

标准防腐	长效防腐 ¹⁾
可保存至 6 个月	可保存至 24 个月 ²⁾ 可保存至 36 个月 ³⁾

1) 不适用于配置迷宫式密封或其他非接触式密封。

2) 仅适用于矿物油或 PAO 基的合成油。

3) 仅适用于 PG 基的合成油。

当超过上述防腐期限时应重新对齿轮箱进行防腐处理。

Preservation:

The internal preservation of FLK gear units is dependent on the oil used.

For gear units with corrosion prevention, the following storage times are possible:

Standard preservation	Long-term preservation ¹⁾
up to 6 months	up to 24 months ²⁾ up to 36 months ³⁾

1) Not for gear units with labyrinth seals or diaphragm glands.

2) Only if mineral oil or synthetic oil on PAO basis is used.

3) Only if synthetic oil on PG basis is used.

If the storage periods mentioned are exceeded, the anti-corrosive agent in the gear unit is to be renewed.

润滑油供给方式可选方案，类型：H2, H3, H4, B2, B3, B4，规格 3-26

Oil Supply Survey of Variants, Types H2, H3, H4, B2, B3, B4, Sizes 3-26

表 2 / Table 2							
类型 Type	规格 Size	浸油润滑 Dip lubrication		法兰泵强制润滑 Forced lubrication, flanged-on pump		电动泵强制润滑 Forced lubrication, motor pump	
H1SH	3-17	H		H		-	
H2..	4	H	V	V		-	
	5-12	H	V	H	V	SR 1) 3)	
	13-18	H M		H M	V	SR 1) 3)	
	19-26	H M		V		-	
H3..	5-12	H	V	V		V	SR 1)
	13-18	H M		V		V	SR 1)
	19-26	H M		V		-	
H4..	7-12	H	V	V		V	
	13-18	H M		V		V	
	19-26	H M		V		-	
B2..	4	H	V	V		-	
	5-12	H	V	H	V	V	SR 2)
	13-18	H M		H M	V	V	SR 2)
	19-26	H M		V		-	
B3..	4	H	V	V		-	
	5-12	H	V	V		V	SR 2)
	13-18	H M		V		V	SR 2)
	19-26	H M		V		-	
B4..	5-12	H	V	V		V	SR 2)
	13-18	H M		V		V	SR 2)
	19-26	H M		V		-	

H= 卧式安装齿轮箱
M= 轴装式水平安装的齿轮箱
V= 立式安装齿轮箱
SR= 带实心输出轴和干井式密封的立式安装齿轮箱

H=Horizontal gear unit
M=Shaft-mounted horizontal gear unit
V=Vertical gear unit
SR= Vertical gear unit with solid output shaft and oil retaining tube

- 1) 仅适于布置形式 B
- 2) 仅适于布置形式 C
- 3) 对于规格 5 的齿轮箱仅适用于传动比 $i \leq 16$
对于规格 7 的齿轮箱仅适用于传动比 $i \leq 16$
对于规格 11 的齿轮箱仅适用于传动比 $i \leq 18$
对于规格 13 的齿轮箱仅适用于传动比 $i \leq 18$
对于规格 17 的齿轮箱仅适用于传动比 $i \leq 16$

- 1) Design B possible only
- 2) Design C possible only
- 3) For size 5 only possible up to $i \leq 16$
For size 7 only possible up to $i \leq 16$
For size 11 only possible up to $i \leq 18$
For size 13 only possible up to $i \leq 18$
For size 17 only possible up to $i \leq 16$

浸油润滑，立式安装，类型：H2, H3, H4, B2, B3, B4，规格 4-12

Dip lubrication, Vertical, Types H2, H3, H4, B2, B3, B4, Sizes 4-12

当采用浸油润滑方式时必须满足下列要求：

- 1) 最大输入转速 n_1 参见表 3
 - 2) 允许油温参见表 1
- n_1 和 i_N 不符合表 3 的齿轮箱应采用强制润滑方式。

For the design with dip lubrication the following criteria are to be taken into account:

- 1) For maximum input speed n_1 , see table 3.
 - 2) For permissible oil temperatures, see table 1.
- Gear units with n_1 and i_N not listed in table 3 must be designed for forced lubrication.

表 3 / Table 3												
规格 Size	类型 / Types											
	H2.V		H3.V		H4.V		B2.V		B3.V		B4.V	
	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}
4	6.3-10 11.2-12.5 14-22.4	1200 1500 1800	-		-		5-5.6 6.3-7.1 8-9 10-11.2	750 900 1000 1200	12.5-71	1800	-	
5	6.3-9 10-12.5 14-16 18-22.4	1000 1200 1500 1800	25-90	1800	-		6.3-7.1 8-9 10-11.2	750 900 1000	12.5-71	1800	80-315	1800
6	8-11.2 12.5-16 18-20 22.4-28	1000 1200 1500 1800	31.5-112	1800	-		9 10-11.2 12.5-14	750 900 1000	16-90	1800	100-400	1800
7	6.3-7.1 8-9 10-11.2 12.5-16 18-22.4	750 900 1000 1200 1500	25-90	1800	100-355	1800	9-10 11.2	750 900	12.5-25 28-71	1500 1800	80-315	1800
8	8-9 10-11.2 12.5-14 16-20 22.4-28	750 900 1000 1200 1500	31.5-112	1800	125-450	1800	11.2-12.5 14	750 900	16-31.5 35.5-90	1500 1800	100-400	1800
9	6.3-7.1 8-10 11.2-22.4	1200 1500 1800	25-90	1800	100-355	1800	5-5.6 6.3-7.1 8-10 11.2	900 1000 1200 1500	12.5-71	1800	80-315	1800
10	8-9 10-12.5 14-28	1200 1500 1800	31.5-112	1800	125-450	1800	6.3-7.1 8-9 10-12.5 14	900 1000 1200 1500	16-90	1800	100-400	1800
11	6.3-7.1 8-10 11.2-12.5 14-22.4	1000 1200 1500 1800	25-90	1800	100-355	1800	5.6-6.3 7.1-8 9-10 11.2	750 900 1000 1200	12.5-22.4 25-71	1500 1800	80-315	1800
12	8-9 10-12.5 14-16 18-28	1000 1200 1500 1800	31.5-112	1800	125-450	1800	7.1-8 9-10 11.2-12.5 14	750 900 1000 1200	16-28 31.5-90	1500 1800	100-400	1800

强制润滑，法兰泵，类型：H2.V, H3.V, H4.V，规格 5-18，立式安装

Forced lubrication, Flanged-on Pump, Types H2.V, H3.V, H4.V, Sizes 5-18, Vertical

表 4 / Table 4

立式安装平行轴齿轮箱的法兰泵配置 / Assignment of flanged-on pumps to vertical helical gear units								
类型 布置形式 Type Design	n ₁ min ⁻¹	齿轮箱规格 Gear unit size		法兰泵规格 Flanged-on pump size	齿轮箱规格 Gear unit size			法兰泵规格 Flanged-on pump size
		5, 7, 9, 11	6, 8, 10, 12		13, 15, 17	14	16, 18	
		传动比 / Ratio i _N			传动比 / Ratio i _N			
H2.V A, C	750-1800	6.3-22.4	8-28	KSW 1	6.3-22.4	8-28	7.1-25	KSW 2
H3.V A, C	1201-1800	25-40	31.5-50	KSW 2	22.4-50	28-63	25-56	KSW 3
		45-90	56-112	KSW 3	56-90	71-112	63-90	KSW 4
							100	*
	901-1200	25-56	31.5-71	KSW 3	22.4-31.5	28-40	25-35.5	KSW 3
		63-90	80-112	*	35.5-56	45-71	40-63	KSW 4
					63-90	80-112	71-100	*
	750-900	25-45	31.5-56	KSW 3	22.4-25	28-31.5	25-28	KSW 3
		50-90	63-112	*	28-45	35.5-56	31.5-50	KSW 4
				50-90	63-112	56-100	*	
H4.V A, C	1201-1800	100-224	125-280	KSW 3	100-355	125-450	112-400	*
		250-355	315-450	*				
	901-1200	100-140	125-180	KSW 3				
		160-355	200-450	*				
	750-900	100-112	125-140	KSW 3				
		125-355	160-450	*				
H2.V B, D	750-1800	6.3-22.4	8-28	KSW 1	6.3-22.4	8-28	7.1-25	KSW 2
H3.V B, D	1201-1800	25-35.5	31.5-45	KSW 2	22.4-35.5	28-45	25-40	KSW 3
		40-71	50-90	KSW 3	40-71	50-90	45-80	KSW 4
		80-90	100-112	*	80-90	100-112	90-100	*
	901-1200	25-50	31.5-63	KSW 3	22.4-25	28-31.5	25-28	KSW 3
		56-90	71-112	*	28-45	35.5-56	31.5-50	KSW 4
					50-90	63-112	56-100	*
	750-900	25-35.5	31.5-45	KSW 3	22.4-35.5	28-45	25-40	KSW 4
		40-90	50-112	*	40-90	50-112	45-100	*
H4.V B, D	1201-1800	100-180	125-224	KSW 3	100-355	125-450	112-400	*
		200-355	250-450	*				
	901-1200	100-125	125-160	KSW 3				
		140-355	180-450	*				
	750-900	100-355	125-450	*				

*=所需电动泵参见表 6 / Motor pump required, see table 6

强制润滑，法兰泵，类型：B2.V, B3.V, B4.V，规格 5-18，立式安装
 Forced lubrication, Flanged-on Pump, Type B2.V, B3.V, B4.V, Sizes 5-18, Vertical

类型 布置形式 Type Design	n ₁ min ⁻¹	齿轮箱规格 Gear unit size		法兰泵规格 Flanged-on pump size	齿轮箱规格 Gear unit size			法兰泵规格 Flanged-on pump size
		5, 7, 9, 11	6, 8, 10, 12		13, 15, 17	14	16, 18	
		传动比 / Ratio i _N			传动比 / Ratio i _N			
B2.V A, B	1201-1800	5-6.3	6.3-8	KSW 1	5-8	6.3-10	5.6-9	KSW 2
		7.1-11.2	9-14	KSW 2	9-11.2	11.2-14	10-12.5	KSW 3
	901-1200	5-8	6.3-10	KSW 2	5	6.3	5.6	KSW 2
		9-11.2	11.2-14	KSW 3	5.6-11.2	7.1-14	6.3-12.5	KSW 3
	750-900	5-6.3	6.3-8	KSW 2	5-10	6.3-12.5	5.6-11.2	KSW 3
		7.1-10	9-12.5	KSW 3	11.2	14	12.5	*
		11.2	14	*				
B2.V C, D	1201-1800	5-6.3	6.3-8	KSW 1	5-6.3	6.3-8	5.6-7.1	KSW 2
		7.1-11.2	9-14	KSW 2	7.1-11.2	9-14	8-12.5	KSW 3
	901-1200	5-8	6.3-10	KSW 2	5-10	6.3-12.5	5.6-11.2	KSW 3
		9-11.2	11.2-14	KSW 3	11.2	14	12.5	*
	750-900	5-6.3	6.3-8	KSW 2	5-7.1	6.3-9	5.6-8	KSW 3
		7.1-10	9-12.5	KSW 3	8-11.2	10-14	9-12.5	*
		11.2	14	*				
B3.V A, B	1201-1800	12.5-35.5	16-45	KSW 2	12.5-22.4	16-28	14-25	KSW 2
		40-71	50-90	KSW 3	25-50	31.5-63	28-56	KSW 3
					56-71	71-90	63-80	KSW 4
	901-1200	12.5-25	16-31.5	KSW 2	12.5-35.5	16-45	14-40	KSW 3
		28-50	35.5-63	KSW 3	40-56	50-71	45-63	KSW 4
	750-900	56-71	71-90	*	63-71	80-90	71-80	*
12.5-35.5		16-45	KSW 3	12.5-25	16-31.5	14-28	KSW 3	
		40-71	50-90	*	28-40	35.5-50	31.5-45	KSW 4
					45-71	56-90	50-80	*
B3.V C, D	1201-1800	12.5-35.5	16-45	KSW 2	12.5-35.5	16-45	14-40	KSW 3
		40-71	50-90	KSW 3	40-71	50-90	45-80	KSW 4
	901-1200	12.5-25	16-31.5	KSW 2	12.5-25	16-31.5	14-28	KSW 3
		28-50	35.5-63	KSW 3	28-50	35.5-63	31.5-56	KSW 4
	750-900	56-71	71-90	*	56-71	71-90	63-80	*
		12.5-35.5	16-45	KSW 3	12.5-35.5	16-45	14-40	KSW 4
		40-71	50-90	*	40-71	50-90	45-80	*
B4.V A, B	1201-1800	80-125	100-160	KSW 2	80-315	100-400	90-355	*
		140-250	180-315	KSW 3				
		280-315	355-400	*				
	901-1200	80-180	100-224	KSW 3				
		200-315	250-400	*				
	750-900	80-125	100-160	KSW 3				
140-315		180-400	*					
B4.V C, D	1201-1800	80-180	100-224	KSW 3	80-315	100-400	90-355	*
		200-315	250-400	*				
	901-1200	80-125	100-160	KSW 3				
		140-315	180-400	*				
	750-900	80-90	100-112	KSW 3				
		100-315	125-400	*				

* = 所需电动泵参见表 7 / Motor pump required, see table 7

强制润滑，电动泵，类型：H2, H3, H4, B2, B3, B4，规格 5-18，立式安装
 Forced lubrication, Motor Pump, Types H2, H3, H4, B2, B3, B4, Sizes 5-18, Vertical

表 6 / Table 6			
立式安装平行轴齿轮箱的电动泵配置 / Assignment of motor pumps to vertical helical gear units			
类型 / Type	规格 / Size	布置形式 / Design	泵 / pump
H2.V	5-18	A / B / C / D	1)
H3.V	5-18	A / C	SF 2/8
	5-12	B / D	SF 2/8
	13-18		SF 2/13
H4.V	7-12	A / C	SF 2/8
	13-18		SF 2/13
	7-18	B / D	SF 2/13

1) 仅用于法兰泵
 1) Flanged-on pump only

表 7 / Table 7			
立式安装直交轴齿轮箱的电动泵配置 / Assignment of motor pumps to vertical bevel-helical gear units			
类型 / Type	规格 / Size	布置形式 / Design	泵 / pump
B2.V	5-12	A / B	SF 2/5
	13-18		SF 2/8
	5-18	C / D	SF 2/8
B3.V	5-12	A / B	SF 2/8
	13-18		SF 2/13
	5-12	C / D	SF 2/8
	13-18		SF 2/13
B4.V	5-12	A / B	SF 2/8
	13-18		SF 2/13
	5-12	C / D	SF 2/8
	13-18		SF 2/13

强制润滑，监测元件，类型：H2, H3, H4, B2, B3, B4，规格 5–18, 立式安装

Forced lubrication, Monitoring Instruments, Types H2, H3, H4, B2, B3, B4, Sizes 5–18, Vertical

法兰泵或电动泵强制润滑系统的监测元件

Monitoring instruments for forced lubrication by means of flanged-on or motor pump

齿轮箱规格 Gear unit size 5-12	齿轮箱规格 Gear unit size 13-18
a) 过滤器 Coarse filter	a) 双切换过滤器 Double change-over filter
b) 压力监测开关 Pressure monitor	b) 压力监测开关 Pressure monitor
	c) 压力表连接接头规格 G 1/2 Connection for pressure gauge G 1/2

a)
过滤器用于滤除和收集杂质颗粒以保护传动装置的安全。

双切换过滤器带有并排布置的两个滤筒，设有一个光电污染示器。

压差 $\Delta p=2 \text{ bar}$ ，一个切换触点。

电气参数最大额定值：

切换电压 $\leq 250 \text{ V DC+AC}$

切换电流 $\leq 1 \text{ A}$

切换容量 $P \leq 30 \text{ W}$ 或 $\leq 60 \text{ VA}$

防护等级 IP65

b)
当油压 $\leq 0.5 \text{ bar}$ 时，压力监测开关通过与所联接的报警系统即可发出光或声报警信号或者关闭系统。

技术参数：

最大切换功率

2 A/250V, AC/250 VA (交流)

4 A/200V, DC/20 W (直流)

防护等级 IP65

a)
Coarse filters serve to protect downstream units by catching and collecting dirt particles.

Double change-over filters with opposed cylinders have an optoelectrical contamination indicator.

Differential pressure $\Delta p=2 \text{ bar}$; 1 change-over contact.

Electrical maximum ratings:

Switching voltage $U \leq 250 \text{ V DC+AC}$

Switching current $\leq 1 \text{ A}$

Switching capability $P \leq 30 \text{ W}$ or $\leq 60 \text{ VA}$

Type of protection IP65

b)
When the oil pressure drops below 0.5 bar, the pressure monitor in combination with a warning system can give an optical or acoustical warning, or switch off the system.

Technical data:

Max. switching capacity

2 A/250 V; AC/250 VA(alternating current)

4 A/200 V; DC/20W(direct current)

Type of protection IP 65

强制润滑，卧式安装，类型：H1SH，规格 5-17
 Forced lubrication, Horizontal, Type H1SH, Sizes 5-17

K20/019

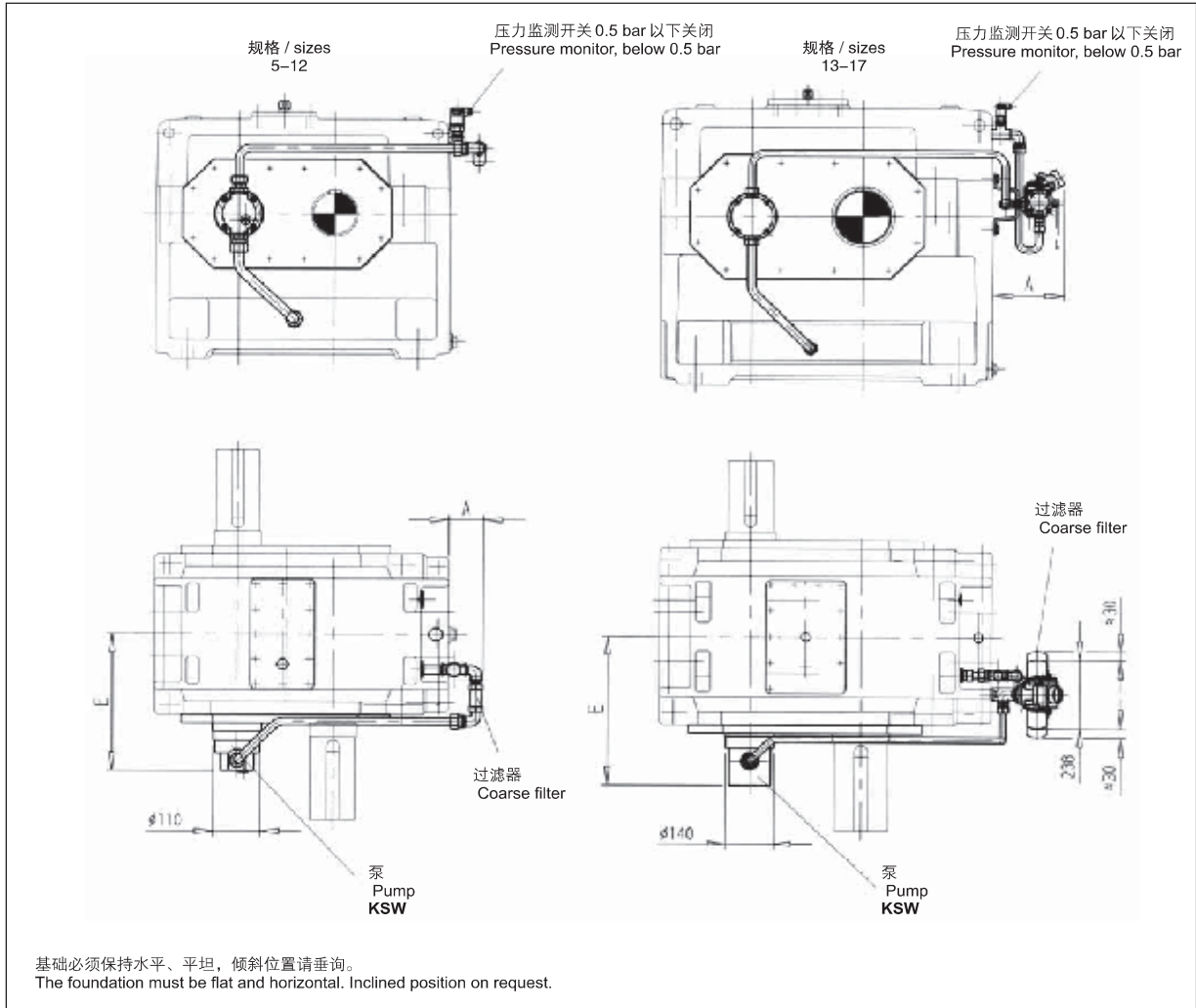


表 9 / Table 9

齿轮箱规格 Gear unit size	5	7	9	11	13	15	17		
泵 Pump KSW	1	2	2	2	3	3	3	3	3
A mm	≈ 115	≈ 105	≈ 105	≈ 125	≈ 240	≈ 240	≈ 240	≈ 240	≈ 240
E mm	283	337	400	430	474	479	$i_N=3.15-4$ 525	$i_N=4.5-5.6$ 525	$i_N=2-2.8$ 525

*) 对转速 $n_1 \geq 900$ 至 1800 min^{-1} 有效

*) Applies to speeds: $n_1 \geq 900$ up to 1800 min^{-1}

强制润滑，卧式安装，类型：H2.H，规格 5-18
 Forced lubrication, Horizontal, Type H2.H, Sizes 5-18

K20/019

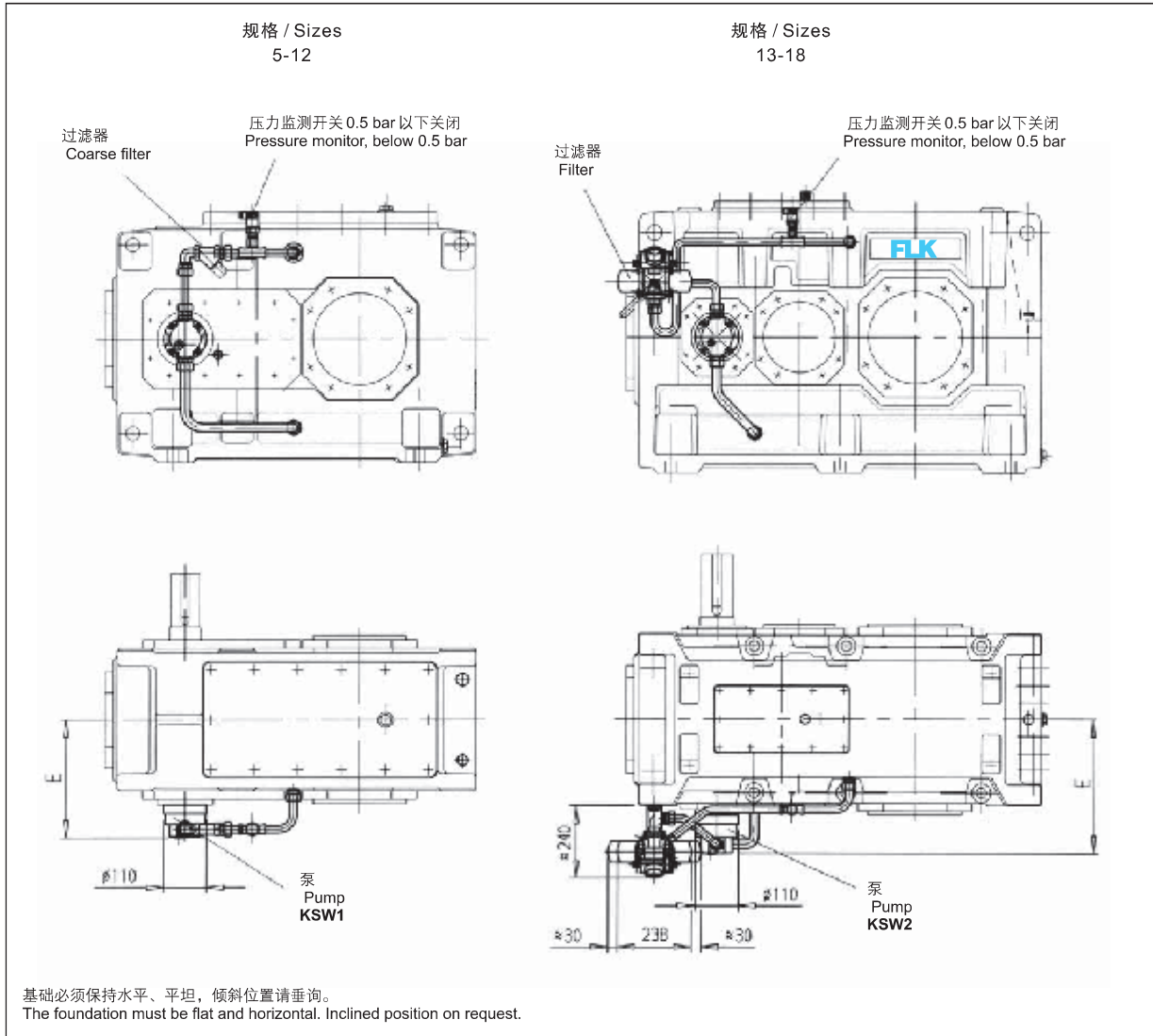


表 10 / Table 10														
齿轮箱规格 Gear unit size	5	6	7	8	9	10	11	12	13	14	15	16	17	18
E mm	264	285	308	344	440	475	500							

*) 对转速 $n_1 \geq 1500$ 至 1800 min^{-1} 有效

*) Applies to speeds: $n_1 \geq 1500$ up to 1800 min^{-1}

强制润滑，卧式安装，类型：B2SH，规格 5-18
 Forced lubrication, Horizontal, Type B2SH, Sizes 5-18

K20/019

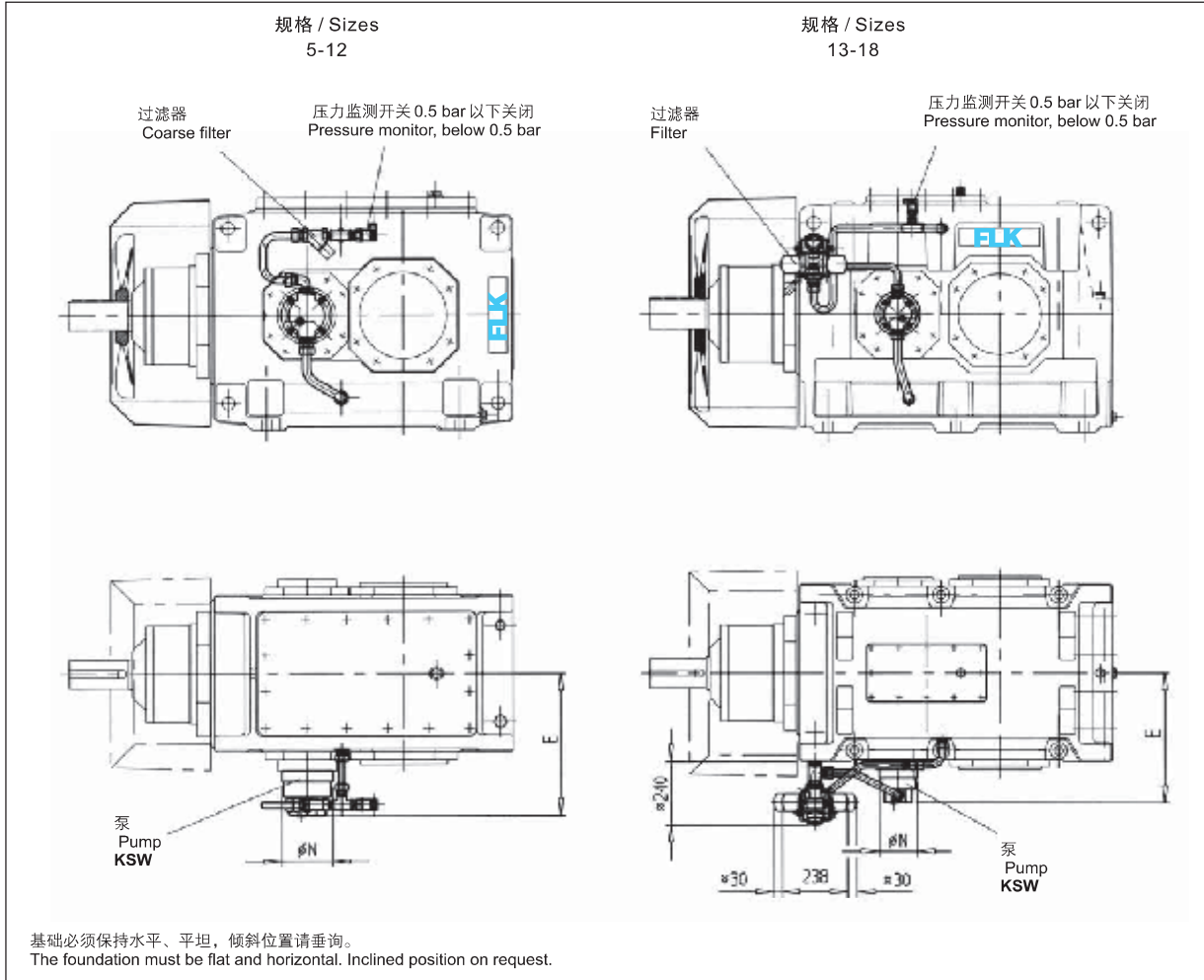


表 11 / Table 11

齿轮箱规格 Gear unit size	5 / 6			7 / 8			9 / 10			11 / 12			13 / 14		15 / 16		17 / 18	
泵 Pump KSW	1	2	3	1	2	3	1	2	3	1	2	3	2	3	2	3	2	3
φ N	110	110	140	110	110	140	110	110	140	110	110	140	110	140	110	140	110	140
E	342	342	342	372	372	372	401	401	401	442	442	442	489	489	545	545	606	606

*) 对下列转速有效：
 规格 1 和 2： $n_1 \geq 1500$ 至 1800 min^{-1}
 规格 3： $n_1 \geq 1200$ 至 1800 min^{-1}

*) Applies to the following speeds:
 Sizes 1 and 2 $n_1 \geq 1500$ up to 1800 min^{-1}
 Size 3 $n_1 \geq 1200$ up to 1800 min^{-1}

水-油冷却器，卧式安装，类型：H1SH，规格 5-17

Water-oil Cooler, Horizontal, Type H1SH, Sizes 5-17

K20/020

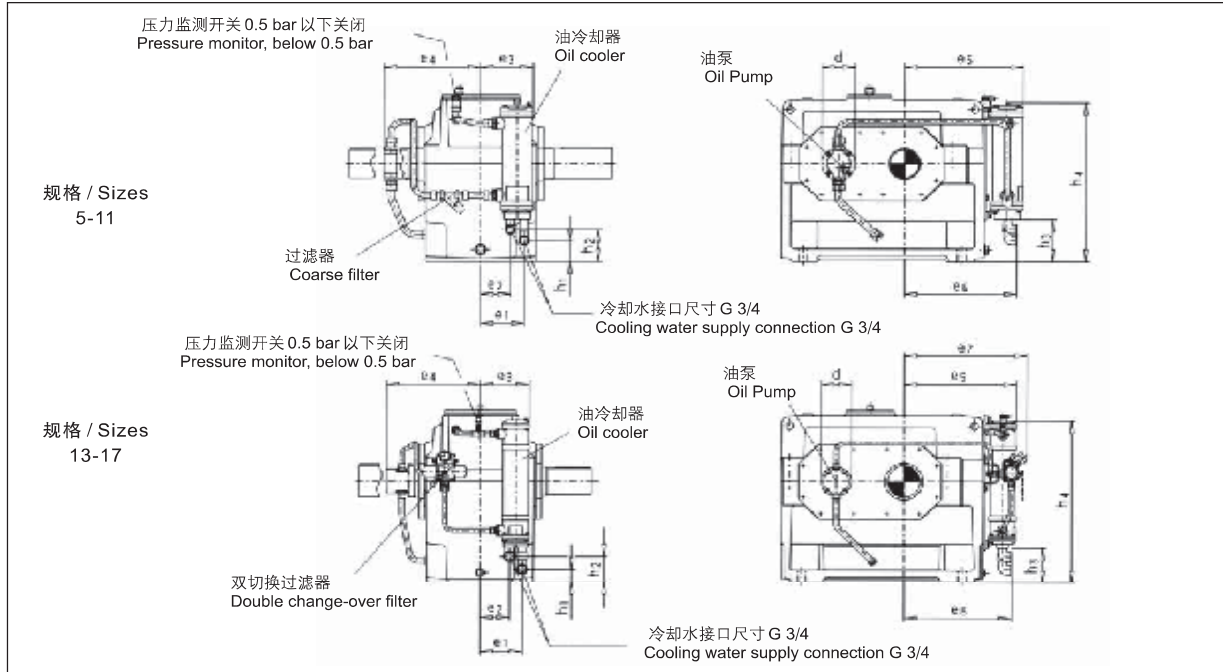


表 12 / Table 12

齿轮箱规格 Gear unit size	油冷却器 / Oil cooler												油泵 / Oil Pump *		
	规格 size	e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	h ₁	h ₂	h ₃	h ₄	KSW 规格 size	d mm	传动比 Ratio i _{ges}
5	01	138	92	170	282	365	342	-	55	95	130	550	1	110	1.25...5.6
7	01	148	102	180	335	405	383	-	90	130	165	570	2	110	1.25...4
					320								1	110	4.5...5.6
9	01	160	114	195	373	450	428	-	140	180	215	620	2	110	1.25...2.8
					373								2	110	3.15...4
					358								1	110	4.5...5.6
11	01	193	147	225	433	510	488	-	185	225	260	665	3	140	1.6...2.8
					433								3	140	3.15...4
					406								2	110	4.5...5.6
13	03	230	160	270	469	610	588	670	75	150	200	938	3	140	1.6...2.8
					469								3	140	3.15...4
					442								2	110	4.5...5.6
15	03	210	140	250	474	685	664	745	95	170	220	958	3	140	2...2.8
					474								3	140	3.15...4
					447								2	110	4.5...5.6
17	03	235	165	275	491	725	704	785	155	230	280	1018	3	140	2...2.8
					491								3	140	3.15...4
					455								2	110	4.5...5.6

当超过热容量 P_{Ge4} 时应配置油冷却器和油泵，
在可能情况下可以与冷却风扇一起使用。
立式安装齿轮箱请垂询
热容量请垂询
冷却器适用于淡水和海水
*) 对转速 n₁=900-1800 min⁻¹ 有效

If the thermal capacities P_{Ge4} are exceeded, oil cooler and oil pump have to
be provided, possibly together with a fan.
Vertical gear units on request
Thermal capacities on request
Cooler suitable for fresh and sea water
*) Applies to speeds: n₁=900-1800 min⁻¹

水-油冷却器，卧式安装，类型：H2.H，规格 5-18

Water-oil Cooler, Horizontal, Type H2.H, Sizes 5-18

K20/020

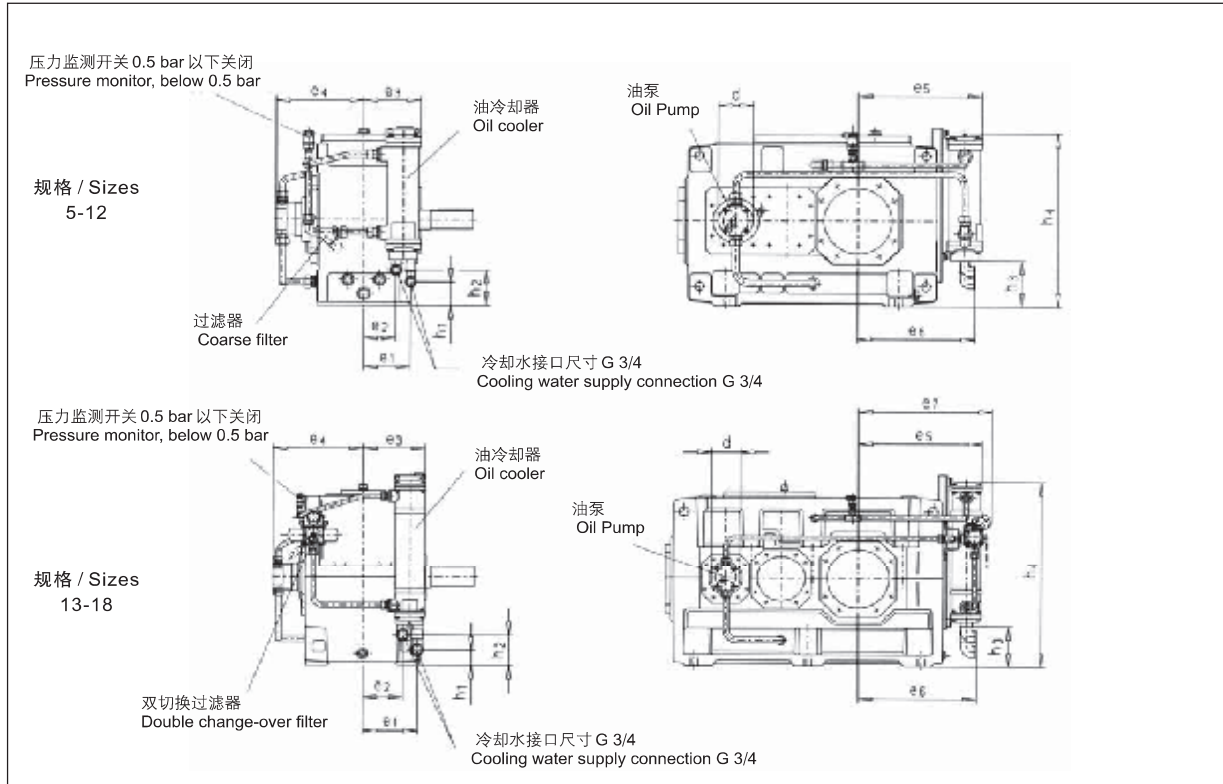


表 13 / Table 13

齿轮箱规格 Gear unit size	油冷却器 / Oil cooler												油泵 / Oil Pump *	
	规格 Size	e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	h ₁	h ₂	h ₃	h ₄	KSW 规格 Size	d mm
5		123	77	155	263	350	318	-	55	95	130	550	1	110
6	01	123	77	155	263	395	363	-	55	95	130	550		
7		148	102	180	283	395	363	-	75	115	150	570		
8		148	102	180	283	455	423	-	75	115	150	570	1	110
9	01	173	127	205	306	455	413	-	150	190	225	645		
10		173	127	205	306	495	463	-	150	190	225	645		
11	01	203	157	235	342	495	458	-	225	265	300	720	1	110
12	01	203	157	235	342	580	543	-	225	265	300	720		
13	03	260	190	300	410	590	563	645	75	150	200	938		
14		260	190	300	410	670	633	725	75	150	200	938	2	110
15	03	300	230	340	445	670	643	725	105	180	230	968		
16		300	230	340	445	715	688	770	105	180	230	968		
17						715	683	770					2	110
18	03	300	260	370	475	770	743	825	145	220	270	1008		

*) 用于所有传动比 ($n_1=750-1800\text{min}^{-1}$)
 当超过热容量 P_{G4} 时应配置油冷却器和油泵，
 在可能情况下可以与冷却风扇一起使用。
 立式安装齿轮箱请垂询
 热容量请垂询
 冷却器适用于淡水和海水

*) For all transmission ratios ($n_1=750-1800\text{min}^{-1}$)
 If the thermal capacities P_{G4} are exceeded, oil cooler and oil pump have to
 be provided, possibly together with a fan.
 Vertical gear units on request
 Thermal capacities on request
 Cooler suitable for fresh and sea water

水-油冷却器，卧式安装，类型：B2.H，规格 5-12

Water-oil Cooler, Horizontal, Type B2.H, Sizes 5-12

K20/020

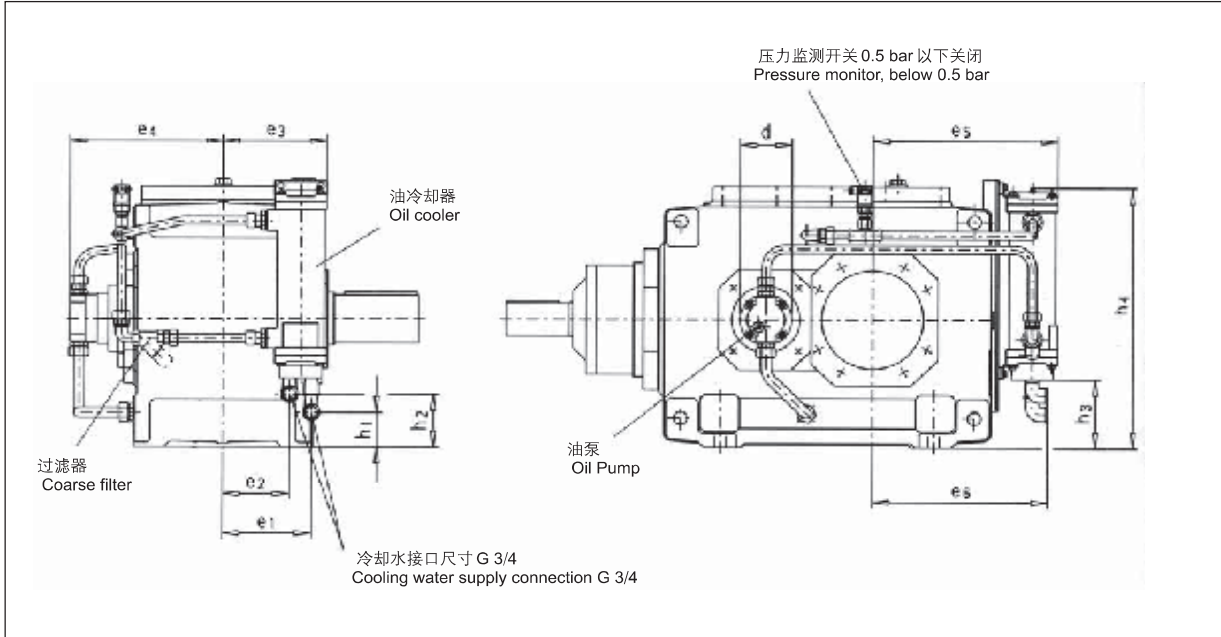


表 14 / Table 14													
齿轮箱规格 Gear unit size	油冷却器 / Oil cooler											油泵 / Oil Pump *	
	规格 Size	e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	h ₁	h ₂	h ₃	h ₄	KSW 规格 Size	d mm
mm													
5	01	158	112	190	340	355	323	55	95	130	550	3	140
					313							2	110
					298							1	110
6	01	158	112	190	340	400	368	55	95	130	550	3	140
					313							2	110
					298							1	110
7	01	188	142	220	370	400	368	75	115	150	570	3	140
					343							2	110
					328							1	110
8	01	188	142	220	370	460	428	75	115	150	570	3	140
					343							2	110
					328							1	110
9	01	218	172	250	399	460	418	150	190	225	645	3	140
					372							2	110
					357							1	110
10	01	218	172	250	399	500	468	150	190	225	645	3	140
					372							2	110
					357							1	110
11	01	263	217	295	440	500	463	225	265	300	720	3	140
					413							2	110
					398							1	110
12	01	263	217	295	440	580	548	225	265	300	720	3	140
					413							2	110
					398							1	110

当超过热容量 P_{G4} 时应配置油冷却器和油泵，在可能情况下可以与冷却风扇一起使用。

立式安装齿轮箱请垂询

热容量请垂询

冷却器适用于淡水和海水

*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n₁ 和传动比确定泵的规格，参见第 125 页

If the thermal capacities P_{G4} are exceeded, oil cooler and oil pump have to be provided, possibly together with a fan.

Vertical gear units on request

Thermal capacities on request

Cooler suitable for fresh and sea water

*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n₁, see page 125.

水-油冷却器，卧式安装，类型：B2.H，规格 13-18

Water-oil Cooler, Horizontal, Type B2.H, Sizes 13-18

K20/020

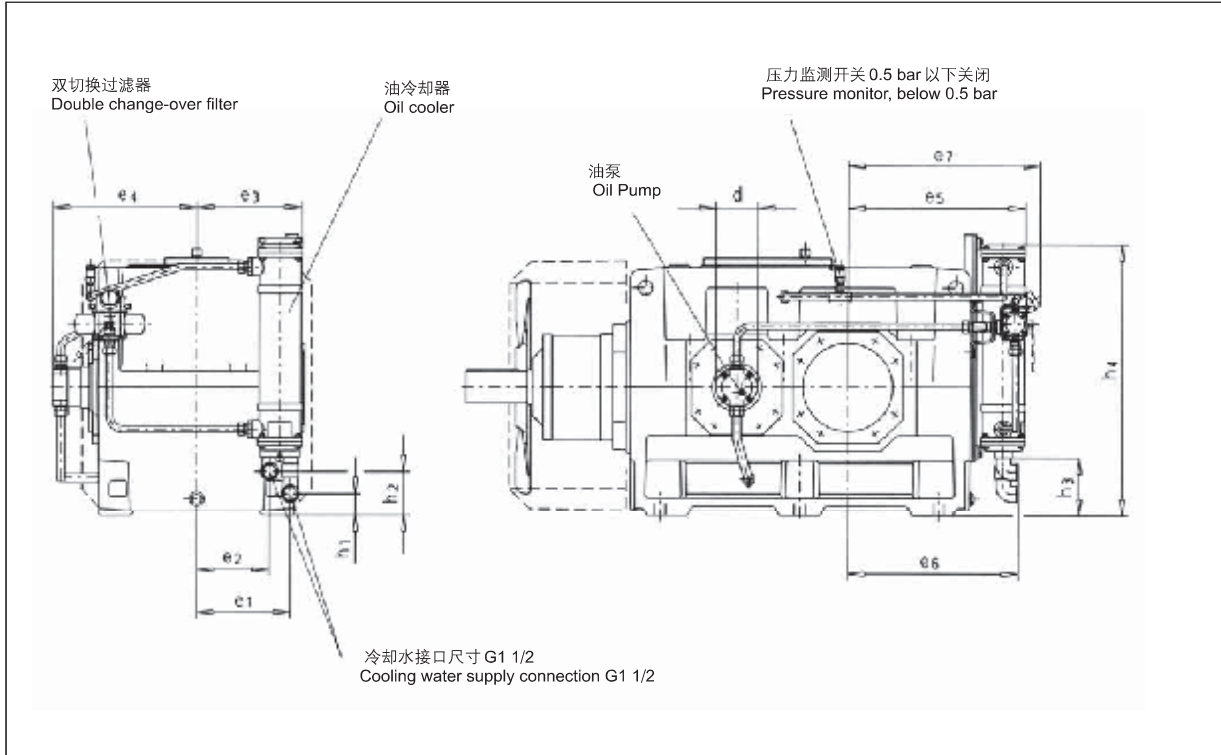


表 15 / Table 15

齿轮箱规格 Gear unit size	油冷却器 / Oil cooler												油泵 / Oil Pump *	
	规格 Size	e1	e2	e3	e4	e5	e6	e7	h1	h2	h3	h4	KSW 规格 Size	d mm
13	03	320	250	355	487	595	573	645	75	150	200	938	3	140
					460								2	110
14	03	320	250	355	487	665	643	715	75	150	200	938	3	140
					460								2	110
15	03	375	305	410	543	675	653	725	105	180	230	968	3	140
					516								2	110
16	03	375	305	410	543	720	698	770	105	180	230	968	3	140
					543								2	110
17	03	435	365	470	605	720	693	770	145	220	270	1008	3	140
					578								2	110
18	03	435	365	470	605	775	753	825	145	220	270	1008	3	140
					578								2	110

当超过热容量 P_{G4} 时应配置油冷却器和油泵，在可能情况下可以与冷却风扇一起使用。
立式安装齿轮箱请垂询
热容量请垂询
冷却器适用于淡水和海水
*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n_1 和传动比确定泵的规格，参见第 125 页

If the thermal capacities P_{G4} are exceeded, oil cooler and oil pump have to be provided, possibly together with a fan.
Vertical gear units on request
Thermal capacities on request
Cooler suitable for fresh and sea water
*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n_1 , see page 125.

气-油冷却器，卧式安装，类型：H1SH，规格 5-11
Air-oil Cooler, Horizontal, Type H1SH, Sizes 5-11

K20/021

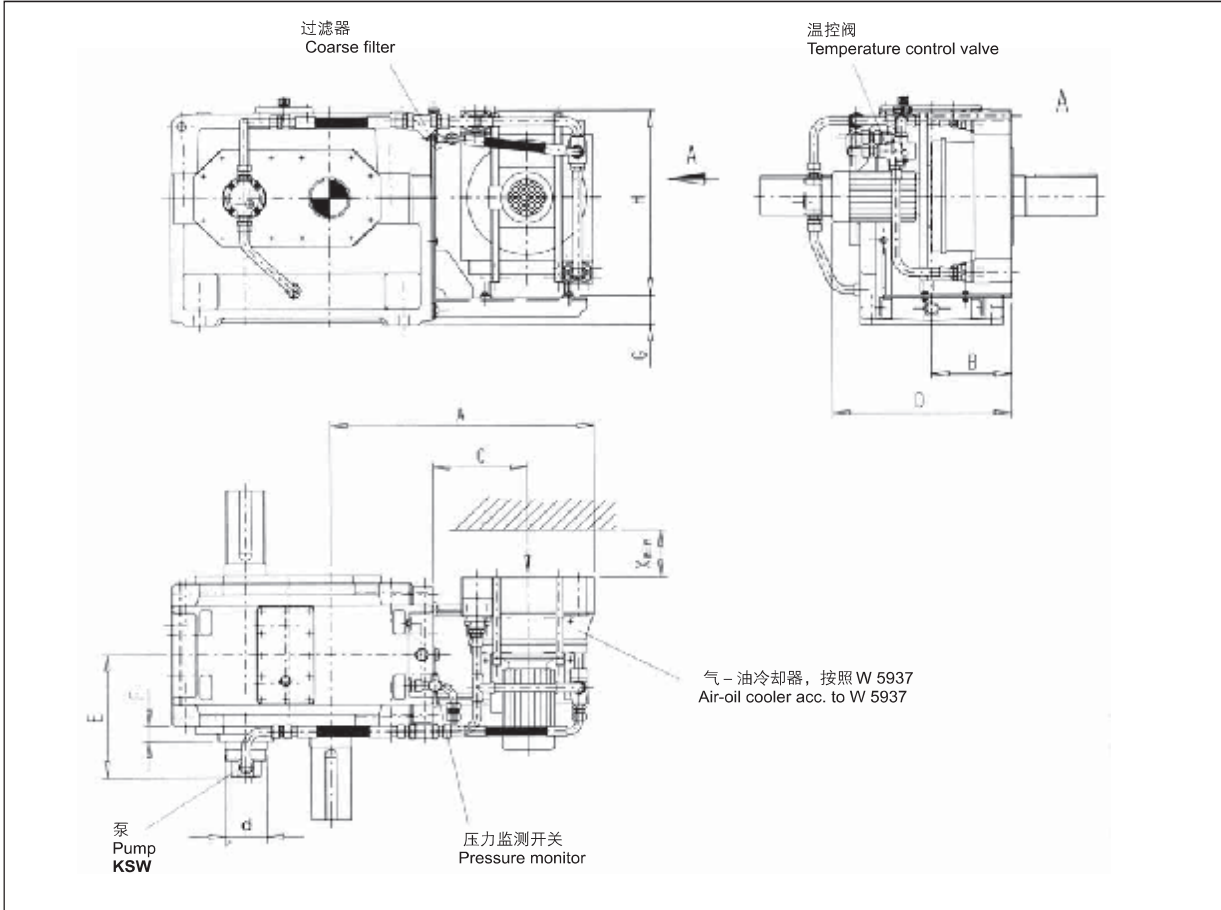


表 16 / Table 16													
齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	X _{min}	规格 / Size			
										气-油冷却器 Air-oil cooler	泵 / Pump *	传动比 / Ratio	
mm										KSW	d	i _{ges}	
5	655	240	250	470	282	46.5	75	438	130	03-3N-1500	1	110	1.25...5.6
7	695	210	250	470	335	40	80	506		04-1N-1500	2	110	1.25...4
					1					110	4.5...5.6		
9	865	240	320	540	373	50	100	612		05-1N-1500	2	110	1.25...2.8
					1					110	4.5...5.6		
11	925	240	320	540	433	38	130	712		06-1N-1500	3	140	1.6...2.8
					3						140	3.15...4	
					406						2	110	4.5...5.6

*) 对转速 $n_1=900-1800 \text{ min}^{-1}$ 有效
立式安装齿轮箱请垂询
热容量请垂询

*) Applies to speeds $n_1=900-1800 \text{ min}^{-1}$
Vertical gear units on request
Thermal capacities on request

气-油冷却器，卧式安装，类型：H1SH，规格 13-17

Air-oil Cooler, Horizontal, Type H1SH, Sizes 13-17

K20/021

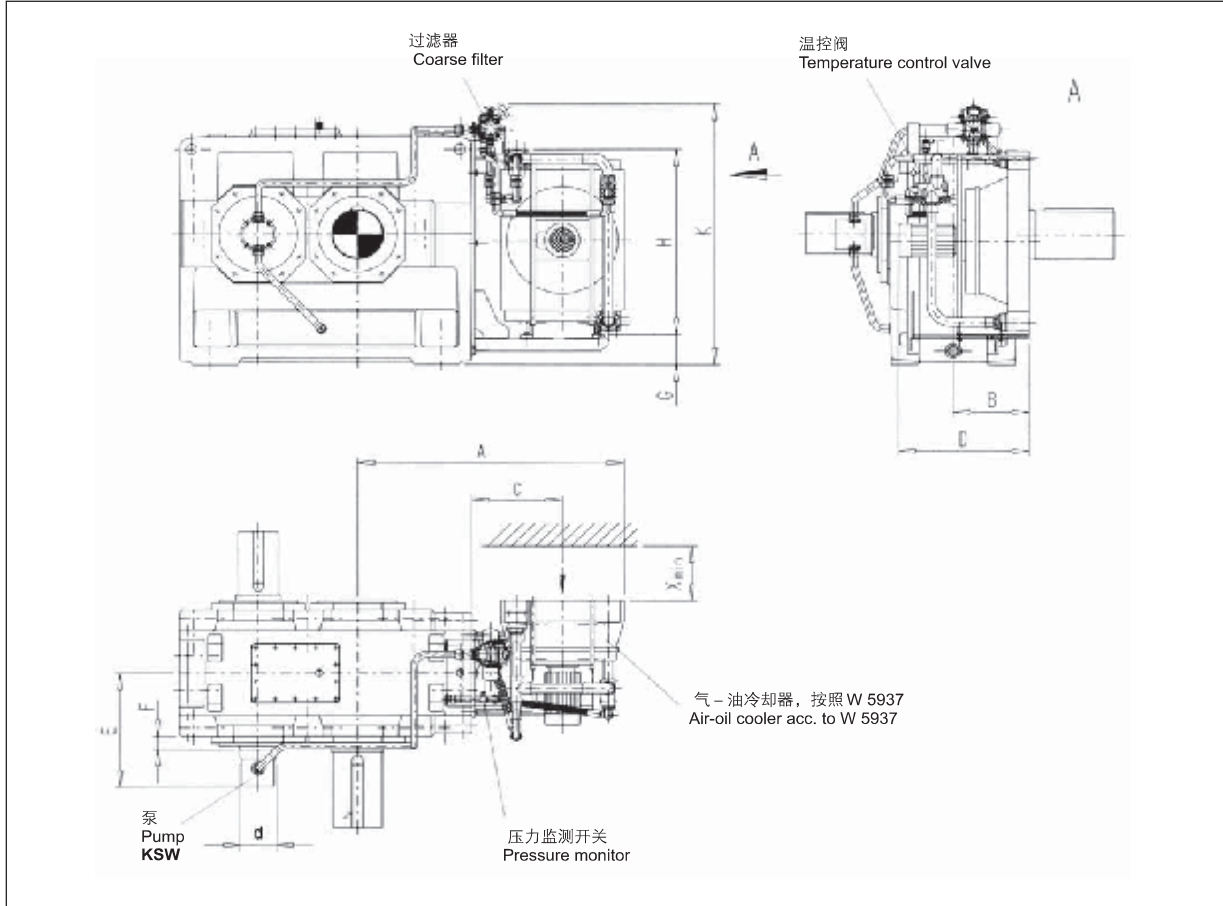


表 17 / Table 17

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	K	X _{min}	规格 / Size			
											气-油冷却器 Air-oil cooler	泵 / Pump *		
												KSW	d	传动比 / Ratio i _{ges}
13	1107	350	400	574	469	40	115	721	1100	130	07-1N-1500	3	140	1.6...2.8
					442							3	140	3.15...4
												2	110	4.5...5.6
15	1185	355	400	574	474	60	135	853	1190	250	08-1N-1500	3	140	2...2.8
					474							3	140	3.15...4
					447							2	110	4.15...5.6
17	1360	357	480	635	491	42	235	853	1310	350	09-1N-1000	3	140	2...2.8
					491							3	140	3.15...4
					455							2	110	4.5...5.6

*) 对转速 n₁=900-1800 min⁻¹有效
立式安装齿轮箱请垂询
热容量请垂询

*) Applies to speeds: n₁=900-1800 min⁻¹
Vertical gear units on request
Thermal capacities on request

气-油冷却器，卧式安装，类型：H2.H，规格 5-12

Air-oil Cooler, Horizontal, Type H2.H, Sizes 5-12

K20/021

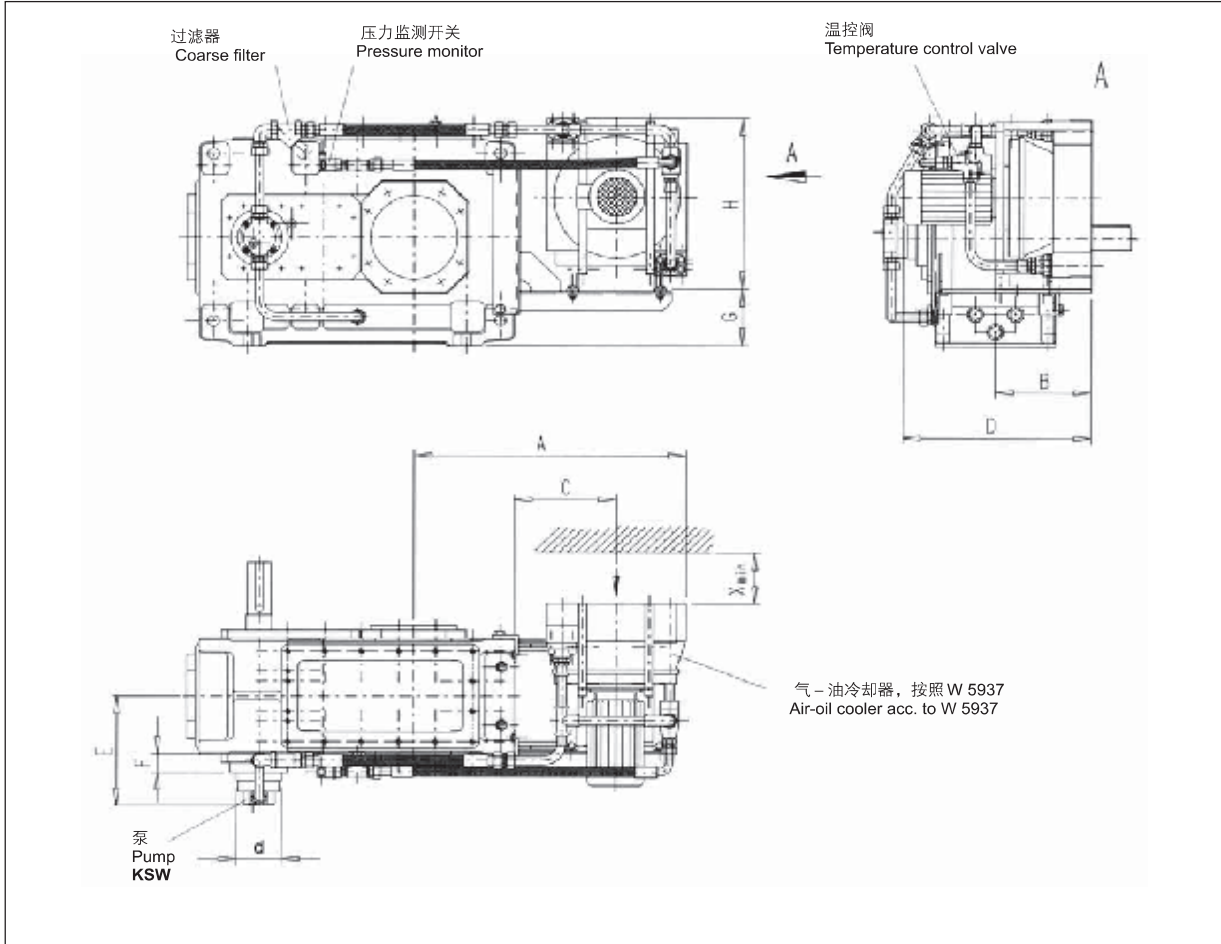


表 18 / Table 18

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	X _{min}	规格 / Size		
										气-油冷却器 Air-oil cooler	泵 / Pump *	
mm										KSW	d	
5	580	250	225	425	263	50	125	376	130	02-3N-1500	1	110
6	625	250	225	525	263	50	125	376		02-3N-1500	1	
7	680	240	255	470	283	48	150	438		03-3N-1500	1	
8	740	240	255	470	283	48	150	438		03-3N-1500	1	
9	730	230	255	470	306	36	150	506		04-3N-1500	1	
10	780	230	255	470	306	36	150	506		04-3N-1500	1	
11	880	260	310	540	342	42	190	612		05-3N-1500	1	
12	965	260	310	540	342	42	190	612		05-3N-1500	1	

*) 用于所有传动比 ($n_1=750-1800\text{min}^{-1}$)
立式安装齿轮箱请垂询
热容量请垂询

*) For all transmission ratios ($n_1=750-1800\text{min}^{-1}$)
Vertical gear units on request
Thermal capacities on request

气-油冷却器，卧式安装，类型：H2.H，规格 13-18
Air-oil Cooler, Horizontal, Type H2.H, Sizes 13-18

K20/021

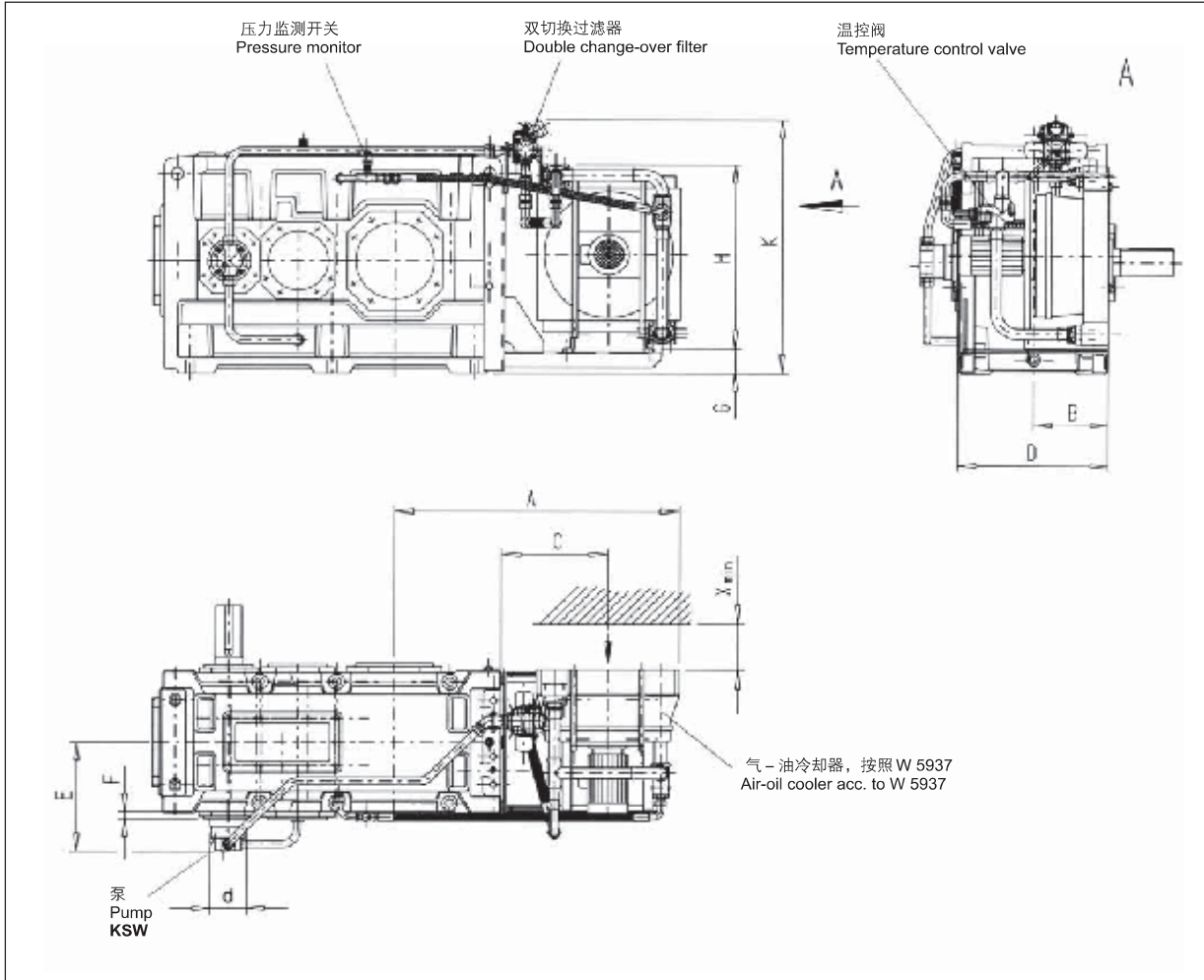


表 19 / Table 19

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	K	X _{min}	规格 / Size		
											气-油冷却器 Air-oil cooler	泵 / Pump *	
	mm										KSW	d	
13	1000	270	365	540	410	37	95	712	990	130	06-3N-1500	2	110
14	1070	270	365	540	410	37	95	712	990	130	06-3N-1500		
15	1175	290	410	574	445	35	150	721	1090	130	07-3N-1500		
16	1220	290	410	574	445	35	150	721	1090	130	07-3N-1500		
17	1215	290	410	574	475	35	170	853	1195	250	08-3N-1500		
18	1275	290	410	574	475	35	170	853	1195	250	08-3N-1500		

*) 对转速 $n_1=900-1800 \text{ min}^{-1}$ 有效
立式安装齿轮箱请垂询
热容量请垂询

*) Applies to speeds: $n_1=900-1800 \text{ min}^{-1}$
Vertical gear units on request
Thermal capacities on request

气-油冷却器，卧式安装，类型：B2.H，规格 5-12

Air-oil Cooler, Horizontal, Type B2.H, Sizes 5-12

K20/021

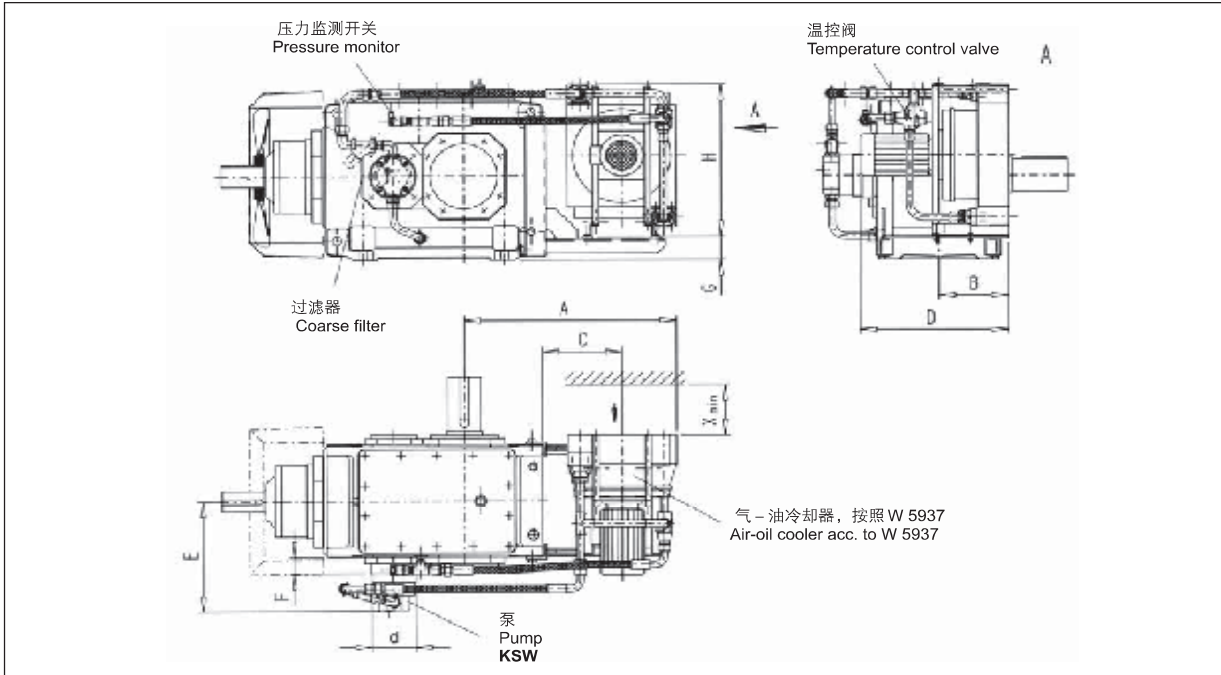


表 20 / Table 20

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	Xmin	规格 / Size			
										气-油冷却器 Air-oil cooler		泵 / Pump *	
												KSW	d
5	634	190	255	470	340	53	80	438	130	03-3N-1500	3	140	
					313						2	110	
6	679	190	255	470	298	53	80	438	130	03-3N-1500	3	140	
					313						2	110	
7	679	220	255	470	370	53	80	506	130	04-3N-1500	3	140	
					343						2	110	
8	739	220	255	470	328	53	80	506	130	04-3N-1500	3	140	
					343						2	110	
9	887	220	310	540	399	52	80	612	130	05-3N-1500	3	140	
					372						2	110	
10	937	220	310	540	357	52	80	612	130	05-3N-1500	3	140	
					372						2	110	
11	882	220	310	540	440	48	80	712	130	06-3N-1500	3	140	
					413						2	110	
12	967	220	310	540	398	48	80	712	130	06-3N-1500	3	140	
					413						2	110	
					398						1	110	

立式安装齿轮箱请垂询
热容量请垂询

*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n_1 和传动比确定泵的规格，参见第125页

Vertical gear units on request
Thermal capacities on request

*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n_1 , see page 125.

气-油冷却器，卧式安装，类型：B2.H，规格 13-18

Air-oil Cooler, Horizontal, Type B2.H, Sizes 13-18

K20/021

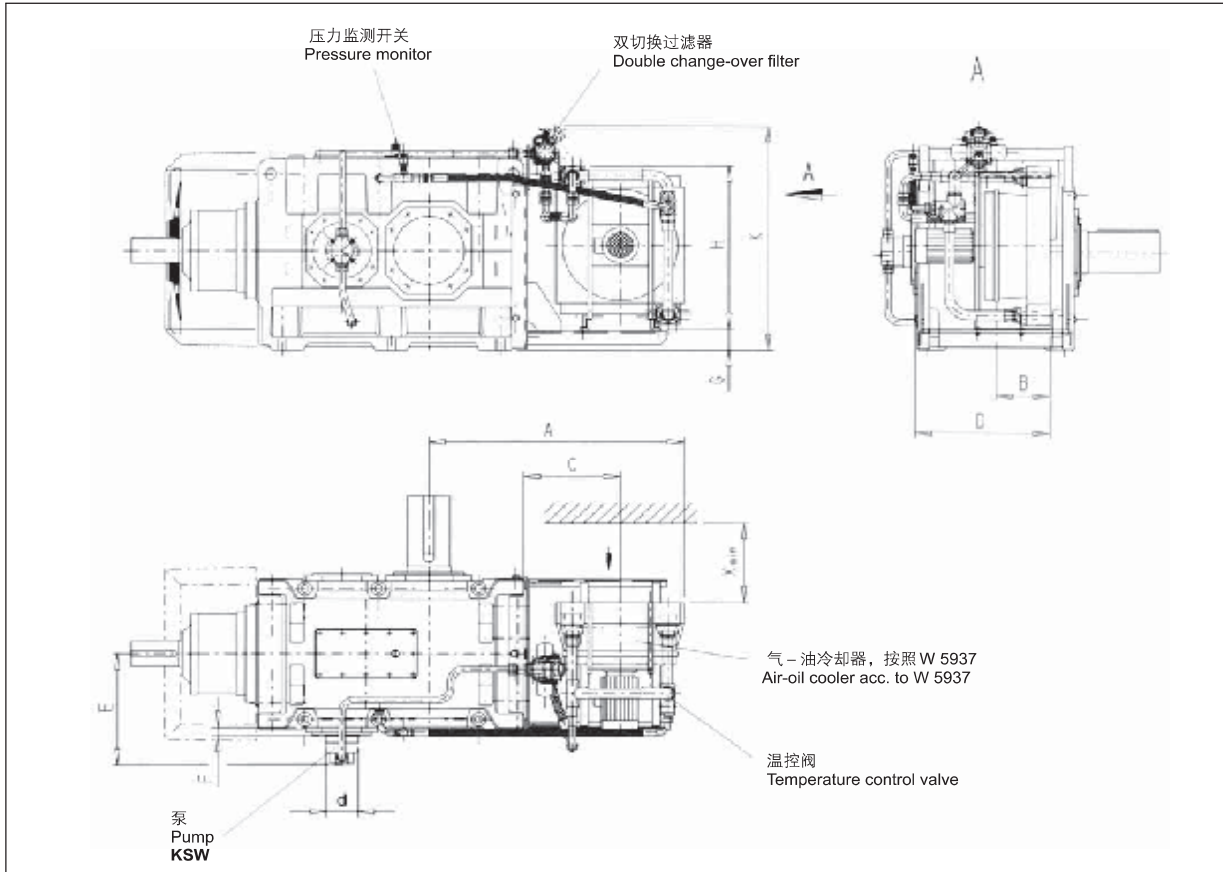


表 21 / Table 21

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	K	Xmin	规格 / Size			
											气-油冷却器 Air-oil cooler		泵 / Pump *	
													KSW	d
13	1092	230	410	574	487	35	95	721	995	130	07-3N-1500	3	140	
					460							2	110	
14	1162	230	410	574	487	35	95	721	995	130	07-3N-1500	3	140	
					460							2	110	
15	1172	175	410	574	543	36	95	853	1095	250	08-3N-1500	3	140	
					516							2	110	
16	1217	175	410	574	543	36	95	853	1095	250	08-3N-1500	3	140	
					516							2	110	
17	1337	150	480	635	605	40	113.5	853	1200	350	09-3N-1500	3	140	
					578							2	110	
18	1397	150	480	635	605	40	113.5	853	1200	350	09-3N-1500	3	140	
					578							2	110	

立式安装齿轮箱请垂询
热容量请垂询

*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n_1 和传动比确定泵的规格，参见第 125 页

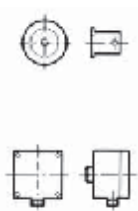
Vertical gear units on request
Thermal capacities on request

*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n_1 , see page 125.

带加热元件, 类型: H2, H3, H4, B2, B3, B4, 规格 4-18
 With Heating Elements, Types H2, H3, H4, B2, B3, B4, Sizes 4-18

K20/022

齿轮箱规格 Gear unit size	4-12	13-18
卧式安装 Horizontal mounting position		
轴装式 Shaft-mounted design		
立式安装 Vertical mounting position	 齿轮箱规格 3-6 的安装位置 Position for sizes 3-6	



- 不能采用迷宫式密封:
- 1) 旋入式加热元件
 技术参数和说明:
 防护等级 IP 65,
 230V, 50Hz, 功率与设计 标相关 (请垂询)
 - 2) 温度监测开关 ATH-SW22
 技术参数和说明:
 防护等级 IP 65,
 双切换触点开关 (可调)
 最大开关容量:
 2A/230V AC/460VA $\cos \phi = 0.6$ (交流)
 0.25A/230V DC/58W (直流)
 - 3) 对规格 4, 6, 8, 10, 12, 14, 16, 18 不能安装在此位置
 当润滑油的温度低于临界温度时, 有必要使用加热元件。
 根据不同的布置形式可以将旋入式加热元件和温度监测开关安装在轴对称位置上。
 具体尺寸请垂询。

Labyrinth seal not possible as shaft seal

- 1) Screwed heating element;
 Technical data and notes:
 type of protection IP 65,
 230V, 50Hz, power rating dependent on design. (Please refer to us)
- 2) Temperature monitor ATH-SW22;
 Technical data and notes:
 type of protection IP 65,
 2 change-over contacts (adjustable),
 max. switching capacity
 2A/230V AC/460VA $\cos \phi = 0.6$ (alternating current),
 0.25A/230V DC/58W (direct current)
- 3) Not applicable for sizes
 4, 6, 8, 10, 12, 14, 16, 18

The use of heating elements will be necessary if the temperature limit for lubrication is undershot.

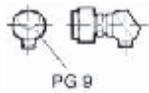
Dependent on the design, screwed heating elements and temperature monitors may be arranged mirror-inverted.
 Dimensions on request.

带油温计，类型：H2, H3, H4, B2, B3, B4，规格 4-18

With Thermometer for Oil Temperature, Types H2, H3, H4, B2, B3, B4, Sizes 4-18

K20/022

齿轮箱规格 Gear unit size	4-12	13-18
卧式安装 Horizontal mounting position		
轴装式 Shaft-mounted design		
立式安装 Vertical mounting position		



电阻式温度计 PT 100
 技术参数和说明：
 接头防护等级：IP 54，
 双线连接
 用户也可以采用三线或四线连接，必须与分析元件相连。
 根据不同的布置形式，可以将电阻式温度计安装在轴对称位置
 上。
 不能采用迷宫式密封：
 具体尺寸请垂询。

Resistance thermometer PT 100
 Technical data and notes:
 Type of protection for terminal head: IP 54,
 two-wire connection.
 Three- and four-wire connection at the customer's is also possible.
 Connection to an evaluation instruments is necessary!
 Dependent on the design, the resistance thermometer may be arranged
 mirror-inverted.
 Labyrinth seal not possible as shaft seal.
 Dimensions on request.

轴封, 类型: H1-H4, B2-B4, 规格 3-26

Shaft Seals, Types H1-H4, B2-B4, Sizes 3-26

K20/005

类型 Type	规格 Size	径向轴封 Radial shaft seal		迷宫式密封 ²⁾ Labyrinth seal		组合式密封 ¹⁾ Taconite seal	
		d1	d2	d1 ³⁾	d2	d1 ³⁾	d2
H1SH	3-17	H	H	H	H	H	H
H2..	4-18	H/V	H/V	H	-	H/V	H/V
H3..	5-18	H/V	H/V	-	-	H ²⁾ /V	H/V
H4..	7-18	H/V	H/V	-	-	H/V	H/V
B2..	4-18	H/V	H/V	-	-	H/V	H/V
B3..	4-18	H/V	H/V	-	-	H/V	H/V
B4..	5-18	H/V	H/V	-	-	H/V	H/V
	19-26	敬请垂询 / On request					

H= 卧式安装

V= 立式安装

1) 可能的布置形式和限制参见下几页所述

2) 不能与冷却风扇组合

3) 不能与电机安装法兰组合

H=Horizontal

V=Vertical

1) For possible designs and restrictions, see the following pages.

2) Not in combination with a fan

3) Not in combination with motor bell housing

in	齿轮箱规格 / Gear unit sizes																													
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26						
	输入转速 (min ⁻¹) / Input speeds n ₁ in min ⁻¹																													
1.25	x		x		x		x																							
1.4	x		x		x		x																							
1.6	740		515		425		370		305		260																			
1.8	810		570		460		395		325		285																			
2	860		610		490		420		350		305		255																	
2.24	920		660		550		455		375		330		275																	
2.5	1020		710		595		495		405		355		295																	
2.8	1100		775		635		530		445		390		320		290															
3.15	1190		850		690		600		480		430		350		315															
3.55	1300		935		755		650		530		470		380		345															
4	1430		1025		835		720		580		515		420		380															
4.5	1575		1145		905		770		640		575		475		425															
5	1730		1205		990		850		730		605		525		455															
5.6	1910		1340		1095		955		765		670		580		505															
6.3		x	x		x		515		x		370		305		260															
7.1		x	810		660		570		460		395		325	305	385	260														
8		1020	860	x	705	x	610	x	490	x	420	370	350	325	305	385														
9		1080	920	x	760	660	660	x	550	x	455	395	375	350	330	305														
10		1190	1020	860	820	705	710	610	595	x	495	420	405	375	355	330														
11.2		1280	1100	920	885	760	775	660	635	550	530	455	445	405	390	355														
12.5		1435	1190	1020	955	820	850	710	690	595	600	495	480	445	430	390														
14		1560	1300	1100	1090	885	935	775	755	635	650	530	530	480	470	430														
16		1715	1430	1190	1200	955	1025	850	835	690	720	600	580	530	515	470														
18		1890	1575	1300	1320	1090	1145	935	905	755	770	650	640	580	575	515														
20			1730	1430	1450	1200	1205	1025	990	835	850	720	730	640	605	575														
22.4			1910	1575	1530	1320	1340	1145	1095	905	x	770	x	730	x	605														
25			1075	1730	885	1450	740	1205	x	990	x	850	x	x	x	x														
28			1170	1910	940	1530	810	1340	x	1095	x	x	x	x	x	x														

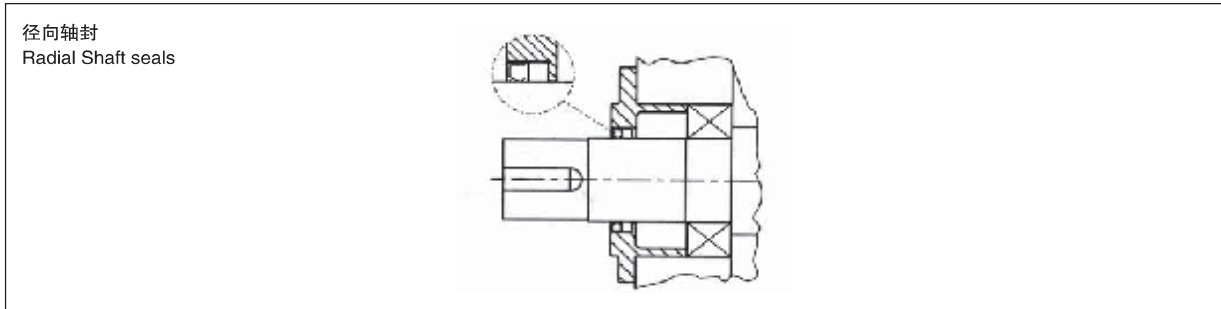
x: 不能采用迷宫式密封:
当低于最低输入转速 n₁ 时应配置径向轴封。

x = Labyrinth seals are not possible
If the minimum input speed n₁ is undershot, radial shaft seals are to be provided.

轴封，径向轴封，迷宫式密封

Shaft Seals, Radial Shaft Seals, Labyrinth Seals

K20/005



径向轴封适用于低工作转速至中等工作转速。

Radial shaft seals are suitable for low to average operating speeds.

其它特征：

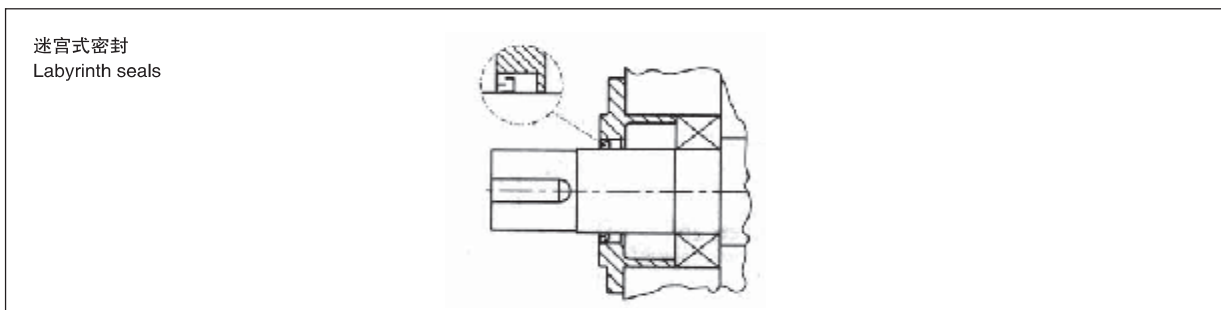
- 这是一种有磨损的密封方式，但是易于维护保养；
- 在密封唇部会局部发热，因此应保持足够的润滑（冷却）；
- 普通市售产品；
- 当法兰轴维修而需要采用剖分析轴封时（请垂询）；
- 较低油位的布置形式请垂询。

Other features are:

- Wearing seal, however, easy to maintain;
- Local heat development on sealing lip; therefore, adequate lubrication (cooling) required;
- Commercial product;
- Split shaft seals are to be used in case of repair of flanged shafts (please refer to us);
- Design with low oil level on request.

径向轴封可以用在各种类型和各种规格的齿轮箱中。

Radial shaft seals can be used for all types and sizes.



迷宫式轴封方式特别适用于较高的工作转速。

Labyrinth seals are specially suitable for higher operating speeds.

其它优点：

- 非接触式，从而无磨损；
- 不会产生局部发热，所以无需维护保养；
- 安装空间小。

Further advantages are:

- Non-contacting and thus, wear-resistant;
- No local heat development and thus, maintenance-free;
- Small space required for fitting.

若选择迷宫式密封方式，则应注意如下要求：

- 只是在固定的传动系统中应用（例如不能是行走机构）；
- 只是采用浸油润滑（强制润滑请垂询）；
- 避免在粉尘很大或污水危及的地点使用。
- 轴应保持水平；
- 平行轴齿轮箱的必要的最低转速 n_1 参见表2；
- 当以最低转速长时间运行时（例如在造纸机中的慢速运行），则有必要采取特殊措施（回油板）。

For the selection of labyrinth seals the following criteria are to be considered:

- Applicable in stationary drives only (e.g. not in travelling gears);
- Only in case of dip lubrication (forced lubrication on request);
- Avoid extremely dusty environments of sites endangered by muddy water.
- Shaft levels must be horizontal;
- For min. required input speed n_1 for helical gear units, see table 2;
- In case of longer operating periods at minimum speeds (e.g. creep speed in case of paper machines) special measures (oil retaining plates) are required.

轴封, 组合式密封

Shaft Seals, Teconite Seals

K20/005

组合式密封
Teconite Seals



可重复填充油脂的迷宫式密封组合。
采用这种密封方式可以使齿轮箱在粉尘环境中达到很高的安全可靠
性,这是防止粉尘状颗粒侵入齿轮箱的三种密封元件的组合。

Grease-filled, refillable labyrinth seal combinations.
With this seal a high degree of operational reliability is
achieved for the gear unit in dusty environments. This seal is a
combination of three sealing elements which protect the gear
unit from ingress of dust-like particles.

组合式密封 Teconite Seal	轴 Shaft	说明 Note
E	输入轴 Input Shaft	注意 H ₃ 和H ₄ 的尺寸 Take into account dimensions for H3 and H4
F	实心轴 Solid Shaft	规格8以上 / from size 8 on
	加强型输出轴 d ₂ Reinforced output shaft d ₂	
	齿轮箱带法兰轴 d ₂ With flanged Shaft d ₂	
F-F	带平键槽的空心轴 Hollow shaft with keyway	两侧组合式密封 Taconite seals on both sides
	带缩紧盘的空心轴 Hollow shaft for shrink disk	防护罩用作防接触保护 Guard as protection against accidental contact
	带花键的空心轴 按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480	
F-H	带平键槽的空心轴 Hollow shaft with keyway	工作机轴侧组合式密封 Taconite seal on driven machine shaft
	带花键的空心轴 按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480	防尘护罩在对侧 Dustproof guard on opposite side
F-K	带缩紧盘的空心轴 Hollow shaft for shrink disk	工作机轴侧组合式密封 Taconite seal on driven machine shaft 防尘护罩在对侧 Dustproof guard on opposite side

表3 / Table 3					
采用 "E" 型组合式密封时的G ₁ 尺寸和轴尺寸 G ₁ dimension and shaft dimensions for Taconite "E"					
类型 Type	规格 Size	传动比 Ratio i	G ₁	d ₁	l ₁
			mm		
H3..	9	25-45	250	60 m6	105
		50-63		45 m6	80
		71-90		32 m6	60
	10	31.5-56	250	60 m6	105
		63-80		45 m6	80
		90-112		32 m6	60
	11	25-45	275	70 m6	100
		31.5-56		70 m6	100
	13	22.4-45	340	85 m6	130
		50-63		60 m6	105
		71-90		50 m6	80
	14	28-56	340	85 m6	130
		63-80		60 m6	105
		90-112		50 m6	80
	15	22.4-45	385	100 m6	165
		50-63		75 m6	105
71-90		60 m6		105	
16	25-50	385	100 m6	165	
	56-71		75 m6	105	
	80-100		60 m6	105	
17	22.4-45	415	100 m6	165	
	50-63		75 m6	105	
	71-90		60 m6	105	
18	25-50	415	100 m6	165	
	56-71		75 m6	105	
	80-100		60 m6	105	
H4..	11	100-180	270	45 m6	80
		200-355		32 m6	60
	12	125-224	270	45 m6	80
		250-450		32 m6	60
	13	100-180	325	50 m6	80
		200-355		38 m6	60
	14	125-224	325	50 m6	80
		250-450		38 m6	60
15	100-180	375	60 m6	105	
	200-355		50 m6	80	
16	112-200	375	60 m6	105	
	224-400		50 m6	80	

IEC-标准电机的安装尺寸

Fitting Dimensions for IEC Standard Motors

K20/007

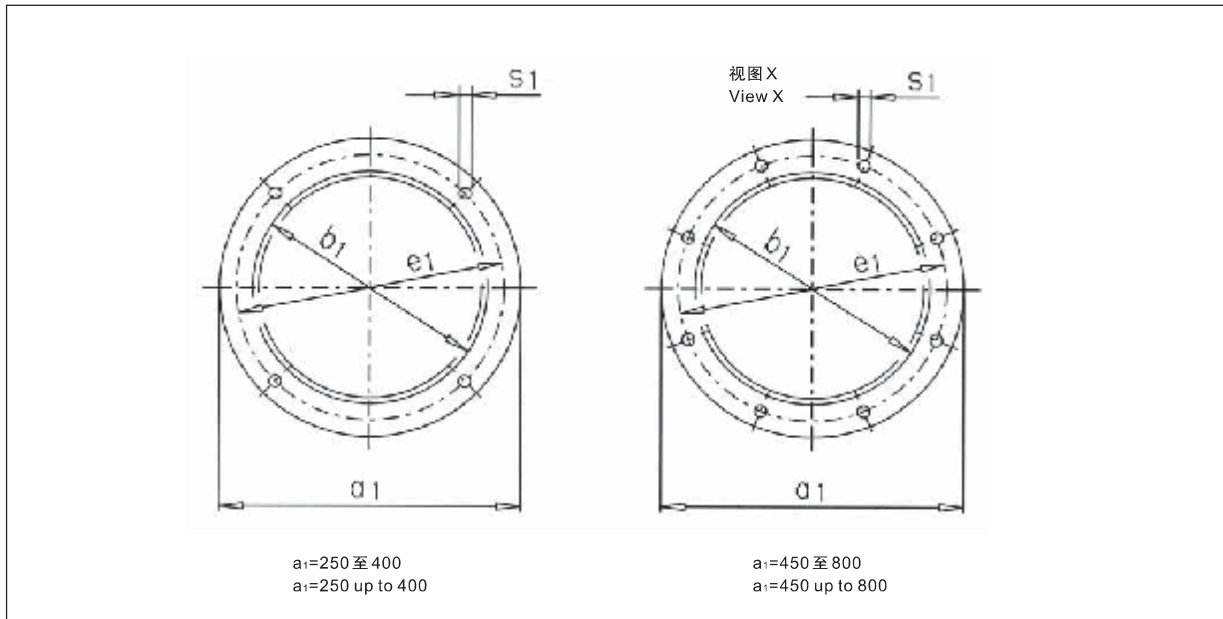


表 1 / Table 1																
法兰尺寸 / Flange dimensions																
三相鼠笼交流电机 按照 DIN 42677 第 1 部分																
Three-phase motors with squirrel-cage rotor acc. to DIN 42677 Part 1																
	电机规格 / Motor sizes															
	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M
a_1 mm	250	250	300	300	350	350	350	350	400	450	450	550	550	550	660	660
b_1 mm	180	180	230	230	250	250	250	250	300	350	350	450	450	450	550	550
e_1 mm	215	215	265	265	300	300	300	300	350	400	400	500	500	500	600	600
S_1	4xM12	4xM12	4xM12	4xM12	4xM16	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM16	8xM16	8xM20	8xM20

三相鼠笼交流电机 (Loher 公司产品)					
Three-phase motors with squirrel-cage rotor (Loher designation)					
	电机规格 / Motor sizes				
	315MC	315MD	315LB	355MB	355LB
a_1 mm	660	660	660	800	800
b_1 mm	550	550	550	680	680
e_1 mm	600	600	600	740	740
S_1	8 x M20	8 x M20	8 x M20	8 x M20	8 x M20

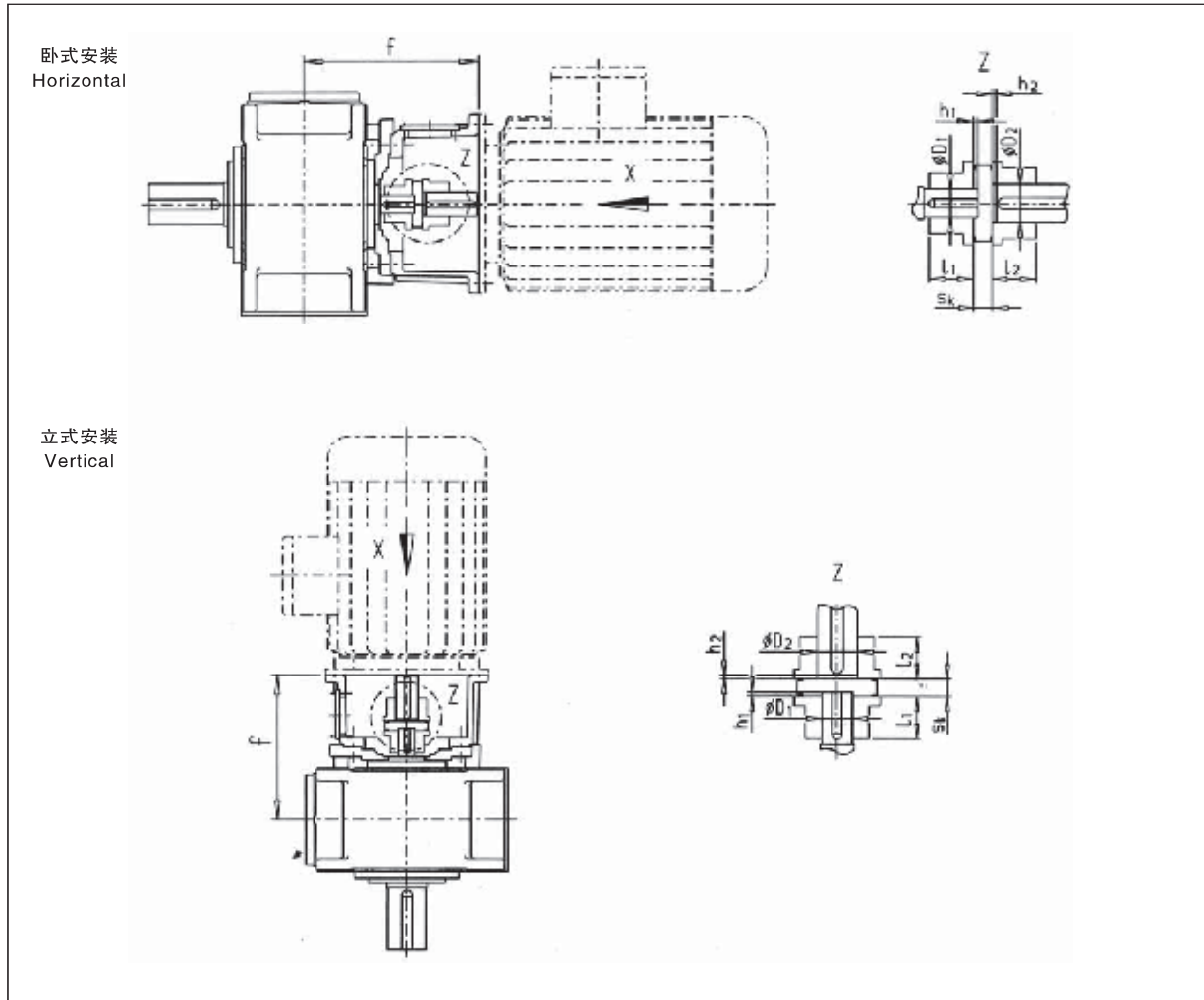
请注意：
对于具有特殊设计要求的机器设备，例如升降机等有必要检查联轴器的设计。

Attention:
For plants with special design requirements, e.g. hoisting gears etc., the coupling design is to be checked.

用于IEC-电机的电机安装法兰，类型H2..，规格4-14，带BIPEX 联轴器

Motor Bell Housing for IEC Standard Motors, Type H2.., Sizes 4-14, With BIPEX Coupling

K20/007



- IEC-标准电机的安装尺寸，按照DIN 42677（视图X），参见第145页。
- 布置形式C，D，G，H，I的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封E或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145.
- Helical gear unit in C, D, G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格315S和315M
- 4) 仅用于立式安装的齿轮箱
- 5) 不适宜在类型H2D，布置形式A和B上安装
- 6) 不适宜在类型H2D，规格5，布置形式A和B上安装
- 7) 不适宜在类型H2D，规格7，布置形式A和B上安装
- 8) 不适宜在类型H2DV，规格9，布置形式A和B上安装
- 9) Loher公司产品（规格不包括在DIN 42677之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 4) For vertical gear units only
- 5) For type H2D. design A + B; fitting not possible.
- 6) For type H2D. size 5 design A + B; fitting not possible.
- 7) For type H2D. size 7 design A + B; fitting not possible.
- 8) For type H2DV size 9 design A + B; fitting not possible.
- 9) Loher designation (Sizes not included in DIN 42677).

用于IEC-电机的电机安装法兰，类型H2..，规格4-14，带BIPEX 联轴器
 Motor Bell Housing for IEC Standard Motors, Type H2.., Sizes 4-14, With BIPEX Coupling

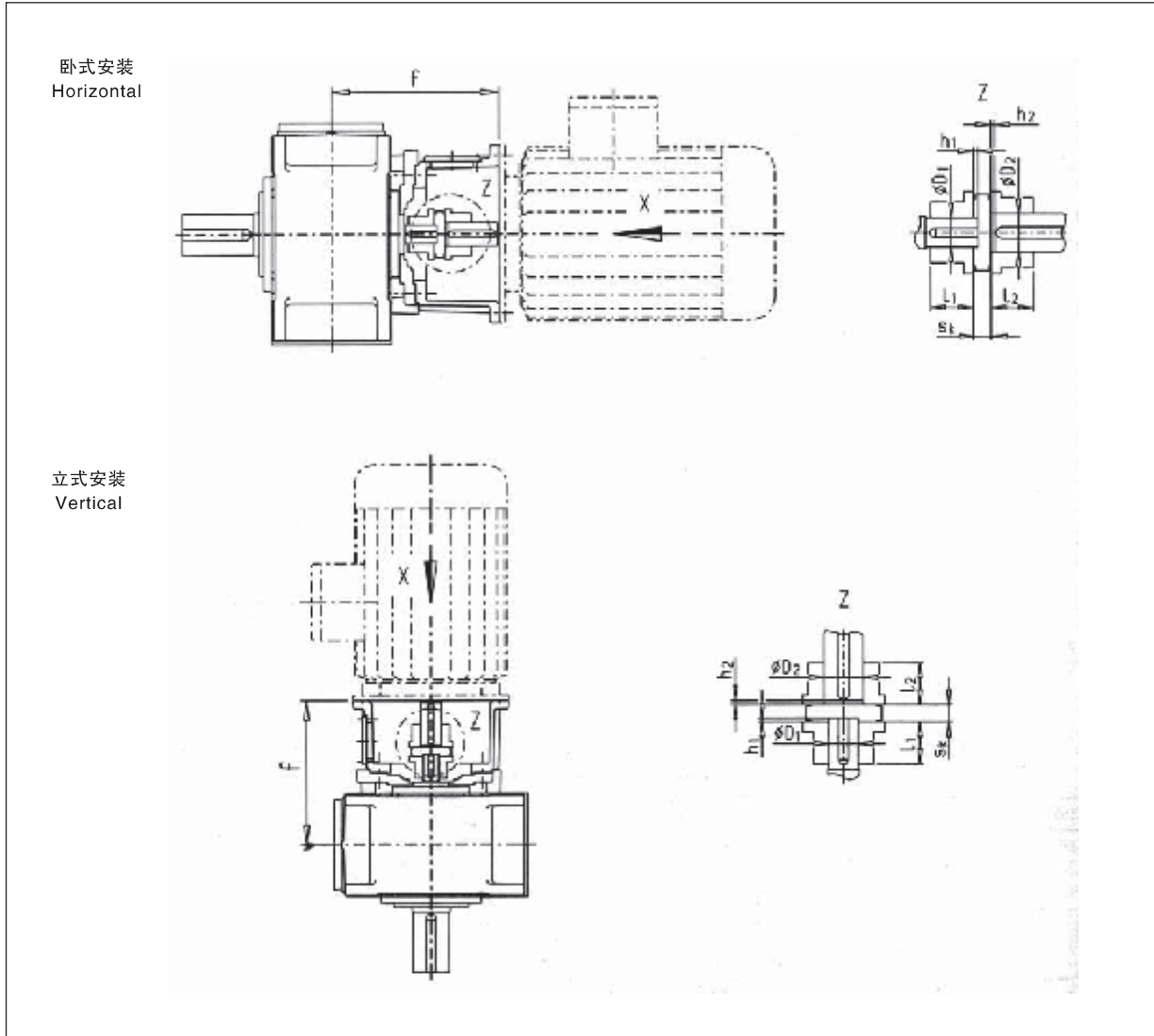
K20/007

表 2 / Table 2																				
规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 6.3-11.2 (规格 / Size 4, 5, 7, 9, 11) 8-14 (规格 / Size 6, 8, 10, 12)										传动比 i_N / Ratios i_N 12.5-22.4 (规格 / Size 4, 5, 7, 9, 11) 16-28 (规格 / Size 6, 8, 10, 12)								
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	
4	160 5)											84	21	40	32	40	42	11	0	370
	180 5)											97	24	50	32	50	48	14	0	370
	200 5)											112	27	60	32	60	55	11	0	376
	225 5) 4)	127	27	65	45	65	60	20	0	417	4)	127	27	65	32	65	60	0	0	417
5/6	200											112	27	60	38	60	55	10	0	402
	225 6)											127	27	65	38	65	60	-1	0	443
7/8	250 5) 4)	127	27	65	50	65	65	17.5	0	444.5	4)	127	27	65	38	65	65	-2.5	0	444.5
	225											127	27	65	50	65	60	13.5	0	473.5
	250 7)											127	27	65	50	65	65	12	0	475
	280 7)											142	31	75	50	75	75	-3	0	494
9/10	315 2) 5) 4)	162	36	80	60	80	80	20	0	531	4)	162	36	80	50	80	80	-2.5	2.5	531
	280											142	31	75	60	75	75	22	0	530
11/12	315 2) 8) 4)	162	36	80	75	80	80	20	0	566	4)	162	36	80	60	80	80	20	0	566
	315 2)											162	36	80	70	80	80	15	0	606

表 3 / Table 3											
规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 12.5-20 (规格 / Size 13) 16-25 (规格 / Size 14)									
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	
13/14	355 MB 9)	4)	202	48	100	85	100	90	0	0	718
	355 LB 9)	4)	227	54	110	85	110	90	6	0	718

用于IEC-电机的电机安装法兰，类型H3..，规格5-18，带BIPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type H3.., Sizes 5-18, With BIPEX Coupling

K20/007



- IEC- 标准电机的安装尺寸，按照 DIN 42677 (视图 X)，参见第 145 页。
- 布置形式 G, H, I 的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

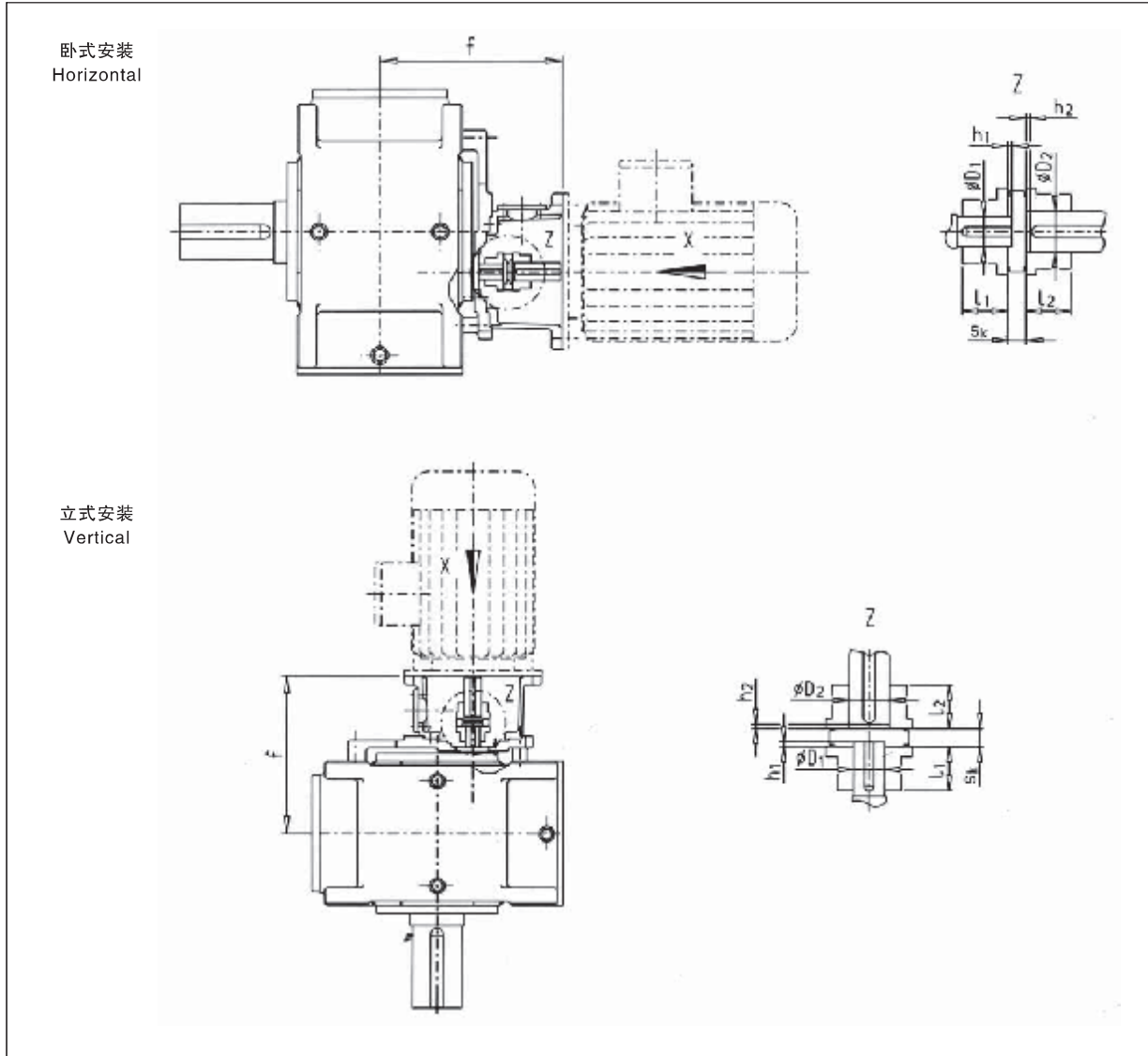
- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145 .
- Helical gear unit in G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格 315S 和 315M
- 3) 联轴器轮毂长度 l_1 已经为装配齿轮箱输入轴而缩短
- 4) 仅用于立式安装的齿轮箱
- 9) Loher 公司产品 (规格不包括在 DIN 42677 之内)。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 3) Length l_1 of coupling hub shortened for fitting onto gear unit shaft
- 4) For vertical gear units only
- 9) Loher designation (Sizes not included in DIN 42677)

用于IEC-电机的电机安装法兰，类型H4..，规格7-18，带BIPEX 联轴器
 Motor Bell Housing for IEC Standard Motors, Type H4.., Sizes 7-18, With BIPEX Coupling

K20/007



- IEC-标准电机的安装尺寸，按照DIN 42677（视图X），参见第145页。
- 布置形式G，H，I的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封E或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145 .
- Helical gear unit in G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格315S和315M
- 3) 联轴器轮毂长度 l_1 已经为装配齿轮箱输入轴而缩短
- 9) Loher公司产品（规格不包括在DIN 42677之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 3) Length l_1 of coupling hub shortened for fitting onto gear unit shaft
- 9) Loher designation (Sizes not included in DIN 42677)

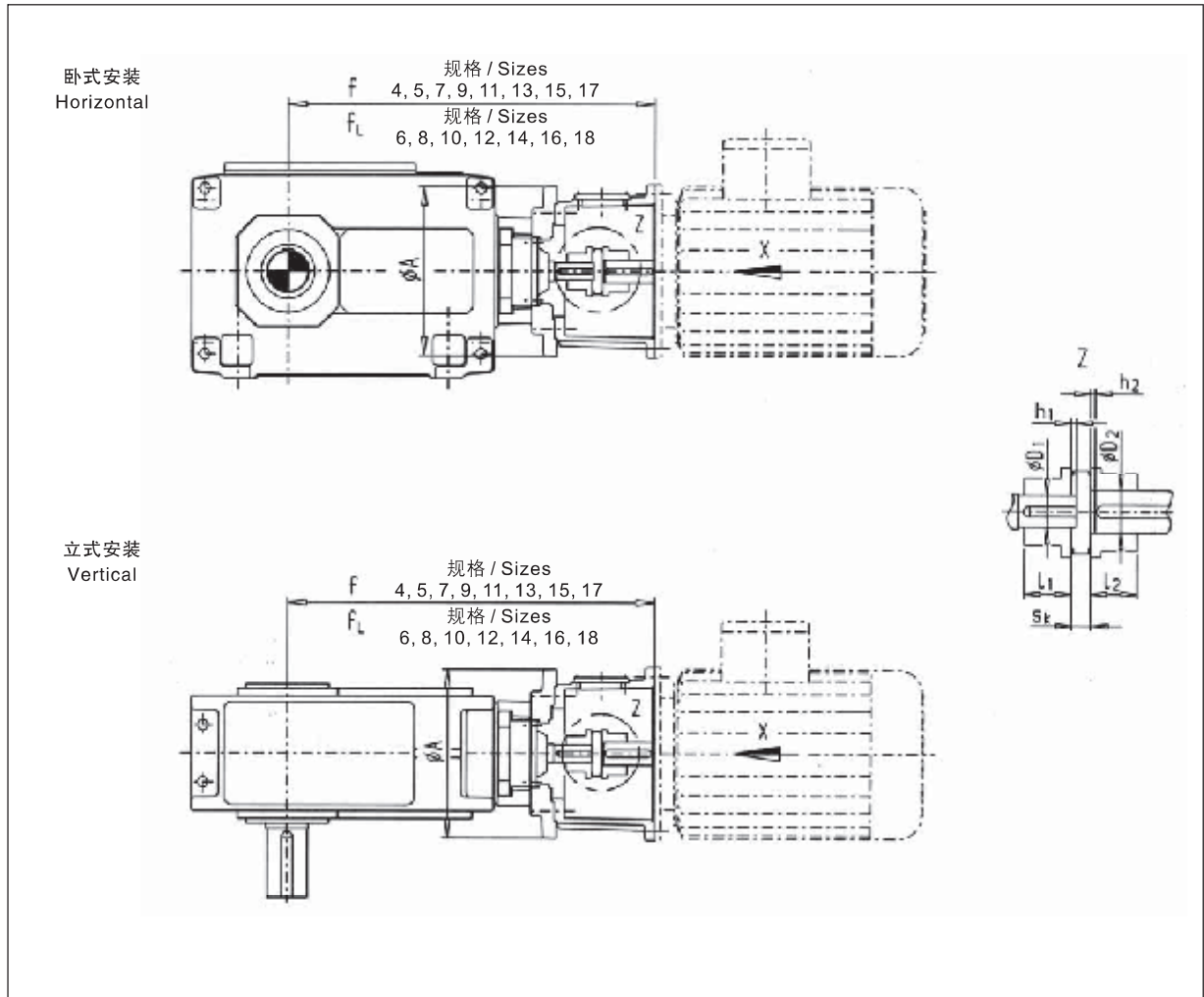
用于IEC-电机的电机安装法兰, 类型H4., 规格7-18, 带BIPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type H4., Sizes 7-18, With BIPEX Coupling

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表 5 / Table 5																					
规格 Size	电机 Motor IEC 1)	传动比 in / Ratios in 100-180 (规格 / Sizes 7, 9, 11) 125-224 (规格 / Sizes 8, 10, 12) 100-180 (规格 / Sizes 13, 15, 17) 125-224 (规格 / Sizes 14) 112-200 (规格 / Sizes 16, 18)										传动比 in / Ratios in 200-355 (规格 / Sizes 7, 9, 11) 250-450 (规格 / Sizes 8, 10, 12) 200-355 (规格 / Sizes 13, 15, 17) 250-450 (规格 / Sizes 14) 224-400 (规格 / Sizes 16, 18)									
		BIPEX BWN	s _k mm	l ₁ mm	D ₁ mm	l ₂ mm	D ₂ mm	h ₁ mm	h ₂ mm	f mm	BIPEX BWN	s _k mm	l ₁ mm	D ₁ mm	l ₂ mm	D ₂ mm	h ₁ mm	h ₂ mm	f mm		
7/8	100											62	16	30	24	30	28	0	0	296	
	112											62	16	30	24	30	28	0	0	296	
	132		72	18	35	30	35	38	-0.5	0	328.5	72	18	35	24	35	38	-5.5	5	328.5	
	160		84	21	40	30	40	42	-3.5	0	364.5	84	21	40	24	40	42	-6.5	7	364.5	
	180	3)	97	24	42	30	50	48	-0.5	0	364.5										
9/10	132											72	18	35	28	35	38	-3.5	3	369.5	
	160		84	21	40	35	40	42	0.5	0	405.5	84	21	40	28	40	42	-4.5	5	405.5	
	180	3)	97	24	47	35	50	48	3.5	0	405.5	3)	97	24	47	28	50	48	-6.5	0	405.5
	200	3)	112	27	54	35	60	55	-5.5	0	417.5										
	225	3)	127	27	59	35	65	60	-10	6.5	458.5										
11/12	160											84	21	40	32	40	42	13.5	0	447.5	
	180		97	24	50	45	50	48	10.5	0	437.5	97	24	50	32	50	48	16.5	0	447.5	
	200		112	27	60	45	60	55	1.5	0	485.5	112	27	60	32	60	55	7.5	0	459.5	
	225		127	27	65	45	65	60	16.5	0	500.5	127	27	65	32	65	60	0	3.5	500.5	
	250		127	27	65	45	65	65	16.5	0	500.5										
13/14	160											84	21	40	38	40	42	0	1.5	517.5	
	180											97	24	50	38	50	48	1.5	0	517.5	
	200		127	27	65	50	65	55	12.5	0	529.5	112	27	50	38	60	55	18.5	0	503.5	
	225		127	27	65	50	65	60	-3.5	4	579.5	127	27	61	38	65	60	7.5	0	544.5	
	250		127	27	65	50	65	65	-3.5	4	579.5	127	27	61	38	65	65	7.5	0	544.5	
	280		142	31	75	50	75	75	11	0	565										
	315 2)		162	36	75	50	80	80	9	0	602										
15/16	200											112	27	60	50	60	55	-3	3.5	598.5	
	225		127	27	65	60	65	60	-1.5	0	648.5	127	27	65	50	65	60	8.5	0	613.5	
	250		127	27	65	60	65	65	-1.5	0	648.5	127	27	65	50	65	65	8.5	0	613.5	
	280		142	31	75	60	75	75	17	0	634	142	31	75	50	75	75	-4	4	634	
	315 2)		162	36	80	60	80	80	15	0	671	162	36	80	50	80	80	-5	5	671	
	315MC 9)		182	42	90	60	90	80	21	0	671										
	315MD 9)		182	42	90	60	90	80	21	0	671										
	315LB 9)		202	48	100	60	100	80	20	-7	671										
17/18	225											127	27	65	50	65	60	3.5	0	623.5	
	250											127	27	65	50	65	65	3.5	0	623.5	
	280		142	31	75	60	75	75	12	0	644	142	31	75	50	75	75	-6.5	6.5	644	
	315 2)		162	36	80	60	80	80	10	0	681	162	36	80	50	80	80	-5	10	681	
	315MC 9)		182	42	90	60	90	80	10	-6	681										
	315MD 9)		182	42	90	60	90	80	10	-6	681										
	315LB 9)		202	48	100	60	100	80	-4	4	711										
	355MB 9)		202	48	100	60	100	90	-5	5	713										

用于IEC-电机的电机安装法兰，类型B2..，规格4-14，带BIPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type B2.., Sizes 4-14, With BIPEX Coupling

K20/007



- IEC-标准电机的安装尺寸，按照DIN 42677（视图X），参见第145页。
- 布置形式G，H，I的平行轴齿轮箱请务必垂询。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145 .
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格315S和315M
- 9) Loher公司产品（规格不包括在DIN 42677之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 9) Loher designation (Sizes not included in DIN 42677)

用于IEC-电机的电机安装法兰，类型B2..，规格4-14，带BIPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type B2.., Sizes 4-14, With BIPEX Coupling

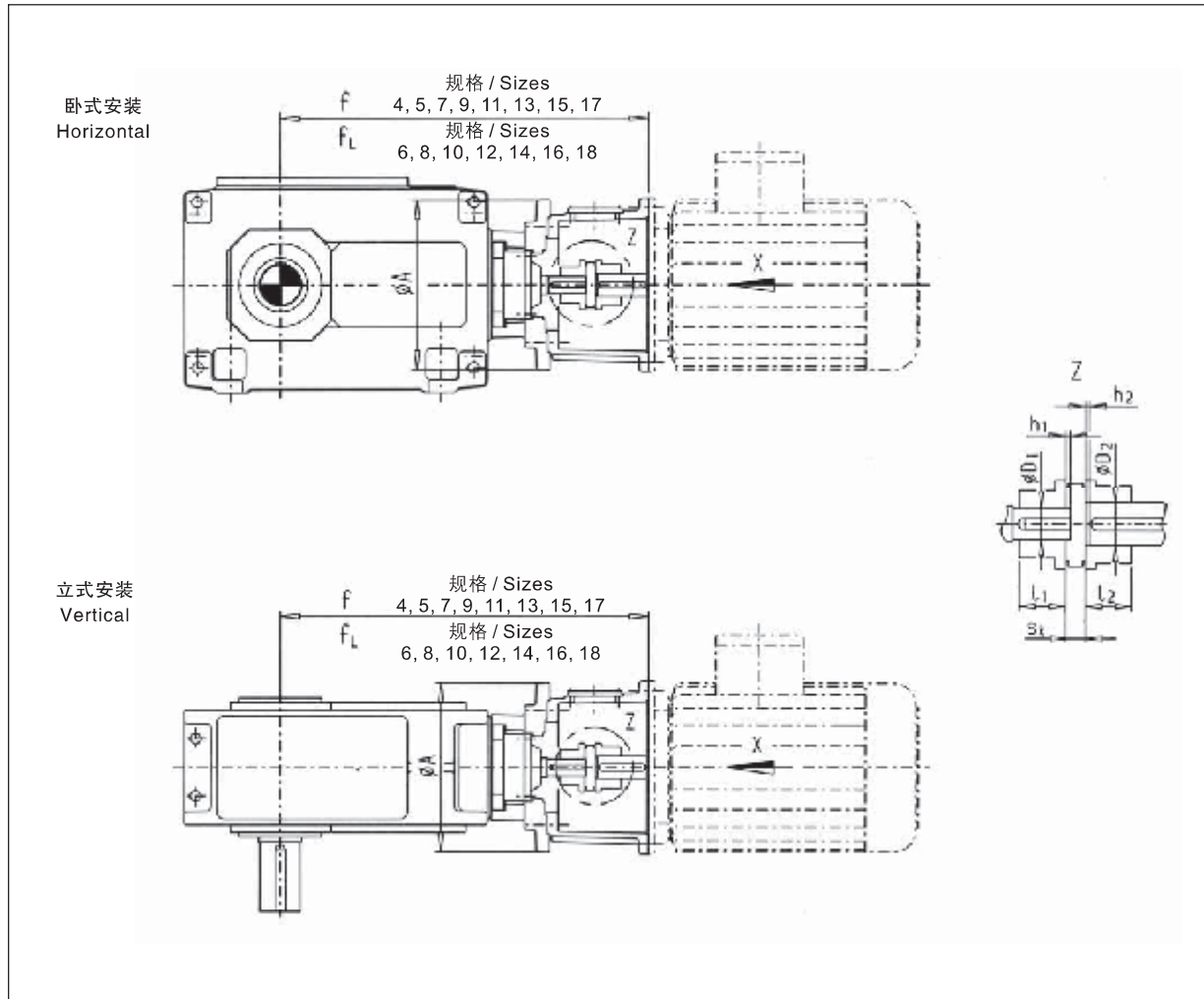
K20/007

表 6 / Table 6																							
规格 Size	电机 Motor IEC ¹⁾	传动比 i_N / Ratios i_N 5-11.2 (规格 / Sizes 4, 5, 7, 9, 11) 6.3-14 (规格 / Sizes 6, 8, 10, 12)											传动比 i_N / Ratios i_N 12.5-18 (规格 / Sizes 4, 5, 7, 9, 11) 16-22.4 (规格 / Sizes 6, 8, 10, 12)										
		BIPEX	s_k	l_1	D_1	l_2	D_2	h_1	h_2	f	f_L	A	BIPEX	s_k	l_1	D_1	l_2	D_2	h_1	h_2	f	f_L	A
		BWN	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	BWN	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
4	180											97	24	50	35	50	48	0.5	0	678.5	-	350	
	200	112	27	60	45	60	55	17.5	0	684.5	-	350	112	27	60	35	60	55	-2.5	0	684.5	-	350
5/6	200											112	27	60	40	60	55	-8.5	0	763.5	798.5	350	
	225											127	27	65	40	65	60	-2.5	0	804.5	839.5	350	
7/8	250											127	27	65	50	65	65	2	0	915	960	440	
	280	162	36	80	70	80	75	17	0	934	979	440	142	31	75	50	75	75	-6.5	6.5	934	979	440
9/10	280											142	31	75	60	75	75	-4	4	1074	1124	445	
11/12	315 ²⁾											162	36	80	70	80	80	15	0	1256	1326	520	

表 7 / Table 7														
规格 size	电机 Motor IEC ¹⁾	传动比 i_N / Ratio i_N 12.5-20 (规格 / Size 13) 16-25 (规格 / Size 14)												
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm		
13/14	355 MB ⁹⁾	202	48	100	80	100	90	1	0	1457	1527	650		
	355 LB ⁹⁾	227	54	110	80	110	90	7	0	1457	1527	650		

用于IEC-电机的电机安装法兰，类型B3..，规格4-18，带BIPEX 联轴器 Motor Bell Housing for IEC Standard Motors, Type B3.., Sizes 4-18, With BIPEX Coupling

K20/007



- IEC-标准电机的安装尺寸，按照DIN 42677（视图X），参见第145页。
- 输入轴不能采用组合式密封E或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格315S和315M
- 3) 联轴器轮毂长度l₁已经为装配齿轮箱输入轴而缩短
- 9) Loher公司产品（规格不包括在DIN 42677之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 3) Length l₁ of coupling hub shortened for fitting onto gear unit shaft
- 9) Loher designation (Sizes not included in DIN 42677)

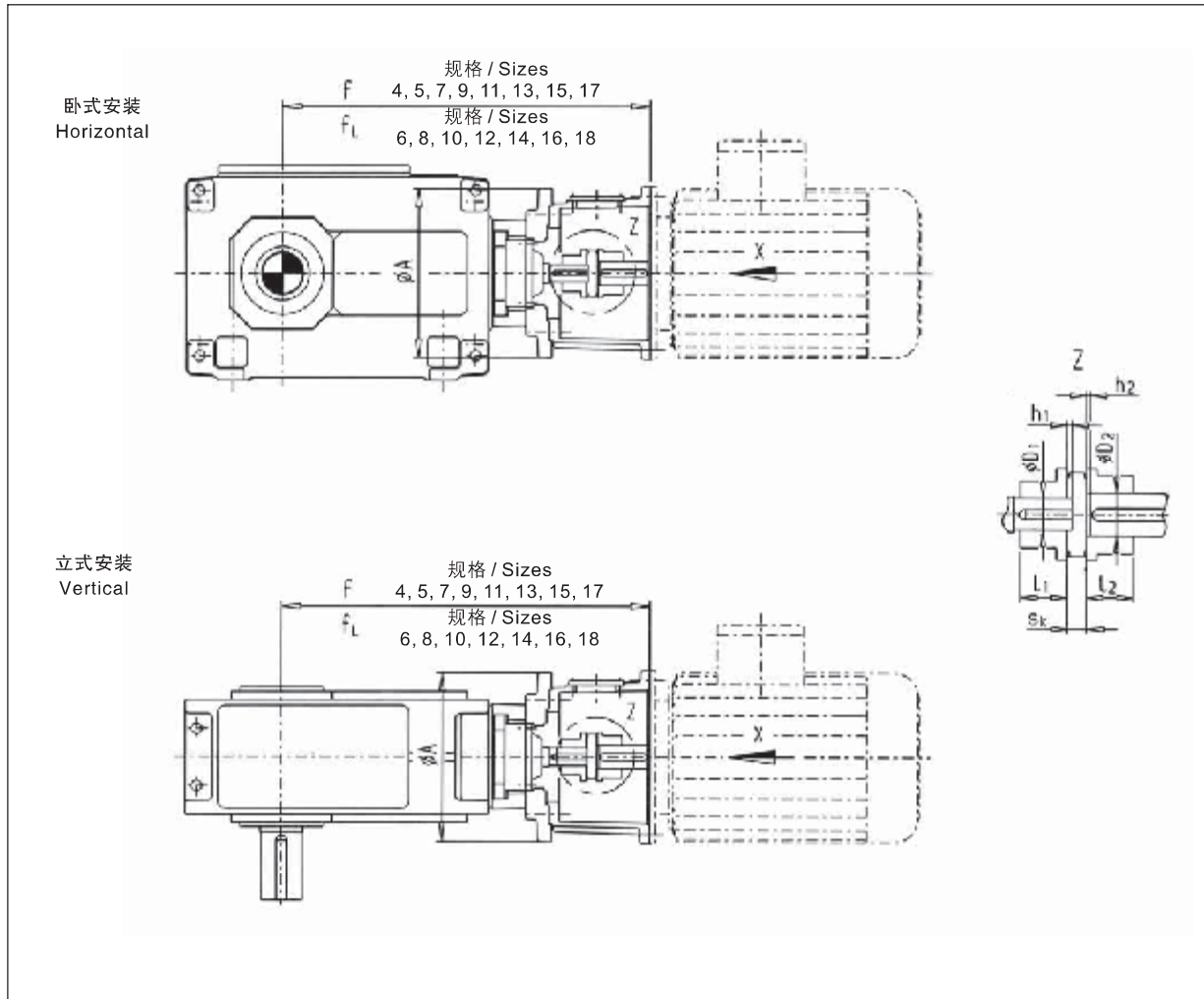
用于IEC-电机的电机安装法兰，类型B3..，规格4-18，带BIPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type B3.., Sizes 4-18, With BIPEX Coupling

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表 8 / Table 8																							
规格 Size	电机 Motor IEC ¹⁾	传动比 i_n / Ratios i_n 12.5-45 (规格 / Sizes 4, 5, 7, 9, 11) 16-56 (规格 / Sizes 6, 8, 10, 12) 12.5-45 (规格 / Sizes 13, 15, 17) 16-56 (规格 / Sizes 14) 14-50 (规格 / Sizes 16, 18)											传动比 i_n / Ratios i_n 50-71 (规格 / Sizes 4, 5, 7, 9, 11) 63-90 (规格 / Sizes 6, 8, 10, 12) 50-71 (规格 / Sizes 13, 15, 17) 63-90 (规格 / Sizes 14) 56-80 (规格 / Sizes 16, 18)										
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm	BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm
4	132																						
	160	84	21	40	30	40	42	-3.5	4	708.5	-	250	72	18	35	25	35	38	10.5	0	646.5	-	250
	180	97	24	50	30	50	48	-2.5	2	708.5	-	250 ³⁾	84	21	40	25	40	42	8.5	0	682.5	-	250
	200	3)	112	27	55	30	60	55	12.5	0	694.5	-	250										
5/6	160	84	21	40	35	40	42	14.5	0	771.5	806.5	350	84	21	40	28	40	42	-2.5	3	771.5	806.5	350
	180	97	24	50	35	50	48	17.5	0	771.5	806.5	350	97	24	50	28	50	48	0	2.5	771.5	806.5	350
	200	112	27	60	35	60	55	8.5	0	782.5	818.5	350	112	27	60	28	60	55	-5.5	6	782.5	818.5	350
	225	127	27	65	35	65	60	0	2.5	824.5	859.5	350											
7/8	160																						
	180																						
	200	112	27	60	45	60	55	17.5	0	909.5	954.5	440	84	21	40	35	40	42	0	2.5	903.5	948.5	440
	225	127	27	65	45	65	60	6.5	0	950.5	995.5	440	97	24	50	35	50	48	0.5	0	903.5	948.5	440
	250	127	27	65	45	65	65	5	0	952	997	440	112	27	60	35	60	55	0	2.5	909.5	945.5	440
	280	142	31	75	45	75	75	-5	5	971	1016	440	127	27	65	35	65	60	1.5	0	935.5	980.5	440
9/10	200																						
	225	127	27	65	55	65	60	1.5	0	1075.5	1125.5	440	127	27	65	40	65	60	-4	4.5	1075.5	1125.5	440
	250	127	27	65	55	65	65	0	0	1077	1127	440	127	27	65	40	65	65	-5	5	1077	1127	440
	280	142	31	75	55	75	75	-7.5	7.5	1096	1146	440	142	31	75	40	75	75	2.5	2.5	1076	1126	440
11/12	225																						
	250	142	31	75	70	75	65	6	0	1260	1330	440	127	27	65	50	65	65	-3	3.5	1243.5	1313.5	440
	280	142	31	75	70	75	75	-6.5	6.5	1279	1349	440	127	27	65	50	65	65	-3	3.5	1243.5	1313.5	440
	315 ²⁾	162	36	80	70	80	80	-7.5	7.5	1316	1386	440	142	31	75	50	75	75	12	0	1229	1299	440
13/14	280																						
	315 ²⁾	182	42	90	80	90	80	-5	4	1511	1581	445	162	36	80	60	75	75	12	0	1424	1494	650
	315MC ⁹⁾	182	42	90	80	90	80	-5	4	1511	1581	445	162	36	80	60	80	80	10	0	1461	1531	650
	315MD ⁹⁾	182	42	90	80	90	80	-5	4	1511	1581	445	182	42	90	60	90	80	16	0	1461	1531	650
	315LB ⁹⁾	202	48	100	80	100	80	-3	0	1511	1581	445	182	42	90	60	90	80	16	0	1461	1531	650
	355MB ⁹⁾	202	48	100	80	100	90	16	0	1492	1562	650	202	48	100	60	100	90	-4.5	4.5	1492	1562	650
15/16	315 ²⁾																						
	315MC ⁹⁾																						
	315MD ⁹⁾																						
	315LB ⁹⁾	202	48	100	90	100	80	0	0	1750	1796	650	202	48	100	70	100	80	25	0	1700	1746	650
	355MB ⁹⁾	202	48	100	90	100	90	18	0	1732	1778	650	202	48	100	70	100	90	-3.5	3.5	1732	1778	650
	355LB ⁹⁾	227	54	110	90	110	90	24	0	1732	1778	650	227	54	110	70	110	90	-1	0	1732	1778	650
17/18	315MC ⁹⁾																						
	315MD ⁹⁾																						
	315LB ⁹⁾																						
	355MB ⁹⁾	227	54	110	110	110	90	-5	5	1999	2059	650	202	48	100	80	100	80	3.	0	1945	2005	650
355LB ⁹⁾	227	54	110	110	110	90	-5	5	1999	2059	650	202	48	100	80	100	90	1	0	1947	2007	650	

用于IEC-电机的电机安装法兰，类型B4..，规格5-18，带BIPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type B4.., Sizes 5-18, With BIPEX Coupling

K20/007



- IEC-标准电机的安装尺寸，按照 DIN 42677（视图 X），参见第 145 页。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格 315S 和 315M
- 3) 联轴器轮毂长度 L_1 已经为装配齿轮箱输入轴而缩短
- 9) Loher 公司产品（规格不包括在 DIN 42677 之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 3) Length L_1 of coupling hub shortened for fitting onto gear unit shaft
- 9) Loher designation (Sizes not included in DIN 42677)

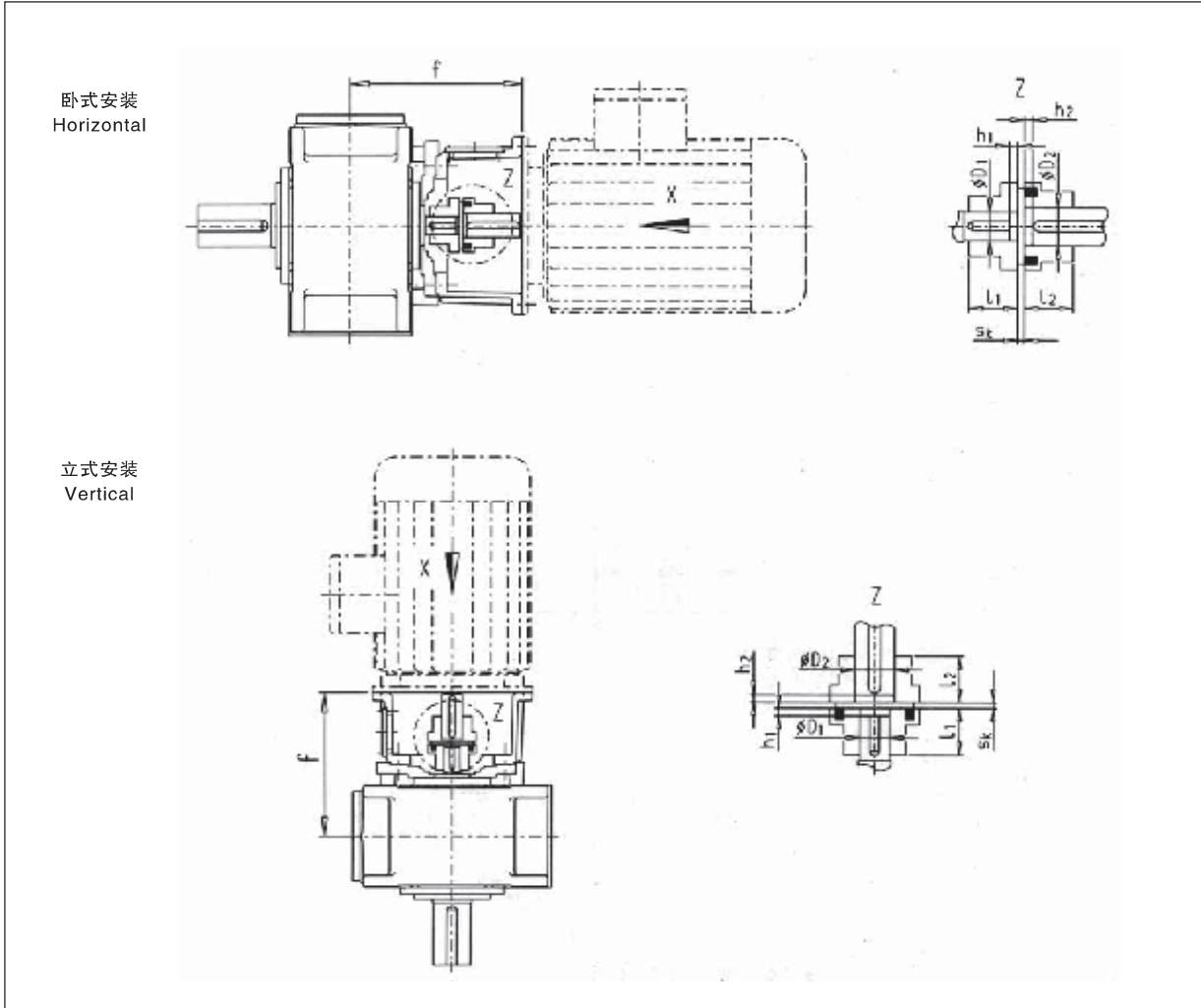
用于IEC-电机的电机安装法兰, 类型B4., 规格5-18, 带BIPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type B4., Sizes 5-18, With BIPEX Coupling

K20/007

表9 / Table 9																							
规格 Size	电机 Motor IEC ¹⁾	传动比 i_n / Ratios i_n 80-180 (规格 / Sizes 5, 7, 9, 11) 100-224 (规格 / Sizes 6, 8, 10, 12) 80-180 (规格 / Sizes 13, 15, 17) 100-224 (规格 / Sizes 14) 90-200 (规格 / Sizes 16, 18)											传动比 i_n / Ratios i_n 200-315 (规格 / Sizes 5, 7, 9, 11) 250-400 (规格 / Sizes 6, 8, 10, 12) 200-315 (规格 / Sizes 13, 15, 17) 250-400 (规格 / Sizes 14) 224-355 (规格 / Sizes 16, 18)										
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_l mm	A mm	BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_l mm	A mm
5/6	100																						
	112	62	16	30	28	30	28	2	2	750	785	250	62	16	30	20	30	28	6	0	735	770	250
	132	72	18	35	28	35	38	0.5	0	767.5	802.5	250	72	18	35	20	35	38	-2.5	2	767.5	802.5	250
	160	84	21	40	28	40	42	-1.5	0	802.5	837.5	250											
7/8	112												62	16	30	25	30	28	6	0	855	900	250
	132	72	18	35	30	35	38	5.5	0	887.5	932.5	250	72	18	35	25	35	38	10.5	0	872.5	917.5	250
	160	84	21	40	30	40	42	-3.5	4	933.5	978.5	250	84	21	40	25	40	42	8.5	0	907.5	952.5	250
	180	97	24	50	30	50	48	-2	2.5	933.5	978.5	250											
	200	³⁾ 112	27	55	30	60	55	12.5	0	919.5	964.5	250											
9/10	132												72	18	35	28	35	38	-1.5	2	1001.5	1051.5	350
	160	84	21	40	35	40	42	14.5	0	1036.5	1086.5	350	84	21	40	28	40	42	-2.5	3	1036.5	1086.5	350
	180	97	24	50	35	50	48	17.5	0	1036.5	1086.5	350	97	24	50	28	50	48	0	2.5	1036.5	1086.5	350
	200	112	27	60	35	60	55	8.5	0	1048.5	1098.5	350											
	225	127	27	65	35	65	60	0	2.5	1089.5	1139.5	350											
11/12	160												84	21	40	35	40	42	0	2.5	1223.5	1293.5	440
	180	97	24	50	45	50	48	-2.5	3	1249.5	1319.5	440	97	24	50	35	50	48	0.5	0	1223.5	1293.5	440
	200	112	27	60	45	60	55	17.5	0	1229.5	1299.5	440	112	27	60	35	60	55	-2.5	0	1229.5	1299.5	440
	225	127	27	65	45	65	60	6.5	0	1270.5	1340.5	440	127	27	65	35	65	60	-6.5	7	1270.5	1340.5	440
	250	127	27	65	45	65	65	5	0	1272	1342	440											
	280	142	31	75	45	75	75	-5	5	1291	1361	440											
13/14	180												97	24	50	40	50	48	5.5	0	1398.5	1468.5	440
	200	112	27	60	55	60	55	12.5	0	1404.5	1474.5	440	112	27	60	40	60	55	2.5	0	1404.5	1474.5	440
	225	127	27	65	55	65	60	1.5	0	1445.5	1515.5	440	127	27	65	40	65	60	-4	4.5	1445.5	1515.5	440
	250	127	27	65	55	65	65	0	0	1447	1517	440	127	27	65	40	65	65	-5	5	1447	1517	440
	280	142	31	75	55	75	75	5	0	1446	1516	440	142	31	75	40	75	75	-2.5	2.5	1446	1516	440
	315 ²⁾	162	36	80	55	80	80	3	0	1483	1553	440											
	315MC ⁹⁾	182	42	90	55	90	80	9	0	1483	1553	440											
315MD ⁹⁾	182	42	90	55	90	80	9	0	1483	1553	440												
15/16	200												112	27	60	50	60	55	-5	5.5	1659.5	1705.5	440
	225	142	31	75	70	75	60	4.5	-3	1700.5	1746.5	440	127	27	65	50	65	60	-3	3.5	1685.5	1731.5	440
	250	142	31	75	70	75	65	6	0	1702	1748	440	127	27	65	50	65	65	-3	3.5	1685.5	1731.5	440
	280	142	31	75	70	75	75	-6.5	6.5	1721	1767	440	142	31	75	50	75	75	12	0	1671	1717	440
	315 ²⁾	162	36	80	70	80	80	5	0	1738	1784	440	162	36	80	50	80	80	10	0	1708	1754	440
	315MC ⁹⁾	182	42	90	70	90	80	11	0	1738	1784	440											
	315MD ⁹⁾	182	42	90	70	90	80	11	0	1738	1784	440											
	315LB ⁹⁾	202	48	100	70	100	80	17	0	1738	1784	440											
355MB ⁹⁾	202	48	100	70	100	90	15	0	1740	1786	650												
17/18	225												127	27	65	50	65	60	-3	-3.5	1733.5	1793.5	440
	250												127	27	65	50	65	65	-3	-3.5	1733.5	1793.5	440
	280	142	31	75	70	75	75	-6.5	6.5	1769	1829	440	142	31	75	50	75	75	12	0	1718.5	1778.5	440
	315 ²⁾	182	42	90	70	90	80	-4.5	4.5	1806	1866	440	162	36	80	50	80	80	10	0	1756	1816	440
	315MC ⁹⁾	182	42	90	70	90	80	-4.5	4.5	1806	1866	440	182	42	90	70	90	80	16	0	1756	1816	440
	315MD ⁹⁾	182	42	90	70	90	80	-4.5	4.5	1806	1866	440	182	42	90	70	90	80	16	0	1756	1816	440
	315LB ⁹⁾	202	48	100	70	100	80	-3	0	1806	1866	440											
	355MB ⁹⁾	202	48	100	70	100	90	15	0	1788	1848	650											
	355LB ⁹⁾	227	54	110	70	110	90	21	0	1788	1848	650											

用于IEC-电机的电机安装法兰，类型H2..，规格4-14，带N-EUPEX联轴器 Motor Bell Housing for IEC Standard Motors, Type H2.., Sizes 4-14, With N-EUPEX Coupling

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- IEC-标准电机的安装尺寸，按照DIN 42677（视图X），参见第145页。
- 布置形式C，D，G，H，I的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封E或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145.
- Helical gear unit in C, D, G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格315S和315M
- 4) 仅用于立式安装的齿轮箱
- 5) 不适宜在类型H2D，布置形式A和B上安装
- 6) 不适宜在类型H2D，规格5，布置形式A和B上安装
- 7) 不适宜在类型H2D，规格7，布置形式A和B上安装
- 8) 不适宜在类型H2DV，规格9，布置形式A和B上安装
- 9) Loher公司产品（规格不包括在DIN 42677之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 4) For vertical gear units only
- 5) For type H2D. design A + B; fitting not possible
- 6) For type H2D. size 5 design A + B; fitting not possible
- 7) For type H2D. size 7 design A + B; fitting not possible
- 8) For type H2DV size 9 design A + B; fitting not possible
- 9) Loher designation (Sizes not included in DIN 42677)

用于IEC-电机的电机安装法兰，类型H2..，规格4-14，带N-EUPEX联轴器
 Motor Bell Housing for IEC Standard Motors, Type H2.., Sizes 4-14, With N-EUPEX Coupling

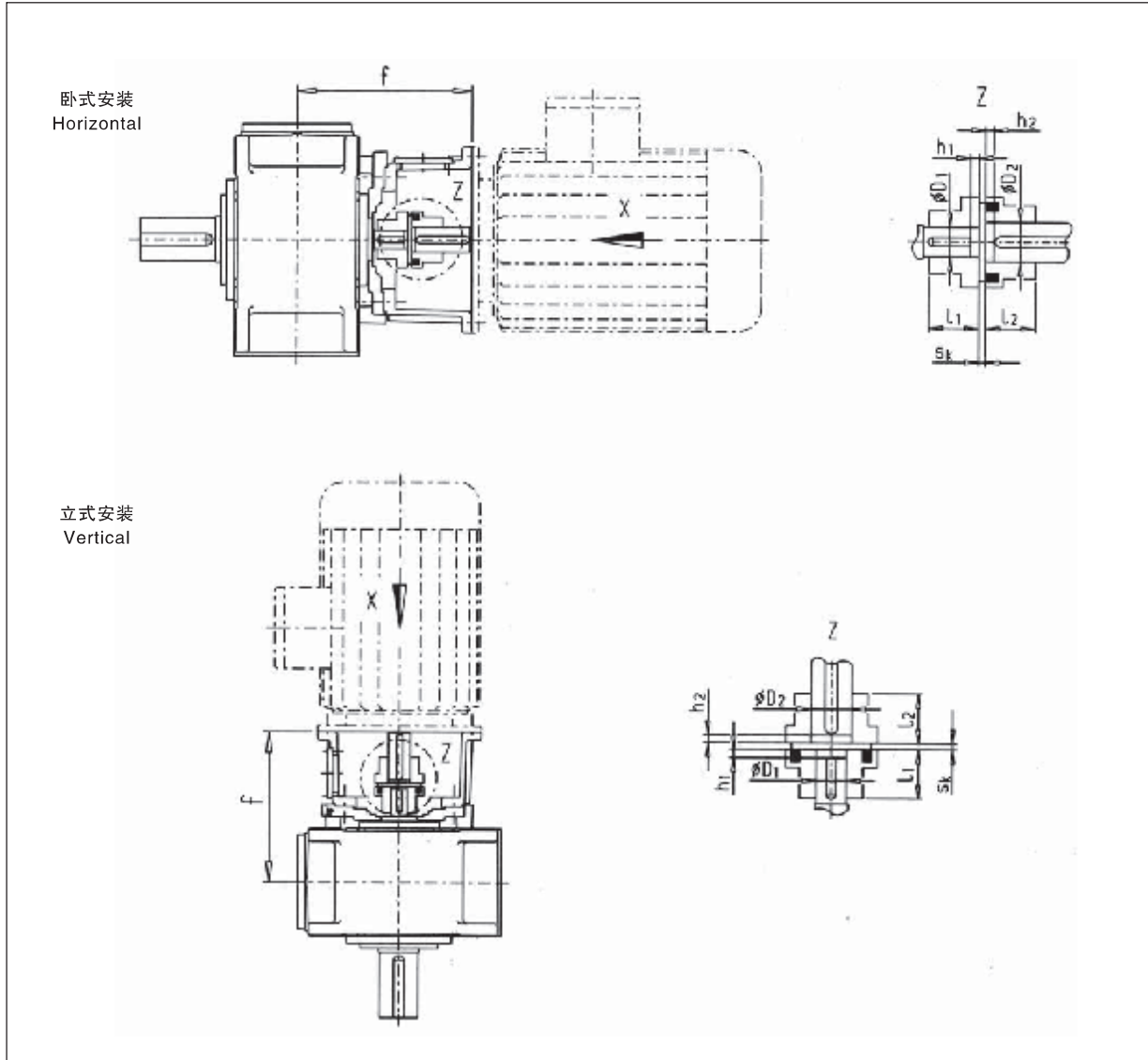
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表 10 / Table 10																				
规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 6.3-11.2 (规格 / Size 4, 5, 7, 9, 11) 8-14 (规格 / Size 6, 8, 10, 12)										传动比 i_N / Ratios i_N 12.5-22.4 (规格 / Size 4, 5, 7, 9, 11) 16-28 (规格 / Size 6, 8, 10, 12)								
		N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	
4	160 5)											A125	3	50	32	50	42	0	7	370
	180 5)											A140	3	55	32	55	48	0	7	370
	200 5)											A160	4	60	32	60	55	0	12	376
	225 5) 4)	A180	4	70	45	70	60	0	3	417	4)	A180	4	70	32	70	60	0	8	402
5/6	200											A160	4	60	38	60	55	0	13	402
	225 6)																			
	250 5) 4)	A180	4	70	50	70	65	0	5.5	444.5	4)	A180	4	70	38	70	65	0	9	428
7/8	225											A180	4	70	50	70	60	0	9.5	473.5
	250 7)											A180	4	70	50	70	65	0	11	475
	280 7)											A200	4	80	50	80	75	0	10	474
	315 2) 5) 4)	A225	4	90	60	90	80	0	12	531	4)	A250	5.5	100	50	100	80	0	15.5	511
9/10	280											A200	4	80	60	80	75	0	5	530
	315 2) 8) 4)	A225	4	90	75	90	80	3	9	566	4)	A225	4	90	60	90	80	0	12	566
11/12	315 2)											A225	4	90	70	90	80	0	17	606

表 11 / Table 11											
规格 Size	电机 Motor IEC 1)	12.5-20 (规格 / Size 13) 16-25 (规格 / Size 14)									
		N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	
13/14	355 MB 9)	4)	A280	5.5	110	85	110	90	1	16.5	693
	355 LB 9)	4)	A280	5.5	110	85	110	90	1	16.5	693

用于IEC-电机的电机安装法兰，类型H3..，规格5-18，带N-EUPEX 联轴器
 Motor Bell Housing for IEC Standard Motors, Type H3.., Sizes 5-18, With N-EUPEX Coupling

K20/007



- IEC-标准电机的安装尺寸，按照 DIN 42677（视图 X），参见第 145 页。
- 布置形式 G，H，I 的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145.
- Helical gear unit in G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格 315S 和 315M
- 4) 仅用于立式安装的齿轮箱
- 9) Loher 公司产品（规格不包括在 DIN 42677 之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 4) For vertical gear units only
- 9) Loher designation (Sizes not included in DIN 42677)

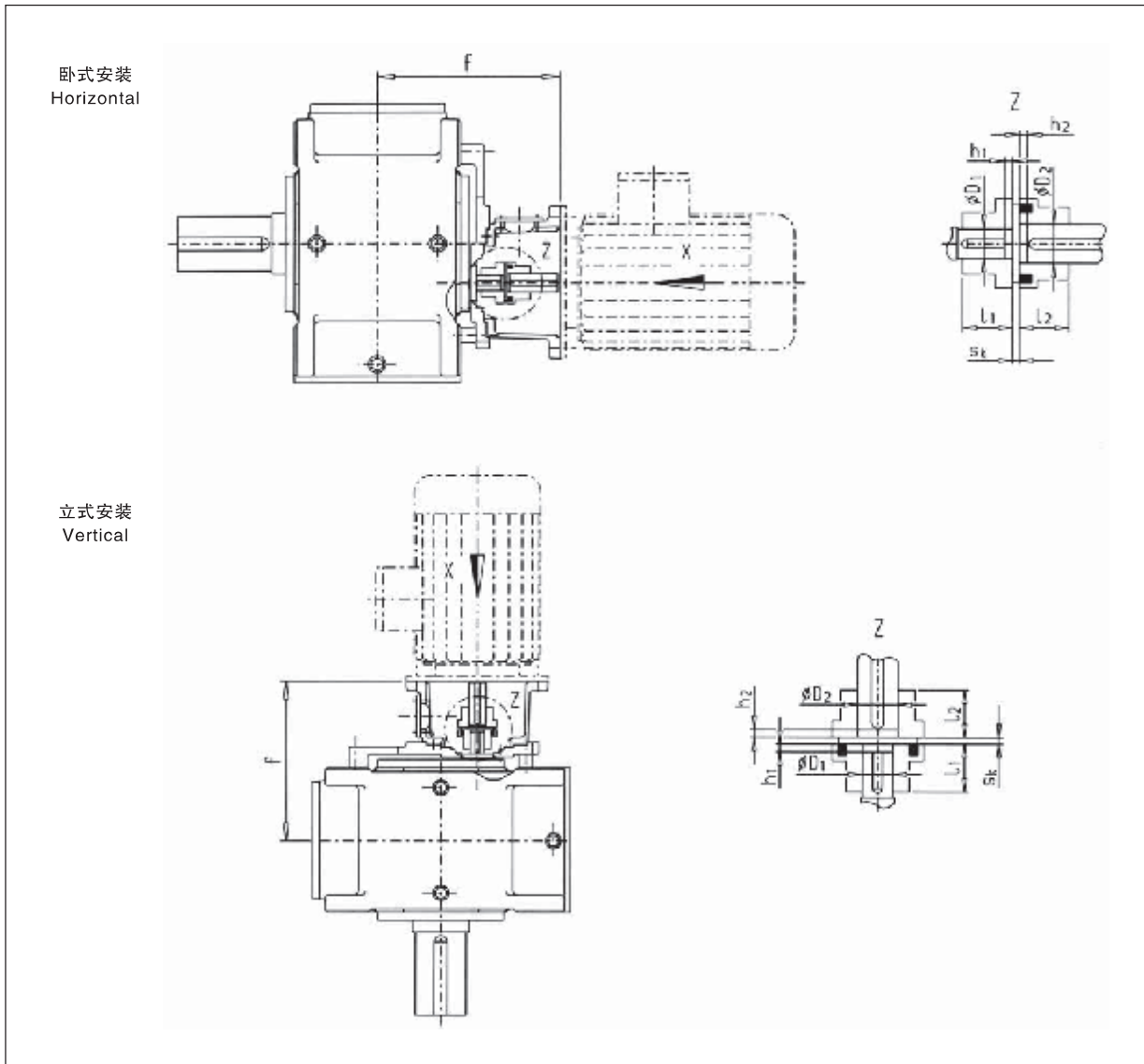
用于IEC-电机的电机安装法兰, 类型H3., 规格5-18, 带N-EUPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type H3., Sizes 5-18, With N-EUPEX Coupling

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表 12 / Table 12																															
规格 Size	电机 Motor IEC ¹⁾	传动比 <i>i</i> n / Ratios in 25-45(规格 / Sizes 5, 7, 9, 11) 31.5-56(规格 / Sizes 6, 8, 10, 12) 22.4-45(规格 / Sizes 13, 15, 17) 28-56(规格 / Sizes 14) 25-50(规格 / Sizes 16, 18)										传动比 <i>i</i> n / Ratios in 50-63(规格 / Sizes 5, 7, 9, 11) 63-80(规格 / Sizes 6, 8, 10, 12) 50-63(规格 / Sizes 13, 15, 17) 63-80(规格 / Sizes 14) 56-71(规格 / Sizes 16, 18)										传动比 <i>i</i> n / Ratios in 71-90(规格 / Sizes 5, 7, 9, 11) 90-112(规格 / Sizes 6, 8, 10, 12) 71-90(规格 / Sizes 13, 15, 17) 90-112(规格 / Sizes 14) 80-100(规格 / Sizes 16, 18)									
		N- EUPEX	s _k mm	l ₁ mm	D ₁ mm	l ₂ mm	D ₂ mm	h ₁ mm	h ₂ mm	f mm		N- EUPEX	s _k mm	l ₁ mm	D ₁ mm	l ₂ mm	D ₂ mm	h ₁ mm	h ₂ mm	f mm		N- EUPEX	s _k mm	l ₁ mm	D ₁ mm	l ₂ mm	D ₂ mm	h ₁ mm	h ₂ mm	f mm	
5/6	132																					B95	3	35	24	35	38	7	12	302	
	160	A125	3	50	40	50	42	12	9	364	A125	3	50	30	50	42	7	8	338	A125	3	50	24	50	42	17	8	338			
	180	A140	3	55	40	55	48	6.5	14.5	364	A140	3	55	30	55	48	5	10	338	A140	3	55	24	55	48	15	10	338			
	200	A160	4	60	40	60	55	0	6	350	A160	4	60	30	60	55	17	9	350												
	225	A180	4	70	40	70	60	10	7	391																					
250	A180	4	70	40	70	65	11.5	5	391																						
7/8	160																					A125	3	50	28	50	42	7	12	367	
	180																					A140	3	55	28	55	48	10	9	367	
	200	A160	4	60	45	60	55	0	0	379	A160	4	60	35	60	55	9	12	379	A160	4	60	28	60	55	17	13	379			
	225	A180	4	70	45	70	60	0	11	420	A180	4	70	35	70	60	18	12.5	420												
	250	A180	4	70	45	70	65	0	11	420	A180	4	70	35	70	65	15	16	420												
280	A200	4	80	45	80	75	14.5	17	440.5																						
9/10	180																					A140	3	55	32	55	48	0	8.5	431.5	
	200																					A160	4	60	32	60	55	0	19.5	443.5	
	225	A180	4	70	60	70	60	13.5	7	519.5	A180	4	70	45	70	60	0	10.5	484.5	A180	4	70	32	70	60	9	21.5	484.5			
	250	A180	4	70	60	70	65	11.5	9	519.5	A180	4	70	45	70	65	0	10.5	484.5	A180	4	70	32	70	65	5.5	28	484.5			
	280	A200	4	80	60	80	75	0	6	505	A200	4	80	45	80	75	5	26	505												
315	A225	4	90	60	90	80	0	13	542	A225	4	90	45	90	80	12	26	542													
11/12	225																					A180	4	70	42	70	60	9.5	11	489.5	
	250																					A180	4	70	42	70	65	9.5	11	489.5	
	280	A200	4	80	70	80	75	12	9	540	A200	4	80	75	80	75	14	17	510												
	315	A225	4	90	70	90	80	0	-2	547																					
13/14	250																					A180	4	70	50	70	65	5	9.5	578.5	
	280																					A200	4	80	50	80	75	5	30	599	
	315	A225	4	90	85	90	80	18	4	666	A225	4	90	60	90	80	0	17	636												
	315MC	A225	4	90	85	90	80	18	4	666	A225	4	90	60	90	80	0	17	636												
	315MD	A225	4	90	85	90	80	18	4	666	A225	4	90	60	90	80	0	17	636												
	315LB	A225	4	90	85	90	80	18	4	666	A250	4	100	60	100	80	0	17	636												
	355MB	A280	5.5	110	85	110	90	-2.5	0	643	A280	5.5	110	60	110	90	0	22.5	643												
355LB	A280	5.5	110	85	110	90	-2.5	0	643																						
15/16	280																					A200	4	80	60	80	75	0	13	647	
	315																					A225	4	90	60	90	80	0	20	684	
	315MC																					A225	4	90	60	90	80	0	20	684	
	315MD																					A225	4	90	60	90	80	0	20	684	
	315LB	A250	4	100	100	100	80	8.5	0	764	A225	4	90	75	90	80	8	12	684	A250	4	100	60	100	80	0	20	684			
	355MB	A280	5.5	110	100	110	90	17.5	0	743	A280	5.5	110	75	110	90	0	25.5	691	A280	5.5	110	60	110	90	0	25.5	691			
	355LB	A280	5.5	110	100	110	90	17.5	0	743	A280	5.5	110	75	110	90	0	25.5	691	A280	5.5	110	60	110	90	0	25.5	691			
17/18	315																					A225	4	90	60	90	80	0	20	714	
	315MC																					A225	4	90	60	90	80	0	20	714	
	315MD																					A225	4	90	60	90	80	0	20	714	
	315LB																					A225	4	90	75	90	80	6.5	13.5	714	
	355MB	A280	5.5	110	100	110	90	17.5	0	773	A280	5.5	110	75	110	90	0	25.5	721	A280	5.5	110	60	110	90	0	25.5	721			
	355LB	A280	5.5	110	100	110	90	17.5	0	773	A280	5.5	110	75	110	90	0	25.5	721	A280	5.5	110	60	110	90	0	25.5	721			

用于IEC-电机的电机安装法兰，类型H4..，规格7-18，带N-EUPEX 联轴器
 Motor Bell Housing for IEC Standard Motors, Type H4.., Sizes 7-18, With N-EUPEX Coupling

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- IEC-标准电机的安装尺寸，按照DIN 42677（视图X），参见第145页。
- 布置形式G，H，I的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封E或迷宫式密封。
- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145.
- Helical gear unit in G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格315S和315M
- 9) Loher公司产品（规格不包括在DIN 42677之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 9) Loher designation (Sizes not included in DIN 42677)

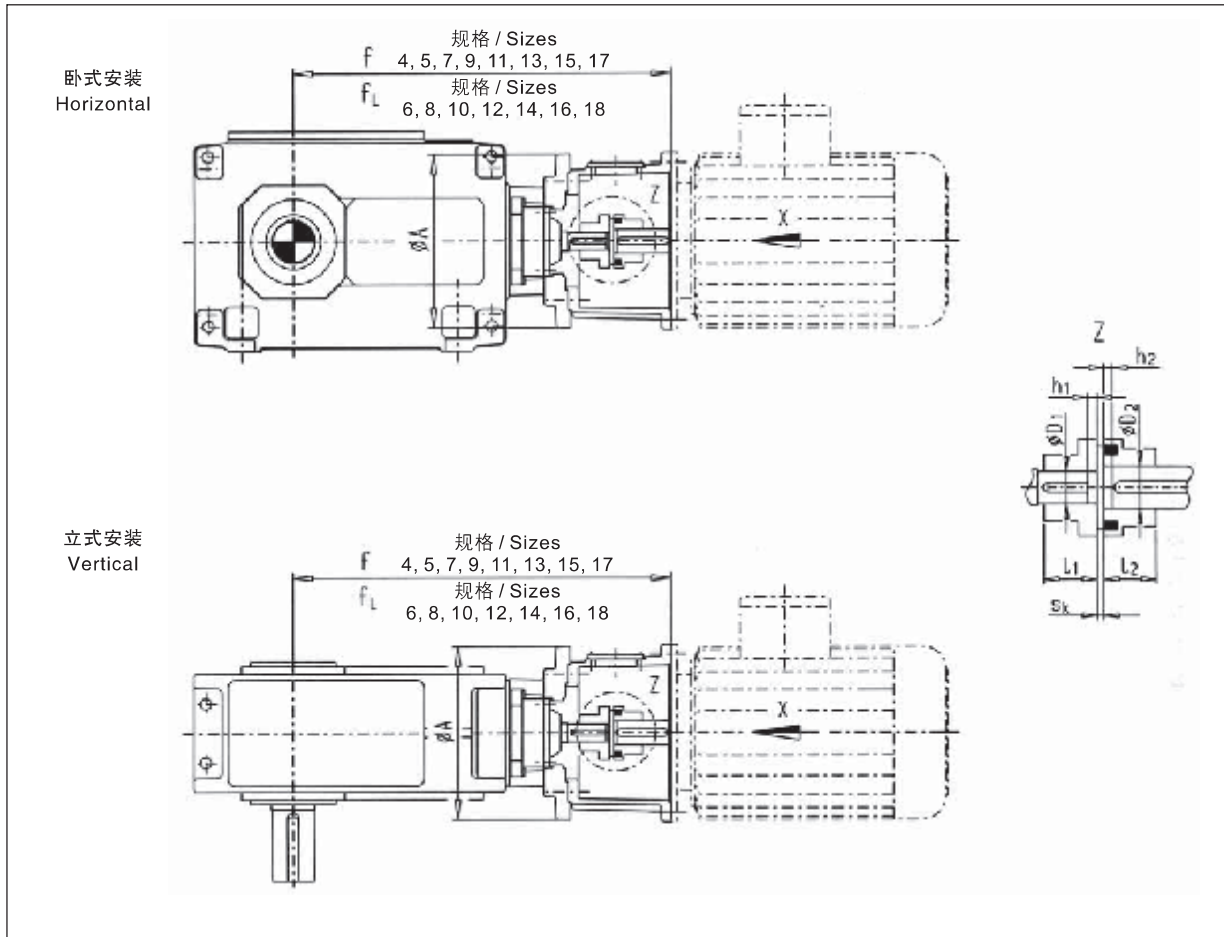
用于IEC-电机的电机安装法兰，类型H4..，规格7-18，带N-EUPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type H4.., Sizes 7-18, With N-EUPEX Coupling

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表 13 / Table 13																					
规格 Size	电机 Motor IEC 1)	传动比 i_n / Ratios i_n 100-180 (规格 / Sizes 7, 9, 11) 125-224 (规格 / Sizes 8, 10, 12) 100-180 (规格 / Sizes 13, 15, 17) 125-224 (规格 / Sizes 14) 112-200 (规格 / Sizes 16, 18)									传动比 i_n / Ratios i_n 200-355 (规格 / Sizes 7, 9, 11) 250-450 (规格 / Sizes 8, 10, 12) 200-355 (规格 / Sizes 13, 15, 17) 250-450 (规格 / Sizes 14) 224-400 (规格 / Sizes 16, 18)										
		N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm		
7/8	100										B80	3	30	24	30	28	7	6	296		
	112										B80	3	30	24	30	28	7	6	296		
	132		B95	3	35	30	35	38	7	8	328.5										
	160		A125	3	50	30	50	42	6.5	15	364.5		A125	3	50	24	50	42	16.5	15	364.5
	180		A140	3	55	30	55	48	17	4.5	364.5										
9/10	132										B95	3	35	28	35	38	10	11.5	369.5		
	160		A125	3	50	35	50	42	6.5	11	405.5		A125	3	50	28	50	42	13	14.5	405.5
	180		A140	3	55	35	55	48	10	7.5	405.5		A140	3	55	28	55	48	20	7.5	405.5
	200		A160	4	60	35	60	55	10	14.5	417.5										
	225		A180	4	70	35	70	60	18.5	21	458.5										
11/12	160										A125	3	50	32	50	42	0	4.5	447.5		
	180		A140	3	55	45	55	48	7	3.5	437.5		A140	3	55	32	55	48	0	4.5	447.5
	200		A160	4	60	45	60	55	6.5	15	485.5		A160	4	60	32	60	55	0	15.5	459.5
	225		A180	4	70	45	70	60	0	6.5	500.5		A180	4	70	32	70	60	3	23.5	500.5
	250		A180	4	70	45	70	65	0	6.5	500.5										
13/14	160										A125	3	50	38	50	42	9	10.5	517.5		
	180										A140	3	55	38	55	48	3.5	16	517.5		
	200		A140	4	60	50	60	55	2	8.5	529.5		A160	4	60	38	60	55	0	4.5	503.5
	225		A160	4	70	50	70	60	9.5	21	579.5		A180	4	70	38	70	60	4	11.5	544.5
	250		A180	4	70	50	70	65	7.5	23	579.5		A180	4	70	38	70	65	4	11.5	544.5
	280		A180	4	80	50	80	75	0	16	565										
	315 ²⁾																				
15/16	200										A160	4	60	50	60	55	0	3.5	572.5		
	225		A180	4	70	60	70	60	15.5	9	648.5		A180	4	70	50	70	60	0	14.5	613.5
	250		A180	4	70	60	70	65	13.5	11	648.5		A180	4	70	50	70	65	0	14.5	613.5
	280		A200	4	80	60	80	75	0	10	634		A200	4	80	50	80	75	3	32	634
	315 ²⁾		A225	4	90	60	90	80	0	17	671										
	315MC ⁹⁾		A225	4	90	60	90	80	0	17	671										
	315MD ⁹⁾		A225	4	90	60	90	80	0	17	671										
	315LB ⁹⁾		A225	4	90	60	90	80	0	17	671										
17/18	225										A180	4	70	50	70	60	3	16.5	623.5		
	250										A180	4	70	50	70	65	4	15.5	623.5		
	280		A200	4	80	60	80	75	5	10	644		A200	4	80	50	80	75	6	34	644
	315 ²⁾		A225	4	90	60	90	80	0	22	681										
	315MC ⁹⁾		A225	4	90	60	90	80	0	22	681										
	315MD ⁹⁾		A225	4	90	60	90	80	0	22	681										
	315LB ⁹⁾		A225	4	90	60	90	80	0	22	681										
355MB ⁹⁾																					

用于IEC-电机的电机安装法兰，类型B2..，规格4-14，带N-EUPEX 联轴器 Motor Bell Housing for IEC Standard Motors, Type B2.., Sizes 4-14, With N-EUPEX Coupling

K20.007



- IEC-标准电机的安装尺寸，按照 DIN 42677（视图 X），参见第 145 页。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145.
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格 315S 和 315M
- 9) Loher 公司产品（规格不包括在 DIN 42677 之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 9) Loher designation (Sizes not included in DIN 42677)

用于IEC-电机的电机安装法兰，类型B2..，规格4-14，带N-EUPEX 联轴器
 Motor Bell Housing for IEC Standard Motors, Type B2.., Sizes 4-14, With N-EUPEX Coupling

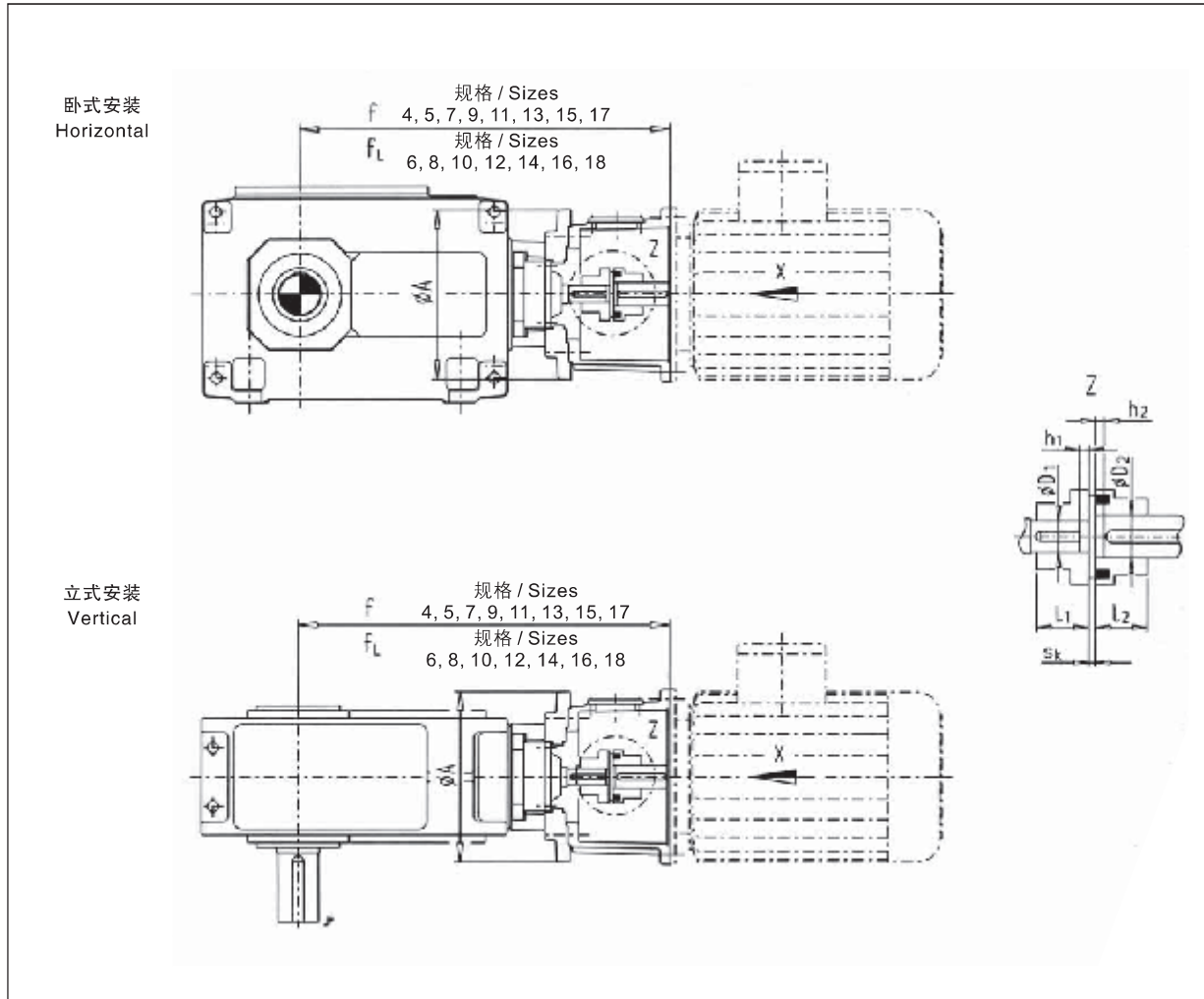
K2D/007

表 14 / Table 14												
规格 Size	电机 Motor IEC ¹⁾	传动比 i_N / Ratios i_N 5-11.2 (规格 / Size 4, 5, 7, 9, 11) 6.3-14 (规格 / Size 6, 8, 10, 12) 12.5-18 (规格 / Size 13) 16-22.4 (规格 / Size 14)										
		N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm
4	180											
	200	A160	4	60	45	60	55	0	5.5	684.5	-	400
5/6	200											
	225											
7/8	250											
	280	A200	4	80	70	80	75	9	6	934	979	550
9/10	280											
11/12	315 ²⁾											
13/14	355MB ⁹⁾	敬请垂询 On request										
	355LB ⁹⁾											

用于IEC-电机的电机安装法兰，类型B3..，规格4-18，带N-EUPEX 联轴器

Motor Bell Housing for IEC Standard Motors, Type B3.., Sizes 4-18, With N-EUPEX Coupling

K20/007



- IEC-标准电机的安装尺寸，按照 DIN 42677（视图 X），参见第 145 页。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145 .
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格 315S 和 315M
- 9) Loher 公司产品（规格不包括在 DIN 42677 之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 9) Loher designation (Sizes not included in DIN 42677)

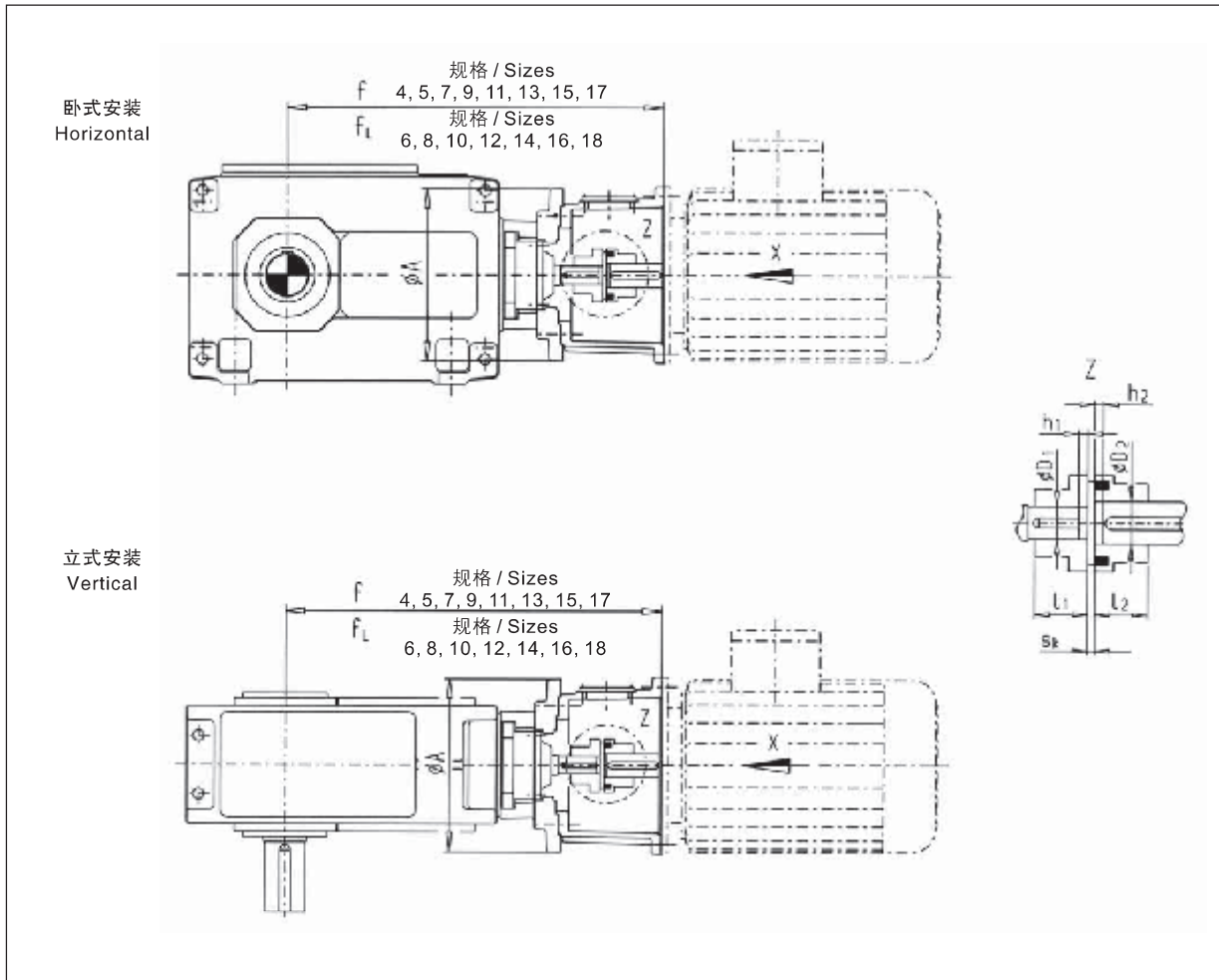
用于IEC-电机的电机安装法兰，类型B3..，规格4-18，带N-EUPEX 联轴器
 Motor Bell Housing for IEC Standard Motors, Type B3.., Sizes 4-18, With N-EUPEX Coupling

K20/007

表 15 / Table 15																							
规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 12.5-45 (规格 / Size 4, 5, 7, 9, 11) 16-56 (规格 / Size 6, 8, 10, 12) 12.5-45 (规格 / Size 13, 15, 17) 16-56 (规格 / Size 14) 14-50 (规格 / Size 16, 18)											传动比 i_N / Ratios i_N 50-71 (规格 / Size 4, 5, 7, 9, 11) 63-90 (规格 / Size 6, 8, 10, 12) 50-71 (规格 / Size 13, 15, 17) 63-90 (规格 / Size 14) 56-80 (规格 / Size 16, 18)										
		N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm	N- EUPEX	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm
4	132																						
	160	A125	3	50	30	50	42	0	-0.5	682.5	-	250	A125	3	50	25	50	42	0	9.5	682.5	-	250
	180	A140	3	55	30	55	48	0	-0.5	682.5	-	250	A140	3	55	25	55	48	0	9.5	682.5	-	250
	200	A160	4	60	30	60	55	0	10.5	694.5	-	250											
5/6	160	A125	3	50	35	50	42	0	3.5	771.5	806.5	340	A125	3	50	28	50	42	7	16.5	771.5	806.5	340
	180	A140	3	55	35	55	48	0	3.5	771.5	806.5	340	A140	3	55	28	55	48	2	21.5	771.5	806.5	340
	200	A160	4	60	35	60	55	0	14.5	783.5	818.5	340	A160	4	60	28	60	55	7.5	27	783.5	818.5	340
	225	A180	4	70	35	70	60	7.5	18	824.5	859.5	340											
7/8	160												A125	3	50	35	50	42	8	12.5	903.5	948.5	440
	180												A140	3	55	35	55	48	3	17.5	903.5	948.5	440
	200	A160	4	60	45	60	55	0	5.5	909.5	954.5	440	A160	4	60	35	60	55	0	1.5	885.5	930.5	440
	225	A180	4	70	45	70	60	0	1.5	935.5	980	440	A180	4	70	35	70	60	0	21.5	935.5	980	440
	250	A180	4	70	45	70	65	0	1.5	935.5	980	440	A180	4	70	35	70	65	0	21.5	935.5	980	440
	280	A200	4	80	45	80	75	0	17	950.5	945.5	440											
9/10	200												A160	4	60	40	60	55	0	20.5	1034.5	1084.5	440
	225	A180	4	70	55	70	60	1.5	5	1060.5	1110.5	440	A180	4	70	40	70	60	0	16.5	1060.5	1110.5	440
	250	A180	4	70	55	70	65	0	6.5	1060.5	1110.5	440	A180	4	70	40	70	65	0	16.5	1060.5	1110.5	440
	280	A200	4	80	55	80	75	0	22	1046	1096.5	440	A200	4	80	40	80	75	0	2	1046	1096	440
11/12	225												A180	4	70	50	70	60	9	20.5	1243.5	1313.5	440
	250	A180	4	70	70	70	60	4.5	0	1243.5	1313.5	440	A180	4	70	50	70	65	9	20.5	1243.5	1313.5	440
	280	A200	4	80	70	80	75	12	8	1258.5	1328.5	440	A200	4	80	50	80	75	0	15	1229	1299	440
	315 2)	A225	4	90	70	90	80	10	17	1296	1366	440	A225	4	90	50	90	80	0	22	1266	1336	440
13/14	280												A200	4	80	60	80	75	0	15	1424	1494	445
	315 2)	A225	4	90	80	90	80	9	8	1481	1551	445	A225	4	90	60	90	80	0	22	1461	1531	445
	315MC 9)	A225	4	90	80	90	80	9	8	1481	1551	445	A225	4	90	60	90	80	0	22	1461	1531	445
	315MD 9)	A225	4	90	80	90	80	9	8	1481	1551	445	A225	4	90	60	90	80	0	22	1461	1531	445
	315LB 9)	A225	4	90	80	90	80	9	8	1481	1551	445	A225	4	90	60	90	80	0	22	1461	1531	445
	355MB 9)	A315	5	125	80	125	90	0	2	1467	1537	645	A315	5	125	60	125	90	0	27	1467	1537	645
	355LB 9)	A315	5	125	80	125	90	0	2	1467	1537	645											
15/16	315 2)												A225	4	90	70	90	80	3	14	1698	1744	520
	315MC 9)												A225	4	90	70	90	80	3	14	1698	1744	520
	315MD 9)												A225	4	90	70	90	80	3	14	1698	1744	520
	315LB 9)	A250	5	100	90	100	80	21	0	1728	1774	520	A250	4	100	70	100	80	3	14	1698	1744	520
	355MB 9)	A315	5	125	90	125	90	0	0	1707	1753	645	A315	5	125	70	125	90	5	20	1707	1753	645
	355LB 9)	A315	5	125	90	125	90	0	0	1707	1753	645	A315	5	125	70	125	90	5	20	1707	1753	645
17/18	315MC 9)												A225	4	90	80	90	80	10	1	1945	2000.5	645
	315MD 9)												A225	4	90	80	90	80	10	1	1945	2000.5	645
	315LB 9)												A250	4	100	80	100	80	10	1	1945	2000.5	645
	355MB 9)	A315	5	125	110	125	90	7	0	1947	2007	645	A315	5	125	80	125	90	0	17	1922	1982	645
	355LB 9)	A315	5	125	110	125	90	7	0	1947	2007	645	A315	5	125	80	125	90	0	17	1922	1982	645

用于IEC-电机的电机安装法兰，类型B4..，规格5-18，带N-EUPEX 联轴器 Motor Bell Housing for IEC Standard Motors, Type B4.., Sizes 5-18, With N-EUPEX Coupling

K20 007



- IEC-标准电机的安装尺寸，按照 DIN 42677（视图 X），参见第 145 页。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For fitting dimensions for IEC standard motors DIN 42677 (View X), see page 145 .
- Not in connection with Taconite E or labyrinth seal on input shaft.

- 1) 其它电机规格敬请垂询
- 2) 仅指规格 315S 和 315M
- 9) Loher 公司产品（规格不包括在 DIN 42677 之内）。

- 1) Other motor sizes on request
- 2) Sizes 315 S and 315 M only
- 9) Loher designation (Sizes not included in DIN 42677)

用于IEC-电机的电机安装法兰, 类型B4..., 规格5-18, 带N-EUPEX 联轴器
Motor Bell Housing for IEC Standard Motors, Type B4..., Sizes 5-18, With N-EUPEX Coupling

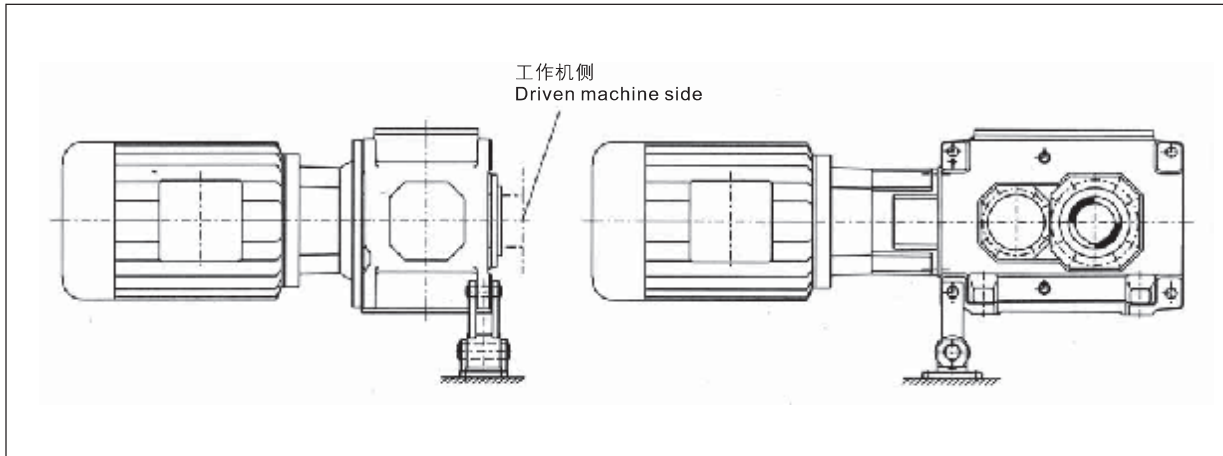
K20 007

表 16 / Table 16		传动比 i_n / Ratios i_n 80-180 (规格 / Size 5, 7, 9, 11) 100-224 (规格 / Size 6, 8, 10, 12) 80-180 (规格 / Size 13, 15, 17) 100-224 (规格 / Size 14) 90-200 (规格 / Size 16, 18)											传动比 i_n / Ratios i_n 200-315 (规格 / Size 5, 7, 9, 11) 250-400 (规格 / Size 6, 8, 10, 12) 200-315 (规格 / Size 13, 15, 17) 250-400 (规格 / Size 14) 224-355 (规格 / Size 16, 18)										
规格 Size	电机 Motor IEC 1)	N-EU	s_k	l_1	D_1	l_2	D_2	h_1	h_2	f	f_L	A	N-EU	s_k	l_1	D_1	l_2	D_2	h_1	h_2	f	f_L	A
		PEX	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	PEX	mm	mm	mm	mm	mm	mm	mm	mm	mm
5/6	100																						
	112	B80	3	30	28	30	28	0	1	734	769	245	B80	3	30	20	30	28	0	6	734	769	245
	132	B95	3	35	28	35	38	5.5	8	766.5	801.5	245	B95	3	35	20	35	38	6	12.5	766.5	801.5	245
	160	A125	3	50	28	50	42	4.5	15	802.5	837.5	245											
7/8	112												B80	3	30	25	30	28	3.5	2.5	854	899	250
	132	B95	3	35	30	35	38	3	5.5	886.5	931.5	250	B95	3	35	25	35	38	0	3.5	871.5	916.5	250
	160	A125	3	50	30	50	42	0	-0.5	907.5	952.5	250	A125	3	50	25	50	42	0	9.5	907.5	952.5	250
	180	A140	3	55	30	55	48	0	-0.5	907.5	952.5	250											
	200	A160	4	60	30	60	55	0	10.5	919.5	964.5	250											
9/10	132												B95	3	35	28	35	38	7.5	10	1000.5	1050.5	340
	160	A125	3	50	35	50	42	0	3.5	1036.5	1086.5	340	A125	3	50	28	50	42	7	16.5	1036.5	1086.5	340
	180	A140	3	55	35	55	48	0	3.5	1036.5	1086.5	340	A140	3	55	28	55	48	2	21.5	1036.5	1086.5	340
	200	A160	4	60	35	60	55	0	14.5	1048.5	1098.5	340											
	225	A180	4	70	35	70	60	0	25.5	1089.5	1139.5	340											
11/12	160												A125	3	50	35	50	42	8	12.5	1223.5	1293.5	440
	180	A140	3	55	45	55	48	0.5	0	1223.5	1293.5	440	A140	3	55	35	55	48	3	17.5	1223.5	1293.5	440
	200	A180	4	70	45	70	55	0	5.5	1229.5	1299.5	440	A180	4	70	35	70	55	0	1.5	1205.5	1275.5	440
	225	A180	4	70	45	70	60	0	1.5	1255.5	1325.5	440	A180	4	70	35	70	60	0	21.5	1255.5	1325.5	440
	250	A180	4	70	45	70	65	0	1.5	1255	1325	440											
	280	A200	4	80	45	80	75	0	17	1270.5	1340.5	440											
13/14	180												A140	3	55	40	55	48	3	12.5	1398.5	1468.5	440
	200	A160	4	60	55	60	55	7.5	3	1404.5	1474.5	440	A160	4	60	40	60	55	0	20.5	1404.5	1474.5	440
	225	A180	4	70	55	70	60	1.5	5	1430.5	1500.5	440	A180	4	70	40	70	60	0	16.5	1430.5	1500.5	440
	250	A180	4	70	55	70	65	0	6.5	1430	1500	440	A180	4	70	40	70	65	0	16.5	1430	1500	440
	280	A200	4	80	55	80	75	0	22	1446	1516	440	A225	4	90	40	90	75	7	25	1446	1516	440
	315 2)	A225	4	90	55	90	80	5	24	1483	1553	440											
	315MC 9)	A225	4	90	55	90	80	5	24	1483	1553	440											
	315MD 9)	A225	4	90	55	90	80	5	24	1483	1553	440											
15/16	200												A160	4	60	50	60	55	1	8.5	1635.5	1681.5	440
	225	A200	4	80	70	80	60	4.5	0	1685.5	1731.5	440	A180	4	70	50	70	60	9	20.5	1685.5	1731.5	440
	250	A200	4	80	70	80	65	4.5	0	1685.5	1731.5	440	A180	4	70	50	70	65	7	22.5	1685.5	1731.5	440
	280	A200	4	80	70	80	75	11.5	8.5	1701	1747	440	A200	4	80	50	80	75	0	15	1671	1717	440
	315 2)	A225	4	90	70	90	80	10	17	1738	1784	440	A225	4	90	50	90	80	0	22	1708	1754	440
	315MC 9)	A225	4	90	70	90	80	10	17	1738	1784	440											
	315MD 9)	A225	4	90	70	90	80	10	17	1738	1784	440											
	315LB 9)	A225	4	90	70	90	80	10	17	1738	1784	440											
	355MB 9)	A250	5	100	70	100	90	0	28	1533	1603	645											
	17/18	225												A180	4	70	50	70	60	9	20.5	1733.5	1793.5
250													A180	4	70	50	70	65	7	22.5	1733.5	1793.5	440
280		A200	4	80	70	80	75	11.5	8.5	1749	1809	440	A200	4	80	50	80	75	0	15	1719	1779	440
315 2)		A225	4	90	70	90	80	9.5	17.5	1786	1846	440	A225	4	90	50	90	80	0	22	1756	1816	440
315MC 9)		A225	4	90	70	90	80	9.5	17.5	1786	1846	440											
315MD 9)		A225	4	90	70	90	80	9.5	17.5	1786	1846	440											
315LB 9)		A225	4	90	70	90	80	9.5	17.5	1786	1846	440											
355MB 9)		A250	5	100	70	100	90	8	20	1788	1848	645											
355LB 9)		A280	5	110	70	110	90	8	20	1788	1848	645											

齿轮箱减振扭力臂支撑，类型H2, H3, H4, B2, B3, B4

Vibration Reducing Torque Supports for Gear Housings, Types H2, H3, H4, B2, B3, B4

K20/006



最大传递扭矩受扭力臂支撑的限制：

$$T_{max} = f_{DMST} \times T_{ZNenn}$$

The maximum transmissible torque is limited by the torque support:

$$T_{max} = f_{DMST} \times T_{ZNenn}$$

表 1 / Table 1						
扭力臂支撑的峰值扭矩系数 f_{DMST} ¹⁾						
Peak torque factor f_{DMST} for torque support						
齿轮箱规格 Gear unit size	类型 / Type					
	H2	H3	H4	B2	B3	B4
4	1.3	-	-	1.2	1.2	-
5	1.9	2.0	-	1.2	1.6	2.0
6	1.6	1.7	-	1.2	1.4	1.7
7	2.0	2.0	2.0	1.3	1.8	2.0
8	1.7	2.0	2.0	1.2	1.6	2.0
9	1.5	1.6	1.7	1.2	1.2	1.7
10	1.3	1.4	1.4	1.2	1.2	1.4
11	2.0	2.0	2.0	1.9	2.0	1.2
12	2.0	2.0	2.0	1.8	2.0	1.2
13	-	2.0	2.0	1.4	1.8	2.0
14	-	1.9	2.0	1.3	1.7	2.0
15	-	1.5	1.7	-	1.4	1.6
16	-	1.4	1.5	-	1.3	1.5
17	-	1.2	1.3	-	1.2	1.3
18	-	1.2	1.2	-	1.2	1.2
19-26	敬请垂询 / On request					

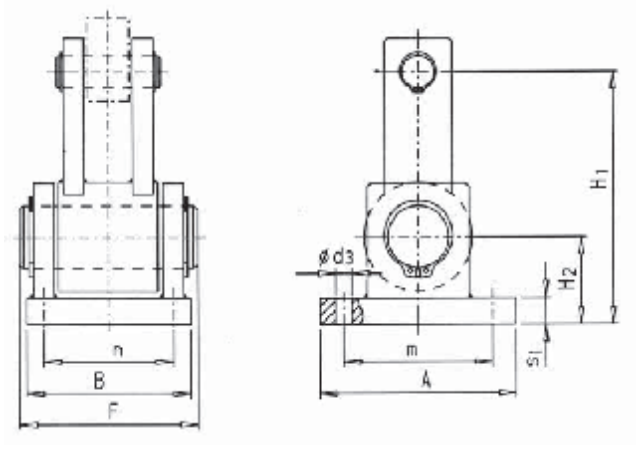
1) 表中给出的数值为最小值。
旋转方向和电机类型确定后有可能允许更大的峰值扭矩。
请垂询！

1) The values in the table are minimum values.
Dependent on direction of rotation and motor type, higher peak torques may possibly be allowed.
Please consult us!

齿轮箱减振扭力臂支撑，类型H2, H3, H4, B2, B3, B4

Vibration Reducing Torque Supports for Gear Housings, Types H2, H3, H4, B2, B3, B4

K20/006



- 在工作机侧的扭力臂支撑。（布置形式C, D, G, H, I的平行轴齿轮箱请务必垂询）
- 不带电机安装法兰的齿轮箱只能带不承受剪力的弹性联轴器。
- 与风扇组合的扭力臂支撑请务必垂询。

- Torque support on driven machine side. (Helical gear unit in C, D, G, H, I design on request only.)
- For gear units without motor bell housing only couplings not transmitting shear forces are allowed.
- Torque support in combination with fan on request only.

表 2 / Table 2

齿轮箱规格 Gear unit size	A	B	ϕd_3	F	H ₁	H ₂	m	n	s ₁	弹性衬套 Bush	重量 Weight kg
4	160	110	19	116	200	65	120	70	15	079	6.8
5 + 6	200	160	19	170	250	90	160	120	20	095	16
7 + 8	320	200	19	195	400	140	260	130	25	772	37
9 + 10											42
11 + 12											155
13 + 14	400	300	24	320	500	175	320	240	30	805	159
15 + 16											163
17 + 18											167
19-26	敬请垂询 / On request										

齿轮箱浮动底座，带N-EUPEX联轴器，IEC电机及相应的联轴器和制动器
 Gear Unit Swing-bases, With N-EUPEX Couplings, IEC Motors and Assigned Couplings and Brakes

K20/013

表 1 / Table 1					
规格 Size	IEC-电机 按照DIN42673 IECmotor acc.toDIN42673		带鼓式制动器的N-EUPEX联轴器, 按照 DIN 15435 N-EUPEX coupling with drum brake acc. to DIN 15435		
	轴端 Shaft end D E mm	N-EUPEX 联轴器规格 N-EUPEX coupling size 2)	N-EUPEX 联轴器规格 N-EUPEX coupling size 3)	制动鼓 Brake drum d 1 mm	鼓式制动器规格 Drum brake size
100	28 x 60	80	125	200 x 75	TE200
112	28 x 60	80	125	200 x 75	TE200
132	38 x 80	95	125	200 x 75	TE200
160M	42 x 110	110	125	200 x 75	TE200
160L	42 x 110	125	125	200 x 75	TE200
180M	48 x 110	125	140	250 x 95	TE250
180L	48 x 110	140	140	250 x 95	TE250
200	55 x 110	160	160	250 x 95	TE250
225	60 x 140	160	180	315 x 118	TE315
250	65 x 140	180	180	315 x 118	TE315
280S	75 x 140	200	225	400 x 150	TE400
280M	75 x 140	200	225	400 x 150	TE400
315S	80 x 170	200	225	400 x 150	TE400
315M	80 x 170	225	225	400 x 150	TE400
315LB1)	80 x 170	250	250	500 x 190	TE500
355MB1)	90 x 170	250	250	500 x 190	TE500
355LB1)	90 x 170	280	280	500 x 190	TE500
400MB1)	100 x 210	315	280	500 x 190	TE500
400MD1)	100 x 210	315	280	500 x 190	TE500

1)Loher公司规格

2)A型规格110以上; B型至规格95

3)P型带制动盘的N-EUPEX联轴器请垂询。

1) Loher sizes

2) TypeAfrom size110up;

TypeB up to size95

3) TypeP

N-EUPEX couplings with brake disk
on request.

齿轮箱浮动底座，带N-EUPEX联轴器，类型B3,B4，规格4-12

Gear Unit Swing-bases, With N-EUPEX Couplings, Types B3,B4, Sizes 4-12

K20/013

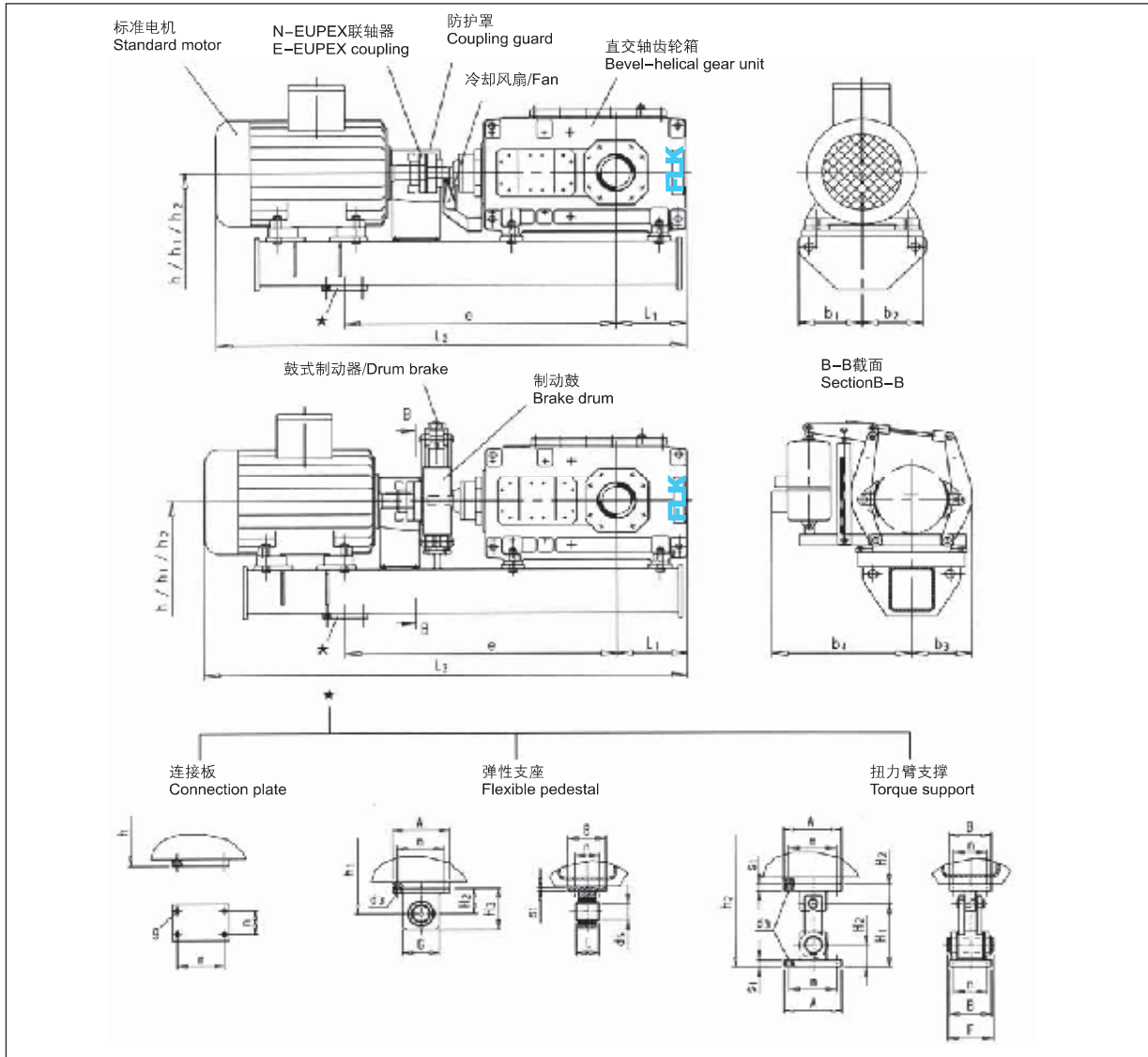


表2/Table2

规格 Size	衬套 Bush															重量/Weight	
		m mm	n mm	g mm	d3 mm	A mm	B mm	d5 mm	F mm	G mm	H1 mm	H2 mm	H3 mm	I mm	s1 mm	支座 Pedestal kg	扭力臂支撑 Torque support kg
4	069	95	65	M12	15	120	90	25	96	60	180	50	80	56	12	2.1	5.8
5-6	079	120	70	M16	19	160	110	32	116	75	200	65	105	72	15	5.3	11.8
7-10	095	160	120	M16	19	200	160	50	170	110	250	90	145	110	20	16	34
11-12	772	260	130	M16	19	320	200	100	195	180	400	140	230	120	25	50	82

齿轮箱浮动底座，带N-EUPEX联轴器，类型B3，规格4-12
 Gear Unit Swing-bases, With N-EUPEX Couplings, Types B3, Sizes 4-12

KZ0.013

表 3 / Table 3		N-EUPEX联轴器 N-EUPEX coupling										带鼓式制动器的N-EUPEX联轴器 N-EUPEX coupling with drum brake						
类型规格 Type Size	电机 Motor	e	h	h ₁	h ₂	l ₁	b ₁	b ₂	i _N =12.5-45 i _N =16-56		i _N =50-71 i _N =63-90		b ₃	b ₄	i _N =12.5-45 i _N =16-56		i _N =50-71 i _N =63-90	
									l ₂ ²⁾	l ₂ ^{*2)}	l ₂ ²⁾	l ₂ ^{*2)}			l ₃ ²⁾	l ₃ ^{*2)}	l ₃ ²⁾	l ₃ ^{*2)}
mm																		
B3..4	132S	950	380	430	610	190	160	145	-	-	1194	1194	170	470	-	-	1237	
	132M							-	-	1232	1232	-			-	1275		
	160M							170	1343	1343	1333	1333			1376			
	160L							185	1387	1387	1377	1387			1420			
	180M							200	1409	1409	1399	1409			1465			
	180L							215	1447	1452	-	-			1503			
200L																1585		
B3..5	160M	1000	450	515	715	205	185	170	-	-	1423	1423	210	590	-	-	1466	
	160L							185	1487	1487	1467	1477			1515			
	180M							220	1509	1509	1489	1499			1555			
	180L							240	1547	1547	1527	1542			1593			
	200L								1629	1629	-	-			1675			
	225S								1682	1682	-	-			1759			
225M		1707	1707	-	-	1784												
B3..6	160M	1050	450	515	715	250	185	170	-	-	1503	1503	210	590	-	-	1546	
	160L							185	1567	1567	1547	1557			1595			
	180M							220	1589	1589	1569	1579			1635			
	180L							240	1627	1627	1607	1622			1673			
	200L								1709	1709	-	-			1755			
	225S								1762	1762	-	-			1839			
225M		1787	1787	-	-	1864												
B3..7	180M	1150	540	630	880	250	215	185	-	-	1669	1669	260	665	-	-	1715	
	180L							240	1809	1809	1789	1789			1840			
	200L							280	1862	1862	1842	1842			1919			
	225S							300	1887	1887	1867	1867			1944			
	225M								1974	1974	-	-			2031			
	250M								2048	2048	-	-			2147			
280S		2099	2099	-	-	2198												
B3..8	180M	1200	540	630	880	310	215	185	-	-	1774	1774	260	665	-	-	1820	
	180L							240	1914	1914	1894	1894			1945			
	200L							280	1967	1967	1947	1947			2024			
	225S							300	1992	1992	1972	1972			2049			
	225M								2079	2079	-	-			2136			
	250M								2153	2153	-	-			2252			
280S		2204	2204	-	-	2303												
B3..9	200L	1350	630	720	970	300	260	215	-	-	1969	1969	310	765	-	-	2000	
	225S							240	2057	2057	2047	2047			2104			
	225M							265	2144	2144	2134	2134			2191			
	250M							300	2218	2218	2208	2208			2307			
	280S								2269	2269	-	-			2358			
	280M								2414	2414	-	-			2503			
315SB		2465	2475	-	-	2554												
315MB		2465	2475	-	-	2554												
315MD		2587	2607	-	-	2654												
315LB																		
B3..10	200L	1400	630	720	970	350	260	215	-	-	2069	2069	310	765	-	-	2100	
	225S							240	2157	2157	2147	2147			2204			
	225M							265	2244	2244	2234	2234			2291			
	250M							300	2318	2318	2308	2308			2407			
	280S								2369	2369	-	-			2458			
	280M								2514	2514	-	-			2603			
315SB		2565	2575	-	-	2654												
315MB		2565	2575	-	-	2654												
315MD		2687	2707	-	-	2754												
315LB																		
B3..11	250M	1550	740	880	1280	345	355	265	-	-	2349	2349	385	840	-	-	2396	
	280S							300	2499	2499	2474	2474			2563			
	280M							330	2644	2644	2619	2619			2708			
	315SB								2695	2695	2670	2680			2759			
	315MB								2695	2695	-	-			2759			
	315MD								2817	2817	-	-			2929			
315LB		2886	2886	-	-	2998												
355MB		2956	2961	-	-	3073												
355LB																		
B3..12	250M	1600	740	880	1280	430	355	265	-	-	2504	2504	385	840	-	-	2551	
	280S							300	-	-	2578	2578			2667			
	280M								2654	2654	2679	2629			2718			
	315SB								2799	2799	2774	2774			2863			
	315MB								2850	2850	2835	2835			2914			
	315MD								2850	2850	-	-			2914			
315LB		2972	2972	-	-	3084												
355MB		3041	3041	-	-	3153												
355LB		3111	3116	-	-	3228												

齿轮箱浮动底座，带N-EUPEX联轴器，类型B4，规格5-12

Gear Unit Swing-bases, With N-EUPEX Couplings, Types B4, Sizes 5-12

K20_013

表 4 / Table 4																		
类型 规格 Type Size	电机 Motor	N-EUPEX联轴器 N-EUPEX coupling						带鼓式制动器的N-EUPEX联轴器 N-EUPEX coupling with drum brake										
		e	h	h ₁	h ₂	l ₁	b ₁	b ₂	in=80-180 in=100-224		in=200-315 in=250-400		b ₃	b ₄	in=80-180 in=100-224		in=200-315 in=250-400	
									I ₂ ²⁾		I ₂ ²⁾				I ₃ ²⁾		I ₃ ²⁾	
mm																		
B4..5	100LD	1000	450	515	715	205	185	115	-	-	1256	170	470	-	-	1309		
	112M							130	1267	1262	1315			1315				
	132S							145	1319	1314	1367			1367				
	132M							145	1357	1352	1405			1405				
	160M							170	1458	-	1506			-				
	160L							170	1502	-	1550			-				
180M	185	1524	-	1595	-													
B4..6	100LD	1050	450	515	715	250	185	115	-	-	1336	170	470	-	-	1389		
	112M							130	1347	1342	1395			1395				
	132S							145	1399	1394	1447			1447				
	132M							145	1437	1432	1485			1485				
	160M							170	1538	-	1586			-				
	160L							170	1882	-	1630			-				
180M	185	1604	-	1675	-													
B4..7	132S	1150	540	630	880	250	215	145	-	-	1479	170	470	-	-	1552		
	132M							170	1527	1517	1560			1560				
	160M							170	1628	1618	1661			1661				
	160L							170	1672	1662	1705			1705				
	180M							185	1694	-	1750			-				
	180L							185	1732	-	1788			-				
200L	215	1814	-	1870	-													
B4..8	132S	1200	540	630	880	310	215	145	-	-	1584	170	470	-	-	1627		
	132M							170	1632	1622	1665			1665				
	160M							170	1733	1723	1766			1766				
	160L							185	1777	1767	1810			1810				
	180M							185	1799	-	1855			-				
	180L							185	1837	-	1893			-				
200L	215	1919	-	1975	-													
B4..9	132M	1350	630	720	970	300	260	145	-	-	1682	170	470	-	-	1725		
	160M							170	-	-	1783			-	1826			
	160L							170	1847	1827	1875			1870				
	180M							185	1969	1849	1915			1915				
	180L							185	1907	1887	1953			1953				
	200L							215	1989	-	2035			-				
	225S							240	2042	-	2119			-				
	225M							240	2067	-	2144			-				
	250M							305	265	2154	-			2231	-			
B4..10	132M	1400	630	720	970	350	260	145	-	-	1782	170	470	-	-	1825		
	160M							170	-	-	1883			-	1926			
	160L							170	1947	1927	1975			1970				
	180M							185	1969	1949	2015			2015				
	180L							185	2007	1987	2053			2053				
	200L							215	2089	-	2135			-				
	225S							240	2142	-	2219			-				
	225M							240	2167	-	2244			-				
	250M							305	265	2254	-			2331	-			
B4..11	160L	1550	740	880	1280	345	270	170	-	-	2062	170	470	-	-	2090		
	180M							185	-	-	2084			-	2130			
	180L							215	2142	2122	2173			2068				
	200L							215	2224	2204	2255			2250				
	225S							240	2277	2257	2334			2334				
	225M							240	2302	-	2359			-				
	250M						265	2389	-	2446	-							
	280S						355	2463	-	2562	-							
	280M						300	2514	-	2613	-							
B4..12	160L	1600	740	880	1280	430	270	170	-	-	2217	170	470	-	-	2245		
	180M							185	-	-	2239			-	2285			
	180L							215	2297	2277	2328			2323				
	200L							215	2379	2359	2410			2405				
	225S							240	2432	2412	2489			2489				
	225M							240	2457	-	2514			-				
	250M						265	2544	-	2601	-							
	280S						355	2618	-	2717	-							
	280M						300	2669	-	2768	-							

1) 敬请垂询

2) I₂, I₂^{*}, I₃, I₃^{*}用于Loher标准电机
I₂^{*}, I₃^{*}用于带冷却风扇的齿轮箱
齿轮箱浮动底座的重量请垂询

1) On request

2) I₂, I₂^{*}, I₃, I₃^{*} for Loher standard motors
I₂^{*}, I₃^{*} for gear units with fan
Weight of gear unit swing-base on request

齿轮箱浮动底座，带N-EUPEX联轴器，类型B3, B4，规格13-18
 Gear Unit Swing-bases, With N-EUPEX Couplings, Types B3,B4, Sizes 13-18

K20/013

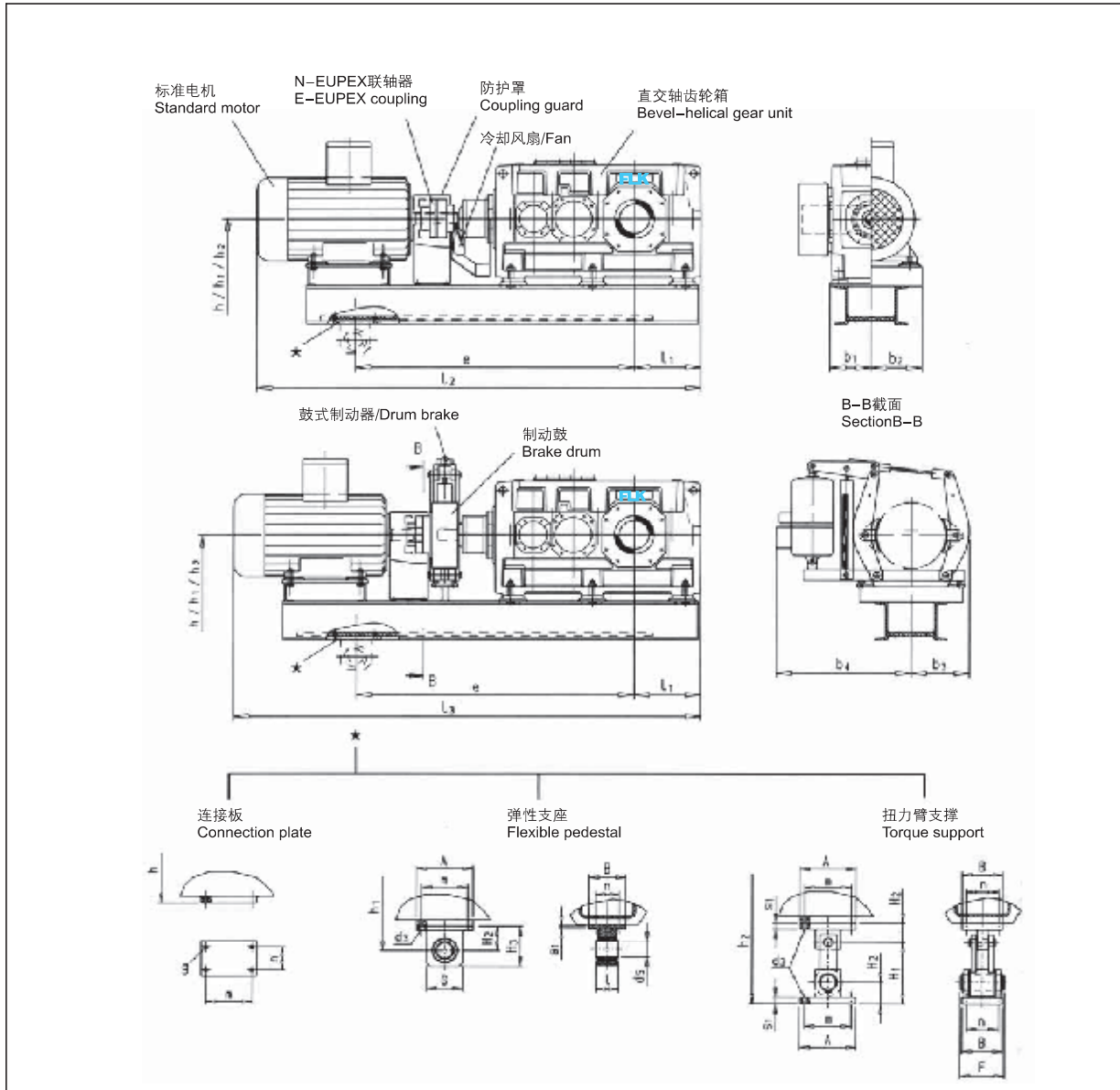


表5/Table5

规格 Size	衬套 Bush															重量/Weight	
		m mm	n mm	g mm	d ₃ mm	A mm	B mm	d ₅ mm	F mm	G mm	H ₁ mm	H ₂ mm	H ₃ mm	I mm	s ₁ mm	支座 Pedestal kg	扭力臂支撑 Torque support kg
13-14	772	260	65	φ 19	19	320	200	100	195	180	400	140	230	120	25	50	82
15-18	805	320	70	φ 24	24	400	300	124	320	240	500	175	285	230	30	95	220

齿轮箱浮动底座，带N-EUPEX联轴器，类型B3，规格13-18

Gear Unit Swing-bases, With N-EUPEX Couplings, Types B3, Sizes 13-18

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表 6 / Table 6																		
类型规格 Type Size	电机 Motor							N-EUPEX联轴器 N-EUPEX coupling				带鼓式制动器的N-EUPEX联轴器 N-EUPEX coupling with drum brake						
		e	h	h ₁	h ₂	I ₁	b ₁	b ₂	in=12.5-45 in=16-56 in=14-50		in=50-71 in=63-90 in=56-80		b ₃	b ₄	in=12.5-45 in=16-56 in=14-50		in=50-71 in=63-90 in=56-80	
									I ₂ ²⁾	I ₂ ^{*2)}	I ₂ ²⁾	I ₂ ^{*2)}			I ₃ ²⁾	I ₃ ^{*2)}	I ₃ ²⁾	I ₃ ^{*2)}
mm																		
B3..13	280M	1750	705	845	1245	405	295	300	-	-	2729	2729	310	765	-	-	2788	
	315SB							-	-	2874	2874	-			-	2933		
	315MB							330	2950	2950	2925	2925			2999	2984		
	315MD								2950	2950	2925	2925			2999	2984		
	315LB							3072	3072	3047	3047	3154			3154			
	355MB							380	3141	3141	-	-			3223	-		
	355LB								3211	3211	-	-			3298	-		
	400MB							420	3471	3471	-	-			3558	-		
400MD	3471	3471	-	-	3558	-												
B3..14	280M	1750	725	865	1265	475	295	300	-	-	2869	2869	310	765	-	-	2928	
	315SB							-	-	3014	3014	-			-	3073		
	315MB							330	3090	3090	3065	3065			3139	3124		
	315MD								3090	3090	3065	3065			3139	3124		
	315LB							3212	3212	3187	3187	3294			3294			
	355MB							380	3281	3281	-	-			3363	-		
	355LB								3351	3351	-	-			3438	-		
	400MB							420	3611	3611	-	-			3698	-		
	400MD								3611	3611	-	-			3698	-		
	B3..15							315MB	2000	810	985	1485			485	340	330	-
315MD		-	-	3247	3247	-	-	3306										
315LB		-	-	3369	3369	-	-	3476										
355MB		380	3463	3463	3438	3438	3545	3545										
355LB			3533	3533	3508	3513	3620	3620										
400MB		420	3793	3793	-	-	3880	-										
400MD			3793	3793	-	-	3880	-										
B3..16	315MB	2000	830	1005	1505	530	340	330	-	-	3338	3338	310	765	-	-	3397	
	315MD							-	-	3338	3338	-			-	3397		
	315LB							-	-	3460	3460	-			-	3567		
	355MB							380	3554	3554	3529	3529			3636	3636		
	355LB								3624	3624	3599	3604			3711	3711		
	400MB							420	3884	3884	-	-			3971	-		
	400MD								3884	3884	-	-			3971	-		
B3..17	315MB	2200	905	1080	1580	525	373	330	-	-	3632	3632	385	840	-	-	3709	
	355MD							-	-	3701	3701	-			-	3778		
	355LB							3806	3806	3771	3771	3868			3853			
	400MB							4066	4066	4031	4031	4128			4113			
	400MD							4066	4066	4031	4031	4128			4113			
B3..18	315LB	2200	935	1110	1610	585	373	330	-	-	3752	3752	385	840	-	-	3829	
	355MB							-	-	3821	3821	-			-	3898		
	355LB							3926	3926	3891	3891	3988			3973			
	400MB							4186	4186	4151	4151	4248			4233			
	400MD							4186	4186	4151	4151	4248			4233			

1) 敬请垂询

2) I₂, I₂^{*}, I₃, I₃^{*}用于Loher标准电机
I₂^{*}, I₃^{*}用于带冷却风扇的齿轮箱
齿轮箱浮动底座的重量请垂询

1) On request

2) I₂, I₂^{*}, I₃, I₃^{*} for Loher standard motors
I₂^{*}, I₃^{*} for gear units with fan
Weight of gear unit swing-base on request

齿轮箱浮动底座，带N-EUPEX联轴器，类型B4，规格13-18

Gear Unit Swing-bases, With N-EUPEX Couplings, Types B4, Sizes 13-18

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表7 / Table 7																
类型规格 Type Size	电机 Motor	e h h ₁ h ₂ l ₁ b ₁						N-EUPEX联轴器 N-EUPEX coupling			带鼓式制动器的N-EUPEX联轴器 N-EUPEX coupling with drum brake					
								b ₂	in=80-180 in=100-224 in=90-200	in=200-315 in=250-400 in=224-355	b ₃	b ₄	in=80-180 in=100-224 in=90-200	in=200-315 in=250-400 in=224-355		
									mm				l ₂ ²⁾	l ₂ ²⁾	l ₃ ²⁾	l ₃ ²⁾
B4..13	180M	1750	705	845	1245	405	295	185	-	2324	210	590	-	2355		
	180L							-	2362	-			2393			
	200L							-	2444	-			2475			
	225S							240	2507	2497			260	665	2554	2554
	225M							2532	2522	2579			2579			
	250M							265	2619	2609			2666	2666		
	280S							300	2693	-			2782	-		
	280M							2744	-	2833			-			
	315SB							330	2889	-			2978	-		
315MB	2940	-	3029	-												
B4..14	180M	1750	725	865	1265	475	295	185	-	2464	210	590	-	2495		
	180L							-	2502	-			2533			
	200L							-	2584	-			2615			
	225S							240	2647	2637			260	665	2694	2694
	225M							2672	2662	2719			2719			
	250M							265	2759	2749			2806	2806		
	280S							300	2833	-			2922	-		
	280M							2884	-	2973			-			
	315SB							330	3029	-			3118	-		
315MB	3080	-	3169	-												
B4..15	200L	2000	810	985	1485	485	340	215	-	2766	210	590	-	2797		
	225S							240	2819	2819			2866			
	225M							2844	2891	2891						
	250M							265	2956	2931			260	665	2995	2978
	280S							300	3030	3005			3111	3094		
	280M							3081	3056	3145			3145			
	315SB							330	3226	-			3290	-		
	315MB							3277	-	3341			-			
	315LB							3277	-	3341			-			
315LB	3399	-	3511	-												
B4..16	200L	2000	830	1005	1505	530	340	215	-	2857	210	590	-	2888		
	225S							240	2910	2910			2957			
	225M							2935	2982	2982						
	250M							265	3047	3022			260	665	3086	3069
	280S							300	3121	3096			3202	3185		
	280M							3172	3147	3236			3236			
	315SB							330	3317	-			3381	-		
	315MB							3368	-	3432			-			
	315MD							3368	-	3432			-			
315LB	3490	-	3602	-												
B4..17	225M	2200	905	1080	1580	525	373	240	-	2932	260	665	-	2979		
	250M							265	3019	3019			3066			
	280S							3118	3093	3199			3182			
	280M							300	3169	3144			3233	3233		
	315SB							3314	3289	3378			3378			
	315MB							330	3365	-			3429	-		
	315MD							3365	-	3429			-			
	315LB							3487	-	3599			-			
	355MB							380	3556	-			3668	-		
355LB	3626	-	3743	-												
B4..18	225M	2200	935	1110	1610	585	373	240	-	3052	260	665	-	3099		
	250M							265	3139	3139			3186			
	280S							3238	3213	3319			3302			
	280M							300	3289	3264			3353	3353		
	315SB							3334	3409	3498			3498			
	315MB							330	3485	-			3549	-		
	315MD							3485	-	3549			-			
	315LB							3607	-	3719			-			
	355MB							380	3676	-			3788	-		
355LB	3746	-	3863	-												

1) 敬请垂询

2) l₂, l₂^{*}, l₃, l₃^{*}用于Loher标准电机
l₂^{*}, l₃^{*}用于带冷却风扇的齿轮箱
齿轮箱浮动底座的重量请垂询

1) On request

2) l₂, l₂^{*}, l₃, l₃^{*} for Loher standard motors
l₂^{*}, l₃^{*} for gear units with fan
Weight of gear unit swing-base on request

齿轮箱浮动底座，带FLUDEX液力耦合器，IEC-电机及相应的联轴器和制动器
 Gear Unit Swing-bases, With FLUDEX Fluid Couplings, IEC Motors and Assigned Couplings and Brakes

K20 013

表 8 / Table 8								
IEC-电机规格 IECmotor Size	FLUDEX- ³⁾ 无延时腔的液力耦合器，启动系数2 Coupling without delay chamber, starting factor 2			FLUDEX- ³⁾ 带延时腔的液力耦合器，启动系数1.5 Coupling with delay chamber, starting factor 1.5				
	类型 / 规格 Type / Size	带鼓式制动器按照 DIN 15 435 with drum brake acc. to DIN 15 435	FLUDEX coupling 类型 / 规格 Type / Size	鼓式制动器规格 Drum brake size	类型 / 规格 Type / Size	带鼓式制动器按照 DIN 15 435 with drum brake acc. to DIN 15 435	FLUDEX coupling 类型 / 规格 Type / Size	鼓式制动器规格 Drum brake size
1500 min ⁻¹								
100	FAD 222	FADB 222	TE 200					
112	FAD 222	FADB 222	TE 200					
132S	FAD 222	FADB 222	TE 200					
132M	FAD 297	FADB 297	TE 200					
160	FAD 297	FADB 297	TE 200	FND 370	FNDB 370	TE 315		
180M	FAD 297	FADB 297	TE 250	FND 370	FNDB 370	TE 315		
180L	FAD 342	FADB 342	TE 250	FND 370	FNDB 370	TE 315		
200	FAD 342	FADB 342	TE 250	FND 370	FNDB 370	TE 315		
225	FAD 395	FADB 395	TE 315	FND 370	FNDB 370	TE 315		
250	FAD 395	FADB 395	TE 315	FND 425	FNDB 425	TE 315		
280	FAD 450	FADB 450	TE 315	FND 425	FNDB 425	TE 315		
315S	FAD 516	FADB 516	TE 400	FND 490	FNDB 490	TE 400		
315M	FAD 516	FADB 516	TE 400	FND 490	FNDB 490	TE 400		
315LB1)	FAD 590	FADB 590	TE 500	FND 565	FNDB 565	TE 500		
355MB1)	FAD 590	FADB 590	TE 500	FND 565	FNDB 565	TE 500		
355LB1)	FAD 590	FADB 590	TE 500	FND 565	FNDB 565	TE 500		

1) Loher电机规格
 3) EOC-断路保护系统请垂询

1) Loher sizes
 3) EOC circuit breaker on request

带制动盘的FLUDEX液力耦合器请垂询

FLUDEX couplings with brake disk on request.

齿轮箱浮动底座，带FLUDEX液力耦合器，类型B3, B4, 规格4-12

Gear Unit Swing-bases, With FLUDEX Fluid Couplings, Types B3, B4, Sizes 4-12

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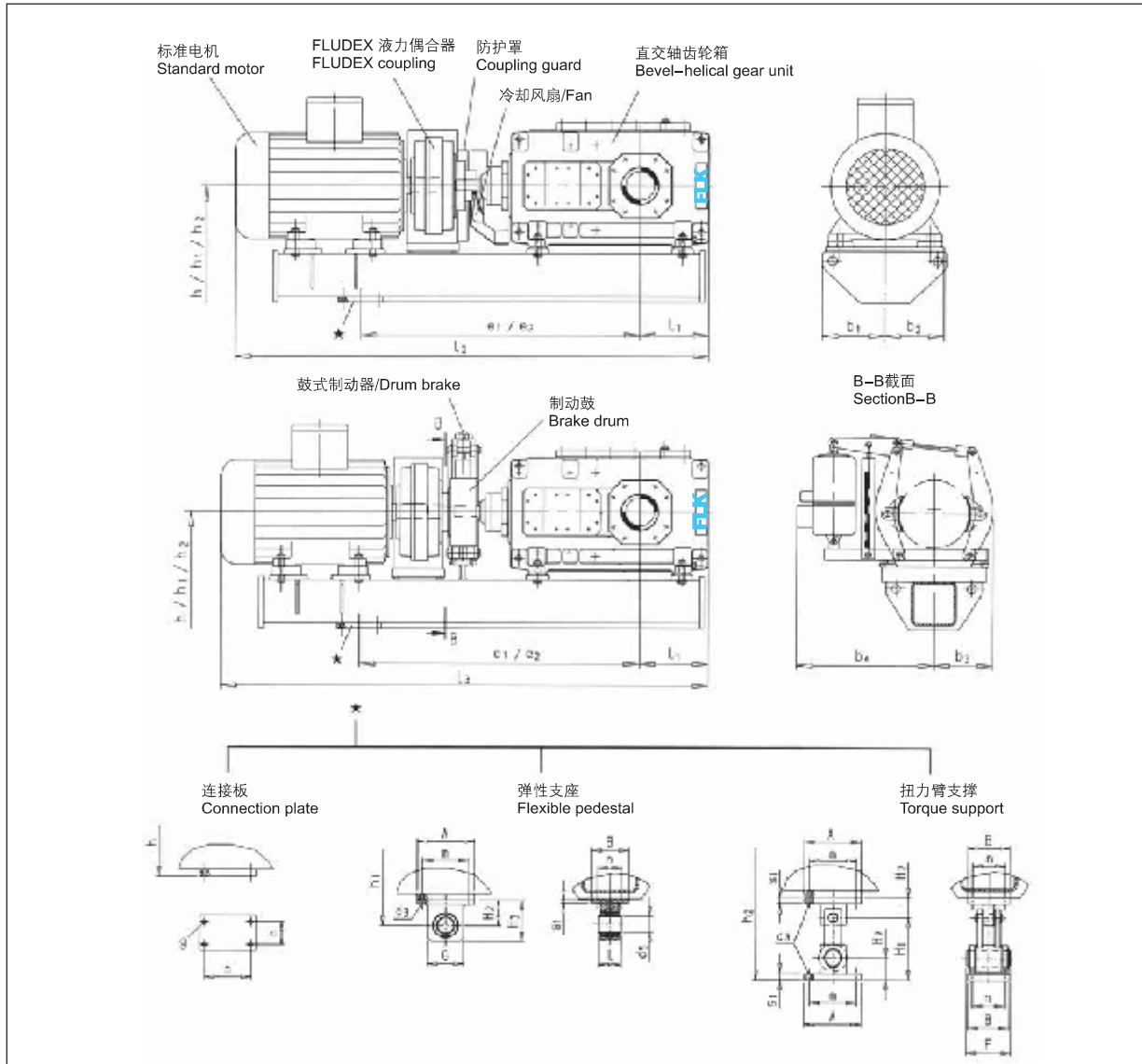


表9 / Table9

规格 Size	衬套 Bush															重量/Weight	
		m mm	n mm	g mm	d ₃ mm	A mm	B mm	d ₅ mm	F mm	G mm	H ₁ mm	H ₂ mm	H ₃ mm	I mm	s ₁ mm	支座 Pedestal kg	扭力臂支撑 Torque support kg
4	069	95	65	M12	15	120	90	25	96	60	180	50	80	56	12	2.1	5.8
5-6	079	120	70	M16	19	160	110	32	116	75	200	65	105	72	15	5.3	11.8
7-10	095	160	120	M16	19	200	160	50	170	110	250	90	145	110	20	16	34
11-12	772	260	130	M16	19	320	200	100	195	180	400	140	230	120	25	50	82

齿轮箱浮动底座，带FLUDEX液力耦合器，类型B4，规格5-12

Gear Unit Swing-bases, With FLUDEX Fluid Couplings, Types B4, Size 5-12

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表 11 / Table 11

类型规格 Type Size	电机 Motor	FLUDEX液力耦合器 FLUDEX coupling											带鼓式制动器的FLUDEX液力耦合器 FLUDEX coupling with drum brake						
		e ¹⁾	e ²⁾	h	h ₁	h ₂	l ₁	b ₁	b ₂	in=80-180 in=100-224		in=200-315 in=250-400		b ₃ ⁶⁾	b ₃ ⁶⁾	in=80-180 in=100-224		in=200-315 in=250-400	
										f _A =2 ⁴⁾	f _A =1.5 ⁴⁾	f _A =2 ⁴⁾	f _A =1.5 ⁴⁾			f _A =2 ⁴⁾	f _A =1.5 ⁴⁾	f _A =2 ⁴⁾	f _A =1.5 ⁴⁾
l ₂ ²⁾	l ₂ ²⁾	l ₂ ²⁾	l ₂ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾				
B4..5	100LD	950	1250	450	515	715	205	185	115	-	-	1338	-	170	470	-	-	1375	-
	112M								130	1349	-	1344	-			1386	-	1381	-
	132S								145	1376	-	1371	-			1413	-	1413	-
	132M								146	1467	-	1462	-			1498	-	1498	-
	160M								170	1528	1744	-	-			1569	1831	-	-
	160L								172	1572	1788	-	-			1613	1875	-	-
	180M								185	1589	1810	-	-			1635	1897	-	-
B4..6	100LD	1000	1300	450	515	715	250	185	115	-	-	1418	-	170	470	-	-	1455	-
	112M								130	1429	-	1424	-			1466	-	1461	-
	132S								145	1456	-	1451	-			1493	-	1493	-
	132M								146	1547	-	1542	-			1578	-	1578	-
	160M								170	1626	1824	-	-			1649	1911	-	-
	160L								172	1652	1868	-	-			1693	1955	-	-
	180M								185	1669	1890	-	-			1715	1977	-	-
B4..7	132S	1050	1350	540	630	880	250	215	145	-	-	1536	-	170	470	-	-	1568	-
	132M								146	1637	-	1627	-			1670	-	1653	-
	160M								170	1698	1899	1688	1899			1724	1986	1724	1986
	160L								172	1742	1943	1732	1943			1768	2030	1768	2030
	180M								185	1759	1965	-	-			1790	2052	-	-
	180L								186	1835	2003	-	-			1886	2090	-	-
	200L								215	1917	2085	-	-			1968	2172	-	-
B4..8	132S	1100	1400	540	630	880	310	215	145	-	-	1641	-	170	470	-	-	1673	-
	132M								146	1742	-	1732	-			1775	-	1758	-
	160M								170	1803	2004	1793	2004			1829	2091	1829	2091
	160L								172	1847	2048	1837	2048			1873	2135	1873	2135
	180M								185	1864	2070	-	-			1895	2157	-	-
	180L								186	1940	2108	-	-			1991	2195	-	-
	200L								215	2022	2190	-	-			2073	2277	-	-
B4..9	132M	1250	1500	630	720	970	300	260	145	-	-	1792	-	170	470	-	-	1818	-
	160M								170	-	-	1853	2064			-	-	1889	2151
	160L								172	1897	2118	1897	2108			1938	2195	1933	2195
	180M								185	1914	2140	1914	2130			1955	2217	1955	2217
	180L								186	1990	2178	1990	2168			2051	2255	2051	2255
	200L								215	2072	2260	-	-			2133	2337	-	-
	225S								240	2118	2282	-	-			2181	2359	-	-
	225M								241	2143	2307	-	-			2206	2384	-	-
	250M								305	2229	2451	-	-			2292	2533	-	-
B4..10	132M	1300	1550	630	720	970	350	260	145	-	-	1892	-	170	470	-	-	1918	-
	160M								170	-	-	1953	2164			-	-	1989	2251
	160L								172	1997	2218	1997	2208			2038	2295	2033	2295
	180M								185	2014	2240	2014	2230			2055	2317	2055	2317
	180L								186	2090	2278	2090	2268			2151	2355	2151	2355
	200L								215	2172	2360	-	-			2233	2437	-	-
	225S								240	2218	2382	-	-			2281	2459	-	-
	225M								241	2243	2407	-	-			2306	2484	-	-
	250M								305	2329	2551	-	-			2392	2633	-	-
B4..11	160L	1450	1650	740	880	1280	345	270	170	-	-	2132	2333	170	470	-	-	2153	2410
	180M								185	-	-	2149	2355			-	-	2170	2432
	180L								215	2245	2413	2225	2393			2271	2470	2266	2470
	200L								216	2227	2495	2307	2475			2353	2552	2348	2552
	225S								240	2343	2517	2332	2497			2396	2574	2395	2574
	225M								241	2368	2542	-	-			2421	2599	-	-
	250M								265	2455	2686	-	-			2508	2748	-	-
	280S								300	2557	2760	-	-			2614	2822	-	-
	280M								310	2608	2811	-	-			2665	2873	-	-
B4..12	160L	1500	1700	740	880	1280	430	270	170	-	-	2287	2488	170	470	-	-	2308	2565
	180M								185	-	-	2306	2510			-	-	2325	2587
	180L								215	2400	2568	2380	2548			2426	2625	2421	2625
	200L								216	2482	2650	2462	2630			2508	2707	2503	2707
	225S								240	2498	2672	2487	2652			2551	2729	2550	2729
	225M								241	2523	2697	-	-			2576	2754	-	-
	250M								265	2610	2841	-	-			2663	2903	-	-
	280S								300	2712	2915	-	-			2769	2977	-	-
	280M								310	2763	2966	-	-			2820	3028	-	-

- 1) 敬请垂询
- 2) l₂, l₂^{*}, l₃, l₃^{*}用于Loher标准电机
l₂^{*}用于带冷却风扇的齿轮箱。同时带冷却风扇和带鼓式制动器的齿轮箱请垂询。
- 3) f_A=启动系数
- 4) 对于f_A=2和f_A=1.5，从电机规格225S起；
f_A=1.5至电机规格200L； b₃=260mm, b₄=610mm
- 5) 尺寸e₁用于无延时腔的FLUDEX-液力耦合器 (f_A=2)；
无延时腔带鼓式制动器的FLUDEX-液力耦合器 (f_A=2)；
尺寸e₂用于带延时腔的FLUDEX-液力耦合器 (f_A=1.5)；
带延时腔和带鼓式制动器的FLUDEX-液力耦合器 (f_A=1.5)。
齿轮箱浮动底座的重量请垂询
- 6) 1) On request
2) l₂, l₂^{*}, l₃, l₃^{*} for Loher standard motors
l₂^{*} for gear units with fan. Gear units with fan and drum brake on request.
4) f_A=starting factor
5) For f_A=2; for f_A=1.5 from motor size 225 S up;
f_A=1.5 up to motor size 200 L; b₃=260mm, b₄=610mm
6) e₁ dimension for FLUDEX coupling without delay chamber (f_A=2); FLUDEX coupling without delay chamber with drum brake (f_A=2);
e₂ dimension or FLUDEX coupling with delay chamber (f_A=1.5); FLUDEX coupling with delay chamber and drum brake (f_A=1.5);
Weight of gear unit swing-base on request

齿轮箱浮动底座，带FLUDEX液力耦合器，类型B3, B4，规格13-18
 Gear Unit Swing-bases, With FLUDEX Fluid Couplings, Types B3, B4, Sizes 13-18

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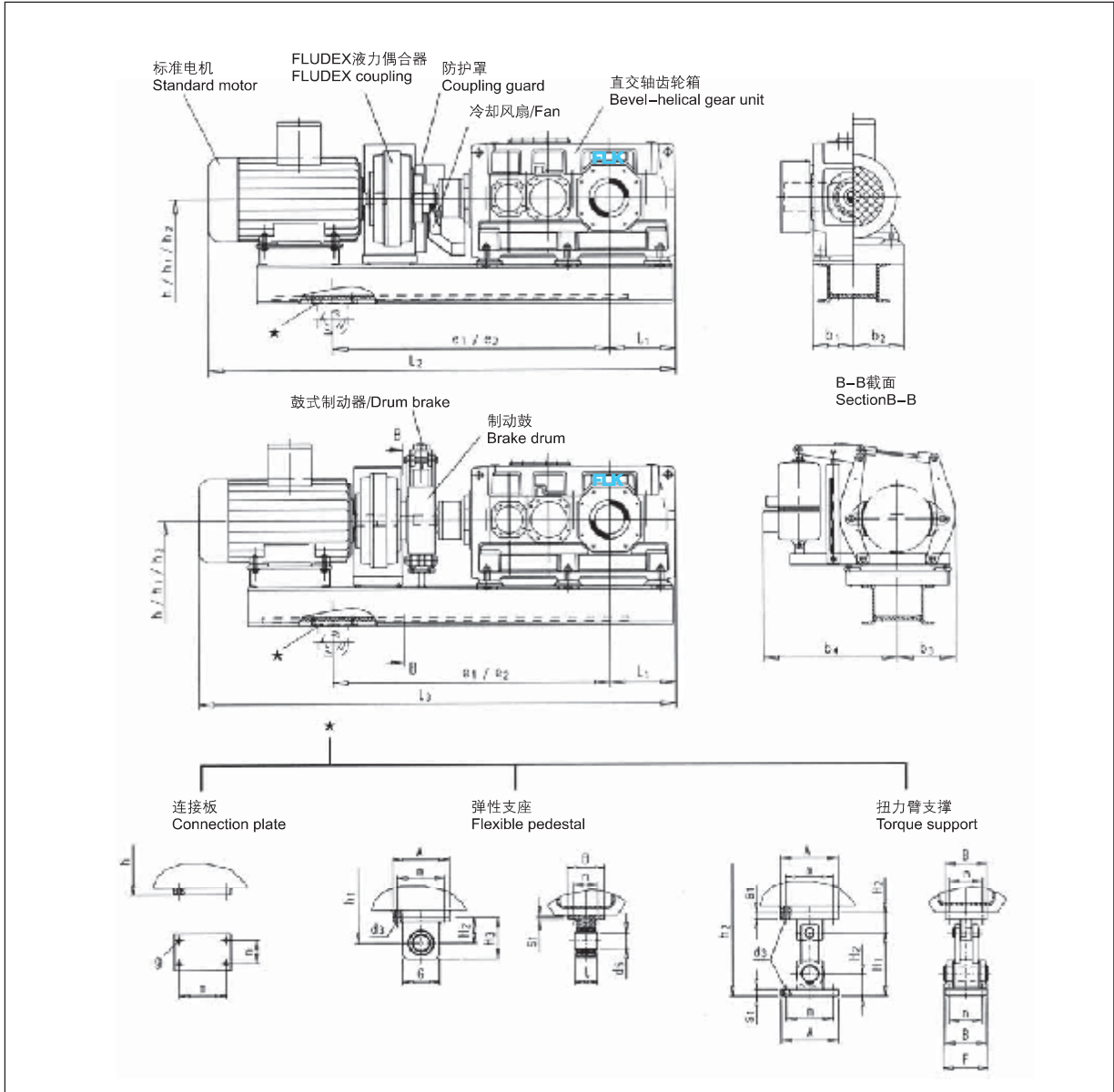


表12 / Table 12

规格 Size	衬套 Bush															重量/Weight	
		m mm	n mm	g mm	d ₃ mm	A mm	B mm	d ₅ mm	F mm	G mm	H ₁ mm	H ₂ mm	H ₃ mm	I mm	s ₁ mm	支座 Pedestal kg	扭力臂支撑 Torque support kg
13-14	772	260	65	√19	19	320	200	100	195	180	400	140	230	120	25	50	82
15-18	805	320	70	√24	24	400	300	124	320	240	500	175	285	230	30	95	220

齿轮箱浮动底座，带FLUDEX液力耦合器，类型B3，规格13-18
 Gear Unit Swing-bases, With FLUDEX Fluid Couplings, Type B3, Sizes 13-18

K20 013

类型规格 Type Size	电机 Motor									FLUDEX液力耦合器 FLUDEX coupling								带鼓式制动器的FLUDEX液力耦合器 FLUDEX coupling with drum brake					
		e1 ⁽⁶⁾	e2 ⁽⁶⁾	h	h1	h2	l1	b1	b2	in=12.5-45				in=50-71				b3 ⁽⁵⁾	b4 ⁽⁵⁾	in=12.5-45		in=50-71	
										in=16-56		in=14-50		in=63-90		in=56-80				in=16-56		in=63-90	
										in=14-50		in=56-80		in=56-80		in=56-80				fa=2 ⁽⁴⁾	fa=1.5 ⁽⁴⁾	fa=2 ⁽⁴⁾	fa=1.5 ⁽⁴⁾
								mm															
B3..13	280M	1900	2150	705	845	1245	405	295	300	-	-	-	-	2823	2823	3026	3026	260	665	-	-	2862	3070
	315SB								-	-	-	-	2974	2994	3189	3189	310	765	-	-	3027	3248	
	315MB								3050	3050	3265	3265	3025	3045	3240	3240	310	776	3093	3314	3078	3299	
	315MD								3050	3050	3265	3265	3025	3045	3240	3240	310	776	3093	3314	3078	3299	
	315LB								3205	3205	3444	3444	3180	3200	3419	3419	310	776	3272	3527	3272	3527	
	355MB								3274	3274	3513	3513	-	-	-	-	385	840	3341	3596	-	-	
355LB	3344	3344	3583	3583	-	-	-	-	385	840	3411	3666	-	-									
B3..14	280M	1900	2150	725	865	1265	475	295	300	-	-	-	-	2963	2963	3166	3166	260	665	-	-	3002	3210
	315SB								-	-	-	-	3114	3134	3329	3329	310	765	-	-	3167	3388	
	315MB								3190	3190	3405	3405	3165	3185	3380	3380	310	765	3233	3454	3218	3439	
	315MD								3190	3190	3405	3405	3165	3185	3380	3380	310	765	3233	3454	3218	3439	
	315LB								3345	3345	3584	3584	3320	3340	3559	3559	385	840	3412	3667	3412	3667	
	355MB								3414	3414	3653	3653	-	-	-	-	385	840	3481	3736	-	-	
355LB	3484	3484	3723	3723	-	-	-	-	385	840	3551	3806	-	-									
B3..15	315MB	2200	2450	810	985	1485	485	340	330	-	-	-	-	3347	3367	3562	3562	310	765	-	-	3400	3621
	315MD								-	-	-	-	3347	3367	3562	3562	310	765	-	-	3400	3621	
	315LB								-	-	-	-	3502	3522	3741	3741	385	840	-	-	3594	3849	
	355MB								3596	3596	3835	3835	3571	3591	3810	3810	385	840	3663	3918	3663	3918	
	355LB								3666	3666	3905	3905	3641	3661	3880	3880	385	840	3733	3988	3733	3988	
	315MB								-	-	-	-	3438	3458	3653	3653	310	765	-	-	3491	3712	
B3..16	315MD	2200	2450	830	1005	1505	530	340	330	-	-	-	-	3438	3458	3653	3653	310	765	-	-	3491	3712
	315LB								-	-	-	-	3438	3458	3653	3653	310	765	-	-	3491	3712	
	355MB								-	-	-	-	3593	3613	3832	3832	385	840	-	-	3685	3940	
	355LB								3687	3687	3926	3926	3662	3682	3901	3901	385	840	3754	4009	3754	4009	
	315MB								3757	3757	3996	3996	3732	3752	3971	3971	385	840	3824	4079	3824	4079	
	315LB								-	-	-	-	3765	3765	4004	4004	385	840	-	-	3827	4082	
B3..17	355MB	2500	2750	905	1080	1580	525	373	380	-	-	-	-	3834	3834	4073	4073	385	840	-	-	3896	4151
	355LB								3939	3939	4178	4178	3904	3904	4143	4143	385	840	3981	4236	3966	4221	
	315MB								-	-	-	-	3885	3885	4124	4124	385	840	-	-	3947	4202	
	315LB								-	-	-	-	3954	3954	4193	4193	385	840	-	-	4016	4271	
	355MB								4059	4059	4298	4298	4024	4024	4263	4263	385	840	4101	4356	4086	4341	
	355LB								-	-	-	-	-	-	-	-	385	840	-	-	-	-	

类型B4，规格13-14 Type B4, Sizes 13-14

类型规格 Type Size	电机 Motor									FLUDEX液力耦合器 FLUDEX coupling				带鼓式制动器的FLUDEX液力耦合器 FLUDEX coupling with drum brake							
		e1 ⁽⁶⁾	e2 ⁽⁶⁾	h	h1	h2	l1	b1	b2	in=80-180		in=200-315		b3 ⁽⁵⁾	b4 ⁽⁵⁾	in=80-180		in=200-315			
										in=100-224		in=250-400				in=80-180		in=250-400			
										in=90-200		in=224-355				fa=2 ⁽⁴⁾	fa=1.5 ⁽⁴⁾	fa=2 ⁽⁴⁾	fa=1.5 ⁽⁴⁾	fa=2 ⁽⁴⁾	fa=1.5 ⁽⁴⁾
								mm													
B4..13	180M	1700	1900	705	845	1245	405	295	185	-	-	-	-	2389	2595	210	590	-	-	2395	2652
	180L								-	-	-	-	2465	2633	210	590	-	-	2491	2690	
	200L								-	-	-	-	2547	2715	210	590	-	-	2573	2772	
	225S								2572	2747	2562	2737	2615	2794	2615	2794	2615	2794	2615	2794	
	225M								2597	2772	2587	2762	2640	2819	2640	2819	2640	2819	2640	2819	
	250M								2684	2916	2674	2906	2727	2968	2727	2968	2727	2968	2727	2968	
	280S								2787	2990	-	-	2834	3042	-	-	2834	3042	-	-	
	280M								2838	3041	-	-	2885	3093	-	-	2885	3093	-	-	
	315SB								3004	3204	-	-	3072	3293	-	-	3072	3293	-	-	
	315MB								3055	3255	-	-	3123	3344	-	-	3123	3344	-	-	
B4..14	180M	1700	1900	725	865	1265	475	295	185	-	-	-	-	2529	2735	210	590	-	-	2535	2792
	180L								-	-	-	-	2605	2773	210	590	-	-	2631	2830	
	200L								-	-	-	-	2687	2855	210	590	-	-	2713	2912	
	225S								2712	2887	2702	2877	2755	2934	2755	2934	2755	2934	2755	2934	
	225M								2737	2912	2727	2902	2780	2959	2780	2959	2780	2959	2780	2959	
	250M								2824	3056	2814	3046	2867	3108	2867	3108	2867	3108	2867	3108	
	280S								2927	3130	-	-	2974	3182	-	-	2974	3182	-	-	
	280M								2978	3181	-	-	3025	3233	-	-	3025	3233	-	-	
	315SB								3114	3344	-	-	3212	3433	-	-	3212	3433	-	-	
	315MB								3195	3395	-	-	3263	3484	-	-	3263	3484	-	-	

齿轮箱浮动底座，带FLUDEX液力耦合器，类型B4，规格15-18

Gear Unit Swing-bases, WithFLUDEX Fluid Couplings, TypeB4, Sizes 15-18

K20-013

表 14 / Table 14		FLUDEX液力耦合器 FLUDEX coupling										带鼓式制动器的FLUDEX液力耦合器 FLUDEX coupling with drum brake											
类型规格 Type Size	电机 Motor	e ₁ ⁶⁾	e ₂ ⁶⁾	h	h ₁	h ₂	l ₁	b ₁	b ₂	in=80-180 in=100-224 in=90-200				in=200-315 in=250-400 in=224-355				b ₃ ⁵⁾	b ₄ ⁵⁾	in=80-180 in=100-224 in=90-200		in=200-315 in=250-400 in=224-355	
										f _A =2 ⁴⁾		f _A =1.5 ⁴⁾		f _A =2 ⁴⁾		f _A =1.5 ⁴⁾				f _A =2 ⁴⁾	f _A =1.5 ⁴⁾	f _A =2 ⁴⁾	f _A =1.5 ⁴⁾
										l ₂ ²⁾	l ₂ ²⁾	l ₂ ²⁾	l ₂ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾	l ₃ ²⁾						
		mm																					
B4..15	200L	2000	2200	810	985	1485	485	340	215	-	-	2869	3037	210	590	-	-	2895	3084				
	225S								240	-	-	2884	3059	260	665	-	-	2927	3106				
	225M								265	-	-	2909	3084			-	-	2952	3131				
	250M								300	3021	3253	2996	3228			3056	3297	3039	3280				
	280S								300	3124	3327	3099	3302	3163	3371	3146	3354						
	280M								300	3175	3378	3150	3353	3214	3422	3197	3405						
	315SB								330	3326	3541	-	-	3384	3605	-	-						
	315MB									3377	3592	-	-	3435	3656	-	-						
	315MD									3377	3592	-	-	3435	3656	-	-						
315LB	3532	3771	-	-	385	840	3629	3884	-	-													
B4..16	200L	2000	2200	830	1005	1505	530	340	215	-	-	2960	3128	210	590	-	-	2986	3175				
	225S								240	-	-	2975	3150	260	665	-	-	3018	3197				
	225M								265	3112	3344	3087	3319			-	-	3043	3222				
	250M								300	3215	3418	3190	3393			3147	3388	3130	3371				
	280S								300	3266	3469	3241	3444	3254	3462	3237	3445						
	280M								300	3417	3632	-	-	3305	3513	3288	3496						
	315SB								330	3475	3696	-	-	3475	3696	-	-						
	315MB									3468	3683	-	-	3526	3747	-	-						
	315MD									3468	3683	-	-	3526	3747	-	-						
315LB	3623	3862	-	-	385	840	3720	3975	-	-													
B4..17	225M	2200	2400	905	1080	1580	525	373	240	-	-	2997	3172	260	665	-	-	3040	3219				
	250M								265	-	-	3084	3316			-	-	3127	3368				
	280S								300	3212	3415	3187	3390			3251	3459	3234	3442				
	280M								300	2363	3466	3238	3441	3302	3510	3285	3493						
	315SB								330	3414	3629	3404	3604	3472	3693	3472	3693						
	315MB									3465	3680	-	-	3523	3744	-	-						
	315MD									3465	3680	-	-	3523	3744	-	-						
	315LB								3620	3859	-	-	3717	3972	-	-							
	355MB								380	3689	3928	-	-	3786	4041	-	-						
355LB	3759	3998	-	-	3856	4111	-	-															
B4..18	225M	2200	2400	935	1110	1610	585	373	240	-	-	3117	3292	260	665	-	-	3160	3339				
	250M								265	-	-	3204	3436			-	-	3247	3488				
	280S								300	3332	3535	3307	3510			3371	3579	3354	3562				
	280M								300	3383	3586	3358	3561	3422	3630	3405	3613						
	315SB								330	3534	3749	3524	3724	3592	3813	3592	3813						
	315MB									3585	3800	-	-	3643	3864	-	-						
	315MD									3585	3800	-	-	3643	3864	-	-						
	315LB								3740	3979	-	-	3837	4092	-	-							
	355MB								380	3809	4048	-	-	3906	4161	-	-						
355LB	3879	4118	-	-	3976	4231	-	-															

- 1) 敬请垂询
- 2) l₂, l₂^{*}, l₃, l₃^{*}用于Loher标准电机
l₂^{*}用于带冷却风扇的齿轮箱。同时带冷却风扇和带鼓式制动器的齿轮箱请垂询。
- 4) f_A=启动系数
- 5) 对于f_A=2和f_A=1.5, 从电机规格225S起;
f_A=1.5至电机规格200L;
b₃=260mm, b₄=610mm
- 6) 尺寸e₁用于无延时腔的FLUDEX-液力耦合器 (f_A=2);
无延时腔带鼓式制动器的FLUDEX-液力耦合器(f_A=2);
尺寸e₂用于带延时腔的FLUDEX-液力耦合器(f_A=1.5);
带延时腔和带鼓式制动器的FLUDEX-液力耦合器(f_A=1.5);
齿轮箱浮动底座的重量请垂询

- 1) On request
- 2) l₂, l₂^{*}, l₃, l₃^{*} for Loher standard motors
l₂^{*} for gear units with fan. Gear units with fan and drum brake on request.
- 4) f_A=starting factor
- 5) For f_A=2; for f_A=1.5 from motor size 225 S up;
f_A=1.5 up to motor size 200 L;
b₃=260mm, b₄=610mm
- 6) e₁ dimension for FLUDEX coupling without delay chamber(f_A=2); FLUDEX coupling without delay chamber with drum brake(f_A=2);
e₂ dimension or FLUDEX coupling with delay chamber(f_A=1.5); FLUDEX coupling with delay chamber and drum brake(f_A=1.5);
Weight of gear unit swing-base on request

特殊安装位置，规格4-18

Special Mounting Positions, Sizes 4-18

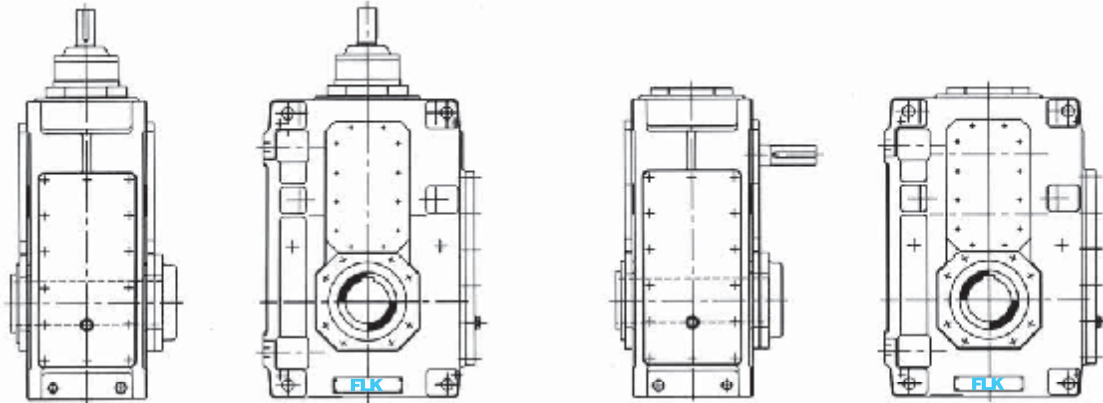
K20-017

对于下图所示的特殊安装位置MRD也可以提供H2...、H3...、H4...、B2...、B3...和B4类型的齿轮箱。

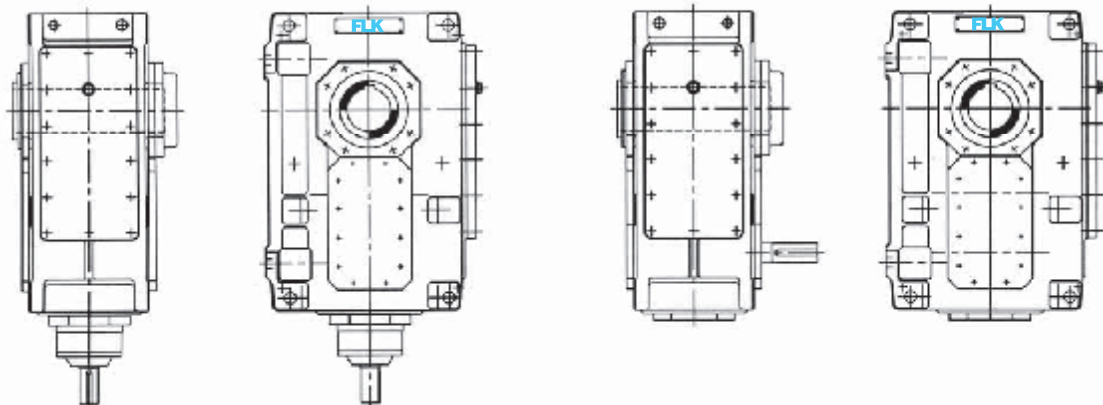
例如这些齿轮箱可以采用带扭力臂支撑的轴装式或脚支座来安装。润滑油供给方式请参考表2

MRD gear units of types H2...、H3...、H4...、B2...、B3...and B4...are also available for the special mounting positions illustrated below. They can be installed, for example, as shaft-mounted gear unit with torque support or by means of base rails. For oil supply, take into account table 2.

安装位置:输入轴d₁在上部
Mounting position: Shaft d₁ upward

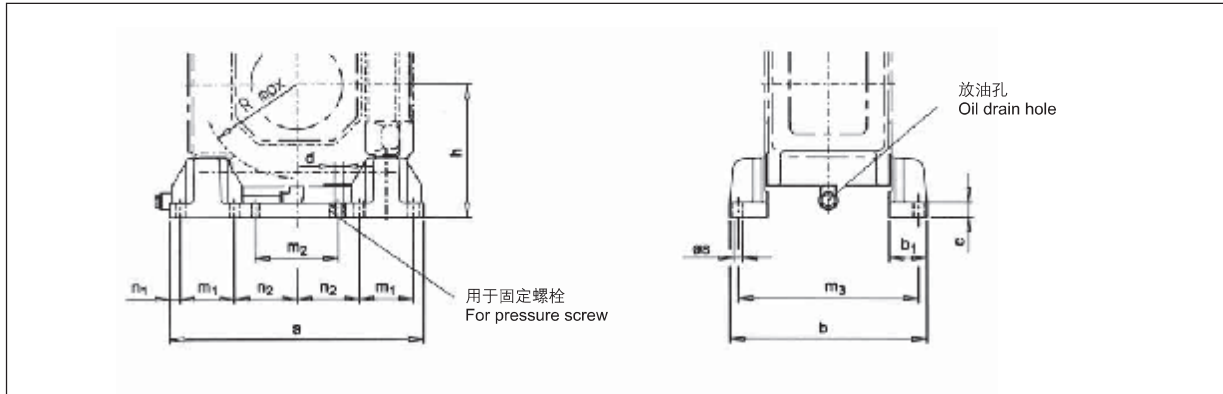


安装位置:输入轴d₁在下部
Mounting position: Shaft d₁ downward



特殊安装位置，齿轮箱脚支座，规格4-18 Special Mounting Positions, Housing Base Rails, Sizes 4-18

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规格 Size	H2, H3, H4, B2, B3, B4											H2, H3, H4, B3, B4		B2	
	a	b ₁	c	4 x d	h	m ₁	m ₂	n ₁	n ₂	8 x φ s	Rmax	b	m ₃	b	m ₃
	mm														
4	450	75	28	M 16	255	110	130	20	95	19	160	355	315	-	-
5	510	75	28	M 16	270	110	170	20	125	19	190	395	355	460	420
6					315						220				
7	610	90	35	M 20	325	130	200	25	150	24	230	470	420	550	500
8					385						270				
9	710	110	40	M 24	380	160	230	30	165	28	260	580	520	650	590
10					430						300				
11	860	120	50	M 30	435	190	270	35	205	35	340	660	590	760	690
12					520						380				
13	965	100	60	M 30	430	260	230	37.5	185	35	300	745	665	850	770
14					500						360				
15	1060	110	70	M 36	505	300	190	45	185	42	350	840	750	980	890
16					550						400				
17	1210	125	80	M 42	550	340	250	55	210	48	390	930	820	1125	1015
18					610						440				

规格 Size	H2	H3	H4	B2	B3	B4
4-12	浸油润滑 Dip lubrication	带补油箱 的浸油润滑 Dip lubrication with oil compensating tank	带补油箱 的浸油润滑 Dip lubrication with oil compensating tank	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump
13-18	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带电动泵 的强制润滑 Forced lubrication with motor pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带电动泵 的强制润滑 Forced lubrication with motor pump

请注意提供供油设备(油泵, 油管等.....)的安装空间!
具体尺寸请垂询

Take into account space required for oil supply elements (pump, pipes, etc.)!
Dimensions on request.

水处理用螺旋输送机, 类型B3SH, 规格4-12
For Water Screws, Type B3SH, Sizes 4-12

K20-015

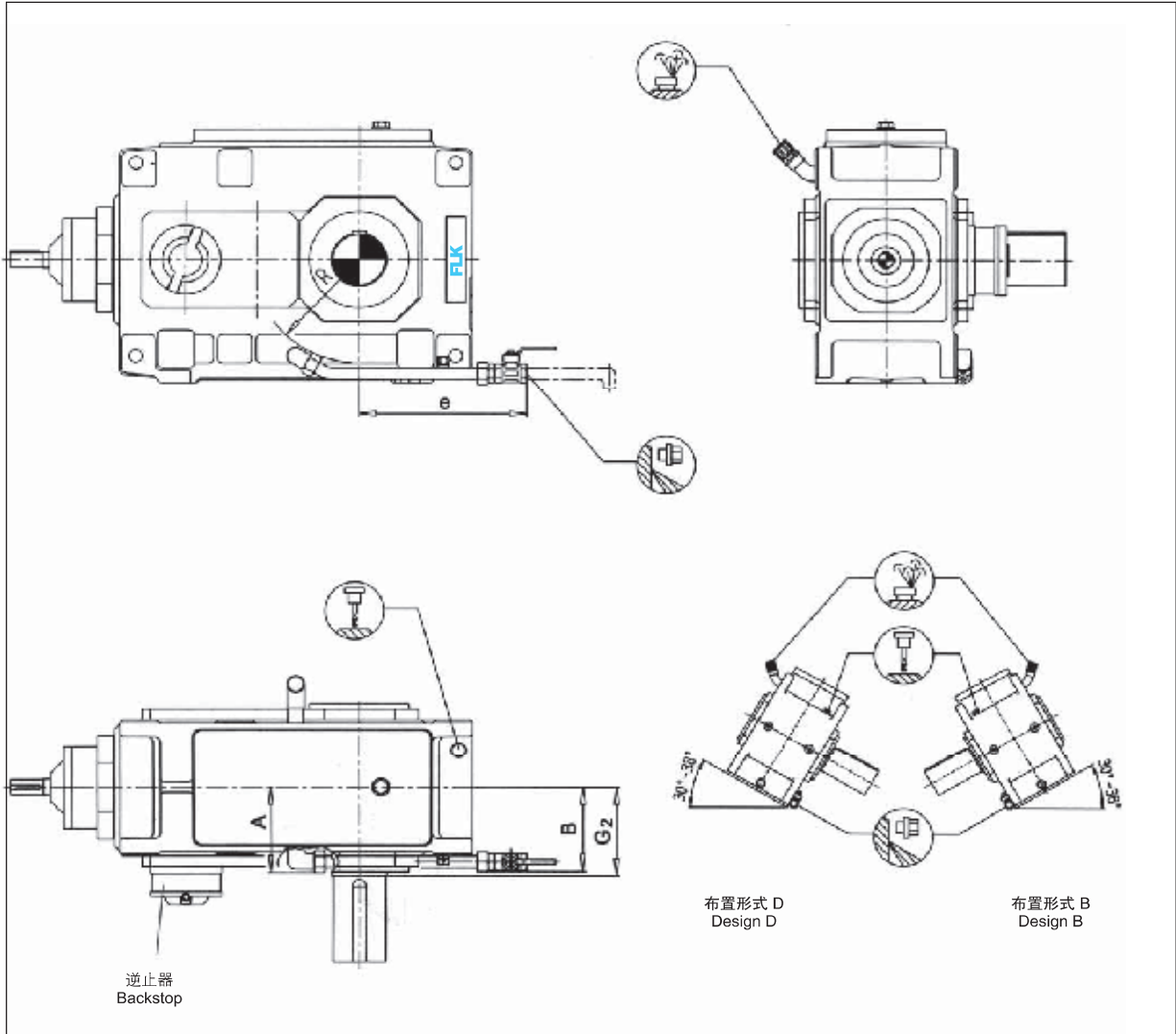


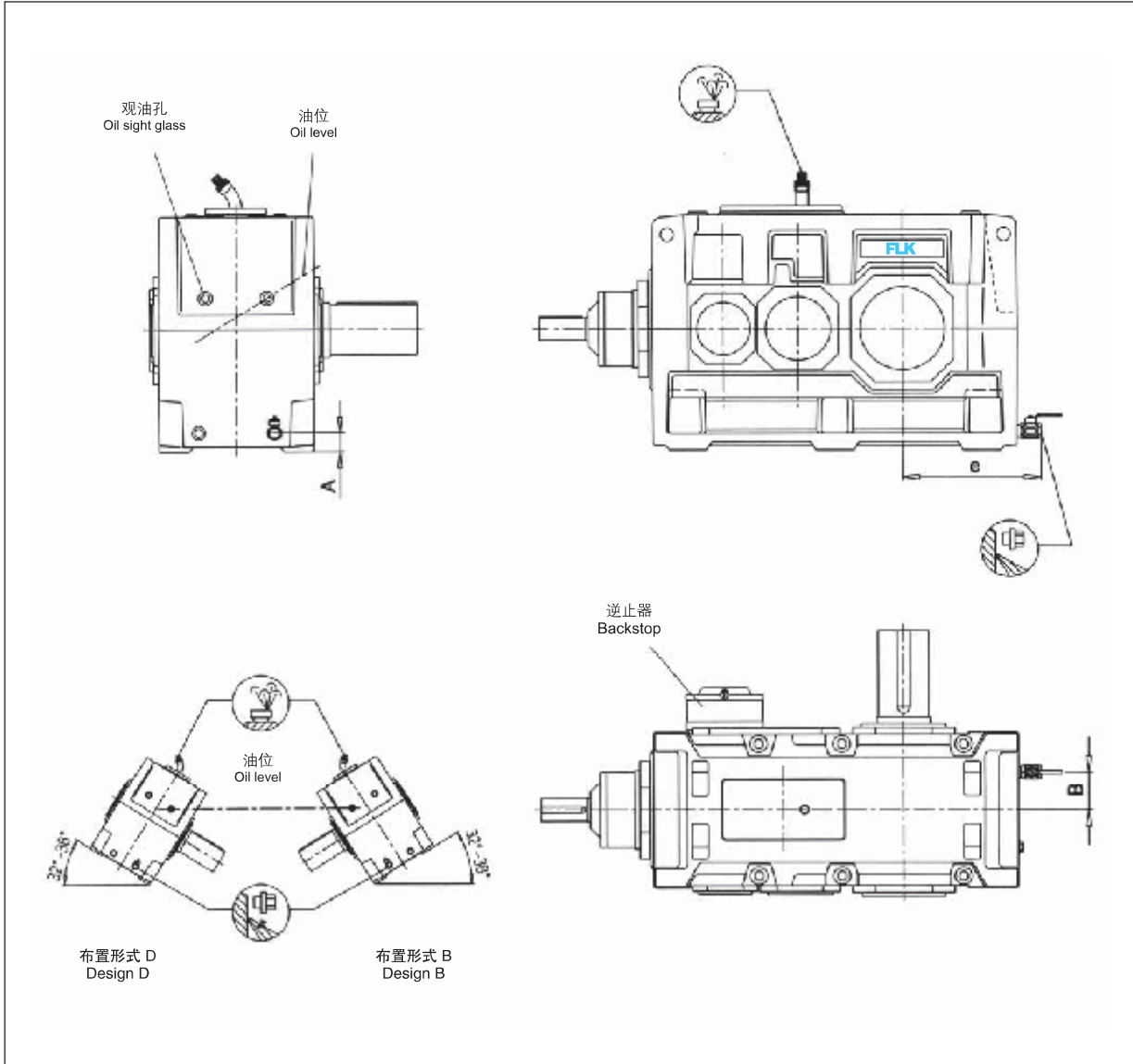
表 1 / Table 1

类型 Type	规格 size	A mm	B mm	G ₂ mm	e mm	泄油阀 Oil drain valve	R mm
B3SH	4	145	135	140	285	G 3/4	125
	5	160	156.5	165	305	G 3/4	-
	6				345		-
	7	190	185	195	360	G 1	-
	8				420		-
	9	220	220	235	410	G 1	-
	10				460		-
	11				465		-
12	258	260	270	550	G 1 1/4	-	

水处理用螺旋输送机，类型B3SH，规格13-18

For Water Screws, Type B3SH, Sizes 13-18

K20-015

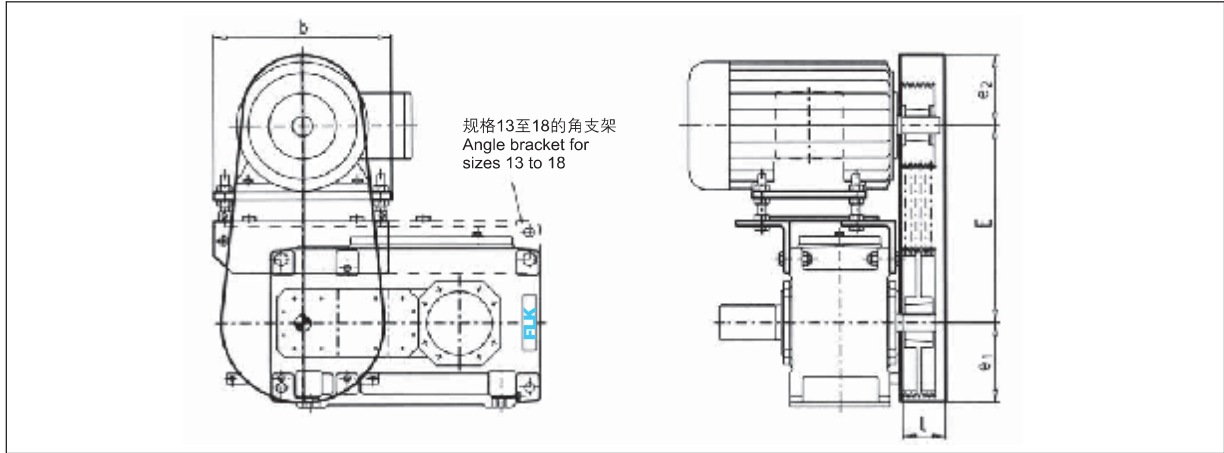


类型 Type	规格 size	A mm	B mm	e mm	泄油阀 Oil drain valve
B3SH	13	67	135	500	G 1 1/4
	14			570	
	15	80	150	610	G 2
	16			655	
	17			650	
18	85	180	710	G 2	

电机支架，卧式安装，类型H3.H，规格5-10

Motor Brackets, Horizontal, Type H3.H, Sizes 5-10

K20/008



类型规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e ₁ mm	e ₂ mm	l mm
H3.H 05	132S	71-90	1.25	89-162	SPZ 140	2	390	493	180	177	120
	132M	50-90	1.4	63-162	SPZ 140	3	390	493	180	177	120
	160M	35.5-71	1.6	44-128	SPZ 180	3	390	530	180	140	120
	160L	25-50	1.8	31-90	SPA 180	3	390	530	180	140	120
H3.H 06	132S	90-112	1.25	113-202	SPZ 140	2	390	493	180	177	120
	132M	63-112	1.4	79-202	SPZ 140	3	390	493	180	177	120
	160M	45-90	1.6	56-162	SPZ 180	3	390	530	180	140	120
	160L	31.5-71	1.8	39-128	SPA 180	3	390	530	180	140	120
H3.H 07	160M	63-90	1.25	79-162	SPZ 180	3	460	586	250	224	120
	160L	50-90		63-162	SPA 180	3	460	586	250	224	120
	180M	40-71	1.4	50-128	SPA 250	3	460	626	250	184	120
	180L	31.5-63	1.6	39-113	SPA 250	3	460	626	250	184	120
	200L	25-45	1.8	31-54	SPB 280	3	570	680	200	200	150
H3.H 08	225S	25-40	1.25	31-50	SPB 280	3	570	680	200	200	150
	160M	80-112		100-202	SPZ 180	3	460	586	250	224	120
	160L	63-112	1.4	79-202	SPA 180	3	460	586	250	224	120
	180M	50-90	1.6	63-162	SPA 250	3	460	626	250	184	120
	180L	40-80	1.8	50-144	SPA 250	3	460	626	250	184	120
H3.H 09	200L	31.5-56	1.25	39-70	SPB 280	3	570	680	200	200	150
	225S	31.5-50		39-63	SPB 280	3	570	680	200	200	150
	160L	80-90	1.4	100-162	SPA 180	3	460	615	250	235	135
	180M	71-90	1.6	89-162	SPA 250	3	460	664	250	186	135
	180L	56-90	1.8	70-162	SPA 250	3	460	664	250	186	135
	200L	40-80	39-113	SPB 280	3	570	747	275	203	150	
H3.H 10	225M	31.5-63	1.25	35-90	SPB 280	4	570	750	275	200	150
	225S	28-50		31-81	SPB 315	4	660	804	305	226	150
	250M	25-45	1.4	125-202	SPA 180	3	460	615	250	235	135
	160L	100; 112		100-202	SPA 250	3	460	664	250	186	135
	180M	80-112	1.6	89-202	SPA 250	3	460	664	250	186	135
	180L	71-112	1.8	63-180	SPB 280	3	570	747	275	203	150
	200L	50-100	39-113	SPB 280	4	570	750	275	200	150	
225M	40-80	39-101	SPB 315	4	660	804	305	226	150		

电机支架，卧式安装，类型H3.H，规格11-18
Motor Brackets, Horizontal, Type H3.H, Sizes 11-18

K20/008

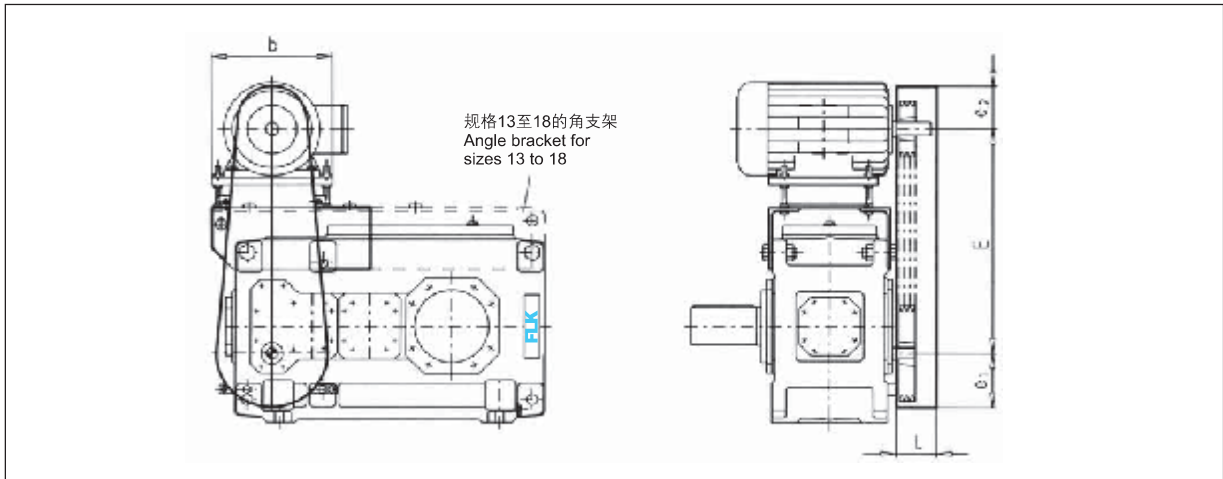
类型规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No.of belts	b mm	E mm	e ₁ mm	e ₂ mm	l mm
H3.H 11	200L	71-90	1.25 1.4 1.6 1.8	89-162	SPB280	3	570	825	275	200	150
	225S	56-90		70-162	SPB280	3	570	825	275	200	150
	225M	50-90		63-162	SPB280	4	570	825	275	200	150
	250M	40-71		50-128	SPB315	4	720	897	305	268	150
	280S	31.5-56		39-101	SPB315	5	720	938	305	227	150
	280M	25-45		31-81	SPB315	6	720	938	305	227	150
H3.H 12	315S	25-35.5		31-64	SPC355	5	810	1001	340	249	180
	200L	90-112	1.25 1.4 1.6 1.8	113-202	SPB280	3	570	825	275	200	150
	225S	71-112		89-202	SPB280	3	570	825	275	200	150
	225M	63-112		79-202	SPB280	4	570	825	275	200	150
	250M	50-90		63-162	SPB315	4	720	897	305	268	150
	280S	35.5-63		44-113	SPB315	5	720	938	305	227	150
280M	31.5-56	39-101		SPB315'	6	720	938	305	227	150	
H3.H 13	315S	31.5-45		39-81	SPC355	5	810	1001	340	249	180
	225M	80; 90	1.25 1.4 1.6 1.8	100-162	SPB280	4	570	881	275	199	175
	250M	63-90		79-162	SPB315	4	720	938	305	227	155
	280S	45-80		56-144	SPB315	5	720	938	305	227	155
	280M	40-71		50-128	SPB315	6	720	938	305	227	155
	315S	31.5-56		39-101	SPC355	5	810	1042	380	268	225
315M	22.4-50	28-90		SPC355	6	810	1042	380	268	225	
H3.H 14	225M	90-112	1.25 1.4 1.6 1.8	113-202	SPB280	4	570	881	275	199	175
	250M	80-112		100-202	SPB315	4	720	938	305	227	155
	280S	56-100		70-180	SPB315	5	720	938	305	227	155
	280M	45-90		56-162	SPB315	6	720	938	305	227	155
	315S	40-71		50-128	SPC355	5	810	1042	380	268	225
	315M	28-63		35-113	SPC355	6	810	1042	380	268	225
H3.H 15	280S	80; 90	1.25 1.4 1.6 1.8	100-162	SPB315	5	720	980	305	225	215
	280M	63-90		79-162	SPB315	6	720	980	305	225	215
	315S	50-90		63-162	SPC355	5	810	1060	380	270	225
	315M	45-80		56-144	SPC355	6	810	1060	380	270	225
	315MD 1)	35.5-45		44-81	SPC400	8	810	1060	380	270	225
	315LB 1)	22.4-45		28-81	SPC400	8	810	1060	380	270	225
H3.H 16	280S	90; 100	1.25 1.4 1.6 1.8	113-180	SPB315	5	720	980	305	225	215
	280M	71-100		89-180	SPB315	6	720	980	305	225	215
	315S	56-100		70-180	SPC355	5	810	1060	380	270	225
	315M	50-90		63-162	SPC355	6	810	1060	380	270	225
	315MD 1)	40-50		50-90	SPC400	8	810	1060	380	270	225
	315LB 1)	25-50		31-90	SPC400	8	810	1060	380	270	225
H3.H 17	280M	80; 90	1.25 1.4 1.6 1.8	100-162	SPB315	6	720	1072	305	223	215
	315S	71-90		89-162	SPC355	5	810	1117	380	268	225
	315M	63-90		79-162	SPC355	6	810	1117	380	268	225
	315MD 1)	50-90		63-162	SPC400	8	810	1117	380	268	225
	315LB 1)	22.4-45		28-81	SPC400	8	810	1117	380	268	225
H3.H 18	280M	100	1.25 1.4 1.6 1.8	125-180	SPB315	6	720	1072	305	223	215
	315S	90; 100		113-180	SPC355	5	810	1117	380	268	225
	315M	71-100		89-180	SPC355	6	810	1117	380	268	225
	315MD 1)	63-100		79-180	SPC400	8	810	1117	380	268	225
	315LB 1)	25-50		31-90	SPC400	8	810	1117	380	268	225

1) Loher电机规格

1) Loher sizes

电机支架，卧式安装，类型H4.H，规格7-12
 Motor Brackets, Horizontal, Type H4.H, Sizes 7-12

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类型规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e ₁ mm	e ₂ mm	l mm
H4.H 07	100LB	315; 355	1.25	394-639	SPZ100	2	310	597	125	123	70
	100LD	250-355		313-639	SPZ100	2	310	597	125	123	70
	112M	180-355	1.4	225-639	SPZ112	2	310	613	125	107	70
	132S	140-250	1.6	175-450	SPZ140	2	350	632	150	123	90
	132M	100-180	1.8	125-324	SPZ140	3	350	632	150	123	90
H4.H 08	100LB	400; 450	1.25	500-810	SPZ100	2	310	597	125	123	70
	100LD	315-450		394-810	SPZ100	2	310	597	125	123	70
	112M	224-450	1.4	280-810	SPZ112	2	310	613	125	107	70
	132S	180-355	1.6	225-639	SPZ140	2	350	632	150	123	90
	132M	125-250	1.8	156-450	SPZ140	3	350	632	150	123	90
H4.H 09	112M	315; 355	1.25	394-639	SPZ112	2	390	672	125	108	70
	132S	224-355		280-639	SPZ140	2	390	701	180	154	120
	132M	160-315	1.4	200-567	SPZ140	3	390	701	180	154	120
	160M	112-224	1.6	140-403	SPZ180	3	390	742	180	143	120
	160L	100-160	1.8	125-288	SPA180	3	390	742	180	143	120
H4.H 10	112M	400; 450	1.25	500-810	SPZ112	2	390	672	125	108	70
	132S	280-450		350-810	SPZ140	2	390	701	180	154	120
	132M	200-400	1.4	250-720	SPZ140	3	390	701	180	154	120
	160M	140-280	1.6	175-504	SPZ180	3	390	742	180	143	120
	160L	125-180	1.8	156-324	SPA180	3	390	742	180	143	120
H4.H 11	132M	280-355	1.25	350-639	SPZ140	3	460	785	150	120	110
	160M	200-355		250-639	SPZ180	3	460	842	250	198	120
	160L	140-280	1.4	175-504	SPA180	3	460	842	250	198	120
	180M	125-224	1.6	156-403	SPA250	3	460	852	250	188	120
	180L	100-180	1.8	125-324	SPA250	3	460	852	250	188	120
H4.H 12	200L	100-140	1.25	125-252	SPB250	3	520	923	250	202	120
	132M	355-450		444-810	SPZ140	3	460	785	150	120	110
	160M	250-450	1.4	313-810	SPZ180	3	460	842	250	198	120
	160L	180-355	1.6	225-639	SPA180	3	460	842	250	198	120
	180M	140-280	1.8	175-504	SPA250	3	460	852	250	188	120
180L	125-224	1.8	156-403	SPA250	3	460	852	250	188	120	
200L	125-180		156-324	SPB280	3	520	923	250	202	120	

电机支架，卧式安装，类型H4.H，规格13-18
Motor Brackets, Horizontal, Type H4.H, Sizes 13-18

K20/008

类型规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e ₁ mm	e ₂ mm	l mm
H4.H 13	160M	315:355	1.25 1.4 1.6 1.8	394-639	SPZ180	3	460	934	250	166	125
	160L	224-355		280-639	SPA180	3	460	934	250	166	125
	180M	180-355		225-639	SPA250	3	460	914	250	186	125
	180L	160-280		200-504	SPA250	3	460	914	250	186	125
	200L	112-224		140-403	SPB280	3	570	1001	275	214	155
	225S	100-180		125-324	SPB280	3	570	1001	275	214	155
	225M	100-140		125-252	SPB280	4	570	1001	275	214	155
H4.H 14	160M	400:450	1.25 1.4 1.6 1.8	500-810	SPZ180	3	460	934	250	166	125
	160L	280-450		350-810	SPA180	3	460	934	250	166	125
	180M	224-450		280-810	SPA250	3	460	914	250	186	125
	180L	200-355		250-639	SPA250	3	460	914	250	186	125
	200L	140-280		175-504	SPB280	3	570	1001	275	214	155
	225S	125-224		156-403	SPB280	3	570	1001	275	214	155
	225M	125-180		156-324	SPB280	4	570	1001	275	214	155
H4.H 15	160L	355	1.25 1.4 1.6 1.8	444-639	SPA180	3	460	928	250	232	150
	180M	315:355		394-639	SPA250	3	460	964	250	196	150
	180L	250-355		313-639	SPA250	3	460	964	250	196	150
	200L	180-355		225-639	SPB280	3	570	1057	275	208	155
	225S	160-280		200-504	SPB280	3	570	1057	275	208	155
	225M	125-250		156-450	SPB280	4	570	1057	275	208	155
	250M	100-200		125-360	SPB315	4	660	1131	305	229	155
H4.H 16	180M	280-400	1.25 1.4 1.6 1.8	350-720	SPA250	3	460	964	250	196	150
	180L	224-400		280-720	SPA250	3	460	964	250	196	150
	200L	180-355		225-639	SPB280	3	570	1057	275	208	155
	225S	140-280		176-504	SPB280	3	570	1057	275	208	155
	225M	112-224		140-403	SPB280	4	570	1057	275	208	155
	250M	112-224		140-403	SPB315	4	660	1131	305	229	155
H4.H 17	180L	355	1.25 1.4 1.6 1.8	444-639	SPA250	3	520	1047	275	190	125
	200L	250-355		313-639	SPB280	3	520	1098	275	207	125
	225S	200-355		250-639	SPB280	3	660	1157	305	253	155
	225M	180-315		225-567	SPB280	4	660	1157	305	253	155
	250M	140-280		175-504	SPB315	4	660	1181	305	229	155
	280S	100-200		125-360	SPB315	5	720	1231	305	229	155
	280M	100-160		125-288	SPB315	6	720	1231	305	229	155
H4.H 18	200L	315-400	1.25 1.4 1.6 1.8	394-720	SPB280	3	520	1098	275	207	125
	225S	250-400		313-720	SPB280	3	660	1157	305	253	155
	225M	224-400		280-720	SPB280	4	660	1157	305	253	155
	250M	180-355		225-639	SPB315	4	660	1181	305	229	155
	280S	125-250		156-450	SPB315	5	720	1231	305	229	155
	280M	112-200		140-360	SPB315	6	720	1231	305	229	155

电机支架，卧式安装，类型B3.H，规格4-10
Motor Brackets, Horizontal, Type B3.H, Sizes 4-10

K20-008

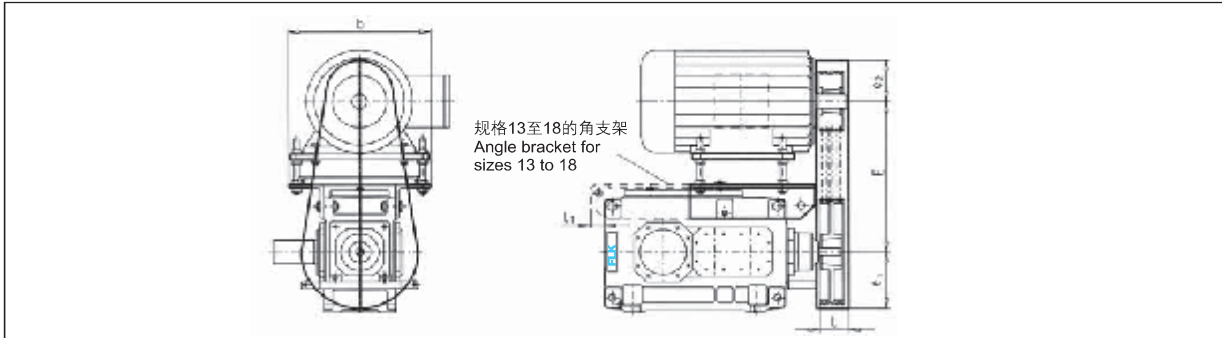


表 3 / Table 3

类型 规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e ₁ mm	e ₂ mm	I mm
B3.H 04	112M	56-71	1.25	70-127.8	SPZ112	2	375	421	120	104	85
	132S	45-71		56.3-127.8	SPZ140	2	455	434	180	182	120
	132M	31.5-45		39.4-81	SPZ140	3	455	434	180	182	120
	160M	20-45		25-81	SPZ180	3	455	476	180	140	120
	160L	31.5; 35.5		39.4-63.9	SPA180	3	455	476	180	140	120
B3.H 05	132M	45-71	1.25	56.3-127.8	SPZ140	3	415	476	180	167	120
	160M	35.5-71		44.4-127.8	SPZ180	3	415	502	180	141	120
	160L	28-50		35-90	SPA180	3	415	502	180	141	120
	180M	22.4-40		28-64	SPA250	3	495	534	220	171	120
	180L	31.5; 35.5		39.4-56.8	SPA250	3	495	534	220	171	120
B3.H 06	132M	30-90	1.25	37.5-162	SPZ140	3	415	476	180	167	120
	160M	45-90		56.3-162	SPZ180	3	415	502	180	141	120
	160L	31.5-63		39.4-113.4	SPA180	3	415	502	180	141	120
	180M	28-50		35-80	SPA250	3	495	534	220	171	120
	180L	25-45		31.3-72	SPA250	3	495	534	220	171	120
B3.H 07	160M	63; 71	1.25	78.8-127.8	SPZ180	3	450	553	180	137	120
	160L	50-71		62.5-127.8	SPA180	3	450	553	180	137	120
	180M	40-71		50-127.8	SPA250	3	660	588	273	320	150
	180L	31.5-63		39.4-113.4	SPA250	3	660	588	273	320	150
	200L	25-45		31.3-81	SPB280	3	660	643	273	265	150
	225S	20-40		25-72	SPB280	3	660	713	273	195	150
	225M	20-31.5		25-56.7	SPB280	4	660	713	273	195	150
B3.H 08	160M	80; 90	1.25	100-162	SPZ180	3	450	553	180	137	120
	160L	63-90		78.8-162	SPA180	3	450	553	180	137	120
	180M	50-90		62.5-162	SPA250	3	660	588	273	320	150
	180L	40-80		50-144	SPA250	3	660	588	273	320	150
	200L	31.5-56		39.4-100.8	SPB280	3	660	643	273	265	150
	225S	25-45		31.3-81	SPB280	3	660	713	273	195	150
	225M	25-40		31.3-72	SPB280	4	660	713	273	195	150
B3.H 09	180M	63; 71	1.25	78.8-127.8	SPA250	3	550	635	270	273	150
	180L	56-71		70-127.8	SPA250	3	550	635	270	273	150
	200L	40-71		50-127.8	SPB280	3	550	713	270	195	150
	225S	40-53		50-113.4	SPB280	3	550	713	270	195	150
	225M	28-50		35-90	SPB280	4	550	713	270	195	150
	250M	22.4-45		28-81	SPB315	4	730	762	300	269	150
	280S	20-31.5		25-56.7	SPB315	5	730	803	300	228	150
	280M	20-25		25-45	SPB315	6	730	803	300	228	150
B3.H 10	180M	80; 90	1.25	100-162	SPA250	3	550	635	270	273	150
	180L	71-90		88.8-162	SPA250	3	550	635	270	273	150
	200L	50-90		62.5-162	SPB280	3	550	713	270	195	150
	225S	40-80		50-144	SPB280	3	550	713	270	195	150
	225M	31.5-63		39.4-113.4	SPB280	4	550	713	270	195	150
	250M	28-56		35-100.8	SPB315	4	730	762	300	269	150
	280S	25-40		31.3-72	SPB315	5	730	803	300	228	150
	280M	25-31.5		31.3-56.7	SPB315	6	730	803	300	228	150

电机支架，卧式安装，类型B3.H，规格11-18
 Motor Brackets, Horizontal, Type B3.H, Sizes 11-18

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类型规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e ₁ mm	e ₂ mm	l mm	l ₁ mm
B3.H 11	225S	56-71	1.25	70-127.8	SPB280	3	630	789	275	200	153	-
	225M	45-71		56.3-127.8	SPB280	4	630	789	275	200	153	
	250M	40-71	1.4	50-127.8	SPB315	4	790	854	305	268	158	
	280S	28-56		35-100.8	SPB315	5	790	897	305	225	158	
	280M	22.4-45	1.6	28-81	SPB315	6	790	897	305	225	158	
	315S	20-35.5		25-63.9	SPC355	5	830	992	340	250	184	
	315M	20-31.5	1.8	25-56.7	SPC355	6	830	992	340	250	184	
315MD ¹⁾	20-25	25-45		SPC400	8	830	992	340	250	184		
B3.H 12	225S	71-90	1.25	88.8-162	SPB280	3	630	789	275	200	153	-
	225M	56-90		70-162	SPB280	4	630	789	275	200	153	
	250M	50-90	1.4	62.5-162	SPB315	4	790	854	305	268	158	
	280S	35.5-63		44.4-113.4	SPB315	5	790	897	305	225	158	
	280M	31.5-56	1.6	39.4-100.8	SPB315	6	790	897	305	225	158	
	315S	25-45		31.3-81	SPC355	5	830	992	340	250	184	
	315M	25-40	1.8	31.3-72	SPC355	6	830	992	340	250	184	
315MD ¹⁾	25-31.5	31.3-56.7		SPC400	8	830	992	340	250	184		
B3.H 13	250M	63; 71	1.25	78.8-127.8	SPB315	4	745	938	320	230	183	100
	280S	45-71		56.3-127.8	SPB315	5	745	938	320	230	183	
	280M	35.5-71	1.4	44.4-127.8	SPB315	6	745	938	320	230	183	
	315S	31.5-56		39.4-100.8	SPC355	5	945	1017	390	283	227	
	315M	25-50	1.6	31.3-90	SPC355	6	945	1017	390	283	227	
	315MD ¹⁾	22.4-40		28-72	SPC400	8	945	1017	390	283	227	
	315LB ¹⁾	20-31.5	1.8	25-56.7	SPC400	8	945	1017	390	283	227	
B3.H 14	250M	80; 90	1.25	100-162	SPB315	4	745	938	320	230	183	100
	280S	56-90		70-162	SPB315	5	745	938	320	230	183	
	280M	45-90	1.4	56.3-162	SPB315	6	745	938	320	230	183	
	315S	40-71		50-127.8	SPC355	5	945	1017	390	283	227	
	315M	31.5-63	1.6	39.4-113.4	SPC355	6	945	1017	390	283	227	
	315MD ¹⁾	28-50		35-90	SPC400	8	945	1017	390	283	227	
	315LB ¹⁾	25-40	1.8	31.3-72	SPC400	8	945	1017	390	283	227	
B3.H 15	280M	63; 71	1.25	78.8-127.8	SPB315	6	827	1031	305	225	180	120
	315S	50-71		62.5-127.8	SPC355	5	827	1042	380	265	226	
	315M	45-71	1.4	56.3-127.8	SPC355	6	827	1042	380	265	226	
	315MD ¹⁾	35.5-63		44.4-113.4	SPC400	8	827	1042	380	265	226	
	315LB ¹⁾	28-56	1.6	35-100.8	SPC400	8	827	1042	380	265	226	
	315MB ¹⁾	22.4-45		28-81	SPC450	8	1027	1130	425	295	336	
	355LB ¹⁾	20-31.5	1.8	25-56.7	SPC450	8	1027	1130	425	295	336	
B3.H 16	280M	71; 90	1.25	88.8-162	SPB315	6	827	1031	305	225	180	120
	315S	56-80		70-144	SPC355	5	827	1042	380	265	226	
	315M	50-80	1.4	62.5-144	SPC355	6	827	1042	380	265	226	
	315MD ¹⁾	40-71		50-127.8	SPC400	8	827	1042	380	265	226	
	315LB ¹⁾	31.5-63	1.6	39.4-113.4	SPC400	8	827	1042	380	265	226	
	355MB ¹⁾	25-50		31.3-90	SPC450	8	1027	1130	425	295	336	
	355LB ¹⁾	22.4-35.5	1.8	28-63.9	SPC450	8	1027	1130	425	295	336	
B3.H 17	315M	63; 71	1.25	78.8-127.8	SPC355	6	900	1118	380	272	227	120
	315MD ¹⁾	50-71		62.5-127.8	SPC400	8	900	1118	380	272	227	
	315LB ¹⁾	35.5-71	1.4	44.4-127.8	SPC400	8	900	1118	380	272	227	
	355MB ¹⁾	28-56		35-100.8	SPC450	8	900	1148	425	302	227	
	355LB ¹⁾	25-45	1.6	31.3-81	SPC450	8	900	1148	425	302	227	
B3.H 18	315M	71; 80	1.25	88.8-144	SPC355	6	900	1118	380	272	227	120
	315MD ¹⁾	63-80		78.8-144	SPC400	8	900	1118	380	272	227	
	315LB ¹⁾	45-80	1.4	56.3-144	SPC400	8	900	1118	380	272	227	
	355MB ¹⁾	35.5-71		44.4-127.8	SPC450	8	900	1148	425	302	227	
	355LB ¹⁾	31.5-56	1.6	39.4-100.8	SPC450	8	900	1148	425	302	227	

1) Loher电机规格

1) Loher sizes

电机支架，卧式安装，类型B4.H，规格5-11
Motor Brackets, Horizontal, Type B4.H, Sizes 5-11

KZ0 006

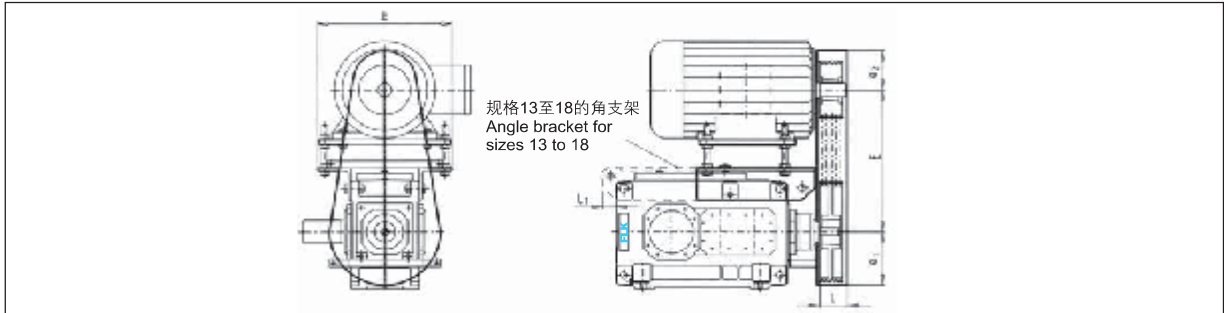


表 4 / Table 4

类型规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e ₁ mm	e ₂ mm	l mm
B4.H 5	90L	280; 315	1.25	350-567	SPZ80	2	385	430	125	130	75
	100LB	180-315		225-567	SPZ100	2	385	442	125	118	75
	100LD	125-180		156-324	SPZ100	2	385	442	125	118	75
	112M	100-180		125-324	SPZ112	2	385	458	125	102	75
	132S	80-140		100-252	SPZ140	2	385	482	150	123	92
	132M	80-112		100-202	SPZ140	3	385	482	150	123	92
B4.H 6	90L	355; 400	1.25	444-720	SPZ80	2	385	430	125	130	75
	100LB	224-400		280-720	SPZ100	2	385	442	125	118	75
	100LD	160-315		200-567	SPZ100	2	385	442	125	118	75
	112M	125-250		156-450	SPZ112	2	385	458	125	102	75
	132S	100-180		125-324	SPZ140	2	385	482	150	118	92
	132M	100-140		125-252	SPZ140	3	385	482	150	118	92
B4.H 7	100LB	280; 315	1.25	350-567	SPZ100	2	322	497	125	118	78
	100LD	250-315		313-567	SPZ100	2	322	497	125	118	78
	112M	180-315		225-567	SPZ112	2	450	513	125	102	78
	132S	125-250		156-450	SPZ140	2	450	530	180	155	120
	132M	90-180		113-324	SPZ140	3	450	530	180	155	120
	160M	80-125		100-225	SPZ180	3	450	552	180	133	120
	160L	80; 90		100-162	SPA180	3	450	552	180	133	120
B4.H 8	100LB	355; 400	1.25	444-720	SPZ100	2	322	497	125	118	78
	100LD	315-400		394-720	SPZ100	2	322	497	125	118	78
	112M	224-400		280-720	SPZ112	2	450	513	125	102	78
	132S	160-315		200-567	SPZ140	2	450	530	180	155	120
	132M	125-224		156-403	SPZ140	2	450	530	180	155	120
	160M	100-160		125-288	SPZ180	3	450	552	180	133	120
	160L	100-125		125-225	SPA180	3	450	552	180	133	120
B4.H 9	132S	224-315	1.25	280-567	SPZ140	2	550	572	180	178	120
	132M	160-315		200-567	SPZ140	3	550	572	180	178	120
	160M	112-224		140-403	SPZ180	3	550	615	180	135	120
	160L	80-160		100-288	SPA180	3	550	615	180	135	120
	180M	80-140		100-252	SPA250	3	550	626	250	184	120
	180L	80-112		100-202	SPA250	3	550	626	250	184	120
B4.H 10	132S	280-400	1.25	350-720	SPZ140	2	550	572	180	183	120
	132M	200-400		250-720	SPZ140	3	550	572	180	183	120
	160M	140-280		175-504	SPZ180	3	550	615	180	140	120
	160L	100-200		125-360	SPA280	3	550	615	180	140	120
	180M	100-160		125-288	SPA250	3	550	626	250	184	120
	180L	100-140		125-252	SPA250	3	550	626	250	184	120
B4.H 11	132M	280; 315	1.25	350-567	SPZ140	3	454	644	180	166	120
	160M	200-315		250-567	SPZ180	3	454	668	180	142	120
	160L	140-280		175-504	SPA180	3	454	668	180	142	120
	180M	112-224		140-403	SPA250	3	630	709	275	316	150
	180L	90-200		113-360	SPA250	3	630	709	275	316	150
	200L	80-140		100-252	SPB280	3	630	750	275	275	150
	225S	80-112		100-202	SPB280	3	630	825	275	200	150
	225M	80; 90		100-162	SPB280	4	630	825	275	200	150

电机支架，卧式安装，类型B4.H，规格12-18
 Motor Brackets, Horizontal, Type B4.H, Sizes 12-18

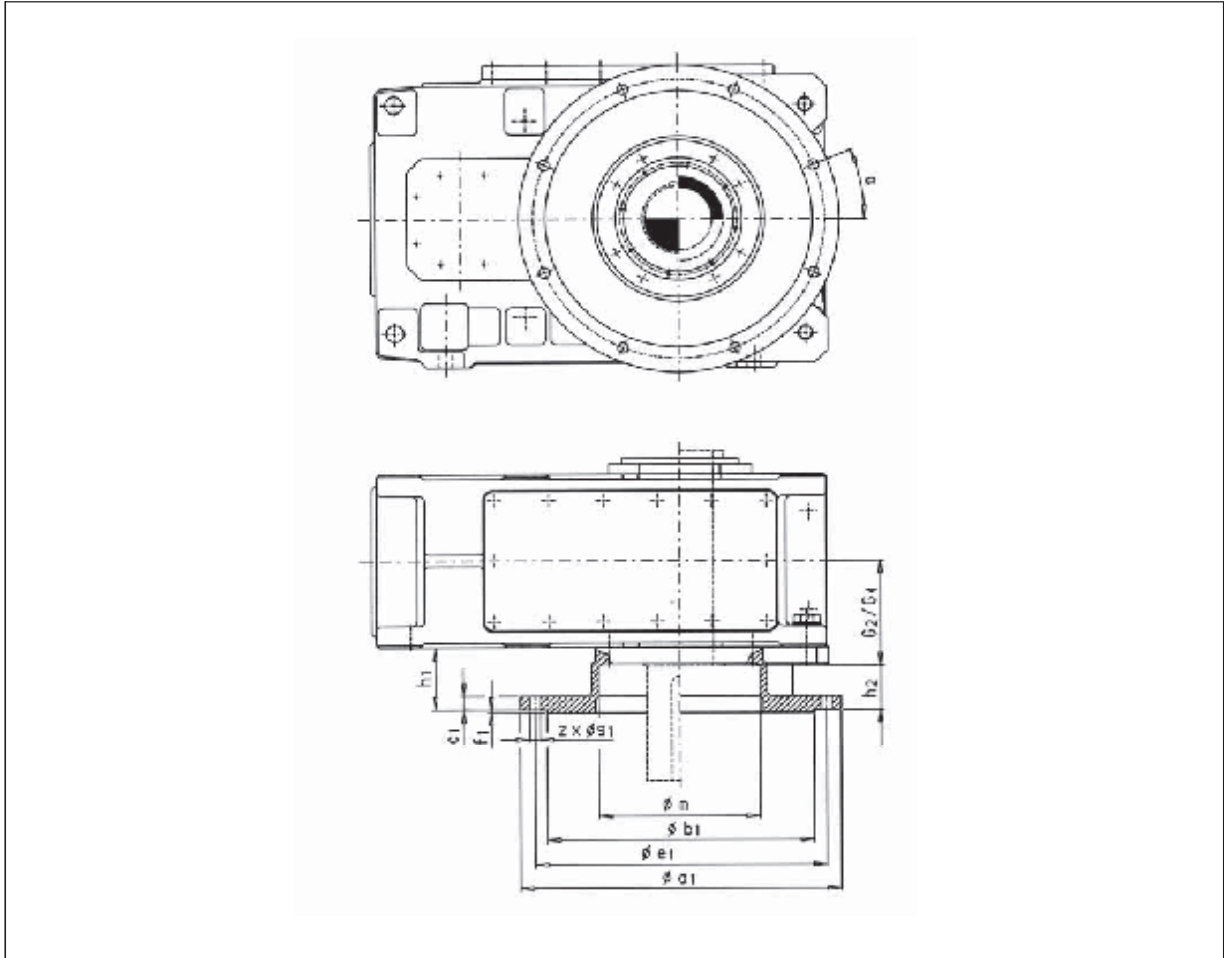
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类型规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e ₁ mm	e ₂ mm	l mm	l ₁ mm
B4.H 12	132M	355; 400	1.25	444-720	SPZ140	3	454	644	180	166	120	-
	160M	250-400		313-720	SPZ180	3	454	668	180	142	120	
	160L	180-355		225-639	SPA180	3	454	668	180	142	120	
	180M	140-280	1.4	175-504	SPA250	3	630	709	275	316	150	
	180L	125-224	1.6	156-403	SPA250	3	630	709	275	316	150	
	200L	100-160	1.8	125-288	SPB280	3	630	750	275	275	150	
	225S	100-140	125-252	SPB280	3	630	825	275	200	150		
225M	100; 112	100-112	125-202	SPB280	4	630	825	275	200	150		
B4.H 13	160L	224-315	1.25	280-567	SPA180	3	575	764	250	186	125	100
	180M	180-315		225-567	SPA250	3	575	764	250	186	125	
	180L	160-280		200-504	SPA250	3	575	764	250	186	125	
	200L	112-200	1.4	140-360	SPB280	3	575	825	275	255	155	
	225S	90-160	1.6	113-288	SPB280	3	751	881	275	199	155	
	225M	80-140	1.8	100-252	SPB280	4	751	881	275	199	155	
	250M	80-112	100-202	SPB315	4	753	938	305	272	155		
280S	80-90	100-162	SPB315	5	753	980	305	230	155			
B4.H 14	160L	280-400	1.25	350-720	SPA180	3	575	764	250	186	125	100
	180M	224-400		280-720	SPA250	3	575	764	250	186	125	
	180L	180-355		225-639	SPA250	3	575	764	250	186	125	
	200L	140-250	1.4	175-450	SPB280	3	575	825	275	255	155	
	225S	112-200	1.6	140-360	SPB280	3	751	881	275	199	155	
	225M	100-180	1.8	125-324	SPB280	4	751	881	275	199	155	
	250M	100-140	125-252	SPB315	4	753	938	305	272	155		
280S	100; 112	125-202	SPB315	5	753	980	305	230	155			
B4.H 15	180L	250-315	1.25	313-567	SPA250	3	650	797	275	283	150	120
	200L	180-315		225-567	SPB280	3	650	881	275	199	150	
	225S	140-315		175-567	SPB280	3	650	923	305	287	155	
	225M	125-250	1.4	156-450	SPB280	4	650	923	305	287	155	
	250M	100-200	1.6	125-360	SPB315	4	820	938	305	272	155	
	280S	80-140	1.8	100-252	SPB315	5	820	980	305	230	155	
	280M	80-125	100-225	SPB315	6	820	980	305	230	155		
315S	80-100	100-180	SPC355	5	820	1051	340	254	185			
B4.H 16	180L	280-355	1.25	350-639	SPA250	3	650	797	275	283	150	120
	200L	200-355		250-639	SPB280	3	650	881	275	199	150	
	225S	160-355		200-639	SPB280	3	650	923	305	287	155	
	225M	140-180	1.4	175-504	SPB280	4	650	923	305	287	155	
	250M	112-224	1.6	140-403	SPB315	4	820	938	305	272	155	
	280S	90-160	1.8	113-288	SPB315	5	820	980	305	230	155	
	280M	90-140	113-252	SPB315	6	820	980	305	230	155		
315S	90-112	113-202	SPC355	5	820	1051	340	254	185			
B4.H 17	200L	250-315	1.25	313-567	SPB280	3	710	1001	275	214	155	120
	225S	200-315		250-567	SPB280	3	710	1001	275	214	155	
	225M	160-315		200-567	SPB280	4	710	1001	275	214	155	
	250M	140-280	1.4	175-504	SPB315	4	880	1031	305	284	155	
	280S	100-200	1.6	125-360	SPB315	5	880	1081	305	234	155	
	280M	80-160	1.8	100-288	SPB315	6	880	1081	305	234	155	
	315S	80-140	100-252	SPC355	5	880	1101	380	294	230		
315M	80-112	100-202	SPC355	6	880	1101	380	294	230			
B4.H 18	200L	315; 355	1.25	394-639	SPB280	3	710	1001	275	214	155	120
	225S	250-355		313-639	SPB280	3	710	1001	275	214	155	
	225M	224-355		280-639	SPB280	4	710	1001	275	214	155	
	250M	180-315	1.4	225-567	SPB315	4	880	1031	305	284	155	
	280S	125-250	1.6	156-450	SPB315	5	880	1081	305	234	155	
	280M	100-200	1.8	125-360	SPB315	6	880	1081	305	234	155	
	315S	90-160	113-288	SPC355	5	880	1101	380	294	230		
315M	90-140	113-252	SPC355	6	880	1101	340	294	230			

安装法兰-大安装空间, 规格 4-12

Mounting Flange-Long Spacer, Sizes 4-12

K20/012



说明:

可采用的布置形式参见表3。
若需带逆止器或泵请垂询。

平行轴(H型)齿轮箱且布置形式为C或D。
若需带电机安装法兰或冷却风扇请垂询。

Notes:

For possible designs, see table 3.
Combination with backstop or pump on request.

Combination with motor bell housing or fan for H-gear units of C and D design on request.

表 1 / Table 1

扭矩系数/Torque factor f									
H2..., H3..., H4..., B3..., B4...									
系数 Factor	规格 / Size								
f	4	5	6	7	8	9	10	11	12
f	1.1	1.2	1.6	1.2	1.4	1.3	1.5	1.3	1.4
B2...									
系数 Factor	规格 / Size								
f	4	5	6	7	8	9	10	11	12
f	1.0	1.0	1.3	1.0	1.2	1.1	1.3	1.1	1.2

安装法兰盘-大安装空间, 规格 4-12
Mounting Flange-Long Spacer, Sizes 4-12

K20/012

表 2 / Table 2												H2S., H2D., H2H., H3S., H3D., H3H., H4S., H4D., H4H., B3S., B3D., B3H., B4S., B4D., B4H.,	B2S., B2H., B2D.,
规格 size 1)	a ₁	b ₁ f7	c ₁	e ₁	f ₁	h ₁	h ₂	m _{max}	Z X S ₁	附加重量 Add. weight kg	G ₂ / G ₄	G ₂ / G ₄	
mm											mm		
4	450	350	24.5	400	5	82.5	50	205	8 x 17.5	40	140	170	
5	550	450	25	500	5	90	52.5	245	8 x 17.5	60	165	200	
6	550	450	25	500	5	90	52.5	245	8 x 17.5	65	165	200	
7	660	550	25	600	5	135	90	290	8 x 22	90	195	235	
8	660	550	30	600	5	135	90	315	8 x 22	100	195	235	
9	660	550	29	600	6	134	84	325	12 x 22	110	235	270	
10	660	550	34	600	6	134	84	355	12 x 26	120	235	270	
11	800	680	44	740	6	184	129	420	12 x 26	210	270	320	
12	800	680	44	740	6	184	129	435	12 x 26	220	270	320	

1) $T_{2max} \leq T_{2N}/f$

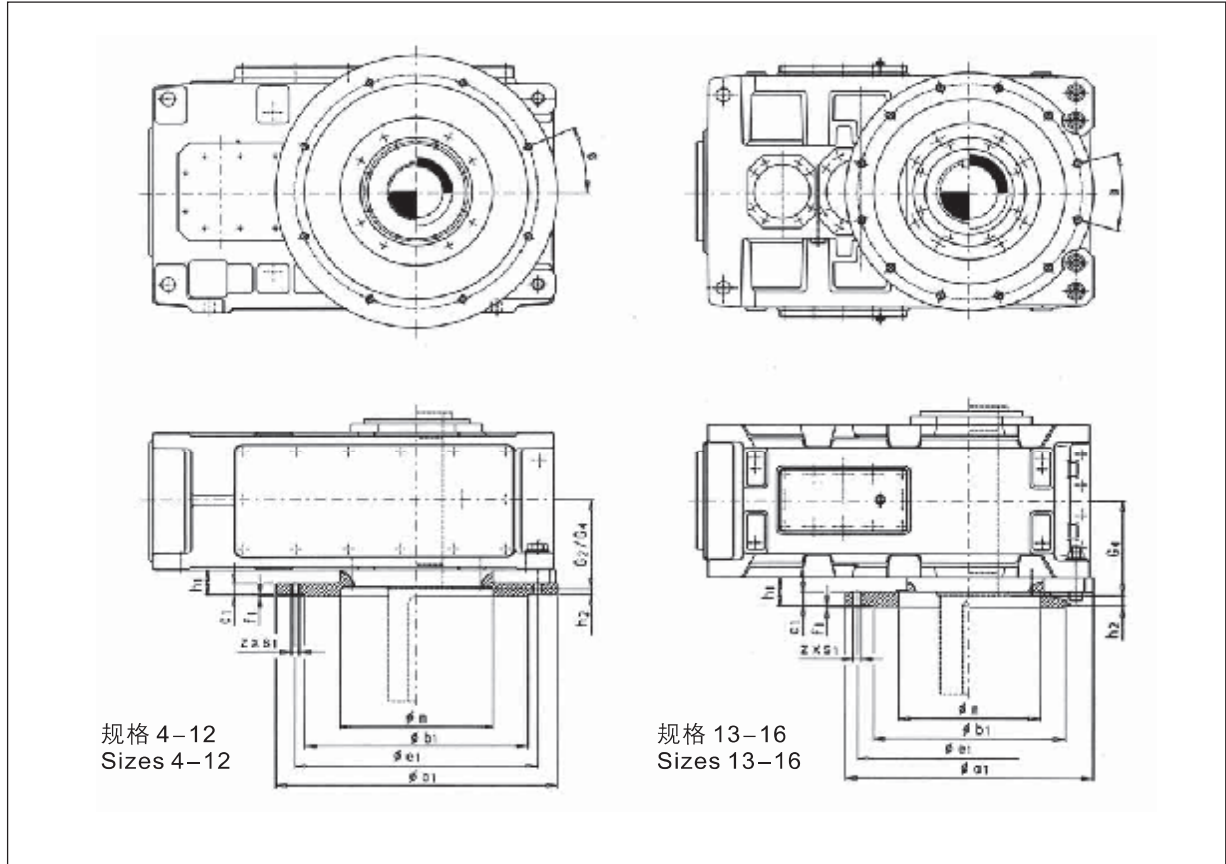
1) $T_{2max} \leq T_{2N}/f$

表 3 / Table 3				
可采用的类型、规格和布置形式 Possible types, sizes, designs				
规格 size	H2.H	H2.V	H3.H, H4.H B2.H, B3.H, B4.H	H3.V, H4.V B2.V, B3.V, B4.V
4	A + B	B	A + B + C + D	B + C
5				
6				
7				
8				
9	A + B + C + D	B + C	A + B + C + D	B + C
10				
11				
12	A + B + C + D	B + C	A + B + C + D	B + C

安装法兰-小安装空间, 规格 4-16

Mounting Flange-Short Spacer, Sizes 4-16

K20-012



说明:

从规格13起只能采用安装方式M,即不带地脚的箱体。

可采用的布置形式参见表3。
若需带逆止器或泵请垂询。

平行轴(H型)齿轮箱且布置形式为C或D。
若需带电机安装法兰或冷却风扇请垂询。

Notes:

From size 13 up, only housings without feet, i.e. mounting position M, are used.

For possible designs, see table 3.
Combination with backstop or pump on request.

Combination with motor bell housing or fan for H-gear units of C and D design on request.

表 1 / Table 1													
扭矩系数f/Torque factor f													
H2... H3... H4... B3... B4...													
规格 / Size													
系数 Factor	4	5	6	7	8	9	10	11	12	13	14	15	16
f	1.1	1.2	1.5	1.2	1.4	1.3	1.5	1.3	1.4	1.4	1.1	1.4	1.2
B2...													
规格 / Size													
系数 Factor	4	5	6	7	8	9	10	11	12	13	14	15	16
f	1.0	1.0	1.2	1.0	1.2	1.1	1.3	1.1	1.2	1.2	1.0	1.2	1.0

安装法兰-小安装空间, 规格 4-16

Mounting Flange-Short Spacer, Sizes 4-16

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表 2 / Table 2													H2S., H2D., H2H., H3S., H3D., H3H., H4S., H4D., H4H., B3S., B3D., B3H., B4S., B4D., B4H.,	B2S., B2H., B2D.,
类型 Type	规格 size 1)	a ₁	b ₁ f7	c ₁	e ₁	f ₁	h ₁	h ₂	m _{max}	z x s ₁	附加重量 Add. weight kg	G ₂ / G ₄	G ₂ / G ₄	
mm													mm	
..S. ..D., ..H.	4	445	340	25	400	5	55	22.5	205	8 x M16	35	140	170	
	5	565	430	25	515	5	60	22.5	245	8 x M16	55	165	200	
	6	565	430	25	515	5	60	22.5	245	8 x M16	55	165	200	
	7	670	530	25	620	5	60	15	295	8 x M20	80	195	235	
	8	670	530	40	620	5	80	35	300	8 x M20	110	195	235	
	9	670	530	35	620	5	80	30	320	12 x M20	105	235	270	
	10	730	560	35	680	5	80	30	355	12 x M24	125	235	270	
	11	730	560	40	680	5	90	35	400	12 x M24	145	270	320	
..S. ..D., ..H.	12	730	560	40	680	5	90	40	420	12 x M24	155	270	320	
											245			390
..S. ..D., ..H.	13	840	650	50	760	5	100	37.5	450	12 x M30	240	335	-	
											255		390	
..S. ..D., ..H.	14	840	650	50	760	5	100	37.5	480	12 M30	245	335	390	
											315		460	
..S. ..D., ..H.	15	960	750	50	880	5	100	30	530	16 x M30	305	380	-	
											320		460	
..S. ..D., ..H.	16	960	750	50	880	5	100	30	540	16 x M30	315	380	450	

1) $T_{2max} \leq T_{2N}/f$

1) $T_{2max} \leq T_{2N}/f$

表 3 / Table 3				
可采用的类型、规格和布置形式 Possible types, sizes, designs				
规格 size	H2SH, H2HH, H2DH	H2.V	H3SH, H4SH, B2SH, B3SH, B4SH H3HH, H4HH, B2HH, B3HH, B4HH H3DH, H4DH, B2DH, B3DH, B4DH	H3.V, H4.V B2.V, B3.V, B4.V
4	A + B	B	A + B + C + D	B + C
5				
6				
7				
8				
9	A + B + C + D	B + C	A + B + C + D	B + C
10				
11				
12				
13	A + B + C + D	B + C	A + B + C + D	B + C
14				
15 ²⁾				
16 ²⁾				

2) 类型 B2... 规格 15+16 不能采用布置形式 A 或 C!

2) Design A or C not possible for type B2..., sizes 15+16!

防爆 Explosion Protection



防爆要求
按照ATEX95



Explosion Protection
according to ATEX 95

FLK齿轮箱可以根据用户的需要提供按照94/9/EC规范认证的改进型结构。

FLK gear units can be supplied in modified design, certified according to direction 94/9/EC.

这种齿轮箱可以在有爆炸危险的环境中使用。

These gear units may be used in hazardous locations.

应用：设备特性类型2+3

Surface application: categories 2+3

环境说明 Description of the surroundings		设备特性对安全要求的适配 Assignment of equipment categories to safety requirements			
爆炸危险的持续时间 Explosive atmospheres occurring:	爆炸危险的起因 Explosive atmospheres caused by:	特性类型: Category:	安全要求: Safety requirements:	在下列 况下安全: Safe if taking into account:	
量化数据仅用于应用选型 The quantification serves for orientation only.	气体、雾、蒸汽 Gases, vapours, mists 粉尘 Dust				
不断发生, 频繁发生, 每年大于1000小时 Continuously, frequently, for more than 1,000h/yr	区域 0 Zone 0	区域 20 Zone 20	特性类型1 Category 1	很高 very high	很少发生爆炸 Rarely occurring disturbances
偶尔发生, 短时发生, 每年在10和1000小时之间 Occasionally, for a short term, between 10 and 1,000 h/yr	区域 1 Zone 1	区域 21 Zone 21	特性类型 2 Category 2	高 high	爆炸有时发生 Normally occurring disturbances
很少发生, 短时发生, 每年少于10小时 Infrequently, for a short term, less than 10 h/yr	区域 2 Zone 2	区域 22 Zone 22	特性类型 3 Category 3	一般 normal	在正常运行条件下 Normal operating conditions

