

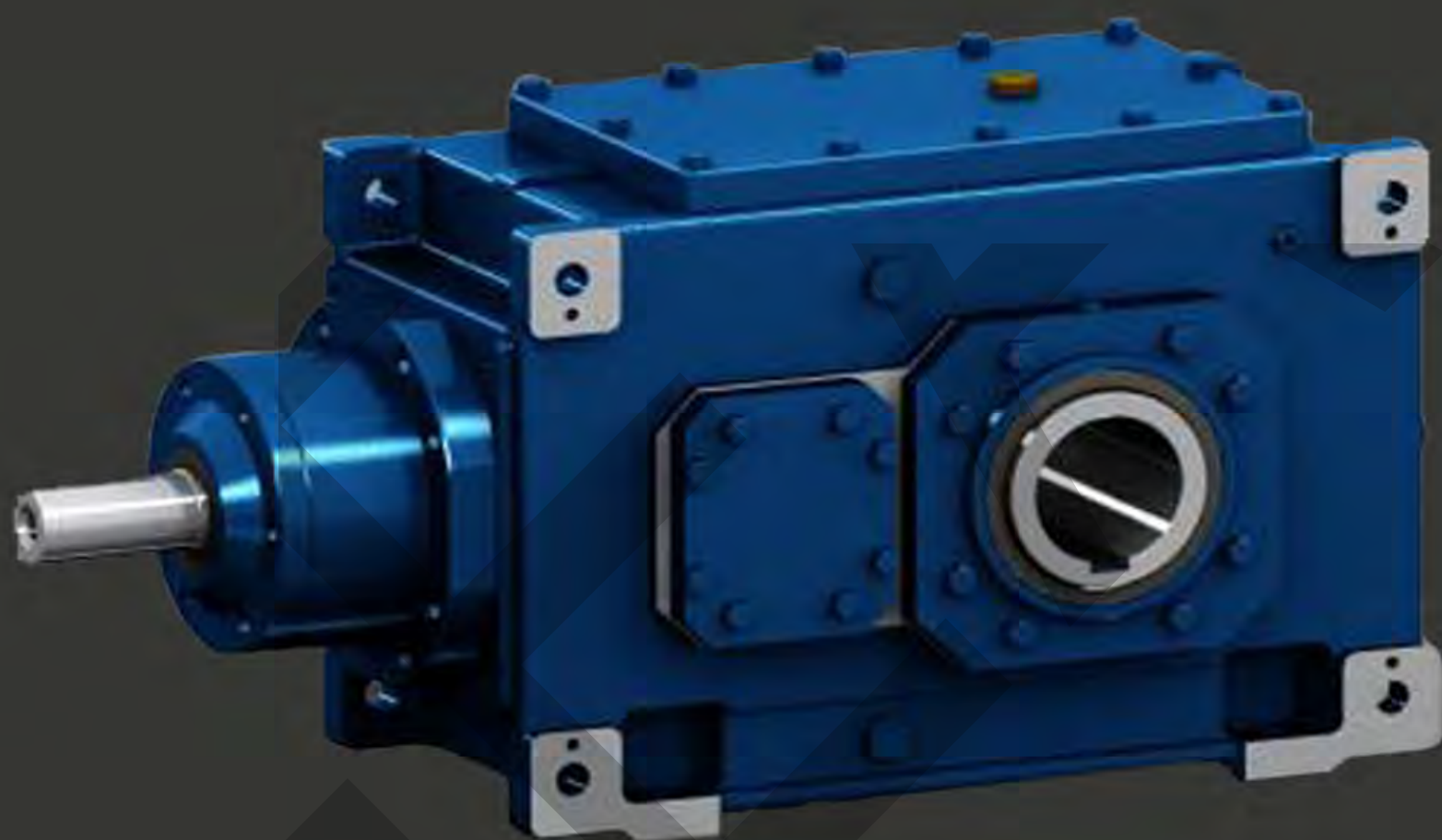


浙江格尔减速机有限公司

ZHEJIANG GEAR SPEED REDUCDCR CO.,LTD

致力于打造一流的驱动技术方案

PROVIDE FIRST CLASS DRIVING SOLUTION



产品手册
CATALOGUE



齿轮箱 Gear Units

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齿轮箱 Gear Units
基本类型概括 Summary of Basic Types

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



齿轮箱 Gear Units

性能特点 Characteristic

设计

平行轴和直交轴齿轮箱采用全新设计，其独特的创新之处在于：

- 零部件种类减少，而规格型号增加；
- 运转可靠性提高，传动功率增大；
- 可以提供法兰盘式输出轴，使齿轮箱满足在狭小空间的安装要求根据（根据用户要求供货）。

安装方式

- 齿轮箱既可卧式安装，也可立式安装。
- 如果用户提出要求，也可采用其他安装形式。
- 安装电机用法兰、扭力支撑装置均为产品的标准配置。

齿轮的噪音特性

- 采用最新设计思想，通过以下途径彻底改善齿轮的噪音特性：
- 利用吸收噪音的箱体结构；
- 采用特大的齿面接触比。

齿轮箱散热

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，主要通过以下方法：

- 增大箱体的表面积；
- 采用大风扇及新型导流风扇罩；
- 根据较低的最大允许油温选择 格尔 齿轮箱。这样，可因换油周期加长而提高设备运行可靠性，并能降低设备维护费用。

库存

格尔 齿轮箱根据单元结构模块化设计原理，大大减少了零部件种类。

Design

GEAR Gear units are a completely new design. Outstanding innovations are:

- More sizes with a reduced variety of parts;
- Higher operational reliability combined with increased power capacity;
- Flanged output shafts to facilitate assembly of gear units in confined spaces (on request).

Mounting position

- GEAR gear units can be supplied for either horizontal or vertical installation.
- Other arrangements are also possible on request.
- Motor bell housings, Torque supports are part of our standard product range.

Noise behaviour

- New concepts were applied to clearly improve the noise emission of the gear units
- Designing noise-absorbing housings
- Achieving exceptionally large contact ratios.

Thermal conduction

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

- Through enlarged housing surface areas;
- because large fans incorporating a new type of air conduction fan cowl are being used,
- The selection of GEAR 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.

Storing

GEAR gear units have been designed according to a new unit construction principle.



齿轮箱 Gear Units

一般说明 General Information

注意事项：

应严格遵守以下各项：

- 样本中的附图只属范例，并不要求严格一致，所注尺寸可以有所变动。
- 所注重量仅为平均值，并不要求严格一致。
- 为防止发生事故，所有旋转部件均应根据国家和当地安全规定加罩防护。
- 试车之前，必须认真阅读设备操作说明书。齿轮箱供货时已作好运行准备，只是未加润滑油。
- 此处给出的加油量只作为参考值。实际油量应以油尺上的标记为准。
- 润滑油粘度须以齿轮箱铭牌上的数值为准。
- 齿轮箱供货时带径向轴封。用户如有特别要求，可提供其它形式的密封装置。
- 转动方向是指输出轴 d2 的方向

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.
- The gear units are supplied with radial shaft seals. Other sealing variants on request.
- Directions of rotation referring to output shaft d2.

在标注尺寸的图纸上使用的符号说明如下：

Explanation of symbols used in the dimensioned drawings:

	=	油尺	Oil dipstick
	=	通气孔	Breather
	=	放油孔	Oil drain
	=	加油孔	Oil filler

规格 13 号以上齿轮箱箱体地脚上配有千斤顶螺丝，箱盖上配有调平面。

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

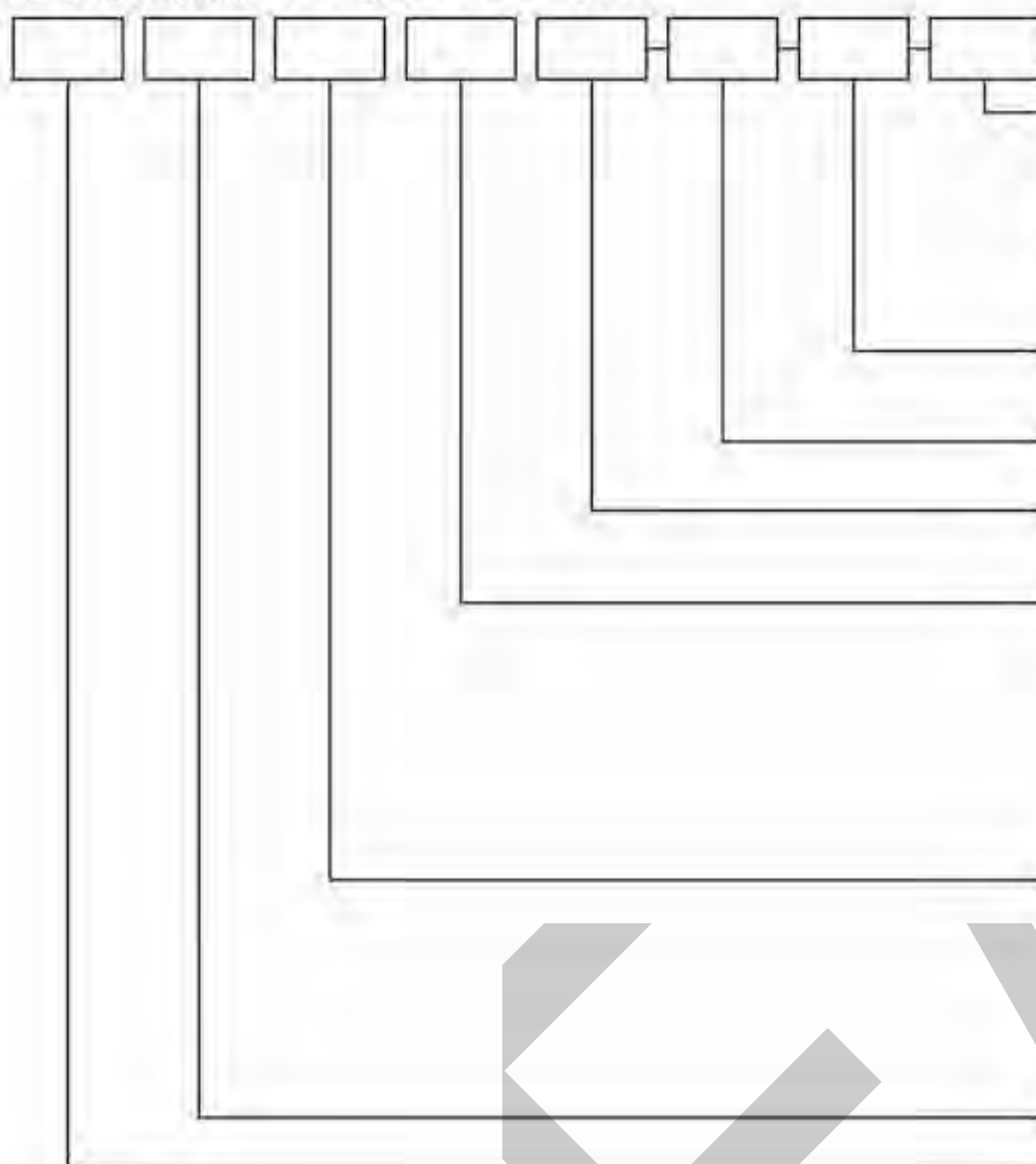
基础螺栓的最低性能等级为 8.8 级。

Foundation bolts of min. property class 8.8.



齿轮箱 Gear Units

型号表示方法 Designation of Types



B系列输入轴旋转方向(面对输入轴看
CW为顺时针,CCW为逆时针,H省略)
The direction of rotation of the
MTB series output shaft(view onto the
input shaft: CW is clockwise, CCW is
counterclockwise, ignore H)

轴布置形式 (A,B,C,D等)
Design of shaft(A,B,C,D etc)

额定传动比 i_N (见 13-21 页)
Nominal ratio

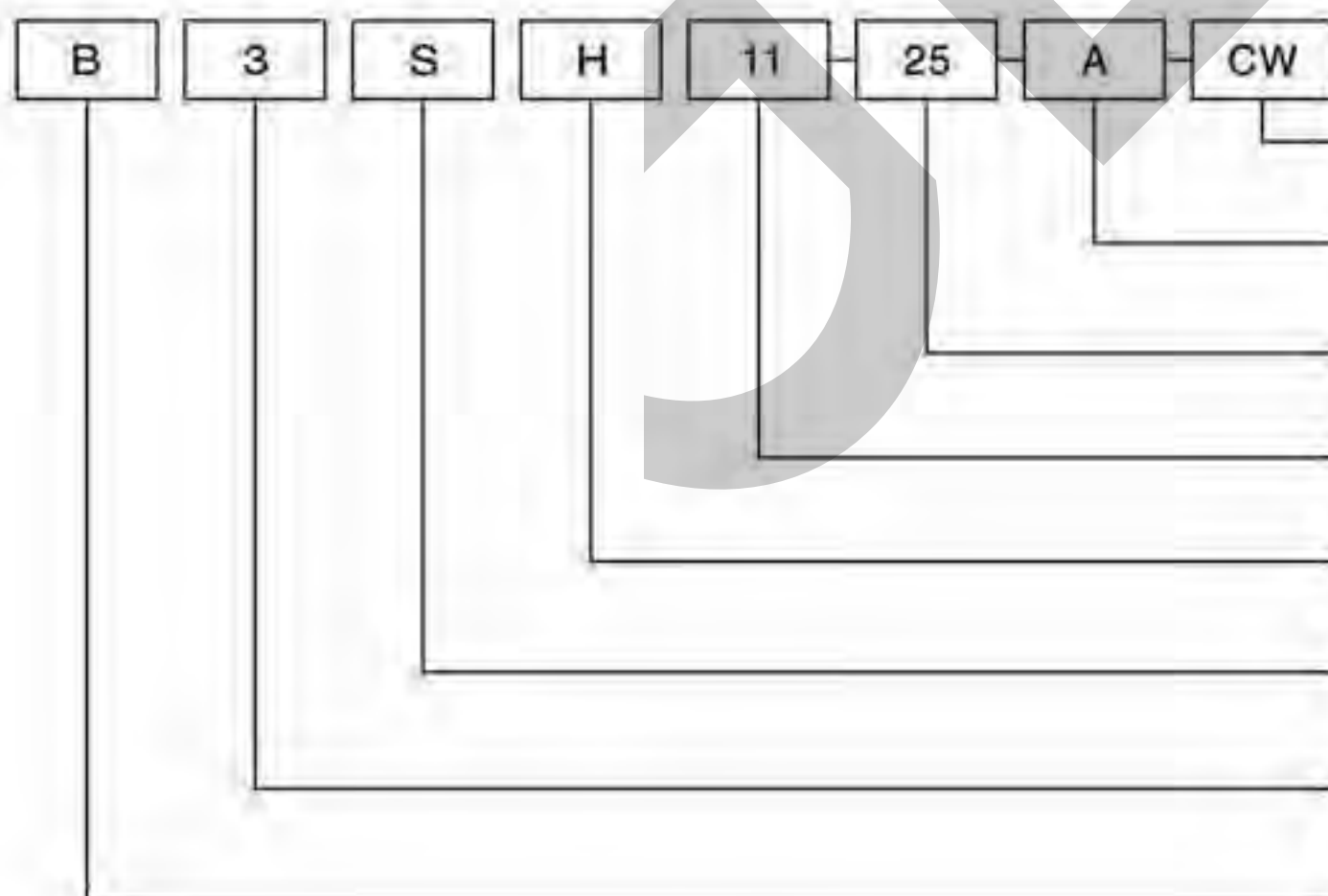
规格 1...26
Sizes 1...26

安装形式
H = 卧式安装
Horizontal
M = 卧式安装不带底脚
Horizontal design without feet
V = 立式安装
Vertical

输出轴布置形式 Output shaft of design
S = 实心轴
Solid shaft
H = 空心轴
Hollow shaft
D = 带胀紧盘的空心轴
Hollow shaft for shrink disk

传动级数 No. of stages

类型 Type
H = 平行轴齿轮箱
Helical gear units
B = 直交轴齿轮箱
Bevel-helical gear units



输入轴旋转方向为顺时针
Input is clockwise

轴布置形式 A
Design of shaft A

额定传动比 $i_N=25$ (见 13-21 页)
Nominal ratio $i_N=25$

规格 11
Sizes 11

H = 卧式安装
Horizontal

S = 实心轴
Solid shaft

传动级数
No. of stages

直交轴齿轮箱
Bevel-helical gear units



齿轮箱 Gear Units

选型指南 Guidelines for the Selection

<p>1. 确定齿轮箱的类型及规格</p> <p>1. Determination of gear unit type and size</p>	<p>1.1 计算传动比 Find the transmission ratio</p> <div>$is = \frac{n_1}{n_2}$</div> <p>1.2 确定齿轮箱的额定功率 Determine nominal power rating of the gear unit</p> <div>$P_N \geq P_2 \times f_1 \times f_2 \times S_A$</div> <p>如果不满足下列条件, 请向我们咨询 It is not necessary to consult us, if:</p> <div>$3.33 \times P_2 \geq P_N$</div> <p>1.3 校核最大扭矩, 如峰值工作扭矩, 起动扭矩或制动扭矩, 看其是否满足要求</p> <p>1.3 Check for maximum torque, e. g. peak operating-, starting- or braking torque</p> <div>$P_N \geq \frac{T_A \times n_1}{9550} \times f_3$</div> <p>齿轮箱的规格和传动级数在额定功率选型表中, 可根据i_N和P_N确定。 Gear unit sizes and number of reduction stages are given in rating tables depending on i_N and P_N</p> <p>1.4 检查输出轴上是否允许有附加载荷; 见 25-26 页。</p> <p>1.4 Check whether additional forces on the output shaft are permissible; see pages 25-26</p> <p>1.5 根据 19-24 页上的表检查实际传动比是否满足要求。</p> <p>1.5 Check whether the actual ratio i as per tables on pages 19-24 is acceptable</p>		
<p>安装方式 Mounting position</p> <table><tr><th data-bbox="711 1441 1358 1485">卧式安装 Horizontal</th><th data-bbox="1358 1441 2005 1485">立式安装 Vertical</th></tr></table>		卧式安装 Horizontal	立式安装 Vertical
卧式安装 Horizontal	立式安装 Vertical		
<p>2. 确定供油方式</p> <p>2. Determination of oil supply</p>	<p>所有需要润滑的零部件均浸在润滑油中, 或采用飞溅润滑方式, 也可按用户要求提供强制润滑方式。 All parts to be lubricated are lying in the oil or are splash lubricated Forced lubrication on request</p> <p>可选润滑油供给方式: —浸油润滑 —通过法兰联接泵或电动泵进行强制润滑。 有关合适的供油方式和选择标准, 参见 19-24 页。 Possible oil supply variations: - Dip lubrication - Forced lubrication by means of flanged-on pump or motor pump. For preferred variants and criteria for selection, page 19-24</p>		
<p>3. 确定所需要的热容量P_G</p> <p>3. Determination of required thermal capacity P_G</p>	<p>3.1 如满足以下条件, 则齿轮箱可不带辅助冷却装置:</p> <p>3.1 Adequate for gear units without auxiliary cooling, if:</p> <div>$P_2 \leq P_G = P_{G1} \times f_4 \times f_5 \times f_6 \times f_9$</div> <p>3.2 如满足以下条件, 则齿轮箱带冷却风扇可满足要求:</p> <p>3.2 Adequate for gear units with fan cooling, if:</p> <div>$P_2 \leq P_G = P_{G2} \times f_4 \times f_5 \times f_6 \times f_{10}$</div> <p>3.3 如满足以下条件, 则齿轮箱带冷却盘管可满足要求:</p> <p>3.3 Adequate for gear units with fitted cooling coil, if:</p> <div>$P_2 \leq P_G = P_{G3} \times f_5 \times f_7 \times f_8 \times f_{11}$</div> <p>3.3 如满足以下条件, 则齿轮箱带冷却盘管和风扇可满足要求:</p> <p>3.3 Adequate for gear units with cooling coil and fan, if:</p> <div>$P_2 \leq P_G = P_{G4} \times f_5 \times f_7 \times f_8 \times f_{12}$</div> <p>3.5 如需要较高的热容量, 则可按用户要求提供外部润滑油冷却装置进行冷却。</p> <p>3.5 For higher thermal capacities, cooling by external oil cooler on request</p>		



齿轮箱 Gear Units

符号说明 Key to Symbols

符号说明:

Key to symbols:

- E_D = 每小时工作周期,以百分比表示,如 $E_D=80\%/h$
Operating cycle per hour in %, e.g. $E_D=80\%/h$
- f_1 = 工作机最低工况系数 (表1), 9 页
Factor for driven machine (table 1), pages 9
- f_2 = 原动机系数 (表2), 10 页
Factor for prime mover (table 2), page 10
- f_3 = 峰值扭矩系数 (表3), 10 页
Peak torque factor (table 3), page 10
- f_4, f_5 = 环境温度系数 (表4+表5), 10 页
Thermal factors (tables 4 + 5), page 10
- f_6, f_7 = 海拔高度系数 (表6+表7), 10 页
Factors for altitude (tables 6 + 7), page 10
- f_8 = 立式安装齿轮箱供油系数 (表8), 11 页
对于卧式安装齿轮箱: $f_8=1$
Oil supply factor for vertical gear units (Table 8), page 11
For horizontal gear units: $f_8=1$
- f_9, f_{10} = 热容量系数 (表9...12), 11-12 页
 f_{11}, f_{12} = Thermal capacity factors (tables 9...12), pages 11-12
- a_1 = 规格系数
Size factor
- a_2 = 传动比系数
Transmission ratio factor
- i = 实际传动比
Actual ratio
- i_N = 公称传动比
Nominal ratio
- i_s = 要求传动比
Required ratio
- n_1 = 输入转速 (1/min)
Input speed (1/min)
- n_2 = 输出转速 (1/min)
Output speed (1/min)
- P_G = 要求的热容量
Required thermal capacity
- P_{G1} = 齿轮箱的热容量, 不带辅助冷却装置, 14-22 页
Thermal capacity for gear units without auxiliary cooling, pages 14-22
- P_{G2} = 齿轮箱的热容量, 带冷却风扇, 14-22 页
Thermal capacity for gear units with fan cooling, pages 14-22
- P_{G3} = 齿轮箱的热容量, 带内置冷却盘管, 14-22 页
Thermal capacity for gear units with built-in cooling coil, pages 14-22
- P_{G4} = 齿轮箱的热容量, 带内置冷却盘管和风扇, 14-22 页
Thermal capacity for gear units with built-in cooling coil and fan, pages 14-22
- P_N = 齿轮箱的额定功率(kW), 见选型表, 13-21 页
Nominal power rating of gear unit (kW), see tables, pages 13-21
- P_2 = 工作机的额定功率 (kW)
Power rating of driven machine (kW)
- t = 环境温度 (°C)
Ambient temperature (°C)
- T_A = 输入轴最大扭矩, 如峰值工作扭矩、起动扭矩或制动扭矩 (N.m)
Max. torque occurring on input shaft, e.g. peak operating-, starting- or braking torque (N.m)
- T_{2N} = 额定输出扭矩(kN.m), 23-24 页
Nominal output torque (kN.m), pages 23-24
- S_A = 减速机安全系数 (表15)
Safety coefficient of speed reducer (tables 15)



齿轮箱 Gear Units

选型指南 Guidelines for the Selection

计算示例 Calculation Example

已知参数:

原动机

电机功率: $P_1=75$ kW

电机转速: $n_1=1500$ rpm

最大起动扭矩: $T_A=720$ N.m

工作机

皮带输送机功率: $P_2=66$ kW

转速: $n_2=26$ rpm

工作制: 12 小时 / 天

每小时起动次数: 7

每小时工作周期: $E_D=100\%$

环境温度: 30 °C

室外安装 (风速): ($w \geq 4$ m/s)

海拔高度: 海平面

重要性与安全要求: 一般

齿轮箱设计

直交轴齿轮箱

安装方式: 卧式安装

输出轴 d_2 : 位于齿轮箱右侧 (面对输入轴), 即布置型式 C

输出轴 d_2 转动方向: ccw

KNOWN CRITERIA:

PRIME MOVER

Electric motor: $P_1=75$ kW

Motor speed: $n_1=1500$ rpm

Max. starting torque: $T_A=720$ N.m

DRIVEN MACHINE

Belt conveyor: $P_2=66$ kW

Speed: $n_2=26$ rpm

Duty: 12 h/day

Starts per hour: 7

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

Ambient temperature: 30 °C

Outdoor installation: ($w \geq 4$ m/s)

Altitude: sea level

Reliability: normal

GEAR UNIT DESIGN

Bevel-helical gear unit

Mounting position: horizontal

Output shaft d_2 : on right hand side of

Direction of rotation of output shaft c

要求: 齿轮箱的类型及规格 Required: Type and size of gear unit

1. 选择齿轮箱的类型及规格: Selection of gear unit type and size

1.1 传动比计算: Calculation of transmission ratio

$$i_a = \frac{n_1}{n_2} = \frac{1500}{26} = 57.7 \quad i_n = 56$$

1.2 确定额定功率 Determination of the gear unit nominal power rating

$$P_n \geq P_2 \times f_1 \times f_2 \times S_A = 66 \times 1.3 \times 1 \times 1.4 = 120 \text{ kW}$$

从额定功率表中选择: 类型 B3, 规格 10, 对应的 $P_N=122$ kW

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

$$3.33 \times P_2 \geq P_N \quad 3.33 \times 66 = 219.8 \text{ kW} > P_N$$

1.3 检查起动扭矩 Checking the starting torque

$$P_N \geq \frac{T_A \times n_1}{9550} \times f_3 = \frac{720 \times 1500}{9550} \times 0.65 = 73.5 \text{ kW} \quad P_N = 122 \text{ kW} > 73.5 \text{ kW}$$

2. 确定热容量 Determination of thermal capacity

2.1 根据表中给出的 B3 型齿轮箱参数, 计算不带辅助冷却装置的齿轮箱热容量

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

$$P_G = P_{G1} \times f_4 \times f_5 \times f_6 \times f_7 \quad P_G = 78.9 \text{ kW} \times 0.88 \times 1 \times 1 \times (1.23 - 2.80 \times 0.095 \times 0.15) \quad P_G = 82.6 \text{ kW}$$

$$P_2 = 66 \text{ kW} < P_G = 82.6 \text{ kW}$$

结论: 齿轮箱不带辅助冷却装置, 可满足要求!

Conclusion: A gear unit without auxiliary cooling is sufficient!



工作机		日带载运行时间(小时)			工作机		日带载运行时间(小时)		
		≤0.5	>0.5~10	>10			≤0.5	>0.5~10	>10
污 水 处 理	浓缩器	—	—	1.2	起 重 机 械	回转机构*	1	1.4	1.8
	压滤器	1	1.3	1.5		俯仰机构	1	1.4	1.8
	絮凝器	0.8	1	1.3		行走机构	1.5	1.75	2
	曝气机	—	1.8	2		提升机构	1	1.1	1.4
	接集设备	1	1.2	1.3		转臂式起重机	1	1.2	1.6
	纵向、回转组合接集装置	1	1.3	1.5	化 学 工 业	挤压机	—	—	1.6
	预缩器	—	1.1	1.3		调浆机	—	1.8	1.8
	螺杆泵	—	1.3	1.5		橡胶研光机	—	1.5	1.5
	水轮机	—	—	2		冷却圆筒	—	1.3	1.4
	离心机	1	1.2	1.3		混料机,用于均匀介质	1	1.3	1.4
	1个活塞容积式泵	1.3	1.4	1.8		混料机,用于非均匀介质	1.4	1.6	1.7
	>1个活塞容积式泵	1.2	1.4	1.5		搅拌机,用于密度均匀介质	1	1.3	1.5
						搅拌机,用于非密度均匀介质	1.2	1.4	1.6
						烘炉	1	1.3	1.5
						离心机	1	1.2	1.3
空 泥 机	斗式运输机	/	1.6	1.6	风 机 类	冷却塔风扇	—	—	2
	倾卸装置	/	1.3	1.5		风机(轴流和离心式)	—	1.4	1.5
	行走机构*	1.2	1.6	1.8	蔗 糖 生 产	甘蔗切碎机	—	—	1.7
	斗轮式挖掘机:用于捡拾	/	1.7	1.7		甘蔗碾磨机	—	—	1.7
	斗轮式挖掘机:用于粗料	/	2.2	2.2	甜 菜 糖 生 产	甜菜绞碎机	—	—	1.2
	切碎机	/	2.2	2.2		榨取机,机械制冷机,蒸煮机	—	—	1.4
钢 铁 工 业	拉线机	1.25	1.5	1.75		甜菜清洗机	—	—	1.5
	绕线机	1	1.25	1.5		甜菜切碎机	—	—	1.5
	集中驱动辊道(无反转)	1.25	1.5	1.75	索 道 缆 车	运货索道	—	1.3	1.4
	单驱动辊道(无反转)	1.5	1.75	2		往反系统空中索道	—	1.6	1.8
	集中驱动辊道(有反转)	1.75	2.25	2.5		T型杆升降机	—	1.3	1.4
	单驱动辊道(有反转)	2	2.25	2.75		连续索道	—	1.4	1.6
纺 织 工 业	织机	1.25	1.5	1.75	水 泥 工 业	混凝土搅拌机	—	1.5	1.5
	纺纱机	1	1.25	1.5		破碎机*	—	1.2	1.4
	洗涤机	1	1.25	1.5		回转窑	—	—	2
输 送 机 械	斗式输送机	—	1.2	1.5		管式磨机	—	—	2
	绞车	1.4	1.6	1.6		选粉机	—	1.6	1.6
	卷扬机	—	1.5	1.8		辊压机	—	—	2
	皮带输送机≤150KW	1	1.2	1.3	造 纸 机 械	各种类型**	—	1.8	2
	皮带输送机>151KW	1.1	1.3	1.4		碎浆机驱动装置	—	2	2.25
	货用电梯*	—	1.2	1.5	压 缩 机	往复式压缩机	—	1.8	1.9
	客用电梯*	—	1.5	1.8		离心式压缩机	—	1.4	1.5
	刮板输送机	—	1.2	1.5					
	自动扶梯	—	1.2	1.4					
	轨道行走机构	—	1.5	—					

工作机额定功率 P_2 的确定

*) 按最大扭矩确定额定功率.

**) 检验热功率是绝对必要的.



齿轮箱 Gear Units
服务系数 Service Factor

表2 Table2	原动机系数 Factor for prime mover	f_2
电机, 液压马达, 气轮机 Electric motors, hydraulic motors, turbines		1.0
4-6缸, 活塞发动机周期变化 1:100至1:200 Piston engines 4-6 cylinders cyclic variation 1:100to 1:200		1.25
1-3缸, 活塞发动机周期变化 最高达1:100 Piston engines 1-3 cylinders cyclic variation up to 1:100		1.5

表3 Table3	峰值扭矩系数 Peak torque factor	f_3
	每小时峰值负荷次数 Load peaks per hour	
	1-5 6-30 31-100 >100	
f_3 单向载荷 Steady direction of load	0.5 0.65 0.7 0.85	
f_3 交变载荷 Alternating direction of load	0.7 0.95 1.10 1.25	

表4 Table4	环境温度系数 Thermal factor	f_4
不带辅助冷却装置或仅带冷却风扇 Without auxiliary cooling or with fan cooling		
环境温度 Ambient temperature	每小时工作周期(E_0)百分比% Operating cycle per hour(E_0)in %	
	100 80 60 40 20	
10℃	1.14 1.20 1.32 1.54 2.04	
20℃	1.00 1.06 1.16 1.35 1.79	
30℃	0.87 0.93 1.00 1.18 1.56	
40℃	0.71 0.75 0.82 0.96 1.27	
50℃	0.55 0.58 0.64 0.74 0.98	

表5 Table5	环境温度系数 Thermal factor	f_5
带冷却盘管和带冷却盘管和风扇 For cooling with cooling coil, or with fan and cooling coil		
环境温度 Ambient temperature	每小时工作周期(E_0)百分比% Operating cycle per hour(E_0)in %	
	100 80 60 40 20	
10℃	1.04 1.10 1.21 1.40 1.86	
20℃	1.00 1.06 1.16 1.35 1.79	
30℃	0.93 0.99 1.08 1.26 1.66	
40℃	0.88 0.93 1.02 1.19 1.58	
50℃	0.81 0.86 0.94 1.09 1.45	

表6 Table6	海拔高度系数 Factor for altitude					f_a
不带辅助冷却装置或只带冷却风扇 Without auxiliary cooling or with fan cooling						
系数 Factor	海拔高度(m,高于海平面) Altitude(metres above MSL)					
	高达 Up to	高达 Up to	高达 Up to	高达 Up to	高达 Up to	
	1000	2000	3000	4000	5000	
f_a	1.0	0.95	0.90	0.85	0.80	

表7 Table7	海拔高度系数 Factor for altitude					f_7
带冷却盘管或带冷却盘管和风扇 For cooling with cooling coil, or with fan and cooling coil						
系数 Factor	海拔高度(m,高于海平面) Altitude(metres above MSL)					
	高达 Up to	高达 Up to	高达 Up to	高达 Up to	高达 Up to	
	1000	2000	3000	4000	5000	
f_7	1.0	0.98	0.96	0.94	0.92	

表15 Table15	安全系数 Safety coefficient		S _A
重要性与安全要求 Importance and safety requirements	一般设备, 减速器失效仅引起单机停产且易更换备件 The failure of ordinary equipment and speed reducer can only result in production halts of single machine and replacement of spare parts.	重要设备, 减速器失效仅引起机组、生产线或全厂停产 The failure of ordinary equipment and speed reducer can only result in production halts of machines, production lines or the whole factory.	高度安全要求, 减速器失效引起设备、人身事故 Higher safety requirements, the failure of speed reducer can cause the incident of equipment and human body.
	S _A	1.1-1.3	1.3-1.5	1.5-1.7



齿轮箱 Gear Units

服务系数 Service Factors

表 8 Table 8		立式安装齿轮箱供油系数。对于卧式安装齿轮箱 $f_o=1.0$ ；当采用强制润滑时， $f_o=1.05$ Oil supply factor for vertical gear units. For horizontal gear units $f_o=1.0$, and in case of forced lubrication $f_o=1.05$								f_o
齿轮箱类型 Gear unit type	供油方式 Oil supply	规格 1...12 Sizes 1...12				规格 13...18 Sizes 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	

表 9 Table 9		不带辅助冷却装置齿轮箱的热容量系数 Thermal capacity factor for gear units without auxiliary cooling															f _{t0}	
齿轮箱 类型 Gear unit type	n r/min	速比 i	狭小空间安装* Small confined dpaces					室内大厅、大车间安装** Large halls workshops					室外安装*** In the open					
			规格 Sizes					规格 Sizes					规格 Sizes					
			1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22	23...26	
H1SH	750	1.25...2 2.24...5.6	0.60 0.67	0.57 0.64	0.61 0.56	—	—	0.77 0.81	0.73 0.79	0.75 0.74	—	—	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	—	
	1000	1.25...2 2.24...5.6	0.55 0.69	— 0.59	0.53 —	—	—	0.72 0.85	0.63 0.76	0.66 0.50	—	—	0.99 1.07	0.90 0.99	0.92 —	0.78 —	—	
	1500	1.25...2 2.24...3.55 4...5.6	0.43 0.56 0.74	— 0.52 —	— — —	— — —	—	0.63 0.76 0.93	— 0.56 0.69	— — —	— — —	—	0.92 1.04 1.19	— 0.86 0.96	— — 0.76	— — —	—	
H2.. B2..	750	5...9 10...28	0.66 0.71	0.58 0.68	0.60 0.67	0.60 0.68	—	0.81 0.83	0.76 0.82	0.74 0.81	0.76 0.81	—	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	—	
	1000	5...9 10...28	0.66 0.75	0.54 0.68	0.51 0.66	0.63 —	—	0.83 0.90	0.69 0.84	0.65 0.80	0.77 —	—	1.06 1.10	0.95 1.06	0.90 1.03	0.97 0.99	—	
	1500	5...6.3 7...9 10...16 18...28	0.56 0.64 0.75 0.81	— 0.47 0.56 0.69	— 0.54 0.63 —	— — — —	—	0.76 0.82 0.94 0.99	0.59 0.62 0.71 0.88	— — 0.67 0.78	— — — 0.68	—	1.05 1.10 1.20 1.24	0.88 0.87 0.98 1.14	— 0.81 0.93 1.05	— — 0.83 0.93	—	
H3.. B3..	750	12.5...112	0.71	0.70	0.70	0.70	—	0.83	0.83	0.83	0.83	—	1.00	1.00	1.00	1.00	—	
	1000	12.5...112	0.76	0.74	0.71	0.70	—	0.90	0.89	0.86	0.84	—	1.09	1.09	1.07	1.05	—	
	1500	12.5...31.5 35.5...56 63...112	0.77 0.83 0.87	0.62 0.78 0.87	0.54 0.69 0.84	0.53 0.64 0.81	—	0.96 1.00 1.03	0.82 0.96 1.03	0.67 0.87 1.00	0.65 0.81 0.97	—	1.21 1.23 1.24	1.10 1.20 1.24	0.95 1.12 1.23	0.88 1.07 1.20	—	
H4.. B4..	750	80...450	0.71	0.72	0.73	0.73	—	0.84	0.85	0.85	0.85	—	1.00	1.00	1.00	1.00	—	
	1000	80...450	0.76	0.77	0.78	0.78	—	0.90	0.91	0.91	0.91	—	1.09	1.09	1.09	1.09	—	
	1500	80...112 125...450	0.79 0.84	0.82 0.86	0.80 0.85	0.72 0.85	—	0.98 1.01	0.99 1.02	0.98 1.01	0.94 1.01	—	1.21 1.23	1.21 1.23	1.20 1.22	1.18 1.22	—	

表 10 Table 10		带冷却风扇齿轮箱的装置热容量系数 Thermal capacity factor for gear units with fan															f_{t0}	
齿轮箱 类型 Gear unit type	n r/min	速比 <i>i</i>	狭小空间安装* Small confined dpaces					室内大厅、大车间安装** Large halls workshops					室外安装*** In the open					
			规格 Sizes					规格 Sizes					规格 Sizes					
			1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22	23...26	
H1SH H2/3... B2/3..	750	1.25...112	0.89	0.93	0.98	0.98	....	0.93	0.95	0.99	0.99	....	1.00	1.00	1.00	1.00	....
	1000		1.07	1.13	1.16	1.18		1.11	1.15	1.17	1.17		1.18	1.19	1.19	1.19		
	1500		1.41	1.46	1.45	1.44		1.43	1.47	1.45	1.44		1.49	1.51	1.47	1.46		

表 11 Table 11		带冷却盘管齿轮箱的热容量系数 Thermal capacity factor for gear units with cooling coil															t_0	
齿轮箱 类型 Gear unit type	n r/min	速比 i	狭小空间安装* Small confined spaces					室内大厅、大车间安装** Large halls workshops					室外安装*** In the open					
			规格 Sizes					规格 Sizes					规格 Sizes					
			1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22	23...26	
H1SH TH2.. TB2..	750	1.25...28	0.83	0.86	0.85	0.88	....	0.90	0.92	0.92	0.93	....	1.00	1.00	1.00	1.00	....
	1000		0.94	1.00	0.96	0.96		1.04	1.05	1.02	1.02		1.15	1.15	1.10	1.09		
	1500		1.13	1.15	1.01	0.95		1.24	1.23	1.07	1.02		1.38	1.34	1.17	1.11		
H3.. B3..	750	12.5...112	0.85					0.92					1.00				
	1000		0.98					1.06					1.15					
	1500		1.19					1.29					1.40					

对于系数 f_o , f_{t0} 和 $f_{t1}<0.5$,请与我们联系! For factors f_o , f_{t0} and $f_{t1}<0.5$, please refer to us!

*) 根据客户要求 *) On request



齿轮箱 Gear Units

服务系数 Service Factors

表12 Table 12																
带冷却风扇和冷却盘管的齿轮箱的热容量系数 Thermal capacity factor for gear units with fan and cooling coil																
齿轮箱 类型 Gear unit type	n r/min	速比 <i>i</i>	狭小空间安装* Small confined dpaces					室内大厅。大车间安装** Large halls workshops					室外安装*** In the open			
			规格 Sizes					规格 Sizes					规格 Sizes			
			1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22	23...26	1...6	7...12	13...18	19...22
H1SH H2/3.. B2/3..	750	1.25...112	0.93	0.97	0.98	....	0.96	0.98	0.99	....	1.00	1.00	1.00	..		
	1000		1.14	1.19	1.19		1.16	1.20	1.20		1.20	1.22	1.21			
	1500		1.53	1.58	1.53		1.54	1.59	1.54		1.58	1.60	1.54			

对于系数 $f_{12}<0.5$, 请与我们联系 For factor $f_{12}<0.5$, please refer to us!



平行轴齿箱 Helical Gear Units

额定功率 Nominal Power Ratings

类型 H1 Type H1

规格 1... 19 Sizes 1 ...19

额定功率 Nominal Power Ratings																												
齿轮箱规格 Gear unit sizes																												
IN	n ₁	n ₂	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	1/min		额定功率 PN , KW Nominal power ratings PN in kW																									
1.25	1500	1200	99		327		880		1671		2702																	
	1000	800	66		218		586		1114		1801																	
	750	600	50		163		440		836		1351																	
1.4	1500	1071	93		303		807		1559		2501																	
	1000	714	62		202		538		1039		1667																	
	750	536	47		152		404		780		1252																	
1.6	1500	938	85		285		737		1395		2318		3929															
	1000	625	57		190		491		929		1545		2618		4123													
	750	469	43		142		368		697		1159		1964		3094													
1.8	1500	833	79		209		672		1326		2128		3611															
	1000	556	53		140		448		885		1421		2410		3860													
	750	417	40		105		336		664		1065		1808		2895													
2	1500	750	73		196		644		1217		1963		3353															
	1000	500	49		131		429		812		1309		2236		3571													
	750	375	37		98		322		609		982		1677		2678		4751											
2.24	1500	670	67		175		589		1087		1754		3087															
	1000	446	45		117		392		724		1168		2055		3283													
	750	335	34		88		295		544		877		1543		2466		4280											
2.5	1500	600	63		163		528		974		1571		2764															
	1000	400	42		109		352		649		1047		1843		3016		4607											
	750	300	31		82		264		487		785		1382		2262		3455											
2.8	1500	536	56		152		471		836		1330		2470															
	1000	357	37		101		314		557		886		1645		2692		4224											
	750	268	28		76		236		418		665		1235		2021		3171		4799									
3.15	1500	476	50		135		419		758		1221		2088		3409													
	1000	317	33		90		279		505		813		1391		2270		3850											
	750	238	25		67		209		379		611		1044		1705		2891		4311									
3.55	1500	423	44		124		368		687		1103		1936		3083													
	1000	282	30		83		245		458		735		1290		2055		3484											
	750	211	22		62		183		342		550		966		1538		2607		3822									
4	1500	375	39		110		330		609		982		1728		2780													
	1000	250	26		73		220		406		654		1152		1853		3194		4529									
	750	188	20		55		165		305		492		866		1394		2402		3406		4823							
4.5	1500	333	29		77		234		481		746		1395		2008		3557											
	1000	222	19		51		156		321		497		930		1339		2371		3394									
	750	167	14		38		117		241		374		699		1007		1784		2553		3777							
5	1500	300	25		66		198		377		644		1059		1712		2790											
	1000	200	16		44		132		251		429		706		1141		1860		2597		3644							
	750	150	12		33		99		188		322		529		856		1395		1948		2733							
5.6	1500	268	17		56		168		320		491		892		1454		2371											
	1000	179	12		37		112		214		328		596		971		1584		2212		2812							
	750	134	9		28		84		160		246		446		727		1186		1656		2105							

根据用户要求供货
On request

卧式安装齿轮箱要采用强制润滑 Forced lubrication required on horizontal gear units



平行轴齿箱 Helical Gear Units 热容量 Thermal Capacities

类型 H1 Types H1

规格 1... 19 Sizes 1 ...19

热容量 Thermal Capacities																											
齿轮箱规格 Gear unit sizes																											
IN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		热容量 PG(单位为 KW) 取决于冷却方式: PG1 : 无辅助冷却装置; PG2: 带冷却风扇; PG3 : 带冷却盘管; PG4 : 带风扇和冷却盘管。																									
		Thermal capacity PG(in KW)dependent on kind of cooling; Pg1 without auxiliary cooling,PG2:fan cooling,PG3:cooling coil,PG4:fan and cooling coil.																									
1.25	PG1	70.4		110		207		230		190																	
	PG2			171		408		562		642																	
	PG3	109		268		641		923		1322																	
	PG4			322		819		1177		1621																	
1.4	PG1	68.0		110		214		250		247																	
	PG2			169		409		567		670																	
	PG3	105		260		629		901		1305																	
	PG4			312		800		1149		1589																	
1.6	PG1	66.2		108		215		261		303		234															
	PG2			164		399		548		686		967		891													
	PG3	100		244		593		836		1246		2138		2631													
	PG4			295		754		1064		1519		2632		3220													
1.8	PG1	66.0		120		214		274		323		330															
	PG2			181		387		552		682		1000		1011													
	PG3	93.7		264		557		818		1195		2082		2547													
	PG4			319		712		1040		1454		2555		3095													
2	PG1	65.0		116		209		273		334		393		302													
	PG2			174		372		534		668		1010		1085		794											
	PG3	89.1		251		526		775		1135		2004		2483		2249											
	PG4			303		670		985		1382		2449		3001		3099											
2.24	PG1	57.0		112		202		263		335		433		416													
	PG2			166		353		496		643		999		1119		908											
	PG3	83.9		236		490		699		1063		1897		2377		2190											
	PG4			286		628		888		1296		2322		2874		2984											
2.5	PG1	54.1		103		192		252		328		452		486													
	PG2			153		332		466		611		971		1121		1001											
	PG3	75.5		212		453		644		984		1778		2246		2140											
	PG4			257		580		818		1201		2174		2714		2876											
2.8	PG1	52.3		97.0		180		263		347		456		525													
	PG2			143		309		477		630		928		1095		1063											
	PG3	69.8		195		413		649		990		1643		2091		2063											
	PG4			237		529		824		1205		2010		2525		2744											
3.15	PG1	49.7		95.1		185		293		371		520		620		464											
	PG2			138		305		535		664		976		1151		1291											
	PG3	64.9		189		408		755		1075		1672		2082		2218											
	PG4			227		517		967		1320		2030		2495		2847											
3.55	PG1	45.0		87.5		182		272		349		493		607		527											
	PG2			126		297		490		616		902		1086		1259											
	PG3	58.7		170		390		676		973		1508		1899		2057											
	PG4			205		494		870		1198		1835		2277		2628											
4	PG1	41.0		79.4		166		247		301		465		580		550											
	PG2			114		269		438		523		833		1006		1194											
	PG3	52.2		151		346		592		806		1358		1711		1869											
	PG4			182		439		763		998		1655		2055		2384											
4.5	PG1	41.0		87.5		172		254		347		446		608		657											
	PG2			122		272		437		585		789		1037		1273											
	PG3	53.0		161		346		586		890		1290		1766		1905											
	PG4			193		438		749		1093		1580		2126		2403											
5	PG1	37.0		79.2		163		245		316		443		586		676											
	PG2			111		257		419		527		770		989		1246											
	PG3	46.5		143		325		551		783		1220		1662		1805											
	PG4			172		411		707		964		1500		2003		2276											
5.6	PG1	36.5		70.9		145		221		304		423		535		630											
	PG2			98.3		227		374		503		730		890		1131											
	PG3	46.8		125		281		483		729		1143		1457		1595											
	PG4			150		357		621		902		1409		1761		2014											



平行轴齿轮箱 Helical Gear Units

额定功率 Nominal Power Ratings

类型 H2...,H3... Types H2...,H3

规格 3...26 Sizes 3...26

额定功率 Nominal power rating																											
in	n ₁	n ₂	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	
	1/min		额定功率 PN, KW Nominal power ratings PN in kW																								
6.3	1500	238	87	157	262		474		785		1383		2143		3564		4860										
	1000	159	58	105	175		316		524		924		1432		2381		3247		4862								
	750	119	44	79	131		237		393		692		1072		1782		2430		3639								
7.1	1500	211	77	139	232		420		696		1226		1900		3159	3535	4308	5082									
	1000	141	52	93	155		281		465		819		1270		2111	2362	2879	3396	4311	4946							
	750	106	39	70	117		211		350		616		955		1587	1776	2164	2553	3241	3718	4551						
8	1500	188	69	124	207	266	374	472	620	778	1093	1358	1693	2106	2815	3150	3839	4528									
	1000	125	46	82	137	177	249	314	412	517	726	903	1126	1401	1872	2094	2552	3010	3822	4385	5366						
	750	94	34	62	103	133	187	236	310	389	546	679	846	1053	1408	1575	1919	2264	2874	3297	4036	4508					
9	1500	167	61	110	184	236	332	420	551	691	971	1207	1504	1871	2501	2798	3410	4022									
	1000	111	41	73	122	157	221	279	366	459	645	802	1000	1244	1662	1860	2266	2673	3394	3894	4765	5323					
	750	83	30	55	91	117	165	209	274	343	482	600	747	930	1243	1391	1695	1999	2538	2912	3563	3981	4693				
10	1500	150	55	99	165	212	298	377	495	620	872	1084	1351	1681	2246	2513	3063	3613									
	1000	100	37	66	110	141	199	251	330	414	581	723	901	1120	1497	1675	2042	2408	3058	3508	4293	4796					
	750	75	27	49	82	106	149	188	247	310	436	542	675	840	1123	1257	1531	1806	2293	2631	3220	3597	4241	4869			
11.2	1500	134	49	88	147	189	267	337	442	554	779	968	1207	1501	2006	2245	2736	3227									
	1000	89	33	59	98	126	177	224	284	368	517	643	801	997	1333	1491	1817	2143	2721	3122	3821	4268	5032				
	750	67	25	44	74	95	133	168	221	277	389	484	603	751	1003	1123	1388	1614	2049	2350	2876	3213	3788	4350			
12.5	1500	120	44	79	132	170	239	302	396	496	697	867	1081	1345	1797	2010	2450	2890	3669								
	1000	80	29	53	88	113	159	201	264	331	465	578	720	896	1198	1340	1634	1927	2446	2806	3435	3837	4524				
	750	60	22	40	66	85	119	151	198	248	349	434	540	672	898	1005	1225	1445	1835	2105	2576	2877	3393	3895	4900		
14	1500	107	39	71	118	151	213	269	353	443	622	773	964	1199	1602	1793	2185	2577	3272	3753							
	1000	71	26	47	78	100	141	178	234	294	413	513	639	795	1063	1190	1450	1710	2171	2491	3048	3405	4015	4609			
	750	54	20	36	59	76	107	136	178	223	314	390	486	605	809	905	1103	1301	1651	1894	2318	2590	3053	3506	4410	4976	
16	1500	94	34	62	103	133	187	236	310	389	546	679	846	1053	1408	1575	1919	2264	2874	3297							
	1000	63	23	42	69	89	125	158	208	261	366	455	567	706	943	1055	1286	1517	1926	2210	2705	3021	3562	4090	5146		
	750	47	17	31	52	66	94	118	155	194	273	340	423	527	704	787	960	1132	1437	1649	2018	2254	2658	3051	3839	4331	
18	1500	83	30	55	91	117	165	209	274	343	482	600	747	930	1243	1391	1695	1999	2538	2912							
	1000	56	21	37	62	79	111	141	185	232	325	405	504	627	839	938	1143	1349	1712	1964	2404	2686	3166	3636	4574	5160	
	750	42	15	28	46	59	84	106	139	174	244	303	378	471	629	704	858	1012	1284	1473	1803	2014	2375	2727	3430	3870	
20	1500	75	27	49	82	106	149	188	247	310	436	542	675	840	1123	1257	1531	1806	2293	2631							
	1000	50	18	33	55	71	99	126	165	207	291	361	450	560	749	838	1021	1204	1529	1754	2147	2398	2827	3246	4084	4607	
	750	38	14	25	42	54	76	95	125	157	221	275	342	426	569	637	776	915	1162	1333	1631	1822	2149	2467	3104	3502	
22.4	1500	67	25	43	72	95	130	168	217	277	382	484	617	751	1073	1123	1403	1614	2105	2350	2947		3929				
	1000	45	16	29	48	64	88	113	146	186	257	325	415	504	721	754	942	1084	1414	1579	1979	2158	2639	2921	3770	4147	
	750	33	12	21	35	47	64	83	107	136	188	238	304	370	529	553	691	795	1037	1158	1451	1583	1935	2142	2764	3041	
25	1500	60			69	85	129	151	214	248	377	434	553	672	961	1087	1257	1508	1885	2168	2639	2953	3518	4021	5026		
	1000	40			46	57	86	101	142	165	251	289	369	448	641	725	838	1005	1257	1445	1759	1969	2346	2681	3351	3770	
	750	30			35	42	64	75	107	124	188	217	276	336	481	543	628	754	942	1084	1319	1476	1759	2010	2513	2827	
28	1500	54			62	74	116	133	192	220	339	383	498	616	865	978	1131	1357	1696	1951	2375	2658	3166	3619	4524	5089	
	1000	36			41	49	77	89	128	147	226	256	332	411	577	652	754	905	1131	1301	1583	1772	2111	2413	3016	3393	
	750	27			31	37	58	66	96	110	170	192	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545	
31.5	1500	48			55	73	103	128	171	216	302	377	442	548	769	870	1005	1206	1508	1734	2111	2362	2815	3217	4021	4524	
	1000	32			37	49	69	85	114	144	201	251	295	365	513	580	670	804	1005	1156	1407	1575	1876	2145	2681	3016	
	750	24			28	36	52	64	85	108	151	188	221	274	385	435	503	603	754	867	1055	1181	1407	1608	2010	2262	
35.5	1500	42			48	64	90	112	150	189	264	330	387	479	673	761	880	1055	1319	1517	1847	2067	2463	2815	3518	3958	
	1000	28			32	43	60	75	100	126	176	220	258	320	449	507	586	704	880	1012	1231	1378	1642	1876	2346	2639	
	750	21			24	32	45	58	75	95	132	165	194	240	336	380	440	528	660	759	924	1034	1231	1407	1759	1979	

卧式安装齿轮箱要采用强制润滑 Forced lubrication required on horizontal gear units



平行轴齿箱 Helical Gear Units
类型 H2...,H3... Types H2...,H3...

热容量 Thermal Capacities
规格 3 ... 26 Sizes 3 ... 26

热容量PG,KW Thermal capacities PG in KW																											
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		
		热容量PG(单位为KW)取决于冷却方式: PG1: 无辅助冷却装置; PG2: 带冷却风扇; PG3: 带冷却盘管; PG4: 带风扇和冷却盘管。 Thermal capacity PG(in KW) dependent on kind of cooling: PG1: without auxiliary cooling, PG2: fan cooling, PG3: cooling coil, PG4: fan and cooling coil.																									
6.3	PG1	53.2	68.2	89.4		128		177		253		333		325		230		291									
	PG2		93.5	129		202		273		443		607		652		775											
	PG3	84.9	114	181		291		454		669		1164		1405		1713											
	PG4		137	218		357		539		835		1394		1653		2122											
7.1	PG1	50.9	69.9	91.1		124		173		256		340		351	342	315	260	375	321	372							
	PG2		95.7	131		194		264		440		601		659	672	807	802										
	PG3	79.9	115	180		273		427		650		1123		1358	1416	1658	1710										
	PG4		139	217		336		506		813		1344		1599	1670	2040	2129										
8	PG1	49.2	67.1	88.5	97.8	120	137	169	176	252	291	341	372	368	368	365	340	431	402	458	398						
	PG2		91.4	127	140	187	213	255	267	428	495	590	661	658	679	826	831										
	PG3	76.3	109	173	187	259	297	405	450	619	849	1069	1218	1310	1370	1611	1658										
	PG4		131	208	226	320	365	481	530	777	1023	1284	1468	1535	1614	1980	2042										
9	PG1	46.5	64.9	85.7	99.5	116	133	163	172	243	293	338	378	375	383	399	388	469	457	516	479	1037					
	PG2		88.2	123	141	180	204	245	257	408	491	573	652	647	676	829	848										
	PG3	71.4	104	165	187	246	280	383	421	572	824	1012	1175	1247	1321	1562	1615										
	PG4		126	198	225	302	344	456	496	717	994	1216	1407	1461	1550	1907	1983										
10	PG1	44.1	61.4	81.0	96.6	112	129	157	167	235	289	331	378	375	390	418	419	508	492	572	535	1076	1119				
	PG2		83.0	115	137	171	197	234	249	388	478	552	637	629	664	820	850										
	PG3	66.4	96.9	152	179	231	266	359	401	537	783	955	1116	1177	1254	1493	1556										
	PG4		117	183	215	285	327	428	472	672	950	1146	1343	1379	1475	1819	1908										
11.2	PG1	41.7	58.8	77.6	93.5	113	125	149	162	236	277	337	373	370	390	426	437	530	530	607	589	1118	1163				
	PG2		79.4	110	132	172	189	221	240	389	462	556	618	606	647	799	840										
	PG3	62.2	91.7	143	171	229	251	335	378	533	720	941	1082	1100	1187	1411	1494										
	PG4		111	173	206	283	310	400	447	668	872	1133	1275	1292	1391	1717	1822										
12.5	PG1	40.8	56.7	76.3	88.1	111	119	146	156	238	267	323	364	372	384	444	443	555	550	641	621	1118	1163	1337			
	PG2		75.7	107	124	167	180	215	229	381	430	523	595	600	622	799	817										
	PG3	59.7	88.5	141	157	224	237	324	356	522	675	863	997	1078	1114	1370	1410										
	PG4		106	169	190	275	292	384	421	650	818	1036	1199	1261	1305	1665	1716										
14	PG1	38.2	53.7	72.1	84.2	102	120	142	149	226	270	310	369	359	385	434	459	551	574	643	653	1110	1194	1327	1393		
	PG2		71.5	101	118	153	181	207	217	359	433	495	598	569	615	766	816										
	PG3	55.5	82.7	131	148	200	235	305	331	483	670	799	987	1001	1087	1280	1369										
	PG4		99.1	156	179	247	290	364	392	602	813	963	1187	1173	1276	1557	1665										
16	PG1	35.3	49.2	67.6	82.6	95.3	118	133	145	212	269	283	354	361	371	420	448	536	568	627	653	1084	1127	1296	1361		
	PG2		65.2	93.7	114	142	175	193	210	334	424	449	563	565	583	725	781										
	PG3	51.3	74.5	120	146	184	229	280	321	440	653	707	900	978	1009	1188	1281										
	PG4		89.6	144	175	226	282	334	378	549	789	855	1084	1147	1183	1444	1559										
18	PG1	34.4	47.0	64.5	78.1	91.1	108	125	140	196	255	285	338	340	373	415	433	534	551	617	637	1050	1092	1256	1318		
	PG2		62.0	89.4	108	136	160	181	202	310	398	450	533	527	579	702	739										
	PG3	50.2	70.0	113	135	175	206	261	302	410	602	709	836	901	987	1132	1185										
	PG4		84.2	136	163	216	253	312	357	513	729	854	1007	1059	1159	1373	1446										
20	PG1	32.1	46.0	60.4	73.1	84.9	102	121	132	189	238	267	308	326	351	406	429	517	548	598	634	1015	1056	1214	1274		
	PG2		60.4	83.5	100	126	149	174	189	297	369	419	482	498	540	681	717										
	PG3	45.9	67.7	105	124	160	189	250	278	387	547	646	740	828	910	1085	1124										
	PG4		81.4	126	150	198	232	298	329	484	663	780	893	970	1069	1318	1368										
22.4	PG1	31.9	42.5	56.1	69.8	81.8	97	111	124	176	220	240	310	330	336	355	420	440	531	524	607	775	1005	928	1210		
	PG2		55.8	77.1	95.8	121	143	161	177	275	343	301	482	443	510	460	695										
	PG3	45.3	61.7	95.4	118	153	180	225	259	352	512	525	740	844	834	844	1078										
	PG4		74.3	115	142	188	221	269	307	441	620	580	89														



平行轴齿轮箱 Helical Gear Units

额定功率 Nominal Power Ratings

类型 H3...,H4... Types H3..., H4...

规格 5...26 Sizes 5...26

额定功率 Nominal power rating																									
in	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	
	1/min		额定功率 PN, KW Nominal power ratings PN in kW																						
40	1500	38	44	58	82	101	135	171	239	298	350	434	609	688	796	955	1194	1373	1671	1870	2228	2547	3183	3581	
	1000	25	29	38	54	67	89	113	157	196	230	285	401	453	524	628	785	903	1099	1230	1466	1675	2094	2356	
	750	18.8	22	29	40	50	67	85	118	148	173	215	301	341	394	472	591	679	827	925	1102	1260	1575	1772	
45	1500	33	38	50	71	88	117	149	207	259	304	377	529	598	691	829	1037	1192	1451	1624	1935	2212	2764	3110	
	1000	22	25	33	47	59	78	99	138	173	203	251	352	399	461	553	691	795	968	1083	1290	1474	1843	2073	
	750	16.7	19	25	36	45	59	75	105	131	154	191	268	303	350	420	525	603	734	822	979	1119	1399	1574	
50	1500	30	35	46	64	80	107	135	188	236	276	342	481	543	628	754	942	1084	1319	1476	1759	2010	2513	2827	
	1000	20	23	30	43	53	71	90	126	157	184	228	320	362	419	503	628	723	880	984	1173	1340	1675	1885	
	750	15	17	23	32	40	53	68	94	118	138	171	240	272	314	377	471	542	660	738	880	1005	1257	1414	
56	1500	27	31	41	58	72	96	122	170	212	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545	
	1000	17.9	21	27	38	48	64	81	112	141	166	204	287	324	375	450	562	647	787	881	1050	1200	1499	1687	
	750	13.4	15	20	29	36	48	60	84	105	123	153	215	243	281	337	421	484	589	659	786	898	1123	1263	
63	1500	24	28	36	52	64	85	108	151	188	221	274	385	435	503	603	754	867	1055	1181	1407	1608	2010	2262	
	1000	15.9	18	24	34	42	57	72	100	125	147	181	255	288	333	400	499	574	699	783	932	1066	1332	1498	
	750	11.9	14	18	26	32	42	54	75	93	110	136	191	216	249	299	374	430	523	586	698	797	997	1121	
71	1500	21	24	32	45	56	75	95	132	165	194	240	336	380	440	528	660	759	924	1034	1231	1407	1759	1979	
	1000	14.1	16	21	30	38	50	63	89	111	130	161	226	255	295	354	443	509	620	694	827	945	1181	1329	
	750	10.6	12	16	23	28	38	48	67	83	98	121	170	192	222	266	333	383	466	522	622	710	888	999	
80	1500	18.8	22	29	40	50	67	85	118	148	173	215	301	341	394	472	591	679	827	925	1102	1260	1575	1772	
	1000	12.5	14	19	27	33	45	56	79	98	115	143	200	226	262	314	393	452	550	615	733	838	1047	1178	
	750	9.4	11	14	20	25	33	42	59	74	87	107	151	170	197	236	295	340	413	463	551	630	787	886	
90	1500	16.7	19	25	35	45	59	75	105	131	154	191	268	303	350	420	507	603	717	822	979	1119	1399	1574	
	1000	11.1	13	17	23	30	39	50	70	87	102	127	178	201	232	279	337	401	477	546	651	744	930	1046	
	750	8.3	10	13	17	22	29	37	52	65	76	95	133	150	174	209	252	300	356	408	487	556	695	782	
100	1500	15		23	32	40	53	68	94	118	138	171	240	272	314	355	471	526	660	730	880	1005	1257	1414	
	1000	10		15	21	27	36	45	63	79	92	114	160	181	209	237	314	351	440	487	586	670	838	942	
	750	7.5		11	16	20	27	34	47	59	69	86	120	136	157	177	236	263	330	365	440	503	628	707	
112	1500	13.4		20	29	35	48	59	84	105	123	153	215	243	281	337	421	484	589	659	786	898	1123	1263	
	1000	8.9		13	19	23	32	39	56	70	82	102	143	161	186	224	280	322	391	438	522	596	746	839	
	750	6.7		10	14	18	24	29	42	53	62	76	107	121	140	168	210	242	295	330	393	449	561	631	
125	1500	12			26	32	43	54	75	94	111	137	192	217	251	302	377	434	528	591	704	804	1005	1131	
	1000	8			17	21	28	36	50	63	74	91	128	145	168	201	251	289	352	394	469	536	670	754	
	750	6			13	16	21	27	38	47	55	68	96	109	126	151	188	217	264	295	352	402	503	565	
140	1500	10.7			23	29	38	48	67	84	99	122	171	194	224	269	336	387	471	527	627	717	896	1008	
	1000	7.1			15	19	25	32	45	56	65	81	114	129	149	178	223	256	312	349	416	476	595	669	
	750	5.4			12	14	19	24	34	42	50	62	87	98	113	136	170	195	237	266	317	362	452	509	
160	1500	9.4			20	25	33	42	59	74	87	107	151	170	197	236	295	340	413	463	551	630	787	886	
	1000	6.3			14	17	22	28	40	49	58	72	101	114	132	158	198	228	277	310	369	422	528	594	
	750	4.7			10	13	17	21	30	37	43	54	75	85	98	118	148	170	207	231	276	315	394	443	
180	1500	8.3			18	22	30	37	52	65	76	95	133	150	174	209	261	300	365	408	487	556	695	782	
	1000	5.6			12	15	20	25	35	44	52	64	90	101	117	141	176	202	246	276	328	375	469	528	
	750	4.2			9.0	11	15	19	26	33	39	48	67	76	88	106	132	152	185	207	264	281	352	396	
200	1500	7.5			16	20	27	34	47	59	69	86	120	136	157	188	236	271	330	369	440	503	628	707	
	1000	5			11	13	18	23	31	39	46	57	80	91	105	126	157	181	220	246	293	335	419	471	
	750	3.8			8.2	10	14	17	24	30	35	43	61	69	80	95	119	137	167	187	223	255	318	358	
224	1500	6.7			14	18	24	30	42	53	62	76	107	121	140	168	210	242	295	330	393	449	561	631	
	1000	4.5			10	12	1																		



平行轴齿轮箱 Helical Gear Units

热容量 Thermal Capacities

类型 H3...,H4... Types H3...,H4...

规格 5...26 Sizes 5...26

热容量Pg Thermal Capacities Pg in kW																							
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
		热容量PG(单位为KW)取决于冷却方式: PG1: 无辅助冷却装置; PG2:带冷却风扇; PG3: 带冷却盘管; PG4: 带风扇和冷却盘管。 Thermal capacity PG(in KW)dependent on kind of cooling; Pg1 without auxiliary cooling.PG2:fan cooling,PG3:cooling coil,PG4:fan and cooling coil.																					
40	PG1	48.1	56.6	74.6	86.8	101	110	149	180	204	236	284	304	300	322	390	416	517	537	754	784	902	938
	PG2	58.3	68.6	92.8	107	127	137	190	228	251	291	371	398	382	409								
	PG3	79.3	92.4	132	151	191	248	312	359	403	467	639	686	641	683								
	PG4	88.6	103	149	170	214	272	349	402	446	517	717	770	711	760								
45	PG1	46.0	54.9	71.8	84.1	97.2	107	148	173	195	227	282	293	297	309	386	401	501	524	745	775	891	927
	PG2	55.7	66.2	89	104	121	133	189	219	240	280	368	381	377	392								
	PG3	74.9	88.3	126	145	181	238	305	341	379	444	626	648	627	644								
	PG4	83.8	98.7	142	163	203	261	342	382	419	491	702	725	695	716								
50	PG1	44.4	51.7	67.6	79.8	94.9	101	145	166	191	219	281	291	292	306	379	395	500	508	736	765	880	915
	PG2	53.6	62.2	83.7	98.0	118	125	184	210	233	269	362	378	368	386								
	PG3	72.3	82.0	118	136	177	221	299	322	369	419	619	634	613	628								
	PG4	80.9	91.7	133	152	197	242	334	360	408	465	691	710	681	701								
56	PG1	42.1	49.6	64.4	76.7	90.3	97.0	134	165	184	209	267	289	278	300	362	388	477	506	720	749	861	895
	PG2	50.7	59.5	79.4	94.1	112	120	170	208	225	256	343	371	350	377								
	PG3	67.9	77.6	111	129	165	209	271	315	349	394	577	626	574	617								
	PG4	75.6	86.9	125	145	185	229	302	353	386	437	645	698	636	684								
63	PG1	39.6	47.7	60.0	72.4	85.3	94.7	127	161	174	204	252	275	262	286	338	371	456	482	697	724	834	867
	PG2	47.6	57.1	73.8	88.5	105	116	160	202	212	249	323	353	329	357								
	PG3	62.9	74.9	102	121	153	204	251	309	325	384	533	582	530	576								
	PG4	70.2	83.8	114	136	172	224	280	345	359	425	596	653	589	640								
71	PG1	39.2	45.2	58.2	68.9	83.4	90.1	124	150	169	197	245	260	252	270	333	346	431	461	669	696	800	832
	PG2	47.0	54.0	71.3	84.1	103	111	155	187	205	239	313	332	315	337								
	PG3	62.2	70.2	97.9	113	150	191	242	279	310	364	513	540	507	534								
	PG4	69.4	78.3	110	127	167	209	270	312	343	403	573	604	564	592								
80	PG1	37.2	42.6	56.8	64.3	78.9	85.1	117	141	164	186	236	252	242	259	315	341	411	435	655	681	783	814
	PG2	44.5	50.6	69.6	78.2	96.8	104	146	176	199	226	300	321	302	323								
	PG3	57.8	65.2	94.2	104	139	177	223	259	299	338	484	519	479	511								
	PG4	64.6	72.8	106	117	156	194	250	290	330	375	542	580	532	567								
90	PG1	36.7	42.2	53.7	62.2	74.9	83.0	113	138	153	180	222	243	228	248	299	322	399	415	627	652	750	780
	PG2	43.9	50.2	65.7	75.4	91.8	101	141	171	186	218	282	308	284	309								
	PG3	56.2	64.6	87.1	100	129	173	214	250	274	323	448	490	443	483								
	PG4	63.0	72.1	98.3	113	145	189	240	280	304	357	501	549	493	537								
100	PG1		40.0	48.1	60.9	67.1	78.8	99.5	130	133	175	179	228	201	234	282	306	388	403	509	632	611	756
	PG2		47.5		73.8		95.9		161		212		289		290								
	PG3		60.0		96.7		161		231		311		453		447								
	PG4		67.2		109		176		259		344		507		497								
112	PG1		39.5	46.3	57.6	64.2	74.9	98.7	126	130	164	171	184	192	206	270	289	379	392	498	518	596	620
	PG2		47.0		69.8		91.2		156		198												
	PG3		58.5		89.6		149		222		286												
	PG4		65.5		101		164		249		317												
125	PG1			44.9	51.6	62.1	67.3	94.6	110	126	142	165	177	185	197	261	276	367	383	488	508	584	607
140	PG1			42.6	49.5	60.1	64.4	91.5	109	122	138	159	170	178	190	251	267	347	371	475	494	568	591
160	PG1			41.0	48.0	56.8	62.4	87.0	105	115	134	153	164	171	183	241	257	333	351	455	473	544	566
180	PG1			39.4	45.6	54.4	60.4	83.9	101	111	130	150	157	167	175	230	247	328	336	439	457	525	546
200	PG1			37.9	43.9	52.6	57.0	79.2	96.4	108	123	146	154	161	172	222	236	309	331	432	449	516	537
224	PG1			35.7	42.0	50.5	54.6	75.9	92.8	103	118	136	150	150	166	213	227	295	312	428	445	512	532
250	PG1			34.1	40.7	48.2	53.0	72.1	87.6	98.0	115	129	139	143	155	202	218	279	297	409	425	489	509
280	PG1			33.1	38.2	46.8	50.8	69.4	84.3	94.9	109	125	132	139	147	194	207	268	281	388	404	467	486
315	PG1			32.4	36.6	44.6	48.5	67.7	79.9	91.0	105	119	128	133	143	190	199	257	270	374	389	447	465
355	PG1			30.9	35.5	43.8	47.1	64.4	76.9	86.8	101	117	123	130	137	181	195	245	260	363	378	435	452
400	PG1				34.8		44.9		75.1		97.1		120		134		185		248		359		429
450	PG1				33.1		44.1		71.4		92.6												



直交轴齿轮箱 Bevel-helical Gear Units

额定功率 Nominal Power Ratings

类型 B2...,B3... Types B2...,B3

规格 1...26 Sizes 1...26

额定功率 Nominal power ratings																												
in	n1	n2	齿轮箱规格 Gear unit sizes																									
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	1/min																											
5	1500	300	36	63	97	182	295		559		880		1351		2073													
	1000	200	24	42	65	121	197		373		586		901		1382		2555											
	750	150	18	31	49	91	148		280		440		675		1037		1916											
5.6	1500	268	32	56	87	163	264		500		786		1263		1880													
	1000	179	22	37	58	109	176		334		525		843		1256		2287											
	750	134	16	28	43	81	132		250		393		631		940		1712	1894	2736									
6.3	1500	238	29	50	77	145	234	299	444	556	698	887	1171	1371	1769	2044												
	1000	159	19	33	52	97	157	200	296	371	466	593	783	916	1182	1365	2164	2348										
	750	119	14	25	39	72	117	150	222	278	349	444	586	685	885	1022	1620	1757	2430									
7.1	1500	211	25	44	68	128	208	265	393	493	619	787	1083	1259	1613	1856												
	1000	141	17	30	46	86	139	177	263	329	413	526	723	842	1078	1240	1949	2141	2879									
	750	106	13	22	34	64	104	133	198	248	311	395	544	633	810	932	1465	1609	2164	2553								
8	1500	188	23	39	61	114	185	236	350	439	551	701	994	1161	1516	1732	2598											
	1000	125	15	26	41	76	123	157	233	292	366	466	661	772	1008	1152	1728	1937	2552									
	750	94	11	20	31	57	93	118	175	219	276	350	497	581	758	866	1299	1457	1919	2264								
9	1500	167	20	35	54	101	164	210	311	390	490	623	883	1067	1364	1591	2309	2588										
	1000	111	13	23	36	67	109	139	207	259	325	414	587	709	907	1058	1534	1720	2266	2673								
	750	83	10	17	27	50	82	104	155	194	243	309	439	530	678	791	1147	1286	1695	1999								
10	1500	150	18	31	49	91	148	188	280	350	440	559	793	974	1225	1492	2073	2325										
	1000	100	12	21	32	61	98	126	186	234	293	373	529	649	817	995	1382	1550	2042	2408								
	750	75	9	16	24	46	74	94	140	175	220	280	397	487	613	746	1037	1162	1531	1806								
11.2	1500	134	16	28	43	81	132	168	250	313	393	500	709	870	1094	1368	1852	2077										
	1000	89	11	19	29	54	88	112	166	208	261	332	471	578	727	909	1230	1379	1817	2143								
	750	67	8.1	14	22	41	66	84	125	156	196	250	354	435	547	684	926	1038	1368	1614								
12.5	1500	120	14	25	39	69	118	151	214	280	352	447	635	779	980	1225	1659	1860	2450									
	1000	80	10	17	26	46	79	101	142	187	235	298	423	519	653	817	1106	1240	1634	1927	2094		2848					
	750	60	7.2	13	19	35	59	75	107	140	176	224	317	390	490	613	829	930	1225	1445	1571		2136					
14	1500	107	13	22	35	67	110	134	204	250	331	399	594	695	896	1092	1535	1658	2185	2577								
	1000	71	8.5	15	23	45	73	89	135	166	219	265	394	461	595	725	1019	1100	1450	1710	1948	2193	2676					
	750	54	6.5	11	18	34	55	68	103	126	167	201	300	351	452	551	775	837	1103	1301	1481	1668	2036	2290				
16	1500	94	11	19	31	61	100	118	188	212	305	350	551	610	817	960	1398	1516	1969	2264								
	1000	63	7.3	13	20	41	67	79	126	142	205	235	369	409	548	643	937	1016	1319	1517	1814	2032	2507	2784				
	750	47	5.4	9.6	15	31	50	59	94	106	153	175	276	305	408	480	699	758	984	1132	1353	1516	1870	2077				
18	1500	83	9	16	26	56	92	110	172	201	282	326	504	565	739	869	1286	1391	1738	2086								
	1000	56	6	11	18	38	62	74	116	135	191	220	340	381	498	586	868	938	1173	1407	1689	1876	2346	2568				
	750	42	4.5	7.9	13	28	47	55	87	102	143	165	255	286	374	440	651	704	880	1055	1267	1407	1759	1926				
20	1500	75			28	52	86	104	161	188	267	309	471	534	691	809	1202	1312	1571	1885								
	1000	50			19	35	58	69	107	125	178	206	314	356	461	539	801	874	1047	1257	1571	1738	2199	2382	2932			
	750	38			14	26	44	53	82	95	135	156	239	271	350	410	609	665	796	955	1194	1321	1671	1810	2228			
22.4	1500	67			25	46	77	97	144	174	239	288	421	505	617	744	1073	1214	1403	1684	2105	2420						
	1000	45			17	31	52	65	97	117	160	193	283	339	415	499	721	815	942	1131	1414	1626	1979	2215	2639	3015		
	750	33			12	23	38	48	71	86	117	142	207	249	304	366	529	598	691	829	1037	1192	1451	1624	1935	2212	2764	
25	1500	60			23	41	69	91	129	160	214	270	377	471	553	685	961	1087	1257	1508	1885	2168						
	1000	40			15	28	46	61	86	107	142	180	251	314	369	457	641	725	838	1005	1257	1445	1759	1969	2346	2681		
	750	30			11	21	35	46	64	80	107	135	188	236	276	342	481	543	628	754	942	1084	1319	1476	1759	2010	2513	2827
28	1500	54			20	37	62	82	116	144	192	243	339	424	498	616	865	978	1131	1357	1696	1950	2375					
	1000	36			14	25	41	55	77	96	128	162	226	283	332	411	577	652	754	905	1131	1301	1583	1772	2111	2413	3016	
	750	27			10.2	19	31	41	58	72	96	122	170	212	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545

卧式安装齿轮箱要采用强制润滑 Forced lubrication required on horizontal gear units



直交轴齿轮箱 Bevel-helical Gear Units

热容量 Thermal Capacities

类型 B2...B3... Types B2...B3...

规格 1...26 Sizes 1...26

热容量Pg Thermal Capacities PG in kW																												
IN		齿轮箱规格 Gear unit sizes																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
		热容量Pg(单位为KW)取决于冷却方式: PG1: 无辅助冷却装置; PG2: 带冷却风扇; PG3: 带冷却盘管; PG4: 带风扇和冷却盘管。 Thermal capacity Pg(In KW)dependent on kind of cooling:PG1: without auxiliary cooling,PG2:fan cooling,PG3:cooling coil,PG4:fan and cooling coil.																										
5	PG1	34.9	45.6	59.7	66.3	86.9		122		150		233		286		330												
	PG2	38.1	50.6	73.1	101	140		223		272		458		662		797												
	PG3	41.1	59.2	109	135	202		313		391		664		1318		1786												
	PG4	45.0	67.5	118	166	250		403		500		862		1632		2158												
5.6	PG1	33.4	44.0	57.6	64.1	85.2		117		144		233		295		349		328										
	PG2	36.0	48.5	70.4	96.9	137		209		256		446		653		789		862										
	PG3	41.6	58.4	104	130	196		288		360		631		1264		1729		2015										
	PG4	45.0	64.8	112	160	242		371		461		821		1573		2084		2427										
6.3	PG1	32.0	39.7	52.2	62.4	81.9	96.5	110	134	137	155	218	277	282	337	351	374	353										
	PG2	34.7	43.7	63.5	83.8	130	152	194	235	240	272	406	516	597	726	752	815	836										
	PG3	38.1	51.2	91.8	124	182	259	261	381	327	451	555	957	1110	1384	1596	1748	1872										
	PG4	41.0	57.3	99.0	153	225	307	337	471	421	554	723	1166	1377	1712	1922	2105	2262										
7.1	PG1	30.7	39.4	51.5	58.8	77.7	94.7	104	127	130	148	217	275	284	341	346	372	364	388									
	PG2	35.4	43.5	62.7	87.6	122	148	182	221	225	256	397	501	589	712	715	775	804	867									
	PG3	37.0	50.4	90.9	114	168	252	240	350	300	414	535	913	1076	1326	1479	1613	1752	1882									
	PG4	39.0	57.0	97.8	140	208	298	310	433	387	510	697	1106	1339	1649	1781	1941	2109	2269									
8	PG1	28.5	36.6	48.0	55.4	73.3	90.6	98.9	120	124	141	201	254	268	322	330	365	356	393									
	PG2	31.2	40.2	58.2	82.1	114	140	171	205	212	240	362	454	539	648	659	736	750	832									
	PG3	33.8	48.0	83.5	105	154	233	222	317	278	376	473	801	959	1162	1330	1501	1590	1758									
	PG4	35.8	52.5	89.8	130	192	277	287	393	359	464	619	974	1190	1441	1598	1802	1909	2115									
9	PG1	25.0	34.2	45.8	52.7	69.6	85.8	94.6	113	119	134	193	252	260	322	321	347	351	381									
	PG2	26.6	37.6	55.2	77.5	108	132	162	192	202	225	345	444	515	638	633	678	723	773									
	PG3	29.9	43.2	78.4	96.9	142	214	208	292	282	346	446	776	897	1130	1258	1342	1512	1593									
	PG4	33.0	48.3	84.0	120	176	255	270	362	339	428	583	941	1118	1403	1513	1614	1815	1915									
10	PG1	22.2	28.6	38.4	44.3	64.6	80.6	88.6	107	112	127	183	232	249	301	307	337	342	374									
	PG2	23.0	31.2	46.4	64.2	98.9	123	150	180	189	212	323	403	485	583	591	650	684	745									
	PG3	25.0	36.0	64.3	77.4	127	197	189	269	240	319	409	687	830	999	1148	1271	1403	1516									
	PG4	26.2	39.8	69.1	95.9	158	235	246	335	310	395	537	835	1033	1244	1383	1528	1684	1818									
11.2	PG1	21.3	27.8	37.6	42.8	57.9	76.6	79.3	102	101	122	164	223	224	290	280	322	315	363									
	PG2	22.1	30.4	44.8	61.9	88.0	116	133	171	167	202	285	384	431	555	532	608	618	705									
	PG3	24.0	34.7	62.1	73.9	111	180	165	252	208	301	354	647	720	934	1010	1159	1243	1411									
	PG4	27.2	38.6	66.4	91.7	138	215	215	314	270	374	465	788	900	1167	1221	1400	1494	1688									
12.5	PG1	20.5	29.4	37.3	45.0	61.1	70.9	97.2	95.7	129	115	183	210	238	277	334	293	377	334									
	PG2	21.4	32.0	45.1	58.5	83.0	106	133	159	182	189	288	359	379	522	533	546	684	636									
	PG3	25.9	38.1	62.2	72.5	117	160	206	230	305	275	431	593	674	865	1054	1019	1264	1251									
	PG4	27.5	40.6	66.7	85.2	137	192	239	287	353	342	526	724	795	1078	1222	1235	1518	1500									
14	PG1	19.4	25.6	33.3	43.7	59.2	63.4	93.9	85.8	125	103	180	187	240	248	322	349	363	411									
	PG2	21.0	27.8	39.7	56.8	80.3	94.4	128	141	176	168	282	316	382	462	512	552	657	734									
	PG3	22.6	32.8	54.4	70.3	113	140	199	201	296	239	422	512	679	749	1006	1066	1214	1331									
	PG4	23.8	35.0	58.1	82.6	132	167	230	250	341	297	514	627	801	937	1166	1241	1455	1598									
16	PG1	18.6	24.0	31.2	41.5	57.2	66.4	89.5	105	122	137	171	203	221	259	318	334	365	379									
	PG2	19.8	25.9	37.1	54.0	77.3	88.6	122	140	172	190	268	311	349	404	503	528	652	672									
	PG3	21.8	30.4	50.2	66.8	109	121	189	211	287	324	401	526	617	699	984	1018	1194	1219									
	PG4	23.0	32.5	53.6	78.3	127	141	219	243	331	371	487	621	727	824	1142	1181	1433	1460									
18	PG1	17.1	21.8	28.3	40.3	55.4	64.3	86.4	101	118	126	168	203	222	261	306	332	351	399									
	PG2	18.2	23.7	33.6	52.4	74.9	85.8	118	136	166	175	262	311	352	407	482	521	626	698									
	PG3	19.5	27.5	45.1	64.7	105	116	182	205	277	298	393	527	621	703	945	1003	1142	1257									



直交轴齿轮箱 Helical Gear Units

类型 B3...,B4... Types B3...,B4...

额定功率 Nominal Power Ratings

规格 3...26 Sizes 3...26

额定功率 Nominal power ratings																											
iH	n ₁	n ₂	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	
			额定功率 PN, KW Nominal power ratings PN in kW																								
1/min																											
31.5	1500	48	18	33	55	73	103	128	171	216	302	377	442	548	769	870	1005	1206	1508	1734	2111						
	1000	32	12.1	22	37	49	69	85	114	144	201	251	295	365	513	580	670	804	1005	1156	1407	1575	1876	2145	2681	3016	
	750	24	9.0	17	28	36	52	64	85	108	151	188	221	274	385	435	503	603	754	867	1055	1181	1407	1608	2010	2262	
35.5	1500	42	15.8	29	48	64	90	112	150	189	264	330	387	479	673	761	880	1055	1319	1517	1847	2067	2463	2815			
	1000	28	11	19	32	43	60	75	100	126	176	220	258	320	449	507	586	704	880	1012	1231	1378	1642	1876	2346	2639	
	750	21	7.9	15	24	32	45	56	75	95	132	165	194	240	336	380	440	528	660	759	924	1034	1231	1407	1759	1979	
40	1500	38	14	26	44	58	82	101	135	171	239	298	350	434	609	688	796	955	1194	1373	1671	1870	2228	2597			
	1000	25	9	17	29	38	54	67	89	113	157	196	230	285	401	453	524	628	785	903	1099	1230	1466	1675	2094	2356	
	750	18.8	7.1	13	22	29	40	50	67	85	118	148	173	215	301	341	394	472	591	679	827	925	1102	1260	1575	1772	
45	1500	33	12	23	38	50	71	88	117	149	207	259	304	377	529	598	691	829	1037	1192	1451	1624	1935	2212	2764		
	1000	22	8.3	15	25	33	47	59	78	99	138	173	203	251	352	399	461	553	691	795	968	1083	1290	1474	1843	2073	
	750	16.7	6.3	12	19	25	36	45	59	75	105	131	154	191	268	303	350	420	525	603	734	822	979	1119	1399	1574	
50	1500	30	11	21	35	46	64	80	107	135	188	236	276	342	481	543	628	754	942	1083	1319	1476	1759	2010	2513	2827	
	1000	20	8	14	23	30	43	53	71	90	126	157	184	228	320	362	419	503	628	723	880	984	1173	1340	1675	1885	
	750	15	6	10.4	17	23	32	40	53	68	94	118	138	171	240	272	314	377	471	542	660	738	880	1005	1257	1414	
56	1500	27	10.2	19	31	41	58	72	96	122	170	212	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545	
	1000	17.9	6.7	12	21	27	38	48	64	81	112	141	165	204	287	324	375	450	562	647	787	881	1050	1200	1499	1687	
	750	13.4	5.1	9.3	15	20	29	36	48	60	84	105	123	153	215	243	281	337	421	484	589	659	786	898	1123	1263	
63	1500	24	9	17	28	36	50	64	85	108	151	188	221	274	385	435	503	603	754	867	1055	1181	1407	1608	2010	2262	
	1000	15.9	6	11	18	24	33	42	57	72	100	125	147	181	255	288	333	400	499	574	699	783	932	1066	1332	1498	
	750	11.9	4.5	8.2	14	18	25	32	42	54	75	93	110	136	191	216	249	299	374	430	523	586	698	797	997	1121	
71	1500	21	7.9	14.5	24	32	44	56	75	95	132	165	194	240	336	380	440	528	660	759	924	1034	1231	1407	1759	1979	
	1000	14.1	5.3	9.7	16	21	30	38	50	63	89	111	130	161	226	255	295	354	443	509	620	694	827	945	1181	1329	
	750	10.6	4	7.3	12	16	22	28	38	48	67	83	98	121	170	192	222	266	333	383	466	522	622	710	888	999	
80	1500	18.8			22	28	40	50	67	85	118	148	173	215	301	341	394	472	591	679	827	925	1102	1260	1575	1772	
	1000	12.5			14	18	27	33	45	56	79	98	115	143	200	226	262	314	393	452	550	615	733	838	1047	1178	
	750	9.4			11	14	20	25	33	42	59	74	87	107	151	170	197	236	295	340	413	463	551	630	787	886	
90	1500	16.7			19	24	36	44	59	75	105	131	154	191	268	303	350	420	525	603	734	822	979	1119	1399	1574	
	1000	11.1			13	16	24	29	40	50	70	87	102	127	178	201	232	279	349	401	488	546	651	744	930	1046	
	750	8.3			9.6	12	18	22	30	37	52	65	76	95	133	150	174	209	261	300	365	408	487	556	695	782	
100	1500	15			17.3	23	32	40	53	68	94	118	138	171	240	272	314	377	471	542	660	738	880	1005	1257	1414	
	1000	10			12	15	21	27	36	45	63	79	92	114	160	181	209	251	314	361	440	492	586	670	838	942	
	750	7.5			8.6	11.4	16	20	27	34	47	59	69	86	120	136	157	188	236	271	330	369	440	503	628	707	
112	1500	13.4			15	20	29	36	48	60	84	105	123	153	215	243	281	337	421	484	589	659	786	898	1123	1263	
	1000	8.9			10.3	13.5	19	24	32	40	56	70	82	102	143	161	186	224	280	322	391	438	522	596	746	839	
	750	6.7			7.7	10	14	18	24	30	42	53	62	76	107	121	140	168	210	242	295	330	393	449	561	631	
125	1500	12			14	18	26	32	43	54	75	94	111	137	192	217	251	302	377	434	528	591	704	804	1005	1131	
	1000	8			9.2	12	17	21	28	36	50	63	74	91	128	145	168	201	251	289	352	394	469	536	670	754	
	750	6			6.9	9.1	13	16	21	27	38	47	55	68	96	109	126	151	188	217	264	295	352	402	503	565	
140	1500	10.7			12	16.2	23	29	38	48	67	84	99	122	171	194	224	269	336	387	471	527	627	717	896	1008	
	1000	7.1			8.2	11	15	19	25	32	45	56	65	81	114	129	149	178	223	256	312	349	416	476	595	669	
	750	5.4			6.2	8.2	12	14.4	19	24	34	42	50	62	87	98	113	136	170	195	237	266	317	362	452	509	
160	1500	9.4			11	14.3	20	25	33	42	59	74	87	107	151	170	197	236	295	340	413	463	551	630	787	886	
	1000	6.3			7.3	9.6	14	17	22	28	40	49	58	72	101	114	132	158	198	228	277	310	369	422	528	594	
	750	4.7			5.4	7.1	10	13	17	21	30	37	43	54	75	85	98	118	148	170	207	231	276	315	394	443	
180	1500	8.3			9.6	13	18	22	30	37	52	65	76	95	133	150	174	209	261	300	365	408	487	556	695	782	
	1000	5.6			6.5	8.5	12	15	20	25	35	44															



直交轴齿轮箱 Bevel-helical Gear Units

热容量 Thermal Capacities

类型 B3...B4.. Types B3...B4..

规格 3...26 Sizes 3...26

热容量 PG , kW Thermal capacities PG in kW																										
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	
		热容量Pg(单位为KW)取决于冷却方式: PG1: 无辅助冷却装置; PG2: 带冷却风扇; PG3: 带冷却盘管; PG4: 带风扇和冷却盘管。 Thermal capacity Pg(in KW)dependent on kind of cooling;Pg1: without auxiliary cooling,Pg2:fan cooling,Pg3:cooling coil,Pg4:fan and cooling coil.																								
31.5	PG1	28.2	32.0	45.2	53.4	69.7	83.1	95.6	106	131	163	172	205	250	276	301	328	370	403	423	458	742	772	888	932	
	PG2	31.7	41.2	60.5	71.0	93.6	111	132	146	199	245	263	311	378	418	499	545	618	673	688	748	927	965	1110	1165	
	PG3	48.0	49.6	82.7	96.7	138	165	208	240	275	394	428	513	675	752	846	927									
	PG4	50.2	58.2	96.5	113	160	189	240	276	337	467	508	606	784	873	1014	1111									
35.5	PG1	26.7	30.1	42.6	51.5	66.2	78.9	90.8	101	126	155	166	195	241	259	291	311	361	383	409	433	726	755	868	911	
	PG2	29.8	38.5	56.6	68.2	88.4	105	125	138	190	232	252	295	363	388	480	509	596	630	660	695	885	921	1059	1111	
	PG3	44.8	45.6	75.7	91.4	128	153	190	224	261	367	407	478	642	684	805	847									
	PG4	47.0	53.6	88.7	107	148	176	221	257	318	434	483	565	746	794	966	1017									
40	PG1	23.5	26.3	37.0	48.9	57.9	75.3	84.9	96.4	119	147	156	186	228	250	278	301	343	373	388	419	703	731	841	883	
	PG2	26.2	33.5	48.8	64.5	76.7	99.4	116	132	178	218	237	279	341	373	453	489	560	607	618	667	844	877	1009	1060	
	PG3	38.9	38.4	63.0	85.3	106	143	172	210	239	340	375	445	592	649	749	805									
	PG4	40.8	45.2	73.9	99.8	123	164	200	241	293	403	446	526	690	755	900	968									
45	PG1	23.2	25.7	36.0	45.9	56.2	71.4	78.0	91.5	109	141	144	178	211	236	258	287	321	355	359	396	665	692	796	836	
	PG2	25.6	32.7	47.5	60.3	74.0	93.8	106	124	163	209	216	267	313	351	418	463	519	570	569	624	778	810	931	978	
	PG3	38.4	37.3	60.7	78.3	102	132	155	192	215	321	336	421	533	599	679	753									
	PG4	40.0	44.0	71.3	91.6	118	152	180	221	265	382	398	498	621	698	816	903									
50	PG1	22.7	25.9	35.8	40.0	55.4	62.5	76.6	85.6	109	133	146	169	216	218	268	266	317	331	386	367	611	635	730	767	
	PG2	25.3	32.9	46.9	52.2	72.6	81.4	103	116	160	195	216	250	315	322	424	427	498	529	596	574	670	724	832	874	
	PG3	37.0	37.3	59.1	65.3	98.6	110	148	174	210	295	333	389	535	539	686	684									
	PG4	38.7	43.8	69.5	76.6	114	127	173	201	256	350	397	462	620	629	820	821									
56	PG1	20.3	23.9	33.0	39.0	51.4	60.6	70.7	78.9	99.1	122	134	155	198	223	247	276	305	326	365	393	599	623	717	753	
	PG2	22.4	30.2	43.3	50.8	67.4	78.8	95.3	106	145	179	197	228	287	323	388	432	478	506	560	601	683	710	817	858	
	PG3	32.3	33.6	53.3	63.0	89.4	105	133	157	186	264	298	346	479	541	617	688									
	PG4	33.9	39.7	62.9	74.0	104	122	155	181	228	315	354	413	555	628	738	823									
63	PG1	20.0	23.0	31.7	38.7	49.7	59.8	68.2	77.4	95.5	121	129	157	189	204	237	254	295	314	353	371	567	590	679	713	
	PG2	21.8	29.1	41.6	50.2	65.1	77.4	91.9	103	139	175	189	229	273	294	370	395	460	486	540	563	635	661	760	798	
	PG3	31.5	31.8	50.3	61.4	84.8	102	125	150	175	256	280	345	449	482	581	620									
	PG4	32.8	37.6	59.5	72.2	99.0	119	147	173	215	304	334	409	521	561	698	740									
71	PG1	18.6	21.3	30.2	35.7	47.3	55.5	63.9	71.7	88.4	111	121	144	180	195	224	244	279	304	333	360	547	569	654	687	
	PG2	20.0	27.0	39.5	46.2	62	71.8	86.0	95.6	129	159	177	208	258	281	347	377	431	468	505	544	602	626	719	756	
	PG3	28.6	28.9	46.6	55.5	78.4	92.8	113	135	157	227	253	309	413	454	537	585									
	PG4	29.8	34.3	55.3	65.4	92.1	108	134	156	194	271	303	366	482	528	644	701									
80	PG1			32.5	34.2	48.2	53.6	68.2	69.2	103	106	138	138	185	186	208	231	285	287	399	339	560	538	670	650	
	PG2			44.5		69.4		92.3		153		200		266		353		438		509		592		715		
	PG3			52.3		88.0		127		212		290		417		538										
	PG4			61.8		103		148		255		346		487		647										
90	PG1			31.8	32.6	46.7	51.0	66.7	64.9	99.9	98.7	135	129	177	190	199	214	273	292	386	404	554	576	662	695	
	PG2			42.3		66.0		86.5		142		187														
	PG3			48.5		81.5		115		190		262														
	PG4			57.6		95.4		135		230		314														
100	PG1			30.3	34.8	44.2	51.5	63.2	68.7	96.0	115	128	148	167	182	187	205	258	280	363	391	549	571	657	690	
112	PG1			29.2	34.0	42.5	50.0	60.8	67.1	91.4	111	122	144	159	172	179	193	246	264	352	367	497	517	595	625	
125	PG1			27.9	32.5	40.6	47.3	58.0	63.7	87.5	106	117	136	151	164	170	184	234	252	331	356	497	517	595	625	
140	PG1			26.6	31.3	38.6	45.6	54.7	61.3	82.8	101	111	130	146	156	164	175	225	240	320	335	467	486	559	587	
160	PG1			24.5	29.9	35.2	43.5	50.0	58.4	75.5	96.8	105	125	138	150	155	169	213	231	302	323	453	471	542	569	
180	PG1			24.0	28.6	34.3	41.4	48.8	55.4	73.5	91.6	99.2	118	130	142	146	159	199	218	282	306	433	450	518	544	
200	PG1			23.2	26.3	34.0	37.8	47.8	50.7	71.9	83.7	96.9	112	128	134	144	151	198	204	273	286	401	417	480	504	
224	PG1			21.6	25.8	31.7	36.9	44.7	49.4	67.6	81.6	90.8	106	120	132	134	148	186	204	255	277	400	416	478	502	
250	PG1			21.1	24.8	30.6	36.5	43.1	48.4	65.4	79.7	87.9	103	116	123	130	139	180	191	247	259	371	386	444	466	
280	PG1			20.1	23.2	28.7	34.1	41.1	45.3	62.5	74.8	83.0	96.9	108	119	122	134									



平行轴齿轮箱 Helical Gear Units

额定输出扭矩 Nominal Output Torques

类型 H1...H2..., H3...,H4..

Types H1...H2..., H3...,H4..

规格 1..26 Sizes 1...26

传动比 iN ,额定输出扭矩 T _{2N} Transmission ratios iN ,nominal output torques T _{2N}																									
iN	齿轮箱规格 Gear unit sizes																								
	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	额定输出扭矩 T _{2N} (KNm) Nominal output torques T _{2N}																								
1.25	0.79	2.6		7		13.3		21.5																	
1.4	0.83	2.7		7.2		13.9		22.3																	
1.6	0.87	2.9		7.5		14.2		23.6		40		63													
1.8	0.91	2.4		7.7		15.2		24.4		41.4		66.3													
2	0.93	2.5		8.2		15.5		25		42.7		68.2		121											
2.24	0.96	2.5		8.4		15.5		25		44		70.3		122											
2.5	1	2.6		8.4		15.5		25		44		72		110											
2.8	1	2.7		8.4		14.9		23.7		44		72		113		171									
3.15	1	2.7		8.4		15.2		24.5		41.9		68.4		116		173									
3.55	1	2.8		8.3		15.5		24.9		43.7		69.6		118		173									
4	1	2.8		8.4		15.5		25		44		70.8		122		173		245							
4.5	0.82	2.2		6.7		13.8		21.4		40		57.6		102		146		216							
5	0.78	2.1		6.3		12		20.5		33.7		54.5		88.8		124		174							
5.6	0.62	2		6		11.4		17.5		31.8		51.8		84.5		118		150							
6.3		3.5	6.3	10.5		19		31.5		55.5		86		143		195		292							
7.1		3.5	6.3	10.5		19		31.5		55.5		86		143	160	195	230	292	335	410					
8		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458				
9		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540			
10		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540	620		
11.2		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540	620	780	
12.5		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540	620	780	880
14		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540	620	780	880
16		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540	620	780	880
18		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540	620	780	880
20		3.5	6.3	10.5	13.5	19	24	31.5	39.5	55.5	69	86	107	143	160	195	230	292	335	410	458	540	620	780	880
22.4		3.5	6.2	10.2	13.5	18.6	24	31	39.5	54.5	69	88	107	153	160	200	230	300	335	420	458	560	620	800	880
25				11	13.5	20.5	24	34	39.5	60	69	88	107	153	173	200	240	300	345	420	470	560	640	800	900
28				11	13	20.5	23.5	34	38.9	60	67.8	88	109	153	173	200	240	300	345	420	470	560	640	800	900
31.5				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
35.5				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
40				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
45				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
50				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
56				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
63				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
71				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
80				11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
90				11	14.5	20	25.5	33.5	43	60	75	88	109	153	173	200	240	290	345	410	470	560	640	800	900
100					14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	226	300	335	420	465	560	640	800	900
112					14.1	20.5	25.2	34	42	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
125						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
140						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
160						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
180						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
200						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
224						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
250						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
280						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
315						20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
355						19.6	25.5	33	43	59	75	88	109	140	173	192	240	290	345	410	470	560	640	800	900
400							25.5		43		75		109		158		223		335		465		640		900
450							24.8		41.6		74		109												



直交轴齿轮箱 Bevel-helical Gear Units

额定输出扭矩 Nominal Output Torques

类型 B2..., B3..., B4... Types B2..., B3..., B4...

规格 1..26 Sizes 1...26

传动比 iN, 额定输出扭矩 T2N Transmission ratios iN, nominal output torques T2N																										
iN	齿轮箱规格 Gear unit sizes																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	额定输出扭矩 T2N (KNm) Nominal output torques T2N																									
5	1.15	2	3.1	5.8	9.4		17.8		28		43		66		122											
5.6	1.15	2	3.1	5.8	9.4		17.8		28		45		67		122	135	195									
6.3	1.15	2	3.1	5.8	9.4	12	17.8	22.3	28	35.6	47	55	71	82	130	141	195									
7.1	1.15	2	3.1	5.8	9.4	12	17.8	22.3	28	35.6	49	57	73	84	132	145	195	230								
8	1.15	2	3.1	5.8	9.4	12	17.8	22.3	28	35.6	50.5	59	77	88	132	148	195	230								
9	1.15	2	3.1	5.8	9.4	12	17.8	22.3	28	35.6	50.5	61	78	91	132	148	195	230								
10	1.15	2	3.1	5.8	9.4	12	17.8	22.3	28	35.6	50.5	62	78	95	132	148	195	230								
11.2	1.15	2	3.1	5.8	9.4	12	17.8	22.3	28	35.6	50.5	62	78	97.5	132	148	195	230								
12.5	1.15	2	3.1	5.5	9.4	12	17.0	22.3	28	35.6	50.5	62	78	97.5	132	148	195	230	250		340					
14	1.15	2	3.1	6	9.8	12	18.2	22.3	29.5	35.6	53	62	80	97.5	137	148	195	230	262	295	360	405				
16	1.1	1.95	3.1	6.2	10.2	12	19.1	21.5	31	35.6	56	62	83	97.5	142	154	200	230	275	308	380	422				
18	1.03	1.8	3	6.4	10.6	12.6	19.8	23.1	32.5	37.5	58	65	85	100	148	160	200	240	288	320	400	438				
20			3.6	6.6	11	13.2	20.5	23.9	34	39.3	60	68	88	103	153	167	200	240	300	332	420	455	560		800	
22.4			3.6	6.6	11	13.8	20.5	24.8	34	41	60	72	88	106	153	173	200	240	300	345	420	470	560	640	800	900
25			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
28			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
31.5			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
35.5			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
40			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
45			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
50			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
56			3.6	6.6	11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
63			3.6	6.6	11	14.5	20	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
71			3.6	6.6	11	14.5	20	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
80					11	14	20.5	25.2	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
90					11	14	20.5	25.2	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
100					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
112					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
125					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
140					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
160					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
180					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
200					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
224					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
250					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
280					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
315					11	14.5	20.5	25.5	34	43	60	75	88	109	153	173	200	240	300	345	420	470	560	640	800	900
355						14.5		25.5		43		75		109		173		240		345		470		640		900
400						14.5		25.5		43		75		109												



齿轮箱 Gear Units

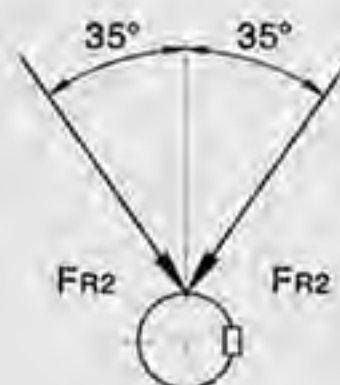
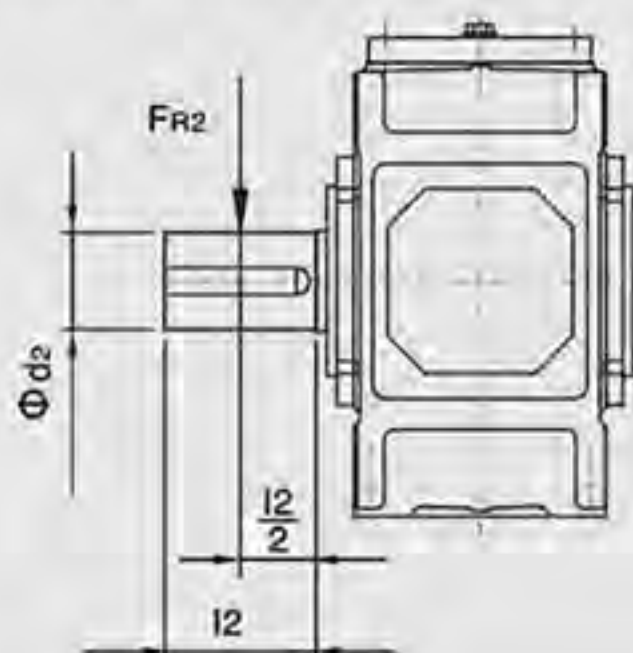
输出轴 d2 上允许的附加径向力1) Permissible Additional Radial Forces on Output Shaft d2 1)

类型 H1SH., H2S., H3S., H4S., B2S., B3S., B4S

Types H1SH., H2S., H3S., H4S., B2S., B3S., B4S

作用力在轴端中部

Application of force on centre of shaft end



允许的作用力方向
Permissible direction of force

允许的附加径向力 FR2 (kN), 作用于输出轴端中部3)

Permissible additional radial forces FR2 in kN with application of force on center of shaft end

类型 Type	布置形式 Design	齿轮箱规格 1), 4) Gearunitsize1), 4)																	
		1	2	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)	-	2)	-
H2S.	A/B/G/H	-	-	8	10	22	22	30	30	30	45	64	64	150	150	140	205	205	205
	C/D	-	-	8	10	13	13	18	18	10	28	35	35	112	112	85	135	135	135
H3S.	A/B/G/H	-	-	-	-	29	29	40	40	40	60	85	85	190	190	185	265	265	265
	C/D	-	-	-	-	18	18	26	26	18	40	50	50	150	150	120	185	185	190
H4S.	A/B	-	-	-	-	-	-	26	26	18	40	50	50	150	150	120	185	185	190
	C/D	-	-	-	-	-	-	40	40	40	60	85	85	190	190	185	265	265	265
B2S.	A/C	7	10	10	13	27	27	37	37	38	55	78	78	160	160	150	210	210	210
	B/D	4	7	9	12	15	15	17	17	10	30	38	38	110	110	75	145	100	100
B3S.	A/C	-	-	9	14	29	29	40	40	40	60	85	85	190	190	185	265	265	265
	B/D	-	-	7	9	18	18	26	26	18	40	50	50	150	150	120	185	185	190
B4S.	A/C	-	-	-	-	29	29	40	40	40	60	85	85	190	190	185	265	265	265
	B/D	-	-	-	-	18	18	26	26	18	40	50	50	150	150	120	185	185	190

1) 表中数据为最小值。如果给定了力的作用角和旋转方向，通常情况下，可允许承受较大的附加力。请与我们联系。

Values in tables are minimum values. 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.

2) 根据用户要求供货。On request.

3) 当作用力不在轴端中部时，请参见第 26 页。For application of force outside the center of the shaft end, see page 26.

4) 基础螺栓的最低性能等级为 8.8 级。基础必须干燥，不得有油脂。如用户要求，允许输入轴 d1 上附加径向力。

Use foundation bolts of min. Property class 8.8. Foundation must be dry and grease-free. Permissible additional radial forces on input shaft d1 on request.



齿轮箱 Gear Units

输出轴 d2 上允许的附加径向力 Permissible Additional Radial Forces on Output Shaft d2

类型 H1SH., H2S., H3S., Types H1SH, H2S., H3S.,

H4S., B2S., B3S., B4S H4S., B2S., B3S., B4S

作用力不在轴端中部
Application of force outside the centre of the shaft end

FRZ2 允许的轴端外部径向力
FRZ2 Permissible external radial force

FR2 允许的附加径向力根据 25 页上的表确定
FR2 Permissible additional radial force acc. to table page 25

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

$$FRZ2 = FR2 \times K$$

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
1						1.11	1.00	0.81	0.68	0.58	0.51				
2						1.11	1.00	0.83	0.71	0.63	0.56				
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	0.76	0.68	0.62	0.52	0.44		
5+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



平行轴齿轮箱 Helical Gear Units

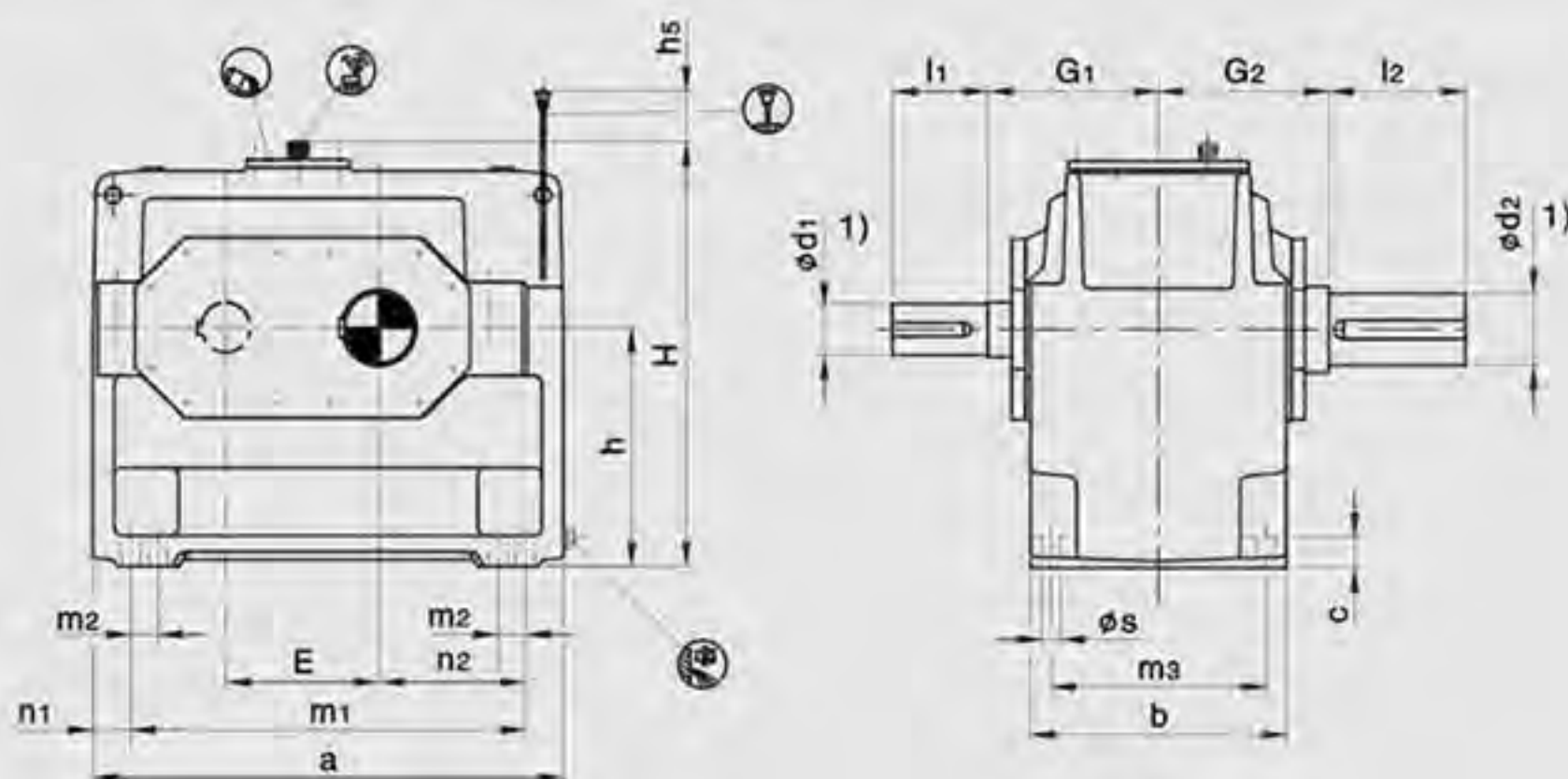
单级传动 Single Stage

卧式安装 Horizontal

类型H1SH Type H1SH

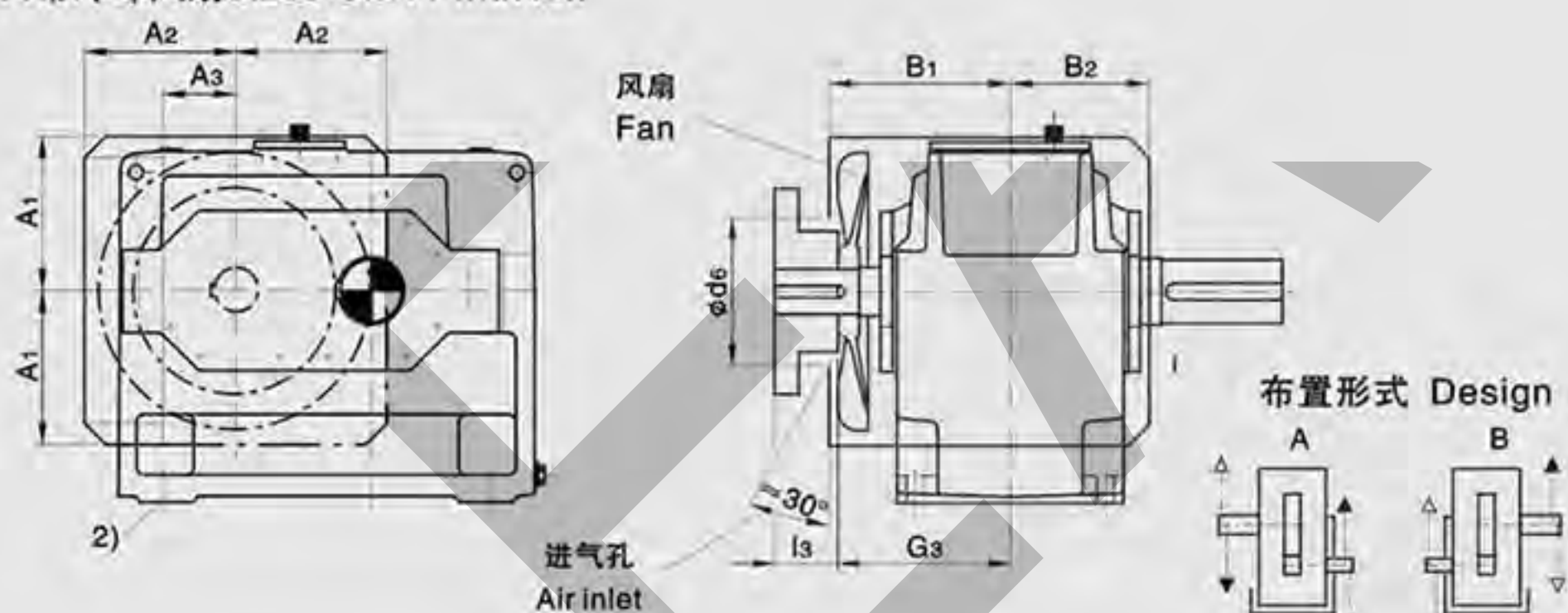
规格1...19 Sizes 1...19

H1SH



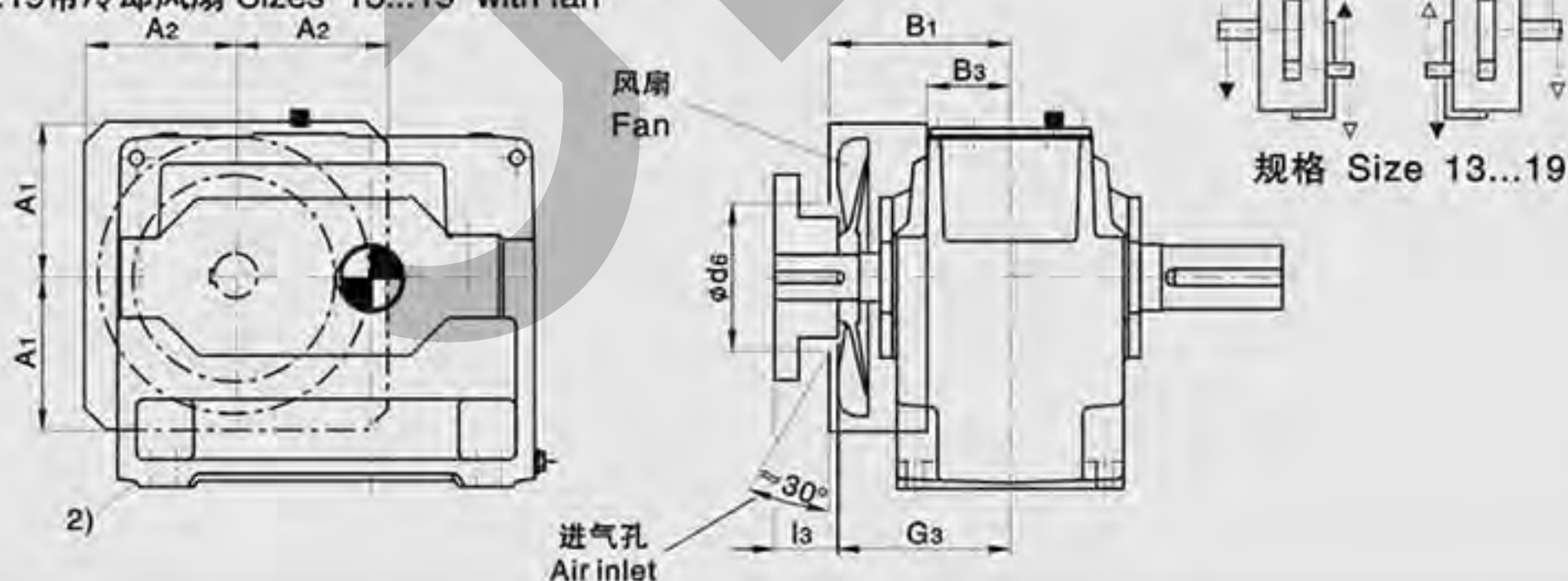
H1SH

规格 3...11带冷却风扇 Sizes 3...11 with fan



H1SH

规格 13...19带冷却风扇 Sizes 13...19 with fan



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979 型和中心孔, 参见第 87-88 页。For parallel key GB/T1095-1979 and for centre hole, see page 87-88 .

2) 在安装基础螺栓前, 应拆下风扇罩。Remove air guide cover before fitting the foundation bolts.

3) 规格1号不带风扇。Sizes 1 without fan.



平行轴齿轮箱 Helical Gear Units
类型 H1SH Type H1SH

单级传动 Single Stage
规格 1...19 Sizes 1...19

卧式安装 Horizontal

规格 Size	尺寸mm Dimensions in mm															
	输入轴 Input															
	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
	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	
1	40	70	—							30	50		24	40	—	110
3	60	125	105							45	100	80	32	80	60	170
5	85	160	130							60	135	105	50	110	80	210
7	100	200	165							75	140	105	60	140	105	250
9	110	200	165							90	165	130	75	140	105	280
11				130	240	205				110	205	170	90	170	135	325
13				150	245	200				130	245	200	100	210	165	365
15							180	290	240	150	250	200	125	250	200	360
17							200	330	280	170	290	240	140	250	200	400
19							220	340	290	190	340	290	160	300	250	440

规格 Size	尺寸mm Dimensions in mm																			
	齿轮箱 Gear units																			
	a	A ₁	A ₂	A ₃	b	B ₁	B ₂	B ₃	c	d ₆	E	h	h ₅	H	m ₁	m ₂	m ₃	n ₁	n ₂	s
1	295	—	—	—	150	—	—	—	18	—	90	140	55	275	220	—	120	37.5	80	12
3	420	150	145	80	200	205	130	—	28	130	130	200	85	375	310	—	160	55	110	19
5	580	225	215	115	285	255	185	—	35	190	185	290	100	525	440	—	240	70	160	24
7	690	255	250	120	375	300	230	—	45	245	225	350	75	625	540	—	315	75	195	28
9	805	300	265	140	425	330	265	—	50	280	265	420	50	735	625	—	350	90	225	35
11	960	360	330	190	515	375	320	—	60	350	320	500	40	875	770	—	440	95	280	35
13	1100	415	350	—	580	430	—	150	70	350	370	580	40	1020	870	—	490	115	315	42
15	1295	500	430	—	545	430	—	120	80	450	442	600	10	1115	1025	—	450	135	370	48
17	1410	550	430	—	615	470	—	150	80	445	490	670	—	1235	1170	130	530	120	425	42
19	1590	630	475	—	690	510	—	190	90	445	555	760	—	1395	1290	150	590	150	465	48

规格 Size	尺寸mm Dimensions in mm			润滑油 Oil	重量 Weight (kg)
	输出轴 Output			轴封 Shaft seal (l)	
	d2 ¹⁾	G2	l2		
1	45	110	80	2.5	55
3	60	170	125	7	128
5	85	210	160	22	302
7	105	250	200	42	547
9	125	270	210	68	862
11	150	320	240	120	1515
13	180	360	310	175	2395
15	220	360	350	190	3200
17	240	400	400	270	4250
19	270	440	450	390	5800



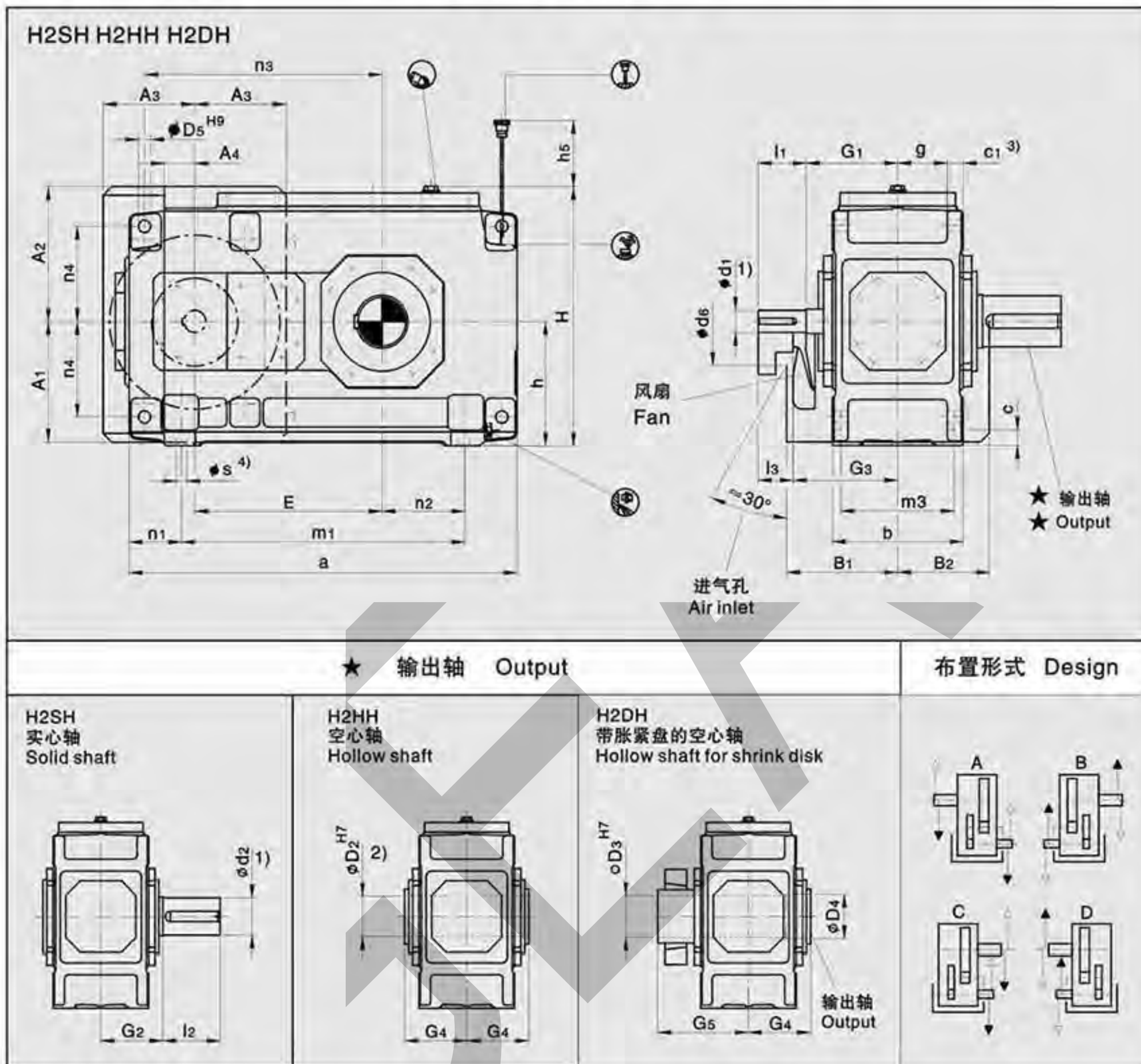
平行轴齿轮箱 Helical Gear Units

两级传动 Two stage

卧式安装 Horizontal

类型 2.H Type H2.H

规格 3...12 Sizes 3...12



1) $k_0 \leq \Phi 50$ $m_0 > \Phi 50$

有关平键 GB/T1095-1979 型和中心孔, 参见第 87-88 页。For parallel key GB/T1095-1979 and for centre hole, see page 87-88 .

2) 键槽 GB/T1095-1979。Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。Torque support on driven machine side.

4) 在安装螺栓前, 应先拆下风扇罩。Remove air guide cover before fitting the foundation bolts.



平行轴齿轮箱 Helical Gear Units
类型 H2.H Type H2.H

两级传动 Two stage
规格 3...12 Sizes 3...12

卧式安装 Horizontal

规格 Size	尺寸 mm Dimensions in mm													
	输入轴 Input													
	n=6.3-11.2			n=8-14			n=12.5-22.4			n=16-28			G ₁	G ₃
	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂		
3	35	60	-				28	50					135	-
4	45	100	80				32	80	60				170	190
5	50	100	80				38	80	60				195	215
6				50	100	80				38	80	60	195	215
7	60	135	105				50	110	80				210	240
8				60	135	105				50	110	80	210	240
9	75	140	110				60	140	110				240	270
10				75	140	110				60	140	110	240	270
11	90	165	130				70	140	105				275	310
12				90	165	130				70	140	105	275	310

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A ₁	A ₂	A ₃	A ₄	b	B ₁	B ₂	c	C ₁	D ₅	d ₆
3	450	-	-	-	-	190	-	-	22	24 ± 1	18	-
4	565	195	225	150	30	215	205	158	28	30 ± 1	24	136
5	640	225	260	175	55	255	230	177.5	28	30 ± 1	24	150
6	720	225	260	175	55	255	230	177.5	28	30 ± 1	24	150
7	785	272	305	210	70	300	255	210	35	36 ± 1	28	200
8	890	272	305	210	70	300	255	210	35	36 ± 1	28	200
9	925	312	355	240	100	370	285	245	40	45 ± 1.5	36	200
10	1025	312	355	240	100	370	285	245	40	45 ± 1.5	36	200
11	1105	372	420	285	135	430	325	285	50	54 ± 1.5	40	210
12	1260	372	420	285	135	430	325	285	50	54 ± 1.5	40	210

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	E	g	h	h ₅	H	m ₁	m ₃	n ₁	n ₂	n ₃	n ₄	s
3	220	71	175	110	360	290	160	80	65	285	132.5	15
4	270	77.5	200	110	415	355	180	105	85	345	150	19
5	315	97.5	230	150	482	430	220	105	100	405	180	19
6	350	97.5	230	150	482	510	220	105	145	440	180	19
7	385	114	280	190	572	545	260	120	130	500	215	24
8	430	114	280	190	582	650	260	120	190	545	215	24
9	450	140	320	205	662	635	320	145	155	585	245	28
10	500	140	320	215	662	735	320	145	205	635	245	28
11	545	161	380	250	782	775	370	165	180	710	300	35
12	615	161	380	250	790	930	370	165	265	780	300	35

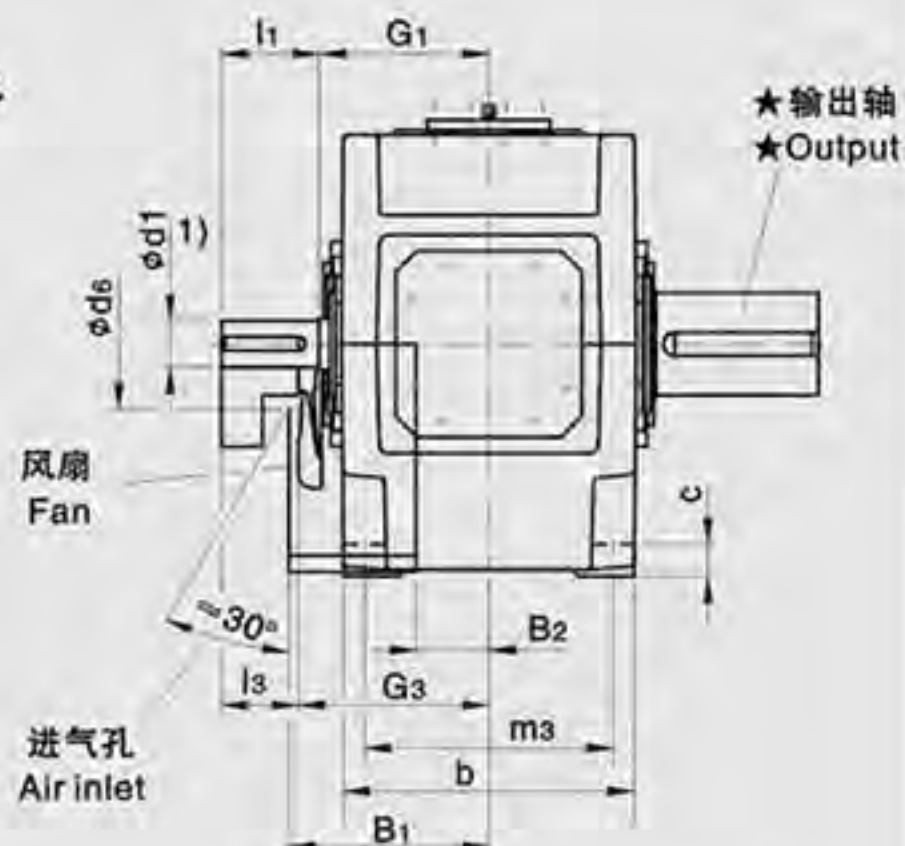
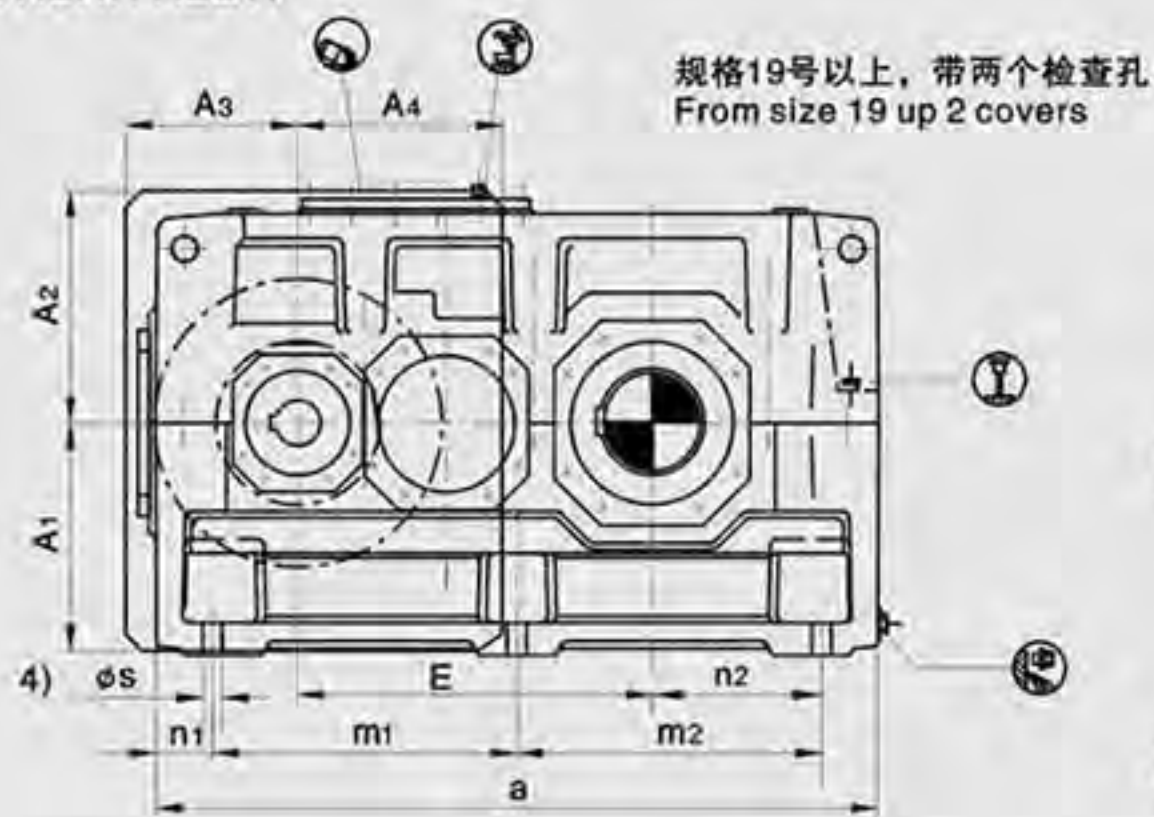
规格 Size	尺寸mm Dimensions in mm									润滑油 Oil	重量 Weight (kg)
	输出轴 Output									轴封 Shaft seal (l)	
	H2SH			H2HH		H2DH					
	d ₂ 1)	G ₂	l ₂	D ₂ 2)	G ₄	D ₃	D ₄	G ₄	G ₅		
3	65	125	140	65	125	70	70	125	180	6	115
4	80	140	170	80	140	85	85	140	205	10	190
5	100	165	210	95	165	100	100	165	240	15	300
6	110	165	210	105	165	110	110	165	240	16	355
7	120	195	210	115	195	120	120	195	280	27	505
8	130	195	250	125	195	130	130	195	285	30	590
9	140	235	250	135	235	140	145	235	330	42	830
10	160	235	300	150	235	150	155	235	350	45	960
11	170	270	300	165	270	165	170	270	400	71	1335
12	180	270	300	180	270	180	185	270	405	76	1615



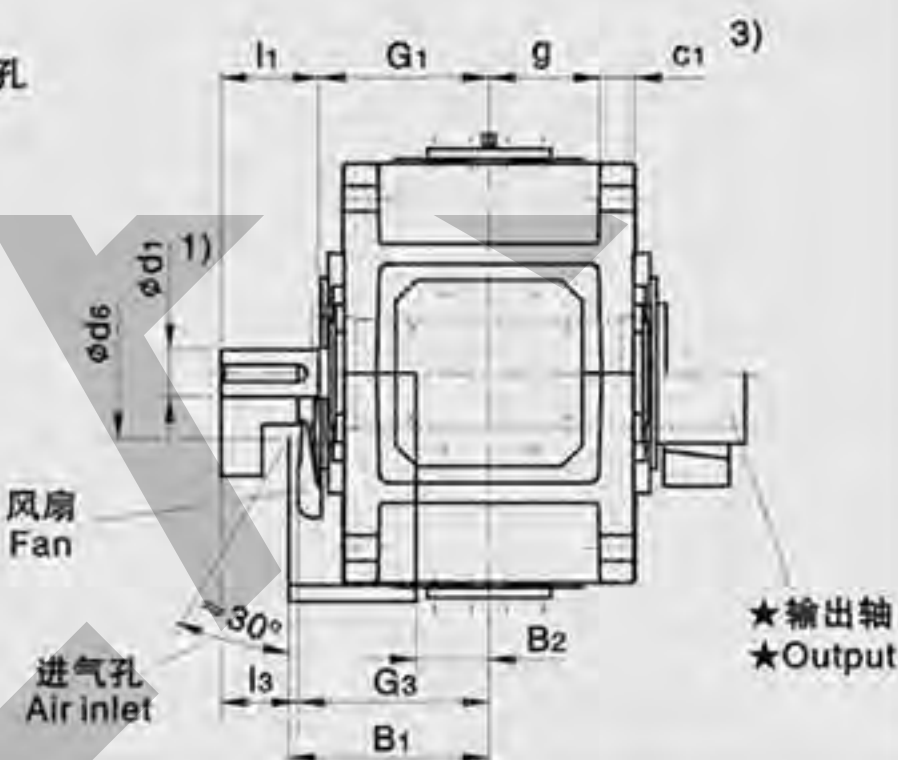
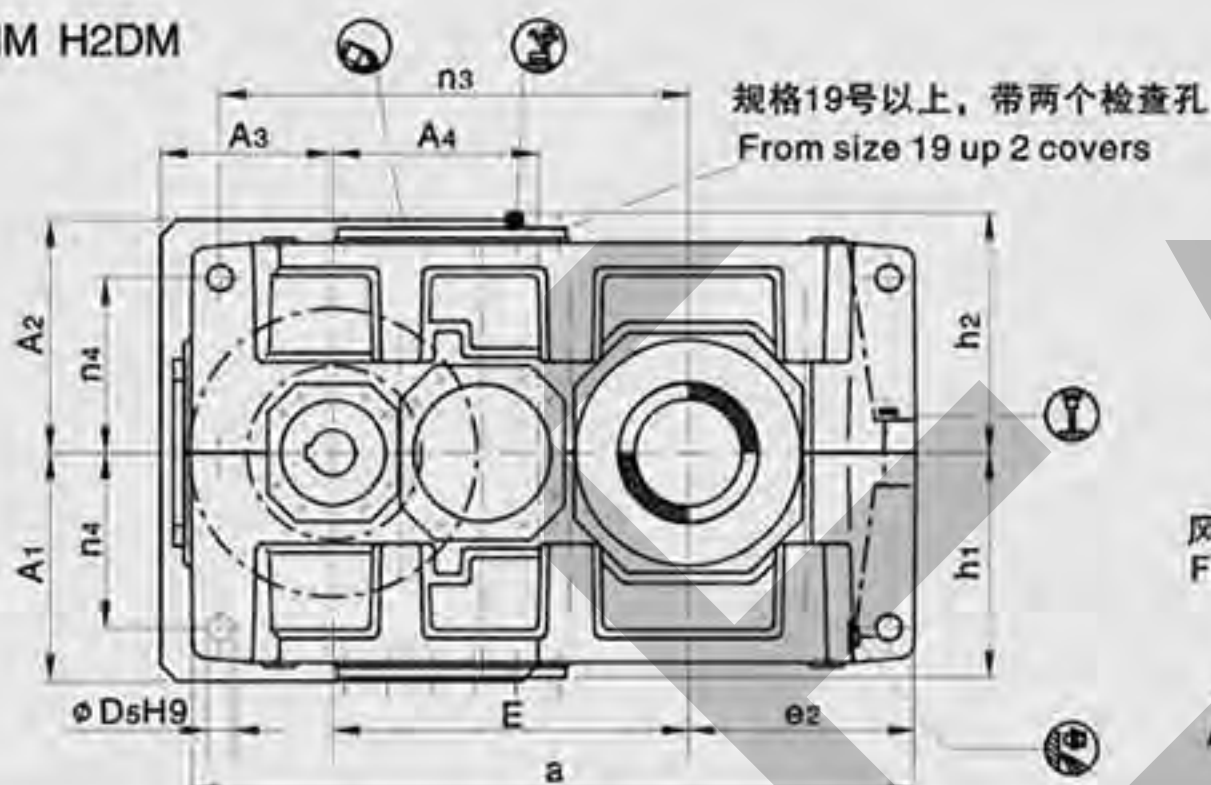
平行轴齿轮箱 Helical Gear Units 两级传动 Two stage 卧式安装 Horizontal

类型 H2.H, H2.M Types H2.H, H2.M 规格 13...22 Sizes 13...22

H2SH H2HH H2DH



H2HM H2DM



★ 输出轴 Output			布置形式 Design
H2SH 实心轴 Solid shaft	H2HH⁵⁾, H2HM⁵⁾ 空心轴 Hollow shaft	H2DH⁵⁾, H2DM⁵⁾ 带胀紧盘的空心轴 Hollow shaft for shrink disk	

1) $k_0 \leq \Phi 50$ $m_0 > \Phi 50$

有关平键 GB/T1095-1979 型和中心孔, 参见第 87-88 页。For parallel key GB/T1095-1979 and for center hole, see page 87-88.

2) 键槽 GB/T1095-1979。Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。Torque support on driver machine side.

4) 在安装基础螺栓前, 应拆下风扇罩。Remove air guide cover before fitting the foundation bolts.

5) 规格 13 和 15 号: 速比只有 $i_n=6.3-18$; 规格 17 和 19 号: 速比只有 $i_n=6.3-16$ 。

Sizes 13 and 15 :only $i_n=6.3-18$; Sizes 17 and 19:only $i_n=6.3-16$.



平行轴齿轮箱 Helical Gear Units

两级传动 Two Stage

卧式安装 Horizontal

类型 H2.H, H2.M

Type H2.H, H2.M

规格 13...22 Sizes 13...22

规格 Size	尺寸mm Dimension in mm																	
	输入轴 Input																	
	in=6.3-11.2			in=7.1-12.5			in=8-14			in=12.5-20			in=14-22.4			in=16-25		
	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂	d ₁ 1)	l ₁	l ₂
13	100	205	170							85	170	135						
14							100	205	170							85	170	135
15	120	210	165							100	210	165						
16				120	210	165							100	210	165			
17	125	245	200							110	210	165						
18				125	245	200							110	210	165			
19	150	245	200							120	210	165						
20				150	245	200							120	210	165			
21	170	290	240							140	250	200						
22				170	290	240							140	250	200			

规格 Size	尺寸mm Dimension in mm													
	齿轮箱 Gear units													
	a	A ₁	A ₂	A ₃	A ₄	b	B ₁	B ₂	c	c ₁	d ₅	D ₅	e ₂	E
13	1290	430	460	330	365	550	385	135	60	61 ± 2	250	48	405	635
14	1430	430	460	330	365	550	385	135	60	61 ± 2	250	48	475	705
15	1550	490	500	370	440	625	430	155	70	72 ± 2	280	55	485	762
16	1640	490	500	370	440	625	430	155	70	72 ± 2	280	55	530	808
17	1740	540	565	435	505	690	485	140	80	81 ± 2	280	55	525	860
18	1860	540	565	435	505	690	485	140	80	81 ± 2	280	55	585	920
19	2010	600	600	500	450	790	540	190	90	91 ± 2	310	65	590	997
20	2130	600	600	500	450	790	540	190	90	91 ± 2	310	65	650	1057
21	2140	680	680	500	610	830	565	200	100	100 ± 2	450	75	655	1067
22	2250	680	680	500	610	830	565	200	100	100 ± 2	450	75	710	1122

规格 Size	尺寸mm Dimension in mm												
	齿轮箱 Gear units												
	g	h	h ₁	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
13	211.5	440	450	460	900	545	545	475	100	305	835	340	35
14	211.5	440	450	460	900	545	685	475	100	375	905	340	35
15	238	500	490	500	1000	655	655	535	120	365	1005	375	42
16	238	500	490	500	1000	655	745	535	120	410	1050	375	42
17	259	550	555	560	1110	735	735	600	135	390	1145	425	42
18	259	550	555	560	1110	735	855	600	135	450	1205	425	42
19	299	620	615	620	1240	850	850	690	155	435	1345	475	48
20	299	620	615	620	1240	850	970	690	155	495	1405	475	48
21	310	700	685	690	1390	900	900	720	170	485	1400	520	56
22	310	700	685	690	1390	900	1010	720	170	540	1455	520	56

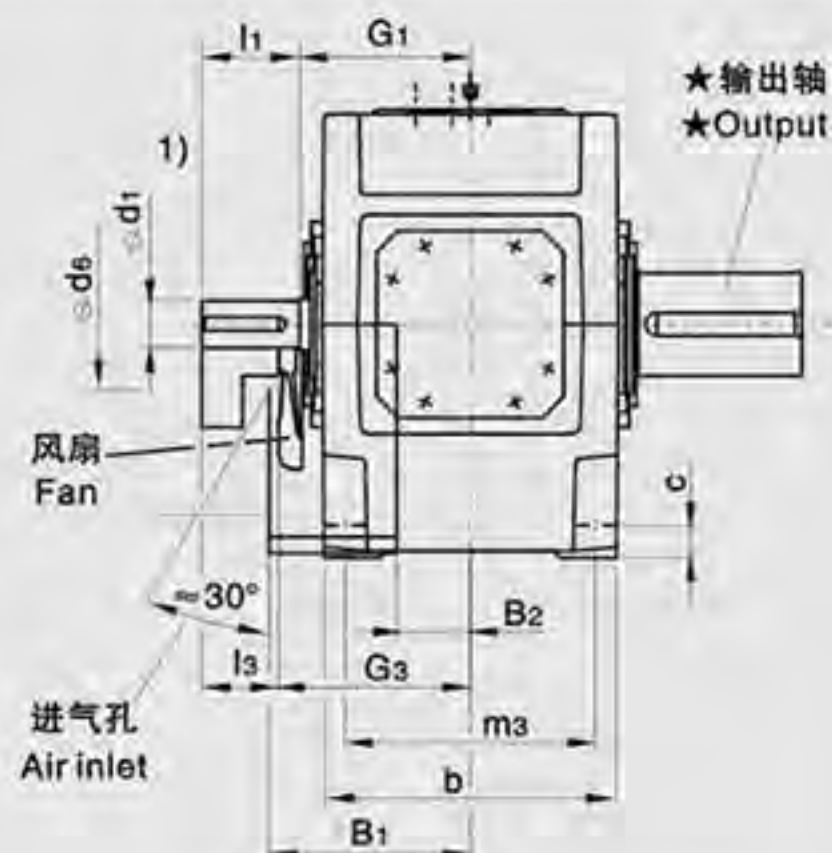
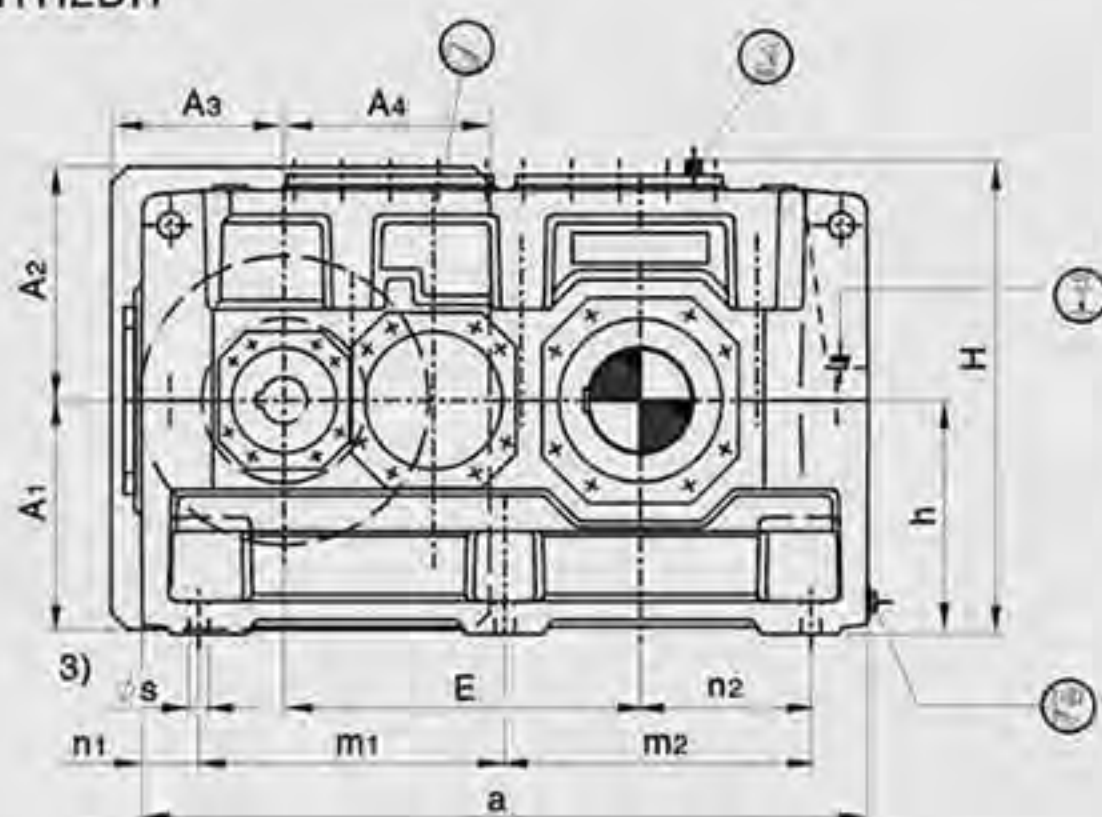
规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Gear units									H2.H	H2.M		
	H2SH			H2HH 5) H2HM 5)		H2DH 5) H2DM 5)				轴封 Shaft seal (l)		H2.H	H2.M
	d ₂ 1)	G ₂	l ₂	D ₂ 2)	G ₄	D ₃	D ₄	G ₄	G ₅			(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	135	110	2000	1880
14	210	335	350	210	335	210	215	335	480	140	115	2570	2430
15	230	380	410	230	380	230	235	380	550	210	160	3430	3240
16	240	380	410	240	380	240	245	380	550	215	165	3655	3465
17	250	415	410	250	415	250	260	415	600	290	230	4650	4420
18	270	415	470	275	415	280	285	415	600	300	240	5125	4870
19	290	465	470	-	-	285	295	465	670	320	300	5250	5000
20	300	465	500	-	-	310	315	465	670	340	320	5550	5150
21	320	490	500	-	-	330	335	490	715	320	350	7200	6950
22	340	490	550	-	-	340	345	490	725	340	370	7800	7550



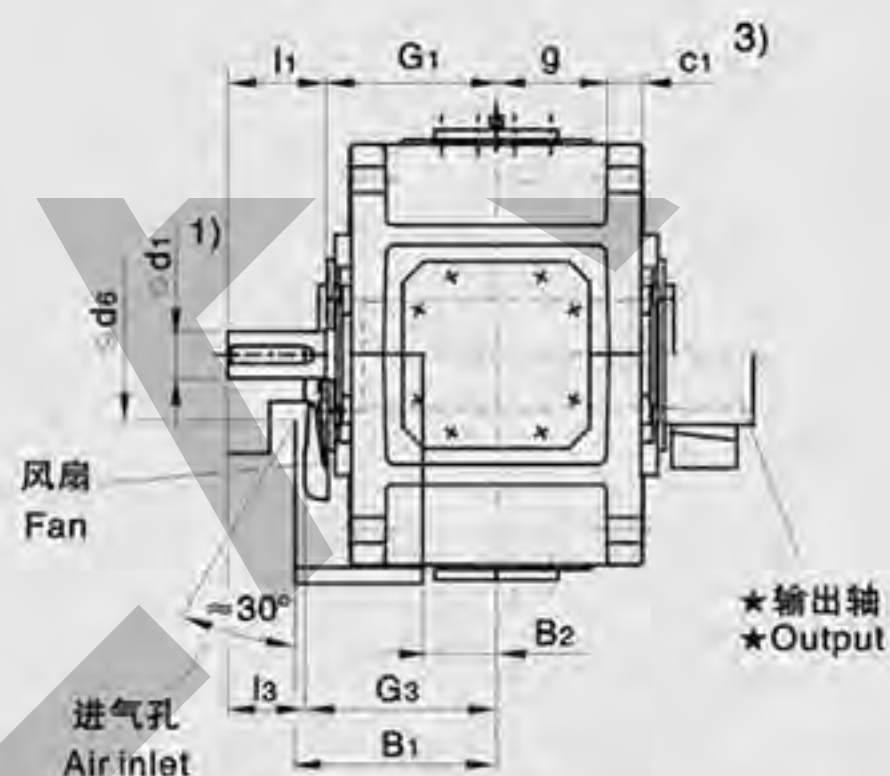
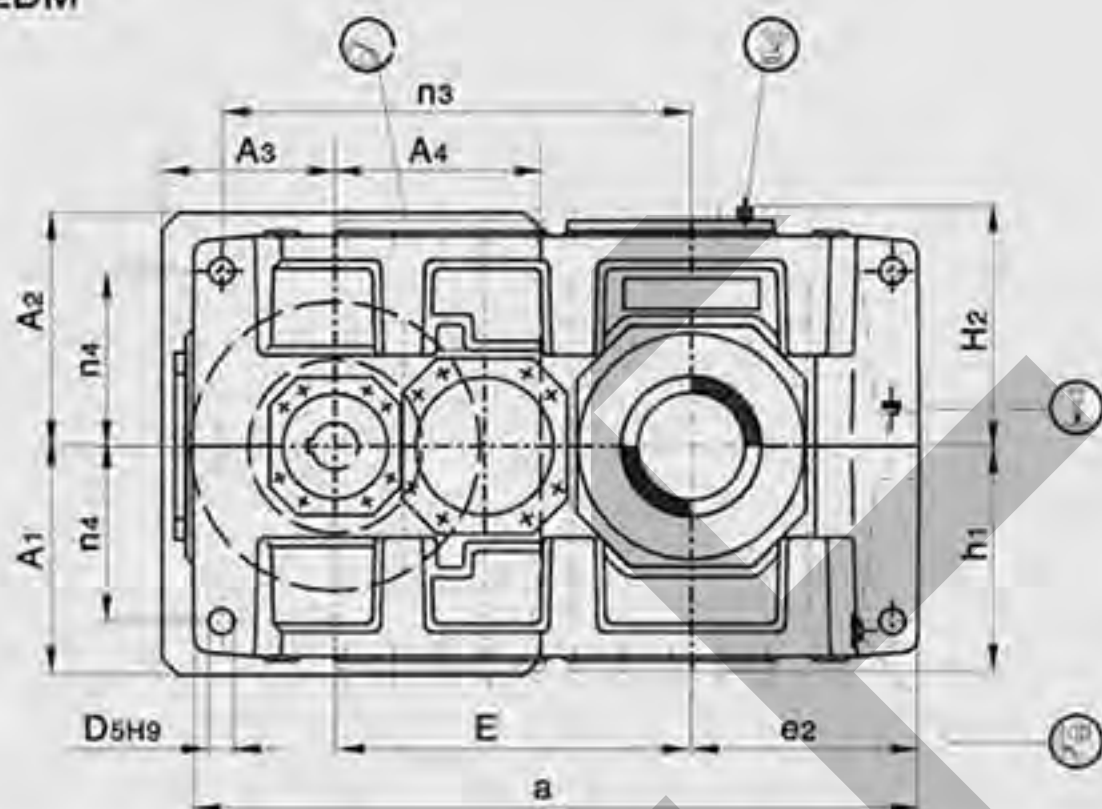
平行轴齿轮箱 Helical Gear Units 两级传动 Two Stage 卧式安装 Horizontal

类型 H2.H, H2.M Types H2.H, H2.M 规格 23...26 Sizes 23...26

H2SH H2DH



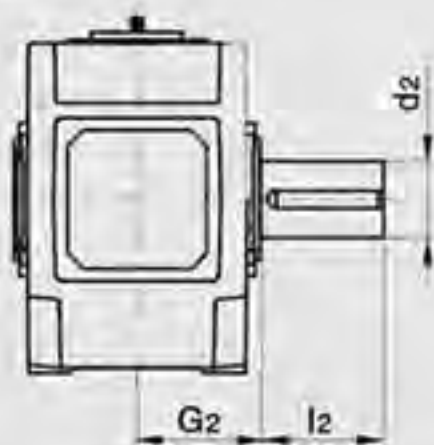
H2DM



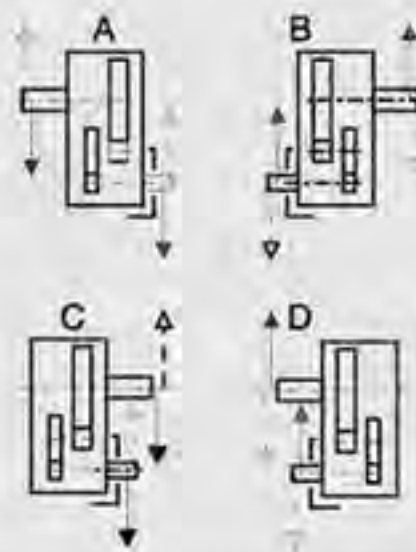
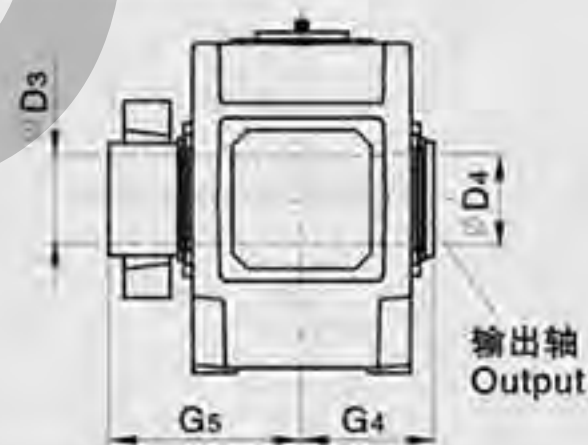
★ 输出轴 Output

布置形式 Design

H2SH
实心轴
Solid shaft



H2DH, H2DM
带胀紧盘的空心轴
Hollow shaft for shrink disk



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。For parallel key GB/T1095-1979 and for center hole,see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T 1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



平行轴齿轮箱 Helical Gear Units 两级传动 Two stage 卧式安装 Horizontal
类型 H2.H,H2.M Types H2.H,H2.M 规格 23...26 Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm													
	输入轴 Input													
	IN = 6.3 - 11.2			IN = 7.1 - 12.5			IN = 12.5 - 20			IN = 14 - 22.4			G1	G3
	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃		
23	190	330	280				150	250	200				560	610
24				190	330	280				150	250	200	560	610
25	200	340	290				170	300	250				600	650
26				200	340	290				170	300	250	600	650

规格 Size	尺寸mm Dimensions in mm													
	齿轮箱 Gear units													
	a	A ₁	A ₂	A ₃	A ₄	b	B ₁	B ₂	c	c ₁	d ₆	D ₅	e ₂	E
23	2380	770	770	550	550	930	630	220	115	120 ± 2	450	80	730	1185
24	2510	770	770	550	550	930	630	220	115	120 ± 2	450	80	795	1250
25	2580	845	865	550	550	1045	670	240	130	120 ± 2	450	90	790	1325
26	2760	845	865	550	550	1045	670	240	130	120 ± 2	450	90	880	1415

规格 Size	尺寸mm Dimensions in mm												
	齿轮箱 Gear units												
	g	h	h ₁	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
23	342	780	770	770	1550	1010	1010	810	180	550	1560	580	56
24	342	780	770	770	1550	1010	1140	810	180	615	1625	580	56
25	400	860	860	860	1720	1090	1090	910	200	590	1685	660	66
26	400	860	860	860	1720	1090	1270	910	200	680	1775	660	66

规格 Size	尺寸 mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴			Output							
	H2SH			H2DH		H2DM		H2.H	H2.M	H2.H	H2.M
	d2 1)	G2	l2	D3	D4	G4	G5	(l)	(l)	(kg)	(kg)
23	360	540	590	360	365	540	785	430	470	11600	11000
24	380	540	590	380	385	540	805	450	500	13000	12300
25	400	605	650	400	405	605	875	600	660	15500	14700
26	420	605	650	430	435	605	900	640	700	17200	16200



平行轴齿轮箱 Helical Gear Units

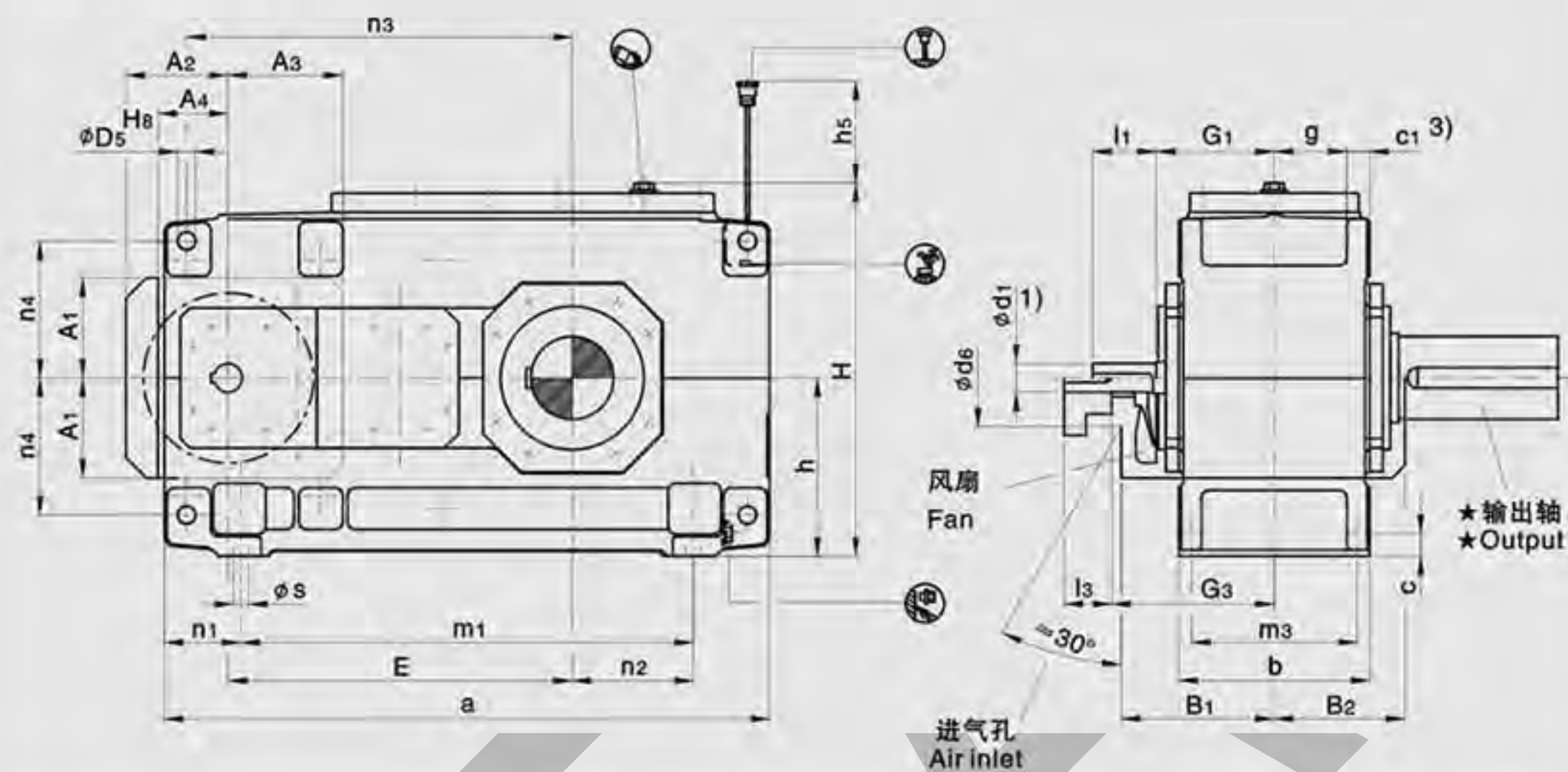
三级传动 Three Stage

卧式安装 Horizontal

类型 H3.H Type H3.H

规格 5...12 Sizes 5...12

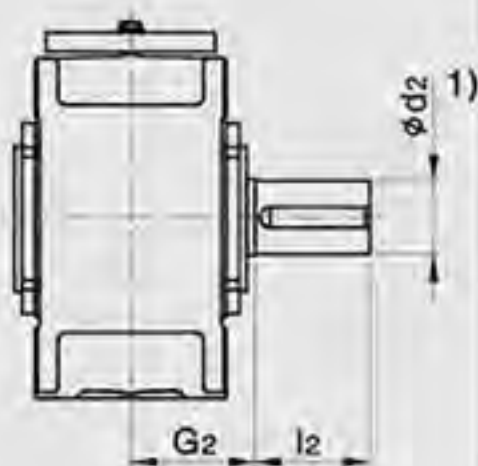
H3SH H3HH H3DH



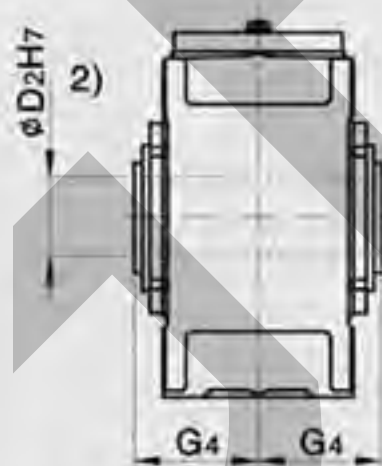
★ 输出轴 Output

布置形式 Design

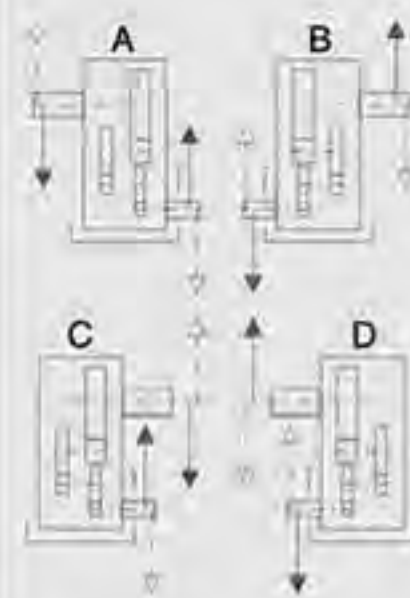
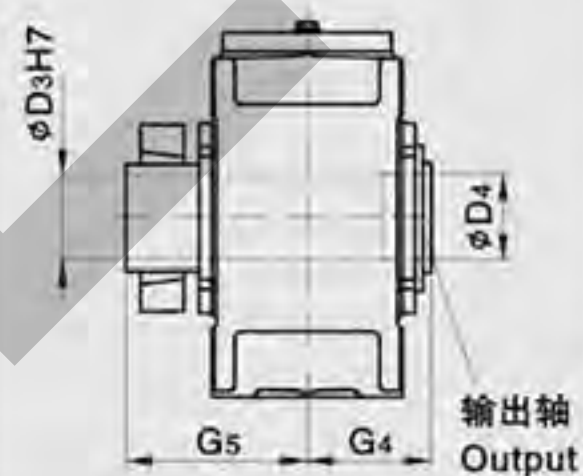
H3SH
实心轴
Solid shaft



H3HH
空心轴
Hollow shaft



H3DH
带胀紧盘的空心轴
Hollow shaft for shrink disk



1) $k_6 \leq \phi 50$ $m_6 > \phi 50$

有关平键 GB/T1095-1979 型和中心孔, 参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole, see page 87-88.

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作侧。 Torque support on driven machine side.



平行轴齿轮箱 Helical Gear Units
类型 H3.H Type H3.H

三级传动 Three Stage
规格 5...12 Sizes 5...12

卧式安装 Horizontal

规格 Size	尺寸mm Dimensions in mm																			
	输入轴 Input																		G ₁	G ₃
	iN = 25 - 45			iN = 31.5 - 56			iN = 50 - 63			iN = 63 - 80			iN = 71 - 90			iN = 90 - 112				
	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃		
5	40	70	70				30	50	50				24	40	40				160	220
6				40	70	70				30	50	50				24	40	40	160	220
7	45	80	80				35	60	60				28	50	50				185	250
8				45	80	80				35	60	60				28	50	50	185	250
9	60	125	105				45	100	80				32	80	60				230	300
10				60	125	105				45	100	80				32	80	60	230	300
11	70	120	120				50	80	80				42	70	70				255	330
12				70	120	120				50	80	80				42	70	70	255	330

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A ₁	A ₂	A ₃	A ₄	b	B ₁	B ₂	c	c ₁	d ₆	D ₅
5	690	137	135	140	80	255	215	175	28	30 ± 1	60	24
6	770	137	135	140	80	255	215	175	28	30 ± 1	60	24
7	845	157	160	180	100	300	245	205	35	36 ± 1	75	28
8	950	157	160	180	100	300	245	205	35	36 ± 1	75	28
9	1000	182	190	205	120	370	295	240	40	45 ± 1.5	90	36
10	1100	182	190	205	120	370	295	240	40	45 ± 1.5	90	36
11	1200	218	220	255	150	430	325	280	50	54 ± 1.5	100	40
12	1355	218	220	255	150	430	325	280	50	54 ± 1.5	100	40

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	E	g	h	h _s	H	m ₁	m ₃	n ₁	n ₂	n ₃	n ₄	s
5	405	97.5	230	130	482	480	220	105	100	455	180	19
6	440	97.5	230	130	482	560	220	105	145	490	180	19
7	495	114	280	170	572	605	260	120	130	560	215	24
8	540	114	280	160	582	710	260	120	190	605	215	24
9	580	140	320	185	662	710	320	145	155	660	245	28
10	630	140	320	185	662	810	320	145	205	710	245	28
11	705	161	380	180	782	870	370	165	180	805	300	35
12	775	161	380	170	790	1025	370	165	265	875	300	35

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	H3SH			H3HH		H3DH					
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅		
5	100	165	210	95	165	100	100	165	240	15	320
6	110	165	210	105	165	110	110	165	240	17	365
7	120	195	210	115	195	120	120	195	280	28	540
8	130	195	250	125	195	130	130	195	285	30	625
9	140	235	250	135	235	140	145	235	330	45	875
10	160	235	300	150	235	150	155	235	350	46	1020
11	170	270	300	165	270	165	170	270	400	85	1400
12	180	270	300	180	270	180	185	270	405	90	1675



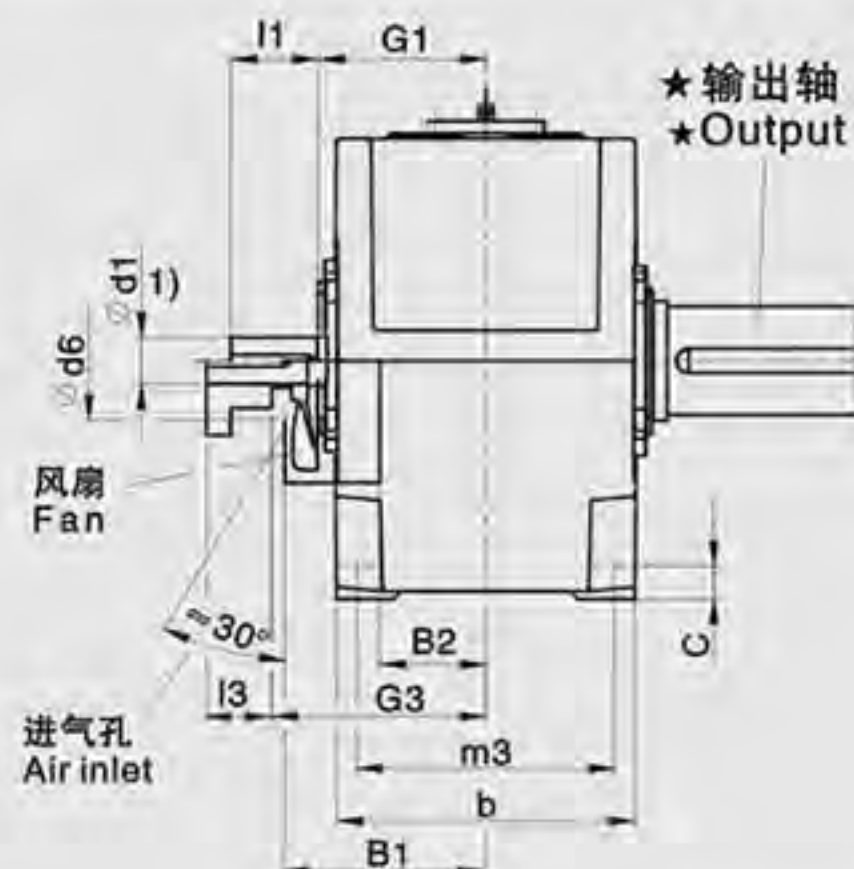
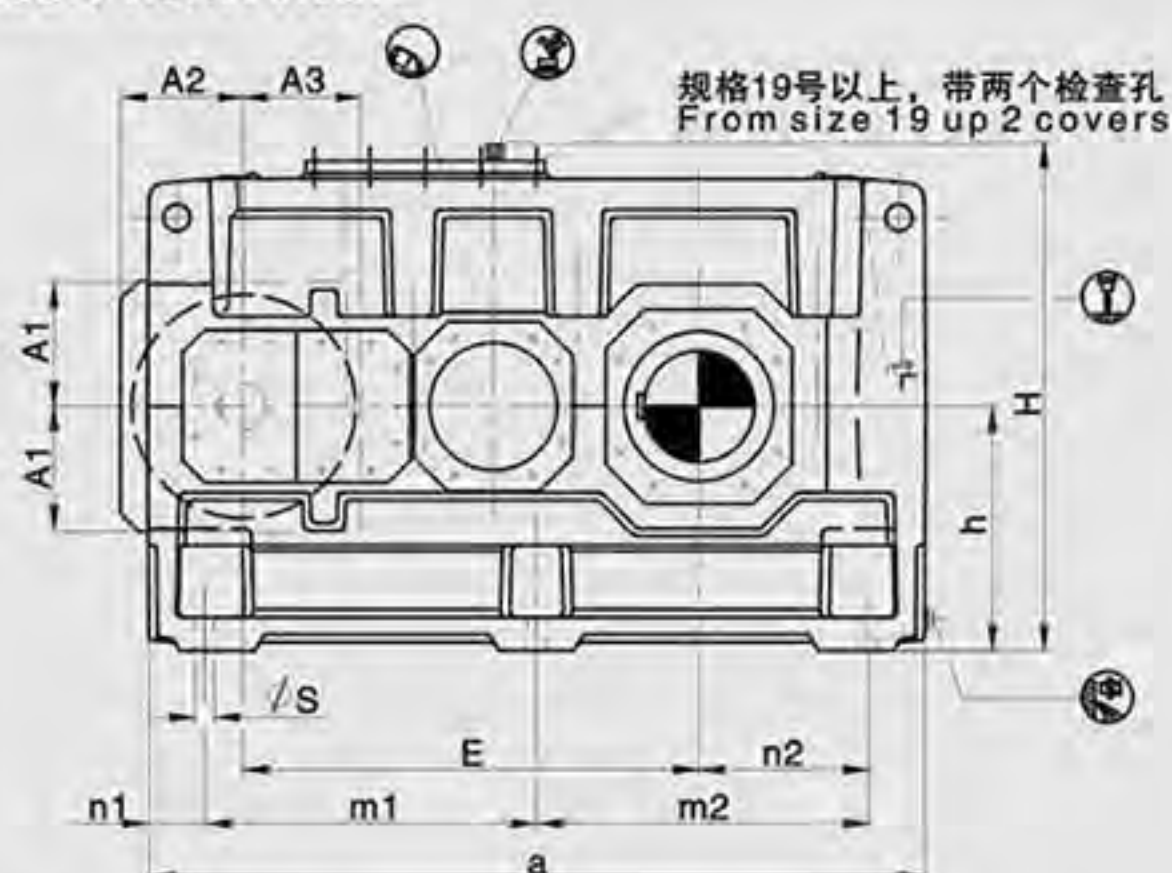
平行轴齿轮箱 Helical Gear Units 三级传动 Three Stage

类型 H3.H, H3.M Types H3.H, H3.M

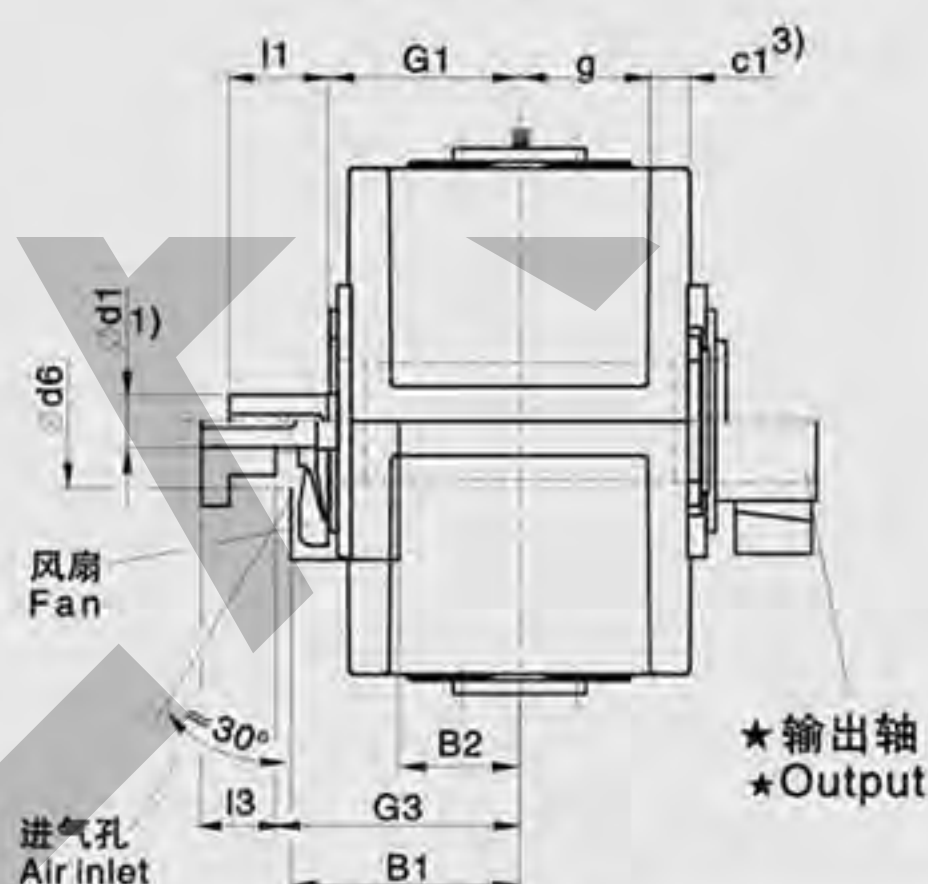
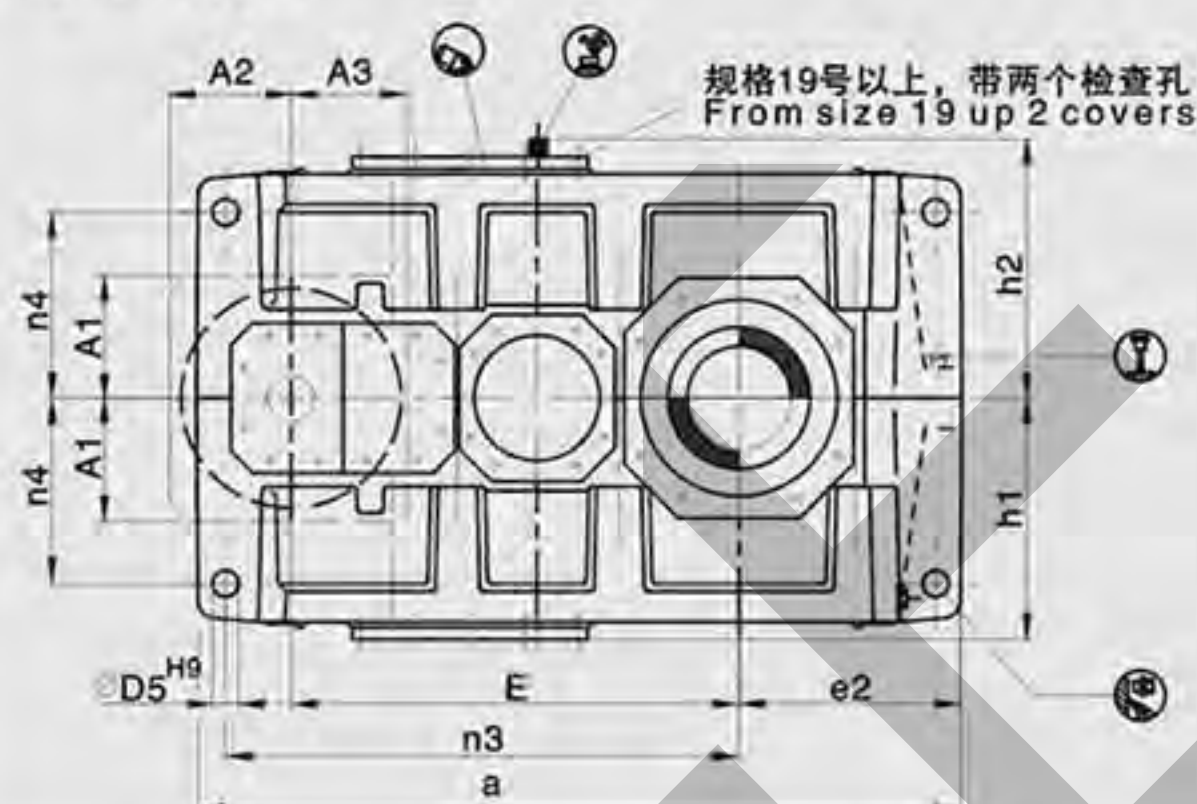
卧式安装 Horizontal

规格 13...22 Sizes 13...22

H3SH H3HH H3DH



H3HM H3DM

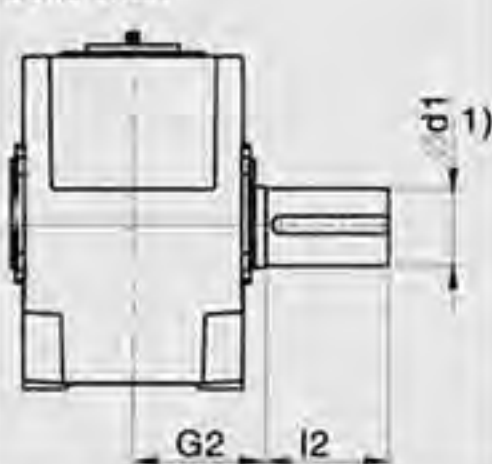


★ 输出轴 Output

布置形式 Design

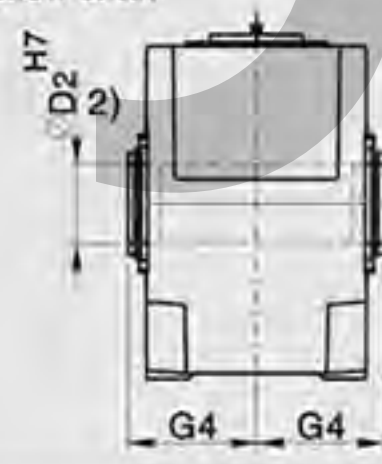
H3SH

实心轴
Solid shaft



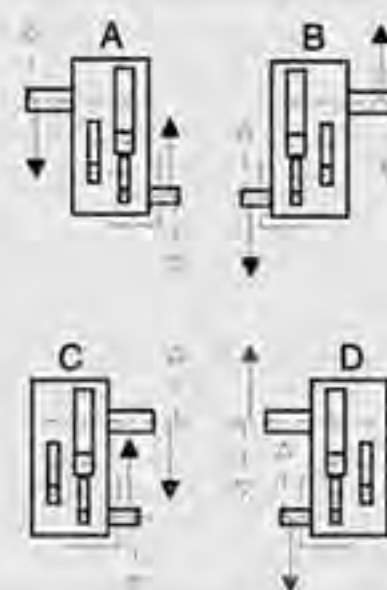
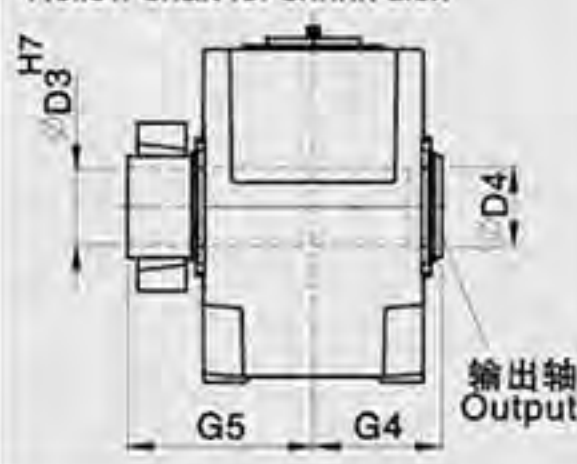
H3HH, H3HM

空心轴
Hollow shaft



H3DH, H3DM

带胀紧盘的空心轴
Hollow shaft for shrink disk



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔, 参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole, see page 87-88.

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



平行轴齿轮箱 Helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal
类型 H3.H, H3.M Types H3.H, H3.M 规格 13...22 Sizes 13...22

规格 Size	尺寸 mm Dimensions in mm																	
	输入轴 Input																	
	$i_N = 22.4 - 45$			$i_N = 25 - 50$ $i_N = 28 - 56$ 4)			$i_N = 50 - 63$			$i_N = 56 - 71$ $i_N = 63 - 80$ 4)			$i_N = 71 - 90$			$i_N = 80 - 100$ $i_N = 90 - 112$ 4)		
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3
13	85	160	130				60	135	105				50	110	80			
14				85	160	130				60	135	105				50	110	80
15	100	200	165				75	140	105				60	140	105			
16				100	200	165				75	140	105				60	140	105
17	100	200	165				75	140	105				60	140	105			
18				100	200	165				75	140	105				60	140	105
19	110	200	4)				90	165	4)				75	140	4)			
20				110	200	4)				90	165	4)				75	140	4)
21	130	240	4)				110	205	4)				90	170	4)			
22				130	240	4)				110	205	4)				90	170	4)

* 仅指规格14号齿轮箱 Only size 14

规格 Size	尺寸 mm Dimensions in mm												
	齿轮箱 Gear units												
	a	A ₁	A ₂	A ₃	b	B ₁	B ₂	c	c ₁	d ₆	D ₅	e ₂	E
13	1395	225	225	212	550	380	195	60	61 ± 2	120	48	405	820
14	1535	225	225	212	550	380	195	60	61 ± 2	120	48	475	890
15	1680	270	265	252	625	415	205	70	72 ± 2	150	55	485	987
16	1770	270	265	252	625	415	205	70	72 ± 2	150	55	530	1033
17	1770	270	265	252	690	445	235	80	81 ± 2	150	55	525	1035
18	1890	270	265	252	690	445	235	80	81 ± 2	150	55	585	1095
19	2030				790			90	91 ± 2		65	590	1190
20	2150	4)	4)	4)	790	4)	4)	90	91 ± 2	4)	65	650	1250
21	2340				830			100	100 ± 2		75	655	1387
22	2450				830			100	100 ± 2		75	710	1442

规格 Size	尺寸 mm Dimensions in mm												
	齿轮箱 Gear units												
	g	h	h ₁	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
13	211.5	440	450	460	900	597.5	597.5	475	100	305	940	340	35
14	211.5	440	450	460	900	597.5	737.5	475	100	375	1010	340	35
15	238	500	490	500	1000	720	720	535	120	365	1135	375	42
16	238	500	490	500	1000	720	810	535	120	410	1180	375	42
17	259	550	555	560	1110	750	750	600	135	390	1175	425	42
18	259	550	555	560	1110	750	870	600	135	450	1235	425	42
19	299	620	615	620	1240	860	860	690	155	435	1365	475	48
20	299	620	615	620	1240	860	980	690	155	495	1425	475	48
21	310	700	685	690	1390	1000	1000	720	170	485	1615	520	56
22	310	700	685	690	1390	1000	1110	720	170	540	1670	520	56

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Output									H3.H (l)	H3.M (l)	H3.H (kg)	H3.M (kg)
	H3SH			H3HH	H3HM	H3DH H3DM							
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅				
13	200	335	350	190	335	190	195	335	480	160	125	2295	2155
14	210	335	350	210	335	210	215	335	480	165	130	2625	2490
15	230	380	410	230	380	230	235	380	550	235	190	3475	3260
16	240	380	410	240	380	240	245	380	550	245	195	3875	3625
17	250	415	410	250	415	250	260	415	600	305	240	4560	4250
18	270	415	470	275	415	280	285	415	600	315	250	5030	4740
19	290	465	470	-	-	285	295	465	670	420	390	5050	4750
20	300	465	500	-	-	310	315	465	670	450	415	6650	6250
21	320	490	500	-	-	330	335	490	715	470	515	6950	6550
22	340	490	550	-	-	340	345	490	725	490	540	7550	7050

4)根据用户要求供货 On request



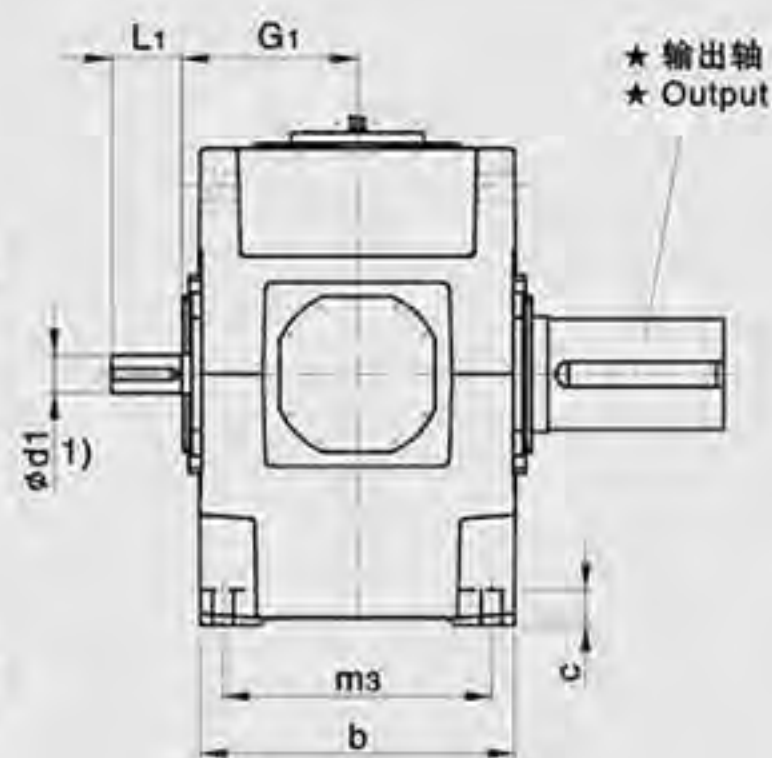
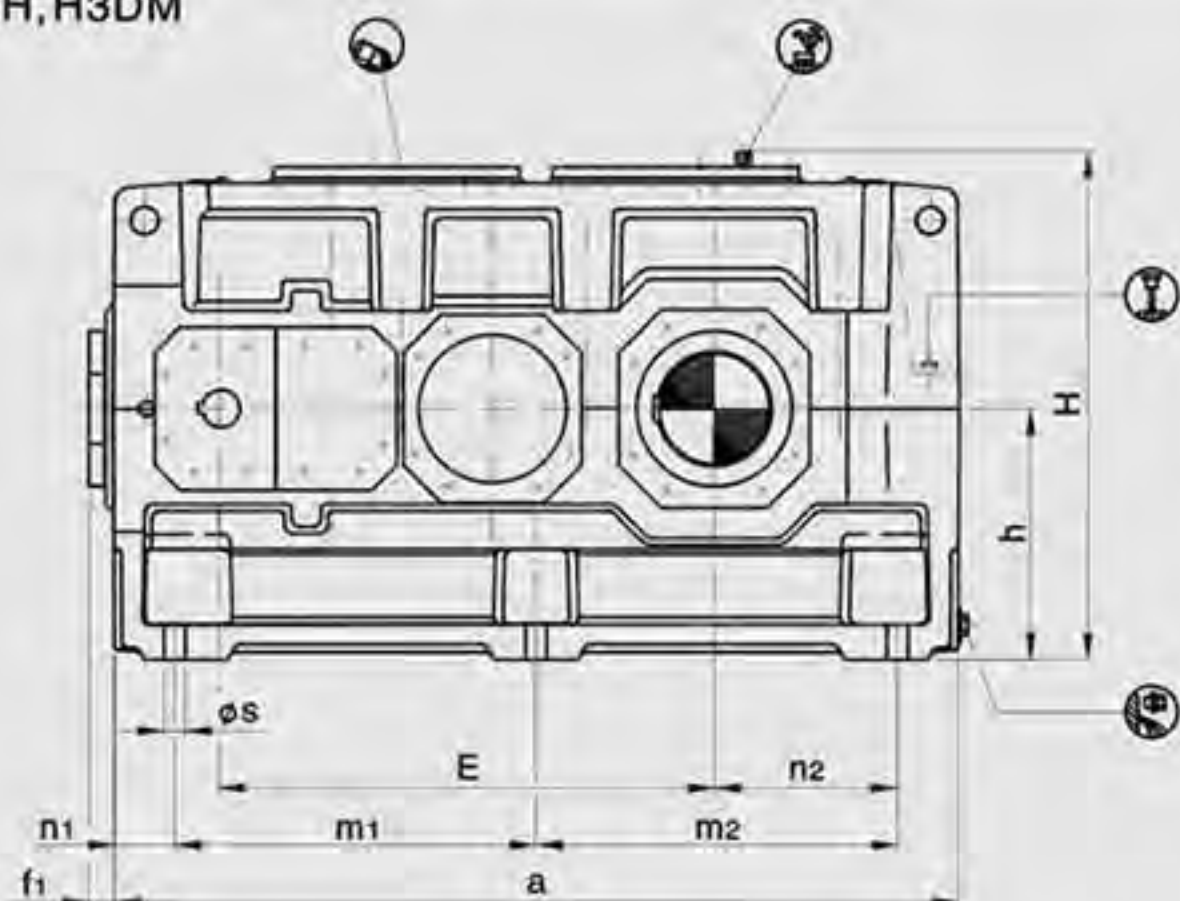
平行轴齿轮箱 Helical Gear Units
类型 H3.H, H3.M Types H3.H, H3.M

三级传动 Three Stage

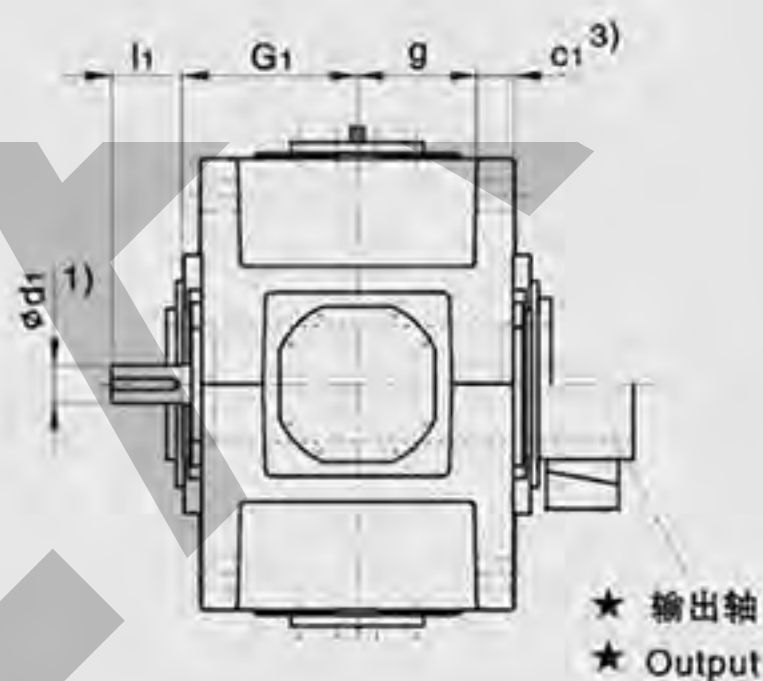
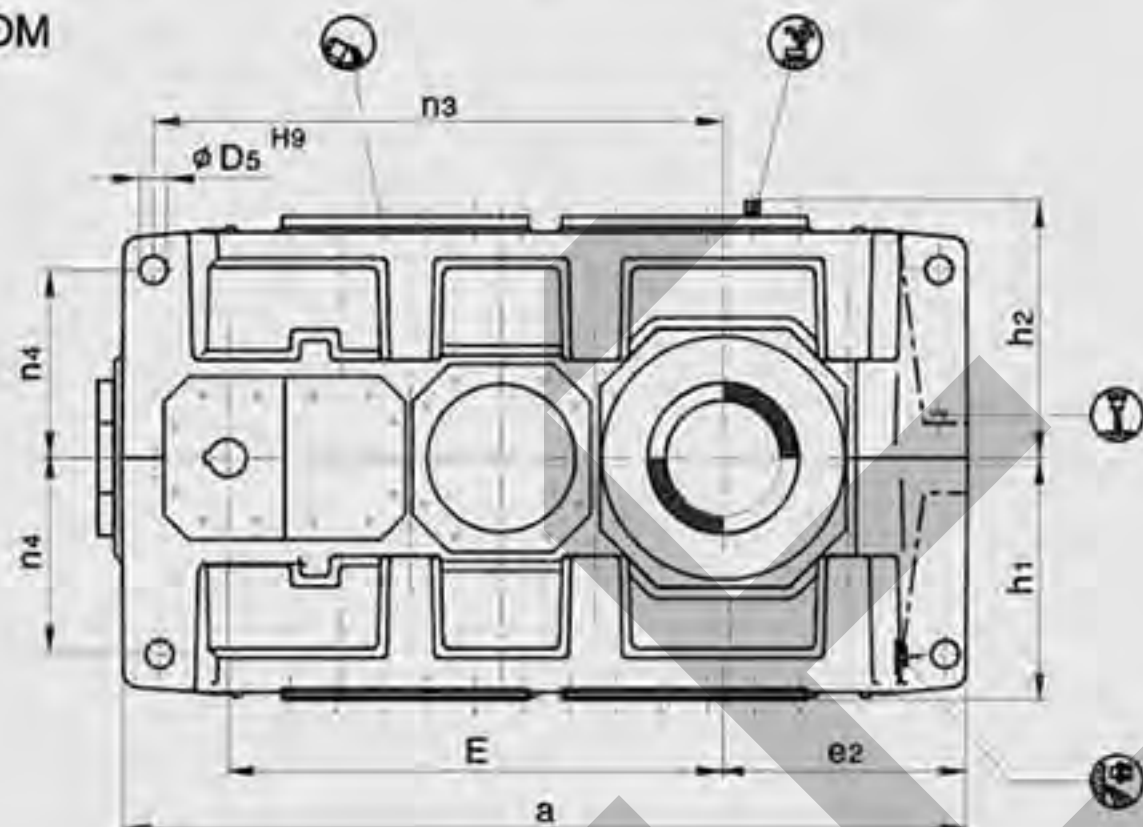
卧式安装 Horizontal

规格 23...26 Sizes 23...26

H3SH, H3DM



H3DM

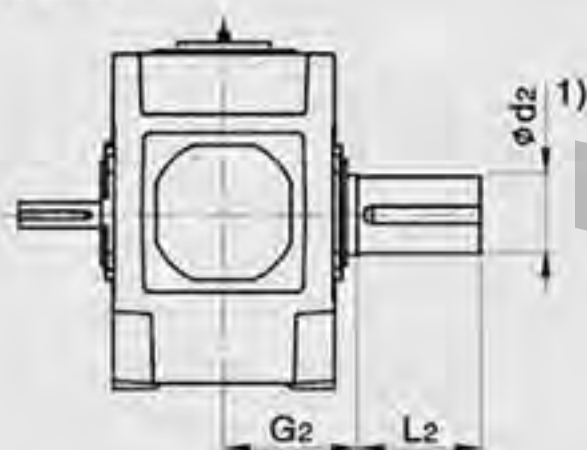


★输出轴 Output

布置形式 Design

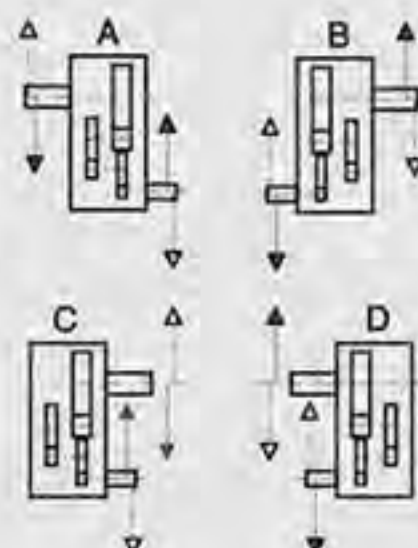
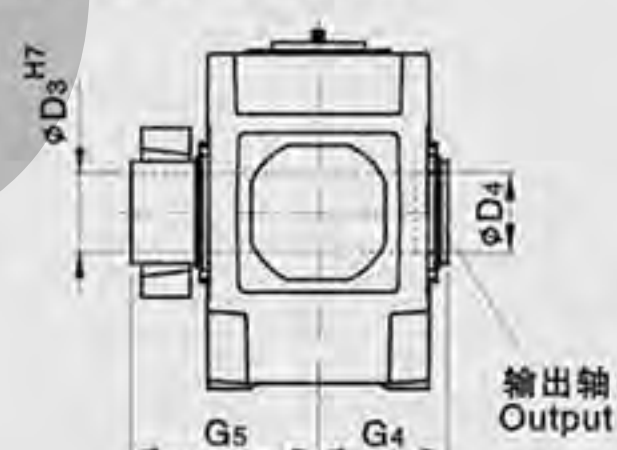
H3SH

实心轴
Solid Shaft



H3DH, H3DM

带胀紧盘的空心轴
Hollow shaft for shrink disk



1) $k_6 \leq \phi 50$ $m_6 > \phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole, see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



平行轴齿轮箱 Helical Gear Units

卧式安装 Horizontal

规格 23...26 Sizes 23...26

三级传动 Three Stage

类型 H3.H,H3.M Types H3.H,H3.M

规格 Size	尺寸mm Dimensions in mm												
	输入轴 Input												
	in = 22,4 - 45		in = 25 - 50		in = 50 - 63		in = 56 - 71		in = 71 - 90		in = 80 - 100		G ₁
	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	
23	130	240			110	205			90	170			510
24			130	240			110	205			90	170	510
25	150	245			130	245			100	210			570
26			150	245			130	245			100	210	570

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	a	b	c	c ₁	D ₅	e ₂	E	f ₁	g	h	h ₁	
23	2530	930	115	120 ± 2	80	730	1505	35	342	780	770	
24	2660	930	115	120 ± 2	80	795	1570	35	342	780	770	
25	2830	1045	130	120 ± 2	90	790	1659	65	400	860	860	
26	3010	1045	130	120 ± 2	90	880	1785	65	400	860	860	

规格 Size	尺寸mm Dimensions in mm										
	齿轮箱 Gear units										
	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s	
23	790	1570	1085	1085	810	180	550	1725	580	56	
24	790	1570	1085	1215	810	180	615	1790	580	56	
25	860	1720	1215	1215	910	200	590	1965	660	66	
26	860	1720	1215	1395	910	200	680	2055	660	66	

规格 Size	尺寸mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output										
	H3SH			H3DH		H3DM		H3.H	H3.M	H3.H	H3.M
	D2 1)	G2	l2	D3	D4	G4	G5	(1)	(1)	(Kg)	(Kg)
23	360	540	590	360	365	540	785	620	690	11500	10600
24	380	540	590	380	385	540	805	650	725	13400	12500
25	400	605	650	400	405	605	875	880	970	16100	15200
26	420	605	650	430	435	605	900	935	1030	17600	16500



平行轴齿轮箱 Helical Gear Units

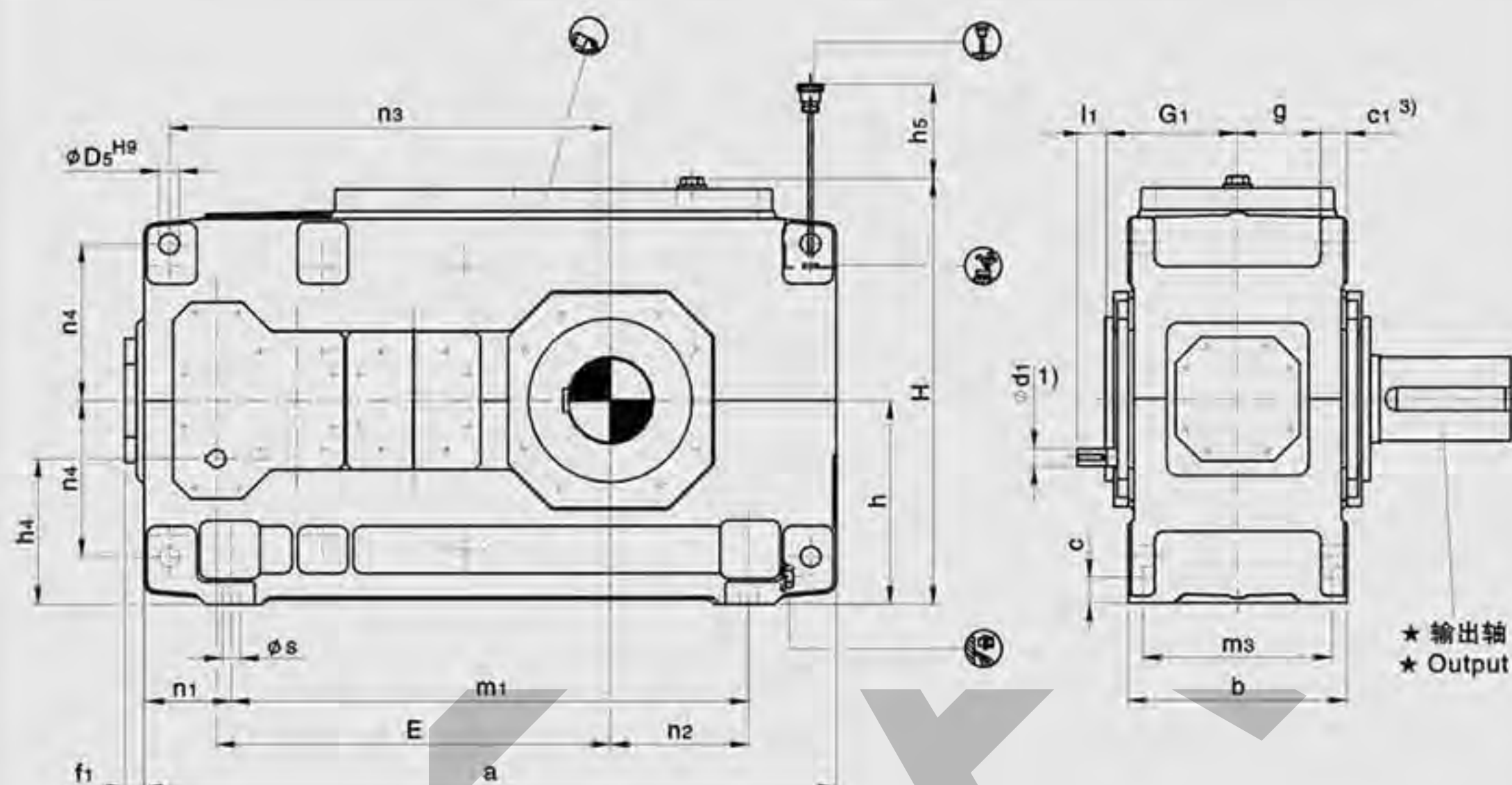
四级传动 Four Stage

卧式安装 Horizontal

类型 H4.H Type H4.H

规格 7...12 Size 7...12

H4SH H4HH H4DH

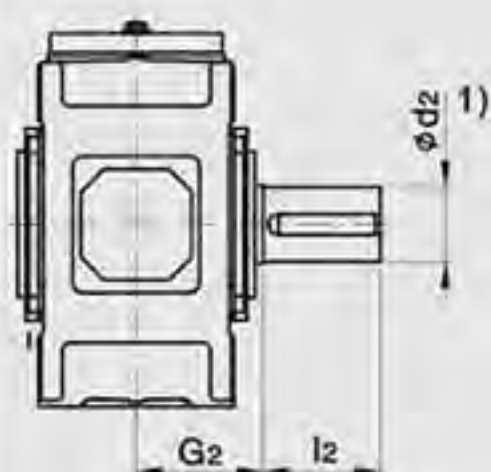


★ 输出轴
★ Output

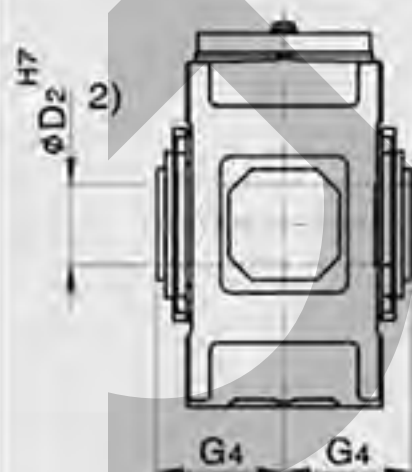
★ 输出轴 Output

布置形式 Design

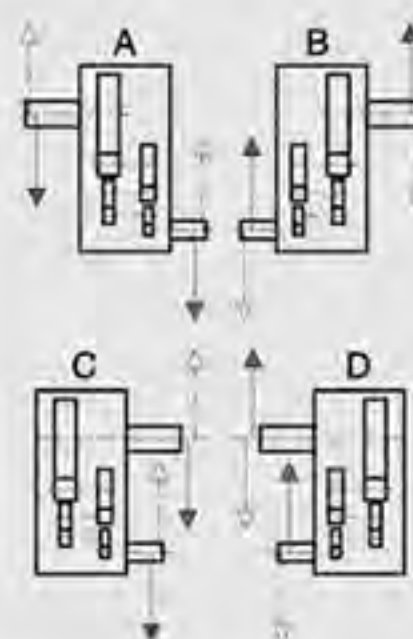
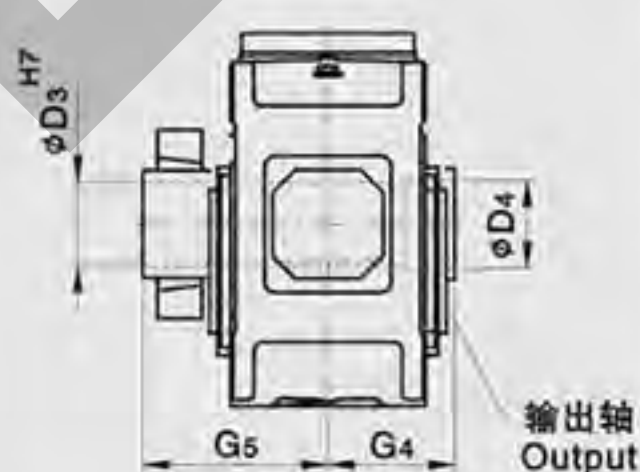
H4SH
实心轴
Solid shaft



H4HH
空心轴
Hollow shaft



H4DH
带胀紧盘的空心轴
Hollow shaft for shrink disk



1) $k_6 \leq \phi 50$ $m_6 > \phi 50$

有关平键 GB/T1095-1979型和中心孔, 参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole, see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal
类型 H4.H Type H4.H 规格 7...12 Sizes 7...12

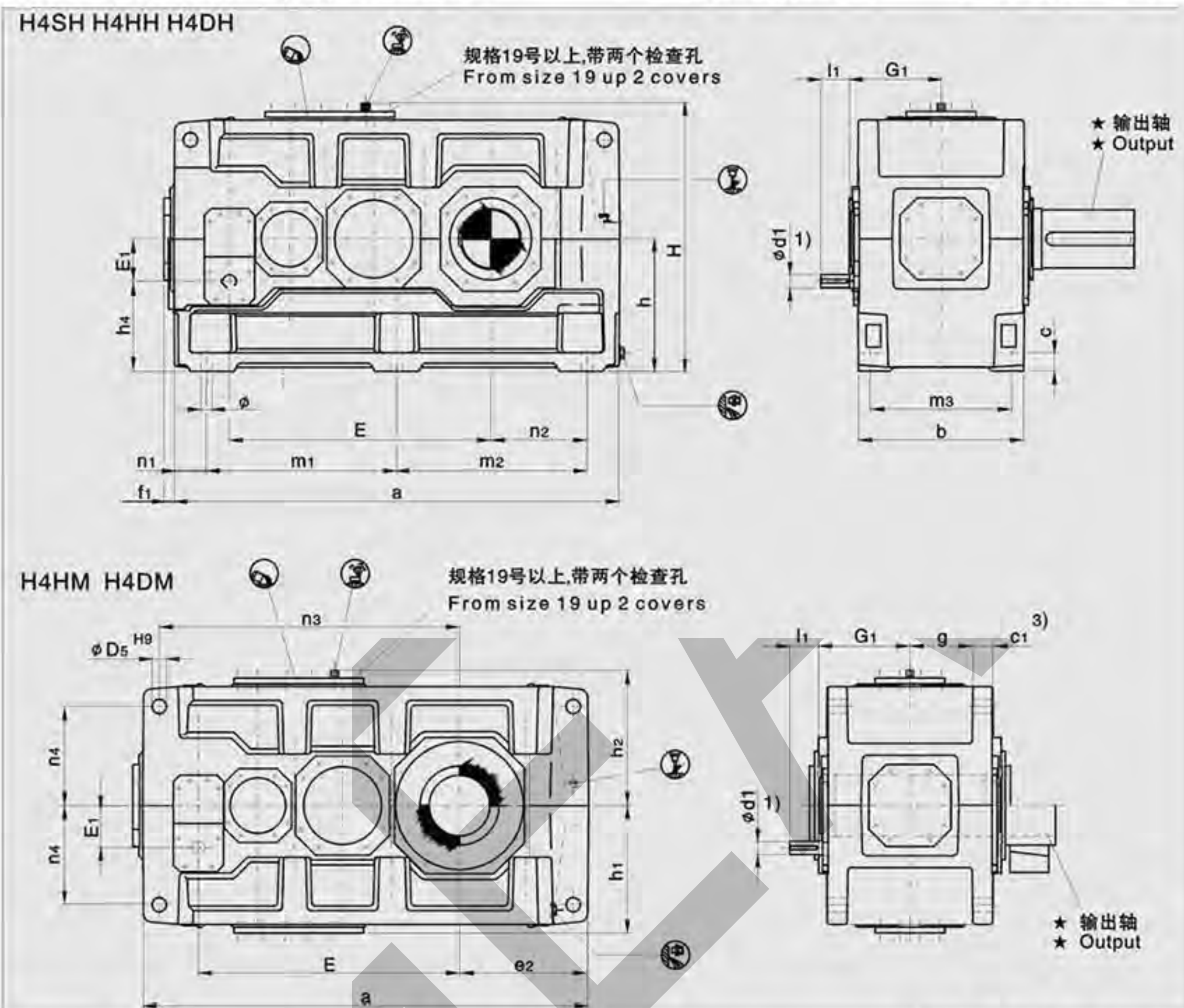
规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i _N = 100 – 180		i _N = 125 – 224		i _N = 200 – 355		i _N = 250 – 450		G ₁
	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	
7	30	50			24	40			180
8			30	50			24	40	180
9	35	60			28	50			215
10			35	60			28	50	215
11	45	100			32	80			250
12			45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

规格 Size	尺寸 mm Dimensions in mm																		
	齿轮箱 Gear units																		
	a	b	c	c ₁	D ₅	E	f ₁	g	h	h ₄	h ₅	H	m ₁	m ₃	n ₁	n ₂	n ₃	n ₄	s
7	845	300	35	36 ± 1	28	495	37	114	280	200	140	572	605	260	120	130	560	215	24
8	950	300	35	36 ± 1	28	540	37	114	280	200	140	582	710	260	120	190	605	215	24
9	1000	370	40	45 ± 1.5	36	580	43	140	320	230	150	662	710	320	145	155	660	245	28
10	1100	370	40	45 ± 1.5	36	630	43	140	320	230	150	662	810	320	145	205	710	245	28
11	1200	430	50	54 ± 1.5	40	705	47	161	380	270	165	782	870	370	165	180	805	300	35
12	1355	430	50	54 ± 1.5	40	775	47	161	380	270	165	790	1025	370	165	265	875	300	35

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	H4SH			H4HH		H4DH					
	d2 1)	G2	l2	D2 2)	G4	D3	D4	G4	G5		
7	120	195	210	115	195	120	120	195	280	25	550
8	130	195	250	125	195	130	130	195	285	27	645
9	140	235	250	135	235	140	145	235	330	48	875
10	160	235	300	150	235	150	155	235	350	50	1010
11	170	270	300	165	270	165	170	270	400	80	1460
12	180	270	300	180	270	180	185	270	405	87	1725



平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal
 类型 H4.H, H4.M Types H4.H, H4.M 规格 13 ... 22 Sizes 13 ... 22



★ 输出轴 Output			布置形式 Design
H4SH 实心轴 Solid shaft	H4HH, H4HM 空心轴 Hollow shaft	H4DH, H4DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	

1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal
 类型 H4.H, H4.M Types H4.H, H4.M 规格 13...22 Sizes 13...22

规格 Size	尺寸mm Dimensions in mm												
	输入轴 Input												
	in = 100 - 180		in = 112 - 200		in = 125 - 224		in = 200 - 355		in = 224 - 400		in = 250 - 450		G ₁
d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁		
13	50	100					38	80					305
14					50	100					38	80	305
15	60	135					50	110					345
16			60	135					50	110			345
17	60	105					50	80					380
18			60	105					50	80			380
19	75	105					60	105					440
20			75	105					60	105			440
21	90	165					70	140					460
22			90	165					70	140			460

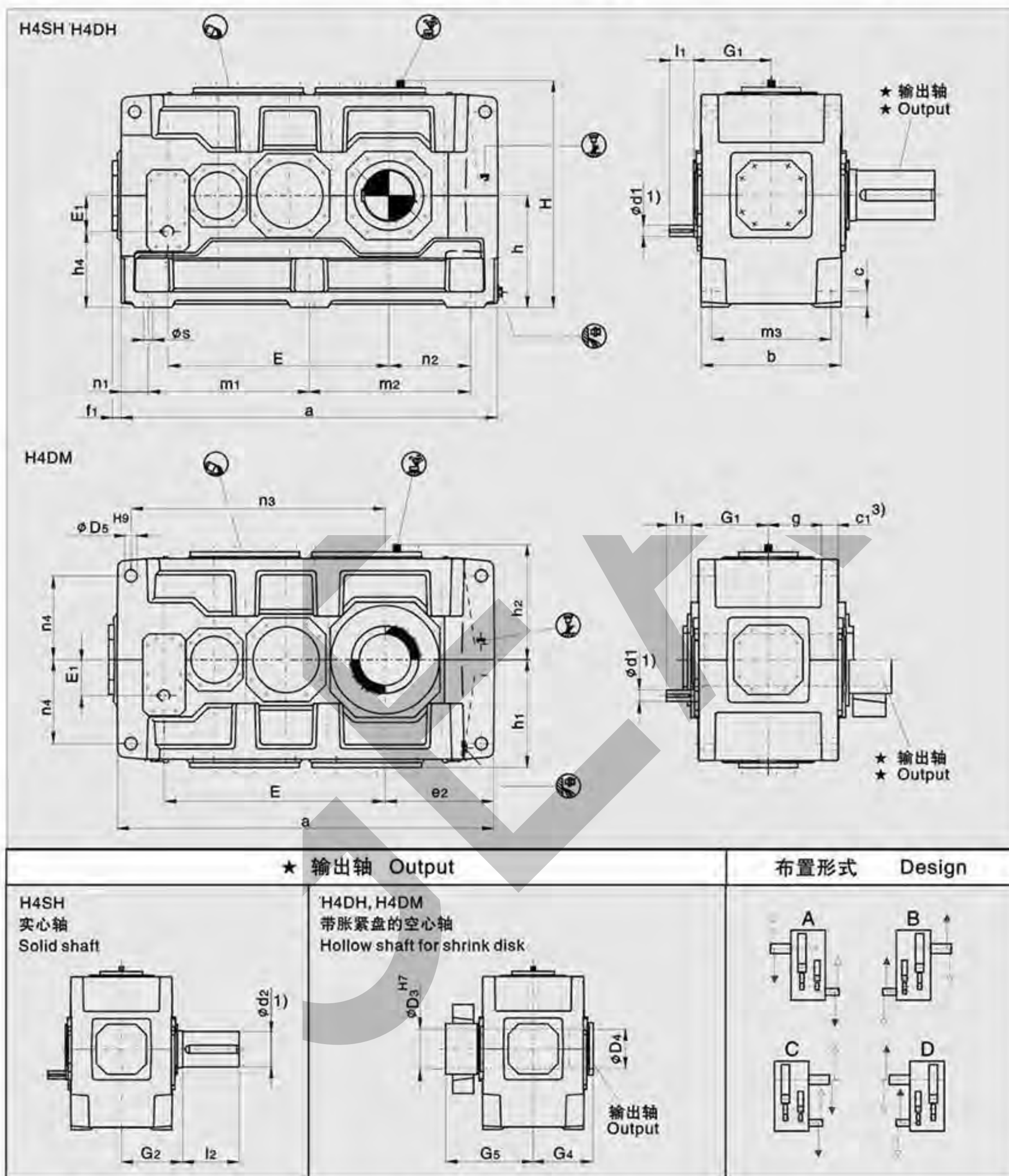
规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	a	b	c	c ₁	D ₅	ø ₂	E	E ₁	f ₁	g	h	
13	1395	550	60	61 ± 2	48	405	820	130	47	211.5	440	
14	1535	550	60	61 ± 2	48	475	890	130	47	211.5	440	
15	1680	625	70	72 ± 2	55	485	987	160	56	238	500	
16	1770	625	70	72 ± 2	55	530	1033	160	56	238	500	
17	1770	690	80	81 ± 2	55	525	1035	160	53	259	550	
18	1890	690	80	81 ± 2	55	585	1095	160	53	259	550	
19	2030	790	90	91 ± 2	65	590	1190	185	53	299	620	
20	2150	790	90	91 ± 2	65	650	1250	185	53	299	620	
21	2340	830	100	100 ± 2	75	655	1387	225	62	310	700	
22	2450	830	100	100 ± 2	75	710	1442	225	62	310	700	

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	h ₁	h ₂	h ₄	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
13	450	460	310	900	597.5	597.5	475	100	305	940	340	35
14	450	460	310	900	597.5	737.5	475	100	375	1010	340	35
15	490	500	340	1000	720	720	535	120	365	1135	375	42
16	490	500	340	1000	720	810	535	120	410	1180	375	42
17	555	560	390	1110	750	750	600	135	390	1175	425	42
18	555	560	390	1110	750	870	600	135	450	1235	425	42
19	615	620	435	1240	860	860	690	155	435	1365	475	48
20	615	620	435	1240	860	980	690	155	495	1425	475	48
21	685	690	475	1390	1000	1000	720	170	485	1615	520	56
22	685	690	475	1390	1000	1110	720	170	540	1670	520	56

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Output												
	H4SH			H4HH	H4HM	H4DH H4DM				H4.H	H4.M	H4.H	H4.M
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅	(l)	(l)	(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	130	120	2390	2270
14	210	335	350	210	335	210	215	335	480	140	125	2730	2600
15	230	380	410	230	380	230	235	380	550	230	170	3635	3440
16	240	380	410	240	380	240	245	380	550	235	175	3965	3740
17	250	415	410	250	415	250	260	415	600	290	225	4680	4445
18	270	415	470	275	415	280	285	415	600	305	230	5185	4915
19	290	465	470	-	-	285	295	465	670	360	310	5700	5300
20	300	465	500	-	-	310	315	465	670	380	330	6400	5950
21	320	490	500	-	-	330	335	490	715	395	430	7750	7250
22	340	490	550	-	-	340	345	490	725	420	450	8350	7750



平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal
 类型 H4.H, H4.M Types H4.H, H4.M 规格 23 ... 26 Sizes 23 ... 26



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



平行轴齿轮箱 Helical Gear Units 四级传动 For Stage 卧式安装 Horizontal
类型 H4.H,H4.M Types H4.H,H4.M 规格 23...26 Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i _N = 100 - 180		i _N = 112 - 200		i _N = 200 - 355		i _N = 224 - 400		G ₁
	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	
23	90	130			70	105			505
24			90	130			70	105	505
25	100	205			85	170			565
26			100	205			85	170	565

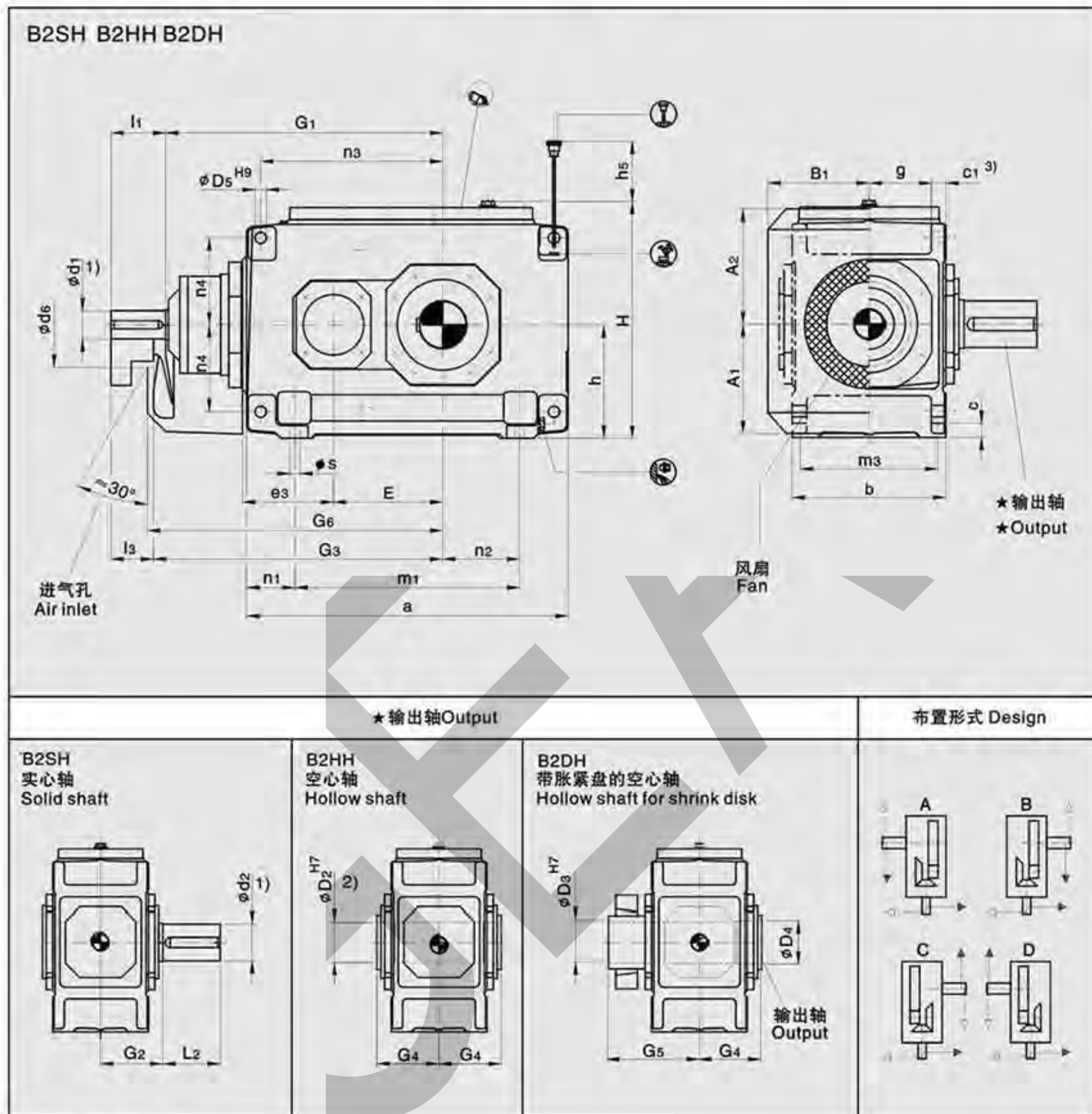
规格 Size	尺寸mm Dimensions in mm										
	齿轮箱 Gear units										
	a	b	c	c ₁	D ₅	e ₂	E	E ₁	f ₁	g	h
23	2530	930	115	120 ± 2	80	730	1505	225	35	342	780
24	2660	930	115	120 ± 2	80	795	1570	225	35	342	780
25	2830	1045	130	120 ± 2	90	790	1695	265	65	400	860
26	3010	1045	130	120 ± 2	90	880	1785	265	65	400	860

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	h ₁	h ₂	h ₄	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
23	770	790	555	1570	1085	1085	810	180	550	1725	580	56
24	770	790	555	1570	1085	1215	810	180	615	1790	580	56
25	860	860	595	1720	1215	1215	910	200	590	1965	660	66
26	860	860	595	1720	1215	1395	910	200	680	2055	660	66

规格 Size	尺寸 mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output							H4.H (l)	H4.M (l)	H4.H (kg)	H4.M (kg)
	H4SH			H4DH H4DM							
	d ₂ ¹⁾	G ₂	l ₂	D ₃	D ₄	G ₄	G ₅				
23	360	540	590	360	365	540	785	520	500	11600	10700
24	380	540	590	380	385	540	805	550	600	13500	12600
25	400	605	650	400	405	605	875	735	800	16100	15200
26	420	605	650	430	435	605	900	780	850	17600	16500



直交轴齿轮箱 Bevel-helical Gear Units 二级传动 Two Stage 卧式安装 Horizontal
 类型 B2.H Type B2.H 规格 1...12 Sizes 1...12



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



直交轴齿轮箱 Bevel-helical Gear Units

二级传动 Two Stage

卧式安装 Horizontal

类型 B2.H

Type B2.H

规格 1...12 Sizes 1...12

规格 Size	尺寸 mm Dimensions in mm										
	输入轴 Input										
	in=5-11.2			in=6.3-14			in=12.5-18			G ₁	G ₃
	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃		
1	28	55	40				20	50	35	300	315
2	30	70	50				25	60	40	340	360
3	35	80	60				28	60	40	390	410
4	45	100	80							465	485
5	55	110	80							535	565
6				55	110	80				570	600
7	70	135	105							640	670
8				70	135	105				685	715
9	80	165	130							755	790
10				80	165	130				805	840
11	90	165	130							925	960
12				90	165	130				995	1030

规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A ₁	A ₂	b	B ₁	c	c ₁	D ₅	d ₆	e ₃	E	g
1	305	125	130	180	128	18	16±1	12	110	90	90	74
2	355	140	145	205	143	18	20±1	14	110	110	110	82.5
3	405	170	170	225	163	22	24±1	18	120	130	130	88.5
4	505	195	200	270	188	28	30±1	24	150	160	160	105
5	565	220	235	320	215	28	30±1	24	160	185	185	130
6	645	220	235	320	215	28	30±1	24	160	185	220	130
7	690	270	285	380	250	35	36±1	28	210	225	225	154
8	795	270	285	380	250	35	36±1	28	210	225	270	154
9	820	310	325	440	270	40	48±1.5	36	195	265	265	172
10	920	310	325	440	270	40	48±1.5	36	195	265	315	172
11	975	370	385	530	328	50	54±1.5	40	210	320	320	211
12	1130	370	385	530	328	50	54±1.5	40	210	320	390	211

规格 Size	尺寸 mm Dimensions in mm										
	齿轮箱 Gear units										
	G ₆	h	h ₅	H	m ₁	m ₃	n ₁	n ₂	n ₃	n ₄	s
1	325	130	80	275	185	155	60	70	160	105	12
2	370	145	80	305	225	180	65	75	195	115	12
3	420	175	90	360	245	195	80	70	235	132.5	15
4	495	200	80	415	295	235	105	85	285	150	19
5	575	230	150	482	355	285	105	100	330	180	19
6	610	230	150	482	435	285	105	145	365	180	19
7	685	280	180	582	450	340	120	130	405	215	24
8	730	280	190	582	555	340	120	190	450	215	24
9	805	320	205	662	530	390	145	155	480	245	28
10	855	320	215	662	630	390	145	205	530	245	28
11	980	380	240	790	645	470	165	180	580	300	35
12	1050	380	250	790	800	470	165	265	650	300	35

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil	重量 Weight (kg)
	输出轴 Output									轴封 Shaft seal (l)	
	B2SH			B2HH		B2DH					
	d ₂ 1)	G ₂	L ₂	D ₂ 2)	G ₄	D ₃	D ₄	G ₄	G ₅		
1	45	120	80		-	-	-	-	-	2	65
2	55	135	110	55	135	60	60	135	180	4	90
3	65	145	140	65	145	70	70	145	200	6	140
4	80	170	170	80	170	85	85	170	235	10	235
5	100	200	210	95	200	100	100	200	275	16	360
6	110	200	210	105	200	110	110	200	275	19	410
7	120	235	210	115	235	120	120	235	320	31	615
8	130	235	250	125	235	130	130	235	325	34	700
9	140	270	250	135	270	140	145	270	365	48	1000
10	160	270	300	150	270	150	155	270	385	50	1155
11	170	320	300	165	320	165	170	320	450	80	1640
12	180	320	300	180	320	180	185	320	455	95	1910



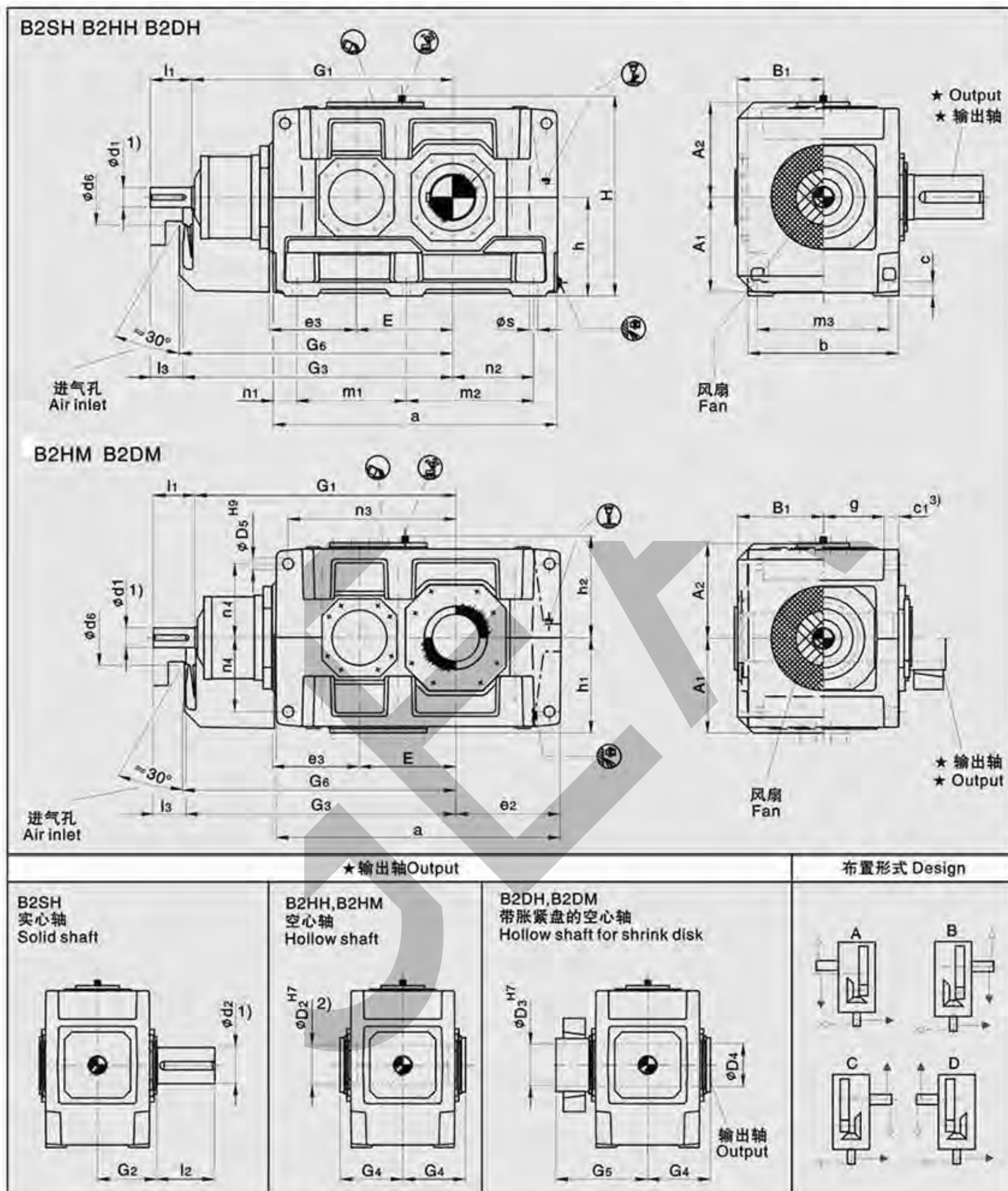
直交轴齿轮箱 Bevel-helical Gear Units

二级传动 Two Stage

卧式安装 Horizontal

类型B2.H, B2.M Types B2.H,B2.M

规格 13...18 Sizes 13...18



1) $k_6 \leq \phi 50$ $m_6 > \phi 50$

有关平键 GB/T1095-1979型和中心孔, 参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole, see page 87-88.

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



直交轴齿轮箱 Bevel-helical Gear Units 二级传动 Two Stage 卧式安装 Horizontal

类型 B2.H, B2.M Types B2.H, B2.M 规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																
	输入轴 Input																
	i _N = 5 - 11.2			i _N = 5.6 - 11.2			i _N = 5.6-12.5			i _N = 6.3-14			i _N = 7.1-12.5			G ₁	G ₃
	d ₁ ¹⁾	h	b	d ₁ ¹⁾	L ₁	b	d ₁ ¹⁾	h	b	d ₁ ¹⁾	h	b	d ₁ ¹⁾	h	b		
13	110	205	165													1070	1110
14										110	205	165				1140	1180
15	130	245	200													1277	1322
16							130	245	200							1323	1368
17				150	245	200										1435	1480
18													150	245	200	1495	1540

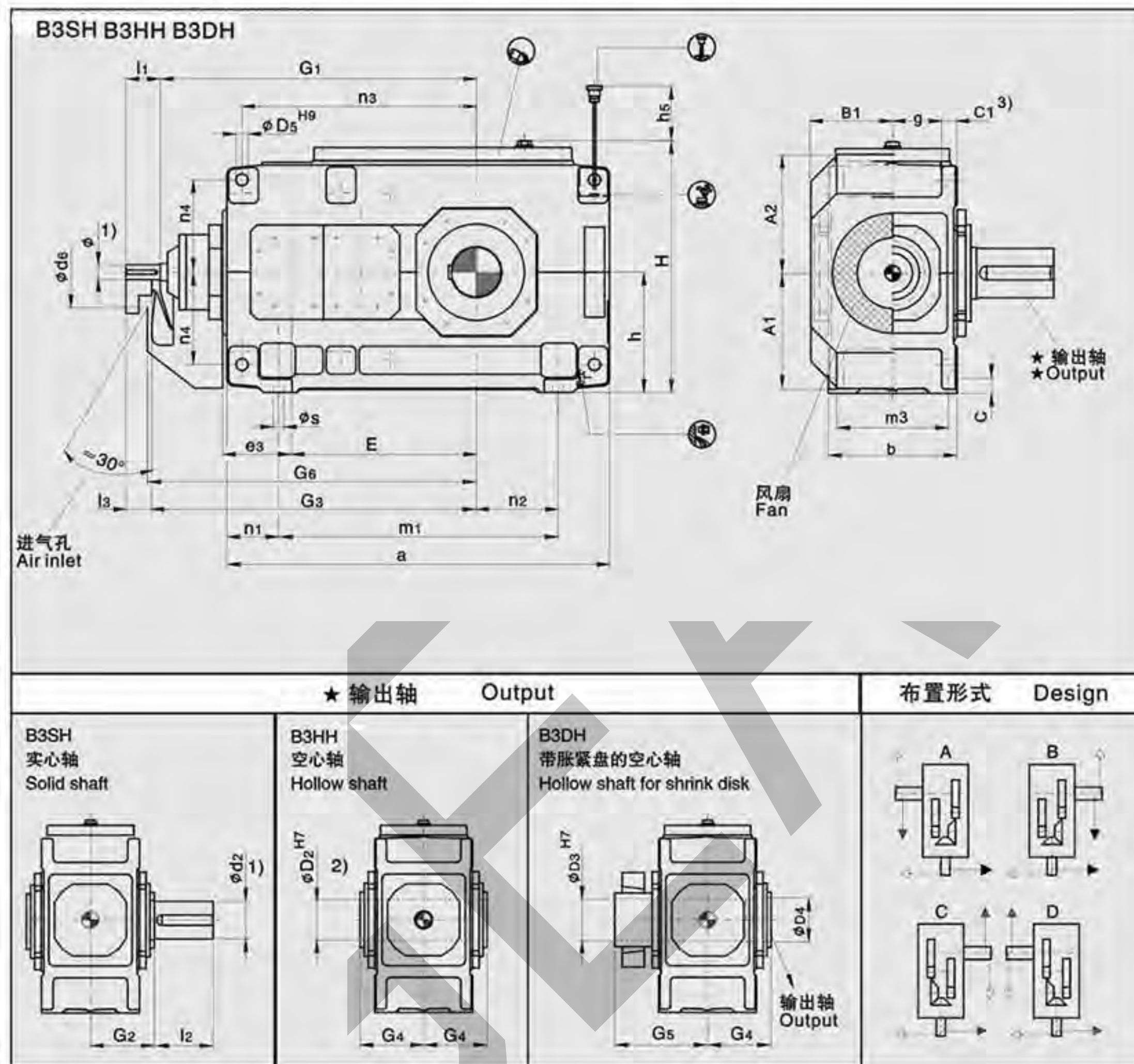
规格 Size	尺寸 mm Dimensions in mm												
	齿 轮 箱 Gear units												
	a	A ₁	A ₂	b	B ₁	c	c ₁	d ₆	D ₅	e ₂	e ₃	E	g
13	1130	430	450	655	375	60	61 ± 2	245	48	405	380	370	264
14	1270	430	450	655	375	60	61 ± 2	245	48	475	380	440	264
15	1350	490	495	765	435	70	72 ± 2	280	55	485	450	442	308
16	1440	490	495	765	435	70	72 ± 2	280	55	530	450	488	308
17	1490	540	555	885	505	80	81 ± 2	380	65	525	510	490	356
18	1610	540	555	885	505	80	81 ± 2	380	65	585	510	550	356

规格 Size	尺寸 mm Dimensions in mm												
	齿轮箱 Gear units												
	G ₆	h	h ₁	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
13	1130	440	450	460	900	465	465	580	100	305	675	340	35
14	1200	440	450	460	900	465	605	580	100	375	745	340	35
15	1340	500	490	500	1000	555	555	670	120	365	805	375	42
16	1385	500	490	500	1000	555	645	670	120	410	850	375	42
17	1500	550	555	560	1110	610	610	780	135	390	895	420	48
18	1560	550	555	560	1110	610	730	780	135	450	955	420	48

规格 Size	尺寸 mm Dimensions in mm										润滑油 Oil		重量 Weight	
	输出轴 Output										B2.H	B2.M		
	B2SH			B2HH B2HM		B2DH B2DM				轴封 (I) Shaft seal			B2.H	B2.M
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅				(kg)	(kg)
13	200	390	350	-	-	-	-	-	-	140	120		2450	2350
14	210	390	350	210	390	210	215	390	535	155	130		2825	2725
15	230	460	410	-	-	-	-	-	-	220	180		3990	3795
16	240	460	410	240	450	240	245	450	620	230	190		4345	4160
17	250	540	410	-	-	-	-	-	-	320	260		5620	5320
18	270	540	470	275	510	280	285	510	700	335	275		6150	5860



直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal
类型 B3.H Type B3.H 规格 3...12 Sizes 3...12



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal

类型 B3.H Type B3.H 规格 3...12 Sizes 3...12

规格 Size	尺寸mm Dimensions in mm																
	输入轴 Input																
	IN = 12.5 - 45			IN = 16 - 56			IN = 20 - 45			IN = 50 - 71			IN = 63 - 90			G ₁	G ₃
d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃			
3							28	55	40	20	50	35				430	445
4	30	70	50							25	60	40				500	520
5	35	80	60							28	60	40				575	595
6				35	80	60							28	60	40	610	630
7	45	100	80							35	80	60				690	710
8				45	100	80							35	80	60	735	755
9	55	110	80							40	100	70				800	830
10				55	110	80							40	100	70	850	880
11	70	135	105							50	110	80				960	990
12				70	135	105							50	110	80	1030	1060

规格 Size	尺寸mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A ₁	A ₂	b	B ₁	c	c ₁	d ₆	D ₅	ø ₃	E	g
3	450	170	170	190	128	22	24 ± 1	90	18	90	220	71
4	565	195	200	215	143	28	30 ± 1	110	24	110	270	77.5
5	640	220	235	255	168	28	30 ± 1	130	24	130	315	97.5
6	720	220	235	255	168	28	30 ± 1	130	24	130	350	97.5
7	785	275	275	300	193	35	36 ± 1	165	28	160	385	114
8	890	275	275	300	193	35	36 ± 1	165	28	160	430	114
9	925	315	325	370	231	40	45 ± 1.5	175	36	185	450	140
10	1025	315	325	370	231	40	45 ± 1.5	175	36	185	500	140
11	1105	370	385	430	263	50	54 ± 1.5	190	40	225	545	161
12	1260	370	385	430	263	50	54 ± 1.5	190	40	225	615	161

规格 Size	尺寸mm Dimensions in mm										
	齿轮箱 Gear units										
	G ₆	h	h ₅	H	m ₁	m ₃	n ₁	n ₂	n ₃	n ₄	s
3	455	175	100	360	290	160	80	65	285	132.5	15
4	530	200	100	415	355	180	105	85	345	150	19
5	605	230	130	482	430	220	105	100	405	180	19
6	640	230	130	482	510	220	105	145	440	180	19
7	720	280	170	572	545	260	120	130	500	215	24
8	765	280	160	582	650	260	120	190	545	215	24
9	845	320	175	662	635	320	145	155	585	245	28
10	895	320	175	662	735	320	145	205	635	245	28
11	1010	380	220	782	775	370	165	180	710	300	35
12	1080	380	210	790	930	370	165	265	780	300	35

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	B3SH			B3HH		B3DH					
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅		
3	65	125	140	65	125	70	70	125	180	6	130
4	80	140	170	80	140	85	85	140	205	9	210
5	100	165	210	95	165	100	100	165	240	14	325
6	110	165	210	105	165	110	110	165	240	15	380
7	120	195	210	115	195	120	120	195	280	25	550
8	130	195	250	125	195	130	130	195	285	28	635
9	140	235	250	135	235	140	145	235	330	40	890
10	160	235	300	150	235	150	155	235	350	42	1020
11	170	270	300	165	270	165	170	270	400	66	1455
12	180	270	300	180	270	180	185	270	405	72	1730



直交轴齿轮箱 Bevel-Helical Gear Units

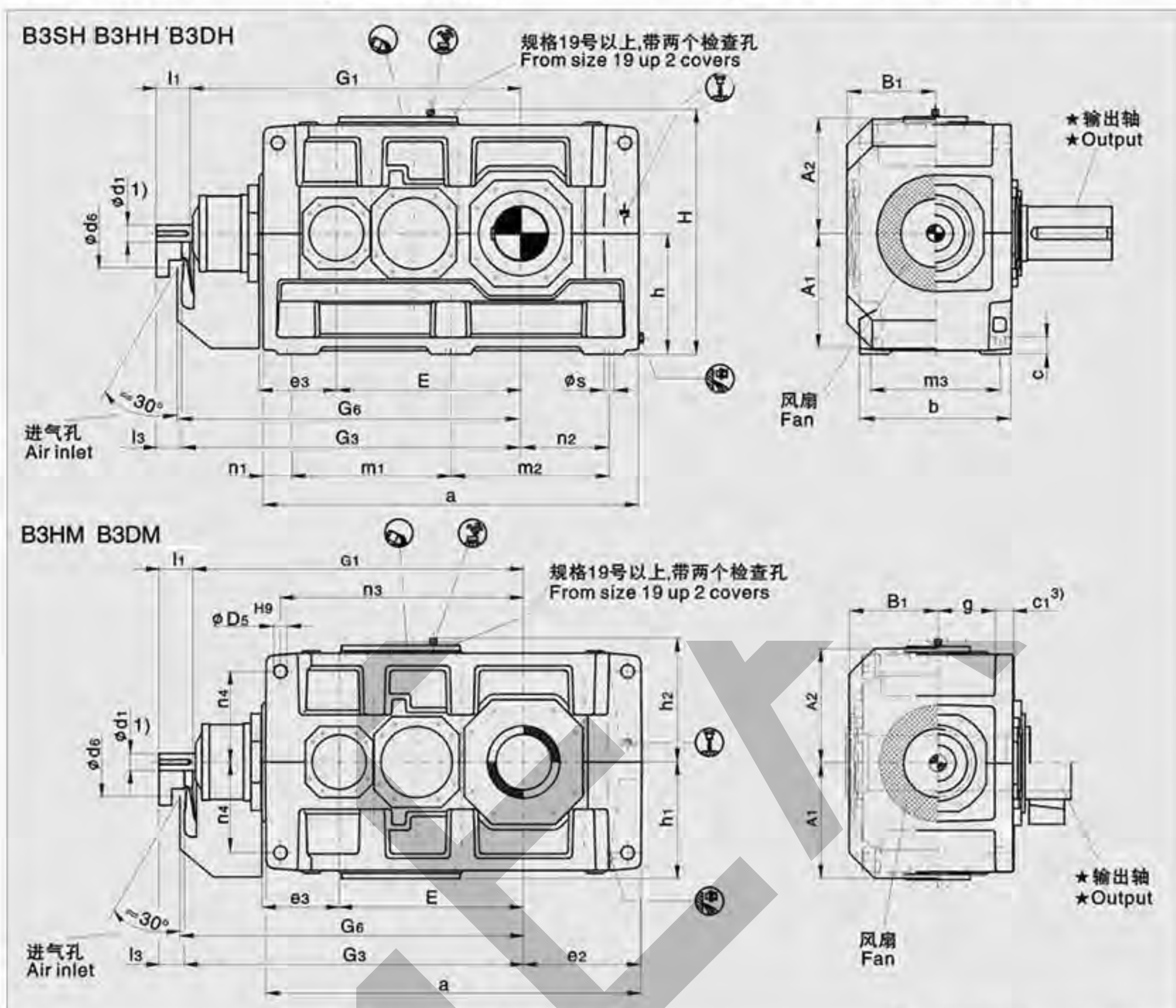
三级传动 Three Stage

卧式安装 Horizontal

类型 B3.H,B3.M

Types B3.H,B3.M

规格 13...22 Sizes 13...22



★输出轴 Output			布置形式 Design
B3SH 实心轴 Solid shaft	B3HH, B3HM 空心轴 Hollow shaft	B3DH, B3DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	

1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



直交轴齿轮箱 Bevel-helical Gear Units
类型 B3.H,B3.M Types B3.H,B3.M

三级传动 Three Stage 卧式安装 Horizontal
规格 13...22 Sizes 13...22

规格 Size	尺寸mm Dimensions in mm																	
	输入轴 Input																	
	IN=12.5 - 45			IN=14 - 50			IN=16 - 56			IN=50 - 71			IN=56 - 80			IN=63 - 90		
	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃		l ₁	l ₃
13	80	165	130							60	140	105						
14							80	165	130							60	140	105
15	90	165	130							70	140	105						
16				90	165	130							70	140	105			
17	110	205	165							80	170	130						
18				110	205	165							80	170	130			
19	130	245	200							100	210	165						
20				130	245	200							100	210	165			
21	130	245	200							100	210	165						
22				130	245	200							100	210	165			

规格 Size	尺寸mm Dimensions in mm												
	齿轮箱 Gear units												
	a	A ₁	A ₂	b	B ₁	c	c ₁	d ₆	D ₅	e ₂	e ₃	E	g
13	1290	425	435	550	325	60	61 ± 2	210	48	405	265	635	211.5
14	1430	425	435	550	325	60	61 ± 2	210	48	475	265	705	211.5
15	1550	485	520	625	365	70	72 ± 2	210	55	485	320	762	238
16	1640	485	520	625	365	70	72 ± 2	210	55	530	320	808	238
17	1740	535	570	690	395	80	81 ± 2	230	55	525	370	860	259
18	1860	535	570	690	395	80	81 ± 2	230	55	585	370	920	259
19	2010	610	630	790	448	90	91 ± 2	245	65	590	420	997	299
20	2130	610	630	790	448	90	91 ± 2	245	65	650	420	1057	299
21	2140	690	690	830	473	100	100 ± 2	280	75	655	450	1067	310
22	2250	690	690	830	473	100	100 ± 2	280	75	710	450	1122	310

规格 Size	尺寸mm Dimensions in mm												
	齿轮箱 Gear units												
	G ₆	h	h ₁	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
13	1180	440	450	460	900	545	545	475	100	305	835	340	35
14	1250	440	450	460	900	545	685	475	100	375	905	340	35
15	1420	500	490	500	1000	655	655	535	120	365	1005	375	42
16	1470	500	490	500	1000	655	745	535	120	410	1050	375	42
17	1620	550	555	560	1110	735	735	600	135	390	1145	425	42
18	1680	550	555	560	1110	735	855	600	135	450	1205	425	42
19	1900	620	615	620	1240	850	850	690	155	435	1345	475	48
20	1960	620	615	620	1240	850	970	690	155	495	1405	475	48
21	1970	700	685	690	1390	900	900	720	170	485	1400	520	56
22	2025	700	685	690	1390	900	1010	720	170	540	1455	520	56

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Output												
	B3SH			B3HH	B3HM	B3DH		B3DM		B3.H	B3.M	B3.H	B3.M
	D ₂ 1)	G ₂	l ₂	D ₂ 2)	G ₄	D ₃	D ₄	G ₄	G ₅	(l)	(l)	(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	130	110	2380	2260
14	210	335	350	210	335	210	215	335	480	140	115	2750	2615
15	230	380	410	230	380	230	235	380	550	210	160	3730	3540
16	240	380	410	240	380	240	245	380	550	220	165	3955	3765
17	250	415	410	250	415	250	260	415	600	290	230	4990	4760
18	270	415	470	275	415	280	285	415	600	300	235	5495	5240
19	290	465	470	-	-	285	295	465	670	380	360	6240	6050
20	300	465	500	-	-	310	315	465	670	440	420	6950	6710
21	320	490	500	-	-	330	335	490	715	370	420	8480	8190
22	340	490	550	-	-	340	345	490	725	430	490	9240	8950



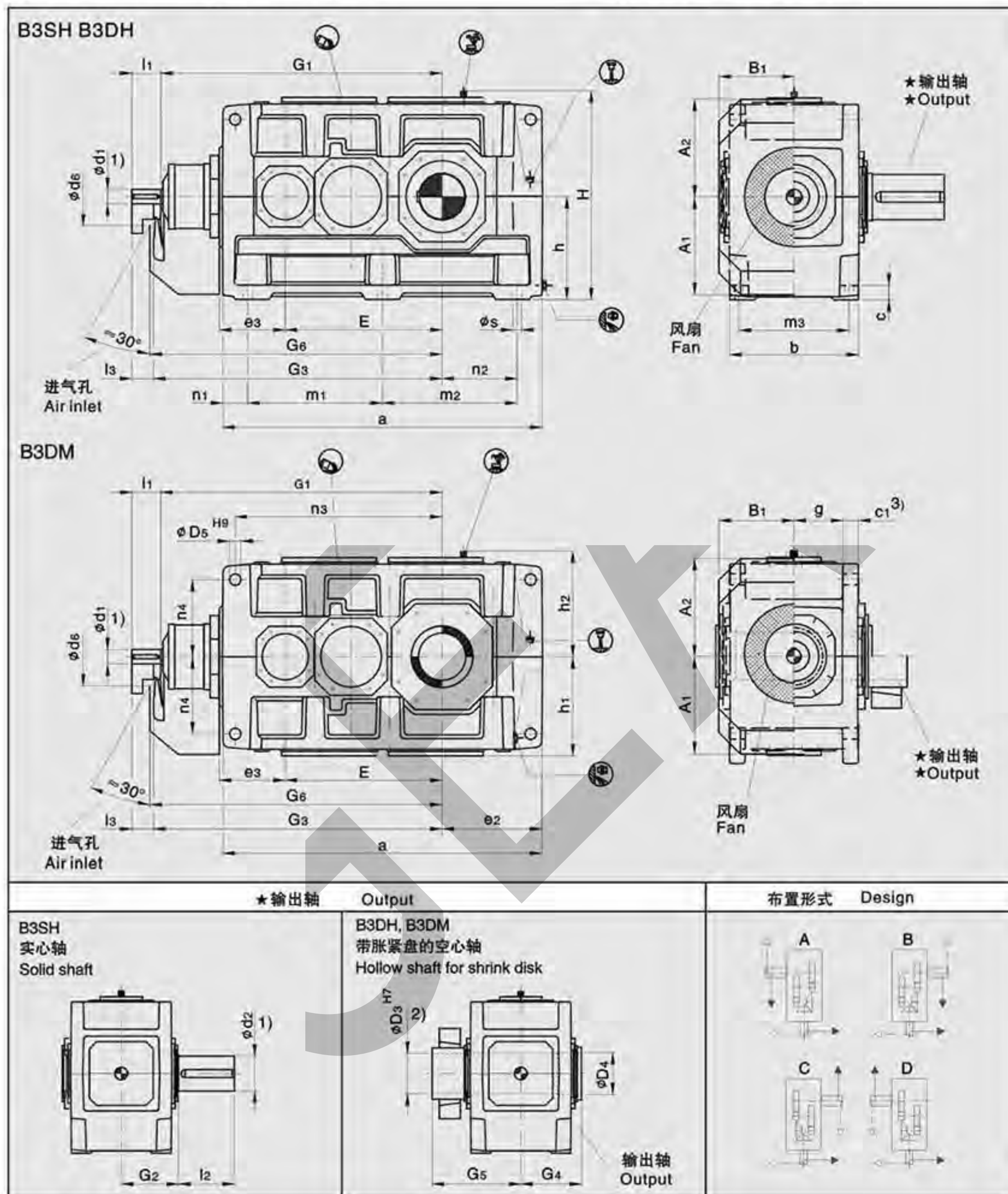
直交轴齿轮箱 Bevel-helical Gear Units

三级传动 Three Stage

卧式安装 Horizontal

类型 B3.H, B3.M Types B3.H, B3.M

规格 23..26 Sizes 23...26





直交轴齿轮箱 Bevel-helical Gear Units
类型 B3.H,B3.M Types B3.H,B3.M

三级传动 Three Stage 卧式安装 Horizontal
规格 23...26 Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm													
	输入轴 Input													
	iN=20-45			iN=22.4-50			iN=50-71			iN=56-80			G ₁	G ₃
	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃	d ₁ 1)	l ₁	l ₃		
23	150	245	200				110	210	165				2130	2175
24				150	245	200				110	210	165	2195	2240
25	150	245	200				110	210	165				2270	2315
26				150	245	200				110	210	165	2360	2405

规格 Size	尺寸 mm Dimensions in mm												
	齿轮箱 Gear units												
	a	A ₁	A ₂	b	B ₁	c	c ₁	d ₆	D ₅	e ₂	e ₃	E	g
23	2380	770	770	930	528	115	120±2	350	80	730	490	1185	342
24	2510	770	770	930	528	115	120±2	350	80	795	490	1250	342
25	2580	845	865	1045	585	130	120±2	380	90	790	490	1325	400
26	2760	845	865	1045	585	130	120±2	380	90	880	490	1415	400

规格 Size	尺寸 mm Dimensions in mm												
	齿轮箱 Gear units												
	G ₆	h	h ₁	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
23	2200	780	770	790	1570	1010	1010	810	180	550	1560	580	56
24	2265	780	770	790	1570	1010	1140	810	180	615	1625	580	56
25	2315	860	860	860	1720	1090	1090	910	200	590	1685	660	66
26	2430	860	860	860	1720	1090	1270	910	200	680	1775	660	66

规格 Size	尺寸 mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output										
	B3SH			B3DH B3DM				B3.H	B3.M	B3.H	B3.M
	d ₂ 1)	G ₂	l ₂	D ₃	D ₄	G ₄	G ₅	(l)	(l)	(kg)	(kg)
23	360	540	590	360	365	540	785	520	560	11500	10600
24	380	540	590	380	385	540	805	600	650	13400	12500
25	400	605	650	400	405	605	875	720	790	16000	15100
26	420	605	650	430	435	605	900	840	920	17500	16400



卧式安装 Horizontal

规格 5...12 Sizes 5...12

Technical drawing of a motor showing front and side views with dimensions.

Front View Dimensions:

- ϕd_1 1)
- ϕD_5 H9
- n_3
- G_1
- h_5
- H
- h
- ϕS
- E
- n_2
- n_1
- m_1
- a

Side View Dimensions:

- g
- c_1 3)
- m_3
- b
- c

Legend:

- ★ 输出轴
- ★ Output

布置形式 Design

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



直交轴齿轮箱 Bevel-helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal
 类型 B4.H Type B4.H 规格5...12 Sizes 5...12

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

规格 Size	尺寸mm Dimensions in mm																
	齿轮箱 Gear units																
	a	b	c	c ₁	D ₅	E	g	h	h ₅	H	m ₁	m ₃	n ₁	n ₂	n ₃	n ₄	s
5	690	255	28	30 ± 1	24	405	97.5	230	100	482	480	220	105	100	455	180	19
6	770	255	28	30 ± 1	24	440	97.5	230	100	482	560	220	105	145	490	180	19
7	845	300	35	36 ± 1	28	495	114	280	140	572	605	260	120	130	560	215	24
8	950	300	35	36 ± 1	28	540	114	280	130	582	710	260	120	190	605	215	24
9	1000	370	40	45 ± 1.5	36	580	140	320	135	662	710	320	145	155	660	245	28
10	1100	370	40	45 ± 1.5	36	630	140	320	135	662	810	320	145	205	710	245	28
11	1200	430	50	54 ± 1.5	40	705	161	380	170	782	870	370	165	180	805	300	35
12	1355	430	50	54 ± 1.5	40	775	161	380	160	790	1025	370	165	265	875	300	35

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	B4SH			B4HH		B4DH					
	d2 1)	G2	l2	D2 2)	G4	D3	D4	G4	G5		
5	100	165	210	95	165	100	100	165	240	16	335
6	110	165	210	105	165	110	110	165	240	18	385
7	120	195	210	115	195	120	120	195	280	30	555
8	130	195	250	125	195	130	130	195	285	33	655
9	140	235	250	135	235	140	145	235	330	48	890
10	160	235	300	150	235	150	155	235	350	50	1025
11	170	270	300	165	270	165	170	270	400	80	1485
12	180	270	300	180	270	180	185	270	405	90	1750



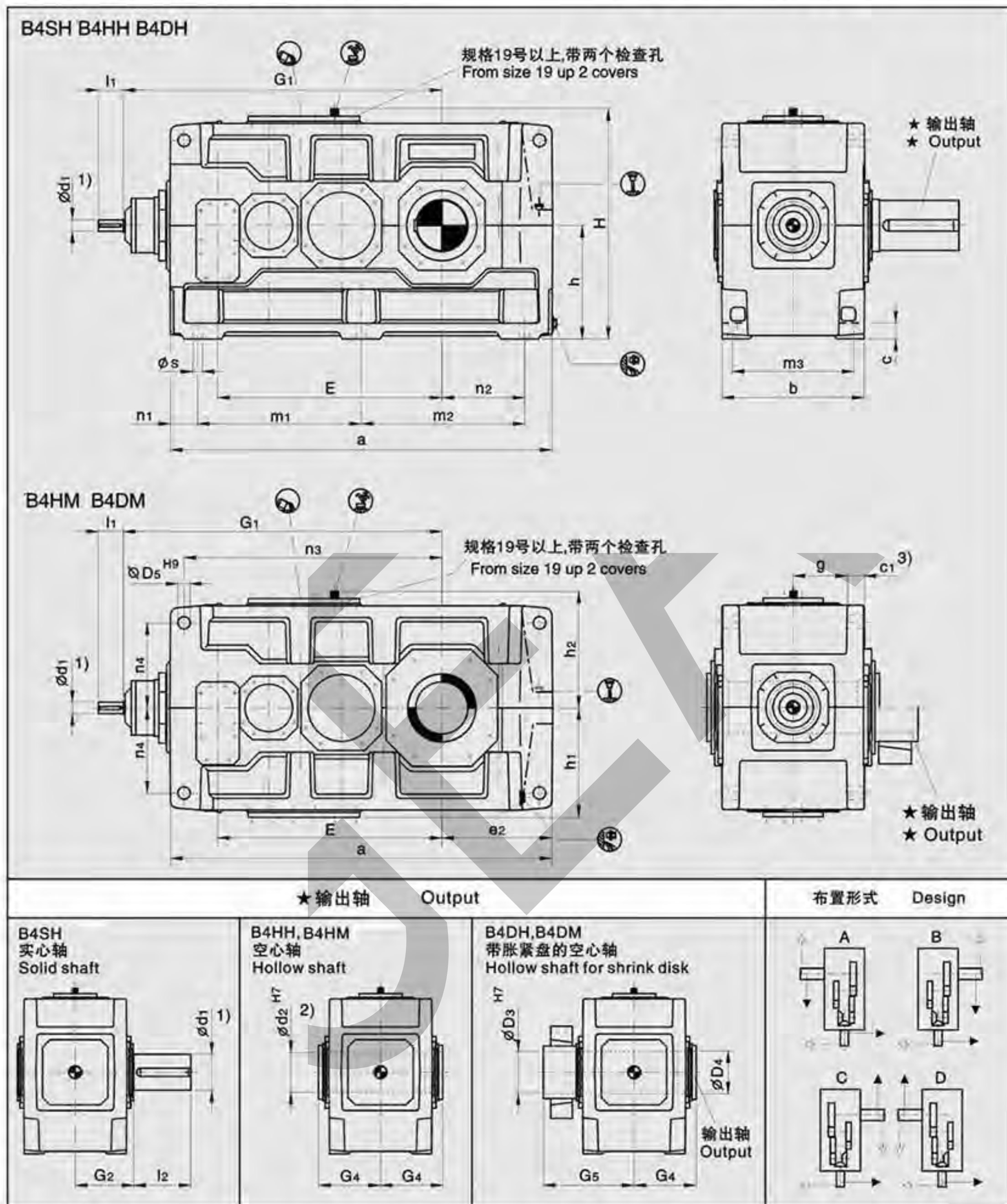
直交轴齿轮箱 Bevel-helical Gear Units

四级传动 Four Stage

卧式安装 Horizontal

类型 B4.H, B4.M Types B4.H, B4.M

规格 13...22 Sizes 13...22



1) $k_8 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



直交轴齿轮箱 Bevel-helical Gear Units

四级传动 FourStage

卧式安装 Horizontal

类型 B4,H,B4.M Types B4.H.B4.M

规格 13...22 Sizes 13...22

规格 Size	尺寸 mm Dimensions in mm											
	输入轴 Input											
	in=80-180		in=90-200		in=100-224		in=200-315		in=224-355		in=250-400	
	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁
13	55	110					40	100				
14					55	110					40	100
15	70	135					50	110				
16			70	135					50	110		
17	70	135					50	110				
18			70	135					50	110		
19	80	165					60	140				
20			80	165					60	140		
21	90	165					70	140				
22			90	165					70	140		

规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	a	b	c	c ₁	D ₅	e ₂	E	g	h	h ₁
13	1395	550	60	61±2	48	405	820	211.5	440	450
14	1535	550	60	61±2	48	475	890	211.5	440	450
15	1680	625	70	72±2	55	485	987	238	500	490
16	1770	625	70	72±2	55	530	1033	238	500	490
17	1770	690	80	81±2	55	525	1035	259	550	555
18	1890	690	80	81±2	55	585	1095	259	550	555
19	2030	790	90	91±2	65	590	1190	299	620	615
20	2150	790	90	91±2	65	650	1250	299	620	615
21	2340	830	100	100±2	75	655	1387	310	700	685
22	2450	830	100	100±2	75	710	1442	310	700	685

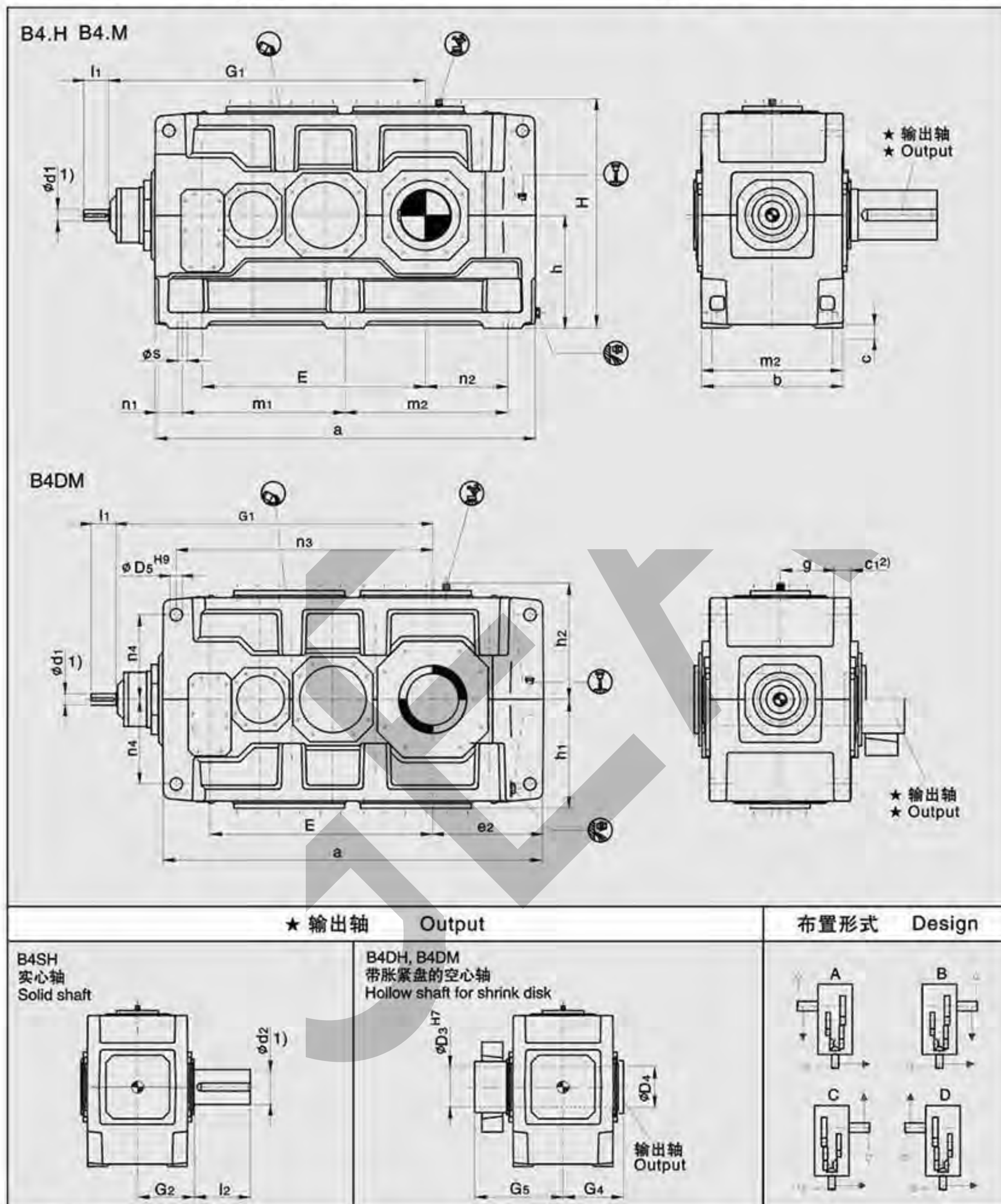
规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	n ₄	s
13	460	900	597.5	597.5	475	100	305	940	340	35
14	460	900	597.5	737.5	475	100	375	1010	340	35
15	500	1000	720	720	535	120	365	1135	375	42
16	500	1000	720	810	535	120	410	1180	375	42
17	560	1110	750	750	600	135	390	1175	425	42
18	560	1110	750	870	600	135	450	1235	425	42
19	620	1240	860	860	690	155	435	1365	475	48
20	620	1240	860	980	690	155	495	1425	475	48
21	690	1390	1000	1000	720	170	485	1615	520	56
22	690	1390	1000	1110	720	170	540	1670	520	56

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight		
	输出轴 Output													
	B4SH				B4HH B4HM		B4DH B4DM				B4.H	B4.M	B4.H	B4.M
	d ₁ 1)	G ₂	l ₂		D ₂ 2)	G ₄	D ₃	D ₄	G ₄	G ₅	(l)	(l)	(kg)	(kg)
13	200	335	350		190	335	190	195	335	480	145	120	2395	2280
14	210	335	350		210	335	210	215	335	480	150	125	2735	2605
15	230	380	410		230	380	230	235	380	550	230	170	3630	3435
16	240	380	410		240	380	240	245	380	550	235	175	3985	3765
17	250	415	410		250	415	250	260	415	600	295	230	4695	4460
18	270	415	470		275	415	280	285	415	600	305	235	5200	4930
19	290	465	470		-	-	285	295	465	670	480	440	5750	5400
20	300	465	500		-	-	310	315	465	670	550	510	6450	6000
21	320	490	500		-	-	330	335	490	715	540	590	7850	7350
22	340	490	550		-	-	340	345	490	725	620	680	8400	7850



直交轴齿轮箱 Bevel-Helical Gear Units
类型 B4.H, B4.M Types B4.H, B4.M

四级传动 Four Stage 卧式安装 Horizontal
规格 23 ... 26 Sizes 23 ... 26



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole, see page 87-88 .

2) 键槽 GB/T1095-1979。 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧。 Torque support on driven machine side.



直交轴齿轮箱 Bevel-helical GearUnits

四级传动 Four Stage

卧式安装 Horizontal

类型 B4.H, B4.M Types B4.H, B4.M

规格 23...26 Sizes 23...26

$i_N = 200 - 315$

规格 Size	尺寸mm Dimensions in mm								
	输入轴 Input								
	$i_N=80-180$		$i_N=90-200$		$i_N=200-315$		$i_N=224-355$		G_1
	$d_1^{1)}$	l_1	$d_1^{1)}$	l_1	$d_1^{1)}$	l_1	$d_1^{1)}$	l_1	
23	90	165			70	140			2110
24			90	165			70	140	2175
25	110	205			80	170			2395
26			110	205			80	170	2485

规格 Size	尺寸mm Dimensions in mm									
	齿轮箱 Gear units									
	a	b	c	c_1	D_5	e_2	E	g	h	h_1
23	2530	930	115	120 ± 2	80	730	1505	342	780	770
24	2660	930	115	120 ± 2	80	795	1570	342	780	770
25	2830	1045	130	120 ± 2	80	790	1695	400	860	860
26	3010	1045	130	120 ± 2	80	880	1785	400	860	860

规格 Size	尺寸mm Dimensions in mm									
	齿轮箱 Gear units									
	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
23	790	1570	1085	1085	810	180	550	1725	580	56
24	790	1570	1085	1215	810	180	615	1790	580	56
25	860	1720	1215	1215	910	200	590	1965	660	66
26	860	1720	1215	1395	910	200	680	2055	660	66

规格 Size	尺寸mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output										
	B4SH			B4DH B4DM				B4.H	B4.M	B4.H	B4.M
	d2 1)	G2	l2	D2	D3	G4	G5	(1)	(1)	(kg)	(kg)
23	360	540	590	360	365	540	785	710	790	11600	10700
24	380	540	590	360	365	540	805	810	910	13500	12600
25	400	605	650	400	405	605	875	1000	1110	16100	15200
26	420	605	650	430	435	605	900	1100	1200	17600	16500



平行轴齿轮箱 Helical Gear Units

二级传动 Two Stage

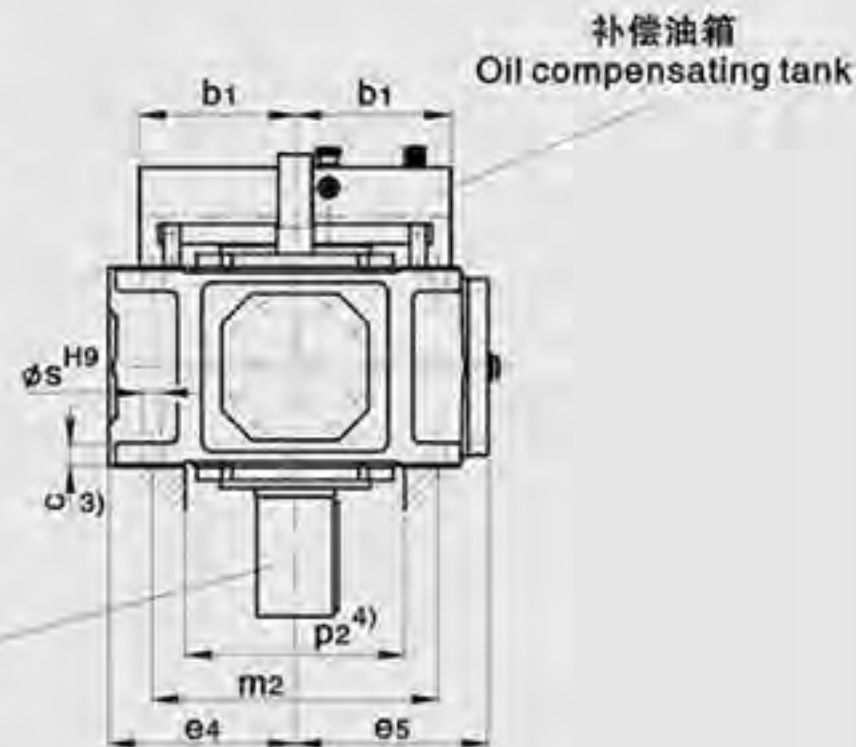
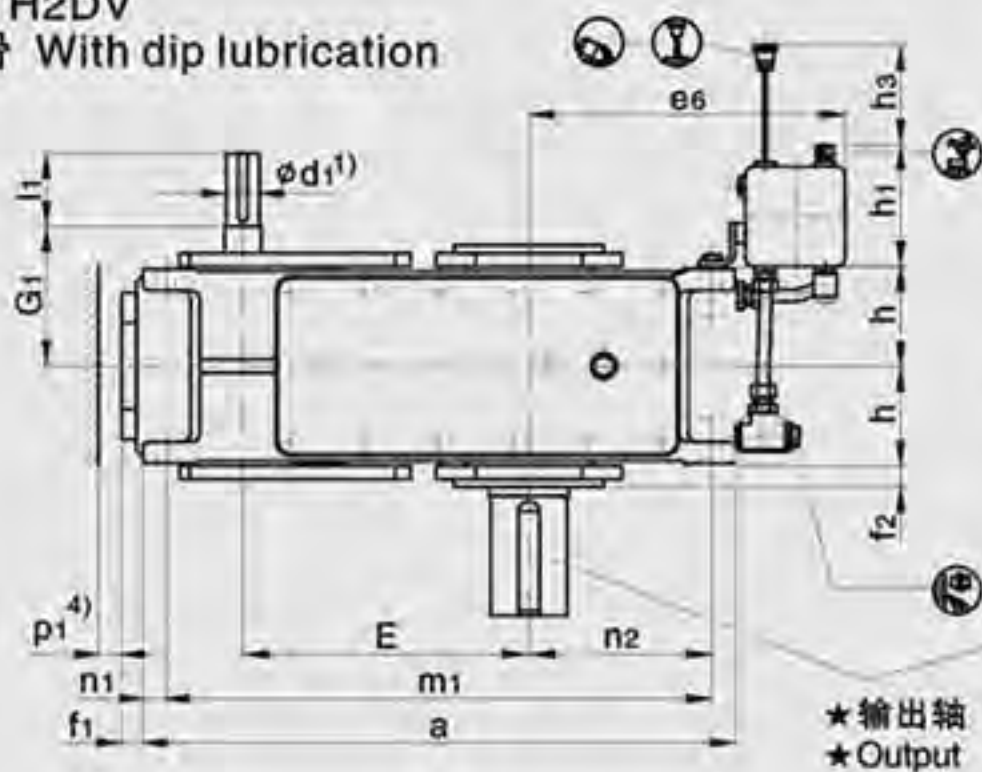
立式安装 Vertical

类型 H2.V Type H2.V

规格 3...12 Sizes 3...12

H2SV H2HV H2DV

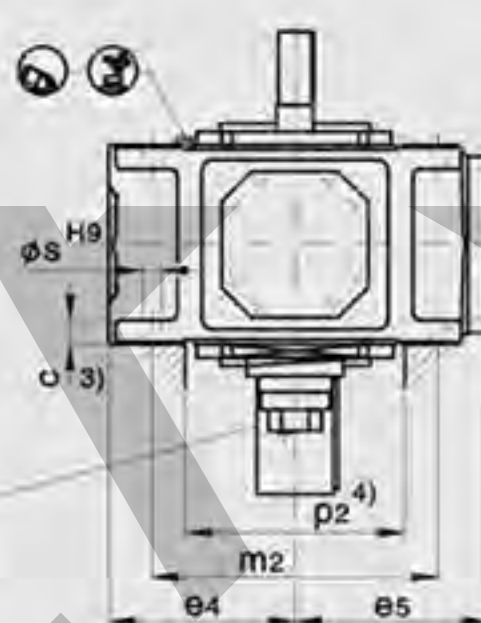
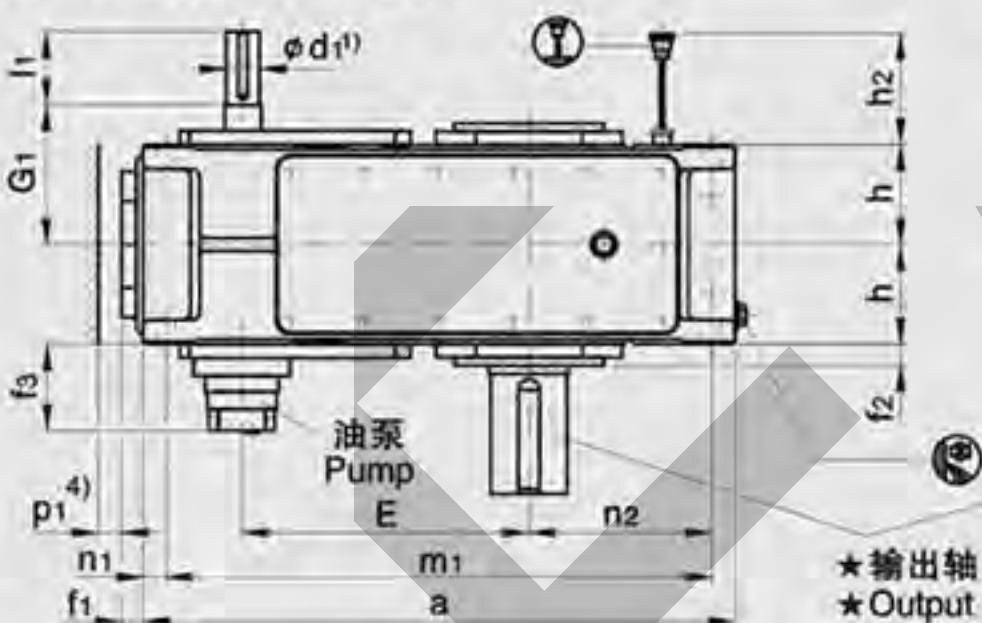
采用浸油润滑 With dip lubrication



★输出轴
★Output

H2SV H2HV H2DV

采用强制润滑 With forced lubrication



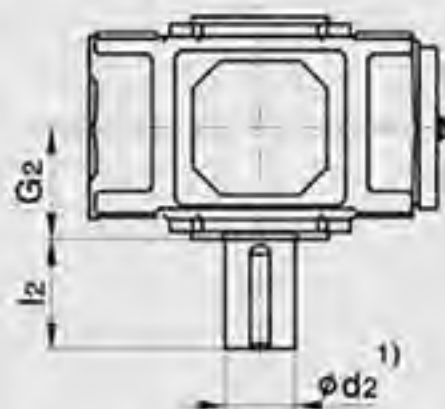
★输出轴
★Output

有关供油方式(浸油润滑或强制润滑),参见103-111页
Oil supply(dip or forced lubrication), see pages 103-111.

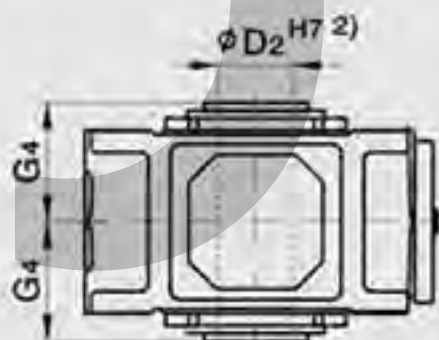
★输出轴 Output

布置形式 Design

H2SV
实心轴
Solid shaft



H2HV
空心轴
Hollow shaft

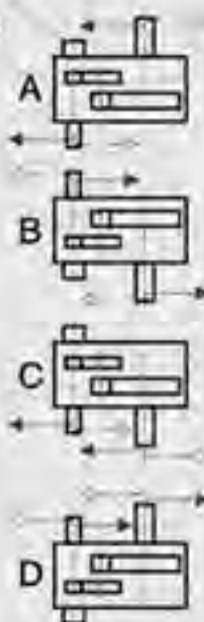


H2DV
带胀紧盘的空心轴
Hollow shaft for shrink disk



布置形式A+D根据用户要求供货
Design A+D on request

油泵
Pump



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole, see page 87-88 .

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸, 请与我们联系。 Space for pump, pipes and cover; for exact dimensions, please refer to us.



平行轴齿轮箱 Helical Gear Units

二级传动 Two Stage

立式安装 Vertical

类型 H2.V Type H2.V

规格 3...12 Sizes 3...12

规格 Size	尺寸 mm Dimensions in mm								G ₁
	输入轴 Input								
	I N = 6.3 - 11.2		I N = 8 - 14		I N = 12.5 - 22.4		I N = 16 - 28		
	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	
3	35	60			28	50			135
4	45	100			32	80			170
5	50	100			38	80			195
6			50	100			38	80	195
7	60	135			50	110			210
8			60	135			50	110	210
9	75	140			60	140			240
10			75	140			60	140	240
11	90	165			70	140			275
12			90	165			70	140	275

规格 Size	尺寸mm Dimensions in mm									
	齿轮箱 Gear units									
	a	b ₁	c	e ₄	e ₅	e ₆	E	f ₁	f ₂	f ₃
3	450	150	24 ± 1	175	185	290	220	28	20	-
4	565	150	30 ± 1	200	215	320	270	28	22	-
5	640	240	30 ± 1	230	252	385	315	38	28	150
6	720	240	30 ± 1	230	252	425	350	38	28	150
7	785	240	36 ± 1	280	292	425	385	42	30	145
8	890	240	36 ± 1	280	302	485	430	42	32	145
9	925	330	45 ± 1.5	320	342	560	450	42	32	135
10	1025	330	45 ± 1.5	320	342	610	500	42	32	135
11	1105	330	54 ± 1.5	380	402	595	545	48	35	145
12	1260	330	54 ± 1.5	380	410	680	615	48	35	145

规格 Size	尺寸mm Dimensions in mm										
	齿轮箱 Gear units										
	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₁ ⁴⁾	p ₂ ⁴⁾	s
3	95	165	-	180	410	265	20	125	35	210	18
4	107.5	165	-	180	505	300	30	160	35	220	24
5	127.5	205	190	240	580	360	30	175	35	270	24
6	127.5	205	190	240	660	360	30	220	35	270	24
7	150	205	165	250	715	430	35	215	35	330	28
8	150	205	165	250	820	430	35	275	35	330	28
9	185	275	205	330	845	490	40	260	40	370	36
10	185	275	205	330	945	490	40	310	40	370	36
11	215	275	240	340	1005	600	50	295	50	440	40
12	215	275	240	340	1160	600	50	380	50	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油浸润 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	H2SV			H2HV		H2DV						
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅			
3	65	125	140	65	125	70	70	125	180	14	-	115
4	80	140	170	80	140	85	85	140	205	25	-	190
5	100	165	210	95	165	100	100	165	240	23	10	300
6	110	165	210	105	165	110	110	165	240	27	11	355
7	120	195	210	115	195	120	120	195	280	58	22	505
8	130	195	250	125	195	130	130	195	285	62	25	590
9	140	235	250	135	235	140	145	235	330	100	42	830
10	160	235	300	150	235	150	155	235	350	110	46	960
11	170	270	300	165	270	165	170	270	400	160	60	1335
12	180	270	300	180	270	180	185	270	405	180	70	1615



平行轴齿轮箱 Helical Gear Units

二级传动 Two Stage

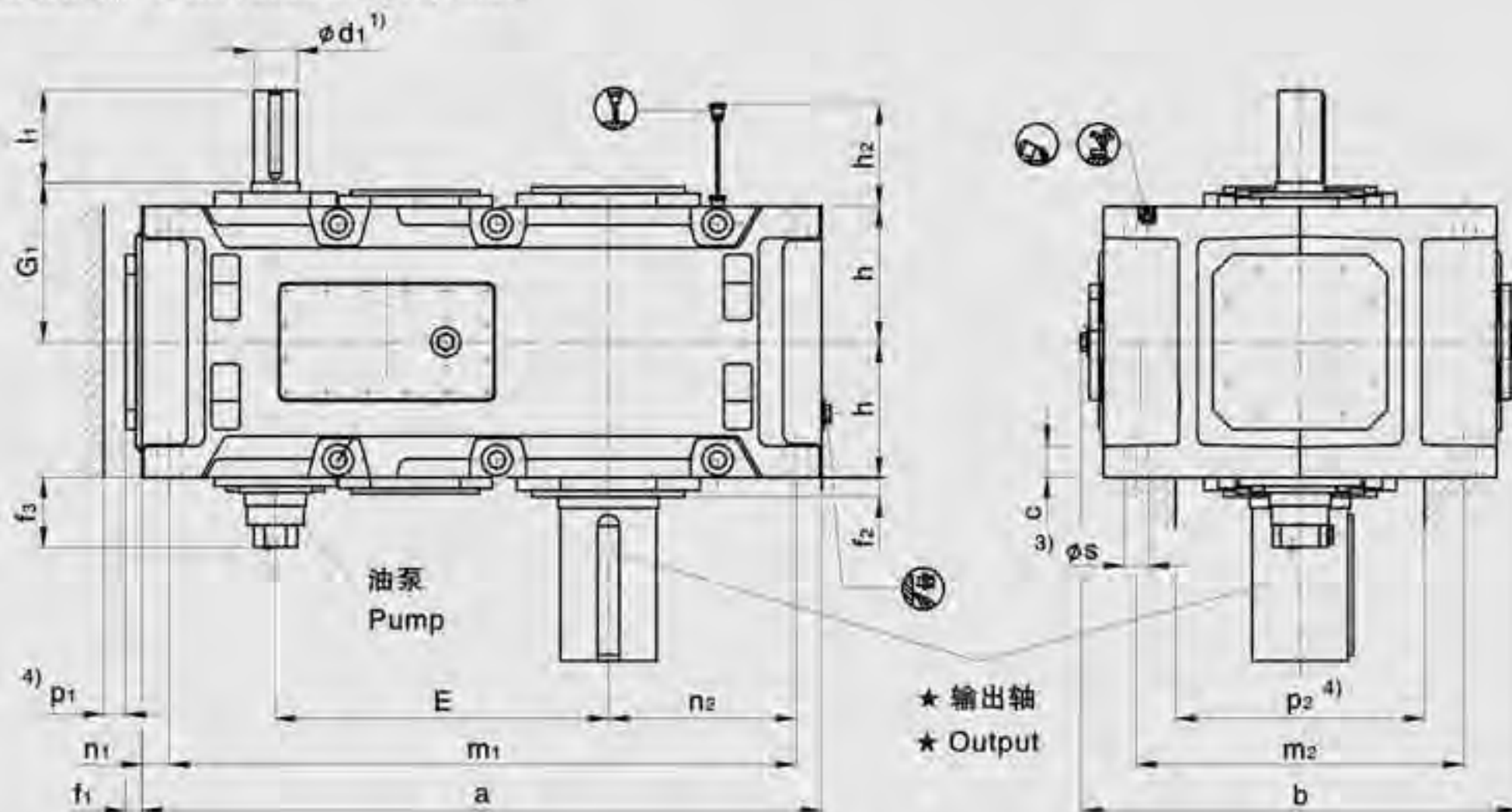
立式安装 Vertical

类型 H2.V Type H2.V

规格 13...18 Sizes 13...18

H2SV H2HV H2DV

采用强制润滑 With forced lubrication

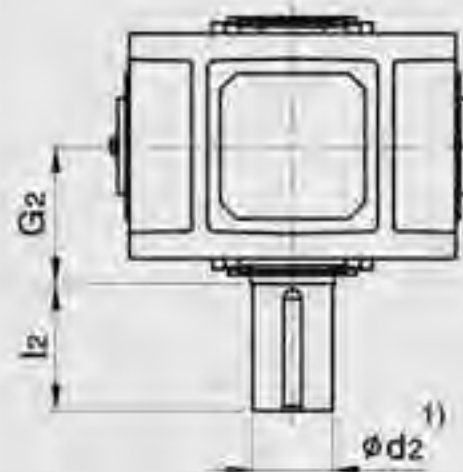


有关供油方式(浸油润滑或强制润滑),参见103-111页
Oil supply(dip or forced lubrication),see pages103-111.

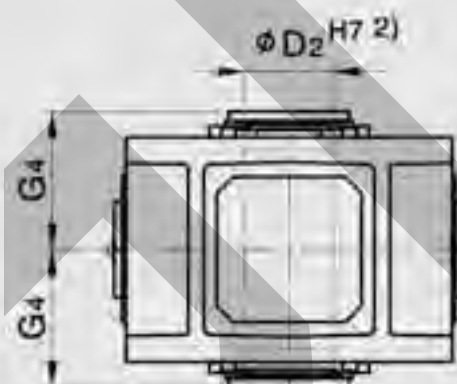
★ 输出轴 Output

布置形式 Design

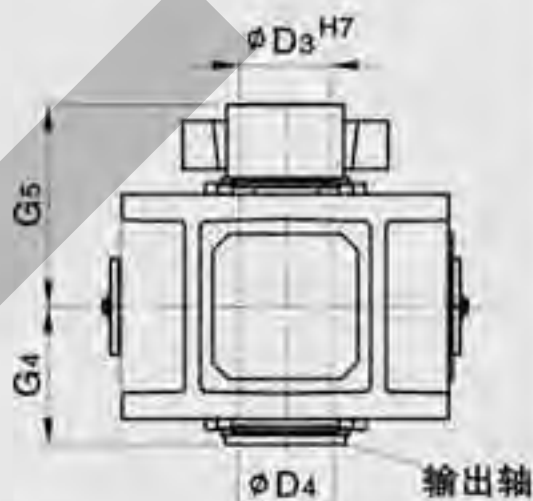
H2SV
实心轴
Solid shaft



H2HV
空心轴
Hollow shaft

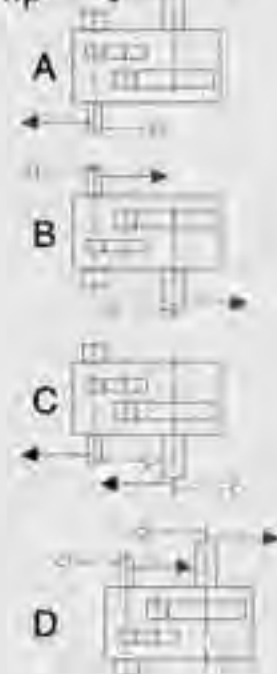


H2DV
带胀紧盘的空心轴
Hollow shaft for shrink disk



布置形式A+D 根据用户要求供货
Design A+D on request

油泵
Pump



1) $k_8 \leq \phi 50$ $m_8 > \phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88 ,

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸, 请与我们联系。 Space for pump,pipes and cover; for exact dimensions,please refer to us.

5) 规格13和15号速比只有 $i_N=6.3-18$;规格17号:速比只有 $i_N=6.3-16$ Size 13 and 15:only $i_N=6.3-18$,Size 17:only $i_N=6.3-16$.



平行轴齿轮箱 Helical Gear Units

两级传动 Two Stage

立式安装 Vertical

类型 H2.V Type H2.V

规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm												
	输入轴 Input												
	in=6.3-11.2		in=7.1-12.5		in=8-14		in=12.5-20		in=14-22.4		in=16-25		G ₁
	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	d ₁ 1)	l ₁	
13	100	205					85	170					330
14					100	205					85	170	330
15	120	210					100	210					365
16			120	210					100	210			365
17	125	245					110	210					420
18			125	245					110	210			420
19							根据用户要求供货 On request						
20													
21													
22													

规格 Size	尺寸 mm Dimensions in mm															
	齿轮箱 Gear units															
	a	b	c	E	f ₁	f ₂	f ₃	h	h ₂	m ₁	m ₂	n ₁	n ₂	p ₁ 4)	p ₂ 4)	s
13	1290	900	61 ± 2	635	53	35	130	272.5	300	1195	680	50	360	50	500	48
14	1430	900	61 ± 2	705	53	35	130	272.5	300	1335	680	50	430	50	500	48
15	1550	980	72 ± 2	762	63	42	130	310	340	1435	750	60	430	50	570	55
16	1640	980	72 ± 2	808	63	42	130	310	340	1525	750	60	475	50	570	55
17	1740	1110	81 ± 2	860	60	42	170	340	374	1610	850	70	465	70	630	55
18	1860	1110	81 ± 2	920	60	42	170	340	374	1730	850	70	525	70	630	55
19																
20																
21																
22																

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	H2SV			H2HV 5)		H2DV 5)					
	d ₂ 1)	G ₂	l ₂	D ₂ 2)	G ₄	D ₃	D ₄	G ₄	G ₅		
13	200	335	350	190	335	190	195	335	480	80	1880
14	210	335	350	210	335	210	215	335	480	90	2430
15	230	380	410	230	380	230	235	380	550	140	3240
16	240	380	410	240	380	240	245	380	550	150	3465
17	250	415	410	250	415	250	260	415	600	175	4420
18	270	415	470	275	415	280	285	415	600	185	4870
19					根据用户要求供货 On request						
20											
21											
22											



平行轴齿轮箱 Helical Gear Units

三级传动 Three Stage

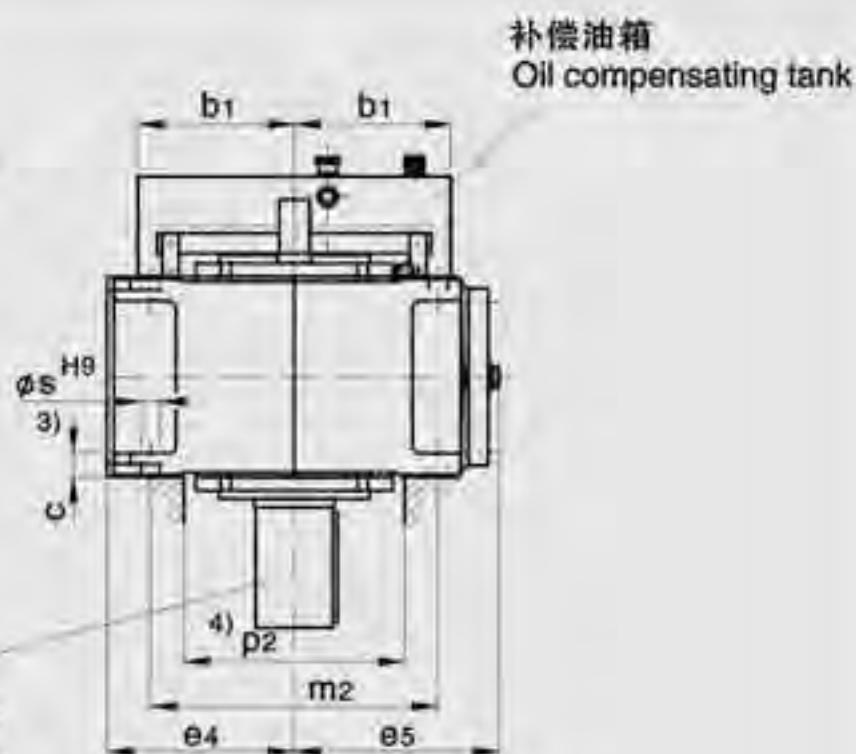
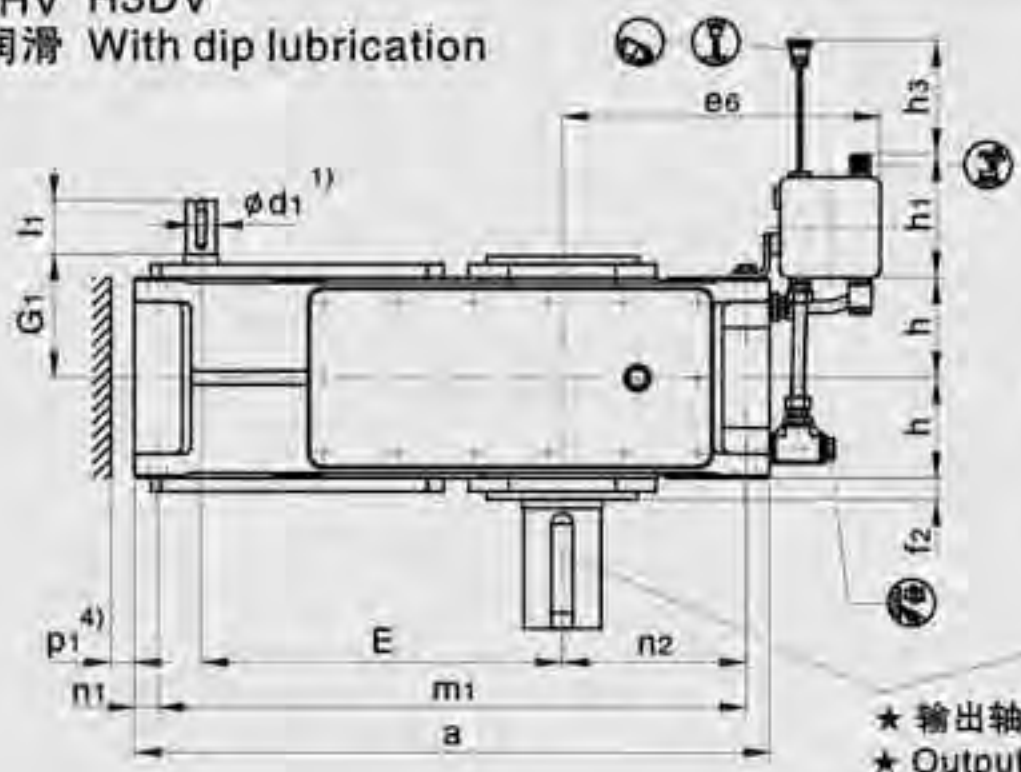
立式安装 Vertical

类型 H3.V Type H3.V

规格 5...12 Sizes 5...12

H3SV H3HV H3DV

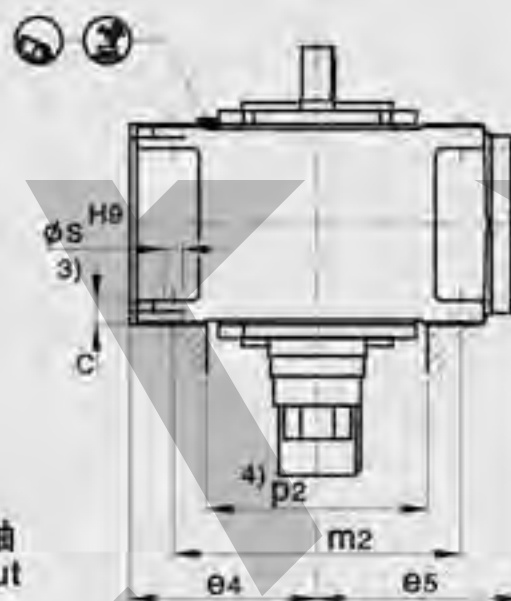
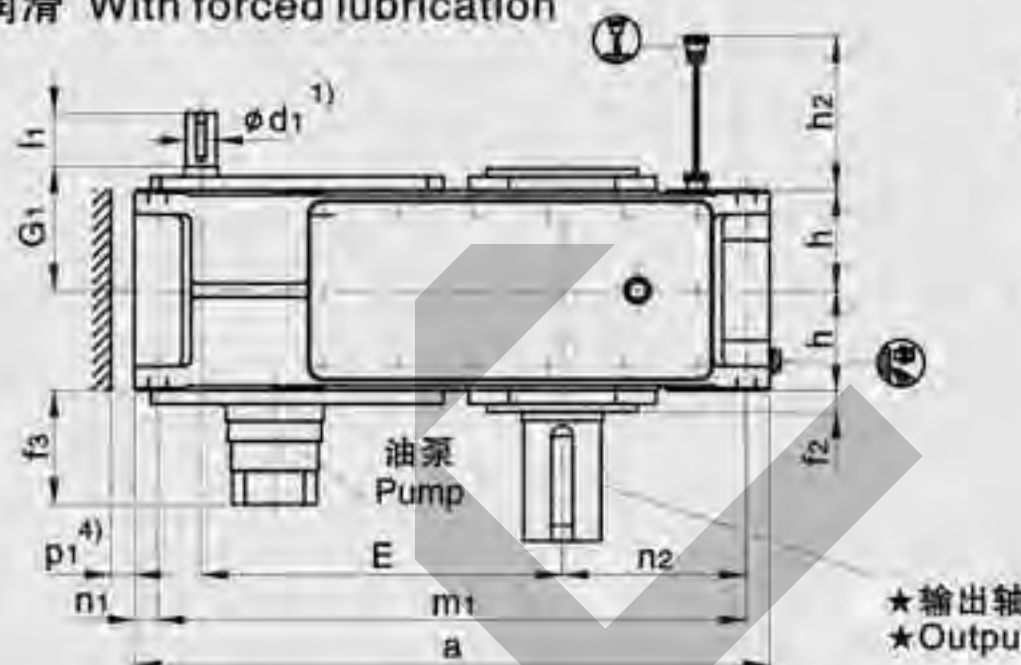
采用浸油润滑 With dip lubrication



★ 输出轴
★ Output

H3SV H3HV H3DV

采用强制润滑 With forced lubrication



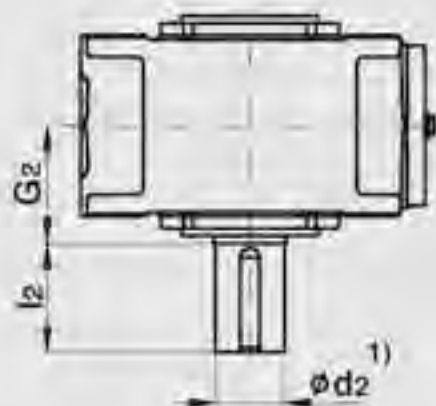
★ 输出轴
★ Output

有关供油方式(浸油润滑或强制润滑),参见103-111页 Oil supply(dip or forced lubrication),see pages 103-111

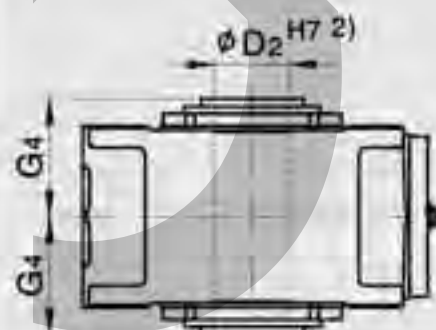
★ 输出轴 Output

布置形式 Design

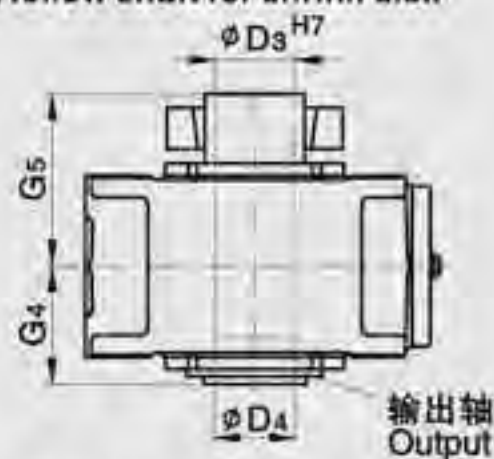
H3SV
实心轴
Solid shaft



H3HV
空心轴
Hollow shaft

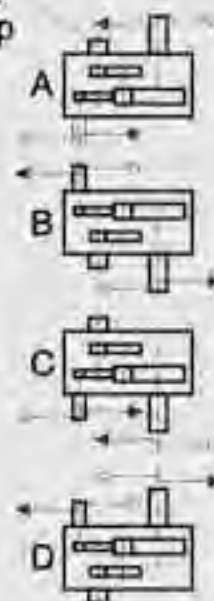


H3DV
带胀紧盘的空心轴
Hollow shaft for shrink disk



布置形式A+D根据用户要求供货
Design A+D on request

油泵
Pump



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸, 请与我们联系 Space for pump,pipes and cover;for exact dimensions,please refer to us.



平行轴齿轮箱 Helical Gear Units

三级传动 Three Stage

立式安装 Vertical

类型 H3.V Type H3.V

规格 5...12 Sizes 5...12

规格 Size	尺寸 mm Dimensions in mm												
	输入轴 Input												
	IN = 25 - 45		IN = 31.5 - 56		IN = 50 - 63		IN = 63 - 80		IN = 71 - 90		IN = 90 - 112		G ₁
	D ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	
5	40	70			30	50			24	40			160
6			40	70			30	50			24	40	160
7	45	80			35	60			28	50			185
8			45	80			35	60			28	50	185
9	60	125			45	100			32	80			230
10			60	125			45	100			32	80	230
11	70	120			50	80			42	70			255
12			70	120			50	80			42	70	255

规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	a	b ₁	c	e ₄	e ₅	e ₆	E	f ₂	f ₃	h
5	690	240	30 ± 1	230	252	385	405	28	190	127.5
6	770	240	30 ± 1	230	252	425	440	28	190	127.5
7	845	240	36 ± 1	280	292	425	495	30	185	150
8	950	240	36 ± 1	280	312	485	540	32	185	150
9	1000	330	45 ± 1.5	320	342	560	580	32	170	185
10	1100	330	45 ± 1.5	320	342	610	630	32	170	185
11	1200	330	54 ± 1.5	380	402	595	705	35	170	215
12	1355	330	54 ± 1.5	380	410	680	775	35	170	215

规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₁ ⁴⁾	p ₂ ⁴⁾	s
5	205	190	240	630	360	30	175	35	270	24
6	205	190	240	710	360	30	220	35	270	24
7	205	165	250	775	430	35	215	35	330	28
8	205	165	250	880	430	35	275	35	330	28
9	275	205	330	920	490	40	260	40	370	36
10	275	205	330	1020	490	40	310	40	370	36
11	275	240	340	1100	600	50	295	50	440	40
12	275	240	340	1255	600	50	380	50	440	40

规格 Size	尺寸 mm					Dimensions in mm				润滑油 Oil		重量 Weight (kg)
	输出轴					Output				浸油润滑 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	H3SV			H3HV		H3DV						
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅			
5	100	165	210	95	165	100	100	165	240	35	13	320
6	110	165	210	105	165	110	110	165	240	37	15	365
7	120	195	210	115	195	120	120	195	280	60	25	540
8	130	195	250	125	195	130	130	195	285	72	30	625
9	140	235	250	135	235	140	145	235	330	100	40	875
10	160	235	300	150	235	150	155	235	350	110	45	1020
11	170	270	300	165	270	165	170	270	400	170	66	1400
12	180	270	300	180	270	180	185	270	405	190	75	1675



平行轴齿轮箱 Helical Gear Units

三级传动 Three Stage

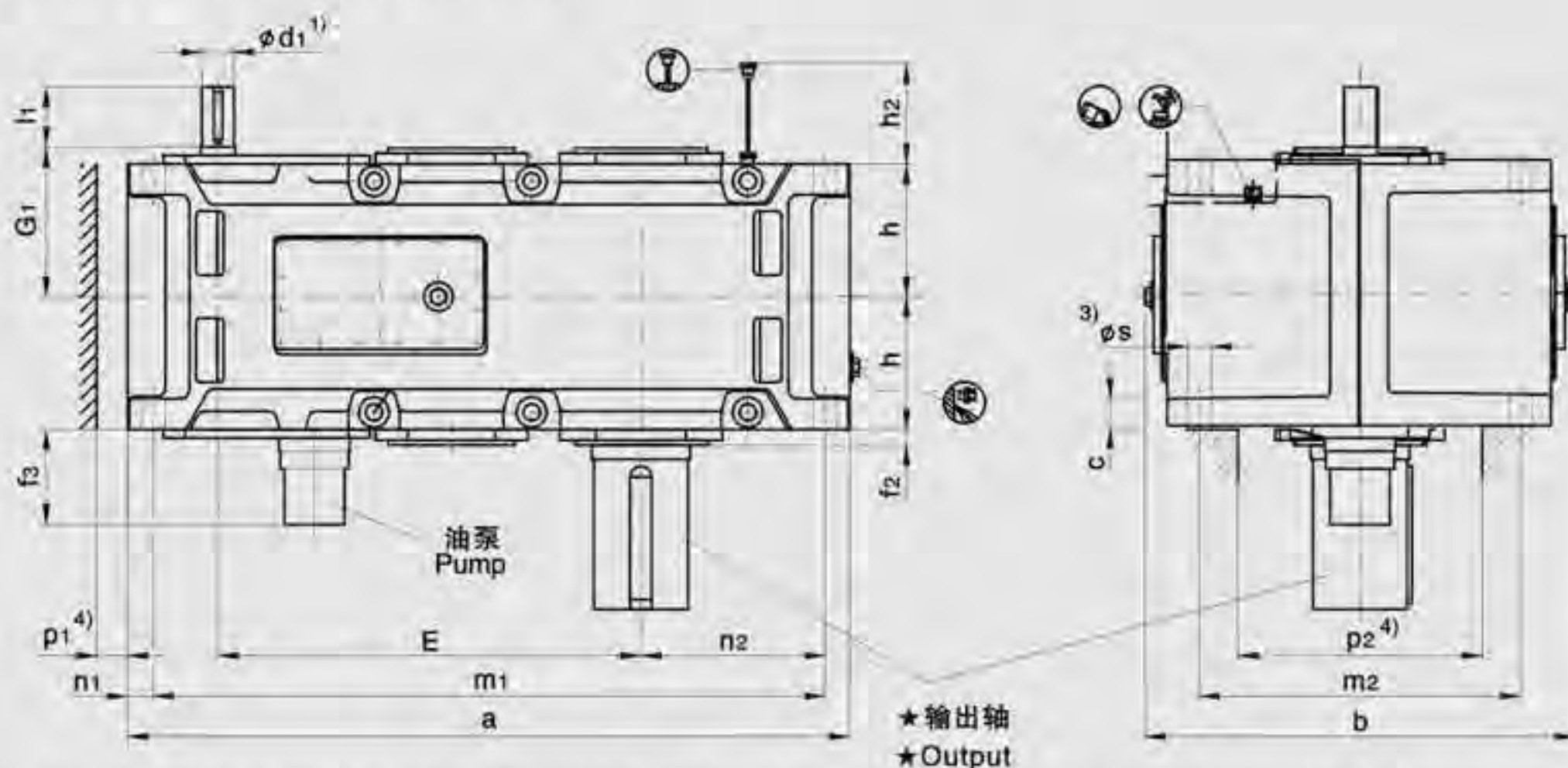
立式安装 Vertical

类型 H3.V Type H3.V

规格 13...18 Sizes 13...18

H3SV H3HV H3DV

采用强制润滑 With forced lubrication

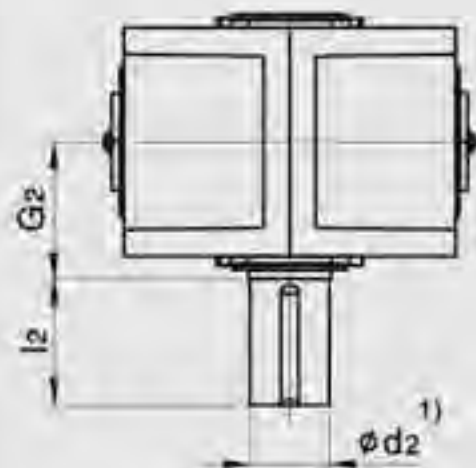


有关供油方式(浸油润滑或强制润滑),参见 103-111 页 Oil supply(dip or forced lubrication),see pages 103-111

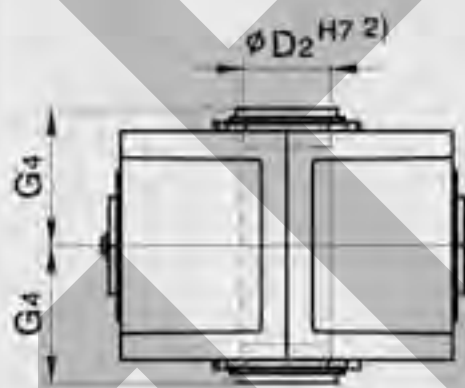
★ 输出轴 Output

布置形式 Design

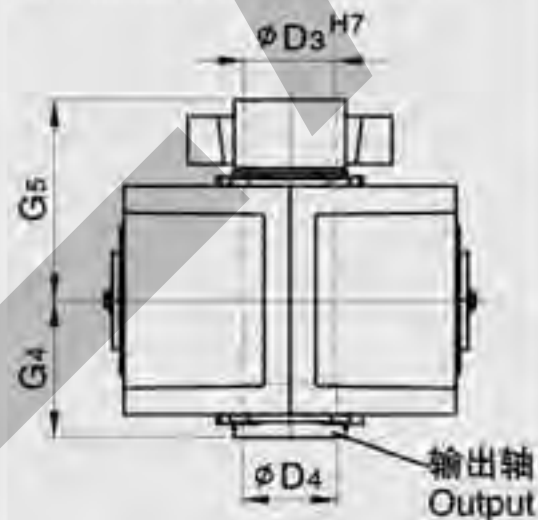
H3SV
实心轴
Solid shaft



H3HV
空心轴
Hollow shaft

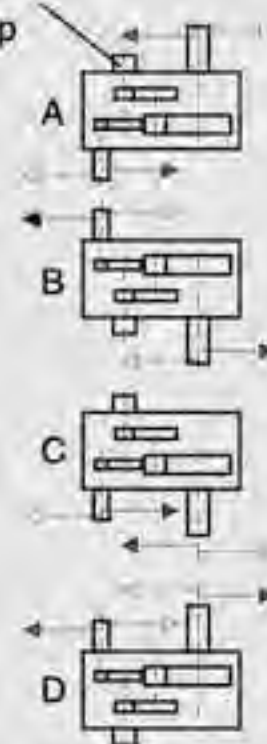


H3DV
带胀紧盘的空心轴
Hollow shaft for shrink disk



布置形式A+D 根据用户要求供货
Design A+D on request

油泵
Pump



1) $k_6 \leq \phi 50$ $m_6 > \phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover;for exact dimensions,please refer to us.



平行轴齿轮箱 Helical Gear Units

三级传动 Three Stage

立式安装 Vertical

类型 H3.V Type H3.V

规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																		
	输入轴 Input																		
	iN=22.4-45		iN=25-50		iN=28-56		iN=50-63		iN=56-71		iN=63-80		iN=71-90		iN=80-100		iN=90-112		G ₁
	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	
13	85	160					60	135					50	110					310
14					85	160					60	135					50	110	310
15	100	200					75	140					60	140					350
16			100	200					75	140					60	140			350
17	100	200					75	140					60	140					380
18			100	200					75	140					60	140			380
19									根据用户要求供货 On request										
20																			
21																			
22																			

规格 Size	尺寸 mm Dimensions in mm															
	齿轮箱 Gear units															
	a	b	c	E	f ₂	f ₃	h	h ₂	m ₁	m ₂	n ₁	n ₂	p ₁ ⁴⁾	p ₂ ⁴⁾	s	
13	1395	900	61±2	820	35	170	272.5	300	1300	680	50	360	50	500	48	
14	1535	900	61±2	890	35	170	272.5	300	1440	680	50	430	50	500	48	
15	1680	980	72±2	987	42	170	310	340	1565	750	60	430	50	570	55	
16	1770	980	72±2	1033	42	170	310	340	1655	750	60	475	50	570	55	
17	1770	1110	81±2	1035	42	210	340	374	1640	850	70	465	70	630	55	
18	1890	1110	81±2	1095	42	210	340	374	1760	850	70	525	70	630	55	
19									根据用户要求供货 On request							
20																
21																
22																

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 output										
	H3SV			H3HV		H3DV					
	d2 ¹⁾	G2	l2	D2 ²⁾	G4	D3	D4	G4	G5		
13	200	335	350	190	335	190	195	335	480	115	2155
14	210	335	350	210	335	210	215	335	480	126	2490
15	230	380	410	230	380	230	235	380	550	180	3260
16	240	380	410	240	380	240	245	380	550	190	3625
17	250	415	410	250	415	250	260	415	600	190	4250
18	270	415	470	275	415	280	285	415	600	200	4740
19					根据用户要求供货 On request						
20											
21											
22											



平行轴齿轮箱 Helical Gear Units

四级传动 Four Stage

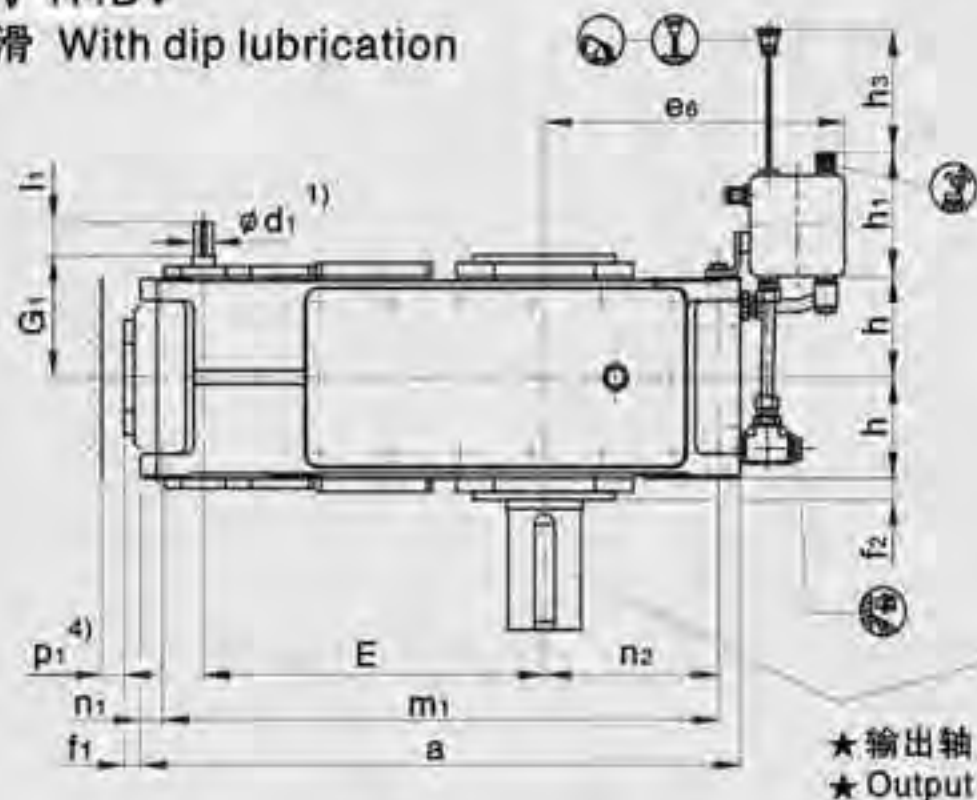
立式安装 Vertical

类型 H4.V Type H4.V

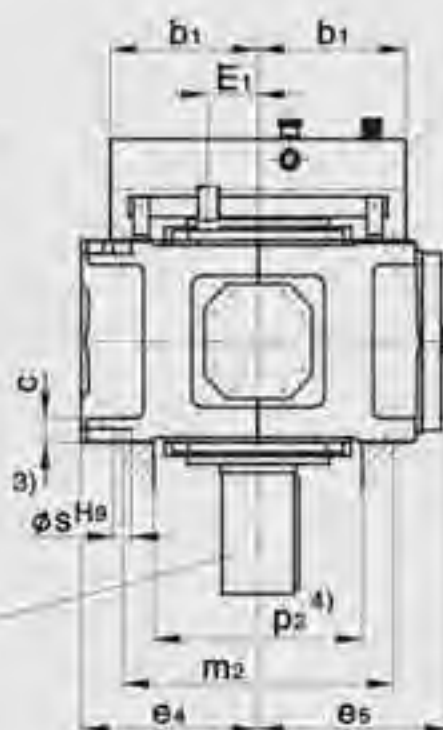
规格 7...12 Sizes 7...12

H4SV H4HV H4DV

采用浸油润滑 With dip lubrication

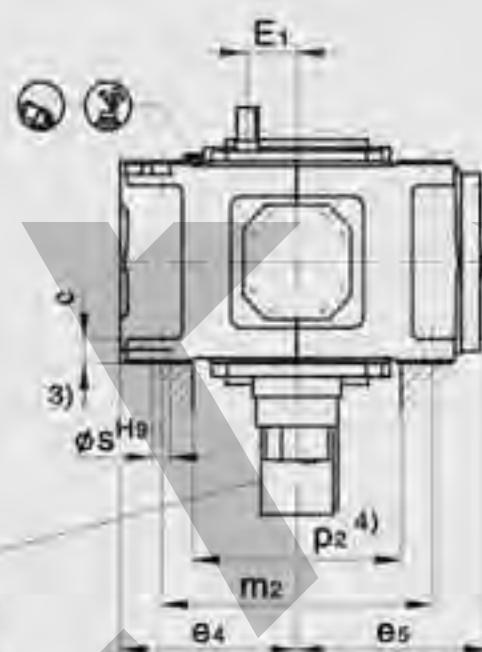
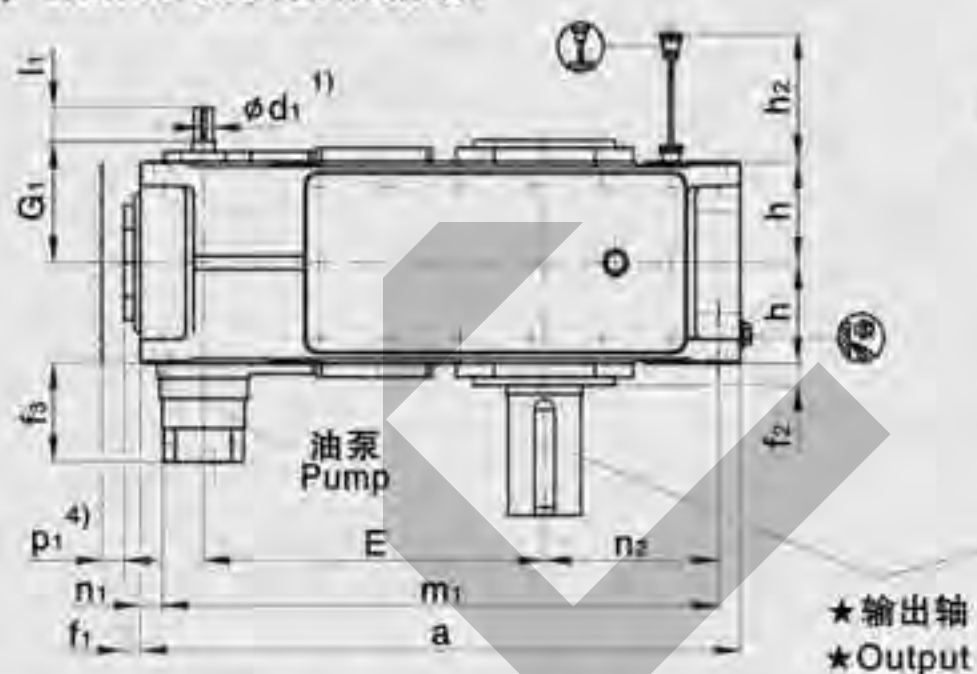


补偿油箱
Oil compensating tank



H4SV H4HV H4DV

采用强制润滑 With forced lubrication



有关供油方式(浸油润滑或强制润滑),参见 103-111 页 Oil supply(dip or forced lubrication),see pages 103-111

★ 输出轴 Output			布置形式 Design
<p>H4SV 实心轴 Solid shaft</p>	<p>H4HV 空心轴 Hollow shaft</p>	<p>H4DV 带胀紧盘的空心轴 Hollow shaft for shrink disk</p> <p>布置形式A+D根据用户要求供货 Design A+D on request</p>	<p>油泵 Pump</p>

1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover;for exact dimensions,please refer to us.



平行轴齿轮箱 Helical Gear Units

四级传动 Four Stage

立式安装 Vertical

类型 H4.V Type H4.V

规格 7...12 Sizes 7...12

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

规格 Size	尺寸mm Dimensions in mm										
	齿轮箱 Gear units										
	a	b ₁	c	e ₄	e ₅	e ₆	E	E ₁	f ₁	f ₂	f ₃
7	845	240	36 ± 1	280	292	425	495	80	37	30	160
8	950	240	36 ± 1	280	302	485	540	80	37	32	160
9	1000	330	45 ± 1.5	320	342	560	580	90	43	32	170
10	1100	330	45 ± 1.5	320	342	610	630	90	43	32	170
11	1200	330	54 ± 1.5	380	402	595	705	110	47	35	170
12	1355	330	54 ± 1.5	380	410	680	775	110	47	35	170

规格 Size	尺寸mm Dimensions in mm										
	齿轮箱 Gear units										
	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₁ ⁴⁾	p ₂ ⁴⁾	s
7	150	205	165	250	775	430	35	215	35	330	28
8	150	205	165	250	880	430	35	275	35	330	28
9	185	275	205	330	920	490	40	260	40	370	36
10	185	275	205	330	1020	490	40	310	40	370	36
11	215	275	240	340	1100	600	50	295	50	440	40
12	215	275	240	340	1255	600	50	380	50	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油浸润 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	H4SV			H4HV		H4DV						
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅			
7	120	195	210	115	195	120	120	195	280	50	20	550
8	130	195	250	125	195	130	130	195	285	60	25	645
9	140	235	250	135	235	140	145	235	330	95	38	875
10	160	235	300	150	235	150	155	235	350	110	45	1010
11	170	270	300	165	270	165	170	270	400	165	65	1460
12	180	270	300	180	270	180	185	270	405	180	75	1725



平行轴齿轮箱 Helical Gear Units

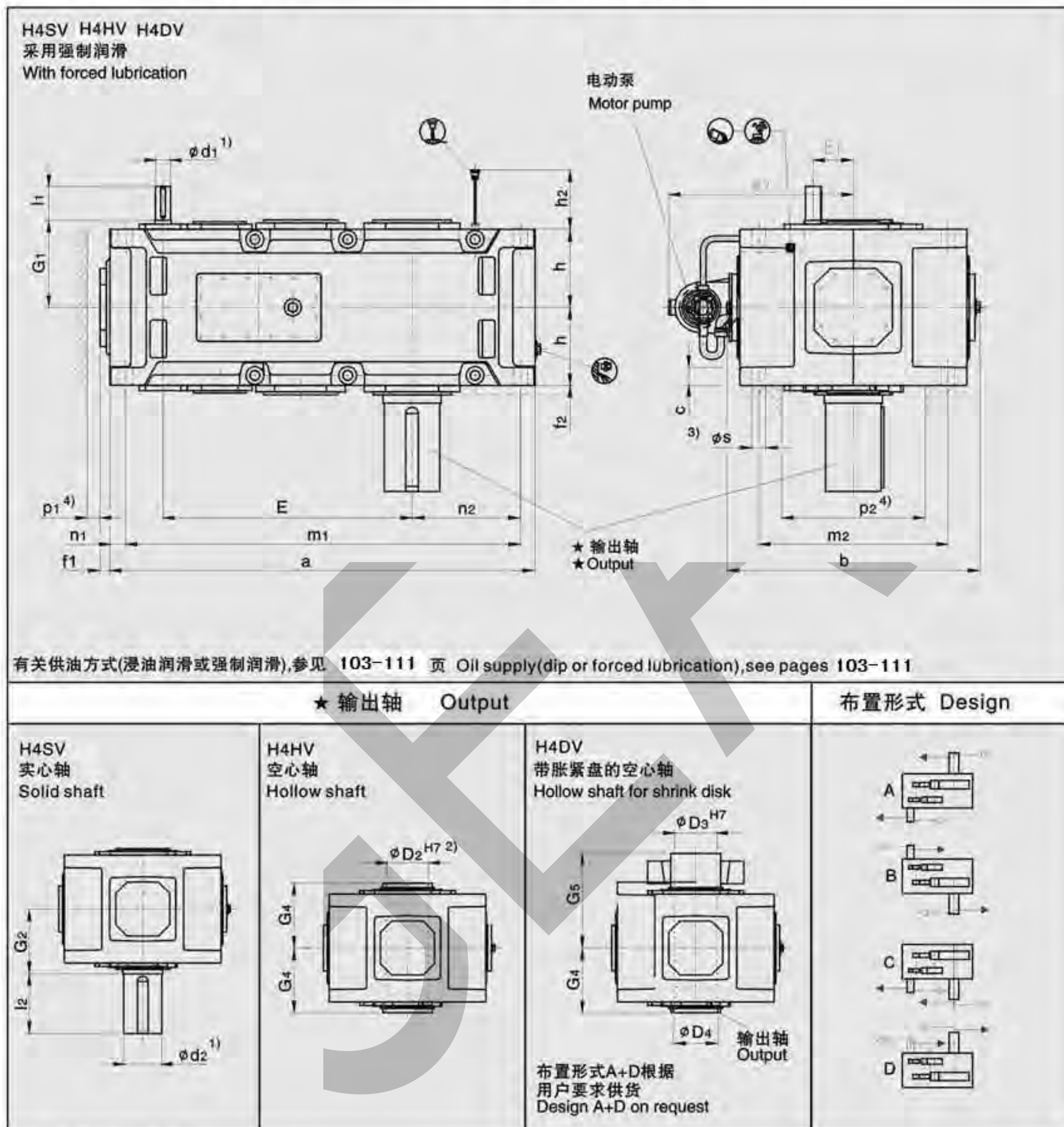
四级传动 Four Stage

立式安装 vertical

类型 H4.V

Type H4.V

规格 13...18 Sizes 13...18



1) $k_6 \leq \phi 50$ $m_6 > \phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover;for exact dimensions,please refer to us.



平行轴齿轮箱 Helical Gear Units

四级传动 Four Stage

立式安装 Vertical

类型 H4.V Type H4.V

规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm												
	输入轴 Input												
	IN=100 – 180		IN=112 – 200		IN=125 – 224		IN=200 – 355		IN=224– 400		IN=250– 450		G _T
	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	
13	50	100					38	80					305
14					50	100					38	80	305
15	60	135					50	110					345
16			60	135					50	110			345
17	60	105					50	80					380
18			60	105					50	80			380
19							根据用户要求供货 On request						
20													
21													
22													

规格 Size	尺寸 mm Dimensions in mm																
	齿轮箱 Gear units																
	a	b	c	e ₁	E	E ₁	f ₁	f ₂	h	h ₂	m ₁	m ₂	n ₁	n ₂	p ₁ ⁴⁾	p ₂ ⁴⁾	s
13	1395	900	61±2	695	820	130	47	35	272.5	300	1300	680	50	360	50	500	48
14	1535	900	61±2	695	890	130	47	35	272.5	300	1440	680	50	430	50	500	48
15	1680	980	72±2	735	987	160	56	42	310	340	1565	750	60	430	50	570	55
16	1770	980	72±2	735	1033	160	56	42	310	340	1655	750	60	475	50	570	55
17	1770	1110	81±2	795	1035	160	53	42	340	374	1640	850	70	465	70	630	55
18	1890	1110	81±2	795	1095	160	53	42	340	374	1760	850	70	525	70	630	55
19																	
20									根据用户要求供货 On request								
21																	
22																	

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	H4SV			H4HV		H4DV					
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ¹⁾	G ₄	D ₃	D ₄	G ₄	G ₅		
13	200	335	350	190	335	190	195	335	480	95	2270
14	210	335	350	210	335	210	215	335	480	105	2600
15	230	380	410	230	380	230	235	380	550	150	3440
16	240	380	410	240	380	240	245	380	550	160	3740
17	250	415	410	250	415	250	260	415	600	190	4445
18	270	415	470	275	415	280	285	415	600	200	4915
19						根据用户要求供货 On request					
20											
21											
22											



立式安装 Vertical

规格 1...12 Sizes 1...12

补偿油箱
Oil compensating tank

风扇
Fan

Technical drawing of a 3-position, 3-way solenoid valve in its closed position. The drawing shows the valve body with three ports: an air inlet at the top left, and two output ports at the bottom. Dimensions are labeled with letters and numbers. A 30-degree angle is indicated for the internal valve mechanism. A large diagonal watermark 'S' is overlaid on the drawing.

进气孔
Air inlet

★输出轴
★Output

有关供油方式(浸油润滑或强制润滑),参见 103-111 页 Oil supply(dip or forced lubrication), see pages 103-111

★输出轴 Output

布置形式 Design

Technical drawing of a shaft-hub connection. The drawing shows a cross-section of a hub with a central hole and a shaft passing through it. The dimensions are labeled as follows: G_2 is the distance from the top of the hub to the center of the shaft; L_2 is the length of the shaft; and $\varnothing d_2$ is the diameter of the shaft.

布置形式A+D根据用户要求供货
Design A+D on request

4) 有关油泵、油管 and 护盖的安装空间及确切尺寸, 请与我们联系 Space for pump, pipes and cover; for exact dimensions, please refer to us.



直交轴齿轮箱
立式传动
规格 1...12

Bevel-helical Gear Units
Vertical
类型 B2.V
Sizes 1...12

二级传动
Type B2.V

Two Stage

规格 Size	尺寸 mm Dimensions in mm										
	输入轴 Input										
	IN = 5 - 11.2			IN = 6.3 - 14			IN = 12.5 - 18			G ₁	G ₃
	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃		
1	28	55	40				20	50	35	300	315
2	30	70	50				25	60	40	340	360
3	35	80	60				28	60	40	390	410
4	45	100	80							465	485
5	55	110	80							535	565
6				55	110	80				570	600
7	70	135	105							640	670
8				70	135	105				685	715
9	80	165	130							755	790
10				80	165	130				805	840
11	90	165	130							925	960
12				90	165	130				995	1030

规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A ₁	b ₁	B ₁	c	d _a	e ₃	e ₄	e ₅	e ₆	E	f ₂
1	305	128	150	130	16±1	100	90	130	145	280	90	22
2	355	143	150	145	20±1	110	110	145	160	285	110	22
3	405	163	150	170	24±1	120	130	175	185	290	130	24
4	505	188	150	200	30±1	150	160	200	215	320	160	26
5	565	215	240	235	30±1	160	185	230	252	385	185	30
6	645	215	240	235	30±1	160	185	230	252	425	220	30
7	690	250	240	285	36±1	210	225	280	302	425	225	32
8	795	250	240	285	36±1	210	225	280	302	485	270	32
9	820	270	330	325	48±1.5	195	265	320	342	560	265	45
10	920	270	330	325	48±1.5	195	265	320	342	610	315	45
11	975	328	330	385	54±1.5	210	320	380	410	595	320	47
12	1130	328	330	385	54±1.5	210	320	380	410	680	390	47

规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	f ₃	G ₆	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₂ ⁴⁾	s
1	—	325	90	165	—	170	275	210	15	115	150	12
2	—	370	102.5	165	—	170	315	230	20	120	170	14
3	—	420	112.5	165	—	180	365	265	20	130	200	18
4	—	495	135	165	—	180	445	300	30	160	220	24
5	190	575	160	205	245	240	505	360	30	175	270	24
6	190	610	160	205	245	240	585	360	30	220	270	24
7	200	685	190	205	220	250	620	430	35	215	330	28
8	200	730	190	205	220	250	725	430	35	275	330	28
9	200	805	220	275	250	330	740	490	40	260	370	36
10	200	855	220	275	250	330	840	490	40	310	370	36
11	200	980	265	275	300	340	875	600	50	295	440	40
12	200	1050	265	275	300	340	1030	600	50	380	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油浸润 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	B2SV			B2HV		B2DV						
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅			
1	45	120	80	-	-	-	-	-	-	7	-	65
2	55	135	110	55	135	60	60	135	180	11	-	90
3	65	145	140	65	145	70	70	145	200	16	-	140
4	80	170	170	80	170	85	85	170	235	28	-	235
5	100	200	210	95	200	100	100	200	275	41	20	360
6	110	200	210	105	200	110	110	200	275	50	23	410
7	120	235	210	115	235	120	120	235	320	75	35	615
8	130	235	250	125	235	130	130	235	325	90	38	700
9	140	270	250	135	270	140	145	270	360	115	53	1000
10	160	270	300	150	270	150	155	270	385	135	60	1155
11	170	320	300	165	320	165	170	320	450	190	86	1640
12	180	320	300	180	320	180	185	320	455	215	95	1910



直交轴齿轮箱 Bevel-helical Gear Units

二级传动 Two Stage

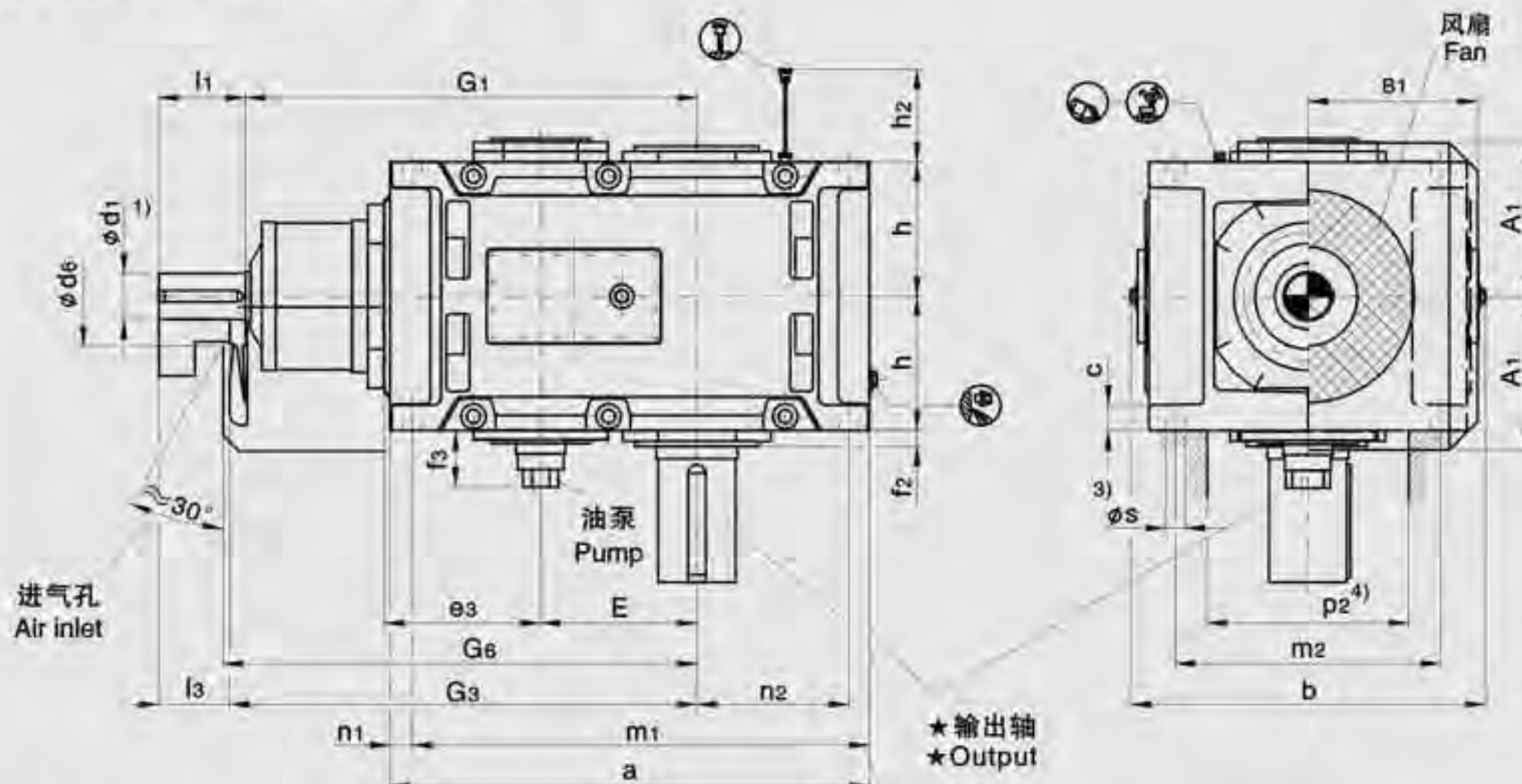
立式安装 Vertical

类型 B2.V Type B2.V

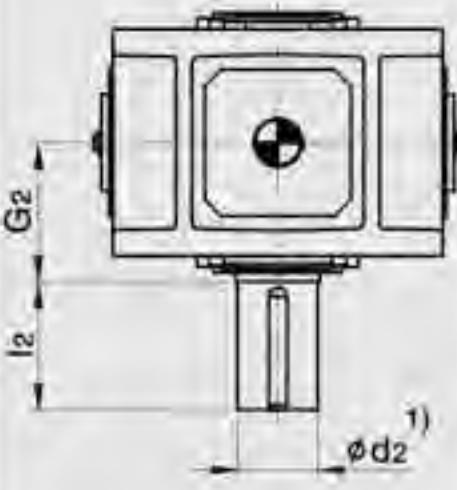
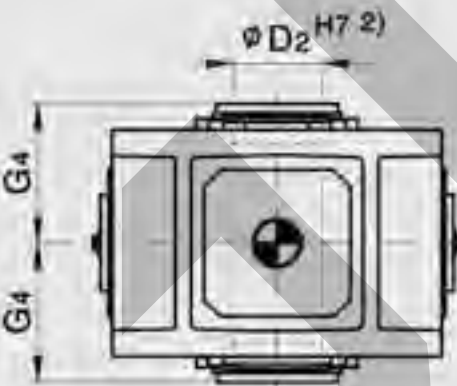
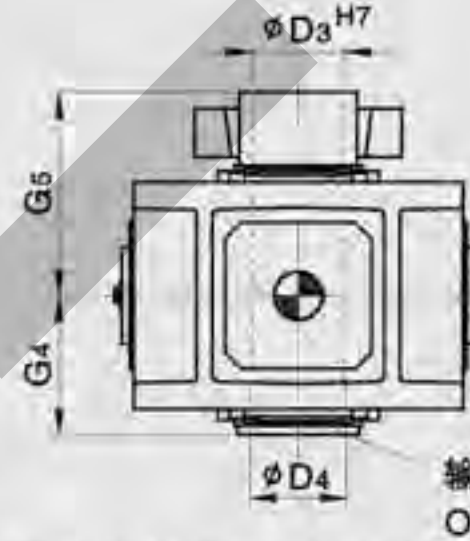
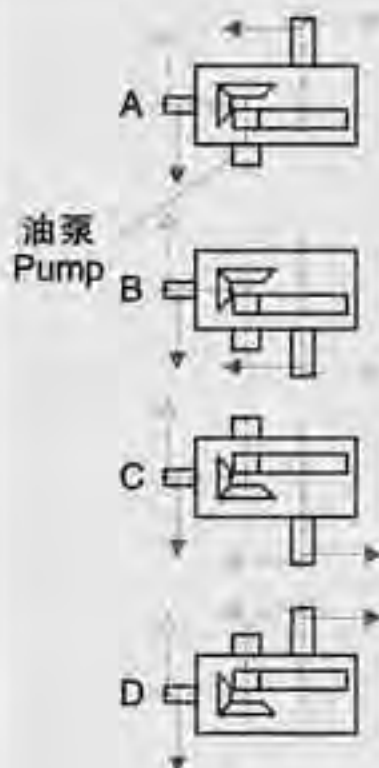
规格 13...18 Sizes 13...18

B2SV B2HV B2DV

采用强制润滑 With forced lubrication



有关供油方式(浸油润滑或强制润滑),参见 103-111 页 Oil supply(dip or forced lubrication),see pages 103-111

★ 输出轴 Output			布置形式 Design
<p>B2SV 实心轴 Solid shaft</p> 	<p>B2HV 空心轴 Hollow shaft</p> 	<p>B2DV 带胀紧盘的空心轴 Hollow shaft for shrink disk</p>  <p>布置形式 A+D 根据用户要求供货 Design A+D on request</p>	

1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover;for exact dimensions,please refer to us.



直交轴齿轮箱 Bevel-helical Gear Units 二级传动 Two Stage 立式安装 Vertical
类型 B2.V Type B2.V 规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																
	输入轴 Input																
	IN = 5 - 11.2			IN = 5.6 - 11.2			IN = 5.6 - 12.5			IN = 6.3 - 14			IN = 7.1 - 12.5			G1	G3
d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₁			
13	110	205	165													1070	1110
14										110	205	165				1140	1180
15	130	245	200													1277	1322
16							130	245	200							1323	1368
17				150	245	200										1435	1480
18													150	245	200	1495	1540

规格 Size	尺寸mm Dimensions in mm									
	齿轮箱 Gear units									
	a	A1	b	B1	c	d _s	e ₃	E	f ₂	f ₃
13	1130	375	900	450	61 ± 2	245	380	370	38	200
14	1270	375	900	450	61 ± 2	245	380	440	45	200
15	1350	435	980	495	72 ± 2	280	450	442	75	200
16	1440	435	980	495	72 ± 2	280	450	488	75	200
17	1490	505	1110	555	81 ± 2	380	510	490	98	200
18	1610	505	1110	555	81 ± 2	380	510	550	98	200

规格 Size	尺寸 mm Dimensions in mm								
	齿轮箱 Gear units								
	G _a	h	h ₂	m ₁	m ₂	n ₁	n ₂	p ₂ ⁴⁾	s
13	1130	325	350	1035	680	50	360	500	48
14	1200	325	350	1175	680	50	430	500	48
15	1340	380	430	1235	750	60	430	570	55
16	1385	380	430	1325	750	60	475	570	55
17	1500	437.5	480	1360	840	70	465	630	65
18	1560	437.5	480	1480	840	70	525	630	65

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	B2SV			B2HV		B2DV					
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅		
13	200	390	350	-	-	-	-	-	-	100	2350
14	210	390	350	210	390	210	215	390	535	110	2725
15	230	460	410	-	-	-	-	-	-	145	3795
16	240	460	410	240	450	240	245	450	620	160	4160
17	250	540	410	-	-	-	-	-	-	210	5320
18	270	540	470	275	510	280	285	510	700	220	5860



直交轴齿轮箱 Bevel-helical Gear Units

三级传动 Three Stage

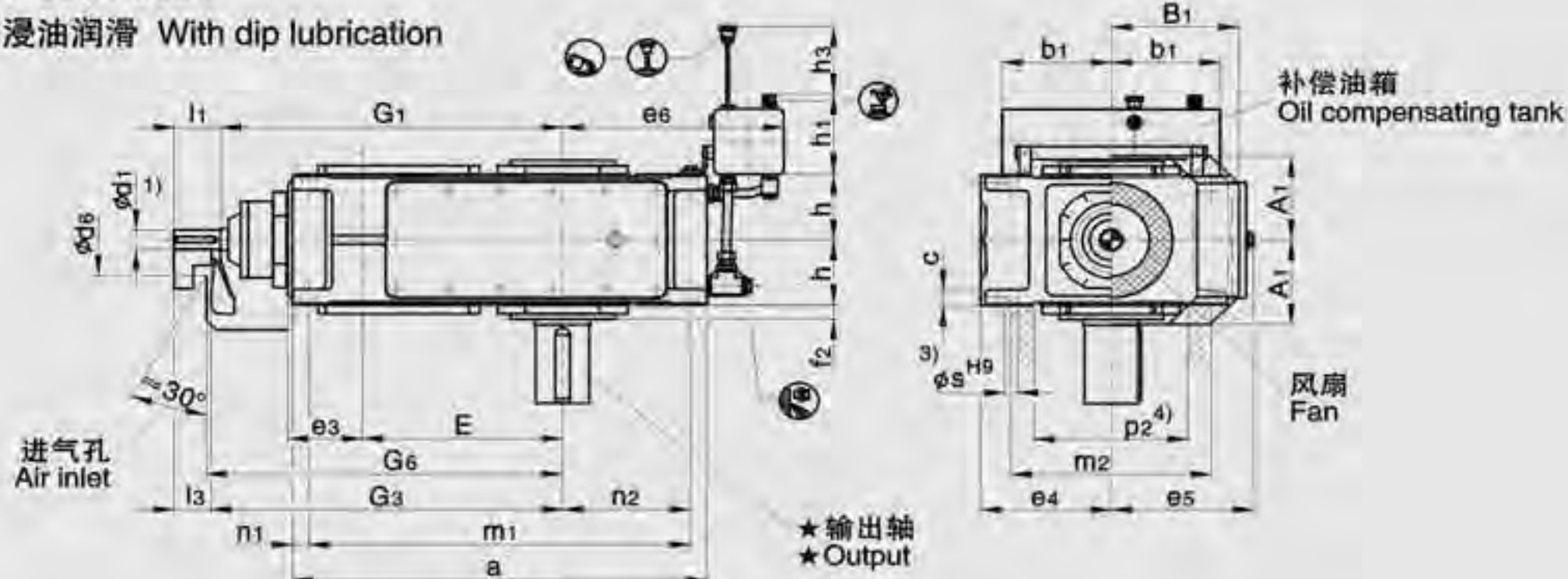
立式安装 Vertical

类型 B3.V Type B3.V

规格 3...12 Sizes 3...12

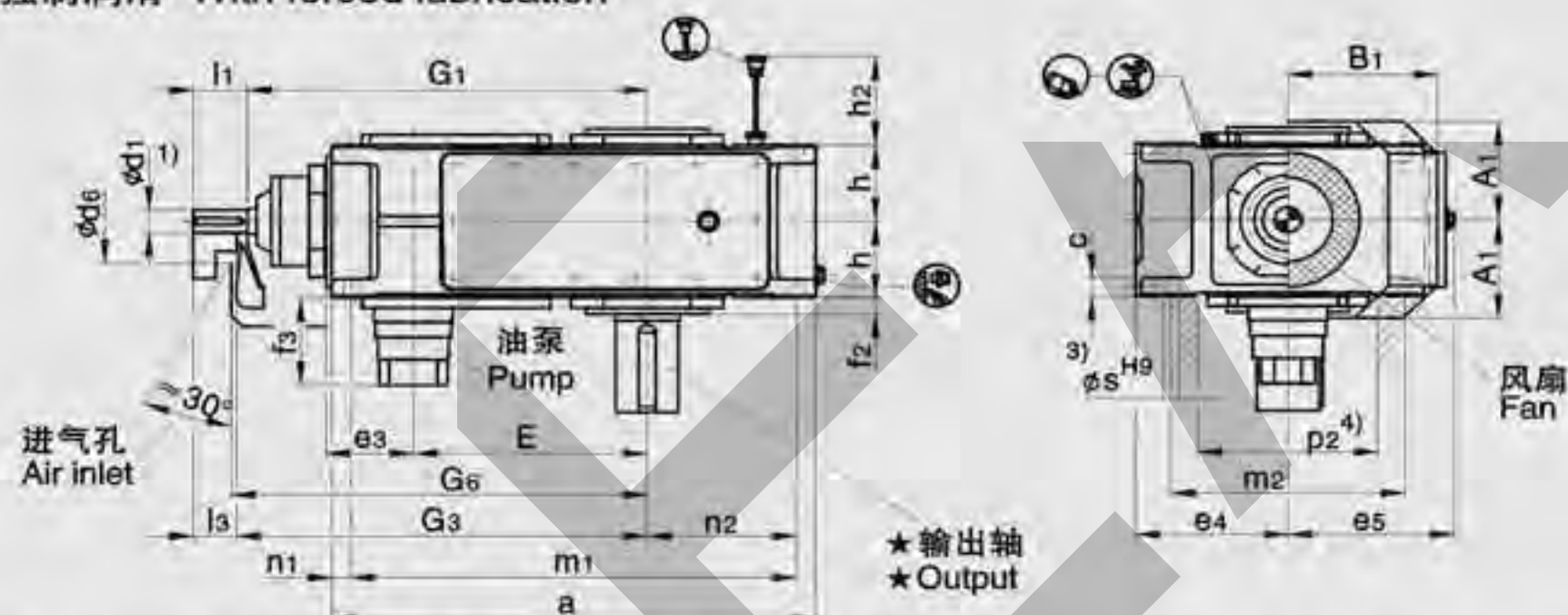
B3SV B3HV B3DV

采用浸油润滑 With dip lubrication



B3SV B3HV B3DV

采用强制润滑 With forced lubrication

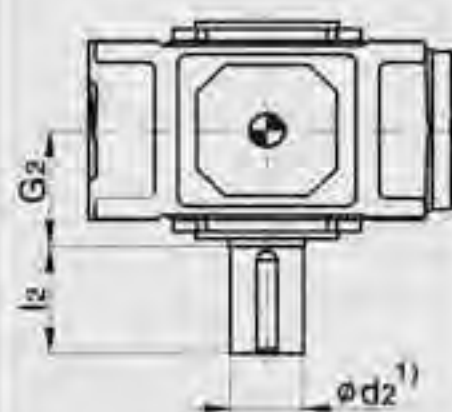


有关供油方式(浸油润滑或强制润滑),参见 103-111 页 Oil supply(dip or forced lubrication),see pages 103-111

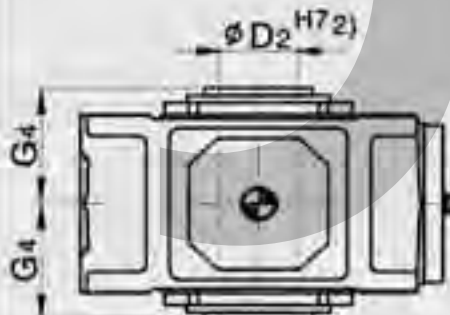
★输出轴 Output

布置形式 Design

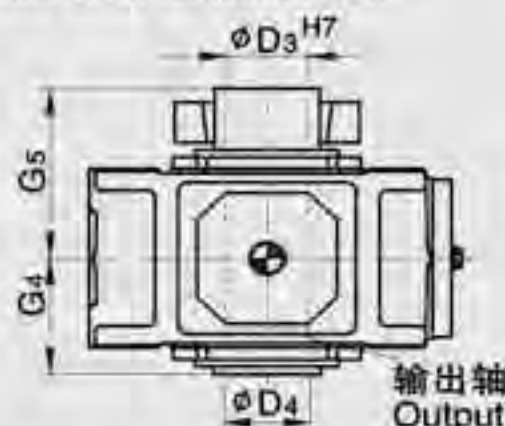
B3SV
实心轴
Solid shaft



B3HV
空心轴
Hollow shaft

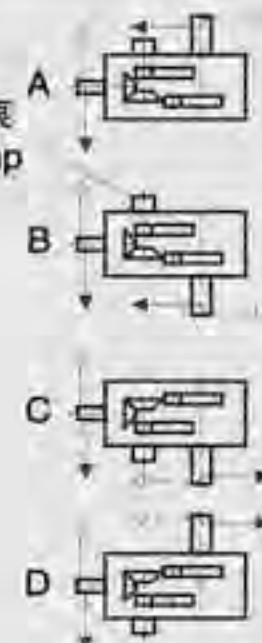


B3DV
带胀紧盘的空心轴
Hollow shaft for shrink disk



布置形式 A+D 根据用户要求供货
Design A+D on request

油泵
Pump



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover,for exact dimensions,please refer to us.



直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 立式安装 Vertical
 类型 B3.V Type B3.V 规格 3...12 Sizes 3...12

规格 Size	尺寸 mm Dimensions in mm															
	输入轴 Input															
	IN = 12.5 - 45			IN = 16 - 56			IN = 20 - 45			IN = 50 - 71			IN = 63 - 90			G ₁
	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	
3							28	55	40	20	50	35				430
4	30	70	50							25	60	40				500
5	35	80	60							28	60	40				575
6				35	80	60							28	60	40	610
7	45	100	80							35	80	60				690
8				45	100	80							35	80	60	735
9	55	110	80							40	100	70				800
10				55	110	80							40	100	70	850
11	70	135	105							50	110	80				960
12				70	135	105							50	110	80	1030

规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A ₁	b ₁	B ₁	c	d ₆	e ₃	e ₄	e ₅	e ₆	E	f ₂
3	450	128	150	170	24 ± 1	90	90	175	185	290	220	20
4	565	143	150	200	30 ± 1	110	110	200	215	320	270	22
5	640	168	240	235	30 ± 1	130	130	230	252	385	315	28
6	720	168	240	235	30 ± 1	130	130	230	252	425	350	28
7	785	193	240	275	36 ± 1	165	160	280	292	425	385	30
8	890	193	240	275	36 ± 1	165	160	280	302	485	430	32
9	925	231	330	325	45 ± 1.5	175	185	320	342	560	450	32
10	1025	231	330	325	45 ± 1.5	175	185	320	342	610	500	32
11	1105	263	330	385	54 ± 1.5	190	225	380	402	595	545	35
12	1260	263	330	385	54 ± 1.5	190	225	380	410	680	615	35

规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱						Gear units					
	f ₃	G ₆	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₂ ⁴⁾	s
3	—	455	95	165	—	180	410	265	20	125	210	18
4	—	530	107.5	165	—	180	505	300	30	160	220	24
5	190	605	127.5	205	180	240	580	360	30	175	270	24
6	190	640	127.5	205	180	240	660	360	30	220	270	24
7	190	720	150	205	165	250	715	430	35	215	330	28
8	190	765	150	205	165	250	820	430	35	275	330	28
9	180	845	185	275	205	330	845	490	40	260	370	36
10	180	895	185	275	205	330	945	490	40	310	370	36
11	180	1010	215	275	240	340	1005	600	50	295	440	40
12	180	1080	215	275	240	340	1160	600	50	380	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
				输出轴 Output						浸油润滑 Dip lubrication (l)	强制润滑 Forced lubrication(l)	
	B3SV			B3HV		B3DV						
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅			
3	65	125	140	65	125	70	70	125	180	15	—	130
4	80	140	170	80	140	85	85	140	205	28	—	210
5	100	165	210	95	165	100	100	165	240	32	12	325
6	110	165	210	105	165	110	110	165	240	35	13	380
7	120	195	210	115	195	120	120	195	280	52	22	550
8	130	195	250	125	195	130	130	195	285	67	28	635
9	140	235	250	135	235	140	145	235	330	115	48	890
10	160	235	300	150	235	150	155	235	350	125	52	1020
11	170	270	300	165	270	165	170	270	400	180	75	1455
12	180	270	300	180	270	180	185	270	405	200	85	1730



直交轴齿轮箱 Bevel-helical Gear Units

三级传动 Three Stage

立式安装 Vertical

类型 B3.V

Type B3.V

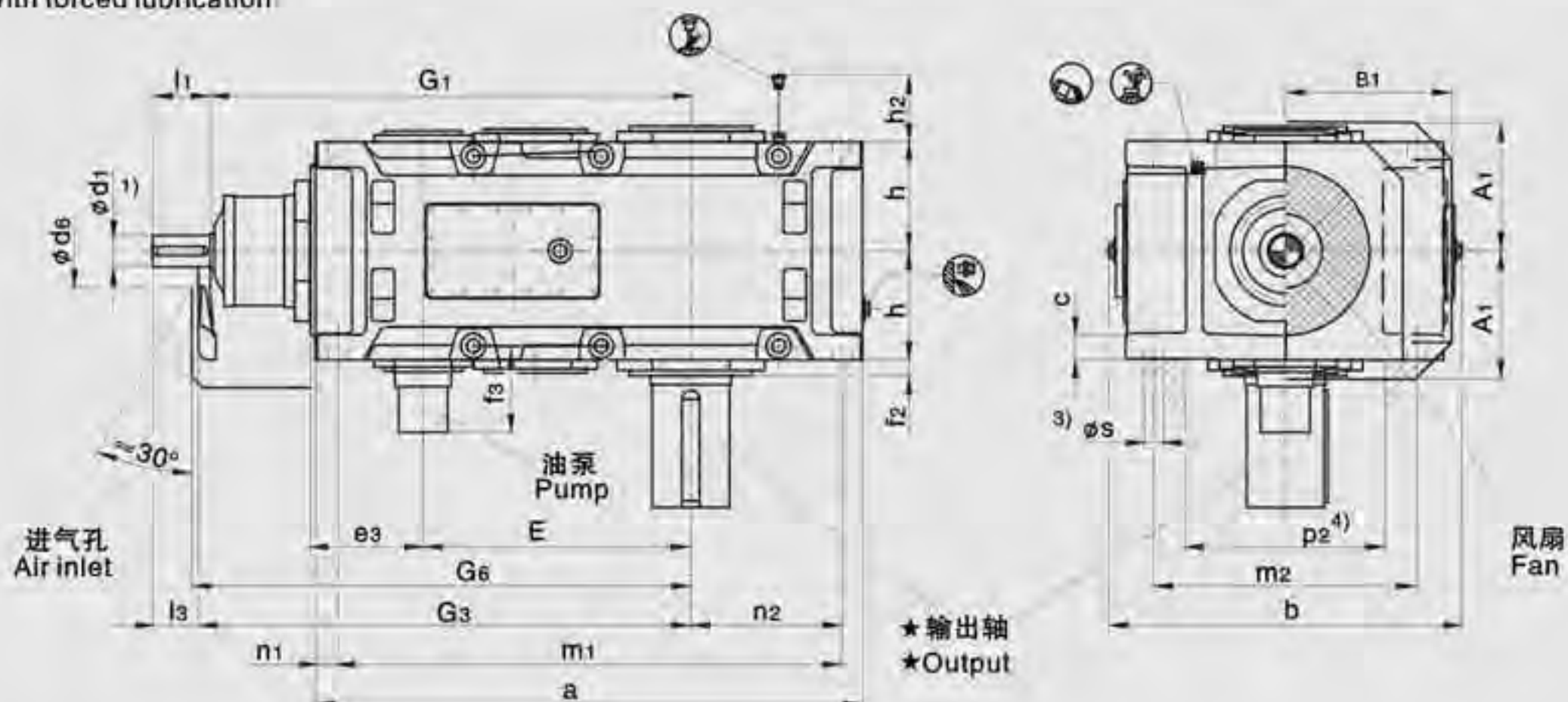
规格 13...18

Sizes 13...18

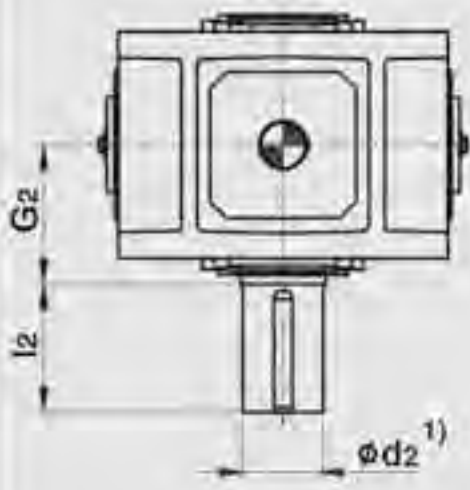
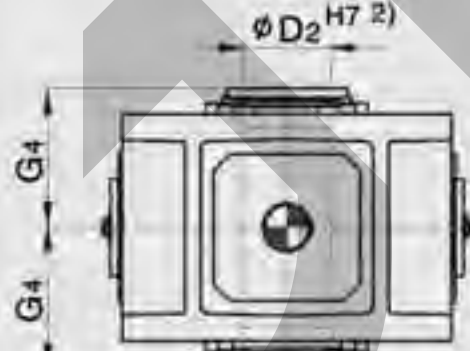
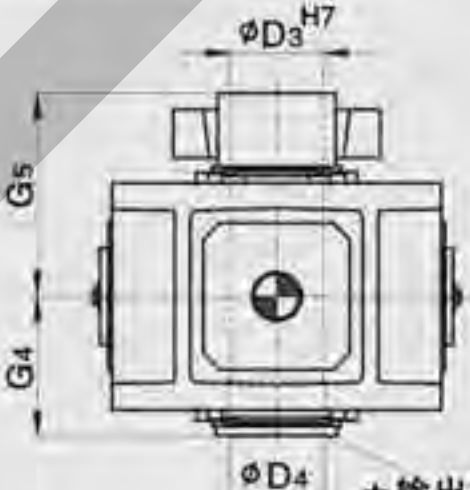
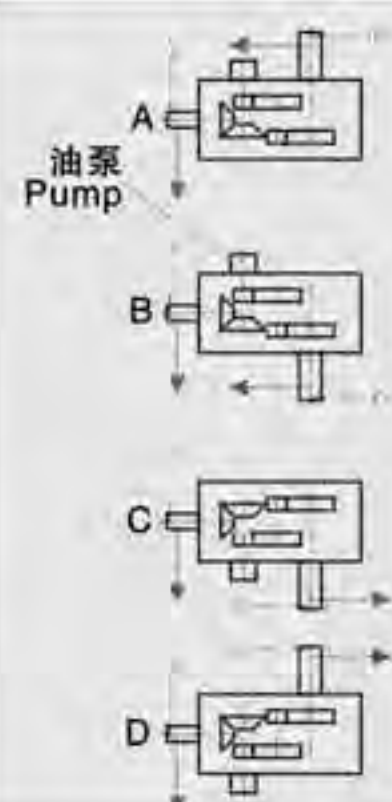
B3SV B3HV B3DV

采用浸油润滑

With forced lubrication



有关供油方式(浸油润滑或强制润滑),参见 103-111 页 Oil supply(dip or forced lubrication),see pages 103-111

★ 输出轴 Output			布置形式 Design
<p>B3SV 实心轴 Solid shaft</p> 	<p>B3HV 空心轴 Hollow shaft</p> 	<p>B3DV 带胀紧盘的空心轴 Hollow shaft for shrink disk</p>  <p>布置形式A+D 根据用户要求供货 Design A+D on request</p>	

1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover;for exact dimensions,please refer to us.



直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 立式安装 Vertical
类型 B3.V Type B3.V 规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																					
	输入轴 Input																		G ₁	G ₃		
	iN=12.5-45			iN=14-50			iN=16-56			iN=50-71			iN=56-80			iN=63-90						
	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃				
13	80	165	130							60	140	105							1125	1160		
14							80	165	130							60	140	105	1195	1230		
15	90	165	130							70	140	105							1367	1402		
16				90	165	130							70	140	105				1413	1448		
17	110	205	165							80	170	130							1560	1600		
18				110	205	165							80	170	130				1620	1660		
19										根据用户要求供货 Onrequest												
20																						
21																						
22																						

规格 Size	尺寸 mm Dimensions in mm										
	齿轮箱 Gear units										
	a	A ₁	b	B ₁	c	d ₅	θ ₃	E	f ₂	f ₃	
13	1290	325	900	475	61±2	210	265	635	35	170	
14	1430	325	900	475	61±2	210	265	705	35	170	
15	1550	365	980	520	72±2	210	320	762	42	170	
16	1640	365	980	520	72±2	210	320	808	42	170	
17	1740	395	1110	570	81±2	230	370	860	42	170	
18	1860	395	1110	570	81±2	230	370	920	42	170	
19					根据用户要求供货 Onrequest						
20											
21											
22											

规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	G ₆	h	h ₂	m ₁	m ₂	n ₁	n ₂	p ₂ ⁴⁾	s	
13	1180	272.5	300	1195	680	50	360	500	48	
14	1250	272.5	300	1335	680	50	430	500	48	
15	1420	310	340	1435	750	60	430	570	55	
16	1470	310	340	1525	750	60	475	570	55	
17	1620	340	380	1610	850	70	465	630	55	
18	1680	340	380	1730	850	70	525	630	55	
19				根据用户要求供货 Onrequest						
20										
21										
22										

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)		
	输出轴 Output												
	B3SV			B3HV		B3DV							
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ¹⁾	G ₄	D ₃	D ₄	G ₄	G ₅				
13	200	335	350	190	335	195	95	335	480	95	2260		
14	210	335	350	210	335	210	215	335	480	110	2615		
15	230	380	410	230	380	230	235	380	550	165	3540		
16	240	380	410	240	380	240	245	380	550	190	3765		
17	250	415	410	250	415	250	260	415	600	210	4760		
18	270	415	470	275	415	280	285	415	600	240	5240		
19						根据用户要求供货 Onrequest							
20													
21													
22													



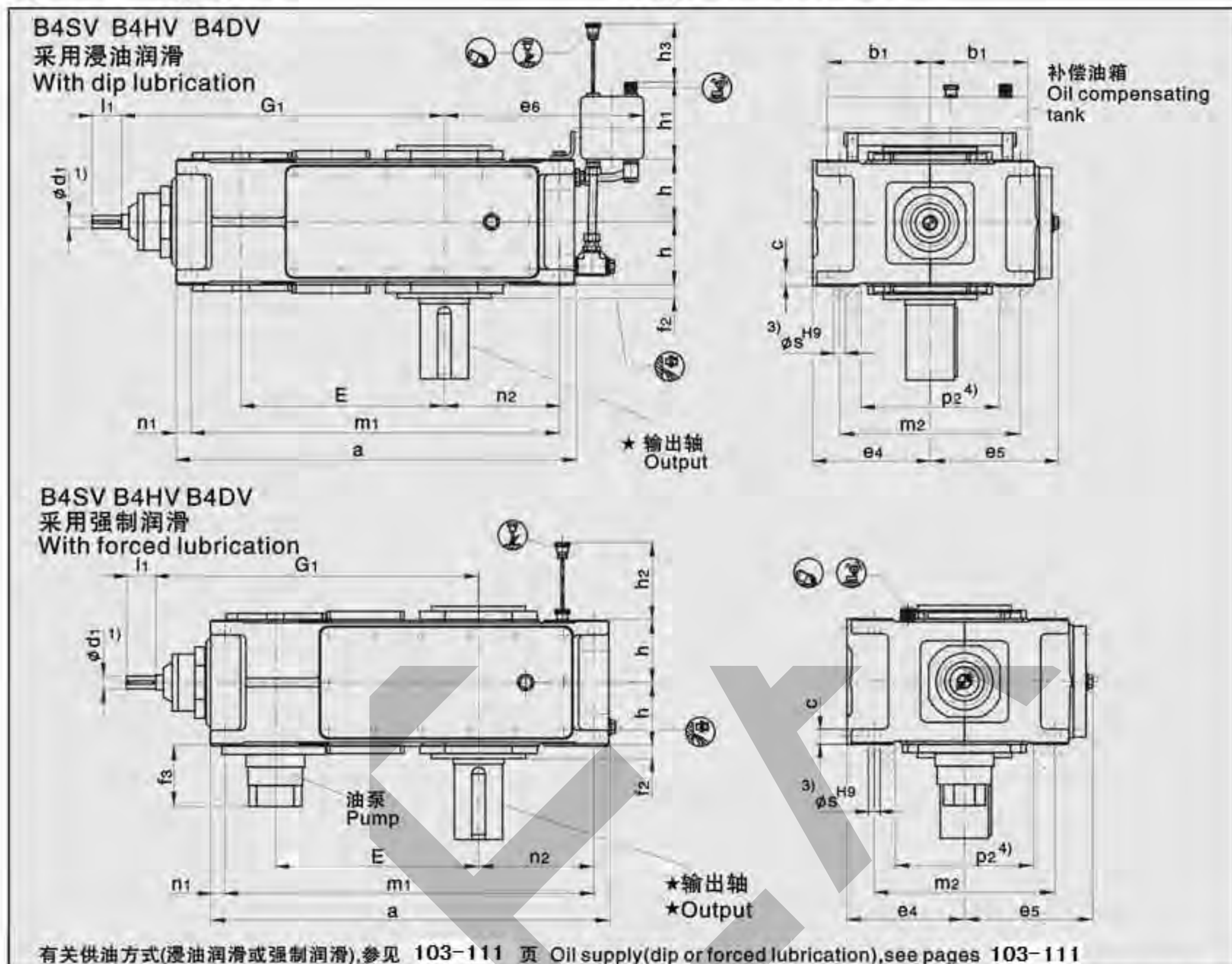
直交轴齿轮箱 Bevel-helical Gear Units

四级传动 Four Stage

立式安装 Vertical

类型 B4.V Type B4.V

规格 5 ...12 Sizes 5 ...12



★输出轴 Output			布置形式 Design
B4S 实心轴 Solid shaft	B4HV 空心轴 Hollow shaft	B4DV 带胀紧盘的空心轴 Hollow shaft for shrink disk <p>布置形式 A+D 根据用户要求供货 Design A+D on request</p>	

1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88.

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管 and 护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover;for exact dimensions,please refer to us.



直交轴齿轮箱
立式安装
规格 5... 12

Bevel-helical Gear Units
Vertical
类型 B4.V
Sizes 5... 12

四级传动
Type B4.V

Four Stage

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	in = 80 – 180		in = 100 – 224		in = 200 – 315		in = 250 – 400		G1
	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	
5	28	55			20	50			615
6			28	55			20	50	650
7	30	70			25	60			725
8			30	70			25	60	770
9	35	80			28	60			840
10			35	80			28	60	890
11	45	100			35	80			1010
12			45	100			35	80	1080

规格 Size	尺寸mm Dimensions in mm								
	齿轮箱 Gear units								
	a	b ₁	c	ø4	ø5	ø6	E	f ₂	f ₃
5	690	240	30 ± 1	230	252	385	405	28	200
6	770	240	30 ± 1	230	252	425	440	28	200
7	845	240	36 ± 1	280	292	425	495	30	120
8	950	240	36 ± 1	280	302	485	540	32	120
9	1000	330	45 ± 1.5	320	342	560	580	32	120
10	1100	330	45 ± 1.5	320	342	610	630	32	120
11	1200	330	54 ± 1.5	380	402	595	705	35	130
12	1355	330	54 ± 1.5	380	410	680	775	35	130

规格 Size	尺寸mm Dimensions in mm									
	齿轮箱 Gear units									
	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₂	s
5	127.5	205	190	240	630	360	30	175	270	24
6	127.5	205	190	240	710	360	30	220	270	24
7	150	205	165	250	775	430	35	215	330	28
8	150	205	165	250	880	430	35	275	330	28
9	185	275	205	330	920	490	40	260	370	36
10	185	275	205	330	1020	490	40	310	370	36
11	215	275	240	340	1100	600	50	295	440	40
12	215	275	240	340	1255	600	50	380	440	40

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油浸润 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	B4SV			B4HV		B4DV						
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅			
5	100	165	210	95	165	100	100	165	240	36	15	335
6	110	165	210	105	165	110	110	165	240	40	16	385
7	120	195	210	115	195	120	120	195	280	60	30	555
8	130	195	250	125	195	130	130	195	285	70	35	655
9	140	235	250	135	235	140	145	235	330	110	60	890
10	160	235	300	150	235	150	155	235	350	130	67	1025
11	170	270	300	165	270	165	170	270	400	180	75	1485
12	180	270	300	180	270	180	185	270	405	195	85	1750



直交轴齿轮箱 Bevel-helical Gear Units

四级传动 Four Stage

立式安装 Vertical

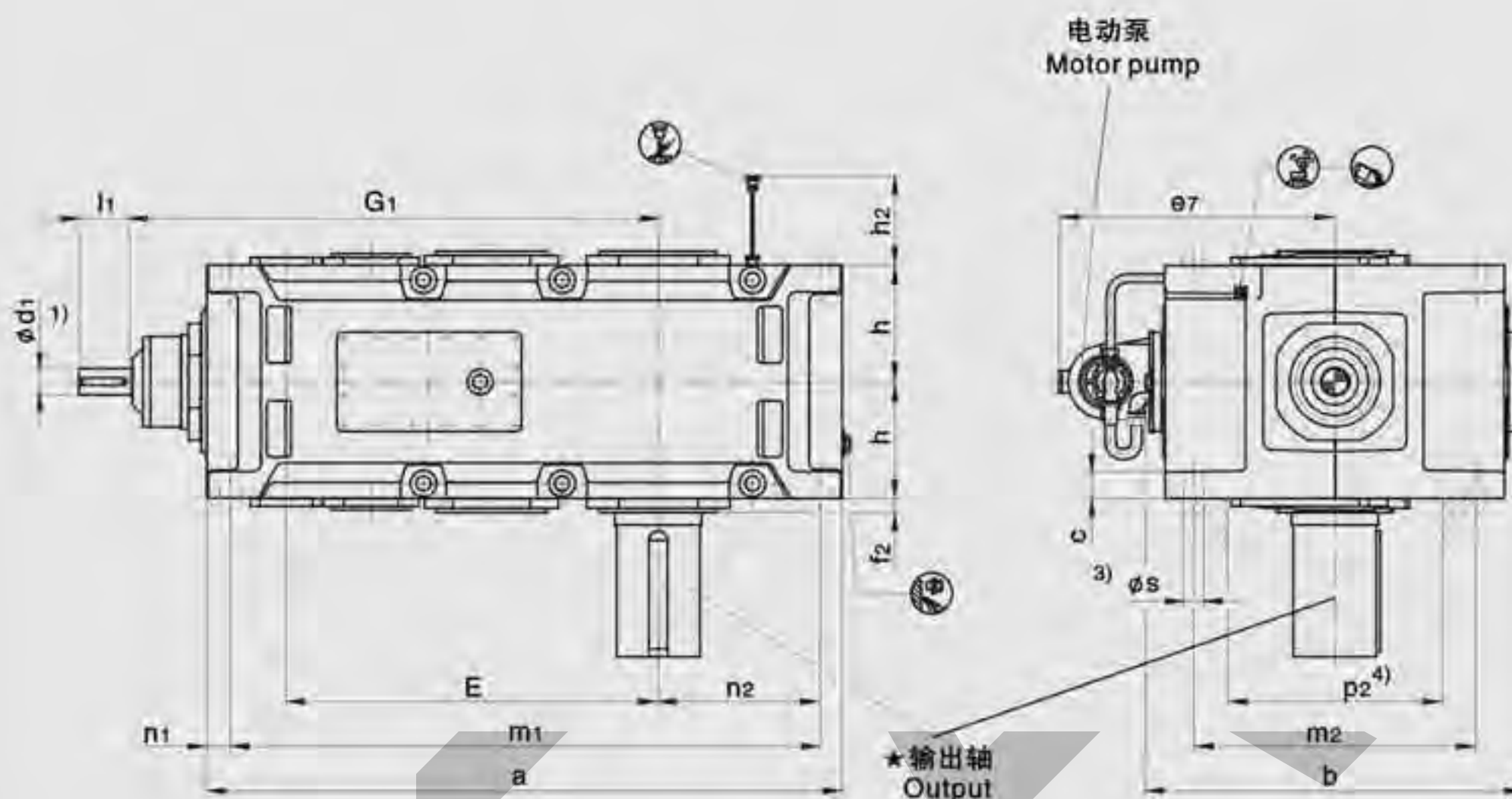
类型 B4V. Type B4V.

规格 13 ...18 Sizes 13 ...18

B4SV B4HV B4DV

采用浸油润滑

With dip lubrication

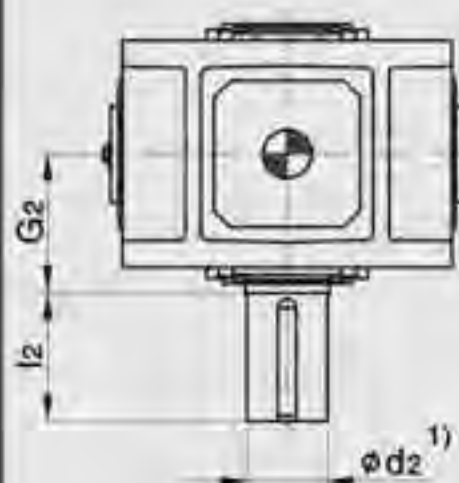


有关供油方式(浸油润滑或强制润滑),参见 103-111 页 Oil supply(dip or forced lubrication),see pages 103-111

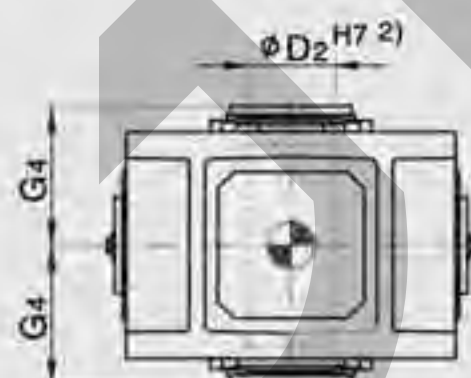
★输出轴 Output

布置形式 Design

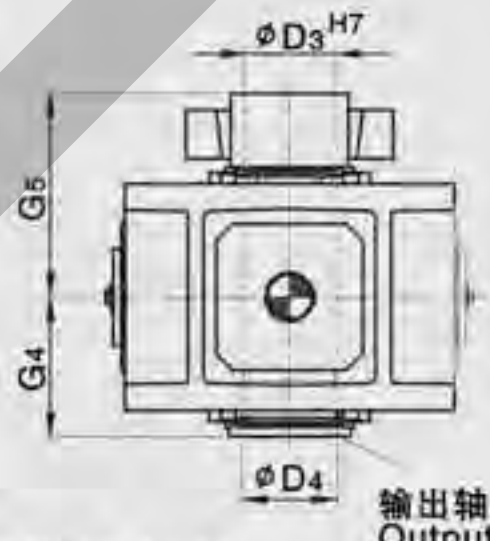
B4SV
实心轴
Solid shaft



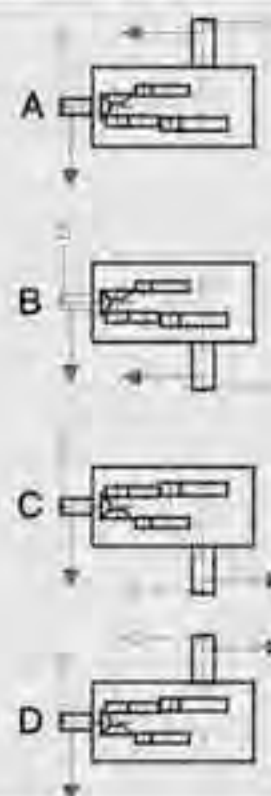
B4HV
空心轴
Hollow shaft



B4DV
带胀紧盘的空心轴



布置形式 A+ D
Design A+D on request



1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

有关平键 GB/T1095-1979型和中心孔,参见第 87-88 页。 For parallel key GB/T1095-1979 and for center hole,see page 87-88.

2) 键槽 GB/T1095-1979 Keyway GB/T1095-1979.

3) 扭力支撑位于工作机侧 Torque support on driven machine side.

4) 有关油泵、油管和护盖的安装空间及确切尺寸,请与我们联系 Space for pump, pipes and cover;for exact dimensions,please refer to us.



直交轴齿轮箱
立式安装
规格 13 ... 18

Bevel-helical Gear Units
Vertical 类型 B4.V
Sizes 13 ... 18

四级传动
Type B4.V

Four Stage

规格 Size	尺寸 mm Dimensions in mm												G ₁
	输入轴 Input												
	i _N = 80 – 180		i _N = 90 – 200		i _N = 100 – 224		i _N = 200 – 315		i _N = 224 – 355		i _N = 250 – 400		
	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	
13	55	110					40	100					1170
14					55	110					40	100	1240
15	70	135					50	110					1402
16			70	135					50	110			1448
17	70	135					50	110					1450
18			70	135					50	110			1510
19						根据用户要求供货 On request							
20													
21													
22													

规格 Size	尺寸mm Dimensions in mm													
	齿轮箱 Gear units													
	a	b	c	e ₇	E	f ₂	h	h ₂	m ₁	m ₂	n ₁	n ₂	P ₂	s
13	1395	900	61 ± 2	695	820	35	272.5	300	1300	680	50	360	500	48
14	1535	900	61 ± 2	695	890	35	272.5	300	1440	680	50	430	500	48
15	1680	980	72 ± 2	735	987	42	310	340	1565	750	60	430	570	55
16	1770	980	72 ± 2	735	1033	42	310	340	1655	750	60	475	570	55
17	1770	1110	81 ± 2	795	1035	42	340	374	1640	850	70	465	630	55
18	1890	1110	81 ± 2	795	1095	42	340	374	1760	850	70	525	630	55
19														
20							根据用户要求供货 On request							
21														
22														

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	B4SH			B4HV		B4DV					
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	G ₅		
13	200	335	350	190	335	190	195	335	480	130	2280
14	210	335	350	210	335	210	215	335	480	150	2605
15	230	380	410	230	380	230	235	380	550	200	3435
16	240	380	410	240	380	240	245	380	550	235	3765
17	250	415	410	250	415	250	260	415	600	215	4460
18	270	415	470	275	415	280	285	415	600	250	4930
19						根据用户要求供货 On request					
20											
21											
22											

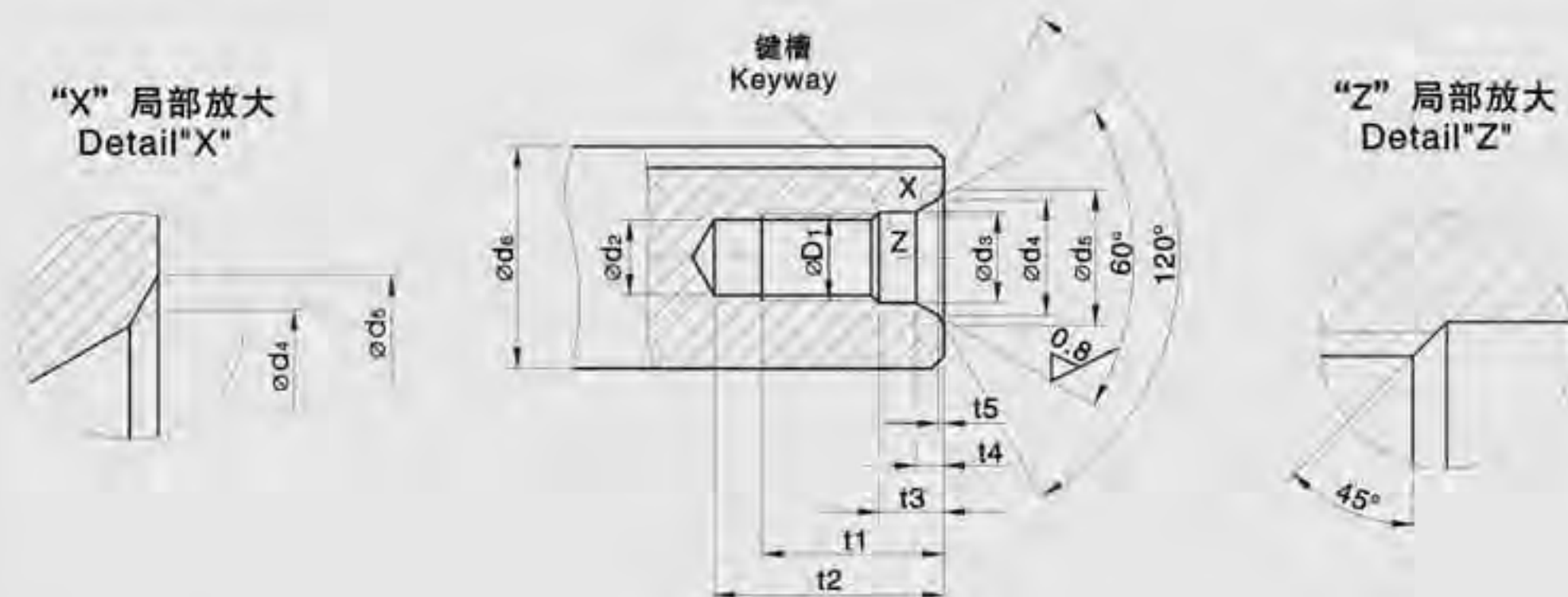


齿轮箱 Gear Units

C 型轴端中心孔, 符合 GB145-1985 标准 Centre Holes, Form C in Shaft Ends GB145-1985

C型中心孔 Form C

锥孔, 带一段直孔和护锥沉孔 Tapped hole, with straight running face and counterbore



推荐尺寸 Recommended diameters		C型 From C											
d ₆ ¹⁾		C 中心孔 C- Centering	d ₁	d ₂	d ₃	d ₄	d ₅	t ₁ +2	t ₂		t ₃ +1	t ₄ ≈	t ₅ ≈
大于 above	至 to								min.	max.			
mm									mm				
16	21	C 6	M6	5	6.4	9.6	10.5	16	20	22	5	2.8	0.4
21	24	C 8	M8	6.8	8.4	12.2	13.2	19	25	28	6	3.3	0.4
24	30	C 10	M10	8.5	10.5	14.9	16.3	22	30	34	7.5	3.8	0.6
30	38	C 12	M12	10.2	13	18.1	19.8	28	37	42	9.5	4.4	0.7
38	50	C 16	M16	14	17	23	25.3	36	45	50	12	5.2	1.0
50	85	C 20	M20	17.5	21	28.4	31.3	42	53	59	15	6.4	1.3
85	130	C 24	M24	21	25	34.2	38	50	63	68	18	8	1.6
130*	225*	C 30	M30*	26.5	31	44	48	60	77	83	17	11	1.9
225*	320*	C 36	M36*	32	37	55	60	74	93	99	22	15	2.3
220*	500*	C 42	M42*	37.5	43	65	71	84	105	111	26	19	2.7

1) 工件加工后最终尺寸 1) Diameter of the finished work piece

*) 不是根据GB145-1985确定的尺寸 *) Dimensions not acc. to GB145-1985



齿轮箱 Gear units

选择 ISO 配合精度 Selection of ISO fits

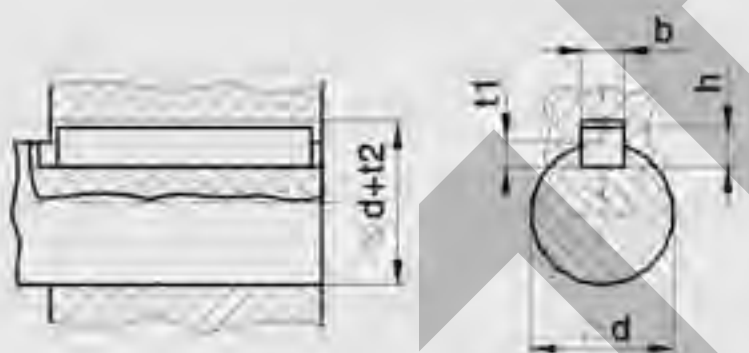
平键和键槽 Parallel keys and keyways

选择 ISO 配合精度 Selection of ISO fits				
选择 ISO 配合精度 Selection of ISO fits	轴 shaft d		轴公差 Shaft tolerance	孔公差 Bore tolerance
	大于 Above mm	至 To mm		
轴公差根据 OMITER 标准确定 Shaft tolerance acc. To OMITER standard		50	k6	H7
	50		m6	

对于重载工件条件，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 ISOP9 公差等级。

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.

平键 Parallel keys						
平键紧固方式，采用无锥度联接。 Drive type fastening without taper action	直径 Diameter d		宽度1) Width 1) b 1) mm	高度 Height h mm	轴键槽深度 Depth of key- way in shaft t ₁ mm	轮毂键槽深度 Depth of key- way in hub d + t ₂ GB/T1095- 1979 mm
	大于 Above mm	至 To mm				
平键和键槽根据 GB/T1095-1979 标准确定 Parallel key and keyway acc. to GB/T1095-1979	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



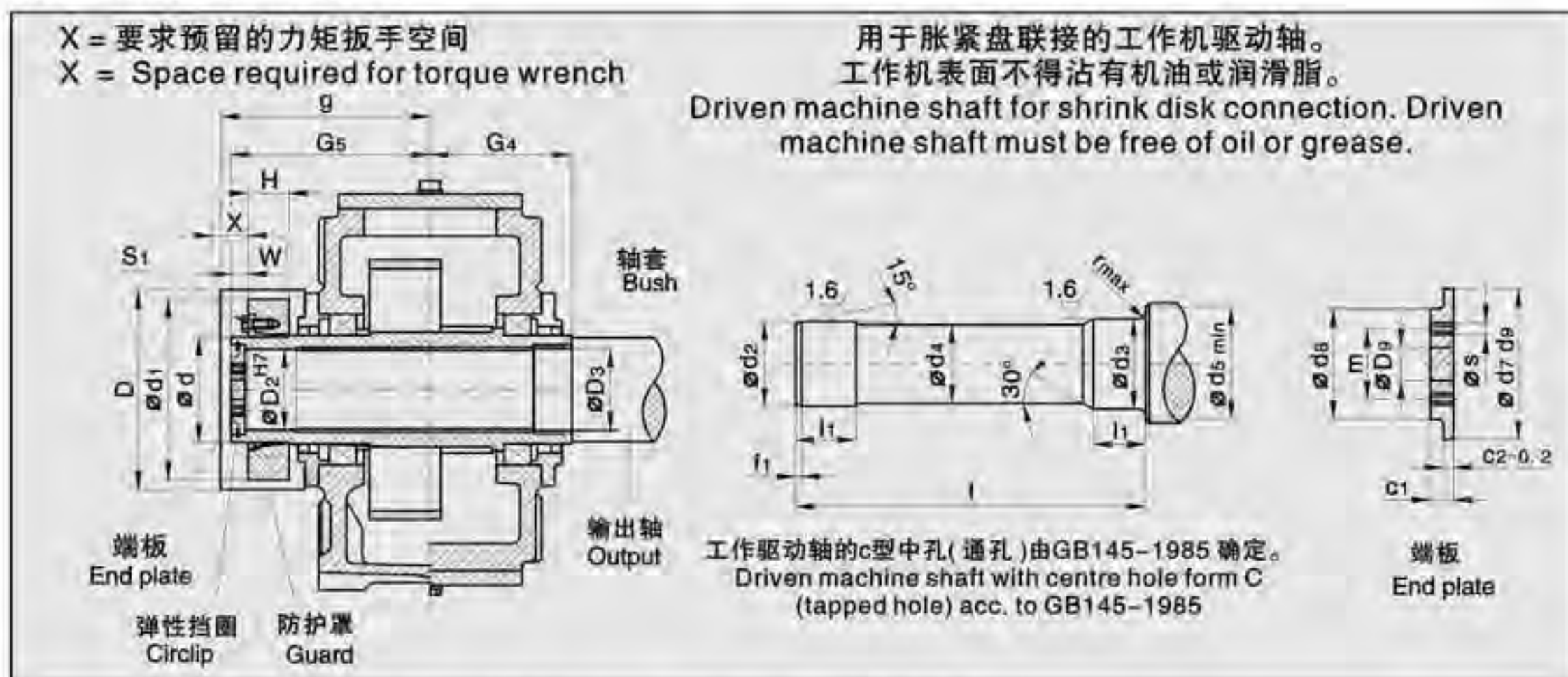
- 1) 重载工作条件下轮毂平键键槽宽度 b 的公差带应按 ISOJS9 或 ISOP9 确定。
- 1) The tolerance zone for the hub keyway width b for parallel keys is ISO JS9, or ISO P9 for heavy-duty operating conditions.



齿轮箱 Gear Units 带涨紧盘的空心轴 Hollow Shaft For Shrink Disk

类型 H2,H3,H4,B3,B4 Type H2,H3,H4,B3,B4

规格 3...26 Sizes 3...26



类型 H2D,H3D,H4D,B3D,B4D Types H2D, H3D, H4D, B3D, B4D																												
齿轮箱规格 Gear unit size	工作机驱动轴 ²⁾ Driven machine shaft								端板 End plate								弹性挡圈 Ring Circlip	空心轴 Hollow shaft				胀紧盘 ¹⁾ Shrink disk				螺钉 Screw		
	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.	GB89/ 3.2-86	D ₂	D ₃	G ₄	G ₅	类型 Type	d	d ₁	H	W	s ₁	
	mm																mm											
	3	70 g ₆	70 g ₆	69.5	80	4	286	38	2	17	7	75	55	22	40	M8	2	75x2.5	70	70	125	180	90-32	90	155	38	20	M 10
4	85 g ₆	85 h ₆	84.5	95	4	326	48	2	17	7	90	70	22	50	M8	2	90 x 3	85	85	140	205	110-32	110	185	49	20	M 12	
5	100 g ₆	100 h ₆	99.5	114	5	383	53	2	20	8	105	80	26	55	M10	2	105 x 4	100	100	165	240	125-32	125	215	53	20	M 12	
6	110 g ₆	110 h ₆	109.5	124	5	383	58	3	20	8	115	85	26	60	M10	2	115 x 4	110	110	165	240	140-32	140	230	58	20	M 14	
7	120 g ₆	120 h ₆	119.5	134	5	453	68	3	20	8	125	90	26	65	M12	2	125 x 4	120	120	195	280	155-32	155	263	62	23	M 14	
8	130 g ₆	130 h ₆	129.5	145	6	458	73	3	20	8	135	100	26	70	M12	2	135 x 4	130	130	195	285	165-32	165	290	68	23	M 16	
9	140 g ₆	145 m ₆	139.5	160	6	539	82	4	23	10	150	110	33	80	M12	2	150 x 4	140	145	235	330	175-32	175	300	68	28	M 16	
10	150 g ₆	155 m ₆	149.5	170	6	559	92	4	23	10	160	120	33	90	M12	2	160 x 4	150	155	235	350	200-32	200	340	85	28	M 16	
11	165 f ₆	170 m ₆	164.5	185	7	644	112	4	23	10	175	130	33	90	M12	2	175 x 4	165	170	270	400	220-32	220	370	103	30	M 20	
12	180 f ₆	185 m ₆	179.5	200	7	649	122	4	23	10	190	140	33	100	M16	2	190 x 4	180	185	270	405	240-32	240	405	107	30	M 20	
13	190 f ₆	195 m ₆	189.5	213	7	789	137	5	23	10	200	150	33	110	M16	2	200 x 4	190	195	335	480	260-32	260	430	119	30	M 20	
14	210 f ₆	215 m ₆	209.5	233	8	784	147	5	28	14	220	170	33	130	M16	2	220 x 5	210	215	335	480	280-32	280	460	132	30	M 20	
15	230 f ₆	235 m ₆	229.5	253	8	899	157	5	28	14	240	180	39	140	M16	2	240 x 5	230	235	380	550	300-32	300	485	140	35	M 24	
16	240 f ₆	245 m ₆	239.5	263	8	899	157	5	28	14	250	190	39	150	M20	2	250 x 5	240	245	380	550	320-32	320	520	140	35	M 24	
17	250 f ₆	260 m ₆	249.5	278	8	982	177	5	30	14	265	200	39	150	M20	2	265 x 5	250	260	415	600	340-32	340	570	155	35	M 24	
18	280 f ₆	285 m ₆	279.5	306	9	982	177	5	30	14	290	210	39	160	M20	2	290 x 5	280	285	415	600	360-32	360	590	162	35	M 24	
19	285 f ₆	295 m ₆	284.5	316	9	1100	187	5	32	15	300	220	39	170	M24	2	300 x 5	285	295	465	670	380-32	380	640	166	40	M 27	
20	310 f ₆	315 m ₆	309.5	336	9	1100	187	5	32	15	320	230	39	180	M24	2	320 x 6	310	315	465	670	390-32	390	650	166	40	M 27	
21	330 f ₆	335 m ₆	329	358	9	1160	205	5	40	20	340	250	45	190	M24	2	340 x 6	330	335	490	715	420-32	420	670	186	45	M 27	
22	340 f ₆	345 m ₆	339	368	9	1170	215	5	40	20	350	260	45	200	M24	2	350 x 6	340	345	490	725	440-32	440	720	194	45	M 27	
23	根据用户要求供货 On request																											
24																												
25																												
26																												

1) 胀紧盘不在我们的供货范围之内。如有需要的话, 请另行订货。

Shrink disk does not belong to our scope of supply. Please order separately, if required.

2) 工作机驱动轴材质: 60 或强度更高的钢。根据用户要求, 胀紧盘可布置在工作机侧。工作机驱动轴尺寸函索即复。

Material of driver machine shaft: 60 or higher strength. Shrink disk on machine side on request. Shrink disk is supplied as loose item. Dimensions of machine shaft on request.



齿轮箱 Gear units

类型 B2D. Type B2D.

带胀紧盘联接的空心轴 Hollow shafts for shrink disks

规格 2 ... 18 Sizes 2 ... 18

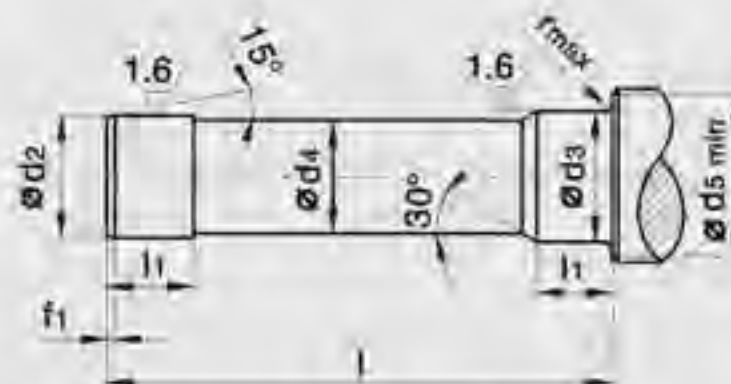
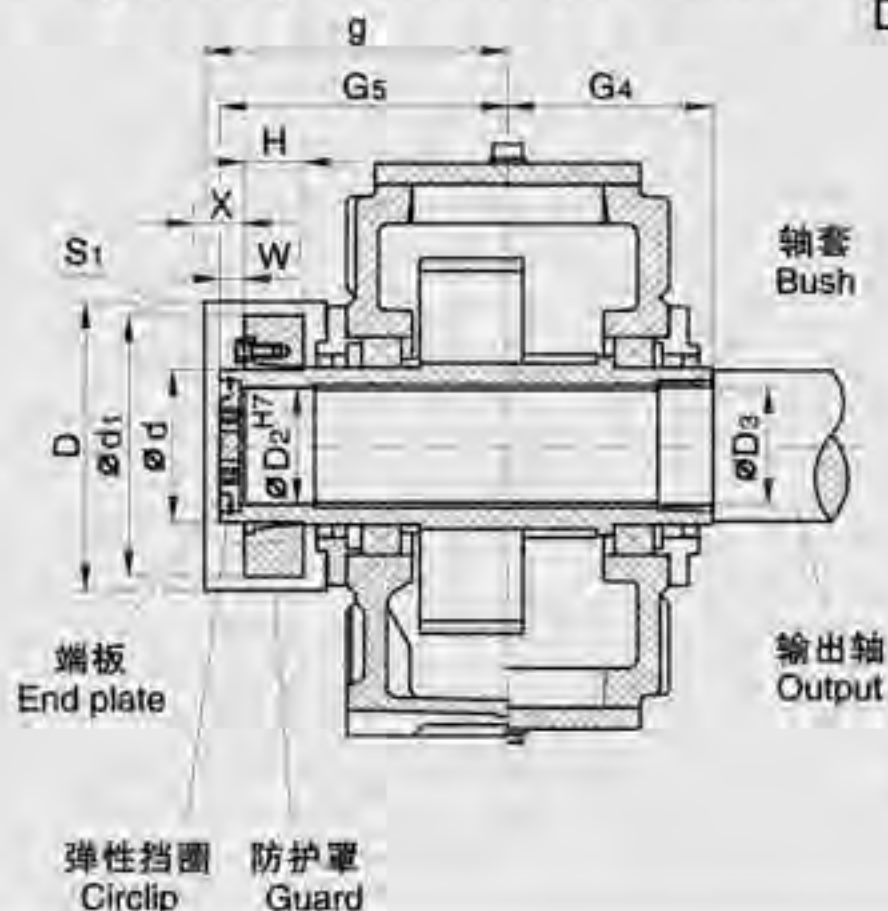
X = 要求预留的力矩扳手空间

X = Space required for torque wrench

用于胀紧盘联接的工作机驱动轴。

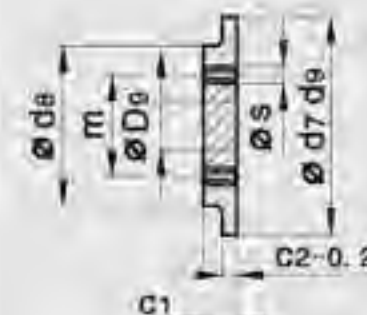
工作机表面不得沾有机油或润滑脂。

Driven machine shaft for shrink disk connection. Driven machine shaft must be free of oil or grease.



工作驱动轴的 C 型中孔(通孔)由 GB145-1985 确定。

Driven machine shaft with centre hole form C (tapped hole) acc. to GB145-1985

端板
End plate

齿轮箱规格 Gear unit size	类型 B2D																Type B2D.													
	工作机驱动轴 ²⁾ Driven machine shaft						端板 End plate										弹性挡圈 Ring Circlip	空心轴 Hollow shaft				胀紧盘 ¹⁾ Shrink disk				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.	GB89/ 3.2-86	D ₂	D ₃	G ₄	G ₅	类型 Type	d	d ₁	H	W	s ₁	D	g	
	mm																mm													
2	60 g _e	60 g _e	59.5	70	3	300	36	2	13	6	65	47	22	35	M6	2	65x2.5	60	60	135	180	80-32	80	141	31	16	M10	180	200	
3	70 g _e	70 h _e	69.5	80	4	326	38	2	17	7	75	55	22	40	M8	2	75x2.5	70	70	145	200	90-32	90	155	38	20	M10	200	220	
4	85 g _e	85 h _e	84.5	95	4	386	48	2	17	7	90	70	22	50	M8	2	90 x 3	85	85	170	235	110-32	110	185	49	20	M12	235	250	
5	100 g _e	100 h _e	99.5	114	5	453	53	2	20	8	105	80	26	55	M10	2	105 x 4	100	100	200	275	125-32	125	215	53	20	M12	275	285	
6	110 g _e	110 h _e	109.5	124	5	453	58	3	20	8	115	85	26	60	M10	2	15 x 4	110	110	200	275	140-32	140	230	58	20	M14	285	285	
7	120 g _e	120 h _e	119.5	134	5	533	68	3	20	8	125	90	26	65	M12	2	125 x 4	120	120	235	320	155-32	155	263	62	23	M14	330	335	
8	130 g _e	130 h _e	129.5	145	6	538	73	3	20	8	135	100	26	70	M12	2	135 x 4	130	130	235	325	165-32	165	290	68	23	M16	340	340	
9	140 g _e	145 m _e	139.5	160	6	609	82	4	23	10	150	110	33	80	M12	2	150 x 4	140	145	270	365	175-32	175	300	68	28	M16	360	380	
10	150 g _e	155 m _e	149.5	170	6	629	92	4	23	10	160	120	33	90	M12	2	160 x 4	150	155	270	385	200-32	200	340	85	28	M16	395	400	
11	165 f _e	170 m _e	164.5	185	7	744	112	4	23	10	175	130	33	90	M12	2	175 x 4	165	170	320	450	220-32	220	370	103	30	M20	435	470	
12	180 f _e	185 m _e	179.5	200	7	749	122	4	23	10	190	140	33	100	M16	2	190 x 4	180	185	320	455	240-32	240	405	107	30	M20	450	470	
14	210 f _e	215 m _e	209.5	233	8	894	147	5	28	14	220	170	33	130	M16	2	220 x 5	210	215	390	535	280-32	280	460	132	30	M20	525	555	
16	240 f _e	245 m _e	239.5	263	8	1039	157	5	28	14	250	190	39	150	M20	2	250 x 5	240	245	450	620	320-32	320	520	140	35	M24	595	645	
18	280 f _e	285 m _e	279.5	306	9	1177	177	5	30	14	290	210	39	160	M20	2	290 x 5	280	285	510	700	360-32	360	590	162	35	M24	635	725	



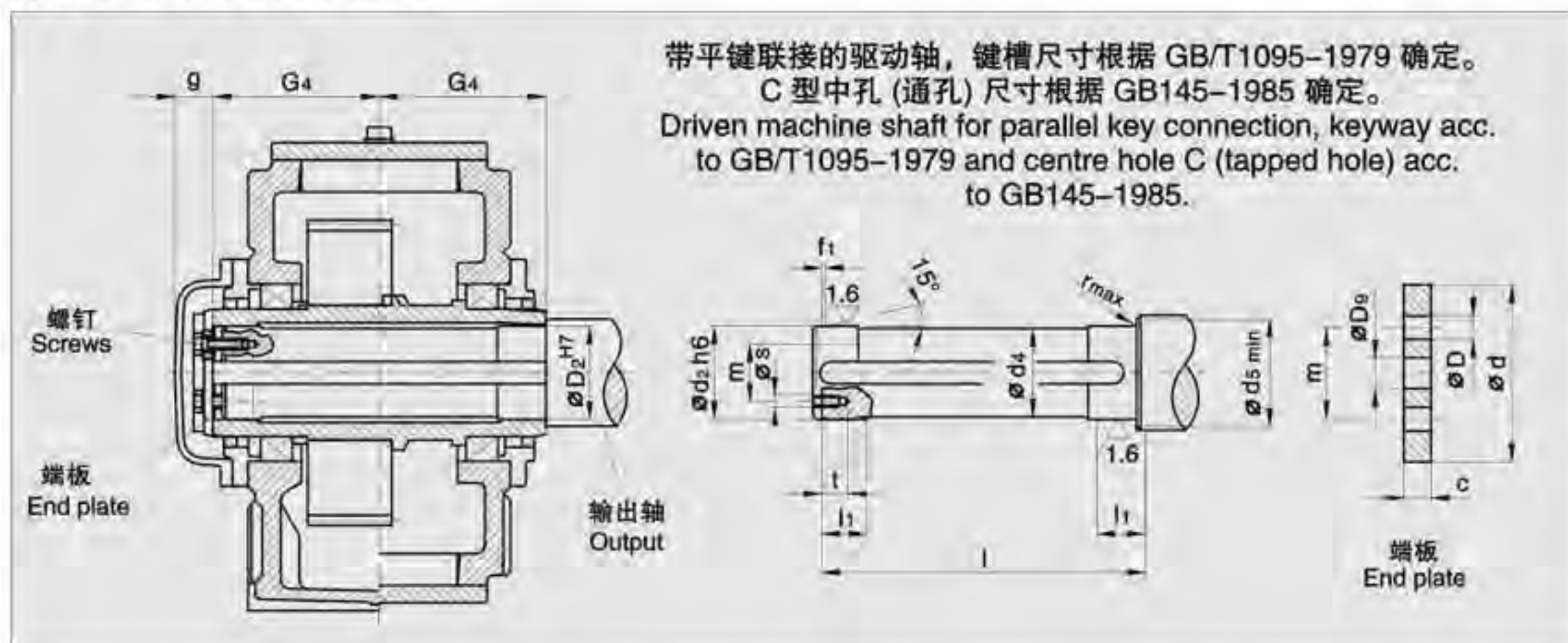
齿轮箱 Gear Units

带平键联接的空心轴 Hollow Shafts for Parallel Key Connections

类型 H2,H3, H4, B3, B4

Types H2, H3, H4, B3, B4

规格 3 ...18 Sizes 3 ... 18



类型 H2,H3, H4, B3, B4 Types H2, H3, H4, B3, B4																			
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 _g	d	m	规格Size	数量 Qty.	D ₂	G ₄	g
	mm																mm		
3	65	64.5	73	4	248	30	1.2	M 10	18	8	11	18	78	45	M 10 x 25	2	65	125	35
4	80	79.5	88	4	278	35	1.2	M 10	18	10	11	22	100	60	M 10 x 25	2	80	140	35
5	95	94.5	105	5	328	40	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	95	165	40
6	105	104.5	116	5	328	45	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	105	165	40
7	115	114.5	126	5	388	50	1.6	M 12	20	12	13.5	26	140	80	M 12 x 30	2	115	195	40
8	125	124.5	136	6	388	55	2.5	M 12	20	12	13.5	26	150	85	M 12 x 30	2	125	195	40
9	135	134.5	147	6	467	60	2.5	M 12	20	12	13.5	33	160	90	M 12 x 30	2	135	235	45
10	150	149.5	162	6	467	65	2.5	M 12	20	12	13.5	33	185	110	M 12 x 30	2	150	235	45
11	165	164.5	177	7	537	70	2.5	M 16	28	15	17.5	33	195	120	M 16 x 40	2	165	270	45
12	180	179.5	192	7	537	75	2.5	M 16	28	15	17.5	33	220	130	M 16 x 40	2	180	270	45
13	190	189.5	206	7	667	80	3	M 16	28	18	17.5	33	230	140	M 16 x 40	2	190	335	45
14	210	209.5	226	8	667	85	3	M 16	28	18	17.5	33	250	160	M 16 x 40	2	210	335	45
15	230	229.5	248	8	756	100	3	M 20	38	25	22	39	270	180	M 20 x 55	4	230	380	60
16	240	239.5	258	8	756	100	3	M 20	38	25	22	39	280	180	M 20 x 55	4	240	380	60
17	250	249.5	270	8	826	110	4	M 20	38	25	22	39	300	190	M 20 x 55	4	250	415	60
18	275	274.5	295	9	826	120	4	M 20	38	25	22	39	330	210	M 20 x 55	4	275	415	60

1) 工作机驱动轴材质：60 或强度更高的钢。平键不在我们的供货范围之内。如果需要的话，请另行订货。

Material of driven machine shaft: 60 or higher strength. Parallel key does not belong to our scope of supply .

Please order separately, if required.

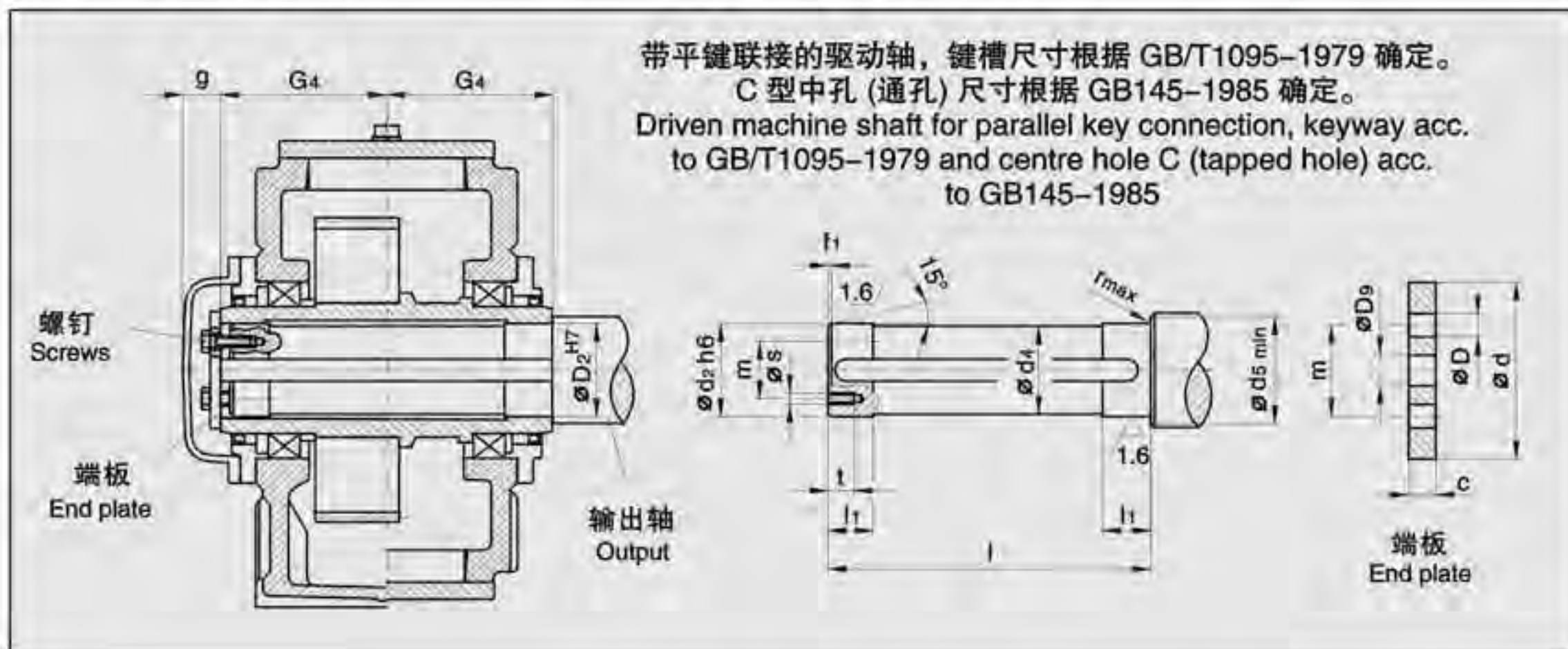


齿轮箱 Gear Units

类型 B2H. Type B2H.

带平键联接的空心轴 Hollow Shafts for Parallel Key Connections

规格 2 ...18 Sizes 2 ... 18



类型 B2H.										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	l ₁	r	s	t	c	D	D ₉	d	m	规格 Size	数量 Qty.	D ₂	G ₄	g	
	mm															mm				
	2	55	54.5	63	3	268	30	1.2	M 8	15	8	9	18	70	40	M 8 x 20	2	55	135	35
3	65	64.5	73	4	288	30	1.2	M 10	18	8	11	18	78	45	M 10 x 25	2	65	145	35	
4	80	79.5	88	4	338	35	1.2	M 10	18	10	11	22	100	60	M 10 x 25	2	80	170	35	
5	95	94.5	105	5	398	40	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	95	200	40	
6	105	104.5	116	5	398	45	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	105	200	40	
7	115	114.5	126	5	468	50	1.6	M 12	20	12	13.5	26	140	80	M 12 x 30	2	115	235	40	
8	125	124.5	136	6	468	55	2.5	M 12	20	12	13.5	26	150	85	M 12 x 30	2	125	235	40	
9	135	134.5	147	6	537	60	2.5	M 12	20	12	13.5	33	160	90	M 12 x 30	2	135	270	45	
10	150	149.5	162	6	537	65	2.5	M 12	20	12	13.5	33	185	110	M 12 x 30	2	150	270	45	
11	165	164.5	177	7	637	70	2.5	M 16	28	15	17.5	33	195	120	M 16 x 40	2	165	320	45	
12	180	179.5	192	7	637	75	2.5	M 16	28	15	17.5	33	220	130	M 16 x 40	2	180	320	45	
14	210	209.5	226	8	777	85	3	M 16	28	18	17.5	33	250	160	M 16 x 40	2	210	390	45	
16	240	239.5	258	8	896	100	3	M 20	38	25	22	39	280	180	M 20 x 55	4	240	450	60	
18	275	274.5	295	9	1016	120	4	M 20	38	25	22	39	330	210	M 20 x 55	4	275	510	60	

1) 工作机驱动轴材质: 60 或强度更高的钢。平键不在我们的供货范围之内。如果需要的话, 请另行订货。
Material of driven machine shaft: 60 or higher strength. Parallel key does not belong to our scope of supply. Please order separately, if required.



平行轴齿轮箱 Helical Gear Units 实际速比 Actual Ratios

类型 H1..., H2..., H3..., H4.. Types H1..., H2..., H3..., H4..

规格 1 ... 13 Sizes 1 ... 13

iN	实际速比 i Actual ratios i												
	齿轮箱规格 Gear unit sizes												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1.25	1.250		1.243		1.256		1.263		1.270				
1.4	1.415		1.371		1.378		1.389		1.400				
1.6	1.605		1.594		1.588		1.606		1.625		1.636		1.588
1.8	1.829		1.829		1.839		1.774		1.800		1.806		1.839
2.0	2.000		2.000		2.034		1.966		2.000		2.000		2.034
2.24	2.194		2.194		2.259		2.308		2.231		2.222		2.259
2.5	2.536		2.536		2.520		2.583		2.500		2.480		2.520
2.8	2.808		2.808		2.826		2.800		2.741		2.783		2.826
3.15	3.125		3.125		3.190		3.130		3.208		3.080		3.208
3.55	3.500		3.500		3.591		3.524		3.591		3.478		3.591
4.0	3.950		3.950		4.050		4.000		4.050		3.905		4.050
4.5	4.476		4.435		4.619		4.400		4.381		4.421		4.619
5.0	5.053		4.952		4.900		4.905		4.947		5.150		4.900
5.6	5.571		5.579		5.556		5.526		5.684		5.474		5.556
6.3			6.232	6.319	6.286		6.088		6.260		6.246		6.410
7.1			7.099	6.857	7.213		7.048		7.247		6.900		7.100
8.0			7.765	7.778	7.889	7.792	7.799	7.676	8.018	7.848	7.644	7.941	7.889
9.0			8.516	8.485	8.652	8.940	8.660	8.887	8.904	9.085	8.974	8.772	8.799
10			9.845	9.722	10.002	9.778	9.660	9.833	9.932	10.053	10.046	9.718	9.861
11.2			10.900	10.694	11.075	10.724	10.648	10.920	11.138	11.163	10.889	11.410	10.811
12.5			12.132	12.444	12.326	12.397	11.807	12.180	12.574	12.452	12.174	12.773	12.655
14			13.588	13.865	13.806	13.726	13.939	13.426	14.152	13.964	13.704	13.844	14.164
16			15.335	15.556	15.581	15.278	15.717	14.887	15.962	15.765	15.556	15.478	15.975
18			17.378	17.602	17.493	17.111	17.598	17.576	18.204	17.743	17.111	17.423	17.280
20			19.616	19.444	19.534	19.311	19.742	19.817	19.312	20.012	19.074	19.778	19.515
22.4			21.630	22.037	22.006	21.681	20.982	22.189	21.895	22.824	21.491	21.756	22.020
25					25.011	24.212	25.540	24.892	25.439	24.212	24.706	24.251	25.372
28					28.490	27.275	27.711	26.456	29.187	27.451	28.602	27.325	29.373
31.5					31.161	30.999	31.433	32.202	31.924	31.894	31.648	31.412	32.501
35.5					34.177	35.312	34.291	34.940	35.013	36.593	35.144	36.366	36.092
40					39.508	38.622	39.292	39.633	40.474	40.024	39.200	40.238	40.257
45					43.745	42.360	43.221	43.236	44.816	43.897	43.210	44.683	45.147
50					48.689	48.967	50.293	49.542	49.881	50.744	47.911	49.840	50.968
56					54.532	54.220	56.033	54.496	55.866	56.187	56.566	54.938	57.365
63					61.543	60.347	62.867	63.413	63.049	62.537	63.778	60.916	64.699
71					69.742	67.589	71.139	70.651	70.787	70.041	71.414	71.919	73.789
80					78.723	76.279	78.583	79.267	79.049	79.046	80.111	81.089	78.278
90					86.806	86.440	89.061	89.696	89.050	88.748	85.146	90.798	88.750
100						97.572	101.554	99.083	101.210	99.106	103.639	101.856	103.114
112						107.590	115.256	112.294	115.290	111.645	112.450	108.257	118.306
125							125.733	128.046	126.098	126.890	127.556	131.769	129.398
140							143.985	145.322	138.301	144.542	139.152	142.973	141.920
160							158.251	158.533	159.874	158.093	159.444	162.176	164.058
180							174.630	181.546	177.022	173.392	175.389	176.921	181.654
200							193.629	199.533	197.028	200.439	204.089	202.722	202.184
224							228.606	220.185	220.671	221.938	227.382	222.994	226.446
250							257.753	244.141	249.043	247.020	255.111	259.484	255.560
280							288.615	288.242	282.219	276.663	288.678	289.100	286.925
315							305.352	324.993	318.563	312.234	318.889	324.356	320.413
355							344.112	363.906	351.273	353.827	361.407	367.034	360.951
400								385.010		399.393		405.444	
450								433.881		440.402		459.504	



平行轴齿轮箱 Helical Gear Units 实际速比 Actual Ratios

类型 H1..., H2..., H3..., H4.. Types H1..., H2..., H3..., H4..

规格 14 ... 26 Sizes 14 ... 26

实际速比 i Actual ratios i													
齿轮箱规格 Gear unit sizes													in
14	15	16	17	18	19	20	21	22	23	24	25	26	
													1.25
													1.4
													1.6
													1.8
	2.000		2.000		1.967								2.0
	2.231		2.250		2.296								2.24
	2.481		2.481		2.560								2.5
	2.760		2.760		2.870								2.8
	3.087		3.087		3.238								3.15
	3.476		3.476		3.450								3.55
	3.947		3.947		3.944								4.0
	4.579		4.526		4.400								4.5
	5.100		4.900		4.950								5.0
	5.778		5.556		5.700								5.6
	6.449		6.154		6.410		6.500		6.306		6.280		6.3
	7.120	7.316	7.125	7.147	7.100	7.312	7.200	7.265	7.038	7.059	6.915	7.232	7.1
7.944	7.882	8.076	7.884	8.274	7.889	8.100	8.000	8.047	7.882	7.878	7.635	7.963	8.0
8.800	8.758	8.941	8.755	9.155	8.799	9.000	8.923	8.941	8.868	8.824	8.915	8.792	9.0
9.778	9.774	9.935	9.765	10.167	9.788	10.038	9.926	9.973	9.780	9.926	9.939	10.266	10
10.906	10.967	11.087	10.951	11.340	10.887	11.167	11.040	11.094	10.878	10.948	11.141	11.445	11.2
12.222	12.139	12.440	12.432	12.717	12.176	12.420	12.348	12.339	12.166	12.176	12.571	12.829	12.5
13.399	13.708	13.769	13.915	14.438	13.712	13.891	13.905	13.801	13.700	13.619	13.394	14.476	14
15.685	15.389	15.550	15.694	16.159	15.570	15.643	15.789	15.541	15.557	15.336	15.314	15.424	16
17.556	17.424	17.457	17.899	18.225	18.061	17.763	18.316	17.647	17.839	17.415	17.082	17.634	18
19.800	20.297	19.765	18.988	20.786	20.117	20.605	20.400	20.471	19.312	19.969	19.218	19.671	20
21.418	21.374	23.024	20.930	22.050	21.782	22.950	22.368	22.800	22.039	21.618	21.108	22.129	22.4
24.187	24.716	24.245	24.202	24.306	25.283	24.850	25.837	25.000	25.457	24.671	24.322	24.306	25
27.292	27.304	28.036	26.736	28.106	28.006	28.844	28.523	28.877	28.103	28.497	28.157	28.007	28
31.447	30.248	30.971	29.619	31.048	31.117	31.950	31.579	31.879	31.115	31.459	31.156	32.424	31.5
36.406	35.514	34.311	34.776	34.397	34.708	35.500	35.088	35.294	34.572	34.830	34.598	35.876	35.5
40.283	39.756	40.284	38.929	40.385	38.897	39.596	39.158	39.216	38.582	38.700	38.591	39.840	40
44.733	43.090	45.096	42.194	45.208	42.642	44.375	43.936	43.765	43.290	43.189	43.278	44.438	45
49.896	48.175	48.878	47.174	49.000	49.917	48.648	48.632	49.105	47.916	48.459	49.132	49.835	50
55.957	54.229	54.647	53.102	54.783	55.870	56.948	54.920	54.353	54.112	53.638	54.990	56.576	56
63.171	61.557	61.514	60.278	61.667	63.013	63.739	61.654	61.381	60.747	60.573	62.021	63.322	63
71.100	67.713	69.826	66.306	70.000	68.162	71.888	69.806	68.908	68.780	68.001	70.735	71.418	71
80.190	75.481	76.809	73.912	77.000	76.974	77.762	81.316	78.019	80.120	76.992	75.037	81.452	80
91.457	85.046	85.620	83.279	85.833	88.439	87.816	86.427	90.882	85.156	89.687	85.076	86.407	90
97.020	97.768	96.471	95.735	96.711	100.079	100.895	99.020	96.594	97.564	95.323	100.783	97.967	100
110.00	113.186	110.901	110.833	111.176	115.862	114.174	109.386	110.670	107.778	109.214	111.637	116.054	112
127.803	125.238	128.390	122.634	128.710	128.198	132.180	121.182	122.255	119.400	120.647	124.041	128.552	125
146.633	139.074	142.060	136.183	142.414	142.362	146.254	142.279	135.439	140.186	133.657	138.354	142.835	140
160.380	155.125	157.756	151.900	158.148	158.792	162.413	159.273	159.017	156.931	156.925	155.051	159.316	160
175.901	170.993	175.962	167.438	176.400	178.079	181.156	172.632	178.011	170.093	175.669	169.982	178.544	180
203.339	189.597	193.962	185.656	194.444	201.040	203.160	193.004	192.941	190.166	190.402	198.983	195.737	200
225.149	223.845	215.065	219.192	215.600	226.272	229.355	217.257	215.711	214.062	212.872	222.710	229.132	224
250.594	252.385	253.914	247.139	254.545	255.201	258.141	246.617	242.817	242.990	239.622	251.183	256.454	250
280.665	282.605	286.288	276.730	287.000	291.058	291.144	271.278	275.630	267.289	272.004	271.709	289.241	280
316.751	317.021	320.566	310.431	321.364	308.761	332.052	302.399	303.193	297.952	299.204	306.839	312.877	315
355.625	336.946	359.606	329.942	360.500	350.069	352.249	340.720	337.975	335.710	333.528	352.538	353.329	355
397.131		382.207		383.158		399.375		380.805		375.794		405.953	400
447.376													450



直交轴齿轮箱 Bevel-helical Gear Units

实际速比 Actual Ratios

类型 B2..,B3..,B4.. Types B2..,B3..,B4..

规格 1 ... 13 Sizes 1 ... 13

实际速比 | Actual ratios |													
in	齿轮箱规格 Gear unit sizes												
	1	2	3	4	5	6	7	8	9	10	11	12	13
5.0	4.980	5.043	4.895	4.936	5.006		4.865		5.002		4.897		4.967
5.6	5.566	5.636	5.471	5.480	5.488		5.333		5.483		5.534		5.613
6.3	6.455	6.526	6.334	6.296	6.386	6.205	6.206	6.135	6.381	6.271	6.296	6.226	6.386
7.1	7.068	7.158	6.947	6.959	7.058	6.802	6.860	6.725	7.053	6.875	7.037	7.036	7.138
8.0	7.668	7.765	7.536	7.549	7.657	7.915	7.880	7.825	8.101	8.000	7.994	8.005	8.108
9.0	8.829	8.941	8.678	8.693	8.817	8.749	8.569	8.649	8.810	8.842	8.693	8.947	8.817
10	10.027	10.154	9.855	9.872	10.108	9.490	9.823	9.935	10.099	10.157	9.965	10.164	10.108
11.2	10.938	11.077	10.751	10.769	10.923	10.928	10.615	10.804	10.914	11.045	10.769	11.052	10.923
12.5	12.458	12.615	12.244	12.034	12.703	12.528	12.433	12.385	12.554	12.662	12.334	12.670	12.482
14	14.005	14.182	13.765	13.484	13.964	13.538	13.515	13.385	14.137	13.683	13.821	13.692	13.721
16	15.441	15.636	15.176	15.601	15.835	15.826	16.275	15.773	15.952	15.693	15.522	15.888	16.354
18	17.595	17.818	17.294	17.482	17.407	17.307	17.692	17.041	17.963	17.724	17.393	17.572	17.978
20			19.336	19.614	19.645	19.729	19.948	20.648	20.259	19.940	19.744	19.995	20.276
22.4			21.609	21.919	21.954	21.575	22.146	22.308	22.208	22.520	21.643	22.114	22.226
25			25.021	25.380	25.421	24.349	25.446	25.152	25.843	25.400	25.185	25.103	25.864
28			27.442	27.836	27.881	27.211	28.125	27.923	28.563	27.842	27.836	27.517	28.587
31.5			29.769	30.196	30.245	31.508	30.509	32.084	30.985	32.400	31.975	32.021	32.838
35.5			34.279	34.771	34.827	34.557	35.131	35.461	35.679	35.811	34.771	35.392	35.709
40			38.928	39.487	39.551	37.486	39.896	38.468	40.902	38.846	39.861	40.654	40.936
45			42.467	43.077	43.146	43.166	43.523	44.296	44.202	44.732	43.077	44.209	44.238
50			48.365	49.060	49.139	49.021	49.568	50.304	50.341	51.280	49.060	50.681	50.383
56			54.371	55.152	55.240	53.477	55.723	54.877	56.592	55.417	55.152	54.769	56.639
63			59.947	60.808	60.906	60.904	61.438	62.499	62.396	63.114	60.808	62.376	62.448
71			68.312	69.293	69.404	68.467	70.011	70.259	71.102	70.951	69.293	70.121	71.161
80					77.598	75.489	79.267	77.465	79.497	78.228	80.949	77.313	82.118
90					86.720	86.022	88.585	88.274	88.842	89.143	89.869	88.101	90.016
100					100.413	96.178	102.572	99.945	102.869	99.667	103.259	102.921	104.750
112					110.130	107.484	112.498	111.694	112.824	111.384	114.129	114.262	115.777
125					119.466	124.455	122.035	129.330	122.389	128.971	123.804	131.287	125.592
140					137.567	136.499	140.525	141.846	140.933	141.452	142.562	145.106	144.621
160					156.225	148.071	159.585	153.871	160.047	153.443	161.897	157.408	165.791
180					170.427	170.506	174.092	177.184	174.597	176.692	176.615	181.258	179.166
200					194.098	193.631	198.272	201.215	198.847	200.656	201.145	205.841	204.050
224					218.199	211.234	222.891	219.508	223.537	218.898	226.121	224.554	229.386
250					240.578	240.572	245.752	249.995	246.464	249.300	249.313	255.742	252.913
280					274.147	270.443	280.042	281.036	280.855	280.256	284.101	287.497	288.204
315					302.121	298.181	308.618	309.861	309.513	309.000	313.091	316.984	317.612
355						339.788		353.097		352.116		361.214	
400						374.460		389.127		388.046		398.073	
450													



直交轴齿轮箱 Bevel-helical Gear Units

实际速比 Actual Ratios

类型 B2..., B3..., B4.. Types B2..., B3..., B4..

规格14 ... 26 Sizes 14 ... 26

实际速比 i Actual ratios i													
齿轮箱规格 Gear unit sizes													iN
14	15	16	17	18	19	20	21	22	23	24	25	26	
	4.963												5.0
	5.609	5.630	5.514										5.6
6.156	6.340	6.362	6.234										6.3
6.957	7.132	7.192	7.012	7.239									7.1
7.915	8.101	8.090	7.965	8.143									8.0
8.847	8.810	9.190	8.662	9.250									9.0
10.049	10.099	9.993	9.930	10.059									10
10.928	10.914	11.456	10.731	11.531									11.2
12.528	12.172	12.380	12.770	12.462	12.062		12.256						12.5
13.538	13.810	13.832	13.790	14.654	13.709	13.698	13.902	13.719					14
15.552	15.215	15.665	16.226	16.014	15.192	15.640	15.436	15.538					16
17.007	17.262	17.290	17.522	18.620	17.267	17.252	17.510	17.279					18
20.376	19.379	19.581	19.762	20.348	19.607	19.698	19.883	19.570	19.591		19.284		20
22.282	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
25.131	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
27.548	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
32.057	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
35.432	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
40.700	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
44.259	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
50.737	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
54.831	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
62.446	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
70.200	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
77.400	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
88.200	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
101.780	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
111.569	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
129.831	126.535	124.952	123.904	125.263	129.526	128.641	126.733	124.890	124.870	123.049	127.487	129.232	125
143.498	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
155.663	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
179.284	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
205.487	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
222.065	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
252.907	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
284.310	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
313.470	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
357.210		342.784		343.636		352.902		338.273		333.823		350.596	355
393.660													400
													450



平行轴齿轮箱 Helical Gear Units

转动惯量 J_1 Mass Moments of Inertia J_1

类型 H1...,H2...,H3...,H4.. Types H1...,H2...,H3...,H4..

规格 1 ... 13 Sizes 1 ... 13

转动惯量 J_2 (单位 kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量, 可按下式计算: $J_2 = i n^2 \times J_1$ 。

转动惯量 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量, 输入轴不带风扇。

如果输入轴 d_1 上带有风扇, 则应加上 J_L 。

The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = i n^2 \times J_1$.

The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.

For shaft d with fan, J_L has to be added.

转动惯量 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 mass moment of inertia J_1 in kgm^2 referring to shaft d_1													
in	齿轮箱规格 Gear unit sizes												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1.25	0.0048		0.0285		0.1570		0.4228		0.9271				
1.4	0.0042		0.0259		0.1432		0.3849		0.8413				
1.6	0.0037		0.0244		0.1249		0.3345		0.7272		1.7511		3.7389
1.8	0.0033		0.0197		0.1088		0.3045		0.6590		1.5889		3.2189
2.0	0.0030		0.0182		0.0991		0.2769		0.5960		1.4383		2.9044
2.24	0.0028		0.0167		0.0901		0.2390		0.5376		1.2975		2.6113
2.5	0.0023		0.0148		0.0816		0.2159		0.4830		1.1653		2.3370
2.8	0.0021		0.0134		0.0738		0.2010		0.4432		1.0408		2.0794
3.15	0.0015		0.0092		0.0500		0.1402		0.3105		0.8423		1.6719
3.55	0.0013		0.0081		0.0437		0.1225		0.2728		0.7361		1.4732
4.0	0.0012		0.0070		0.0380		0.1058		0.2373		0.6465		1.2855
4.5	0.00087		0.0052		0.0297		0.0861		0.1996		0.4956		0.9652
5.0	0.00074		0.0045		0.0276		0.0748		0.1707		0.4062		0.8932
5.6	0.00065		0.0038		0.0233		0.0640		0.1410		0.3747		0.7557
J_L			0.060		0.045		0.100		0.100		0.290		0.290
6.3			0.0055	0.0149	0.0329		0.0907		0.1995		0.5118		1.0873
7.1			0.0046	0.0134	0.0275		0.0746		0.1640		0.4473		0.9480
8.0			0.0041	0.0114	0.0245	0.0393	0.0655	0.1092	0.1438	0.2364	0.3906	0.6361	0.8255
9.0			0.0037	0.0102	0.0218	0.0323	0.0574	0.0884	0.1260	0.1916	0.3178	0.5491	0.7172
10			0.0030	0.0086	0.0182	0.0285	0.0500	0.0767	0.1097	0.1664	0.2760	0.4736	0.6211
11.2			0.0026	0.0076	0.0159	0.0252	0.0441	0.0665	0.0940	0.1443	0.2486	0.3780	0.5540
12.5			0.0020	0.0053	0.0116	0.0207	0.0334	0.0574	0.0712	0.1244	0.1899	0.3241	0.4217
14			0.0017	0.0045	0.0100	0.0179	0.0266	0.0501	0.0604	0.1057	0.1615	0.2895	0.3642
16			0.0014	0.0038	0.0084	0.0133	0.0224	0.0383	0.0508	0.0804	0.1348	0.2226	0.3117
18			0.0012	0.0032	0.0071	0.0113	0.0189	0.0302	0.0416	0.0676	0.1162	0.1872	0.2761
20			0.00099	0.0028	0.0060	0.0094	0.0160	0.0252	0.0382	0.0565	0.0992	0.1549	0.2330
22.4			0.00086	0.0023	0.0050	0.0079	0.0147	0.0211	0.0320	0.0460	0.0833	0.1328	
25						0.0067		0.0178		0.0421		0.1125	
28						0.0056		0.0163		0.0351		0.0938	
J_L				0.006	0.010	0.010	0.045	0.045	0.045	0.045	0.100	0.100	0.290
22.4													0.2807
25					0.0065		0.0162		0.0391		0.1026		0.2287
28					0.0054		0.0144		0.0325		0.0833		0.1866
31.5					0.0048	0.0069	0.0121	0.0173	0.0289	0.0414	0.0724	0.1105	0.1629
35.5					0.0042	0.0057	0.0107	0.0153	0.0256	0.0342	0.0629	0.0892	0.1421
40					0.0034	0.0050	0.0089	0.0128	0.0215	0.0303	0.0545	0.0773	0.1237
45					0.0030	0.0044	0.0078	0.0113	0.0189	0.0268	0.0481	0.0668	0.1075
50					0.0023	0.0036	0.0057	0.0083	0.0136	0.0223	0.0359	0.0577	0.0762
56					0.0019	0.0031	0.0049	0.0082	0.0117	0.0196	0.0283	0.0507	0.0644
63					0.0016	0.0024	0.0041	0.0060	0.0099	0.0142	0.0238	0.0380	0.0544
71					0.0012	0.0020	0.0032	0.0051	0.0074	0.0121	0.0190	0.0298	0.0420
80					0.0010	0.0017	0.0028	0.0043	0.0062	0.0102	0.0160	0.0250	0.0385
90					0.00087	0.0013	0.0023	0.0034	0.0052	0.0077	0.0145	0.0199	0.0318
100						0.0011		0.0029		0.0065		0.0167	
112						0.00090		0.0024		0.0054		0.0152	
J_L					0.006	0.006	0.010	0.010	0.020	0.020	0.045	0.045	0.045
100							0.0033		0.0067		0.0175		0.0396
112							0.0027		0.0055		0.0156		0.0325
125							0.0024	0.0033	0.0049	0.0068	0.0131	0.0179	0.0287
140							0.0020	0.0028	0.0043	0.0056	0.0116	0.0160	0.0253
160							0.0018	0.0025	0.0035	0.0050	0.0097	0.0134	0.0208
180							0.0015	0.0021	0.0030	0.0044	0.0085	0.0119	0.0180
200							0.0012	0.0018	0.0023	0.0035	0.0059	0.0099	0.0134
224							0.00097	0.0016	0.0019	0.0031	0.0051	0.0086	0.0113
250							0.00081	0.0013	0.0016	0.0023	0.0043	0.0061	0.0095
280							0.00065	0.00098	0.0013	0.0020	0.0035	0.0052	0.0079
315							0.00060	0.00082	0.0011	0.0016	0.0030	0.0043	0.0067
355							0.00050	0.00066	0.00096	0.0014	0.0025	0.0036	0.0056
400								0.00060		0.0011		0.0031	
450								0.00050		0.00097		0.0026	



平行轴齿轮箱 Helical Gear Units

转动惯量 J_1 Mass Moments of Inertia J_1

类型 H1...,H2...,H3...,H4.. Types H1...,H2...,H3...,H4..

规格 14 ... 26 Sizes 14 ... 26

转动惯量 J_2 (单位 kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量, 可按下式计算: $J_2 = i n^2 \times J_1$ 。

转动惯量 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量, 输入轴不带风扇。

如果输入轴 d_1 上带有风扇, 则应加上 J_L 。

The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = i n^2 \times J_1$.

The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.

For shaft d with fan, J_L has to be added.

转动惯量 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 mass moment of inertia J_1 in kgm^2 referring to shaft d_1													
齿轮箱规格 Gear unit sizes													in
14	15	16	17	18	19	20	21	22	23	24	25	26	
													1.25
													1.4
													1.6
													1.8
	6.8655		11.6548		21.8584								2.0
	6.1491		10.3549		18.6492								2.24
	5.5216		9.3831		16.6673								2.5
	4.9573		8.4273		14.7965								2.8
	3.9096		6.7095		11.9834								3.15
	3.4057		5.8542		11.1368								3.55
	2.9306		5.0470		9.5179								4.0
	2.3019		4.0029		7.8709								4.5
	1.9601		3.5545		6.6571								5.0
	1.6568		3.0066		5.5019								5.6
	0.690		0.690		0.690								J_L
	2.6799		5.2845		10.5289								6.3
	2.3538	2.8931	4.3679	5.7591	9.2492	11.3721	12.2959						7.1
1.2839	2.0651	2.5287	3.8397	4.7220	8.1117	9.9364	10.7071	13.2150					8.0
1.1082	1.8080	2.2077	3.3666	4.1290	7.0946	8.6683	9.3069	11.4516					9.0
0.9553	1.5782	1.9236	2.9408	3.6012	6.2359	7.5421	8.1419	9.9054	13.82				10
0.8216	1.3718	1.6710	2.5560	3.1293	5.4896	6.5975	7.1415	8.6256	12.15	14.70			11.2
0.7041	1.1198	1.4455	2.0404	2.7059	4.4208	5.7819	6.6707	7.5325	9.45	12.87			12.5
0.6231	0.9578	1.1799	1.7645	2.1567	3.7953	4.6544	4.8559	5.9832	8.09	10.02	15.28		14
0.4721	0.8265	1.0050	1.5114	1.8573	3.2226	3.9795	4.1218	5.1024	6.86	8.54	12.83	16.31	16
0.4044	0.6730	0.8639	1.2153	1.5843	2.5603	3.3655	3.2191	4.3129	5.49	7.20	10.74	13.62	18
0.3434	0.5438	0.7022	1.1227	1.2714	2.2165	2.6665	2.7632	3.3611	4.90	5.75	8.99	11.37	20
0.3032		0.5653		1.1726		2.3021		2.8777		5.12		9.49	22.4
0.2542													25
													28
0.290	0.290	0.290	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	J_L
	0.7409		0.8137		1.6434		3.7138		5.010		10.05		22.4
	0.6011	0.7603	0.6552	0.8546	1.3216	1.7165	3.0172	3.8090	3.991	5.183	8.05	10.46	25
0.2974	0.5232	0.6156	0.5669	0.6857	1.1429	1.3759	2.6255	3.0886	3.426	4.121	6.43	8.36	28
0.2413	0.4553	0.5351	0.4909	0.5920	0.9874	1.1871	2.2815	2.6841	2.937	3.533	5.53	6.66	31.5
0.1960	0.3689	0.4650	0.3943	0.5113	0.8515	1.0232	1.9780	2.3293	2.511	3.024	4.74	5.72	35.5
0.1705	0.3198	0.3759	0.3398	0.4091	0.7323	0.8803	1.7091	2.0167	2.139	2.581	4.04	4.89	40
0.1483	0.2896	0.3254	0.3084	0.3516	0.6501	0.7552	1.4696	1.7402	1.813	2.195	3.44	4.17	45
0.1287	0.2106	0.2944	0.2241	0.3165	0.4647	0.6692	1.1988	1.4943	1.477	1.858	2.73	3.53	50
0.1114	0.1782	0.2145	0.1886	0.2322	0.3961	0.4786	1.0146	1.2189	1.234	1.514	2.32	2.80	56
0.0793	0.1491	0.1812	0.1569	0.1949	0.3344	0.4073	0.8665	1.0304	1.042	1.263	1.95	2.38	63
0.0669	0.1216	0.1515	0.1289	0.1619	0.2818	0.3431	0.6700	0.8790	0.803	1.065	1.48	2.00	71
0.0564	0.1034	0.1235	0.1093	0.1330	0.2352	0.2893	0.5346	0.6798	0.633	0.821	1.35	1.51	80
0.0435	0.0865	0.1050	0.0911	0.1126	0.1898	0.2410	0.4883	0.5418	0.575	0.646	1.11	1.38	90
0.0398		0.0877		0.0937		0.1943		0.4946		0.587		1.13	100
0.0329													112
0.045	0.100	0.100	0.100	0.100									J_L
	0.1080		0.1130		0.2401		0.6098		0.679		1.344		100
	0.0875	0.1089	0.0916	0.1149	0.1936	0.2436	0.5276	0.6147	0.582	0.688	1.158	1.363	112
0.0403	0.0760	0.0881	0.0796	0.0930	0.1681	0.1962	0.4561	0.5316	0.501	0.590	0.995	1.172	125
0.0331	0.0660	0.0766	0.0691	0.0808	0.1457	0.1702	0.3653	0.4594	0.398	0.507	0.854	1.007	140
0.0292	0.0570	0.0664	0.0598	0.0701	0.1254	0.1474	0.3140	0.3677	0.340	0.403	0.730	0.863	160
0.0258	0.0498	0.0573	0.0524	0.0606	0.1065	0.1268	0.2809	0.3158	0.303	0.344	0.644	0.737	180
0.0211	0.0380	0.0501	0.0393	0.0530	0.0811	0.1076	0.2157	0.2825	0.233	0.306	0.488	0.651	200
0.0183	0.0299	0.0382	0.0310	0.0398	0.0681	0.0820	0.1819	0.2170	0.196	0.236	0.417	0.492	224
0.0136	0.0250	0.0301	0.0259	0.0314	0.0569	0.0688	0.1506	0.1829	0.162	0.198	0.353	0.421	250
0.0115	0.0210	0.0251	0.0218	0.0262	0.0463	0.0574	0.1297	0.1514	0.138	0.163	0.311	0.356	280
0.0096	0.0177	0.0211	0.0184	0.0221	0.0424	0.0467	0.1097	0.1299	0.117	0.139	0.261	0.314	315
0.0080	0.0162	0.0177	0.0169	0.0186	0.0363	0.0427	0.0916	0.1103	0.097	0.118	0.212	0.263	355
0.0068		0.0162		0.0170		0.0366		0.0920		0.098		0.213	400
0.0056													450



直交轴齿轮箱 Bevel-helical Gear Units

转动惯量 J_1 Mass Moments of Inertia J_1

类型 B2...,B3...,B4... Types B2...,B3...,B4...

规格 1 ... 13 Sizes 1 ... 13

转动惯量 J_2 (单位 kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量, 可按下列公式计算: $J_2 = i n^2 \times J_1$ 。

转动惯量 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量, 输入轴不带风扇。

如果输入轴 d_1 上带有风扇, 则应加上 J_L 。

The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = i n^2 \times J_1$.

The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.

For shaft d with fan, J_L has to be added.

转动惯量 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 Mass moment of inertia J_1 in kgm^2 referring to shaft d_1													
in	齿轮箱规格 Gear unit sizes												
	1	2	3	4	5	6	7	8	9	10	11	12	13
5.0	0.0021	0.0049	0.0314	0.0314	0.0707		0.1988		0.4403		1.2743		2.7700
5.6	0.0019	0.0043	0.0096	0.0262	0.0604		0.1691		0.3744		1.0697		2.3418
6.3	0.0016	0.0035	0.0076	0.0228	0.0495	0.0805	0.1365	0.2276	0.2988	0.4986	0.8428	1.4755	1.8526
7.1	0.0014	0.0033	0.0071	0.0197	0.0420	0.0687	0.1207	0.1931	0.2543	0.4229	0.7257	1.2273	1.6222
8.0	0.0012	0.0027	0.0057	0.0152	0.0321	0.0555	0.0875	0.1542	0.1874	0.3346	0.5250	0.9645	1.1744
9.0	0.0010	0.0023	0.0052	0.0129	0.0295	0.0470	0.0786	0.1352	0.1709	0.2837	0.4753	0.8231	1.0617
10	0.00084	0.0018	0.0039	0.0104	0.0250	0.0363	0.0681	0.0985	0.1456	0.2097	0.4072	0.6005	0.9214
11.2	0.00079	0.0017	0.0037	0.0093	0.0214	0.0327	0.0590	0.0879	0.1241	0.1897	0.3493	0.5392	0.7959
12.5	0.00054	0.0012	0.0028			0.0274		0.0752		0.1599		0.4557	
14	0.00043	0.00098	0.0023			0.0235		0.0650		0.1363		0.3909	
16	0.00040	0.00082	0.0019										
18	0.00031	0.00063	0.0015										
J_L	0.005	0.006	0.010	0.020	0.045	0.045	0.100	0.100	0.100	0.100	0.290	0.290	0.690
12.5				0.0073	0.0159		0.0445		0.0995		0.2740		0.6152
14				0.0071	0.0156		0.0436		0.0967		0.2671		0.6026
16				0.0060	0.0136	0.0174	0.0368	0.0487	0.0842	0.1084	0.2344	0.3029	0.5141
18				0.0059	0.0133	0.0168	0.0363	0.0474	0.0825	0.1040	0.2300	0.2925	0.5068
20			0.0023	0.0055	0.0124	0.0145	0.0339	0.0393	0.0770	0.0897	0.2146	0.2527	0.4742
22.4			0.0021	0.0047	0.0105	0.0141	0.0282	0.0385	0.0657	0.0870	0.1822	0.2461	0.4026
25			0.0017	0.0039	0.0083	0.0130	0.0243	0.0356	0.0534	0.0805	0.1462	0.2270	0.3196
28			0.0015	0.0036	0.0077	0.0111	0.0209	0.0296	0.0452	0.0687	0.1286	0.1926	0.2714
31.5			0.0013	0.0029	0.0062	0.0087	0.0162	0.0253	0.0348	0.0555	0.0936	0.1539	0.2004
35.5			0.0011	0.0024	0.0055	0.0080	0.0137	0.0218	0.0315	0.0470	0.0837	0.1349	0.1819
40			0.00089	0.0019	0.0041	0.0065	0.0110	0.0169	0.0265	0.0363	0.0720	0.0983	0.1539
45			0.00083	0.0018	0.0039	0.0057	0.0098	0.0142	0.0227	0.0326	0.0626	0.0877	0.1312
50			0.00057	0.0013	0.0030	0.0043	0.0081	0.0114	0.0178	0.0274	0.0469	0.0751	0.1028
56			0.00046	0.0011	0.0025	0.0040	0.0068	0.0102	0.0146	0.0235	0.0384	0.0649	0.0853
63			0.00042	0.00087	0.0021	0.0031	0.0059	0.0084	0.0124	0.0184	0.0326	0.0489	0.0725
71			0.00033	0.00067	0.0016	0.0026	0.0047	0.0070	0.0100	0.0150	0.0262	0.0400	0.0585
80						0.0021		0.0061		0.0128		0.0339	
90						0.0016		0.0048		0.0102		0.0272	
J_L			0.005	0.006	0.010	0.010	0.020	0.020	0.045	0.045	0.100	0.100	0.290
80					0.0024		0.0057		0.0129		0.0350		0.0795
90					0.0021		0.0049		0.0110		0.0291		0.0678
100					0.0018	0.0024	0.0040	0.0058	0.0086	0.0131	0.0250	0.0358	0.0549
112					0.0016	0.0022	0.0037	0.0049	0.0079	0.0111	0.0215	0.0297	0.0465
125					0.0013	0.0018	0.0030	0.0040	0.0064	0.0087	0.0167	0.0254	0.0359
140					0.0011	0.0016	0.0025	0.0038	0.0057	0.0081	0.0141	0.0219	0.0323
160					0.00091	0.0013	0.0020	0.0031	0.0043	0.0065	0.0113	0.0170	0.0271
180					0.00085	0.0011	0.0018	0.0025	0.0040	0.0058	0.0101	0.0143	0.0233
200					0.00058	0.00092	0.0013	0.0020	0.0031	0.0043	0.0083	0.0114	0.0182
224					0.00047	0.00086	0.0011	0.0018	0.0025	0.0041	0.0070	0.0102	0.0149
250					0.00043	0.00059	0.00089	0.0014	0.0021	0.0031	0.0060	0.0084	0.0127
280					0.00033	0.00047	0.00069	0.0011	0.0016	0.0026	0.0048	0.0071	0.0102
315					0.00028	0.00043	0.00058	0.00091	0.0014	0.0021	0.0040	0.0061	0.0081
355						0.00034		0.00069		0.0016		0.0048	
400						0.00028		0.00059		0.0014		0.0041	



直交轴齿轮箱 Bevel-helical Gear Units

转动惯量 J_1 Mass Moments of Inertia J_1

类型 B2...B3...B4.. Types B2...B3...B4..

规格 14...26 Sizes 14...26

转动惯量 J_2 (单位 kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量, 可按下式计算: $J_2 = iN^2 \times J_1$ 。

转动惯量 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量, 输入轴不带风扇。

如果输入轴 d_1 上带有风扇, 则应加上 J_L 。

The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = iN^2 \times J_1$.

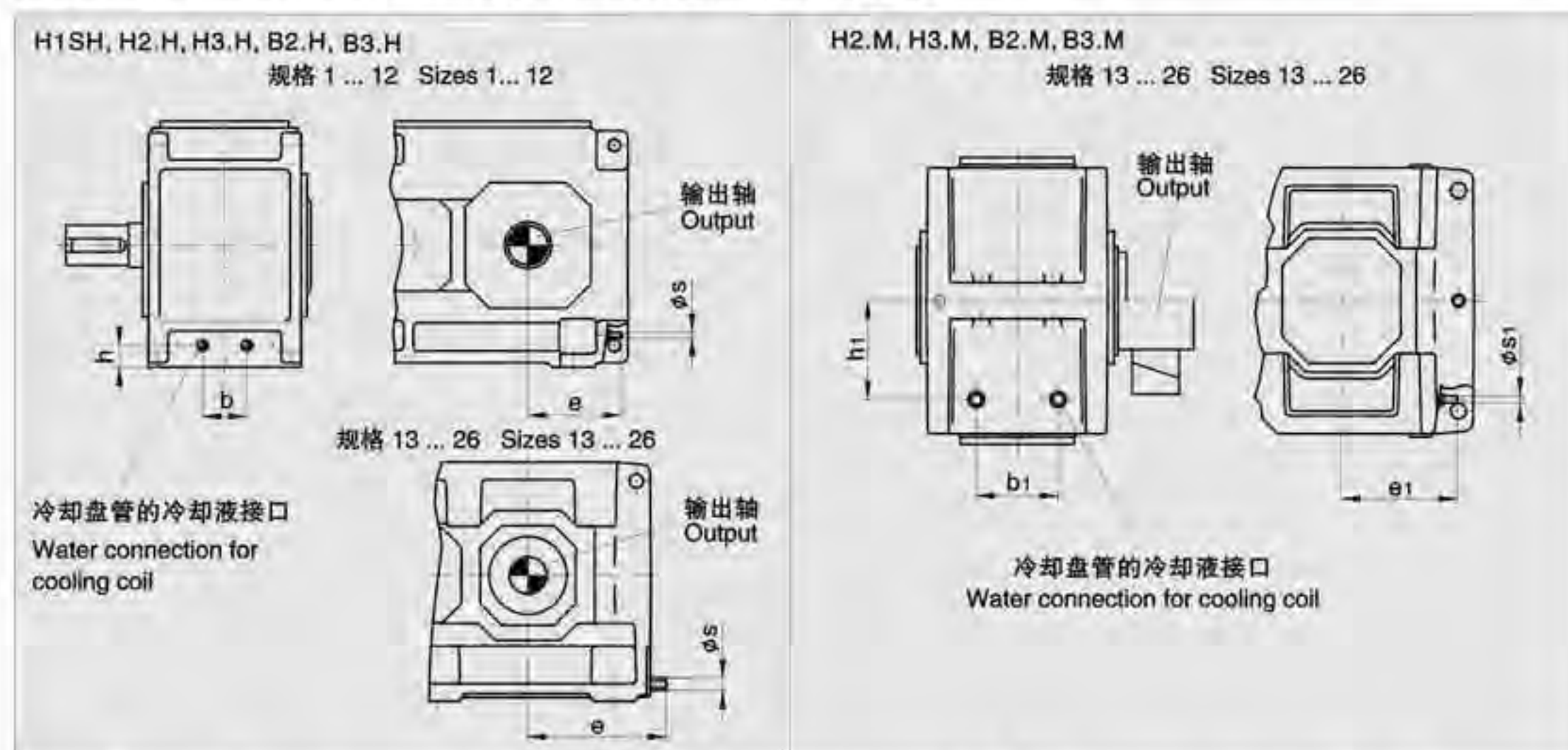
The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.

For shaft d with fan, J_L has to be added.

转动惯性 J_1 (单位 kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 Mass moment of inertia J_1 in kgm^2 refering to shaft d_1													
齿轮箱规格 Gear unit sizes													in
14	15	16	17	18	19	20	21	22	23	24	25	26	
	6.1753												5.0
	5.3415	6.6007	10.3549										5.6
3.0962	4.4466	5.6746	8.5744										6.3
2.5972	3.7296	4.7073	7.1324	9.0369									7.1
2.0500	2.7508	3.9356	5.0109	7.4979									8.0
1.7802	2.5048	2.9105	4.5186	5.2942									9.0
1.2968	2.1468	2.6398	3.8518	4.7581									10
1.1653	1.7964	2.2495	3.3164	4.0340									11.2
1.0001		1.8843		3.4725									12.5
0.8634													14
													16
													18
0.690	0.690	0.690	0.690	0.690									JL
	1.6952		3.4843		7.8896		8.3877						12.5
	1.6558	1.7505	3.4451	3.5988	7.7305	8.0659	8.2186	8.6052					14
0.6638	1.4797	1.7023	3.0661	3.5397	6.9989	7.8400	7.4408	8.3643					16
0.6456	1.4545	1.5152	3.0418	3.1370	6.8398	6.9560	7.2717	7.4142					18
0.5424	1.3716	1.4843	2.8806	3.1004	6.3626	6.8399	6.7643	7.2972	12.93				20
0.5318	1.1459	1.3952	2.4284	2.9267	5.4882	6.4527	5.8027	6.8842	10.90	13.15	13.51		22.4
0.4938	0.9016	1.1644	1.9196	2.4645	4.5614	5.5587	4.8075	5.8965	8.99	11.07	11.03		25
0.4189	0.7728	0.9159	1.6758	1.9474	3.8203	4.6166	4.0148	4.8809	7.45	9.12	9.06	11.34	28
0.3317	0.5615	0.7842	1.2159	1.6981	2.8212	3.8639	2.9719	4.0729	5.24	7.55	6.49	9.30	31.5
0.2812	0.5062	0.5703	1.0968	1.2332	2.5642	2.8550	2.6917	3.0169	4.70	5.32	5.76	6.68	35.5
0.2079	0.4306	0.5137	0.9481	1.1114	2.1920	2.5928	2.2890	2.7297	3.98	4.77	4.78	5.92	40
0.1882	0.3694	0.4363	0.8188	0.9592	1.8351	2.2138	1.9182	2.3180	3.42	4.03	4.11	4.90	45
0.1587	0.2765	0.3743	0.5713	0.8283	1.4000	1.8537	1.4641	1.9429	2.58	3.46	3.11	4.21	50
0.1353	0.2284	0.2802	0.4692	0.5787	1.1439	1.4144	1.1946	1.4832	2.16	2.61	2.58	3.19	56
0.1060	0.1956	0.2314	0.4054	0.4750	1.0429	1.1553	1.0845	1.2097	1.98	2.19	2.33	2.65	63
0.0878	0.1587	0.1981	0.3333	0.4101	0.8730	1.0522	0.9051	1.0970	1.62	2.01	1.89	2.38	71
0.0745		0.1605		0.3369		0.8802		0.9147		1.64		1.93	80
0.0601													90
0.290	0.290	0.290	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	JL
	0.2219		0.2276		0.4955		1.4120		1.519		3.158		80
	0.1883	0.2234	0.1931	0.2307	0.4203	0.5009	1.1776	1.4199	1.261	1.533	2.645	3.188	90
0.0807	0.1507	0.1896	0.1542	0.1956	0.3327	0.4248	0.9261	1.1838	0.991	1.272	2.087	2.669	100
0.0688	0.1323	0.1516	0.1352	0.1561	0.2821	0.3360	0.7924	0.9309	0.844	0.999	1.810	2.106	112
0.0556	0.0964	0.1330	0.0985	0.1367	0.2085	0.2848	0.5767	0.7962	0.617	0.851	1.320	1.825	125
0.0471	0.0861	0.0969	0.0879	0.0997	0.1887	0.2106	0.5190	0.5796	0.553	0.622	1.185	1.331	140
0.0364	0.0738	0.0866	0.0752	0.0889	0.1591	0.1905	0.4404	0.5215	0.466	0.557	1.015	1.194	160
0.0327	0.0638	0.0742	0.0650	0.0760	0.1357	0.1605	0.3778	0.4423	0.400	0.470	0.876	1.022	180
0.0274	0.0481	0.0641	0.0490	0.0657	0.1063	0.1368	0.2829	0.3794	0.300	0.403	0.598	0.882	200
0.0235	0.0393	0.0483	0.0400	0.0495	0.0880	0.1071	0.2335	0.2842	0.247	0.302	0.504	0.620	224
0.0184	0.0333	0.0395	0.0339	0.0404	0.0747	0.0887	0.1998	0.2345	0.211	0.249	0.438	0.508	250
0.0151	0.0267	0.0335	0.0272	0.0343	0.0603	0.0753	0.1619	0.2007	0.170	0.212	0.355	0.441	280
0.0128	0.0217	0.0269	0.0221	0.0275	0.0493	0.0607	0.1289	0.1625	0.136	0.172	0.286	0.358	315
0.0103		0.0218		0.0223		0.0497		0.1294		0.137		0.288	355
0.0082													400



齿轮箱 Gear Units 冷却盘管 Cooling Coils 卧式安装 Horizontal 规格 1 ... 26 Sizes 1 ... 26
类型 H..H, H..M, B..H, B..M Types H..H, H..M, B..H, B..M



规格 Size	类型 H1SH Type H1SH					类型 H2.H/B3.H Type H2.H/B3.H					类型 H3.H Type H3.H					类型 B2.H Type B2.H				
	b mm	e mm	h mm	s	1)	b mm	e mm	h mm	s	1)	b mm	e mm	h mm	s	1)	b mm	e mm	h mm	s	1)
1	30	150	45	G 1/4	4	-	-	-	-	-	-	-	-	-	-	64	125	40	G 1/4	4
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	130	40	G 1/4	4
3	48	205	74	G 1/2	4	34	130	55	G 1/2	4	-	-	-	-	-	58	140	52	G 1/2	4
4	-	-	-	-	-	34	155	60	G 1/2	4	-	-	-	-	-	74	160	54	G 1/2	4
5	88	270	90	G 1/2	4	68	170	64	G 1/2	4	70	175	60	G 1/2	4	130	175	62	G 1/2	8
6	-	-	-	-	-	70	215	68	G 1/2	4	70	220	69	G 1/2	4	120	220	68	G 1/2	4
7	124	310	135	G 1/2	4	100	210	83	G 1/2	4	80	210	83	G 1/2	4	140	210	80	G 1/2	8
8	-	-	-	-	-	100	270	83	G 1/2	4	80	270	83	G 1/2	4	140	270	80	G 1/2	4
9	116	365	110	G 1/2	8	140	245	110	G 1/2	8	150	245	107	G 1/2	4	232	245	110	G 1/2	8
10	-	-	-	-	-	100	295	95	G 1/2	8	90	295	95	G 1/2	4	150	295	90	G 1/2	8
11	146	425	130	G 1/2	8	110	275	95	G 1/2	8	200	275	115	G 1/2	8	312	275	115	G 1/2	8
12	-	-	-	-	-	200	360	109	G 1/2	8	200	360	115	G 1/2	8	300	360	115	G 1/2	8
13	152	480	150	G 1/2	8	252	455	116	G 1/2	8	252	460	116	G 1/2	8	324	460	116	G 1/2	8
14	-	-	-	-	-	252	525	116	G 1/2	8	252	530	116	G 1/2	8	324	530	116	G 1/2	8
15	172	560	130	G 1/2	8	290	535	119	G 1/2	8	290	540	119	G 1/2	8	396	540	119	G 1/2	8
16	-	-	-	-	-	290	580	119	G 1/2	8	290	585	119	G 1/2	8	396	585	119	G 1/2	8
17	202	600	145	G 1/2	8	340	575	134	G 1/2	8	300	580	134	G 1/2	8	468	580	134	G 1/2	8
18	-	-	-	-	-	340	635	134	G 1/2	8	300	640	134	G 1/2	8	468	640	134	G 1/2	8
19	根据用户要求供货 On request					根据用户要求供货 On request					根据用户要求供货 On request					-				
20 - 26	-					-					-					-				

规格 Size	类型 H2.M/B3.M Type H2.M/B3.M					类型 H3.M Type H3.M					类型 B2.M Type B2.M				
	b ₁ mm	e ₁ mm	h ₁ mm	s ₁	1)	b ₁ mm	e ₁ mm	h ₁ mm	s ₁	1)	b ₁ mm	e ₁ mm	h ₁ mm	s ₁	1)
13	252	335	300	G 1/2	8	252	335	300	G 1/2	8	324	335	300	G 1/2	8
14	252	405	300	G 1/2	8	252	405	300	G 1/2	8	324	405	300	G 1/2	8
15	290	395	335	G 1/2	8	290	395	340	G 1/2	8	396	390	345	G 1/2	8
16	290	440	335	G 1/2	8	290	440	340	G 1/2	8	396	435	345	G 1/2	8
17	340	425	380	G 1/2	8	300	425	380	G 1/2	8	324	425	395	G 1/2	8
18	340	485	380	G 1/2	8	300	485	380	G 1/2	8	324	485	395	G 1/2	8
19 - 26	根据用户要求供货 On request					根据用户要求供货 On request					-				

1) 冷却液需要量 (l/min)
Required cooling water quantity (l/min)

冷却盘管适用于淡水、海水和半咸水。
Cooling coil suitable for fresh, sea and brackish



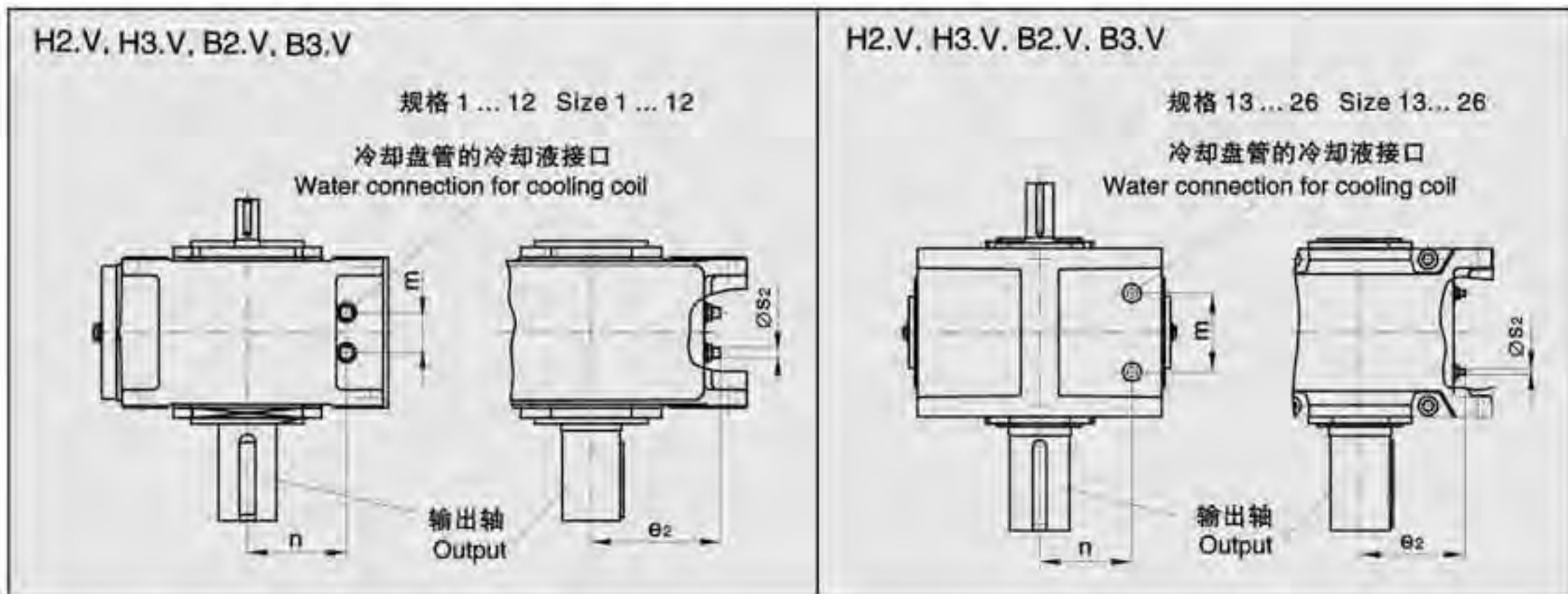
齿轮箱 Gear Units

冷却盘管 Cooling Coils

立式安装 Vertical

类型 H..V, B..V Types H..V, B..V

规格 1... 26 Sizes 1 ... 26



规格 Size	类型 H2.V/B3.V Type H2.V/B3.V					类型 H3.V Type H3.V					类型 B2.V Type B2.V				
	m mm	n mm	Ø2 mm	S2	1)	m mm	n mm	Ø2 mm	S2	(1)	m mm	n mm	Ø2 mm	S2	(1)
1	—	—	—	—	—	—	—	—	—	—	64	90	125	G 1/4	4
2	—	—	—	—	—	—	—	—	—	—	78	105	130	G 1/4	4
3	34	120	130	G 1/2	4	—	—	—	—	—	58	123	140	G 1/2	4
4	34	140	155	G 1/2	4	—	—	—	—	—	74	146	160	G 1/2	4
5	68	166	170	G 1/2	4	70	170	175	G 1/2	4	130	168	175	G 1/2	8
6	70	162	215	G 1/2	4	70	161	220	G 1/2	4	120	162	220	G 1/2	4
7	100	197	210	G 1/2	4	80	197	210	G 1/2	4	140	200	210	G 1/2	8
8	100	197	270	G 1/2	4	80	197	270	G 1/2	4	140	200	270	G 1/2	4
9	140	210	245	G 1/2	8	150	213	245	G 1/2	4	232	210	245	G 1/2	8
10	100	225	295	G 1/2	8	90	225	295	G 1/2	4	150	230	295	G 1/2	8
11	110	285	275	G 1/2	8	200	265	275	G 1/2	8	312	265	275	G 1/2	8
12	200	271	360	G 1/2	8	200	265	360	G 1/2	8	300	265	360	G 1/2	8
13	252	300	335	G 1/2	8	252	300	335	G 1/2	8	324	300	335	G 1/2	8
14	252	300	405	G 1/2	8	252	300	405	G 1/2	8	324	300	405	G 1/2	8
15	290	335	395	G 1/2	8	290	340	395	G 1/2	8	396	345	390	G 1/2	8
16	290	335	440	G 1/2	8	290	340	440	G 1/2	8	396	345	435	G 1/2	8
17	340	380	425	G 1/2	8	300	380	425	G 1/2	8	324	395	425	G 1/2	8
18	340	380	485	G 1/2	8	300	380	485	G 1/2	8	324	395	485	G 1/2	8
19 – 26	根据用户要求供货 On request					根据用户要求供货 On request					—				

冷却盘管适用于 Cooling coil for														
类型 Types	规格 Size	浸油润滑 Dip lubrication				法兰泵强制润滑 Forced lubrication with flanged on pump				电动泵强制润滑 Forced lubrication with motor pump				
		适用布置形式 for design				适用布置形式 for design				适用布置形式 for design				
		A	B	C	D	A	B	C	D	A	B	C	D	
H2.V	4	x	x	x	x	—	—	—	—					
	5 – 12	x	x	x	x	—	x	—	x					
	13 – 18	—	—	—	—	—	x	—	x					
H3.V	5 – 12	x	x	x	x	—	x	—	x					
	13 – 18	—	—	—	—	—	x	—	x					
B2.V	4	x	x	x	x	—	—	—	—					
	5 – 12	x	x	x	x	x	x	—	—					
	13 – 18	—	—	—	—	x	x	—	—					
B3.V	4	x	x	x	x	—	—	—	—					
	5 – 12	x	x	x	x	—	—	x	x					
	13 – 18	—	—	—	—	—	—	x	x					

X = 可供货 x = Possible variants

1) 冷却液需要量 (l/min) Required cooling water quantity (l/min)

冷却盘管适用于淡水、海水和半咸水。 Cooling coil suitable for fresh, sea and brackish.



齿轮箱 Gear Units 润滑油供给方式可选方案 Oil Supply for

类型 H2 ... H4, B2 ... B4 Types H2 ... H4, B2 ... B4

规格 1 ... 18 立式安装 Sizes 1 ... 18 Vertical

各种润滑油供给方式 Oil supply variants

立式安装齿轮箱所用的各种润滑油供给方式列于表1

Oil supply variants for vertical gear units can be derived from table 1.

表 1 Table 1				
类型) Types	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
H2.V	4	X	—	—
	5 ... 12	X	X	—
	13 ... 18	—	X	—
H3.V	5 ... 12	X	X	X
	13 ... 18	—	X	X
H4.V	7 ... 12	X	X	X
	13 ... 18	—	—	X
B2.V	4	X	—	—
	5 ... 12	X	X	X
	13 ... 18	—	X	X
B3.V	4	X	—	—
	5 ... 12	X	X	X
	13 ... 18	—	X	X
B4.V	5 ... 12	X	X	X
	13 ... 18	—	—	X

X=可供货 X=Possible variants

1) 采用实心轴、带储油管的齿轮箱所用的各种润滑油供给方式见110页表14。

1) For possible variants for gear units with solid shaft and oil retaining tube, see page 110, table 14

推荐供油方式 Preferred order:

规格 6 号 (含) 以下各型: 浸油润滑, 规格 7 号以上各型: 强制润滑

up to size 6: dip lubrication from size 7 up: forced lubrication

对各种润滑油供给方式的说明 Notes on the individual oil supply variants

浸油润滑Dip lubrication:

当用浸油润滑时, 所有需要润滑的零部件均需浸在润滑油液中。

附带的补偿油箱用于储藏涨溢的油液。

选择依据参见104页。

in case of dip lubrication, all parts to be lubricated are lying in the oil.

an oil compensating tank has been fitted for oil ex-pansion.

criteria for selection, see page 104

强制润滑 Forced lubrication:

当采用强制润滑时, 所有未浸在润滑油液中的零部件均通过一个法兰联接油泵或单独的电动油泵进行飞溅润滑。

选择依据参见105-109页。

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

or by a separate motor pump. criteria for selection, see pages 105-109



齿轮箱 Gear Units 浸油润滑方式 Dip Lubrication for
 类型 H2...H4 , B2...B4 Types H2...H4,B2...B4
 规格 1 ... 12 立式安装 Sizes1...12Vertical

当选用浸油润滑方式时, 应满足下列要求: a)最大输入转速 n_1 , 参见表2; b)允许油温参见表3。

For the design with dip lubrication the following criteria have to be observed:

a)Maximum input speed n_1 ,See table 2. b)Permissible oil temperatures, see table 3.

规格 Size	类型 Types											
	H2.V		H3.V		H4.V		B2.V		B3.V		B4.V	
	iN	n_{1max}	iN	n_{1max}	iN	n_{1max}	iN	n_{1max}	iN	n_{1max}	iN	n_{1max}
1	—	—	—	—	—	—	5-6.3 7.1-8 9-18	1200 1500 1800	—	—	—	—
2	—	—	—	—	—	—	5-5.6 6.3-8 9-10 11.2-18	1000 1200 1500 1800	—	—	—	—
3	6.3-7.1 8-10 11.2-22.4	1200 1500 1800	—	—	—	—	5-7.1 8-9 10-12.5 14-18	1000 1200 1500 1800	20-71	1800	—	—
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

n_1 和 iN 值不在表2所列范围内的齿轮箱必须采用强制润滑方式。

Gear units with n_1 and iN which are not listed in table 2 must be designed for forced lubrication

40℃以下的ISO - VG粘度 mm ² /s (cst) Viscosity ISO - VG at 40 °C in mm ² /s(cst)	浸油允许极限温度,℃ Permissible temperature limit in℃ for dip lubrication	
	矿物油 Mineral oil	合成油 Synthetic oil
VG 220	-15	-25
VG 320	-12	-25
VG 460	-9	-25

若油温低于表中所列数值, 则必须对润滑油进行加热。

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

当采用浸油润滑时, 油温不得低于所用润滑油的倾点。

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



平行轴齿轮箱 Helical Gear Units

强制润滑方式 Forced Lubrication for

类型 H2 ... H4 Types H2 ... H4

规格 5 ... 18 立式安装 Sizes 5 ... 18 Vertical

表4 Table 4				
40 °C 以下的 ISO – VG粘度, mm ² /s(cSt) Viscosity ISO – VG at 40 °C in mm ² /s(cSt)	强制润滑允许极限温度°C Permissible temperature limit in °C for forced feed lubrication			
	矿物油 Mineral oil		合成油 Synthetic oil	
	最低 min	最高 max	最低 min	最高 max
VG 220	10	80	0	90
VG 320	15	90	5	100
VG 460	20	95	10	105

强制润滑:

当使用强制润滑时, 工作粘度不得超过 1800cSt。最低工作粘度不得小于 25cSt。当油温低于表 4 所列的数值时, 必须提供浸油润滑 方式, 或者对润滑油进行加热。

Forced lubrication:

In case of forced lubrication, the operating Viscosity 1800 cSt must not be exceeded during starting. A minimum operating viscosity of 25 cSt must be ensured. If the temperatures are below the values as listed in table 4, dip Lubrication has to be provided or the oil must be heated.

表5 Table5								
立式安装平行轴箱采用法兰泵 Assignment of flanged-on pumps to vertical helical gear units								
类型 Types	n/ 1/min	齿轮箱规格 Gearunit size		法兰泵规格 Flanged-on pumpsiz	齿轮箱规格 Gearunitsize			法兰泵规格 Flanged-on Pump size
		5,7,9,11	6,8,10,12		13,15,17	14	16,18	
		速比 Ratio i _N			速比 Ratio i _N			
H2.V ¹⁾	750 – 1800	6.3–22.4	8 – 28	KSW1	6.3–22.4	8 – 28	7.1–25	KSW2
H3.V ¹⁾	1201 – 1800	25–35.5	31.5–45	KSW2	22.4–35.5	28 – 45	25 – 40	KSW3
		40 – 71	50 – 90	KSW3	40 – 71	50 – 90	45 – 80	KSW4
		80 – 90	100 – 112	*	80 – 90	100 – 112	90 – 100	*
	901 – 1200	25 – 50	31.5–63	KSW3	22.4–25	28–31.5	25 – 28	KSW3
		56 – 90	71 – 112	*	28 – 45	35.5–56	31.5–50	KSW4
					50 – 90	63 – 112	56 – 100	*
	750 – 900	25–35.5	31.5–45	KSW3	22.4–35.5	28 – 45	25 – 40	KSW4
		40 – 90	50 – 112	*	40 – 90	50 – 112	45 – 100	*
H4.V ¹⁾	1201 – 1800	100 – 180	125 – 224	KSW3	100 – 355	125 – 450	112 – 400	*
		200 – 335	250 – 450	*				
	901 – 1200	100 – 125	125 – 160	KSW3				
		140 – 335	180 – 450	*				
	750 – 900	100 – 335	125 – 450	*				
* = 所需电动泵,参见表7 *=Motor pump require,see table 7.								

1) 布置形式 B, D.
Design BD.



平行轴齿轮箱 Helical Gear Units

强制润滑方式 Forced Lubrication for

类型 H2 ... H4 Types H2 ... H4

规格 5... 18 立式安装 Sizes 5 ... 18 Vertical

表6 Table6

表6 Table6								
立式安装平行轴箱采用法兰泵 Assignment of flanged-on pumps to vertical helical gear units								
类型 Types	n ₁ 1/min	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	
		速比 Ratio i _N			速比 Ratio i _N			
H2.V ¹⁾	750 – 1800	6.3–22.4	8 – 28	KSW1	6.3–22.4	8 – 28	7.1–25	KSW2
H3.V ¹⁾	1201 – 1800	25–40	31.5–50	KSW2	22.4–50	28 – 63	25 – 56	KSW3
		45 – 90	56– 112	KSW3	56–90	71 – 112	63 – 90	KSW4
							100	*
	901 – 1200	25 – 56	31.5–71	KSW3	22.4–31.5	28–40	25 – 35.5	KSW3
		63 – 90	80 – 112	*	35.5 – 56	45–71	40–63	KSW4
					63 – 90	80– 112	71 – 100	*
	750 – 900	25–45	31.5–56	KSW3	22.4–25	28 – 31.5	25 – 28	KSW3
		50– 90	63 – 112	*	28–45	35.5 – 56	31.5 – 50	KSW4
					50–90	63 – 112	56– 100	*
H4.V ¹⁾	1201 – 1800	100 – 224	125 – 280	KSW3	100 – 355	125 – 450	112 – 400	*
		250 – 355	315 – 450	*				
	901 – 1200	100 – 140	125 – 180	KSW3				
		160 – 355	200 – 450	*				
	750 – 900	100 – 112	125 – 140	KSW3				
		125 – 335	160 – 450	*				
* = 所需电动泵,参见表7 *=Motor pump require,see table 7.								

1) 布置形式A,C DesignA,C

表7 Table 7

立式安装平行轴齿轮箱采用法兰泵 Assignment of flanged-on pumps to vertical helical gear units			
类型 Types	规格 Sizes	布置方式 Design	油泵 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) 只提供法兰泵 Flanged-on pump only



直交轴齿轮箱 Helical Gear Units

类型 B2 ... B4 Types B2 ... B4

强制润滑方式 Forced Lubrication for

规格 5 ... 18 立式安装 Sizes 5 ... 18 Vertical

表格 8 Table 8				
40℃以下的ISOVG-粘度, mm/s(cSt) Viscosity ISO-Vgat40℃ in mm/s(cSt)	强制润滑允许极限温度℃ Permissible temperature limit in °C for forced feed lubrication			
	矿物油 Mineral oil		合成油 Synthetic oil	
	最低 min	最高 max	最低 min	最高 max
VG220	10	80	0	90
VG320	15	90	5	100
VG460	20	95	10	105

强制润滑 Forced lubrication:

当使用强制润滑时，工作粘度不得超过1800cSt。

最低工作粘度不得小于25cSt。

当油温低于表8所列的数值时，必须提供浸油润滑方式，或者对润滑油进行加热。

In case of forced lubrication, the operating Viscosity 1800cSt must not be exceeded during starting.

A minimum operating viscosity of 25cSt must be ensured. If the temperatures are below the values as listed in table 8, dip Lubrication has to be provided or the oil must be heated

表格 9 Table 9								
立式安装直交轴箱采用法兰泵 Assignment of flanged-on pumps to vertical bevel-helical gear units								
类型 Types	n/ 1/min	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	
		速比 Ratio in			速比 Ratio in			
B2.V ¹⁾	1201-1800	5-6.3	6.3-8	KSW1	5-8	6.3-10	5.6-9	KSW2
		7.1-11.2	9-14	KSW2	9-11.2	11.2-14	10-12.5	KSW3
	901 - 1200	5-8	6.3-10	KSW2	5	6.3	5.6	KSW2
		9-11.2	11.2-14	KSW3	5.6-11.2	7.1-14	6.3-12.5	KSW3
	750 - 900	5-6.3	6.3-8	KSW2	5-10	6.3-12.5	5.6-11.2	KSW3
		7.1-10	9-12.5	KSW3	11.2	14	12.5	*
		11.2	14	*				
B3.V ¹⁾	1201-1800	12.5-35.5	16-45	KSW2	12.5-35.5	16-45	14-40	KSW3
		40-71	50-90	KSW3	40-71	50-90	45 - 80	KSW4
	901 - 1200	12.5-25	16-31.5	KSW2	12.5-25	16-31.5	14-28	KSW3
		28-50	35.5-63	KSW3	28-50	35.5-63	31.5-56	KSW4
		56-71	71-90	*	56-71	71-90	63-80	*
	750 - 900	12.5-35.5	16-45	KSW3	12.5-35.5	16-45	14-40	KSW4
		40-71	50-90	*	40-71	50-90	45-80	*
B4.V ¹⁾	1201-1800	80-125	100-160	KSW2	80 - 315	100 - 400	90 - 355	*
		140-250	180-315	KSW3				
		280-315	355-400	*				
	901 - 1200	80-180	100-224	KSW3				
		200-315	250-400	*				
	750 - 900	80-125	100-160	KSW3				
		140-315	180-400	*				
* = 所需电动泵, 参见表11。 * = Motor pump require, see table 11.								

1) 布置形式A, B Design A, B
2) 布置形式C, D Design C, D



直交轴齿轮箱 Helical Gear Units 强制润滑方式 Forced Lubrication for

类型 B2 ... B4 Types B2 ... B4 规格 5 ... 18 立式安装 Sizes 5 ... 18 Vertical

表 10 Table 10								
立式安装直交轴箱采用法兰泵 Assignment of flanged-on pumps to vertical bevel-helical gear units								
类型 Types	n ₁ 1/min	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	
		速比 Ratio			速比 Ratio			
		i _N			i _N			
B2.V ¹⁾	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 ²⁾	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
		56-71	71-90	*	63-71	80-90	71-80	*
	750 – 900	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	*
B4.V ¹⁾	1201 – 1800	80-100	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 11。 * = Motor pump required ,see table 11.								

* = 所需电动泵, 参见表 11。 * = Motor pump required, see table 11

1) 布置形式 C, D Design C, D
2) 布置形式 A, B Design A, B

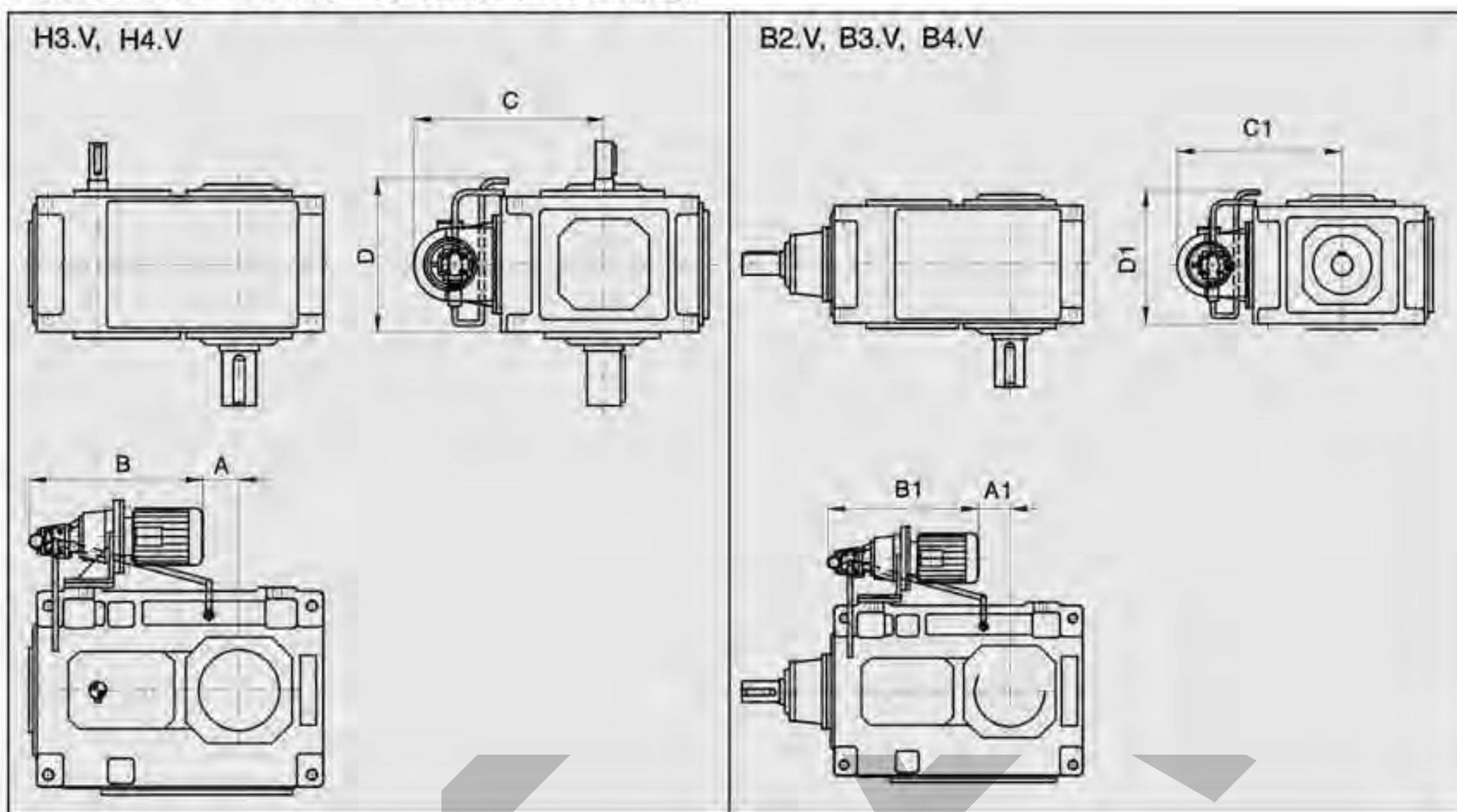
表 11 Table 11			
立式安装直交轴齿轮箱采用法兰泵 Assignment of flanged-on pumps to vertical helical gear units			
类型 Types	规格 Size	布置方式 Design	油泵 Pump
B2.V	5 ... 12	A / B	SF 2/5
	13 ... 18		SF 2/8
	5 ... 18	C / D	SF 2/8
B3.V	5 ... 12	A / B	SF 2/8
	13 ... 18		SF 2/13
	5 ... 12	C / D	SF 2/8
	13 ... 18		SF 2/13
B4.V	5 ... 12	A / B	SF 2/8
	13 ... 18		SF 2/13
	5 ... 12	C / D	SF 2/8
	13 ... 18		SF 2/13



齿轮箱 Gear Units 电动泵强制润滑方式 Mounted Motor Pumps

类型 H3, H4, B2, B3, B4 Types H3, H4, B2, B3, B4

规格 5 ... 18 立式安装 Sizes 5 ... 18 Vertical



表格 12 Table 12

安装尺寸 Mounting dimensions on mm

类型 Types	规格 Size	布置形式 Design	A	B	C	D
H3.V	5 / 6	A/B/C/D	-30 / 5	560	480	385
	7 / 8	A/B/C/D	55 / 100	585	550	430
	9 / 10	A/B/C/D	140 / 190	610	565	500
	11 / 12	A/B/C/D	375 / 445	530	625	560
	13 / 14	A / C	155 / 225	880	670	700
	13 / 14	B / D	100 / 170	935	670	700
	15 / 16	A / C	275 / 320	965	710	770
	15 / 16	B / D	220 / 265	1020	710	770
	17 / 18	A / C	250 / 310	1040	770	835
	17 / 18	B / D	195 / 255	1095	770	835
H4.V	7 / 8	A / C	55 / 100	600	550	430
	7 / 8	B / D	0 / 45	680	550	430
	9 / 10	A / C	140 / 190	625	565	500
	9 / 10	B / D	85 / 135	705	565	500
	11 / 12	A / C	375 / 445	550	625	560
	11 / 12	B / D	320 / 390	635	625	560
	13 / 14	A/B/C/D	135 / 205	910	670	700
	15 / 16	A/B/C/D	255 / 300	1000	710	775
	17 / 18	A/B/C/D	230 / 290	1070	775	835

表格 13 Table 13

安装尺寸 Mounting dimensions on mm

类型 Types	规格 Size	布置形式 Design	A ₁	B ₁	C ₁	D ₁
B2.V	5 / 6	A/B/C/D	-160 / -125	480	470	415
	7 / 8	A/B/C/D	5 / 50	480	525	510
	9 / 10	A/B/C/D	60 / 110	480	565	570
	11 / 12	A/B/C/D	150 / 220	480	625	660
	13 / 14	A/B/C/D	-70 / 0	755	670	805
	15 / 16	A/B/C/D	15 / 60	780	710	910
	17 / 18	A/B/C/D	-5 / 55	890	775	1025
B3.V	5 / 6	A/B/C/D	-85 / -50	480	480	365
	7 / 8	A/B/C/D	-5 / 40	480	550	430
	9 / 10	A/B/C/D	65 / 115	480	565	500
	11 / 12	A/B/C/D	280 / 350	480	625	560
	13 / 14	A/B/C/D	35 / 105	810	670	700
	15 / 16	A/B/C/D	120 / 165	875	710	775
	17 / 18	A/B/C/D	165 / 225	970	775	835
B4.V	5 / 6	A/B/C/D	-35 / 0	480	480	385
	7 / 8	A/B/C/D	55 / 100	480	550	430
	9 / 10	A/B/C/D	140 / 190	615	565	500
	11 / 12	A/B/C/D	375 / 445	530	625	560
	13 / 14	A/B/C/D	135 / 205	905	670	700
	15 / 16	A/B/C/D	255 / 300	990	710	775
	17 / 18	A/B/C/D	230 / 290	1065	775	835



齿轮箱 Gear Units

采用实心轴、带储油管的齿轮箱的润滑油供给方式

Oil Supply for Gear Units With Solid Shaft and Oil Retaining

类型 H2 ... H4, B2 ... B4

Types H2 ... H4, B2 ... B4

规格 5 ... 18 立式安装 Sizes 5 ... 18 Vertical

表14 Table 14			
可选润滑油供给方式 Possible oil supply variants			
类型 Types	规格 Size	布置形式 Design	
		B	C
H2SV	5-6	O ¹⁾	-
	7-12	O ²⁾	-
	13-18	O ³⁾	-
H3SV	5-7	O	-
	7-12	O	-
	13-18	O	-
H2SV	5-6	-	O
	7-12	-	O
	13-18	-	O
B3SV	5-6	-	O
	7-12	-	O
	13-18	-	O
B4SV	5-6	-	O
	7-12	-	O
	13-18	-	O

- = 布置形式不允许 Design not possible

O = 可选强制润滑 Forced lubrication possible

1) 对于规格5号齿轮箱, 仅适用于速比 $i \leq 16$ For size 5 only possible up to $i \leq 16$

2) 对于规格7号齿轮箱, 仅适用于速比 $i \leq 16$ For size 7 only possible up to $i \leq 16$

对于规格11号齿轮箱, 仅适用于速比 $i \leq 18$ For size 11 only possible up to $i \leq 18$

3) 对于规格13号齿轮箱, 仅适用于速比 $i \leq 18$ For size 13 only possible up to $i \leq 18$

对于规格17号齿轮箱, 仅适用于速比 $i \leq 16$ For size 17 only possible up to $i \leq 16$



齿轮箱 GearUnit 润滑油供给方式监测之件 Oil Supply for
类型 H2... H4, B2... B4 Types H2... H4, B2... B4
立式安装 Vertical 规格 5...18 Sizes 5...18

齿轮箱规格 5 ...12 Gear unit size 5...12	齿轮箱规格 13...18 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G 1/2 Connection for pressure gauge G1/2

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，设有一个光电污染指示器。

压差 $\Delta p = 2\text{bar}$; 1个切换触点

电器参数最大额定值

切换电压 $U \leq 250\text{V DC+AC}$

切换电流 $I \leq 1\text{A}$

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

保护级别: IP65

b) 当油压降至0.5bar以下时，压力监测开关通过报警系统可发出光、声报警信号，或关闭该系统。

技术参数:

最大切换能力:

(交流) 2A/250V, AC/250VA

(直流) 4A/200V, DC/20W

保护级别: IP65

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

Double change-over filters with opposed cylinders have an optical-electrical 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 $I \leq 1\text{A}$

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:

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

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

Type of protection IP65



齿轮箱 Gear Units

布置形式 Design

类型 H2 ... H4 ..., B2 ... B4

Types H2 ... H4 ..., B2 ... B4

规格 1 ... 26 Sizes 1 ... 26

平行轴齿轮箱 Helical gear units			直交轴齿轮箱 Bevel-helical gear units		
H.SH, H.SV		实心轴 Solid shaft	B.SH, B.SV		实心轴 Solid shaft
A	B	C	A	B	C
D	E	F	D	E	F
G	H				
H.DH, H.DM, H.DV		带胀紧盘的空心轴 Hollow shaft for shrink disk *)	B.DH, B.DM, B.DV		带胀紧盘的空心轴 Hollow shaft for shrink disk *)
A	B	C	A	B	
D	G	H	C	D	
H.HH, H.HM, H.HV		空心轴 Hollow shaft *)	B.HH, B.HM, B.HV		空心轴 Hollow shaft *)
A	B	G	A/B	C/D	

*) 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.

附边 Attachment side			
		X 终端面上D ₁ 的视图 View on end face of D ₁	
L LH 边上的连接件 Attachment on LH side	R RH 边上的连接件 Attachment on RH side		

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