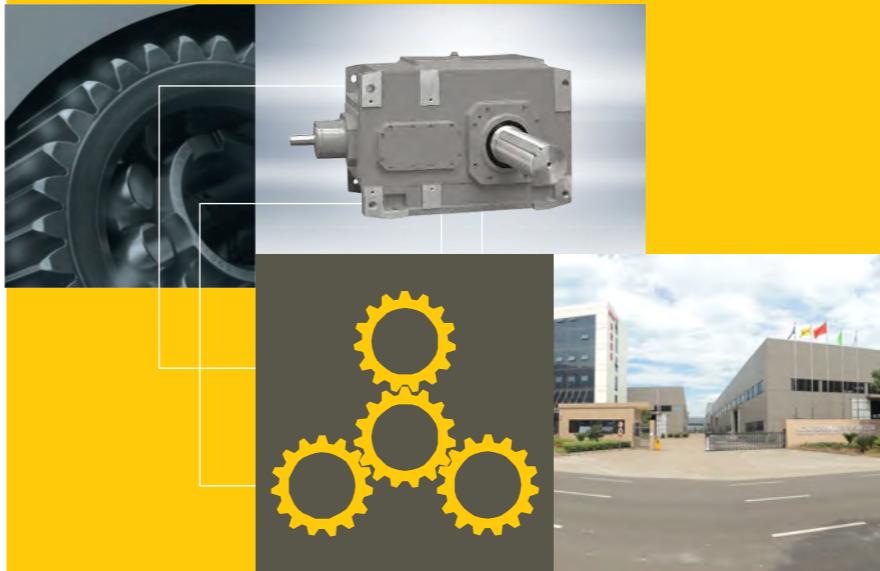


TAIXING

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SHANGHAI TAIXING
DRIVE TECHNOLOGY CO., LTD.
(上海)臺星傳動科技有限公司



H/B series H/B系列大功率减速机 HIGH POWER REDUCTOR



企业简介 ABOUT US

(上海)台星传动科技有限公司是生产减速机、变速机等传动设备的专业制造商。公司一直致力于传动产品的研制和生产，产品在国际市场享有很高的声誉，在动力传输领域有极高的知名度。

公司拥有世界先进的加工机床与检测设备、雄厚的技术力量，为用户提供高品质的产品。主要产品有P系列行星齿轮减速机、K系列斜齿轮—螺旋伞齿轮减速机、T系列螺旋伞齿轮转向箱、R系列硬齿面齿轮减速机、F系列平行轴减速机、S系列斜齿轮--蜗轮减速机、H、B系列硬齿面工业齿轮箱、NMRV蜗轮减速机等各系列产品，主要零部件硬齿面齿轮采用渗碳淬火热处理，磨齿加工精度5级，确保产品的可靠性及低噪音。

台星产品具有高强度、体积小、噪音低、传动扭矩大等特点，广泛应用于环保工程、啤酒饮料、纺织印染、石化、轻工、钢铁冶金、仓库物流、立体车库等行业。

Shanghai Taixing Driving Science & Technology Co.,Ltd is a professional manufacturer who specialized on producing transmission equipment as reducer and variator , devote ourselves to research and produce above products . Our products win very high reputation in international market ,specially in transmission field .

We offer high quality products as world advanced processing machines ,testing equipment and strong technical capacity . Main products are : P series planetary gearbox , K series helical bevel gearbox , T series Bevel gearbox , R series helical inline gearbox , F series parallel shaft gearbox , S series helical worm gearbox , H B series helical gear unit , NMRV worm gearbox etc .

The main spares(helical gears) is proceeded by carburizing and Quenching heat treatment and gear precision is DIN5 ,which ensure the security and low noise of gearbox .

High strength ,compact design ,low noise ,heavier transmission torque are the characters of Taixing products which are widely used for Environment protection project, bear & Beverage ,Weave ,printing & Dyeing ,Light industry and etc.

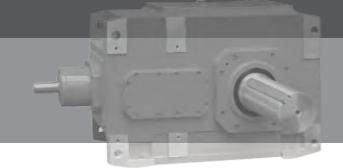


H/B SERIES

HIGH POWER REDUCTOR

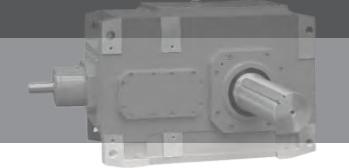
H/B系列大功率减速机





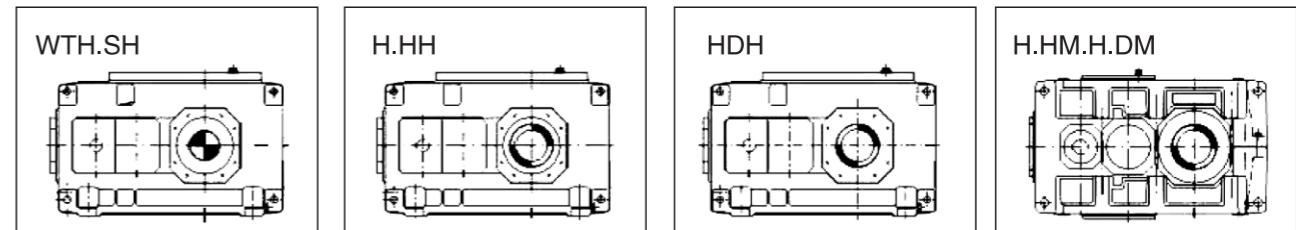
齿轮箱 Gear Units 目录 Contents

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齿轮箱型号表示方法 Gear units designation of types		5页 Pages 5
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	平行轴齿轮箱 Helical gear units H2SH,H2HH,H2DH,H2HM,H2DM H3SH,H3HH,H3DH,H3HM,H3DM H4SH,H4HH,H4DH,H4HM,H4DM	29~40页 Pages 29~40
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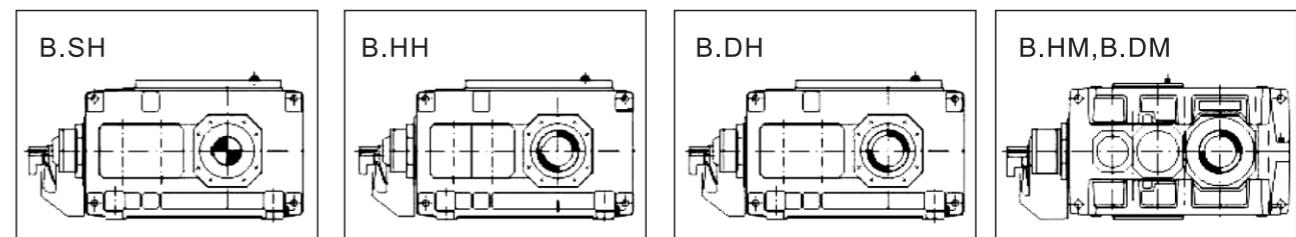


齿轮箱 Gear Units 基本类型概括 Summary of Basic Types

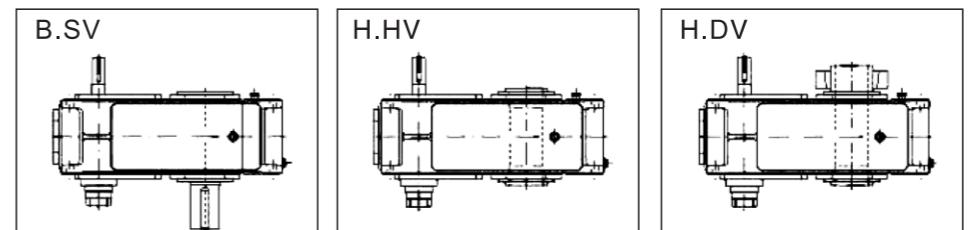
卧式安装
Horizontal mounting position
平行轴齿轮箱
Helical gear units
类型H1...,H2...,H3...,H4..
1...4-级传动, $iN=1.25\sim450$
1...4-stage, $iN=1.25\sim450$



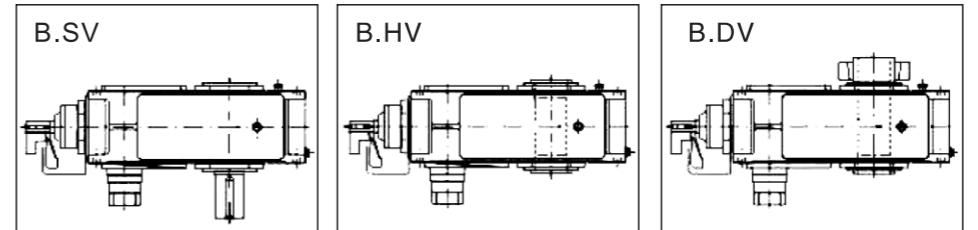
直交轴齿轮箱
Bevel-Helical gear units
类型 B2...,B3...,B4..
2~4-4-级传动, $iN=5\sim400$
2~4-stage, $iN=5\sim400$

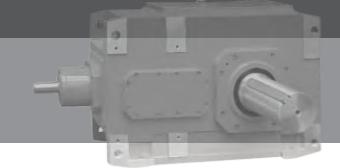


立式安装
Vertical mounting position
平行轴齿轮箱
Helical gear units
类型 H2,VH3.V,H4.V
2~4-4-级传动, $iN=6.3\sim450$
2~4-stage, $iN=6.3\sim450$



直交轴齿轮箱
Bevel-helical gear units
类型 B2.V,B3.V,B4.V
2~4-stage, $iN=5\sim400$
2~4-stage, $iN=5\sim400$





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根据要求（根据客户要求供货）。

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。

齿轮箱的散热

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齿轮箱。这样，可因换油周期加长而提供设备运行可靠性，并能降低设备维护费用

库存

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 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 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 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 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 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。减速机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。实际油量应以油标上的标记为准。
- 润滑油粘度须以减速机铭牌上的数值为准。
- 减速机供货时带径向轴封。用户如有特别要求，可提供其它形式的密封装置。
- 转动方向是输出轴d2的方向。

Attention:

The following items are absolutely to be observed:

- Illustrations are examples only and 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 reducers 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 reducers 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号以上减速机箱体地脚上配有千斤顶螺丝，箱盖上配有调平面。

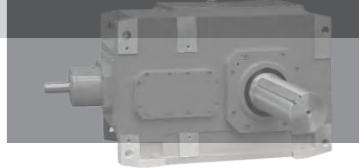
Form size 13 up jack screws in the housing feet, and leveling pads on the upper housing part.

基础螺栓的最低性能等级为8.8级。

Foundation bolts of min. property class 8.8.



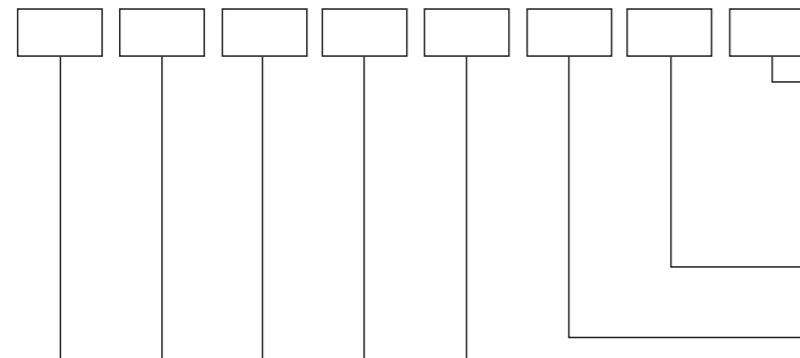
齿轮箱型号表示方法
Gear units designation of types



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

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 B 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iN 见 (13~24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

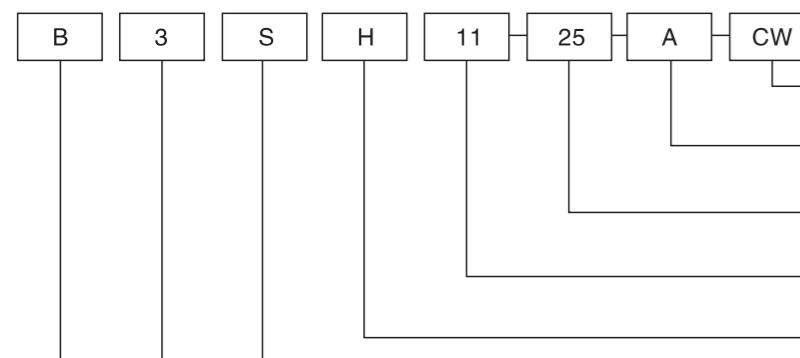
D=带胀紧盘的空心轴
Hollow shaft for shrink disk

传动级数 No.of stages

类型 Type

H=平行轴齿轮箱
Helical gear unit

B=直交轴齿轮箱
Bevel-helical gear unit



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 iN=25

Norminal ratio iN=25 (13~24页)

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

1.确定齿轮箱的类型及规格 1.Determination of gear unit type and size	1.1 计算传动比 Find the transmission ratio $i_S = \frac{n_1}{n_2}$ 1.2 确定齿轮箱的额定功率 Determine nominal power rating of the gear unit $P_N \geq P_2 \times f_1 \times f_2 \times S_A$ 如果不满足下列条件, 请向我们咨询 It is not necessary to consult us, if: $3.33 \times P_2 \geq P_N$	
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 1.3 Check for maximum torque, e.g. peak operating-, starting- or braking torque $T_N \geq \frac{T_A \times n_1}{9550} \times f_3$	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 1.3 Check for maximum torque, e.g. peak operating-, starting- or braking torque $T_N \geq \frac{T_A \times n_1}{9550} \times f_3$	
1.4 检查输出轴上是否允许有附加载荷; 见25~26页。 1.4 Check whether additional forces on the output shaft are permissible; see pages 25~26.	1.4 检查输出轴上是否允许有附加载荷; 见25~26页。 1.4 Check whether additional forces on the output shaft are permissible; see pages 25~26.	
1.5根据93~96页上的检查实际传动比是否满足要求 1.5 Check whether the actual ratio is as per table on pages 93~96 is acceptable	安装方式 Mounting position	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95~102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 95~102.
2.确定供油方式 2.Determination of oil supply	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	
3.确定所需要的热容量PG 3.Determination of required thermal capacity PG	3.1 如满足以下条件, 则齿轮箱可不带辅助冷却装置: 3.1 Adequate for gear unit without auxiliary cooling, if: $P_2 \leq P_G = P_{G1} \times f_4 \times f_6 \times f_8$ 3.1 如满足以下条件, 则齿轮箱带冷却风扇可满足要求: 3.1 Adequate for gear unit with fan cooling, if: $P_2 \leq P_G = P_{G2} \times f_4 \times f_6 \times f_8$ 3.1 如满足以下条件, 则齿轮箱带冷却盘管可满足要求: 3.1 Adequate for gear unit with fitted cooling, if: $P_2 \leq P_G = P_{G3} \times f_5 \times f_7 \times f_8$ 3.1 如满足以下条件, 则齿轮箱带冷却盘管和风扇可满足要求: 3.1 Adequate for gear unit with cooling coil and fan, if: $P_2 \leq P_G = P_{G3} \times f_5 \times f_7 \times f_8$ 3.1 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。 3.1 For higher thermal capacities, cooling by external oil cooler on request	



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

齿轮箱 Gear Units

符号说明 Key to Symbols

符号说明:

Key to symbols:

- ED = 每小时工作周期, 以百分比表示, 如 $ED=80\%/\text{h}$
Operating cycle per hour in %, e.g. $ED=80\%/\text{h}$
- f_1 = 工作机系数 (表1), 09页
Factor for driven machine(table*1), pages 09
- f_2 = 原动机系数 (表2), 10页
Factor for prime mover(table2), page 10
- f_3 = 峰值扭矩系数 (表3), 10页
Peak torque factor(table3), page 10
- $f_{4,5}$ = 环境温度系数 (表4+表5), 10页
Thermal factors(tables4+5), page 10
- $f_{6,7}$ = 海拔高度系数 (表6+表7), 11页
Factors for altitude(tables6+7), page 11
- f_8 = 立式安装齿轮箱供油系数 (表8), 12页
对于卧式安装齿轮箱: $f_8=1$
Oil supply factor for vertical gear units(Table8), page 12
For horizontal gear units: $f_8=1$
- i = 实际传动比
Actual ratio
- i_N = 额定传动比
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
- PG_1 = 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
- PG_2 = 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
- PG_3 = 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
- PG_4 = 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
- PN = 齿轮箱的额定功率 (kW) 见选型表, 14~21页
Nominal power rating of gear units(kW), see tables, pages 14~21
- 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)
- TA = 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) 14~24页
Nominal output torque(kN.m), pages 14~24
- SA = 减速机安全系数 (表15) 11页
Safty coefficient of speed reducer(table 15)Page 11



齿轮箱型号选型, 额定功率, 输出扭矩, 允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

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: $P_1=75 \text{ kW}$
电机转速: $n_1=1500 \text{ rpm}$
最大起动扭矩: $TA=720 \text{ N.m}$

工作机

皮带输送机功率: $P_2=66 \text{ kW}$
转速: $n_2=26 \text{ rpm}$
工作制: 12小时/天
每小时起动次数: 7
每小时工作周期: $ED=100\%$
环境温度: 30°C
室外安装 (风速): ($w \geq 4 \text{ m/s}$)
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 d2: 位于齿轮箱右侧 (面对输入轴), 既布置形式C
输出轴 d2 转动方向: ccw

KNOWN CRITERIA:

PRIME MOVER
Electric motor: $P_1=75 \text{ kW}$
Motor speed: $n_1=1500 \text{ rpm}$
Max.starting torque: $TA=720 \text{ N.m}$

DRIVEN MACHINE

Belt conveyor: $P_2=66 \text{ kW}$
Speed: $n_2=26 \text{ rpm}$
Duty: 12 h/day
Starts per hour: 7
Operating cycle per hour: $ED=100\%$
Ambient temperature: 30°C
Outdoor installation: ($w \geq 4 \text{ m/s}$)
Altitude: sea level
Reliability: normal

GEAR UNIT DESIGN

Bevel-helical reducers
Mounting position: horizontal
Output shaft d2: on right hand side design C
Direction of rotation of output shaft d2: ccw

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

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

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

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

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

从额定功率表中选择: 类型B3, 规格10, 对应的 $PN=122 \text{ kW}$

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

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

1.3 检查起动扭矩 Checking the starting torque

$$PN \geq \frac{T_{A \times n_1}}{9550} \times f_3 = \frac{720 \times 1500}{9550} \times 0.65 = 73.5 \text{ kW} \quad PN = 120 \text{ kW} > 73.5 \text{ kW}$$

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

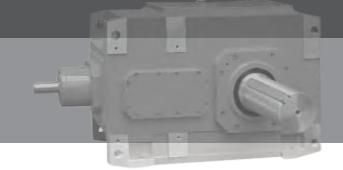
2.1 Thermal capacity for gear units without auxiliary cooling, acc.to table for type B3

$$P_G = PG_1 \times f_4 \times f_5 \times f_6 \times f_7 \quad PG \geq 78.9 \text{ kW} \times 0.88 \times 1 \times 1 \times (1.23 - 2.80 \times 0.095 \times 0.15) \quad PG \geq 82.6 \text{ kW}$$

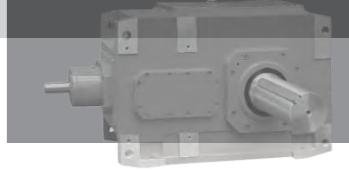
$$P_2 = 66 \text{ kW} < PG = 82.6$$

结论: 齿轮箱不带辅助冷却装置, 可满足要求!

Conclusion: A gear units without auxiliary cooling is sufficient!



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

表1 Table 1 工作机最低工况系数f1 Minmum working machine working condition coefficient f1									
工作机 Working machine	工作机最低工况系数f1 Minmum working machine working condition coefficient f1			工作机 Working machine	工作机最低工况系数f1 Minmum working machine working condition coefficient f1				
	≤0.5h	0.5~10h	>10h		≤0.5h	0.5~10h	>10h		
污水 Sewage 处理 treatment	浓缩器(中心传动) Concentrator(central transmission)	-	-	1.50	起重 Hoisting 机械 machinery	回转机构 Rotary mechanism	2.50	2.75	3.00
	压滤器 Filter press	1.25	1.50	1.75		俯仰机构 Elevation mechanism	2.50	2.75	3.00
	絮凝器 Flocculato	1.00	1.25	1.50		行走机构 Walking mechanism	2.50	3.00	3.25
	曝气机 Aerator	-	2.00	2.00		提升机构 Hoisting mechanism	2.50	2.75	3.00
	楼集设备 Raking device	1.25	1.50	1.75		转臂式起重机 Rotary arm crane	2.50	2.75	3.00
	纵向、回转组合接集装置 Vertical and rotary combination raking device	1.25	1.50	1.75	化学 Chemical 工业 Industry	挤压式 Extrusion press	-	-	1.75
	预浓缩器 Pre-concentrator	-	1.50	1.50		调浆机 Size mixer	-	2.00	2.00
	螺杆泵 Screw pump	-	1.50	1.75		橡胶砑光机 Rubber calender	-	1.50	1.75
	水轮机 Hydraulic turbine	-	-	2.00		冷却圆筒 Cooling cylinder	-	1.50	1.75
	离心泵 Centrifugal pump	1.25	1.50	1.75		混料机, 用于均匀介质 Mixer, for homogeneous medium	1.25	1.50	1.75
	1个活塞容积试泵 1 piston volume test pump	1.50	1.75	2.00		混料机, 用于非均匀介质 Mixer, for inhomogeneous medium	1.50	1.75	2.00
	>1个活塞容积试泵 > 1 piston volume test pump	1.25	1.50	1.75		搅拌机, 用于密度均匀介质 Blender, for homogeneous density Medium	1.25	1.50	1.75
钢铁 Steel 工业 industry	拉线机 Wire drawing machine	1.25	1.50	1.75	冷却塔 Cooling tower	搅拌机, 用于密度非均匀介质 Blender, for inhomogeneous density Medium	1.25	1.50	1.75
	绕线机 Reeling machine	-	1.75	1.75		烘炉 Baking oven	1.25	1.50	1.75
	集中驱动轨道(无反转) Centralized driving rail (without reverserotation)	-	1.50	1.75		离心机 Centrifugal machine	1.25	1.50	1.75
	单独驱动轨道(无反转) Individual driving rail (without reverse rotation)	1.50	1.75	2.00		冷却塔风扇 Cooling tower fan	-	-	2.00
	集中驱动轨道(有反转) Centralized driving rail (with reverse rotation)	1.75	2.25	2.5	蔗糖 Sucrose 生产 production	风机(轴流和离心式) Fan(axial flow and centrifugal type)	-	1.50	1.75
	单独驱动轨道(有反转) Individual driving rail (with reverse rotation)	2.00	2.25	2.75		甘蔗切碎机 Sugarcane chopper	-	-	1.75
	可逆式中厚板轧机 Reversible middle thickness platerolling machine	-	2.50	2.75		甘蔗碾磨机 Sugarcane mil	-	-	1.75
纺织 Textile 工业 industry	织机 Weaving machine	1.25	1.50	1.75	甜菜糖 Beet sugar 生产 production	甜菜绞碎机 Beet mince	-	-	2.00
	纺纱机 Spinning machine	1.00	1.25	1.50		榨取机, 机械制冷机, 蒸煮机 squeezer, mechanical refrigerator, cooking machine	-	-	1.50
	洗涤剂 Washing machine	1.00	1.25	1.50		甜菜清洗机 Beet cleaner	-	-	1.50
输送 Conveying 机械 machinery	斗式输送机 Bucket conveyor	-	1.40	1.50	索道 Ropeway	甜菜切碎机 Beet choppe	-	1.50	1.50
	绞车 Winding engine	1.50	1.75	2.00		运货索道 Cargo ropeway	-	1.50	1.75
	卷扬机 Winding machine	-	1.75	2.00		往返系统空中索道 reciprocating system aerial ropeway	-	1.75	2.00
	货用电梯 Goods lift	-	1.50	1.75	缆车 cable car	T型杆升降机 T-shaped rod lifter	-	1.50	1.75
	客用电梯 Passenger lift	-	1.75	2.00		连续索道 Continuous ropeway	-	1.50	1.75
	刮板式输送机 Scraper conveyor	-	1.50	1.75		混凝土搅拌器 Concrete blender	-	1.50	1.75
	自动扶梯 Escalator	-	1.50	1.75		破碎机 Cracking machine	-	2.00	2.50
	轨道行走机构 Rail walking mechanism	-	1.50	1.75		回转窑 Rotary kiln	-	-	2.00
造纸 Papermaking 机械 machinery	各种类型 Various types	-	2.00	2.00	水泥 Cement 工业 industry	管式磨机 Pipe type grinding machine	-	-	2.00
	碎浆机驱动装置 Drive device of pulp shredder	2.00	2.00	2.00		选粉机 Power chooseing machine	-	1.75	2.00
	往复式压缩机 Reciprocating compressor	-	2.00	2.00		辊压机 Roller press	-	-	2.00

齿轮箱 Gear Units

服务系数 Service Factor

表2 Table 2	原动机系数 Factor for prime mover	f ₂
电机, 液压马达, 汽轮机 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 1:100 to 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 Table 3	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
f ₃ 交变载荷 Alternating direction of load	0.7	0.95
1.10	1.25	

表4 Table 4	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 _D)百分比% Operating cycle per hour(E _D)in %	
100	80	60
1.14	1.20	1.32
200	1.00	1.06
300	0.87	0.93
400	0.71	0.75
500	0.55	0.58
	0.64	0.74
	0.98	

表5 Table 5	环境温度系数 Thermal factor	f ₅
带冷盘管或带冷却盘管和风扇 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 _D)百分比% Operating cycle per hour(E _D)in %	
100	80	60
1.04	1.10	1.21
200	1.00	1.06
300	0.93	0.99
400	0.88	0.93
500	0.81	0.86
	0.94	1.09
	1.45	



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

齿轮箱 Gear Units 服务系数 Service Factor

海拔高度系数 Factor for altitude f_6					
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_6	1.0	0.95	0.90	0.85	0.80

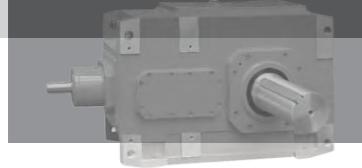
海拔高度系数 Factor for altitude f_7					
系数 Factor	海拔高度 (m, 高于海平面) Altitude (metres above MSL)				
	高达 Up to	高达 Up to	高达 Up to	高达 Up to	高达 Up to
	1000	2000	3000	4000	5000
f_7	1.0	0.98	0.96	0.94	0.92

减速机安全系数 Factor safety			
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更换备件 The failure of ordinary equipment and speed reducer can only result in production halts of single machine and replace cement of spare parts.	一般设备，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 or 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.
SA	1.3–1.7	1.5–2.0	1.7–2.5

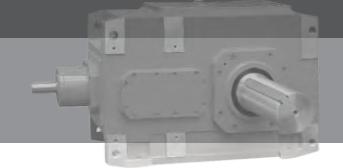
齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

齿轮箱 Gear Units 服务系数 Service Factors

立式安装齿轮箱供油系数。对于卧式安装齿轮箱 $f_8=1.0$; 当采用强制润滑时, $f_8=1.05$ Oil supply factor for vertical gear units for horizontal gear units $f_8=1.0$, and in case of forced lubrication $f_8=1.05$ f_8									
齿轮箱类型 Gear Unit Type	供油方式 Oil supply	规格 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	浸油润滑 Dip lubrication	0.95	*	0.95	*	*	*	*	*
H3.V	强制润滑 Forced lubrication	1.15	*	1.05	*	1.15	*	1.05	*
H4.V									
B2.V	浸油润滑 Dip lubrication	0.95	0.95	0.95	0.95	*	*	*	*
B3.V	强制润滑 Forced lubrication	1.15	1.10	1.10	1.10	1.15	1.10	1.10	1.10
B4.V									



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

平行轴齿轮箱 Helical Gear Units

额定功率 Nominal Power Ratings

类型 H1 Type H1

规格 1...19 Sizes 1...19

iN		n1 n2		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		齿轮回格 Gear unit sizes																									
额定功率PN.kW Nominal power rating PN in kW																													
1500 1200 99 327 880 1671 2702 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26																													
1.25 1000 800 66 218 566 1114 1801 750 600 50 163 440 836 1351 1500 1071 93 303 807 1559 2501 1000 714 62 202 538 1039 1667 750 536 47 152 404 780 1252 1500 938 85 285 737 1395 2318 3929 1000 625 57 190 491 929 1545 2618 4128 750 469 43 142 368 697 1159 1964 3094 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 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																													
根据用户要求供货 On request																													
1.25 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 2486 4280 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 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 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 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 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 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 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 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																													

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

特别注意：该系列各型号减速机实际允许的最大额定输入功率仅为表中值的0.71倍

Special note: The actually allowed maximum rated input power of the series speed reduces of all models is 0.71 times higher than the value in the table.

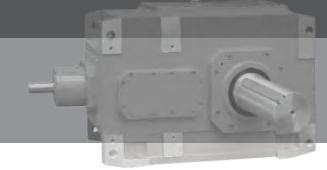
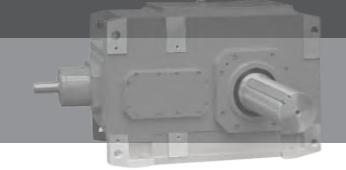
平行轴齿轮箱 Helical Gear Units

热容量 Thermal Capacities

类型 H1 Types H1

规格 1...19 Sizes 1...19

iN		热容量 Thermal Capacities																																																	
		齿轮回格 Gear unit sizes																																																	
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.																																																			
PG1 70.4 110 207 230 190 1.25 PG2 171 408 562 642 PG3 109 268 641 923 1322 PG4 322 819 1177 1621																																																			
PG1 68.0 110 214 250 247 1.4 PG2 169 409 567 670 PG3 105 260 629 901 1306 PG4 312 800 1149 1589																																																			
PG1 66.2 108 215 261 234 1.6 PG2 164 399 548 686 891 PG3 100 244 593 836 1246 2138 2631 PG4 295 754 1064 1519 2632 3220																																																			
PG1 66.0 120 214 274 323 330 1.8 PG2 181 387 552 682 1000 1011 PG3 93.7 264 557 818 1195 2082 2547 PG4 319 712 1040 1454 2555 3095																																																			
PG1 65.0 116 209 273 334 393 302 2 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																																																			
PG1 57.0 112 202 263																																																			



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

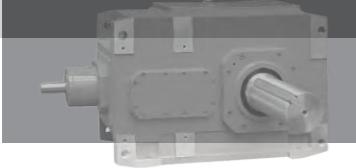
平行轴齿轮箱 Helical Gear Units

类型 H2..,H3.., Types H2..,H3

规格 3...26 Sizes 3...26

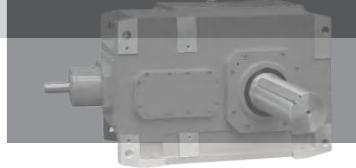
额定功率 Nominal power ratings

iN	n1	n2	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 rastings 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	294	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	1368	1614	249	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	311	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</td														



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

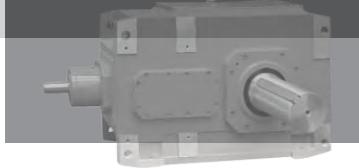
平行轴齿轮箱 Helical Gear Units

类型 H3..,H4.., Types H3..,H4

额定功率 Nominal Power Ratings

规格 5...26 Sizes 5...26

iN	n1	n2	额定功率 Nominal power rating																							
			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		
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	242	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	165	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	737	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	433	522	596	746	839			
	750	6.7	1																							



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.



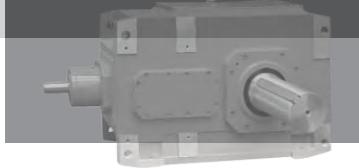
齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

直交轴齿轮箱 Bevel-helical Gear Units 类型 B2..,B3... Types B2...,B3...

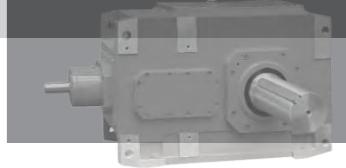
热容量 Thermal Capacities 规格 1...26 Size 1...26

			额定功率 Nominal power rating																													
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				
1500	300	36	63	97	182	295	559	880	1351	2073	3832*																					
5	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	3423*3788*																				
	1000	179	22	37	58	109	176	334	525	843	1256	22872530*3654*																				
	750	134	16	28	43	81	132	250	393	631	940	171218942736																				
6.3	1500	238	29	50	77	145	234	299	444	556	698	887	1171176920443239*3513*4859*																			
	1000	159	19	33	52	97	157	200	296	371	466	593	783	91611821365216423483246*																		
	750	119	14	25	39	72	117	150	222	278	349	444	596	685	885	1022162017572430																
7.1	1500	211	25	44	68	128	208	265	393	493	619	787	1083	1259161318562916*3203*4308*																		
	1000	141	17	30	46	86	139	177	263	329	413	526	723	842	107812401949214128793359*																	
	750	106	13	22	34	64	104	133	198	248	311	395	544	633	810	932	1465160921642553															
8	1500	188	23	39	61	114	185	236	350	439	551	701	994	11611516173225982913*3838*4527*																		
	1000	125	15	26	41	76	123	157	233	292	366	466	661	772	100811521728193725523010*																	
	750	94	11	20	31	57	93	118	175	219	276	350	497	581	756	866	1299145719192264															
9	1500	167	20	35	54	101	164	210	311	390	490	623	883	106713641591230925883409*4021*																		
	1000	111	13	23	36	67	109	139	207	259	325	414	587	709	907	10581534172022662673																
	750	83	10	17	27	50	82	104	155	194	243	309	439	530	678	791	1147128616951999															
10	1500	150	18	31	49	91	148	188	280	350	440	559	793	974	12251492207323253062*3612*																	
	1000	100	12	21	32	61	98	126	186	234	293	373	529	649	817	995	1382155020422408															
	750	75	9	16	24	46	74	94	140	175	220	280	397	487	613	746	1037116215311806															
11.2	1500	134	16	28	43	81	132	168	250	313	393	500	709	870	10941368185220772736*3227*																	
	1000	89	11	19	29	54	88	112	166	208	261	332	471	578	727	909	1230137918172143															
	750	67	8.1	14	22	41	66	84	125	156	196	250	354	435	547	684	926	103813681614														
12.5	1500	120	14	25	39	69	118	151	214	280	352	447	635	779	980	12251659186024502890*3141*	4272*															
	1000	80	10	17	26	46	79	101	142	187	235	298	428	519	653	817	11061240163419272094	2848														
	750	60	7.2	13	19	35	59	75	107	140	176	224	317	390	490	613	829	930	122514451571	2136												
14	1500	107	13	22	35	67	110	134	204	250	331	399	594	695	896	109215351658218525772935*3305*4033*4537*																
	1000	71	8.5	15	23	45	73	89	135	166	219	265	394	461	595	725	10191100145017101948219326763647*															
	750	54	6.5	11	18	34	55	68	103	126	167	201	300	351	452	551	775	837	110313011481166820362290													
16	1500	94	11																													



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

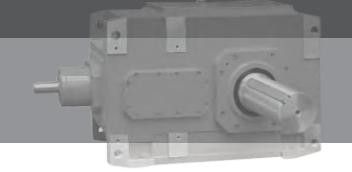
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

直交轴齿轮箱 Bevel-helical Gear Units 类型 B3..,B4... Types B3...,B4...

额定功率 Nominal Power Ratings

规格 3...26 Size 3...26

iN	n1	n2	额定功率 Nominal power ratings																								
			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																											
31.5	1500	48	18	33	55	73	103	128	171	216	302	377	442	548	769	870	1005	1206	1508	1734	2111	2362*	2814*	3216*	4020*	4523*	
	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	
35.5	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	
	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	3518*	3958*	
40	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	
	1500	38	14	26	44	58	82	101	135	171	239	298	350	434	609	688	796	955	1194	1373	1671	1870	2228	2597	3183*	3581*	
45	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	
50	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	3109*	
	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	
56	1500	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	
	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	
63	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	
71	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	589	659	786	898	1123	1263			
	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	
80	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	
80	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	
80	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	
	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	
90	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	551	630	787			
90	1500	16.7			19	24	36	44	59	75	105	131	154	191	268	303	350	420	525	603	734	822	979	111			



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

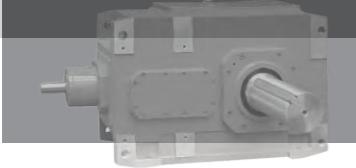
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

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

iN	传动比iN, 额定输出扭矩 T _{2N} Transmission ratios iN.nominal output torques T _{2N}																												
	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																													



齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

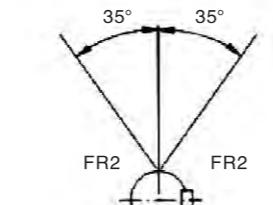
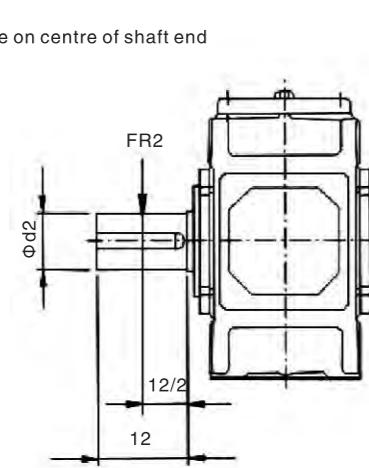
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

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 H1S.,H2S.,H3S.,H4S.,B2S.,B3S.,B4S

Types H1S.,H2S.,H3S.,H4S.,B2S.,B3S.,B4S

允许的作用力方向
Permissible direction of force

齿轮箱型号选型，额定功率，输出扭矩，允许的附加径向力

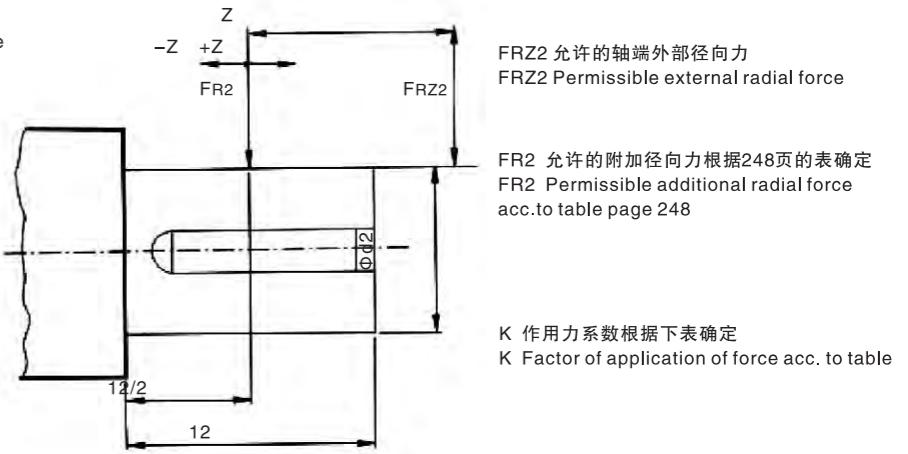
Selection of gear units, nominal power ratings, output torque, permissible additional radial forces.

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 H1S.,H2S.,H3S.,H4S.,B2S.,B3S.,B4S

Types H1S.,H2S.,H3S.,H4S.,B2S.,B3S.,B4S



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

类型 Type	布置形式 Design	齿轮箱规格1), 4) Gear unit sizes), 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)	-		
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。请与我们取得联系。

Values in table are minimum values. If the angle of application of force and the direction of rotation given, significantly higher additional forces can mostly be allowed. Please consult us.

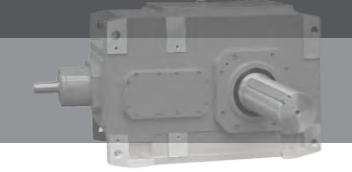
2)根据用户要求供货。On request.

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

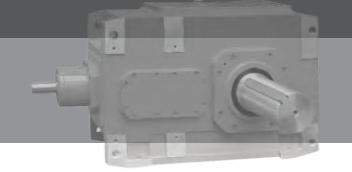
4)基础螺栓的最低性能等级为8.8级。基础必须干燥,不得有油脂。如用户要求,允许输入轴d1上附加径向力。

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.

规格 Size	作用力系数 K Factor of application of force K														
	距离Z (mm) Distance Z in mm														
-200	-150	-100	-75	-50	-25	0	25	50	75	100	105	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



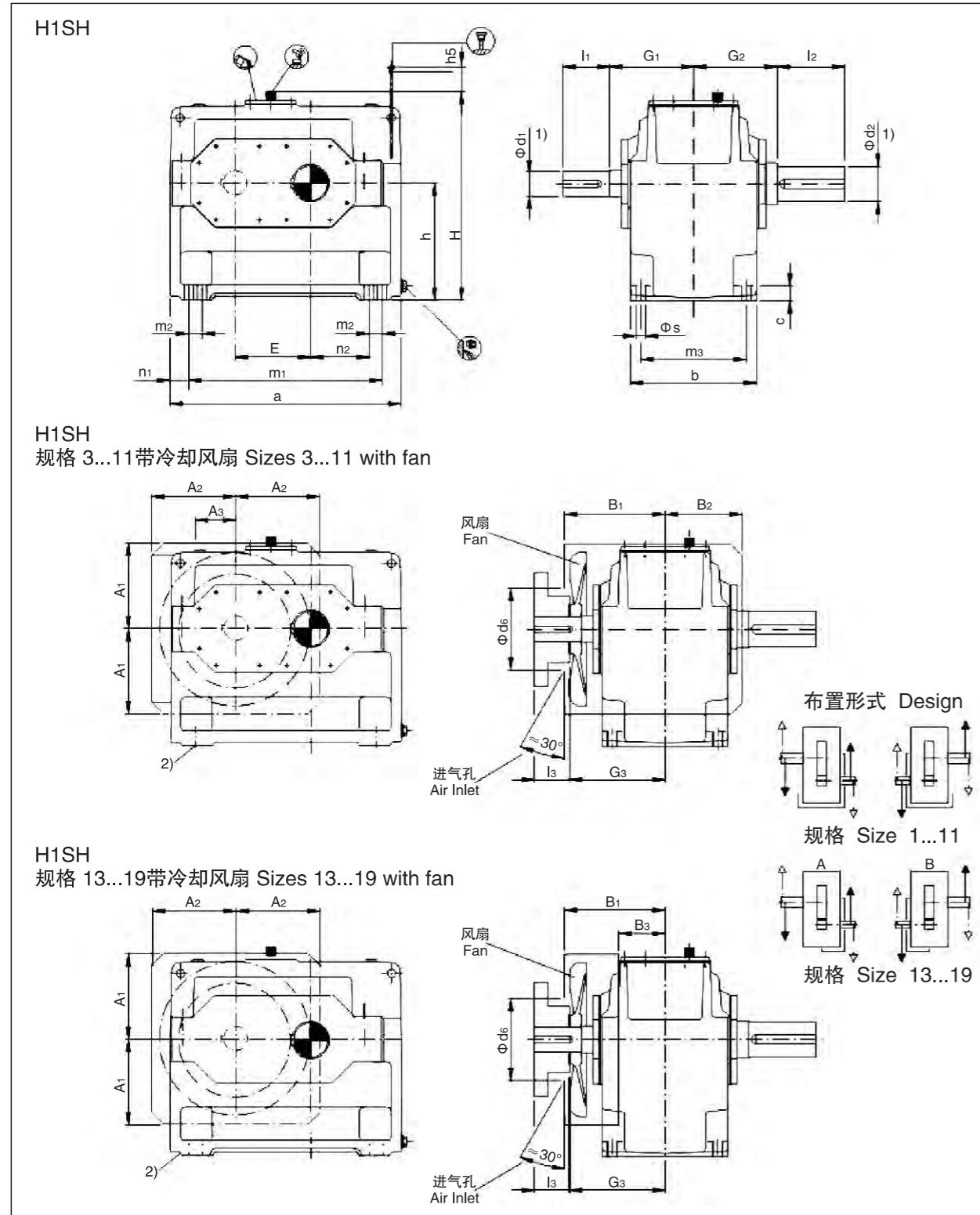
卧式安装
Horizontal



卧式安装
Horizontal

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 Size 1...19



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 cover before fitting the foundation bolts.

3) 规格1号不带风扇。Sizes 1 without fan.

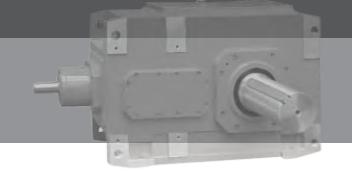
平行轴齿轮箱 Helical Gear Units 单级传动 Single Stage 卧式安装 Horizontal

类型 H1SH Type H1SH 规格 1...19 Size 1...19

规格 Size	尺寸mm Dimensions in mm														G1	G3				
	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							
1	40	70	-	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	110				
3	60	125	105										45	100	80	60	170	190		
5	85	160	130										60	135	105	50	110	80	210	240
7	100	200	165										75	140	105	60	140	105	250	285
9	110	200	165										90	165	130	75	140	105	280	315
11				130	240	205							110	205	170	90	170	135	325	360
13				150	245	200							130	245	200	100	210	165	365	410
15							180	290	240	150	250	200	125	250	200	360	410			
17							200	330	280	170	290	240	140	250	200	400	450			
19							220	340	290	190	340	290	160	300	250	440	490			

规格 Size	尺寸mm Dimensions in mm																重量 (kg)			
	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	m 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	82	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	450	490	670	-	1235	1170	130	530	120	425	42
19	1590	630	475	-	690	510	-	190	90	450	555	760	-	1395	1290	150	590	150	465	48

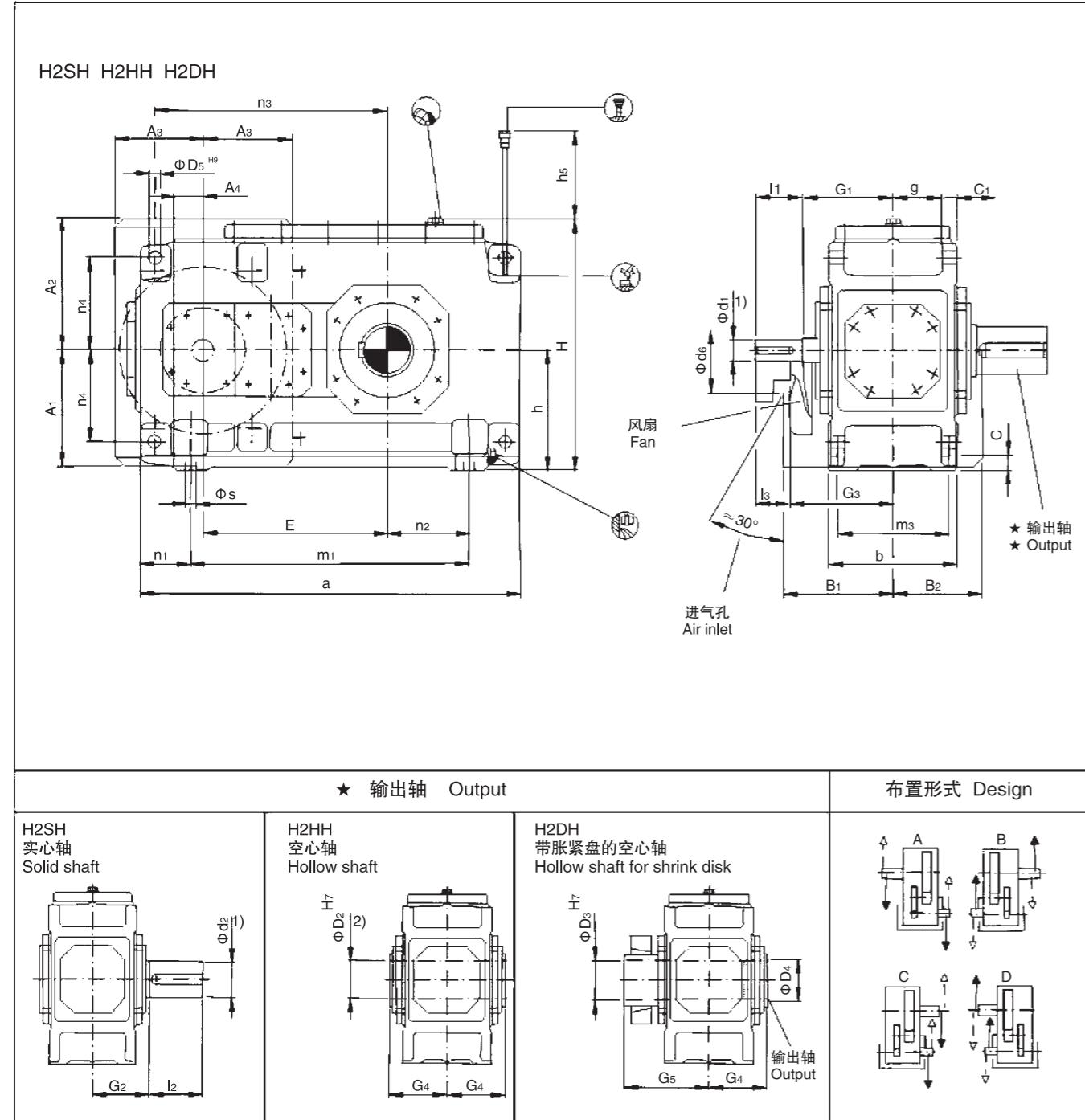
规格 Size	尺寸mm Dimensions in mm												重量 (kg)	润滑油 Lubrication		
	输出轴 Output															
	d ₂ ¹⁾	G ₂	I ₂													
1	45	110	80											2.5	55	
3	60	170	125											7	128	
5	85	210	160											22	302	
7	105	250	200											42	547	
9	125	270	210											68	862	
11	150	320	240											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	



卧式安装
Horizontal

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

类型 H2.H Type H2.H 规格 3...12 Size 3...12



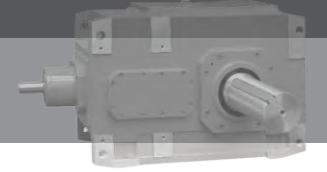
1) $k_e \leq \Phi 50$ $m_e > \Phi 50$

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，应先拆下风罩扇 Remove air guide cover before fitting the foundation bolts.

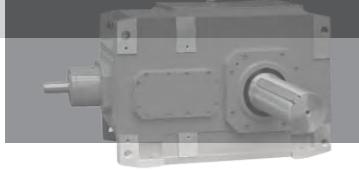


卧式安装
Horizontal

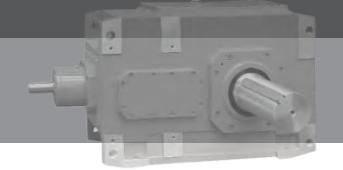
平行轴齿轮箱 Helical Gear Units 两级传动 Two Stage 卧式安装 Horizontal

类型 H2.H Type H2.H 规格 3...12 Size 3...12

规格 Size	尺寸 mm Dimensions in mm																
	输入轴 Input			iN=6.3-11.2			iN=8-14			iN=12.5-22.4			iN=16-28			G1	G3
	d1 ¹⁾	I1	I3	d1 ¹⁾	I1	I3	d1 ¹⁾	I1	I3	d1 ¹⁾	I1	I3	G1	G3			
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	80	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	A1	A2	A3	A4	b	B1	B2	c	C1	D5	d6					
	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	h5	H	m1	m3	n1	n2	n3	n4	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	120	505	215	24					
8	430	114	280	190	582	650	260	120	180	550	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 Lubrication		(L)				
	输出轴 Output																
	H2SH					H2HH					H2DH						
d2 ¹⁾	G2	I2	D2 ²⁾	G4	G4	D3	D4	G4	G5	G5			(L)				
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				



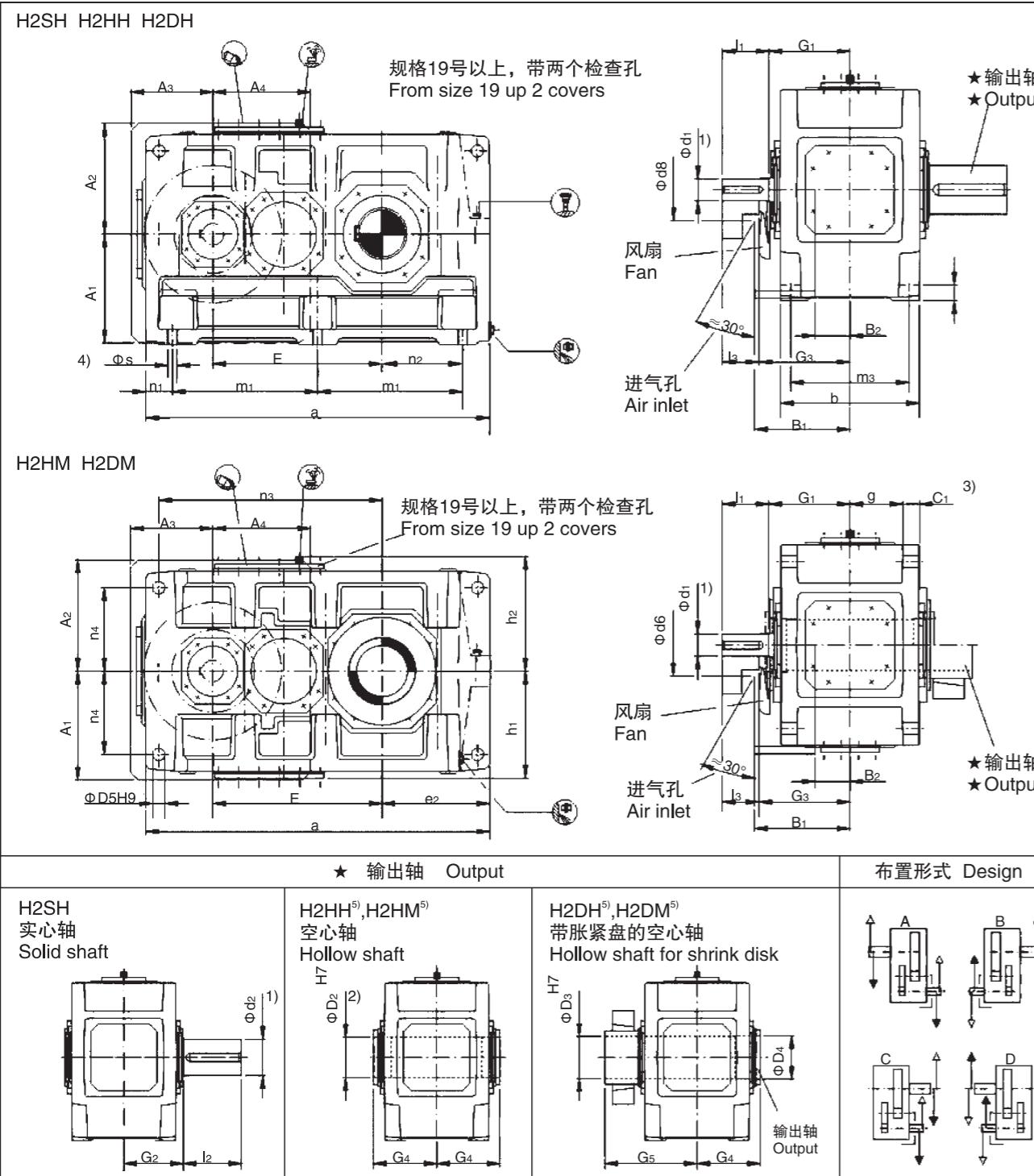
卧式安装
Horizontal



卧式安装
Horizontal

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



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) 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, 应先拆下风罩扇 Remove air guide cover before fitting the foundation bolts.

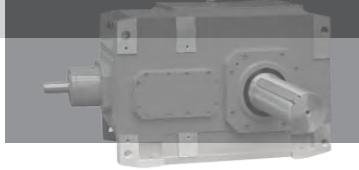
5) 规格13和15: 速比只有iN=6.3-18; 规格17号和19号: 速比只有iN=6.3-16

Size 13 and 15: only iN=6.3-18; Size 17 and 19: only iN=6.3-16

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

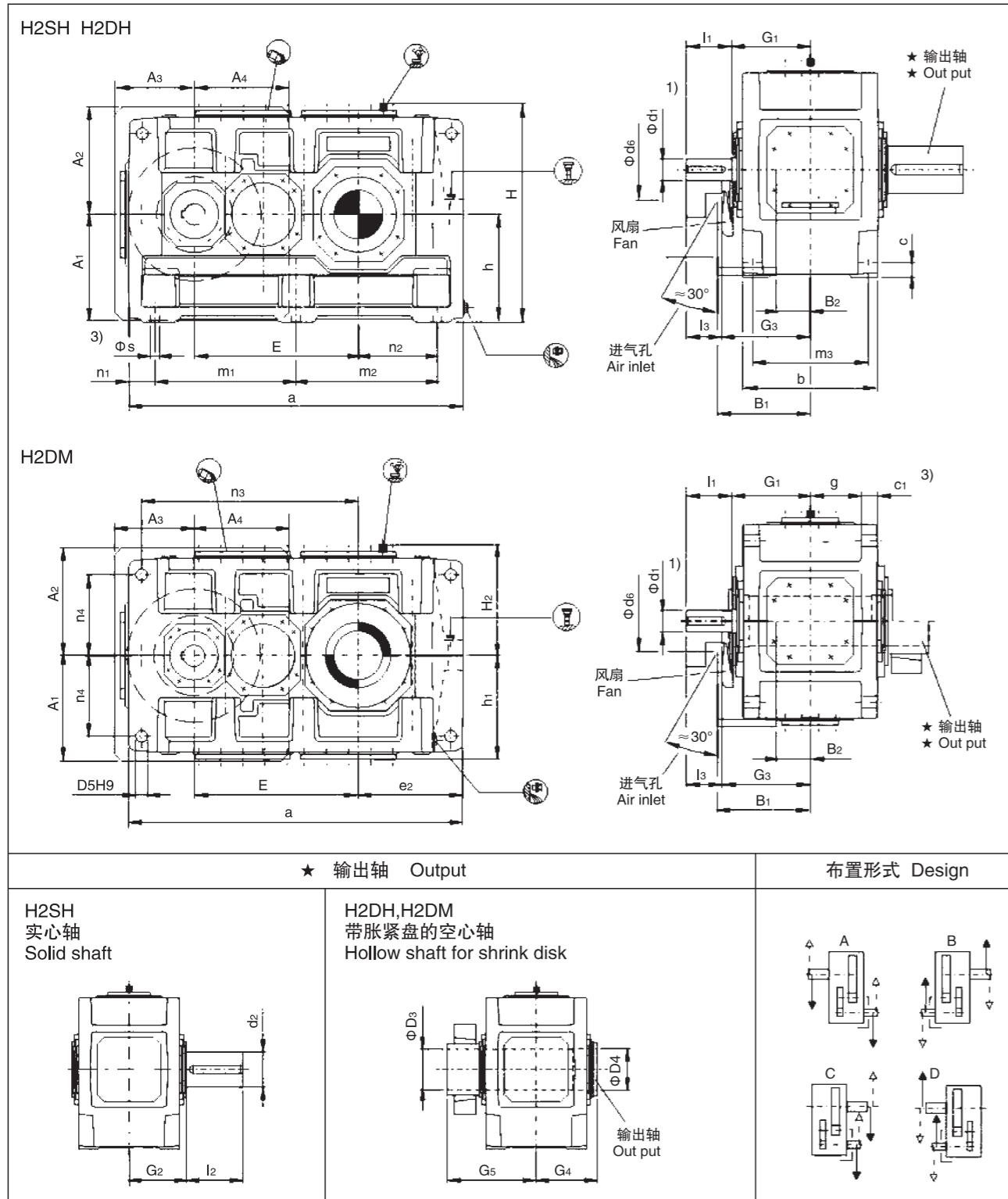
类型 H2.H, H2.M Types H2.H, H2.M 规格 13...22 Sizes 13...22

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														
13	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	d ₁ ¹⁾	l ₁	l ₃	85	170	135			G ₁	G ₃											
14							100	205	170					85	170	135	330 365										
15	120	210	165							100	210	165					365 410										
16				120	210	165							100	210	165		365 410										
17	125	245	200							110	210	165					420 465										
18				125	245	200							110	210	165		420 465										
19	150	245	200							120	210	165					475 520										
20				150	245	200							120	210	165		475 520										
21	170	290	240							140	250	200					495 545										
22				170	290	240							140	250	200		495 545										
规格 Size	尺寸 mm Dimensions in mm													齿轮箱 Gear units													
	齿轮箱 Gear units													a	A ₁	A ₂	A ₃	A ₄	b	B ₁	B ₃	c	C ₁	d ₆	D ₅	G ₂	E
	13	1290	430	460	330	365	550	385	135	60	61±2	250	48	405	635												
规格 Size	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 Dimensions in mm													齿轮箱 Gear units													
	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													
规格 Size	尺寸 mm Dimensions in mm													润滑油 Lubrication		重量 Weight (kg)											
	输出轴 Output													H2.H	H2.M												
	H2SH		H2HH ⁵ /H2HM ⁵		H2DH ⁵ /H2DM ⁵		H2DH ⁵ /H2DM ⁵						(L)		H2.H (kg)												
	d ₂ ¹⁾	G ₂	I ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G ₄	D ₅																		
	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</td																			



卧式安装
Horizontal

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



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) 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.



卧式安装
Horizontal

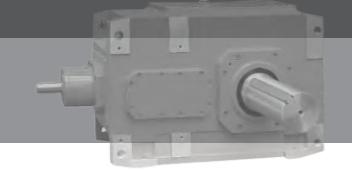
平行轴齿轮箱 Helical Gear Units 两级传动 Two Stage 卧式安装 Horizontal
类型 H2.H, H2.M Types H2.H, H2.M 规格 23...26 Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm																		
	输入轴 Input			iN=6.3-11.2			iN=7.1-11.5			iN=12.5-20			iN=14-22.4			G1	G3		
	d ₁ ¹⁾	I ₁	I ₃	d ₁	I ₁	I ₃	d ₁	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃							
23	190	330	280		190	330	280			150	250	200			560	610			
24															560	610			
25	200	340	290							170	300	250			600	650			
26					200	340	290								170	300	250	600	650

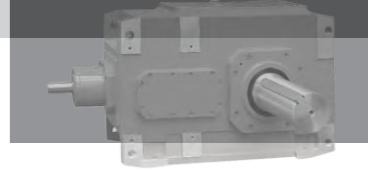
规格 Size	尺寸 mm Dimensions in mm													
	齿轮箱 Gear units													
	a	A ₁	A ₂	A ₃	A ₄	b	B ₁	B ₂	c	C ₁	d ₆	D ₅	e ₂	E
23	2380	770	770	550	550	930	630	220	115	120±2	450	80	730	1185
24	2510	770	770	550	550	930	630	220	115	120±2	450	80	795	1250
25	2580	845	865	550	550	1045	670	240	130	120±2	450	90	790	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	1040	910	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										
	输出轴 Output										
	H2SH			H2DH H2DM			润滑油 Lubrication			重量 Weight(kg)	
g	d ₂ ¹⁾	G ₂	I ₂	D ₃	D ₄	G ₄	G ₅	(L)	(L)	H2.H	H2.M
23	360	540	590	360	365	540	785	430	470	11600	11000
24	380	540	590	380	385	540	705	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



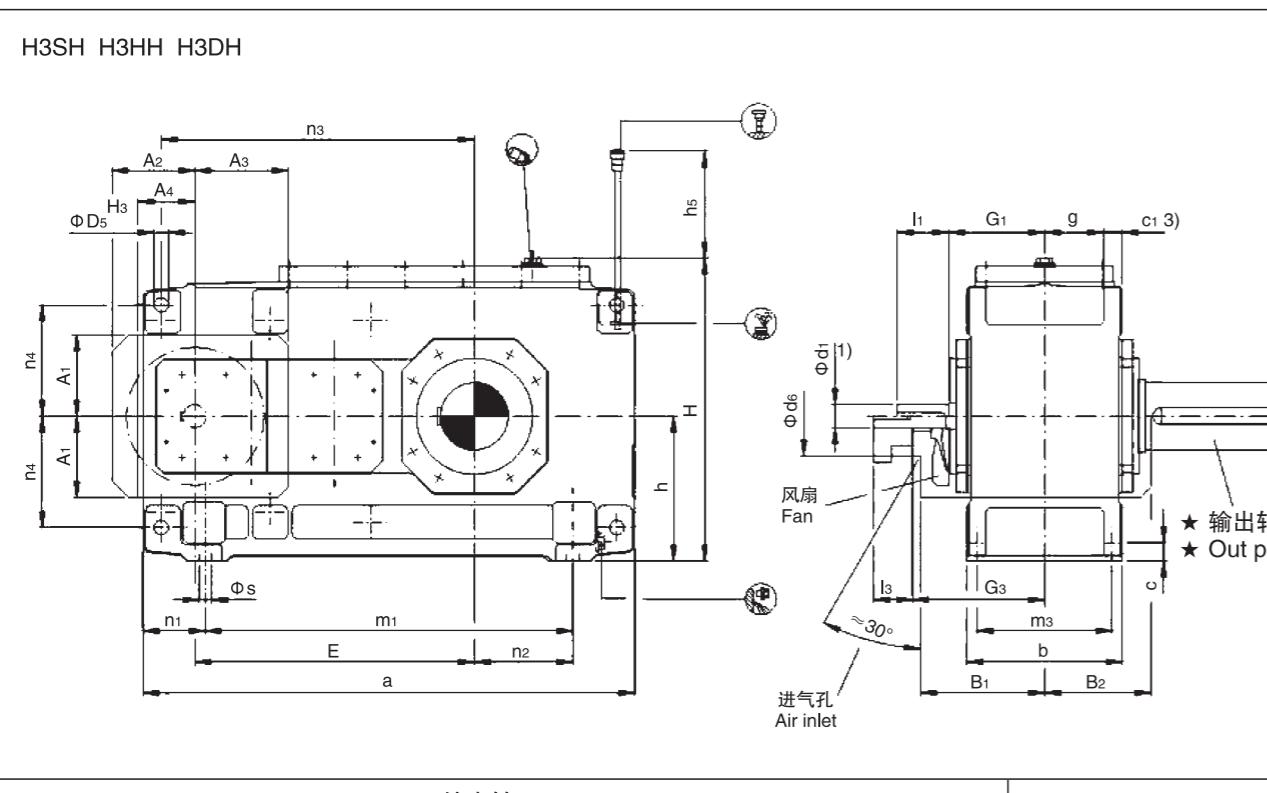
卧式安装
Horizontal



卧式安装
Horizontal

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 Size 5...12



★ 输出轴 Out put			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 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.

平行轴齿轮箱 Helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal

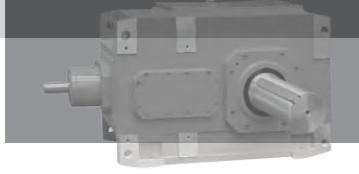
类型 H3.H Type H3.H 规格 5...12 Size 5...12

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			G1	G3 (配风扇 Equipped with fan)			
	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3					
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

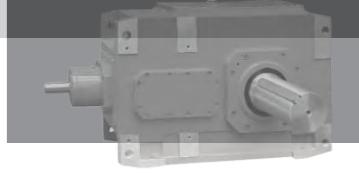
规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A1	A2	A3	A4	b	B1	B2	c	C1	d6	D5
5	690	137	135	140	80	255	215	175	28	30±1	60	24
6	770	137	135	140	80	255	215	175	28	30±1	60	24
7	845	157	160	180	100	300	245	205	35	36±1	75	28
8	950	157	160	180	100	300	245	205	35	36±1	75	28
9	1000	182	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	h5	H	m1	m3	n1	n2	n3	n4	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											
	输出轴 Output											
	H3SH				H3HH				H3DH			
	d _{2¹⁾}	G ₂	l ₂	D _{2²⁾}	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												



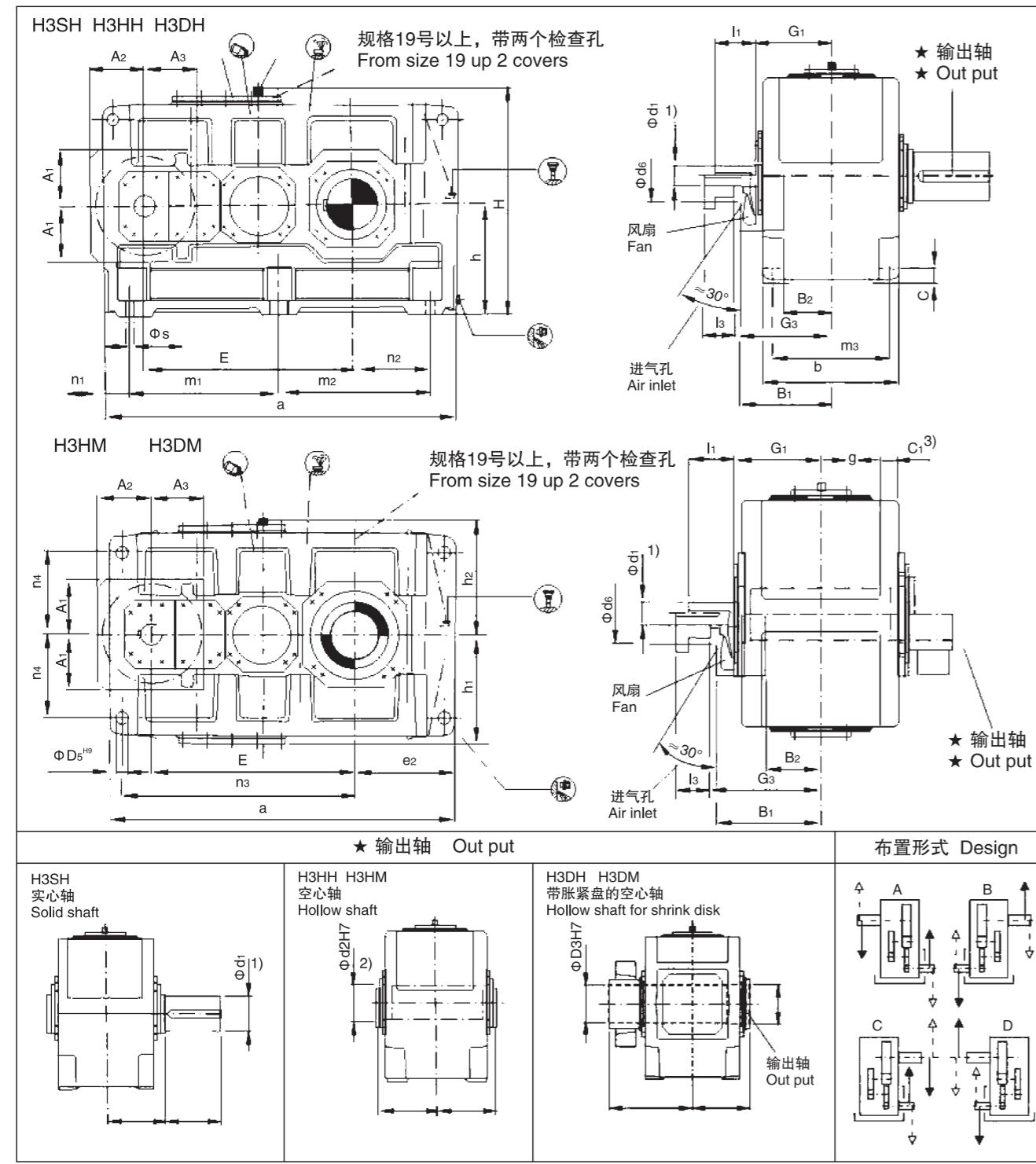
卧式安装
Horizontal



卧式安装
Horizontal

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



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) 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			G1	G3	
	iN=22.4~45			iN=25~50 *) iN=28~56			iN=50~63			iN=56~71 *) iN=63~80			iN=71~90			G1	G3	
	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃
13	85	160	130				60	135	105				50	110	80		310	385
14				85	160	130				60	135	105				50	110	80
15	100	200	165				75	140	105				60	140	105		350	420
16				100	200	165				75	140	105				60	140	105
17	100	200	165				75	140	105				60	140	105		380	450
18				100	200	165				75	140	105				60	140	105
19	110	200	4)				90	165	4)				75	140	4)		430	4
20				110	200	4)				90	165	4)				75	140	4)
21	130	240	4)				110	205	4)				90	170	4)		470	4)
22				130	240	4)				110	205	4)				90	170	4)

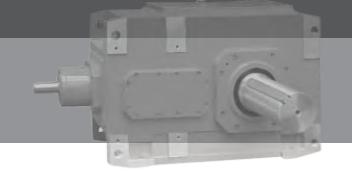
* 仅指规格14号齿轮箱 Only size 14

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	
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)			790			90	91±2		65	650	1250
21	2340				830			100	100±2		75	655	1387
22	2450							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	210	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											
输出轴 Output												
H3SH	H3HH	H3HM	H3DH	H3DM	H3.H	H3.M	H3.H	H3.M	润滑油 Lubrication			重量 Weight

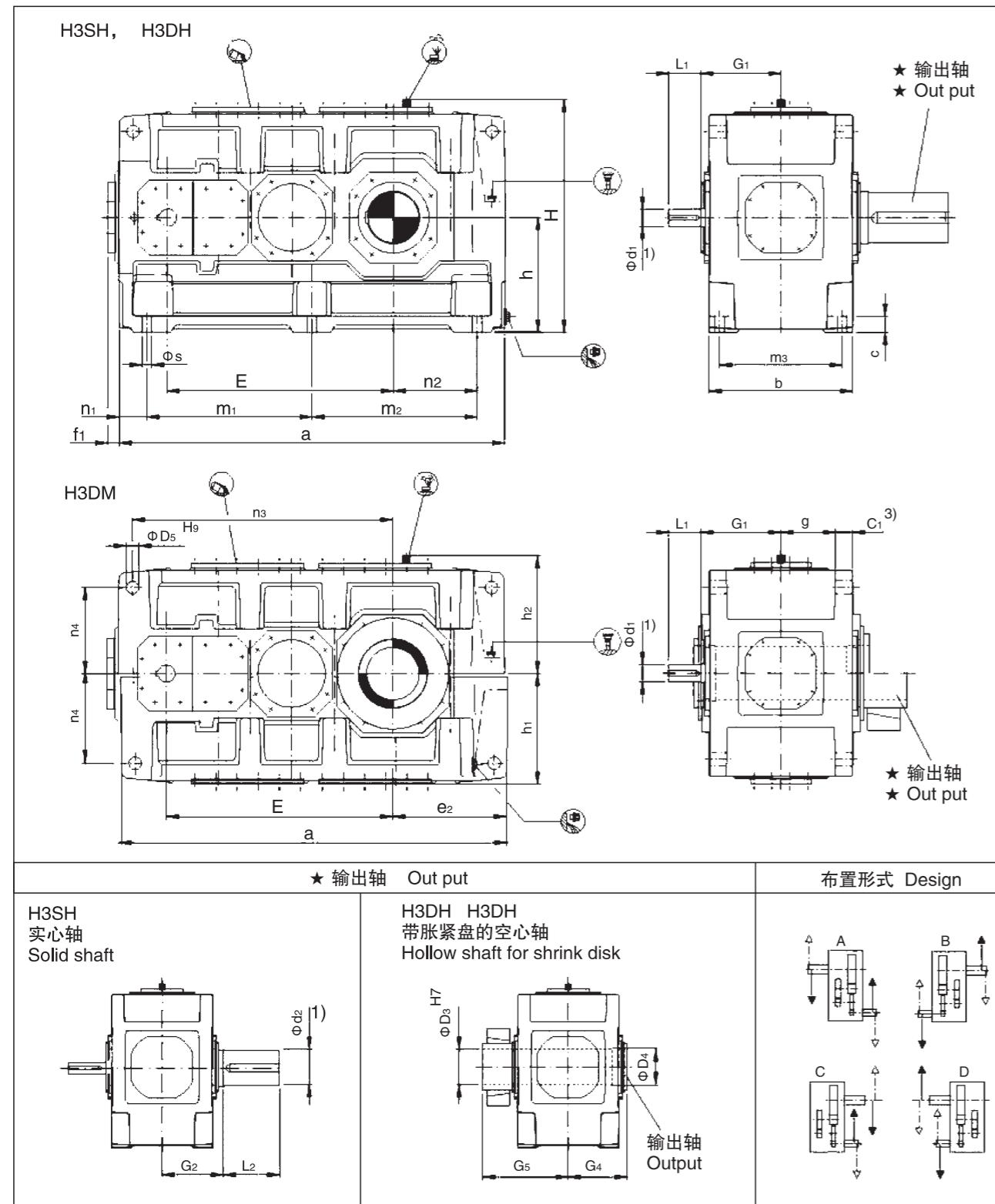
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卧式安装
Horizontal

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 23...26 Sizes 23...26

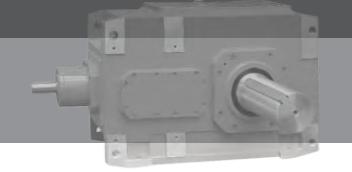


1) $k_e \leq \Phi 50$ $m_e > \Phi 50$

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.



卧式安装
Horizontal

平行轴齿轮箱 Helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal

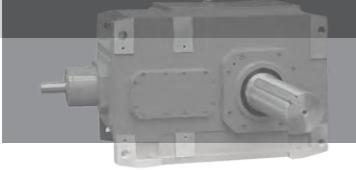
类型 MTH3.H, MTH3.M Types H3.H, H3.M 规格 23...26 Sizes 23...26

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	d ¹⁾	l ₁	G 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	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 Lubrication		重量 Weight	
	输出轴 Output										
	H3SH			H3DH		H3DM		H3.H	H3.M	H3.H	H3.M
23	D ₂ ¹⁾	G ₂	l ₂	D ₃	D ₄	G ₄	G ₅	(L)	(L)	(Kg)	(L)
24	360	540	590	360	365	540	785	620	690	11500	10600
25	380	540	590	380	385	540	805	650	725	13400	12500
26	400	605	650	400	405	605	875	880	970	16100	15200
	420	605	650	430	435	605	900	935	1030	17600	16500



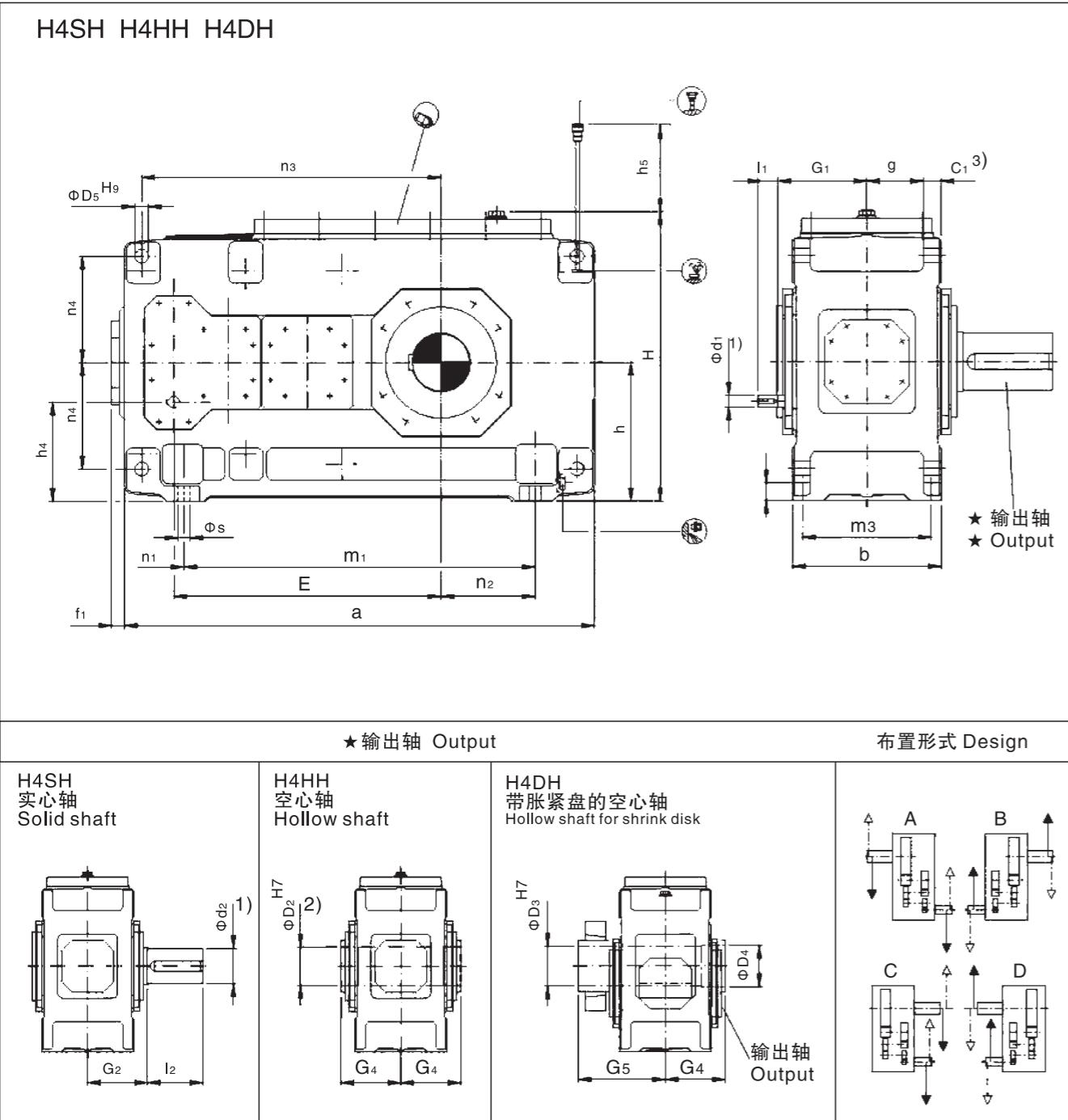
卧式安装
Horizontal



卧式安装
Horizontal

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



1) $k_e \leq \Phi 50$ $m_e > \Phi 50$

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.

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

规格 Size	尺寸 mm Dimensions in mm										G1	
	输入轴 Input											
	iN=100~180		iN=125~224		iN=200~355		iN=250~450					
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															s		
	齿轮箱 Gear units																	
	a	b	c	c1	D5	E	f1	g	h	h4	h5	H	m1	m3	n1	n2	n3	n4
7	845	300	35	36 ± 1	28	495	37	114	280	200	140	572	605	260	120	130	560	215
8	950	300	35	36 ± 1	28	540	37	114	280	200	140	582	710	260	120	190	605	215
9	1000	370	40	45 ± 1.5	36	580	43	140	320	230	150	662	710	320	145	155	660	245
10	1100	370	40	45 ± 1.5	36	630	43	140	320	230	150	662	810	320	145	205	710	245
11	1200	430	50	54 ± 1.5	40	705	56	161	380	270	165	782	870	370	165	180	805	300
12	1355	430	50	54 ± 1.5	40	775	56	161	380	270	165	790	1025	370	165	265	875	300

规格 Size	尺寸 mm Dimensions in mm										润滑油 Lubrication (L)	重量 Weight (kg)		
	输出轴 Output													
	H4SH			H4HH			H4DH							
d ₂ ¹⁾	G ₂	I ₂	D ₂ ²⁾	G ₄	G ₄	D ₃	D ₄	G ₄	G ₅					
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			

1) $k_e \leq \Phi 50$ $m_e > \Phi 50$

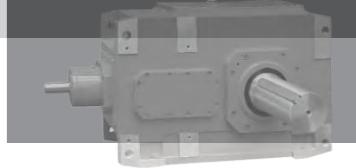
有关平键GB/T1095-1979型和中心孔，参见第87~88页。For parallel key GB/T1095-1979 and for centre hole, see page 87~88

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.



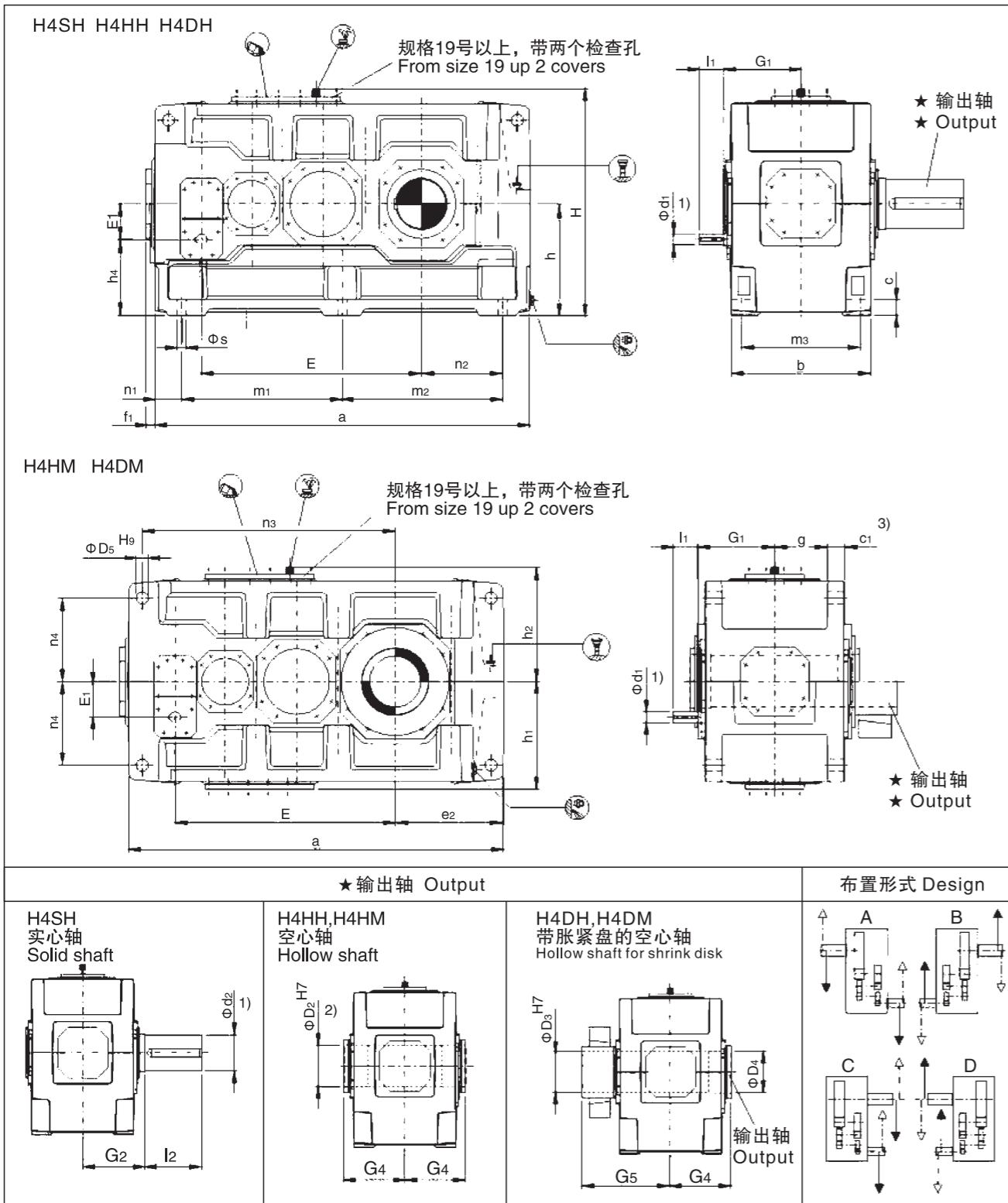
卧式安装
Horizontal



卧式安装
Horizontal

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



1) $k_o \leq \Phi 50$ $m_o > \Phi 50$

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

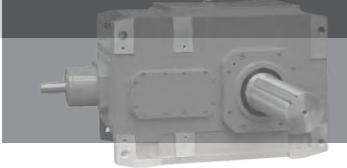
2) 键槽 GB/T1095-1979。Keyway GB/T1095-1979。

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

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

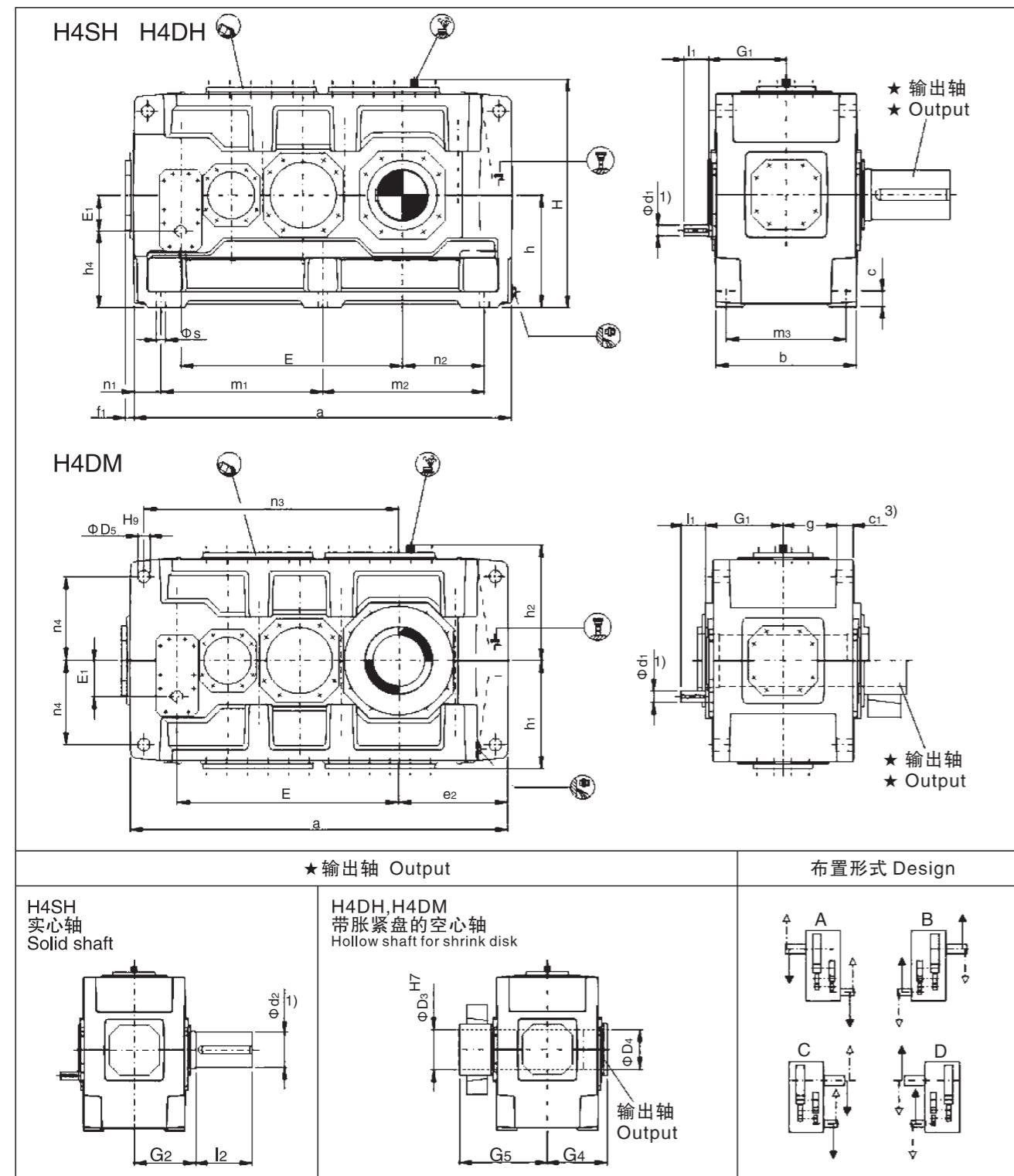
规格 Size	尺寸 mm Dimensions in mm										G1		
	输入轴 Input												
	iN=100~180	iN=112~200	iN=125~224	iN=200~355	iN=224~400	iN=250~450	G1						
13	50	100			38	80					305		
14			50	100					38	80	305		
15	60	135			50	110					345		
16		60	135				50	110			345		
17	60	105			50	80					380		
18		60	105			60	105		50	80	380		
19	75	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										h		
	齿轮箱 Gear units												
	a	b	c	c1	d5	e2	E	E1	f1	g			
13	1395	550	60	61±2	48	405	820	130	55	211.5	440		
14	1535	550	60	61±2	48	475	890	130	55	210	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										s		
	齿轮箱 Gear units												
	h1	h2	h4	H	m1	m2	m3	n1	n2	n3			
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										重量 Weight		
	输出轴 Output												
	H4SH	H4HH	H4HM	H4DH	H4DM	H4.H	H4.M	H4.H	MTH4.M				
	d2 ¹⁾	G2	I2	D2 ²⁾	G4	D3	D4	G4	G5	(L)	(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	6800	6300
20	300	465	500	-	-	310	315	465	670	380	330	8200	7700
21	320	490	500	-	-	330	335	490	715	395	430	9200	8600
22	340	490	500	-	-	340	345	490	725	420	450	9900	9400



卧式安装
Horizontal

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 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.



卧式安装
Horizontal

平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal

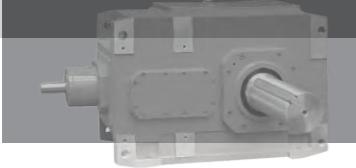
类型 H4.H, H4.M Types H4.H, H4.M 规格 23...26 Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm							G1		
	输入轴 Input		iN=100-180		iN=112-200		iN=200-355			
	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ ¹⁾	l ₁	d ₁ 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	

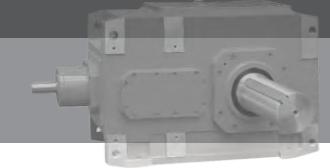
规格 Size	尺寸 mm Dimensions in mm										
	齿轮箱 Gear units										
	a	b	c	c ₁	D ₅	e ₂	E	E ₁	f ₁	g	h
23	2530	930	115	120±2	80	730	1505	225	35	342	780
24	2660	930	115	120±2	80	795	1570	225	35	342	780
25	2830	1045	130	120±2	90	790	1695	265	65	400	860
26	3010	1045	130	120±2	90	880	1785	265	65	400	860

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	s
23	770	790	555	1570	1085	1085	810	180	550	1725	580
24	770	790	555	1570	1085	1215	810	180	615	1790	580
25	860	860	595	1720	1215	1215	910	200	590	1965	660
26	860	860	595	1720	1215	1395	910	200	680	2055	660

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

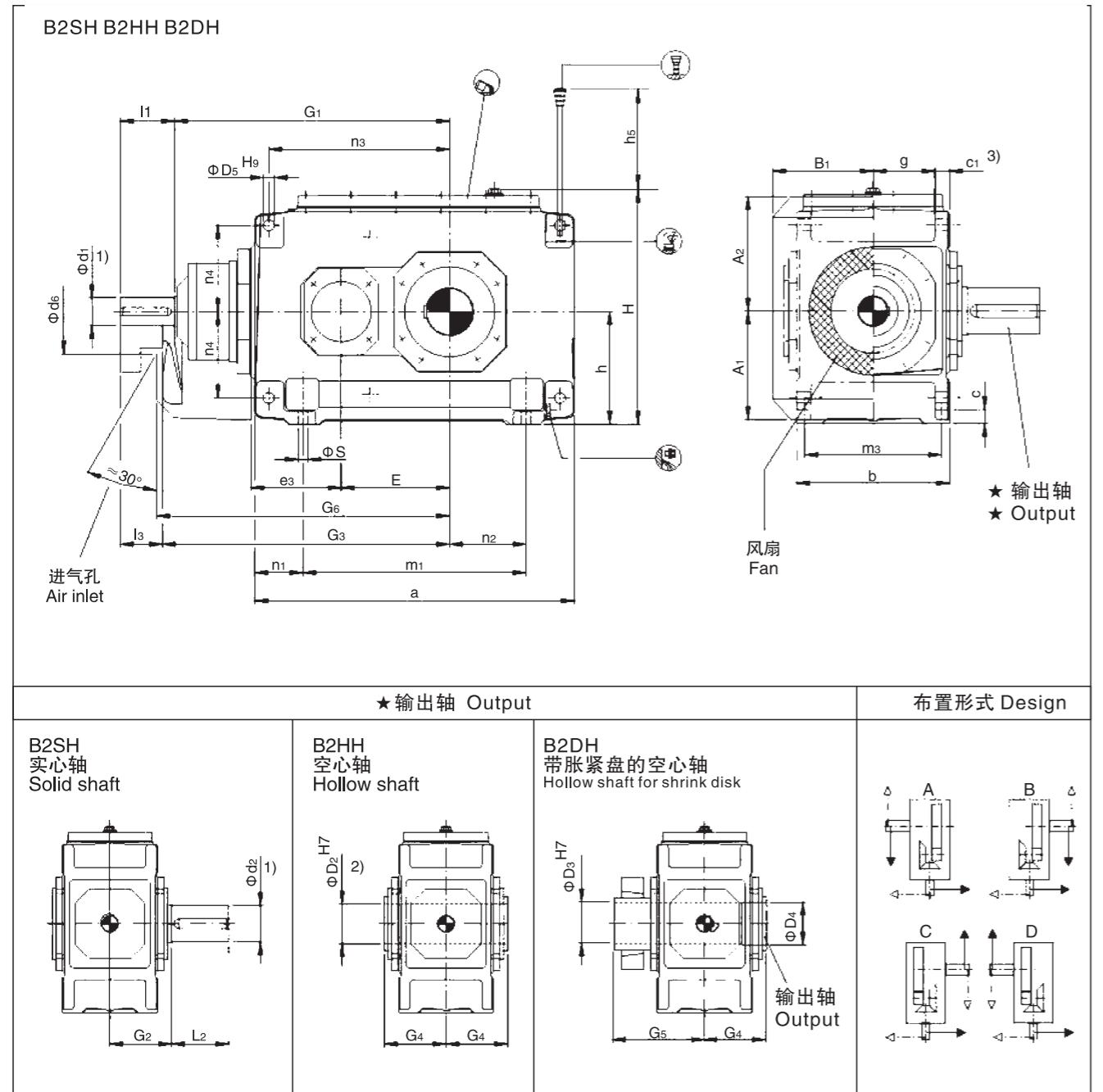


立式安装
Vertical



立式安装
Vertical

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 Size 1...12



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

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) 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.

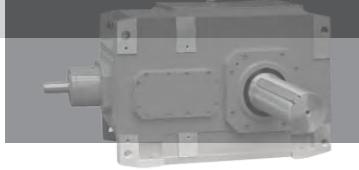
直交轴齿轮箱 Bevel-helical Gear Units 二级传动 Two Stage 卧式安装 Horizontal
类型 B2.H Type B2.H 规格 1...12 Size 1...12

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			G1	G3
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	80	165	130				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	994	1030

规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A1	A2	b	B1	c	C1	D5	d6	e3	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

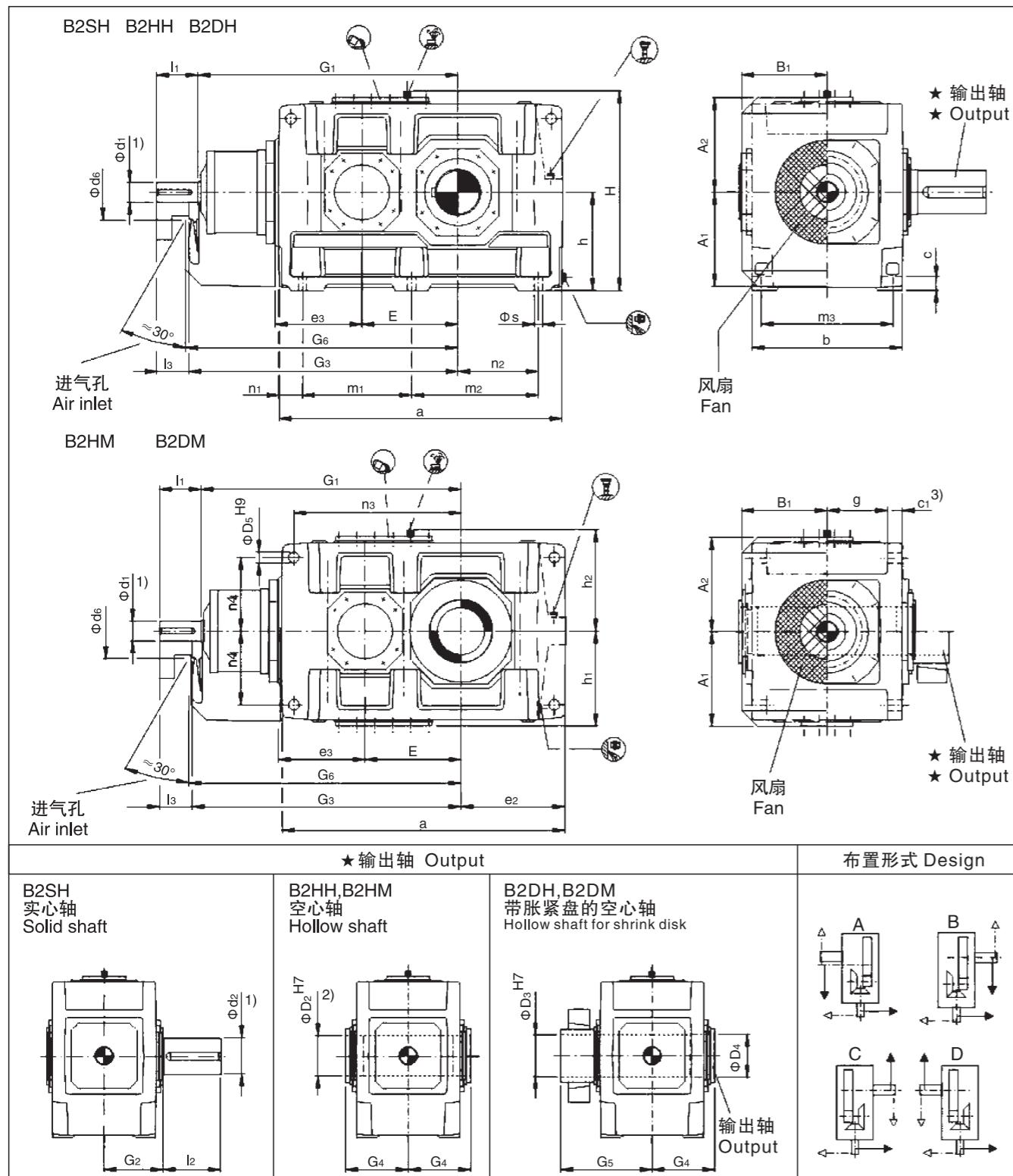
规格 Size	尺寸 mm Dimensions in mm										
	齿轮箱 Gear units										
G6	h	h5	H	m1	m3	n1	n2	n3	n4	s	
1	325	130	80	275	185	155	60	70	160	105	12
2	370	145	80	305	225	180	65	75	195	115	12
3	420	175	90	360	245	195	80	85	235	132.5	15
4	495	200	80	415	295	235	105	100	285	150	19
5	575	230	150	482	355	285	105	100	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							
	输出轴 Output				B2DH			
d2 ¹⁾	G2	L2	D2 ²⁾	G4	D3	D4	G5	
1	45	120	80	—	—	—	—	2
2	55	135	110	55	135	60	135	4
3	65	145	140	65	145	70	145	6
4	80	170	170	80	170	85	170	10
5	100	200	210	95	200	100	200	16
6	110	200	210	105	200	110	200	410
7	120	235	210	115	235</td			



立式安装
Vertical

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

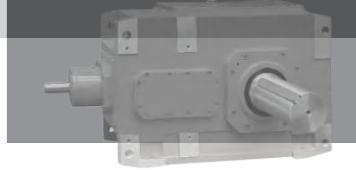


1) $k_6 \leq \Phi 50$ $k_6 > \Phi 50$

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

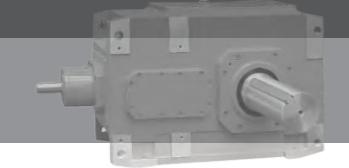
3) 扭力支撑位于工作机侧。Torque support on driven machine side.



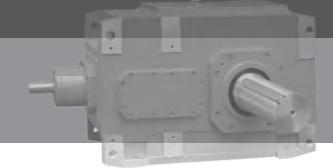
立式安装
Vertical

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												G1	G3		
	iN=5-11.2			iN=5.6-11.2			iN=5.6-12.5			iN=6.3-14						
	d ₁ ^①	I ₁	I ₃	d ₁ ^①	L ₁	I ₃	d ₁ ^①	I ₁	I ₃	d ₁ ^①	I ₁	I ₃				
13	110	205	165							110	205	165				
14													1070	1110		
15	130	245	200										1140	1180		
16							130	245	200				1277	1322		
17				150	245	200							1323	1368		
18										150	245	200	1435	1480		
													1495	1540		
规格 Size	尺寸 mm Dimensions in mm												齿轮箱 Gear units			
	输入轴 Input			齿轮箱 Gear units			a			b			c			
	d ₁ ^①	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	356.5			
18	1610	540	555	885	505	80	81±2	380	65	585	510	550	356.5			
规格 Size	尺寸 mm Dimensions in mm												齿轮箱 Gear units			
	输出轴 Output			B2SH B2HH B2HM			B2DH B2DM			润滑油 Lubrication			重量 Weight			
	d ₂ ^①	G ₂	I ₂	D ₂ ^②	G ₄	D ₃	D ₄	G ₄	G ₅	B2.H	B2.M		B2.H	B2.M		
										轴封(L) Shaft seal			(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			

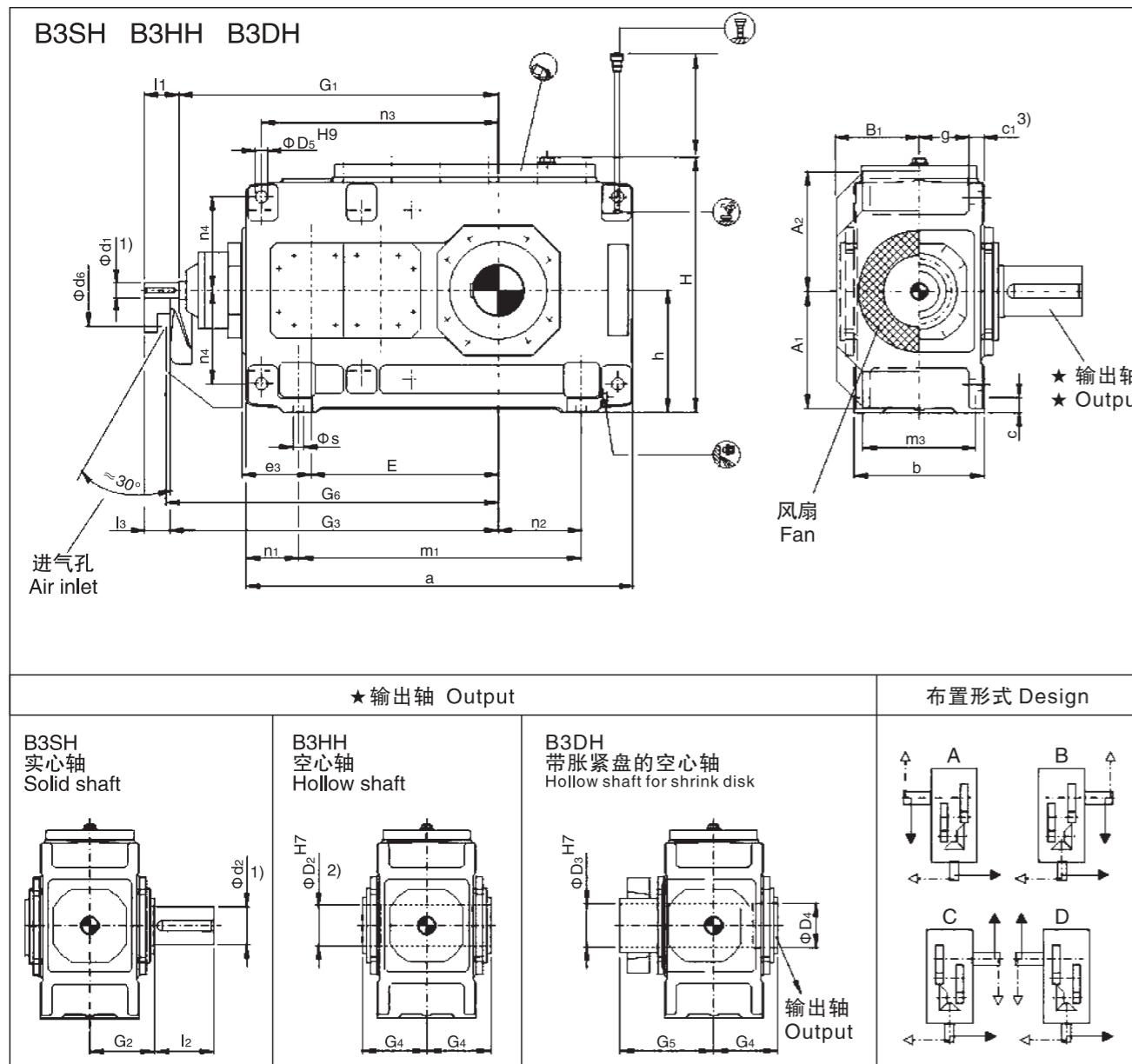


立式安装
Vertical



立式安装
Vertical

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 Size 3...12



- 1) $k_6 \leq \Phi 50$ $k_6 > \Phi 50$
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) 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.

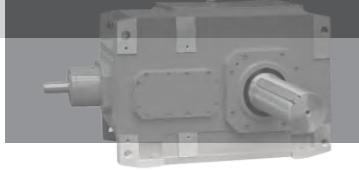
直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal
类型 B3.H Type B3.H 规格 3...12 Size 3...12

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			G1	G3
	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3	d1 ¹⁾	l1	l3		
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									610	630	
7	45	100	80							35	80	60			690	710	
8				45	100	80									735	755	
9	55	110	80							40	100	70			800	830	
10				55	110	80									850	880	
11	70	135	105							50	110	80			960	990	
12				70	135	105									1030	1060	

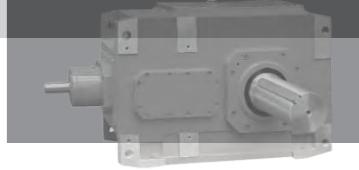
规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	a	A1	A2	b	B1	c	c1	d6	D5	e3	E	g
3	450	170	170	190	128	22	24±1	90	18	90	220	71
4	565	195	200	215	143	28	30±1	110	24	110	270	77.5
5	640	220	235	255	168	28	30±1	130	24	130	315	97.5
6	720	220	235	255	168	28	30±1	180	24	130	350	97.5
7	785	275	275	300	193	35	36±1	165	28	170	385	114
8	890	275	275	300	193	35	36±1	165	28	170	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										
	G6	h	h5	H	m1	m3	n1	n2	n3	n4	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	120	505	215	24
8	765	280	160	582	650	260	120	180	550	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									
	输出轴 Output									
	B3SH					B3HH				
3	d2 ¹⁾	G2	l2	D2 ²⁾	G4	D3	D4	G4	G5	Lubrication (L)
4	65	125	140	65	125	70	70	125	180	6
5	80	140	170	80	140	85	85	140	205	9
6	100	165	210	95	165	100	100	165	240	14
7	110	165	210	105	165	110	110	165	240	15
8	120	195	210	115	195	120	120	195	280	25
9	130	195	250	125	195	130	130	195	285	28
10	140	235	250	135	235	140	145	235	330	40
11	160	235	300	150	235	150	155	235	350	42
12	170	270	300	165	270	165	170</td			

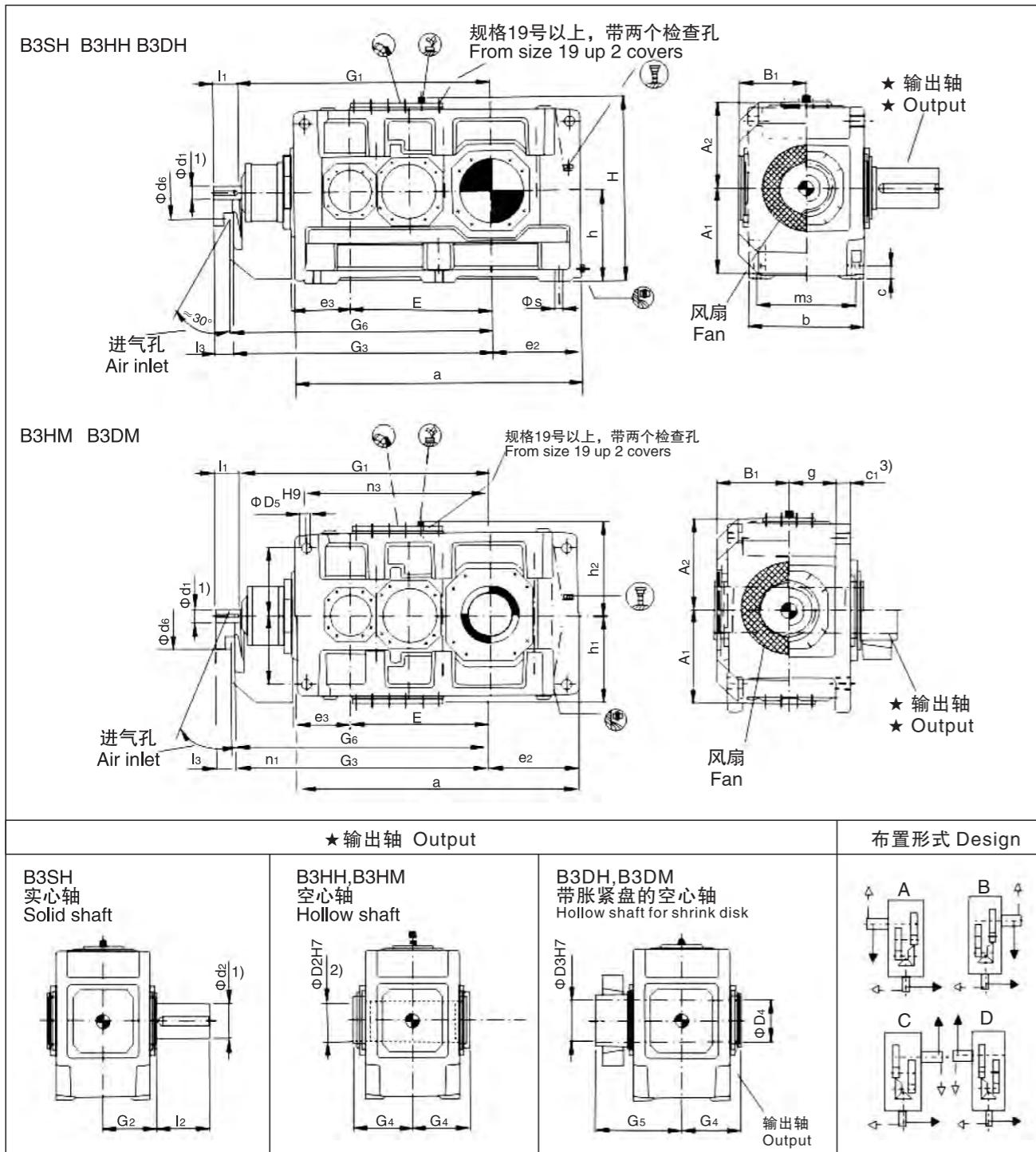


立式安装
Vertical



立式安装
Vertical

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



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) 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.

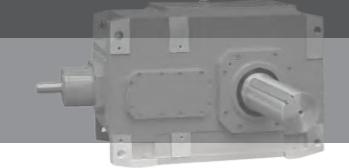
直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal
类型 B3.H, B3.M Types B3.H, B3.M 规格 13...22 Sizes 13...22

规格 Size	尺寸 mm Dimensions in mm														G1	G3		
	输入轴 Input																	
	iN=12.5~45			iN=14~50			iN=16~56			iN=50~71			iN=56~80					
13	80	165	130							60	140	105				1125	1160	
14										80	165	130				60	140	
15	90	165	130							70	140	105				1367	1402	
16				90	165	130				70	140	105				1413	1448	
17	100	205	165							80	170	130				1560	1600	
18				100	205	165				80	170	130				1620	1660	
19	130	245	200							100	210	165				1832	1877	
20				130	245	200				100	210	165				1892	1937	
21	130	245	200							100	210	165				1902	1947	
22				130	245	200				100	210	165				1957	2002	

规格 Size	尺寸 mm Dimensions in mm												E	g		
	齿轮箱 Gear units															
	a	A1	A2	b	B1	c	C1	d6	D5	e2	e3	E				
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	214			
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			

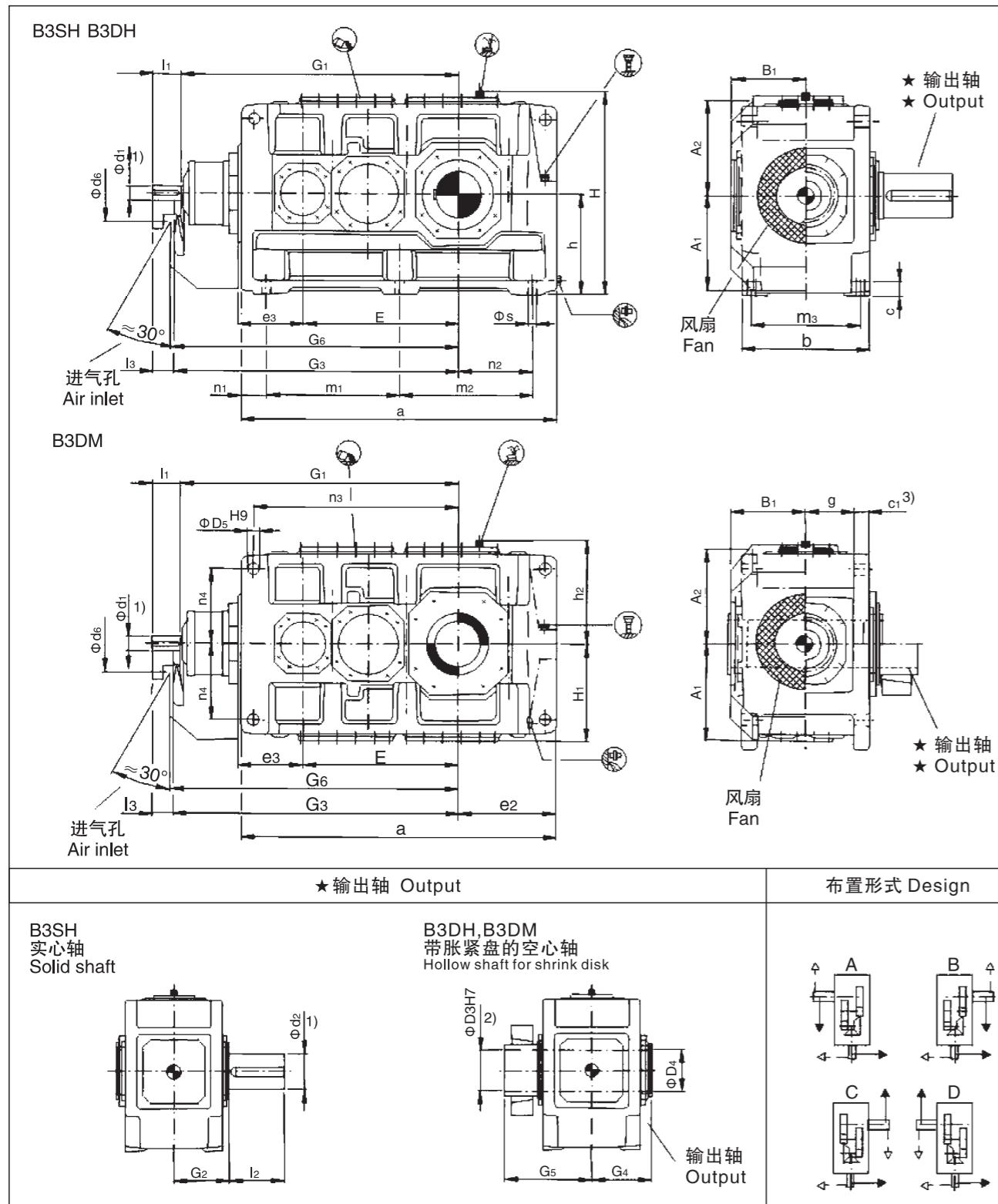
规格 Size	尺寸 mm Dimensions in mm												s	
	齿轮箱 Gear units													
	G6	h	h1	h2	H	m1	m2	m3	n1	n2	n3	n4		
13	1180	440	450	460	900	545	545	475	100	305	835	340	35	
14	1250	440	450	460	900	545	685	475	100	375	905	340	35	
15	1420	500	490	500	1000	655	655	535	120	365	1005	375	42	
16	1470	500	490	500	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												重量 Weight	
	输出轴 Output													
	B3SH			B3HH			B3HM			B3DH				
D2 ¹⁾	G2	I2	D2 ²⁾	G4	D3	D4	G4	G5	(L)	(L)	(



立式安装
Vertical

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



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)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.



立式安装
Vertical

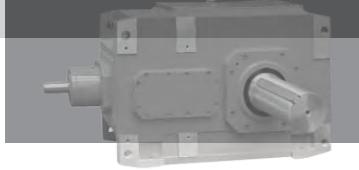
直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 卧式安装 Horizontal
类型 B3.H, B3.M Types B3.H, B3.M 规格 23...26 Sizes 23...26

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			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	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

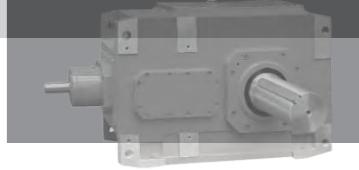
规格 Size	尺寸 mm Dimensions in mm												
	齿轮箱 Gear units												
	a	A ₁	A ₂	b	B ₁	c	C ₁	d ₆	D ₅	e ₂	e ₃	E	g
23	2380	770	770	930	528	115	120±2	350	80	730	490	1185	342
24	2510	770	770	930	528	115	120±2	350	80	795	490	1250	342
25	2580	845	865	1045	585	130	120±2	380	90	790	490	1325	400
26	2760	845	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												
	G6	h	h1	h2	H	m1	m2	m3	n1	n2	n3	n4	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	Lubrication	重量 Weight	
	输出轴 Output									B3.H	B3.M
	B3SH			B3DH B3DM						(kg)	(L)
	d ₂ ¹⁾	G ₂	l ₂	D ₃	D ₄	G ₄	G ₅	(L)	(L)		
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

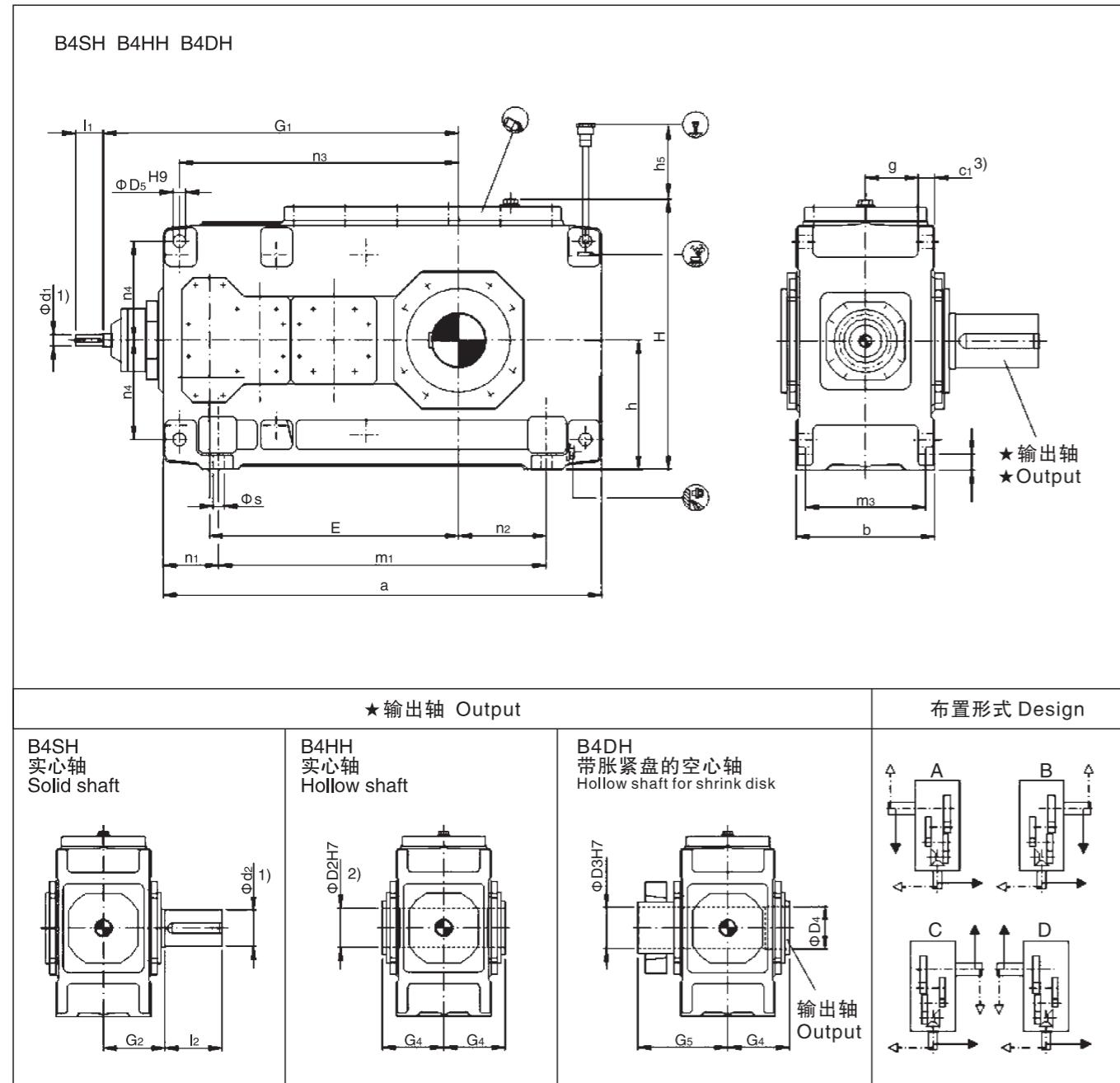


立式安装
Vertical



立式安装
Vertical

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 Size 5...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 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.

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 Size 5...12

规格 Size	尺寸 mm Dimensions in mm														
	输入轴 Input							输出轴 Output							
	iN=80~180		iN=100~224		iN=200~315		iN=250~400		G1						
	d ₁ ¹⁾	l ₁	G 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 _s	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

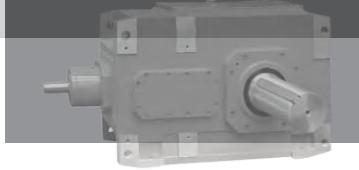
规格 Size	尺寸 mm Dimensions in mm														润滑油 Lubrication (L)	重量 Weight (kg)			
	输出轴 Output																		
	B4SH		B4HH		B4DH			D ₃	D ₄	G ₄	G ₅								
	d ₂ ¹⁾	G ₂	l ₂	D ₂ ²⁾	G ₂	D ₃	D ₄	G ₄	G ₅										
5	100	165	210	95	165	100	100	165	240	16	335								
6	110	165	210	105	165	110	110	165	240	18	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								

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

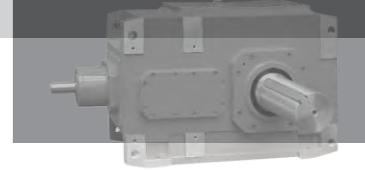
有关平键GB/T1095-1979型和中心孔，参见第87~88页。For parallel key GB/T1095-1979 and for centre hole, see page 87~88

2) 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.

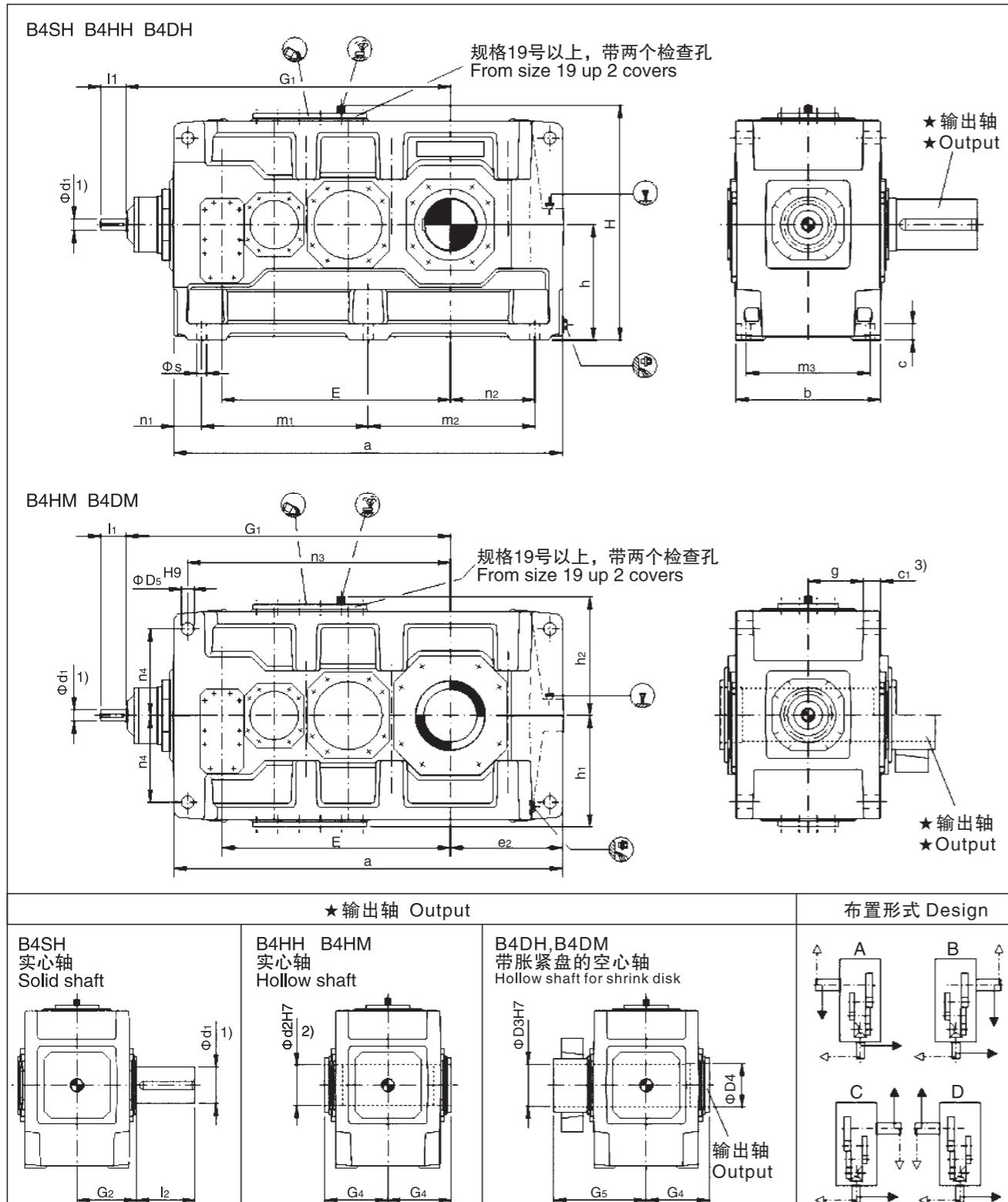


立式安装
Vertical



立式安装
Vertical

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

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) 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.

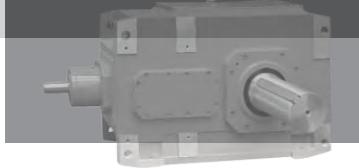
直交轴齿轮箱 Bevel-helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal
类型 B4.H, B4.M Types B4.H, B4.M 规格 13...22 Sizes 13...22

规格 Size	尺寸 mm Dimensions in mm									
	输入轴 Input								G1	
	iN=80~180	iN=90~200	iN=100~224	iN=200~315	iN=224~355	iN=250~400				
13	55	110			40	100				1170
14			55	110					40	100
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	80	165			60	140				1680
20		80	165				60	140		1740
21	90	165			70	140				1992
22		90	165				70	140		2047

规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	a	b	c	c1	D5	e2	E	g	h	h1
13	1395	550	60	61 ± 2	48	405	820	211.5	440	450
14	1535	550	60	61 ± 2	48	475	890	210	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

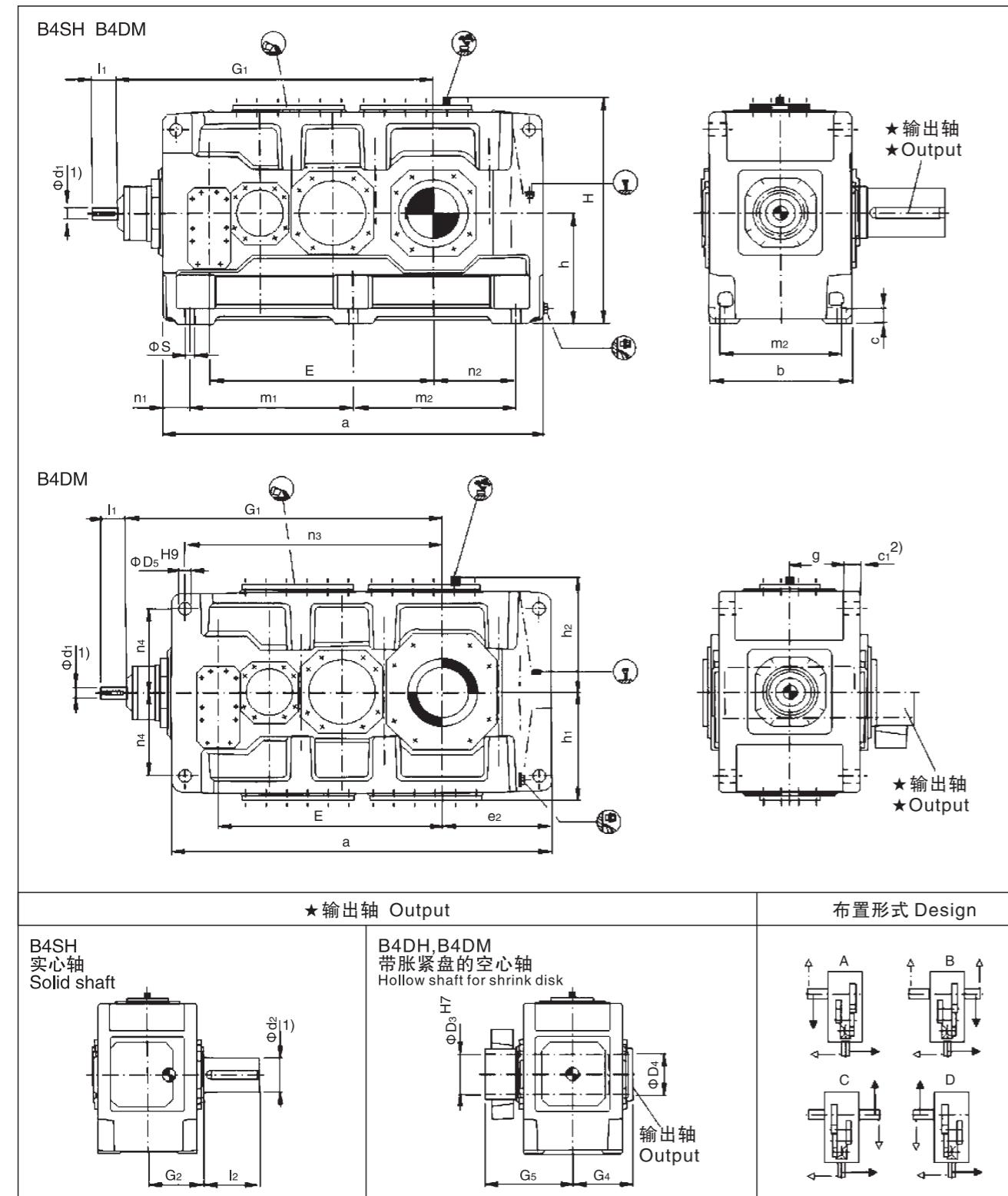
规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	h2	H	m1	m2	m3	n1	n2	n3	n4	s
13	460	900	597.5	597.5	475	100	305	940	340	35
14	460	900	597.5	737.5	475	100	375	1010	340	35
15	500	1000	720	720	535	120	365	1135	375	42
16	500	1000	720	810	535	120	410	1180	375	42
17	560	1110	750	750	600	135	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									
	输入轴 Input									
	B4SH		B4HH B4HM		B4DH B4DM		B4.H B4.M		润滑油 Lubrication	重量 Weight
d1 ¹⁾	G2	I2	D2	G4	D3	D4	G4	G5	(L)	(kg)
13	200	335	350	190	335	190	335	480	145	120
14	210	335	350	210	335	210	335	480	150	125
15	230	380	410	230	380	230	380	550	230	170
16	240	380	410	240	380	240	380	550	235	175
17	250	415	410	250	415	250	415	600	295	230
18	270	415	470	275	415	280	415	600	305	235
19	290	465	470	-	-	285	295	465	670	480
20	300	465	500	-	-	310	315	465	670	550
21	320	490	500	-	-	330	335	490	715	540
22	340	490	550	-	-	340	345	490	725	620



立式安装
Vertical

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 23...26 Sizes 23...26

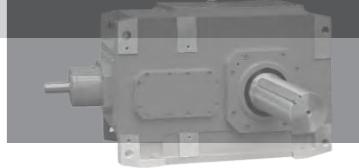


1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

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 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.



立式安装
Vertical

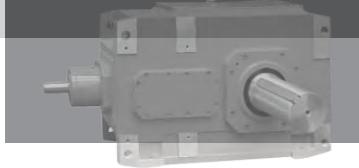
直交轴齿轮箱 Bevel-helical Gear Units 四级传动 Four Stage 卧式安装 Horizontal
类型 B4.H, B4.M Types B4.H, B4.M 规格 23...26 Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	iN=80-180		iN=90-200		iN=200-315		iN=224-355		G1
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

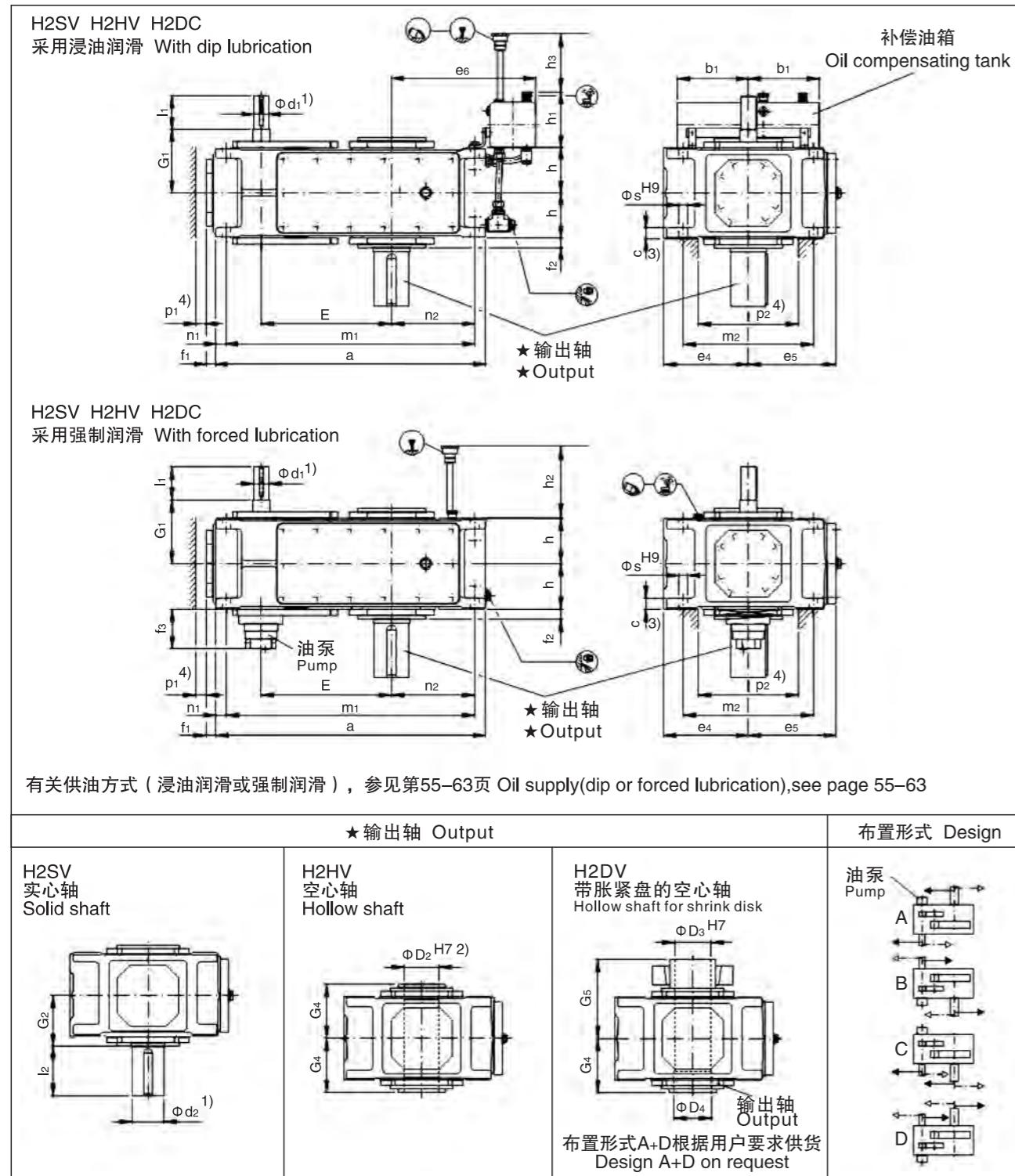
规格 Size	尺寸 mm Dimensions in mm								润滑油 Lubrication	
	齿轮箱 Gear units								重量 Weight	
	h ₂	H	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	B4.H	B4.M
23	790	1570	1085	1285	810	180	550	1725	580	56
24	790	1570	1085	1215	810	180	615	1790	580	56
25	860	1720	1215	1215	910	200	590	1965	660	66
26	860	1720	1215	1305	910	200	680	2055	660	66

规格 Size	尺寸 mm Dimensions in mm										
	输入轴 Input										
	B4SH		B4DH		B4DM						
d ₂ ¹⁾	G ₂	l ₂	D ₂	D ₃	G ₄	G ₅	(L)				
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	432	605	900	1100	1200	17600	16500



立式安装
Vertical

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 Size 3...12



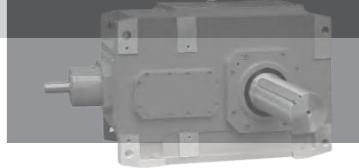
1) $k_e \leq \Phi 50$ $m_e > \Phi 50$

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) 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



立式安装
Vertical

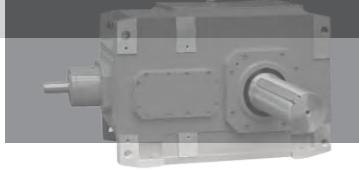
平行轴齿轮箱 Helical Gear Units 二级传动 Two Stage 卧式安装 Horizontal
类型 H2.V Type H2.V 规格 3...12 Size 3...12

规格 Size	尺寸 mm Dimensions in mm							
	输入轴 Input		iN=6.3-11.2		iN=8-14		iN=12.5-22.4	
	$d_1^{(1)}$	l_1	$d_1^{(1)}$	l_1	$d_1^{(1)}$	l_1	$d_1^{(1)}$	l_1
3	35	60			28	50		
4	45	100			32	80		
5	50	100			38	80		
6			50	100			38	80
7	60	135			50	110		
8			60	135			50	110
9	75	140			60	140		
10			75	140			60	140
11	90	165			70	140		
12			90	165			70	140

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

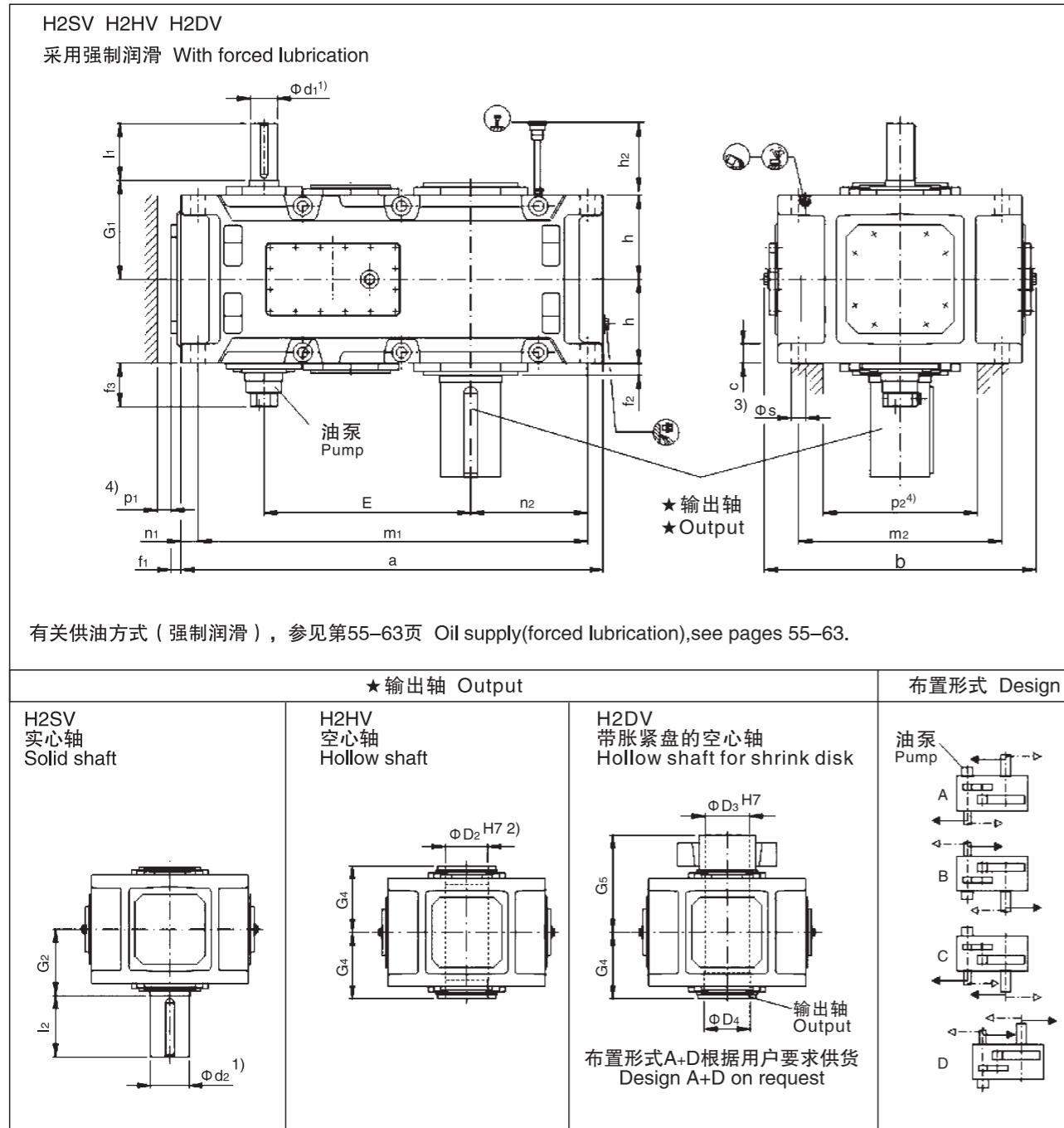
规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₁ ⁽⁴⁾	p ₂ ⁽⁴⁾
3	95	165	-	180	410	265	20	125	35	210
4	107.5	165	-	180	505	300	30	160	35	220
5	127.5	205	190	240	580	360	30	175	35	270
6	127.5	205	190	240	660	360	30	220	35	270
7	150	205	165	250	715	430	35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

规格 Size	尺寸 mm Dimensions in mm								润滑油 Lubrication		重量 Weight (kg)
	输出轴 Output								浸油润滑 Dip lubrication (L)	强制润滑 Forced lubrication (L)	
	H2SV		H2HV		H2DV						
d ₂ ⁽¹⁾	G ₂	I ₂	D ₂ ⁽²⁾	G ₄	D ₃	D ₄	G ₄	G ₅	14	-	115
3	65	125	140	65	125	70	70	125	180	25	190
4	80	140	170	80	140	85	85	140	205	33	300
5	100	165	210	95	165	100	100	165	240	23	10
6	110	165	210	105	165	110	110	165	240	27	11
7	120	195	210	115	195	120	120	195	280	58	22
8	130	195	250	125	195	130	130	195	285	62	25
9	140	235	250	135	235	140	145	235	330	100	42
10	160	235	300	150	235	150	155	235	350	110	46
11	170	270	300	165	270	165	170	270	400	160	60
12	180	270	300	180	270	180	185	270	405	180	70



立式安装
Vertical

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 Size 13...18



1) $K_0 \leq \Phi 50$ $m_e > \Phi 50$

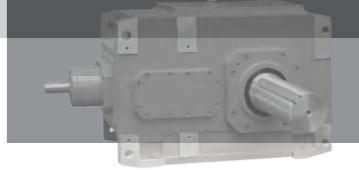
有关平键 GB/T1095-1979型和中心孔,参见第87~88页。For parallel key GB/T1095-1979 and for centre hole, see page 87~88

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) 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iN=6.3~18;规格17号;速比只有iN=6.3~16 Size 13 and 15: only iN=6.3~18; Size 17: only iN=6.3~16



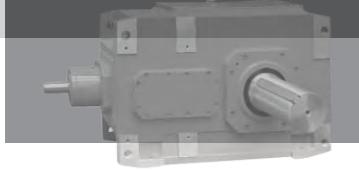
立式安装
Vertical

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 Size 13...18

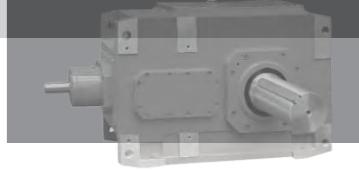
规格 Size	尺寸 mm Dimensions in mm										G1	
	输入轴 Input		iN=6.3~11.2		iN=7.1~12.5		iN=8~14		iN=12.5~20			
	d ₁ ¹⁾	l ₁										
13	100	205					85	170			330	
14					100	205					330	
15	120	210					100	210			365	
16			120	210					100	210	365	
17	125	245					110	210			420	
18			125	245					110	210	420	
19												
20												
21												
22												

规格 Size	尺寸 mm Dimensions in mm												s			
	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⁾	
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	275	300	1335	680	50	430	50	500	48
15	1550	980	72±2	762	63	46	130	310	340	1435	750	60	430	50	570	55
16	1640	980	72±2	808	63	46	130	310	340	1525	750	60	475	50	570	55
17	1740	1110	81±2	860	60	48	170	340	374	1610	850	70	465	70	630	55
18	1860	1110	81±2	920	60	48	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 Lubrication (L)	重量 Weight (kg)		
	输出轴 Output											
	H2SV		H2HV5)		H2DV5)							
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	335	480	80	1880		
14	210	335	350	210	335	215	335	480	90	2430		
15	230	380	410	230	380	230	380	550	140	3240		
16	240	380	410	240	380	240	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												
20												
21												
22												

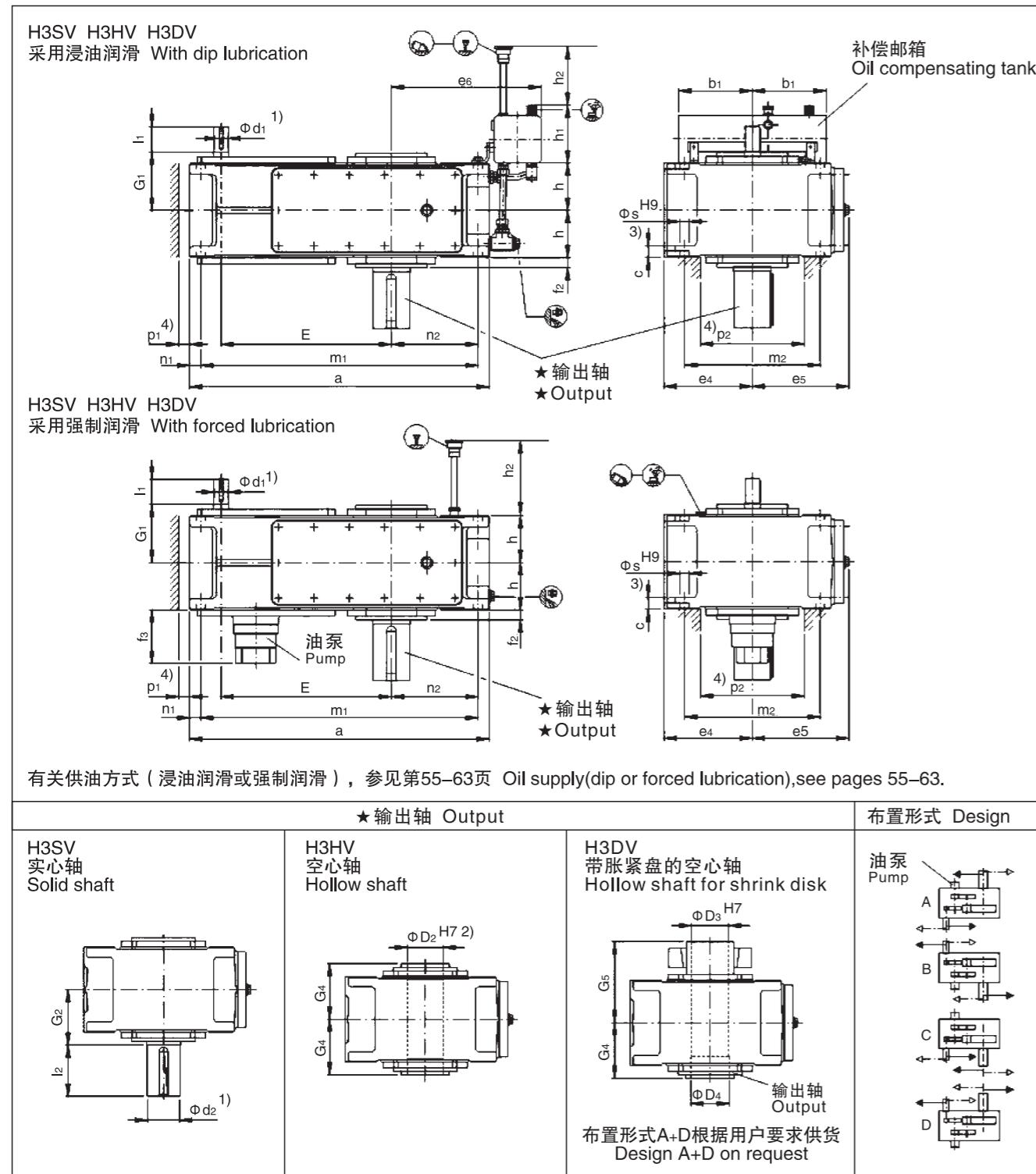


立式安装
Vertical



立式安装
Vertical

平行轴齿轮箱 Helical Gear Units 三级传动 Three Stage 立式安装 Vertical
类型 H3.V Types H3.V 规格 5...12 Sizes 5...12



1) $k_0 \leq \Phi 50$ $m_6 > \Phi 50$

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) 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 Types H3.V 规格 5...12 Sizes 5...12

规格 Size	尺寸 mm Dimensions in mm											
	iN=25–45		iN=31.5–56		iN=50–63		iN=63–80		iN=71–90			
	D ₁ ^①	I 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	27	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	31	185	150
8	950	240	36 ± 1	280	312	485	540	28	185	150
9	1000	330	45 ± 1.5	320	342	560	580	31	170	185
10	1100	330	45 ± 1.5	320	342	610	630	38	170	185
11	1200	330	54 ± 1.5	380	402	595	705	31	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									
	输出轴 Output									
	H3SV		H3HV		H3DV				润滑油 Lubrication	重量 Weight (kg)
5	d ₂ ^①	G ₂	I ₂	D ₂ ^②	G ₄	D ₃	D ₄	G ₄	G ₅	
6	110	165	210	105	165	100	100	165	240	35
7	120	195	210	115	195	120	120	195	280	60
8	130	195	250	125	195	130	130	195	285	72
9	140	235	250	135	235	140	145	235	330	100
10	160	235	300	150	235	150	155	235	350	110
11	170	270	300	165	270	165	170	270	400	170
12	180	270	300	180	270	180	185	270	405	190

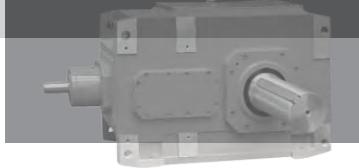
1) $k_0 \leq \Phi 50$ $m_6 > \Phi 50$

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.

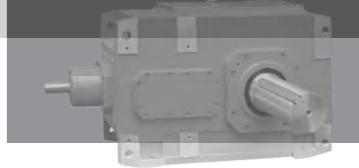
2) 键槽GB/T1095–1979。Keyway GB/T1095–1979.

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.

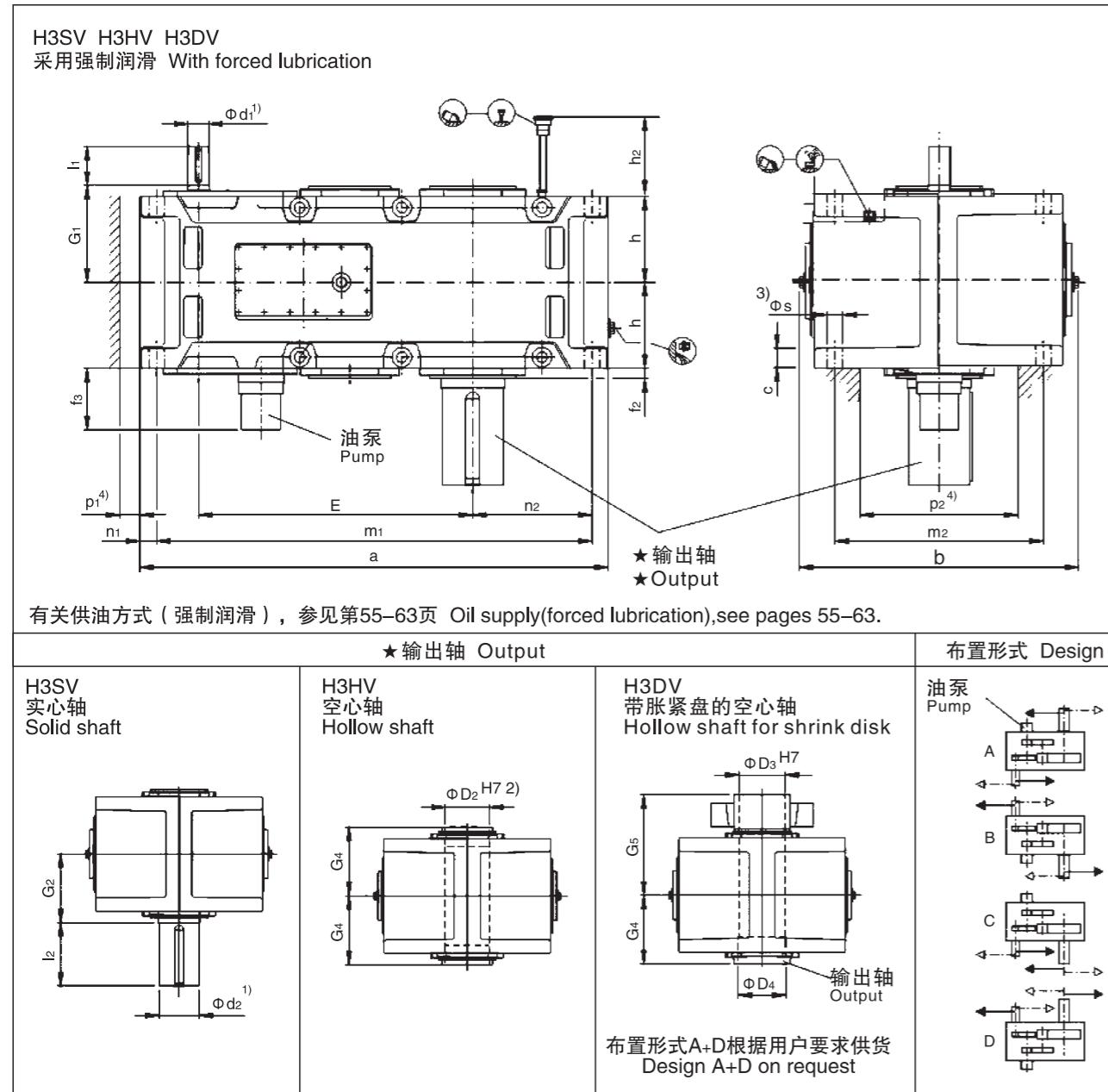


立式安装
Vertical



立式安装
Vertical

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 Size 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 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.

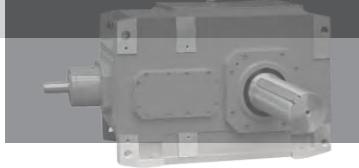
4) 有关油泵, 油管和护盖的安装空间及确切尺寸, 请与我们联系 Space for pump, pipes and cover, for exact dimensions, please refer to us

平行轴齿轮箱 Helical Gear Units 三级传动 Three Stage 立式安装 Vertical
类型 H3.V Types H3.V 规格 13...18 Sizes 13...18

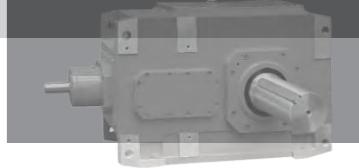
规格 Size	尺寸 mm Dimensions in mm													G1				
	输入轴 Input		iN=22.4~45		iN=25~50		iN=28~56		iN=50~63		iN=56~71		iN=63~80		iN=71~90		iN=80~100	
13	$d_1^{(1)}$	l_1	$d_1^{(1)}$	l_1				$d_1^{(1)}$	l_1	$d_1^{(1)}$	l_1			50	110			310
14					85	160				60	135					50	110	310
15	100	200						75	140					60	140			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																		
20																		
21																		
22																		

规格 Size	尺寸 mm Dimensions in mm														
	齿轮箱 Gear units														
13	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	46	170	310	340	1565	750	60	430	50	570	55
16	1770	980	72±2	1033	46	170	310	340	1655	750	60	475	50	570	55
17	1770	1110	81±2	1035	48	210	340	374	1640	850	70	465	70	630	55
18	1890	1110	81±2	1095	48	210	340	374	1760	850	70	525	70	630	55
19															
20															
21															
22															

规格 Size	尺寸 mm Dimensions in mm												
	输出轴 Output		H3SV		H3HV		H3DV		润滑油 Lubrication (L)		重量 Weight (kg)		
13	$d_2^{(1)}$	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	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													
20													
21													
22													

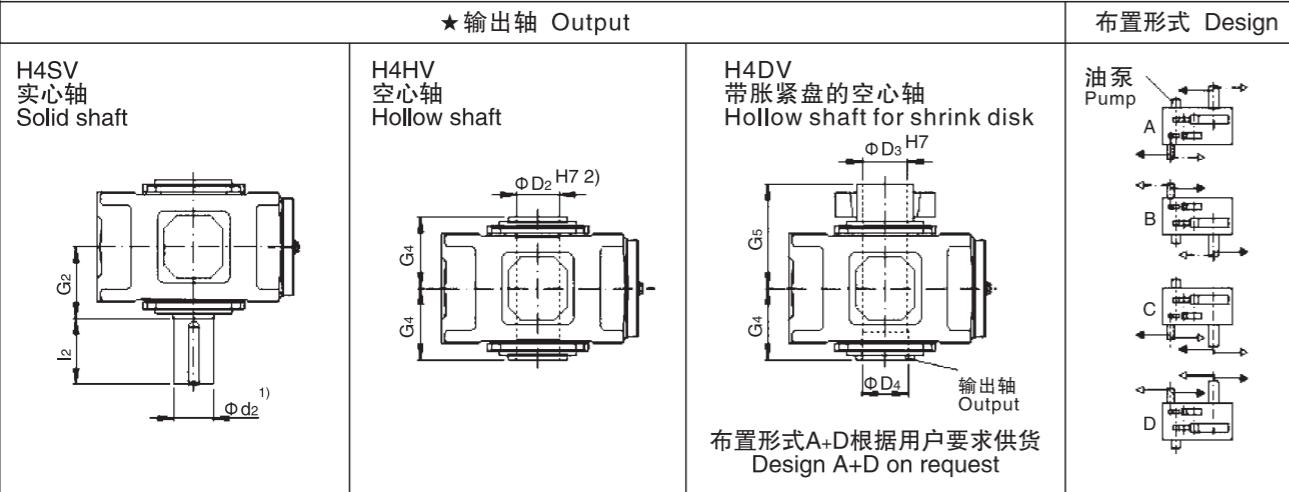
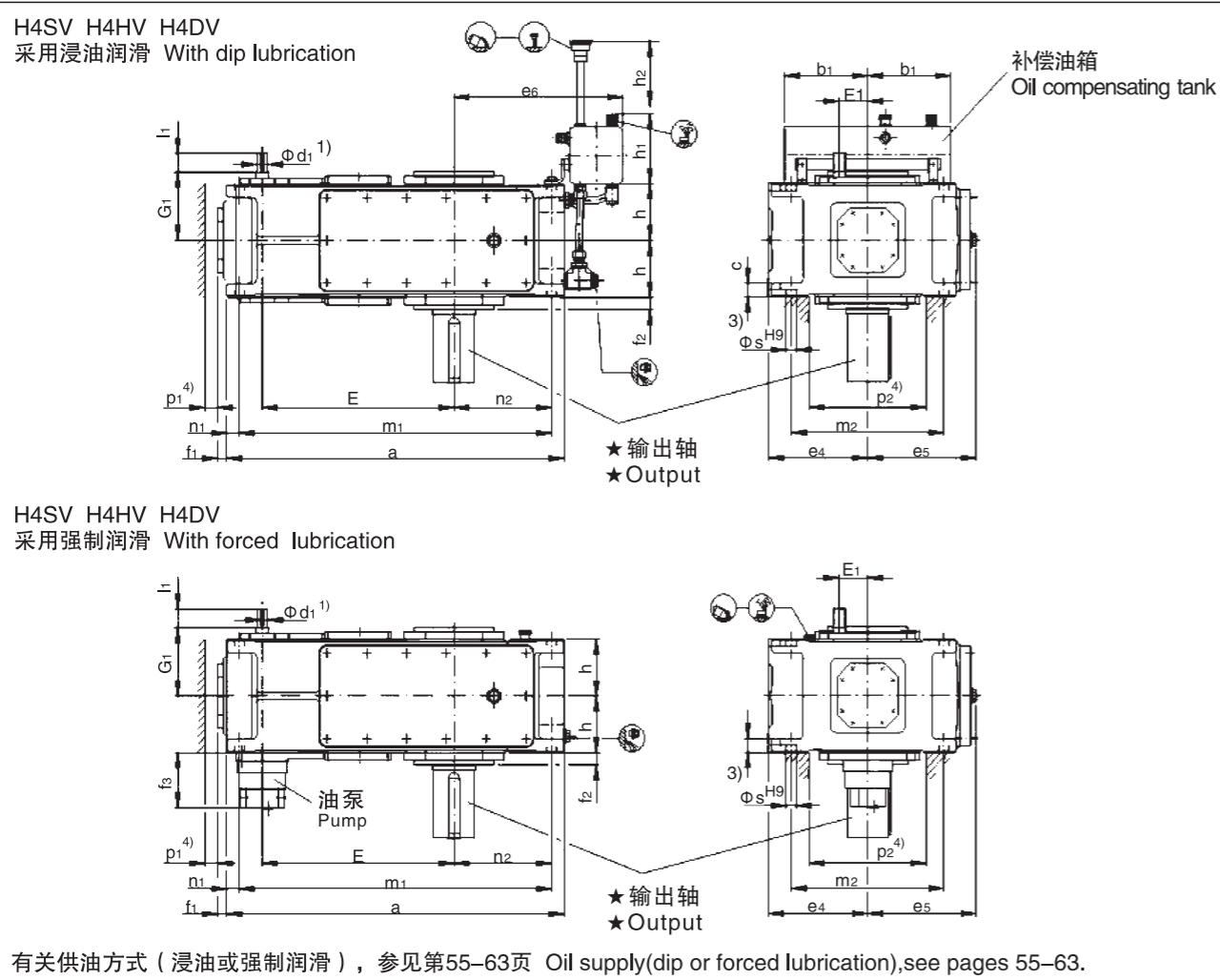


立式安装
Vertical



立式安装
Vertical

平行轴齿轮箱 Helical Reducers 四级传动 Four Stage 立式安装 Vertical
类型 H4.V Types H4.V 规格 7...12 Sizes 7...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 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) 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

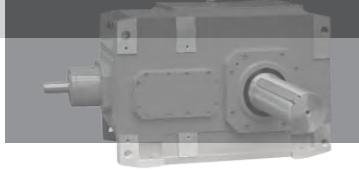
平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 立式安装 Vertical
类型 H4.V Types H4.V 规格 7...12 Sizes 7...12

规格 Size	尺寸 mm Dimensions in mm								G1	
	输入轴 Input				iN=200~355					
	iN=100~180	iN=125~224	iN=250~450	iN=200~355	iN=125~224	iN=100~180	iN=250~450	iN=100~180		
7	30	50	24	40	24	40	24	40	180	
8		30	50		24	40	24	40	180	
9	35	60	28	50					215	
10		35	60		28	50	28	50	215	
11	45	100	32	80					250	
12		45	100		32	80	32	80	250	

规格 Size	尺寸 mm Dimensions in mm										
	齿轮箱 Gear units										
	a	b1	C	e4	e5	e6	E	E1	I1	f2	f3
7	845	240	36 ± 1	280	292	425	495	80	37	31	160
8	950	240	36 ± 1	280	302	485	540	80	37	28	160
9	1000	330	45 ± 1.5	320	342	560	580	90	43	31	170
10	1100	330	45 ± 1.5	320	342	610	630	90	43	38	170
11	1200	330	54 ± 1.5	380	402	595	705	110	56	31	170
12	1355	330	54 ± 1.5	380	410	680	775	110	56	35	170

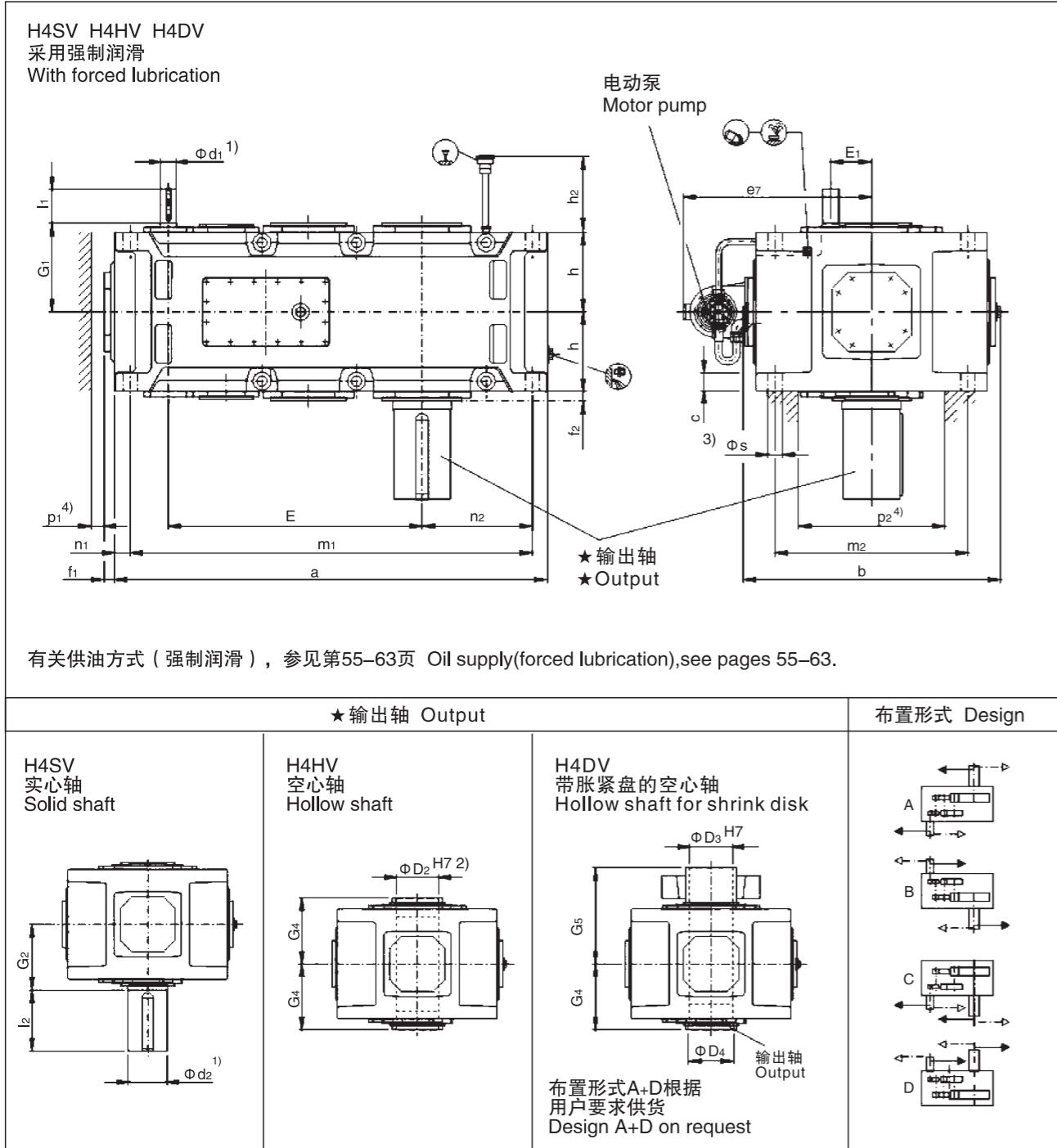
规格 Size	尺寸 mm Dimensions in mm										
	齿轮箱 Gear units										
	h	h1	h2	h3	m1	m2	n1	n2	p1 ⁴⁾	p2 ⁴⁾	s
7	150	205	165	250	775	430	35	215	35	330	28
8	150	205	165	250	880	430	35	275	35	330	28
9	185	275	205	330	920	490	40	260	40	370	36
10	185	275	205	330	1020	490	40	310	40	370	36
11	215	275	240	340	1100	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								重量 Weight (kg)	
	输出轴 Output									
	H4SV		H4HV		H4DV					
d2 ¹⁾	G2	I2	D2 ²⁾	G2	D3	D4	G4	G5		
7	120	195	210	115	195	120	120	195	280	
8	130	195	250	125	195	130	130	195	285	
9	140	235	250	135	235	140	145	235	330	
10	160	235	300	150	235	150	155	235	350	
11	170	270	300	165	270	165	170	270	400	
12	180	270	300	180	270	180	185	270	405	



立式安装
Vertical

平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 立式安装 Vertical
类型 H4.V Types H4.V 规格 13...18 Sizes 13...18



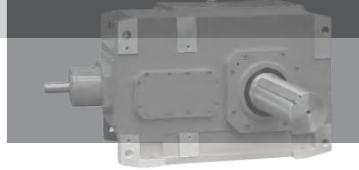
1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

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 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) 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



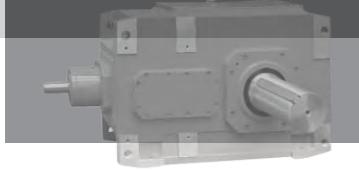
立式安装
Vertical

平行轴齿轮箱 Helical Gear Units 四级传动 Four Stage 立式安装 Vertical
类型 H4.V Types H4.V 规格 13...18 Sizes 13...18

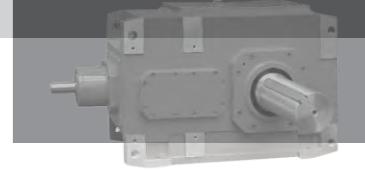
规格 Size	尺寸 mm Dimensions in mm												G1	
	输入轴 Input													
	iN=100~180		iN=112~200		iN=125~224		iN=200~355		iN=224~400		iN=250~450			
13	50	100					38	80					305	
14					50	100					38	80	305	
15	60	135					50	110					345	
16		60	135						50	110			345	
17	60	105					50	80					380	
18		60	105						50	80			380	
19														
20														
21														
22														

规格 Size	尺寸 mm Dimensions in mm													s			
	齿轮箱 Gear units																
	a	b	c	e7	E	E1	f1	f2	h	h2	m1	m2	n1	n2	p1 ⁴⁾	p2 ⁴⁾	
13	1395	900	61 ± 2	695	820	130	55	35	272.5	300	1300	680	50	360	50	500	48
14	1535	900	61 ± 2	695	890	130	55	35	272.5	300	1440	680	50	430	50	500	48
15	1680	980	72 ± 2	735	987	160	56	46	310	340	1565	750	60	430	50	570	55
16	1770	980	72 ± 2	735	1033	160	56	46	310	340	1655	750	60	475	50	570	55
17	1770	1110	81 ± 2	795	1035	160	53	48	340	374	1640	850	70	465	70	630	55
18	1890	1110	81 ± 2	795	1095	160	53	48	340	374	1760	850	70	525	70	630	55
19																	
20																	
21																	
22																	

规格 Size	尺寸 mm Dimensions in mm										润滑油 Lubrication (L)	重量 Weight (kg)	
	输出轴 Output												
	H4SV		H4HV		H4DV		H4SV		H4HV		H4DV		
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													
20													
21													
22													

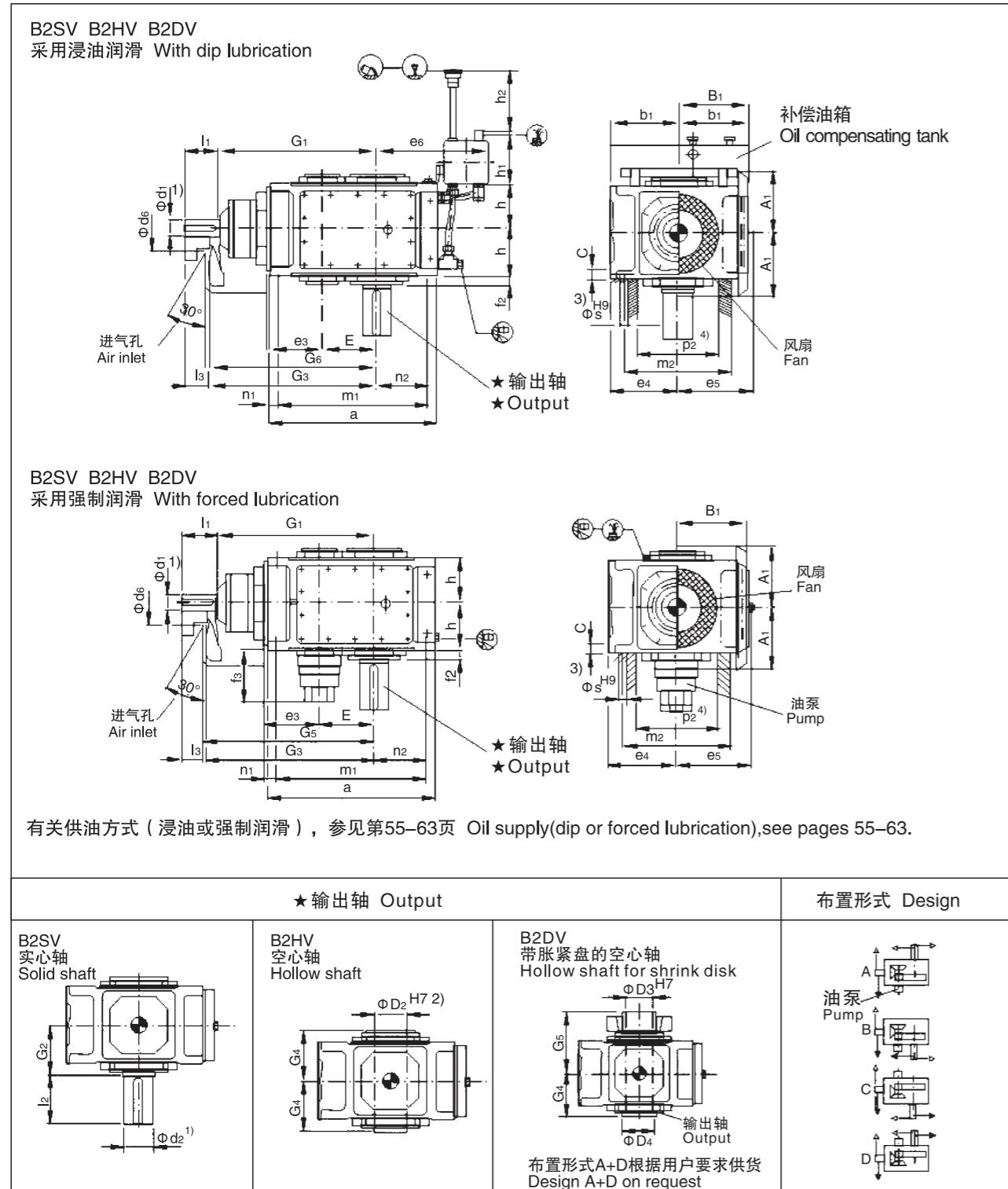


立式安装
Vertical



立式安装
Vertical

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 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 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) 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

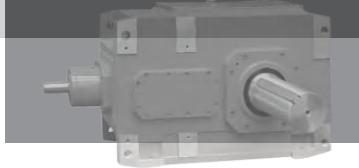
直交轴齿轮箱 Bevel-helical Gear Units 二级传动 Two Stage 立式安装 Vertical
类型 B2.V Type B2.V 规格 1...12 Sizes 1...12

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⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I 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 ₆	e ₃	e ₄	e ₅	E	f ₂
1	305	128	150	130	16±1	100	90	130	145	280	90
2	355	143	150	145	20±1	110	110	145	160	285	110
3	405	163	150	170	24±1	120	130	175	185	290	130
4	505	188	150	200	30±1	150	160	200	215	320	160
5	565	215	240	235	30±1	160	185	230	252	385	185
6	645	215	240	235	30±1	160	185	230	252	425	220
7	690	250	240	285	36±1	210	225	280	302	425	225
8	795	250	240	285	36±1	210	225	280	302	485	270
9	820	270	330	325	48±1.5	195	265	320	342	560	265
10	920	270	330	325	48±1.5	210	320	380	410	595	315
11	975	328	330	385	54±1.5	210	320	380	410	680	390
12	1130	328	330	385	54±1.5	210	320	380	410	680	47

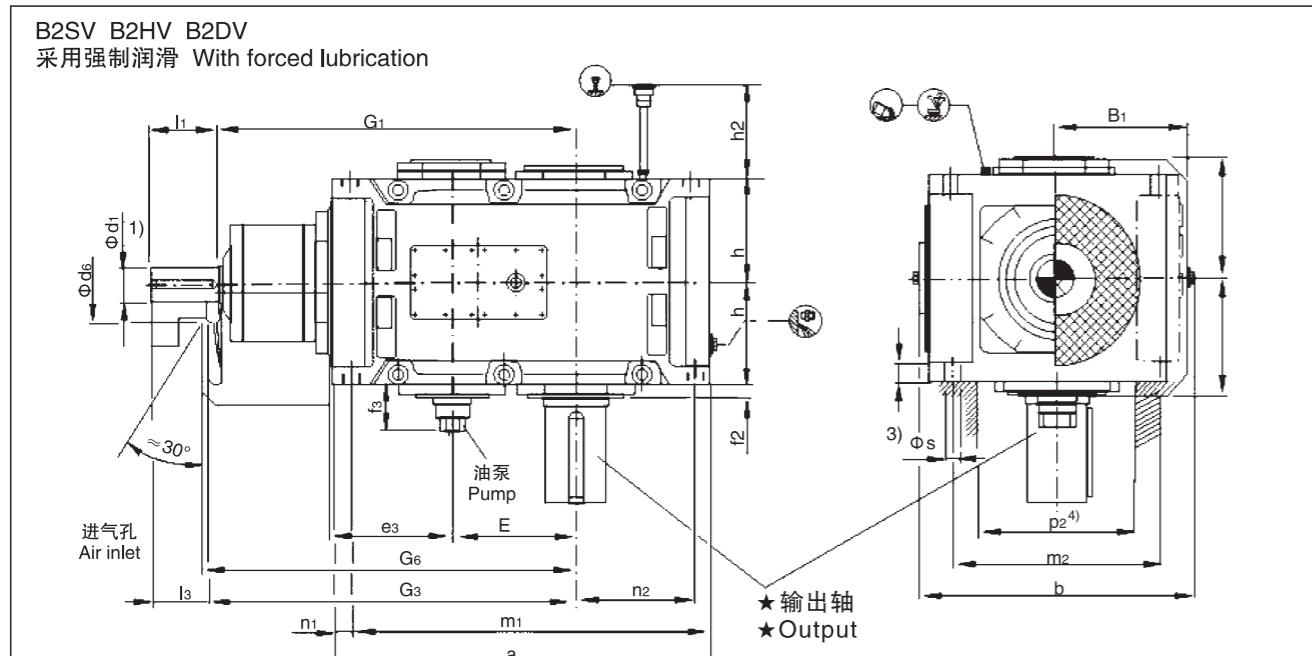
规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	f ₃	G ₆	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₂ ⁴⁾	s
1	—	325	90	165	—	170	275	210	15	115	150	12
2	—	370	102.5	165	—	170	315	230	20	120	170	14
3	—	420	112.5	165	—	180	365	265	20	130	200	18
4	—	495	135	165	—	180	445	300	30	160	220	24
5	190	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

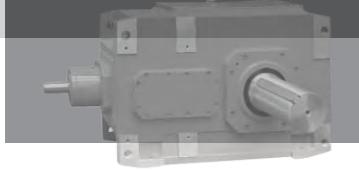
规格 Size	尺寸 mm Dimensions in mm									润滑油 Lubrication			
	输出轴 Output			B2SV			B2HV			B2DV			重量 Weight (kg)
	d ₂ ¹⁾	G ₂	I ₂	D ₂ ²⁾	G ₄	D ₃	D ₄	G					



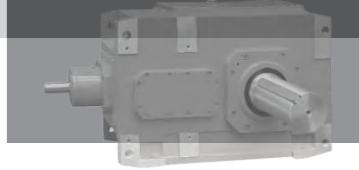
立式安装
Vertical

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



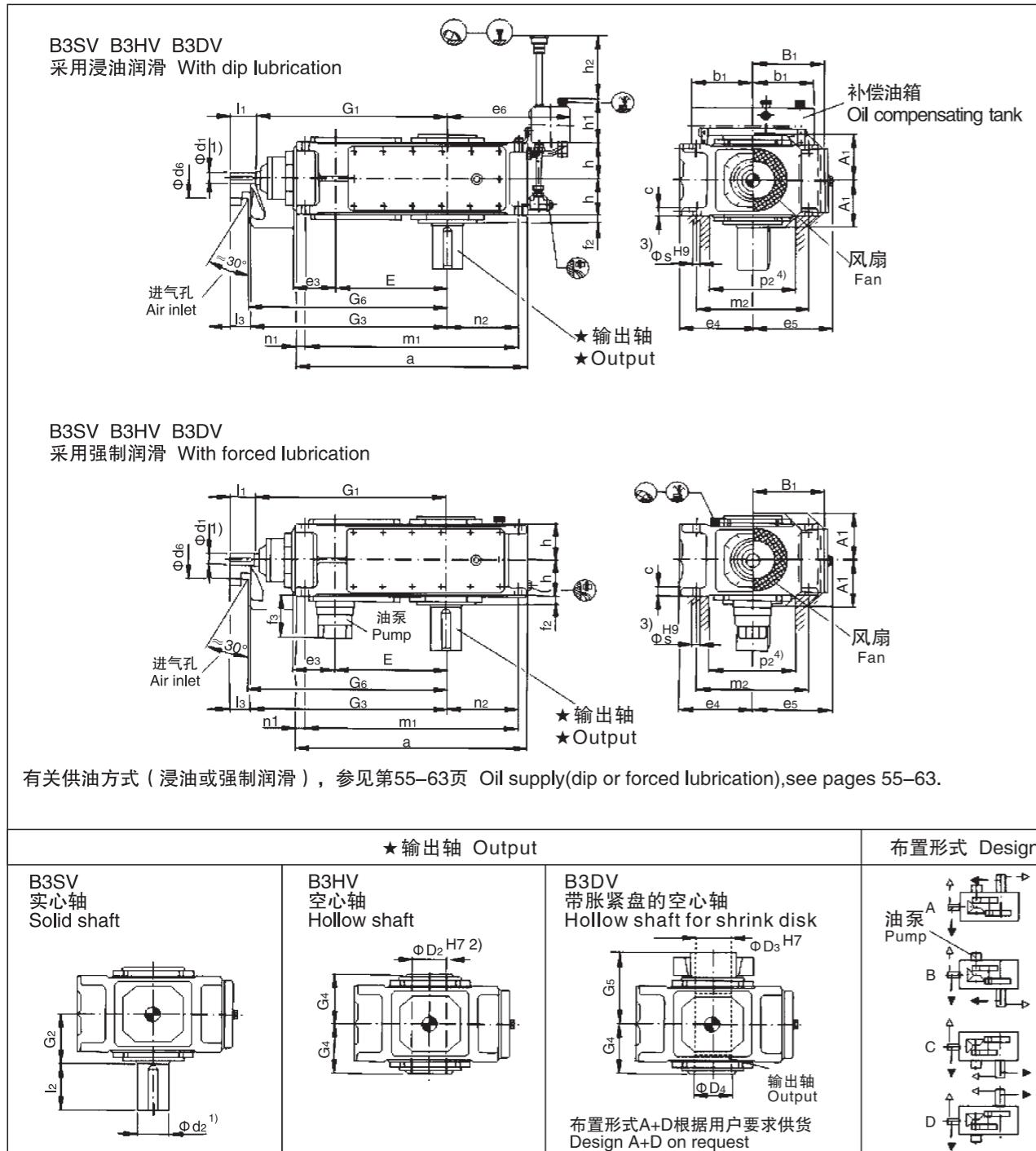


立式安装
Vertical



立式安装
Vertical

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



1) $k_0 \leq \Phi 50$ $m_6 > \Phi 50$

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) 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

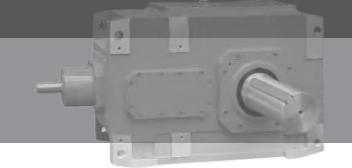
直交轴齿轮箱 Bevel-helical Gear Units 三级传动 Three Stage 立式安装 Vertical
类型 B3.V Type B3.V 规格 3...12 Sizes 3...12

规格 Size	尺寸 mm Dimensions in mm													
	iN=12.5~45			iN=15~56			iN=20~45			iN=50~71			iN=63~90	
	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	d ₁ ¹⁾	I ₁	I ₃	G ₁	G ₃
3							28	55	40	20	50	35		
4	30	70	50							25	60	40		
5	35	80	60							28	60	40		
6				35	80	60							28	60
7	45	100	80							35	80	60		
8				45	100	80							35	80
9	55	110	80							40	100	70		
10				55	110	80							40	100
11	70	135	105							50	110	80		
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	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

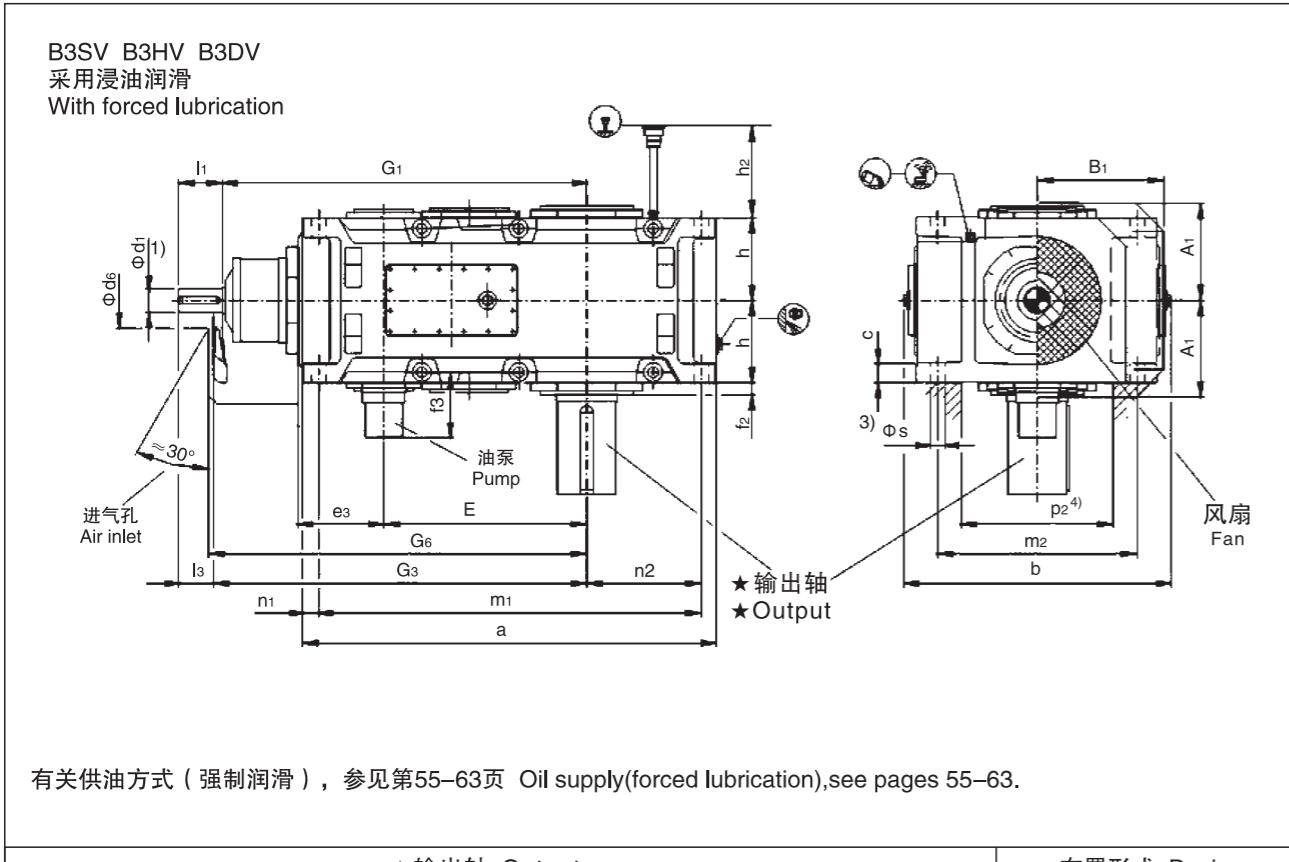
规格 Size	尺寸 mm Dimensions in mm											
	齿轮箱 Gear units											
	f ₃	G ₆	h	h ₁	h ₂	h ₃	m ₁	m ₂	n ₁	n ₂	p ₂ ⁴⁾	s
3	—	455	95	165	—	180	410	265	20	125	210	18
4	—	530	107.5	165	—	180	505	300	30	160	220	24
5	190	605	127.5	205	180	240	580	360	30	175	270	24
6	190	640	127.5	205	180	240	660	360	30	220	270	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	1060	600	50	380	440	40

规格 Size	尺寸 mm Dimensions in mm								润滑油 Lubrication		重量 Weight (kg)
	输出轴 Output				B3DV				浸油润滑 Dip lubrication (L)	强制润滑 Forced lubrication (L)	
	B3SV	B3HV	B3DV	D ₂ ¹⁾	G ₂	I ₂	D ₃	D ₄	G ₄	G ₅	

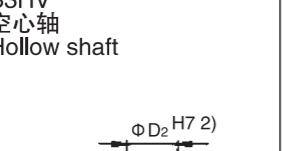
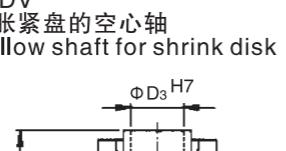


立式安装
Vertical

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



有关供油方式(强制润滑),参见第55-63页 Oil supply(forced lubrication), see pages 55-63

★ 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

1) $k_6 \leq \Phi 50$ $m_6 > \Phi 5$

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~

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



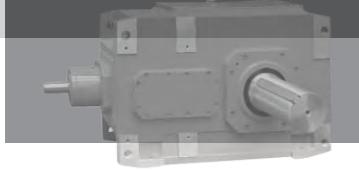
立式安装
Vertical

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

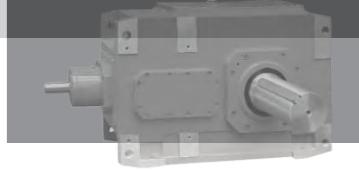
规格 Size	尺寸 mm Dimensions in mm									
	齿轮箱 Gear units									
	a	A ₁	b	B ₁	c	d ₆	e ₃	E	f ₂	f ₃
13	1290	325	900	475	61±2	210	265	635	35	170
14	1430	325	900	475	61±2	210	265	705	35	170
15	1550	365	980	520	72±2	210	320	762	42	170
16	1640	365	980	520	72±2	210	320	808	42	170
17	1740	395	1110	570	81±2	230	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 On request					
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	275	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 On request					
20									
21									
22									

规格 Size	尺寸 mm Dimensions in mm									润滑油 Lubrication (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 On request						
20													
21													
22													

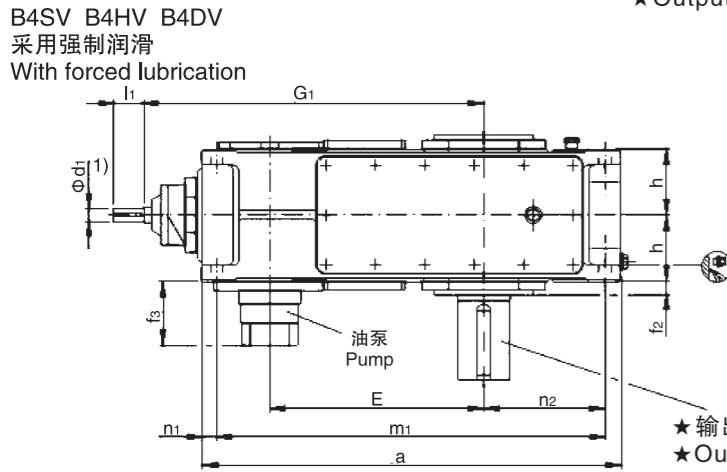
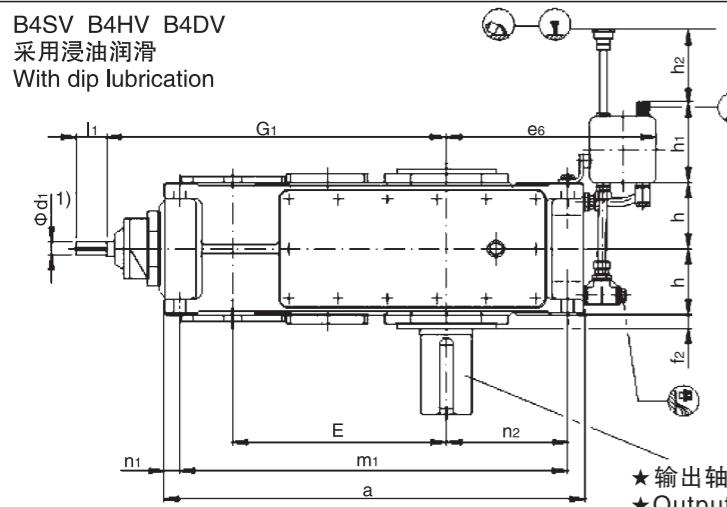


立式安装
Vertical



立式安装
Vertical

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



有关供油方式(浸油或强制润滑),参见第55~63页 Oil supply(dip or forced lubrication), see pages 55~63.

★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 Hollow shaft for shrink disk		
			A	
			B	
			C	
			D	
布置形式A+D 根据用户要求供货 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 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) 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

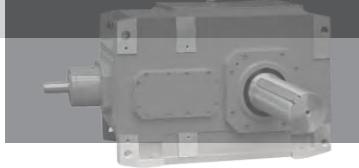
直交轴齿轮箱 Bevel-helical Gear Units 四级传动 Four Stage 立式安装 Vertical
类型 B4.V Type B4.V 规格 5...12 Sizes 5...12

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	
5	28	55			20	50		615
6			28	55			20	50
7	30	70			25	60		725
8			30	70			25	60
9	35	80			28	60		840
10			35	80			28	60
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	b1	c	e4	e5	e6	E	f2
5	690	240	30 ± 1	230	252	385	405	28
6	770	240	30 ± 1	230	252	425	440	28
7	845	240	36 ± 1	280	292	425	495	30
8	950	240	36 ± 1	280	302	485	540	32
9	1000	330	45 ± 1.5	320	342	560	580	32
10	1100	330	45 ± 1.5	320	342	610	630	32
11	1200	330	54 ± 1.5	380	402	595	705	35
12	1355	330	54 ± 1.5	380	410	680	775	35
								130

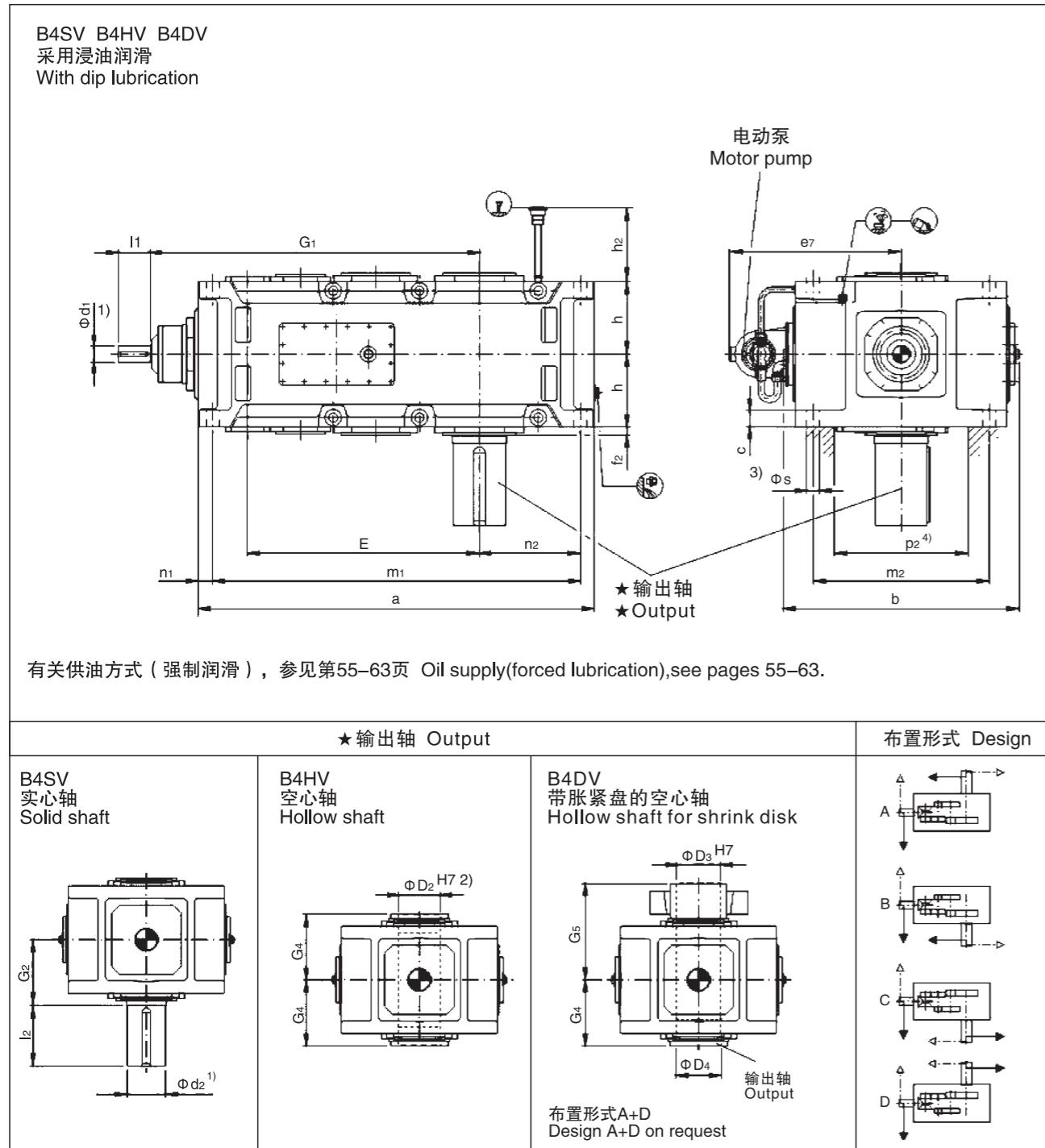
规格 Size	尺寸 mm Dimensions in mm								
	齿轮箱 Gear units								
	h	h1	h2	h3	m1	m2	n1	n2	p2
5	127.5	205	190	240	630	360	30	175	270
6	127.5	205	190	240	710	360	30	220	270
7	150	205	165	250	775	430	35	215	330
8	150	205	165	250	880	430	35	275	330
9	185	275	205	330	920	490	40	260	370
10	185	275	205	330	1020	490	40	310	370
11	215	275	240	340	1100	600	50	295	440
12	215	275	240	340	1255	600	50	380	440
									40

规格 Size	尺寸 mm Dimensions in mm								润滑油 Lubrication	重量 Weight (kg)		
	输出轴 Output											
	B4SV		B4HV		B4DV							
d2 ¹⁾	G2	l2	D2 ²⁾	G4	D3	D4	G4	G5	d2 ¹⁾	335		
5	100	165	210	95	165	100	165	240	36	15		
6	110	165	210	105	165	110	165	240	40	16		
7	120	195	210	115	195	120	195	280	60	30		
8	130	195	250	125	195	130	195	285	70	35		
9	140	235	250	135	235	140	145	330	110	60		
10	160	235	300	150	235	150	155	350	130	67		
11	170	270	300	165	270	165	170	270	400	180		
12	180	270	300	180	270	180	185	270	405	195		
										1750		



立式安装
Vertical

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 13...18 Sizes 13...18



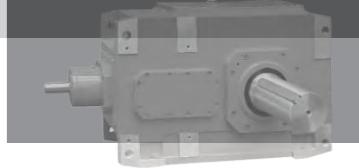
1) $k_6 \leq \Phi 50$ $m_6 > \Phi 50$

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 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) 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



立式安装
Vertical

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 13...18 Sizes 13...18

规格 Size											G1
	iN=80–180		iN=90–200		iN=100–224		iN=200–315		iN=224–355		
13	55	110					40	100			1170
14					55	110				40	100
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											
20											
21											
22											

规格 Size	尺寸mm Dimensions in mm												根据用户要求供货 On request	
	齿轮箱 Gear Units													
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	275	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														
21														
22														

规格 Size	尺寸mm Dimensions in mm										润滑油 Lubrication (L)	重量 Weight (kg)
	输出轴 Output					B4DV						
	B4SH			B4HV		B4DV			G5	130	2260	
d2 ¹⁾	G2	I2	D2 ²⁾	G4	D3	D4	G4	G5	130	150	2605	
13	200	335	350	190	335	190	195	335	480	150	2605	
14	210	335	350	210	335	210	215	335	480	200	3435	
15	230	380	410	230	380	230	235	380	550	235	3765	
16	240	380	410	240	380	240	245	380	550	215	4460	
17	250	415	410	250	415	250	260	415	600	250	4930	
18	270	415	470	275	415	280	285	415	600			
19												
20												
21												
22												

根据用户要求供货
On request



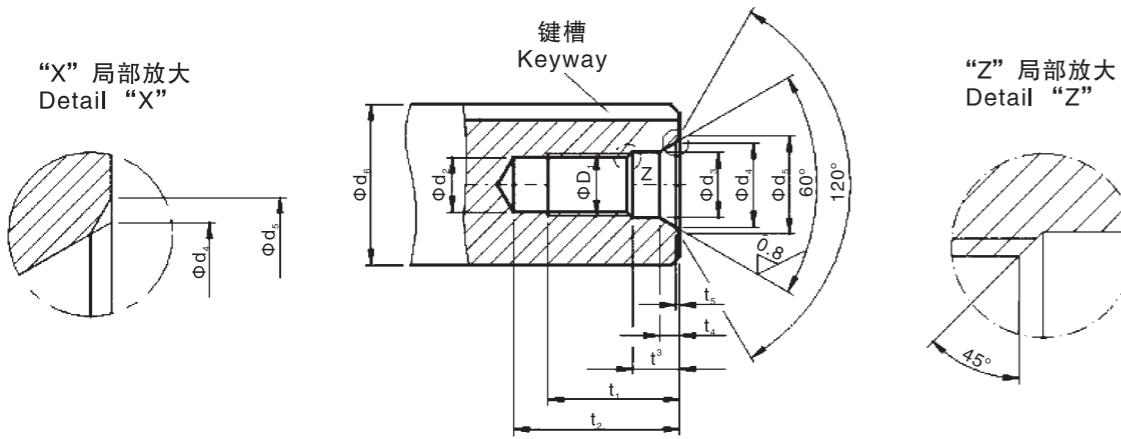
平键及键槽的配合精度，选用ISO
Selection of ISO fits,parallel keys and keyway

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

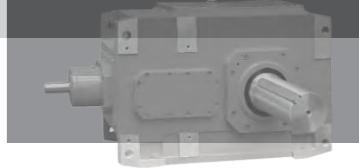
锥孔，带一段直孔和护锥沉孔 Tapped hole,with straight running face and counterbore



推荐尺寸 Recommended diameters		C型 Form C											
d6 ¹⁾		C 中心孔 C-Centering	d ₁	d ₂	d ₃	d ₄	d ₅	t ₁	t ₂		t ₃	t ₄	t ₅
大于 above	至 to								+2	min.	max.	+1	≈
mm		mm											
16	21	C6	M6	5	6.4	9.6	10.5	16	20	22	5	2.8	0.4
21	24	C8	M8	6.8	8.4	12.2	13.2	19	25	28	6	3.3	0.4
24	30	C10	M10	8.5	10.5	14.9	16.3	22	30	34	7.5	3.8	0.6
30	38	C12	M12	10.2	13	18.1	19.8	28	37	42	9.5	4.4	0.7
38	50	C16	M16	14	17	23	25.3	36	45	50	12	5.2	1.0
50	85	C20	M20	17.5	21	28.4	31.3	42	53	59	15	6.4	1.3
85	130	C24	M24	21	25	34.2	38	50	63	68	18	8	1.6
130*	225*	C30	M30*	26.5	31	44	48	60	77	83	17	11	1.9
225*	320*	C36	M36*	32	37	55	60	74	93	99	22	15	2.3
320*	500*	C42	M42*	37.5	43	65	71	84	105	111	26	19	2.7

1)工作加工后最终尺寸 1) Diameter of the finished work piece

*)不是根据GB145-1985确定的尺寸 *).Dimensions not acc.to GB 145-1985



平键及键槽的配合精度，选用ISO
Selection of ISO fits,parallel keys and keyway

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

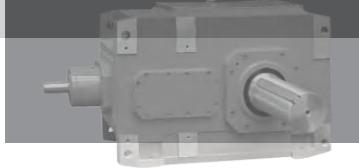
选择ISO配合精度 Selection of ISO fits	选择ISO配合精度 Selection of ISO fits		轴公差 Shaft tolerance	孔公差 Bore tolerance
	大于 Above mm	至 To mm		
轴公差根据标准确定 Shaft tolerance acc.To OMITER standard	50		k6	H7
	50		m6	

对于重载工作条件，如带载反向回转，建议采用比较紧密的配合，轮载键槽宽度亦应选择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					
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 t1 mm	轴键槽深度 Depth of key- way in hub d+t ₂ GB/T1095- 1979 mm	
				大于 Above mm	至 To mm
17	22	6	6	3.5	d+2.8
22	30	8	7	4	d+3.3
30	38	10	8	5	d+3.3
38	44	12	8	5	d+3.3
44	50	14	9	5.5	d+3.8
50	58	16	10	6	d+4.3
58	65	18	11	7	d+4.4
65	75	20	12	7.5	d+4.9
75	85	22	14	9	d+5.4
85	95	25	14	9	d+5.4
95	110	28	16	10	d+6.4
110	130	32	18	11	d+7.4
130	150	36	20	12	d+8.4
150	170	40	22	13	d+9.4
170	200	45	25	15	d+10.4
200	230	50	28	17	d+11.4
230	260	56	32	20	d+12.4
260	290	63	32	20	d+12.4
290	330	70	36	22	d+14.4
330	380	80	40	25	d+15.4
380	440	90	45	28	d+17.4

1)重载工作条件下轮载平键宽度b的公差应带按ISOJS9或ISOP9确定。

1)The tolerance zone for the hub keyway width b for parallel keys is IOS JS9,or ISO P9 for heavy-duty operating conditions.



带胀紧盘联接的空心轴或带平键联接的空心轴
Hollow shaft for shrink disk or parallel key connections

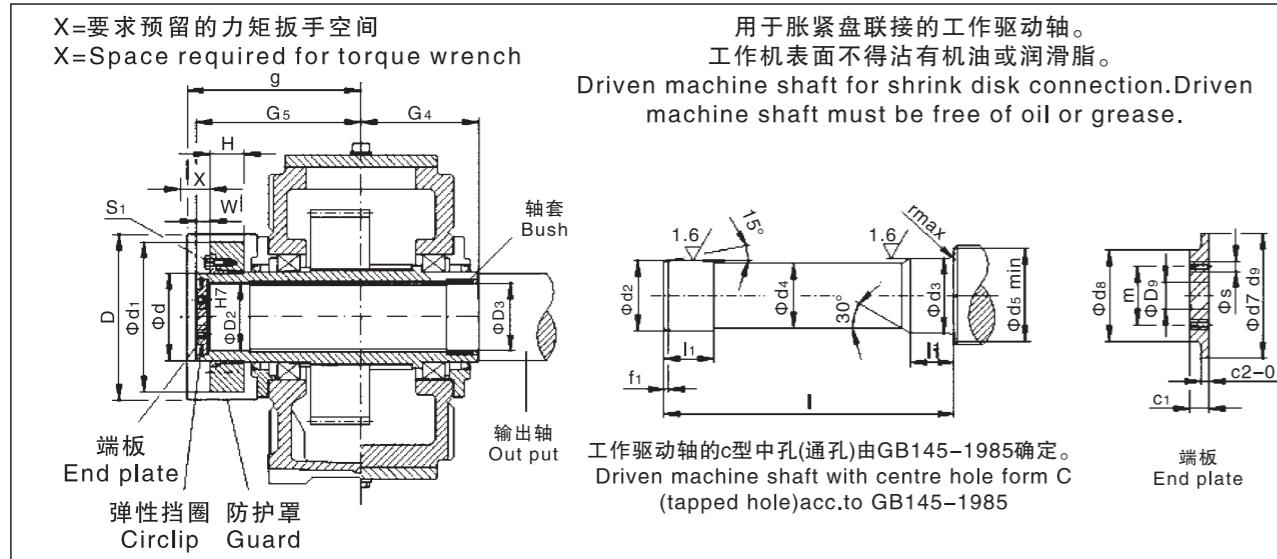


带胀紧盘联接的空心轴或带平键联接的空心轴
Hollow shaft for shrink disk or parallel key connections

齿轮箱 Gear Units 带胀紧盘的空心轴 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



齿轮箱规格 Gear units 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	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																										
3	70g6	70g6	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	M10
4	85g6	85h6	84.5	95	4	326	48	2	17	7	90	70	22	50	M8	2	90x2.5	85	85	140	205	110-32	110	185	49	20	M12
5	100g6	100h6	99.5	114	5	383	53	2	20	8	105	80	26	55	M10	2	105x3	100	100	165	240	125-32	125	215	53	20	M12
6	110g6	110h6	109.5	124	5	383	58	3	20	8	115	85	26	60	M10	2	115x3	110	110	165	240	140-32	140	230	58	20	M14
7	120g6	120h6	119.5	134	5	453	68	3	20	8	125	90	26	65	M12	2	125x3	120	120	195	280	155-32	155	263	62	23	M14
8	130g6	130h6	129.5	145	6	458	73	3	20	8	135	100	26	70	M12	2	135x3	130	130	195	285	165-32	165	290	68	23	M16
9	140g6	145h6	139.5	160	6	539	82	4	23	10	150	110	33	80	M12	2	150x3	140	145	235	330	175-32	175	300	68	28	M16
10	150g6	155g6	149.5	170	6	559	92	4	23	10	160	120	33	90	M12	2	160x3	150	155	235	350	200-32	200	340	85	28	M16
11	165f6	170g6	164.5	185	7	644	112	4	23	10	175	130	33	90	M12	2	175x3	165	170	270	400	220-32	220	370	103	30	M20
12	180f6	185g6	179.5	200	7	649	122	4	23	10	190	140	33	100	M16	2	190x3	180	185	270	405	240-32	240	405	107	30	M20
13	190f6	195g6	189.5	213	7	789	137	5	23	10	200	150	33	110	M16	2	200x3	190	195	335	480	260-32	260	430	119	30	M20
14	210f6	215g6	209.5	233	8	784	147	5	28	14	220	170	33	130	M16	2	220x5	210	215	335	480	280-32	280	460	132	30	M20
15	230f6	235g6	229.5	253	8	899	157	5	28	14	240	180	39	140	M16	2	240x5	230	235	380	550	300-32	300	485	140	35	M24
16	240f6	245g6	239.5	263	8	899	157	5	28	14	250	190	39	150	M20	2	250x5	240	245	380	550	320-32	320	520	140	35	M24
17	250f6	260g6	249.5	278	8	982	177	5	30	14	265	200	39	150	M20	2	265x5	250	260	415	600	340-32	340	570	155	35	M24
18	280f6	285g6	279.5	306	9	982	177	5	30	14	290	210	39	160	M20	2	290x5	280	285	415	600	360-32	360	590	159	35	M24
19	285f6	295g6	284.5	316	9	1100	187	5	32	15	300	220	39	170	M24	2	300x5	285	295	465	670	380-32	380	645	163	40	M27
20	310f6	315g6	309.5	336	9	1100	187	5	32	15	320	230	39	180	M24	2	320x6	310	315	465	670	390-32	390	660	163	40	M27
21	330f6	335g6	329	358	9	1160	205	5	40	20	340	250	45	190	M24	2	340x6	330	335	490	715	420-32	420	670	184	45	M27
22	340f6	345g6	339	368	9	1170	215	5	40	20	350	260	45	200	M24	2	350x6	340	345	490	725	440-32	440	750	192	45	M27
23																											
24																											
25																											
26																											

根据用户要求供货
On request

1)胀紧盘不在我们的供货范围之内。如果有需要的话,请另行订货。

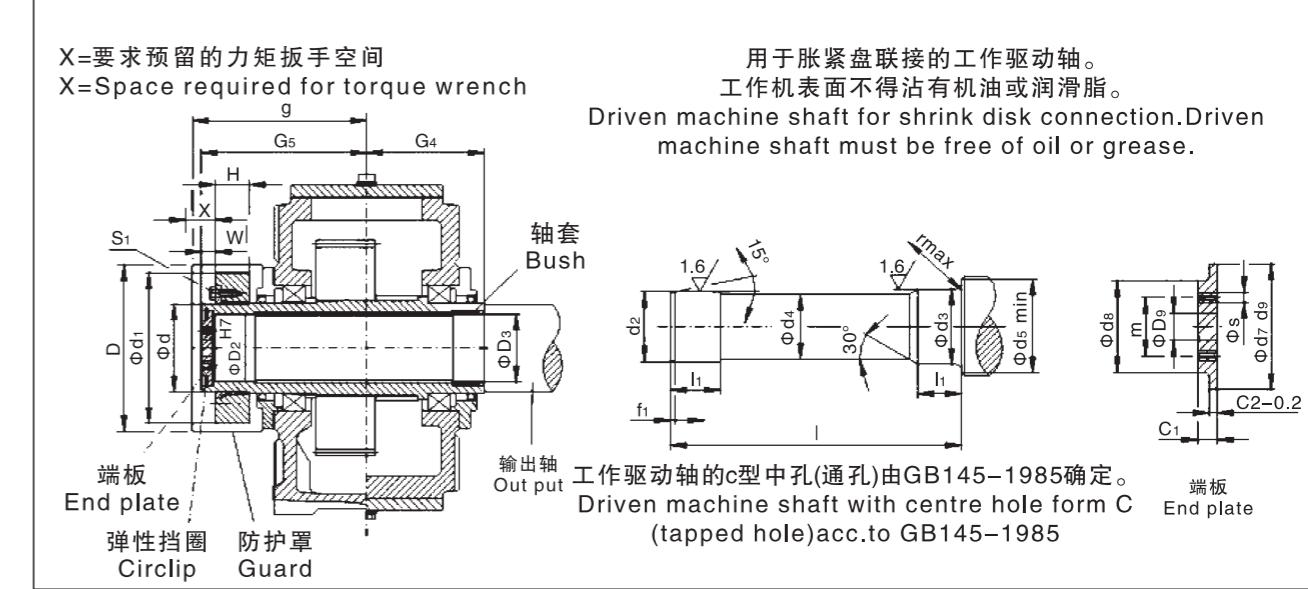
Shrink disk does not belong to our scope of supply. Please order separately, if required.

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既复。

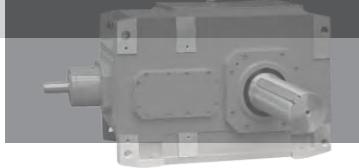
Material of driver machine shaft: 60 or higher strength. Shrink disk on machine side on request. Shrink disk is supplied as loose item. Dimensions of machine shaft on request.

齿轮箱 Gear Units 带胀紧盘的空心轴 Hollow shafts for shrink disks

类型 B2D Type B2D 规格 2...18 Sizes 2...18

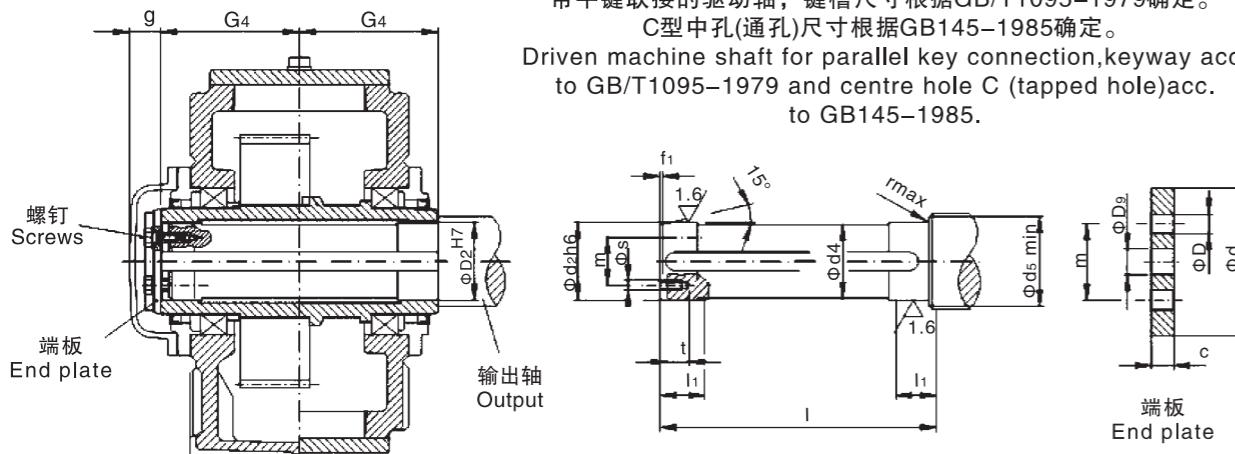


齿轮箱规格 Gear units size	工作机驱动轴2) Driven machine shaft								端板 End plate				弹性挡圈 Ring Circlip		空心轴 Hollow shaft				胀紧盘1) Shrink disk				螺钉 Screw		防护罩 Guard	
d₂	d₃	d₄	d₅	f₁	l	c<sub																				



带胀紧盘联接的空心轴或带平键联接的空心轴
Hollow shaft for shrink disk or parallel key connections

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 Type H2,H3,H4,B3,B4
规格 2...18 Sizes 2...18



齿轮箱 规格 Gear units size	类型 H2,H3,H4,B3,B4 Type H2,H3,H4,B3,B4												螺钉 Screw			空心轴 Hollow shaft			
	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	I	I ₁	r	s	t	c	D	D ₉	d	m	规格Size	数量Qty.	D ₂	G ₄	g
mm																			
3	65	64.5	73	4	248	30	1.2	M10	18	8	11	18	78	45	M10X25	2	65	125	35
4	80	79.5	88	4	278	35	1.2	M10	18	10	11	22	100	60	M10X25	2	80	140	35
5	95	94.5	105	5	328	40	1.6	M10	18	10	11	26	120	70	M10X25	2	95	165	40
6	105	104.5	116	5	328	45	1.6	M10	18	10	11	26	120	70	M10X25	2	105	165	40
7	115	114.5	126	5	388	50	1.6	M12	20	12	13.5	26	140	80	M12X30	2	115	195	40
8	125	124.5	136	6	388	55	2.5	M12	20	12	13.5	26	150	85	M12X30	2	125	195	40
9	135	134.5	147	6	467	60	2.5	M12	20	12	13.5	33	160	90	M12X30	2	135	235	45
10	150	149.5	162	6	467	65	2.5	M12	20	12	13.5	33	185	110	M12X30	2	150	235	45
11	165	164.5	177	7	537	70	2.5	M16	28	15	17.5	33	195	120	M16X40	2	165	270	45
12	180	179.5	192	7	537	75	2.5	M16	28	15	17.5	33	220	130	M16X40	2	180	270	45
13	190	189.5	206	7	667	80	3	M16	28	18	17.5	33	230	140	M16X40	2	190	335	45
14	210	209.5	226	8	667	85	3	M16	28	18	17.5	33	250	160	M16X40	2	210	335	45
15	230	229.5	248	8	756	100	3	M20	38	25	22	39	270	180	M20X55	4	230	380	60
16	240	239.5	258	8	756	100	3	M20	38	25	22	39	280	180	M20X55	4	240	380	60
17	250	249.5	270	8	826	110	4	M20	38	25	22	39	300	190	M20X55	4	250	415	60
18	275	274.5	295	9	826	120	4	M20	38	25	22	39	330	210	M20X55	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。

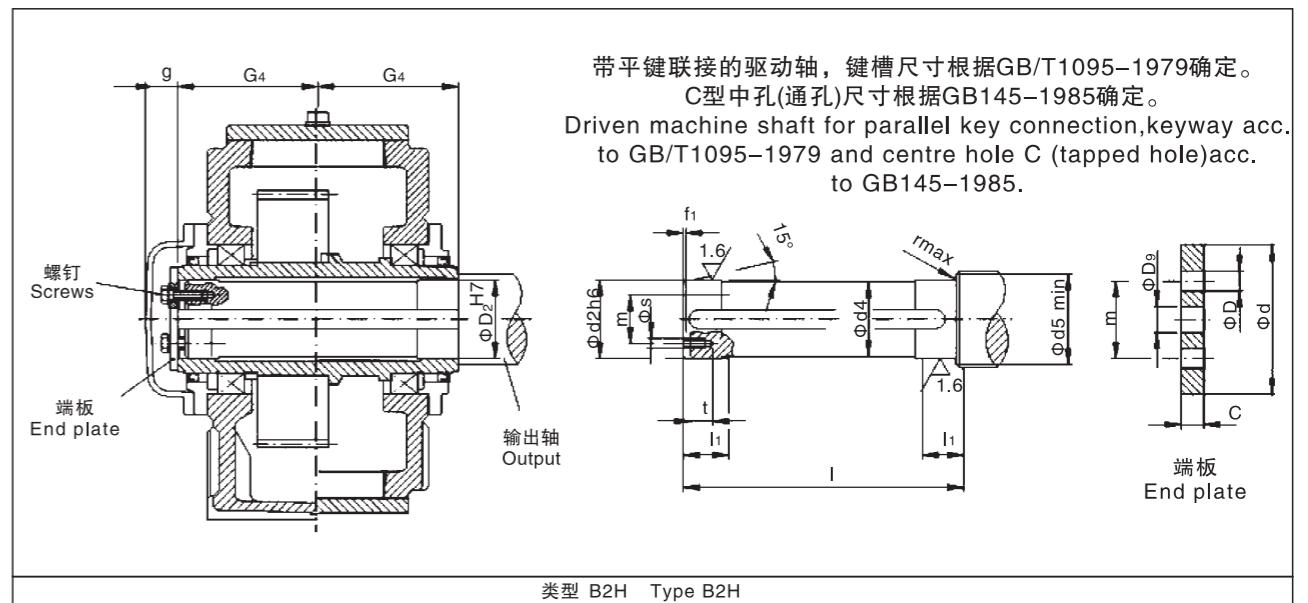
Material of driven machine shaft:60 or higher strength.Parallel key does not belong to our scope of supply.

Please order separately,if required.

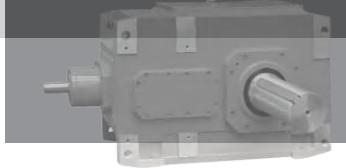


带胀紧盘联接的空心轴或带平键联接的空心轴
Hollow shaft for shrink disk or parallel key connections

齿轮箱 Gear Units 带平键联接的空心轴 Hollow Shafts For Parallel Key Connections
类型BH2 Type BH2 规格 2...18 Sizes 2...18



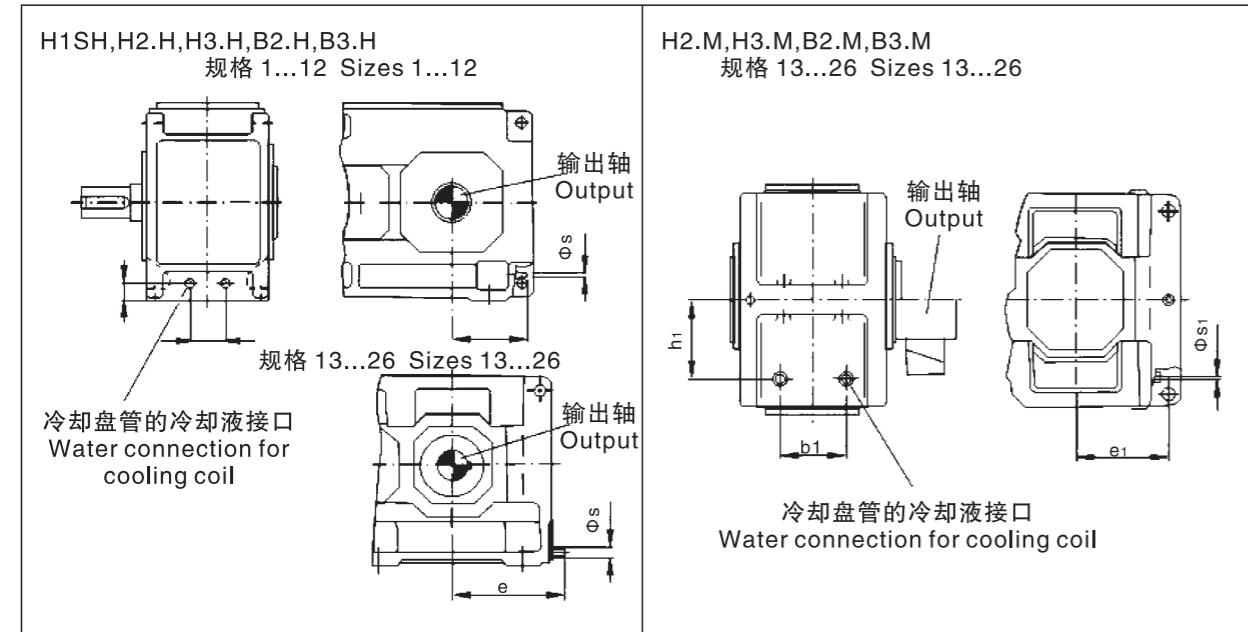
齿轮 箱规 格 Gear units size	工作机驱动轴1) Driven machine shaft												端板 End plate				螺钉 Screw		
	d ₂	d ₄	d ₅	f ₁	I	I ₁	r	s	t	c	D	D ₉	d	m	规格Size	数量Qty.	D ₂	G ₄	g
	mm																		
mm																			
2	55	54.5	63	3	268	30	1.2	M8	15	8	9	18	70	40	M8X20	2	55	135	35
3	65	64.5	73	4	288	30	1.2	M10	18	8	11	18	78	45	M10X25	2	65	145	35
4	80	79.5	88	4	338	35	1.2	M10	18	10	11	22	100	60	M10X25	2	80	170	35
5	95	94.5	105	5	398	40	1.6	M10	18	10	11	26	120	70	M10X25	2	95	200	40
6	105	104.5	116	5	398	45	1.6	M10	18	10	11	26	120	70	M10X25	2	105	200	40
7	115	114.5	126	5	468	50	1.6	M12	20	12	13.5	26	140	80	M12X30	2	115	235	40
8	125	124.5	136	6	468	55	2.5	M12	20	12	13.5	26	150	85	M12X30	2	125	235	40
9	135	134.5	147	6	537	60	2.5	M12	20	12	13.5	33	160	90	M12X30	2	135	270	45
10	150	149.5	162	6	537	65	2.5	M12	20	12	13.5	33	185	110	M12X30	2	150	270	45
11	165	164.5	177	7	637	70	2.5	M16	28	15	17.5	33	195	120	M16X40	2	165	320	45
12	180	179.5	192	7	637	75	2.5	M16	28	15	17.5	33	220	130	M16X40	2	180	320	45
14	210	209.5	226	8	777	85	3	M16	28	18	17.5	33	250	160	M16X40	2	210	390	45
16	240</td																		



冷却盘管
Cooling coils



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



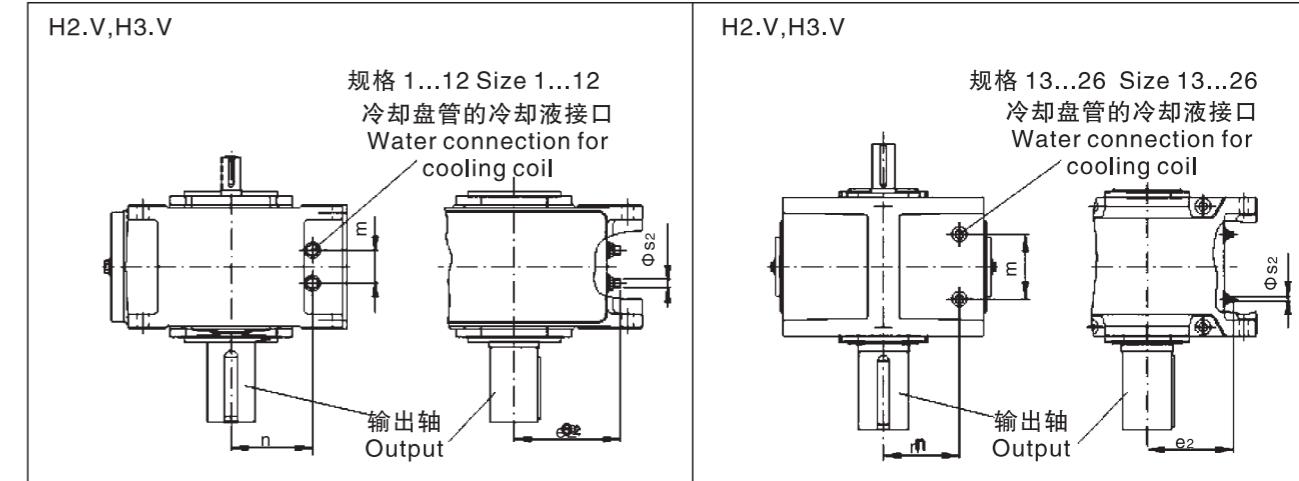
规格 Size	类型 H1SH Type H1SH					类型 H2.H/B3.H Type H2.H/B3.H					类型 H3.H Type H3.H					类型 B2.H Type B2.H				
	b mm	e mm	h mm	s	1)	b mm	e mm	h mm	s	1)	b mm	e mm	h mm	s	1)	b mm	e mm	h mm	s	1)
1	30	150	45	G1/4	4	-	-	-	-	-	64	125	40	G1/4	4					
2	-	-	-	-	-	-	-	-	-	-	78	130	40	G1/4	4					
3	48	205	74	G1/2	4	34	130	55	G1/2	4	-	-	-	G1/4	4					
4	-	-	-	-	-	34	155	60	G1/2	4	-	-	-	G1/2	4					
5	88	270	90	G1/2	4	68	170	64	G1/2	4	70	175	60	G1/2	4	130	175	62	G1/2	8
6	-	-	-	-	-	70	215	68	G1/2	4	70	220	69	G1/2	4	120	220	68	G1/2	4
7	124	310	135	G1/2	4	100	210	83	G1/2	4	80	210	83	G1/2	4	140	210	80	G1/2	8
8	-	-	-	-	-	100	270	83	G1/2	4	80	270	83	G1/2	4	140	270	80	G1/2	4
9	116	365	110	G1/2	8	140	245	110	G1/2	8	150	245	107	G1/2	4	232	245	110	G1/2	8
10	-	-	-	-	-	100	295	95	G1/2	8	90	295	95	G1/2	4	150	295	90	G1/2	8
11	146	425	130	G1/2	8	110	275	95	G1/2	8	200	275	115	G1/2	8	312	275	115	G1/2	8
12	-	-	-	-	-	200	360	109	G1/2	8	200	360	115	G1/2	8	300	360	115	G1/2	8
13	152	480	150	G1/2	8	252	455	116	G1/2	8	252	460	116	G1/2	8	324	460	116	G1/2	8
14	-	-	-	-	-	252	525	116	G1/2	8	252	530	116	G1/2	8	324	530	116	G1/2	8
15	172	560	130	G1/2	8	290	535	119	G1/2	8	290	540	119	G1/2	8	396	540	119	G1/2	8
16	-	-	-	-	-	290	580	119	G1/2	8	290	585	119	G1/2	8	396	585	119	G1/2	8
17	202	600	145	G1/2	8	340	575	134	G1/2	8	300	580	134	G1/2	8	468	580	134	G1/2	8
18	-	-	-	-	-	340	635	134	G1/2	8	300	640	134	G1/2	8	468	640	134	G1/2	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	-					根据用户要求供货 On request					根据用户要求供货 On request					-				

规格 Size	类型H2.M/B3M Type H2.M/B3M					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	G1/2	8	252	335	300	G1/2	8	324	335	300	G1/2	8
14	252	405	300	G1/2	8	252	405	300	G1/2	8	324	405	300	G1/2	8
15	290	395	335	G1/2	8	290	395	340	G1/2	8	396	390	345	G1/2	8
16	290	440	335	G1/2	8	290	440	340	G1/2	8	396	435	345	G1/2	8
17	340	425	380	G1/2	8	300	425	380	G1/2	8	324	425	395	G1/2	8
18	340	485	380	G1/2	8	300	485	380	G1/2	8	324	485	395	G1/2	8
19-26	根据用户要求供货 On request					根据用户要求供货 On request					-				

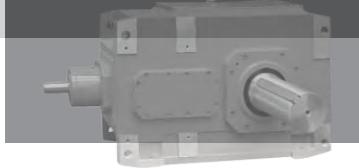
1)冷却液需要量 (l/min)
Required cooling water quantity (l/min)
冷却盘管适用于淡水、海水和半咸水。
Cooling coil suitable for fresh, sea and brackish.

冷却盘管
Cooling coils

齿轮箱 Gear Units 冷却盘管 Cooling Coils 立式安装 Vertical
类型 H..V, B..V Type H..V, B..V 规格 1...26 Size 1...26



规格 Size	类型 H2.V/B.V Type H2.V/B3.V					类型 H3.V Type H3.V					类型 B2.V Type B2.V				
	m mm	n mm	e ₂ mm	s ₂	(1)	m mm	n mm	e ₂ mm	s ₂	(1)	m mm	n mm	e ₂ mm	s ₂	(1)
1	-	-	-	-	-	-	-	-	-	-	64	90	125	G1/4	4
2	-	-	-	-	-	-	-	-	-	-	78	105	130	G1/4	4
3	34	120	130	G1/2	4	-	-	-	-	-	58	123	140	G1/2	4
4	34	140	155	G1/2	4	-	-	-	-	-	74	146	160	G1/2	4
5	68	166	170	G1/2	4	70	170	175	G1/2	4	130	168	175	G1/2	8
6															



立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)



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...18Vertical

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 Table1				
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	-
	13...18	-	X	X
B3.V	4	X	-	-
	5...12	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102页表14。

1) For possible variants for gear units with solid shaft and oil retaining tube, see page 102,table14.

推荐供油方式 Preferred order:

规格6号(含)一下各型: 浸油润滑, 规格7号以上各型: 强制润滑

up to size6: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:

当浸油润滑时, 所用需要润滑的零部件均需浸在润滑油中。

附带的补偿油箱用于储藏溢油的油液。

选择依据参见96页。

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

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

crieria for selection,see page 96

强制润滑 Forced lubrication:

当强制润滑时, 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泵进行飞溅润滑。

选择依据参见97~101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 97~101

立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)

齿轮箱 Gear Units 润滑油方式可选方案 Dip Lubrication for

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

规格 1...12 Size 1...12 立式安装 Vertical

当选用浸油润滑方式时, 应满足下列要求: a)最大输入转速n1, 参见表2; b)允许油温参见表3。

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

a)Maximum input speed n1,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	n1max	iN	n1max	iN	n1max	iN	n1max	iN	n1max	iN	n1max
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

n1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 n1 and iN which are not listed in table 2 must designed for forced lubrication

表3 Table3

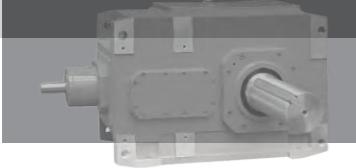
40°C以下的ISO-VG粘度 mm ² /s(cst) Viscosity ISO-VG at 40°C in mm ² /s(cst)	浸油允许极限温度 °C Permissible temperature limit in °C for dip lubrication	
	矿物油 Mineral oil	合成油 Synthetic oil
VG 220	-15	-25
VG 320	-12	-25
VG 460	-9	-25

若油温低于表中所列数值, 则必须对润滑油进行加热。

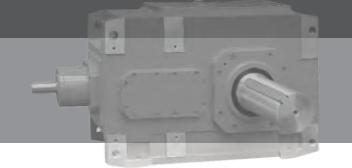
If the temperatures are below the values as listed in the table,the oil must be heated.

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.



立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)



平行轴齿轮箱 Helical Gear Units
类型 H2...H4 Types H2...H4

强制润滑方式 Forced Lubrication for
规格 5...18 Sizes 5...18 立式安装 Vertical

表4 Table4

40℃以下的 ISO-VG粘度, mm ² /s(cst) Viscosity ISO-VG at 40℃ in mm ² /s(cst)	强制润滑允许极限温度 ℃ Permissible temperature limit in ℃ 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 values as listed in table 4, dip Lubrication has to be provided or the oil must be heated.

表5 Table 5

类型 Types	n1 1/min	齿轮箱规格 Gear units size		法兰泵规格 Flanged-on pump size	齿轮箱规格 Gear units 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			
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	*
H4.V ¹⁾	750-900	25-35.5	31.5-45	KSW3	22.4-35.5	28-45	25-40	KSW3
		40-90	50-112	*	40-90	50-112	45-100	*
		100-180	125-224	KSW3				
	901-1200	200-335	250-450	*				
		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
DesignBD

立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)

平行轴齿轮箱 Helical Gear Units
类型 H2...H4 Types H2...H4

强制润滑方式 Forced Lubrication for
规格 5...18 Sizes 5...18 立式安装 Vertical

表6 Table6

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	n1 1/min	齿轮箱规格 Gear units size		法兰泵规格 Flanged-on pump size	齿轮箱规格 Gear units size		法兰泵规格 Flanged-on pump size	
		5,7,9,11	6,8,10,12		13,15,17	14	16,18	
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	*
H4.V ¹⁾	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	*
	1201-1800	100-224	125-280	KSW3				
		250-355	315-450	*				
		100-140	125-180	KSW3				
	901-1200	160-355	200-450	*				
		100-112	125-140	KSW3				
		125-335	160-450	*				

*=所需电动泵，参见表7

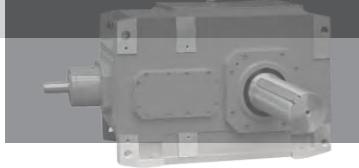
*=Motor pump require, see table 7.

1) 布置形式A,C DesignA,C

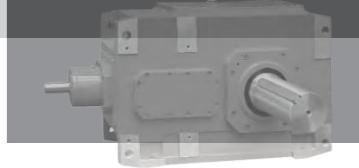
表7 Table7

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		SF 2/8
	13...18	B/D	SF 2/13
H4.V	7...12		SF 2/8
	13...18	A/C	SF 2/13
	7...18	B/D	SF 2/13

1) 只提供法兰泵 Flaged-on pump only



立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)



直交轴齿轮箱 Bevel-helical Gear Units 强制润滑方式 Forced Lubrication for
类型 B2...B4 Types B2...B4 规格 5...18 Sizes 5...18 立式安装 Vertical

表格 8 Table 8

40℃以下的ISOVG-粘度, mm ² (cSt) Viscosity ISO-Vgat40℃ in mm ² (cSt)	强制润滑允许极限温度 ℃ Permissible temperature limit in ℃ 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
VG302	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 1800 cSt 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9 Table 9

立式安装直交轴减速机采用法兰泵 Assignment of flaged-on pumps to vertical bevel-helical reducers								
类型 Types	n1 1/min	齿轮箱规格 Gear units size		法兰泵规格 Flanged-on Pump size	齿轮箱规格 Gear units 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	63	56	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	*	*
		112	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	14-40	KSW3
		28-50	35.5-63	KSW3	28-50	35.5-63	50-71	KSW4
	750-900	56-71	71-90	*	56-71	71-90	63-71	80-90
		12.5-35.5	16-45	KSW3	12.5-35.5	16-45	45-71	56-90
		40-71	50-90	*	40-71	50-90	50-80	*
B4.V ¹⁾	1201-1800	80-100	100-224	KSW3	80-100	100-224	80-315	KSW3
		200-315	250-400	*	200-315	250-400	250-400	*
	901-1200	80-125	100-160	KSW3	80-125	100-160	100-400	90-355
		140-315	180-400	*	140-315	180-400	180-400	*
	750-900	80-90	100-112	KSW3	80-90	100-112	100-315	KSW3
		100-315	125-400	*	100-315	125-400	125-400	*

*=所需电动泵，参见表11 * =Motor pump require,see table 11.

1) 布置形式A,B DesignA,B
2) 布置形式C,D DesignC,D

立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)

直交轴齿轮箱 Bevel-helical Gear Units 强制润滑方式 Forced Lubrication for
类型 B2...B4 Types B2...B4 规格 5...18 Sizes 5...18 立式安装 Vertical

表格 10 Table 10

立式安装直交轴减速机采用法兰泵
Assignment of flaged-on pumps to vertical bevel-helical reducers

类型 Types	n1 1/min	齿轮箱规格 Gear units size		法兰泵规格 Flanged-on Pump size	齿轮箱规格 Gear units size		法兰泵规格 Flanged-on Pump size
		5,7,9,11	6,8,10,12		13,15,17	14	
		速比 Ratio iN	速比 Ratio iN		速比 Ratio iN	速比 Ratio iN	
B2.V	1201-1800	5-6.3	6.3-8	KSW1	5-8	6.3-10	KSW2
		7.1-11.2	9-14	KSW2	9-11.2	11.2-14	KSW3
		5-8	6.3-10	KSW2	5	63	KSW2
	901-1200	9-11.2	11.2-14	KSW3	5.6-11.2	7.1-14	KSW3
		5-6.3	6.3-8	KSW2	5-10	6.3-12.5	KSW3
		7.1-10	9-12.5	KSW3	11.2	14	*
B3.V	750-900	12.5-35.5	14-45	KSW3	12.5-35.5	16-45	KSW3
		40-71	50-90	KSW3	40-71	50-90	KSW4
		12.5-25	16-31.5	KSW2	12.5-25	16-31.5	KSW3
	1201-1800	28-50	35.5-63	KSW3	28-50	35.5-63	KSW4
		56-71	71-90	*	56-71	71-90	*
		12.5-35.5	14-45	KSW3	12.5-35.5	16-45	KSW4
B4.V	901-1200	40-71	50-90	*	40-71	50-90	*
		80-125	100-160	KSW2	80-125	100-160	KSW3
		140-315	180-400	*	140-315	180-400	*
	750-900	80-90	100-112	KSW3	80-90	100-112	KSW3
		100-315	125-400	*	100-315	125-400	*
		12.5-35.5	14-45	KSW3	12.5-35.5	16-45	KSW3

*=所需电动泵，参见表11 * =Motor pump require,see table 11.

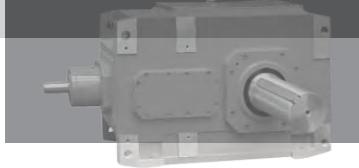
1) 布置形式C,D DesignC,D
2) 布置形式A,B DesignA,B

表格 11 Table 11

立式安装直交轴减速机采用法兰泵

Assignment of flaged-on pumps to vertical helical gear units

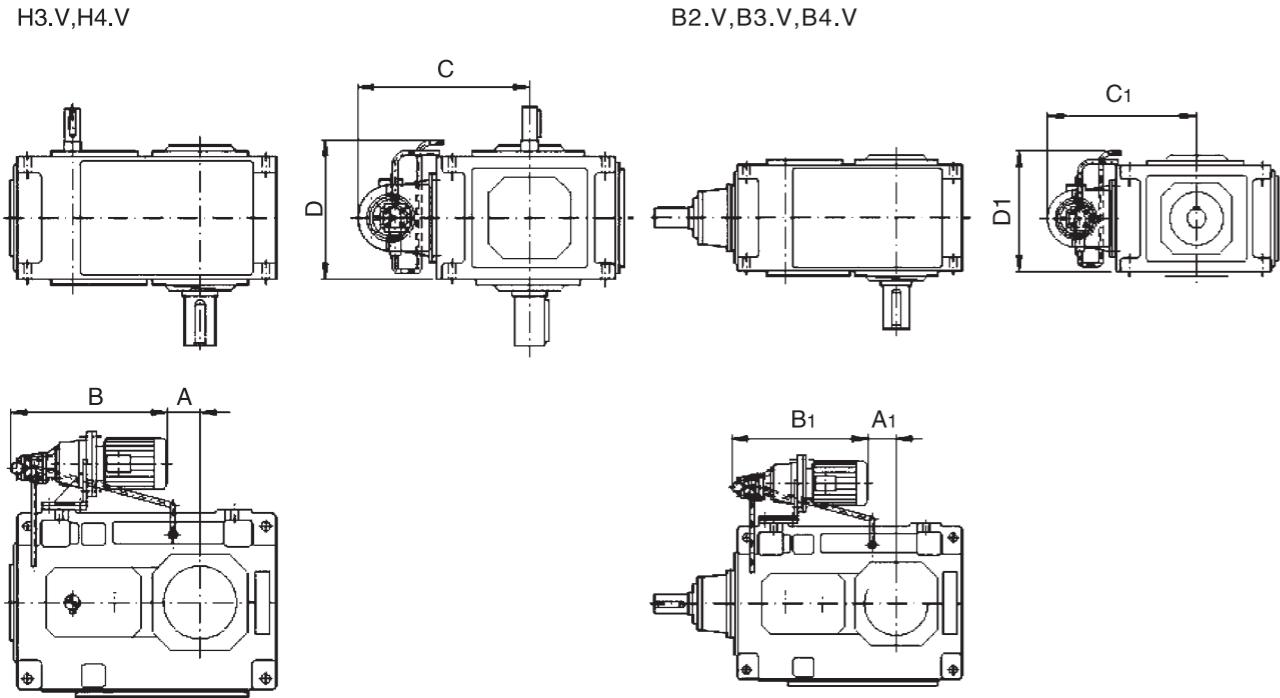
类型 Types	规格 Size		布置方式 Design	油泵 Pump
	5...12	13...18		
	A/B	C/D		
B2.V	5...12	13...18	A/B	SF 2/5
	13...18	5...12		SF 2/8
	5...18	13...18		SF 2/8
	5...12	5...12	C/D	SF 2/8
	13...18	13...18		SF 2/13
	5...12	13...18		SF 2/13
B3.V				



立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)

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 Size 5...18 立式安装 Vertical

H3.V,H4.V



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	类型 Types	规格 Size	布置形式 Design	A ₁	B ₁	C ₁	D ₁
H3.V	5/6	A/B/C/D	-30/5	560	480	385	B2.V	5/6	A/B/C/D	-160/-125	480	470	415
	7/8	A/B/C/D	55/100	585	550	430		7/8	A/B/C/D	5/50	480	525	510
	9/10	A/B/C/D	140/190	610	565	500		9/10	A/B/C/D	60/110	480	565	570
	11/12	A/B/C/D	375/425	530	625	560		11/12	A/B/C/D	150/220	480	625	660
	13/14	A/C	155/225	880	670	700		13/14	A/B/C/D	-70/0	755	670	805
	13/14	B/D	100/170	935	670	700		15/16	A/B/C/D	15/60	780	710	910
	15/16	A/C	275/320	965	710	770		17/18	A/B/C/D	-5/55	890	775	1025
	15/16	B/D	220/265	1020	710	770		5/6	A/B/C/D	-85/-50	480	480	365
	17/18	A/C	250/310	1040	770	835		7/8	A/B/C/D	-5/40	480	550	430
	17/18	B/D	195/255	1095	770	835		9/10	A/B/C/D	65/115	480	565	500
H4.V	7/8	A/C	55/100	600	550	430	B3.V	11/12	A/B/C/D	280/350	480	625	560
	7/8	B/D	0/45	680	550	430		13/14	A/B/C/D	35/105	810	670	700
	9/10	A/C	140/190	625	565	500		15/16	A/B/C/D	120/165	875	710	775
	9/10	B/D	85/135	705	565	500		17/18	A/B/C/D	165/225	970	775	835
	11/12	A/C	375/445	550	625	560	B4.V	5/6	A/B/C/D	-35/0	480	480	385
	11/12	B/D	320/390	635	625	560		7/8	A/B/C/D	55/100	480	550	430
	13/14	A/B/C/D	135/205	910	670	700		9/10	A/B/C/D	140/190	615	565	500
	15/16	A/B/C/D	255/300	1000	710	775		11/12	A/B/C/D	375/445	530	625	560
	17/18	A/B/C/D	230/290	1070	775	835		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



立式安装齿轮箱润滑油供给方式 (强制润滑和浸油润滑)
Oil supply for vertical gear units(forced and dip lubrication)

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 Size 5...18 立式安装 Vertical

表格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	-
B2SV	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*≤16 For size 5 only possible up to *i*≤16

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

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

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

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



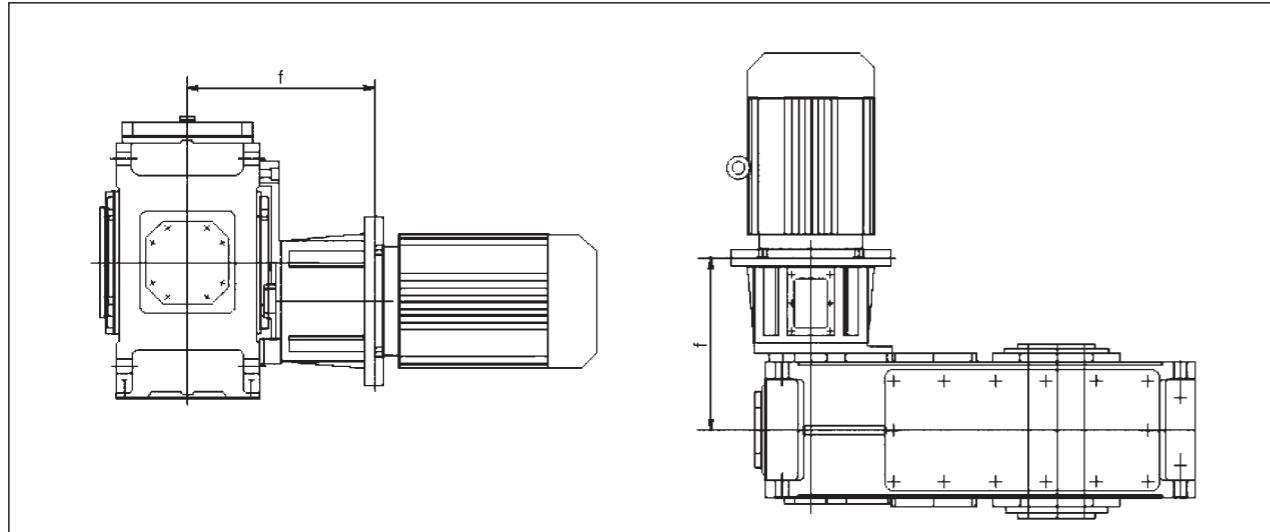
减速机电机法兰连接
Gear units motor mounting with flanges



减速机电机法兰连接
Gear units motor mounting with flanges

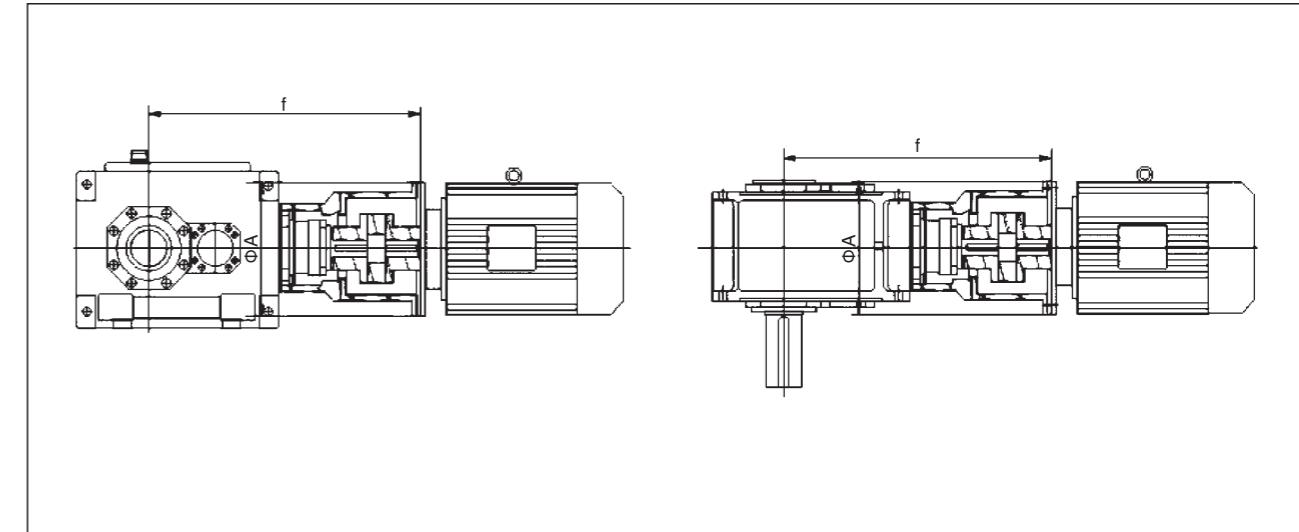
减速器
电机法兰联接
类型H2,H3,H4

Gear Units
Motor mounting with flanges
Type H2,H3,H4



减速器
电机法兰联接
类型H2,H3,H4

Gear Units
Motor mounting with flanges
Type H2,H3,H4



H2..		
电机功率 Motor Power		
	4	5/6
	f	mm
11-15kW	403	
18.5-22kW	403	428
30kW	405	430
37-45kW	442	467
55kW		467

H4..				
电机功率 Motor Power	规格/Size			
	7/8	9	10	11/12
	f mm			
齿轮轴1: 传动比 iN/Ratio iN				
	≥3.15	≤2.8	≥3.15	≤2.8
2.2-4kW	318			
5.5-7.5kW	341	379		384
11-15kW	383	421	430	426
18.5-22kW		421	430	426
30kW			432	
37-45kW			469	
55kW				532
75-90kW				532

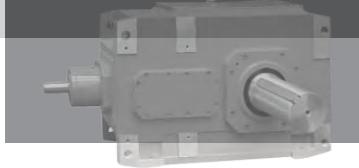
H3															
电机功率 Motor Power	规格/Size														
	7/8	9	10	11/12											
	f mm														
齿轮轴1: 传动比 iN/Ratio iN															
	≥3.15	≤2.8	=3.15-4 ≥4.5	≤2.8	=3.15-4 ≥4.5	≤2.8	≥4.5	=3.15-4	≤2.8						
11-15kW	388		463	508	468	513									
18.5-22kW	388	413	463	508	468	513									
30kW	390	415	465	510	470	515									
37-45kW	427	452	502	547	507	552	507	532	577						
55kW	427	452	502	547	507	552	507	532	577						
75-90kW			502	547	507	552	507	532	577						

*标准电机安装尺寸参见第106页, /Fitting dimensions for standard motors see page 106.

B2...							
电机功率 Motor Power	规格/Size						
	4	5	6	7	8		
	f	A	f	A	f	A	f
mm							
11-15kW	708	350					
18.5-22kW	708	350					
30kW	710	400	790	400	825		
37-45kW			827	450	862	957	450
55kW					957	550	1002
75-90kW					957	550	1002

B3..												
电机功率 Motor Power	规格/ Size											
	4	5	6	7	8	9	10	11	12			
	f	A	f	A	f	f	A	f	f	A	f	f
2.2-4kW	648	250										
5.5-7.5kW	671	300	756	350	791							
11-15kW	713	350	788	350	823	933	400	978				
18.5-22kW	713	350	788	350	823	933	400	978	1053	420	1103	
30kW	715	400	780	400	825	935	400	980	1055	420	1105	1240
37-45kW			827	450	862	972	450	1017	1092	450	1142	1277
55kW					972	550	1017	1092	550	1142	1277	550
75-90kW					972	550	1017	1092	550	1142	1277	550

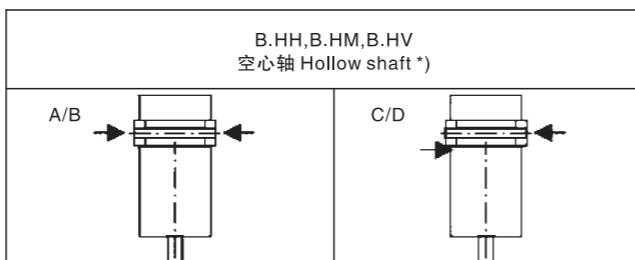
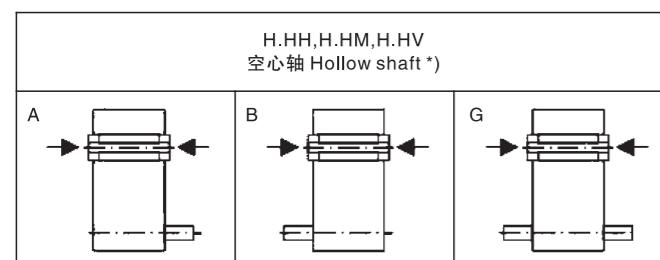
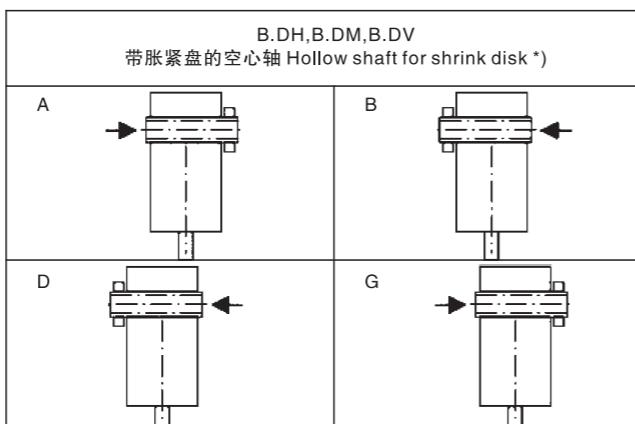
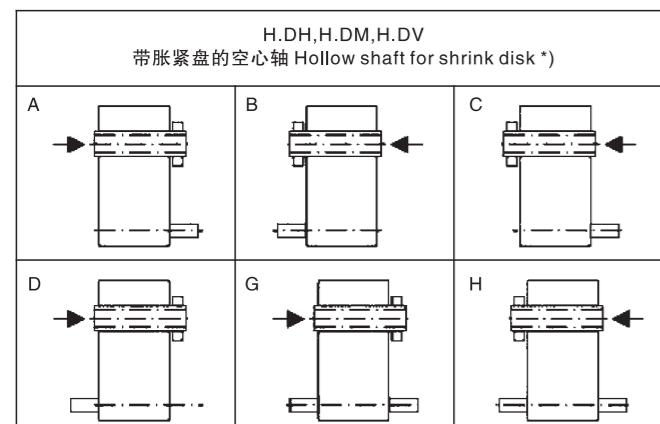
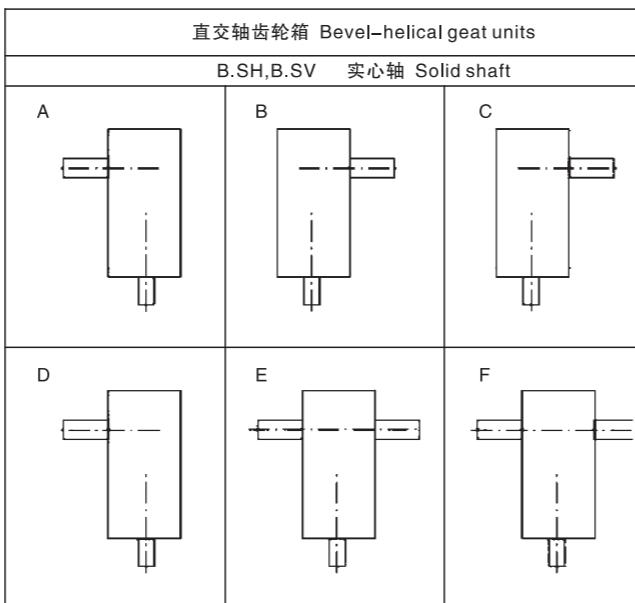
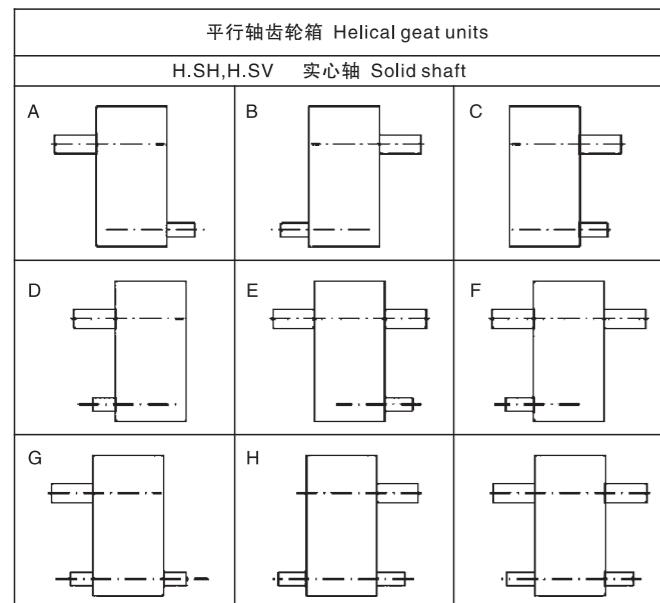
B4..														
电机功率 Motor Power	规格/Size													
	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	f	A	f	f	A	f	f	A	f	f	A	f	f	f
2.2-4kW	753	250	780	873	250	918		350						
5.5-7.5kW	776	330	811	896	300	941	1021	350	1071					
11-15kW	818	350	853	938	350	983	1053	350	1003	1253	400	1323		
18.5-22kW	818	350	853	938	350	983	1053	400	1103	1253	400	1323		
30kW				940	400	985	1055	450	1105	1255	400	1325	1423	420
37-45kW						1092		1142	1292	450	1362	1462	450	1532
55kW									1292	550	1362	1462	550	1532
75-90kW		</td												



布置形式
Design



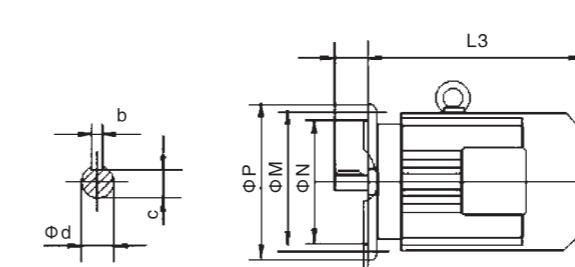
齿轮箱 Gear Units 布置形式 Design
类型 H2...H4...,B2...B4 Types H2...H4...,B2...B4 规格 1...26 Size 1...26



*) 箭头表示工作机械驱动插入方向
The arrow indicates the direction of insertion of the driven machine shaft.

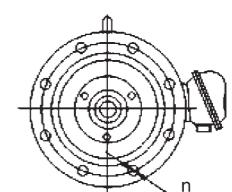
布置形式
Design

标准普通电机的参数及安装尺寸
Standard and for dinary motor parameter and mounting dimension



电机机座号 63~200
Motorsize 63~200

电机机座号 225~315
Motorsize 225~315



电机 机座号 Motor size	4级 Class 4		6级 Class 6		8级 Class 8		L3				安装尺寸 Mounting dimensions							M(kg)									
	P1 (kW)	n1 (r/min)	P1 (kW)	n1 (r/min)	P1 (kW)	n1 (r/min)	Y2	B	E	V	M	N	P	n	T	d	I	b	c	Y (铝壳)	Y2	B	E	V			
63	0.12	1390									202	270	328		115	95j6	140	4XΦ10	3	11j6	23	4	8.5	5.5	13		11
	0.18	1390																			6	13.5	15		12		
71	0.25	1390	0.18	850				225	285	345		130	110j6	160	4XΦ10	3.5	14j6	30	5	11	6.5	14	16	12	14		
	0.37	1390	0.25	850																7.5	14.5	16	13	15			
80	0.55	1390	0.37	885	0.18	645		255	290	350	310	165	130j6	200	4XΦ12	3.5	19j6	40	6	15.5	10	15	31	20	16		
	0.75	1390	0.55	885	0.25	645														11	16	32	21	17			
90S	1.1	1400	0.75	910	0.37	670	270	310	370	320	165	130j6	200	4XΦ12	3.5	24j6	50	8	20	16	23	35	27	23			
90L	1.5	1400	1.1	910	0.55	670	295	335	395	345	165	130j6	200	4XΦ12	3.5	24j6	50	8	20	20	25	39	31	28			
100	2.2	1420		920	0.75	680		325	370	420	370	215	180j6	250	4XΦ15	4	28j6	60	8	24		33	49	41	36		
	3	1420			1.1	680														35	53	44	36				
112M	4	1440	2.2	940	1.5	690	340	400	450	390	215	180j6	250	4XΦ15	4	28j6	60	8	24		41	67	60	43			
132S	5.5	1440	3	960	2.2	710	390	430	505	450	265	230j6	300	4XΦ15	4	38k6	80	10	33		65	93	85	63			
132M	7.5	1460		960	4	960		3710	430	470	545	490	295	230j6	300	4XΦ15	4	38k6	80	10	30		76	105	98	75	
					5.5	960																					
160M	11	1460	7.5	960		7.5	720		505	545	610	550	300	250h6	350	4XΦ19	5	42k6	110	12	37		118	150	143	116	
							5.5	720																			
160L	15	1460		960	11	960	7.5		560	585	655	595	300	250h6	350	4XΦ19	5	42k6	110	12	37		132	169	165	136	
								720																			
180M	18.5	1470			11	960	4	720		590	620	715	740	300	250h6	350	4XΦ19	5	48k6	110	14	42.5		164	205	203	169
							5.5	720																			
180L	22	1470	15	970	11	730	630	640	765	790	300	250h6	350	4XΦ19	5	48k6	110	14	42.5		182	222	216	183			
200	30	1470	18.5	970	15	730	660	695	790	850	350	300h6	400	4XΦ19	5	55k6	110	16	49		245	300	296	236			
			22	970																							
225S	37	1480			18.5	730	675	705	860	910	400	350h6	450	8XΦ19	5	60m6	140	18	53		258	360	370	291			
225M	45	1480	30	980	22	730	705	730	890	940	400	350h6	450	8XΦ19	5	60m6	140	18	53		290	390	405	327			
250	55	1480	37	980	30	730	770	795	1060	500	450h6	550	8XΦ19	5	65m6	140	18	58		388	530	498	393				
280S	75	1480	45	980	37	730	845	870		1160	500	450h6	500	8XΦ19	5	75m6	140	20	67.5		510	660	633	520			
280M	90	1485	55	980	45	740	895	920		1260	500	450h6	550	8XΦ19	5	75m6	140</										



减(变)速机订货须知

- 1、主机名称: _____。
 - 2、减速机在主机中的作用_____。
 - 3、使用环境条件: 温度____摄氏度。
 - 4、每天运转时间_____。
 - 5、电动机类型_____；功率_____千瓦；电压_____伏特；输入转速_____转/分；频率_____赫兹；
 - 6、传动比_____；输出轴转速_____转/分。
 - 7、减速机所承受载荷(转矩)_____N.m。
 - 8、减速机型号规格(按型号表示示例填写)_____。
 - 9、减速机与电动机连接方法_____。
 - 10、所需台数_____。希望供货时间____年____月____日。
 - 11、用户在订货时，双方需签定全国统一格式文本合同，签定生效后，双方务必按《中华人民共和国合同法》中有关条款规定执行。
 - 12、在签定合同前，必须详细阅读了解本书中的各产品性能，使用范围独特，各机型的型号表示方法，包括机型号安装方式、是否带电机、减速比、电机功率、扭矩力等相关内容。直接配电机的产品，除注明电机功率外，还要务必注明机种类，相数(电机)极数(转数)如没有注明，一律按三相四极交流电机出厂。
 - 13、用户在订货时尽量选取我公司生产的型号、规格、如特殊减速比、变速比、特殊电机可特殊订货，我公司可为用户特殊设计制造。
 - 14、本书所列的各项技术数据及其它，可供用户参考使用，如有技术改进、恕不另行通知。
- 注：订货时请尽量选择本目录内的标准产品，如有特殊要求请在合同上详细说明。

Notices in speed reducer (speed changer) procurement

1. Main unit name: _____.
2. Purpose of speed reducer in main unit_____.
3. Operating conditions: Temperature____°C.
4. Working time every day_____.
5. Motor type_____; Power_____KW; Voltage_____V; Input rotation speed_____r/min; Frequency_____Hz;
6. Transmission ratio_____; Output spindle rotation speed_____r/min.
7. Maximum (torque) load allowed on speed reducer_____N.m.
8. Type of speed reducer (fill in types as specified)_____.
9. Coupling method between speed reducer and motor_____.
10. Quantity required_____. Expected delivery date____year____month____day.
11. When a user places an order, the two parties shall sign a national uniform-pattern contract, which comes into effect after being signed, and the two parties shall implement according to relevant provisions in Contract Law of the People's Republic of China.
12. Before signing a contract, please read all technical parameters, application range and expression of types, including installation patterns, motors attached or not, speed reduction ratio, motor power, torque and so on. To products directly coupled with motors, besides motor power, motor type, phase number (motor) and stage number (rotation number) shall be specified, otherwise, we will provide 3-phase & 4-stage AC motors for all.
13. Users shall try to select the types manufactured by our company. Special orders are available for special speed reduction ratio, transmission ratio and motors, and our company can design and manufacture for users.
14. All technical parameters and other information in this document are for users' reference, and we will not otherwise when any technical improvements are made.

Note: When ordering, please try to select the standard products in the catalogue. If there is any special requirement, please notify it in the contract.

· ISO9001国际质量体系认证

· 中国减变速机行业协会会员单位

· international quality system certificate

· the member of reducer and variator association in china



ADVANCED MANUFACTURING EQUIPMENT 先进的制造设备

优秀的品质，源于制造工艺的先进。我们拥有先进的生产技术和设备，使产品在品质与外在个性化设计紧密结合，完美满足并引领工业现代化的需要。

Superior quality is originated from advanced manufacturing technology. With the use of advanced production technology and equipment, our products are given good quality and individualized design to fully meet and lead the requirements of industrial modernization.