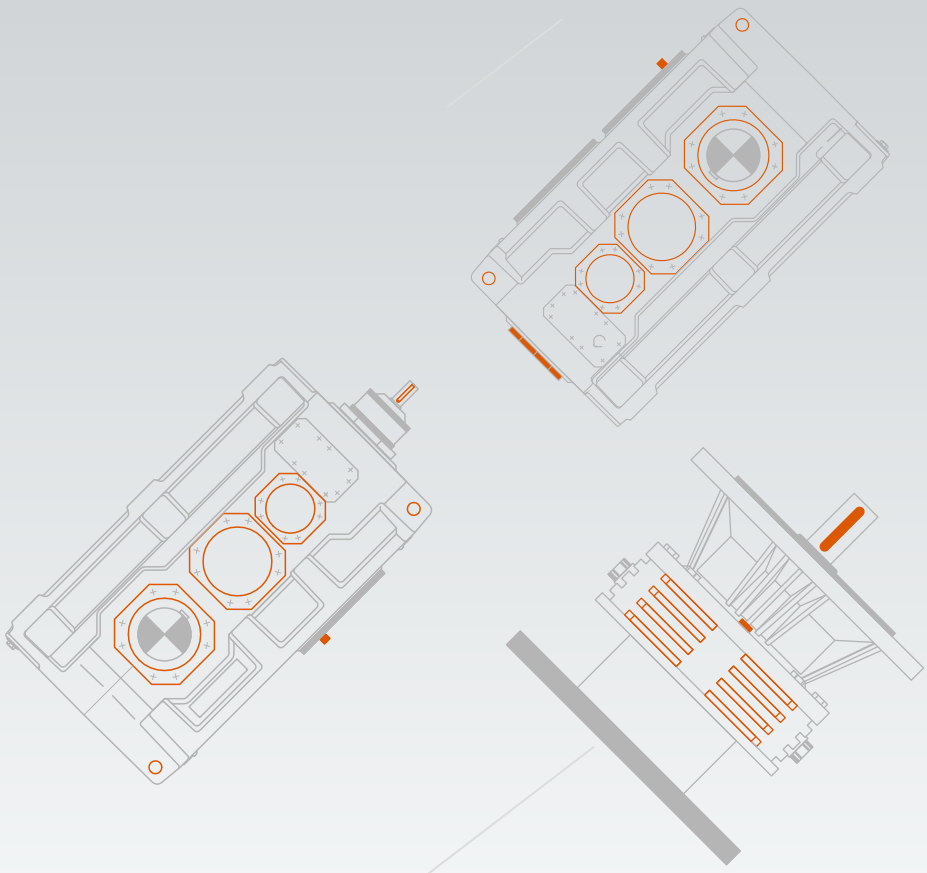
WUMA 午马传动
Dreams drive the future!

Industrial Gearbox Selection Catalogue

工业齿轮箱目录册

2025F



SINCE 1995

DREAMS DRIVE THE FUTURE

面积
Area **60,000m²**

历史
Experience **30 year**

技术人员
Technicians **30+**

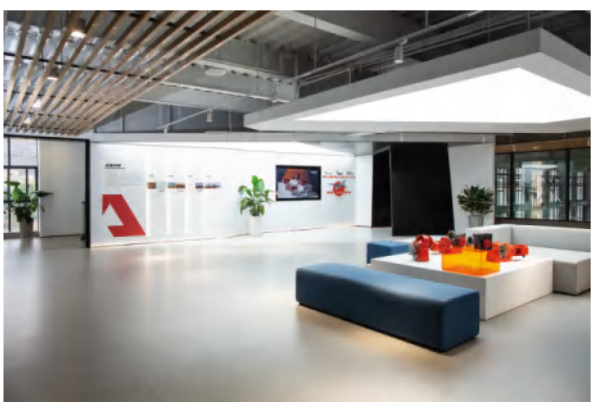
员工
Employees **300+**

年产量
Annual Output Units **500,000**

浙江午马传动有限公司是由浙江午马减速机有限公司全资投资的服务型制造企业。

公司始创于 1995 年，地处沿海经 济带，传承传动领域近三十年的制造经验，专业生产 RV 系列蜗轮蜗杆减速机，R,K,F,S 四大系列硬齿面斜齿轮减速机，准双曲面减速机等超过 10 个系列的产品，现拥有资深全职研究生，高级工程师，温州市高层次特殊支持计划人才等高水准的人才梯队，并先后参与了行业标准及团体标准的制定 12 项，拥有专利 35 件，荣获浙江工业科学技术奖，温州市重大科技创新项目，丽水市绿谷精英创新引领 ” 计划等科研成果。

Zhejiang Wuma Drive Co., Ltd. was established in 1995. It integrates R&D, manufacturing, and sales. It specializes in the production of RV series worm gearboxes, R, K, F, and S series helical gearboxes, hypoid gearboxes, and more than 10 series of products. All products are manufactured using ISO 9001-certified processes and comply with DIN/AGMA standards.
With 30 years of technical expertise, WUMA serves multiple industries such as the food machinery Industry, the pharmaceutical machinery industry, and the ceramic machinery industry in 80 countries. We are committed to continuous innovation through strict quality assurance.



愿景 VISION

让世界爱上午马制造
Made in WUMA, make world better!

使命 MISSION

为全球提供绿色高效的传动方案
Provide a green and efficient transmission scheme for the world

价值观 VALUES

至诚至信，共创共享
Sincere and trustworthy, co-creation and sharing

午马传动智能数字化车间以工业 4.0 技术为核心，构建了一个高效、精准且环保的现代化生产体系。车间采用了高度自动化的生产线，整合了 AGV 无人搬运系统、德马吉、马扎克等精密加工设备，实现从原材料到成品的智能化生产，并通过物联网传感器实时收集设备状态和工艺数据，结合 PLM 与 MES 系统集成，实现了生产调度的动态优化，从而将生产线切换时间缩短了 40 %，质量缺陷率降低了 30%。

Wuma Drive's intelligent digital workshop takes Industry 4.0 technology as its core and builds an efficient, precise and environmentally friendly modern production system. The workshop uses a highly automated production line, integrates AGV unmanned handling systems, DMG and Mazak precision processing equipment, and realizes intelligent production from raw materials to finished products. It also collects equipment status and process data in real time through IoT sensors, and combines PLM and MES system integration to achieve dynamic optimization of production scheduling, thereby shortening the production line switching time by 40% and reducing the quality defect rate by 30%

DMG 德玛吉 卧式箱体加工中心	**LG-MAZAK** 马扎克 箱体加工中心
MITSUBUSHI 三菱 滚齿机	**TSUGAMI** 津上 精加工车床
HEADMAN 海德曼 精加工车床	**TOMAN** 陀曼 滚齿机

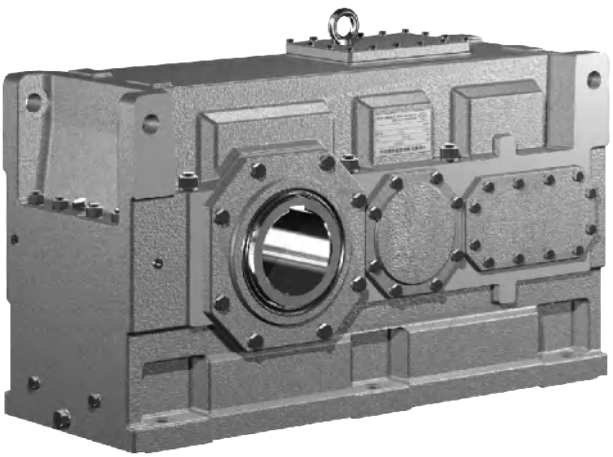
Smart Workshop
智能化车间

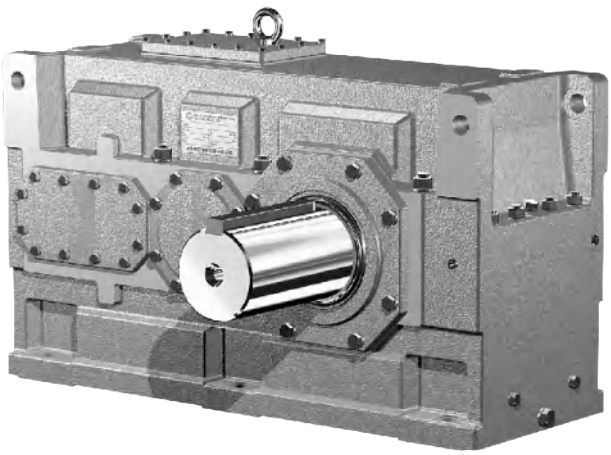
QUALITY

Digital Factory
数字化工厂

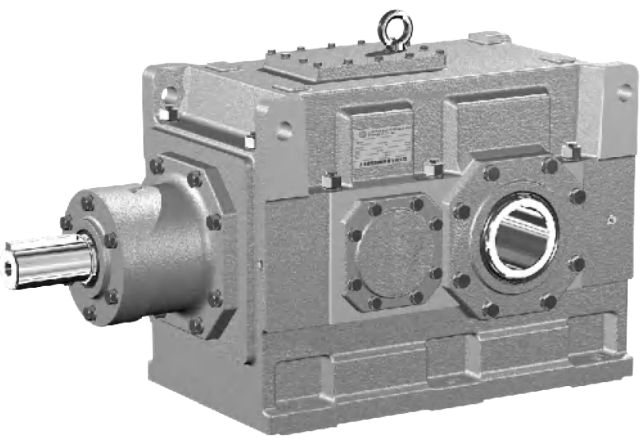
Contents 目录

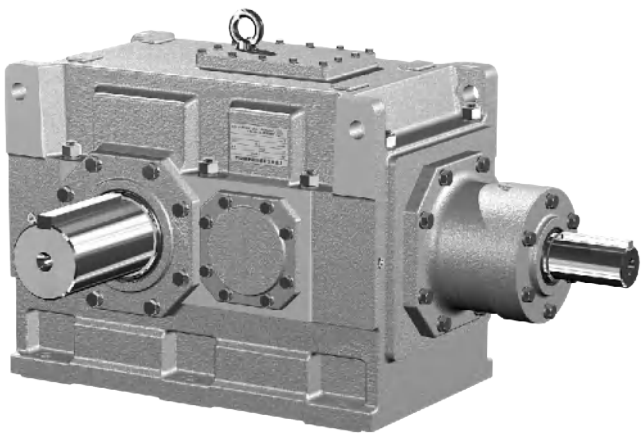
WH系列平行轴传动工业齿轮箱
WH Series Parallel Shaft Industrial Gearbox





WB系列直交轴传动工业齿轮箱
WB Series Rectangular Shaft Industrial Gearbox



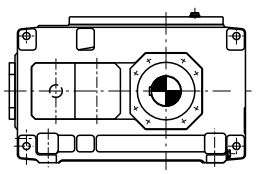


减速机 Reductors
基本类型概括 Summary of Basic Types

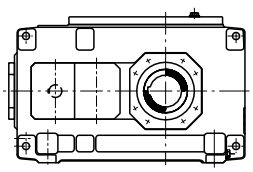
卧式安装
平行轴减速机
类型 WH1...,WH2...,WH3...,WH4..
1–...4–级传动,i_N=1.25–450

Horizontal mounting position
Helical reductors
Types WH1...,WH2...,WH3...,WH4..
1–...4–stage,i_N=1.25–450

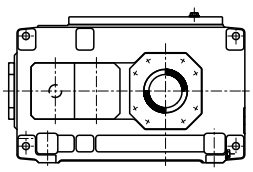
WH.SH



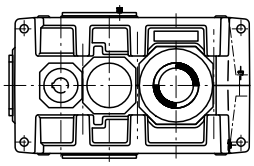
WH.HH



WH.DH



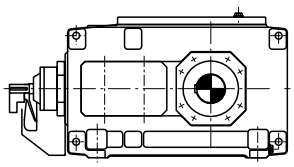
WH.HM, WH.DM



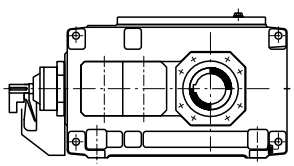
直交轴减速机
类型 WB2..., WB3..., WB4..
2–...4–级传动,i_N=5–400

Bevel–helical reductors
TYPES WB2..., WB3..., WB4..
2–...4–stage,i_N=5–400

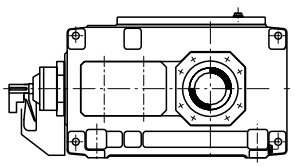
WB.SH



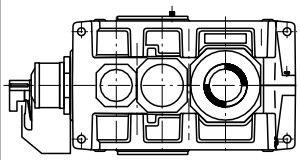
WB.HH



WB.DH



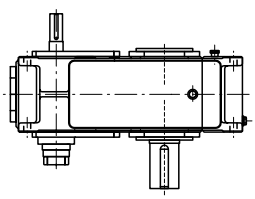
WB.HM, WB.DM



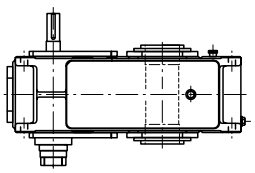
立式安装
平行轴减速机
类型 WH2V,WH3V,WH4V
2–...4–级传动,i_N=6.3–450

Vertical mounting position
Helical reductors
Types WH2V,WH3V,WH4V
2–...4–stage,i_N=6.3–450

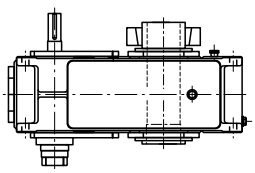
WH.SV



WH.HV



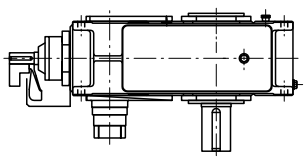
WH.DV



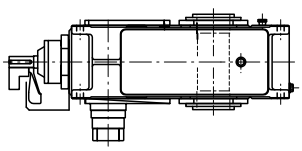
直交轴减速机
类型WB2.V,WB3.V,WB4.V
2–...4–级传动,i_N=5–400

Bevel–helical reductors
Types WB2.V,WB3.V,WB4.V
2–...4–stage,i_N=5–400

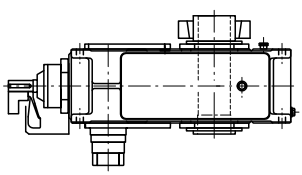
WB.SV



WB.HV



WB.DV



减速机 Reductors

性能特点 Characteristic

设计

午马平行轴和直交轴减速机采用全新设计，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，使减速机满足在狭小空间的安装要求根据（根据用户要求供货）。

安装方式

- 午马减速机既可卧式安装，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。

减速机散热

午马减速机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午马减速机。这样可因换油周期加长而提高设备运行可靠 性，并能降低设备维护费用。

库存

午马减速机根据单元结构模块化设计原理，大大减少了零部件种类。

Design

WUMA reductors are a completely new design.Outsanding innovations are:

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

Mounting position

- WUMA reductors 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 productrange.

Noise behaviour

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

Thermal conduction

WUMA reductors 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 WUMA reductors 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

WUMA reductors have been designed according to a new unit construction principle.

注意事项：

应严格遵守以下各项：

- 样本中的附图只属范例，并不要求严格一致，所注尺寸可以有所变动。
- 所注重量仅为平均值，并不要求严格一致。
- 为防止发生事故，所有旋转部件均应根据国家和当地安全规定加罩防护。
- 试车之前，必须认真阅读设备操作说明书。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。实际油量应以油尺上的标记为准。
- 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。
- 转动方向是指输出轴 d2 的方向

Attention:

The following items are absolutely to be observed:

- Illustrations are examples only and are not strictly binding. Dimensions are subject to change
- The weights are mean values and not strictly binding.
- To prevent accidents, all rotating parts should be guarded according to local and national safety regulations.
- Prior to commissioning, the operating instructions must be observed.The reductors 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 oildipstick.
- The oil viscosity has to correspond to the data given on the name plate.
- The reductors are supplied with radial shaft seals. Other sealing variants on request.
- Directions of rotation referring to output shaft d_2.

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。

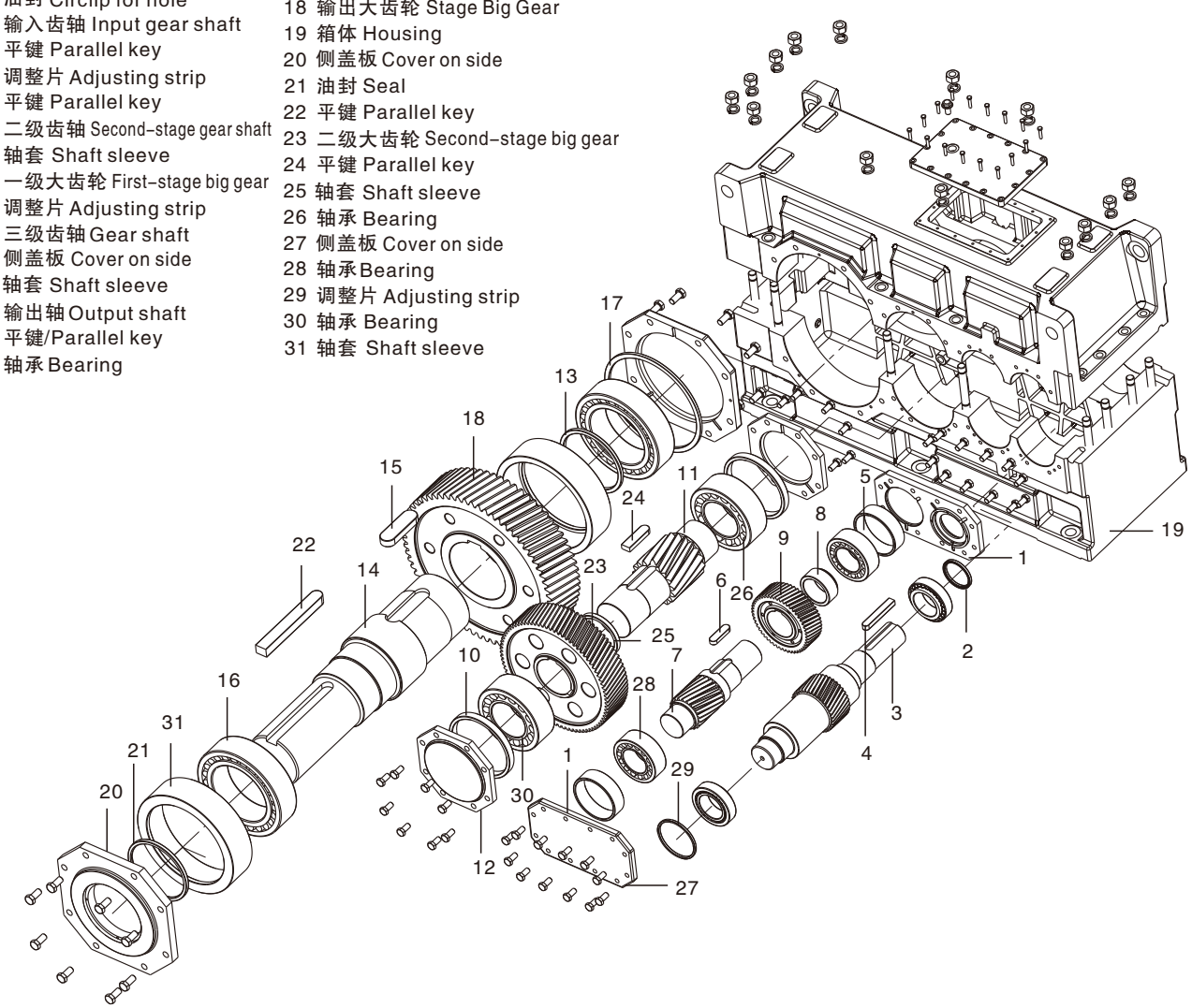
From size 13 up jack screws in the housing feet, and leveling pads on the upper housing part.

基础螺栓的最低性能等级为 8.8 级。

Foundation bolts of min. property class 8.8.

WH系列结构图:/WH series structrue drawing:

1 侧盖板 Cover on side
2 油封 Circlip for hole
3 输入齿轴 Input gear shaft
4 平键 Parallel key
5 调整片 Adjusting strip
6 平键 Parallel key
7 二级齿轴 Second-stage gear shaft
8 轴套 Shaft sleeve
9 一级大齿轮 First-stage big gear
10 调整片 Adjusting strip
11 三级齿轴 Gear shaft
12 侧盖板 Cover on side
13 轴套 Shaft sleeve
14 输出轴 Output shaft
15 平键/Parallel key
16 轴承 Bearing
17 调整片Adjusting strip
18 输出大齿轮 Stage Big Gear
19 箱体 Housing
20 侧盖板 Cover on side
21 油封 Seal
22 平键 Parallel key
23 二级大齿轮 Second-stage big gear
24 平键 Parallel key
25 轴套 Shaft sleeve
26 轴承 Bearing
27 侧盖板 Cover on side
28 轴承Bearing
29 调整片 Adjusting strip
30 轴承 Bearing
31 轴套 Shaft sleeve



WH系列工业齿轮箱机型号规格及机型表示方法：

本系列减速器的型号规格有:WH(01、03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26)等25种，减速比有1.25～450等多种速比，可分配9～660kW。

其中一级传动的机型号有：WH1-(01、03、05、07、09、11、13、15、17、19）等10种，公称传动比i分别有：1.25、1.40、1.60、1.80、2.00、2.24、2.50、2.80、3.15、3.55、4.00、4.50、5.00、5.60等14种。

其中二级传动的机型号有：WH2-(03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26等24种。公称传动比i分别有6.30、7.10、8.00、9.00、10.0、11.2、12.5、14.0、16.0、18.0、20.0、22.4、25.0、28.0等14种

其中三级传动的机型号有：WH3-(05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26等22种。公称传动比i分别有22.4、25.0、28.0、31.5、35.5、40.0、45.0、50.0、56.0、63.0、71.0、80.0、90.0、100、112等15种。

其中四级传动的机型号有：WH4-(07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26等20种。公称传动比i分别有100、112、125、140、160、180、200、224、250、280、315、355、400、450等14种。

Notation for wH series industrial gearbox models, specificationsand machine types:

Models and specifications of this reducer series include: WH (01、02、03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26), reduction ratio range: 1.25～450, allocable: 9～660kW.

Machine models of one-stage gearing include: WH1-(01、03、05、07、09、11、13、15、17、19). Nominal transmission ratioe i includes 1.25、1.40、1.60、1.80、2.00、2.24、2.50、2.80、3.15、3.55、4.00、4.50、5.00、5.60 etc.

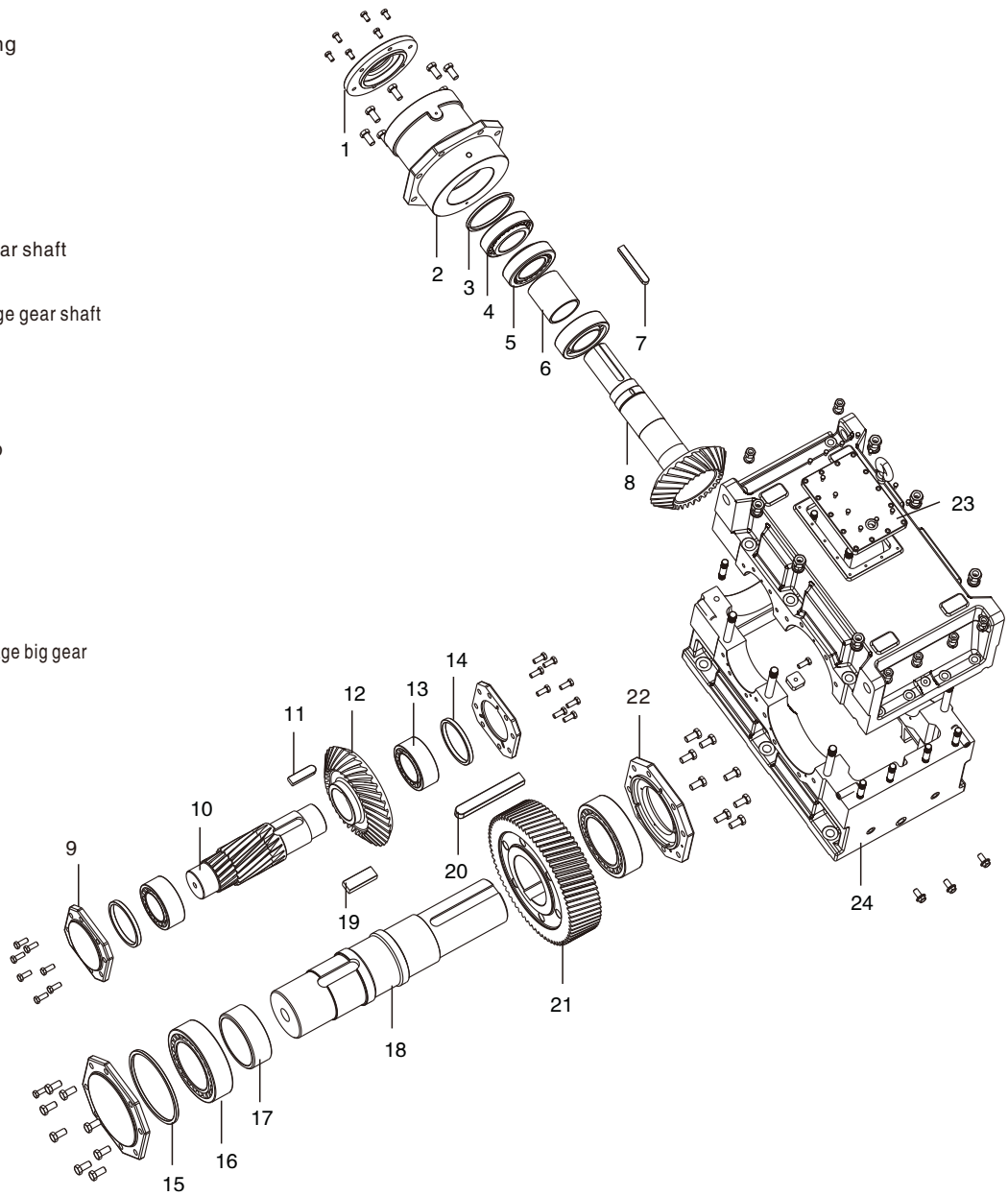
Machine models of two-stage gearing include: WH2-(03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26). Nominal transmission ratioe i includes 6.30、7.10、8.00、9.00、10.0、11.2、12.5、14.0、16.0、18.0、20.0、22.4、25.0、28.0 etc.

Machine models of three-stage gearing include WH3-(05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26). Nominal transmission ratioe i includes 22.4、25.0、28.0、31.5、35.5、40.0、45.0、50.0、56.0、63.0、71.0、80.0、90.0、100、112 etc.

Machine models of four-stage gearing include WH4-(07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26). Nominal transmission ratioe i includes 100、112、125、140、160、180、200、224、250、280、315、355、400、450 etc.

WB系列结构图:/WB series structrue drawing:

1 通盖 End cover
2 轴承座 Bearing Housing
3 调整垫 Adjusting strip
4 轴承Bearing
5 轴承Bearing
6 轴套 Shaft sleeve
7 平键 Key
8 一级齿轴 First-stage gear shaft
9 侧盖板 Cover on side
10 二级齿轴 Second-stage gear shaft
11 平键 Key
12 齿轮 gear
13 轴承 Bearing
14 调整垫 Adjusting strip
15 油封Circlip for hole
16 轴承 Bearing
17 轴套 Shaft sleeve
18 输出轴 Output shaft
19 平键 Key
20 平键 Key
21 二级大齿轮 Second-stage big gear
22 侧盖板 Cover on side
23 盖板 Cover
24 箱体 Housing



WB系列工业齿轮箱机型号规格及机型表示方法：

本系列减速器的型号规格有:WB(01、02、03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26)等26种，减速比有5.0～400等多种速比，可分配18～822kW。

其中二级传动的机型号有：WB2-(01、02、03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18等18种。公称传动比i分别有5.0、5.6、6.3、7.1、8.0、9.0、10、11.2、12.5、14、16、18等12种

其中三级传动的机型号有：WB3-(03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26)等24种。公称传动比i分别有12.5、14、16、18、20、22.4、25、28、31.5、35.5、40、45、50、56、63、71、80、90等18种。

其中四级传动的机型号有：WB4-(05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26)等18种。公称传动比i分别有80、90、100、112、125、140、160、180、200、224、250、280、315、355、400等15种。

.Notation for WB series industrial gearbox models, specificationsand machine types:

Models and specifications of this reducer series include: WB (01、02、03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26), reduction ratio range: 5.0～400, allocable: 18～822kW.

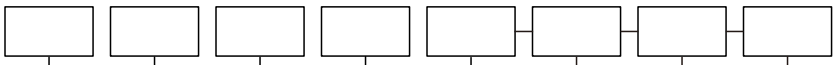
Machine models of two-stage gearing include: WB2-(01、02、03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18). Nominal transmission ratioe i includes 5.0、5.6、6.3、7.1、8.0、9.0、10、11.2、12.5、14、16、18 etc.

Machine models of three-stage gearing include WB3-(03、04、05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26). Nominal transmission ratioe i includes 12.5、14、16、18、20、22.4、25、28、31.5、35.5、40、45、50、56、63、71、80、90.

Machine models of four-stage gearing include WB4-(05、06、07、08、09、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25、26). Nominal transmission ratioe i includes 80、90、100、112、125、140、160、180、200、224、250、280、315、355、400 etc.

减速机 Reductors

型号表示方法 Designation of Types



WB 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, WH 省略)
The direction of rotation of the WB series output shaft(view onto the input shaft:CW is clockwise,CCW is counterclockwise,ignore WH)

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

额定传动比 i_N
Norminal ratio

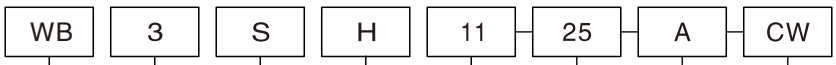
规格 1...26
Sizes 1...26

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
WH= 平行轴齿轮箱
Heilical gear units
WB= 直交轴齿轮箱
Bevel–helical gear units



输入轴旋转方向为顺时针
Input is clockwise

轴布置形式 A
Design of shaft A

额定传动比 i_N=25
Norminal ratio i_N=25

规格 11
Sizes 11

H = 卧式安装
Horizontal

S = 实心轴
Solid shaft

传动级数
No.of stages

直交轴齿轮箱
Bevel–helical gear units

减速机 Reductors

选型指南 Guidelines for the Selection

1. 确定减速机的类型及规格 1. Determination of reductors type and size	1.1 计算传动比 Find the transmission ratio $is = \frac{n_1}{n_2}$ 1.2 确定减速机的额定功率 Determine nominal power rating of the reductors $P_N \geqslant P_2 x\ f_1 x f_2$ 如果不满足下列条件，请向我们咨询 It is not necessary to consult us, if: $3.33 \times P_2 \geqslant P_N$ 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 $P_N \geqslant \frac{T_A \times n_1}{9550} x f_3$ 减速机的规格和传动级数列在额定功率选型表中，可根据i_N和P_N确定。 reductors sizes and number of reduction stages are given in rating tables depending on i_N and P_N 1.4 检查输出轴上是否允许有附加载荷；见217–218页。 1.4 Check whether additional forces on the output shaft are permissible; see pages 217–218 1.5 根据285–288页上的表检查实际传动比是否满足要求。 1.5 Check whether the actual ratio i as per tables on pages 285–288 is acceptable	
	安装方式 Mounting position	
	卧式安装 Horizontal	立式安装 Vertical
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	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295–303页。 Possible oil supply variations: – Dip lubrication – Forced lubrication by means of flanged–onpump or motor pump. For preferred variants and criteria for selection,page 295–303.
3. 确定所需要的热容量P_G 3. Determination of required thermal capacity P_G	3.1 如满足以下条件，则减速机可不带辅助冷却装置： 3.1 Adequate for reductors without auxiliary cooling,if: $P_2 \leqslant P_G = P_{G1} x f_4 x f_6 x f_8 x f_9$ 3.2 如满足以下条件，则减速机带冷却风扇可满足要求： 3.2 Adequate for reductors with fan cooling,if: $P_2 \leqslant P_G = P_{G2} x f_4 x f_6 x f_8 x f_{10}$ 3.3 如满足以下条件，则减速机带冷却盘管可满足要求： 3.3 Adequate for reductors with fitted cooling coil,if: $P_2 \leqslant P_G = P_{G3} x f_5 x f_7 x f_8 x f_{11}$ 3.4 如满足以下条件，则减速机带冷却盘管和风扇可满足要求： 3.4 Adequate for reductors with cooling coil and fan,if: $P_2 \leqslant P_G = P_{G4} x f_5 x f_7 x f_8 x f_{12}$ 3.5 如需要较高的热容量，则可按用户要求提供外部润滑油冷却装置进行冷却。 3.5 For higher thermal capacities, cooling by external oil cooler on request	

减速机 Reductors

符号说明 Key to Symbols

符号说明:
Key to symbols:

E_D = 每小时工作周期,以百分比表示,如 E_D=80% / h
Operating cycle per hour in %, e.g. E_D=80% / h

f_1 = 工作机系数（表1），201–202页
Factor for driven machine (table 1), pages 201–202

f_2 = 原动机系数（表2），201页
Factor for prime mover (table 2), page 201

f_3 = 峰值扭矩系数（表3），201页
Peak torque factor (table 3), page 201

f_4, f_5 = 环境温度系数（表4+表5），201页
Thermal factors (tables 4 + 5),page 201

f_6, f_7 = 海拔高度系数（表6+表7），202页
Factors for altitude (tables 6 + 7), page 202

f_8 = 立式安装减速机供油系数（表8），203页
对于卧式安装减速机：f_8=1
Oil supply factor for vertical (Table 8), page 203
For horizontal reductors : f_8=1

f_9，f_{10} f_{11}, f_{12} = 热容量系数（表9…14），203–204页
Therm alcapacity factors(tables9…14),pages 203–204

a_1 = 规格系数
Size factor

a_2 = 传动比系数
Transmission ratio factor

i = 实际传动比
Actual ratio

i_N = 公称传动比
Nominal ratio

i_S = 要求传动比
Required ratio

n_1 = 输入转速（1/min)
Input speed (1/min)

n_2 = 输出转速（1/min)
Output speed (1/min)

P_G = 要求的热容量
Required thermal capacity

P_{G1} = 减速机的热容量，不带辅助冷却装置，206–214页
Thermal capacity for reductors without auxiliary cooling, pages 206–214

P_{G2} = 减速机的热容量，带冷却风扇，206–214页
Thermal capacity for reductors with fan cooling, pages 206–214

P_{G3} = 减速机的热容量，带内置冷却盘管，206–214页
Thermal capacity for reductors with built–in cooling coil, pages 206–214

P_{G4} = 减速机的热容量，带内置冷却盘管和风扇，206–214页
Thermal capacity for reductors with built–in cooling coil and fan, pages 206–214

P_N = 减速机的额定功率(kW),见选型表，205–213页
Nominal power rating of reductors (kW), see tables, pages 205–213

P_2 = 工作机的额定功率（kW)
Power rating of driven machine (kW)

t = 环境温度（℃）
Ambient temperature (℃)

T_A = 输入轴最大扭矩，如峰值工作扭矩、起动扭矩或制动扭矩（N.m)
Max. torque occurring on input shaft, e.g. peak operating–, starting– or braking torque(N.m)

T_{2N} = 额定输出扭矩(kN.m)，215–216页
Nominal output torque (kN.m), pages 215–216

已知参数：

原动机
电机功率： P_1=75 kW
电机转速： n_1=1500 rpm
最大起动扭矩： T_A=720 N.m

工作机

皮带输送机功率： P_2=66 kW
转速： n_2=26 rpm
工作制： 12 小时 / 天
每小时起动次数： 7
每小时工作周期： E_D=100%
环境温度： 30 ℃
室外安装（风速）： (w ⩾ 4m/s)
海拔高度：海平面

减速机设计

直交轴减速机
安装方式 ：卧式安装
输出轴 d_2: 位于齿轮箱右侧（面对输入轴），即布置型式 C
输出轴 d_2 转动方向： ccw

KNOWN CRITERIA:

PRIME MOVER
Electric motor:P_1=75 kW
Motor speed:n_1=1500 rpm
Max. starting torque:T_A=720 N.m

DRIVEN MACHINE

Belt conveyor:P_2=66 kW
Speed:n_2=26 rpm
Duty:12 h/day
Starts per hour:7
Operating cycle per hour:E_D=100%
Ambient temperature:30 ℃
Outdoor installation:(w ⩾ 4m/s)
Altitude:sea level

REDUCTORTS DESIGN

Bevel–helical reductors
Mounting position: horizontal
Output shaft d_2:on right hand side design C
Direction of rotation of output shaft d2:ccw

要求：减速机的类型及规格 Required:Type and size of reductors

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

1.1 传动比计算： Calculation of transmission ratio

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

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

$$P_N \geqslant P_2 \times f_1 \times f_2 = 66 \times 1.3 \times 1 = 85.8 \text{ kW}$$

从额定功率表中选择：类型 WB3 ，规格 9，对应的 P_N= 96 kW

Selected from power rating table : type WB3 ,gear unit size 9, with P_N = 96 kW

$$3.33 \times P_2 \geqslant P_N \qquad 3.33 \times 66 = 219.8 \text{ kW} > P_N$$

1.3 检查起动扭矩 Checking the starting torque

$$P_N \geqslant \frac{T_A \times n_1}{9550} \times f_3 = \frac{720 \times 1500}{9550} \times 0.65 = 73.5 \text{ kW} \qquad P_N = 96 \text{ kW} > 73.5 \text{ kW}$$

2. 确定热容量 Determination of thermal capacity

2.1 根据表中给出的 WB3 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 WB3

$$P_G = P_{G1} \times f_4 \times f_6 \times f_8 \times f_9 \quad P_G = 70.7 \text{ kW} \times 0.88 \times 1 \times 1 \times (1.23 - 2.80 \times 0.085 \times 0.15) \quad P_G = 74.3 \text{ kW}$$
$$P_2 = 66 \text{ kW} < P_G = 74.3 \text{kW}$$

结论：减速机不带辅助冷却装置，可满足要求！

Conclusion: A reductors without auxiliary cooling is sufficient!

减速机 Reductors

使用系数 Service Factor

表1 Table 1 — 工作机系数 Factor for driven machine — f_1

工作机 Driven machines	日带载运行时间 以小时计 Effective daily operating period under load in hours ≤0.5	>0.5–10	>10
污水处理 Waste water treatment			
浓缩器(中心转动) Thickeners(central drive)	–	–	1.2
压滤器 Filter presses	1.0	1.3	1.5
絮凝器 Flocculation apparata	0.8	1.0	1.3
爆气机 Aerattors	–	1.8	2.0
搂集设备 Raking equipment	1.0	1.2	1.3
纵向、回转组合式接集装置 Combined longitudinal and rotary rakes	1.0	1.3	1.5
预浓缩器 Pre–thickeners	–	1.1	1.3
螺杆泵 Screw pumps	–	1.3	1.5
水轮机 Water turbines	–	–	2.0
泵 Pumps			
离心泵 Centrifugal pumps	1.0	1.2	1.3
容积式泵 Positive–displacement pumps			
1个活塞 1 position	1.3	1.4	1.8
>1个活塞 >1 position	1.2	1.4	1.5
挖泥机 Dredgers			
斗式运输机 Bucket conveyors	–	1.6	1.6
倾卸装置 Dumping devices	–	1.3	1.5
Carterpillar 行走机构 Carterpillar travelling gears	1.2	1.5	1.5
斗轮式挖掘机 Bucket wheel excavators			
用于捡拾 As pick–up	–	1.7	1.7
用于粗料 For primitive material	–	2.2	2.2
切碎机 Cutter heads	–	2.2	2.2
行走机构* Traversing gears *	–	1.4	1.8
弯板机* Plate bending machines *	–	1.0	1.0
化学工业 Chemical industry			
挤压机 Extruders	–	–	1.6
调浆机 Dough mills	–	1.8	1.8
橡胶砑光机 Rubber calenders	–	1.5	1.5
冷却圆筒 Cooling drums	–	1.3	1.4
混料机,用于 Mixers for			
均匀介质 Uniform media	1.0	1.3	1.4
非均匀介质 Non–uniform media	1.4	1.6	1.7

工作机 Driven machines	日带载运行时间 以小时计 Effective daily operating period under load in hours ≤0.5	>0.5–10	>10
输送机械 Conveyors			
斗式输送机 Bucket conveyors	–	1.2	1.5
绞车 Hauling winches	1.4	1.6	1.6
卷扬机 Hoists	–	1.5	1.8
皮带输送机≤150KW Belt conveyors≤150kw	1.0	1.2	1.3
皮带输送机≥150KW Belt conveyors≥150kw	1.1	1.3	1.4
货用电梯* Goods lifts *	–	1.2	1.5
客用电梯* Passenger lifts *	–	1.5	1.8
刮板式输送机 Apron conveyors	–	1.2	1.5
自动扶梯 Escalators	–	1.2	1.4
轨道行走机构 Rail traveling gears	–	1.5	–
变频装置 Frequency converters	–	1.8	2.0
往复式压缩机 Reclprocating compressors	–	1.8	1.9
机械起重 Cranes			
回转机构* Slewing gears *	1.0	1.4	1.8
俯仰机构 Luffing gears	1.0	1.1	1.4
行走机构 Travelling gears	1.1	1.6	2.0
提升机构 Hoisting gears	1.0	1.1	1.4
转臂式起重机 Derricking jib cranes	1.0	1.2	1.6
冷却塔 Cooling towers			
冷却塔风扇 Cooling tower fans	–	–	2.0
风机(轴流和离心式) Blowers (axial and radial)	–	1.4	1.5
食品工业 Food industry			
庶糖生产 Cane sugar production			
甘蔗切碎机* Cane knives *	–	–	1.7
甘蔗碾磨机 Cane mills	–	–	1.7
甜菜糖生产 Beet sugar production			
甜菜纹绞机 Beet cossettes macerators	–	–	1.2
榨取机,机械制冷机,蒸煮机 Extraction plants,mechanicl Refrigerators, juice boilers	–	–	1.4
甜菜清洗机 Sugar beet washing machines			
甜菜切碎机 Sugar beet cutters	–	–	1.5
造纸机械 Paper machines			
各种类型** Of all kind**	–	1.8	1.2
碎浆机驱动装置 Pulper drives	根据用户要求供货 On request		

表2 Table2 — 原动机系数 Factor for prime mover — f_2

电机,液压马达,气轮机 Electric motors,hydraulic motors, tubines	1.0
4–6缸,活塞发动机 周期变化 1:100至1:200 Piston engines 4–6 cylinders cyclic variation 1:100to 1:200	1.25
1–3缸,活塞发动机 周期变化 最高达1:100 Piston engines 1–3 cylinders Cyclic variation up to 1:100	1.5

表3 Table3 — 峰值扭矩系数 Peak torque factor — f_3

	每小时峰值负荷次数 Load peaks per hour 1–5	6–30	31–100	>100
f_3 单向载荷 Steady direction of load	0.5	0.65	0.7	0.85
f_3 交变载荷 Altemating direction of load	0.7	0.95	1.10	1.25

表4 Table4 — 环境温度系数 Thermal factor — f_4

不带辅助冷却装置或仅带冷却风扇 Without auxiliary cooling or with fan cooling

环境温度 Ambient temperature	每小时工作周期(E_D)百分比% Oprating cycle per hour(E_D)in % 100	80	60	40	20
10℃	1.14	1.20	1.32	1.54	2.04
20℃	1.00	1.06	1.16	1.35	1.79
30℃	0.87	0.93	1.00	1.18	1.56
40℃	0.71	0.75	0.82	0.96	1.27
50℃	0.55	0.58	0.64	0.74	0.98

表5 Table5 — 环境温度系数 Thermal factor — f_5

带冷却盘管和带冷却盘管和风扇 For cooling with cooling coil , or with fan and cooling coil

环境温度 Ambient temperature	每小时工作周期(E_D)百分比% Oprating cycle per hour(E_D)in % 100	80	60	40	20
10℃	1.04	1.10	1.21	1.40	1.86
20℃	1.00	1.06	1.16	1.35	1.79
30℃	0.93	0.99	1.08	1.26	1.66
40℃	0.88	0.93	1.02	1.19	1.58
50℃	0.81	0.86	0.94	1.09	1.45

减速机 Reductors
使用系数 Service Factor

表1 Table 1 — 工作机系数 Factor for driven machine — f_1

工作机 Driven machines	日带载运行时间 以小时计 Effective daily operating period under load in hours			工作机 Driven machines	日带载运行时间 以小时计 Effective daily operating period under load in hours		
	≤0.5	>0.5–10	>10		≤0.5	>0.5–10	>10
化学工业 Chemical industry				**离心式压缩机** Centrifugal compressors	–	1.4	1.5
搅拌机,用于 Agitators for media with				**索道缆车** Cableways			
密度均匀介质 Uniform density	1.0	1.3	1.5	货运索道 Material ropeways	–	1.3	1.4
不均匀介质 Non–uniform density	1.2	1.4	1.6	往返系统空中索道 To–and fro system Aerial ropeways	–	1.6	1.8
不均匀气体吸收 Non–uniform gas absorption	1.4	1.6	1.8	T型杆升降机 T–bar lifts	–	1.3	1.4
烘炉 Toasters	1.0	1.3	1.5	连续索道 Continuous ropeways	–	1.4	1.6
离心机 Centrifuges	1.0	1.2	1.3	**水泥工业** Cement industry			
金属加工设备 Metal working mills				混凝土搅拌器 Concrete mixers	–	1.5	1.5
翻板机 Plate tilters	1.0	1.0	1.2	破碎机* Breakers *	–	1.2	1.4
推钢机 Ingot pushers	1.0	1.2	1.2	回转窑 Rotary kilns	–	–	2.0
绕线机 Winding machines	–	1.6	1.6	管式磨机 Tube mills	–	–	2.0
冷床横移架 Cooling bed transfer frames	–	1.5	1.5	选粉机 Separators	–	1.6	1.6
辊式矫直机 Roller straighteners	–	1.6	1.6	辊压机 Roll crushers	–	–	2.0
辊道 Roller tables							
连续式 Continuous	–	1.5	1.5				
间歇式 Intermittent	–	2.0	2.0				
可逆式轧管机 Reversing tube mills	–	1.8	1.8				
剪切机 Shears							
连续式* Continuous *	–	1.5	1.5				
曲柄式* Crank type *	1.0	1.0	1.0				
连铸机驱动装置 Continuous casting drivers*	–	1.4	1.4				
轧机 Rolls							
可逆式开坯机 Reversing blooming mills	–	2.5	2.5				
可逆式板坯轧机 Reversing slabbing mills	–	2.5	2.5				
可逆式线材轧机 Reversing wire mills	–	1.8	1.8				
可逆式薄板轧机 Reversing sheet mills	–	2.0	2.0				
可逆式中厚板轧机 Reversing plate mills	–	1.8	1.8				
辊缝调节驱动装置 Roll adjustment drives	0.9	1.0	–				

表6 Table6 — 海拔高度系数 Factor for altitude — f_6

不带辅助冷却装置或只带冷却风扇 Without auxiliary cooling or with fan cooling

系数 Factor	海拔高度(m,高于海平面) Altitude(metres above MSL)				
	高达 Up to	高达 Up to	高达 Up to	高达 Up to	高达 Up to
	1000	2000	3000	4000	5000
f_6	1.0	0.95	0.90	0.85	0.80

表7 Table7 — 海拔高度系数 Factor for altitude — f_7

带冷却盘管或带冷却盘管和风扇 For cooling with cooling coil,or with fan and cooling coil

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

工作机额定功率的P_2确定
*)按最大扭矩确定额定功率。 **)检验热容量是绝对必要的。
所列各项系数均为经验值。使用这些系数的前提条件是，所述机械设备应符合通常的设计规范和载荷条件。
如遇特殊情况,请及时与我们联系。
对于那些未列入此表的工作机械,请与我们联系。
Design for power rating of driven machine P_2
*) Designed power corresponding to max torque **) A check for thermal capacity is absolutely essential
The listed factors are empirical values.Prerequisite for their application is that the machinery and equipment mentioned correspond to generally accepted design and load specifications.In case of deviations from standard conditions,please refer to us.
For driven mahcines which are not listed in this table, please please refer to us.

减速机 Reductors　　使用系数　Service Factors

表 8
Table 8

立式安装减速机供油系数。对于卧式安装减速机f_8=1.0；当采用强制润滑时，f_8=1.05
Oil supply factor for vertical reductors.For horizontal reductors f_8=1.0,and in case of forced lubrication f_8=1.05

f_8

减速机类型 reductors 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
WH2.V WH3.V WH4.V	浸油润滑 Dip lubrication	0.95	*	0.95	*	*	*	*	*
	强制润滑 Forced lubrication	1.15	*	1.05	*	1.15	*	1.05	*
WB2.V WB3.V WB4.V	浸油润滑 Dip lubrication	0.95	0.95	0.95	0.95	*	*	*	*
	强制润滑 Forced lubrication	1.15	1.10	1.10	1.10	1.15	1.10	1.10	1.10

表 9
Table 9

不带辅助冷却装置减速机的热容量系数
Thermal capacity factor for redutors without auxiliary cooling

f_9

减速机类型 reduct-ors	n r/min	安装位置 Place of installation: 狭小空间安装规格 风速≥0.5m/s Small confined spaces Wind velocity≥0.5m/s	室内大厅,大车间安装 风速≥1.4m/s Large halls workshops Wind velocity≥1.4m/s	室外安装 风速≥4.0m/s In the open Wind velocity≥4.0m/s
type WH1	750	0.68–0.26× a_1× a_2	0.79–0.27× a_1× a_2	1.00
	1000	0.70 – 0.79 × a_1× a_2	0.84–0.85× a_1× a_2	1.14–0.81× a_1× a_2
	1500	0.72 –2.50× a_1× a_2	0.89–2.60× a_1× a_2	1.25–2.60× a_1× a_2
	1800	0.71–3.60× a_1× a_2	0.92–4.40× a_1× a_2	1.30–4.20× a_1× a_2
WH2	750	0.76–0.08× a_1× a_2	0.79–0.21× a_1× a_2	1.00
	1000	0.76–1.00× a_1× a_2	0.87–1.40× a_1× a_2	1. 12–1.30× a_1× a_2
	1500	0.83–4.10× a_1× a_2	0.96–4.60× a_1× a_2	1.25–4.20× a_1× a_2
	1800	0.85–6.80× a_1× a_2	0.98–7.10× a_1× a_2	1.31–6.80× a_1× a_2
WH3	750	0.76	0.81–0.06× a_1× a_2	1.0
	1000	0.83–1.20× a_1× a_2	0.90–1.36× a_1× a_2	1.11–1.30× a_1× a_2
	1500	0.93–4.70× a_1× a_2	1.00–4.80× a_1× a_2	1.27–5.10× a_1× a_2
	1800	0.96–7.50× a_1× a_2	1.05–7.60× a_1× a_2	1.32–7.40× a_1× a_2
WH4	750	0.78	0.83	1.00
	1000	0.85	0.91– 1.60× a_1× a_2	1.10–2.40× a_1× a_2
	1500	0.97–10.0× a_1× a_2	1.03–12.5× a_1× a_2	1.27–14.0× a_1× a_2
	1800	1.02 –18.4× a_1× a_2	1.09–21. 2× a_1× a_2	1.34–23× a_1× a_2
WB2	750	0.66–0.09× a_1× a_2	0.77–0.14× a_1× a_2	1.00
	1000	0.69–0.70× a_1× a_2	0.81–0.77× a_1× a_2	1.08–0.64× a_1× a_2
	1500	0.74–3.20× a_1× a_2	0.88–3.30× a_1× a_2	1.20–2.90× a_1× a_2
	1800	0.75–5.60× a_1× a_2	0.90–5.50× a_1× a_2	1.25–4.90× a_1× a_2
WB3	750	0.73	0.80–0.05× a_1× a_2	1.00
	1000	0.79–0.63× a_1× a_2	0.87–0.81× a_1× a_2	1.10–0.73× a_1× a_2
	1500	0.86–2.40× a_1× a_2	0.95–2.60× a_1× a_2	1.23–2.80× a_1× a_2
	1800	0.88–4.00× a_1× a_2	0.99–4.30× a_1× a_2	1.28–4.30× a_1× a_2
WB4	750	0.77	0.82	1.00
	1000	0.83	0.88	1.09–0.29× a_1× a_2
	1500	0.92–1.70× a_1× a_2	0.99–2.20× a_1× a_2	1.24–2.60× a_1× a_2
	1800	0.96–3.90× a_1× a_2	1.04–4.4 0× a_1× a_2	1.30–4.80× a_1× a_2

表 10
Table 10

带冷却风扇减速机的装置热容量系数
Thermal capacity factor for redutors with fan

f_{10}

减速机类型 reduct-ors	n r/min	安装位置 Place of installation: 狭小空间安装规格 风速≥0.5m/s Small confined spaces Wind velocity≥0.5m/s	室内大厅,大车间安装 风速≥1.4m/s Large halls workshops Wind velocity≥1.4m/s	室外安装 风速≥4.0m/s In the open Wind velocity≥4.0m/s
type WH1	750	0.97– 0.05× a_1× a_2	0.97–0.04× a_1× a_2	1.00
	1000	1.18–0.33× a_1× a_2	1.20–0.33× a_1× a_2	1.23–0.32× a_1× a_2
	1500	1.53–1.00× a_1× a_2	1.53–0.95× a_1× a_2	1.56–0.94× a_1× a_2
	1800	1.69– 1.50× a_1× a_2	1.70–1.50× a_1× a_2	1.73–1.50× a_1× a_2
WH2	750	0.95–0.07× a_1× a_2	0.96–0.06× a_1× a_2	1.00
	1000	1.16–0.65× a_1× a_2	1. 17– 0.63× a_1× a_2	1.21–0.55× a_1× a_2
	1500	1.54–2.40× a_1× a_2	1.55–2.40× a_1× a_2	1.58–2.20× a_1× a_2
	1800	1.74–3.80× a_1× a_2	1.75–3.80× a_1× a_2	1.78–3.60× a_1× a_2
WH4	750	0.89–0.29× a_1× a_2	0.91– 0.25× a_1× a_2	1.00
	1000	1.06–1.30× a_1× a_2	1.08–1.20× a_1× a_2	1.17–0.93× a_1× a_2
	1500	1.38–4.20× a_1× a_2	1.40–4.10× a_1× a_2	1.48–3.70× a_1× a_2
	1800	1.54–6.40× a_1× a_2	1. 56–6.40× a_1× a_2	1.64–5.80× a_1× a_2
WB2	750	0.95	0.96	1.00
	1000	1.13–0.15× a_1× a_2	1.14–0.16× a_1× a_2	1.19–0.19× a_1× a_2
	1500	1.47–0.92× a_1× a_2	1.48–0.92× a_1× a_2	1.52–0.95× a_1× a_2
	1800	1.65–1.70× a_1× a_2	1.66–1.70× a_1× a_2	1.69–1.70× a_1× a_2
WB3	750	0.94	0.96	1.00
	1000	1.13–0.17× a_1× a_2	1.14–0.18× a_1× a_2	1.18–0.25× a_1× a_2
	1500	1.48–1.40× a_1× a_2	1.49–1.40× a_1× a_2	1.52–1.40× a_1× a_2
	1800	1.66–2.50× a_1× a_2	1.67–2.50× a_1× a_2	1.71–2.50× a_1× a_2

表 11
Table 11

带冷却盘管减速机的热容量系数
Thermal capacity factor for redutors with cooling coil

f_{11}

减速机类型 reduct-ors	n r/min	安装位置 Place of installation: 狭小空间安装规格 风速≥0.5m/s Small confined spaces Wind velocity≥0.5m/s	室内大厅,大车间安装 风速≥1.4m/s Large halls workshops Wind velocity≥1.4m/s	室外安装 风速≥4.0m/s In the open Wind velocity≥4.0m/s
type WH1	750	0.87	0.91	1.00
	1000	0.97–0.02× a_1× a_2	1.03–0.05× a_1× a_2	1.16–0.10× a_1× a_2
	1500	1.15–0.19× a_1× a_2	1.22–0.23× a_1× a_2	1.39–0.33× a_1× a_2
	1800	1.25–0.42× a_1× a_2	1.32–0.47× a_1× a_2	1.50–0.57× a_1× a_2
WH2	750	0.88	0.91	1.00
	1000	1.01	1.06–0.08× a_1× a_2	1.17–0.24× a_1× a_2
	1500	1.27–0.79× a_1× a_2	1.33–0.88× a_1× a_2	1.47–1.10× a_1× a_2
	1800	1.40–1.40× a_1× a_2	1.46–1.50× a_1× a_2	1.61–1.70× a_1× a_2
WH4	750	0.89	0.91	1.00
	1000	1.04	1.07	1.18–0.38× a_1× a_2
	1500	1.30–0.78× a_1× a_2	1.34–1.10× a_1× a_2	1.47–1.60× a_1× a_2
	1800	1.44–1.70× a_1× a_2	1.48–2.00× a_1× a_2	1.62–2.60× a_1× a_2
WB2	750	0.86	0.90	1.00
	1000	0.98	1.02	1.15–0.09× a_1× a_2
	1500	1.14	1.19–0.05× a_1× a_2	1.38–0.37× a_1× a_2
	1800	1.21–0.13× a_1× a_2	1.29–0.29× a_1× a_2	1.49–0.64× a_1× a_2
WB3	750	0.88	0.91	1.00
	1000	1.03	1.06	1.17–0.18× a_1× a_2
	1500	1.28–0.35× a_1× a_2	1.32–0.48× a_1× a_2	1.46–0.84× a_1× a_2
	1800	1.41–0.83× a_1× a_2	1.46–0.99× a_1× a_2	1.61–1.40× a_1× a_2

对于系数f_9,f_{10}和f_{11}<0.5,请与我们联系！ For factors f_9,f_{10} and f_{11}<0.5,please refer to us!　　*) 根据客户要求 *) On request

减速机 Reductors

使用系数 Service Factors

表12
Table 12

带冷却风扇和冷却盘管的减速机的热容量系数
Thermal capacity factor for redutors with fan cooling coil

f_{12}

减速机类型 reduc-tors type	n r/min	安装地点 Place of installation		
		狭小空间安装 风速 Small confined spaces Wind velocity ≥0.5m/s	室内大厅,大车间安装 风速 Large halls,workshops Wind velocity ≥1.4m/s	室外安装 风速 In the open Wind velocity ≥4.0m/s
WH1	750	0.98	0.98	1.00
	1000	1.19–0.09 × a1 × a2	1.20–0.09 × a1 × a2	1.22–0.09 × a1 × a2
	1500	1.56–0.31 × a1 × a2	1.56–0.30 × a1 × a2	1.57–0.29 × a1 × a2
	1800	1.75–0.52 × a1 × a2	1.76–0.52 × a1 × a2	1.77–0.52 × a1 × a2
WH2	750	0.97	0.98	1.00
	1000	1.19–0.25 × a1 × a2	1.20–0.25 × a1 × a2	1.22–0.25 × a1 × a2
	1500	1.59–1.06 × a1 × a2	1.59–1.00 × a1 × a2	1.61–1.00 × a1 × a2
	1800	1.82–1.80 × a1 × a2	1.82–1.80 × a1 × a2	1.84–1.80 × a1 × a2
WH3	750	0.94	0.95	1.00
	1000	1.14–0.46 × a1 × a2	1.15–0.47 × a1 × a2	1.20–0.48 × a1 × a2
	1500	1.51–2.10 × a1 × a2	1.52–2.00 × a1 × a2	1.57–2.00 × a1 × a2
	1800	1.71–3.30 × a1 × a2	1.72–3.30 × a1 × a2	1.77–3.20 × a1 × a2
WB2	750	0.97	0.98	1.00
	1000	1.17–0.08 × a1 × a2	1.18–0.08 × a1 × a2	1.21–0.12 × a1 × a2
	1500	1.55–0.47 × a1 × a2	1.55–0.47 × a1 × a2	1.58–0.52 × a1 × a2
	1800	1.74–0.81 × a1 × a2	1.75–0.82 × a1 × a2	1.77–0.84 × a1 × a2
WB3	750	0.97	0.97	1.00
	1000	1.17–0.08 × a1 × a2	1.18–0.10 × a1 × a2	1.21–0.19 × a1 × a2
	1500	1.56–0.84 × a1 × a2	1.57–0.85 × a1 × a2	1.60–0.92 × a1 × a2
	1800	1.78–1.50 × a1 × a2	1.78–1.50 × a1 × a2	1.80–1.50 × a1 × a2

对于系数 f_{12}<0.5,请与我们联系 For factor f12<0.5,please refer to us!

表13
Table 13

尺寸系数 Size factor a1

Size	3	4	5	6	7	8	9	10	11	12	13	14
a1	0.024	0.030	0.050	0.055	0.065	0.075	0.085	0.095	0.135	0.160	0.190	0.200
Size	15	16	17	18	19	20	21	22	23	24	25	26
a1	0.027	0.290	0.320	0.345	0.370	0.390	0.530	0.610	*			

*) 对于这些尺寸,请与我们联系 *) for these sizes,please refer to us!

表 14
Table 14

传动比系数 Transmission ratio factor a2

i	WH1SH	i	WH2SH	i	WH3SH	i	WH4SH	i	WB2SH	i	WB3SH	i	WB4SH
1.25	13.000	6.3	1.800	22.4	0.320	100	0.020	5	3.500	12.5	0.950	80	0.110
1.4	12.000	7.1	1.600	25	0.310	112	0.015	5.6	2.800	14	0.850	90	0.100
1.6	10.000	8	1.400	28	0.270	125	0.012	6.3	2.400	16	0.800	100	0.090
1.8	8.500	9	1.100	31.5	0.230	140	0.009	7.1	1.900	18	0.750	112	0.080
2	8.000	10	0.890	35.5	0.190	160	0.007	8	1.600	20	0.700	125	0.070
2.24	7.000	11.2	0.740	40	0.170	180	0.004	9	1.350	22.4	0.650	140	0.060
2.5	6.500	12.5	0.630	45	0.160	200	0.002	10	1.200	25	0.550	160	0.050
2.8	6.000	14	0.530	50	0.110	224	0.000	11.2	1.100	28	0.450	180	0.040
3.15	3.500	16	0.450	56	0.080	250	0.000	12.5	0.950	31.5	0.380	200	0.030
3.55	3.300	18	0.370	63	0.050	280	0.000	14	0.850	35.5	0.330	224	0.020
4	2.900	20	0.330	71	0.045	315	0.000	16	0.800	40	0.300	250	0.010
4.5	2.100	22.4	0.320	80	0.040	355	0.000	18	0.750	45	0.270	280	0.000
5	1.600	25	0.310	90	0.035	400	0.000			50	0.200	315	0.000
5.6	1.600	28	0.270	100	0.020	450	0.000			56	0.150	355	0.000
				112	0.015					63	0.130	400	0.000
										71	0.120		
										80	0.110		
										90	0.100		

平行轴减速机 Helical Reductors　　额定功率 Nominal Power Ratings

类型 WH1 Type WH1　　规格 1... 19 Sizes 1 ...19

额定功率 Nominal Power Ratings																												
减速机规格 Reductors sizes																												
i_N	n_1	n_2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	1/min		额定功率 PN , KW Nominal power ratings PN in kW																									
1.25	1500	1200	99		327		880		1671		2702																	
	1000	800	66		218		586		1114		1801																	
	750	600	50		163		440		836		1351																	
1.4	1500	1071	93		303		807		1559		2501																	
	1000	714	62		202		538		1039		1667																	
	750	536	47		152		404		780		1252																	
1.6	1500	938	85		285		737		1395		2318		3929															
	1000	625	57		190		491		929		1545		2618		4123													
	750	469	43		142		368		697		1159		1964		3094													
1.8	1500	833	79		209		672		1326		2128		3611															
	1000	556	53		140		448		885		1421		2410		3860													
	750	417	40		105		336		664		1065		1808		2895													
2	1500	750	73		196		644		1217		1963		3353											根据用户要求供货 On request				
	1000	500	49		131		429		812		1309		2236		3571													
	750	375	37		98		322		609		982		1677		2678													
2.24	1500	670	67		175		589		1087		1754		3087															
	1000	446	45		117		392		724		1168		2055		3283													
	750	335	34		88		295		544		877		1543		2466		4280											
2.5	1500	600	63		163		528		974		1571		2764															
	1000	400	42		109		352		649		1047		1843		3016		4607											
	750	300	31		82		264		487		785		1382		2262		3455											
2.8	1500	536	56		152		471		836		1330		2470															
	1000	357	37		101		314		557		886		1645		2692		4224											
	750	268	28		76		236		418		665		1235		2021		3171		4799									
3.15	1500	476	50		135		419		758		1221		2088		3409													
	1000	317	33		90		279		505		813		1391		2270		3850											
	750	238	25		67		209		379		611		1044		1705		2891		4311									
3.55	1500	423	44		124		368		687		1103		1936		3083													
	1000	282	30		83		245		458		735		1290		2055		3484											
	750	211	22		62		183		342		550		966		1538		2607		3822									
4	1500	375	39		110		330		609		982		1728		2780													
	1000	250	26		73		220		406		654		1152		1853		3194		4529									
	750	188	20		55		165		305		492		866		1394		2402		3406		4823							
4.5	1500	333	29		77		234		481		746		1395		2008		3557											
	1000	222	19		51		156		321		497		930		1339		2371		3394									
	750	167	14		38		117		241		374		699		1007		1784		2553		3777							
5	1500	300	25		66		198		377		644		1059		1712		2790											
	1000	200	16		44		132		251		429		706		1141		1860		2597		3644							
	750	150	12		33		99		188		322		529		856		1395		1948		2733							
5.6	1500	268	17		56		168		320		491		892		1454		2371											
	1000	179	12		37		112		214		328		596		971		1584		2212		2812							
	750	134	9		28		84		160		246		446		727		1186		1656		2105							

WH1

卧式安装减速机要采用强制润滑 Forced lubrication required on horizontal reductors

平行轴减速机 Helical Reductors　热容量 Thermal Capacities

类型 WH1 Type WH1　规格 1... 19 Sizes 1 ...19

热容量 Thermal Capacities																											
减速机规格 Reductors 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
i_N		热容量 PG(单位为 KW) 取决于冷却方式： PG1 ：无辅助冷却装置； PG2: 带冷却风扇； PG3 ：带冷却盘管； PG4 ：带风扇和冷却盘管 。 Thermal capacity PG(in KW)dependent on kind of cooling; Pg1 without auxiliary cooling.PG2:fan cooling,PG3:cooling coil,PG4:fan and cooling coil.																									
1.25	P_{G1}	70.4		110		207		230		190																	
	P_{G2}			171		408		562		642																	
	P_{G3}	109		268		641		923		1322																	
	P_{G4}			322		819		1177		1621																	
1.4	P_{G1}	68.0		110		214		250		247																	
	P_{G2}			169		409		567		670																	
	P_{G3}	105		260		629		901		1305																	
	P_{G4}			312		800		1149		1589																	
1.6	P_{G1}	66.2		108		215		261		303		234															
	P_{G2}			164		399		548		686		967		891													
	P_{G3}	100		244		593		836		1246		2138		2631													
	P_{G4}			295		754		1064		1519		2632		3220													
1.8	P_{G1}	66.0		120		214		274		323		330															
	P_{G2}			181		387		552		682		1000		1011													
	P_{G3}	93.7		264		557		818		1195		2082		2547													
	P_{G4}			319		712		1040		1454		2555		3095													
2	P_{G1}	65.0		116		209		273		334		393		302									根据用户要求供货 On request				
	P_{G2}			174		372		534		668		1010		1085		794											
	P_{G3}	89.1		251		526		775		1135		2004		2483		2249											
	P_{G4}			303		670		985		1382		2449		3001		3099											
2.24	P_{G1}	57.0		112		202		263		335		433		416													
	P_{G2}			166		353		496		643		999		1119		908											
	P_{G3}	83.9		236		490		699		1063		1897		2377		2190											
	P_{G4}			286		628		888		1296		2322		2874		2984											
2.5	P_{G1}	54.1		103		192		252		328		452		486													
	P_{G2}			153		332		466		611		971		1121		1001											
	P_{G3}	75.5		212		453		644		984		1778		2246		2140											
	P_{G4}			257		580		818		1201		2174		2714		2876											
2.8	P_{G1}	52.3		97.0		180		263		347		456		525													
	P_{G2}			143		309		477		630		928		1095		1063		884									
	P_{G3}	69.8		195		413		649		990		1643		2091		2063		2359									
	P_{G4}			237		529		824		1205		2010		2525		2744		3138									
3.15	P_{G1}	49.7		95.1		185		293		371		520		620		464											
	P_{G2}			138		305		535		664		976		1151		1291		1253									
	P_{G3}	64.9		189		408		755		1075		1672		2082		2218		2585									
	P_{G4}			227		517		967		1320		2030		2495		2847		3297									
3.55	P_{G1}	45.0		87.5		182		272		349		493		607		527		420									
	P_{G2}			126		297		490		616		902		1086		1259		1288									
	P_{G3}	58.7		170		390		676		973		1508		1899		2057		2443									
	P_{G4}			205		494		870		1198		1835		2277		2628		3088									
4	P_{G1}	41.0		79.4		166		247		301		465		580		550		514									
	P_{G2}			114		269		438		523		833		1006		1194		1267		1221							
	P_{G3}	52.2		151		346		592		806		1358		1711		1869		2249									
	P_{G4}			182		439		763		998		1655		2055		2384		2829									
4.5	P_{G1}	41.0		87.5		172		254		347		446		608		657		649		563							
	P_{G2}			122		272		437		585		789		1037		1273		1337		1351							
	P_{G3}	53.0		161		346		586		890		1290		1766		1905		2236									
	P_{G4}			193		438		749		1093		1580		2126		2403		2782									
5	P_{G1}	37.0		79.2		163		245		316		443		586		676		776		788							
	P_{G2}			111		257		419		527		770		989		1246		1495		1578							
	P_{G3}	46.5		143		325		551		783		1220		1662		1805		2414									
	P_{G4}			172		411		707		964		1500		2003		2276		2988									
5.6	P_{G1}	36.5		70.9		145		221		304		423		535		630		745		904							
	P_{G2}			98.3		227		374		503		730		890		1131		1374		1658							
	P_{G3}	46.8		125		281		483		729		1143		1457		1595		2148									
	P_{G4}			150		357		621		902		1409		1761		2014		2660									

平行轴减速机 Helical Reductors

类型 WH2.., WH3... Type WH2.., WH3...

额定功率 Nominal Power Ratings

规格 3...26 Sizes 3...26

			额定功率 Nominal power rasting																							
			减速机规格 Reductors sizes																							
iN	n_1	n_2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	1/min		额定功率 PN , KW Nominal power ratings PN in kW																							
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	2049	2350	2876	3213	3788	4350		
12.5	1500	120	44	79	132	170	239	302	396	496	697	867	1081	1345	1797	2010	2450	2890	3669							
	1000	80	29	53	88	113	159	201	264	331	465	578	720	896	1198	1340	1634	1927	2446	2806	3435	3837	4524			
	750	60	22	40	66	85	119	151	198	248	349	434	540	672	898	1005	1225	1445	1835	2105	2576	2877	3393	3895	4900	
14	1500	107	39	71	118	151	213	269	353	443	622	773	964	1199	1602	1793	2185	2577	3272	3753						
	1000	71	26	47	78	100	141	178	234	294	413	513	639	795	1063	1190	1450	1710	2171	2491	3048	3405	4015	4609		
	750	54	20	36	59	76	107	136	178	223	314	390	486	605	809	905	1103	1301	1651	1894	2318	2590	3053	3506	4410	4976
16	1500	94	34	62	103	133	187	236	310	389	546	679	846	1053	1408	1575	1919	2264	2874	3297						
	1000	63	23	42	69	89	125	158	208	261	366	455	567	706	943	1055	1286	1517	1926	2210	2705	3021	3562	4090	5146	
	750	47	17	31	52	66	94	118	155	194	273	340	423	527	704	787	960	1132	1437	1649	2018	2254	2658	3051	3839	4331
18	1500	83	30	55	91	117	165	209	274	343	482	600	747	930	1243	1391	1695	1999	2538	2912						
	1000	56	21	37	62	79	111	141	185	232	325	405	504	627	839	938	1143	1349	1712	1964	2404	2686	3166	3636	4574	5160
	750	42	15	28	46	59	84	106	139	174	244	303	378	471	629	704	858	1012	1284	1473	1803	2014	2375	2727	3430	3870
20	1500	75	27	49	82	106	149	188	247	310	436	542	675	840	1123	1257	1531	1806	2293	2631						
	1000	50	18	33	55	71	99	126	165	207	291	361	450	560	749	838	1021	1204	1529	1754	2147	2398	2827	3246	4084	4607
	750	38	14	25	42	54	76	95	125	157	221	275	342	426	569	637	776	915	1162	1333	1631	1822	2149	2467	3104	3502
22.4	1500	67	25	43	72	95	130	168	217	277	382	484	617	751	1073	1123	1403	1614	2105	2350	2947		3929			
	1000	45	16	29	48	64	88	113	146	186	257	325	415	504	721	754	942	1084	1414	1579	1979	2158	2639	2921	3770	4147
	750	33	12	21	35	47	64	83	107	136	188	238	304	370	529	553	691	795	1037	1158	1451	1583	1935	2142	2764	3041
25	1500	60			69	85	129	151	214	248	377	434	553	672	961	1087	1257	1508	1885	2168	2639	2953	3518	4021	5026	
	1000	40			46	57	86	101	142	165	251	289	369	448	641	725	838	1005	1257	1445	1759	1969	2346	2681	3351	3770
	750	30			35	42	64	75	107	124	188	217	276	336	481	543	628	754	942	1084	1319	1476	1759	2010	2513	2827
28	1500	54			62	74	116	133	192	220	339	383	498	616	865	978	1131	1357	1696	1951	2375	2658	3166	3619	4524	5089
	1000	36			41	49	77	89	128	147	226	256	332	411	577	652	754	905	1131	1301	1583	1772	2111	2413	3016	3393
	750	27			31	37	58	66	96	110	170	192	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545
31.5	1500	48			55	73	103	128	171	216	302	377	442	548	769	870	1005	1206	1508	1734	2111	2362	2815	3217	4021	4524
	1000	32			37	49	69	85	114	144	201	251	295	365	513	580	670	804	1005	1156	1407	1575	1876	2145	2681	3016
	750	24			28	36	52	64	85	108	151	188	221	274	385	435	503	603	754	867	1055	1181	1407	1608	2010	2262
35.5	1500	42			48	64	90	112	150	189	264	330	387	479	673	761	880	1055	1319	1517	1847	2067	2463	2815	3518	3958
	1000	28			32	43	60	75	100	126	176	220	258	320	449	507	586	704	880	1012	1231	1378	1642	1876	2346	2639
	750	21			24	32	45	56	75	95	132	165	194	240	336	380	440	528	660	759	924	1034	1231	1407	1759	1979

卧式安装减速机要采用强制润滑 Forced lubrication required on horizontal reductors

平行轴减速机 Helical Reductors　　类型 WH2.., WH3... Type WH2.., WH3...

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

热容量PG,KW Thermal capacities PG in KW

iN		减速机规格 Reductors sizes																							
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		热容量PG(单位为KW)取决于冷却方式：PG1：无辅助冷却装置；PG2:带冷却风扇；PG3：带冷却盘管；PG4：带风扇和冷却盘管 。 Thermal capacity PG(in KW) dependent on kind of cooling ;PG1:without auxiliary cooling, PG2:fan cooling,PG3:cooling coil,PG4:fan and cooling coil.																							
6.3	PG1	53.2	68.2	89.4		128		177		253		333		325		230		291							
	PG2		93.5	129		202		273		443		607		652		775									
	PG3	84.9	114	181		291		454		669		1164		1405		1713									
	PG4		137	218		357		539		835		1394		1653		2122									
7.1	PG1	50.9	69.9	91.1		124		173		256		340		351	342	315	260	375	321	372					
	PG2		95.7	131		194		264		440		601		659	672	807	802								
	PG3	79.9	115	180		273		427		650		1123		1358	1416	1658	1710								
	PG4		139	217		336		506		813		1344		1599	1670	2040	2129								
8	PG1	49.2	67.1	88.5	97.8	120	137	169	176	252	291	341	372	368	368	365	340	431	402	458	398				
	PG2		91.4	127	140	187	213	255	267	428	495	590	661	658	679	826	831								
	PG3	76.3	109	173	187	259	297	405	450	619	849	1069	1218	1310	1370	1611	1658								
	PG4		131	208	226	320	365	481	530	777	1023	1284	1468	1535	1614	1980	2042								
9	PG1	46.5	64.9	85.7	99.5	116	133	163	172	243	293	338	378	375	383	399	388	469	457	516	479	1037			
	PG2		88.2	123	141	180	204	245	257	406	491	573	652	647	676	829	848								
	PG3	71.4	104	165	187	246	280	383	421	572	824	1012	1175	1247	1321	1562	1615								
	PG4		126	198	225	302	344	456	496	717	994	1216	1407	1461	1550	1907	1983								
10	PG1	44.1	61.4	81.0	96.6	112	129	157	167	235	289	331	378	375	390	418	419	508	492	572	535	1076	1119		
	PG2		83.0	115	137	171	197	234	249	388	478	552	637	629	664	820	850								
	PG3	66.4	96.9	152	179	231	266	359	401	537	783	955	1116	1177	1254	1493	1556								
	PG4		117	183	215	285	327	428	472	672	950	1146	1343	1379	1475	1819	1908								
11.2	PG1	41.7	58.8	77.6	93.5	113	125	149	162	238	277	337	373	370	390	426	437	530	530	607	589	1118	1163		
	PG2		79.4	110	132	172	189	221	240	389	452	556	618	606	647	799	840								
	PG3	62.2	91.7	143	171	229	251	335	378	533	720	941	1062	1100	1187	1411	1494								
	PG4		111	173	206	283	310	400	447	668	872	1133	1275	1292	1391	1717	1822								
12.5	PG1	40.8	56.7	76.3	88.1	111	119	146	156	238	267	323	364	372	384	444	443	555	550	641	621	1118	1163	1337	
	PG2		75.7	107	124	167	180	215	229	381	430	523	595	600	622	799	817								
	PG3	59.7	88.5	141	157	224	237	324	356	522	675	863	997	1078	1114	1370	1410								
	PG4		106	169	190	275	292	384	421	650	818	1036	1199	1261	1305	1665	1716								
14	PG1	38.2	53.7	72.1	84.2	102	120	142	149	226	270	310	369	359	385	434	459	551	574	643	653	1110	1194	1327	1393
	PG2		71.5	101	118	153	181	207	217	359	433	495	598	569	615	766	816								
	PG3	55.5	82.7	131	148	200	235	305	331	483	670	799	987	1001	1087	1280	1369								
	PG4		99.1	156	179	247	290	364	392	602	813	963	1187	1173	1276	1557	1665								
16	PG1	35.3	49.2	67.6	82.6	95.3	118	133	145	212	269	283	354	361	371	420	448	536	568	627	653	1084	1127	1296	1361
	PG2		65.2	93.7	114	142	175	193	210	334	424	449	563	565	583	725	781								
	PG3	51.3	74.5	120	146	184	229	280	321	440	653	707	900	978	1009	1188	1281								
	PG4		89.6	144	175	226	282	334	378	549	789	855	1084	1147	1183	1444	1559								
18	PG1	34.4	47.0	64.5	78.1	91.1	108	125	140	196	255	285	338	340	373	415	433	534	551	617	637	1050	1092	1256	1318
	PG2		62.0	89.4	108	136	160	181	202	310	398	450	533	527	579	702	739								
	PG3	50.2	70.0	113	135	175	206	261	302	410	602	709	836	901	987	1132	1185								
	PG4		84.2	136	163	216	253	312	357	513	729	854	1007	1059	1159	1373	1446								
20	PG1	32.1	46.0	60.4	73.1	84.9	102	121	132	189	238	267	308	326	351	406	429	517	548	598	634	1015	1056	1214	1274
	PG2		60.4	83.5	100	126	149	174	189	297	369	419	482	498	540	681	717								
	PG3	45.9	67.7	105	124	160	189	250	278	387	547	646	740	828	910	1085	1124								
	PG4		81.4	126	150	198	232	298	329	484	663	780	893	970	1069	1318	1368								
22.4	PG1	31.9	42.5	56.1	69.8	81.8	97	111	124	176	220	240	310	330	336	355	420	440	531	524	607	775	1005	928	1210
	PG2		55.8	77.1	95.8	121	143	161	177	275	343	301	482	443	510	460	695								
	PG3	45.3	61.7	95.4	118	153	180	225	259	352	512	525	740	844	834	844	1078								
	PG4		74.3	115	142	188	221	269	307	441	620	580	893	941	980	934	1311								
25	PG1			56.8	65.4	84.3	90.6	115	120	173	213	234	290	322	341	344	367	435	453	537	535	760	790	908	945
	PG2			69.2	89.3	105	132	145	171	224	329	292	448	429	456	445	474								
	PG3			98.7	108	158	165	231	248	392	480	499	676	795	854	796	847								
	PG4			110	131	177	203	258	294	436	583	550	815	888	953	881	940								
28	PG1			54.5	60.7	84.7	87.1	114	111	167	198	225	259	318	333	339	355	427	447	540	548	778	809	930	967
	PG2			66.5	82.6	106	127	143	158	215	304	281	323	421	441	436	456								
	PG3			93.2	98.8	157	157	224	224	367	435	468	548	767	804	766	799								
	PG4			104	119	176	193	250	267	410	530	518	605	858	898	850	887								
31.5	PG1			52.9	61.2	81.2	90.3	111	115	161	194	219	252	310	328	329	349	417	439	537	549	773	804	925	962
	PG2			64.3	73.9	101	112	139	144	207	247	272	312	409	433	422	447								
	PG3			89.4	102	148	162	215	268	350	403	449	520	732	775	734	772								
	PG4			100	114	167	181	240	293	391	450	496	574	819	867	813	856								
35.5	PG1			51.0	58.7	78.6	90.6	107	114	155	186	212	243	295	320	313	339	405	429	530	545	766	797	916	953
	PG2			62.0	70.9	98.1	112	134	141	199	236	262	301	388	420	399	433								
	PG3			85.4	96.3	142	160	205	260	331	377	427	489	678	741	678	738								
	PG4			95.4	108	160	180	230	284	371	423	472	541	759	831	753	819								

平行轴减速机 Helical Reductors

类型 WH3.., WH4... Type WH3.., WH4...

额定功率 Nominal Power Ratings

规格 5...26 Sizes 5...26

			额定功率 Nominal power rating																					
			减速机规格 Reductors sizes																					
i_N	n_1	n_2	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	1/min		额定功率 PN , KW Nominal power ratings PN in kW																					
40	1500	38	44	58	82	101	135	171	239	298	350	434	609	688	796	955	1194	1373	1671	1870	2228	2547	3183	3581
	1000	25	29	38	54	67	89	113	157	196	230	285	401	453	524	628	785	903	1099	1230	1466	1675	2094	2356
	750	18.8	22	29	40	50	67	85	118	148	173	215	301	341	394	472	591	679	827	925	1102	1260	1575	1772
45	1500	33	38	50	71	88	117	149	207	259	304	377	529	598	691	829	1037	1192	1451	1624	1935	2212	2764	3110
	1000	22	25	33	47	59	78	99	138	173	203	251	352	399	461	553	691	795	968	1083	1290	1474	1843	2073
	750	16.7	19	25	36	45	59	75	105	131	154	191	268	303	350	420	525	603	734	822	979	1119	1399	1574
50	1500	30	35	46	64	80	107	135	188	236	276	342	481	543	628	754	942	1084	1319	1476	1759	2010	2513	2827
	1000	20	23	30	43	53	71	90	126	157	184	228	320	362	419	503	628	723	880	984	1173	1340	1675	1885
	750	15	17	23	32	40	53	68	94	118	138	171	240	272	314	377	471	542	660	738	880	1005	1257	1414
56	1500	27	31	41	58	72	96	122	170	212	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545
	1000	17.9	21	27	38	48	64	81	112	141	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	787	886
90	1500	16.7	19	25	35	45	59	75	105	131	154	191	268	303	350	420	507	603	717	822	979	1119	1399	1574
	1000	11.1	13	17	23	30	39	50	70	87	102	127	178	201	232	279	337	401	477	546	651	744	930	1046
	750	8.3	10	13	17	22	29	37	52	65	76	95	133	150	174	209	252	300	356	408	487	556	695	782
100	1500	15		23	32	40	53	68	94	118	138	171	240	272	314	355	471	526	660	730	880	1005	1257	1414
	1000	10		15	21	27	36	45	63	79	92	114	160	181	209	237	314	351	440	487	586	670	838	942
	750	7.5		11	16	20	27	34	47	59	69	86	120	136	157	177	236	263	330	365	440	503	628	707
112	1500	13.4		20	29	35	48	59	84	105	123	153	215	243	281	337	421	484	589	659	786	898	1123	1263
	1000	8.9		13	19	23	32	39	56	70	82	102	143	161	186	224	280	322	391	438	522	596	746	839
	750	6.7		10	14	18	24	29	42	53	62	76	107	121	140	168	210	242	295	330	393	449	561	631
125	1500	12			26	32	43	54	75	94	111	137	192	217	251	302	377	434	528	591	704	804	1005	1131
	1000	8			17	21	28	36	50	63	74	91	128	145	168	201	251	289	352	394	469	536	670	754
	750	6			13	16	21	27	38	47	55	68	96	109	126	151	188	217	264	295	352	402	503	565
140	1500	10.7			23	29	38	48	67	84	99	122	171	194	224	269	336	387	471	527	627	717	896	1008
	1000	7.1			15	19	25	32	45	56	65	81	114	129	149	178	223	256	312	349	416	476	595	669
	750	5.4			12	14	19	24	34	42	50	62	87	98	113	136	170	195	237	266	317	362	452	509
160	1500	9.4			20	25	33	42	59	74	87	107	151	170	197	236	295	340	413	463	551	630	787	886
	1000	6.3			14	17	22	28	40	49	58	72	101	114	132	158	198	228	277	310	369	422	528	594
	750	4.7			10	13	17	21	30	37	43	54	75	85	98	118	148	170	207	231	276	315	394	443
180	1500	8.3			18	22	30	37	52	65	76	95	133	150	174	209	261	300	365	408	487	556	695	782
	1000	5.6			12	15	20	25	35	44	52	64	90	101	117	141	176	202	246	276	328	375	469	528
	750	4.2			9.0	11	15	19	26	33	39	48	67	76	88	106	132	152	185	207	264	281	352	396
200	1500	7.5			16	20	27	34	47	59	69	86	120	136	157	188	236	271	330	369	440	503	628	707
	1000	5			11	13	18	23	31	39	46	57	80	91	105	126	157	181	220	246	293	335	419	471
	750	3.8			8.2	10	14	17	24	30	35	43	61	69	80	95	119	137	167	187	223	255	318	358
224	1500	6.7			14	18	24	30	42	53	62	76	107	121	140	168	210	242	295	330	393	449	561	631
	1000	4.5			10	12	16	20	28	35	41	51	72	82	94	113	141	163	198	221	264	302	377	424
	750	3.3			7.1	8.8	12	15	21	26	30	38	53	60	69	83	104	119	145	162	194	221	276	311
250	1500	6			13	16	21	27	38	47	55	68	96	109	126	151	188	217	264	295	352	402	503	565
	1000	4			8.6	11	14	18	25	31	37	46	64	72	84	101	126	145	176	197	235	268	335	377
	750	3			6.4	8.0	11	14	19	24	28	34	48	54	63	75	94	108	132	148	176	201	251	283
280	1500	5.4			12	14	19	24	34	42	50	62	87	98	113	136	170	195	237	266	317	362	452	509
	1000	3.6			7.7	9.6	13	16	23	28	33	41	58	65	75	90	113	130	158	177	211	241	302	339
	750	2.7			5.8	7.2	10	12	17	21	25	31	43	49	57	68	85	98	119	133	158	181	226	254
315	1500	4.8			10.3	13	17	22	30	38	44	55	77	87	101	121	151	173	211	236	281	322	402	452
	1000	3.2			7	8.5	11	14	20	25	29	37	51	58	67	80	101	116	141	157	188	214	268	302
	750	2.4			5.2	6.4	8.5	11	15	19	22	27	38	43	50	60	75	87	106	118	141	161	201	226
355	1500	4.2			8.6	11	15	19	26	33	39	48	62	76	84	106	128	152	180	207	246	281	352	396
	1000	2.8			5.7	7.5	9.7	13	17	22	26	32	41	51	56	70	85	101	120	138	164	188	235	264
	750	2.1			4.3	5.6	7.3	9.5	13	16	19	24	31	38	42	53	64	76	90	103	123	141	176	198
400	1500	3.8				10.1		17		30		43		63		89		133		185		255		358
	1000	2.5				6.7		11		20		29		41		58		88		122		168		236
	750	1.9				5.1		8.6		15		22		31		44		67		93		127		179
450	1500	3.3				8.6		14		26		38												
	1000	2.2				5.7		9.6		17		25												
	750	1.7				4.4		7.4		13		19												

平行轴减速机 Helical Reductors　　热容量 Thermal Capacities

类型 WH3.., WH4... Type WH3.., WH4...　　规格 5...26 Sizes 5...26

热容量PG Thermal Capacities PG in kW																								
		减速机规格 Reductors sizes																						
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
i_N		热容量PG(单位为KW)取决于冷却方式：PG1：无辅助冷却装置；PG2:带冷却风扇；PG3：带冷却盘管；PG4：带风扇和冷却盘管 。 Thermal capacity PG(in KW)dependent on kind of cooling; Pg1 without auxiliary cooling.PG2:fan cooling,PG3:cooling coil,PG4:fan and cooling coil.																						
40	P_{G1}	48.1	56.6	74.6	86.8	101	110	149	180	204	236	284	304	300	322	390	416	517	537	754	784	902	938
	P_{G2}	58.3	68.6	92.8	107	127	137	190	228	251	291	371	398	382	409								
	P_{G3}	79.3	92.4	132	151	191	248	312	359	403	467	639	686	641	683								
	P_{G4}	88.6	103	149	170	214	272	349	402	446	517	717	770	711	760								
45	P_{G1}	46.0	54.9	71.8	84.1	97.2	107	148	173	195	227	282	293	297	309	386	401	501	524	745	775	891	927
	P_{G2}	55.7	66.2	89	104	121	133	189	219	240	280	368	381	377	392								
	P_{G3}	74.9	88.3	126	145	181	238	305	341	379	444	626	648	627	644								
	P_{G4}	83.8	98.7	142	163	203	261	342	382	419	491	702	725	695	716								
50	P_{G1}	44.4	51.7	67.6	79.8	94.9	101	145	166	191	219	281	291	292	306	379	395	500	508	736	765	880	915
	P_{G2}	53.6	62.2	83.7	98.0	118	125	184	210	233	269	362	378	368	386								
	P_{G3}	72.3	82.0	118	136	177	221	299	322	369	419	619	634	613	628								
	P_{G4}	80.9	91.7	133	152	197	242	334	360	408	465	691	710	681	701								
56	P_{G1}	42.1	49.6	64.4	76.7	90.3	97.0	134	165	184	209	267	289	278	300	362	388	477	506	720	749	861	895
	P_{G2}	50.7	59.5	79.4	94.1	112	120	170	208	225	256	343	371	350	377								
	P_{G3}	67.9	77.6	111	129	165	209	271	315	349	394	577	626	574	617								
	P_{G4}	75.6	86.9	125	145	185	229	302	353	386	437	645	698	636	684								
63	P_{G1}	39.6	47.7	60.0	72.4	85.3	94.7	127	161	174	204	252	275	262	286	338	371	456	482	697	724	834	867
	P_{G2}	47.6	57.1	73.8	88.5	105	116	160	202	212	249	323	353	329	357								
	P_{G3}	62.9	74.9	102	121	153	204	251	309	325	384	533	582	530	576								
	P_{G4}	70.2	83.8	114	136	172	224	280	345	359	425	596	653	589	640								
71	P_{G1}	39.2	45.2	58.2	68.9	83.4	90.1	124	150	169	197	245	260	252	270	333	346	431	461	669	696	800	832
	P_{G2}	47.0	54.0	71.3	84.1	103	111	155	187	205	239	313	332	315	337								
	P_{G3}	62.2	70.2	97.9	113	150	191	242	279	310	364	513	540	507	534								
	P_{G4}	69.4	78.3	110	127	167	209	270	312	343	403	573	604	564	592								
80	P_{G1}	37.2	42.6	56.8	64.3	78.9	85.1	117	141	164	186	236	252	242	259	315	341	411	435	655	681	783	814
	P_{G2}	44.5	50.6	69.6	78.2	96.8	104	146	176	199	226	300	321	302	323								
	P_{G3}	57.8	65.2	94.2	104	139	177	223	259	299	338	484	519	479	511								
	P_{G4}	64.6	72.8	106	117	156	194	250	290	330	375	542	580	532	567								
90	P_{G1}	36.7	42.2	53.7	62.2	74.9	83.0	113	138	153	180	222	243	228	248	299	322	399	415	627	652	750	780
	P_{G2}	43.9	50.2	65.7	75.4	91.8	101	141	171	186	218	282	308	284	309								
	P_{G3}	56.2	64.6	87.1	100	129	173	214	250	274	323	448	490	443	483								
	P_{G4}	63.0	72.1	98.3	113	145	189	240	280	304	357	501	549	493	537								
100	P_{G1}		40.0	48.1	60.9	67.1	78.8	99.5	130	133	175	179	228	201	234	282	306	388	403	509	632	611	756
	P_{G2}		47.5		73.8		95.9		161		212		289		290								
	P_{G3}		60.0		96.7		161		231		311		453		447								
	P_{G4}		67.2		109		176		259		344		507		497								
112	P_{G1}		39.5	46.3	57.6	64.2	74.9	98.7	126	130	164	171	184	192	206	270	289	379	392	498	518	596	620
	P_{G2}		47.0		69.8		91.2		156		198												
	P_{G3}		58.5		89.6		149		222		286												
	P_{G4}		65.5		101		164		249		317												
125	P_{G1}			44.9	51.6	62.1	67.3	94.6	110	126	142	165	177	185	197	261	276	367	383	488	508	584	607
140	P_{G1}			42.6	49.5	60.1	64.4	91.5	109	122	138	159	170	178	190	251	267	347	371	475	494	568	591
160	P_{G1}			41.0	48.0	56.8	62.4	87.0	105	115	134	153	164	171	183	241	257	333	351	455	473	544	566
180	P_{G1}			39.4	45.6	54.4	60.4	83.9	101	111	130	150	157	167	175	230	247	328	336	439	457	525	546
200	P_{G1}			37.9	43.9	52.6	57.0	79.2	96.4	108	123	146	154	161	172	222	236	309	331	432	449	516	537
224	P_{G1}			35.7	42.0	50.5	54.6	75.9	92.8	103	118	136	150	150	166	213	227	295	312	428	445	512	532
250	P_{G1}			34.1	40.7	48.2	53.0	72.1	87.6	98.0	115	129	139	143	155	202	218	279	297	409	425	489	509
280	P_{G1}			33.1	38.2	46.8	50.8	69.4	84.3	94.9	109	125	132	139	147	194	207	268	281	388	404	467	486
315	P_{G1}			32.4	36.6	44.6	48.5	67.7	79.9	91.0	105	119	128	133	143	190	199	257	270	374	389	447	465
355	P_{G1}			30.9	35.5	43.8	47.1	64.4	76.9	86.8	101	117	123	130	137	181	195	245	260	363	378	435	452
400	P_{G1}				34.8		44.9		75.1		97.1		120		134		185		248		359		429
450	P_{G1}				33.1		44.1		71.4		92.6												

直交轴减速机 Bevel-helical Reductors　　额定功率 Nominal Power Ratings

类型 WB2.., WB3... Type WB2.., WB3...　　规格 1...26 Sizes 1...26

			额定功率 Nominal power ratings																									
			减速机规格 Reductors sizes																									
i_N	n_1	n_2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	1/min																											
5	1500	300	36	63	97	182	295		559		880		1351		2073													
	1000	200	24	42	65	121	197		373		586		901		1382		2555											
	750	150	18	31	49	91	148		280		440		675		1037		1916											
5.6	1500	268	32	56	87	163	264		500		786		1263		1880													
	1000	179	22	37	58	109	176		334		525		843		1256		2287											
	750	134	16	28	43	81	132		250		393		631		940		1712	1894	2736									
6.3	1500	238	29	50	77	145	234	299	444	556	698	887	1171	1371	1769	2044												
	1000	159	19	33	52	97	157	200	296	371	466	593	783	916	1182	1365	2164	2348										
	750	119	14	25	39	72	117	150	222	278	349	444	586	685	885	1022	1620	1757	2430									
7.1	1500	211	25	44	68	128	208	265	393	493	619	787	1083	1259	1613	1856												
	1000	141	17	30	46	86	139	177	263	329	413	526	723	842	1078	1240	1949	2141	2879									
	750	106	13	22	34	64	104	133	198	248	311	395	544	633	810	932	1465	1609	2164	2553								
8	1500	188	23	39	61	114	185	236	350	439	551	701	994	1161	1516	1732	2598											
	1000	125	15	26	41	76	123	157	233	292	366	466	661	772	1008	1152	1728	1937	2552									
	750	94	11	20	31	57	93	118	175	219	276	350	497	581	758	866	1299	1457	1919	2264								
9	1500	167	20	35	54	101	164	210	311	390	490	623	883	1067	1364	1591	2309	2588										
	1000	111	13	23	36	67	109	139	207	259	325	414	587	709	907	1058	1534	1720	2266	2673								
	750	83	10	17	27	50	82	104	155	194	243	309	439	530	678	791	1147	1286	1695	1999								
10	1500	150	18	31	49	91	148	188	280	350	440	559	793	974	1225	1492	2073	2325										
	1000	100	12	21	32	61	98	126	186	234	293	373	529	649	817	995	1382	1550	2042	2408								
	750	75	9	16	24	46	74	94	140	175	220	280	397	487	613	746	1037	1162	1531	1806								
11.2	1500	134	16	28	43	81	132	168	250	313	393	500	709	870	1094	1368	1852	2077										
	1000	89	11	19	29	54	88	112	166	208	261	332	471	578	727	909	1230	1379	1817	2143								
	750	67	8.1	14	22	41	66	84	125	156	196	250	354	435	547	684	926	1038	1368	1614								
12.5	1500	120	14	25	39	69	118	151	214	280	352	447	635	779	980	1225	1659	1860	2450									
	1000	80	10	17	26	46	79	101	142	187	235	298	423	519	653	817	1106	1240	1634	1927	2094		2848					
	750	60	7.2	13	19	35	59	75	107	140	176	224	317	390	490	613	829	930	1225	1445	1571		2136					
14	1500	107	13	22	35	67	110	134	204	250	331	399	594	695	896	1092	1535	1658	2185	2577								
	1000	71	8.5	15	23	45	73	89	135	166	219	265	394	461	595	725	1019	1100	1450	1710	1948	2193	2676					
	750	54	6.5	11	18	34	55	68	103	126	167	201	300	351	452	551	775	837	1103	1301	1481	1668	2036	2290				
16	1500	94	11	19	31	61	100	118	188	212	305	350	551	610	817	960	1398	1516	1969	2264								
	1000	63	7.3	13	20	41	67	79	126	142	205	235	369	409	548	643	937	1016	1319	1517	1814	2032	2507	2784				
	750	47	5.4	9.6	15	31	50	59	94	106	153	175	276	305	408	480	699	758	984	1132	1353	1516	1870	2077				
18	1500	83	9	16	26	56	92	110	172	201	282	326	504	565	739	869	1286	1391	1738	2086								
	1000	56	6	11	18	38	62	74	116	135	191	220	340	381	498	586	868	938	1173	1407	1689	1876	2346	2568				
	750	42	4.5	7.9	13	28	47	55	87	102	143	165	255	286	374	440	651	704	880	1055	1267	1407	1759	1926				
20	1500	75			28	52	86	104	161	188	267	309	471	534	691	809	1202	1312	1571	1885								
	1000	50			19	35	58	69	107	125	178	206	314	356	461	539	801	874	1047	1257	1571	1738	2199	2382	2932			
	750	38			14	26	44	53	82	95	135	156	239	271	350	410	609	665	796	955	1194	1321	1671	1810	2228			
22.4	1500	67			25	46	77	97	144	174	239	288	421	505	617	744	1073	1214	1403	1684	2105	2420						
	1000	45			17	31	52	65	97	117	160	193	283	339	415	499	721	815	942	1131	1414	1626	1979	2215	2639	3015		
	750	33			12	23	38	48	71	86	117	142	207	249	304	366	529	598	691	829	1037	1192	1451	1624	1935	2212	2764	
25	1500	60			23	41	69	91	129	160	214	270	377	471	553	685	961	1087	1257	1508	1885	2168						
	1000	40			15	28	46	61	86	107	142	180	251	314	369	457	641	725	838	1005	1257	1445	1759	1969	2346	2681		
	750	30			11	21	35	46	64	80	107	135	188	236	276	342	481	543	628	754	942	1084	1319	1476	1759	2010	2513	2827
28	1500	54			20	37	62	82	116	144	192	243	339	424	498	616	865	978	1131	1357	1696	1950	2375					
	1000	36			14	25	41	55	77	96	128	162	226	283	332	411	577	652	754	905	1131	1301	1583	1772	2111	2413	3016	
	750	27			10.2	19	31	41	58	72	96	122	170	212	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545

卧式安装减速机要采用强制润滑 Forced lubrication required on horizontal reductors

直交轴减速机 Bevel-helical Reductors　　热容量 Thermal Capacities
类型 WB2.., WB3... Type WB2.., WB3...　　规格 1...26 Sizes 1...26

热容量PG Thermal Capacities PG in kW

iN		减速机规格 Reductors sizes																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		热容量PG(单位为KW)取决于冷却方式：PG1：无辅助冷却装置；PG2.:带冷却风扇；PG3：带冷却盘管；PG4：带风扇和冷却盘管 。 Thermal capacity PG(in KW)dependent on kind of cooling;PG1 without auxiliary cooling.PG2:fan cooling,PG3:cooling coil,PG4:fan and cooling coil.																									
5	PG1	34.9	45.6	59.7	66.3	86.9		122		150		233		286		330											
	PG2	38.1	50.6	73.1	101	140		223		272		458		662		797											
	PG3	41.1	59.2	109	135	202		313		391		664		1318		1786											
	PG4	45.0	67.5	118	166	250		403		500		862		1632		2158											
5.6	PG1	33.4	44.0	57.6	64.1	85.2		117		144		233		295		349		328									
	PG2	36.0	48.5	70.4	96.9	137		209		256		446		653		789		862									
	PG3	41.6	58.4	104	130	196		288		360		631		1264		1729		2015									
	PG4	45.0	64.8	112	160	242		371		461		821		1573		2084		2427									
63	PG1	32.0	39.7	52.2	62.4	81.9	96.5	110	134	137	155	218	277	282	337	351	374	353									
	PG2	34.7	43.7	63.5	93.8	130	152	194	235	240	272	406	516	597	726	752	815	836									
	PG3	38.1	51.2	91.8	124	182	259	261	381	327	451	555	957	1110	1384	1596	1748	1872									
	PG4	41.0	57.3	99.0	153	225	307	337	471	421	554	723	1166	1377	1712	1922	2105	2262									
71	PG1	30.7	39.4	51.5	58.8	77.7	94.7	104	127	130	148	217	275	284	341	346	372	364	388								
	PG2	35.4	43.5	62.7	87.6	122	148	182	221	225	256	397	501	589	712	715	775	804	867								
	PG3	37.0	50.4	90.9	114	168	252	240	350	300	414	535	913	1076	1326	1479	1613	1752	1882								
	PG4	39.0	57.0	97.8	140	208	298	310	433	387	510	697	1106	1339	1649	1781	1941	2109	2269								
8	PG1	28.5	36.6	48.0	55.4	73.3	90.6	98.9	120	124	141	201	254	268	322	330	365	356	393								
	PG2	31.2	40.2	58.2	82.1	114	140	171	205	212	240	362	454	539	648	659	736	750	832								
	PG3	33.8	48.0	83.5	105	154	233	222	317	278	376	473	801	959	1162	1330	1501	1590	1758								
	PG4	35.8	52.5	89.8	130	192	277	287	393	359	464	619	974	1190	1441	1598	1802	1909	2115								
9	PG1	25.0	34.2	45.8	52.7	69.6	85.8	94.6	113	119	134	193	252	260	322	321	347	351	381								
	PG2	26.6	37.6	55.2	77.5	108	132	162	192	202	225	345	444	515	638	633	678	723	773								
	PG3	29.9	43.2	78.4	96.9	142	214	208	292	262	346	446	776	897	1130	1258	1342	1512	1593								
	PG4	33.0	48.3	84.0	120	176	255	270	362	339	428	583	941	1118	1403	1513	1614	1815	1915								
10	PG1	22.2	28.6	38.4	44.3	64.6	80.6	88.6	107	112	127	183	232	249	301	307	337	342	374								
	PG2	23.0	31.2	46.4	64.2	98.9	123	150	180	189	212	323	403	485	583	591	650	684	745								
	PG3	25.0	36.0	64.3	77.4	127	197	189	269	240	319	409	687	830	999	1148	1271	1403	1516								
	PG4	26.2	39.8	69.1	95.9	158	235	246	335	310	395	537	835	1033	1244	1383	1528	1684	1818								
11.2	PG1	21.3	27.8	37.6	42.8	57.9	76.6	79.3	102	101	122	164	223	224	290	280	322	315	363								
	PG2	22.1	30.4	44.8	61.9	88.0	116	133	171	167	202	285	384	431	555	532	608	618	705								
	PG3	24.0	34.7	62.1	73.9	111	180	165	252	208	301	354	647	720	934	1010	1159	1243	1411								
	PG4	27.2	38.6	66.4	91.7	138	215	215	314	270	374	465	788	900	1167	1221	1400	1494	1688								
12.5	PG1	20.5	29.4	37.3	45.0	61.1	70.9	97.2	95.7	129	115	183	210	238	277	334	293	377	334								
	PG2	21.4	32.0	45.1	58.5	83.0	106	133	159	182	189	288	359	379	522	533	546	684	636								
	PG3	25.9	38.1	62.2	72.5	117	160	206	230	305	275	431	593	674	865	1054	1019	1264	1251								
	PG4	27.5	40.6	66.7	85.2	137	192	239	287	353	342	526	724	795	1078	1222	1235	1518	1500								
14	PG1	19.4	25.6	33.3	43.7	59.2	63.4	93.9	85.8	125	103	180	187	240	248	322	349	363	411								
	PG2	21.0	27.8	39.7	56.8	80.3	94.4	128	141	176	168	282	316	382	462	512	552	657	734								
	PG3	22.6	32.8	54.4	70.3	113	140	199	201	296	239	422	512	679	749	1006	1066	1214	1331								
	PG4	23.8	35.0	58.1	82.6	132	167	230	250	341	297	514	627	801	937	1166	1241	1455	1598								
16	PG1	18.6	24.0	31.2	41.5	57.2	66.4	89.5	105	122	137	171	203	221	259	318	334	365	379								
	PG2	19.8	25.9	37.1	54.0	77.3	88.6	122	140	172	190	268	311	349	404	503	528	652	672								
	PG3	21.8	30.4	50.2	66.8	109	121	189	211	287	324	401	526	617	699	984	1018	1194	1219								
	PG4	23.0	32.5	53.6	78.3	127	141	219	243	331	371	487	621	727	824	1142	1181	1433	1460								
18	PG1	17.1	21.8	28.3	40.3	55.4	64.3	86.4	101	118	126	168	203	222	261	306	332	351	399								
	PG2	18.2	23.7	33.6	52.4	74.9	85.8	118	136	166	175	262	311	352	407	482	521	626	698								
	PG3	19.5	27.5	45.1	64.7	105	116	182	205	277	298	393	527	621	703	945	1003	1142	1257								
	PG4	20.8	29.3	48.0	76.0	123	136	211	236	320	341	477	622	732	829	1091	1161	1371	1506								
20	PG1			33.0	38.0	53.1	61.9	82.8	96	113	129	160	189	209	239	296	317	340	366	411		475		795			
	PG2			37.1	49.4	71.8	82.6	113	129	159	180	250	289	329	371	464	497	602	639	745		838		993			
	PG3			58.4	61.2	101	112	174	193	265	305	374	487	581	639	907	953	1099	1146								
	PG4			61.1	71.6	118	131	201	223	307	350	454	575	684	753	1047	1104	1316	1375								
22.4	PG1			32.8	37.1	52.2	60.0	80.0	93.2	110	119	153	189	201	242	289	306	337	354	409	431	473	492	814	847	974	
	PG2			37.1	48.1	70.6	80.1	109	125	155	165	237	289	313	374	450	478	586	614	725	762	818	849	993	1033	1188	
	PG3			58.6	59.5	99.8	109	168	187	257	279	347	486	542	645	859	912	1051	1099								
	PG4			61.1	69.8	117	127	193	216	297	320	423	574	639	759	994	1057	1261	1318								
25	PG1			30.7	35.2	49.4	57.5	77.3	89.3	105	114	145	181	190	226	273	300	322	350	399	427	461	487	783	814	936	983
	PG2			34.7	45.5	66.6	76.6	105	119	147	158	222	275	294	349	419	462	548	598	692	741	778	828	955	993	1142	1199
	PG3			54.1	56.1	93.8	104	160	179	239	268	318	462	498	602	777	867	956	1053								
	PG4			56.5	65.7	109	121	185	207	276	306	388	547	588	708	899	1004	1147	1264								
28	PG1			29.9	33.8	47.7	56.5	73.4	86.3	100	111	138	173	181	217	266	283	318	334	388	415	446	473	762	793	912	958
	PG2			33.6	43.5	64.0	75.3	98.8	115	139	154	211	262	278	332	406	430	535	559	659	706	740	786	952	991	1140	1197
	PG3			51.8	52.9	88.7	103	148	173	222	259	296	431	462	560	745	785	925	958								
	PG4			54.2	62.1	103	120	171	199	257	297	362	509	547	660	863	909	1109	1148								

直交轴减速机 Bevel–helical Reductors 额定功率 Nominal Power Ratings
类型 WB3.., WB4... Type WB3.., WB4... 规格 3...26 Sizes 3...26

额定功率 Nominal power ratings																											
			减速机规格 Reductors sizes																								
i_N	n_1	n_2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	1/min		额定功率 PN , KW Nominal power ratings PN in kW																								
31.5	1500	48	18	33	55	73	103	128	171	216	302	377	442	548	769	870	1005	1206	1508	1734	2111						
	1000	32	12.1	22	37	49	69	85	114	144	201	251	295	365	513	580	670	804	1005	1156	1407	1575	1876	2145	2681	3016
	750	24	9.0	17	28	36	52	64	85	108	151	188	221	274	385	435	503	603	754	867	1055	1181	1407	1608	2010	2262
35.5	1500	42	15.8	29	48	64	90	112	150	189	264	330	387	479	673	761	880	1055	1319	1517	1847	2067	2463	2815		
	1000	28	11	19	32	43	60	75	100	126	176	220	258	320	449	507	586	704	880	1012	1231	1378	1642	1876	2346	2639
	750	21	7.9	15	24	32	45	56	75	95	132	165	194	240	336	380	440	528	660	759	924	1034	1231	1407	1759	1979
40	1500	38	14	26	44	58	82	101	135	171	239	298	350	434	609	688	796	955	1194	1373	1671	1870	2228	2597		
	1000	25	9	17	29	38	54	67	89	113	157	196	230	285	401	453	524	628	785	903	1099	1230	1466	1675	2094	2356
	750	18.8	7.1	13	22	29	40	50	67	85	118	148	173	215	301	341	394	472	591	679	827	925	1102	1260	1575	1772
45	1500	33	12	23	38	50	71	88	117	149	207	259	304	377	529	598	691	829	1037	1192	1451	1624	1935	2212	2764	
	1000	22	8.3	15	25	33	47	59	78	99	138	173	203	251	352	399	461	553	691	795	968	1083	1290	1474	1843	2073
	750	16.7	6.3	12	19	25	36	45	59	75	105	131	154	191	268	303	350	420	525	603	734	822	979	1119	1399	1574
50	1500	30	11	21	35	46	64	80	107	135	188	236	276	342	481	543	628	754	942	1083	1319	1476	1759	2010	2513	2827
	1000	20	8	14	23	30	43	53	71	90	126	157	184	228	320	362	419	503	628	723	880	984	1173	1340	1675	1885
	750	15	6	10.4	17	23	32	40	53	68	94	118	138	171	240	272	314	377	471	542	660	738	880	1005	1257	1414
56	1500	27	10.2	19	31	41	58	72	96	122	170	212	249	308	433	489	565	679	848	975	1187	1329	1583	1809	2262	2545
	1000	17.9	6.7	12	21	27	38	48	64	81	112	141	165	204	287	324	375	450	562	647	787	881	1050	1200	1499	1687
	750	13.4	5.1	9.3	15	20	29	36	48	60	84	105	123	153	215	243	281	337	421	484	589	659	786	898	1123	1263
63	1500	24	9	17	28	36	50	64	85	108	151	188	221	274	385	435	503	603	754	867	1055	1181	1407	1608	2010	2262
	1000	15.9	6	11	18	24	33	42	57	72	100	125	147	181	255	288	333	400	499	574	699	783	932	1066	1332	1498
	750	11.9	4.5	8.2	14	18	25	32	42	54	75	93	110	136	191	216	249	299	374	430	523	586	698	797	997	1121
71	1500	21	7.9	14.5	24	32	44	56	75	95	132	165	194	240	336	380	440	528	660	759	924	1034	1231	1407	1759	1979
	1000	14.1	5.3	9.7	16	21	30	38	50	63	89	111	130	161	226	255	295	354	443	509	620	694	827	945	1181	1329
	750	10.6	4	7.3	12	16	22	28	38	48	67	83	98	121	170	192	222	266	333	383	466	522	622	710	888	999
80	1500	18.8			22	28	40	50	67	85	118	148	173	215	301	341	394	472	591	679	827	925	1102	1260	1575	1772
	1000	12.5			14	18	27	33	45	56	79	98	115	143	200	226	262	314	393	452	550	615	733	838	1047	1178
	750	9.4			11	14	20	25	33	42	59	74	87	107	151	170	197	236	295	340	413	463	551	630	787	886
90	1500	16.7			19	24	36	44	59	75	105	131	154	191	268	303	350	420	525	603	734	822	979	1119	1399	1574
	1000	11.1			13	16	24	29	40	50	70	87	102	127	178	201	232	279	349	401	488	546	651	744	930	1046
	750	8.3			9.6	12	18	22	30	37	52	65	76	95	133	150	174	209	261	300	365	408	487	556	695	782
100	1500	15			17.3	23	32	40	53	68	94	118	138	171	240	272	314	377	471	542	660	738	880	1005	1257	1414
	1000	10			12	15	21	27	36	45	63	79	92	114	160	181	209	251	314	361	440	492	586	670	838	942
	750	7.5			8.6	11.4	16	20	27	34	47	59	69	86	120	136	157	188	236	271	330	369	440	503	628	707
112	1500	13.4			15	20	29	36	48	60	84	105	123	153	215	243	281	337	421	484	589	659	786	898	1123	1263
	1000	8.9			10.3	13.5	19	24	32	40	56	70	82	102	143	161	186	224	280	322	391	438	522	596	746	839
	750	6.7			7.7	10	14	18	24	30	42	53	62	76	107	121	140	168	210	242	295	330	393	449	561	631
125	1500	12			14	18	26	32	43	54	75	94	111	137	192	217	251	302	377	434	528	591	704	804	1005	1131
	1000	8			9.2	12	17	21	28	36	50	63	74	91	128	145	168	201	251	289	352	394	469	536	670	754
	750	6			6.9	9.1	13	16	21	27	38	47	55	68	96	109	126	151	188	217	264	295	352	402	503	565
140	1500	10.7			12	16.2	23	29	38	48	67	84	99	122	171	194	224	269	336	387	471	527	627	717	896	1008
	1000	7.1			8.2	11	15	19	25	32	45	56	65	81	114	129	149	178	223	256	312	349	416	476	595	669
	750	5.4			6.2	8.2	12	14.4	19	24	34	42	50	62	87	98	113	136	170	195	237	266	317	362	452	509
160	1500	9.4			11	14.3	20	25	33	42	59	74	87	107	151	170	197	236	295	340	413	463	551	630	787	886
	1000	6.3			7.3	9.6	14	17	22	28	40	49	58	72	101	114	132	158	198	228	277	310	369	422	528	594
	750	4.7			5.4	7.1	10	13	17	21	30	37	43	54	75	85	98	118	148	170	207	231	276	315	394	443
180	1500	8.3			9.6	13	18	22	30	37	52	65	76	95	133	150	174	209	261	300	365	408	487	556	695	782
	1000	5.6			6.5	8.5	12	15	20	25	35	44	52	64	90	101	117	141	176	202	246	276	328	375	469	528
	750	4.2			4.8	6.4	9.0	11.2	15	19	26	33	39	48	67	76	88	106	132	152	185	207	246	281	352	396
200	1500	7.5			8.6	11.4	16	20	27	34	47	59	69	86	120	136	157	188	236	271	330	369	440	503	628	707
	1000	5			5.8	7.6	11	13.4	18	23	31	39	46	57	80	91	105	126	157	181	220	246	293	335	419	471
	750	3.8			4.4	5.8	8.2	10	14	17	24	30	35	43	61	69	80	95	119	137	167	187	223	255	318	358
224	1500	6.7			7.7	10	14.4	18	24	30	42	53	62	76	107	121	140	168	210	242	295	330	393	449	561	631
	1000	4.5			5.2	6.8	9.7	12	16	20	28	35	41	51	72	82	94	113	141	163	198	221	264	302	377	424
	750	3.3			3.8	5.0	7.1	9	12	15	21	26	30	38	53	60	69	83	104	119	145	162	194	221	276	311
250	1500	6			6.9	9.1	13	16	21	27	38	47	55	68	96	109	126	151	188	217	264	295	352	402	503	565
	1000	4			4.6	6.1	8.6	11	14	18	25	31	37	46	64	72	84	101	126	145	176	197	235	268	335	377
	750	3			3.5	4.6	6.4	8.0	11	14	19	24	28	34	48	54	63	75	94	108	132	148	176	201	251	283
280	1500	5.4			6.2	8.2	12	14.4	19	24	34	42	50	62	87	98	113	136	170	195	237	266	317	362	452	509
	1000	3.6			4.1	5.5	7.7	9.6	13	16	23	28	33	41	58	65	75	90	113	130	158	177	211	241	302	339
	750	2.7			3.1	4.1	5.8	7.2	10	12	17	21	25	31	43	49	57	68	85	98	119	133	158	181	226	254
315	1500	4.8			5.5	7.3	10.3	13	17	22	30	38	44	55	77	87	101	121	151	173	211	236	281	322	402	452
	1000	3.2			3.7	4.9	6.9	8.5	11	14	20	25	29	37	51	58	67	80	101	116	141	157	188	214	268	302
	750	2.4			2.8	3.6	5.2	6.4	8.5	11	15.1	19	22	27	38	43	50	60	75	87	106	118	141	161	201	226
355	1500	4.2				6.4		11.2		19		33		48		76		106		152		207		281		396
	1000	2.8				4.3		7.5		13		22		32		51		70		101		138		188		264
	750	2.1				3.2		5.6		9.5		16		24		38		53		76		103		141		198
400	1500	3.8				5.8		10		17		30		43												
	1000	2.5				3.8		6.7		11.3		20		29												
	750	1.5				2.9		5.1		8.6		15		22												

卧式安装减速机要采用强制润滑 Forced lubrication required on horizontal reductors

直交轴减速机 Bevel–helical Reductors　　热容量 Thermal Capacities

类型 WB3.., WB4... Type WB3.., WB4...　　规格 3...26 Sizes 3...26

热容量 PG , kW　Thermal capacities PG in kW

iN		减速机规格 Reductors sizes																						
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		热容量P_G(单位为KW)取决于冷却方式：P_{G1}：无辅助冷却装置；P_{G2}.:带冷却风扇；P_{G3}：带冷却盘管；P_{G4}：带风扇和冷却盘管 。 Thermal capacity P_G(in KW)dependent on kind of cooling;P_{G1} without auxiliary cooling.P_{G2}:fan cooling,P_{G3}:cooling coil,P_{G4}:fan and cooling coil.																						
31.5	PG1	28.2	32.0	45.2	53.4	69.7	83.1	95.6	106	131	163	172	205	250	276	301	328	370	403	423	458	742	772	888	932
	PG2	31.7	41.2	60.5	71.0	93.6	111	132	146	199	245	263	311	378	418	499	545	618	673	688	748	927	965	1110	1165
	PG3	48.0	49.6	82.7	96.7	138	165	208	240	275	394	428	513	675	752	846	927								
	PG4	50.2	58.2	96.5	113	160	189	240	276	337	467	508	606	784	873	1014	1111								
35.5	PG1	26.7	30.1	42.6	51.5	66.2	78.9	90.8	101	126	155	166	195	241	259	291	311	361	383	409	433	726	755	868	911
	PG2	29.8	38.5	56.6	68.2	88.4	105	125	138	190	232	252	295	363	388	480	509	596	630	660	695	885	921	1059	1111
	PG3	44.8	45.6	75.7	91.4	128	153	190	224	261	367	407	478	642	684	805	847								
	PG4	47.0	53.6	88.7	107	148	176	221	257	318	434	483	565	746	794	966	1017								
40	PG1	23.5	26.3	37.0	48.9	57.9	75.3	84.9	96.4	119	147	156	186	228	250	278	301	343	373	388	419	703	731	841	883
	PG2	26.2	33.5	48.8	64.5	76.7	99.4	116	132	178	218	237	279	341	373	453	489	560	607	618	667	844	877	1009	1060
	PG3	38.9	38.4	63.0	85.3	106	143	172	210	239	340	375	445	592	649	749	805								
	PG4	40.8	45.2	73.9	99.8	123	164	200	241	293	403	446	526	690	755	900	968								
45	PG1	23.2	25.7	36.0	45.9	56.2	71.4	78.0	91.5	109	141	144	178	211	236	258	287	321	355	359	396	665	692	796	836
	PG2	25.6	32.7	47.5	60.3	74.0	93.8	106	124	163	209	216	267	313	351	418	463	519	570	569	624	778	810	931	978
	PG3	38.4	37.3	60.7	78.3	102	132	155	192	215	321	336	421	533	599	679	753								
	PG4	40.0	44.0	71.3	91.6	118	152	180	221	265	382	398	499	621	698	816	903								
50	PG1	22.7	25.9	35.8	40.0	55.4	62.5	76.6	85.6	109	133	146	169	216	218	268	266	317	331	386	367	611	635	730	767
	PG2	25.3	32.9	46.9	52.2	72.6	81.4	103	116	160	195	216	250	315	322	424	427	498	529	596	574	670	724	832	874
	PG3	37.0	37.3	59.1	65.3	98.6	110	148	174	210	295	333	389	535	539	686	684								
	PG4	38.7	43.8	69.5	76.6	114	127	173	201	256	350	397	462	620	629	820	821								
56	PG1	20.3	23.9	33.0	39.0	51.4	60.6	70.7	78.9	99.1	122	134	155	198	223	247	276	305	326	365	393	599	623	717	753
	PG2	22.4	30.2	43.3	50.8	67.4	78.8	95.3	106	145	179	197	228	287	323	388	432	478	506	560	601	683	710	817	858
	PG3	32.3	33.6	53.3	63.0	89.4	105	133	157	186	264	298	346	479	541	617	688								
	PG4	33.9	39.7	62.9	74.0	104	122	155	181	228	315	354	413	555	628	738	823								
63	PG1	20.0	23.0	31.7	38.7	49.7	59.8	68.2	77.4	95.5	121	129	157	189	204	237	254	295	314	353	371	567	590	679	713
	PG2	21.8	29.1	41.6	50.2	65.1	77.4	91.9	103	139	175	189	229	273	294	370	395	460	486	540	563	635	661	760	798
	PG3	31.5	31.8	50.3	61.4	84.8	102	125	150	175	256	280	345	449	482	581	620								
	PG4	32.8	37.6	59.5	72.2	99.0	119	147	173	215	304	334	409	521	561	698	740								
71	PG1	18.6	21.3	30.2	35.7	47.3	55.5	63.9	71.7	88.4	111	121	144	180	195	224	244	279	304	333	360	547	569	654	687
	PG2	20.0	27.0	39.5	46.2	62	71.8	86.0	95.6	129	159	177	208	258	281	347	377	431	468	505	544	602	626	719	756
	PG3	28.6	28.9	46.6	55.5	78.4	92.8	113	135	157	227	253	309	413	454	537	585								
	PG4	29.8	34.3	55.3	65.4	92.1	108	134	156	194	271	303	366	482	528	644	701								
80	PG1			32.5	34.2	48.2	53.6	68.2	69.2	103	106	138	138	185	186	208	231	285	287	399	339	560	538	670	650
	PG2				44.5		69.4		92.3		153		200		266		353		438		509		592		715
	PG3				52.3		88.0		127		212		290		417		538								
	PG4				61.8		103		148		255		346		487		647								
90	PG1			31.8	32.6	46.7	51.0	66.7	64.9	99.9	98.7	135	129	177	190	199	214	273	292	386	404	554	576	662	695
	PG2				42.3		66.0		86.5		142		187												
	PG3				48.5		81.5		115		190		262												
	PG4				57.6		95.4		135		230		314												
100	PG1			30.3	34.8	44.2	51.5	63.2	68.7	96.0	115	128	148	167	182	187	205	258	280	363	391	549	571	657	690
112	PG1			29.2	34.0	42.5	50.0	60.8	67.1	91.4	111	122	144	159	172	179	193	246	264	352	367	497	517	595	625
125	PG1			27.9	32.5	40.6	47.3	58.0	63.7	87.5	106	117	136	151	164	170	184	234	252	331	356	497	517	595	625
140	PG1			26.6	31.3	38.6	45.6	54.7	61.3	82.8	101	111	130	146	156	164	175	225	240	320	335	467	486	559	587
160	PG1			24.5	29.9	35.2	43.5	50.0	58.4	75.5	96.8	105	125	138	150	155	169	213	231	302	323	453	471	542	569
180	PG1			24.0	28.6	34.3	41.4	48.8	55.4	73.5	91.6	99.2	118	130	142	146	159	199	218	282	306	433	450	518	544
200	PG1			23.2	26.3	34.0	37.8	47.8	50.7	71.9	83.7	96.9	112	128	134	144	151	198	204	273	286	401	417	480	504
224	PG1			21.6	25.8	31.7	36.9	44.7	49.4	67.6	81.6	90.8	106	120	132	134	148	186	204	255	277	400	416	478	502
250	PG1			21.1	24.8	30.6	36.5	43.1	48.4	65.4	79.7	87.9	103	116	123	130	139	180	191	247	259	371	386	444	466
280	PG1			20.1	23.2	28.7	34.1	41.1	45.3	62.5	74.8	83.0	96.9	108	119	122	134	169	184	236	250	354	368	423	444
315	PG1			18.8	22.6	26.9	32.8	38.6	43.7	58.4	72.4	79.2	93.7	102	112	115	126	160	174	220	239	333	346	398	418
355	PG1				21.6		30.8		41.7		69.1		88.5		105		119		164		223		317		383
400	PG1				20.2		28.9		39.3		64.5		84.3												

平行轴减速机 Helical Reductors

类型 WH1.., WH2.., WH3.., WH4...

规格 1...26 Sizes 1...26

额定输出扭矩 Nominal Output Torques

Types WH1.., WH2.., WH3.., WH4...

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

直交轴减速机 Bevel-helical Reductors　　额定输出扭矩 Nominal Output Torques

类型 WB2.., WB3.., WB4... Types WB2.., WB3.., WB4...规格 1..26 Sizes 1..26

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

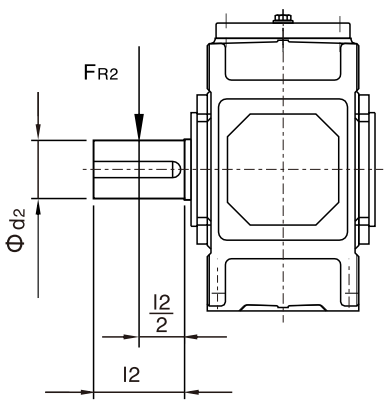
减速机 Reductors

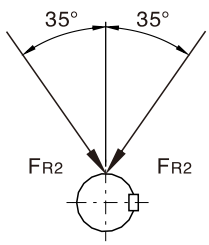
输出轴 d2 上允许的附加径向力1) Permissible Additional Radial Forces on Output Shaft d2 1)

类型 WH1SH., WH2S., WH2S., WH4S., WB2S., WB3S., WB4S..

Types WH1SH., WH2S., WH2S., WH4S., WB2S., WB3S., WB4S..

作用力在轴端中部
Application of force on centre of shaft end





允许的作用力方向
Permissible direction of force

允许的附加径向力 FR2 (kN)，作用于输出轴端中部3)

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

类型 Type	布置形式 Design	减速机规格1), 4) Reductors sizes1), 4)																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
WH1SH	A /B	2)	–	2)	–	2)	–	2)	–	2)	–	2)	–	2)	–	2)		2)	
WH2S	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
WH3S	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
WH4S	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
WB2S	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
WB3S	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
WB4S	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 tables are minimum values.If the angle of application of force and the direction of rotation are given,signif– icantly higher additional forces can mostly beallowed.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 218页。 For aplication of force outside the center of the shaft end,see page218.

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 class8.8. Foundation must be dry and grease–free. Permissible additional radial forces on input shaft d1 on request.

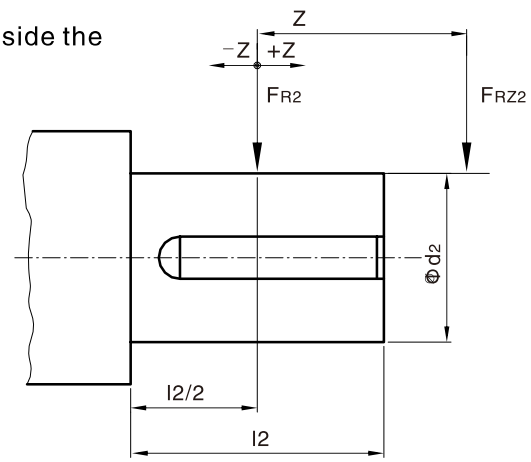
减速机 Reductors

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

类型 WH1SH., WH2S., WH2S., WH4S., WB2S., WB3S., WB4S..

Types WH1SH., WH2S., WH2S., WH4S., WB2S., WB3S., WB4S..

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



$F_{RZ2} = F_{R2} \times K$

F_{RZ2} 允许的轴端外部径向力
F_{RZ2} Permissible external radial force

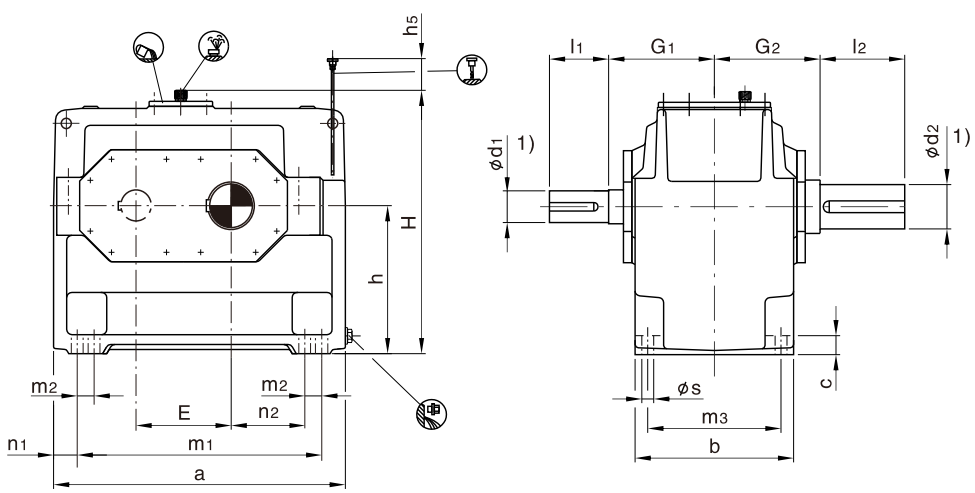
F_{R2} 允许的附加径向力根据 217 页上的表确定
F_{R2} Permissible additional radial force acc. to table page 217

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

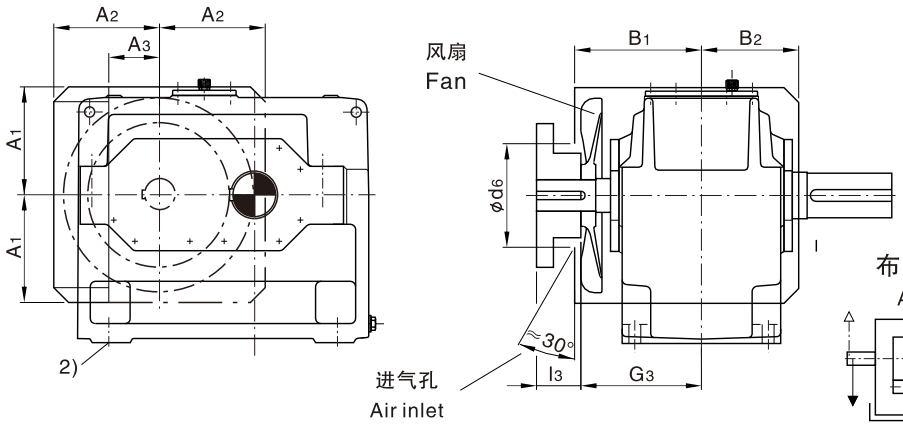
作用力系数 K Factor of application of force K															
规格 Size	距离 Z (mm) Distance Z in mm														
	−200	−150	−100	−75	−50	−25	0	25	50	75	100	150	200	250	300
1						1.11	1.00	0.81	0.68	0.58	0.51				
2						1.11	1.00	0.83	0.71	0.63	0.56				
3					1.21	1.09	1.00	0.85	0.74	0.65	0.58	0.48			
4					1.17	1.08	1.00	0.86	0.76	0.68	0.62	0.52	0.44		
5 + 6				1.22	1.14	1.06	1.00	0.88	0.79	0.72	0.66	0.56	0.49	0.43	
7 + 8				1.19	1.12	1.06	1.00	0.89	0.81	0.74	0.68	0.58	0.51	0.46	0.41
9 + 10			1.22	1.15	1.10	1.05	1.00	0.90	0.82	0.76	0.70	0.61	0.54	0.48	0.44
11 + 12			1.18	1.13	1.08	1.04	1.00	0.91	0.84	0.78	0.73	0.64	0.57	0.51	0.47
13 + 14		1.24	1.15	1.11	1.07	1.03	1.00	0.92	0.86	0.80	0.75	0.67	0.60	0.55	0.50
15 + 16		1.20	1.12	1.09	1.06	1.03	1.00	0.93	0.87	0.82	0.77	0.69	0.63	0.58	0.53
17 + 18	1.25	1.17	1.11	1.08	1.05	1.03	1.00	0.94	0.88	0.84	0.79	0.72	0.66	0.60	0.56

平行轴减速机 Helical Reductors 单级传动 Single Stage 卧式安装 Horizontal
类型 WH1SH Type WH1SH 规格1...19 Sizes 1...19

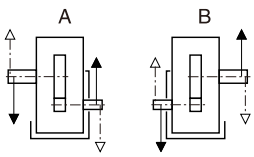
WH1SH



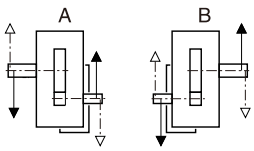
WH1SH
规格 3...11带冷却风扇Sizes 3...11 with fan



布置形式 Design

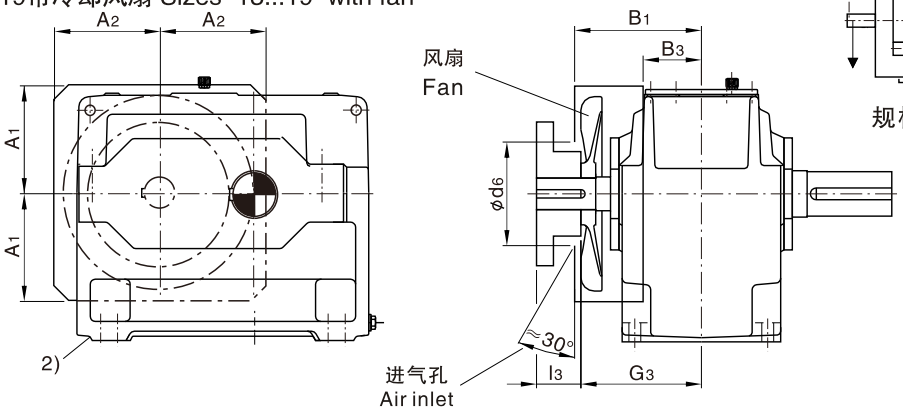


规格 Size 1...11 3)



规格 Size 13...19

WH1SH
规格 13...19带冷却风扇 Sizes 13...19 with fan



1) k6≤ Φ50 m6 > Φ50
有关平键GB/T1095-1979型和中心孔，参见第279-280页。For parallel key GB/T1095-1979 and for centre hole,see page 279-280.
2) 在安装基础螺栓前，应拆下风扇罩。Remove air guide cover before fitting the foundation bolts.
3) 规格1号不带风扇。Sizes 1 without fan.

平行轴减速机 Helical Reductors　　单级传动 Single Stage　　卧式安装 Horizontal

类型 WH1SH　Type WH1SH　　规格 1...19　Sizes 1...19

规格 Size	尺寸mm Dimensions in mm																
	输入轴 Input																
	i_N=1.25–2.8			i_N=1.6–2.8			i_N=2–2.8			i_N=3.15–4			i_N=4.5–5.6			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
1	40	70	–							30	50		24	40	–	110	
3	60	125	105							45	100	80	32	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

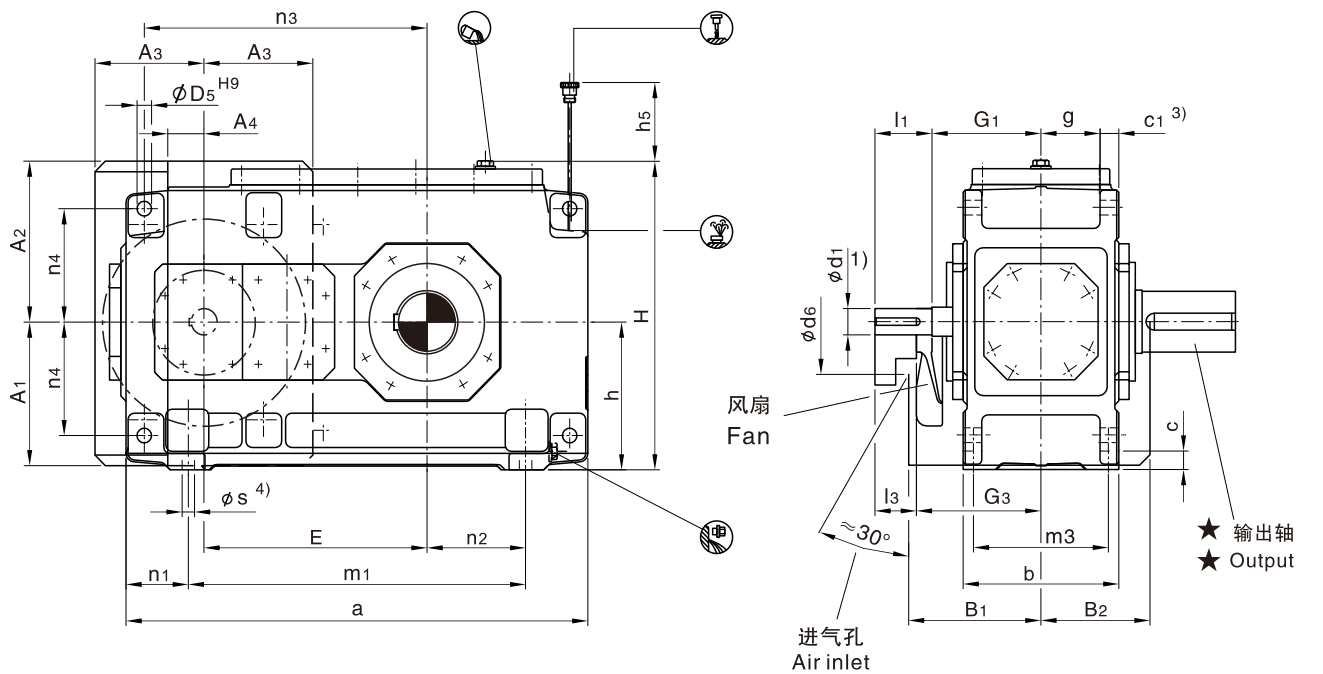
规格 Size	尺寸mm Dimensions in mm																			
	减速机 Reductors																			
	a	A_1	A_2	A_3	b	B_1	B_2	B_3	c	d_6	E	h	h_5	H	m_1	m_2	m_3	n_1	n_2	s
1	295	–	–	–	150	–	–	–	18	–	90	140	55	275	220	–	120	37.5	80	12
3	420	150	145	80	200	205	130	–	28	130	130	200	85	375	310	–	160	55	110	19
5	580	225	215	115	285	255	185	–	35	190	185	290	100	525	440	–	240	70	160	24
7	690	255	250	120	375	300	230	–	45	245	225	350	75	625	540	–	315	75	195	28
9	805	300	265	140	425	330	265	–	50	280	265	420	50	735	625	–	350	90	225	35
11	960	360	330	190	515	375	320	–	60	350	320	500	40	875	770	–	440	95	280	35
13	1100	415	350	–	580	430	–	150	70	350	370	580	40	1020	870	–	490	115	315	42
15	1295	500	430	–	545	430	–	120	80	450	442	600	10	1115	1025	–	450	135	370	48
17	1410	550	430	–	615	470	–	150	80	445	490	670	–	1235	1170	130	530	120	425	42
19	1590	630	475	–	690	510	–	190	90	445	555	760	–	1395	1290	150	590	150	465	48

规格 Size	尺寸mm Dimensions in mm			润滑油 Oil	重量 Weight (kg)
	输出轴 Output			轴封 Shaft seal (l)	
	d_2 1)	G_2	l_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

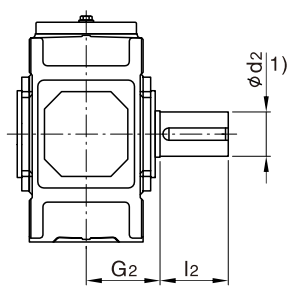
平行轴减速机 Helical Reductors　　两级传动 Two stage　　卧式安装 Horizontal

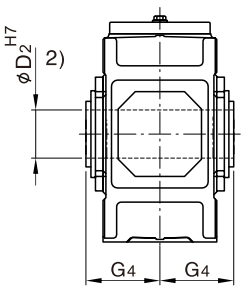
类型 WH2.H　Type WH2.H　　规格 3...12 Sizes 3...12

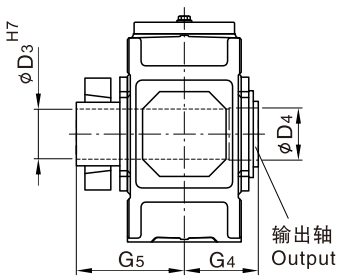
WH2SH WH2HH WH2DH

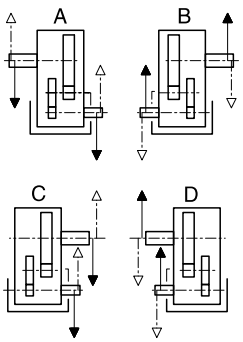


★ 输出轴 Output			布置形式 Design
WH2SH 实心轴 Solid shaft	WH2HH 空心轴 Hollow shaft	WH2DH 带胀紧盘的空心轴 Hollow shaft for shrink disk	









1) k6≤ Φ50　m6 > Φ50

有关平键GB/T1095-1979型和中心孔，参见第279-280页。For parallel key GB/T1095-1979 and for centre hole,see page 279-280.

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

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

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

平行轴减速机 Helical Reductors　两级传动 Two stage　卧式安装 Horizontal
类型 WH2.H　Type WH2.H　规格 3...12　Sizes 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)	l1	l3	d1 1)	l1	l3	d1 1)	l1	l3	d1 1)	l1	l3		
3	35	60	–				28	50					135	–
4	45	100	80				32	80	60				170	190
5	50	100	80				38	80	60				195	215
6				50	100	80				38	80	60	195	215
7	60	135	105				50	110	80				210	240
8				60	135	105				50	110	80	210	240
9	75	140	110				60	140	110				240	270
10				75	140	110				60	140	110	240	270
11	90	165	130				70	140	105				275	310
12				90	165	130				70	140	105	275	310

规格 Size	尺寸mm Dimensions in mm											
	减速机 Reductors											
	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

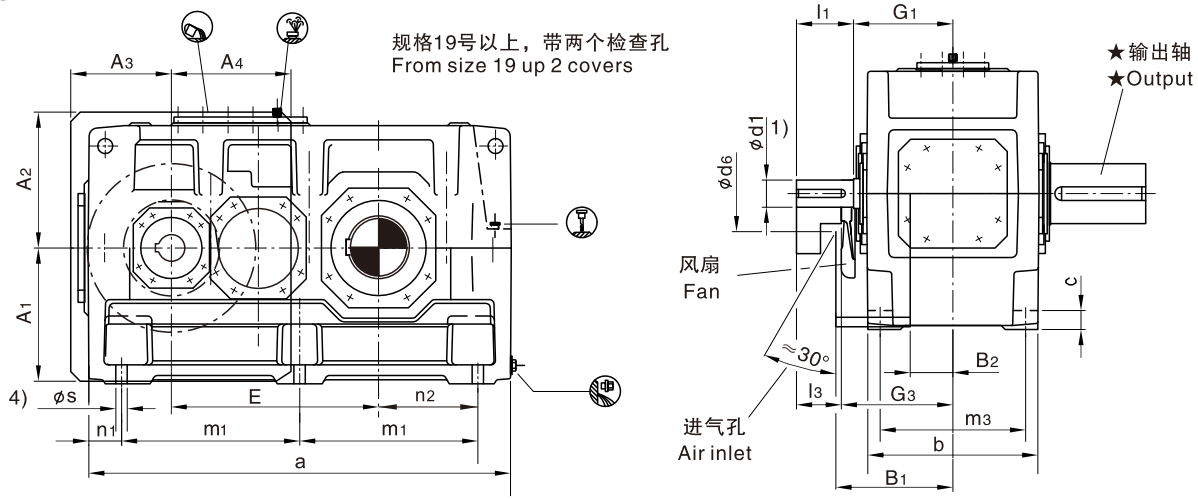
规格 Size	尺寸mm Dimensions in mm											
	减速机 Reductors											
	E	g	h	h5	H	m1	m3	n1	n2	n3	n4	s
3	220	71	175	110	360	290	160	80	65	285	132.5	15
4	270	77.5	200	110	415	355	180	105	85	345	150	19
5	315	97.5	230	150	482	430	220	105	100	405	180	19
6	350	97.5	230	150	482	510	220	105	145	440	180	19
7	385	114	280	190	572	545	260	120	130	500	215	24
8	430	114	280	190	582	650	260	120	190	545	215	24
9	450	140	320	205	662	635	320	145	155	585	245	28
10	500	140	320	215	662	735	320	145	205	635	245	28
11	545	161	380	250	782	775	370	165	180	710	300	35
12	615	161	380	250	790	930	370	165	265	780	300	35

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil	重量 Weight (kg)
	输出轴 Output									轴封 Shaft seal (l)	
	WH2SH			WH2HH		WH2DH					
	d2 1)	G2	l2	D2 2)	G4	D3	D4	G4	G5		
3	65	125	140	65	125	70	70	125	180	6	115
4	80	140	170	80	140	85	85	140	205	10	190
5	100	165	210	95	165	100	100	165	240	15	300
6	110	165	210	105	165	110	110	165	240	16	355
7	120	195	210	115	195	120	120	195	280	27	505
8	130	195	250	125	195	130	130	195	285	30	590
9	140	235	250	135	235	140	145	235	330	42	830
10	160	235	300	150	235	150	155	235	350	45	960
11	170	270	300	165	270	165	170	270	400	71	1335
12	180	270	300	180	270	180	185	270	405	76	1615

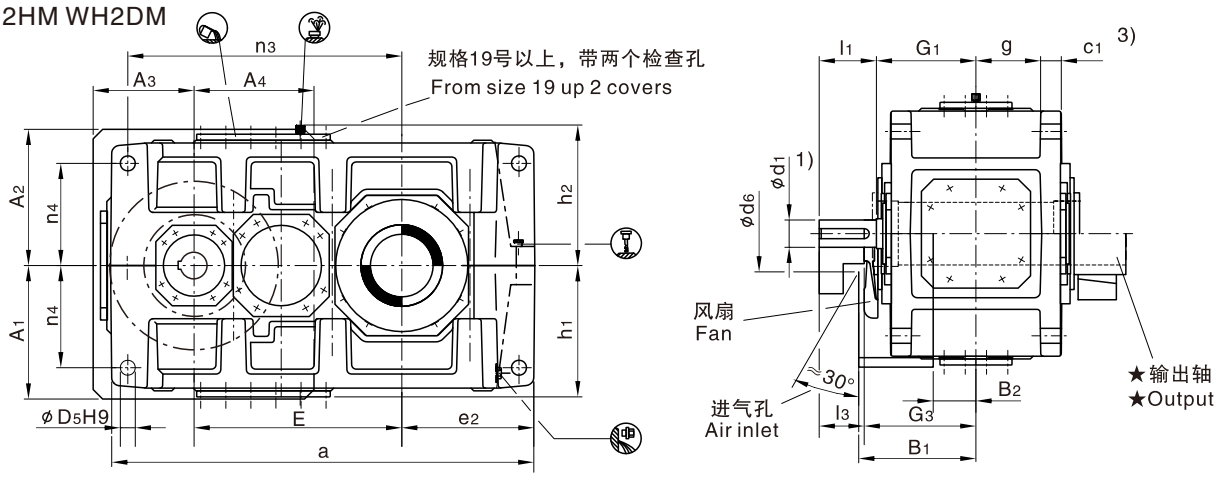
平行轴减速机 Helical Reductors　两级传动 Two stage　卧式安装 Horizontal

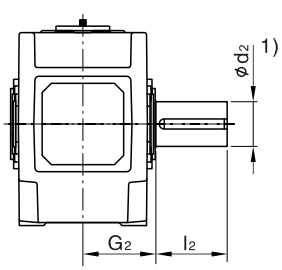
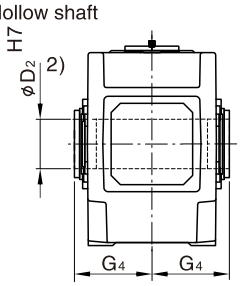
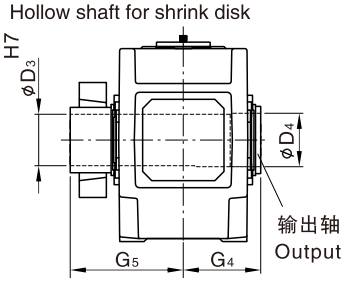
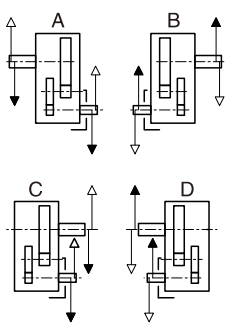
类型 WH2.H, WH2.M Types WH2.H, WH2.M　规格 13...22 Sizes 13...22

WH2SH WH2HH WH2DH



WH2HM WH2DM



★ 输出轴 Output			布置形式 Design
WH2SH 实心轴 Solid shaft	WH2HH[5], WH2HM[5] 空心轴 Hollow shaft	WH2DH[5], WH2DM[5] 带胀紧盘的空心轴 Hollow shaft for shrink disk	
			

1) $k_6 \leqslant \Phi\ 50$　$m_6 > \Phi\ 50$
有关平键 GB/T1095–1979 型和中心孔，参见第 279–280 页。 For parallel key GB/T1095–1979 and for center hole ,see page 279–280.

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

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

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

5) 规格 13 和 15 号：速比只有 i_N=6.3–18; 规格 17 和 19 号：速比只有 i_N=6.3–16 。
Sizes 13 and 15 :only i_N=6.3–18;Sizes 17 and 19:only i_N=6.3–16.

平行轴减速机 Helical Reductors　两级传动 Two Stage　卧式安装 Horizontal
类型 WH2.H, WH2.M Types WH2.H, WH2.M　规格 13...22 Sizes 13...22

规格 Size	尺寸mm Dimension in mm																			
	输入轴 Input																			
	i_N=6.3–11.2			i_N=7.1–12.5			i_N=8–14			i_N=12.5–20			i_N=14–22.4			i_N=16–25			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
13	100	205	170							85	170	135							330	365
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 Dimension in mm													
	减速机 Reductors													
	a	A_1	A_2	A_3	A_4	b	B_1	B_2	c	c_1	d_6	D_5	e_2	E
13	1290	430	460	330	365	550	385	135	60	61 ± 2	250	48	405	635
14	1430	430	460	330	365	550	385	135	60	61 ± 2	250	48	475	705
15	1550	490	500	370	440	625	430	155	70	72 ± 2	280	55	485	762
16	1640	490	500	370	440	625	430	155	70	72 ± 2	280	55	530	808
17	1740	540	565	435	505	690	485	140	80	81 ± 2	280	55	525	860
18	1860	540	565	435	505	690	485	140	80	81 ± 2	280	55	585	920
19	2010	600	600	500	450	790	540	190	90	91 ± 2	310	65	590	997
20	2130	600	600	500	450	790	540	190	90	91 ± 2	310	65	650	1057
21	2140	680	680	500	610	830	565	200	100	100 ± 2	450	75	655	1067
22	2250	680	680	500	610	830	565	200	100	100 ± 2	450	75	710	1122

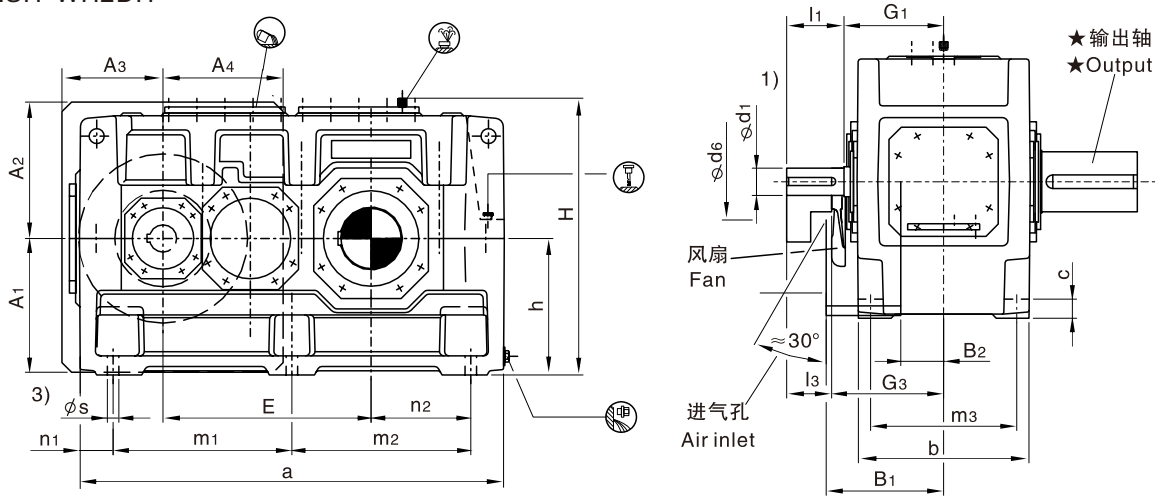
规格 Size	尺寸mm Dimension in mm												
	减速机 Reductors												
	g	h	h_1	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
13	211.5	440	450	460	900	545	545	475	100	305	835	340	35
14	211.5	440	450	460	900	545	685	475	100	375	905	340	35
15	238	500	490	500	1000	655	655	535	120	365	1005	375	42
16	238	500	490	500	1000	655	745	535	120	410	1050	375	42
17	259	550	555	560	1110	735	735	600	135	390	1145	425	42
18	259	550	555	560	1110	735	855	600	135	450	1205	425	42
19	299	620	615	620	1240	850	850	690	155	435	1345	475	48
20	299	620	615	620	1240	850	970	690	155	495	1405	475	48
21	310	700	685	690	1390	900	900	720	170	485	1400	520	56
22	310	700	685	690	1390	900	1010	720	170	540	1455	520	56

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Gear units									WH2.H	WH2.M		
	WH2SH			WH2HH5) WH2HM5)		WH2DH5) WH2DM5)				轴封 Shaft seal (l)		WH2.H	WH2.M
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5			(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	135	110	2000	1880
14	210	335	350	210	335	210	215	335	480	140	115	2570	2430
15	230	380	410	230	380	230	235	380	550	210	160	3430	3240
16	240	380	410	240	380	240	245	380	550	215	165	3655	3465
17	250	415	410	250	415	250	260	415	600	290	230	4650	4420
18	270	415	470	275	415	280	285	415	600	300	240	5125	4870
19	290	465	470	–	–	285	295	465	670	320	300	5250	5000
20	300	465	500	–	–	310	315	465	670	340	320	6550	6150
21	320	490	500	–	–	330	335	490	715	320	350	7200	6950
22	340	490	550	–	–	340	345	490	725	340	370	7800	7550

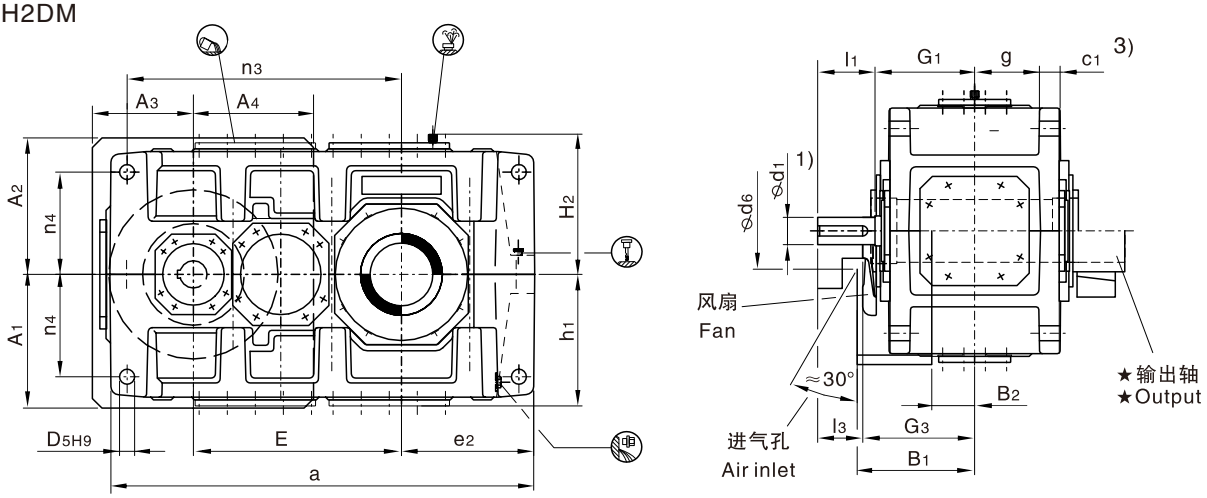
平行轴减速机 Helical Reductors 两级传动 Two Stage 卧式安装 Horizontal

类型 WH2.H, WH2.M Types WH2.H, WH2.M 规格 23...26 Sizes 23...26

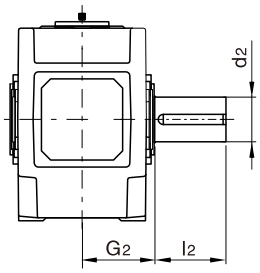
WH2SH WH2DH

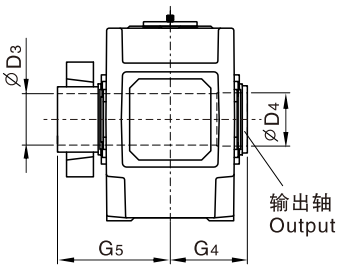


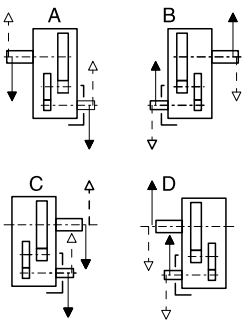
WH2DM



★ 输出轴 Output		布置形式 Design
WH2SH 实心轴 Solid shaft	WH2DM, WH2DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	







1) k6≤Φ50 m6>Φ50

有关平键 GB/T1095-1979型和中心孔,参见第279-280页。 For parallel key GB/T1095-1979 and for center hole,see page 279-280 .

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

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

平行轴减速机 Helical Reductors　两级传动 Two stage　卧式安装 Horizontal

类型 WH2.H, WH2.M　Types WH2.H, WH2.M　规格 23...26　Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm													
	输入轴 Input													
	i_N = 6.3 – 11.2			i_N = 7.1 – 12.5			i_N = 12.5 – 20			i_N = 14 – 22.4			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
23	190	330	280				150	250	200				560	610
24				190	330	280				150	250	200	560	610
25	200	340	290				170	300	250				600	650
26				200	340	290				170	300	250	600	650

规格 Size	尺寸mm Dimensions in mm													
	减速机 Reductors													
	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

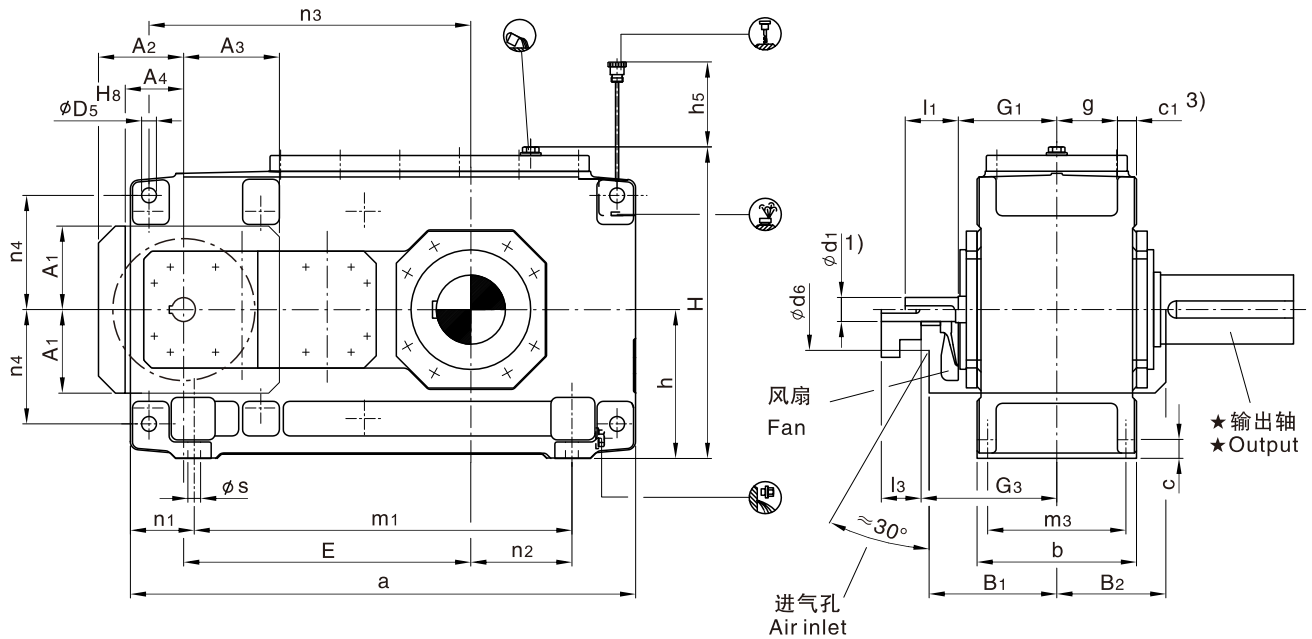
规格 Size	尺寸mm Dimensions in mm												
	减速机 Reductors												
	g	h	h_1	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
23	342	780	770	770	1550	1010	1010	810	180	550	1560	580	56
24	342	780	770	770	1550	1010	1140	810	180	615	1625	580	56
25	400	860	860	860	1720	1090	1090	910	200	590	1685	660	66
26	400	860	860	860	1720	1090	1270	910	200	680	1775	660	66

规格 Size	尺寸 mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output										
	WH2SH			WH2DH WH2DM				WH2.H	WH2.M	WH2.H	WH2.M
	d_2 1)	G_2	l_2	D_3	D_4	G_4	G_5	(l)	(l)	(kg)	(kg)
23	360	540	590	360	365	540	785	430	470	11600	11000
24	380	540	590	380	385	540	805	450	500	13000	12300
25	400	605	650	400	405	605	875	600	660	15500	14700
26	420	605	650	430	435	605	900	640	700	17200	16200

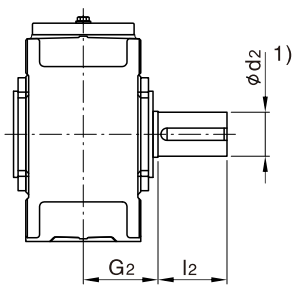
平行轴减速机 Helical Reductors　三级传动 Three Stage　卧式安装 Horizontal

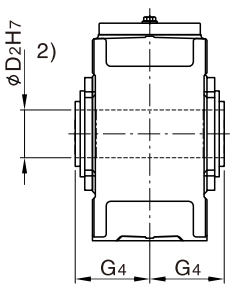
类型 WH3.H Types WH3.H　规格 5...12 Sizes 5...12

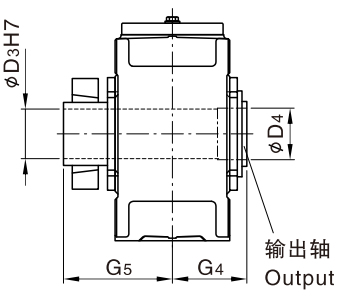
WH3SH WH3HH WH3DH

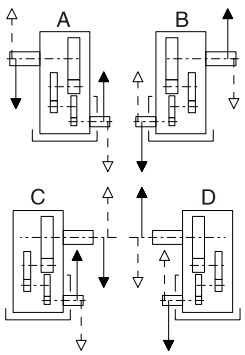


★ 输出轴 Output			布置形式 Design
WH3SH 实心轴 Solid shaft	WH3HH 空心轴 Hollow shaft	WH3DH 带胀紧盘的空心轴 Hollow shaft for shrink disk	









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

有关平键 GB/T1095–1979 型和中心孔，参见第 279–280 页。For parallel key GB/T1095–1979 and for center hole,see page 279–280.

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

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

平行轴减速机 Helical Reductors　三级传动 Three Stage　卧式安装 Horizontal

类型 WH3.H Types WH3.H　规格 5...12 Sizes 5...12

规格 Size	尺寸mm Dimensions in mm																			
	输入轴 Input																			
	i_N = 25 – 45			i_N = 31.5 – 56			i_N = 50 – 63			i_N = 63 – 80			i_N = 71 – 90			i_N = 90 – 112			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
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											
	减速机 Reductors											
	a	A_1	A_2	A_3	A_4	b	B_1	B_2	c	c_1	d_6	D_5
5	690	137	135	140	80	255	215	175	28	30 ± 1	60	24
6	770	137	135	140	80	255	215	175	28	30 ± 1	60	24
7	845	157	160	180	100	300	245	205	35	36 ± 1	75	28
8	950	157	160	180	100	300	245	205	35	36 ± 1	75	28
9	1000	182	190	205	120	370	295	240	40	45 ± 1.5	90	36
10	1100	182	190	205	120	370	295	240	40	45 ± 1.5	90	36
11	1200	218	220	255	150	430	325	280	50	54 ± 1.5	100	40
12	1355	218	220	255	150	430	325	280	50	54 ± 1.5	100	40

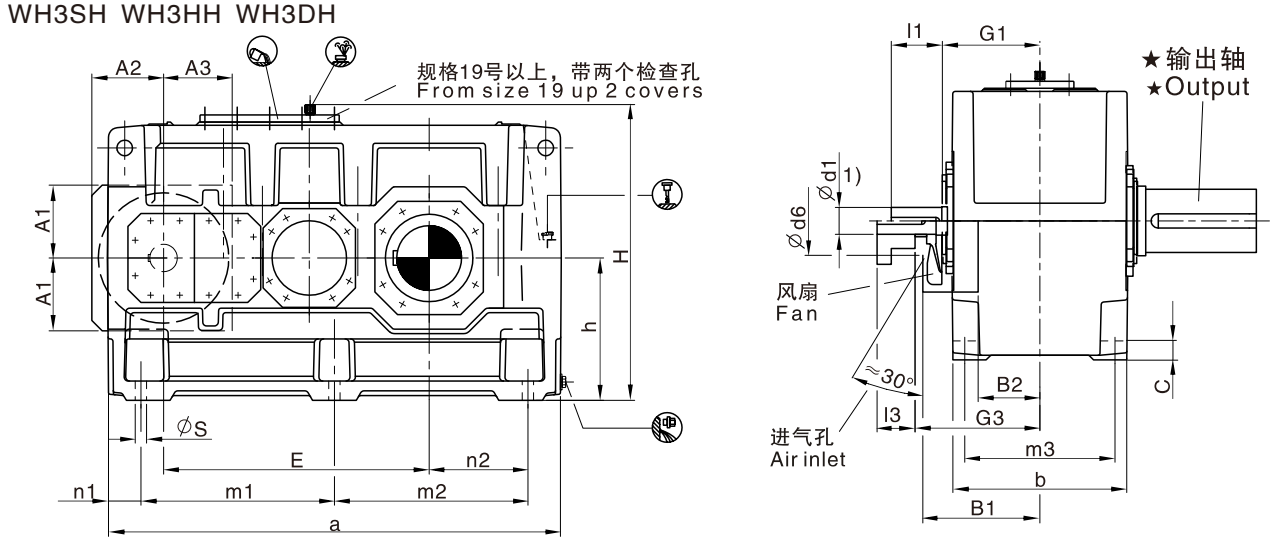
规格 Size	尺寸mm Dimensions in mm											
	减速机 Reductors											
	E	g	h	h_5	H	m_1	m_3	n_1	n_2	n_3	n_4	s
5	405	97.5	230	130	482	480	220	105	100	455	180	19
6	440	97.5	230	130	482	560	220	105	145	490	180	19
7	495	114	280	170	572	605	260	120	130	560	215	24
8	540	114	280	160	582	710	260	120	190	605	215	24
9	580	140	320	185	662	710	320	145	155	660	245	28
10	630	140	320	185	662	810	320	145	205	710	245	28
11	705	161	380	180	782	870	370	165	180	805	300	35
12	775	161	380	170	790	1025	370	165	265	875	300	35

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WH3SH			WH3HH		WH3DH					
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
5	100	165	210	95	165	100	100	165	240	15	320
6	110	165	210	105	165	110	110	165	240	17	365
7	120	195	210	115	195	120	120	195	280	28	540
8	130	195	250	125	195	130	130	195	285	30	625
9	140	235	250	135	235	140	145	235	330	45	875
10	160	235	300	150	235	150	155	235	350	46	1020
11	170	270	300	165	270	165	170	270	400	85	1400
12	180	270	300	180	270	180	185	270	405	90	1675

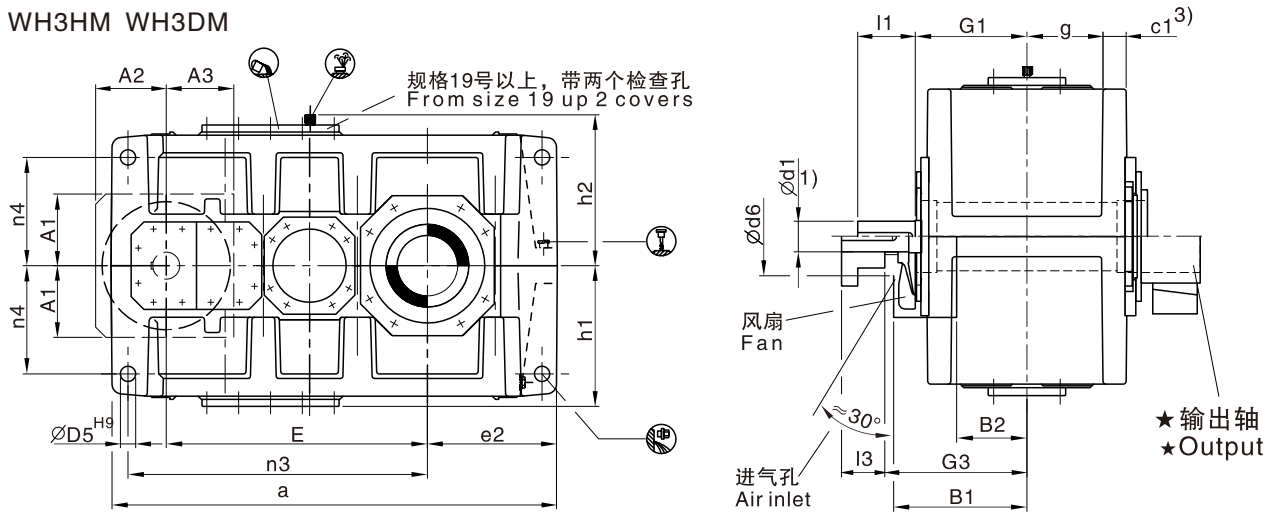
平行轴减速机 Helical Reductors 三级传动 Three Stage 卧式安装 Horizontal

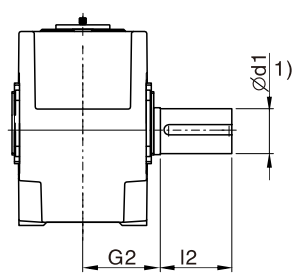
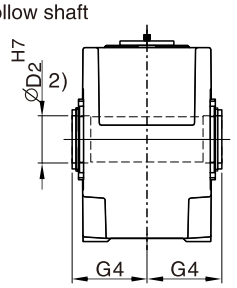
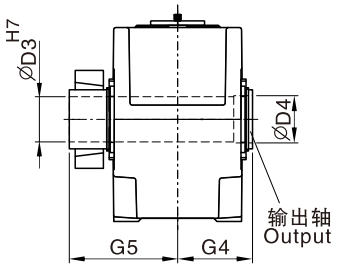
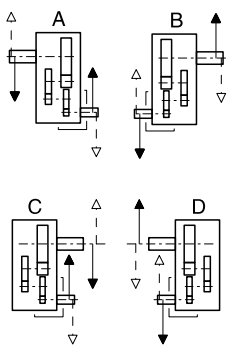
类型 WH3.H, WH3.M Types WH3.H, WH3.M 规格 13 . . . 22 Sizes 13 . . . 22

WH3SH WH3HH WH3DH



WH3HM WH3DM



★ 输出轴 Output			布置形式 Design
WH3SH 实心轴 Solid shaft	WH3HH, WH3HM 空心轴 Hollow shaft	WH3DH, WH3DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	
			

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

有关平键 GB/T1095–1979型和中心孔,参见第279–280 页。 For parallel key GB/T1095–1979 and for center hole,see page 279–280.

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.

平行轴减速机 Helical Reductors 三级传动 Three Stage 卧式安装 Horizontal

类型 WH3.H, WH3.M Types WH3.H, WH3.M 规格 13 . . . 22 Sizes 13 . . . 22

规格 Size	尺寸 mm Dimensions in mm																			
	输入轴 Input																			
	i_N = 22.4 – 45			i_N = 25 – 50 *) i_N = 28 – 56			i_N = 50 – 63			i_N = 56–71 i_N = 63–80 *)			i_N = 71 – 90			i_N = 80–100 *) i_N = 90 – 112			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
13	85	160	130				60	135	105				50	110	80				310	385
14				85	160	130				60	135	105				50	110	80	310	385
15	100	200	165				75	140	105				60	140	105				350	420
16				100	200	165				75	140	105				60	140	105	350	420
17	100	200	165				75	140	105				60	140	105				380	450
18				100	200	165				75	140	105				60	140	105	380	450
19	110	200	4)				90	165	4)				75	140	4)				430	4)
20				110	200	4)				90	165	4)				75	140	4)	430	4)
21	130	240	4)				110	205	4)				90	170	4)				470	4)
22				130	240	4)				110	205	4)				90	170	4)	470	4)

* 仅指规格14号齿轮箱 Only size 14

规格 Size	尺寸 mm Dimensions in mm												
	减速机 Reductors												
	a	A_1	A_2	A_3	b	B_1	B_2	c	c_1	d_6	D_5	e_2	E
13	1395	225	225	212	550	380	195	60	61 ± 2	120	48	405	820
14	1535	225	225	212	550	380	195	60	61 ± 2	120	48	475	890
15	1680	270	265	252	625	415	205	70	72 ± 2	150	55	485	987
16	1770	270	265	252	625	415	205	70	72 ± 2	150	55	530	1033
17	1770	270	265	252	690	445	235	80	81 ± 2	150	55	525	1035
18	1890	270	265	252	690	445	235	80	81 ± 2	150	55	585	1095
19	2030	4)	4)	4)	790	4)	4)	90	91 ± 2	4)	65	590	1190
20	2150				790			90	91 ± 2		65	650	1250
21	2340				830			100	100 ± 2		75	655	1387
22	2450				830			100	100 ± 2		75	710	1442

规格 Size	尺寸 mm Dimensions in mm												
	减速机 Reductors												
	g	h	h_1	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
13	211.5	440	450	460	900	597.5	597.5	475	100	305	940	340	35
14	211.5	440	450	460	900	597.5	737.5	475	100	375	1010	340	35
15	238	500	490	500	1000	720	720	535	120	365	1135	375	42
16	238	500	490	500	1000	720	810	535	120	410	1180	375	42
17	259	550	555	560	1110	750	750	600	135	390	1175	425	42
18	259	550	555	560	1110	750	870	600	135	450	1235	425	42
19	299	620	615	620	1240	860	860	690	155	435	1365	475	48
20	299	620	615	620	1240	860	980	690	155	495	1425	475	48
21	310	700	685	690	1390	1000	1000	720	170	485	1615	520	56
22	310	700	685	690	1390	1000	1110	720	170	540	1670	520	56

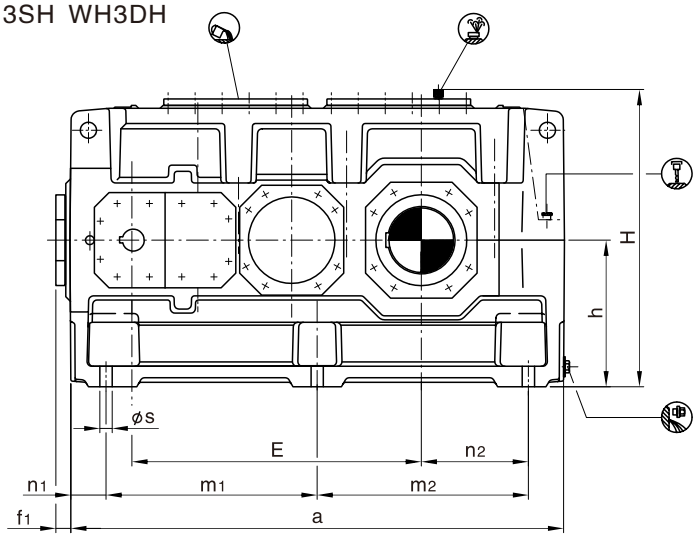
规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Output												
	WH3SH			WH3HH WH3HM		WH3DH WH3DM				WH3.H	WH3.M	WH3.H	WH3.M
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5	(l)	(l)	(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	160	125	2295	2155
14	210	335	350	210	335	210	215	335	480	165	130	2625	2490
15	230	380	410	230	380	230	235	380	550	235	190	3475	3260
16	240	380	410	240	380	240	245	380	550	245	195	3875	3625
17	250	415	410	250	415	250	260	415	600	305	240	4560	4250
18	270	415	470	275	415	280	285	415	600	315	250	5030	4740
19	290	465	470	–	–	285	295	465	670	420	390	5050	4750
20	300	465	500	–	–	310	315	465	670	450	415	6650	6250
21	320	490	500	–	–	330	335	490	715	470	515	6950	6550
22	340	490	550	–	–	340	345	490	725	490	540	7550	7050

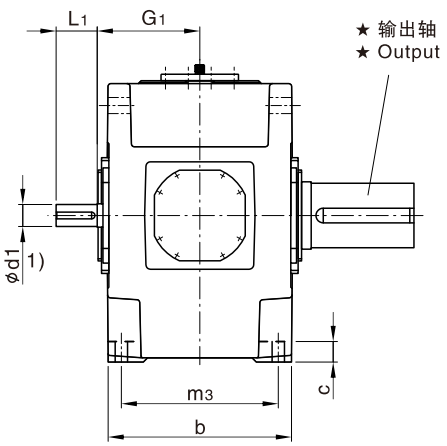
4)根据用户要求供货 On request

平行轴减速机 Helical Reductors　　三级传动 Three Stage　　卧式安装 Horizontal

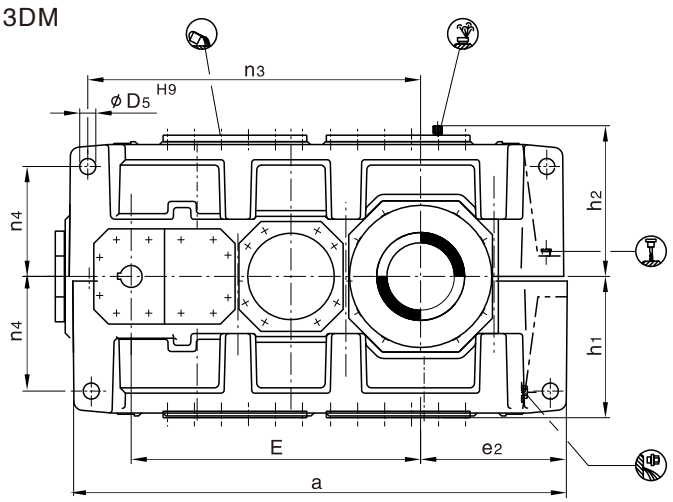
类型 WH3.H, WH3.M　Types WH3.H, WH3.M　　规格 23...26 Sizes 23...26

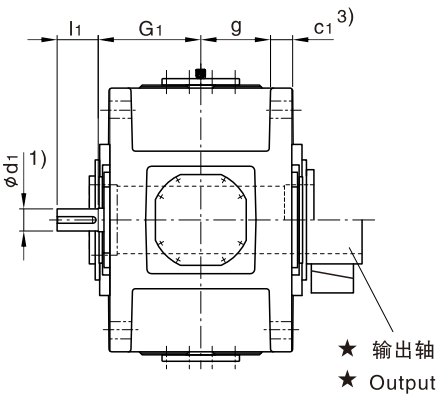
WH3SH WH3DH



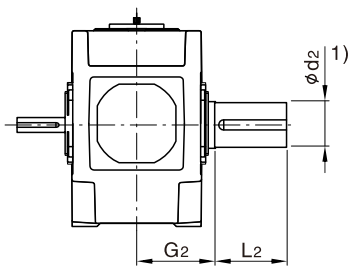


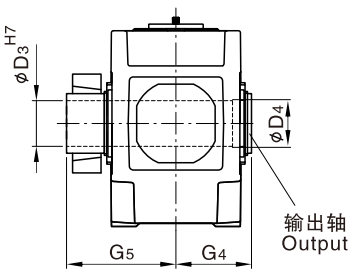
WH3DM

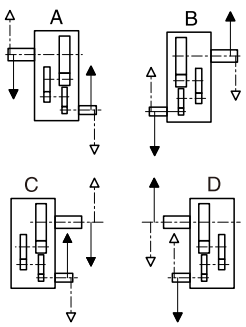




★输出轴 Output		布置形式 Design
WH3SH 实心轴 Solid Shaft	WH3DH, WH3DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	







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 279–280 页。 For parallel key GB/T1095–1979 and for center hole,see page 279–280 .

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.

平行轴减速机 Helical Reductors　　三级传动 Three Stage

卧式安装 Horizontal　　类型 WH3.H, WH3.M Types WH3.H, WH3.M

规格 23...26 Sizes 23...26

规格 Size	尺寸mm Dimensions in mm												
	输入轴 Input												
	i_N = 22.4 – 45		i_N = 25 – 50		i_N = 50 – 63		i_N = 56 – 71		i_N = 71 – 90		i_N = 80 – 100		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
23	130	240			110	205			90	170			510
24			130	240			110	205			90	170	510
25	150	245			130	245			100	210			570
26			150	245			130	245			100	210	570

规格 Size	尺寸mm Dimensions in mm										
	减速机 Reductors										
	a	b	c	c_1	D_5	e_2	E	f_1	g	h	h_1
23	2530	930	115	120 ± 2	80	730	1505	35	342	780	770
24	2660	930	115	120 ± 2	80	795	1570	35	342	780	770
25	2830	1045	130	120 ± 2	90	790	1659	65	400	860	860
26	3010	1045	130	120 ± 2	90	880	1785	65	400	860	860

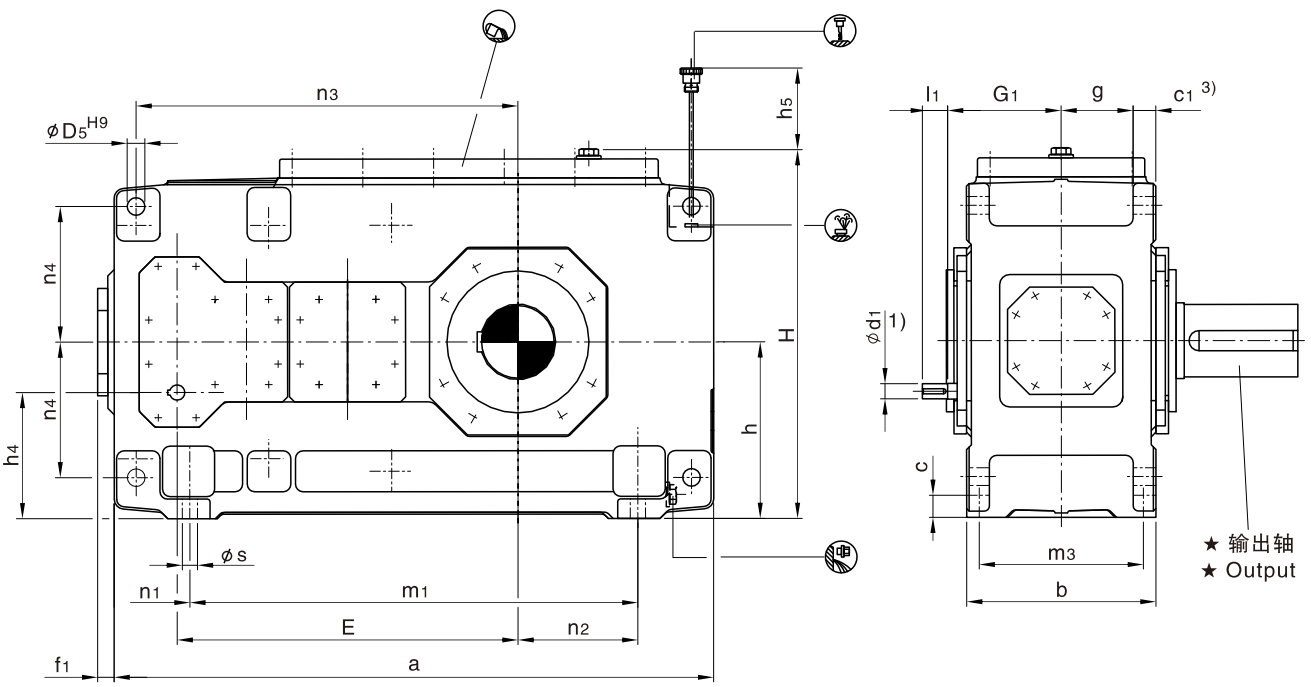
规格 Size	尺寸mm Dimensions in mm									
	减速机 Reductors									
	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
23	790	1570	1085	1085	810	180	550	1725	580	56
24	790	1570	1085	1215	810	180	615	1790	580	56
25	860	1720	1215	1215	910	200	590	1965	660	66
26	860	1720	1215	1395	910	200	680	2055	660	66

规格 Size	尺寸mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output										
	WH3SH			WH3DH WH3DM				WH3.H	WH3.M	WH3.H	WH3.M
	D_2 1)	G_2	l_2	D_3	D_4	G_4	G_5	(1)	(1)	(Kg)	(Kg)
23	360	540	590	360	365	540	785	620	690	11500	10600
24	380	540	590	380	385	540	805	650	725	13400	12500
25	400	605	650	400	405	605	875	880	970	16100	15200
26	420	605	650	430	435	605	900	935	1030	17600	16500

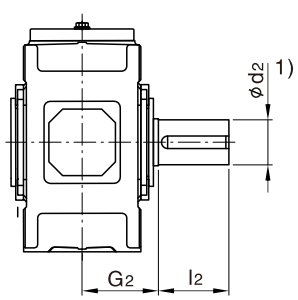
平行轴减速机 Helical Reductors　　四级传动 Four Stage　　卧式安装 Horizontal

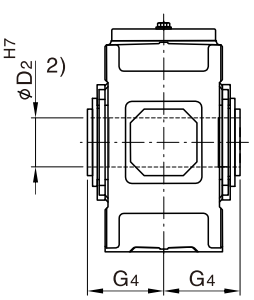
类型 WH4.H Types WH4.H　　规格 7...12 Size 7...12

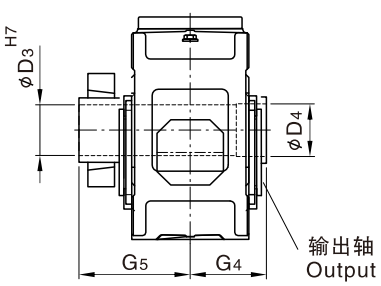
WH4SH WH4HH WH4DH

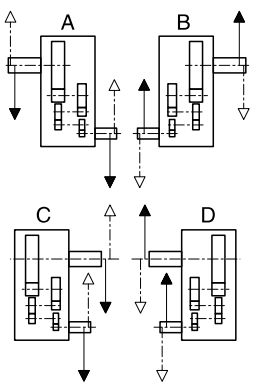


★输出轴 Output			布置形式 Design
WH4SH 实心轴 Solid shaft	WH4HH 空心轴 Hollow shaft	WH4DH 带胀紧盘的空心轴 Hollow shaft for shrink disk	









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 279–280 页。　For parallel key GB/T1095–1979 and for centre hole,see page 279–280.

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.

平行轴减速机 Helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

类型 WH4.H Types WH4.H　规格 7...12 Sizes 7...12

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i_N = 100 – 180		i_N = 125 – 224		i_N = 200 – 355		i_N = 250 – 450		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
7	30	50			24	40			180
8			30	50			24	40	180
9	35	60			28	50			215
10			35	60			28	50	215
11	45	100			32	80			250
12			45	100			32	80	250

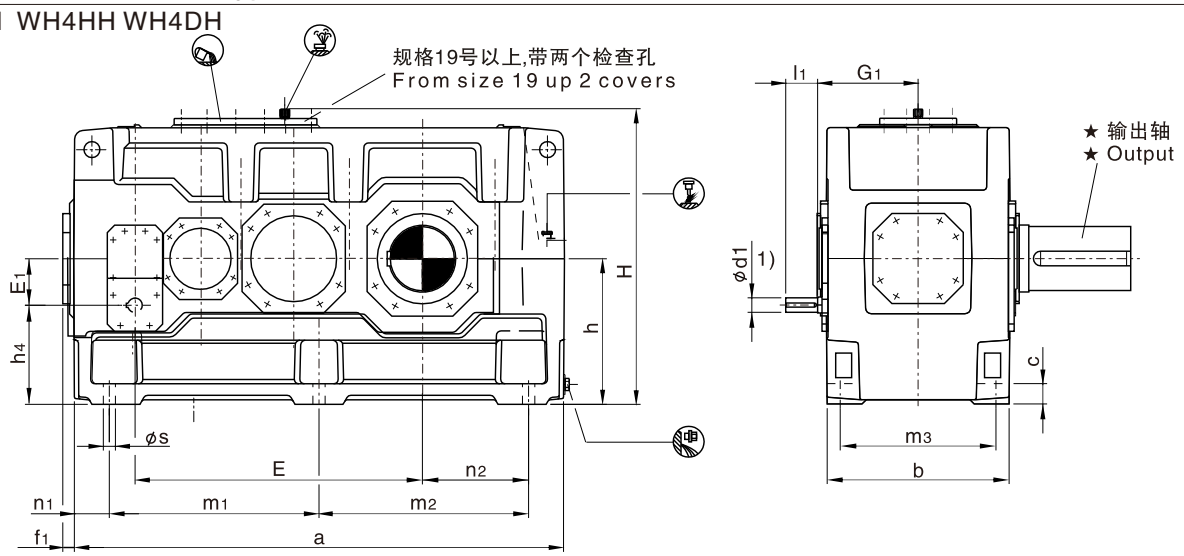
规格 Size	尺寸 mm Dimensions in mm																		
	减速机 Reductors																		
	a	b	c	c_1	D_5	E	f_1	g	h	h_4	h_5	H	m_1	m_3	n_1	n_2	n_3	n_4	s
7	845	300	35	36 ± 1	28	495	37	114	280	200	140	572	605	260	120	130	560	215	24
8	950	300	35	36 ± 1	28	540	37	114	280	200	140	582	710	260	120	190	605	215	24
9	1000	370	40	45 ± 1.5	36	580	43	140	320	230	150	662	710	320	145	155	660	245	28
10	1100	370	40	45 ± 1.5	36	630	43	140	320	230	150	662	810	320	145	205	710	245	28
11	1200	430	50	54 ± 1.5	40	705	47	161	380	270	165	782	870	370	165	180	805	300	35
12	1355	430	50	54 ± 1.5	40	775	47	161	380	270	165	790	1025	370	165	265	875	300	35

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WH4SH			WH4HH		WH4DH					
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
7	120	195	210	115	195	120	120	195	280	25	550
8	130	195	250	125	195	130	130	195	285	27	645
9	140	235	250	135	235	140	145	235	330	48	875
10	160	235	300	150	235	150	155	235	350	50	1010
11	170	270	300	165	270	165	170	270	400	80	1460
12	180	270	300	180	270	180	185	270	405	87	1725

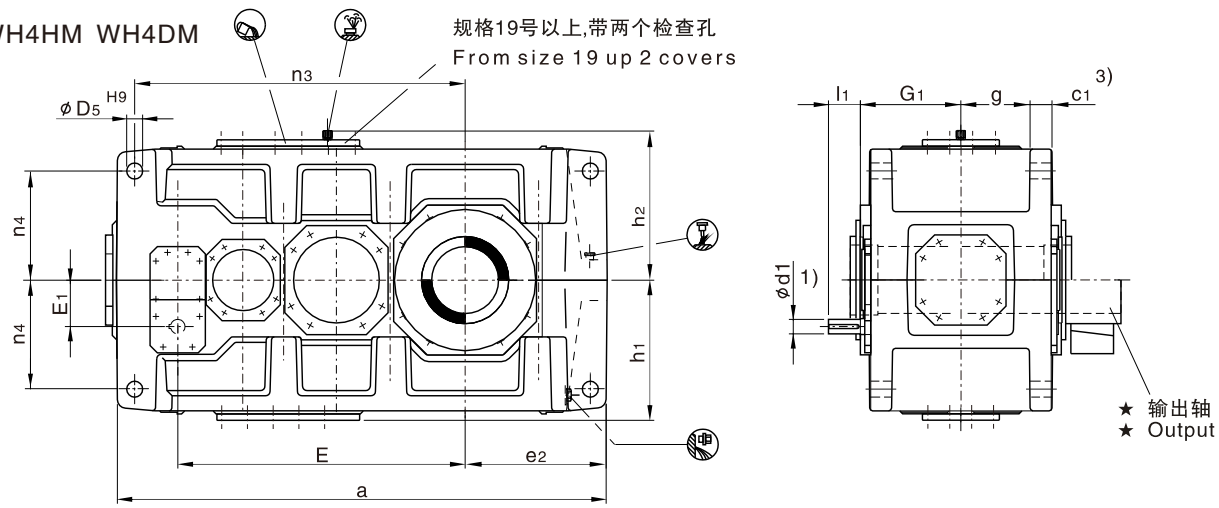
平行轴减速机 Helical Reductors 四级传动 Four Stage 卧式安装 Horizontal

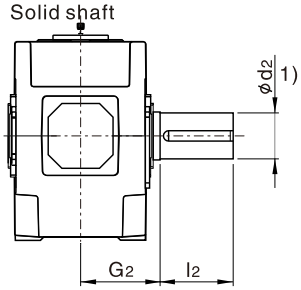
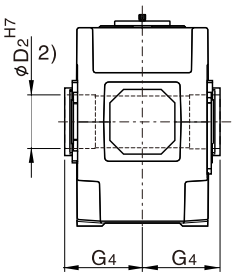
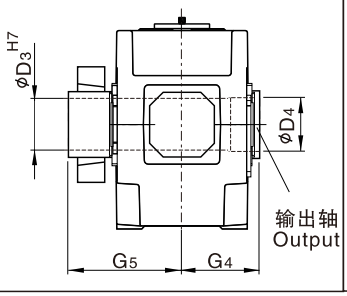
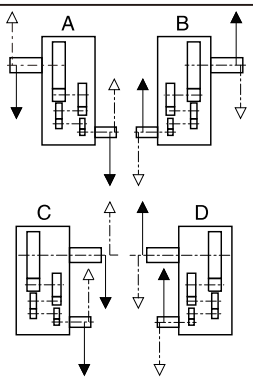
类型 WH4.H, WH4.M Types WH4.H, WH4.M 规格 13 . . . 22 Sizes 13 . . . 22

WH4SH WH4HH WH4DH



WH4HM WH4DM



★ 输出轴 Output			布置形式 Design
WH4SH 实心轴 Solid shaft	WH4HH, WH4HM 空心轴 Hollow shaft	WH4DH, WH4DM 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 279-280 页。For parallel key GB/T1095-1979 and for center hole,see page 279-280.
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.

平行轴减速机 Helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

类型 WH4.H, WH4.M Types WH4.H, WH4.M　规格 13 ...22 Sizes 13...22

规格 Size	尺寸mm Dimensions in mm												
	输入轴 Input												
	i_N = 100 – 180		i_N = 112 – 200		i_N = 125 – 224		i_N = 200 – 355		i_N = 224 – 400		i_N = 250 – 450		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
13	50	100					38	80					305
14					50	100					38	80	305
15	60	135					50	110					345
16			60	135					50	110			345
17	60	105					50	80					380
18			60	105					50	80			380
19	75	105					60	105					440
20			75	105					60	105			440
21	90	165					70	140					460
22			90	165					70	140			460

规格 Size	尺寸mm Dimensions in mm										
	减速机 Reductors										
	a	b	c	c_1	D_5	e_2	E	E_1	f_1	g	h
13	1395	550	60	61 ±2	48	405	820	130	47	211.5	440
14	1535	550	60	61 ±2	48	475	890	130	47	211.5	440
15	1680	625	70	72 ±2	55	485	987	160	56	238	500
16	1770	625	70	72 ±2	55	530	1033	160	56	238	500
17	1770	690	80	81 ±2	55	525	1035	160	53	259	550
18	1890	690	80	81 ±2	55	585	1095	160	53	259	550
19	2030	790	90	91 ±2	65	590	1190	185	53	299	620
20	2150	790	90	91 ±2	65	650	1250	185	53	299	620
21	2340	830	100	100±2	75	655	1387	225	62	310	700
22	2450	830	100	100±2	75	710	1442	225	62	310	700

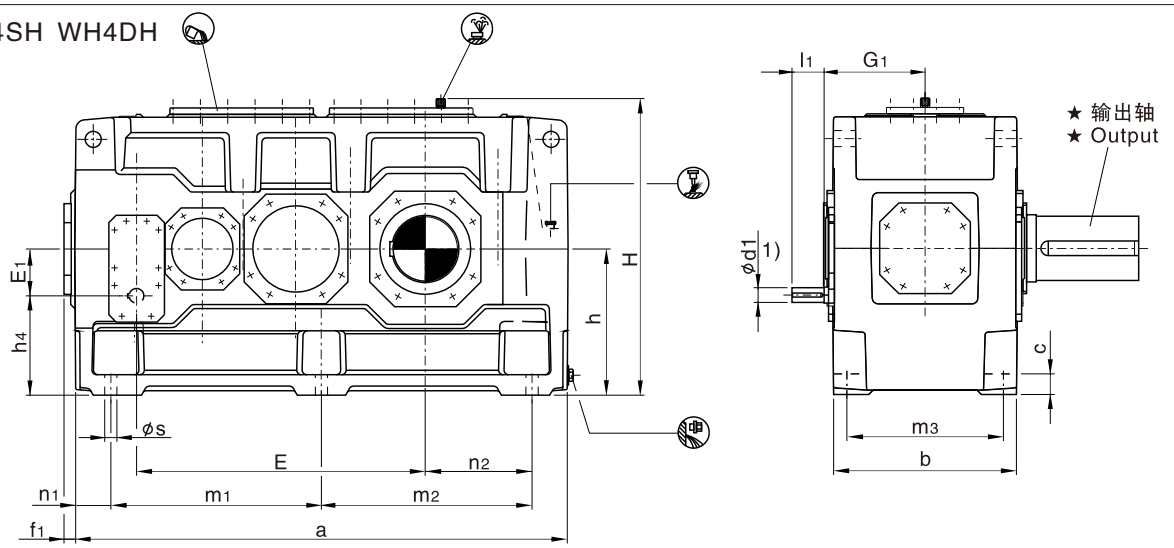
规格 Size	尺寸mm Dimensions in mm											
	减速机 Reductors											
	h_1	h_2	h_4	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
13	450	460	310	900	597.5	597.5	475	100	305	940	340	35
14	450	460	310	900	597.5	737.5	475	100	375	1010	340	35
15	490	500	340	1000	720	720	535	120	365	1135	375	42
16	490	500	340	1000	720	810	535	120	410	1180	375	42
17	555	560	390	1110	750	750	600	135	390	1175	425	42
18	555	560	390	1110	750	870	600	135	450	1235	425	42
19	615	620	435	1240	860	860	690	155	435	1365	475	48
20	615	620	435	1240	860	980	690	155	495	1425	475	48
21	685	690	475	1390	1000	1000	720	170	485	1615	520	56
22	685	690	475	1390	1000	1110	720	170	540	1670	520	56

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Output												
	WH4SH			WH4HH WH4HM		WH4DH WH4DM				WH4.H	WH4.M	WH4.H	WH4.M
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5	(l)	(l)	(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	130	120	2390	2270
14	210	335	350	210	335	210	215	335	480	140	125	2730	2600
15	230	380	410	230	380	230	235	380	550	230	170	3635	3440
16	240	380	410	240	380	240	245	380	550	235	175	3965	3740
17	250	415	410	250	415	250	260	415	600	290	225	4680	4445
18	270	415	470	275	415	280	285	415	600	305	230	5185	4915
19	290	465	470	–	–	285	295	465	670	360	310	5700	5300
20	300	465	500	–	–	310	315	465	670	380	330	6400	5950
21	320	490	500	–	–	330	335	490	715	395	430	7750	7250
22	340	490	550	–	–	340	345	490	725	420	450	8350	7750

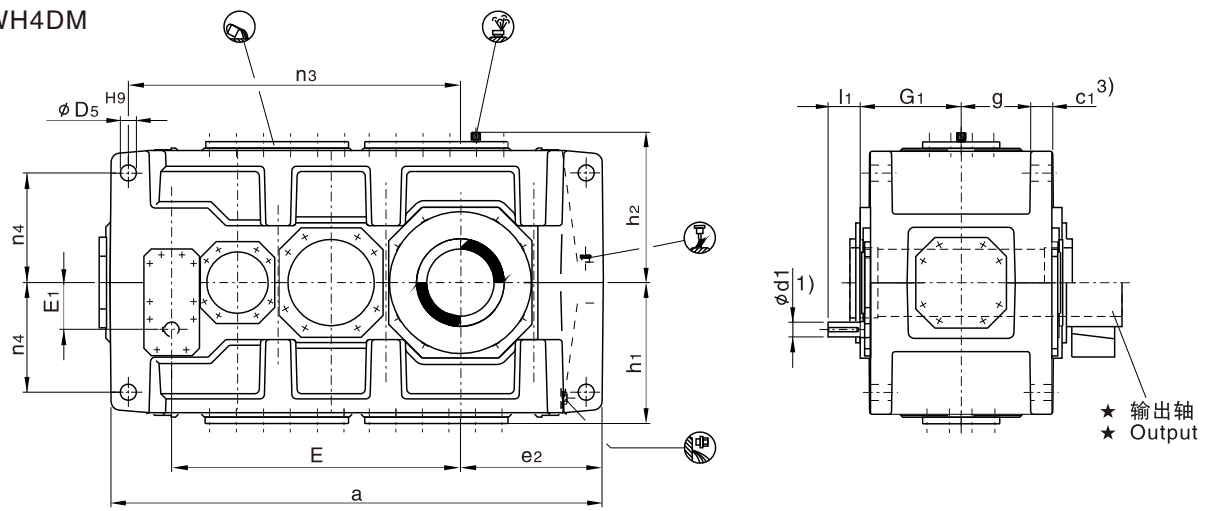
平行轴减速机 Helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

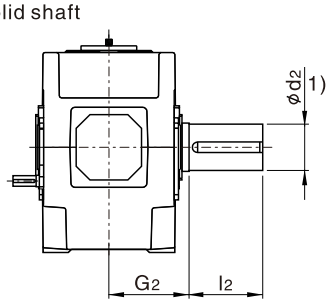
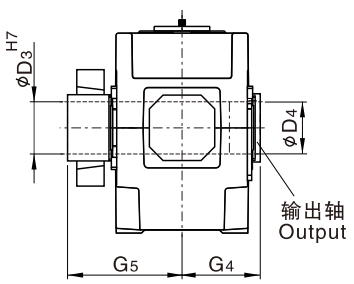
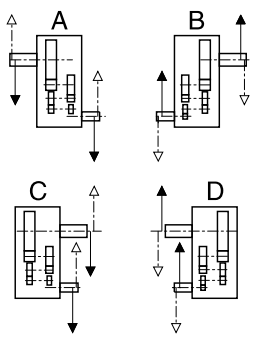
类型 WH4.H, WH4.M　Types WH4.H, WH4.M　规格 23 . . . 26　Sizes 23 . . . 26

WH4SH WH4DH



WH4DM



★ 输出轴 Output		布置形式 Design
WH4SH 实心轴 Solid shaft  	WH4DH, WH4DM 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 279-280页。For parallel key GB/T1095-1979 and for center hole,see page 279-280.
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.

平行轴减速机 Helical Reductors 四级传动 For Stage 卧式安装 Horizontal

类型 WH4.H, WH4.M Types WH4.H, WH4.M 规格 23…26 Sizes 23…26

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i_N = 100 – 180		i_N = 112 – 200		i_N = 200 – 355		i_N = 224 – 400		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
23	90	130			70	105			505
24			90	130			70	105	505
25	100	205			85	170			565
26			100	205			85	170	565

规格 Size	尺寸mm Dimensions in mm										
	减速机 Reductors										
	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

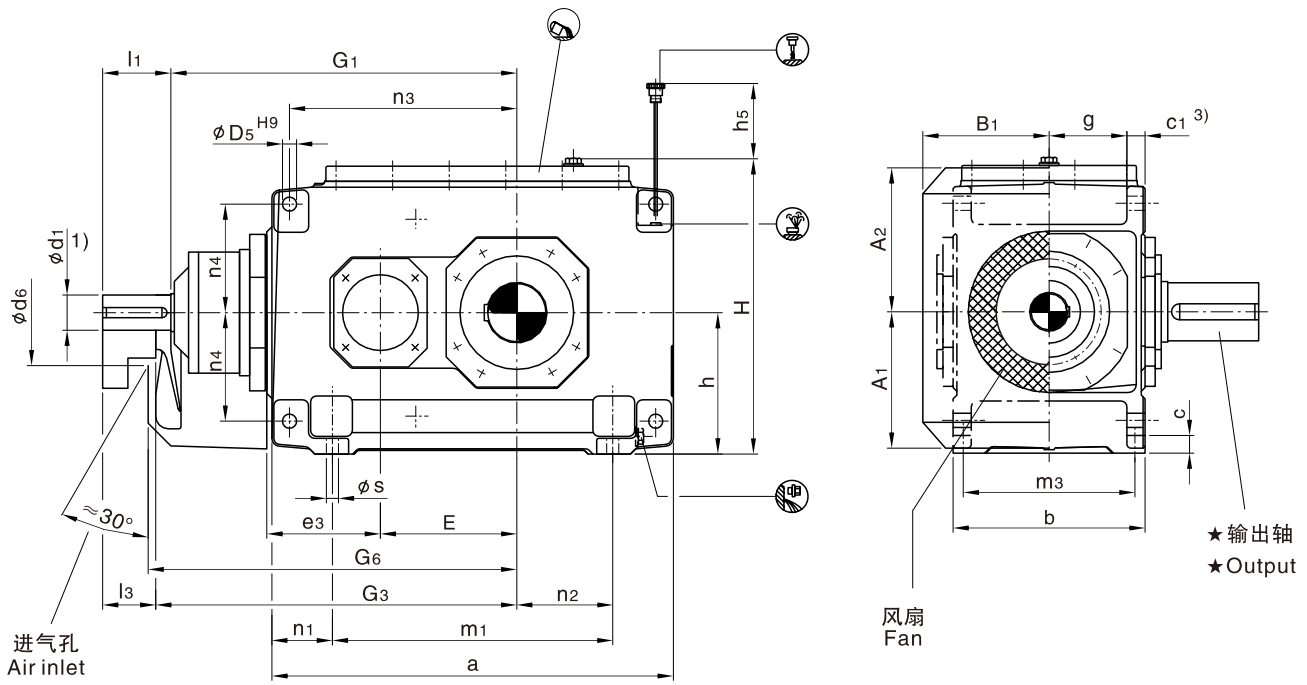
规格 Size	尺寸mm Dimensions in mm											
	减速机 Reductors											
	h_1	h_2	h_4	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
23	770	790	555	1570	1085	1085	810	180	550	1725	580	56
24	770	790	555	1570	1085	1215	810	180	615	1790	580	56
25	860	860	595	1720	1215	1215	910	200	590	1965	660	66
26	860	860	595	1720	1215	1395	910	200	680	2055	660	66

规格 Size	尺寸 mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output										
	WH4SH			WH4DH WH4DM				WH4.H	WH4.M	WH4.H	WH4.M
	d_2 1)	G_2	l_2	D_3	D_4	G_4	G_5	(l)	(l)	(kg)	(kg)
23	360	540	590	360	365	540	785	520	500	11600	10700
24	380	540	590	380	385	540	805	550	600	13500	12600
25	400	605	650	400	405	605	875	735	800	16100	15200
26	420	605	650	430	435	605	900	780	850	17600	16500

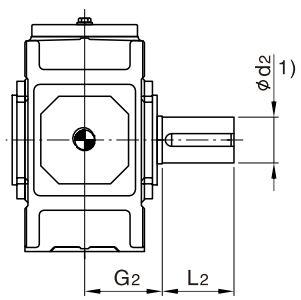
直交轴减速机 Bevel-helical Reductors 二级传动 Two Stage 卧式安装 Horizontal

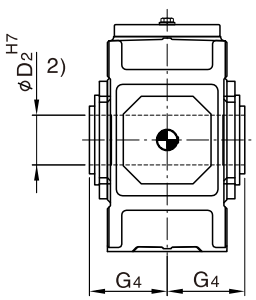
类型 WB2.H Types WB2.H 规格 1...12 Sizes 1...12

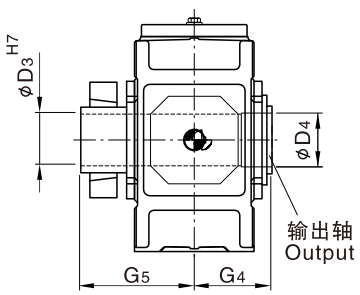
WB2SH WB2HH WB2DH

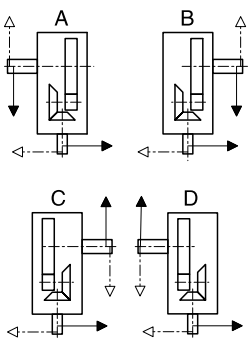


★输出轴Output			布置形式 Design
WB2SH 实心轴 Solid shaft	WB2HH 空心轴 Hollow shaft	WB2DH 带胀紧盘的空心轴 Hollow shaft for shrink disk	









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

有关平键 GB/T1095-1979 型和中心孔,参见第279-280 页。For parallel key GB/T1095-1979 and for centre hole,see page279-280.

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.

直交轴减速机 Bevel-helical Reductors 二级传动 Two Stage

卧式安装 Horizontal 类型 WB2.H Types WB2.H 规格 1...12 Sizes 1...12

规格 Size	尺寸 mm Dimensions in mm										
	输入轴 Input										
	i_N=5–11.2			i_N=6.3–14			i_N=12.5–18			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
1	28	55	40				20	50	35	300	315
2	30	70	50				25	60	40	340	360
3	35	80	60				28	60	40	390	410
4	45	100	80							465	485
5	55	110	80							535	565
6				55	110	80				570	600
7	70	135	105							640	670
8				70	135	105				685	715
9	80	165	130							755	790
10				80	165	130				805	840
11	90	165	130							925	960
12				90	165	130				995	1030

规格 Size	尺寸 mm Dimensions in mm											
	减速机 Reductors											
	a	A_1	A_2	b	B_1	c	c_1	D_5	d_6	e_3	E	g
1	305	125	130	180	128	18	16 ± 1	12	110	90	90	74
2	355	140	145	205	143	18	20 ± 1	14	110	110	110	82.5
3	405	170	170	225	163	22	24 ± 1	18	120	130	130	88.5
4	505	195	200	270	188	28	30 ± 1	24	150	160	160	105
5	565	220	235	320	215	28	30 ± 1	24	160	185	185	130
6	645	220	235	320	215	28	30 ± 1	24	160	185	220	130
7	690	270	285	380	250	35	36 ± 1	28	210	225	225	154
8	795	270	285	380	250	35	36 ± 1	28	210	225	270	154
9	820	310	325	440	270	40	48 ± 1.5	36	195	265	265	172
10	920	310	325	440	270	40	48 ± 1.5	36	195	265	315	172
11	975	370	385	530	328	50	54 ± 1.5	40	210	320	320	211
12	1130	370	385	530	328	50	54 ± 1.5	40	210	320	390	211

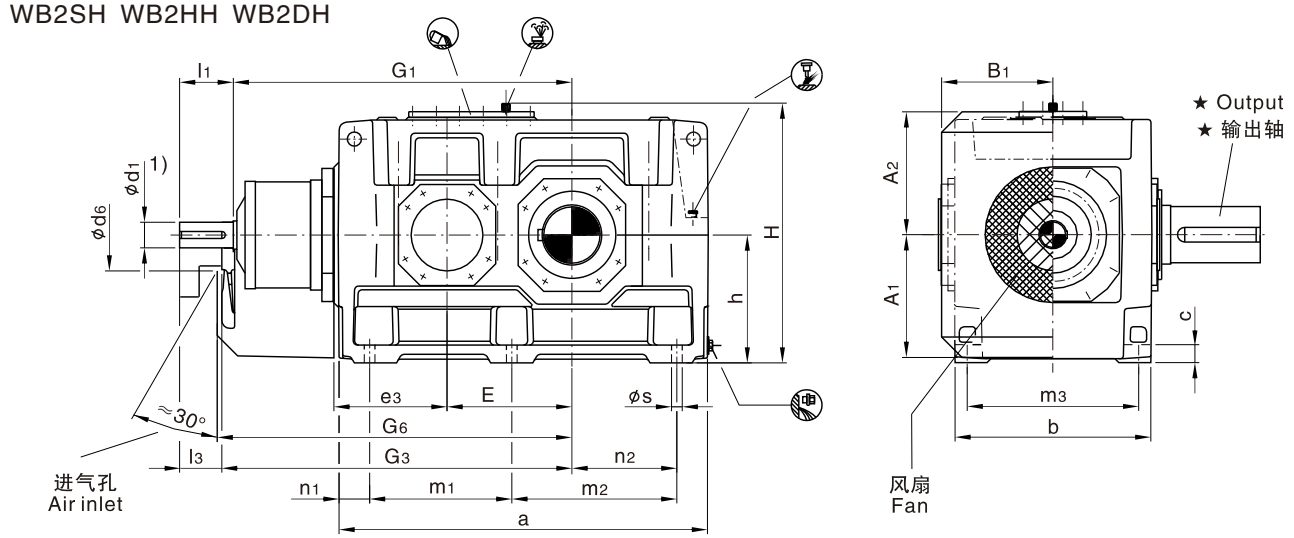
规格 Size	尺寸 mm Dimensions in mm										
	减速机 Reductors										
	G_6	h	h_5	H	m_1	m_3	n_1	n_2	n_3	n_4	s
1	325	130	80	275	185	155	60	70	160	105	12
2	370	145	80	305	225	180	65	75	195	115	12
3	420	175	90	360	245	195	80	85	235	132.5	15
4	495	200	80	415	295	235	105	100	285	150	19
5	575	230	150	482	355	285	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									润滑油 Oil	重量 Weight (kg)
	输出轴 Output									轴封 Shaft seal (l)	
	WB2SH			WB2HH		WB2DH					
	d_2 1)	G_2	L_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
1	45	120	80		–	–	–	–	–	2	65
2	55	135	110	55	135	60	60	135	180	4	90
3	65	145	140	65	145	70	70	145	200	6	140
4	80	170	170	80	170	85	85	170	235	10	235
5	100	200	210	95	200	100	100	200	275	16	360
6	110	200	210	105	200	110	110	200	275	19	410
7	120	235	210	115	235	120	120	235	320	31	615
8	130	235	250	125	235	130	130	235	325	34	700
9	140	270	250	135	270	140	145	270	365	48	1000
10	160	270	300	150	270	150	155	270	385	50	1155
11	170	320	300	165	320	165	170	320	450	80	1640
12	180	320	300	180	320	180	185	320	455	95	1910

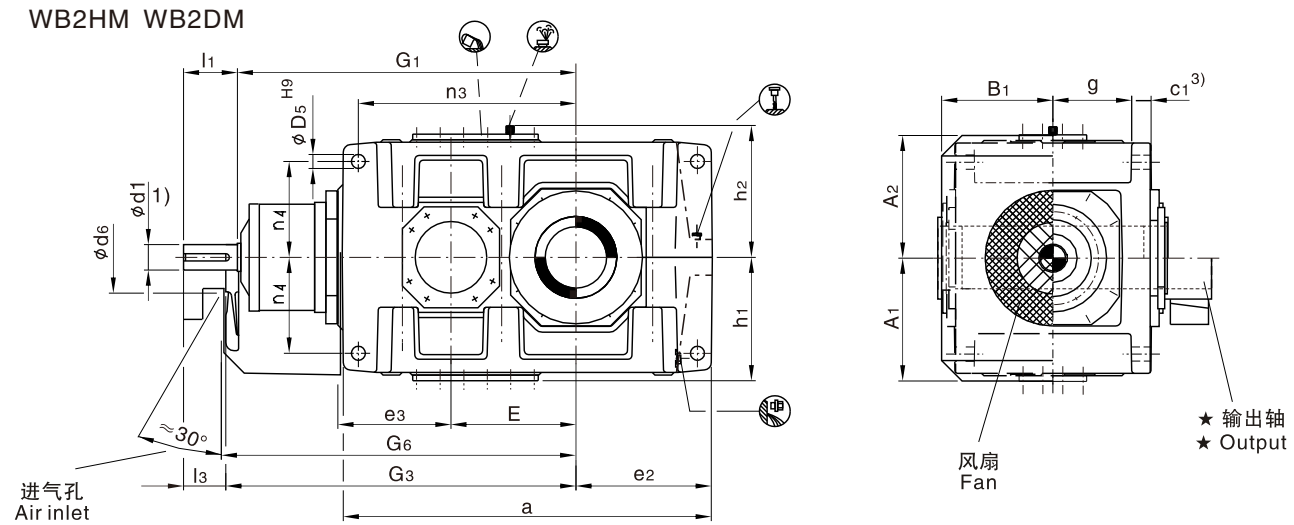
直交轴减速机 Bevel-helical Reductors　二级传动 Two Stage　卧式安装 Horizontal

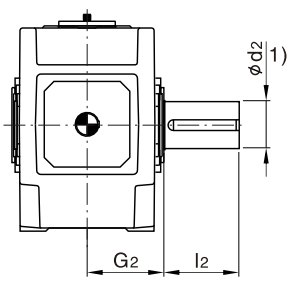
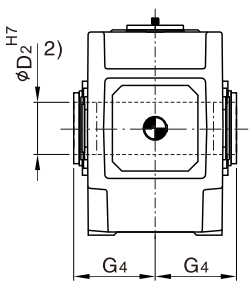
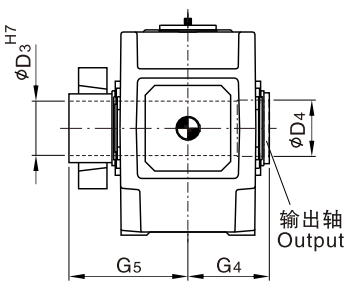
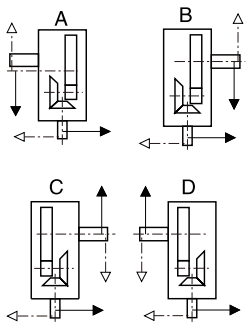
类型 WB2.H, WB2.M Types WB2.H, WB2.M　规格 13...18 Sizes 13...18

WB2SH WB2HH WB2DH



WB2HM WB2DM



★输出轴Output			布置形式 Design
WB2SH 实心轴 Solid shaft	WB2HH, WB2HM 空心轴 Hollow shaft	WB2DH, WB2DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	
			

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

有关平键 GB/T1095-1979 和中心孔,参见第279-280页。For parallel key GB/T1905-1979 and for centre hole,see page 279-280 .

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.

直交轴减速机 Bevel–helical Reductors 二级传动 Two Stage 卧式安装 Horizontal

类型 WB2.H, WB2.M Types WB2.H, WB2.M 规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																
	输入轴 Input																
	i_N = 5 – 11.2			i_N = 5.6 – 11.2			i_N = 5.6–12.5			i_N = 6.3–14			i_N = 7.1–12.5			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	L_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
13	110	205	165													1070	1110
14										110	205	165				1140	1180
15	130	245	200													1277	1322
16							130	245	200							1323	1368
17				150	245	200										1435	1480
18													150	245	200	1495	1540

规格 Size	尺寸 mm Dimensions in mm												
	减速机 Reductors												
	a	A_1	A_2	b	B_1	c	c_1	d_6	D_5	e_2	e_3	E	g
13	1130	430	450	655	375	60	61 ± 2	245	48	405	380	370	264
14	1270	430	450	655	375	60	61 ± 2	245	48	475	380	440	264
15	1350	490	495	765	435	70	72 ± 2	280	55	485	450	442	308
16	1440	490	495	765	435	70	72 ± 2	280	55	530	450	488	308
17	1490	540	555	885	505	80	81 ± 2	380	65	525	510	490	356
18	1610	540	555	885	505	80	81 ± 2	380	65	585	510	550	356

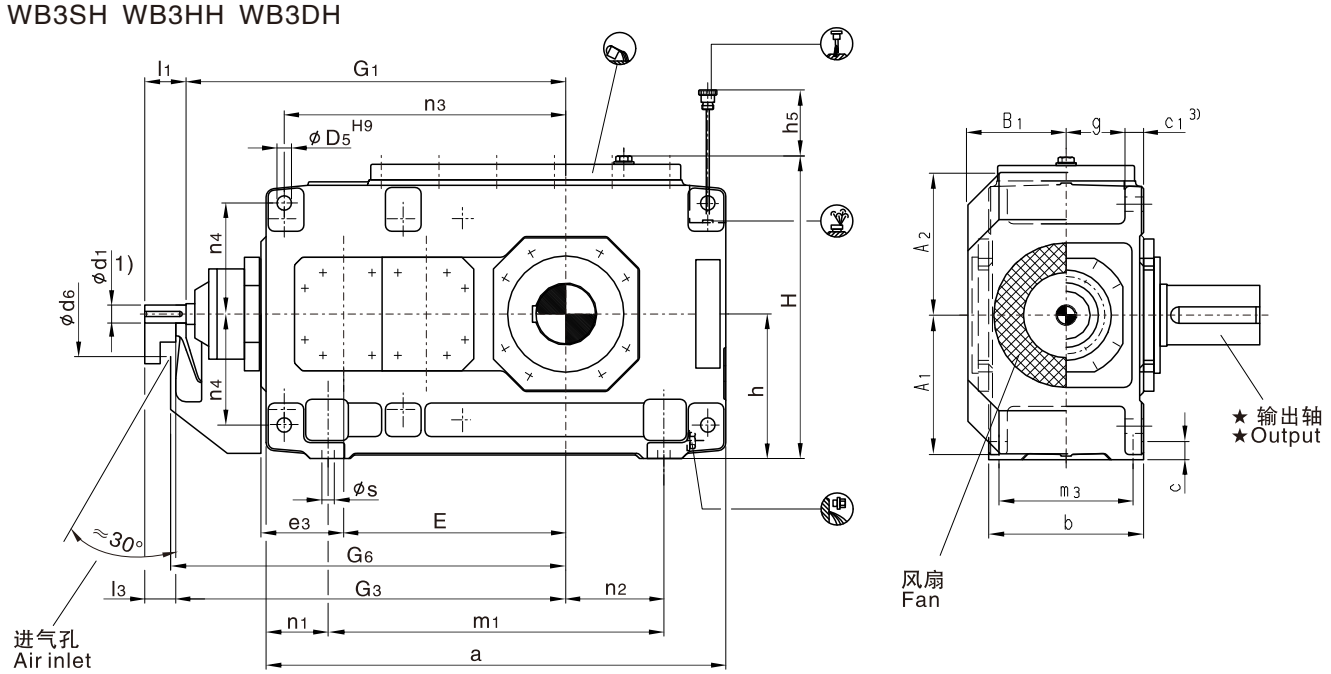
规格 Size	尺寸 mm Dimensions in mm												
	减速机 Reductors												
	G_6	h	h_1	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
13	1130	440	450	460	900	465	465	580	100	305	675	340	35
14	1200	440	450	460	900	465	605	580	100	375	745	340	35
15	1340	500	490	500	1000	555	555	670	120	365	805	375	42
16	1385	500	490	500	1000	555	645	670	120	410	850	375	42
17	1500	550	555	560	1110	610	610	780	135	390	895	420	48
18	1560	550	555	560	1110	610	730	780	135	450	955	420	48

规格 Size	尺寸 mm Dimensions in mm									润滑油Oil		重量 Weight	
	输出轴 Output									WB2.H	WB2.M		
	WB2SH			WB2HH WB2HM		WB2DH WB2DM				轴封 (l) Shaft seal		WB2.H	WB2.M
	$d_2$1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5			(kg)	(kg)
13	200	390	350	–	–	–	–	–	–	140	120	2450	2350
14	210	390	350	210	390	210	215	390	535	155	130	2825	2725
15	230	460	410	–	–	–	–	–	–	220	180	3990	3795
16	240	460	410	240	450	240	245	450	620	230	190	4345	4160
17	250	540	410	–	–	–	–	–	–	320	260	5620	5320
18	270	540	470	275	510	280	285	510	700	335	275	6150	5860

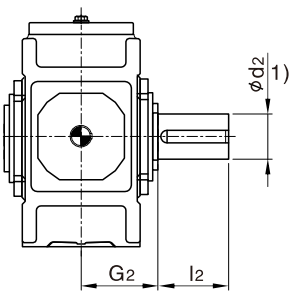
直交轴减速机 Bevel-helical Reductors 三级传动 Three Stage 卧式安装 Horizontal

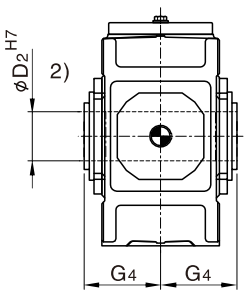
类型 WB3.H Types WB3.H 规格 3 . . . 12 Sizes 3 . . . 12

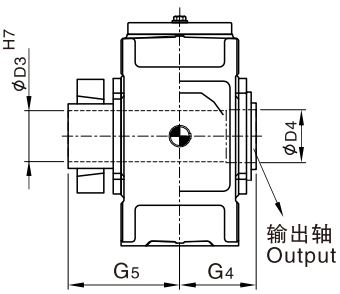
WB3SH WB3HH WB3DH

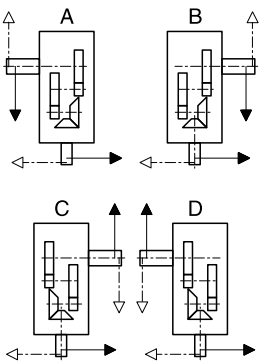


★ 输出轴 Output			布置形式 Design
WB3SH 实心轴 Solid shaft	WB3HH 空心轴 Hollow shaft	WB3HH 带胀紧盘的空心轴 Hollow shaft for shrink disk	









1) $k_6 \leqslant \Phi 50$ $m_6 > \Phi 50$
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280 页。
For parallel key GB/T1095-1979 and for center hole,see page279-280 .

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.

直交轴减速机 Bevel–helical Reductors 三级传动 Three Stage 卧式安装 Horizontal

类型 WB3.H Types WB3.H 规格 3…12 Sizes 3…12

规格 Size	尺寸mm Dimensions in mm																
	输入轴 Input																
	i_N = 12.5 – 45			i_N = 16 – 56			i_N = 20 – 45			i_N = 50 – 71			i_N = 63 – 90			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
3							28	55	40	20	50	35				430	445
4	30	70	50							25	60	40				500	520
5	35	80	60							28	60	40				575	595
6				35	80	60							28	60	40	610	630
7	45	100	80							35	80	60				690	710
8				45	100	80							35	80	60	735	755
9	55	110	80							40	100	70				800	830
10				55	110	80							40	100	70	850	880
11	70	135	105							50	110	80				960	990
12				70	135	105							50	110	80	1030	1060

规格 Size	尺寸mm Dimensions in mm											
	减速机 Reductors											
	a	A_1	A_2	b	B_1	c	c_1	d_6	D_5	e_3	E	g
3	450	170	170	190	128	22	24 ± 1	90	18	90	220	71
4	565	195	200	215	143	28	30 ± 1	110	24	110	270	77.5
5	640	220	235	255	168	28	30 ± 1	130	24	130	315	97.5
6	720	220	235	255	168	28	30 ± 1	130	24	130	350	97.5
7	785	275	275	300	193	35	36 ± 1	165	28	160	385	114
8	890	275	275	300	193	35	36 ± 1	165	28	160	430	114
9	925	315	325	370	231	40	45 ±1.5	175	36	185	450	140
10	1025	315	325	370	231	40	45 ±1.5	175	36	185	500	140
11	1105	370	385	430	263	50	54 ±1.5	190	40	225	545	161
12	1260	370	385	430	263	50	54 ±1.5	190	40	225	615	161

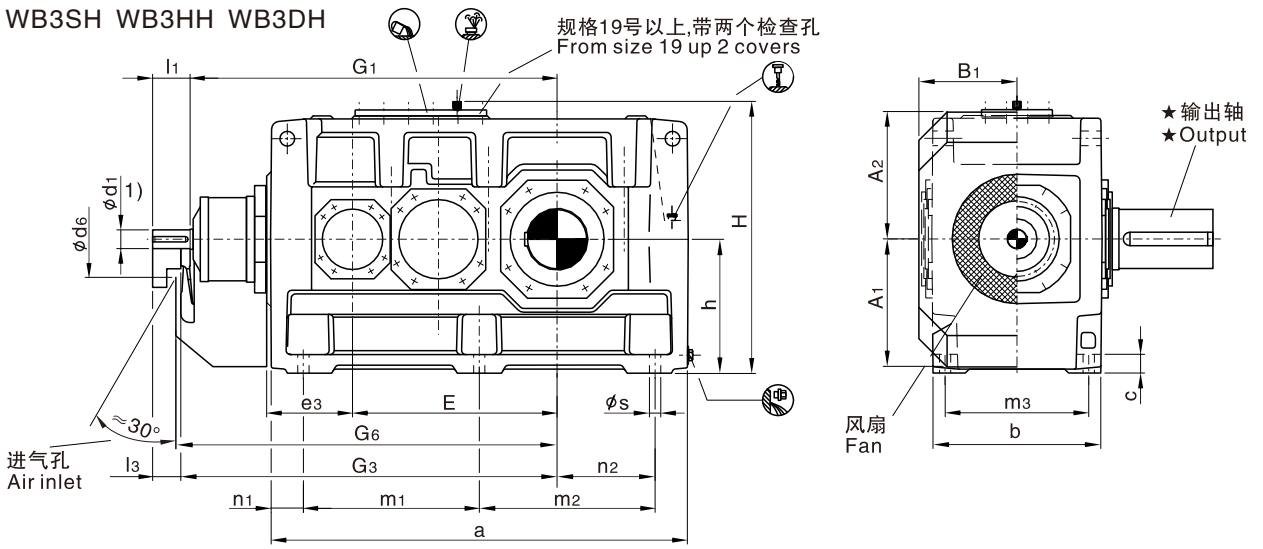
规格 Size	尺寸mm Dimensions in mm										
	减速机 Reductors										
	G_6	h	h_5	H	m_1	m_3	n_1	n_2	n_3	n_4	s
3	455	175	100	360	290	160	80	65	285	132.5	15
4	530	200	100	415	355	180	105	85	345	150	19
5	605	230	130	482	430	220	105	100	405	180	19
6	640	230	130	482	510	220	105	145	440	180	19
7	720	280	170	572	545	260	120	130	500	215	24
8	765	280	160	582	650	260	120	190	545	215	24
9	845	320	175	662	635	320	145	155	585	245	28
10	895	320	175	662	735	320	145	205	635	245	28
11	1010	380	220	782	775	370	165	180	710	300	35
12	1080	380	210	790	930	370	165	265	780	300	35

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WB3SH			WB3HH		WB3DH					
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
3	65	125	140	65	125	70	70	125	180	6	130
4	80	140	170	80	140	85	85	140	205	9	210
5	100	165	210	95	165	100	100	165	240	14	325
6	110	165	210	105	165	110	110	165	240	15	380
7	120	195	210	115	195	120	120	195	280	25	550
8	130	195	250	125	195	130	130	195	285	28	635
9	140	235	250	135	235	140	145	235	330	40	890
10	160	235	300	150	235	150	155	235	350	42	1020
11	170	270	300	165	270	165	170	270	400	66	1455
12	180	270	300	180	270	180	185	270	405	72	1730

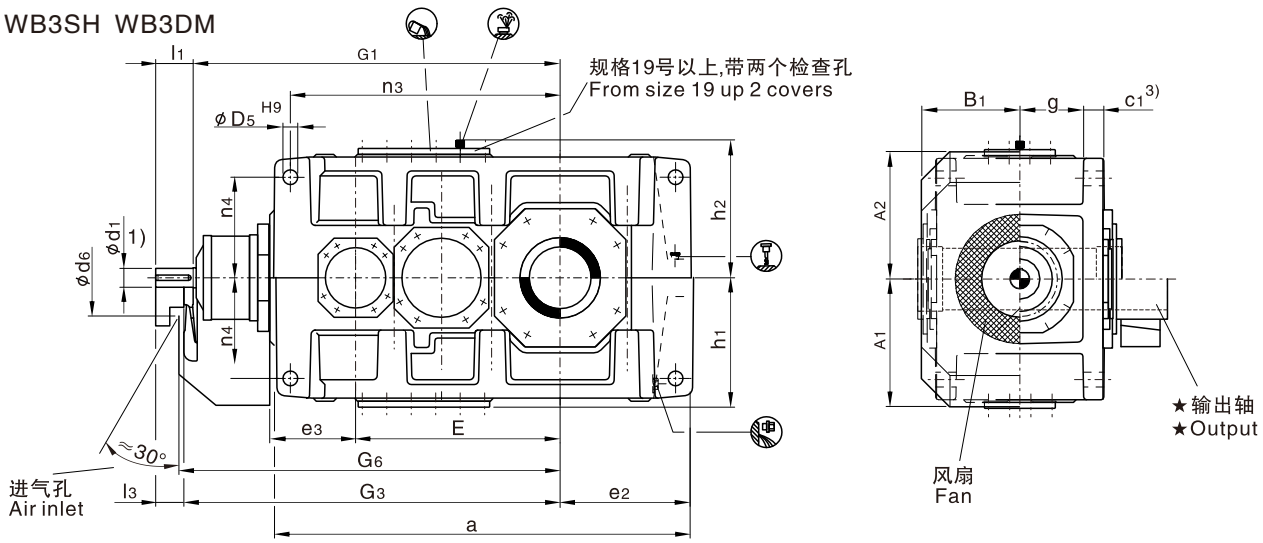
直交轴减速机 Bevel–helical Reductors 三级传动 Three Stage 卧式安装 Horizontal

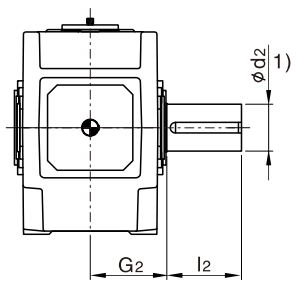
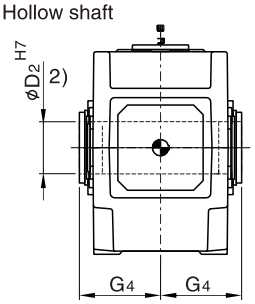
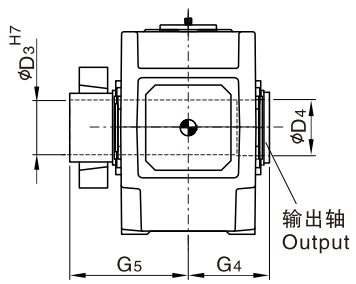
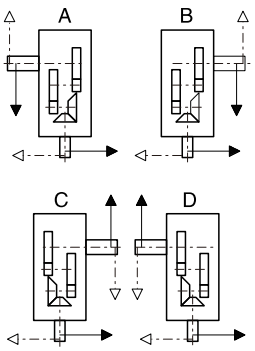
类型 WB3.H, WB3.M Types WB3.H, WB3.M 规格 13 . . . 22 Sizes 13 . . . 22

WB3SH WB3HH WB3DH



WB3SH WB3DM



★输出轴 Output			布置形式 Design
WB3SH 实心轴 Solid shaft	WB3HH, WB3HM 空心轴 Hollow shaft	WB3DH, WB3DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	
			

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

有关平键 GB/T1095–1979 型和中心孔, 参见第279–280 页。For parallel key GB/T1095–1979 and for center hole,see page279–280 .

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.

直交轴减速机 Bevel–helical Reductors 三级传动 Three Stage 卧式安装 Horizontal

类型 WB3.H, WB3.M Types WB3.H, WB3.M 规格 13...22 Sizes 13...22

规格 Size	尺寸mm Dimensions in mm																			
	输入轴 Input																			
	i_N=12.5 – 45			i_N=14 – 50			i_N=16 – 56			i_N=50 – 71			i_N =56 – 80			i_N =63 – 90			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		l_1	l_3		
13	80	165	130							60	140	105							1125	1160
14							80	165	130							60	140	105	1195	1230
15	90	165	130							70	140	105							1367	1402
16				90	165	130							70	140	105				1413	1448
17	110	205	165							80	170	130							1560	1600
18				110	205	165							80	170	130				1620	1660
19	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												
	减速机 Reductors												
	a	A_1	A_2	b	B_1	c	c_1	d_6	D_5	e_2	e_3	E	g
13	1290	425	435	550	325	60	61 ± 2	210	48	405	265	635	211.5
14	1430	425	435	550	325	60	61 ± 2	210	48	475	265	705	211.5
15	1550	485	520	625	365	70	72 ± 2	210	55	485	320	762	238
16	1640	485	520	625	365	70	72 ± 2	210	55	530	320	808	238
17	1740	535	570	690	395	80	81 ± 2	230	55	525	370	860	259
18	1860	535	570	690	395	80	81 ± 2	230	55	585	370	920	259
19	2010	610	630	790	448	90	91 ± 2	245	65	590	420	997	299
20	2130	610	630	790	448	90	91 ± 2	245	65	650	420	1057	299
21	2140	690	690	830	473	100	100 ± 2	280	75	655	450	1067	310
22	2250	690	690	830	473	100	100 ± 2	280	75	710	450	1122	310

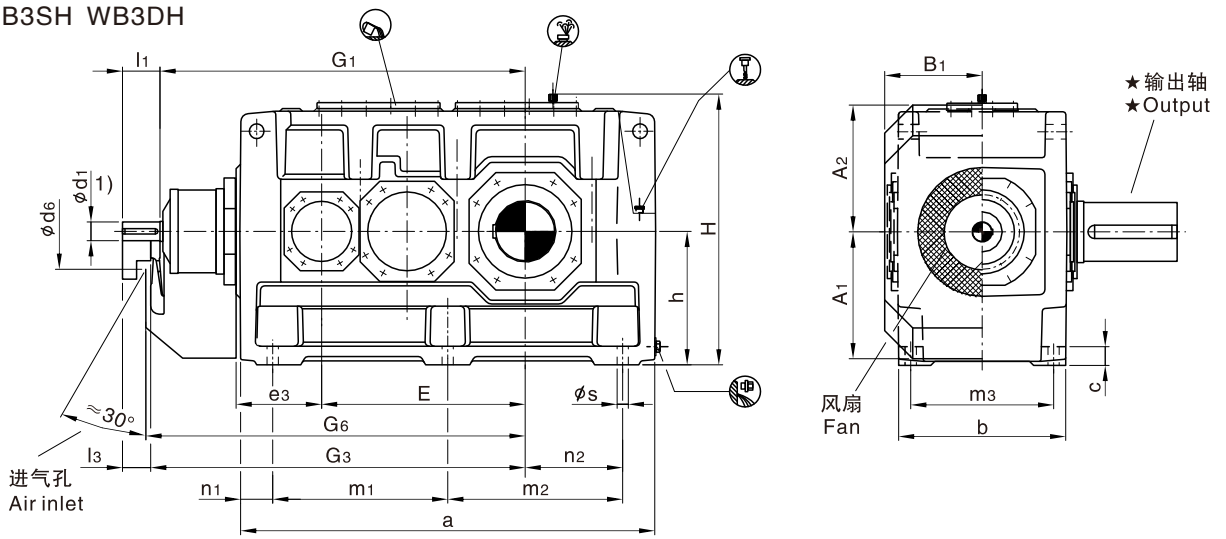
规格 Size	尺寸mm Dimensions in mm												
	减速机 Reductors												
	G_6	h	h_1	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
13	1180	440	450	460	900	545	545	475	100	305	835	340	35
14	1250	440	450	460	900	545	685	475	100	375	905	340	35
15	1420	500	490	500	1000	655	655	535	120	365	1005	375	42
16	1470	500	490	500	1000	655	745	535	120	410	1050	375	42
17	1620	550	555	560	1110	735	735	600	135	390	1145	425	42
18	1680	550	555	560	1110	735	855	600	135	450	1205	425	42
19	1900	620	615	620	1240	850	850	690	155	435	1345	475	48
20	1960	620	615	620	1240	850	970	690	155	495	1405	475	48
21	1970	700	685	690	1390	900	900	720	170	485	1400	520	56
22	2025	700	685	690	1390	900	1010	720	170	540	1455	520	56

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输出轴 Output												
	WB3SH			WB3HH WB3HM		WB3DH WB3DM				WB3.H	WB3.M	WB3.H	WB3.M
	D_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5	(l)	(l)	(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	130	110	2380	2260
14	210	335	350	210	335	210	215	335	480	140	115	2750	2615
15	230	380	410	230	380	230	235	380	550	210	160	3730	3540
16	240	380	410	240	380	240	245	380	550	220	165	3955	3765
17	250	415	410	250	415	250	260	415	600	290	230	4990	4760
18	270	415	470	275	415	280	285	415	600	300	235	5495	5240
19	290	465	470	–	–	285	295	465	670	380	360	6240	6050
20	300	465	500	–	–	310	315	465	670	440	420	6950	6710
21	320	490	500	–	–	330	335	490	715	370	420	8480	8190
22	340	490	550	–	–	340	345	490	725	430	490	9240	8950

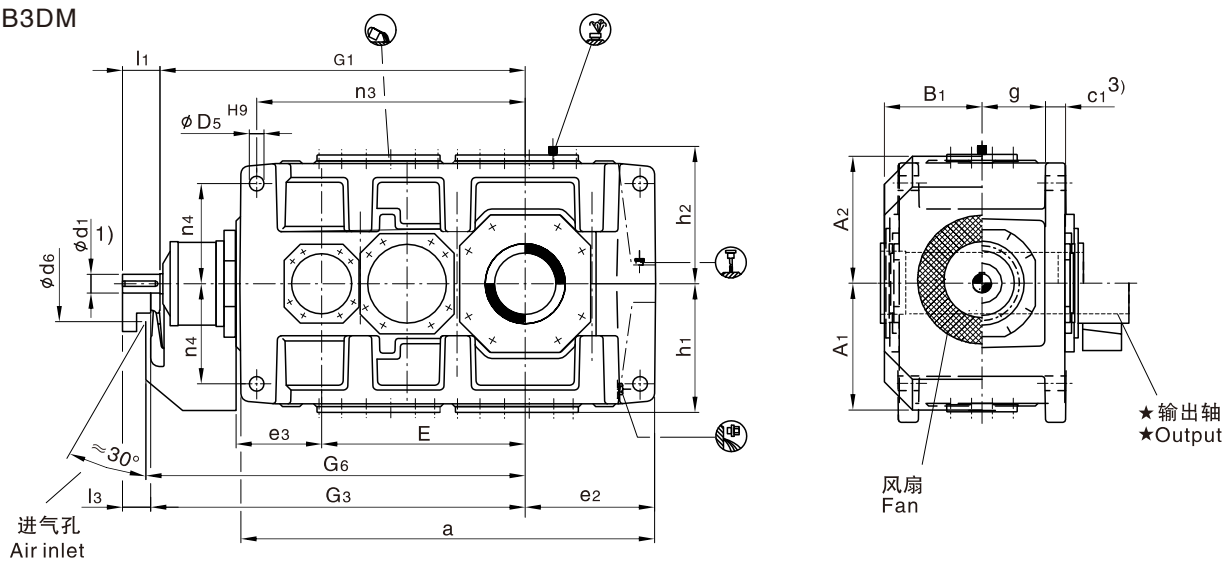
直交轴减速机 Bevel-helical Reductors　三级传动 Three Stage　卧式安装 Horizontal

类型 WB3.H, WB3.M Types WB3.H, WB3.M　规格 23..26 Sizes 23...26

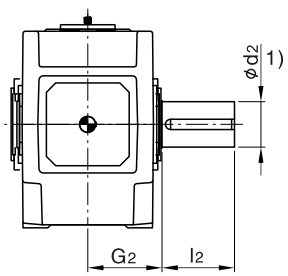
WB3SH WB3DH

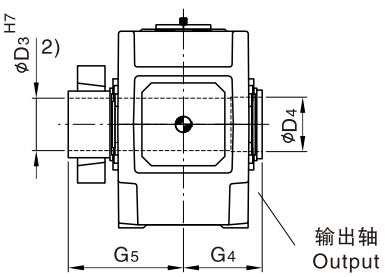


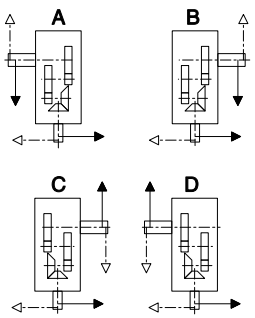
WB3DM



★输出轴 Output		布置形式 Design
WB3SH 实心轴 Solid shaft	WB3DH, WB3DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	







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

有关平键 GB/T1095-1979 型和中心孔, 参见第279-280页。For parallel key GB/T1095-1979 and for center hole,see page279-280.

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.

直交轴减速机 Bevel–helical Reductors　三级传动 Three Stage　卧式安装Horizontal

类型 WB3.H, WB3.M Types WB3.H, WB3.M　规格 23...26 Sizes 23...26

规格 Size	尺寸 mm Dimensions in mm													
	输入轴 Input													
	i_N=20–45			i_N=22.4–50			i_N=50–71			i_N=56–80			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
23	150	245	200				110	210	165				2130	2175
24				150	245	200				110	210	165	2195	2240
25	150	245	200				110	210	165				2270	2315
26				150	245	200				110	210	165	2360	2405

规格 Size	尺寸 mm Dimensions in mm												
	减速机 Reductors												
	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

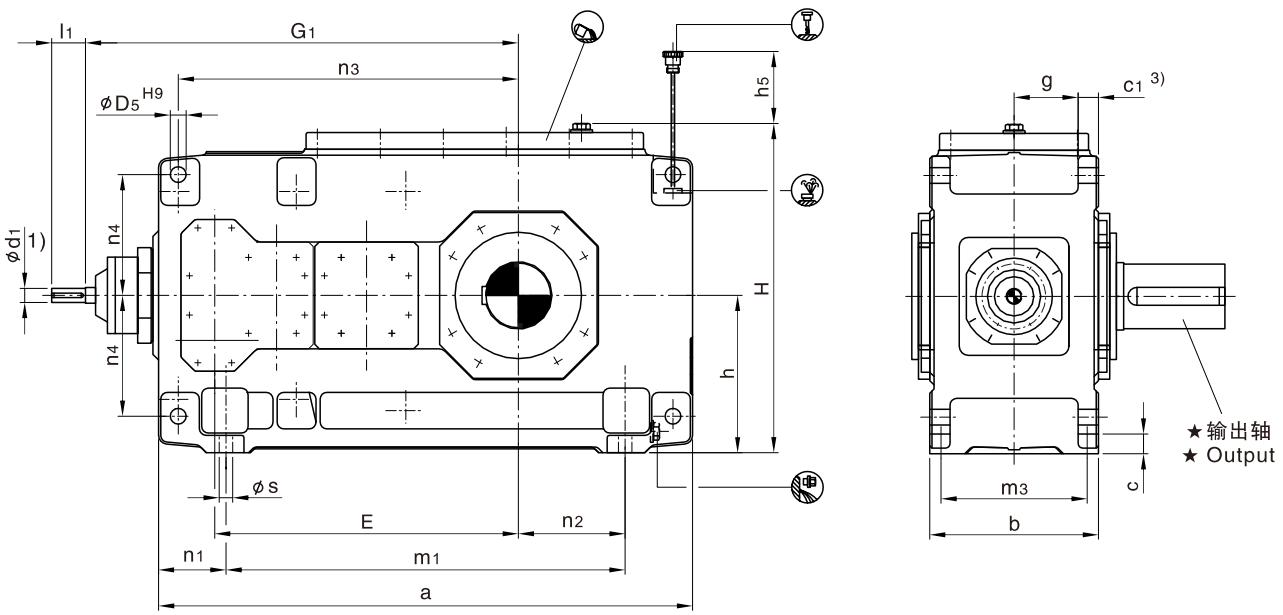
规格 Size	尺寸 mm Dimensions in mm												
	减速机 Reductors												
	G_6	h	h_1	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
23	2200	780	770	790	1570	1010	1010	810	180	550	1560	580	56
24	2265	780	770	790	1570	1010	1140	810	180	615	1625	580	56
25	2315	860	860	860	1720	1090	1090	910	200	590	1685	660	66
26	2430	860	860	860	1720	1090	1270	910	200	680	1775	660	66

规格 Size	尺寸 mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输出轴 Output										
	WB3SH			WB3DH WB3DM				WB3.H	WB3.M	WB3.H	WB3.M
	d_2 1)	G_2	l_2	D_3	D_4	G_4	G_5	(l)	(l)	(kg)	(kg)
23	360	540	590	360	365	540	785	520	560	11500	10600
24	380	540	590	380	385	540	805	600	650	13400	12500
25	400	605	650	400	405	605	875	720	790	16000	15100
26	420	605	650	430	435	605	900	840	920	17500	16400

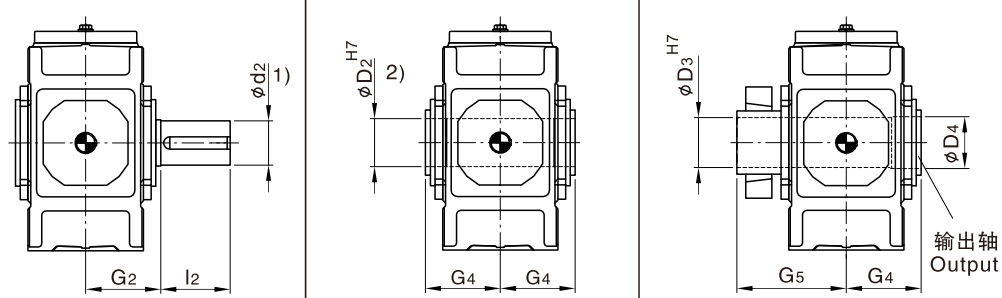
直交轴减速机 Bevel–helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

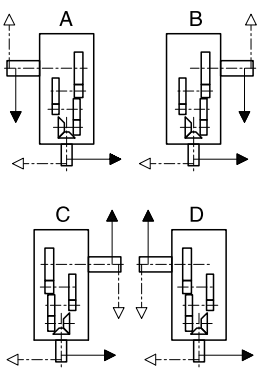
类型 WB4.H Types WB4.H　规格 5...12 Sizes 5...12

WB4SH WB4HH WB4DH



★ 输出轴 Output			布置形式 Design
WB4SH 实心轴 Solid shaft	WB4HH 空心轴 Hollow shaft	WB4DH 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279–280页。For parallel key GB/T1095–1979 and for center hole,see page279–280.

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.

直交轴减速机 Bevel–helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

类型 WB4.H Types WB4.H　规格5...12 Sizes 5...12

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i_N = 80 – 180		i_N = 100 – 224		i_N = 200 – 315		i_N = 250 – 400		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
5	28	55			20	50			615
6			28	55			20	50	650
7	30	70			25	60			725
8			30	70			25	60	770
9	35	80			28	60			840
10			35	80			28	60	890
11	45	100			35	80			1010
12			45	100			35	80	1080

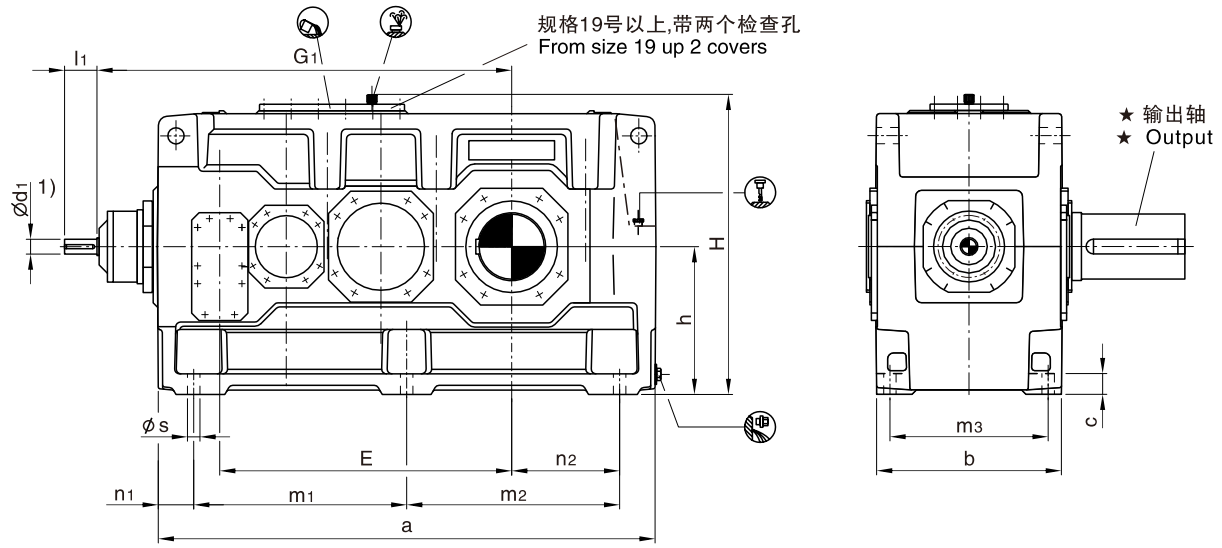
规格 Size	尺寸mm Dimensions in mm																
	减速机 Reductors																
	a	b	c	c_1	D_5	E	g	h	h_5	H	m_1	m_3	n_1	n_2	n_3	n_4	s
5	690	255	28	30 ± 1	24	405	97.5	230	100	482	480	220	105	100	455	180	19
6	770	255	28	30 ± 1	24	440	97.5	230	100	482	560	220	105	145	490	180	19
7	845	300	35	36 ± 1	28	495	114	280	140	572	605	260	120	130	560	215	24
8	950	300	35	36 ± 1	28	540	114	280	130	582	710	260	120	190	605	215	24
9	1000	370	40	45 ± 1.5	36	580	140	320	135	662	710	320	145	155	660	245	28
10	1100	370	40	45 ± 1.5	36	630	140	320	135	662	810	320	145	205	710	245	28
11	1200	430	50	54 ± 1.5	40	705	161	380	170	782	870	370	165	180	805	300	35
12	1355	430	50	54 ± 1.5	40	775	161	380	160	790	1025	370	165	265	875	300	35

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WB4SH			WB4HH		WB4DH					
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
5	100	165	210	95	165	100	100	165	240	16	335
6	110	165	210	105	165	110	110	165	240	18	385
7	120	195	210	115	195	120	120	195	280	30	555
8	130	195	250	125	195	130	130	195	285	33	655
9	140	235	250	135	235	140	145	235	330	48	890
10	160	235	300	150	235	150	155	235	350	50	1025
11	170	270	300	165	270	165	170	270	400	80	1485
12	180	270	300	180	270	180	185	270	405	90	1750

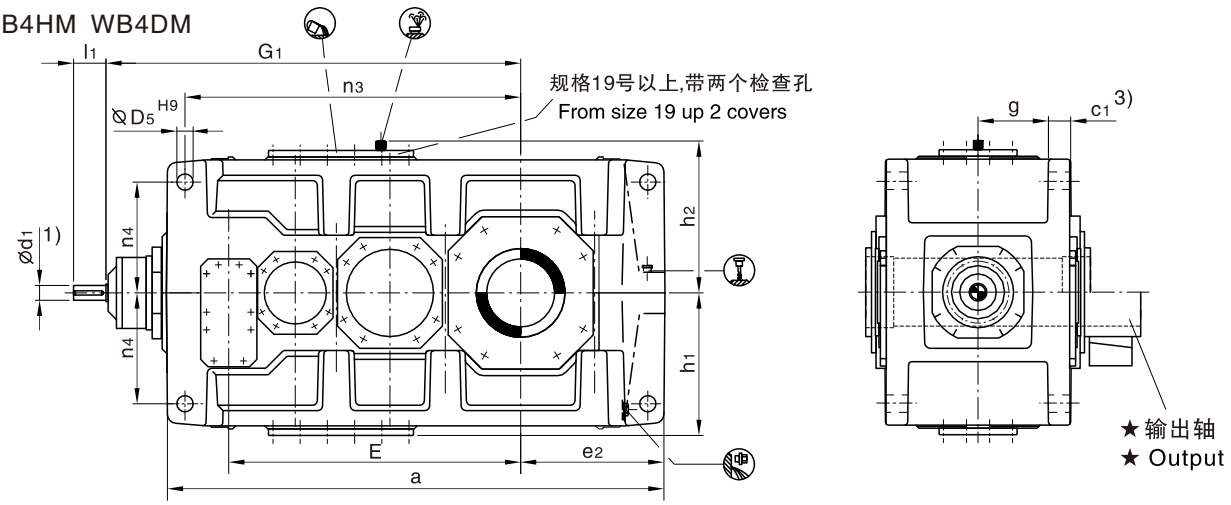
直交轴减速机 Bevel–helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

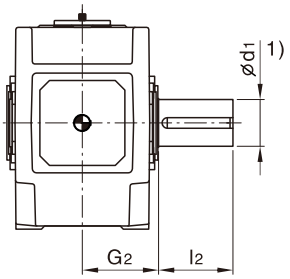
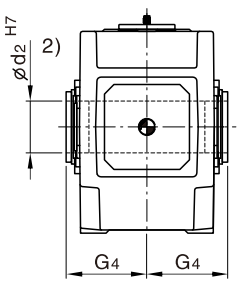
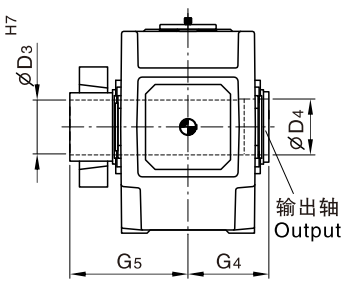
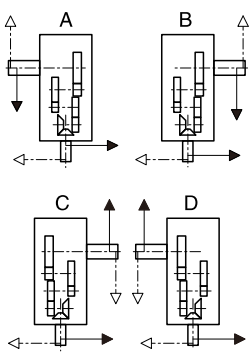
类型 WB4.H, WB4.M Types WB4.H, WB4.M　规格 13...22 Sizes 13...22

WB4SH WB4HH WB4DH



WB4HM WB4DM



★ 输出轴 Output			布置形式 Design
WB4SH 实心轴 Solid shaft	WB4HH, WB4HM 空心轴 Hollow shaft	WB4DH WB4DM 带胀紧盘的空心轴 Hollow shaft for shrink disk	
			

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

有关平键 GB/T1095–1979 型和中心孔, 参见第279–280 页。For parallel key GB/T1095–1979 and for center hole,see page279–280 .

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.

直交轴减速机 Bevel–helical Reductors　四级传动 FourStage　卧式安装 Horizontal

类型 WB4.H, WB4.M　Types WB4.H, WB4.M　规格 13...22　Sizes 13...22

规格 Size	尺寸 mm Dimensions in mm												
	输入轴 Input												
	i_N=80–180		i_N=90–200		i_N=100–224		i_N=200–315		i_N=224–355		i_N=250–400		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
13	55	110					40	100					1170
14					55	110					40	100	1240
15	70	135					50	110					1402
16			70	135					50	110			1448
17	70	135					50	110					1450
18			70	135					50	110			1510
19	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									
	减速机 Reductors									
	a	b	c	c_1	D_5	e_2	E	g	h	h_1
13	1395	550	60	61 ± 2	48	405	820	211.5	440	450
14	1535	550	60	61 ± 2	48	475	890	211.5	440	450
15	1680	625	70	72 ± 2	55	485	987	238	500	490
16	1770	625	70	72 ± 2	55	530	1033	238	500	490
17	1770	690	80	81 ± 2	55	525	1035	259	550	555
18	1890	690	80	81 ± 2	55	585	1095	259	550	555
19	2030	790	90	91 ± 2	65	590	1190	299	620	615
20	2150	790	90	91 ± 2	65	650	1250	299	620	615
21	2340	830	100	100 ± 2	75	655	1387	310	700	685
22	2450	830	100	100 ± 2	75	710	1442	310	700	685

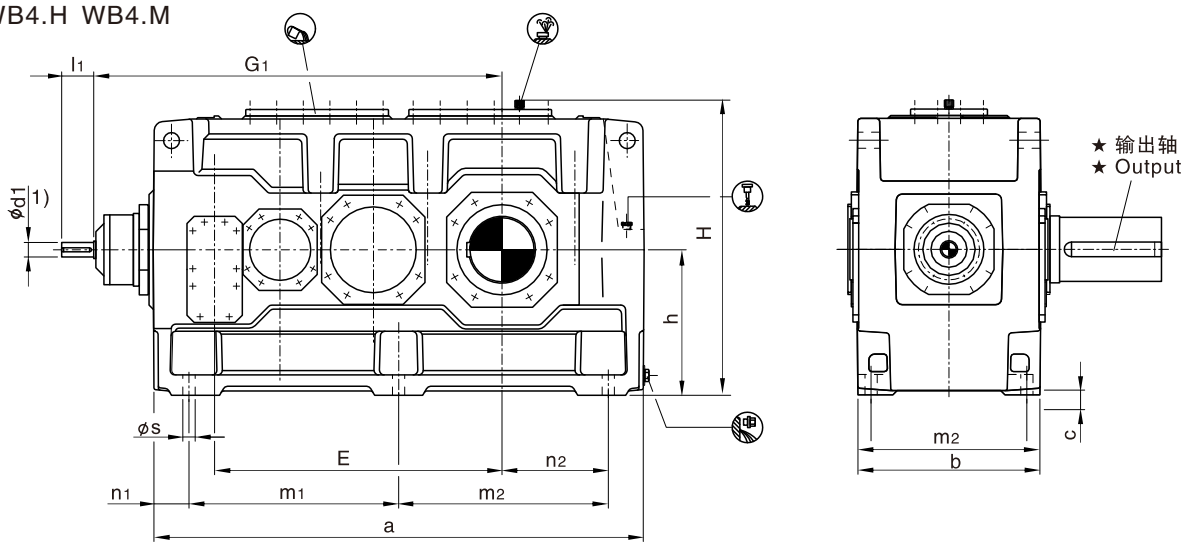
规格 Size	尺寸 mm Dimensions in mm									
	减速机 Reductors									
	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
13	460	900	597.5	597.5	475	100	305	940	340	35
14	460	900	597.5	737.5	475	100	375	1010	340	35
15	500	1000	720	720	535	120	365	1135	375	42
16	500	1000	720	810	535	120	410	1180	375	42
17	560	1110	750	750	600	135	390	1175	425	42
18	560	1110	750	870	600	135	450	1235	425	42
19	620	1240	860	860	690	155	435	1365	475	48
20	620	1240	860	980	690	155	495	1425	475	48
21	690	1390	1000	1000	720	170	485	1615	520	56
22	690	1390	1000	1110	720	170	540	1670	520	56

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight	
	输入轴 Input												
	WB4SH			WB4HH WB4HM		WB4DH WB4DM				WB4.H	WB4.M	WB4.H	WB4.M
	d_1 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5	(l)	(l)	(kg)	(kg)
13	200	335	350	190	335	190	195	335	480	145	120	2395	2280
14	210	335	350	210	335	210	215	335	480	150	125	2735	2605
15	230	380	410	230	380	230	235	380	550	230	170	3630	3435
16	240	380	410	240	380	240	245	380	550	235	175	3985	3765
17	250	415	410	250	415	250	260	415	600	295	230	4695	4460
18	270	415	470	275	415	280	285	415	600	305	235	5200	4930
19	290	465	470	–	–	285	295	465	670	480	440	5750	5400
20	300	465	500	–	–	310	315	465	670	550	510	6450	6000
21	320	490	500	–	–	330	335	490	715	540	590	7850	7350
22	340	490	550	–	–	340	345	490	725	620	680	8400	7850

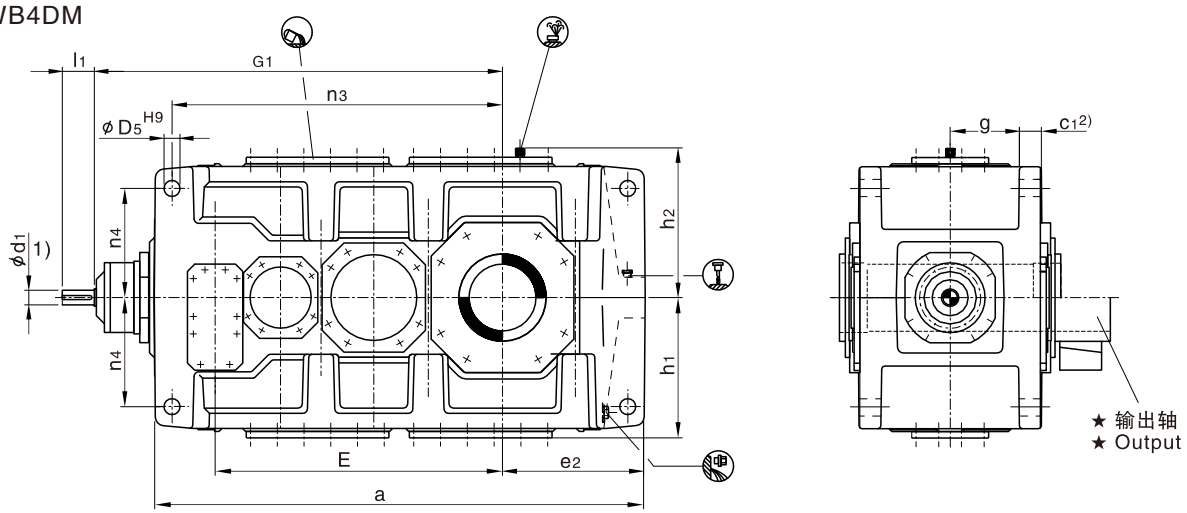
直交轴减速机 Bevel-helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

类型 WB4.H, WB4.M Types WB4.H, WB4.M　规格 23 . . . 26 Sizes 23 . . . 26

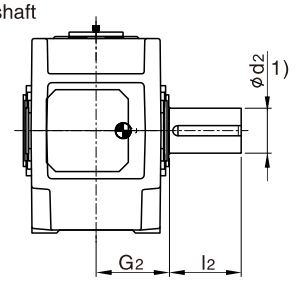
WB4.H WB4.M

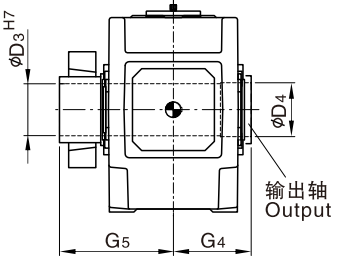


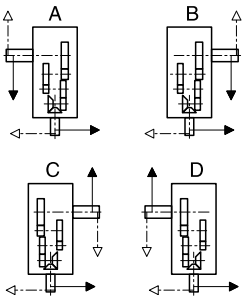
WB4DM



★ 输出轴 Output		布置形式 Design
WB4SH 实心轴 Solid shaft	WB4DH, WB4DM 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279-280 页。For parallel key GB/T1095-1979 and for center hole,see page279-280 .

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.

直交轴减速机 Bevel-helical Reductors　四级传动 Four Stage　卧式安装 Horizontal

类型 WB4.H, WB4.M Types WB4.H, WB4.M　规格 23...26 Sizes 23...26

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

规格 Size	尺寸mm Dimensions in mm									
	减速机 Reductors									
	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

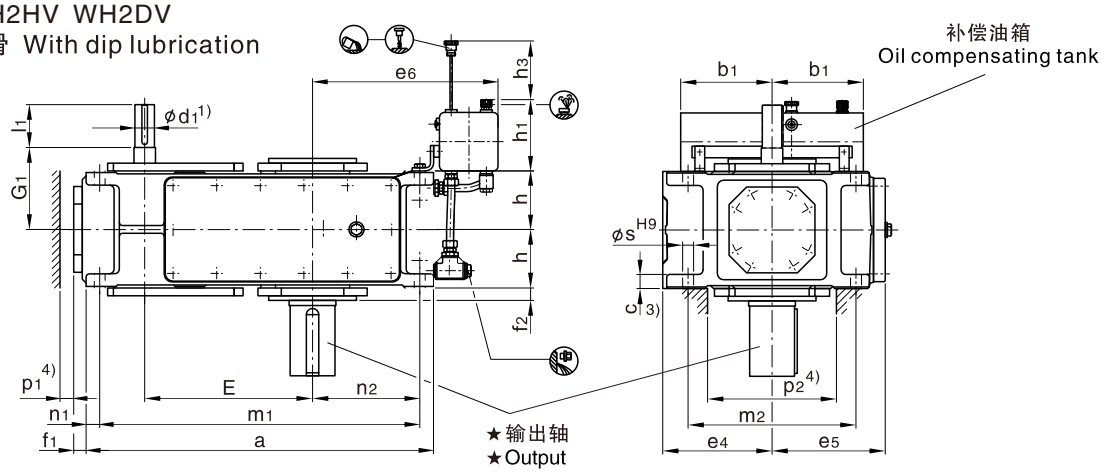
规格 Size	尺寸mm Dimensions in mm									
	减速机 Reductors									
	h_2	H	m_1	m_2	m_3	n_1	n_2	n_3	n_4	s
23	790	1570	1085	1285	810	180	550	1725	580	56
24	790	1570	1085	1215	810	180	615	1790	580	56
25	860	1720	1215	1215	910	200	590	1965	660	66
26	860	1720	1215	1305	910	200	680	2055	660	66

规格 Size	尺寸mm Dimensions in mm							润滑油 Oil		重量 Weight	
	输入轴 Input										
	WB4SH			WB4DH WB4DM				WB4.H	WB4.M	WB4.H	WB4.M
	d_2 1)	G_2	l_2	D_2	D_3	G_4	G_5	(1)	(1)	(kg)	(kg)
23	360	540	590	360	365	540	785	710	790	11600	10700
24	380	540	590	360	365	540	805	810	910	13500	12600
25	400	605	650	400	405	605	875	1000	1110	16100	15200
26	420	605	650	430	435	605	900	1100	1200	17600	16500

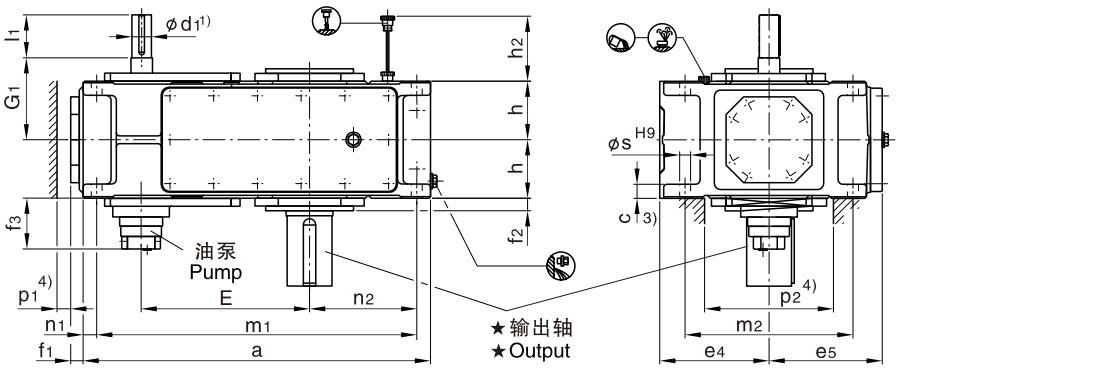
平行轴减速机 Helical Reductors　　二级传动 Two Stage　　立式安装 Vertical

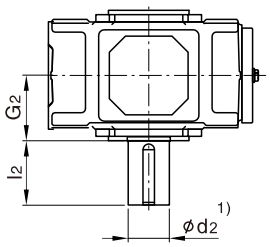
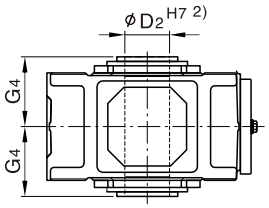
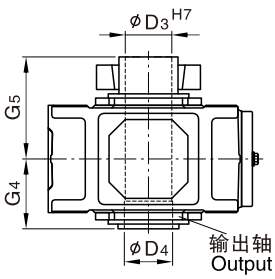
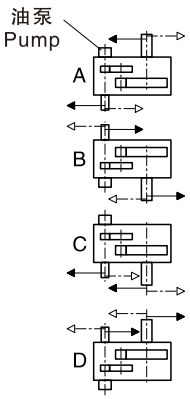
类型 WH2.V Types WH2.V　　规格 3...12 Sizes 3...12

WH2SV WH2HV WH2DV
采用浸油润滑 With dip lubrication



WH2SV WH2HV WH2DV
采用强制润滑 With forced lubrication



★ 输出轴 Output			布置形式 Design
WH2SV 实心轴 Solid shaft	WH2HV 空心轴 Hollow shaft	WH2DV 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) $k_6 \leq \Phi 50$　$m_6 > \Phi 50$
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280页。For parallel key GB/T1095-1979 and for center hole,see page279-280.
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 dimension,please refer to us.

平行轴减速机 Helical Reductors　　二级传动 Two Stage　　立式安装 Vertical

类型 WH2.V Types WH2.V　　规格 3...12 Sizes 3...12

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i_N = 6.3 – 11.2		i_N = 8 – 14		i_N = 12.5 – 22.4		i_N = 16 – 28		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
3	35	60			28	50			135
4	45	100			32	80			170
5	50	100			38	80			195
6			50	100			38	80	195
7	60	135			50	110			210
8			60	135			50	110	210
9	75	140			60	140			240
10			75	140			60	140	240
11	90	165			70	140			275
12			90	165			70	140	275

规格 Size	尺寸mm Dimensions in mm									
	减速机 Reductors									
	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

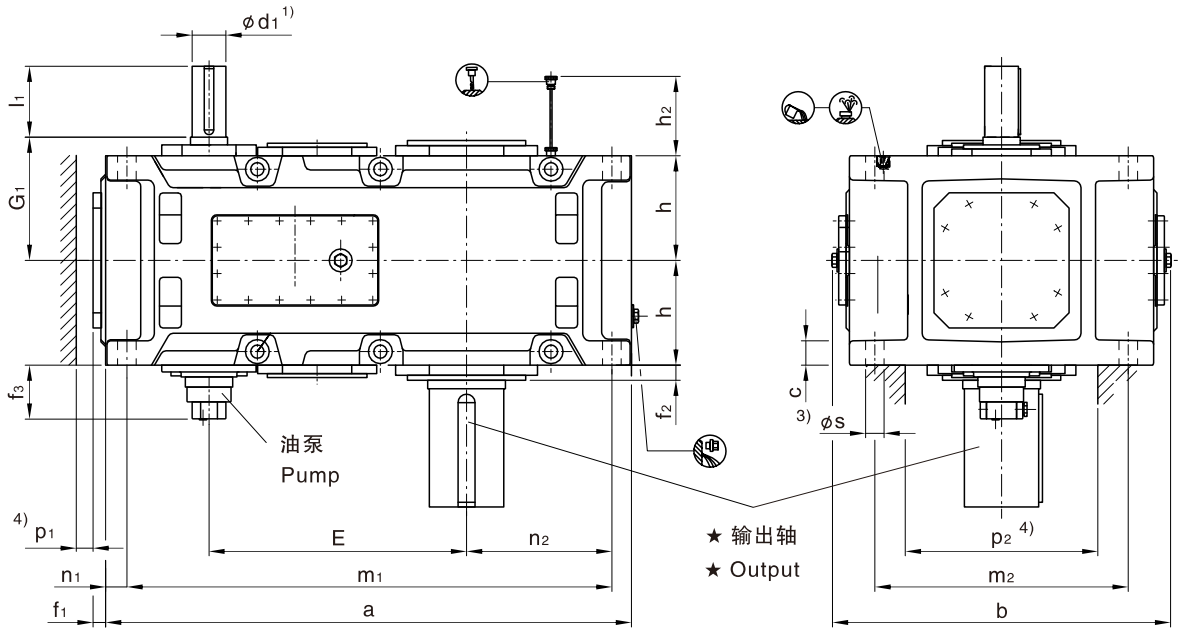
规格 Size	尺寸mm Dimensions in mm										
	减速机 Reductors										
	h	h_1	h_2	h_3	m_1	m_2	n_1	n_2	p_1 4)	p_2 4)	s
3	95	165	–	180	410	265	20	125	35	210	18
4	107.5	165	–	180	505	300	30	160	35	220	24
5	127.5	205	190	240	580	360	30	175	35	270	24
6	127.5	205	190	240	660	360	30	220	35	270	24
7	150	205	165	250	715	430	35	215	35	330	28
8	150	205	165	250	820	430	35	275	35	330	28
9	185	275	205	330	845	490	40	260	40	370	36
10	185	275	205	330	945	490	40	310	40	370	36
11	215	275	240	340	1005	600	50	295	50	440	40
12	215	275	240	340	1160	600	50	380	50	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油浸润 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	WH2SV			WH2HV		WH2DV						
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5			
3	65	125	140	65	125	70	70	125	180	14	–	115
4	80	140	170	80	140	85	85	140	205	25	–	190
5	100	165	210	95	165	100	100	165	240	23	10	300
6	110	165	210	105	165	110	110	165	240	27	11	355
7	120	195	210	115	195	120	120	195	280	58	22	505
8	130	195	250	125	195	130	130	195	285	62	25	590
9	140	235	250	135	235	140	145	235	330	100	42	830
10	160	235	300	150	235	150	155	235	350	110	46	960
11	170	270	300	165	270	165	170	270	400	160	60	1335
12	180	270	300	180	270	180	185	270	405	180	70	1615

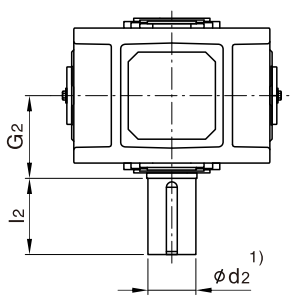
平行轴减速机 Helical Reductors　　二级传动Two Stage　　立式安装 Vertical

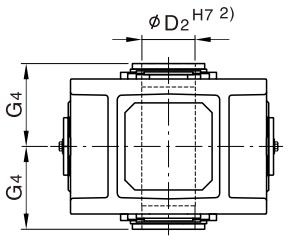
类型 WH2.V Types WH2.V　　规格 13...18 Sizes 13...18

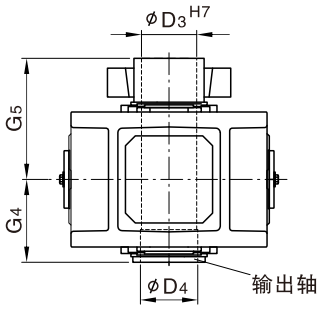
WH2SV WH2HV WH2DV
采用强制润滑 With forced lubrication



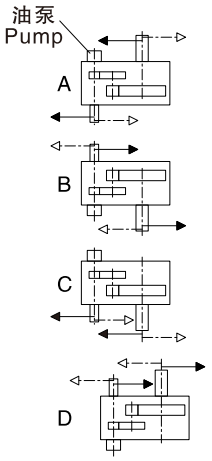
★ 输出轴 Output			布置形式 Design
WH2SV 实心轴 Solid shaft	WH2HV 空心轴 Hollow shaft	WH2DV 带胀紧盘的空心轴 Hollow shaft for shrink disk	







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



1) k6≤Φ50　m6>Φ50
有关平键 GB/T1095–1979 型和中心孔, 参见第279–280页。For parallel key GB/T1095–1979 and for center hole,see page279–280 .
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 dimension,please refer to us.
5) 规格13和15号速比只有 i_N=6.3–18;规格17号:速比只有i_N=6.3–16　Size 13 and 15:only i_N=6.3–18,Size 17:only i_N=6.3–16.

平行轴减速机 Helical Reductors　　两级传动 Two Stage　　立式安装 Vertical

类型 WH2.V Types WH2.V　　规格 13...18Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm												
	输入轴 Input												
	i_N=6.3–11.2		i_N=7.1–12.5		i_N=8–14		i_N=12.5–20		i_N=14–22.4		i_N=16–25		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
13	100	205					85	170					330
14					100	205					85	170	330
15	120	210					100	210					365
16			120	210					100	210			365
17	125	245					110	210					420
18			125	245					110	210			420
19						根据用户要求供货 On request							
20													
21													
22													

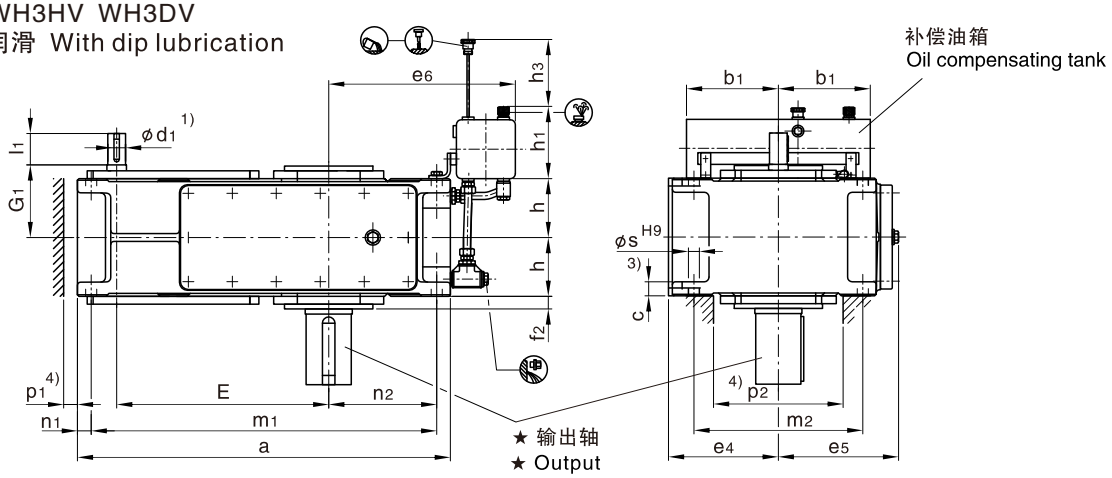
规格 Size	尺寸mm Dimensions in mm															
	减速机 Reductors															
	a	b	c	E	f_1	f_2	f_3	h	h_2	m_1	m_2	n_1	n_2	p_1 4)	p_2 4)	s
13	1290	900	61 ± 2	635	53	35	130	272.5	300	1195	680	50	360	50	500	48
14	1430	900	61 ± 2	705	53	35	130	272.5	300	1335	680	50	430	50	500	48
15	1550	980	72 ± 2	762	63	42	130	310	340	1435	750	60	430	50	570	55
16	1640	980	72 ± 2	808	63	42	130	310	340	1525	750	60	475	50	570	55
17	1740	1110	81 ± 2	860	60	42	170	340	374	1610	850	70	465	70	630	55
18	1860	1110	81 ± 2	920	60	42	170	340	374	1730	850	70	525	70	630	55
19							根据用户要求供货 On request									
20																
21																
22																

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WH2SV			WH2SV		WH2DV					
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
13	200	335	350	190	335	190	195	335	480	80	1880
14	210	335	350	210	335	210	215	335	480	90	2430
15	230	380	410	230	380	230	235	380	550	140	3240
16	240	380	410	240	380	240	245	380	550	150	3465
17	250	415	410	250	415	250	260	415	600	175	4420
18	270	415	470	275	415	280	285	415	600	185	4870
19					根据用户要求供货 On request						
20											
21											
22											

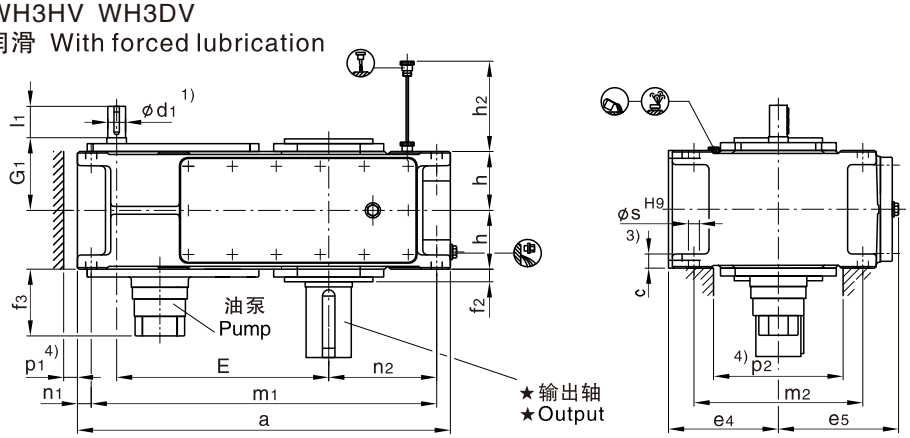
平行轴减速机 Helical Reductors　　三级传动 Three Stage　　立式安装 Vertical

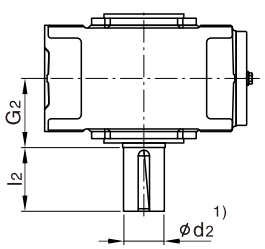
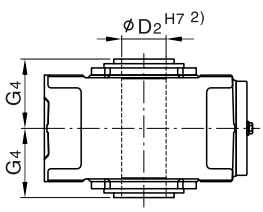
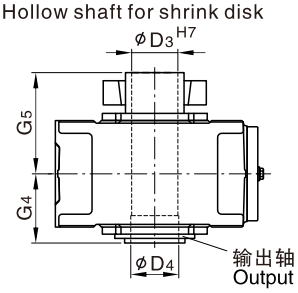
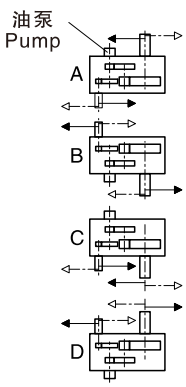
类型 WH3.V Types WH3.V　　规格 5...12 Sizes 5...12

WH3SV WH3HV WH3DV
采用浸油润滑 With dip lubrication



WH3SV WH3HV WH3DV
采用强制润滑 With forced lubrication



★ 输出轴 Output			布置形式 Design
WH3SV 实心轴 Solid shaft 	WH3HV 空心轴 Hollow shaft 	WH3DV 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) k6≤Φ50　m6>Φ50
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280 页。For parallel key GB/T1095-1979 and for center hole,see page279-280 .
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 dimension,please refer to us.

平行轴减速机 Helical Reductors　　三级传动 Three Stage　　立式安装 Vertical

类型 WH3.V Types WH3.V　　规格 5...12 Sizes 5...12

规格 Size	尺寸 mm Dimensions in mm												
	输入轴 Input												
	i_N = 25 – 45		i_N = 31.5 – 56		i_N = 50 – 63		i_N = 63 – 80		i_N = 71 – 90		i_N = 90 – 112		G_1
	D_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
5	40	70			30	50			24	40			160
6			40	70			30	50			24	40	160
7	45	80			35	60			28	50			185
8			45	80			35	60			28	50	185
9	60	125			45	100			32	80			230
10			60	125			45	100			32	80	230
11	70	120			50	80			42	70			255
12			70	120			50	80			42	70	255

规格 Size	尺寸 mm Dimensions in mm									
	减速机 Reductors									
	a	b_1	c	e_4	e_5	e_6	E	f_2	f_3	h
5	690	240	30 ±1	230	252	385	405	28	190	127.5
6	770	240	30 ±1	230	252	425	440	28	190	127.5
7	845	240	36 ±1	280	292	425	495	30	185	150
8	950	240	36 ±1	280	312	485	540	32	185	150
9	1000	330	45 ±1.5	320	342	560	580	32	170	185
10	1100	330	45 ±1.5	320	342	610	630	32	170	185
11	1200	330	54 ±1.5	380	402	595	705	35	170	215
12	1355	330	54 ±1.5	380	410	680	775	35	170	215

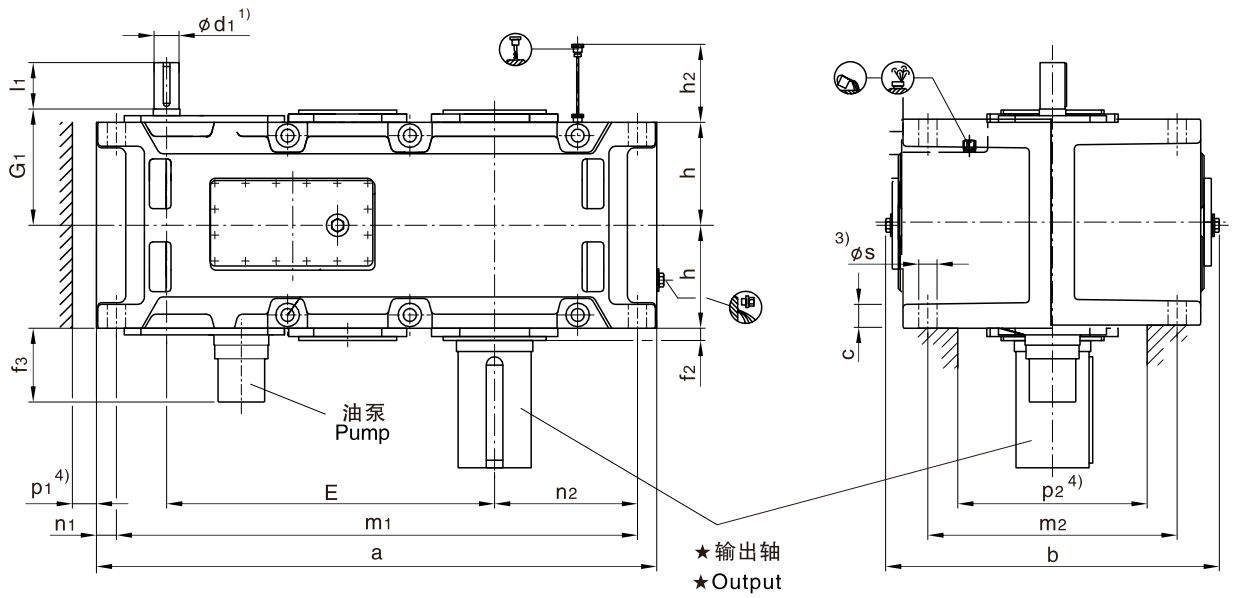
规格 Size	尺寸 mm Dimensions in mm									
	减速机 Reductors									
	h_1	h_2	h_3	m_1	m_2	n_1	n_2	p_1 4)	p_2 4)	s
5	205	190	240	630	360	30	175	35	270	24
6	205	190	240	710	360	30	220	35	270	24
7	205	165	250	775	430	35	215	35	330	28
8	205	165	250	880	430	35	275	35	330	28
9	275	205	330	920	490	40	260	40	370	36
10	275	205	330	1020	490	40	310	40	370	36
11	275	240	340	1100	600	50	295	50	440	40
12	275	240	340	1255	600	50	380	50	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油润滑 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	WH3SV			WH3HV		WH3DV						
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5			
5	100	165	210	95	165	100	100	165	240	35	13	320
6	110	165	210	105	165	110	110	165	240	37	15	365
7	120	195	210	115	195	120	120	195	280	60	25	540
8	130	195	250	125	195	130	130	195	285	72	30	625
9	140	235	250	135	235	140	145	235	330	100	40	875
10	160	235	300	150	235	150	155	235	350	110	45	1020
11	170	270	300	165	270	165	170	270	400	170	66	1400
12	180	270	300	180	270	180	185	270	405	190	75	1675

平行轴减速机 Helical Reductors　　三级传动 Three Stage　　立式安装 Vertical

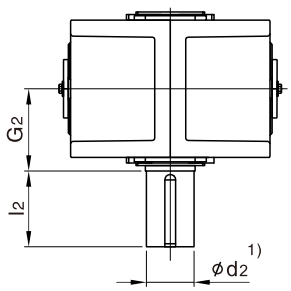
类型 WH3.V Types WH3.V　　规格 13...18 Sizes 13...18

WH3SV WH3HV WH3.V
采用强制润滑 With forced lubrication

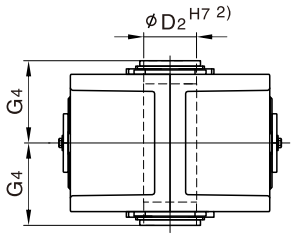


★ 输出轴 Output

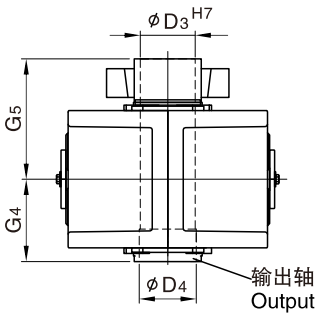
WH3SV
实心轴
Solid shaft



WH3HV
空心轴
Hollow shaft

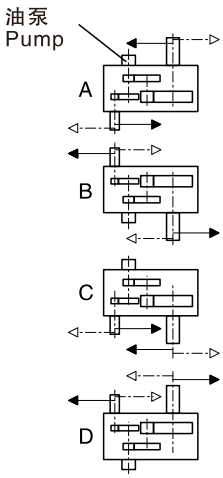


WH3DV
带胀紧盘的空心轴
Hollow shaft for shrink disk



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

布置形式 Design



1) $k_6 \leqslant \Phi 50$　$m_6 > \Phi 50$
有关平键 GB/T1095–1979 型和中心孔, 参见第279–280 页。For parallel key GB/T1095–1979 and for center hole,see page279–280 .
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 dimension,please refer to us.

平行轴减速机 Helical Reductors　　三级传动 Three Stage　　立式安装 Vertical

类型 WH3.V Types WH3.V　　规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																		
	输入轴 Input																		
	i_N=22.4–45		i_N=25–50		i_N=28–56		i_N=50–63		i_N=56–71		i_N=63–80		i_N=71–90		i_N=80–100		i_N=90–112		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
13	85	160					60	135					50	110					310
14					85	160					60	135					50	110	310
15	100	200					75	140					60	140					350
16			100	200					75	140					60	140			350
17	100	200					75	140					60	140					380
18			100	200					75	140					60	140			380
19								根据用户要求供货 On request											
20																			
21																			
22																			

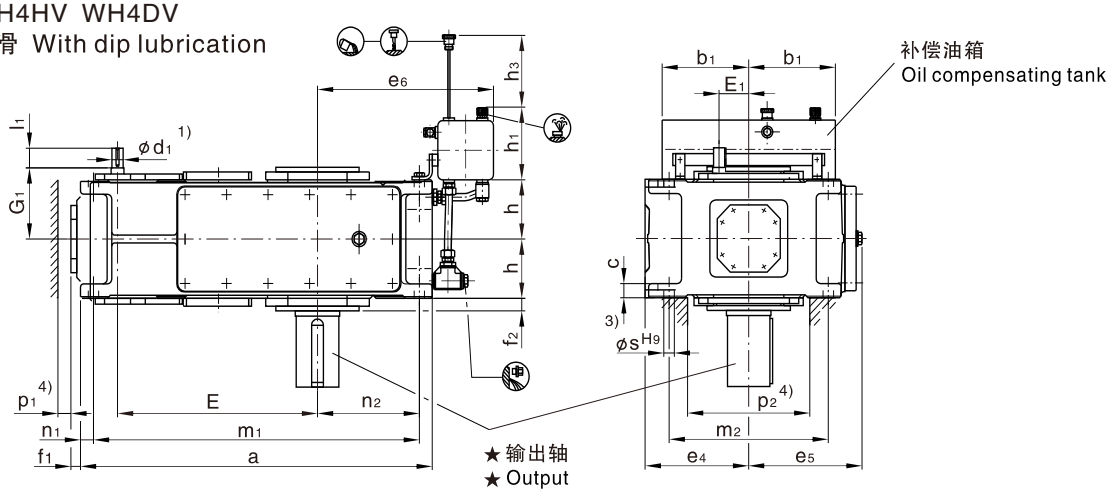
规格 Size	尺寸 mm Dimensions in mm														
	减速机 Reductors														
	a	b	c	E	f_2	f_3	h	h_2	m_1	m_2	n_1	n_2	p_1 4)	p_2 4)	s
13	1395	900	61±2	820	35	170	272.5	300	1300	680	50	360	50	500	48
14	1535	900	61±2	890	35	170	272.5	300	1440	680	50	430	50	500	48
15	1680	980	72±2	987	42	170	310	340	1565	750	60	430	50	570	55
16	1770	980	72±2	1033	42	170	310	340	1655	750	60	475	50	570	55
17	1770	1110	81±2	1035	42	210	340	374	1640	850	70	465	70	630	55
18	1890	1110	81±2	1095	42	210	340	374	1760	850	70	525	70	630	55
19						根据用户要求供货 On request									
20															
21															
22															

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 output										
	WH3SV			WH3HV		WH3DV					
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
13	200	335	350	190	335	190	195	335	480	115	2155
14	210	335	350	210	335	210	215	335	480	126	2490
15	230	380	410	230	380	230	235	380	550	180	3260
16	240	380	410	240	380	240	245	380	550	190	3625
17	250	415	410	250	415	250	260	415	600	190	4250
18	270	415	470	275	415	280	285	415	600	200	4740
19					根据用户要求供货 On request						
20											
21											
22											

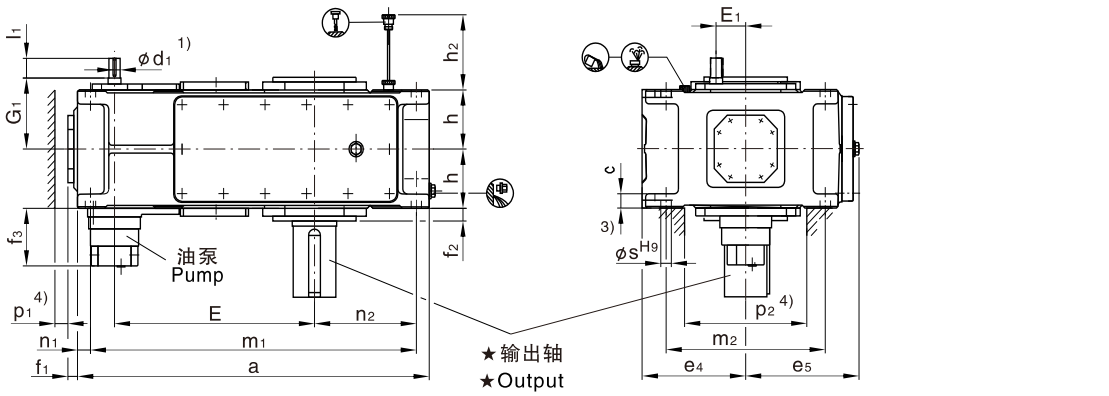
平行轴减速机 Helical Reductors　　四级传动 Four Stage　　立式安装 Vertical

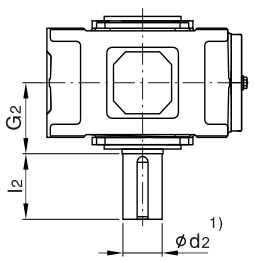
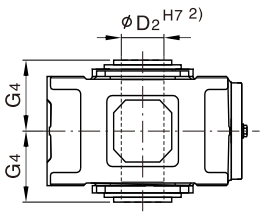
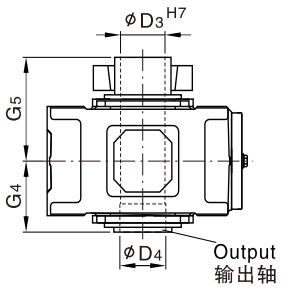
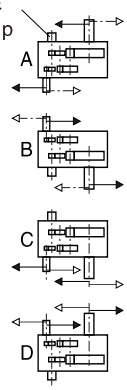
类型 WH4.V Types WH4.V　　规格 7...12 Sizes 7...12

WH4SV WH4HV WH4DV
采用浸油润滑 With dip lubrication



WH4SV WH4HV WH4DV
采用强制润滑 With forced lubrication



★输出轴 Output			布置形式 Design
WH4SV 实心轴 Solid shaft	WH4HV 空心轴 Hollow shaft	WH4DV 带胀紧盘的空心轴 Hollow shaft for shrink disk	油泵 Pump
		 Output 输出轴 布置形式A+D根据用户要求供货 Design A+D on request	 A B C D

1) $k_6 \leqslant \Phi 50$　$m_6 > \Phi 50$
有关平键 GB/T1095–1979 型和中心孔, 参见第279–280 页。For parallel key GB/T1095–1979 and for center hole,see page279–280 .
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 dimension,please refer to us.

平行轴减速机 Helical Reductors　　四级传动 Four Stage　　立式安装 Vertical

类型 WH4.V Types WH4.V　　规格 7...12 Sizes 7...12

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i_N=100–180		i_N=125–224		i_N=200–355		i_N=250–450		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
7	30	50			24	40			180
8			30	50			24	40	180
9	35	60			28	50			215
10			35	60			28	50	215
11	45	100			32	80			250
12			45	100			32	80	250

规格 Size	尺寸mm Dimensions in mm										
	减速机 Reductors										
	a	b_1	c	e_4	e_5	e_6	E	E_1	f_1	f_2	f_3
7	845	240	36 ± 1	280	292	425	495	80	37	30	160
8	950	240	36 ± 1	280	302	485	540	80	37	32	160
9	1000	330	45 ± 1.5	320	342	560	580	90	43	32	170
10	1100	330	45 ± 1.5	320	342	610	630	90	43	32	170
11	1200	330	54 ± 1.5	380	402	595	705	110	47	35	170
12	1355	330	54 ± 1.5	380	410	680	775	110	47	35	170

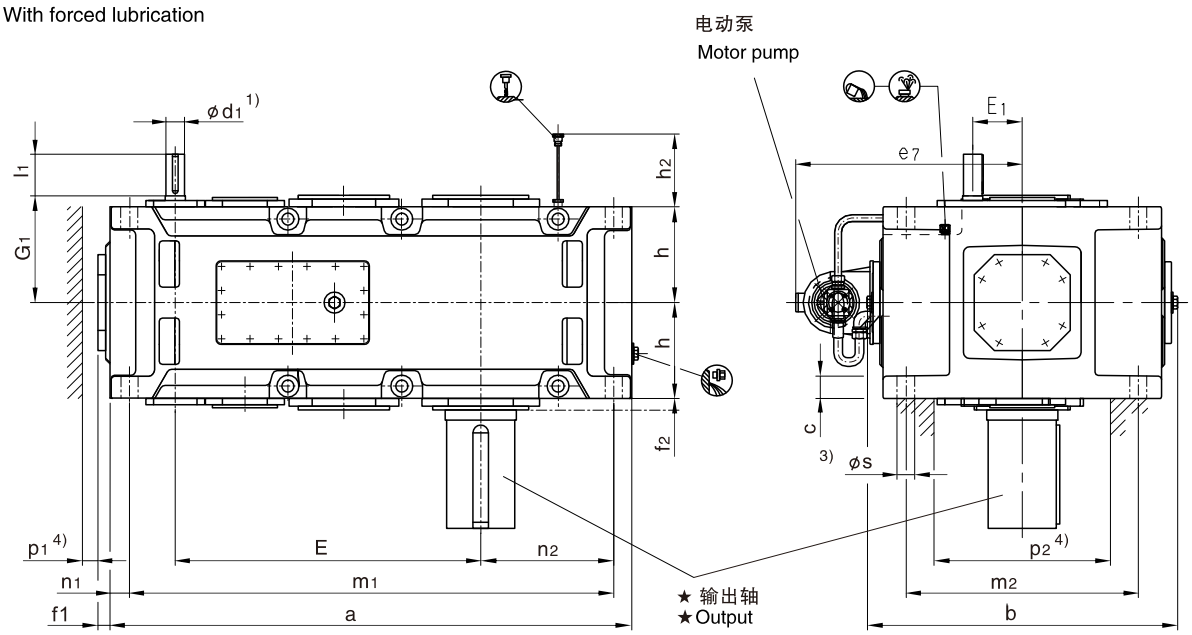
规格 Size	尺寸mm Dimensions in mm										
	减速机 Reductors										
	h	h_1	h_2	h_3	m_1	m_2	n_1	n_2	p_1 4)	p_2 4)	s
7	150	205	165	250	775	430	35	215	35	330	28
8	150	205	165	250	880	430	35	275	35	330	28
9	185	275	205	330	920	490	40	260	40	370	36
10	185	275	205	330	1020	490	40	310	40	370	36
11	215	275	240	340	1100	600	50	295	50	440	40
12	215	275	240	340	1255	600	50	380	50	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油浸润 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	WH4SV			WH4HV		WH4DV						
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5			
7	120	195	210	115	195	120	120	195	280	50	20	550
8	130	195	250	125	195	130	130	195	285	60	25	645
9	140	235	250	135	235	140	145	235	330	95	38	875
10	160	235	300	150	235	150	155	235	350	110	45	1010
11	170	270	300	165	270	165	170	270	400	165	65	1460
12	180	270	300	180	270	180	185	270	405	180	75	1725

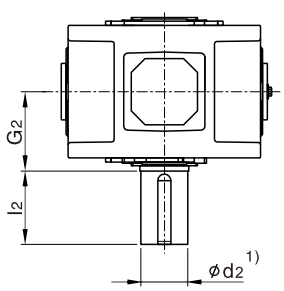
平行轴减速机 Helical Reductors　四级传动 Four Stage　立式安装 vertical

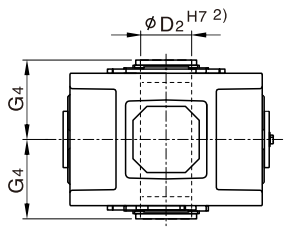
类型 WH4.V Types WH4.V　规格 13...18 Sizes 13...18

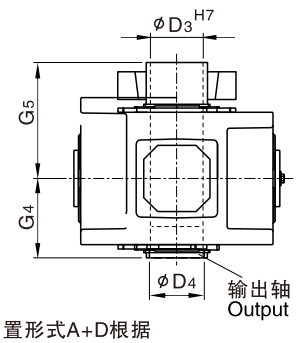
WH4SV WH4HV WH4DV
采用强制润滑
With forced lubrication



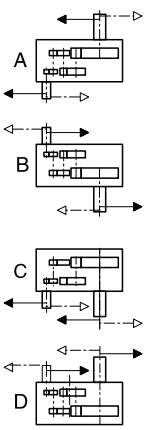
★ 输出轴 Output			布置形式 Design
WH4SV 实心轴 Solid shaft	WH4HV 空心轴 Hollow shaft	WH4DV 带胀紧盘的空心轴 Hollow shaft for shrink disk	







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



1) k6≤Φ50　m6>Φ50
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280页。For parallel key GB/T1095-1979 and for center hole,see page279-280.
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 dimension,please refer to us.

平行轴减速机 Helical Reductors　　四级传动 Four Stage　　立式安装 Vertical

类型 WH4.V Types WH4.V　　规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm												
	输入轴 Input												
	i_N=100 – 180		i_N=112 – 200		i_N=125 – 224		i_N=200 – 355		i_N=224– 400		i_N=250– 450		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
13	50	100					38	80					305
14					50	100					38	80	305
15	60	135					50	110					345
16			60	135					50	110			345
17	60	105					50	80					380
18			60	105					50	80			380
19						根据用户要求供货 On request							
20													
21													
22													

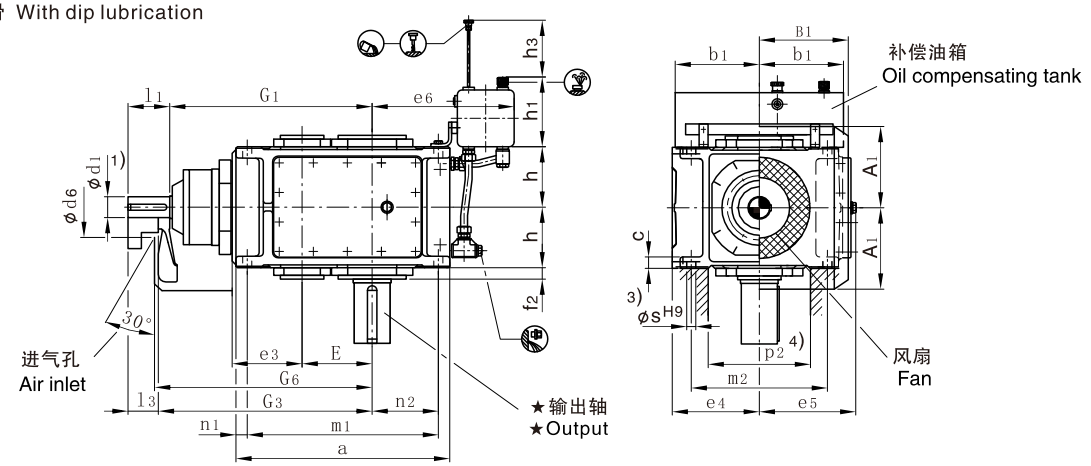
规格 Size	尺寸 mm Dimensions in mm																
	减速机 Reductors																
	a	b	c	e_7	E	E_1	f_1	f_2	h	h_2	m_1	m_2	n_1	n_2	p_1 4)	p_2 4)	s
13	1395	900	61 ± 2	695	820	130	47	35	272.5	300	1300	680	50	360	50	500	48
14	1535	900	61 ± 2	695	890	130	47	35	272.5	300	1440	680	50	430	50	500	48
15	1680	980	72 ± 2	735	987	160	56	42	310	340	1565	750	60	430	50	570	55
16	1770	980	72 ± 2	735	1033	160	56	42	310	340	1655	750	60	475	50	570	55
17	1770	1110	81 ± 2	795	1035	160	53	42	340	374	1640	850	70	465	70	630	55
18	1890	1110	81 ± 2	795	1095	160	53	42	340	374	1760	850	70	525	70	630	55
19								根据用户要求供货 On request									
20																	
21																	
22																	

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WH4SV			WH4SV		WH4DV					
	d_2 1)	G_2	l_2	D_2 1)	G_4	D_3	D_4	G_4	G_5		
13	200	335	350	190	335	190	195	335	480	95	2270
14	210	335	350	210	335	210	215	335	480	105	2600
15	230	380	410	230	380	230	235	380	550	150	3440
16	240	380	410	240	380	240	245	380	550	160	3740
17	250	415	410	250	415	250	260	415	600	190	4445
18	270	415	470	275	415	280	285	415	600	200	4915
19						根据用户要求供货 On request					
20											
21											
22											

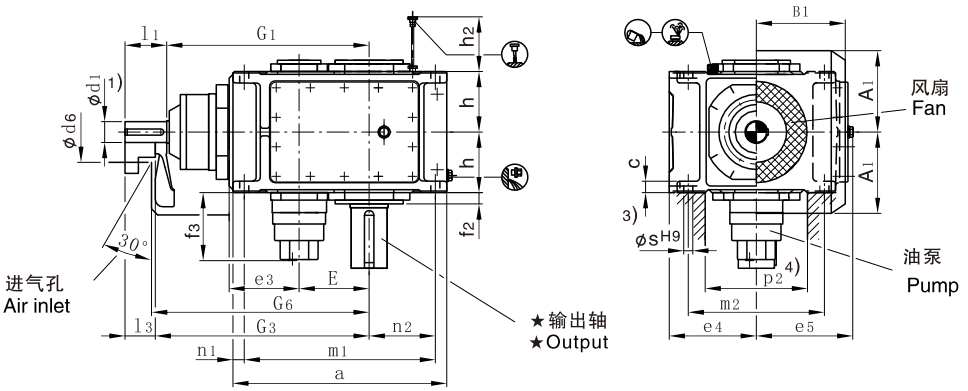
直交轴减速机 Bevel-helical Reductors 二级传动 Two Stage 立式安装 Vertical

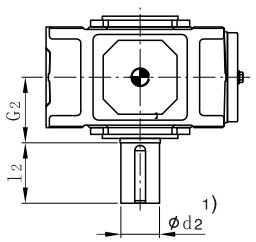
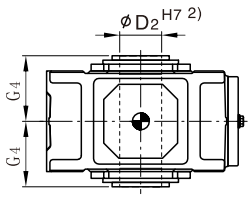
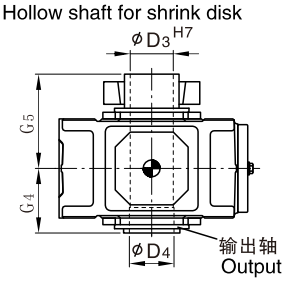
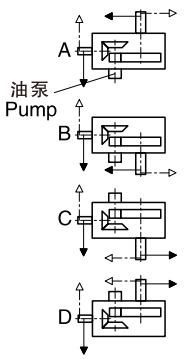
类型 WB2.V Types WB2.V 规格 1...12 Sizes 1...12

WB2SV WB2HV WB2DV
采用浸油润滑 With dip lubrication



WB2SV WB2HV WB2DV
采用强制润滑With forced lubrication



★输出轴 Output			布置形式 Design
WB2SV 实心轴 Solid shaft 	WB2HV 空心轴 Hollow shaft 	WB2DV 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) k6≤Φ50 m6>Φ50
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280页。For parallel key GB/T1095-1979 and for center hole,see page279-280.
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 dimension,please refer to us.

直交轴减速机 Bevel–helical Reductors 二级传动 Two Stage
立式传动 Vertical 类型 WB2.V Types WB2.V
规格 1...12 Sizes 1...12

规格 Size	尺寸 mm Dimensions in mm										
	输入轴 Input										
	i_N = 5 – 11.2			i_N = 6.3 – 14			i_N = 12.5 – 18			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
1	28	55	40				20	50	35	300	315
2	30	70	50				25	60	40	340	360
3	35	80	60				28	60	40	390	410
4	45	100	80							465	485
5	55	110	80							535	565
6				55	110	80				570	600
7	70	135	105							640	670
8				70	135	105				685	715
9	80	165	130							755	790
10				80	165	130				805	840
11	90	165	130							925	960
12				90	165	130				995	1030

规格 Size	尺寸 mm Dimensions in mm											
	减速机 Reductors											
	a	A_1	b_1	B_1	c	d_6	e_3	e_4	e_5	e_6	E	f_2
1	305	128	150	130	16 ± 1	100	90	130	145	280	90	22
2	355	143	150	145	20 ± 1	110	110	145	160	285	110	22
3	405	163	150	170	24 ± 1	120	130	175	185	290	130	24
4	505	188	150	200	30 ± 1	150	160	200	215	320	160	26
5	565	215	240	235	30 ± 1	160	185	230	252	385	185	30
6	645	215	240	235	30 ± 1	160	185	230	252	425	220	30
7	690	250	240	285	36 ± 1	210	225	280	302	425	225	32
8	795	250	240	285	36 ± 1	210	225	280	302	485	270	32
9	820	270	330	325	48 ± 1.5	195	265	320	342	560	265	45
10	920	270	330	325	48 ± 1.5	195	265	320	342	610	315	45
11	975	328	330	385	54 ± 1.5	210	320	380	410	595	320	47
12	1130	328	330	385	54 ± 1.5	210	320	380	410	680	390	47

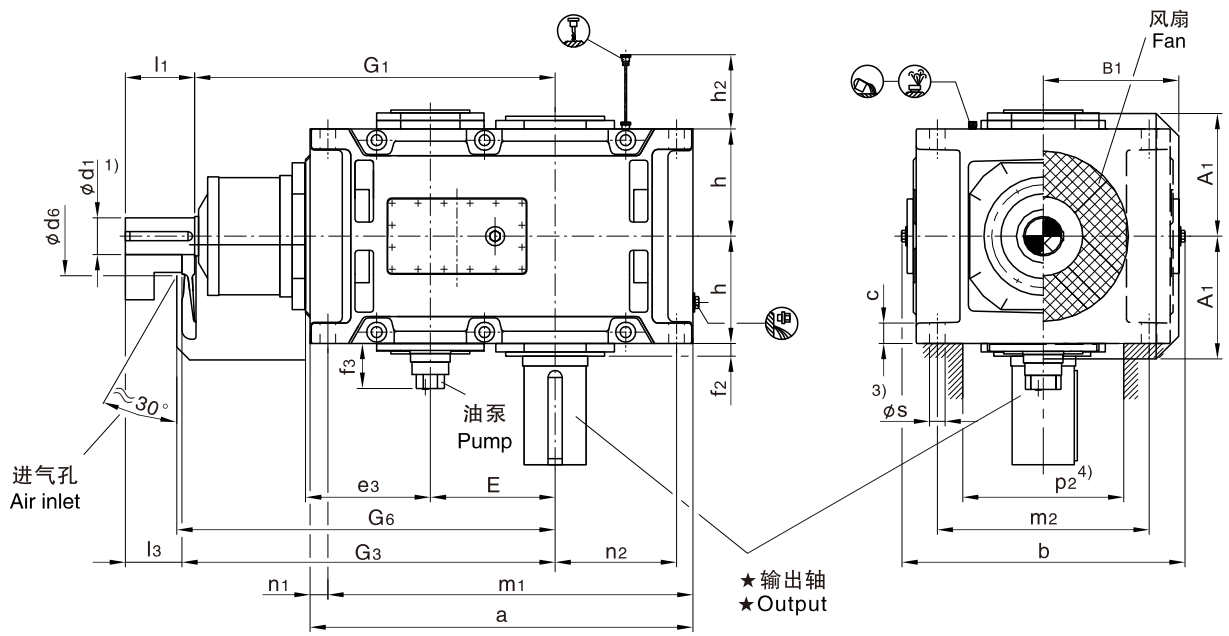
规格 Size	尺寸 mm Dimensions in mm											
	减速机 Reductors											
	f_3	G_6	h	h_1	h_2	h_3	m_1	m_2	n_1	n_2	p_2 4)	s
1	–	325	90	165	–	170	275	210	15	115	150	12
2	–	370	102.5	165	–	170	315	315	20	120	170	14
3	–	420	112.5	165	–	180	365	365	20	130	200	18
4	–	495	135	165	–	180	445	300	30	160	220	24
5	190	575	160	205	245	240	505	360	30	175	270	24
6	190	610	160	205	245	240	585	360	30	220	270	24
7	200	685	190	205	220	250	620	430	35	215	330	28
8	200	730	190	205	220	250	725	430	35	275	330	28
9	200	805	220	275	250	330	740	490	40	260	370	36
10	200	855	220	275	250	330	840	490	40	310	370	36
11	200	980	265	275	300	340	875	600	50	295	440	40
12	200	1050	265	275	300	340	1030	600	50	380	440	40

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil		重量 Weight (kg)
	输出轴 Output									浸油浸润 Dip lubrication (l)	强制润滑 Forced lubrication (l)	
	WB2SV			WB2HV		WB2DV						
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5			
1	45	120	80	–	–	–	–	–	–	7	–	65
2	55	135	110	55	135	60	60	135	180	11	–	90
3	65	145	140	65	145	70	70	145	200	16	–	140
4	80	170	170	80	170	85	85	170	235	28	–	235
5	100	200	210	95	200	100	100	200	275	41	20	360
6	110	200	210	105	200	110	110	200	275	50	23	410
7	120	235	210	115	235	120	120	235	320	75	35	615
8	130	235	250	125	235	130	130	235	325	90	38	700
9	140	270	250	135	270	140	145	270	360	115	53	1000
10	160	270	300	150	270	150	155	270	385	135	60	1155
11	170	320	300	165	320	165	170	320	450	190	86	1640
12	180	320	300	180	320	180	185	320	455	215	95	1910

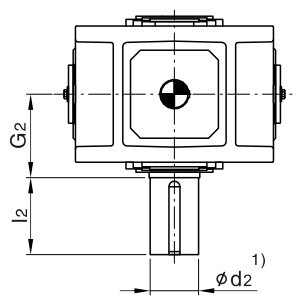
直交轴减速机 Bevel-helical Reductors 二级传动 Two Stage 立式安装 Vertical

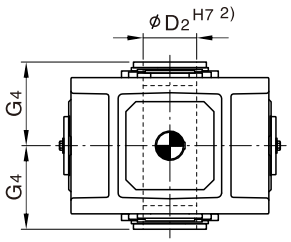
类型 WB2.V Types WB2.V 规格 13...18 Sizes 13...18

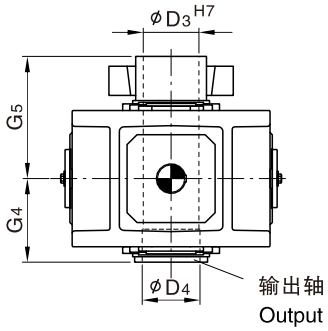
WB2SV WB2HV WB2DV
采用强制润滑 With forced lubrication



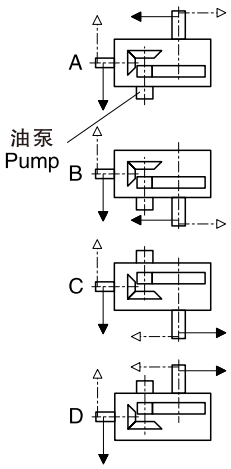
★ 输出轴 Output			布置形式 Design
WB2SV 实心轴 Solid shaft	WB2HV 空心轴 Hollow shaft	WB2DV 带胀紧盘的空心轴 Hollow shaft for shrink disk	







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



1) k6≤Φ50 m6>Φ50
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280 页。For parallel key GB/T1095-1979 and for center hole,see page279-280 .
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 dimension,please refer to us.

直交轴减速机 Bevel–helical Reductors 二级传动 Two Stage 立式安装 Vertical

类型 WB2.V Types WB2.V 规格 13...18 Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																
	输入轴 Input																
	i_N = 5 – 11.2			i_N = 5.6 – 11.2			i_N = 5.6 – 12.5			i_N = 6.3 – 14			i_N = 7.1 – 12.5			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_1		
13	110	205	165													1070	1110
14										110	205	165				1140	1180
15	130	245	200													1277	1322
16							130	245	200							1323	1368
17				150	245	200										1435	1480
18													150	245	200	1495	1540

规格 Size	尺寸mm Dimensions in mm									
	减速机 Reductors									
	a	A_1	b	B_1	c	d_6	e_3	E	f_2	f_3
13	1130	375	900	450	61 ± 2	245	380	370	38	200
14	1270	375	900	450	61 ± 2	245	380	440	45	200
15	1350	435	980	495	72 ± 2	280	450	442	75	200
16	1440	435	980	495	72 ± 2	280	450	488	75	200
17	1490	505	1110	555	81 ± 2	380	510	490	98	200
18	1610	505	1110	555	81 ± 2	380	510	550	98	200

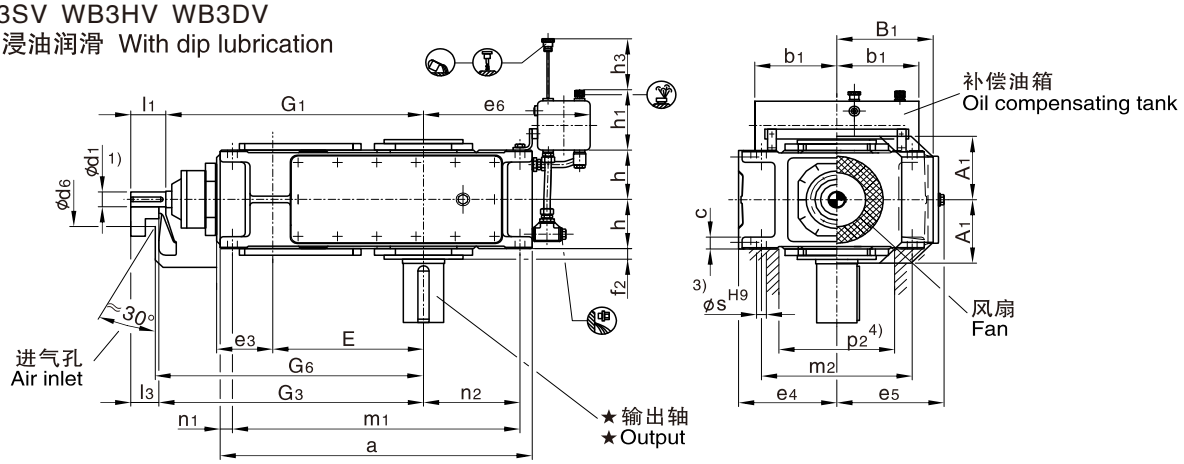
规格 Size	尺寸 mm Dimensions in mm								
	减速机 Reductors								
	G_6	h	h_2	m_1	m_2	n_1	n_2	p_2 4)	s
13	1130	325	350	1035	680	50	360	500	48
14	1200	325	350	1175	680	50	430	500	48
15	1340	380	430	1235	750	60	430	570	55
16	1385	380	430	1325	750	60	475	570	55
17	1500	437.5	480	1360	840	70	465	630	65
18	1560	437.5	480	1480	840	70	525	630	65

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WB2SV			WB2HV		WB2DV					
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5		
13	200	390	350	–	–	–	–	–	–	100	2350
14	210	390	350	210	390	210	215	390	535	110	2725
15	230	460	410	–	–	–	–	–	–	145	3795
16	240	460	410	240	450	240	245	450	620	160	4160
17	250	540	410	–	–	–	–	–	–	210	5320
18	270	540	470	275	510	280	285	510	700	220	5860

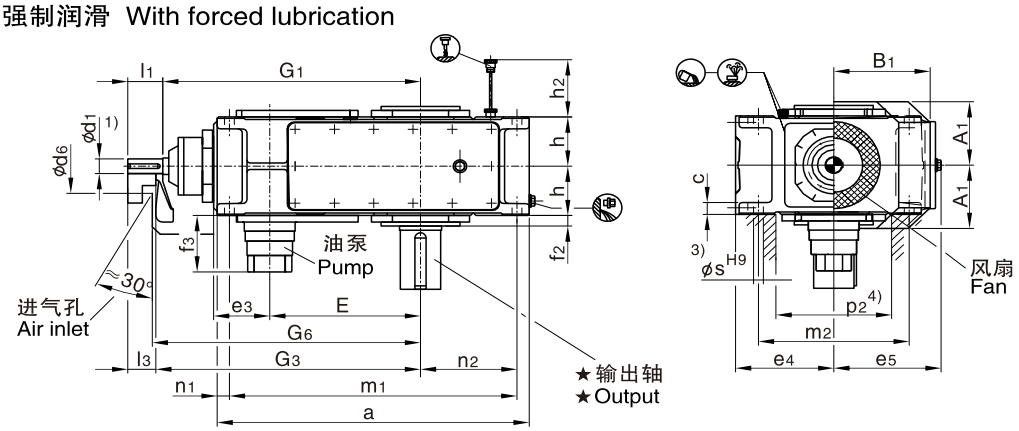
直交轴减速机 Bevel-helical Reductors　三级传动 Three Stage　立式安装 Vertical

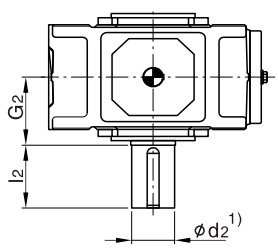
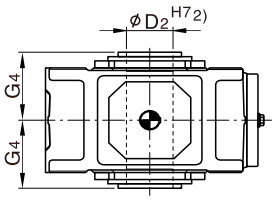
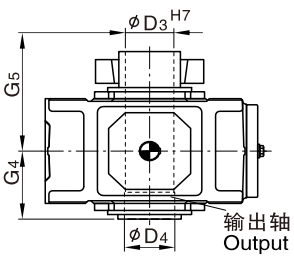
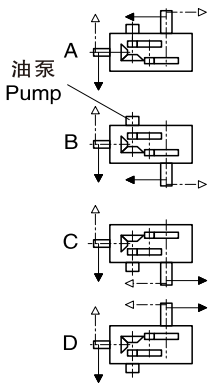
类型 WB3.V Types WB3.V　规格 3...12 Sizes 3...12

WB3SV WB3HV WB3DV
采用浸油润滑 With dip lubrication



WB3SV WB3HV WB3DV
采用强制润滑 With forced lubrication



★输出轴 Output			布置形式 Design
WB3SV 实心轴 Solid shaft	WB3HV 空心轴 Hollow shaft	WB3DV 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) $k_6 \leq \Phi 50$　$m_6 > \Phi 50$
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280页。For parallel key GB/T1095-1979 and for center hole,see page279-280.
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 dimension,please refer to us.

直交轴减速机 Bevel-helical Reductors 三级传动 Three Stage 立式安装 Vertical

类型 WB3.V Types WB3.V 规格 3...12 Sizes 3...12

规格 Size	尺寸 mm Dimensions in mm																
	输入轴 Input																
	i_N = 12.5 – 45			i_N = 16 – 56			i_N = 20 – 45			i_N = 50 – 71			i_N = 63 – 90			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
3							28	55	40	20	50	35				430	445
4	30	70	50							25	60	40				500	520
5	35	80	60							28	60	40				575	595
6				35	80	60							28	60	40	610	630
7	45	100	80							35	80	60				690	710
8				45	100	80							35	80	60	735	755
9	55	110	80							40	100	70				800	830
10				55	110	80							40	100	70	850	880
11	70	135	105							50	110	80				960	990
12				70	135	105							50	110	80	1030	1060

规格 Size	尺寸 mm Dimensions in mm											
	减速机 Reductors											
	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

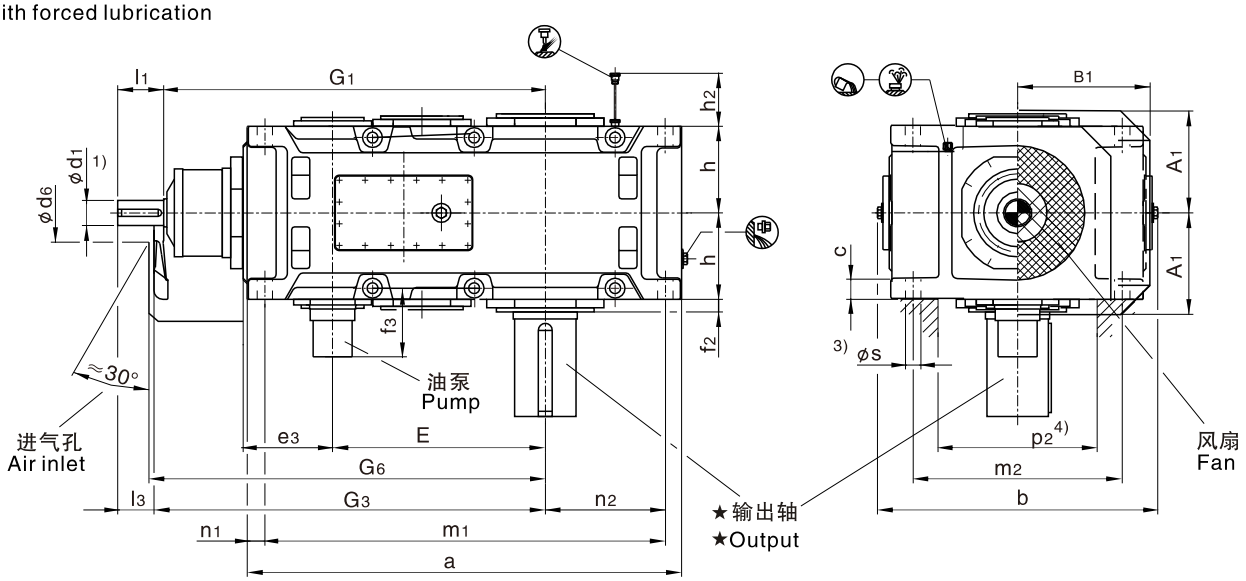
规格 Size	尺寸 mm Dimensions in mm											
	减速机 Reductors											
	f_3	G_6	h	h_1	h_2	h_3	m_1	m_2	n_1	n_2	p_2 4)	s
3	–	455	95	165	–	180	410	265	20	125	210	18
4	–	530	107.5	165	–	180	505	300	30	160	220	24
5	190	605	127.5	205	180	240	580	360	30	175	270	24
6	190	640	127.5	205	180	240	660	360	30	220	270	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 Oil		重量 Weight (kg)
	输出轴 Output									浸油润滑 Dip lubrication (l)	强制润滑 Forced lubrication(l)	
	WB3SV			WB3HV		WB3DV						
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5			
3	65	125	140	65	125	70	70	125	180	15	–	130
4	80	140	170	80	140	85	85	140	205	28	–	210
5	100	165	210	95	165	100	100	165	240	32	12	325
6	110	165	210	105	165	110	110	165	240	35	13	380
7	120	195	210	115	195	120	120	195	280	52	22	550
8	130	195	250	125	195	130	130	195	285	67	28	635
9	140	235	250	135	235	140	145	235	330	115	48	890
10	160	235	300	150	235	150	155	235	350	125	52	1020
11	170	270	300	165	270	165	170	270	400	180	75	1455
12	180	270	300	180	270	180	185	270	405	200	85	1730

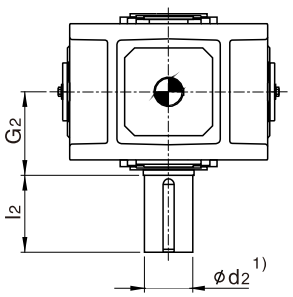
直交轴减速机 Bevel-helical Reductors　三级传动 Three Stage　立式安装 Vertical

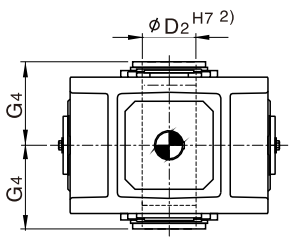
类型 WB3.V Types WB3.V　规格 13...18 Sizes 13...18

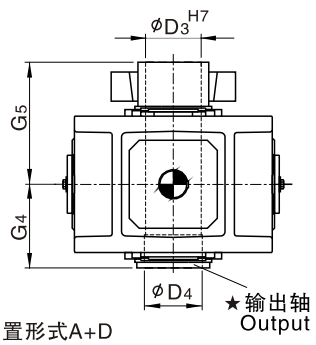
WB3SV WB3HV WB3DV
采用浸油润滑
With forced lubrication



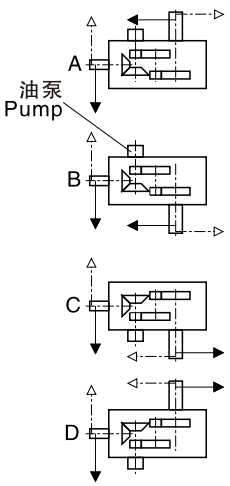
★ 输出轴 Output			布置形式 Design
WB3SV 实心轴 Solid shaft	WB3HV 空心轴 Hollow shaft	WB3DV 带胀紧盘的空心轴 Hollow shaft for shrink disk	







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



1) k6≤Φ50　m6>Φ50
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直交轴减速机 Bevel–helical Reductors　三级传动 Three Stage　立式安装 Vertical

类型 WB3.V Types WB3.V　Sizes 13...18

规格 Size	尺寸 mm Dimensions in mm																			
	输入轴 Input																			
	i_N=12.5–45			i_N=14–50			i_N=16–56			i_N=50–71			i_N=56–80			i_N=63–90			G_1	G_3
	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3	d_1 1)	l_1	l_3		
13	80	165	130							60	140	105							1125	1160
14							80	165	130							60	140	105	1195	1230
15	90	165	130							70	140	105							1367	1402
16				90	165	130							70	140	105				1413	1448
17	110	205	165							80	170	130							1560	1600
18				110	205	165							80	170	130				1620	1660
19									根据用户要求供货 Onrequest											
20																				
21																				
22																				

规格 Size	尺寸 mm Dimensions in mm									
	减速机 Reductors									
	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 Onrequest					
20										
21										
22										

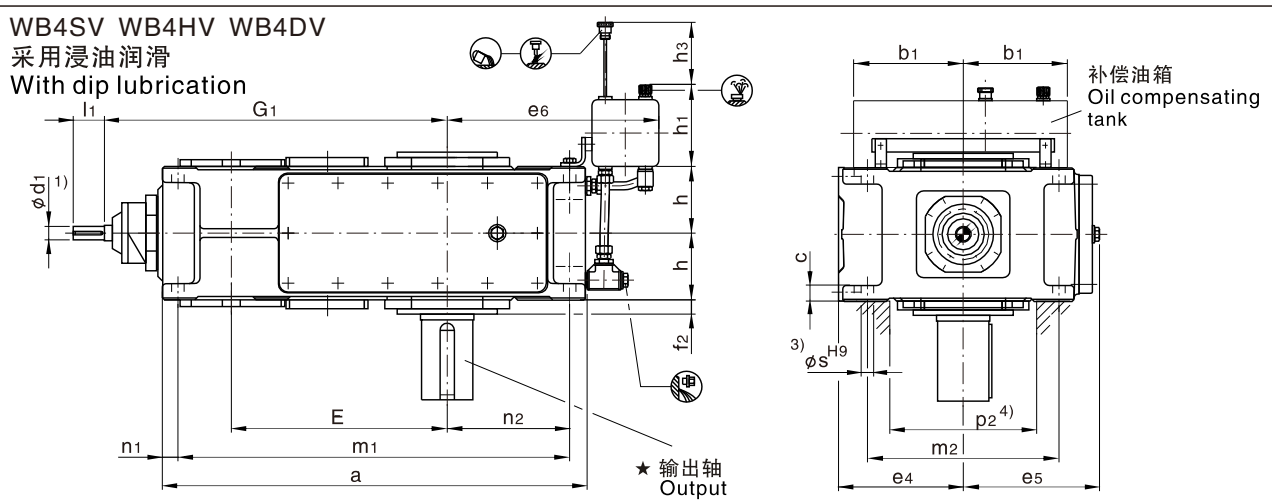
规格 Size	尺寸mm Dimensions in mm								
	减速机 Reductors								
	G_6	h	h_2	m_1	m_2	n_1	n_2	p_2 4)	s
13	1180	272.5	300	1195	680	50	360	500	48
14	1250	272.5	300	1335	680	50	430	500	48
15	1420	310	340	1435	750	60	430	570	55
16	1470	310	340	1525	750	60	475	570	55
17	1620	340	380	1610	850	70	465	630	55
18	1680	340	380	1730	850	70	525	630	55
19				根据用户要求供货 Onrequest					
20									
21									
22									

规格 Size	尺寸 mm Dimensions in mm									润滑油 Oil (l)	重量 Weight (kg)
	输出轴 Output										
	WB3SV			WB3HV		WB3DV					
	d_2 1)	G_2	l_2	D_2 1)	G_4	D_3	D_4	G_4	G_5		
13	200	335	350	190	335	195	95	335	480	95	2260
14	210	335	350	210	335	210	215	335	480	110	2615
15	230	380	410	230	380	230	235	380	550	165	3540
16	240	380	410	240	380	240	245	380	550	190	3765
17	250	415	410	250	415	250	260	415	600	210	4760
18	270	415	470	275	415	280	285	415	600	240	5240
19						根据用户要求供货 Onrequest					
20											
21											
22											

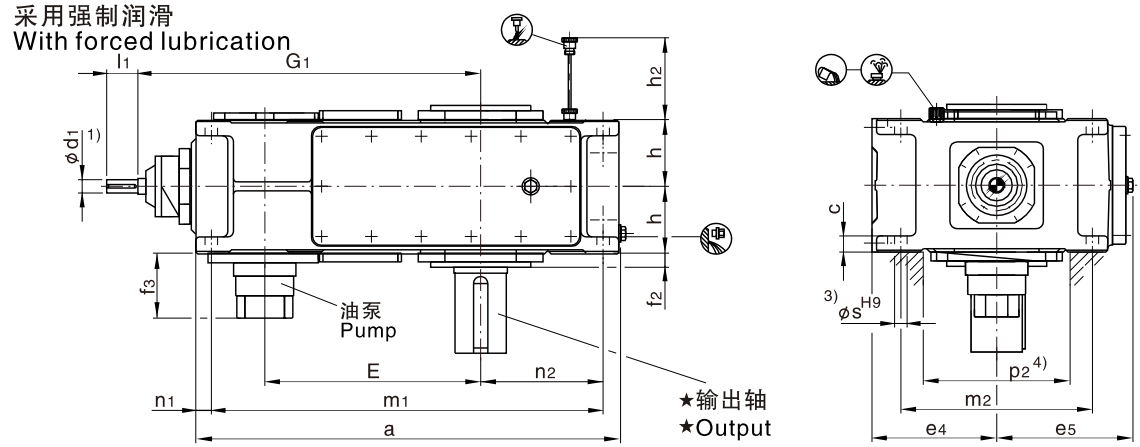
直交轴减速机 Bevel-helical Reductors　四级传动 Four Stage　立式安装 Verticall

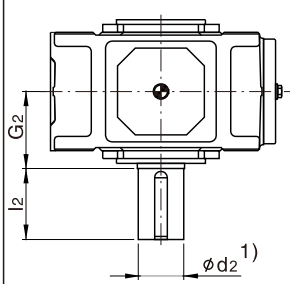
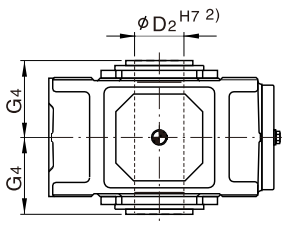
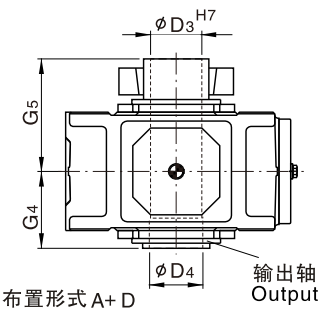
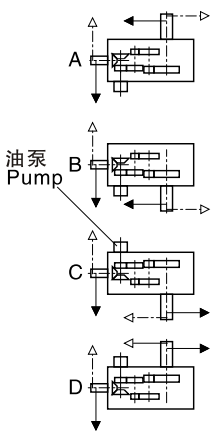
类型 WB4.V Types WB4.V　规格 5 ...12 Sizes 5 ...12

WB4SV WB4HV WB4DV
采用浸油润滑
With dip lubrication



WB4SV WB4HV WB4DV
采用强制润滑
With forced lubrication



★输出轴 Output			布置形式 Design
WB4SV 实心轴 Solid shaft	WB4HV 空心轴 Hollow shaft	WB4DV 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) $k_6 \leq \Phi 50$　$m_6 > \Phi 50$
有关平键 GB/T1095-1979 型和中心孔, 参见第279-280页。For parallel key GB/T1095-1979 and for center hole,see page279-280.
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直交轴减速机 Bevel–helical Reductors 四级传动 Four Stage
立式安装 Vertical 类型 WB4.V Type WB4.V
规格 5... 12 Sizes 5... 12

规格 Size	尺寸 mm Dimensions in mm								
	输入轴 Input								
	i_N = 80 – 180		i_N = 100 – 224		i_N = 200 – 315		i_N = 250 – 400		G_1
	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	d_1 1)	l_1	
5	28	55			20	50			615
6			28	55			20	50	650
7	30	70			25	60			725
8			30	70			25	60	770
9	35	80			28	60			840
10			35	80			28	60	890
11	45	100			35	80			1010
12			45	100			35	80	1080

规格 Size	尺寸mm Dimensions in mm								
	减速机 Reductors								
	a	b_1	c	e_4	e_5	e_6	E	f_2	f_3
5	690	240	30 ± 1	230	252	385	405	28	200
6	770	240	30 ± 1	230	252	425	440	28	200
7	845	240	36 ± 1	280	292	425	495	30	120
8	950	240	36 ± 1	280	302	485	540	32	120
9	1000	330	45 ± 1.5	320	342	560	580	32	120
10	1100	330	45 ± 1.5	320	342	610	630	32	120
11	1200	330	54 ± 1.5	380	402	595	705	35	130
12	1355	330	54 ± 1.5	380	410	680	775	35	130

规格 Size	尺寸mm Dimensions in mm									
	减速机 Reductors									
	h	h_1	h_2	h_3	m_1	m_2	n_1	n_2	p_2	s
5	127.5	205	190	240	630	360	30	175	270	24
6	127.5	205	190	240	710	360	30	220	270	24
7	150	205	165	250	775	430	35	215	330	28
8	150	205	165	250	880	430	35	275	330	28
9	185	275	205	330	920	490	40	260	370	36
10	185	275	205	330	1020	490	40	310	370	36
11	215	275	240	340	1100	600	50	295	440	40
12	215	275	240	340	1255	600	50	380	440	40

规格 Size	尺寸mm Dimensions in mm									润滑油 Oil		重量 Weight
	输出轴 Output									浸油浸润 Dip lubrication	强制润滑 Forced lubrication	
	WB4SV			WB4HV		WB4DV						
	d_2 1)	G_2	l_2	D_2 2)	G_4	D_3	D_4	G_4	G_5	(l)	(l)	(kg)
5	100	165	210	95	165	100	100	165	240	36	15	335
6	110	165	210	105	165	110	110	165	240	40	16	385
7	120	195	210	115	195	120	120	195	280	60	30	555
8	130	195	250	125	195	130	130	195	285	70	35	655
9	140	235	250	135	235	140	145	235	330	110	60	890
10	160	235	300	150	235	150	155	235	350	130	67	1025
11	170	270	300	165	270	165	170	270	400	180	75	1485
12	180	270	300	180	270	180	185	270	405	195	85	1750

减速器常见故障、原因、措施
Common malfunctions, reasons and measures

故障 Malfunction	原因 Causes	措施 Measurs
减速器漏油 Oil–lead If aear unit	箱体盖或者联接处的密封不良 Sealing at cover and conneetion notin good stare	检查密封和连接处，如果必要的话，更换新的。将连接处密封好。 Checd air–proofand conneetion part,replace then if necessary,and seal up connection part.
	油封漏油 Oil seal leaks oil.	和售后服务部联系，换新的油封。 Please contact after sales service department to replace it with new oil seal.
油中有水 Water in oil	油中有杂物 Mixer in oil	用试管检查油的状态是否有水份存在。实验室分析油。 Classify if there is water in lil by using tube, Analyse oil in laboratory.
	润滑油冷却器或者冷却螺旋管失效 Cooling coil is If mal–fanction	和售后服务部联系，找出并修理漏油之处，更换冷却器或者螺旋管。 Consult after–sales department,Find ort and repair leakage place,Replace cooling coil.
	减速机表面受机器间通风过来的凉气而产生凝露 Cool air will cause water drop in gear unit	用适合的保温材料将减速机保护起来，关闭空气的出口或者在结构上改变其方向。 Shelter gear units with proper.
轴承处的振幅升高 Swing at bearing higher	轴承损坏 Bearingis damaged	和售后服务部联系,检查并按需更换轴承。 Consult after–sales department,Check and replace gears.
	齿轮损坏 Gear is damaged	和售后服务部联系,检查并按需更换齿轮。 Consult after–sales department，Check and replace gears.
止回装置的温度过高，止回功能的失效 Temperature of antibackstop too high and it becomes malfunction	止回装置损坏 Anti–backstop becmes malfunction	和售后服务部联系,检查并按需更换止回装置。 Consult after–sales department,Replace anti–backstop.
轴承温度升高 Bearing temperature rise	箱体里面的油面过高或过低 Oil level is too high or low	在室温下检查油面的高度并按需加油 Checd oil level at room temperature and add pm reduce oil
	油过于陈旧 Oil is used too tong	和客户服务部联系。检查上次换油时间 Consult after–sales department Check the date that oil be replaced last timel.
	油泵的机械故障 Malfunction of oil pump	和客户服务部联系。检查油泵的工作是否正常，修理或换新的油泵 Consult after–sales department Cheek if pump works normally,repair or replace it.
	轴承损坏 Bearings get damaged	和售后服务部联系，查阅操作人员在振动测量中所获得的数据，检查并按需更换轴承。 Consult after–sales department.–look up the date about vibration.–check and replace it on request.

减速器常见故障、原因、措施
Common malfunctions, reasons and measures

故障 Malfunction	原因 Causes	措施 Measurs
工作温度升高 Working temper ature too high	箱体里面的油面过高 Oil leve is too high	检查油面高度，如果有必要的话进行调整。 Check oil level,and adjust if necessary.
	油过于陈旧 Oil is used too long	和售后服务部联系。检查上一次换油的时间， 如果有必要的话就更换。 Consult after–sales department,Check the date that oil was replaced last time,replace it if necessary.
	通过水冷装置的油流过低，其 原因是滤油器严重堵塞 Oil flux through water cooling devices is too low	清理滤油器 Clean oil filter
	油泵的机械故障，油泵损坏 Malfunction of oil pump oil pump damage	和售后服务部联系。检查油泵的功能是否正常， 修理或者换新油泵。 Consult after–sales department,Check of oil pump works normally,Repair or replace it.
	在配备了风扇的减速机上， 风扇罩和箱体严重污染 Enteance of fan shield and housing polluted seriously	清理风扇罩和箱体 Cleanse fan shield and housing.
	配备了冷却螺旋管的减速机， 冷却螺管里面结垢 Residues in cooling coil	和售后服务部联系。清理或者更换螺旋管。 Consult after–sales department,Clean or replace cooling coil.
在减速机的紧固件处有大的噪声 High noise at tightening parts	紧固件松动了 Loose of tightening parts	将螺栓/螺母拧紧到规定的扭矩。 更换损坏了的螺栓、螺母。 Tighten nut bolt to correct stare Replace damagde nut/bolt
减速机的噪声变化 Changing noise	齿轮的轮齿发生了损坏 Teeth of gears get damaged	和客户服务部联系。检查所有零件上的齿， 更换损坏了的零件。 Consult after–sales department Check teeth of gears and replace damaged ome.
	轴承间隙过大 Clearance of bearings too big	和客户服务部联系。调整轴承间隙。 Consult after–sales department Adjust the clearance of bearings
	轴承损坏 Bearings get damaged	和客户服务部联系。更换坏的轴承。 Consult after–sales department Replace damaged bearings

午马公司售后服务
WUMA Companyafter-sales service

尊敬的客户，感谢您选用 WUMA 品牌的产品，您在使用过程中如出现质量问题，请不要先拆卸零件，应说明具体情况后与本公司售后服务部联系，说明现象后，确认问题所在，以便我们更好地为您服务。

Dear respected clients, thank you for choosing products of WUMA brand. If you come across any quality problems during your use, please do not demount accessories and should report specific circumstances to our after sales department so that we are able to offer better service for you.

型号规格/Model and specification _____

出厂日期/Ex-factory date _____

编　号/NO. _____

已使用时间/Time used _____

使用场合和主机名称
Application scope and name of host machine _____

主机生产单位/Production unit of host machine _____

用户单位/User unit _____

地址/ADD _____

电话/Tel _____

传真/Fax _____

邮编/P.C _____

联系人/Contact person _____

质量问题 Quality problems

_____

备忘录

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