研发 领先的研发能力

品质 优越的品质保障能力

制造 先进的制造能力

服务 快速的服务能力

WANSHSIN®
萬鑫精工

HB工业齿轮箱产品选型手册

PRODUCT SELECTION MANUAL OF
HB SERIE INDUSTRIAL GEAR UNITS

WANSHSIN®

万鑫精工（湖南）股份有限公司
WANSHSIN SEIKOU (HUNAN) CO., LTD
企业官网：www.wanshsin.com
生产基地：湖南省长沙市宁乡高新技术产业园区金沙东路158号

官微二维码

官网二维码

致力于打造世界一流的智能机电品牌
Committed To Building A World-class Intelligent Electromechanical Brand

万鑫精工(湖南)股份有限公司

WANSHSIN SEIKOU (HUNAN) CO., LTD

专业化减速机 / 减速电机 / 控制器制造商

智能自动化全套方案提供商

SPECIALIZED REDUCER / REDUCTION MOTOR / CONTROLLER MANUFACTURER

INTELLIGENT AUTOMATION SOLUTION PROVIDER



打造不漏油的减速机

COMMITTED TO

BUILDING A NO-LEAKAGE GEARBOX

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万鑫精工（湖南）股份有限公司

WANSHSIN SEIKOU (HUNAN) CO., LTD



万鑫精工是集研发、生产、销售、服务于一体的专业化减速机、减速电机、控制器制造商及智能自动化全套方案提供商，拥有广东东莞、湖南宁乡两大生产基地，湖南省企业技术中心、湖南省减速机工程技术研究中心和长沙技术创新中心三大技术创新平台以及日本、深圳、湖南总部三大研发中心，产品型号达8万种，广泛应用于自动化生产线、机器人、工程机械、仓储物流、车库、施工电梯、陶瓷、畜牧等行业领域，是减速机领域产品线最齐全的公司之一。

WANSHSIN SEIKOU (HUNAN) CO., LTD is a professional gear box, motor, controller manufacturer and intelligent automation complete solution provider integrating R&D, production, sales and service.

It has two production bases in Dongguan city, Guangdong province and Ningxiang city, Hunan province, with three technology innovation platforms,: Hunan Enterprise Technology Center, Hunan Reducer Engineering Technology Research Center and Changsha Technology Innovation Center, and three R&D centers in Japan, Shenzhen and Hunan headquarters.

There are over 80,000 product models, which are widely used in automated production lines, robots, construction machinery, warehousing and logistics, garages, construction elevators, ceramics, animal husbandry and other industries. It is one of the companies with the most complete product lines in the field of reducers.

企业荣誉

Enterprise Honor

2019

- 国家高新技术企业
  National high-tech enterprise

2020

- 国家工信部“专精特新”重点小巨人企业
  Ministry of Industry and Information Technology of the People's Republic of China "specialized, special and new" key small giant enterprise
- 湖南省企业技术中心
  Hunan Enterprise Technology Center

2022

- 湖南省减速机工程技术研究中心
  2022 Hunan Reducer Engineering Technology Research Center









四大核心竞争力

Core Competiveness





一、研发领先

Leading R&D Capability

先后成立三大研发中心，以创新引领行业高质量发展；投入4%以上的营收建立84人的研发团队；拥有94项专利。

Three major R&D centers have been established to lead the industry's high-quality development with innovation; more than 4% of the revenue has been invested to establish a R&D team of 84 people; and have gained 94 patents.

二、品质卓越

Excellent Quality

行业率先启动先进的汽车行业（产品质量先期策划）；配置了大量进口国际先进检验/检测设备保证产品品质。

We are the pioneer in introducing and launching the advanced automotive industry quality control standards (pre-planning of product quality) and have equipped with a large number of imported international advanced inspection/testing equipment to ensure product quality.

三、制造先进

Advanced Manufacturing

200余台先进国内外加工设备总值超1.6亿，年产减速机、电机80余万套。

More than 200 sets of advanced domestic and foreign processing equipment with a total value of over RMB160 million, with an annual output of more than 800,000 sets of reducers and motors.

四、服务快速

Fast Service

经销网点达950+；中型减速机市场占有率达20%；自备2亿元零部件仓储库存；交付周期短常规产品3-5天，非标产品15天；配置国内多家TOP级物流商；售后省内24小时解决，省外48小时解决。

With over 950 distribution network; medium gearbox's market share of 20%; 200 million yuan of parts storage inventory; short delivery cycle, 3-5 days for conventional products and 15 days for non-standard products; configured with a number of domestic TOP-level logistics providers; after sale service is solved within 24-hourwithin the province and 48-hour outside the province.

万鑫精工HB系列工业齿轮箱

WANSHSIN HB SERIES INDUSTRIAL GEAR UNITS



产品特点/Features:

- 产品线齐全:共有3-26号机座,传动级数1-4级。
  Complete product line: a total of 3-26 machine base, transmission series 1-4 levels.
- 承载能力强：输出扭矩最大至900KN.m，速比1.25-450。
  Bearing capacity: maximum output torque up to 900KN.m, with speed ratio among 1.25-450.
- 组合性、互换性高:采用新的模块化单元结构,使得箱体和内部零件具有极高的组合性、互换性,从而显著减少零部件种类,实现平行轴、直交轴、立式、卧式箱体通用。
  High combination and interchangeability: new modular unit structure, making the box and internal parts a very high combination and interchangeability, thus significantly reducing the types of parts, which realizes the universal use of the parallel and orthogonal axis, and the vertical and the horizontal box types.
- 安装形式多样：多种输出轴型式，安装方式多样化，利于客户选择。
  Various installation forms: a variety of output shaft types, with multiple installation methods for customer choice.
- 噪音小：圆锥齿轮采用磨削工艺，圆柱齿轮采用修形工艺，箱体采用优化的降噪结构设计，使得齿轮箱噪音有很大降低。
  Low noise: bevel gear using grinding process, and cylindrical gear using modification process. The box uses optimized noise-reducing structure design, greatly reduced the gearbox noise.
- 散热性好：方形箱体，增大了箱体表面积，合理选用风扇、冷却盘管，提高了齿轮箱的热功率。
  Good heat dissipation: square box design to increase the surface area of the box. Fine selection of fans and cooling coil to improve the thermal power of the gearbox.

应用领域/Applications:

冶金、矿山、起重机械、石油、化工、金属加工、输送机械、水泥工业、造纸机械、食品工业等

Metallurgy, mining, lifting machinery, petroleum, chemical industry, metal processing, conveying machinery, cement industry, paper-making machinery, food industry, etc.



配件说明
ACCESSORY INSTRUCTION

万鑫根据HB工业齿轮箱使用工况的不同配置了齐全的配件。包括强制润滑，法兰泵、电动泵、冷却盘管、冷却风扇、油气冷却器等！

Wanshsin has equipped a complete set of accessories according to the different working conditions of the HB industrial gearbox. Including forced lubrication, flange pumps, electric pumps, cooling coils, cooling fans, oil and gas coolers and more!



水冷式油冷却器
Water-Cooled Oil Cooler



润滑冷却系统柜机
Lubrication Cooling System Cabinet



风冷式冷却器
Air-Cooled Cooler



水油冷却器系统
Water-Oil Cooler System

防漏油结构
OIL-LEAKAGE-PROOF STRUCTURE

为解决HB工业齿轮箱**漏油**和**换油封**麻烦的问题，万鑫自主设计了一套解决漏油和方便换油封的结构。

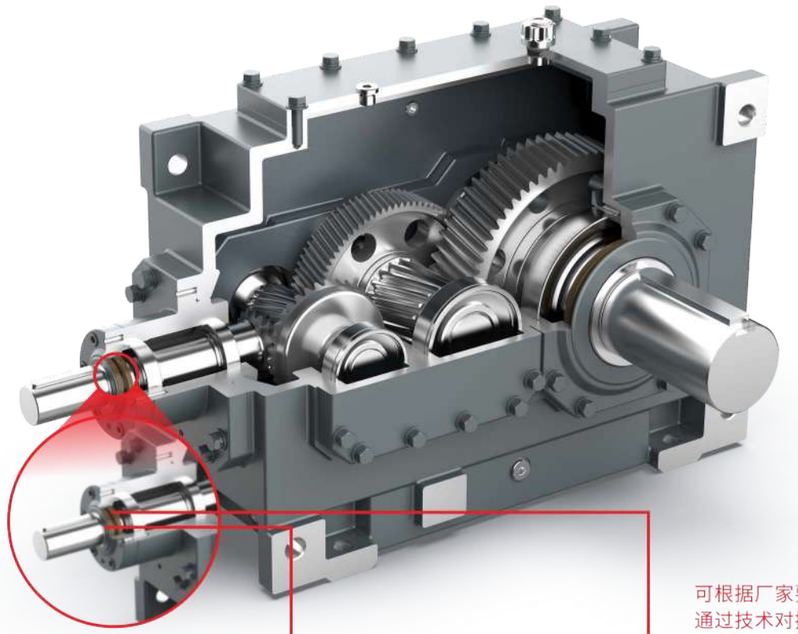
1.为确保不漏油采用双油封和防尘盖的结构，确保产品不漏油。

2.自主设计油封结构，替换油封操作更方便。

3.其它非标结构详情请咨询销售及技术人员！

To solve the problem of oil leakage and trouble of changing oil seal in HB industrial gear box, Wanshsin has designed a set of structure to solve oil leakage and change oil seal easily.

1. Use the structure of double oil seal and dust cover to ensure the product does not leak oil.
2. More convenient to replace the oil seal with the independently designed oil seal structure.
3. For other non-standard structure, please consult sales and technical personnel for details.



可根据厂家要求，
通过技术对接定制非标型号产品



防尘盖/Dust caps

减少长期使用造成积灰进入油封的风险

Reduce the risk of Ash accumulation into the oil seals due to long-term use



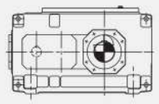
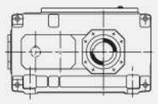
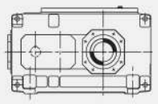
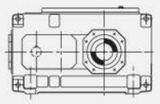
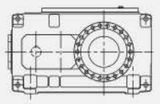
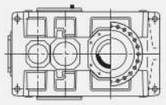
双油封/Double oil seal

根据特殊使用工况定制双油封结构，确保其在恶劣工况下不漏油。

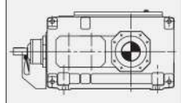
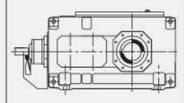
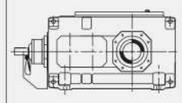
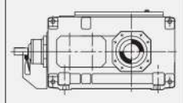
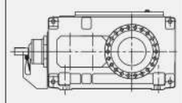
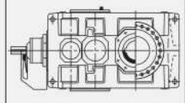
The double oil seal structure is customized according to the special working conditions to ensure that it does not leak oil under severe working conditions.

基本类型概述
Overview of Basic Types

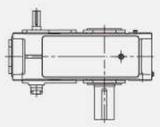
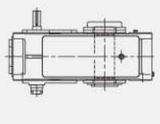
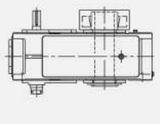
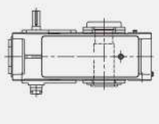
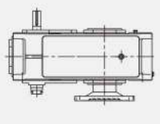
卧式安装	Horizontal mounting position
平行轴齿轮箱 类型 WSH1.., WSH2.., WSH3.., WSH4.. 1 - ... 4 - 级，i_N = 1.25 - 450	**Helical gear units** Types WSH1.., WSH2.., WSH3.., WSH4.. 1- ... 4-stage, i_N = 1.25 - 450

WSH.SH	WSH.HH	WSH.DH	WSH.KH	WSH.FH	WSH.HM, WSH.DM WSH.KM, WSH.FM
					

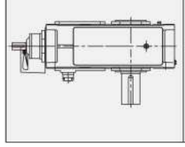
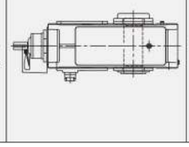
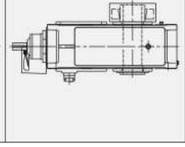
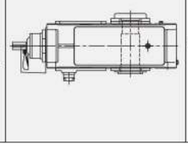
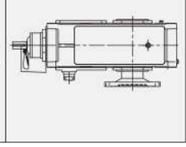
直交轴齿轮箱	**Bevel-helical gear units**
类型 WSB2.., WSB3.., WSB4.. 2 - ... 4 - 级，i_N = 5 - 400	Types WSB2.., WSB3.., WSB4.. 2- ... 4-stage, i_N = 5 - 400

WSB.SH	WSB.HH	WSB.DH	WSB.KH	WSB.FH	WSB.HM, WSB.DM, WSB.KM, WSB.FM
					

立式安装	Vertical mounting position
平行轴齿轮箱 类型 WSH2.V , WSH3.V , WSH4.V 2 - ... 4 - 级，i_N = 6.3 - 450	**Helical gear units** Types WSH2.V , WSH3.V , WSH4.V 2- ... 4-stage, i_N = 6.3 - 450

WSH.SV	WSH.HV	WSH.DV	WSH.KV	WSH.FV
				

直交轴齿轮箱	**Bevel-helical gear units**
类型 WSB2.V , WSB3.V , WSB4.V 2 - ... 4 - 级，i_N = 5 - 400	Types WSB2.V , WSB3.V , WSB4.V 2- ... 4-stage, i_N = 5 - 400

WSB.SV	WSB.HV	WSB.DV	WSB.KV	WSB.FV
				

基本类型概述
Overview of Basic Types

WS | B | 3 | S | H | 11 | - | 25 | - | A | - | CW | - | AC4

附件代号/Accessories Code
AC1=法兰泵/Flanged-on pump
AC2=电动泵/Motor pump
AC3=油箱/Oil box
AC4=冷却风扇/Cooling fan
AC5=冷却盘管/Cooling coil
AC6=冷却器/Oil cooler
AC7=迷宫式密封/Labyrinth seals
AC8=组合式密封/Taconite seals
AC9=电机安装法兰/Motor bell housing
AC10=扭力臂/Torque support
AC11=浮动底座/Swing-bases
AC12=齿轮箱脚支座/Housing base rails
AC13=逆止器/Backstop
AC14=电机支架/Motor brackets
AC15=法兰安装/Housing flange

WSB系列输入轴旋转方向/The direction of the MTB series input shaft
面对输入轴方向/View onto the input shaft
CW=顺时针/clockwise
CCW=逆时针/counterclockwise

轴布置形式/Design of shaft

公称传动比i_N(见295-298页)
Nominal ratio(Pages P295-298)

规格 / **Size**
3 ... 26

安装方式 / **Mounting**
H = 卧式安装 / Horizontal
M = 卧式安装，不带地脚
Horizontal design without feet
V = 立式安装 / Vertical

输出轴布置形式 / **Output shaft design**
S = 实心轴 / Solid shaft
H = 空心轴 / Hollow shaft
D = 带缩紧盘的空心轴
Hollow shaft for shrink disk
K = 带花键的空心轴，按照 DIN 5480
Hollow shaft with involute splines acc. to DIN 5480
F = 法兰轴
Flanged shaft

传动级数 / **No. of stages**
1, 2, 3 或 / or **4**

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

品牌
WS = 万鑫品牌 / Wanshsin

示例 **WSB3SH11-25-A-CW/AC4**
直交轴齿轮箱，3级传动，实心轴输出，卧式安装，规格11，传动比i=25，布置形式A，输入轴顺时针旋转，带冷却风扇

Example **WSB3SH11-25-A-CW/AC4**
Bevel-helical gear unit, 3-stage, solid output shaft design,horizontal mounting position, size 11, i=25, design A,Clockwise rotation of the input shaft, with cooling fanon of the input shaft,with cooling fan

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性能特点
Performance Characteristics

设计

齿轮箱采用全新设计，其独特的创新在于:

- 零部件种类减少而规格数量增多，
- 传动功率增大，运转可靠性提高，
- 可采用性能优异的非接触式装置，
- 可提供适于狭小空间安装的法兰轴
- 可采用万鑫自主设计的防漏油结构,保证产品不漏油(敎请垂询)。

高强度、高承载能力

采用更大规格的轴承设计，大大提高齿轮箱的承载能力。

安装方式

可以提供卧式安装和立式安装的齿轮箱。

也可以提供其他安装形式,请垂询。

标准齿轮箱可以通过加带不同附件如电机安装法兰。

齿轮箱浮动底座或逆止器等很好地满足客户需求。

低噪音特性

采用最新设计理念并通过以下途径显著地改善了齿轮箱的噪音特性:

- 圆锥齿轮采用磨削工艺，圆柱齿轮采用独特的修形工艺。
- 箱体采用优化的降噪结构设计。
- 实现特大的齿面接触比

散热性能

齿轮箱不仅具有很高的传动效率，而且具有良好的散热性能，因为:

- 采用方形箱体，增大箱体表面积，冷却系统的合理选用，提高了齿轮箱的热功率。
- 可采用非接触式的迷宫式密封装置，
- 可采用大风扇和新型的导流风扇罩.

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

快速的服务

网点齐全，业务网点覆盖国外及国内多个省份

交付周期：常规产品从下单到交付，只需3-5天。非标产品，15天出货。

物流运输：与国内多家TOP级物流服务商，共享运输渠道。

仓储库存：自建仓储系统，自备2亿元零部件库存，满足各类型号产品 快速交付。

售后服务：售后1刻钟响应，8小时处理，24小时解决。

Design

Brand new design with following unique innovations:

- The number of parts is reduced while the number of specifications is increased.
- The transmission power is increased and the operation reliability is improved.
- Non-contact devices with excellent performance are available.
- Flange shafts suitable for installation in small spaces are available.
- Wanshsin's own design of oil-leakage-proof structure is available, to ensure no oil leakage.(Please Inquire)

High Strength & High Load Capacity

Using larger bearing design to greatly improve the load capacity of the gearbox.

Installation Method

Both horizontal and vertical installation can be provided.
Other types of mounting are also available upon request.

Standard gearboxes can be supplied with different accessories such as motor mounting flanges.
Gearboxes with floating bases or backstops are available to meet customer needs.

Low Noise Characteristics

The noise characteristics has been significantly improved by using the latest design concepts and by:

- Grinding of bevel gears, and unique shaping of cylindrical gears.
- The gearbox is designed with an optimized noise reduction structure.
- Extra large tooth contact ratio is achieved.

Heat Dissipation Performance

The gearbox not only has high transmission efficiency, but also has good heat dissipation performance, because:
The square box body is adopted to increase the surface area of the box.

- Reasonable selection of cooling system improves the thermal power of the gearbox.
- The non-contact labyrinth seal device can be used.
- A large fan and a new type of inflow fan cover can be used.

In gearbox selection, gearboxes are based on lower maximum allowable oil temperature, which not only improves operational reliability, but also reduces maintenance costs due to longer oil change intervals.

Fast & Complete Service Network

Business network covering most foreign countries and domestic provinces.
Delivery cycle: from order to delivery, conventional products only 3-5 days; non-standard products 15 days.
Logistics transportation: with a number of domestic TOP-level logistics service providers.
Warehouse inventory: self-built warehouse system, 200 million yuan of parts inventory, to meet the rapid delivery of various types of products.
After-sales Service: 15 minutes response, 8 hours processing, 24 hours solution in Chinese market.

一般说明
General Instructions

注意事项!

必须严格遵守以下各项!

- 样本中的附图只属范例，并不具有约束力。公司保留变更尺寸的权利。
- 所注重量仅为平均值，并不具有约束力。
- 为防止意外事故发生，所有旋转部件均应按照使用者所在国家和地区的安全规范由购置方加罩保护。
- 试车之前必须认真阅读操作说明。
  齿轮箱在供货时已处于准运行状态，运行前需加注润滑油。
- 本样本中所示注油量只作为参考值，
  实际注油量应以油尺上的标记为准。
- 润滑油粘度应符合齿轮箱铭牌上的数据。
- 齿轮箱在供货时已配置了径向轴封。如果需要其他类型的轴封敬请垂询。
- 转动方向是指面向输出轴时输出轴 的转动方向。

在尺寸图上所使用的符号说明如下:

= 油尺
= 通气孔
= 放油孔
= 加油孔

地脚螺栓的最低强度等级为 **8.8** 级。

Attention!

The following items are absolutely to be observed!

- **Illustrations are examples only and are not strictly binding. Dimensions are subject to change.**
- **The weights are mean values and not strictly binding.**
- **To prevent accidents, all rotating parts should be guarded according to local and national safety regulations.**
- **Prior to commissioning, the operating instructions must be observed. The gear units are delivered ready for operation but without oil filling.**
- **Oil quantities given are guide values only. The exact quantity of oil depends on the marks on the oil dipstick.**
- **The oil viscosity has to correspond to the data given on the name plate.**
- **The gear units are supplied with radial shaft seals. Other sealing variants on request.**
- **Directions of rotation referring to output shaft .**

Explanation of symbols used in the dimensioned drawings:

= **Oil dipstick**
= **Breather**
= **Oil drain**
= **Oil filler**

Foundation bolts of min. property class 8.8.

选型指南
Selection Guidelines
恒定功率 Constant power

1. 确定齿轮箱类型和规格
Determination of gear unit type and size

1.1 确定传动比
Find the transmission ratio

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

1.2 确定齿轮箱额定功率
Determine nominal power rating of the gear unit

$$P_{2N} \geqslant P_2 \times f_1 \times f_2$$

如果不满足下列条件，请与我们联系：
It is not necessary to consult us, if:

$$3.33 \times P_2 \geqslant P_{2N}$$

1.3 校核最大扭矩，例如峰值工作扭矩，起动扭矩或制动扭矩：
Check for maximum torque, e. g. peak operating-, starting- or braking torque

$$P_{2N} \geqslant \frac{T_A \times n_1}{9550} \times f_3$$

根据 i_N 和 P_{2N} 在额定功率表中确定的齿轮箱的规格和传动级数
Gear unit sizes and number of reduction stages are given in rating tables depending on i_N and P_{2N}

1.4 校核输出轴上允许附加作用力，见第 57 和 58 页
Check whether additional forces on the output shaft are permissible; see pages 57 and 58

1.5 校核实际传动比见第 53 至 56 页
Check whether the actual ratio i as per tables on pages 53 - 56 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 **Determination of oil supply**	可供选择润滑油供油方式： – 飞溅润滑 – 浸油润滑 所有需润滑的零部件均浸在润滑油中 – 强制润滑 All parts to be lubricated are lying in the oil or are splash lubricated Forced lubrication on request	可供选择的润滑油供油方式： – 浸油润滑 – 采用法兰泵或电动泵进行强制润滑 优选供油方式和选择标准见第 135 至 150 页 Possible oil supply variations: – Dip lubrication – Forced lubrication by means of flanged-on pump or motor pump For preferred variants and criteria for selection, see pages 135 - 150

选型指南
Selection Guidelines
热容量计算 Heat capacity calculation

3. 确定所需的热容量 P_G
需要的数据：
- 类型 · 规格
- 额定传动比
- 环境温度
- 输入转速 （1000 / 1200 / 1500 / 1800 min^{-1}）
- 齿轮箱采用浸油润滑

计算依据如下假设：
- 工作周期：100 % / h
- 室内大空间 ** 安装（4 m / s > 风速 ⩾ 1.4 m / s）海拔高度至 1000 m
- 齿轮箱采用矿物油 ISO - VG 460 润滑

3. Determination of required thermal capacity P_G
Data required:
- Type · Size
- Nominal ratio
- Ambient temperature □
- Input speed（1000 / 1200 / 1500 / 1800 min^{-1}）
- Gear unit with dip lubrication

For the calculation below the following has been assumed:
- Operating cycle: 100 % / h
- Installation in a large hall ** (4 m / s > wind velocity ⩾ 1.4 m / s), altitude up to 1000 m
- Gear unit with mineral oil ISO - VG 460

假设的应用条件 / Assumptions corresponding to operating conditions

假设应用条件有变化
Assumptions deviating from operating conditions

1) 不带辅助冷却装置 / without auxiliary cooling
$P_G = P_{GA} * f_4 * f_8$ | P_{GA} = ... （见第 17 至 52 页 / see pages 17-52 ）
P_G = ... | f_4 = ... f_8 = ...

$P_G < P_2$: 需要辅助冷却装置 / auxiliary cooling required
2) 冷却风扇 / fan
3) 冷却盘管 / cooling coil
4) 冷却风扇和冷却盘管 / fan and cooling coil
5) 水 / 气－油冷却器 / water- / air-oil cooler

$P_G \geqslant P_2$ → 齿轮箱不带辅助冷却装置可以满足要求 Gear unit without auxiliary cooling is sufficient

2) 可以采用冷却风扇 / Fan possible
$P_G = P_{GB} * f_4 * f_8$ | P_{GB} = ... （见第 17 至 52 页 / see pages 17-52 ）
P_G = ... | f_4 = ... f_8 = ...

$P_G < P_2$: 需要辅助冷却装置 auxiliary cooling required
3) 冷却盘管 / cooling coil
4) 冷却风扇和冷却盘管 / fan and cooling coil
5) 水 / 气－油冷却器 / water- / air-oil cooler

$P_G \geqslant P_2$ → 齿轮箱带冷却风扇可以满足要求 Gear unit with fan is sufficient

3) 可以采用冷却盘管 / Cooling coil possible
$P_G = P_{GC} * f_5 * f_8$ | P_{GC} = ... （见第 17 至 52 页 / see pages 17-52 ）*)
P_G = ... | f_5 = ... f_8 = ...

$P_G < P_2$: 需要辅助冷却装置 auxiliary cooling required
4) 冷却风扇和冷却盘管 / fan and cooling coil
5) 水 / 气－油冷却器 / water- / air-oil cooler

$P_G \geqslant P_2$ → 齿轮箱带冷却盘管可以满足要求 Gear unit with cooling coil is sufficient

4) 可同时采用冷却风扇和冷却盘管 / Fan and cooling coil possible
$P_G = P_{GD} * f_5 * f_8$ | P_{GD} = ... （见第 17 至 52 页 / see pages 17-52 ）*)
P_G = ... | f_5 = ... f_8 = ...

$P_G < P_2$: 需要辅助冷却装置 auxiliary cooling required
5) 水／气－油冷却器 water- / air-oil cooler

$P_G \geqslant P_2$ → 齿轮箱同时带冷却风扇和冷却盘管可以满足要求 Gear unit with fan and cooling coil is sufficient

根据变化后的应用条件重新计算：
Recalculation with other assumptions:
FLENDER CD-ROM e.CAT
www.flender.com

$P_G \geqslant P_2$ → 齿轮箱带所选择的冷却装置可以满足要求 Gear unit with selected cooling is sufficient

$P_G < P_2$

请向我们咨询！
下列选项可能需要调整
- 润滑油品种／润滑油粘度／注油量
- 基础安装齿轮箱或轴装式齿轮箱
- 采用润滑油站

Consult us!
Variation of the following items is possible:
- Oil grade / viscosity / level
- Gear unit on foundation or shaft-mounted gear unit
- Application of an oil supply system

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

** 室内小空间（风速 < 1.4m/s）和室外（风速 ⩾ 4m/s），请按弗兰德选型光盘 e.CAT 计算或垂询我们！
** Calculation referring to FLENDER CD-ROM e.CAT or consult us when small confined spaces (wind velocity < 1.4m/s) or in the open (wind velocity ⩾ 4m/s)

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

选型指南
Selection Guidelines

可变功率　Variable Power

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

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

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

然后按照第 1.1 ... 1.5 项和第 3 项确定齿轮箱规格，需满足：

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

$$P_{2N} \geqslant P_{2äq} \times f_1 \times f_2$$

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

1）各个功率分量 P_I, P_{II} ... P_n 应大于 0.4 x P_{2N}。

2）各个功率分量 P_I, P_{II} ... P_n 不能超过 1.4 x P_{2N}。

3）功率分量 P_I, P_{II} ... P_n 中大于 P_{2N} 的分量所对应的时间分量 X_I, X_{II}... X_n 总和不超过 10%。

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

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

如果以上三个条件中的任何一项不满足，则必须重新计算 $P_{2äq}$。

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

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

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

在以可变扭矩和恒定转速运行的情况下，齿轮箱应按当量扭矩计算。

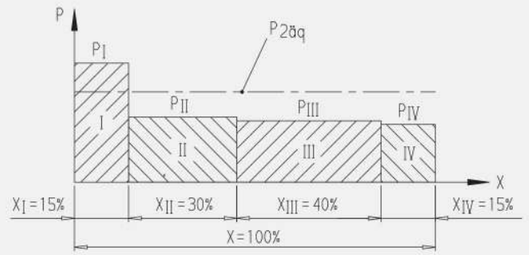
In applications where the **torque is variable** but the **speed constant** the gear unit can be designed on the basis of the so-called **equivalent torque.**

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

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

示例：
载荷谱

Example:
Service classification



选型指南
Selection Guidelines

符号说明　Symbol Description

E_D	=	每小时工作周期，以 % 表示（例如 E_D = 80 %/ h）	E_D	=	Operating cycle per hour in %, e.g. E_D = 80 %/ h
f_1	=	工作机系数（表 1），见第 13 页	f_1	=	Factor for driven machine (table 1), page 13
f_2	=	原动机系数（表 2），见第 14 页	f_2	=	Factor for prime mover (table 2), page 14
f_3	=	峰值扭矩系数（表 3），见第 14 页	f_3	=	Peak torque factor (table 3), page 14
f_4	=	环境温度系数（表 4），见第 14 页	f_4	=	Thermal factors (table 4), page 14
f_5	=	环境温度系数（表 5），见第 14 页	f_5	=	Thermal factors (table 5), page 14
f_8	=	齿轮箱供油系数 对于立式安装齿轮箱见第 14 页（表 8） 对于卧式安装齿轮箱：f_8 = 1	f_8	=	Oil supply factor for vertical gear units (table 8), page 14 . For horizontal gear units: f_8 = 1
i	=	实际传动比	i	=	Actual ratio
i_N	=	额定传动比	i_N	=	Nominal ratio
i_s	=	要求传动比	i_s	=	Required ratio
n_1	=	输入转速 (min^{-1})	n_1	=	Input speed (min^{-1})
n_2	=	输出转速 (min^{-1})	n_2	=	Output speed (min^{-1})
P_G	=	需要的热容量	P_G	=	Required thermal capacity
P_{GA}	=	齿轮箱的基础热容量口不带辅助冷却装置，见第 17-52 页	P_{GA}	=	Thermal capacity for gear units without auxiliary cooling, pages 17-52
P_{GB}	=	齿轮箱的基础热容量，带冷却风扇，见第 17-52 页	P_{GB}	=	Thermal capacity for gear units with fan cooling, pages 17-52
P_{GC}	=	齿轮箱的基础热容量，同时带内置式冷却盘管，见第 17-52 页	P_{GC}	=	Thermal capacity for gear units with built-in cooling coil, pages 17-52
P_{GD}	=	齿轮箱的基础热容量，同时带内置式冷却盘管和冷却风扇，见第 17-52 页	P_{GD}	=	Thermal capacity for gear units with built-in cooling coil and fan, pages 17-52
P_{2N}	=	齿轮箱的额定功率 (kW)，见第 15-49 页选型表，	P_{2N}	=	Nominal power rating of gear unit (kW), see rating tables, pages 15-49
P_2	=	工作机的额定功率 (kW)	P_2	=	Power rating of driven machine (kW)
t	=	环境温度 (°C)	t	=	Ambient temperature (°C)
T_A	=	输入轴最大扭矩，例如峰值工作扭矩，起动扭矩或制动扭矩（Nm）	T_A	=	Max. torque occurring on input shaft, e.g. peak operating-, starting- or braking torque (Nm)
T_{2N}	=	额定输出扭矩 (kNm)，见第 16-50 页	T_{2N}	=	Nominal output torque (kNm), pages 16-50
S_A	=	减速机安全系数（表6）见第 14 页	S_A	=	Safety coefficient of reducer (table 6) pages 14
$P_{2äq}$	=	当量功率 (kW)	$P_{2äq}$	=	Equivalent power rating (kW)
P_I, P_{II}, P_n	=	与载荷谱对应的功率分量 (kW)	P_I, P_{II}, P_n	=	Fractions of power rating (kW) obtained from service classification
X_I, X_{II}, X_n	=	与载荷谱对应的时间分量 (%)	X_I, X_{II}, X_n	=	Fractions of time (%) obtained from service classification

选型指南
Selection Guidelines

计算示例 在机械方面

已知：

原动机

电机功率：	P_1 = 75 kW
电机转速：	n_1 = 1500 min^{-1}
最大起动扭矩	T_A = 720 Nm

工作机

皮带输送机功率：	P_2 = 66 kW
转速：	n_2 = 26 min^{-1}
每天运行时间：	12 h / 日
每小时起动次数：	7
每小时工作周期：	E_D = 100%
环境温度：	30°C
室内大空间安装：	风速 ⩾ 1.4 m/s
海拔高度：	海平面

齿轮箱设计

直交轴齿轮箱

安装方式：	卧式安装
输出轴 d_2：	位于齿轮箱右侧，布置形式 C 实心轴
输出轴 d_2 的旋转方向：	逆时针旋转

要求：

选择齿轮箱类型和规格

1. 选择齿轮箱类型和规格

1.1 确定传动比

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

1.2 确定齿轮箱额定功率

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

从功率表中选择类型 WSB3SH，齿轮箱规格 9，对应的额定功率 P_{2N} = 100 kW

$$3.33 \times P_2 \geqslant P_{2N} \quad 3.33 \times 66 = 219.8\ kW > P_{2N}$$

满足要求 It is not necessary to consult us

1.3 起动扭矩校核

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

2. 确定润滑油供油方式
齿轮箱采用浸油润滑

Calculation Example Mechanical Power Rating

Known criteria:

PRIME MOVER

Electric motor:	P_1 = 75 kW
Motor speed:	n_1 = 1500 min^{-1}
Max. starting torque:	T_A = 720 Nm

DRIVEN MACHINE

Belt conveyor:	P_2 = 66 kW
Speed:	n_2 = 26 min^{-1}
Duty:	12 h / day
Starts per hour:	7
Operating cycle per hour:	E_D = 100%
Ambient temperature:	30°C
Installation in a large hall:	wind velocity ⩾ 1.4 m/s
Altitude:	sea level

GEAR UNIT DESIGN

Bevel-helical gear unit

Mounting position:	horizontal
Output shaft d_2:	on right hand side design C, solid shaft
Direction of rotation of output shaft d_2:	ccw

Required:

Type and size of gear unit

1. Selection of gear unit type and size

1.1 Calculation of transmission ratio

1.2 Determination of the gear unit nominal power rating

Selected from power rating table: type WSB3SH, gear unit size 9, with P_{2N} = 100 kW

1.3 Checking the starting torque

2. Determination of oil supply
Gear unit with dip lubication

选型指南
Selection Guidelines

计算示例 热容量计算

3. 确定所需的热容量 P_G

需要的数据：
- 类型：B3SH · 规格：09
- 额定传动比：i_N = 56
- 环境温度：t = 30°C
- 输入转速：n_1 = 1500 min^{-1}
- 齿轮箱采用浸油润滑

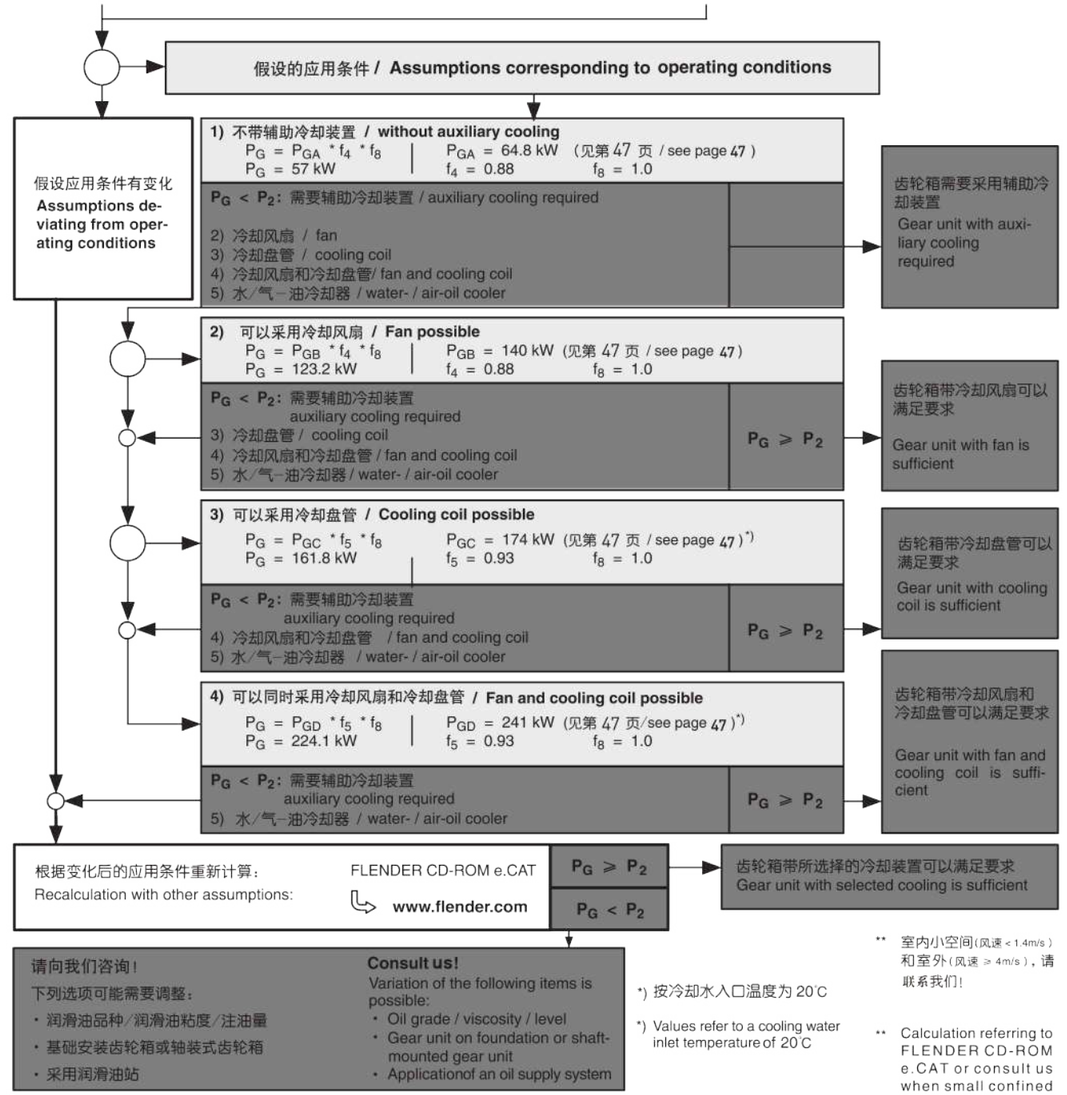
计算依据如下假设：
- 工作周期：100 % / h
- 室内大空间 ** 安装（4 m / s > 风速 ⩾ 1.4 m / s）海拔高度至 1000 m
- 齿轮箱采用矿物油 ISO - VG 460 润滑

Calculation Example Thermal Capacity

3. Determination of required thermal capacity P_G

Data required:
- Type: B3SH · Size: 09
- Nominal ratio: i_N = 56
- Ambient temperature: t = 30°C
- Input speed: n_1 = 1500 min^{-1}
- Gear unit with dip lubrication

For the calculation below the following has been assumed:
- Operating cycle: 100 % / h
- Installation in a large hall ** (4 m / s > wind velocity ⩾ 1.4 m/s), altitude up to 1000 m
- Gear unit with mineral oil ISO - VG 460



所选择的 i_N= 56 的齿轮箱 B3SH 09 应配装适当的辅助冷却装置。根据用户不同的应用条件至少应配置一个冷却风扇或一个冷却盘管。

For the selected gear unit B3SH 09 with i_N = 56 suitable auxiliary cooling is to be provided. Dependent on the operating conditions at the customer's, at

*) 按冷却水入口温度为 20°C

*) Values refer to a cooling water inlet temperature of 20°C

** 室内小空间（风速 < 1.4m/s）和室外（风速 ⩾ 4m/s），请联系我们！

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

服务系数
Service Factor

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

工作机 Driven machines		1) 日带载运行时间,以小时计算 ≤ 0.5	> 0.5-10	> 10
污水处理	**Waste water treatment**			
浓缩器（中心传动）	Thickeners (central drive)	–	–	1.2
压滤机	Filter presses	1.0	1.3	1.5
絮凝器	Flocculation apparata	0.8	1.0	1.3
曝气机	Aerators	–	1.8	2.0
搂集设备	Raking equipment	1.0	1.2	1.3
纵向、回转组合式搂集装置	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 piston	1.3	1.4	1.8
> 1 个活塞	> 1piston	1.2	1.4	1.5
挖泥机	**Dredgers**			
斗式输送机	Bucket conveyors	–	1.6	1.6
倾卸装置	Dumping devices	–	1.3	1.5
履带式行走机构	Carterpillar travelling gears	1.2	1.6	1.8
斗轮式挖掘机	**Bucket wheel excavators**			
用于料堆捡拾	as pick-up	–	1.7	1.7
用于原生岩土	for primitive material	–	2.2	2.2
采掘机机头	Cutter heads	–	2.2	2.2
采掘臂回转 •	Slewing gears •	–	1.4	1.8
弯板机 •	**Plate bending machines** •	–	1.0	1.0
化学工业	**Chemical industry**			
挤出机	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
混匀机，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
搅拌机，用于	**Agitators for media with**			
均匀介质	uniform density	1.0	1.3	1.5
不均匀介质	non-uniform density	1.2	1.4	1.6
不均匀气体吸收	non-uniform gas absorption	1.4	1.6	1.8
烘炉	Toasters	1.0	1.3	1.5
离心机	Centrifuges	1.0	1.2	1.3
金属加工设备	**Metal working mills**			
翻板机	Plate tilters	1.0	1.0	1.2
推钢机	Ingot pushers	1.0	1.2	1.2
绕线机	Winding machines	–	1.6	1.6
冷床横移架	Cooling bed transfer frames	–	1.5	1.5
辊式矫直机	Roller straighteners	–	1.6	1.6
轨道	**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	–

工作机 Driven machines		1) 日带载运行时间,以小时计算 < 0.5	> 0.5-10	> 10
输送机械	**Conveyors**			
斗式输送机	Bucket conveyors	–	1.4	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 ≤150 kW	Belt conveyors ≤150 kW	1.0	1.2	1.3
皮带输送机 ≥150 kW	Belt conveyors ≥150 kW	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	1.0	1.2	1.4
轨道行走机构	Rail travelling gears	–	1.5	–
变频装置	**Frequency converters**	–	1.8	2.0
柱塞式压缩机	**Reciprocating compressors**	–	1.8	1.9
起重机械 ••	**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
起升机构	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**			
蔗糖生产	**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**			
甜菜绞碎机，	Beet cossettes macerators,	–	–	1.2
榨取机，机械制冷机，蒸煮机，	Extraction plants, Mechanical refrigerators, Juice boilers,	–	–	1.4
甜菜清洗机，	Sugar beet washing machines,	–	–	1.5
甜菜切碎机	Sugar beet cutters			
造纸机械	**Paper machines**			
各种类型 •••	of all kind •••	–	1.8	2.0
碎浆机驱动装置（敬请垂询）	Pulper drives (on request)			
离心式压缩机	**Centrifugal compressors**	–	1.4	1.5
索道缆车	**Cableways**			
运货索道	Material ropeways	–	1.3	1.4
往复式空中索道	To-and-fro system aerial ropeways	–	1.6	1.8
拖牵式索道	T-bar lifts	–	1.3	1.4
循环式索道	Continuous ropeways	–	1.4	1.6
水泥工业	**Cement industry**			
混凝土搅拌机	Concrete mixers	–	1.5	1.5
破碎机 •	Breakers •	–	1.2	1.4
回转窑	Rotary kilns	–	–	2.0
管式磨机	Tube mills	–	–	2.0
选粉机	Separators	–	1.6	1.6
辊压机	Roll crushers	–	–	2.0

服务系数
Service Factor

工作机额定功率 P_2 的确定：
*) 按最大扭矩确定额定功率
**) 可将载荷准确地分类，例如根据 FEM 1001进行分类

***) 检验热容量是绝对必要的

所列各项系数均为经验值。使用这些系数的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，请及时与我们取得联系。对于那些未列入此表的工作机械，请与我们联系。

1) 日带载运行时间,以小时计算

Design for power rating of driven machine P_2
*) Designed power corresponding to max. torque
**) Load can be exactly classified, for instance, according to FEM 1001
***) A check for thermal capacity is absolutely essential

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

1) Effective daily operating period under load in hours

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

Table 2 Factor for prime mover	f_2
Electric motors, hydraulic motors, turbines	1.0
Piston engines 4 - 6 cylinders, cyclic variation 1 : 100 to 1 : 200	1.25
Piston engines 1 - 3 cylinders, cyclic variation up to 1 : 100	1.5

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

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

表 4 环境温度系数 （不带辅助冷却装置或仅带冷却风扇进行冷却） f_4
Table 4 Thermal factor (Gear units without auxiliary cooling or with fan)

环境温度 / Ambient	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
f_4	1.11	1.06	1.00	0.94	0.88	0.82	0.75	0.69	0.63

表 5 环境温度系数 （带冷却盘管或同时带冷却盘管和冷却风扇） f_5
Table 5 Thermal factor (For cooling with cooling coil, or with fan and cooling coil)

环境温度 / Ambient	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
f_5	1.05	1.03	1.00	0.97	0.93	0.90	0.87	0.84	0.81

表 8 立式安装齿轮箱供油系数.对于卧式安装齿轮箱 $f_8 = 1.0$，当采用强制润滑时 $f_8 = 1.05$ f_8
Table 8 Oil supply factor for vertical gear units. For horizontal gear units $f_8 = 1.0$, and in case of forced lubrication $f_8 = 1.05$

齿轮箱类型 Gear unit type	供油方式 Oil supply	规格 / Sizes 4 - 12 不带辅助冷却装置 without Auxiliary cooling	带冷却风扇 with Fan	带冷却盘管 with Cooling coil	带冷却风扇和冷却盘管 with Fan and cooling coil	规格 / Sizes 13 - 18 不带辅助冷却装置 without Auxiliary	带冷却风扇 with Fan	带冷却盘管 with Cooling coil	带冷却风扇和冷却盘管 with Fan and cooling coil
WSH2.V, WSH3.V WSH4.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	+
WSB2.V, WSB3.V WSB4.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

+) 请与我们联系

+) On request

额定功率

Power Rating

类型 WSH1.. 规格 3-26

Type WSH1.. Sizes 3-26

i_N	n_1	n_2	额定功率 P_{2N} (kW) / Nominal power ratings P_{2N} (kW) 齿轮箱规格 / Gear unit sizes 3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	1800	1440	437		1206		2291 *		3724 *																	
	1500	1200	364		1005		1909		3103																	
	1200	960	291		804		1527		2482																	
	1000	800	242		670		1273		2069																	
1.4	1800	1286	417		1104		2141 *		3447 *																	
	1500	1071	347		919		1783		2870																	
	1200	857	278		735		1426		2297																	
	1000	714	231		613		1188		1913																	
1.6	1800	1125	388		1013		1920 *		3192 *																	
	1500	938	324		844		1600		2661		4518															
	1200	750	259		675		1280		2128		3612															
	1000	625	215		562		1066		1773		3010		4410													
1.8	1800	1000	282		921		1821 *		2931 *		4984 *															
	1500	833	235		767		1517		2442		4151															
	1200	667	188		614		1215		1955		3324		4951 *													
	1000	556	157		512		1013		1630		2771		4127													
2	1800	900	263		885		1677 *		2704 *		4627 *															
	1500	750	219		738		1397		2253		3856															
	1200	600	175		590		1118		1803		3084		4580 *													
	1000	500	146		492		931		1502		2570		3816													
2.24	1800	804	235		808		1498 *		2416 *		4259 *															
	1500	670	196		673		1248		2013		3549															
	1200	536	157		538		999		1610		2839		4220 *													
	1000	446	130		448		831		1340		2363		3511													
2.5	1800	720	218		723		1341 *		2163 *		3814 *															
	1500	600	182		603		1118		1803		3179		4837 *													
	1200	480	145		482		894		1442		2543		3870 *													
	1000	400	121		402		745		1202		2119		3225		4900											
2.8	1800	643	208		646		1151 *		1831 *		3406 *															
	1500	536	173		538		959		1526		2839		4321 *													
	1200	429	139		431		768		1221		2273		3458 *													
	1000	357	115		358		639		1016		1891		2878		4485											
3.15	1800	571	185		573		1040		1680		2875 *		4370 *													
	1500	476	154		478		867		1400		2397		3643													
	1200	381	123		382		694		1121		1918		2916		4947 *											
	1000	317	102		318		577		932		1596		2426		4116											
3.55	1800	507	169		504		944		1518		2665 *		3949 *													
	1500	423	141		420		788		1266		2223		3295													
	1200	338	113		336		629		1012		1776		2633		4459 *											
	1000	282	94		280		525		844		1482		2196		3720											
4	1800	450	150		452		838		1352		2384 *		3567 *													
	1500	375	125		376		698		1126		1986		2972													
	1200	300	100		301		559		901		1589		2378		4083 *											
	1000	250	83		251		465		751		1324		1981		3403		4528									
4.5	1800	400	104		322		661		1030		1926		2580 *		4565 *											
	1500	333	87		268		550		857		1603		2147		3800											
	1200	267	69		215		441		687		1286		1722		3047		4081 *									
	1000	222	58		178		367		571		1069		1431		2533		3393									
5	1800	360	90		271		520		885		1458		2197 *		3581 *		4674 *									
	1500	300	75		226		433		738		1215		1831		2984		3895 *									
	1200	240	60		180		346		590		972		1465		2387		3116 *		4372 *							
	1000	200	50		150		289		492		810		1220		1989		2596		3643							
5.6	1800	321	77		231		440		675		1226		1862 *		3038 *		3966 *									
	1500	268	64		193		367		564		1024		1554		2536		3311 *		4209 *							
	1200	214	51		154		293		450		817		1241		2025		2644		3361 *							
	1000	179	43		129		245		376		684		1038		1694		2211		2811							

卧式安装齿轮箱应采用强制润滑

* 请与我们联系

Forced lubrication required on horizontal gear units

* Gear units only on request

额定输出扭矩

Rated output torque

类型 WSH2.. 规格 4-26

Type WSH2.. Sizes 4-26

i_N	额定输出扭矩 T_{2N} (kNm) / Nominal output torques T_{2N} (kNm) 齿轮箱规格 / Gear unit sizes 3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	2.9		8		15.2		24.7																	
1.4	3.1		8.2		15.9		25.6																	
1.6	3.3		8.6		16.3		27.1		46		67.4													
1.8	2.7		8.8		17.4		28		47.6		70.9													
2	2.8		9.4		17.8		28.7		49.1		72.9		129											
2.24	2.8		9.6		17.8		28.7		50.6		75.2		130											
2.5	2.9		9.6		17.8		28.7		50.6		77		117											
2.8	3.1		9.6		17.1		27.2		50.6		77		120		171									
3.15	3.1		9.6		17.4		28.1		48.1		73.1		124		173									
3.55	3.2		9.5		17.8		28.6		50.2		74.4		126		173									
4	3.2		9.6		17.8		28.7		50.6		75.7		130		173		245							
4.5	2.5		7.7		15.8		24.6		46		61.6		109		146		216							
5	2.4		7.2		13.8		23.5		38.7		58.3		95		124		174							
5.6	2.3		6.9		13.1		20.1		36.5		55.4		90.4		118		150							
6.3		6.3	10.7		20.3		33.7		59.3		86		143		195		292							
7.1		6.5	11.2		20.3		33.7		59.3		86		143	160	195	230	292	335	410					
8		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458				
9		6.7	11.2	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540			
10		6.3	10.5	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620		
11.2		6.3	10.6	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	
12.5		6.7	11.2	13.5	20.2	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
14		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
16		6.7	11.2	14.4	20.3	25.5	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
18		6.3	10.5	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
20		6.6	11.2	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
22.4		6.3	10.9	13.5	19.8	24	33.1	42.2	58.3	73.8	88	107	153	160	200	230	300	335	420	458	560	620	800	880
25			11.6	14.3	21.7	24	35.7	42.2	63.5	73.8	88	107	153	173	200	240	300	345	420	470	560	640	800	900
28			11.6	13.9	21.7	25	35.7	41.6	63.5	72.5	88	109	153	173	200	240	300	345	420	470	560	640	800	900
31.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
35.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
40			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
45			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
50			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
56			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
63			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
71			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
80			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
90			11.6	15.5	20	27.2	34.5	43.8	63.5	77.2	88	109	153	173	200	240	290	345	410	470	560	640	800	900
100				14.5	21.7	27.2	35.7	43.8	61.6	77.2	90.7	109	153	173	200	226	300	335	420	465	560	640	800	900
112				15	21.7	25.2	35.7	42.8	61.6	77.2	90.7	109	153	173	200	240	300	345	420	470	560	640	800	900
125					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
160					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355					19.6	27.2	35.7	44.2	61.6	78	90.7	113	140	173	192	240	290	345	410	470	560	640	800	900
400						27.2		44.2		78		113		158		223		335		465		640		900
450						25.3		42.8		78		113												

WSH2
WSH3
WSH4

热容量
Thermal Capacity

n_1=1000 min^{-1}
类型 WSH1.. 规格 3-26

n_1=1000 min^{-1}
Type WSH1.. Sizes 3-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																							
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	P_{GA}	63.2		*		*		*																	
	P_{GB}	187		402		517		536																	
	P_{GC}	271		639		911		1288																	
	P_{GD}	377		934		1322		1783																	
1.4	P_{GA}	65.4		*		*		*																	
	P_{GB}	186		409		534		578																	
	P_{GC}	264		629		892		1277																	
	P_{GD}	366		916		1298		1760																	
1.6	P_{GA}	68.6		*		*		*		*		*													
	P_{GB}	183		412		540		630		729		510													
	P_{GC}	248		595		833		1230		2057		2459													
	P_{GD}	347		870		1214		1706		2838		3313													
1.8	P_{GA}	79.9		*		*		*		*		*													
	P_{GB}	205		410		561		655		821		674													
	P_{GC}	269		561		819		1187		2025		2417													
	P_{GD}	376		827		1196		1650		2802		3264													
2	P_{GA}	78.5		104		*		*		*		*		*		*		*							
	P_{GB}	197		397		549		651		852		757		*		*		*							
	P_{GC}	256		531		778		1130		1955		2368		2073		*		*							
	P_{GD}	358		779		1135		1573		2700		3190		3116		*		*							
2.24	P_{GA}	78		109		*		*		*		*		*		*		*							
	P_{GB}	189		382		520		645		887		851		523		*		*							
	P_{GC}	241		496		704		1063		1864		2290		2048		*		*							
	P_{GD}	338		733		1029		1485		2588		3104		3073		*		*							
2.5	P_{GA}	72.8		108		*		*		*		*		*		*		*							
	P_{GB}	175		362		494		621		884		888		621		*		*							
	P_{GC}	216		459		649		986		1753		2174		2016		*		*							
	P_{GD}	304		679		950		1381		2437		2955		2996		*		*							
2.8	P_{GA}	69.6		105		133		*		*		*		*		*		*							
	P_{GB}	164		340		511		649		865		902		707		500		*							
	P_{GC}	199		419		655		994		1625		2034		1957		2203		*							
	P_{GD}	281		620		959		1390		2265		2770		2892		3223		*							
3.15	P_{GA}	73		127		189		217		*		*		*		*		*							
	P_{GB}	161		348		601		731		1019		1128		1146		1040		*							
	P_{GC}	193		416		769		1091		1682		2075		2179		2517		*							
	P_{GD}	270		612		1140		1548		2349		2844		3174		3624		*							
3.55	P_{GA}	67.6		127		178		209		*		*		*		*		*							
	P_{GB}	147		340		553		682		949		1078		1140		1096		*							
	P_{GC}	174		398		689		988		1519		1896		2027		2387		*							
	P_{GD}	244		585		1027		1407		2128		2603		2942		3412		*							
4	P_{GA}	61.9		118		167		189		235		*		*		*		*							
	P_{GB}	134		309		498		585		891		1024		1124		1132		1032							
	P_{GC}	155		353		604		820		1372		1715		1851		2212		*							
	P_{GD}	217		521		902		1175		1927		2364		2692		3158		*							
4.5	P_{GA}	69.7		129		183		238		267		304		*		*		*							
	P_{GB}	144		316		504		667		872		1107		1289		1307		1274							
	P_{GC}	165		354		599		908		1310		1783		1908		2227		*							
	P_{GD}	230		521		889		1294		1855		2474		2760		3170		*							
5	P_{GA}	63.9		125		184		228		290		340		*		*		*							
	P_{GB}	131		301		488		608		869		1087		1317		1541		1585							
	P_{GC}	147		333		564		801		1243		1686		1820		2424		*							
	P_{GD}	205		490		841		1145		1770		2348		2642		3447		*							
5.6	P_{GA}	57.2		111		166		220		277		311		*		*		*							
	P_{GB}	116		266		435		581		823		978		1195		1416		1665							
	P_{GC}	128		288		494		745		1164		1478		1608		2157		*							
	P_{GD}	179		425		739		1071		1663		2065		2338		3069		*							

* 请与我们联系
P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)
P_{GB} (kW) 齿轮箱带冷却风扇 **)
P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)
P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)
**) 表中数值按：
每小时工作周期：100%
在室内大空间安装
海拔高度至 1000 m

* Consult us
P_{GA} (kW) Gear units without auxiliary cooling **)
P_{GB} (kW) Gear units with fan **)
P_{GC} (kW) Gear units with built-in cooling coil **) ***)
P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)
**) Values refer to:
Operating cycle: 100 %
Installation in a large hall
Altitude up to 1000 m

热容量
Thermal Capacity

n_1=1200 min^{-1}
类型 WSH1.. 规格 3-26

n_1=1200 min^{-1}
Type WSH1.. Sizes 3-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																							
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	P_{GA}	*		*		*		*																	
	P_{GB}	201		397		480		446																	
	P_{GC}	296		666		923		1254																	
	P_{GD}	432		1050		1468		1946																	
1.4	P_{GA}	*		*		*		*																	
	P_{GB}	201		410		507		501																	
	P_{GC}	289		660		913		1260																	
	P_{GD}	420		1033		1447		1932																	
1.6	P_{GA}	57		*		*		*		*		*													
	P_{GB}	200		424		533		584		528		*													
	P_{GC}	273		634		869		1246		1924		2078													
	P_{GD}	400		987		1365		1894		3045		3406													
1.8	P_{GA}	69.1		*		*		*		*		*													
	P_{GB}	225		429		570		633		670		*													
	P_{GC}	298		604		866		1225		1958		2157													
	P_{GD}	434		942		1352		1846		3049		3433													
2	P_{GA}	68.7		*		*		*		*		*		*		*		*							
	P_{GB}	218		418		562		638		718		*		*		*		*							
	P_{GC}	284		573		826		1173		1911		2150		1659		*		*							
	P_{GD}	413		889		1286		1765		2952		3380		3133		*		*							
2.24	P_{GA}	69.9		*		*		*		*		*		*		*		*							
	P_{GB}	210		408		541		647		792		625		*		*		*							
	P_{GC}	268		539		754		1117		1860		2148		1734		*		*							
	P_{GD}	391		839		1170		1675		2855		3335		3162		*		*							
2.5	P_{GA}	66		*		*		*		*		*		*		*		*							
	P_{GB}	195		389		518		631		810		691		*		*		*							
	P_{GC}	241		500		699		1042		1768		2073		1752		*		*							
	P_{GD}	352		778		1082		1561		2700		3196		3117		*		*							
2.8	P_{GA}	63.7		*		*		*		*		*		*		*		*							
	P_{GB}	183		366		540		667		812		738		*		*		*							
	P_{GC}	222		458		708		1057		1656		1969		1745		1854		*							
	P_{GD}	325		712		1095		1576		2520		3016		3041		3308		*							
3.15	P_{GA}	70.1		113		159		*		*		*		*		*		*							
	P_{GB}	181		385		658		789		1055		1109		1024		860		*							
	P_{GC}	217		463		848		1193		1798		2159		2175		2445		*							
	P_{GD}	314		707		1314		1777		2669		3194		3501		3951		*							
3.55	P_{GA}	65		114		153		*		*		*		*		*		*							
	P_{GB}	166		376		607		738		990		1072		1040		934		*							
	P_{GC}	196		443		761		1083		1629		1983		2040		2342		*							
	P_{GD}	284		676		1184		1616		2421		2930		3257		3736		*							
4	P_{GA}	60		108		147		156		*		*		*		*		*							
	P_{GB}	151		344		549		637		942		1040		1065		1018		873							
	P_{GC}	174		394		670		903		1482		1813		1894		2213		*							
	P_{GD}	252		603		1042		1352		2200		2673		3001		3488		*							
4.5	P_{GA}	68.4		121		169		211		*		*		*		*		*							
	P_{GB}	163		355		562		737		944		1168		1303		1283		1210							
	P_{GC}	186		397		669		1009		1436		1925		2012		2315		*							
	P_{GD}	268		604		1030		1495		2131		2823		3118		3558		*							
5	P_{GA}	63.2		121		174		211		248		*		*		*		*							
	P_{GB}	149		339		547		678		953		1171		1378		1581		1592							
	P_{GC}	166		375		633		894		1374		1843		1955		2577		*							
	P_{GD}	239		569		976		1326		2041		2694		3009		3907		*							
5.6	P_{GA}	56.6		107		157		202		237		*		*		*		*							
	P_{GB}	132		299		488		647		903		1054		1251		1453		1672							
	P_{GC}	145		324		555		833		1287		1616		1728		2293		*							
	P_{GD}	208		494		857		1240		1917		2369		2662		3478		*							

* 请与我们联系
P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)
P_{GB} (kW) 齿轮箱带冷却风扇 **)
P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)
P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)
**) 表中数值按：
每小时工作周期：100%
在室内大空间安装
海拔高度至 1000 m

* Consult us
P_{GA} (kW) Gear units without auxiliary cooling **)
P_{GB} (kW) Gear units with fan **)
P_{GC} (kW) Gear units with built-in cooling coil **) ***)
P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)
**) Values refer to:
Operating cycle: 100 %
Installation in a large hall
Altitude up to 1000 m

热容量
Thermal Capacity

n_1=1500 min^{-1}
类型 WSH1.. 规格 3-26

n_1=1500 min^{-1}
Type WSH1.. Sizes 3-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																								
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	P_{GA}	*		*		*		*																	
	P_{GB}	210		372		408		*																	
	P_{GC}	307		686		946		1276																	
	P_{GD}	472		1117		1537		1991																	
1.4	P_{GA}	*		*		*		*																	
	P_{GB}	212		392		447		375																	
	P_{GC}	299		680		937		1285																	
	P_{GD}	459		1104		1523		1992																	
1.6	P_{GA}	*		*		*		*		*		*													
	P_{GB}	213		420		500		495		*		*													
	P_{GC}	284		655		894		1276		1944		2060													
	P_{GD}	438		1063		1452		1982		3039		3187													
1.8	P_{GA}	*		*		*		*		*		*													
	P_{GB}	241		435		554		575		*		*													
	P_{GC}	309		625		894		1259		1990		2161													
	P_{GD}	478		1019		1450		1953		3106		3328													
2	P_{GA}	*		*		*		*		*		*		*		*		*							
	P_{GB}	234		427		553		590		509		*		*		*		*							
	P_{GC}	295		593		852		1207		1947		2161		1626		*		*							
	P_{GD}	455		964		1382		1873		3026		3313		2826		*		*							
2.24	P_{GA}	*		*		*		*		*		*		*		*		*							
	P_{GB}	227		422		544		620		631		*		*		*		*							
	P_{GC}	278		558		779		1151		1902		2172		1719		*		*							
	P_{GD}	431		913		1264		1790		2964		3336		2963		*		*							
2.5	P_{GA}	*		*		*		*		*		*		*		*		*							
	P_{GB}	211		405		525		614		676		*		*		*		*							
	P_{GC}	251		518		723		1075		1810		2102		1746		*		*							
	P_{GD}	388		848		1172		1674		2819		3228		2972		*		*							
2.8	P_{GA}	50		*		*		*		*		*		*		*		*							
	P_{GB}	199		384		553		658		705		*		*		*		*							
	P_{GC}	231		475		733		1091		1698		2002		1748		1836		*							
	P_{GD}	359		777		1189		1695		2647		3075		2947		3087		*							
3.15	P_{GA}	63.8		*		*		*		*		*		*		*		*							
	P_{GB}	200		415		702		828		1055		1033		816		*		*							
	P_{GC}	226		481		881		1237		1858		2221		2223		2487		*							
	P_{GD}	348		779		1442		1941		2879		3394		3634		4035		*							
3.55	P_{GA}	59.8		*		*		*		*		*		*		*		*							
	P_{GB}	183		407		649		778		998		1014		860		678		*							
	P_{GC}	204		460		791		1124		1685		2042		2087		2387		*							
	P_{GD}	314		746		1301		1768		2617		3123		3397		3839		*							
4	P_{GA}	56.2		85.1		*		*		*		*		*		*		*							
	P_{GB}	166		374		591		677		964		1012		938		821		623							
	P_{GC}	181		410		696		937		1534		1870		1943		2263		*							
	P_{GD}	280		665		1147		1483		2387		2866		3159		3625		*							
4.5	P_{GA}	66.4		106		135		*		*		*		*		*		*							
	P_{GB}	180		389		611		795		994		1193		1261		1192		1069							
	P_{GC}	194		413		696		1049		1489		1992		2075		2382		*							
	P_{GD}	298		669		1137		1646		2330		3062		3339		3779		*							
5	P_{GA}	62.5		111		151		169		*		*		*		*		*							
	P_{GB}	165		373		599		738		1020		1227		1395		1560		1526							
	P_{GC}	173		390		659		930		1427		1911		2022		2660		*							
	P_{GD}	266		631		1080		1464		2242		2942		3255		4202		*							
5.6	P_{GA}	56		98.8		136		163		*		*		*		*		*							
	P_{GB}	146		330		535		704		967		1104		1266		1433		1604							
	P_{GC}	151		337		577		866		1337		1675		1787		2367		*							
	P_{GD}	232		548		949		1370		2106		2586		2880		3741		*							

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

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

热容量
Thermal Capacity

n_1=1800 min^{-1}
类型 WSH1.. 规格 3-26

n_1=1800 min^{-1}
Type WSH1.. Sizes 3-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																								
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	P_{GA}	*		*		*		*																	
	P_{GB}	210		295		*		*																	
	P_{GC}	314		650		851		1058																	
	P_{GD}	514		1164		1554		1921																	
1.4	P_{GA}	*		*		*		*																	
	P_{GB}	214		327		300		*																	
	P_{GC}	308		652		859		1096																	
	P_{GD}	502		1158		1556		1953																	
1.6	P_{GA}	*		*		*		*		*		*													
	P_{GB}	219		379		397		*		*		*													
	P_{GC}	294		643		848		1146		1465		*													
	P_{GD}	482		1131		1513		2002		2784		2485													
1.8	P_{GA}	*		*		*		*		*		*													
	P_{GB}	252		411		480		420		*		*													
	P_{GC}	323		623		867		1171		1625		1428													
	P_{GD}	527		1095		1531		2012		2972		2848													
2	P_{GA}	*		*		*		*		*		*		*		*		*							
	P_{GB}	245		409		491		454		*		*		*		*		*							
	P_{GC}	308		595		833		1135		1628		1503		*		*		*							
	P_{GD}	503		1039		1467		1943		2934		2909		1973		*		*							
2.24	P_{GA}	*		*		*		*		*		*		*		*		*							
	P_{GB}	240		414		504		519		*		*		*		*		*							
	P_{GC}	292		566		773		1105		1661		1651		*		*		*							
	P_{GD}	478		990		1352		1879		2945		3070		2319		*		*							
2.5	P_{GA}	*		*		*		*		*		*		*		*		*							
	P_{GB}	224		402		496		532		*		*		*		*		*							
	P_{GC}	264		528		722		1043		1613		1661		*		*		*							
	P_{GD}	431		922		1259		1768		2834		3033		2437		*		*							
2.8	P_{GA}	*		*		*		*		*		*		*		*		*							
	P_{GB}	212		386		531		589		*		*		*		*		*							
	P_{GC}	244		486		737		1069		1543		1639		1152		*		*							
	P_{GD}	399		848		1283		1801		2690		2947		2517		2389		*							
3.15	P_{GA}	52.3		*		*		*		*		*		*		*		*							
	P_{GB}	217		438		726		832		967		808		*		*		*							
	P_{GC}	242		505		915		1268		1835		2097		1942		2051		*							
	P_{GD}	389		862		1587		2118		3074		3528		3611		3882		*							
3.55	P_{GA}	50		*		*		*		*		*		*		*		*							
	P_{GB}	199		431		675		788		930		824		*		*		*							
	P_{GC}	218		484		824		1156		1674		1947		1853		2012		*							
	P_{GD}	352		827		1434		1933		2804		3265		3407		3739		*							
4	P_{GA}	48.7		*		*		*		*		*		*		*		*							
	P_{GB}	181		398		620		695		926		878		627		*		*							
	P_{GC}	194		433		728		970		1542		1815		1779		1987		*							
	P_{GD}	313		739		1268		1628		2575		3028		3225		3613		*							
4.5	P_{GA}	61		*		*		*		*		*		*		*		*							
	P_{GB}	198		419		653		837		1005		1142		1081		925		722							
	P_{GC}	208		439		735		1100		1530		1999		2006		2245		*							
	P_{GD}	334		746		1265		1822		2547		3300		3520		3924		*							
5	P_{GA}	59.4		92.5		*		*		*		*		*		*		*							
	P_{GB}	182		406		646		788		1059		1230		1310		1393		1281							
	P_{GC}	186		416		700		983		1486		1956		2016		2605		*							
	P_{GD}	299		706		1206		1628		2471		3208		3494		4463		*							
5.6	P_{GA}	53.2		82.3		*		*		*		*		*		*		*							
	P_{GB}	161		358		577		752		1004		1107		1189		1280		1346							
	P_{GC}	162		360		613		915		1392		1715		1781		2318		*							
	P_{GD}	261		613		1059		1523		2321		2820		3092		3973		*							

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

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

额定功率

Power Rating

类型 WSH2.. 规格 4-26　　Type WSH2.. Sizes 4-26

			额定功率 P_{2N} (kW) / Nominal power ratings P_{2N} (kW)																					
i_N	n_1	n_2	齿轮箱规格 / Gear unit sizes																					
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
6.3	1800	286	188	320		607		1009		1775		2575		4282*										
	1500	238	157	266		505		839		1477		2143		3563		4859								
	1200	190	125	212		403		670		1179		1710		2845		3879								
	1000	159	104	178		337		561		987		1431		2380		3246		4861						
7.1	1800	254	172	297		539		896		1577		2287		3803*	4255*									
	1500	211	143	247		448		744		1310		1900		3159	3535	4308								
	1200	169	115	198		359		596		1049		1521		2530	2831	3450	4070							
	1000	141	95	165		299		497		875		1269		2111	2362	2879	3395	4311	4946					
8	1800	225	157	263	318	478	603	793	994	1397	1738	2026	2520	3369*	3769*	4594*								
	1500	188	131	220	265	399	503	663	830	1167	1452	1692	2106	2815	3149	3838	4527							
	1200	150	105	175	212	318	402	529	662	931	1159	1350	1680	2246	2513	3062	3612	4586*						
	1000	125	87	146	176	265	335	441	552	776	965	1125	1400	1871	2094	2552	3010	3821	4384					
9	1800	200	140	234	301	425	536	705	883	1241	1545	1801	2240	2994*	3350*	4083*	4816*							
	1500	167	117	195	251	354	447	589	737	1036	1290	1503	1871	2500	2797	3409	4021							
	1200	133	93	155	200	282	356	469	587	825	1027	1197	1490	1991	2228	2715	3203	4066*	4665*					
	1000	111	77	130	167	235	297	391	490	689	857	999	1243	1662	1859	2266	2673	3393	3893	4765				
10	1800	180	118	197	271	382	482	635	795	1117	1390	1620	2016	2695*	3015*	3675*	4335*							
	1500	150	98	164	226	318	402	529	662	931	1159	1350	1680	2246	2513	3062	3612	4586*						
	1200	120	79	131	180	255	321	423	530	745	927	1080	1344	1796	2010	2450	2890	3669*	4209*					
	1000	100	65	109	150	212	268	352	441	620	772	900	1120	1497	1675	2041	2408	3057	3507	4293	4795			
11.2	1800	161	106	178	242	342	431	568	711	999	1244	1449	1803	2410*	2697*	3287*	3877*	4922*						
	1500	134	88	148	202	284	359	472	592	832	1035	1206	1501	2006	2245	2736	3227	4097*	4700*					
	1200	107	70	118	161	227	286	377	472	664	826	963	1198	1602	1792	2184	2576	3271*	3753*	4593*				
	1000	89	58	98	134	189	238	314	393	552	687	801	997	1332	1491	1817	2143	2721	3121	3820	4268			
12.5	1800	144	101	168	203	304	386	508	636	894	1112	1296	1613	2156*	2412*	2940*	3468*	4402*						
	1500	120	84	140	169	253	321	423	530	745	927	1080	1344	1796	2010	2450	2890	3669	4209*					
	1200	96	67	112	135	203	257	338	424	596	741	864	1075	1437	1608	1960	2312	2935	3367*	4121*	4603*			
	1000	80	56	93	113	169	214	282	353	496	618	720	896	1197	1340	1633	1926	2446	2806	3434	3836	4523		
14	1800	129	90	151	182	274	345	455	570	801	996	1161	1445	1931*	2161*	2634*	3106*	3944*	4525*					
	1500	107	75	125	151	227	286	377	472	664	826	963	1198	1602	1792	2184	2576	3271	3753	4593*				
	1200	86	60	100	121	182	230	303	380	534	664	774	963	1287	1440	1756	2071	2629	3016	3692*	4124*	4862*		
	1000	71	49	83	100	150	190	250	313	440	548	639	795	1063	1189	1449	1709	2170	2490	3048	3405	4014	4609	
16	1800	113	79	132	170	240	301	398	499	701	873	1017	1266	1692*	1893*	2307*	2721*	3455*	3963*	4851*				
	1500	94	65	110	141	199	250	331	415	583	726	846	1053	1407	1574	1919	2263	2874	3297	4035*	4508*			
	1200	75	52	87	113	159	200	264	331	465	579	675	840	1123	1256	1531	1806	2293	2630	3219*	3596*	4240*	4869*	
	1000	63	44	73	94	133	168	222	278	391	486	567	705	943	1055	1286	1517	1926	2209	2704	3021	3562	4090	
18	1800	100	65	109	150	198	268	352	441	620	772	900	1120	1497*	1675*	2041*	2408*	3057*	3507*	4293*	4795*			
	1500	83	54	91	125	165	222	292	366	515	641	747	929	1242	1390	1694	1998	2537	2911	3563*	3980*	4693*		
	1200	67	44	73	101	133	179	236	296	416	517	603	750	1003	1122	1368	1613	2048	2350	2876*	3213*	3788*	4349*	
	1000	56	36	61	84	111	150	197	247	347	432	504	627	838	938	1143	1348	1712	1964	2404	2685	3166	3635	4573
20	1800	90	62	105	135	179	241	317	397	558	695	810	1008	1347*	1507*	1837*	2167*	2751*	3157*	3863*	4316*			
	1500	75	51	87	113	149	201	264	331	465	579	675	840	1123	1256	1531	1806	2293	2630	3219*	3596*	4240*	4869*	
	1200	60	41	70	90	119	160	211	265	372	463	540	672	898	1005	1225	1445	1834	2104	2575*	2877*	3392*	3895*	4900*
	1000	50	34	58	75	99	134	176	220	310	386	450	560	748	837	1020	1204	1528	1753	2146	2397	2827	3246	4083	4607
22.4	1800	80	52	91	113	165	201	277	353	488	618		896		1340*		1926*		2806*		3836*				
	1500	67	44	76	94	138	168	232	296	409	517		750		1122		1613		2350		3213*		4349*		
	1200	54	35	61	76	111	135	187	238	329	417		605		904		1300		1894		2589*		3505*		4975*
	1000	45	29	51	63	93	113	155	198	274	347		504		753		1083		1578		2158		2921		4146
25	1800	72			107		180		318		556		806												
	1500	60			89		150		265		463		672												
	1200	48			71		120		212		370		537												
	1000	40			59		100		176		309		448												
28	1800	64			93		167		278		485														
	1500	54			78		141		235		409														
	1200	43			62		112		187		326														
	1000	36			52		94		156		273														

卧式安装齿轮箱应采用强制润滑

* 请与我们联系

Forced lubrication required on horizontal gear units

* Gear units only on request

额定输出扭矩

Rated output torque

类型 WSH2.. 规格 4-26　　Type WSH2.. Sizes 4-26

	额定输出扭矩 T_{2N} (kNm) / Nominal output torques T_{2N} (kNm)																							
i_N	齿轮箱规格 / Gear unit sizes																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	2.9		8		15.2		24.7																	
1.4	3.1		8.2		15.9		25.6																	
1.6	3.3		8.6		16.3		27.1		46		67.4													
1.8	2.7		8.8		17.4		28		47.6		70.9													
2	2.8		9.4		17.8		28.7		49.1		72.9		129											
2.24	2.8		9.6		17.8		28.7		50.6		75.2		130											
2.5	2.9		9.6		17.8		28.7		50.6		77		117											
2.8	3.1		9.6		17.1		27.2		50.6		77		120		171									
3.15	3.1		9.6		17.4		28.1		48.1		73.1		124		173									
3.55	3.2		9.5		17.8		28.6		50.2		74.4		126		173									
4	3.2		9.6		17.8		28.7		50.6		75.7		130		173		245							
4.5	2.5		7.7		15.8		24.6		46		61.6		109		146		216							
5	2.4		7.2		13.8		23.5		38.7		58.3		95		124		174							
5.6	2.3		6.9		13.1		20.1		36.5		55.4		90.4		118		150							
6.3		6.3	10.7		20.3		33.7		59.3		86		143		195		292							
7.1		6.5	11.2		20.3		33.7		59.3		86		143	160	195	230	292	335	410					
8		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458				
9		6.7	11.2	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540			
10		6.3	10.5	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620		
11.2		6.3	10.6	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	
12.5		6.7	11.2	13.5	20.2	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
14		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
16		6.7	11.2	14.4	20.3	25.5	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
18		6.3	10.5	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
20		6.6	11.2	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
22.4		6.3	10.9	13.5	19.8	24	33.1	42.2	58.3	73.8	88	107	153	160	200	230	300	335	420	458	560	620	800	880
25			11.6	14.3	21.7	24	35.7	42.2	63.5	73.8	88	107	153	173	200	240	300	345	420	470	560	640	800	900
28			11.6	13.9	21.7	25	35.7	41.6	63.5	72.5	88	109	153	173	200	240	300	345	420	470	560	640	800	900
31.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
35.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
40			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
45			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
50			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
56			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
63			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
71			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
80			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
90			11.6	15.5	20	27.2	34.5	43.8	63.5	77.2	88	109	153	173	200	240	290	345	410	470	560	640	800	900
100				14.5	21.7	27.2	35.7	43.8	61.6	77.2	90.7	109	153	173	200	226	300	335	420	465	560	640	800	900
112				15	21.7	25.2	35.7	42.8	61.6	77.2	90.7	109	153	173	200	240	300	345	420	470	560	640	800	900
125					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
160					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355					19.6	27.2	35.7	44.2	61.6	78	90.7	113	140	173	192	240	290	345	410	470	560	640	800	900
400						27.2		44.2		78		113		158		223		335		465		640		900
450						25.3		42.8		78		113												

WSH1
WSH3
WSH4

热容量

Thermal Capacity

n_1=1000 min^{-1}

类型 WSH2.. 规格 4-26

n_1=1000 min^{-1}

Type WSH2.. Sizes 4-26

		热容量 P_G (kW) / Thermal capacities P_G (kW)																					
		齿轮箱规格 / Gear unit sizes																					
i_N		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
6.3	P_{GA}	54.1	66.5		90.3		116		134		*		*		*		*		*		*		*	
	P_{GB}	106	143		221		293		450		579		563		625		*		*		*		*	
	P_{GC}	120	190		305		475		696		1201		1434		1736		*		*		*		*	
	P_{GD}	162	256		417		626		951		1553		1782		2240		*		*		*		*	
7.1	P_{GA}	56.1	69		89.8		117		145		*		*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	109	146		214		286		454		588		591	589	683	659	*	*	*	*	*	*	*	*
	P_{GC}	121	189		287		447		677		1163		1392	1448	1689	1737	*	*	*	*	*	*	*	*
	P_{GD}	165	256		394		589		931		1510		1746	1810	2186	2260	*	*	*	*	*	*	*	*
8	P_{GA}	54.4	68.3	74.5	89.1	99	118	120	152	161	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	104	142	157	208	235	279	290	449	509	591	656	613	620	733	719	*	*	*	*	*	*	*	*
	P_{GC}	115	182	197	272	312	425	472	646	884	1110	1263	1348	1407	1649	1693	*	*	*	*	*	*	*	*
	P_{GD}	155	245	266	376	428	562	618	895	1170	1455	1658	1696	1772	2154	2203	*	*	*	*	*	*	*	*
9	P_{GA}	53.4	67.9	78.1	89.3	100	120	124	160	182	195	212	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	101	139	159	202	228	272	283	437	520	594	672	635	655	786	789	*	*	*	*	*	*	*	*
	P_{GC}	109	174	197	259	294	403	442	599	861	1055	1224	1292	1366	1611	1662	*	*	*	*	*	*	*	*
	P_{GD}	150	234	266	357	405	536	582	833	1149	1395	1611	1644	1736	2120	2191	*	*	*	*	*	*	*	*
10	P_{GA}	51.1	65.4	77.4	88.3	100	119	125	164	193	209	234	200	198	*	*	*	*	*	*	*	*	*	*
	P_{GB}	95.7	131	156	193	222	262	278	424	516	587	673	640	668	812	830	*	*	*	*	*	*	*	*
	P_{GC}	102	160	189	243	280	378	422	564	821	999	1167	1224	1303	1548	1611	*	*	*	*	*	*	*	*
	P_{GD}	139	217	255	337	386	505	556	786	1106	1326	1551	1571	1674	2053	2143	*	*	*	*	*	*	*	*
11.2	P_{GA}	49.3	63.4	76	90.7	99	116	124	173	195	226	247	218	222	229	223	*	*	*	*	*	*	*	*
	P_{GB}	91.7	126	151	196	214	249	270	430	495	601	665	632	669	815	847	*	*	*	*	*	*	*	*
	P_{GC}	97	151	180	241	264	353	398	560	756	986	1113	1148	1237	1468	1553	*	*	*	*	*	*	*	*
	P_{GD}	132	205	245	336	367	473	528	784	1020	1319	1482	1485	1594	1958	2070	*	*	*	*	*	*	*	*
12.5	P_{GA}	47.8	63	72.3	90.2	95.6	116	122	178	194	226	252	235	235	260	250	301	289	*	*	*	*	*	*
	P_{GB}	87.6	123	142	191	205	244	259	425	475	572	648	637	656	833	844	*	*	*	*	*	*	*	*
	P_{GC}	93.6	149	165	236	250	342	375	549	710	906	1046	1128	1164	1430	1470	*	*	*	*	*	*	*	*
	P_{GD}	126	201	226	327	346	455	498	766	960	1212	1401	1459	1506	1914	1965	*	*	*	*	*	*	*	*
14	P_{GA}	45.5	60	69.8	83.8	97.7	114	119	173	202	225	266	240	252	274	281	328	333	*	*	*	*	*	*
	P_{GB}	82.9	116	135	175	207	236	247	403	483	547	659	614	659	814	860	*	*	*	*	*	*	*	*
	P_{GC}	87.5	138	156	211	248	322	349	509	705	840	1037	1049	1138	1339	1431	*	*	*	*	*	*	*	*
	P_{GD}	118	186	213	294	345	432	465	711	958	1131	1392	1365	1482	1802	1921	*	*	*	*	*	*	*	*
16	P_{GA}	41.8	56.6	68.9	79	97	108	117	166	206	212	263	252	254	280	292	341	354	336	*	*	*	*	*
	P_{GB}	75.7	108	131	163	201	221	240	377	476	501	626	617	634	782	837	*	*	*	*	*	*	*	*
	P_{GC}	78.8	126	154	194	242	295	339	464	688	744	947	1027	1059	1245	1341	*	*	*	*	*	*	*	*
	P_{GD}	107	171	208	269	336	397	449	650	932	1007	1276	1341	1381	1680	1810	*	*	*	*	*	*	*	*
18	P_{GA}	40.1	54.4	65.7	76.1	89.7	103	114	156	200	219	259	248	268	292	299	362	368	367	352	*	*	*	*
	P_{GB}	72.1	103	124	157	184	208	231	352	450	506	598	583	638	768	805	*	*	*	*	*	*	*	*
	P_{GC}	74.1	119	142	185	217	276	319	432	635	747	881	947	1037	1189	1243	*	*	*	*	*	*	*	*
	P_{GD}	100	162	194	257	301	371	425	609	864	1009	1189	1244	1359	1606	1689	*	*	*	*	*	*	*	*
20	P_{GA}	39.3	51.1	61.7	71.3	85.2	100	109	152	189	208	239	242	258	293	304	361	378	373	372	*	*	*	*
	P_{GB}	70.2	96.8	115	145	172	200	217	339	419	473	543	554	599	751	787	*	*	*	*	*	*	*	*
	P_{GC}	71.7	111	131	169	199	264	293	408	577	681	780	871	957	1140	1181	*	*	*	*	*	*	*	*
	P_{GD}	97.4	150	179	236	276	355	392	575	786	923	1056	1142	1257	1546	1602	*	*	*	*	*	*	*	*
22.4	P_{GA}	36.4	47.5	59	68.7	81.1	92.3	102	142	175		241		248		300		369		362		*		*
	P_{GB}	64.9	89.4	111	139	165	185	203	314	390		544		566		764		*		*		*		*
	P_{GC}	65.3	101	124	161	190	238	273	371	540		780		877		1133		*		*		*		*
	P_{GD}	88.9	137	169	224	263	320	366	524	736		1057		1153		1537		*		*		*		*
25	P_{GA}			55.3		75.8		99.4		170		227												
	P_{GB}			103		152		196		374		506												
	P_{GC}			114		174		262		506		713												
	P_{GD}			156		242		350		692		965												
28	P_{GA}			51.5		73.3		92.5		160														
	P_{GB}			95.8		146		182		347														
	P_{GC}			104		166		236		459														
	P_{GD}			142		230		318		630														

* 请与我们联系

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

* Consult us

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

热容量

Thermal Capacity

n_1=1200 min^{-1}

类型 WSH2.. 规格 4-26

n_1=1200 min^{-1}

Type WSH2.. Sizes 4-26

		热容量 P_G (kW) / Thermal capacities P_G (kW)																					
		齿轮箱规格 / Gear unit sizes																					
i_N		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
6.3	P_{GA}	49.2	54.6		67.4		*		*		*		*		*		*		*		*		*	
	P_{GB}	112	146		220		279		382		415		*		*		*		*		*		*	
	P_{GC}	126	196		311		475		665		1088		1192		1360		*		*		*		*	
	P_{GD}	176	276		445		658		966		1515		1628		1954		*		*		*		*	
7.1	P_{GA}	51.8	58.4		70.3		*		*		*		*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	116	151		215		278		400		452		344	*	*	*	*	*	*	*	*	*	*	*
	P_{GC}	127	196		294		451		656		1075		1196	1220	1380	1383	*	*	*	*	*	*	*	*
	P_{GD}	180	276		422		624		956		1497		1636	1670	1971	1997	*	*	*	*	*	*	*	*
8	P_{GA}	50.9	59.5	63.6	72.9	77.3	88	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	111	149	162	212	236	276	283	410	443	484	526	407	386	*	*	*	*	*	*	*	*	*	*
	P_{GC}	121	189	204	281	319	432	477	635	853	1048	1183	1196	1228	1403	1409	*	*	*	*	*	*	*	*
	P_{GD}	170	266	288	404	458	599	654	929	1197	1465	1660	1629	1681	2003	2015	*	*	*	*	*	*	*	*
9	P_{GA}	51.1	61.6	69.8	77.5	84.3	97.8	97.3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	109	147	167	210	234	277	285	419	482	529	589	495	490	552	523	*	*	*	*	*	*	*	*
	P_{GC}	116	182	206	269	305	415	453	601	852	1026	1184	1199	1253	1450	1473	*	*	*	*	*	*	*	*
	P_{GD}	164	255	289	386	437	576	622	878	1197	1436	1651	1635	1710	2059	2103	*	*	*	*	*	*	*	*
10	P_{GA}	49.5	60.9	71.3	79.5	88.1	102	104	121	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	103	140	166	204	232	272	285	420	498	549	624	545	554	645	635	*	*	*	*	*	*	*	*
	P_{GD}	108	169	198	255	292	392	436	573	825	991	1153	1172	1235	1446	1487	*	*	*	*	*	*	*	*
	P_{GB}	153	237	278	367	419	546	599	836	1167	1386	1616	1598	1691	2051	2121	*	*	*	*	*	*	*	*
11.2	P_{GA}	48.2	60.1	71.4	83.7	89.7	103	108	138	144	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	100	135	161	208	226	262	281	435	491	582	638	569	591	698	705	*	*	*	*	*	*	*	*
	P_{GD}	103	159	190	254	277	369	414	575	769	993	1116	1122	1200	1408	1474	*	*	*	*	*	*	*	*
	P_{GD}	145	225	268	366	400	514	572	841	1086	1393	1561	1535	1638	1994	2092	*	*	*	*	*	*	*	*
12.5	P_{GA}	47.1	60.4	68.9	84.6	88.4	105	109	149	154	167	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	95.8	133	153	204	218	258	273	436	480	567	638	596	604	748	742	*	*	*	*	*	*	*	*
	P_{GD}	99.8	158	175	249	263	358	393	568	728	921	1061	1118	1147	1396	1423	*	*	*	*	*	*	*	*
	P_{GD}	139	220	248	357	378	496	542	825	1029	1289	1487	1524	1566	1976	2017	*	*	*	*	*	*	*	*
14	P_{GA}	45.1	58.2	67.3	79.8	92	106	109	151	169	179	207	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	90.9	126	147	189	222	252	262	420	496	553	663	593	629	761	792	*	*	*	*	*	*	*	*
	P_{GC}	90.9	147	166	223	262	339	367	529	729	862	1062	1055	1138	1328	1410	*	*	*	*	*	*	*	*
	P_{GD}	130	204	234	322	377	472	507	770	1032	1211	1489	1440	1557	1883	1998	*	*	*	*	*	*	*	*
16	P_{GA}	41.7	55.4	67.1	76.1	92.6	102	109	148	179	176	216	185	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	83.1	118	143	177	216	237	256	397	496	514	640	610	620	754	797	*	*	*	*	*	*	*	*
	P_{GC}	84.3	135	164	206	256	312	357	485	716	769	977	1043	1071	1251	1341	*	*	*	*	*	*	*	*
	P_{GD}	118	189	229	295	368	435	491	706	1009	1085	1372	1426	1463	1772	1901	*	*	*	*	*	*	*	*
18	P_{GA}	40.2	53.7	64.5	74.2	86.8	99	109	144	180	191	223	197	207	217	*	*	*	*	*	*	*	*	*
	P_{GB}	79.3	113	136	170	200	225	249	375	474	528	621	590	640	762	790	*	*	*	*	*	*	*	*
	P_{GC}	79.3	127	152	196	231	292	337	455	664	778	915	973	1061	1210	1260	*	*	*	*	*	*	*	*
	P_{GD}	111	179	214	283	331	407	465	664	938	1093	1286	1333	1453	1710	1792	*	*	*	*	*	*	*	*
20	P_{GA}	39.5	50.6	60.9	69.9	82.9	97.1	104	142	172	185	211	200	208	228	230	264	*	*	*	*	*	*	*
	P_{GB}	77.4	106	126	158	187	217	235	362	444	497	569	567	608	755	785	*	*	*	*	*	*	*	*
	P_{GC}	76.7	118	140	180	212	280	311	430	606	712	814	899	985	1168	1204	*	*	*	*	*	*	*	*
	P_{GD}	107	166	197	260	304	390	430	628	856	1002	1145	1228	1349	1654	1708	*	*	*	*	*	*	*	*
22.4	P_{GA}	36.5	47.1	58.3	67.5	79.1	89.4	98.6	133	160		214		202		230		267		*		*		*
	P_{GB}	71.5	98	121	152	179	201	220	336	414		571		577		765		*		*		*		*
	P_{GC}	69.9	107	133	172	202	252	290	392	567		815		904		1157		*		*		*		*
	P_{GD}	98.3	151	187	247	290	352	401	573	802		1147		1238		1640		*		*		*		*
25	P_{GA}			54.7		74.1		95.8		156		202												
	P_{GB}			113		166		213		398		532												
	P_{GC}			122		185		278		532		745												
	P_{GD}			172		266		384		754		1048												
28	P_{GA}			51.2		72		89.9		149														
	P_{GB}			105		160		198		371														
	P_{GC}			111		177		251		484														
	P_{GD}			157		253		350		688														

* 请与我们联系

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

* Consult us

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

热容量
Thermal Capacity

n_1=1500 min^{-1}

类型 WSH2.. 规格 4-26

n_1=1500 min^{-1}

Type WSH2.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																						
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
6.3	P_{GA}	48.5	48.8		*		*		*		*		*		*		*		*		*		*	
	P_{GB}	132	172		256		322		428		442		*		*		*		*		*		*	
	P_{GC}	146	226		357		542		746		1197		1267		1410		*		*		*		*	
	P_{GD}	210	327		525		774		1124		1739		1824		2151		*		*		*		*	
7.1	P_{GA}	51.6	53.9		*		*		*		*		*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	137	177		252		323		453		493		338	*	*	*	*	*	*	*	*	*	*	*
	P_{GC}	148	226		338		516		740		1193		1289	1305	1458	1443	*	*	*	*	*	*	*	*
	P_{GD}	214	327		499		735		1117		1728		1851	1880	2199	2209	*	*	*	*	*	*	*	*
8	P_{GA}	51.4	56.4	59.2	64.9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	132	175	191	249	276	322	328	469	501	537	580	422	390	*	*	*	*	*	*	*	*	*	*
	P_{GC}	140	219	236	323	367	496	545	720	961	1171	1319	1306	1332	1507	1500	*	*	*	*	*	*	*	*
	P_{GD}	202	316	341	479	542	707	772	1088	1397	1700	1923	1860	1910	2261	2260	*	*	*	*	*	*	*	*
9	P_{GA}	52.4	60.5	67.8	73.2	77.2	86.3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	129	174	198	248	275	324	333	484	553	600	666	541	530	584	542	*	*	*	*	*	*	*	*
	P_{GC}	135	211	238	311	352	477	521	686	968	1159	1335	1332	1386	1593	1608	*	*	*	*	*	*	*	*
	P_{GD}	196	303	344	458	518	682	736	1033	1405	1679	1927	1889	1970	2360	2400	*	*	*	*	*	*	*	*
10	P_{GA}	51.4	61.1	70.9	77.7	84.2	96	95.3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	123	165	196	241	273	320	335	489	577	631	715	612	617	710	691	*	*	*	*	*	*	*	*
	P_{GC}	126	196	230	295	338	453	503	657	943	1128	1309	1316	1383	1611	1649	*	*	*	*	*	*	*	*
	P_{GD}	182	282	331	436	498	648	710	987	1375	1628	1896	1861	1964	2374	2447	*	*	*	*	*	*	*	*
11.2	P_{GA}	50.4	61.2	72.2	83.4	88	99.9	103	119	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	118	160	191	246	267	309	331	509	572	674	738	648	669	784	787	*	*	*	*	*	*	*	*
	P_{GC}	120	185	221	294	321	427	479	662	882	1135	1274	1269	1354	1582	1651	*	*	*	*	*	*	*	*
	P_{GD}	174	268	319	436	475	610	679	995	1283	1642	1838	1796	1913	2323	2431	*	*	*	*	*	*	*	*
12.5	P_{GA}	49.5	62.1	70.5	85.6	88.3	104	106	135	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	113	157	181	242	258	305	322	512	562	660	742	685	691	851	840	*	*	*	*	*	*	*	*
	P_{GC}	116	183	204	289	305	415	454	655	837	1056	1215	1272	1302	1579	1605	*	*	*	*	*	*	*	*
	P_{GD}	166	263	295	425	450	589	644	978	1218	1523	1755	1790	1836	2311	2355	*	*	*	*	*	*	*	*
14	P_{GA}	47.6	60.4	69.5	81.7	93.2	106	108	142	153	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	108	150	174	224	263	298	310	494	583	647	774	686	726	875	906	*	*	*	*	*	*	*	*
	P_{GC}	108	171	193	259	304	393	425	611	841	991	1220	1205	1298	1511	1600	*	*	*	*	*	*	*	*
	P_{GD}	155	243	279	384	449	562	603	914	1223	1434	1761	1697	1832	2211	2342	*	*	*	*	*	*	*	*
16	P_{GA}	44.1	57.8	69.8	78.6	94.9	104	110	144	169	160	193	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	98.9	140	169	210	257	281	303	469	583	603	751	710	721	873	919	*	*	*	*	*	*	*	*
	P_{GC}	98.1	157	191	239	297	362	414	561	827	887	1125	1196	1226	1429	1528	*	*	*	*	*	*	*	*
	P_{GD}	141	225	273	352	438	518	584	839	1197	1286	1626	1684	1726	2088	2236	*	*	*	*	*	*	*	*
18	P_{GA}	42.7	56.4	67.6	77.3	89.8	101	111	143	175	181	209	170	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	94.4	134	162	202	237	266	296	443	560	621	731	690	748	888	919	*	*	*	*	*	*	*	*
	P_{GC}	92.4	148	177	229	268	339	392	527	769	899	1057	1119	1219	1387	1442	*	*	*	*	*	*	*	*
	P_{GD}	132	213	255	338	395	486	555	790	1115	1297	1526	1578	1718	2020	2114	*	*	*	*	*	*	*	*
20	P_{GA}	42	53.3	64	73.1	86.3	100	107	142	170	179	202	179	182	*	*	*	*	*	*	*	*	*	*
	P_{GB}	92.1	126	150	188	222	257	278	428	525	586	670	665	712	882	915	*	*	*	*	*	*	*	*
	P_{GC}	89.4	138	162	209	247	326	362	499	702	823	941	1036	1133	1342	1382	*	*	*	*	*	*	*	*
	P_{GD}	128	198	235	310	363	465	512	747	1019	1191	1360	1455	1597	1956	2019	*	*	*	*	*	*	*	*
22.4	P_{GA}	38.9	49.7	61.3	70.7	82.4	92.6	101	133	159		206		179		*		*		*		*		*
	P_{GB}	85.2	116	144	181	213	239	261	397	489		673		676		893		*		*		*		*
	P_{GC}	81.5	125	155	200	235	293	337	454	657		942		1041		1329		*		*		*		*
	P_{GD}	117	181	223	295	346	420	478	682	954		1362		1467		1939		*		*		*		*
25	P_{GA}			57.6		77.2		98.9		155		195												
	P_{GB}			134		197		252		470		627												
	P_{GC}			142		216		323		617		862												
	P_{GD}			206		318		458		898		1245												
28	P_{GA}			54.1		75.5		93.4		150														
	P_{GB}			125		190		235		439														
	P_{GC}			130		206		292		562														
	P_{GD}			187		302		417		819														

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20℃ 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

热容量
Thermal Capacity

n_1=1800 min^{-1}

类型 WSH2.. 规格 4-26

n_1=1800 min^{-1}

Type WSH2.. Sizes 4-26

热容量 P (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																						
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
6.3	P_{GA}	40.6	*		*		*		*		*		*		*		*		*		*		*	
	P_{GB}	144	181		263		319		366		*		*		*		*		*		*		*	
	P_{GC}	157	239		373		558		732		1102		1027		1020		*		*		*		*	
	P_{GD}	236	361		574		832		1154		1678		1562		1661		*		*		*		*	
7.1	P_{GA}	44.6	*		*		*		*		*		*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	150	189		262		325		408		357		*	*	*	*	*	*	*	*	*	*	*	*
	P_{GC}	159	241		355		536		738		1127		1102	1081	1147	1080	*	*	*	*	*	*	*	*
	P_{GD}	240	363		548		797		1163		1710		1666	1644	1832	1759	*	*	*	*	*	*	*	*
8	P_{GA}	45.7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	145	188	204	262	287	330	332	441	444	436	453	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GC}	152	234	251	342	386	519	567	728	954	1134	1266	1169	1165	1269	1219	*	*	*	*	*	*	*	*
	P_{GD}	228	352	379	529	595	772	837	1149	1449	1722	1931	1749	1757	2006	1941	*	*	*	*	*	*	*	*
9	P_{GA}	48.3	50.5	54.7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	143	189	214	266	293	341	347	481	530	547	595	402	363	*	*	*	*	*	*	*	*	*	*
	P_{GC}	146	227	256	332	374	505	548	707	985	1160	1327	1265	1296	1455	1438	*	*	*	*	*	*	*	*
	P_{GD}	221	340	384	510	574	753	809	1113	1494	1755	2003	1877	1930	2262	2254	*	*	*	*	*	*	*	*
10	P_{GA}	48.5	53.7	61	63.7	65.2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	136	181	214	261	294	342	355	501	577	611	683	526	510	547	495	*	*	*	*	*	*	*	*
	P_{GC}	137	211	248	317	361	483	534	687	975	1152	1331	1294	1345	1541	1555	*	*	*	*	*	*	*	*
	P_{GD}	207	318	372	489	555	720	787	1077	1485	1736	2013	1913	1999	2378	2418	*	*	*	*	*	*	*	*
11.2	P_{GA}	48.3	55.6	64.6	72.1	73.2	79.4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	132	177	210	269	290	333	355	533	587	675	733	600	604	679	655	*	*	*	*	*	*	*	*
	P_{GC}	130	200	239	317	345	457	512	698	923	1175	1314	1276	1350	1558	1609	*	*	*	*	*	*	*	*
	P_{GD}	197	303	359	490	533	682	756	1095	1401	1775	1980	1886	1994	2393	2478	*	*	*	*	*	*	*	*
12.5	P_{GA}	47.9	57.7	64.6	76.5	76.6	87.5	86.5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	127	174	200	266	282	332	348	543	587	677	756	662	656	786	754	*	*	*	*	*	*	*	*
	P_{GC}	126	199	221	313	329	447	487	695	883	1105	1267	1298	1321	1585	1598	*	*	*	*	*	*	*	*
	P_{GD}	189	297	333	480	506	661	720	1083	1340	1662	1910	1908	1945	2426	2451	*	*	*	*	*	*	*	*
14	P_{GA}	46.5	57	65	75	83.7	93.7	92.7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	120	166	193	247	289	326	338	530	618	676	805	686	717	846	861	*	*	*	*	*	*	*	*
	P_{GC}	118	186	209	281	329	424	458	653	892	1045	1284	1246	1336	1543	1623	*	*	*	*	*	*	*	*
	P_{GD}	177	276	316	434	507	632	677	1018	1355	1578	1933	1832	1969	2358	2482	*	*	*	*	*	*	*	*
16	P_{GA}	43.5	55.4	66.4	73.6	87.3	94.2	98	116	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	110	155	188	232	283	309	333	507	625	639	792	727	731	872	905	*	*	*	*	*	*	*	*
	P_{GC}	107	171	207	260	322	392	448	602	882	941	1192	1249	1275	1477	1571	*	*	*	*	*	*	*	*
	P_{GD}	160	256	310	399	496	584	658	939	1333	1424	1797	1836	1875	2253	2401	*	*	*	*	*	*	*	*
18	P_{GA}	42.3	54.7	65.2	73.7	84.5	94.5	102	122	142	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	105	150	180	225	263	295	326	483	606	667	782	722	777	912	934	*	*	*	*	*	*	*	*
	P_{GC}	101	161	192	249	292	368	424	567	825	960	1127	1180	1282	1451	1503	*	*	*	*	*	*	*	*
	P_{GD}	151	242	290	383	447	550	627	887	1249	1446	1698	1736	1885	2206	2299	*	*	*	*	*	*	*	*
20	P_{GA}	41.8	52.1	62.2	70.2	82	94.4	99.9	125	144	142	157	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	103	140	168	210	246	285	308	469	571	633	722	702	748	918	944	*	*	*	*	*	*	*	*
	P_{GC}	97.8	150	177	228	268	354	392	539	755	882	1007	1098	1197	1412	1449	*	*	*	*	*	*	*	*
	P_{GD}	146	225	268	352	411	527	580	842	1143	1331	1519	1609	1761	2148	2209	*	*	*	*	*	*	*	*
22.4	P_{GA}	38.7	48.6	59.6	68	78.5	87.3	94.7	118	135		162		*		*		*		*		*		*
	P_{GB}	95.6	130	161	202	237	265	289	436	533		726		712		924		*		*		*		*
	P_{GC}	89.1	136	169	218	256	319	366	491	708		1009		1101		1395		*		*		*		*
	P_{GD}	133	205	253	335	392	476	541	768	1071		1522		1619		2125		*		*		*		*
25	P_{GA}			56.1		73.8		92.5		133		156												
	P_{GB}			150		219		280		513		678												
	P_{GC}			154		235		351		665		924												
	P_{GD}			234		360		519		1009		1392												
28	P_{GA}			53		72.8		88.5		133														
	P_{GB}			139		212		261		482														
	P_{GC}			142		224		318		606														
	P_{GD}			213		344		473		923														

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20℃ 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

额定功率

Power Rating

类型 WSH3.. 规格 5-26

Type WSH3.. Sizes 5-26

额定功率 P_{2N} (kW) / Nominal power ratings P_{2N} (kW)																								
i_N	n_1	n_2	齿轮箱规格 / Gear unit sizes																					
			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
22.4	1800	80									737		1281		1675		2513*		3518*		4691*			
	1500	67									617		1073		1403		2104		2946		3928			
	1200	54									497		865		1130		1696		2374		3166		4523	
	1000	45									414		720		942		1413		1979		2638		3769	
25	1800	72	87		163		269		478		663		1153	1304	1507	1809	2261*	2601*	3166*	3543*	4221*	4825*		
	1500	60	72		136		224		398		552		961	1086	1256	1507	1884	2167	2638	2952	3518	4020		
	1200	48	58		109		179		319		442		769	869	1005	1206	1507	1734	2110	2362	2814	3216	4020	4523
	1000	40	48		90		149		265		368		640	724	837	1005	1256	1445	1759	1968	2345	2680	3350	3769
28	1800	64	77		145		239		425		589	730	1025	1159	1340	1608	2010*	2312*	2814*	3149*	3752*	4289*		
	1500	54	65		122		201		359		497	616	865	978	1130	1357	1696	1950	2374	2657	3166	3618	4523	
	1200	43	52		97		160		285		396	490	688	778	900	1080	1350	1553	1891	2116	2521	2881	3602	4052
	1000	36	43		81		134		239		331	410	576	652	753	904	1130	1300	1583	1771	2110	2412	3015	3392
31.5	1800	57	69	92	129	162	213	261	379	460	525	650	913	1032	1193	1432	1790*	2059*	2506*	2805*	3342*	3819*	4774*	
	1500	48	58	77	109	136	179	220	319	388	442	547	769	869	1005	1206	1507	1734	2110	2362	2814	3216	4020	4523
	1200	38	46	61	86	108	142	174	252	307	350	433	608	688	795	954	1193	1372	1671	1870	2228	2546	3183	3581
	1000	32	38	51	72	91	119	146	212	258	294	365	512	579	670	804	1005	1156	1407	1574	1876	2144	2680	3015
35.5	1800	51	61	82	115	145	190	233	339	412	469	582	817	923	1068	1281	1602*	1842*	2242*	2509*	2990*	3417*	4272*	4806*
	1500	42	51	68	95	119	157	192	279	339	387	479	672	760	879	1055	1319	1517	1847	2067	2462	2814	3518	3958
	1200	34	41	55	77	96	127	155	226	274	313	388	544	615	712	854	1068	1228	1495	1673	1993	2278	2848	3204
	1000	28	34	45	63	79	104	128	186	226	258	319	448	507	586	703	879	1011	1231	1378	1641	1876	2345	2638
40	1800	45	54	73	102	128	168	206	299	363	414	513	720	815	942	1130	1413*	1625*	1979*	2214*	2638*	3015*	3769*	4240*
	1500	38	46	61	86	108	142	174	252	307	350	433	608	688	795	954	1193	1372	1671	1870	2228	2546	3183	3581
	1200	30	36	48	68	85	112	137	199	242	276	342	480	543	628	753	942	1083	1319	1476	1759	2010	2513	2827
	1000	25	30	40	56	71	93	114	166	202	230	285	400	452	523	628	785	903	1099	1230	1465	1675	2094	2356
45	1800	40	48	64	90	113	149	183	265	323	368	456	640	724	837	1005	1256*	1445*	1759*	1968*	2345*	2680*	3350*	3769*
	1500	33	40	53	74	93	123	151	219	266	304	376	528	597	691	829	1036	1192	1451	1624	1935	2211	2764	3109
	1200	27	32	43	61	76	100	123	179	218	248	308	432	489	565	678	848	975	1187	1328	1583	1809	2261	2544
	1000	22	26	35	49	62	82	100	146	177	202	251	352	398	460	552	691	794	967	1082	1290	1474	1842	2073
50	1800	36	43	58	81	102	134	165	239	291	331	410	576	652	753	904	1130	1300*	1583*	1771*	2110*	2412*	3015*	3392*
	1500	30	36	48	68	85	112	137	199	242	276	342	480	543	628	753	942	1083	1319	1476	1759	2010	2513	2827
	1200	24	29	38	54	68	89	110	159	194	221	273	384	434	502	603	753	867	1055	1181	1407	1608	2010	2261
	1000	20	24	32	45	56	74	91	132	161	184	228	320	362	418	502	628	722	879	984	1172	1340	1675	1884
56	1800	32	38	51	72	91	119	146	212	258	294	365	512	579	670	804	1005	1156	1407*	1574*	1876*	2144*	2680*	3015*
	1500	27	32	43	61	76	100	123	179	218	248	308	432	489	565	678	848	975	1187	1328	1583	1809	2261	2544
	1200	21	25	34	47	59	78	96	139	169	193	239	336	380	439	527	659	758	923	1033	1231	1407	1759	1979
	1000	17.9	21	29	40	50	66	82	119	144	164	204	286	324	374	449	562	646	787	880	1049	1199	1499	1686
63	1800	29	35	47	65	82	108	133	192	234	267	330	464	525	607	728	910	1047	1275*	1427*	1700*	1943*	2429*	2732*
	1500	24	29	38	54	68	89	110	159	194	221	273	384	434	502	603	753	867	1055	1181	1407	1608	2010	2261
	1200	19	23	30	43	54	71	87	126	153	175	216	304	344	397	477	596	686	835	935	1114	1273	1591	1790
	1000	15.9	19	25	36	45	59	72	105	128	146	181	254	288	332	399	499	574	699	782	932	1065	1331	1498
71	1800	25	30	40	56	71	93	114	166	202	230	285	400	452	523	628	785	903	1099*	1230*	1465*	1675*	2094*	2356*
	1500	21	25	34	47	59	78	96	139	169	193	239	336	380	439	527	659	758	923	1033	1231	1407	1759	1979
	1200	16.9	20	27	38	48	63	77	112	136	155	192	270	306	353	424	530	610	743	831	990	1132	1415	1592
	1000	14.1	17	22	32	40	52	64	93	113	129	160	225	255	295	354	442	509	620	693	826	944	1181	1328
80	1800	23	27	37	52	65	85	105	152	185	211	262	368	416	481	578	722	830	1011*	1131*	1348*	1541*	1926*	2167*
	1500	18.8	22	30	42	53	70	86	125	151	173	214	301	340	393	472	590	679	826	925	1102	1259	1574	1771
	1200	15	18	24	34	42	56	68	99	121	138	171	240	271	314	376	471	541	659	738	879	1005	1256	1413
	1000	12.5	15	20	28	35	46	57	83	101	115	142	200	226	261	314	392	451	549	615	732	837	1047	1178
90	1800	20	24	32	41	56	72	91	132	161	184	228	320	362	418	502	607	722	858*	984*	1172*	1340*	1675*	1884*
	1500	16.7	20	27	34	47	60	76	111	134	153	190	267	302	349	419	507	603	716	821	979	1119	1398	1573
	1200	13.3	16	21	27	37	48	60	88	107	122	151	213	240	278	334	403	480	570	654	779	891	1114	1253
	1000	11.1	13	18	23	31	40	50	73	89	102	126	177	201	232	278	337	400	476	546	650	743	929	1046
100	1800	18		27		51		82		145		205		326		425		631		876*		1206*		1696*
	1500	15		22		42		68		121		171		271		354		526		730		1005		1413
	1200	12		18		34		55		97		136		217		283		420		584		804		1130
	1000	10		15		28		45		80		114		181		236		350		486		670		942
112	1800	16.1		25		42		72		130		183												
	1500	13.4		21		35		60		108		152												
	1200	10.7		16		28		47		86		122												
	1000	8.9		13		23		39		71		101												

卧式安装齿轮箱应采用强制润滑

* 请与我们联系

Forced lubrication required on horizontal gear units

* Gear units only on request

额定输出扭矩

Rated Output Torque

类型 WSH3.. 规格 5-26

Type WSH3.. Sizes 5-26

额定输出扭矩 T_{2N} (kNm) Nominal output torques T_{2N} (kNm)																								
i_N	齿轮箱规格 / Gear unit sizes																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	2.9		8		15.2		24.7																	
1.4	3.1		8.2		15.9		25.6																	
1.6	3.3		8.6		16.3		27.1		46		67.4													
1.8	2.7		8.8		17.4		28		47.6		70.9													
2	2.8		9.4		17.8		28.7		49.1		72.8		129											
2.24	2.8		9.6		17.8		28.7		50.6		75.2		130											
2.5	2.9		9.6		17.8		28.7		50.6		77		117											
2.8	3.1		9.6		17.1		27.2		50.6		77		120		171									
3.15	3.1		9.6		17.4		28.1		48.1		73.1		124		173									
3.55	3.2		9.5		17.8		28.6		50.2		74.4		126		173									
4	3.2		9.6		17.8		28.7		50.6		75.7		130		173		245							
4.5	2.5		7.7		15.8		24.6		46		61.6		109		146		216							
5	2.4		7.2		13.8		23.5		38.7		58.3		95		124		174							
5.6	2.3		6.9		13.1		20.1		36.5		55.4		90.4		118		150							
6.3		6.3	10.7		20.3		33.7		59.3		86		143		195		292							
7.1		6.5	11.2		20.3		33.7		59.3		86		143	160	195	230	292	335	410					
8		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458				
9		6.7	11.2	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540			
10		6.3	10.5	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620		
11.2		6.3	10.6	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	
12.5		6.7	11.2	13.5	20.2	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
14		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
16		6.7	11.2	14.4	20.3	25.5	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
18		6.3	10.5	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
20		6.6	11.2	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
22.4		6.3	10.9	13.5	19.8	24	33.1	42.2	58.3	73.8	88	107	153	160	200	230	300	335	420	458	560	620	800	880
25			11.6	14.3	21.7	24	35.7	42.2	63.5	73.8	88	107	153	173	200	240	300	345	420	470	560	640	800	900
28			11.6	13.9	21.7	25	35.7	41.6	63.5	72.5	88	109	153	173	200	240	300	345	420	470	560	640	800	900
31.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
35.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
40			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
45			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
50			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
56			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
63			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
71			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
80			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
90			11.6	15.5	20	27.2	34.5	43.8	63.5	77.2	88	109	153	173	200	240	290	345	410	470	560	640	800	900
100				14.5	21.7	27.2	35.7	43.8	61.6	77.2	90.7	109	153	173	200	226	300	335	420	465	560	640	800	900
112				15	21.7	25.2	35.7	42.8	61.6	77.2	90.7	109	153	173	200	240	300	345	420	470	560	640	800	900
125					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
160					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355					19.6	27.2	35.7	44.2	61.6	78	90.7	113	140	173	192	240	290	345	410	470	560	640	800	900
400						27.2		44.2		78		113		158		223		335		465		640		900
450						25.3		42.8		78		113												

WSH1 WSH2 WSH4

热容量
Thermal Capacity

n_1=1000 min^{-1}

类型 WSH3.. 规格 5-26

n_1=1000 min^{-1}

Type WSH3.. Sizes 5-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																					
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
22.4	P_{GA}									196		258		270		325		350		*		*	
	P_{GB}									303		432		440		*		*		*		*	
	P_{GC}									561		903		903		*		*		*		*	
	P_{GD}									650		1043		1029		*		*		*		*	
25	P_{GA}	49.9		73.5		99.3		145		191		253	265	263	276	323	333	363	343	*	*	*	*
	P_{GB}	73.4		110		152		230		294		420	443	427	451	*	*	*	*	*	*	*	*
	P_{GC}	105		169		247		419		533		850	913	851	906	*	*	*	*	*	*	*	*
	P_{GD}	125		201		293		492		617		986	1055	972	1033	*	*	*	*	*	*	*	*
28	P_{GA}	48		74.2		99		142		186	214	254	264	265	274	326	338	380	370	*	*	*	*
	P_{GB}	70.7		112		150		222		286	327	417	434	425	441	*	*	*	*	*	*	*	*
	P_{GC}	99.7		167		239		392		500	586	820	860	819	854	*	*	*	*	*	*	*	*
	P_{GD}	118		200		284		464		583	680	957	999	942	981	*	*	*	*	*	*	*	*
31.5	P_{GA}	46.7	54	71.4	79.1	96.9	100	138	164	184	211	252	265	263	276	327	341	394	389	*	*	*	*
	P_{GB}	68.5	78.6	107	118	146	151	215	255	279	319	411	432	418	440	*	*	*	*	*	*	*	*
	P_{GC}	95.6	109	158	173	230	286	374	431	480	556	783	829	785	826	*	*	*	*	*	*	*	*
	P_{GD}	114	130	190	206	273	333	443	509	560	647	917	969	906	952	*	*	*	*	*	*	*	*
35.5	P_{GA}	45.2	51.9	69.4	79.7	93.9	99.8	134	159	180	206	244	264	255	274	325	342	404	404	*	*	*	*
	P_{GB}	66.2	75.6	104	119	142	149	208	246	271	311	395	425	401	433	*	*	*	*	*	*	*	*
	P_{GC}	91.3	103	151	171	219	278	354	403	456	523	725	792	725	789	*	*	*	*	*	*	*	*
	P_{GD}	109	123	183	205	262	324	422	480	534	612	854	934	844	916	*	*	*	*	*	*	*	*
40	P_{GA}	42.7	50.4	66	76.6	88.9	96.5	129	155	174	201	237	253	247	264	317	336	401	407	*	*	*	*
	P_{GB}	62.3	73.3	98.9	113	134	145	199	238	261	302	380	406	387	412	*	*	*	*	*	*	*	*
	P_{GC}	84.8	98.8	141	161	204	265	333	384	431	499	683	734	685	730	*	*	*	*	*	*	*	*
	P_{GD}	101	117	170	194	244	310	397	457	506	586	809	867	799	853	*	*	*	*	*	*	*	*
45	P_{GA}	40.8	48.7	63.6	74.3	85.6	94	128	149	167	194	237	245	246	254	316	326	393	402	*	*	*	*
	P_{GB}	59.6	70.7	95	110	128	141	199	229	250	291	378	390	383	397	*	*	*	*	*	*	*	*
	P_{GC}	80.1	94.4	134	155	193	254	326	364	405	475	669	693	670	689	*	*	*	*	*	*	*	*
	P_{GD}	96	113	162	186	232	298	389	434	475	557	793	817	782	804	*	*	*	*	*	*	*	*
50	P_{GA}	39.6	46.1	60.1	70.9	84.2	89.4	127	145	166	190	241	249	248	259	320	332	410	410	*	*	*	*
	P_{GB}	57.5	66.7	89.6	104	126	133	195	222	245	283	378	393	381	399	*	*	*	*	*	*	*	*
	P_{GC}	77.3	87.7	126	145	189	236	319	344	394	448	662	678	655	671	*	*	*	*	*	*	*	*
	P_{GD}	92.8	105	152	174	225	277	381	411	465	529	785	805	771	793	*	*	*	*	*	*	*	*
56	P_{GA}	37.6	44.3	57.5	68.4	80.4	86.2	118	145	161	183	232	250	240	258	311	332	401	421	*	*	*	*
	P_{GB}	54.5	63.9	85.2	100	120	128	181	221	238	271	361	390	367	394	*	*	*	*	*	*	*	*
	P_{GC}	72.6	83	118	138	176	223	289	337	373	421	617	669	614	660	*	*	*	*	*	*	*	*
	P_{GD}	86.7	99.7	143	166	212	262	345	403	441	499	735	795	723	777	*	*	*	*	*	*	*	*
63	P_{GA}	35.5	42.7	53.7	64.7	76.2	84.6	113	143	154	180	222	242	230	250	295	324	393	413	*	*	*	*
	P_{GB}	51.2	61.4	79.4	95.1	112	124	171	216	226	265	343	375	349	378	*	*	*	*	*	*	*	*
	P_{GC}	67.3	80.1	109	129	163	218	268	330	347	410	570	622	567	616	*	*	*	*	*	*	*	*
	P_{GD}	80.6	96.2	130	156	197	257	321	395	411	486	681	746	672	730	*	*	*	*	*	*	*	*
71	P_{GA}	35.1	40.5	52.1	61.6	74.6	80.5	110	133	150	174	216	229	221	237	292	303	373	397	*	*	*	*
	P_{GB}	50.6	58.1	76.7	90.4	110	119	166	200	219	255	333	353	334	357	*	*	*	*	*	*	*	*
	P_{GC}	66.5	75.1	104	120	160	204	258	298	331	389	548	577	542	571	*	*	*	*	*	*	*	*
	P_{GD}	79.7	89.9	126	145	191	239	309	357	393	461	655	690	644	676	*	*	*	*	*	*	*	*
80	P_{GA}	33.3	38.2	50.9	57.6	70.6	76.1	104	125	145	165	208	222	213	228	277	299	358	377	*	*	*	*
	P_{GB}	47.9	54.5	74.9	84.1	104	111	156	188	213	241	320	342	321	343	*	*	*	*	*	*	*	*
	P_{GC}	61.8	69.7	100	111	148	189	238	277	319	361	517	555	512	546	*	*	*	*	*	*	*	*
	P_{GD}	74.2	83.6	121	134	179	222	286	332	378	429	620	663	608	648	*	*	*	*	*	*	*	*
90	P_{GA}	32.9	37.8	48.1	55.7	67.1	74.3	100	123	136	160	196	215	201	219	263	283	349	361	*	*	*	*
	P_{GB}	47.3	54.1	70.7	81.1	98.8	108	151	183	199	233	301	328	302	329	*	*	*	*	*	*	*	*
	P_{GC}	60.1	69.1	93.1	107	138	185	228	267	293	345	479	524	474	516	*	*	*	*	*	*	*	*
	P_{GD}	72.3	82.8	112	129	166	217	275	321	348	409	573	628	564	614	*	*	*	*	*	*	*	*
100	P_{GA}		35.9		54.6		70.7		116		156		203		208		272		356		*		*
	P_{GB}		51.2		79.5		103		173		227		310		310		*		*		*		*
	P_{GC}		64.2		103		172		247		332		484		478		*		*		*		*
	P_{GD}		77.2		125		202		297		394		581		569		*		*		*		*
112	P_{GA}		35.5		51.7		67.2		112		146												
	P_{GB}		50.7		75.2		98.3		168		213												
	P_{GC}		62.5		95.8		159		237		306												
	P_{GD}		75.2		116		188		286		364												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20°C 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

热容量
Thermal Capacity

n_1=1200 min^{-1}

类型 WSH3.. 规格 5-26

n_1=1200 min^{-1}

Type WSH3.. Sizes 5-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																					
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
22.4	P_{GA}									173		209		206		232		*		*		*	
	P_{GB}									295		393		382		*		*		*		*	
	P_{GC}									580		913		901		*		*		*		*	
	P_{GD}									681		1059		1023		*		*		*		*	
25	P_{GA}	49.8		72.6		96.6		136		170		207	212	203	207	234	235	*	*	*	*	*	*
	P_{GB}	79.1		118		160		235		288		385	399	375	386	*	*	*	*	*	*	*	*
	P_{GC}	113		180		262		439		552		862	921	852	900	*	*	*	*	*	*	*	*
	P_{GD}	138		221		319		527		647		1004	1066	970	1021	*	*	*	*	*	*	*	*
28	P_{GA}	48.1		73.7		97.1		134		170	193	216	221	215	217	252	255	*	*	*	*	*	*
	P_{GB}	76.5		120		159		229		285	324	394	404	387	394	*	*	*	*	*	*	*	*
	P_{GC}	106		179		255		413		521	609	839	875	828	859	*	*	*	*	*	*	*	*
	P_{GD}	131		221		311		500		617	718	987	1024	956	987	*	*	*	*	*	*	*	*
31.5	P_{GA}	47.1	54.2	71.3	78.6	95.8	98.4	132	156	171	194	222	230	223	230	267	274	276	*	*	*	*	*
	P_{GB}	74.4	85.3	115	127	157	161	225	263	283	322	399	415	394	408	*	*	*	*	*	*	*	*
	P_{GC}	102	117	169	185	245	305	396	454	503	581	808	852	802	840	*	*	*	*	*	*	*	*
	P_{GD}	126	144	210	227	300	365	481	549	598	690	959	1008	935	975	*	*	*	*	*	*	*	*
35.5	P_{GA}	45.7	52.5	69.7	79.8	93.6	99	130	153	171	194	222	237	226	239	279	290	311	292	*	*	*	*
	P_{GB}	72.2	82.4	113	128	153	160	220	257	280	320	393	420	391	417	*	*	*	*	*	*	*	*
	P_{GC}	98.3	110	163	183	234	297	376	427	481	550	755	822	749	812	*	*	*	*	*	*	*	*
	P_{GD}	121	137	202	227	289	356	460	521	576	658	905	984	884	954	*	*	*	*	*	*	*	*
40	P_{GA}	43.3	51.1	66.5	76.9	88.9	96.2	126	150	167	192	219	231	223	235	279	293	322	310	*	*	*	*
	P_{GB}	68.1	80	107	123	145	156	212	251	272	313	383	406	383	404	*	*	*	*	*	*	*	*
	P_{GC}	91.3	106	151	173	219	284	355	407	455	527	714	765	712	756	*	*	*	*	*	*	*	*
	P_{GD}	112	131	189	215	270	342	434	497	547	633	862	921	843	895	*	*	*	*	*	*	*	*
45	P_{GA}	41.5	49.4	64.2	74.7	85.9	93.9	126	145	161	186	220	226	224	229	281	287	321	313	*	*	*	*
	P_{GB}	65.2	77.3	103	120	139	152	212	242	261	303	384	393	382	392	*	*	*	*	*	*	*	*
	P_{GC}	86.3	101	144	166	207	272	347	387	429	502	701	724	698	715	*	*	*	*	*	*	*	*
	P_{GD}	106	125	180	206	256	329	427	474	516	603	847	871	828	848	*	*	*	*	*	*	*	*
50	P_{GA}	40.4	47	61.2	71.9	85.2	90.3	127	144	164	187	232	239	236	245	300	309	365	356	*	*	*	*
	P_{GB}	63.2	73.2	98.2	114	137	145	210	238	262	301	395	410	394	410	*	*	*	*	*	*	*	*
	P_{GC}	83.5	94.6	136	156	203	254	342	368	421	477	701	717	691	707	*	*	*	*	*	*	*	*
	P_{GD}	103	117	169	193	250	307	421	452	510	580	852	872	832	853	*	*	*	*	*	*	*	*
56	P_{GA}	38.5	45.3	58.7	69.7	81.8	87.7	119	146	161	183	228	245	234	250	300	319	374	386	*	*	*	*
	P_{GB}	60.1	70.4	93.7	110	131	140	197	240	257	292	384	414	387	414	*	*	*	*	*	*	*	*
	P_{GC}	78.5	89.7	128	148	190	241	311	361	400	451	658	713	652	700	*	*	*	*	*	*	*	*
	P_{GD}	96.9	111	160	185	236	292	383	446	486	550	805	869	789	846	*	*	*	*	*	*	*	*
63	P_{GA}	36.4	43.9	55.1	66.4	78	86.5	115	145	156	182	222	242	229	249	293	320	382	398	*	*	*	*
	P_{GB}	56.6	67.9	87.6	105	124	137	188	236	247	289	371	405	375	406	*	*	*	*	*	*	*	*
	P_{GC}	72.8	86.6	118	139	176	235	289	356	374	441	611	667	607	659	*	*	*	*	*	*	*	*
	P_{GD}	90.2	107	146	174	220	286	357	439	456	540	753	824	741	804	*	*	*	*	*	*	*	*
71	P_{GA}	36.1	41.6	53.5	63.2	76.4	82.4	112	135	152	177	217	230	222	236	290	301	365	385	*	*	*	*
	P_{GB}	56	64.3	84.8	99.8	122	131	182	219	239	279	361	382	361	385	*	*	*	*	*	*	*	*
	P_{GC}	72	81.2	113	130	173	220	279	321	357	419	589	620	581	611	*	*	*	*	*	*	*	*
	P_{GD}	89.2	100	141	163	214	267	345	398	436	512	725	764	712	746	*	*	*	*	*	*	*	*
80	P_{GA}	34.3	39.2	52.3	59.1	72.4	78	106	128	148	167	210	224	214	228	277	299	352	368	*	*	*	*
	P_{GB}	53	60.3	82.8	92.9	114	123	172	207	233	264	348	371	348	371	*	*	*	*	*	*	*	*
	P_{GC}	66.9	75.5	109	120	160	204	257	298	344	389	556	596	550	586	*	*	*	*	*	*	*	*
	P_{GD}	83	93.6	136	150	200	248	319	370	420	478	688	735	673	716	*	*	*	*	*	*	*	*
90	P_{GA}	33.9	38.9	49.5	57.2	68.8	76.2	103	125	138	163	199	217	203	220	264	284	345	355	*	*	*	*
	P_{GB}	52.4	59.8	78.3	89.7	109	119	166	201	218	256	328	358	329	357	*	*	*	*	*	*	*	*
	P_{GC}	65.1	74.8	100	115	149	200	247	288	316	372	515	563	509	555	*	*	*	*	*	*	*	*
	P_{GD}	81	92.7	126	145	186	242	307	358	388	455	637	697	625	680	*	*	*	*	*	*	*	*
100	P_{GA}		37		56.3		72.7		119		160		207		212		276		358		*		*
	P_{GB}		56.8		88.1		114		191		251		340		340		*		*		*		*
	P_{GC}		69.5		112		186		267		359		523		515		*		*		*		*
	P_{GD}		86.5		140		226		332		441		648		634		*		*		*		*
112	P_{GA}		36.6		53.3		69.2		116		150												
	P_{GB}		56.2		83.4		108		185		235												
	P_{GC}		67.8		103		172		257		330												
	P_{GD}		84.3		130		211		320		407												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20°C 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

热容量
Thermal Capacity

n_1=1500 min^{-1}
类型 WSH3.. 规格 5-26

n_1=1500 min^{-1}
Type WSH3.. Sizes 5-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																					
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
22.4	P_{GA}									169		193		180		*		*		*		*	
	P_{GB}									346		463		450		*		*		*		*	
	P_{GC}									668		1050		1035		*		*		*		*	
	P_{GD}									811		1267		1228		*		*		*		*	
25	P_{GA}	52.5		76.1		100		138		167		192	193	180	*	*	*	*	*	*	*	*	*
	P_{GB}	92.4		138		187		275		338		453	470	442	455	*	*	*	*	*	*	*	*
	P_{GC}	130		208		302		507		636		992	1059	979	1035	*	*	*	*	*	*	*	*
	P_{GD}	163		261		378		626		771		1201	1277	1164	1227	*	*	*	*	*	*	*	*
28	P_{GA}	50.9		77.5		101		137		169	191	206	207	198	196	222	*	*	*	*	*	*	*
	P_{GB}	89.4		140		186		268		334	380	463	475	455	464	*	*	*	*	*	*	*	*
	P_{GC}	123		207		294		477		600	701	966	1008	953	988	*	*	*	*	*	*	*	*
	P_{GD}	155		261		368		593		734	854	1179	1224	1145	1182	*	*	*	*	*	*	*	*
31.5	P_{GA}	49.9	57.4	75.3	82.8	100	102	137	159	173	196	217	222	212	216	246	249	*	*	*	*	*	*
	P_{GB}	86.9	99.6	135	148	183	188	263	308	332	377	468	487	463	480	*	*	*	*	*	*	*	*
	P_{GC}	118	135	195	214	283	352	457	523	580	670	930	981	924	967	*	*	*	*	*	*	*	*
	P_{GD}	149	170	248	268	355	432	570	650	710	819	1143	1202	1116	1165	*	*	*	*	*	*	*	*
35.5	P_{GA}	48.6	55.7	73.9	84.4	98.7	104	135	158	175	198	222	235	221	232	268	276	273	*	*	*	*	*
	P_{GB}	84.3	96.2	132	150	178	186	257	300	328	374	461	493	459	489	*	*	*	*	*	*	*	*
	P_{GC}	113	127	188	211	271	343	434	492	555	634	870	948	863	935	*	*	*	*	*	*	*	*
	P_{GD}	143	161	239	268	342	421	544	617	683	781	1075	1171	1052	1137	*	*	*	*	*	*	*	*
40	P_{GA}	46.1	54.3	70.6	81.4	93.9	101	132	156	172	197	221	232	221	231	272	283	293	269	*	*	*	*
	P_{GB}	79.5	93.4	125	144	170	182	248	293	318	366	449	476	449	474	*	*	*	*	*	*	*	*
	P_{GC}	105	122	175	200	252	327	410	470	525	608	823	882	820	871	*	*	*	*	*	*	*	*
	P_{GD}	133	154	223	254	319	404	514	589	649	750	1024	1094	1003	1066	*	*	*	*	*	*	*	*
45	P_{GA}	44.2	52.5	68.2	79.2	90.8	99.1	132	151	166	192	223	227	224	227	276	280	297	278	*	*	*	*
	P_{GB}	76.1	90.2	120	140	162	177	247	283	306	355	450	460	448	460	*	*	*	*	*	*	*	*
	P_{GC}	99.7	117	167	192	239	314	401	447	495	579	809	835	804	823	*	*	*	*	*	*	*	*
	P_{GD}	126	148	212	243	303	388	505	561	611	714	1006	1034	985	1009	*	*	*	*	*	*	*	*
50	P_{GA}	43.2	50.1	65.2	76.6	90.6	95.9	134	151	171	195	240	246	242	250	304	313	360	344	*	*	*	*
	P_{GB}	73.8	85.5	114	133	160	169	246	278	306	352	462	479	462	480	*	*	*	*	*	*	*	*
	P_{GC}	96.4	109	157	181	235	293	395	425	485	551	809	827	797	815	*	*	*	*	*	*	*	*
	P_{GD}	122	138	200	228	295	362	497	534	603	686	1009	1033	987	1012	*	*	*	*	*	*	*	*
56	P_{GA}	41.2	48.5	62.7	74.4	87.3	93.4	127	154	170	192	239	256	243	260	310	329	379	387	*	*	*	*
	P_{GB}	70.1	82.2	109	129	153	164	230	280	300	341	449	484	453	485	*	*	*	*	*	*	*	*
	P_{GC}	90.6	103	148	172	219	278	359	417	461	521	759	822	752	808	*	*	*	*	*	*	*	*
	P_{GD}	114	131	188	218	278	344	452	527	574	650	952	1028	934	1001	*	*	*	*	*	*	*	*
63	P_{GA}	39.1	47	59	71	83.5	92.5	122	154	166	194	235	255	241	262	307	336	397	411	*	*	*	*
	P_{GB}	66.1	79.2	102	122	145	160	219	276	288	338	434	473	439	474	*	*	*	*	*	*	*	*
	P_{GC}	84.1	100	136	161	204	272	334	411	432	510	706	770	700	760	*	*	*	*	*	*	*	*
	P_{GD}	106	126	172	205	259	338	421	518	538	637	889	973	876	950	*	*	*	*	*	*	*	*
71	P_{GA}	38.7	44.6	57.3	67.7	81.8	88.2	120	144	162	188	230	243	234	249	306	316	381	400	*	*	*	*
	P_{GB}	65.3	75	98.9	116	142	153	213	256	279	325	422	447	422	450	*	*	*	*	*	*	*	*
	P_{GC}	83.1	93.8	130	151	200	255	322	371	412	484	680	715	671	706	*	*	*	*	*	*	*	*
	P_{GD}	105	118	166	192	252	315	407	469	515	605	857	902	841	881	*	*	*	*	*	*	*	*
80	P_{GA}	36.8	42.1	56	63.3	77.6	83.5	113	136	158	178	223	237	227	241	292	315	369	384	*	*	*	*
	P_{GB}	61.9	70.3	96.6	108	134	143	201	241	272	308	406	434	406	433	*	*	*	*	*	*	*	*
	P_{GC}	77.3	87.2	125	139	185	236	297	345	398	449	642	688	635	676	*	*	*	*	*	*	*	*
	P_{GD}	97.9	110	160	177	236	293	377	437	496	564	812	868	795	846	*	*	*	*	*	*	*	*
90	P_{GA}	36.3	41.8	53.1	61.4	73.8	81.6	110	134	148	173	211	231	215	233	280	300	363	372	*	*	*	*
	P_{GB}	61.1	69.8	91.3	104	127	140	194	235	255	298	383	418	384	417	*	*	*	*	*	*	*	*
	P_{GC}	75.1	86.4	116	133	172	231	285	333	365	430	595	651	588	640	*	*	*	*	*	*	*	*
	P_{GD}	95.5	109	148	171	219	286	362	422	458	537	752	823	738	803	*	*	*	*	*	*	*	*
100	P_{GA}		39.7		60.4		78		128		171		221		226		294		379		*		*
	P_{GB}		66.2		102		133		223		293		397		397		*		*		*		*
	P_{GC}		80.3		129		215		308		415		604		595		*		*		*		*
	P_{GD}		101		165		266		392		520		764		748		*		*		*		*
112	P_{GA}		39.3		57.2		74.3		124		161												
	P_{GB}		65.6		97.3		127		216		274												
	P_{GC}		78.3		119		199		296		382												
	P_{GD}		99.4		153		248		377		479												

★ 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)
P_{GB} (kW) 齿轮箱带冷却风扇 **)
P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)
P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20℃ 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

★ On request

P_{GA} (kW) Gear units without auxiliary cooling **)
P_{GB} (kW) Gear units with fan **)
P_{GC} (kW) Gear units with built-in cooling coil **) ***)
P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20℃ with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

热容量
Thermal Capacity

n_1=1800 min^{-1}
类型 WSH3.. 规格 5-26

n_1=1800 min^{-1}
Type WSH3.. Sizes 5-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																					
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
22.4	P_{GA}									141		*		*		*		*		*		*	
	P_{GB}									352		446		416		*		*		*		*	
	P_{GC}									713		1103		1076		*		*		*		*	
	P_{GD}									881		1350		1290		*		*		*		*	
25	P_{GA}	52.9		75.6		97.7		126		140		*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	101		150		201		289		345		439	448	411	414	*	*	*	*	*	*	*	*
	P_{GC}	143		227		329		547		679		1043	1110	1020	1072	*	*	*	*	*	*	*	*
	P_{GD}	183		292		421		689		839		1282	1356	1226	1285	*	*	*	*	*	*	*	*
28	P_{GA}	51.6		77.6		99.8		129		148	165	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	97.9		153		202		285		346	392	460	466	439	439	*	*	*	*	*	*	*	*
	P_{GC}	135		226		321		516		644	751	1023	1064	1001	1033	*	*	*	*	*	*	*	*
	P_{GD}	174		292		411		655		803	932	1269	1312	1219	1252	*	*	*	*	*	*	*	*
31.5	P_{GA}	50.9	58.3	76	82.9	100	101	131	149	157	176	179	178	*	*	*	*	*	*	*	*	*	*
	P_{GB}	95.5	109	147	162	199	204	281	327	348	394	475	490	459	470	*	*	*	*	*	*	*	*
	P_{GC}	130	148	214	234	309	384	496	566	625	721	992	1043	978	1020	*	*	*	*	*	*	*	*
	P_{GD}	168	191	279	301	397	482	632	719	781	900	1240	1300	1200	1248	*	*	*	*	*	*	*	*
35.5	P_{GA}	49.8	56.9	75.1	85.3	99.2	104	132	152	164	184	194	201	184	187	208	*	*	*	*	*	*	*
	P_{GB}	92.9	105	145	164	195	203	277	322	348	396	477	507	467	493	*	*	*	*	*	*	*	*
	P_{GC}	124	140	206	232	296	375	472	535	601	686	933	1015	920	995	*	*	*	*	*	*	*	*
	P_{GD}	161	182	268	301	383	471	606	685	755	862	1176	1278	1144	1231	*	*	*	*	*	*	*	*
40	P_{GA}	47.3	55.7	72	82.7	94.9	101	130	151	164	186	199	205	190	194	223	227	*	*	*	*	*	*
	P_{GB}	87.7	102	138	158	186	199	268	315	339	390	469	495	462	484	*	*	*	*	*	*	*	*
	P_{GC}	116	135	192	219	277	359	447	511	570	659	887	947	878	930	*	*	*	*	*	*	*	*
	P_{GD}	149	173	250	285	357	453	573	655	719	831	1124	1199	1095	1160	*	*	*	*	*	*	*	*
45	P_{GA}	45.5	53.9	69.7	80.6	92	99.9	131	147	159	183	203	204	196	194	231	230	*	*	*	*	*	*
	P_{GB}	84	99.5	132	154	178	194	268	305	327	379	472	481	464	473	*	*	*	*	*	*	*	*
	P_{GC}	109	129	183	211	262	345	438	487	537	628	872	898	863	882	*	*	*	*	*	*	*	*
	P_{GD}	141	166	239	273	340	435	563	624	678	792	1107	1135	1077	1101	*	*	*	*	*	*	*	*
50	P_{GA}	44.7	51.9	67.3	78.7	92.9	98	135	152	170	193	231	234	228	233	280	285	303	274	*	*	*	*
	P_{GB}	81.7	94.6	126	147	177	186	269	303	332	381	495	512	491	508	*	*	*	*	*	*	*	*
	P_{GC}	106	120	172	199	258	322	433	465	530	601	879	897	864	881	*	*	*	*	*	*	*	*
	P_{GD}	137	155	225	257	332	407	558	598	673	766	1120	1146	1092	1117	*	*	*	*	*	*	*	*
56	P_{GA}	42.9	50.4	65	77	90.1	96.2	129	157	171	194	236	252	237	252	298	315	347	343	*	*	*	*
	P_{GB}	77.7	91.1	121	143	169	181	253	307	329	373	487	523	488	521	*	*	*	*	*	*	*	*
	P_{GC}	99.9	114	163	189	241	306	395	458	505	570	829	897	820	879	*	*	*	*	*	*	*	*
	P_{GD}	129	148	212	246	314	388	508	592	644	728	1063	1147	1040	1114	*	*	*	*	*	*	*	*
63	P_{GA}	40.8	49	61.5	73.9	86.8	96	126	159	170	198	238	258	243	262	307	334	386	394	*	*	*	*
	P_{GB}	73.4	88	113	135	160	177	242	304	317	372	475	517	479	517	*	*	*	*	*	*	*	*
	P_{GC}	92.7	110	150	178	225	299	368	452	474	560	774	844	767	832	*	*	*	*	*	*	*	*
	P_{GD}	120	143	194	232	293	381	475	584	606	716	998	1091	981	1064	*	*	*	*	*	*	*	*
71	P_{GA}	40.4	46.6	59.8	70.5	85.1	91.6	124	149	166	193	234	247	237	251	307	317	374	387	*	*	*	*
	P_{GB}	72.6	83.3	109	129	158	170	235	283	308	359	463	490	462	492	*	*	*	*	*	*	*	*
	P_{GC}	91.7	103	144	166	220	281	355	408	453	532	746	785	735	773	*	*	*	*	*	*	*	*
	P_{GD}	118	134	188	217	285	356	458	529	580	681	962	1012	943	987	*	*	*	*	*	*	*	*
80	P_{GA}	38.4	44	58.5	66	80.8	86.8	118	141	162	183	228	242	230	244	295	317	365	376	*	*	*	*
	P_{GB}	68.8	78.2	107	120	148	159	222	267	300	340	447	476	446	475	*	*	*	*	*	*	*	*
	P_{GC}	85.3	96.2	138	153	204	260	327	380	437	494	705	756	696	742	*	*	*	*	*	*	*	*
	P_{GD}	110	124	181	200	266	331	425	492	559	635	912	975	892	949	*	*	*	*	*	*	*	*
90	P_{GA}	38	43.6	55.4	64	76.9	85	114	139	152	179	217	236	219	237	284	304	362	368	*	*	*	*
	P_{GB}	67.9	77.6	101	116	141	155	215	260	282	330	422	460	422	458	*	*	*	*	*	*	*	*
	P_{GC}	82.9	95.3	128	147	190	254	314	367	401	473	654	715	645	703	*	*	*	*	*	*	*	*
	P_{GD}	107	123	168	193	247	323	409	476	516	605	846	925	829	902	*	*	*	*	*	*	*	*
100	P_{GA}		41.6		63.2		81.6		133		178		229		233		303		385		*		*
	P_{GB}		73.7		114		148		247		325		440		439		*		*		*		*
	P_{GC}		88.6		142		237		340		457		665		655		*		*		*		*
	P_{GD}		115		186		301		442		587		862		843		*		*		*		*
112	P_{GA}		41.2		59.9		77.8		130		168												
	P_{GB}		73		108		141		240		305												
	P_{GC}		86.4		132		220		327		421												
	P_{GD}		112		173		281		426		542												

★ 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)
P_{GB} (kW) 齿轮箱带冷却风扇 **)
P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)
P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20℃ 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

★ On request

P_{GA} (kW) Gear units without auxiliary cooling **)
P_{GB} (kW) Gear units with fan **)
P_{GC} (kW) Gear units with built-in cooling coil **) ***)
P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20℃ with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

额定功率

Power Rating

类型 WSH4.. 规格 7-26　　Type WSH4.. Sizes 7-26

额定功率 P_{2N} (kW) / Nominal power ratings P_{2N} (kW)																							
i_N	n_1	n_2	齿轮箱规格 / Gear unit sizes																				
			7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	1800	18	40		67		116		170		288		376		565		791		1055 *		1507 *	
	1500	15	34		56		96		142		240		314		471		659		879		1256	
	1200	12	27		44		77		113		192		251		376		527		703		1005	
	1000	10	22		37		64		94		160		209		314		439		586		837	
112	1800	16.1	36		60		103		152		257	291	337	404	505	581	708	792	944 *	1078 *	1348 *	1517 *
	1500	13.4	30		50		86		127		214	242	280	336	420	484	589	659	785	898	1122	1262
	1200	10.7	24		39		69		101		171	193	224	268	336	386	470	526	627	717	896	1008
	1000	8.9	20		33		57		84		142	161	186	223	279	321	391	438	521	596	745	838
125	1800	14.4	32	41	53	66	92	117	136	170	230	260	301	361	452	520	633	708	844 *	965 *	1206 *	1357 *
	1500	12	27	34	44	55	77	98	113	141	192	217	251	301	376	433	527	590	703	804	1005	1130
	1200	9.6	21	27	35	44	61	78	91	113	153	173	201	241	301	346	422	472	562	643	804	904
	1000	8	18	22	29	37	51	65	75	94	128	144	167	201	251	289	351	393	469	536	670	753
140	1800	12.9	29	36	48	59	83	105	122	152	206	233	270	324	405	466	567	634	756 *	864 *	1080 *	1215 *
	1500	10.7	24	30	39	49	69	87	101	126	171	193	224	268	336	386	470	526	627	717	896	1008
	1200	8.6	19	24	32	39	55	70	81	101	137	155	180	216	270	310	378	423	504	576	720	810
	1000	7.1	16	20	26	32	45	57	67	84	113	128	148	178	223	256	312	349	416	475	594	669
160	1800	11.3	25	32	42	52	72	92	107	133	181	204	236	283	354	408	496	556	662 *	757 *	946 *	1064 *
	1500	9.4	21	26	35	43	60	76	89	111	150	170	196	236	295	339	413	462	551	629	787	885
	1200	7.5	17	21	28	34	48	61	71	88	120	135	157	188	235	270	329	369	439	502	628	706
	1000	6.3	14	17	23	29	40	51	59	74	100	114	131	158	197	227	277	310	369	422	527	593
180	1800	10	22	28	37	46	64	81	94	118	160	181	209	251	314	361	439	492	586 *	670 *	837 *	942 *
	1500	8.3	18	23	31	38	53	67	78	98	132	150	173	208	260	299	365	408	486	556	695	782
	1200	6.7	15	19	25	31	43	54	63	79	107	121	140	168	210	242	294	329	392	449	561	631
	1000	5.6	12	15	20	25	36	45	53	66	89	101	117	140	175	202	246	275	328	375	469	527
200	1800	9	20	25	33	41	58	73	85	106	144	163	188	226	282	325	395	442	527 *	603 *	753 *	848 *
	1500	7.5	17	21	28	34	48	61	71	88	120	135	157	188	235	270	329	369	439	502	628	706
	1200	6	13	17	22	27	38	49	56	70	96	108	125	150	188	216	263	295	351	402	502	565
	1000	5	11	14	18	23	32	40	47	59	80	90	104	125	157	180	219	246	293	335	418	471
224	1800	8	18	22	29	37	51	65	75	94	128	144	167	201	251	289	351	393	469 *	536 *	670 *	753 *
	1500	6.7	15	19	25	31	43	54	63	79	107	121	140	168	210	242	294	329	392	449	561	631
	1200	5.4	12	15	20	24	34	44	51	63	86	97	113	135	169	195	237	265	316	361	452	508
	1000	4.5	10	12	16	20	29	36	42	53	72	81	94	113	141	162	197	221	263	301	376	424
250	1800	7.2	16	20	26	33	46	58	68	85	115	130	150	180	226	260	316	354	422 *	482 *	603 *	678 *
	1500	6	13	17	22	27	38	49	56	70	96	108	125	150	188	216	263	295	351	402	502	565
	1200	4.8	10	13	17	22	30	39	45	56	76	86	100	120	150	173	211	236	281	321	402	452
	1000	4	9	11	14	18	25	32	37	47	64	72	83	100	125	144	175	196	234	268	335	376
280	1800	6.4	14	18	23	29	41	52	60	75	102	115	134	160	201	231	281	314	375 *	428 *	536 *	603 *
	1500	5.4	12	15	20	24	34	44	51	63	86	97	113	135	169	195	237	265	316	361	452	508
	1200	4.3	9.7	12	16	19	27	35	40	50	68	77	90	108	135	155	189	211	252	288	360	405
	1000	3.6	8.1	10	13	16	23	29	34	42	57	65	75	90	113	130	158	177	211	241	301	339
315	1800	5.7	12	16	21	26	36	46	54	67	91	103	119	143	179	205	250	280	334 *	381 *	477 *	537 *
	1500	4.8	10	13	17	22	30	39	45	56	76	86	100	120	150	173	211	236	281	321	402	452
	1200	3.8	8.6	10	14	17	24	31	36	44	60	68	79	95	119	137	167	187	222	254	318	358
	1000	3.2	7.2	9.1	11	14	20	26	30	37	51	57	67	80	100	115	140	157	187	214	268	301
355	1800	5.1	10	14	19	23	32	41	48	60	74	92	102	128	154	184	218	250	299 *	341 *	427 *	480 *
	1500	4.2	8.6	11	15	19	27	34	39	49	61	76	84	105	127	151	180	206	246	281	351	395
	1200	3.4	6.9	9.6	12	15	21	27	32	40	49	61	68	85	103	122	145	167	199	227	284	320
	1000	2.8	5.7	7.9	10	12	18	22	26	33	41	50	56	70	85	101	120	137	164	187	234	263
400	1800	4.5		12		20		36		53		74		105		157		219		301 *		424 *
	1500	3.8		10		17		31		44		62		88		133		185		254		358
	1200	3		8.5		13		24		35		49		70		105		146		201		282
	1000	2.5		7.1		11		20		29		41		58		87		121		167		235
450	1800	4		10		17		32		47												
	1500	3.3		8.7		14		26		39												
	1200	2.7		7.1		12		22		31												
	1000	2.2		5.8		9.8		17		26												

* 敬请垂询　　* Gear units only on request

额定输出扭矩

Rated Output Torque

类型 WSH4.. 规格 7-26　　Type WSH4.. Sizes 7-26

额定输出扭矩 T_{2N} (kNm) Nominal output torques T_{2N} (kNm)																								
i_N	齿轮箱规格 / Gear unit sizes																							
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.25	2.9		8		15.2		24.7																	
1.4	3.1		8.2		15.9		25.6																	
1.6	3.3		8.6		16.3		27.1		46		67.4													
1.8	2.7		8.8		17.4		28		47.6		70.9													
2	2.8		9.4		17.8		28.7		49.1		72.9		129											
2.24	2.8		9.6		17.8		28.7		50.6		75.2		130											
2.5	2.9		9.6		17.8		28.7		50.6		77		117											
2.8	3.1		9.6		17.1		27.2		50.6		77		120		171									
3.15	3.1		9.6		17.4		28.1		48.1		73.1		124		173									
3.55	3.2		9.5		17.8		28.6		50.2		74.4		126		173									
4	3.2		9.6		17.8		28.7		50.6		75.7		130		173		245							
4.5	2.5		7.7		15.8		24.6		46		61.6		109		146		216							
5	2.4		7.2		13.8		23.5		38.7		58.3		95		124		174							
5.6	2.3		6.9		13.1		20.1		36.5		55.4		90.4		118		150							
6.3		6.3	10.7		20.3		33.7		59.3		86		143		195		292							
7.1		6.5	11.2		20.3		33.7		59.3		86		143	160	195	230	292	335	410					
8		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458				
9		6.7	11.2	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540			
10		6.3	10.5	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620		
11.2		6.3	10.6	14.4	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	
12.5		6.7	11.2	13.5	20.2	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
14		6.7	11.2	13.5	20.3	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
16		6.7	11.2	14.4	20.3	25.5	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
18		6.3	10.5	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
20		6.6	11.2	14.4	19	25.6	33.7	42.2	59.3	73.8	86	107	143	160	195	230	292	335	410	458	540	620	780	880
22.4		6.3	10.9	13.5	19.8	24	33.1	42.2	58.3	73.8	88	107	153	160	200	230	300	335	420	458	560	620	800	880
25			11.6	14.3	21.7	24	35.7	42.2	63.5	73.8	88	107	153	173	200	240	300	345	420	470	560	640	800	900
28			11.6	13.9	21.7	25	35.7	41.6	63.5	72.5	88	109	153	173	200	240	300	345	420	470	560	640	800	900
31.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
35.5			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
40			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
45			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
50			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
56			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
63			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
71			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
80			11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	88	109	153	173	200	240	300	345	420	470	560	640	800	900
90			11.6	15.5	20	27.2	34.5	43.8	63.5	77.2	88	109	153	173	200	240	290	345	410	470	560	640	800	900
100				14.5	21.7	27.2	35.7	43.8	61.6	77.2	90.7	109	153	173	200	226	300	335	420	465	560	640	800	900
112				15	21.7	25.2	35.7	42.8	61.6	77.2	90.7	109	153	173	200	240	300	345	420	470	560	640	800	900
125					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
160					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315					21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355					19.6	27.2	35.7	44.2	61.6	78	90.7	113	140	173	192	240	290	345	410	470	560	640	800	900
400						27.2		44.2		78		113		158		223		335		465		640		900
450						25.3		42.8		78		113												

WSH1
WSH2
WSH3

热容量
Thermal Capacity

n_1=1000 min^{-1}
类型 WSH4.. 规格 7-26

n_1=1000 min^{-1}
Type WSH4.. Sizes 7-26

热容量 P_G (kW) / Thermal capacities P_G (kW)																					
i_N		齿轮箱规格 / Gear unit sizes																			
		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	P_{GA}	43.6		60.8		90.1		120		161		180		253		346		*		*	
112	P_{GA}	42		58.2		89.4		117		154	166	173	185	243	260	340	350	*	*	*	*
125	P_{GA}	40.8	46.8	56.4	61.1	85.8	99.7	114	128	149	160	167	177	235	249	330	344	*	*	*	*
140	P_{GA}	38.7	44.9	54.6	58.5	83	98.9	110	125	144	153	161	171	227	241	313	334	*	*	*	*
160	P_{GA}	37.2	43.6	51.6	56.7	79	95.3	104	121	138	148	154	165	218	232	301	317	*	*	*	*
180	P_{GA}	35.8	41.4	49.4	54.9	76.2	91.8	100	118	136	142	151	158	208	224	297	304	*	*	*	*
200	P_{GA}	34.4	39.9	47.8	51.8	72	87.6	98.2	111	132	139	146	156	201	214	280	300	*	*	*	*
224	P_{GA}	32.4	38.2	45.9	49.6	69	84.4	93.7	107	123	136	136	151	193	206	268	283	*	*	*	*
250	P_{GA}	31	37	43.8	48.2	65.6	79.7	89.1	104	117	126	130	141	183	198	253	270	*	*	*	*
280	P_{GA}	30.1	34.7	42.5	46.2	63.1	76.7	86.3	99.1	113	120	126	133	176	188	243	255	*	*	*	*
315	P_{GA}	29.4	33.3	40.5	44.1	61.6	72.7	82.8	95.5	108	116	121	130	172	181	233	245	*	*	*	*
355	P_{GA}	28.1	32.3	39.8	42.8	58.6	69.9	78.9	91.9	106	111	118	124	164	177	222	236	*	*	*	*
400	P_{GA}		31.6		40.8		68.3		88.3		109		121		168		225		*		*
450	P_{GA}		30.1		40.1		64.9		84.2												

n_1=1200 min^{-1}
类型 WSH4.. 规格 7-26

n_1=1200 min^{-1}
Type WSH4.. Sizes 7-26

热容量 P_G (kW) / Thermal capacities P_G (kW)																					
i_N		齿轮箱规格 / Gear unit sizes																			
		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	P_{GA}	45.4		63.1		92.4		121		160		178		246		325		*		*	
112	P_{GA}	43.9		60.6		92.4		120		156	167	173	185	241	257	329	335	*	*	*	*
125	P_{GA}	42.7	49	58.8	63.7	89	103	117	132	152	162	169	179	237	250	325	335	*	*	*	*
140	P_{GA}	40.6	47.1	57.1	61.1	86.5	102	114	129	148	158	164	175	231	245	314	332	*	*	*	*
160	P_{GA}	39.1	45.7	54.1	59.4	82.5	99.4	108	126	143	153	159	170	224	238	305	319	*	*	*	*
180	P_{GA}	37.7	43.6	52	57.7	80	96.2	105	123	142	148	157	165	216	232	306	313	*	*	*	*
200	P_{GA}	36.3	42	50.3	54.5	75.7	92.1	103	117	139	146	153	163	211	224	292	313	*	*	*	*
224	P_{GA}	34.2	40.3	48.4	52.4	72.8	89	98.8	113	130	144	144	159	204	217	283	299	*	*	*	*
250	P_{GA}	32.7	39	46.2	50.8	69.2	84	94	110	123	133	137	148	193	209	267	285	*	*	*	*
280	P_{GA}	31.7	36.6	44.9	48.7	66.6	80.9	91.1	104	120	126	133	141	186	198	257	269	*	*	*	*
315	P_{GA}	31.1	35.1	42.8	46.5	64.9	76.7	87.3	100	114	122	127	137	182	191	246	259	*	*	*	*
355	P_{GA}	29.6	34	42	45.2	61.8	73.8	83.3	96.9	112	118	124	131	173	187	235	249	*	*	*	*
400	P_{GA}		33.4		43.1		72		93.2		115		128		177		238		*		*
450	P_{GA}		31.7		42.3		68.5		88.8												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

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

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

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

热容量
Thermal Capacity

n_1=1500 min^{-1}
类型 WSH4.. 规格 7-26

n_1=1500 min^{-1}
Type WSH4.. Sizes 7-26

热容量 P_G (kW) / Thermal capacities P_G (kW)																					
i_N		齿轮箱规格 / Gear unit sizes																			
		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	P_{GA}	48.7		67.6		99.1		130		172		190		264		348		*		*	
112	P_{GA}	47.1		65.1		99.1		129		167	179	186	198	259	276	352	358	*	*	*	*
125	P_{GA}	45.8	52.5	63.1	68.3	95.5	110	126	142	163	174	181	192	254	268	348	359	*	*	*	*
140	P_{GA}	43.5	50.5	61.3	65.6	92.8	110	123	139	158	169	176	188	248	263	336	356	*	*	*	*
160	P_{GA}	41.9	49.1	58	63.7	88.5	106	116	135	153	164	171	182	240	255	327	342	*	*	*	*
180	P_{GA}	40.4	46.7	55.8	61.9	85.8	103	113	132	152	159	169	177	232	249	329	335	*	*	*	*
200	P_{GA}	38.9	45.1	54	58.5	81.3	98.9	110	126	149	157	164	175	226	240	314	335	*	*	*	*
224	P_{GA}	36.7	43.2	52	56.2	78.1	95.5	106	121	140	154	154	170	219	233	303	321	*	*	*	*
250	P_{GA}	35.1	41.9	49.6	54.5	74.2	90.2	100	118	132	143	147	159	208	224	287	305	*	*	*	*
280	P_{GA}	34	39.3	48.2	52.3	71.4	86.8	97.7	112	128	135	143	151	199	213	276	289	*	*	*	*
315	P_{GA}	33.3	37.6	45.9	49.9	69.7	82.2	93.7	108	122	z1zz31136		147	195	204	264	278	*	*	*	*
355	P_{GA}	31.8	36.5	45.1	48.5	66.3	79.2	89.4	104	120	126	133	141	186	200	252	267	*	*	*	*
400	P_{GA}		35.8		46.2		77.3		100		123		138		190		255		*		*
450	P_{GA}		34		45.4		73.5		95.3												

n_1=1800 min^{-1}
类型 WSH4.. 规格 7-26

n_1=1800 min^{-1}
Type WSH4.. Sizes 7-26

热容量 P_G (kW) / Thermal capacities P_G (kW)																					
i_N		齿轮箱规格 / Gear unit sizes																			
		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
100	P_{GA}	51.1		70.7		102		134		174		191		263		335		*		*	
112	P_{GA}	49.5		68.2		103		133		171	183	189	201	262	279	349	351	*	*	*	*
125	P_{GA}	48.1	55.2	66.3	71.7	99.8	115	131	147	168	179	186	197	259	273	350	358	*	*	*	*
140	P_{GA}	45.9	53.2	64.5	69	97.3	115	128	145	165	175	183	194	255	271	343	361	*	*	*	*
160	P_{GA}	44.2	51.7	61.1	67.1	93	111	122	142	160	171	178	190	249	265	336	350	*	*	*	*
180	P_{GA}	42.7	49.4	58.9	65.3	90.4	108	119	139	160	167	177	185	243	261	342	348	*	*	*	*
200	P_{GA}	41.2	47.7	57.1	61.9	85.8	104	116	133	157	165	173	184	238	253	329	352	*	*	*	*
224	P_{GA}	38.9	45.7	55	59.5	82.7	101	112	128	148	163	163	180	232	247	321	340	*	*	*	*
250	P_{GA}	37.1	44.3	52.5	57.7	78.5	95.4	106	125	140	151	155	168	220	237	304	323	*	*	*	*
280	P_{GA}	36	41.6	51	55.3	75.6	91.8	103	118	136	143	151	160	211	225	292	306	*	*	*	*
315	P_{GA}	35.3	39.8	48.6	52.8	73.7	87	99.1	114	129	139	144	155	207	216	280	294	*	*	*	*
355	P_{GA}	33.6	38.6	47.7	51.3	70.1	83.8	94.6	110	127	134	141	149	197	212	267	283	*	*	*	*
400	P_{GA}		37.9		48.9		81.8		105		130		146		201		270		*		*
450	P_{GA}		36		48		77.8		100												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

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

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

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

额定功率

Power Rating

类型 WSB2.. 规格 4-26　　Type WSB2.. Sizes 4-26

额定功率 P_{2N} (kW) / Nominal power ratings P_{2N} (kW)

i_N	n_1	n_2	齿轮箱规格 / Gear unit sizes																						
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	1800	360	229	354		716		1127		1734*		2585*		4598*											
	1500	300	191	295		596		939		1445		2154		3832*											
	1200	240	153	236		477		751		1156		1723		3065*											
	1000	200	127	196		397		626		963		1436		2554											
5.6	1800	321	208	315		638		1005		1616*		2339*		4100*	4537*										
	1500	268	173	263		533		839		1349		1953		3423*	3788*										
	1200	214	138	210		425		670		1077		1559		2733*	3025*	4369*									
	1000	179	116	176		356		560		901		1304		2286	2530	3654*									
6.3	1800	286	185	281	359	569	712	895	1138	1503*	1760*	2210*	2551*	3893*	4222*										
	1500	238	154	234	299	473	593	745	947	1251	1465	1839	2123	3239*	3513*	4859*									
	1200	190	123	187	238	378	473	594	756	998	1169	1468	1695	2586*	2805*	3879*									
	1000	159	103	156	199	316	396	497	632	835	978	1228	1418	2164	2347	3246*									
7.1	1800	254	164	250	319	505	633	795	1010	1393*	1619*	2018*	2321*	3510*	3856*										
	1500	211	136	207	265	419	525	660	839	1157	1345	1676	1928	2916*	3203*	4308*									
	1200	169	109	166	212	336	421	529	672	927	1077	1343	1544	2335*	2565*	3450*	4070*								
	1000	141	91	138	177	280	351	441	561	773	899	1120	1288	1948	2140	2879	3395*								
8	1800	225	146	221	282	447	560	704	895	1272*	1486*	1884*	2155*	3109*	3486*	4594*									
	1500	188	122	185	236	374	468	588	748	1063	1242	1574	1801	2598	2913*	3838*	4527*								
	1200	150	97	147	188	298	373	469	596	848	991	1256	1437	2073	2324*	3062*	3612*								
	1000	125	81	123	157	248	311	391	497	706	825	1047	1197	1727	1937	2552	3010								
9	1800	200	129	196	251	397	498	626	795	1130*	1365*	1698*	1981*	2764*	3099*	4083*	4816*								
	1500	167	108	164	209	332	416	522	664	944	1140	1418	1654	2308	2588	3409*	4021*								
	1200	133	86	130	167	264	331	416	529	752	908	1129	1317	1838	2061	2715*	3203*								
	1000	111	72	109	139	220	276	347	441	627	757	942	1099	1534	1720	2266	2673								
10	1800	180	116	177	226	358	448	563	716	1017*	1249*	1528*	1862*	2487*	2789*	3675*	4335*								
	1500	150	97	147	188	298	373	469	596	848	1041	1273	1551	2073	2324	3062*	3612*								
	1200	120	77	118	150	238	299	375	477	678	833	1019	1241	1658	1859	2450*	2890*								
	1000	100	64	98	125	198	249	313	397	565	694	849	1034	1382	1549	2041	2408								
11.2	1800	161	104	158	202	320	401	504	640	910*	1117*	1367*	1709*	2225*	2495*	3287*	3877*								
	1500	134	86	131	168	266	333	419	533	757	930	1137	1422	1852	2076	2736*	3227*								
	1200	107	69	105	134	212	266	335	425	605	742	908	1136	1478	1658	2184*	2576*								
	1000	89	57	87	111	177	221	278	354	503	617	755	944	1230	1379	1817	2143								
12.5	1800	144			180		358		572		999*		1528*		2231*		3468*								
	1500	120			150		299		477		833		1274		1859		2890*								
	1200	96			120		239		381		666		1019		1487		2312*								
	1000	80			100		199		318		555		849		1239		1926								
14	1800	129			162		321		513		895*		1369*												
	1500	107			134		266		425		742		1136												
	1200	86			108		214		342		597		913												
	1000	71			89		176		282		492		753												

卧式安装齿轮箱应采用强制润滑
* 请与我们联系

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

额定输出扭矩

Rated Output Torque

类型 WSB2.. 规格 4-26　　Type WSB2.. Sizes 4-26

额定输出扭矩 T_{2N} (kNm)
Nominal output torques T_{2N} (kNm)

i_N	齿轮箱规格 / Gear unit sizes																							
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	6.1	9.4		19		29.9		46		68.6		122											
5.6	6.2	9.4		19		29.9		48.1		69.6		122	135	195									
6.3	6.2	9.4	12	19	23.8	29.9	38	50.2	58.8	73.8	85.2	130	141	195									
7.1	6.2	9.4	12	19	23.8	29.9	38	52.4	60.9	75.9	87.3	132	145	195	230								
8	6.2	9.4	12	19	23.8	29.9	38	54	63.1	80	91.5	132	148	195	230								
9	6.2	9.4	12	19	23.8	29.9	38	54	65.2	81.1	94.6	132	148	195	230								
10	6.2	9.4	12	19	23.8	29.9	38	54	66.3	81.1	98.8	132	148	195	230								
11.2	6.2	9.4	12	19	23.8	29.9	38	54	66.3	81.1	101	132	148	195	230								
12.5	5.5	9.4	12	17	23.8	28	38	52.4	66.3	79.5	101	132	148	195	230	250		340					
14	6	9.8	12	18.2	23.8	29.5	38	56.7	66.3	81.6	101	137	148	195	230	262	295	360	405				
16	6.6	10.5	12	19.8	21.5	31	35.6	59.9	66.3	83.8	99.4	142	154	200	230	275	308	380	422				
18	6.7	11.3	12.6	21.1	23.1	33.9	37.5	62	69.5	86.7	102	148	160	200	240	288	320	400	438				
20	6.7	11.6	13.2	21.7	25	35.7	39.3	63.5	72.7	90.7	105	153	167	200	240	300	332	420	455	560		800	
22.4	6.7	11.6	14.2	21.7	26.5	35.7	41.8	63.5	75.6	90.7	108	153	173	200	240	300	345	420	470	560	640	800	900
25	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
28	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
31.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
35.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
40	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
45	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
50	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
56	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
63	6.6	11.4	15.5	21.4	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
71	6.6	11	15.5	20	27.2	34	43.8	60	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
80		11.6	14	21.7	26.9	35.7	43.8	61.6	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
90		11.6	14	21.7	25.2	35.7	43	61.6	75	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
100		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
112		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
125		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
160		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280		11.6	15.5	21.7	27.2	35.3	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315		11.2	15.5	20.5	27.2	34	44.2	60	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355			15.5		26.5		44.2		78		113		173		240		345		470		640		900
400			14.5		25.5		43		75		113												

WSB3
WSB4

热容量
Thermal Capacity

n_1=1000 min^{-1}

类型 WSB2.. 规格 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																						
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	P_{GA}	48.3	58.6		77.4		87.1		*		*		*											
	P_{GB}	113	155		246		297		487		684		788											
	P_{GC}	137	206		319		398		677		1344		1821											
	P_{GD}	194	291		468		578		984		1838		2383											
5.6	P_{GA}	47.7	59.8		78.3		90.2		120		*		*		*									
	P_{GB}	109	153		232		282		481		688		804		859									
	P_{GC}	132	199		293		367		643		1289		1763		2055									
	P_{GD}	187	282		432		535		943		1789		2333		2689									
6.3	P_{GA}	47	58.7	68.3	75.8	89.9	89.4	98.3	122	142	*	*	*	*	*									
	P_{GB}	105	145	170	216	261	265	300	441	556	637	771	779	838	850									
	P_{GC}	126	185	264	266	388	333	460	566	976	1132	1411	1627	1782	1909									
	P_{GD}	179	263	359	393	548	489	643	834	1340	1574	1954	2168	2366	2530									
7.1	P_{GA}	45	57.2	69	74.3	88.9	89.1	99.3	132	158	151	176	*	*	*	*								
	P_{GB}	99	137	166	203	246	250	284	436	546	637	768	756	815	838	897								
	P_{GC}	116	171	257	244	357	306	422	545	931	1097	1352	1508	1645	1787	1919								
	P_{GD}	164	243	349	362	506	451	594	808	1278	1541	1895	2028	2204	2386	2558								
8	P_{GA}	42.8	54.8	67.2	72.1	86.1	87.4	97.7	129	155	154	181	*	*	*	*								
	P_{GB}	92.9	128	157	192	229	237	267	400	498	588	705	705	784	793	874								
	P_{GC}	107	157	237	226	323	283	383	482	817	978	1185	1356	1531	1621	1793								
	P_{GD}	152	225	324	336	459	419	541	719	1129	1375	1663	1830	2059	2174	2402								
9	P_{GA}	41	52.7	64.5	70.2	82.7	85.8	95.3	129	162	159	193	169	176	*	*								
	P_{GB}	87.8	121	148	182	215	226	251	383	490	565	699	684	730	774	823								
	P_{GC}	98.8	144	218	212	297	267	352	454	791	914	1152	1283	1368	1542	1624								
	P_{GD}	141	206	299	316	424	396	500	679	1094	1296	1625	1741	1853	2078	2188								
10	P_{GA}	34.6	49.3	61.1	66.4	79.2	81.9	91.7	125	153	157	188	172	182	175	*								
	P_{GB}	72.8	111	138	169	202	212	237	359	447	535	642	643	704	737	799								
	P_{GC}	78.9	129	200	192	274	244	325	417	700	846	1018	1170	1296	1431	1546								
	P_{GD}	112	185	276	288	392	363	462	626	972	1200	1444	1596	1760	1935	2085								
11.2	P_{GA}	33.5	44.4	58.4	59.8	76.1	74.5	89	114	150	145	185	162	181	169	187								
	P_{GB}	70.3	99.5	131	150	192	187	226	318	426	476	613	581	662	669	760								
	P_{GC}	75.4	113	183	168	257	212	307	361	659	734	952	1030	1182	1267	1439								
	P_{GD}	107	162	252	252	368	316	438	543	918	1046	1356	1411	1616	1720	1940								
12.5	P_{GA}			54.5		72.2		85.1		145		183		175		186								
	P_{GB}			119		179		212		400		579		598		691								
	P_{GC}			163		234		280		604		882		1039		1276								
	P_{GD}			225		337		401		845		1255		1430		1730								
14	P_{GA}			49		65.2		77		131		168												
	P_{GB}			106		159		189		353		514												
	P_{GC}			142		205		243		522		763												
	P_{GD}			196		293		348		733		1092												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20°C 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

热容量
Thermal Capacity

n_1=1000 min^{-1}

类型 WSB2.. 规格 4-26

Type WSB3.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																						
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	P_{GA}	47.2	53.4		66		*		*		*		*											
	P_{GB}	132	178		276		325		500		645		640											
	P_{GC}	153	228		353		441		744		1467		1968											
	P_{GD}	228	338		538		657		1085		1953		2390											
5.6	P_{GA}	47.5	56.5		70.8		75.8		*		*		*		*									
	P_{GB}	128	177		265		316		512		689		724		718									
	P_{GC}	147	222		326		406		709		1414		1918		2224									
	P_{GD}	221	330		501		614		1058		1950		2434		2726									
6.3	P_{GA}	47.3	56.6	65.1	70.5	81.4	78.6	83.8	*	*	*	*	*	*	*									
	P_{GB}	125	169	197	249	298	301	337	480	591	657	789	740	778	762									
	P_{GC}	141	206	293	295	431	370	510	625	1076	1245	1551	1778	1944	2076									
	P_{GD}	212	308	419	458	636	566	740	944	1500	1740	2150	2311	2499	2633									
7.1	P_{GA}	45.8	56.4	67.5	71.4	83.8	82.4	89.8	108	*	*	*	*	*	*	*								
	P_{GB}	117	161	194	237	285	288	325	485	598	683	817	762	809	811	849								
	P_{GC}	129	190	286	272	397	340	468	604	1029	1211	1491	1655	1803	1954	2096								
	P_{GD}	194	286	410	424	590	525	689	925	1451	1733	2124	2218	2394	2563	2723								
8	P_{GA}	43.9	54.8	66.7	70.6	83	83	91.2	112	127	*	*	*	*	*	*								
	P_{GB}	110	151	185	225	267	274	308	451	555	643	767	735	807	800	868								
	P_{GC}	119	175	264	252	359	315	426	535	904	1081	1309	1493	1683	1780	1965								
	P_{GD}	181	265	382	395	539	490	631	830	1293	1562	1884	2032	2273	2378	2608								
9	P_{GA}	42.3	53.2	64.8	69.7	81.1	83.2	91.1	116	140	130	*	*	*	*	*								
	P_{GB}	105	144	176	214	253	264	292	437	554	630	775	732	773	807	847								
	P_{GC}	110	161	243	236	331	297	392	505	877	1013	1275	1415	1508	1697	1786								
	P_{GD}	167	244	353	373	498	465	585	788	1261	1484	1857	1956	2073	2308	2414								
10	P_{GA}	35.8	50.1	61.8	66.5	78.5	80.3	88.9	115	137	134	157	*	*	*	*								
	P_{GB}	87.1	132	164	199	238	249	277	413	508	601	719	698	759	783	839								
	P_{GC}	88.1	144	224	214	305	272	362	463	777	938	1129	1293	1431	1577	1703								
	P_{GD}	134	219	326	340	462	426	542	729	1126	1381	1658	1806	1984	2167	2322								
11.2	P_{GA}	34.8	45.3	59.3	60.2	75.9	73.6	87	106	136	127	160	*	*	*	*								
	P_{GB}	84.3	118	155	177	227	220	265	367	488	539	691	637	720	720	809								
	P_{GC}	84.2	126	204	187	286	236	341	401	733	814	1056	1139	1306	1399	1587								
	P_{GD}	128	192	298	298	434	372	514	633	1066	1208	1563	1605	1831	1938	2175								
12.5	P_{GA}			55.7		72.7		84.3		135		164		*		*								
	P_{GB}			142		212		250		462		659		661		750								
	P_{GC}			182		261		312		672		979		1150		1409								
	P_{GD}			267		398		472		985		1454		1632		1957								
14	P_{GA}			50.3		66.1		76.9		125		154												
	P_{GB}			127		189		223		409		589												
	P_{GC}			159		228		271		580		848												
	P_{GD}			232		347		411		856		1270												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

P_{GB} (kW) 齿轮箱带冷却风扇 **)

P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)

P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20°C 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)

P_{GB} (kW) Gear units with fan **)

P_{GC} (kW) Gear units with built-in cooling coil **) ***)

P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

热容量
Thermal Capacity

n_1=1500 min^{-1}
类型 WSB2.. 规格 4-26

n_1=1500 min^{-1}
Type WSB2.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																						
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	P_{GA}	35.3	*		*		*		*		*		*											
	P_{GB}	139	184		283		328		478		574		486											
	P_{GC}	159	238		368		459		774		1524		2040											
	P_{GD}	249	366		581		705		1144		2019		2386											
5.6	P_{GA}	38.6	*		*		*		*		*		*		*									
	P_{GB}	135	185		274		322		504		646		618		565									
	P_{GC}	154	231		340		424		738		1470		1992		2307									
	P_{GD}	241	359		543		662		1126		2044		2489		2739									
6.3	P_{GA}	40	*	*	*	*	*	*	*	*	*	*	*	*	*									
	P_{GB}	132	178	206	259	308	310	345	479	581	633	753	664	684	646									
	P_{GC}	147	215	306	308	449	385	531	651	1120	1295	1613	1847	2019	2155									
	P_{GD}	231	336	456	497	690	612	799	1010	1596	1839	2267	2393	2574	2689									
7.1	P_{GA}	40.6	44	50.6	*	*	*	*	*	*	*	*	*	*	*	*								
	P_{GB}	125	169	204	248	298	299	336	493	601	676	804	720	754	740	760								
	P_{GC}	135	199	298	284	414	354	488	629	1072	1261	1552	1722	1875	2031	2177								
	P_{GD}	213	313	447	462	642	570	747	996	1556	1848	2261	2331	2505	2666	2817								
8	P_{GA}	39.9	45.1	53.4	53	*	*	*	*	*	*	*	*	*	*	*								
	P_{GB}	117	160	195	236	280	287	321	463	564	646	768	713	775	756	808								
	P_{GC}	124	182	276	263	375	328	444	557	942	1126	1364	1553	1751	1851	2043								
	P_{GD}	198	290	417	430	586	533	686	896	1392	1674	2016	2152	2400	2499	2729								
9	P_{GA}	39.3	45.7	54.4	55.8	61.6	59.6	*	*	*	*	*	*	*	*	*								
	P_{GB}	111	153	186	226	266	277	306	452	568	640	785	724	759	782	812								
	P_{GC}	115	168	253	246	346	310	409	526	915	1055	1329	1474	1570	1766	1858								
	P_{GD}	183	267	386	407	543	507	637	853	1363	1598	1996	2085	2204	2444	2549								
10	P_{GA}	33.7	44	53.3	55.1	62.3	60.8	63.9	*	*	*	*	*	*	*	*								
	P_{GB}	92.8	140	174	211	251	261	291	429	525	616	734	698	753	770	818								
	P_{GC}	91.9	150	233	224	318	284	377	483	810	978	1176	1347	1490	1642	1772								
	P_{GD}	147	240	356	372	505	465	591	791	1218	1490	1787	1933	2118	2306	2464								
11.2	P_{GA}	33	40.4	52.1	51	61.9	57.7	65.2	*	*	*	*	*	*	*	*								
	P_{GB}	89.8	125	165	188	240	232	279	382	506	555	709	641	721	714	797								
	P_{GC}	87.9	131	213	195	298	246	356	418	764	849	1101	1186	1360	1457	1652								
	P_{GD}	140	210	327	326	474	406	561	688	1156	1306	1688	1722	1960	2068	2315								
12.5	P_{GA}			50.1		61.7		66.9		*		*		*		*								
	P_{GB}			151		224		264		481		681		669		749								
	P_{GC}			189		272		326		701		1021		1198		1468								
	P_{GD}			292		435		515		1070		1574		1754		2093								
14	P_{GA}			46		57.4		63.1		*		*												
	P_{GB}			135		200		236		428		611												
	P_{GC}			166		238		283		605		884												
	P_{GD}			255		380		449		931		1377												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)
P_{GB} (kW) 齿轮箱带冷却风扇 **)
P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)
P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20°C 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)
P_{GB} (kW) Gear units with fan **)
P_{GC} (kW) Gear units with built-in cooling coil **) ***)
P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

热容量
Thermal Capacity

n_1=1800 min^{-1}
类型 WSB2.. 规格 4-26

n_1=1800 min^{-1}
Type WSB2.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																						
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	P_{GA}	*	*		*		*		*		*		*											
	P_{GB}	149	190		283		313		392		350		*											
	P_{GC}	170	250		383		470		765		1446		1814											
	P_{GD}	276	401		630		753		1174		1966		2104											
5.6	P_{GA}	*	*		*		*		*		*		*		*									
	P_{GB}	147	194		282		321		453		493		*		*									
	P_{GC}	164	244		356		439		744		1435		1851		2075									
	P_{GD}	268	395		593		716		1182		2066		2355		2464									
6.3	P_{GA}	31	*	*	*	*	*	*	*	*	*	*	*	*	*									
	P_{GB}	144	189	218	270	318	315	346	450	519	528	612	419	*	*									
	P_{GC}	157	228	324	324	471	402	551	663	1127	1285	1592	1758	1902	1997									
	P_{GD}	258	371	504	546	754	666	865	1073	1673	1894	2322	2342	2482	2533									
7.1	P_{GA}	34	*	*	*	*	*	*	*	*	*	*	*	*	*	*								
	P_{GB}	136	182	219	263	313	311	346	485	572	616	721	563	560	503	473								
	P_{GC}	145	212	317	301	437	372	512	650	1097	1275	1564	1687	1823	1951	2070								
	P_{GD}	238	347	495	511	707	625	817	1073	1659	1946	2371	2367	2519	2639	2751								
8	P_{GA}	35	*	*	*	*	*	*	*	*	*	*	*	*	*	*								
	P_{GB}	129	173	211	253	298	302	336	467	556	616	723	609	641	592	600								
	P_{GC}	133	195	294	279	397	347	468	580	973	1152	1391	1549	1734	1815	1986								
	P_{GD}	222	323	464	477	649	588	754	973	1500	1785	2143	2230	2467	2539	2743								
9	P_{GA}	35	36	*	*	*	*	*	*	*	*	*	*	*	*	*								
	P_{GB}	123	166	202	244	285	295	324	465	574	630	766	658	674	669	671								
	P_{GC}	123	180	271	263	368	329	433	551	952	1090	1369	1489	1578	1761	1839								
	P_{GD}	206	298	430	453	603	561	703	933	1480	1721	2144	2195	2306	2533	2619								
10	P_{GA}	31	36	43	*	*	*	*	*	*	*	*	*	*	*	*								
	P_{GB}	102	154	190	229	271	280	310	447	537	617	729	655	694	688	712								
	P_{GC}	99	161	250	239	339	302	400	508	847	1015	1219	1373	1511	1653	1773								
	P_{GD}	164	268	398	414	561	516	654	868	1329	1614	1932	2052	2237	2416	2564								
11.2	P_{GA}	30	34	43	40	*	*	*	*	*	*	*	*	*	*	*								
	P_{GB}	99	137	180	204	259	250	299	401	522	562	713	614	679	656	715								
	P_{GC}	94	141	229	209	319	262	379	441	801	885	1145	1215	1387	1476	1664								
	P_{GD}	157	235	365	363	528	451	622	757	1265	1420	1831	1839	2083	2183	2428								
12.5	P_{GA}			43		48		*		*		*		*		*								
	P_{GB}			166		244		284		503		697		650		701								
	P_{GC}			203		291		347		738		1068		1233		1494								
	P_{GD}			327		485		573		1176		1718		1882		2221								
14	P_{GA}			40		47		*		*		*												
	P_{GB}			149		218		255		451		633												
	P_{GC}			178		255		302		640		929												
	P_{GD}			285		424		500		1027		1509												

* 敬请垂询

P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)
P_{GB} (kW) 齿轮箱带冷却风扇 **)
P_{GC} (kW) 齿轮箱带内置冷却盘管 **) ***)
P_{GD} (kW) 齿轮箱带冷却风扇和内置冷却盘管 **) ***)

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

***) 表中数值按冷却水入口温度 20°C 和无限定的冷却水出口温度情况下计算得来的。
对于限定冷却水出口温度数值的重新计算是可以的，敬请垂询。

* On request

P_{GA} (kW) Gear units without auxiliary cooling **)
P_{GB} (kW) Gear units with fan **)
P_{GC} (kW) Gear units with built-in cooling coil **) ***)
P_{GD} (kW) Gear units with fan and built-in cooling coil **) ***)

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

***) Values refer to a cooling water inlet temperature of 20°C with unlimited cooling water outlet temperature.
A recalculation with a limited cooling water outlet temperature is possible on request.

额定功率

Power Rating

类型 WSB3.. 规格 4-26　　Type WSB3.. Sizes 4-26

额定功率 P_{2N} (kW) / Nominal power ratings P_{2N} (kW)																								
i_N	n_1	n_2	齿轮箱规格 / Gear unit sizes																					
			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12.5	1800	144	82	141		256		422		790		1198		1990*		2940*		3769*							
	1500	120	69	118		213		351		658		998		1658		2450		3141*		4272*					
	1200	96	55	94		170		281		526		799		1326		1960		2513*		3417*					
	1000	80	46	78		142		234		438		665		1105		1633		2094		2848					
14	1800	129	81	132		245		398		765		1102		1850*	1999*	2634*	3106*	3539*	3984*	4862*					
	1500	107	67	109		203		330		635		914		1534	1658	2184	2576	2935*	3305*	4033*	4537*				
	1200	86	54	88		163		265		510		734		1233	1332	1756	2071	2359*	2656*	3241*	3647*				
	1000	71	44	72		135		219		421		606		1018	1100	1449	1709	1947	2193	2676	3010				
16	1800	113	78	124	141	234	254	366	421	708	784	991	1176	1680*	1822*	2366*	2721*	3253*	3644*	4496*	4993*				
	1500	94	64	103	118	194	211	305	350	589	652	824	978	1397	1515	1968	2263	2706*	3031*	3740*	4153*				
	1200	75	51	82	94	155	168	243	279	470	520	658	780	1115	1209	1570	1806	2159*	2418*	2984*	3314*				
	1000	63	43	69	79	130	141	204	234	395	437	552	655	936	1015	1319	1517	1814	2031	2506	2783				
18	1800	100	70	118	131	220	241	354	392	649	727	907	1068	1549*	1675*	2094*	2513*	3015*	3350*	4188*	4586*				
	1500	83	58	98	109	183	200	294	325	538	604	753	886	1286	1390	1738	2085	2503*	2781*	3476*	3806*				
	1200	67	47	79	88	148	162	237	263	434	487	608	715	1038	1122	1403	1683	2020*	2245*	2806*	3072*				
	1000	56	39	66	73	123	135	198	219	363	407	508	598	867	938	1172	1407	1688	1876	2345	2568				
20	1800	90	63	109	124	204	235	336	370	598	685	854	989	1441*	1573*	1884*	2261*	2827*	3128*	3958*	4287*				
	1500	75	52	91	103	170	196	280	308	498	570	712	824	1201	1311	1570	1884	2356*	2607*	3298*	3573*	4397*			
	1200	60	42	72	82	136	157	224	246	398	456	569	659	961	1049	1256	1507	1884	2085*	2638	2858*	3518			
	1000	50	35	60	69	113	130	186	205	332	380	474	549	801	874	1047	1256	1570	1738	2198	2382	2931		4188*	
22.4	1800	80	56	97	118	181	221	299	350	531	633	759	904	1281*	1449*	1675*	2010*	2513*	2890*	3518*	3937*	4691*			
	1500	67	47	81	99	152	185	250	293	445	530	636	757	1073	1213	1403	1683	2104	2420*	2946*	3297*	3928*	4490*		
	1200	54	37	65	80	122	149	201	236	359	427	512	610	865	978	1130	1357	1696	1950	2374*	2657	3166*	3618	4523*	
	1000	45	31	54	66	102	124	168	196	299	356	427	508	720	815	942	1130	1413	1625	1979	2214	2638	3015	3769*	4240*
25	1800	72	50	87	116	163	205	269	330	478	582	683	851	1153*	1304*	1507*	1809*	2261*	2601*	3166*	3543*	4221*	4825*		
	1500	60	42	72	97	136	170	224	275	398	485	569	709	961	1086	1256	1507	1884	2167	2638*	2952*	3518*	4020*		
	1200	48	33	58	77	109	136	179	220	319	388	455	567	769	869	1005	1206	1507	1734	2110*	2362*	2814*	3216*	4020*	4523*
	1000	40	28	48	64	90	113	149	183	265	323	379	473	640	724	837	1005	1256	1445	1759	1968	2345	2680	3350*	3769*
28	1800	64	44	77	103	145	182	239	293	425	517	607	757	1025*	1159*	1340*	1608*	2010*	2312*	2814*	3149*	3752*	4289*		
	1500	54	37	65	87	122	153	201	247	359	436	512	638	865	978	1130	1357	1696	1950	2374	2657*	3166*	3618*	4523*	
	1200	43	30	52	69	97	122	160	197	285	347	408	508	688	778	900	1080	1350	1553	1891	2116*	2521*	2881*	3602*	4052*
	1000	36	25	43	58	81	102	134	165	239	291	341	425	576	652	753	904	1130	1300	1583	1771	2110	2412	3015	3392*
31.5	1800	57	39	69	92	129	162	213	261	379	460	541	674	913*	1032*	1193*	1432*	1790*	2059*	2506*	2805*	3342*	3819*	4774*	
	1500	48	33	58	77	109	136	179	220	319	388	455	567	769	869	1005	1206	1507	1734	2110	2362	2814*	3216*	4020*	4523*
	1200	38	26	46	61	86	108	142	174	252	307	360	449	608	688	795	954	1193	1372	1671	1870	2228*	2546*	3183*	3581*
	1000	32	22	38	51	72	91	119	146	212	258	303	378	512	579	670	804	1005	1156	1407	1574	1876	2144	2680	3015
35.5	1800	51	35	61	82	115	145	190	233	339	412	484	603	817*	923*	1068*	1281*	1602*	1842*	2242*	2509*	2990*	3417*	4272*	4806*
	1500	42	29	51	68	95	119	157	192	279	339	398	496	672	760	879	1055	1319	1517	1847	2067	2462	2814*	3518*	3958*
	1200	34	23	41	55	77	96	127	155	226	274	322	402	544	615	712	854	1068	1228	1495	1673	1993	2278*	2848*	3204*
	1000	28	19	34	45	63	79	104	128	186	226	265	331	448	507	586	703	879	1011	1231	1378	1641	1876	2345	2638
40	1800	45	31	54	73	102	128	168	206	299	363	427	532	720*	815*	942*	1130*	1413*	1625*	1979*	2214*	2638*	3015*	3769*	4240*
	1500	38	26	46	61	86	108	142	174	252	307	360	449	608	688	795	954	1193	1372	1671	1870	2228	2546	3183*	3581*
	1200	30	21	36	48	68	85	112	137	199	242	284	354	480	543	628	753	942	1083	1319	1476	1759	2010	2513*	2827*
	1000	25	17	30	40	56	71	93	114	166	202	237	295	400	452	523	628	785	903	1099	1230	1465	1675	2094	2356
45	1800	40	28	48	64	90	113	149	183	265	323	379	473	640*	724*	837*	1005*	1256*	1445*	1759*	1968*	2345*	2680*	3350*	3769*
	1500	33	23	40	53	74	93	123	151	219	266	313	390	528	597	691	829	1036	1192	1451	1624	1935	2211	2764	3109*
	1200	27	18	32	43	61	76	100	123	179	218	256	319	432	489	565	678	848	975	1187	1328	1583	1809	2261	2544*
	1000	22	15	26	35	49	62	82	100	146	177	208	260	352	398	460	552	691	794	967	1082	1290	1474	1842	2073
50	1800	36	25	43	58	81	102	134	165	239	291	341	425	576	652*	753*	904*	1130*	1300*	1583*	1771*	2110*	2412*	3015*	3392*
	1500	30	21	36	48	68	85	112	137	199	242	284	354	480	543	628	753	942	1083	1319	1476	1759	2010	2513	2827
	1200	24	16	29	38	54	68	89	110	159	194	227	283	384	434	502	603	753	867	1055	1181	1407	1608	2010	2261
	1000	20	14	24	32	45	56	74	91	132	161	189	236	320	362	418	502	628	722	879	984	1172	1340	1675	1884
56	1800	32	22	38	51	72	91	119	146	212	258	303	378	512	579	670*	804*	1005*	1156*	1407*	1574*	1876*	2144*	2680*	3015*
	1500	27	18	32	43	61	76	100	123	179	218	256	319	432	489	565	678	848	975	1187	1328	1583	1809	2261	2544
	1200	21	14	25	34	47	59	78	96	139	169	199	248	336	380	439	527	659	758	923	1033	1231	1407	1759	1979
	1000	17.9	12	21	29	40	50	66	82	119	144	170	211	286	324	374	449	562	646	787	880	1049	1199	1499	1686
63	1800	29	20	34	47	64	82	108	133	192	234	275	343	464	525	607*	728*	910*	1047*	1275*	1427*	1700*	1943*	2429*	2732*
	1500	24	16	28	38	53	68	89	110	159	194	227	283	384	434	502	603	753	867	1055	1181	1407	1608	2010	2261
	1200	19	13	22	30	42	54	71	87	126	153	180	224	304	344	397	477	596	686	835	935	1114	1273	1591	1790
	1000	15.9	10	18	25	35	45	59	72	105	128	151	188	254	288	332	399	499	574	699	782	932	1065	1331	1498
71	1800	25	17	28	40	52	71	89	114	157	202	237	295	400	452	523*	628*	785*	903*	1099*	1230*	1465*	1675*	2094*	2356*
	1500	21	14	24	34	43	59	74	96	131	169	199	248	336	380	439	527	659	758	923	1033	1231	1407	1759	1979
	1200	16.9	11	19	27	35	48	60	77	106	136	160	199	270	306	353	424	530	610	743	831	990	1132	1415	1592
	1000	14.1	9.7	16	22	29	40	50	64	88	113	133	166	225	255	295	354	442	509	620	693	826	944	1181	1328
80	1800	23			33		64		105		185		272		416		578*		830*		1131*		1541*		2167*
	1500	18.8			27		52		86		151		222		340		472		679		925		1259		1771
	1200	15			21		42		68		121		177		271		376		541		738		1005		1413
	1000	12.5			18		35		57		101		147		226		314		451		615		837		1178
90	1800	20			29		52		90		157		236												
	1500	16.7			24		44		75		131		197												
	1200	13.3			19		35		59		104		157												
	1000	11.1			16		29		49		87		131												

卧式安装齿轮箱应采用强制润滑

* 请与我们联系

Forced lubrication required on horizontal gear units

* Gear units only on request

额定输出扭矩

Rated Output Torque

类型 WSB3.. 规格 4-26　　Type WSB3.. Sizes 4-26

额定输出扭矩 T_{2N} (kNm) / Nominal output torques T_{2N} (kNm)																								
i_N	齿轮箱规格 / Gear unit sizes																							
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	6.1	9.4		19		29.9		46		68.6		122											
5.6	6.2	9.4		19		29.9		48.1		69.6		122	135	195									
6.3	6.2	9.4	12	19	23.8	29.9	38	50.2	58.8	73.8	85.2	130	141	195									
7.1	6.2	9.4	12	19	23.8	29.9	38	52.4	60.9	75.9	87.3	132	145	195	230								
8	6.2	9.4	12	19	23.8	29.9	38	54	63.1	80	91.5	132	148	195	230								
9	6.2	9.4	12	19	23.8	29.9	38	54	65.2	81.1	94.6	132	148	195	230								
10	6.2	9.4	12	19	23.8	29.9	38	54	66.3	81.1	98.8	132	148	195	230								
11.2	6.2	9.4	12	19	23.8	29.9	38	54	66.3	81.1	101	132	148	195	230								
12.5	5.5	9.4	12	17	23.8	28	38	52.4	66.3	79.5	101	132	148	195	230	250		340					
14	6	9.8	12	18.2	23.8	29.5	38	56.7	66.3	81.6	101	137	148	195	230	262	295	360	405				
16	6.6	10.5	12	19.8	21.5	31	35.6	59.9	66.3	83.8	99.4	142	154	200	230	275	308	380	422				
18	6.7	11.3	12.6	21.1	23.1	33.9	37.5	62	69.5	86.7	102	148	160	200	240	288	320	400	438				
20	6.7	11.6	13.2	21.7	25	35.7	39.3	63.5	72.7	90.7	105	153	167	200	240	300	332	420	455	560		800	
22.4	6.7	11.6	14.2	21.7	26.5	35.7	41.8	63.5	75.6	90.7	108	153	173	200	240	300	345	420	470	560	640	800	900
25	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
28	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
31.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
35.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
40	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
45	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
50	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
56	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
63	6.6	11.4	15.5	21.4	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
71	6.6	11	15.5	20	27.2	34	43.8	60	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
80		11.6	14	21.7	26.9	35.7	43.8	61.6	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
90		11.6	14	21.7	25.2	35.7	43	61.6	75	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
100		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
112		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
125		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
160		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280		11.6	15.5	21.7	27.2	35.3	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315		11.2	15.5	20.5	27.2	34	44.2	60	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355			15.5		26.5		44.2		78		113		173		240		345		470		640		900
400			14.5		25.5		43		75		113												

WSB2
WSB4

热容量
Thermal Capacity

n_1=1000 min^{-1}
类型 WSB3.. 规格 4-26

n_1=1000 min^{-1}
Type WSB3.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																							
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12.5	P_{GA}	38.1	50.8		79.7		103		140		172		221		235		*		*					
	P_{GB}	66.3	93.9		150		204		321		419		583		742		*		*					
	P_{GC}	76.8	124		218		323		456		714		1117		1339		*		*					
	P_{GD}	100	161		280		413		613		923		1410		1745		*		*					
14	P_{GA}	37.1	49.4		77.4		101		139		177		220	233	235	259	*	*	*	*				
	P_{GB}	64.4	90.9		144		198		315		424		562	604	716	798	*	*	*	*				
	P_{GC}	74.5	119		210		313		447		719		1066	1129	1286	1410	*	*	*	*				
	P_{GD}	97.2	155		270		399		600		932		1349	1433	1677	1838	*	*	*	*				
16	P_{GA}	35.2	47.9	55.4	74	86.2	99.4	110	133	155	165	191	221	227	241	245	*	*	*	*				
	P_{GB}	61.3	87.5	100	137	158	193	214	300	347	388	448	553	579	713	732	*	*	*	*				
	P_{GC}	70.8	115	128	200	223	304	343	425	557	654	740	1043	1079	1265	1292	*	*	*	*				
	P_{GD}	92.2	149	165	257	285	388	434	569	724	846	959	1322	1366	1654	1682	*	*	*	*				
18	P_{GA}	34.3	46.5	53.7	71.7	83.2	96.5	102	132	156	167	195	216	230	237	263	*	*	*	*				
	P_{GB}	59.5	84.8	97.1	133	153	187	197	293	347	392	452	531	573	686	763	*	*	*	*				
	P_{GC}	68.5	111	122	192	217	293	315	416	558	658	745	1001	1063	1210	1332	*	*	*	*				
	P_{GD}	89.5	144	159	247	277	375	399	558	726	853	965	1265	1344	1584	1738	*	*	*	*				
20	P_{GA}	32.4	44.6	51.9	68.9	79.4	92.8	105	126	147	159	180	212	223	234	246	271	*	270	*		*		*
	P_{GB}	56.1	81.3	93.5	127	145	179	203	280	323	367	413	513	548	662	700	814	*	899	*		*		*
	P_{GC}	64.8	107	118	184	204	280	323	396	516	615	677	961	1010	1164	1214	*	*	*	*		*		*
	P_{GD}	84.3	138	154	236	261	360	410	531	672	798	877	1215	1280	1523	1589	*	*	*	*		*		*
22.4	P_{GA}	31.6	44	50.4	66.8	77.4	90.7	97.5	122	148	154	185	210	219	236	243	276	286	279	270	*	*	*	*
	P_{GB}	54.6	80	90.7	123	141	175	186	266	324	349	417	498	528	646	675	795	833	881	907	*	*	*	*
	P_{GC}	63	105	115	178	198	272	295	367	515	574	683	910	966	1114	1164	*	*	*	*	*	*	*	*
	P_{GD}	82.2	137	149	226	253	348	375	495	671	746	885	1155	1227	1461	1525	*	*	*	*	*	*	*	*
25	P_{GA}	30.1	41.8	48.6	65	74.7	87.3	94.3	117	144	149	176	204	222	234	250	281	297	292	291	*	*	*	*
	P_{GB}	51.7	75.5	86.9	119	134	166	178	250	309	329	390	466	513	607	661	763	816	846	893	*	*	*	*
	P_{GC}	59.4	99.4	110	169	189	253	284	337	489	527	638	823	919	1013	1116	*	*	*	*	*	*	*	*
	P_{GD}	77.4	128	142	217	243	324	359	454	640	687	827	1047	1168	1333	1467	*	*	*	*	*	*	*	*
28	P_{GA}	29	40.6	48	62.1	72.7	83.9	92.7	113	140	144	172	205	216	239	248	285	302	301	306	*	*	*	*
	P_{GB}	49.4	72.7	85.5	112	130	157	174	238	295	312	373	453	480	596	621	731	782	811	857	*	*	*	*
	P_{GC}	56	94	109	156	183	235	274	313	456	489	593	789	832	980	1015	*	*	*	*	*	*	*	*
	P_{GD}	73.1	121	141	201	234	302	349	424	596	640	772	1007	1060	1292	1336	*	*	*	*	*	*	*	*
31.5	P_{GA}	27.5	38.6	45.5	59.2	70.3	80.6	89.1	108	133	139	165	196	215	232	250	279	302	299	312	*	*	*	*
	P_{GB}	46.8	68.7	80.6	106	125	149	165	225	276	296	350	423	468	557	608	688	749	759	821	*	*	*	*
	P_{GC}	52.5	87.6	102	146	174	220	254	291	417	453	543	715	797	896	982	*	*	*	*	*	*	*	*
	P_{GD}	68.6	113	133	188	222	282	324	395	548	595	710	917	1020	1184	1296	*	*	*	*	*	*	*	*
35.5	P_{GA}	25.9	36.4	44	56.4	67	76.9	85.3	105	128	135	159	192	205	228	241	278	293	297	306	*	*	*	*
	P_{GB}	43.8	64.3	77.5	100	119	141	156	215	262	284	332	407	435	538	569	666	703	731	767	*	*	*	*
	P_{GC}	48.3	80.2	96.8	135	162	201	237	276	389	431	506	680	725	853	897	*	*	*	*	*	*	*	*
	P_{GD}	63.1	104	126	174	207	260	302	373	509	566	662	873	929	1129	1188	*	*	*	*	*	*	*	*
40	P_{GA}	22.6	31.7	41.8	49.4	64.1	72.1	81.6	99.6	122	128	152	183	199	220	236	267	289	287	302	*	*	*	*
	P_{GB}	38.1	55.5	73.3	87.1	112	131	149	201	246	267	315	383	419	508	548	627	679	686	738	*	*	*	*
	P_{GC}	40.7	66.7	90.4	112	151	182	222	253	360	397	471	627	687	793	853	*	*	*	*	*	*	*	*
	P_{GD}	53.2	87	117	144	193	235	283	344	473	523	617	808	884	1053	1132	*	*	*	*	*	*	*	*
45	P_{GA}	22.1	30.9	39.3	48	60.9	66.4	77.7	91.6	117	119	147	171	190	206	228	253	278	270	291	*	*	*	*
	P_{GB}	37.2	54	68.5	84.1	106	120	140	184	236	244	301	352	395	470	520	582	638	634	692	*	*	*	*
	P_{GC}	39.5	64.3	82.9	108	139	164	203	227	340	356	446	564	634	719	798	*	*	*	*	*	*	*	*
	P_{GD}	51.8	84	107	139	179	211	260	311	449	467	586	728	818	955	1057	*	*	*	*	*	*	*	*
50	P_{GA}	22.4	30.8	34.4	47.6	53.6	65.5	73.1	92.4	112	122	141	178	179	219	216	256	267	302	283	*	*	*	*
	P_{GB}	37.4	53.3	59.4	82.5	92.5	117	131	181	221	244	283	356	363	478	481	561	595	668	641	*	*	*	*
	P_{GC}	39.5	62.6	69.2	104	116	156	184	222	312	352	412	567	571	727	725	*	*	*	*	*	*	*	*
	P_{GD}	51.6	81.9	90.3	134	149	203	236	301	411	466	543	728	738	962	963	*	*	*	*	*	*	*	*
56	P_{GA}	20.7	28.5	33.6	44.3	52.1	60.7	67.7	84.5	103	113	131	165	186	205	228	251	268	294	312	*	*	*	*
	P_{GB}	34.4	49.3	57.8	76.7	89.6	108	120	164	203	223	258	325	365	438	488	540	571	630	675	*	*	*	*
	P_{GC}	35.6	56.4	66.7	94.7	111	140	166	197	279	315	366	507	573	654	729	*	*	*	*	*	*	*	*
	P_{GD}	46.8	74.1	87.2	122	143	182	213	268	370	416	486	652	738	867	966	*	*	*	*	*	*	*	*
63	P_{GA}	19.9	27.4	33.4	42.8	51.5	58.7	66.5	81.7	103	109	133	159	171	198	211	245	260	287	298	*	*	*	*
	P_{GB}	33.1	47.3	57.1	74.1	88.1	104	117	158	198	214	259	309	333	419	447	520	549	608	633	*	*	*	*
	P_{GC}	33.7	53.3	65	89.8	108	132	159	185	271	296	365	475	510	615	657	*	*	*	*	*	*	*	*
	P_{GD}	44.3	70.1	85.1	116	140	173	203	253	358	393	481	612	659	820	869	*	*	*	*	*	*	*	*
71	P_{GA}	18.4	26.1	30.8	40.8	47.8	55	61.7	75.7	94.8	103	122	151	164	187	204	232	252	272	291	*	*	*	*
	P_{GB}	30.7	44.9	52.6	70.5	81.7	97.8	108	146	180	201	236	292	318	393	426	487	529	569	612	*	*	*	*
	P_{GC}	30.6	49.3	58.8	83.1	98.3	119	143	166	240	268	327	437	481	569	620	*	*	*	*	*	*	*	*
	P_{GD}	40.4	65.2	77.1	108	127	157	183	228	319	356	431	567	621	757	824	*	*	*	*	*	*	*	*
80	P_{GA}			29.5		46.2		59.6		90.7		117		157		193		239		276		*		*
	P_{GB}			50.6		79		105		173		227		301		400		495		574		*		*
	P_{GC}			55.4		93.2		134		224		307		442		570		*		*		*		*
	P_{GD}			72.8		121		174		300		407		573		761		*		*		*		*
90	P_{GA}			28.2		44		55.9		84.5		110												
	P_{GB}			48.1		75.1		98.4		161		212												
	P_{GC}			51.4		86.3		121		201		277												
	P_{GD}			67.9		112		159		271		369												

* 敬请垂询 其他说明见类型WSB2.

* On request For additional notes, see type WSB2.

热容量
Thermal Capacity

n_1=1200 min^{-1}
类型 WSB3.. 规格 4-26

n_1=1200 min^{-1}
Type WSB3.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																							
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12.5	P_{GA}	39.7	52.1		80.7		103		132		152		173		*		*		*					
	P_{GB}	75.6	106		169		230		356		457		620		777		*		*					
	P_{GC}	85.5	138		243		359		508		795		1243		1491		*		*					
	P_{GD}	115	184		321		472		697		1042		1577		1939		*		*					
14	P_{GA}	38.8	51		79		101		134		161		181	186	*	*	*	*	*	*				
	P_{GB}	73.5	103		163		223		350		465		603	645	758	838	*	*	*	*				
	P_{GC}	82.9	133		234		349		497		801		1187	1257	1432	1570	*	*	*	*				
	P_{GD}	111	178		309		457		683		1054		1513	1605	1871	2046	*	*	*	*				
16	P_{GA}	37	49.5	57	75.7	87.5	100	110	129	147	151	174	185	186	189	*	*	*	*	*				
	P_{GB}	70	99.5	113	156	178	218	240	334	384	426	492	597	621	758	774	*	*	*	*				
	P_{GC}	78.8	128	142	223	248	338	382	473	620	728	824	1161	1201	1408	1438	*	*	*	*				
	P_{GD}	105	171	190	294	326	444	496	648	823	958	1085	1486	1532	1849	1876	*	*	*	*				
18	P_{GA}	36	48.1	55.5	73.6	84.8	97.7	102	129	149	155	180	185	193	191	205	*	*	*	*				
	P_{GB}	67.9	96.5	110	151	173	211	222	328	386	432	498	575	617	734	811	*	*	*	*				
	P_{GC}	76.3	123	136	214	241	326	351	463	621	732	829	1115	1183	1347	1483	*	*	*	*				
	P_{GD}	102	166	183	284	317	429	457	635	825	967	1093	1424	1510	1775	1942	*	*	*	*				
20	P_{GA}	34	46.4	53.7	70.9	81.2	94.3	106	124	141	149	168	185	191	194	198	211	*	*	*	*		*	
	P_{GB}	64.1	92.6	106	145	165	202	228	314	360	406	456	557	593	711	749	865	*	920	*	*		*	
	P_{GC}	72.2	119	132	205	227	312	359	441	574	685	754	1070	1124	1296	1352	*	*	*	*	*		*	
	P_{GD}	96.9	159	176	270	300	412	469	605	764	905	995	1370	1440	1710	1780	*	*	*	*	*		*	
22.4	P_{GA}	33.3	45.8	52.3	68.9	79.4	92.5	98.9	120	144	147	174	187	192	201	202	222	226	*	*	*	*	*	*
	P_{GB}	62.4	91.1	103	140	160	198	210	298	361	387	462	544	574	698	725	850	888	910	920	*	*	*	*
	P_{GC}	70.2	117	128	198	220	303	329	409	573	639	761	1013	1076	1240	1296	*	*	*	*	*	*	*	*
	P_{GD}	94.5	158	171	260	290	399	429	565	764	847	1005	1304	1383	1644	1712	*	*	*	*	*	*	*	*
25	P_{GA}	31.8	43.7	50.6	67.4	77.1	89.7	96.4	117	142	144	170	189	202	208	219	241	250	*	*	*	*	*	*
	P_{GB}	59.1	86.2	99	135	153	188	202	281	346	367	435	513	563	662	718	826	880	889	926	*	*	*	*
	P_{GC}	66.1	110	122	188	211	282	316	375	545	587	710	916	1023	1128	1242	*	*	*	*	*	*	*	*
	P_{GD}	89	147	163	249	279	371	411	519	730	783	941	1186	1322	1505	1654	*	*	*	*	*	*	*	*
28	P_{GA}	30.7	42.6	50.3	64.8	75.5	86.8	95.6	114	140	143	170	195	204	222	227	257	269	244	*	*	*	*	*
	P_{GB}	56.6	83	97.5	127	148	179	197	269	332	350	417	503	531	656	682	800	854	868	906	*	*	*	*
	P_{GC}	62.4	104	121	174	204	261	305	349	508	545	660	879	926	1091	1130	*	*	*	*	*	*	*	*
	P_{GD}	84.2	139	162	231	268	346	400	486	682	731	881	1145	1204	1465	1513	*	*	*	*	*	*	*	*
31.5	P_{GA}	29.1	40.6	47.8	62	73.4	83.9	92.4	111	135	140	165	191	208	221	236	260	279	257	256	*	*	*	*
	P_{GB}	53.7	78.5	92.1	121	143	170	188	254	312	333	393	473	521	619	673	760	824	822	881	*	*	*	*
	P_{GC}	58.5	97.5	114	162	194	245	283	324	464	505	605	796	887	998	1093	*	*	*	*	*	*	*	*
	P_{GD}	78.9	130	153	216	255	324	372	453	627	680	811	1044	1161	1345	1471	*	*	*	*	*	*	*	*
35.5	P_{GA}	27.5	38.4	46.3	59.2	70.2	80.3	88.8	108	131	137	160	189	201	221	232	265	277	265	263	*	*	*	*
	P_{GB}	50.2	73.6	88.6	114	136	161	178	244	296	321	375	457	487	599	633	739	779	798	830	*	*	*	*
	P_{GC}	53.8	89.3	107	151	180	224	264	307	433	480	564	757	807	949	999	*	*	*	*	*	*	*	*
	P_{GD}	72.7	120	144	200	238	298	347	428	584	648	758	996	1059	1286	1351	*	*	*	*	*	*	*	*
40	P_{GA}	24	33.5	44.1	52	67.3	75.4	85.2	102	125	130	155	182	197	215	230	258	277	262	266	*	*	*	*
	P_{GB}	43.7	63.5	83.8	99.6	128	150	170	229	279	302	355	430	470	568	611	698	754	753	804	*	*	*	*
	P_{GC}	45.3	74.3	100	125	168	202	247	282	401	442	525	698	765	883	949	*	*	*	*	*	*	*	*
	P_{GD}	61.3	100	135	166	222	270	325	395	542	599	706	923	1009	1200	1289	*	*	*	*	*	*	*	*
45	P_{GA}	23.5	32.7	41.5	50.6	64	69.6	81.3	95	121	122	150	171	189	204	224	247	270	251	263	*	*	*	*
	P_{GB}	42.6	61.8	78.4	96.1	121	137	160	210	268	276	341	397	444	526	581	650	712	698	758	*	*	*	*
	P_{GC}	44	71.6	92.3	120	155	182	226	253	378	396	496	628	706	801	888	*	*	*	*	*	*	*	*
	P_{GD}	59.7	96.7	124	159	205	243	299	357	515	535	671	832	934	1090	1205	*	*	*	*	*	*	*	*
50	P_{GA}	23.8	32.7	36.4	50.3	56.6	69.1	77	96.6	116	126	146	182	182	221	218	257	266	293	269	*	*	*	*
	P_{GB}	42.9	61.1	68	94.5	105	133	150	207	251	278	321	402	411	539	542	631	669	744	712	*	*	*	*
	P_{GC}	44	69.7	77	116	129	174	205	247	348	392	459	631	636	809	807	*	*	*	*	*	*	*	*
	P_{GD}	59.4	94.3	103	154	172	234	272	346	472	535	623	834	845	1101	1101	*	*	*	*	*	*	*	*
56	P_{GA}	22	30.2	35.7	47	55.2	64.3	71.5	88.9	108	118	136	171	191	210	233	256	272	293	307	*	*	*	*
	P_{GB}	39.4	56.5	66.3	87.9	102	124	137	188	232	254	294	369	415	497	553	611	645	708	755	*	*	*	*
	P_{GC}	39.6	62.8	74.3	105	123	156	185	219	311	351	408	565	638	728	811	*	*	*	*	*	*	*	*
	P_{GD}	53.9	85.4	100	141	165	210	245	308	426	478	558	748	846	994	1107	*	*	*	*	*	*	*	*
63	P_{GA}	21.2	29.1	35.5	45.5	54.6	62.2	70.4	86.1	108	114	139	165	177	204	217	251	266	289	297	*	*	*	*
	P_{GB}	38	54.3	65.5	84.9	100	119	134	180	227	244	296	352	378	475	507	589	622	686	712	*	*	*	*
	P_{GC}	37.5	59.3	72.4	100	120	147	177	206	302	330	407	529	568	685	731	*	*	*	*	*	*	*	*
	P_{GD}	51	80.8	98	134	161	199	234	291	411	452	553	703	757	941	997	*	*	*	*	*	*	*	*
71	P_{GA}	19.6	27.7	32.8	43.3	50.8	58.3	65.3	79.9	99.8	108	128	158	170	194	210	239	259	275	292	*	*	*	*
	P_{GB}	35.3	51.6	60.3	80.9	93.6	112	124	167	206	229	269	333	362	446	484	553	600	643	689	*	*	*	*
	P_{GC}	34.1	54.9	65.4	92.5	109	133	159	185	267	298	364	487	535	633	690	*	*	*	*	*	*	*	*
	P_{GD}	46.6	75.1	88.8	125	146	181	211	262	367	410	495	651	713	869	945	*	*	*	*	*	*	*	*
80	P_{GA}			31.4		49.1		63.1		95.5		123		163		200		247		278		*		*
	P_{GB}			58.1		90.5		120		198		259		343		454		563		647		*		*
	P_{GC}			61.7		103		149		250		342		492		634		*		*		*		*
	P_{GD}			83.9		139		200		345		468		658		873		*		*		*		*
90	P_{GA}			30		46.8		59.3		89.2		115												
	P_{GB}			55.2		86.1		112		184		242												
	P_{GC}			57.2		96.1		135		224		309												
	P_{GD}			78.2		129		183		311		425												

* 敬请垂询 其他说明见类型WSB2.

* On request For additional notes, see type WSB2.

热容量
Thermal Capacity

n_1=1500 min^{-1}
类型 WSB3.. 规格 4-26

n_1=1500 min^{-1}
Type WSB3.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																							
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12.5	P_{GA}	39.4	50.4		76.7		95.4		112		*		*		*		*		*					
	P_{GB}	84.8	118		186		250		377		468		602		728		*		*					
	P_{GC}	94.7	151		265		390		542		831		1261		1484		*		*					
	P_{GD}	131	209		362		529		768		1126		1652		1991		*		*					
14	P_{GA}	38.6	49.6		75.7		95.2		117		127		*	*	*	*	*	*	*	*				
	P_{GB}	82.6	114		180		244		374		482		598	631	728	792	*	*	*	*				
	P_{GC}	91.9	146		257		380		533		843		1217	1280	1443	1569	*	*	*	*				
	P_{GD}	127	202		350		514		756		1147		1603	1688	1947	2110	*	*	*	*				
16	P_{GA}	36.8	48.3	55.4	72.9	83.3	94.3	103	114	125	122	138	*	*	*	*	*	*	*	*				
	P_{GB}	78.6	110	126	172	196	239	262	358	407	445	511	597	615	737	741	*	*	*	*				
	P_{GC}	87.4	141	157	244	272	369	415	508	662	769	868	1196	1230	1429	1447	*	*	*	*				
	P_{GD}	121	195	216	334	369	500	558	719	907	1047	1181	1583	1621	1937	1949	*	*	*	*				
18	P_{GA}	35.9	47.2	54.1	71.1	81.1	92.5	96.3	115	129	128	146	*	*	*	*	*	*	*	*				
	P_{GB}	76.4	107	122	167	191	232	243	353	411	454	520	581	617	722	787	*	*	*	*				
	P_{GC}	84.7	136	150	235	265	357	383	499	665	777	877	1155	1219	1375	1503	*	*	*	*				
	P_{GD}	117	189	208	322	359	485	514	707	913	1060	1195	1525	1608	1872	2033	*	*	*	*				
20	P_{GA}	34	45.6	52.6	68.8	78	89.8	100	112	124	126	140	*	*	*	*	*	*	*	*		*		*
	P_{GB}	72.1	103	118	161	182	223	251	339	385	428	480	568	599	708	736	839	*	813	*		*		*
	P_{GC}	80.1	131	145	225	249	342	392	476	616	729	800	1114	1165	1332	1379	*	*	*	*		*		*
	P_{GD}	111	181	201	307	340	466	529	676	848	996	1092	1475	1542	1815	1876	*	*	*	*		*		*
22.4	P_{GD}	33.3	45.1	51.4	67.2	76.7	88.6	93.9	110	128	126	148	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	70.3	101	115	155	177	218	231	324	388	412	489	559	586	702	722	836	864	824	793	*	*	*	*
	P_{GC}	77.9	130	142	218	242	332	360	443	617	683	811	1061	1121	1282	1332	*	*	*	*	*	*	*	*
	P_{GD}	108	180	195	296	330	452	485	632	850	936	1107	1412	1490	1756	1818	*	*	*	*	*	*	*	*
25	P_{GA}	31.9	43.3	50.1	66.2	75.2	86.9	92.8	109	130	128	150	153	160	*	*	*	*	*	*	*	*	*	*
	P_{GB}	66.7	96.6	110	151	170	209	223	307	375	395	466	537	585	681	732	833	881	841	844	*	*	*	*
	P_{GC}	73.6	122	135	208	232	310	347	408	590	632	762	970	1078	1181	1294	*	*	*	*	*	*	*	*
	P_{GD}	102	168	186	284	317	422	466	584	817	870	1045	1297	1440	1629	1780	*	*	*	*	*	*	*	*
28	P_{GA}	30.9	42.5	50	64.1	74.4	85	93.1	109	131	131	155	168	172	183	182	200	*	*	*	*	*	*	*
	P_{GB}	63.9	93.3	109	143	165	199	220	296	363	380	452	535	562	689	711	828	878	855	869	*	*	*	*
	P_{GC}	69.4	116	134	193	225	288	336	382	554	590	715	939	987	1157	1193	*	*	*	*	*	*	*	*
	P_{GD}	96.7	159	185	264	306	395	455	549	767	819	985	1265	1326	1605	1650	*	*	*	*	*	*	*	*
31.5	P_{GA}	29.4	40.7	47.8	61.7	72.7	82.7	90.7	106	129	131	154	170	183	190	199	216	227	*	*	*	*	*	*
	P_{GB}	60.7	88.5	103	136	160	190	210	282	344	365	430	508	558	658	712	799	863	831	871	*	*	*	*
	P_{GC}	65.2	108	126	180	215	271	312	356	508	550	658	857	952	1067	1165	*	*	*	*	*	*	*	*
	P_{GD}	90.8	149	175	247	292	370	424	514	709	766	912	1162	1288	1487	1620	*	*	*	*	*	*	*	*
35.5	P_{GA}	27.8	38.6	46.4	59.1	69.8	79.6	87.7	105	125	130	151	173	181	196	203	228	235	*	*	*	*	*	*
	P_{GB}	56.8	83	99.8	129	152	181	199	271	328	353	412	495	526	644	677	786	825	821	839	*	*	*	*
	P_{GC}	59.9	99.3	119	167	200	248	292	338	475	524	615	819	871	1021	1071	*	*	*	*	*	*	*	*
	P_{GD}	83.7	138	166	229	272	341	396	487	661	732	855	1114	1181	1429	1498	*	*	*	*	*	*	*	*
40	P_{GA}	24.3	33.7	44.3	52	67.1	75	84.4	100	121	125	147	168	180	194	204	226	240	208	*	*	*	*	*
	P_{GB}	49.4	71.6	94.6	112	144	168	191	255	310	334	392	469	510	614	657	747	805	783	822	*	*	*	*
	P_{GC}	50.5	82.7	111	138	187	224	274	310	440	484	574	758	829	954	1022	*	*	*	*	*	*	*	*
	P_{GD}	70.6	115	155	191	254	309	372	449	616	678	798	1035	1129	1339	1434	*	*	*	*	*	*	*	*
45	P_{GA}	23.8	32.9	41.8	50.8	64	69.4	80.8	93.2	118	117	144	160	176	187	203	221	240	207	206	*	*	*	*
	P_{GB}	48.3	69.8	88.5	108	137	154	180	234	298	306	377	434	484	572	629	700	765	733	785	*	*	*	*
	P_{GC}	49	79.7	102	133	172	202	251	280	417	435	544	684	768	868	960	*	*	*	*	*	*	*	*
	P_{GD}	68.7	111	142	183	236	279	342	407	585	607	760	936	1049	1221	1346	*	*	*	*	*	*	*	*
50	P_{GA}	24.2	33	36.8	50.7	56.9	69.3	77	95.8	115	124	142	174	174	210	204	240	247	260	232	*	*	*	*
	P_{GB}	48.7	69.2	76.9	106	119	151	169	232	281	310	358	445	453	593	594	690	730	799	757	*	*	*	*
	P_{GC}	49.1	77.7	85.8	129	144	194	228	274	384	433	506	692	696	884	880	*	*	*	*	*	*	*	*
	P_{GD}	68.5	108	119	177	197	269	312	396	539	610	709	944	956	1242	1240	*	*	*	*	*	*	*	*
56	P_{GA}	22.4	30.7	36.2	47.5	55.7	64.8	72	88.9	108	117	135	167	186	203	225	245	260	271	279	*	*	*	*
	P_{GB}	44.8	64	75.1	99.5	116	140	155	211	260	285	330	411	461	552	612	675	712	772	818	*	*	*	*
	P_{GC}	44.2	70.1	82.9	117	138	174	206	243	345	389	451	622	702	800	891	*	*	*	*	*	*	*	*
	P_{GD}	62.1	98.3	115	162	190	241	281	354	488	547	637	852	962	1128	1255	*	*	*	*	*	*	*	*
63	P_{GA}	21.6	29.5	36	46.1	55.2	62.8	71	86.3	108	114	138	162	173	199	211	243	256	272	275	*	*	*	*
	P_{GB}	43.2	61.6	74.2	96.2	114	135	151	203	255	275	332	393	422	529	563	654	689	752	776	*	*	*	*
	P_{GC}	41.9	66.2	80.8	111	134	164	197	229	335	366	451	585	627	755	805	*	*	*	*	*	*	*	*
	P_{GD}	58.9	93	112	154	185	229	269	334	471	517	633	802	862	1071	1133	*	*	*	*	*	*	*	*
71	P_{GA}	20	28.2	33.3	43.9	51.4	59	65.9	80.2	99.9	107	127	155	167	190	205	232	251	261	273	*	*	*	*
	P_{GB}	40	58.5	68.4	91.7	106	126	140	189	232	258	302	372	404	498	539	615	666	707	754	*	*	*	*
	P_{GC}	38	61.3	73	103	122	148	177	206	297	331	404	538	591	698	760	*	*	*	*	*	*	*	*
	P_{GD}	53.7	86.5	102	143	168	209	243	301	421	469	567	743	813	990	1075	*	*	*	*	*	*	*	*
80	P_{GA}			31.9		49.7		63.8		95.8		123		161		196		240		262		*		*
	P_{GB}			65.9		102		136		224		291		384		507		626		710		*		*
	P_{GC}			68.8		115		167		278		379		544		700		*		*		*		*
	P_{GD}			96.7		160		231		396		536		751		994		*		*		*		*
90	P_{GA}			30.5		47.4		60		89.6		115												
	P_{GB}			62.7		97.6		127		208		273												
	P_{GC}			63.8		107		151		249		343												
	P_{GD}			90.1		149		210		357		487												

★ 敬请垂询 其他说明见类型WSB2.

★ On request For additional notes, see type WSB2.

热容量
Thermal Capacity

n_1=1800 min^{-1}
类型 WSB3.. 规格 4-26

n_1=1800 min^{-1}
Type WSB3.. Sizes 4-26

热容量 P_G (kW) / Thermal capacities P_G (kW)

i_N		齿轮箱规格 / Gear unit sizes																							
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12.5	P_{GA}	39	48		70.4		82.9		*		*		*		*		*		*					
	P_{GB}	93.5	128		201		267		388		461		548		622		*		*					
	P_{GC}	103	165		288		420		574		863		1271		1465		*		*					
	P_{GD}	148	234		403		585		835		1199		1704		2009		*		*					
14	P_{GA}	38.4	47.7		70.6		84.9		*		*		*	*	*	*	*	*	*	*				
	P_{GB}	91.2	125		196		262		390		483		561	581	650	687	*	*	*	*				
	P_{GC}	100	160		279		410		568		882		1240	1296	1445	1556	*	*	*	*				
	P_{GD}	143	226		390		570		826		1231		1674	1750	1996	2141	*	*	*	*				
16	P_{GA}	36.8	46.7	53.1	68.5	76.8	85.1	90.8	89.8	*	*	*	*	*	*	*	*	*	*	*				
	P_{GB}	86.9	121	138	187	212	258	281	375	419	450	513	568	575	671	658	*	*	*	*				
	P_{GC}	95.9	154	171	266	295	399	448	542	701	807	909	1226	1252	1440	1446	*	*	*	*				
	P_{GD}	136	218	241	372	410	555	618	787	986	1128	1268	1662	1691	2000	1994	*	*	*	*				
18	P_{GA}	35.9	45.9	52.2	67.4	75.5	84.4	86.1	93.1	*	*	*	*	*	*	*	*	*	*	*				
	P_{GB}	84.5	118	134	182	207	250	261	371	426	462	527	560	586	669	714	*	*	*	*				
	P_{GC}	93	149	164	256	287	386	414	534	706	819	921	1190	1248	1395	1513	*	*	*	*				
	P_{GD}	132	212	233	360	400	539	570	776	995	1146	1289	1610	1687	1946	2096	*	*	*	*				
20	P_{GA}	34.1	44.5	51	65.7	73.3	82.9	90.8	93.3	96	*	*	*	*	*	*	*	*	*	*		*		*
	P_{GB}	79.9	113	129	175	198	241	270	358	401	440	489	555	577	668	681	761	*	622	*		*		*
	P_{GC}	88	143	159	246	271	371	425	511	657	771	844	1154	1199	1360	1399	*	*	*	*		*		*
	P_{GD}	125	203	225	344	379	519	588	743	926	1081	1182	1566	1628	1900	1949	*	*	*	*		*		*
22.4	P_{GA}	33.6	44.3	50.1	64.6	72.7	82.7	86.2	93.7	102	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	77.9	112	126	170	193	237	250	343	407	426	503	554	573	673	681	774	789	661	576	*	*	*	*
	P_{GC}	85.7	142	155	238	263	361	390	476	659	725	858	1104	1161	1318	1360	*	*	*	*	*	*	*	*
	P_{GD}	122	202	219	331	368	504	539	697	932	1019	1203	1507	1582	1851	1902	*	*	*	*	*	*	*	*
25	P_{GA}	32.3	43	49.4	64.6	72.5	82.8	87.2	97.2	110	102	116	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	74.1	106	122	165	186	228	243	329	398	414	486	544	587	674	714	803	840	732	688	*	*	*	*
	P_{GC}	80.9	134	148	227	254	337	377	440	634	675	813	1020	1128	1229	1339	*	*	*	*	*	*	*	*
	P_{GD}	115	189	209	319	355	471	520	647	901	954	1143	1399	1546	1738	1890	*	*	*	*	*	*	*	*
28	P_{GA}	31.4	42.6	49.9	63.4	72.9	82.5	89.4	100	117	112	130	*	*	*	*	*	*	*	*	*	*	*	*
	P_{GB}	71.1	103	121	157	182	218	240	320	390	404	479	554	577	700	716	826	869	794	773	*	*	*	*
	P_{GC}	76.5	127	147	211	246	315	367	414	598	635	767	998	1044	1218	1251	*	*	*	*	*	*	*	*
	P_{GD}	109	179	209	296	344	442	509	611	851	903	1085	1378	1440	1734	1776	*	*	*	*	*	*	*	*
31.5	P_{GA}	30.1	41	48	61.6	72	81.3	88.4	100	118	116	135	137	142	*	*	*	*	*	*	*	*	*	*
	P_{GB}	67.6	98.1	114	150	177	209	230	306	371	391	460	534	582	681	731	814	874	802	815	*	*	*	*
	P_{GC}	71.8	119	139	198	236	297	341	387	551	594	710	916	1015	1133	1233	*	*	*	*	*	*	*	*
	P_{GD}	102	169	197	278	328	415	476	573	788	849	1009	1274	1409	1619	1759	*	*	*	*	*	*	*	*
35.5	P_{GA}	28.5	39.1	46.9	59.4	69.7	78.9	86.3	100	118	119	137	146	149	155	155	*	*	*	*	*	*	*	*
	P_{GB}	63.3	92.1	110	142	168	199	219	296	356	381	443	525	555	674	705	813	849	813	810	*	*	*	*
	P_{GC}	66.1	109	131	184	219	272	320	369	516	568	666	880	933	1091	1141	*	*	*	*	*	*	*	*
	P_{GD}	94.6	155	187	258	306	384	445	544	738	814	949	1228	1299	1566	1636	*	*	*	*	*	*	*	*
40	P_{GA}	25	34.2	44.9	52.4	67.2	74.7	83.6	97	115	116	136	146	153	160	164	175	*	*	*	*	*	*	*
	P_{GB}	55.1	79.6	105	124	160	186	211	279	337	362	424	500	541	647	690	779	836	786	808	*	*	*	*
	P_{GC}	55.7	91	123	152	205	246	300	339	480	526	623	816	891	1022	1092	*	*	*	*	*	*	*	*
	P_{GD}	79.8	129	175	215	286	348	418	503	688	755	888	1144	1245	1472	1572	*	*	*	*	*	*	*	*
45	P_{GA}	24.5	33.5	42.5	51.3	64.4	69.5	80.4	90.8	113	110	134	142	154	159	169	179	190	*	*	*	*	*	*
	P_{GB}	53.9	77.7	98.4	120	151	170	199	257	326	333	409	465	517	607	665	737	801	746	785	*	*	*	*
	P_{GC}	54.1	87.8	113	147	190	222	275	306	454	473	592	739	828	933	1029	*	*	*	*	*	*	*	*
	P_{GD}	77.7	125	161	206	265	314	384	457	655	677	847	1037	1160	1346	1481	*	*	*	*	*	*	*	*
50	P_{GA}	24.9	33.9	37.7	51.7	57.8	70.2	77.7	95.2	113	120	138	163	161	191	184	212	216	206	*	*	*	*	*
	P_{GB}	54.4	77.1	85.7	118	132	167	188	256	310	340	392	483	491	640	639	739	780	837	783	*	*	*	*
	P_{GC}	54.2	85.7	94.6	142	158	213	250	300	421	473	552	752	755	958	951	*	*	*	*	*	*	*	*
	P_{GD}	77.5	122	135	200	223	303	352	445	606	684	794	1053	1064	1380	1376	*	*	*	*	*	*	*	*
56	P_{GA}	23.1	31.6	37.2	48.7	57	66.1	73.2	89.4	108	116	133	161	179	193	211	229	240	236	234	*	*	*	*
	P_{GB}	50	71.4	83.7	110	129	156	173	234	288	314	363	450	504	601	665	731	771	823	866	*	*	*	*
	P_{GC}	48.9	77.4	91.4	129	152	192	227	267	379	426	494	680	766	871	969	*	*	*	*	*	*	*	*
	P_{GD}	70.3	111	130	183	215	272	318	398	549	614	716	954	1076	1260	1401	*	*	*	*	*	*	*	*
63	P_{GA}	22.3	30.4	37.1	47.3	56.6	64.2	72.5	87.3	108	114	137	158	168	192	202	231	242	244	240	*	*	*	*
	P_{GB}	48.3	68.7	82.9	107	127	150	168	226	283	303	367	431	463	579	615	712	750	808	828	*	*	*	*
	P_{GC}	46.3	73.1	89.2	123	147	181	217	252	368	401	494	639	685	824	877	*	*	*	*	*	*	*	*
	P_{GD}	66.7	105	127	174	210	259	304	377	531	582	712	899	966	1198	1267	*	*	*	*	*	*	*	*
71	P_{GA}	20.7	29.1	34.3	45.2	52.7	60.4	67.4	81.3	100	107	127	153	163	184	198	222	239	238	243	*	*	*	*
	P_{GB}	44.8	65.3	76.3	102	118	141	156	210	257	285	334	409	444	546	590	671	726	763	808	*	*	*	*
	P_{GC}	42	67.7	80.6	113	134	163	195	226	327	363	443	589	647	763	830	*	*	*	*	*	*	*	*
	P_{GD}	60.8	97.9	115	162	190	236	275	340	474	528	638	834	912	1109	1204	*	*	*	*	*	*	*	*
80	P_{GA}			32.9		51.1		65.3		96.9		123		158		190		231		237		*		*
	P_{GB}			73.6		114		151		248		323		423		556		684		764		*		*
	P_{GC}			76		127		184		305		417		595		765		*		*		*		*
	P_{GD}			109		182		261		447		604		843		1114		*		*		*		*
90	P_{GA}			31.5		48.8		61.5		90.9		116												
	P_{GB}			70		108		142		231		302												
	P_{GC}			70.5		118		166		274		377												
	P_{GD}			102		168		238		403		549												

★ 敬请垂询 其他说明见类型WSB2.

★ On request For additional notes, see type WSB2.

额定功率

Power Rating

类型 WSB4.. 规格 5-26　　Type WSB4.. Sizes 5-26

额定功率 P_{2N} (kW) / Nominal power ratings P_{2N} (kW)

i_N	n_1	n_2	齿轮箱规格 / Gear unit sizes																						
			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
80	1800	23	27		52		85		148		218		368		481		722 *		1011 *		1348 *		1926 *	
	1500	18.8	22		42		70		121		178		301		393		590		826		1102		1574	
	1200	15	18		34		56		96		142		240		314		471		659		879		1256	
	1000	12.5	15		28		46		80		118		200		261		392		549		732		1047	
90	1800	20	24		45		74		129		189		320	362	418	502	628 *	722 *	879 *	984 *	1172 *	1340 *	1675 *	1884 *
	1500	16.7	20		37		62		107		158		267	302	349	419	524	603	734	821	979	1119	1398	1573
	1200	13.3	16		30		49		85		126		213	240	278	334	417	480	584	654	779	891	1114	1253
	1000	11.1	13		25		41		71		105		177	201	232	278	348	400	488	546	650	743	929	1046
100	1800	18	21	29	40	51	67	83	116	147	170	212	288	326	376	452	565 *	650 *	791 *	885 *	1055 *	1206 *	1507 *	1696 *
	1500	15	18	24	34	42	56	69	96	122	142	177	240	271	314	376	471	541	659	738	879	1005	1256	1413
	1200	12	14	19	27	34	44	55	77	98	113	141	192	217	251	301	376	433	527	590	703	804	1005	1130
	1000	10	12	16	22	28	37	46	64	81	94	118	160	181	209	251	314	361	439	492	586	670	837	942
112	1800	16.1	19	26	36	45	60	74	103	131	152	190	257	291	337	404	505 *	581 *	708 *	792 *	944 *	1078 *	1348 *	1517 *
	1500	13.4	16	21	30	38	50	62	86	109	127	158	214	242	280	336	420	484	589	659	785	898	1122	1262
	1200	10.7	12	17	24	30	39	49	69	87	101	126	171	193	224	268	336	386	470	526	627	717	896	1008
	1000	8.9	10	14	20	25	33	41	57	72	84	105	142	161	186	223	279	321	391	438	521	596	745	838
125	1800	14.4	17	23	32	41	53	66	92	117	136	170	230	260	301	361	452 *	520 *	633 *	708 *	844 *	965 *	1206 *	1357 *
	1500	12	14	19	27	34	44	55	77	98	113	141	192	217	251	301	376	433	527	590	703	804	1005	1130
	1200	9.6	11	15	21	27	35	44	61	78	91	113	153	173	201	241	301	346	422	472	562	643	804	904
	1000	8	9.7	12	18	22	29	37	51	65	75	94	128	144	167	201	251	289	351	393	469	536	670	753
140	1800	12.9	15	20	29	36	48	59	83	105	122	152	206	233	270	324	405 *	466 *	567 *	634 *	756 *	864 *	1080 *	1215 *
	1500	10.7	12	17	24	30	39	49	69	87	101	126	171	193	224	268	336	386	470	526	627	717	896	1008
	1200	8.6	10	13	19	24	32	39	55	70	81	101	137	155	180	216	270	310	378	423	504	576	720	810
	1000	7.1	8.6	11	16	20	26	32	45	57	67	84	113	128	148	178	223	256	312	349	416	475	594	669
160	1800	11.3	13	18	25	32	42	52	72	92	107	133	181	204	236	283	354 *	408 *	496 *	556 *	662 *	757 *	946 *	1064 *
	1500	9.4	11	15	21	26	35	43	60	76	89	111	150	170	196	236	295	339	413	462	551	629	787	885
	1200	7.5	9.1	12	17	21	28	34	48	61	71	88	120	135	157	188	235	270	329	369	439	502	628	706
	1000	6.3	7.6	10	14	17	23	29	40	51	59	74	100	114	131	158	197	227	277	310	369	422	527	593
180	1800	10	12	16	22	28	37	46	64	81	94	118	160	181	209	251	314 *	361 *	439 *	492 *	586 *	670 *	837 *	942 *
	1500	8.3	10	13	18	23	31	38	53	67	78	98	132	150	173	208	260	299	365	408	486	556	695	782
	1200	6.7	8.1	10	15	19	25	31	43	54	63	79	107	121	140	168	210	242	294	329	392	449	561	631
	1000	5.6	6.8	9	12	15	20	25	36	45	53	66	89	101	117	140	175	202	246	275	328	375	469	527
200	1800	9	10	14	20	25	33	41	58	73	85	106	144	163	188	226	282 *	325 *	395 *	442 *	527 *	603 *	753 *	848 *
	1500	7.5	9.1	12	17	21	28	34	48	61	71	88	120	135	157	188	235	270	329	369	439	502	628	706
	1200	6	7.2	9.7	13	17	22	27	38	49	56	70	96	108	125	150	188	216	263	295	351	402	502	565
	1000	5	6	8.1	11	14	18	23	32	40	47	59	80	90	104	125	157	180	219	246	293	335	418	471
224	1800	8	9.7	12	18	22	29	37	51	65	75	94	128	144	167	201	251 *	289 *	351 *	393 *	469 *	536 *	670 *	753 *
	1500	6.7	8.1	10	15	19	25	31	43	54	63	79	107	121	140	168	210	242	294	329	392	449	561	631
	1200	5.4	6.5	8.7	12	15	20	24	34	44	51	63	86	97	113	135	169	195	237	265	316	361	452	508
	1000	4.5	5.4	7.3	10	12	16	20	29	36	42	53	72	81	94	113	141	162	197	221	263	301	376	424
250	1800	7.2	8.7	11	16	20	26	33	46	58	68	85	115	130	150	180	226 *	260 *	316 *	354 *	422 *	482 *	603 *	678 *
	1500	6	7.2	9.7	13	17	22	27	38	49	56	70	96	108	125	150	188	216	263	295	351	402	502	565
	1200	4.8	5.8	7.7	10	13	17	22	30	39	45	56	76	86	100	120	150	173	211	236	281	321	402	452
	1000	4	4.8	6.4	9	11	14	18	25	32	37	47	64	72	83	100	125	144	175	196	234	268	335	376
280	1800	6.4	7.7	10	14	18	23	29	41	52	60	75	102	115	134	160	201 *	231 *	281 *	314 *	375 *	428 *	536 *	603 *
	1500	5.4	6.5	8.7	12	15	19	24	34	44	51	63	86	97	113	135	169	195	237	265	316	361	452	508
	1200	4.3	5.2	6.9	9.7	12	15	19	27	35	40	50	68	77	90	108	135	155	189	211	252	288	360	405
	1000	3.6	4.3	5.8	8.1	10	13	16	23	29	34	42	57	65	75	90	113	130	158	177	211	241	301	339
315	1800	5.7	6.6	9.2	12	16	20	26	35	46	54	67	91	103	119	143	179 *	205 *	250 *	280 *	334 *	381 *	477 *	537 *
	1500	4.8	5.6	7.7	10	13	17	22	30	39	45	56	76	86	100	120	150	173	211	236	281	321	402	452
	1200	3.8	4.4	6.1	8.1	10	13	17	23	31	36	44	60	68	79	95	119	137	167	187	222	254	318	358
	1000	3.2	3.7	5.1	6.8	9.1	11	14	20	26	30	37	51	57	67	80	100	115	140	157	187	214	268	301
355	1800	5.1		8.2		14		23		41		60		92		128		184 *		250 *		341 *		480 *
	1500	4.2		6.8		11		19		34		49		76		105		151		206		281		395
	1200	3.4		5.5		9.4		15		27		40		61		85		122		167		227		320
	1000	2.8		4.5		7.7		12		22		33		50		70		101		137		187		263
400	1800	4.5		6.8		12		20		35		53												
	1500	3.8		5.7		10		17		29		44												
	1200	3		4.5		8		13		23		35												
	1000	2.5		3.7		6.6		11		19		29												

卧式安装齿轮箱应采用强制润滑

* 请与我们联系

Forced lubrication required on horizontal gear units

* Gear units only on request

额定输出扭矩

Rated Output Torque

类型 WSB4.. 规格 5-26　　Type WSB4.. Sizes 5-26

额定输出扭矩 T_{2N} (kNm)
Nominal output torques T_{2N} (kNm)

i_N	齿轮箱规格 / Gear unit sizes																							
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5	6.1	9.4		19		29.9		46.0		68.6		122											
5.6	6.2	9.4		19		29.9		48.1		69.6		122	135	195									
6.3	6.2	9.4	12	19	23.8	29.9	38	50.2	58.8	73.8	85.2	130	141	195									
7.1	6.2	9.4	12	19	23.8	29.9	38	52.4	60.9	75.9	87.8	132	145	195	230								
8	6.2	9.4	12	19	23.8	29.9	38	54	63.1	80	91.5	132	148	195	230								
9	6.2	9.4	12	19	23.8	29.9	38	54	65.2	81.1	94.6	132	148	195	230								
10	6.2	9.4	12	19	23.8	29.9	38	54	66.3	81.1	98.8	132	148	195	230								
11.2	6.2	9.4	12	19	23.8	29.9	38	54	66.3	81.1	101	132	148	195	230								
12.5	5.5	9.4	12	17	23.8	28	38	52.4	66.3	79.5	101	132	148	195	230	250		340					
14	6	9.8	12	18.2	23.8	29.5	38	56.7	66.3	81.6	101	137	148	195	230	262	295	360	405				
16	6.6	10.5	12	19.8	21.5	31	35.6	59.9	66.3	83.8	99.4	142	154	200	230	275	308	380	422				
18	6.7	11.3	12.6	21.1	23.1	33.9	37.5	62	69.5	86.7	102	148	160	200	240	288	320	400	438				
20	6.7	11.6	13.2	21.7	25	35.7	39.3	63.5	72.7	90.7	105	153	167	200	240	300	332	420	455	560		800	
22.4	6.7	11.6	14.2	21.7	26.5	35.7	41.8	63.5	75.6	90.7	108	153	173	200	240	300	345	420	470	560	640	800	900
25	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
28	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
31.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
35.5	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
40	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
45	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
50	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
56	6.7	11.6	15.5	21.7	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
63	6.6	11.4	15.5	21.4	27.2	35.7	43.8	63.5	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
71	6.6	11	15.5	20	27.2	34	43.8	60	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
80		11.6	14	21.7	26.9	35.7	43.8	61.6	77.2	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
90		11.6	14	21.7	25.2	35.7	43	61.6	75	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
100		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
112		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
125		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
140		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
160		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
180		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
200		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
224		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
250		11.6	15.5	21.7	27.2	35.7	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
280		11.6	15.5	21.7	27.2	35.3	44.2	61.6	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
315		11.2	15.5	20.5	27.2	34	44.2	60	78	90.7	113	153	173	200	240	300	345	420	470	560	640	800	900
355			15.5		26.5		44.2		78		113		173		240		345		470		640		900
400			14.5		25.5		43		75		113												

WSB2
WSB3

热容量
Thermal Capacity

n_1=1000 min^{-1}
类型 WSB4.. 规格 5-26

n_1=1000 min^{-1}
Type WSB4.. Sizes 5-26

热容量 P_G (kW) / Thermal capacities P_G (kW)																								
i_N		齿轮箱规格 / Gear unit sizes																						
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
80	P_{GA}	28.6		42.4		60		90.6		121		162		183		250		351		*		*	
90	P_{GA}	27.9		41		58.6		87.9		118		155	167	175	188	240	256	339	355	*	*	*	*
100	P_{GA}	26.6	30.6	38.8	45.3	55.6	60.4	84.4	101	112	130	146	160	164	180	227	246	319	344	*	*	*	*
112	P_{GA}	25.6	29.9	37.4	44	53.5	59	80.4	97.6	107	126	139	151	157	169	216	232	309	322	*	*	*	*
125	P_{GA}	24.5	28.6	35.7	41.6	51	56	77	93.2	102	119	132	144	149	161	205	221	291	313	*	*	*	*
140	P_{GA}	23.4	27.5	33.9	40.1	48.1	53.9	72.8	88.8	97.6	114	128	137	144	154	198	211	281	294	*	*	*	*
160	P_{GA}	21.5	26.3	30.9	38.2	44	51.3	66.4	85.1	92.4	110	121	132	136	148	187	203	265	284	*	*	*	*
180	P_{GA}	21.1	25.1	30.1	36.4	42.9	48.7	64.6	80.6	87.2	103	114	124	128	139	175	191	248	269	*	*	*	*
200	P_{GA}	20.4	23.1	29.9	33.2	42	44.6	63.2	73.6	85.2	98.5	112	117	126	132	174	179	240	251	*	*	*	*
224	P_{GA}	19	22.7	27.8	32.4	39.3	43.4	59.4	71.8	79.9	93.2	105	116	117	130	163	179	224	243	*	*	*	*
250	P_{GA}	18.5	21.8	26.9	32.1	37.9	42.5	57.5	70.1	77.3	90.6	102	108	114	122	158	168	217	227	*	*	*	*
280	P_{GA}	17.6	20.4	25.2	30	36.1	39.8	55	65.8	73	85.2	95	104	107	117	148	161	207	220	*	*	*	*
315	P_{GA}	16.5	19.8	23.6	28.8	33.9	38.4	51.3	63.7	69.6	82.4	89.7	98.5	101	110	140	153	193	210	*	*	*	*
355	P_{GA}		19		27.1		36.6		60.8		77.8		92.4		104		144		196		*		*
400	P_{GA}		17.7		25.4		34.5		56.7		74.1												

n_1=1200 min^{-1}
类型 WSB4.. 规格 5-26

n_1=1200 min^{-1}
Type WSB4.. Sizes 5-26

热容量 P_G (kW) / Thermal capacities P_G (kW)																								
i_N		齿轮箱规格 / Gear unit sizes																						
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
80	P_{GA}	30.5		45.1		63.5		94.9		125		165		183		248		334		*		*	
90	P_{GA}	29.9		43.7		62.2		92.3		123		159	170	176	189	240	255	327	336	*	*	*	*
100	P_{GA}	28.5	32.7	41.4	48.2	59.1	64.1	88.9	106	117	135	150	163	167	182	228	247	311	330	*	*	*	*
112	P_{GA}	27.5	32	39.9	46.9	56.9	62.7	84.9	102	112	132	144	155	161	173	219	235	306	314	*	*	*	*
125	P_{GA}	26.3	30.6	38.2	44.4	54.4	59.7	81.5	98.4	108	125	138	149	154	166	210	226	291	309	*	*	*	*
140	P_{GA}	25.1	29.5	36.3	42.9	51.4	57.5	77.3	94.1	103	120	134	143	149	159	204	217	284	294	*	*	*	*
160	P_{GA}	23.1	28.2	33.2	41	47	54.9	70.7	90.4	97.8	116	127	138	142	155	194	210	271	288	*	*	*	*
180	P_{GA}	22.7	27	32.4	39	46	52.2	69	85.9	92.8	110	120	131	135	146	183	200	256	276	*	*	*	*
200	P_{GA}	21.9	24.9	32.1	35.7	45.1	47.8	67.7	78.7	91	105	119	125	134	140	183	189	251	261	*	*	*	*
224	P_{GA}	20.4	24.4	30	34.9	42.3	46.7	63.8	77	85.6	99.8	112	123	125	138	174	190	237	256	*	*	*	*
250	P_{GA}	20	23.5	29	34.6	40.8	45.8	61.9	75.4	83.1	97.4	109	116	122	131	169	180	232	243	*	*	*	*
280	P_{GA}	19	22	27.2	32.3	39	43	59.3	71	78.8	92	102	113	115	127	160	174	224	237	*	*	*	*
315	P_{GA}	17.8	21.4	25.5	31.1	36.6	41.5	55.4	68.7	75.2	89	96.9	106	109	119	152	165	209	227	*	*	*	*
355	P_{GA}		20.5		29.2		39.6		65.6		84		99.7		113		155		211		*		*
400	P_{GA}		19.1		27.4		37.3		61.2		80												

* 敬请垂询
P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

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

* On request
P_{GA} (kW) Gear units without auxiliary cooling **)

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

热容量
Thermal Capacity

n_1=1500 min^{-1}
类型 WSB4.. 规格 5-26

n_1=1500 min^{-1}
Type WSB4.. Sizes 5-26

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

n_1=1800 min^{-1}
类型 WSB4.. 规格 5-26

n_1=1800 min^{-1}
Type WSB4.. Sizes 5-26

热容量 P_G (kW) / Thermal capacities P_G (kW)																								
i_N		齿轮箱规格 / Gear unit sizes																						
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
80	P_{GA}	33		48.6		68.1		100		130		168		184		245		312		*		*	
90	P_{GA}	32.3		47.2		66.8		97.9		129		163	173	178	190	239	253	311	311	*	*	*	*
100	P_{GA}	30.9	35.4	44.8	52	63.6	68.8	94.7	112	123	142	155	168	170	185	230	247	301	312	*	*	*	*
112	P_{GA}	29.8	34.7	43.2	50.6	61.4	67.5	90.7	109	118	139	150	161	165	177	223	238	300	302	*	*	*	*
125	P_{GA}	28.5	33.2	41.4	48	58.8	64.3	87.3	105	114	133	144	155	160	171	216	231	290	303	*	*	*	*
140	P_{GA}	27.3	32	39.4	46.5	55.6	62.2	83.1	100	109	128	141	150	156	166	212	224	288	294	*	*	*	*
160	P_{GA}	25.2	30.7	36.1	44.5	51	59.5	76.2	97.2	104	124	135	146	150	162	204	220	278	292	*	*	*	*
180	P_{GA}	24.7	29.4	35.2	42.5	50	56.6	74.6	92.6	99.8	118	129	140	143	155	194	211	266	285	*	*	*	*
200	P_{GA}	23.9	27.1	35	38.9	49.1	52	73.4	85.2	98.3	113	128	134	143	150	196	201	264	274	*	*	*	*
224	P_{GA}	22.3	26.7	32.7	38.1	46.1	50.9	69.5	83.7	92.9	108	121	133	135	149	187	205	253	273	*	*	*	*
250	P_{GA}	21.8	25.7	31.7	37.8	44.6	50.1	67.6	82.3	90.6	106	119	126	133	142	184	195	251	262	*	*	*	*
280	P_{GA}	20.9	24.1	29.8	35.4	42.7	47.1	65	77.7	86.3	100	112	123	126	139	175	191	245	260	*	*	*	*
315	P_{GA}	19.5	23.5	27.9	34.1	40.1	45.4	60.7	75.2	82.3	97.4	106	116	119	131	166	180	228	248	*	*	*	*
355	P_{GA}		22.4		32		43.3		71.8		92		109		123		170		231		*		*
400	P_{GA}		21		30		40.8		67		87.6												

* 敬请垂询
P_{GA} (kW) 齿轮箱不带辅助冷却装置 **)

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

* On request
P_{GA} (kW) Gear units without auxiliary cooling **)

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

实际传动比

Actual Transmission Ratio

类型 WSH1..,WSH2..,WSH3..,WSH4.. 规格 3-14　　Type WSWSH1..,WSH2..,WSH3..,WSH4.. Sizes 3-14

实际传动比 i / Actual ratios i												
i_N	齿轮箱规格 / Gear unit sizes											
	3	4	5	6	7	8	9	10	11	12	13	14
1.25	1.243	–	1.256	–	1.263	–	1.270	–	–	–	–	–
1.4	1.371	–	1.378	–	1.389	–	1.400	–	–	–	–	–
1.6	1.594	–	1.588	–	1.606	–	1.625	–	1.636	–	1.588	–
1.8	1.829	–	1.839	–	1.774	–	1.800	–	1.806	–	1.839	–
2.0	2.000	–	2.034	–	1.966	–	2.000	–	2.000	–	2.034	–
2.24	2.194	–	2.259	–	2.308	–	2.231	–	2.222	–	2.259	–
2.5	2.536	–	2.520	–	2.583	–	2.500	–	2.480	–	2.520	–
2.8	2.808	–	2.826	–	2.800	–	2.741	–	2.783	–	2.826	–
3.15	3.125	–	3.190	–	3.130	–	3.208	–	3.080	–	3.208	–
3.55	3.500	–	3.591	–	3.524	–	3.591	–	3.478	–	3.591	–
4.0	3.950	–	4.050	–	4.000	–	4.050	–	3.905	–	4.050	–
4.5	4.435	–	4.619	–	4.400	–	4.381	–	4.421	–	4.619	–
5.0	4.952	–	4.900	–	4.905	–	4.947	–	5.150	–	4.900	–
5.6	5.579	–	5.556	–	5.526	–	5.684	–	5.474	–	5.556	–
6.3	–	6.319	6.286	–	6.088	–	6.260	–	6.246	–	6.410	–
7.1	–	6.857	7.213	–	7.048	–	7.247	–	6.900	–	7.100	–
8.0	–	7.778	7.889	7.792	7.799	7.676	8.018	7.848	7.644	7.941	7.889	7.944
9.0	–	8.485	8.652	8.940	8.660	8.887	8.904	9.085	8.974	8.772	8.799	8.800
10	–	9.722	10.002	9.778	9.660	9.833	9.932	10.053	10.046	9.718	9.861	9.778
11.2	–	10.694	11.075	10.724	10.648	10.920	11.138	11.163	10.889	11.410	10.811	10.906
12.5	–	12.444	12.326	12.397	11.807	12.180	12.574	12.452	12.174	12.773	12.655	12.222
14	–	13.865	13.806	13.726	13.939	13.426	14.152	13.964	13.704	13.844	14.164	13.399
16	–	15.556	15.581	15.278	15.717	14.887	15.962	15.765	15.556	15.478	15.975	15.685
18	–	17.602	17.493	17.111	17.598	17.576	18.204	17.743	17.111	17.423	17.280	17.556
20	–	19.444	19.534	19.311	19.742	19.817	19.312	20.012	19.074	19.778	19.515	19.800
22.4	–	22.037	22.006	21.681	20.982	22.189	21.895	22.824	21.491	21.756	22.020	21.418
25	–	–	25.011	24.212	25.540	24.892	25.439	24.212	24.706	24.251	25.372	24.187
28	–	–	28.490	27.275	27.711	26.456	29.187	27.451	28.602	27.325	29.373	27.292
31.5	–	–	31.161	30.999	31.433	32.202	31.924	31.894	31.648	31.412	32.501	31.447
35.5	–	–	34.177	35.312	34.291	34.940	35.013	36.593	35.144	36.366	36.092	36.406
40	–	–	39.508	38.622	39.292	39.633	40.474	40.024	39.200	40.238	40.257	40.283
45	–	–	43.745	42.360	43.221	43.236	44.816	43.897	43.210	44.683	45.147	44.733
50	–	–	48.689	48.967	50.293	49.542	49.881	50.744	47.911	49.840	50.968	49.896
56	–	–	54.532	54.220	56.033	54.496	55.866	56.187	56.566	54.938	57.365	55.957
63	–	–	61.543	60.347	62.867	63.413	63.049	62.537	63.778	60.916	64.699	63.171
71	–	–	69.742	67.589	71.139	70.651	70.787	70.041	71.414	71.919	73.789	71.100
80	–	–	78.723	76.279	78.583	79.267	79.049	79.046	80.111	81.089	78.278	80.190
90	–	–	86.806	86.440	89.061	89.696	89.050	88.748	85.146	90.798	88.750	91.457
100	–	–	–	97.572	101.554	99.083	101.210	99.106	103.639	101.856	103.114	97.020
112	–	–	–	107.590	115.256	112.294	115.290	111.645	112.450	108.257	118.306	110.000
125	–	–	–	–	125.733	128.046	126.098	126.890	127.556	131.769	129.398	127.803
140	–	–	–	–	143.985	145.322	138.301	144.542	139.152	142.973	141.920	146.633
160	–	–	–	–	158.251	158.533	159.874	158.093	159.444	162.178	164.058	160.380
180	–	–	–	–	174.630	181.546	177.022	173.392	175.389	176.921	181.654	175.901
200	–	–	–	–	193.629	199.533	197.028	200.439	204.089	202.722	202.184	203.339
224	–	–	–	–	228.606	220.185	220.671	221.938	227.382	222.994	226.446	225.149
250	–	–	–	–	257.753	244.141	249.043	247.020	255.111	259.484	255.560	250.594
280	–	–	–	–	288.615	288.242	282.219	276.663	288.678	289.100	286.925	280.665
315	–	–	–	–	305.352	324.993	318.563	312.234	318.889	324.356	320.413	316.751
355	–	–	–	–	344.112	363.906	351.273	353.827	361.407	367.034	360.951	355.625
400	–	–	–	–	–	385.010	–	399.393	–	405.444	–	397.131
450	–	–	–	–	–	433.881	–	440.402	–	459.504	–	447.376

WSH1
WSH2
WSH3
WSH4

实际传动比

Actual Transmission Ratio

类型 WSH1..,WSH2..,WSH3..,WSH4.. 规格 15-26　　Type WSWSH1..,WSH2..,WSH3..,WSH4.. Sizes 15-26

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

实际传动比

Actual Transmission Ratio

类型 WSB2..,WSB3..,WSB4.. 规格 4-14　　Type WSB2..,WSB3..,WSB4.. Sizes 4-14

实际传动比 i / Actual ratios i											
i_N	齿轮箱规格 / Gear unit sizes										
	4	5	6	7	8	9	10	11	12	13	14
5.0	4.936	5.006	–	4.865	–	5.002	–	4.897	–	4.967	–
5.6	5.480	5.488	–	5.333	–	5.483	–	5.534	–	5.613	–
6.3	6.296	6.386	6.205	6.206	6.135	6.381	6.271	6.296	6.226	6.386	6.156
7.1	6.959	7.058	6.802	6.860	6.725	7.053	6.875	7.037	7.036	7.138	6.957
8.0	7.549	7.657	7.915	7.880	7.825	8.101	8.000	7.994	8.005	8.108	7.915
9.0	8.693	8.817	8.749	8.569	8.649	8.810	8.842	8.693	8.947	8.817	8.847
10	9.872	10.108	9.490	9.823	9.935	10.099	10.157	9.965	10.164	10.108	10.049
11.2	10.769	10.923	10.928	10.615	10.804	10.914	11.045	10.769	11.052	10.923	10.928
12.5	12.034	12.703	12.528	12.433	12.385	12.554	12.662	12.334	12.670	12.482	12.528
14	13.484	13.964	13.538	13.515	13.385	14.137	13.683	13.821	13.692	13.721	13.538
16	15.601	15.835	15.826	16.275	15.773	15.952	15.693	15.522	15.888	16.354	15.552
18	17.482	17.407	17.307	17.692	17.041	17.963	17.724	17.393	17.572	17.978	17.007
20	19.614	19.645	19.729	19.948	20.648	20.259	19.940	19.744	19.995	20.276	20.376
22.4	21.919	21.954	21.575	22.146	22.308	22.208	22.520	21.643	22.114	22.226	22.282
25	25.380	25.421	24.349	25.446	25.152	25.843	25.400	25.185	25.103	25.864	25.131
28	27.836	27.881	27.211	28.125	27.923	28.563	27.842	27.836	27.517	28.587	27.548
31.5	30.196	30.245	31.508	30.509	32.084	30.985	32.400	31.975	32.021	32.838	32.057
35.5	34.771	34.827	34.557	35.131	35.461	35.679	35.811	34.771	35.392	35.709	35.432
40	39.487	39.551	37.486	39.896	38.468	40.902	38.846	39.861	40.654	40.936	40.700
45	43.077	43.146	43.166	43.523	44.296	44.202	44.732	43.077	44.209	44.238	44.259
50	49.060	49.139	49.021	49.568	50.304	50.341	51.280	49.060	50.681	50.383	50.737
56	55.152	55.240	53.477	55.723	54.877	56.592	55.417	55.152	54.769	56.639	54.831
63	60.808	60.906	60.904	61.438	62.499	62.396	63.114	60.808	62.376	62.448	62.446
71	69.293	69.404	68.467	70.011	70.259	71.102	70.951	69.293	70.121	71.161	70.200
80	–	77.598	75.489	79.267	77.465	79.497	78.228	80.949	77.313	82.118	77.400
90	–	86.720	86.022	88.585	88.274	88.842	89.143	89.869	88.101	90.016	88.200
100	–	100.413	96.178	102.572	99.945	102.869	99.667	103.259	102.921	104.750	101.780
112	–	110.130	107.484	112.498	111.694	112.824	111.384	114.129	114.262	115.777	111.569
125	–	119.466	124.455	122.035	129.330	122.389	128.971	123.804	131.287	125.592	129.831
140	–	137.567	136.499	140.525	141.846	140.933	141.452	142.562	145.106	144.621	143.498
160	–	156.225	148.071	159.585	153.871	160.047	153.443	161.897	157.408	165.791	155.663
180	–	170.427	170.506	174.092	177.184	174.597	176.692	176.615	181.258	179.166	179.248
200	–	194.098	193.631	198.272	201.215	198.847	200.656	201.145	205.841	204.050	205.487
224	–	218.199	211.234	222.891	219.508	223.537	218.898	226.121	224.554	229.386	222.065
250	–	240.578	240.572	245.752	249.995	246.464	249.300	249.313	255.742	252.913	252.907
280	–	274.147	270.443	280.042	281.036	280.855	280.256	284.101	287.497	288.204	284.310
315	–	302.121	298.181	308.618	309.861	309.513	309.000	313.091	316.984	317.612	313.470
355	–	–	339.788	–	353.097	–	352.116	–	361.214	–	357.210
400	–	–	374.460	–	389.127	–	388.046	–	398.073	–	393.660

WSB2
WSB3
WSB4

实际传动比

Actual Transmission Ratio

类型 WSB2..,WSB3..,WSB4.. 规格 15-26　　Type WSB2..,WSB3..,WSB4.. Sizes 15-26

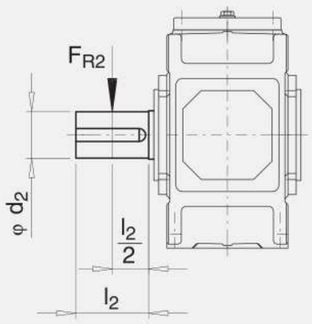
实际传动比 i / Actual ratios i													
齿轮箱规格 / Gear unit sizes													i_N
15	16	17	18	19	20	21	22	23	24	25	26		
4.963	–	–	–	–	–	–	–	–	–	–	–		5.0
5.609	5.630	5.514	–	–	–	–	–	–	–	–	–		5.6
6.340	6.362	6.234	–	–	–	–	–	–	–	–	–		6.3
7.132	7.192	7.012	7.239	–	–	–	–	–	–	–	–		7.1
8.101	8.090	7.965	8.143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

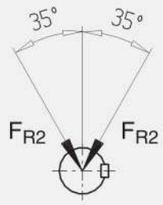
WSB2
WSB3
WSB4

输出轴d_2上允许的附加径向力[1)]
实心轴（S）

Permissible Additional Radial Forces on Output Shaft d_2 [1)]
Solid Shaft (S)

作用力在轴伸中部
Application of force on centre of shaft end





允许的作用力方向
Permissible direction of force

表 1 / Table 1

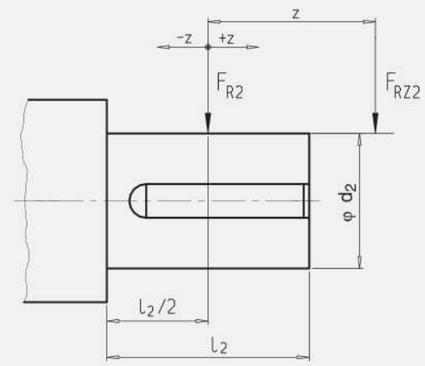
允许的附加径向力 F_{R2}（kN），作用在输出轴轴伸中部 3)
Permissible additional radial forces F_{R2} in kN with application of force on centre of shaft end 3)

类型 Type	布置形式 Design	齿轮箱规格 / Gear unit sizes 1) 4)															
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
WSH1SH	A / B	2)	–	2)	–	2)	–	2)	–	2)	–	2)	–	2)	–	2)	–
WSH2S.	A / B / G / H	–	10	22	22	30	30	30	45	64	64	150	150	140	205	205	205
	C / D	–	10	13	13	18	18	10	28	35	35	112	112	85	135	135	135
WSB2S.	A / C	–	13	27	27	37	37	38	55	78	78	160	160	150	210	210	210
	B / D	–	12	15	15	17	17	10	30	35	38	110	110	75	145	100	100
WSH3S.	A / B / G / H	–	–	29	29	40	40	40	60	85	85	190	190	185	265	265	265
WSH4S.	C / D	–	–	–	–												
WSB3S.	A / C	–	14	29	29												
WSB4S.	A / C	–	–														
WSH3S.	C / D	–	–	18	18	26	26	18	40	50	50	150	150	120	185	185	190
WSH4S.	A / B	–	–	–	–												
WSB3S.	B / D	–	9	18	18												
WSB4S.	B / D	–	–														

输出轴d_2上允许的附加径向力[1)]
实心轴（S）

Permissible Additional Radial Forces on Output Shaft d_2 [1)]
Solid Shaft (S)

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



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

F_{RZ2} 允许的外部径向力
Permissible external radial force

F_{R2} 允许的附加径向力，根据第 61 页上的表 1 确定
Permissible additional radial force acc. to table 1 page 61

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

表 2 / Table 2

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

规格 Size	距离 z, mm / Distance z in mm														
	- 200	- 150	- 100	- 75	- 50	- 25	0	25	50	75	100	150	200	250	300
3					1.21	1.09	1.00	0.85	0.74	0.65	0.58	0.48			
4					1.17	1.08	1.00	0.86	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

1) 表中数值为最小值，在 $f_1 \geqslant 1.2$ 时可以满足要求。
如果给出了力的作用角和旋转方向，则在绝大多数情况下可以承受较大的附加力。
请与我们联系。
在必要时可以采用一个加强型输出轴(V)。

2) 敬请垂询

3) 当作用力不在轴伸中部时，请参阅第 58 页。

4) 地脚螺栓的最低性能等级为 8.8。
基础必须干燥，不得有油脂。

1) Values in tables are minimum values. They are valid for $f_1 \geqslant 1.2$. If the angle of application of force and the direction of rotation are given, significantly higher additional forces can mostly be allowed.
Please consult us.
If necessary, a reinforced output shaft (V) can be used.

2) on request

3) For application of force outside the centre of the shaft end, see page 58.

4) Use foundation bolts of min. property class 8.8.
Foundation must be dry and grease-free.

敬请垂询：

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

On request:

- Permissible additional radial forces on input shaft d_1.
- Permissible additional radial forces on solid output shafts on both sides (assemblies E, F and I).
- Permissible additional radial forces for gear unit sizes 19-26.

转动惯量 J_1

Mass Moments of Inertia J_1

类型 WSH1..,WSH2..,WSH3..,WSH4.. 规格 3-14　　Type WSH1..,WSH2..,WSH3..,WSH4.. Sizes 3-14

转动惯量 J_2 (kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量，可按下列公式计算：$J_2 = i_N^2 \times J_1$.
转动惯量 J_1 (kgm^2) 是指相对于齿轮箱不带冷却风扇的输入轴 d_1 的转动惯量。
如果输入轴 d_1 带有冷却风扇，则应加上 J_L。

The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = i_N^2 \times J_1$.
The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.
For shaft d_1 with fan, J_L has to be added.

转动惯量 J_1 (kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 / **Mass moments of inertia J_1 in kgm^2 referring to shaft d_1**

i_N	齿轮箱规格 / Gear unit sizes											
	3	4	5	6	7	8	9	10	11	12	13	14
1.25	0.02855	–	0.15709	–	0.42300	–	0.92932	–	–	–	–	–
1.4	0.02589	–	0.14349	–	0.38558	–	0.84322	–	–	–	–	–
1.6	0.02243	–	0.12352	–	0.33519	–	0.72861	–	1.74977	–	3.74077	–
1.8	0.01974	–	0.10903	–	0.30515	–	0.66019	–	1.58798	–	3.22057	–
2.0	0.01820	–	0.09932	–	0.27747	–	0.59704	–	1.43757	–	2.90582	–
2.24	0.01677	–	0.09029	–	0.23964	–	0.53840	–	1.29698	–	2.61258	–
2.5	0.01479	–	0.08187	–	0.21652	–	0.48366	–	1.16495	–	2.33813	–
2.8	0.01347	–	0.07398	–	0.20156	–	0.44378	–	1.04055	–	2.08042	–
3.15	0.00915	–	0.05006	–	0.14031	–	0.31089	–	0.84211	–	1.67273	–
3.55	0.00807	–	0.04369	–	0.12256	–	0.27320	–	0.73595	–	1.47399	–
4.0	0.00702	–	0.03797	–	0.10584	–	0.23756	–	0.64640	–	1.28613	–
4.5	0.00522	–	0.02975	–	0.08623	–	0.19980	–	0.49550	–	0.96567	–
5.0	0.00451	–	0.02756	–	0.07492	–	0.17089	–	0.40618	–	0.89360	–
5.6	0.00384	–	0.02332	–	0.06407	–	0.14114	–	0.37471	–	0.75803	–
J_L	0.060	–	0.045	–	0.100	–	0.100	–	0.290	–	0.290	–
6.3	–	0.01493	0.03380	–	0.09209	–	0.20124	–	0.52103	–	1.10195	–
7.1	–	0.01340	0.02812	–	0.07563	–	0.16652	–	0.45488	–	0.95997	–
8.0	–	0.01138	0.02503	0.03969	0.06630	0.11062	0.14592	0.23956	0.39684	0.63968	0.83523	1.28897
9.0	–	0.01020	0.02227	0.03260	0.05805	0.08946	0.12771	0.19511	0.32236	0.55211	0.72509	1.11239
10	–	0.00860	0.01857	0.02877	0.05058	0.07759	0.11102	0.16927	0.27967	0.47606	0.62735	0.95870
11.2	–	0.00757	0.01619	0.02538	0.04457	0.06721	0.09506	0.14665	0.25168	0.37982	0.55925	0.82433
12.5	–	0.00527	0.01187	0.02089	0.03379	0.05794	0.07209	0.12624	0.19234	0.32553	0.42550	0.70636
14	–	0.00453	0.01013	0.01809	0.02691	0.05063	0.06102	0.10716	0.16348	0.29072	0.36723	0.62499
16	–	0.00384	0.00853	0.01340	0.02264	0.03872	0.05133	0.08159	0.13633	0.22357	0.31417	0.47348
18	–	0.00320	0.00758	0.01136	0.02005	0.03044	0.04385	0.06852	0.12189	0.18813	0.28054	0.40553
20	–	0.00276	0.00649	0.00949	0.01712	0.02542	0.04039	0.05722	0.10460	0.15546	0.23699	0.34428
22.4	–	0.00230	0.00550	0.00834	0.01578	0.02227	0.03414	0.04838	0.08840	0.13769	–	0.30627
25	–	–	–	0.00710	–	0.01888	–	0.04442	–	0.11733	–	0.25717
28	–	–	–	0.00598	–	0.01734	–	0.03728	–	0.09842	–	–
J_L	–	0.006	0.010	0.010	0.045	0.045	0.045	0.045	0.100	0.100	0.290	0.290
22.4	–	–	–	–	–	–	–	–		–	0.28093	–
25	–	–	0.00645	–	0.01629	–	0.03910	–	0.10272	–	0.22706	–
28	–	–	0.00536	–	0.01447	–	0.03237	–	0.08333	–	0.18629	0.29678
31.5	–	–	0.00474	0.00682	0.01209	0.01734	0.02874	0.04142	0.07242	0.11030	0.16244	0.23899
35.5	–	–	0.00418	0.00565	0.01070	0.01536	0.02550	0.03413	0.06284	0.08898	0.14149	0.19520
40	–	–	0.00343	0.00498	0.00888	0.01278	0.02129	0.03021	0.05440	0.07704	0.12303	0.16971
45	–	–	0.00301	0.00438	0.00782	0.01129	0.01874	0.02673	0.04799	0.06659	0.10672	0.14739
50	–	–	0.00228	0.00358	0.00570	0.00933	0.01359	0.02221	0.03603	0.05741	0.07610	0.12778
56	–	–	0.00194	0.00313	0.00487	0.00819	0.01162	0.01949	0.02835	0.05047	0.06432	0.11049
63	–	–	0.00163	0.00238	0.00413	0.00597	0.00982	0.01419	0.02386	0.03805	0.05428	0.07906
71	–	–	0.00123	0.00202	0.00324	0.00509	0.00738	0.01210	0.01900	0.02979	0.04221	0.06666
80	–	–	0.00102	0.00169	0.00278	0.00430	0.00624	0.01020	0.01595	0.02500	0.03866	0.05611
90	–	–	0.00088	0.00128	0.00229	0.00337	0.00520	0.00768	0.01453	0.01991	0.03176	0.04362
100	–	–	–	0.00106	–	0.00289	–	0.00648	–	0.01667	–	0.03992
112	–	–	–	0.00091	–	0.00238	–	0.00539	–	0.01517	–	0.03274
J_L	–	–	0.006	0.006	0.010	0.010	0.020	0.020	0.045	0.045	0.045	0.045
100	–	–	–	–	0.00328	–	0.00667	–	0.01753	–	0.03962	–
112	–	–	–	–	0.00274	–	0.00552	–	0.01560	–	0.03254	–
125	–	–	–	–	0.00243	0.00334	0.00486	0.00683	0.01310	0.01796	0.02873	0.04034
140	–	–	–	–	0.00202	0.00279	0.00428	0.00564	0.01164	0.01597	0.02534	0.03309
160	–	–	–	–	0.00176	0.00247	0.00348	0.00496	0.00970	0.01338	0.02087	0.02919
180	–	–	–	–	0.00153	0.00205	0.00300	0.00436	0.00848	0.01188	0.01806	0.02572
200	–	–	–	–	0.00124	0.00178	0.00230	0.00354	0.00595	0.00988	0.01339	0.02115
224	–	–	–	–	0.00097	0.00155	0.00195	0.00305	0.00508	0.00863	0.01135	0.01829
250	–	–	–	–	0.00081	0.00126	0.00163	0.00234	0.00428	0.00606	0.00948	0.01358
280	–	–	–	–	0.00065	0.00098	0.00134	0.00199	0.00354	0.00517	0.00794	0.01150
315	–	–	–	–	0.00060	0.00082	0.00112	0.00165	0.00304	0.00435	0.00670	0.00960
355	–	–	–	–	0.00050	0.00066	0.00097	0.00136	0.00252	0.00360	0.00559	0.00803
400	–	–	–	–	–	0.00060	–	0.00114	–	0.00309	–	0.00678
450	–	–	–	–	–	0.00050	–	0.00098	–	0.00256	–	0.00565

转动惯量 J_1

Mass Moments of Inertia J_1

类型 WSH1..,WSH2..,WSH3..,WSH4.. 规格 15-26　　Type WSH1..,WSH2..,WSH3..,WSH4.. Sizes 15-26

转动惯量 J_2 (kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量，可按下列公式计算：$J_2 = i_N^2 \times J_1$.
转动惯量 J_1 (kgm^2) 是指相对于齿轮箱不带冷却风扇的输入轴 d_1 的转动惯量。
如果输入轴 d_1 带有冷却风扇，则应加上 J_L。

The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = i_N^2 \times J_1$.
The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.
For shaft d_1 with fan, J_L has to be added.

转动惯量 J_1 (kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 / **Mass moments of inertia J_1 in kgm^2 referring to shaft d_1**

齿轮箱规格 / Gear unit sizes													i_N
15	16	17	18	19	20	21	22	23	24	25	26	
–	–	–	–	–	–	–	–	–	–	–	–	1.25
–	–	–	–	–	–	–	–	–	–	–	–	1.4
–	–	–	–	–	–	–	–	–	–	–	–	1.6
–	–	–	–	–	–	–	–	–	–	–	–	1.8
6.86903	–	11.68172	–	21.86950	–	–	–	–	–	–	–	2.0
6.15225	–	10.37670	–	18.65867	–	–	–	–	–	–	–	2.24
5.52442	–	9.40145	–	16.67579	–	–	–	–	–	–	–	2.5
4.95982	–	8.44258	–	14.80399	–	–	–	–	–	–	–	2.8
3.91162	–	6.72168	–	11.98945	–	–	–	–	–	–	–	3.15
3.40747	–	5.86409	–	11.14244	–	–	–	–	–	–	–	3.55
2.93210	–	5.05491	–	9.52270	–	–	–	–	–	–	–	4.0
2.30308	–	4.00905	–	7.87489	–	–	–	–	–	–	–	4.5
1.96108	–	3.55977	–	6.66044	–	–	–	–	–	–	–	5.0
1.65759	–	3.01084	–	5.50473	–	–	–	–	–	–	–	5.6
0.690	–	0.690	–	0.690	–	–	–	–	–	–	–	J_L
2.69450	–	5.30249	–	10.62628	–	14.12289	–	24.64317		43.55254		6.3
2.36587	2.93445	4.38152	5.79425	9.32889	11.42554	12.30855	15.24965	21.27286	26.82051	38.24316	48.18357	7.1
2.07496	2.56276	3.85101	4.74843	8.17656	9.98029	10.71777	13.22687	18.34784	23.02087	33.54245	42.06256	8.0
1.81611	2.23558	3.37587	4.15070	7.14706	8.70419	9.31584	11.46160	15.79400	19.74133	27.44042	36.67561	9.0
1.58473	1.94622	2.94834	3.61890	6.27857	7.57118	8.14946	9.91374	13.98253	16.89503	23.90250	29.73863	10
1.37708	1.68919	2.56216	3.14368	5.52433	6.62132	7.14789	8.63265	12.28293	14.88773	20.72374	25.75162	11.2
1.14218	1.46006	2.04515	2.71748	4.44852	5.80139	5.67579	7.53848	9.55712	13.01466	16.62461	22.19542	12.5
0.97937	1.20991	1.76837	2.16566	3.81731	4.67000	4.86012	5.98802	8.17152	10.14205	15.30108	17.78037	14
0.82110	1.03247	1.51448	1.86457	3.23981	3.99197	4.12526	5.10635	6.92018	8.63279	12.85289	16.31922	16
0.68720	0.86324	1.21881	1.59010	2.59172	3.37526	3.27028	4.31621	5.53436	7.27791	10.75060	13.63177	18
0.56007	0.72007	1.10345	1.27695	2.24548	2.69238	2.81401	3.41219	4.94009	5.80643	9.00584	11.37655	20
–	0.58429	–	1.15512	–	2.32662	–	2.92840	–	5.17225	–	9.50042	22.4
–	–	–	–	–	–	–	–	–	–	–	–	25
–	–	–	–	–	–	–	–	–	–	–	–	28
0.290	0.290	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	J_L
0.74161	–	0.81650	–	1.65788	–	3.73410	–	5.04264	–	10.06130	–	22.4
0.60098	0.76346	0.65739	0.85893	1.33246	1.72711	3.03258	3.82925	4.01585	5.22093	8.05438	10.47078	25
0.52263	0.61732	0.56883	0.68913	1.15173	1.38384	2.63821	3.10389	3.44684	4.14947	6.43749	8.36280	28
0.45433	0.53601	0.49253	0.59483	0.99457	1.19361	2.29194	2.69673	2.95348	3.55649	5.53232	6.66760	31.5
0.36744	0.46523	0.39559	0.51371	0.85730	1.02850	1.98651	2.33968	2.52426	3.04293	4.74133	5.72028	35.5
0.31814	0.37536	0.34093	0.41097	0.73692	0.88457	1.71599	2.02518	2.14973	2.59672	4.04798	4.89375	40
0.28778	0.32445	0.30742	0.35319	0.65396	0.75863	1.47554	1.74703	1.82214	2.20791	3.43873	4.17049	45
0.21066	0.29316	0.22462	0.31786	0.46753	0.67202	1.20329	1.50020	1.48427	1.86835	2.73103	3.53614	50
0.17805	0.21496	0.18897	0.23297	0.39842	0.48071	1.01816	1.22342	1.23983	1.52199	2.31874	2.80661	56
0.14889	0.18145	0.15726	0.19556	0.33619	0.40895	0.86937	1.03395	1.04655	1.26941	1.95017	2.37908	63
0.12167	0.15152	0.13362	0.16237	0.28899	0.34446	0.69699	0.88189	0.80638	1.07002	1.47637	1.99761	71
0.10341	0.12385	0.11393	0.13785	0.24205	0.29606	0.55341	0.70676	0.63528	0.82469	1.34742	1.51283	80
0.08646	0.10516	0.09573	0.11733	0.19751	0.24759	0.50692	0.56061	0.57752	0.64877	1.11106	1.37982	90
–	0.08784	–	0.09841	–	0.20171	–	0.51330	–	0.58946	–	1.13627	100
–	–	–	–	–	–	–	–	–	–	–	–	112
0.100	0.100	0.100	0.100	–	–	–	–	–	–	–	–	J_L
0.10814	–	0.11315	–	0.23894	–	0.60939	–	0.68056	–	1.34533	–	100
0.08764	0.10910	0.09173	0.11518	0.19488	0.24222	0.52729	0.61425	0.58382	0.68966	1.15832	1.36329	112
0.07613	0.08829	0.07972	0.09324	0.16925	0.19732	0.45584	0.53127	0.50190	0.59128	0.99590	1.17296	125
0.06605	0.07672	0.06922	0.08096	0.14680	0.17125	0.36516	0.45909	0.39942	0.51001	0.85423	1.00776	140
0.05704	0.06652	0.05986	0.07022	0.12654	0.14842	0.31382	0.36751	0.34116	0.40382	0.73018	0.86376	160
0.04990	0.05742	0.05247	0.06066	0.10759	0.12785	0.28076	0.31570	0.30345	0.34468	0.64480	0.73776	180
0.03803	0.05022	0.03937	0.05313	0.08150	0.10862	0.21559	0.28235	0.23376	0.30645	0.48793	0.65111	200
0.02994	0.03828	0.03102	0.03991	0.06851	0.08231	0.18183	0.21687	0.19653	0.23615	0.41707	0.49254	224
0.02503	0.03013	0.02596	0.03140	0.05728	0.06915	0.15057	0.18284	0.16198	0.19842	0.35335	0.42075	250
0.02100	0.02517	0.02181	0.02626	0.04677	0.05779	0.12952	0.15135	0.13871	0.16344	0.31167	0.35624	280
0.01768	0.02111	0.01840	0.02206	0.04283	0.04716	0.10994	0.13017	0.11753	0.13993	0.26090	0.31414	315
0.01616	0.01777	0.01685	0.01859	0.03572	0.04318	0.09172	0.11046	0.09770	0.11850	0.20636	0.26284	355
–	0.01625	–	0.01702	–	0.03599	–	0.09213	–	0.09847	–	0.20782	400
–	–	–	–	–	–	–	–	–	–	–	–	450

转动惯量 J_1

Mass Moments of Inertia J_1

类型 WSH2..,WSH3..,WSH4.. 规格 4-14

Type WSH2..,WSH3..,WSH4.. Sizes 4-14

转动惯量 J_2 (kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量，可按下列公式计算：$J_2 = i_N^2 \times J_1$.
转动惯量 J_1 (kgm^2) 是指相对于齿轮箱不带冷却风扇的输入轴 d_1 的转动惯量。
如果输入轴 d_1 带有冷却风扇，则应加上 J_L。

The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = i_N^2 \times J_1$.
The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.
For shaft d_1 with fan, J_L has to be added.

转动惯量 J_1 (kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 / **Mass moments of inertia J_1 in kgm^2 referring to shaft d_1**

i_N	齿轮箱规格 / Gear unit sizes										
	4	5	6	7	8	9	10	11	12	13	14
5.0	0.03211	0.07501	–	0.20154	–	0.44627	–	1.29058	–	2.79496	–
5.6	0.03024	0.06915	–	0.17137	–	0.37934	–	1.08250	–	2.36141	–
6.3	0.02673	0.05791	0.08406	0.13819	0.23057	0.30248	0.50622	0.85265	1.48203	1.86785	3.10156
7.1	0.02249	0.04955	0.07668	0.11905	0.19554	0.25734	0.42923	0.73360	1.23242	1.63448	2.60149
8.0	0.01814	0.03799	0.06347	0.08858	0.15603	0.18973	0.33932	0.53110	0.96847	1.18384	2.05333
9.0	0.01486	0.03115	0.05410	0.07952	0.13365	0.17287	0.28749	0.48051	0.82632	1.06973	1.78297
10	0.01037	0.02538	0.04185	0.06883	0.09965	0.14614	0.21259	0.41113	0.60295	0.92751	1.29891
11.2	0.00931	0.02176	0.03406	0.05956	0.08888	0.12482	0.19220	0.35269	0.54127	0.80120	1.16704
12.5	–	–	0.02760	–	0.07596	–	0.16085	–	0.45737	–	1.00155
14	–	–	0.02366	–	0.06566	–	0.13741	–	0.39227	–	0.86460
J_L	0.020	0.045	0.045	0.100	0.100	0.100	0.100	0.290	0.290	0.690	0.690
12.5	0.00756	0.01615	–	0.04549	–	0.10285	–	0.27616	–	0.61844	–
14	0.00734	0.01575	–	0.04455	–	0.09999	–	0.26878	–	0.60537	–
16	0.00623	0.01371	0.01750	0.03768	0.04966	0.08727	0.11205	0.23571	0.30357	0.51600	0.66451
18	0.00610	0.01346	0.01695	0.03713	0.04831	0.08550	0.10750	0.23105	0.29302	0.50838	0.64618
20	0.00569	0.01248	0.01458	0.03464	0.04011	0.07999	0.09297	0.21547	0.25301	0.47566	0.54284
22.4	0.00527	0.01157	0.01422	0.03229	0.03933	0.07329	0.09015	0.18297	0.24635	0.40380	0.53216
25	0.00456	0.01073	0.01308	0.02828	0.03637	0.06097	0.08364	0.14675	0.22734	0.32054	0.49435
28	0.00394	0.00881	0.01206	0.02376	0.03369	0.05206	0.07633	0.12605	0.19285	0.27212	0.41936
31.5	0.00335	0.00730	0.01109	0.01922	0.02934	0.04011	0.06322	0.09389	0.15405	0.20094	0.33203
35.5	0.00271	0.00586	0.00911	0.01568	0.02463	0.03275	0.05390	0.08401	0.13203	0.18235	0.28152
40	0.00190	0.00416	0.00755	0.01100	0.01996	0.02660	0.04168	0.07225	0.09842	0.15335	0.20806
45	0.00177	0.00393	0.00605	0.00984	0.01624	0.02280	0.03393	0.06249	0.08784	0.13099	0.18837
50	0.00129	0.00301	0.00431	0.00812	0.01143	0.01784	0.02750	0.04683	0.07516	0.10268	0.15794
56	0.00105	0.00248	0.00405	0.00682	0.01020	0.01462	0.02357	0.03850	0.06498	0.08549	0.13492
63	0.00087	0.00207	0.00310	0.00589	0.00840	0.01242	0.01844	0.03265	0.04876	0.07262	0.10571
71	0.00067	0.00157	0.00256	0.00467	0.00705	0.00997	0.01509	0.02622	0.04002	0.05866	0.08789
80	–	–	0.00213	–	0.00607	–	0.01280	–	0.03390	–	0.07459
90	–	–	0.00162	–	0.00481	–	0.01027	–	0.02719	–	0.06017
J_L	0.006	0.010	0.010	0.020	0.020	0.045	0.045	0.100	0.100	0.290	0.290
80	–	0.00240	–	0.00589	–	0.01293	–	0.03573	–	0.08226	–
90	–	0.00227	–	0.00543	–	0.01193	–	0.03317	–	0.07518	–
100	–	0.00200	0.00244	0.00468	0.00600	0.01100	0.01317	0.02895	0.03644	0.06237	0.08339
112	–	0.00176	0.00230	0.00404	0.00551	0.00903	0.01212	0.02431	0.03375	0.05320	0.07613
125	–	0.00145	0.00202	0.00344	0.00474	0.00749	0.01114	0.01969	0.02939	0.04108	0.06307
140	–	0.00117	0.00178	0.00278	0.00409	0.00600	0.00915	0.01603	0.02467	0.03348	0.05377
160	–	0.00091	0.00147	0.00195	0.00348	0.00427	0.00759	0.01127	0.01999	0.02716	0.04157
180	–	0.00085	0.00118	0.00181	0.00281	0.00402	0.00608	0.01007	0.01626	0.02328	0.03385
200	–	0.00058	0.00092	0.00132	0.00198	0.00308	0.00433	0.00830	0.01145	0.01821	0.02744
224	–	0.00047	0.00086	0.00108	0.00183	0.00254	0.00407	0.00696	0.01021	0.01491	0.02352
250	–	0.00043	0.00058	0.00090	0.00134	0.00211	0.00312	0.00600	0.00841	0.01266	0.01840
280	–	0.00033	0.00047	0.00069	0.00109	0.00160	0.00257	0.00476	0.00705	0.01016	0.01506
315	–	0.00028	0.00043	0.00058	0.00091	0.00136	0.00214	0.00405	0.00608	0.00812	0.01278
355	–	–	0.00034	–	0.00070	–	0.00162	–	0.00482	–	0.01025
400	–	–	0.00028	–	0.00059	–	0.00138	–	0.00409	–	0.00820

WSB2 WSB3 WSB4

转动惯量 J_1

Mass Moments of Inertia J_1

类型 WSH2..,WSH3..,WSH4.. 规格 15-26

Type WSH2..,WSH3..,WSH4.. Sizes 15-26

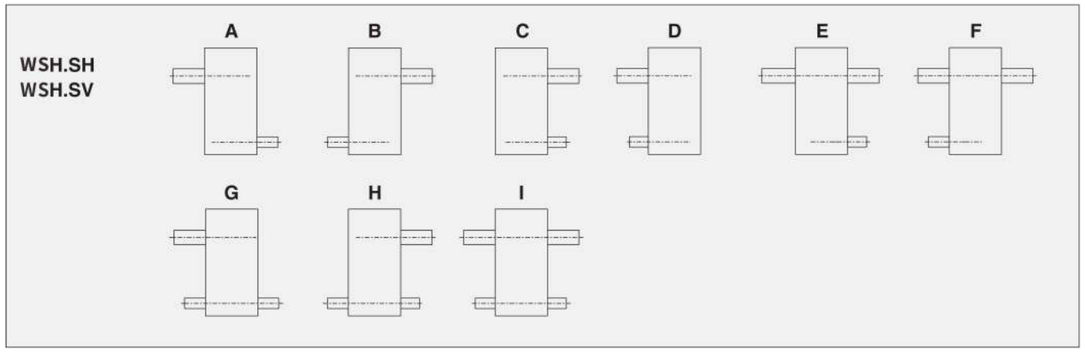
转动惯量 J_2 (kgm^2) 是指相对于齿轮箱输出轴 d_2 的转动惯量，可按下列公式计算：$J_2 = i_N^2 \times J_1$.
转动惯量 J_1 (kgm^2) 是指相对于齿轮箱不带冷却风扇的输入轴 d_1 的转动惯量。
如果输入轴 d_1 带有冷却风扇，则应加上 J_L。

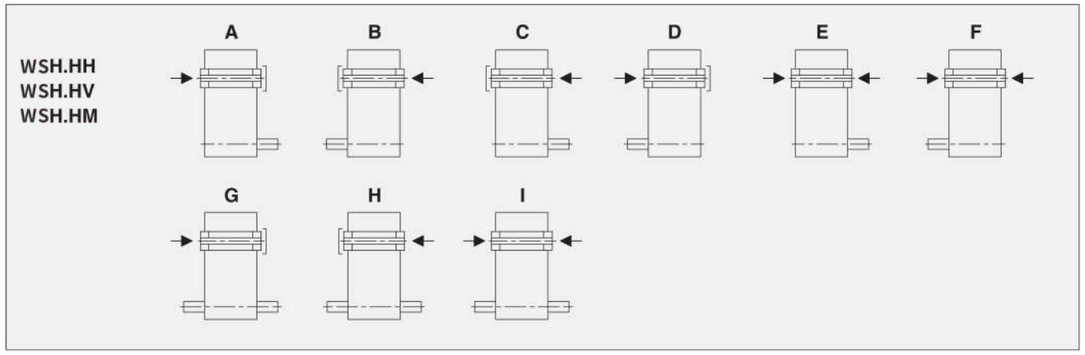
The mass moment of inertia J_2 in kgm^2 refers to the output shaft d_2 of a gear unit and is calculated with the following formula: $J_2 = i_N^2 \times J_1$.
The mass moment of inertia J_1 in kgm^2 refers to the input shaft d_1 of a gear unit without fan.
For shaft d_1 with fan, J_L has to be added.

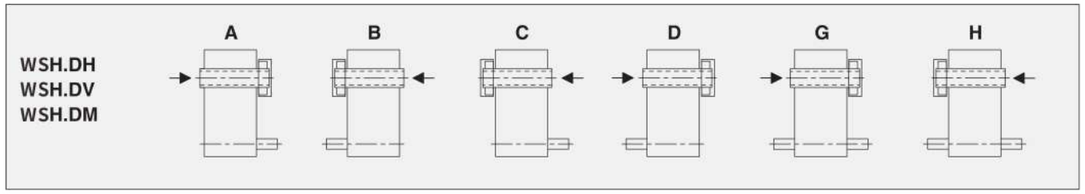
转动惯量 J_1 (kgm^2) 是指相对于齿轮箱输入轴 d_1 的转动惯量 / **Mass moments of inertia J_1 in kgm^2 referring to shaft d_1**

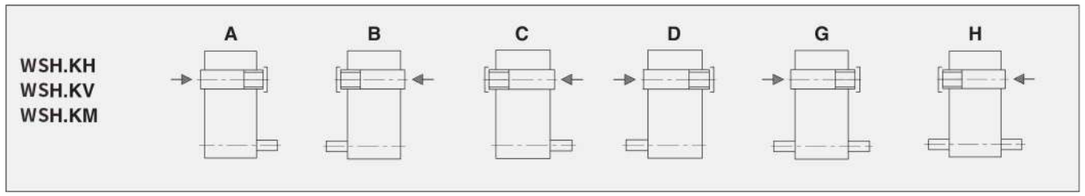
齿轮箱规格 / Gear unit sizes												i_N
15	16	17	18	19	20	21	22	23	24	25	26	
6.25795	–	–	–	–	–	–	–	–	–	–	–	5.0
5.40648	6.66677	10.37011	–	–	–	–	–	–	–	–	–	5.6
4.49760	5.72660	8.58657	–	–	–	–	–	–	–	–	–	6.3
3.77001	4.74810	7.14219	9.06446	–	–	–	–	–	–	–	–	7.1
2.78214	3.96800	5.01824	7.51989	–	–	–	–	–	–	–	–	8.0
2.53133	2.93557	4.52494	5.31094	–	–	–	–	–	–	–	–	9.0
2.16711	2.66107	3.85677	4.77245	–	–	–	–	–	–	–	–	10
1.81377	2.26584	3.32075	4.04511	–	–	–	–	–	–	–	–	11.2
–	1.89831	–	3.48202	–	–	–	–	–	–	–	–	12.5
–	–	–	–	–	–	–	–	–	–	–	–	14
0.690	0.690	0.690	0.690	–	–	–	–	–	–	–	–	J_L
1.69718	–	3.48560	–	7.8896	–	8.3877	–	–	–	–	–	12.5
1.65740	1.76004	3.44624	3.60423	7.7305	8.0659	8.2186	8.6052	–	–	–	–	14
1.48103	1.70973	3.06690	3.54418	6.9989	7.8400	7.4408	8.3643	–	–	–	–	16
1.45557	1.52126	3.04252	3.14038	6.8398	6.9560	7.2717	7.4142	–	–	–	–	18
1.37309	1.48906	2.88266	3.10318	6.37936	6.8399	6.79596	7.2972	13.03215	–	16.34176	–	20
1.14711	1.39966	2.43009	2.93035	5.50155	6.46478	5.82775	6.91637	10.99213	13.25774	13.58363	16.83295	22.4
0.90256	1.16792	1.92090	2.46743	4.57199	5.56843	4.82726	5.92204	9.07333	11.16877	11.10130	13.96823	25
0.77356	0.91864	1.67696	1.94976	3.82881	4.62433	4.03056	4.90105	7.52690	9.21156	9.12970	11.40227	28
0.56206	0.78643	1.21675	1.70005	2.82771	3.87017	2.98405	4.08888	5.31637	7.63615	6.55845	9.36758	31.5
0.50670	0.57204	1.09757	1.23465	2.56986	2.85976	2.70207	3.02924	4.77705	5.40103	5.82741	6.74279	35.5
0.43106	0.51513	0.94869	1.11270	2.19643	2.59697	2.29704	2.74029	4.04861	4.84864	4.84785	5.98329	40
0.36975	0.43748	0.81933	0.96021	1.83887	2.21706	1.92502	2.32612	3.48501	4.10309	4.16938	4.96647	45
0.27673	0.37524	0.57171	0.82919	1.40288	1.85654	1.46929	1.94992	2.60969	3.53166	3.13732	4.27095	50
0.22863	0.28096	0.46952	0.57931	1.14615	1.41650	1.19871	1.48849	2.12784	2.64566	2.54535	3.21563	56
0.19582	0.23198	0.40563	0.47553	1.04477	1.15693	1.08801	1.21390	1.85969	2.15630	2.20313	2.60731	63
0.15881	0.19858	0.33347	0.41058	0.84654	1.05364	0.87983	1.10050	1.50642	1.88310	1.77090	2.25410	71
–	0.16093	–	0.33728	–	0.85337	–	0.88945	–	1.52444	–	1.81015	80
–	–	–	–	–	–	–	–	–	–	–	–	90
0.290	0.290	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	0.690	J_L
0.22213	–	0.22783	–	0.49622	–	1.41079	–	1.52207	–	3.15981	–	80
0.18851	0.22377	0.19326	0.23101	0.42091	0.50136	1.17663	1.41869	1.26377	1.53687	2.64711	3.18972	90
0.15085	0.18988	0.15435	0.19590	0.33318	0.42519	0.92537	1.18281	0.99269	1.27536	2.08857	2.67053	100
0.12941	0.15185	0.13227	0.15630	0.28247	0.33633	0.79182	0.93015	0.84571	1.00164	1.81118	2.10666	112
0.09644	0.13023	0.09861	0.13387	0.20878	0.28505	0.57621	0.79564	0.61798	0.85288	1.32077	1.82566	125
0.08616	0.09706	0.08799	0.09982	0.18898	0.21073	0.51866	0.57917	0.55398	0.62353	1.18553	1.33199	140
0.07389	0.08669	0.07528	0.08902	0.15840	0.19063	0.44016	0.52117	0.46704	0.55868	1.01562	1.19502	160
0.06389	0.07429	0.06509	0.07606	0.13531	0.15966	0.37754	0.44207	0.40055	0.47061	0.87664	1.02284	180
0.04791	0.06423	0.04883	0.06575	0.10601	0.13639	0.28273	0.37918	0.30048	0.40361	0.59852	0.88283	200
0.03935	0.04818	0.04008	0.04935	0.08813	0.10684	0.23338	0.28399	0.24742	0.30284	0.50448	0.62066	224
0.03335	0.03956	0.03395	0.04049	0.07479	0.08879	0.19973	0.23438	0.21128	0.24929	0.43439	0.50825	250
0.02676	0.03353	0.02723	0.03429	0.06032	0.07533	0.16181	0.20055	0.17071	0.21282	0.35562	0.43750	280
0.02169	0.02690	0.02207	0.02748	0.04934	0.06074	0.12885	0.16245	0.13618	0.17189	0.28657	0.35801	315
–	0.02180	–	0.02228	–	0.04968	–	0.12937	–	0.13715	–	0.28854	355
–	–	–	–	–	–	–	–	–	–	–	–	400

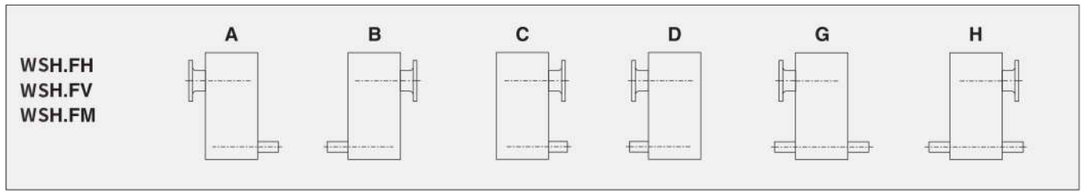
布置形式
Assemblies









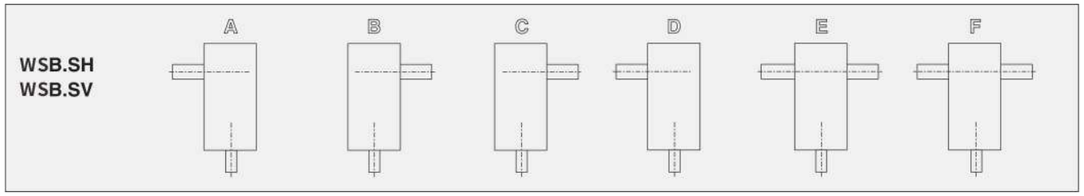


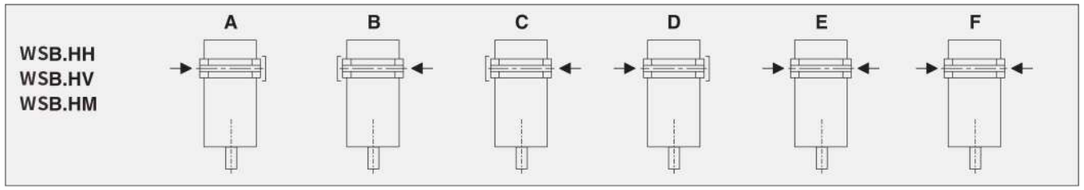
→ 箭头表示工作机驱动轴插入方向
The arrow indicates the direction of insertion of the driven machine shaft

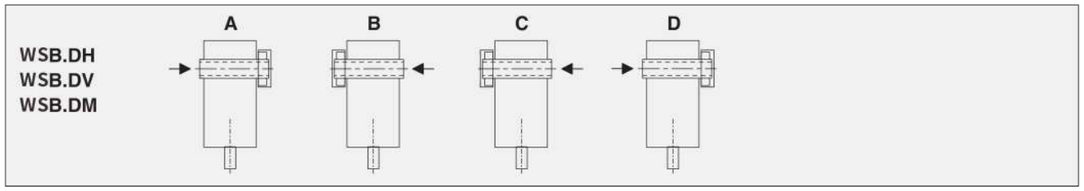
布置形式
Assemblies

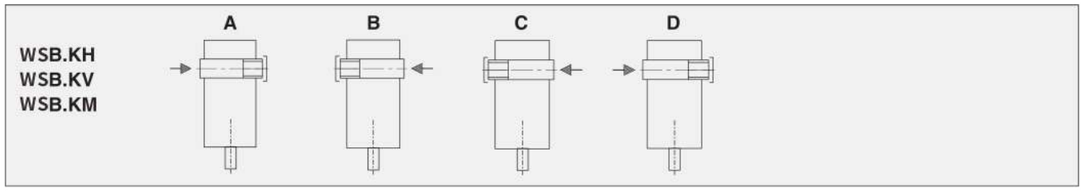
安装侧
齿轮箱倾斜安装或摆动

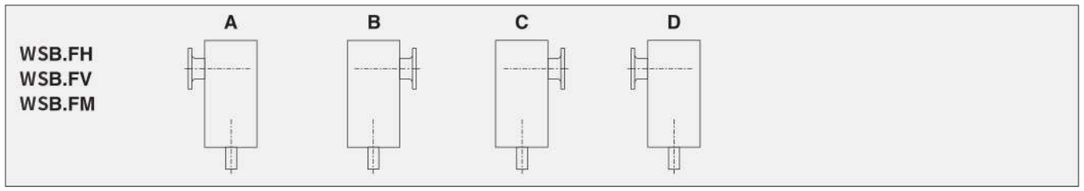
Attachment Side
Gear Unit Inclination











安装侧 / Attachment side

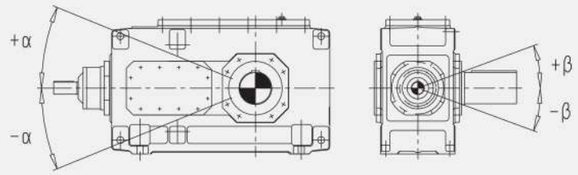
L 左侧安装
Attachment on LH side

R 右侧安装
Attachment on RH side



面向 D_1 的端面观察
View on end face of D_1

齿轮箱倾斜安装或摆动 / Gear unit inclination

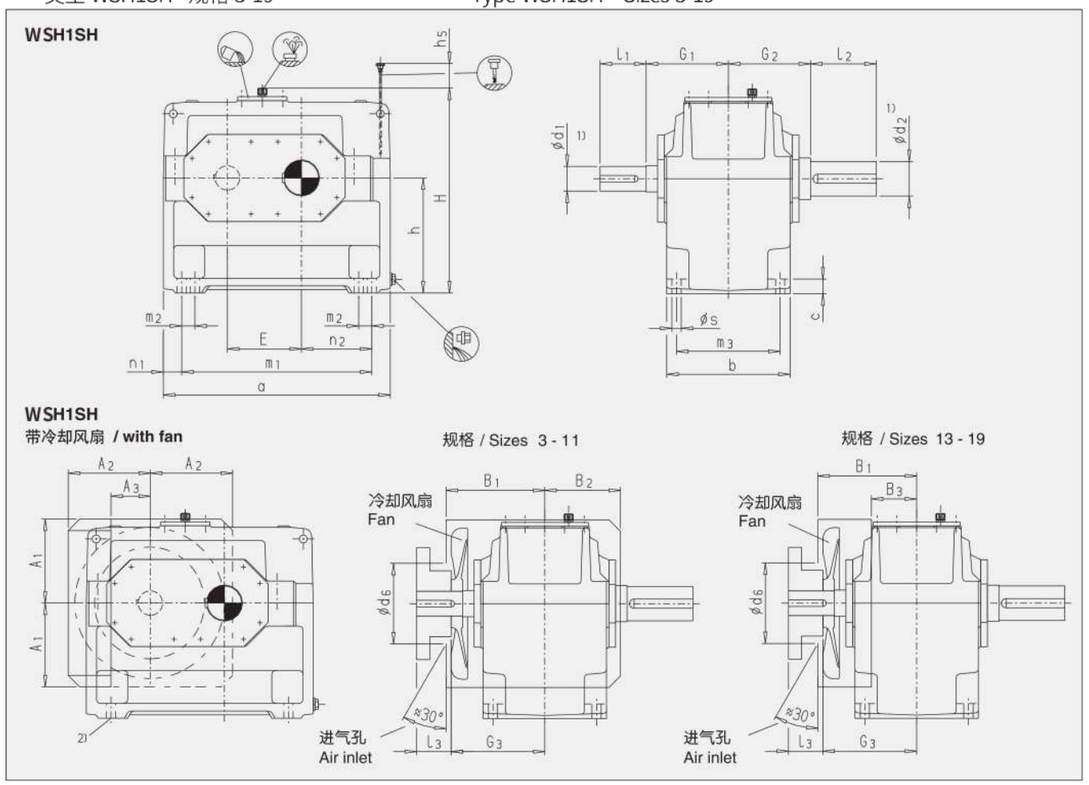


如果轴指向上方，α 或 β > 0
α or β > 0, if shaft points upward

单级传动/卧式安装

Single Stage / Horizontal

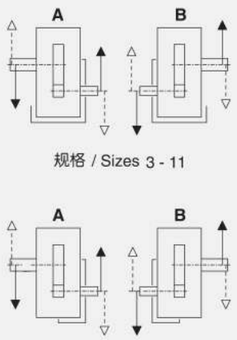
类型 WSH1SH 规格 3-19　　Type WSH1SH Sizes 3-19



规格 Size	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			冷却风扇 / Fan							
	d_1	l_1	l_3	d_1	l_1	l_3	d_1	l_1	l_3	G_1	G_3	A_1	A_2	A_3	B_1	B_2	B_3	d_6
3	60	125	105	45	100	80	32	80	60	170	190	150	145	80	205	130	–	130
5	85	160	130	60	135	105	50	110	80	210	240	225	215	115	255	185	–	190
7	100	200	165	75	140	105	60	140	105	250	285	255	250	120	300	230	–	245
9	110	200	165	90	165	130	75	140	105	280	315	300	265	140	330	265	–	280
11 +)	130	240	205	110	205	170	90	170	135	325	360	360	330	190	375	320	–	350
13 +)	150	245	200	130	245	200	100	210	165	365	410	415	350	–	430	–	150	350
15 ++)	180	290	240	150	250	200	125	250	200	360	410	500	430	–	430	–	120	450
17 ++)	200	330	280	170	290	240	140	250	200	400	450	550	430	–	470	–	150	445
19 ++)	220	340	290	190	340	290	160	300	250	440	490	630	475	–	510	–	190	445

规格 Size	齿轮箱 / Gear units												
	a	b	c	E	h_{-1}	h_5	H	m_1	m_2	m_3	n_1	n_2	s
3	420	200	28	130	200	85	375	310	–	160	55	110	19
5	580	285	35	185	290	100	525	440		240	70	160	24
7	690	375	45	225	350	75	625	540	–	315	75	195	28
9	805	425	50	265	420	50	735	625	–	350	90	225	35
11	960	515	60	320	500	40	875	770	–	440	95	280	35
13	1100	580	70	370	580	40	1020	870	–	490	115	315	42
15	1295	545	80	442	600	10	1115	1025	–	450	135	370	48
17	1410	615	80	490	670	–	1235	1170	130	530	120	425	42
19	1590	690	90	555	760	–	1395	1290	150	590	150	465	48

布置形式
Design



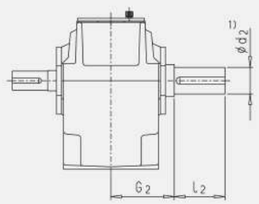
单级传动/卧式安装

Single Stage / Horizontal

类型 WSH1SH 规格 3-19　　Type WSH1SH Sizes 3-19

输出轴 / **Output**

WSH1SH
实心轴
Solid shaft

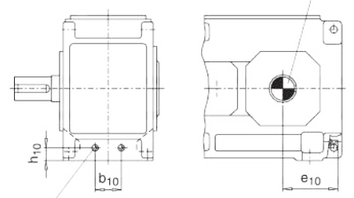


规格 Size	WSH1SH d_2	l_2	G_2
3	60	125	170
5	85	160	210
7	105	200	250
9	125	210	270
11	150	240	320
13	180	310	360
15	220	350	360
17	240	400	400
19	270	450	440

规格 Size	润滑油量 / Oil quantity (l) *) 轴封 Shaft seal	迷宫式密封 Labyrinth seal	重量 Weight (kg) *) **)
3	7	5.2	128
5	22	18	302
7	42	34	547
9	68	57	862
11	120	100	1515
13	175	155	2395
15	190	156	3200
17	270	225	4250
19	390	330	5800

冷却盘管 / Cooling coil

输出轴 / Output



规格 Size	b_{10}	e_{10}	h_{10}	x) L / min
3	48	205	74	4
5	88	270	90	4
7	124	310	135	4
9	116	365	110	8
11	146	425	130	8
13	152	480	150	8
15	172	560	130	8
17	202	600	145	8
19	敬请垂询 On request			

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

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

x) 所需冷却水量；冷却水压最大值： 8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 在安装地脚螺栓前应先拆下风扇罩。

*) 参考值；
轴封见第 157-159 页

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

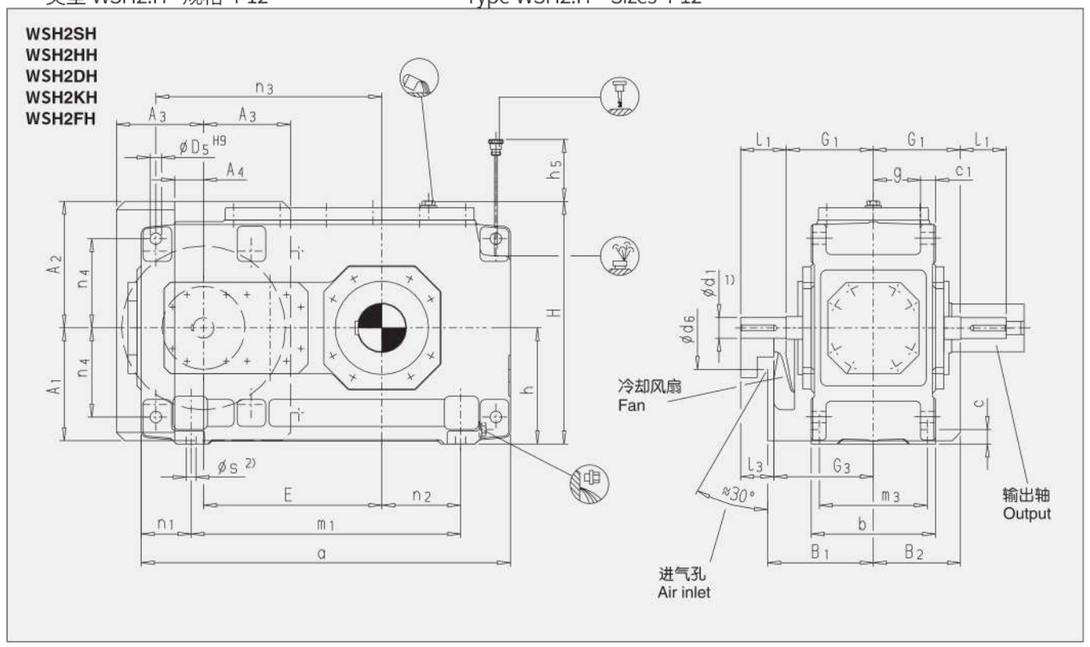
2) Remove air guide cover before fitting the foundation bolts.

*) Approximate values
For shaft seals, see pages 157-159

**) Without oil filling

两级传动/卧式安装
Two Stage / Horizontal

类型 WSH2.H 规格 4-12　　Type WSH2.H Sizes 4-12

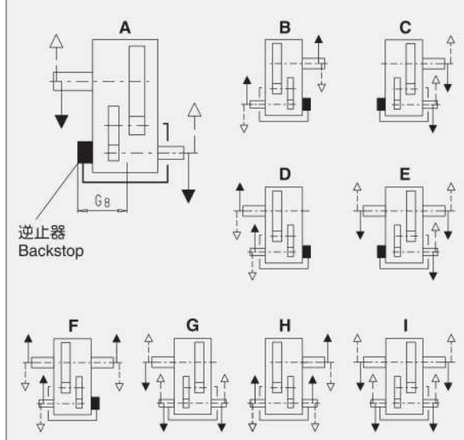


规格 Size	输入轴 / Input i_N = 6.3 - 11.2, i_N = 8 - 14 d_1	l_1	l_3	输入轴 / Input i_N = 12.5 - 22.4, i_N = 16 - 28 d_1	l_1	l_3	G_1	G_3	3) 布置形式 / Design G, H, I 仅用于 / only for i_N =		冷却风扇 / Fan A_1	A_2	A_3	A_4	B_1	B_2	d_6
4	45	100	80	32	80	60	170	190	6.3 - 18		195	225	150	30	205	158	136
5 + 6	50	100	80	38	80	60	195	215	6.3 - 18	8 - 22.4	225	260	175	55	230	178	150
7 + 8	60	135	105	50	110	80	210	240	6.3 - 16	8 - 20	272	305	210	70	255	210	200
9 + 10	75	140	110	60	140	110	240	270	6.3 - 16	8 - 20	312	355	240	100	285	245	200
11 + 12	90	165	130	70	140	105	275	310	6.3 - 18	8 - 22.4	372	420	285	135	325	285	210

规格 Size	齿轮箱 / Gear units b	c	c_1	D_5	g	h_{-1}	m_3	n_1	n_4	s
4	215	28	30±1	24	77.5	200	180	105	150	19
5 + 6	255	28	30±1	24	97.5	230	220	105	180	19
7 + 8	300	35	36±1	28	114	280	260	120	215	24
9 + 10	370	40	45±1.5	36	140	320	320	145	245	28
11 + 12	430	50	54±1.5	40	161	380	370	165	300	35

规格 Size	齿轮箱 / Gear units a	E	h_5	H	m_1	n_2	n_3	逆止器 Backstop G_8
4	565	270	110	415	355	85	345	敬请垂询相关尺寸 Dimensions on request
5	640	315	150	482	430	100	405	
6	720	350	150	482	510	145	440	
7	785	385	190	572	545	130	500	
8	890	430	190	582	650	190	545	
9	925	450	205	662	635	155	585	
10	1025	500	215	662	735	205	635	
11	1105	545	250	782	775	180	710	
12	1260	615	250	790	930	265	780	

布置形式 / Design 3)

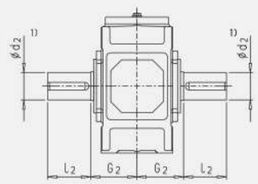


两级传动/卧式安装
Two Stage / Horizontal

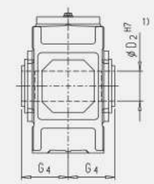
类型 WSH2.H 规格 4-12　　Type WSH2.H Sizes 4-12

输出轴 / Output

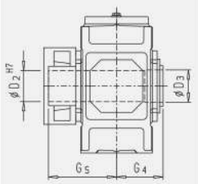
WSH2SH 实心轴 Solid shaft



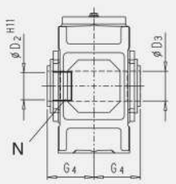
WSH2HH 空心轴 Hollow shaft



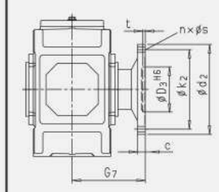
WSH2DH 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH2KH 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



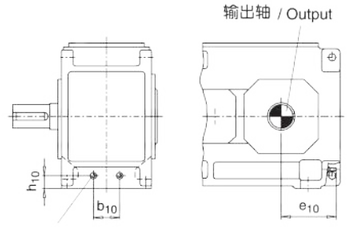
WSH2FH 法兰轴 Flanged shaft



规格 Size	WSH2SH d_2	l_2	G_2	WSH2HH D_2	G_4	WSH2DH D_2	D_3	G_4	G_5	WSH2KH N / DIN 5480	D_2	D_3	G_4	WSH2FH c	d_2	D_3	k_2	n x s	t	G_7
4	80	170	140	80	140	85	85	140	205	-	-	-	-	-	-	-	-	-	-	-
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 / Oil quantity (l) *) 轴封 Shaft seal	迷宫式密封 Labyrinth seal	重量 / Weight (kg) *) **) WSH2SH, WSH2HH, WSH2DH, WSH2KH	WSH2FH
4	10	7	190	-
5	15	11	300	335
6	16	12	355	395
7	27	21	505	555
8	30	23	590	645
9	42	33	830	915
10	45	34	960	1050
11	71	58	1335	1465
12	76	60	1615	1755

冷却盘管 / Cooling coil



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

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

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 < \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 在安装地脚螺栓前应先拆下风扇罩。

3) 方案：
- 逆止器不能与布置形式 G、H 和 I 组合。

*) 参考值：
轴封见第 157-159 页

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 < \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

3) **Variants:**
- Backstop not possible with G, H and I designs.

*) Approximate values
For shaft seals, see pages 157-159

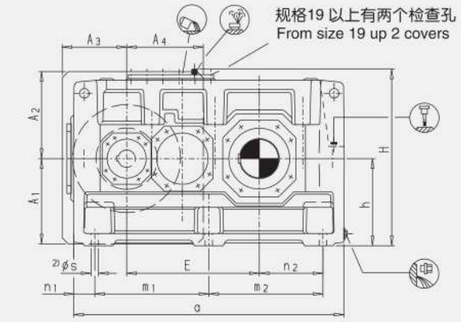
**) Without oil filling

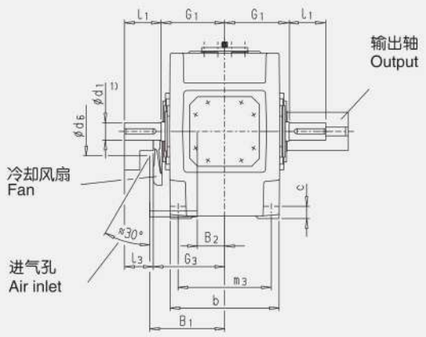
两级传动/卧式安装

Two Stage / Horizontal

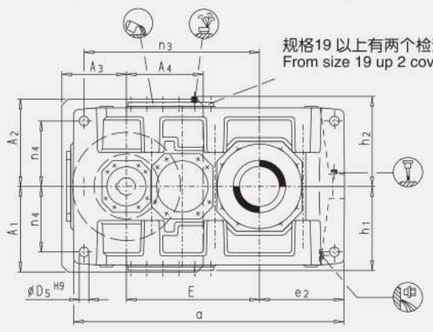
类型 WSH2.H,WSH2.M 规格 13-22　　Type WSH2.H,WSH2.M Sizes 13-22

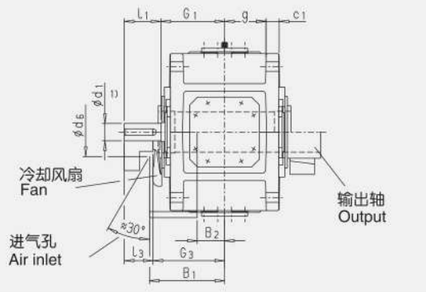
WSH2SH
WSH2HH
WSH2DH
WSH2KH
WSH2FH





WSH2HM
WSH2DM
WSH2KM
WSH2FM



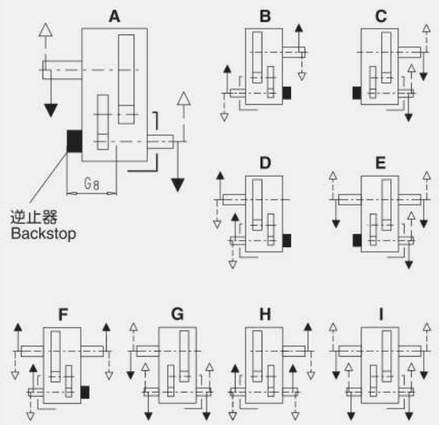


规格 Size	输入轴 / Input i_N = 6.3 - 11.2 / 7.1 - 12.5 / 8 - 14			i_N = 12.5 - 20 / 14 - 22.5 / 16 - 25			G1	G3	3) 布置形式 / Design G, H, I, 仅用于 / only for i_N =		冷却风扇 / Fan						
	d_1	l_1	l_3	d_1	l_1	l_3					A_1	A_2	A_3	A_4	B_1	B_2	d_6
13 + 14	100	205	170	85	170	135	330	365	6.3 - 16	8 - 20	430	460	330	365	385	135	250
15 + 16	120	210	165	100	210	165	365	410	6.3 - 16	7.1 - 18	490	500	370	440	430	155	280
17 + 18	125	245	200	110	210	165	420	465	6.3 - 16	7.1 - 18	540	565	435	505	485	140	280
19 + 20	150	245	200	120	210	165	475	520	根据用户要求提供 / On request		600	600	500	450	540	190	310
21 + 22	170	290	240	140	250	200	495	545			680	680	500	610	565	200	450

规格 Size	齿轮箱 / Gear units											
	b	c	c_1	D_5	g	h_{-1}	h_1	h_2	m_3	n_1	n_4	s
13 + 14	550	60	61±2	48	211.5	440	450	460	475	100	340	35
15 + 16	625	70	72±2	55	238	500	490	500	535	120	375	42
17 + 18	690	80	81±2	55	259	550	555	560	600	135	425	42
19 + 20	790	90	91±2	65	299	620	615	620	690	155	475	48
21 + 22	830	100	100±2	75	310	700	685	690	720	170	520	56

规格 Size	齿轮箱 / Gear units								逆止器 Backstop
	a	e_2	E	H	m_1	m_2	n_2	n_3	G_8
13	1290	405	635	900	545	545	305	835	敬请垂询 相关尺寸 Dimensions on request
14	1430	475	705	900	545	685	375	905	
15	1550	485	762	1000	655	655	365	1005	
16	1640	530	808	1000	655	745	410	1050	
17	1740	525	860	1110	735	735	390	1145	
18	1860	585	920	1110	735	855	450	1205	
19	2010	590	997	1240	850	850	435	1345	
20	2130	650	1057	1240	850	970	495	1405	
21	2140	655	1067	1390	900	900	485	1400	
22	2250	710	1122	1390	900	1010	540	1455	

布置形式 / **Design** 3)



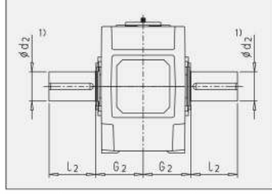
两级传动/卧式安装

Two Stage / Horizontal

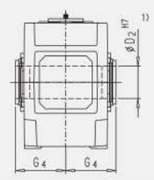
类型 WSH2.H,WSH2.M 规格 13-22　　Type WSH2.H,WSH2.M Sizes 13-22

输出轴 / **Output**

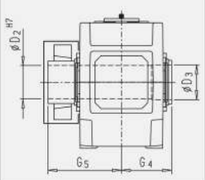
WSH2SH
实心轴
Solid shaft



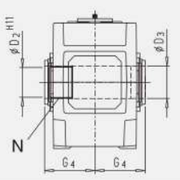
WSH2HH, H2HM 3) 6)
空心轴
Hollow shaft



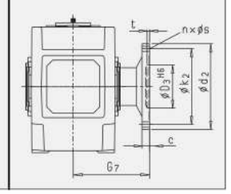
WSH2DH, H2DM 3) 6)
带缩紧盘的空心轴
Hollow shaft for shrink disk



WSH2KH, H2KM 3) 6)
带花键的空心轴，按照 DIN 5480
Hollow shaft with involute splines acc. to DIN 5480



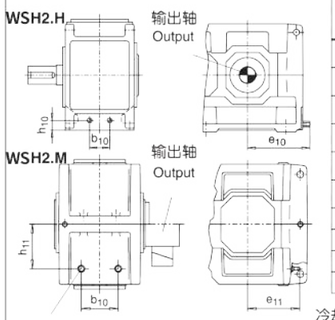
WSH2FH, H2FM
法兰轴
Flanged shaft



规格 Size	WSH2SH d_2	WSH2SH l_2	WSH2SH G_2	WSH2HH WSH2HM D_2	WSH2HH WSH2HM G_4	WSH2DH, WSH2DM D_2	WSH2DH, WSH2DM D_3	WSH2DH, WSH2DM G_4	WSH2DH, WSH2DM G_5	WSH2KH,WSH2KM N / DIN 5480	WSH2KH,WSH2KM D_2	WSH2KH,WSH2KM D_3	WSH2KH,WSH2KM G_4	WSH2FH,WSH2FM c	WSH2FH,WSH2FM d_2	WSH2FH,WSH2FM D_3	WSH2FH,WSH2FM k_2	WSH2FH,WSH2FM n x s	WSH2FH,WSH2FM t	WSH2FH,WSH2FM G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30 x 39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32 x 39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28 x 45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28 x 45	20	710

规格 Size	润滑油量 / Oil quantity (l) *) WSH2.H 轴封 Shaft seal	WSH2.H 迷宫式密封 Labyrinth seal	WSH2.M	重量 / Weight (kg) *) **) WSH2SH WSH2HH WSH2DH WSH2KH	WSH2HM WSH2KM WSH2DM	WSH2FH	WSH2FM
13	135	120	110	2000	1880	2160	2040
14	140	130	115	2570	2430	2740	2600
15	210	190	160	3430	3240	3670	3480
16	215	200	165	3655	3465	3910	3720
17	290	260	230	4650	4420	4950	4720
18	300	270	240	5125	4870	5475	5220
19	320	-	300	6600	6300	敬请垂询 On request	
20	340	-	320	7500	7200		
21	320	-	350	8900	8400		
22	340	-	370	9600	9200		

冷却盘管 / **Cooling coil**



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

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

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 在安装地脚螺栓前应先拆下风扇罩。

3) 方案：
- 逆止器不能与布置形式 G、H 和 I 组合。
- 轴装式齿轮箱（WSH2.M）不能配置迷宫式密封。

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

*) 参考值：
轴封见第 157-159 页

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

3) **Variants:**
- Backstopnot possible with G, H and I designs.
- Shaft-mountedgear unit (WSH2.M) not with labyrinth seal.

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

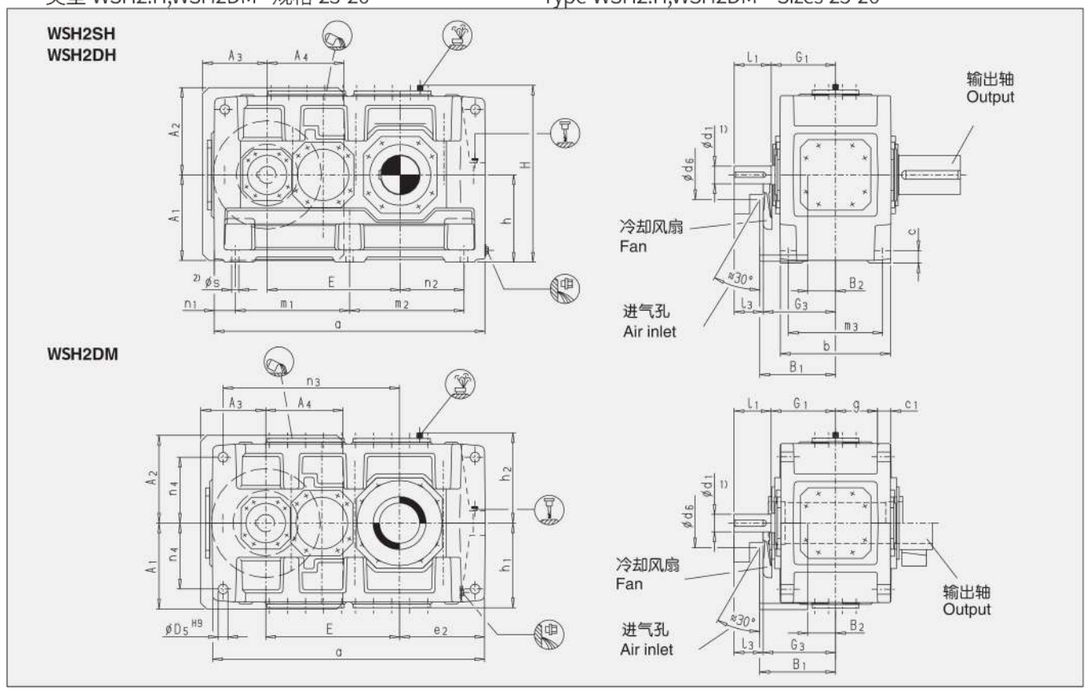
*) Approximate values
For shaft seals, see pages 157-159

**) Without oil filling

两级传动/卧式安装

Two Stage / Horizontal

类型 WSH2.H,WSH2DM 规格 23-26　　Type WSH2.H,WSH2DM Sizes 23-26

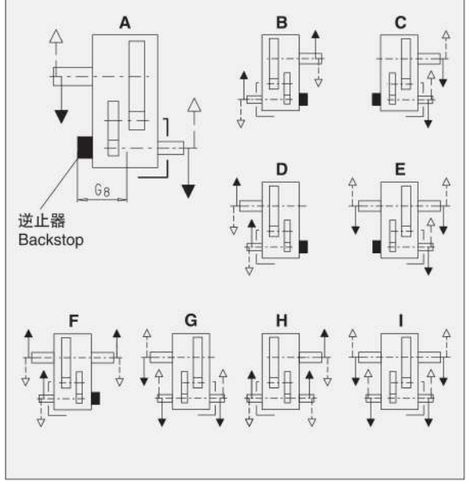


规格 Size	输入轴 / Input i_N = 6.3 - 11.2, i_N = 7.1 - 12.5			输入轴 / Input i_N = 12.5 - 20, i_N = 14 - 22.5			G_1	G_3	3) 布置形式 / Design G, H, I 仅用于 / only for i_N =	冷却风扇 / Fan A_1	A_2	A_3	A_4	B_1	B_2	d_6
	d_1	l_1	l_3	d_1	l_1	l_3										
23 + 24	190	330	280	150	250	200	560	610	敬请垂询 On request	770	770	550	550	630	220	450
25 + 26	200	340	290	170	300	250	600	650		845	865	550	550	670	240	450

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

规格 Size	齿轮箱 / Gear units a	e_2	E	H	m_1	m_2	n_2	n_3	逆止器 Backstop G_8
23	2380	730	1185	1550	1010	1010	550	1560	敬请垂询 相关尺寸 Dimensions on request
24	2510	795	1250	1550	1010	1140	615	1625	
25	2580	790	1325	1720	1090	1090	590	1685	
26	2760	880	1415	1720	1090	1270	680	1775	

布置形式 / Design 3)



尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 在安装地脚螺栓前应先拆下风扇罩。

3) 方案：
- 逆止器不能与布置形式 G、H 和 I 组合。
- 轴装式齿轮箱（WSH2.M）不能配置迷宫式密封。

*) 参考值：

**) 未注油时

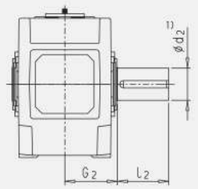
两级传动/卧式安装

Two Stage / Horizontal

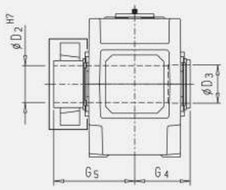
类型 WSH2.H,WSH2DM 规格 23-26　　Type WSH2.H,WSH2DM Sizes 23-26

输出轴 / Output

WSH2SH
实心轴
Solid shaft



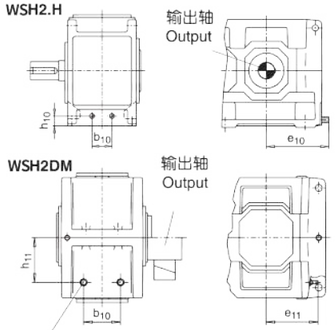
WSH2DH, H2DM 3)
带缩紧盘的空心轴
Hollow shaft for shrink disk



规格 Size	WSH2SH d_2	WSH2SH l_2	WSH2SH G_2	WSH2DH,WSH2DM D_2	WSH2DH,WSH2DM D_3	WSH2DH,WSH2DM G_4	WSH2DH,WSH2DM G_5
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

规格 Size	润滑油量 Oil quantity (l) *) WSH2SH	润滑油量 Oil quantity (l) *) WSH2DM	重量 Weight (kg) *) **) WSH2SH WSH2DH	重量 Weight (kg) *) **) WSH2DM
23	430	470	11600	11000
24	450	500	13000	12300
25	600	660	15500	14700
26	640	700	17200	16200

冷却盘管 / Cooling coil



规格 Size	b_{10}	e_{10}	e_{11}	h_{10}	h_{11}	x) L / min
23	敬请垂询 On request					
24						
25						
26						

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

x) 所需冷却水量；
冷却水压力最大值：8巴
Cooling water quantity required; max. cooling water pressure: 8 bar

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

3) **Variants:**
- Backstopnot possible with G, H and I designs.
- Shaft-mountedgear unit (WSH2.M) not with labyrinth seal.

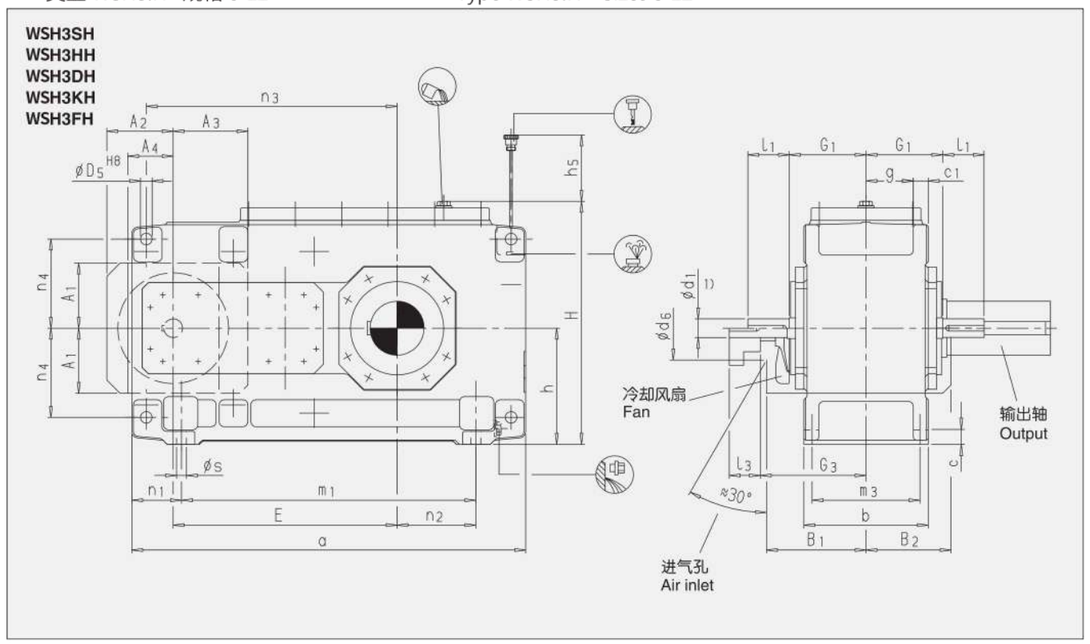
*) Approximate values

**) Without oil filling

三级传动/卧式安装

Three Stage / Horizontal

类型 WSH3.H 规格 5-12　　Type WSH3.H Sizes 5-12

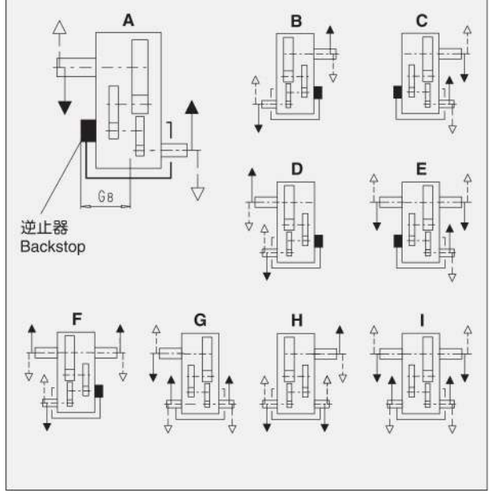


规格 Size	输入轴 / Input i_N = 25 - 45 i_N = 31.5 - 56 d_1	l_1	l_3	i_N = 50 - 63 i_N = 63 - 80 d_1	l_1	l_3	i_N = 71 - 90 i_N = 90 - 112 d_1	l_1	l_3	G_1	G_3	布置形式 3) / Design G, H, I 仅用于 / only for i_N =		冷却风扇 / Fan A_1	A_2	A_3	A_4	B_1	B_2	d_6
5 + 6	40	70	70	30	50	50	24	40	40	160	220	25 - 90	31.5 - 112	137	135	140	140	215	175	60
7 + 8	45	80	80	35	60	60	28	50	50	185	250	25 - 90	31.5 - 112	157	160	180	180	245	205	75
9 + 10	60	125	105	45	100	80	32	80	60	230	300	25 - 90	31.5 - 112	182	190	205	205	295	240	90
11 + 12	70	120	120	50	80	80	42	70	70	255	330	25 - 90	31.5 - 112	218	220	255	255	325	280	100

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

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

布置形式 / Design 3)



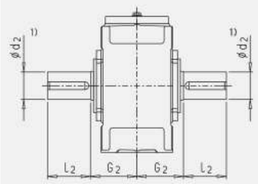
三级传动/卧式安装

Three Stage / Horizontal

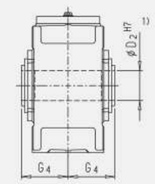
类型 WSH3.H 规格 5-12　　Type WSH3.H Sizes 5-12

输出轴 / Output

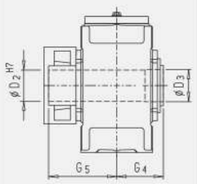
WSH3SH 实心轴 Solid shaft



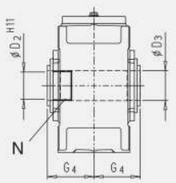
WSH3HH 空心轴 Hollow shaft



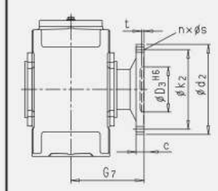
WSH3DH 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH3KH 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



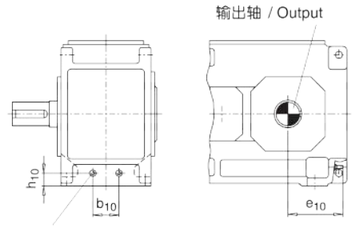
WSH3FH 法兰轴 Flanged shaft



规格 Size	WSH3SH d_2	l_2	G_2	WSH3HH D_2	G_4	WSH3DH D_2	D_3	G_4	G_5	WSH3KH N / DIN 5480	D_2	D_3	G_4	WSH3FH c	d_2	D_3	k_2	n x s	t	G_7
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 Oil quantity (l) *)	重量 / Weight (kg) *) **) WSH3SH WSH3HH WSH3DH WSH3KH	WSH3FH
5	16	320	355
6	18	365	405
7	29	540	590
8	32	625	675
9	48	875	960
10	49	1020	1110
11	85	1400	1530
12	90	1675	1815

冷却盘管 / Cooling coil



规格 Size	b_{10}	e_{10}	h_{10}	x) L / min
5	70	175	60	4
6	70	220	69	4
7	80	210	83	4
8	80	270	83	4
9	150	245	107	4
10	90	295	95	4
11	200	275	115	8
12	200	360	115	8

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

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 在安装地脚螺栓前应先拆下风扇罩。

3) 方案：
- 逆止器不能与布置形式 G、H 和 I 组合。

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

3) **Variants:**
- Backstop not possible with G, H and I designs.

*) Approximate values

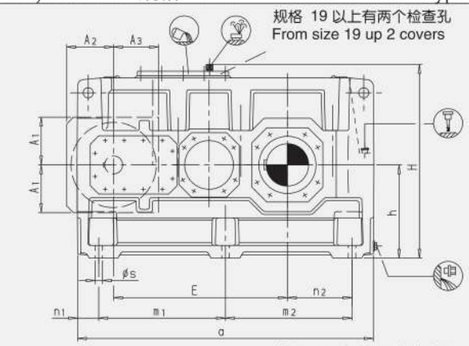
**) Without oil filling

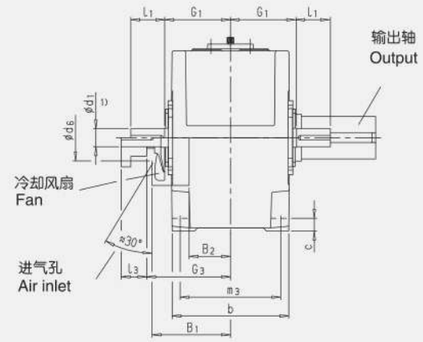
三级传动/卧式安装

Three Stage / Horizontal

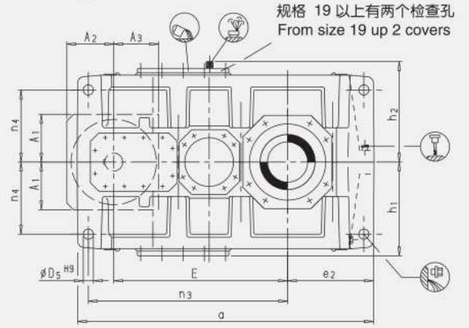
类型 WSH3.H, WSH3.M 规格 13-22　　Type WSH3.H, WSH3.M Sizes 13-22

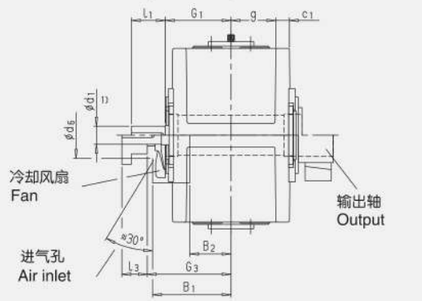
WSH3SH
WSH3HH
WSH3DH
WSH3KH
WSH3FH





WSH3HM
WSH3DM
WSH3KM
WSH3FM



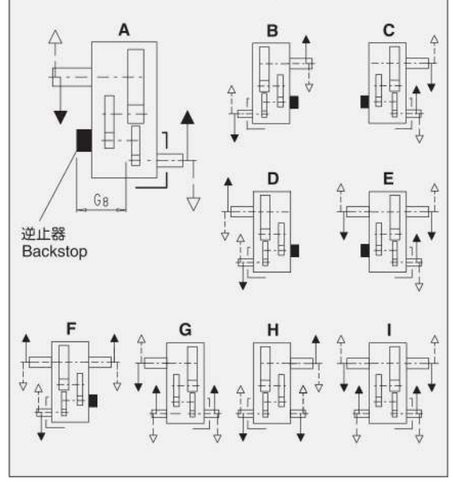


规格 Size	输入轴 / Input i_N = 22.4 - 45, 25 - 50, 28 - 56			i_N = 50 - 63, 56 - 71, 63 - 80			i_N = 71 - 90, 80 - 100, 90 - 112			G_1	G_3	3) 布置形式 / Design G, H, I 仅用于 / only for i_N =		冷却风扇 / Fan A_1	A_2	A_3	B_1	B_2	d_6
	d_1	l_1	l_3	d_1	l_1	l_3	d_1	l_1	l_3										
13 + 14	85	160	130	60	135	105	50	110	80	310	385	22.4 - 90	28 - 112	225	225	212	380	195	120
15 + 16	100	200	165	75	140	105	60	140	105	350	420	22.4 - 90	25 - 100	270	265	252	415	205	150
17 + 18	100	200	165	75	140	105	60	140	105	380	450	22.4 - 90	25 - 100	270	265	252	455	235	150
19 + 20	110	200	-	90	165	-	75	140	-	430	-	敬请垂询 / On request							
21 + 22	130	240	-	110	205	-	90	170	-	470	-								

规格 Size	齿轮箱 / Gear units b	c	c_1	D_5	g	h -1	h_1	h_2	m_3	n_1	n_4	s
13 + 14	550	60	61 ±2	48	211.5	440	450	460	475	100	340	35
15 + 16	625	70	72± 2	55	238	500	490	500	535	120	375	42
17 + 18	690	80	81± 2	55	259	550	555	560	600	135	425	42
19 + 20	790	90	91± 2	65	299	620	615	620	690	155	475	48
21 + 22	830	100	100± 2	75	310	700	685	690	720	170	520	56

规格 Size	齿轮箱 / Gear units a	e_2	E	H	m_1	m_2	n_2	n_3	逆止器 Backstop G_8
13	1395	405	820	900	597.5	597.5	305	940	敬请垂询 相关尺寸 Dimensions on request
14	1535	475	890	900	597.5	737.5	375	1010	
15	1680	485	987	1000	720	720	365	1135	
16	1770	530	1033	1000	720	810	410	1180	
17	1770	525	1035	1110	750	750	390	1175	
18	1890	585	1095	1110	750	870	450	1235	
19	2030	590	1190	1240	860	860	435	1365	
20	2150	650	1250	1240	860	980	495	1425	
21	2340	655	1387	1390	1000	1000	485	1600	
22	2450	710	1442	1390	1000	1110	540	1655	

布置形式 / Design 3)



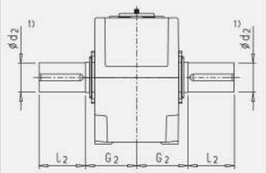
三级传动/卧式安装

Three Stage / Horizontal

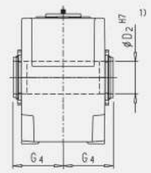
类型 WSH3.H, WSH3.M 规格 13-22　　Type WSH3.H, WSH3.M Sizes 13-22

输出轴 / Output

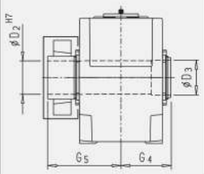
WSH3SH
实心轴
Solid shaft



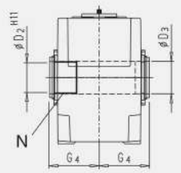
WSH3HH,WSH3HM
空心轴
Hollow shaft



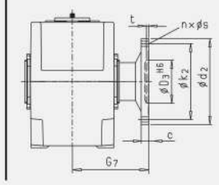
WSH3DH,WSH3DM
带缩紧盘的空心轴
Hollow shaft for shrink disk



WSH3KH,WSH3KM
带花键的空心轴，按照 DIN 5480
Hollow shaft with involute splines acc. to DIN 5480



WSH3FH,WSH3FM
法兰轴
Flanged shaft

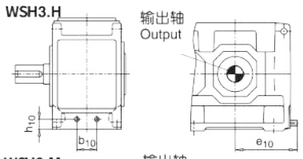


规格 Size	WSH3SH d_2	l_2	G_2	WSH3HH WSH3HM D_2	G_4	WSH3DH,WSH3DM D_2	D_3	G_4	G_5	WSH3KH,WSH3KM N / DIN 5480	D_2	D_3	G_4	WSH3FH,WSH3FM c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30 x 39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32 x 39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28 x 45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28 x 45	20	710

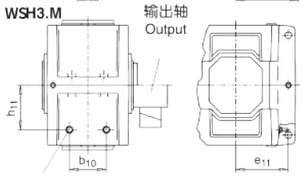
规格 Size	润滑油量 / Oil quantity (l) *) WSH3.H	WSH3.M	重量 / Weight (kg) *) **) WSH3SH WSH3HH WSH3DH WSH3KH	WSH3HM WSH3KM WSH3DM	WSH3FH	WSH3FM
13	160	125	2295	2155	2455	2305
14	165	130	2625	2490	2795	2660
15	235	190	3475	3260	3715	3500
16	245	195	3875	3625	4130	3880
17	305	240	4560	4250	4860	4550
18	315	250	5030	4740	5380	5090
19	420	390	6700	6200	敬请垂询 On request	
20	450	415	8100	7600		
21	470	515	9100	8500		
22	490	540	9800	9300		

冷却盘管 / Cooling coil

WSH3.H



WSH3.M



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

规格 Size	b_{10}	e_{10}	e_{11}	h_{10}	h_{11}	x) L / min
13	252	460	335	116	300	8
14	252	530	405	116	300	8
15	290	540	395	119	335	8
16	290	585	440	119	335	8
17	300	580	425	134	380	8
18	300	640	485	134	380	8
19	敬请垂询 On request					
20						
21						
22						

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 在安装地脚螺栓前应先拆下风扇罩。

3) 方案：
- 逆止器不能与布置形式 G、H 和 I 组合。

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

3) **Variants:**
- Backstop not possible with G, H and I designs.

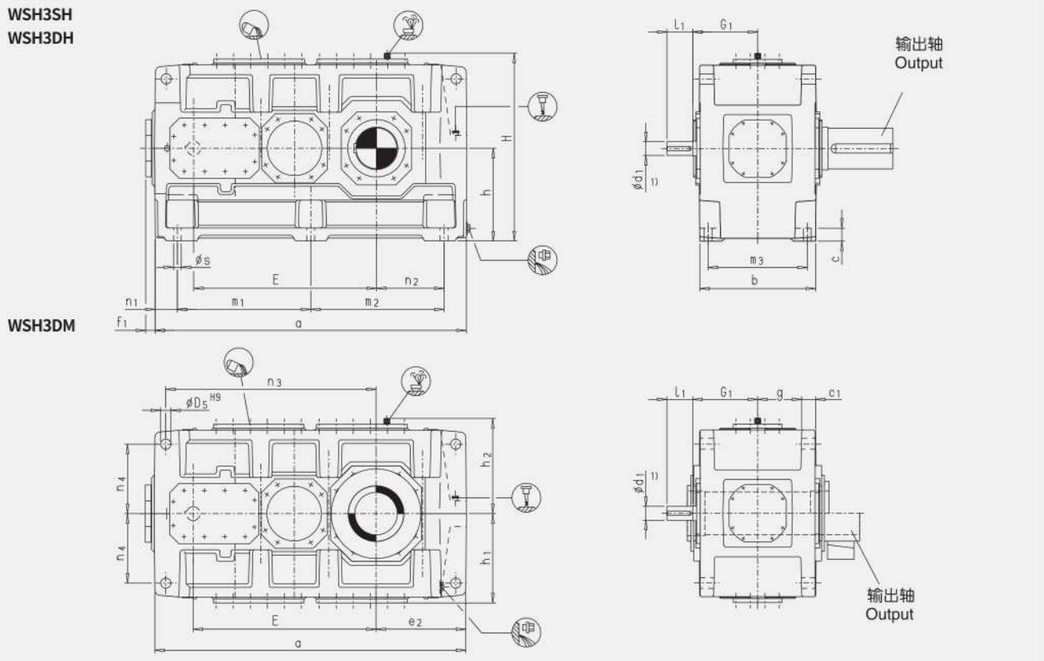
*) Approximate values

**) Without oil filling

三级传动/卧式安装

Three Stage / Horizontal

类型 WSH3.H,WSH3DM 规格 23-26　　Type WSH3.H,WSH3DM Sizes 23-26

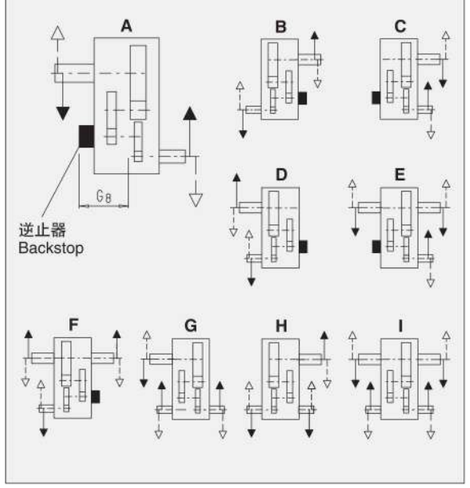


规格 Size	输入轴 / Input i_N = 22.4 - 45, i_N = 25 - 50 d_1	输入轴 / Input i_N = 22.4 - 45, i_N = 25 - 50 l_1	输入轴 / Input i_N = 50 - 63, i_N = 56 - 71 d_1	输入轴 / Input i_N = 50 - 63, i_N = 56 - 71 l_1	输入轴 / Input i_N = 71 - 90, i_N = 80 - 100 d_1	输入轴 / Input i_N = 71 - 90, i_N = 80 - 100 l_1	G_1	3) 布置形式 / Design G, H, I 仅用于 / only for i_N =
23 + 24	130	240	110	205	90	170	510	敬请垂询 On request
25 + 26	150	245	130	245	100	210	570	

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

规格 Size	齿轮箱 / Gear units a	e_2	E	f_1	H	m_1	m_2	n_2	n_3	逆止器 Backstop G_8
23	2530	730	1505	35	1570	1085	1085	550	1725	敬请垂询 相关尺寸 Dimensions on request
24	2660	795	1570	35	1570	1085	1215	615	1790	
25	2830	790	1695	65	1720	1215	1215	590	1965	
26	3010	880	1785	65	1720	1215	1395	680	2055	

布置形式 / Design 3)



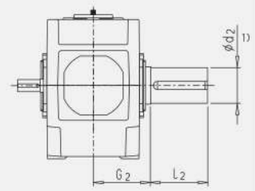
三级传动/卧式安装

Three Stage / Horizontal

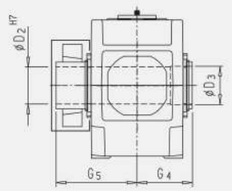
类型 WSH3.H,WSH3DM 规格 23-26　　Type WSH3.H,WSH3DM Sizes 23-26

输出轴 / Output

WSH3SH
实心轴
Solid shaft



WSH3DH,WSH3DM
带缩紧盘的空心轴
Hollow shaft for shrink disk

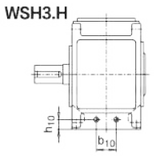


规格 Size	WSH3SH d_2	WSH3SH l_2	WSH3SH G_2	WSH3DH,WSH3DM D_2	WSH3DH,WSH3DM D_3	WSH3DH,WSH3DM G_4	WSH3DH,WSH3DM G_5
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

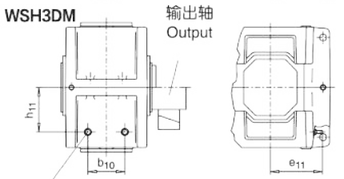
规格 Size	润滑油量 Oil quantity (l) *) WSH3SH	润滑油量 Oil quantity (l) *) WSH3DM	重量 Weight (kg) *)** WSH3SH WSH3DH	重量 Weight (kg) *)** WSH3DM
23	620	690	11500	10600
24	650	725	13400	12500
25	880	970	16100	15200
26	935	1030	17600	16500

冷却盘管 / Cooling coil

WSH3.H



WSH3DM



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

规格 Size	b_{10}	e_{10}	e_{11}	h_{10}	h_{11}	x) L / min
23	敬请垂询 On request					
24						
25						
26						

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

x) 所需冷却水量；
冷却水压力最大值：8巴
Cooling water quantity required; max. cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

3) 方案：
- 逆止器不能与布置形式 G、H 和 I 组合。

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

3) **Variants:**
- Backstop not possible with G, H and I designs.

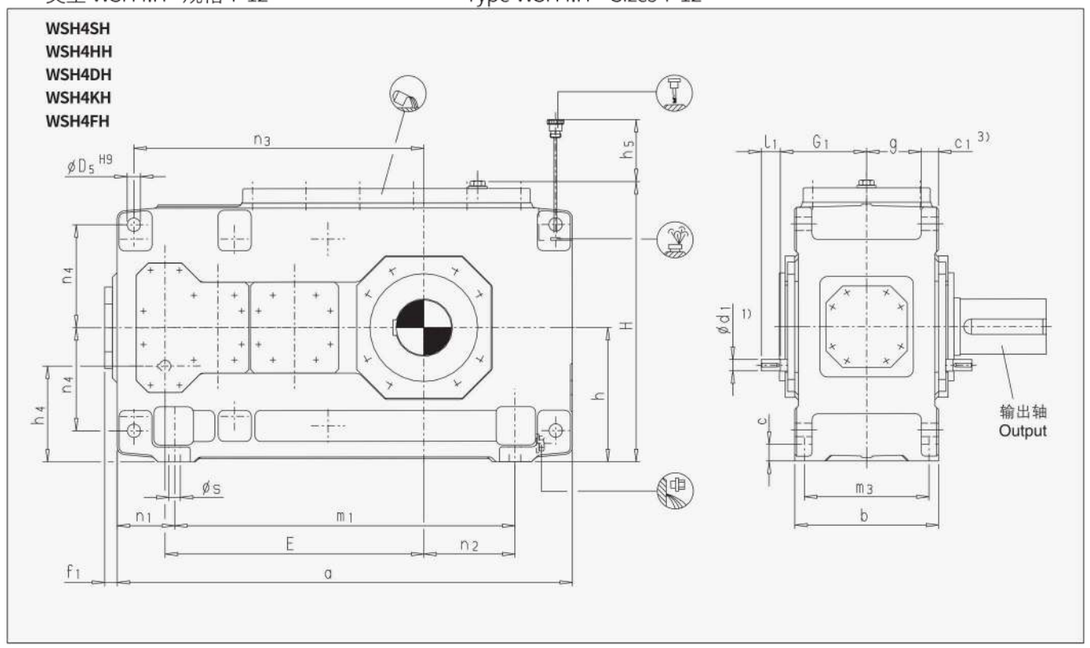
*) Approximate values

**) Without oil filling

四级传动/卧式安装

Four Stage / Horizontal

类型 WSH4.H 规格 7-12　　Type WSH4.H Sizes 7-12

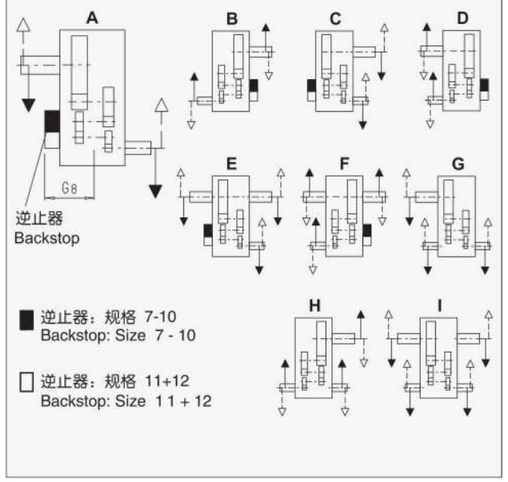


规格 Size	输入轴 / Input i_N = 100 - 180, i_N = 125 - 224 d_1	输入轴 / Input i_N = 100 - 180, i_N = 125 - 224 l_1	输入轴 / Input i_N = 200 - 355, i_N = 250 - 450 d_1	输入轴 / Input i_N = 200 - 355, i_N = 250 - 450 l_1	G_1	2) 布置形式 / Design G,H,I 仅用于 / only for i_N =	
7 + 8	30	50	24	40	180	100 - 224	125 - 280
9 + 10	35	60	28	50	215	100 - 250	125 - 315
11 + 12	45	100	32	80	250	100 - 250	125 - 315

规格 Size	齿轮箱 / Gear units b	c	c_1	D_5	g	h_{-1}	h_4	m_3	n_1	n_4	s
7 + 8	300	35	36 ± 1	28	114	280	200	260	120	215	24
9 + 10	370	40	45 ± 1.5	36	140	320	230	320	145	245	28
11 + 12	430	50	54 ± 1.5	40	161	380	270	370	165	300	35

规格 Size	齿轮箱 / Gear units a	E	f_1	h_5	H	m_1	n_2	n_3	逆止器 Backstop G_8
7	845	495	37	140	572	605	130	560	敬请垂询相关尺寸 Dimensions on request
8	950	540	37	140	582	710	190	605	
9	1000	580	43	150	662	710	155	660	
10	1100	630	43	150	662	810	205	710	
11	1200	705	47	165	782	870	180	805	
12	1355	775	47	165	790	1025	265	875	

布置形式 / Design

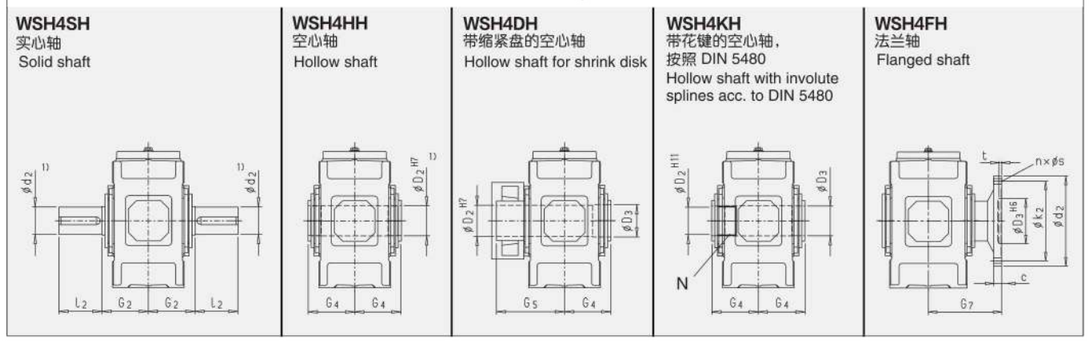


四级传动/卧式安装

Four Stage / Horizontal

类型 WSH4.H 规格 7-12　　Type WSH4.H Sizes 7-12

输出轴 / Output



规格 Size	WSH4SH d_2	WSH4SH l_2	WSH4SH G_2	WSH4HH D_2	WSH4HH G_4	WSH4DH D_2	WSH4DH D_3	WSH4DH G_4	WSH4DH G_5	WSH4KH N / DIN 5480	WSH4KH D_2	WSH4KH D_3	WSH4KH G_4	WSH4FH c	WSH4FH d_2	WSH4FH D_3	WSH4FH k_2	WSH4FH n x s	WSH4FH t	WSH4FH G_7
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 Oil quantity (l) *)	重量 Weight (kg) *) **) WSH4SH WSH4HH WSH4DH WSH4KH	重量 Weight (kg) *) **) WSH4FH
7	25	550	600
8	27	645	700
9	48	875	960
10	50	1010	1100
11	80	1460	1590
12	87	1725	1865

尺寸以 mm 为单位

1）轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

3）方案：
- 逆止器不能与布置形式 G、H 和 I 组合。

*）参考值；

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

3) **Variants:**
- Backstop not possible with G, H and I designs.

*) Approximate values

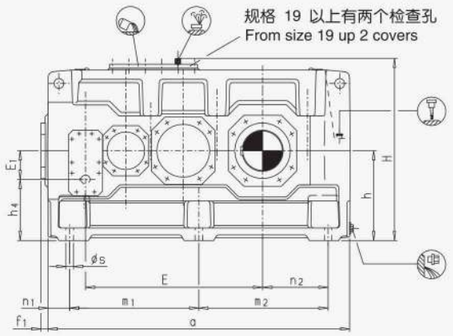
**) Without oil filling

四级传动/卧式安装

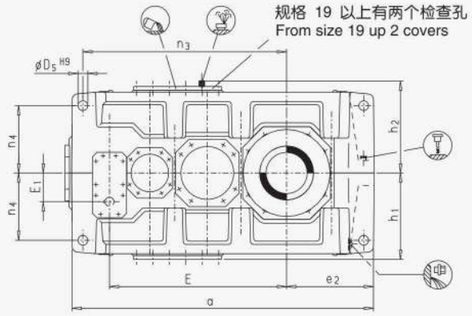
Four Stage / Horizontal

类型 WSH4.H，MTH4.M 规格 13-22　　Type WSH4.H，MTH4.M Sizes 13-22

WSH4SH
WSH4HH
WSH4DH
WSH4KH
WSH4FH



WSH4HM
WSH4DM
WSH4KM
WSH4FM

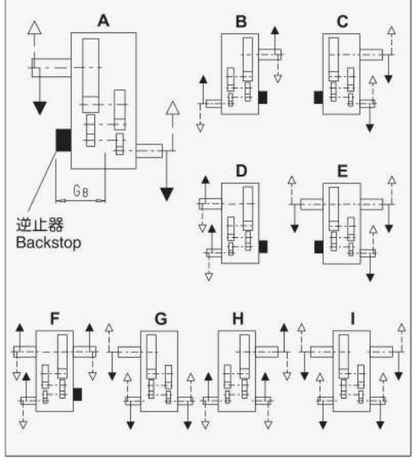


规格 Size	输入轴 / Input i_N = 100 - 180, 112 - 200, 125 - 224: d_1	l_1	i_N = 200 - 355, 224 - 400, 250 - 450: d_1	l_1	G_1	2) 布置形式 / Design G,H,I 仅用于 / only for i_N = 100 - 250	125 - 315
13 + 14	50	100	38	80	305	100 - 250	125 - 315
15 + 16	60	135	50	110	345	100 - 250	112 - 280
17 + 18	60	105	50	80	380	–	–
19 + 20	75	105	60	105	440	–	–
21 + 22	90	165	70	140	460	–	–

规格 Size	齿轮箱 / Gear units b	c	c_1	D_5	g	h_{-1}	h_1	h_4	h_2	m_3	n_1	n_4	s
13 + 14	550	60	61 ± 2	48	211.5	440	450	310	460	475	100	340	35
15 + 16	625	70	72 ± 2	55	238	500	490	340	500	535	120	375	42
17 + 18	690	80	81 ± 2	55	259	550	555	390	560	600	135	425	42
19 + 20	790	90	91 ± 2	65	299	620	615	435	620	690	155	475	48
21 + 22	830	100	100 ± 2	75	310	700	685	475	690	720	170	520	56

规格 Size	齿轮箱 / Gear units a	e_2	E	E_1	f_1	H	m_1	m_2	n_2	n_3	逆止器 Backstop G_8
13	1395	405	820	130	47	900	597.5	597.5	305	940	敬请垂询 相关尺寸 Dimensions on request
14	1535	475	890	130	47	900	597.5	737.5	375	1010	
15	1680	485	987	160	56	1000	720	720	365	1135	
16	1770	530	1033	160	56	1000	720	810	410	1180	
17	1770	525	1035	160	53	1110	750	750	390	1175	
18	1890	585	1095	160	53	1110	750	870	450	1235	
19	2030	590	1190	185	53	1240	860	860	435	1365	
20	2150	650	1250	185	53	1240	860	980	495	1425	
21	2340	655	1387	225	62	1390	1000	1000	485	1600	
22	2450	710	1442	225	62	1390	1000	1110	540	1655	

布置形式 / Design



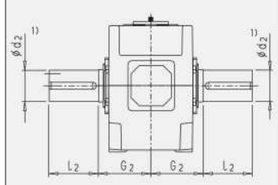
四级传动/卧式安装

Four Stage / Horizontal

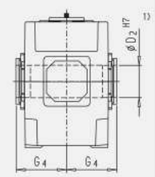
类型 WSH4.H，MTH4.M 规格 13-22　　Type WSH4.H，MTH4.M Sizes 13-22

输出轴 / Output

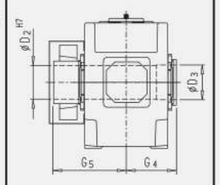
WSH4SH 实心轴 Solid shaft



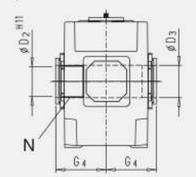
WSH4HH,WSH4HM 空心轴 Hollow shaft



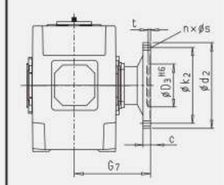
WSH4DH,WSH4DM 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH4KH,WSH4KM 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSH4FH,WSH4FM 法兰轴 Flanged shaft



规格 Size	WSH4SH d_2	l_2	G_2	WSH4HH WSH4HM D_2	G_4	WSH4DH,WSH4DM D_2	D_3	G_4	G_5	WSH4KH,WSH4KM N / DIN 5480	D_2	D_3	G_4	WSH4FH,WSH4FM c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30 x 39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32 x 39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28 x 45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28 x 45	20	710

规格 Size	润滑油量 Oil quantity (l) *) WSH4.H	WSH4.M	重量 Weight (kg) *) **) WSH4SH WSH4HH WSH4DH WSH4KH	WSH4HM WSH4KM WSH4DM	WSH4FH	WSH4FM
13	130	120	2390	2270	2550	2430
14	140	125	2730	2600	2900	2770
15	230	170	3635	3440	3875	3680
16	235	175	3965	3740	4220	3995
17	290	225	4680	4445	4980	4745
18	305	230	5185	4915	5535	5265
19	430	310	6800	6300	敬请垂询 On request	
20	380	330	8200	7700		
21	395	430	9200	8600		
22	420	450	9900	9400		

尺寸以 mm 为单位

1）轴：
- $K_6 \leq \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

3）方案：
- 逆止器不能与布置形式 G、H 和 I 组合。

*）参考值；

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leq \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

3) **Variants:**
- Backstop not possible with G, H and I designs.

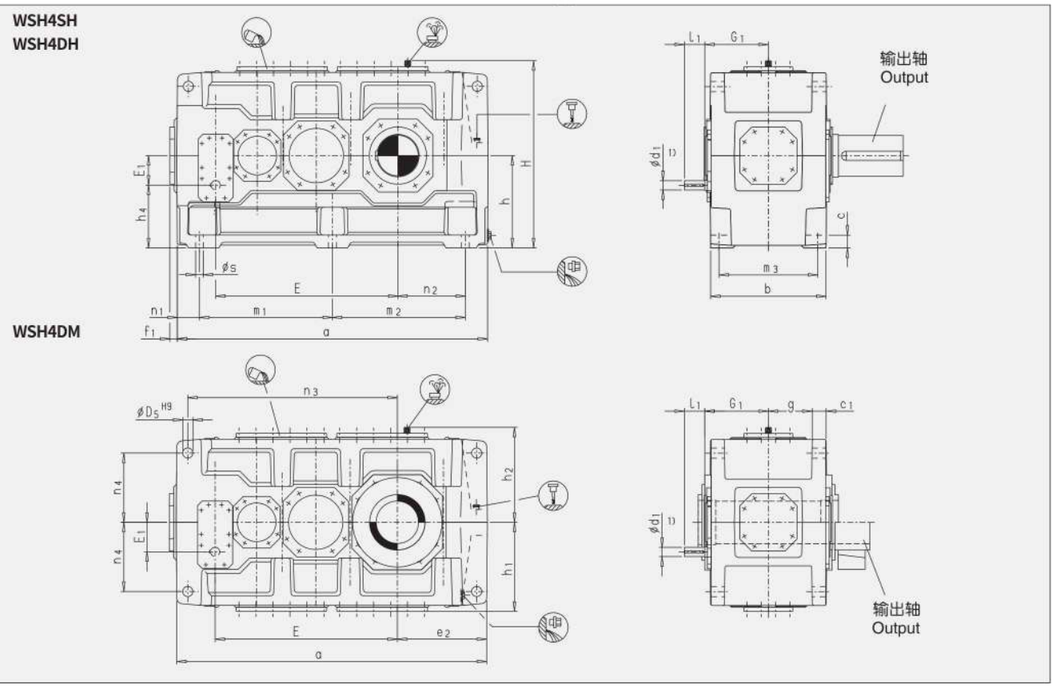
*) Approximate values

**) Without oil filling

四级传动/卧式安装

Four Stage / Horizontal

类型 WSH4.H，MTH4DM 规格 23-26　　Type WSH4.H，MTH4DM Sizes 23-26

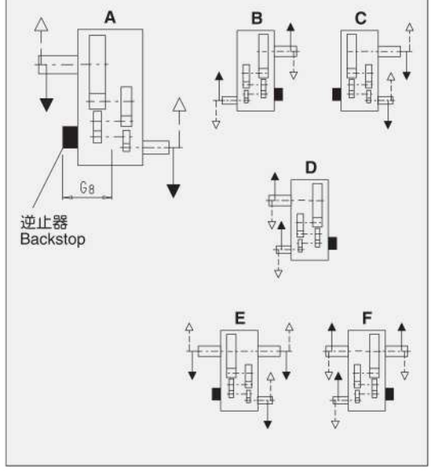


规格 Size	输入轴 / Input				
	i_N = 100 - 180 i_N = 112 - 200		i_N = 200 - 355 i_N = 224 - 400		
	d_1	l_1	d_1	l_1	G_1
23 + 24	90	130	70	105	505
25 + 26	100	205	85	170	565

规格 Size	齿轮箱 / Gear units												
	b	c	c_1	D_5	g	$h_{.1}$	h_1	h_2	h_4	m_3	n_1	n_4	s
23 + 24	930	115	120±2	80	342	780	770	790	555	810	180	580	56
25 + 26	1045	130	120±2	90	400	860	860	860	595	910	200	660	66

规格 Size	齿轮箱 / Gear units										逆止器 Backstop G_8
	a	e_2	E	E_1	f_1	H	m_1	m_2	n_2	n_3	
23	2530	730	1505	225	35	1570	1085	1085	550	1725	敬请垂询 相关尺寸 Dimensions on request
24	2660	795	1570	225	35	1570	1085	1215	615	1790	
25	2830	790	1695	265	65	1720	1215	1215	590	1965	
26	3010	880	1785	265	65	1720	1215	1395	680	2055	

布置形式 / **Design**



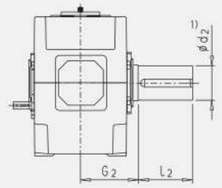
四级传动/卧式安装

Four Stage / Horizontal

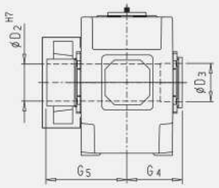
类型 WSH4.H，MTH4DM 规格 23-26　　Type WSH4.H，MTH4DM Sizes 23-26

输出轴 / **Output**

WSH4SH
实心轴
Solid shaft



WSH4DH,WSH4DM
带缩紧盘的空心轴
Hollow shaft for shrink disk



规格 Size	WSH4SH			WSH4DH,WSH4DM			
	d_2	l_2	G_2	D_2	D_3	G_4	G_5
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

规格 Size	润滑油量 Oil quantity (l) *)		重量 Weight (kg) *) **)	
	WSH4SH	WSH4DM	WSH4SH WSH4DH	WSH4DM
23	520	500	11600	10700
24	550	600	13500	12600
25	735	800	16100	15200
26	780	850	17600	16500

尺寸以 mm 为单位

1) 轴：
- $K_6 \leq \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leq \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

*) Approximate values

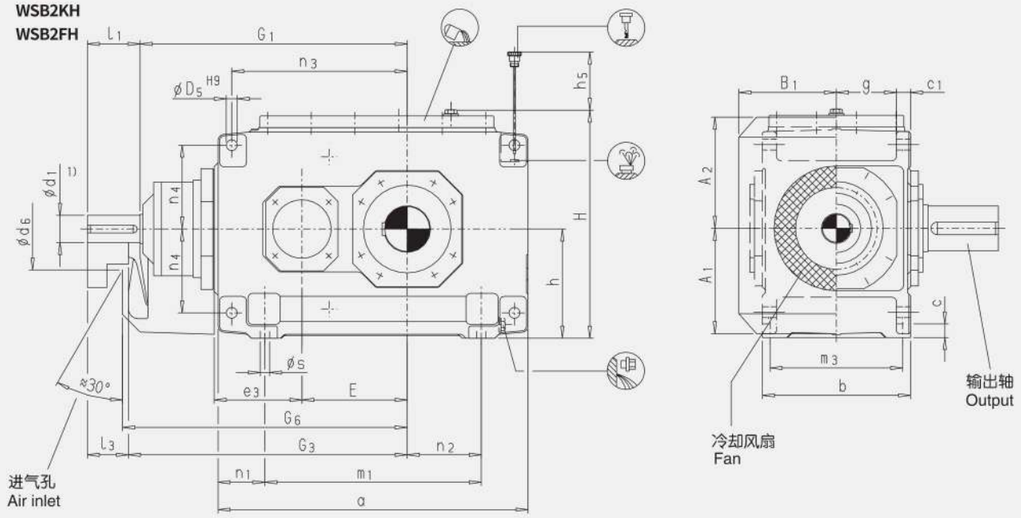
**) Without oil filling

两级传动/卧式安装

Two Stage / Horizontal

类型 WSB2.H 规格 4-12　　Type WSB2.H Sizes 4-12

WSB2SH
WSB2HH
WSB2DH
WSB2KH
WSB2FH

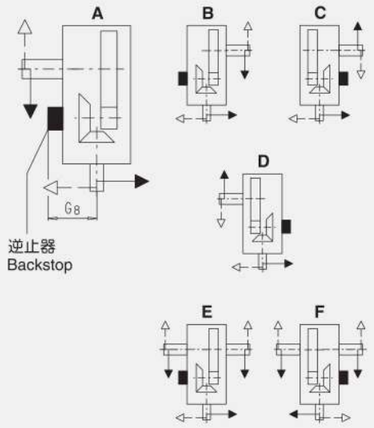


规格 Size	输入轴 / Input i_N = 5 - 11.2 i_N = 6.3 - 14					冷却风扇 / Fan					
	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	A_2	B_1	d_6
4	45	100	80	465	485	-	-	195	200	188	150
5 + 6	55	110	80	535	565	570	600	220	235	215	160
7 + 8	70	135	105	640	670	685	715	270	285	250	210
9 + 10	80	165	130	755	790	805	840	310	325	270	195
11 + 12	90	165	130	925	960	995	1030	370	385	328	210

规格 Size	齿轮箱 / Gear units										
	b	c	c_1	D_5	e_3	g	h_{-1}	m_3	n_1	n_4	s
4	270	28	30 ±1	24	160	105	200	235	105	150	19
5 + 6	320	28	30 ±1	24	185	130	230	285	105	180	19
7 + 8	380	35	36 ±1	28	225	154	280	340	120	215	24
9 + 10	440	40	48 ±1.5	36	265	172	320	390	145	245	28
11 + 12	530	50	54 ±1.5	40	320	211	380	470	165	300	35

规格 Size	齿轮箱 / Gear units								逆止器 Backstop G_8
	a	E	G_6	h_5	H	m_1	n_2	n_3	
4	505	160	495	80	415	295	85	285	敬请垂询 相关尺寸 Dimensions on request
5	565	185	575	150	482	355	100	330	
6	645	220	610	150	482	435	145	365	
7	690	225	685	180	582	450	130	405	
8	795	270	730	190	582	555	190	450	
9	820	265	805	205	662	530	155	480	
10	920	315	855	215	662	630	205	530	
11	975	320	980	240	790	645	180	580	
12	1130	390	1050	250	790	800	265	650	

布置形式 / Design



逆止器不能与以下布置形式组合安装
Backstop **not** possible for

B2SH	布置形式 / Design	**A, C, E + F**
B2FH	布置形式 / Design	**A + C**
B2DH	布置形式 / Design	**B + D**

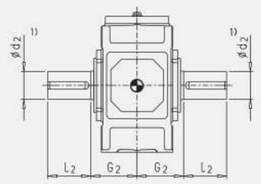
两级传动/卧式安装

Two Stage / Horizontal

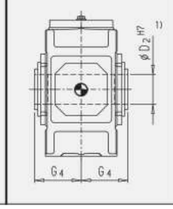
类型 WSB2.H 规格 4-12　　Type WSB2.H Sizes 4-12

输出轴 / **Output**

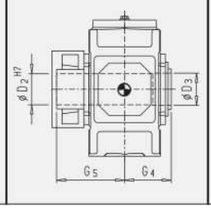
WSB2SH
实心轴
Solid shaft



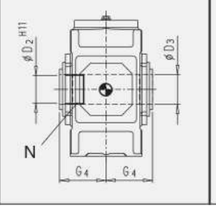
WSB2HH
空心轴
Hollow shaft



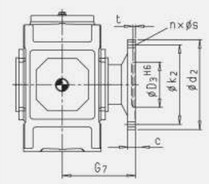
WSB2DH
带缩紧盘的空心轴
Hollow shaft for shrink disk



WSB2KH
带花键的空心轴，按照 DIN 5480
Hollow shaft with involute splines acc. to DIN 5480



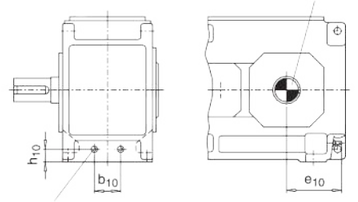
WSB2FH
法兰轴
Flanged shaft



规格 Size	WSB2SH			WSB2HH		WSB2DH				WSB2KH				WSB2FH							
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
4	80	170	170	80	170	85	85	170	235	-	-	-	-	-	-	-	-	-	-	-
5	100	210	200	95	200	100	100	200	275	N 95x3x30x30x9H	89	100	200	25	300	150	260	16 x 22	10	290
6	110	210	200	105	200	110	110	200	275	N 95x3x30x30x9H	89	110	200	25	320	160	280	18 x 22	10	290
7	120	210	235	115	235	120	120	235	320	N 120x3x30x38x9H	114	120	235	30	370	180	320	16 x 26	10	340
8	130	250	235	125	235	130	130	235	325	N 120x3x30x38x9H	114	130	235	30	390	190	340	18 x 26	10	340
9	140	250	270	135	270	140	145	270	365	N 140x3x30x45x9H	134	145	270	38	430	220	380	20 x 26	12	385
10	160	300	270	150	270	150	155	270	385	N 140x3x30x45x9H	134	155	270	38	470	240	420	22 x 26	12	385
11	170	300	320	165	320	165	170	320	450	N 170x5x30x32x9H	160	170	320	42	510	260	450	18 x 33	12	450
12	180	300	320	180	320	180	185	320	455	N 170x5x30x32x9H	160	185	320	42	540	280	480	22 x 33	12	450

规格 Size	润滑油量 Oil quantity (l) *) 轴封 Shaft seal	重量 Weight (kg) *) **)	
		WSB2SH WSB2HH WSB2DH WSB2KH	WSB2FH
4	10	235	-
5	16	360	400
6	19	410	455
7	31	615	670
8	34	700	760
9	48	1000	1090
10	50	1155	1250
11	80	1640	1775
12	95	1910	2060

冷却盘管 / Cooling coil



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

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

规格 Size	b_{10}	e_{10}	h_{10}	x) L / min
4	74	160	54	4
5	130	175	62	8
6	120	220	68	4
7	140	210	80	8
8	140	270	80	4
9	232	245	110	8
10	150	295	90	8
11	312	275	115	8
12	300	360	115	8

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leq \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；
**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leq \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

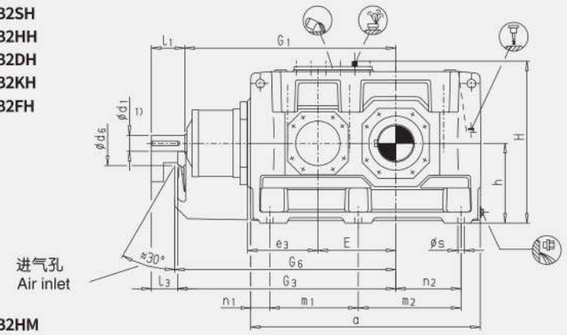
*) Approximate values
**) Without oil filling

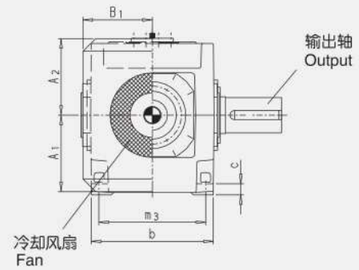
两级传动/卧式安装

Two Stage / Horizontal

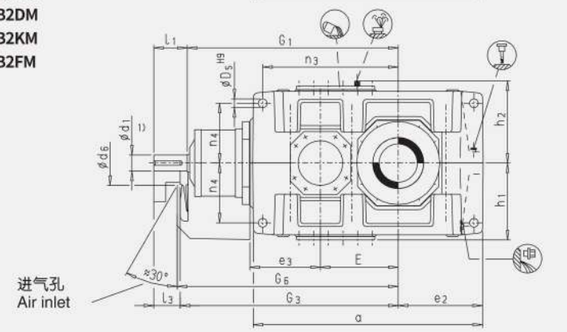
类型 WSB2.H,WSB2.M 规格 13-18　　Type WSB2.H,WSB2.M Sizes 13-18

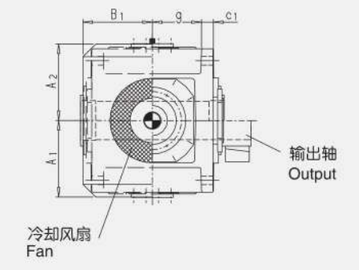
WSB2SH
WSB2HH
WSB2DH
WSB2KH
WSB2FH





WSB2HM
WSB2DM
WSB2KM
WSB2FM



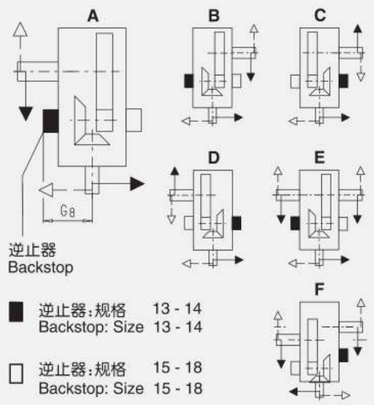


规格 Size	输入轴 / Input i_N = 5 - 11.2 / i_N = 6.3 - 14 / i_N = 7.1 - 12.5			i_N = 5.6 - 11.2 / i_N = 5.6 - 12.5							冷却风扇 / Fan			
	d_1	l_1	l_3	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	A_2	B_1	d_6
13 + 14	110	205	165				1070	1110	1140	1180	430	450	375	245
15	130	245	200				1277	1322			490	495	435	280
16				130	245	200			1323	1368	490	495	435	280
17				150	245	200	1435	1480			540	555	505	380
18	150	245	200				1495	1540			540	555	505	380

规格 Size	齿轮箱 / Gear units												
	b	c	c_1	D_5	e_3	g	h_{-1}	h_1	h_2	m_3	n_1	n_4	s
13 + 14	655	60	61 + 2	48	380	264	440	450	460	580	100	340	35
15 + 16	765	70	72 + 2	55	450	308	500	490	500	670	120	375	42
17 + 18	885	80	81 + 2	65	510	356	550	555	560	780	135	420	48

规格 Size	齿轮箱 / Gear units									逆止器 Backstop
	a	e_2	E	G_6	H	m_1	m_2	n_2	n_3	G_8
13	1130	405	370	1130	900	465	465	305	675	敬请垂询 相关尺寸 Dimensions on request
14	1270	475	440	1200	900	465	605	375	745	
15	1350	485	442	1340	1000	555	555	365	805	
16	1440	530	488	1385	1000	555	645	410	850	
17	1490	525	490	1500	1110	610	610	390	895	
18	1610	585	550	1560	1110	610	730	450	955	

布置形式 / **Design**



■ 逆止器:规格 13 - 14
Backstop: Size 13 - 14

□ 逆止器:规格 15 - 18
Backstop: Size 15 - 18

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

WSB2SH 规格 / Size 13 + 14
布置形式 / Design **A, C, E + F**
WSB2SH 规格 / Size 15 - 18
布置形式 / Design **B, D, E + F**
WSB2FH 规格 / Size 13 + 14
布置形式 / Design **A + C**
WSB2FH 规格 / Size 15 - 18
布置形式 / Design **B + D**
WSB2DH 规格 / Size 14
布置形式 / Design **B + D**
WSB2DH 规格 / Size 16 + 18
布置形式 / Design **A + C**

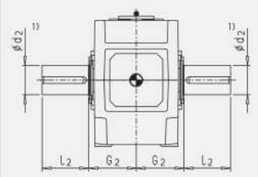
两级传动/卧式安装

Two Stage / Horizontal

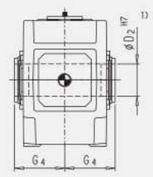
类型 WSB2.H,WSB2.M 规格 13-18　　Type WSB2.H,WSB2.M Sizes 13-18

输出轴 / **Output**

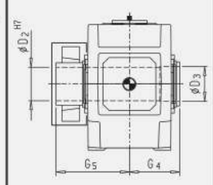
WSB2SH
实心轴
Solid shaft



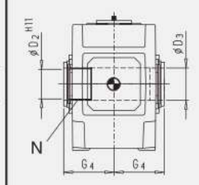
WSB2HH,WSB2HM
空心轴
Hollow shaft



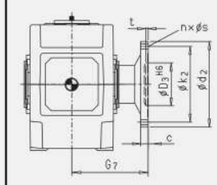
WSB2DH,WSB2DM
带缩紧盘的空心轴
Hollow shaft for shrink disk



WSB2KH,WSB2KM
带花键的空心轴，按照 DIN 5480
Hollow shaft with involute splines acc. to DIN 5480



WSB2FH,WSB2FM
法兰轴
Flanged shaft

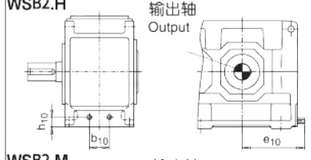


规格 Size	WSB2SH			WSB2HH WSB2HM		WSB2DH,WSB2DM				WSB2KH,WSB2KM				WSB2FH,WSB2FM						
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	390	-	-	-	-	-	-	-	-	-	-	48	580	310	500	20 x 33	14	525
14	210	350	390	210	390	210	215	390	535	N 190x5x30x36x9H	180	215	390	48	620	310	540	24 x 33	14	525
15	230	410	460	-	-	-	-	-	-	-	-	-	-	55	710	360	630	28 x 33	17	625
16	240	410	460	240	450	240	245	450	620	N 220x5x30x42x9H	210	245	450	55	740	360	660	30 x 33	17	625
17	250	410	540	-	-	-	-	-	-	-	-	-	-	60	750	410	660	24 x 39	18	695
18	270	470	540	275	510	280	285	510	700	N 250x5x30x48x9H	240	285	510	60	800	410	710	26 x 39	18	695

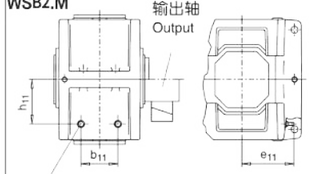
规格 Size	润滑油量 Oil quantity (l) *)		重量 Weight (kg) *) **)			
	WSB2.H	WSB2.M	WSB2SH WSB2HH WSB2DH WSB2KH	WSB2HM WSB2KM WSB2DM	WSB2FH	WSB2FM
13	140	120	2450	2350	2620	2520
14	155	130	2825	2725	3005	2905
15	220	180	3990	3795	4245	4050
16	230	190	4345	4160	4615	4430
17	320	260	5620	5320	5940	5640
18	335	275	6150	5860	6520	6230

冷却盘管 / **Cooling coil**

WSB2.H



WSB2.M



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

规格 Size	b_{10}	b_{11}	e_{10}	e_{11}	h_{10}	h_{11}	x) L / min
13	324	324	460	335	116	300	8
14	324	324	530	405	116	300	8
15	396	396	540	395	119	335	8
16	396	396	585	440	119	335	8
17	468	324	580	425	134	380	8
18	468	324	640	485	134	380	8

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

x) 所需冷却水量；
冷却水压力最大值：8巴
Cooling water quantity required; max. cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；
**) 未注油时

Dimensions in mm

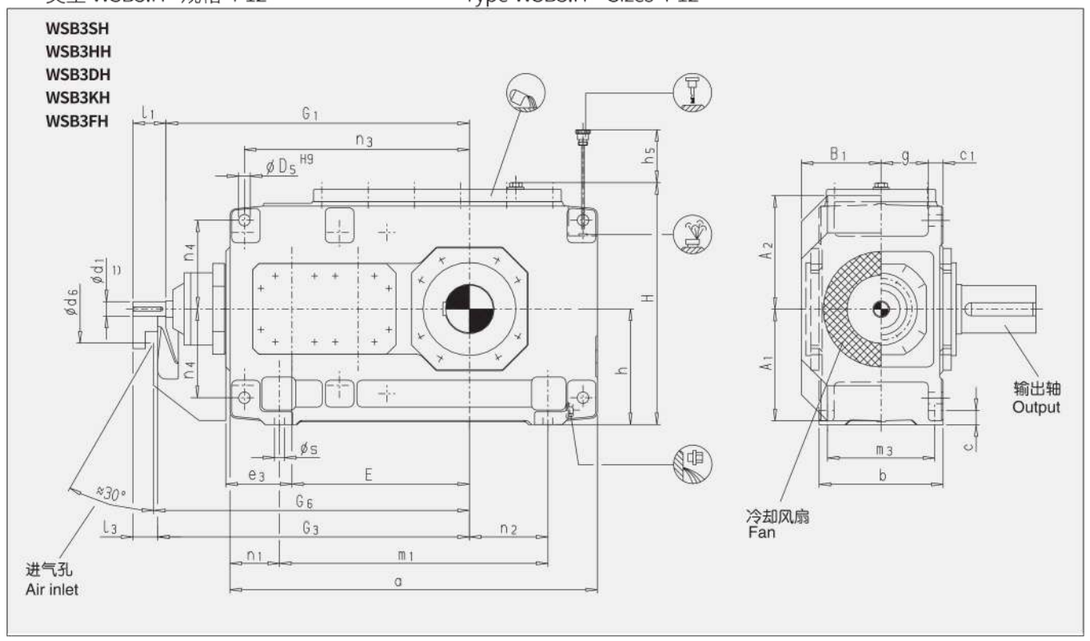
1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

*) Approximate values
**) Without oil filling

三级传动/卧式安装

Three Stage / Horizontal

类型 WSB3.H 规格 4-12　　Type WSB3.H Sizes 4-12

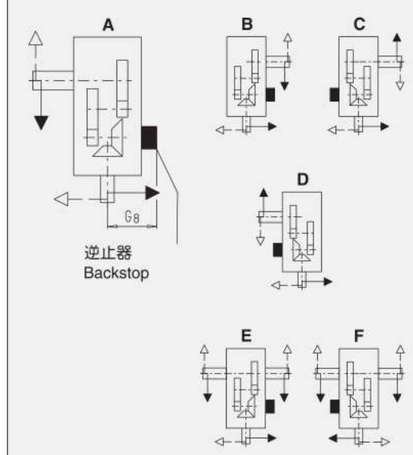


规格 Size	输入轴 / Input i_N = 12.5 - 45, i_N = 16 - 56			输入轴 / Input i_N = 50 - 71, i_N = 63 - 90							冷却风扇 / Fan			
	d_1	l_1	l_3	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	A_2	B_1	d_6
4	30	70	50	25	60	40	500	520	-	-	195	200	143	110
5 + 6	35	80	60	28	60	40	575	595	610	630	220	235	168	130
7 + 8	45	100	80	35	80	60	690	710	735	755	275	275	193	165
9 + 10	55	110	80	40	100	70	800	830	850	880	315	325	231	175
11 + 12	70	135	105	50	110	80	960	990	1030	1060	370	385	263	190

规格 Size	齿轮箱 / Gear units										
	b	c	c_1	D_5	e_3	g	h_{-1}	m_3	n_1	n_4	s
4	215	28	30 ± 1	24	110	77.5	200	180	105	150	19
5 + 6	255	28	30 ± 1	24	130	97.5	230	220	105	180	19
7 + 8	300	35	36 ± 1	28	160	114	280	260	120	215	24
9 + 10	370	40	45 ± 1.5	36	185	140	320	320	145	245	28
11 + 12	430	50	54 ± 1.5	40	225	161	380	370	165	300	35

规格 Size	齿轮箱 / Gear units								逆止器 Backstop G_8
	a	E	G_6	h_5	H	m_1	n_2	n_3	
4	565	270	530	100	415	355	85	345	敬请垂询相关尺寸 Dimensions on request
5	640	315	605	130	482	430	100	405	
6	720	350	640	130	482	510	145	440	
7	785	385	720	170	572	545	130	500	
8	890	430	765	160	582	650	190	545	
9	925	450	845	175	662	635	155	585	
10	1025	500	895	175	662	735	205	635	
11	1105	545	1010	220	782	775	180	710	
12	1260	615	1080	210	790	930	265	780	

布置形式 / Design



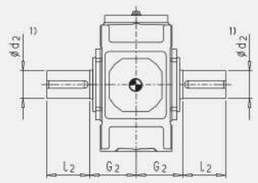
三级传动/卧式安装

Three Stage / Horizontal

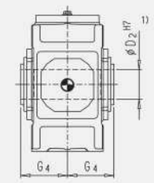
类型 WSB3.H 规格 4-12　　Type WSB3.H Sizes 4-12

输出轴 / Output

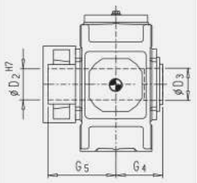
WSB3SH 实心轴 Solid shaft



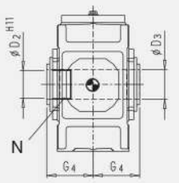
WSB3HH 空心轴 Hollow shaft



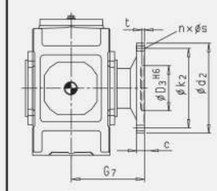
WSB3DH 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSB3KH 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



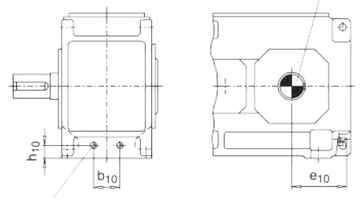
WSB3FH 法兰轴 Flanged shaft



规格 Size	WSB3SH d_2	WSB3SH l_2	WSB3SH G_2	WSB3HH D_2	WSB3HH G_4	WSB3DH D_2	WSB3DH D_3	WSB3DH G_4	WSB3DH G_5	WSB3KH N / DIN 5480	WSB3KH D_2	WSB3KH D_3	WSB3KH G_4	WSB3FH c	WSB3FH d_2	WSB3FH D_3	WSB3FH k_2	WSB3FH n x s	WSB3FH t	WSB3FH G_7
4	80	170	140	80	140	85	85	140	205	-	-	-	-	-	-	-	-	-	-	-
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 Oil quantity (l) *)	重量 / Weight (kg) *) **) WSB3SH WSB3HH WSB3DH WSB3KH	重量 / Weight (kg) *) **) WSB3FH
4	9	210	-
5	15	325	360
6	16	380	420
7	27	550	600
8	30	635	690
9	42	890	975
10	45	1020	1110
11	71	1455	1585
12	76	1730	1870

冷却盘管 / Cooling coil



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

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

规格 Size	b_{10}	e_{10}	h_{10}	x) L / min
4	34	155	60	4
5	68	170	64	4
6	70	220	69	4
7	100	210	83	4
8	100	270	83	4
9	140	245	110	8
10	100	295	95	8
11	110	275	95	8
12	200	360	109	8

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值：

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

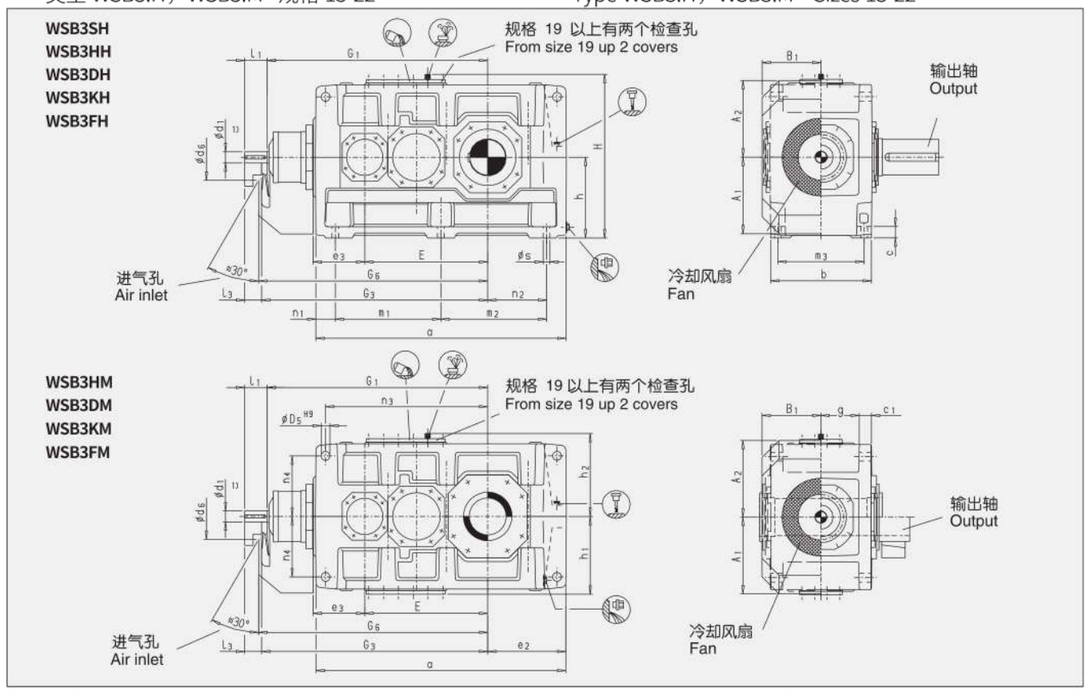
*) Approximate values

**) Without oil filling

三级传动/卧式安装

Three Stage / Horizontal

类型 WSB3.H，WSB3.M 规格 13-22　　Type WSB3.H，WSB3.M Sizes 13-22

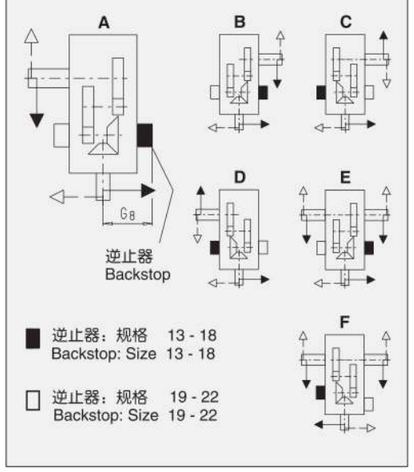


规格 Size	输入轴 / Input i_N = 12.5 - 45, i_N = 14 - 50, i_N = 16 - 56			输入轴 / Input i_N = 50 - 71, i_N = 56 - 80, i_N = 63 - 90			冷却风扇 / Fan							
	d_1	l_1	l_3	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	A_2	B_1	d_6
13 + 14	80	165	130	60	140	105	1125	1160	1195	1230	425	435	325	210
15 + 16	90	165	130	70	140	105	1367	1402	1413	1448	485	520	365	210
17 + 18	110	205	165	80	170	130	1560	1600	1620	1660	535	570	395	230
19 + 20	130	245	200	100	210	165	1832	1877	1892	1937	610	630	448	245
21 + 22	130	245	200	100	210	165	1902	1947	1957	2002	690	690	473	280

规格 Size	齿轮箱 / Gear units												
	b	c	c_1	D_5	e_3	g	h_{-1}	h_1	h_2	m_3	n_1	n_4	s
13 + 14	550	60	61±2	48	265	211.5	440	450	460	475	100	340	35
15 + 16	625	70	72±2	55	320	238	500	490	500	535	120	375	42
17 + 18	690	80	81±2	55	370	259	550	555	560	600	135	425	42
19 + 20	790	90	91±2	65	420	299	620	615	620	690	155	475	48
21 + 22	830	100	100±2	75	450	310	700	685	690	720	170	520	56

规格 Size	齿轮箱 / Gear units									逆止器 Backstop
	a	e_2	E	G_6	H	m_1	m_2	n_2	n_3	G_8
13	1290	405	635	1180	900	545	545	305	835	敬请垂询 相关尺寸 Dimensions on request
14	1430	475	705	1250	900	545	685	375	905	
15	1550	485	762	1420	1000	655	655	365	1005	
16	1640	530	808	1470	1000	655	745	410	1050	
17	1740	525	860	1620	1110	735	735	390	1145	
18	1860	585	920	1680	1110	735	855	450	1205	
19	2010	590	997	1900	1240	850	850	435	1345	
20	2130	650	1057	1960	1240	850	970	495	1405	
21	2140	655	1067	1970	1390	900	900	485	1400	
22	2250	710	1122	2025	1390	900	1010	540	1455	

布置形式 / Design



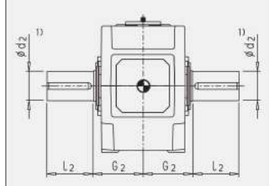
三级传动/卧式安装

Three Stage / Horizontal

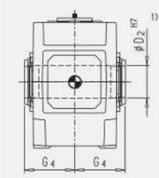
类型 WSB3.H，WSB3.M 规格 13-22　　Type WSB3.H，WSB3.M Sizes 13-22

输出轴 / Output

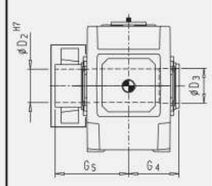
WSB3SH 实心轴 Solid shaft



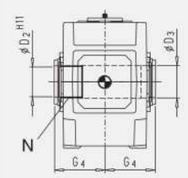
WSB3HH,WSB3HM 空心轴 Hollow shaft



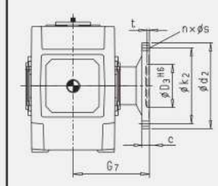
WSB3DH,WSB3DM 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSB3KH,WSB3KM 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSB3FH,WSB3FM 法兰轴 Flanged shaft

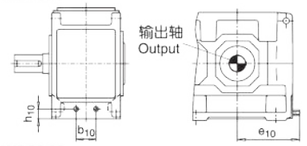


规格 Size	WSB3SH			WSB3HH WSB3HM		WSB3DH,WSB3DM				WSB3KH,WSB3KM				WSB3FH,WSB3FM						
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30 x 39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32 x 39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28 x 45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28 x 45	20	710

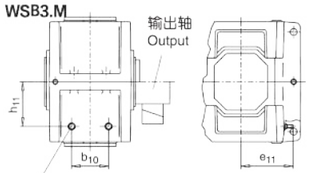
规格 Size	润滑油量 Oil quantity (l) *)		重量 Weight (kg) *) **)			
	WSB3.H	WSB3.M	WSB3SH WSB3HH WSB3DH WSB3KH	WSB3HM WSB3KM WSB3DM	WSB3FH	WSB3FM
13	130	110	2380	2260	2540	2420
14	140	115	2750	2615	2920	2785
15	210	160	3730	3540	3970	3780
16	220	165	3955	3765	4250	4020
17	290	230	4990	4760	5290	5060
18	300	235	5495	5240	6045	5590
19	380	360	7000	6500	敬请垂询 On request	
20	440	420	8100	7600		
21	370	420	9200	8600		
22	430	490	9900	9400		

冷却盘管 / Cooling coil

WSB3.H



WSB3.M



冷却盘管接口尺寸 G1/2"
Water connection for cooling coil G2/1"

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

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

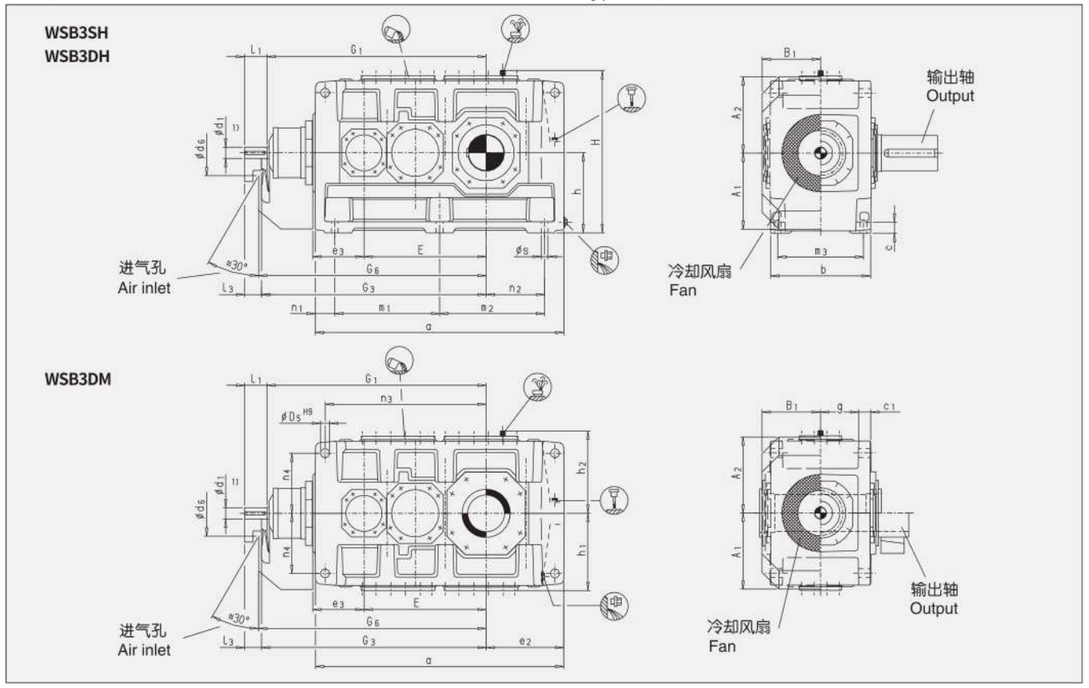
*) Approximate values

**) Without oil filling

三级传动/卧式安装

Three Stage / Horizontal

类型 WSB3.H，WSB3DM 规格 23-26　　Type WSB3.H，WSB3DM Sizes 23-26

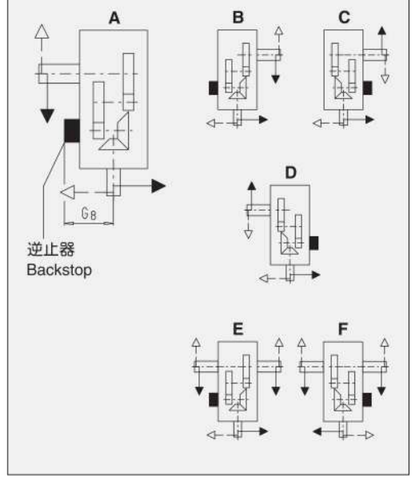


规格 Size	输入轴 / Input i_N = 20 - 45, i_N = 22.4 - 50 d_1	l_1	l_3	i_N = 50 - 71, i_N = 56 - 80 d_1	l_1	l_3	G_1	G_3	G_1	G_3	冷却风扇 / Fan A_1	A_2	B_1	d_6
23 + 24	150	245	200	110	210	165	2130	2175	2195	2240	770	770	528	350
25 + 26	150	245	200	110	210	165	2270	2315	2360	2405	845	865	585	380

规格 Size	齿轮箱 / Gear units b	c	c_1	D_5	e_3	g	h_{-1}	h_1	h_2	m_3	n_1	n_4	s
23 + 24	930	115	120±2	80	490	342	780	770	790	810	180	580	56
25 + 26	1045	130	120±2	90	490	400	860	860	860	910	200	660	66

规格 Size	齿轮箱 / Gear units a	e_2	E	G_6	H	m_1	m_2	n_2	n_3	逆止器 Backstop G_8
23	2380	730	1185	2200	1570	1010	1010	550	1560	敬请垂询 相关尺寸 Dimensions on request
24	2510	795	1250	2265	1570	1010	1140	615	1625	
25	2580	790	1325	2315	1720	1090	1090	590	1685	
26	2760	880	1415	2430	1720	1090	1270	680	1775	

布置形式 / Design



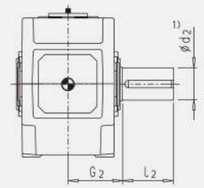
三级传动/卧式安装

Three Stage / Horizontal

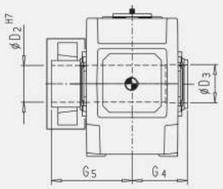
类型 WSB3.H，WSB3DM 规格 23-26　　Type WSB3.H，WSB3DM Sizes 23-26

输出轴 / Output

WSB3SH
实心轴
Solid shaft



WSB3DH,WSB3DM
带缩紧盘的空心轴
Hollow shaft for shrink disk

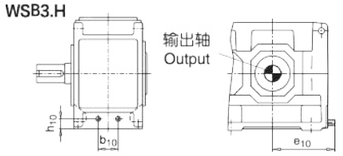


规格 Size	WSB3SH d_2	l_2	G_2	WSB3DH,WSB3DM D_2	D_3	G_4	G_5
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

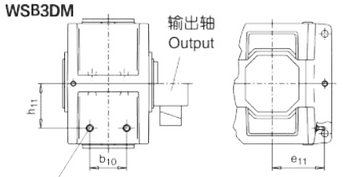
规格 Size	润滑油量 Oil quantity (l) *) WSB3SH	WSB3DM	重量 Weight (kg) *) **) WSB3SH WSB3DH	WSB3DM
23	520	560	11500	10600
24	600	650	13400	12500
25	720	790	16000	15100
26	840	920	17500	16400

冷却盘管 / Cooling coil

WSB3.H



WSB3DM



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

规格 Size	b_{10}	e_{10}	e_{11}	h_{10}	h_{11}	x) L / min
23	敬请垂询 On request					
24						
25						
26						

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

x) 所需冷却水量：
冷却水压力最大值：8巴
Cooling water quantity required; max. cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

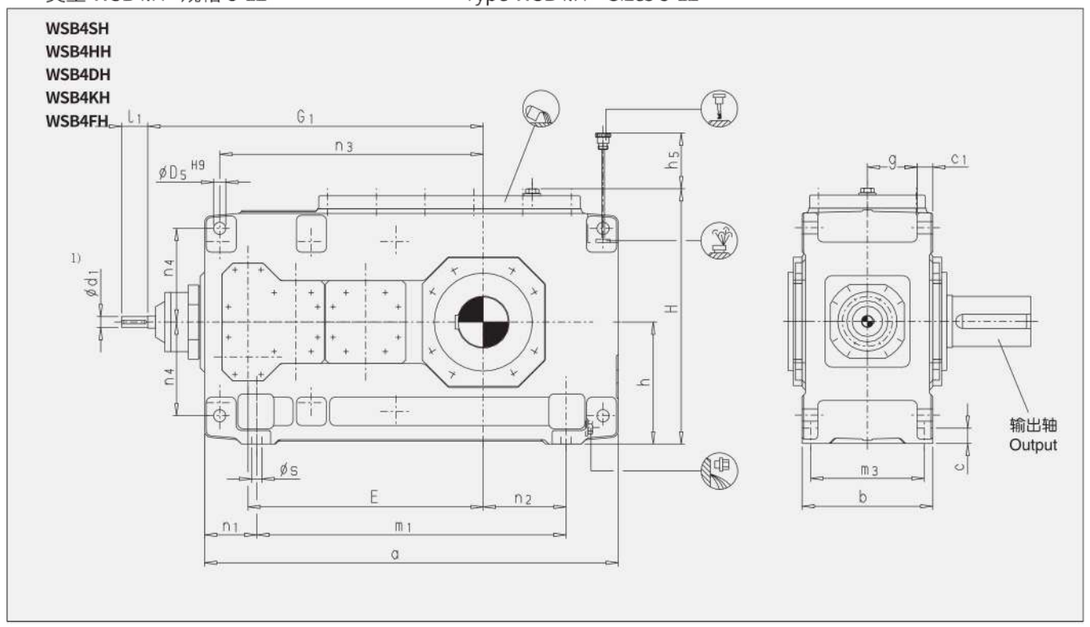
*) Approximate values

**) Without oil filling

四级传动/卧式安装

Four Stage / Horizontal

类型 WSB4.H 规格 5-12　　Type WSB4.H Sizes 5-12

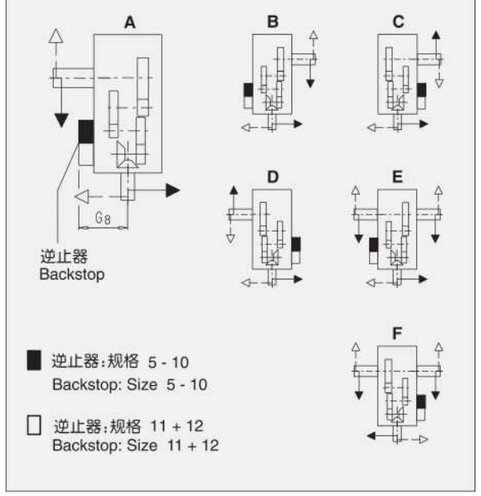


规格 Size	输入轴 / Input i_N = 80 - 180, 100 - 224 d_1	l_1	i_N = 200 - 315, 250 - 400 d_1	l_1	G_1	G_1
5 + 6	28	55	20	50	615	650
7 + 8	30	70	25	60	725	770
9 + 10	35	80	28	60	840	890
11 + 12	45	100	35	80	1010	1080

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

规格 Size	齿轮箱 / Gear units a	E	h_5	H	m_1	n_2	n_3	逆止器 Backstop G_8
5	690	405	100	482	480	100	455	敬请垂询 相关尺寸 Dimensions on request
6	770	440	100	482	560	145	490	
7	845	495	140	572	605	130	560	
8	950	540	130	582	710	190	605	
9	1000	580	135	662	710	155	660	
10	1100	630	135	662	810	205	710	
11	1200	705	170	782	870	180	805	
12	1355	775	160	790	1025	265	875	

布置形式 / **Design**



■ 逆止器：规格 5 - 10
Backstop: Size 5 - 10

□ 逆止器：规格 11 + 12
Backstop: Size 11 + 12

四级传动/卧式安装

Four Stage / Horizontal

类型 WSB4.H 规格 5-12　　Type WSB4.H Sizes 5-12

输出轴 / **Output**

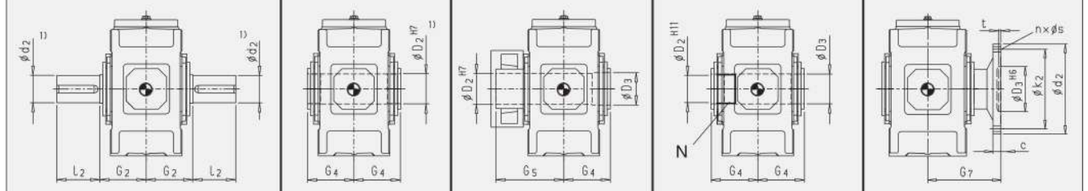
WSB4SH 实心轴 Solid shaft

WSB4HH 空心轴 Hollow shaft

WSB4DH 带缩紧盘的空心轴 Hollow shaft for shrink disk

WSB4KH ( ) 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480

WSB4FH 法兰轴 Flanged shaft



规格 Size	WSB4SH d2	l2	G2	WSB4HH D2	G4	WSB4DH D2	D3	G4	G5	WSB4KH N / DIN 5480	D2	D3	G4	WSB4FH c	d2	D3	k2	n x s	t	G7
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 Oil quantity (l) *)	重量 Weight (kg) *) **) WSB4SH WSB4HH WSB4DH WSB4KH	WSB4FH
5	16	335	370
6	18	385	425
7	30	555	605
8	33	655	710
9	48	890	975
10	50	1025	1115
11	80	1485	1615
12	90	1750	1890

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$ ； $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

*) Approximate values

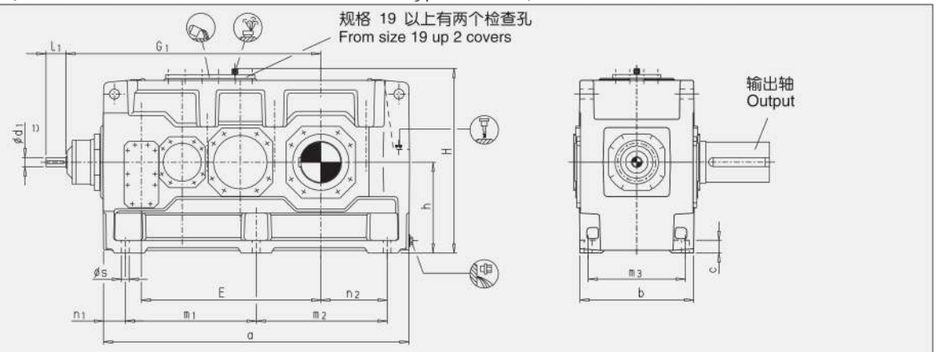
**) Without oil filling

四级传动/卧式安装

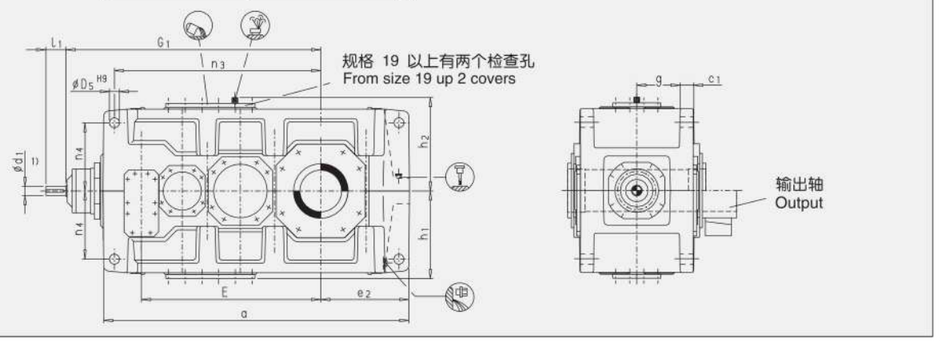
Four Stage / Horizontal

类型 WSB4.H,WAB4.M 规格 13-22　　Type WSB4.H,WAB4.M Sizes 13-22

WSB4SH
WSB4HH
WSB4DH
WSB4KH
WSB4FH



WSB4HM
WSB4DM
WSB4KM
WSB4FM

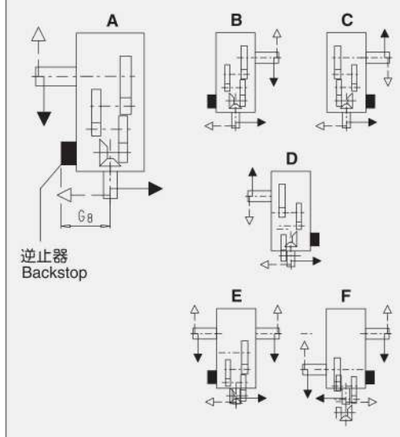


规格 Size	输入轴 / Input i_N = 80 - 180, i_N = 90 - 200, i_N = 100 - 224		i_N = 200 - 315, i_N = 224 - 355, i_N = 250 - 400			
	d_1	l_1	d_1	l_1	G_1	G_1
13 + 14	55	110	40	100	1170	1240
15 + 16	70	135	50	110	1402	1448
17 + 18	70	135	50	110	1450	1510
19 + 20	80	165	60	140	1680	1740
21 + 22	90	165	70	140	1992	2047

规格 Size	齿轮箱 / Gear units											
	b	c	c_1	D_5	g	h_{-1}	h_1	h_2	m_3	n_1	n_4	s
13 + 14	550	60	61±2	48	211.5	440	450	460	475	100	340	35
15 + 16	625	70	72±2	55	238	500	490	500	535	120	375	42
17 + 18	690	80	81±2	55	259	550	555	560	600	135	425	42
19 + 20	790	90	91±2	65	299	620	615	620	690	155	475	48
21 + 22	830	100	100±2	75	310	700	685	690	720	170	520	56

规格 Size	齿轮箱 / Gear units								逆止器 Backstop G_8
	a	e_2	E	H	m_1	m_2	n_2	n_3	
13	1395	405	820	900	597.5	597.5	305	940	敬请垂询 相关尺寸 Dimensions on request
14	1535	475	890	900	597.5	737.5	375	1010	
15	1680	485	987	1000	720	720	365	1135	
16	1770	530	1033	1000	720	810	410	1180	
17	1770	525	1035	1110	750	750	390	1175	
18	1890	585	1095	1110	750	870	450	1235	
19	2030	590	1190	1240	860	860	435	1365	
20	2150	650	1250	1240	860	980	495	1425	
21	2340	655	1387	1390	1000	1000	485	1600	
22	2450	710	1442	1390	1000	1110	540	1655	

布置形式 / Design



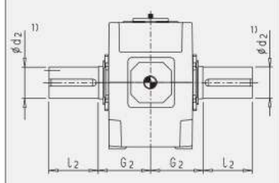
四级传动/卧式安装

Four Stage / Horizontal

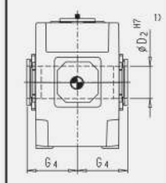
类型 WSB4.H,WAB4.M 规格 13-22　　Type WSB4.H,WAB4.M Sizes 13-22

输出轴 / Output

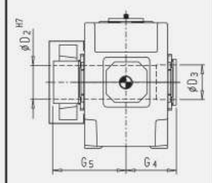
WSB4SH 实心轴 Solid shaft



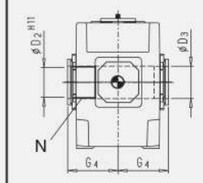
WSB4HH,WSB4HM 空心轴 Hollow shaft



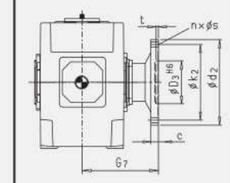
WSB4DH,WSB4DM 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSB4KH,WSB4KM 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSB4FH,WSB4FM 法兰轴 Flanged shaft



规格 Size	WSB4SH			WSB4HH WSB4HM		WSB4DH,WSB4DM				WSB4KH,WSB4KM				WSB4FH,WSB4FM						
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19	290	470	465	-	-	285	295	465	670	敬请垂询 On request				65	860	460	770	30 x 39	18	670
20	300	500	465	-	-	310	315	465	670					65	930	460	830	32 x 39	18	670
21	320	500	490	-	-	330	335	490	715					75	950	520	850	28 x 45	20	710
22	340	550	490	-	-	340	345	490	725					75	1040	520	940	28 x 45	20	710

规格 Size	润滑油量 Oil quantity (l) *)		重量 Weight (kg) *) **)			
	WSB4.H	WSB4.M	WSB4SH WSB4HH WSB4DH WSB4KH	WSB4HM WSB4KM WSB4DM	WSB4FH	WSB4FM
13	145	120	2395	2280	2555	2440
14	150	125	2735	2605	2905	2775
15	230	170	3630	3435	3870	3675
16	235	175	3985	3765	4240	4020
17	295	230	4695	4460	4995	4760
18	305	235	5200	4930	5550	5280
19	480	440	6800	6300	敬请垂询 On request	
20	550	510	8200	7700		
21	540	590	9200	8600		
22	620	680	9900	9400		

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

*) Approximate values

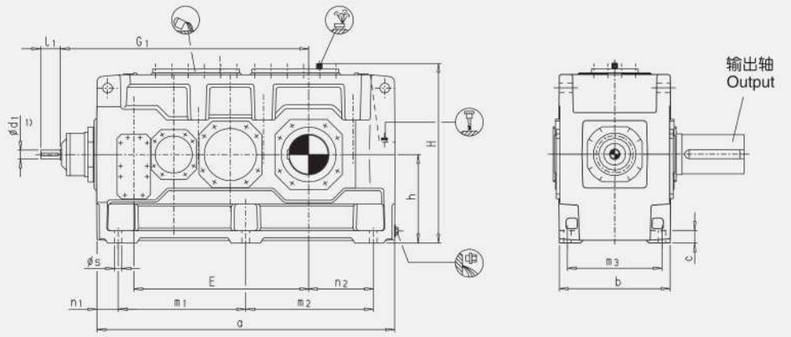
**) Without oil filling

四级传动/卧式安装

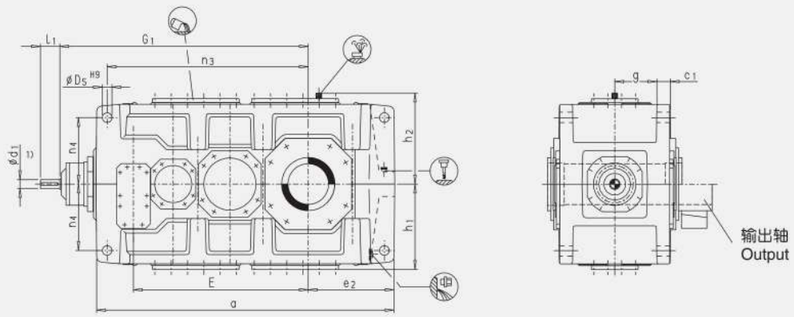
Four Stage / Horizontal

类型 WSB4.H,WSB4DM 规格 23-26　　Type WSB4.H,WSB4DM Sizes 23-26

WSB4SH
WSB4DH



WSB4DM

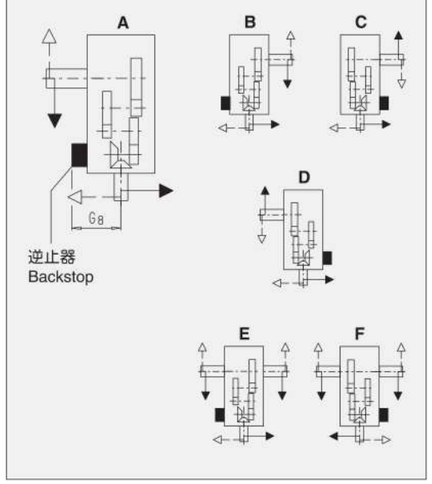


规格 Size	输入轴 / Input i_N = 80 - 180, i_N = 90 - 200		i_N = 200 - 315, i_N = 224 - 355			
	d_1	l_1	d_1	l_1	G_1	G_1
23 + 24	90	165	70	140	2110	2175
25 + 26	110	205	80	170	2395	2485

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

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

布置形式 / Design



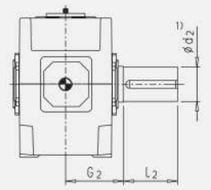
四级传动/卧式安装

Four Stage / Horizontal

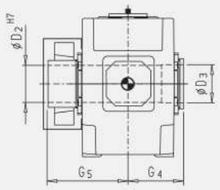
类型 WSB4.H,WSB4DM 规格 23-26　　Type WSB4.H,WSB4DM Sizes 23-26

输出轴 / **Output**

WSB4SH
实心轴
Solid shaft



WSB4DH, WSB4DM
带缩紧盘的空心轴
Hollow shaft for shrink disk



规格 Size	WSB4SH			WSB4DH, WSB4DM			
	d_2	l_2	G_2	D_2	D_3	G_4	G_5
23	360	590	540	360	365	540	785
24	380	590	540	380	385	540	805
25	400	650	605	400	405	605	875
26	420	650	605	430	435	605	900

规格 Size	润滑油量 Oil quantity (l) *)		重量 Weight (kg) *) **)	
	WSB4SH	WSB4DM	WSB4SH WSB4DH	WSB4DM
23	710	790	11600	10700
24	810	910	13500	12600
25	1000	1110	16100	15200
26	1100	1200	17600	16500

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

*) 参考值；

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

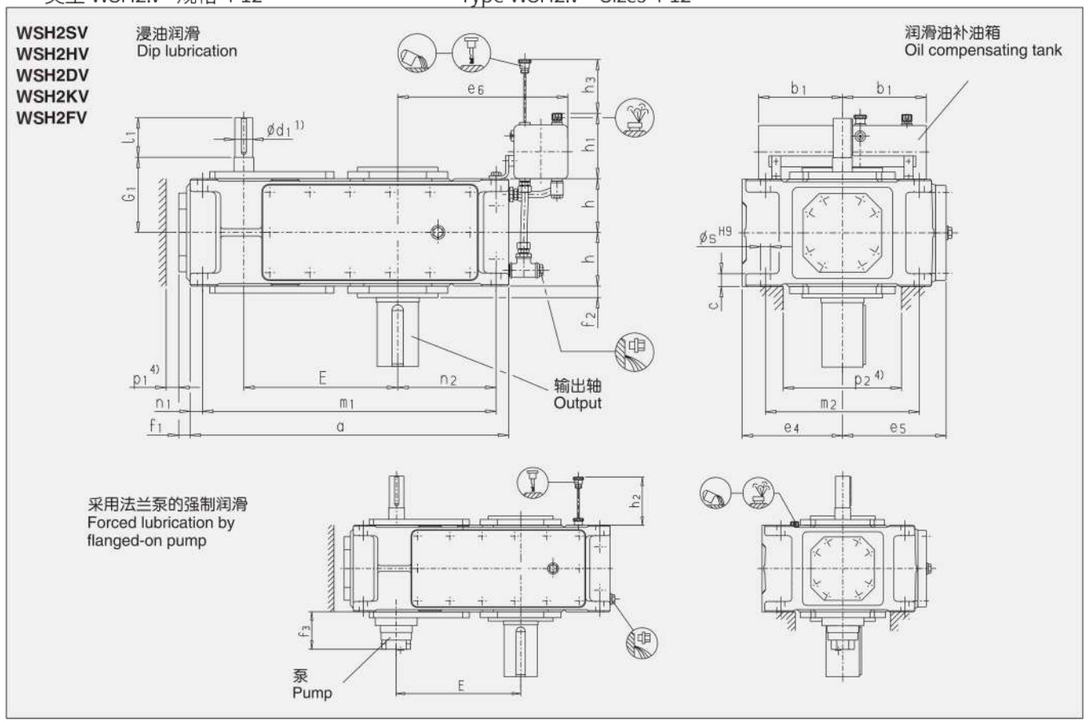
*) Approximate values

**) Without oil filling

两级传动/立式安装
Two Stage / Vertical

类型 WSH2.V 规格 4-12　　Type WSH2.V Sizes 4-12

WSH2SV
WSH2HV
WSH2DV
WSH2KV
WSH2FV

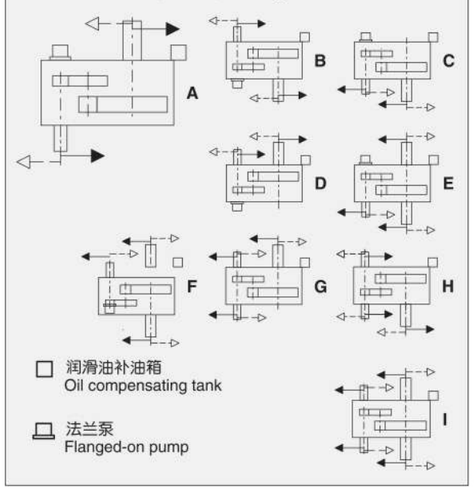


规格 Size	输入轴 / Input i_N = 6.3 - 11.2 (i_N = 8 - 14) d_1	l_1	l_3	i_N = 12.5 - 22.4 (i_N = 16 - 28) d_1	l_1	l_3	G_1	2) 布置形式 / Design G, H, I 仅用于 / only for i_N =	
4	45	100	80	32	80	60	170	6.3 - 18	
5 + 6	50	100	80	38	80	60	195	6.3 - 18	8 - 22.4
7 + 8	60	135	105	50	110	80	210	6.3 - 16	8 - 20
9 + 10	75	140	110	60	140	110	240	6.3 - 16	8 - 20
11 + 12	90	165	130	70	140	105	275	6.3 - 18	8 - 22.4

规格 Size	齿轮箱 / Gear units b_1	c	e_4	f_1	h	h_1	h_2	h_3	m_2	n_1	s
4	150	30±1	200	28	107.5	165	-	180	300	30	24
5 + 6	240	30±1	230	38	127.5	205	190	240	360	30	24
7 + 8	240	36±1	280	42	150	205	165	250	430	35	28
9 + 10	330	45±1.5	320	42	185	275	205	330	490	40	36
11 + 12	330	54±1.5	380	48	215	275	240	340	600	50	40

规格 Size	齿轮箱 / Gear units a	e_5	e_6	E	f_2	m_1	n_2	p_1	p_2	泵 Pump f_3 2)
4	565	215	320	270	22	505	160	35	220	敬请垂询相关尺寸 Dimensions on request
5	640	252	385	315	28	580	175	35	270	
6	720	252	425	350	28	660	220	35	270	
7	785	292	425	385	30	715	215	35	330	
8	890	302	485	430	32	820	275	35	330	
9	925	342	560	450	32	845	260	40	370	
10	1025	342	610	500	32	945	310	40	370	
11	1105	402	595	545	35	1005	295	50	440	
12	1260	410	680	615	35	1160	380	50	440	

布置形式 / Design 2) 3)

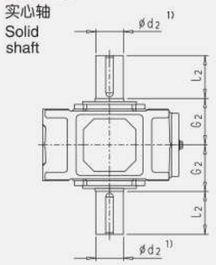


两级传动/立式安装
Two Stage / Vertical

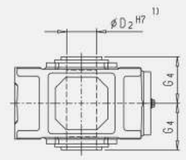
类型 WSH2.V 规格 4-12　　Type WSH2.V Sizes 4-12

输出轴 / Output

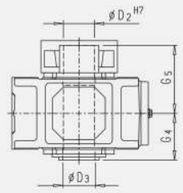
WSH2SV 实心轴 Solid shaft



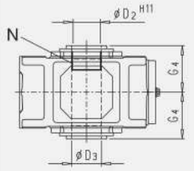
WSH2HV 空心轴 Hollow shaft



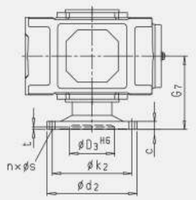
WSH2DV 5) 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH2KV (K20/004) 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSH2FV (K20/028) 法兰轴 Flanged shaft

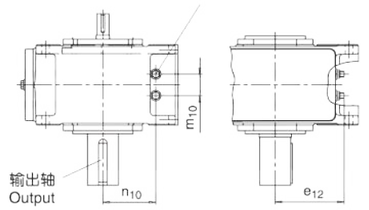


规格 Size	WSH2SV d_2	l_2	G_2	WSH2HV D_2	G_4	WSH2DV D_2	D_3	G_4	G_5	WSH2KV N / DIN 5480	D_2	D_3	G_4	WSH2FV c	d_2	D_3	k_2	n x s	t	G_7
4	80	170	140	80	140	85	85	140	205	-	-	-	-	-	-	-	-	-	-	-
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 / Oil quantity (l) *) 浸油润滑 Dip lubrication	强制润滑 Forced lubrication	重量 / Weight (kg) *) **) WSH2SV WSH2HV WSH2DV WSH2KV	WSH2FV
4	23	-	190	-
5	35	17.5	300	335
6	37	18.5	355	395
7	62	31	505	555
8	69	35	590	645
9	98	49	830	915
10	110	55	960	1050
11	160	80	1335	1465
12	180	90	1615	1755

冷却盘管 / Cooling coil 3)

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



规格 Size	m_{10}	n_{10}	e_{12}	x) L / min
4	34	140	155	4
5	68	166	170	4
6	70	162	215	4
7	100	197	210	4
8	100	197	270	4
9	140	210	245	8
10	100	225	295	8
11	110	285	275	8
12	200	271	360	8

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

x) 所需冷却水量：冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 方案：
- 布置形式 G，H 和 I 不能采用法兰泵强制润滑。

3) 采用冷却盘管时：- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4) 油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5) 对空心轴减速机布置形式A,D和G请垂询

*) 参考值

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

2) **Variants:**
- Flanged-on pump not possible with G, H and I designs.

3) **Cooling coil:** - For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

*) Approximate values

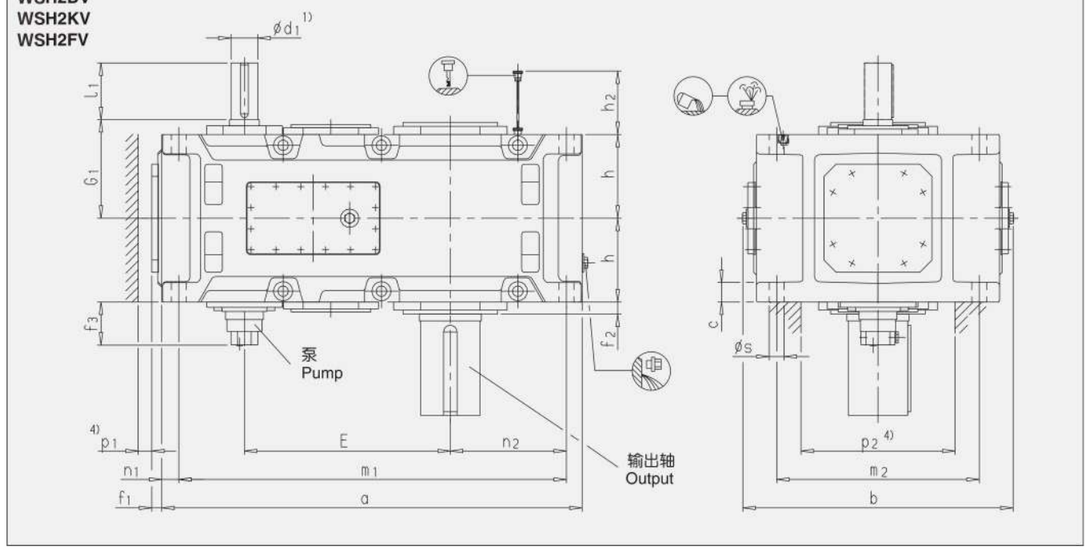
**) Without oil filling

两级传动/立式安装
Two Stage / Vertical

类型 WSH2.V 规格 13-22　　Type WSH2.V Sizes 13-22

WSH2SV
WSH2HV
WSH2DV
WSH2KV
WSH2FV

采用法兰泵的强制润滑
Forced lubrication by flanged-on pump

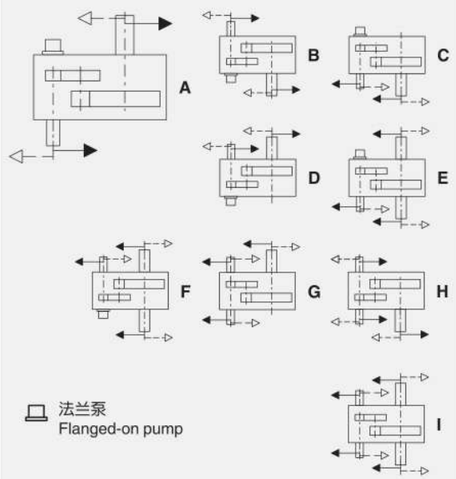


规格 Size	输入轴 / Input i_N = 6.3 - 11.2 / i_N = 7.1 - 12.5 / i_N = 8 - 14 d_1	l_1	i_N = 12.5 - 20 / i_N = 14 - 22.4 / i_N = 16 - 25 d_1	l_1	G_1	2) 布置形式 / Design **G, H, I** 仅用于 / only for i_N = 6.3 - 16	8 - 20
13 + 14	100	205	85	170	330	6.3 - 16	8 - 20
15 + 16	120	210	100	210	365	6.3 - 16	7.1 - 18
17 + 18	125	245	110	210	420	6.3 - 16	7.1 - 18
19 + 20	敬请垂询 / On request						
21 + 22							

规格 Size	齿轮箱 / Gear units b	c	f_1	h	h_2	m_2	n_1	s
13 + 14	900	61±2	53	272.5	300	680	50	48
15 + 16	980	72±2	63	310	340	750	60	55
17 + 18	1110	81±2	60	340	374	850	70	55
19 + 20	敬请垂询 / On request							
21 + 22								

规格 Size	齿轮箱 / Gear units a	E	f_2	m_1	n_2	p_1	p_2	泵 / Pump f_3 2)
13	1290	635	35	1195	360	50	500	敬请垂询 相关尺寸 Dimensions on request
14	1430	705	35	1335	430	50	500	
15	1550	762	42	1435	430	50	570	
16	1640	808	42	1525	475	50	570	
17	1740	860	42	1610	465	70	630	
18	1860	920	42	1730	525	70	630	
19	敬请垂询 / On request							
20								
21								
22								

布置形式 / Design 2) 3)

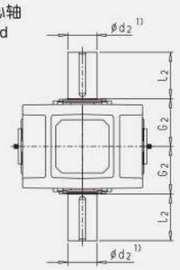


两级传动/立式安装
Two Stage / Vertical

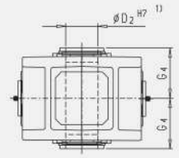
类型 WSH2.V 规格 13-22　　Type WSH2.V Sizes 13-22

输出轴 / **Output**

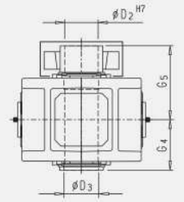
WSH2SV 实心轴 Solid



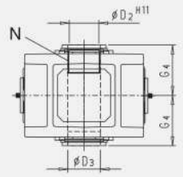
WSH2HV 6) 空心轴 Hollow shaft



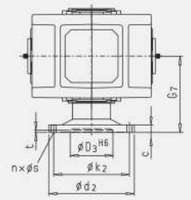
WSH2DV 5) 6) 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH2KV 6) (K20/004) 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSH2FV (K20/028) 法兰轴 Flanged shaft

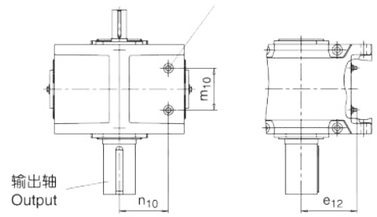


规格 Size	WSH2SV d_2	l_2	G_2	WSH2HV D_2	G_4	WSH2DV D_2	D_3	G_4	G_5	WSH2KV N / DIN 5480	D_2	D_3	G_4	WSH2FV c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19 - 22	敬请垂询 / On request																			

规格 Size	润滑油量 Oil quantity (l) *)	重量 / Weight (kg) *) **) WSH2SV WSH2HV WSH2DV WSH2KV	WSH2FV
13	120	1880	2040
14	135	2430	2600
15	185	3240	3480
16	200	3465	3720
17	265	4420	4720
18	285	4870	5220
19 - 22	敬请垂询 / On request		

冷却盘管 / Cooling coil 3)

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



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

规格 Size	m_{10}	n_{10}	e_{12}	x) L / min
13	252	300	335	8
14	252	300	405	8
15	290	335	395	8
16	290	335	440	8
17	340	380	425	8
18	340	380	485	8
19 - 22	敬请垂询 On request			

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leq \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2) 方案：• 布置形式 G，H 和 I 不能采用法兰泵强制润滑。

3) 采用冷却盘管时：
• 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4) 油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5) 对空心轴减速机布置形式A,D和G请垂询

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

*) 参考值

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leq \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

2) **Variants:** • Flanged-on pump not possible with G, H and I designs.

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

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

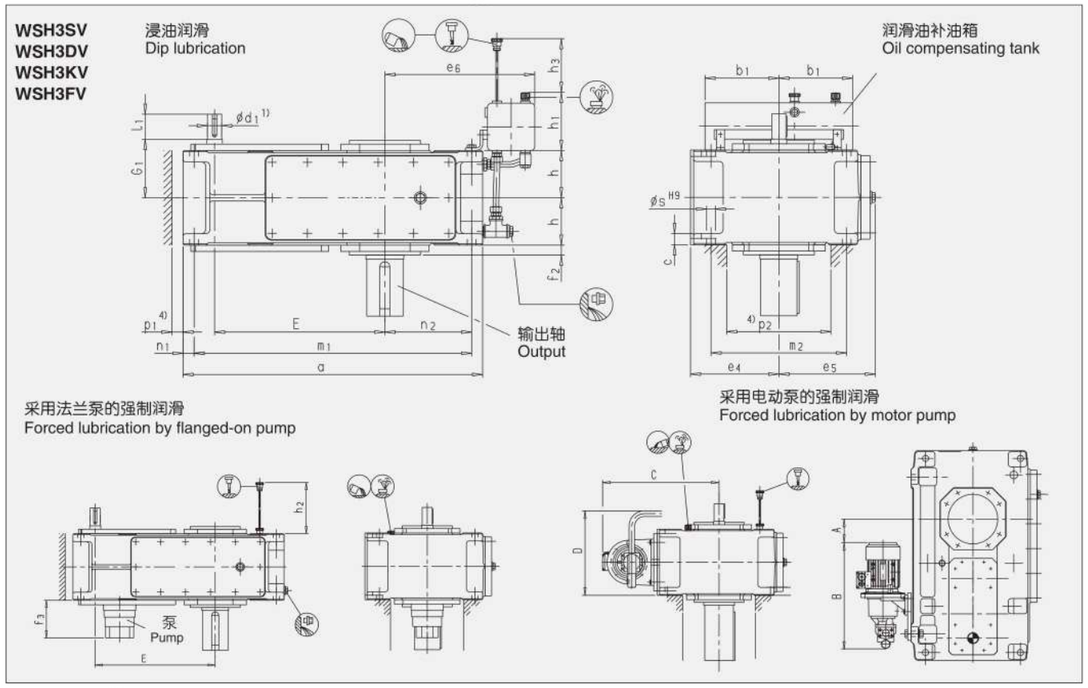
*) Approximate values

**) Without oil filling

三级传动/立式安装

Three Stage / Vertical

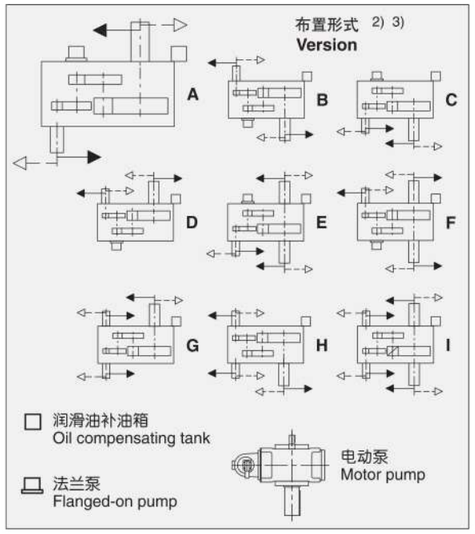
类型 WSH3.V 规格 5-12　　Type WSH3.V Sizes 5-12



规格 Size	输入轴 / Input i_N = 25 - 45, i_N = 31.5 - 56 d_1	l_1	i_N = 50 - 63, i_N = 63 - 80 d_1	l_1	i_N = 71 - 90, i_N = 90 - 112 d_1	l_1	G_1	2) 布置形式 / Design G, H, I 仅用于 / only for i_N = 25 - 90	31.5 - 112
5 + 6	40	70	30	50	24	40	160		
7 + 8	45	80	35	60	28	50	185		
9 + 10	60	125	45	100	32	80	230		
11 + 12	70	120	50	80	42	70	255		

规格 Size	齿轮箱 / Gear units b_1	c	e_4	h	h_1	h_2	h_3	m_2	n_1	p_1	p_2	s
5 + 6	240	30 ±1	230	127.5	205	190	240	360	30	35	270	24
7 + 8	240	36 ±1	280	150	205	165	250	430	35	35	330	28
9 + 10	330	45 ±1.5	320	185	275	205	330	490	40	40	370	36
11 + 12	330	54 ±1.5	380	215	275	240	340	600	50	50	440	40

规格 Size	齿轮箱 / Gear units a	e_5	e_6	E	f_2	m_1	n_2	泵 Pump f_3 2)	电动泵 / Motor pump A	B	C	D
5	690	252	385	405	28	630	175	敬请垂询 相关尺寸 Dimensions on request				
6	770	252	425	440	28	710	220					
7	845	292	425	495	30	775	215					
8	950	302	485	540	32	880	275					
9	1000	342	560	580	32	920	260					
10	1100	342	610	630	32	1020	310					
11	1200	402	595	705	35	1100	295					
12	1355	410	680	775	35	1255	380					



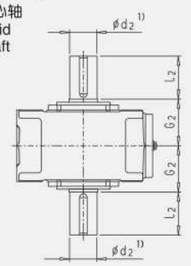
三级传动/立式安装

Three Stage / Vertical

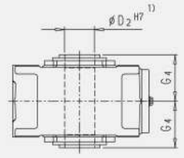
类型 WSH3.V 规格 5-12　　Type WSH3.V Sizes 5-12

输出轴 / **Output**

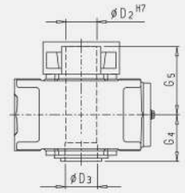
WSH3SV 实心轴 Solid shaft



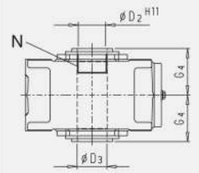
WSH3HV 空心轴 Hollow shaft



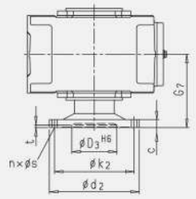
WSH3DV 5) 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH3KV (K20/004) 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSH3FV (K20/028) 法兰轴 Flanged shaft

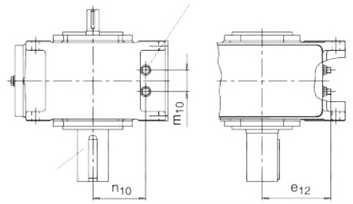


规格 Size	WSH3SV d_2	l_2	G_2	WSH3HV D_2	G_4	WSH3DV D_2	D_3	G_4	G_5	WSH3KV N / DIN 5480	D_2	D_3	G_4	WSH3FV c	d_2	D_3	k_2	n x s	t	G_7
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 / Oil quantity (l) *) 浸油润滑 Dip lubrication	强制润滑 Forced lubrication	重量 / Weight (kg) *) **) WSH3SV WSH3HV WSH3DV WSH3KV	WSH3FV
5	36	24	320	355
6	40	27	365	405
7	64	42	540	590
8	70	47	625	680
9	110	73	875	960
10	120	80	1020	1110
11	190	110	1400	1530
12	205	120	1675	1815

冷却盘管 / **Cooling coil** 3)

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



规格 Size	m_{10}	n_{10}	e_{12}	x) L / min
5	70	170	175	4
6	70	161	220	4
7	80	197	210	4
8	80	197	270	4
9	150	213	245	4
10	90	225	295	4
11	200	265	275	8
12	200	265	360	8

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1）轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2）方案：• 布置形式 G，H 和 I 不能采用法兰泵强制润滑。

3）采用冷却盘管时：
- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

2) **Variants:** • Flanged-on pump not possible with G, H and I designs.

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

*) Approximate values

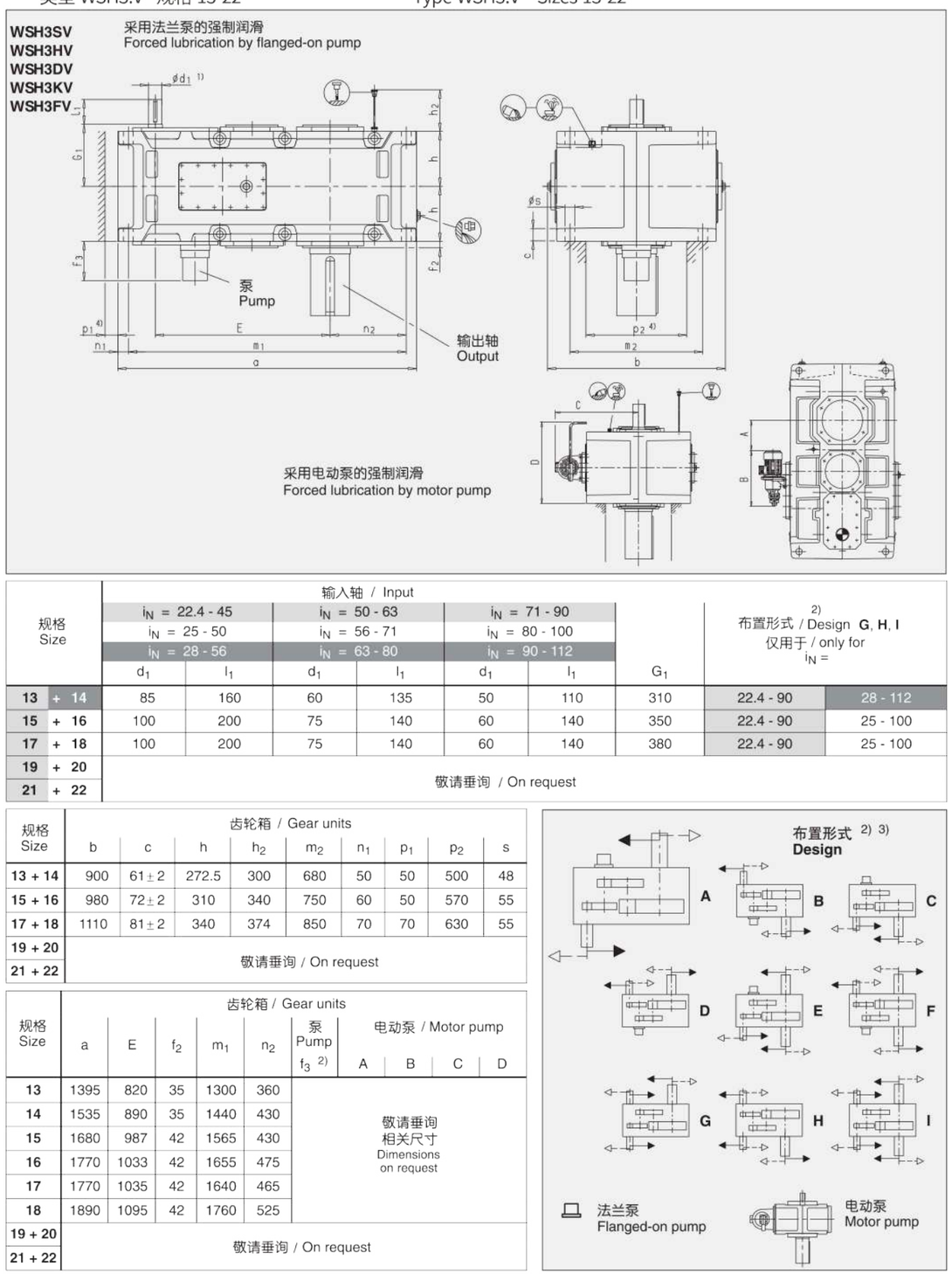
**) Without oil filling

三级传动/立式安装

Three Stage / Vertical

类型 WSH3.V 规格 13-22　　Type WSH3.V Sizes 13-22

WSH3SV
WSH3HV
WSH3DV
WSH3KV
WSH3FV



规格 Size	输入轴 / Input i_N = 22.4 - 45 / i_N = 25 - 50 / i_N = 28 - 56 d_1	l_1	i_N = 50 - 63 / i_N = 56 - 71 / i_N = 63 - 80 d_1	l_1	i_N = 71 - 90 / i_N = 80 - 100 / i_N = 90 - 112 d_1	l_1	G_1	布置形式 2) Design G, H, I 仅用于 / only for i_N = 22.4 - 90	28 - 112
13 + 14	85	160	60	135	50	110	310	22.4 - 90	28 - 112
15 + 16	100	200	75	140	60	140	350	22.4 - 90	25 - 100
17 + 18	100	200	75	140	60	140	380	22.4 - 90	25 - 100
19 + 20	敬请垂询 / On request								
21 + 22									

规格 Size	齿轮箱 / Gear units b	c	h	h_2	m_2	n_1	p_1	p_2	s
13 + 14	900	61±2	272.5	300	680	50	50	500	48
15 + 16	980	72±2	310	340	750	60	50	570	55
17 + 18	1110	81±2	340	374	850	70	70	630	55
19 + 20	敬请垂询 / On request								
21 + 22									

规格 Size	齿轮箱 / Gear units a	E	f_2	m_1	n_2	泵 Pump f_3 2)	电动泵 / Motor pump A	B	C	D
13	1395	820	35	1300	360	敬请垂询 相关尺寸 Dimensions on request				
14	1535	890	35	1440	430					
15	1680	987	42	1565	430					
16	1770	1033	42	1655	475					
17	1770	1035	42	1640	465					
18	1890	1095	42	1760	525					
19 + 20	敬请垂询 / On request									
21 + 22										

布置形式 2) 3) Design

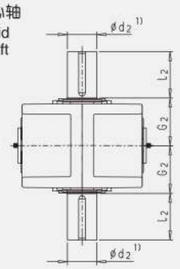
三级传动/立式安装

Three Stage / Vertical

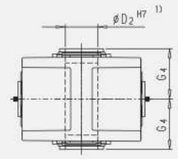
类型 WSH3.V 规格 13-22　　Type WSH3.V Sizes 13-22

输出轴 / Output

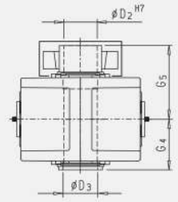
WSH3SV 实心轴 Solid shaft



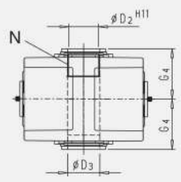
WSH3HV 空心轴 Hollow shaft



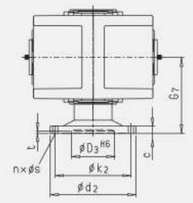
WSH3DV 5) 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH3KV 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSH3FV 法兰轴 Flanged shaft

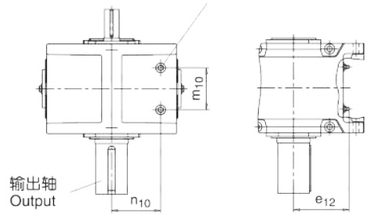


规格 Size	WSH3SV d_2	l_2	G_2	WSH3HV D_2	G_4	WSH3DV D_2	D_3	G_4	G_5	WSH3KV N / DIN 5480	D_2	D_3	G_4	WSH3FV c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19 - 22	敬请垂询 / On request																			

规格 Size	润滑油量 Oil quantity (l) *)	重量 / Weight (kg) *) **) WSH3SV WSH3HV WSH3DV WSH3KV	WSH3FV
13	160	2155	2315
14	180	2490	2660
15	255	3260	3500
16	260	3625	3880
17	325	4250	4550
18	335	4740	5090
19 - 22	敬请垂询 / On request		

冷却盘管 / Cooling coil 3)

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



规格 Size	m_{10}	n_{10}	e_{12}	x) L / min
13	252	300	335	8
14	252	300	405	8
15	290	340	395	8
16	290	340	440	8
17	300	380	425	8
18	300	380	485	8
19 - 22	敬请垂询 On repuest			

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1）轴：
- $K_6 \leq \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2）方案：• 布置形式 G，H 和 I 不能采用法兰泵强制润滑。

3）采用冷却盘管时：
- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leq \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

2) **Variants:** • Flanged-on pump not possible with G, H and I designs.

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

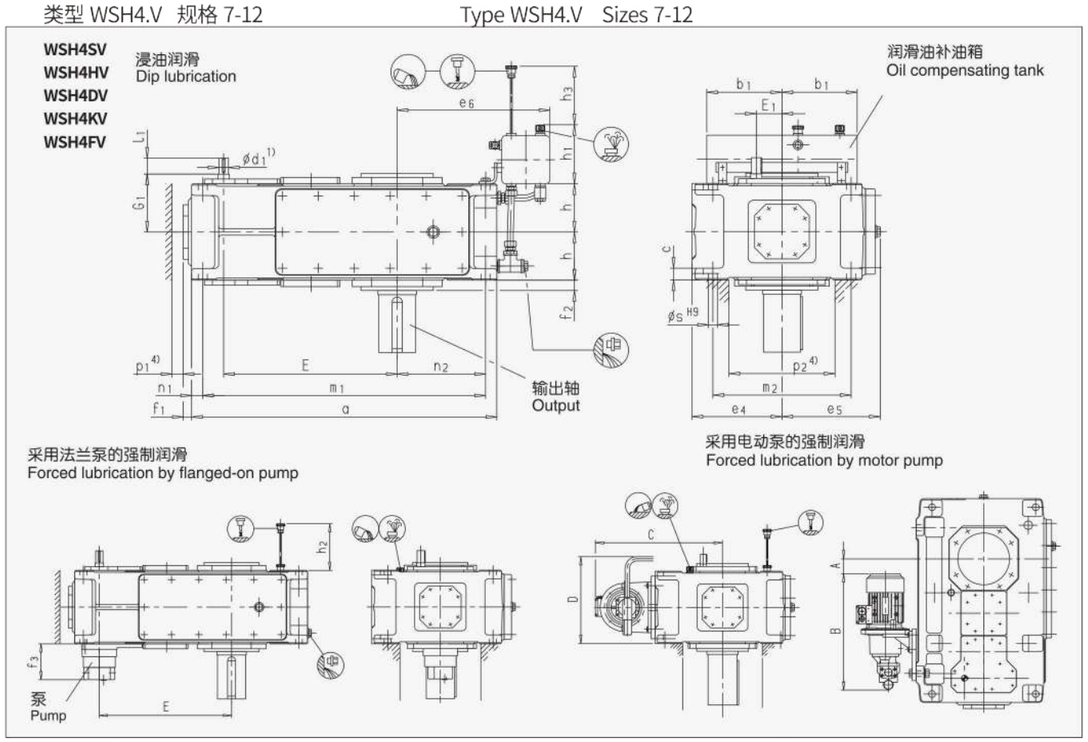
*) Approximate values

**) Without oil filling

四级传动/立式安装

Four Stage / Vertical

类型 WSH4.V 规格 7-12　　Type WSH4.V Sizes 7-12

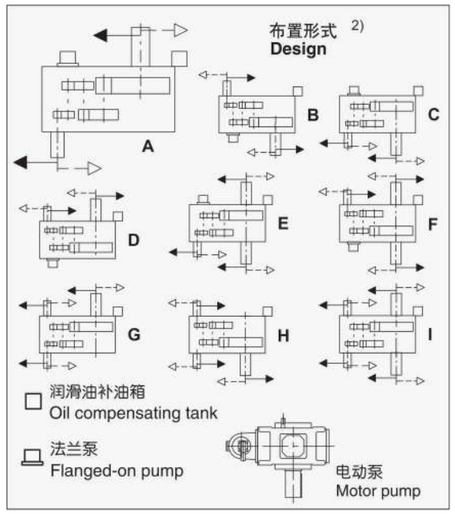


规格 Size	输入轴 / Input i_N = 100 - 180, 125 - 224 d_1	l_1	i_N = 200 - 355, 250 - 450 d_1	l_1	G_1	布置形式 / Design G,H,I 仅用于 / only for i_N = 100 - 224	125 - 280
7 + 8	30	50	24	40	180	100 - 224	125 - 280
9 + 10	35	60	28	50	215	100 - 250	125 - 315
11 + 12	45	100	32	80	250	100 - 250	125 - 315

规格 Size	齿轮箱 / Gear units b_1	c	e_4	E_1	f_1	h	h_1	h_2	h_3	m_2	n_1	p_1	p_2	s
7 + 8	240	36 ± 1	280	80	37	150	205	165	250	430	35	35	330	28
9 + 10	330	45 ± 1.5	320	90	43	185	275	205	330	490	40	40	370	36
11 + 12	330	54 ± 1.5	380	110	47	215	275	240	340	600	50	50	440	40

规格 Size	齿轮箱 / Gear units a	e_5	e_6	E	f_2	m_1	n_2	泵 f_3	电动泵 / Motor pump A	B	C	D
7	845	292	425	495	30	775	215	敬请垂询 相关尺寸 Dimensions on request				
8	950	302	485	540	32	880	275					
9	1000	342	560	580	32	920	260					
10	1100	342	610	630	32	1020	310					
11	1200	402	595	705	35	1100	295					
12	1355	410	680	775	35	1255	380					

布置形式 2) Design

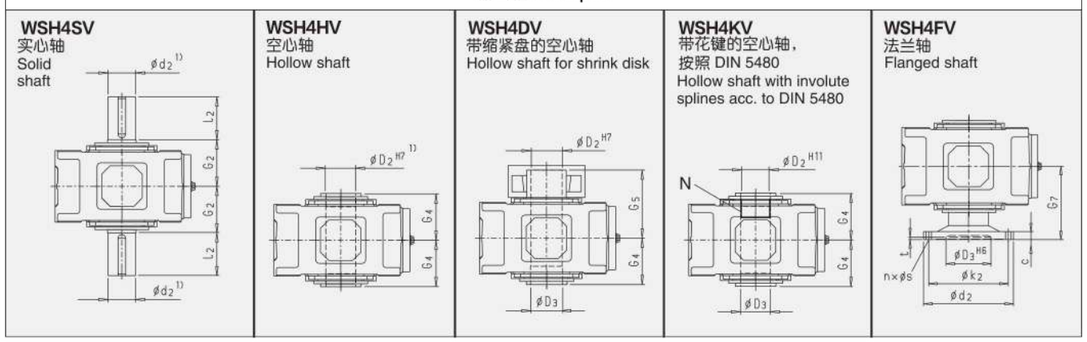


四级传动/立式安装

Four Stage / Vertical

类型 WSH4.V 规格 7-12　　Type WSH4.V Sizes 7-12

输出轴 / Output



规格 Size	WSH4SV d_2	l_2	G_2	WSH4HV D_2	G_4	WSH4DV D_2	D_3	G_4	G_5	WSH4KV N / DIN 5480	D_2	D_3	G_4	WSH4FV c	d_2	D_3	k_2	n x s	t	G_7
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 Oil quantity (l) *) 浸油润滑 Dip lubrication	强制润滑 Forced lubrication	重量 / Weight (kg) *) **) WSH4SV WSH4HV WSH4DV WSH4KV	WSH4FV
7	60	44	550	600
8	65	48	645	700
9	105	78	875	960
10	110	81	1010	1100
11	175	113	1460	1590
12	200	129	1725	1865

尺寸以 mm 为单位

1）轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

2）方案：• 布置形式 G，H 和 I 不能采用法兰泵强制润滑。

3）采用冷却盘管时：
- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

2) **Variants:** • Flanged-on pump not possible with G, H and I designs.

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

*) Approximate values

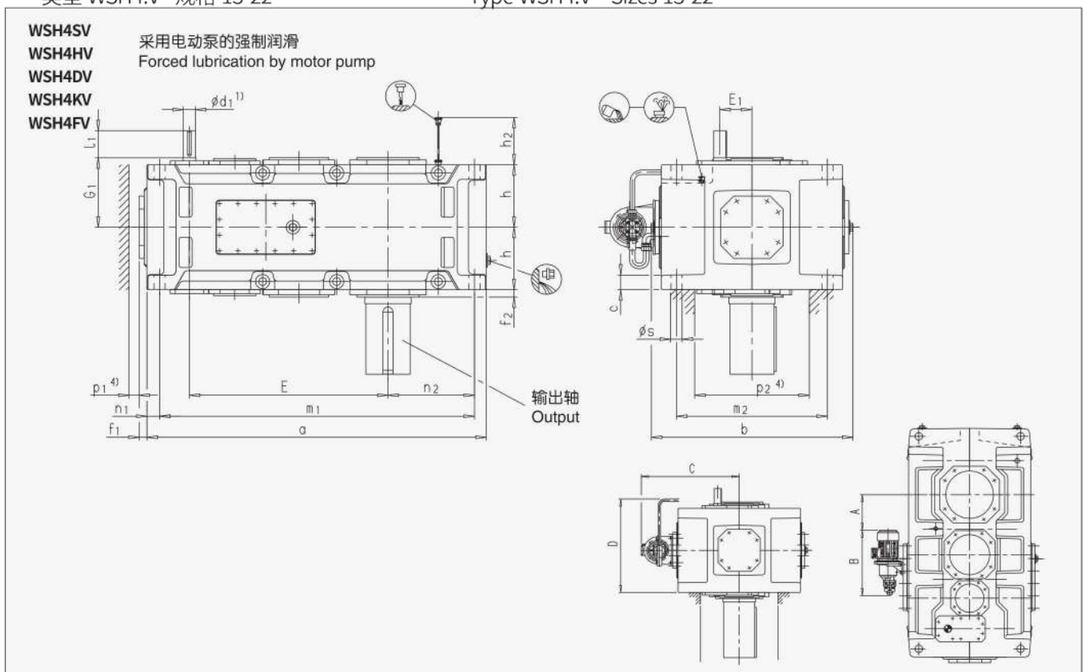
**) Without oil filling

四级传动/立式安装
Four Stage / Vertical

类型 WSH4.V 规格 13-22　　Type WSH4.V Sizes 13-22

WSH4SV
WSH4HV
WSH4DV
WSH4KV
WSH4FV

采用电动泵的强制润滑
Forced lubrication by motor pump

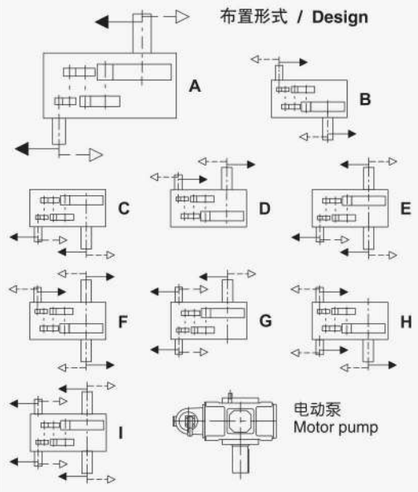


规格 Size	输入轴 / Input i_N = 100 - 180, 112 - 200, 125 - 224 d_1	l_1	输入轴 / Input i_N = 200 - 355, 224 - 400, 250 - 450 d_1	l_1	G_1	2) 布置形式 / Design G,H,I 仅用于 / only for i_N =	
13 + 14	50	100	38	80	305	100 - 250	125 - 315
15 + 16	60	135	50	110	345	100 - 250	112 - 280
17 + 18	60	105	50	80	380	–	–
19 + 20	敬请垂询 / On request						
21 + 22							

规格 Size	齿轮箱 / Gear units b	c	E_1	h	h_2	m_2	n_1	p_1	p_2	s
13 + 14	900	61 ± 2	130	272.5	300	680	50	50	500	48
15 + 16	980	72 ± 2	160	310	340	750	60	60	570	55
17 + 18	1110	81 ± 2	160	340	374	850	70	70	630	55
19 + 20	敬请垂询 / On request									
21 + 22										

规格 Size	齿轮箱 / Gear units a	E	f_1	f_2	m_1	n_2	电动泵 / Motor pump A	B	C	D
13	1395	820	47	35	1300	360	敬请垂询 相关尺寸 Dimensions on request			
14	1535	890	47	35	1440	430				
15	1680	987	56	42	1565	430				
16	1770	1033	56	42	1655	475				
17	1770	1035	53	42	1640	465				
18	1890	1095	53	42	1760	525				
19 + 20	敬请垂询 / On request									
21 + 22										

布置形式 / Design

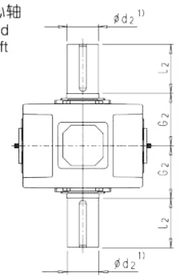


四级传动/立式安装
Four Stage / Vertical

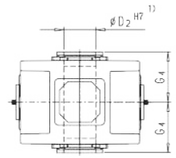
类型 WSH4.V 规格 13-22　　Type WSH4.V Sizes 13-22

输出轴 / Output

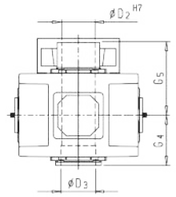
WSH4SV 实心轴 Solid shaft



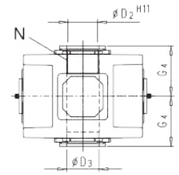
WSH4HV 空心轴 Hollow shaft



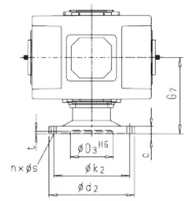
WSH4DV 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSH4KV 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSH4FV 法兰轴 Flanged shaft



规格 Size	WSH4SV d_2	l_2	G_2	WSH4HV D_2	G_4	WSH4DV D_2	D_3	G_4	G_5	WSH4KV N / DIN 5480	D_2	D_3	G_4	WSH4FV c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19 - 22	敬请垂询 / On request																			

规格 Size	润滑油量 Oil quantity (l) *)	重量 / Weight (kg) *) **) WSH4SV WSH4HV WSH4DV WSH4KV	WSH4FV
13	140	2270	2430
14	160	2600	2770
15	220	3440	3680
16	230	3740	3995
17	280	4445	4745
18	300	4915	5265
19 - 22	敬请垂询 / On request		

尺寸以 mm 为单位

1）轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

5) A, D and G designs for gear units with hollow shaft on request

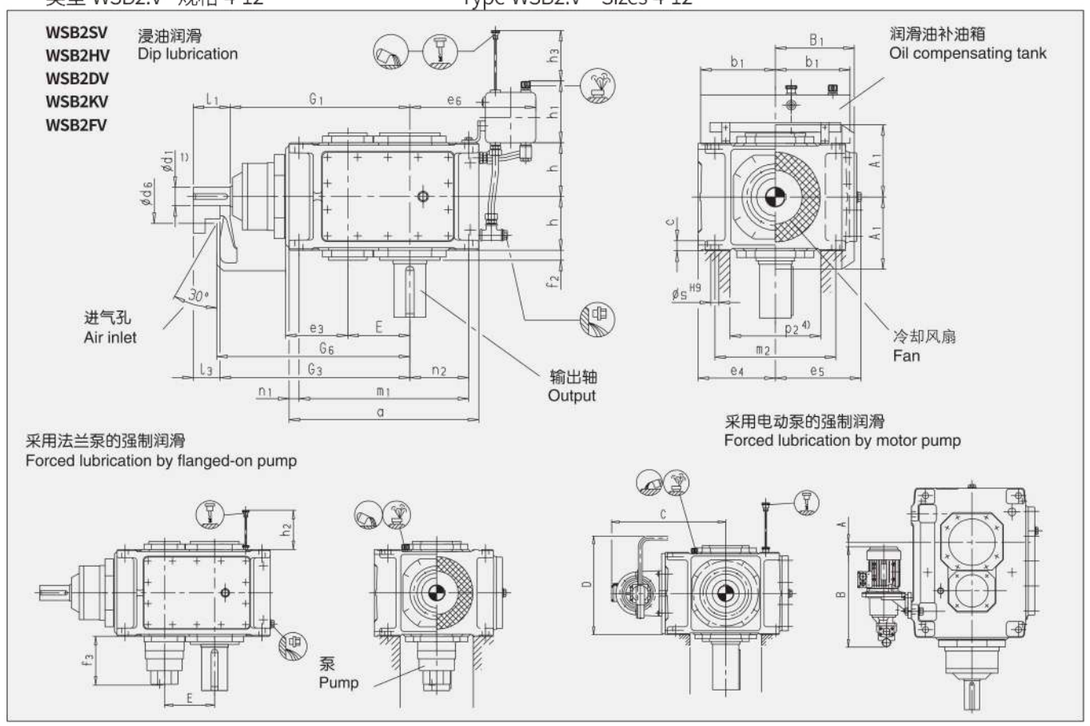
*) Approximate values

**) Without oil filling

两级传动/立式安装

Two Stage / Vertical

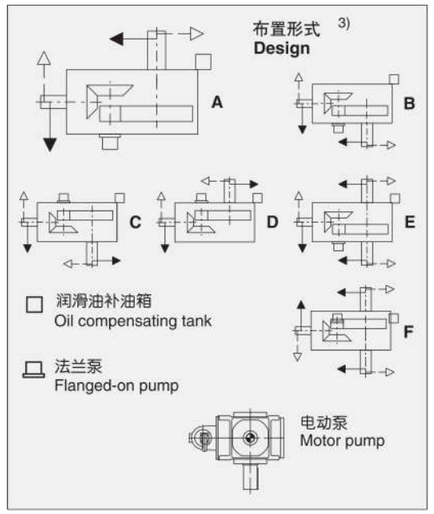
类型 WSB2.V 规格 4-12　　Type WSB2.V Sizes 4-12



规格 Size	输入轴 / Input i_N = 5 - 11.2 / i_N = 6.3 - 14					冷却风扇 / Fan				
	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	B_1	d_6
4	45	100	80	465	485	-	-	188	200	150
5 + 6	55	110	80	535	565	570	600	215	235	160
7 + 8	70	135	105	640	670	685	715	250	285	210
9 + 10	80	165	130	755	790	805	840	270	325	195
11 + 12	90	165	130	925	960	995	1030	328	385	210

规格 Size	齿轮箱 / Gear units												
	b_1	c	e_3	e_4	e_5	f_2	h	h_1	h_2	h_3	m_2	n_1	s
4	150	30±1	100	200	215	26	135	165	-	180	300	30	24
5 + 6	240	30±1	185	230	252	30	160	205	245	240	360	30	24
7 + 8	240	36±1	225	280	302	32	190	205	220	250	430	35	28
9 + 10	330	45±1.5	265	320	342	45	220	275	250	330	490	40	36
11 + 12	330	54±1.5	320	380	410	47	265	275	300	340	600	50	40

规格 Size	齿轮箱 / Gear units							泵 Pump	电动泵 / Motor pump			
	a	e_6	E	G_6	m_1	n_2	p_2	f_3	A	B	C	D
4	505	320	160	495	445	160	220	敬请垂询 相关尺寸 Dimensions on request				
5	565	385	185	575	505	175	270					
6	645	425	220	610	585	220	270					
7	690	425	225	685	620	215	330					
8	795	485	270	730	725	275	330					
9	820	560	265	805	740	260	370					
10	920	610	315	855	840	310	370					
11	975	595	320	980	875	295	440					
12	1130	680	390	1050	1030	380	440					

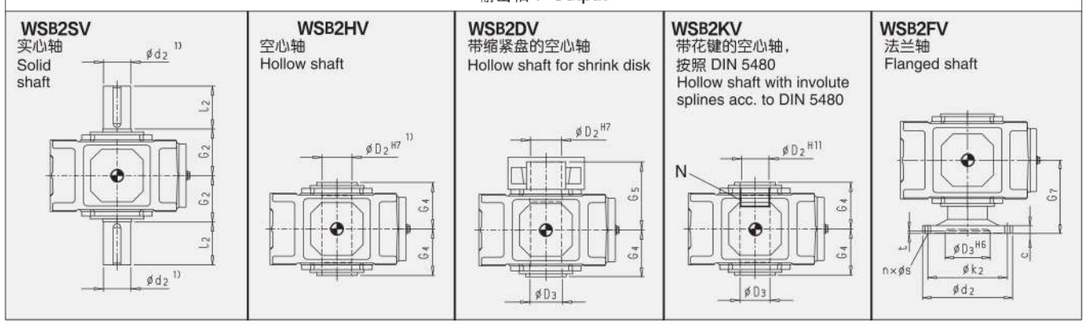


两级传动/立式安装

Two Stage / Vertical

类型 WSB2.V 规格 4-12　　Type WSB2.V Sizes 4-12

输出轴 / Output

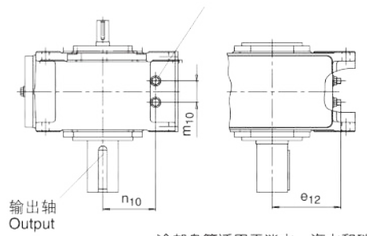


规格 Size	WSB2SV			WSB2HV		WSB24DV				WSB2KV				WSB2FV						
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
4	80	170	170	80	170	85	85	170	235	-	-	-	-	-	-	-	-	-	-	-
5	100	210	200	95	200	100	100	200	275	N 95x3x30x30x9H	89	100	200	25	300	150	260	16 x 22	10	290
6	110	210	200	105	200	110	110	200	275	N 95x3x30x30x9H	89	110	200	25	320	160	280	18 x 22	10	290
7	120	210	235	115	235	120	120	235	320	N 120x3x30x38x9H	114	120	235	30	370	180	320	16 x 26	10	340
8	130	250	235	125	235	130	130	235	325	N 120x3x30x38x9H	114	130	235	30	390	190	340	18 x 26	10	340
9	140	250	270	135	270	140	145	270	365	N 140x3x30x45x9H	134	145	270	38	430	220	380	20 x 26	12	385
10	160	300	270	150	270	150	155	270	385	N 140x3x30x45x9H	134	155	270	38	470	240	420	22 x 26	12	385
11	170	300	320	165	320	165	170	320	450	N 170x5x30x32x9H	160	170	320	42	510	260	450	18 x 33	12	450
12	180	300	320	180	320	180	185	320	455	N 170x5x30x32x9H	160	185	320	42	540	280	480	22 x 33	12	450

规格 Size	润滑油量 / Oil quantity (l) *) 浸油润滑 Dip lubrication	强制润滑 Forced lubrication	重量 / Weight (kg) *) **) WSB2SV WSB2HV WSB2DV WSB2KV	WSB2FV
4	23.5	-	235	-
5	38	19	360	400
6	46	23	410	455
7	74	37	615	670
8	81	40	700	760
9	115	57	1000	1090
10	120	60	1155	1250
11	190	95	1640	1775
12	225	114	1910	2060

冷却盘管 / Cooling coil 3)

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



规格 Size	m_{10}	n_{10}	e_{12}	x) L / min
4	74	146	160	4
5	130	168	175	8
6	120	162	220	4
7	140	200	210	8
8	140	200	270	4
9	232	210	245	8
10	150	230	295	8
11	312	265	275	8
12	300	265	360	8

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1) 轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

3) 采用冷却盘管时：
- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4) 油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5) 对空心轴减速机布置形式A,D和G请垂询

*) 参考值

**) 未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

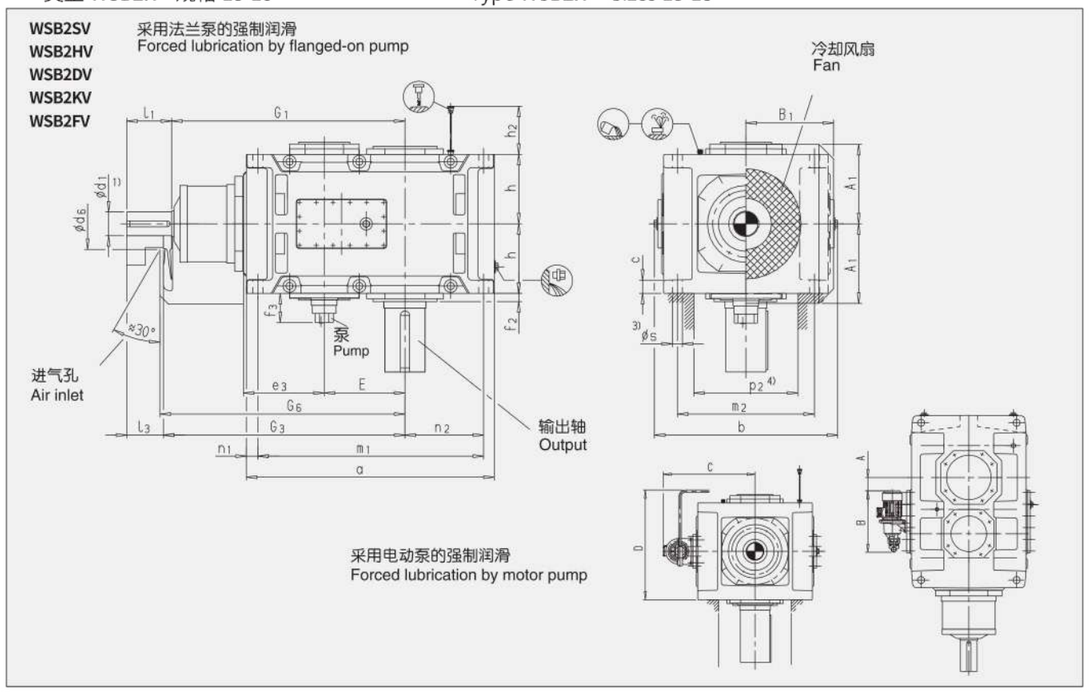
*) Approximate values

**) Without oil filling

两级传动/立式安装

Two Stage / Vertical

类型 WSB2.V 规格 13-18　　Type WSB2.V Sizes 13-18

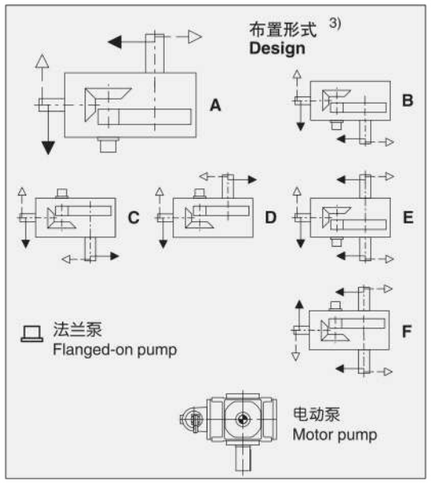


规格 Size	输入轴 / Input i_N = 5 - 11.2 / i_N = 6.3 - 14 / i_N = 7.1 - 12.5			i_N = 5.6 - 11.2 / i_N = 5.6 - 12.5							冷却风扇 / Fan		
	d_1	l_1	l_3	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	B_1	d_6
13 + 14	110	205	165				1070	1110	1140	1180	375	450	245
15	130	245	200				1277	1322			435	495	280
16				130	245	200			1323	1368	435	495	280
17				150	245	200	1435	1480			505	555	380
18	150	245	200				1495	1540			505	555	380

规格 Size	齿轮箱 / Gear units								
	b	c	e_3	h	h_2	m_2	n_1	p_2	s
13 + 14	900	61±2	380	325	350	680	50	500	48
15 + 16	980	72±2	450	380	430	750	60	570	55
17 + 18	1110	81±2	510	437.5	480	840	70	630	65

规格 Size	齿轮箱 / Gear units						泵 Pump	电动泵 / Motor pump			
	a	E	f_2	G_6	m_1	n_2	f_3	A	B	C	D
13	1130	370	38	1130	1035	360	敬请垂询 相关尺寸 Dimensions on request				
14	1270	440	45	1200	1175	430					
15	1350	442	75	1340	1235	430					
16	1440	488	75	1385	1325	475					
17	1490	490	98	1500	1360	465					
18	1610	550	98	1560	1480	525					

布置形式 3) Design



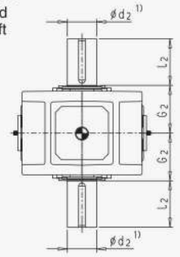
两级传动/立式安装

Two Stage / Vertical

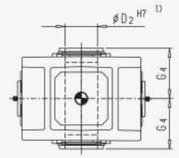
类型 WSB2.V 规格 13-18　　Type WSB2.V Sizes 13-18

输出轴 / Output

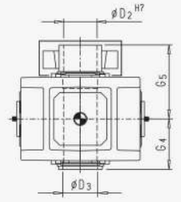
WSB2SV 实心轴 Solid shaft



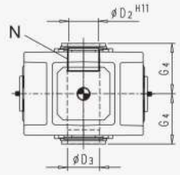
WSB2HV 空心轴 Hollow shaft



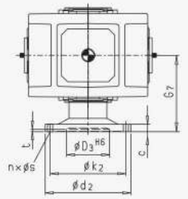
WSB2DV 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSB2KV 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSB2FV 法兰轴 Flanged shaft

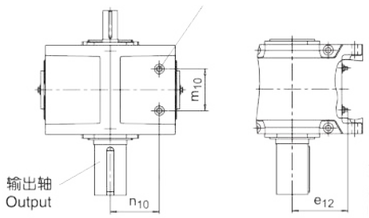


规格 Size	WSB2SV			WSB2HV		WSB24DV				WSB2KV				WSB2FV						
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	390	-	-	-	-	-	-	-	-	-	-	48	580	310	500	20 x 33	14	525
14	210	350	390	210	390	210	215	390	535	N 190x5x30x36x9H	180	215	390	48	620	310	540	24 x 33	14	525
15	230	410	460	-	-	-	-	-	-	-	-	-	-	55	710	360	630	28 x 33	17	625
16	240	410	460	240	450	240	245	450	620	N 220x5x30x42x9H	210	245	450	55	740	360	660	30 x 33	17	625
17	250	410	540	-	-	-	-	-	-	-	-	-	-	60	750	410	660	24 x 39	18	695
18	270	470	540	275	510	280	285	510	700	N 250x5x30x48x9H	240	285	510	60	800	410	710	26 x 39	18	695

规格 Size	润滑油量 Oil quantity (l) *) (l) *)	重量 / Weight (kg) *) **) WSB2SV WSB2HV WSB2DV WSB2KV	WSB2FV
13	125	2350	2520
14	140	2725	2905
15	190	3795	4050
16	200	4160	4430
17	270	5320	5640
18	295	5860	6230

冷却盘管 **Cooling coil** 3)

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



规格 Size	m_{10}	n_{10}	e_{12}	l/min x)
13	324	300	335	8
14	324	300	405	8
15	396	345	390	8
16	396	345	435	8
17	324	395	425	8
18	324	395	485	8

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1）轴：
- $K_6 \leq \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

3）采用冷却盘管时：
- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leq \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

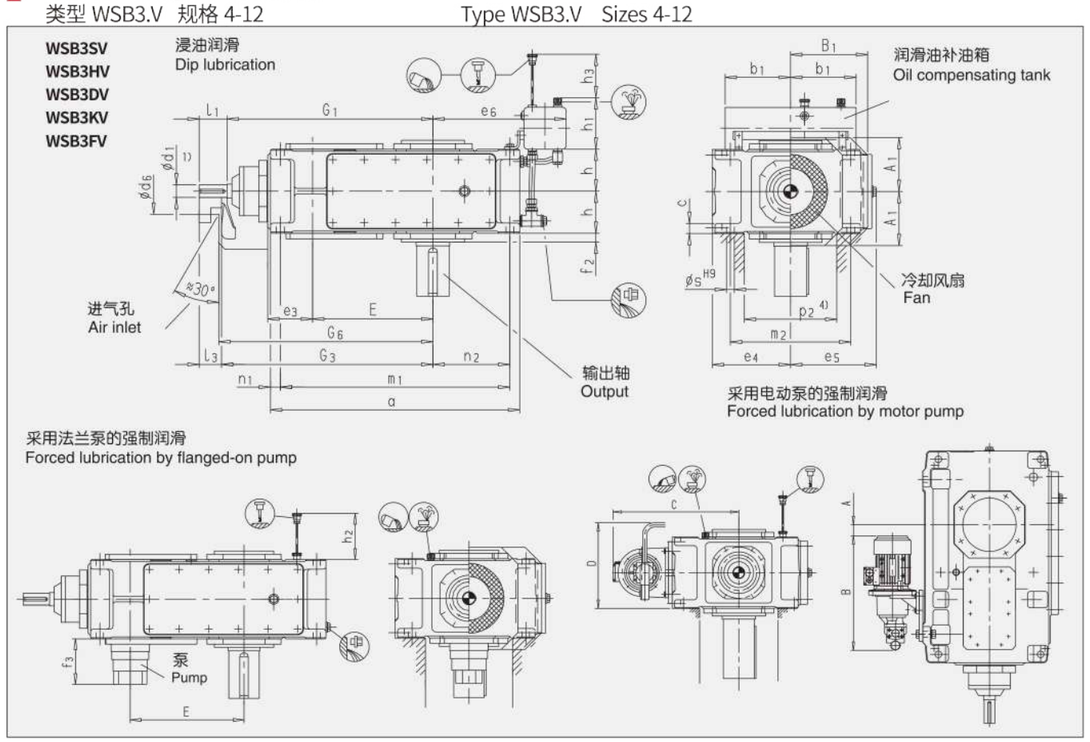
*) Approximate values

**) Without oil filling

三级传动/立式安装

Three Stage / Vertical

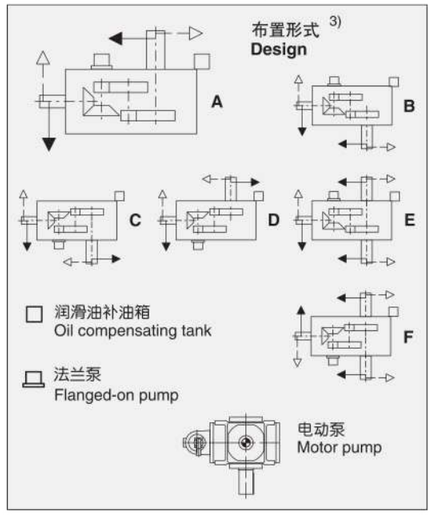
类型 WSB3.V 规格 4-12　　Type WSB3.V Sizes 4-12



规格 Size	输入轴 / Input i_N = 12.5 - 45, i_N = 16 - 56			输入轴 / Input i_N = 50 - 71, i_N = 63 - 90			齿轮箱 / Gear units				冷却风扇 / Fan		
	d_1	l_1	l_3	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	B_1	d_6
4	30	70	50	25	60	40	500	520	-	-	143	200	110
5 + 6	35	80	60	28	60	40	575	595	610	630	168	235	130
7 + 8	45	100	80	35	80	60	690	710	735	755	193	275	165
9 + 10	55	110	80	40	100	70	800	830	850	880	231	325	175
11 + 12	70	135	105	50	110	80	960	990	1030	1060	263	385	190

规格 Size	齿轮箱 / Gear units											
	b_1	c	e_3	e_4	h	h_1	h_2	h_3	m_2	n_1	p_2	s
4	150	30±1	110	200	107.5	165	-	180	300	30	220	24
5 + 6	240	30±1	130	230	127.5	205	180	240	360	30	270	24
7 + 8	240	36±1	160	280	150	205	165	250	430	35	330	28
9 + 10	330	45±1.5	185	320	185	275	205	330	490	40	370	36
11 + 12	330	54±1.5	225	380	215	275	240	340	600	50	440	40

规格 Size	齿轮箱 / Gear units								泵 Pump	电动泵 / Motor pump			
	a	e_5	e_6	E	f_2	G_6	m_1	n_2	f_3	A	B	C	D
4	565	215	320	270	22	530	505	160	敬请垂询 相关尺寸 Dimensions on request				
5	640	252	385	315	28	605	580	175					
6	720	252	425	350	28	640	660	220					
7	785	292	425	385	30	720	715	215					
8	890	302	485	430	32	765	820	275					
9	925	342	560	450	32	845	845	260					
10	1025	342	610	500	32	895	945	310					
11	1105	402	595	545	35	1010	1005	295					
12	1260	410	680	615	35	1080	1160	380					

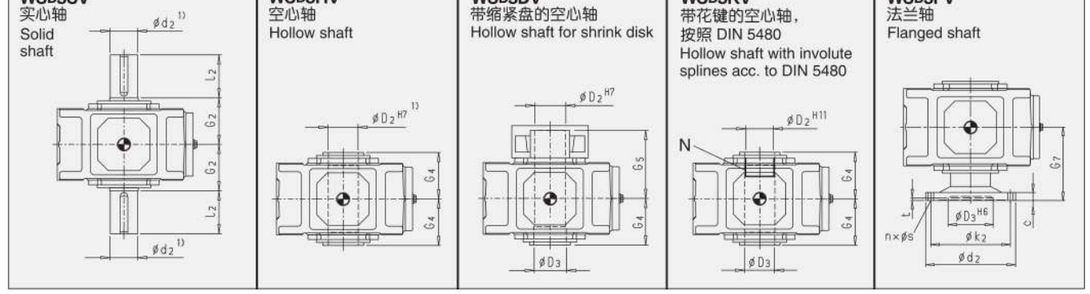


三级传动/立式安装

Three Stage / Vertical

类型 WSB3.V 规格 4-12　　Type WSB3.V Sizes 4-12

输出轴 / **Output**

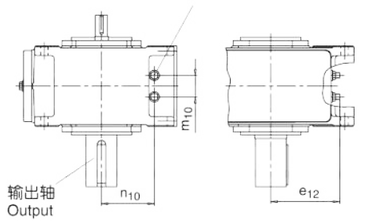


规格 Size	WSB3SV d_2	WSB3SV l_2	WSB3SV G_2	WSB3HV D_2	WSB3HV G_4	WSB34DV D_2	WSB34DV D_3	WSB34DV G_4	WSB34DV G_5	WSB3KV N / DIN 5480	WSB3KV D_2	WSB3KV D_3	WSB3KV G_4	WSB3FV c	WSB3FV d_2	WSB3FV D_3	WSB3FV k_2	WSB3FV n x s	WSB3FV t	WSB3FV G_7
4	80	170	140	80	140	85	85	140	205	-	-	-	-	-	-	-	-	-	-	-
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 / Oil quantity (l) *) 浸油润滑 Dip lubrication	润滑油量 / Oil quantity (l) *) 强制润滑 Forced lubrication	重量 / Weight (kg) *) **) WSB3SV WSB3HV WSB3DV WSB3KV	重量 / Weight (kg) *) **) WSB3FV
4	20	-	210	-
5	34	17	325	360
6	36	18	380	420
7	60	30	550	600
8	68	34	635	690
9	96	48	890	975
10	105	52	1020	1110
11	155	77	1455	1585
12	175	87	1730	1870

冷却盘管 / **Cooling coil** 3)

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



规格 Size	m_{10}	n_{10}	e_{12}	x) L / min
4	34	140	155	4
5	68	168	170	4
6	70	162	215	4
7	100	197	210	4
8	100	197	270	4
9	140	210	245	8
10	100	225	295	8
11	110	285	275	8
12	200	271	360	8

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

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1）轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

3）采用冷却盘管时：
- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

*) Approximate values

**) Without oil filling

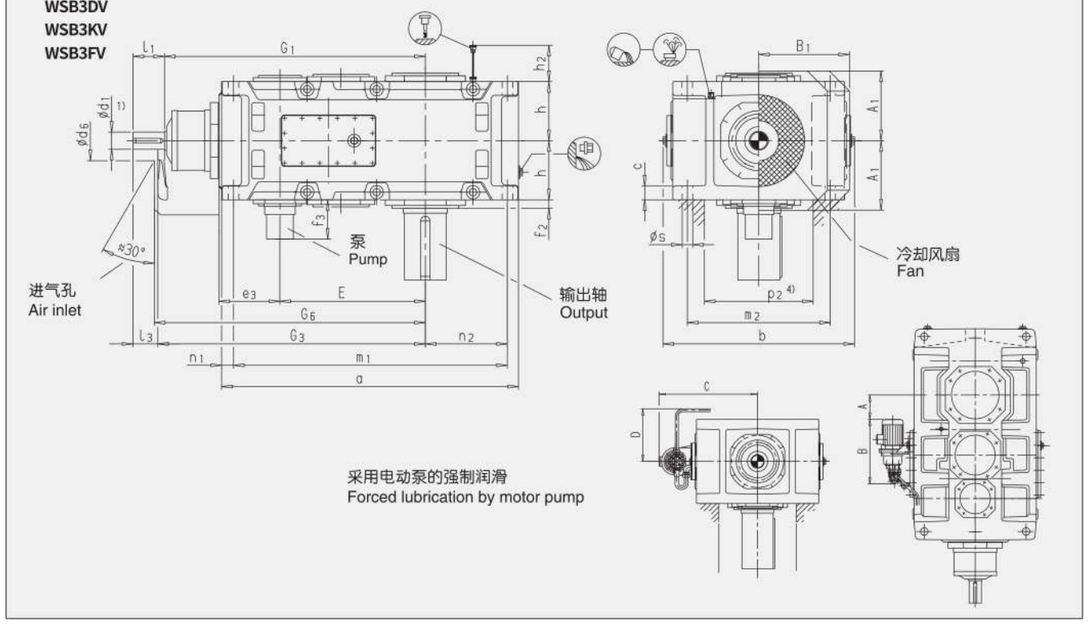
三级传动/立式安装

Three Stage / Vertical

类型 WSB3.V 规格 13-22　　Type WSB3.V Sizes 13-22

WSB3SV
WSB3HV
WSB3DV
WSB3KV
WSB3FV

采用法兰泵的强制润滑
Forced lubrication with flanged-on pump

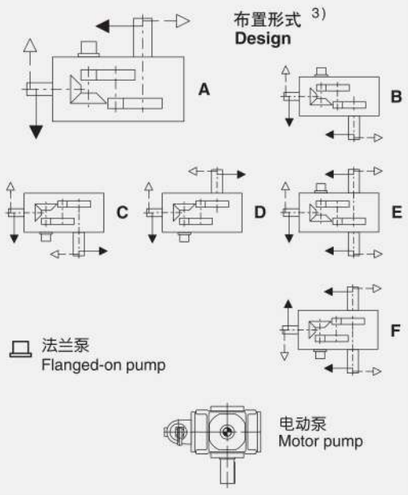


规格 Size	输入轴 / Input i_N = 12.5 - 45, i_N = 14 - 50, i_N = 16 - 56			i_N = 50 - 71, i_N = 56 - 80, i_N = 63 - 90							冷却风扇 / Fan		
	d_1	l_1	l_3	d_1	l_1	l_3	G_1	G_3	G_1	G_3	A_1	B_1	d_6
13 + 14	80	165	130	60	140	105	1125	1160	1195	1230	325	475	210
15 + 16	90	165	130	70	140	105	1367	1402	1413	1448	365	520	210
17 + 18	110	205	165	80	170	130	1560	1600	1620	1660	395	570	230
19 + 20	敬请垂询 / On request												
21 + 22													

规格 Size	齿轮箱 / Gear units									
	b	c	e_3	f_2	h	h_2	m_2	n_1	p_2	s
13 + 14	900	61±2	265	35	272.5	300	680	50	500	48
15 + 16	980	72±2	320	42	310	340	750	60	570	55
17 + 18	1110	81±2	370	42	340	380	850	70	630	55
19 + 20	敬请垂询 / On request									
21 + 22										

规格 Size	齿轮箱 / Gear units					泵 Pump	电动泵 / Motor pump			
	a	E	G_6	m_1	n_2	f_3	A	B	C	D
13	1290	635	1180	1195	360	敬请垂询 相关尺寸 Dimensions on request				
14	1430	705	1250	1335	430					
15	1550	762	1420	1435	430					
16	1640	808	1470	1525	475					
17	1740	860	1620	1610	465					
18	1860	920	1680	1730	525					
19 + 20	敬请垂询 / On request									
21 + 22										

布置形式 3)
Design



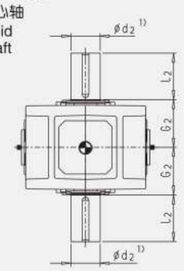
三级传动/立式安装

Three Stage / Vertical

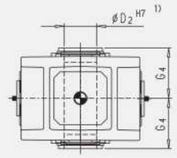
类型 WSB3.V 规格 13-22　　Type WSB3.V Sizes 13-22

输出轴 / **Output**

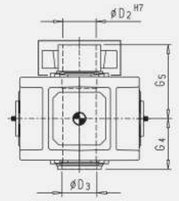
WSB3SV 实心轴 Solid shaft



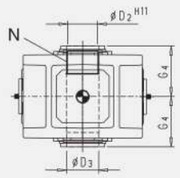
WSB3HV 空心轴 Hollow shaft



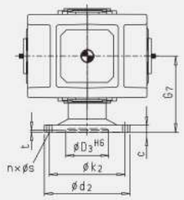
WSB3DV 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSB3KV 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSB3FV 法兰轴 Flanged shaft

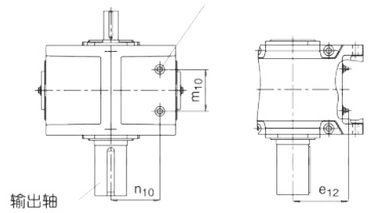


规格 Size	WSB3SV			WSB3HV		WSB3DV				WSB3KV				WSB3FV						
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19 - 22	敬请垂询 / On request																			

规格 Size	润滑油量 Oil quantity (l) *)	重量 / Weight (kg) *) **) WSB3SV WSB3HV WSB3DV WSB3KV	WSB3FV
13	115	2260	2420
14	130	2615	2785
15	180	3540	3780
16	190	3765	4020
17	260	4760	5060
18	275	5240	5590
19 - 22	敬请垂询 / On request		

冷却盘管 / **Cooling coil** 3)

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



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

规格 Size	m_{10}	n_{10}	e_{12}	x) L / min
13	252	300	335	8
14	252	300	405	8
15	290	335	395	8
16	290	335	440	8
17	340	380	425	8
18	340	380	485	8
19 - 22	敬请垂询 On request			

x) 所需冷却水量；冷却水压力最大值：8 巴
Cooling water quantity required; max.cooling water pressure: 8 bar

尺寸以 mm 为单位

1）轴：
- $K_6 \leq \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

3）采用冷却盘管时：
- 布置形式 A，C 和 E 不能采用法兰泵强制润滑。

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leq \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

3) **Cooling coil:**
- For A, C and E designs, forced lubrication by flanged-on pump not possible.

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

5) A, D and G designs for gear units with hollow shaft on request

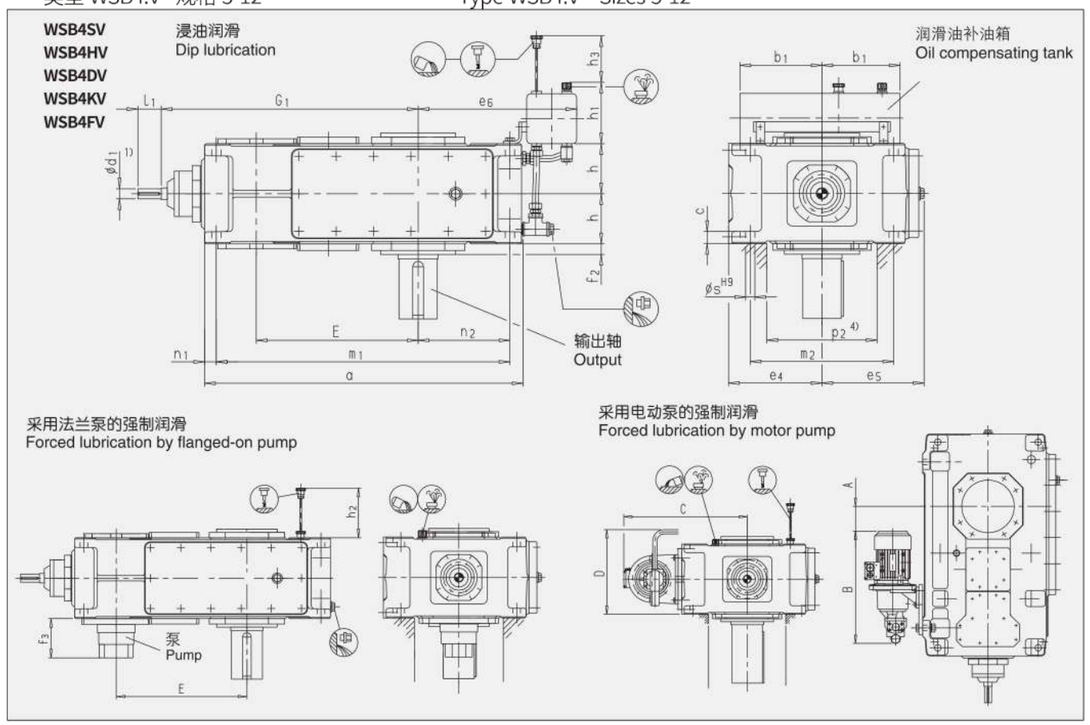
*) Approximate values

**) Without oil filling

四级传动/立式安装

Four Stage / Vertical

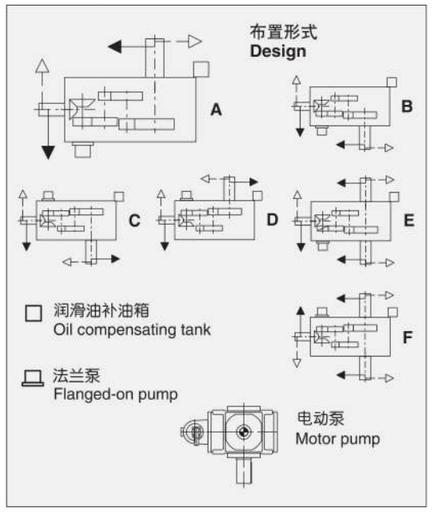
类型 WSB4.V 规格 5-12　　Type WSB4.V Sizes 5-12



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

规格 Size	齿轮箱 / Gear units b_1	c_1	e_4	h	h_1	h_2	h_3	m_2	n_1	p_2	s
5 + 6	240	30±1	230	127.5	205	190	240	360	30	270	24
7 + 8	240	36±1	280	150	205	165	250	430	35	330	28
9 + 10	330	45±1.5	320	185	275	205	330	490	40	370	36
11 + 12	330	54±1.5	380	215	275	240	340	600	50	440	40

规格 Size	齿轮箱 / Gear units a	e_5	e_6	E	f_2	m_1	n_2	泵 Pump f_3	电动泵 / Motor pump A	B	C	D
5	690	252	385	405	28	630	175	敬请垂询 相关尺寸 Dimensions on request				
6	770	252	425	440	28	710	220					
7	845	292	425	495	30	775	215					
8	950	302	485	540	32	880	275					
9	1000	342	560	580	32	920	260					
10	1100	342	610	630	32	1020	310					
11	1200	402	595	705	35	1100	295					
12	1355	410	680	775	35	1255	380					

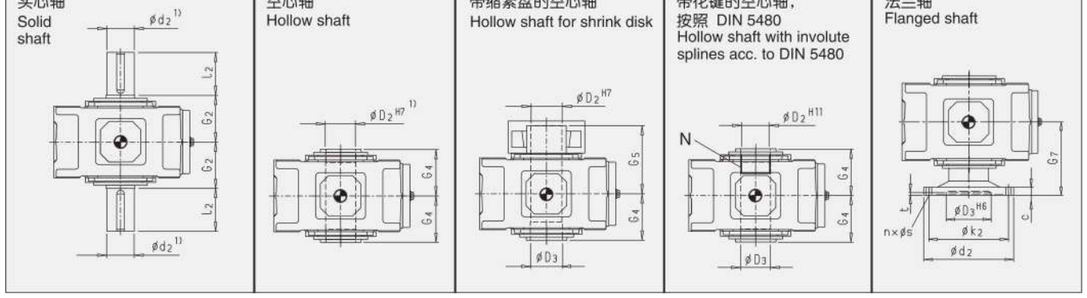


四级传动/立式安装

Four Stage / Vertical

类型 WSB4.V 规格 5-12　　Type WSB4.V Sizes 5-12

输出轴 / Output



规格 Size	WSB4SV d_2	l_2	G_2	WSB4HV D_2	G_4	WSB4DV D_2	D_3	G_4	G_5	WSB4KV N / DIN 5480	D_2	D_3	G_4	WSB4FV c	d_2	D_3	k_2	n x s	t	G_7
5	100	210	165	95	165	100	100	165	240	N 95x3x30x30x9H	89	100	165	25	300	150	260	16 x 22	10	255
6	110	210	165	105	165	110	110	165	240	N 95x3x30x30x9H	89	110	165	25	320	160	280	18 x 22	10	255
7	120	210	195	115	195	120	120	195	280	N 120x3x30x38x9H	114	120	195	30	370	180	320	16 x 26	10	300
8	130	250	195	125	195	130	130	195	285	N 120x3x30x38x9H	114	130	195	30	390	190	340	18 x 26	10	300
9	140	250	235	135	235	140	145	235	330	N 140x3x30x45x9H	134	145	235	38	430	220	380	20 x 26	12	350
10	160	300	235	150	235	150	155	235	350	N 140x3x30x45x9H	134	155	235	38	470	240	420	22 x 26	12	350
11	170	300	270	165	270	165	170	270	400	N 170x5x30x32x9H	160	170	270	42	510	260	450	18 x 33	12	400
12	180	300	270	180	270	180	185	270	405	N 170x5x30x32x9H	160	185	270	42	540	280	480	22 x 33	12	400

规格 Size	润滑油量 Oil quantity (l) *) 浸油润滑 Dip lubrication	强制润滑 Forced lubrication	重量 Weight (kg) *) **) WSB4SV WSB4HV WSB4DV WSB4KV	WSB4FV
5	36	18	335	370
6	40	20	385	425
7	65	32	555	605
8	73	36	655	710
9	105	52	890	975
10	110	55	1025	1115
11	175	87	1485	1615
12	200	100	1750	1890

尺寸以 mm 为单位

1）轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

5) A, D and G designs for gear units with hollow shaft on request

*) Approximate values

**) Without oil filling

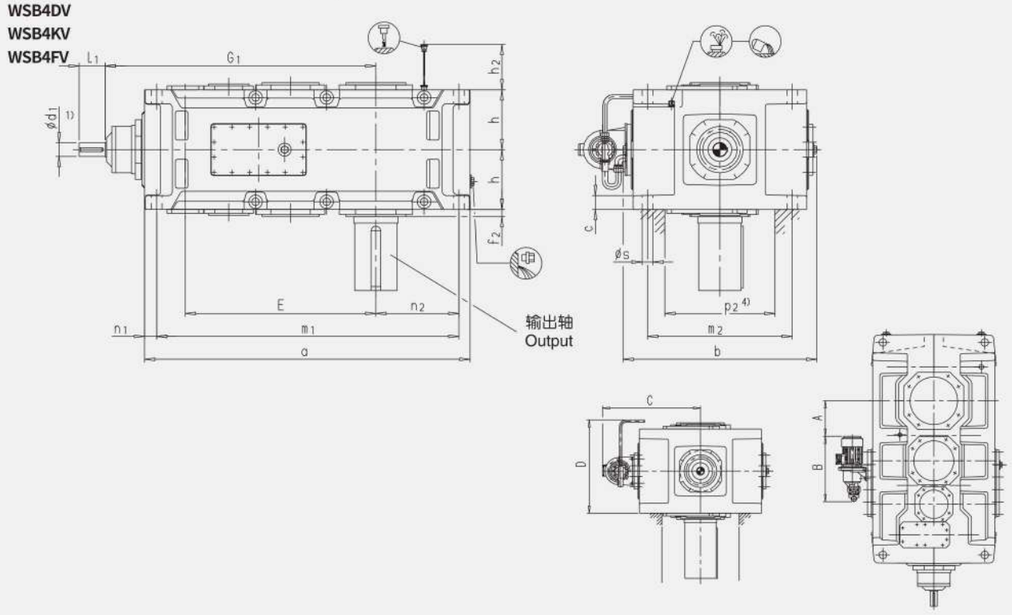
四级传动/立式安装

Four Stage / Vertical

类型 WSB4.V 规格 13-22　　Type WSB4.V Sizes 13-22

WSB4SV
WSB4HV
WSB4DV
WSB4KV
WSB4FV

采用电动泵的强制润滑
Forced lubrication by motor pump

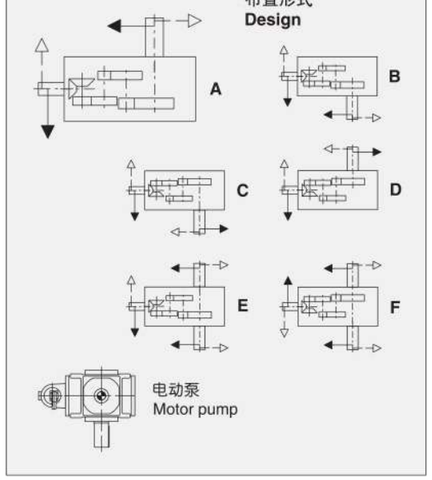


规格 Size	输入轴 / Input i_N = 80 - 180, i_N = 90 - 200, i_N = 100 - 224		i_N = 200 - 315, i_N = 224 - 355, i_N = 250 - 400			
	d_1	l_1	d_1	l_1	G_1	G_1
13 + 14	55	110	40	100	1170	1240
15 + 16	70	135	50	110	1402	1448
17 + 18	70	135	50	110	1450	1510
19 + 20	敬请垂询 / On request					
21 + 22						

规格 Size	齿轮箱 / Gear units							
	b	c	h	h_2	m_2	n_1	p_2	s
13 + 14	900	61±2	272.5	300	680	50	500	48
15 + 16	980	72±2	310	340	750	60	570	55
17 + 18	1110	81±2	340	374	850	70	630	55
19 + 20	敬请垂询 / On request							
21 + 22								

规格 Size	齿轮箱 / Gear units					电动泵 / Motor pump			
	a	E	f_2	m_1	n_2	A	B	C	D
13	1395	820	35	1300	360	敬请垂询 相关尺寸 Dimensions on request			
14	1535	890	35	1440	430				
15	1680	987	42	1565	430				
16	1770	1033	42	1655	475				
17	1770	1035	42	1640	465				
18	1890	1095	42	1760	525				
19 + 20	敬请垂询 / On request								
21 + 22									

布置形式
Design



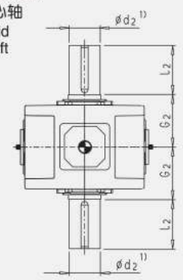
四级传动/立式安装

Four Stage / Vertical

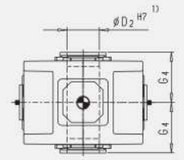
类型 WSB4.V 规格 13-22　　Type WSB4.V Sizes 13-22

输出轴 / **Output**

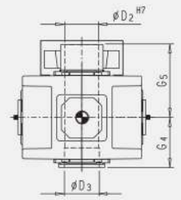
WSB4SV 实心轴 Solid shaft



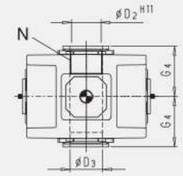
WSB4HV 空心轴 Hollow shaft



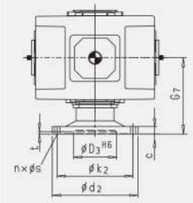
WSB4DV 带缩紧盘的空心轴 Hollow shaft for shrink disk



WSB4KV 带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480



WSB4FV 法兰轴 Flanged shaft



规格 Size	WSB4SV			WSB4HV		WSB4DV				WSB4KV				WSB4FV						
	d_2	l_2	G_2	D_2	G_4	D_2	D_3	G_4	G_5	N / DIN 5480	D_2	D_3	G_4	c	d_2	D_3	k_2	n x s	t	G_7
13	200	350	335	190	335	190	195	335	480	N 190x5x30x36x9H	180	195	335	48	580	310	500	20 x 33	14	480
14	210	350	335	210	335	210	215	335	480	N 190x5x30x36x9H	180	215	335	48	620	310	540	24 x 33	14	480
15	230	410	380	230	380	230	235	380	550	N 220x5x30x42x9H	210	235	380	55	710	360	630	28 x 33	17	550
16	240	410	380	240	380	240	245	380	550	N 220x5x30x42x9H	210	245	380	55	740	360	660	30 x 33	17	550
17	250	410	415	250	415	250	260	415	600	N 250x5x30x48x9H	240	260	415	60	750	410	660	24 x 39	18	600
18	270	470	415	275	415	280	285	415	600	N 250x5x30x48x9H	240	285	415	60	800	410	710	26 x 39	18	600
19 - 22	敬请垂询 / On request																			

规格 Size	润滑油量 Oil quantity (l) *)	重量 Weight (kg) *) **)	
		WSB4SV WSB4HV WSB4DV WSB4KV	WSB4FV
13	135	2280	2440
14	150	2605	2775
15	210	3435	3675
16	220	3765	4020
17	270	4460	4760
18	285	4930	5280
19 - 22	敬请垂询 / On request		

尺寸以 mm 为单位

1）轴：
- $K_6 \leqslant \phi 50$；$m_6 > \phi 50$
- 键槽按照 GB/T1095-1979
- 有关细节见第 125-134 页

4）油泵、油管和护盖所需的空间尺寸，欲了解精确尺寸，请与我们联系。

5）对空心轴减速机布置形式A,D和G请垂询

*）参考值

**）未注油时

Dimensions in mm

1) **Shafts:**
- $K_6 \leqslant \phi 50$; $m_6 > \phi 50$
- Keyway acc. to GB/T1095-1979
- For details, see pages 125-134

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

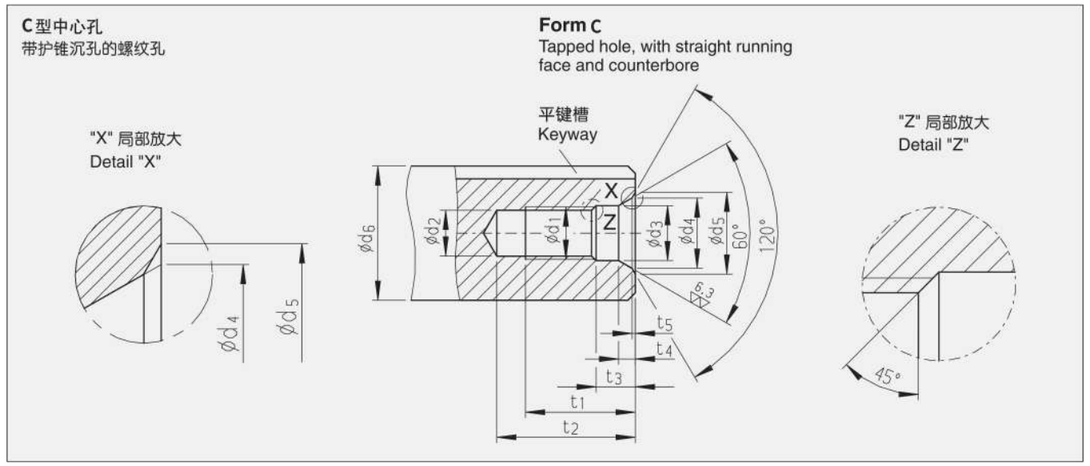
5) A, D and G designs for gear units with hollow shaft on request

*) Approximate values

**) Without oil filling

C型轴伸中心孔 按照GB145-1985

Gentre Holes, Form C in Shaft Ends GB145-1985



推荐直径范围 Recommended diameters d_6 1) 大于 above mm	至 to mm	C型 中心孔 Centering	d_1	d_2 2)	d_3	d_4	d_5	t_1 +2	t_2 min.	t_2 max.	t_3 +1	t_4 ≈	t_5 ≈
		C 型 / Form C						mm					
16	**21**	DS 6	M 6	5	6.4	9.6	10.5	16	20	22	5	2.8	0.4
21	**24**	DS 8	M 8	6.8	8.4	12.2	13.2	19	25	28	6	3.3	0.4
24	**30**	DS 10	M 10	8.5	10.5	14.9	16.3	22	30	34	7.5	3.8	0.6
30	**38**	DS 12	M 12	10.2	13	18.1	19.8	28	37	42	9.5	4.4	0.7
38	**50**	DS 16	M 16	14	17	23	25.3	36	45	50	12	5.2	1.0
50	**85**	DS 20	M 20	17.5	21	28.4	31.3	42	53	59	15	6.4	1.3
85	**130**	DS 24	M 24	21	25	34.2	38	50	63	68	18	8	1.6
130 *	**225** *	DS 30	M 30 *	26.5	31	44	48	60	77	83	17	11	1.9
225 *	**320** *	DS 36	M 36 *	32	37	55	60	74	93	99	22	15	2.3
320 *	**500** *	DS 42	M 42 *	37.5	43	65	71	84	105	111	26	19	2.7

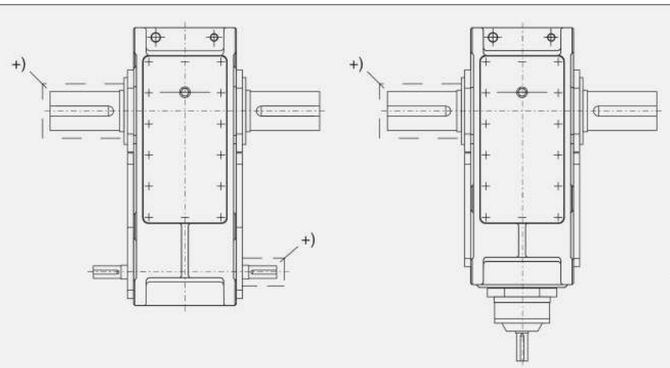
1）工件加工后最终直径

*）不是按照 GB145-1985 确定的尺寸

1) Diameter of the finished work piece

*) Dimensions not acc. to GB145-1985

防护罩 Guards



用于布置形式
for designs
E, F, G, H, I

+) 敬请垂询备用轴伸的防护罩

+) Guard for free shaft end on request

ISO配合精度的选择/平键和平键槽

Selection of ISO Fits Parallel/Keys and Keyways

ISO 配合精度的选择 / Selection of ISO fits

ISO 配合精度的选择 Selection of ISO fits	轴 / Shaft d 大于 above mm	至 to mm	轴公差 Shaft tolerance	孔公差 Bore tolerance
轴公差按照我司标准 Shaft tolerance acc. to Wanshsin standard		50	k6	H7
	50		m6	

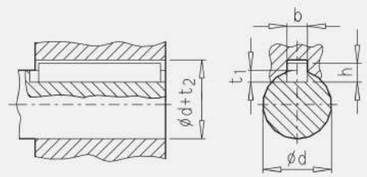
对于重载工作条件，如带载反向回转，建议采用比较紧密的配合，轮毂键槽宽度亦应选择 ISO P9 公差等级。

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

平键 / Parallel keys

平键紧固方式，采用无锥度连接
Drive type fastening without taper action

平键和平键槽按照 GB/T1095-1979
Parallel key and keyway acc. to GB/T1095-1979



1）轮毂平键键槽宽度 b 的公差带应按 ISO JS9 确定，重载条件下应按 ISO P9 确定。

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

直径 Diameter d 大于 above mm	至 to mm	宽度 Width b 1) mm	高度 Height h mm	轴键槽深度 Depth of keyway in shaft t_1 mm	轮毂键槽深度 Depth of keyway in hub $d + t_2$ GB/T1095-1979 mm
17	**22**	6	6	3.5	d + 2.8
22	**30**	8	7	4	d + 3.3
30	**38**	10	8	5	d + 3.3
38	**44**	12	8	5	d + 3.3
44	**50**	14	9	5.5	d + 3.8
50	**58**	16	10	6	d + 4.3
58	**65**	18	11	7	d + 4.4
65	**75**	20	12	7.5	d + 4.9
75	**85**	22	14	9	d + 5.4
85	**95**	25	14	9	d + 5.4
95	**110**	28	16	10	d + 6.4
110	**130**	32	18	11	d + 7.4
130	**150**	36	20	12	d + 8.4
150	**170**	40	22	13	d + 9.4
170	**200**	45	25	15	d + 10.4
200	**230**	50	28	17	d + 11.4
230	**260**	56	32	20	d + 12.4
260	**290**	63	32	20	d + 12.4
290	**330**	70	36	22	d + 14.4
330	**380**	80	40	25	d + 15.4
380	**440**	90	45	28	d + 17.4

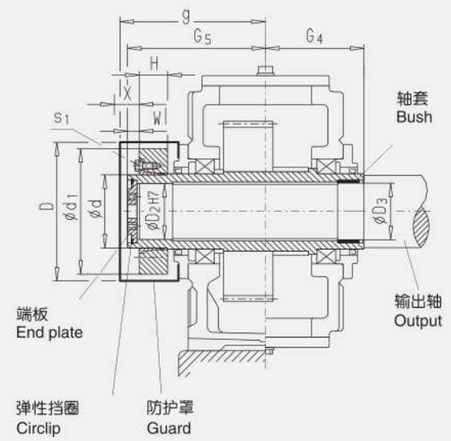
带胀紧盘的空心轴

Hollow Shaft for Shrink Disks

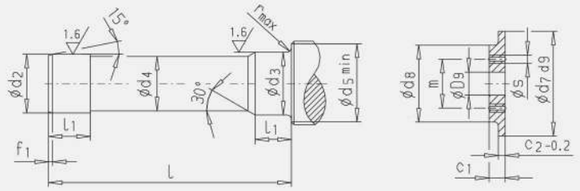
类型 WSH2,WSH3,WSH4,WSB3,WSB4 规格 4-26

Type WSH2,WSH3,WSH4,WSB3,WSB4 Sizes 4-26

X = 要求预留的力矩扳手空间
X = Space required for torque wrench



用于缩紧盘联接的工作机驱动轴。
工作机驱动轴表面不得沾有机油或润滑脂。
Driven machine shaft for shrink disk connection. Driven machine shaft must be free of oil or grease.



带按照 GB145-1985 加工的 C 型中心孔（螺纹孔）的工作机驱动轴
Driven machine shaft with centre hole form C (tapped hole) acc. to GB145-1985.

端板
End plate

类型 / Types **WSH2D.,WSH3D.,WSH4D.,WSB3D.,WSB4D.**

齿轮箱规格 Gear unit size	工作机驱动轴 2) Driven machine shaft								端板 End plate								弹性挡圈 Circlip	空心轴 Hollow shaft				缩紧盘 Shrink disk 1)					螺钉 Screw	防护罩 Guard	
	d_2	d_3	d_4	d_5	f_1	l	l_1	r	c_1	c_2	d_7	d_8	D_9	m	s	数量 Qty.	DIN 472	D_2	D_3	G_4	G_5	类型 Type	d	d_1	H	W	s_1	D	g
	mm																	mm											
4	85 g6	85 h6	84.5	95	4	326	48	2	17	7	90	70	22	50	M 8	2	90 x 3	85	85	140	205	110-32	110	185	51	20	M 12	235	225
5	100 g6	100 h6	99.5	114	5	383	53	2	20	8	105	80	26	55	M 10	2	105 x 4	100	100	165	240	125-32	125	215	55	20	M 12	275	260
6	110 g6	110 h6	109.5	124	5	383	58	3	20	8	115	85	26	60	M 10	2	115 x 4	110	110	165	240	140-32	140	230	61	20	M 14	285	255
7	120 g6	120 h6	119.5	134	5	453	68	3	20	8	125	90	26	65	M 12	2	125 x 4	120	120	195	280	155-32	155	263	64	23	M 14	330	305
8	130 g6	130 h6	129.5	145	6	458	73	3	20	8	135	100	26	70	M 12	2	135 x 4	130	130	195	285	165-32	165	290	70	23	M 16	340	305
9	140 g6	145 m6	139.5	160	6	539	82	4	23	10	150	110	33	80	M 12	2	150 x 4	140	145	235	330	175-32	175	300	71	28	M 16	360	355
10	150 g6	155 m6	149.5	170	6	559	92	4	23	10	160	120	33	90	M 12	2	160 x 4	150	155	235	350	200-32	200	340	87	28	M 16	395	365
11	165 f6	170 m6	164.5	185	7	644	112	4	23	10	175	130	33	90	M 12	2	175 x 4	165	170	270	400	220-32	220	370	103	30	M 20	435	420
12	180 f6	185 m6	179.5	200	7	649	122	4	23	10	190	140	33	100	M 16	2	190 x 4	180	185	270	405	240-32	240	405	107	30	M 20	450	420
13	190 f6	195 m6	189.5	213	7	789	137	5	23	10	200	150	33	110	M 16	2	200 x 4	190	195	335	480	260-32	260	430	119	30	M 20	500	505
14	210 f6	215 m6	209.5	233	8	784	147	5	28	14	220	170	33	130	M 16	2	220 x 5	210	215	335	480	280-32	280	460	132	30	M 20	525	505
15	230 f6	235 m6	229.5	253	8	899	157	5	28	14	240	180	39	140	M 16	2	240 x 5	230	235	380	550	300-32	300	485	140	35	M 24	575	575
16	240 f6	245 m6	239.5	263	8	899	157	5	28	14	250	190	39	150	M 20	2	250 x 5	240	245	380	550	320-32	320	520	140	35	M 24	595	575
17	250 f6	260 m6	249.5	278	8	982	177	5	30	14	265	200	39	150	M 20	2	265 x 5	250	260	415	600	340-32	340	570	155	35	M 24	615	630
18	280 f6	285 m6	279.5	306	9	982	177	5	30	14	290	210	39	160	M 20	2	290 x 5	280	285	415	600	360-32	360	590	162	35	M 24	635	625
19	285 f6	295 m6	284.5	316	9	1100	187	5	32	15	300	220	39	170	M 24	2	300 x 5	285	295	465	670	380-32	380	640	166	40	M 27	—	—
20	310 f6	315 m6	309.5	336	9	1100	187	5	32	15	320	230	39	180	M 24	2	320 x 6	310	315	465	670	390-32	390	650	166	40	M 27	—	—
21	330 f6	335 m6	329	358	9	1160	205	5	40	20	340	250	45	190	M 24	2	340 x 6	330	335	490	715	420-32	420	670	186	45	M 27	—	—
22	340 f6	345 m6	339	368	9	1170	215	5	40	20	350	260	45	200	M 24	2	350 x 6	340	345	490	725	440-32	440	720	194	45	M 27	—	—
23 - 26	敬请垂询 / On request																												

1）胀紧盘不在供货范围之内。
如果需要请另行订购。

2）工作机驱动轴材质为 60 或强度更高的钢材。

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

2) Material of driven machine shaft: 60 or higher strength.

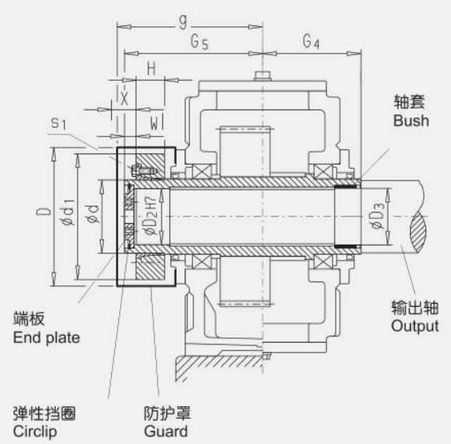
带胀紧盘的空心轴

Hollow Shaft for Shrink Disks

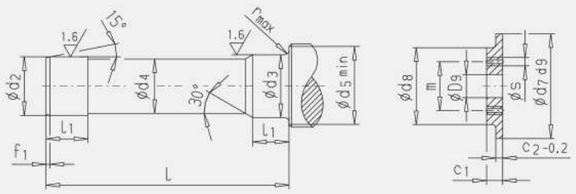
类型 WSB2 规格 4-18

Type WSB2 Sizes 4-18

X = 要求预留的力矩扳手空间
X = Space required for torque wrench



用于缩紧盘联接的工作机驱动轴。
工作机驱动轴表面不得沾有机油或润滑脂。
Driven machine shaft for shrink disk connection. Driven machine shaft must be free of oil or grease.



带按照 GB145-1985 加工的 C 型中心孔（螺纹孔）的工作机驱动轴
Driven machine shaft with centre hole form C (tapped hole) acc. to GB145-1985.

端板
End plate

类型 / Type **WSB2D.**

齿轮箱规格 Gear unit size	工作机驱动轴 2) Driven machine shaft								端板 End plate								弹性挡圈 Circlip	空心轴 Hollow shaft				缩紧盘 Shrink disk 1)					螺钉 Screw	防护罩 Guard	
	d_2	d_3	d_4	d_5	f_1	l	l_1	r	c_1	c_2	d_7	d_8	D_9	m	s	数量 Qty.	DIN 472	D_2	D_3	G_4	G_5	类型 Type	d	d_1	H	W	s_1	D	g
	mm																	mm											
4	85 g6	85 h6	84.5	95	4	386	48	2	17	7	90	70	22	50	M 8	2	90 x 3	85	85	170	235	110-32	110	185	51	20	M 12	235	255
5	100 g6	100 h6	99.5	114	5	453	53	2	20	8	105	80	26	55	M 10	2	105 x 4	100	100	200	275	125-32	125	215	55	20	M 12	275	290
6	110 g6	110 h6	109.5	124	5	453	58	3	20	8	115	85	26	60	M 10	2	115 x 4	110	110	200	275	140-32	140	230	61	20	M 14	285	285
7	120 g6	120 h6	119.5	134	5	533	68	3	20	8	125	90	26	65	M 12	2	125 x 4	120	120	235	320	155-32	155	263	64	23	M 14	330	345
8	130 g6	130 h6	129.5	145	6	538	73	3	20	8	135	100	26	70	M 12	2	135 x 4	130	130	235	325	165-32	165	290	70	23	M 16	340	345
9	140 g6	145 m6	139.5	160	6	609	82	4	23	10	150	110	33	80	M 12	2	150 x 4	140	145	270	365	175-32	175	300	71	28	M 16	360	390
10	150 g6	155 m6	149.5	170	6	629	92	4	23	10	160	120	33	90	M 12	2	160 x 4	150	155	270	385	200-32	200	340	87	28	M 16	395	400
11	165 f6	170 m6	164.5	185	7	744	112	4	23	10	175	130	33	90	M 12	2	175 x 4	165	170	320	450	220-32	220	370	103	30	M 20	435	470
12	180 f6	185 m6	179.5	200	7	749	122	4	23	10	190	140	33	100	M 16	2	190 x 4	180	185	320	455	240-32	240	405	107	30	M 20	450	470
14	210 f6	215 m6	209.5	233	8	894	147	5	28	14	220	170	33	130	M 16	2	220 x 5	210	215	390	535	280-32	280	460	132	30	M 20	525	555
16	240 f6	245 m6	239.5	263	8	1039	157	5	28	14	250	190	39	150	M 20	2	250 x 5	240	245	450	620	320-32	320	520	140	35	M 24	595	645
18	280 f6	285 m6	279.5	306	9	1177	177	5	30	14	290	210	39	160	M 20	2	290 x 5	280	285	510	700	360-32	360	590	162	35	M 24	635	725

1）胀紧盘不在供货范围之内。
如果需要请另行订购。

2）工作机驱动轴材质为 60 或强度更高的钢材。

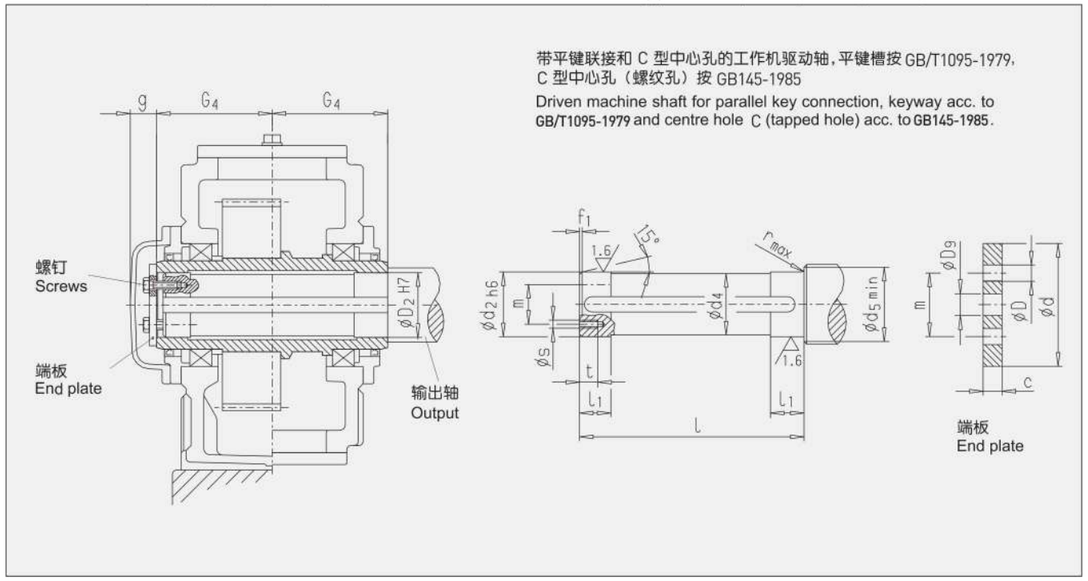
1) Shrink disk does not belong to our scope of supply.
Please order separately, if required.

2) Material of driven machine shaft: 60 or higher strength.

带平键联接的空心轴

Hollow Shaft for Parallel Key Connections

类型 WSH2,WSH3,WSH4,WSB3,WSB4 规格 4-18　　Type WSH2,WSH3,WSH4,WSB3,WSB4 Sizes 4-18



齿轮箱规格 Gear unit size	工作机驱动轴 1) Driven machine shaft									端板 End plate					螺钉 Screw		空心轴 Hollow shaft		
	d_2	d_4	d_5	f_1	l	l_1	r	s	t	c	D	D_9	d	m	规格 Size	数量 Qty.	D_2	G_4	g
	mm																mm		
4	80	79.5	88	4	278	35	1.2	M 10	18	10	11	22	100	60	M 10 x 25	2	80	140	35
5	95	94.5	105	5	328	40	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	95	165	40
6	105	104.5	116	5	328	45	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	105	165	40
7	115	114.5	126	5	388	50	1.6	M 12	20	12	13.5	26	140	80	M 12 x 30	2	115	195	40
8	125	124.5	136	6	388	55	2.5	M 12	20	12	13.5	26	150	85	M 12 x 30	2	125	195	40
9	135	134.5	147	6	467	60	2.5	M 12	20	12	13.5	33	160	90	M 12 x 30	2	135	235	45
10	150	149.5	162	6	467	65	2.5	M 12	20	12	13.5	33	185	110	M 12 x 30	2	150	235	45
11	165	164.5	177	7	537	70	2.5	M 16	28	15	17.5	33	195	120	M 16 x 40	2	165	270	45
12	180	179.5	192	7	537	75	2.5	M 16	28	15	17.5	33	220	130	M 16 x 40	2	180	270	45
13	190	189.5	206	7	667	80	3	M 16	28	18	17.5	33	230	140	M 16 x 40	2	190	335	45
14	210	209.5	226	8	667	85	3	M 16	28	18	17.5	33	250	160	M 16 x 40	2	210	335	45
15	230	229.5	248	8	756	100	3	M 20	38	25	22	39	270	180	M 20 x 55	4	230	380	60
16	240	239.5	258	8	756	100	3	M 20	38	25	22	39	280	180	M 20 x 55	4	240	380	60
17	250	249.5	270	8	826	110	4	M 20	38	25	22	39	300	190	M 20 x 55	4	250	415	60
18	275	274.5	295	9	826	120	4	M 20	38	25	22	39	330	210	M 20 x 55	4	275	415	60

1）工作机驱动轴材质为 60 或强度更高的钢材。

平键不在供货范围之内。如果需要请另行订购。

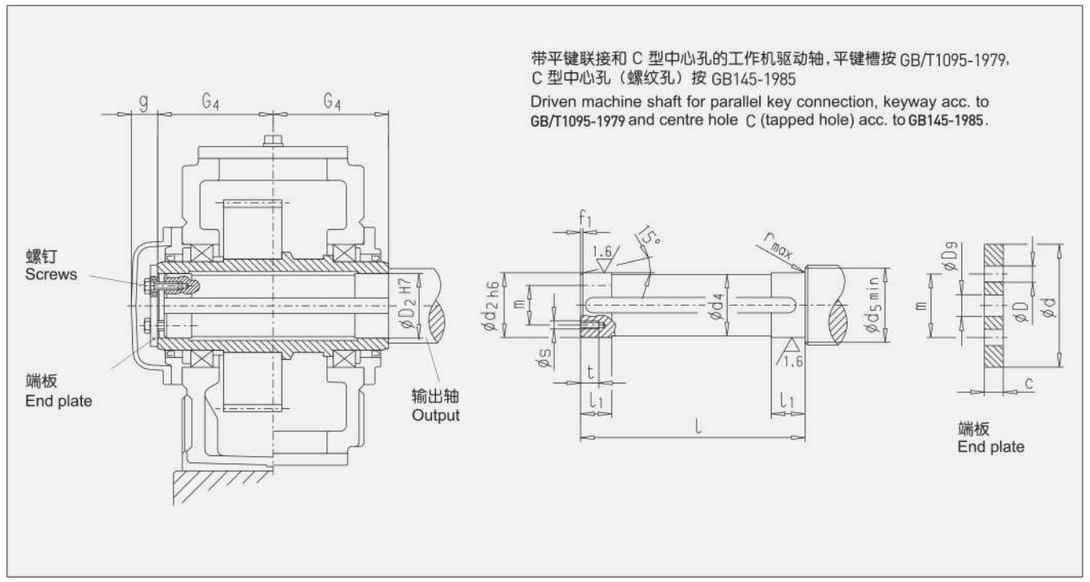
1) Material of driven machine shaft: 60 or higher strength.

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

带平键联接的空心轴

Hollow Shaft for Parallel Key Connections

类型 WSB2 规格 4-18　　Type WSB2 Sizes 4-18



齿轮箱规格 Gear unit size	工作机驱动轴 1) Driven machine shaft									端板 End plate					螺钉 Screw		空心轴 Hollow shaft		
	d_2	d_4	d_5	f_1	l	l_1	r	s	t	c	D	D_9	d	m	规格 Size	数量 Qty.	D_2	G_4	g
	mm																mm		
4	80	79.5	88	4	338	35	1.2	M 10	18	10	11	22	100	60	M 10 x 25	2	80	170	35
5	95	94.5	105	5	398	40	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	95	200	40
6	105	104.5	116	5	398	45	1.6	M 10	18	10	11	26	120	70	M 10 x 25	2	105	200	40
7	115	114.5	126	5	468	50	1.6	M 12	20	12	13.5	26	140	80	M 12 x 30	2	115	235	40
8	125	124.5	136	6	468	55	2.5	M 12	20	12	13.5	26	150	85	M 12 x 30	2	125	235	40
9	135	134.5	147	6	537	60	2.5	M 12	20	12	13.5	33	160	90	M 12 x 30	2	135	270	45
10	150	149.5	162	6	537	65	2.5	M 12	20	12	13.5	33	185	110	M 12 x 30	2	150	270	45
11	165	164.5	177	7	637	70	2.5	M 16	28	15	17.5	33	195	120	M 16 x 40	2	165	320	45
12	180	179.5	192	7	637	75	2.5	M 16	28	15	17.5	33	220	130	M 16 x 40	2	180	320	45
14	210	209.5	226	8	777	85	3	M 16	28	18	17.5	33	250	160	M 16 x 40	2	210	390	45
16	240	239.5	258	8	896	100	3	M 20	38	25	22	39	280	180	M 20 x 55	4	240	450	60
18	275	274.5	295	9	1016	120	4	M 20	38	25	22	39	330	210	M 20 x 55	4	275	510	60

1）工作机驱动轴材质为 60 或强度更高的钢材。

平键不在供货范围之内。如果需要请另行订购。

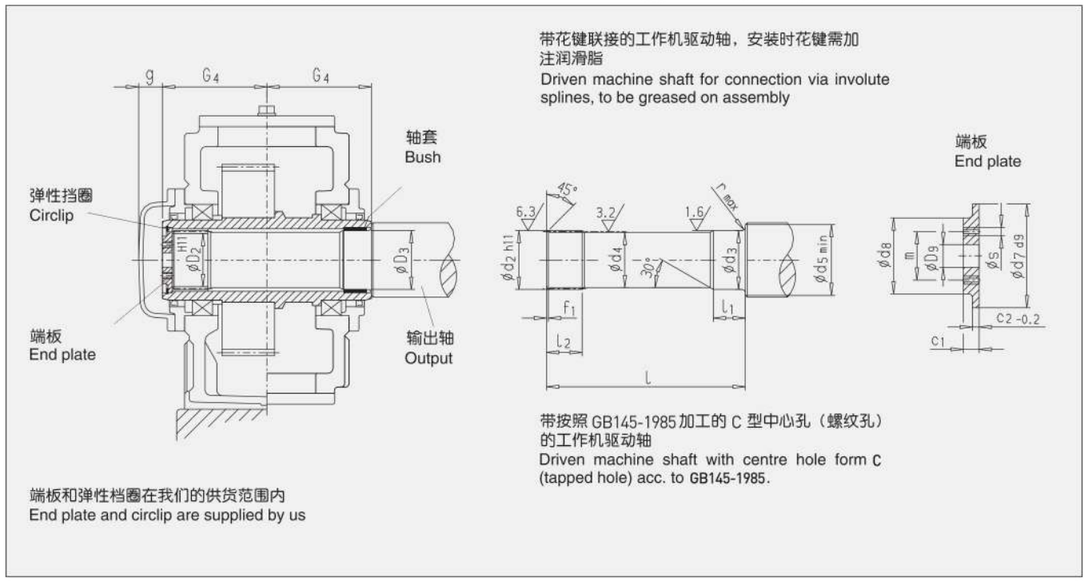
1) Material of driven machine shaft: 60 or higher strength.

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

带花键（按照DIN 5480）的空心轴

Hollow Shaft with Involute Splines acc. to DIN 5480

类型 WSH2,WSH3,WSH4,WSB3,WSB4　规格 5-26　　Type WSH2,WSH3,WSH4,WSB3,WSB4　Sizes 5-26



类型 / Types **WSH2K.,WSH3K.,WSH4K.,WSB3K.,WSB4K.**																										
齿轮箱规格 Gear unit size	工作机驱动轴 1) Driven machine shaft										端板 End plate								空心轴 Hollow shaft				弹性挡圈 Circlip		螺钉 Screw
	渐开线花键 Involute splines	d_2	d_3	d_4	d_5	f_1	l	l_1	l_2	r	c_1	c_2	d_7	d_8	D_9	m	s	数量 Qty.	D_2	D_3	G_4	g	DIN 472	
	DIN 5480	mm									mm								mm						
5	W 95x3x30x30x8f	94.4	100 h6	93	114	3	308	53	90	2	20	8	105	80	26	55	M 10	2	89	100	165	40	105x4		M 24
6	W 95x3x30x30x8f	94.4	110 h6	93	124	3	308	58	90	3	20	8	105	80	26	55	M 10	2	89	110	165	40	105x4		M 24
7	W120x3x30x38x8f	119.4	120 h6	118	134	3	368	68	105	3	20	8	125	90	26	65	M 12	2	114	120	195	40	125x4		M 24
8	W120x3x30x38x8f	119.4	130 h6	118	145	3	368	73	105	3	20	8	125	90	26	65	M 12	2	114	130	195	40	125x4		M 24
9	W140x3x30x45x8f	139.4	145 m6	138	160	3	444	82	125	4	23	10	150	110	33	80	M 12	2	134	145	235	45	150x4		M 30
10	W140x3x30x45x8f	139.4	155 m6	138	170	3	444	92	125	4	23	10	150	110	33	80	M 12	2	134	155	235	45	150x4		M 30
11	W170x5x30x32x8f	169	170 m6	168	185	5	514	112	150	4	23	10	175	130	33	90	M 12	2	160	170	270	45	175x4		M 30
12	W170x5x30x32x8f	169	185 m6	168	200	5	514	122	150	4	23	10	175	130	33	90	M 12	2	160	185	270	45	175x4		M 30
13	W190x5x30x36x8f	189	195 m6	188	213	5	644	137	180	5	23	10	200	150	33	110	M 16	2	180	195	335	45	200x4		M 30
14	W190x5x30x36x8f	189	215 m6	188	233	5	644	147	180	5	23	10	200	150	33	110	M 16	2	180	215	335	45	200x4		M 30
15	W220x5x30x42x8f	219	235 m6	218	253	5	728	157	200	5	28	14	240	180	39	140	M 16	2	210	235	380	60	240x5		M 36
16	W220x5x30x42x8f	219	245 m6	218	263	5	728	157	200	5	28	14	240	180	39	140	M 16	2	210	245	380	60	240x5		M 36
17	W250x5x30x48x8f	249	260 m6	248	278	5	796	177	215	5	30	14	265	200	39	150	M 20	2	240	260	415	60	265x5		M 36
18	W250x5x30x48x8f	249	285 m6	248	306	5	796	177	215	5	30	14	265	200	39	150	M 20	2	240	285	415	60	265x5		M 36
19 -26	敬请垂询 / On request																								

1）工作机驱动轴材质为 60 或强度更高的钢材。

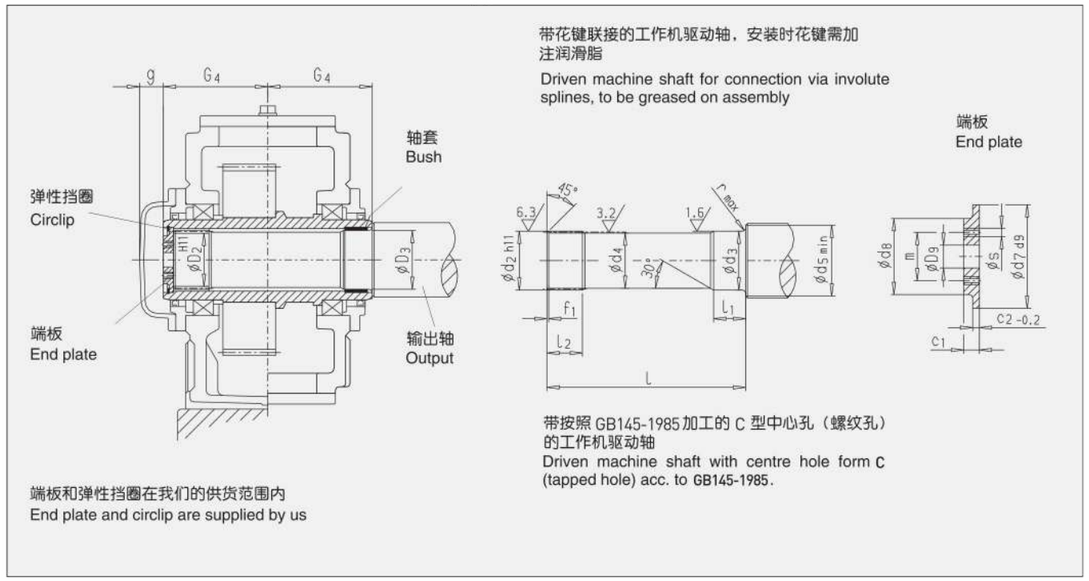
1) Material of driven machine shaft: 60 or higher strength.

带花键（按照DIN 5480）的空心轴

Hollow Shaft with Involute Splines acc. to DIN 5480

K20/004

类型 WSB2　规格 5-18　　Type WSB2　Sizes 5-18



类型 / Type **WSB2K.**																										
齿轮箱规格 Gear unit size	工作机驱动轴 1) Driven machine shaft										端板 End plate								空心轴 Hollow shaft				弹性挡圈 Circlip		螺钉 Screw
	渐开线花键 Involute splines	d_2	d_3	d_4	d_5	f_1	l	l_1	l_2	r	c_1	c_2	d_7	d_8	D_9	m	s	数量 Qty.	D_2	D_3	G_4	g	DIN 472	
	DIN 5480	mm									mm								mm						
5	W 95x3x30x30x8f	94.4	100 h6	93	114	3	378	53	90	2	20	8	105	80	26	55	M 10	2	89	100	200	40	105x4		M 24
6	W 95x3x30x30x8f	94.4	110 h6	93	124	3	378	58	90	3	20	8	105	80	26	55	M 10	2	89	110	200	40	105x4		M 24
7	W120x3x30x38x8f	119.4	120 h6	118	134	3	448	68	105	3	20	8	125	90	26	65	M 12	2	114	120	235	40	125x4		M 24
8	W120x3x30x38x8f	119.4	130 h6	118	145	3	448	73	105	3	20	8	125	90	26	65	M 12	2	114	130	235	40	125x4		M 24
9	W140x3x30x45x8f	139.4	145 m6	138	160	3	514	82	125	4	23	10	150	110	33	80	M 12	2	134	145	270	45	150x4		M 30
10	W140x3x30x45x8f	139.4	155 m6	138	170	3	514	92	125	4	23	10	150	110	33	80	M 12	2	134	155	270	45	150x4		M 30
11	W170x5x30x32x8f	169	170 m6	168	185	5	614	112	150	4	23	10	175	130	33	90	M 12	2	160	170	320	45	175x4		M 30
12	W170x5x30x32x8f	169	185 m6	168	200	5	614	122	150	4	23	10	175	130	33	90	M 12	2	160	185	320	45	175x4		M 30
14	W190x5x30x36x8f	189	215 m6	188	233	5	754	147	180	5	23	10	200	150	33	110	M 16	2	180	215	390	45	200x4		M 30
16	W220x5x30x42x8f	219	245 m6	218	263	5	868	157	200	5	28	14	240	180	39	140	M 16	2	210	245	450	60	240x5		M 36
18	W250x5x30x48x8f	249	285 m6	248	306	5	986	177	215	5	30	14	265	200	39	150	M 20	2	240	285	510	60	265x5		M 36

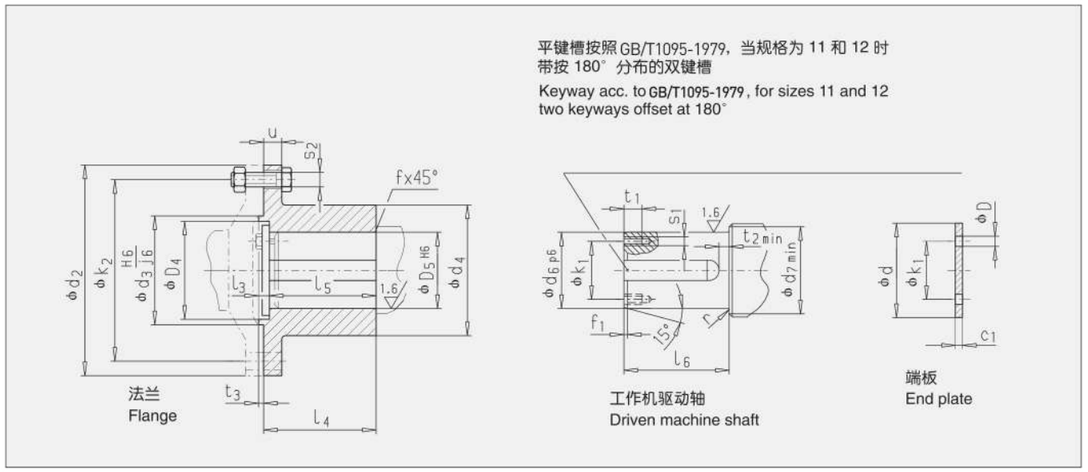
1）工作机驱动轴材质为 60 或强度更高的钢材。

1) Material of driven machine shaft: 60 or higher strength.

与法兰轴联接的对接法兰

Counterflanges for Flanged Shafts

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 规格 5-12　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 Sizes 5-12



类型 / Types **WSH2F.,WSH3F.,WSH4F.,WSB3F.,WSB4F.**

齿轮箱规格 Gear unit size	法兰 / Flange mm													螺栓 1) Bolt 规格 Size	数量 Qty.	T_A 2) Nm
	d_2	d_3	d_4	D_4	D_5	f	k_2	l_3	l_4	l_5	s_2	t_3	u			
5	300	150	190	135	110	2.5	260	16	175	167	M 20	8	25	M 20 x 70	16	610
6	320	160	210	145	120	2.5	280	22	185	171	M 20	8	25	M 20 x 70	18	610
7	370	180	230	160	135	2.5	320	21	220	207	M 24	8	30	M 24 x 90	16	1050
8	390	190	270	175	150	2.5	340	22	220	206	M 24	8	30	M 24 x 90	18	1050
9	430	220	290	195	160	4.0	380	22	250	238	M 24	10	38	M 24 x 100	20	1050
10	470	240	310	220	180	4.0	420	22	250	238	M 24	10	38	M 24 x 100	22	1050
11	510	260	340	235	200	4.0	450	22	290	278	M 30	10	42	M 30 x 120	18	2100
12	540	280	360	255	210	4.0	480	22	290	278	M 30	10	42	M 30 x 120	22	2100

齿轮箱规格 Gear unit size	工作机驱动轴 Driven machine shaft mm									端板 End plate mm				螺栓 Bolt 规格 Size	数量 Qty.	重量 Weight kg
	d_6	d_7	f_1	k_1	l_6	r	s_1	t_1	t_2	c_1	d	D	k_1			
5	110	122	2.5	80	165	2	M 12	28	7.5	10	130	13.5	80	M 12 x 35	4	35
6	120	132	2.5	95	169	2	M 16	32	7.5	14	140	17.5	95	M 16 x 45	4	45
7	135	147	2.5	95	205	2	M 16	32	16	14	155	17.5	95	M 16 x 45	4	65
8	150	162	2.5	110	204	2	M 16	32	16	16	170	17.5	110	M 16 x 45	4	85
9	160	176	4.0	110	235	3	M 16	32	16	16	190	17.5	110	M 16 x 45	4	115
10	180	196	4.0	145	235	3	M 20	38	16	18	215	22	145	M 20 x 55	4	130
11	200	216	4.0	145	275	3	M 20	38	16	18	230	22	145	M 20 x 55	4	175
12	210	230	4.0	160	275	3	M 20	38	16	18	250	22	160	M 20 x 55	4	200

平键不在供货范围内。如果需要请另行订购。

1）螺栓按照GB5781-86，性能等级为 10.9 级；
螺母按照GB41-86 ，性能等级为 10 级

2）法兰联接螺栓的拧紧力矩。
法兰和工作机驱动轴的材质为60 或强度更高的钢材。

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

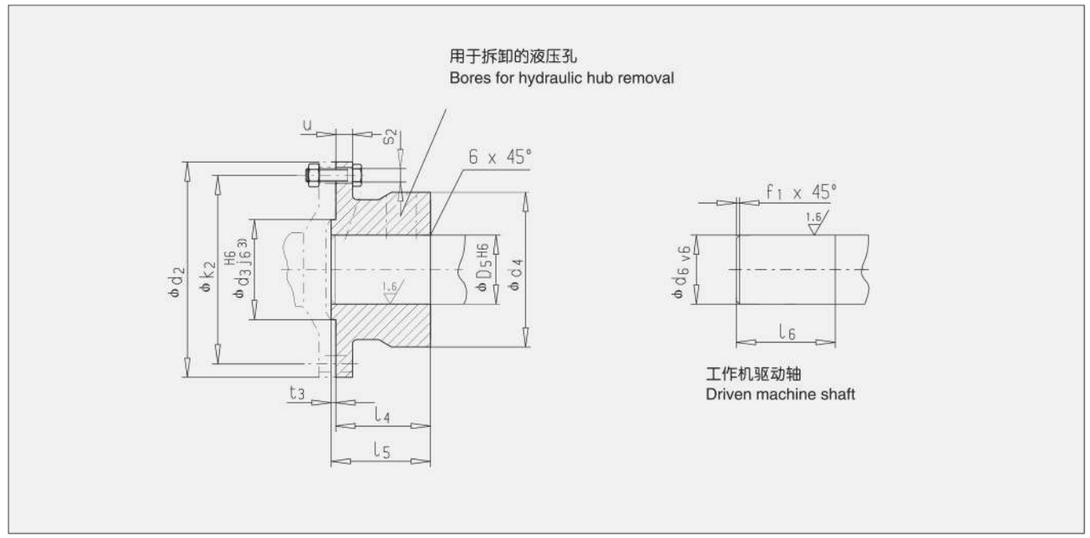
1) Bolts acc. to GB5781-86, material 10.9;
Nuts acc. to GB41-86, material 10

2) Tightening torque of flange connection bolts
Material of flanges and driven machine shafts: 60 or higher strength.

与法兰轴联接的对接法兰

Counterflanges for Flanged Shafts

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 规格 13-26　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 Sizes 13-26



类型 / Types **WSH2F.,WSH3F.,WSH4F.,WSB2F.,WSB3F.,WSB4F.**

齿轮箱规格 Gear unit size	法兰 / Flange mm										螺栓 1) Bolt 规格 Size	数量 Qty.	T_a Nm	工作机驱动轴 Driven machine shaft mm			重量 Weight kg
	d_2	d_3	d_4	2) D_5	k_2	l_4	l_5	s_2	t_3	u				d_6	f_1	l_6	
13	580	310	390	240	500	310	322	M 30	12	48	M 30 x 130	20	2100	240	3	322	235
14	620	310	425	260	540	345	357	M 30	12	48	M 30 x 130	24	2100	260	3	357	300
15	710	360	460	280	630	365	380	M 30	15	55	M 30 x 140	28	2100	280	3	380	400
16	740	360	480	300	660	395	410	M 30	15	55	M 30 x 140	30	2100	300	4	410	450
17	750	410	520	320	660	420	436	M 36	16	60	M 36 x 160	24	3560	320	4	436	540
18	800	410	550	340	710	450	466	M 36	16	60	M 36 x 160	26	3560	340	4	466	650
19 - 26	敬请垂询 / On request																

平键不在供货范围内。如果需要请另行订购。

1）螺栓按照GB5781-86，性能等级为 10.9 级；
螺母按照GB41-86 ，性能等级为 10 级

2）法兰联接螺栓的拧紧力矩。
法兰和工作机驱动轴的材质为 60 或强度更高的钢材。

对接法兰在装配时应加热至 190°C，
工作机驱动轴应在 20°C。

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

1) Bolts acc. to GB5781-86, material 10.9;
Nuts acc. to GB41-86, material 10

2) Tightening torque of flange connection bolts
Material of flanges and driven machine shafts: 60 or higher strength.

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

润滑油选择和防腐保存
Selection of Oil and Preservation

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

表 2 给出了相应齿轮箱类型和规格的润滑油供给方式可选方案。

最低工作粘度不得小于 25 cSt。

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

In table 2 a survey of the possible oil supply variants is given for the respective types and sizes.
A minimum operating viscosity of 25 cSt must be ensured.

表 1 / Table 1

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

浸油润滑：

当采用浸油润滑时，所有需要润滑的零部件均需浸在润滑油液中。

附带的补油箱用于存储涨溢的润滑油。

选择依据参见第 137 页。

如果油温低于表中给出的温度值，则必须对润滑油进行加热。

但采用浸油润滑时，油温不得低于润滑油的倾点。

Dip lubrication:
In case of dip lubrication, all parts to be lubricated are lying in the oil.
An oil compensating tank has been fitted for oil expansion.
For criteria for selection, see page 137.
If the temperatures are below the values as listed in the table, the oil must be heated.

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

强制润滑：

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

选择依据参见第 138 至 141 页。

当采用强制润滑时，在起动时的工作粘度不得超过 1800 cSt 。

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

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

For criteria for selection, see pages 138-141.
In case of forced lubrication, the operating viscosity 1800 cSt must not be exceeded during start-up.
If the temperatures are below the values as listed in table 1, dip lubrication has to be provided or the oil must be heated.

防腐保存：

齿轮箱的内部防腐与所使用的润滑油密切相关。

已做过防腐处理的齿轮箱可能的存储时间如下：

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

1）不适用于配置迷宫式密封或其它非接触式密封。

2）仅适用于矿物油或 PAO 基的合成油。

3）仅适用于 PG 基的合成油。

当超过上述防腐期限时应重新对齿轮箱进行防腐处理。

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

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

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

1) Not for gear units with labyrinth seals or diaphragm glands.
2) Only if mineral oil or synthetic oil on PAO basis is used.
3) Only if synthetic oil on PG basis is used.

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

润滑油供给方式可选方案
Oil Supply Survey of Variants

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 规格 3-26 Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 Sizes 3-26

表 2 / Table 2

类型 Type	规格 Size	浸油润滑 Dip lubrication		法兰泵强制润滑 Forced lubrication, flanged-on pump			电动泵强制润滑 Forced lubrication, motor pump	
WSH1SH	3 - 17	H		H			—	
WSH2..	4	H	V		V		—	
	5 - 12	H	V	H	V	SR [1) 3)]	—	
	13 - 18	H M		H M	V	SR [1) 3)]	—	
	19 - 26	H M			V		—	
WSH3..	5 - 12	H	V		V	SR [1)]	V	SR [1)]
	13 - 18	H M			V	SR [1)]	V	SR [1)]
	19 - 26	H M			V		—	
WSH4..	7 - 12	H	V		V		V	
	13 - 18	H M			V		V	
	19 - 26	H M			V		—	
WSB2..	4	H	V		V		—	
	5 - 12	H	V	H	V	SR [2)]	V	SR [2)]
	13 - 18	H M		H M	V	SR [2)]	V	SR [2)]
	19 - 26	H M			V		—	
WSB3..	4	H	V		V		—	
	5 - 12	H	V		V	SR [2)]	V	SR [2)]
	13 - 18	H M			V	SR [2)]	V	SR [2)]
	19 - 26	H M			V		—	
WSB4..	5 - 12	H	V		V	SR [2)]	V	SR [2)]
	13 - 18	H M			V	SR [2)]	V	SR [2)]
	19 - 26	H M			V		—	

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

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

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

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

浸润油滑/立式安装

Dip lubrication/Vertical

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　规格 4-12　　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　Sizes 4-12

当采用浸油润滑方式时必须满足下列要求：

a) 最大输入转速 n_1 参见表 3

b) 允许油温参见表 1

对于 n_1 和 i_N 不符合表3的齿轮箱，其热功率计算的参数与该手册的数值可能存在偏差，如必要，此类齿轮箱应采用强制润滑方式，请垂询.

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

a) For maximum input speed n_1, see table 3.

b) For permissible oil temperatures, see table 1.

For gear units with n_1 and i_N not listed in table 3,the parameters for the calculation of the thermal capacity can deviate from those given in this brochure. If necessary, such gear units are to be designed with forced lubrication. Please consult us!

表 3 / Table 3

规格 Size	类型 / Types											
	WSH2.V		WSH3.V		WSH4.V		WSB2.V		WSB3.V		WSB4.V	
	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}	i_N	n_{1max}
4	6.3 - 10 11.2 - 12.5 14 - 22.4	1200 1500 1800	–		–		5 - 5.6 6.3 - 7.1 8 - 9 10 - 11.2	750 900 1000 1200	12.5 - 71	1800	–	
5	6.3 - 9 10 - 12.5 14 - 16 18 - 22.4	1000 1200 1500 1800	25 - 90	1800	–		6.3 - 7.1 8 - 9 10 - 11.2	750 900 1000	12.5 - 71	1800	80 - 315	1800
6	8 - 11.2 12.5 - 16 18 - 20 22.4 - 28	1000 1200 1500 1800	31.5 - 112	1800	–		9 10 - 11.2 12.5 - 14	750 900 1000	16 - 90	1800	100 - 400	1800
7	6.3 - 7.1 8 - 9 10 - 11.2 12.5 - 16 18 - 22.4	750 900 1000 1200 1500	25 - 90	1800	100 - 355	1800	9 - 10 11.2	750 900	12.5 - 25 28 - 71	1500 1800	80 - 315	1800
8	8 - 9 10 - 11.2 12.5 - 14 16 - 20 22.4 - 28	750 900 1000 1200 1500	31.5 - 112	1800	125 - 450	1800	11.2 - 12.5 14	750 900	16 - 31.5 35.5 - 90	1500 1800	100 - 400	1800
9	6.3 - 7.1 8 - 10 11.2 - 22.4	1200 1500 1800	25 - 90	1800	100 - 355	1800	5 - 5.6 6.3 - 7.1 8 - 10 11.2	900 1000 1200 1500	12.5 - 71	1800	80 - 315	1800
10	8 - 9 10 - 12.5 14 - 28	1200 1500 1800	31.5 - 112	1800	125 - 450	1800	6.3 - 7.1 8 - 9 10 - 12.5 14	900 1000 1200 1500	16 - 90	1800	100 - 400	1800
11	6.3 - 7.1 8 - 10 11.2 - 12.5 14 - 22.4	1000 1200 1500 1800	25 - 90	1800	100 - 355	1800	5.6 - 6.3 7.1 - 8 9 - 10 11.2	750 900 1000 1200	12.5 - 22.4 25 - 71	1500 1800	80 - 315	1800
12	8 - 9 10 - 12.5 14 - 16 18 - 28	1000 1200 1500 1800	31.5 - 112	1800	125 - 450	1800	7.1 - 8 9 - 10 11.2 - 12.5 14	750 900 1000 1200	16 - 28 31.5 - 90	1500 1800	100 - 400	1800

强制润滑/法兰泵/立式安装

Dip lubrication/Flanged-on Pump/Vertical

类型 WSH2.V,WSH3.V,WSH4.V　规格 5-18　　Type WSH2.V,WSH3.V,WSH4.V　Sizes 5-18

表 4 / Table 4

立式安装平行轴齿轮箱的法兰泵配置 / **Assignment of flanged-on pumps to vertical helical gear units**

类型 布置形式 Type Design	n_1 min^{-1}	齿轮箱规格 Gear unit size		法兰泵规格 Flanged-on pump size	齿轮箱规格 Gear unit size			法兰泵规格 Flanged-on pump size
		5, 7, 9, 11	6, 8, 10, 12		13, 15, 17	14	16, 18	
		传动比/ Ratio i_N			传动比 / Ratio i_N			
WSH2.V A, C	750 - 1800	6.3 - 22.4	8 - 28	KSW 1	6.3 - 22.4	8 - 28	7.1 - 25	KSW 2
WSH3.V A, C	1201 - 1800	25 - 40	31.5 - 50	KSW 2	22.4 - 50	28 - 63	25 - 56	KSW 3
		45 - 90	56 - 112	KSW 3	56 - 90	71 - 112	63 - 90	KSW 4
							100	*
	901 - 1200	25 - 56	31.5 - 71	KSW 3	22.4 - 31.5	28 - 40	25 - 35.5	KSW 3
		63 - 90	80 - 112	*	35.5 - 56	45 - 71	40 - 63	KSW 4
					63 - 90	80 - 112	71 - 100	*
	750 - 900	25 - 45	31.5 - 56	KSW 3	22.4 - 25	28 - 31.5	25 - 28	KSW 3
		50 - 90	63 - 112	*	28 - 45	35.5 - 56	31.5 - 50	KSW 4
					50 - 90	63 - 112	56 - 100	*
WSH4.V A, C	1201 - 1800	100 - 224	125 - 280	KSW 3	100 - 355	125 - 450	112 - 400	*
		250 - 355	315 - 450	*				
	901 - 1200	100 - 140	125 - 180	KSW 3				
		160 - 355	200 - 450	*				
	750 - 900	100 - 112	125 - 140	KSW 3				
		125 - 355	160 - 450	*				
WSH2.V B, D	750 - 1800	6.3 - 22.4	8 - 28	KSW 1	6.3 - 22.4	8 - 28	7.1 - 25	KSW 2
WSH3.V B, D	1201 - 1800	25 - 35.5	31.5 - 45	KSW 2	22.4 - 35.5	28 - 45	25 - 40	KSW 3
		40 - 71	50 - 90	KSW 3	40 - 71	50 - 90	45 - 80	KSW 4
		80 - 90	100 - 112	*	80 - 90	100 - 112	90 - 100	*
	901 - 1200	25 - 50	31.5 - 63	KSW 3	22.4 - 25	28 - 31.5	25 - 28	KSW 3
		56 - 90	71 - 112	*	28 - 45	35.5 - 56	31.5 - 50	KSW 4
					50 - 90	63 - 112	56 - 100	*
	750 - 900	25 - 35.5	31.5 - 45	KSW 3	22.4 - 35.5	28 - 45	25 - 40	KSW 4
		40 - 90	50 - 112	*	40 - 90	50 - 112	45 - 100	*
WSH4.V B, D	1201 - 1800	100 - 180	125 - 224	KSW 3	100 - 355	125 - 450	112 - 400	*
		200 - 355	250 - 450	*				
	901 - 1200	100 - 125	125 - 160	KSW 3				
		140 - 355	180 - 450	*				
	750 - 900	100 - 355	125 - 450	*				

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

强制润滑/法兰泵/立式安装

Dip lubrication/Flanged-on Pump/Vertical

类型 WSB2.V,WSB3.V,WSB4.V 规格 5-18　　Type WSB2.V,WSB3.V,WSB4.V Sizes 5-18

表 5 / Table 5

立式安装平行轴齿轮箱的法兰泵配置 / **Assignment of flanged-on pumps to vertical bevel-helical gear units**

类型 布置形式 Type Design	n_1 min^{-1}	齿轮箱规格 Gear unit size		法兰泵规格 Flanged-on pump size	齿轮箱规格 Gear unit size			法兰泵规格 Flanged-on pump size
		5, 7, 9, 11	6, 8, 10, 12		13, 15, 17	14	16, 18	
		传动比 / Ratio i_N			传动比 / Ratio i_N			
WSB2.V A, B	1201 - 1800	5 - 6.3	6.3 - 8	KSW 1	5 - 8	6.3 - 10	5.6 - 9	KSW 2
		7.1 - 11.2	9 - 14	KSW 2	9 - 11.2	11.2 - 14	10 - 12.5	KSW 3
	901 - 1200	5 - 8	6.3 - 10	KSW 2	5	6.3	5.6	KSW 2
		9 - 11.2	11.2 - 14	KSW 3	5.6 - 11.2	7.1 - 14	6.3 - 12.5	KSW 3
	750 - 900	5 - 6.3	6.3 - 8	KSW 2	5 - 10	6.3 - 12.5	5.6 - 11.2	KSW 3
		7.1 - 10	9 - 12.5	KSW 3	11.2	14	12.5	*
		11.2	14	*				
WSB2.V C, D	1201 - 1800	5 - 6.3	6.3 - 8	KSW 1	5 - 6.3	6.3 - 8	5.6 - 7.1	KSW 2
		7.1 - 11.2	9 - 14	KSW 2	7.1 - 11.2	9 - 14	8 - 12.5	KSW 3
	901 - 1200	5 - 8	6.3 - 10	KSW 2	5 - 10	6.3 - 12.5	5.6 - 11.2	KSW 3
		9 - 11.2	11.2 - 14	KSW 3	11.2	14	12.5	*
	750 - 900	5 - 6.3	6.3 - 8	KSW 2	5 - 7.1	6.3 - 9	5.6 - 8	KSW 3
		7.1 - 10	9 - 12.5	KSW 3	8 - 11.2	10 - 14	9 - 12.5	*
		11.2	14	*				
WSB3.V A, B	1201 - 1800	12.5 - 35.5	16 - 45	KSW 2	12.5 - 22.4	16 - 28	14 - 25	KSW 2
		40 - 71	50 - 90	KSW 3	25 - 50	31.5 - 63	28 - 56	KSW 3
					56 - 71	71 - 90	63 - 80	KSW 4
	901 - 1200	12.5 - 25	16 - 31.5	KSW 2	12.5 - 35.5	16 - 45	14 - 40	KSW 3
		28 - 50	35.5 - 63	KSW 3	40 - 56	50 - 71	45 - 63	KSW 4
		56 - 71	71 - 90	*	63 - 71	80 - 90	71 - 80	*
	750 - 900	12.5 - 35.5	16 - 45	KSW 3	12.5 - 25	16 - 31.5	14 - 28	KSW 3
		40 - 71	50 - 90	*	28 - 40	35.5 - 50	31.5 - 45	KSW 4
					45 - 71	56 - 90	50 - 80	*
WSB3.V C, D	1201 - 1800	12.5 - 35.5	16 - 45	KSW 2	12.5 - 35.5	16 - 45	14 - 40	KSW 3
		40 - 71	50 - 90	KSW 3	40 - 71	50 - 90	45 - 80	KSW 4
	901 - 1200	12.5 - 25	16 - 31.5	KSW 2	12.5 - 25	16 - 31.5	14 - 28	KSW 3
		28 - 50	35.5 - 63	KSW 3	28 - 50	35.5 - 63	31.5 - 56	KSW 4
		56 - 71	71 - 90	*	56 - 71	71 - 90	63 - 80	*
	750 - 900	12.5 - 35.5	16 - 45	KSW 3	12.5 - 35.5	16 - 45	14 - 40	KSW 4
		40 - 71	50 - 90	*	40 - 71	50 - 90	45 - 80	*
WSB4.V A, B	1201 - 1800	80 - 125	100 - 160	KSW 2	80 - 315	100 - 400	90 - 355	*
		140 - 250	180 - 315	KSW 3				
		280 - 315	355 - 400	*				
	901 - 1200	80 - 180	100 - 224	KSW 3				
		200 - 315	250 - 400	*				
	750 - 900	80 - 125	100 - 160	KSW 3				
		140 - 315	180 - 400	*				
WSB4.V C, D	1201 - 1800	80 - 180	100 - 224	KSW 3	80 - 315	100 - 400	90 - 355	*
		200 - 315	250 - 400	*				
	901 - 1200	80 - 125	100 - 160	KSW 3				
		140 - 315	180 - 400	*				
	750 - 900	80 - 90	100 - 112	KSW 3				
		100 - 315	125 - 400	*				

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

强制润滑/电动泵/立式安装

Dip lubrication/Motor Pump/Vertical

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 规格 5-18　　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 Sizes 5-18

表 6 / **Table** 6

立式安装平行轴齿轮箱的电动泵配置 / **Assignment of motor pumps to vertical helical gear units**

类型 / Type	规格 / Size	布置形式 / Design	泵 / Pump
WSH2.V	**5 - 18**	**A / B / C / D**	1)
WSH3.V	**5 - 18**	**A / C**	SF 2/8
	5 - 12	**B / D**	SF 2/8
	13 - 18		SF 2/13
WSH4.V	**7 - 12**	**A / C**	SF 2/8
	13 - 18		SF 2/13
	7 - 18	**B / D**	SF 2/13

1) 仅采用法兰泵　　1) Flanged-on pump only

表 7 / **Table 7**

立式安装直交轴齿轮箱的电动泵配置 / **Assignment of motor pumps to vertical bevel-helical gear units**

类型 / Type	规格 / Size	布置形式 / Design	泵 / Pump
WSB2.V	**5 - 12**	**A / B**	SF 2/5
	13 - 18		SF 2/8
	5 - 18	**C / D**	SF 2/8
WSB3.V	**5 - 12**	**A / B**	SF 2/8
	13 - 18		SF 2/13
	5 - 12	**C / D**	SF 2/8
	13 - 18		SF 2/13
WSB4.V	**5 - 12**	**A / B**	SF 2/8
	13 - 18		SF 2/13
	5 - 12	**C / D**	SF 2/8
	13 - 18		SF 2/13

强制润滑/电动泵/立式安装

Dip lubrication/Motor Pump/Vertical

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 规格 5-18　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4 Sizes 5-18

法兰泵或电动泵强制润滑系统的监测元件

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

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

a)

过滤器用于滤除和收集杂质颗粒以保护传动装置的安全。

双切换过滤器带有并排布置的两个滤筒，设有一个光电污染指示器。

压差 Δp = 2 bar，一个切换触点。

电气参数最大额定值：

切换电压 ⩽250 V DC + AC

切换电流 ⩽1A

切换容量 P ⩽30 W 或 ⩽ 60 VA

防护等级 IP 65

a)

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

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

Differential pressure Δp = 2 bar; 1 change-over contact.

Electrical maximum ratings:

Switching voltage U ⩽250 V DC + AC

Switching current I ⩽1A

Switching capability P ⩽ 30W or ⩽ 60 VA

Type of protection IP 65

b)

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

技术参数：

最大切换功率

2 A/250 V， AC/250 VA（交流）

4 A/200 V， DC/20 W（直流）

防护等级 IP 65

b)

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

Technical data:

Max. switching capacity

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

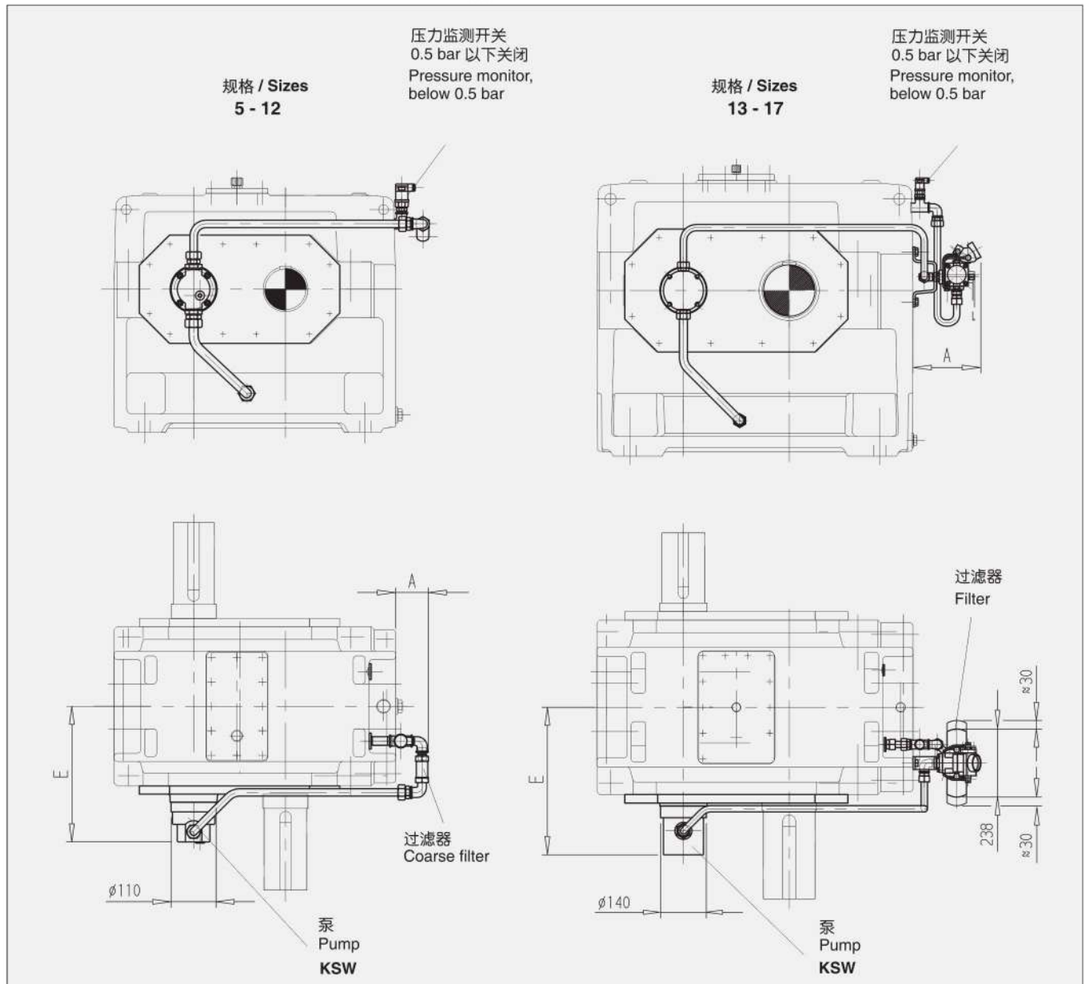
4 A/200 V; DC/20 W (direct current)

Type of protection IP 65

强制润滑/卧式安装

Dip lubrication/Horizontal

类型 WSH1SH 规格 5-17　Type WSH1SH Sizes 5-17



基础必须保持水平、平坦，倾斜位置请垂询。

The foundation must be flat and horizontal.
Inclined position on request.

表 9 / Table 9

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

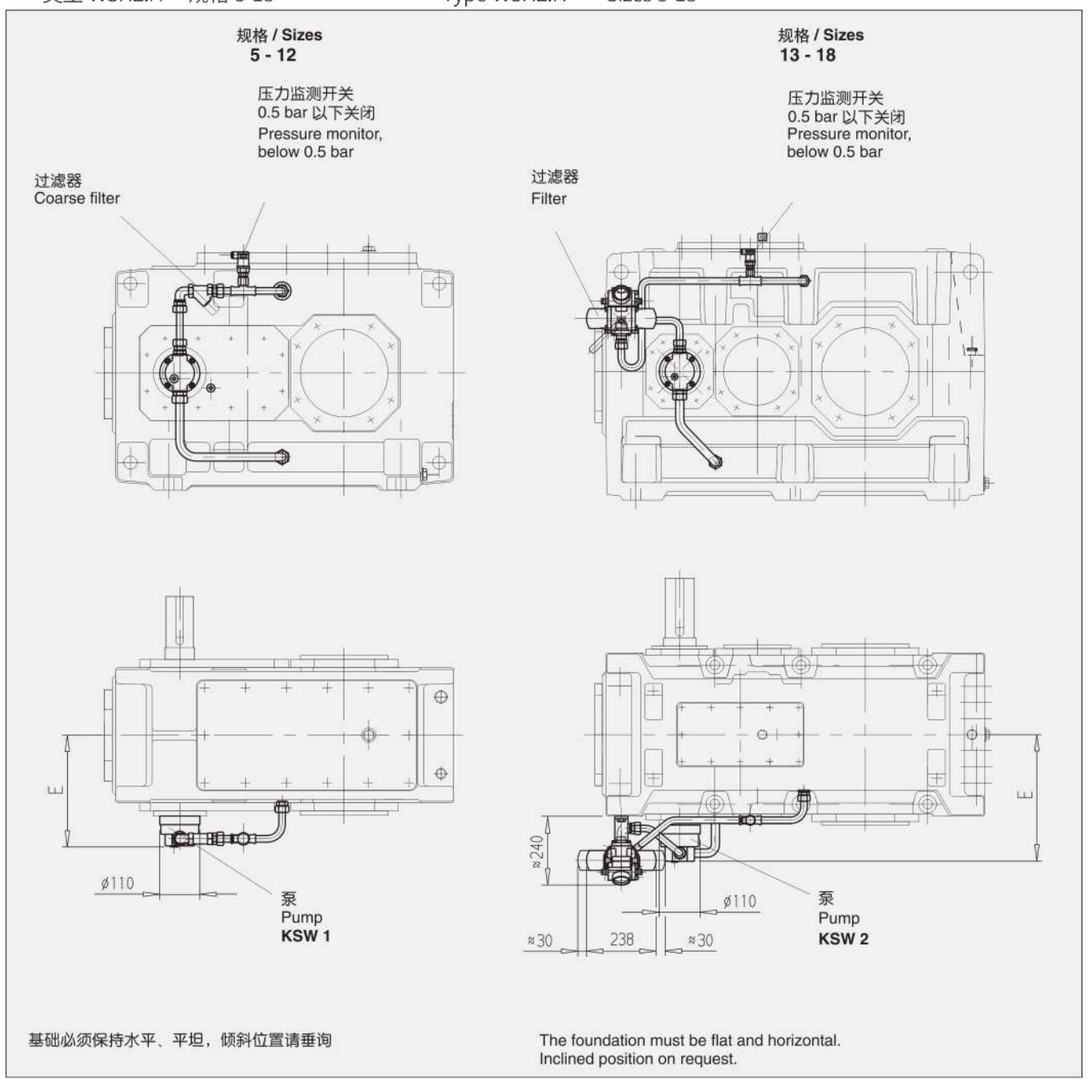
*) 对转速 n_1 ⩾ 900 至 1800 min^{-1} 有效

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

强制润滑/卧式安装

Dip lubrication/Horizontal

类型 WSH2.H　规格 5-18　　Type WSH2.H　Sizes 5-18



基础必须保持水平、平坦，倾斜位置请垂询

The foundation must be flat and horizontal.
Inclined position on request.

表 10／ **Table10**

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

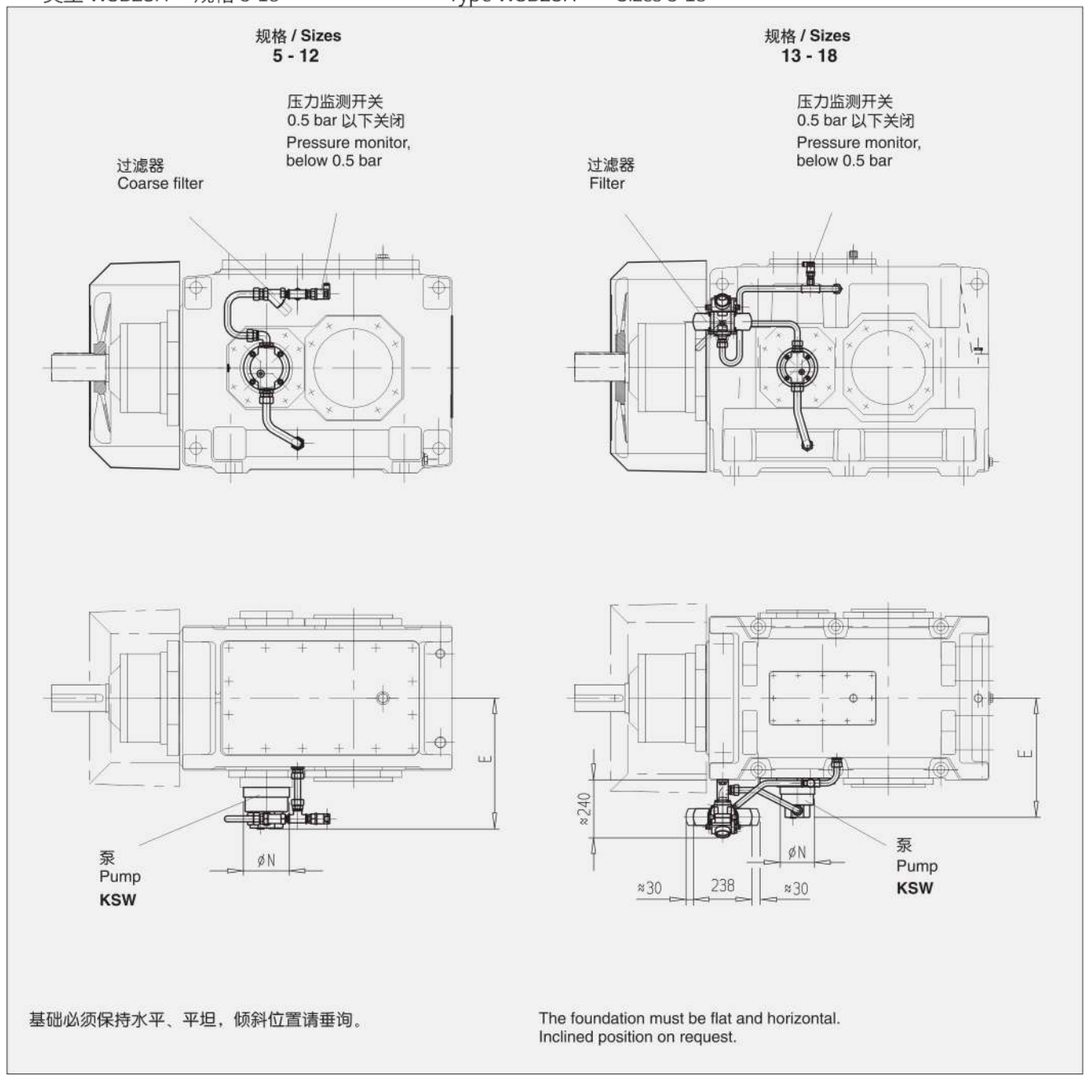
*) 对转速 $n_1 \geqslant 1500$ 至 1800 min^{-1} 有效

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

强制润滑/卧式安装

Dip lubrication/Horizontal

类型 WSB2SH　规格 5-18　　Type WSB2SH　Sizes 5-18



基础必须保持水平、平坦，倾斜位置请垂询。

The foundation must be flat and horizontal.
Inclined position on request.

表 11 / **Table 11**

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

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

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

水-油冷却器/卧式安装

Water-oil Cooler/Horizontal

类型 WSH1SH　规格 5-17　　Type WSH1SH　Sizes 5-17

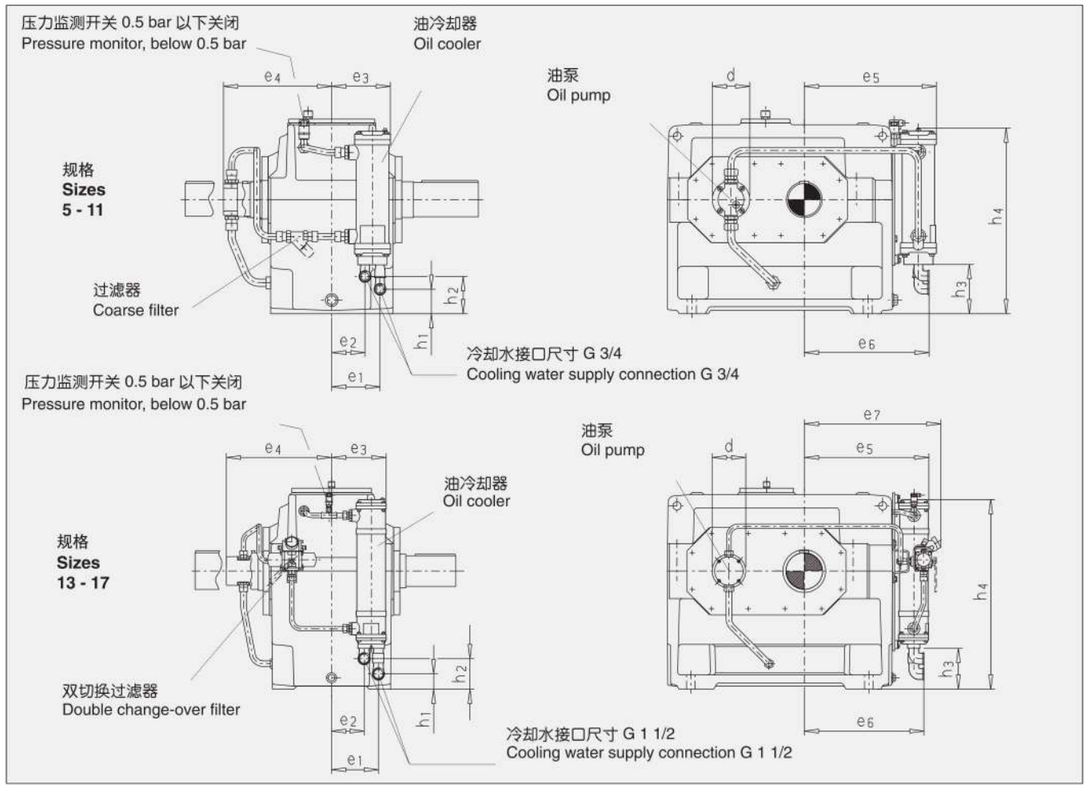


表 12 / Table 12

齿轮箱规格 Gear unit size	油冷却器 / Oil cooler												油泵 / Oil pump *		
	规格 Size	e_1	e_2	e_3	e_4	e_5	e_6	e_7	h_1	h_2	h_3	h_4	KSW 规格 Size	d mm	传动比 Ratio i_{ges}
		mm													
5	01	138	92	170	282	365	342	–	55	95	130	550	1	110	1.25 ... 5.6
7	01	148	102	180	335 320	405	383	–	90	130	165	570	2 1	110 110	1.25 ... 4 4.5 ... 5.6
9	01	160	114	195	373 373 358	450	428	–	140	180	215	620	2 2 1	110 110 110	1.25 ... 2.8 3.15 ... 4 4.5 ... 5.6
11	01	193	147	225	433 433 406	510	488	–	185	225	260	665	3 3 2	140 140 110	1.6 ... 2.8 3.15 ... 4 4.5 ... 5.6
13	03	230	160	270	469 469 442	610	588	670	75	150	200	938	3 3 2	140 140 110	1.6 ... 2.8 3.15 ... 4 4.5 ... 5.6
15	03	210	140	250	474 474 447	685	664	745	95	170	220	958	3 3 2	140 140 110	2 ... 2.8 3.15 ... 4 4.5 ... 5.6
17	03	235	165	275	491 491 455	725	704	785	155	230	280	1018	3 3 2	140 140 110	2 ... 2.8 3.15 ... 4 4.5 ... 5.6

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

立式安装齿轮箱请垂询

热容量请垂询

冷却器适用于淡水和海水

*) 对转速 n_1 = 900 - 1800 min^{-1} 有效

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

Vertical gear units on request

Thermal capacities on request

Cooler suitable for fresh and sea water

*) Applies to speeds n_1 = 900 - 1800 min^{-1}

水-油冷却器/卧式安装

Water-oil Cooler/Horizontal

类型 WSH2.H　规格 5-18　　Type WSH2.H　Sizes 5-18

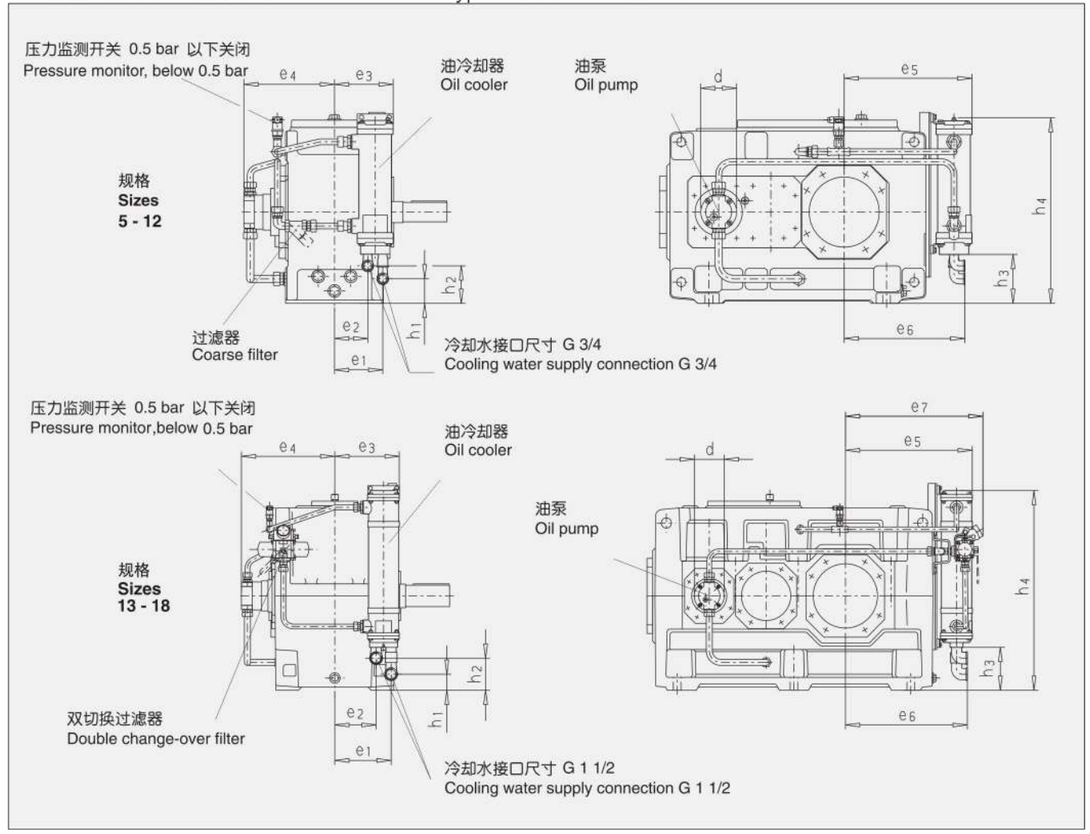


表 13 / Table 13

齿轮箱规格 Gear unit size	油冷却器 / Oil cooler											油泵 / Oil pump *	
	规格 Size	e_1	e_2	e_3	e_4	e_5	e_6	e_7	h_1	h_2	h_3	h_4	KSW 规格 Size	d mm
		mm												
5 6 7	01	123 123 148	77 77 102	155 155 180	263 263 283	350 395 395	318 363 363	- - -	55 55 75	95 95 115	130 130 150	550 550 570	1	110
8 9 10	01	148 173 173	102 127 127	180 205 205	283 306 306	455 455 495	423 413 463	- - -	75 150 150	115 190 190	150 225 225	570 645 645	1	110
11 12 13	01 01 03	203 203 260	157 157 190	235 235 300	342 342 410	495 580 590	458 543 563	- - 645	225 225 75	265 265 150	300 300 200	720 720 938	1 2 2	110
14 15 16	03	260 300 300	190 230 230	300 340 340	410 445 445	670 670 715	633 643 688	725 725 770	75 105 105	150 180 180	200 230 230	938 968 968	2	110
17 18	03	330	260	370	475	715 770	683 743	770 825	145	220	270	1008	2	110

*) 用于所有传动比
(n_1 = 750 - 1800 min^{-1})

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

立式安装齿轮箱请垂询

热容量请垂询

冷却器适用于淡水和海水

*) For all transmission ratios
(n_1 = 750 - 1800 min^{-1})

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

Vertical gear units on request

Thermal capacities on request

Cooler suitable for fresh and sea water

水-油冷却器/卧式安装

Water-oil Cooler/Horizontal

类型 WSB2.H　规格 5-12　　Type WSB2.H　Sizes 5-12

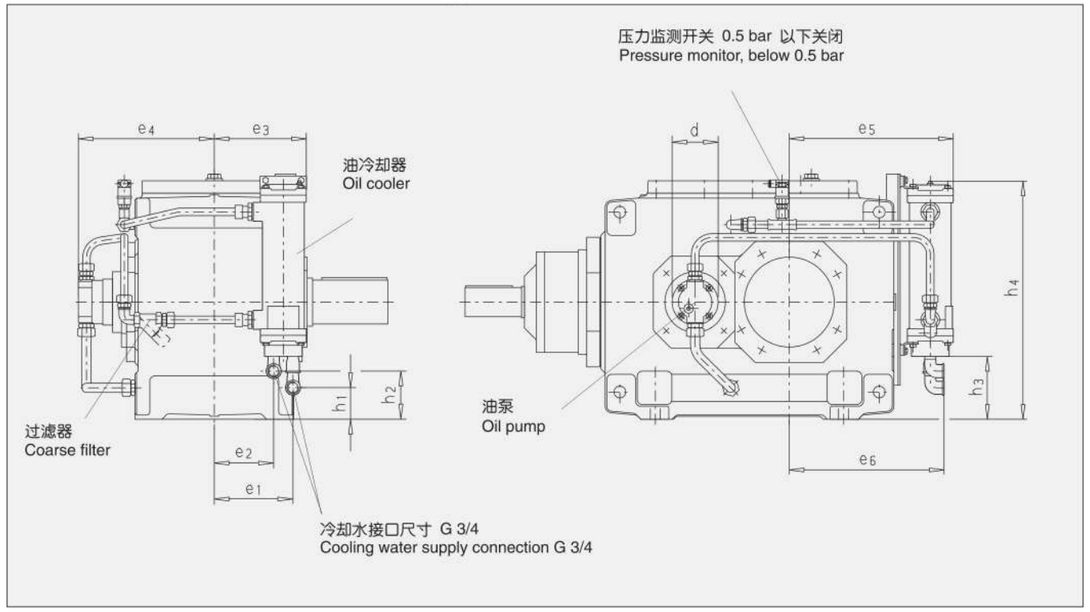


表 14 / Table 14

齿轮箱规格 Gear unit size	规格 Size	油冷却器 / Oil cooler e_1	e_2	e_3	e_4	e_5	e_6	h_1	h_2	h_3	h_4	油泵 / Oil pump* KSW 规格 Size	d
		mm											mm
5	**01**	158	112	190	340 313 298	355	323	55	95	130	550	**3** **2** **1**	140 110 110
6	**01**	158	112	190	340 313 298	400	368	55	95	130	550	**3** **2** **1**	140 110 110
7	**01**	188	142	220	370 343 328	400	368	75	115	150	570	**3** **2** **1**	140 110 110
8	**01**	188	142	220	370 343 328	460	428	75	115	150	570	**3** **2** **1**	140 110 110
9	**01**	218	172	250	399 372 357	460	418	150	190	225	645	**3** **2** **1**	140 110 110
10	**01**	218	172	250	399 372 357	500	468	150	190	225	645	**3** **2** **1**	140 110 110
11	**01**	263	217	295	440 413 398	500	463	225	265	300	720	**3** **2** **1**	140 110 110
12	**01**	263	217	295	440 413 398	580	548	225	265	300	720	**3** **2** **1**	140 110 110

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

立式安装齿轮箱请垂询
热容量请垂询
冷却器适用于淡水和海水

*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n_1 和传动比确定泵的规格，参见第 139 页

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

Vertical gear units on request

Thermal capacities on request

Cooler suitable for fresh and sea water

*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n_1, see page 139 .

水-油冷却器/卧式安装

Water-oil Cooler/Horizontal

类型 WSB2.H　规格 13-18　　Type WSB2.H　Sizes 13-18

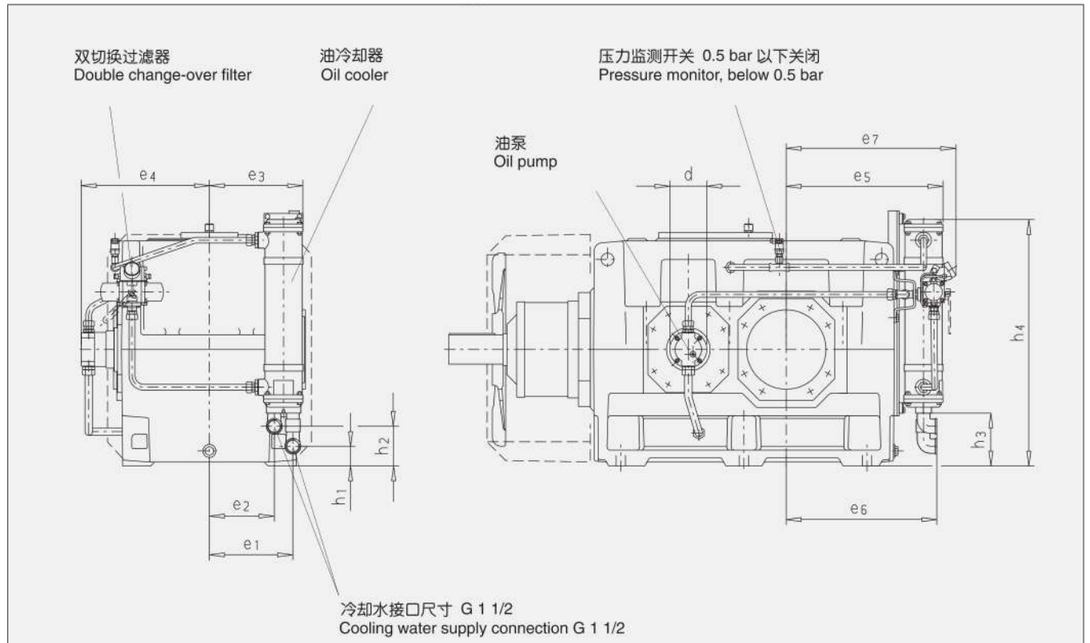


表 15 / Table 15

齿轮箱规格 Gear unit size	规格 Size	油冷却器 / Oil cooler e_1	e_2	e_3	e_4	e_5	e_6	e_7	h_1	h_2	h_3	h_4	油泵 / Oil pump* KSW 规格 Size	d
		mm												mm
13	**03**	320	250	355	487 460	595	573	645	75	150	200	938	**3** **2**	140 110
14	**03**	320	250	355	487 460	665	643	715	75	150	200	938	**3** **2**	140 110
15	**03**	375	305	410	543 516	675	653	725	105	180	230	968	**3** **2**	140 110
16	**03**	375	305	410	543 516	720	698	770	105	180	230	968	**3** **2**	140 110
17	**03**	435	365	470	605 578	720	693	770	145	220	270	1008	**3** **2**	140 110
18	**03**	435	365	470	605 578	775	753	825	145	220	270	1008	**3** **2**	140 110

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

立式安装齿轮箱请垂询
热容量请垂询
冷却器适用于淡水和海水

*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n_1 和传动比确定泵的规格，参见第 139 页。

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

Vertical gear units on request

Thermal capacities on request

Cooler suitable for fresh and sea water

*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n_1, see page 139 .

气-油冷却器/卧式安装

Air-oil Cooler/Horizontal

类型 WSH1SH　规格 5-11　　Type WSH1SH　Sizes 5-11

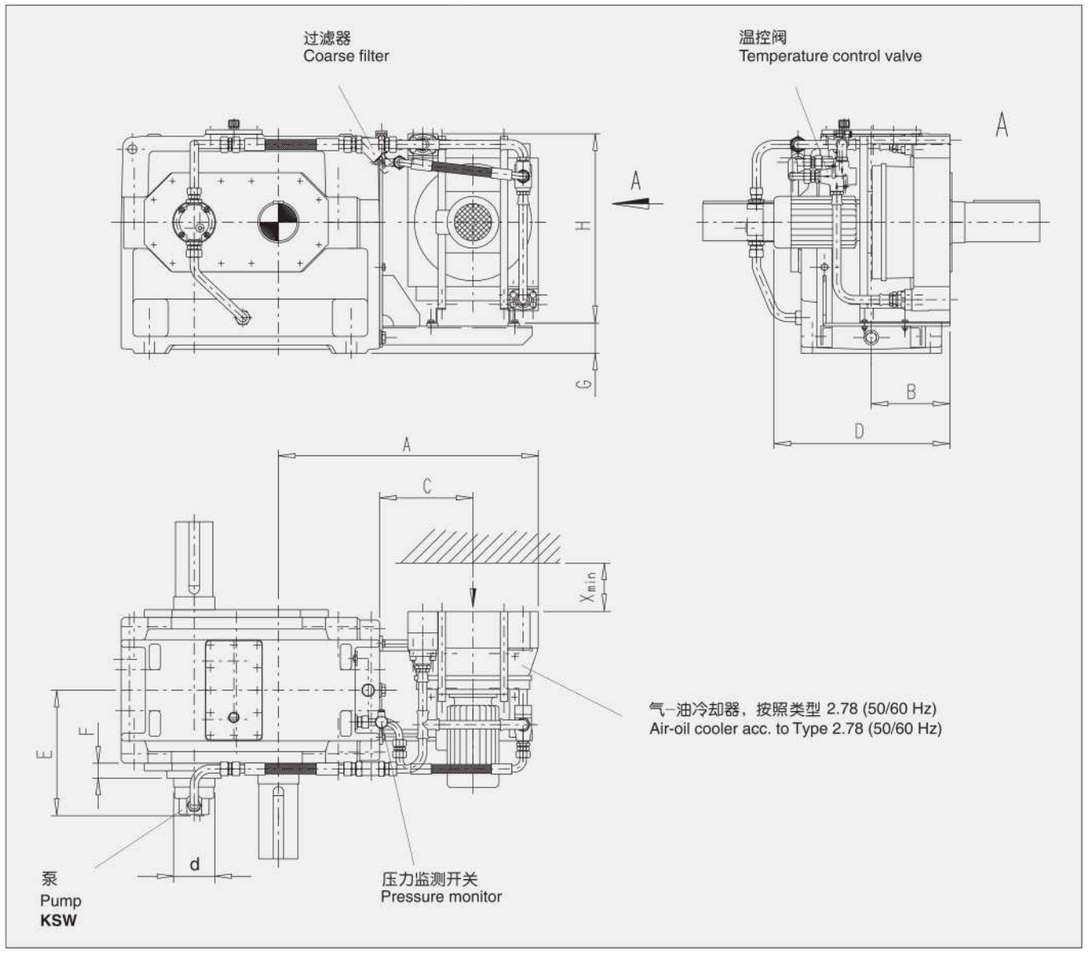


表 16 / Table 16

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	X_{min}	规格 / Size			
	mm									气-油冷却器 Air-oil cooler	泵 / Pump * KSW	d	传动比 / Ratio i_{ges}
5	655	240	250	470	282	46.5	75	438	130	03 - 3N - 1500	**1**	110	1.25 ... 5.6
7	695	210	250	470	335 320	40	80	506		04 - 1N - 1500	**2** **1**	110 110	1.25 ... 4 4.5 ... 5.6
9	865	240	320	540	373 373 358	50	100	612		05 - 1N - 1500	**2** **2** **1**	110 110 110	1.25 ... 2.8 3.15 ... 4 4.5 ... 5.6
11	925	240	320	540	433 433 406	38	130	712		06 - 1N - 1500	**3** **3** **2**	140 140 110	1.6 ... 2.8 3.15 ... 4 4.5 ... 5.6

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

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

气-油冷却器/卧式安装

Air-oil Cooler/Horizontal

类型 WSH1SH　规格 13-17　　Type WSH1SH　Sizes 13-17

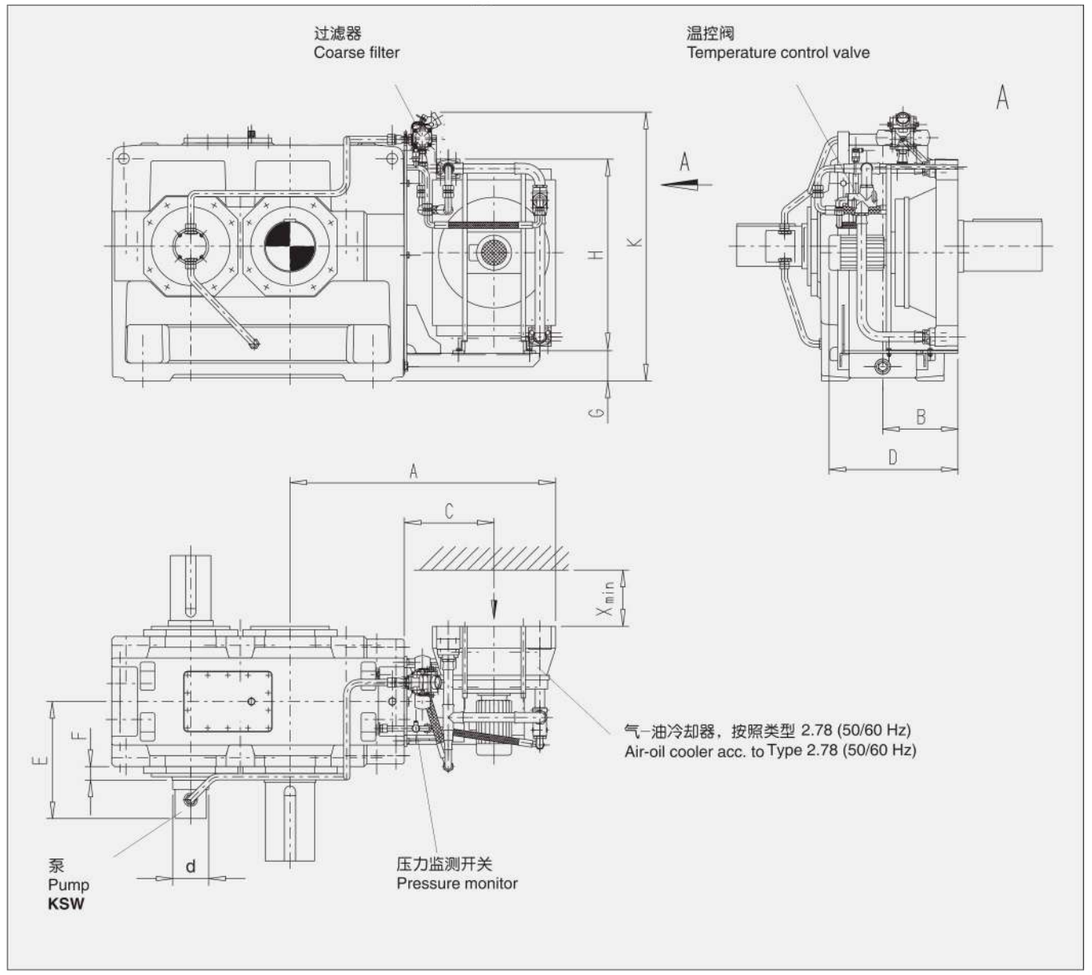


表 17 / Table 17

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	K	X_{min}	规格 / Size			
	mm										气-油冷却器 Air-oil cooler	泵 / Pump * KSW	d	传动比 / Ratio i_{ges}
13	1107	350	400	574	469 469 442	40	115	721	1100	130	07 - 1N - 1500	**3** **3** **2**	140 140 110	1.6 ... 2.8 3.15 ... 4 4.5 ... 5.6
15	1185	355	400	574	474 474 447	60	135	853	1190	250	08 - 1N - 1500	**3** **3** **2**	140 140 110	2 ... 2.8 3.15 ... 4 4.15 ... 5.6
17	1360	357	480	635	491 491 455	42 42 45	235	853	1310	350	09 - 1N - 1000	**3** **3** **2**	140 140 110	2 ... 2.8 3.15 ... 4 4.5 ... 5.6

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

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

气-油冷却器/卧式安装

Air-oil Cooler/Horizontal

类型 WSH2.H　规格 5-12　　Type WSH2.H　Sizes 5-12

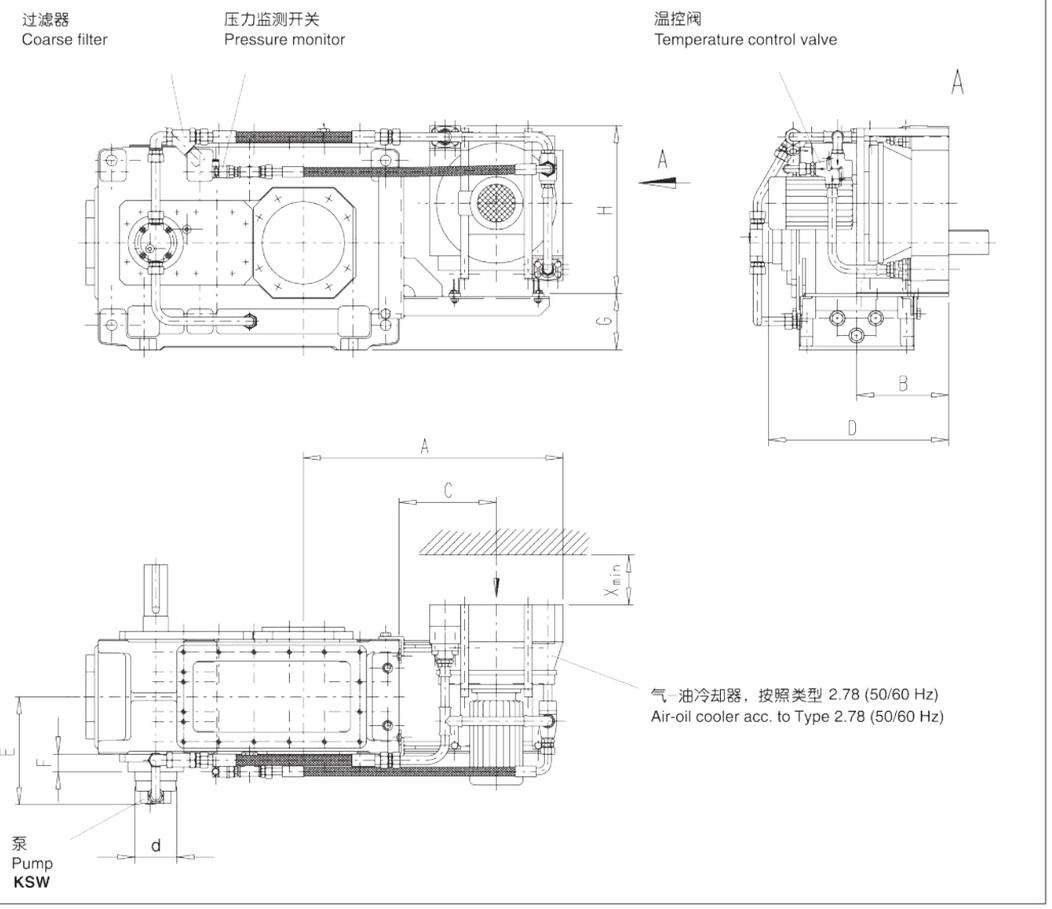


表 18 / Table 18

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

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

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

气-油冷却器/卧式安装

Air-oil Cooler/Horizontal

类型 WSH2.H　规格 13-18　　Type WSH2.H　Sizes 13-18

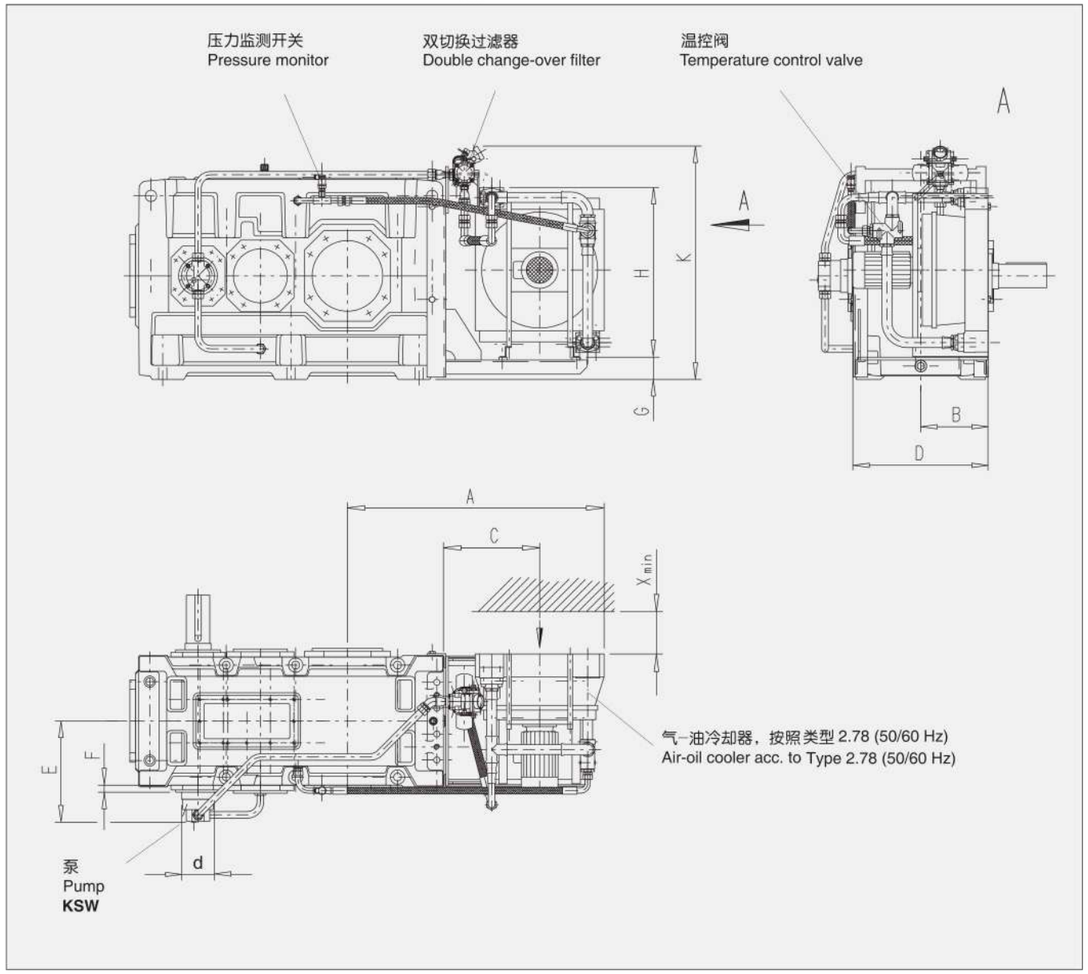


表 19 / Table 19

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

*) 对转速 n_1 = 750 - 1800 min^{-1} 有效
立式安装齿轮箱请垂询
热容量请垂询

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

气-油冷却器/卧式安装

Air-oil Cooler/Horizontal

类型 WSB2.H　规格 5-12　　Type WSB2.H　Sizes 5-12

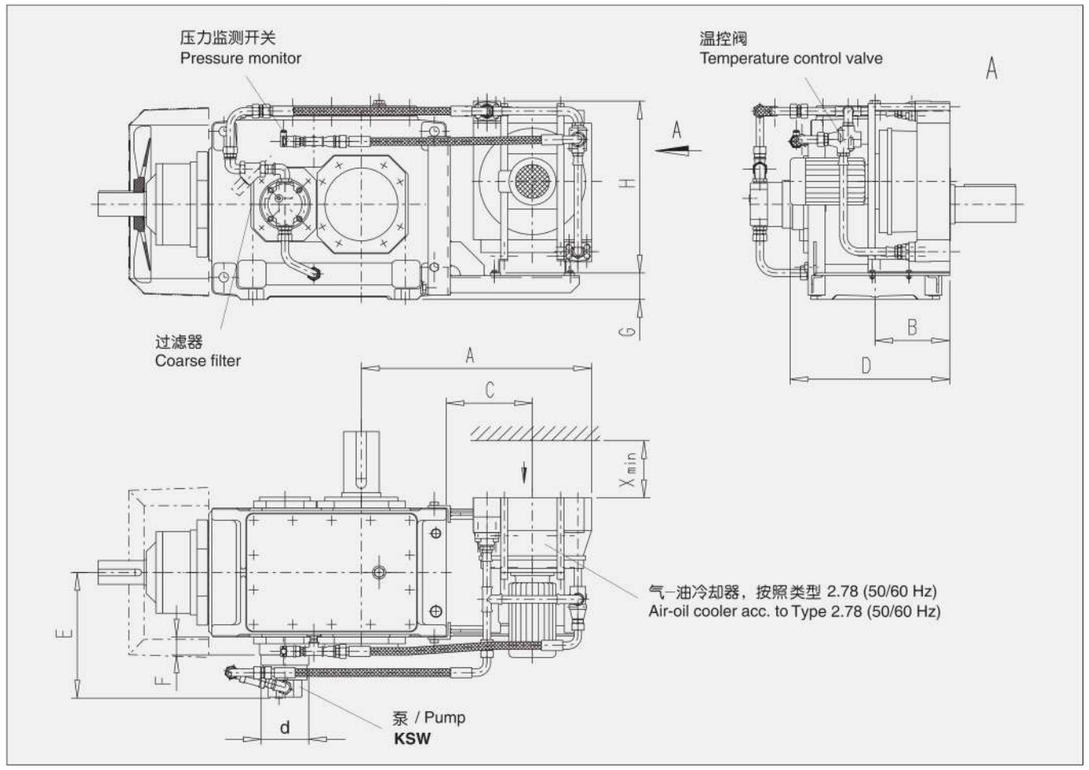


表 20 / Table 20

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

立式安装齿轮箱请垂询
热容量请垂询

*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n_1 和传动比确定泵的规格，参见第 139 页

Vertical gear units on request
Thermal capacities on request

*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n_1, see page 139 .

气-油冷却器/卧式安装

Air-oil Cooler/Horizontal

类型 WSB2.H　规格 13-18　　Type WSB2.H　Sizes 13-18

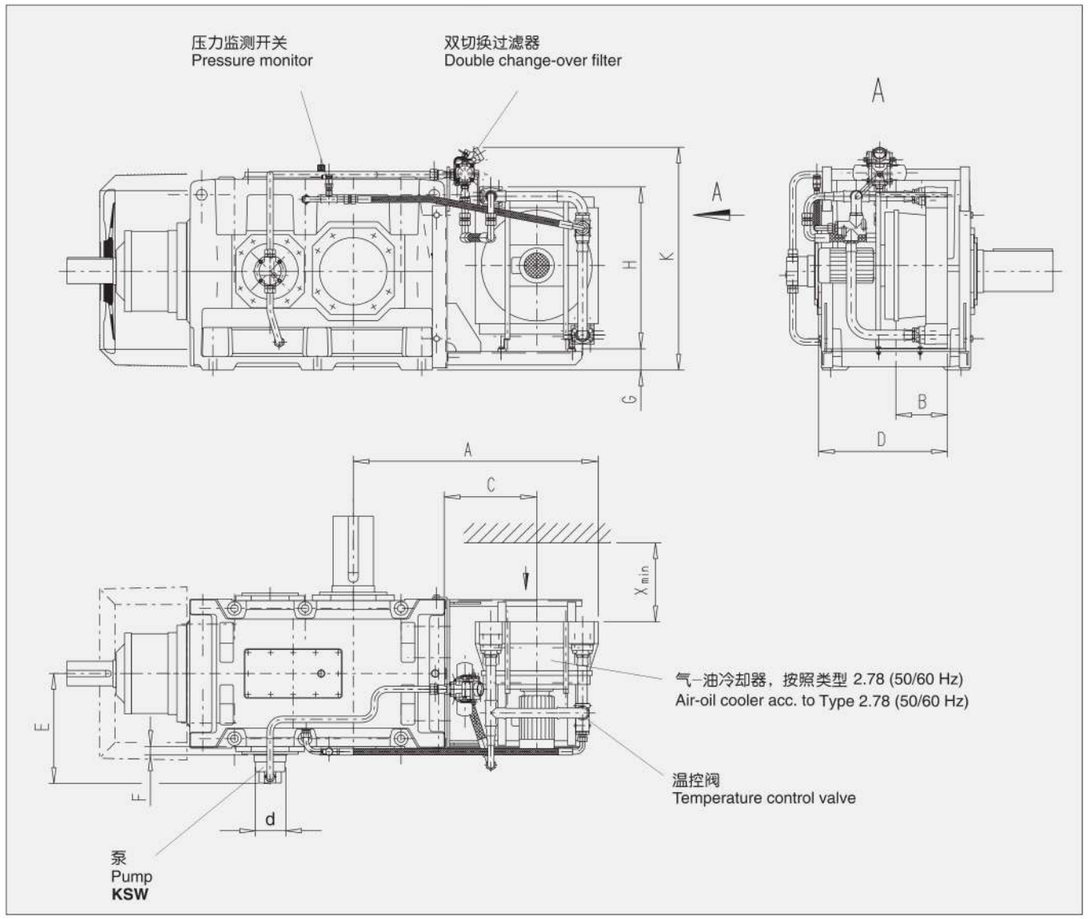


表 21 / Table 21

齿轮箱规格 Gear unit size	A	B	C	D	E	F	G	H	K	X_{min}	规格 / Size		
					mm						气-油冷却器 Air-oil cooler	泵 / Pump *	
												KSW	d
13	1092	230	410	574	487 460	35	95	721	995	130	07 - 3N - 1500	**3** **2**	140 110
14	1162	230	410	574	487 460	35	95	721	995	130	07 - 3N - 1500	**3** **2**	140 110
15	1172	175	410	574	543 516	36	95	853	1095	250	08 - 3N - 1500	**3** **2**	140 110
16	1217	175	410	574	543 516	36	95	853	1095	250	08 - 3N - 1500	**3** **2**	140 110
17	1337	150	480	635	605 578	40	113.5	853	1200	350	09 - 3N - 1000	**3** **2**	140 110
18	1397	150	480	635	605 578	40	113.5	853	1200	350	09 - 3N - 1000	**3** **2**	140 110

立式安装齿轮箱请垂询
热容量请垂询

*) 泵的规格的确定与立式安装齿轮箱相同，即根据转速 n_1 和传动比确定泵的规格，参见第 139 页

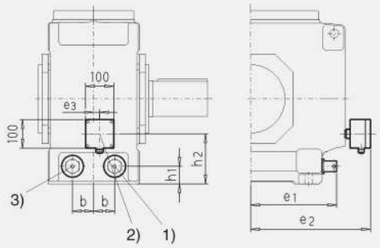
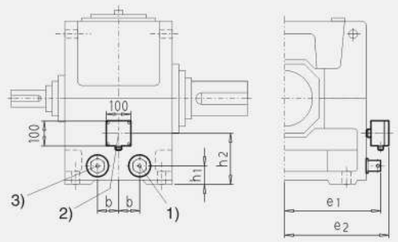
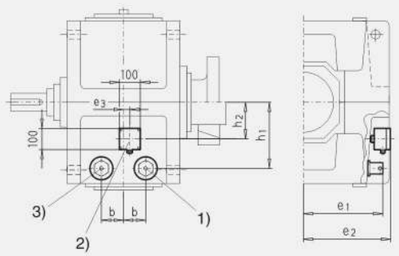
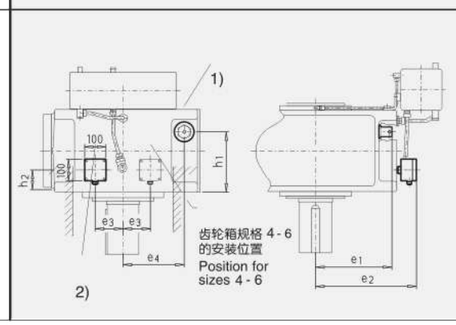
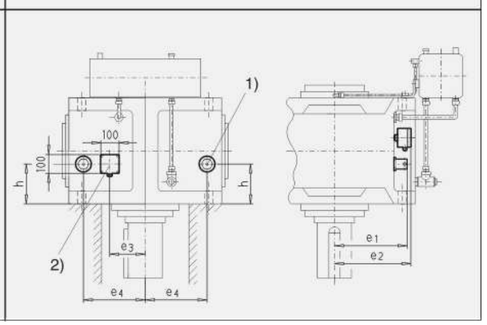
Vertical gear units on request
Thermal capacities on request

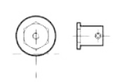
*) For different pump sizes the transmission ratio assignments will apply as determined for vertical gear units and speeds n_1, see page 139 .

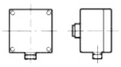
带加热元件

With Heating Elements

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　规格 4-18　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　Sizes 4-18

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





不能采用迷宫式密封：

1) 旋入式加热元件
技术参数和说明：
防护等级　IP 65，
230 V，50 Hz，功率与设计指标相关(请垂询)

2) 温度监测开关　ATH-SW22
技术参数和说明：
防护等级 IP 65，
双切换触点开关（可调）
最大开关容量：
2 A / 230 V AC / 460 VA　cos φ = 0.6(交流)
0.25 A / 230 V DC / 58 W(直流)

3) 对规格 4, 6, 8, 10, 12, 14, 16, 18 不能安装在此位置

当润滑油的温度低于临界温度时，有必要使用加热元件。

根据不同的布置形式可以将旋入式加热元件和温度监测开关安装在轴对称位置上。

具体尺寸请垂询

Labyrinth seal not possible as shaft seal

1) Screwed heating element;
Technical data and notes:
type of protection IP 65,
230V, 50 Hz, power rating dependent on design. (Please refer to us)

2) Temperature monitor ATH-SW22;
Technical data and notes:
type of protection IP 65,
2 change-over contacts (adjustable),
max. switching capacity
2 A / 230 V AC/460 VA cos φ = 0.6
(alternating current),
0.25 A / 230 V DC/58 W (direct current)

3) Not applicable for sizes
4, 6, 8, 10, 12, 14, 16, 18

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

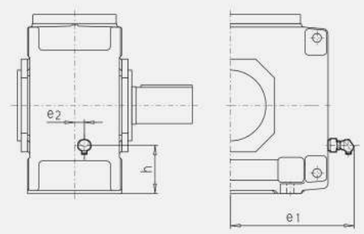
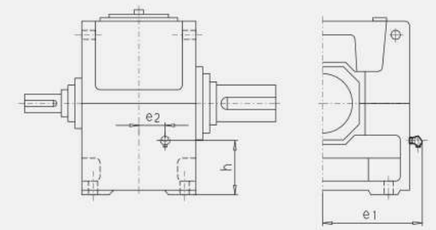
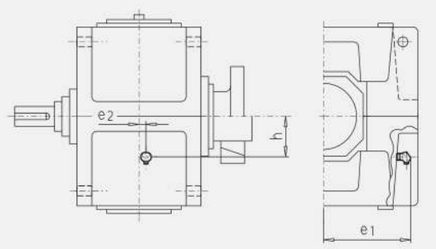
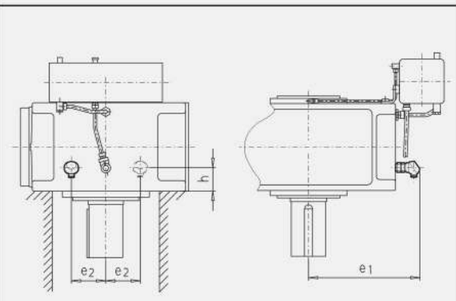
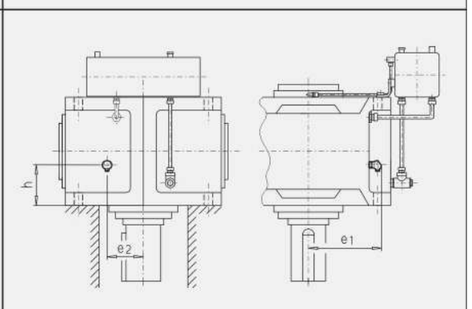
Dependent on the design, screwed heating elements and temperature monitors may be arranged mirror-inverted.

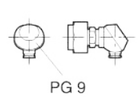
Dimensions on request

带油温计

With Thermometer for Oil Temperature

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　规格 4-18　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　Sizes 4-18

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



PG 9

电阻式温度计　**PT 100**
技术参数和说明：
接头防护等级：IP 54
双线连接
用户也可以采用三线或四线连接，必须与分析元件相连。

根据不同的布置形式，可以将电阻式温度计安装在轴对称位置上。

不能采用迷宫式密封。

具体尺寸请垂询

Resistance thermometer PT 100
Technical data and notes:
Type of protection for terminal head: IP 54, two-wire connection.
Three- and four-wire connection at the customer's is also possible.
Connection to an evaluation instrument is necessary!

Dependent on the design, the resistance thermometer may be arranged mirror-inverted.
Labyrinth seal not possible as shaft seal.

Dimensions on request

轴封
Shaft Seals

类型 WSH1-WSH4,WSB2-WSB4　规格 3-26　　Type WSH1-WSH4,WSB2-WSB4　Sizes3-26

表 1 / Table 1　　轴封方案 / **Variants of shaft seals**

类型 Type	规格 Size	径向轴封 Radial shaft seal		迷宫式密封 2) Labyrinth seal		组合式密封 1) Taconite seal	
		d_1	d_2	d_1 3)	d_2	d_1 3)	d_2
WSH1SH	**3 - 17**	**H**	**H**	**H**	**H**	**H**	**H**
WSH2..	**4 - 18**	**H / V**	**H / V**	**H**	–	**H / V**	**H / V**
WSH3..	**5 - 18**	**H / V**	**H / V**	–	–	**H** 2) **/ V**	**H / V**
WSH4..	**7 - 18**	**H / V**	**H / V**	–	–	**H / V**	**H / V**
WSB2..	**4 - 18**	**H / V**	**H / V**	–	–	**H / V**	**H / V**
WSB3..	**4 - 18**	**H / V**	**H / V**	–	–	**H / V**	**H / V**
WSB4..	**5 - 18**	**H / V**	**H / V**	–	–	**H / V**	**H / V**
	19 - 26	敬请垂询 / On request					

H = 卧式安装
V = 立式安装
1）可能的布置形式和限制参见下几页所述
2）不能与冷却风扇组合
3）不能与电机安装法兰组合

H = Horizontal
V = Vertical
1) For possible designs and restrictions, see the following pages.
2) Not in combination with a fan
3) Not in combination with motor bell housing

表 2 / Table 2　　采用迷宫式密封的临界转速 / **Speed limits for labyrinth seals**

i_N	齿轮箱规格 / Gear unit sizes 输入转速 (min^{-1}) / Input speeds n_1 in min^{-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
1.25	x		x		x		x																	
1.4	x		x		x		x																	
1.6	740		515		425		370		305		260													
1.8	810		570		460		395		325		285													
2	860		610		490		420		350		305		255											
2.24	920		660		550		455		375		330		275											
2.5	1020		710		595		495		405		355		295											
2.8	1100		775		635		530		445		390		320		290									
3.15	1190		850		690		600		480		430		350		315									
3.55	1300		935		755		650		530		470		380		345									
4	1430		1025		835		720		580		515		420		380									
4.5	1575		1145		905		770		640		575		475		425									
5	1730		1205		990		850		730		605		525		455									
5.6	1910		1340		1095		955		765		670		580		505									
6.3		x	x		x		515		x		370		305		260									
7.1		x	810		660		570		460		395		325	305	385	260								
8		1020	860	x	705	x	610	x	490	x	420	370	350	325	305	385								
9		1080	920	x	760	660	660	x	550	x	455	395	375	350	330	305								
10		1190	1020	860	820	705	710	610	595	x	495	420	405	375	355	330								
11.2		1280	1100	920	885	760	775	660	635	550	530	455	445	405	390	355								
12.5		1435	1190	1020	955	820	850	710	690	595	600	495	480	445	430	390								
14		1560	1300	1100	1090	885	935	775	755	635	650	530	530	480	470	430								
16		1715	1430	1190	1200	955	1025	850	835	690	720	600	580	530	515	470								
18		1890	1575	1300	1320	1090	1145	935	905	755	770	650	640	580	575	515								
20			1730	1430	1450	1200	1205	1025	990	835	850	720	730	640	605	575								
22.4			1910	1575	1530	1320	1340	1145	1095	905	x	770	x	730	x	605								
25			1075	1730	885	1450	740	1205	x	990	x	850	x	x	x	x								
28			1170	1910	940	1530	810	1340	x	1095	x	x	x	x	x	x								

敬请垂询 On request

x：不能采用迷宫式密封
　当低于最低输入转速 n_1 时应配置径向轴封。

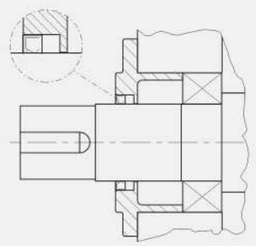
x = Labyrinth seals are not possible
If the minimum input speed n_1 is undershot, radial shaft seals are to be provided.

WSH1
WSH2

轴封
Shaft Seals

径向轴封/迷宫式轴封　　Radial Shaft Seals / Labyrinth Seals

径向轴封
Radial shaft seals



径向轴封适用于低工作转速至中等工作转速。

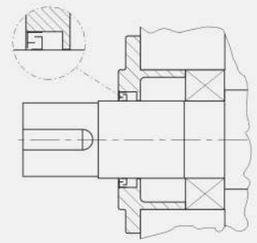
其它特征：
- 这是一种有磨损的密封方式，但是易于维护保养；
- 在密封唇部会局部发热，因此应保持足够的润滑（冷却）；
- 普通市售产品；
- 当法兰轴维修而需要采用剖分式轴封时（请垂询）；
- 较低油位的布置形式请垂询。
径向轴封可以用在各种类型和各种规格的齿轮箱中。

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

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

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

迷宫式密封
Labyrinth seals



迷宫式密封方式特别适用于较高的工作转速。

其它优点：
- 非接触式，从而无磨损；
- 不会产生局部发热，所以勿需维护保养；
- 安装空间小。

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

Labyrinth seals are specially suitable for higher operating speeds.

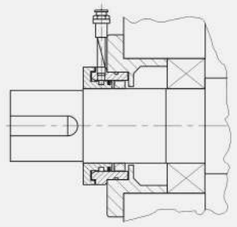
Further advantages are:
- Non-contacting and thus, wear-resistant;
- No local heat development and thus, maintenance-free;
- Small space required for fitting.

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

轴封
Shaft Seals

组合式密封 Taconite Seals

组合式密封
Taconite seals



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

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

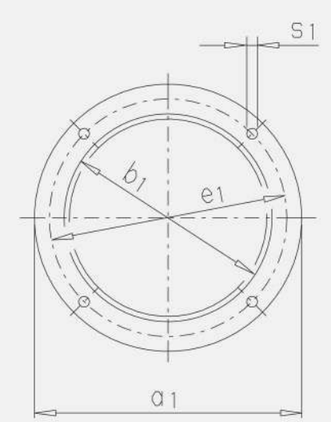
组合式密封 Taconite Seal	轴 Shaft	说明 Note
E	输入轴 Input shaft	注意 H3 和 H4 的尺寸 Take into account dimensions for H3 and H4
F	实心轴 Solid shaft	
	加强型输出轴 d_2 Reinforced output shaft d_2	
	齿轮箱带法兰轴 d_2 With flanged shaft d_2	规格 8 以上 / from size 8 on
F - F	带平键槽的空心轴 Hollow shaft with keyway	两侧组合式密封 Taconite seals on both sides
	带缩紧盘的空心轴 Hollow shaft for shrink disk	
	带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480	防护罩用作防接触保护 Guard as protection against accidental contact
F - H	带平键槽的空心轴 Hollow shaft with keyway	工作机轴侧组合式密封 Taconite seal on driven machine shaft
	带花键的空心轴，按照 DIN 5480 Hollow shaft with involute splines acc. to DIN 5480	防尘护罩在对侧 Dustproof guard on opposite side
F - K	带缩紧盘的空心轴 Hollow shaft for shrink disk	工作机轴侧组合式密封 Taconite seal on driven machine shaft
		防尘护罩在对侧 Dustproof guard on opposite side

表 3 / Table 3

采用 "**E**" 型组合式密封时的 G_1 尺寸和轴尺寸
G_1 dimension and shaft dimensions for Taconite"E"

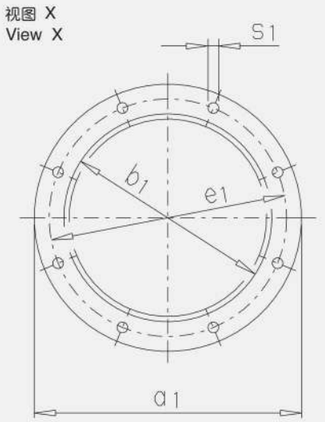
类型 Type	规格 Size	传动比 Ratio i	G_1	d_1 mm	l_1
WSH3..	**9**	25 - 45 50 - 63 71 - 90	250	60 m6 45 m6 32 m6	105 80 60
	10	31.5 - 56 63 - 80 90 - 112	250	60 m6 45 m6 32 m6	105 80 60
	11	25 - 45	275	70 m6	100
	12	31.5 - 56	275	70 m6	100
	13	22.4 - 45 50 - 63 71 - 90	340	85 m6 60 m6 50 m6	130 105 80
	14	28 - 56 63 - 80 90 - 112	340	85 m6 60 m6 50 m6	130 105 80
	15	22.4 - 45 50 - 63 71 - 90	385	100 m6 75 m6 60 m6	165 105 105
	16	25 - 50 56 - 71 80 - 100	385	100 m6 75 m6 60 m6	165 105 105
	17	22.4 - 45 50 - 63 71 - 90	415	100 m6 75 m6 60 m6	165 105 105
	18	25 - 50 56 - 71 80 - 100	415	100 m6 75 m6 60 m6	165 105 105
WSH4..	**11**	100 - 180 200 - 355	270	45 m6 32 m6	80 60
	12	125 - 224 250 - 450	270	45 m6 32 m6	80 60
	13	100 - 180 200 - 355	325	50 m6 38 m6	80 60
	14	125 - 224 250 - 450	325	50 m6 38 m6	80 60
	15	100 - 180 200 - 355	375	60 m6 50 m6	105 80
	16	112 - 200 224 - 400	375	60 m6 50 m6	105 80

IEC-标准电机的安装尺寸
Fitting Dimensions for IEC Standard Motors



a_1 = 250 至 400
a_1 = 250 up to 400

视图 X
View X



a_1 = 450 至 800
a_1 = 450 up to 800

表 1 / Table 1

法兰尺寸 / Flange dimensions

三相鼠笼交流电机
Three-phase motors with squirrel-cage rotor

	电机规格 / Motor sizes															
	100 L	**112 M**	**132 S**	**132 M**	**160 M**	**160 L**	**180 M**	**180 L**	**200 L**	**225 S**	**225 M**	**250 M**	**280 S**	**280 M**	**315 S**	**315 M**
a_1 mm	250	250	300	300	350	350	350	350	400	450	450	550	550	550	660	660
b_1 mm	180	180	230	230	250	250	250	250	300	350	350	450	450	450	550	550
e_1 mm	215	215	265	265	300	300	300	300	350	400	400	500	500	500	600	600
s_1	4 x M12	4 x M12	4 x M12	4 x M12	4 x M16	4 x M16	4 x M16	4 x M16	4 x M16	8 x M16	8 x M16	8 x M16	8 x M16	8 x M16	8 x M20	8 x M20

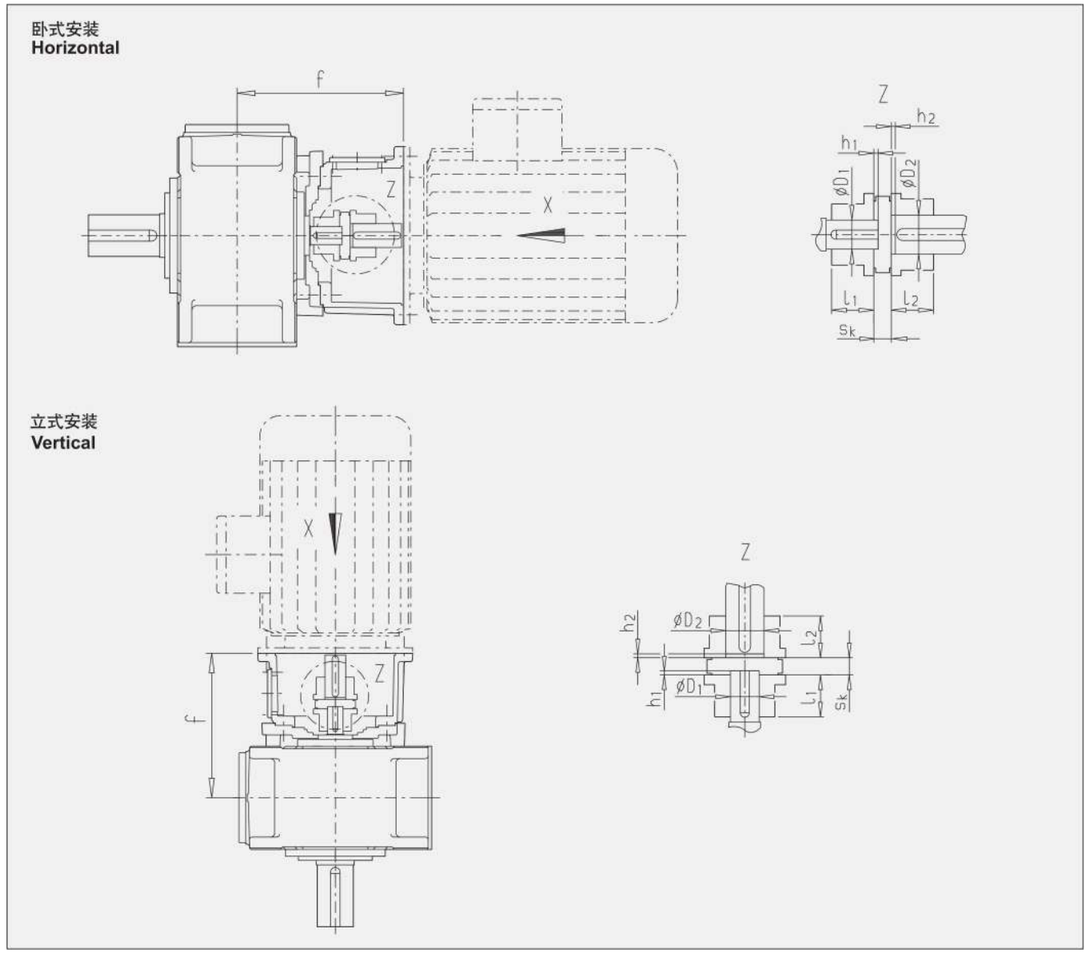
三相鼠笼交流电机
Three-phase motors with squirrel-cage rotor

	电机规格 / Motor sizes				
	315 MC	**315 MD**	**315 LB**	**355 MB**	**355 LB**
a_1 mm	660	660	660	800	800
b_1 mm	550	550	550	680	680
e_1 mm	600	600	600	740	740
s_1	8 x M20	8 x M20	8 x M20	8 x M20	8 x M20

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSH2.. 规格 4-14　　Type WSH2.. Sizes4-14



- 对于有特殊设计要求的设备。例如，高开关频率、交变负载方向的升降机、行走机等。其联轴器布置形式必须参照相关的联轴器样本，对于其它联轴器，请咨询我公司。
- IEC - 标准电机的安装尺寸，参见第 160 页。
- 布置形式 C，D，G，H，I 的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For plants with special design requirements (high switching frequency, alternating direction of load; e.g. hoisting gears, travelling gears, etc.) the coupling design is to be checked in accordance with the respective valid coupling brochure. For other couplings,please consult us!
- For fitting dimensions for IEC standard motors , see page 160.
- Helical gear unit in C, D, G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

1）其它电机规格敬请垂询
2）仅指规格 315 S 和 315 M
4）仅用于立式安装的齿轮箱
5）不适宜在类型**WSH2D**,布置形式 A 和 B 上安装。
6）不适宜在类型**WSH2D**,规格 5，布置形式 A 和 B 上安装。
7）不适宜在类型**WSH2D**,规格 7，布置形式 A 和 B 上安装。
8）不适宜在类型**WSH2DV**,规格 9，布置形式 A 和 B 上安装。

1) Other motor sizes on request
2) Sizes 315 S and 315 M only
4) For vertical gear units only
5) For type **WSH2D.** design A + B; fitting not possible.
6) For type **WSH2D.** size 5 design A + B; fitting not possible.
7) For type **WSH2D.** size 7 design A + B; fitting not possible.
8) For type **WSH2DV** size 9 design A + B; fitting not possible.

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSH2.. 规格 4-14　　Type WSH2.. Sizes4-14

表 2 / Table 2

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

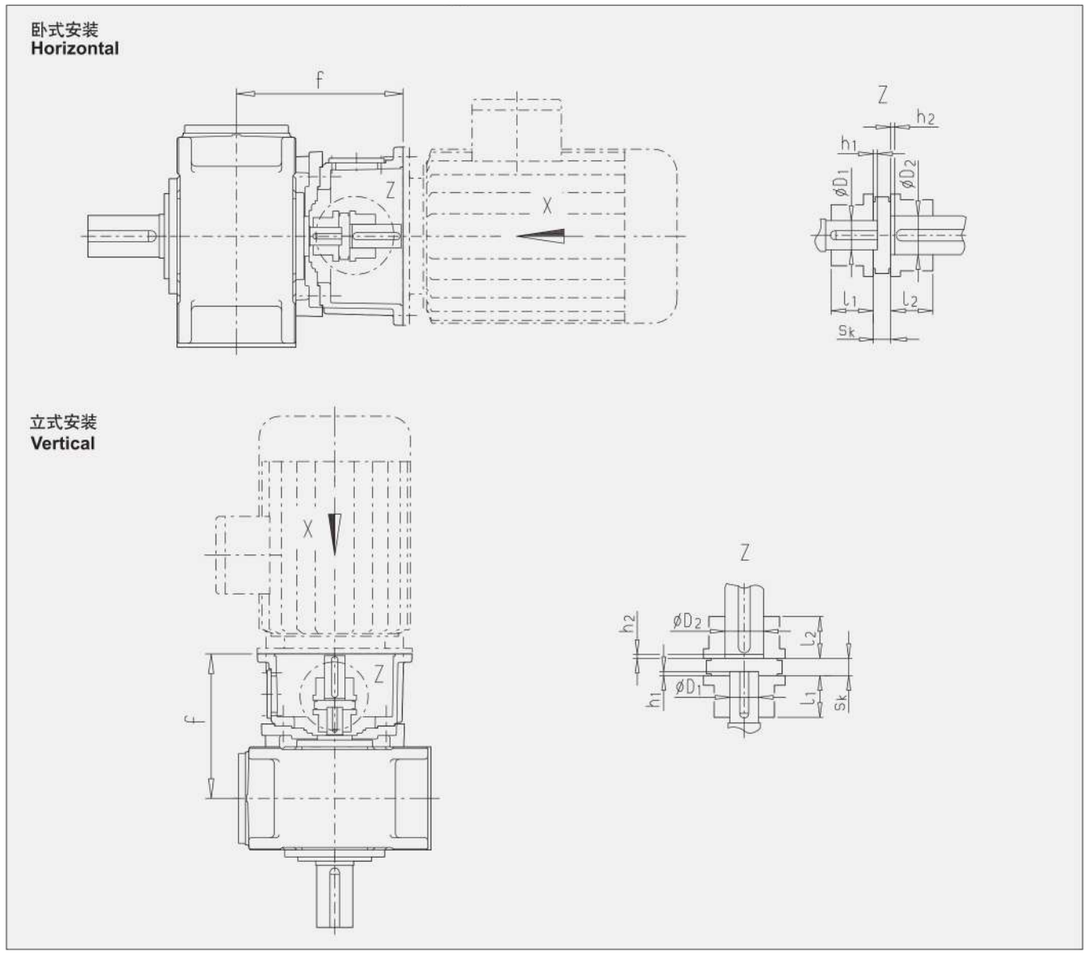
表 3 / Table 3

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

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSH3.. 规格 5-18　　Type WSH3.. Sizes5-18



- 对于有特殊设计要求的设备。例如，高开关频率、交变负载方向的升降机、行走机等。其联轴器布置形式必须参照相关的联轴器样本，对于其它联轴器，请咨询我公司。
- IEC - 标准电机的安装尺寸，参见第 160 页。
- 布置形式 G，H，I 的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For plants with special design requirements (high switching frequency, alternating direction of load; e.g. hoisting gears, travelling gears, etc.) the coupling design is to be checked in accordance with the respective valid coupling brochure. For other couplings,please consult us!
- For fitting dimensions for IEC standard motors , see page 160.
- Helical gear unit in G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

1）其它电机规格敬请垂询
2）仅指规格 315 S 和 315 M
3）联轴器轮毂长度 l_1 已经为装配齿轮箱输入轴而缩短。
4）仅用于立式安装的齿轮箱

1) Other motor sizes on request
2) Sizes 315 S and 315 M only
3) Length l_1 of coupling hub shortened for fitting onto gear unit shaft.
4) For vertical gear units only

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSH3.. 规格 5-18　　Type WSH3.. Sizes5-18

表 4 / Table 4

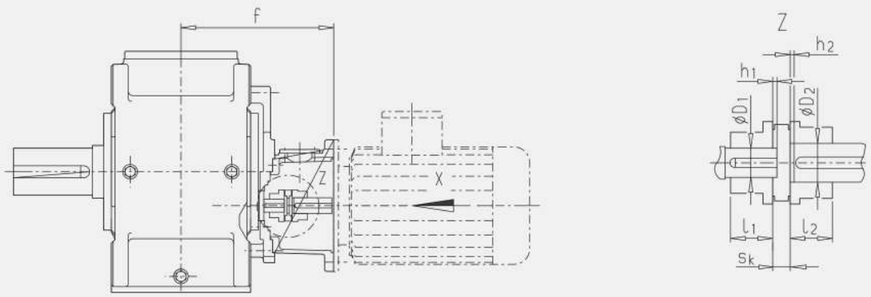
规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 25 - 45（规格 / Sizes 5, 7, 9, 11）31.5 - 56（规格 / Sizes 6, 8, 10, 12）22 4 - 45（规格 / Sizes 13, 15, 17）28 - 56（规格 / Size 14）25 - 50（规格 / Sizes 16, 18）									传动比 i_N / Ratios i_N 50 - 63（规格 / Sizes 5, 7, 9, 11）63 - 80（规格 / Sizes 6, 8, 10, 12）50 - 63（规格 / Sizes 13, 15, 17）63 - 80（规格 / Size 14）56 - 71（规格 / Sizes 16, 18）									传动比 i_N / Ratios i_N 71 - 90（规格 / Sizes 5, 7, 9, 11）90 - 112（规格 / Sizes 6, 8, 10, 12）71 - 90（规格 / Sizes 13, 15, 17）90 - 112（规格 / Size 14）80 - 100（规格 / Sizes 16, 18）								
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm
5 / 6	132																			72	18	35	24	35	38	- 2	- 2	302
	160	84	21	40	40	40	42	-1.5	1.5	364	84	21	40	30	40	42	3	0	338	84	21	40	24	40	42	- 7	0	338
	180	97	24	50	40	50	48	0	0	364	3) 97	24	44	30	50	48	6	0	338	3) 97	24	44	24	50	48	- 4	0	338
	200	3) 112	27	53	40	60	55	17	0	350	3) 112	27	53	30	60	55	- 3	0	350									
	225	3) 127	27	60	40	65	60	6	0	391																		
	250	3) 4) 127	27	60	40	65	65	6	0	391																		
7 / 8	160																			84	21	40	28	40	42	- 1	0	367
	180										3) 97	24	45	35	50	48	12	0	367	3) 97	24	45	28	50	48	2	0	367
	200	112	27	60	45	60	55	-1.5	1.5	405	3) 112	27	55	35	60	55	3	0	379	3) 112	27	55	28	60	55	- 7	0	379
	225	127	27	65	45	65	60	12	0	420	127	27	65	35	65	60	- 8	0	420	127	27	65	28	65	60	- 18	0	420
	250	127	27	65	45	65	65	12	0	420	127	27	65	35	65	65	- 8	0	420									
	280	142	31	75	45	75	75	-4.5	0	440.5																		
	315 2)	4) 162	36	80	45	80	80	-6.5	0	477.5																		
9 / 10	180																			97	24	50	32	50	48	12.5	0	431.5
	200																			112	27	60	32	60	55	3.5	0	443.5
	225	127	27	65	60	65	60	2.5	0	519.5	127	27	65	45	65	60	12.5	0	484.5	127	27	65	32	65	60	-3.75	-3.75	484.5
	250	127	27	65	60	65	65	2.5	0	519.5	127	27	65	45	65	65	12.5	0	484.5	127	27	65	32	65	65	-3.75	-3.75	484.5
	280	142	31	75	60	75	75	21	0	505	142	31	75	45	75	75	- 2	2	505									
	315 2)	4) 162	36	80	60	80	80	19	0	545	4) 162	36	80	45	80	80	- 3	3	542									
11 / 12	225																			127	27	65	42	65	60	2.5	0	489.5
	250										127	27	65	50	65	65	12.5	0	489.5	127	27	65	42	65	65	2.5	0	489.5
	280	142	31	75	70	75	75	6	0	540	142	31	75	50	75	75	- 4	0	510	142	31	75	42	75	75	- 7	- 7	510
	315 2)	162	36	80	70	80	80	4	0	577	162	36	80	50	80	80	- 6	0	547	162	36	80	42	80	80	- 16	0	547
13 / 14	250																			127	27	65	50	65	65	8.5	0	578.5
	280										142	31	75	60	75	75	17	0	599	142	31	75	50	75	75	- 4	4	599
	315 2)	182	42	90	85	90	80	13	- 3	666	162	36	80	60	80	80	15	0	636	162	36	80	50	80	80	- 5	5	636
	315 MC 9)	182	42	90	85	90	80	13	- 3	666	182	42	90	60	90	80	21	0	636	182	42	90	50	90	80	0	4	636
	315 MD 9)	182	42	90	85	90	80	13	- 3	666	182	42	90	60	90	80	21	0	636	182	42	90	50	90	80	0	4	636
	315 LB 9)	202	48	100	85	100	80	22	0	666	202	48	100	60	100	80	22	- 5	636	202	48	100	50	100	80	0	- 2	636
	355 MB 9)	202	48	100	85	100	90	20	0	668	202	48	100	60	100	90	- 2.5	2.5	668									
	355 LB 9)	227	54	110	85	110	90	26	0	668																		
15 / 16	280																			142	31	75	60	75	75	14	0	647
	315 2)										162	36	80	75	80	80	12	0	684	162	36	80	60	80	80	12	0	684
	315 MC 9)										182	42	90	75	90	80	18	0	684	182	42	90	60	90	80	18	0	684
	315 MD 9)										182	42	90	75	90	80	18	0	684	182	42	90	60	90	80	18	0	684
	315 LB 9)	202	48	100	100	100	80	4	0	764	202	48	100	75	100	80	24	0	684	202	48	100	60	100	80	24	0	684
	355 MB 9)	202	48	100	100	100	90	0	0	768	202	48	100	75	100	90	- 4	4	716	202	48	100	60	100	90	- 4	4	716
	355 LB 9)	227	54	110	100	110	90	6	0	768	227	54	110	75	110	90	- 2	0	716	227	54	110	60	110	90	- 2	0	716
17 / 18	315 2)																			162	36	80	60	80	80	12	0	714
	315 MC 9)																			182	42	90	60	80	80	18	0	714
	315 MD 9)																			182	42	90	60	90	80	18	0	714
	315 LB 9)										202	48	100	75	100	80	24	0	714	202	48	100	60	100	80	24	0	714
	355 MB 9)	202	48	100	100	100	90	0	0	798	202	48	100	75	100	90	- 4	4	746	202	48	100	60	100	90	- 4	4	746
	355 LB 9)	227	54	110	100	110	90	6	0	798	227	54	110	75	110	90	- 2	0	746	227	54	110	60	110	90	- 2	0	746

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

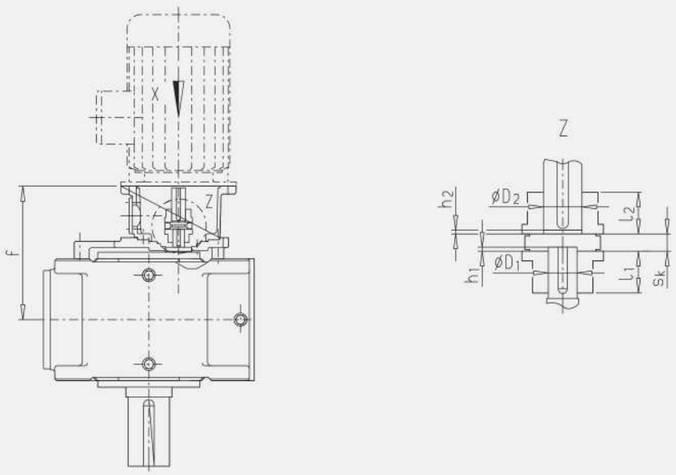
Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSH4.. 规格 7-18　　Type WSH4.. Sizes7-18

卧式安装
Horizontal



立式安装
Vertical



- 对于有特殊设计要求的设备。例如，高开关频率、交变负载方向的升降机、行走机等。其联轴器布置形式必须参照相关的联轴器样本，对于其它联轴器，请咨询我公司。
- IEC - 标准电机的安装尺寸，参见第 160 页。
- 布置形式 G，H，I 的平行轴齿轮箱请务必垂询。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For plants with special design requirements (high switching frequency, alternating direction of load; e.g. hoisting gears, travelling gears, etc.) the coupling design is to be checked in accordance with the respective valid coupling brochure. For other couplings,please consult us!
- For fitting dimensions for IEC standard motors , see page 160.
- Helical gear unit in G, H, I design on request only.
- Not in connection with Taconite E or labyrinth seal on input shaft.

1）其它电机规格敬请垂询
2）仅指规格 315 S 和 315 M
3）联轴器轮毂长度 l_1 已经为装配齿轮箱输入轴而缩短。

1) Other motor sizes on request
2) Sizes 315 S and 315 M only
3) Length l_1 of coupling hub shortened for fitting onto gear unit shaft.

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSH4.. 规格 7-18　　Type WSH4.. Sizes7-18

表 5 / Table 5

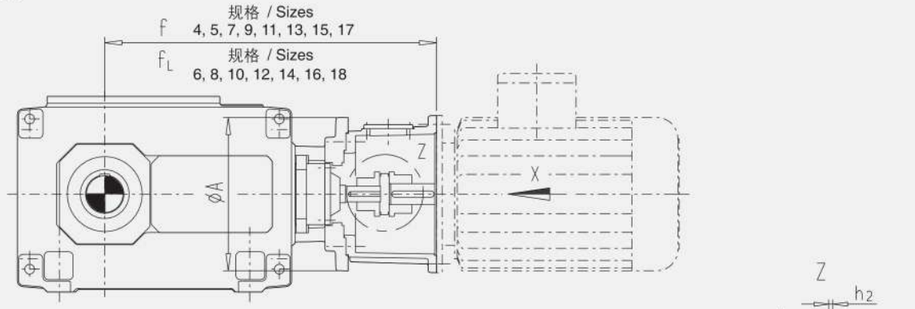
规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 100 -180 (规格 / Sizes 7, 9, 11) 125 - 224 (规格 / Sizes 8, 10, 12) 100 -180 (规格 / Sizes 13, 15, 17) 125 - 224 (规格 / Size 14) 112 - 200 (规格 / Sizes 16, 18)										传动比 i_N / Ratios i_N 200 -355 (规格 / Sizes 7, 9, 11) 250 - 450 (规格 / Sizes 8, 10, 12) 200 -355 (规格 / Sizes 13, 15, 17) 250 - 450 (规格 / Size 14) 224 - 400 (规格 / Sizes 16, 18)								
			BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm
7 / 8	100												62	16	30	24	30	28	0	0	296
	112												62	16	30	24	30	28	0	0	296
	132		72	18	35	30	35	38	- 0.5	0	328.5		72	18	35	24	35	38	- 5.5	5	328.5
	160		84	21	40	30	40	42	- 3.5	0	364.5		84	21	40	24	40	42	- 6.5	7	364.5
	180	3)	97	24	42	30	50	48	- 0.5	0	364.5										
9 / 10	132												72	18	35	28	35	38	- 3.5	3	369.5
	160		84	21	40	35	40	42	0.5	0	405.5		84	21	40	28	40	42	- 4.5	5	405.5
	180	3)	97	24	47	35	50	48	3.5	0	405.5	3)	97	24	47	28	50	48	- 6.5	0	405.5
	200	3)	112	27	54	35	60	55	- 5.5	0	417.5										
	225	3)	127	27	59	35	65	60	- 10	6.5	458.5										
11 / 12	160												84	21	40	32	40	42	13.5	0	447.5
	180		97	24	50	45	50	48	10.5	0	437.5		97	24	50	32	50	48	16.5	0	447.5
	200		112	27	60	45	60	55	1.5	0	485.5		112	27	60	32	60	55	7.5	0	459.5
	225		127	27	65	45	65	60	16.5	0	500.5		127	27	65	32	65	60	0	3.5	500.5
	250		127	27	65	45	65	65	16.5	0	500.5										
13 / 14	160												84	21	40	38	40	42	0	1.5	517.5
	180												97	24	50	38	50	48	1.5	0	517.5
	200		127	27	65	50	65	55	12.5	0	529.5		112	27	50	38	60	55	18.5	0	503.5
	225		127	27	65	50	65	60	- 3.5	4	579.5		127	27	61	38	65	60	7.5	0	544.5
	250		127	27	65	50	65	65	- 3.5	4	579.5		127	27	61	38	65	65	7.5	0	544.5
	280		142	31	75	50	75	75	11	0	565										
	315	2)	162	36	75	50	80	80	9	0	602										
15 / 16	200												112	27	60	50	60	55	- 3	3.5	598.5
	225		127	27	65	60	65	60	- 1.5	0	648.5		127	27	65	50	65	60	8.5	0	613.5
	250		127	27	65	60	65	65	- 1.5	0	648.5		127	27	65	50	65	65	8.5	0	613.5
	280		142	31	75	60	75	75	17	0	634		142	31	75	50	75	75	- 4	4	634
	315	2)	162	36	80	60	80	80	15	0	671		162	36	80	50	80	80	- 5	5	671
	315 MC	9)	182	42	90	60	90	80	21	0	671										
	315 MD	9)	182	42	90	60	90	80	21	0	671										
	315 LB	9)	202	48	100	60	100	80	20	- 7	671										
17 / 18	225												127	27	65	50	65	60	3.5	0	623.5
	250												127	27	65	50	65	65	3.5	0	623.5
	280		142	31	75	60	75	75	12	0	644		142	31	75	50	75	75	- 6.5	6.5	644
	315	2)	162	36	80	60	80	80	10	0	681		162	36	80	50	80	80	- 5	10	681
	315 MC	9)	182	42	90	60	90	80	10	- 6	681										
	315 MD	9)	182	42	90	60	90	80	10	- 6	681										
	315 LB	9)	202	48	100	60	100	80	- 4	4	711										
	355 MB	9)	202	48	100	60	100	90	- 5	5	713										

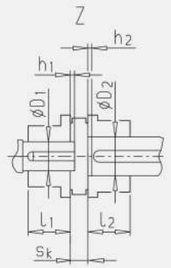
用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

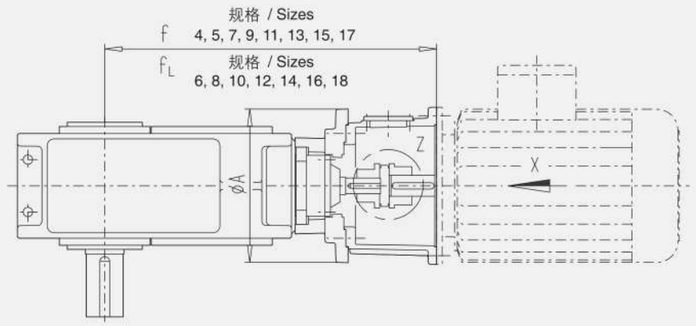
类型 WSB2.. 规格 4-14　　Type WSB2.. Sizes4-14

卧式安装
Horizontal





立式安装
Vertical



- 对于有特殊设计要求的设备。例如，高开关频率、交变负载方向的升降机、行走机等。其联轴器布置形式必须参照相关的联轴器样本，对于其它联轴器，请咨询我公司。
- IEC - 标准电机的安装尺寸 ，参见第 160 页。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For plants with special design requirements (high switching frequency, alternating direction of load; e.g. hoisting gears, travelling gears, etc.) the coupling design is to be checked in accordance with the respective valid coupling brochure. For other couplings,please consult us!
- For fitting dimensions for IEC standard motors , see page 160.
- Not in connection with Taconite E or labyrinth seal on input shaft.

1）其它电机规格敬请垂询
2）仅指规格 315 S 和 315 M

1) Other motor sizes on request
2) Sizes 315 S and 315 M

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSB2.. 规格 4-14　　Type WSB2.. Sizes4-14

表 6/ Table 6

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

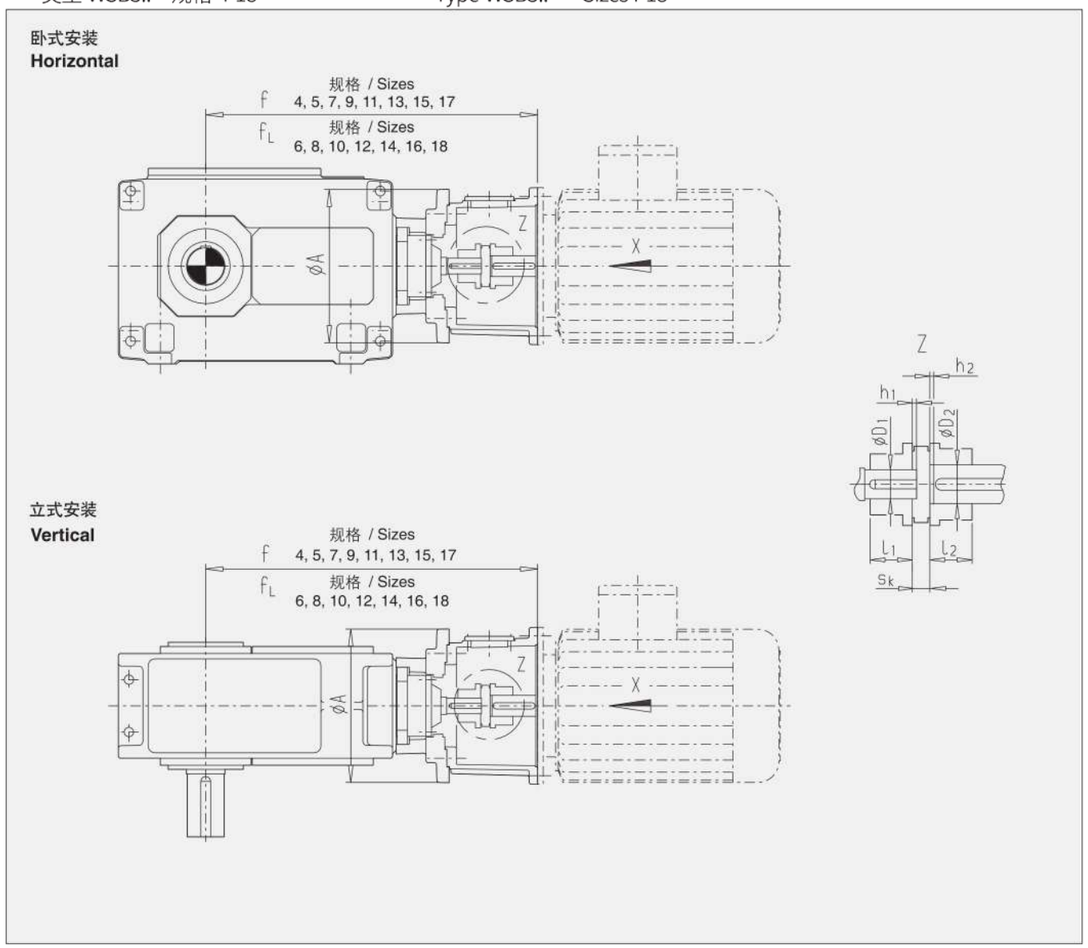
表 7 / Table 7

规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 12.5 - 18 (规格 / Size 13) 16 - 22.4 (规格 / Size 14)										
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm
13 / 14	355 MB 9)	202	48	100	80	100	90	1	0	1457	1527	650
	355 LB 9)	227	54	110	80	110	90	7	0	1457	1527	650

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSB3.. 规格 4-18　　Type WSB3.. Sizes4-18



- 对于有特殊设计要求的设备。例如，高开关频率、交变负载方向的升降机、行走机等。其联轴器布置形式必须参照相关的联轴器样本，对于其它联轴器，请咨询我公司。
- IEC - 标准电机的安装尺寸 ， 参见第 160 页。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For plants with special design requirements (high switching frequency, alternating direction of load; e.g. hoisting gears, travelling gears, etc.) the coupling design is to be checked in accordance with the respective valid coupling brochure. For other couplings,please consult us!
- For fitting dimensions for IEC standard motors , see page 160.
- Not in connection with Taconite E or labyrinth seal on input shaft.

1）其它电机规格敬请垂询
2）仅指规格 315 S 和 315 M

1) Other motor sizes on request
2) Sizes 315 S and 315 M only

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSB3.. 规格 4-18　　Type WSB3.. Sizes4-18

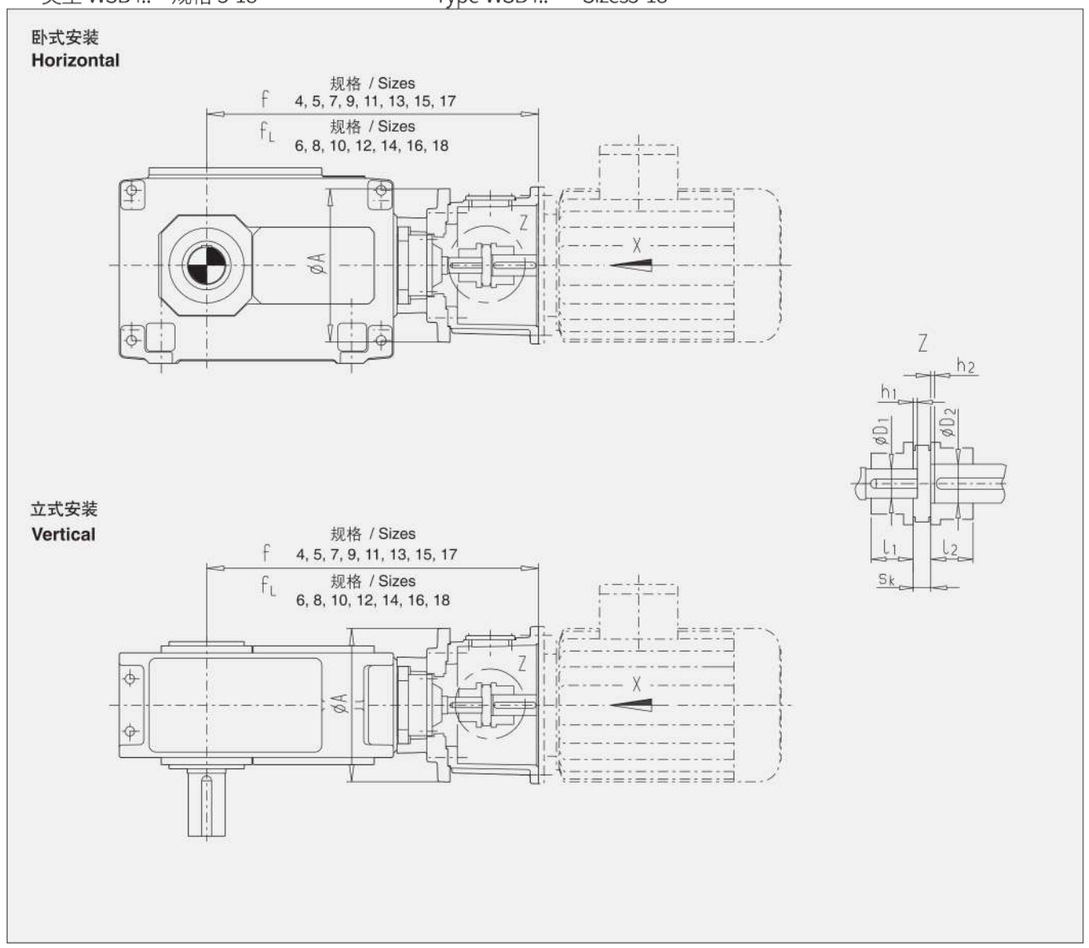
表 8 / Table 8

规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 12.5 - 45 (规格/Sizes 4, 5, 7, 9, 11) 16 - 56 (规格/Sizes 6, 8, 10, 12) 12.5 - 45 (规格/Sizes 13, 15, 17) 16 - 56 (规格/ Size 14) 14 - 50 (规格/Sizes 16, 18)											传动比 i_N / Ratios i_N 50 - 71 (规格/Sizes 4, 5, 7, 9, 11) 63 - 90 (规格/Sizes 6, 8, 10, 12) 50 - 71 (规格/Sizes 13, 15, 17) 63 - 90 (规格/ Size 14) 56 - 80 (规格/Sizes 16, 18)										
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm
4	132													72	18	35	25	35	38	10.5	0	646.5	–	250
	160		84	21	40	30	40	42	- 3.5	4	708.5	–	250	84	21	40	25	40	42	8.5	0	682.5	–	250
	180		97	24	50	30	50	48	- 2.5	2	708.5	–	250	3) 97	24	40	25	50	48	11.5	0	682.5	–	250
	200	3)	112	27	55	30	60	55	12.5	0	694.5	–	250											
5 / 6	160		84	21	40	35	40	42	14.5	0	771.5	806.5	350	84	21	40	28	40	42	- 2.5	3	771.5	806.5	350
	180		97	24	50	35	50	48	17.5	0	771.5	806.5	350	97	24	50	28	50	48	0	2.5	771.5	806.5	350
	200		112	27	60	35	60	55	8.5	0	782.5	818.5	350	112	27	60	28	60	55	- 5.5	6	782.5	818.5	350
	225		127	27	65	35	65	60	0	2.5	824.5	859.5	350											
7 / 8	160													84	21	40	35	40	42	0	2.5	903.5	948.5	440
	180													97	24	50	35	50	48	0.5	0	903.5	948.5	440
	200		112	27	60	45	60	55	17.5	0	909.5	954.5	440	112	27	60	35	60	55	0	2.5	909.5	945.5	440
	225		127	27	65	45	65	60	6.5	0	950.5	995.5	440	127	27	65	35	65	60	1.5	0	935.5	980.5	440
	250		127	27	65	45	65	65	5	0	952	997	440	127	27	65	35	65	65	1.5	0	935.5	980.5	440
	280		142	31	75	45	75	75	- 5	5	971	1016	440											
9 / 10	200													112	27	60	40	60	55	2.5	0	1034.5	1084.5	440
	225		127	27	65	55	65	60	1.5	0	1075.5	1125.5	440	127	27	65	40	65	60	- 4	4.5	1075.5	1125.5	440
	250		127	27	65	55	65	65	0	0	1077	1127	440	127	27	65	40	65	65	- 5	5	1077	1127	440
	280		142	31	75	55	75	75	- 7.5	7.5	1096	1146	440	142	31	75	40	75	75	2.5	2.5	1076	1126	440
11 / 12	225													127	27	65	50	65	60	- 3	3.5	1243.5	1313.5	440
	250		142	31	75	70	75	65	6	0	1260	1330	440	127	27	65	50	65	65	- 3	3.5	1243.5	1313.5	440
	280		142	31	75	70	75	75	- 6.5	6.5	1279	1349	440	142	31	75	50	75	75	12	0	1229	1299	440
	315 2)		162	36	80	70	80	80	- 7.5	7.5	1316	1386	440	162	36	80	50	80	80	10	0	1266	1336	440
13 / 14	280													142	31	75	60	75	75	12	0	1424	1494	650
	315 2)		182	42	90	80	90	80	- 5	4	1511	1581	445	162	36	80	60	80	80	10	0	1461	1531	650
	315 MC 9)		182	42	90	80	90	80	- 5	4	1511	1581	445	182	42	90	60	90	80	16	0	1461	1531	650
	315 MD 9)		182	42	90	80	90	80	- 5	4	1511	1581	445	182	42	90	60	90	80	16	0	1461	1531	650
	315 LB 9)		202	48	100	80	100	80	- 3	0	1511	1581	445	202	48	100	60	100	80	22	0	1461	1531	650
	355 MB 9)		202	48	100	80	100	90	16	0	1492	1562	650	202	48	100	60	100	90	- 4.5	4.5	1492	1562	650
	355 LB 9)		227	54	110	80	110	90	22	0	1492	1562	650											
15 / 16	315 2)													162	36	80	70	80	80	13	0	1700	1746	650
	315 MC 9)													182	42	90	70	90	80	19	0	1700	1746	650
	315 MD 9)													182	42	90	70	90	80	19	0	1700	1746	650
	315 LB 9)		202	48	100	90	100	80	0	0	1750	1796	650	202	48	100	70	100	80	25	0	1700	1746	650
	355 MB 9)		202	48	100	90	100	90	18	0	1732	1778	650	202	48	100	70	100	90	- 3.5	3.5	1732	1778	650
	355 LB 9)		227	54	110	90	110	90	24	0	1732	1778	650	227	54	110	70	110	90	- 1	0	1732	1778	650
17 / 18	315 MC 9)													182	42	90	80	90	80	- 3	0	1945	2005	650
	315 MD 9)													182	42	90	80	90	80	- 3	0	1945	2005	650
	315 LB 9)													202	48	100	80	100	80	3	0	1945	2005	650
	355 MB 9)		227	54	110	110	110	90	- 5	5	1999	2059	650	202	48	100	80	100	90	1	0	1947	2007	650
	355 LB 9)		227	54	110	110	110	90	- 5	5	1999	2059	650	227	54	110	80	110	90	7	0	1947	2007	650

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSB4.. 规格 5-18　　Type WSB4.. Sizes5-18



- 对于有特殊设计要求的设备。例如，高开关频率、交变负载方向的升降机、行走机等。其联轴器布置形式必须参照相关的联轴器样本，对于其它联轴器，请咨询我公司。
- IEC - 标准电机的安装尺寸，参见第 160 页。
- 输入轴不能采用组合式密封 E 或迷宫式密封。

- For plants with special design requirements (high switching frequency, alternating direction of load; e.g. hoisting gears, travelling gears, etc.) the coupling design is to be checked in accordance with the respective valid coupling brochure. For other couplings,please consult us!
- For fitting dimensions for IEC standard motors , see page 160.
- Not in connection with Taconite E or labyrinth seal on input shaft.

1）其它电机规格敬请垂询
2）仅指规格 315 S 和 315 M
3）联轴器轮毂长度 l_1 已经为装配齿轮箱输入轴而缩短。

1) Other motor sizes on request
2) Sizes 315 S and 315 M only
3) Length l_1 of coupling hub shortened for fitting onto gear unit shaft.

用于IEC-标准电机的电机安装法兰/带BIPEX联轴器

Motor Bell Housing for IEC Standard Motors / With BIPEX Coupling

类型 WSB4.. 规格 5-18　　Type WSB4.. Sizes5-18

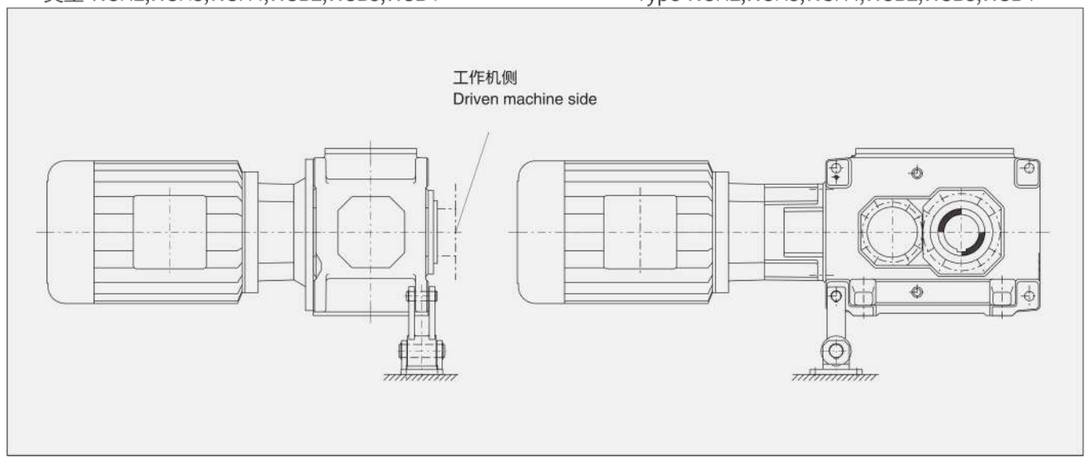
表 9 / Table 9

规格 Size	电机 Motor IEC 1)	传动比 i_N / Ratios i_N 80 - 180 (规格 / Sizes 5, 7, 9, 11) 100 - 224 (规格 / Sizes 6, 8, 10,12) 80 - 180 (规格 / Sizes 13, 15, 17) 100 - 224 (规格 / Size 14) 90 - 200 (规格 / Sizes 16, 18)											传动比 i_N / Ratios i_N 200 - 315 (规格 / Sizes 5, 7, 9, 11) 250 - 400 (规格 / Sizes 6, 8, 10,12) 200 - 315 (规格 / Sizes 13, 15, 17) 250 - 400 (规格 / Size 14) 224 - 355 (规格 / Sizes 16, 18)										
		BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm	BIPEX BWN	s_k mm	l_1 mm	D_1 mm	l_2 mm	D_2 mm	h_1 mm	h_2 mm	f mm	f_L mm	A mm
5 / 6	100												62	16	30	20	30	28	6	0	735	770	250
	112	62	16	30	28	30	28	2	2	750	785	250	62	16	30	20	30	28	6	0	735	770	250
	132	72	18	35	28	35	38	0.5	0	767.5	802.5	250	72	18	35	20	35	38	- 2.5	2	767.5	802.5	250
	160	84	21	40	28	40	42	- 1.5	0	802.5	837.5	250											
7 / 8	112												62	16	30	25	30	28	6	0	855	900	250
	132	72	18	35	30	35	38	5.5	0	887.5	932.5	250	72	18	35	25	35	38	10.5	0	872.5	917.5	250
	160	84	21	40	30	40	42	- 3.5	4	933.5	978.5	250	84	21	40	25	40	42	8.5	0	907.5	952.5	250
	180	97	24	50	30	50	48	- 2	2.5	933.5	978.5	250											
	200 3)	112	27	55	30	60	55	12.5	0	919.5	964.5	250											
9 / 10	132												72	18	35	28	35	38	- 1.5	2	1001.5	1051.5	350
	160	84	21	40	35	40	42	14.5	0	1036.5	1086.5	350	84	21	40	28	40	42	- 2.5	3	1036.5	1086.5	350
	180	97	24	50	35	50	48	17.5	0	1036.5	1086.5	350	97	24	50	28	50	48	0	2.5	1036.5	1086.5	350
	200	112	27	60	35	60	55	8.5	0	1048.5	1098.5	350											
	225	127	27	65	35	65	60	0	2.5	1089.5	1139.5	350											
11 / 12	160												84	21	40	35	40	42	0	2.5	1223.5	1293.5	440
	180	97	24	50	45	50	48	- 2.5	3	1249.5	1319.5	440	97	24	50	35	50	48	0.5	0	1223.5	1293.5	440
	200	112	27	60	45	60	55	17.5	0	1229.5	1299.5	440	112	27	60	35	60	55	- 2.5	0	1229.5	1299.5	440
	225	127	27	65	45	65	60	6.5	0	1270.5	1340.5	440	127	27	65	35	65	60	- 6.5	7	1270.5	1340.5	440
	250	127	27	65	45	65	65	5	0	1272	1342	440											
	280	142	31	75	45	75	75	- 5	5	1291	1361	440											
13 / 14	180												97	24	50	40	50	48	5.5	0	1398.5	1468.5	440
	200	112	27	60	55	60	55	12.5	0	1404.5	1474.5	440	112	27	60	40	60	55	2.5	0	1404.5	1474.5	440
	225	127	27	65	55	65	60	1.5	0	1445.5	1515.5	440	127	27	65	40	65	60	- 4	4.5	1445.5	1515.5	440
	250	127	27	65	55	65	65	0	0	1447	1517	440	127	27	65	40	65	65	- 5	5	1447	1517	440
	280	142	31	75	55	75	75	5	0	1446	1516	440	142	31	75	40	75	75	- 2.5	2.5	1446	1516	440
	315 2)	162	36	80	55	80	80	3	0	1483	1553	440											
	315 MC 9)	182	42	90	55	90	80	9	0	1483	1553	440											
	315 MD 9)	182	42	90	55	90	80	9	0	1483	1553	440											
15 / 16	200												112	27	60	50	60	55	- 5	5.5	1659.5	1705.5	440
	225	142	31	75	70	75	60	4.5	- 3	1700.5	1746.5	440	127	27	65	50	65	60	- 3	3.5	1685.5	1731.5	440
	250	142	31	75	70	75	65	6	0	1702	1748	440	127	27	65	50	65	65	- 3	3.5	1685.5	1731.5	440
	280	142	31	75	70	75	75	- 6.5	6.5	1721	1767	440	142	31	75	50	75	75	12	0	1671	1717	440
	315 2)	162	36	80	70	80	80	5	0	1738	1784	440	162	36	80	50	80	80	10	0	1708	1754	440
	315 MC 9)	182	42	90	70	90	80	11	0	1738	1784	440											
	315 MD 9)	182	42	90	70	90	80	11	0	1738	1784	440											
	315 LB 9)	202	48	100	70	100	80	17	0	1738	1784	440											
	355 MB 9)	202	48	100	70	100	90	15	0	1740	1786	650											
17 / 18	225												127	27	65	50	65	60	- 3	- 3.5	1733.5	1793.5	440
	250												127	27	65	50	65	65	- 3	- 3.5	1733.5	1793.5	440
	280	142	31	75	70	75	75	- 6.5	6.5	1769	1829	440	142	31	75	50	75	75	12	0	1718.5	1778.5	440
	315 2)	182	42	90	70	90	80	- 4.5	4.5	1806	1866	440	162	36	80	50	80	80	10	0	1756	1816	440
	315 MC 9)	182	42	90	70	90	80	- 4.5	4.5	1806	1866	440	182	42	90	70	90	80	16	0	1756	1816	440
	315 MD 9)	182	42	90	70	90	80	- 4.5	4.5	1806	1866	440	182	42	90	70	90	80	16	0	1756	1816	440
	315 LB 9)	202	48	100	70	100	80	- 3	0	1806	1866	440											
	355 MB 9)	202	48	100	70	100	90	15	0	1788	1848	650											
	355 LB 9)	227	54	110	70	110	90	21	0	1788	1848	650											

齿轮箱减振扭力臂支撑

Vibration Reducing Torque Supports for Gear Housings

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4



最大传递扭矩受扭力臂支撑的限制：

$T_{max} = f_{DMST} \times T_{2Nenn}$

The maximum transmissible torque is limited by the torque support:

$T_{max} = f_{DMST} \times T_{2Nenn}$

表1 / **Table 1**

齿轮箱规格 Gear unit size	扭力臂支撑的峰值扭矩系数 f_{DMST} [1] Peak torque factor f_{DMST} for torque support 类型 / Type					
	WSH2	**WSH3**	**WSH4**	**WSB2**	**WSB3**	**WSB4**
4	1.3	–	–	1.2	1.2	–
5	1.9	2.0	–	1.2	1.6	2.0
6	1.6	1.7	–	1.2	1.4	1.7
7	2.0	2.0	2.0	1.3	1.8	2.0
8	1.7	2.0	2.0	1.2	1.6	2.0
9	1.5	1.6	1.7	1.2	1.2	1.7
10	1.3	1.4	1.4	1.2	1.2	1.4
11	2.0	2.0	2.0	1.9	2.0	1.2
12	2.0	2.0	2.0	1.8	2.0	1.2
13	–	2.0	2.0	1.4	1.8	2.0
14	–	1.9	2.0	1.3	1.7	2.0
15	–	1.5	1.7	–	1.4	1.6
16	–	1.4	1.5	–	1.3	1.5
17	–	1.2	1.3	–	1.2	1.3
18	–	1.2	1.2	–	1.2	1.2
19 - 26	敬请垂询 / On request					

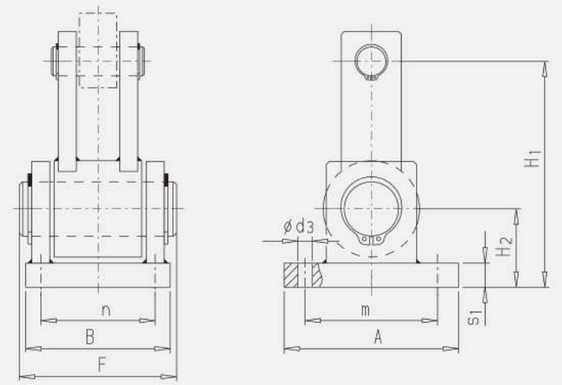
1）表中给出的数值为最小值，
旋转方向和电机类型确定后有可能允许更大的峰值扭矩。
请垂询！

1) The values in the table are minimum values. Dependent on direction of rotation and motor type, higher peak torques may possibly be allowed.
Please consult us!

齿轮箱减振扭力臂支撑

Vibration Reducing Torque Supports for Gear Housings

类型 WSH2,WSH3,WSH4,WSB2,WSB3,WSB4　　Type WSH2,WSH3,WSH4,WSB2,WSB3,WSB4



- 在工作机侧的扭力臂支撑。
(布置形式 C, D, G, H, I 的平行轴齿轮箱请务必垂询)
- 不带电机安装法兰的齿轮箱只能带不承受剪力的弹性联轴器。
- 与风扇组合的扭力臂支撑请务必垂询。

- Torque support on driven machine side. (Helical gear unit in C, D, G, H, I design on request only.)
- For gear units without motor bell housing only couplings not transmitting shear forces are allowed.
- Torque support in combination with fan on request only.

表 2 / **Table 2**

齿轮箱规格 Gear unit size	A	B	ϕ d_3	F	H_1	H_2	m	n	s_1	弹性衬套 Bush	重量 Weight kg
	mm										
4	160	110	19	116	200	65	120	70	15	079	6.8
5 + 6	200	160	19	170	250	90	160	120	20	095	16
7 + 8	320	200	19	195	400	140	260	130	25	772	37
9 + 10											42
11 + 12	400	300	24	320	500	175	320	240	30	805	155
13 + 14											159
15 + 16											163
17 + 18											167
19 - 26	敬请垂询 / On request										

齿轮箱浮动底座带N-EUPEX联轴器

Gear Unit Swing-bases with N-EUPEX Couplings

类型 WSB3,WSB4　规格 4-12　　Type WSB3,WSB4　Sizes 4-12

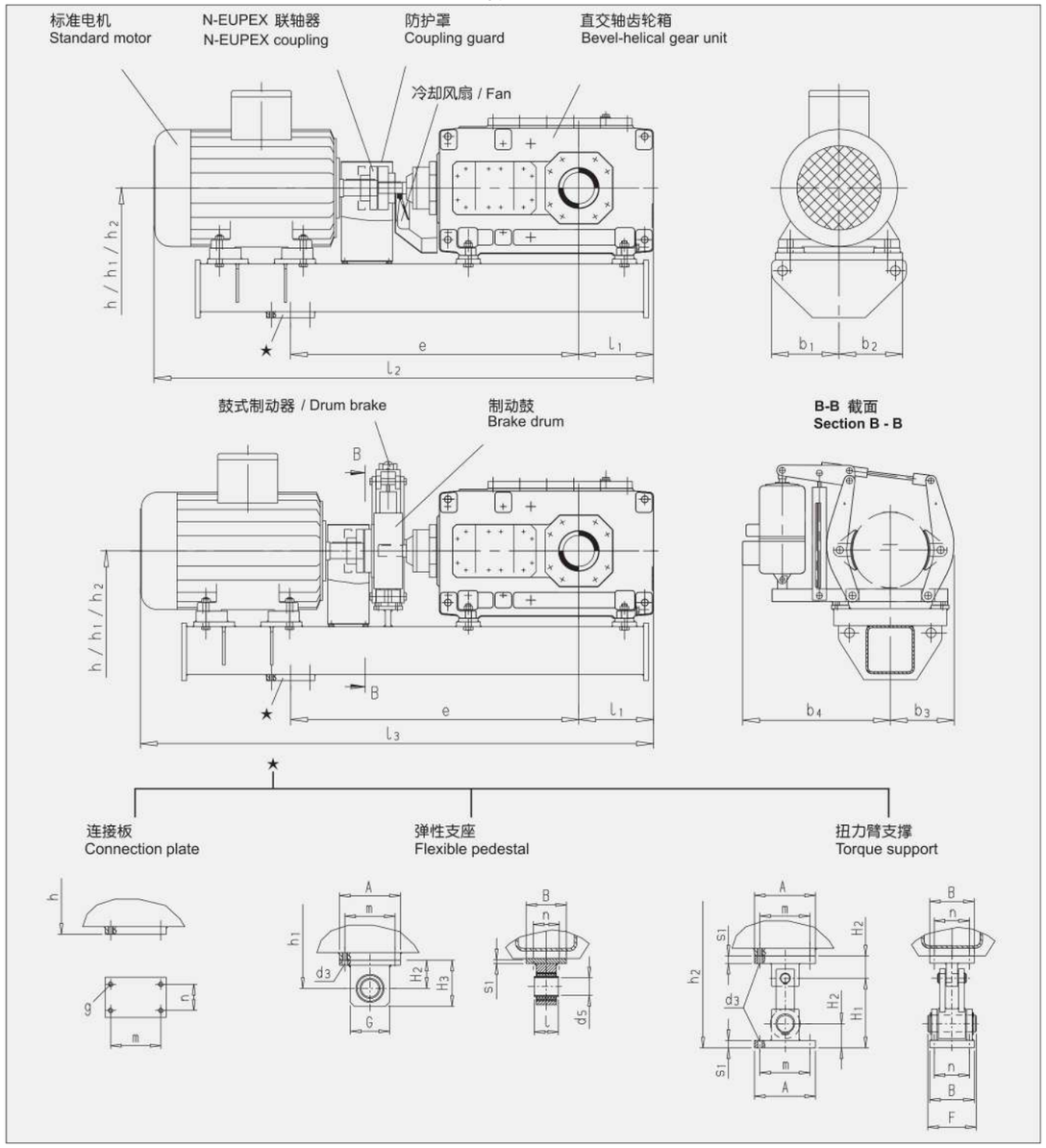


表 2 / Table 2

规格 Size	衬套 Bush	m	n	g	d_3	A	B	d_5	F	G	H_1	H_2	H_3	l	s_1	重量 / Weight 支座 Pedestal	重量 / Weight 扭力臂支撑 Torque support
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg
4	069	95	65	M 12	15	120	90	25	96	60	180	50	80	56	12	2.1	5.8
5 - 6	079	120	70	M 16	19	160	110	32	116	75	200	65	105	72	15	5.3	11.8
7 - 10	095	160	120	M 16	19	200	160	50	170	110	250	90	145	110	20	16	34
11 - 12	772	260	130	M 16	19	320	200	100	195	180	400	140	230	120	25	50	82

齿轮箱浮动底座带N-EUPEX联轴器

Gear Unit Swing-bases with N-EUPEX Couplings

类型 WSB3　规格 4-12　　Type WSB3　Sizes 4-12

表 3 / Table 3

类型 规格 Type Size	符合 DIN42673 准则的 IEC 电机 IEC motor acc. to DIN 42673	e	h	h_1	h_2	l_1	b_1	N-EUPEX 联轴器 N-EUPEX coupling b_2	i_N = 12.5 - 45 i_N = 16 - 56 l_2 2)	i_N = 12.5 - 45 i_N = 16 - 56 l_2★ 2)	i_N = 50 - 71 i_N = 63 - 90 l_2 2)	i_N = 50 - 71 i_N = 63 - 90 l_2★ 2)	带鼓式制动器的 N-EUPEX 联轴器 N-EUPEX coupling with drum brake b_3	b_4	i_N = 12.5 - 45 i_N = 16 - 56 l_3 2)	i_N = 12.5 - 45 i_N = 16 - 56 l_3★ 2)	i_N = 50 - 71 i_N = 63 - 90 l_3 2)	i_N = 50 - 71 i_N = 63 - 90 l_3★ 2)
		mm																
WSB3 .. 4	132 S	950	380	430	610	190	160	145	–	–	1194	1194	170	470	–		1237	
	132 M								–	–	1232	1232			–		1275	
	160 M						200	170	1343	1343	1333	1333			1376		1376	
	160 L								1387	1387	1377	1387			1420		1420	
	180 M							185	1409	1409	1399	1409			1465		1465	
	180 L								1447	1452	–	–	210	590	1503		–	
	200 L							215	1529	1534	–	–			1585		–	
WSB3 .. 5	160 M	1000	450	515	715	205	185	170	–	–	1423	1423	170	470	–		1466	
	160 L								1487	1487	1467	1477			1515		1510	
	180 M							185	1509	1509	1489	1499			1555		1555	
	180 L								1547	1547	1527	1542	210	590	1593		1593	
	200 L						220	215	1629	1629	–	–			1675		–	
	225 S							240	1682	1682	–	–			1759		–	
	225 M								1707	1707	–	–	260	665	1784		–	
WSB3 .. 6	160 M	1050	450	515	715	250	185	170	–	–	1503	1503	170	470	–		1546	
	160 L								1567	1567	1547	1557			1595		1590	
	180 M							185	1589	1589	1569	1579			1635		1635	
	180 L								1627	1627	1607	1622	210	590	1673		1673	
	200 L						220	215	1709	1709	–	–			1755		–	
	225 S							240	1762	1762	–	–			1839		–	
	225 M								1787	1787	–	–	260	665	1864		–	
WSB3 .. 7	180 M	1150	540	630	880	250	215	185	–	–	1669	1669			–		1715	
	180 L								–	–	1707	1707	210	590	–		1753	
	200 L							215	1809	1809	1789	1789			1840		1835	
	225 S						280	240	1862	1862	1842	1842			1919		1919	
	225 M								1887	1887	1867	1867	260	665	1944		1944	
	250 M							265	1974	1974	–				2031		–	
	280 S							300	2048	2048	–		310	765	2147		–	
	280 M								2099	2099	–				2198		–	
WSB3 .. 8	180 M	1200	540	630	880	310	215	185	–	–	1774	1774			–		1820	
	180 L								–	–	1812	1812	210	590	–		1858	
	200 L							215	1914	1914	1894	1894			1945		1940	
	225 S						280	240	1967	1967	1947	1947			2024		2024	
	225 M								1992	1992	1972	1972	260	665	2049		2049	
	250 M							265	2079	2079	–	–			2136		–	
	280 S							300	2153	2153	–	–	310	765	2252		–	
	280 M								2204	2204	–	–			2303		–	
WSB3 .. 9	200 L	1350	630	720	970	300	260	215	–	–	1969	1969	210	590	–	1)	2000	1)
	225 S							240	–	–	2022	2022			–		2079	
	225 M								2057	2057	2047	2047	260	665	2104		2104	
	250 M						305	265	2144	2144	2134	2134			2191		2191	
	280 S							300	2218	2218	2208	2208			2307		2307	
	280 M								2269	2269	–	–			2358		–	
	315 SB							330	2414	2414	–	–	310	765	2503		–	
	315 MB								2465	2475	–	–			2554		–	
	315 MD								2465	2475	–	–			2554		–	
	315 LB								2587	2607	–	–	1)	1)	1)		–	
WSB3 .. 10	200 L	1400	630	720	970	350	260	215	–	–	2069	2069	210	590	–		2100	
	225 S							240	–	–	2122	2122			–		2179	
	225 M								2157	2157	2147	2147	260	665	2204		2204	
	250 M						305	265	2244	2244	2234	2234			2291		2291	
	280 S							300	2318	2318	2308	2308			2407		2407	
	280 M								2369	2369	–	–			2458		–	
	315 SB							330	2514	2514	–	–	310	765	2603		–	
	315 MB								2565	2575	–	–			2654		–	
	315 MD								2565	2575	–	–			2654		–	
	315 LB								2687	2707	–	–	1)	1)	1)		–	
WSB3 .. 11	250 M	1550	740	880	1280	345	355	265	–	–	2349	2349	260	665	–		2396	
	280 S							300	–	–	2423	2423			–		2512	
	280 M								2499	2499	2474	2474			2563		2563	
	315 SB							330	2644	2644	2619	2619	310	765	2708		2708	
	315 MB								2695	2695	2670	2680			2759		2759	
	315 MD								2695	2695	–	–			2759		–	
	315 LB								2817	2817	–	–			2929		–	
	355 MB							380	2886	2886	–	–	385	840	2998		–	
	355 LB								2956	2961	–	–			3073		–	
WSB3 .. 12	250 M	1600	740	880	1280	430	355	265	–	–	2504	2504	260	665	–		2551	
	280 S							300	–	–	2578	2578			–		2667	
	280 M								2654	2654	2679	2629			2718		2718	
	315 SB							330	2799	2799	2774	2774	310	765	2863		2863	
	315 MB								2850	2850	2825	2835			2914		2914	
	315 MD								2850	2850	–	–			2914		–	
	315 LB								2972	2972	–	–			3084		–	
	355 MB							380	3041	3041	–	–	385	840	3153		–	
	355 LB								3111	3116	–	–			3228		–	

齿轮箱浮动底座带N-EUPEX联轴器

Gear Unit Swing-bases with N-EUPEX Couplings

类型 WSB3,WSB4　规格 5-12　　Type WSB3,WSB4　Sizes 5-12

表 4 / Table 4

类型规格 Type Size	符合DIN42673准则的IEC电机 IEC motor acc. to DIN 42673	e	h	h_1	h_2	l_1	b_1	N-EUPEX 联轴器 N-EUPEX coupling			带鼓式制动器的 N-EUPEX 联轴器 N-EUPEX coupling with drum brake			
								b_2	i_N = 80 - 180 i_N = 100 - 224 l_2 2)	i_N = 200 - 315 i_N = 250 - 400 l_2 2)	b_3	b_4	i_N = 80 - 180 i_N = 100 - 224 l_3 2)	i_N = 200 - 315 i_N = 250 - 400 l_3 2)
		mm						mm						
WSB4 .. 5	100 LD	1000	450	515	715	205	185	115	–	1256	170	470	–	1309
	112 M							130	1267	1262			1315	1315
	132 S							145	1319	1314			1367	1367
	132 M								1357	1352			1405	1405
	160 M							170	1458	–			1506	–
	160 L								1502	–			1550	–
	180 M							185	1524	–	210	590	1595	–
WSB4 .. 6	100 LD	1050	450	515	715	250	185	115	–	1336	170	470	–	1389
	112 M							130	1347	1342			1395	1395
	132 S							145	1399	1394			1447	1447
	132 M								1437	1432			1485	1485
	160 M							170	1538	–			1586	–
	160 L								1882	–			1630	–
	180 M							185	1604	–	210	590	1675	–
WSB4 .. 7	132 S	1150	540	630	880	250	215	145	–	1479	170	470	–	1552
	132 M								1527	1517			1560	1560
	160 M							170	1628	1618			1661	1661
	160 L								1672	1662			1705	1705
	180 M							185	1694	–			1750	–
	180 L								1732	–	210	590	1788	–
	200 L							215	1814	–			1870	–
WSB4 .. 8	132 S	1200	540	630	880	310	215	145	–	1584	170	470	–	1627
	132 M								1632	1622			1665	1665
	160 M							170	1733	1723			1766	1766
	160 L								1777	1767			1810	1810
	180 M							185	1799	–			1855	–
	180 L								1837	–	210	590	1893	–
	200 L							215	1919	–			1975	–
WSB4 .. 9	132 M	1350	630	720	970	300	260	145	–	1682	170	470	–	1725
	160 M							170	–	1783			–	1826
	160 L								1847	1827			1875	1870
	180 M							185	1969	1849			1915	1915
	180 L								1907	1887	210	590	1953	1953
	200 L							215	1989	–			2035	–
	225 S							240	2042	–			2119	–
	225 M								2067	–	260	665	2144	–
	250 M						305	265	2154	–			2231	–
WSB4 .. 10	132 M	1400	630	720	970	350	260	145	–	1782	170	470	–	1825
	160 M							170	–	1883			–	1926
	160 L								1947	1927			1975	1970
	180 M							185	1969	1949			2015	2015
	180 L								2007	1987	210	590	2053	2053
	200 L							215	2089	–			2135	–
	225 S							240	2142	–			2219	–
	225 M								2167	–	260	665	2244	–
	250 M						305	265	2254	–			2331	–
WSB4 .. 11	160 L	1550	740	880	1280	345	270	170	–	2062	170	470	–	2090
	180 M							185	–	2084			–	2130
	180 L								2142	2122	210	590	2173	2168
	200 L							215	2224	2204			2255	2250
	225 S							240	2277	2257			2334	2334
	225 M								2302	–	260	665	2359	–
	250 M						355	265	2389	–			2446	–
	280 S							300	2463	–	310	765	2562	–
	280 M								2514	–			2613	–
WSB4 .. 12	160 L	1600	740	880	1280	430	270	170	–	2217	170	470	–	2245
	180 M							185	–	2239			–	2285
	180 L								2297	2277	210	590	2328	2323
	200 L							215	2379	2359			2410	2405
	225 S							240	2432	2412			2489	2489
	225 M								2457	–	260	665	2514	–
	250 M						355	265	2544	–			2601	–
	280 S							300	2618	–	310	765	2717	–
	280 M								2669	–			2768	–

1）敬请垂询

2）l_2*, l_3* 用于带冷却风扇的齿轮箱

1) On request

2) l_2*, l_3* for gear units with fan

齿轮箱浮动底座带N-EUPEX联轴器

Gear Unit Swing-bases with N-EUPEX Couplings

类型 WSB3,WSB4　规格 13-18　　Type WSB3,WSB4　Sizes13-18

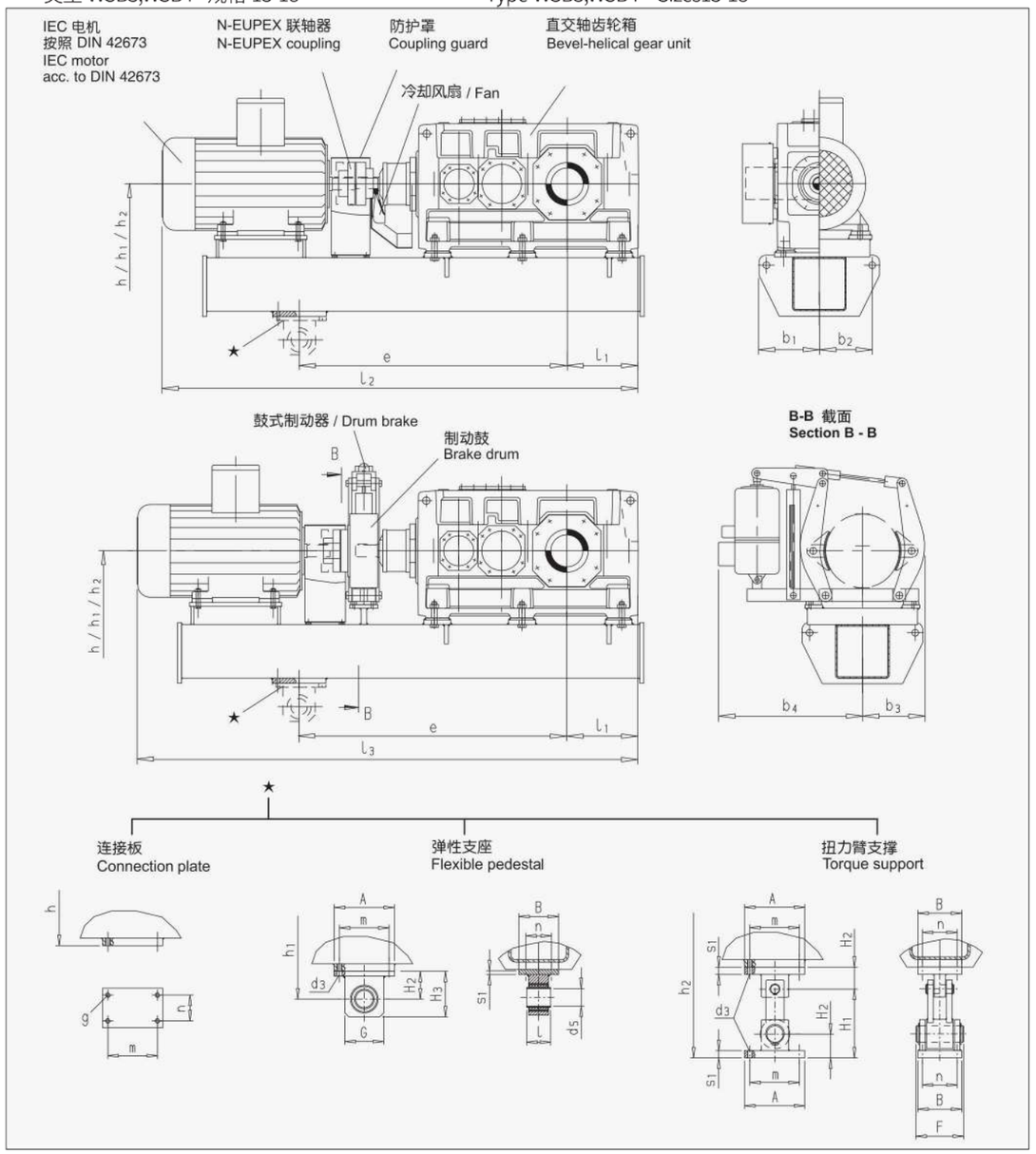


表 5 / Table 5

规格 Size	衬套 Bush	m	n	g	d_3	A	B	d_5	F	G	H_1	H_2	H_3	l	s_1	重量 / Weight 支座 Pedestal	重量 / Weight 扭力臂支撑 Torque support
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg
13 - 14	772	260	130	∅19	19	320	200	100	195	180	400	140	230	120	25	50	82
15 - 18	805	320	240	∅24	24	400	300	124	320	240	500	175	285	230	30	95	220

齿轮箱浮动底座带N-EUPEX联轴器

Gear Unit Swing-bases with N-EUPEX Couplings

类型 WSB3　规格13-18　　Type WSB3　Sizes 13-18

表 6 / Table 6

类型 规格 Type Size	符合 DIN42673 准则的 IEC 电机 IEC motor acc. to DIN 42673	e	h	h_1	h_2	l_1	b_1	b_2	N-EUPEX 联轴器 N-EUPEX coupling i_N = 12.5 - 45 / i_N = 16 - 56 / i_N = 14 - 50 l_2 2)	l_2* 2)	i_N = 50 - 71 / i_N = 63 - 90 / i_N = 56 - 80 l_2 2)	l_2* 2)	带鼓式制动器的 N-EUPEX 联轴器 N-EUPEX coupling with drum brake b_3	b_4	i_N = 12.5 - 45 / i_N = 16 - 56 / i_N = 14 - 50 l_3 2)	l_3* 2)	i_N = 50 - 71 / i_N = 63 - 90 / i_N = 56 - 80 l_3 2)	l_3* 2)
		mm																
WSB3 .. 13	280 M	1750	800	940	1340	405	345	300	–	–	2729	2729	310	765	–		2788	
	315 SB								–	–	2874	2874			–		2933	
	315 MB							330	2950	2950	2925	2925			2999		2984	
	315 MD								2950	2950	2925	2925			2999		2984	
	315 LB								3072	3072	3047	3047			3154		3154	
	355 MB							380	3141	3141	–	–			3223		–	
	355 LB								3211	3211	–	–	385	840	3298		–	
	400 MB							420	3471	3471	–	–			3558		–	
	400 MD								3471	3471	–	–			3558		–	
WSB3 .. 14	280 M	1750	800	940	1340	475	345	300	–	–	2869	2869	310	765	–		2928	
	315 SB								–	–	3014	3014			–		3073	
	315 MB							330	3090	3090	3065	3065			3139		3124	
	315 MD								3090	3090	3065	3065			3139		3124	
	315 LB								3212	3212	3187	3187			3294		3294	
	355 MB							380	3281	3281	–	–			3363		–	
	355 LB								3351	3351	–	–	385	840	3438		–	
	400 MB							420	3611	3611	–	–			3698		–	
	400 MD								3611	3611	–	–			3698		–	
WSB3 .. 15	315 MB	2000	990	1165	1665	485	345	330	–	–	3247	3247	310	765	–		3306	
	315 MD								–	–	3247	3247			–		3306	
	315 LB								–	–	3369	3369			–		3476	
	355 MB							380	3463	3463	3438	3438			3545		3545	
	355 LB								3533	3533	3508	3513	385	840	3620		3620	
	400 MB							420	3793	3793	–	–			3880		–	
	400 MD								3793	3793	–	–			3880		–	
WSB3 .. 16	315 MB	2000	990	1165	1665	530	345	330	–	–	3338	3338	310	765	–		3397	
	315 MD								–	–	3338	3338			–		3397	
	315 LB								–	–	3460	3460			–		3567	
	355 MB							380	3554	3554	3529	3529			3636		3636	
	355 LB								3624	3624	3599	3604	385	840	3711		3711	
	400 MB							420	3884	3884	–	–			3971		–	
	400 MD								3884	3884	–	–			3971		–	
WSB3 .. 17	315 MB	2200	1050	1225	1725	525	500	330	–	–	3632	3632	385	840	–		3709	
	355 MD							380	–	–	3701	3701			–		3778	
	355 LB								3806	3806	3771	3771			3868		3853	
	400 MB							420	4066	4066	4031	4031			4128		4113	
	400 MD								4066	4066	4031	4031			4128		4113	
WSB3 .. 18	315 LB	2200	1050	1225	1725	585	500	330	–	–	3752	3752	385	840	–		3829	
	355 MB							380	–	–	3821	3821			–		3898	
	355 LB								3926	3926	3891	3891			3988		3973	
	400 MB							420	4186	4186	4151	4151			4248		4233	
	400 MD								4186	4186	4151	4151			4248		4233	

1）敬请垂询

2）l_2*，l_3* 用于带冷却风扇的齿轮箱

齿轮箱浮动底座的重量请垂询

1) On request

2) l_2*, l_3* for gear units with fan

Weight of gear unit swing-base on request

齿轮箱浮动底座带N-EUPEX联轴器

Gear Unit Swing-bases with N-EUPEX Couplings

类型 WSB4　规格13-18　　Type WSB4　Sizes 13-18

表 7 / Table 7

类型 规格 Type Size	符合 DIN42673 准则的 IEC 电机 IEC motor acc. to DIN 42673	e	h	h_1	h_2	l_1	b_1	b_2	N-EUPEX 联轴器 N-EUPEX coupling i_N = 80 - 180 / i_N = 100 - 224 / i_N = 90 - 200 l_2 2)	i_N = 200 - 315 / i_N = 250 - 400 / i_N = 224 - 355 l_2 2)	带鼓式制动器的 N-EUPEX 联轴器 N-EUPEX coupling with drum brake b_3	b_4	i_N = 80 - 180 / i_N = 100 - 224 / i_N = 90 - 200 l_3 2)	i_N = 200 - 315 / i_N = 250 - 400 / i_N = 224 - 355 l_3 2)
		mm												
WSB4 .. 13	180 M	1750	800	940	1340	405	345	185	–	2324	210	590	–	2355
	180 L								–	2362			–	2393
	200 L							215	–	2444			–	2475
	225 S							240	2507	2497	260	665	2554	2554
	225 M								2532	2522			2579	2579
	250 M							265	2619	2609			2666	2666
	280 S							300	2693	–	310	765	2782	–
	280 M								2744	–			2833	–
	315 SB							330	2889	–			2978	–
	315 MB								2940	–			3029	–
WSB4 .. 14	180 M	1750	800	940	1340	475	345	185	–	2464	210	590	–	2495
	180 L								–	2502			–	2533
	200 L							215	–	2584			–	2615
	225 S							240	2647	2637	260	665	2694	2694
	225 M								2672	2662			2719	2719
	250 M							265	2759	2749			2806	2806
	280 S							300	2833	–	310	765	2922	–
	280 M								2884	–			2973	–
	315 SB							330	3029	–			3118	–
	315 MB								3080	–			3169	–
WSB4 .. 15	200 L	2000	990	1165	1665	485	345	215	–	2766	210	590	–	2797
	225 S							240	–	2819	260	665	–	2866
	225 M								–	2844			–	2891
	250 M							265	2956	2931			2995	2978
	280 S							300	3030	3005	310	765	3111	3094
	280 M								3081	3056			3145	3145
	315 SB							330	3226	–			3290	–
	315 MB								3277	–			3341	–
	315 MD								3277	–			3341	–
	315 LB								3399	–	385	840	3511	–
WSB4 .. 16	200 L	2000	990	1165	1665	530	345	215	–	2857	210	590	–	2888
	225 S							240	–	2910	260	665	–	2957
	225 M								–	2935			–	2982
	250 M							265	3047	3022			3086	3069
	280 S							300	3121	3096	310	765	3202	3185
	280 M								3172	3147			3236	3236
	315 SB							330	3317	–			3381	–
	315 MB								3368	–			3432	–
	315 MD								3368	–			3432	–
	315 LB								3490	–	385	840	3602	–
WSB4 .. 17	225 M	2200	1050	1225	1725	525	500	240	–	2932	260	665	–	2979
	250 M							265	–	3019			–	3066
	280 S							300	3118	3093	310	765	3199	3182
	280 M								3169	3144			3233	3233
	315 SB							330	3314	3289			3378	3378
	315 MB								3365	–			3429	–
	315 MD								3365	–			3429	–
	315 LB								3487	–			3599	–
	355 MB							380	3556	–	385	840	3668	–
	355 LB								3626	–			3743	–
WSB4 .. 18	225 M	2200	1050	1225	1725	585	500	240	–	3052	260	665	–	3099
	250 M							265	–	3139			–	3186
	280 S							300	3238	3213	310	765	3319	3302
	280 M								3289	3264			3353	3353
	315 SB							330	3434	3409			3498	3498
	315 MB								3485	–			3549	–
	315 MD								3485	–			3549	–
	315 LB								3607	–			3719	–
	355 MB							380	3676	–	385	840	3788	–
	355 LB								3746	–			3863	–

1）敬请垂询

2）l_2*，l_3* 用于带冷却风扇的齿轮箱

齿轮箱浮动底座的重量请垂询

1) On request

2) l_2*, l_3* for gear units with fan

Weight of gear unit swing-base on request

特殊安装位置

Special Mounting Positions

规格4-18　　Sizes 4-18

对于下图所示的特殊安装位置也可以提供WSH2…, WSH3..,WSH4.., WSB2.., WSB3..和WSB4类型的弗兰德齿轮箱。

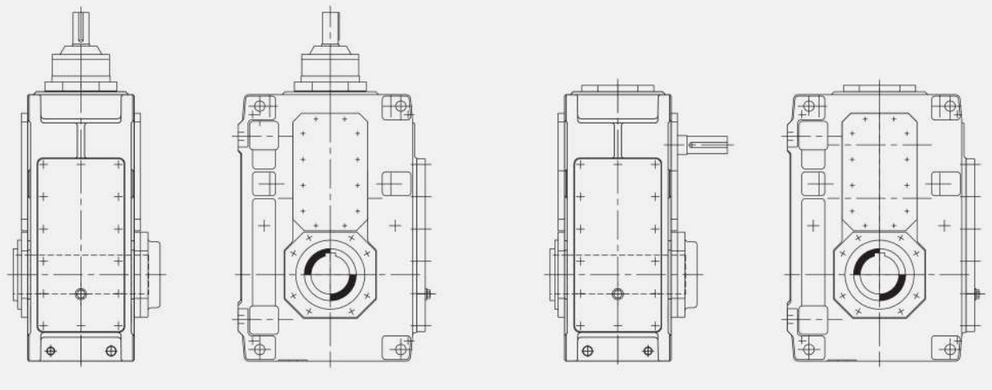
例如这些齿轮箱可以采用带扭力臂支撑的轴装式或脚支座来安装。

润滑油供给方式请参考表 2

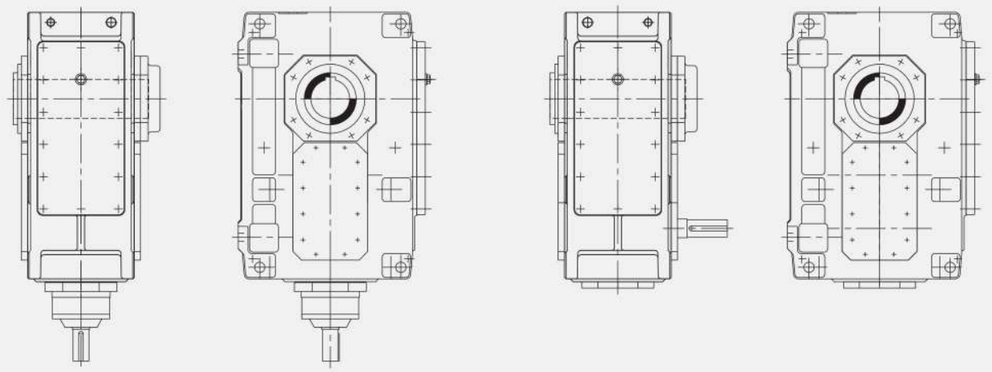
FLENDER gear units of types WSH2. WSH3.. WSH4.., WSB2.. WSB3.. and WSB4.. are also available for the special mounting positions illustrated below.

They can be installed, for example, as shaft-mounted gear unit with torque support or by means of base rails.
For oil supply, take into account table 2.

安装位置：输入轴 d_1 在上部
Mounting position: Shaft d_1 upward



安装位置：输入轴 d_1 在下部
Mounting position: Shaft d_1 downward



特殊安装位置齿轮脚支座

Special Mounting Positions Housing Base Rails

规格4-18　　Sizes 4-18

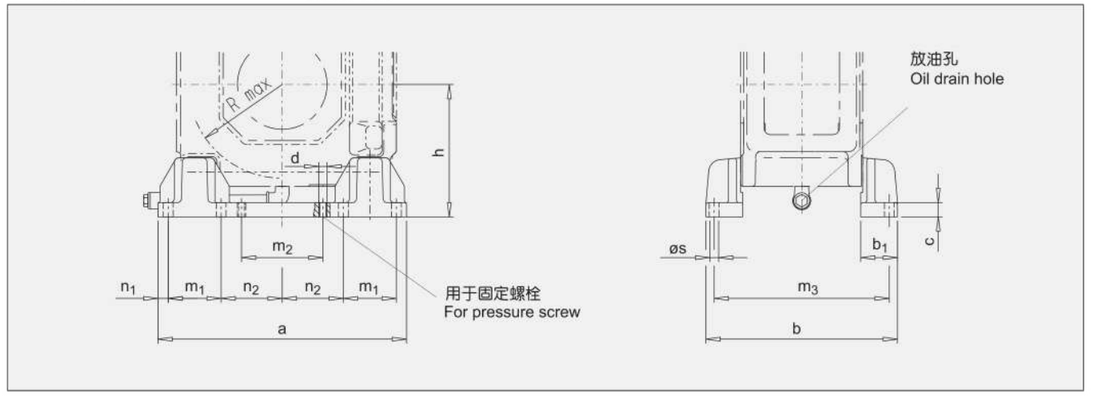


表 1 / Table 1

规格 Size	WSH2,WSH3,WSH4,WSB2,WSB3,WSB4											WSH2,WSH3,WSH4 WSB3,WSB4		WSB2	
	a	b_1	c	4 x d	h	m_1	m_2	n_1	n_2	8 x ϕs	R_{max}	b	m_3	b	m_3
	mm														
4	450	75	28	M16	255	110	130	20	95	19	160	355	315	–	–
5	510	75	28	M16	270	110	170	20	125	19	190	395	355	460	420
6					315						220				
7	610	90	35	M20	325	130	200	25	150	24	230	470	420	550	500
8					385						270				
9	710	110	40	M24	380	160	230	30	165	28	260	580	520	650	590
10					430						300				
11	860	120	50	M30	435	190	270	35	205	35	340	660	590	760	690
12					520						380				
13	965	100	60	M30	430	260	230	37.5	185	35	300	745	665	850	770
14					500						360				
15	1060	110	70	M36	505	300	190	45	185	42	350	840	750	980	890
16					550						400				
17	1210	125	80	M42	550	340	250	55	210	48	390	930	820	1125	1015
18					610						440				

表 2 / Table 2

规格 Size	WSH2	WSH3	WSH4	WSB2	WSB3	WSB4
4 - 12	浸油润滑 Dip lubrication	带补油箱 的浸油润滑 Dip lubrication with oil compensating tank	带补油箱 的浸油润滑 Dip lubrication with oil compensating tank	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump
13 - 18	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带电动泵 的强制润滑 Forced lubrication with motor pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带法兰泵 的强制润滑 Forced lubrication with flanged-on pump	带电动泵 的强制润滑 Forced lubrication with motor pump

请注意提供供油设备（油泵，油管等 ……）的安装空间!
具体尺寸请垂询

Take into account space required for oil supply elements (pump, pipes, etc.)!
Dimensions on request

水处理用螺旋输送机

For Water Screws

类型 WSB3SH　规格 4-12　　Type WSB3SH　Sizes 4-12

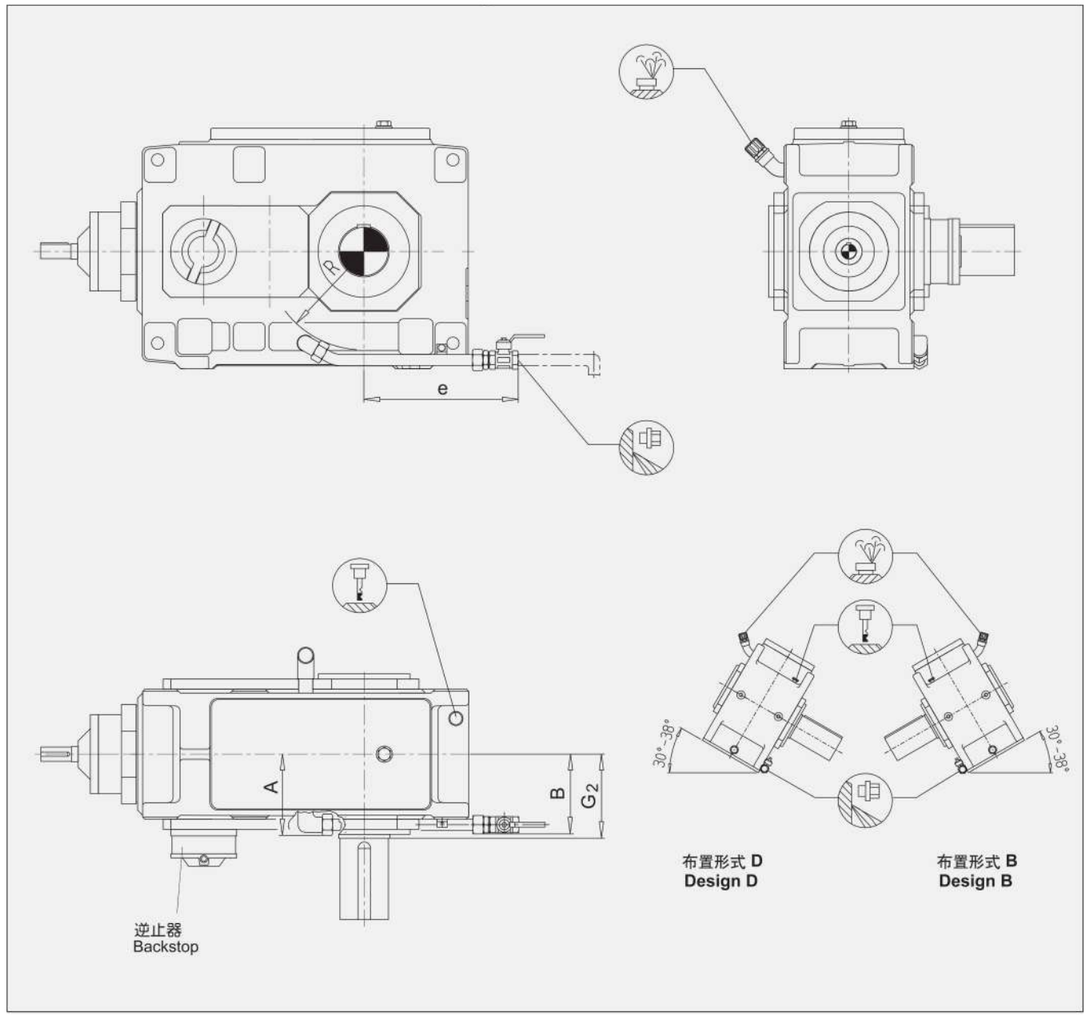


表 1 / Table 1

类型 Type	规格 Size	A mm	B mm	G_2 mm	e mm	泄油阀 Oil drain valve	R mm
WSB3SH	4	145	135	140	285	G 3/4	125
	5	160	156.5	165	305	G 3/4	–
	6				345		–
	7	190	185	195	360	G 1	–
	8				420		–
	9	220	220	235	410	G 1	–
	10				460		–
	11	258	260	270	465	G 1 1/4	–
	12				550		–

水处理用螺旋输送机

For Water Screws

类型 WSB3SH　规格 13-18　　Type WSB3SH　Sizes 13-18

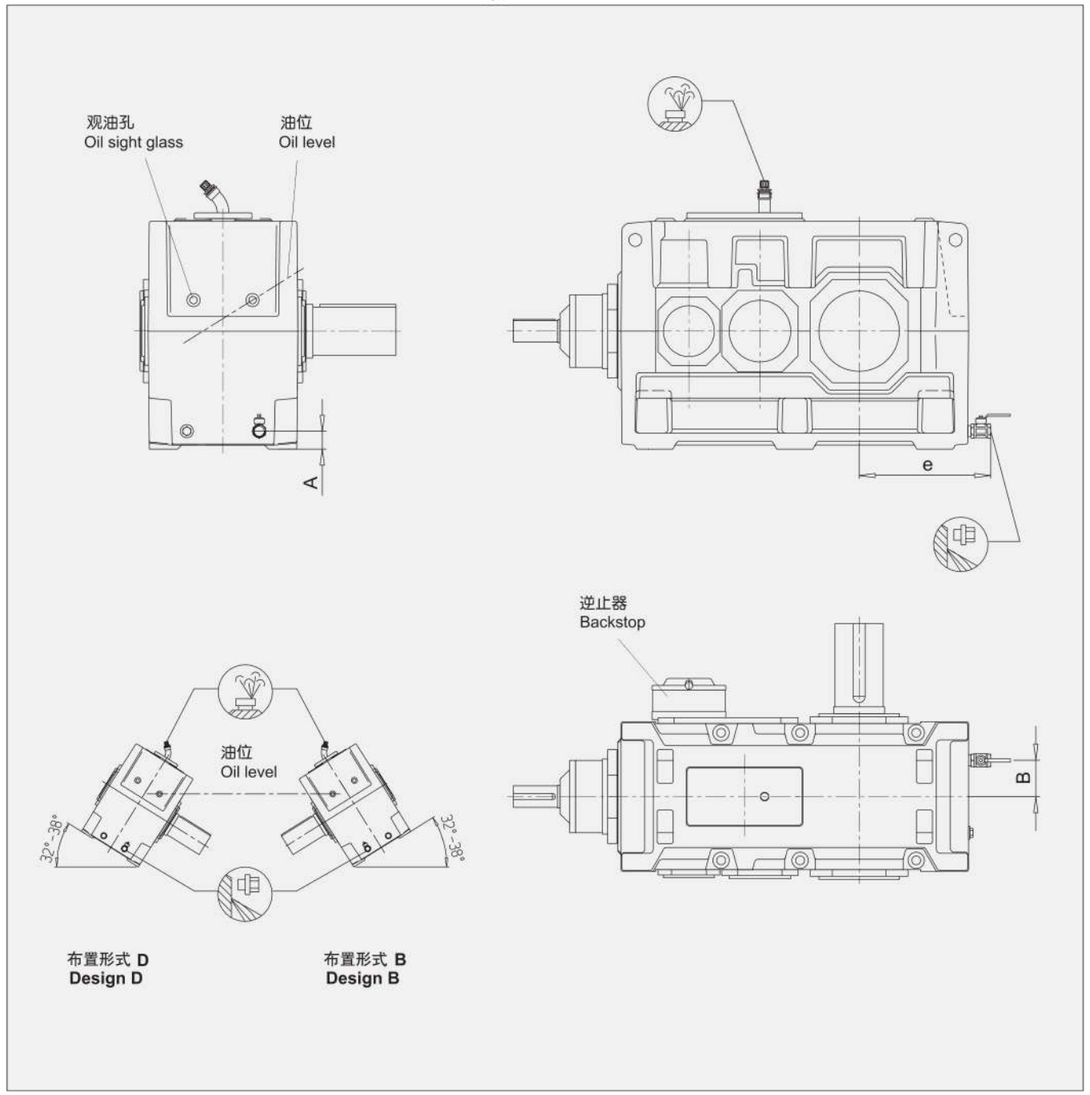


表 2 / Table 2

类型 Type	规格 Size	A mm	B mm	e mm	泄油阀 Oil drain valve
WSB3SH	13	67	135	500	G 1 1/4
	14			570	
	15	80	150	610	G 2
	16			655	
	17	85	180	650	G 2
	18			710	

电机支架/卧式安装

Motor Brackets / Horzontal

类型 WSH3.H 规格 5-10　　Type WSH3.H Sizes 5-10

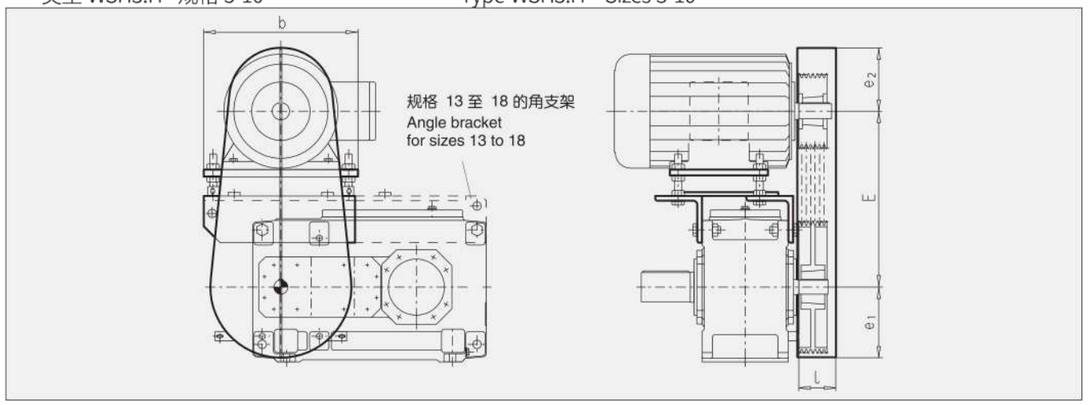


表 1 / Table 1

类型 规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b	E	e_1	e_2	l
WSH3.H 05	132 S	71 - 90	1.25 1.4 1.6 1.8	89 - 162	SPZ 140	2	390	493	180	177	120
	132 M	50 - 90		63 - 162	SPZ 140	3	390	493	180	177	120
	160 M	35.5 - 71		44 - 128	SPZ 180	3	390	530	180	140	120
	160 L	25 - 50		31 - 90	SPA 180	3	390	530	180	140	120
WSH3.H 06	132 S	90 - 112	1.25 1.4 1.6 1.8	113 - 202	SPZ 140	2	390	493	180	177	120
	132 M	63 - 112		79 - 202	SPZ 140	3	390	493	180	177	120
	160 M	45 - 90		56 - 162	SPZ 180	3	390	530	180	140	120
	160 L	31.5 - 71		39 - 128	SPA 180	3	390	530	180	140	120
WSH3.H 07	160 M	63 - 90	1.25 1.4 1.6 1.8	79 - 162	SPZ 180	3	460	586	250	224	120
	160 L	50 - 90		63 - 162	SPA 180	3	460	586	250	224	120
	180 M	40 - 71		50 - 128	SPA 250	3	460	626	250	184	120
	180 L	31.5 - 63		39 - 113	SPA 250	3	460	626	250	184	120
	200 L	25 - 45		31 - 54	SPB 280	3	570	680	200	200	150
	225 S	25 - 40		31 - 50	SPB 280	3	570	680	200	200	150
WSH3.H 08	160 M	80 - 112	1.25 1.4 1.6 1.8	100 - 202	SPZ 180	3	460	586	250	224	120
	160 L	63 - 112		79 - 202	SPA 180	3	460	586	250	224	120
	180 M	50 - 90		63 - 162	SPA 250	3	460	626	250	184	120
	180 L	40 - 80		50 - 144	SPA 250	3	460	626	250	184	120
	200 L	31.5 - 56		39 - 70	SPB 280	3	570	680	200	200	150
	225 S	31.5 - 50		39 - 63	SPB 280	3	570	680	200	200	150
WSH3.H 09	160 L	80 - 90	1.25 1.4 1.6 1.8	100 - 162	SPA 180	3	460	615	250	235	135
	180 M	71 - 90		89 - 162	SPA 250	3	460	664	250	186	135
	180 L	56 - 90		70 - 162	SPA 250	3	460	664	250	186	135
	200 L	40 - 80		50 - 144	SPB 280	3	570	747	275	203	150
	225 S	31.5 - 63		39 - 113	SPB 280	3	570	750	275	200	150
	225 M	28 - 50		35 - 90	SPB 280	4	570	750	275	200	150
	250 M	25 - 45		31 - 81	SPB 315	4	660	804	305	226	150
WSH3.H 10	160 L	100; 112	1.25 1.4 1.6 1.8	125 - 202	SPA 180	3	460	615	250	235	135
	180 M	80 - 112		100 - 202	SPA 250	3	460	664	250	186	135
	180 L	71 - 112		89 - 202	SPA 250	3	460	664	250	186	135
	200 L	50 - 100		63 - 180	SPB 280	3	570	747	275	203	150
	225 S	40 - 80		50 - 144	SPB 280	3	570	750	275	200	150
	225 M	31.5 - 63		39 - 113	SPB 280	4	570	750	275	200	150
	250 M	31.5 - 56		39 - 101	SPB 315	4	660	804	305	226	150

电机支架/卧式安装

Motor Brackets / Horzontal

类型 WSH3.H 规格 11-18　　Type WSH3.H Sizes 11-18

类型 规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e_1 mm	e_2 mm	l mm
WSH3.H 11	200 L	71 - 90	1.25 1.4 1.6 1.8	89 - 162	SPB 280	3	570	825	275	200	150
	225 S	56 - 90		70 - 162	SPB 280	3	570	825	275	200	150
	225 M	50 - 90		63 - 162	SPB 280	4	570	825	275	200	150
	250 M	40 - 71		50 - 128	SPB 315	4	720	897	305	268	150
	280 S	31.5 - 56		39 - 101	SPB 315	5	720	938	305	227	150
	280 M	25 - 45		31 - 81	SPB 315	6	720	938	305	227	150
	315 S	25 - 35.5		31 - 64	SPC 355	5	810	1001	340	249	180
WSH3.H 12	200 L	90 - 112	1.25 1.4 1.6 1.8	113 - 202	SPB 280	3	570	825	275	200	150
	225 S	71 - 112		89 - 202	SPB 280	3	570	825	275	200	150
	225 M	63 - 112		79 - 202	SPB 280	4	570	825	275	200	150
	250 M	50 - 90		63 - 162	SPB 315	4	720	897	305	268	150
	280 S	35.5 - 63		44 - 113	SPB 315	5	720	938	305	227	150
	280 M	31.5 - 56		39 - 101	SPB 315	6	720	938	305	227	150
	315 S	31.5 - 45		39 - 81	SPC 355	5	810	1001	340	249	180
WSH3.H 13	225 M	80; 90	1.25 1.4 1.6 1.8	100 - 162	SPB 280	4	570	881	275	199	175
	250 M	63 - 90		79 - 162	SPB 315	4	720	938	305	227	155
	280 S	45 - 80		56 - 144	SPB 315	5	720	938	305	227	155
	280 M	40 - 71		50 - 128	SPB 315	6	720	938	305	227	155
	315 S	31.5 - 56		39 - 101	SPC 355	5	810	1042	380	268	225
	315 M	22.4 - 50		28 - 90	SPC 355	6	810	1042	380	268	225
WSH3.H 14	225 M	90 - 112	1.25 1.4 1.6 1.8	113 - 202	SPB 280	4	570	881	275	199	175
	250 M	80 - 112		100 - 202	SPB 315	4	720	938	305	227	155
	280 S	56 - 100		70 - 180	SPB 315	5	720	938	305	227	155
	280 M	45 - 90		56 - 162	SPB 315	6	720	938	305	227	155
	315 S	40 - 71		50 - 128	SPC 355	5	810	1042	380	268	225
	315 M	28 - 63		35 - 113	SPC 355	6	810	1042	380	268	225
WSH3.H 15	280 S	80; 90	1.25 1.4 1.6 1.8	100 - 162	SPB 315	5	720	980	305	225	215
	280 M	63 - 90		79 - 162	SPB 315	6	720	980	305	225	215
	315 S	50 - 90		63 - 162	SPC 355	5	810	1060	380	270	225
	315 M	45 - 80		56 - 144	SPC 355	6	810	1060	380	270	225
	315 MD 1)	35.5 - 45		44 - 81	SPC 400	8	810	1060	380	270	225
	315 LB 1)	22.4 - 45		28 - 81	SPC 400	8	810	1060	380	270	225
WSH3.H 16	280 S	90; 100	1.25 1.4 1.6 1.8	113 - 180	SPB 315	5	720	980	305	225	215
	280 M	71 - 100		89 - 180	SPB 315	6	720	980	305	225	215
	315 S	56 - 100		70 - 180	SPC 355	5	810	1060	380	270	225
	315 M	50 - 90		63 - 162	SPC 355	6	810	1060	380	270	225
	315 MD 1)	40 - 50		50 - 90	SPC 400	8	810	1060	380	270	225
	315 LB 1)	25 - 50		31 - 90	SPC 400	8	810	1060	380	270	225
WSH3.H 17	280 M	80; 90	1.25 1.4 1.6 1.8	100 - 162	SPB 315	6	720	1072	305	223	215
	315 S	71 - 90		89 - 162	SPC 355	5	810	1117	380	268	225
	315 M	63 - 90		79 - 162	SPC 355	6	810	1117	380	268	225
	315 MD 1)	50 - 90		63 - 162	SPC 400	8	810	1117	380	268	225
	315 LB 1)	22.4 - 45		28 - 81	SPC 400	8	810	1117	380	268	225
WSH3.H 18	280 M	100	1.25 1.4 1.6 1.8	125 - 180	SPB 315	6	720	1072	305	223	215
	315 S	90; 100		113 - 180	SPC 355	5	810	1117	380	268	225
	315 M	71 - 100		89 - 180	SPC 355	6	810	1117	380	268	225
	315 MD 1)	63 - 100		79 - 180	SPC 400	8	810	1117	380	268	225
	315 LB 1)	25 - 50		31 - 90	SPC 400	8	810	1117	380	268	225

1) Loher 电机规格　　1) Loher sizes

电机支架/卧式安装

Motor Brackets / Horzontal

类型 WSH4.H 规格 7-12　　Type WSH4.H Sizes 7-12

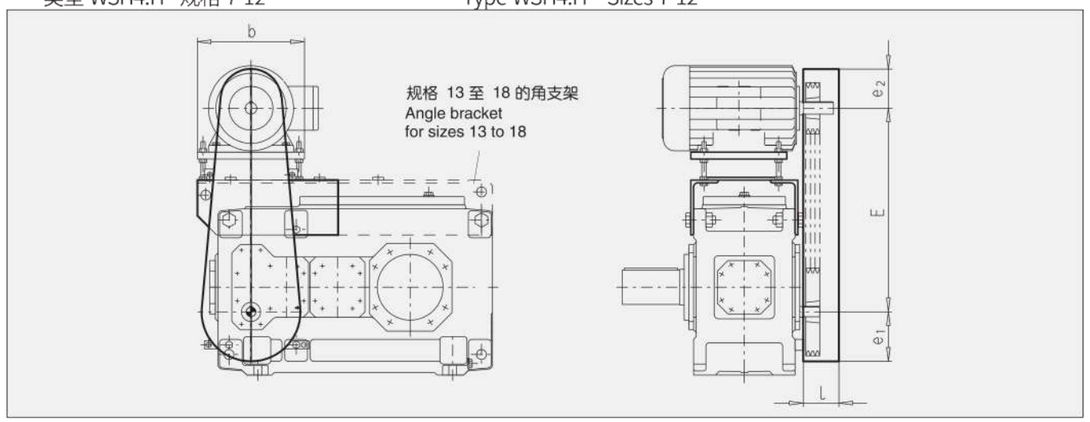


表 2 / Table 2

类型 规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e_1 mm	e_2 mm	l mm
WSH4.H 07	100 LB	315; 355	1.25 1.4 1.6 1.8	394 - 639	SPZ 100	2	310	597	125	123	70
	100 LD	250 - 355		313 - 639	SPZ 100	2	310	597	125	123	70
	112 M	180 - 355		225 - 639	SPZ 112	2	310	613	125	107	70
	132 S	140 - 250		175 - 450	SPZ 140	2	350	632	150	123	90
	132 M	100 - 180		125 - 324	SPZ 140	3	350	632	150	123	90
WSH4.H 08	100 LB	400; 450	1.25 1.4 1.6 1.8	500 - 810	SPZ 100	2	310	597	125	123	70
	100 LD	315 - 450		394 - 810	SPZ 100	2	310	597	125	123	70
	112 M	224 - 450		280 - 810	SPZ 112	2	310	613	125	107	70
	132 S	180 - 355		225 - 639	SPZ 140	2	350	632	150	123	90
	132 M	125 - 250		156 - 450	SPZ 140	3	350	632	150	123	90
WSH4.H 09	112 M	315; 355	1.25 1.4 1.6 1.8	394 - 639	SPZ 112	2	390	672	125	108	70
	132 S	224 - 355		280 - 639	SPZ 140	2	390	701	180	154	120
	132 M	160 - 315		200 - 567	SPZ 140	3	390	701	180	154	120
	160 M	112 - 224		140 - 403	SPZ 180	3	390	742	180	143	120
	160 L	100 - 160		125 - 288	SPA 180	3	390	742	180	143	120
WSH4.H 10	112 M	400; 450	1.25 1.4 1.6 1.8	500 - 810	SPZ 112	2	390	672	125	108	70
	132 S	280 - 450		350 - 810	SPZ 140	2	390	701	180	154	120
	132 M	200 - 400		250 - 720	SPZ 140	3	390	701	180	154	120
	160 M	140 - 280		175 - 504	SPZ 180	3	390	742	180	143	120
	160 L	125 - 180		156 - 324	SPA 180	3	390	742	180	143	120
WSH4.H 11	132 M	280 - 355	1.25 1.4 1.6 1.8	350 - 639	SPZ 140	3	460	785	150	120	110
	160 M	200 - 355		250 - 639	SPZ 180	3	460	842	250	198	120
	160 L	140 - 280		175 - 504	SPA 180	3	460	842	250	198	120
	180 M	125 - 224		156 - 403	SPA 250	3	460	852	250	188	120
	180 L	100 - 180		125 - 324	SPA 250	3	460	852	250	188	120
	200 L	100 - 140		125 - 252	SPB 280	3	520	923	250	202	120
WSH4.H 12	132 M	355 - 450	1.25 1.4 1.6 1.8	444 - 810	SPZ 140	3	460	785	150	120	110
	160 M	250 - 450		313 - 810	SPZ 180	3	460	842	250	198	120
	160 L	180 - 355		225 - 639	SPA 180	3	460	842	250	198	120
	180 M	140 - 280		175 - 504	SPA 250	3	460	852	250	188	120
	180 L	125 - 224		156 - 403	SPA 250	3	460	852	250	188	120
	200 L	125 - 180		156 - 324	SPB 280	3	520	923	250	202	120

电机支架/卧式安装

Motor Brackets / Horzontal

类型 WSH4.H 规格 13-18　　Type WSH4.H Sizes 13-18

类型 规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e_1 mm	e_2 mm	l mm
WSH4.H 13	160 M	315; 355	1.25 1.4 1.6 1.8	394 - 639	SPZ 180	3	460	934	250	166	125
	160 L	224 - 355		280 - 639	SPA 180	3	460	934	250	166	125
	180 M	180 - 355		225 - 639	SPA 250	3	460	914	250	186	125
	180 L	160 - 280		200 - 504	SPA 250	3	460	914	250	186	125
	200 L	112 - 224		140 - 403	SPB 280	3	570	1001	275	214	155
	225 S	100 - 180		125 - 324	SPB 280	3	570	1001	275	214	155
	225 M	100 - 140		125 - 252	SPB 280	4	570	1001	275	214	155
WSH4.H 14	160 M	400; 450	1.25 1.4 1.6 1.8	500 - 810	SPZ 180	3	460	934	250	166	125
	160 L	280 - 450		350 - 810	SPA 180	3	460	934	250	166	125
	180 M	224 - 450		280 - 810	SPA 250	3	460	914	250	186	125
	180 L	200 - 355		250 - 639	SPA 250	3	460	914	250	186	125
	200 L	140 - 280		175 - 504	SPB 280	3	570	1001	275	214	155
	225 S	125 - 224		156 - 403	SPB 280	3	570	1001	275	214	155
	225 M	125 - 180		156 - 324	SPB 280	4	570	1001	275	214	155
WSH4.H 15	160 L	355	1.25 1.4 1.6 1.8	444 - 639	SPA 180	3	460	928	250	232	150
	180 M	315; 355		394 - 639	SPA 250	3	460	964	250	196	150
	180 L	250 - 355		313 - 639	SPA 250	3	460	964	250	196	150
	200 L	180 - 355		225 - 639	SPB 280	3	570	1057	275	208	155
	225 S	160 - 280		200 - 504	SPB 280	3	570	1057	275	208	155
	225 M	125 - 250		156 - 450	SPB 280	4	570	1057	275	208	155
	250 M	100 - 200		125 - 360	SPB 315	4	660	1131	305	229	155
WSH4.H 16	180 M	280 - 400	1.25 1.4 1.6 1.8	350 - 720	SPA 250	3	460	964	250	196	150
	180 L	224 - 400		280 - 720	SPA 250	3	460	964	250	196	150
	200 L	180 - 355		225 - 639	SPB 280	3	570	1057	275	208	155
	225 S	140 - 280		175 - 504	SPB 280	3	570	1057	275	208	155
	225 M	112 - 224		140 - 403	SPB 280	4	570	1057	275	208	155
	250 M	112 - 224		140 - 403	SPB 315	4	660	1131	305	229	155
WSH4.H 17	180 L	355	1.25 1.4 1.6 1.8	444 - 639	SPA 250	3	520	1047	275	190	125
	200 L	250 - 355		313 - 639	SPB 280	3	520	1098	275	207	125
	225 S	200 - 355		250 - 639	SPB 280	3	660	1157	305	253	155
	225 M	180 - 315		225 - 567	SPB 280	4	660	1157	305	253	155
	250 M	140 - 280		175 - 504	SPB 315	4	660	1181	305	229	155
	280 S	100 - 200		125 - 360	SPB 315	5	720	1231	305	229	155
	280 M	100 - 160		125 - 288	SPB 315	6	720	1231	305	229	155
WSH4.H 18	200 L	315 - 400	1.25 1.4 1.6 1.8	394 - 720	SPB 280	3	520	1098	275	207	125
	225 S	250 - 400		313 - 720	SPB 280	3	660	1157	305	253	155
	225 M	224 - 400		280 - 720	SPB 280	4	660	1157	305	253	155
	250 M	180 - 355		225 - 639	SPB 315	4	660	1181	305	229	155
	280 S	125 - 250		156 - 450	SPB 315	5	720	1231	305	229	155
	280 M	112 - 200		140 - 360	SPB 315	6	720	1231	305	229	155

电机支架/卧式安装

Motor Brackets / Horzontal

类型 WSB3.H 规格 4-10　　Type WSB3.H Sizes4-10

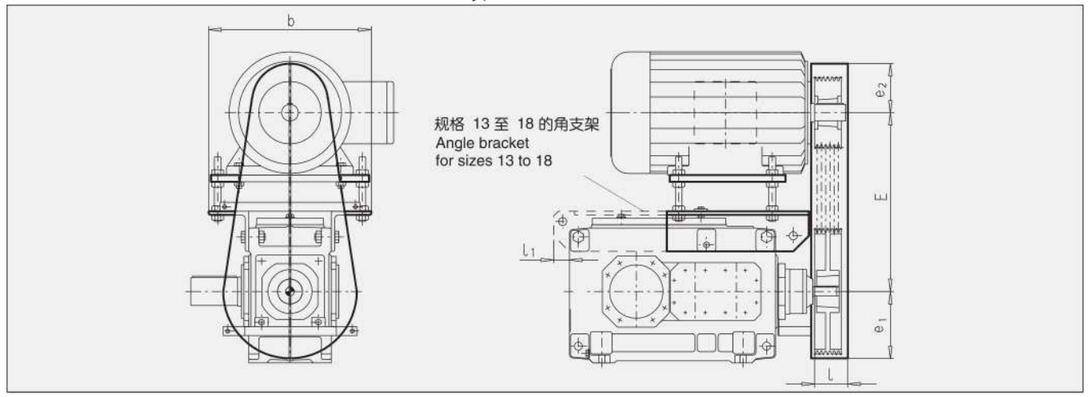


表 3											
类型 规格 Type Size	IEC 电机 IEC motor	$i_{齿轮箱}$ $i_{Gear\ unit}$	$i_{皮带传动}$ i_{Belt}	$i_{总}$ i_{Total}	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e_1 mm	e_2 mm	l mm
WSB3.H 04	112 M	56 - 71	1.25 1.4 1.6 1.8	70 - 127.8	SPZ 112	2	375	421	120	104	85
	132 S	45 - 71		56.3 - 127.8	SPZ 140	2	455	434	180	182	120
	132 M	31.5 - 45		39.4 - 81	SPZ 140	3	455	434	180	182	120
	160 M	20 - 45		25 - 81	SPZ 180	3	455	476	180	140	120
	160 L	31.5; 35.5		39.4 - 63.9	SPA 180	3	455	476	180	140	120
WSB3.H 05	132 M	45 - 71	1.25 1.4 1.6 1.8	56.3 - 127.8	SPZ 140	3	415	476	180	167	120
	160 M	35.5 - 71		44.4 - 127.8	SPZ 180	3	415	502	180	141	120
	160 L	28 - 50		35 - 90	SPA 180	3	415	502	180	141	120
	180 M	22.4 - 40		28 - 64	SPA 250	3	495	534	220	171	120
	180 L	31.5; 35.5		39.4 - 56.8	SPA 250	3	495	534	220	171	120
WSB3.H 06	132 M	30 - 90	1.25 1.4 1.6 1.8	37.5 - 162	SPZ 140	3	415	476	180	167	120
	160 M	45 - 90		56.3 - 162	SPZ 180	3	415	502	180	141	120
	160 L	31.5 - 63		39.4 - 113.4	SPA 180	3	415	502	180	141	120
	180 M	28 - 50		35 - 80	SPA 250	3	495	534	220	171	120
	180 L	25 - 45		31.3 - 72	SPA 250	3	495	534	220	171	120
WSB3.H 07	160 M	63; 71	1.25 1.4 1.6 1.8	78.8 - 127.8	SPZ 180	3	450	553	180	137	120
	160 L	50 - 71		62.5 - 127.8	SPA 180	3	450	553	180	137	120
	180 M	40 - 71		50 - 127.8	SPA 250	3	660	588	273	320	150
	180 L	31.5 - 63		39.4 - 113.4	SPA 250	3	660	588	273	320	150
	200 L	25 - 45		31.3 - 81	SPB 280	3	660	643	273	265	150
	225 S	20 - 40		25 - 72	SPB 280	3	660	713	273	195	150
	225 M	20 - 31.5		25 - 56.7	SPB 280	4	660	713	273	195	150
WSB3.H 08	160 M	80; 90	1.25 1.4 1.6 1.8	100 - 162	SPZ 180	3	450	553	180	137	120
	160 L	63 - 90		78.8 - 162	SPA 180	3	450	553	180	137	120
	180 M	50 - 90		62.5 - 162	SPA 250	3	660	588	273	320	150
	180 L	40 - 80		50 - 144	SPA 250	3	660	588	273	320	150
	200 L	31.5 - 56		39.4 - 100.8	SPB 280	3	660	643	273	265	150
	225 S	25 - 45		31.3 - 81	SPB 280	3	660	713	273	195	150
	225 M	25 - 40		31.3 - 72	SPB 280	4	660	713	273	195	150
WSB3.H 09	180 M	63; 71	1.25 1.4 1.6 1.8	78.8 - 127.8	SPA 250	3	550	635	270	273	150
	180 L	56 - 71		70 - 127.8	SPA 250	3	550	635	270	273	150
	200 L	40 - 71		50 - 127.8	SPB 280	3	550	713	270	195	150
	225 S	40 - 53		50 - 113.4	SPB 280	3	550	713	270	195	150
	225 M	28 - 50		35 - 90	SPB 280	4	550	713	270	195	150
	250 M	22.4 - 45		28 - 81	SPB 315	4	730	762	300	269	150
	280 S	20 - 31.5		25 - 56.7	SPB 315	5	730	803	300	228	150
	280 M	20 - 25		25 - 45	SPB 315	6	730	803	300	228	150
WSB3.H 10	180 M	80; 90	1.25 1.4 1.6 1.8	100 - 162	SPA 250	3	550	635	270	273	150
	180 L	71 - 90		88.8 - 162	SPA 250	3	550	635	270	273	150
	200 L	50 - 90		62.5 - 162	SPB 280	3	550	713	270	195	150
	225 S	40 - 80		50 - 144	SPB 280	3	550	713	270	195	150
	225 M	31.5 - 63		39.4 - 113.4	SPB 280	4	550	713	270	195	150
	250 M	28 - 56		35 - 100.8	SPB 315	4	730	762	300	269	150
	280 S	25 - 40		31.3 - 72	SPB 315	5	730	803	300	228	150
	280 M	25 - 31.5		31.3 - 56.7	SPB 315	6	730	803	300	228	150

电机支架/卧式安装

Motor Brackets / Horzontal

类型 WSB3.H 规格 11-18　　Type WSB3.H Sizes11-18

类型 规格 Type Size	IEC 电机 IEC motor 1)	$i_{齿轮箱}$ $i_{Gear\ unit}$	$i_{皮带传动}$ $i_{Belt\ drive}$	$i_{总}$ i_{Total}	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e_1 mm	e_2 mm	l mm	l_1 mm
WSB3.H 11	225 S	56 - 71	125 1.4 1.6 1.8	70 - 127.8	SPB 280	3	630	789	275	200	153	–
	225 M	45 - 71		56.3 - 127.8	SPB 280	4	630	789	275	200	153	
	250 M	40 - 71		50 - 127.8	SPB 315	4	790	854	305	268	158	
	280 S	28 - 56		35 - 100.8	SPB 315	5	790	897	305	225	158	
	280 M	22.4 - 45		28 - 81	SPB 315	6	790	897	305	225	158	
	315 S	20 - 35.5		25 - 63.9	SPC 355	5	830	992	340	250	184	
	315 M	20 - 31.5		25 - 56.7	SPC 355	6	830	992	340	250	184	
	315 MD 1)	20 - 25		25 - 45	SPC 400	8	830	992	340	250	184	
WSB3.H 12	225 S	71 - 90	1.25 1.4 1.6 1.8	88.8 - 162	SPB 280	3	630	789	275	200	153	–
	225 M	56 - 90		70 - 162	SPB 280	4	630	789	275	200	153	
	250 M	50 - 90		62.5 - 162	SPB 315	4	790	854	305	268	158	
	280 S	35.5 - 63		44.4 - 113.4	SPB 315	5	790	897	305	225	158	
	280 M	31.5 - 56		39.4 - 100.8	SPB 315	6	790	897	305	225	158	
	315 S	25 - 45		31.3 - 81	SPC 355	5	830	992	340	250	184	
	315 M	25 - 40		31.3 - 72	SPC 355	6	830	992	340	250	184	
	315 MD 1)	25 - 31.5		31.3 - 56.7	SPC 400	8	830	992	340	250	184	
WSB3.H 13	250 M	63; 71	1.25 1.4 1.6 1.8	78.8 - 127.8	SPB 315	4	745	938	320	230	183	100
	280 S	45 - 71		56.3 - 127.8	SPB 315	5	745	938	320	230	183	
	280 M	35.5 - 71		44.4 - 127.8	SPB 315	6	745	938	320	230	183	
	315 S	31.5 - 56		39.4 - 100.8	SPC 355	5	945	1017	390	283	227	
	315 M	25 - 50		31.3 - 90	SPC 355	6	945	1017	390	283	227	
	315 MD 1)	22.4 - 40		28 - 72	SPC 400	8	945	1017	390	283	227	
	315 LB 1)	20 - 31.5		25 - 56.7	SPC 400	8	945	1017	390	283	227	
WSB3.H 14	250 M	80; 90	1.25 1.4 1.6 1.8	100 - 162	SPB 315	4	745	938	320	230	183	100
	280 S	56 - 90		70 - 162	SPB 315	5	745	938	320	230	183	
	280 M	45 - 90		56.3 - 162	SPB 315	6	745	938	320	230	183	
	315 S	40 - 71		50 - 127.8	SPC 355	5	945	1017	390	283	227	
	315 M	31.5 - 63		39.4 - 113.4	SPC 355	6	945	1017	390	283	227	
	315 MD 1)	28 - 50		35 - 90	SPC 400	8	945	1017	390	283	227	
	315 LB 1)	25 - 40		31.3 - 72	SPC 400	8	945	1017	390	283	227	
WSB3.H 15	280 M	63; 71	1.25 1.4 1.6 1.8	78.8 - 127.8	SPB 315	6	827	1031	305	225	180	120
	315 S	50 - 71		62.5 - 127.8	SPC 355	5	827	1042	380	265	226	
	315 M	45 - 71		56.3 - 127.8	SPC 355	6	827	1042	380	265	226	
	315 MD 1)	35.5 - 63		44.4 - 113.4	SPC 400	8	827	1042	380	265	226	
	315 LB 1)	28 - 56		35 - 100.8	SPC 400	8	827	1042	380	265	226	
	315 MB 1)	22.4 - 45		28 - 81	SPC 450	8	1027	1130	425	295	336	
	355 LB 1)	20 - 31.5		25 - 56.7	SPC 450	8	1027	1130	425	295	336	
WSB3.H 16	280 M	71; 90	1.25 1.4 1.6 1.8	88.8 - 162	SPB 315	6	827	1031	305	225	180	120
	315 S	56 - 80		70 - 144	SPC 355	5	827	1042	380	265	226	
	315 M	50 - 80		62.5 - 144	SPC 355	6	827	1042	380	265	226	
	315 MD 1)	40 - 71		50 - 127.8	SPC 400	8	827	1042	380	265	226	
	315 LB 1)	31.5 - 63		39.4 - 113.4	SPC 400	8	827	1042	380	265	226	
	355 MB 1)	25 - 50		31.3 - 90	SPC 450	8	1027	1130	425	295	336	
	355 LB 1)	22.4 - 35.5		28 - 63.9	SPC 450	8	1027	1130	425	295	336	
WSB3.H 17	315 M	63; 71	1.25 1.4 1.6 1.8	78.8 - 127.8	SPC 355	6	900	1118	380	272	227	120
	315 MD 1)	50 - 71		62.5 - 127.8	SPC 400	8	900	1118	380	272	227	
	315 LB 1)	35.5 - 71		44.4 - 127.8	SPC 400	8	900	1118	380	272	227	
	355 MB 1)	28 - 56		35 - 100.8	SPC 450	8	900	1148	425	302	227	
	355 LB 1)	25 - 45		31.3 - 81	SPC 450	8	900	1148	425	302	227	
WSB3.H 18	315 M	71; 80	1.25 1.4 1.6 1.8	88.8 - 144	SPC 355	6	900	1118	380	272	227	120
	315 MD 1)	63 - 80		78.8 - 144	SPC 400	8	900	1118	380	272	227	
	315 LB 1)	45 - 80		56.3 - 144	SPC 400	8	900	1118	380	272	227	
	355 MB 1)	35.5 - 71		44.4 - 127.8	SPC 450	8	900	1148	425	302	227	
	355 LB 1)	31.5 - 56		39.4 - 100.8	SPC 450	8	900	1148	425	302	227	

1) Loher 电机规格

1) Loher sizes

电机支架/卧式安装

Motor Brackets / Horzontal

类型 WSB4.H 规格 5-11　　Type WSB4.H Sizes5-11

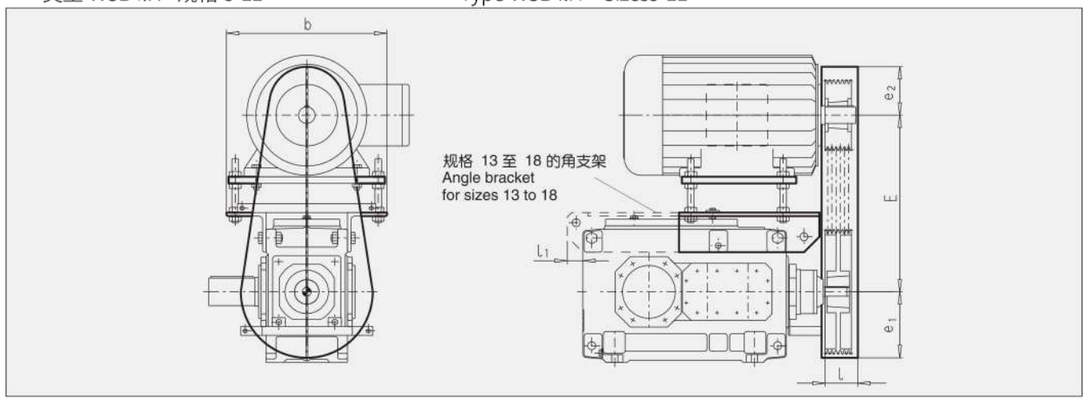


表 4 / Table 4

类型 规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e_1 mm	e_2 mm	l mm
WSB4.H 5	90 L	280; 315	1.25 1.4 1.6 1.8	350 - 567	SPZ 80	2	385	430	125	130	75
	100 LB	180 - 315		225 - 567	SPZ 100	2	385	442	125	118	75
	100 LD	125 - 180		156 - 324	SPZ 100	2	385	442	125	118	75
	112 M	100 - 180		125 - 324	SPZ 112	2	385	458	125	102	75
	132 S	80 - 140		100 - 252	SPZ 140	2	385	482	150	123	92
	132 M	80 - 112		100 - 202	SPZ 140	3	385	482	150	123	92
WSB4.H 6	90 L	355; 400	1.25 1.4 1.6 1.8	444 - 720	SPZ 80	2	385	430	125	130	75
	100 LB	224 - 400		280 - 720	SPZ 100	2	385	442	125	118	75
	100 LD	160 - 315		200 - 567	SPZ 100	2	385	442	125	118	75
	112 M	125 - 250		156 - 450	SPZ 112	2	385	458	125	102	75
	132 S	100 - 180		125 - 324	SPZ 140	2	385	482	150	118	92
	132 M	100 - 140		125 - 252	SPZ 140	3	385	482	150	118	92
WSB4.H 7	100 LB	280; 315	1.25 1.4 1.6 1.8	350 - 567	SPZ 100	2	322	497	125	118	78
	100 LD	250 - 315		313 - 567	SPZ 100	2	322	497	125	118	78
	112 M	180 - 315		225 - 567	SPZ 112	2	450	513	125	102	78
	132 S	125 - 250		156 - 450	SPZ 140	2	450	530	180	155	120
	132 M	90 - 180		113 - 324	SPZ 140	3	450	530	180	155	120
	160 M	80 - 125		100 - 225	SPZ 180	3	450	552	180	133	120
	160 L	80; 90		100 - 162	SPA 180	3	450	552	180	133	120
WSB4.H 8	100 LB	355; 400	1.25 1.4 1.6 1.8	444 - 720	SPZ 100	2	322	497	125	118	78
	100 LD	315 - 400		394 - 720	SPZ 100	2	322	497	125	118	78
	112 M	224 - 400		280 - 720	SPZ 112	2	450	513	125	102	78
	132 S	160 - 315		200 - 567	SPZ 140	2	450	530	180	155	120
	132 M	125 - 224		156 - 403	SPZ 140	2	450	530	180	155	120
	160 M	100 - 160		125 - 288	SPZ 180	3	450	552	180	133	120
	160 L	100 - 125		125 - 225	SPA 180	3	450	552	180	133	120
WSB4.H 9	132 S	224 - 315	1.25 1.4 1.6 1.8	280 - 567	SPZ 140	2	550	572	180	178	120
	132 M	160 - 315		200 - 567	SPZ 140	3	550	572	180	178	120
	160 M	112 - 224		140 - 403	SPZ 180	3	550	615	180	135	120
	160 L	80 - 160		100 - 288	SPA 180	3	550	615	180	135	120
	180 M	80 - 140		100 - 252	SPA 250	3	550	626	250	184	120
	180 L	80 - 112		100 - 202	SPA 250	3	550	626	250	184	120
WSB4.H 10	132 S	280 - 400	1.25 1.4 1.6 1.8	350 - 720	SPZ 140	2	550	572	180	183	120
	132 M	200 - 400		250 - 720	SPZ 140	3	550	572	180	183	120
	160 M	140 - 280		175 - 504	SPZ 180	3	550	615	180	140	120
	160 L	100 - 200		125 - 360	SPA 180	3	550	615	180	140	120
	180 M	100 - 160		125 - 288	SPA 250	3	550	626	250	184	120
	180 L	100 - 140		125 - 252	SPA 250	3	550	626	250	184	120
WSB4.H 11	132 M	280; 315	1.25 1.4 1.6 1.8	350 - 567	SPZ 140	3	454	644	180	166	120
	160 M	200 - 315		250 - 567	SPZ 180	3	454	668	180	142	120
	160 L	140 - 280		175 - 504	SPA 180	3	454	668	180	142	120
	180 M	112 - 224		140 - 403	SPA 250	3	630	709	275	316	150
	180 L	90 - 200		113 - 360	SPA 250	3	630	709	275	316	150
	200 L	80 - 140		100 - 252	SPB 280	3	630	750	275	275	150
	225 S	80 - 112		100 - 202	SPB 280	3	630	825	275	200	150
	225 M	80; 90		100 - 162	SPB 280	4	630	825	275	200	150

电机支架/卧式安装

Motor Brackets / Horzontal

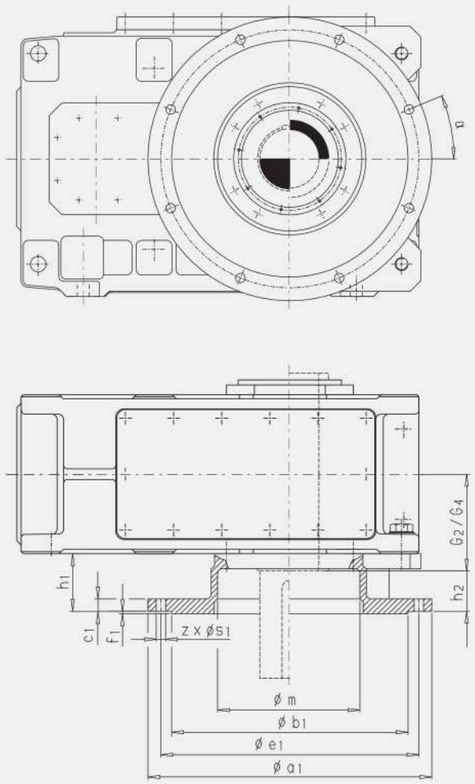
类型 WSB4.H 规格 12-18　　Type WSB4.H Sizes12-18

类型 规格 Type Size	IEC 电机 IEC motor	i 齿轮箱 i Gear unit	i 皮带传动 i Belt drive	i 总 i Total	电机轴皮带轮 Motor shaft pulley	皮带数量 No. of belts	b mm	E mm	e_1 mm	e_2 mm	l mm	l_1 mm
WSB4.H 12	132 M	355; 400	1.25 1.4 1.6 1.8	444 - 720	SPZ 140	3	454	644	180	166	120	–
	160 M	250 - 400		313 - 720	SPZ 180	3	454	668	180	142	120	
	160 L	180 - 355		225 - 639	SPA 180	3	454	668	180	142	120	
	180 M	140 - 280		175 - 504	SPA 250	3	630	709	275	316	150	
	180 L	125 - 224		156 - 403	SPA 250	3	630	709	275	316	150	
	200 L	100 - 160		125 - 288	SPB 280	3	630	750	275	275	150	
	225 S	100 - 140		125 - 252	SPB 280	3	630	825	275	200	150	
	225 M	100; 112		125 - 202	SPB 280	4	630	825	275	200	150	
WSB4.H 13	160 L	224 - 315	1.25 1.4 1.6 1.8	280 - 567	SPA 180	3	575	764	250	186	125	100
	180 M	180 - 315		225 - 567	SPA 250	3	575	764	250	186	125	
	180 L	160 - 280		200 - 504	SPA 250	3	575	764	250	186	125	
	200 L	112 - 200		140 - 360	SPB 280	3	575	825	275	255	155	
	225 S	90 - 160		113 - 288	SPB 280	3	751	881	275	199	155	
	225 M	80 - 140		100 - 252	SPB 280	4	751	881	275	199	155	
	250 M	80 - 112		100 - 202	SPB 315	4	753	938	305	272	155	
	280 S	80 - 90		100 - 162	SPB 315	5	753	980	305	230	155	
WSB4.H 14	160 L	280 - 400	1.25 1.4 1.6 1.8	350 - 720	SPA 180	3	575	764	250	186	125	100
	180 M	224 - 400		280 - 720	SPA 250	3	575	764	250	186	125	
	180 L	180 - 355		225 - 639	SPA 250	3	575	764	250	186	125	
	200 L	140 - 250		175 - 450	SPB 280	3	575	825	275	255	155	
	225 S	112 - 200		140 - 360	SPB 280	3	751	881	275	199	155	
	225 M	100 - 180		125 - 324	SPB 280	4	751	881	275	199	155	
	250 M	100 - 140		125 - 252	SPB 315	4	753	938	305	272	155	
	280 S	100; 112		125 - 202	SPB 315	5	753	980	305	230	155	
WSB4.H 15	180 L	250 - 315	1.25 1.4 1.6 1.8	313 - 567	SPA 250	3	650	797	275	283	150	120
	200 L	180 - 315		225 - 567	SPB 280	3	650	881	275	199	150	
	225 S	140 - 315		175 - 567	SPB 280	3	650	923	305	287	155	
	225 M	125 - 250		156 - 450	SPB 280	4	650	923	305	287	155	
	250 M	100 - 200		125 - 360	SPB 315	4	820	938	305	272	155	
	280 S	80 - 140		100 - 252	SPB 315	5	820	980	305	230	155	
	280 M	80 - 125		100 - 225	SPB 315	6	820	980	305	230	155	
	315 S	80 - 100		100 - 180	SPC 355	5	820	1051	340	254	185	
WSB4.H 16	180 L	280 - 355	1.25 1.4 1.6 1.8	350 - 639	SPA 250	3	650	797	275	283	150	120
	200 L	200 - 355		250 - 639	SPB 280	3	650	881	275	199	150	
	225 S	160 - 355		200 - 639	SPB 280	3	650	923	305	287	155	
	225 M	140 - 180		175 - 504	SPB 280	4	650	923	305	287	155	
	250 M	112 - 224		140 - 403	SPB 315	4	820	938	305	272	155	
	280 S	90 - 160		113 - 288	SPB 315	5	820	980	305	230	155	
	280 M	90 - 140		113 - 252	SPB 315	6	820	980	305	230	155	
	315 S	90 - 112		113 - 202	SPC 355	5	820	1051	340	254	185	
WSB4.H 17	200 L	250 - 315	1.25 1.4 1.6 1.8	313 - 567	SPB 280	3	710	1001	275	214	155	120
	225 S	200 - 315		250 - 567	SPB 280	3	710	1001	275	214	155	
	225 M	160 - 315		200 - 567	SPB 280	4	710	1001	275	214	155	
	250 M	140 - 280		175 - 504	SPB 315	4	880	1031	305	284	155	
	280 S	100 - 200		125 - 360	SPB 315	5	880	1081	305	234	155	
	280 M	80 - 160		100 - 288	SPB 315	6	880	1081	305	234	155	
	315 S	80 - 140		100 - 252	SPC 355	5	880	1101	380	294	230	
	315 M	80 - 112		100 - 202	SPC 355	6	880	1101	380	294	230	
WSB4.H 18	200 L	315; 355	1.25 1.4 1.6 1.8	394 - 639	SPB 280	3	710	1001	275	214	155	120
	225 S	250 - 355		313 - 639	SPB 280	3	710	1001	275	214	155	
	225 M	224 - 355		280 - 639	SPB 280	4	710	1001	275	214	155	
	250 M	180 - 315		225 - 567	SPB 315	4	880	1031	305	284	155	
	280 S	125 - 250		156 - 450	SPB 315	5	880	1081	305	234	155	
	280 M	100 - 200		125 - 360	SPB 315	6	880	1081	305	234	155	
	315 S	90 - 160		113 - 288	SPC 355	5	880	1101	380	294	230	
	315 M	90 - 140		113 - 252	SPC 355	6	880	1101	340	254	230	

安装法兰-大空间安装

Mounting Flange-Long Spacer

规格 4-12　　Sizes4-12



说明：

可采用的布置形式参见表 3。

若需带逆止器或泵请垂询。

平行轴(WSH型)齿轮箱且布置形式为 C 或 D，若需带电机安装法兰或冷却风扇请垂询。

Notes:

For possible designs, see table 3.

Combination with backstop or pump on request.

Combination with motor bell housing or fan for WSH-gear units of C and D design on request.

表 1 / Table 1

扭矩系数 f / Torque factor f

WSH2..,WSH3..,WSH4..,WSB3..,WSB4..,

系数 Factor	规格 / Size 4	5	6	7	8	9	10	11	12
f	1.1	1.2	1.6	1.2	1.4	1.3	1.5	1.3	1.4

WSB2..

系数 Factor	规格 / Size 4	5	6	7	8	9	10	11	12
f	1.0	1.0	1.3	1.0	1.2	1.1	1.3	1.1	1.2

安装法兰-大空间安装

Mounting Flange-Long Spacer

规格 4-12　　Sizes4-12

表 2 / Table 2

规格 Size 1)	a_1	b_1 f7	c_1	e_1	f_1	h_1	h_2	m_{max}	z x s_1	附加重量 Add. weight	WSH2S., WSH2D., WSH2H., WSH3S., WSH3D., WSH3H., WSH4S., WSH4D., WSH4H., WSB3S., WSB3D., WSB3H., WSB4S., WSB4D., WSB4H., G_2 / G_4	WSH2S., WSH2H., WSH2D., G_2 / G_4
	mm									kg	mm	
4	450	350	24.5	400	5	82.5	50	205	8 x 17.5	40	140	170
5	550	450	25	500	5	90	52.5	245	8 x 17.5	60	165	200
6	550	450	25	500	5	90	52.5	245	8 x 17.5	65	165	200
7	660	550	25	600	5	135	90	290	8 x 22	90	195	235
8	660	550	30	600	5	135	90	315	8 x 22	100	195	235
9	660	550	29	600	6	134	84	325	12 x 22	110	235	270
10	660	550	34	600	6	134	84	355	12 x 26	120	235	270
11	800	680	44	740	6	184	129	420	12 x 26	210	270	320
12	800	680	44	740	6	184	129	435	12 x 26	220	270	320

1) $T_{2max} \leq T_{2N} / f$

1) $T_{2max} \leq T_{2N} / f$

表 3 / Table 3

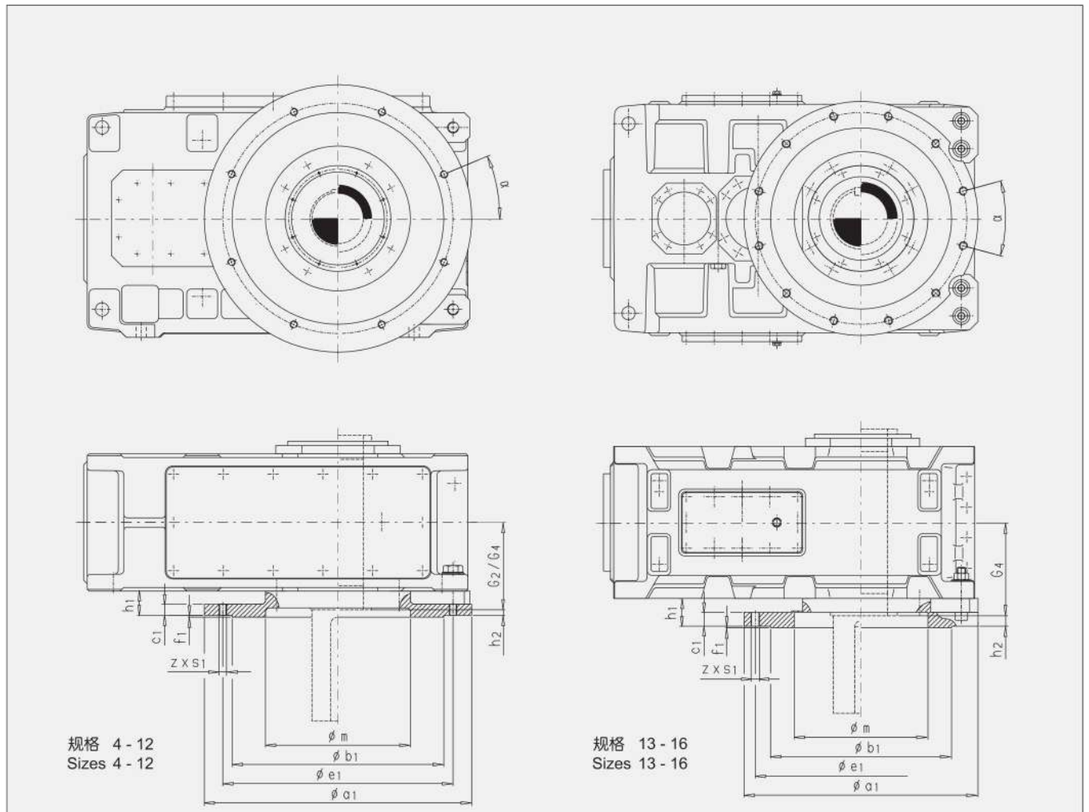
可采用的类型、规格和布置形式
Possible types, sizes, designs

规格 Size	WSH2.H	WSH2.V	WSH3.H, WSH4.H WSB2.H, WSB3.H WSB4.H	WSH3.V, WSH4.V WSB2.V, WSB3.V WSB4.V
4	**A + B**	**B**	**A + B + C + D**	**B + C**
5				
6				
7				
8				
9				
10	**A + B + C + D**	**B + C**		
11	**A + B**	**B**		
12	**A + B + C + D**	**B + C**		

安装法兰-小空间安装

Mounting Flange-Short Spacer

规格 4-16　　Sizes4-16



说明：

从规格 13 起只能采用安装方式 M，即不带地脚的箱体。

可采用的布置形式参见表 3。
若需带逆止器或泵请垂询。

平行轴(WSH型)齿轮箱且布置形式为 C 或 D，若需带电机安装法兰或冷却风扇请垂询。

Notes:

From size 13 up, only housings without feet, i.e. mounting position M, are used.

For possible designs, see table 3.

Combination with backstop or pump on request.

Combination with motor bell housing or fan for WSH-gear units of C and D design on request.

表 1 / Table 1

扭矩系数 f / Torque factor f

系数 Factor	规格 / Size 4	5	6	7	8	9	10	11	12	13	14	15	16
WSH2.., WSH3.., WSH4.., WSB3.., WSB4..													
f	1.1	1.2	1.5	1.2	1.4	1.3	1.5	1.3	1.4	1.4	1.1	1.4	1.2
WSB2..													
f	1.0	1.0	1.2	1.0	1.2	1.1	1.3	1.1	1.2	1.2	1.0	1.2	1.0

安装法兰-小空间安装

Mounting Flange-Short Spacer

规格 4-16　　Sizes4-16

表 2 / Table 2

类型 Type	规格 Size 1)	a_1	b_1 f7	c_1	e_1	f_1	h_1	h_2	m_{max}	z x s_1	附加重量 Add. weight kg	H2S., H2D., H2H., H3S., H3D., H3H., H4S., H4D., H4H., B3S., B3D., B3H., B4S., B4D., B4H., G_2 / G_4 mm	B2S., B2H., B2D., G_2 / G_4 mm
		mm											
..S. ..D., ..H.	**4**	445	340	25	400	5	55	22.5	205	8 x M 16	35	140	170
	5	565	430	25	515	5	60	22.5	245	8 x M 16	55	165	200
	6	565	430	25	515	5	60	22.5	245	8 x M 16	55	165	200
	7	670	530	25	620	5	60	15	295	8 x M 20	80	195	235
	8	670	530	40	620	5	80	35	300	8 x M 20	110	195	235
	9	670	530	35	620	5	80	30	320	12 x M 20	105	235	270
	10	730	560	35	680	5	80	30	355	12 x M 24	125	235	270
	11	730	560	40	680	5	90	35	400	12 x M 24	145	270	320
	12	730	560	40	680	5	90	35	420	12 x M 24	155	270	320
..S.	**13**	840	650	50	760	5	100	37.5	450	12 x M 30	245	335	390
..D., ..H.											240		–
..S.	**14**	840	650	50	760	5	100	37.5	480	12 x M 30	255	335	390
..D., ..H.											245		390
..S.	**15**	960	750	50	880	5	100	30	530	16 x M 30	315	380	460
..D., ..H.											305		–
..S.	**16**	960	750	50	880	5	100	30	540	16 x M 30	320	380	460
..D., ..H.											315		450

1) $T_{2max} \leq T_{2N} / f$

1) $T_{2max} \leq T_{2N} / f$

表 3 / Table 3

可采用的类型、规格和布置形式 / Possible types, sizes, designs

规格 Size	WSH2SH,WSH2HH WSH2DH	WSH2.V	WSH3SH,WSH4SH,WSB2SH,WSB3SH,WSB4SH WSH3HH,WSH4HH,WSB2HH,WSB3HH,WSB4HH WSH3DH,WSH4DH,WSB2DH,WSB3DH,WSB4DH	WSH3.V, WSH4.V WSB2.V, WSB3.V WSB4.V
4	**A + B**	**B**	**A + B + C + D**	**B + C**
5				
6				
7				
8				
9				
10	**A + B + C + D**	**B + C**		
11	**A + B**	**B**		
12	**A + B + C + D**	**B + C**		
13	**A + B**	**B**	**A + B + C + D**	**B + C**
14	**A + B + C + D**	**B + C**		
15 2)				
16 2)				

2) 类型 B2..，规格 15 + 16 不能采用布置形式 A 或 C！

2) Design A or C not possible for type B2.., sizes 15 + 16 !