

SHANGHAI SGR HEAVY  
INDUSTRY MACHINERY  
CO.,LTD.  
上海合纵重工机械有限公司

# C Series

C系列平面二次包络环面蜗杆减速器

## PLANAR DOUBLE-ENVELOPING WORM GEAR UNIT

# SGR®

Driving the industry forward



## 公司简介

上海合纵重工机械有限公司是从事齿轮箱设计与生产的专业化公司，是上海市高新技术企业。

公司自1996年成立以来，紧跟市场需求，先后开发出十余个系列、数万规格的产品。广泛应用在冶金工业、造船工业、石化机械、轻工机械、工程机械、建筑机械等领域。

低能耗、轻量化、大转矩、重载荷是减速机行业的发展趋势。

我公司近年重点投入对渐开线行星齿轮减速机、平面二次包络环面蜗杆减速机的研发和生产，很好的适应了社会生产的需要，满足了客户对高品质产品的严格要求。我公司正进一步加大投入，争取用较少的的时间，发展系列化产品，让高品质的减速器产品，延伸应用到各工业领域，为实现“节能降排”的全社会目标作出贡献。

立足国内，放眼世界。我公司产品除了满足国内需求，我们也在积极开拓国际市场。在东南亚、中东、欧洲、美洲、澳洲、非洲等市场，“SGR”品牌正在显现其良好的销售态势，销售额逐年上升。

我公司通过了DNV ISO9001产品质量体系认证，SGS供应商认证。在整个销售过程中做到售前详细技术咨询，售时热情接洽，售后积极质量跟踪，我们始终以服务客户为中心，以满足客户所需为宗旨，与客户携手共创未来。

## Company Introduction

Shanghai SGR Heavy Industry Machinery Co., Ltd. Specialized in gearbox design & manufacturing since 1996. Be honoured “Shanghai High-tech Enterprise”.

SGR produce near ten series ,several thousand gearbox to meet market requirements, it is widely used in metal, marine chemistry, construction, transportation and light industry.

High efficiency, light weight, big torque and heavy duty requirements push the gearbox development forward.

SGR focus on Planetary Gear units , Planar Double-enveloping Worm gear unit development in these years. These gear unit just suit the social requirement, meet the need of strict & high quality products. We continue developing these project, let the high quality & competitive price products applied to industry in short time, achieve “Energy-saving & Emission-reduction” purpose.

Base home market, carve out international market. SGR products are widely welcomed, have been exported to Southeast Asia, Middle Asia, Africa, America and European countries, sale increase year after year.

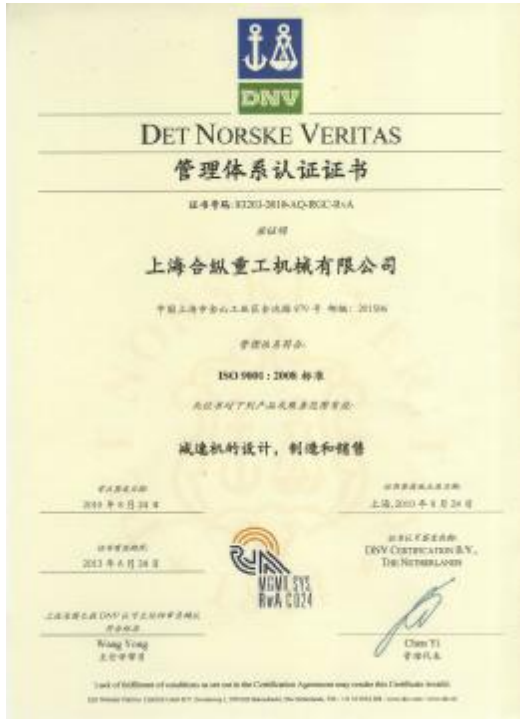
Quality controlled by ISO9001 issued by DNV, audited supplier certification by SGS. Supply detailed technical inquiry before sales, fervency reception in sales, quality tracing after sales, SGR always perform client's requirement, supply favorable service, grow up with client together.





### 认证资料

### Certifications





## 目录

## Contents

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产品简介	2	product introduce	2
传动特点		characteristic features	
齿轮啮合特点	3	gear teeth system	3
产品外形	4	products figure	4
型号标识	5	designation	5
安装位置		mounting positions	
安装位置及油孔布置	6-8	mounting positions & oil plug position	6-8
符号意义	9	key to symbols	9
选型	9	selection of size	9
其它注意事项	9	additional notes	9
计算示例	10	calculation example	10
载荷分类	11-12	load classification symbols	11-12
承载能力		rated power and torques	
单级蜗杆减速器	14-20	single worm gear unit	14-20
双级蜗杆减速器	21-30	double worm gear unit	21-30
安装尺寸		mounting dimensions	
单级蜗杆减速器	31-38	single worm gear unit	31-38
双级蜗杆减速器	39-45	double worm gear unit	39-45
外接电机安装尺寸	46-48	dimensions for electric motor	46-48
逆止器	49	backstops	49
未注法兰尺寸	50-51	other dimensions for flange	50-51
未注平键和键槽尺寸	52	key and keyway	52
润滑油量和减速器重量	53	oil quantity & worm gear unit weight	53
润滑		lubrication	
润滑油粘度选择	54	lubrication viscosity selection	54
动力连接	55	Input connection	55



### 产品简介

平面二次包络环面蜗杆传动是我国1971年研究成功的新型产品。该传动性能好，蜗轮副齿面啮合瞬时呈双线接触，接触点的法向速度大，综合曲率半径大，接触应力小，易形成油膜。具有承载能力大、效率高，使用寿命长等优点。经美国ConeDrive公司测试，承载能力为普通蜗轮蜗杆产品的2.2倍，被誉为“当代最优越的蜗杆传动”。

本产品与阿基米德蜗杆减速器比较，当材料和尺寸相同的情况下，其承载能力提高3-4倍，传动效率提高10%以上，使用寿命提高近10倍。在冶金工业、造船工业、石油、化工机械、通用机械、轻工机械、兵器工业、建筑机械等都有很高的声誉。尤其是在轧钢、有色冶金、选矿洗煤、舰艇、船用辅机、橡胶轮胎硫化机、电梯曳引机和室外施工电梯等都已成为必选品。平面二次包络环面蜗杆的优越性目前日益为有关厂家所了解。

我公司在多年生产平面二次包络蜗轮蜗杆副及专用减速器的经验基础上，推出了C系列通用减速器。它的面市，必将给普通用户带来更便捷的应用选择，使其配套产品得到更强大的动力。

### Product Introduce

Planar Double-enveloping Worm gearing(PDW) invented in 1971, worm gearing profile contact with double line, contact point curvature bigger than conventional worm gearing with smaller contact stress, more easy to get oil film. So it can carry more load, higher efficiency, longer life. PDW tested by ConeDrive, approved it have two times capacity than general worm gearing. Be honoured "Best Worm gearing at Present".

PDW gearing have 3-4 times capacity than Archimedes cylinder worm gearing at the same centre distance, efficiency increase by 10%, life time increase by 10 times. it have been widely used in metal, marine, chemistry, construction, transportation and light machinery industry, and got high praise. especially be suited in steel rolling, metallurgy, weapon, marine, construction situation. the advantage of PDW known by more and more factories.

SGR produce customized PDW worm gearing since 2004. base this experience, SGR decide to produce general gearbox base PDW to meet the general client requirements, make the host machinery stronger and get more capacity.





### 传动特点 齿轮啮合特点

### Characteristic features gear teeth system

平面二次包络环面蜗杆减速器是一种不同于普通蜗轮蜗杆减速器的新型转角传动形式。

Planer double enveloping worm wheel is substantially different to conventional designs.

平面二次包络环面蜗轮是由蜗杆平面包络一次线上的同一点在不同瞬时两次接触蜗轮展成。

A point on the planar primary-enveloping line acting twice at different moment, generated worm wheel profile .

平面二次包络环面蜗杆减速器与普通蜗轮蜗杆减速器接触线不同，接触线更多，见FIG1。

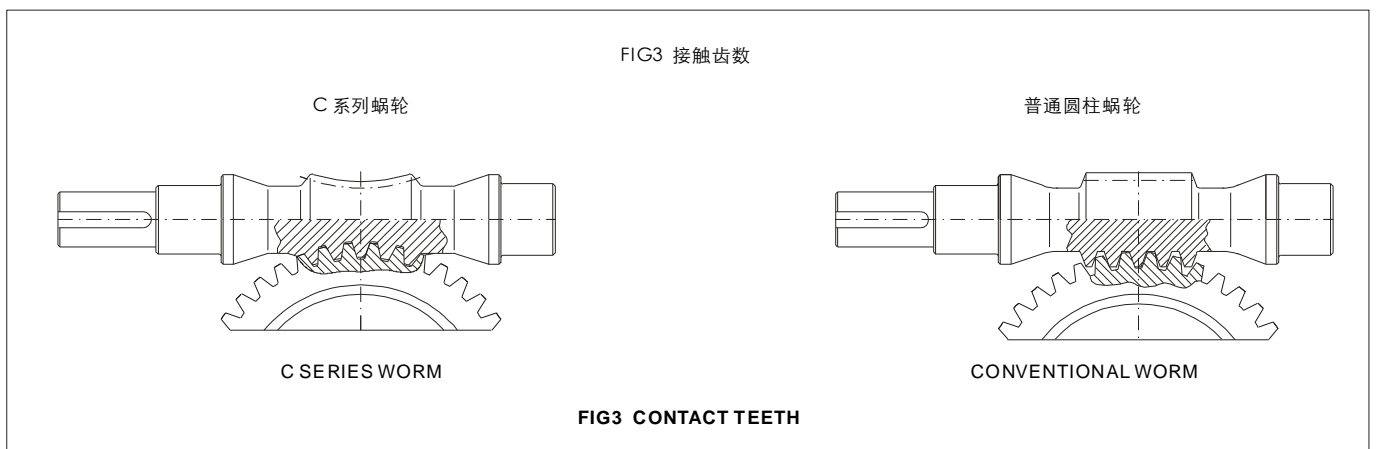
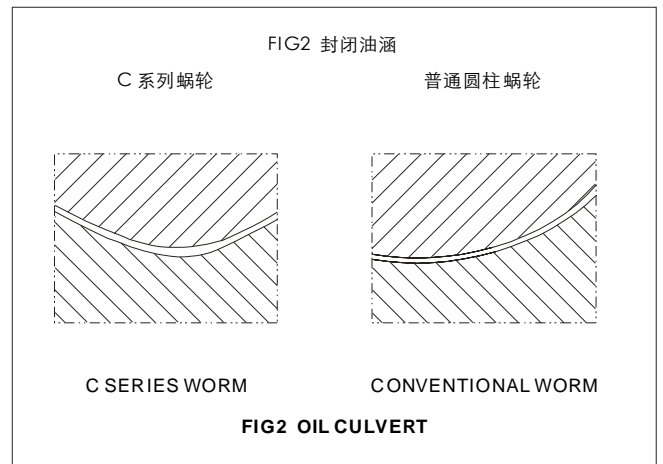
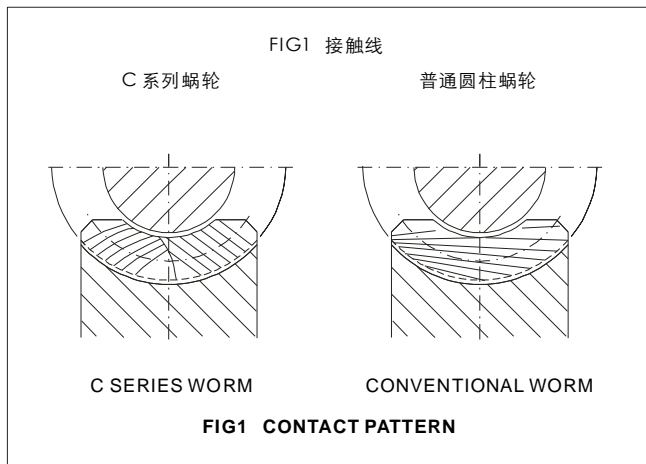
FIG1 shows the worm thread contact pattern is longer than conventional worm threads.

平面二次包络环面蜗杆减速器比普通蜗轮蜗杆减速器更易形成油涵，润滑更充分，有更高的效率，见FIG2。

FIG2 shows the worm thread envelops more oil and lubricate the contact profile better than conventional worm threads, it makes the efficiency higher.

平面二次包络环面蜗杆减速器比普通蜗轮蜗杆减速器有更多的接触齿数，承载能力更强，见FIG3。

FIG3 shows the worm threads have more contact teeth than conventional worm threads, so it is more stronger .

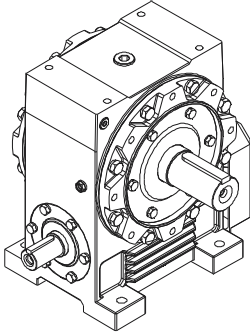




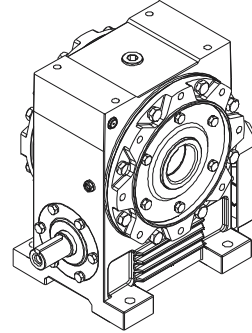
产品外形

Products Figure

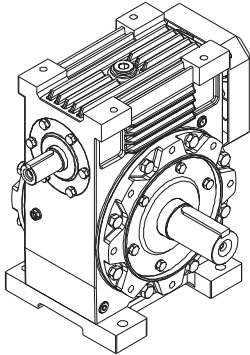
CUW



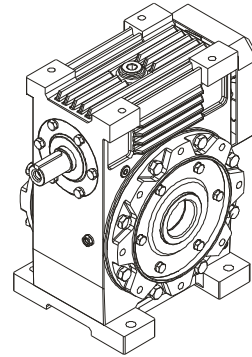
CUA



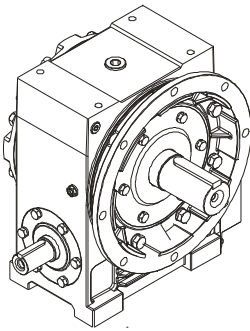
COW



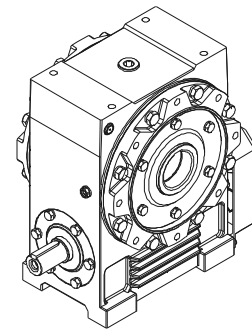
COA



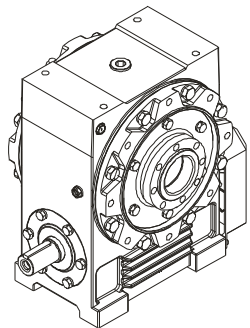
CFW



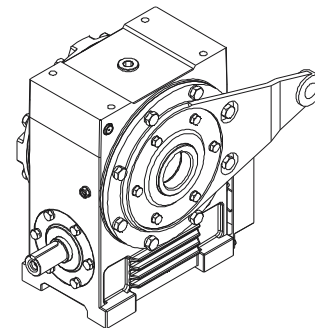
CFA



CHA



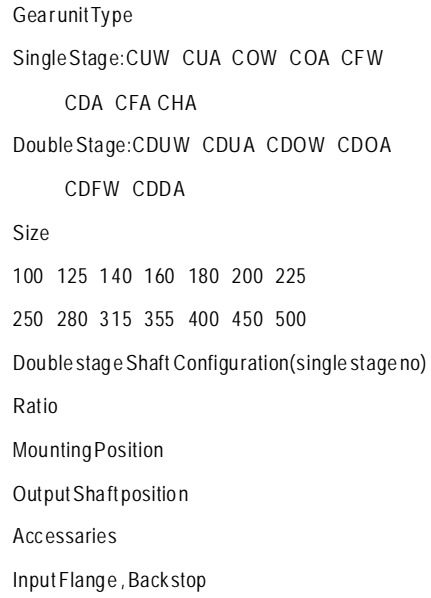
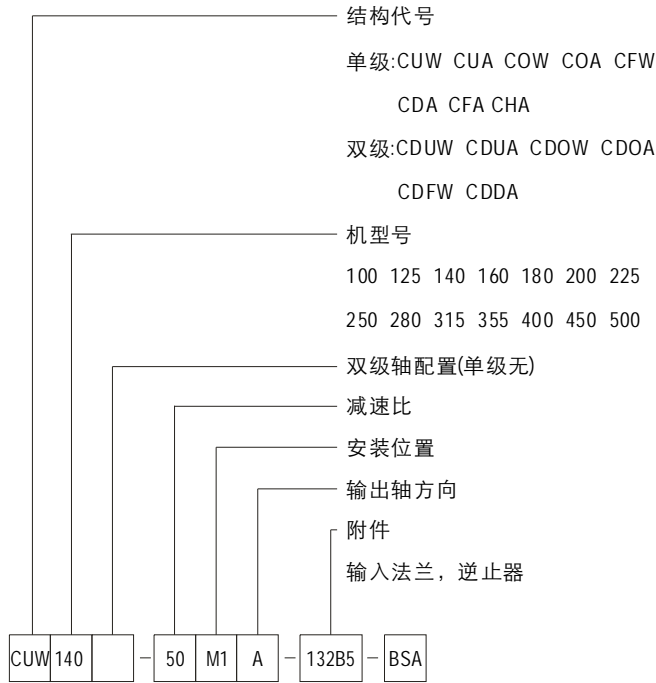
CDA





## 型号标识

## Designation



### 标识示例

CUW140-50M1A

机型号CUW140, 减速比50, 安装位置M1, 输出轴方向A

CDFW355E-1000M2B

机型号CDFW355, 轴配置E, 减速比1000, 安装位置M2, 输出轴方向B

CUW140-40M1A-132B5-BSACW

机型号CUW140, 减速比40, 安装位置M1, 输出轴方向A, 带输入法兰

132B5, 带逆止器BS, 设计A, 旋转方向CW

### Designation

CUW140-50M1A

gear unit type CUW, size 140, ratio 50, mounting position M1, output shaft position A

CDFW355E-1000M2B

gear unit type CDFW, size 355, shaft configuration E, ratio 1000, mounting position M2, output shaft position B

CUW140-40M1A-132B5-BSACW

gear unit type CUW, size 140, ratio 40, mounting position M1, output shaft position A, with input flange 132B5, with backstop BS, design A, rotate direction CW





### 安装位置

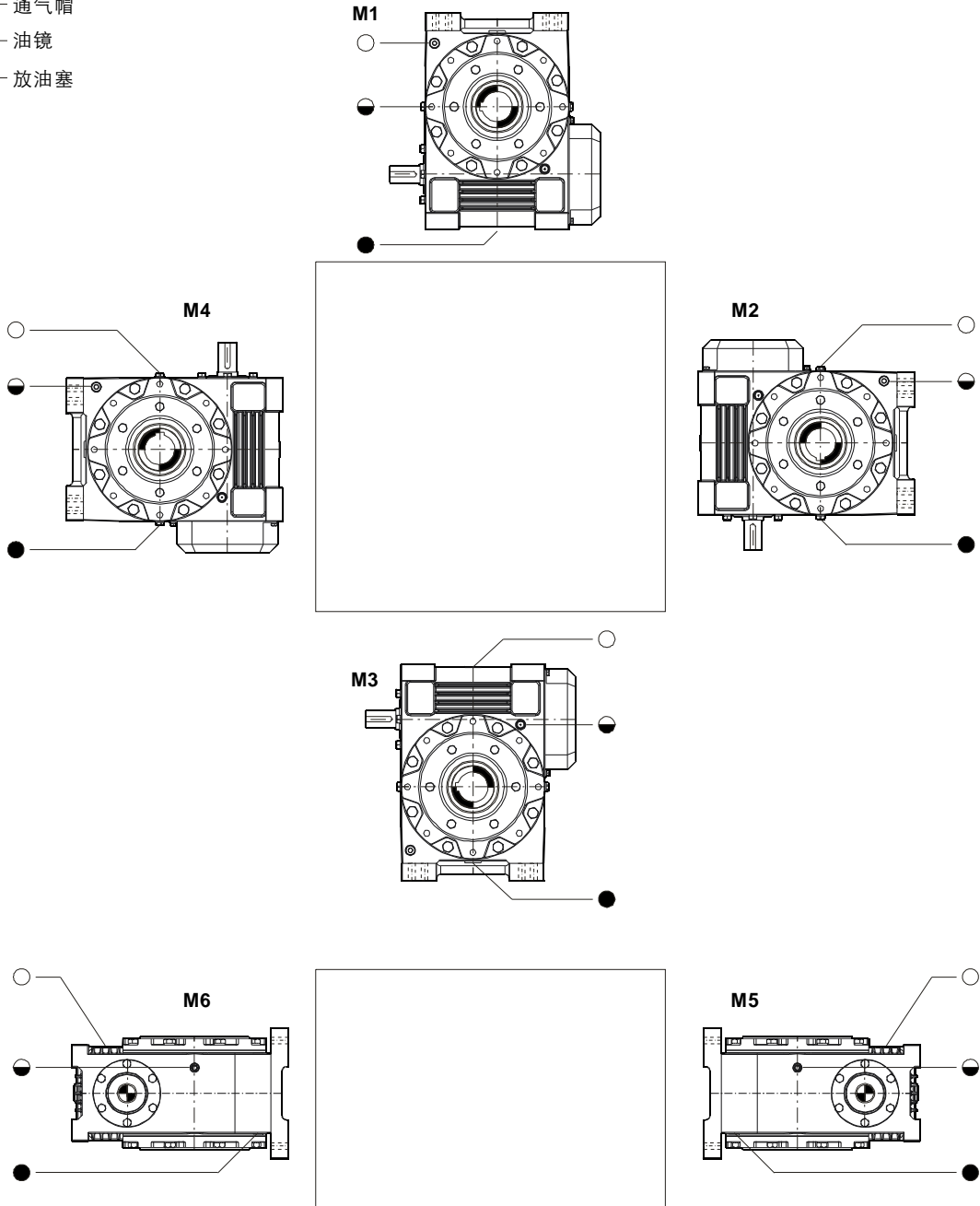
安装位置及油孔布置

### Mounting Positions

Mounting Positions & Oil Plug Position

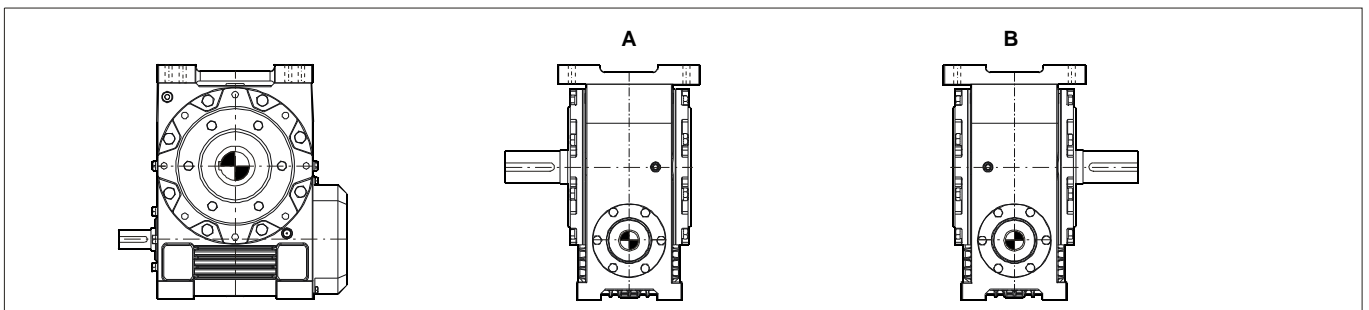
- COW ○ — 通气帽
- CUA ● — 油镜
- CDOW ● — 放油塞
- CDUA

- — Breather
- — Oil Level
- — Oil Drain



### 输出轴位置

### Output Shaft Position





安装位置

安装位置及油孔布置

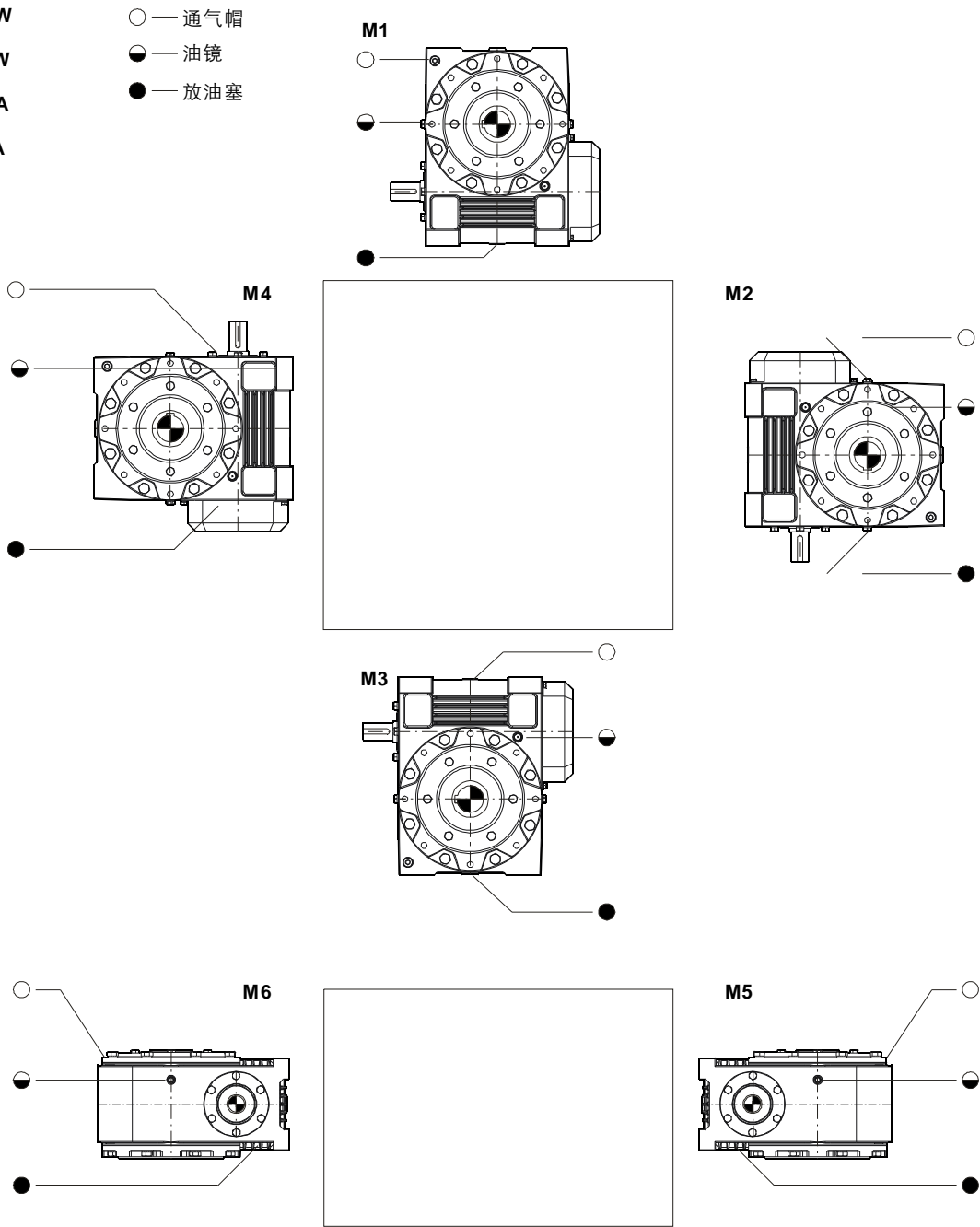
Mounting Positions

Mounting Positions & Oil Plug Position

- CUW CDUW
- CFW CDFW
- COA CDOA
- CFA CDFA
- CHA

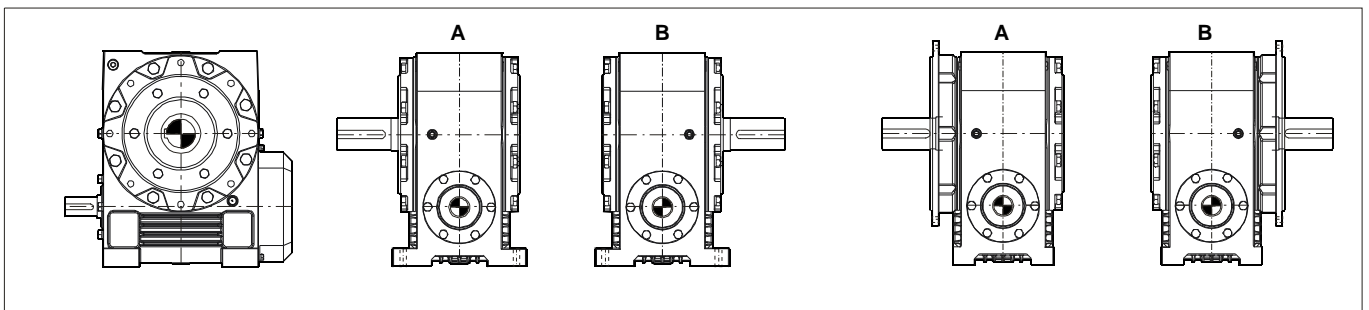
- — 通气帽
- ◐ — 油镜
- — 放油塞

- — Breather
- ◐ — Oil Level
- — Oil Drain



输出轴位置

Output Shaft Position





**安装位置**

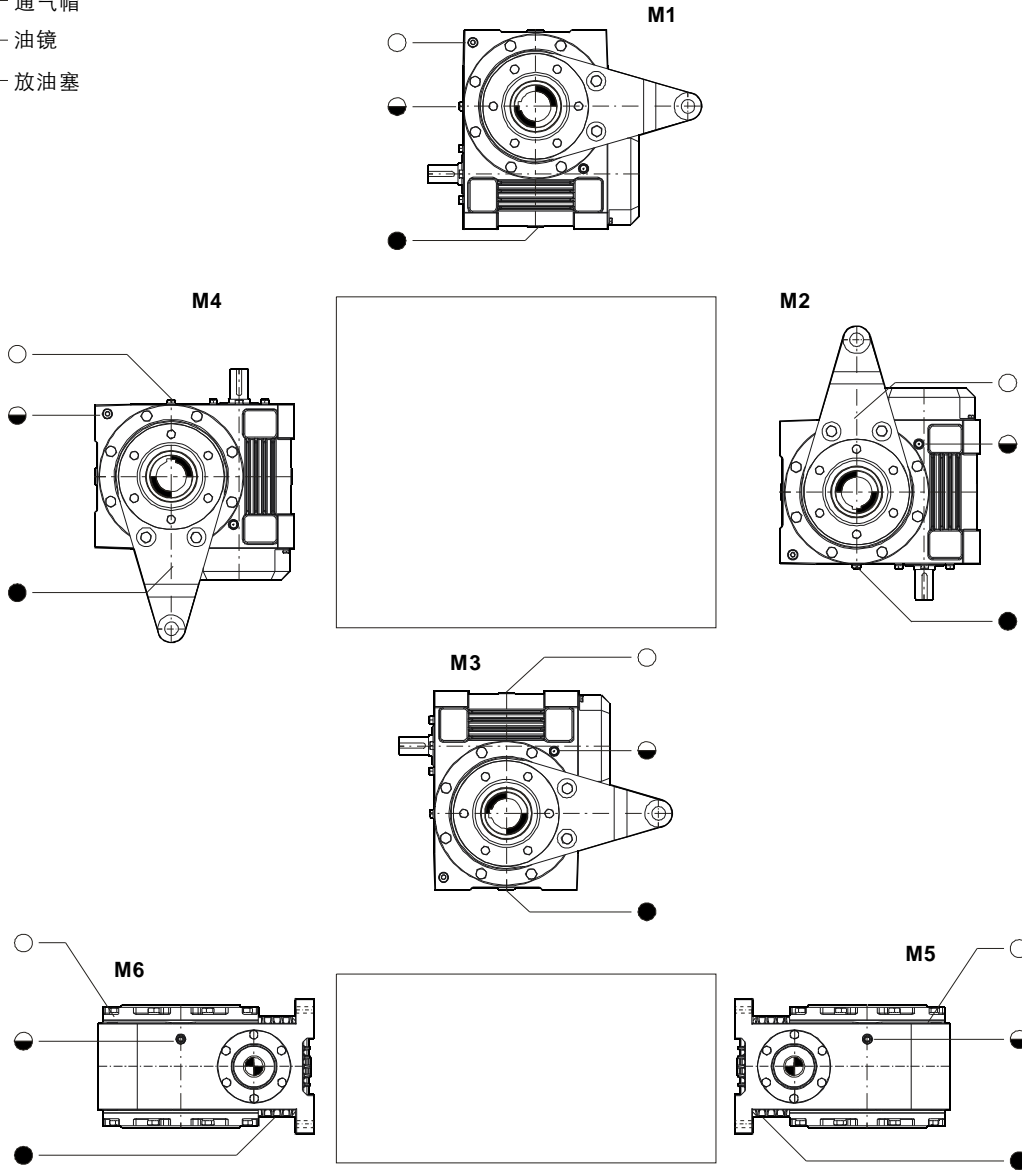
安装位置及油孔布置

**Mounting Positions**

Mounting Positions & Oil Plug Position

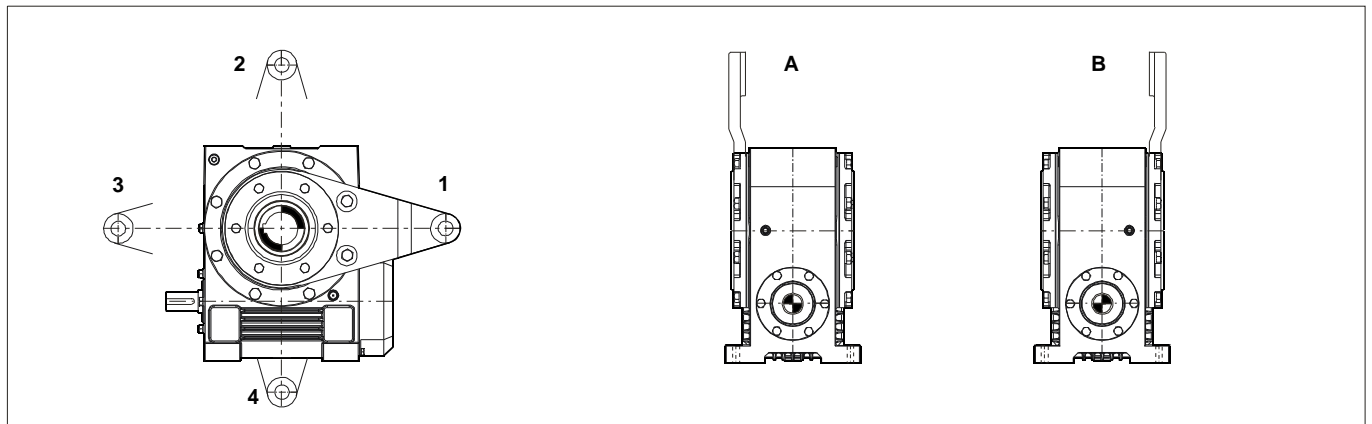
- CDA** ○ — 通气帽  
**CDDA** ● — 油镜  
 ● — 放油塞

- — Breather  
 ● — Oil Level  
 ● — Oil Drain



**输出轴位置**

**Output Shaft Position**





## 符号意义

## Key to Symbols

$E_D$	= 每小时负荷率	% (e.g. $E_D = 80\% / h$ )
$f_1 \dots f_6$	= 系数	见第13页
$i$	= 减速比	$n_1 / n_2$ 见第14-30页
$n_1$	= 输入转速	r/min 见第14-30页
$n_2$	= 输出转速	r/min 见第14-30页
$P_{1N}$	= 额定输入功率	kW 见第14-30页
$P_2$	= 输出功率	kW
$T_2$	= 输出转矩( $9550 \times P_2 / n_2$ )	Nm
$T_{2A}$	= 启动, 峰值, 制动载荷	Nm
$T_{2max}$	= 最大许用输出载荷( $2.5 \times T_{2N}$ )	Nm 见第14-30页

$E_D$	= Operating cycle per hour in %	(e.g. $E_D = 80\% / h$ )
$f_1 \dots f_6$	= For factors	see page 13
$i$	= Transmission ratio	$n_1 / n_2$ see page 14-30
$n_1$	= Input speed	rpm see page 14-30
$n_2$	= Output speed	rpm see page 14-30
$P_{1N}$	= Nominal input power rating	kW see page 14-30
$P_2$	= Power rating of driven machine	kW see page 14-30
$T_2$	= Output torque( $9550 \times P_2 / n_2$ )	Nm
$T_{2A}$	= Peak operating, starting or braking torque	Nm
$T_{2max}$	= permissible maximum torque( $2.5 \times T_{2N}$ )	Nm see page 14-30

## 选型

## Selection of Size

首先按公式  $T_{2N} / f_1 \times f_2 \times T_2$  初选规格, 然后把各种系数带入下面公式校核:

After a first selection of the worm and wheel set, where  $T_{2N}$  should be  $f_1 \times f_2 \times T_2$ , the following conditions should be fulfilled:

- |      |  |
|------|--|
| I)   | $T_{2N} / T_2 \times f_1 \times f_2 \times f_3$            |
| II)  | $T_{2N} / T_2 \times f_3 \times f_4 \times f_5 \times f_6$ |
| III) | $T_{2max} / T_{2A} \times f_2 \times f_3$                  |

通过以上校核, 通常可以很容易地选出接近的规格, 如果不满足以上要求, 可以选用更大的规格进行计算。

If the conditions are generously fulfilled one can try to select a smaller worm and wheel set.

If the conditions are not fulfilled a larger worm and wheel set has to be selected.

## 其它注意事项

## Additional Notes

- A. 如果输入和输出方向固定并受限制, 右旋蜗轮蜗杆减速机不能满足要求, 可以考虑选用左旋蜗轮蜗杆减速机;
- B. 选用规格大小时, 热功率已经考虑在内了, 不再做热功率校核, 公式II已经考虑油温小于80 °C;
- C. 适用环境温度 -10 °C ~ +40 °C, 超过此温度范围请联系我们;
- D. 如需输入和输出轴的许用径向力, 请联系我们

- A. If the direction of rotation for input and output shaft is fixed, LH gear teeth might possibly become necessary;
- B. When selecting the size, thermal influences are taken into consideration with condition II based on a lubricant temperature of +80 °C;
- C. For ambient temperatures below -10 °C or above +40 °C, please refer to us;
- D. If need radial load on input and output shaft, please contact us.



## 计算示例

## Calculation Example

### 要求

蜗轮蜗杆减速器，用于带式输送机运送原材料，用矿物油润滑，带逆止器，无风扇设计B

电机功率:	$P_1 = 3 \text{ kW}$
电机转速:	$n_1 = 1000 \text{ rpm}$
传动比:	$i \approx 40$
需要转矩:	$T_2 = 850 \text{ Nm}$
最大转矩:	$T_{2A} = 1750 \text{ Nm}$
每天工作时间:	16 hours
每小时启动次数:	30
负荷率:	$ED = 40 \%$
环境温度:	$\leq 40 \text{ }^\circ\text{C}$

### 计算过程

在未确定型号之前，可以确定的几个系数：

载荷类型M（大于10小时）：	$f_1 = 1.4$
启动频率30/小时：	$f_2 = 1.1$

首先使用这两个系数计算：

$$850 \times 1.4 \times 1.1 = 1309$$

按结果选125规格，见第14页，其中：

$$T_{2N} = 1627 \text{ Nm} \quad T_{2\max} = 1627 \times 2.5 = 4067.5 \text{ Nm}$$

按此规格其他系数均可查出，见第13页

矿物润滑油系数	$f_3 = 1.25$
负荷率系数	$f_4 = 0.74$
环境温度系数	$f_5 = 1.42$
冷却方式系数	$f_6 = 1.59$

把以上系数带入公式校核：

### Required

worm gear unit for a belt conveyor drive for bulk material; the worm and wheel set is to be lubricated with mineral oil, with backstop, design B.

Electric motor:	$P_1 = 3 \text{ kW}$
Motor speed:	$n_1 = 1000 \text{ rpm}$
Transmission ratio:	$i \approx 40$
Required torque:	$T_2 = 850 \text{ Nm}$
Max. output torque:	$T_{2A} = 1750 \text{ Nm}$
Daily operating period:	16 hours
Starts per hour:	30
Operating cycle per hour:	$ED = 40 \%$
Ambient temperature:	up to 40

### Solution

the worm and wheel set has to be considered for:

Load classification M (above 10 hrs)	$f_1 = 1.4$
Starting frequency: 30 starts/hour	$f_2 = 1.1$

First selection with  $f_1$  and  $f_2$

$$850 \times 1.4 \times 1.1 = 1309$$

Select size 125, shown on page 14

$$T_{2N} = 1627 \text{ Nm} \quad T_{2\max} = 1627 \times 2.5 = 4067.5 \text{ Nm}$$

The other factor can be found on page 13

Mineral oil	$f_3 = 1.25$
Operating cycle per hour: $ED = 40 \%$	$f_4 = 0.74$
Ambient temperature: up to 40	$f_5 = 1.42$
Cool way	$f_6 = 1.59$

Second check with:

$$\text{I) } T_{2N} = 1627 / 850 \times 1.4 \times 1.1 \times 1.25 = 1636$$

$$\text{II) } T_{2N} = 1627 / 850 \times 1.25 \times 0.74 \times 1.42 \times 1.59 = 1775$$

$$\text{III) } T_{2\max} = 4067.5 / 1750 \times 1.1 \times 1.25 = 2406$$

I和II条件不成立，改选140规格，按以上方式带入各种系数，此规格满足要求，计算过程省略。

Conditions I and II are not fulfilled; therefore, either synthetic oil or size 140 is to be selected.



## 载荷分类

## Load Classification Symbols

所列载荷是按经验分类的。

不在本列表范围的载荷类型可以联系我们共同探讨。

根据实际应用情况选用载荷分类，并和设计要求相符合。

根据实际的运行工况，载荷类型分类可能和所列分类不同，请

酌情修改

符号说明：

U=稳定载荷

M=中等冲击

H=严重冲击

\*=仅限于24小时运转

### 工业应用中的载荷分类

The listed load classification symbols are empirical values.

Prerequisite for application is that the machinery and equipment mentioned correspond to generally accepted design and load specifications.

In case of deviations from listed conditions, please refer to us.

Listed load classification symbols may be modified after giving exact details of operating conditions.

U = Uniform load

M = Medium shock load

H = Heavy shock load

### Load classification symbols in applications and industries

气压机, 压缩机	运输机械
M 旋转活塞式压缩机	M 螺旋输送机
U 轴流式气压机	M 钢带输送机
M 冷却塔	M 链板式输送机
M 风扇人工产气	M 牵引式输送机
U 涡轮压缩机	起重机械
建筑机械	M 吊杆起重机构
M 混凝土搅拌机	H 提升机构*
M 提升机	M 摆动机构*
M 道路施工机械	M 回转机构
化工机械	H 行走机构
U 液体搅拌机	采矿机械
M 半流体搅拌机	H 斗式输送机
M 重载离心分离机	H 铲斗装置
U 轻载离心分离机	H 破碎装置
M 冷却滚筒*	M 绞盘装置
M 干燥滚筒*	M 泵
M 混合器	M 回转机构
空气压缩机	H 掘进机构
H 活塞式空气压缩机	M 轨道运动机构
M 涡轮空气压缩机	食品机械
运输机械	U 灌装机及包装机
M 链斗式输送机	M 甘蔗破碎机*
M 斗式提升机	M 甘蔗切割机*
M 斗轮带式输送机	M 甘蔗压榨机*
M 散装橡胶带式输送机	H 捏合机
H 块装橡胶带式输送机	M 捣碎机
U 桶装粉末输送机	U 打包机
M 链条式输送机	M 甜菜切割机
M 循环轨道输送机	M 甜菜清洗机
M 轻载提升机	变换器及发生器
H 重载提升机*	H 频率变换器
H 倾斜式输送机*	H 发生器
M 链带输送机	H 焊接机
M 乘客运输机	

Blowers, Ventilators	Conveyors
M Rotary piston blowers	M Screw conveyors
U Blowers (axial/radial)	M Steel belt conveyors
M Cooling tower fans	M Trough chain conveyors
M Induced draught fans	M Hauling winches
U Turbo blowers	Cranes
Building machinery	M Derricking jib gears
M Concrete mixers	H Hoisting gears *
M Hoists	M Luffing gears *
M Road construction machinery	M Slewing gears
Chemical industry	H Travelling gears
U Agitators (liquid material)	Dredgers
M Agitators (semi-liquid material)	H Bucket conveyors
M Centrifuges (heavy)	H Bucket wheels
U Centrifuges (light)	H Cutter heads
M Cooling drums *	M Manoeuvring winches
M Drying drums *	M Pumps
M Mixers	M Slewing gears
Compressors	H Travelling gears (caterpillar)
H Piston compressors	M Travelling gears (rails)
M Turbo compressors	Food industry machinery
Conveyors	U Bottling and container filling machines
M Apron conveyors	M Cane crushers *
M Ballast elevators	M Cane knives *
M Band pocket conveyors	M Cane mills *
M Belt conveyors (bulk material)	H Kneading machines
H Belt conveyors (piece goods)	M Mash tubs, crystallizers
U Bucket conveyors for flour	U Packaging machines
M Chain conveyors	M Sugar beet cutters
M Circular conveyors	M Sugar beet washing machines
M Goods lifts	Generators, transformers
H Hoists *	H Frequency transformers
H Inclined hoists *	H Generators
M Link conveyors	H Welding generators
M Passenger lifts	



## 载荷分类

## Load Classification Symbols

### 工业应用中的载荷分类

### Load classification symbols in applications and industries

服装机械	纸品加工机械	Laundries	Paper machines
M 滚筒式机械	H 光泽缸 *	M Tumblers	H Glazing cylinders *
M 洗衣机	H 纸浆碾磨机 *	M Washing machines	H Pulpers *
轧钢机械	H 纸浆碾磨机 *	Metal rolling mills	H Pulp grinders *
H 带钢轧机 *	H 真空(吸水)筛浆机 *	H Billet shears *	H Suction rolls *
M 链条输送机 *	H 真空(吸水)压榨机 *	M Chain transfers *	H Suction presses *
H 冷轧机 *	H 打浆机 *	H Cold rolling mills *	H Wet presses *
H 连铸机 *	H 挤浆机 *	H Continuous casting plants *	H Willows *
M 冷床装置 *	塑料机械	M Cooling beds *	Plastic industry machinery
H 剪切机 *	M 研光机 *	H Cropping shears *	M Calenders *
M 卷取机 *	M 破碎机 *	M Cross transfers *	M Crushers *
H 精整机 *	M 挤压机 *	H Descaling machines *	M Extruders *
H 中重型电镀机械 *	M 混合机 *	H Heavy and medium plate mills *	M Mixers *
H 初轧机 *	泵	H Ingot and blooming mills *	Pumps
H 钢锭装卸运送机械 *	U 轻质液体离心泵	H Ingot handling machinery *	U Centrifugal pumps (light liquids)
H 推钢机械 *	M 粘性液体离心泵	H Ingot pushers *	M Centrifugal pumps (viscous liquids)
H 主传动装置	H 活塞泵	H Manipulators	H Piston pumps
H 剪板机 *	H 柱塞泵 *	H Plate shears *	H Plunger pumps *
M 厚板机组 *	H 压力泵 *	M Plate tilters *	H Pressure pumps *
M 轧辊调整装置	橡胶机械	M Roller adjustment drives	Rubber machinery
M 辊式矫直机 *	M 研光机 *	M Roller straighteners *	M Calenders *
H 重型翻板机 *	H 挤压机 *	H Roller tables (heavy) *	H Extruders *
M 轻型翻板机 *	M 混合机 *	M Roller tables (light) *	M Mixers *
H 薄板机组 *	H 搅拌机 *	H Sheet mills *	H Pug mills *
M 修整机组 *	H 碾滚成型机械 *	M Trimming shears *	H Rolling mills *
H 焊接钢管机组	矿石及泥土加工机械	H Tube welding machines	Stone and clay working machines
M 线带卷取机组	H 球磨机 *	M Winding machines (strip and wire)	H Ball mills *
M 拉丝架	H 搅拌机 *	M Winding machines (strip and wire)	H Beater mills *
金属加工机械	H 碎石机	Metal working machines	H Breakers
U 弯曲和校直机械	H 压砖机	U Countershafts, line shafts	H Brick presses
H 锻压机械	H 锤式粉碎机 *	H Forging presses	H Hammer mills *
H 锻锤 *	H 圆盘切割机 *	H Hammers *	H Rotary kilns *
U 工作母机中的辅助机械	H 开槽机 *	U Machine tools, auxiliary drives	H Tube mills *
M 工作母机的主传动	纺织机械	M Machine tools, main drives	Textile machines
H 平面加工机械	M 混纺机	H Metal planing machines	M Batchers
H 矫直板机械	M 织布机	H Plate straightening machines	M Looms
H 压力机	M 印染机	H Presses	M Printing and dyeing machines
H 冲床	M 鞣革机	H Punch presses	M Tanning vats
		M Shears	M Willows
		M Sheet metal bending machines	Water treatment



使用系数

Service Factor

f <sub>1</sub> 每天工作时间系数		f <sub>1</sub> For daily operating periods and load classifications			
运行周期 hrs Daily operating period (hrs)	0.5	<0.5 ~2	<2~10	<10~24	
载荷分类 U Load classification symbol U	0.8	0.9	1	1.2	
载荷分类 M Load classification symbol M	0.9	1	1.2	1.4	
载荷分类 H Load classification symbol H	1	1.2	1.4	1.6	

f <sub>2</sub> 启动频率, 峰值载荷作用频率及制动频率系数		f <sub>2</sub> For starts, peak torques, braking			
每小时作用次数	10	<10~60	<60~240	<240~600	
f <sub>2</sub>	1	1.1	1.2	1.3	

f <sub>3</sub> 矿物油润滑系数(合成油润滑系数为1)		f <sub>3</sub> For lubrication with mineral oils (for synthetic oils, f <sub>3</sub> = 1)			
蜗杆减速机中心距 Worm gear unit size	100~250	280~450	500~630		
f <sub>3</sub>	1.25	1.3	1.3		

f <sub>4</sub> 每小时负荷率 (ED)		f <sub>4</sub> For operating cycle per hour (ED)				
ED %	100	80	60	40	20	
f <sub>4</sub>	1	0.94	0.86	0.74	0.56	

f <sub>5</sub> 环境温度系数		f <sub>5</sub> For ambient temperature				
环境温度 ambient temperature(°C)	0~10	10~20	20~30	30~40	40~50	
n <sub>1</sub> ≤ 300	0.89	1	1.14	1.33	1.6	
300 < n <sub>1</sub> ≤ 1500	0.9	1	1.17	1.42	1.75	
n <sub>1</sub> > 1500	0.9	1	1.2	1.5	1.9	

f <sub>6</sub> 冷却方式系数		f <sub>6</sub> For cool way				
冷却方式 Cool way	蜗杆减速器规格 Worm gear unit size	蜗杆速度(rpm)/ Worm shaft speed(rpm)				
		1500	1000	750	500	
无风扇自然冷却 Nature cool without fan	100~225	1.37	1.59	1.59	1.33	
	250~710	1.51	1.85	1.89	1.78	
风扇冷却/ Cool with fan	100~710	1	1	1	1	





## 承载能力

### 单级蜗杆减速器

## Rated Power and Torques

### Single Worm gear Unit

规格 100

size 100

规格 125

size 125

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
10.25	1500	146	11.5	683	91.0
	1000	98	10.6	944	91.0
	750	73	8.94	1044	89.5
	500	49	7.2	1233	87.5
13.33	1500	113	9.34	709	89.5
	1000	75	8.4	957	89.5
	750	56	6.85	1023	88.0
	500	38	5.24	1147	86.0
16.5	1500	91	8.54	798	89.0
	1000	61	7.73	1084	89.0
	750	45	6.25	1142	87.0
	500	30	4.84	1289	84.5
20.5	1500	73	7.19	826	88.0
	1000	49	6.18	1065	88.0
	750	37	5.11	1147	86.0
	500	24	3.97	1298	83.5
25.5	1500	59	5.91	810	86.0
	1000	39	5.04	1023	85.0
	750	29	4.30	1143	83.5
	500	20	3.23	1225	79.5
33	1500	45	4.77	792	79.0
	1000	30	4.17	1038	79.0
	750	23	3.09	1006	77.5
	500	15	2.69	1246	73.5
40	1500	38	3.9	760	76.5
	1000	25	3.23	944	76.5
	750	19	2.82	1084	75.5
	500	13	2.08	1136	71.5
50	1500	30	3.16	744	74.0
	1000	20	2.76	975	74.0
	750	15	2.28	1052	72.5
	500	10	1.74	1138	68.5
62	1500	24	2.55	715	71.0
	1000	16	2.28	958	71.0
	750	12	2.08	1141	69.5
	500	8	1.41	1094	65.5

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
10.25	1500	146	19.7	1170	91.0
	1000	98	18.2	1621	91.0
	750	73	15.3	1797	90.0
	500	49	12.3	2119	88.0
13.33	1500	113	17.3	1321	90.0
	1000	75	15.4	1764	90.0
	750	56	12.7	1919	89.0
	500	38	9.67	2142	87.0
16.5	1500	91	14.6	1365	89.0
	1000	61	13.2	1851	89.0
	750	45	10.7	1978	88.0
	500	30	8.29	2221	85.0
20	1500	75	12.3	1363	87.0
	1000	50	10.6	1761	87.0
	750	37.5	8.75	1916	86.0
	500	25	6.79	2153	83.0
25.5	1500	59	10.1	1410	86.0
	1000	39	8.64	1809	86.0
	750	29	7.37	2010	84.0
	500	20	5.53	2155	80.0
33	1500	45	8.18	1392	81.0
	1000	30	7.14	1823	81.0
	750	23	5.30	1782	80.0
	500	15	4.61	2208	76.0
40	1500	38	6.68	1310	77.0
	1000	25	5.53	1627	77.0
	750	19	4.84	1874	76.0
	500	13	3.57	1964	72.0
50	1500	30	5.41	1274	74.0
	1000	20	4.72	1668	74.0
	750	15	3.92	1822	73.0
	500	10	2.99	1970	69.0
62	1500	24	4.38	1228	71.0
	1000	16	3.92	1648	71.0
	750	12	3.57	1973	70.0
	500	8	2.42	1891	66.0

#### 注意事项:

瞬时最大启动转矩  $T_{2max}=2.5XT_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

#### ATTENTION:

Briefly maximum start torque  $T_{2max}=2.5XT_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

单级蜗杆减速器

### Rated Power and Torques

Single Worm gear Unit

规格 140

size 140

规格 160

size 160

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
10.25	1500	146	25.90	1555	92.0
	1000	98	23.90	2152	92.0
	750	73	20.10	2387	91.0
	500	49	16.20	2823	89.0
13.33	1500	113	22.70	1753	91.0
	1000	75	20.30	2352	91.0
	750	56	16.70	2551	90.0
	500	38	12.70	2845	88.0
16.5	1500	91	19.20	1815	90.0
	1000	61	17.40	2468	90.0
	750	45	14.10	2637	89.0
	500	30	10.90	2954	86.0
20.5	1500	73	16.20	1861	88.0
	1000	49	13.90	2395	88.0
	750	37	11.50	2612	87.0
	500	24	8.99	2957	84.0
25.5	1500	59	13.30	1879	87.0
	1000	39	11.40	2415	87.0
	750	29	9.69	2674	85.0
	500	20	7.27	2868	81.0
32	1500	47	10.70	1788	82.0
	1000	31	9.39	2353	82.0
	750	23	6.96	2297	81.0
	500	16	6.06	2833	76.5
40	1500	38	8.78	1744	78.0
	1000	25	7.27	2166	78.0
	750	19	6.36	2494	77.0
	500	13	4.69	2616	73.0
50	1500	30	7.12	1700	75.0
	1000	20	6.21	2224	75.0
	750	15	5.15	2426	74.0
	500	10	3.94	2634	70.0
64	1500	23	6.51	1910	72.0
	1000	16	5.60	2464	72.0
	750	12	5.14	2974	71.0
	500	8	4.24	3473	67.0

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
10.25	1500	146	35.70	2143	92.0
	1000	98	33.00	2972	92.0
	750	73	27.80	3302	91.0
	500	49	22.40	3903	89.0
14.33	1500	105	29.00	2408	91.0
	1000	70	26.10	3250	91.0
	750	52	21.30	3478	89.5
	500	35	16.30	3904	87.5
17.5	1500	86	24.40	2433	89.5
	1000	57	20.90	3109	89.0
	750	43	17.60	3451	88.0
	500	29	13.40	3807	85.0
21.5	1500	70	22.40	2698	88.0
	1000	47	19.20	3469	88.0
	750	35	15.90	3787	87.0
	500	23	12.30	4243	84.0
26.5	1500	57	20.50	3009	87.0
	1000	38	17.60	3875	87.0
	750	28	14.60	4212	85.5
	500	19	11.30	4690	82.0
33	1500	45	14.80	2550	82.0
	1000	30	13.00	3359	82.0
	750	23	9.61	3271	81.0
	500	15	8.36	4031	76.5
40	1500	38	12.10	2404	78.0
	1000	25	10.00	2980	78.0
	750	19	8.78	3443	77.0
	500	13	6.48	3614	73.0
50	1500	30	9.82	2345	75.0
	1000	20	8.57	3069	75.0
	750	15	7.10	3345	74.0
	500	10	5.43	3630	70.0
65	1500	23	7.94	2366	72.0
	1000	15	7.10	3173	72.0
	750	12	6.48	3808	71.0
	500	8	4.39	3652	67.0

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5XT_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5XT_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

#### 单级蜗杆减速器

### Rated Power and Torques

#### Single Worm gear Unit

规格 180

size 180

规格 200

size 200

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	47.50	2812	93.0
	1000	100	43.90	3899	93.0
	750	75	36.90	4323	92.0
	500	50	29.70	5105	90.0
12.5	1500	120	41.70	3070	92.5
	1000	80	37.20	4108	92.5
	750	60	30.50	4442	91.5
	500	40	23.30	4951	89.0
16	1500	94	35.30	3272	91.0
	1000	63	31.90	4436	91.0
	750	47	25.80	4731	90.0
	500	31	20.00	5317	87.0
20	1500	75	29.70	3385	89.5
	1000	50	25.50	4359	89.5
	750	38	21.10	4782	89.0
	500	25	16.40	5325	85.0
25	1500	60	24.40	3418	88.0
	1000	40	20.80	4370	88.0
	750	30	17.80	4873	86.0
	500	20	13.30	5176	81.5
33	1500	45	19.70	3435	83.0
	1000	30	17.20	4499	83.0
	750	23	12.80	4410	82.0
	500	15	11.10	5387	77.0
40	1500	38	16.10	3239	79.0
	1000	25	13.30	4014	79.0
	750	19	11.70	4648	78.0
	500	13	8.61	4868	74.0
50	1500	30	13.10	3169	76.0
	1000	20	11.40	4137	76.0
	750	15	9.44	4508	75.0
	500	10	7.22	4896	71.0
63	1500	24	10.60	3090	73.0
	1000	16	9.44	4147	73.0
	750	12	8.61	4972	72.0
	500	8	5.83	4771	68.0

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	61.20	3624	93.0
	1000	100	56.60	5027	93.0
	750	75	47.60	5576	92.0
	500	50	38.30	6584	90.0
12.5	1500	120	53.70	3953	92.5
	1000	80	48.00	5300	92.5
	750	60	39.40	5738	91.5
	500	40	30.10	6396	89.0
16	1500	94	45.50	4218	91.0
	1000	63	41.20	5729	91.0
	750	47	33.30	6106	90.0
	500	31	25.80	6859	87.0
20	1500	75	38.30	4365	89.5
	1000	50	32.90	5624	89.5
	750	38	27.20	6165	89.0
	500	25	21.10	6851	85.0
25	1500	60	31.50	4412	88.0
	1000	40	26.90	5652	88.0
	750	30	22.90	6269	86.0
	500	20	17.20	6694	81.5
31.5	1500	48	25.40	4429	83.0
	1000	32	22.20	5807	83.0
	750	24	16.50	5685	82.0
	500	16	14.30	6940	77.0
40	1500	38	20.80	4185	79.0
	1000	25	17.20	5191	79.0
	750	19	15.00	5959	78.0
	500	13	11.10	6275	74.0
50	1500	30	16.80	4064	76.0
	1000	20	14.70	5335	76.0
	750	15	12.20	5826	75.0
	500	10	9.31	6313	71.0
63	1500	24	13.60	3982	73.0
	1000	16	12.20	5358	73.0
	750	12	11.10	6411	72.0
	500	8	7.52	6153	68.0

#### 注意事项:

瞬时最大启动转矩 $T_{2max}=2.5XT_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

#### ATTENTION:

Briefly maximum start torque $T_{2max}=2.5XT_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

单级蜗杆减速器

### Rated Power and Torques

Single Worm gear Unit

规格 225

size 225

规格 250

size 250

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	81.40	4872	94.0
	1000	100	75.20	6751	94.0
	750	75	63.30	7496	93.0
	500	50	50.90	8847	91.0
12.5	1500	120	71.40	5313	93.5
	1000	80	63.80	7121	93.5
	750	60	52.30	7658	92.0
	500	40	40.00	8595	90.0
16	1500	94	60.40	5661	92.0
	1000	63	54.70	7690	92.0
	750	47	44.30	8213	91.0
	500	31	34.30	9224	88.0
20	1500	75	50.90	5833	90.0
	1000	50	43.80	7529	90.0
	750	38	36.20	8251	89.5
	500	25	28.10	9231	86.0
25	1500	60	41.90	5902	88.5
	1000	40	35.70	7543	88.5
	750	30	30.50	8447	87.0
	500	20	22.80	9036	83.0
31.5	1500	48	33.80	5694	84.0
	1000	32	29.50	7454	84.0
	750	24	21.90	7291	83.0
	500	16	19.00	8916	78.0
40	1500	38	27.60	5623	80.0
	1000	25	22.80	6968	80.0
	750	19	20.00	8047	79.0
	500	13	14.80	8480	75.0
50	1500	30	22.40	5491	77.0
	1000	20	19.50	7170	77.0
	750	15	16.20	7839	76.0
	500	10	12.40	8526	72.0
63	1500	24	18.10	5372	74.0
	1000	16	16.20	7213	74.0
	750	12	14.80	8667	73.0
	500	8	9.99	8294	69.0

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	105	6284	94.0
	1000	100	97.0	8708	94.0
	750	75	81.6	9663	93.0
	500	50	65.7	11419	91.0
12.5	1500	120	92.0	6846	93.5
	1000	80	82.2	9175	93.5
	750	60	67.5	9884	92.0
	500	40	51.5	11066	90.0
16	1500	94	77.9	7301	92.0
	1000	63	70.6	9925	92.0
	750	47	57.1	10586	91.0
	500	31	44.2	11887	88.0
20	1500	75	65.7	7529	90.0
	1000	50	56.5	9712	90.0
	750	38	46.6	10621	89.5
	500	25	36.2	11892	86.0
25	1500	60	54.0	7607	88.5
	1000	40	46.0	9720	88.5
	750	30	39.3	10884	87.0
	500	20	29.5	11832	84.0
31.5	1500	48	43.6	7345	84.0
	1000	32	38.0	9602	84.0
	750	24	28.2	9388	83.0
	500	16	24.5	11498	78.0
40	1500	38	35.6	7253	80.0
	1000	25	29.5	9015	80.0
	750	19	25.8	10381	79.0
	500	13	19.0	10887	75.0
50	1500	30	28.8	7059	77.0
	1000	20	25.2	9265	77.0
	750	15	20.9	10113	76.0
	500	10	16.0	11002	72.0
63	1500	24	23.3	6916	74.0
	1000	16	20.9	9305	74.0
	750	12	19.0	11127	73.0
	500	8	12.9	10711	69.0

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



## 承载能力

单级蜗杆减速器

## Rated Power and Torques

Single Worm gear Unit

规格 280

size 280

规格 315

size 315

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	138.00	8347	95.0
	1000	100	127.00	11522	95.0
	750	75	107.00	12807	94.0
	500	50	86.30	15165	92.0
12.5	1500	120	121.00	9100	94.5
	1000	80	108.00	12183	94.5
	750	60	88.70	13130	93.0
	500	40	67.80	14730	91.0
16	1500	94	102.00	9663	93.0
	1000	63	92.80	13187	93.0
	750	47	75.00	14058	92.0
	500	31	58.10	15802	89.0
20	1500	75	86.30	10000	91.0
	1000	50	74.20	12897	91.0
	750	38	61.30	14050	90.0
	500	25	47.60	15819	87.0
25	1500	60	71.00	10058	89.0
	1000	40	60.50	12855	89.0
	750	30	51.60	14455	88.0
	500	20	38.70	15707	85.0
31.5	1500	48	57.30	9768	85.0
	1000	32	50.00	12785	85.0
	750	24	37.10	12500	84.0
	500	16	32.30	15352	79.0
40	1500	38	46.80	9654	81.0
	1000	25	38.70	11975	81.0
	750	19	33.90	13813	80.0
	500	13	25.00	14516	76.0
50	1500	30	37.90	9411	78.0
	1000	20	33.10	12328	78.0
	750	15	27.40	13432	77.0
	500	10	21.00	14640	73.0
63	1500	24	30.70	9235	75.0
	1000	16	27.40	12364	75.0
	750	12	25.00	14841	74.0
	500	8	16.90	14235	70.0

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	183.0	11068	95.0
	1000	100	169.0	15333	95.0
	750	75	143.0	17116	94.0
	500	50	115.0	20208	92.0
12.5	1500	120	161.0	12108	94.5
	1000	80	144.0	16245	94.5
	750	60	118.0	17467	93.0
	500	40	90.00	19554	91.0
16	1500	94	136.0	12884	93.0
	1000	63	123.0	17479	93.0
	750	47	99.70	18687	92.0
	500	31	77.20	20997	89.0
20	1500	75	115.0	13325	91.0
	1000	50	98.60	17138	91.0
	750	38	81.50	18680	90.0
	500	25	63.20	21004	87.0
25	1500	60	94.30	13358	89.0
	1000	40	80.40	17084	89.0
	750	30	68.60	19217	88.0
	500	20	51.50	20903	85.0
31.5	1500	48	66.50	11336	85.0
	1000	32	60.00	15342	85.0
	750	24	51.50	17352	84.0
	500	16	40.70	19345	79.0
40	1500	38	62.20	12831	81.0
	1000	25	51.50	15935	81.0
	750	19	45.00	18336	80.0
	500	13	33.20	19277	76.0
50	1500	30	50.40	12514	78.0
	1000	20	43.90	16351	78.0
	750	15	36.40	17844	77.0
	500	10	27.90	19450	73.0
63	1500	24	40.70	12244	75.0
	1000	16	36.40	16425	75.0
	750	12	33.20	19708	74.0
	500	8	22.50	18952	70.0

### 注意事项:

瞬时最大启动转矩  $T_{2max}=2.5XT_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

### ATTENTION:

Briefly maximum start torque  $T_{2max}=2.5XT_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

单级蜗杆减速器

### Rated Power and Torques

Single Worm gear Unit

规格 355

size 355

规格 400

size 400

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	245.0	14818	95.0
	1000	100	226.0	20504	95.0
	750	75	190.0	22742	94.0
	500	50	153.0	26885	92.0
12.5	1500	120	215.0	16169	94.5
	1000	80	192.0	21659	94.5
	750	60	157.0	23240	93.0
	500	40	120.0	26072	91.0
16	1500	94	182.0	17242	93.0
	1000	63	165.0	23447	93.0
	750	47	133.0	24929	92.0
	500	31	103.0	28014	89.0
20	1500	75	153.0	17729	91.0
	1000	50	132.0	22943	91.0
	750	38	109.0	24983	90.0
	500	25	84.40	28049	87.0
25	1500	60	126.0	17849	89.0
	1000	40	107.0	22736	89.0
	750	30	91.60	25660	88.0
	500	20	68.70	27884	85.0
31.5	1500	48	102.0	17388	85.0
	1000	32	88.70	22681	85.0
	750	24	65.80	22170	84.0
	500	16	57.20	27187	79.0
40	1500	38	83.00	17121	81.0
	1000	25	68.70	21257	81.0
	750	19	60.10	24489	80.0
	500	13	44.30	25722	76.0
50	1500	30	87.20	21652	78.0
	1000	20	58.60	21826	78.0
	750	15	48.60	23825	77.0
	500	10	37.20	25934	73.0
63	1500	24	54.40	16365	75.0
	1000	16	48.60	21930	75.0
	750	12	44.30	26298	74.0
	500	8	30.00	25269	70.0

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	261.0	15786	95.0
	1000	100	241.0	21865	95.0
	750	75	203.0	24298	94.0
	500	50	163.0	28642	92.0
12.5	1500	120	229.0	17222	94.5
	1000	80	205.0	23126	94.5
	750	60	168.0	24868	93.0
	500	40	128.0	27810	91.0
16	1500	94	194.0	18379	93.0
	1000	63	176.0	25010	93.0
	750	47	142.0	26616	92.0
	500	31	110.0	29918	89.0
20	1500	75	163.0	18887	91.0
	1000	50	140.0	24333	91.0
	750	38	116.0	26587	90.0
	500	25	90.10	29944	87.0
25	1500	60	134.0	18982	89.0
	1000	40	114.0	24224	89.0
	750	30	97.70	27369	88.0
	500	20	73.30	29751	85.0
31.5	1500	48	108.0	18410	85.0
	1000	32	94.60	24189	85.0
	750	24	70.20	23652	84.0
	500	16	61.10	29041	79.0
40	1500	38	88.50	18256	81.0
	1000	25	73.30	22680	81.0
	750	19	64.10	26119	80.0
	500	13	47.30	27464	76.0
50	1500	30	71.70	17803	78.0
	1000	20	62.60	23315	78.0
	750	15	51.90	25443	77.0
	500	10	39.70	27677	73.0
63	1500	24	58.00	17448	75.0
	1000	16	51.90	23419	75.0
	750	12	47.30	28079	74.0
	500	8	32.10	27038	70.0

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5XT_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5XT_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



## 承载能力

单级蜗杆减速器

规格 450

size 450

## Rated Power and Torques

Single Worm gear Unit

规格 500

size 500

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	347.0	20988	95.0
	1000	100	320.0	29032	95.0
	750	75	270.0	32317	94.0
	500	50	217.0	38131	92.0
12.5	1500	120	304.0	22863	94.5
	1000	80	272.0	30684	94.5
	750	60	223.0	33010	93.0
	500	40	170.0	36935	91.0
16	1500	94	258.0	24442	93.0
	1000	63	233.0	33110	93.0
	750	47	189.0	35425	92.0
	500	31	146.0	39710	89.0
20	1500	75	217.0	25145	91.0
	1000	50	187.0	32502	91.0
	750	38	154.0	35297	90.0
	500	25	120.0	39881	87.0
25	1500	60	178.0	25215	89.0
	1000	40	152.0	32298	89.0
	750	30	130.0	36417	88.0
	500	20	97.40	39532	85.0
31.5	1500	48	144.0	24547	85.0
	1000	32	126.0	32218	85.0
	750	24	93.30	31435	84.0
	500	16	81.10	38547	79.0
40	1500	38	118.0	24341	81.0
	1000	25	97.40	30138	81.0
	750	19	85.20	34716	80.0
	500	13	62.90	36522	76.0
50	1500	30	95.30	23663	78.0
	1000	20	83.20	30988	78.0
	750	15	69.00	33826	77.0
	500	10	52.70	36740	73.0
63	1500	24	77.10	23194	75.0
	1000	16	69.00	31135	75.0
	750	12	62.90	37339	74.0
	500	8	42.60	35882	70.0

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
10	1500	150	448.0	27097	95.0
	1000	100	413.0	37469	95.0
	750	75	348.0	41653	94.0
	500	50	280.0	49202	92.0
12.5	1500	120	392.0	29481	94.5
	1000	80	351.0	39596	94.5
	750	60	288.0	42631	93.0
	500	40	220.0	47798	91.0
16	1500	94	332.0	31452	93.0
	1000	63	301.0	42773	93.0
	750	47	243.0	45547	92.0
	500	31	188.0	51133	89.0
20	1500	75	280.0	32445	91.0
	1000	50	241.0	41888	91.0
	750	38	199.0	45611	90.0
	500	25	154.0	51180	87.0
25	1500	60	230.0	32581	89.0
	1000	40	196.0	41648	89.0
	750	30	167.0	46782	88.0
	500	20	126.0	51140	85.0
31.5	1500	48	186.0	31707	85.0
	1000	32	162.0	41424	85.0
	750	24	120.0	40431	84.0
	500	16	105.0	49907	79.0
40	1500	38	152.0	31355	81.0
	1000	25	126.0	38987	81.0
	750	19	110.0	44821	80.0
	500	13	81.10	47090	76.0
50	1500	30	123.0	30541	78.0
	1000	20	107.0	39852	78.0
	750	15	88.90	43582	77.0
	500	10	68.00	47406	73.0
63	1500	24	99.40	29902	75.0
	1000	16	88.90	40115	75.0
	750	12	81.10	48143	74.0
	500	8	54.90	46243	70.0

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5XT_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5XT_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 180

### Rated power and Torques

Double Worm gear Unit

size 180

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
102.5	1500	15	12	6469	85
	1000	10	9.2	7592	85
	750	7.3	7.9	8564	83
	500	4.9	5.8	9279	81
133.3	1500	11	8.7	6136	83
	1000	7.5	6.6	6943	83
	750	5.6	5.5	7617	82
	500	3.8	4.0	8098	80
165	1500	9.1	6.8	5927	83
	1000	6.1	5.0	6550	83
	750	4.5	4.2	7057	81
	500	3.0	3.0	7412	79
205	1500	7.3	5.4	5759	82
	1000	4.9	3.9	6240	82
	750	3.7	3.2	6624	80
	500	2.4	2.3	6887	78
255	1500	5.9	4.3	5624	80
	1000	3.9	3.1	5997	79
	750	2.9	2.5	6289	78
	500	2.0	1.8	6487	74
330	1500	4.5	3.6	5501	73
	1000	3.0	2.5	5777	73
	750	2.3	2.0	5990	72
	500	1.5	1.4	6131	68
400	1500	3.8	3.0	5428	71
	1000	2.5	2.1	5649	71
	750	1.9	1.6	5818	70
	500	1.3	1.2	5928	66
500	1500	3.0	2.4	5359	69
	1000	2.0	1.7	5531	69
	750	1.5	1.3	5659	67
	500	1.0	0.9	5741	64
620	1500	2.4	2.0	5306	66
	1000	1.6	1.4	5440	66
	750	1.2	1.1	5539	65
	500	0.8	0.8	5600	61

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
800	1500	1.9	1.6	5484	68
	1000	1.3	1.1	5587	68
	750	0.9	0.8	5662	68
	500	0.6	0.6	5707	64
841.5	1500	1.8	1.4	5539	71
	1000	1.2	1.0	5637	71
	750	0.9	0.8	5708	69
	500	0.6	0.5	5750	66
1000	1500	1.5	1.3	5449	66
	1000	1.0	0.9	5527	66
	750	0.8	0.7	5583	65
	500	0.5	0.5	5615	61
1240	1500	1.2	1.1	5422	64
	1000	0.8	0.7	5482	64
	750	0.6	0.6	5523	62
	500	0.4	0.4	5545	59
1650	1500	0.9	0.8	5456	61
	1000	0.6	0.6	5498	61
	750	0.5	0.4	5525	60
	500	0.3	0.3	5537	57
2046	1500	0.7	0.7	5440	59
	1000	0.5	0.5	5470	59
	750	0.4	0.4	5488	58
	500	0.2	0.3	5495	54
2480	1500	0.6	0.6	4905	56
	1000	0.4	0.4	4925	56
	750	0.3	0.3	4936	55
	500	0.2	0.2	4938	52
3100	1500	0.5	0.5	4923	54
	1000	0.3	0.3	4936	54
	750	0.2	0.2	4942	53
	500	0.2	0.2	4941	50
3906	1500	0.4	0.4	4990	52
	1000	0.3	0.2	4998	52
	750	0.2	0.2	5000	51
	500	0.1	0.1	4996	48

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.





### 承载能力

双级蜗杆减速器

规格 200

### Rated power and Torques

Double Worm gear Unit

size 200

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
102.5	1500	15	11.5	6336	85
	1000	10	9.0	7436	85
	750	7.3	7.7	8388	83
	500	4.9	5.7	9089	81
133.3	1500	11	9.4	6611	83
	1000	7.5	7.1	7480	83
	750	5.6	5.9	8206	82
	500	3.8	4.3	8725	80
165	1500	9.1	8.5	7431	83
	1000	6.1	6.3	8211	83
	750	4.5	5.2	8847	81
	500	3.0	3.8	9293	79
205	1500	7.3	7.0	7427	82
	1000	4.9	5.0	8047	82
	750	3.7	4.1	8543	80
	500	2.4	2.9	8883	78
255	1500	5.9	5.6	7254	80
	1000	3.9	4.0	7735	79
	750	2.9	3.2	8111	78
	500	2.0	2.3	8366	74
330	1500	4.5	4.6	7094	73
	1000	3.0	3.2	7451	73
	750	2.3	2.6	7726	72
	500	1.5	1.8	7907	68
400	1500	3.8	3.9	7000	71
	1000	2.5	2.7	7286	71
	750	1.9	2.1	7504	70
	500	1.3	1.5	7645	66
420	1500	3	3.5	6979	74
	1000	2.3	2.4	7250	74
	750	1.7	1.9	7455	73
	500	1.1	1.3	7587	71
510	1500	2.9	2.8	6905	77
	1000	2.0	1.9	7121	76
	750	1.5	1.5	7283	75
	500	1.0	1.1	7386	71

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
645.75	1500	2.2	2.3	6833	73
	1000	1.5	1.6	6997	73
	750	1.1	1.2	7118	71
	500	0.7	0.8	7193	69
800	1500	1.9	2.0	7055	68
	1000	1.3	1.4	7188	68
	750	0.9	1.1	7284	68
	500	0.6	0.8	7342	64
1000	1500	1.5	1.7	7010	66
	1000	1.0	1.1	7112	66
	750	0.8	0.9	7183	65
	500	0.5	0.6	7224	61
1240	1500	1.2	1.4	6975	64
	1000	0.8	0.9	7052	64
	750	0.6	0.7	7106	62
	500	0.4	0.5	7134	59
1575	1500	1.0	1.1	7035	61
	1000	0.6	0.8	7091	61
	750	0.5	0.6	7129	60
	500	0.3	0.4	7147	57
1953	1500	0.8	1.0	7012	59
	1000	0.5	0.6	7054	59
	750	0.4	0.5	7080	58
	500	0.3	0.3	7090	54
2480	1500	0.6	0.7	6322	56
	1000	0.4	0.5	6348	56
	750	0.3	0.4	6362	55
	500	0.2	0.3	6366	52
3100	1500	0.5	0.6	6347	54
	1000	0.3	0.4	6364	54
	750	0.2	0.3	6372	53
	500	0.2	0.2	6371	50
3906	1500	0.4	0.5	6435	52
	1000	0.3	0.3	6444	52
	750	0.2	0.3	6447	51
	500	0.1	0.2	6442	48

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 225

### Rated power and Torques

Double Worm gear Unit

size 225

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
102.5	1500	15	19.8	11025	86
	1000	10	15.5	12938	86
	750	7.3	13.2	14596	85
	500	4.9	9.8	15814	83
133.3	1500	11	14.8	10633	85
	1000	7.5	11.2	12032	85
	750	5.6	9.3	13200	84
	500	3.8	6.7	14034	82
165	1500	9.1	11.7	10272	84
	1000	6.1	8.6	11351	84
	750	4.5	7.0	12230	83
	500	3.0	5.1	12845	80
200	1500	7.5	9.6	10010	82
	1000	5.0	7.0	10868	82
	750	3.8	5.6	11555	81
	500	2.5	4.0	12027	78
255	1500	5.9	7.4	9747	81
	1000	3.9	5.3	10393	81
	750	2.9	4.3	10899	79
	500	2.0	3.1	11241	75
330	1500	4.5	6.0	9533	76
	1000	3.0	4.2	10012	76
	750	2.3	3.3	10381	75
	500	1.5	2.4	10625	71
400	1500	3.8	5.1	9406	72
	1000	2.5	3.5	9791	72
	750	1.9	2.8	10083	71
	500	1.3	2.0	10273	68
510	1500	2.9	3.9	9681	77
	1000	2.0	2.6	9984	77
	750	1.5	2.1	10211	76
	500	1.0	1.5	10355	72
630	1500	2.4	3.2	9262	73
	1000	1.6	2.2	9491	73
	750	1.2	1.7	9660	72
	500	0.8	1.2	9765	70

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
660	1500	2	3.0	9245	73
	1000	1.5	2.1	9462	73
	750	1.1	1.6	9621	72
	500	0.8	1.1	9720	68
800	1500	1.9	2.7	9506	69
	1000	1.3	1.8	9686	69
	750	0.9	1.4	9815	68
	500	0.6	1.0	9893	65
1000	1500	1.5	2.2	9445	67
	1000	1.0	1.5	9582	67
	750	0.8	1.2	9679	66
	500	0.5	0.8	9734	62
1240	1500	1.2	1.9	9398	64
	1000	0.8	1.3	9502	64
	750	0.6	1.0	9574	63
	500	0.4	0.7	9613	59
1575	1500	1.0	1.4	9037	62
	1000	0.6	1.0	9110	62
	750	0.5	0.7	9159	61
	500	0.3	0.5	9182	58
1953	1500	0.8	1.2	9009	60
	1000	0.5	0.8	9062	60
	750	0.4	0.6	9096	59
	500	0.3	0.4	9109	55
2480	1500	0.6	1.0	8544	57
	1000	0.4	0.6	8579	57
	750	0.3	0.5	8598	56
	500	0.2	0.3	8603	53
3100	1500	0.5	0.8	8572	55
	1000	0.3	0.5	8595	55
	750	0.2	0.4	8606	54
	500	0.2	0.3	8604	51
3906	1500	0.4	0.7	8699	53
	1000	0.3	0.4	8712	53
	750	0.2	0.3	8715	52
	500	0.1	0.2	8709	49

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 250

### Rated power and Torques

Double Worm gear Unit

size 250

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
102.5	1500	15	19.5	10898	86
	1000	10	15.3	12790	86
	750	7.3	13.1	14428	85
	500	4.9	9.7	15632	83
133.3	1500	11	17.2	12320	85
	1000	7.5	12.9	13940	85
	750	5.6	10.8	15293	84
	500	3.8	7.8	16259	82
165	1500	9.1	14.5	12772	84
	1000	6.1	10.7	14113	84
	750	4.5	8.7	15206	83
	500	3.0	6.3	15972	80
200	1500	7.5	12.3	12786	82
	1000	5.0	8.9	13881	82
	750	3.8	7.2	14758	81
	500	2.5	5.2	15362	78
255	1500	5.9	9.6	12581	81
	1000	3.9	6.8	13414	81
	750	2.9	5.5	14068	79
	500	2.0	4.0	14509	75
330	1500	4.5	7.7	12304	76
	1000	3.0	5.4	12923	76
	750	2.3	4.2	13399	75
	500	1.5	3.0	13714	71
400	1500	3.8	6.6	12140	72
	1000	2.5	4.6	12637	72
	750	1.9	3.6	13014	71
	500	1.3	2.6	13259	68
510	1500	2.9	5.0	12472	77
	1000	2.0	3.4	12863	77
	750	1.5	2.7	13155	76
	500	1.0	1.9	13340	72
630	1500	2.4	4.1	11944	73
	1000	1.6	2.8	12240	73
	750	1.2	2.1	12458	72
	500	0.8	1.5	12593	70

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
660	1500	2	4.0	12330	73
	1000	1.5	2.7	12620	73
	750	1.1	2.1	12833	72
	500	0.8	1.5	12964	68
800	1500	1.9	3.5	12247	69
	1000	1.3	2.4	12478	69
	750	0.9	1.8	12644	68
	500	0.6	1.3	12744	65
1000	1500	1.5	2.9	12168	67
	1000	1.0	1.9	12344	67
	750	0.8	1.5	12469	66
	500	0.5	1.1	12540	62
1240	1500	1.2	2.4	12108	64
	1000	0.8	1.6	12242	64
	750	0.6	1.2	12334	63
	500	0.4	0.9	12384	59
1575	1500	1.0	1.9	11655	62
	1000	0.6	1.3	11749	62
	750	0.5	1.0	11811	61
	500	0.3	0.7	11841	58
1953	1500	0.8	1.6	11618	60
	1000	0.5	1.1	11687	60
	750	0.4	0.8	11730	59
	500	0.3	0.6	11747	55
2480	1500	0.6	1.2	10969	57
	1000	0.4	0.8	11014	57
	750	0.3	0.6	11039	56
	500	0.2	0.4	11044	53
3100	1500	0.5	1.0	11062	55
	1000	0.3	0.7	11091	55
	750	0.2	0.5	11105	54
	500	0.2	0.4	11103	51
3906	1500	0.4	0.8	10751	53
	1000	0.3	0.5	10767	53
	750	0.2	0.4	10770	52
	500	0.1	0.3	10762	49

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5XT_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5XT_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 280

### Rated power and Torques

Double Worm gear Unit

size 280

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
102.5	1500	15	33.7	19217	87
	1000	10	26.4	22553	87
	750	7.3	22.5	25442	86
	500	4.9	16.7	27566	85
133.3	1500	11	24.8	18227	86
	1000	7.5	18.7	20624	86
	750	5.6	15.6	22626	86
	500	3.8	11.3	24056	84
165	1500	9.1	19.6	17608	86
	1000	6.1	14.4	19456	86
	750	4.5	11.8	20964	85
	500	3.0	8.6	22019	82
205	1500	7.3	15.7	17107	84
	1000	4.9	11.3	18536	84
	750	3.7	9.1	19676	83
	500	2.4	6.5	20460	80
255	1500	5.9	12.5	16708	83
	1000	3.9	8.9	17815	83
	750	2.9	7.1	18683	81
	500	2.0	5.1	19269	77
320	1500	4.7	10.3	16379	78
	1000	3.1	7.2	17231	78
	750	2.3	5.7	17888	77
	500	1.6	4.1	18323	73
400	1500	3.8	8.5	16123	74
	1000	2.5	5.9	16782	74
	750	1.9	4.6	17283	73
	500	1.3	3.2	17609	71
510	1500	2.9	6.5	16590	79
	1000	2.0	4.4	17110	79
	750	1.5	3.5	17499	77
	500	1.0	2.5	17746	74
640	1500	2.3	5.4	16422	75
	1000	1.6	3.7	16822	75
	750	1.2	2.8	17116	74
	500	0.8	2.0	17298	70

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
800	1500	1.9	4.5	16291	71
	1000	1.3	3.1	16598	71
	750	0.9	2.4	16820	70
	500	0.6	1.7	16953	66
840	1500	1.8	4.2	15261	68
	1000	1.2	2.8	15532	68
	750	0.9	2.2	15728	68
	500	0.6	1.5	15844	66
1000	1500	1.5	3.7	16187	68
	1000	1.0	2.5	16421	68
	750	0.8	1.9	16586	67
	500	0.5	1.4	16681	64
1260	1500	1.2	2.9	15625	66
	1000	0.8	2.0	15795	66
	750	0.6	1.5	15911	65
	500	0.4	1.1	15974	62
1575	1500	1.0	2.4	15561	64
	1000	0.6	1.6	15687	64
	750	0.5	1.3	15770	63
	500	0.3	0.9	15810	60
2000	1500	0.8	1.9	14662	61
	1000	0.5	1.3	14746	61
	750	0.4	1.0	14799	60
	500	0.3	0.7	14819	57
2560	1500	0.6	1.5	14621	58
	1000	0.4	1.0	14677	58
	750	0.3	0.8	14708	58
	500	0.2	0.6	14714	54
3200	1500	0.5	1.3	14716	56
	1000	0.3	0.9	14752	56
	750	0.2	0.7	14768	55
	500	0.2	0.5	14764	52
4032	1500	0.4	1.0	14285	54
	1000	0.2	0.7	14304	54
	750	0.2	0.5	14307	53
	500	0.1	0.4	14296	50

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5 \times T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5 \times T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 315

### Rated power and Torques

Double Worm gear Unit

size 315

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
102.5	1500	15	35.8	20402	87
	1000	10	28.0	23943	87
	750	7.3	23.9	27010	86
	500	4.9	17.7	29265	85
143.3	1500	10	29.0	22909	86
	1000	7.0	21.7	25700	86
	750	5.2	18.1	28012	85
	500	3.5	13.0	29651	83
175	1500	8.6	24.6	23267	85
	1000	5.7	18.1	25563	85
	750	4.3	14.7	27424	84
	500	2.9	10.6	28719	81
215	1500	7.0	19.8	22669	84
	1000	4.7	14.3	24469	84
	750	3.5	11.4	25901	83
	500	2.3	8.2	26880	80
265	1500	5.7	15.9	22182	83
	1000	3.8	11.3	23593	83
	750	2.8	9.0	24696	81
	500	1.9	6.5	25438	78
330	1500	4.5	13.3	21774	78
	1000	3.0	9.3	22870	78
	750	2.3	7.3	23713	77
	500	1.5	5.3	24270	73
400	1500	3.8	11.4	21485	74
	1000	2.5	7.9	22363	74
	750	1.9	6.2	23031	73
	500	1.3	4.4	23465	69
530	1500	2.8	8.2	21986	79
	1000	1.9	5.7	22647	79
	750	1.4	4.4	23139	78
	500	0.9	3.1	23451	75
660	1500	2.3	6.9	21778	75
	1000	1.5	4.7	22290	75
	750	1.1	3.7	22666	74
	500	0.8	2.6	22897	70

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
800	1500	1.9	6.0	21631	71
	1000	1.3	4.1	22038	71
	750	0.9	3.1	22333	70
	500	0.6	2.2	22509	66
903	1500	1.7	5.0	19446	68
	1000	1.1	3.4	19764	68
	750	0.8	2.6	19991	67
	500	0.6	1.8	20124	66
1000	1500	1.5	4.9	21492	68
	1000	1.0	3.3	21803	68
	750	0.8	2.6	22023	67
	500	0.5	1.8	22149	64
1260	1500	1.2	3.7	19689	66
	1000	0.8	2.5	19903	66
	750	0.6	1.9	20050	65
	500	0.4	1.3	20129	62
1575	1500	1.0	3.1	19609	64
	1000	0.6	2.1	19767	64
	750	0.5	1.6	19872	63
	500	0.3	1.1	19922	60
2000	1500	0.8	2.5	19471	61
	1000	0.5	1.7	19583	61
	750	0.4	1.3	19652	60
	500	0.3	0.9	19679	57
2600	1500	0.6	2.0	19413	58
	1000	0.4	1.3	19485	58
	750	0.3	1.0	19525	58
	500	0.2	0.7	19532	54
3250	1500	0.5	1.7	19548	56
	1000	0.3	1.1	19595	56
	750	0.2	0.8	19615	56
	500	0.2	0.6	19609	52
4032	1500	0.4	1.4	19018	54
	1000	0.2	0.9	19044	54
	750	0.2	0.7	19048	53
	500	0.1	0.5	19033	50

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 355

### Rated power and Torques

Double Worm gear Unit

size 355

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
100	1500	15	47.1	26507	88
	1000	10	37.0	31230	88
	750	7.5	31.8	35336	87
	500	5.0	23.5	38364	86
125	1500	12	41.7	29189	88
	1000	8.0	31.7	33296	88
	750	6.0	26.6	36756	87
	500	4.0	19.4	39243	85
160	1500	9.4	35.2	31026	86
	1000	6.3	26.0	34391	86
	750	4.7	21.3	37145	86
	500	3.1	15.5	39076	83
200	1500	7.5	28.1	30419	85
	1000	5.0	20.3	33026	85
	750	3.8	16.3	35113	85
	500	2.5	11.8	36549	81
250	1500	6.0	22.3	29678	84
	1000	4.0	15.9	31686	84
	750	3.0	12.8	33264	82
	500	2.0	9.3	34330	77
330	1500	4.5	17.5	28968	79
	1000	3.0	12.2	30426	79
	750	2.3	9.6	31548	78
	500	1.5	7.0	32289	73
400	1500	3.8	15.0	28584	75
	1000	2.5	10.4	29752	75
	750	1.9	8.1	30640	74
	500	1.3	5.8	31218	70
500	1500	3.0	11.6	29445	80
	1000	2.0	7.9	30389	80
	750	1.5	6.2	31095	78
	500	1.0	4.5	31544	74
625	1500	2.4	9.3	28975	78
	1000	1.6	6.4	29699	78
	750	1.2	5.0	30232	77
	500	0.8	3.5	30564	73

i	n1	n2	P1N	T2N	$\eta$
	rpm	rpm	KW	N.m	%
660	1500	2.3	9.2	29083	76
	1000	1.5	6.3	29766	76
	750	1.1	4.8	30268	75
	500	0.8	3.5	30577	70
800	1500	1.9	7.9	28886	72
	1000	1.3	5.4	29430	72
	750	0.9	4.1	29823	71
	500	0.6	2.9	30059	67
1000	1500	1.5	6.5	28701	69
	1000	1.0	4.4	29116	69
	750	0.8	3.4	29409	68
	500	0.5	2.4	29578	65
1260	1500	1.2	5.1	27671	67
	1000	0.8	3.5	27971	67
	750	0.6	2.6	28178	66
	500	0.4	1.9	28288	63
1575	1500	1.0	4.3	27557	65
	1000	0.6	2.9	27780	65
	750	0.5	2.2	27927	64
	500	0.3	1.5	27999	60
2000	1500	0.8	3.3	25981	62
	1000	0.5	2.2	26130	62
	750	0.4	1.7	26223	61
	500	0.3	1.2	26259	58
2520	1500	0.6	2.7	25912	59
	1000	0.4	1.8	26014	59
	750	0.3	1.4	26071	58
	500	0.2	1.0	26083	55
3150	1500	0.5	2.3	26072	57
	1000	0.3	1.5	26138	57
	750	0.2	1.2	26168	56
	500	0.2	0.8	26163	53
4032	1500	0.4	1.8	25357	55
	1000	0.2	1.2	25391	55
	750	0.2	0.9	25398	54
	500	0.1	0.6	25377	51

注意事项:

瞬时最大启动转矩  $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque  $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 400

### Rated power and Torques

Double Worm gear Unit

size 400

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
100	1500	15	64.9	36501	88
	1000	10	51.0	43004	88
	750	7.5	43.7	48658	87
	500	5.0	32.3	52828	86
125	1500	12	49.8	34834	88
	1000	8.0	37.9	39737	88
	750	6.0	31.7	43865	87
	500	4.0	23.2	46833	85
160	1500	9.4	37.9	33408	86
	1000	6.3	28.0	37032	86
	750	4.7	23.0	39996	86
	500	3.1	16.7	42076	83
200	1500	7.5	29.9	32407	85
	1000	5.0	21.7	35185	85
	750	3.8	17.4	37408	85
	500	2.5	12.6	38937	81
250	1500	6.0	23.8	31618	84
	1000	4.0	16.9	33757	84
	750	3.0	13.6	35438	82
	500	2.0	9.9	36573	77
315	1500	4.8	19.6	30973	79
	1000	3.2	13.7	32612	79
	750	2.4	10.8	33876	78
	500	1.6	7.9	34715	73
400	1500	3.8	15.9	30452	75
	1000	2.5	11.1	31697	75
	750	1.9	8.6	32643	74
	500	1.3	6.2	33258	70
500	1500	3.0	12.3	31435	80
	1000	2.0	8.5	32442	80
	750	1.5	6.7	33196	78
	500	1.0	4.8	33676	74
625	1500	2.4	9.9	30915	78
	1000	1.6	6.8	31687	78
	750	1.2	5.3	32257	77
	500	0.8	3.8	32610	73

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
800	1500	1.9	8.4	30837	72
	1000	1.3	5.7	31418	72
	750	0.9	4.4	31838	71
	500	0.6	3.1	32090	67
1000	1500	1.5	7.0	30640	69
	1000	1.0	4.7	31083	69
	750	0.8	3.6	31396	68
	500	0.5	2.6	31576	65
1260	1500	1.2	5.5	29558	67
	1000	0.8	3.7	29879	67
	750	0.6	2.8	30099	66
	500	0.4	2.0	30217	63
1575	1500	1.0	4.5	29437	65
	1000	0.6	3.1	29674	65
	750	0.5	2.3	29832	64
	500	0.3	1.6	29908	60
2000	1500	0.8	3.5	27741	62
	1000	0.5	2.4	27900	62
	750	0.4	1.8	27999	61
	500	0.3	1.3	28037	58
2520	1500	0.6	2.9	27667	59
	1000	0.4	2.0	27775	59
	750	0.3	1.5	27836	58
	500	0.2	1.1	27850	55
3150	1500	0.5	2.4	27824	57
	1000	0.3	1.6	27895	57
	750	0.2	1.2	27927	56
	500	0.2	0.9	27921	53
3969	1500	0.4	2.0	27135	55
	1000	0.3	1.3	27173	55
	750	0.2	1.0	27182	54
	500	0.1	0.7	27160	51

注意事项:

瞬时最大启动转矩  $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

ATTENTION:

Briefly maximum start torque  $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.



### 承载能力

双级蜗杆减速器

规格 450

### Rated power and Torques

Double Worm gear Unit

size 450

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
100	1500	15	80.5	45767	89
	1000	10	63.2	53921	89
	750	7.5	54.2	61010	88
	500	5.0	40.1	66239	86
125	1500	12	65.6	46375	89
	1000	8.0	49.9	52901	89
	750	6.0	42.0	58397	87
	500	4.0	30.5	62349	86
160	1500	9.4	50.0	44476	87
	1000	6.3	36.9	49300	87
	750	4.7	30.2	53247	86
	500	3.1	21.9	56016	84
200	1500	7.5	39.6	43144	86
	1000	5.0	28.7	46841	86
	750	3.8	23.0	49801	85
	500	2.5	16.6	51837	82
250	1500	6.0	31.5	42093	84
	1000	4.0	22.4	44941	84
	750	3.0	17.9	47178	83
	500	2.0	12.9	48690	79
315	1500	4.8	25.8	41235	80
	1000	3.2	18.1	43416	80
	750	2.4	14.3	45099	79
	500	1.6	10.4	46217	74
400	1500	3.8	20.9	40540	76
	1000	2.5	14.5	42198	76
	750	1.9	11.4	43457	75
	500	1.3	8.1	44276	71
500	1500	3.0	16.3	41866	81
	1000	2.0	11.2	43208	81
	750	1.5	8.8	44212	79
	500	1.0	6.2	44851	76
625	1500	2.4	13.1	41078	79
	1000	1.6	9.0	42105	79
	750	1.2	7.0	42862	77
	500	0.8	4.9	43331	74

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
800	1500	1.9	11.1	41071	73
	1000	1.3	7.5	41845	73
	750	0.9	5.8	42404	72
	500	0.6	4.1	42739	68
1000	1500	1.5	9.1	40808	70
	1000	1.0	6.2	41398	70
	750	0.8	4.7	41815	69
	500	0.5	3.4	42054	66
1260	1500	1.2	7.2	39233	68
	1000	0.8	4.8	39659	68
	750	0.6	3.7	39952	67
	500	0.4	2.6	40108	64
1575	1500	1.0	6.0	39072	65
	1000	0.6	4.0	39388	65
	750	0.5	3.1	39597	65
	500	0.3	2.2	39698	61
2000	1500	0.8	4.6	36890	62
	1000	0.5	3.1	37102	62
	750	0.4	2.4	37233	62
	500	0.3	1.7	37284	58
2520	1500	0.6	3.8	36792	60
	1000	0.4	2.6	36936	60
	750	0.3	2.0	37017	59
	500	0.2	1.4	37035	56
3150	1500	0.5	3.2	36935	58
	1000	0.3	2.1	37029	58
	750	0.2	1.6	37072	57
	500	0.2	1.1	37064	54
3969	1500	0.4	2.6	36011	56
	1000	0.3	1.7	36062	56
	750	0.2	1.3	36073	55
	500	0.1	0.9	36044	52

注意事项:

瞬时最大启动转矩  $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

ATTENTION:

Briefly maximum start torque  $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.





### 承载能力

双级蜗杆减速器

规格 500

### Rated power and Torques

Double Worm gear Unit

size 500

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
100	1500	15	103.9	59068	89
	1000	10	81.6	69592	89
	750	7.5	70.0	78741	88
	500	5.0	51.8	85489	86
125	1500	12	84.7	59840	89
	1000	8.0	64.4	68261	89
	750	6.0	54.2	75352	87
	500	4.0	39.4	80451	86
160	1500	9.4	64.5	57389	87
	1000	6.3	47.6	63614	87
	750	4.7	39.0	68706	86
	500	3.1	28.3	72279	84
200	1500	7.5	51.1	55670	86
	1000	5.0	37.0	60441	86
	750	3.8	29.7	64260	85
	500	2.5	21.4	66888	82
250	1500	6.0	40.6	54314	84
	1000	4.0	28.9	57989	84
	750	3.0	23.1	60876	83
	500	2.0	16.5	62826	80
315	1500	4.8	33.2	53207	80
	1000	3.2	23.3	56021	80
	750	2.4	18.4	58194	79
	500	1.6	13.4	59635	74
400	1500	3.8	27.0	52311	76
	1000	2.5	18.8	54450	76
	750	1.9	14.7	56074	75
	500	1.3	10.5	57131	71
500	1500	3.0	21.0	53728	81
	1000	2.0	14.4	55449	81
	750	1.5	11.3	56738	79
	500	1.0	7.9	57558	76
625	1500	2.4	17.0	53141	79
	1000	1.6	11.6	54469	79
	750	1.2	9.0	55447	77
	500	0.8	6.3	56055	75

i	n1	n2	P1N	T2N	η
	rpm	rpm	KW	N.m	%
800	1500	1.9	14.2	52707	73
	1000	1.3	9.7	53700	73
	750	0.9	7.4	54418	72
	500	0.6	5.3	54848	68
1000	1500	1.5	11.7	52369	70
	1000	1.0	7.9	53126	70
	750	0.8	6.1	53662	69
	500	0.5	4.3	53969	66
1260	1500	1.2	9.3	50795	68
	1000	0.8	6.3	51346	68
	750	0.6	4.8	51725	67
	500	0.4	3.4	51929	64
1575	1500	1.0	7.7	50587	65
	1000	0.6	5.2	50996	65
	750	0.5	4.0	51266	65
	500	0.3	2.8	51397	61
2000	1500	0.8	6.0	47565	62
	1000	0.5	4.0	47837	62
	750	0.4	3.1	48007	62
	500	0.3	2.2	48073	58
2520	1500	0.6	4.9	47438	60
	1000	0.4	3.3	47624	60
	750	0.3	2.5	47729	59
	500	0.2	1.8	47751	56
3150	1500	0.5	4.1	47340	58
	1000	0.3	2.7	47460	58
	750	0.2	2.1	47516	57
	500	0.2	1.5	47505	54
3969	1500	0.4	3.3	46409	56
	1000	0.3	2.2	46474	56
	750	0.2	1.7	46489	55
	500	0.1	1.2	46452	52

注意事项:

瞬时最大启动转矩 $T_{2max}=2.5T_{2N}$ ;

瞬时最大启动转矩持续时间小于15秒;

瞬时最大启动转矩启动时间小于3秒.

**ATTENTION:**

Briefly maximum start torque $T_{2max}=2.5T_{2N}$ ;

Briefly maximum start torque constant time less than 15s;

Briefly maximum start torque start time less than 3s.

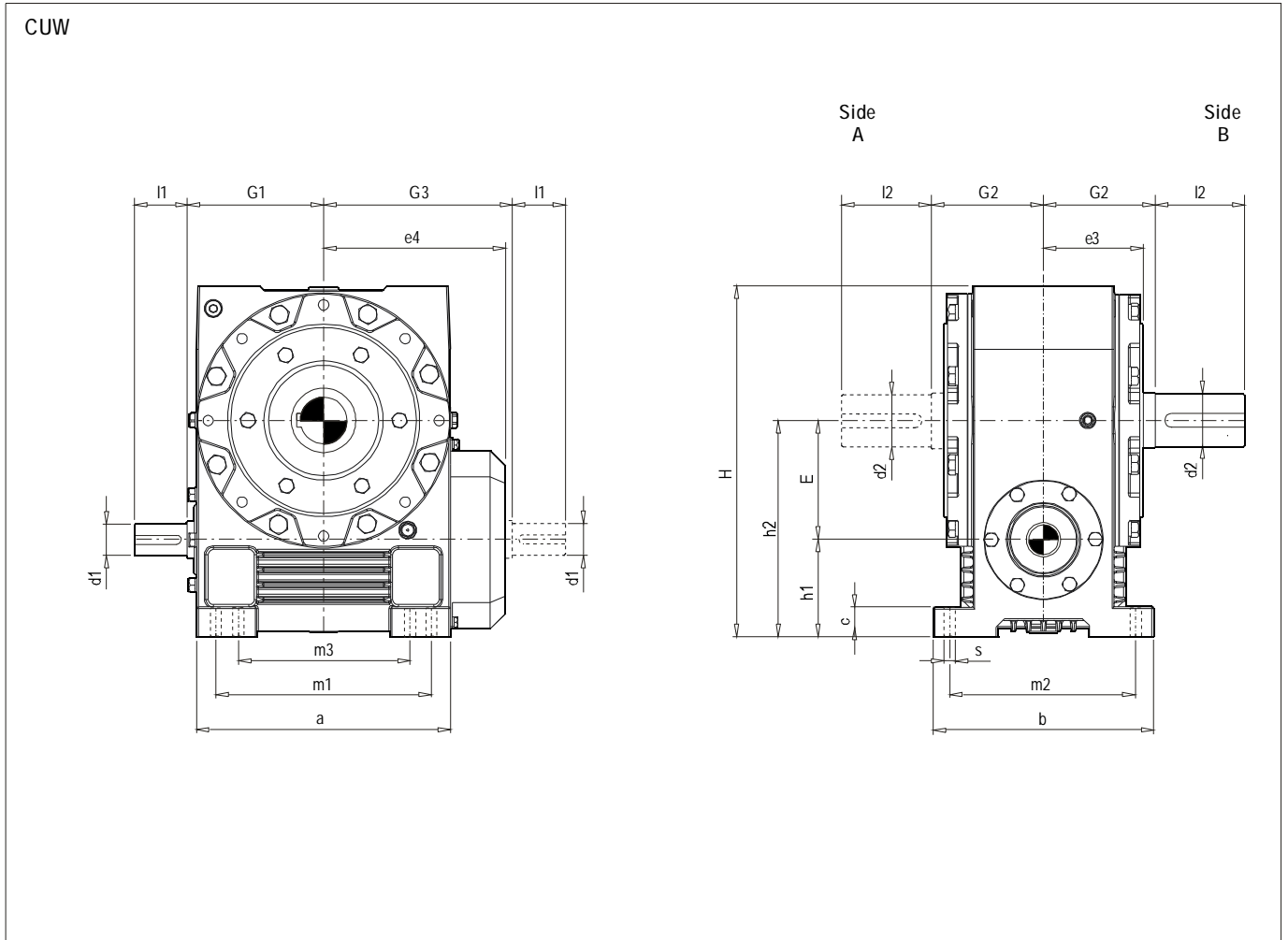


安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit



型号 Size	a	b	c	d1	l1	d2	l2	e3	e4	E	G1	G3	G2	h1	h2	H	m1	m2	m3	s
100	216	200	28	28 m6	50	48 m6	80	98	168	100	124	171	102	90	190	309	170	170	-	15
125	254	235	32	32 m6	55	55 m6	95	114	194	125	145	197	120	100	225	364	200	200	-	19
140	290	260	36	38 m6	60	65 m6	105	126	220	140	165	224	132	115	255	416	230	225	-	19
160	324	295	40	42 m6	70	70 m6	120	143	244	160	184	248	150	130	290	472	260	255	-	19
180	364	325	45	48 m6	80	80 m6	140	159	272	180	205	276	165	140	320	522	290	280	-	24
200	396	350	50	55 m6	90	90 m6	160	171	294	200	223	298	178	150	350	573	315	295	-	24
225	440	380	55	60 m6	100	100 m6	180	188	323	225	245	327	195	165	390	638	350	325	-	28
250	480	415	60	65 m6	105	110 n6	200	204	354	250	270	358	212	180	430	703	385	355	-	28
280	525	450	65	70 m6	110	120 n6	220	222	387	280	318	392	230	200	480	786	430	385	-	35
315	590	490	70	75 m6	120	140 n6	240	244	430	315	355	434	252	215	530	870	480	420	-	35
355	665	535	78	80 m6	130	150 n6	260	266	478	355	395	482	275	240	595	977	540	460	-	42
400	748	585	85	90 m6	145	170 n6	290	291	526	400	432	530	300	260	660	1086	605	510	-	42
450	855	562	92	100 m6	160	190 n6	320	322	596	450	485	600	332	290	740	1270	750	495	560	35
500	955	616	100	110 n6	175	210 n6	350	355	663	500	540	668	365	315	815	1410	840	540	630	42

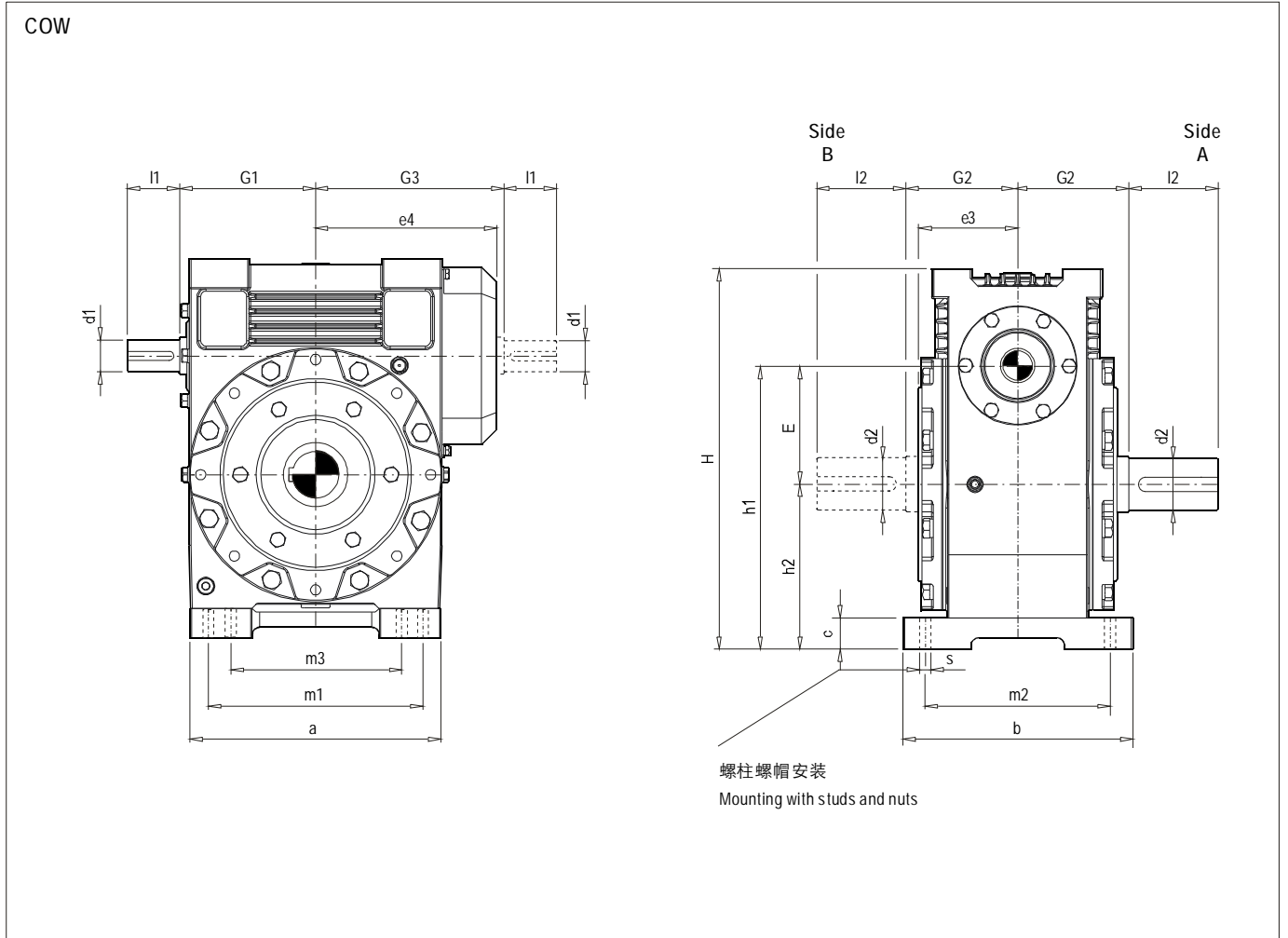


安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit



型号 Size	a	b	c	d1	l1	d2	l2	e3	e4	E	G1	G3	G2	h1	h2	H	m1	m2	m3	s
100	216	200	28	28 m6	50	48 m6	80	98	168	100	124	171	102	245	145	335	170	170	-	15
125	254	235	32	32 m6	55	55 m6	95	114	194	125	145	197	120	295	170	395	200	200	-	19
140	290	260	36	38 m6	60	65 m6	105	126	220	140	165	224	132	335	195	450	230	225	-	19
160	324	295	40	42 m6	70	70 m6	120	143	244	160	184	248	150	380	220	510	260	255	-	19
180	364	325	45	48 m6	80	80 m6	140	159	272	180	205	276	165	425	245	565	290	280	-	24
200	396	350	50	55 m6	90	90 m6	160	171	294	200	223	298	178	470	270	620	315	295	-	24
225	440	380	55	60 m6	100	100 m6	180	188	323	225	245	327	195	525	300	690	350	325	-	28
250	480	415	60	65 m6	105	110 n6	200	204	354	250	270	358	212	580	330	760	385	355	-	28
280	525	450	65	70 m6	110	120 n6	220	222	387	280	318	392	230	647	367	847	430	385	-	35
315	590	490	70	75 m6	120	140 n6	240	244	430	315	355	434	252	720	405	935	480	420	-	35
355	665	535	78	80 m6	130	150 n6	260	266	478	355	395	482	275	810	455	1050	540	460	-	42
400	748	585	85	90 m6	145	170 n6	290	291	526	400	432	530	300	905	505	1165	605	510	-	42
450	855	562	92	100 m6	160	190 n6	320	322	596	450	485	600	332	980	530	1270	750	495	560	35
500	955	616	100	110 n6	175	210 n6	350	355	663	500	540	668	365	1095	595	1410	840	540	630	42

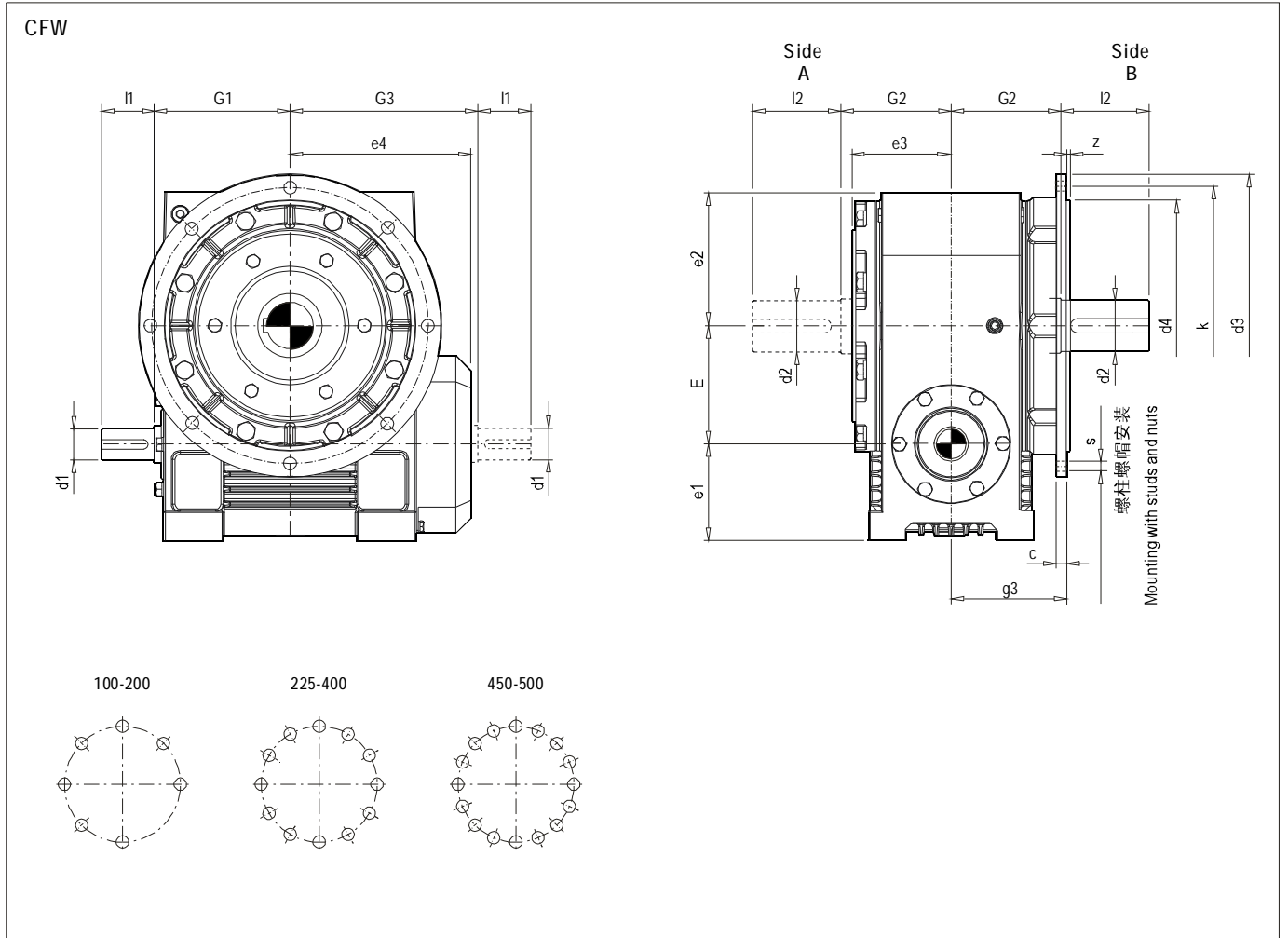


安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit



型号 Size	c	d1	l1	d2	l2	d3	d4	e1	e2	e3	e4	E	g3	G1	G3	G2	k	s	z
100	9	28 m6	50	48 m6	80	266	220 h8	90	119	98	168	100	107	124	171	102	245	7 x 11	4
125	10	32 m6	55	55 m6	95	315	260 h8	100	139	114	194	125	125	145	197	120	290	7 x 13.5	5
140	11	38 m6	60	65 m6	105	360	305 h8	115	161	126	220	140	138	165	224	132	335	7 x 13.5	5
160	12	42 m6	70	70 m6	120	410	340 h8	130	182	143	244	160	157	184	248	150	380	7 x 17.5	5
180	13	48 m6	80	80 m6	140	450	380 h8	140	202	159	272	180	172	205	276	165	420	7 x 17.5	5
200	14	55 m6	90	90 m6	160	490	420 h8	150	223	171	294	200	185	223	298	178	460	7 x 17.5	5
225	15	60 m6	100	100 m6	180	540	465 h8	165	248	188	323	225	202	245	327	195	505	12 x 17.5	5
250	16.5	65 m6	105	110 n6	200	590	515 h8	180	273	204	354	250	220	270	358	212	555	12 x 17.5	6
280	18	70 m6	110	120 n6	220	665	575 h8	200	306	222	387	280	238	318	392	230	625	12 x 22	6
315	19.5	75 m6	120	140 n6	240	730	640 h8	215	340	244	430	315	260	355	434	252	690	12 x 22	6
355	21	80 m6	130	150 n6	260	825	725 h8	240	382	266	478	355	286	395	482	275	780	12 x 26	6
400	22.5	90 m6	145	170 n6	290	910	805 h8	260	426	291	526	400	312	432	530	300	865	12 x 26	6
450	24	100 m6	160	190 n6	320	1025	905 h8	290	530	322	596	450	345	485	600	332	975	16 x 26	6
500	25.5	110 n6	175	210 n6	350	1150	1015 h8	315	595	355	663	500	380	540	668	365	1095	16 x 33	6

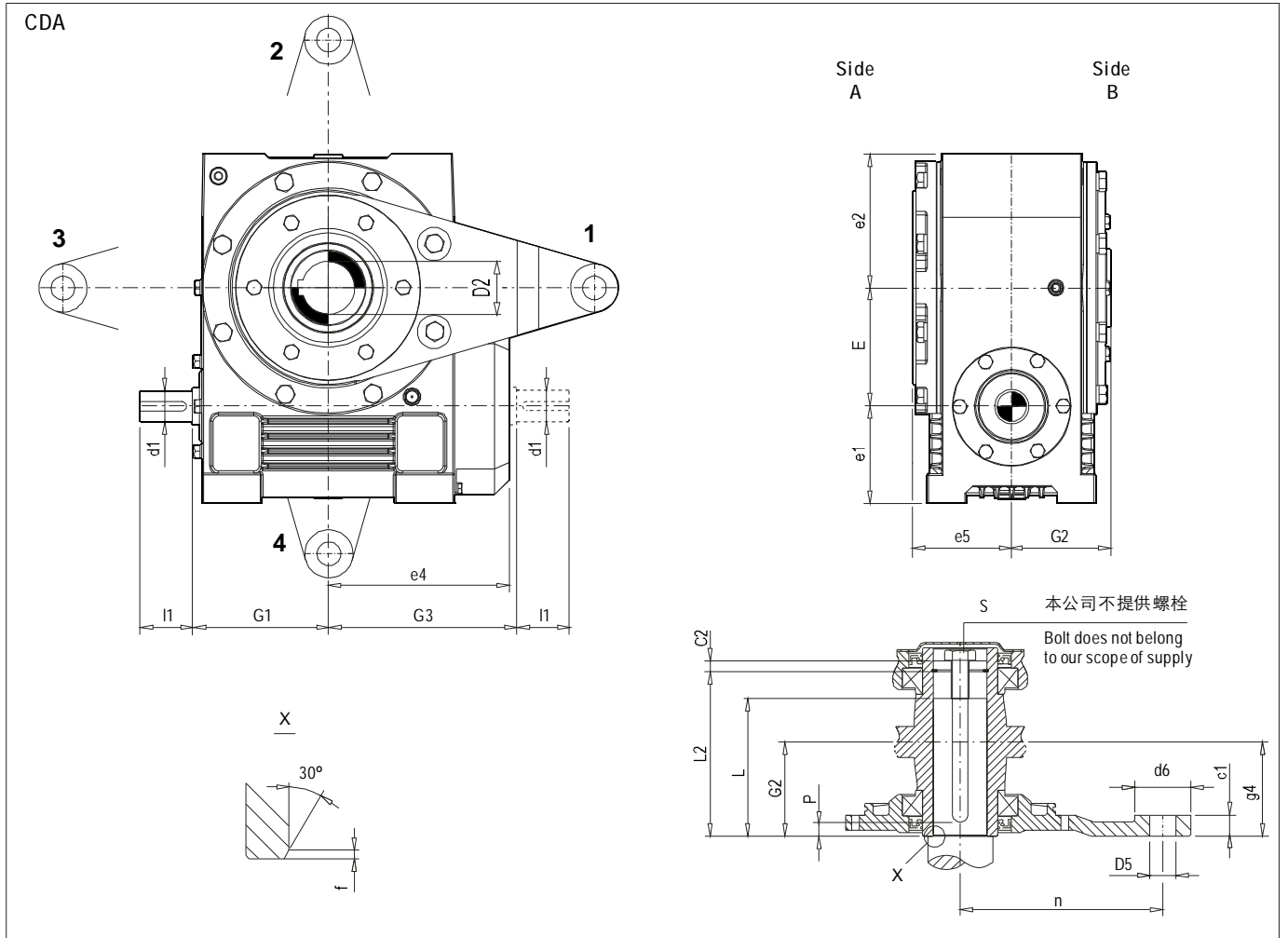


安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit



型号 Size	c1	c2	d1	l1	d6	D2 H7	D5 H8	e1	e2	e4	e5	E	f	g4	G1	G3	G2	Lmin	Lmax	L2	n	Pmin	s
100	20	11	28 m6	50	40	50	20	90	119	168	102	100	3	88	124	171	93	136	147	165	225	14	M 16
125	20	12	32 m6	55	50	60	25	100	139	194	115	125	3	101	145	197	106	155	167	187	270	16	M 20
140	25	14	38 m6	60	50	65	25	115	161	220	127	140	3	113	165	224	118	173	186	208.5	315	18	M 20
160	25	15	42 m6	70	65	75	32	130	182	244	142	160	4	126	184	248	132	194	212	235.5	360	20	M 20
180	32	16	48 m6	80	65	85	32	140	202	272	154	180	4	138	205	276	144	212	233	259	405	22	M 20
200	32	17	55 m6	90	80	95	40	150	223	294	165	200	4	148	223	298	155	228	250	278	450	25	M 24
225	40	18	60 m6	100	80	105	40	165	248	323	182	225	5	163	245	327	170	250	276	307	505	28	M 24
250	40	20	65 m6	105	80	115	40	180	273	354	197	250	5	178	270	358	185	272	301	335	560	30	M 24
280	40	22	70 m6	110	100	125	50	200	306	387	213	280	5	192	318	392	200	293	326	363	630	32	M 24
315	50	24	75 m6	120	100	140	50	215	340	430	233	315	5	212	355	434	220	322	357	397	710	36	M 30
355	50	27	80 m6	130	120	160	60	240	382	478	256	355	5	233	395	482	242	354	394	438	800	40	M 30
400	60	30	90 m6	145	120	180	60	260	426	526	279	400	5	256	432	530	265	387	433	481	900	45	M 30
450	60	33	100 m6	160	150	200	75	290	530	596	308	450	6	282	485	600	292	425	480	532	1010	48	M 30
500	75	36	110 n6	175	150	220	75	315	595	663	336	500	6	310	540	668	320	465	528	585	1120	50	M 30

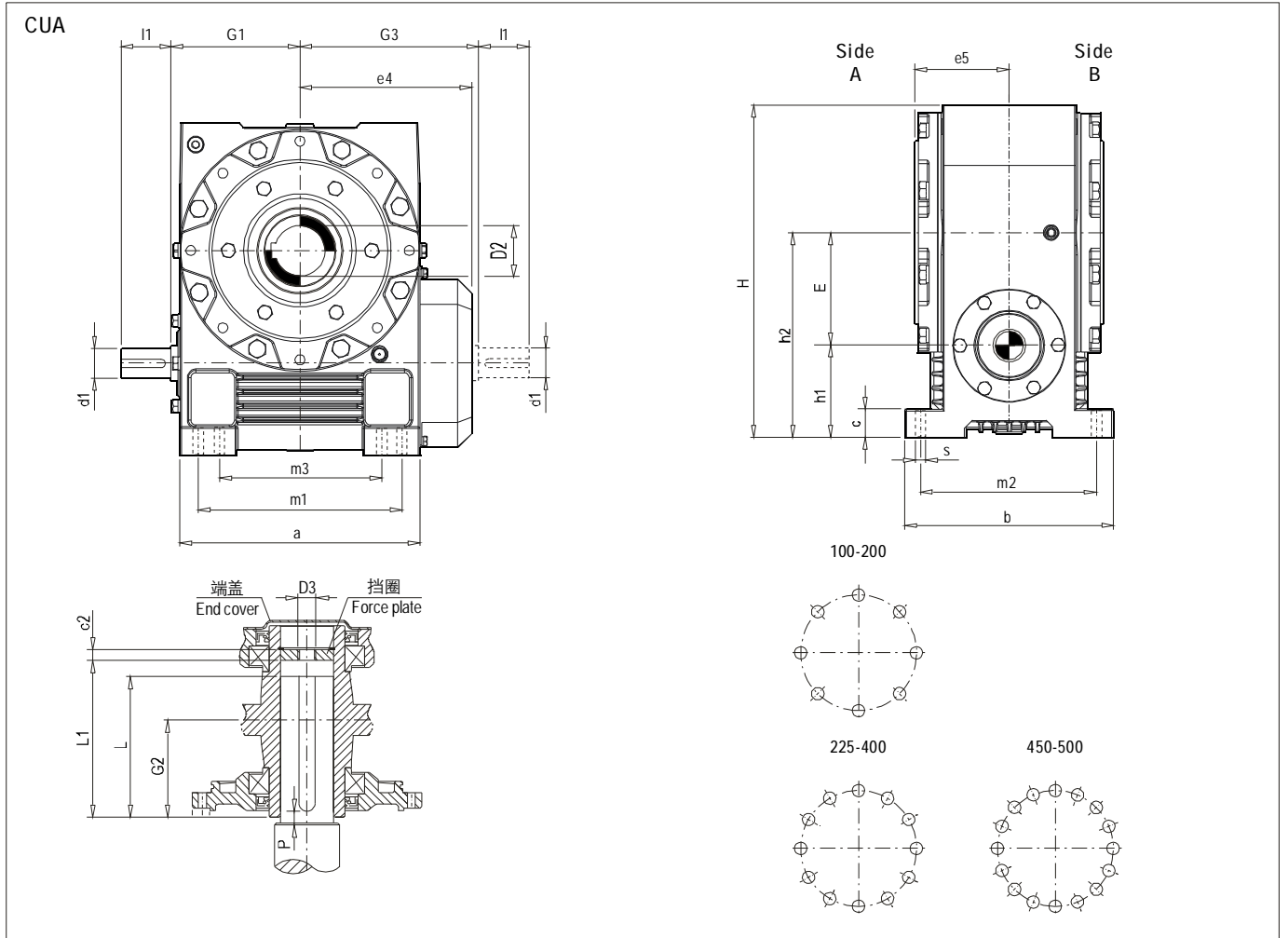


安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit



型号 Size	a	b	c	c2	d1	l1	D2 H7	D3	e4	e5	E	G1	G2	G3	h1	h2	H	Lmin	Lmax	L1	m1	m2	m3	Pmin	s	z
100	216	200	28	11	28 m6	50	50	M20	168	102	100	124	93	171	90	190	309	136	147	152	170	170	-	14	15	3.5
125	254	235	32	12	32 m6	55	60	M24	194	115	125	145	106	197	100	225	364	155	167	173	200	200	-	16	19	4
140	290	260	36	14	38 m6	60	65	M24	220	127	140	165	118	224	115	255	416	173	186	192.5	230	225	-	18	19	4
160	324	295	40	15	42 m6	70	75	M24	244	142	160	184	132	248	130	290	472	194	212	218.5	260	255	-	20	19	5
180	364	325	45	16	48 m6	80	85	M24	272	154	180	205	144	276	140	320	522	212	233	240	290	280	-	22	24	5
200	396	350	50	17	55 m6	90	95	M30	294	165	200	223	155	298	150	350	573	228	250	258	315	295	-	25	24	5
225	440	380	55	18	60 m6	100	105	M30	323	182	225	245	170	327	165	390	638	250	276	285	350	325	-	28	28	5
250	480	415	60	20	65 m6	105	115	M30	354	197	250	270	185	358	180	430	703	272	301	311	385	355	-	30	28	5
280	525	450	65	22	70 m6	110	125	M36	387	213	280	318	200	392	200	480	786	293	326	337	430	385	-	32	35	6
315	590	490	70	24	75 m6	120	140	M36	430	233	315	355	220	434	215	530	870	322	357	369	480	420	-	36	35	6
355	665	535	78	27	80 m6	130	160	M36	478	256	355	395	242	482	240	595	977	354	394	407	540	460	-	40	42	6
400	748	585	85	30	90 m6	145	180	M36	526	279	400	432	265	530	260	660	1086	387	433	447	605	510	-	45	42	6
450	855	562	92	33	100 m6	160	200	M36	596	308	450	485	292	600	290	740	1270	425	480	495	750	495	560	48	35	6
500	955	616	100	36	110 n6	175	220	M36	663	336	500	540	320	668	315	815	1410	465	528	544	840	540	630	50	42	6

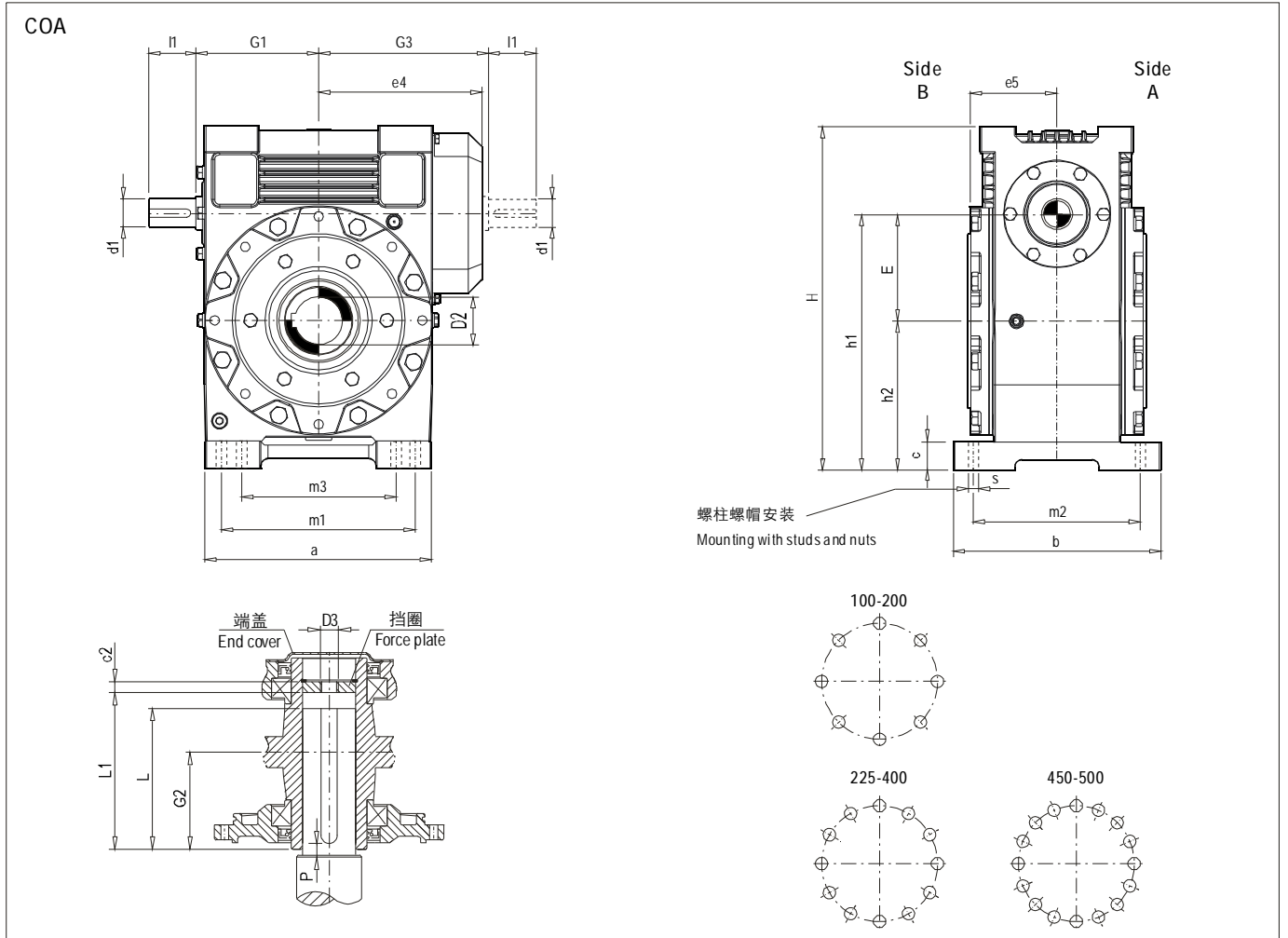


安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit



型号 Size	a	b	c	c2	d1	l1	D2 H7	D3	G1	G3	G2	e4	e5	E	h1	h2	H	m1	m2	m3	Lmin	Lmax	L1	Pmin	s
100	216	200	28	11	28 m6	50	50	M20	124	171	93	168	102	100	245	145	335	170	170	-	136	147	152	14	15
125	254	235	32	12	32 m6	55	60	M24	145	197	106	194	115	125	295	170	395	200	200	-	155	167	173	16	19
140	290	260	36	14	38 m6	60	65	M24	165	224	118	220	127	140	335	195	450	230	225	-	173	186	192.5	18	19
160	324	295	40	15	42 m6	70	75	M24	184	248	132	244	142	160	380	220	510	260	255	-	194	212	218.5	20	19
180	364	325	45	16	48 m6	80	85	M24	205	276	144	272	154	180	425	245	565	290	280	-	212	233	240	22	24
200	396	350	50	17	55 m6	90	95	M30	223	298	155	294	165	200	470	270	620	315	295	-	228	250	258	25	24
225	440	380	55	18	60 m6	100	105	M30	245	327	170	323	182	225	525	300	690	350	325	-	250	276	285	28	28
250	480	415	60	20	65 m6	105	115	M30	270	358	185	354	197	250	580	330	760	385	355	-	272	301	311	30	28
280	525	450	65	22	70 m6	110	125	M30	318	392	200	387	213	280	647	367	847	430	385	-	293	326	337	32	35
315	590	490	70	24	75 m6	120	140	M36	355	434	220	430	233	315	720	405	935	480	420	-	322	357	369	36	35
355	665	535	78	27	80 m6	130	160	M36	395	482	242	478	256	355	810	455	1050	540	460	-	354	394	407	40	42
400	748	585	85	30	90 m6	145	180	M36	432	530	265	526	279	400	905	505	1165	605	510	-	387	433	447	45	42
450	855	562	92	33	100 m6	160	200	M36	485	600	292	596	308	450	980	530	1270	750	495	560	425	480	495	48	35
500	955	616	100	36	110 n6	175	220	M36	540	668	320	663	336	500	1095	595	1410	840	540	630	465	528	544	50	42

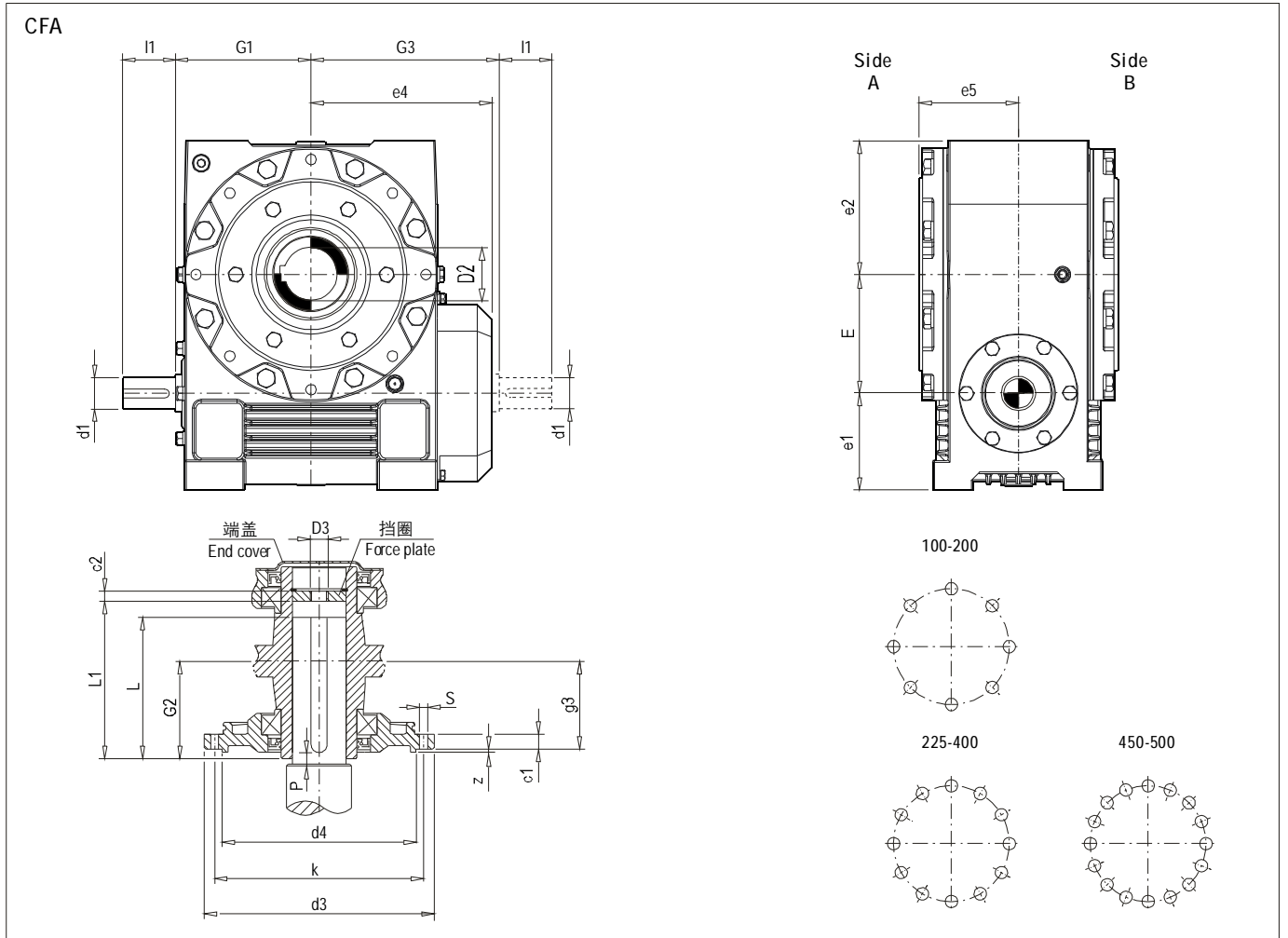


安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit



型号 Size	c1	c2	d1	l1	d3	d4 h8	D2 H7	D3	e1	e2	e4	e5	E	g3	G1	G2	G3	k	Lmin	Lmax	L1	Pmin	s	z
100	18	11	28 m6	50	217	155	50	M20	90	119	168	102	100	90	124	93	171	195	136	147	152	14	8 X M 10	3.5
125	20	12	32 m6	55	258	190	60	M24	100	139	194	115	125	104	145	106	197	235	155	167	173	16	8 X M 12	4
140	22	14	38 m6	60	302	225	65	M24	115	161	220	127	140	116	165	118	224	275	173	186	192.5	18	8 X M 12	4
160	25	15	42 m6	70	338	260	75	M24	130	182	244	142	160	129	184	132	248	310	194	212	218.5	20	8 X M 16	5
180	28	16	48 m6	80	379	295	85	M24	140	202	272	154	180	142	205	144	276	350	212	233	240	22	8 X M 16	5
200	31	17	55 m6	90	416	330	95	M30	150	223	294	165	200	152	223	155	298	385	228	250	258	25	8 X M 16	5
225	34	18	60 m6	100	462	375	105	M30	165	248	323	182	225	167	245	170	327	430	250	276	285	28	12 X M 16	5
250	37	20	65 m6	105	510	420	115	M30	180	273	354	197	250	181	270	185	358	480	272	301	311	30	12 X M 16	5
280	40	22	70 m6	110	574	465	125	M30	200	306	387	213	280	196	318	200	392	535	293	326	337	32	12 X M 20	6
315	43	24	75 m6	120	638	530	140	M36	215	340	430	233	315	216	355	220	434	600	322	357	369	36	12 X M 20	6
355	46	27	80 m6	130	720	600	160	M36	240	382	478	256	355	238	395	242	482	680	354	394	407	40	12 X M 24	6
400	48	30	90 m6	145	804	680	180	M36	260	426	526	279	400	260	432	265	530	760	387	433	447	45	12 X M 24	6
450	52	33	100 m6	160	906	770	200	M36	290	530	596	308	450	287	485	292	600	860	425	480	495	48	16 X M 24	6
500	55	36	110 n6	175	1014	860	220	M36	315	595	663	336	500	314	540	320	668	960	465	528	544	50	16 X M 30	6





安装尺寸

单级减速器

Mounting Dimensions

Single Worm gear Unit

**CHA**

防护套  
Guard

涨紧套  
Shrink disk

滑套  
Sliding bush

轴配合尺寸  
Fiting dimensions for shaft

**注意:**

A 其他相关尺寸见CFA

B 订货时防护套需单独指明

**NOTE:**

A. Other dimensions see CFA type

B. Guard to be ordered separately

型号 Size	涨紧套/Shrink disk			d7	d8	d9	d10	f1	G2	G4	l3	l4	l5	l6	l7
	型号/Size	T <sub>2max</sub> (N.m)	D												
100	HSD 68-32	2200	115	50	55	51	64	1	93	129	222	27	30	30	14
125	HSD 80-32	4600	141	60	65	61	75	1	106	144	250	29	32	32	16
140	HSD 90-32	6400	155	65	70	66	80	2	118	166	284	35	38	40	16
160	HSD 100-32	9700	170	75	80	77	90	2	132	184	316	40	43	45	16
180	HSD 110-32	14000	185	85	90	87	100	2	144	202	346	45	48	50	18
200	HSD 125-32	21200	215	95	100	97	110	2	155	216	371	48	51	50	19
225	HSD 140-32	29800	230	105	110	107	120	2	170	238	408	53	56	60	20
250	HSD 155-32	40000	263	115	120	117	130	2	185	257	442	57	60	60	20
280	HSD 165-32	51000	290	125	130	127	140	2	200	280	480	63	66	65	22
315	HSD 185-32	79000	320	140	150	142	160	2	220	317	537	78	82	80	23
355	HSD 200-32	95000	340	155	160	157	170	2	242	340	582	78	82	80	23
400	HSD 240-32	148000	405	175	180	177	190	2	265	385	650	98	102	100	27
450	HSD 260-32	215000	430	200	205	202	215	2	292	425	717	112	116	120	30
500	HSD 280-32	279000	460	220	225	222	235	2	320	467	787	125	130	135	31

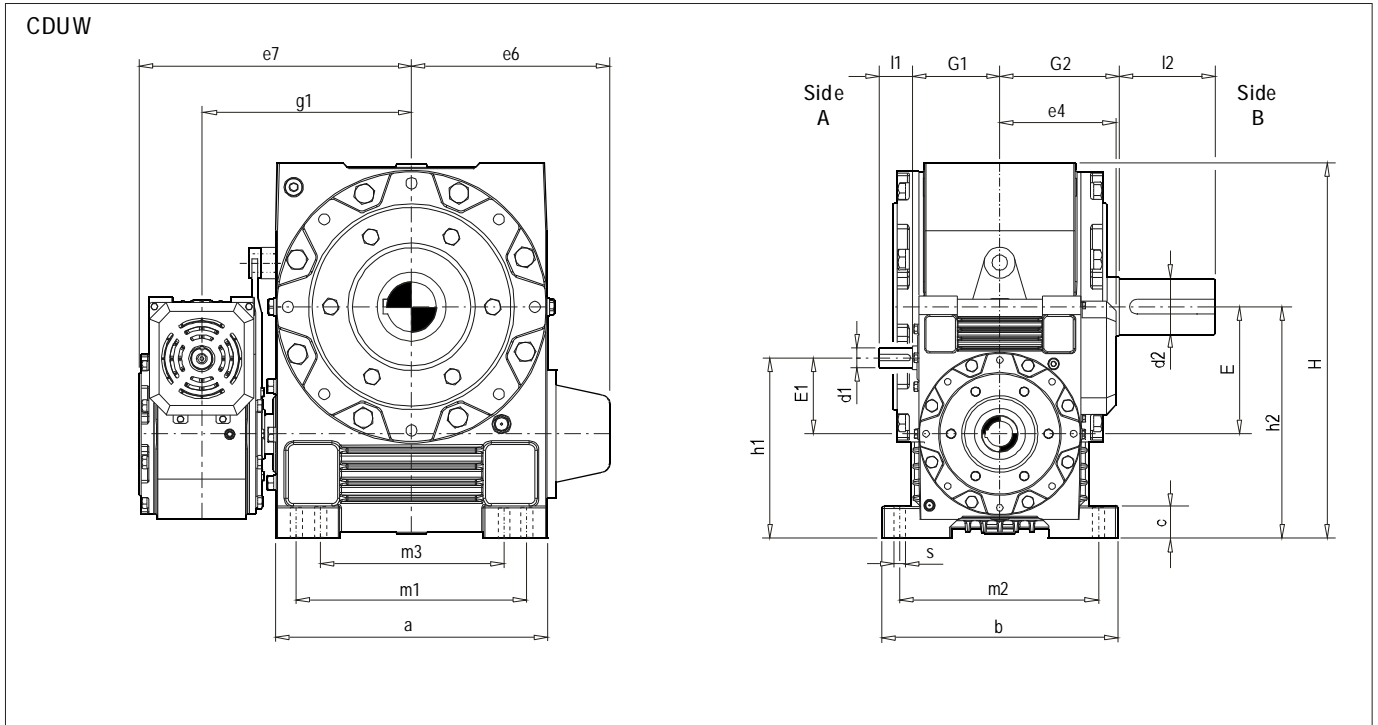


安装尺寸

双级减速器

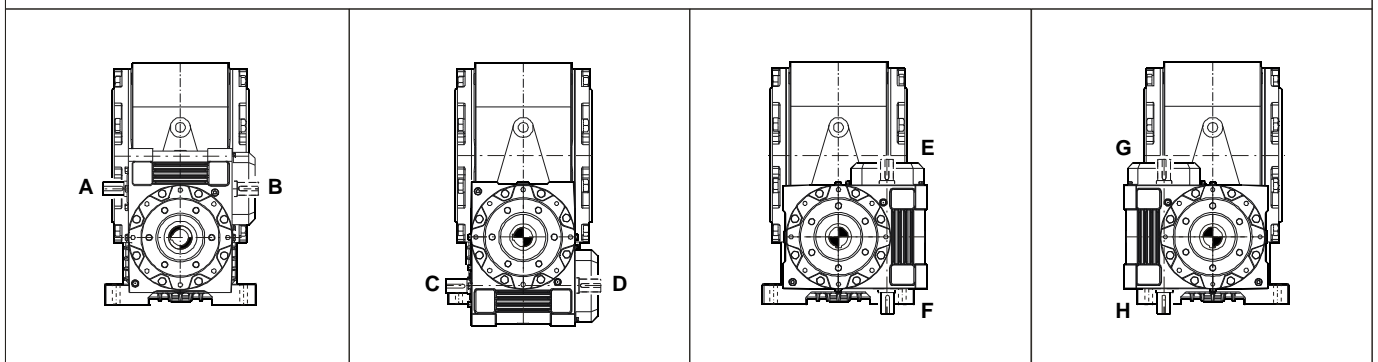
Mounting Dimensions

Double Worm gear Unit



轴配置

Shaft Configuration



型号 Size	a	b	c	d1	l1	d2	l2	e4	e6	e7	E	E1	g1	G1	G2	h1	h2	H	m1	m2	m3	s
180	364	325	45	28 m6	50	80m6	140	168	249	400	180	100	298	124	165	240	320	522	290	280	-	24
200	396	350	50	28 m6	50	90m6	160	168	269	418	200	100	316	124	178	250	350	573	315	295	-	24
225	440	380	55	32 m6	55	100m6	180	194	294	466	225	125	351	145	195	290	390	638	350	325	-	28
250	480	415	60	32 m6	55	110n6	200	194	321	491	250	125	376	145	212	305	430	703	385	355	-	28
280	525	450	65	38 m6	60	120n6	220	220	299	550	280	140	423	165	230	340	480	786	430	385	-	35
315	590	490	70	42 m6	70	140n6	240	244	334	611	315	160	469	184	252	375	530	870	480	420	-	35
355	665	535	78	48 m6	80	150n6	260	272	376	679	355	180	525	205	275	420	595	977	540	460	-	42
400	748	585	85	55 m6	90	170n6	290	294	419	741	400	200	576	223	300	460	660	1086	605	510	-	42
450	855	562	92	60 m6	100	190n6	320	323	475	835	450	225	653	245	332	515	740	1270	750	495	560	35
500	955	616	100	65 m6	105	210n6	350	354	530	922	500	250	726	270	365	565	815	1410	840	540	630	42

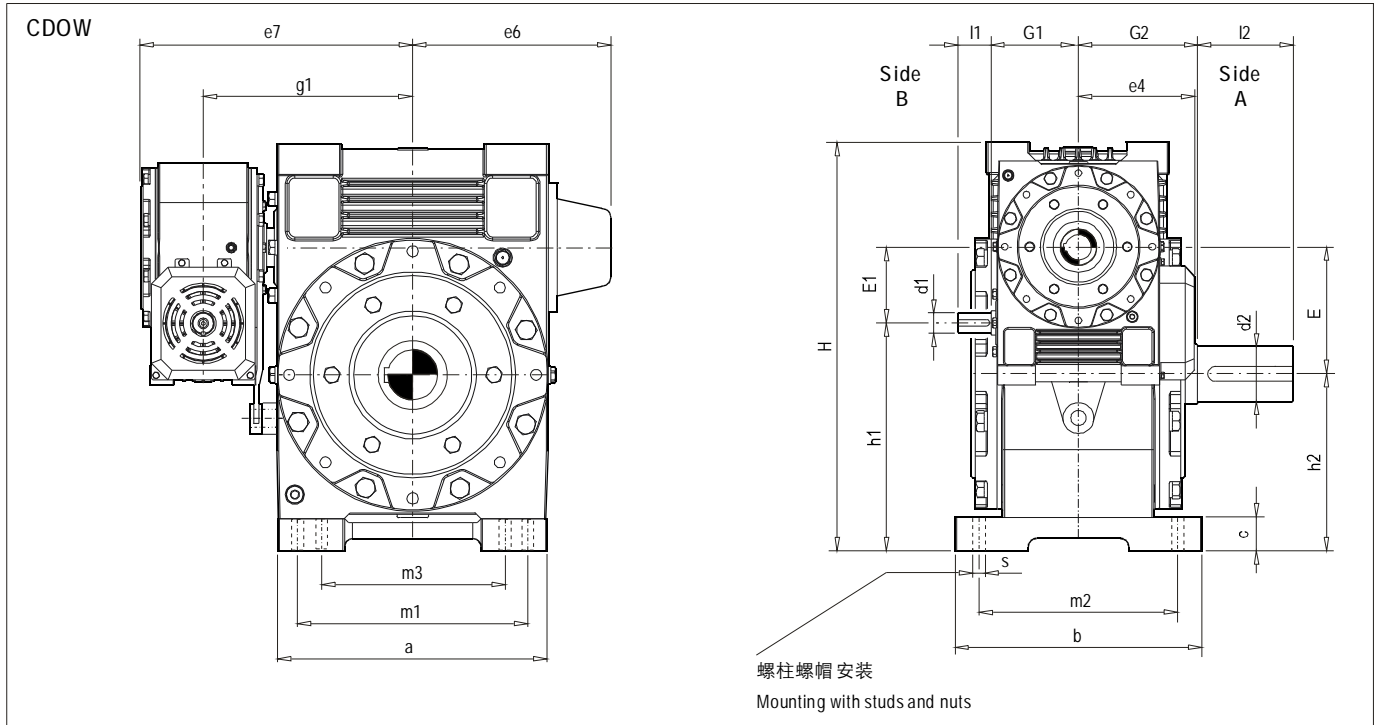


安装尺寸

双级减速器

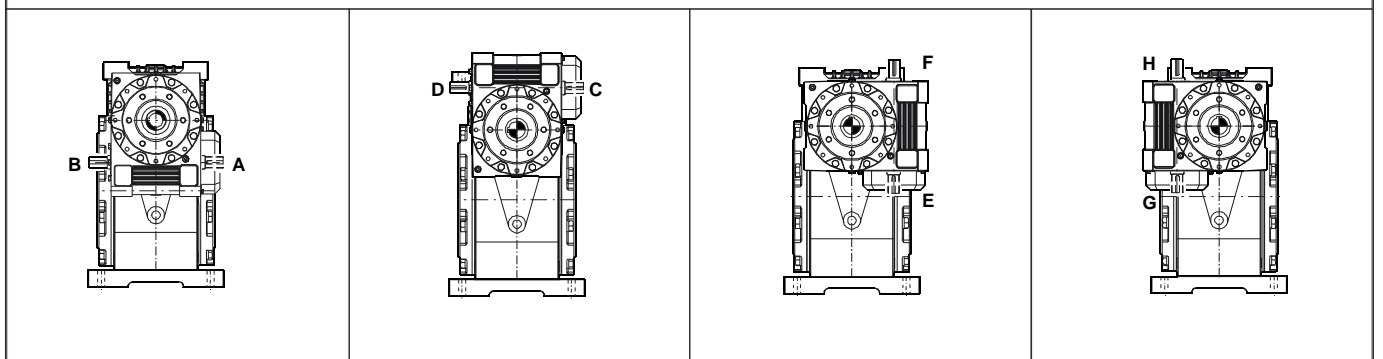
Mounting Dimensions

Double Worm gear Unit



轴配置

Shaft Configuration



型号 Size	a	b	c	d1	l1	d2	l2	e4	e6	e7	E	E1	g1	G1	G2	h1	h2	H	m1	m2	m3	s
180	364	325	45	28 m6	50	80m6	140	168	249	400	180	100	298	124	165	325	245	522	290	280	-	24
200	396	350	50	28 m6	50	90m6	160	168	269	418	200	100	316	124	178	370	270	573	315	295	-	24
225	440	380	55	32 m6	55	100m6	180	194	294	466	225	125	351	145	195	400	300	638	350	325	-	28
250	480	415	60	32 m6	55	110n6	200	194	321	491	250	125	376	145	212	455	330	703	385	355	-	28
280	525	450	65	38 m6	60	120n6	220	220	299	550	280	140	423	165	230	507	367	786	430	385	-	35
315	590	490	70	42 m6	70	140n6	240	244	334	611	315	160	469	184	252	560	405	870	480	420	-	35
355	665	535	78	48 m6	80	150n6	260	272	376	679	355	180	525	205	275	690	455	977	540	460	-	42
400	748	585	85	55 m6	90	170n6	290	294	419	741	400	200	576	223	300	705	505	1086	605	510	-	42
450	855	562	92	60 m6	100	190n6	320	323	475	835	450	225	653	245	332	755	530	1270	750	495	560	35
500	955	616	100	65 m6	105	210n6	350	354	530	922	500	250	726	270	365	845	595	1410	840	540	630	42

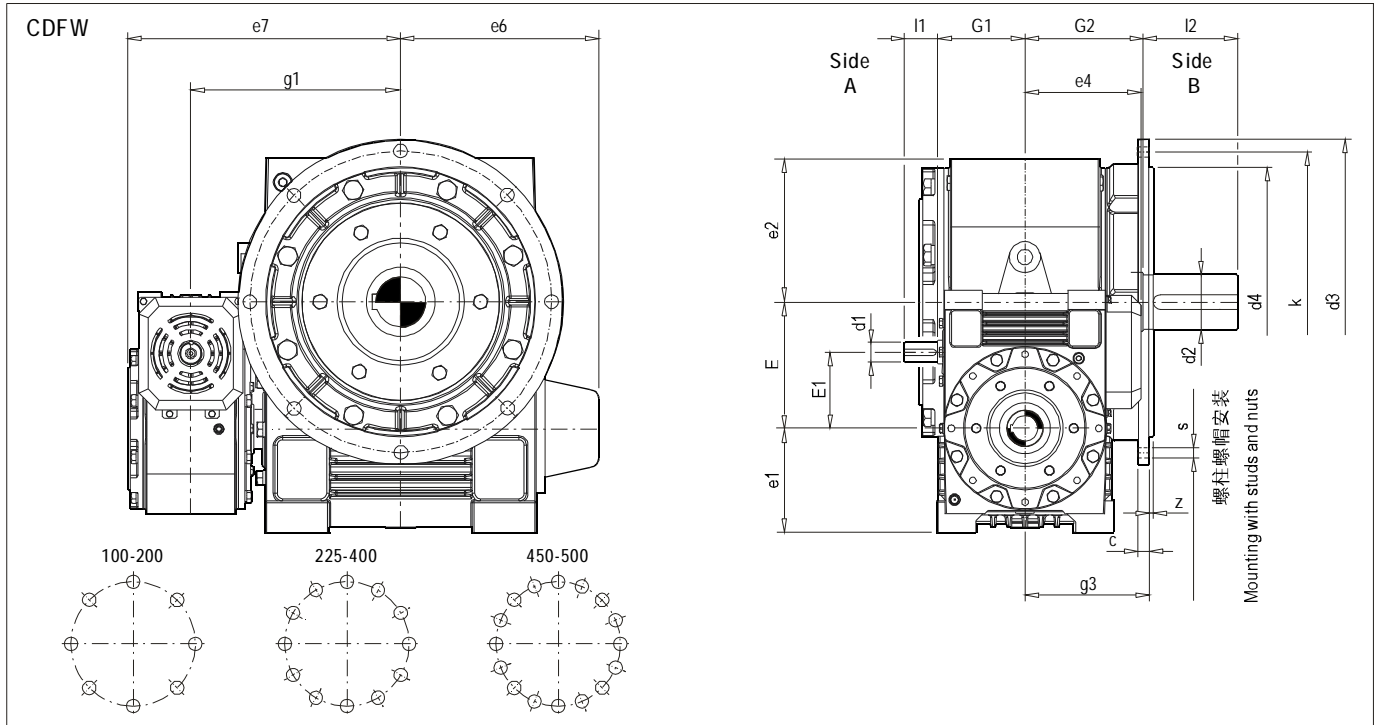


安装尺寸

双级减速器

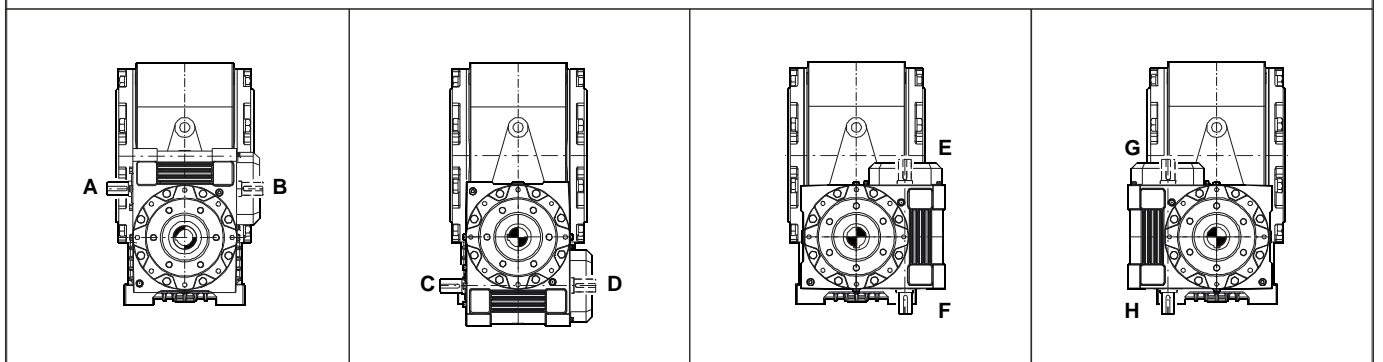
Mounting Dimensions

Double Worm gear Unit



轴配置

Shaft Configuration



型号 Size	c	d1	l1	d2	l2	d3	d4 h8	e1	e2	e4	e6	e7	E	E1	g1	g3	G1	G2	k	s	z
180	13	28 m6	50	80m6	140	450	380	140	202	168	249	400	180	100	298	172	124	165	420	8 X17.5	5
200	14	28 m6	50	90m6	160	490	420	150	223	168	269	418	200	100	316	185	124	178	460	8 X17.5	5
225	15	32 m6	55	100m6	180	540	465	165	248	194	294	466	225	125	351	202	145	195	505	12 X17.5	5
250	16.5	32 m6	55	110n6	200	590	515	180	273	194	321	491	250	125	376	220	145	212	555	12 X17.5	6
280	18	38 m6	60	120n6	220	665	575	200	306	220	299	550	280	140	423	238	165	230	625	12 X22	6
315	19.5	42 m6	70	140n6	240	730	640	215	340	244	334	611	315	160	469	260	184	252	690	12 X22	6
355	21	48 m6	80	150n6	260	825	725	240	382	272	376	679	355	180	525	286	205	275	780	12 X26	6
400	22.5	55 m6	90	170n6	290	910	805	260	426	294	419	741	400	200	576	312	223	300	865	12 X26	6
450	24	60 m6	100	190n6	320	1025	905	290	530	323	475	835	450	225	653	345	245	332	975	16 X26	6
500	25.5	65 m6	105	210n6	350	1150	1015	315	595	354	530	922	500	250	726	389	270	365	1095	16 X33	6

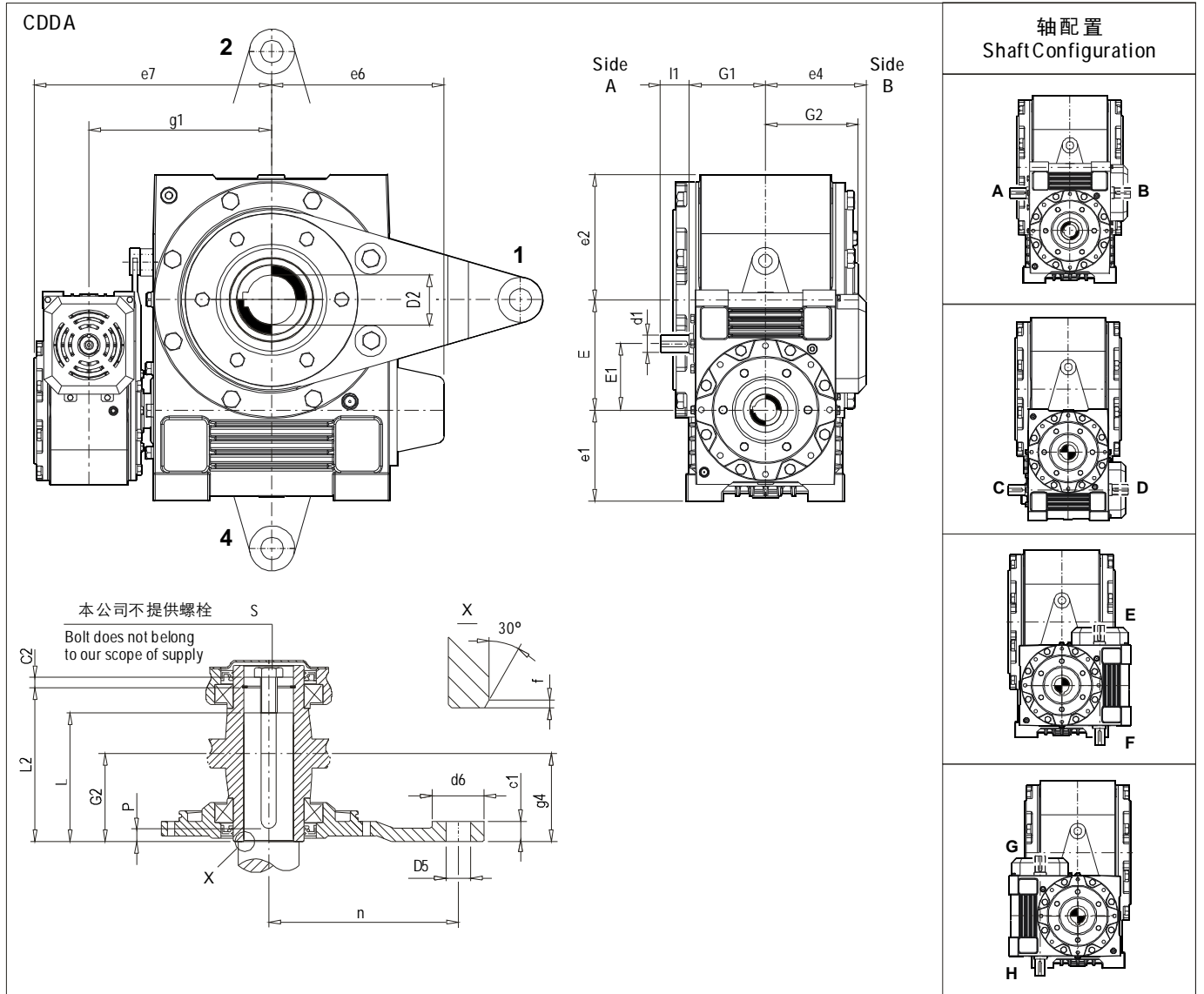


安装尺寸

双级减速器

Mounting Dimensions

Double Worm gear Unit



型号 Size	c1	c2	d1	l1	d6	D2 H7	D5 H8	e1	e2	e4	e6	e7	E	E1	f	g1	g4	G1	G2	Lmin	Lmax	L2	n	Pmin	S
180	32	16	28 m6	50	65	85	32	140	202	168	249	400	180	100	4	298	138	124	144	212	233	259	405	22	M20
200	32	17	28 m6	50	80	95	40	150	223	168	269	418	200	100	4	316	148	124	155	228	250	278	450	25	M24
225	40	18	32 m6	55	80	105	40	165	248	194	294	466	225	125	5	351	163	145	170	250	276	307	505	28	M24
250	40	20	32 m6	55	80	115	40	180	273	194	321	491	250	125	5	376	178	145	185	272	301	335	560	30	M24
280	40	22	38 m6	60	100	125	50	200	306	220	299	550	280	140	5	423	192	165	200	293	326	363	630	32	M24
315	50	24	42 m6	70	100	140	50	215	340	244	334	611	315	160	5	469	212	184	220	322	357	397	710	36	M30
355	50	27	48 m6	80	120	160	60	240	382	272	376	679	355	180	5	525	233	205	242	354	394	438	800	40	M30
400	60	30	55 m6	90	120	180	60	260	426	294	419	741	400	200	5	576	256	223	265	387	433	481	900	45	M30
450	60	33	60 m6	100	150	200	75	290	530	323	475	835	450	225	6	653	282	245	292	425	480	532	1010	48	M30
500	75	36	65 m6	105	150	220	75	315	595	354	530	922	500	250	6	726	310	270	320	465	528	585	1120	50	M36

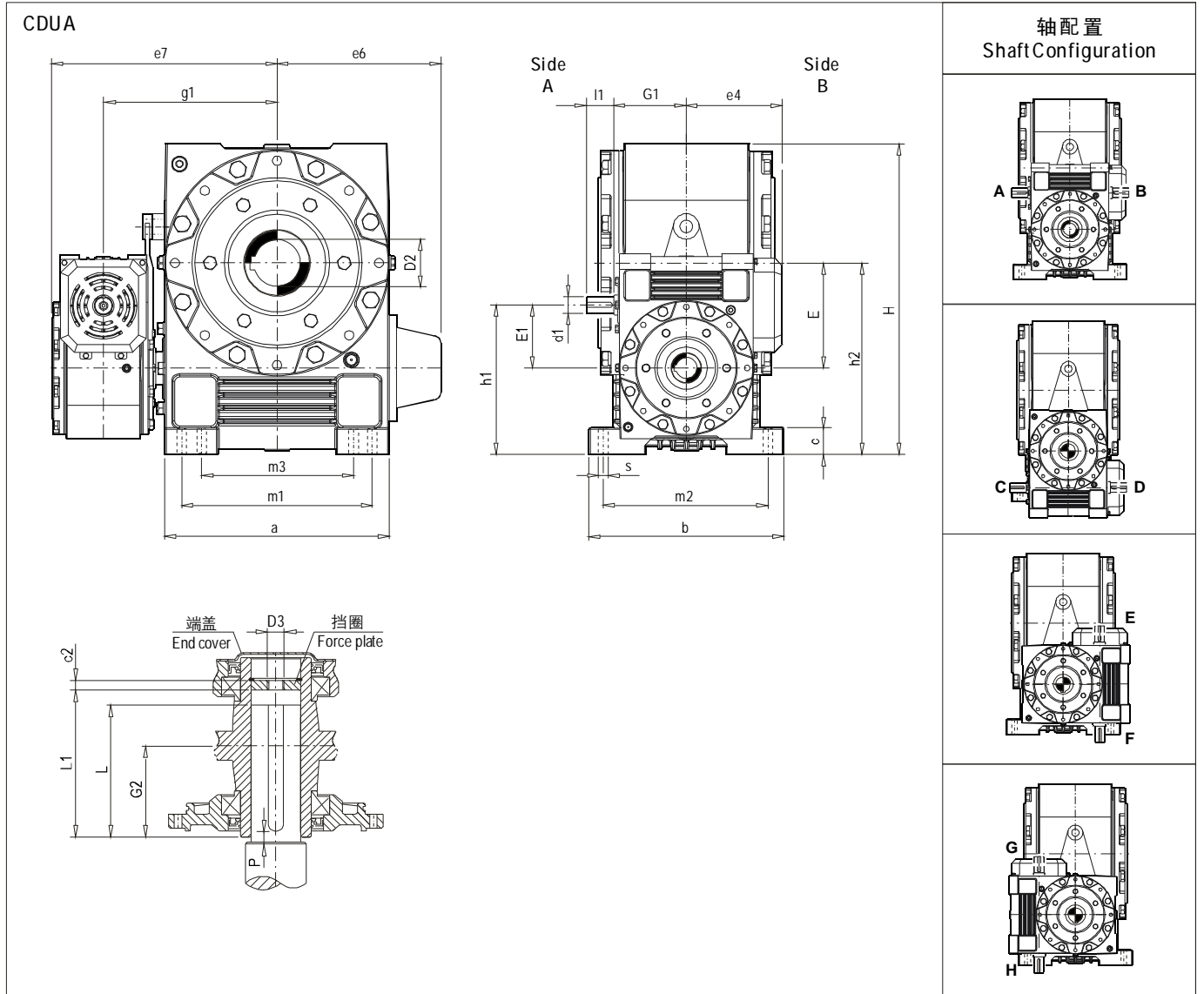


安装尺寸

双级减速器

Mounting Dimensions

Double Worm gear Unit



型号 Size	a	b	c	c2	d1 m6	l1	D2 H7	D3	e4	e6	e7	E	E1	g1	G1	G2	h1	h2	H	Lmin	Lmax	L1	m1	m2	m3	Pmin	s
180	364	325	45	16	28	50	85	M24	168	249	400	180	100	298	124	144	240	320	522	212	233	240	290	280	-	22	24
200	396	350	50	17	28	50	95	M30	168	269	418	200	100	316	124	155	250	350	573	228	250	258	315	295	-	25	24
225	440	380	55	18	32	55	105	M30	194	294	466	225	125	351	145	170	290	390	638	250	276	285	350	325	-	28	28
250	480	415	60	20	32	55	115	M30	194	321	491	250	125	376	145	185	305	430	703	272	301	311	385	355	-	30	28
280	525	450	65	22	38	60	125	M30	220	299	550	280	140	423	165	200	340	480	786	293	326	337	430	385	-	32	35
315	590	490	70	24	42	70	140	M36	244	334	611	315	160	469	184	220	375	530	870	322	357	369	480	420	-	36	35
355	665	535	78	27	48	80	160	M36	272	376	679	355	180	525	205	242	420	595	977	354	394	407	540	460	-	40	42
400	748	585	85	30	55	90	180	M36	294	419	741	400	200	576	223	265	460	660	1086	387	433	447	605	510	-	45	42
450	855	562	92	33	60	100	200	M36	323	475	835	450	225	653	245	292	515	740	1270	425	480	495	750	495	560	48	35
500	955	616	100	36	65	105	220	M36	354	530	922	500	250	726	270	320	565	815	1410	465	528	544	840	540	630	50	42

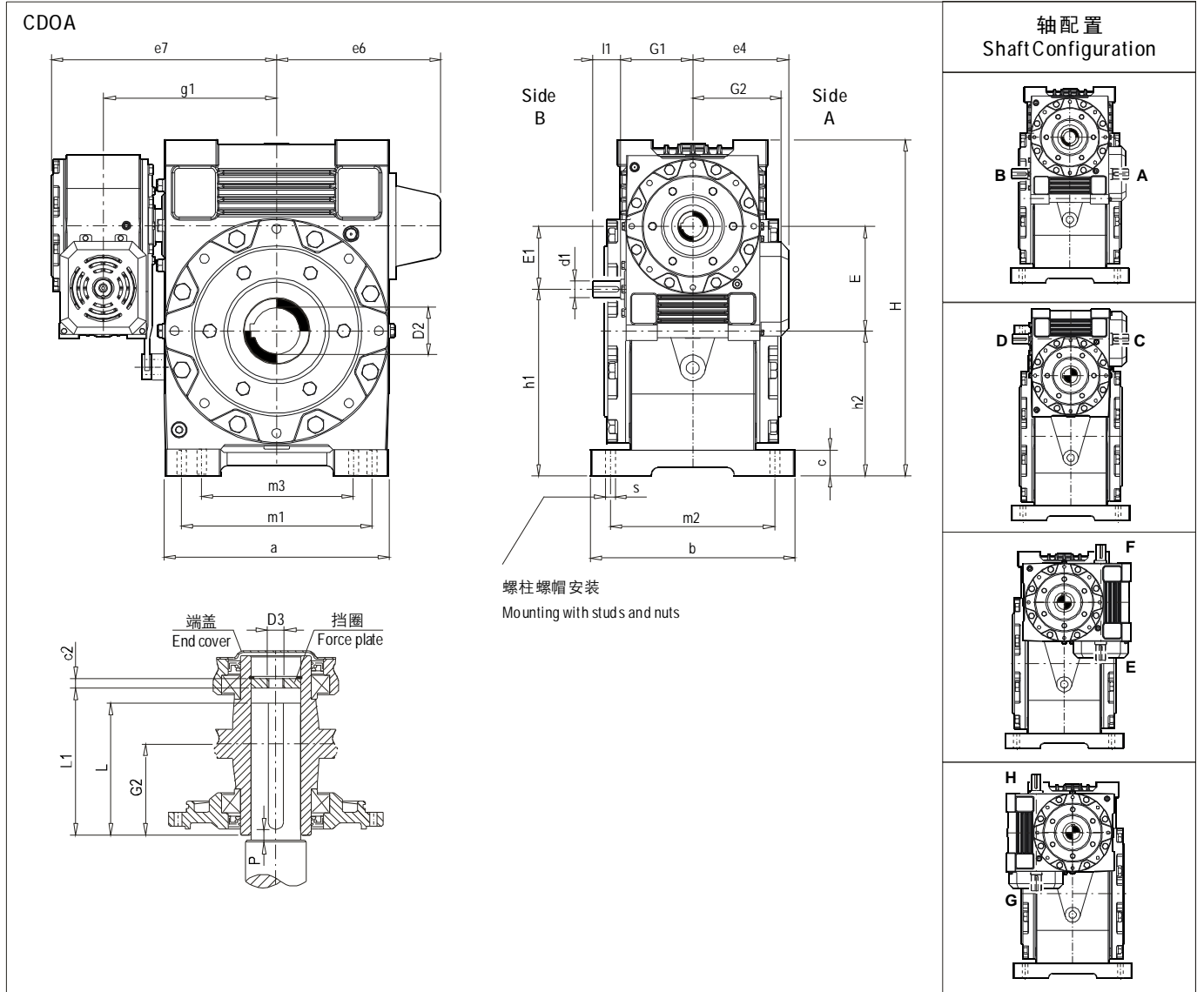


安装尺寸

双级减速器

Mounting Dimensions

Double Worm gear Unit



型号 Size	a	b	c	c2	d1 m6	l1	D2 H7	D3	e4	e6	e7	E	E1	g1	G1	G2	h1	h2	H	Lmin	Lmax	L1	m1	m2	m3	Pmin	s
180	364	325	45	16	28	50	85	M24	168	249	400	180	100	298	124	144	325	245	522	212	233	240	290	280	-	22	24
200	396	350	50	17	28	50	95	M30	168	269	418	200	100	316	124	155	370	270	573	228	250	258	315	295	-	25	24
225	440	380	55	18	32	55	105	M30	194	294	466	225	125	351	145	170	400	300	638	250	276	285	350	325	-	28	28
250	480	415	60	20	32	55	115	M30	194	321	491	250	125	376	145	185	455	330	703	272	301	311	385	355	-	30	28
280	525	450	65	22	38	60	125	M30	220	299	550	280	140	423	165	200	507	367	786	293	326	337	430	385	-	32	35
315	590	490	70	24	42	70	140	M36	244	334	611	315	160	469	184	220	560	405	870	322	357	369	480	420	-	36	35
355	665	535	78	27	48	80	160	M36	272	376	679	355	180	525	205	242	630	455	977	354	394	407	540	460	-	40	42
400	748	585	85	30	55	90	180	M36	294	419	741	400	200	576	223	265	705	505	1086	387	433	447	605	510	-	45	42
450	855	562	92	33	60	100	200	M36	323	475	835	450	225	653	245	292	755	530	1270	425	480	495	750	495	560	48	35
500	955	616	100	36	65	105	220	M36	354	530	922	500	250	726	270	320	845	595	1410	465	528	544	840	540	630	50	42

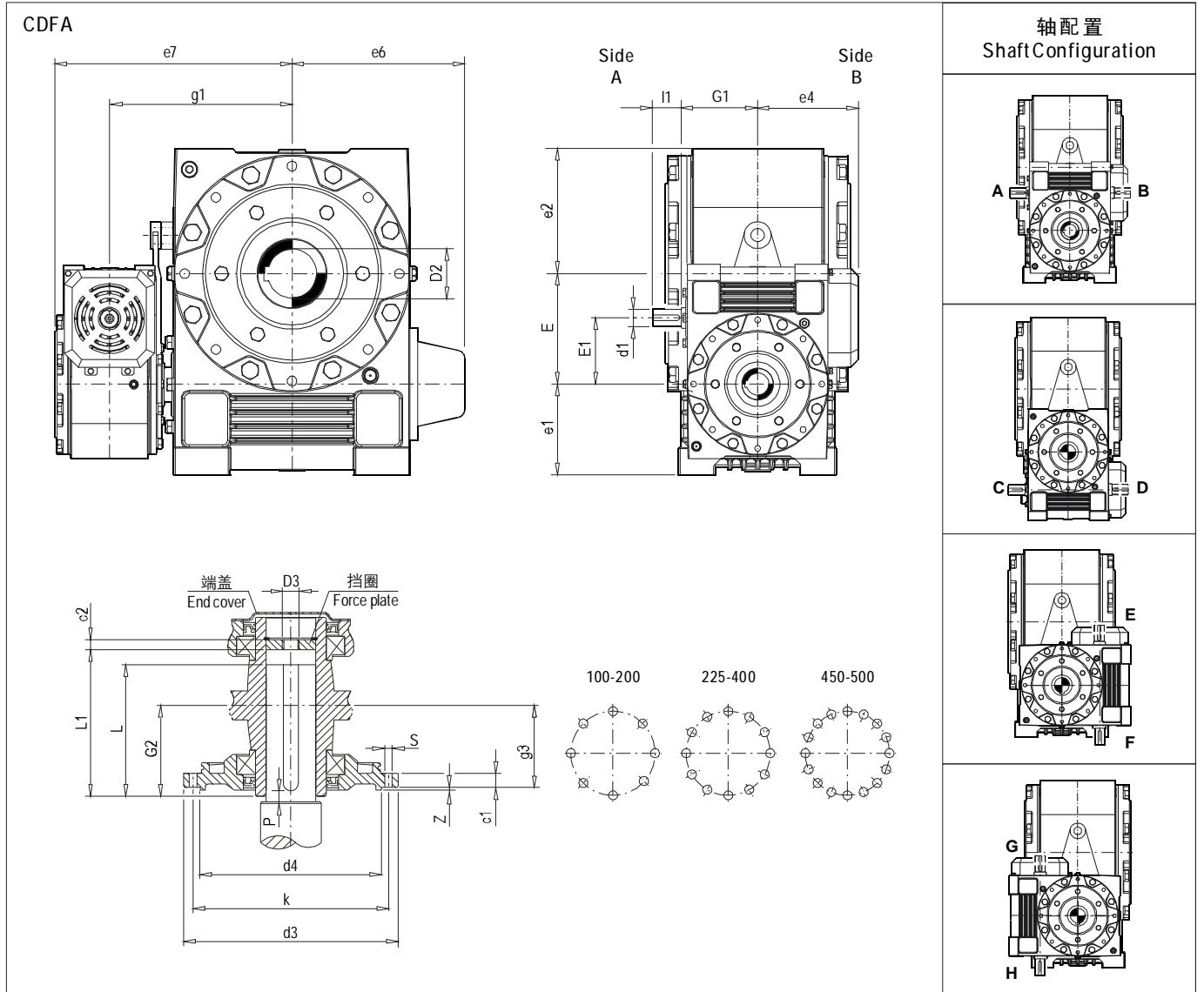


## 安装尺寸

### 双级减速器

## Mounting Dimensions

### Double Worm gear Unit



型号 Size	c1	c2	d1 m6	l1	D2 H7	D3	d3	d4 h8	e1	e2	e4	e6	e7	E	E1	g1	g3	G1	G2	k	Lmin	Lmax	L1	Pmin	S	Z
180	28	16	28	50	85	M24	379	295	140	202	168	249	400	180	100	298	142	124	144	350	212	233	240	22	8xM16	5
200	31	17	28	50	95	M30	416	330	150	223	168	269	418	200	100	316	152	124	155	385	228	250	258	25	8xM16	5
225	34	18	32	55	105	M30	462	375	165	248	194	294	466	225	125	351	167	145	170	430	250	276	285	28	12xM16	5
250	37	20	32	55	115	M30	510	420	180	273	194	321	491	250	125	376	181	145	185	480	272	301	311	30	12xM16	5
280	40	22	38	60	125	M30	574	465	200	306	220	299	550	280	140	423	196	165	200	535	293	326	337	32	12xM20	6
315	43	24	42	70	140	M36	638	530	215	340	244	334	611	315	160	469	216	184	220	600	322	357	369	36	12xM20	6
355	46	27	48	80	160	M36	720	600	240	382	272	376	679	355	180	525	238	205	242	680	354	394	407	40	12xM24	6
400	48	30	55	90	180	M36	804	680	260	426	294	419	741	400	200	576	260	223	265	760	387	433	447	45	12xM24	6
450	52	33	60	100	200	M36	906	770	290	530	323	475	835	450	225	653	287	245	292	860	425	480	495	48	16xM24	6
500	55	36	65	105	220	M36	1014	860	315	595	354	530	922	500	250	726	314	270	320	960	465	528	544	50	16xM24	6





安装尺寸

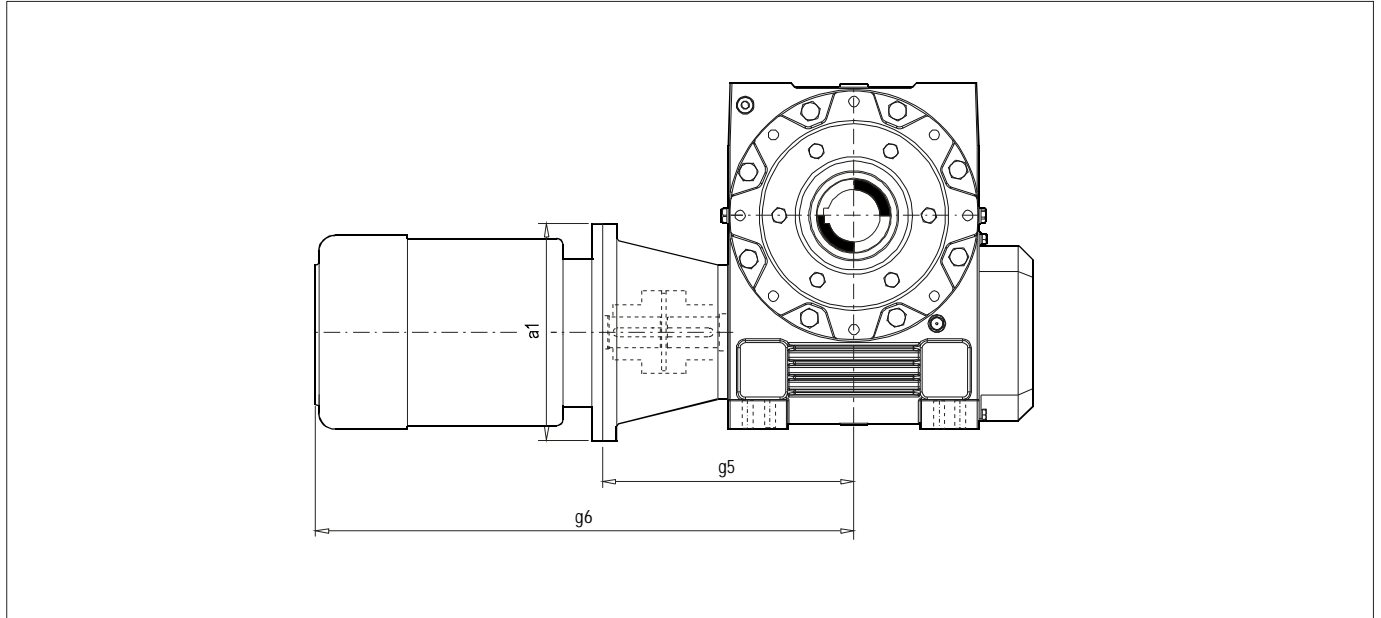
Mounting Dimensions

外接电机安装尺寸

Dimensions for Electric motor

电机按 IEC B5 标准

motor perform IEC B5 standard



型号 Size	国际电工委员会标准电机 IEC standard motor			
	型号 Size	a1	g5	g6
100	90	200	238	510
	100/112	250	250	570
	132	300	272	680
	160	350	308	830
125	100/112	250	276	600
	132	300	298	700
	160	350	334	860
	180	350	334	920
140	100/112	250	303	630
	132	300	323	730
	160	350	359	880
	180	350	359	940
160	100/112	250	332	660
	132	300	352	760
	160	350	388	910
	180	350	388	970
	200	400	391	1020
180	132	300	386	790
	160	350	419	940
	180	350	419	1000
	200	400	422	1050
	225	450	452	1150
200	132	300	420	820
	160	350	450	970
	180	350	450	1030
	200	400	450	1080
	225	450	480	1170

型号 Size	国际电工委员会标准电机 IEC standard motor			
	型号 Size	a1	g5	g6
225	160	350	482	1000
	180	350	482	1060
	200	400	482	1110
	225	450	512	1210
	250	550	512	1240
250	160	350	512	1030
	180	350	512	1090
	200	400	512	1140
	225	450	542	1240
	250	550	546	1270
	280	550	546	1460
280	180	350	569	1150
	200	400	569	1200
	225	450	599	1290
	250	550	599	1320
	280	550	599	1500
315	200	400	616	1240
	225	450	646	1340
	250	550	646	1370
	280	550	646	1550
	315	660	681	1650
	200	400	671	1300
355	225	450	701	1390
	250	550	701	1420
	280	550	701	1600
	315	660	731	1700
	200	400	729	1360
400	225	450	759	1450
	250	550	759	1480
	280	550	759	1660
	315	660	789	1760
	200	400	789	1660



安装尺寸

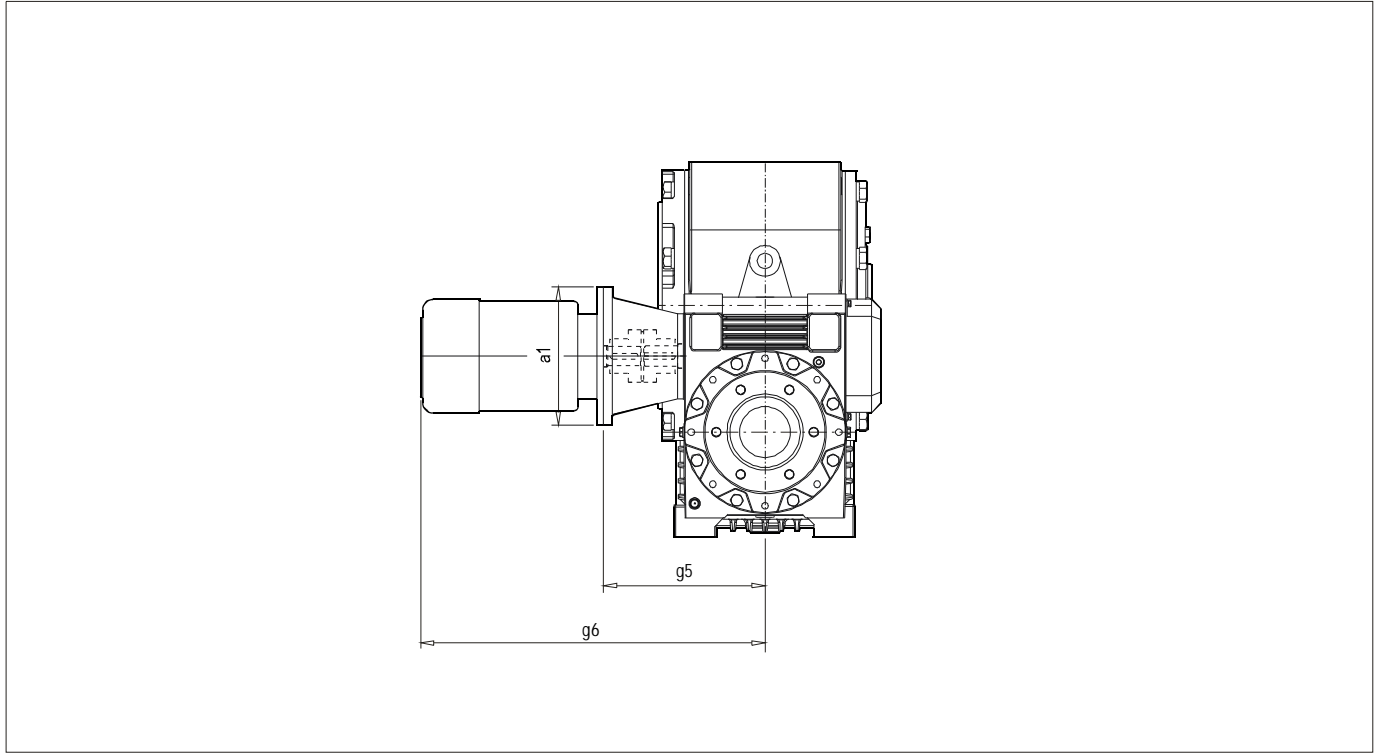
Mounting Dimensions

外接电机安装尺寸

Dimensions for Electric motor

电机按 IEC B5 标准

motor perform IEC B5 standard



型号 Size	国际电工委员会标准电机 IEC standard motor			
	型号 Size	a1	g5	g6
180	90	200	238	510
	100/112	250	250	570
	132	300	272	680
	160	350	308	830
200	90	200	238	510
	100/112	250	250	570
	132	300	272	680
	160	350	308	830
225	100/112	250	276	600
	132	300	298	700
	160	350	334	860
	180	350	334	920
250	100/112	250	276	600
	132	300	298	700
	160	350	334	860
	180	350	334	920
280	100/112	250	303	630
	132	300	323	730
	160	350	359	880
	180	350	359	940

型号 Size	国际电工委员会标准电机 (IEC standard motor)			
	型号 Size	a1	g5	g6
315	100/112	250	332	660
	132	300	352	760
	160	350	388	910
	180	350	388	970
	200	400	391	1020
355	132	300	386	890
	160	350	419	940
	180	350	419	1000
	200	400	422	1050
	225	450	452	1150
400	132	300	420	820
	160	350	450	970
	180	350	450	1030
	200	400	450	1080
	225	450	480	1170
450	160	350	482	1000
	180	350	482	1060
	200	400	482	1110
	225	450	512	1210
	250	550	512	1240
500	160	350	512	1030
	180	350	512	1090
	200	400	512	1140
	225	450	542	1240
	250	550	546	1270
	280	550	546	1460



安装尺寸

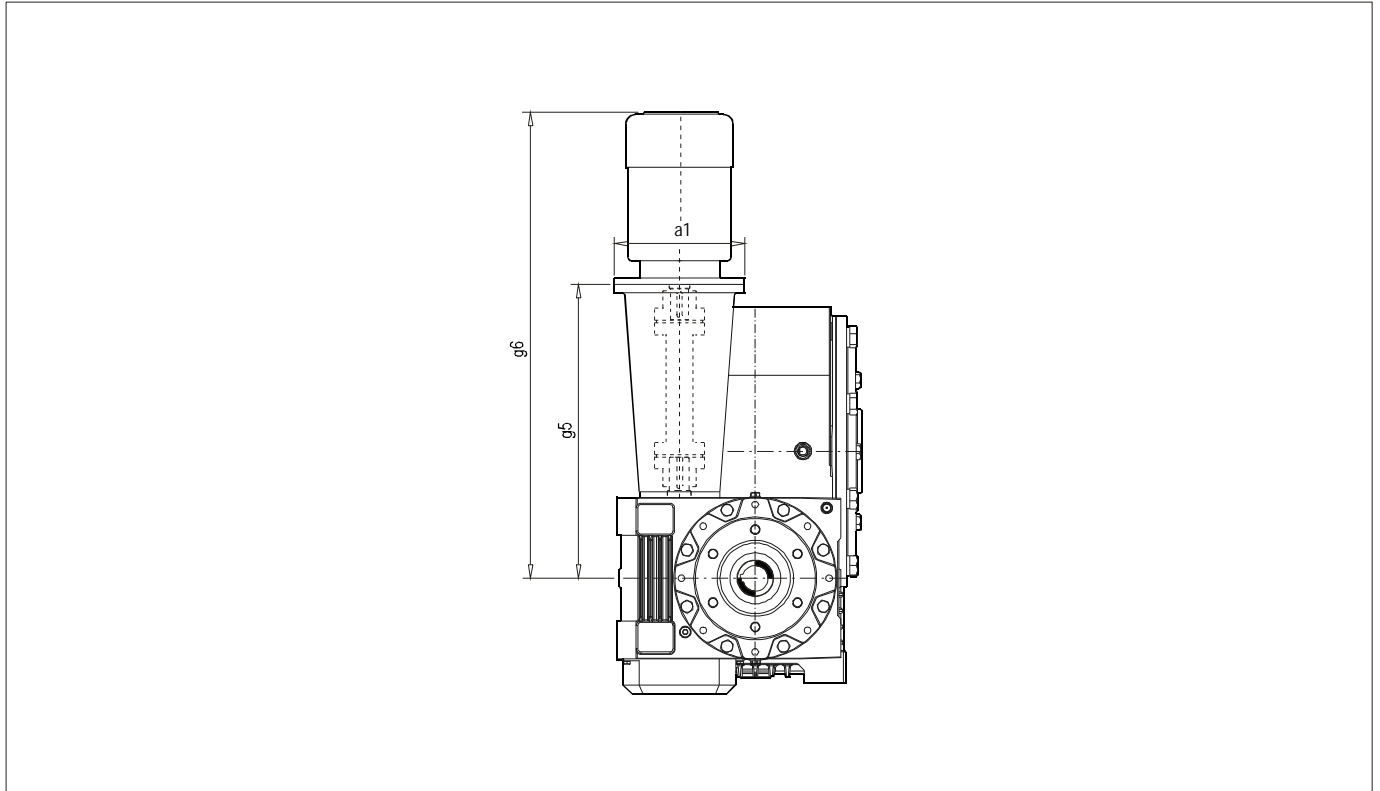
Mounting Dimensions

外接电机安装尺寸

Dimensions for Electric motor

电机按IEC B5标准

motor perform IEC B5 standard



型号 Size	国际电工委员会标准电机 IEC standard motor			
	型号 Size	a1	g5	g6
180	90	200	319	590
	100/112	250	426	750
	132	300	444	850
	160	350	474	1000
200	90	200	319	590
	100/112	250	426	750
	132	300	444	850
	160	350	474	1000
225	100/112	250	445	770
	132	300	555	960
	160	350	585	1170
	180	350	585	1170
250	100/112	250	445	770
	132	300	555	960
	160	350	585	1170
	180	350	585	1170

型号 Size	国际电工委员会标准电机 (IEC standard motor)			
	型号 Size	a1	g5	g6
280	100/112	250	410	730
	132	300	485	890
	160	350	605	1130
	180	350	605	1190
315	100/112	250	429	750
	132	300	504	910
	160	350	694	1220
	180	350	694	1280
	200	400	694	1330
355	132	300	525	930
	160	350	645	1170
	180	350	645	1230
400	132	300	573	980
	160	350	663	1180
	180	350	663	1250
	200	400	733	1370



**安装尺寸**

**逆止器**

所有减速器均可安装逆止器,有两种设计安装方式

设计A: (标识为BSA)

此设计的外形安装尺寸保持不变,逆止器安装于轴承盖内。要改变旋转方向,需要拆出轴承盖,必须有丰富的经验。因此,在定单中须指明需要的旋转方向。

设计B: (标识为BSB)

此设计取消风扇冷却,可根据需要的旋转方向调整逆止器。此设计用于短时间运转或低速运行,如果需要高速运行,需另加强制冷却系统。

对于串联减速器,逆止器装于高速级。

**Mounting Dimensions**

**Backstops**

Backstops can be fitted into all gear units, two designs are possible:

Design A:(BSA in designation)

With this standard design all dimensions remain unchanged.

The backstop is fitted into the bearing cover under the fan cover.

Change the direction of rotation, should carry the covers out first, entailing great expenses, so it is necessary that indicate rotation direction is needed in order.

Design B:(BSB in designation)

This design can be selected under circumstances where a later change in the direction of rotation is to be expected. Since a fan cannot be fitted, design B is only suitable for low operating cycles or low speeds, if need high input speed, a extra cooling system needed.

On double worm gear units, the backstop is fitted to the primary gear stage.



类型 type	型号/size											
C..	100	120	140	160	180	200	225	250	280	315	355	400
CD..	180 200	225 250	280	315	355	400						
设计B外形尺寸/dimensions for DesignB												
a	171	182	200	218	239	256	288	308	389	423	452	507
d	95	95	100	110	125	125	150	150	175	190	190	210
最大反转转矩/Max. Reverse torque for Design B(N.m)												
设计A DesignA	210	210	500	600	900	900	1520	1600	1900	1900	3200	5000
设计B DesignB	180	180	250	300	450	450	800	800	1100	1600	1600	2500

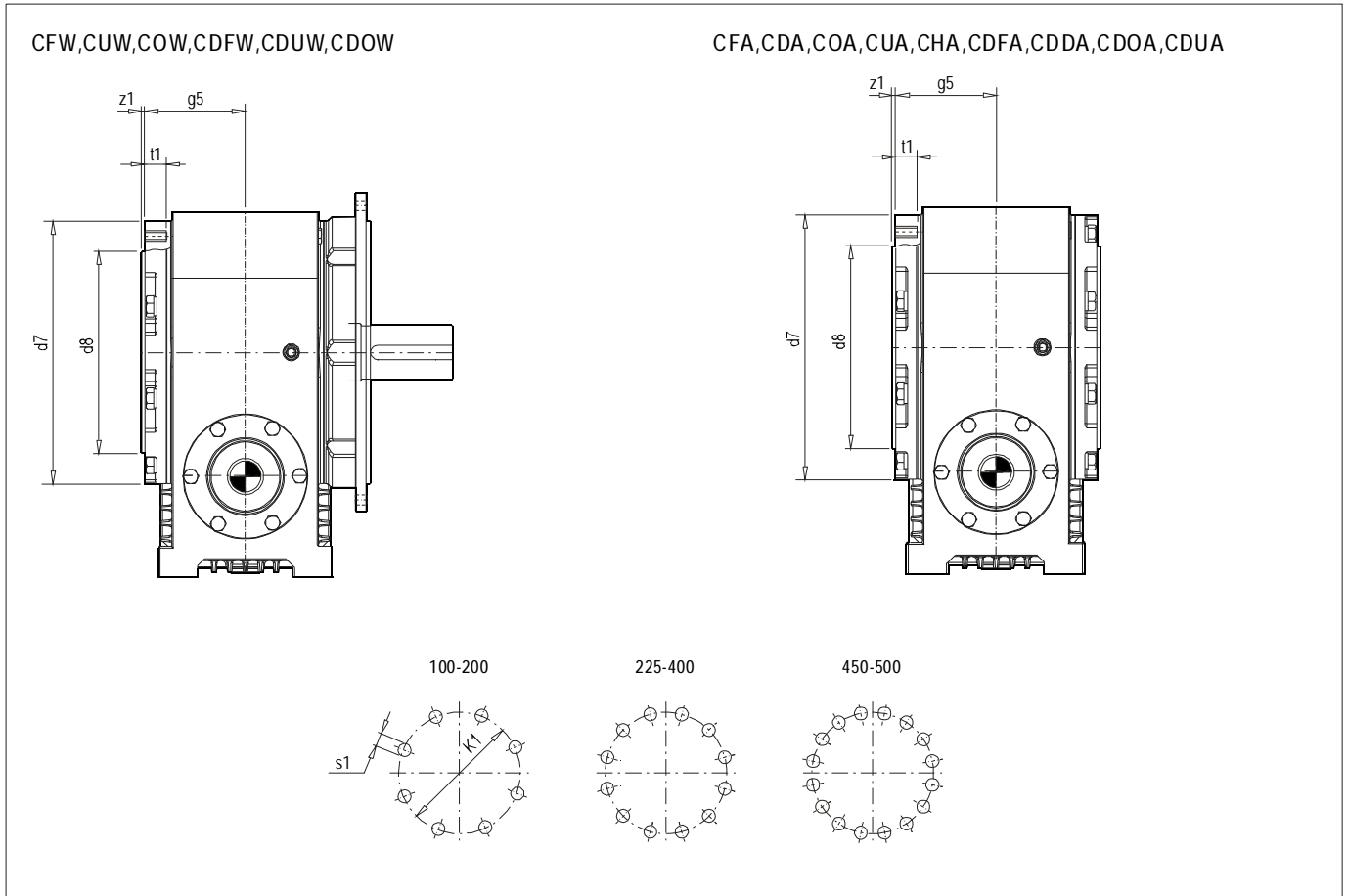


安装尺寸

Mounting Dimensions

未注法兰尺寸

Other dimensions for Flange



型号 Size	g5	d7	d8(h8)	K1	s1	t1	z1
100	90	217	155	195	8 X M 10	18	3.5
125	104	258	190	235	8 X M 12	20	4
140	116	302	225	275	8 X M 12	22	4
160	129	338	260	310	8 X M 16	25	5
180	142	379	295	350	8 X M 16	28	5
200	152	416	330	385	8 X M 16	31	5
225	167	462	375	430	12 X M 16	34	5
250	181	510	420	480	12 X M 16	37	5
280	196	574	465	535	12 X M 20	40	6
315	216	638	530	600	12 X M 20	43	6
355	238	720	600	680	12 X M 24	46	6
400	260	804	680	760	12 X M 24	48	6
450	287	906	770	860	16 X M 24	52	6
500	314	1014	860	960	16 X M 30	55	6

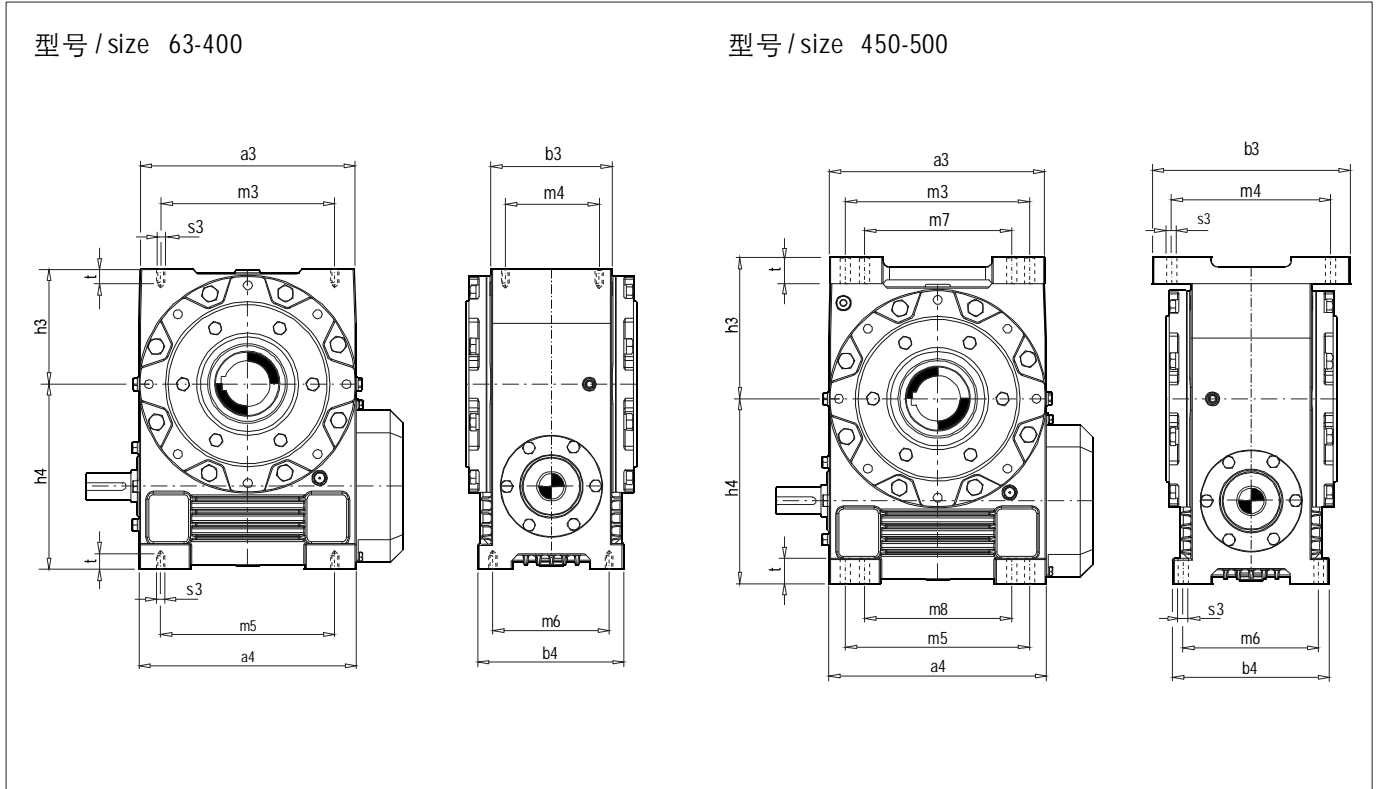


安装尺寸

Mounting Dimensions

未注底面尺寸

Other dimensions for Mounting surface



型号 Size	安装面/mounting surface a3Xb3							
	a3	b3	h3	m3	m4	m7	s3	t
100	216	131	115	163	105	—	M 12	23
125	254	155	135	190	125	—	M 16	25
140	290	172	156	220	140	—	M 16	26
160	324	189	177	245	155	—	M 16	27
180	354	210	197	275	170	—	M 20	30
200	396	222	217	300	182	—	M 20	31
225	440	246	242	335	200	—	M 24	38
250	480	266	267	370	220	—	M 24	40
280	525	296	298	400	240	—	M 30	45
315	590	325	331	450	265	—	M 30	45
355	665	363	373	510	295	—	M 36	55
400	748	403	416	570	335	—	M 36	55

型号 Size	安装面/mounting surface a4Xb4							
	a4	b4	h4	m5	m6	m8	s3	t
100	216	160	190	170	133	—	M 12	23
125	254	183	225	194	151.5	—	M 16	25
140	290	204	255	220	172	—	M 16	26
160	324	223	290	240	187.5	—	M 16	27
180	354	245	320	268	209.5	—	M 20	30
200	396	260	350	280	219	—	M 20	31
225	440	280	390	300	234.5	—	M 24	38
250	480	305	430	340	265.5	—	M 24	40
280	525	345	480	430	290	—	M 30	45
315	590	370	530	480	310	—	M 30	45
355	665	415	595	540	350	—	M 36	55
400	748	445	660	605	375	—	M 36	55

型号 Size	安装面/mounting surface a3Xb3							
	a3	b3	h3	m3	m4	m7	s3	t
450	855	562	530	750	495	560	35	92
500	955	616	595	840	540	630	42	100

型号 Size	安装面/mounting surface a4Xb4							
	a4	b4	h4	m5	m6	m8	s3	t
450	855	562	740	750	495	560	35	92
500	955	616	815	840	540	630	42	100



安装尺寸

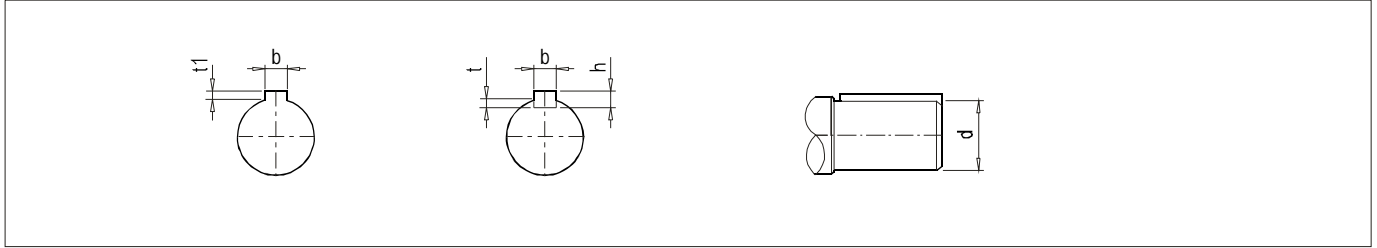
Mounting Dimensions

未注平键和键槽尺寸

Key and Keyway

平键和键槽尺寸按GB/T 1095-2003, 轴上键槽公差按N9, 孔内键槽按JS9

Key and keyway perform standard GB/1095-2003, tolerance N9 for shaft and tolerance Js9 for hole



轴径/shaft diameter d	width of key/键宽 b	high of key/键高 h	depth on shaft/轴槽深 t	depth on hole/毂槽深 t1
>22-30	8	7	4.0	3.3
>30-38	10	8	5.0	3.3
>38-44	12	8	5.0	3.3
>44-50	14	9	5.5	3.8
>50-58	16	10	6.0	4.3
>58-65	18	11	7.0	4.4
>65-75	20	12	7.5	4.9
>75-85	22	14	9.0	5.4
>85-95	25	14	9.0	5.4
>95-110	28	16	10	6.4
>110-130	32	18	11	7.4
>130-150	36	20	12	8.4
>150-170	40	22	13	9.4
>170-200	45	25	15	10.4
>200-230	50	28	17	11.4



## 润滑油量和减速器重量

## Oil Quantity & Worm Gear Unit Weight

### 单级减速器

### Single Worm Gear Unit

型号 size	平均油量(L)/Average oil quantities in litres								不含油平均重量(kg) Average weights without oil	
	安装位置CUW, COW, CFW Mounting position for CUW, COW, CFW				安装位置CUA, COA, CFA, CDA Mounting position for CUA, COA, CFA, CDA				减速器类型/ Worm gear unit type	
	M1	M3	M5/M6	M2/M4	M1	M3	M5/M6	M2/M4	C..W	C..A
100	1.3	3.3	2.3	4.2	1.3	3	2	3.8	42	40
120	2	5.5	4	7	2	5	3.5	6.5	65	62
140	3	9	6	11	3	8	5.5	10	90	85
160	4.5	12.5	8.5	16	4.5	11.5	8	15	125	120
180	5.5	17	12	22	5.5	16	11	20	170	160
200	7.5	23	16	29	7.5	22	15	27	220	210
225	10	32	21	39	10	29	20	36	290	270
250	13	44	27	52	13	40	26	47	380	360
280	15	58	35	66	15	54	33	62	520	490
315	20	78	50	88	20	72	47	82	700	660
355	28	110	71	124	28	102	68	116	1030	980
400	40	155	95	174	40	145	90	164	1400	1340
450	55	220	133	243	55	208	127	232	1980	1910
500	77	310	186	340	77	295	178	325	2700	2620

### 双级减速器

### Double Worm Gear Unit

型号 size	高速级平均油量(L)/ Primary average oil quantities in litres													不含油平均重量(kg) Average weights without oil	
	安装位置/ Mounting position													减速器类型/ Worm gear unit type	
	M1			M3			M5			M6			M2/M4	CD..W	CD..A
a/b	c/d	e-h	a/b	c/d	e-h	a-d	e/f	g/h	a-d	e/f	g/h	a-h			
180	3	1.3	3.8	1.3	3	3.8	3.8	3	1.3	3.8	1.3	3	2	210	200
200	3	1.3	3.8	1.3	3	3.8	3.8	3	1.3	3.8	1.3	3	2	260	250
225	5	2	6.5	2	5	6.5	6.5	5	2	6.5	2	5	3.5	350	330
250	5	2	6.5	2	5	6.5	6.5	5	2	6.5	2	5	3.5	440	420
280	3	8	10	3	8	10	10	8	3	10	3	8	5.5	600	570
315	11.5	4.5	15	4.5	11.5	15	15	11.5	4.5	15	4.5	11.5	8	810	770
355	16	5.5	20	5.5	16	20	20	16	5.5	20	5.5	16	11	1180	1130
400	22	7.5	27	7.5	22	27	27	22	7.5	27	7.5	22	15	1600	1540
450	29	10	36	10	29	36	36	29	10	36	10	29	20	2240	2170
500	40	13	47	13	40	47	47	40	13	47	13	40	26	3040	2960

低速级油量，参照上面单级蜗杆减速器

For the main gear stages, see upon single worm gear unit.





### 润滑

### Lubrication

#### 润滑油粘度选择

#### Lubrication Viscosity Selection

根据蜗杆滑动速度进行润滑油粘度的选择,通过计算,下表给出了选择的结果。

The viscosity of the oil to be used depends on the sliding velocity, as a rule, the following should be used:

粘度代号	Viscosities code				
蜗杆滑动速度 Sliding velocity	<2m/s	>2~4.5m/s	>4.5~7m/s	>7~10m/s	>10m/s
ISO-VG at 40℃(mm <sup>2</sup> /s)	VG 1000 ○	VG680 □	VG460 ◇	VG320 ●	VG220 ■

粘度选择		Viscosities selection												
n1 rpm	蜗杆减速机中心距/ Worm and wheel size													
	100	125	140	160	180	200	225	250	280	315	355	400	450	500
3000	●	●	●	■	■	■								
2400	◇	◇	●	●	●	■	■	■						
1800	◇	◇	◇	◇	●	●	●	●	■	■	■			
1500	□	□	◇	◇	◇	◇	●	●	●	●	■	■	■	■
1200	□	□	□	□	◇	◇	◇	◇	◇	●	●	●	●	■
1000	□	□	□	□	□	□	◇	◇	◇	◇	◇	●	●	●
750	○	□	□	□	□	□	□	□	□	◇	◇	◇	◇	◇
500	○	○	○	○	□	□	□	□	□	□	□	□	□	◇
300	○	○	○	○	○	○	○	○	○	○	□	□	□	□
150	○	○	○	○	○	○	○	○	○	○	○	○	○	○

#### 润滑油品牌选择

#### Lubrication Brand Selection

油品 Brand	粘度等级 Viscosity 40℃(mm <sup>2</sup> /s)		中国品牌						Overseas Brand					
			沈阳化工厂		中石油兰州炼油厂		中石化茂名石油公司		BP	ESSO	Klüber	Mobil	Shell	
	ISO	GB	合成极压蜗轮蜗杆油	普通	重载极压	WA型	WB型	WS型						
			复合蜗杆油		蜗轮蜗杆油									
合成油 Synthetical Oil	VG1000	1000									Syntheso D1000EP			
	VG680	680	680								Syntheso D680EP			
	VG460	460	460						Energol SG-XP460		Syntheso D460EP	Glygoyle 80	Tivela SD	
	VG320	320	320								Syntheso D320EP			
	VG220	220	220						Energol SG-XP220	Umlauföl S220	Syntheso D220EP	Glygoyle 30	Tivela WB	
矿物油 Mineral Oil	VG1000	1000			HD-1000W						Lamora 1000			
	VG680	680			HD-680W	WA-680	WB-680	WS-680	Energol GR-XP680	Spartan Ep680	Lamora 680	Mobil Gear 636	Compound GG	Omala 680
	VG460	460		G-460W	HD-460W	WA-460	WB-460	WS-460	Energol GR-XP460	Spartan Ep460	Lamora 460	Mobil Gear 634	Compound FF	Omala 460
	VG320	320		G-320W	HD-320W	WA-320	WB-320	WS-320	Energol GR-XP320	Spartan Ep320	Lamora 320	Mobil Gear 632	Compound EE	Omala 320
	VG220	220		G-220W	HD-220W		WB-220		Energol GR-XP220	Spartan Ep220	Lamora 220	Mobil Gear 630		Omala 220

注意:

本表所列不同品牌牌号的油品,其承载特性不尽相同,不能等效看待,用户应结合本身工况,通过试验选取。

Attention:

different brand oil have same viscosity, but the characteristics is different, please select the oil base application situation and through testing to over selection.



## 动力连接

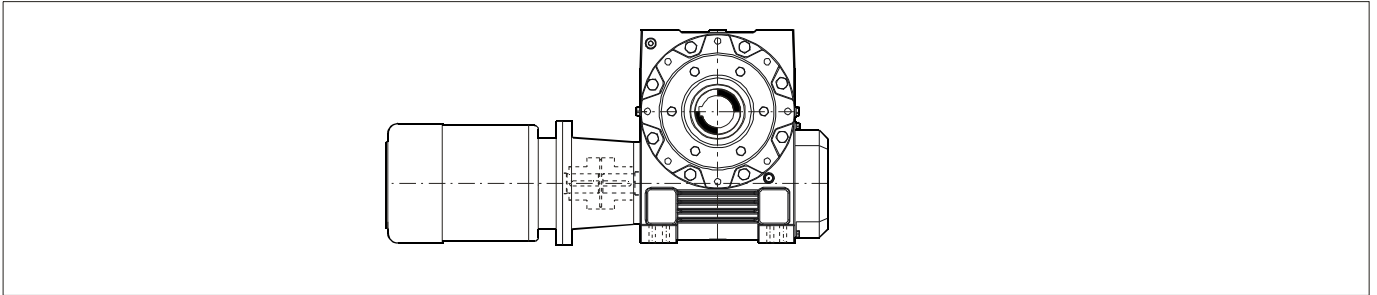
## Input Connection

根据不同工况，有各种动力输入连接形式，下图给出几种电机输入的布局形式

Deferent situation deferent connection, following drawings show several connection with electric motor

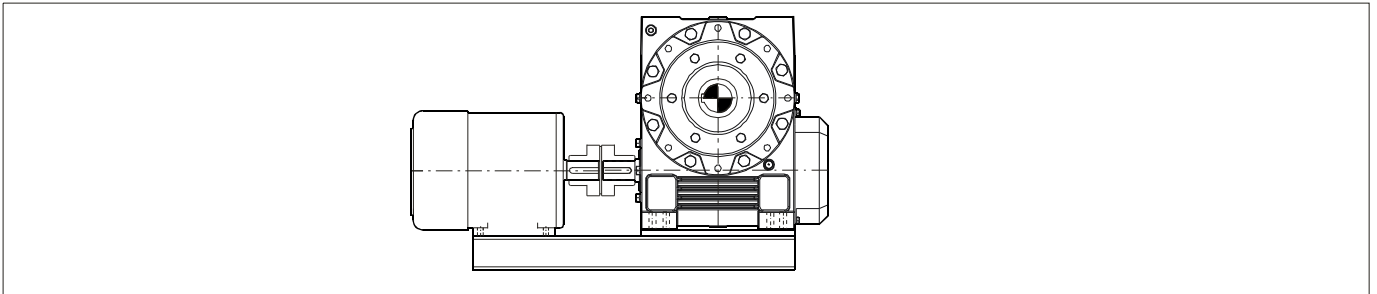
电机与减速器法兰连接

Gear unit connect motor with flange



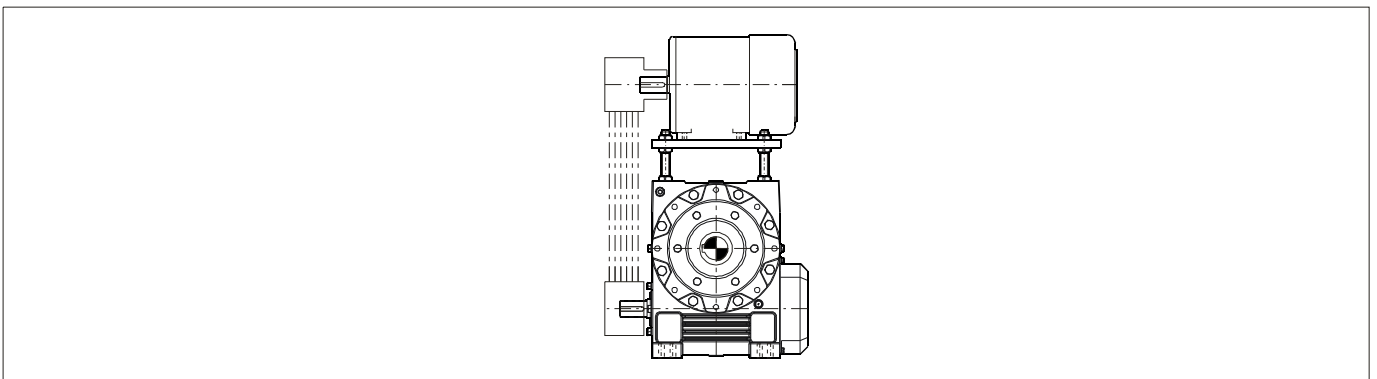
电机与减速器联轴器连接

Gear unit and motor mounted on base with a coupling connection



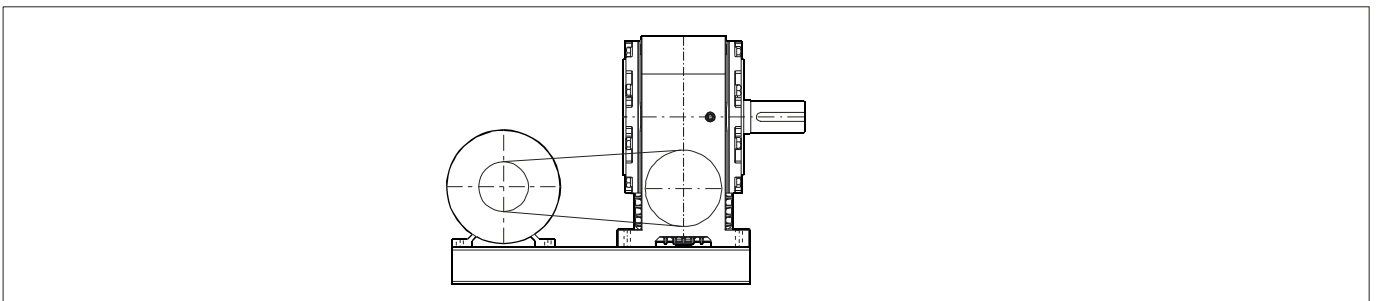
电机与减速器皮带连接,利用减速器底面孔上下布置

Gear unit and motor connected with belt, fastened with gear unit base screw



电机与减速器皮带连接,水平布置

Gear unit and motor connected with belt, setted at same level



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