

企业简介 COMPANY INTRODUCTION

浙江通力重型齿轮股份有限公司（原通力减速机有限公司）创建于1990年，是一家从事减速机（齿轮箱）研发、制造、销售及服务的国家高新技术企业。经过二十五年的稳健发展和技术积累，通力已逐步壮大成为中国减速机行业公认的知名企业，在技术、装备、产品性能等方面均处于国内领先水平。近年来，通力参与制订2项“工业齿轮箱”产品国家标准，并作为发起单位之一负责起草“中国齿轮行业中小功率工业通用减速机”系列行业标准；拥十几项核心技术专利，自主研发十一个系列减速机（齿轮箱）产品，其中五个系列产品分别被列为国家重点新产品和国家火炬计划项目。

通力主导产品通用减速机、重载齿轮箱广泛适用于钢铁冶金、煤矿、电力、水泥、石油化工、筑路、环保、制药、起重运输、啤酒饮料机械等国民经济的支柱产业领域。先后为上海宝钢、鞍钢、江南造船、振华港机、胜利油田、京沪高铁、京广高铁、青藏铁路、中央电视台春晚舞台设备等国内大型工业企业及国家重点工程项目提供高性能的配套减速机，并出口东南亚、南美、中东等国家和地区，获得国内外众多客户的首肯和赞许。

Zhejiang TONGLI Heavy Gear Co., Ltd (Originally known as TONGLI Gearbox Co., Ltd) established in 1990 and is a National High-Tech enterprise which engaged in Gear Reducer (Gearbox) R & D, manufacturing, sales and service. After twenty-five years of steady development and technology accumulation, TONGLI has been grown to become China Gear industry Well-Known recognized enterprises. In Technology, Equipment, Product Performance and other aspects are at the leading domestic level. In recent years, TONGLI has participate in formulate two “Industrial Gearbox” National Standards, and as one of the launched company, TONGLI is responsible for drafting the “Low-power universal industrial Gearbox in China Gear Industry” this series of industry standards. Owns more than a dozen of core technology patents and independent R&D eleven series Reducer (Gearbox) products, Wherein Five series products were listed as National Key New product respectively and National Torch Program project.

Universal Gearbox and Heavy Duty Gearbox are TONGLI's leading products and widely used in Steel metallurgy, Coal, Electricity, Cement, Petrochemicals, Road construction, Environmental Protection, Pharmaceutical, Hoist and Transportation, Beer and Drinking Machinery and other pillar industries of the national economy. Successively provide high performance matching Gear for Shanghai BAOSTEEL, ANSTEEL, CSSC, ZPMC, SHENGLI OILFIELD, Beijing-Shanghai High-speed railway, Beijing-Guangzhou High-speed railway, Beijing-Tibet Railway, The CCTV Spring Festival GALA stage equipment and other large domestic industrial enterprises and National Key Projects. And exported to Southeast Asia, South America, the Middle East and other countries and regions, and obtained many approvals and praises from home and abroad customers.





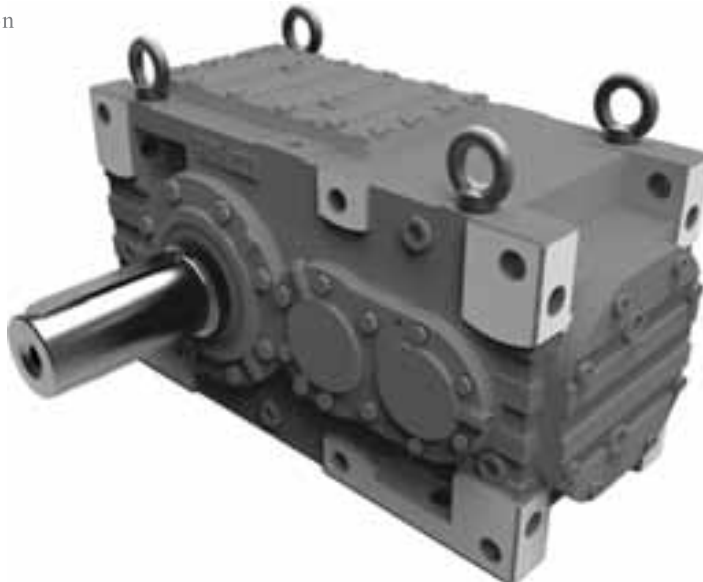
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TMC

系列减速器产品简介

Series Gearbox Introduction



■ TMC系列减速器具有轻便、紧凑的特点，整体箱体结构使产品刚性好，进一步提高减速器承载能力。

模块化 的方案及针对特殊工况的设计，适应各种多样性需要；

■ 该系列减速器有TMC.H平行轴类型及TMC.B直角轴类型传动；

■ 产品规格8个：02~09机座号；

■ 额定扭矩 $T=8000\sim65000\text{Nm}$ ；

■ 2-3级传动，公称传动比 $i_N=7.1\sim112$ ；

■ 产品应用领域：建材、起重、散料输送、化工、搅拌、食品、木材和造纸、破碎机环保等众多行业。

■ TMC series reduce has the characteristics of lightweight,compact ,the overall structure of the box body products rigid,further improve the carrying capacity of reducer.Modular scheme and design according to the special condition,adapt to the diverse needs.

■ The reducer series TMC.H parallel shaft type and TMC.B orthogonal shaft type transmission.

■ Product specifications,8:seat NO.02~09;

■ Rated torque: $T=8000\sim65000\text{Nm}$;

■ 2~3stage transmission,nominal transmission ratio of $i_N=7.1\sim112$;

■ Product application:Building materials,Crane,Bulk material conveying,Mixing,Chemical,Food,Wood and paper,Broken and environmental protection and many other industries.



概述

减速机选型是必须要做的一项工作。
用户应提下列传动数据：负载循环技术要求，周期和运行条件。为确保减速器的功能符合技术要求，应根据通力的说明书考虑减速器的选型贮藏、安装、润滑、运行和维护。连接转动部件的系统必须是相容的，在规定的速度范围内不受临界速度以及扭矩和其他形式振动的影响。

正常供货时包括：
低速轴上的端键(实心轴) 油尺
高速轴上的端键 通气装置
加油和放油塞 吊耳
端板、挡圈和收缩盘盖（带收缩盘的空心轴）
端板、挡圈和轴端盖（带键槽的空心轴）
正常供货时不包括：
端板螺栓和收缩盘（带收缩盘的空心轴）
端板螺栓和平键（带键槽的空心轴）
减速器地脚螺栓

润滑油（减速机安装时无油）
所用缩写
LSS=低速轴 HSS=高速轴
尺寸图中所用标准
键和键槽：GB/T1096-2003 / GB/T1095-2003
底脚安装面的螺钉强度：6.8
尺寸图中所用插图说明

General

The selection of the gear unit is a demanding task.The customer supplies the following data : drive specification,duty cycle and operation conditions. To ensure that the gear unit functions according to the specification,please take TL instruction into consideration eg. selection storage,mounting,lubrication,operation and maintenance of the gear unit. The system of connected rotating parts must be compatible , free from critical speed as well as torsional and other type vibrations within the specified speed range.

Included in normal delivery:
End key on LSS (solid shaft) Oil dipstick
End key on HSS Breather
Oil filling and drain plug Lifting possibility
End plate circlip and shrink disk cover (hollow shaft with shrink disk)
End plate circlip and shrink end cover (hollow shaft with keyway)
Excluded in normal delivery:
End plate bolts and shrink disk (hollow shaft with shrink disk)
End plate bolts and parallel end (hollow shaft with keyway)
Gear unit foundation bolts

gearunits will be delivered without oil
Abbreviations used
LSS=Low Speed Shaft HSS=High Speed Shaft
Standards used in dimensional drawings
Keys and keyways : GB/T1096-2003 / GB/T1095-2003
Screw strength grade of Foot Mounting Face fixing:6.8
Definition of icons used in dimensional drawings



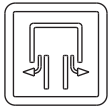
目视观察孔
Visual inspection opening



加油口
Oil filler



油尺
Oil dipstick



通气器
Breather

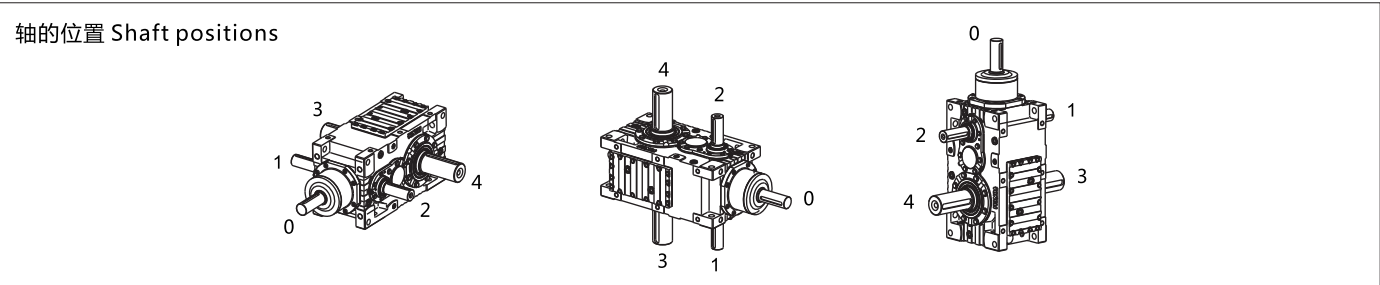
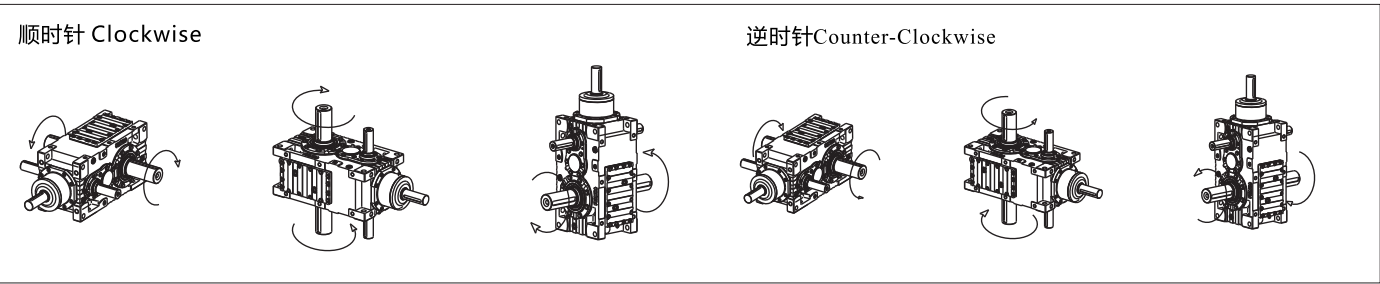


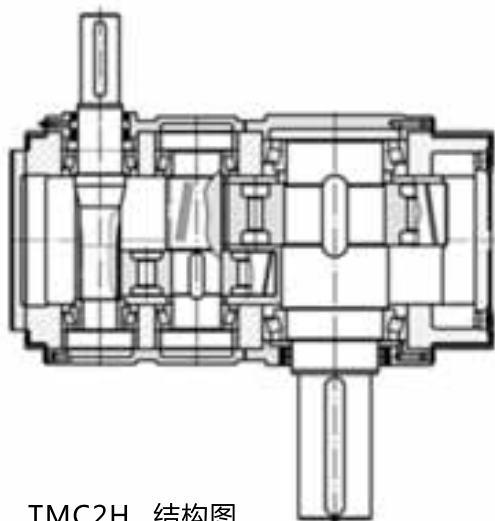
放油口
oil drainage



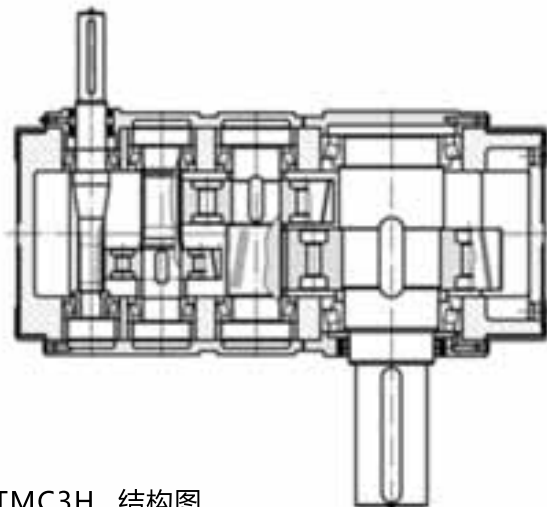
油观察孔
Oil glass

输出轴的旋转方向 Direction of rotation for output shaft
用逆止器时单向旋转方向 Freewheeling direction when backstop is applied.

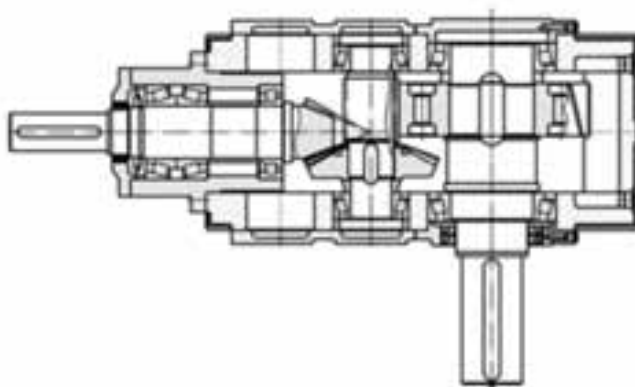




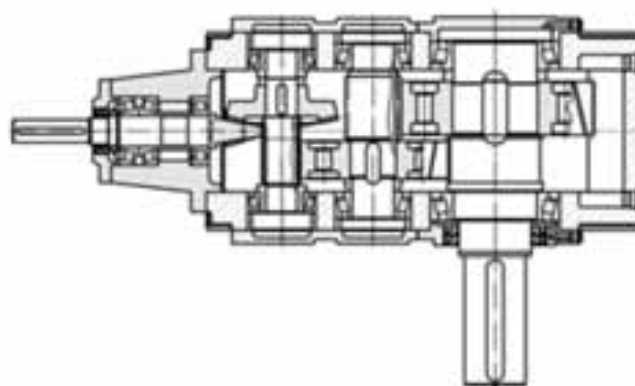
TMC2H 结构图



TMC3H 结构图

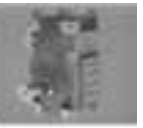


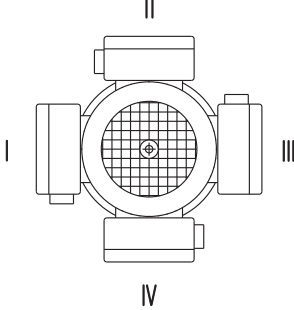
TMC2B 结构图



TMC3B 结构图



TMC	2	HL			S	05	7.1	70	13							
↓	↓	↓			↓	↓	↓	↓	↓							
Series 系列	Number of stages 级数	Gear Unit design 减速器结构			LSS type 低速轴型式	Size 规格	Ratio 传动比	Attachment 附件	Design 布置形式							
T M C	2 - 3	Helical Gear Unit (Parallel Shaft) 斜齿轮减速器 (平行轴)			S Solid Shaft 实心轴	02 - 03 - 04 - 05	7.1 to 112	见附件 In Attachment	见尺寸图 In Dimensions							
		HL Horizontal mounting 卧式安装	HV Vertical mounting 立式安装	HE Upright mounting 竖立安装												
					H Hollow shaft 空心轴	06 - 07 - 08 - 09										
		Bevel Helical Gear Unit (Orthogonal Shaft) 锥齿轮-斜齿轮减速器 (直交轴)														
		BL Horizontal mounting 卧式安装	BV Vertical mounting 立式安装	BE Upright mounting 竖立安装	D Shrink Disk 锁紧盘轴											
																

Y45	4P	I	CW
↓	↓	↓	↓
Motor code and power 电机代号及功率	Motor series 电机级数	Motor terminal box position 电机接线盒位置	Direction of rotation of input shaft 输入轴旋转方向
普通Ordinary Y 防爆Flame-proof B 制动Brake E 变频Variable frequency V 电机自配With built-in motor ZP 更多类型... /More code...	4P 1800rpm (60HZ) 4P 1500rpm (50HZ) 6P 1200rpm (60HZ) 6P 1000rpm (50HZ) 8P 750rpm (50HZ)	卧式安装 Horizontal mounting 	面对输入轴方向看 Cw为顺时针方向， CCW为逆时针方向， TMC..H省略。 Viewing on input shaft : CW-Clockwise , CCW-Counter clockwise , TMC..H is omitted.

产品概览 Product description

▼ TMC2HLS

二级卧式实心轴



▼ TMC2HVS

二级立式实心轴



▼ TMC2HES

二级竖立实心轴



▼ TMC2HLH

二级卧式空心轴



▼ TMC2H VH

二级立式空心轴



▼ TMC2HEH

二级竖立空心轴



▼ TMC3HLS

三级卧式实心轴



▼ TMC3HVS

三级立式实心轴



▼ TMC3HES

三级竖立实心轴



▼ TMC3HLH

三级卧式空心轴



▼ TMC3H VH

三级立式空心轴



▼ TMC3HEH

三级竖立空心轴





产品概览 Product description

▼ TMC2BLS
二级卧式实心轴



▼ TMC2BVS
二级立式实心轴



▼ TMC2BES
二级竖立实心轴



▼ TMC2BLH
二级卧式空心轴



▼ TMC2BVH
二级立式空心轴



▼ TMC2BEH
二级竖立空心轴



▼ TMC3BLS
三级卧式实心轴



▼ TMC3BVS
三级立式实心轴



▼ TMC3BES
三级竖立实心轴



▼ TMC3BLH
三级卧式空心轴



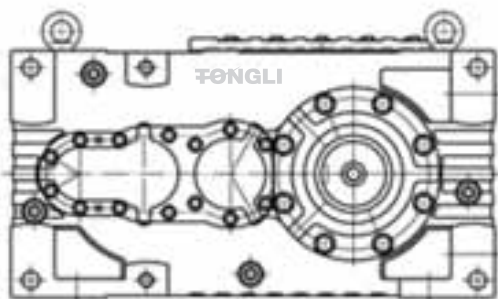
▼ TMC3BVH
三级立式空心轴



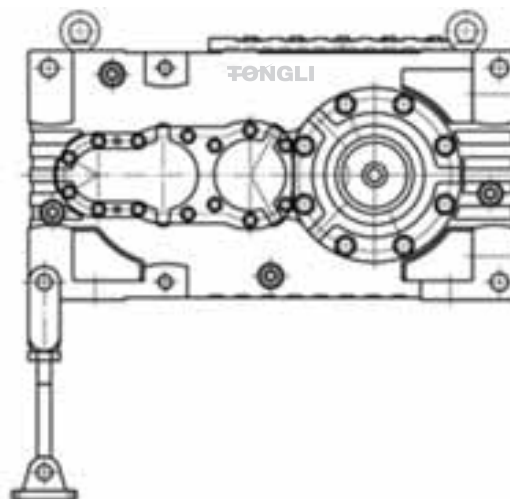
▼ TMC3BEH
三级竖立空心轴



卧式安装Horizontal mounting

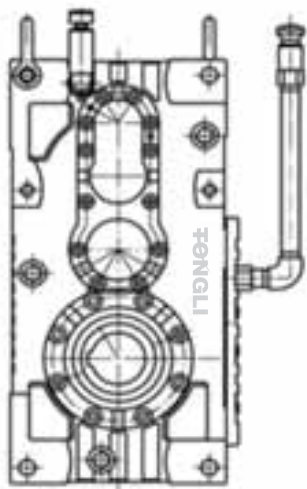


TMC..LH(S)
Solid LSS/Hollow LSS
实心轴输出/空心轴输出 (S/H)
Foot Mounting/安装底脚 (-)

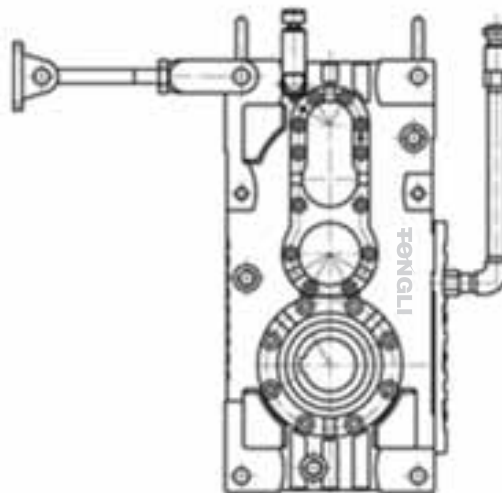


TMC..LH(S)..T
Solid LSS/Hollow LSS
实心轴输出/空心轴输出 (S/H)
Torque Arm/力矩支臂 (T)

竖立安装Upright mounting



TMC..EH(S)
Solid LSS/Hollow LSS
实心轴输出/空心轴输出 (S/H)
Foot Mounting/安装底脚 (-)



TMC..EH(S)..T
Solid LSS/Hollow LSS
实心轴输出/空心轴输出 (S/H)
Torque Arm/力矩支臂 (T)



TMC系列减速器

1.选型指南

1.1传动比

计算传动比 $i=n_1/n_2$ ，选择功率表中相近的公称传动比 i_N 。

精
确传动比列于选型参数表中。选择与传动比 i_N 一致的减速器型号。

n_1 =高速轴转速

n_2 =低速轴转速

$$(1) \quad i_{ex} = n_1/n_2$$

1.2运行功率 P_{K1} ， P_{K2} 和运行转矩 M_{K2}

η =效率

$$\text{二级} \quad \eta=0.97 \quad (2) \quad P_{K1} = P_{K2}/\eta \quad (3) \quad P_{K1} = M_{K2} \times n_2 / 9550\eta$$

$$\text{三级} \quad \eta=0.955$$

$$P_{K1}, P_{K2}[\text{kW}] \quad M_{K2}[\text{Nm}]$$

1.3用 F_s 选择减速器

使用系数 F_s 由原动机和从动机的载荷特性来确定。 F_s 列于表

1.3.1中。

从功率表选择减速器的尺寸，使公称功率 P_{N1} 满足传动比 i_N 和输入速度 n_1 的要求（HSS）：

$$(4) \quad P_{K1} \times F_s \times F_z \leq P_{N1}$$

1.4最大功率 P_{K1max} 和最大转矩 M_{K2max}

$$(5) \quad P_{K1max} \leq \frac{2 \times P_{N1}}{F_p} \quad (6) \quad M_{K2max} \leq \frac{2 \times M_{N2}}{F_p}$$

系数 F_p 在表1.4.1中给出。

减速器可以瞬间超载，单项负载峰值不应超过10秒。

1.5轴端外载荷

校核输入轴(HSS)和输出轴(LSS)的连接及在轴端的可能的径向

和轴向载荷。

1.6逆向传动

列于表中的额定功率 P_{N1} 和额定转矩 M_{N2} 是恒定负载方向的计

算值。满载时，转动方向每分钟改变一次能利用70%的 P_{N1} 和 M_{N2} 。

1.7热功率

热功率 P_T 是实际功率，减速器连续传动时不超过计算油温+90°C。

$$(7) \quad P_T = P_{TH} \times f_1 \times f_2 \times f_3 \times f_4$$

f_1 =海拔系数，见表1.7.1

f_2 =1.07安装力矩臂的减速器； f_2 =1.0其他减速器。

f_3 =安装位置系数；见表1.7.2

f_4 =1.10压力润滑； f_4 =1.0用浸油和飞溅润滑。

在实际环境温度下确定减速器的热功率 P_T 。如果 $P_{K1} > P_T$ ，要用外部压力润滑和冷却装置

$$(8) \quad P_{K1} \leq P_T$$

TMC series Gear Units

1.Guidelines for the Selection

1.1 Ratio

Calculate ratio $i=n_1/n_2$ and choose the nearest nominal i_N shown in

rating table.The exact i_{ex} are found in selection table.Choose the gear unit

type in conformity with the ratio i_N .

n_1 =High speed shaft rotation speed

n_2 =Low speed shaft rotation speed

1.2 Running Power P_{K1} , P_{K2} and Running Torque M_{K2}

η =Efficiency

double stage $\eta=0.97$

triple stage $\eta=0.955$

1.3 Gear Unit selection by means of F_s

The service factor F_s is determined by the load characteristic Of the driving

1.3.1and driven machine. F_s is given in table 1.3.1. Select the size of the Gear

Unit from the rating table so that the nominal power rating P_{N1}

meets the

requirement relative to ratio i_N and input speed n_1 ;

1.4 Maximum Power P_{K1max} and maximum Torque M_{K2max}

P_{N1} [kW]

M_{N2} [Nm]

Factor F_p is given in table 1.4.1

The Gear Unit can be momentarily overloaded.Single load peak Should not exceed 10 seconds period.

1.5 External Load on Shaft Ends

Check the connections of input and output shafts and the Possible radial possible radial and axial loads on shaft ends.

1.6 Reversing Drive

Power ratings P_{N1} and torque ratings M_{N2} given in table are calculated for constant load direction.When rotation direction changes with full load once per minute,70% of P_{N1} and M_{N2} can be utilized.

1.7 Thermal Rating

The thermal rating P_T is actual power rating the gear unit can transmit

+90°C continuously without exceeding the calculated oil temperature +90°C.

f_1 =factor for altitude,see table 1.7.1

f_2 =1.07 for torque arm mounted gear units and f_2 =1.0 for other.s.

f_3 =factor for mounting position,see table 1.7.2

f_4 =1.10 with pressure lubrication and f_4 =1.0 with bath and splash lubrications.

Determine the thermal rating P_T of the gear unit in the actual ambient

temperature.If $P_{K1} > P_T$,check if external pressure lubrication and cooling unit can be used.

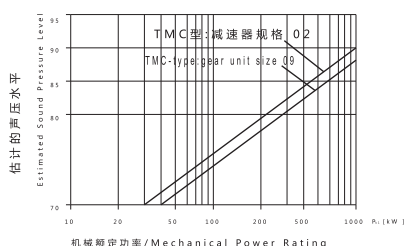
表/Table1.7.1 海拔系数 f_1 /Factor for altitude f_1

	海拔高度/ Altitude(meters above sea)up to				
	0	1000	2000	3000	4000
f_1	1	0.95	0.91	0.87	0.83

f_1 中间值内插

1.8润滑方法

从功率表来检查所选减速器的润滑方法。
飞溅润滑=油位低，轮齿和轴随用内溅油润滑。
浸油润滑=油位高，轮齿和轴承浸入油中。



1.9噪声水平

估计的声压水平 $L_p(A)$ 仅适用于开敞条件，距离减速机表面1米处。

1.10最后的选择

通力对减速器选择的正确性负责，用户对所给的载荷情况和技术要求负责。

表/ Table1.7.2 安装系数 f_3 /Factor for mounting f_3

f_3	安装位置 / Mounting position		
	L	V	E
无风扇/Without fan 带风扇/With fan	1.00	0.90	0.90
	1.00	0.95	0.95

f_1 intermediate values have to be interpolated.

1.8 Lubrication Method

Check from the rating table the lubrication method of the selected gear unit.
Splash lubrication = Oil level is low, gear teeth and bearings are lubricated by oil splashes.
Bath lubrication = Oil level is so high that gear teeth and bearings are Submerged in oil.

1.9 Noise level

estimated sound pressure level $L_p(A)$ applies only in freefield conditions at one(1) meter distance from the gear unit surface.

1.10 final selection

TONGLI responsible for selecting the right gear unit. the buyer is responsible for giving service factor F_s table 1.3.1.

使用系数 F_s 表 1.3.1/service factor F_s table 1.3.1

驱动机 (原动机) Driving Machine (Prime Mover)	从动机负载等级 Load classification of driven machine	每天使用小时数 Run hours/ day		
		<3	3-10	>10
电动机，蒸汽机或汽油机，水轮机，液压马达 Electric Motor, Steam or Gas Turbine Water Turbine, Hydraulic Motor	类别U/Group U	1.00	1.00	1.25
	类别M/Group M	1.15	1.25	1.50
	类别C/Group C	1.35	1.50	1.75
	类别H/Group H	1.55	1.75	2.00
多缸内燃机 Multicylinder Combustion Engine	类别U/Group U	1.15	1.25	1.50
	类别M/Group M	1.35	1.50	1.75
	类别C/Group C	1.55	1.75	2.00
	类别H/Group H	1.80	2.00	2.25

这些使用系数只是根据一般情况给出的。对特殊工作条件，例如，激烈地冲击载荷，满载时频繁启动、逆向传动、快速加速或减速、接近临界速度运行、制动、在轴端有大的外载荷和异常的环境条件等，请向通力咨询将得到满意的答复。

减速机安全系数 F_Z 表 1.3.2/service factor F_Z table 1.3.2

重要与安全要求	一般设备，减速器失效引起单机停产且易更换设备。	重要设备，减速器失效引起机组、生产线或全厂停产。	高度安全要求，减速器失效引起设备、人身事故。
Importance and safety request	Ordinary equipment, malfunction cause the accident of assembling unit, production-line or whole factory.	Important equipment, Malfunction cause the accident of assembling unit, production-line or whole factory.	Safety request highly malfunction cause the accident of equipment and personal injury.
F_Z	1.0-1.25	1.25-1.5	1.5-1.75

These service factors are given as a general guide only. For exceptional conditions, such as extreme shock loads, frequent starts on full load, reversing drive, rapid acceleration or deceleration, function near to Critical speed, braking, high external load on shaft ends and exceptional ambient conditions, reference to TongLi is recommended.

表/ Table1.4.1 最大载荷出现系数 F_F / Maximum load occurrancy factor F_F

最大载荷出现次数 F_F/h maximum load occurrancy F_F /hour	1..5	6..20	21..40	41..80	81..160	>160
F_F	1.00	1.20	1.30	1.50	1.75	2.00



2. 选型资料 Selection Information

从动机/Driven Machine

载荷等级 (表3) / Load Class (Table 3)

转速 n_2 / Rotation Speed n_2

PK2 或/ or MK2

载荷峰值/ Load Peaks (P_{K2max} 或 M_{K2max})

使用持续时间/ Duration of Service

起动频率/ Starting Frequency

原动机/Driving Machine

额定功率/ 转速Nominal Power Rating / rot. Speed

减速器型式/ Gear unit type

安装位置/ Mounting Position

环境条件/ Ambient conditions

温度/ Temperature

其他条件/ Other conditions

减速器选择/ Selection of gear unit

$n_1/n_2=i$

最近公称传动比 i_N / Nearest nominal ratio i_N

减速器型号 (效率) / Gear Unit

Type (efficiency)

要求的FS (表1.3.1) / Required

FS (Table 1.3.1)

要求的FZ (表1.3.2) / Required

FZ (Table 1.3.2)

$$P_{K1} = \frac{P_{K2}}{\eta} = \frac{M_{K2} \times n_2}{9550 \times \eta}$$

$PK1 \times FS \times FZ < PN1$

所选的减速器/ Selected gear unit

选择检查和应用要求/

Selection Check and Application Requirements

减速器精确传动比 i_{ex} / Gear Unit exact ratio

P_{K2max} 和 M_{K2max} 检查/ Checking of P_{K2max} and

M_{K2max}

热功率PT / Thermal rating PT

冷却装置/ Cooling devices

最大允许转速和润滑方法/

Max allowed rotat.speed and Lubrication method.

多灰尘或潮湿条件的要求和安装位置要求/

Requirements of very dusty or moist conditions and requirements of mounting position.

冷环境温度的要求 (冷起动等) /

Requirements of cold ambient temperature (cold start etc.)

可能的附件/ Possible accessories

例1/Example

Belt Conveyor/ (Uniformly loaded)

带式输送机 (均匀载荷) 类别U / Group U

38min⁻¹

32kW

50kW

16h/d, 5700h/a

每小时起动一次/ 1start per hour

交流电动机/ AC Motor

37kW / 1500min⁻¹

空心轴/ Hollow Shaft

直角, 水平/ Right angle, horizontal

0...+30°C

多灰尘/ Very dusty

1500/38=39.5:1

40:1

TMC3BLH(0.955)

1.25

1.15

32kW / 0.955=33.5kW

33.5kW×1.25×1.15=48.1kW < 48.8kW

TMC3BLH03

39.66

50kW≤(2×47.3)/1.00=94.6kW

PT=33×1.0×1.07×1.0×1.0=35.3kW

(环境温度+30°C/ by ambient temperature +30°C)

不需要风扇/ Fan is not needed
n_{1max}=3000rpm,飞溅润滑足够/

enough for splash lubrication

在LSS和HSS上带注油脂咀的双唇密封

Double lip seal with grese nipple on LSS and HSS

用合成油PAO, 见说明书B

Use of synthetic PAO oil, See Instruction B

HSS上电动机法兰 (带冷却风扇), 联轴器,

LSS上力矩臂、收缩盘, 键。

Motor flange (with cooling fan), coupling on HSS,

Torque arm, shrink disk, key on LSS. j

例2 /Example

Mixer (Variable density)

搅拌机 (可变浓度) 类别M / Group M

65min⁻¹

10000Nm

14000Nm

24h/d, 8600h/a

很少/ seldom

交流电动机/ AC Motor

75kW / 1500min⁻¹

实心轴/ Solid Shaft

平行, 垂直/ parallel, vertical

+35°C

潮湿/ Moist

1500/65=23.1:1

22.5:1

TMC3HVS(0.955)

1.5

1.15

(10000×65) / (9550×0.955) =71.3kW

71.3kW×1.5×1.15=112kW < 134kW

TMC3HV06

22.801

14kNm≤(2×18.6)/1.00=37.2kNm

PT=72.5×1.0×1.0×0.9×1.0=65.2kW

(环境温度+35°C/ by ambient temperature +35°C)

需要风扇/ Fan is needed

n_{1max}=2256rpm, 浸油润滑足够/

enough for bath lubrication

HSS上单唇密封和V型圈

LSS上带注油脂咀的双唇密封

One lip seal and V-ring on HSS

Double lip seal with grease nipple on LSS

HSS上电动机法兰冷却风扇, 联轴器,

LSS上联轴器, 安装法兰, 膨胀箱 (主要附件)

Motor flange with

表[3] 从动机载荷分类 U类：均匀载荷 M类：中等冲击载荷 C类：相当大的冲击载荷 H类：强冲击载荷

应用	载荷类别	应用	载荷类别	应用	载荷类别
搅拌机 and 混料机		木材工业	*	低速磨浆机	C
混凝土	M	机床	*	划线轴	M
液体（等浓度）和固体	U	金属加工		压榨机（树皮，油毡，胶料，真空抽吸）	C
液体（变浓度）	M	拉拔机	M	碎浆机	C
鼓风机和风扇	M	平整机	*	卷纸机	C
压缩机		剪切机	H	辊（吸移，同传动，砂网真空抽吸）	C
离心机	U	辊道单向		洗浆机	M
罗茨机	M	集中驱动	C	杨克式园网（缸）	*
往复式，多汽缸	M	单独驱动	H	塑料和橡胶工业	
往复式，单汽缸，螺杆式	C	辊道双向	*	压延和破碎机	H
输送机，均匀负载或进料		拉拔机	C	挤出机（塑料）	M
平板式，链板式，螺旋式	U	绕线机	C	挤出机（橡胶）	C
皮带式，料斗时，链条式	U	碾磨机和滚筒（旋转式）		混炼机	*
输送机，大负载，进料不均匀		球磨机（碾磨机）	C	精炼机	H
平板式，链板式，螺旋式	M	球磨机（重型）和棒磨机（碾磨机）	H	橡胶磨2联	H
皮带式，料斗时，链条式	M	水泥窑	C	橡胶磨3联	C
传动辊式	*	煤碾机	H	压片机	H
摆动往复式	H	干燥机和冷却机	M	制管机	*
起重机和升降机	*	旋转窑	C	热炼机	C
起升机		采矿工业		泵（轻型）	
斗式重负载	M	铣头驱动	C	离心泵	M
斗式均匀负载	U	破碎机	H	往复泵（多缸）	M
升降机		筛和振动筛	H	往复泵（单缸）	C
自动扶梯	M	石油工业	*	旋转泵（凸轮，齿轮叶片）	U
货梯	M	造纸和纸浆工业	*	螺旋泵	M
客梯	*	搅拌机（贮浆池和两轴）	M	污水处理设备	
食品工业		剥皮鼓和剥皮机	H	通风机	C
甜菜切片机	M	打浆机和削片机	H	除尘器	M
轧碎机和碾磨机	C	压光机（滚动轴承）	C	混合器	M
烘干滚筒	M	切纸机	H	沉降器	M
甘蔗粉碎机	M	烘缸（滚动轴承）	C	真空吸泵过滤器	M
发电机	U	过滤机（压力和真空）	M	风力发电机	*

注：*向通力查询

列于表3中的值为经验值，一般应用情况是正确的。对特殊应用或负载不清楚的情况建议实测。

表3中不包括的应用情况请向通力咨询。

Table 3. Load Classification of the Drive Machine Group U = uniform Group M = moderate shocks Group C = considerable shocks Group H = heavy shocks

Application	Group	Application	Group	Application	Group
Agitators and Mixers		Machine tools	*	Line Shafts	M
Concrete	M	Metal mills		Presses(Bark,Felt,Size,Suction)	C
Liquids(constant density)and Solids	U	Draw Bench Carriage and main drive	M	Pulpers	C
Liquids(variable density)	M	Flattening Machines	*	Reels	C
Blowers and Fans	M	Slitters	H	Rolls(pick up,wire Drive,wire suction)	C
Compressors		Table Conveyors,non-reversing		Washers	M
Centrifugal	U	-group drives	C	Yankee Cylinders(Dryers)	*
Lobe	M	-individual drives	H	Plastics and Rubber Industry	H
Reciprocating,multi - cylinder	M	Table Conveyors,reversing	*	Calenders and Grinders	M
Reciprocating,single - cylinder,screw	C	Wire Drawing Machines	C	Extruders (Plastics)	C
Conveyors(uniformly loaded or fed)		Winders	C	Extruders (Rubber)	*
Apron,Flight,Screw	U	Mills and Drums (rotary type)		Mixing Mills	
Belt,Bucket,Chain	U	Ball (mills)	C	Refiners	H
Conveyors(heavy duty not uniformly fed)		Ball (heavy)and Rod(mills)	H	Rubber Mills,2 on line	H
Apron,Flight,Screw	M	Cement Kilns	C	Rubber Mills,3 on line	C
Belt,Bucket,Chain	M	Coal Mills	H	Sheeters	H
Live Roll	*	Dryers and Coolers	M	Tubers	*
Shaker,reciprocating	H	Rotary Kilns	C	Warming Mills	C
Cranes and Hoists	*	Mining Industry		Pumps(light)	
Elevators		Cutter head drives	C	Centrifugal	M
Bucket,heavy load	M	Crushers	H	Reciprocating(multi - cylinder)	M
Bucket,uniform load	U	Screens and Shakers	H	Reciprocating(single - cylinder)	C
Escalators	M	Oil Industry	*	Rotary (gear type,lobe,vane)	U
Freight	M	Paper and Pulp Industry	*	Screw Pumps	M
Man Lifts	*	Agitators(Chest and Two Shaft)	M	Sewage Disposal Equipment	
Food Industry		Debarking Drums and Barkers	H	Aerators	C
Beet Slicer	M	Beaters and Chippers	H	Collectors	M
Crushers and mills	C	Calenders(antifriction bearings)	C	Mixers	M
Drying Drums	M	Cutter head drives	H	Thickeners	M
Sugar cane Crushers	M	Dryer Cylinders(antifriction bearings)	C	Vacuum filters	M
Generators	U	Filters(pressure and vacuum)	M	Windmills	*
Lumber industry	*	Jordans	C		

Note:* refer to TongLi

The values given in Table 3 are based on experience and are valid for applications in general.In the case of a special application or where the loading is not clear,it is recommended that the loads be measured.For application not included in Table 3,Please refer to TongLi



规格 size		n ₁ /min	额定机械功率P _{N1} (kW) Nominal Mechanical Power Ratings P _{N1} in kW														
			公称传动比i _N							Nominal Ratio i _N							
TMC2H		7.1	8	9	10	11.2	12.5	14	16	18	20						
02	1800	190	171	157	149	137	125	110	91.9	82.4	67.3						
	1500	167	151	132	131	115	110	91.7	77.1	69.1	56.4						
	1200	143	127	106	111	91.8	89.1	73.5	62.1	55.7	45.4						
03	1000	126	106	88.8	93.3	76.6	74.4	61.3	52	46.7	38						
	1800	236	220	199	192	176	155	149	130	118	95.2						
	1500	208	193	176	169	155	130	131	109	98.7	79.9						
	1200	178	165	150	144	133	105	106	87.8	79.5	64.4						
04	1000	157	146	125	127	112	87.6	88.4	73.5	66.6	54						
	1800	307	284	264	245	227	207	192	175	167	143						
	1500	270	250	232	216	200	182	169	151	141	120						
	1200	231	214	198	185	171	155	144	121	113	96.2						
05	1000	203	188	175	162	150	129	122	101	94.5	80.6						
	1800	428	396	368	345	319	289	270	248	226	187						
	1500	377	349	324	304	281	243	237	207	189	157						
	1200	322	298	277	260	240	196	195	167	152	126						
06	1000	284	262	242	229	207	164	163	140	127	106						
	1800	514	507	469	395	395	338	338	315	291	237						
	1500	452	446	413	348	348	298	298	273	243	198						
	1200	387	382	353	298	298	255	254	219	196	160						
07	1000	341	336	311	262	259	224	212	184	164	134						
	1800	657	629	580	512	500	427	427	389	354	320						
	1500	578	554	510	451	441	376	376	343	312	270						
	1200	495	474	436	386	377	321	321	293	267	217						
08	1000	436	417	384	339	332	283	281	256	225	182						
	1800	828	828	765	650	650	541	541	509	473	426						
	1500	729	729	673	572	572	476	476	448	417	357						
	1200	623	623	576	489	489	407	407	383	346	288						
09	1000	549	549	507	431	431	358	358	321	289	242						
	1800	1066	1066	1042	846	846	719	719	719	659	601						
	1500	938	938	917	745	745	633	633	633	580	504						
	1200	802	802	784	637	637	541	541	541	489	405						
10	1000	706	706	690	561	561	477	477	455	410	339						
	TMC3H		22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
	02	1800	74.1	61	50.9	49.1	41	43.3	35.6	29.7	28.5	24	22.5	19.1	15.5	16.1	13.1
		1500	62.1	51.1	42.6	41.2	34.4	36.3	29.7	24.9	23.7	20.1	18.8	16	13	13.5	11
1200		50	41.2	34.4	33	27.7	29.3	23.8	20.1	19	16.2	15.1	12.9	10.5	10.9	8.84	
03	1000	42	34.5	28.8	27.6	23.2	24.5	19.8	16.9	15.9	13.6	12.6	10.8	8.78	9.17	7.42	
	1800	99	88.2	73	69.9	57.8	58.6	51.1	42.3	40.5	33.5	32.6	27	21.8	21.7	17.5	
	1500	82.5	73.9	61.2	58.6	48.5	48.8	42.9	35.5	33.8	28.1	27.1	22.7	18.3	18.2	14.7	
	1200	66	59.6	49.3	47	39.1	39.1	34.6	28.6	27	22.7	21.7	18.3	14.8	14.7	11.8	
04	1000	55	50	41.4	39.1	32.8	32.6	29	24	22.5	19	18.1	15.3	12.4	12.4	9.99	
	1800	118	118	101	94.2	79.2	70.3	70	58.4	55.3	45.8	44.3	36.5	31	30.1	26	
	1500	98	98	84.3	79	66.1	58.6	58.6	48.7	46.3	38.2	37.2	30.4	26	25.1	21.8	
	1200	78.4	78.4	67.6	63.6	52.9	46.9	46.9	39	37.4	30.6	30	24.4	21	20	17.6	
05	1000	65.3	65.3	56.4	53.4	44.2	39.1	39.1	32.6	31.3	25.5	25.1	20.3	17.6	16.7	14.8	
	1800	135	135	135	121	109	89.8	82.1	81.9	72.8	64.6	57.8	51.1	42.2	38.8	34.8	
	1500	113	113	113	101	91.2	75.3	68.4	68.4	60.7	54.2	48.1	42.9	35.4	32.4	29.2	
	1200	90.3	90.3	90.3	80.5	73.5	60.7	54.7	54.7	48.6	43.7	38.5	34.6	28.5	25.9	23.5	
06	1000	75.2	75.2	75.2	67.1	61.6	50.9	45.6	45.6	40.5	36.6	32.1	29	23.9	21.6	19.8	
	1800	161	161	161	146	142	115	96.1	96.1	87.2	83	69.8	66.2	54.5	53.2	45.3	
	1500	134	134	134	122	119	97	80.1	80.1	72.7	69.6	58.1	55.5	45.7	44.3	38	
	1200	107	107	107	97.6	95.9	78.4	64.1	64.1	58.1	56.1	46.5	44.8	36.8	35.4	30.6	
07	1000	89.3	89.3	89.3	81.3	80.4	65.9	53.4	53.4	48.4	47	38.8	37.6	30.9	29.5	25.7	
	1800	219	219	219	197	197	160	131	131	117	116	95.5	94.5	76.3	63.5	59.7	
	1500	183	183	183	164	164	134	109	109	97.6	97.3	79.6	79.2	64	53	50.1	
	1200	146	146	146	131	131	108	87.2	87.2	78.1	78.1	63.7	63.7	51.6	42.4	40.4	
08	1000	122	122	122	110	110	90.8	72.7	72.7	65.1	65.1	53.1	53.1	43.2	35.3	34	
	1800	323	323	323	280	260	216	197	187	170	148	138	120	100	92.8	81.7	
	1500	284	284	275	246	218	181	165	157	142	124	115	101	84.2	77.4	68.5	
	1200	227	227	221	199	175	146	133	126	114	100	92.4	81.1	67.8	61.9	55.2	
09	1000	189	189	185	166	147	123	110	106	95.3	83.9	77.3	68	56.9	51.6	46.4	
	1800	410	410	410	360	360	296	276	254	223	207	187	167	138	135	112	
	1500	361	361	361	317	301	248	230	213	195	174	156	140	115	112	93.6	
	1200	309	309	297	271	243	200	184	171	156	140	125	113	91.8	89.7	74.9	
10	1000	259	259	249	229	203	167	153	144	130	118	104	94.7	76.5	74.8	62.4	

功率：功率为额定值，使用系数Fs=1.0。减速器选择见9页
润滑：水平安装用飞溅润滑。垂直安装和竖立安装用浸油润滑。
冷却：如果实际传递的机械功率P_{N1}大于热功率需要人工冷却。

Power ratings:The ratings are nominal,service factor Fs=1.0.
Selection of gear unit:see page 9
Lubrication: Splash lubrication is used in horizontal solutions.Bath lubrication is used in vertical and upright solutions.
Cooling:Additional cooling is required,when the mechanical power rating P_{N1} is higher than the thermal rating P_T

选型参数表 Parameter Selection Table

规格 Size		n ₁ /min	额定输出扭矩P _{N1} (kw) Output Torque M _{N2} IN kNm														
			公称传动比i _N					Nominal Ratio i _N									
TMC2H			7.1	8	9	10	11.2	12.5	14	16	18	20					
02	1800	6.89	7.18	7.41	7.54	8.01	7.92	8.06	7.56	7.58	7.01						
	1500	7.27	7.61	7.48	7.95	8.07	8.36	8.06	7.61	7.63	6.80						
	1200	7.78	8.01	7.51	8.42	8.05	8.47	8.08	7.66	7.69	7.09						
	1000	8.23	8.02	7.55	8.49	8.07	8.49	8.09	7.71	7.74	7.13						
03	1800	8.9	9.3	9.5	9.8	10.2	10.1	11.0	10.8	10.9	10.0						
	1500	9.4	9.8	10.1	10.4	10.7	10.2	11.6	10.9	10.9	10.1						
	1200	10.0	10.5	10.7	11.1	11.5	10.3	11.7	11.0	11.0	10.1						
	1000	10.6	11.1	10.8	11.7	11.6	10.3	11.7	11.0	11.0	10.2						
04	1800	11.3	11.7	12.2	12.5	13.1	13.6	14.1	14.4	14.7	14.2						
	1500	11.9	12.7	12.8	13.3	13.8	14.3	14.9	14.9	14.9	14.3						
	1200	12.7	13.6	13.7	14.2	14.8	15.2	15.9	14.9	14.9	14.3						
	1000	13.4	14.0	14.5	15.0	15.6	15.2	16.2	15.0	15.0	14.4						
05	1800	15.6	15.7	16.8	17.4	18.1	18.6	19.6	20.0	20.0	18.7						
	1500	16.5	17.3	17.7	18.4	19.1	18.8	20.6	20.0	20.1	18.8						
	1200	17.7	18.4	19.0	19.6	20.4	18.9	21.2	20.2	20.2	18.9						
	1000	18.7	19.4	19.9	20.7	21.1	19.0	21.3	20.3	20.3	19.0						
06	1800	18.0	19.6	21.4	20.0	23.1	20.9	24.2	25.3	26.3	24.3						
	1500	19.0	21.7	22.6	21.1	24.4	22.1	25.6	26.3	26.4	24.3						
	1200	20.4	23.3	24.1	22.6	26.1	23.7	27.3	26.4	26.6	24.6						
	1000	21.5	24.5	25.5	23.8	27.3	25.0	27.3	26.6	26.7	24.8						
07	1800	23.2	25.0	25.9	25.4	27.9	26.8	30.6	30.9	32.4	33.3						
	1500	24.5	26.4	27.3	26.9	29.6	28.3	32.3	32.7	34.2	33.8						
	1200	26.2	28.3	29.2	28.7	31.6	30.2	34.5	34.9	36.6	33.9						
	1000	27.7	29.8	30.9	30.3	33.4	31.9	35.7	36.6	36.8	34.2						
08	1800	29.8	33.6	35.3	32.8	36.9	34.8	39.2	41.8	43.2	43.6						
	1500	31.5	35.5	37.2	34.6	39.0	36.7	41.3	44.2	45.7	43.9						
	1200	33.7	37.9	39.8	37.0	41.6	39.2	44.2	47.2	47.4	44.2						
	1000	35.6	40.1	42.0	39.1	44.0	41.5	46.7	47.4	47.6	44.5						
09	1800	37.9	43.8	48.1	41.5	48.2	43.5	50.3	56.5	57.7	59.6						
	1500	40.0	46.3	50.8	43.9	50.7	46.0	53.2	59.7	60.9	59.9						
	1200	42.8	49.5	54.3	46.9	54.2	49.1	56.8	63.8	64.2	60.2						
	1000	45.2	52.3	57.4	49.5	57.3	51.9	60.1	64.3	64.6	60.5						
TMC3H			22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
02	1800	8.37	7.97	7.46	8.04	7.53	8.53	8.11	7.59	8.14	7.69	8.12	7.73	7.10	7.78	7.16	
	1500	8.42	8.01	7.50	8.09	7.58	8.58	8.12	7.64	8.12	7.73	8.14	7.77	7.15	7.83	7.22	
	1200	8.47	8.08	7.57	8.10	7.63	8.66	8.13	7.71	8.14	7.78	8.17	7.83	7.22	7.90	7.25	
	1000	8.54	8.1	7.61	8.13	7.68	8.70	8.13	7.76	8.15	7.84	8.16	7.91	7.25	7.97	7.31	
03	1800	11.4	11.4	10.7	11.5	10.8	11.8	11.7	10.9	11.8	11.0	11.8	11.1	10.2	11.2	10.3	
	1500	11.4	11.5	10.7	11.6	10.8	11.8	11.7	10.9	11.8	11.0	11.8	11.2	10.2	11.3	10.4	
	1200	11.4	11.6	10.8	11.6	10.9	11.8	11.8	11.0	11.8	11.2	11.8	11.2	10.3	11.4	10.4	
	1000	11.4	11.6	10.9	11.6	11.0	11.8	11.9	11.1	11.8	11.2	11.8	11.3	10.4	11.5	10.6	
04	1800	13.9	15.6	14.9	15.9	15.0	14.3	16.1	15.0	16.2	15.0	16.4	15.1	14.4	14.9	14.5	
	1500	13.8	15.6	15.0	16.0	15.0	14.3	16.1	15.0	16.3	15.0	16.5	15.1	14.5	14.9	14.5	
	1200	13.8	15.6	15.0	16.1	15.0	14.4	16.1	15.0	16.5	15.1	16.6	15.1	14.6	14.8	14.7	
	1000	13.8	15.6	15.0	16.3	15.0	14.4	16.1	15.0	16.6	15.1	16.7	15.1	14.7	14.9	14.8	
05	1800	15.4	17.4	19.3	19.9	19.9	18.5	18.1	20.0	20.6	20.2	21.0	20.4	19.0	18.9	19.1	
	1500	15.5	17.5	19.4	20.0	20.0	18.6	18.1	20.1	20.6	20.4	20.9	20.6	18.6	19.0	19.3	
	1200	15.5	17.4	19.3	19.9	20.2	18.7	18.1	20.1	20.6	20.5	20.9	20.7	19.2	19.0	19.4	
	1000	15.5	17.4	19.3	19.9	20.3	18.8	18.1	20.1	20.6	20.7	20.8	20.8	19.7	19.0	19.6	
06	1800	18.6	21.5	24.2	23.9	26.1	23.9	22.4	25.1	24.9	26.6	25.1	26.8	24.9	26.1	25.1	
	1500	18.6	21.5	24.1	24.0	26.3	24.2	22.4	25.1	24.9	26.7	25.1	26.9	25.1	26.1	25.3	
	1200	18.5	21.5	24.1	24.0	26.4	24.5	22.4	25.1	24.9	26.9	25.1	27.2	25.3	26.0	25.5	
	1000	18.6	21.5	24.1	24.0	26.6	24.7	22.4	25.1	24.9	27.1	25.1	27.3	25.4	26.1	25.7	
07	1800	24.8	28.0	31.4	31.8	35.7	33.3	29.1	32.7	32.9	36.6	33.2	36.9	34.2	32.0	34.5	
	1500	24.9	28.0	31.5	31.8	35.7	33.4	29.1	32.7	32.9	36.9	33.2	37.1	34.4	32.1	34.7	
	1200	24.8	28.0	31.4	31.7	35.6	33.7	29.0	32.7	32.9	37.0	33.2	37.3	34.7	32.1	35.0	
	1000	24.9	28.0	31.5	31.8	35.8	34.0	29.1	32.7	32.9	37.0	33.2	37.3	34.9	32.0	35.3	
08	1800	35.5	40.0	45.4	44.2	46.6	43.3	43.5	46.9	47.9	47.4	48.3	47.7	45.5	45.7	45.1	
	1500	37.5	42.2	46.4	46.6	46.9	43.6	43.8	47.3	48.0	47.6	48.3	48.2	46.0	45.8	45.4	
	1200	37.4	42.1	46.6	47.1	47.0	43.9	44.1	47.4	48.2	48.0	48.5	48.4	46.3	45.8	45.7	
	1000	37.4	42.1	46.9	47.2	47.4	44.4	44.0	47.8	48.3	48.3	48.7	48.7	45.6	45.8	46.1	
09	1800	44.9	52.0	58.3	56.3	63.2	58.8	61.7	63.7	61.5	64.1	64.5	64.6	60.4	64.2	60.3	
	1500	47.5	54.9	61.6	59.5	63.4	59.1	61.7	64.1	64.5	64.6	64.5	65.0	60.4	64.0	60.5	
	1200	50.8	58.7	63.4	63.6	64.0	59.6	61.7	64.3	64.5	65.0	64.6	65.6	60.3	64.0	60.5	
	1000	51.1	59.1	63.7	64.4	64.3	59.9	61.6	64.9	64.6	65.5	64.7	66.0	60.3	64.1	60.5	

最大转矩M_{k2max} 为2×M_{N2} / Maximum torque M_{k2max} is 2×M_{N2}



规格 size	精确传动比 <i>I</i> _{ex}					Exact Ratio <i>I</i> _{ex}				
	公称传动比 <i>i</i> _N					Nominal Ratio <i>i</i> _N				
TMC2H	7.1	8	9	10	11.2	12.5	14	16	18	20
02	7.070	8.176	9.175	9.829	11.366	12.314	14.240	15.981	17.880	20.238
03	7.291	8.226	9.280	9.952	11.227	12.697	14.324	16.160	17.913	20.401
04	7.124	8.014	8.958	9.945	11.186	12.723	14.312	15.998	17.115	19.250
05	7.104	7.996	8.871	9.783	11.012	12.522	14.095	15.636	17.236	19.400
06	6.817	7.889	8.853	9.822	11.366	12.036	13.927	15.630	17.588	19.908
07	6.860	7.725	8.677	9.647	10.863	12.19	13.731	15.424	17.664	20.249
08	7.005	7.888	8.958	9.798	11.033	12.488	14.063	15.969	17.763	19.895
09	6.911	7.992	8.969	9.534	11.025	11.767	13.607	15.271	17.012	19.256

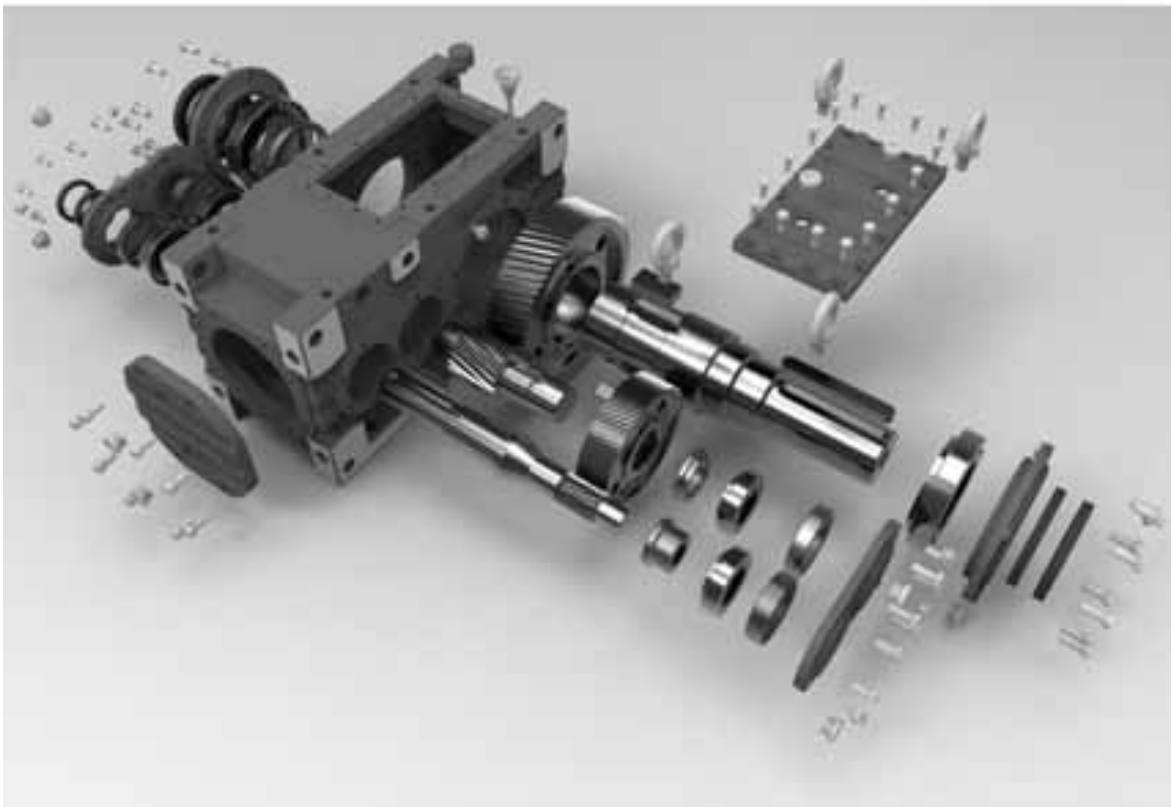
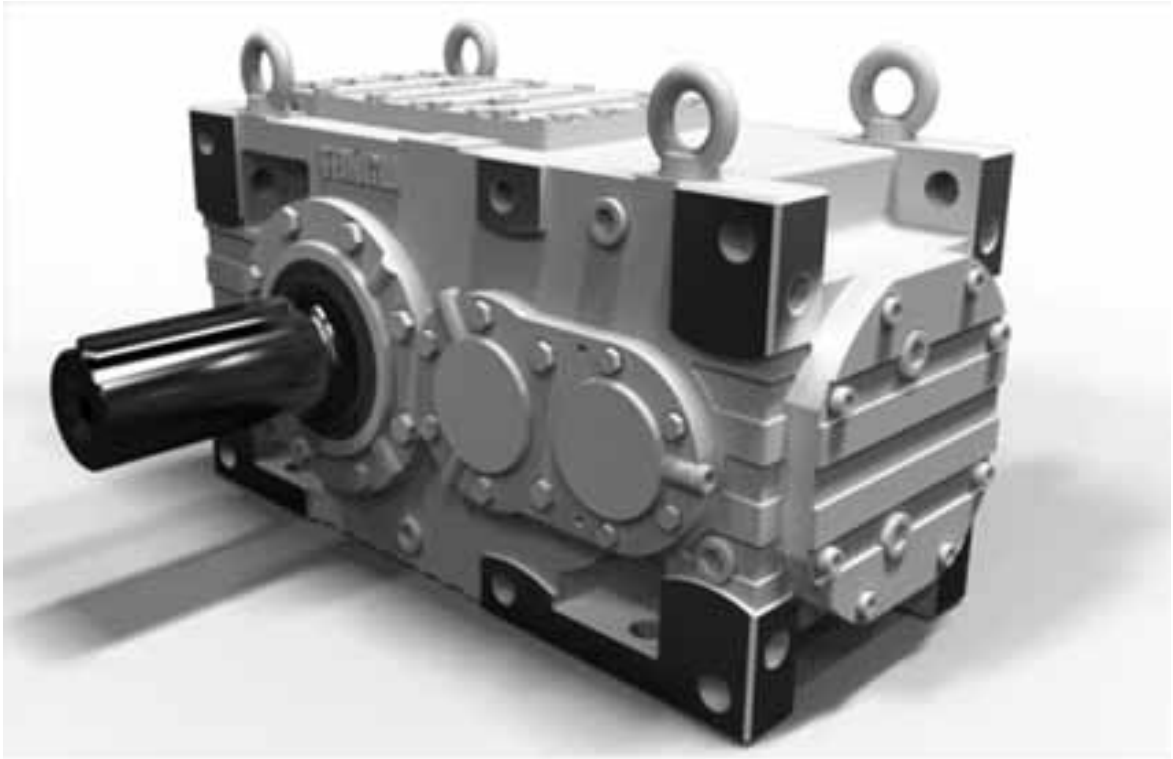
TMC3H	22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
02	22.303	25.791	28.945	32.314	36.265	38.887	44.968	50.467	56.341	63.231	71.200	79.907	90.446	95.359	107.937
03	22.650	25.552	28.828	32.599	36.778	39.810	44.909	50.667	57.295	64.640	71.618	80.800	92.022	101.822	115.963
04	23.204	26.101	29.176	33.394	37.329	40.276	45.304	50.642	57.962	64.792	72.860	81.444	91.602	97.558	109.725
05	22.575	25.412	28.191	32.528	36.084	40.615	43.547	48.308	55.740	61.835	71.064	79.833	88.733	96.362	108.464
06	22.801	26.385	29.611	32.330	36.284	41.069	45.957	51.576	56.313	63.199	71.100	79.795	90.319	96.735	109.493
07	22.380	25.202	28.310	31.856	35.783	41.020	43.887	49.298	55.473	62.312	68.655	77.119	88.405	99.471	114.036
08	21.695	24.431	27.742	31.139	35.360	39.603	43.631	49.545	55.612	63.150	69.091	78.456	89.891	97.274	108.947
09	21.634	25.017	28.076	30.877	34.652	39.223	44.098	49.491	54.427	61.082	68.034	76.353	86.423	93.938	106.328

规格 size	许用转速 n_{1max} (r/min)				Allowed Rotational Speed n_{1max} (r/min)					
	用飞溅润滑				With splash lubrication					
	公称传动比 i_N				Nominal Ratio i_N					
TMC2HL	7.1	8	9	10	11.2	12.5	14	16	18	20
02	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
03	2778	2778	2778	2778	2778	2778	2778	2778	2778	2778
04	2546	2546	2546	2546	2546	2546	2546	2546	2546	2546
05	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350
06	2037	2037	2037	2037	2037	2037	2037	2037	2037	2037
07	1910	1910	1910	1910	1910	1910	1910	1910	1910	1910
08	1797	1797	1797	1797	1797	1797	1797	1797	1797	1797
09	1697	1697	1697	1697	1697	1697	1697	1697	1697	1697

TMC3HL	22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
02	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
03	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
04	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
05	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
06	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
07	2778	2778	2778	2778	2778	2778	2961	2961	2961	2961	3000	3000	3000	3000	3000
08	2546	2546	2546	2546	2546	2546	2703	2703	2703	2703	3000	3000	3000	3000	3000
09	2350	2350	2350	2350	2350	2350	2480	2480	2480	2480	2976	2976	2976	3000	3000

规格 Size	许用转速n1max (r/min)				Allowed Rotational Speed n1max (r/min)										
	用飞溅润滑				With splash lubrication										
TMC2HV TMC2HE	公称传动比i _N				Nominal Ratio i _N										
	7.1	8	9	10	11.2	12.5	14	16	18	20					
02	1585	1585	1585	2018	2018	2408	2408	2408	2637	2637					
03	1463	1463	1463	1836	1836	2221	2221	2221	2414	2414					
04	1315	1315	1315	1674	1674	2027	2027	2027	2140	2140					
05	1216	1216	1216	1534	1534	1860	1860	1860	2012	2012					
06	1098	1098	1098	1433	1433	1679	1679	1679	1847	1847					
07	1025	1025	1025	1313	1313	1575	1575	1575	1758	1758					
08	936	936	936	1195	1195	1445	1445	1445	1575	1575					
09	851	851	851	1075	1075	1266	1266	1266	1381	1381					
TMC2HV TMC2HE	公称传动比i _N				Nominal Ratio i _N										
	22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
02	2838	2838	2838	2838	2838	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
03	2553	2553	2553	2553	2553	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
04	2448	2448	2448	2448	2448	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
05	2256	2256	2256	2256	2256	2256	3000	3000	3000	3000	3000	3000	3000	3000	3000
06	2114	2114	2114	2114	2114	2114	3000	3000	3000	3000	3000	3000	3000	3000	3000
07	1950	1950	1950	1950	1950	1950	2961	2961	2961	2961	3000	3000	3000	3000	3000
08	1753	1753	1753	1753	1753	1753	2703	2703	2703	2703	3000	3000	3000	3000	3000
09	1621	1621	1621	1621	1621	1621	2480	2480	2480	2480	2976	2976	2976	3000	3000

规格 Size	风扇数 Fan pcs	热功率PTH (kW)								Thermal Ratings PTH in kW							
		n1=1500r/min的计算值								Calculated with n1=1500r/min							
		公称传动比i _N 环境温度								Nominal Ratio i _N /Ambient Air Temperature							
		TMC2H								TMC3H							
		i _N =7.1 ~ 14				i _N =16 ~ 20				i _N =22.5 ~ 63				i _N =71 ~ 112			
		20℃	30℃	40℃	50℃	20℃	30℃	40℃	50℃	20℃	30℃	40℃	50℃	20℃	30℃	40℃	50℃
02	-	49	37	25	12	43	31	19	7	48	39	30	20	44	34	25	16
	1	104	84	65	45	91	71	52	32	90	75	61	46	80	65	50	35
	2	131	108	85	62	115	92	68	45	-	-	-	-	-	-	-	-
03	-	61	46	31	15	54	39	24	8	60	48	37	25	54	43	31	19
	1	129	105	81	56	113	89	64	40	112	93	75	56	99	81	62	44
	2	163	134	106	77	142	114	85	56	-	-	-	-	-	-	-	-
04	-	77	58	39	19	68	49	30	11	74	60	45	31	67	53	38	24
	1	163	132	102	71	143	112	81	51	139	116	93	70	123	100	77	54
	2	206	170	133	97	180	144	107	71	-	-	-	-	-	-	-	-
05	-	88	66	44	22	77	56	34	12	86	69	52	36	78	61	44	28
	1	186	151	116	81	162	128	93	58	160	134	107	81	142	116	89	63
	2	235	193	152	110	205	163	122	81	-	-	-	-	-	-	-	-
06	-	106	80	53	27	94	68	41	15	102	82	63	43	93	73	53	33
	1	226	183	141	99	198	155	113	70	191	159	128	96	170	138	106	75
	2	285	235	185	134	249	199	149	98	-	-	-	-	-	-	-	-
07	-	131	98	66	33	116	83	50	18	125	101	77	53	114	89	65	41
	1	277	225	173	121	243	191	138	86	234	196	157	118	208	169	131	92
	2	351	289	227	165	306	244	182	120	-	-	-	-	-	-	-	-
08	-	162	122	82	41	144	103	63	22	155	125	95	65	141	111	81	51
	1	345	280	215	150	302	237	172	107	290	242	194	146	258	210	162	114
	2	436	359	282	205	380	304	227	150	-	-	-	-	-	-	-	-
09	-	188	142	95	48	167	120	73	26	184	148	113	77	167	131	95	60
	1	400	325	249	174	350	275	200	124	344	287	230	173	305	248	191	135
	2	505	416	327	238	441	352	263	174	-	-	-	-	-	-	-	-



结 构 爆 炸 图
Structure exploded diagram

规格 Size	n1 /min	额定机械功率 P_{N1} (kW) Nominal Mechanical Power Ratings P_{N1} in kW												
		TMC2B 公称传动比 i_N						TMC3B Nominal Ratio i_N						
		7.1	8	9	10	11.2	12.5	14	16	18	20	22.5	25	28
02	1800	144	133	124	107	99.2	93	77.4	77.4	76.3	68.2	66.8	55.7	53.8
	1500	127	117	109	94.1	87.3	81.9	68.1	68.1	64	60	56	46.7	45.1
	1200	108	100	93.6	78.2	74.7	70.1	56.7	56.7	51.5	51.4	45.1	37.6	36.3
	1000	95.5	88.1	82.4	65.5	65.2	61.7	47.4	47.4	43.2	45.2	37.8	31.5	30.3
03	1800	177	166	155	128	123	115	102	102	102	96.7	96.7	80.2	76.4
	1500	156	146	136	107	108	101	85.5	85.5	85.5	85.1	81.2	67.2	63.7
	1200	134	125	117	86	87	86.6	68.7	68.7	68.7	68.7	65.4	54.1	51
	1000	118	110	103	71.9	72.8	73.8	57.4	57.4	57.4	57.4	54.8	45.4	42.6
04	1800	227	212	199	168	158	149	117	117	117	117	117	114	106
	1500	199	187	175	148	139	131	103	103	103	103	103	94.9	88.6
	1200	171	160	150	125	119	112	88.2	88.2	88.2	83.7	83.7	76	71.4
	1000	150	141	132	107	103	98.3	75.5	75.5	75.5	69.7	69.7	63.4	59.9
05	1800	321	301	283	237	223	211	162	162	162	150	150	150	136
	1500	282	265	249	209	197	186	136	136	136	125	125	125	116
	1200	241	226	213	169	168	159	109	109	109	99.8	99.8	99.8	92.6
	1000	212	199	188	142	143	140	90.8	90.8	90.8	83.2	83.2	83.2	77.2
06	1800	425	393	367	306	284	267	202	202	202	184	184	184	173
	1500	374	346	323	269	250	235	168	168	168	153	153	153	144
	1200	320	296	276	229	214	201	135	135	135	123	123	123	115
	1000	282	260	243	198	187	177	112	112	112	102	102	102	95.9
07	1800	515	483	451	375	353	331	269	269	269	232	232	232	202
	1500	454	425	397	331	311	292	224	224	224	204	204	204	178
	1200	388	364	340	280	266	249	179	179	179	165	165	165	152
	1000	342	320	299	242	231	220	149	149	149	137	137	137	128
08	1800	684	640	595	506	476	444	340	340	340	294	294	294	255
	1500	602	564	523	446	419	391	300	300	300	259	259	259	225
	1200	515	482	448	381	359	334	256	256	256	221	221	221	192
	1000	453	424	394	330	314	294	223	223	223	195	195	195	169
09	1800	953	879	822	706	654	613	412	412	412	379	379	379	336
	1500	839	774	723	621	576	540	363	363	363	334	334	334	296
	1200	718	662	619	531	492	462	310	310	310	286	286	286	253
	1000	632	583	544	463	433	407	273	273	273	251	251	251	223
TMC3B		31.5	35.5	40	45	50	56	63	71	80	90	100	112	
02	1800	44.8	36.4	32.8	33	31.7	26.6	21.6	22.6	19.2	15.6	12.3	12.3	
	1500	37.6	30.5	27.5	27.7	26.5	22.3	18.1	18.9	16.1	13.1	10.3	10.3	
	1200	30.3	24.6	22.1	22.3	21.2	18	14.6	15.1	13	10.5	8.38	8.37	
	1000	25.4	20.6	18.5	18.7	17.7	15.1	12.2	12.6	10.9	8.82	7.07	7.05	
03	1800	63.5	60.4	56.7	47.8	38.6	37.7	30.4	30.2	27.7	22.4	18.2	18.2	
	1500	53.2	50.6	47.3	40.1	32.4	31.6	25.5	25.2	23.3	18.8	15.3	15.3	
	1200	42.9	40.8	37.9	32.3	26.1	25.5	20.6	20.2	18.8	15.1	12.3	12.3	
	1000	36	34.2	31.6	27.1	21.9	21.4	17.2	16.9	15.7	12.7	10.3	10.4	
04	1800	89.2	75.2	76.4	66.8	55.8	49.6	44.5	38.3	36.9	32.7	18.5	18.7	
	1500	74.4	62.9	64	55.8	46.8	41.5	37.3	31.9	30.8	27.4	15.5	15.7	
	1200	59.6	50.6	51.5	44.7	37.7	33.4	30.1	25.6	24.7	22.1	12.6	12.7	
	1000	49.7	42.4	43.1	37.3	31.6	28	25.2	21.3	20.5	18.6	10.6	10.7	
05	1800	121	107	98.7	91.2	75.3	70.3	59.3	44.4	44.4	42.9	27.9	28.3	
	1500	101	88.9	82.3	76.4	63.1	58.8	49.7	37	37	36	23.5	23.8	
	1200	81.8	71.1	65.8	61.6	50.9	47.3	40.1	29.6	29.6	29	19	19.3	
	1000	68.5	59.3	54.8	51.7	42.6	39.6	33.6	24.6	24.6	24.3	16	16.2	
06	1800	159	132	123	119	97	86.2	77.2	62.9	62.9	56	46.4	45.7	
	1500	133	110	103	99.7	81.5	72.1	64.9	52.4	52.4	47.1	39	38.4	
	1200	107	87.8	82.1	80.4	65.9	58	52.5	41.9	41.9	38	31.5	30.9	
	1000	89.9	73.2	68.5	67.4	55.4	48.6	44	35	35	31.9	26.4	26	
07	1800	202	172	157	157	135	114	108	71.2	71.2	71.2	60.2	60.2	
	1500	178	143	133	133	113	95.1	90.3	59.4	59.4	59.4	50.2	50.2	
	1200	150	115	107	107	91.3	76.4	72.8	47.5	47.5	47.5	40.2	40.2	
	1000	126	95.5	88.8	88.8	76.5	63.9	61	39.6	39.6	39.6	33.5	33.5	
08	1800	255	223	195	195	173	160	137	104	104	98.6	67.7	68.6	
	1500	225	196	172	172	145	138	115	86.7	86.7	82.8	56.9	57.6	
	1200	187	159	147	140	117	111	93	69.3	69.3	66.7	46	46.5	
	1000	157	133	129	118	98.4	93.2	77.9	57.8	57.8	55.9	38.6	39.1	
09	1800	336	288	256	256	243	207	190	149	149	137	73.1	74.1	
	1500	296	253	226	226	203	177	159	124	124	115	61.4	62.2	
	1200	253	212	193	193	164	142	128	99.3	99.3	91.9	49.6	50.3	
	1000	223	177	170	167	137	119	107	82.8	82.8	76.6	41.7	42.2	

功率：功率为额定值，使用系数 $F_s=1.0$ 。减速器选择见9页
 润滑：水平安装用飞溅润滑。垂直安装和竖立安装用浸油润滑。
 冷却：如果实际传递的机械功率 P_{N1} 大于热功率需要人工冷却。

Power ratings: The ratings are nominal, service factor $F_s=1.0$. Selection of gear unit: see page 9
 Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.
 Cooling: Additional cooling is required, when the mechanical power rating P_{N1} is higher than the thermal rating P_{th} .



规格 Size	n1 /min	额定输出扭矩P _{N1} (KNm) Output TorqueM _{N2} IN KNm												
		TMC2B 公称传动比i _N						TMC3B Nominal Ratio i _N						
		7.1	8	9	10	11.2	12.5	14	16	18	20	22.5	25	28
02	1800	5.16	5.51	5.76	5.29	5.67	5.97	5.73	6.63	7.33	7.02	7.95	7.44	8.02
	1500	5.46	5.82	6.08	5.58	5.99	6.30	6.05	7.00	7.38	7.41	8.00	7.48	8.07
	1200	5.80	6.21	6.53	5.80	6.40	6.74	6.30	7.28	7.42	7.93	8.05	7.53	8.12
	1000	6.16	6.57	6.89	5.82	6.71	7.12	6.32	7.30	7.47	8.37	8.10	7.58	8.12
03	1800	6.49	6.86	7.23	6.59	7.14	7.53	7.79	8.78	9.91	10.08	11.37	10.64	11.46
	1500	6.86	7.24	7.61	6.67	7.52	7.94	7.83	8.84	9.97	10.64	11.45	10.69	11.46
	1200	7.37	7.75	8.19	6.64	7.58	8.51	7.87	8.87	10.01	10.74	11.53	10.76	11.47
	1000	7.76	8.20	8.63	6.66	7.61	8.70	7.90	8.91	10.00	10.80	11.60	10.80	11.50
04	1800	8.5	8.9	9.4	8.8	9.3	9.8	8.7	9.8	11.0	12.2	13.7	15.0	15.9
	1500	9.0	9.5	9.9	9.3	9.8	10.3	9.2	10.4	11.6	12.9	14.5	14.9	16.0
	1200	9.6	10.1	10.6	9.8	10.5	11.0	9.9	11.1	12.4	13.1	14.7	15.0	16.1
	1000	10.1	10.7	11.2	10.1	10.9	11.6	10.2	11.4	12.8	13.1	14.7	15.0	16.2
05	1800	11.7	12.4	12.9	12.1	9.8	13.4	12.0	13.6	15.0	15.4	17.3	19.2	20.1
	1500	12.4	13.1	13.6	12.8	13.5	14.2	12.1	13.7	15.2	15.4	17.3	19.2	20.5
	1200	13.2	13.9	15.8	12.9	14.4	15.1	12.2	13.7	15.2	15.3	17.3	19.1	20.5
	1000	14.0	14.7	15.4	13.0	14.8	16.0	12.2	13.7	15.2	15.3	17.3	19.2	20.5
06	1800	14.7	15.8	16.5	15.2	9.8	17.2	14.4	16.7	18.7	18.9	21.9	24.6	25.2
	1500	15.6	16.7	17.5	16.0	17.2	18.2	14.4	16.7	18.7	18.9	21.8	24.5	25.2
	1200	16.6	17.8	18.6	17.0	18.4	19.4	14.5	16.7	18.8	19.0	22.0	24.6	25.2
	1000	17.6	18.8	19.7	17.7	19.3	20.5	14.4	16.7	18.7	18.9	21.9	24.5	25.2
07	1800	18.1	19.1	20.1	18.8	9.8	21.0	19.3	21.8	24.4	23.4	26.4	29.6	29.0
	1500	19.2	20.2	21.2	19.9	21.1	22.2	19.3	21.7	24.4	24.7	27.8	31.3	30.7
	1200	20.5	21.6	22.7	21.0	22.5	23.7	19.3	21.7	24.4	25.0	28.2	31.6	32.8
	1000	21.6	22.8	23.9	21.9	23.5	25.0	19.3	21.8	24.4	25.0	28.1	31.6	33.1
08	1800	24.4	25.8	27.2	25.4	9.8	28.4	24.9	28.1	31.9	30.2	34.0	38.6	37.5
	1500	25.8	27.2	28.7	26.8	28.4	30.1	26.4	29.7	33.8	31.9	35.9	40.8	39.8
	1200	27.6	29.1	30.7	28.6	30.4	32.1	28.2	31.7	36.0	34.0	38.3	43.5	42.4
	1000	29.2	30.7	32.4	29.7	31.9	33.9	29.5	33.2	37.7	36.0	40.5	46.0	44.8
09	1800	33.6	35.8	37.6	34.9	9.8	39.3	29.8	34.5	38.7	37.8	43.7	49.1	47.9
	1500	35.5	37.9	39.7	36.8	39.5	41.6	29.8	34.4	38.7	40.0	46.3	51.9	50.6
	1200	38.0	40.5	44.5	39.4	42.2	44.5	33.6	38.9	43.7	42.8	49.5	55.6	54.1
	1000	40.1	42.8	44.9	41.2	44.6	46.9	35.6	41.2	46.2	45.2	52.2	58.6	57.1
TMC3B		31.5	35.5	40	45	50	56	63	71	80	90	100	112	
02	1800	7.50	6.89	6.70	7.56	8.11	7.64	7.02	8.13	7.75	7.13	6.07	6.87	
	1500	7.55	6.93	6.74	7.62	8.13	7.68	7.06	8.15	7.80	7.18	6.10	6.90	
	1200	7.61	6.99	6.77	7.66	8.13	7.75	7.12	8.14	7.87	7.19	6.20	7.01	
	1000	7.66	7.03	6.80	7.70	8.14	7.81	7.16	8.16	7.91	7.26	6.27	7.09	
03	1800	10.7	10.7	11.4	10.8	10.0	10.9	10.0	10.7	11.1	10.2	9.0	10.2	
	1500	10.8	10.8	11.4	10.9	10.0	11.0	10.1	10.7	11.2	10.3	9.1	10.3	
	1200	10.9	10.9	11.4	11.0	10.1	11.1	10.2	10.7	11.3	10.3	9.1	10.4	
	1000	11.0	10.9	11.4	11.1	10.2	11.2	10.3	10.7	11.3	10.4	9.19	10.5	
04	1800	15.0	13.2	15.3	15.0	14.1	14.1	14.2	13.4	14.4	14.4	8.7	9.9	
	1500	15.0	13.2	15.4	15.0	14.2	14.1	14.3	13.4	14.3	14.4	8.8	10.0	
	1200	15.0	13.3	15.5	15.0	14.3	14.2	14.4	13.4	14.5	14.5	8.9	10.1	
	1000	15.0	13.4	15.6	15.1	14.4	14.3	14.5	13.4	14.4	14.7	8.97	10.2	
05	1800	19.8	18.3	19.5	20.0	18.6	19.7	18.7	15.7	17.4	19.0	13.3	15.1	
	1500	19.8	18.3	19.5	20.1	18.7	19.8	18.9	15.7	17.4	19.1	13.4	15.3	
	1200	20.1	18.3	19.5	20.3	18.9	19.9	19.0	15.7	17.4	19.2	13.5	15.5	
	1000	20.2	18.3	19.5	20.4	19.0	20.0	19.1	15.7	17.4	19.4	13.7	15.6	
06	1800	26.0	23.8	24.2	26.2	24.2	24.2	24.5	22.0	24.7	24.9	22.5	25.1	
	1500	26.1	23.8	24.3	26.4	24.4	24.2	24.7	22.0	24.7	25.1	22.7	25.3	
	1200	26.3	23.7	24.2	26.6	24.7	24.4	25.0	22.0	24.6	25.3	22.9	25.5	
	1000	26.5	23.7	24.2	26.8	24.9	24.5	25.1	22.0	24.7	25.4	23.1	25.7	
07	1800	32.6	29.4	30.2	34.0	33.5	31.2	33.9	25.5	28.7	32.9	29.3	33.6	
	1500	34.5	29.4	30.7	34.5	33.6	31.2	34.0	25.6	28.7	32.9	29.4	33.6	
	1200	36.3	29.5	30.9	34.7	34.0	31.3	34.2	25.5	28.7	32.9	29.4	33.7	
	1000	36.6	29.4	30.8	34.6	34.2	31.5	34.4	25.5	28.7	32.9	29.4	33.6	
08	1800	42.6	39.4	38.7	43.9	43.7	45.9	44.0	37.1	42.1	44.7	33.2	37.6	
	1500	45.1	41.6	41.0	46.5	43.9	47.5	44.3	37.1	42.1	45.1	33.5	37.9	
	1200	46.9	42.2	43.8	47.3	44.3	47.8	44.8	37.1	42.1	45.4	33.8	38.3	
	1000	47.3	42.2	46.2	47.7	44.7	48.1	45.1	37.1	42.1	45.7	34.1	38.6	
09	1800	53.7	50.3	49.2	55.2	59.3	57.4	59.6	51.5	57.8	60.1	35.0	40.2	
	1500	56.8	53.0	52.1	58.4	59.4	58.9	59.9	51.4	57.7	60.6	35.3	40.5	
	1200	60.7	55.5	55.6	62.4	60.0	59.0	60.2	51.5	57.8	60.5	35.6	40.9	
	1000	64.0	55.8	58.7	64.7	60.2	59.4	60.3	51.5	57.8	60.5	35.9	41.2	

最大转矩M_{k2max} 为2×M_{N2} / Maximum torque M_{k2max} is 2×M_{N2}

规格 size	精确传动比 i_{ex}						Exact Ratios I_{ex}						
	TMC2B 公称传动比 i_N						TMC3B Nominal Ratio i_N						
	7.1	8	9	10	11.2	12.5	14	16	18	20	22.5	25	28
02	6.961	8.050	9.034	9.605	11.107	12.465	14.611	16.896	18.962	20.312	23.489	26.361	29.429
03	7.124	8.036	9.067	10.000	11.281	12.727	15.069	16.999	19.179	20.568	23.203	26.178	29.602
04	7.293	8.203	9.170	10.147	11.414	12.759	14.757	16.600	18.555	20.600	23.171	25.901	29.646
05	7.096	7.987	8.861	9.873	11.114	12.329	14.681	16.526	18.333	20.217	22.758	25.246	29.130
06	6.739	7.798	8.752	9.638	11.152	12.516	14.089	16.303	18.297	20.299	23.489	26.361	28.782
07	6.835	7.697	8.646	9.736	10.963	12.315	14.177	15.965	17.933	19.937	22.450	25.218	28.377
08	6.946	7.821	8.882	9.736	10.963	12.449	14.477	16.302	18.512	20.249	22.802	25.892	29.063
09	6.852	7.924	8.893	9.605	11.107	12.465	14.282	16.516	18.536	19.703	22.784	25.570	28.121

TMC3B	31.5	35.5	40	45	50	56	63	71	80	90	100	112
02	33.028	37.384	40.296	45.224	50.488	56.661	64.135	70.968	79.646	90.152	97.346	110.185
03	33.397	35.077	39.665	44.751	50.966	57.295	65.252	69.861	78.817	89.764	97.527	111.072
04	33.139	34.627	39.632	44.302	49.827	55.993	62.976	68.901	77.019	86.625	93.184	104.806
05	32.315	33.829	39.033	43.301	48.738	55.438	62.400	69.916	77.560	87.300	93.838	105.622
06	32.302	35.533	38.796	43.540	49.283	55.306	62.600	68.956	77.388	87.595	95.757	108.387
07	31.876	33.791	38.024	42.712	48.963	53.983	61.883	70.765	79.490	91.123	96.173	110.247
08	33.002	34.901	39.175	44.485	49.823	56.617	63.411	70.393	79.934	89.526	96.711	108.316
09	31.559	34.467	37.904	42.539	48.150	54.720	61.937	68.215	76.556	86.653	94.513	106.979

规格 size	许用转速 n_{1max} (r/min)						Allowed Rotational Speed n_{1max} in r/min						
	用飞溅润滑						With splash lubrication						
	TMC2BL 公称传动比 i_N						TMC3BL Nominal Ratio i_N						
	7.1	8	9	10	11.2	12.5	14	16	18	20	22.5	25	28
02	2680	2680	2680	2680	2680	2680	3000	3000	3000	3000	3000	3000	3000
03	2474	2474	2474	2474	2474	2474	3000	3000	3000	3000	3000	3000	3000
04	2297	2297	2297	2297	2297	2297	3000	3000	3000	3000	3000	3000	3000
05	2144	2144	2144	2144	2144	2144	2924	2924	2924	2924	2924	2924	2924
06	2010	2010	2010	2010	2010	2010	2680	2680	2680	2680	2680	2680	2680
07	1859	1859	1859	1859	1859	1859	2474	2474	2474	2474	2474	2474	2474
08	1693	1693	1693	1693	1693	1693	2297	2297	2297	2297	2297	2297	2297
09	1547	1547	1547	1584	1584	1584	2144	2144	2144	2144	2144	2144	2144

TMC3B	31.5	35.5	40	45	50	56	63	71	80	90	100	112
02	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
03	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
04	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
05	2924	2924	2924	2924	2924	3000	3000	3000	3000	3000	3000	3000
06	2680	2680	2680	2680	2680	3000	3000	3000	3000	3000	3000	3000
07	2474	2474	2474	2474	2474	2967	2967	3000	3000	3000	3000	3000
08	2297	2297	2297	2297	2297	2715	2715	3000	3000	3000	3000	3000
09	2144	2144	2144	2144	2144	2467	2467	2907	2907	2907	3000	3000



规格 size	许用转速 $n_{1\max}$ (r/min)						Allowed Rotational Speed $n_{1\max}$ in r/min						
	用飞溅润滑						With splash lubrication						
	TMC2BV/TMC2BE			公称传动比 i_N			TMC3BV/TMC3BE			Nominal Ratio i_N			
	7.1	8	9	10	11.2	12.5	14	16	18	20	22.5	25	28
02	1568	1568	1568	2131	2131	2131	2652	2652	2652	2652	2652	2652	2652
03	1451	1451	1451	2033	2033	2033	2463	2463	2463	2463	2463	2463	2463
04	1319	1319	1319	1814	1814	1814	2366	2366	2366	2366	2366	2366	2366
05	1189	1189	1189	1631	1631	1631	2100	2100	2100	2100	2100	2100	2100
06	1047	1047	1047	1480	1480	1480	1873	1873	1873	1873	1873	1873	1873
07	929	929	929	1298	1298	1298	1785	1785	1785	1785	1785	1785	1785
08	872	872	872	1221	1221	1221	1599	1599	1599	1599	1599	1599	1599
09	773	773	773	1084	1084	1084	1447	1447	1447	1447	1447	1447	1447

TMC3B	31.5	35.5	40	45	50	56	63	71	80	90	100	112
02	2652	2652	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
03	2463	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
04	2366	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
05	2100	2799	2799	2799	2799	3000	3000	3000	3000	3000	3000	3000
06	1873	2491	2491	2491	2491	3000	3000	3000	3000	3000	3000	3000
07	1785	2395	2395	2395	2395	2967	2967	3000	3000	3000	3000	3000
08	159	2141	2141	2141	2141	2715	2715	3000	3000	3000	3000	3000
09	1447	1924	1924	1924	1924	2467	2467	2907	2907	2907	3000	3000

规格 size	n ₁ /min	热功率P _{TH} (kw)				Thermal Ratings P _{TH} in kw							
		n ₁ =1500r/min的计算值				Calculated with n ₁ =1500r/min							
		公称传动比i _N 环境温度				Nominal Ratio i _N /Ambient Air Temperature							
		TMC2B				TMC3B							
		I _N =7.1 ~ 12.5				I _N =14 ~ 63				I _N =71 ~ 112			
		20°C	30°C	40°C	50°C	20°C	30°C	40°C	50°C	20°C	30°C	40°C	50°C
02	-	34	23	14	*)	37	27	18	9	36	26	17	8
	1	76	55	33	11	75	61	46	32	69	55	40	26
03	-	42	29	18	7	44	33	22	10	43	32	21	9
	1	92	66	40	14	91	73	56	38	84	66	48	31
04	-	52	35	22	9	55	41	27	13	53	39	25	11
	1	114	82	49	17	112	91	69	47	103	82	60	38
05	-	57	40	27	11	62	46	30	14	60	44	29	13
	1	129	92	56	19	127	102	78	53	116	92	67	43
06	-	66	48	32	14	74	55	36	17	72	53	34	15
	1	154	111	67	23	152	123	93	64	139	110	81	52
07	-	80	57	38	17	90	67	44	21	87	64	42	19
	1	187	134	81	28	184	149	113	78	169	134	98	63
08	-	95	67	42	21	110	82	54	26	107	79	51	23
	1	231	165	100	34	227	183	139	96	208	165	121	77
09	-	109	76	49	23	127	95	62	30	124	91	59	26
	1	266	190	115	39	261	211	161	110	240	190	139	89

*) 需要冷却/Cooling needed

尺寸/Dimensions/
TMC2BL...27-
TMC3BL...29-

尺寸/Dimensions
TMC2BV...35-
TMC3BV...37-

尺寸/Dimensions
TMC2BE...43-
TMC3BE...45-

实心轴 (LSS)

1. 许用径向力 F_R 的确定

Determining the allowed radial force F_R

F_R = 实际许用径向力

F_R = the allowed actual radial force,

F_{RN} = 轴端中点许用的额定径向力, 使用系数 $F_S = 1.0$ 的计算值

F_{RN} = the allowed nominal radial force in the middle of the shaft end, calculated with service factor

$F_S = 1.0$

F_S = 使用系数

F_S = service factor,

K_Y = 径向力位置的影响系数

K_Y = the effect of the radial force location.

2. 实心轴 (LSS) 的径向外力 Radial external for Solid(LSS)

径向外力可以为任意方向。表中表示的 F_{RN} 是低速轴端最不利方向的许用径向力。

External radial can be to any direction. F_{RN} in the table shows

the allowed radial force to the most unfavorable direction on the LSS end.

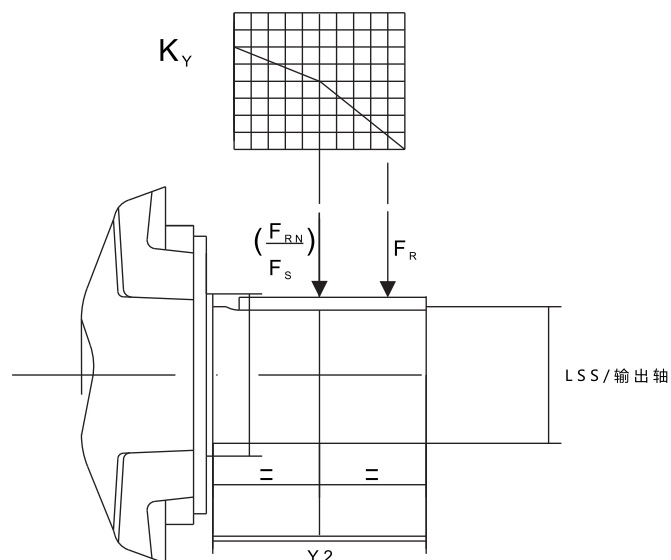


图1：径向力位置的影响

Picture 1: The effect of the radial force location

表1: 轴向力 $F_A = 0$ kN 时, 许用额定径向力 F_{RN}

Table 1: Allowed nominal radial force F_{RN} when axial force $F_A = 0$ kN

减速器 规格 gear unit size	表1: 轴向力 $F_A = 0$ kN 时, 许用额定径向力 F_{RN}			
	低速轴端中点 F_{RN} / F_{RN} in the middle of the LSS end [kN]			
	低速轴速度 n_2 [r/min]/LSS speed			
	≤ 17	≤ 30	≤ 60	≤ 90
02	34	29	27	24
03	46	39	33	32
04	53	45	39	38
05	62	54	47	45
06	68	59	51	43
07	79	68	60	56
08	100	85	75	72
09	120	115	91	86

高速轴 (HSS) 端

假定径向力作用在高速轴的中点, 无轴向力 F_A 来确定减速器尺寸。(按轴伸中点, 10000小时核定径向许用力)

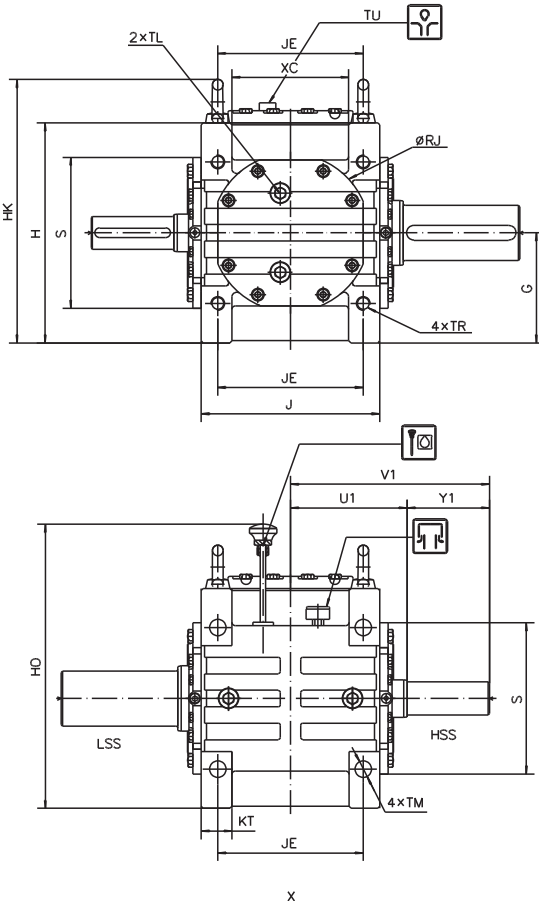
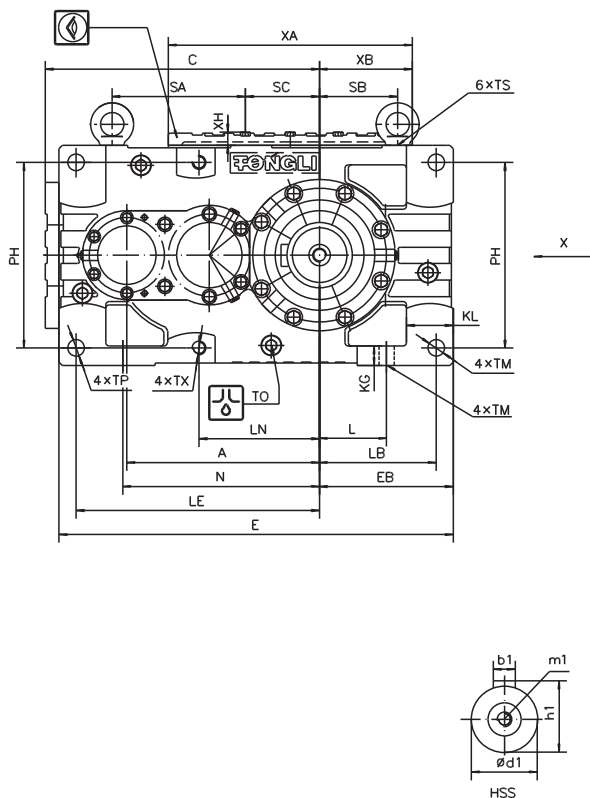
V型带轮节圆直径必须大于轴端直径的6倍。

高速轴承受径向力时请向我公司咨询。



2-级斜齿轮减速器
TMC2HL..02-09
卧式安装

2-stage Helical Gear Unit
TMC2HL..02-09
Horizontal mounting



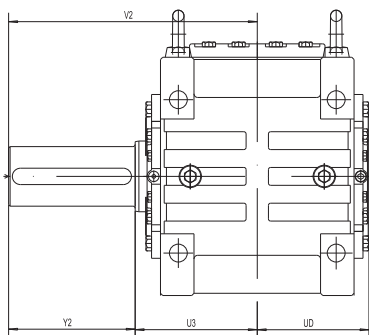
技术数据13页

Technical Data Page13

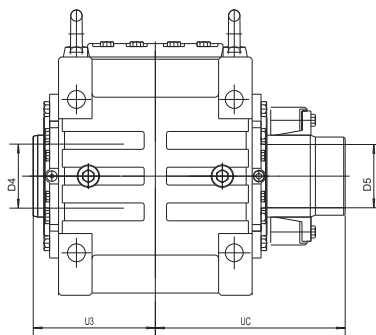
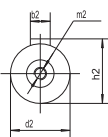
上图仅作为例子，不是严格的装配关系。
重量和油量仅是指导值。

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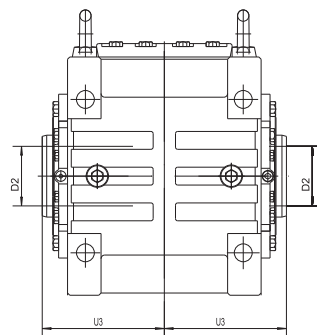
输出轴形式LSS Types



Solid Shaft
实心轴



Hollow Shaft , Shrink Disk
Page48
实心轴, 收缩盘



Hollow Shaft, Key Connection
Page49
实心轴, 键连接

2-级斜齿轮减速器
TMC2HL..02-09
卧式安装

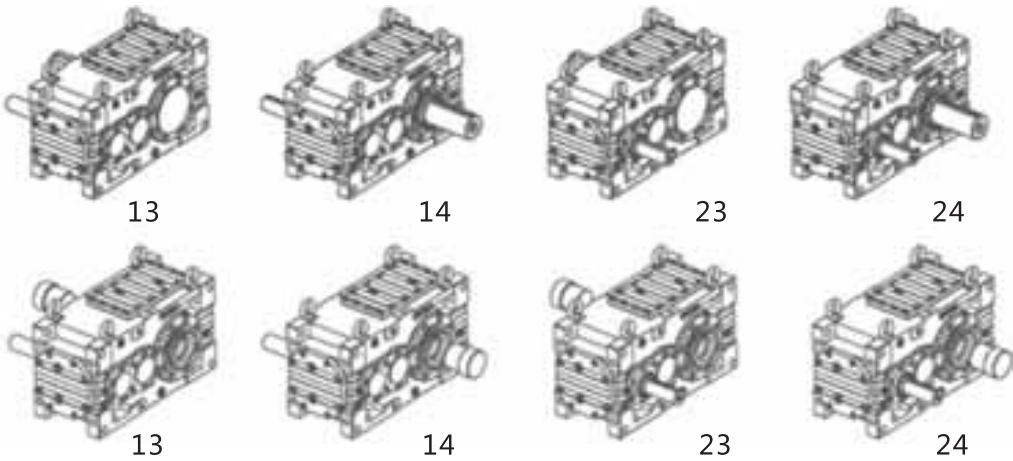
2-stage Helical Gear Unit
TMC2HL..02-09
Horizontal mounting

规格 size	箱体尺寸 (mm)										Housing Dimensions in mm									
	A	C	E	EB _{h11}	G _{h11}	H	HK	HO	J _{h11}	JE	KG	KL	KT	L	LB	LE	LN	N	PH	φRJ
02	280	400	574	195	160	320	382	380	260	212	28	68	45	98	170	354	175	282	270	240
03	310	432	618	207	180	360	422	445	274	228	28	68	45	110	182	389	207	314	310	239
04	340	471	677	229	200	400	462	510	314	260	30	71	50	122	201	420	233	341	344	276
05	374	514	731	240	215	430	500	565	329	279	34	71	50	136	212	463	228	387	374	320
06	409	565	812	270	235	470	540	605	356	292	40	88	64	141	235	507	256	413	400	322
07	445	616	885	295	265	530	620	595	380	316	40	91	64	150	260	555	285	445	454	346
08	490	685	981	322	300	600	690	760	431	353	52	103	78	174	280	617	318.5	511	516	366
09	540	742	1049	335	335	670	779	870	451	373	52	103	78	187	293	672	373.5	566	586	392

规格 size	箱体尺寸 (mm)										Housing Dimensions in mm										重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TU	TM	TO	TP _{H9}	TR=TX	TS	XA	XB	XC	XH							Kg	L
02	206	206	114	96	M27×1.5	24	M22×1.5	24	M20×35	M16×32	355	135	182	18							201	9
03	246	246	122	84	M27×1.5	24	M22×1.5	24	M20×35	M16×32	384	147	196	18							256	12
04	260	256	147	114	M27×1.5	28	M22×1.5	28	M24×42	M16×32	430	168	211	22							353	16
05	296	296	136	106	M27×1.5	28	M22×1.5	28	M24×42	M20×35	460	182	226	22							455	28
06	308	308	141	132	M27×1.5	33	M27×1.5	33	M30×53	M20×35	525	195	248	22							560	36
07	350	350	150	112	M27×1.5	33	M27×1.5	33	M30×53	M24×42	561	219	262	22							726	46
08	406	406	174	115	M27×1.5	39	M27×1.5	39	M30×53	M24×42	597	234	289	22							969	58
09	476	476	187	100	M27×1.5	39	M27×1.5	39	M30×53	M30×53	652	247	309	22							1208	75

规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm)										LSS Dimensions in mm				
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ΦD2	ΦD4	ΦD5			
02	170	120	290	48k6	14h9	51.5	M16	80m6	22h9	85	M20	140	304	164	257	156	80js7/H8	86js6/H7	85h6/H7			
03	177	120	297	50k6	14h9	53.5	M16	100m6	28h9	106	M24	170	341	171	274	163	95js7/H8	101js6/H7	100h6/H7			
04	197	130	327	55m6	16h9	59	M20	105m6	28h9	111	M24	210	403	193	302	187	105js7/H8	111js6/H7	110h6/H7			
05	205	135	340	60m6	18h9	64	M20	120m6	32h9	127	M24	210	411	201	311	193	115js7/H8	121js6/H7	120h6/H7			
06	218	140	358	70m6	20h9	74.5	M20	130m6	32h9	137	M24	220	434	214	331	210	125js7/H8	131js6/H7	130h6/H7			
07	230	140	370	75m6	20h9	79.5	M20	140m6	36h9	148	M24	250	478	228	354	224	135js7/H8	141js6/H7	140h6/H7			
08	256	160	416	80m6	22h9	85	M20	160m6	40h9	169	M24	250	504	254	397	246	150js7/H8	151js6/H7	150h6/H7			
09	266	160	426	85m6	22h9	90	M20	170m6	40h9	179	M24	310	574	264	407	262	165js7/H8	166js6/H7	165h6/H7			

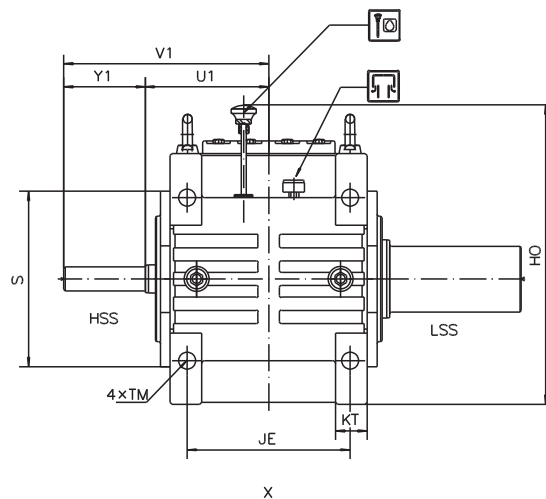
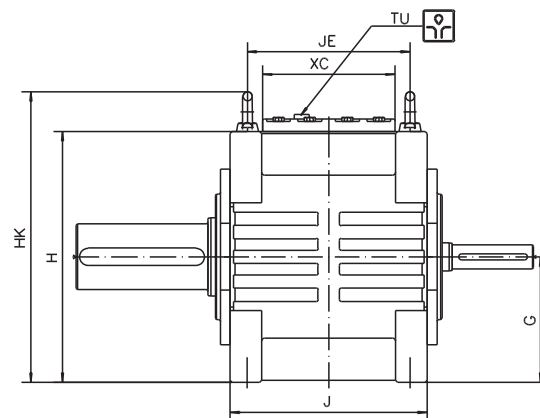
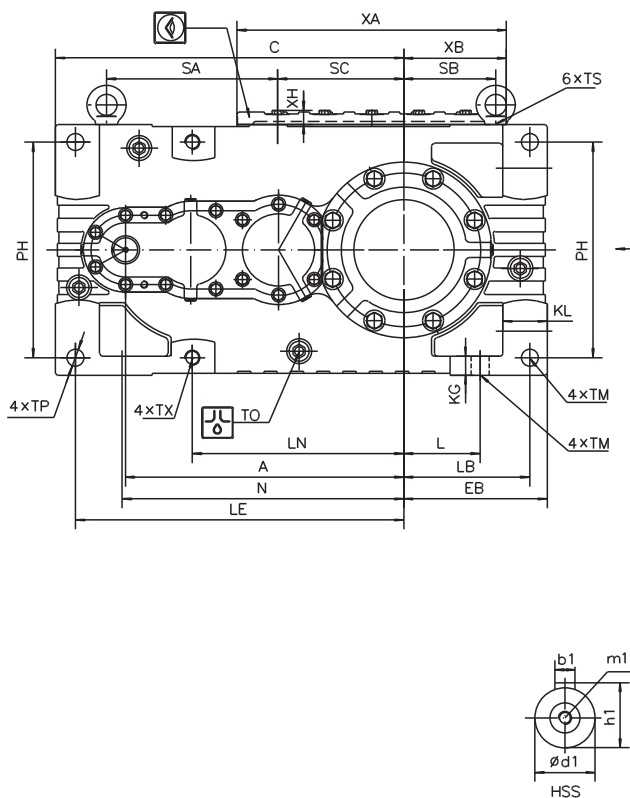
轴 的 位 置
Shaft Positions





3-级斜齿轮减速器
TMC3HL..02-09
卧式安装

3-Stage Helical Gear Unit
TMC3HL..02-09
Horizontal mounting

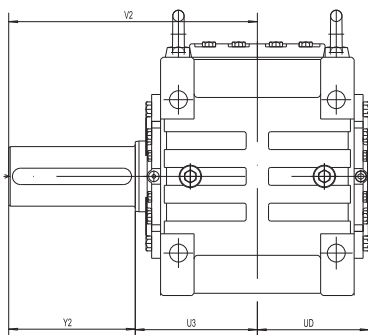


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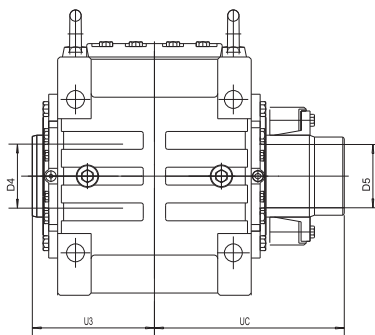
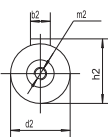
上图仅仅作例子 , 不是严格的装配关系。
重量和油量仅是指导值。

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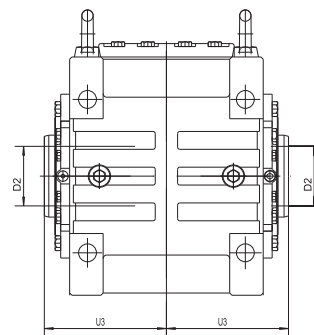
输出轴形式LSS Types



Solid Shaft
实心轴



Hollow Shaft , Shrink Disk
Page48
空心轴, 收缩盘



Hollow Shaft, Key Connection
Page49
空心轴, 键连接

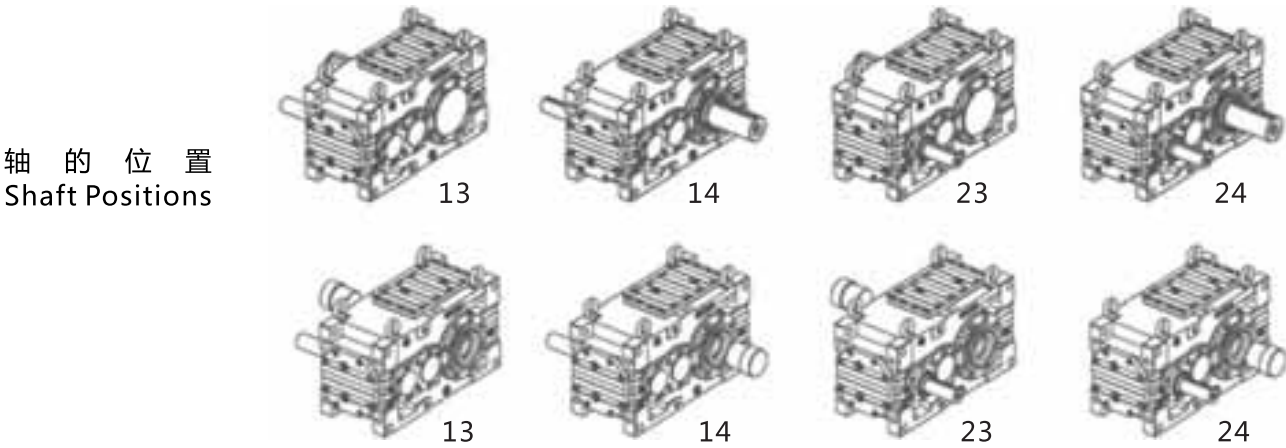
3-级斜齿轮减速器
TMC3HL..02-09
卧式安装

3-stage Helical Gear Unit
TMC3HL..02-09
Horizontal mounting

规格 size	箱体尺寸 (mm)									Housing Dimensions in mm								
	A	C	EB _{h11}	G _{h11}	H	HK	HO	J _{h11}	JE	KG	KL	KT	L	LB	LE	LN	N	PH
02	368	467	195	160	320	382	380	260	212	28	68	45	98	170	442	263	369	270
03	408	513	207	180	360	422	445	274	228	28	68	45	110	182	488	306	416	310
04	444	556	229	200	400	462	510	314	260	30	71	50	122	201	524	337	449	344
05	486	605	240	215	430	500	565	329	279	34	71	50	136	212	575	340	499	374
06	529	665	270	235	470	540	605	356	292	40	88	64	141	235	627	376	533	400
07	575	720	295	265	530	620	595	380	316	40	91	64	150	260	685	415	575	454
08	630	803	322	300	600	690	760	431	353	52	103	78	174	280	757	458.5	651	516
09	694	872	335	335	670	779	870	451	373	52	103	78	187	293	826	527.5	720	586

规格 size	箱体尺寸 (mm)										Housing Dimensions in mm					重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TU	TM	TO	TP _{H9}	TX	TS	XA	XB	XC	XH	Kg	L	
02	206	206	114	175	M27×1.5	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	222	13	
03	246	246	122	181	M27×1.5	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	292	17	
04	260	256	147	218	M27×1.5	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	396	24	
05	296	296	136	218	M27×1.5	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	517	34	
06	308	308	141	252	M27×1.5	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	614	45	
07	350	350	150	242	M27×1.5	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	797	53	
08	406	406	174	255	M27×1.5	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	1085	68	
09	476	476	187	254	M27×1.5	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1297	85	

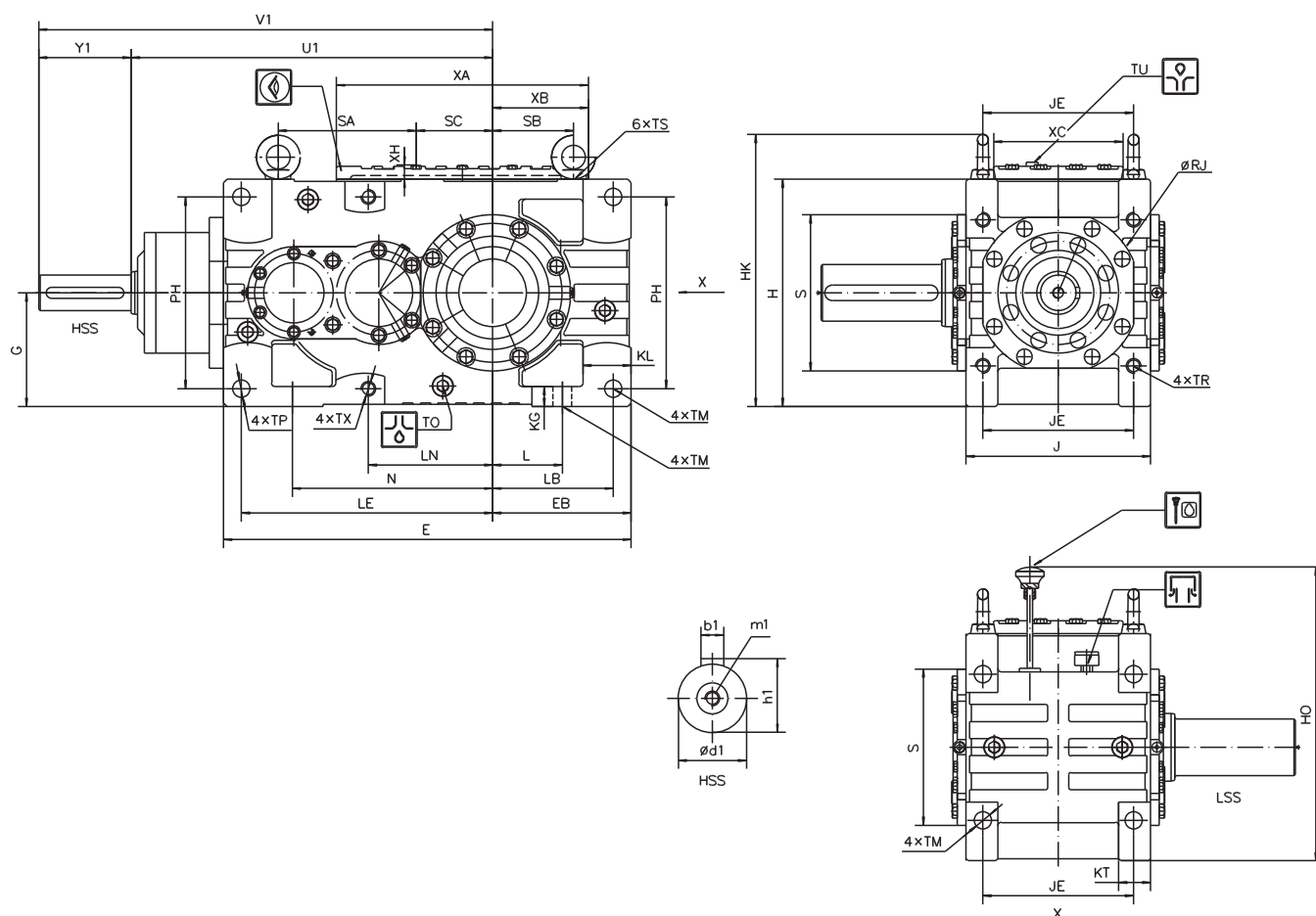
规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm) LSS Dimensions in mm											
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ΦD2	ΦD4	ΦD5
02	170	120	290	32k6	10h9	35	M12	80m6	22h9	85	M20	140	304	164	257	156	80js7/H8	86js6/H7	85h6/H7
03	177	120	297	38k6	10h9	41	M12	100m6	28h9	106	M24	170	341	171	274	163	95js7/H8	101js6/H7	100h6/H7
04	197	130	327	38k6	10h9	41	M12	105m6	28h9	111	M24	210	403	193	302	187	105js7/H8	111js6/H7	110h6/H7
05	205	135	340	48k6	14h9	51.5	M16	120m6	32h9	127	M24	210	411	201	311	193	115js7/H8	121js6/H7	120h6/H7
06	218	140	358	48k6	14h9	51.5	M16	130m6	32h9	137	M24	220	434	214	331	210	125js7/H8	131js6/H7	130h6/H7
07	230	140	370	50k6	14h9	53.5	M16	140m6	36h9	148	M24	250	478	228	354	224	135js7/H8	141js6/H7	140h6/H7
08	256	160	416	55m6	16h9	59	M20	160m6	40h9	169	M24	250	504	254	397	246	150js7/H8	151js6/H7	150h6/H7
09	266	160	426	60m6	18h9	64	M20	170m6	40h9	179	M24	310	574	264	407	262	165js7/H8	166js6/H7	165h6/H7





2-级锥齿轮-斜齿轮减速器
TMC2BL..02-09
卧式安装

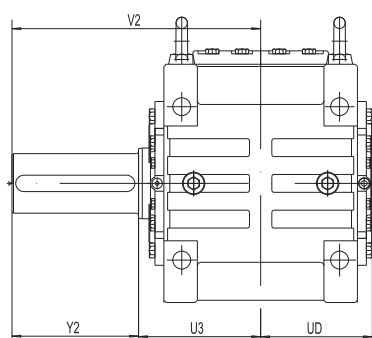
2-stage Bevel Helical Gear Unit
TMC2BL..02-09
Horizontal mounting



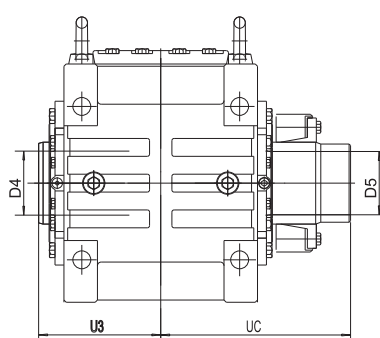
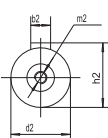
技术数据18页 Technical Data Page 18
上图仅仅作作为例子，不是严格的装配关系。
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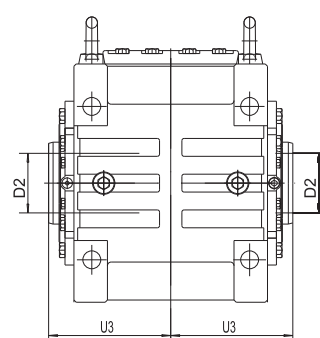
输出轴形式LSS Types



Solid Shaft
实心轴



Hollow Shaft , Shrink Disk
Page48
空心轴，收缩盘



Hollow Shaft, Key Connection
Page49
空心轴，键连接

2-级锥齿轮-斜齿轮减速器
TMC2BL..02-09
卧式安装

2-stage Bevel Helical Gear Unit
TMC2BL..02-09
Horizontal mounting

规格 size	箱体尺寸 (mm)								Housing Dimensions in mm									
	E	EB _{h11}	G _{h11}	H	HK	HO	J _{h11}	JE	KG	KL	KT	L	LB	LE	LN	N	PH	φRJ
02	574	195	160	320	382	395	260	212	28	68	45	98	170	354	175	282	270	240
03	618	207	180	360	422	460	274	228	28	68	45	110	182	389	207	314	310	240
04	677	229	200	400	462	520	314	260	30	71	50	122	201	420	233	341	344	276
05	731	240	215	430	500	575	329	279	34	71	50	136	212	463	228	387	374	320
06	812	270	235	470	540	615	356	292	40	88	64	141	235	507	256	413	400	322
07	885	295	265	530	620	705	380	316	40	91	64	150	260	555	285	445	454	346
08	981	322	300	600	690	775	431	353	52	103	78	174	280	617	318.5	511	516	385
09	1049	335	335	670	779	885	451	373	52	103	78	187	293	672	373.5	566	586	392

规格 size	箱体尺寸 (mm)									Housing Dimensions in mm						重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TU	TM	TO	TP _{H9}	TR=TX	TS	XA	XB	XC	XH	Kg	L	
02	206	206	114	96	M27×1.5	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	221	10	
03	246	246	122	84	M27×1.5	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	280	14	
04	260	253	147	114	M27×1.5	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	381	19	
05	296	296	136	106	M27×1.5	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	505	22	
06	308	308	141	132	M27×1.5	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	615	26	
07	350	350	150	112	M27×1.5	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	793	32	
08	406	406	174	115	M27×1.5	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	1055	58	
09	476	476	187	100	M27×1.5	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1330	84	

规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm)					LSS Dimensions in mm						
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ΦD2	ΦD4	ΦD5
02	509	130	639	50k6	14h9	53.5	M16	80m6	22h9	85	M20	140	304	164	257	156	80js7/H8	86js6/H7	85h6/H7
03	549	135	684	55m6	16h9	59	M16	100m6	28h9	106	M24	170	341	171	274	163	95js7/H8	101js6/H7	100h6/H7
04	600	135	735	60m6	18h9	64	M20	105m6	28h9	111	M24	210	403	193	302	187	105js7/H8	111js6/H7	110h6/H7
05	655	138	793	65m6	18h9	69	M20	120m6	32h9	127	M24	210	411	201	311	193	115js7/H8	121js6/H7	120h6/H7
06	698	140	838	70m6	20h9	74.5	M20	130m6	32h9	137	M24	220	434	214	331	210	125js7/H8	131js6/H7	130h6/H7
07	752	160	912	75m6	20h9	79.5	M20	140m6	36h9	148	M24	250	478	228	354	224	135js7/H8	141js6/H7	140h6/H7
08	822	160	982	85m6	22h9	90	M20	160m6	40h9	169	M24	250	504	254	397	246	150js7/H8	151js6/H7	150h6/H7
09	921	195	1116	90m6	22h9	95	M24	170m6	40h9	179	M24	310	574	264	407	262	165js7/H8	166js6/H7	165h6/H7

轴 的 位 置
Shaft Positions



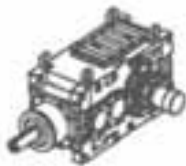
03



04



03



04



3-级锥齿轮-斜齿轮减速器

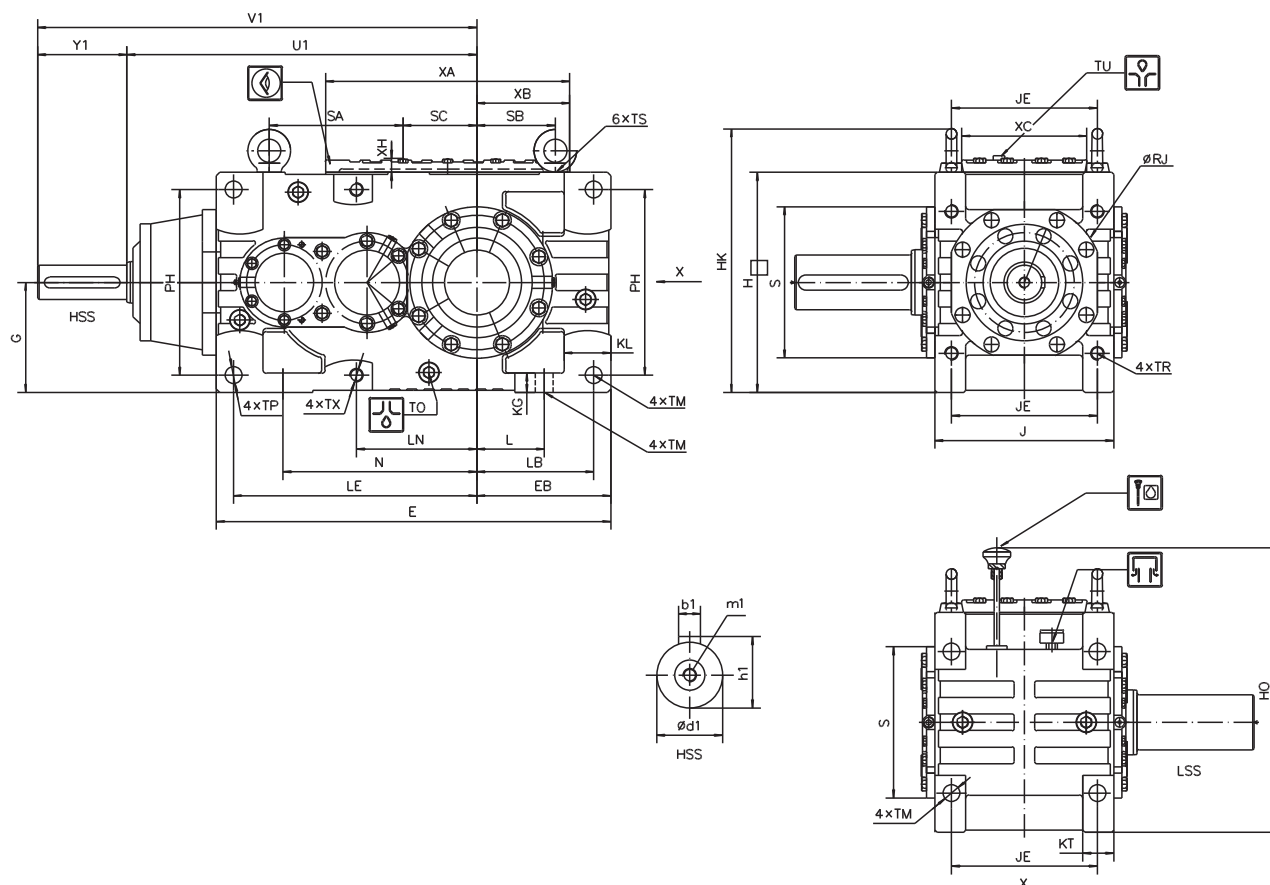
TMC3BL..02-09

卧式安装

3-stage Bevel Helical Gear Unit

TMC3BL..02-09

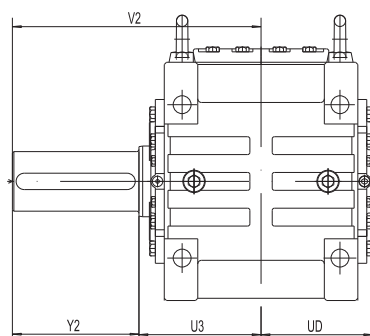
Horizontal mounting



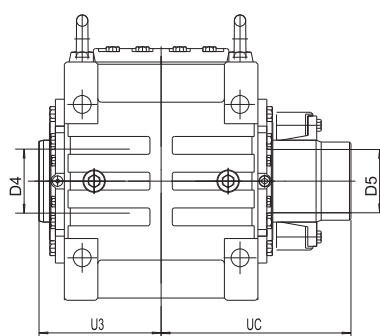
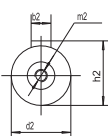
Technical Data Page 18-技术数据18页
上图仅仅作作为例子，不是严格的装配关系。
重量和油量仅是指导值。

Illustrations show examples only and are not strictly binding
The weight and oil quantities are guide values only.

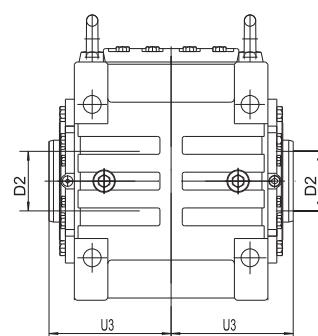
输出轴形式LSS Types



Solid Shaft
实心轴



Hollow Shaft , Shrink Disk
Page48
实心轴，收缩盘



Hollow Shaft, Key Connection
Page49
实心轴，键连接

3-级锥齿轮-斜齿轮减速器
TMC3BL..02-09
卧式安装

3-stage Bevel Helical Gear Unit
TMC3BL..02-09
Horizontal mounting

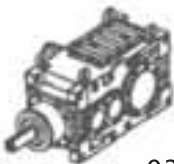
规格 size	箱体尺寸 (mm)									Housing Dimensions in mm								
	E	EB _{h11}	G _{h11}	H	HK	HO	J _{h11}	JE	KG	KL	KT	L	LB	LE	LN	N	PH	φRJ
02	574	195	160	320	382	380	260	212	28	68	45	98	170	354	175	282	270	240
03	618	207	180	360	422	445	274	228	28	68	45	110	182	389	207	314	310	240
04	677	229	200	400	462	510	314	260	30	71	50	122	201	420	233	341	344	276
05	731	240	215	430	500	565	329	279	34	71	50	136	212	463	228	387	374	320
06	812	270	235	470	540	605	356	292	40	88	64	141	235	507	256	413	400	322
07	885	295	265	530	620	695	380	316	40	91	64	150	260	555	285	445	454	346
08	981	322	300	600	690	760	431	353	52	103	78	174	280	617	318.5	511	516	385
09	1049	335	335	670	779	870	451	373	52	103	78	187	293	672	373.5	566	586	392

规格 size	箱体尺寸 (mm)										Housing Dimensions in mm					重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TU	TM	TO	TP _{H9}	TR=TX	TS	XA	XB	XC	XH	Kg	L	
02	206	206	114	96	M27×1.5	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	219	11	
03	246	246	122	84	M27×1.5	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	279	14	
04	260	256	147	117	M27×1.5	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	382	20	
05	296	296	136	106	M27×1.5	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	493	30	
06	308	308	141	132	M27×1.5	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	601	40	
07	350	350	150	112	M27×1.5	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	779	50	
08	406	406	174	115	M27×1.5	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	1037	65	
09	476	476	187	100	M27×1.5	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1299	80	

规格 size	输出轴尺寸 (mm)															LSS Dimensions in mm			
				i=14-63				i=71-90				i=100-112							
	U1	Y1	V1	Φd1	b1	h1	m1	Φd1	b1	h1	m1	Φd1	b1	h1	m1				
02	533	100	633	35k6	10h9	38	M12	30k6	8h9	33	M10	25k6	8h9	28	M10				
03	584	112	696	40k6	12h9	43	M16	30k6	8h9	33	M10	25k6	8h9	28	M10				
04	642	120	762	42k6	12h9	45	M16	35k6	10h9	38	M12	25k6	8h9	28	M10				
05	693	125	818	50k6	14h9	53.5	M16	40k6	12h9	43	M16	30k6	8h9	33	M10				
06	758	130	888	50k6	14h9	53.5	M16	45k6	14h9	48.5	M16	35k6	10h9	38	M12				
07	814	135	949	60m6	18h9	64	M20	45k6	14h9	48.5	M16	40k6	12h9	43	M16				
08	890	135	1025	60m6	18h9	64	M20	55m6	16h9	59	M20	40k6	12h9	43	M16				
09	969	140	1109	70m6	20h9	74.5	M20	60m6	18h9	64	M20	45k6	14h9	48.5	M16				

规格 size	输出轴尺寸 (mm)						LSS Dimensions in mm					
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	Φ D2	Φ D4	Φ D5
02	80m6	22h9	85	M20	140	304	164	257	156	80js7/H8	86js6/H7	85h6/H7
03	100m6	28h9	106	M24	170	341	171	274	163	95js7/H8	101js6/H7	100h6/H7
04	105m6	28h9	111	M24	210	403	193	302	187	105js7/H8	111js6/H7	110h6/H7
05	120m6	32h9	127	M24	210	411	201	311	193	115js7/H8	121js6/H7	120h6/H7
06	130m6	32h9	137	M24	220	434	214	331	210	125js7/H8	131js6/H7	130h6/H7
07	140m6	36h9	148	M24	250	478	228	354	224	135js7/H8	141js6/H7	140h6/H7
08	160m6	40h9	169	M24	250	504	254	397	246	150js7/H8	151js6/H7	150h6/H7
09	170m6	40h9	179	M24	310	574	264	407	262	165js7/H8	166js6/H7	165h6/H7

轴 的 位 置
Shaft Position



03



04



03



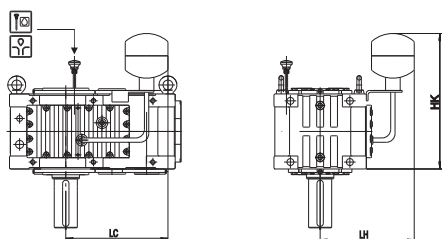
04

规格 size	箱体尺寸 (mm)										Housing Dimensions in mm									
	A	C	E	EB _{h11}	G _{h11}	H	HK	HG	KL	KH	KT	L	LB	LE	LN	N	PH	RH	φRJ	RK
02	280	400	574	195	320	260	212	28	68	90	45	98	170	354	175	282	270	107	240	73
03	310	432	618	207	360	274	228	28	68	100	45	110	182	389	207	314	310	127	239	78
04	340	471	677	229	400	314	260	30	71	118	50	122	201	420	233	341	344	136	276	83
05	374	514	731	240	430	329	279	34	71	118	50	136	212	463	228	387	374	146	320	90
06	409	565	812	270	470	356	292	40	88	131	64	141	235	507	256	413	400	156	322	97
07	445	616	885	295	530	380	316	40	91	152	64	150	260	555	285	445	454	173	346	102
08	490	685	981	322	600	431	353	52	103	153	78	174	280	617	318.5	511	516	178	366	107
09	540	742	1049	335	670	451	373	52	103	153	78	187	293	672	373.5	566	586	196	392	112

规格 size	箱体尺寸 (mm)										Housing Dimensions in mm										重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TM	TL	TO	TP _{1H9}	TR=TX	TS	XA	XB	XC	XH							Kg	L
02	206	206	114	96	24	M27×1.5	M22×1.5	24	M20×35	M16×32	355	135	182	18							201	25
03	246	246	122	84	24	M27×1.5	M22×1.5	24	M20×35	M16×32	384	147	196	18							256	30
04	260	256	147	114	28	M27×1.5	M22×1.5	28	M24×42	M16×32	430	168	211	22							353	40
05	296	296	136	106	28	M27×1.5	M22×1.5	28	M24×42	M20×35	460	182	226	22							455	58
06	308	308	141	132	33	M27×1.5	M27×1.5	33	M30×53	M20×35	525	195	248	22							560	70
07	350	350	150	112	33	M27×1.5	M27×1.5	33	M30×53	M24×42	561	219	262	22							726	95
08	406	406	174	115	39	M27×1.5	M27×1.5	39	M30×53	M24×42	597	234	289	22							969	110
09	476	476	187	100	39	M27×1.5	M27×1.5	39	M30×53	M30×53	652	247	309	22							1208	130

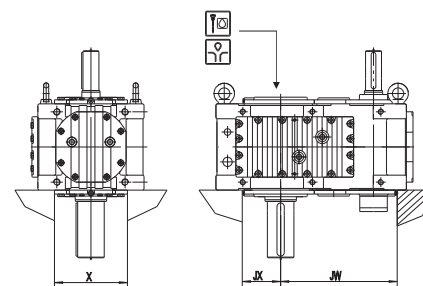
规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm) LSS Dimensions in mm														
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ΦD2	ΦD4	ΦD5	
02	300	120	420	48k6	14h9	51.5	M16	80m6	22h9	85	M20	140	174	34	164	34	257	156	80js7/H8	86js6/H7	85h6/H7	
03	314	120	434	50k6	14h9	53.5	M16	100m6	28h9	106	M24	170	204	34	171	34	274	163	95js7/H8	101js6/H7	100h6/H7	
04	354	130	484	55m6	16h9	59	M20	105m6	28h9	111	M24	210	246	36	193	36	302	187	105js7/H8	111js6/H7	110h6/H7	
05	370	135	505	60m6	18h9	64	M20	120m6	32h9	127	M24	210	246	36	201	36	311	193	115js7/H8	121js6/H7	120h6/H7	
06	396	140	436	70m6	20h9	74.5	M20	130m6	32h9	137	M24	220	256	36	214	36	331	210	125js7/H8	131js6/H7	130h6/H7	
07	420	140	560	75m6	20h9	79.5	M20	140m6	36h9	148	M24	250	288	38	228	38	354	224	135js7/H8	141js6/H7	140h6/H7	
08	472	160	632	80m6	22h9	85	M20	160m6	40h9	169	M24	250	288	38	254	38	397	246	150js7/H8	151js6/H7	150h6/H7	
09	492	160	652	85m6	22h9	90	M20	170m6	40h9	179	M24	310	348	38	264	38	407	262	165js7/H8	166js6/H7	165h6/H7	

主要附件：可供垂直安装 Essential Accessory :Alternatives for vertical mounting



膨胀箱 Expansion tank

规格 size	附件尺寸 (mm) Accessory Dimensions in mm					
	HK	LC	LH	X	JX	JW
02	620	460	600	-	-	-
03	640	490	620	-	-	-
04	680	530	620	250	162	380
05	690	560	630	250	169	420
06	710	600	650	250	182	454
07	740	620	680	250	204	499
08	790	690	640	316	219	556
09	810	740	670	386	232	611



轴端泵 Shaft End Pump

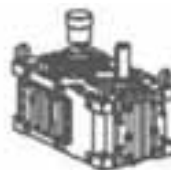
轴的位置
Shaft Positions



2 4



2 3



2 4

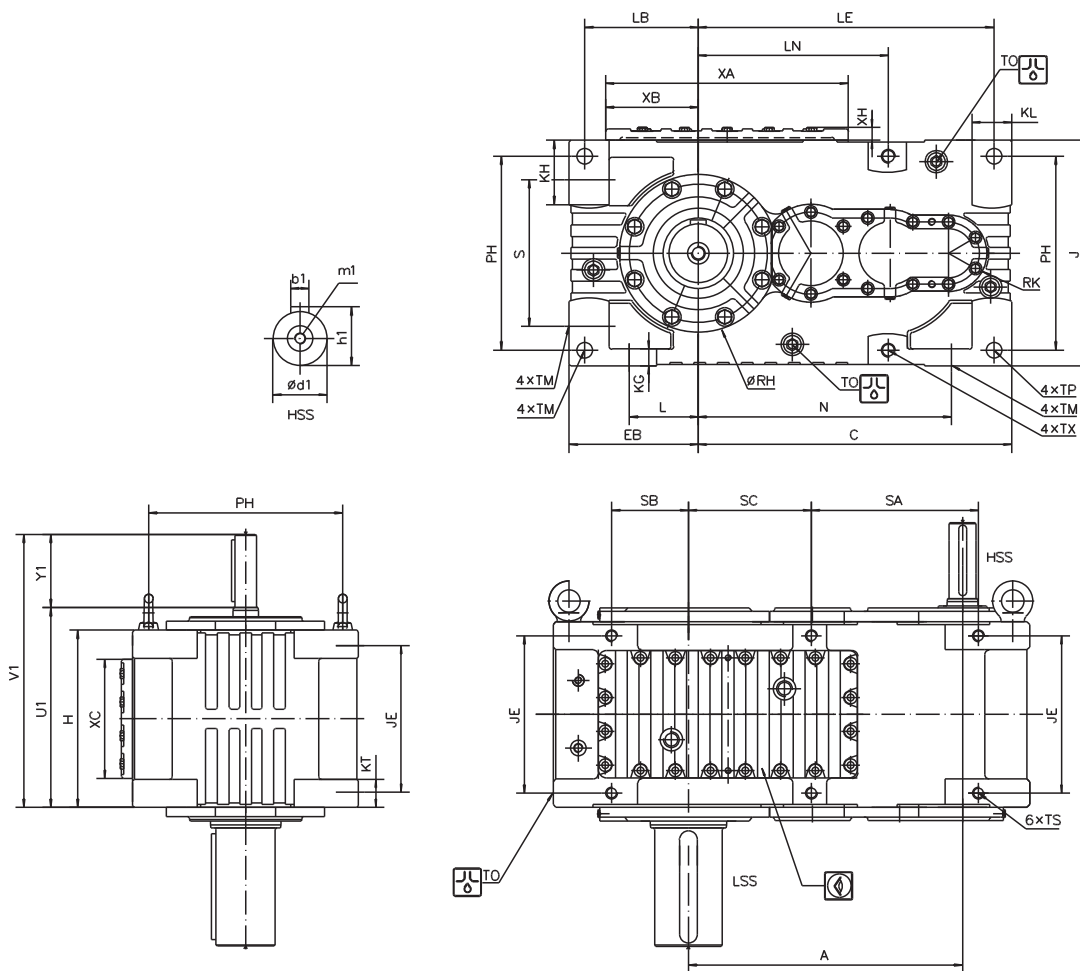


2 3



3-级斜齿轮减速器 TMC3HV..02-09 立式安装

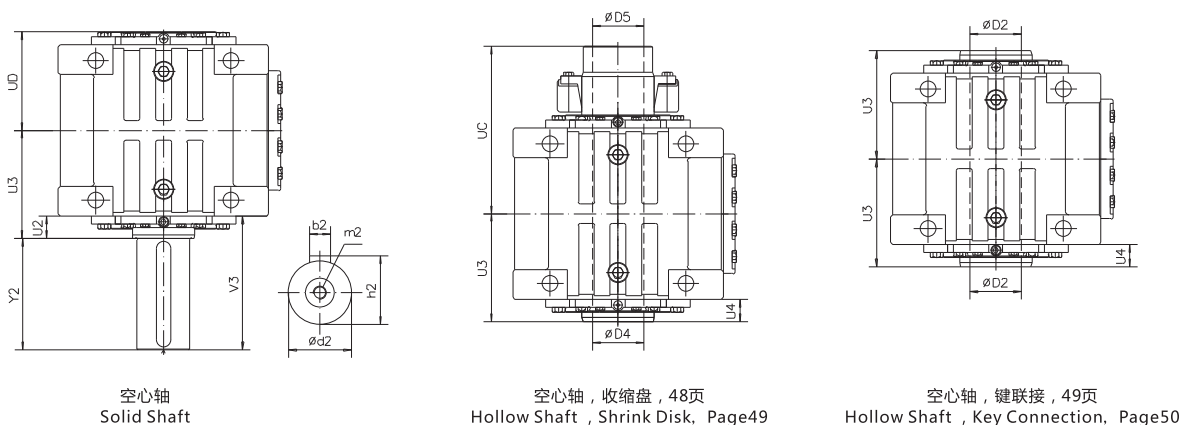
3-stage Helical Gear Unit TMC3HV..02-09 Vertical mounting



技术数据13页,上图仅仅作作为例子,
不是严格的装配关系。
重量和油量仅是指导值。

Technical Data Page13- Illustrations show examples only
and are not strictly binding
The weight and oil quantities are guide values only.

输出轴形式 LSS Types



空心轴
Solid Shaft

空心轴, 收缩盘, 48页
Hollow Shaft , Shrink Disk, Page49

空心轴, 键联接, 49页
Hollow Shaft , Key Connection, Page50

3-级斜齿轮减速器
TMC3HV..02-09
立式安装

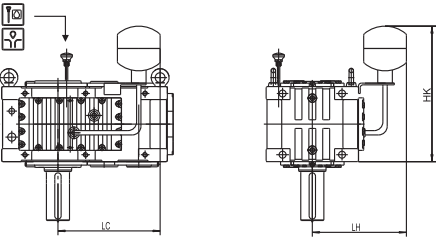
3-stage Helical Gear Unit
TMC3HV..02-09
Vertical mounting

规格 size	箱体尺寸 (mm)									Housing Dimensions in mm								
	A	C	EB h11	J	H h11	JE	KG	KL	KH	KT	L	LB	LE	LN	N	PH	RH	RK
02	368	467	195	320	260	212	28	68	90	45	98	170	442	263	369	270	107	73
03	408	513	207	360	274	228	28	68	100	45	110	182	488	306	416	310	127	78
04	444	556	229	400	314	260	30	71	118	50	122	201	524	337	449	344	136	83
05	486	603	240	430	329	279	34	71	118	50	136	212	575	340	499	374	146	90
06	529	665	270	470	356	292	40	88	131	64	141	235	627	376	533	400	156	97
07	575	720	295	530	380	316	40	91	152	64	150	260	685	415	575	454	173	102
08	630	803	322	600	431	353	52	103	153	78	174	280	757	458.5	651	516	178	107
09	694	872	335	670	451	373	52	103	153	78	187	293	826	527.5	720	586	196	112

规格 size	箱体尺寸 (mm)													Housing Dimensions in mm		重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TM	TO	TP _{H9}	TX	TS	XA	XB	XC	XH	Kg	L		
02	206	206	114	175	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	222	36		
03	246	246	122	181	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	292	42		
04	260	256	147	218	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	396	55		
05	296	296	136	218	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	517	70		
06	308	308	141	252	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	614	90		
07	350	350	150	242	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	797	130		
08	406	406	174	255	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	1085	135		
09	476	476	187	254	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1297	160		

规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm) LSS Dimensions in mm														
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ΦD2	ΦD4	ΦD5	
02	300	120	420	32k6	10h9	35	M12	80m6	22h9	85	M20	140	174	34	164	34	257	156	80js7/H8	86js6/H7	85h6/H7	
03	314	120	434	38k6	10h9	41	M12	100m6	28h9	106	M24	170	204	34	171	34	274	163	95js7/H8	101js6/H7	100h6/H7	
04	354	130	484	38k6	10h9	41	M12	105m6	28h9	111	M24	210	246	36	193	36	302	187	105js7/H8	111js6/H7	110h6/H7	
05	370	135	505	48k6	14h9	51.5	M16	120m6	32h9	127	M24	210	246	36	201	36	311	193	115js7/H8	121js6/H7	120h6/H7	
06	396	140	536	48k6	14h9	51.5	M16	130m6	32h9	137	M24	220	256	36	214	36	331	210	125js7/H8	131js6/H7	130h6/H7	
07	420	140	560	50k6	14h9	53.5	M16	140m6	36h9	148	M24	250	288	38	228	38	354	224	135js7/H8	141js6/H7	140h6/H7	
08	472	160	632	55m6	16h9	59	M20	160m6	40h9	169	M24	250	288	38	254	38	397	246	150js7/H8	151js6/H7	150h6/H7	
09	492	160	652	60m6	18h9	64	M20	170m6	40h9	179	M24	310	348	38	264	38	407	262	165js7/H8	166js6/H7	165h6/H7	

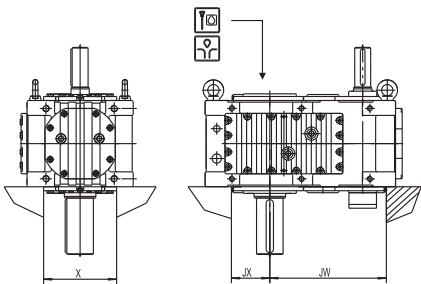
主要附件
可供垂直安装



膨胀箱 Expansion tank

Essential Accessory
Alternatives for vertical mounting

规格 size	附件尺寸 (mm) Accessory Dimensions in mm					
	HK	LC	LH	X	JX	JW
02	620	540	600	-	-	-
03	640	580	620	-	-	-
04	680	640	620	250	162	488
05	690	680	630	250	169	532
06	710	720	650	250	182	574
07	740	750	680	250	204	629
08	790	830	640	316	219	696
09	810	900	670	386	232	765



轴端泵 Shaft End Pump

轴 的 位 置
Shaft Positions



2 4



2 3



2 4

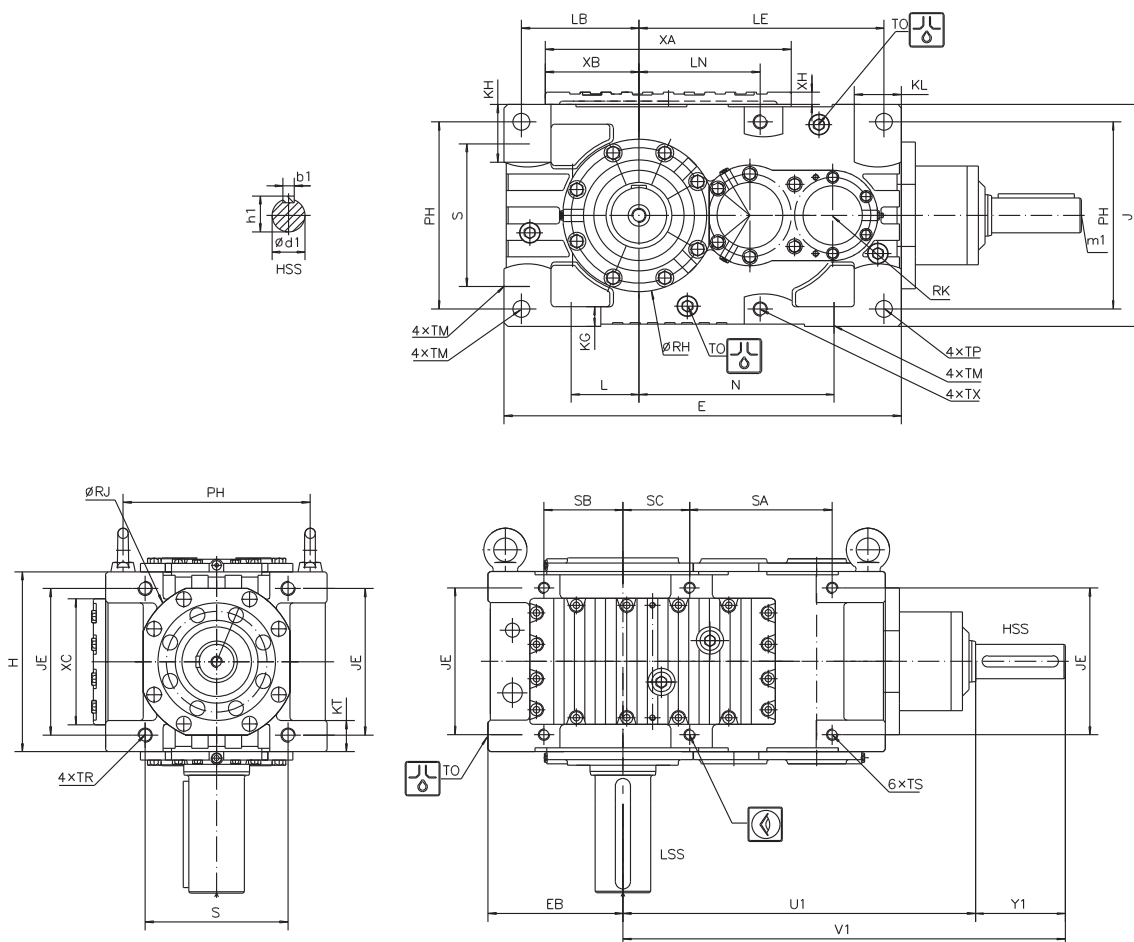


2 3



2-级锥齿轮-斜齿轮减速器
TMC2BV..02-09
立式安装

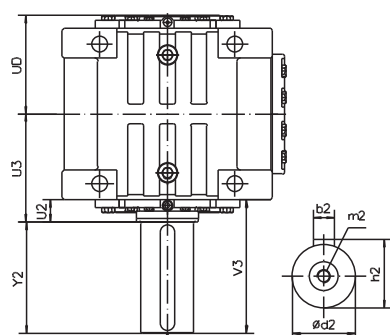
2-stage Bevel Helical Gear Unit
TMC2BV..02-09
Vertical mounting



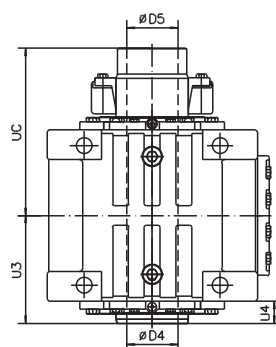
Technical Data Page13- Illustrations show examples only and are not strictly binding
技术数据13页,上图仅仅作作为例子,不是严格的装配关系。

重量和油量仅是指导值。 The weight and oil quantities are guide values only.

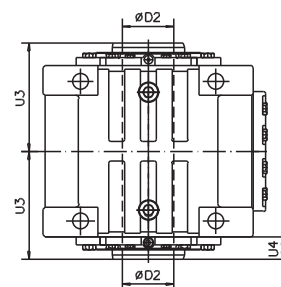
输出轴形式LSS Types



空心轴
Solid Shaft



空心轴, 收缩盘, 48页
Hollow Shaft , Shrink Disk, Page49



空心轴, 键联接, 49页
Hollow Shaft , Key Connection, Page50

2-级斜齿轮减速器
TMC2BV..02-09 立式安装

2-stage Helical Gear Unit
TMC2BV..02-09 Vertical mounting

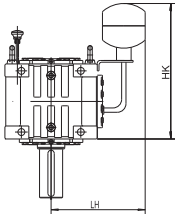
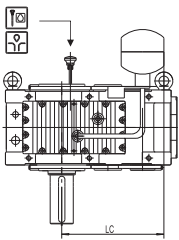
规格 size	箱体尺寸 (mm)									Housing Dimensions in mm								
	E	EB _{h11}	J	KH	H _{h11}	JE	KG	KL	KT	L	LB	LE	LN	N	PH	RH	ΦRJ	RK
02	574	195	320	90	260	212	28	68	45	98	170	354	175	282	270	107	240	73
03	618	207	360	100	274	228	28	68	45	110	182	389	207	314	310	127	240	78
04	677	229	400	118	314	260	30	71	50	122	201	420	233	341	344	136	276	83
05	731	240	430	118	329	279	34	71	50	136	212	463	228	387	374	146	320	90
06	812	270	470	131	356	292	40	88	64	141	235	507	256	413	400	156	322	97
07	885	295	530	152	380	316	40	91	64	150	260	555	285	445	454	173	346	102
08	981	322	600	153	431	353	52	103	78	174	280	617	318.5	511	516	178	385	107
09	1049	335	670	153	451	373	52	103	78	187	293	672	373.5	566	586	196	392	112

规格 size	箱体尺寸 (mm)								Housing Dimensions in mm					重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TM	TO	TP _{H9}	TR=TX	TS	XA	XB	XC	XH	Kg	L
02	206	206	114	96	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	221	21
03	246	246	122	84	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	280	38
04	256	256	147	114	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	381	50
05	296	296	136	106	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	505	65
06	308	308	141	132	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	615	84
07	350	350	150	112	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	793	120
08	406	406	174	115	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	1055	120
09	476	476	187	100	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1330	145

规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm) LSS Dimensions in mm													
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ΦD2	ΦD4	ΦD5
02	509	130	639	50k6	14h9	53.5	M16	80m6	22h9	85	M20	140	174	34	164	34	257	156	80js7/H8	86js6/H7	85h6/H7
03	549	135	684	55m6	16h9	59	M20	100m6	28h9	106	M24	170	204	34	171	34	274	163	95js7/H8	101js6/H7	100h6/H7
04	600	135	735	60m6	18h9	64	M20	105m6	28h9	111	M24	210	246	36	193	36	302	187	105js7/H8	111js6/H7	110h6/H7
05	655	138	793	65m6	18h9	69	M20	120m6	32h9	127	M24	210	246	36	201	36	311	193	115js7/H8	121js6/H7	120h6/H7
06	698	140	838	70m6	20h9	74.5	M20	130m6	32h9	137	M24	220	256	36	214	36	331	210	125js7/H8	131js6/H7	130h6/H7
07	752	160	912	75m6	20h9	79.5	M20	140m6	36h9	148	M24	250	288	38	228	38	354	224	135js7/H8	141js6/H7	140h6/H7
08	822	160	982	85m6	22h9	90	M20	160m6	40h9	169	M24	250	288	38	254	38	397	246	150js7/H8	151js6/H7	150h6/H7
09	921	195	1116	90m6	25h9	95	M24	170m6	40h9	179	M24	310	348	38	264	38	407	262	165js7/H8	166js6/H7	165h6/H7

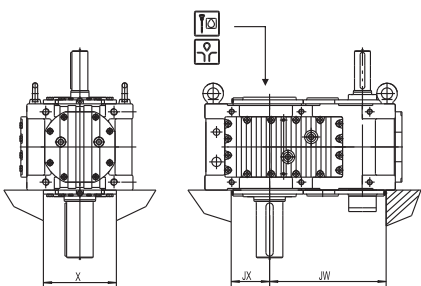
主要附件
可供垂直安装

Essential Accessory
Alternatives for vertical mounting



膨胀箱 Expansion tank

规格 size	附件尺寸 (mm) Accessory Dimensions in mm					
	HK	LC	LH	X	JX	JW
02	710	430	310	—	—	—
03	730	440	330	—	—	—
04	770	480	350	250	162	380
05	780	510	370	250	169	420
06	810	540	380	250	182	454
07	830	580	410	250	204	499
08	880	620	450	316	219	556
09	900	670	480	386	232	611



轴端泵 Shaft End Pump

轴的位置
Shaft Positions



2 4



2 3



2 4

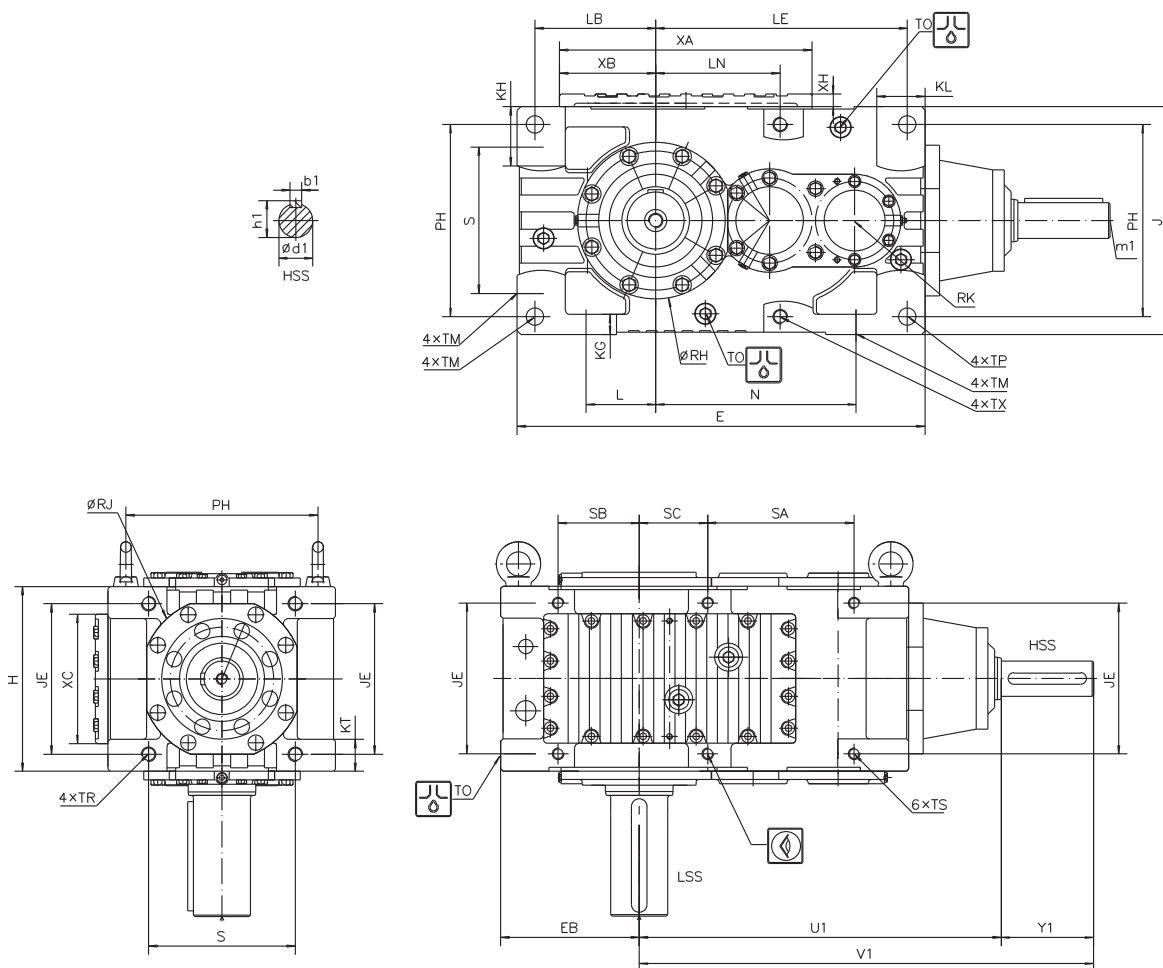


2 3



3 级锥齿轮-斜齿轮减速器
TMC3BV..02-09 立式安装

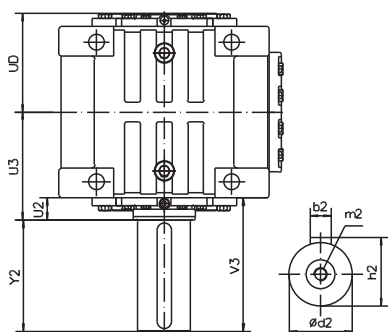
3-stage Bevel Helical Gear Unit
TMC2BV..02-09 Vertical mounting



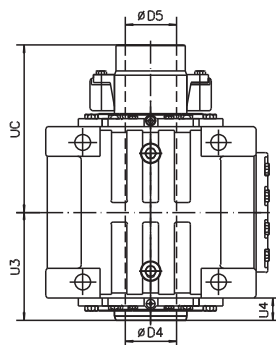
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重量和油量仅是指导值。 The weight and oil quantities are guide values only.

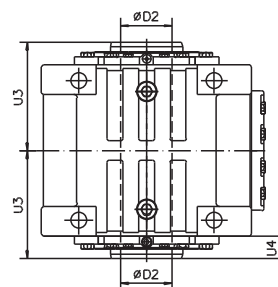
输出轴形式LSS Types



空心轴
Solid Shaft



空心轴, 收缩盘, 48页
Hollow Shaft , Shrink Disk, Page49



空心轴, 键联接, 49页
Hollow Shaft , Key Connection, Page50

3-级斜齿轮减速器

TMC3BV..02-09 立式安装

3-stage Helical Gear Unit

TMC3BV..02-09 Vertical mounting

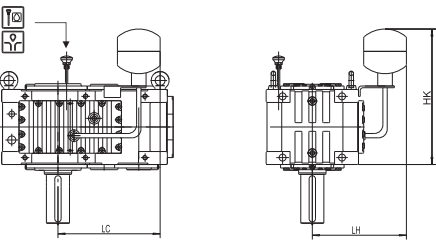
规格 size	箱体尺寸 (mm)										Housing Dimensions in mm													
	E	EB _{h11}	J	KH	H _{h11}	JE	KG	KL	KT	L	LB	LE	LN	N	PH	RH	ΦRJ	RK	S	SA	SB	SC	TM	TO
02	574	195	320	90	260	212	28	68	45	98	170	354	175	282	270	107	240	73	206	206	114	96	24	M22×1.5
03	618	207	360	100	274	228	28	68	45	110	182	389	207	314	310	127	240	78	246	246	122	84	24	M22×1.5
04	677	229	400	118	314	260	30	71	50	122	201	420	233	341	344	136	276	83	260	256	147	114	28	M22×1.5
05	731	240	430	118	329	279	34	71	50	136	212	463	228	387	374	146	320	90	296	296	136	106	28	M22×1.5
06	812	270	470	131	356	292	40	88	64	141	235	507	256	413	400	156	322	97	308	308	141	132	33	M27×1.5
07	885	295	530	152	380	316	40	91	64	150	260	555	285	445	454	173	346	102	350	350	150	112	33	M27×1.5
08	981	322	600	153	431	353	52	103	78	174	280	617	318.5	511	516	178	385	107	406	406	174	115	39	M27×1.5
09	1049	335	670	153	451	373	52	103	78	187	293	672	373.5	566	586	196	392	112	476	476	187	100	39	M27×1.5

规格 size	箱体尺寸 (mm) Housing Dimensions in mm							输入轴尺寸 (mm)										HSS Dimensions in mm							
											i=14-63				i=71-90				i=90-112						
	TP _{H9}	TR=TX	TS	XA	XB	XC	XH	U1	Y1	V1	Φd1	b1	h1	m1	Φd1	b1	h1	m1	Φd1	b1	h1	m1			
02	24	M20×35	M16×32	355	135	182	18	533	100	633	35k6	10h9	38	M12	30k6	8h9	33	M10	25k6	8h9	28	M10			
03	24	M20×35	M16×32	384	147	196	18	584	112	696	40k6	12h9	43	M16	30k6	8h9	33	M10	25k6	8h9	28	M10			
04	28	M24×42	M16×32	430	168	211	22	642	120	762	42k6	12h9	45	M16	35k6	10h9	38	M12	25k6	8h9	28	M10			
05	28	M24×42	M20×35	460	182	226	22	693	125	818	50k6	14h9	53.5	M16	40k6	12h9	43	M16	30k6	8h9	33	M10			
06	33	M30×53	M20×35	525	195	248	22	758	130	888	50k6	14h9	53.5	M16	45k6	14h9	48.5	M16	35k6	10h9	38	M12			
07	33	M30×53	M24×42	561	219	262	22	814	135	949	60m6	18h9	64	M20	45k6	14h9	48.5	M16	40k6	12h9	43	M16			
08	39	M30×53	M24×42	597	234	289	22	890	135	1025	60m6	18h9	64	M20	55m6	16h9	59	M20	40k6	12h9	43	M16			
09	39	M30×53	M30×53	652	247	309	22	969	140	1109	70m6	20h9	74.5	M20	60m6	18h9	64	M20	45k6	14h9	48.5	M16			

规格 size	LSS Dimensions in mm												输出轴尺寸 (mm)										重量 Weight	油量 Oil Capacity
	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ΦD2	ΦD4	ΦD5									kg	L
02	80m6	22h9	85	M20	140	174	34	164	34	257	156	80js7/H8	86js6/H7	85js6/H7									219	30
03	100m6	28h9	106	M24	170	204	34	171	34	274	163	95js7/H8	101js6/H7	100js6/H7									279	38
04	105m6	28h9	111	M24	210	246	36	193	36	302	187	105js7/H8	111js6/H7	110js6/H7									382	50
05	120m6	32h9	127	M24	210	246	36	201	36	311	193	115js7H8	121js6/H7	120js6/H7									493	65
06	130m6	32h9	137	M24	220	256	36	214	36	331	210	125js7/H8	131js6/H7	130js6/H7									601	84
07	140m6	36h9	148	M24	250	288	38	228	38	354	224	135js7/H8	141js6/H7	140js6/H7									779	120
08	160m6	40h9	169	M24	250	288	38	254	38	397	246	150js7/H8	151js6/H7	150js6/H7									1037	120
09	170m6	40h9	179	M24	310	348	38	264	38	407	262	165js7/H8	166js6/H7	165js6/H7									1299	145

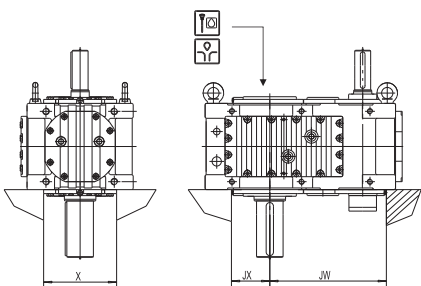
主要附件
可供垂直安装

Essential Accessory
Alternatives for vertical mounting



膨胀箱 Expansion tank

规格 size	附件尺寸 (mm)					
	HK	LC	LH	X	JX	JW
02	710	430	310	-	-	-
03	730	440	330	-	-	-
04	770	480	350	250	162	380
05	780	510	370	250	169	420
06	810	540	380	250	182	454
07	830	580	410	250	204	499
08	880	620	450	316	219	556
09	900	670	480	386	232	611



轴端泵 Shaft End Pump

轴 的 位 置
Shaft Positions



2 4



2 3



2 4



2 3

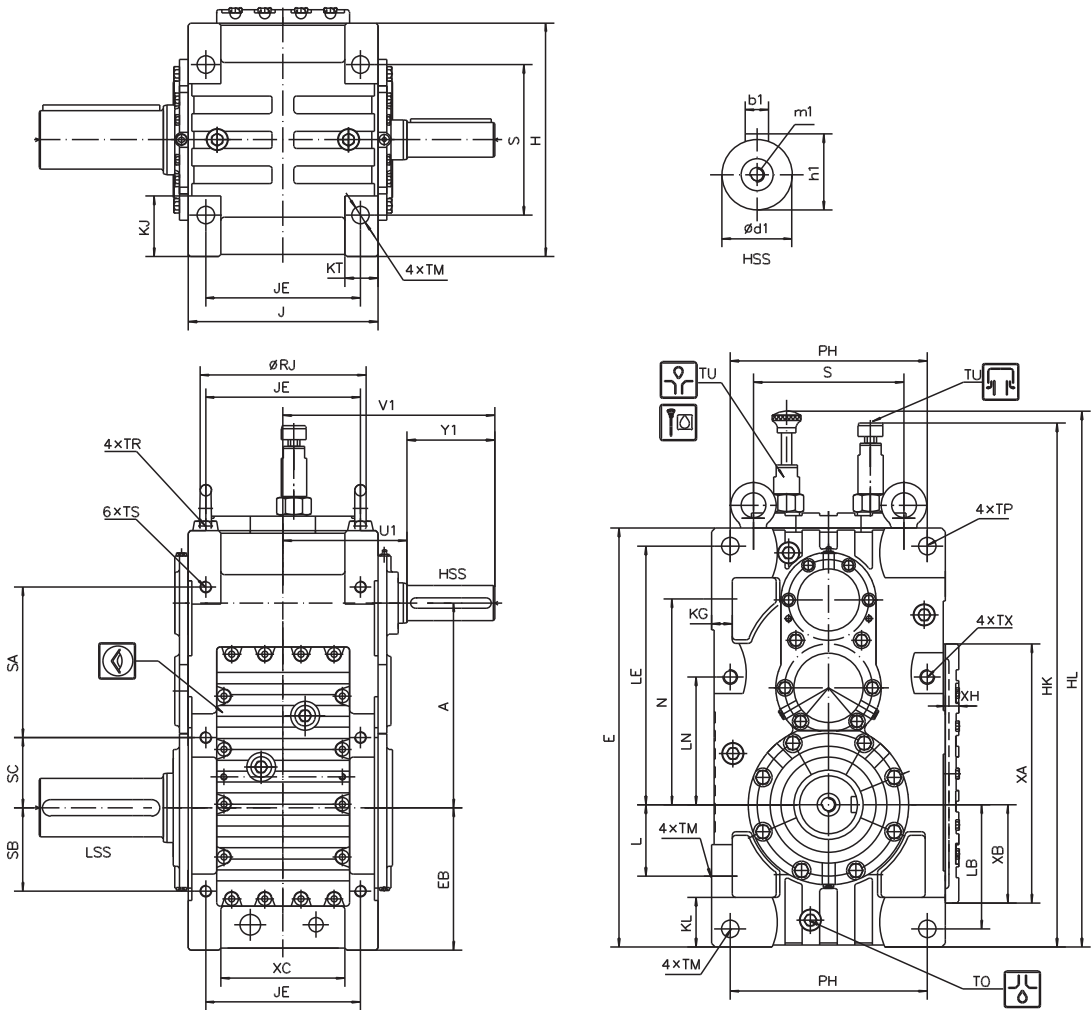


2-级锥齿轮-斜齿轮减速器

TMC2HE..02-09 立式安装

2-stage Bevel Helical Gear Unit

TMC2HE..02-09 Vertical mounting

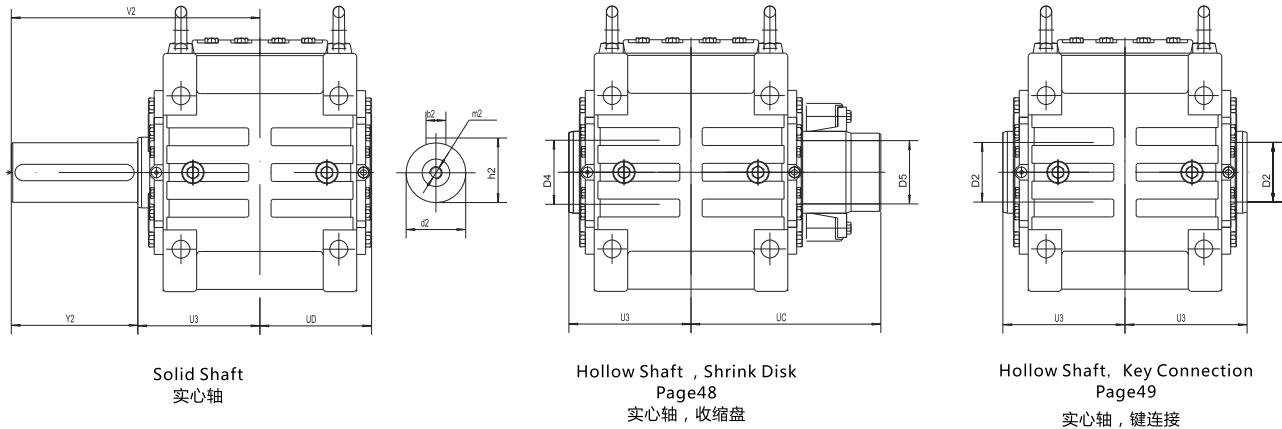


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技术数据13页,上图仅仅作例子,不是严格的装配关系。

重量和油量仅是指导值。
输出轴形式 LSS Types

The weight and oil quantities are guide values only.

输出轴形式LSS Types



2-级斜齿轮减速器
TMC2HE..02-09 立式安装

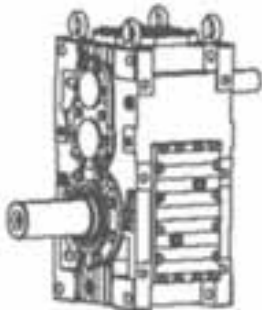
2-stage Helical Gear Unit
TMC2HE..02-09 Vertical mounting

规格 size	箱体尺寸 (mm)									Housing Dimensions in mm								
	A	E	EB _{h11}	H	HK	HL	J _{h11}	JE	KG	KJ	KL	KT	L	LB	LE	LN	N	PH
02	280	574	195	320	740	880	260	212	28	90	68	45	98	170	354	175	282	270
03	310	618	207	360	790	965	274	228	28	100	68	45	110	182	389	207	314	310
04	340	677	229	400	850	1035	314	260	30	118	71	50	122	201	420	233	341	344
05	374	731	240	430	900	1100	329	279	34	118	71	50	136	212	463	228	387	374
06	409	812	270	470	980	1220	356	292	40	131	88	64	141	235	507	256	413	400
07	445	885	295	530	1055	1335	380	316	40	152	91	64	150	260	555	285	445	454
08	490	981	322	600	1150	1460	431	353	52	153	103	78	174	280	617	318.5	511	516
09	540	1049	335	670	1220	1540	451	373	52	153	103	78	187	293	672	373.5	566	586

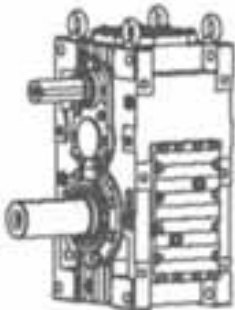
规格 size	箱体尺寸 (mm)														Housing Dimensions in mm		重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TU	TM	TO	TP _{H9}	TR=TX	TS	XA	XB	XC	XH	Kg	L		
02	206	206	114	96	M22×1.5	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	201	20		
03	246	246	122	84	M22×1.5	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	256	25		
04	260	256	147	117	M22×1.5	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	353	35		
05	296	296	136	106	M22×1.5	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	455	50		
06	308	308	141	132	M22×1.5	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	560	65		
07	350	350	150	112	M22×1.5	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	726	85		
08	406	406	174	115	M22×1.5	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	969	100		
09	476	476	187	100	M22×1.5	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1208	130		

规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm) LSS Dimensions in mm											
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ΦD2	ΦD4	ΦD5
02	170	120	290	48k6	14h9	51.5	M16	80m6	22h9	85	M20	140	304	164	257	156	80js7/H8	86js6/H7	85h6/H7
03	177	120	297	50k6	14h9	53.5	M16	100m6	28h9	106	M24	170	341	171	274	163	95js7/H8	101js6/H7	100h6/H7
04	197	130	327	55m6	16h9	59	M20	105m6	28h9	111	M24	210	403	193	302	187	105js7/H8	111js6/H7	110h6/H7
05	205	135	340	60m6	18h9	64	M20	120m6	32h9	127	M24	210	411	201	311	193	115js7/H8	121js6/H7	120h6/H7
06	218	140	358	70m6	20h9	74.5	M20	130m6	32h9	137	M24	220	434	214	331	210	125js7/H8	131js6/H7	130h6/H7
07	230	140	370	75m6	20h9	79.5	M20	140m6	36h9	148	M24	250	478	228	354	224	135js7/H8	141js6/H7	140h6/H7
08	256	160	416	80m6	22h9	85	M20	160m6	40h9	169	M24	250	504	254	397	246	150js7/H8	151js6/H7	150h6/H7
09	266	160	426	85m6	22h9	90	M20	170m6	40h9	179	M24	310	574	264	407	262	165js7/H8	166js6/H7	165h6/H7

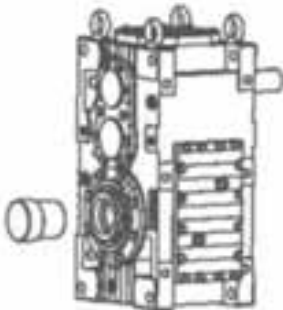
轴的位置 Shaft Positions



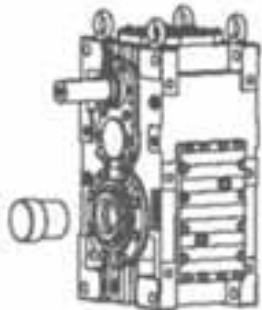
1 4



2 4



1 4

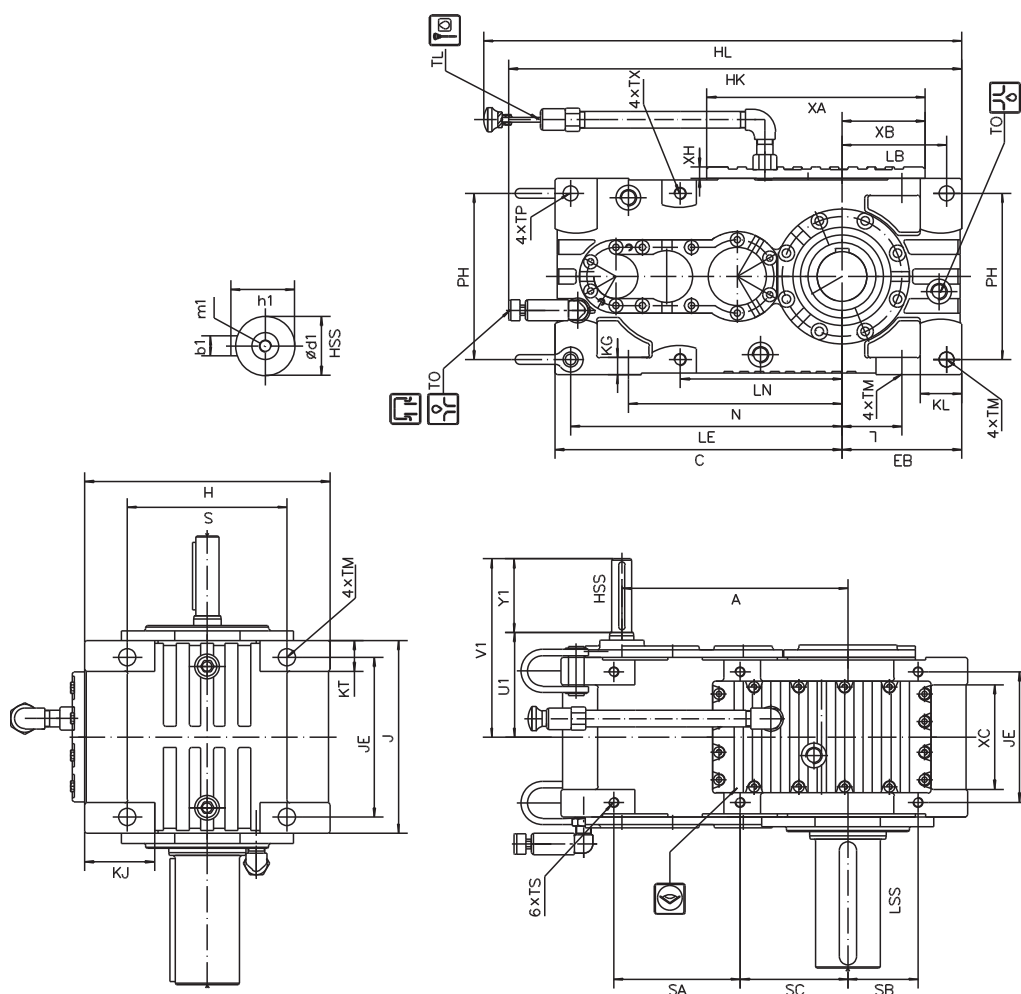


2 4



3级锥齿轮-斜齿轮减速器
TMC3HE..02-09 立式安装

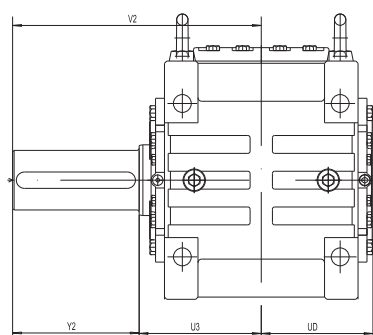
3-stage Bevel Helical Gear Unit
TMC3HE..02-09 Vertical mounting



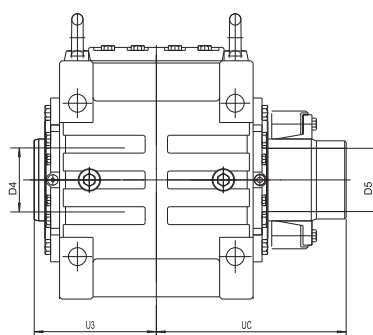
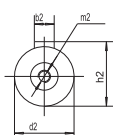
Technical Data Page13- Illustrations show examples only and are not strictly binding
技术数据13页,上图仅作为例子,不是严格的装配关系。

重量和油量仅是指导值。 The weight and oil quantities are guide values only.

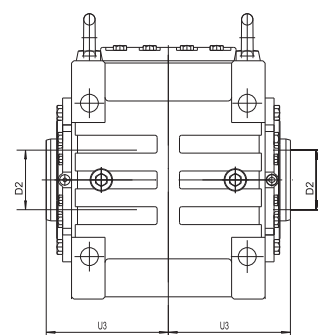
输出轴形式LSS Types



Solid Shaft
实心轴



Hollow Shaft, Shrink Disk
Page48
实心轴, 收缩盘



Hollow Shaft, Key Connection
Page49
实心轴, 键连接

3-级斜齿轮减速器

TMC3HE..02-09

立式安装

3-stage Helical Gear Unit

TMC3HV..02-09

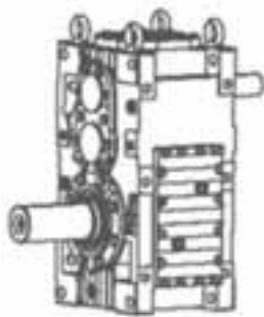
Vertical mounting

规格 size	箱体尺寸 (mm)									Housing Dimensions in mm								
	A	C	EB _{h11}	H	J _{h11}	HK	HL	JE	KG	KL	KJ	KT	L	LB	LE	LN	N	PH
02	368	467	195	320	260	674	715	212	28	68	90	45	98	170	442	263	369	270
03	408	513	207	360	274	718	765	228	28	68	100	45	110	182	488	306	416	310
04	444	556	229	400	314	777	810	260	30	71	118	50	122	201	524	337	449	344
05	486	605	240	430	329	831	890	279	34	71	118	50	136	212	575	340	499	374
06	529	665	270	470	356	912	945	292	40	88	131	64	141	235	627	376	533	400
07	575	720	295	530	380	985	1015	316	40	91	152	64	150	260	685	415	575	454
08	630	803	322	600	431	1081	1090	353	52	103	153	78	174	280	757	458.5	651	516
09	694	872	335	670	451	1149	1165	373	52	103	153	78	187	293	826	527.5	720	586

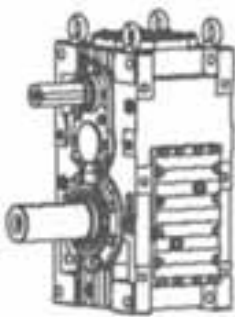
规格 size	箱体尺寸 (mm)									Housing Dimensions in mm					重量 Weight	油量 Oil Capacity
	S	SA	SB	SC	TL	TM	TO	TP _{H9}	TX	TS	XA	XB	XC	XH	Kg	L
02	206	206	114	175	M22×1.5	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	222	27
03	246	246	122	181	M22×1.5	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	292	32
04	260	256	147	218	M22×1.5	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	396	43
05	296	296	136	218	M22×1.5	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	517	60
06	308	308	141	252	M22×1.5	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	614	76
07	350	350	150	242	M22×1.5	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	797	105
08	406	406	174	255	M22×1.5	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	1085	125
09	476	476	187	254	M22×1.5	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1297	150

规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm) LSS Dimensions in mm											
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ΦD2	ΦD4	ΦD5
02	170	120	290	32k6	10h9	35	M12	80m6	22h9	85	M20	140	304	164	257	156	80js7/H8	86js6/H7	85h6/H7
03	177	120	297	38k6	10h9	41	M12	100m6	28h9	106	M24	170	341	171	274	163	95js7/H8	101js6/H7	100h6/H7
04	197	130	327	38k6	10h9	41	M12	105m6	28h9	111	M24	210	403	193	302	187	105js7/H8	111js6/H7	110h6/H7
05	205	135	340	48k6	14h9	51.5	M16	120m6	32h9	127	M24	210	411	201	311	193	115js7/H8	121js6/H7	120h6/H7
06	218	140	358	48k6	14h9	51.5	M16	130m6	32h9	137	M24	220	434	214	331	210	125js7/H8	131js6/H7	130h6/H7
07	230	140	370	50k6	14h9	53.5	M16	140m6	36h9	148	M24	250	478	228	354	224	135js7/H8	141js6/H7	140h6/H7
08	256	160	416	55m6	16h9	59	M20	160m6	40h9	169	M24	250	504	254	397	246	150js7/H8	151js6/H7	150h6/H7
09	266	160	426	60m6	18h9	64	M20	170m6	40h9	179	M24	310	574	264	407	262	165js7/H8	166js6/H7	165h6/H7

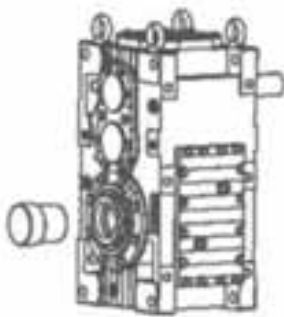
轴的位置 Shaft Positions



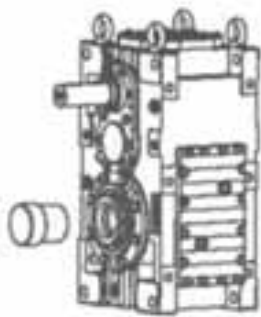
1 4



2 4



1 4



2 4

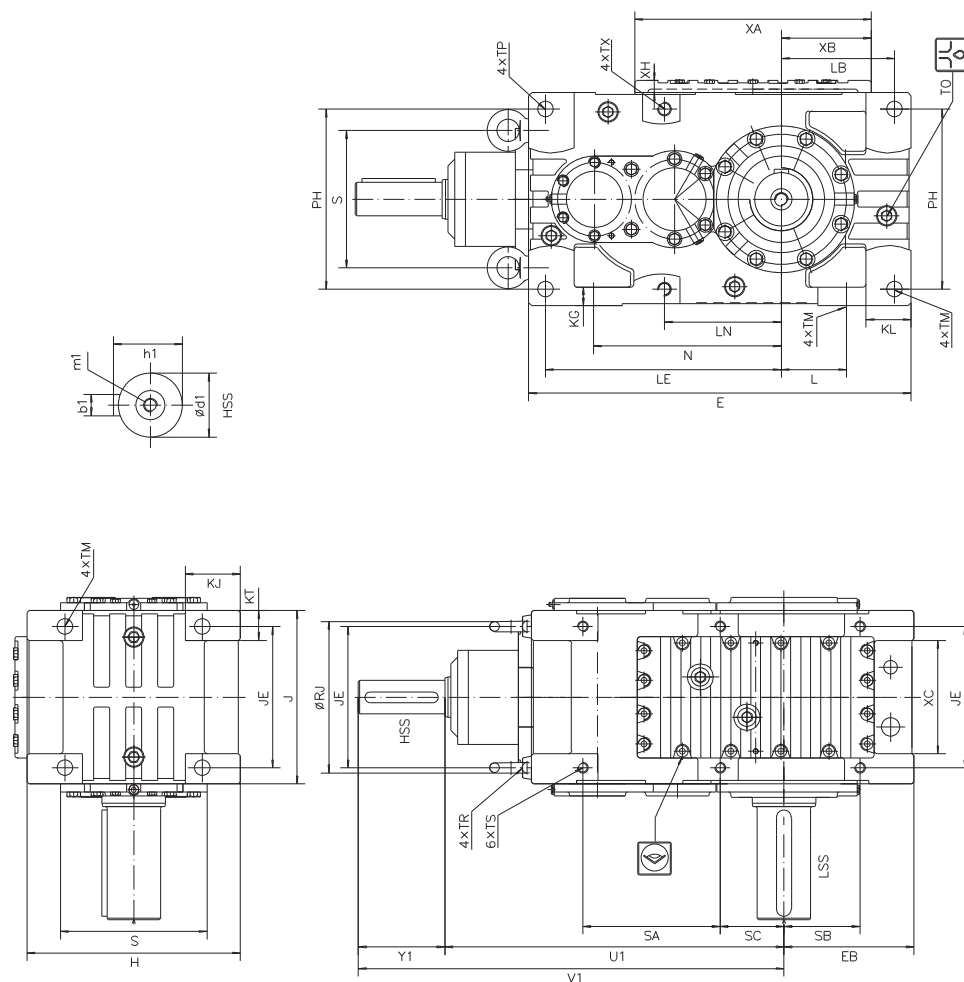


2-级锥齿轮-斜齿轮减速器

TMC2BE..02-09 立式安装

2-stage Bevel Helical Gear Unit

TMC2BE..02-09 Vertical mounting

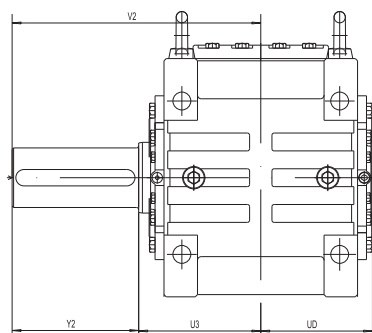


Technical Data Page13- Illustrations show examples only and are not strictly binding
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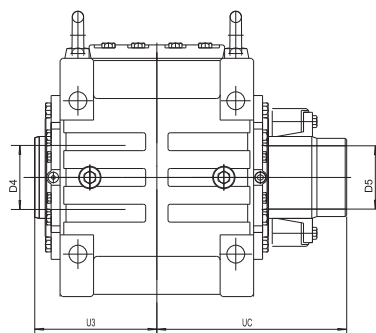
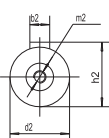
重量和油量仅是指导值。
输出轴形式LSS Types

The weight and oil quantities are guide values only.

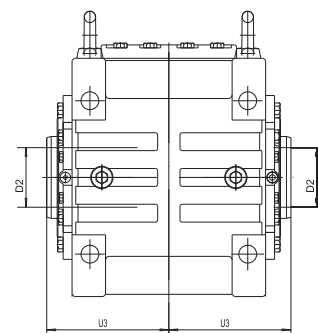
输出轴形式LSS Types



Solid Shaft
实心轴



Hollow Shaft, Shrink Disk
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实心轴, 收缩盘



Hollow Shaft, Key Connection
Page49
实心轴, 键连接

2-级斜齿轮减速器
TMC2BE..02-09
立式安装

2-stage Helical Gear Unit
TMC2BE..02-09
Vertical mounting

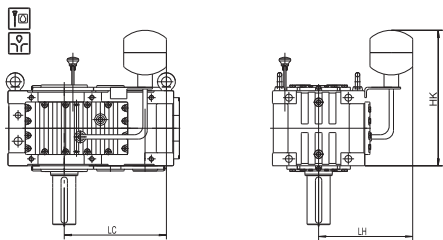
规格 size	箱体尺寸 (mm)							Housing Dimensions in mm							
	EB h11	E	H	Jh11	JE	KG	KJ	KL	KT	L	LB	LE	LN	N	PH
02	195	574	320	260	212	28	90	68	45	98	170	354	175	282	270
03	207	618	360	274	228	28	100	68	45	110	182	389	207	314	310
04	229	677	430	314	260	30	118	71	50	122	201	420	233	341	344
05	240	731	470	329	279	34	118	71	50	136	212	463	228	387	374
06	270	812	470	356	292	40	118	88	64	141	235	507	256	413	400
07	295	885	530	380	316	40	152	91	64	150	260	555	285	445	454
08	322	981	600	431	353	52	153	103	78	174	280	617	318.5	511	516
09	335	1049	670	451	373	52	153	103	78	187	293	672	373.5	566	586

规格 size	箱体尺寸 (mm)													重量 Weight	油量 Oil Capacity
														Kg	L
02	206	206	114	96	24	M22×1.5	24	M20×35	M16×32	355	135	182	18	221	30
03	246	246	122	84	24	M22×1.5	24	M20×35	M16×32	384	147	196	18	280	36
04	260	256	147	114	28	M22×1.5	28	M24×42	M16×32	430	168	211	22	381	46
05	296	296	136	106	28	M22×1.5	28	M24×42	M20×35	460	182	226	22	505	65
06	308	308	141	132	33	M27×1.5	33	M30×53	M20×35	525	195	248	22	615	80
07	350	350	150	112	33	M27×1.5	33	M30×53	M24×42	561	219	262	22	793	115
08	406	406	174	115	39	M27×1.5	39	M30×53	M24×42	597	234	289	22	1055	110
09	476	476	187	100	39	M27×1.5	39	M30×53	M30×53	652	247	309	22	1330	135

规格 size	输入轴尺寸 (mm) HSS Dimensions in mm							输出轴尺寸 (mm) LSS Dimensions in mm											
	U1	Y1	V1	Φd1	b1	h1	m1	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ΦD2	ΦD4	ΦD5
02	509	130	639	50k6	14h9	53.5	M16	80m6	22h9	85	M20	140	304	164	257	156	80js6/H7	86js6/H7	85h6/H7
03	549	135	684	55m6	16h9	59	M20	100m6	28h9	106	M24	170	341	171	274	163	95js6/H7	101js6/H7	100h6/H7
04	600	135	735	60m6	18h9	64	M20	105m6	28h9	111	M24	210	403	193	302	187	105js6/H7	111js6/H7	110h6/H7
05	655	138	793	65m6	18h9	69	M20	120m6	32h9	127	M24	210	411	201	311	193	115js6/H7	121js6/H7	120h6/H7
06	698	140	838	70m6	20h9	74.5	M20	130m6	32h9	137	M24	220	434	214	331	210	125js6/H7	131js6/H7	130h6/H7
07	752	160	912	75m6	20h9	79.5	M20	140m6	36h9	148	M24	250	478	228	354	224	135js6/H7	141js6/H7	140h6/H7
08	822	160	982	85m6	22h9	90	M20	160m6	40h9	169	M24	250	504	254	397	246	150js6/H7	151js6/H7	150h6/H7
09	921	195	1116	90m6	25h9	95	M24	170m6	40h9	179	M24	310	574	264	407	262	165js6/H7	166js6/H7	165h6/H7

主要附件
可供垂直安装

Essential Accessory
Alternatives for vertical mounting



膨胀箱 Expansion tank

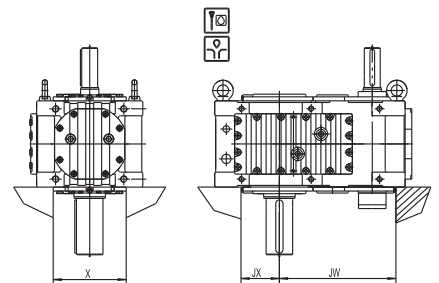
轴的位置 Shaft Positions



04



04

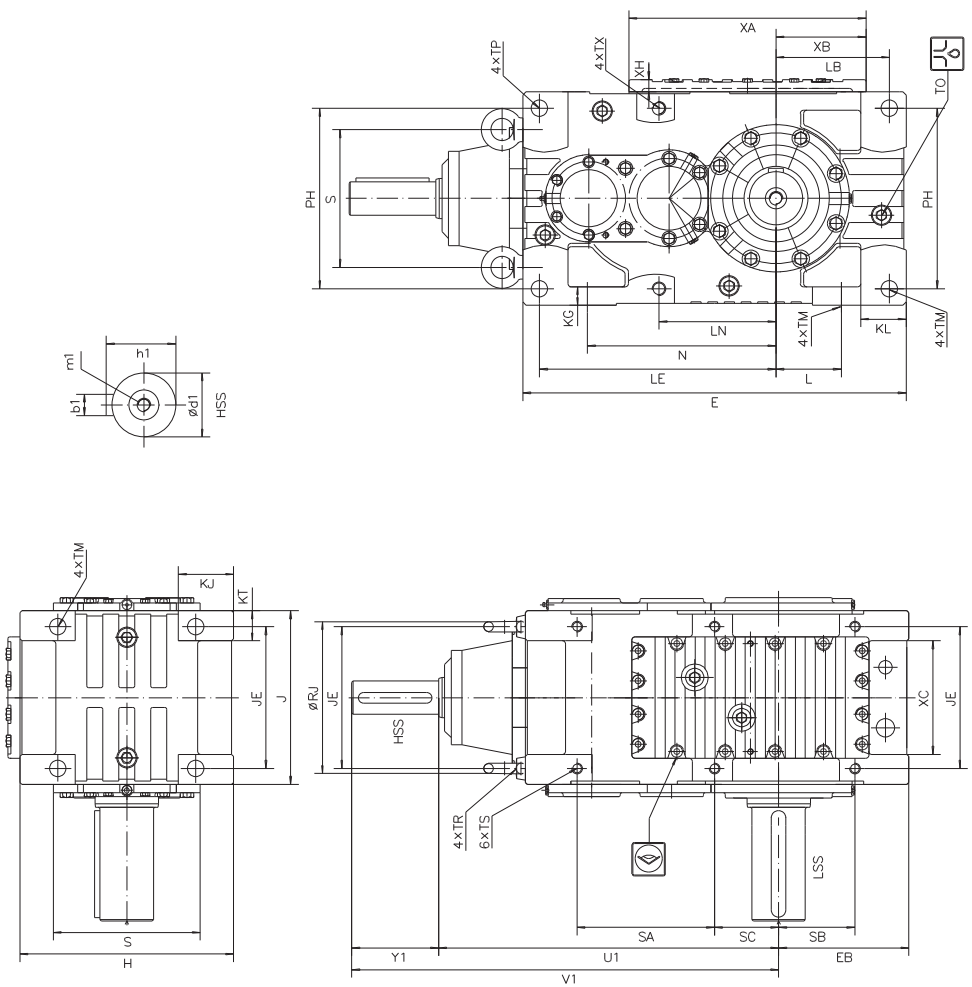


轴端泵 Shaft End Pump



3-级锥齿轮-斜齿轮减速器
TMC3BE..02-09
立式安装

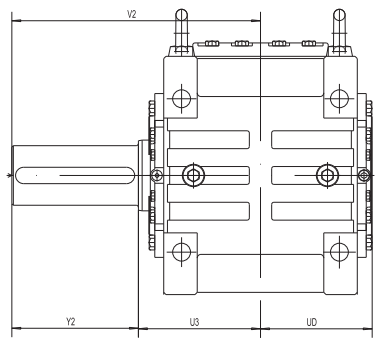
3-stage Bevel Helical Gear Unit
TMC3BE..02-09
Vertical mounting



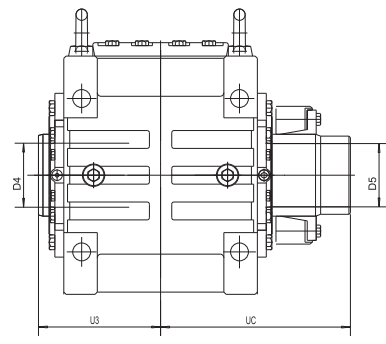
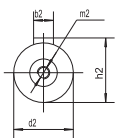
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输出轴形式LSS Types

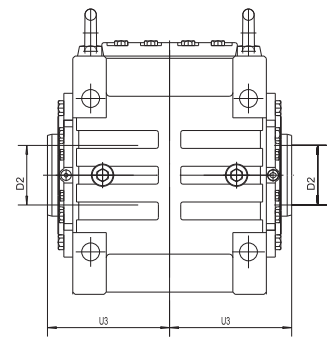
输出轴形式LSS Types



Solid Shaft
实心轴



Hollow Shaft , Shrink Disk
Page48
实心轴, 收缩盘



Hollow Shaft, Key Connection
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实心轴, 键连接

3-级斜齿轮减速器
TMC3BE..02-09
立式安装

3-stage Helical Gear Unit
TMC3BE..02-09
Vertical mounting

规格 size	箱体尺寸 (mm)										Housing Dimensions in mm											
	E	EB _{h11}	H	KJ	J _{h11}	JE	KG	KL	KT	L	LB	LE	LN	N	PH	S	SA	SB	SC	TM	TO	
02	574	195	320	90	260	212	28	68	45	98	170	354	175	282	270	206	206	114	96	24	M27×1.5	
03	618	207	360	100	274	228	28	68	45	110	182	389	207	314	310	246	246	122	84	24	M27×1.5	
04	677	229	462	118	314	260	30	71	50	122	201	420	233	341	344	260	256	147	114	28	M27×1.5	
05	731	240	430	118	329	279	34	71	50	136	212	463	228	387	374	296	296	136	106	28	M27×1.5	
06	812	270	470	131	356	292	40	88	64	141	235	507	256	413	400	308	308	141	132	33	M27×1.5	
07	885	295	530	152	380	316	40	91	64	150	260	555	285	445	454	350	350	150	112	33	M27×1.5	
08	981	322	600	153	431	353	52	103	78	174	280	617	318.5	511	516	406	406	174	115	39	M27×1.5	
09	1049	335	670	153	451	373	52	103	78	187	293	672	373.5	566	586	476	476	187	100	39	M27×1.5	

规格 size	箱体尺寸 (mm) Housing Dimensions in mm							HSS Dimensions in mm										输入轴尺寸 (mm)							
											i=14-63				i=71-90				i=90-112						
	TP _{H9}	TR=TX	TS	XA	XB	XC	XH	U1	Y1	V1	Φd1	b1	h1	m1	Φd1	b1	h1	m1	Φd1	b1	h1	m1			
02	24	M20×35	M16×32	355	135	182	18	533	100	633	35k6	10h9	38	M12	30k6	8h9	33	M10	25k6	8h9	28	M10			
03	24	M20×35	M16×32	384	147	196	18	584	112	696	40k6	12h9	43	M16	30k6	8h9	33	M10	25k6	8h9	28	M10			
04	28	M24×42	M16×32	430	168	211	22	642	120	762	42k6	12h9	45	M16	35k6	10h9	38	M12	25k6	8h9	28	M10			
05	28	M24×42	M20×35	460	182	226	22	693	125	818	50k6	14h9	53.5	M16	40k6	12h9	43	M16	30k6	8h9	33	M10			
06	33	M30×53	M20×35	525	195	248	22	758	130	888	50k6	14h9	53.5	M16	45k6	14h9	48.5	M16	35k6	10h9	38	M12			
07	33	M30×53	M24×42	561	219	262	22	814	135	949	60m6	18h9	64	M20	45k6	14h9	48.5	M16	40k6	12h9	43	M16			
08	39	M30×53	M24×42	597	234	289	22	890	135	1025	60m6	18h9	64	M20	55m6	16h9	59	M20	40k6	12h9	43	M16			
09	39	M30×53	M30×53	652	247	309	22	969	140	1109	70m6	20h9	74.5	M20	60m6	18h9	64	M20	45k6	14h9	48.5	M16			

规格 size														
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ΦD2	ΦD4	ΦD5	kg	L
02	80m6	22h9	85	M20	140	304	164	257	156	80js6/H7	86js6/H7	85js6/H7	219	30
03	100m6	28h9	106	M24	170	341	171	274	163	95js6/H7	101js6/H7	100js6/H7	279	36
04	105m6	28h9	111	M24	210	403	193	302	187	105js6/H7	111js6/H7	110js6/H7	382	46
05	120m6	32h9	127	M24	210	411	201	311	193	115js6/H7	121js6/H7	120js6/H7	493	65
06	130m6	32h9	137	M24	220	434	214	331	210	125js6/H7	131js6/H7	130js6/H7	601	80
07	140m6	36h9	148	M24	250	478	228	354	224	135js6/H7	141js6/H7	140js6/H7	779	115
08	160m6	40h9	169	M24	250	504	254	397	246	150js6/H7	151js6/H7	150js6/H7	1037	110
09	170m6	40h9	179	M24	310	574	264	407	262	165js6/H7	166js6/H7	165js6/H7	1299	135

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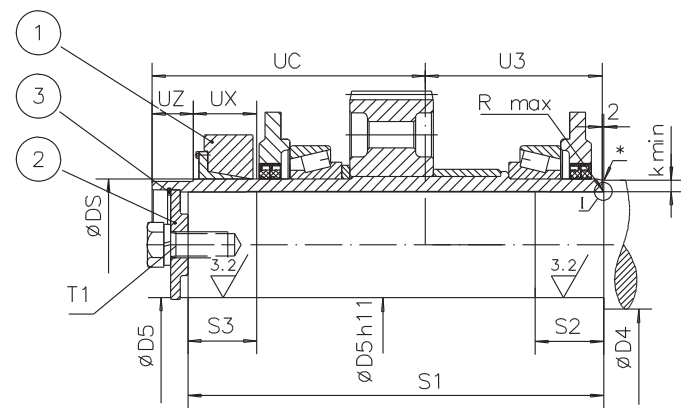
收缩盘

空心轴减速器的空心轴孔和从动轴端。

Shrink Disk

Hollow Shaft Bore and Drive Shaft End For hollow Shaft Gear Units.

对所有安装位置，空心轴的左面和右面相对中心是对称的。
For all mounting positions. Left and right handed hollow shafts are symmetrical regarding to center line.



- 序号1：收缩盘
 - 序号2：端板
 - 序号3：挡圈
 - *) 轴肩（不需要）
- Item 1: Shrink Disk
Item 2: End Plate
Item 3: Circlip
*) Shaft shoulder (not necessary)



仅对较小的轴向和/或径向外力。
如果有非常明显的外部轴向力和/或径向外力存在，
请与最近的通力办事处联系。

For minor external axial and/ or radial forces only.
If noticeable external axial and/ or radial forces exist ,
Please contact nearest TongLi office.

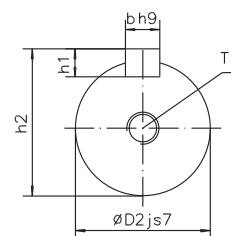
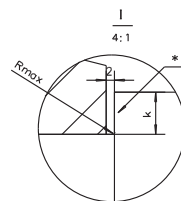
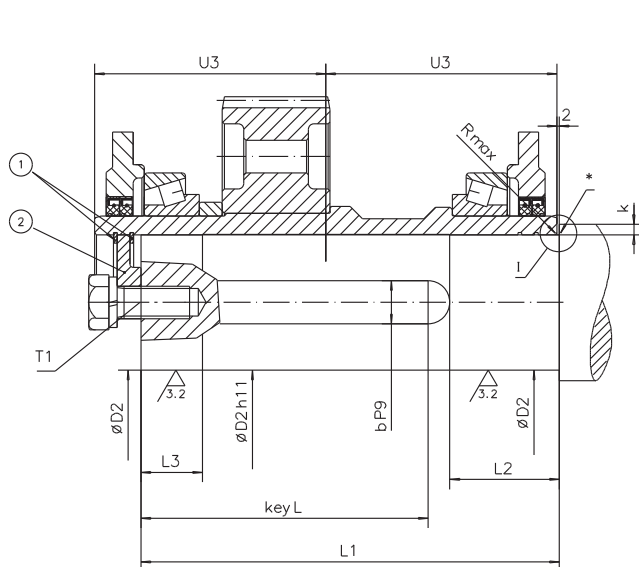
对所有型号的减速器 For All Gear Unit Type

规格 size	尺寸 (mm)							Dimensions in mm					
	ΦD5	ΦD4	ΦD5	S1	S2	S3	K min	R max	U3	UC	UZ	UX	T1
02	110	86js6/H7	85h6/H7	386	45	53	6	3	164	257	40	54	M24×45
03	125	101js6/H7	100h6/H7	407	52	58	6	3	171	274	47	55	M24×45
04	140	111js6/H7	110h6/H7	457	57	64	6	3	193	302	47	63	M24×45
05	150	121js6/H7	120h6/H7	473	62	68	6	3	201	311	44	67	M24×45
06	165	131js6/H7	130h6/H7	507	67	72	6	4	214	331	44	72	M24×45
07	175	141js6/H7	140h6/H7	534	72	72	7	4	228	354	53	72	M30×60
08	185	151js6/H7	150h6/H7	602	77	88	7	5	254	397	54	88	M30×60
09	200	166js6/H7	165h6/H7	622	85	87	7	5	264	407	54	90	M30×60

键联接 Key Connection

空心轴减速器的空心轴孔和从动轴端。
对所有安装位置，空心轴的左面和右面相对中心是对称的。

Hollow Shaft Bore and Drive Shaft End For
Hollow Shaft Gear Units.
For all mounting positions. Left and right handed hollow
shafts are symmetrical regarding to center line.



Shaft End

轴端

序号1：挡圈

序号2：端板

*) 仅贯通轴和有显著轴向外力要求轴肩

Item 1: End Plate

Item 2: Circlip

*) Shaft shoulder required for through
going shaft and with noticeable external Axial forces only.

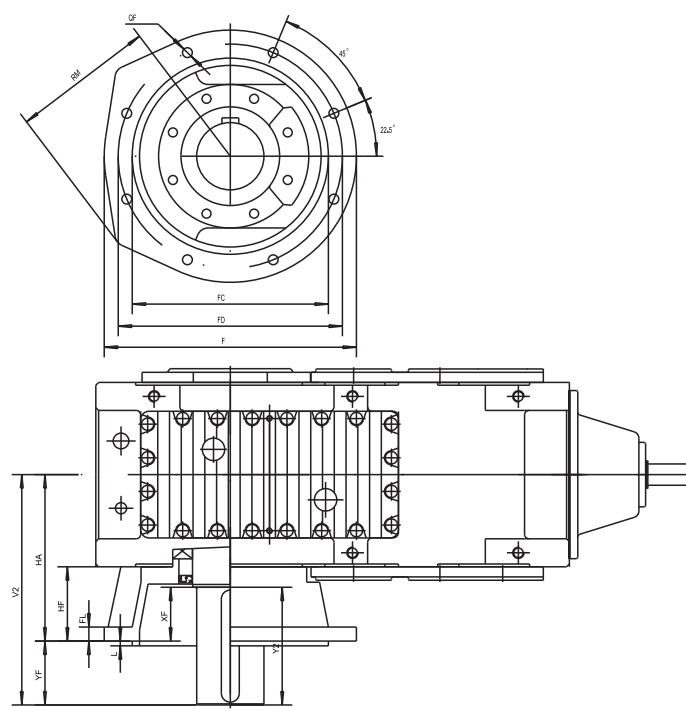


仅对较小的轴向和/或径向外力。
如果有非常明显的外部轴向力和/或径向外力存在，请与最近
的通力办事处联系。
对所有型号的减速器

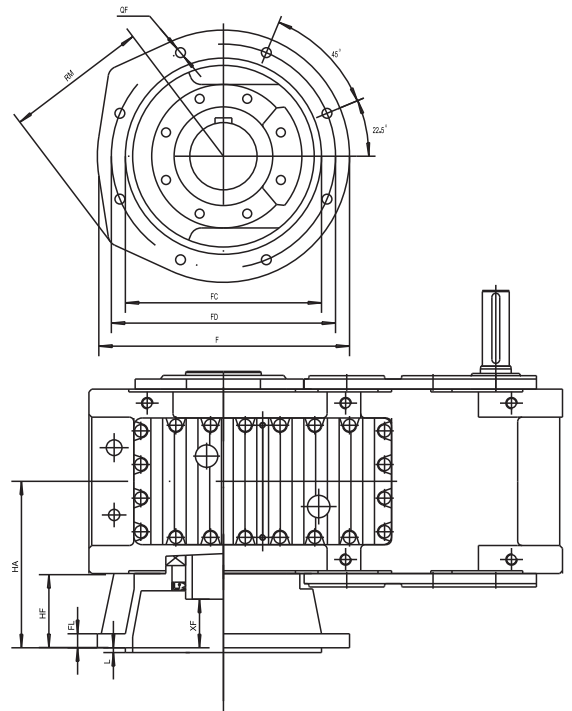
For minor external axial and/or radial forces only.
If noticeable external axial and/or radial forces exist,
please
contact nearest Tongli office.
For all gear unit type



附件代号74 / Code 74



实心轴



空心轴

带键或收缩盘的空心轴：
Hollow shaft with key or with shrink disk：

轴的尺寸见收缩盘和键连接一节。
Shaft dimensions see Sections Shrink Disk and Key Connection

实心轴：轴的尺寸见减速器尺寸图页。
Solid shaft :Shaft dimensions see Gear Unit Dimension Drawing pages.

Vertical/立式LSS

对所有型号的减速器 For all gear unit type

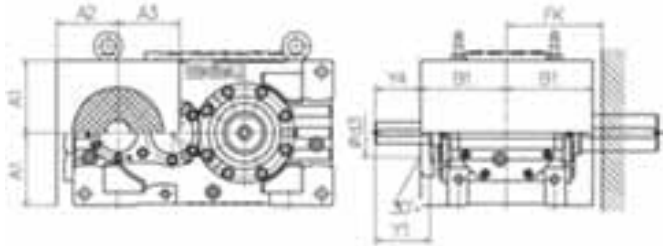
规格 size	尺寸 (mm) Dimensions in mm												
	ΦF	ΦFD	ΦC js7/H8	ΦQF	L	FL	YF	Y2	XF	HF	V2	HA	RM
02	440	400	350	18	5	22	74	140	66	100	304	230	237
03	500	450	400	18	5	25	88	170	81	115	340	252	260
04	500	450	400	18	6	25	126	210	84	120	403	277	293
05	550	500	450	22	6	30	112	210	99	135	412	300	311
06	600	550	500	22	7	30	113	220	107	143	434	321	337
07	660	600	550	22	7	30	148	250	102	140	478	330	378
08	730	680	620	27	7	35	139	250	112	150	505	366	421
09	750	680	620	27	7	35	184	310	127	165	575	391	452

风扇 Fans

附件代号84/Code 84

减速器型号TMC..HL,TMC..HE /Gear unit type

TMC2HL/TMC2HE,TMC3HL/TMC3HE

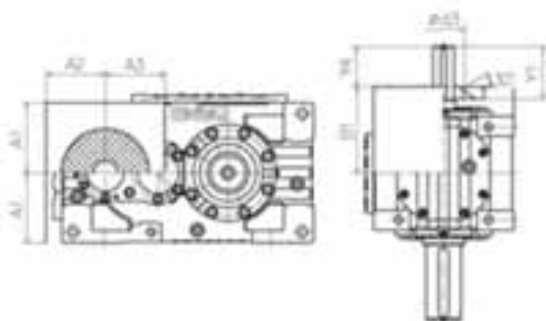


size 规格	A1	A2	A3	B1	FK	Y4	Y1	Air Inlet/空气入口	
								Φd3	Angle/角度
02	158	160	140	210	233	90	120	131	30°
03	178	180	140	215	255	90	120	131	30°
04	198	195	165	235	275	100	130	156	30°
05	213	205	170	245	295	105	135	156	30°
06	232	225	205	260	308	110	140	198	30°
07	263	250	230	270	330	110	140	226	30°
08	298	275	230	295	355	130	160	226	30°
09	335	280	230	305	365	130	160	226	30°

尺寸FK仅对2级斜齿轮减速器。Dimension FK only for 2-stage Helical Gear Unit.

减速器型号TMC..HV /Gear unit type

TMC2HV/TMC3HV

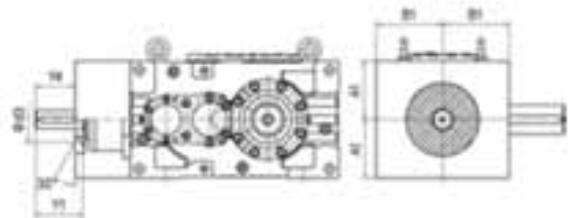


size 规格	A1	A2	A3	B1	Y4	Y1	Air Inlet/空气入口	
							Φd3	Angle/角度
02	158	160	140	210	90	120	131	30°
03	178	180	140	215	90	120	131	30°
04	198	195	165	235	100	130	156	30°
05	213	205	170	245	105	135	156	30°
06	232	225	205	260	110	140	198	30°
07	263	250	230	270	110	140	226	30°
08	298	275	230	295	130	160	226	30°
09	335	280	230	305	130	160	226	30°

减速器型号TMC..BL, TMC..BE/Gear unit type

TMC2BL/TMC2BE

TMC3BL/TMC3BE



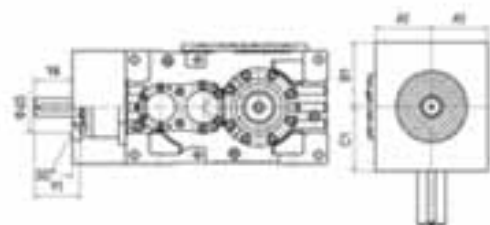
size 规格	A1	B2	Y4	Y1	Air Inlet/空气入口	
					Φd3	Angle/角度
02	158	160	100	130	109	30°
03	178	165	105	135	131	30°
04	198	185	105	135	131	30°
05	213	195	108	138	156	30°
06	232	220	110	140	156	30°
07	262	230	130	160	156	30°
08	297	255	130	160	198	30°
09	332	265	165	195	226	30°

A1	B2	Y4	Y1	Air Inlet/空气入口	
				Φd3	Angle/角度
158	160	70	100	109	30°
178	165	82	112	131	30°
198	185	90	120	131	30°
213	195	95	125	156	30°
232	220	100	130	156	30°
262	230	105	135	156	30°
297	255	105	135	198	30°
332	265	100	140	226	30°

减速器型号TMC..BV/Gear unit type

TMC2BL/TMC2BE

TMC3BL/TMC3BE



size 规格	A1	B1	Y4	Y1	Air Inlet/空气入口	
					Φd3	Angle/角度
02	158	160	100	130	109	30°
03	178	165	105	135	131	30°
04	198	185	105	135	131	30°
05	213	195	108	138	156	30°
06	232	220	110	140	156	30°
07	262	230	130	160	156	30°
08	297	255	130	160	198	30°
09	332	265	165	195	226	30°

A1	B1	C1	Y4	Y1	Air Inlet/空气入口	
					Φd3	Angle/角度
180	160	125	70	100	109	30°
200	165	133	82	112	131	30°
220	185	152	90	120	131	30°
235	195	159	95	125	156	30°
260	220	172	100	130	156	30°
290	230	184	105	135	156	30°
325	255	210	105	135	198	30°
360	265	219	110	140	226	30°



散热器 Heat exchangers

附件代号85/Code 85

减速机轴端泵

下列情况使用轴端泵

- 上面轴承用压力润滑
- 用油过滤器
- 需用油散热器

油泵和油管空间；见尺寸图

Shaft End Pump for Gear Units

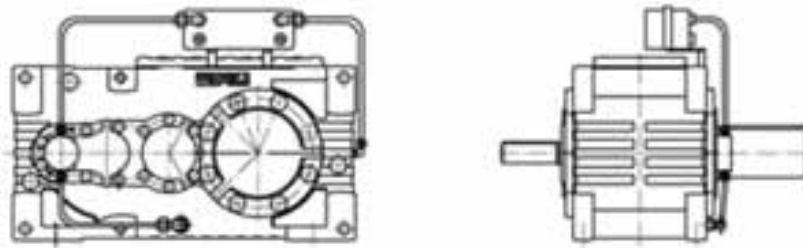
Shaft End Pump is used when

- Upper bearings are pressure lubricated
- Oil filter is used
- Oil heat exchanger is necessary

Space for oil pump and oil pipes ;
See Dimensional Drawings

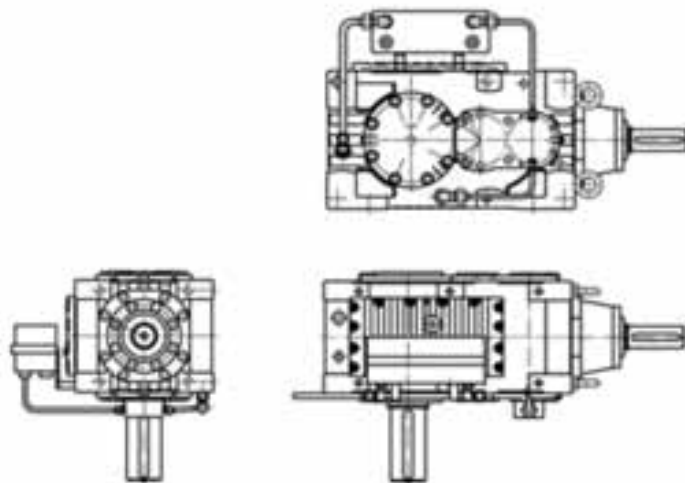
卧式减速器位置

Horizontal Gear Unit Position



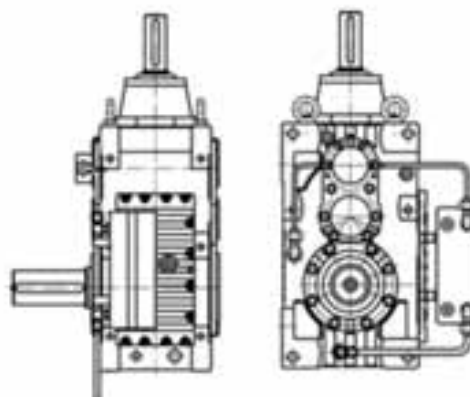
立式减速器位置

Vertical Gear Unit Position



竖立减速器位置

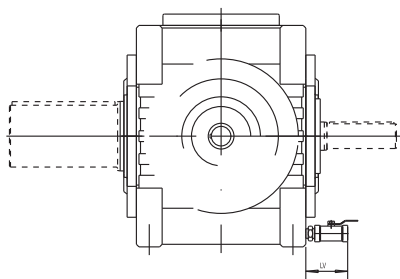
Upright gear unit position



泄油阀

附件 代号95

泄油阀的尺寸取决于减速器的规格。泄油阀可以备伸长管，标准长度（Lv）列于表中，也可以用其他长度。

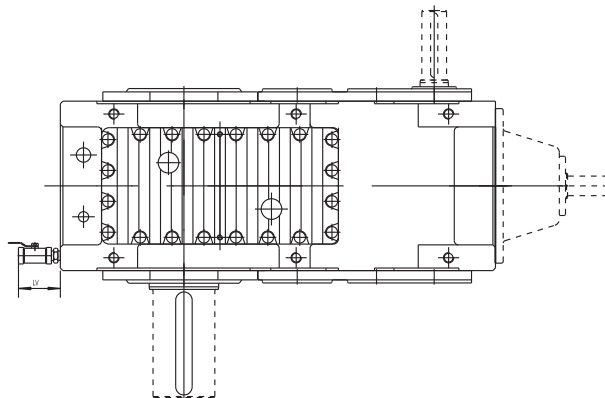


卧式安装Horizontal Mounting

Oil Drain Valves

Code 95

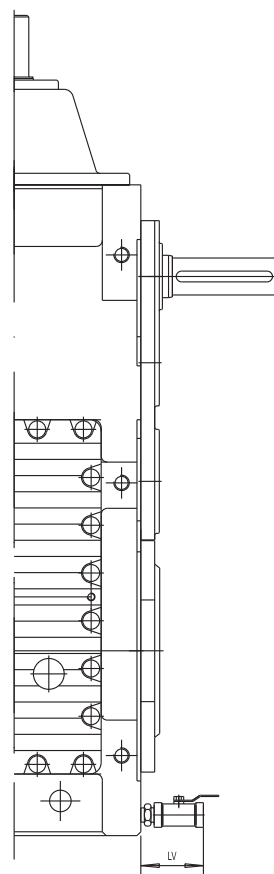
Size of the oil drain valve depends on the size of gear unit. Oil drain valve can be furnished with an extension tube. Standard lengths (Lv) are in table. Other Lengths are also possible.



立式安装Vertical Mounting

泄油阀长度/Oil drain valve lengths

Gear Unit size 减速器规格	size 尺寸	Length LV 长度LV
02	M22×1.5	115
03	M22×1.5	115
04	M22×1.5	115
05	M22×1.5	115
06	M27×1.5	140
07	M27×1.5	140
08	M27×1.5	140
09	M27×1.5	140



竖立安装Upright Mounting



联轴器保护装置和LSS端盖（附件代号90）
有或无冷却风扇均能用输入联轴器保护装置。

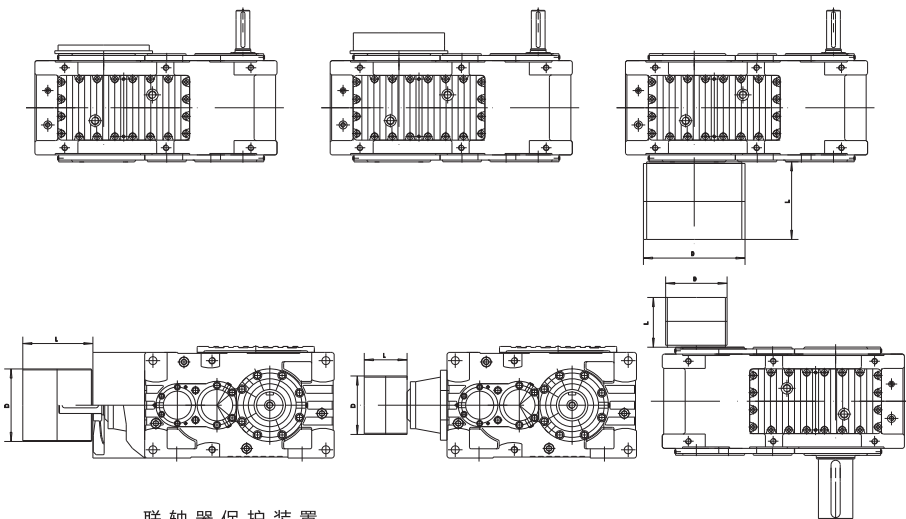
Coupling guards for input shaft couplings can
be used with or without cooling fans.

空心轴端盖
Hollow shaft end covers

收缩盘盖
Shrink disk covers

输出轴联轴器的保护装置
Coupling guards for output shaft couplings

size 规格	联轴器的最大直径 Max Coupling diameter	长度[L] Length[L]	直径 [D] Diameter[D]
02	150	138-190	216
03	150	190-294	216
04	240	190-294	306
05	240	297-483	306
06	370	297-483	436
07	480	483-830	546
08	580	483-830	646



联 轴 器 保 护 装 置

力矩支臂（附件代号75）

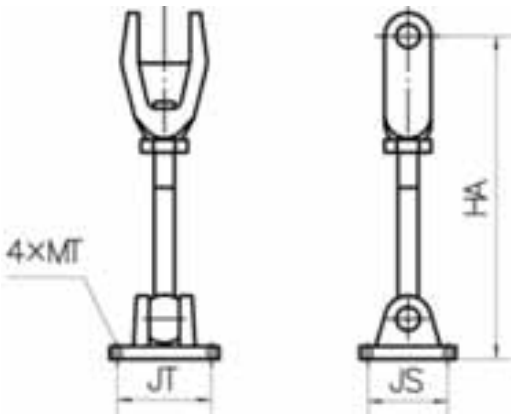
订购力矩支臂时必须告知HA尺寸。可以在HAmín-HAmax 之间任意选择。
如果HA比HAmax长，力矩反作用支臂要专门设计。

Torque arm（Code 75）

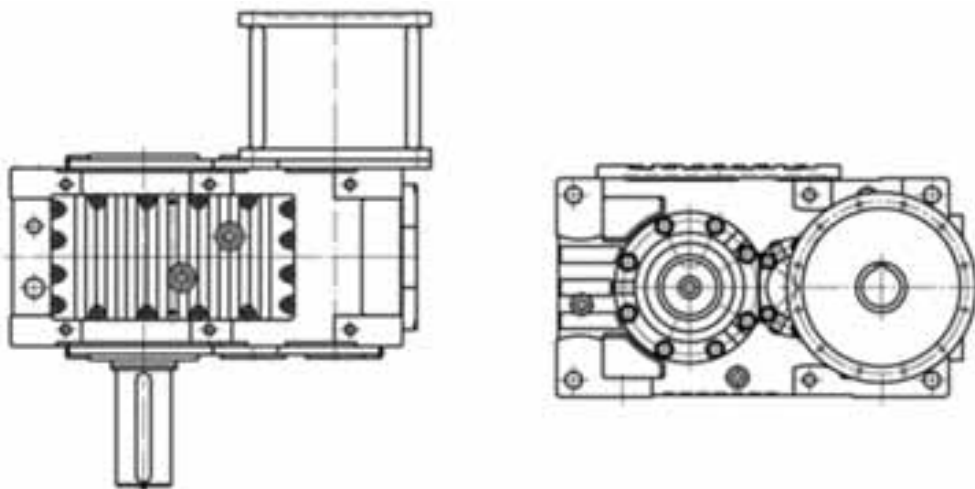
When ordering the torque arm,dimension HA must be advised.It can be freely chosen between HAmín-HAmax If HA is to be longer than HAmín-HAmax the torque reaction arm will be of special design.

size 规格	HA	JT	JS	MT
0203	360-410	148	100	Φ18
0405	405-455	148	100	Φ18
0607	417-467	148	100	Φ18
0809	432-482	188	130	Φ22

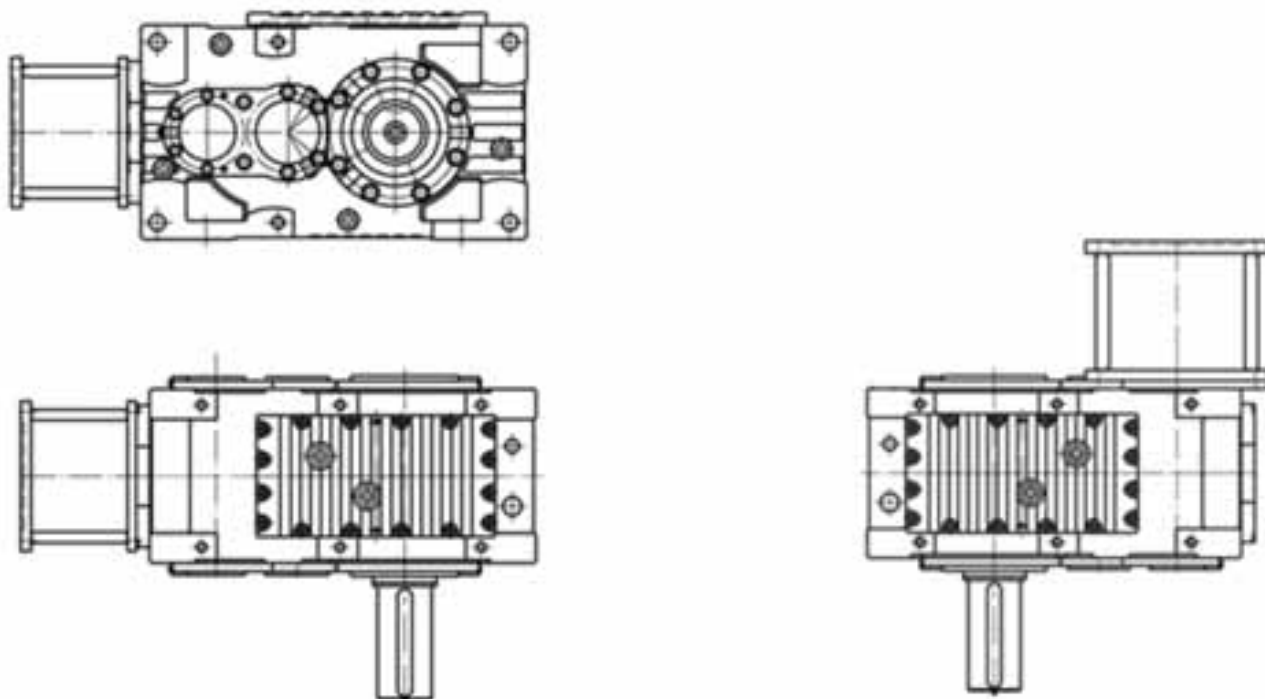
力矩臂必须在从动机边。
Torque arm must be on driven machine side.



电动机法兰Motor Flange (附件代号70/Code70)

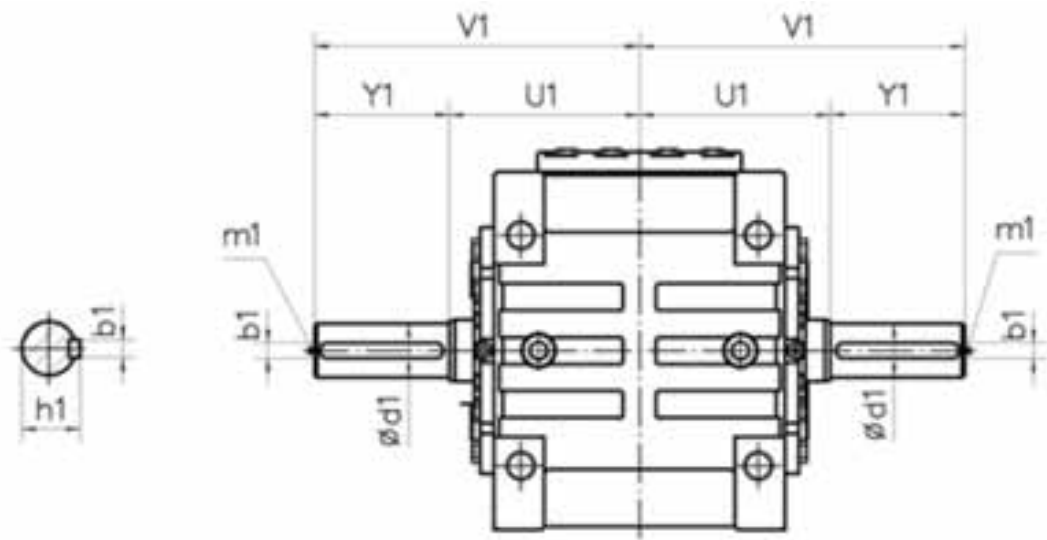


锥齿轮-斜齿轮减速器





双输入轴 Through Going Shaft（附件代号80/Code 80）



Two stage helical gear units/两级平行轴

Three stage helical gear units/三级平行轴

size 规格	Ratio area 速比范围	Ød1	h1	b1	m1	v1	y1	u1
02	7.1-11.2	48k6	51.5	14h9	M16	290	120	170
	12.5-20	40k6	43	12h9	M16	290	120	170
03	7.1-11.2	50k6	53.5	14h9	M16	297	120	177
	12.5-20	42k6	45	12h9	M16	297	120	177
04	7.1-11.2	55m6	59	16h9	M20	327	130	197
	12.5-20	50k6	53.5	14h9	M16	327	130	197
05	7.1-11.2	60m6	64	18h9	M20	340	135	205
	12.5-20	50k6	53.5	14h9	M16	340	135	205
06	7.1-11.2	70m6	74.5	20h9	M20	358	140	218
	12.5-20	55m6	59	16h9	M20	358	140	218
07	7.1-11.2	75m6	79.5	20h9	M20	370	140	230
	12.5-20	60m6	64	18h9	M20	370	140	230
08	7.1-11.2	80m6	85	22h9	M20	416	160	256
	12.5-20	65m6	69	18h9	M20	416	160	256
09	7.1-11.2	85m6	90	22h9	M20	426	160	266
	12.5-20	75m6	79.5	20h9	M20	426	160	266

当高速轴有外载径向力时， 请向通力咨询。
In case of external radial forces on input shaft,
p;ease contact Tongli.
实心输出轴尺寸同标准的实心轴尺寸。
Solid output shaft. Dimensions are the same as for standard solid shafts.

附件代号一览	Accessories
电机法兰 (70)	Motor Flange (70)
安装法兰 (74)	Mounting Flange (74)
力矩支臂 (75)	Torque arm (75)
双输入轴 (80)	Through Going Shaft (80)
风扇 (84)	Fans (84)
散热器 (85)	Heat exchangers (85)
电机油泵强制润滑 (86)	Shaft End Pump (86)
膨胀箱 (87)	Expansion tank (87)
联轴器保护装置和LSS端盖 (90)	Coupling Guard and LSS cover (90)
泄油阀 (95)	Oil Drain Valves (95)