



## 徐州杰恒回转支承有限公司

地址: 江苏省徐州市铜山新区珠江路北、衡山路东  
电话: 0516-83310721 83310792  
传真: 0516-83310729  
邮编: 221116  
邮箱: jieheng@xzjieheng.com  
网址: <http://www.xzjieheng.com>

XUZHOU JIEHENG SLEWING BEARING CO.,LTD.  
Add: Hengshan East Road, Zhujiang North Road,  
Tongshan new district, Xuzhou, Jiangsu, China  
Tel: 86-516-83310532/738  
Fax: 86-516-83310738  
Post code: 221116  
Email: [info@slewbearing.net](mailto:info@slewbearing.net)  
Website: <http://www.slewbearing.net>



## 徐州杰恒回转支承有限公司

XUZHOU JIEHENG SLEWING BEARING CO.,LTD.

回转支承 ( 转盘轴承 ) Slewing Bearing(Turntable Bearing)



# 生产设备



公司外景



企业外景



2.5M数控立式车床



4M数控立式车床



数控卧式车床



数控钻床



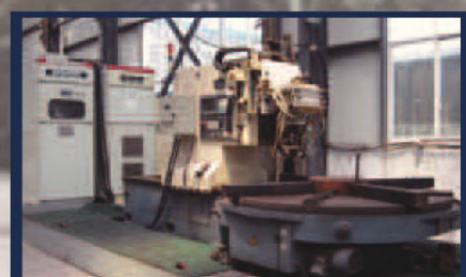
2.5M滚齿机



滚齿机

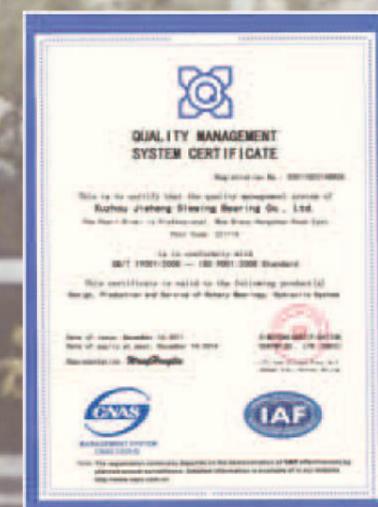


数控滚道淬火机床



数控齿淬火机床

# 资质证书





## 企业简介

徐州杰恒回转支承有限公司位于五省通衢的徐州，坐落在徐州市铜山经济开发区，交通便利，环境优美。

我公司专业生产：单排球式（01系列、HS系列、Q系列）、双排球式（02系列）三排滚柱式（13系列）、单排交叉滚柱式（11系列）、双列球式（07系列）、球柱联合式六大系列回转支承。广泛应用于工程机械、建筑机械、冶金矿业机械、船舶港口机械、环保机械、轻工机械、石油化工机械、工程车辆、军工装备等行业。产品型号覆盖200mm—4500mm各种标准与非标规格。

公司坚持“以人为本”“科学管理”“诚实守信”“开拓进取”的发展方针，使公司得以持续发展。公司占地面积5.2万平方米，现有员工300余人，其中各类专业技术人员占职工的40%，具有大、中专以上学历的员工占职工的70%，产品销售额以年增幅30%的比例逐年上升。公司具有现代化的厂房和专业的生产设备，完善的检验检测设备与先进的加工设备。具备从原料粗加工到精加工—热处理—制齿—成品装配等全过程流水线生产能力，是国内专业生产回转支承主要生产厂家之一。公司和有关大专院校联合成立了技术研发中心。公司技术精益求精，对不同的客户实行个性化优化设计，以满足客户的需求。公司连续多年被主管部门评为先进企业，纳税先进单位，安全生产文明单位。公司生产的系列产品，通过国家特种机械零部件质检认定，达到同行业领先水平。公司组建了完善的管理机构，建立了行之有效的ISO9001：2000的质量管理体系，并通过了权威机构的认证，进一步促进企业质量和管理水平迈向更高的层次。

公司产品销往全国各地并出口俄罗斯、土耳其、罗马尼亚、巴西、马来西亚、捷克、芬兰、荷兰、爱尔兰、阿联酋、加拿大、西班牙等多个国家，产品得到用户的广泛赞同和认可。

公司拥有一支团结、敬业、求实、高效的团队，凭借先进的技术、专业的服务从定单、采购、制造到售后服务等多方面，向客户提供具有高性价比的产品。公司有精力，有能力，更有实力，完成自己的目标——打造世界品牌的杰恒。

## Brief Introduction

Xuzhou Jieheng Slewing Bearing Co., Ltd. is one professional manufacturer and exporter of ball and roller type slewing bearings in standard and non-standard in China for many years, we always supply the high quality product & satisfied service to the cooperative partners from all over of the world. We have successfully created the positive and steady relation with customers in domestic and overseas market, and own the sound credit and reputation from them.

Jieheng offers you the full services in slewing bearing industry, from designing & manufacturing, technical support to after-sale market at the professional standing.

The product range covers Single row ball slewing bearing (01 series, Hs series, Q series), Double row ball slewing bearing(02 Series, 07 series), Three Row Roller Slewing Bearing (13 series), Single Row Crossed Roller slewing bearing(11 Series), ball and roller combined slewing bearing, and the thin section slewing bearing(Light type & Flange type).

Our product is available in diameters from 200mm to 4500mm and widely applies to engineering machinery, construction machinery, mining industry, metallurgical machinery, harbor facilities, environmental mechanism, Light Industry Machinery, Petroleum and chemical machinery, Engineering vehicle, Military equipment, solar tracker and so on.

As one ISO 9001 certified manufacturer, we have the advantage equipments and the well-run management system, we are in competitive position that provide superior slewing bearing at reasonable price and on short lead-time. In years, all staff at Jieheng will accomplish the goal to create “JIEHENG BRAND” in world through our satisfied service.

## 目录 CONTENTS

1、回转支承结构形式 Slewing Bearing Structural Type.....	1
2、回转支承热处理 Slewing Bearing Heat Treatment .....	2
3、回转支承编号方法 Slewing bearing model description.....	3
3.1 编号方法 Model description.....	3
3.2 标记示例 Example.....	3
4、回转支承选型计算 Selection and Calculation of Slewing Bearing.....	3
4.1 回转支承受载情况 Supporting Load of Slewing Bearing.....	3
4.2 回转支承选型所需的技术参数 Necessary technical data.....	5
4.3 回转支承承载能力曲线 Slewing Bearing Load Curve.....	6
4.4 回转支承选型计算方法 Slewing Bearing Type Selection and Calculation.....	6
5、回转支承的安装及保养.....	12
Slewing Bearing Installation And Maintenance	
5.1 装卸与贮运.....	12
Loading and Unloading & Storage and Transportation	
5.2 回转支承的安装 Slewing Bearing Installation.....	12
5.2.1 安装支架的要求.....	12
Requirements of Mounting Bracket	
5.2.2 回转支承用螺栓的选择与安装注意事项.....	14
Bolt selection and installation notices	
5.2.3 安装回转支承 Slewing bearing installation.....	15
5.3 润滑与使用维护 Lubrication and Maintenance.....	17

## 目录 CONTENTS

6、产品信息 Product.....	19
承载曲线	
单排四点接触球式承载曲线Load Curve .....	19
单排交叉滚柱式承载曲线Load Curve.....	23
双排球式承载曲线Load Curve.....	25
三排滚柱式承载曲线Load Curve.....	27
法兰式承载曲线Load Curve.....	29
薄型承载曲线Load Curve.....	30
结构参数	
6.1 单排四点接触球式结构参数.....	31
Single-row four point contact ball slewing bearing-Data	
6.2 单排交叉滚柱式结构参数.....	43
Single-row Crossed Roller Slewing Bearing-Data	
6.3 双排球式结构参数.....	49
Double-row Ball Slewing Bearing-Data	
6.4 三排滚柱式结构参数.....	55
Three-row Roller Slewing Bearing-Data	
6.5 轻型回转支承 Thin Section Slewing Bearing.....	61
6.5.1 法兰式结构参数 Flange Type-Data.....	61
6.5.2 薄型结构参数 Light Type-Data.....	63
6.6 单排四点接触球式回转支承 (HS系列) 结构参数.....	65
Single-row four point contact ball slewing bearing(HS Series)-Data	
6.7 单排四点接触球式回转支承 (Q系列) 结构参数.....	71
Single-row four point contact ball slewing bearing(Q Series)-Data	
6.8 单排交叉滚柱式回转支承 (HJ系列) 结构参数.....	77
Single-row Crossed Roller Slewing Bearing(HJ Series)-Data	

## 1、回转支承结构形式 Slewing Bearing Structural Type

单排四点接触球式

Single-row Four Point Contact Ball Slewing Bearing



单排交叉滚柱式

Single-row Crossed Roller Slewing Bearing



双排球式

Double-row Ball Slewing Bearing



三排滚柱式

Three-row Roller Slewing Bearing



轻型回转支承 Thin Section Slewing Bearing

法兰式 Flange Type

薄型 Light Type

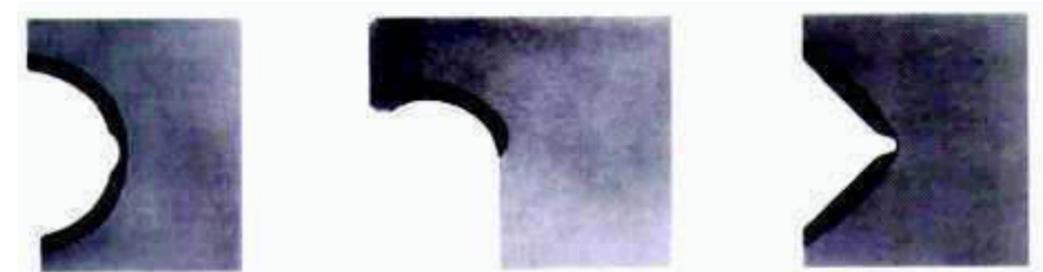


## 2、回转支承热处理 Slewing Bearing Heat Treatment

滚道热处理: Raceway Hardening

回转支承滚道通常进行感应淬火, 淬火硬度在HRC55~62, 淬火热形式如下:

The raceway of slewing bearing is in treatment by heat, the hardness is in range of HRC55~62, the specifications as follows:



单排四点接触球式滚道

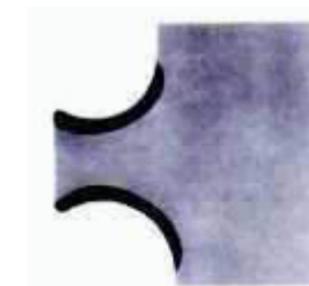
Raceway of single-row ball type

双排异径球式压圈滚道

Raceway of double row ball type

单排交叉滚柱式滚道

Raceway of single-row crossed roller type



双排异径球式鼻圈滚道

Raceway of supporting ring in a double row ball type



三排滚柱式鼻圈滚道

Raceway of nose ring in a three row roller type

### 齿轮热处理 Gear Heat Treatment

回转支承由于传递力或力矩的需要，在其中一个圈上通常制有齿，齿轮的热处理状态一般为正火或调质状态。根据应用场合的不同，齿轮还可以进行齿感应淬火。齿感应淬火又可分为齿面齿根淬火、齿面淬火和全齿淬火。齿淬火硬度在HRC50~60。

The hardness is in range of HRC50~60, according to the different applications, the gears have the three types of tooth quenching as follow.



## 3、回转支承编号方法：Slewing Bearing Model Description

### 3.1 编号方法 Model Establishment Description

(如右图)

### 3.2 标记示例 Example

回转支承，单排球式，外齿小模数，滚动体直径 45mm，滚道中心圆直径 1250mm 的回转支承其标记如下：011.45.1250

For example, single row four point contact ball slewing bearing, Normal, Outer gear Diameter of rolling element 45mm, (Upper row) Diameter of track center 1250mm. The model is 011.45.1250

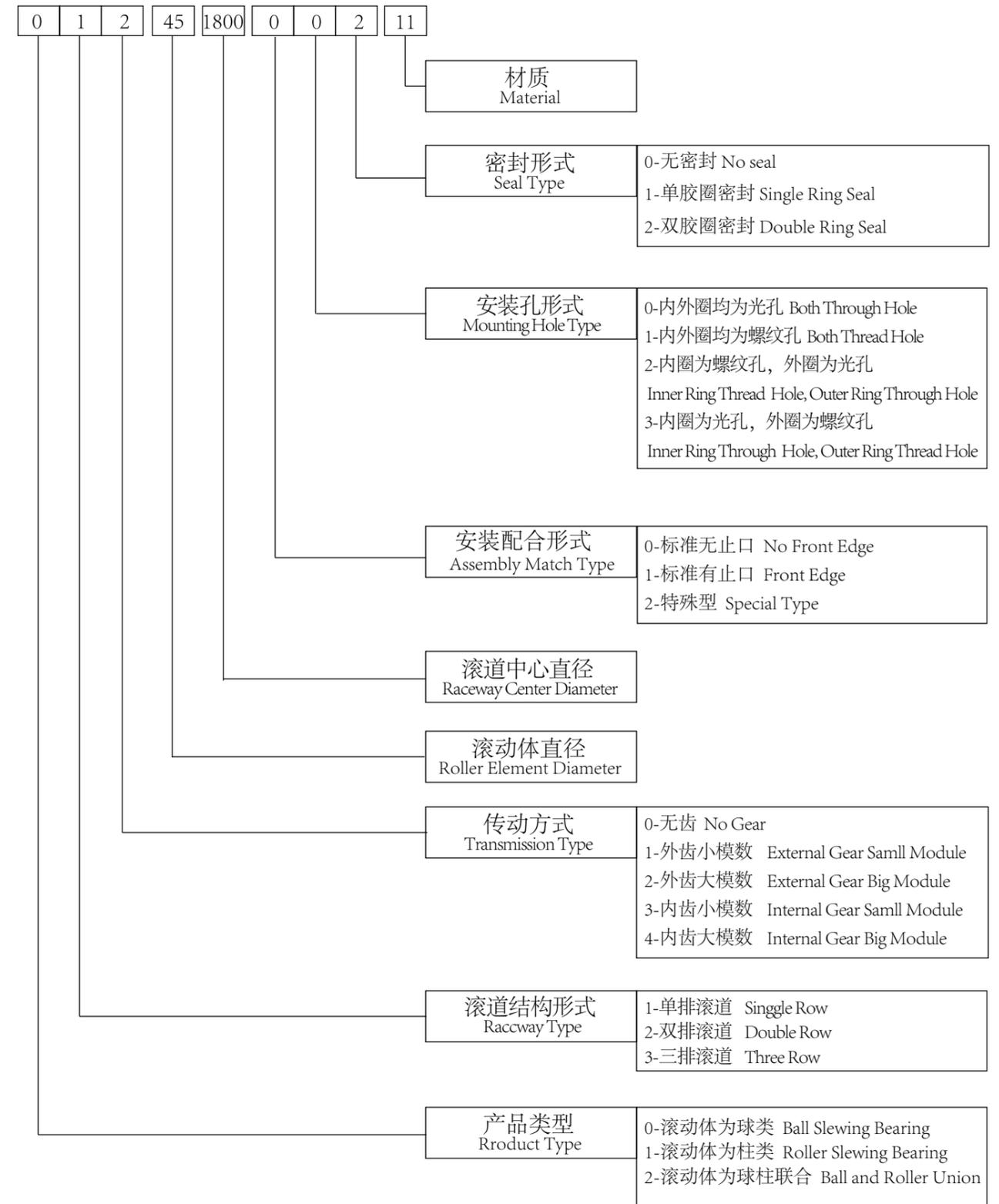
## 4. 回转支承选型计算 Selection and Calculation of Slewing Bearing

### 4.1 回转支承受载情况 Supporting Load of Slewing Bearing

回转支承在使用过程中，一般要承受轴向力  $F_a$ 、径向力  $F_r$  以及倾覆力矩  $M$  的共同作用，对不同的应用场合，由于主机的工作方式及结构形式不同，上述三种荷载的作用组合情况将有所变化，有时可能是两种荷载的共同作用，有时也有可能仅仅是一个荷载的单独作用。

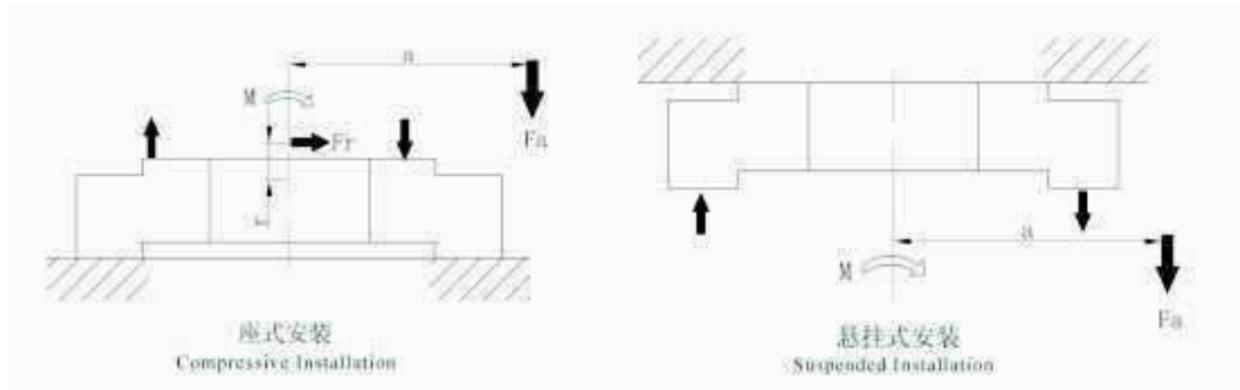
通常，回转支承的安装方式有以下两种形式——座式安装和悬挂式安装。两种安装形式支承承受的载荷示意如下：

During the use of slewing bearing, it usually supports axial force, radial force and overturning moment together. For different application fields, the three load above will have the change in the



function combined due to the difference of working manner and structure form, sometimes, it maybe support the combination of two loads, sometimes may be only one load.

Generally speaking, slewing bearing has two kinds of installation mode: compressive installation and suspended installation. The two installation type sketch is shown below



客户在选型时，若所用回转支承为座式安装，可按下面的选型计算来进行选型；若所用回转支承为悬挂式安装或其他安装方式，请与我公司技术部联系。

If customers need the slewing bearing in compressive installation, the customer could select and calculate the model as follows; if the slewing bearing need to be in suspended installation, please contact us.

#### 4.2 回转支承选型所需的技术参数 Necessary technical data

- 回转支承承受的载荷 Support load  
Each load and percentage share of operating time
- 在每种载荷作用下回转支承的转速或转数  
Rotating speed or number of revolutions under each load.
- 作用在齿轮上的圆周力 Circumferential force on gear
- 回转支承的尺寸 Slewing bearing dimension
- 其他的运转条件 Other operating conditions

主机厂家可根据产品样本所提供的信息，利用静态承载能力曲线图，按回转支承型计算方法初步选择回转支承，然后，与我公司技术部共同确认。也可向我公司提供和回转支承相关信息，由我公司进行设计选型。

Refer to the specifications in catalogue and the static and dynamic load curve, customers can preliminary select the slewing bearing following the model description, then contact our technical department and confirm it, or provide the relative information of slewing bearing to us, our company can help you with selection, calculation and design as your demands.

#### 4.3 回转支承承载能力曲线 Slewing Bearing Load Curve

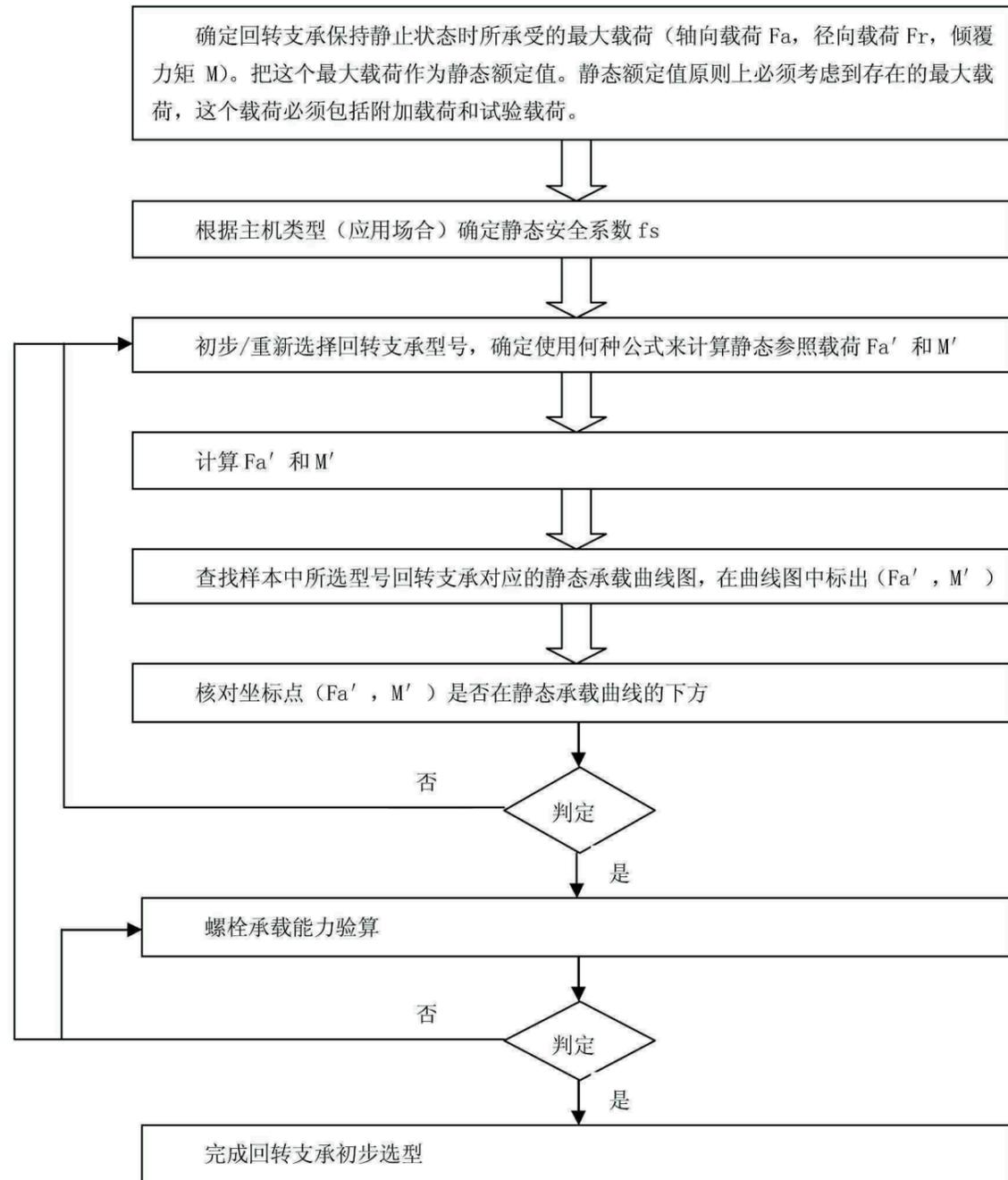
回转支承承载能力曲线:每个型号的回转支承都对应一个承载能力曲线图,曲线可以帮助用户初步地选择回转支承.曲线图中有二种类型的曲线,一类为静态曲线(1线),表示回转支承保持静止状态时所能承受的最大负荷.另一类为回转支承螺栓负荷曲线(8.8、10.9线),它是在螺栓夹持长度为螺栓公称直径的5倍,预紧力为螺栓材料屈服极限的70%时确定的。

Each model slewing bearing matches one load curve, which shows the load to help customer with selecting the ring type. Two curve lines are shown on the curve chart, No. 1 is the static curve showing maximum load while slewing bearing doesn't work, the other is the bolt ultimate load curve(8.8 and 10.9 lines), which is confirmed when connecting length is five times of bolt nominal diameter and pre-stress is 70% of bolt material yield limit.

#### 4.4 回转支承选型计算方法 Slewing Bearing Type Selection and Calculation

##### 1 静态选型 Selection in static status:

1) 选型计算流程图 The calculation chart



2) 静态参照载荷 Fa' 和 M' 的计算方法: Fa' and M' calculation method.

- 单排四点接触球式 Single-row Four Point Contact Ball Slewing Bearing 分别按承载角 45° 和 60° 两种情况进行。(to calculate per angle 45° and 60°)

I、a=45° II、a=60°

$$Fa'=(1.225 \times Fa+2.676 \times Fr) \times fs \quad Fa'=(Fa+5.046 \times Fr) \times fs$$

$$M'=1.225 \times M \times fs \quad M'=M \times fs$$

然后在曲线图上找出以上二点，其中一点在曲线以下即可。

(Then find the two points on curve, and one point below curve is ok)。

- 单排交叉滚柱式 Single-row Crossed Roller Slewing Bearing

$$Fa'=(Fa+2.05Fr) \times fs \quad M'=M \times fs$$

- 双排异径球式 Double-row Ball Slewing Bearing

对于双排异径球式回转支承选型计算，当  $Fr \leq 10\%Fa$  时， $Fr$  忽略不计；当  $Fr \geq 10\%Fa$  时，必须考虑轨道内侧压力角的变化，其计算请与我们联系。

Regarding the selection and calculation of double row ball slewing bearing,  $Fr \leq 10\%Fa$ ,  $Fr$  is negligible;  $Fr \geq 10\%Fa$ , must considerate the change of the pressure angle in raceway, pls contact us for assistance.

$$Fa'=Fa \times fs \quad M'=M \times fs$$

- 三排滚柱式 Three row Roller Slewing Bearing

仅对轴向滚道负荷和倾覆力矩的作用进行计算。

For the selection of the three row roller slewing bearing, only need to calculate the function of axial rolling load and moment.

$$Fa'=Fa \times fs \quad M'=M \times fs$$

2 动态选型: Selection in dynamic status

对于连续运转、高速回转和其它对回转支承的寿命有具体要求的应用场合，请与我公司技术部联系。

Please contact us for assistance when your slewing bearing need to work in the condition of constant and high-speed operation, or in other special work fields.

3 螺栓承载能力验算 The bolt load calculation:

- 1) 把回转支承所承受的最大载荷(没有乘静态安全系数fs)作为选择螺栓的载荷;

Take the maximum load of slewing bearing as the bolt load.

- 2) 查对载荷是否落在所需等级螺栓极限负荷曲线以下;

Check if the load is below the limited load curve of bolts wanted

- 3) 若螺栓承载能力不够，可重新选择回转支承，或与我公司技术部联系。

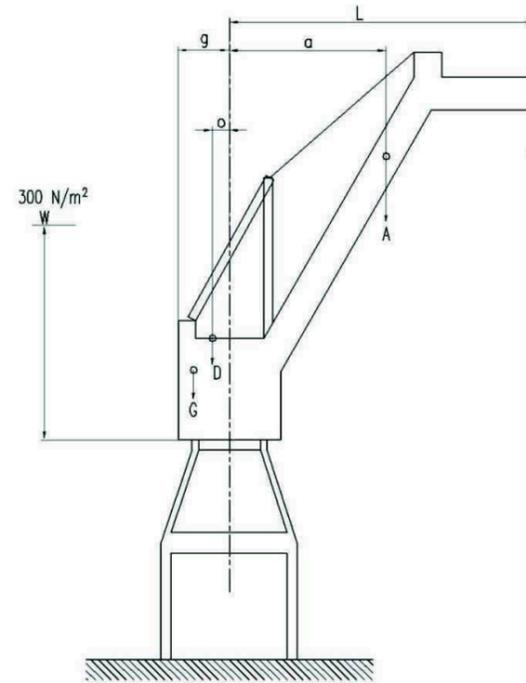
If the bolt load is not enough for using, pls consider to select the other ring, or contact us for assistance.

选型计算距离 - 门坐式起重机 (抓斗) Calculate distance- portal crane

表一

应用场合		静负荷安全系数 $f_s$	寿命负荷系数 $f_L$	原则上, 必须以作用在支承上的最大载荷做为静态计算值, 这个载荷必须包括附加载荷和试验载荷。 没有被列入表中的应用场合, 可以参照表中与其相类似的工作条件和应用, 选取静安全系数 $f_s$ 。 *) 上回转式塔机 $M$ =空载时的反向倾覆力矩 $M$ =幅度最大时的倾覆力矩 **) 对于静安全系数 $f_s$ 取1.45 的应用场合, 因平均负载较高和繁重的工作场合, 应优先选择多排滚道式回转支承。  在这些应用场合, 工作条件变化相当大, 比如对于不经常回转的情况下使用的回转支承, 只要求静态校核。对于连续回转和间歇式情况下使用的回转支承, 将需要进行动态寿命计算。	
浮式起重机(货物负载) 汽车起重机(货物负载) 船用甲板起重机(抓斗) 焊接设备 工作台(连续运转)		1.10	1.0		
塔式起重机	上回转	1.25	$M_f \leq 0.5M$		1.0
			$0.5M \leq M_f < 0.8M$		1.15
			$M_f \geq 0.8M$		1.25
	下回转		1.0		
回转式起重机(货物负载) 造船厂起重机 装船机/卸船机			1.15		
冶金起重机			1.5		
汽车起重机(抓斗式或处理繁重工作) 回转式起重机(抓斗或吸盘) 桥式起重机(抓斗或吸盘) 浮式起重机(抓斗或吸盘)		1.45**	1.7		
斗轮挖掘机 堆取料机 悬臂输送机			2.15		
近海起重机		根据特殊的标准			
铁路起重机 甲板起重机(货物负载)		1.00	对于这些应用, 请参见右面说明		
堆料机 输送机		1.10			
绳索式挖掘机/索斗		1.25			
小于等于1.5m <sup>3</sup> 液压挖掘机		1.45			
大于1.5m <sup>3</sup> 液压挖掘机		根据特殊的标准			
钢包回转台		1.75			

注:  $f_L$  为动态安全系数, 它必须结合动态承载曲线使用(动态承载曲线不包含在此样本中)。它来源于经验和试验, 是基于最大工作载荷情况下的一个参考值。



采用承载能力曲线选型时, 最大负荷的计算方法推荐如下:

在选择回转支承之前, 首先确定对该主机应考虑的安全系数  $f_s$ , 可由表1查得。

门坐式起重机(抓斗):  $f_s=1.45$  已知最大静载荷出现在幅度最大时, 其载荷计算公式如下:

1) 计八级风力的最大工作载荷

$$\text{轴向力 } F_a = Q + A + O + G$$

$$\text{倾覆力矩 } M = Q \times I_{\max} + A \times a_{\max} + W \times r - O \times o - G \times g$$

2) 不计风力, 考虑 25% 实验负荷的载荷

$$\text{轴向力 } F_a = 1.25Q + A + O + G$$

$$\text{倾覆力矩 } M = 1.25Q \times I_{\max} + A \times a_{\max} - O \times o - G \times g$$

例: 已知一抓斗港口吊最大幅度时的工作负荷和幅值为:

$$Q = 260 \text{KN} \quad I_{\max} = 23 \text{m}$$

$$A = 75 \text{KN} \quad a_{\max} = 11 \text{m}$$

$$O = 450 \text{KN} \quad o = 0.75 \text{m}$$

$$G = 900 \text{KN} \quad g = 3 \text{m}$$

$$W = 27 \text{KN} \quad r = 6.5 \text{m}$$

1) 八级风力时的最大工作载荷:

$$F_a = Q + A + O + G = 260 + 75 + 450 + 900 = 1685 \text{KN}$$

$$\begin{aligned} M &= Q I_{\max} + A \times a_{\max} + W \times r - O \times o - G \times g \\ &= 260 \times 23 + 75 \times 11 + 27 \times 6.5 - 450 \times 0.75 - 900 \times 3 \\ &= 3943 \text{KNm} \end{aligned}$$

2) 不计风力, 考虑 25% 试验负载时的最大工作载荷

$$F_a = 1.25 \times Q + A + O + G = 325 + 75 + 450 + 900 = 1750 \text{KN}$$

$$M = 1.25 \times Q \times I_{\max} + A \times a_{\max} - O \times o - G \times g$$

$$= 325 \times 23 + 75 \times 11 - 45 \times 0.75 - 900 \times 3$$

$$= 5566.3 \text{KNm}$$

3) 不计风力时最大工作载荷

$$F_a = 1685 \text{KN}$$

$$M = Q \times I_{\max} + A \times a_{\max} - O \times o - G \times g$$

$$= 260 \times 23 + 75 \times 11 - 450 \times 0.75 - 900 \times 3$$

$$= 3767.5 \text{KNm}$$

选用符合情况 2 作为静态计算的工作载荷。

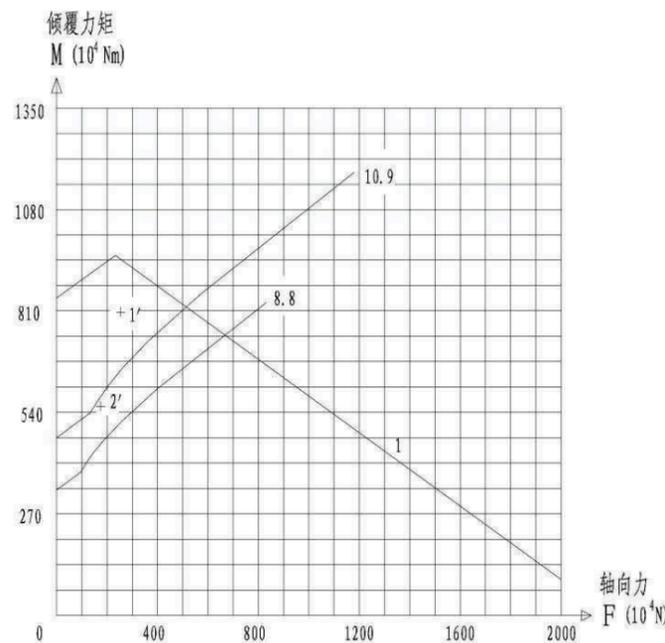
回转支承静态参照载荷为:

$$F_a' = 1750 \text{KN} \times 1.45 = 2537.5 \text{KN}$$

$$M' = 5566.3 \text{KNm} \times 1.45 = 8071.1 \text{KNm}$$

而螺栓的计算载荷为:  $F_a = 1750 \text{KNm} = 5566.3 \text{KNm}$

按上述计算结果, 在承载能力曲线中选择, 可确定选用 131.45.2000.002 回转支承。



1 线为静态承载能力曲线

8.8、10.9 为螺栓承载曲线

1' - 静态载荷点

2' - 螺栓载荷点

1' 点在滚道静态承载曲线 1 下方, 因此满足要求

2' 点在 10.9 级螺栓承载曲线下方, 因此选择 10.9 级螺栓可以满足要求。

## 5. 回转支承安装与保养 Slewing Bearing Installation And Maintenance

### 5.1 装卸与储运 Loading and unloading & storage and transportation

1) 回转支承必须小心装卸

Slewing bearing must be loaded or unloaded carefully.

2) 运输和储存以水平放置为宜, 储存必须放在干燥的室内。

Slewing bearing should be placed on level while storage and transportation must be stored in dry room.

3) 吊装宜用吊环螺钉, 一水平方式进行, 且勿碰撞, 特别是径向方向的碰撞

It is suitable to use eye bolt and keep bearing horizontal while lifting, never collision, especially radial collision.

4) 回转支承外表面涂有防锈剂, 其防锈期一般为 6 个月, 对于超过 6 个月的储存的 (如作配件) 应重新进行防锈包装或采取其它储存措施。

External surface of slewing bearing should be coated with anti-rust oil, the period of anti-rust is normal six months, if storage period exceed six months (such as use for fittings), bearing should be prevented rust and packaged again or adopt other measures of storage & transportation.

### 5.2 回转支承安装 Slewing bearing installation

#### 5.2.1 安装支架的要求 Requirements of mounting bracket

1) 安装配合支架一般采用筒形结构, 同壁与轨道中心对齐为好。

Mounting combination bracket normally adopt barrel type structure, tunnel wall must be in alignment with raceway center.

2) 为了防止回转支承局部过载, 保证其灵活运转, 安装支架应在所有焊接工序后进行消除内应力处理, 并对安装平面进行机械加工, 其平面度 (包括水平面的角度偏差) 应控制在一定范围内。见表 1

In order to avoid slewing bearing partial overload, ensure operating flexible, mounting bracket should be relieved internal stress after all welding sequence, and process mounting plane, the planeness (include plane angular deviation) should be controlled within a certain range, see table 1:

滚道中心圆直径 DL(mm) Raceway center circle diameter(mm)	安装支架平面偏差 P ( mm ) Mounting bracket plane deviation P(mm)		
	单排四点接触球式支 承single row four point contact ball slewing bearing bracket	双排球式支承 Double row ball slewing bearing bracket	滚柱式支承 Cylindrical roller slewing bearing bracket
~1000	0.15	0.20	0.10
> 1000~1500	0.19	0.25	0.12
> 1500~2000	0.22	0.30	0.15
> 2000~2500	0.25	0.35	0.17
> 2500~4000	0.30	0.40	0.20
> 4000~6000	0.40	0.50	0.30
> 6000~8000	0.50	0.60	0.40

表1 包含角偏差在内的平面度许可值 Planeness allowable value including angular deviation

注:

表1中的数值为最大值,在180°的扇形区内只允许有一处波峰达到该值,并在0°~90°~180°区域内平稳上升或下降。不允许忽升忽降,以避免峰值负荷。

Note: the numerical value in table 1 is maximum value, permit one wave crest to achieve this value in sector region of degree 180, and steadily rise or decline in the region of 0°~90°~180°, not permit sharp increase or sharp decline, so as to avoid peak load.

3) 安装支架还应具有良好的刚性。在最大允许符合下,挠曲变形量应控制在表2规定的范围内。

Mounting bracket should possess well rigidity. Under max permissible load, deflection deformation should be controlled within specified range of Table 2.

滚道中心圆直径 Raceway center circle diameter(mm)	~1000	> 1000 ~ 1500	> 1500 ~ 2000	> 2000 ~ 2500	> 2000 ~ 2500	> 2500 ~ 3000	> 3000 ~ 3500	> 3500 ~ 4000	> 4000 ~ 4500	> 5000 ~ 5500	> 5500 ~ 6000
支架平面最大扰度 Bracket plane max deflection (mm)	0.6	0.8	1.0	1.3	1.6	2.0	2.5	3.0	3.6	4.2	4.8

表2 最大与许符合下的挠曲变形量 Deflection deformation under max permissible load

4) 安装支架的螺栓孔按 GB/T5277-1985 中级精度加工,并于回转支承安装孔对齐。

Bolt holes of mounting bracket should be processed as per middle level accuracy of standard GB/T5277-1985, and must be in alignment with support mounting hole of slewing bearing.

### 5.2.2 回转支承用螺栓的选择与安装注意事项

#### Notice of Selection and Installation of Bolt

1. 螺栓按GB3098.1和GB 5782选用,亦可自行设计大六角头螺栓性能等级为8.8级、10.9级和12.9级。

对于一般建筑机械,建议采用10.9级螺栓。

对于额定载荷下螺栓静强度要求和最大载荷下螺栓屈服强度要求很高,而对于疲劳强度要求不严格时,可选用12.9级螺栓。

对于载荷频繁多变,螺栓强度要求极为严格的场所,可选用8.8级螺栓。

2. 紧固螺母按GB3098.2和GB6175选用或自行设计大六角头螺母。其性能等级应与螺栓相配。

3. 不应采用弹簧垫圈防松。建议采用具有双面防松齿纹并经淬硬的平垫圈防松或双螺母防松。当采用双螺母防松时,双螺母采用GB6170规定的两个螺母;也可选用GB6175规定的一个厚螺母,GB6172规定的一个薄螺母,外螺母为厚螺母,内螺母为薄螺母。两螺母材料相同。

4. 拧紧螺栓时,应在螺栓的螺纹及螺母断面涂润滑油,并用扭矩扳手在180°方向对称均匀多次拧紧。如图所示:

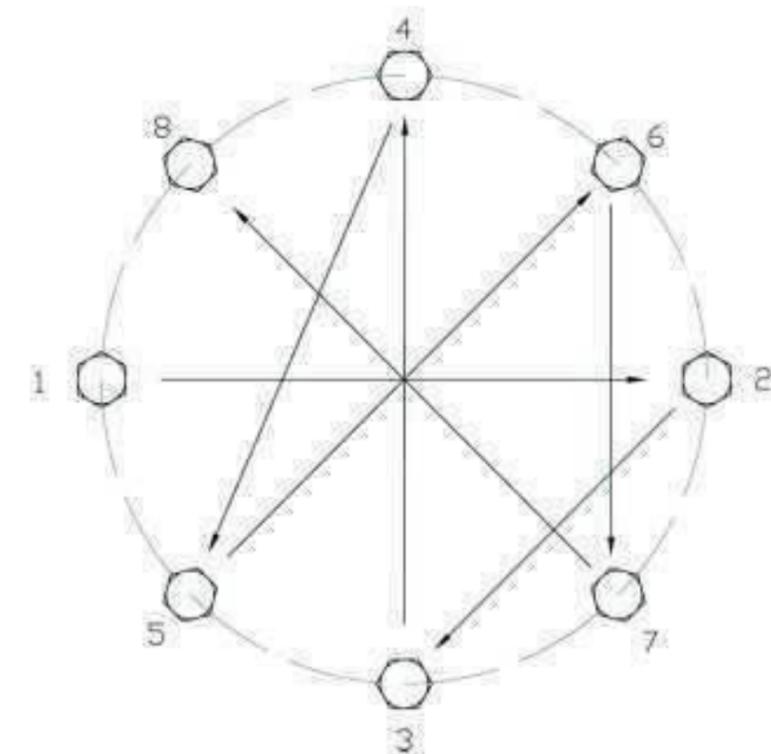


图3 figure 3

1. You can select the bolt of GB3098.1 and GB5782. and also could design the hexagon head blot by yourself. The performance classifications include 8.8, 10.9 and 12.9.It is usually use 10.9 level of bolt in the commonly construction machine.If there is a strictly requirement on bolt static strength under rated load and bolt yield strength undermaximum load but not rigid on fatigue strength. You can use 12.9 level bolt.In the condition that load change frequently and have extreme demand on bolt fatigue strength, you' d better choose 8.8 level bolt.
2. Tightening nut have GB3098.2, GB6175 and also could design the hexagon head nut by yourself. The performance classification should accord with the bolt.
3. The use of any type of elastic washer is forbidden. It is advised to use quenched and tempered flat washers which has locked on double-face or use double nuts. When use double nuts, two nuts can select from GB6170; or select one thick outside nut from GB6175 and one thin inside nut from GB6172. Thematerial of two nuts must use the same one.
4. when tightening the bolt, the screw thread and nut should be greased and using torquewrench symmetrically tightening bolt several times along the 180° direction. See figure in below:

### 5.2.3安装回转支承Installing slewing bearing

1) 安装前，回转支承安装基准面和支架安装平面必须清理干净，去除油污、毛刺、油漆以及其他异物。

Before installing, be sure to keep the slewing bearing base clear, must clear surface sundries, burr, paint and other foreign matter.

2) 回转支承滚到淬火软带（外部标记“S”或堵塞孔处）应置于非负荷区或非经常负荷区。

Soft zone symbol “S” was marked on ring side surface of SBI slewing bearing supplied forcustomer, or the position of fitting and filling plug hole is soft zone, soft zone should be placed in non-load area or non-regular load area while mounting .

3) 回转支承吊装到位后，应用塞尺检查贴合平面的平整度。如有间隙应重新进行机械加工，如确实无法加工可以采用填塑或局部垫片充，以防螺栓拧紧后支承变形，影响回转支承性能。

Slewing bearing has been lifted at position when mounting, use feeler gauge to inspect flatness of abutted plane. If the clearance is too large, need to re-machine, if really unable to process, may fill plastics or fill up with washers in local region, so as to avoid bearing deformation after bolt was tightened and affect slewing bearing performance.

4) 安装螺栓拧紧前，根据齿轮节圆径向跳动最高点（三个涂有绿色标记齿）调节侧间隙，并于螺栓拧紧后，在全部齿圈上进行一次齿侧间隙的检查。

Before tightening the bolt, pls be sure to adjust the gap following the greatest jumping point on the gear (color is coated on top of the ring with teeth), and inspect the gap of all ring gear after tightening the bolt.

5) 拧紧螺栓应在 180 方向对称的连续进行，最后通过一遍，保证圆周上的螺栓有相同的预紧力。

When tightening the bolt, the screw thread and nut should be greased and using torque wrench symmetrically tightening bolt several times along the 180° direction.

表 3 预紧扭矩或预紧力 Pre-tightening torque or forces of bolts

螺栓规格 Specifications of bolts	安装孔直径 ( mm ) Mounting hole Dia.	螺栓轻度等级 ( GB/T3098.1-2000 ) Bolt' s strength class	
		8.8	10.9
GB/T5782-2000 GB/T5783-2000		螺栓材料的屈服强度极限 Bolt ultimate strength $\sigma_{smin}(N/mm^2)$	
		640	900
		预紧力矩MA(Nm)Pre-tightening torque	
M10	11	44	62
M12	13.5	77.5	110
M14	15.5	120	170
M16	18	190	265
M18	20	260	365
M20	22	370	520
M22	24	500	700
M24	26	640	900
M27	30	950	1350
M30	33	1300	1800
		预紧力矩 FA(10³N) Pre-tightening force	
M33	36	293	412
M36	39	344	484
M39	42	414	581
M42	45	473	665
M45	48	553	777
M48	52	623	876
M52	56	749	1054
M56	62	863	1214
M60	66	1008	1418

注：(1) 当螺栓尺寸不符合GB/T5782-2000或GB/T5783-2000时，表值需另行计算。

(2) 螺栓头部与被夹紧面之间的总摩擦系数  $\mu = 0.14$ ，螺纹少许涂以轻油。

### 5.3 润滑与使用维护 Lubrication and maintenance

1、回转支承出厂时滚道内涂有少量的 2 号极压锂基润滑脂 (GB/T7324-1994)，启用时用户应根据不同的工作条件，重新充满新的润滑脂。

Small quantity of No.2 lithium base grease should be coated into raceway when slewing bearing leaving factory, customer should refill new grease according to different working conditions in using.

2、回转支承滚道应定期加注润滑脂。一般球类支承每运转 100 小时加油一次，滚柱类支承每 50 小时加油一次，特殊工作环境，如热带、湿度大、灰尘多、温差大以及连续工作时，应缩短润滑周期。机器长期停止运转的前后也必须加注新的润滑脂。每次润滑必须将滚道内注满润滑脂，直至从密封带处渗出为止。注润滑脂时，要慢慢转动回转支承，使润滑脂填充均匀。

Slewing bearing should be filled grease at regular intervals during use, In general, ball slewing bearing fill oil once per 100hours, roller slewing bearing fill oil per 50 hours, In special working environment, such as high temperature, high humidity, dusty, great temperature change and continuous working, need to shorten lubrication interval. And it must be fully stuffed with new grease before and after long term stop running. Every time lubricate, it must be fully filled with grease in raceway, until exuding grease trace from the edge of sealing ring. When fill grease, rotate slewing bearing slowly, make grease filling uniform.

3、齿面应经常清除杂物，并涂以相应的润滑脂。

For slewing bearing with internal or external gear, need to clear sundries frequently and coat the corresponding grease.

4、应为综合工作因素多，用户也可以根据具体要求自行选择最佳润滑脂，如滚道可采用 Mobilux EP 2、Shell Alvania EP(LP)2 润滑脂。

According to different working conditions, customer may adopt different grease to meet requirement with optimum performance, such as extreme pressure lubricant Mobilux EP2、Shell Alvania EP(LP)2 etc.

5、回转支承首次运转 100 小时后，应检查螺栓的预紧力，以后每运转 500 小时检查一次，必须保持足够的预紧力。

After slewing bearing first time operating for 100 hours, need to check bolt pre-tightening force, later operate every 500 hours to check it once, must keep enough pre-tightening force.

6、使用中注意回转支承的运转情况，如发现噪声、冲击、功率突然增大、应立即停机检查，排除故障，必要时需拆检。

Pay attention to slewing bearing operating situation in use, if discover abnormal situation such as noise, heating, shock, current suddenly increase etc, must stop the machine immediately to check and remove the faults, if necessary need strip inspection.

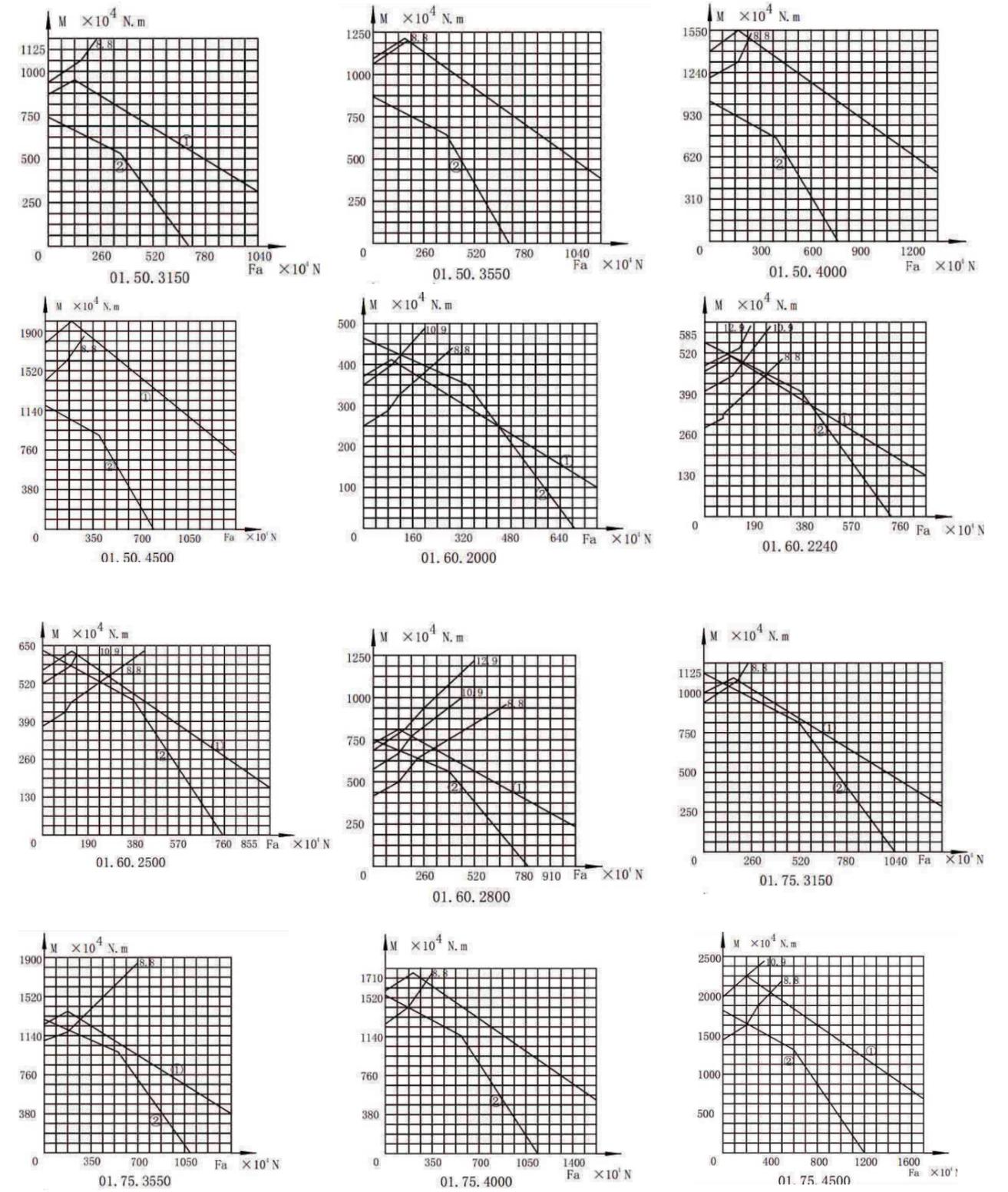
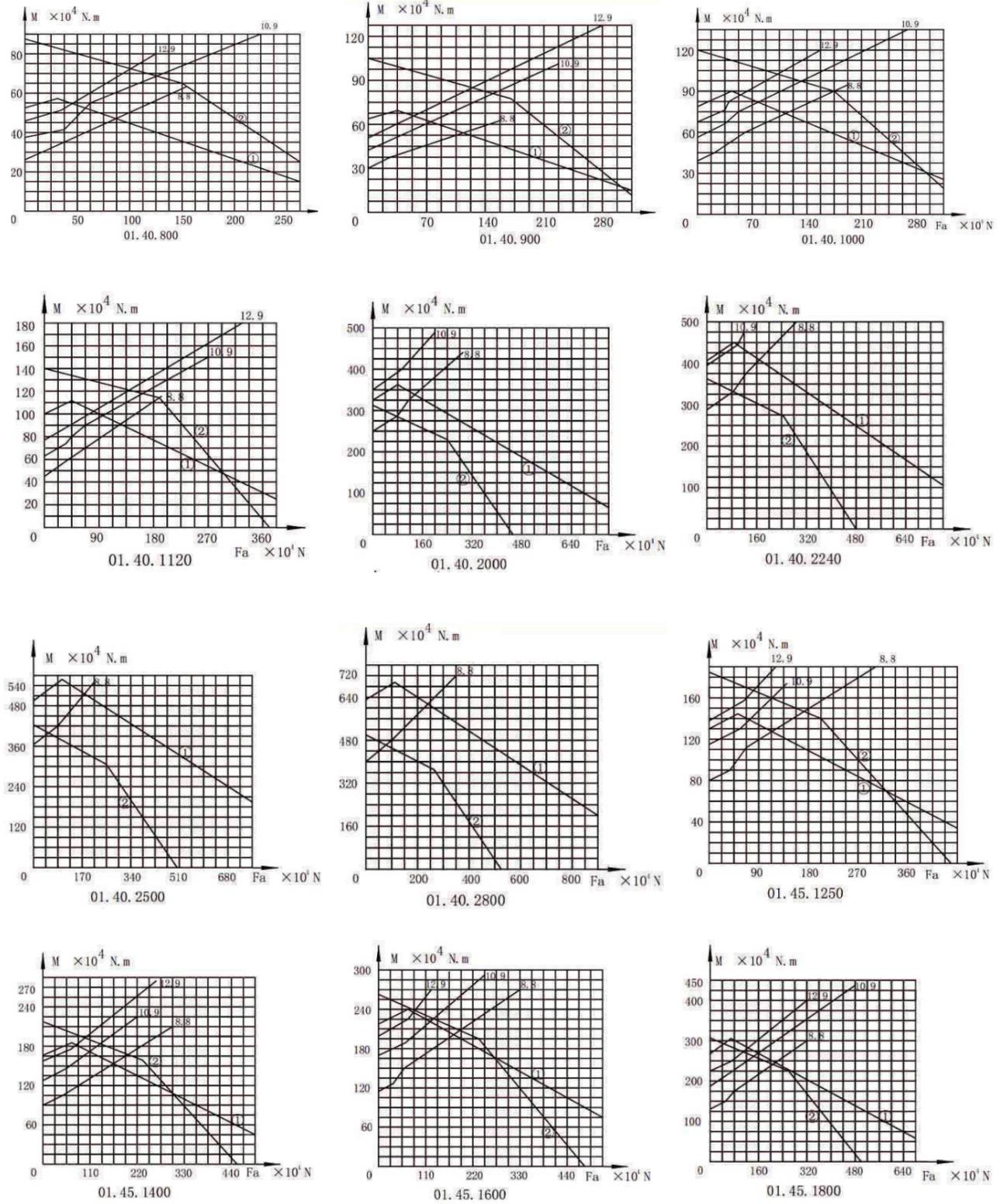
7、使用中禁止用水直接冲刷回转支承，以防进入滚道。严防较硬异物接近或进入齿啮合区。

In use, it is prohibited for slewing bearing to washing with water directly, so as to prevent water entering raceway and strictly prevent harder foreign matter near or entering teeth meshing area.

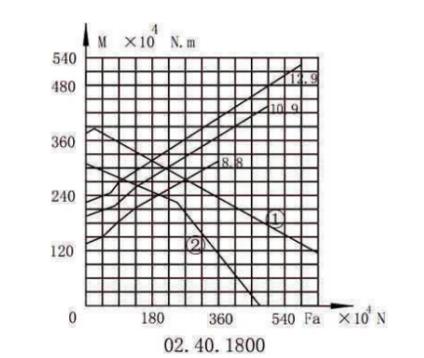
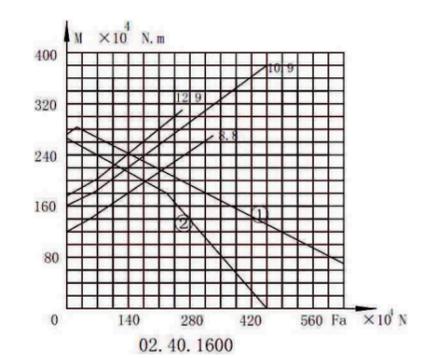
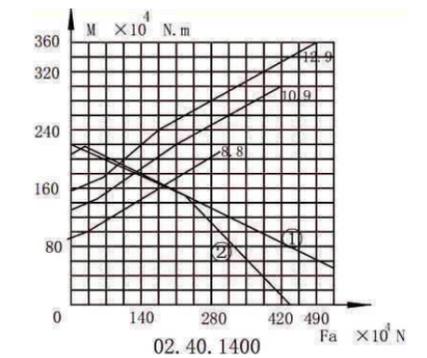
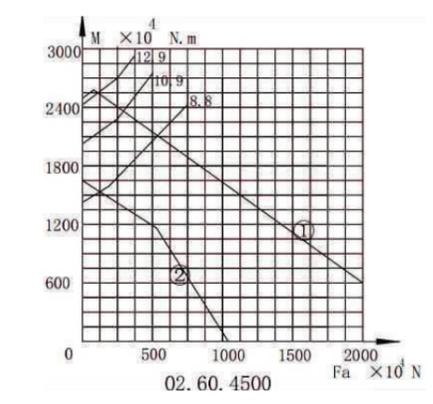
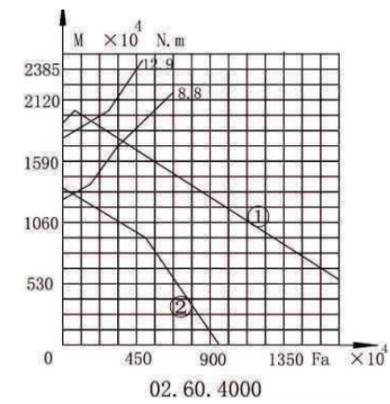
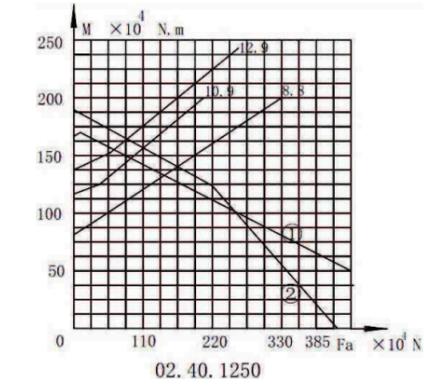
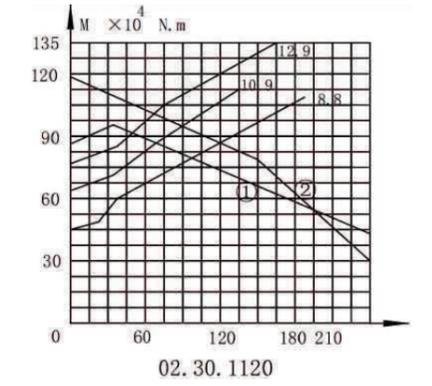
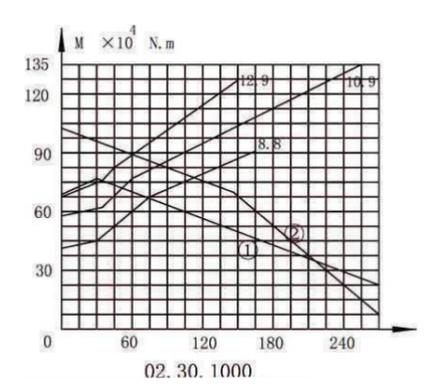
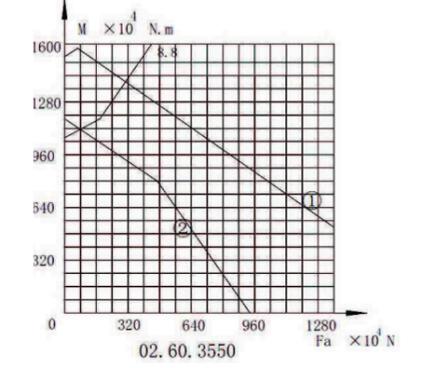
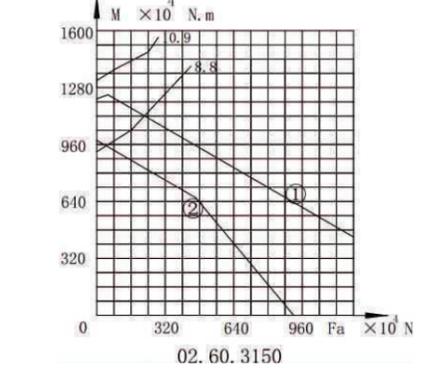
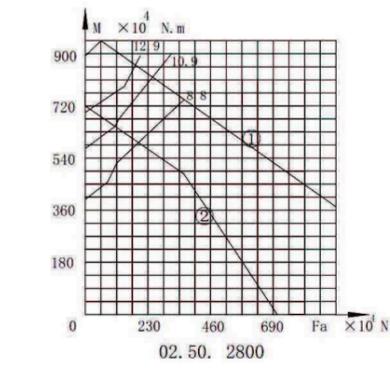
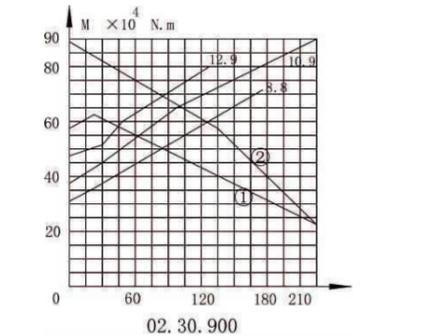
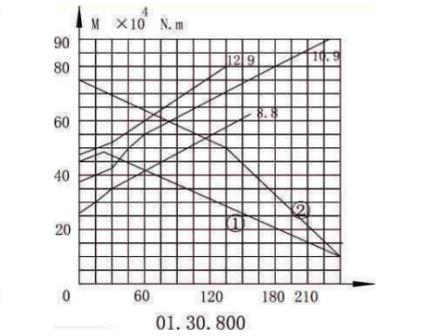
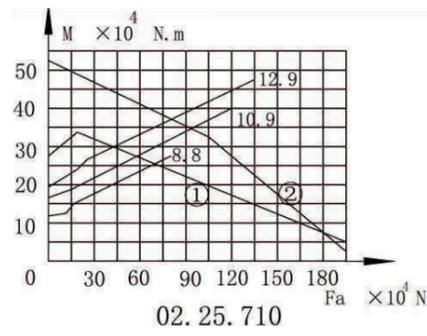
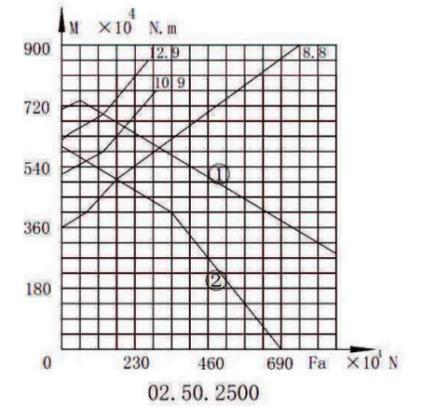
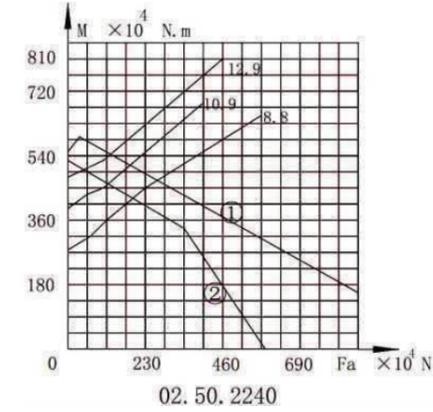
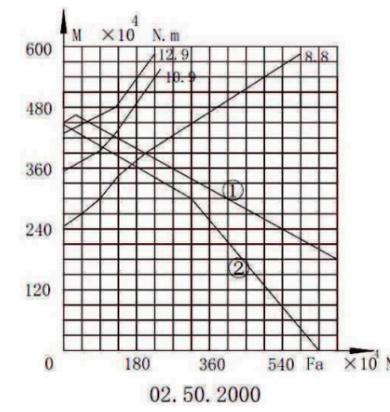
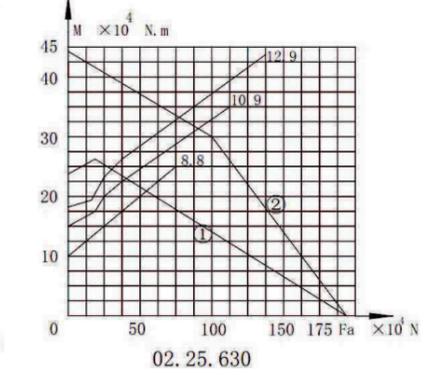
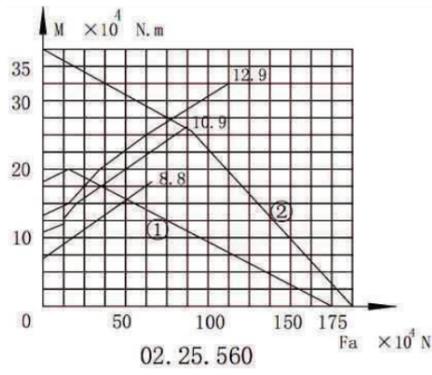
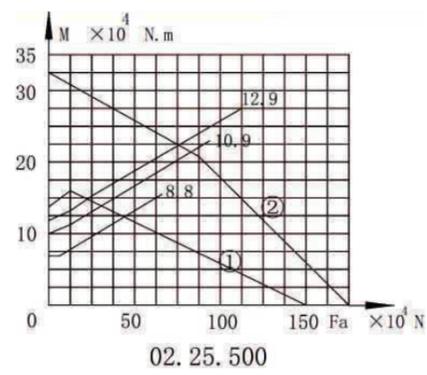
8、经常查密封的完好情况，如果发现密封袋破损应及时更换。如果发现脱落应及时复位。

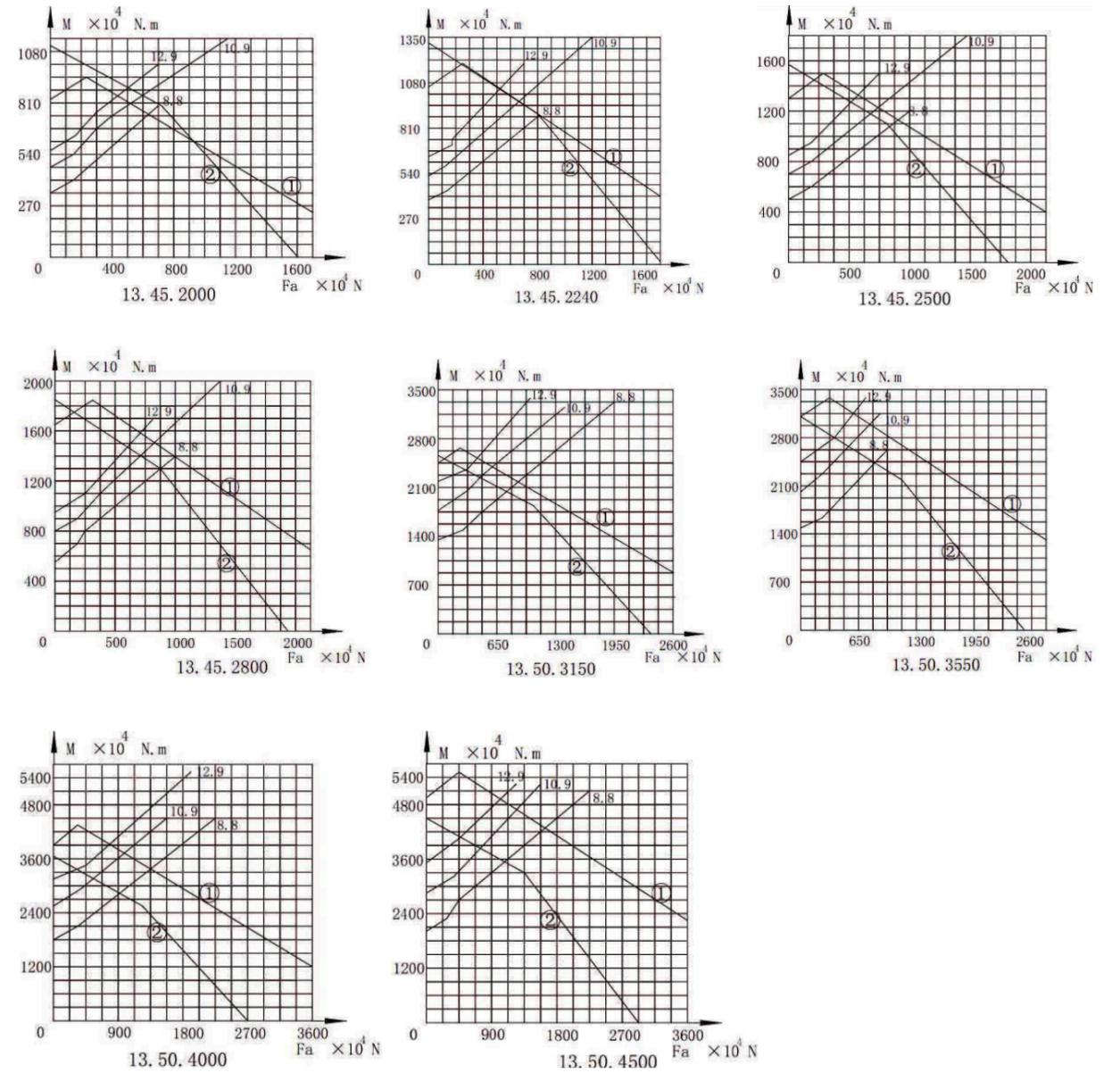
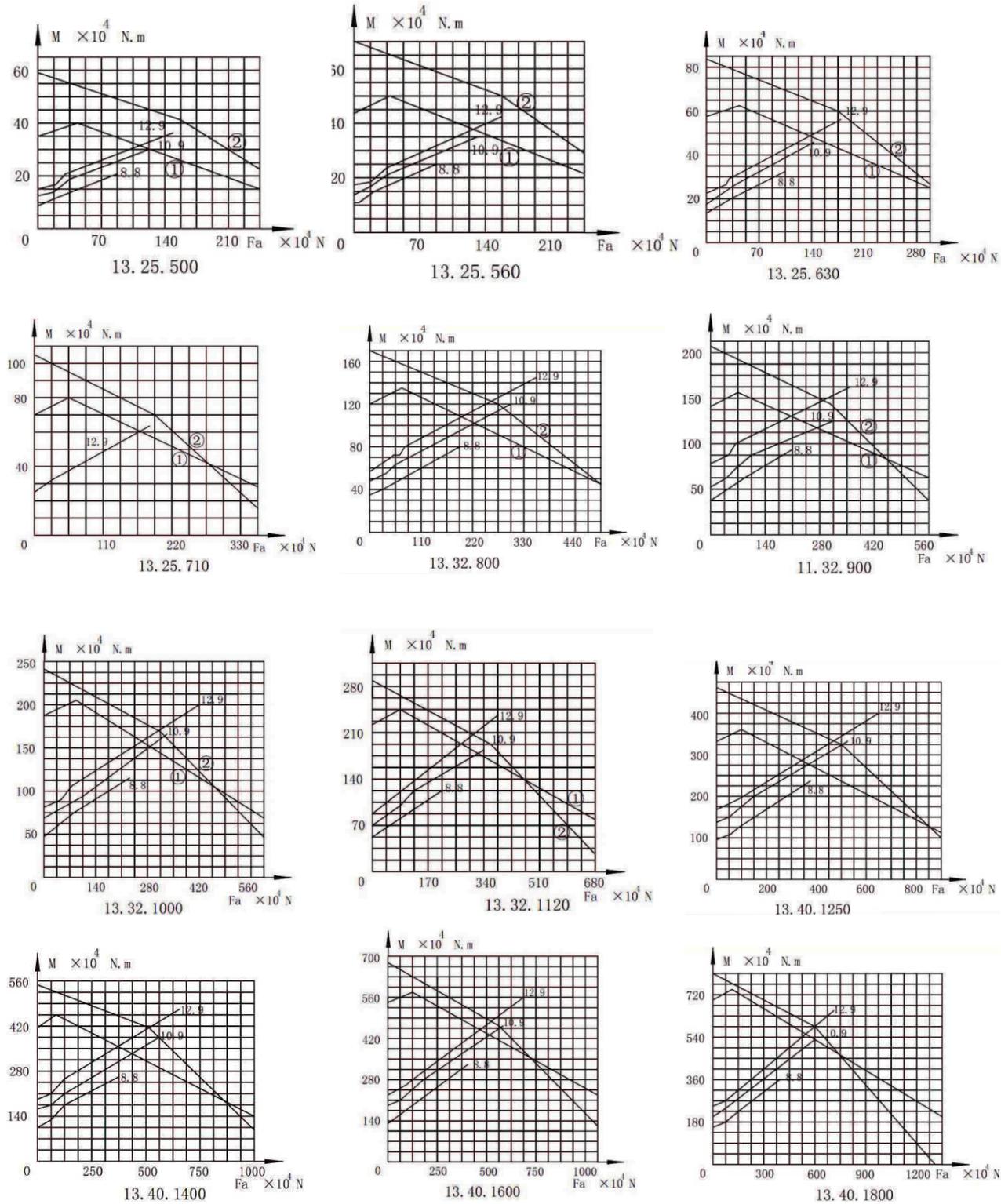
To check seal in good condition, replace sealing ring immediately if it becomes damaged, reset immediately if it feel off.

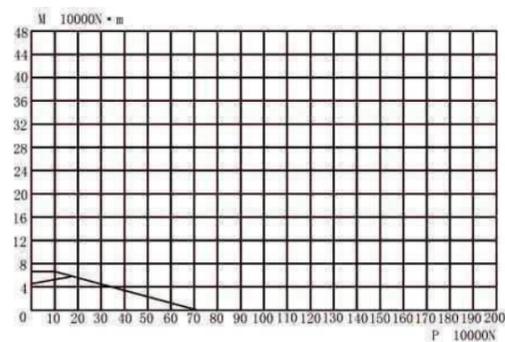




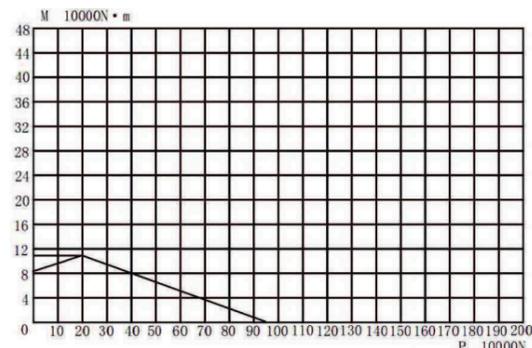




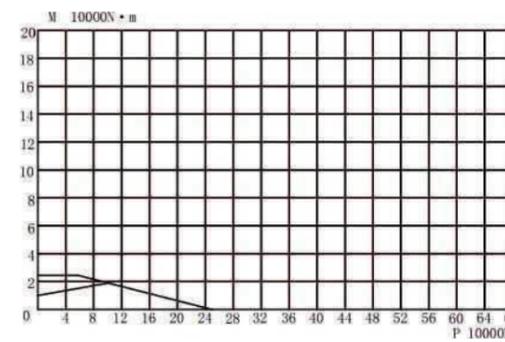




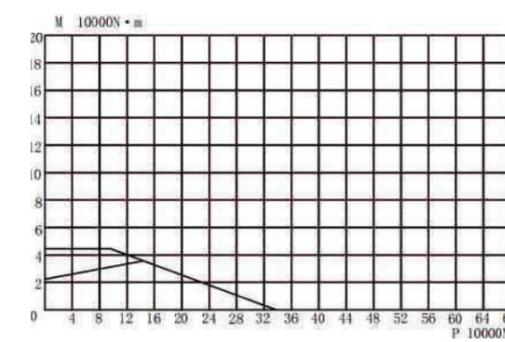
06.20.0414



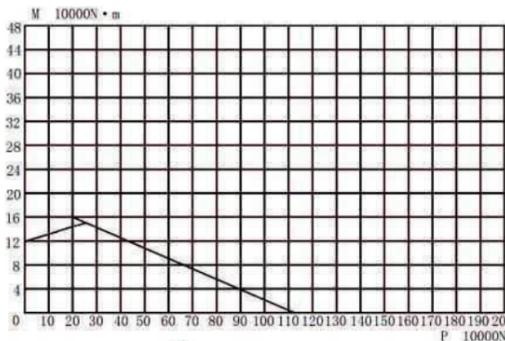
06.20.0544



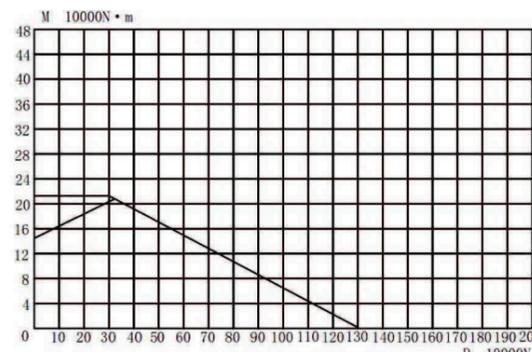
23.20.0414



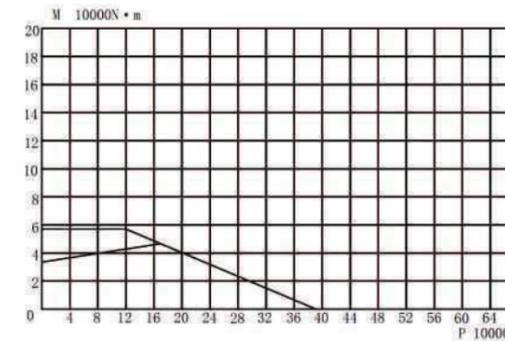
23.20.0544



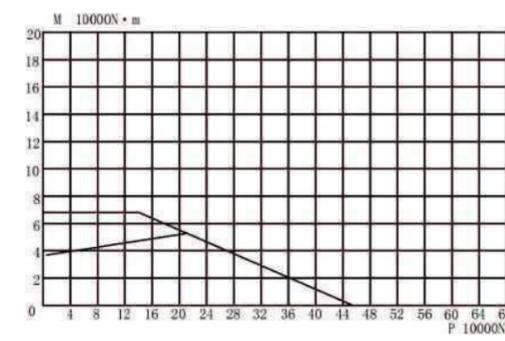
06.20.0644



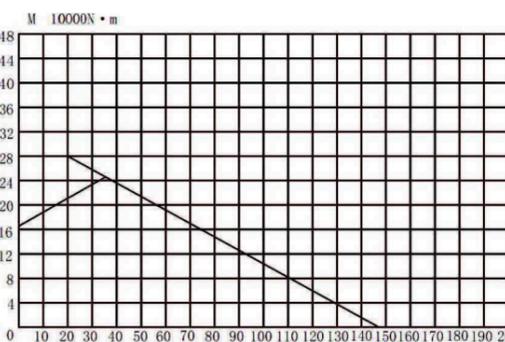
06.20.0744



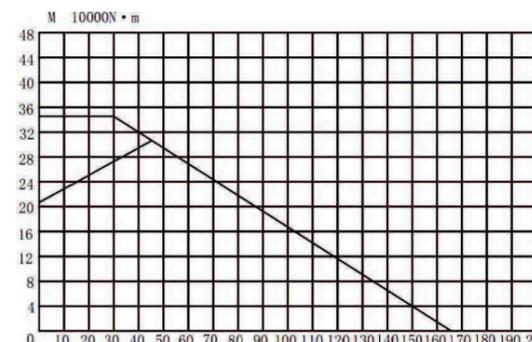
23.20.0644



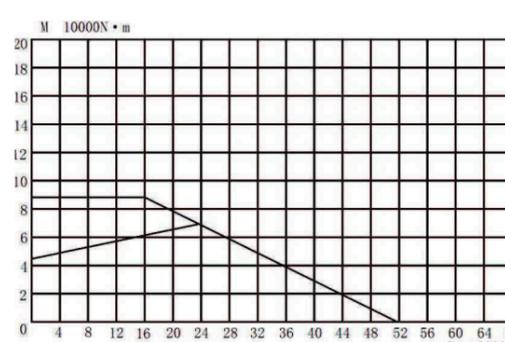
23.20.0744



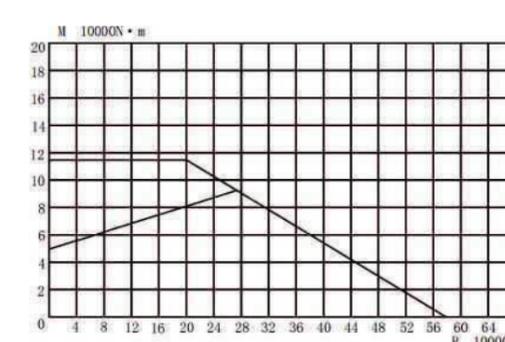
06.20.0844



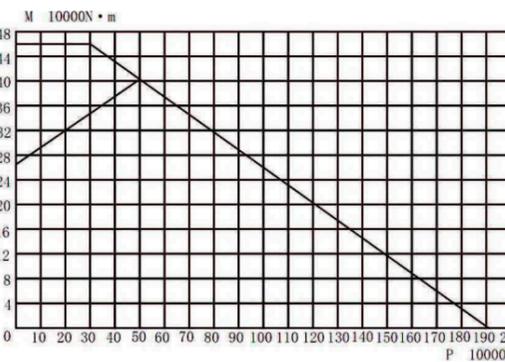
06.20.0944



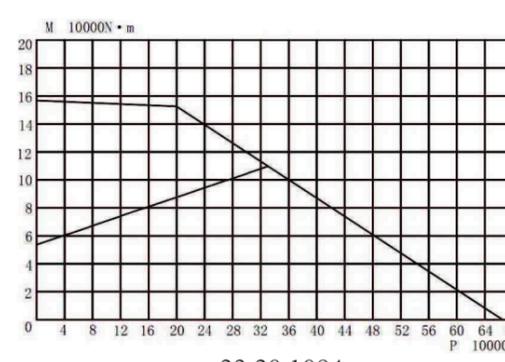
23.20.0844



23.20.0944



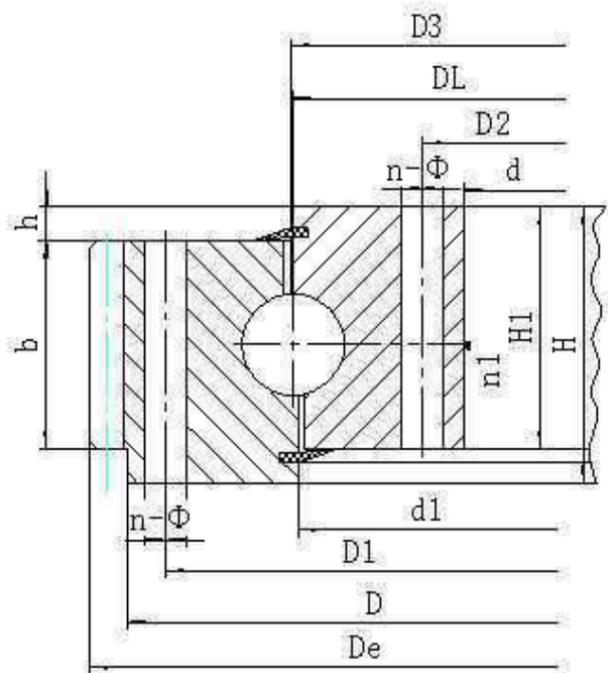
06.20.1094



23.20.1094

6.1.1 单排四点接触球式-外齿

Single Row Four Point Contact Ball Slewing Bearing - Outer Gear 011/012



011. 012

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	011.20.200	280	120	60	248
2	011.20.224	304	144	60	272
3	011.20.250	330	170	60	298
4	011.20.280	360	200	60	328
5	011.25.315	408	222	70	372
6	011.25.355	448	262	70	412
7	011.25.400	493	307	70	457
8	011.25.450	543	357	70	507
9	011.30.500 012.30.500	602	398	80	566
9'	011.25.500 012.25.500	602	398	80	566
10	011.30.560 012.30.560	662	458	80	626
10'	011.25.560 012.25.560	662	458	80	626
11	011.30.630 012.30.630	732	528	80	696
11'	011.25.630 012.25.630	732	528	80	696
12	011.30.710 012.30.710	812	608	80	776
12'	011.25.710 012.25.710	812	608	80	776
13	011.40.800 012.40.800	922	678	100	878
13'	011.30.800 012.30.800	922	678	100	878
14	011.40.900 012.40.900	1022	778	100	978
14'	011.30.900 012.30.900	1022	778	100	978
15	011.40.1000 012.40.1000	1122	878	100	1078
15'	011.30.1000 012.30.1000	1122	878	100	1078
16	011.40.1120 012.40.1120	1242	998	100	1198
16'	011.30.1120 012.30.1120	1242	998	100	1198

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-dn1、n-dn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、外齿修顶系数为0.1

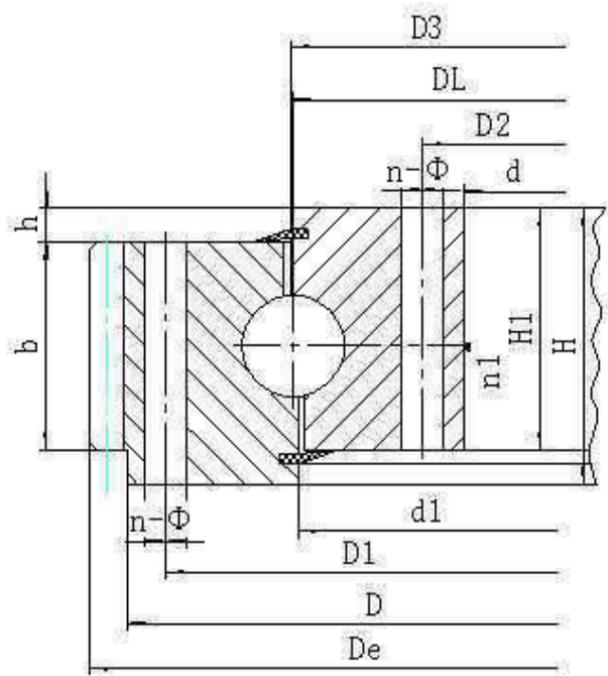
NOTE:

1. n1 is the nos of lubricating holes. Oil cup M10×1 JB/T7940.1~JB/T7940.2.
2. Mounting hole n-dn1、n-dn2 can change to tapped hole; tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.1.

安装尺寸Mounting dimensions					结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	M mm	De mm	z	正火 Normalizing Z 10 <sup>4</sup> N	调质 Quenching T 10 <sup>4</sup> N	
152	12	16	M14	28	2	201	199	50	10	40	0	3	300	98	1.5	2.1	24
176	12	16	M14	28	2	225	223	50	10	40	0	3	321	105	1.5	2.1	25
202	18	16	M14	28	2	251	249	50	10	40	0	4	352	86	2.1	2.8	30
232	18	16	M14	28	2	281	279	50	10	40	0	4	384	94	1.5	2.8	34
258	20	18	M16	32	2	316	314	60	10	50	0	5	435	85	2.9	4.4	52
298	20	18	M16	32	2	356	354	60	10	50	0	5	475	93	2.9	4.4	59
343	20	18	M16	32	2	401	399	60	10	50	0	6	528	86	3.5	5.3	69
393	20	18	M16	32	2	451	449	60	10	50	0	6	576	94	3.5	5.3	76
434	20	18	M16	32	4	501	498	70	10	60	0.5	5	629	123	3.7	5.2	85
												6	628.8	102	4.5	6.2	
434	20	18	M16	32	4	501	499	70	10	60	0.5	5	629	123	3.7	5.2	85
												6	628.8	102	4.5	6.2	
494	20	18	M16	32	4	561	558	70	10	60	0.5	5	689	135	3.7	5.2	95
												6	688.8	112	4.5	6.2	
494	20	18	M16	32	4	561	559	70	10	60	0.5	5	689	135	3.7	5.2	95
												6	688.8	112	4.5	6.2	
564	24	18	M16	32	4	631	628	70	10	60	0.5	6	772.8	126	4.5	6.2	110
												8	774.4	94	6	8.3	
564	24	18	M16	32	4	631	629	70	10	60	0.5	6	772.8	126	4.5	6.2	110
												8	774.4	94	6	8.2	
644	24	18	M16	32	4	711	708	70	10	60	0.5	6	850.8	139	4.5	6.2	120
												8	854.4	104	6	8.3	
644	24	18	M16	32	4	711	709	70	10	60	0.5	6	850.8	139	4.5	6.2	120
												8	854.4	104	6	8.9	
722	30	22	M20	40	6	801	798	90	10	80	0.5	8	966.4	118	8	11.1	220
												10	968	94	10	14	
722	30	22	M20	40	6	801	798	90	10	80	0.5	8	966.4	118	8	11.1	220
												10	968	94	10	14.1	
822	30	22	M20	40	6	901	898	90	10	80	0.5	8	1062.4	130	8	11.1	240
												10	1068	104	10	14	
822	30	22	M20	40	6	901	898	90	10	80	0.5	8	1062.4	130	8	11.1	240
												10	1068	104	10	14	
922	36	22	M20	40	6	1001	998	90	10	80	0.5	10	1188	116	10	14	270
												12	1185.6	96	12	16.7	
922	36	22	M20	40	6	1001	998	90	10	80	0.5	10	1188	116	10	14	270
												12	1185.6	96	12	16.7	
1042	36	22	M20	40	6	1121	1118	90	10	80	0.5	10	1298	127	10	14	300
												12	1305.6	106	12	16.7	
1042	36	22	M20	40	6	1121	1118	90	10	80	0.5	10	1298	127	10	14	300
												12	1305.6	106	12	16.7	

6.1.1 单排四点接触球式-外齿

Single Row Four Point Contact Ball Slewing Bearing - Outer Gear 011/012



011.012

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
17	011.45.1250 012.45.1250	1390	1110	110	1337
17'	011.35.1250 012.35.1250	1390	1110	110	1337
18	011.45.1400 012.45.1400	1540	1260	110	1487
18'	011.35.1400 012.35.1400	1540	1260	110	1487
19	011.45.1600 012.45.1600	1740	1460	110	1687
19'	011.35.1600 012.35.1600	1740	1460	110	1687
20	011.45.1800 012.45.1800	1940	1660	110	1887
20'	011.35.1800 012.35.1800	1940	1660	110	1887
21	011.60.2000 012.60.2000	2178	1825	144	2110
21'	011.40.2000 012.40.2000	2178	1825	144	2110
22	011.60.2240 012.60.2240	2418	2065	144	2350
22'	011.40.2240 012.40.2240	2418	2065	144	2350
23	011.60.2500 012.60.2500	2678	2325	144	2610
23'	011.40.2500 012.40.2500	2678	2325	144	2610
24	011.60.2800 012.60.2800	2978	2625	144	2910
24'	011.40.2800 012.40.2800	2978	2625	144	2910
25	011.75.3150 012.75.3150	3376	2922	174	3286
25'	011.50.3150 012.50.3150	3376	2922	174	3286
26	011.75.3550 012.75.3550	3376	3322	174	3686
26'	011.50.3550 012.50.3550	3376	3322	174	3686
27	011.75.4000 012.75.4000	4226	3772	174	4136
27'	011.50.4000 012.50.4000	4226	3772	174	4136
28	011.75.4500 012.75.4500	4726	4272	174	4636
28'	011.50.4500 012.50.4500	4726	4272	174	4636

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-dn1、n-dn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、外齿修顶系数为0.1

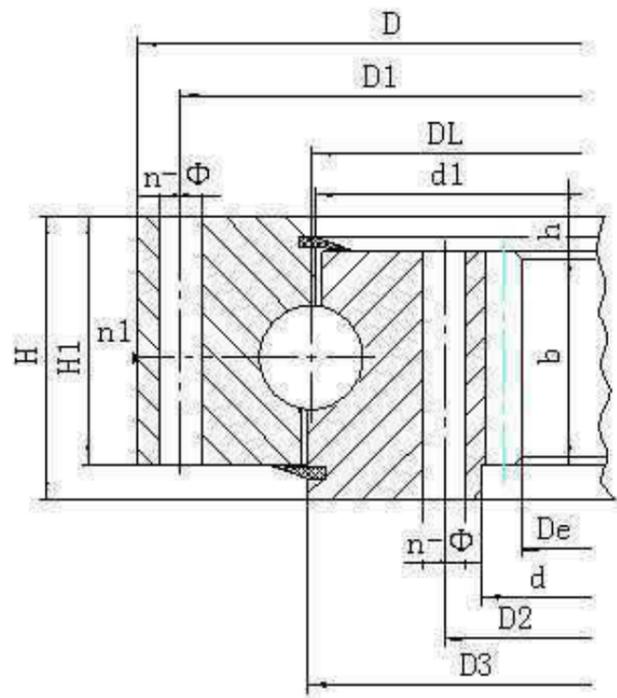
NOTE:

1. n1 is the nos of lubricating holes. Oil cup M10×1 JB/T7940.1~JB/T7940.2.
2. Mounting hole n-dn1、n-dn2 can change to tapped hole; tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force, the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.1.

安装尺寸Mounting dimensions					结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm	z	正火 Normalizing Z 10 <sup>3</sup> N	调质 Quenching T 10 <sup>3</sup> N	
1163	40	26	M24	48	5	1252	1248	100	10	90	0.5	12	1449.6	118	13.5	18.8	420
												14	1453.2	101	15.8	21.9	
1163	40	26	M24	48	5	1251	1248	100	10	90	0.5	12	1449.6	118	13.5	18.8	420
												14	1453.2	101	15.8	21.9	
1313	40	26	M24	48	5	1402	1398	100	10	90	0.5	12	1605.6	131	13.5	18.8	480
												14	1607.2	112	15.5	21.9	
1313	40	26	M24	48	5	1401	1398	100	10	90	0.5	12	1605.6	131	13.5	18.8	480
												14	1607.2	112	15.8	21.9	
1513	45	26	M24	48	5	1602	1598	100	10	90	0.5	14	1817.2	127	15.8	21.9	550
												16	1820.8	111	18.1	25	
1513	45	26	M24	48	5	1601	1598	100	10	90	0.5	14	1817.2	127	15.8	21.9	550
												16	1820.8	111	18.1	25	
1713	45	26	M24	48	5	1802	1798	100	10	90	0.5	14	2013.2	141	15.8	21.9	610
												16	2012.8	123	18.1	25	
1713	45	26	M24	48	5	1801	1798	100	10	90	0.5	14	2013.2	141	15.8	21.9	610
												16	2012.8	123	18.1	25	
1891	48	33	M30	60	8	2002	1998	132	12	120	0.5	16	2268.8	139	24.1	33.3	1100
												18	2264.4	123	27.1	37.5	
1891	48	33	M30	60	8	2001	1998	132	12	120	0.5	16	2268.8	139	24.1	33.3	1100
												18	2264.4	123	27.1	37.5	
2131	48	33	M30	60	8	2242	2238	132	12	120	0.5	16	2492.8	153	24.1	33.3	1250
												18	2498.4	136	27.1	37.5	
2131	48	33	M30	60	8	2241	2238	132	12	120	0.5	16	2492.8	153	24.1	33.3	1250
												18	2498.4	136	27.1	37.5	
2391	56	33	M30	60	8	2502	2498	132	12	120	0.5	18	2768.4	151	27.1	37.5	1400
												20	2776	136	30.1	41.8	
2391	56	33	M30	60	8	2501	2498	132	12	120	0.5	18	2768.4	151	27.1	37.5	1400
												20	2776	136	30.1	41.8	
2691	56	33	M30	60	8	2802	2798	132	12	120	0.5	18	3074.4	168	27.1	37.5	1600
												20	3076	151	30.1	41.8	
2691	56	33	M30	60	8	2802	2798	132	12	120	0.5	18	3074.4	168	27.1	37.5	1600
												20	3076	151	30.1	41.8	
3014	56	45	M42	84	8	3152	3147	162	12	150	0.5	20	3476	171	37.7	52.2	2800
												22	3471.6	155	41.5	57.4	
3014	56	45	M42	84	8	3152	3147	162	12	150	0.5	20	3476	171	37.7	52.2	2800
												22	3471.6	155	41.5	57.4	
3014	56	45	M42	84	8	3552	3547	162	12	150	0.5	20	3876	191	37.7	51.7	3500
												22	3889.6	174	41.5	57	
3014	56	45	M42	84	10	3552	3548	162	12	150	0.5	20	3876	191	37.7	51.7	3500
												22	3889.6	174	41.5	57	
3864	60	45	M42	84	10	4002	3997	162	12	150	0.5	22	4329.6	194	41.5	57	4200
												25	4345	171	47.1	64.6	
3864	60	45	M42	84	10	4002	3998	162	12	150	0.5	22	4329.6	194	41.5	57	4200
												25	4345	171	47.1	64.6	
4364	60	45	M42	84	10	4502	4497	162	12	150	0.5	22	4835.6	217	41.5	57	5100
												25	4845	191	47.1	64.6	
4364	60	45	M42	84	10	4502	4498	162	12	150	0.5	22	4835.6	217	41.5	57	5100
												25	4845	191	47.1	64.6	

6.1.2 单排四点接触球式-内齿

Single Row Four Point Contact Ball Slewing Bearing - Inner Gear 013/014



013.014

序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	013.25.315	408	222	70	372
2	013.25.355	448	262	70	412
3	013.25.400	493	307	70	457
4	013.25.450	543	357	70	507
5	013.30.500 014.30.500	602	398	80	566
5'	013.25.500 014.25.500	602	398	80	566
6	013.30.560 014.30.560	662	458	80	626
6'	013.25.560 014.25.560	662	458	80	626
7	013.30.630 014.30.630	732	528	80	696
7'	013.25.630 014.25.630	732	528	80	696
8	013.30.710 014.30.710	812	608	80	776
8'	013.25.710 014.25.710	812	608	80	776
9	013.40.800 014.40.800	922	678	100	878
9'	013.30.800 014.30.800	922	678	100	878
10	013.40.900 014.40.900	1022	778	100	978
10'	013.30.900 014.30.900	1022	778	100	978
11	013.40.1000 014.40.1000	1122	878	100	1078
11'	013.30.1000 014.30.1000	1122	878	100	1078
12	013.40.1120 014.40.1120	1242	998	100	1198
12'	013.30.1120 014.30.1120	1242	998	100	1198
13	013.45.1250 014.45.1250	1390	1110	110	1337
13'	013.35.1250 014.35.1250	1390	1110	110	1337

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-dn1、n-dn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数为0.2。

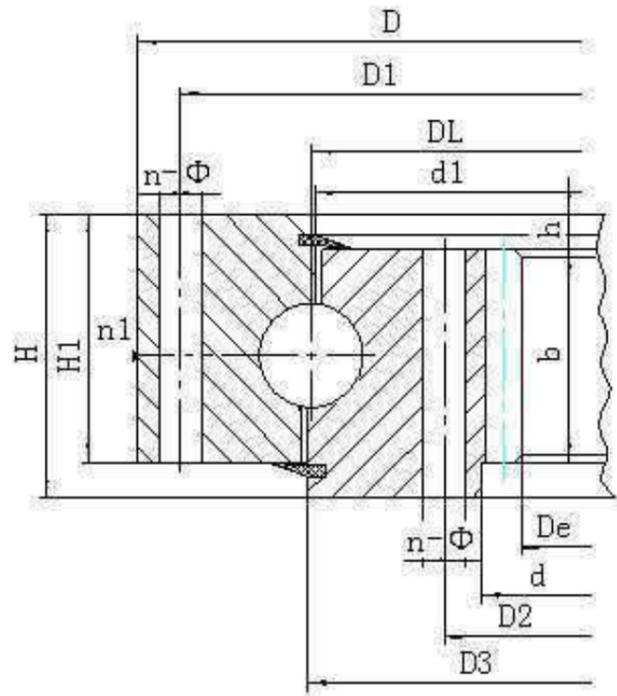
NOTE:

1. n1 is the nos of lubricating holes. Oil cup M10×1 JB/T7940.1~JB/T7940.2.
2. Mounting hole n-dn1、n-dn2 can change to tapped hole; tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force, the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.2.

安装尺寸Mounting dimensions					结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	M mm	De mm	z	正火 Normalizi ng Z 10 <sup>4</sup> N	调质 Quenchin g T 10 <sup>4</sup> N	
258	20	18	M16	32	2	316	314	60	10	50	0	5	190	40	2.9	4.4	49
298	20	18	M16	32	2	356	354	60	10	50	0	5	235	49	2.9	4.4	54
343	20	18	M16	32	2	401	399	60	10	50	0	6	276	48	3.5	5.3	62
393	20	18	M16	32	2	451	449	60	10	50	0	6	324	56	3.5	5.3	71
434	20	18	M16	32	4	501	498	70	10	60	0.5	5	367	74	3.7	5.2	85
434	20	18	M16	32	4	501	499	70	10	60	0.5	6	368.4	62	4.5	6.2	85
494	20	18	M16	32	4	561	558	70	10	60	0.5	5	427	86	3.7	5.2	95
494	20	18	M16	32	4	561	559	70	10	60	0.5	6	428.4	72	4.5	6.2	95
564	24	18	M16	32	4	631	628	70	10	60	0.5	6	494.4	83	4.5	6.2	110
564	24	18	M16	32	4	631	629	70	10	60	0.5	8	491.2	62	6	8.3	110
644	24	18	M16	32	4	711	708	70	10	60	0.5	6	572.4	96	4.5	6.2	120
644	24	18	M16	32	4	711	709	70	10	60	0.5	8	571.2	72	6	8.3	120
722	30	22	M20	40	6	801	798	90	10	80	0.5	6	635.2	80	8	11.1	220
722	30	22	M20	40	6	801	798	90	10	80	0.5	8	634	64	10	14	220
822	30	22	M20	40	6	901	898	90	10	80	0.5	8	739.2	93	8	11.1	240
822	30	22	M20	40	6	901	898	90	10	80	0.5	10	734	74	10	14	240
922	36	22	M20	40	6	1001	998	90	10	80	0.5	8	824	83	10	14	270
922	36	22	M20	40	6	1001	998	90	10	80	0.5	12	820.8	69	12	16.7	270
1042	36	22	M20	40	6	1121	1118	90	10	80	0.5	8	944	95	10	14	300
1042	36	22	M20	40	6	1121	1118	90	10	80	0.5	12	940.8	79	12	16.7	300
1163	40	26	M24	48	5	1252	1248	100	10	90	0.5	10	1048.8	88	13.5	18.8	420
1163	40	26	M24	48	5	1251	1248	100	10	90	0.5	14	1041.6	75	15.8	21.9	420

6.1.2 单排四点接触球式-内齿

Single Row Four Point Contact Ball Slewing Bearing - Inner Gear 013/014



013.014

序号 NO.	内齿式 Tinner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
14	013.45.1400	1540	1260	110	1487
	014.45.1400				
14'	013.35.1400	1540	1260	110	1487
	014.35.1400				
15	013.45.1600	1740	1460	110	1687
	014.45.1600				
15'	013.35.1600	1740	1460	110	1687
	014.35.1600				
16	013.45.1800	1940	1660	110	1887
	014.45.1800				
16'	013.35.1800	1940	1660	110	1887
	014.35.1800				
17	013.60.2000	2178	1825	144	2110
	014.60.2000				
17'	013.40.2000	2178	1825	144	2110
	014.40.2000				
18	013.60.2240	2418	2065	144	2350
	014.60.2240				
18'	013.40.2240	2418	2065	144	2350
	014.40.2240				
19	013.60.2500	2678	2325	144	2610
	014.60.2500				
19'	013.40.2500	2678	2325	144	2610
	014.40.2500				
20	013.60.2800	2978	2625	144	2910
	014.60.2800				
20'	013.40.2800	2978	2625	144	2910
	014.40.2800				
21	013.75.3150	3376	2922	174	3286
	014.75.3150				
21'	013.50.3150	3376	2922	174	3286
	014.50.3150				
22	013.75.3550	3776	3322	174	3686
	014.75.3550				
22'	013.50.3550	3776	3322	174	3686
	014.50.3550				
23	013.75.4000	4226	3772	174	4136
	014.75.4000				
23'	013.50.4000	4226	3772	174	4136
	014.50.4000				
24	013.75.4500	4726	4272	174	4636
	014.75.4500				
24'	013.50.4500	4726	4272	174	4636
	014.50.4500				

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-dn1、n-dn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数为0.2。

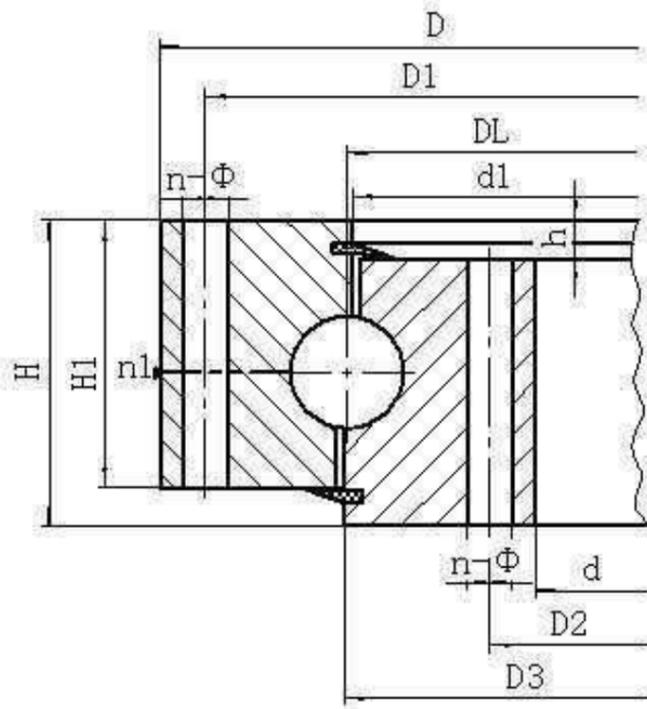
NOTE:

1. n1 is the nos of lubricating holes. Oil cup M10×1JB/T7940.1~JB/T7940.2.
2. Mounting hole n-dn1、n-dn2 can change to tapped hole; tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.2.

安装尺寸Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data				齿轮圆周力Gear circumferential force		参考重量 weight kg				
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	M mm		De mm	z	正火 Normalizing Z 10 <sup>3</sup> N	调质 Quenching T 10 <sup>3</sup> N
1313	40	26	M24	48	5	1402	1398	100	10	90	0.5	12	1192.8	100	13.5	18.8	480
												14	1195.6	86	15.5	21.9	
1313	40	26	M24	48	5	1401	1398	100	10	90	0.5	12	1192.8	100	13.5	18.8	480
												14	1195.6	86	15.8	21.9	
1513	45	26	M24	48	5	1602	1598	100	10	90	0.5	14	1391.6	100	15.8	21.9	550
												16	1382.4	87	18.1	25	
1513	45	26	M24	48	5	1601	1598	100	10	90	0.5	14	1391.6	100	15.8	21.9	550
												16	1382.4	87	18.1	25	
1713	45	26	M24	48	5	1802	1798	100	10	90	0.5	14	1573.6	113	15.8	21.9	610
												16	1574.4	99	18.1	25	
1713	45	26	M24	48	5	1801	1798	100	10	90	0.5	14	1573.6	113	15.8	21.9	610
												16	1574.4	99	18.1	25	
1891	48	33	M30	60	8	2002	1998	132	12	120	0.5	16	1734.4	109	24.1	33.3	1100
												18	1735.2	97	27.1	37.5	
1891	48	33	M30	60	8	2001	1998	132	12	120	0.5	16	1734.4	109	24.1	33.3	1100
												18	1735.2	97	27.1	37.5	
2131	48	33	M30	60	8	2242	2238	132	12	120	0.5	16	1990.4	125	24.1	33.3	1250
												18	1987.2	111	27.1	37.5	
2131	48	33	M30	60	8	2241	2238	132	12	120	0.5	16	1990.4	125	24.1	33.3	1250
												18	1987.2	111	27.1	37.5	
2391	56	33	M30	60	8	2502	2498	132	12	120	0.5	18	2239.2	125	27.1	37.5	1400
												20	2228	112	30.1	41.8	
2391	56	33	M30	60	8	2501	2498	132	12	120	0.5	18	2239.2	125	27.1	37.5	1400
												20	2228	112	30.1	41.8	
2691	56	33	M30	60	8	2802	2798	132	12	120	0.5	18	2527.2	141	27.1	37.5	1600
												20	2528	127	30.1	41.8	
2691	56	33	M30	60	8	2802	2798	132	12	120	0.5	18	2527.2	141	27.1	37.5	1600
												20	2528	127	30.1	41.8	
3014	56	45	M42	84	8	3152	3147	162	12	150	0.5	20	2828	142	37.7	52.2	2800
												22	2824.8	129	41.5	57.4	
3014	56	45	M42	84	8	3152	3147	162	12	150	0.5	20	2828	142	37.7	52.2	2800
												22	2824.8	129	41.5	57.4	
3014	56	45	M42	84	8	3552	3547	162	12	150	0.5	20	3228	162	37.7	51.7	3500
												22	3220.8	147	41.5	57	
3014	56	45	M42	84	10	3552	3548	162	12	150	0.5	20	3228	162	37.7	51.7	3500
												22	3220.8	147	41.5	57	
3864	60	45	M42	84	10	4002	3997	162	12	150	0.5	22	3660.8	167	41.5	57	4200
												25	3660	147	47.5	64.6	
3864	60	45	M42	84	10	4002	3998	162	12	150	0.5	22	3660.8	167	41.5	57	4200
												25	3660	147	47.5	64.6	
4364	60	45	M42	84	10	4502	4497	162	12	150	0.5	22	4166.8	190	41.5	57	5100
												25	4160	167	47.1	64.6	
4364	60	45	M42	84	10	4502	4498	162	12	150	0.5	22	4166.8	190	41.5	57	5100
												25	4160	167	47.1	64.6	

6.1.3 单排四点接触球式-无齿

Single Row Four Point Contact Ball Slewing Bearing - Non Gear 010



010

注:

1、n1为润滑油孔数，均布：油杯M10×1

JB/T7940.1-JB/T7940.2

2、安装孔n-dn1、n-dn2可改用螺孔；齿宽b可改为H-h。

NOTE:

1.n1 is the nos of lubricating holes. Oil cup

M10×1JB/T7940.1~JB/T7940.2.

2.Mounting hole n-dn1、n-dn2 can change to tapped hole;

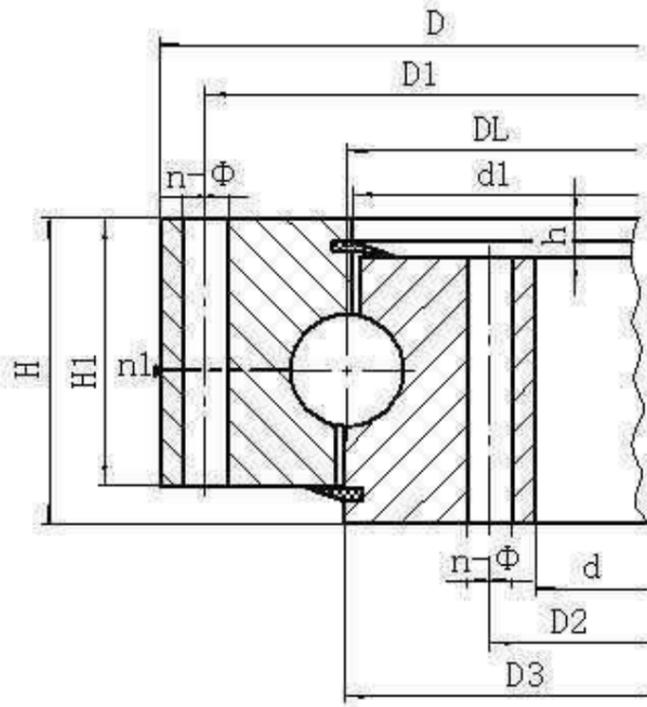
tooth wide can change to H-h

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	010.20.200	280	120	60	248
2	010.20.224	304	144	60	272
3	010.20.250	330	170	60	298
4	010.20.280	360	200	60	328
5	010.25.315	408	222	70	372
6	010.25.355	448	262	70	412
7	010.25.400	493	307	70	457
8	010.25.450	543	357	70	507
9	010.30.500	602	398	80	566
9'	010.25.500	602	398	80	566
10	010.30.560	662	458	80	626
10'	010.25.560	662	458	80	626
11	010.30.630	732	528	80	696
11'	010.25.630	732	528	80	696
12	010.30.710	812	608	80	776
12'	010.25.710	812	608	80	776
13	010.40.800	922	678	100	878
13'	010.30.800	922	678	100	878
14	010.40.900	1022	778	100	978
14'	010.30.900	1022	778	100	978
15	010.40.1000	1122	878	100	1078
15'	010.30.1000	1122	878	100	1078
16	010.40.1120	1242	998	100	1198
16'	010.30.1120	1242	998	100	1198

安装尺寸Mounting dimensions					结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	M mm	De mm	z	正火 Normalizi ng Z 10 <sup>4</sup> N	调质 Quenchin g T 10 <sup>4</sup> N	
152	12	16	M14	28	2	201	199	50	10								20
176	12	16	M14	28	2	225	223	50	10								22
202	18	16	M14	28	2	251	249	50	10								25
232	18	16	M14	28	2	281	279	50	10								28
258	20	18	M16	32	2	316	314	60	10								44
298	20	18	M16	32	2	356	354	60	10								49
343	20	18	M16	32	2	401	399	60	10								56
393	20	18	M16	32	2	451	449	60	10								62
434	20	18	M16	32	4	501	498	70	10								85
434	20	18	M16	32	4	501	499	70	10								85
494	20	18	M16	32	4	561	558	70	10								95
494	20	18	M16	32	4	561	559	70	10								95
564	24	18	M16	32	4	631	628	70	10								110
564	24	18	M16	32	4	631	629	70	10								110
644	24	18	M16	32	4	711	708	70	10								120
644	24	18	M16	32	4	711	709	70	10								120
722	30	22	M20	40	6	801	798	90	10								220
722	30	22	M20	40	6	801	798	90	10								220
822	30	22	M20	40	6	901	898	90	10								240
822	30	22	M20	40	6	901	898	90	10								240
922	36	22	M20	40	6	1001	998	90	10								270
922	36	22	M20	40	6	1001	998	90	10								270
1042	36	22	M20	40	6	1121	1118	90	10								300
1042	36	22	M20	40	6	1121	1118	90	10								300

6.1.3 单排四点接触球式-无齿

Single Row Four Point Contact Ball Slewing Bearing - Non Gear 010



010

注:

1、n1为润滑油孔数，均布：油杯M10×1

JB/T7940.1-JB/T7940.2

2、安装孔n-dn1、n-dn2可改用螺孔；齿宽b可改为H-h。

NOTE:

1.n1 is the nos of lubricating holes. Oil cup

M10×1JB/T7940.1~JB/T7940.2.

2.Mounting hole n-dn1、n-dn2 can change to tapped hole;

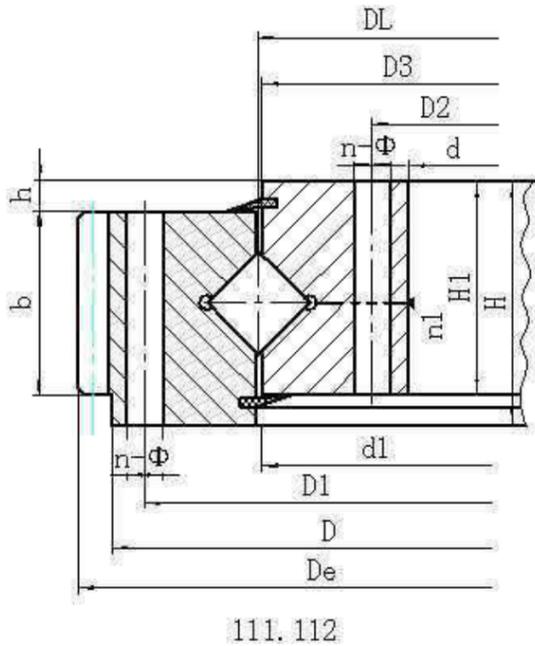
tooth wide can change to H-h

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
17	010.45.1250	1390	1110	110	1337
17'	010.35.1250	1390	1110	110	1337
18	010.45.1400	1540	1260	110	1487
18'	010.35.1400	1540	1260	110	1487
19	011.45.1600	1740	1460	110	1687
19'	010.35.1600	1740	1460	110	1687
20	010.45.1800	1940	1660	110	1887
20'	010.35.1800	1940	1660	110	1887
21	010.60.2000	2178	1825	144	2110
21'	010.40.2000	2178	1825	144	2110
22	010.60.2240	2418	2065	144	2350
22'	010.40.2240	2418	2065	144	2350
23	010.60.2500	2678	2325	144	2610
23'	010.40.2500	2678	2325	144	2610
24	010.60.2800	2978	2625	144	2910
24'	010.40.2800	2978	2625	144	2910
25	010.75.3150	3376	2922	174	3286
25'	010.50.3150	3376	2922	174	3286
26	010.75.3550	3776	3322	174	3686
26'	010.50.3550	3776	3322	174	3686
27	010.75.4000	4226	3772	174	4136
27'	010.50.4000	4226	3772	174	4136
28	010.75.4500	4726	4272	174	4636
28'	010.50.4500	4726	4272	174	4636

安装尺寸Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg			
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	M mm	De mm		z	正火 Normalizi ng Z 10 <sup>3</sup> N	调质 Quenchin g T 10 <sup>3</sup> N
1163	40	26	M24	48	5	1252	1248	100	10								420
1163	40	26	M24	48	5	1251	1248	100	10								420
1313	40	26	M24	48	5	1402	1398	100	10								480
1313	40	26	M24	48	5	1401	1398	100	10								480
1513	45	26	M24	48	5	1602	1598	100	10								550
1513	45	26	M24	48	5	1601	1598	100	10								550
1713	45	26	M24	48	5	1802	1798	100	10								610
1713	45	26	M24	48	5	1801	1798	100	10								610
1891	48	33	M30	60	8	2002	1998	132	12								1100
1891	48	33	M30	60	8	2001	1998	132	12								1100
2131	48	33	M30	60	8	2242	2238	132	12								1250
2131	48	33	M30	60	8	2241	2238	132	12								1250
2391	56	33	M30	60	8	2502	2498	132	12								1400
2391	56	33	M30	60	8	2501	2498	132	12								1400
2691	56	33	M30	60	8	2802	2798	132	12								1600
2691	56	33	M30	60	8	2802	2798	132	12								1600
3014	56	45	M42	84	8	3152	3147	162	12								2800
3014	56	45	M42	84	8	3152	3147	162	12								2800
3014	56	45	M42	84	8	3552	3547	162	12								3500
3014	56	45	M42	84	10	3552	3548	162	12								3500
3864	60	45	M42	84	10	4002	3997	162	12								4200
3864	60	45	M42	84	10	4002	3998	162	12								4200
4364	60	45	M42	84	10	4502	4497	162	12								5100
4364	60	45	M42	84	10	4502	4498	162	12								5100

6.2.1 单排交叉滚柱式-外齿

Single Row Roller Slewing Bearing - Outer Gear 111/112



注:

- 1、n1为润滑油孔数，均布；油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-φ可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、外齿修顶系数为0.1。

NOTE:

1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
- 3.The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.1

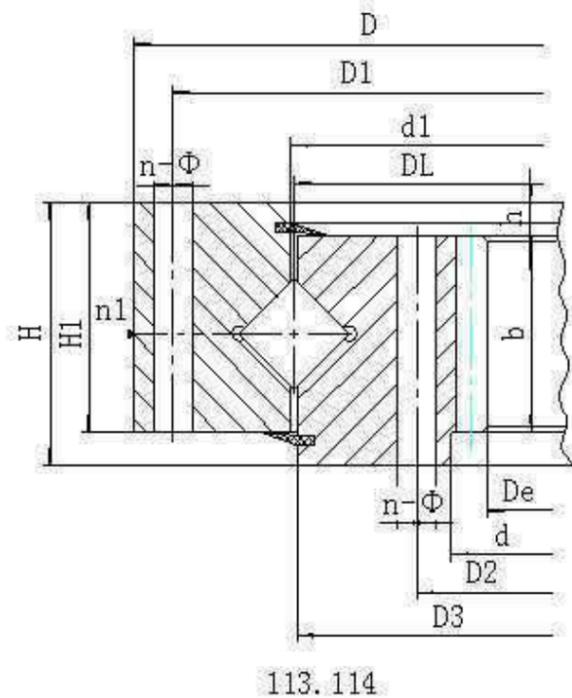
序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	111.25.500	602	398	75	566
	112.25.500				
2	111.25.560	662	458	75	626
	112.25.560				
3	111.25.630	732	528	75	696
	112.25.630				
4	111.25.710	812	608	75	776
	112.25.710				
5	111.28.800	922	678	82	878
	112.28.800				
6	111.28.900	1022	778	82	978
	112.28.900				
7	111.28.1000	1122	878	82	1078
	112.28.1000				
8	111.25.1120	1242	998	82	1198
	112.25.1120				
9	111.32.1250	1390	1110	91	1337
	112.32.1250				
10	111.32.1400	1540	1260	91	1487
	112.32.1400				
11	111.32.1600	1740	1460	91	1687
	112.32.1600				
12	111.32.1800	1940	1660	91	1887
	112.32.1800				
13	111.40.2000	2178	1825	112	2110
	112.40.2000				
14	111.40.2240	2418	2065	112	2350
	112.40.2240				
15	111.40.2500	2678	2325	112	2610
	112.40.2500				
16	111.40.2800	2978	2625	112	2910
	112.40.2800				
17	111.50.3150	3376	2922	134	3286
	112.50.3150				
18	111.50.3550	3776	3322	134	3686
	112.50.3550				
19	111.50.4000	4226	3772	134	4136
	112.50.4000				
20	111.50.4500	4726	4272	134	4636
	112.50.4500				

安装尺寸Mounting dimensions					结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm	z	正火 Normalizi ng Z 10 <sup>4</sup> N	调质 Quenchin g T 10 <sup>4</sup> N	
434	20	18	M16	32	4	498	502	65	10	60	0.5	5	629	123	3.7	5.2	80
												6	628.8	102	4.5	6.2	
494	20	18	M16	32	4	558	562	65	10	60	0.5	5	689	135	3.7	5.2	90
												6	688.8	112	4.5	6.2	
564	24	18	M16	32	4	628	632	65	10	60	0.5	6	772.8	126	4.5	6.2	100
												8	774.4	94	6	8.3	
644	24	18	M16	32	4	708	712	65	10	60	0.5	6	850.8	139	4.5	6.2	110
												8	854.4	104	6	8.3	
722	30	22	M20	40	6	798	802	72	10	65	0.5	8	966.4	118	6.5	9.1	170
												10	968	94	8.1	11.4	
822	30	22	M20	40	6	898	902	72	10	65	0.5	8	1062.4	130	6.5	9.1	190
												10	1068	104	8.1	11.4	
922	36	22	M20	40	6	998	1002	72	10	65	0.5	10	1188	116	8.1	11.4	210
												12	1185.6	96	9.7	13.6	
1042	36	22	M20	40	6	1118	1122	72	10	65	0.5	10	1298	127	8.1	11.4	230
												12	1305.6	106	9.7	13.6	
1163	40	26	M24	48	5	1248	1252	81	10	75	0.5	12	1449.6	118	11.3	15.7	350
												14	1453.2	101	13.2	18.2	
1313	40	26	M24	48	5	1398	1402	81	10	75	0.5	12	1605.6	131	11.3	15.7	400
												14	1607.2	112	13.2	18.2	
1513	45	26	M24	48	5	1598	1602	81	10	75	0.5	14	1817.2	127	13.2	18.2	440
												16	1820.8	111	15.1	22.4	
1713	45	26	M24	48	5	1798	1802	81	10	75	0.5	14	2013.2	141	13.2	18.2	500
												16	2012.8	123	15.1	22.4	
1891	48	33	M30	60	8	1997	2003	100	12	90	0.5	16	2268.8	139	18.1	25	900
												18	2264.4	123	20.3	28.1	
2131	48	33	M30	60	8	2237	2243	100	12	90	0.5	16	2492.8	153	18.1	25	1000
												18	2498.4	136	20.3	28.1	
2391	56	33	M30	60	8	2497	2503	100	12	90	0.5	18	2768.4	151	20.3	28.1	1100
												20	2776	136	22.6	31.3	
2691	56	33	M30	60	8	2797	2803	100	12	90	0.5	18	3074.4	168	20.3	28.1	1250
												20	3076	151	22.6	31.3	
3014	56	45	M42	84	8	3147	3153	122	12	110	0.5	20	3476	171	27.6	38.3	2150
												22	3471.6	155	30.4	42.1	
3414	56	45	M42	84	8	3547	3553	122	12	110	0.5	20	3876	191	30.4	38.3	2470
												22	3889.6	174	30.4	42.1	
3864	60	45	M42	84	10	3997	4003	122	12	110	0.5	22	4329.6	194	30.4	42.1	2800
												25	4345	171	34.5	47.8	
4364	60	45	M42	84	10	4497	4503	122	12	110	0.5	22	4835.6	217	30.4	42.1	3100
												25	4845	191	34.5	47.8	

6.2.2 单排交叉滚柱式-内齿

Single Row Roller Slewing Bearing - Inner

Gear 113/114



113. 114

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-Φ可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数为0.2。

NOTE:

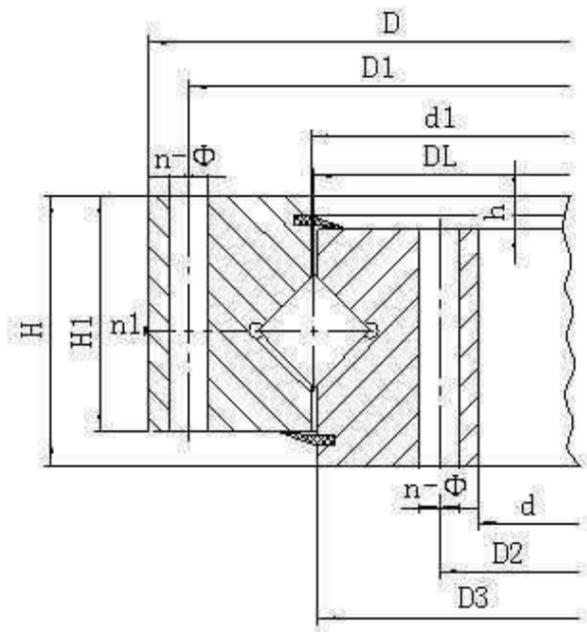
1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is +0.35

序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	113.25.500	602	398	75	566
	114.25.500				
2	113.25.560	662	458	75	626
	114.25.560				
3	113.25.630	732	528	75	696
	114.25.630				
4	113.25.710	812	608	75	776
	114.25.710				
5	113.28.800	922	678	82	878
	114.28.800				
6	113.28.900	1022	778	82	978
	114.28.900				
7	113.28.1000	1122	878	82	1078
	114.28.1000				
8	111.25.1120	1242	998	82	1198
	111.25.1120				
9	113.32.1250	1390	1110	91	1337
	114.32.1250				
10	113.32.1400	1540	1260	91	1487
	114.32.1400				
11	113.32.1600	1740	1460	91	1687
	114.32.1600				
12	113.32.1800	1940	1660	91	1887
	114.32.1800				
13	113.40.2000	2178	1825	112	2110
	114.40.2000				
14	113.40.2240	2418	2065	112	2350
	114.40.2240				
15	113.40.2500	2678	2325	112	2610
	114.40.2500				
16	113.40.2800	2978	2625	112	2910
	114.40.2800				
17	113.50.3150	3376	2922	134	3286
	114.50.3150				
18	113.50.3550	3776	3322	134	3686
	114.50.3550				
19	113.50.4000	4226	3772	134	4136
	114.50.4000				
20	113.50.4500	4726	4272	134	4636
	114.50.4500				

安装尺寸Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg			
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm		z	正火 Normalizi ng Z 10 <sup>4</sup> N	调质 Quenchin g T 10 <sup>4</sup> N
434	20	18	M16	32	4	498	502	65	10	60	0.5	5	367	74	3.7	5.2	80
												6	368.4	62	4.5	6.2	
494	20	18	M16	32	4	558	562	65	10	60	0.5	5	427	86	3.7	5.2	90
												6	428.4	72	4.5	6.2	
564	24	18	M16	32	4	628	632	65	10	60	0.5	6	494.4	83	4.5	6.2	100
												8	491.2	62	6	8.3	
644	24	18	M16	32	4	708	712	65	10	60	0.5	6	572.4	96	4.5	6.2	110
												8	571.2	72	6	8.3	
722	30	22	M20	40	6	798	802	72	10	65	0.5	8	635.2	80	6.5	9.1	170
												10	634	64	8.1	11.4	
822	30	22	M20	40	6	898	902	72	10	65	0.5	8	739.2	93	6.5	9.1	190
												10	734	74	8.1	11.4	
922	36	22	M20	40	6	998	1002	72	10	65	0.5	10	824	83	8.1	11.4	210
												12	820.8	69	9.7	13.6	
1042	36	22	M20	40	6	1118	1122	72	10	65	0.5	10	944	95	8.1	11.4	230
												12	940.8	79	9.7	13.6	
1163	40	26	M24	48	5	1248	1252	81	10	75	0.5	12	1048.8	88	11.3	15.7	350
												14	1041.6	75	13.2	18.2	
1313	40	26	M24	48	5	1398	1402	81	10	75	0.5	12	1192.8	100	11.3	15.7	400
												14	1195.6	86	13.2	18.2	
1513	45	26	M24	48	5	1598	1602	81	10	75	0.5	14	1391.6	100	13.2	18.2	440
												16	1382.4	87	15.1	22.4	
1713	45	26	M24	48	5	1798	1802	81	10	75	0.5	14	1573.6	113	13.2	18.2	500
												16	1574.4	99	15.1	22.4	
1891	48	33	M30	60	8	1997	2003	100	12	90	0.5	16	1734.4	109	18.1	25	900
												18	1735.2	97	20.3	28.1	
2131	48	33	M30	60	8	2237	2243	100	12	90	0.5	16	1990.4	125	18.1	25	1000
												18	1987.2	111	20.3	28.1	
2391	56	33	M30	60	8	2497	2503	100	12	90	0.5	18	2239.2	125	20.3	28.1	1100
												20	2228	112	22.6	31.3	
2691	56	33	M30	60	8	2797	2803	100	12	90	0.5	18	2527.2	141	20.3	28.1	1250
												20	2528	127	22.6	31.3	
3014	56	45	M42	84	8	3147	3153	122	12	110	0.5	20	2828	142	27.6	38.3	2150
												22	2824.8	129	30.4	42.1	
3414	56	45	M42	84	8	3547	3553	122	12	110	0.5	20	3228	162	30.4	38.3	2470
												22	3220.8	147	30.4	42.1	
3864	60	45	M42	84	10	3997	4003	122	12	110	0.5	22	3660.8	167	30.4	42.1	2800
												25	3660	147	34.5	47.8	
4364	60	45	M42	84	10	4497	4503	122	12	110	0.5	22	4166.8	190	30.4	42.1	3100
												25	4160	167	34.5	47.8	

6.2.3 单排交叉滚柱式-无齿

Single Row Roller Slewing Bearing - Non Gear 110



110

注:

1、n1为润滑油孔数，均布：油杯M10×1

JB/T7940.1-JB/T7940.2

2、安装孔n-φ可改用螺孔；齿宽b可改为H-h。

NOTE:

1. n1 is the nos of lubricating holes.Oil cup

M10×1JB/T7940.1~JB/T7940.2.

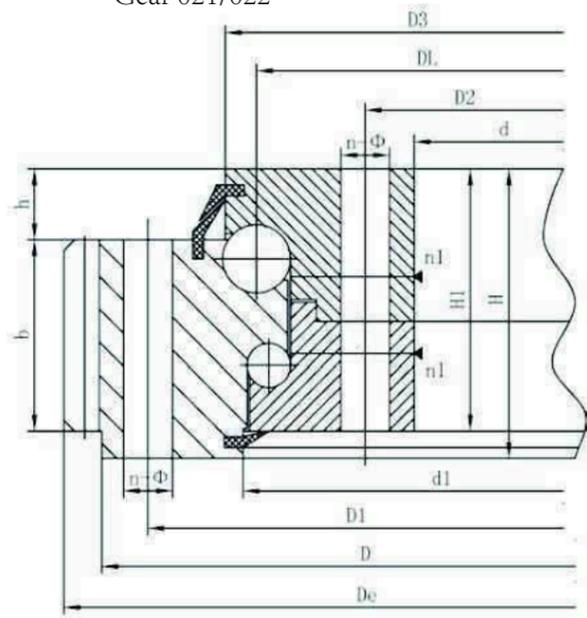
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h

序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	110.25.500	602	398	75	566
2	110.25.560	662	458	75	626
3	110.25.630	732	528	75	696
4	110.25.710	812	608	75	776
5	110.28.800	922	678	82	878
6	110.28.900	1022	778	82	978
7	110.28.1000	1122	878	82	1078
8	110.25.1120	1242	998	82	1198
9	110.32.1250	1390	1110	91	1337
10	110.32.1400	1540	1260	91	1487
11	110.32.1600	1740	1460	91	1687
12	110.32.1800	1940	1660	91	1887
13	110.40.2000	2178	1825	112	2110
14	110.40.2240	2418	2065	112	2350
15	110.40.2500	2678	2325	112	2610
16	110.40.2800	2978	2625	112	2910
17	110.50.3150	3376	2922	134	3286
18	110.50.3550	3776	3322	134	3686
19	110.50.4000	4226	3772	134	4136
20	110.50.4500	4726	4272	134	4636

安装尺寸Mounting dimensions					结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm	z	正火 Normalizi ng Z 10 <sup>4</sup> N	调质 Quenchin g T 10 <sup>4</sup> N	
434	20	18	M16	32	4	498	502	65	10								80
494	20	18	M16	32	4	558	562	65	10								90
564	24	18	M16	32	4	628	632	65	10								100
644	24	18	M16	32	4	708	712	65	10								110
722	30	22	M20	40	6	798	802	72	10								170
822	30	22	M20	40	6	898	902	72	10								190
922	36	22	M20	40	6	998	1002	72	10								210
1042	36	22	M20	40	6	1118	1122	72	10								230
1163	40	26	M24	48	5	1248	1252	81	10								350
1313	40	26	M24	48	5	1398	1402	81	10								400
1513	45	26	M24	48	5	1598	1602	81	10								440
1713	45	26	M24	48	5	1798	1802	81	10								500
1891	48	33	M30	60	8	1997	2003	100	12								900
2131	48	33	M30	60	8	2237	2243	100	12								1000
2391	56	33	M30	60	8	2497	2503	100	12								1100
2691	56	33	M30	60	8	2797	2803	100	12								1250
3014	56	45	M42	84	8	3147	3153	122	12								2150
3414	56	45	M42	84	8	3547	3553	122	12								2470
3864	60	45	M42	84	10	3997	4003	122	12								2800
4364	60	45	M42	84	10	4497	4503	122	12								3100

6.3.1 双排球式 - 外齿

Double Row Ball Slewing Bearing - Outer Gear  
Gear 021/022



021. 022

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JBT7940.2
- 2、安装孔n-φn1、n-φn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数0.2。

NOTE:

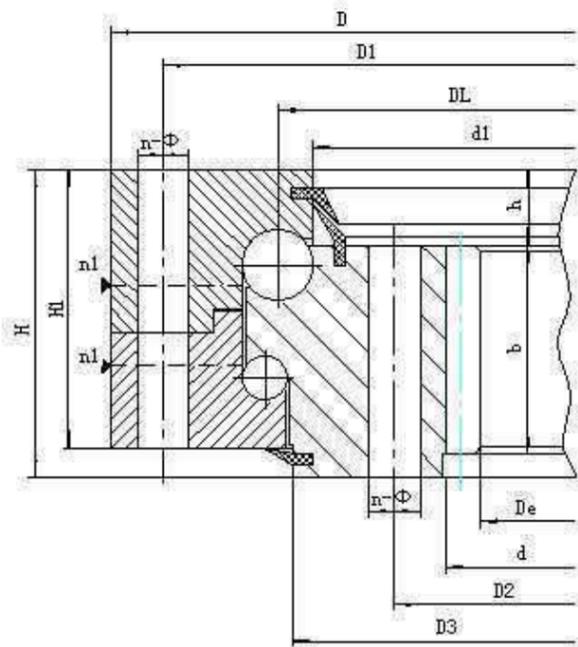
1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1~JB/T7940.2.
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.2

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	021.25.500	616	384	106	580
	022.25.500				
2	021.25.560	676	444	106	640
	022.25.560				
3	021.25.630	746	514	106	710
	022.25.630				
4	021.25.710	826	594	106	790
	022.25.710				
5	021.30.800	942	658	124	898
	022.30.800				
6	021.30.900	1042	758	124	998
	022.30.900				
7	021.30.1000	1142	858	124	1098
	022.30.1000				
8	021.30.1120	1262	978	124	1218
	022.30.1120				
9	021.40.1250	1426	1074	160	1374
	022.40.1250				
10	021.40.1400	1576	1224	160	1524
	022.40.1400				
11	021.40.1600	1776	1424	160	1724
	022.40.1600				
12	021.40.1800	1976	1624	160	1924
	022.40.1800				
13	021.50.2000	2215	1785	190	2149
	022.50.2000				
14	021.50.2240	2455	2025	190	2389
	022.50.2240				
15	021.50.2500	2715	2285	190	2649
	022.50.2500				
16	021.50.2800	3015	2585	190	2949
	022.50.2800				
17	021.60.3150	3428	2872	226	3338
	022.60.3150				
18	021.60.3550	3828	3272	226	3738
	022.60.3550				
19	021.60.4000	4278	3722	226	4188
	022.60.4000				
20	021.60.4500	4778	4222	226	4688
	022.60.4500				

安装尺寸Mounting dimensions			结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	D3 mm	d1 mm	n1	H1 mm	h mm	b mm	x	m mm	De mm	z	正火 Normalizing Z 10 <sup>4</sup> N	调质 Quenching T 10 <sup>4</sup> N	
420	20	18	523	518	4	96	26	60	0.5	5	644	126	3.7	5.2	100
										6	646.8	105	4.5	6.2	
480	20	18	583	578	4	96	26	60	0.5	5	704	138	3.7	5.2	115
										6	706.8	115	4.5	6.2	
550	24	18	653	648	4	96	26	60	0.5	6	790.8	129	4.5	6.2	130
										8	790.4	96	6	8.3	
630	24	18	733	728	4	96	26	60	0.5	6	862.8	141	4.5	6.2	140
										8	862.4	105	6	8.3	
702	30	22	829	823	6	114	29	80	0.5	8	982.4	120	8	11.1	200
										10	988	96	10	14	
802	30	22	929	923	6	114	29	80	0.5	8	1086.4	133	8	11.1	250
										10	1088	106	10	14	
902	36	22	1029	1023	6	114	29	80	0.5	10	1198	117	10	14	300
										12	1197.6	97	12	16.7	
1022	36	22	1148	1143	6	114	29	80	0.5	10	1318	129	10	14	340
										12	1317.6	107	12	16.7	
1126	40	26	1286	1282	5	150	39	90	0.5	12	1497.6	122	13.5	18.8	580
										14	1495.2	104	15.8	21.9	
1272	40	26	1436	1432	5	150	39	90	0.5	12	1641.6	134	13.5	18.8	650
										14	1649.2	115	15.8	21.9	
1476	45	26	1636	1635	5	150	39	90	0.5	14	1845.2	129	15.8	21.9	750
										16	1852.8	113	18.1	25	
1676	45	26	1836	1835	5	150	39	90	0.5	14	2055.2	144	15.8	21.9	820
										16	2060.8	126	18.1	25	
1851	48	33	2038	2035	8	178	47	120	0.5	16	2300.8	141	24.1	33.3	1150
										18	2300.4	125	27.1	37.5	
2091	48	33	2278	2275	8	178	47	120	0.5	16	2540.8	156	24.1	33.3	1500
										18	2552.4	139	27.1	37.5	
2351	56	33	2538	2532	8	178	47	120	0.5	18	2804.4	153	27.1	37.5	1700
										20	2816	138	30.1	41.8	
2651	56	33	2838	2832	8	178	47	120	0.5	18	3110.4	170	27.1	37.5	1900
										20	3116	153	30.1	41.8	
2962	56	45	3198	3196	8	214	56	150	0.5	20	3536	174	37.7	52.2	3300
										22	3537.6	158	41.5	57.4	
3362	56	45	3598	3596	8	214	56	150	0.5	20	3936	194	37.7	52.2	3700
										22	3933.6	176	41.5	57.4	
3812	60	45	4048	4046	10	214	56	150	0.5	22	4395.6	197	41.5	57.4	4200
										25	4395	173	47.1	65.2	
4312	60	45	4548	4546	10	214	56	150	0.5	22	4879.6	219	41.5	57.4	4700
										25	4895	193	47.1	65.2	

6.3.2 双排球式 - 内齿

Double Row Ball Slewing Bearing - Inner Gear 023/024



023.024

序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	023.25.500	616	384	106	580
	024.25.500				
2	023.25.560	676	444	106	640
	024.25.560				
3	023.25.630	746	514	106	710
	024.25.630				
4	023.25.710	826	594	106	790
	024.25.710				
5	023.30.800	942	658	124	898
	024.30.800				
6	023.30.900	1042	758	124	998
	024.30.900				
7	023.30.1000	1142	858	124	1098
	024.30.1000				
8	023.30.1120	1262	978	124	1218
	024.30.1120				
9	023.40.1250	1426	1074	160	1374
	024.40.1250				
10	023.40.1400	1576	1224	160	1524
	024.40.1400				
11	023.40.1600	1776	1424	160	1724
	024.40.1600				
12	023.40.1800	1976	1624	160	1924
	024.40.1800				
13	023.50.2000	2215	1785	190	2149
	024.50.2000				
14	023.50.2240	2455	2025	190	2389
	024.50.2240				
15	023.50.2500	2715	2285	190	2649
	024.50.2500				
16	023.50.2800	3015	2585	190	2949
	024.50.2800				
17	023.60.3150	3428	2872	226	3338
	024.60.3150				
18	023.60.3550	3828	3272	226	3738
	024.60.3550				
19	023.60.4000	4278	3722	226	4188
	024.60.4000				
20	023.60.4500	4778	4222	226	4688
	024.60.4500				

注:

- 1、n1为润滑油孔数，均布；油杯M10×1 JB/T7940.1-JBT7940.2。
- 2、安装孔n-φn1、n-φn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数0.2。

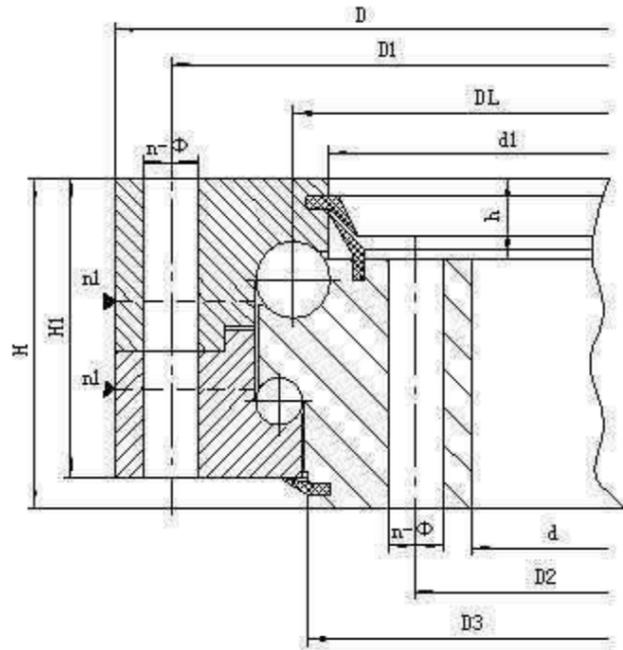
NOTE:

1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1~ JB/T7940.2.
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.2

安装尺寸Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data				齿轮圆周力Gear circumferential force		参考重量 weight kg		
D2 mm	n	Φ mm	D3 mm	d1 mm	n1	H1 mm	h mm	b mm	x	m mm	De mm	z		正火 Normalizi ng Z 10 <sup>4</sup> N	调质 Quenchin g T 10 <sup>4</sup> N
420	20	18	482	477	4	96	26	60	0.5	5	257	72	3.7	5.2	100
										6	350.4	59	4.5	6.2	
480	20	18	542	537	4	96	26	60	0.5	5	417	84	3.7	5.2	115
										6	410.4	69	4.5	6.2	
550	24	18	612	607	4	96	26	60	0.5	6	482.4	81	4.5	6.2	130
										8	475.2	60	6	8.3	
630	24	18	692	687	4	96	26	60	0.5	6	560.4	94	4.5	6.2	140
										8	555.2	70	6	8.3	
702	30	22	777	771	6	114	29	80	0.5	8	619.2	78	8	11.1	200
										10	614	62	10	14	
802	30	22	877	871	6	114	29	80	0.5	8	715.2	90	8	11.1	250
										10	714	72	10	14	
902	36	22	977	971	6	114	29	80	0.5	10	814	82	10	14	300
										12	796.8	67	12	16.7	
1022	36	22	1097	1091	6	114	29	80	0.5	10	924	93	10	14	340
										12	916.8	77	12	16.7	
1126	40	26	1215	1214	5	150	39	90	0.5	12	1012.8	85	13.5	18.8	580
										14	1013.6	73	15.8	21.9	
1272	40	26	1365	1364	5	150	39	90	0.5	12	1156.8	97	13.5	18.8	650
										14	1153.6	83	15.8	21.9	
1476	45	26	1565	1564	5	150	39	90	0.5	14	1349.6	97	15.8	21.9	750
										16	1350.4	85	18.1	25	
1676	45	26	1765	1764	5	150	39	90	0.5	14	1545.6	111	15.8	21.9	820
										16	1542.4	97	18.1	25	
1851	48	33	1965	1962	8	178	47	120	0.5	16	1702.4	107	24.1	33.3	1150
										18	1699.2	95	27.1	37.5	
2091	48	33	2206	2202	8	178	47	120	0.5	16	1942.4	122	24.1	33.3	1500
										18	1933.2	108	27.1	37.5	
2351	56	33	2465	2462	8	178	47	120	0.5	18	2203.2	123	27.1	37.5	1700
										20	2188	110	30.1	41.8	
2651	56	33	2765	2762	8	178	47	120	0.5	18	2491.2	139	27.1	37.5	1900
										20	2488	125	30.1	41.8	
2962	56	45	3104	3102	8	214	56	150	0.5	20	2768	139	37.7	52.2	3300
										22	2758.8	126	41.5	57.4	
3362	56	45	3504	3502	8	214	56	150	0.5	20	3168	159	37.7	52.2	3700
										22	3176.8	145	41.5	57.4	
3812	60	45	3954	3592	10	214	56	150	0.5	22	3616.8	165	41.5	57.4	4200
										25	3610	145	47.1	65.2	
4312	60	45	4454	4452	10	214	56	150	0.5	22	4122.8	188	41.5	57.4	4700
										25	4110	165	47.1	65.2	

6.3.3 双排球式 - 无齿

Double Row Ball Slewing Bearing - Non Gear 020



注:

020

1、n1为润滑油孔数，均布：油杯M10×1

JB/T7940.1-JBT7940.2

2、安装孔n-dn1、n-dn2可改用螺孔；齿宽b可改为

H-h。

NOTE:

1. n1 is the nos of lubricating holes.Oil cup

M10×1JB/T7940.1 ~ JB/T7940.2.

2. Mounting hole n- φ can change to tapped hole,tooth

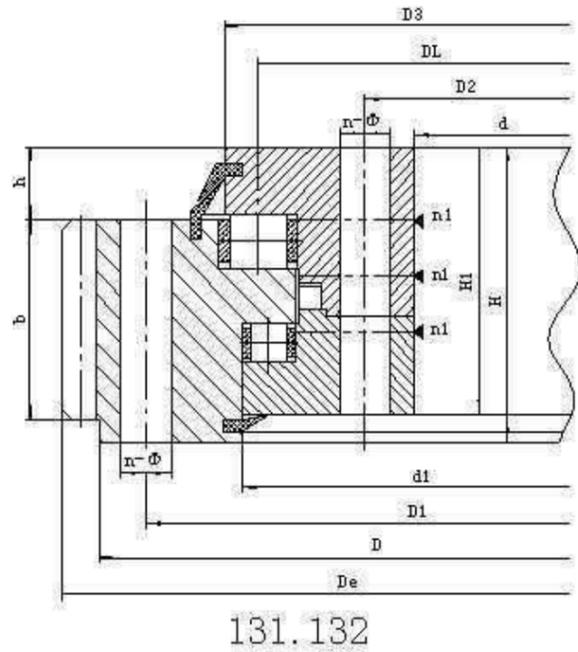
wide can change to H-hcan change to H-h

序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	020.25.500	616	384	106	580
2	020.25.560	676	444	106	640
3	020.25.630	746	514	106	710
4	020.25.710	826	594	106	790
5	020.30.800	942	658	124	898
6	020.30.900	1042	758	124	998
7	020.30.1000	1142	858	124	1098
8	020.30.1120	1262	978	124	1218
9	020.40.1250	1426	1074	160	1374
10	020.40.1400	1576	1224	160	1524
11	020.40.1600	1776	1424	160	1724
12	020.40.1800	1976	1624	160	1924
13	020.50.2000	2215	1785	190	2149
14	020.50.2240	2455	2025	190	2389
15	020.50.2500	2715	2285	190	2649
16	020.50.2800	3015	2585	190	2949
17	020.60.3150	3428	2872	226	3338
18	020.60.3550	3828	3272	226	3738
19	020.60.4000	4278	3722	226	4188
20	020.60.4500	4778	4222	226	4688

安装尺寸Mounting dimensions			结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	D3 mm	d1 mm	n1	H1 mm	h mm	b mm	x	m mm	De mm	z	正火 Normalizi ng Z 10°N	调质 Quenchin g T 10°N	
420	20	18	482	477	4	96	26								100
480	20	18	542	537	4	96	26								115
550	24	18	612	607	4	96	26								130
630	24	18	692	687	4	96	26								140
702	30	22	777	771	6	114	29								200
802	30	22	877	871	6	114	29								250
902	36	22	977	971	6	114	29								300
1022	36	22	1097	1091	6	114	29								340
1126	40	26	1215	1214	5	150	39								580
1272	40	26	1365	1364	5	150	39								650
1476	45	26	1565	1564	5	150	39								750
1676	45	26	1765	1764	5	150	39								820
1851	48	33	1965	1962	8	178	47								1150
2091	48	33	2206	2202	8	178	47								1500
2351	56	33	2465	2462	8	178	47								1700
2651	56	33	2765	2762	8	178	47								1900
2962	56	45	3104	3102	8	214	56								3300
3362	56	45	3504	3502	8	214	56								3700
3812	60	45	3954	3952	10	214	56								4200
4312	60	45	4454	4452	10	214	56								4700

6.4.1 三排滚柱式 - 外齿

Three Row Roller Slewing Bearing - Outer Gear 131/132



注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n- $\phi$ n1、n- $\phi$ n2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数为0.2。

NOTE:

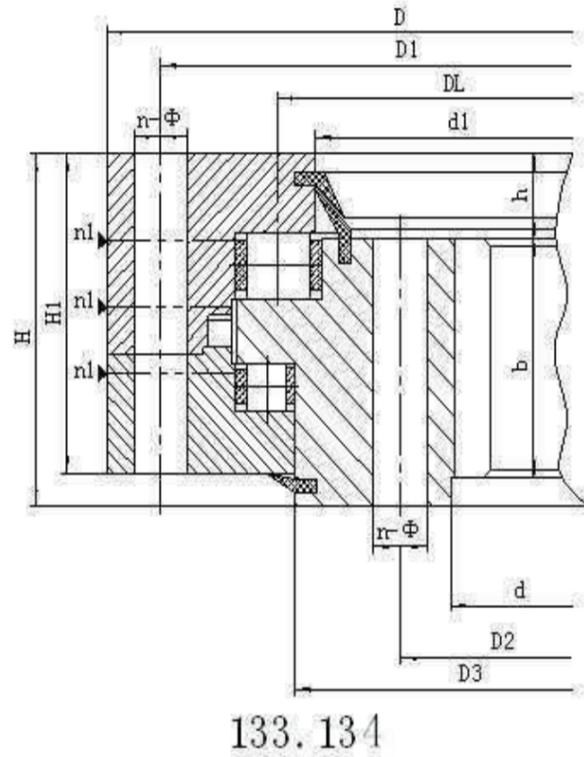
1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n-  $\phi$  can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.2

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	131.25.500	634	366	148	598
	132.25.500				
2	131.25.560	694	426	148	658
	132.25.560				
3	131.25.630	764	496	148	728
	132.25.630				
4	131.25.710	844	576	148	808
	132.25.710				
5	131.32.800	964	636	182	920
	132.32.800				
6	131.32.900	1064	736	182	1020
	132.32.900				
7	131.32.1000	1164	836	182	1120
	132.32.1000				
8	131.32.1120	1284	956	182	1240
	132.32.1120				
9	131.40.1250	1445	1055	220	1393
	132.40.1250				
10	131.40.1400	1595	1205	220	1543
	132.40.1400				
11	131.40.1600	1795	1405	220	1743
	132.40.1600				
12	131.40.1800	1995	1605	220	1943
	132.40.1800				
13	131.45.2000	2221	1779	231	2155
	132.45.2000				
14	131.45.2240	2461	2019	231	2395
	132.45.2240				
15	131.45.2500	2721	2279	231	2655
	132.45.2500				
16	131.45.2800	3021	2579	231	2955
	132.45.2800				
17	131.50.3150	3432	2868	270	3342
	132.50.3150				
18	131.50.3550	3832	3268	270	3742
	132.50.3550				
19	131.50.4000	4282	3718	270	4192
	132.50.4000				
20	131.50.4500	4782	4218	270	4692
	131.50.4500				

安装尺寸Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data				齿轮圆周力Gear circumferential force		参考重量 weight kg				
D2 mm	n	$\Phi$ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm		De mm	z	正火 Normalizi ng Z 10 <sup>3</sup> N	调质 Quenchin g T 10 <sup>3</sup> N
402	24	18	M16	32	4	537	526	138	32	80	0.5	5	664	130	5	6.7	224
												6	664.8	108	6	8	
462	24	18	M16	32	4	597	586	138	32	80	0.5	5	724	142	5	6.7	240
												6	724.8	118	6	8	
532	28	18	M16	32	4	667	656	138	32	80	0.5	6	808.8	132	6	8	270
												8	806.4	98	8	11	
612	28	18	M16	32	4	747	736	138	32	80	0.5	6	886.8	145	6	8	300
												8	886.4	108	8	11	
680	36	22	M20	40	4	841	830	172	40	120	0.5	8	1006.4	123	12.1	16.7	500
												10	1008	98	15.1	20.9	
780	36	22	M20	40	4	941	930	172	40	120	0.5	8	1102.4	135	12.1	16.7	600
												10	1108	108	15.1	20.9	
880	40	22	M20	40	5	1041	1030	172	40	120	0.5	10	1218	119	15.1	20.9	680
												12	1221.6	99	18.1	25.1	
1000	40	22	M20	40	5	1161	1150	172	40	120	0.5	10	1338	131	15.1	20.9	820
												12	1341.6	109	18.1	25.1	
1107	45	26	M24	48	5	1300	1287	210	50	150	0.5	12	1509.6	123	22.9	31.4	1200
												14	1509.2	105	26.3	36.6	
1257	45	26	M24	48	5	1450	1437	210	50	150	0.5	12	1665.6	136	22.9	31.4	1300
												14	1663.2	116	26.3	36.6	
1457	48	26	M24	48	6	1650	1637	210	50	150	0.5	14	1873.2	131	26.3	36.6	1520
												16	1868.8	114	30.2	41.7	
1657	48	26	M24	48	6	1850	1837	210	50	150	0.5	14	2069.2	145	26.3	36.6	1750
												16	2076.8	127	30.2	41.7	
1845	60	33	M30	60	6	2055	2033	219	54	160	0.5	16	2300.8	141	32.2	44.5	2400
												18	2300.4	125	36.2	50.1	
2085	60	33	M30	60	6	2295	2273	219	54	160	0.5	16	2556.8	157	32.2	44.5	2700
												18	2552.4	139	36.2	50.1	
2345	72	33	M30	60	8	2555	2533	219	54	160	0.5	18	2822.4	154	36.2	50.1	3000
												20	2816	138	40.2	55.6	
2645	72	33	M30	60	8	2855	2833	219	54	160	0.5	18	3110.4	170	36.2	50.1	3400
												20	3116	153	40.2	55.6	
2958	72	45	M42	84	8	3213	3196	258	65	180	0.5	20	3536	174	45.2	62.6	5000
												22	3537.6	158	49.8	68.9	
3358	72	45	M42	84	8	3613	3596	258	65	180	0.5	20	3936	194	45.2	62.6	5680
												22	3933.6	176	49.8	68.9	
3808	80	45	M42	84	8	4063	4046	258	65	180	0.5	22	4395.6	197	56.5	68.9	6470
												25	4395	173	56.5	78.3	
4308	80	45	M42	84	8	4563	4546	258	65	180	0.5	22	4901.6	220	49.8	68.9	7320
												25	4895	193	56.5	78.3	

6.4.2 三排滚柱式 - 内齿

Three Row Roller Slewing Bearing - Inner Gear 133/134



序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	133.25.500	634	366	148	598
	134.25.500				
2	133.25.560	694	426	148	658
	134.25.560				
3	133.25.630	764	496	148	728
	134.25.630				
4	133.25.710	844	576	148	808
	134.25.710				
5	133.32.800	964	636	182	920
	134.32.800				
6	133.32.900	1064	736	182	1020
	134.32.900				
7	133.32.1000	1164	836	182	1120
	134.32.1000				
8	133.32.1120	1284	956	182	1240
	134.32.1120				
9	133.40.1250	1445	1055	220	1393
	134.40.1250				
10	133.40.1400	1595	1205	220	1543
	134.40.1400				
11	133.40.1600	1795	1405	220	1743
	134.40.1600				
12	133.40.1800	1995	1605	220	1943
	134.40.1800				
13	133.45.2000	2221	1779	231	2155
	134.45.2000				
14	133.45.2240	2461	2019	231	2395
	134.45.2240				
15	133.45.2500	2721	2279	231	2655
	134.45.2500				
16	133.45.2800	3021	2579	231	2955
	134.45.2800				
17	133.50.3150	3432	2868	270	3342
	134.50.3150				
18	131.50.3350	3832	3268	270	3742
	132.50.3550				
19	131.50.4000	4282	3718	270	4192
	132.50.4000				
20	131.50.4500	4782	4218	270	4692
	132.50.4500				

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-φn1、n-φn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数为0.2。

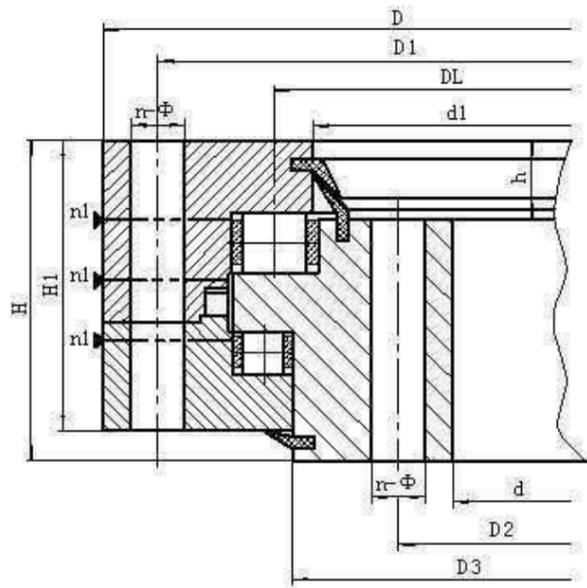
NOTE:

1. n1 is the nos of lubricating holes.Oil cup M10×1 JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.2

安装尺寸Mounting dimensions					结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力Gear circumferential force		参考重量 weight kg
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm	z	正火 Normaliz ng Z 10 <sup>4</sup> N	调质 Quenchin g T 10 <sup>4</sup> N	
402	24	18	M16	32	4	474	463	138	32	80	0.5	5	337	68	5	6.7	224
												6	338.4	57	6	8	
462	24	18	M16	32	4	534	523	138	32	80	0.5	5	397	80	5	6.7	240
												6	398.4	67	6	8	
532	28	18	M16	32	4	604	593	138	32	80	0.5	6	458.4	77	6	8	270
												8	459.2	58	8	11	
612	28	18	M16	32	4	684	673	138	32	80	0.5	6	536.4	90	6	8	300
												8	539.2	68	8	11	
680	36	22	M20	40	4	770	759	172	40	120	0.5	8	595.2	75	12.1	16.7	500
												10	594	60	15.1	20.9	
780	36	22	M20	40	4	870	859	172	40	120	0.5	8	691.2	87	12.1	16.7	600
												10	694	70	15.1	20.9	
880	40	22	M20	40	5	970	959	172	40	120	0.5	10	784	79	15.1	20.9	680
												12	784.8	66	18.1	25.1	
1000	40	22	M20	40	5	1090	1079	172	40	120	0.5	10	904	91	15.1	20.9	820
												12	904.8	76	18.1	25.1	
1107	45	26	M24	48	5	1213	1200	210	50	150	0.5	12	988.8	83	22.9	31.4	1200
												14	985.6	71	26.3	36.6	
1257	45	26	M24	48	5	1363	1350	210	50	150	0.5	12	1144.8	96	22.9	31.4	1300
												14	1139.6	82	26.3	36.6	
1457	48	26	M24	48	6	1563	1550	210	50	150	0.5	14	1335.6	96	26.3	36.6	1520
												16	1334.4	84	30.2	41.7	
1657	48	26	M24	48	6	1763	1750	210	50	150	0.5	14	1531.6	110	26.3	36.6	1750
												16	1526.4	96	30.2	41.7	
1845	60	33	M30	60	6	1967	1945	219	54	160	0.5	16	1702.4	107	32.2	44.5	2400
												18	1699.2	95	36.2	50.1	
2085	60	33	M30	60	6	2207	2185	219	54	160	0.5	16	1926.4	121	32.2	44.5	2700
												18	1933.2	108	36.2	50.1	
2345	72	33	M30	60	8	2467	2445	219	54	160	0.5	18	2185.2	122	36.2	50.1	3000
												20	2188	110	40.2	55.6	
2645	72	33	M30	60	8	2767	2745	219	54	160	0.5	18	2491.2	139	36.2	50.1	3400
												20	2488	125	40.2	55.6	
2958	72	45	M42	84	8	3104	3090	258	65	180	0.5	20	2768	139	45.2	62.6	5000
												22	2758.8	126	49.8	68.9	
3358	72	45	M42	84	8	3504	3490	258	65	180	0.5	20	3168	159	45.2	62.6	5680
												22	3154.8	144	49.8	68.9	
3808	80	45	M42	84	8	3954	3940	258	65	180	0.5	22	3116.8	165	56.5	68.9	6470
												25	3610	145	56.5	78.3	
4308	80	45	M42	84	8	4454	4440	258	65	180	0.5	22	4122.8	188	49.8	68.9	7320
												25	4110	165	56.5	78.3	

6.4.3 三排滚柱式 - 无齿

Three Row Roller Slewing Bearing - Non Gear 130



130

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-φn1、n-φn2可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿修顶系数为0.2。

NOTE:

1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1~JB/T7940.2.
- 2.Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is 0.2

序号 NO.	无齿式 Non Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	130.25.500	634	366	148	598
2	130.25.560	694	426	148	658
3	130.25.630	764	496	148	728
4	130.25.710	844	576	148	808
5	130.32.800	964	636	182	920
6	130.32.900	1064	736	182	1020
7	130.32.1000	1164	836	182	1120
8	130.32.1120	1284	956	182	1240
9	130.40.1250	1445	1055	220	1393
10	130.40.1400	1595	1205	220	1543
11	130.40.1600	1795	1405	220	1743
12	130.40.1800	1995	1605	220	1943
13	130.45.2000	2221	1779	231	2155
14	130.45.2240	2461	2019	231	2395
15	130.45.2500	2721	2279	231	2655
16	130.45.2800	3021	2579	231	2955
17	130.50.3150	3432	2868	270	3342
18	130.50.3550	3832	3268	270	3742
19	130.50.4000	4282	3718	270	4192
20	130.50.4500	4782	4218	270	4692

安装尺寸Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data				齿轮圆周力Gear circumferential force		参考重量 weight kg				
D2 mm	n	Φ mm	dm mm	L mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm		De mm	z	正火 Normalizing Z 10 <sup>3</sup> N	调质 Quenching T 10 <sup>3</sup> N
402	24	18	M16	32	4	474	463	138	32								224
462	24	18	M16	32	4	534	523	138	32								240
532	28	18	M16	32	4	604	593	138	32								270
612	28	18	M16	32	4	684	673	138	32								300
680	36	22	M20	40	4	770	759	172	40								500
780	36	22	M20	40	4	870	859	172	40								600
880	40	22	M20	40	5	970	959	172	40								680
1000	40	22	M20	40	5	1090	1079	172	40								820
1107	45	26	M24	48	5	1213	1200	210	50								1200
1257	45	26	M24	48	5	1363	1350	210	50								1300
1457	48	26	M24	48	6	1563	1550	210	50								1520
1657	48	26	M24	48	6	1763	1750	210	50								1750
1845	60	33	M30	60	6	1967	1945	219	54								2400
2085	60	33	M30	60	6	2207	2185	219	54								2700
2345	72	33	M30	60	8	2467	2445	219	54								3000
2645	72	33	M30	60	8	2767	2745	219	54								3400
2958	72	45	M42	84	8	3104	3090	258	65								5000
3358	72	45	M42	84	8	3504	3490	258	65								5680
3808	80	45	M42	84	8	3954	3940	258	65								6470
4308	80	45	M42	84	8	4454	4440	258	65								7320

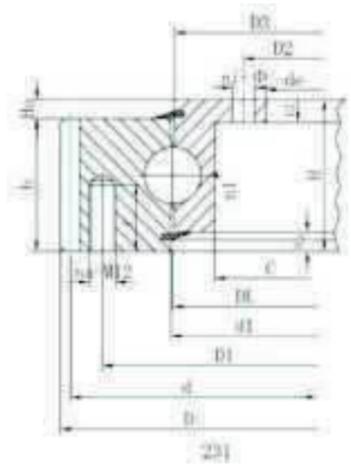
6.5.1 法兰式

Thin Section Slewing Bearing - Flange  
Type 23 Series

注:

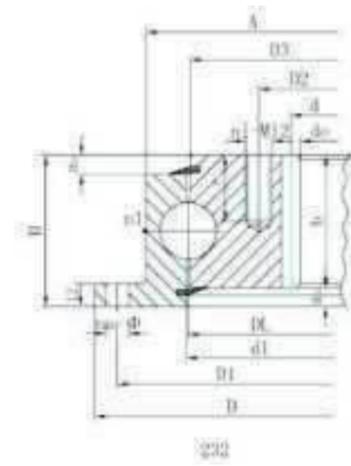
- n1 为润滑油孔数。油杯M8×1 JB/T7940.1~JB/T7940.2。根据应用情况用户可指定油孔位置。
- Km为削顶量 ( addendum reduction)

外齿Outer Gear



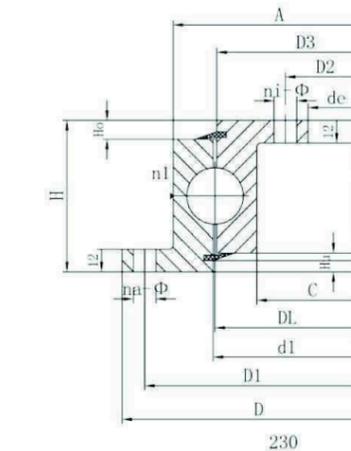
序号 No.	型号 Model	重量 Weight	外形尺寸 Dimensions			安装尺寸 Mounting dimensions				
			D	de	H	D1	D2	na	ΦM	
	DL	kg	mm						mm	
1	231.20.0414	29	504	304	56	455	332	10	M12	
2	231.20.0544	39.2	640.8	434	56	585	462	14	M12	
3	231.20.0644	47.2	742.8	534	56	685	562	16	M12	
4	231.20.0744	53.1	838.8	634	56	785	662	18	M12	
5	231.20.0844	64.7	950.4	734	56	885	762	18	M12	
6	231.20.0944	69.1	1046.4	834	56	985	862	20	M12	
7	231.20.1094	82.5	1198.4	984	56	1135	1012	22	M12	

内齿Inner Gear



1	232.20.0414	26.9	518	326.5	56	490	375	16	18
2	232.20.0544	36.7	648	445.5	56	620	505	20	18
3	232.20.0644	43.4	748	547.5	56	720	605	24	18
4	232.20.0744	50.8	848	649.2	56	820	705	24	18
5	232.20.0844	61.3	948	737.6	56	920	805	28	18
6	232.20.0944	65.4	1048	841.6	56	1020	905	32	18
7	232.20.1094	80.3	1198	985.6	56	1170	1055	32	18

无齿Non Gear



1	230.20.0414	23	518	304	56	490	332	16	18
2	230.20.0544	30.4	648	434	56	620	462	20	18
3	230.20.0644	35.8	748	534	56	720	562	24	18
4	230.20.0744	42.2	848	634	56	820	662	24	18
5	230.20.0844	47.1	948	734	56	920	762	28	18
6	230.20.0944	52.3	1048	834	56	1020	862	32	18
7	230.20.1094	61.1	1198	984	56	1170	1012	32	18

NOTE:

- n1 is the number of lubricating holes.Oil cup M8×1JB/T7940.1~JB/T794. 2, customers can specify Oil nipple's location according to application.
- Km is addendum reduction

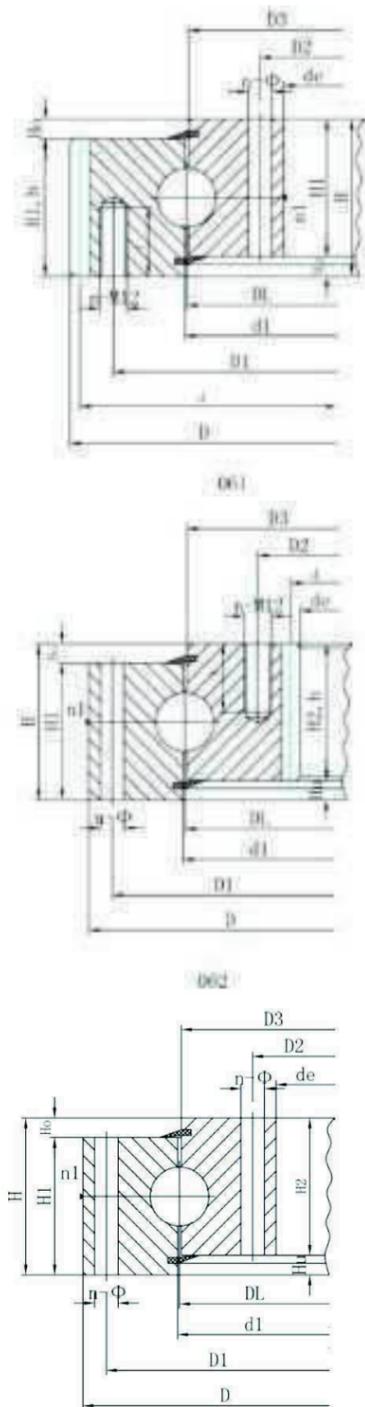
			结构尺寸 Structure dimensions							齿轮参数 Gear data					齿轮圆周力 Gear circumferential force		轴承间隙 Clearance	
ni	Φ/M	t	n1	D3	d1	A	C	Hu	Ho	d	m	z	k.m	b	允许圆周力 Allowed circumferential force	最大允许圆周力 Max allowed circumferential force	轴向 axial	径向 radial
mm		mm													kN		mm	
24	18	20	4	412.5	415.5		375	10.5	10.5	495	5	99	45.5	-0.5	11.75	23.5	≤0.5	≤0.5
28	18	20	4	542.5	545.5		505	10.5	10.5	630	6	105	45.5	-0.5	14.2	28.4	≤0.5	≤0.5
32	18	20	4	642.5	645.5		605	10.5	10.5	732	6	122	45.5	-0.6	14.2	28.4	≤0.5	≤0.5
32	18	20	4	742.5	745.5		705	10.5	10.5	828	6	138	45.5	-0.6	14.2	28.4	≤0.5	≤0.5
36	18	20	4	842.5	845.5		805	10.5	10.5	936	8	117	45.5	-0.8	18.93	37.86	≤0.5	≤0.5
40	18	20	4	942.5	945.5		905	10.5	10.5	1032	8	129	45.5	-0.8	18.93	37.86	≤0.5	≤0.5
40	18	20	4	1092.5	1095.5		1055	10.5	10.5	1184	8	148	45.5	-0.8	18.93	37.86	≤0.5	≤0.5

12	M12	20	4	412.5	415.5	453		10.5	10.5	335	5	67	45.5	-0.75	13.54	27.08	≤0.5	≤0.5
16	M12	20	4	542.5	545.5	583		10.5	10.5	456	6	76	45.5	-0.6	16.00	32.00	≤0.5	≤0.5
18	M12	20	4	642.5	645.5	683		10.5	10.5	558	6	93	45.5	-0.6	15.62	31.24	≤0.5	≤0.5
20	M12	20	4	742.5	745.5	783		10.5	10.5	660	6	110	45.5	-0.6	15.32	30.64	≤0.5	≤0.5
20	M12	20	4	842.5	845.5	883		10.5	10.5	752	8	94	45.5	-0.8	20.80	41.60	≤0.5	≤0.5
22	M12	20	4	942.5	945.5	983		10.5	10.5	856	8	107	45.5	-0.8	20.49	40.98	≤0.5	≤0.5
24	M12	20	4	1092.5	1095.5	1133		10.5	10.5	1000	8	125	45.5	-0.8	20.16	40.32	≤0.5	≤0.5

24	18	20	4	412.5	415.5	453	375	10.5	10.5								≤0.5	≤0.5
28	18	20	4	542.5	545.5	583	505	10.5	10.5								≤0.5	≤0.5
32	18	20	4	642.5	645.5	683	605	10.5	10.5								≤0.5	≤0.5
32	18	20	4	742.5	745.5	783	705	10.5	10.5								≤0.5	≤0.5
36	18	20	4	842.5	845.5	883	805	10.5	10.5								≤0.5	≤0.5
40	18	20	4	942.5	945.5	983	905	10.5	10.5								≤0.5	≤0.5
40	18	20	4	1092.5	1095.5	1133	1055	10.5	10.5								≤0.5	≤0.5

6.5.2 薄型

Thin Section Slewing Bearing - Light Type  
06 Series.



060

注:

1. n1 为润滑油孔数。油杯M8×1 JB/T7940.1 ~ JB/T7940.2, 根据应用情况用户可指定油孔位置。
2. Km为削顶量 ( addendum reduction)

外齿Outer Gear

序号 No.	型号 Model	重量 Weight	外形尺寸 Dimensions			安装尺寸 Mounting dimensions		
			D	de	H	D1	D2	n
	DL	kg	mm					
1	061.20.0414	31	504	342	56	455	368	20/24
2	061.20.0544	43	640.8	472	56	585	498	28/32
3	061.20.0644	52	742.8	572	56	685	598	32/36
4	061.20.0744	59	838.8	672	56	785	698	36/40
5	061.20.0844	71	950.4	772	56	885	798	36/40
6	061.20.0944	77	1046.4	872	56	985	898	40/44
7	061.20.1094	91	1198.4	1022	56	1135	1048	44/48

内齿Inner Gear

1	062.20.0414	31	486	326.5	56	460	375	24
2	062.20.0544	42	616	445.2	56	590	505	32
3	062.20.0644	50	716	547.2	56	690	605	36
4	062.20.0744	58	816	649.2	56	790	705	40
5	062.20.0844	69	916	737.6	56	890	805	40
6	062.20.0944	76	1016	841.6	56	990	905	44
7	062.20.1094	91	1166	985.6	56	1140	1055	48

无齿Non Gear

1	060.20.0414	29	486	342	56	460	368	24
2	060.20.0544	37	616	472	56	590	498	32
3	060.20.0644	44	716	572	56	690	598	36
4	060.20.0744	52	816	672	56	790	698	40
5	060.20.0844	60	916	772	56	890	798	40
6	060.20.0944	67	1016	872	56	990	898	44
7	060.20.1094	77	1166	1022	56	1140	1048	48

NOTE:

1. n1 is the Nos of lubricating holes. Oil cup is M8\*1JB/T7940.1~JB/T 7940.2. the oil nipple' s location can be changed according to customer' s application .
2. km is addendum reduction

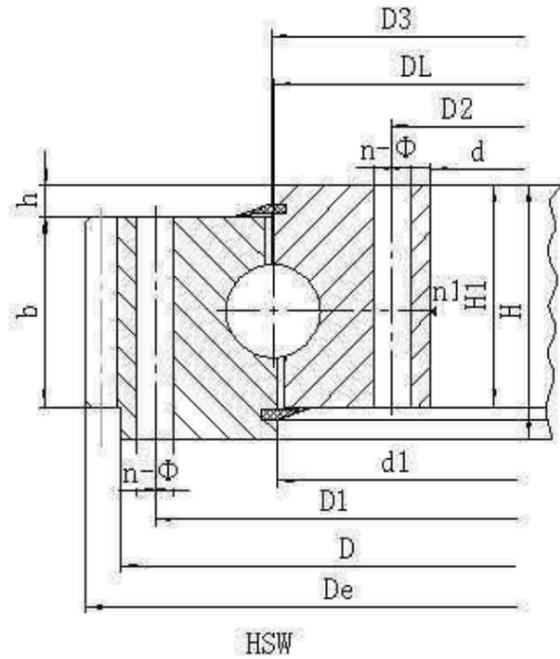
			结构尺寸 Structure dimensions						齿轮参数 Gear data					齿轮圆周力 Gear circumferential force		轴承间隙 Clearance	
Φ	M	t	D3	d1	H1	H2	Hu	Ho	d	m	z	k.m	b	允许圆周力 Allowed circumferential force	最大允许圆周力 Max allowed circumferential force	轴向 axial	径向 radial
														KN	KN	mm	mm
13.5	12	20	412.5	415.5	45.5	45.5	10.5	10.5	495	5	99	-0.5	45.5	11.75	23.5	≤0.28	≤0.24
13.5	12	20	542.5	545.5	45.5	45.5	10.5	10.5	630	6	105	-0.6	45.5	14.2	28.4	≤0.30	≤0.26
13.5	12	20	642.5	645.5	45.5	45.5	10.5	10.5	732	6	122	-0.6	45.5	14.2	28.4	≤0.30	≤0.26
13.5	12	20	742.5	745.5	45.5	45.5	10.5	10.5	828	6	138	-0.6	45.5	14.2	28.4	≤0.30	≤0.26
13.5	12	20	842.5	845.5	45.5	45.5	10.5	10.5	936	8	117	-0.8	45.5	18.93	37.86	≤0.30	≤0.26
13.5	12	20	942.5	945.5	45.5	45.5	10.5	10.5	1032	8	129	-0.8	45.5	18.93	37.86	≤0.30	≤0.26
13.5	12	20	1092.5	1095.5	45.5	45.5	10.5	10.5	1184	8	148	-0.8	45.5	18.93	37.86	≤0.30	≤0.26

13.5	12	20	412.5	415.5	45.5	45.5	10.5	10.5	335	5	67	-0.8	45.5	13.54	27.08	≤0.28	≤0.24
13.5	12	20	542.5	545.5	45.5	45.5	10.5	10.5	456	6	76	-0.6	45.5	16.00	32.00	≤0.30	≤0.26
13.5	12	20	642.5	645.5	45.5	45.5	10.5	10.5	558	6	93	-0.6	45.5	15.62	31.24	≤0.30	≤0.26
13.5	12	20	742.5	745.5	45.5	45.5	10.5	10.5	660	6	110	-0.6	45.5	15.32	30.64	≤0.30	≤0.26
13.5	12	20	842.5	845.5	45.5	45.5	10.5	10.5	752	8	94	-0.8	45.5	20.80	41.60	≤0.30	≤0.26
13.5	12	20	942.5	945.5	45.5	45.5	10.5	10.5	856	8	107	-0.8	45.5	20.49	40.98	≤0.30	≤0.26
13.5	12	20	1092.5	1095.5	45.5	45.5	10.5	10.5	1000	8	125	-0.8	45.5	20.16	40.32	≤0.30	≤0.26

13.5	12	20	412.5	415.5	45.5	45.5	10.5	10.5								≤0.28	≤0.24
13.5	12	20	542.5	545.5	45.5	45.5	10.5	10.5								≤0.30	≤0.26
13.5	12	20	642.5	645.5	45.5	45.5	10.5	10.5								≤0.30	≤0.26
13.5	12	20	742.5	745.5	45.5	45.5	10.5	10.5								≤0.30	≤0.26
13.5	12	20	842.5	845.5	45.5	45.5	10.5	10.5								≤0.30	≤0.26
13.5	12	20	942.5	945.5	45.5	45.5	10.5	10.5								≤0.30	≤0.26
13.5	12	20	1092.5	1095.5	45.5	45.5	10.5	10.5								≤0.30	≤0.26

6.6.1 单排四点接触球式 (HS系列) - 外齿

Single Row Four Point Contact Ball Slewing Bearing  
(HS Series)- Outer Gear

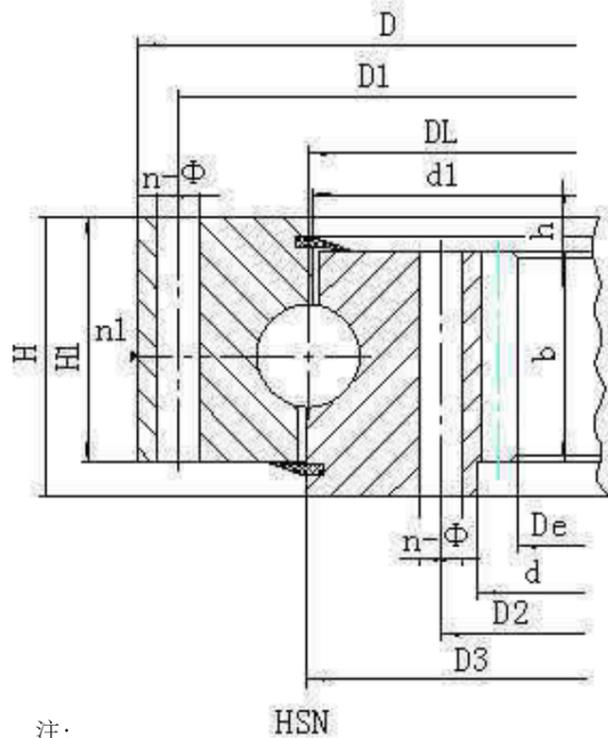


- 注:
- 1、n1为润滑油孔数，均布；油杯M10×1 JB/T7940.1-TB7940.2.
  - 2、安装孔n-Φ可改用螺孔；齿宽b可改为H-h。
  - 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
  - 4、表内变位系数均为外齿式设计。
- NOTE:
1. n1 is the nos of lubricating holes. Oil cup M10×1 JB/T7940.1~JB/T7940.2.
  2. Mounting hole n-dn1、n-dn2 can change to tapped hole; tooth wide can change to H-h
  3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
  4. Addendum reduction coefficient is 0.1

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	HSW.25.625	725	525	80	685
	HSW.25.625A				
2	HSW.25.720	820	620	80	780
	HSW.25.720A				
3	HSW.30.820	940	705	95	893
	HSW.30.820A				
4	HSW.30.880	1000	760	95	956
	HSW.30.880A				
5	HSW.30.1020	1170	875	95	1120
	HSW.30.1020A				
6	HSW.30.1220	1365	1075	120	1310
	HSW.30.1220A				
7	HSW.35.1250	1400	1090	120	1350
	HSW.35.1250A				
8	HSW.35.1435	1595	1278	120	1535
	HSW.35.1435A				
9	HSW.35.1540	1720	1360	140	1660
	HSW.35.1540A				
10	HSW.35.1700	1875	1525	140	1815
	HSW.35.1700A				
11	HSW.40.1880	2100	1665	160	2030
	HSW.40.1880A				
12	HSW.40.2115	2325	1900	160	2245
	HSW.40.2115A				
13	HSW.40.2370	2600	2146	180	2520
	HSW.40.2370A				
14	HSW.40.2600	2835	2365	180	2750
	HSW.40.2600A				
15	HSW.50.2820	3085	2555	200	3000
	HSW.50.2820A				
16	HSW.50.3120	3400	2840	200	3310
	HSW.50.3120A				
17	HSW.50.3580	3920	3240	240	3820
	HSW.50.3580A				
18	HSW.50.4030	4370	3690	240	4270
	HSW.50.4030A				
19	HSW.50.4540	4860	4210	240	4760
	HSW.50.4540A				

安装尺寸 Mounting dimensions			结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力 Gear circumferential force	参考重量 weight kg
D2 mm	n	Φ mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm	z	调质Quenching T 10 <sup>4</sup> N	
565	18	18	3	626	624	68	12	60	1.4	5	751.9	146	5.2	100
									1.15	6	755.5	122	6.2	
660	18	18	3	721	719	68	12	60	1.4	6	860.3	139	6.2	120
									1	8	861.1	104	8.3	
749	24	20	4	821	818	83	12	70	1.4	6	980.6	159	7.2	210
									1	10	986.2	95	12.2	
800	24	20	4	881	878	83	12	70	1.15	8	1047.5	127	9.7	230
									1	10	1046.3	101	12.2	
930	24	22	4	1021	1018	80	15	70	1.4	8	1219.3	148	9.7	300
									1.15	10	1219.2	118	12.2	
1130	36	24	6	1221	1218	105	15	90	1.4	10	1424.9	138	15.7	450
									1	12	1435.9	116	18.8	
1150	36	26	6	1251	1248	105	15	90	-0.35	10	1443	143	15.7	520
									1	12	1449.6	117	18.8	
1335	36	26	6	1436	1433	105	15	90	1.15	12	1655.5	134	18.8	610
									1	14	1661.2	115	21.9	
1420	42	26	6	1541	1538	122	18	110	1.4	12	1780.8	144	23	732
									1.15	14	1791.1	124	26.8	
1585	42	29	6	1701	1698	122	18	110	1.15	14	1945.4	135	26.8	844
									1.15	16	1950.8	118	30.5	
1740	48	32	6	1881	1878	140	20	115	1.4	14	2189.8	152	27.8	1400
									1.15	18	2194.6	118	35.8	
1980	48	32	6	2116	2113	140	20	115	1.4	16	2406.5	146	31.9	1600
									1.15	20	2418.4	117	40	
2220	48	32	6	2371	2368	158	22	130	1.4	18	2707.3	146	40.7	2100
									1.15	22	2704.4	119	49.7	
2450	54	36	6	2601	2598	158	22	130	1.4	18	2941.7	159	37.6	2400
									1.15	22	2946.9	130	45.9	
2640	54	36	6	2822	2818	178	22	150	1.4	20	3188.4	155	52.2	3400
									1.15	25	3198.4	124	65.3	
2930	54	36	6	3122	3118	178	22	150	1.4	22	3507.2	155	57.4	4000
									1.4	25	3509.6	136	65.3	
3340	60	40	6	3582	3578	218	22	190	1.4	22	4036.1	179	72.7	6700
									1.4	25	4035.6	157	82.6	
3790	66	40	6	4032	4028	218	22	190	1.4	22	4520.6	201	53.6	7700
									1.4	28	4522.4	157	68.2	
4310	72	40	6	4542	4538	218	22	190	1.4	22	4983.1	222	72.1	8760
									1.4	30	4992.9	162	99.1	

6.6.2 单排四点接触球式 (HS系列) -内齿  
Single Row Four Point Contact Ball Slewing  
Bearing(HS Series) -Inner Gear



序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	HSN.25.625	725	525	80	685
	HSN.25.625A				
2	HSN.25.720	820	620	80	780
	HSN.25.720A				
3	HSN.30.820	940	705	95	893
	HSN.30.820A				
4	HSN.30.880	1000	760	95	956
	HSN.30.880A				
5	HSN.30.1020	1170	875	95	1120
	HSN.30.1020A				
6	HSN.30.1220	1365	1075	120	1310
	HSN.30.1220A				
7	HSN.35.1250	1400	1090	120	1350
	HSN.35.1250A				
8	HSN.35.1435	1595	1278	120	1535
	HSN.35.1435A				
9	HSN.35.1540	1720	1360	140	1660
	HSN.35.1540A				
10	HSN.35.1700	1875	1525	140	1815
	HSN.35.1700A				
11	HSN.40.1880	2100	1665	160	2030
	HSN.40.1880A				
12	HSN.40.2115	2325	1900	160	2245
	HSN.40.2115A				
13	HSN.40.2370	2600	2146	180	2520
	HSN.40.2370A				
14	HSN.40.2600	2835	2365	180	2750
	HSN.40.2600A				
15	HSN.50.2820	3085	2555	200	3000
	HSN.50.2820A				
16	HSN.50.3120	3400	2840	200	3310
	HSN.50.3120A				
17	HSN.50.3580	3920	3240	240	3820
	HSN.50.3580A				
18	HSN.50.4030	4370	3690	240	4270
	HSN.50.4030A				
19	HSN.50.4540	4860	4210	240	4760
	HSN.50.4540A				

注:

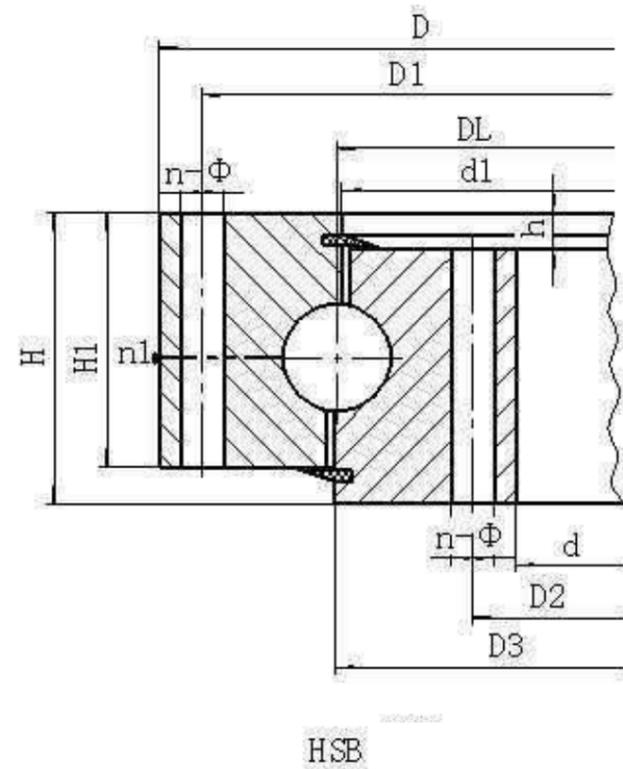
- 1、n1为润滑油孔数，均布；油杯M10×1 JB/T7940.1-TB7940.2.
- 2、安装孔n-Φ可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、表内变位系数均为外齿式设计。

NOTE:

1. n1 is the nos of lubricating holes. Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n-dn1、 n-dn2 can change to tapped hole; tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is external gear design Series

安装尺寸 Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data				齿轮圆周力 Gear circumferential force	参考 重量 weight kg		
D2 mm	n	Φ mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm		z	调质Quenching T 10 <sup>4</sup> N
565	18	18	3	626	624	68	12	60	0.35	5	498.8	101	5.2	100
									0.35	6	496.7	84	6.2	
660	18	18	3	721	719	68	12	60	0.35	6	586.6	99	6.2	120
									0.35	8	582.3	74	8.3	
749	24	20	4	821	818	83	12	70	0.35	6	664.5	112	7.2	210
									0.35	10	658	67	12.2	
800	24	20	4	881	878	83	12	70	0.35	8	718.2	91	9.7	230
									0.35	10	707.9	72	12.2	
930	24	22	4	1021	1018	80	15	70	0.35	8	830.1	105	9.7	300
									0.35	10	827.8	84	12.2	
1130	36	24	6	1221	1218	105	15	90	0.35	10	1027.8	104	15.7	450
									0.35	12	1017.3	86	18.8	
1150	36	26	6	1251	1248	105	15	90	0.35	10	1037	105	15.7	520
									0.35	12	1028.8	87	18.8	
1335	36	26	6	1436	1433	105	15	90	0.35	12	1221.2	103	18.8	610
									0.35	14	1214.8	88	21.9	
1420	42	26	6	1541	1538	122	18	110	0.35	12	1293.1	109	23	732
									0.35	14	1284.8	93	26.8	
1585	42	29	6	1701	1698	122	18	110	0.35	14	1452.7	105	26.8	844
									0.35	16	1452.3	92	30.5	
1740	48	32	6	1881	1878	140	20	115	0.35	14	1592.6	115	27.8	1400
									0.35	18	1579.9	89	35.8	
1980	48	32	6	2116	2113	140	20	115	0.35	16	1804.1	114	31.9	1600
									0.35	20	1795.4	91	40	
2220	48	32	6	2371	2368	158	22	130	0.35	18	2065.6	116	40.7	2100
									0.35	22	2040.9	94	49.7	
2450	54	36	6	2601	2598	158	22	130	0.35	18	2263.5	127	37.6	2400
									0.35	22	2260.8	104	45.9	
2640	54	36	6	2822	2818	178	22	150	0.35	20	2455	124	52.2	3400
									0.35	25	2444.1	99	65.3	
2930	54	36	6	3122	3118	178	22	150	0.35	22	2722.5	125	57.4	4000
									0.35	25	2719	110	65.3	
3340	60	40	6	3582	3578	218	22	190	0.35	22	3118.4	143	72.7	6700
									0.35	25	3118.8	126	82.6	
3790	66	40	6	4032	4028	218	22	190	0.35	22	3558.3	163	53.6	7700
									0.35	28	3549	128	68.2	
4310	72	40	6	4542	4538	218	22	190	0.35	22	4042.2	185	72.1	8760
									0.35	30	4042.4	136	99.1	

6.6.3 单排四点接触球式 (HS系列) - 无齿  
Single Row Four Point Contact Ball Slewing  
Bearing(HS Series) - Non Gear



序号 NO.	无齿式 Non Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	HSB.25.625	725	525	80	685
2	HSB.25.720	820	620	80	780
3	HSB.30.820	940	705	95	893
4	HSB.30.880	1000	760	95	956
5	HSB.30.1020	1170	875	95	1120
6	HSB.30.1220	1365	1075	120	1310
7	HSB.35.1250	1400	1090	120	1350
8	HSB.35.1435	1595	1278	120	1535
9	HSB.35.1540	1720	1360	140	1660
10	HSB.35.1700	1875	1525	140	1815
11	HSB.40.1880	2100	1665	160	2030
12	HSB.40.2115	2325	1900	160	2245
13	HSB.40.2370	2600	2146	180	2520
14	HSB.40.2600	2835	2365	180	2750
15	HSB.50.2820	3085	2555	200	3000
16	HSB.50.3120	3400	2840	200	3310
17	HSB.50.3580	3920	3240	240	3820
18	HSB.50.4030	4370	3690	240	4270
19	HSB.50.4540	4860	4210	240	4760

注:

1、n1为润滑油孔数, 均布: 油杯M10×1

JB/T7940.1-TB7940.2.

2、安装孔n-Φ可改用螺孔; 齿宽b可改为H-h。

NOTE:

1. n1 is the nos of lubricating holes. Oil cup

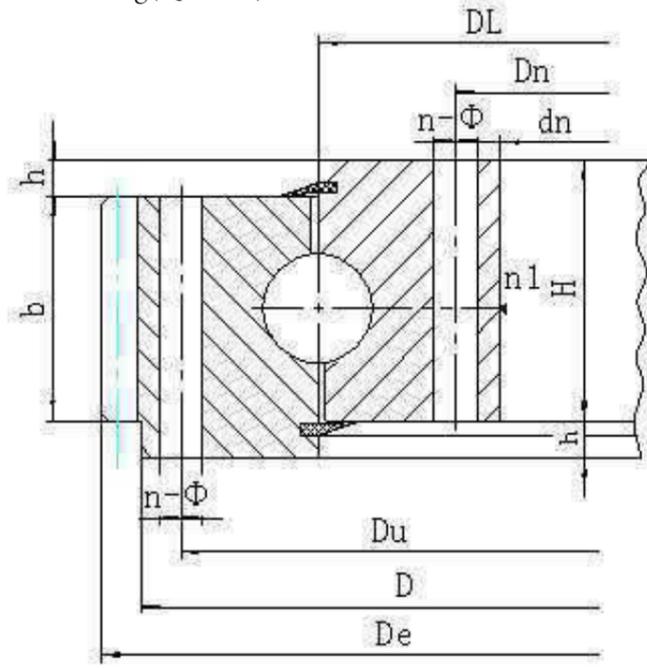
M10×1JB/T7940.1 ~ JB/T7940.2.

2. Mounting hole n-dn1、 n-dn2 can change to tapped hole.

安装尺寸 Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data				齿轮圆周力 Gear circumferential force	参考 重量 weight kg		
D2 mm	n	Φ mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm		z	调质Quenching T 10 <sup>4</sup> N
565	18	18	3	626	624	68	12							100
660	18	18	3	721	719	68	12							120
749	24	20	4	821	818	83	12							210
800	24	20	4	881	878	83	12							230
930	24	22	4	1021	1018	80	15							300
1130	36	24	6	1221	1218	105	15							450
1150	36	26	6	1251	1248	105	15							520
1335	36	26	6	1436	1433	105	15							610
1420	42	26	6	1541	1538	122	18							732
1585	42	29	6	1701	1698	122	18							844
1740	48	32	6	1881	1878	140	20							1400
1980	48	32	6	2116	2113	140	20							1600
2220	48	32	6	2371	2368	158	22							2100
2450	54	36	6	2601	2598	158	22							2400
2640	54	36	6	2822	2818	178	22							3400
2930	54	36	6	3122	3118	178	22							4000
3340	60	40	6	3582	3578	218	22							6700
3790	66	40	6	4032	4028	218	22							7700
4310	72	40	6	4542	4538	218	22							8760

6.7.1 单排四点接触球式 (Q系列) - 外齿

Single-row four point contact ball slewing bearing(Q Series)-Outer Gear



QW

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-Φ可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。

NOTE:

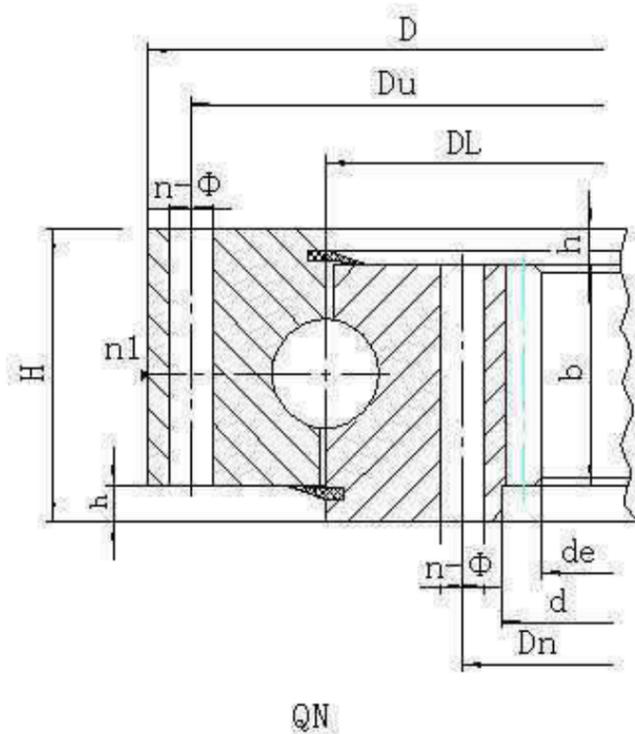
1. n1 is the nos of lubricating holes. Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n-dn1、 n-dn2 can change to tapped hole; tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.

序号 NO.	型号 Model	外型尺寸Dimensions		
		外齿式 Outer Gear		H
		D	d	
		mm		
1	QW.315.20 QW.315.20A	406	222	60
2	QW.355.20 QW.355.20A	446	262	60
3	QW.400.20 QW.400.20A	490	307	60
4	QW.450.20 QW.450.20A	540	357	60
5	QW.500.20 QW.500.20A	590	407	60
6	QW.560.20 QW.560.20A	654	464	70
7	QW.630.20 QW.630.20A	724	534	70
8	QW.710.20 QW.710.20A	804	614	70
9	QW.800.20 QW.800.20A	894	704	70
10	QW.800.25 QW.800.25A	904	692	78
11	QW.900.25 QW.900.25A	1004	792	78
12	QW.1000.25 QW.1000.25A	1104	892	78
13	QW.1000.32 QW.1000.32A	1120	876	90
14	QW.1120.32 QW.1120.32A	1240	996	90
15	QW.1250.32 QW.1250.32A	1370	1126	90
16	QW.1400.32 QW.1400.32A	1520	1276	90
17	QW.1250.40 QW.1250.40A	1390	1108	102
18	QW.1400.40 QW.1400.40A	1540	1258	102
19	QW.1600.40 QW.1600.40A	1740	1458	102
20	QW.1800.40 QW.1800.40A	1940	1658	102
21	QW.1600.50 QW.1600.50A	1762	1434	124
22	QW.1800.50 QW.1800.50A	1964	1634	124
23	QW.2000.50 QW.2000.50A	2162	1834	124
24	QW.2240.50 QW.2240.50A	2402	2074	124
25	QW.2500.50 QW.2500.50A	2662	2334	124
26	QW.2500.60 QW.2500.60A	2696	2304	150

安装尺寸Mounting dimensions						结构尺寸 Structural dimensions		齿轮参数Gear data				
Du	Dn	n	通孔 Through-hole A	螺孔 Tapped hole B/C/D		油杯数量n1 Oil cup no.	h	B	m	Outer Gear x=-0.5		
			Φ	d1	T					De	齿数z Gear no.	重量 Weight
			mm				mm	mm			kg	
370	260	10	17	M16	24	2	10	40	3	423	140	35
410	300	10	17	M16	24	2	10	40	4	428	106	36
									3	462	153	40
455	345	12	17	M16	24	2	10	40	4	512	127	45
									5	520	103	47
505	395	12	17	M16	24	2	10	40	4	564	140	51
									5	570	113	53
555	445	14	17	M16	24	2	10	40	5	615	122	56
									6	624	103	58
618	502	14	17	M16	30	2	10	50	4	680	169	78
									5	685	136	79
688	572	16	17	M16	30	2	10	50	4	748	186	86
									5	755	150	88
768	652	18	17	M16	30	2	10	50	5	835	166	99
									6	840	139	101
858	742	20	17	M16	30	2	10	50	6	930	154	114
									8	936	116	114
864	736	18	22	M20	36	2	10	58	6	942	156	143
									8	952	118	147
964	836	20	22	M20	36	2	10	58	8	1048	130	162
									10	1060	105	168
1064	936	24	22	M20	36	2	10	58	8	1152	143	182
									10	1160	115	185
1074	926	24	24	M22	40	2	10	70	8	1160	144	227
									10	1170	116	232
1194	1046	28	24	M22	40	4	10	70	10	1300	129	272
									12	1308	108	275
1324	1176	32	24	M22	40	4	10	70	10	1430	142	302
									12	1440	119	309
1474	1326	36	24	M22	40	4	10	70	12	1584	131	337
									14	1596	113	347
1336	1164	32	26	M24	45	4	12	80	10	1450	144	396
									12	1452	120	392
1486	1314	36	26	M24	45	4	12	80	12	1608	133	448
									14	1610	114	443
1686	1514	40	26	M24	45	4	12	80	12	1812	150	528
									14	1820	129	534
1886	1714	44	26	M24	45	4	12	80	14	2016	143	583
									16	2032	126	607
1704	1496	40	30	M27	50	4	12	100	12	1824	151	714
									14	1834	130	727
1904	1696	44	30	M27	50	4	12	100	14	2044	145	845
									16	2048	127	843
2104	1896	48	30	M27	50	6	12	100	16	2240	139	912
									18	2250	124	927
2344	2136	54	30	M27	50	6	12	100	16	2480	154	1020
									18	2502	138	1078
2604	2396	60	30	M27	50	6	12	100	18	2754	152	1171
									20	2760	137	1175
2626	2374	60	33	M30	56	6	14	122	18	2790	154	1677
									20	2800	139	1701

6.7.2 单排四点接触球式 (Q系列) -内齿

Single-row four point contact ball slewing bearing(Q Series) - Inner Gear



QN

注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
- 2、安装孔n-Φ可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。

NOTE:

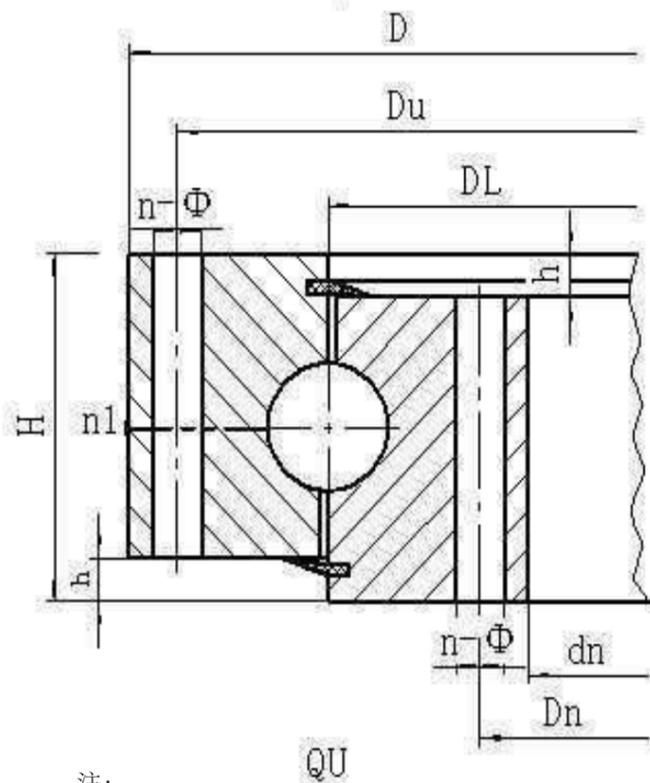
1. n1 is the nos of lubricating holes. Oil cup M10×1 JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n-dn1、 n-dn2 can change to tapped hole; tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.

序号 NO.	型号 Model	外型尺寸Dimensions		
		内齿式 Inner Gear		H
		D	d	
mm				
1	QN.315.20 QN.315.20A	408	224	60
2	QN.355.20 QN.355.20A	448	264	60
3	QN.400.20 QN.400.20A	493	310	60
4	QN.450.20 QN.450.20A	543	360	60
5	QN.500.20 QN.500.20A	593	410	60
6	QN.560.20 QN.560.20A	656	468	70
7	QN.630.20 QN.630.20A	726	538	70
8	QN.710.20 QN.710.20A	806	618	70
9	QN.800.20 QN.800.20A	896	708	70
10	QN.800.25 QN.800.25A	908	694	78
11	QN.900.25 QN.900.25A	1008	794	78
12	QN.1000.25 QN.1000.25A	1108	894	78
13	QN.1000.32 QN.1000.32A	1124	880	90
14	QN.1120.32 QN.1120.32A	1244	1000	90
15	QN.1250.32 QN.1250.32A	1374	1130	90
16	QN.1400.32 QN.1400.32A	1524	1280	90
17	QN.1250.40 QN.1250.40A	1394	1110	102
18	QN.1400.40 QN.1400.40A	1544	1260	102
19	QN.1600.40 QN.1600.40A	1744	1460	102
20	QN.1800.40 QN.1800.40A	1944	1660	102
21	QN.1600.50 QN.1600.50A	1766	1438	124
22	QN.1800.50 QN.1800.50A	1966	1638	124
23	QN.2000.50 QN.2000.50A	2166	1842	124
24	QN.2240.50 QN.2240.50A	2406	2078	124
25	QN.2500.50 QN.2500.50A	2666	2342	124
26	QN.2500.60 QN.2500.60A	2696	2308	150

安装尺寸Mounting dimensions						结构尺寸 Structural dimensions		齿轮参数Gear data				
Du	Dn	n	通孔 Through-hole A	螺孔 Tapped hole B/C/D		油杯数 量n1 Oil cup no.	h	B	m	Outer Gear x=-0.5		
			Φ	d1	T					De	齿数z Gear no.	重量 Weight
mm							mm	mm			kg	
370	260	10	17	M16	24	2	10	40	3	207	70	34
410	300	10	17	M16	24	2	10	40	4	200	51	35
									3	246	84	39
455	345	12	17	M16	24	2	10	40	4	288	73	44
									5	280	57	46
505	395	12	17	M16	24	2	10	40	4	336	85	50
									5	330	67	52
555	445	14	17	M16	24	2	10	40	5	385	78	55
									6	378	64	57
618	502	14	17	M16	30	2	10	50	4	440	111	76
									5	435	88	77
688	572	16	17	M16	30	2	10	50	4	512	129	84
									5	505	102	86
768	652	18	17	M16	30	2	10	50	5	585	118	97
									6	582	98	97
858	742	20	17	M16	30	2	10	50	6	672	113	110
									8	664	84	111
864	736	18	22	M20	36	2	10	58	6	654	110	142
									8	648	82	142
964	836	20	22	M20	36	2	10	58	8	744	94	163
									10	740	75	162
1064	936	24	22	M20	36	2	10	58	8	848	107	178
									10	840	85	179
1074	926	24	24	M22	40	2	10	70	8	832	105	230
									10	830	84	227
1194	1046	28	24	M22	40	4	10	70	10	940	95	263
									12	936	79	262
1324	1176	32	24	M22	40	4	10	70	10	1070	108	294
									12	1068	90	290
1474	1326	36	24	M22	40	4	10	70	12	1212	102	333
									14	1204	87	336
1336	1164	32	26	M24	45	4	12	80	10	1050	106	388
									12	1044	88	388
1486	1314	36	26	M24	45	4	12	80	12	1188	100	444
									14	1190	86	434
1686	1514	40	26	M24	45	4	12	80	12	1392	117	509
									14	1386	100	511
1886	1714	44	26	M24	45	4	12	80	14	1582	114	576
									16	1568	99	591
1704	1496	40	30	M27	50	4	12	100	12	1368	115	714
									14	1358	98	723
1904	1696	44	30	M27	50	4	12	100	14	1568	113	794
									16	1552	98	818
2104	1896	48	30	M27	50	6	12	100	16	1760	111	891
									18	1746	98	913
2344	2136	54	30	M27	50	6	12	100	16	1984	125	1044
									18	1980	111	1041
2604	2396	60	30	M27	50	6	12	100	18	2250	126	1132
									20	2240	113	1148
2626	2374	60	33	M30	56	6	14	122	18	2214	124	1621
									20	2200	111	1654

6.7.3 单排四点接触球式 (Q系列) - 无齿

Single-row four point contact ball slewing bearing(Q Series) - Non Gear



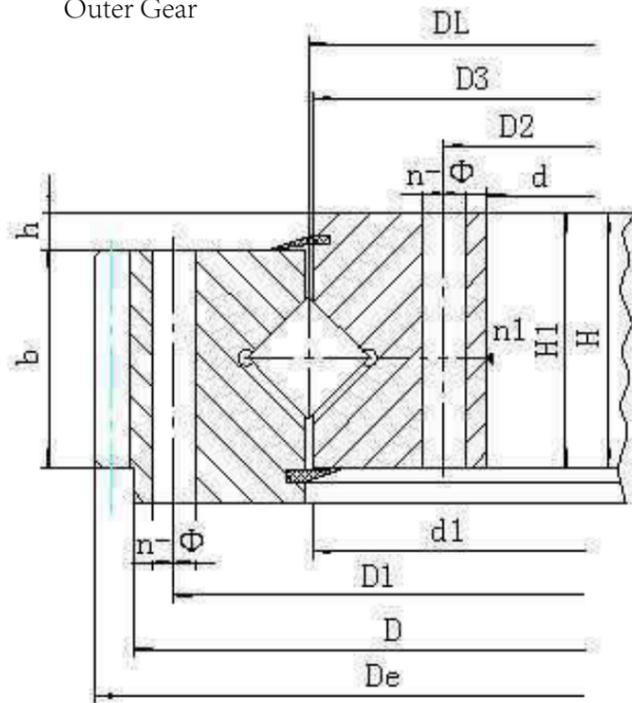
注:

- 1、n1为润滑油孔数，均布：油杯M10×1 JB/T7940.1-JB/T7940.2
  - 2、安装孔n-Φ可改用螺孔；齿宽b可改为H-h。
  - 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- NOTE:
- 1.n1 is the nos of lubricating holes. Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
  2. Mounting hole n-dn1、 n-dn2 can change to tapped hole; tooth wide can change to H-h
  3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.

序号 NO.	型号 Model	外型尺寸Dimensions		
		无齿Non Gear		H
		D	d	
mm				
1	QU.315.20 QU.315.20A	408	222	60
2	QU.355.20 QU.355.20A	448	262	60
3	QU.400.20 QU.400.20A	493	307	60
4	QU.450.20 QU.450.20A	543	357	60
5	QU.500.20 QU.500.20A	593	407	60
6	QU.560.20 QU.560.20A	656	464	70
7	QU.630.20 QU.630.20A	726	534	70
8	QU.710.20 QU.710.20A	806	614	70
9	QU.800.20 QU.800.20A	896	704	70
10	QU.800.25 QU.800.25A	908	692	78
11	QU.900.25 QU.900.25A	1008	792	78
12	QU.1000.25 QU.1000.25A	1108	892	78
13	QU.1000.32 QU.1000.32A	1124	876	90
14	QU.1120.32 QU.1120.32A	1244	996	90
15	QU.1250.32 QU.1250.32A	1374	1126	90
16	QU.1400.32 QU.1400.32A	1524	1276	90
17	QU.1250.40 QU.1250.40A	1394	1108	102
18	QU.1400.40 QU.1400.40A	1544	1258	102
19	QU.1600.40 QU.1600.40A	1744	1458	102
20	QU.1800.40 QU.1800.40A	1944	1658	102
21	QU.1600.50 QU.1600.50A	1766	1434	124
22	QU.1800.50 QU.1800.50A	1966	1634	124
23	QU.2000.50 QU.2000.50A	2166	1834	124
24	QU.2240.50 QU.2240.50A	2406	2074	124
25	QU.2500.50 QU.2500.50A	2666	2334	124
26	QU.2500.60 QU.2500.60A	2696	2304	150

安装尺寸Mounting dimensions						结构尺寸 Structural dimensions		齿轮参数Gear data				
Du	Dn	n	通孔 Through-hole A	螺孔 Tapped hole B/C/D		油杯数量n1 Oil cup no.	h	B	m	Outer Gear x=-0.5		
			Φ	d1	T					De	齿数z Gear no.	重量 Weight
			mm				mm	mm			kg	
370	260	10	17	M16	24	2	10					34
410	300	10	17	M16	24	2	10					39
455	345	12	17	M16	24	2	10					44
505	395	12	17	M16	24	2	10					50
555	445	14	17	M16	24	2	10					55
618	502	14	17	M16	30	2	10					76
688	572	16	17	M16	30	2	10					84
768	652	18	17	M16	30	2	10					97
858	742	20	17	M16	30	2	10					110
864	736	18	22	M20	36	2	10					142
964	836	20	22	M20	36	2	10					163
1064	936	24	22	M20	36	2	10					178
1074	926	24	24	M22	40	2	10					230
1194	1046	28	24	M22	40	4	10					263
1324	1176	32	24	M22	40	4	10					294
1474	1326	36	24	M22	40	4	10					333
1336	1164	32	26	M24	45	4	12					388
1486	1314	36	26	M24	45	4	12					444
1686	1514	40	26	M24	45	4	12					509
1886	1714	44	26	M24	45	4	12					576
1704	1496	40	30	M27	50	4	12					714
1904	1696	44	30	M27	50	4	12					794
2104	1896	48	30	M27	50	6	12					891
2344	2136	54	30	M27	50	6	12					1044
2604	2396	60	30	M27	50	6	12					1132
2626	2374	60	33	M30	56	6	14					1621

6.8.1 单排交叉滚柱式 (HJ系列) - 外齿  
Single Row Roller Slewing Bearing(HJ Series) -  
Outer Gear



HJW

注:

- 1、n1为润滑油孔数, 均布: 油杯M10×1 JB/T7940.1-JB/T7940.2.
- 2、安装孔n-Φ可改用螺孔; 齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力, 额定圆周力取其1/2。
- 4、内齿变位系数均为+0.35。

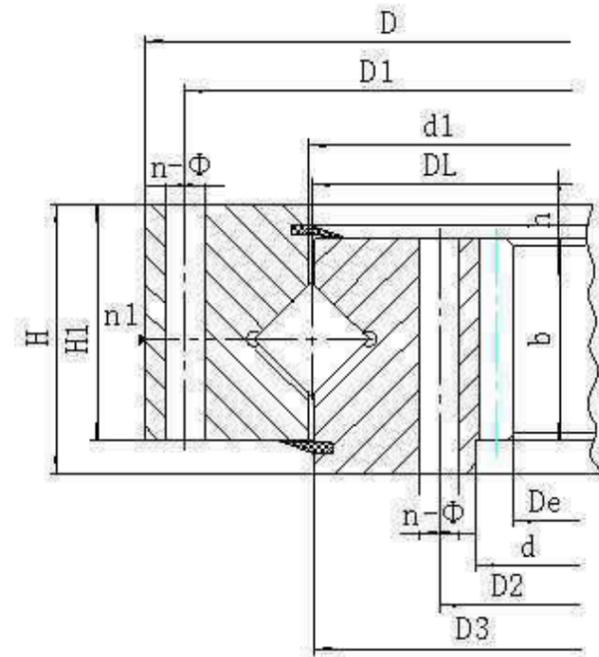
NOTE:

1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is +0.35

序号 NO.	外齿式 Outer Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	HJW.20.625	725	525	80	685
	HJW.20.625A				
2	HJW.20.720	820	620	80	780
	HJW.20.720A				
3	HJW.30.820	940	705	95	893
	HJW.30.820A				
4	HJW.30.880	1000	760	95	956
	HJW.30.880A				
5	HJW.30.1020	1170	875	95	1120
	HJW.30.1020A				
6	HJW.36.1220	1365	1075	120	1310
	HJW.36.1220A				
7	HJW.36.1250	1400	1090	120	1350
	HJW.36.1250A				
8	HJW.36.1435	1595	1278	120	1535
	HJW.36.1435A				
9	HJW.45.1540	1720	1360	140	1660
	HJW.45.1540A				
10	HJW.45.1700	1875	1525	140	1815
	HJW.45.1700A				
11	HJW.45.1880	2100	1665	160	2030
	HJW.45.1880A				
12	HJW.45.2115	2325	1900	160	2245
	HJW.45.2115A				
13	HJW.45.2370	2600	2146	180	2520
	HJW.45.2370A				
14	HJW.45.2600	2835	2365	180	2750
	HJW.45.2600A				
15	HJW.50.2820	3085	2555	200	3000
	HJW.50.2820A				
16	HJW.50.3120	3400	2840	200	3310
	HJW.50.3120A				
17	HJW.50.3580	3920	3240	240	3820
	HJW.50.3580A				
18	HJW.50.4030	4370	3690	240	4270
	HJW.50.4030A				
19	HJW.50.4540	4860	4210	240	4760
	HJW.50.4540A				

安装尺寸 Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data				齿轮圆周力 Gear circumferential force	参考 重量 weight kg		
D2 mm	n	Φ mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm		z	调质Quenching T 10 <sup>4</sup> N
565	18	18	3	627	623	68	12	60	1.4	5	751.9	146	5.2	100
									1.15	6	755.5	122	6.2	
660	18	18	3	722	718	68	12	60	1.4	6	860.3	139	6.2	120
									1	8	861.1	104	8.3	
749	24	20	4	822	818	83	12	70	1.4	6	980.6	159	7.2	210
									1	10	986.2	95	12.2	
800	24	20	4	882	878	83	12	70	1.15	8	1047.5	127	9.7	230
									1	10	1046.3	101	12.2	
930	24	22	4	1022	1018	80	15	70	1.4	8	1219.3	148	9.7	300
									1.15	10	1219.2	118	12.2	
1130	36	24	6	1222	1218	105	15	90	1.4	10	1424.9	138	15.7	450
									1	12	1435.9	116	18.8	
1150	36	26	6	1252	1248	105	15	90	-0.35	10	1443	143	15.7	520
									1	12	1449.6	117	18.8	
1335	36	26	6	1437	1433	105	15	90	1.15	12	1655.5	134	18.8	610
									1	14	1661.2	115	21.9	
1420	42	26	6	1543	4537	122	18	110	1.4	12	1780.8	144	23	732
									1.15	14	1791.1	124	26.8	
1585	42	29	6	1703	1697	122	18	110	1.15	14	1945.4	135	26.8	844
									1.15	16	1950.8	118	30.5	
1740	48	32	6	1883	1876	140	20	115	1.4	14	2189.8	152	27.8	1400
									1.15	18	2194.6	118	35.8	
1980	48	32	6	2118	2112	140	20	115	1.4	16	2406.5	146	31.9	1600
									1.15	20	2418.4	117	40	
2220	48	32	6	2373	2367	158	22	130	1.4	18	2707.3	146	40.7	2100
									1.15	22	2704.4	119	49.7	
2450	54	36	6	2603	2597	158	22	130	1.4	18	2941.7	159	37.6	2400
									1.15	22	2946.9	130	45.9	
2640	54	36	6	2823	2817	178	22	150	1.4	20	3188.4	155	52.2	3400
									1.15	25	3198.4	124	65.3	
2930	54	36	6	3123	3117	178	22	150	1.4	22	3507.2	155	57.4	4000
									1.4	25	3509.6	136	65.3	
3340	60	40	6	3583	3577	218	22	190	1.4	22	4036.1	179	72.7	6700
									1.4	25	4035.6	157	82.6	
3790	66	40	6	4033	4027	218	22	190	1.4	22	4520.6	201	53.6	7700
									1.4	28	4522.4	157	68.2	
4310	72	40	6	4543	4537	218	22	190	1.4	22	4983.1	222	72.1	8760
									1.4	30	4992.9	162	99.1	

6.8.2 单排交叉滚柱式 (HJ系列) - 内齿  
Single Row Roller Slewing Bearing(HJ Series) -  
Inner Gear



HJN

注:

- 1、n1为润滑油孔数，均布；油杯M10×1 JB/T7940.1-JB/T7940.2。
- 2、安装孔n-φ可改用螺孔；齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力，额定圆周力取其1/2。
- 4、内齿变位系数均为+0.35。

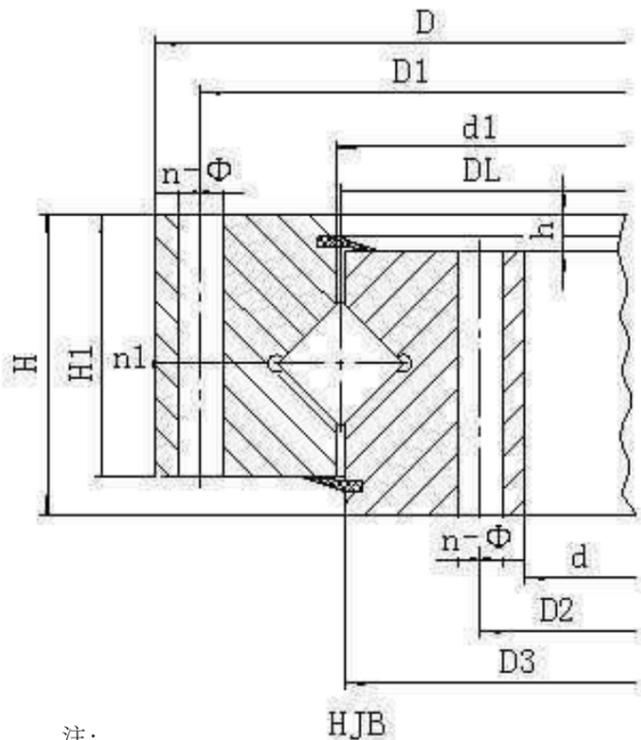
NOTE:

1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n- φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is +0.35

序号 NO.	内齿式 Inner Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	HJN.20.625	725	525	80	685
	HJN.20.625A				
2	HJN.20.720	820	620	80	780
	HJN.20.720A				
3	HJN.30.820	940	705	95	893
	HJN.30.820A				
4	HJN.30.880	1000	760	95	956
	HJN.30.880A				
5	HJN.30.1020	1170	875	95	1120
	HJN.30.1020A				
6	HJN.36.1220	1365	1075	120	1310
	HJN.36.1220A				
7	HJN.36.1250	1400	1090	120	1350
	HJN.36.1250A				
8	HJN.36.1435	1595	1278	120	1535
	HJN.36.1435A				
9	HJN.45.1540	1720	1360	140	1660
	HJN.45.1540A				
10	HJN.45.1700	1875	1525	140	1815
	HJN.45.1700A				
11	HJN.45.1880	2100	1665	160	2030
	HJN.45.1880A				
12	HJN.45.2115	2325	1900	160	2245
	HJN.45.2115A				
13	HJN.45.2370	2600	2146	180	2520
	HJN.45.2370A				
14	HJN.45.2600	2835	2365	180	2750
	HJN.45.2600A				
15	HJN.50.2820	3085	2555	200	3000
	HJN.50.2820A				
16	HJN.50.3120	3400	2840	200	3310
	HJN.50.3120A				
17	HJN.50.3580	3920	3240	240	3820
	HJN.50.3580A				
18	HJN.50.4030	4370	3690	240	4270
	HJN.50.4030A				
19	HJN.50.4540	4860	4210	240	4760
	HJN.50.4540A				

安装尺寸 Mounting dimensions			结构尺寸Structural dimensions				齿轮参数Gear data					齿轮圆周力 Gear circumferential force	参考 重量 weight kg	
D2 mm	n	φ mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm	z		调质Quenching T 10 <sup>4</sup> N
565	18	18	3	627	623	68	12	60	0.35	5	498.8	101	5.2	100
									0.35	6	496.7	84	6.2	
660	18	18	3	722	718	68	12	60	0.35	6	586.6	99	6.2	120
									0.35	8	582.3	74	8.3	
749	24	20	4	822	818	83	12	70	0.35	6	664.5	112	7.2	210
									0.35	10	658	67	12.2	
800	24	20	4	882	878	83	12	70	0.35	8	718.2	91	9.7	230
									0.35	10	707.9	72	12.2	
930	24	22	4	1022	1018	80	15	70	0.35	8	830.1	105	9.7	300
									0.35	10	827.8	84	12.2	
1130	36	24	6	1222	1218	105	15	90	0.35	10	1027.8	104	15.7	450
									0.35	12	1017.3	86	18.8	
1150	36	26	6	1252	1248	105	15	90	0.35	10	1037	105	15.7	520
									0.35	12	1028.8	87	18.8	
1335	36	26	6	1437	1433	105	15	90	0.35	12	1221.2	1.3	18.8	610
									0.35	14	1214.8	88	21.9	
1420	42	26	6	1543	4537	122	18	110	0.35	12	1293.1	109	23	732
									0.35	14	1284.8	93	26.8	
1585	42	29	6	1703	1697	122	18	110	0.35	14	1452.7	105	26.8	844
									0.35	16	1452.3	92	30.5	
1740	48	32	6	1883	1876	140	20	115	0.35	14	1592.6	115	27.8	1400
									0.35	18	1579.9	89	35.8	
1980	48	32	6	2118	2112	140	20	115	0.35	16	1804.1	114	31.9	1600
									0.35	20	1795.4	91	40	
2220	48	32	6	2373	2367	158	22	130	0.35	18	2065.6	116	40.7	2100
									0.35	22	2040.9	94	49.7	
2450	54	36	6	2603	2597	158	22	130	0.35	18	2263.5	127	37.6	2400
									0.35	22	2260.8	104	45.9	
2640	54	36	6	2823	2817	178	22	150	0.35	20	2455	124	52.2	3400
									0.35	25	2444.1	99	65.3	
2930	54	36	6	3123	3117	178	22	150	0.35	22	2722.5	125	57.4	4000
									0.35	25	2719	110	65.3	
3340	60	40	6	3583	3577	218	22	190	0.35	22	3118.4	143	72.7	6700
									0.35	25	3118.8	126	82.6	
3790	66	40	6	4033	4027	218	22	190	0.35	22	3558.3	163	53.6	7700
									0.35	28	3549	128	68.2	
4310	72	40	6	4543	4537	218	22	190	0.35	22	4042.2	185	72.1	8760
									0.35	30	4042.4	136	99.1	

6.8.3 单排交叉滚柱式 (HJ系列) - 无齿  
Single Row Roller Slewing Bearing(HJ Series) - Non Gear



注:

- 1、n1为润滑油孔数,均布:油杯M10×1 JB/T7940.1-JB/T7940.2.
- 2、安装孔n-φ可改用螺孔;齿宽b可改为H-h。
- 3、表内齿轮圆周力为最大圆周力,额定圆周力取其1/2
- 4、内齿变位系数均为+0.35。

NOTE:

1. n1 is the nos of lubricating holes.Oil cup M10×1JB/T7940.1 ~ JB/T7940.2.
2. Mounting hole n-φ can change to tapped hole,tooth wide can change to H-h
3. The tangential tooth force in the form is the max tooth force,the nominal tangential tooth force is 1/2 of the max one.
4. Addendum reduction coefficient is +0.35

序号 NO.	无齿式 Non Gear DL mm	外型尺寸Dimensions			
		D mm	d mm	H mm	D1 mm
1	HJB.20.625	725	525	80	685
2	HJB.20.720	820	620	80	780
3	HJB.30.820	940	705	95	893
4	HJB.30.880	1000	760	95	956
5	HJB.30.1020	1170	875	95	1120
6	HJB.36.1220	1365	1075	120	1310
7	HJB.36.1250	1400	1090	120	1350
8	HJB.36.1435	1595	1278	120	1535
9	HJB.45.1540	1720	1360	140	1660
10	HJB.45.1700	1875	1525	140	1815
11	HJB.45.1880	2100	1665	160	2030
12	HJB.45.2115	2325	1900	160	2245
13	HJB.45.2370	2600	2146	180	2520
14	HJB.45.2600	2835	2365	180	2750
15	HJB.50.2820	3085	2555	200	3000
16	HJB.50.3120	3400	2840	200	3310
17	HJB.50.3580	3920	3240	240	3820
18	HJB.50.4030	4370	3690	240	4270
19	HJB.50.4540	4860	4210	240	4760

安装尺寸 Mounting dimensions			结构尺寸Structural dimensions					齿轮参数Gear data					齿轮圆周力 Gear circumferential force	参考重量 weight kg
D2 mm	n	φ mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	x	m mm	De mm	z	调质Quenching T 10 <sup>4</sup> N	
565	18	18	3	627	623	68	12							100
660	18	18	3	722	718	68	12							120
749	24	20	4	822	818	83	12							210
800	24	20	4	882	878	83	12							230
930	24	22	4	1022	1018	80	15							300
1130	36	24	6	1222	1218	105	15							450
1150	36	26	6	1252	1248	105	15							520
1335	36	26	6	1437	1433	105	15							610
1420	42	26	6	1543	1537	122	18							732
1585	42	29	6	1703	1697	122	18							844
1740	48	32	6	1883	1876	140	20							1400
1980	48	32	6	2118	2112	140	20							1600
2220	48	32	6	2373	2367	158	22							2100
2450	54	36	6	2603	2597	158	22							2400
2640	54	36	6	2823	2817	178	22							3400
2930	54	36	6	3123	3117	178	22							4000
3340	60	40	6	3583	3577	218	22							6700
3790	66	40	6	4033	4027	218	22							7700
4310	72	40	6	4543	4537	218	22							8760