

NSAR® BEARINGS

NSAR®

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德福来NSAR® 轴承制造工厂

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德福来集团是以河北德福来商贸有限公司为基础发展成立的集团公司，下辖NSAR轴承制造工厂，河北德福来商贸有限公司，香港CODO公司，美国恩泽公司。德福来集团运行ISO9001：2008质量管理体系；德福来集团的核心价值观：厚德积福。DFL GROUP was established on the basis of Hebei DFL Minmet Refractories Corp., now this group include DFL NSAR Bearings Manufacture Corp., Hebei DFL Minmet Refractories Corp., CODO Group Ltd. (Hongkong) and NSAR IND LLC(USA).DFL GROUP running ISO9001-2008 quality system.

我们的核心价值观：厚德积福

Our Core Value : Sowing the seeds of good karma

DFL NSAR轴承制造工厂主要加工深沟球，圆锥滚子，调心滚子，轮毂，滚针，外球面等各类标准轴承，同时为客户研发生产英制非标轴承及各类非标轴承，工厂管理人员，工程师，技术人员从业20年以上，具有严格的质量控制体系，为客户提供质优价廉的产品和周到的服务；我们的品牌包括NSAR®、3D®、OWO®、CBQ®、NASA®。

DFL NSAR Bearings Manufacture Corp. is one of the largest factory of standard bearings in China, the main products includes deep groove ball bearings, tapered roller bearings, spherical roller bearings, wheel hub bearings, needle bearings and pillow block ball bearing etc., meanwhile it also develops and produces British-system and non-standard bearings to meet customers' requirements. The administrative staff, engineer and technician has been in this industry for more than 20 years, the factory has its strictly quality control system, that is the guarantee to provide qualified products with competitive prices. Our brand includes NSAR®, 3D®, OWO®, CBQ®, and NASA®.

河北德福来商贸有限公司是一家专业综合性的生产和贸易公司，具有20年以上的从业经验，是世界蛭石协会亚洲唯一董事。主营产品包括轴承，非金属矿产品，耐火和保温材料，石材石雕。河北德福来商贸有限公司是集团其他子公司的外贸业务经营公司。

Hebei DFL Minmet Refractories Corp. is a professional and comprehensive corporation which based on production and trading business, it has more than 20 years export experience, DFL is the only director company of TVA (The Vermiculite Association) in Asia. Besides bearings, the corporation also covers the products and service of non-metallic minerals, refractories and insulation products, culture stone and stone carving products. So Hebei DFL Minmet Refractories Corp. is the foreign trade operating corp. of DFL GROUP.

CODO公司是一家位于香港的专业投资管理和综合性的集团公司

CODO GROUP LTD is one of the most professional investment management teams and comprehensive group companies in Hongkong.

恩泽工贸有限公司是德福来集团全资子公司，位于美国南卡州。现在恩泽工贸有限公司已经成为其母公司德福来集团全球战略的关键，旨在通过该公司的成立和发展，获得必要的营销/管理经验，为德福来集团在非洲和中东开设分公司打下坚实的基础。

NSAR IND LLC (USA) is a South Carolina-based company and wholly owned by DFL group .now NSAR IND LLC (USA). has become the strategic key for the parent company, DFL group, to explore the global market. By establishing and developing NSAR, DFL group aims to gain essential marketing/management experience, which serves as a solid foundation for DFL group to launch its Africa and Middle-East branches.

Our brands

NSAR®---Never Stop Always Run

OWO®

CBQ®

NASA®

3D®-----Delicate
Diligent
Development

德福来集团
DFL GROUP

德福来NSAR®轴承制造工厂
DFL NSAR®Bearings Manufacture Corp.

河北德福来商贸有限公司
Hebei DFL Minmet Refractories Corp.

香港CODO公司
CODO Group Ltd. (Hongkong)

恩泽工贸有限公司
NSAR IND LLC. (USA)



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德福来集团

<http://www.nsarbearings.com>



先进的生产设备 ADVANCED MANUFACTURING EQUIPMENT



锻造 Forging



车床 Carefully turning



热处理 Heat treatment



磨床 Grinding many times



清洗 Cleaning



铸座车间 Cast block workshop



喷漆 Painting for blocks



托盘装运 Final pallet packing



集装箱装运 Loading into container

包装 PACKING



It can measure the various kinds of bearings components of the linear shape,straightness,angle,convexity,logarithmic curve,groove depth,groove width,groove shape,arc and other parameters.With high frequency rate and high accuracy,it can accurate and fast measure & test for the object contour,two-dimensional size,two-dimensional displacement.By this way,it can control the accuracy of bearings & bearings components effectively.

可测量各种轴承零件的素线形状，直线度、角度、凸度、对数曲线、槽深、槽宽、沟形、圆弧等参数。具有高频率、高精度，可以对物体的轮廓、二维尺寸、二维位移进行精确和快速测量与检验的仪器，通过该仪器测量，可以有效的对轴承套圈、轴承零部件的尺寸精度进行控制。

5. 成品尺寸 Dimension testing for goods

为了保证轴承的尺寸精度，在最后包装前，我们会有具有多年工作经验的质检人员进行外观，尺寸的双重检验，保证合格的货物到客户仓库。

In order to ensure the accuracy of the bearing dimension, before the final packing, we will check the appearance and dimension by our quality inspection person with many years experience ,to ensure qualified goods arrive customer warehouse.

7. 寿命检测 Fatigue life testing

轴承寿命检测仪是通过测量由轴承缺陷高频加速度包络值，同时测量振动的加速度值、包络值及峭度值等数据。对信号进行时域波形分析、FFT 频率分析、包络分析，来分析产生故障的原因或部位，通过该仪器的检测，可对于轴承早期产生的故障进行诊断，从而保障轴承的使用寿命。



1. 金相组织检测 Metallographic structure checking



2. 磨床尺寸检测 Diameter checking during grinding production



3. 硬度检测 Hardness testing



4. 沟道检测通过圆度仪 Groove testing by the Profile instrument



5. 成品尺寸 Dimension testing for goods



6. 振动检测 Vibration testing



It is used for measuring the bearings defect by high frequency acceleration & vibration measurement,It can analysis the domain waveform,FFT frequency to analyze the reason part failure,through the detection of the instrument,It can check out for the bearings fault produced during the first production process,so as to guarantee the bearings long lifetime

轴承套圈和滚动体 Rings And Rolling Elements

高碳铬轴承钢GCr15是轴承套圈和滚动体的标准钢材料，根据客户要求和轴承用途，我们一般使用轴承钢和不锈钢材料生产。
High carbon chrome bearing steel (GCr15) is the standard material for bearing rings and rolling elements, also stainless steel will be used upon request.

GCr15的化学成份表如下：

The chemical composition of GCr15 is listed in the below tables:

钢号 Steel No.	化学成份 (%) Chemical Composition(%)							
	碳 C	硅 Si	锰 Mn	磷 P	硫 S	铬 Cr	铜 Cu	镍 Ni
GCr15	0.95-1.05	0.15-0.35	0.25-0.45	<0.025	≤ 0.025	1.40-1.65	<0.25	<0.30

各国轴承钢型号

The contrast of gcr15 of each country

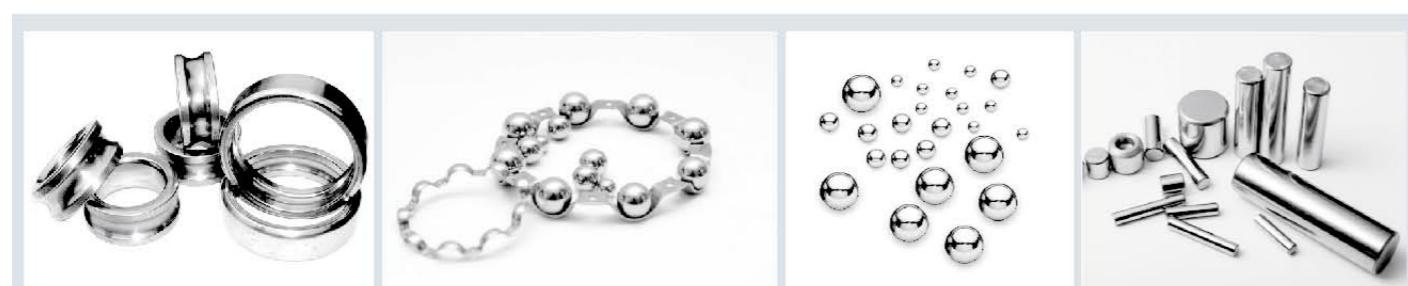
国家 Country	中国 China	国际标准组织 ISO	美国 U.S.A	德国 Germany	日本 Japan	瑞典 Sweden
轴承钢型号 Bearing Steel No.	GCr15	683/XVII	(AISI)52100	(Din)100Cr6	(Jis)SUJ2	SKF3

保持器 Cages

钢材代号 Steel No.	化学成份 (%) Chemical Composition (%)						
JISG3141 SPCC	碳 C	硅 Si	锰 Mn	磷 P	硫 S	镍 Ni	铬 Cr
	<0.12	-----	<0.5	<0.04	≤ 0.045	-----	-----

NSAR轴承保持器采用H62黄铜皮或08冷轧钢带冲压制程，如果在腐蚀性、非直线性运动或高速运转的环境下运作，则根据不同要求选用不锈钢、尼龙或酚醛树脂保持架。

NSAR cages adopt H62 Brass sheet & 08F cold rolling steel belt, however, in cases of corrosive environment, misalignment or high speed operation. Stainless steel, nylons or phenolic resins will be used upon request.



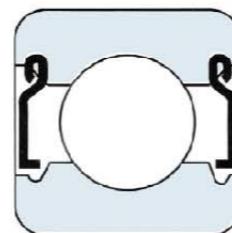
防尘盖和密封圈 Shield & Seals

NSAR轴承防尘盖主要采用SPCC材料制成，必要时用AISI-300不锈钢。密封圈则采用硝酰丁钠橡胶，其他碳氯化合物，硅树脂，聚四氟乙烯等普遍用于高温作业的轴承。

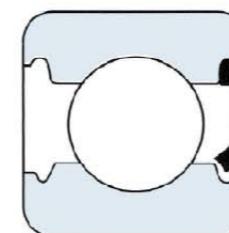
NSAR shield's main material is SPCC, while stainless steel can be used upon request, Buna Nitrile is standard sealing material we use, fluorocarbon, teflon and silicone seals are commonly specified for high temperatures.

深沟球轴承的密封结构

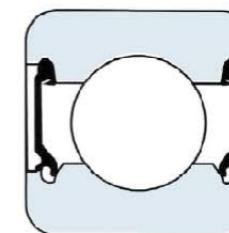
SEALING STRUCTURE OF DEEP GROOVE BEARING



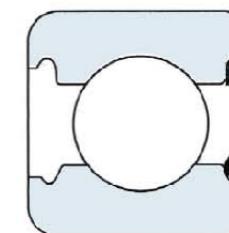
防尘盖
Cage
ZZ



非接触式密封圈
Non-contact Sealing Ring
RZ



接触式密封圈
Contact Sealing Ring
RS₂



接触式密封圈
Contact Sealing Ring
RS₁

我们提供的防尘盖及密封轴承的性能比较如下（仅供参考）

COMPARISON OF OUR DUST-PROOF AND SEALING BEARING PERFORMANCE(REFERENCE ONLY)

结构 Structure	防尘盖型 (ZZ型) Cage Type(ZZ)	非接触橡胶密封圈式 (RZ型) Non contact Rubber Sealing Ring(RZ)	接触橡胶密封 (RS) Contact Rubber Sealing(RS)
摩擦力矩 Friction Torque	小 Small	小 Small	因是接触密封，所以RS1型、RS2型比ZZ型、RZ型大 Because of contact sealing, Models RS1 and RS2 are bigger than models ZZ and RZ
高速性 High Speed Performance	良好 Good	良好 Good	由于接触密封的极限 Because the limit of contact sealing
脂密性 Grease Sealing	良好 Good	比 ZZ型好 Better than Model ZZ	比RZ型略好，但RS1型好于RS2型 A little better than model RZ but Model RS1 is better than Model RS2
防尘性 Dust-proof	良好 Good	比 ZZ型好 (有少些粉尘的条件下也可以使用) Better than model ZZ,(could be used in some dust environment)	最好 (粉尘多的环境下也可以使用)，但RS2型好于RS1型。 The Best (could be used in most dust condition)But Model RS2 is better than Model RS1
防水性 Water Resistance	不适 Unsuitable	不适 Unsuitable	良好(飞溅的条件下也可以使用)Good(could be used in splash condition)
使用温度 Range of application temperature	广泛 All	-30°C to +120 °C	-30°C to +120 °C

注：以上数据为标准品的范围，根据装入耐寒，耐热用油脂及密封用橡胶材质，则可以扩大温度范围，如有要求，请与NSAR轴承联系。

Note: The description is for standard products only. However, the range of application temperature could be extended if you select cold resistant or hot resistant grease and rubber. Please contact NSAR bearing if you have any special requirement.

润滑 Lubrication

润滑的目的与方式 The purpose and ways of lubrication

对轴承来说，润滑是左右其性能的重要问题，润滑剂或润滑方式的合适与否将大大影响轴承的寿命。

The lubrication is very important, which will directly affect the function of bearings in working conditions. Whether the lubricant is properly used will have a great effect on the life of the bearings.

润滑的作用如下 The main functions of the lubrication

- 1.润滑轴承的各部分，减小摩擦和磨损 Lubricate moving surface of all parts to reduce friction and wearing
- 2.带走轴承内部因摩擦或其他原因产生的热量 Reduce the heat caused by friction of bearings
- 3.使轴承的滚动接触面经常形成适当的油膜，延长轴承的使用寿命 Extend the life of bearings by oil covering on raceway
- 4.轴承的防锈和防尘 Prevent the bearings from dust and rust

轴承的润滑方式主要分为脂润滑，其一般性比较如下表所示：

The lubrication system of bearings includes grease and oil lubrication as follows:

项目 ITEM	脂 GREASE	油 OIL
密封装置 Sealing arrangement	简单 Easy	较复杂，需注意保养 Complex (need to maintain)
润滑性能 Lubrication properties	好 Good	非常好 Super
转速 Rotating speed	低速-中速 Low speed to medium speed	也可用于高速 High speed
润滑剂的更换 Lubrication replacing	较麻烦 Complex	简单 Easy
润滑剂的寿命 Lubrication's life	较短 Shorter	长 Long
冷却效果 Cooling effect	无 No	好（需要循环）Good (need to circulate)
杂质的滤除 Filtration of impurities	困难 Difficult	容易 Easy

润滑脂 Consistent grease

脂润滑可做到填充一次润滑脂后长时间不需补充，而且密封装置的结构也较简单，因此使用广泛。

The grease will not be supplied again for a long period once filled and its sealing device is very simple, so it is widely used.

脂润滑有预先在密封型轴承中填充润滑脂密封方式，以及在外壳内部填充适量润滑脂，每隔一段时间进行补充或更换的填充供脂方式。Fill the sealing bearings with grease in advance or add it inside the outer covering, and supply more or replace it after a certain period. The grease can also be delivered by pipes to all parts of the machine if there are many parts to be lubricated.

润滑脂的填充量 The supplemental quantity of the grease

外壳内的润滑脂填充随外壳的结构和容积的变化而有所不同，一般填充至容积1/3-1/2为宜。

The supplemental quantity of grease is based on the structure and volume of the outer covering. In general, 1/3-1/2 of volume can be added.

填充量过多时，润滑脂因搅拌发热发生变质，老化和硬化，应加以注意。

Watch out for the deterioration, aging and melting problems caused by the agitation heat when too much grease is added.

但用于低速轴承时，为防止异物侵入，有时也填充至容积的2/3-1。

To prevent something coming into the low speed bearings, 2/3-1 of volume can be added.

润滑脂的补充和更换 The supplement and replacement of grease

润滑脂的补充与更换同润滑方式有密切的关系，无论采用何种方式，都必须使用清洁的润滑脂，并注意防止外部异物的侵入。

The supplement and replacement of grease is closely connected with the lubrication system. Whichever way is chosen, clean lubricant should be used and anything should be stopped from coming into the bearings.

补充的润滑脂应为同一品牌的润滑脂。

The brand of supplemental grease should be the same.

补充润滑脂时，尤为重要的应保证新润滑脂确实进到轴承内部。

It is important to assure the grease has not leaked into bearings.

油润滑 Oil lubrication

油润滑适用于高速轴承并可耐一定程度的高温，而且还对减小振动和降低噪音有效，大多用于脂润滑不适用的场合。油润滑大体分为：Oil lubrication is used in high speed bearings and resist the heat. It can reduce the vibration and noise, generally used where grease is not fit, including:

- 1.油浴润滑（oil bath lubrication）2.滴油润滑（Dripping lubrication）3.飞溅润滑（Splashing Lubrication）4.循环润滑（Lubrication by oil circulation）5.喷射润滑（Spurting Lubrication）6.油雾润滑（Oil mist lubrication）7.油气润滑（Oil gas lubrication）

根据不同的工作环境和操作环境，NSAR轴承采用多种品牌不同性能的油脂来满足客户要求。以下是我们推荐的一般常规使用油脂以供客户选择。除了下面列出的油脂外，我们还可以根据客户的要求添加其他油脂。

There are so many types of grease available for NSAR bearings, according to the different working environment and operating conditions of bearings, NSAR lists the below chart to regular grease to help customers to choose. Besides the below types of grease, NSAR will fill other types of grease according to customers requirement.

品牌 Company	产品 Product	基油 Base oil	使用温度范围 Usage range temperature	特性 Characteristics
协同 KYODO YUSHI	Multemp SRL	多羟基脂+二脂 Polyolester+Dieste	-50 to +150 °C	能有效抑制噪音，延长使用寿命 Excellent noises up pressant property and extended performance life
	Multemp PS	二脂+精炼矿物油 Diester+Refined mineral oil	-50 to +130 °C	适用于低温，能有效抑制噪音 Excellent low-temperature performance, has outstanding noise suppressant property
	Multemp SMB	合成烃 Synthetic hydrocarbon	-50 to +200 °C	高温工作下寿命长，宜适用于低温高速运转时扭矩低，噪音低 Long service life under high temperature.Excellent low-temperature performance has high -speed operation,low noise property
	Multemp ETK	合成醚+多羟基脂 Synthetic ether+Polyol ester	-40 to +200 °C	高温状态下延续作业寿命更长 Has more extended life under a high operating temperature condition
埃克森美孚 EXXON MOBILE	Polyrex EM	矿物油脂 Mineral grease	-40 to +180 °C	寿命长，耐高温 Long life and High temperature
	Beacon 325	人造油脂 Synthetic grease	-54 to +150 °C	普通用途油脂 General purpose grease
	Andok C	石油油脂 Channeling Petroleum grease	-27 to +120 °C	滑动顺畅，最小滑动时寿命长 Smooth running,long life with minimum migration
	Mobil 28 (MIL-G 81322)	合成烃 Synthetic hydrocarbon	-54 to +177 °C	温度范围广，扭矩低 Wide temperature,good low temperature torque
	Mobil HP	锂化合物 Lithium complex	-30 to +110 °C	速度适中，有效抑制腐蚀 Vibration,moderate speed and good corrosion resistance
雪弗龙 CHEVRON	SRI-2	矿物油脂 Mineral grease	-30 to +180 °C	温度范围广，防水效果好， High temperature range,good water resistance
壳牌 SHELL	Alvania 2	矿物油脂 Mineral grease	-35 to +120 °C	寿命长，耐高温 Long life and high temperature
	RLQ#2	矿物油脂 Mineral grease	-50 to +150 °C	噪音低，速度快，耐高温 Low noise,high speed and high temperature.
杜邦 DUPONT	Krytox240AC	氟化油脂 Fluorinated grease	-35 to +290 °C	高温状态下稳定效果好，润滑效果强 High temperature stability With good lubrication properties
克鲁勃 KLUBER	ASONIC	合成烃 Synthetic hydrocarbon	-50 to +140 °C	噪音低，寿命长，扭矩低 Low noise,long life and low torque

包装和标签 Packing And Marks

NSAR轴承是用塑料桶或用防锈纸卷包后装入纸箱，也可单套装入塑料小袋后装入小纸盒，订货时可规定包装形式。每个外包装箱外面有明显的标志，标明轴承的数量，重量和轴承规格等，以便客户储存及分类。

NSAR bearings are packed into one plastic tube or wrapped rustproof paper then packed into carton, single package is also available , that is ,each set bearing is contained into small spastic bag and then packed into little paper box, The user who have special requirement in packing should point out in contract.

防锈 Rust-resisting

轴承在正常储存保管下，防锈期一般为6个月，保管期超过6个月的，应该在防锈期前检查产品情况，再按规定进行复防，以保持轴承不会生锈。

Under the normal storage and preserve protect condition, the bearing's rustresisting period is half a year over, you should have to check it over before the expiring date of rustresisting has been past,then-rustresisted again according to the stipulation so as to keep them not rusty.

游隙 Clearance

径向游隙按ISO5753标准分为五组。无载荷的径向游隙值见表：

In accordance with the standard of ISO 5753.The radial clearance can be divided into five groups.Radial Clearance Value without load See Table:

深沟球轴承的径向游隙Gr(μm)

Deep groove ball bearing radial clearance

轴承内径 Bore diameter D(mm)		第 2 组 (C2) Group 2		基本组 (0) Standard group		第 3 组 (C3) Group 3		第 4 组 (C4) Group 4		第 5 组 (C5) Group 5	
超过 over	到 to	最小 Min	最大 Max	最小 Min	最大 Max	最小 Min	最大 Max	最小 Min	最大 Max	最小 Min	最大 Max
2.5	6	0	7	2	13	8	23	---	---	---	---
6	10	0	7	2	13	8	23	14	29	20	37
10	18	0	9	3	18	11	25	18	33	25	45
18	24	0	10	5	20	13	28	20	36	28	48
24	30	1	11	5	20	13	28	23	41	30	53
30	40	1	11	6	20	15	33	28	46	40	64
40	50	1	11	6	23	18	36	30	51	45	73
50	65	1	12	8	28	23	43	38	61	55	90

注：C2组游隙，仅适用于6级精度以上轴承

Note: C2 group clearance only for bearings over 6 grade accuracy

轴承检测 Bearing Testing

NSAR 轴承从原材料采购至零件制造的每一个工序的生产，都有严格的进厂验收规定和工序技术要求以及文件约束，为确保产品的品质，公司无论在软件或硬件配备，均提供了必须和可靠的条件。NSAR轴承产品检验项目及方式见下表：

Every manufacturing operation of NSAR bearing is strictly required for material selection and parts production, inspection and documentation.To guarantee the quality of the products,our company has equipped itself with reliable software and hardware.

Our examination items and devices are as follows:

序号 NO.	检验项目 Examination Item	使用仪器 Test Device	备注 Remarks
1	① 尺寸及公差 Tolerance of dimension 内孔直径偏离及变动量 Bore devciation and variaion $\Delta ds, \Delta Dmp, Vdp, Vdmp$	D922,D923	全数检查 Testing every one
	② 外径偏差及其变动量 Od deviation and variation $\Delta ds, \Delta Dmp, VDp, VDmp$	D011 D051	全数检查 Testing every one
	③ 内圈宽度及其变动量 Inner ring windth and variation $\Delta Bs, VBs$	G903SM	抽查 Example testing
	④ 外圈宽度及其变动量 Outer ring windth and variation $\Delta Cs, VCs$	G903SM	抽查 Example testing
	⑤ 装配倒角尺寸 Fitting chamfering dimension	极限样板	抽查 Example testing
2	① 旋转精度 Accuracy of rotation 内圈径向跳动 Kia inner ring radial runout	B002	抽查 Example testing
	② 外圈径向跳动 Kea outer ring radial runout	B013	抽查 Example testing
	③ 内圈基准端面对内径的跳动 Sd runout between inner ring reference plane and bore	B002	抽查 Example testing
	④ 外径表面母线对基准端面的倾斜度边动量 SDtiltvariation between OD surface baeline and reference plane	C002	抽查 Example testing
	⑤ 内圈端面对沟道的跳动 Sia runout between inner ring plane and groove	B002	抽查 Example testing
	⑥ 外圈端面对沟道的跳动 Sea runout between outer ring plane and groove	B013	抽查 Example testing
	⑦ 内外圈沟道圆度和内外圈外径圆度 Insi de and outside circle groove round slem inside and outside circle extemal diameter round degree	Y9025C	抽查 Example testing
3	径向游隙 (Gr radial clearance)	X092,X093	全数检查 Testing every one
4	① 热处理质量 Heat treat quality 硬度 Hardness(GCr15 58HRC)	HR150DT MHI	抽查 Example testing
	② 材料和金相组织分析 Material and metallographic analysis	显微镜 Microscope	抽查 Example testing
5	① 外观质量 Apparent quality 旋转灵活性 Rotating flexibility	手感 Feeling	全数检查 Testing every one
	② 防尘盖或密封圈标识及牢固 Shield or seal ring mark and fastness	目测及手感 Visual and feeling	组装控制 Assembling control
	③ 包装状况 Package condition	目测 Visual examination	全数检查 Testing every one
6	振动 (噪音) Vibration(Noise)	S0910III	按需求检 According usege



DEEP GROOVE BALL BEARINGS

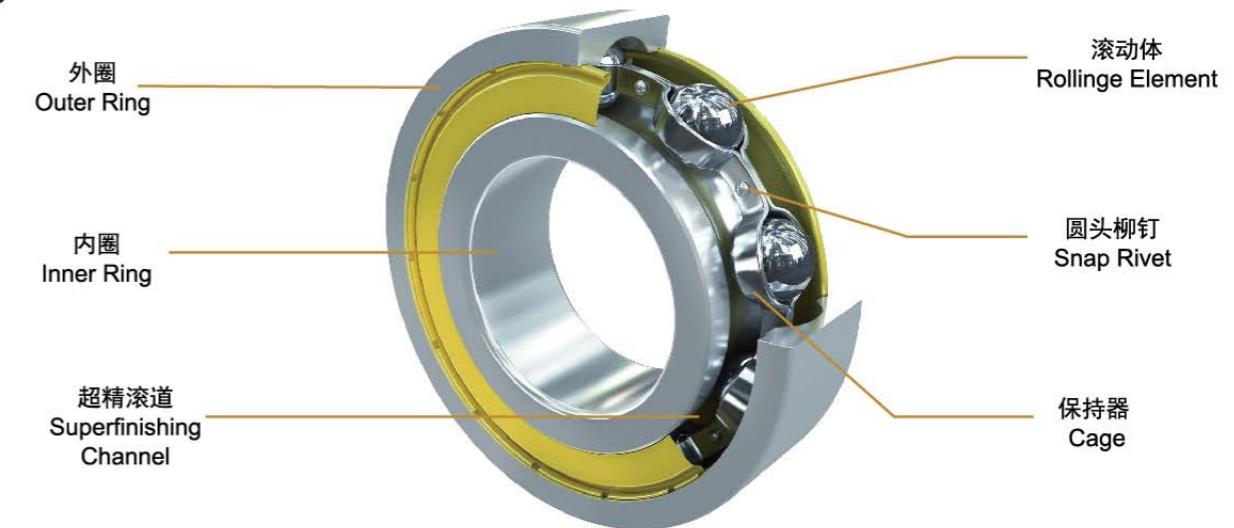
NSAR®
BEARINGS


深沟球轴承

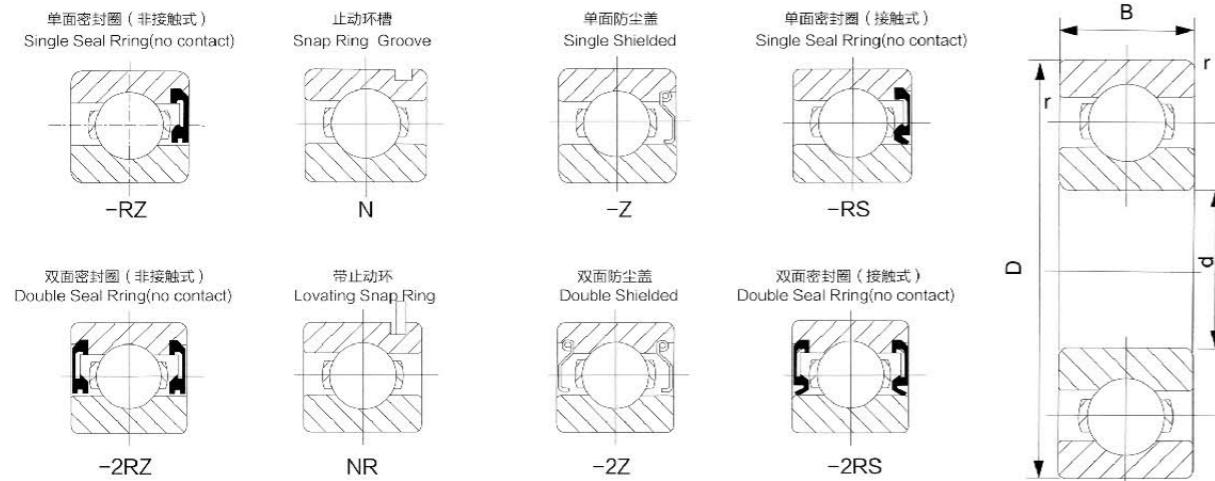
深沟球轴承 Deep Groove Ball Bearings

NSAR 轴承编码系统采用基本的轴承号表示相应的轴承序列，并用前缀和后缀符号来完整的说明任何一种轴承结构特征。

NSAR bearing's numbering system utilizes a basic bearing number to indicate the appropriate bearing series , and a complementary set of prefix and suffix designations which allow a complete description of any bearing configuration.



S - Material Codes	Blank - Gcr 15(Chrome Steel) S - 440C (Stainless Steel)
F - Ring/OD Modification Codes	F - Flanged Outer Ring W - Extended Inner Ring FW - Flanged Outer/Extended Inner Ring
608	Basic Bearing Number Codes Blank - Open Bearing
2RS - Shield/Closure Codes	Z - Single Shield ZZ - Double Shields RS - Single Seal 2RS - Double Seals
NR - Snap Ring Codes	N - Groove Without Ring NR - Groove With Ring Blank - Standard
C3 - Internal Clearance Codes	C2 - Tight C3 - Loose C4 - Loose Than C3 C5 - Loose Than C4 Blank - Standard
V3 - Vibration Level Codes	V4 - Ultralow Noise V3 - Low Noise V2 - Electric Motor Quality V1 - Above Standard,Less Than V2
A3 - ABEC Tolerance Codes	Blank - ABEC 1 A3 - ABEC 3 A5 - ABEC 5 A7 - ABEC 7



轴承型号 Bearings No.	外形尺寸 (mm) Boundary Dimensions			基本额定负荷 (Kn)Basic Load Rating		极限转速(r/min)Limit Rotational Speed		重量(Kg) Weight
	内径d	外径D	宽度B	动负荷 Dynamic Cr	静负荷 Static C _{or}	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	
603	3	9	3	0.49	0.22	40000	48000	0.0009
604	4	12	4	0.75	0.34	36000	44000	0.0021
605	5	14	5	1.02	0.49	32000	40000	0.0035
606	6	17	6	1.13	0.56	30000	38000	0.006
607	7	19	6	2.01	1.05	28000	36000	0.008
608	8	22	7	2.53	1.36	26000	34000	0.015
609	9	24	7	2.57	1.36	24000	32000	0.016
6000	10	26	8	4.58	1.97	20000	28000	0.019
6001	12	28	8	5.11	2.39	19000	26000	0.021
6002	15	32	9	5.59	2.84	18000	24000	0.03
6003	17	35	10	6.00	3.25	17000	22000	0.04
6004	20	42	12	9.38	5.03	15000	19000	0.068
6005	25	47	12	10.06	5.85	13000	17000	0.079
6006	30	55	13	13.23	8.30	10000	14000	0.113
6007	35	62	14	16.21	10.42	9000	12000	0.149
6008	40	68	15	17.03	11.70	8500	11000	0.185
6009	45	75	16	21.09	14.77	8000	10000	0.231
6010	50	80	16	22.02	16.25	7000	9000	0.25
6011	55	90	8	30.26	21.93	----	----	0.362
6012	60	95	18	31.66	24.22	----	----	0.385
6013	65	100	18	32.06	24.89	----	----	0.408
6014	70	110	20	38.59	30.43	----	----	0.537
6015	75	115	20	40.20	33.20	----	----	0.603
6016	80	125	22	47.50	39.80	----	----	0.821
6017	85	130	22	50.80	42.80	----	----	0.848
6018	90	140	24	58.00	49.80	----	----	1.103
6019	95	145	24	57.80	50.00	----	----	0.156
6020	100	150	24	64.50	56.20	----	----	1.174

轴承型号 Bearings No.	外形尺寸 (mm) Boundary Dimensions			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(Kg) Weight
	内径d	外径D	宽度B	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	
624	4	13	5	1.31	0.49	36000	45000	0.0032
625	5	16	5	1.76	0.68	32000	40000	0.0048
626	6	19	6	2.34	0.885	28000	36000	0.0081
627	7	22	7	3.35	1.4	26000	34000	0.013
628	8	24	8	4	1.59	24000	32000	0.017
629	9	26	8	4.55	1.96	22000	30000	0.02
6200	10	30	9	5.1	2.39	19000	26000	0.032
6201	12	32	10	6.1	2.75	18000	24000	0.037
6202	15	35	11	7.75	3.6	17000	22000	0.045
6203	17	40	12	9.6	4.6	16000	20000	0.066
6204	20	47	14	12.8	6.65	14000	18000	0.106
6205	25	52	15	14	7.85	12000	16000	0.128
6206	30	62	16	19.5	11.3	10000	13000	0.199
6207	35	72	17	25.7	15.3	8800	10000	0.287
6208	40	80	18	29.1	17.8	7700	9200	0.367
6209	45	85	19	32.5	20.4	6800	8200	0.416
6210	50	90	20	35	23.2	6100	7300	0.462
6211	55	100	21	43.5	29.2	5500	6600	0.602
6212	60	110	22	52.5	36	5000	6000	0.789
6213	65	120	23	58.5	40.5	4800	5800	0.99
6214	70	125	24	63.7	45	4600	5600	1.1
6215	75	130	25	68.9	49	4400	5400	1.2
6216	80	140	26	72.5	53	4200	5300	1.4
6217	85	150	28	83.2	63.8	4000	5000	1.75
6218	90	160	30	95.8	71.5	3800	4800	2.2
6219	95	170	32	110	82.8	3600	4500	2.62
6220	100	180	34	122	92.8	3400	4300	3.2

轴承型号 Bearings No.	外形尺寸 (mm) Boundary Dimensions			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(Kg) Weight
	内径d	外径D	宽度B	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	
16002	15	32	8	5.6	2.8	19000	24000	0.023
16003	17	35	8	6	3.3	18000	22000	0.028
16004	20	42	8	7.9	4.45	16000	19000	0.052
16005	25	47	8	8.8	5.6	13000	17000	0.059
16006	30	55	9	11.2	7.4	11000	14000	0.084
16007	35	62	9	12.2	8.8	9500	12000	0.107
16008	40	68	9	12.5	9.6	9000	11000	0.125
16009	45	75	10	15.6	12.2	8000	10000	0.155
16010	50	80	10	16.2	13.2	8000	9500	0.166
16011	55	90	11	19.4	16.2	7000	8000	0.207
16012	60	95	11	19.9	17.5	6300	7500	0.224
16013	65	100	11	20.5	18.6	6000	7000	0.241

轴承型号 Bearings No.	外形尺寸 (mm) Boundary Dimensions			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(Kg) Weight
	内径d	外径D	宽度B	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	
635	5	19	6	2.34	0.89	28000	36000	0.008
636	6	22	7	3.3	1.35	26000	34000	0.013
637	7	26	9	4.55	1.95	24000	32000	0.024
638	8	28	9	4.55	1.95	22000	30000	0.029
639	9	30	10	6	2.65	20000	26000	0.035
6300	10	35	11	7.65	3.47	18000	24000	0.0532
6301	12	37	12	9.72	5.09	17000	22000	0.0574
6302	15	42	13	11.44	5.43	15000	19000	0.0804
6303	17	47	14	13.58	6.58	13000	17000	0.1096
6304	20	52	15	15.94	7.88	10000	14000	0.1417
6305	25	62	17	22.38	11.49	9000	12000	0.2193
6306	30	72	19	27	15.19	8500	11000	0.3498
6307	35	80	21	33.36	19.21	8000	10000	0.4542
6308	40	90	23	4.75	24.01	7000	9000	0.6394
6309	45	100	25	52.86	31.83	6300	8000	0.8368
6310	50	110	27	61.86	37.49	6000	7500	1.0822
6311	55	120	29	74.1	45	6300	8000	1.35
6312	60	130	31	85.2	52	5600	7000	1.7
6313	65	140	33	97.5	60	5300	6700	2.08
6314	70	150	35	111	68	5000	6300	2.55
6315	75	160	37	113	76.85	4000	4800	3.05
6316	80	170	39	123	86.5	3800	4500	3.62
6317	85	180	41	132	96.5	3600	4300	4.27
6318	90	190	43	145	108	3400	4000	4.91
6319	95	200	45	157	122	3200	3800	5.7
6320	100	215	47	173	140	2800	3600	7.2

轴承型号 Bearings No.	外形尺寸 (mm) Boundary Dimensions			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(Kg) Weight
	内径d	外径D	宽度B	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	
685	5	11	3	0.715	0.282	35000	45000	0.0011
686	6	13	3.5	1.08	0.44	33000	42000	0.0019
687	7	14	3.5	1.17	0.51	31000	40000	0.0021
688	8	16	4	1.26	0.585	29000	38000	0.0031
689	9	17	4	1.72	0.82	28000	36000	0.0032
6800	10	19	5	1.83	0.925	26000	34000	0.005
6800W7	10	19	7	1.83	0.925	26000	34000	0.006
6801	12	21	5	1.92	1.04	22000	30000	0.006
6802	15	24	5	2.08	1.26	20000	28000	0.007
6803	17	26	5	2.81	1.72	19000	26000	0.008
6804	20	32	7	4	2.47	17000	22000	0.019
6805	25	37	7	4.3	2.95	15000	19000	0.022
6806	30	42	7	4.7	3.65	13000	17000	0.026
6807	35	47	7	4.9	4.05	11000	15000	0.029
6808	40	52	7	5.1	4.4	9000	13000	0.033
6809	45	58	7	6.4	5.65	7000	11000	0.04
6810	50	65	7	6.6	6.1	5000	9000	0.052

轴承型号 Bearings No.	外形尺寸 (mm) Boundary Dimensions			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(Kg) Weight
	内径d	外径D	宽度B	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	
693	3	8	3	0.56	0.18	54000	63000	0.0006
W693	3	8	4	0.56	0.18	54000	63000	0.0007
694	4	11	4	0.715	0.276	45000	52000	0.0018
695	5	13	4	1.08	0.43	34000	43000	0.0024
696	6	15	5	1.35	0.53	32000	40000	0.0038
697	7	17	5	1.61	0.715	30000	38000	0.0052
698	8	19	6	1.99	0.865	28000	36000	0.0073
699	9	20	6	2.48	1.09	27000	34000	0.0082
6900	10	22	6	2.7	1.27	25000	32000	0.009
6901	12	24	6	2.89	1.46	20000	28000	0.011
6902	15	28	7	4.1	2.06	19000	26000	0.016
6903	17	30	7	4.65	2.58	18000	24000	0.018
6904	20	37	9	6.4	3.7	17000	22000	0.036
6905	25	42	9	7.05	4.55	14000	18000	0.042
6906	30	47	9	7.25	5	12000	16000	0.048
6907	35	55	10	11.2	7.45	10000	14000	0.074
6908	40	62	12	14.6	10.2	8000	12000	0.11
6909	45	68	12	15.1	11.2	6000	10000	0.128
6910	50	72	12	15.6	12.2	4000	8000	0.132

轴承型号 Bearings No.	外形尺寸 (mm) Boundary Dimensions			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		
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TAPERED ROLLER BEARINGS

NSAR[®]

BEARINGS



圆锥滚子轴承

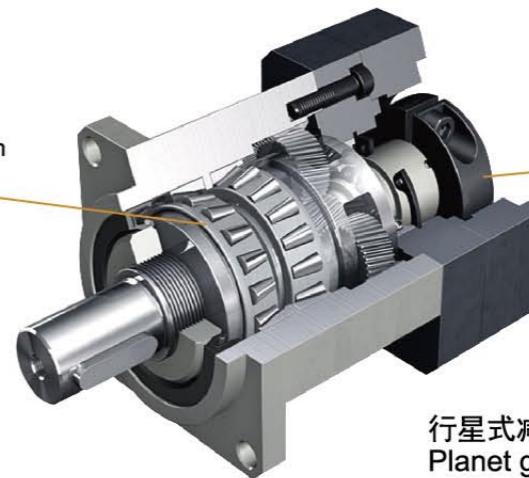
圆锥滚子轴承

Tapered Roller Bearings

圆锥滚子轴承属于分离型轴承，轴承的内、外圈均具有锥形滚道。该类轴承按所装滚子的列数分为单列、双列和四列圆锥滚子轴承等不同的结构型式。

Tapered roller bearing belongs to the separable bearing, and have taper race on the inner and outer rings. This kind bearings divide into single row, double row and four row roller bearings of different structure,according to the row number of assembled roller.

圆锥滚子轴承配置
Tapered roller bearing configuration



筒夹式锁紧机构
Collet type locking mechanism

行星式减速机
Planet gear speed reducer

后缀定义 Suffix defined

- A: 内部结构变更 Internal structure changed
- B: 增大的接触角 Enlarged contact angle
- X: 外形尺寸采用国际标准 Overall Dimension adopt international standard
- CD: 双外圈, 带油孔或油槽 Double outer rings,with oil hole or oil groove
- TD: 带锥孔的双内圈 Double inner rings with taper hole

公差 Tolerance

公制圆锥滚子轴承具有普通级公差，也提供P6X、P6、P5、P4、P2级公差产品，全部与GB307.1相符合。

Metric tapered roller bearings have common tolerance,also can supply P6X、P6、P5、P4、P2 grade clearance, all of them accord with GB307.1.

NSAR英制圆锥滚子轴承具有普通级公差，根据需要也可提供CL2、CL3、CL0、CL00级公差产品。

NSAR brand Inch tapered roller bearings have common tolerance,and also can supply CL2、CL3、CL0、CL00 grade clearance according to the requirement.

径向游隙 Radial Internal Clearance

NSAR单列圆锥滚子轴承仅在安装后才有游隙，并在有另一个以相反方向定位的轴承进行调节后才能确定。

NSAR brand single tapered roller bearings just have clearance after assembled, and can be confirmed after the adjust of opposite direction bearings.

保持器 Cage

圆锥滚子轴承一般采用钢板冲压，筐形保持架，但尺寸较大时，亦采用车制实体支柱保持架。

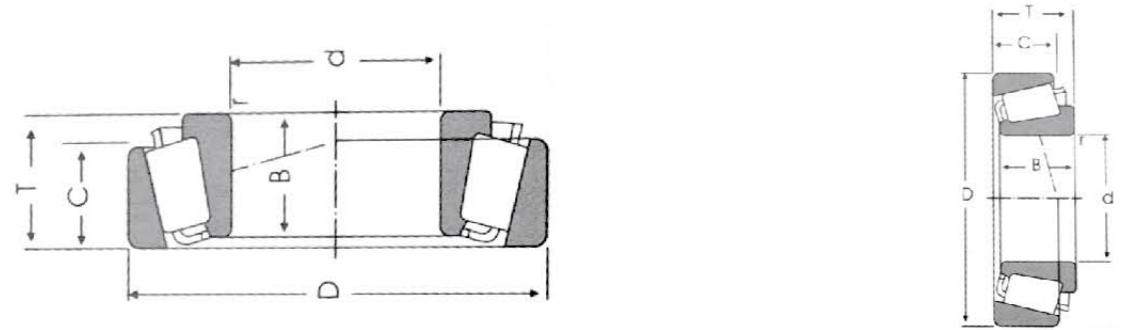
Tapered roller bearings normally use the steel punching, basketful shape cage. While for large size,also adopt the entity pillar cage.

1. 当轴承外径D≤650mm时，采用钢板冲压保持架，保持架后置代号均不标志。

When the outer diameter of bearings D≤650mm, use the steel punching cage, the cage suffix code don't mark.

2. 当轴承外径D>650mm时，采用钢制实体支柱保持架，保持架后置代号不标志。

When the outer diameter of bearings D>650mm, use the steel entity pillar cage, the cage suffix code don't mark.



轴承型号 Bearings No.	外型尺寸 Boundary Dimensions				基本载荷 (KN)		重量 (KG)Weight	轴承型号 Bearings No.	外型尺寸 Boundary Dimensions				基本载荷 (KN)		重量 (KG)Weight		
	内径d	外径D	宽度B	装配高度 T	外圈宽度 C	动负荷 Dynamic Cr	静负荷 Static Cor		内径d	外径D	宽度B	装配高度 T	外圈宽度 C	动负荷 Dynamic Cr	静负荷 Static Cor		
30203	17	40	12	13.25	11	20.5	20.3	0.081	30214	70	125	24	26.25	21	132.3	174	1.32
30204	20	47	14	15.25	12	28.2	28.7	0.127	30215	75	130	25	27.25	22	138.4	185	1.42
30205	25	52	15	16.25	13	31.5	34	0.156	30216	80	140	26	28.25	22	160	213	1.72
30206	30	62	16	17.25	14	43.3	50.5	0.236	30217	85	150	28	30.5	24	178	237	2.17
30207	35	72	17	18.25	15	54.2	63.5	0.344	30218	90	160	30	32.5	26	200	270	2.65
30208	40	80	18	19.75	16	63	74	0.434	30219	95	170	32	34.5	27	227	309	3.2
30209	45	85	19	20.75	16	67.9	83.6	0.502	30220	100	180	34	37	29	254	350	3.83
30210	50	90	20	21.75	17	73.3	92.1	0.566	30221	105	190	36	39	30	285	399	4.49
30211	55	100	21	22.75	18	90.8	113.7	0.732	30222	110	200	38	41	32	315	444	5.33
30212	60	110	22	23.75	19	103.3	130	0.90	30224	120	215	40	43.5	34	337	483	6.36
30213	65	120	23	24.75	20	120.6	153	1.18	30226	130	230	40	43.75	34	366	521	7.24

轴承型号 Bearings No.	外型尺寸 Boundary Dimensions				基本载荷 (KN)		重量 (KG)Weight	轴承型号 Bearings No.	外型尺寸 Boundary Dimensions				基本载荷 (KN)		重量 (KG)Weight		
	内径d	外径D	宽度B	装配高度 T	外圈宽度 C	动负荷 Dynamic Cr	静负荷 Static Cor		内径d	外径D	宽度B	装配高度 T	外圈宽度 C	动负荷 Dynamic Cr	静负荷 Static Cor		
30303	17	47	14	15.25	12	28.9	26.3	0.133	30311	55	120	29	31.5	25	153	188	1.65
30304	20	52	16	16.25	13	35.5	34	0.179	30312	60	130	31	33.5	22	171	210	1.99
30305	25	62	17	18.25	15	48.5	47.5	0.269	30313	65	140	33	36	28	196	242	2.56
30306	30	72	19	20.75	16	59	63.1	0.411	30314	70	150	35	38	30	219	272	3.08
30307	35	80	21	22.75	18	75.3	82.6	0.536	30315	75	160	37	40	31	253	319	3.52
30308	40	90	23	25.25	20	90.9	107.6	0.757	30316	80	170	39	42.5	33	279	353	4.46
30309	45	100	25	27.25	22	108.9	129.8	0.973	30317	85	180	41	44.5	34	305	388	4.97
30310	50	110	27	29.25	23	130.1	157	1.32	30318	90	190	43	46.5	36	342	441	5.78

轴承型号 Bearings No.	外型尺寸 Boundary Dimensions				基本载荷 (KN)		重量 (KG)Weight	轴承型号 Bearings No.	外型尺寸 Boundary Dimensions				基本载荷 (KN)		重量 (KG)Weight		
	内径d	外径D	宽度B	装配高度 T	外圈宽度 C	动负荷 Dynamic Cr	静负荷 Static Cor		内径d	外径D	宽度B	装配高度 T	外圈宽度 C	动负荷 Dynamic Cr	静负荷 Static Cor		
32005	25	47	15	15	11.5	27.8	33.5	0.118	32014	70	110	25	25	19	105	160	0.884
32006	30	55	17	17	13	37.5	46	0.177	32015	75	115	25	25	19	106	167	0.93
32007	35	62	18	14	14	41.5	52.5	0.231	32016	80	125	29	29	22	139	216	1.32
32008	40	68	19	19	14.5	50	65	0.282	32017	85	130	29	29	22	142	224	1.38
32009	45	75	20	20	14.5	57.5	76.5	0.354	32018	90	140	32	32	24	168	270	1.8
32010	50	80	20	20	15.5	62.5	88	0.389	32019	95	145	32	32	24	171	280	1.88
32011	55	90	23	23	17.5	80.5	118	0.569	32020	100	150	32	32	24	170	281	1.95
32012	60	95	23	23	17.5	82	123	0.621	32021	105	160	35	35	26	201	335	2.45
32013	65	100	23	23	17.5	83	128	0.664	32022	110	170	38	38	29	236	390	3.12

轴承型号 Bearings

轴承型号 Bearings No.	外型尺寸 Boundary Dimensions			重量 (KG)Weight
	内径d	外径D	宽度B	
344A/332	40	80	21	0.472
358/354	45	80	20.638	0.523
359A/354A	40.038	85	20.639	0.51
368/362	50.8	90	20	0.507
375/374	50.8	93.264	22.225	0.59
387/382S	57.12	96.838	25.4	0.654
387AS/382A	57.15	96.838	21	0.587
390A/394A	57.15	110	21.999	0.84
395/394A	63.5	110	21.999	0.83
399/394A	68.262	110	22	0.75
418/414	38.1	88.101	26.908	0.845
455/453	50.8	107.59	27.783	1.23
459A/493	76.2	136.525	30.162	1.82
462/453X	57.15	104.775	30.162	1.068
462/454	57.15	110	27.795	1.23
475/472	55	120	29.007	1.64
482/472	70	120	29.794	1.304
469/453X	57.15	104.775	30.162	1.055
480/472	68.262	120	29.794	1.342
NA484/472D	70	120	29.794	1.314
560S/552A	68.263	123.825	38.1	1.822
527/522	44.45	101.6	34.925	1.37
528X/520X	47.625	101.6	34.925	1.3
535/532A	44.45	111.125	36.957	1.84
555/552A	50.8	123.825	36.678	2.3
567/563	73.025	127	36.673	1.81
575/572	76.2	139.99	36.512	2.39
577/572	74.612	139.992	36.098	2.42
580/572	82.55	139.99	36.512	2.17
581/572	80.962	146.24	36.512	2.34
582/872	82.6	139.9	36.512	2.15
594/592A	95.25	152.4	39.688	2.49
594/593X	95.25	150	35.992	2.21
597/593X	93.662	150	35.992	2.35
598/593X	92.075	150	39.688	2.41
599X/593X	85	150	35.992	2.7
615/612	44.45	120.65	41.275	2.42
621/612	53.975	120.65	41.275	2.18
622X/614X	55	115	40.021	1.9
636/632	53.975	136.525	41.275	3.1
645/632	71.438	136.525	41.275	5.64
655/653	69.85	146.05	41.275	3.24
663/653	82.55	146.05	47.276	2.75
677/672	85.725	168.275	41.275	4.18
749/742	85.027	150.089	44.45	3.17
755/752	76.2	161.925	48.26	4.68
835/832	69.85	168.275	56.363	6.15
1280/20	22.225	57.15	22.225	0.286
1755/29	22.22	56.89	19.36	0.258
1988/22	28.575	57.15	19.845	0.214
2474/20	28.575	68.262	23.812	0.41
2559/23	30.162	73.711	23.812	0.483
2578/23	33.338	69.85	23.812	0.435
2687/31	25.4	66.421	25.433	0.44
2788/20	38.10	76.20	23.812	0.495

轴承型号 Bearings No.	外型尺寸 Boundary Dimensions			重量 (KG)Weight
	内径d	外径D	宽度B	
3187/20	30.162	72.626	29.997	0.59
3379/20	34.925	80.167	29.37	0.714
3386/20	39.688	80.167	29.37	0.651
3490/20	38.1	79.375	29.37	0.646
3578/25	44.45	83.312	30.162	0.789
3574/25	42.86	87.3	30.16	0.806
3659/20	23.812	61.912	30.416	0.43
3780/20	50.8	93.264	30.162	0.981
3182/20	44.45	93.264	30.162	0.981
3876/20	38.1	85.725	30.162	0.84
3939/68	39	68	37	0.536
3975/62	50.8	112.712	33.338	1.59
JRM3939/68XD	39	68	18.5	0.541
A4049/4138	12.68	34.988	10.988	0.06
4388/35	41.275	90.488	38.658	1.217
JW4549/10	45	95	26.5	0.91
5565/35	50.8	122.238	43.08	2.76
JW6549/10	65	130	33.5	2.14
6575/35	76.2	161.925	53.975	5.43
JP7049/10	70	110	20	0.69
02474/20	28.575	68.263	22.225	0.397
02475/20	31.75	68.263	22.225	0.365
0687/71	31.75	54	15	0.133
02878/20	34.925	73.025	22.225	0.491
07093/196	23.812	50.005	13.495	0.119
09067/195	19.05	47.225	18.34	0.174
11590/20	15.87	42.86	14.29	0.099
LM11749/10	17.462	39.878	13.843	0.087
LM11949/10	19.05	45.237	15.494	0.124
12580/20	20.638	49.225	19.84	0.165
M12649/10	21.43	50.005	17.52	0.172
LM12749/10	22	45.237	15.494	0.116
LM12749/11	22	46	15.494	0.121
14117/274A	30	68.956	19.845	0.34
14124/274	31.75	69.012	19.845	0.357
14125A/274	31.75	69.02	19.845	0.357
14131/274	33.338	69.012	19.845	0.345
14137A/274	34.925	69.012	19.845	0.328
14138A/274	34.925	69.012	19.845	0.328
14137A/276	34.925	69.012	19.84	0.324
14125A/276	31.75	69.012	19.845	0.347
15101/245	25.4	62	19.05	0.298
15103S/243	26.162	61.913	19.05	0.287
15113/245	28.575	62	19.05	0.276
15123/245	31.75	62	18.161	0.243
15126/245	31.75	62	19.5	0.252
15579/15520	25.987	57.15	17.46	0.211
16137/282	34.93	71.99	20.64	0.374
16150/282	38.1	72	19	0.33
17580/20	15.875	42.862	16.67	0.11
17887/31	45.23	79.985	19.843	0.402
18590/20	41	73	16.7	0.275
21075/212	19.05	59.975	22.225	0.246
L21549/11	15.875	34.988	10.998	0.05
22168/325	42.682	82.55	19.837	0.44

轴承型号 Bearings No.	外型尺寸 Boundary Dimensions</
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SPHERICAL ROLLER BEARINGS

NSAR®

BEARINGS



调心滚子轴承 Spherical Roller Bearings

调心滚子轴承是在有二条滚道的内圈和滚道为球面的外圈之间，组装着鼓形滚子的轴承。这类轴承分单、双列调心滚子轴承，有E, CA型, CC型, M型, 和密封型。主要应用在矿山和大型输送设备领域，石油和天然气的开采和生产领域。

Spherical roller bearing is in the two race between inner ring and groove for spherical outer ring, assembled cylindrical roller bearing. This kind of bearings have single and double row. They have E, CA, CC , M and seal model. Mainly used in the field of mining and large transport equipment, oil and gas exploration and production field.

基本设计 Basic Design

调心滚子轴承在有滚道的内圈和滚道为球面的外圈之间，装配有鼓形滚子的轴承。外圈滚道的曲率中心与轴承中心一致，所以具有与自动调心球轴承同样的调心功能。在轴、外壳出现挠曲时，可以自动调整，不增加轴承负担。

Spherical roller bearings is in a race between inner ring and groove for spherical outer ring, assembled with cylindrical roller bearing. Outer ring raceway curvature center and bearing center consistent, so with automatic self-aligning ball bearing the same tone heart function. If there was a deflection axis, a hood, can automatically adjust, don't increase the bearing burden.

调心滚子轴承的产品范围包括：开式轴承 密封轴承 振动机械用轴承

Spherical roller bearing product range includes: open type bearing ,seal bearing ,ibration machinery bearings

轴承代号：Bearings Code

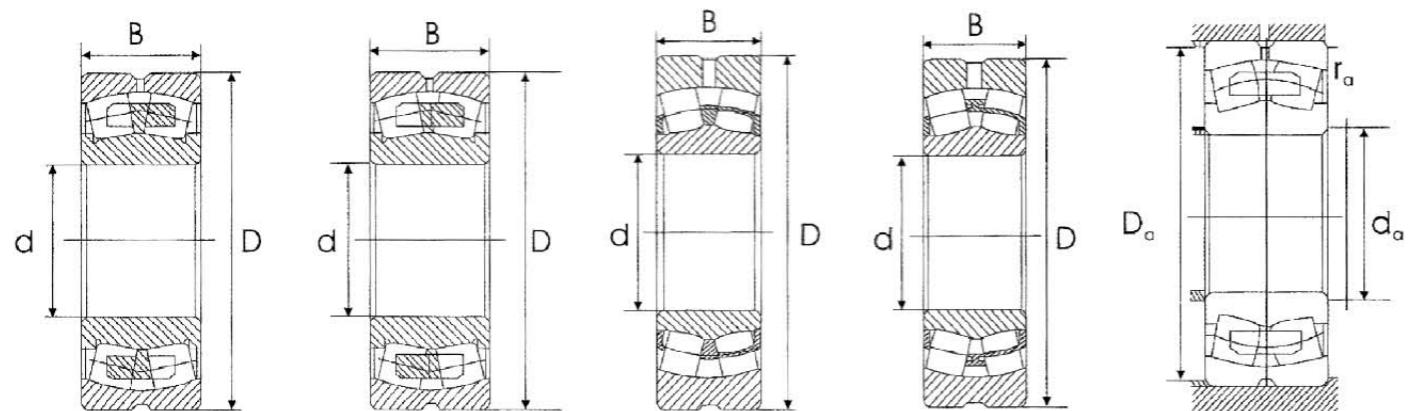
2 -----类型代号 调心滚子轴承
2-----Type Code Spherical roller bearings
2 3 -----尺寸系列代号：23系列
23-----Dimension Series Code:Series 23
1 0 -----轴承内径尺寸代号：06*5=30mm; 07*5=35mm
10-----Bearings Inner Diameter Code:06*5=30mm; 07*5=35mm
CA-----内部结构代号：CA型内圈带小挡边黄铜实体保持器
CA-----Internal structure code CA type is Brass cage with small flange of inner ring
K -----轴承内孔型式 圆锥孔（锥度1:12）
K-----Bearing innergroove type Taper bore(Taper 1:12)
/W33---润滑结构：轴承外圈上有润滑油槽和三个润滑油孔
/W33---Lubrication structure .There is lubrication groove and three lubrication oil bore on outer ring
/P6 -----精度等级：P6
/P6-----Precision grade P6



调心滚子轴承轴承代号系统中最常用的后置代号摘录表

The list of Spherical roller bearings bearing code system in the rear of the most commonly used code

Q	青铜保持器 Bronze Cage	W33	轴承外圈上有润滑油槽和三个润滑油孔。 On the bearing outer ring has lubrication groove and three lubrication hole
K	圆锥孔轴承，锥度为 1:12 Taper bore bearing,Taper 1:12	W33X	轴承外圈上有润滑油槽和六个润滑油孔。 On the bearing outer ring has lubrication groove and six lubrication hole
K30	圆锥孔轴承，锥度为 1:30 Taper bore bearing,Taper 1:30	2RS	两侧带接触式密封圈 Contact-type seal on both of side
N	外圈有止动槽 Snap groove on outer ring	RS	单侧带接触式密封圈 Contact-type seal on single side
P0	尺寸和运转精度符合 ISO 公差 0 级标准 Dimension and rolling precision meet ISO stand tolerance Level 0	S0	轴承套圈经过高温回火处理，工作温度可达 150°C Bearing ring after high temperature tempering process, the working temperature can reach 150°C
P6	尺寸和运转精度符合 ISO 公差 6 级标准 Dimension and rolling precision meet ISO stand tolerance Level 6	S1	轴承套圈经过高温回火处理，工作温度可达 200°C Bearing ring after high temperature tempering process, the working temperature can reach 200°C
P5	尺寸和运转精度符合 ISO 公差 5 级标准 Dimension and rolling precision meet ISO stand tolerance Level 5	S2	轴承套圈经过高温回火处理，工作温度可达 250°C Bearing ring after high temperature tempering process, the working temperature can reach 250°C
C0	基本游隙组，代号可省略 Basic clearance, the code can be omit	S3	轴承套圈经过高温回火处理，工作温度可达 300°C Bearing ring after high temperature tempering process, the working temperature can reach 300°C
C2	小于基本游隙组 Small than basic clearance	S4	轴承套圈经过高温回火处理，工作温度可达 350°C Bearing ring after high temperature tempering process, the working temperature can reach 350°C
C3	游隙比 C0 组大 Clearance bigger than C0	X2	宽度非标 Non-standard width
C4	游隙比 C3 组大 Clearance bigger than C3		
C5	游隙比 C4 组大 Clearance bigger than C4		
C9	特殊游隙，一般为客户指定或特殊工况要求 Special clearance, normally customized by client or special industrial condition requirement		
W20	轴承外圈上有三个润滑油孔，无润滑油槽。 On the bearing outer ring has three lubrication oil hole, no lubrication groove		
W26	轴承外圈上有六个润滑油孔，无润滑油槽。 On the bearing outer ring has six lubrication oil hole, no lubrication groove		



轴承代号 Bearings No.		外形尺寸 (mm) Boudary Dimensions			安装尺寸 Installation Dimension			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(KG) Weight
新代号 New	旧代号 Old	内径d	外径D	宽度B	内径da	外径Da	宽度Ra	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑Grease Lubrication	油润滑Oil Lubrication	≈
22205/20E		20	52	18	25.6	46.4	1	45.1	40.5	11050	14450	0.28
22205 CC/W33	53505	25	52	18	30.6	46.4	1	45.1	40.5	11050	14450	0.26
22206 CC/W33	53506	30	62	20	35.6	56.4	1	58.9	55.2	8500	11900	0.29
22207 CC/W33	53507	35	72	23	42	65	1	79.6	78.2	7650	10200	0.43
22208 CC/W33	53508	40	80	23	47	73	1	88.8	82.8	6800	9350	0.55
22209 CC/W33	53509	45	85	23	52	78	1	93.8	90.1	6375	8500	0.59
22210 CC/W33	53510	50	90	23	57	83	1	95.7	99.4	5950	8075	0.87
22211 CC/W33	53511	55	100	25	64	91	1.5	1156	116.8	5355	7225	0.88
22212 CC/W33	53512	60	110	28	69	101	1.5	143.6	182.7	4760	6375	1.22
22213 CC/W33	53513	65	120	31	74	111	1.5	178	199	4250	5950	1.63
22214 CC/W33	53514	70	125	31	79	116	1.5	191	210	4250	5695	1.66
22215 CC/W33	53515	75	130	31	84	121	1.5	195	221	4080	5355	1.75
22216 CC/W33	53516	80	140	33	90	130	2	217	249	3655	5100	2.2
22217 CC/W33	53517	85	150	36	95	140	2	362	299	3400	4760	2.8
22218 CC/W33	53518	90	160	40	100	150	2	299	345	3230	4505	4
22219 CC/W33	53519	95	170	43	107	158	2	350	414	3060	4080	4.2
22220 CC/W33	53520	100	180	60.3	112	168	2	391	451	2890	3825	5
22222 CC/W33	53522	110	200	53	122	188	2	515	589	2550	3400	7.4
22224 CC/W33	53524	130	215	58	132	203	2	580	704	2380	3230	9.2
22226 CC/W33	53526	130	230	64	144	216	2.5	680	860	2210	3060	11.2
22228 CC/W33	53528	140	250	68	154	236	2.5	650	830	2040	2720	14.5
22230 CC/W33	53530	150	270	73	164	256	2.5	780	990	1870	2550	18.5
22232 CC/W33	53532	160	290	80	174	276	2.5	1290	920	1700	2380	22
22234 CC/W33	53534	180	310	86	188	292	3	1030	1340	1615	2210	29
22236 CC/W33	53536	180	320	86	198	302	3	1080	1430	1530	2210	30
22238 CC/W33	53538	190	340	92	208	322	3	1170	1500	1455	2040	35.3
22240 CC/W33	53540	200	360	4	218	342	3	1350	1780	1360	1870	47.7
22244 CC/W33	53544	220	400	108	237	383	3	1620	2170	1275	1700	60.5

轴承代号 Bearings No.		外形尺寸 (mm) Boudary Dimensions			安装尺寸 Installation Dimension			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(KG) Weight
新代号 New	旧代号 Old	内径d	外径D	宽度B	内径da	外径Da	宽度Ra	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑Grease Lubrication	油润滑Oil Lubrication	≈
21305CC/W33	53305H	25	62	17	32	55	1	41.4	41.5	7225	10200	0.28
21306CC/W33	53306H	30	72	19	37	65	1	50	56	6375	8500	0.41
21307CC/W33	53307H	35	80	21	44	71	1.5	60	66	5695	8075	0.55
21308CC/W33	53308H	40	90	23	49	81	1.5	95.7	99.4	5950	8075	0.71
21309CC/W33	53309H	45	100	25	54	91	1.5	115	116.8	5355	7225	0.95
21310CC/W33	53310H	50	110	27	61	99	2	143.5	153	4760	6370	1.35
21311CC/W33	53311H	55	120	29	65	110	2	143.5	152.7	4760	6375	1.6
21312CC/W33	53312H	60	130	31	72	118	2	195	220	4080	5355	1.95
21313CC/W33	53312H	65	140	33	77	128	2	217	248	3655	5100	2.45
21314CC/W33	53314H	70	150	35	82	138	2	262	299	3400	4760	3
21315CC/W33	53315H	75	160	37	87	148	2	262	300	3400	4760	3.55
21316CC/W33	53316H	80	170	39	92	158	2	299	345	3230	4505	4.2
21317CC/W33	53317H	85	180	41	99	166	2.5	299	345	3230	4505	5
21318CC/W33	53318H	90	190	43	104	176	2.5	350	414	3060	4080	5.8
21319CC/W33	53319H	95	200	45	109	186	2.5	391	451	2890	3825	7.15
21320CC/W33	53320H	100	215	47	114	201	2.5	391	451	2890	3825	8.8

轴承代号 Bearings No.		外形尺寸 (mm) Boudary Dimensions			安装尺寸 Installation Dimension			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(KG) Weight
新代号 New	旧代号 Old	内径d	外径D									



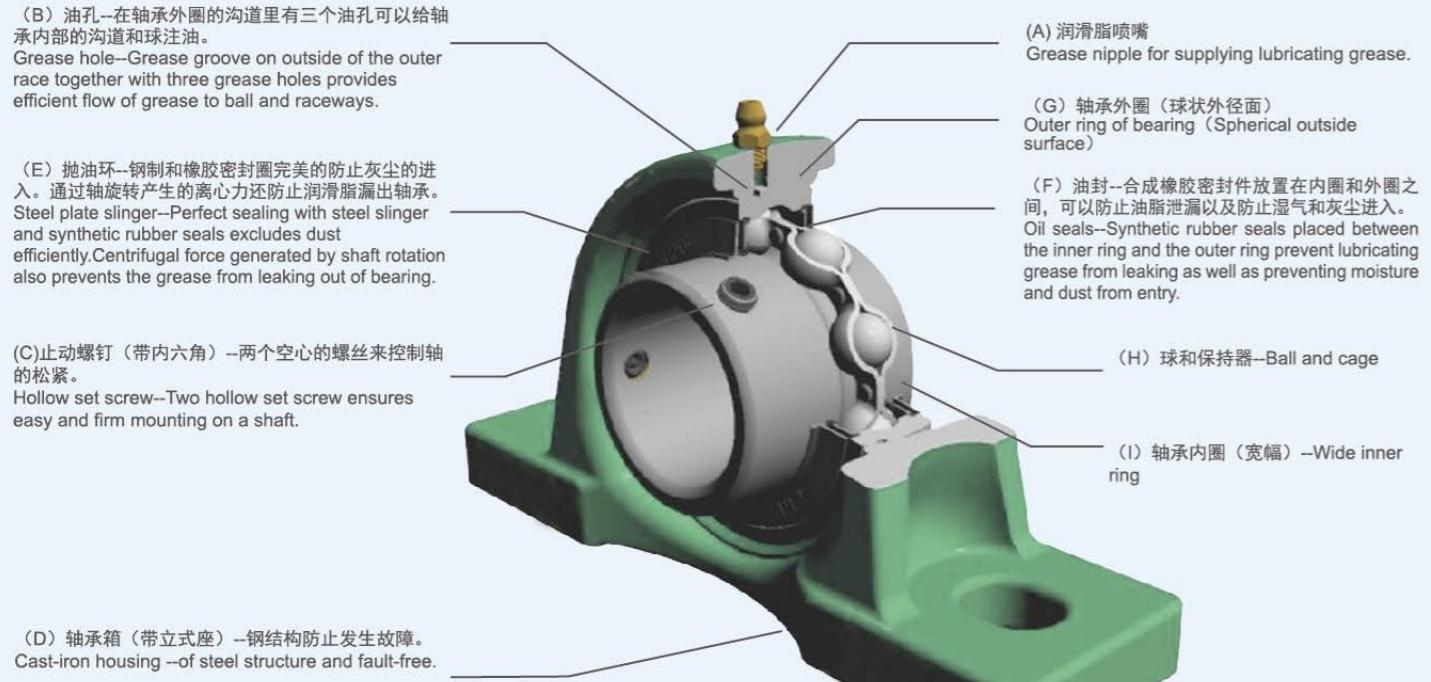
轴承代号 Bearings No.		外形尺寸 (mm) Boundary Dimensions			安装尺寸 Installation Dimension			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(KG) Weight
新代号 New	旧代号 Old	内径d	外径D	宽度B	内径da	外径Da	宽度Ra	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	≈
23022 CC/W33	3053220H	110	170	45	120	160	2	285	404	2890	3655	3.75
23024 CC/W33	3053124H	120	180	46	130	170	2	327	469	2720	3400	4.3
23026 CC/W33	3053126H	130	200	52	140	190	2	396	561	2380	3060	6.2
23028 CC/W33	3053128H	140	210	53	150	200	2	430	620	2210	2890	6.7
23030 CC/W33	3053730H	150	225	56	162	213	2	470	690	2040	2720	8.14
23032 CC/W33	3053132H	160	240	60	172	228	2	540	810	2040	2550	20.5
23034 CC/W33	3053134H	170	260	67	182	248	2	650	790	1870	2380	13.1
23036 CC/W33	3053136H	180	280	74	192	268	2	760	1150	1700	2210	17.4
23038 CC/W33	3053138H	190	290	75	202	278	2	790	1230	1615	2040	18.4
23040 CC/W33	3053140H	200	310	82	212	298	2	920	14100	1530	1870	23.4
23044 CC/W33	3053144H	220	340	90	233	327	2.5	1120	1710	1360	1700	33.5

轴承代号 Bearings No.		外形尺寸 (mm) Boundary Dimensions			安装尺寸 Installation Dimension			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(KG) Weight
新代号 New	旧代号 Old	内径d	外径D	宽度B	内径da	外径Da	宽度Ra	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	≈
23218 CC/W33	3053218	90	160	52.4	100	150	2	327	405	2380	3230	4.6
23220 CC/W33	3053720H	100	180	60.3	112	138	2	437	552	2040	2890	6.7
23222 CC/W33	3053222H	110	200	69.8	122	188	2	552	704	1870	2720	9.7
23224 CC/W33	3053224H	130	215	76	132	203	2	639	856	1700	2380	12
23226 CC/W33	3053226H	130	230	80	144	216	2.5	720	970	1615	2210	14
23228 CC/W33	3053228H	140	250	88	154	236	2.5	840	1150	1445	2040	18.5
23230 CC/W33	3053230H	150	270	96	164	256	2.5	990	1340	1360	1870	24
23232 CC/W33	3053232H	160	290	104	174	276	2.5	1120	1530	1275	1870	30
23234 CC/W33	3053234H	180	310	110	188	292	3	1220	1780	1190	1700	36.5
23236 CC/W33	3053236H	180	320	112	198	302	3	1380	1950	1105	1615	69
23238 CC/W33	3053238H	190	340	120	208	322	3	1530	2210	1105	1530	47.5
23240 CC/W33	305324H	200	360	128	218	342	3	1710	2480	1020	1445	57
23244 CC/W33	3053244H	220	400	144	237	383	3	2170	3170	935	1275	81.5

轴承代号 Bearings No.		外形尺寸 (mm) Boundary Dimensions			安装尺寸 Installation Dimension			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(KG) Weight
新代号 New	旧代号 Old	内径d	外径D	宽度B	内径da	外径Da	宽度Ra	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	≈
24024 CC/W33	4053124H	120	180	60	130	170	2	396	616	2040	2890	5.4
24026 CC/W33	4053126H	130	200	69	140	190	2	497	750	1700	2550	7.95
24028 CC/W33	4053128H	140	210	69	150	200	2	520	830	1700	2380	8.45
24030 CC/W33	3053130H	150	225	75	162	213	2	600	960	1530	2210	10.5
24032 CC/W33	4053132H	160	240	80	172	228	2	690	1100	1445	2040	13
24034 CC/W33	405313H	180	260	90	182	248	2	860	1340	1360	2040	17.5
24036 CC/W33	4053136H	180	280	100	192	268	2	990	1590	1275	1870	23
24038 CC/W33	4053138H	190	290	100	202	278	2	1030	1650	1190	1700	24
24040 CC/W33	4053140H	200	310	109	212	298	2	1190	1950	1105	1615	30.5
24044 CC/W33	4053144H	220	340	118	233	327	2.5	1430	2390	1020	1445	40

轴承代号 Bearings No.		外形尺寸 (mm) Boundary Dimensions			安装尺寸 Installation Dimension			基本额定负荷(KN) Basic Load Rating		极限转速(r/min) Limit Rotational Speed		重量(KG) Weight
新代号 New	旧代号 Old	内径d	外径D	宽度B	内径da	外径Da	宽度Ra	动负荷 Dynamic Cr	静负荷 Static Cor	脂润滑 Grease Lubrication	油润滑 Oil Lubrication	≈
24122 CC/W33	3053722H	110	180	69	120	170	2	478	690	1870	3060	6.85
24124 CC/W33	4053724H	130	200	80	130	190	2	603	874	1615	2210	10
24126 CC/W33	4053726H	130	210	80	140	200	2	630	920	1530	2040	11
24128 CC/W33	4053728	140	225	85	152	213	2	700	1070	1445	2040	13
24130 CC/W33	405											

带座轴承 Pillow Block Ball Bearings



组件 Components	所用的原材料 Materials used	JIS symbols	JIS number
紧定套 Sleeve for adapter	机械结构用的碳钢 Carbon steel for machine structural use	S25C	JISG4051
螺母 Nut for adapter	机械结构用的碳钢 Carbon steel for machine structural use	S25C	JISG4051
垫圈 Washer for adapter	机械结构用的冷钢 Cold steel for machine structural use	SPCC	JISG3141
油封 Oil seal	合成丁腈橡胶 Synthetic nitrile rubber	-----	-----
吊环 Slinger	冷轧碳钢薄板和钢带 Cold rolled carbon steel sheet and strip	SPCC	JISG3141
六角螺丝 Hexagon set screw	镍铬钼钢 Nickel chromium molybdenum steel	SCM435	JISG4105
六角扳手 Hexagon wrench key	镍铬钼钢 Nickel chromium molybdenum steel	SNCM630	JISG4103
注油嘴 Grease nipple	易切削黄铜棒 Free cutting brass bar	C3604	JISG3250

NSAR球轴承不用和其他低质量轴承一样经常的检测，但是如果能建立一个检测的计划也是很好的做法。由于轴承不能拆开进行检查，如果组件的内部状态或者轴承的外观，出现较明显的以下迹象时，此时要根据以下特征建立特定的检测计划，对轴承进行检测。

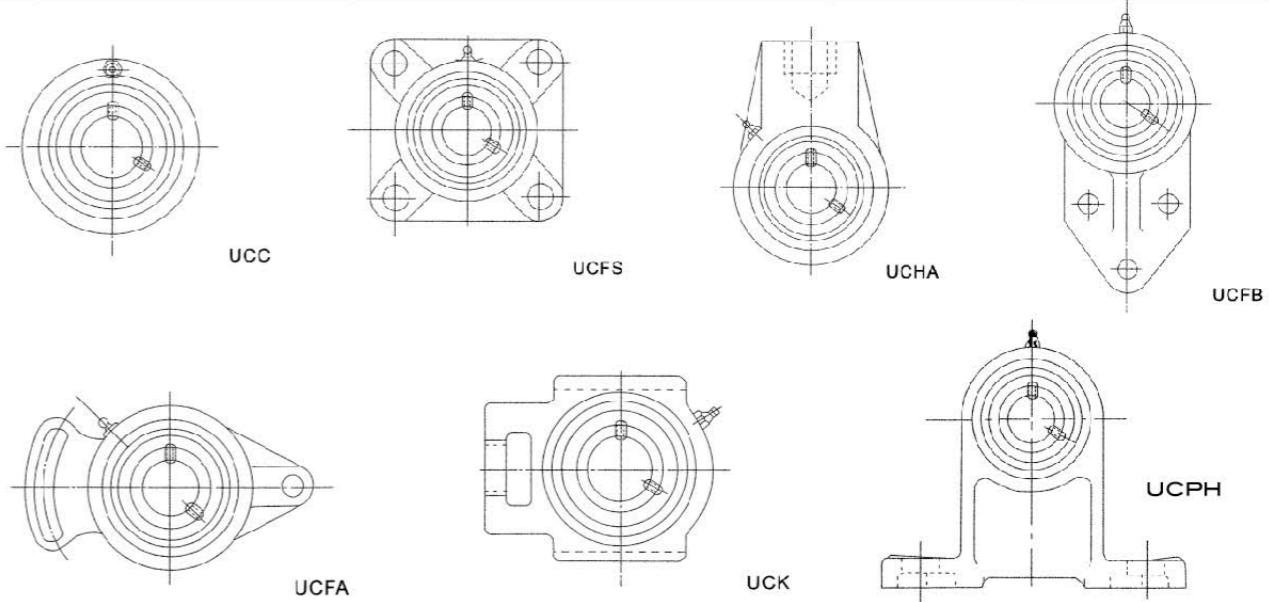
Periodic inspection

NSAR ball bearing units do not need to be inspected as frequently as lower quality bearings. However it is good practice to set up an inspection schedule for even these high quality bearings. Since a ball bearing unit cannot be disassembled for inspection if the internal status of components, the external appearance of the bearing must be inspected to give tell-tell signs of the status and expected life of the bearing. The following characteristics must be checked per the inspection schedule that is established for a particular application.

整体的外观 Overall appearance

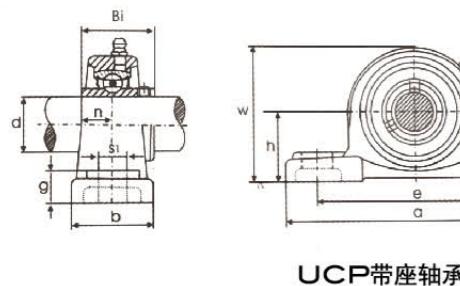
1. 轴承内圈的螺丝和固定的螺栓松动
2. 震动产生的噪音
3. 轴承座子和内圈的温度
4. 轴承油脂供应的间隔或者量过多或者过少，都会对轴承的寿命产生影响。
 1. Looseness of set screw of bearing inner ring or of the mounting bolts.
 2. Noise from vibration
 3. Temperature of the bearing housing or the inner ring.
 4. Grease supply interval and quantity of grease injected into the bearing either too much or too little grease can be detrimental to the life of the bearing

故障 Faults	过度的扭矩 Excessive torque	异常震动产生的噪音 Abnormal noise abnormal vibration	异常高温 Abnormal temperatures
原因 Causes	1.油脂的减少 2.过度的油脂干扰密封吊环 3.吊环的变形 4.过度增加了轴的载荷 (1)Degrade grease (2)Interference of seal with slinger due to excessive supply of grease (3)Deformation of slinger casing interference with seal (4)High load due to shaft expansion	(1)螺丝过紧或不当的安装螺栓 (2)内圈和轴的震动和磨损 (3)外来杂质或者灰尘进入轴承 (4)由于运转疲劳造成的保持器和球的磨损 (5)由于过度负荷造成沟道和滚动体的损坏 (6)轴的扭曲和弯曲 (1)Improper tightening of set screws or of mounting bolts (2)Wear on inner ring of bearing or shaft due to creep or fretting (3)Ingress of foreign matter dirt into bearing (4)Damage to cage or ball rolling surfaces due to rolling fatigue (5)Dent on raceway surface or ball rolling surface because of excessive load (6)Warped or bent shaft.	(1)润滑脂的减少 (2)过度的油脂干扰密封吊环 (3)吊环的变形 (4)轴承的螺丝，紧定套，和吊环的松动 (5)过度增加了轴的载荷 (6)由于运转疲劳造成的保持器和球的磨损 (1)Degraded grease (2)Interference of seal with slinger due to excessive supply of grease (3)Deformation of slinger casing interference with seal (4)Looseness of setscrew eccentric locking ring or adapter lock nut for bearings (5)Load due to shaft expansion (6)Damage to cage or ball rolling surfaces due to rolling fatigue

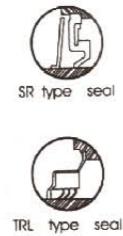


带座轴承 UCP

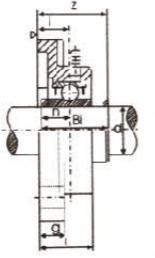
轴承型号 Bearings No.	Shaft Dia d	尺寸Dimensions(mm)										重量 Weight (kg)
		mm	h	a	e	b	S1	S2	g	w	n	Bi
UCP 202	15	30.2	127	95	38	13	19	14	62	12.7	31.0	0.66
UCP 203	17	30.2	127	95	38	13	19	14	62	12.7	31.0	0.66
UCP 204	20	33.3	127	95	38	13	19	14	65	12.7	31.0	0.65
UCP 205	25	36.5	140	105	38	13	19	15	71	14.3	34.1	0.75
UCP 206	30	42.9	165	121	48	17	21	17	83	15.9	38.1	1.20
UCP 207	35	47.6	167	127	48	17	21	18	93	17.5	42.9	1.50
UCP 208	40	49.2	184	137	54	17	21	18	98	19.0	49.2	1.90
UCP 209	45	54.0	190	146	54	17	21	20	106	19.0	49.2	2.05
UCP 210	50	57.2	206	159	60	20	25	21	114	19.0	51.6	2.60
UCP 211	55	63.5	219	171	60	20	25	23	126	22.2	55.6	3.45
UCP 212	60	69.8	241	134	70	20	25	25	138	25.4	65.1	4.50
UCP 213	65	76.2	265	203	70	25	29	27	151	25.4	65.1	5.20
UCP 214	70	79.4	266	210	72	25	31	27	157	30.2	74.6	6.00
UCP 215	75	82.6	275	217	74	25	31	28	163	33.3	77.8	7.00
UCP 216	80	88.9	292	232	78	25	31	30	175	33.3	82.6	8.10
UCP 217	85	95.2	310	247	83	25	31	32	187	34.1	85.7	9.80
UCP 218	90	101.6	327	252	88	27	33	33	200	39.7	96.0	11.60



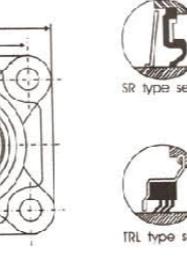
UCP带座轴承



UCP带座轴承



UCF带座轴承



UCFL带座轴承

带座轴承 UCF

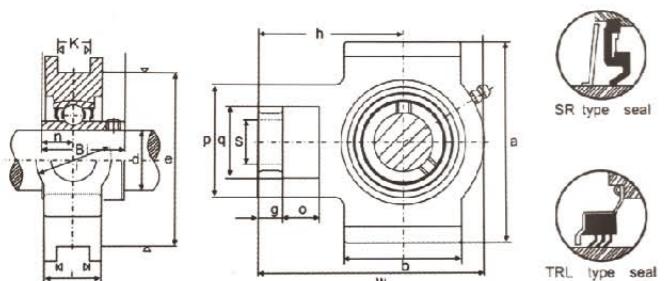
轴承型号 Bearings No.	Shaft Dia d	尺寸Dimensions(mm)										重量 Weight (kg)
		mm	a	e	i	g	l	z	s	n	Bi	
UCF 202	15	86	64	15	11	25.5	30.9	12	12.7	31.0	0.60	
UCF 203	17	86	64	15	11	25.5	30.9	12	12.7	31.0	0.60	
UCF 204	20	86	64	15	11	25.5	33.7	12	12.7	31	0.60	
UCF 205	25	95	70	16	13	27.0	35.8	12	14.3	34.1	0.80	
UCF 206	30	108	83	18	13	31.0	40.2	12	15.9	38.1	1.05	
UCF 207	35	117	92	19	15	34.0	44.4	14	17.5	42.9	1.45	
UCF 208	40	130	102	21	15	36.0	51.2	16	19.0	49.2	1.84	
UCF 209	45	137	105	22	16	38.0	52.2	16	19.0	49.2	2.15	
UCF 210	50	143	111	22	16	40.0	54.6	16	19.0	51.6	2.45	
UCF 211	55	162	130	25	18	43.0	58.4	19	22.2	55.6	3.10	
UCF 212	60	175	143	29	18	48.0	68.7	19	25.4	65.1	4.15	
UCF 213	65	187	149	30	22	50.0	69.7	19	25.4	65.1	5.00	
UCF 214	70	193	152	31	22	54.0	75.4	19	30.2	74.6	5.60	
UCF 215	75	200	159	34	22	56.0	78.5	19	33.3	77.8	6.90	
UCF 216	80	208	165	34	22	58.0	83.3	23	33.3	82.6	7.50	
UCF 217	85	220	175	36	24	63.0	87.6	23	34.1	85.7	9.60	
UCF 218	90	235	187	40	24	68.0	96.3	23	39.7	96.0	12.10	

带座轴承 UCFL

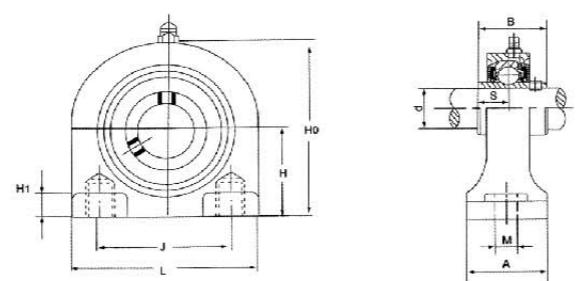
轴承型号 Bearings No.	Shaft Dia d	尺寸Dimensions(mm)											重量 Weight (kg)
		mm	a	e	b	i	g	l	z	s	n	Bi	
UCFL 202	15	113	90	60	15	12	25.5	30.9	12	12.7	31.0	0.40	
UCFL 203	17	113	90	60	15	12	25.5	30.3	12	12.7	31.0	0.40	
UCFL 204	20	113	90	60	15	12	25.5	33.7	12	12.7	31	0.40	
UCFL 205	25	130	99	68	16	14	27.0	35.8	16	14.3	34.1	0.60	
UCFL 206	30	148	117	80	18	14	31.0	40.2	16	15.9	38.1	0.85	
UCFL 207	35	161	130	90	19	16	34.0	44.4	16	17.5	42.9	1.10	
UCFL 208	40	175	144	100	21	16	36.0	51.2	16	19.0	49.2	1.40	
UCFL 209	45	188	148	108	22	18	38.0	52.2	19	19.0	49.2	1.70	
UCFL 210	50	197	157	115	22	18	40.0	54.6	19	19.0	51.6	2.10	
UCFL 211	55	224	184	130	25	20	43.0	58.4	19	22.2	55.6	3.00	
UCFL 212	60	250	202	140	29	20	48.0	68.7	23	25.4	65.1	3.70	
UCFL 213	65	258	210	155	30	24	50.0	69.7	23	25.4	65.1	4.50	
UCFL 214	70	265	216	160	31	24	54.0	75.4	23	30.2	74.6	5.10	
UCFL 215	75	275	225	165	34	24	56.0	78.5	23	33.3	77.8	5.30	
UCFL 216	80	290	233	180	34	24	58.0	83.3	2				

带座轴承 UCT

轴承型号 Bearings No.	Shaft Dia d mm	尺寸 Dimensions(mm)														重量 Weight (kg)	
		o	g	s	p	q	b	k	e	a	w	j	i	h	n	Bi	
UCT 202	15	16	10	51	12	19	51	12	76	89	94	32	21.0	61	12.7	31	0.78
UCT 203	17	16	10	51	12	19	51	12	76	89	94	32	21.0	61	12.7	31.0	0.78
UCT 204	20	16	10	51	12	19	51	12	76	89	94	32	21.0	61	12.7	31.0	0.76
UCT 205	25	16	10	51	12	19	51	12	76	89	97	32	24.0	62	14.3	34.1	0.82
UCT 206	30	16	10	56	12	22	57	12	89	102	113	37	28.0	70	15.9	38.1	1.22
UCT 207	35	16	13	64	12	22	64	12	89	102	129	37	30.0	78	17.5	42.9	1.44
UCT 208	40	19	16	83	16	29	83	16	102	114	144	49	33.0	88	19.0	49.2	2.4
UCT 209	45	19	16	83	16	29	83	16	102	117	144	49	35.0	87	19.0	49.2	2.42
UCT 210	50	19	16	83	16	29	83	16	102	117	149	49	37.0	90	19.0	51.6	2.46
UCT 211	55	25	19	102	22	35	95	22	130	146	171	61	38.0	106	22.2	55.6	4.16
UCT 212	60	32	19	102	22	35	102	22	130	146	194	61	42.0	119	25.4	65.1	4.98
UCT 213	65	32	21	111	26	41	121	26	151	167	224	70	44.0	137	25.4	65.1	6.69
UCT 214	70	32	21	111	26	41	121	26	151	167	224	70	46.0	137	30.2	74.6	7.13
UCT 215	75	32	21	111	26	41	121	26	151	167	232	70	48.0	140	33.3	77.8	7.47
UCT 216	80	32	21	111	26	41	121	26	165	184	235	70	51.0	140	33.3	82.6	8.33
UCT 217	85	38	29	124	30	48	157	30	173	198	260	73	54.0	162	34.1	85.7	11.02



UCT带座轴承



UCPA带座轴承

带座轴承 UCPA

轴承型号 Bearings No.	尺寸 Dimensions(mm)								重量 Weight (kg)	
	H	L	A	J	N	H2	H3	B		
UCPA 201	30.2	76	40	52	M10	62	15	31	12.7	0.57
UCPA 202	30.2	76	40	52	M10	62	15	31	12.7	0.57
UCPA 203	30.2	76	40	52	M10	62	15	31	12.7	0.57
UCPA 204	30.2	76	40	52	M10	62	15	31	12.7	0.57
UCPA 205	36.5	84	38	56	M10	72	15	34.1	14.3	0.84
UCPA 206	42.9	94	50	66	M14	84	18	38.1	15.9	1.12
UCPA 207	47.6	110	55	80	M14	95	20	42.9	17.5	1.51
UCPA 208	49.2	116	58	84	M14	100	20	49.2	19	1.9
UCPA 209	54.2	120	60	90	M14	108	25	49.2	19	2.04
UCPA 209-26	2-9/64	4-23/32	2-23/64	3-35/64	M14	2004/1/4	63/64	1.937	0.748	2.04
UCPA 210	57.2	130	64	94	M16	116	25	51.6	19	2.23
UCPA 210-29	2002/1/4	2005/1/8	2-19/32	3-45/64	M16	2004/9/16	63/64	2.0315	0.748	2.23
UCPA 211	63.5	140	66	104	M16	125	25	55.6	22.2	3.35
UCPA 211-32	2002/1/2	5-33/64	2-19/32	4-3/32	M16	4-59/64	63/64	2.189	0.874	3.35
UCPA 212	69.9	150	68	114	M16	138	25	65.1	25.4	4.24
UCPA 212-36	2002/3/4	5-29/32	2-43/64	4-31/64	M16	2005/7/16	63/64	2.563	1	4.24
UCPA 213	76.2	160	70	124	M16	150	25	65.1	25.4	5.17
UCPA 213-40	3	6-19/64	2002/3/4	2004/7/8	M16	5-29/32	63/64	2.563	1	5.17

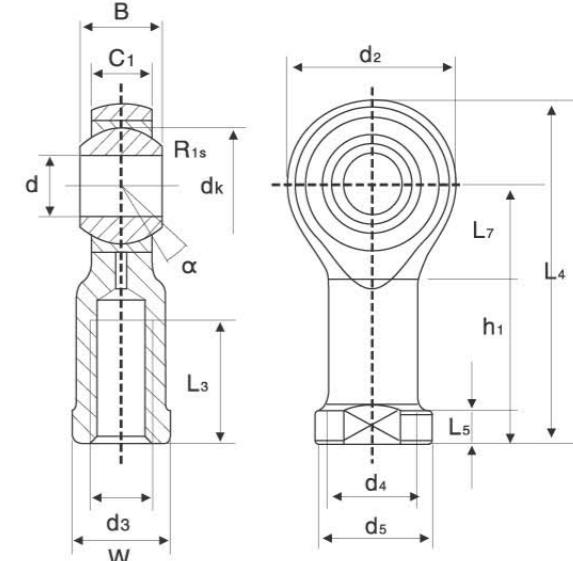
杆端关节轴承 Rod ends SI...T/K

SI...T/K



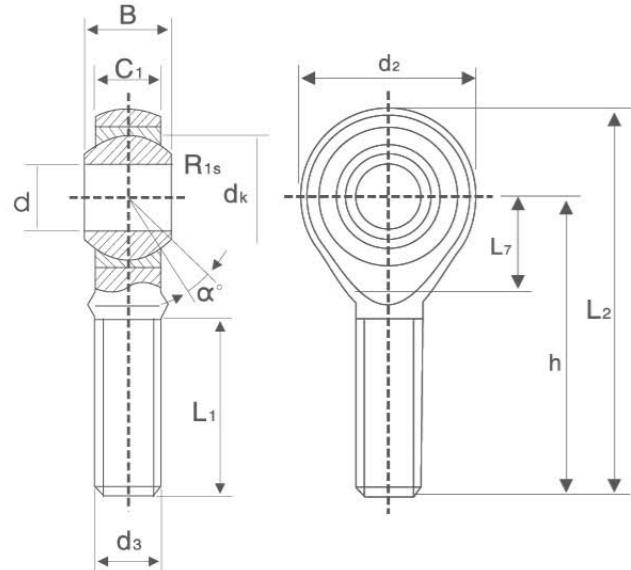
Maintenance free

- 杆端体带有左旋或右旋的内螺纹
Rod body with left or right-hand female thread
- 钢对 PTFE 复合材料
Sliding contact surfaces: steel/PTFE
- 杆端体表面镀锌
Surface of rod body zinc plated



型 号 Part Number	尺寸mm (Dimensions)													负 荷 KN Load ratings			重 量 g Weight
	d	d3	B	C1	W	h1	d2	L4	L5	d4	d5	dk	L3 min	α ≈	动 dyn.c	静 stat.co	
SI5T/K	5	M5×0.8	8	6	9	27	18	36	4	8.5	11	11.11	10	13	5.70	6.00	16
SI6T/K	6	M6×1.0	9	6.75	11	30	20	40	5	10	13	12.70	12	13	7.20	7.65	22
SI8T/K	8	M8×1.25	12	9	14	36	24	48	5	12.5	16	15.875	16	14	11.6	12.9	47
SI10T/K	10	M10×1.5	14	10.5	17	43	28	57	6.5	15	19	19.05	20	13	14.5	18.0	77
SI10-1T/K	10	M10×1.25	14	10.5	17	43	28	57	6.5	15	19	19.05	20	13	14.5	18.0	77
SI12T/K	12	M12×1.75	16	12	19	50	32	66	6.5	17.5	22	22.225	22	13</			

杆端关节轴承 Rod ends SA...T/K

SA...T/K

Maintenance -free

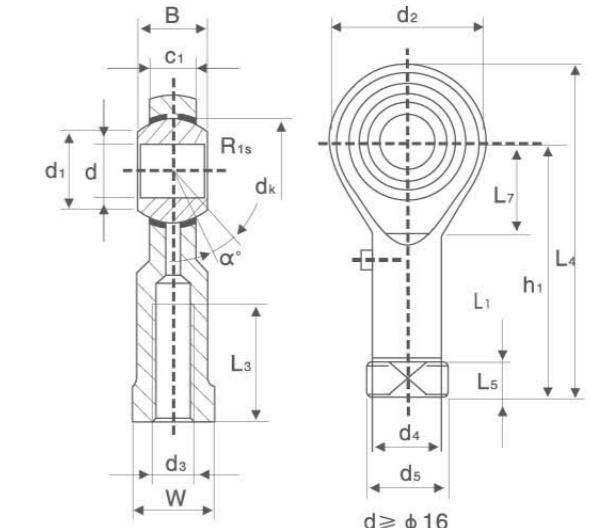
- 杆端体带有左旋或右旋的内螺纹
Rod body with left or right-hand female thread
- 钢对 PTFE 复合材料
Sliding contact surfaces: steel/PTFE
- 杆端体表面镀锌
Surface of rod body zinc plated

杆端关节轴承 Rod ends PHS

PHS

Maintenance required

- 杆端体带有左旋或右旋的内螺纹
Rod body with left or right-hand female thread
- 外圈球面镶有青铜衬垫
Outer race lined with bronze liner
- 杆端体表面镀锌，有润滑孔或油杯
Surface of rod body zinc plated, rod body with a lubricating hole or grease nipple



型号 Part Number	尺寸mm (Dimensions)											负荷 Load ratings		重量 g Weight	
	d	d ₃	B	C ₁	L ₁ _{min}	d ₂	L ₇	h	L ₂	dk	R _{1s}	α _≈	动dyn.c	静stat.co	
SA5T/K	5	M5×0.8	8	6	19	18	.	33	42	11.11	0.3	13	5.70	6.00	13
SA6T/K	6	M6×1.0	9	6.75	21	20	.	36	46	12.70	0.3	13	7.20	7.65	20
SA8T/K	8	M8×1.25	12	9	25	24	.	42	54	15.875	0.3	14	11.6	12.9	38
SA10T/K	10	M10×1.5	14	10.5	28	28	.	48	62	19.05	0.3	13	14.5	18.0	55
SA12T/K	12	M12×1.75	16	12	32	32	.	54	70	22.225	0.3	13	17.0	24.0	85
SA14T/K	14	M14×2.0	19	13.5	36	36	18	60	78	25.40	0.3	16	24.0	31.0	140
SA16T/K	16	M16×2.0	21	15	37	40	21	66	87	28.575	0.3	15	28.5	39.0	210
SA18T/K	18	M18×1.5	23	16.5	41	44	22	72	94	31.75	0.3	15	42.5	47.5	280
SA20T/K	20	M20×1.5	25	18	45	50	25	78	103	34.925	0.3	14	42.5	57.0	380
SA22T/K	22	M22×1.5	28	20	48	54	27	84	111	38.10	0.3	15	57.0	68.0	480
SA25T/K	25	M24×2.0	31	22	55	60	30	94	124	42.85	0.3	15	68.0	85.0	640
SA28T/K	28	M27×2.0	35	24	62	66	33	103	136	47.60	0.3	15	86.0	107.0	800
SA30T/K	30	M30×2.0	37	25	66	70	35	110	145	50.80	0.3	17	88.0	114.0	1100
SA35T/K	35	M36×2.0	43	28	85	81	41	140	180.5	57.10	0.3	16	101	206	1640
SA40T/K	40	M42×2.0	49	33	90	91	46	150	195.5	66.60	0.3	17	124	280	2300
SA50T/K	50	M48×2.0	60	45	105	117	59	185	243.5	82.50	0.3	12	308	485	4800

注:

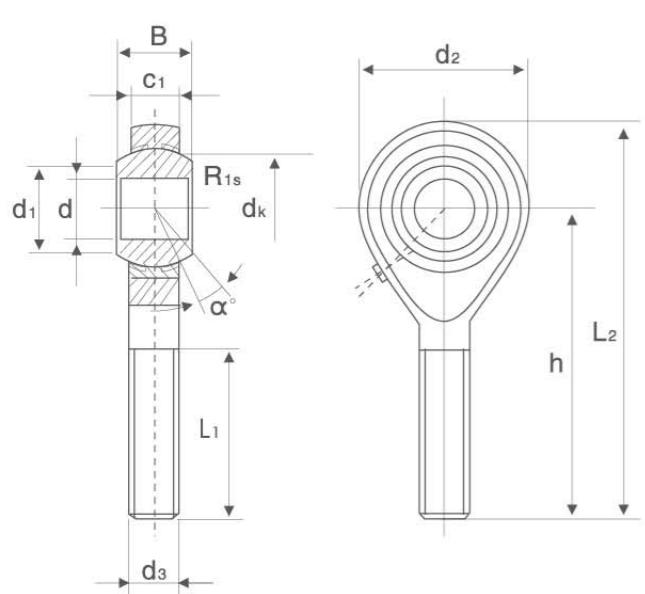
- 若是左旋螺纹，轴承型号需加“L”，例如：SAL 18 T/K。
- For left-hand thread, please add suffix “L”, e.g. SAL 18 T/K.
- 如需不锈钢材料，请在型号前面加“S”，例如：SSA8 T/K。
- If need the stainless steel material please to add “S” in front of the model for example: SSA8 T/K

注:

- 若是左旋螺纹，轴承型号需加“L”，例如：PHSL 8。
- For left-hand thread, please add suffix “L”, e.g. PHS 8.
- 如需不锈钢材料，请在型号前面加“S”，例如：SPHS 8。
- If need the stainless steel material please to add “S” in front of the model for example: SPHS 8.

杆端关节轴承 Rod ends POS

POS



Maintenance required

- 杆端体带有左旋或右旋的内螺纹
Rod body with left or right-hand female thread
- 外圈球面镶有青铜衬垫
Outer race lined with bronze liner
- 杆端体表面镀锌，有润滑孔或油杯
Surface of rod body zinc plated, rod body with a lubricating hole or grease nipple

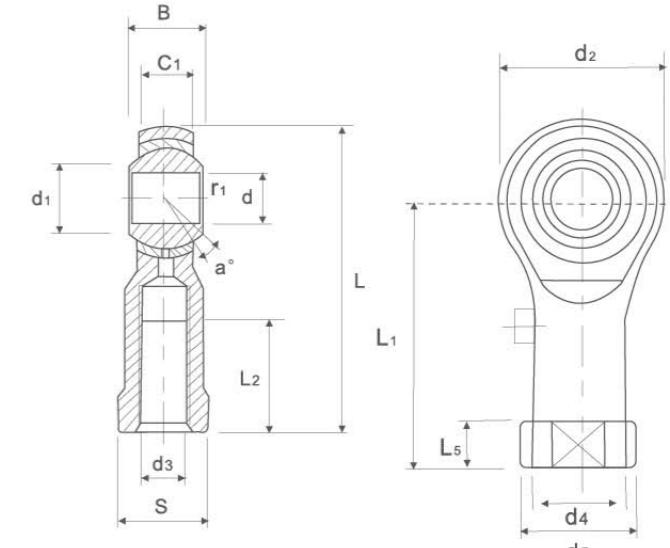
型号 Part Number	尺寸mm (Dimensions)											负荷KN Load ratings		重量 g Weight	
	d	d ₃	B	C ₁	L ₁	d ₂	h	L ₂	d _k	R _{1s}	d ₁	α ≈	动dyn.c	静stat.co	
POS 5	5	M5X0.8	8	6	20	16	33	41	11.11	0.3	7.70	13	3.25	5.70	13
POS 6	6	M6X1.0	9	6.75	22	18	36	45	12.70	0.3	8.96	13	4.30	7.20	20
POS 8	8	M8X1.25	12	9	25	22	42	53	15.875	0.3	10.4	14	7.20	11.6	30
POS 10	10	M10X1.5	14	10.5	29	26	48	61	19.05	0.3	12.9	13	10.0	14.5	55
POS 12	12	M12X1.75	16	12	33	30	54	69	22.225	0.3	15.4	13	13.4	17.0	85
POS 14	14	M14X2.0	19	13.5	36	34	60	77	25.40	0.3	16.9	16	17.0	24.0	140
POS 16	16	M16X2.0	21	15	40	38	66	85	28.575	0.3	19.4	15	21.6	28.5	210
POS 18	18	M18X1.5	23	16.5	44	42	72	94	31.75	0.3	21.9	15	26.0	42.5	280
POS 20	20	M20X1.5	25	18	47	46	78	101	34.925	0.3	24.4	15	31.5	52.5	380
POS 22	22	M22X1.5	28	20	51	50	84	111	38.10	0.3	25.8	15	38.0	57.0	480
POS 25	25	M24X2.0	31	22	57	60	94	124	42.85	0.3	29.6	15	47.5	68.0	640
POS 28	28	M28X2.0	35	24	62	66	103	136	47.60	0.3	32.3	15	58.0	75.5	960
POS 30	30	M30X2.0	37	25	66	70	110	145	50.80	0.3	34.8	17	64.0	88.0	1100

注:

- 若是左旋螺纹，轴承型号需加“L”，例如：POS 8.
- For left-hand thread, please add suffix "L", e.g. POSL 8.
- 如需不锈钢材料，请在型号前面加“S”，例如：SPOS 8.
- If need the stainless steel material please to add "S" in front of the model for example: SPOS 8.

杆端关节轴承内螺纹镶垫杆端关节轴承 (英制PHSB)

Inlaid liner Rod ends with female threaad (inch dimension PHSB)
PHSB



型 号 Part Number	尺寸mm (Dimensions)													a° ≈	重 量 (g)
	d	d ₂	B	C ₁	S	d ₃	d ₅	L	L ₁	L ₂	d ₁	C _d	C _s		
PHSB 3 4.826	.1900 4.826	.6250 15.88	.312 7.92	.250 6.35	.312 7.92	0.19 3/16 -32UNF	.406 10.3	1.38 34.9	1.06 27	.562 14.3	.306 7.77	780	2090	13	14
PHSB 4 6.35	.2500 6.35	.7500 19.05	.375 9.53	.281 7.14	.375 9.53	0.25 1/4 -28UNF	.468 11.9	1.69 42.9	1.31 33.3	.75 19.1	.355 9.02	1030	3040	13	23
PHSB 5 7.938	.3125 7.938	.8750 22.23	.437 11.10	.344 8.74	.437 11.10	0.3125 5/16 -24UNF	.500 12.7	1.81 46	1.38 34.9	.750 19.1	.447 11.35	1530	3800	13	36
PHSB 6 9.525	.3750 9.525	1.000 25.40	.500 12.70	.406 10.31	.562 14.27	0.375 3/8 -24UNF	.687 17.5	2.13 54	1.63 41.3	.937 23.8	.517 13.13	2080	4980	13	59
PHSB 7 11.11	.4375 11.11	1.125 28.58	.562 14.27	.437 11.10	.625 15.88	0.4375 7/16 -20UNF	.750 19.1	2.38 60.3	1.81 46	1.06 27	.586 14.88	2520	6020	13	82
PHSB 8 12.70	.5000 12.70	1.312 33.32	.625 15.88	.500 12.70	.750 19.05	0.5 1/2 -20UNF	.875 22.2	2.78 70.6	2.13 54	1.19 30.2	.698 17.73	3330	8370	13	132
PHSB 10 15.88	.6250 15.88	1.500 38.10	.750 19.05	.562 14.27	.875 22.23	0.625 5/8 -18UNF	1.00 25.4	3.25 82.6	2.50 63.5	1.5 38.1	.839 21.31	4500	9050	13	191
PHSB 12 19.05	.7500 19.05	1.750 44.46	.875 22.23	.687 17.45	1.000 25.4	0.75 3/4 -16UNF	1.13 28.6	3.75 95.3	2.88 73	1.75 44.5	.978 28.84	6410	12700	13	286
PHSB 16 25.40	1.000 25.40	2.750 69.85	1.375 34.93	1.000 25.40	1.500 38.10	1.25 1 1/4 -12UNF	1.75 44.5	5.5 140	4.13 105	2.13 54	1.269 32.23	13300	19500	13	998

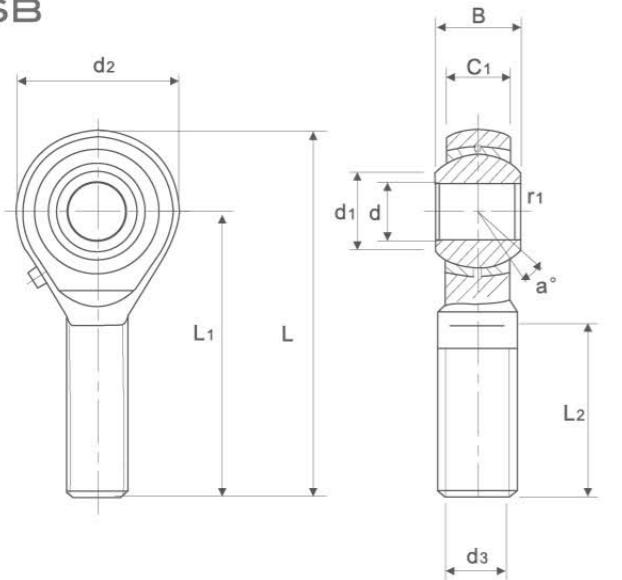
注:

- 若是左螺纹，轴承型号和螺纹标记需加“L”和“左”
例如：POSB6L M3/8×24g左
- For left-hand thread surfix "L" is added to bearings number and thread signeg POSB6L M3/8×24gL
- 外滑动面镶有青铜衬垫
-The surface of spherical plain with a bronze line
- 表端体表面镀锌，有润滑孔或油杯
-表端体表面镀锌，有润滑孔或油杯
- To plate zinc on the surace of rod body the housing with a lubrication or a grease nipple

内螺纹镶垫杆端关节轴承（英制POSB）

Inlaid Liner Rod Ends With Female Thread (Inch Dimension Posb)

POSB



型号 Part Number	尺寸mm (Dimensions)											a° ≈	重量 (g)
	d	d2	B	C1	d3	L	L1	L2	d1	Cd	Cs		
POSB 3 4.826	.1900 15.88	.6250 7.92	.312 6.35	.250 -32UNF	0.19 3/16	1.536 39.70	1.250 31.75	.750 19.05	.306 7.77	780 1030	2090 3040	13 13	14 23
POSB 4 6.35	.2500 19.05	.7500 9.53	.375 7.14	.281 -28UNF	0.25 1/4	1.937 49.20	1.562 -39.67	1.000 25.40	.355 9.02				
POSB 5 7.938	.3125 22.23	.8750 11.10	.437 8.74	.344 -24UNF	0.3125 5/16	2.312 58.72	1.875 47.63	1.250 31.75	.447 11.35	1530 3800		13 13	36 54
POSB 6 9.525	.3750 25.40	1.000 12.70	.500 10.31	.406 -24UNF	0.375 3/8	2.438 61.93	1.938 49.23	1.250 31.75	.517 13.13	2080 4980			
POSB 7 11.11	.4375 28.58	1.125 14.27	.562 11.10	.437 -20UNF	0.4375 7/16	2.688 68.28	2.125 53.98	1.375 34.93	.586 -14.88	2520 6020		13 13	77 127
POSB 8 12.70	.5000 33.32	1.312 15.88	.625 12.70	.500 -20UNF	.5 1/2	3.094 78.59	2.438 61.93	1.500 38.10	.698 17.73	3330 8370		13 13	127 186
POSB 10 15.88	.6250 38.10	1.500 19.05	.750 14.27	.562 -18UNF	0.625 5/8	3.375 85.73	2.625 66.68	1.625 41.28	.893 21.31	4500 13300	9050 19500	13 13	186 1129
POSB 12 19.05	.7500 44.46	1.750 22.23	.875 17.45	.687 -16UNF	0.75 3/4	3.750 95.25	2.875 73.03	1.750 44.45	.978 24.84	6410 12700		13 13	295 295
POSB 16 25.40	1.000 69.85	2.750 34.93	1.375 25.40	1.000 -12UNF	1.25 1 1/4	5.500 139.7	4.125 104.8	2.125 53.98	1.269 32.23				

注:

- 若是左螺纹，轴承型号和螺纹标记需加“L”和“左”
- 例如：POSB6L M3/8×24g左
- For left-hand thread surfix “L” is added to bearings number and thread signeg POSB6L M3/8×24gL
- 外滑动面镀有青铜衬垫
- The surface of spherical plain with a bronze line
- 表端体表面镀锌，有润滑油孔或油杯
- To plate zinc on the surace of rod body the housing with a lubrication or agrease nipple

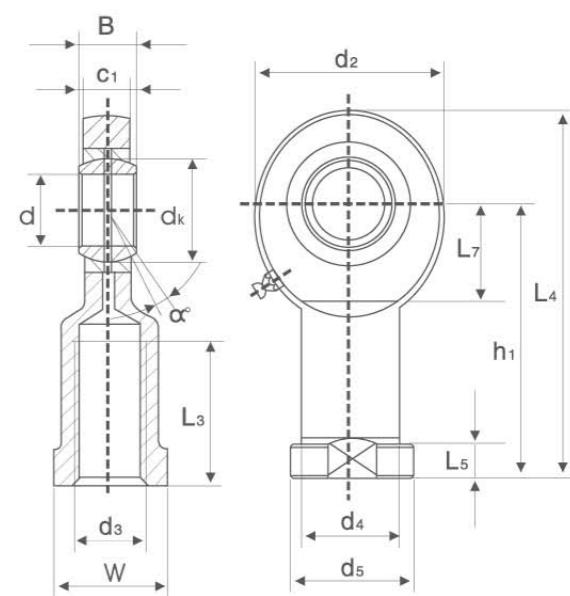
杆端关节轴承 Rod ends GIR...DO

GIR...DO



Maintenance required

- 杆端体带有左旋或右旋的内螺纹
Rod body with left or right-hand female thread
- 由杆端体和向心关节轴承GE..E (S) 或GE..ES 2RS组成
It is made up of a radial spherical plain bearing GE..E (S) or GE..ES 2RS and rod body
- 杆端体表面镀锌，SI..ES型杆端体有润滑油孔或油杯
Surface of rod body zinc plated, housing of SI..ES with a lubricating hole or grease nipple



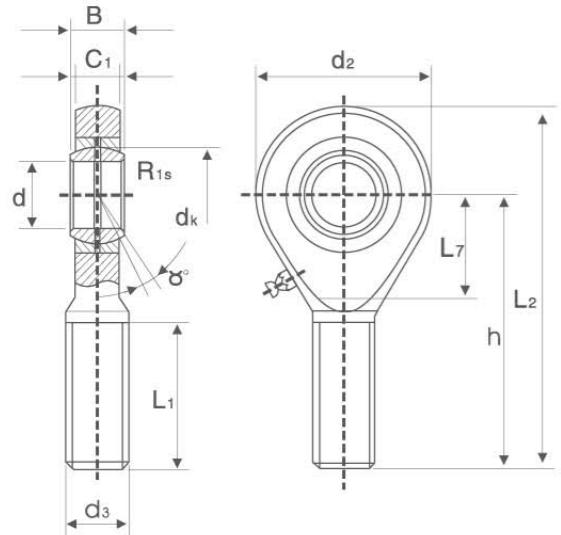
型号 Part Number	尺寸mm (Dimensions)													负荷 Load ratings		重量 g Weight	
	d	d3	B	C1	L ₃ _{min}	W	d ₂	h ₁	L ₄	L ₅	d ₄	d ₅	dk	α° ≈	动dyn.c	静stat.co	
GIR 6 DO*	6	M6×1.0	6	4.4	11	11	21	30	40.5	5	10	13	10	13	3.40	8.15	21
GIR 8 DO*	8	M8×1.25	8	6.0	15	14	24	36	48	5	12.5	16	13	15	5.50	12.9	39
GIR 10 DO*	10	M10×1.5	9	7.0	20	17	29	43	57.5	6.5	15	19	16	12	8.15	17.6	61
GIR 12 DO*	12	M12×1.75	10	8.0	23	19	34	50	67	6.5	17.5	22	18	11	10.8	24.5	96
GIR 15 DO	15	M14×2.0	12	10	30	22	40	61	81	8	21	26	22	8	17.0	36.0	180
GIR 17 DO	17	M16×2.0	14	11	34	27	46	67	90	10	24	30	25	10	21.2	45.0	220
GIR 20 DO	20	M20×1.5	16	13	40	32	53	77	103.5	10	27.5	35	29	9	30.0	60.0	350
GIR 25 DO	25	M24×2.0	20	17	48	36	64	94	126	12	33.5	42	35.5	7	48.0	83.0	640
GIR 30 DO	30	M30×2.0	22	19	56	41	73	110	146.5	15	40	50	40.7	6	62.0	110	930
GIR 35 DO	35	M36×3.0	25	21	60	50	82	125	166	15	47	58	47	6	80.0	146	1300
GIR 40 DO	40	M39×3.0	28	23	65	55	92	142	188	18	52	65	53	7	100	180	2000
GIR 45 DO	45	M42×3.0	32	27	65	60	102	145	196	20	58	70	60	7	127	240	2500
GIR 50 DO	50	M45×3.0	35	30	68	65	112	160	216	20	62	75	66	6	156	290	3500
GIR 60 DO	60	M52×3.0	44	38	70	75	135	175	242.5	20	70	88	80	6	245	450	5500
GIR 70 DO	70	M56×4.0	49	42	80	85	160	200	280	20	80	98	92	6	315	610	8600
GIR 80 DO	80	M64×4.0	55	47	85	100	180	230	320	25	95	110	105	6	400	750	12000

注:

- 若是左旋螺纹，轴承型号需加“L”，例如：SIL30ES。
- For left-hand thread,please add suffix "L",e.g.sil 30es.
- 轴承孔径d≥15,也可制造2RS结构，例如：SI25ES 2RS。
- For bearings d≥15 ,SI..ES 2RS also available,e.g.SI 25 ES 2RS.
- 带*的型号均不配油孔或油杯。
- Lubricating hole or grease nipple isn't available for the sizes marked **.

杆端关节轴承 Rod ends GAR...DO

GAR...DO



Maintenance required

- 杆端体带有左旋或右旋的内螺纹
Rod body with left or right-hand female thread
- 由杆端体和向心关节轴承 GE..E (S) 或 GE..ES 2RS 组成
It is made up of a radial spherical plain bearing GE..E (S) or GE..ES 2RS and rod body
- 杆端体表面镀锌，SI..ES 型杆端体有润滑油孔或油杯
Surface of rod body zinc plated, housing of SI..ES with a lubricating hole or grease nipple

型号 Part Number	尺寸mm (Dimensions)											负荷 Load ratings		重量 g Weight	
	d	d ₃	B	C ₁	L ₁ _{min}	d ₂	L ₇ _{min}	h	L ₂	d _k	R _{1s}	α ≈	动dyn.c	静stat.c ₀	
GAR 6 DO*	6	M6×1.0	6	4.4	18	21	11	36	46.5	10	0.3	13	3.40	8.15	17
GAR 8 DO*	8	M8×1.25	8	6	22	24	14	42	54	13	0.3	15	5.50	12.9	29
GAR 10 DO*	10	M10×1.5	9	7	26	29	15	48	62.5	16	0.3	12	8.15	17.6	51
GAR 12 DO*	12	M12×1.75	10	8	28	34	17	54	71	18	0.3	11	10.8	24.5	86
GAR 15 DO	15	M14×2.0	12	10	34	40	20	63	83	22	0.3	8	17.0	36.0	140
GAR 17 DO	17	M16×2.0	14	11	36	46	23	69	92	25	0.3	10	21.2	45.0	190
GAR 20 DO	20	M20×1.5	16	13	43	53	27	78	104.5	29	0.6	9	30.0	60.0	310
GAR 25 DO	25	M24×2.0	20	17	53	64	32	94	126	35.5	0.6	7	48.0	83.0	560
GAR 30 DO	30	M30×2.0	22	19	65	73	37	110	146.5	40.7	0.6	6	62.0	110	890
GAR 35 DO	35	M36×3.0	25	21	82	82	41	140	181	47	0.6	6	80.0	146	1400
GAR 40 DO	40	M39×3.0	28	23	86	92	46	150	196	53	0.6	7	100	180	1800
GAR 45 DO	45	M42×3.0	32	27	94	102	51	163	214	60	0.6	7	127	240	2600
GAR 50 DO	50	M45×3.0	35	30	107	112	56	185	241	66	0.6	6	156	290	3400
GAR 60 DO	60	M52×3.0	44	38	115	135	68	210	277.5	80	1.0	6	245	450	5900
GAR 70 DO	70	M56×4.0	49	42	125	160	80	235	315	92	1.0	6	315	610	8200
GAR 80 ODO	80	M64×4.0	55	47	140	180	90	270	360	105	1.0	6	400	750	12000

注:

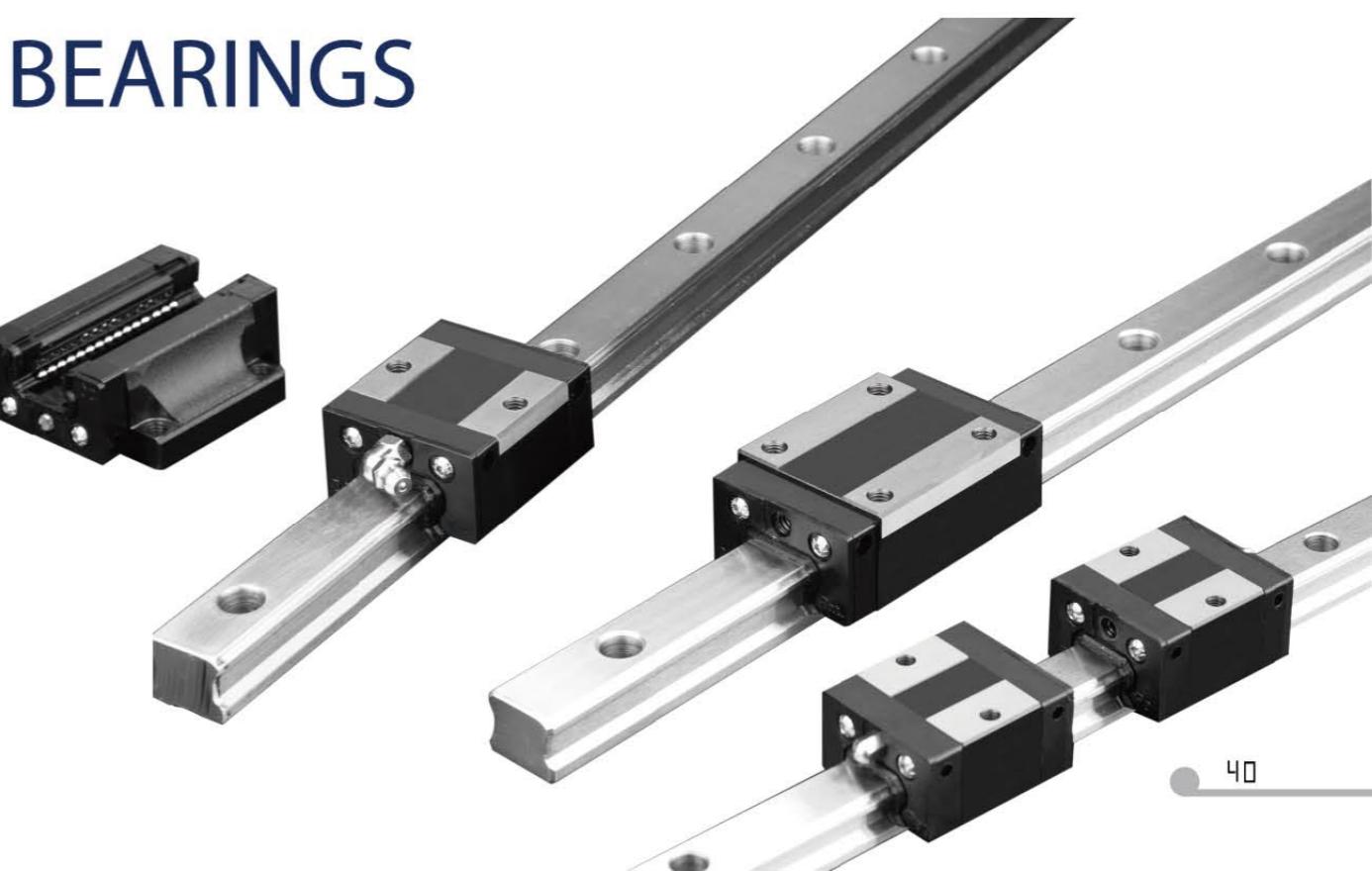
- 若是左旋螺纹，轴承型号需加“L”，例如：GAR 30 OO。
- For left-hand thread, please add suffix "L", e.g. GAR 30 OO.
- 轴承孔径d≥15,也可制造2RS结构，例如：GAR 25 OO 2RS。
- For bearings d≥15, SI..ES 2RS also available, e.g. GAR 25 OO 2RS.
- 带*的型号均不配油孔或油杯。
- Lubricating hole or grease nipple isn't available for the sizes marked “*”



LINEAR GUIDEWAY

线性滑轨

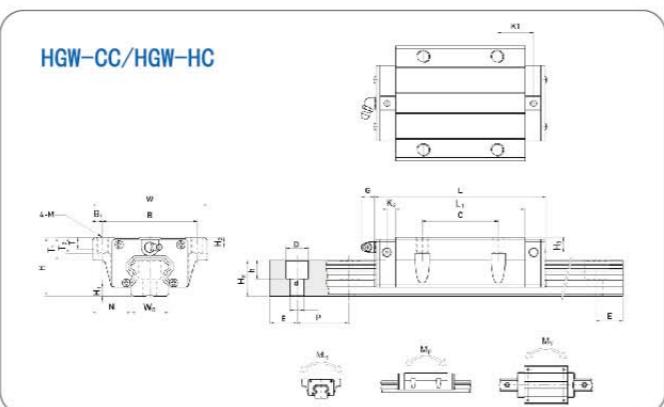
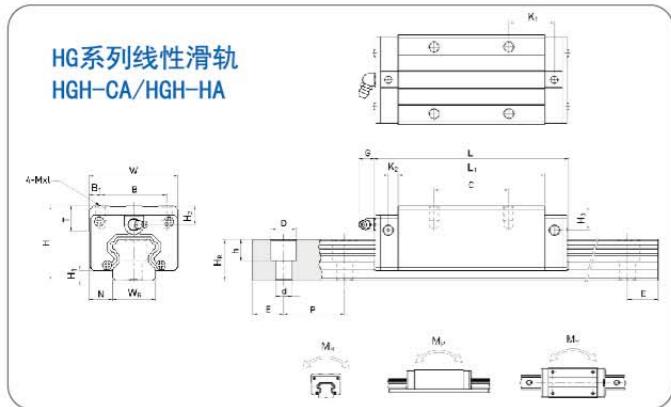
NSAR®
BEARINGS



HG系列线性滑轨 HGH-CA/HGH-HA

型号 Model No.	组件尺寸 Dimensions of Assembly (mm)				滑块尺寸 Dimensions of Block (mm)										滑轨尺寸 Dimensions of Rail (mm)							滑轨固定螺栓尺寸 Mounting Bolt for Rail	动负荷 Basic Dynamic Load Rating	静负荷 Basic Static Load Rating	容许静力矩 Static Rated Moment			重量 Weight			
					H	H1	N	W	B	B1	C	L1	L	K1	K2	G	MxL	T	H2	H3	WR	HR	D	h	d	P	E	(mm)	C(kN)	CO(kN)	kNm
HGH15CA	28	4.3	9.5	34	26	4	26	39.4	61.4	10	4.85	5.3	M4 x 5	6	7.95	7.7	15	15	7.5	5.3	4.5	60	20	M4 x 16	11.38	16.97	0.12	0.10	0.10	0.18	1.45
HGH20CA	30	4.6	12	44	32	6	36	50.5	77.5	12.25	6	12	M5 x 6	8	6	6	20	17.5	9.5	8.5	6	60	20	M5 x 16	17.75	27.76	0.27	0.20	0.20	0.30	2.21
HGH20HA							50	65.2	92.2	12.6															21.18	35.90	0.35	0.35	0.35	0.39	
HGH25CA	40	5.5	12.5	48	35	6.5	35	58	84	15.7	6	12	M6 x 8	8	10	9	23	22	11	9	7	60	20	M6 x 20	26.48	36.49	0.42	0.33	0.33	0.51	3.21
HGH25HA							50	78.6	104.6	18.5															32.75	49.44	0.56	0.57	0.57	0.69	
HGH30CA	45	6	16	60	40	10	40	70	97.4	20.25	6	12	M8 x 10	8.5	9.5	13.8	28	26	14	12	9	80	20	M8 x 25	38.74	52.19	0.66	0.53	0.53	0.88	4.47
HGH30HA							60	93	120.4	21.75															42.27	69.16	0.88	0.92	0.92	1.16	
HGH35CA	55	7.5	18	70	50	10	50	80	112.4	20.6	7	12	M8 x 12	10.2	16	19.6	34	29	14	12	9	80	20	M8 x 25	49.52	69.16	1.16	0.81	0.81	1.45	6.30
HGH35HA							72	105.8	138.2	22.5															60.21	91.63	1.54	1.40	1.40	1.92	
HGH45CA	70	9.5	20.5	86	60	13	60	97	139.4	23	10	12.9	M10 x 17	16	18.5	30.5	45	38	20	17	14	105	22.5	M12 x 35	77.57	102.71	1.98	1.55	1.55	2.73	10.41
HGH45HA							80	128.8	171.2	28.9															94.54	136.46	2.63	2.68	2.68	3.61	
HGH55CA	80	13	23.5	100	75	12.5	75	117.7	166.7	27.35	11	12.9	M12 x 18	17.5	22	29	53	44	23	20	16	120	30	M14 x 45	114.44	148.33	3.69	2.64	2.64	4.17	15.08
HGH55HA							95	155.8	204.8	36.4															139.35	196.20	4.88	4.57	4.57	5.49	
HGH65CA	90	15	31.5	126	76	25	70	144.2	200.2	43.1	14	12.9	M16 x 20	25	15	15	63	53	26	22	18	150	35	M16 x 50	163.63	215.33	6.65	4.27	4.27	7.00	21.18
HGH65HA							120	203.6	259.6	47.8															208.36	303.13	9.38	7.38	7.38	9.82	

Note: 1kgf=9.81N

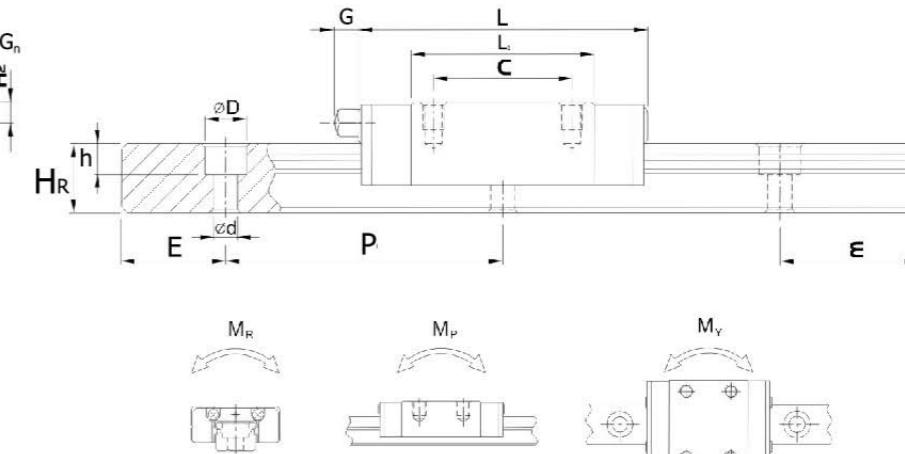
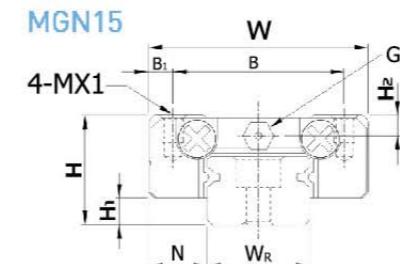
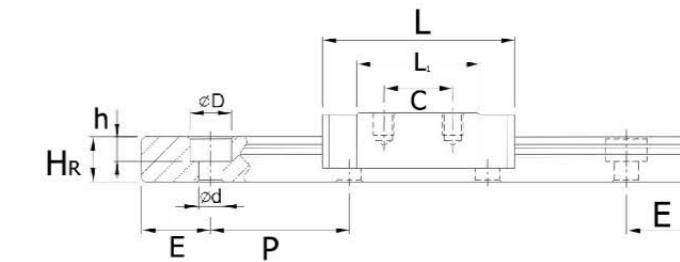
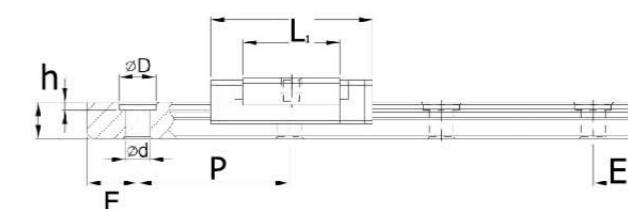
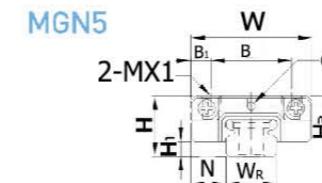


HGW-CC/HGW-HC

Note: 1kgf=9.81N

MGN/MGW系列线性滑轨

MGN-C/MGN-H

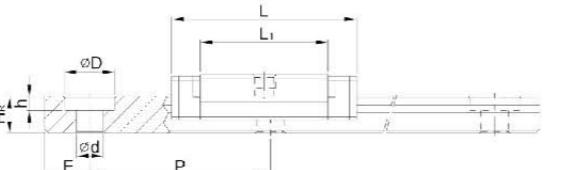
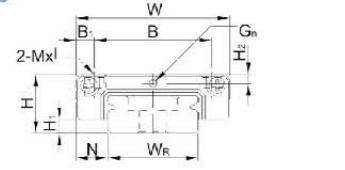


Note: 1kgf=9.81N

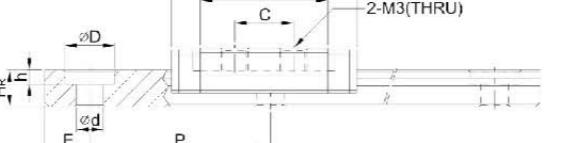
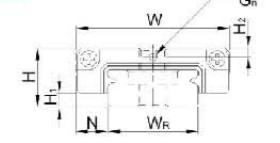


MGW-C/MGW-H系列线性滑轨

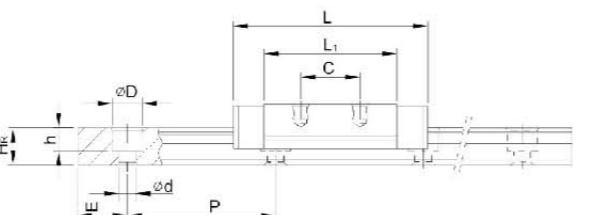
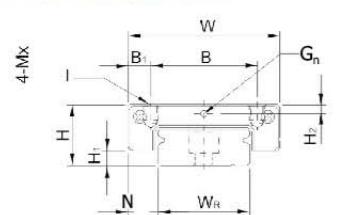
MGW5C



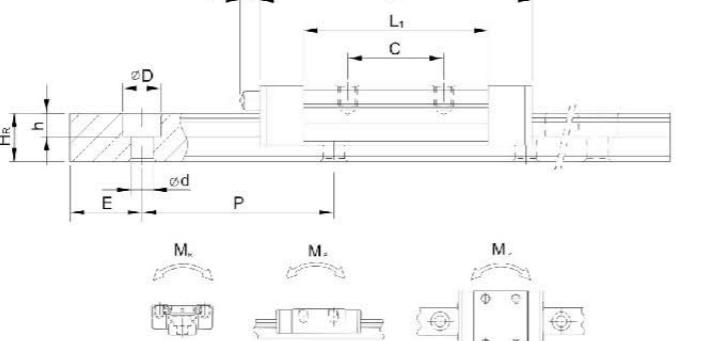
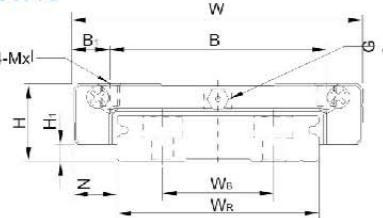
MGW5CL



MGW7, MGW9, MGW12

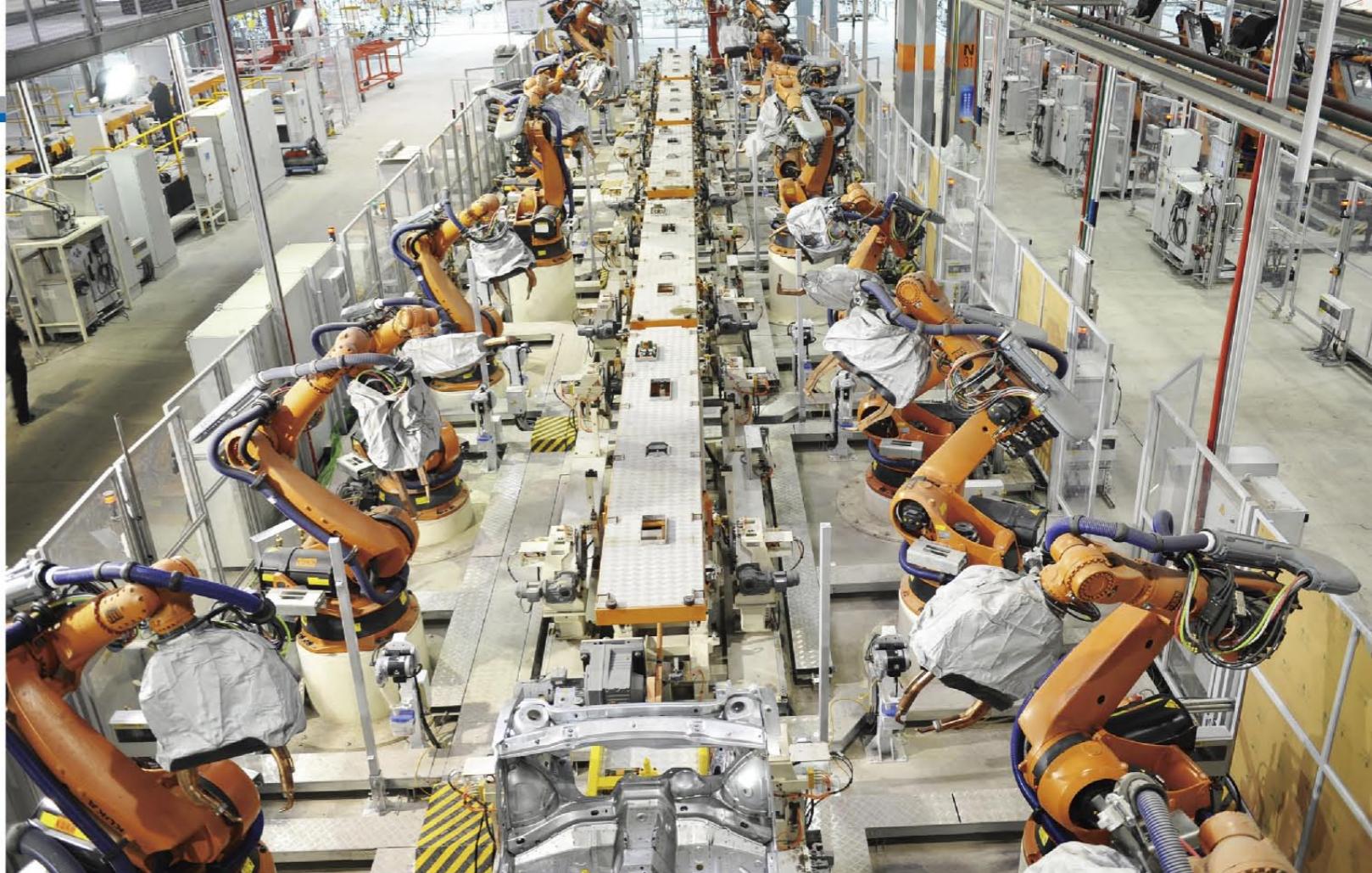


MGW15



型号 Model No.	组件尺寸 Dimensions of Assembly (mm)			滑块尺寸 Dimensions of Block (mm)								滑轨尺寸 Dimensions of Rail (mm)								滑轨固定 螺栓尺寸 Mounting Bolt for Rail		容许静力矩 Static Rated Moment		重量 Weight							
				H	H1	N	W	B	B1	C	L1	L	G	Gn	Mx1	H2	WR	Wa	HR	D	h	d	P	E	(mm)	C(kN)	C0(kN)	MR	MP	MY	滑块 Block kg
	MGW 5C	6.5	1.5	3.5	17	13	2	-	14.1	20.5	-	Φ0.8	M2.5X1.5	1	10	-	4	5.5	1.6	3	20	5	M2.5X7	0.68	1.18	5.5	2.7	2.7	0.016	0.34	
MGW 5CL						8.5	-	6.5					M3-THRU																		
MGW 7C	9	1.9	5.5	25	19	3	10	21	31.2	-	Φ1.2	M3X3	1.85	14	-	5.2	6	3.2	3.5	30	10	M3X6	1.37	2.06	15.70	7.14	7.14	0.020	0.51		
MGW 7H								19	30.8	41																					
MGW 9C	12	2.9	6	30	21	4.5	12	27.5	39.3	-	Φ1.2	M3X3	2.4	18	-	7	6	4.5	3.5	30	10	M3X8	2.75	4.12	40.12	18.96	18.96	0.040	0.91		
MGW 9H						23	3.5	24	38.5	50.7																					
MGW 12C	14	3.4	8	40	28	6	15	31.3	46.1	-	Φ1.2	M3X3.6	2.8	24	-	8.5	8	4.5	4.5	40	15	M4X8	3.92	5.59	70.34	27.80	27.80	0.071	1.49		
MGW 12H								28	45.6	60.4																					
MGW 15C	16	3.4	9	60	45	7.5	20	38	54.8	5.2	M3	M4X4.2	3.2	42	23	9.5	8	4.5	4.5	40	15	M4X10	6.77	9.22	199.34	56.66	56.66	0.143	2.86		
MGW 15H								35	57	73.8																					

Note: 1kgf=9.81N



NEEDLE ROLLER BEARINGS

滚针轴承

NSAR®
BEARINGS



滚针轴承 Needle Roller Bearings

NSAR滚针轴承类型:

NSAR Needle Roller Bearing Types:

1、封闭式冲压外圈滚针轴承

Sealing-Type Drawn Cup Needle Roller Bearings

2、具内圈滚针轴承

Needle Roller Bearings With Inner Ring

3、不具内圈滚针轴承/无内圈无保持架滚针轴承

Needle Roller Bearings Without Inner Ring/ Needle Roller Bearings Without Inner Ring or Cage

4、有保持架和无保持架装满滚针轴承

Full Complement Needle Roller Bearings With Cage/ Without Cage

5、NSAR还可供应各种类型的滚针轴承:

The Other Types of NSAR Needle Roller Bearings

1)、滚针保持器组件

Needle Roller Cage Assemblies

2)、无挡边滚针轴承

Needle Roller Bearings Without Ribs

3)、自调心

Spherical Needle Roller Bearings

4)、组合滚针/球轴承

Combined Needle/Ball Bearings

5)、组合滚针/推力球轴承

Combined Needle/Thrust Ball Bearings

6)、组合滚针/圆柱滚子推力轴承

Combined Needle/Cylindrical Roller Thrust Bearings

支承滚轮分类:

Supporting Roller Types

STO外圈无挡边, 有内圈支承滚轮

STO Supporting Roller, Outer Ring Without Ribs, With Inner Ring

RNA22...2RS双面密封, 无内圈支承滚轮

RNA22...2RS Supporting Rollers, Double-sealing, Without Inner Ring

NA22...2RS双面密封, 有内圈支承滚轮

NA22...2RS Supporting Roller, Double-sealing, With Inner Ring

NATR、NATR...PP平挡圈轴向引导支承滚轮

NATR、NATR...PP Flat Collar Axial Guidance Supporting Rollers

NATV、NATV...PP平挡圈轴向引导支承滚轮, 满针型

NATV、NATV...PP Flat Collar Axial Guidance Supporting Rollers, Complement Needle Type

NUTR滚动体引导支承滚轮, 满滚子型

NUTR Rolling-Element Guide Supporting Roller, Complement Roller Type

CRY英制平挡圈轴向引导支承滚轮

CRY Inch Series Flat Collar Axial Guidance Supporting Rollers

滚针轴承分类:

The Classification of Needle Roller Bearings

1.向心滚针和保持架组件 Radial Needle Roller and Cage Assemblies

2.NA, NKI型滚针轴承 NA, NKI Type Needle Roller Bearings

3.RNA, NK型无内圈滚针轴承 RNA, NK Type Needle Roller Bearings Without Inner Ring

4.HK型冲压外圈滚针轴承 HK Type Drawn Cup Needle Roller Bearings

5.BK型冲压外圈滚针轴承 BK Type Drawn Cup Needle Roller Bearings

英文型号 Type Letter Code:

公制系列:HK、BK、F、FH、FY、MF、MFH、MFY; TA..Z、TLA..Z、TAM、TLAM、YT、YTL。

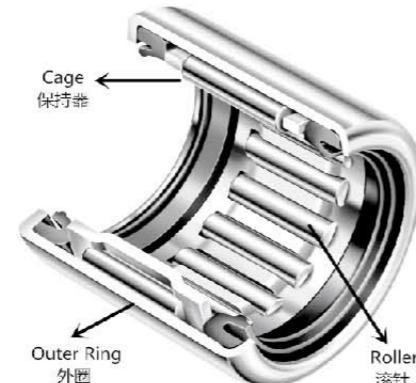
Metric Series:HK、BK、F、FH、FY、MF、MFH、MFY;

TA..Z、TLA..Z、TAM、TLAM、YT、YTL。

英制系列:SCE、BCE、SCH、BCH、SN、B、BH、M、MH、; BA..Z、

BHA..Z、BAM、BHAM、YB、YBH。例: HK XX YY型号 内切圆直径XX

高度YY



Inch Series:SCE、BCE、SCH、BCH、SN、B、BH、M、MH;
BA..Z、BHA..Z、BAM、BHAM、YB、YBH。Such As: Designation
HK XX YY Inscribed Circle Diameter XX Height YY

RS----为一个密封圈配公制系统

RS----Metric Series, Single Seal

2RS----为二个密封圈,配公制系统

2RS----Metric Series, Double Seals

P----为一个密封圈,配英制系统

P----Inch Series, Single Seals

PP----为二个密封圈,配英制系统

PP----Inch Series, Double Seals

ASI/OH--为油孔HK、BA、TA.

ASI/OH-- Oil Hole, HK, BA, TA

Z--穿孔型冲压外圈滚针轴承

Z--Perforated Type Drawn Cup Needle Roller Bearings

BK、TAM、TLAM--封口型冲压外圈滚针轴承

BK、TAM、TLAM--Sealing Type Drawn Cup Needle Roller Bearings

F--穿孔型冲压外圈满装滚针轴承

F--Perforated Type Drawn Cup Completion Needle Roller Bearings

FY、YT--穿孔型冲压外圈满装滚针轴承(油脂限位)

FY、YT--Perforated Type Drawn Cup Completion Needle Roller Bearings (Grease Limits)

FH、YTL--穿孔型冲压外圈满装滚针轴承(重系列)

FY、YTL--Perforated Type Drawn Cup Completion Needle Roller Bearings (Heavy Series)

MF--封口型冲压外圈满装滚针轴承

MF--Sealing Type Drawn Cup Completion Needle Roller Bearings

MFH--封口型冲压外圈满装滚针轴承

MFH--Sealing Type Drawn Cup Completion Needle Roller Bearings

SCE--穿孔型冲压外圈滚针轴承

SCE--Perforated Type Drawn Cup Needle Roller Bearings

BCE--封口型冲压外圈滚针轴承

BCE--Sealing Type Drawn Cup Needle Roller Bearings

SCH--穿孔型冲压外圈滚针轴承

SCH--Perforated Type Drawn Cup Needle Roller Bearings

BCH--封口型冲压外圈滚针轴承

BCH--Sealing Type Drawn Cup Needle Roller Bearings

SN--穿孔型冲压外圈满装滚针轴承

SN--Perforated Type Drawn Cup Completion Needle Roller Bearings

B--穿孔型冲压外圈满装滚针轴承

B--Perforated Type Drawn Cup Completion Needle Roller Bearings

BH--穿孔型冲压外圈满装滚针轴承(重系列)

BH--Perforated Type Drawn Cup Completion Needle Roller Bearings (Heavy Series)

M--封口型冲压外圈满装滚针轴承

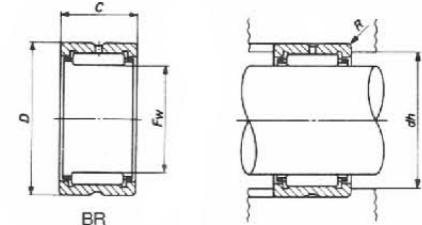
M--Sealing Type Drawn Cup Completion Needle Roller Bearings

MH--封口型冲压外圈满装滚针轴承(重系列)

MH--Sealing Type Drawn Cup Completion Needle Roller Bearings (Heavy Series)

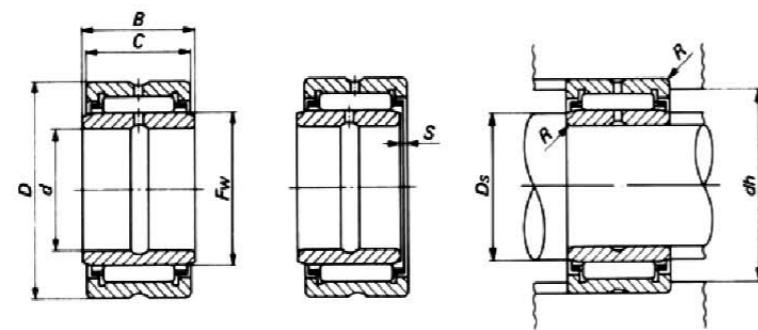
无内圈滚针轴承 (英制) BR

Needle Roller Bearings Without Inner Ring (Inch Series) BR



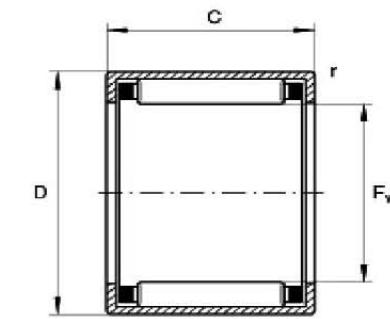
轴径 Shaft Diameter mm	轴承型号 Bearing Designation	外形尺寸 Boundary Dimensions			标准装配尺寸 Standard Mounting Dimensions	额定负荷 Basic Load Rating		极限转速 Limiting Speed rpm
		Fw	D	C		dh	R(2)	
15.875	BR101812	15.875	28.575	19.05	24.5	0.6	1930	2010
19.05	BR122012	19.05	31.75	19.05	26.5	1	2220	2490
19.05	BR122016	19.05	31.75	25.4	26.5	1	2810	3380
22.225	BR142212	22.225	34.925	19.05	29.7	1	2340	2770
22.225	BR142216	22.225	34.925	25.4	29.7	1	2970	3760
25.4	BR162412	25.4	38.1	19.05	32.9	1	2580	3250
25.4	BR162416	25.4	38.1	25.4	32.9	1	3280	4420
28.575	BR182616	28.575	41.275	25.4	36	1	3560	5090
28.575	BR182620	28.575	41.275	31.75	36	1	4410	6690
31.75	BR202816	31.75	44.45	25.4	39.2	1	3670	5450
31.75	BR202820	31.75	44.45	31.75	39.2	1	4550	7180
34.925	BR223016	34.925	47.625	25.4	42.4	1	3930	6120
34.925	BR223020	34.925	47.625	31.75	42.4	1	4870	8060
38.1	BR243316	38.1	52.388	25.4	45.1	1.5	4460	6820
38.1	BR243320	38.1	52.388	31.75	45.1	1.5	5530	8980
41.275	BR263516	41.275	55.562	25.4	48.3	1.5	4570	7230
41.275	BR263520	41.275	55.562	31.75	48.3	1.5	5670	9530
44.45	BR283716	44.45	58.738	25.4	51.5	1.5	4850	7980
44.45	BR283720	44.45	58.738	31.75	51.5	1.5	6010	10500
44.45	BR283820	44.45	60.325	31.75	53.1	1.5	6010	10500
47.625	BR303920	47.625	61.912	31.75	54.7	1.5	6130	11000
50.8	BR324116	50.8	65.088	25.4	57.8	1.5	5200	9110
50.8	BR324120	50.8	65.088	31.75	57.8	1.5	6440	12000
57.15	BR364824	57.15</td						

无内圈滚针轴承（英制） BRI

Needle Roller Bearings Without
Inner Ring (Inch Series) BRI

冲压外圈滚针轴承HK

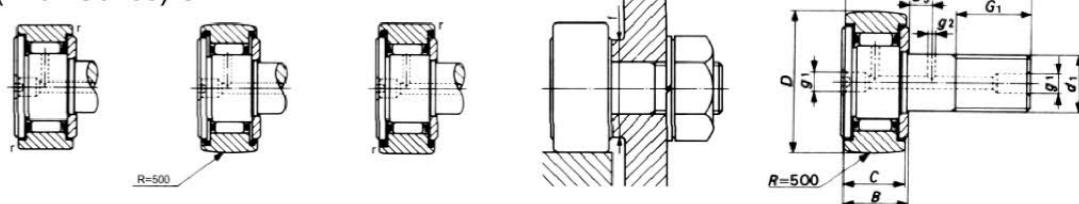
Drawn Cup Needle Roller Bearings HK



轴径 Shaft Diameter mm	轴承型号 Bearing Designation	外形尺寸 Boundary Dimensions			标准装配尺寸 Standard Mounting Dimensions		额定负荷 Basic Load Rating		极限转速 Limiting Speed rpm
		Fw	D	C	dh	R(2)	动	静	
							Dynamic Cr	Static Cor	
inch/mm									
9.525	BRI 61812	15.875	28.575	19.05	24.5	0.6	1930	2010	25000
12.7	BRI 82012	19.05	31.75	19.05	26.5	1	2220	2490	20000
12.7	BRI 82016	19.05	31.75	25.4	26.5	1	2810	3380	20000
15.875	BRI 102212	22.225	34.925	19.05	29.7	1	2340	2770	18000
15.875	BRI 102216	22.225	34.925	25.4	29.7	1	2970	3760	18000
19.05	BRI 122412	25.4	38.1	19.05	32.9	1	2580	3250	16000
19.05	BRI 122416	25.4	38.1	25.4	32.9	1	3280	4420	16000
22.225	BRI 142616	28.575	41.275	25.4	36	1	3560	5090	14000
22.225	BRI 142620	28.575	41.275	31.75	36	1	4410	6690	14000
25.4	BRI 142620	31.75	44.45	25.4	39.2	1	3670	5450	13000
25.4	BRI 162816	31.75	44.45	31.75	39.2	1	4550	7180	13000
28.575	BRI 162820	34.925	47.625	25.4	42.4	1	3930	6120	11000
28.575	BRI 183020	34.925	47.625	31.75	42.4	1	4870	8060	11000
31.75	BRI 203316	38.1	52.388	25.4	45.1	1.5	4460	6820	11000
31.75	BRI 203320	38.1	52.388	31.75	45.1	1.5	5530	8980	11000
34.925	BRI 223516	41.275	55.562	25.4	48.3	1.5	4570	7230	9500
34.925	BRI 223520	41.275	55.562	31.75	48.3	1.5	5670	9530	9500
38.1	BRI 243716	44.45	58.738	25.4	51.5	15	4850	7980	9000
38.1	BRI 243720	44.45	58.738	31.75	51.5	1.5	6010	10500	9000
38.1	BRI 243820	44.45	60.325	31.75	53.1	1.5	6010	10500	9000
38.1	BRI 243920	47.625	31.912	31.75	54.7	1.5	6130	11000	8500
50.8	BRI 264116	50.8	65.088	25.4	57.8	1.5	5200	9110	8000
50.8	BRI 264120	50.8	65.088	31.75	57.8	1.5	6440	12000	8000
57.15	BRI 365624	69.85	88.9	38.1	80.7	2	10100	19300	5500
57.15	BRI 365628	69.85	88.9	44.45	80.7	2	11700	23300	5500
63.5	BRI 406024	76.2	95.25	38.1	87	2	10700	21600	5500
63.5	BRI 406028	76.2	95.25	44.45	87	2	12400	26100	5500
69.85	BRI 446828	82.55	107.95	44.45	99.7	2	14400	26400	5000
69.85	BRI 446832	82.55	107.95	50.8	99.7	2	15700	29500	5000
76.2	BRI 487232	88.9	114.3	50.8	106.1	2	16500	32100	4500
82.55	BRI 527632	95.25	120.65	50.8	111.4	2.5	17200	34900	4000
88.9	BRI 568032	101.6	127	50.8	111.4	2.5	18000	37500	4000

轴径 Shaft Diameter mm	轴承型号 Bearing Designation		重量 Weight g	外形尺寸 Boundary Dimensions			额定负荷 Basic Load Rating		极限转速 L.S. 油润滑 Oil rpm		
	现型号 Current Code	原型号 Original Code		Fw	D	C	动 Dynamic Cr	静 Static Cor N			
							Dynamic Cr				
mm											
3	HK0306TN			3	6.5	6	1320	950	6000		
4	HK0408TN	37941/4	1.6	4	8	8	1540	1070	40000		
5	HK0509TN			5	9	9	2200	1790	36000		
5	HK0509	47941/5	2	5	9	9	2200	1790	36000		
6	HK0607	27941/6	1.8	6	10	7	1600	1400	30000		
6	HK0608	37941/6	2.1	6	10	8	1830	1550	32000		
6	HK0609	47941/6	2.2	6	10	9	2650	2400	30000		
6	HK0611			2.3	6	10	11	1700	1500	29000	
6	HK06X12X8	Jun-41	2.5	6	12	8	2230	2010	33000		
7	HK0708			7	11	8	2800	2150	27000		
7	HK0709	47941/9	2.3	7	11	9	2800	2150	27000		
7	HK07X12X08			2.2	7	12	8	3300	3220	37000	
7	HK07X12X09			2.4	7	12	9	3400	3150	37000	
8	HK0808	37941/8	2.7	8	12	8	2550	2400	21000		
8	HK0810	57941/8	3	8	12	10	3700	3450	21000		
8	HK0812	67941/8		8	12	12					
8	HK08X14X10	27942/8	5.35	8	14	10	3800	3950	25000		
8	HK08X14X12	37942/8	6.6	8	14	12	4100	4320	25000		
9	HK0908	37941/9	3	9	13	8	3650	4050	25000		
9	HK0910	57941/9	4	9	13	10	4050	4250	25000		
9	HK0911			4.1	9	13	11	4300	4700	25000	
9	HK0912	67941/9	4.6	9	13	12	5000	6000	25000		
9	HK09X15X10	27942/9	5.6	9	15	10	5300	6300	25000		
10	HK10X13X08			3.5	10	13	8	4100	4800	20000	
10	HK1010	57941/10	4.1	10	14	10	3900	480			

轴径 Shaft Diameter mm	轴承型号 Bearing Designation		重量 Weight g	外形尺寸 Boundary Dimensions			额定负荷 Basic Load Rating		极限转速 Speed rpm	
	现型号 Current Code	原型号 Original Code		Fw	D	C	动 Dynamic Cr	静 Static Cor		
							N	油润滑 Oil		
12	HK12X17X12	Dec-41	7.5	12	17	12	5100	7000	15000	
12	HK12X17X15	Dec-42	9.5	12	17	15	5100	7000	15000	
12	HK12X17X18	Dec-43	11	12	17	18	5100	7000	15000	
12	HK12X18X12	37942/12	9.1	12	18	12	5500	6300	17000	
12	HK12X18X14	67942/12	10.6	12	18	14	6500	6300	15000	
12	HK12X19X12		10	12	19	12	6800	7400	15000	
13	HK1311	HKI311	8.5	13	19	11	6300	6300	14000	
13	HK1312	HKI312	8.9	13	19	12	6200	7100	17000	
13.5	HK13.5X19X12		13.5	19	12	6200	7100	16000		
13.5	HK13.5X20X12	7941/13.5	10.8	13.5	20	12	6250	7590	16000	
14	HK1410	27941/14	8.3	14	20	10	6700	7000	16000	
14	HK1412	37941/14	10.5	14	20	12	6800	7500	16000	
14	HK1416	57941/14	13.9	14	20	16	7300	9000	14000	
14	HK1418		14	20	18	7300	9000	14000		
15	HK15X20X12	7941/15	8.4	15	20	12	5800	6000	14000	
15	HK15X20X16	7942/15	11.4	15	20	16	6000	6200	14000	
15	HK15X20X20	7943/15	13.8	15	20	20	6100	6400	14000	
15	HK1512	37941/15	11.1	15	21	12	7000	8400	14000	
15	HK1514	47941/15	12.7	15	21	14	8500	10400	13000	
15	HK1515		14.2	15	21	15	9100	11400	13000	
15	HK1516	57941/15	15	15	21	16	9800	11400	14000	
15	HK1522	SZ-439	20.4	15	21	22	10400	16500	14000	
15	HK15X22X12	7948/15	12.5	15	22	12	14300	18400	13000	
15	HK15X22X12.5	7948/15K	13.5	15	22	12.5	14300	18400	13000	
16	HK16X21X06		5.5	16	21	6	4200	5300	12000	
16	HK16X21X09		7.5	16	21	9	4400	5600	12000	
16	HK1612	37941/16	11.7	16	22	12	7100	9200	14000	
16	HK1614	47941/16	14.4	16	22	14	8800	9900	12000	
16	HK1616	57941/16	15.8	16	22	16	10100	14300	14000	
16	HK1617	SZ-435	18	16	22	17	12900	17200	12000	
16	HK1622	87941/16	21.7	16	22	22	11100	17400	14000	
17	HK17X21.5X15	17BTM15	10	17	21.5	15	6300	8600	11000	
17	HK1712	37941/17	12.2	17	23	12	6900	9300	13000	
17	HK1714	7941/17	14	17	23	14	6800	10200	10000	
17	HK1716	57941/17	15.9	17	23	16	8500	12500	10000	
17	HK1718	7942/17	19	17	23	18	9500	10600	10000	
17	HK1720		17	23	20		10000	11800	10000	
17	HK1722	7943/17	17	17	23	22				
17	HK17X24X15		17	17	24	15	11200	12800	10000	
17	HK17X25X14	37942/17K	17.7	17	25	14	13100	14700	10000	
17	HK17X25X15.5		20	17	25	15.5	9320	10400	10000	
17	HK17X25X18	57942/17K	23.5	17	25	18	9500	10600	11000	
18	HK1812	37941/18	13.1	18	24	12	7100	9900	12000	
18	HK1816	57941/18	17.5	18	24	16	10600	15300	12000	
19	HK19X27X16	TA1916	23	19	27	16	8100	9500	10500	
20	HK2010	27941/20	11.8	20	26	10	5900	7200	10000	
20	HK2011		12	20	26	11	7500	9200	9000	

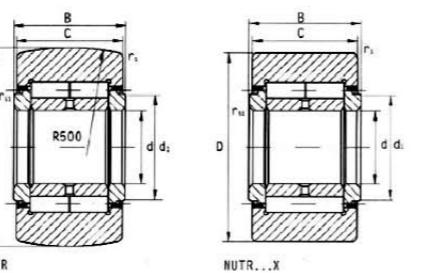
曲线滚轮轴承 (英制) CR
Curve Roller Bearings (Inch Series) CR


轴径 Shaft Diameter mm	轴承型号 Bearing Destination	外型尺寸 Boundary Dimensions(mm)									装配尺寸 Mounting Dimensions	最大拧紧 Maximum Tightening	基本额定负荷 Basic Load Rating	极限转速 Limiting Speed rpm	
		d1	D	C	B	B1	g1	g2	G1	B3					
4.826	CR 8	4.826	12.700	8.731	9.525	22.225	3.175	--	6.350	--	0.397	8.334	0.20	260	220
4.826	CR 8-1	4.826	12.700	9.525	10.319	26.194	3.175	--	6.35	--	0.397	8.334	0.20	260	220
6.350	CR 10	6.35	15.875	10.319	11.112	26.988	3.175	--	7.938	--	0.397	11.509	0.30	370	370
6.350	CR 10-1	6.35	15.875	11.112	11.906	30.956	3.175	--	7.938	--	0.397	11.509	0.30	370	21000
9.525	CR 12	9.525	19.05	12.700	13.494	35.719	4.762	2.381	9.525	6.350	0.794	13.494	1.80	450	520
9.525	CR 14	9.525	22.225	12.700	13.494	35.719	4.762	2.381	9.525	6.350	0.794	15.081	1.80	490	590
11.112	CR 16	11.112	25.4	15.875	16.669	42.063	4.762	3.175	12.700	6.350	1.191	17.859	2.00	900	1100
11.112	CR 18	11.112	28.575	15.875	16.669	42.063	4.762	3.175	12.700	6.350	1.588	19.050	2.00	940	11800
12.700	CR 20	12.7	31.75	19.050	19.844	51.594	4.762	3.175	15.875	7.938	1.588	21.828	2.90	1450	1630



支承滚轮轴承，有轴向引导NUTR

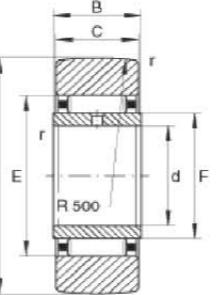
Yoke Type Track Rollers, With Axial Guiding NUTR



外径 Shaft Diameter mm	轴承型号 Bearing Designation	外形尺寸 Boundary Dimensions						基本额定负荷 Basic Load Rating					极限转速 Limiting Speed rpm		
		d	D	B	C	d1	rs	ris	Dynamic Cr	静 Static Cor	作为支承滚轮 As yoke type track rollers	Fr perm	For perm		
		mm	mm	mm	mm	mm	mm	mm	N	min	min	动 动 Ow	静 静 Cow		
35	NUTR 15	15	35	19	18	20	0.6	0.3	23000	27000	16000	18300	8300	16400	6500
40	NUTR 17	17	40	21	20	22	1	0.3	24800	31000	18500	22800	13200	22800	5500
42	NUTR 15 42	15	42	19	18	20	0.6	0.3	23000	27000	19400	23800	23900	23900	6500
47	NUTR 17 47	17	47	21	20	22	1	0.3	24800	31000	21300	28000	28000	28000	5500
47	NUTR 20	20	47	25	24	27	1	0.3	39000	50000	28000	35000	16500	33000	4200
52	NUTR 20 52	20	52	25	24	27	1	0.3	39000	50000	31500	41000	38500	41000	4200
52	NUTR 25	25	52	25	24	31	1	0.3	43500	60000	29000	37500	17300	34500	3400
62	NUTR 25 62	25	62	25	24	31	1	0.3	43500	60000	35500	50000	50000	50000	3400
62	NUTR 30	30	62	29	28	38	1	0.3	59000	79000	40000	51000	23600	47000	2600
72	NUTR 30 72	30	72	29	28	38	1	0.3	59000	79000	48000	65000	65000	65000	2600
72	NUTR 35	35	72	29	28	44	1.1	0.6	65000	93000	45000	61000	32000	61000	2100
80	NUTR 35 80	35	80	29	28	44	1.1	0.6	65000	93000	51000	72000	72000	72000	2100
80	NUTR 40	40	80	32	30	51	1.1	0.6	90000	134000	56000	76000	30500	60000	1600
85	NUTR 45	45	85	32	30	55	1.1	0.6	95000	147000	56000	79000	31500	61000	1400
90	NUTR 40 90	40	90	32	30	51	1.1	0.6	90000	134000	66000	96000	84000	96000	1600
90	NUTR 50	50	90	32	30	60	1.1	0.6	10000	161000	57000	81000	32000	63000	1300
100	NUTR 45 100	45	100	32	30	55	1.1	0.6	95000	147000	72000	10800	106000	108000	1400
110	NUTR 50 110	50	110	32	30	60	1.1	0.6	10000	161000	76000	121000	121000	121000	1300

支承滚轮 STO

Yoke Type Track Rollers STO



外径 Outside Diameter mm	轴承型号 Bearings Designation	重量 Weight g	外形尺寸 Boundary Dimensions						额定负荷 Basic Load Rating			极限转速 Limiting Speed rpm	
			d	D	c	B	FW	E	r	动 Dynamic Cr	静 Static Cor		
			mm	mm	mm	mm	mm	mm	mm	KN	min		
19	STO6TN	17	6	19	9.8	10	10	13	0.3	3.75	4.5	10000	
24	STO8TN	26	8	24	9.8	10	12	15	0.3	4.2	5.5	8000	
30	STO10	49	10	30	11.8	12	14	20	0.3	8.4	9.2	5500	
32	STO12	57	12	32	11.8	12	16	22	0.3	8.9	10.1	4500	
35	STO15	63	15	35	11.8	12	20	26	0.3	9.1	10.7	3300	
40	STO17	107	17	40	15.8	16	22	29	0.3	14.3	17.7	2800	
47	STO20	152	20	47	15.8	16	25	32	0.3	16.2	21.5	2400	
52	STO25	177	25	52	15.8	16	30	37	0.3	16.5	22.9	1800	
62	STO30	308	30	62	19.8	20	38	46	0.6	23.3	35	1300	
72	STO35	441	35	72	19.8	20	42	50	0.6	25.5	40	1100	
80	STO40	530	40	80	19.8	20	50	58	1	35	59.3	850	
85	STO45	576	45	85	19.8	20	55	63	1	25.5	43	750	
90	STO50	617	50	90	19.8	20	60	68	1	43.6	83.4	650	



WHEEL HUB BEARINGS
NSAR® BEARINGS

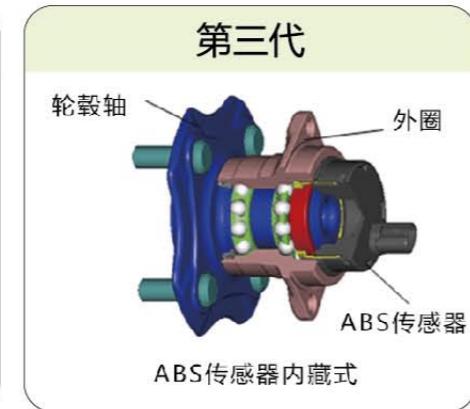
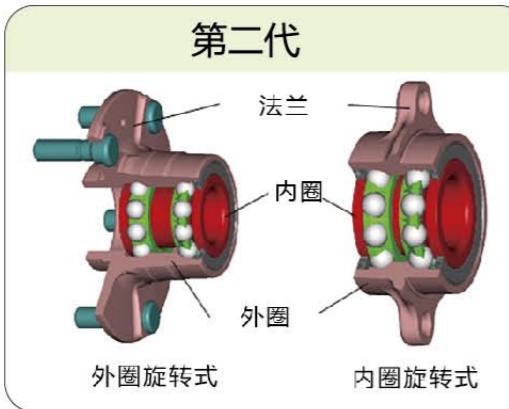
轮毂轴承



轮毂轴承 Wheel Hub Bearings

第一代是由双列角接触轴承组成，也就是DAC轴承。采用双列内圈结构，填球角度较大，能承受较大的径向与轴向负荷。内部间隙由制造时预留，无需调整。轴承内部已经注加优质润滑油脂，使安装、使用更加方便。

The first generation is composed of double row angular contact bearings, namely DAC bearing. To adopt the structure of double row inner rings, the angle which fills the ball is bigger than others, the auto wheel hub bearings can bear heavier axial and radial load. It is no need to adjust the inner clearance because it is already preserved in making. It was filled with lubricating grease in high quality in the inner bearing, which could make the assemblage and usage easily.



第二代在外滚道上有一个用于将轴承固定的法兰，可简单的将轴承套到轮轴上用螺母固定。使得汽车的维修变的容易。

The second generation bearing has a fixed flange which is used on the bearing outer ring raceway. It can be simple to make bearing sleeve on the shaft with a nut to make car maintenance becomes easy.

第三代轮毂轴承单元是采用了轴承单元和防抱刹系统ABS相配合。轮毂单元设计成有内法兰和外法兰，内法兰用螺栓固定在驱动轴上，外法兰将整个轴承安装在一起。

The third generation wheel hub bearing unit is adopted the bearing unit and matches the ABS brake system. It is designed to have the inner flange and the outer flange, the inner flange fixed on the driven shaft bolts, the outer flange installs the whole bearing together.

注意事项：

1、为了最大限度的确保安全和可靠性，建议您不管车龄多长都要经常检查轮毂轴承——注意轴承是否有磨损的早期预警信号：包括任何转动时的摩擦噪音或悬挂组合轮在转弯时不正常的减速。

对后轮驱动的车辆建议在车辆行驶到38000公里时应对前轮毂轴承进行润滑。当更换刹车系统时，检查轴承并更换油封。

2、因为前轮毂导致两侧轴承失效的工作条件相似，所以即使只坏了一个轴承，也建议成对替换。

3、轮毂轴承比较敏感，在任何情况下都需要采用正确的方法和合适的工具。在储运和安装的过程中，轴承的部件不能损坏。一些轴承需要较大的压力压入，所以需要专用工具。一定要参照汽车制造说明书。

4、安装轴承时应该在干净整洁的环境中，细小的微粒进入轴承也会缩短轴承的使用寿命。不允许用榔头敲击轴承，注意轴承不要掉在地上（或者是类似的处理不当）。

5、许多的轴承是密封的，不要企图拆开轮毂轴承或调整轮毂单元的密封圈，否则会使密封圈受损导致水或灰尘的进入，这类轴承在整个寿命期是不需要加润滑油的。如果油脂过多，当轴承转动时，多余的油脂就会渗出。一般经验：在安装时，油脂的总量要占轴承的间隙的50%。

Notes:

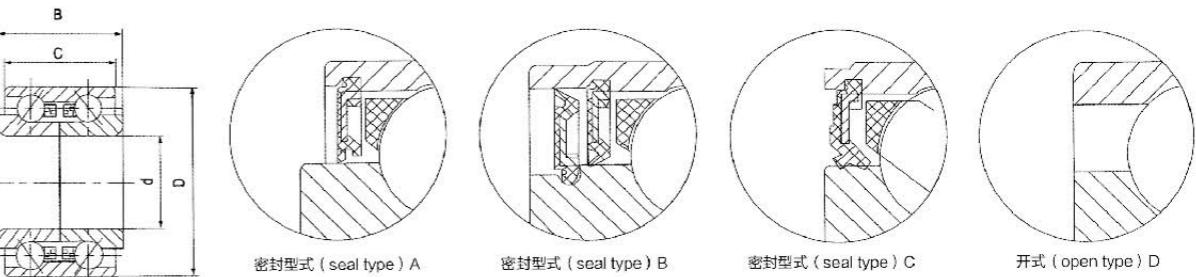
1.In order to ensure maximum security and reliability, it is recommended that no matter how long the vehicles age you should often check the wheel hub bearing--pay attention to whether the bearing has worn early warning signal, including any rotating friction noise or suspension combination of abnormal wheel in turn. For the rear wheel drive vehicles, suggestions to lubricate the front wheel hub bearing when you drive vehicles to 38000 kilometers.

2.Because the front wheel working conditions are similar, so even if only one bearing is broken, we also recommends replacement in pairs.

3.Wheel hub bearing is more sensitive, under any circumstances you need to use the right methods and with the right tools. In the process of storage and transportation and installation, bearing components cannot be damaged. Some larger bearing need more pressure into, so need a special tool. Be sure to follow car manufacturing instruction.

4.When installing the bearing, the environment should be clean and neat, tiny particles into the bearing will shorten the bearing life of bearing. Not allowed to use hammer percussion bearing, pay attention to the bearing don't fall on the ground (or similar misconduct).

5.Many of the bearing is sealed, don't attempt to disassemble the wheel hub bearing or adjust the wheel hub unit seal, otherwise it will make the seal ring damage or dust or water into, this type of bearing don't need to add grease in the whole life period. If there is excessive grease, when bearing rotation, excess oil will seep. Experience in common: during installation, the amount of grease is to account for 50% of the bearing clearance.



型号 Bearing No.	其他品牌型号 Other Brand Model	外形尺寸 Dimensions(mm)				净重 Weight(kg)	适用车型 Use In Automotive
		d	D	B	C		
NSAR	日本光洋KOYO	德国FAG					
DAC205000206		156704 320104	20	50	20.6	20.6	0.17
DAC255200206			25	52	20.6	20.6	0.19
DAC25520037		546467/576467	25	52	37	37	0.31
DAC25520040			25	52	40	40	0.35
DAC25520042			25	52	42	42	0.36
DAC25520043			25	52	43	43	0.36
DAC25550043			25	55	43	43	0.41
DAC255600206/29			25	56	20.6	29	0.28
DAC25560032		445979	25	56	32	32	0.34
DAC25600029/206			25	60	29	20.6	0.33
DAC25720043			25	72	43	43	0.88
DAC28580042	DAC2858W	576447	28	58	42	42	0.47
DAC28610042	DAC286142AWCS40		28	61	42	42	0.56
DAC29530037		801023AB	29	53	37	37	0.35
DAC30580042			30	58	42	42	0.40
DAC30600037	DAC3060372RS	545312A 529891AB 522372	30	60	37	37	0.42
DAC30600337	DAC3060W	529891AB 545312 581736	30	60.03	37	37	0.42
DAC30620038			30	62	38	38	0.52
DAC30630042			30	63	42	42	0.57
DAC30640042	DAC3064W2RKBCS8		30	64	42	42	0.49
DAC30680045			30	68	45	45	0.73
DAC32720045			32	72	45	45	0.60
DAC34620037	DAC34620037	531910 561447	34	62	37	37	0.41
DAC34660037		559529 580400CA 805464	34	66	37	37	0.50
DAC34670037			34	67	37	37	0.44
DAC35620040			35	62	40	40	0.45
DAC35640037	DAC3564A-1		35	64	37	37	0.41
DAC35650035	DAC3565WCS30	546238A	35	65	35	35	0.40
DAC35660032	DAC3566		35	66	32	32	0.42
DAC35660033			35	66	33	33	0.43
DAC35660037	DAC35660037	544307C(D) 581010A	35	66	37	37	0.48
DAC35670042			35	67	42	42	0.45
DAC35680037	DAC3568A2RS	567918B	35	68	37	37	0.52
DAC35720027			35	72	27	27	0.43
DAC35720033	DAC357233B	548083	35	72	33	33	0.58
DAC35720233/31	DAC357233B-1W	562686	35	72.02	33	31	0.54
DAC35720433	DAC357545CW2R		35	72.04	33	33	0.58
DAC35720034	DAC357234A	540763 548376A	35	72	34	34	0.58



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NSAR	日本光洋KOYO	德国FAG	d	D	B	C		
DAC36640042			36	64	42	42	0.46	
DAC36680033	DAC3668AWCS36	805172 BAH0087	36	68	33	33	0.47	SUZUKI SWIFT1.0 86-89, 1.384-89, GTL1铃木, 羚羊
DAC37680045			37	68	45	45	0.72	
DAC37720033			37	72	33	33	0.50	
DAC37720037		562398	37	72	37	37	0.59	Fiat菲亚特, Ford福特, Lancia蓝旗亚, Renault19-21雷诺, Chrysler克莱斯勒
DAC37720237		527631	37	72.02	37	37	0.59	Chrysler克莱斯勒
DAC37720437	DAC37720437	562398A 468683CA	37	72.04	37	37	0.59	Chrysler克莱斯勒
DAC37720052/45			37	72	52	45	0.70	
DAC37740045		541521C 816359	37	74	45	45	0.79	BMW宝马, OPEL欧宝, Ford福特
DAC38700037		ZFRTRBRGH0037	38	70	37	37	0.56	SANTRO-FW现代 KIA起亚
DAC38700038	DAC3870BWCS41 DAC3870DWCS41		38	70	38	38	0.57	夏利7100 ChardeTJ7100系列汽车前轮回顾, 吉利
DAC38710039			38	71	39	39	0.62	Toyota Yaris 99 丰田, 夏利2000
DAC38720034	DAC3872ACS42		38	72	34	34	0.54	Honda本田
DAC38720236/33	DAC3872W-3CS72 DAC3872W-8CS72 DAC3872-WCS81		38	72.02	36	33	0.56	Honda本田, Rover陆虎, Toyota90369-38010/11丰田
DAC38720040	DAC3872W-10 DAC3872B12 RSCS42	575069B	38	72	40	40	0.63	Honda44300-SB3-961/2本田
DAC38730040	DAC3973-1 DAC3873B12 RSCS53 3873W-12RSC5		38	73	40	40	0.67	Honda Fit1.3, 1.5, 1.6本田
DAC38740050			38	74	50	50	0.85	Nissan尼桑
DAC39680037	DAC39680037	439622C 803374 528810 528820 540733BA	39	38	37	37	0.48	Ford福特, Audi奥迪, Santana桑塔纳, Mazda6-26, Passat帕萨特, 普桑
DAC39680737			39	68.07	37	37	0.48	Volkswagen大众, Ford福特, Audi奥迪, Chrysler克莱斯勒
DAC39720037	DAC3972AW4 DAC3972D 2RS	542186A 524096 581169 579794CA	39	72	37	37	0.60	BMW宝马, OPEL欧宝, Ford福特, Bedford贝德福特, Monza马自达, Vauxhall沃克斯豪尔, 桑塔纳2000型
DAC39720637		542186CA	39	72.06	37	37	0.60	BMW宝马, OPEL欧宝, Ford福特, Bedford贝德福特, Vauxhall沃克斯豪尔
DAC39740034			39	74	34	34	0.60	
DAC39740038			39	74	38	38	0.65	
DAC39740039	BAHB636096A	579557 581108CA	39	74	39	39	0.66	Opel欧宝, Vauxhall沃克斯豪尔
DAC39/41750037	DAC39/41750037	567447B	39/41	75	37	37	0.62	Audi1.6-2奥迪, Passat帕萨特, Golf111-Vento, Swift1.6
DAC40680042			40	68	42	42	0.51	
DAC40720036			40	72	36	36	0.54	
DAC40720037	DAC4072	566719 455608	40	72	37	37	0.55	Volkswagen大众, Seat西亚特, 捷达, 奇瑞QQ
DAC40740036/34	DAC4074CWCS73 DAC4074BW		40	74	36	34	0.58	马来西亚Proton前轮毂
DAC40740036			40	74	36	36	0.62	
DAC40740040	DAC407440	559493/801 136	40	74	40	40	0.66	Mazda马自达, KIA起亚
DAC40740042	DAC4074W-3		40	74	42	42	0.71	
DAC40750037		559494	40	75	37	37	0.62	Ford福特, Audi100奥迪
DAC40760033/28		539166AB	40	76	33	28	0.54	Chrysler克莱斯勒, Rover陆虎, Volkswagen大众
DAC40760041/38	DAC407641 2RS	559226	40	76	41	38	0.70	Honda本田, Rover陆虎
DAC40800036/34	DAC4080MCS68M		40	80	36	34	0.74	GM通用, Mitsubishi三菱, 现代索纳塔
DAC408000302		523854	40	80	30.2	30.2	0.68	Peugeot标志, Mitsubishi三菱, Talbot标志, Simca西姆卡, Volvo沃尔沃
DAC408000381		534682B	40	80	38.1	38.1	0.80	
DAC40820040			40	82	40	40	0.80	

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NSAR	日本光洋KOYO	德国FAG	d	D	B	C		
DAC408402538			40	84.025	38	38	0.97	Renault雷诺
DAC40840034			40	84	34	34	0.94	
DAC40840038			40	84	38	38	0.96	
DAC401080032/17			40	108	32	17	1.04	Renault 18GTX雷诺
DAC42720038	DU4272C	521771 533953	42	72	38	38	0.56	Mazda 626-2w d(GD)89-30马自达
DAC42720038/35			42	72	38	35	0.52	Subaru Legacy 4WD斯巴鲁力狮, Nissan尼桑
DAC42750037	DAC4275BW2RS DAC4275	533953 54595D 521771	42	75	37	37	0.59	Alfa Romeo阿尔法 罗密欧, Audi100-200Quattro奥迪, Porsche保时捷, Saab绅宝, BMW宝马
DAC42760033		555801	42	76	33	33	0.65	
DAC42760037/35			42	76	37	35	0.56	
DAC42760038/35			42	76	38	35	0.62	Nissan尼桑
DAC42780038	DAC4278A 2RS		42	78	38	38	0.70	Honda Legend 2.5i 24V 86本田
DAC42780040			42	78	40	40	0.66	
DAC42800036/34	DAC4080MA		42	80	36	34	0.81	Elantra伊兰特
DAC42800037			42	80	37	37	0.70	Alfa Romeo阿尔法 罗密欧
DAC42800342		527243c 582226	42	80.03	42	42	0.82	BMW宝马, Chrysler克莱斯勒
DAC42800045	DAC4280w-2		42	80	45	45	0.86	Mazda马自达
DAC42820036	DAC4282	561481 588226	42	82	36	36	0.77	Citroen雪铁龙, GM通用, 新富康, Peugeot 306-405东风标志
DAC42820037		565636	42	82	37	37	0.79	Audi奥迪
DAC42840036		564727	42	84	36	36	0.84	Peugeot标志, Talbot标志-塔尔伯特, Simca 西姆卡
DAC42840037			42	84	37	37	0.91	
DAC42840039		543359B	42	84	39	39	0.93	Renault雷诺, Peugeot标志
DAC43760043			43	76	43	43	0.71	
DAC43770042/38			43	77	42	38	0.64	
DAC43790045			43	79	45	45	0.84	
DAC43800038		579943B	43	80	38	38	0.75	
DAC43800050/45	DAC4380ACS69	567519A 800941C	43	80	50	45	0.96	Audi 200奥迪
DAC43820045	DAC4382W-3 DAC4382W-3CF79		43	82	45	45	0.96	Toyota Camry 2.2i, 3.0i 91丰田
DAC43/45820037			43/45	82	37	37	0.76	Audi奥迪, Chrysler克莱斯勒
DAC44825037			44	82.5	37	37	0.73	Citroen雪铁龙, Peugeot标志
DAC45800045		564725AB	45	80	45	45	0.80	
DAC45800045/44			45	80	45	44	0.95	
DAC45830045			45	83	45	45	0.60	Mazda马自达
DAC45840039	DAC458439BW	547103E 43BW03	45	84	39	39	0.85	Citroen雪铁龙, Peugeot标志
DAC45840041/39	DAC4584DW		45	84	41	39	0.85	现代, 索纳塔
DAC45840042/40			45	84	42	40	0.90	Mitsubishi三菱
DAC45840042			45	84	42	42	0.9	