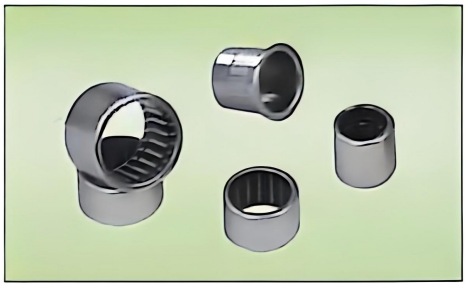
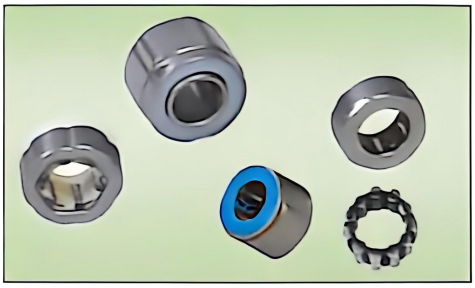
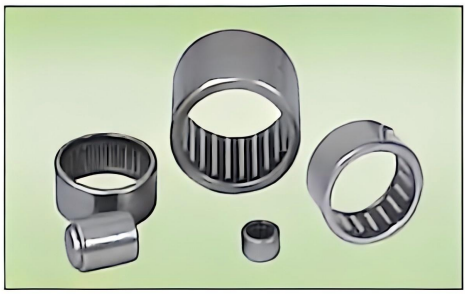
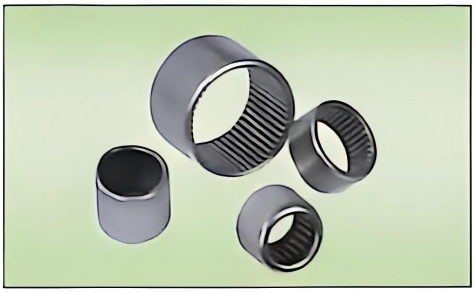
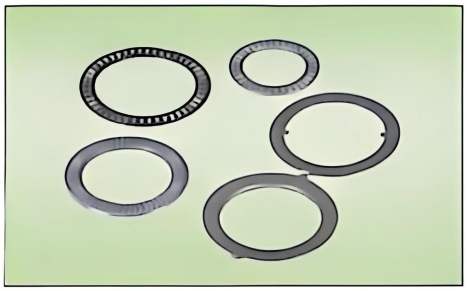
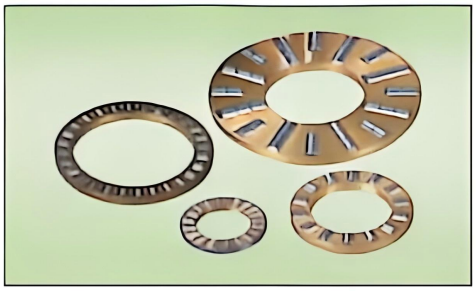
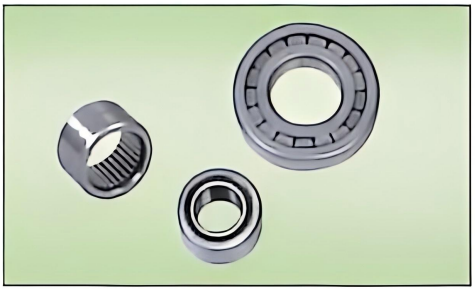
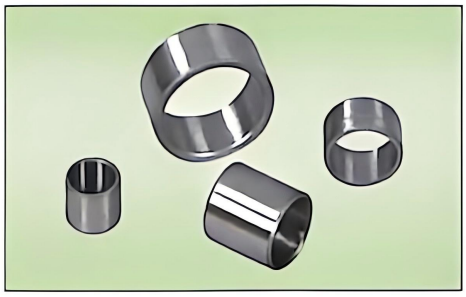
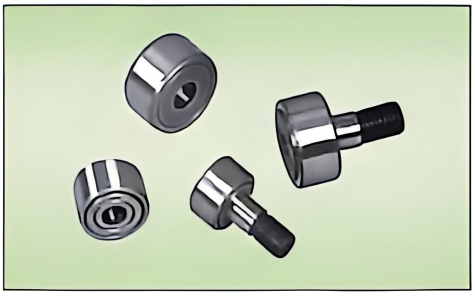
SHANDONG FODA BEARING TRANSMISSION CO., LTD

滚针轴承系列

Needle Roller Bearing

冲压外圈滚针离合器、冲压外圈滚针离合器和轴承组件

Drawn Cup Roller Clutches, Drawn Cup Roller Clutches and Bearing Assemblies

1. 结构形式

系列／Series	说 明	Description
HF	钢弹簧冲压外圈滚针离合器	Drawn Cup Roller Clutch with Steel Springs
HF… KF	塑料弹簧冲压外圈滚针离合器	Drawn Cup Roller Clutch with Plastic Springs
HF… R	钢弹簧冲压外圈滚针离合器，外圈部分滚花	Drawn Cup Roller Clutch with Steel Springs and Partially Knurled Outer Ring
HF… KFR	塑料弹簧冲压外圈滚针离合器，外圈部分滚花	Drawn Cup Roller Clutch with Plastic Springs and Partially Knurled Outer Ring
HFL	钢弹簧冲压外圈滚针离合器和轴承组件，滑动轴承或滚动轴承	Drawn Cup Roller Clutch with Bearing Assemblies with Steel Springs, plain or Rolling Bearings
HFL… KF	塑料弹簧冲压外圈滚针离合器和轴承组件，滑动轴承或滚动轴承	Drawn Cup Roller Clutch and Bearing Assemblies with Plastic Springs, plain or Rolling Bearings
HFL… R	钢弹簧冲压外圈滚针离合器和轴承组件，外圈部分滚花	Drawn Cup Roller Clutch and Plain Bearing Assemblies with Steel Springs, partially Knurled Outer Ring
HFL… KFR	塑料弹簧冲压外圈滚针离合器和轴承组件，外圈部分滚花	Drawn Cup Roller Clutch and Plain Bearing Assemblies with Plastic Springs, partially Knurled Outer Ring
HFLK	变形结构	metabolic configuration

2. 检验

将滚针离合器压入标准环规中用塞规检查，环规的壁度大于20mm。

3. 安装

滚针离合器装入座孔中后，不需要另行轴向定位。安装座孔公差与冲压外圈滚针轴承相同，座孔的表面粗糙度小于Ra0.8。

滚针离合器的内接圆直径与HK系列相同。轴的硬度应在HV670－840，并磨削。

工作温度在充分润滑的条件下，钢弹簧的滚针离合器可在－30℃～＋120℃温度范围内运行。塑料弹簧的滚针离合器工作温度范围为－10℃～＋70℃。

2. Inspection

Press the drawn cup roller clutch into the ring gauge, then inspect with gauge. The wall thickness should over 20mm.

3. Mounting

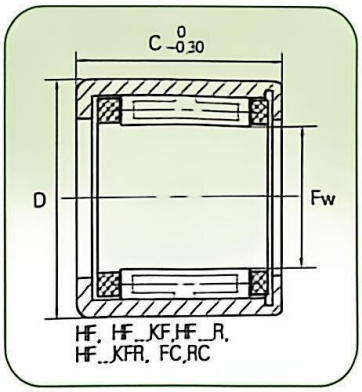
The drawn cup roller clutch is fitted in the housing bore without axial orientation. The roller clutch's tolerance is determined by the accuracy of the housing bore. The surface rouyhness must be less than Ra0.8.

The inscribed circle's diameter of roller chutch is same as series HK's. The grinding operation shaft's hardness should be controlled HV670-840.

Working temperature rang of roller clutches with steel springs is between -30℃ and +120℃, whereas roller clutches with plastic springs' temperature is between -10℃ and +70℃.

冲压外圈滚针离合器

Drawn Cup Needle Roller Clruches



轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			传动力矩 Permissible Torque Md	极限转速 Limiting Speed		适用的冲压外圈滚针轴承 Suitable Drawn Cup Bearings
	塑料弹簧 Plastic Springs	钢弹簧 Steel Springs		Fw	D	C		轴旋转 Rotating Shaft Min⁻¹	外圈旋转 Rotatng Outer Ring Min⁻¹	
mm			g	mm			N · m			
3	HF0306KF		0.9	3	6.5	6	0.2	36000	7000	HK0306TN
4	HF0406KF	–	1	4	8	6	0.34	34000	8000	HK0408TN
	HF0406KFR	–	1	4	8	6	0.34	34000	8000	HK0408TN
6		HF061207	2	6	12	7	1	20000	11000	HK0608
	HK0608KF		2.8	6	10	8	1.5	20000	11000	HK0608
	HF0612KF	HF0612	3	6	10	12	1.76	23000	13000	HK0608
	HF0612KFR	HF0612R	3	6	10	12	1.76	23000	13000	HK0608
		HF061210	3.5	6	12	10	3	20000	13000	HK061208
8	HF0812KF	HF0812	3.5	8	12	12	3.15	17000	12000	HK0808
	HF0812KFR	HF0812R	3.5	8	12	12	3.15	17000	12000	HK0808
		HF081210	3.2	8	12	10	3	16000	12000	HK0808
	HF08145.3KF		3	8	14	5.3	4	15000	11000	HK081410
		HF081410	3.6	8	14	10	4.6	15000	11000	HK081410
		HF081607	4.1	8	16	7	5.5	15000	11000	HK081610
	HF1012KF	HF081610	2	8	14	5	5.5	16000	12000	HK101410
	HF1012KFR	HF081412	4	8	14	12	5	16000	12000	HK101410
10	–	HF1012	4	10	14	12	5.3	14000	11000	HK1010
	–	HF1012R	4	10	14	12	5.3	14000	11000	HK1010
12	–	HF1216	11	12	18	16	12.2	11000	8000	HK1212
14	–	HF1416	13	14	20	16	17.3	9500	8000	HK1412
16	–	HF1616	14	16	22	16	20.5	8500	7500	HK1612
18	–	HF1816	16	18	24	16	24.1	7500	7500	HK1812
20	–	HF2016	17	20	26	16	28.5	7000	6500	HK2010
25	–	HF2520	30	25	32	20	66	5500	5500	HK2512
30	–	HF3020	36	30	37	20	90	4500	4500	HK3012
35	–	HF3520	40	35	42	20	121	3900	3900	HK3512

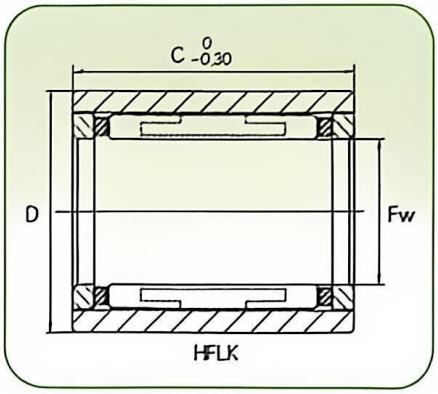
型号	重量 g	主要尺寸			传动力矩 N · m
		Fw	D	C	
FC4K	1	4	8	6	0.35
FC6	3	6	10	12	1.76
FC6K	3	6	10	12	1.76
FC8	4	8	14	12	5.3
FCL8K	3.5	8	12	12	5
FC10	4.8	10	16	12	6
FCL10K	4	10	14	12	5.3
FC12	11	12	18	16	12.2
FC14K	13	14	20	16	17.3
FC16	14	16	22	16	21.7
FC20	17	20	26	16	32.5
FC25	30	25	32	20	71.0
FC30	36	30	37	20	99
FC35	40	35	42	20	107

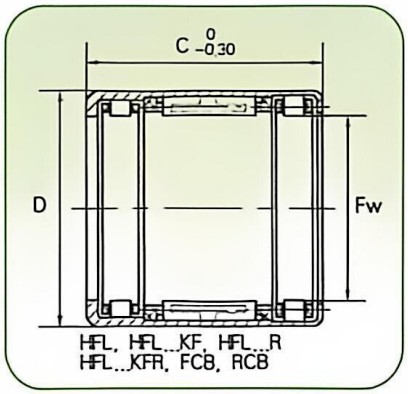
型号	重量 g	主要尺寸			传动力矩 N · m
		Fw	D	C	
RC02	2	3.175	7.15	6.35	0.32
RC040708	3.5	6.35	11.112	12.7	2.03
RC040708-FS	3.5	6.35	11.112	12.7	2.03
RC061008	4.7	9.525	15.875	12.7	5.45
RC061008-FC	4.7	9.525	15.875	12.7	5.45
RC081208	9.2	12.7	19.05	12.7	8.84
RC081208-FS	9.2	12.7	19.05	12.7	8.84
RC101410	14.5	15.875	22.225	15.88	16.9
RC101410-FC	14.5	15.875	22.225	15.88	16.9
RC121610	16.2	19.05	25.4	15.88	23.3
RC121610-FS	16.2	19.05	25.4	15.88	23.3
RC162110	17	25.4	33.338	15.88	49.6
RC162110-FC	17	25.4	33.338	15.88	49.6

极限转速对油和脂润滑均有效,宽度偏差-0.30^{0}mm,特殊要求订货时说明。

冲压外圈滚针离合器和轴承组件

Drawn Cup Needle Roller Clutch and Bearing Assemblies





轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			传动力矩 Permissible Torque Md	极限转速 Limiting Speed		基本额定负荷 Basic Load Ratings	
	塑料弹簧 Plastic Springs	钢弹簧 Steel Springs		Fw	D	C		轴旋转 Rotating Shaft Min⁻¹	外圈旋转 Rotatng Outer Ring Min⁻¹	C	Co
mm			g	mm			Nm			KN	
3	HFL0308KF		3	3	3.6	8	1				
4	HFL0408KF		3.5	4	8	8	1.5				
6	HFL0615KF	HFL0615	4	6	10	15	1.76	23000	13000	–	–
	HFL0615KFR	HFL0615R	4	6	10	15	0.5	23000	13000	–	–
		HFL061012K	5	6	10	12		21000	12000		
8		HFL081212K	6	8	12	12		20000	12000		
		HFL081412K	7	8	14	12		19000	12000		
	HFL0822KF	HFL0822	7	8	12	22	3.15	17000	12000	4.05	4.15
	HFL0822KFR	HFL0822R	7	8	12	22	1	17000	12000	–	–
10	HFL1022KF	HFL1022	8	10	14	22	5.3	14000	11000	4.3	4.65
	HFL1022KFR	HFL1022R	8	10	14	22	1.5	14000	11000	–	–
12	–	HFL1226	18	12	18	26	12.2	11000	8000	6.3	6.5
14	–	HFL1426	20	14	20	26	17.3	9500	8000	7.1	7.7
16	–	HFL1626	22	16	22	26	20.5	8500	7500	7.3	8.4
18	–	HFL1826	25	18	24	26	24.1	7500	7500	8.3	10.3
20	–	HFL2026	27	20	26	26	28.5	7000	6500	8.2	10.4
25	–	HFL2530	44	25	32	30	66	5500	5500	10.9	14.1
	–	HFL2550	65	25	37	50	100	5000	5500	14	17
30	–	HFL3030	51	30	37	30	90	4500	4500	12.6	17.6
35	–	HFL3530	58	35	42	30	121	3900	3900	13	19.3

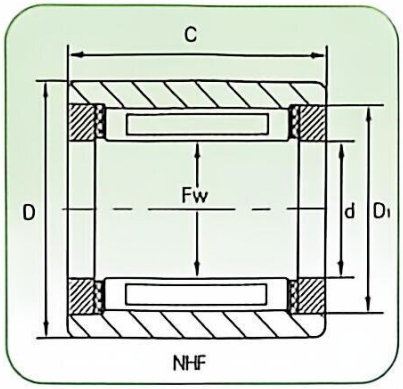
型号	重量 g	主要尺寸			传动力矩 N.m
		Fw	D	C	
FCB8	10	8	14	20	5
FCB10	15	10	16	20	10
FCB12	18	12	18	26	12.2
FCB16	22	16	22	26	20.5
FCB20	27	20	26	26	28.5
FCB25	44	25	32	30	66
FCB30	51	30	37	30	90
FCB35	58	35	42	30	121

型号	重量 g	主要尺寸			传动力矩 N.m
		Fw	D	C	
RCB061014	12	9.525	15.875	22.22	4.83
RCB061014-FS	12	9.525	15.875	22.22	4.83
RCB081214	16	12.7	19.05	22.22	7.9
RCB081214-FC	16	12.7	19.05	22.22	7.9
RCB101416	21.3	15.875	22.225	25.4	15.4
RCB101416-FS	21.3	15.875	22.225	25.4	15.4
RCB121616	26.5	19.05	25.4	25.4	20.9
RCB121616-FC	26.5	19.05	25.4	25.4	20.9
RCB162117	44.8	25.4	33.338	26.99	45
RCB162117-FS	44.8	25.4	33.338	26.99	45

极限转速对油和脂润滑均有效,宽度偏差$^{0}_{-0.30}$mm,特殊要求订货时说明。

冲压外圈滚针离合器和轴承组件

Drawn Cup Needle Roller Clutch and Bearing Assemblies



轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions				传动力矩 Permissible Torque Md
			d	D $^{+0.020}_{0}$	(D1)	C $^{0}_{-0.020}$	
mm		g	mm				N · m
4	NHF04	3.4	4 $^{+0.050}_{+0.020}$	10	8.4	9	0.29
6	NHF06	4.7	6 $^{+0.055}_{+0.020}$	12	10.4	10	0.69
8	NHF08	11	8 $^{+0.055}_{+0.020}$	16	13.5	13	2.06
10	NHF10	14	10 $^{+0.060}_{+0.020}$	18	15.5	14	3.14
12	NHF12	18	12 $^{+0.065}_{+0.020}$	20	17.5	15	4.61

公英制冲压外圈保持架滚针轴承
穿孔型、封口型、带密封、不带密封

Mertic and Inch Drawn Cup Caged Needle Roller Bearings
Open End. Closed End. With Seals, Without Seals

1. 简介

冲压外圈滚针轴承的外圈是用薄钢板精密冲压成型的，结构空间小，且具有较大负荷容量。适用于安装空间受到限制和壳体孔不宜作为滚道的场合，且压入轴承座孔后不必进一步轴向定位。

同穿孔型冲压外圈滚针轴承相比，封口型冲压外圈滚针轴承对轴端部位的密封极为有效。由于该类滚针轴承有润滑脂（锂基脂），在使用温度为-20－＋120℃的范围内，可长期运转。

2. 检验

根据ZBJⅡ020标准和世界各滚针轴承制造公司(日本NTN、KOYO，德国INA，美国TORRINGTON)对冲压外圈滚针轴承的检验规定：冲压外圈壁薄，热处理易变形，在安装前测量检验轴承外径毫无意义。测量检验时应使被测量轴承压入标准座孔后才能获得最终尺寸和几何精度。座孔尺寸偏差应符合推荐规定(见表3）。滚针内接圆直径近似在公差带F8范围内。

推荐的座孔和轴的公差

表1

轴承座材料（刚性轴承座)(注1)	座孔公差(注1)	轴公差(注1)	
		无内圈	有内圈
钢或铸铁	N6(N7)	h5(h6)	k5(k6)
有色金属或座孔壁厚小于6mm	R6(R7)		

关于冲压外圈轴承的滚针内接圆直径偏差的正确的测量检查方法:
1. 测量时应使被测量轴承和标准件处于同一温度，测量的标准温度为20℃。
2. 成套轴承滚针组单一最小内径的偏差△Fwmin的检查，是将轴承压入标准圈中用极限塞规检查。
2.1 成套轴承滚针组单一最小内径的偏差按表2的规定。

表2 (μm)

滚针组公称内径Fw(mm)		△Fwmin=Fwmin−Fw	
超过	到	上差	下差
3	6	+28	+10
6	10	+31	+13
10	18	+34	+16
18	30	+41	+20
30	50	+50	+25
50		+60	+30

2.2 轴承单一宽度偏差△Cs统一规定为$^{0}_{-0.30}$mm。

2.3 标准圈按表3规定。

表3 (mm)

轴承公称外径D(mm)		标准圈公称内径	标准圈公差 μm	标准圈壁厚
超过	到			
6	10	D-0.016	按GB1957中IT8公差级的规定	大于或等于20
10	18	D-0.020		
18	30	D-0.024		
30	50	D-0.028		
50	80	D-0.033		

2.4 塞规按表4规定

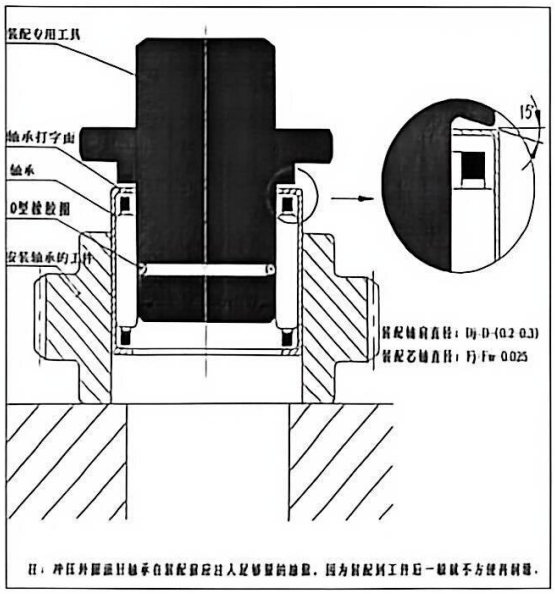
表4 (mm)

轴承公称内径Fw(mm)		塞规公称外径		塞规公差 μm
超过	到	通端	止端	
3	6	Fw+0.008	Fw+0.030	按GB1957中IT7公差的规定
6	10	Fw+0.011	Fw+0.033	
10	18	Fw+0.014	Fw+0.036	
18	30	Fw+0.018	Fw+0.043	
30	50	Fw+0.023	Fw+0.052	
50	70	Fw+0.028	Fw+0.062	

2.5 若用户另有要求，由本公司与用户协商签订。

3. 安装

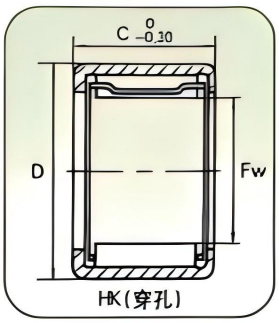
为了避免冲压外圈产生局部变形或脆裂，防止滚针的正常工作遭受破坏，禁止在安装轴承时使用手锤等工具敲击薄壁外圈，应使用压力机或专用安装工具进行安装，参考轴承安装方法示意图如下：



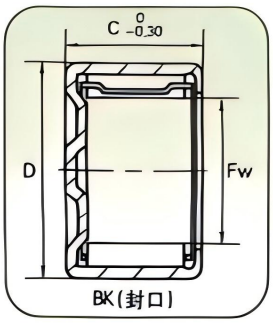
图中：Dj=D-(0.2－0.3)mm
Fj=Fw-0.025mm
Bj由安装位置决定

公制冲压外圈保持架滚针轴承

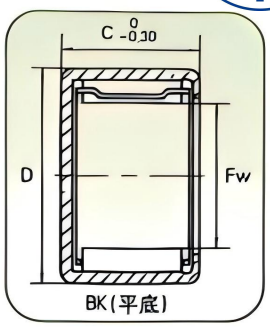
Mertic Drawn Cup Caged Needle Roller Bearings



HK(穿孔)



BK(封口)



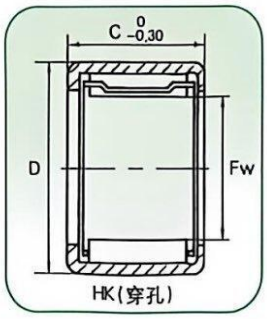
BK(平底)

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
3	HK0306TN		1	3	6.5	6	1230	840	48000
	BK0306TN		1	3	6.5	6	1230	840	48000
4	HK0408TN	37941/4	1.6	4	8	8	1740	1270	43000
	BK0408TN	57941/4	1.8	4	8	8	1740	1270	43000
5	HK0509	47941/5	2	5	9	9	2400	1990	39000
	BK0509	45941/5	2.1	5	9	9	2400	1990	39000
6	HK0608	37941/6	2.1	6	10	8	2030	1650	37000
	HK0609	47941/6	2.2	6	10	9	2850	2600	37000
	BK0609	45941/6	2.6	6	10	9	2850	2600	37000
7	HK0708			7	11	8	2800	2150	27000
	HK0709	47941/7	2.3	7	11	9	3100	2950	33000
	BK0709	45941/7	2.9	7	11	9	3100	2950	33000
8	HK0808	37941/8	2.7	8	12	8	2750	2600	29000
	BK0808	35941/8	3	8	12	8	2750	2600	29000
	HK0810	57941/8	3	8	12	10	3800	3950	29000
	BK0810	88941/8	3.4	8	12	10	3800	3950	29000
	HK08×14×10	27942/8	5.35	8	14	10	3800	3950	25000
	HK08×14×12	37942/8	6.6	8	14	12	4100	4320	25000
9	HK0910	57941/9	4	9	13	10	4250	4650	27000
	BK0910	55941/9	4.3	9	13	10	4250	4650	27000
	HK0912	67941/9	4.6	9	13	12	5300	6300	27000
	BK0912	65941/9	4.9	9	13	12	5300	6300	27000
10	HK1010	57941/10	4.1	10	14	10	4400	5100	24000
	BK1010	55941/10	4.3	10	14	10	4400	5100	24000
	HK1012	67941/10	4.8	10	14	12	5500	6800	24000
	BK1012	65941/10	5	10	14	12	5500	6800	24000
	HK1015		6	10	14	15	6800	8800	24000
	HK10×16×10		6.5	10	16	10	6800	8800	18000
	HK10×16×12	D81012	7.5	10	16	12	6800	8800	18000
	HK10×16×15	7942/10	11	10	16	15	6800	8800	19000
12	HK1210	57941/12	4.6	12	16	10	4950	6200	21000
	BK1210	55941/12	5.2	12	16	10	4950	6200	21000
	HK1212	67941/12	5.6	12	16	12	6500	7300	20000
	BK1212	65941/12	6.2	12	16	12	6500	7300	20000
	HK12×17×12	7941/12	7.5	12	17	12	6500	7500	20000
	HK12×17×15	7942/12	9.5	12	17	15	6100	7500	20000
	HK12×17×18	7943/12	11	12	17	18	6100	7500	20000
	HK12×18×12	37942/12	9.1	12	18	12	5500	7800	19000
	BK12×18×12	35942/12K	10.3	12	18	12	5500	7800	19000
	HK12×19×12		10	12	19	12	6800	7800	19000
13	HK1312		8.9	13	19	12	6800	7900	19000
	BK1312		11.2	13	19	12	6800	7900	19000
13.5	HK13.5×20×12	7941/13.5	10.8	13.5	20	12	6250	7590	16000
14	HK1412	37941/14	10.5	14	20	12	7100	8500	18000

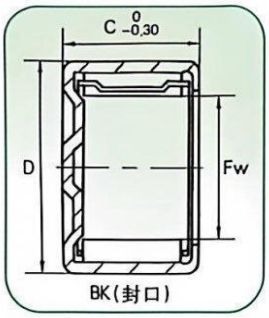
TN=塑料保持架，允许工作温度：120℃连续，180℃短期，宽度偏差$^{0}_{-0.30}$mm，特殊要求订货时说明，脂润滑极限转速为表列数值的60%。

公制冲压外圈保持架滚针轴承

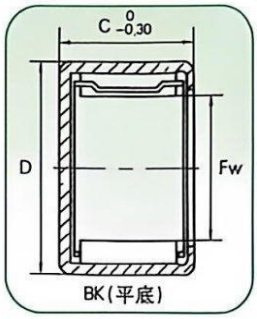
Mertic Drawn Cup Caged Needle Roller Bearings



HK(穿孔)



BK(封口)



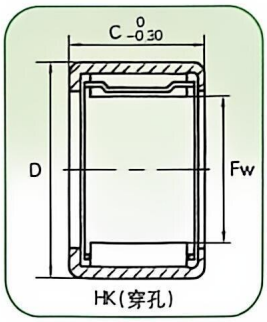
BK(平底)

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
14	HK1416	57941/14	13.9	14	20	16	7300	9000	14000
15	HK15×20×12	7941/15	8.4	15	20	12	5800	6000	14000
	HK15×20×16	7942/15	11.4	15	20	16	6000	6200	14000
	HK15×20×20	7943/15	13.8	15	20	20	6100	6400	14000
	HK1512	37941/15	11.1	15	21	12	7900	9400	16000
	BK1512	35941/15	12.7	15	21	12	7900	9400	16000
	HK1514	47941/15	12.7	15	21	14	8500	10400	13000
	HK1515		14.2	15	21	15	9100	11400	13000
	HK1516	57941/15	15	15	21	16	10500	14400	16000
	BK1516	55941/15	16.5	15	21	16	10000	14400	16000
	HK1522	SZ-439	20.4	15	21	22	13400	19500	16000
	HK15×22×12	7948/15	12.5	15	22	12	14300	19500	16000
16	HK1612	37941/16	11.7	16	22	12	7600	9700	16000
	BK1612	35941/16	13.8	16	22	12	7600	9700	16000
	HK1614	47941/16	14.4	16	22	14	8800	9900	16000
	HK1616	57941/16	15.8	16	22	16	10900	15300	16000
	BK1616	55941/16	17.6	16	22	16	10900	15300	16000
	HK1622	87941/16	21.7	16	22	22	13100	19400	16000
17	HK1712	37941/17	12.2	17	23	12	7900	10300	15000
	BK1712	35941/17	14.5	17	23	12	7900	10300	15000
	HK1714	7941/17	14	17	23	14	7900	10300	13000
	HK1716	57941/17	15.9	17	23	16	8500	12500	13000
	HK1718	7942/17	19	17	23	18	9500	12500	13000
	HK17×25×14	37942/17K	17.7	17	25	14	13100	14700	13000
	HK17×25×18	57942/17K	23.5	17	25	18	9500	10600	14000
18	HK1812	37941/18	13.1	18	24	12	8100	10900	14000
	HK1816	57941/18	17.5	18	24	16	11600	17300	14000
	BK1816	55941/18	19.9	18	24	16	11600	17300	14000
	HK2010	27941/20	11.8	20	26	10	6400	8200	13000
	HK2012	37941/20	14.1	20	26	12	8800	12100	13000
	HK2014	47941/20	15.7	20	26	14	10700	19100	12000
20	HK2016	57941/20	19.3	20	26	16	12700	20100	13000
	BK2016	55941/20	22.3	20	26	16	12700	20100	13000
	HK2018	67941/20	23.3	20	26	18	8900	13800	12000
	HK2020	7942/20	24.1	20	26	20	15700	26000	13000
	HK2030		34.7	20	26	30	21800	40000	13000
	HK20×27×20		82	20	27	20	26300	47800	9900
22	HK2210	27941/22	12.3	22	28	10	7600	10500	12000
	HK2212	37941/22	15	22	28	12	9100	13400	12000
	BK2212	35941/22	18.1	22	28	12	9100	13400	12000
	HK2216	57941/22	20.9	22	28	16	13400	22100	12000
	BK2216	55941/22	24.3	22	28	16	13400	22100	12000
	HK2220	77941/22	26.2	22	28	20	16500	29000	12000
	HK2230		32	22	28	30	17500	30400	9000

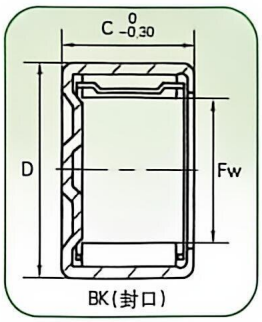
脂润滑极限转速为表列数值的60%；宽度偏差$^{0}_{-0.30}$mm，特殊要求订货时说明。

公制冲压外圈保持架滚针轴承

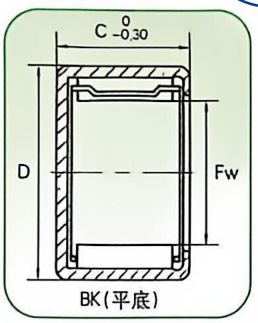
Mertic Drawn Cup Caged Needle Roller Bearings



HK(穿孔)



BK(封口)



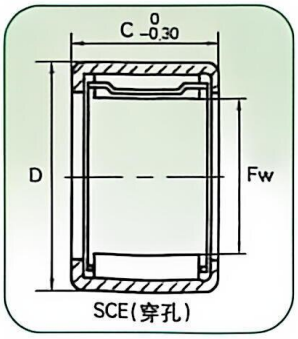
BK(平底)

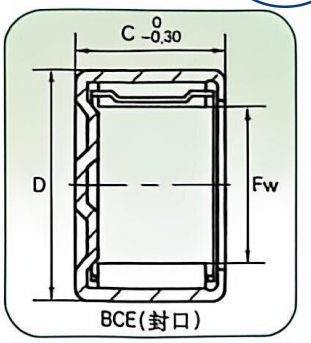
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
22	HK22 × 29 × 30		43	22	29	30	19400	33100	10000
25	HK2512	27941/25	20	25	32	12	11000	15200	10000
	BK2512	25941/25	23.2	25	32	12	11000	15200	10000
	HK2514	37941/25	21.9	25	32	14	15600	17700	10000
	HK2516	7941/25	27.3	25	32	16	15600	24000	10000
	BK2516	5941/25	31	25	32	16	15600	50000	10000
	HK2520	67941/25	34.1	25	32	20	19900	33000	10000
	BK2520	65941/25	38.7	25	32	20	19900	33000	10000
	HK2526		44.8	25	32	26	25500	45000	10000
28	HK2816	47941/28	30.1	28	35	16	16400	26500	9000
	BK2816	45941/28	34.1	28	35	16	16400	26500	9000
	HK2820	67941/28	37.6	28	35	20	20900	36000	9000
30	HK3012	27941/30	24	30	37	12	12100	18200	8500
	HK3016	47941/30	32	30	37	16	17200	29000	8500
	BK3016	45941/30	37.1	30	37	16	17200	29000	8500
	HK3020	67941/30	40.1	30	37	20	22000	39500	8500
	HK3026		52.9	30	37	26	28000	54000	8500
	HK3038		76.1	30	37	38	37500	79000	8500
	BK3038		82.5	30	37	38	37500	79000	8500
	HK30 × 38 × 16	7941/30	32.7	30	38	16	39000	82000	8100
	HK30 × 38 × 24	7942/30	49	30	38	24	39910	88800	8100
	HK30 × 38 × 32	7943/30	69	30	38	32	38890	88700	8100
32	HK3232	97941/32	66.4	32	39	32	27500	54300	8000
	HK32 × 40 × 32	7943/32	72.7	32	39	32	27500	59890	8000
35	HK35 × 43 × 16	7941/35	37	35	42	16	24200	47100	7500
	HK35 × 43 × 25	7942/35	60.5	35	43	25	24440	48200	7500
	HK35 × 43 × 32	7943/35	80	35	43	32	24870	48880	7500
40	HK4012	27941/40	31.1	40	47	12	14000	24300	6500
	BK4012	25941/40	38.2	40	47	12	14000	24300	6500
	HK4016	47941/40	41.4	40	47	16	20000	38500	6500
	HK4020	67941/40	51.8	40	47	20	25500	52000	6500
	BK4020	65941/40	62	40	47	20	25500	52000	6500
45	HK4512	27941/45	34.8	45	52	12	14900	27500	6000
	HK4516	47941/45	46.2	45	52	16	21300	43000	6000
	HK4520	67941/45	56	45	52	20	27000	59000	6000
	BK4520	65941/45	72	45	52	20	27000	59000	6000
50	HK5012	27941/50	44.2	50	58	12	23600	57200	5500
	HK5020	57941/50	72	50	58	20	31000	63000	5500
	BK5020	55941/50	87.3	50	58	20	31000	63000	5500
	HK5025	7943/50	90.1	50	58	25	38500	84000	5500
55	HK5520	57941/55	78	55	63	20	31500	67000	4800
60	HK6012		49.2	60	68	12	17400	32000	4400
	HK6020	57941/60	86	60	68	20	33500	75000	4400
	BK6020	55941/60	105	60	68	20	33500	75000	4400

脂润滑极限转速为表列数值的60%；宽度偏差$^{0}_{-0.30}$mm，特殊要求订货时说明。

英制冲压外圈保持架滚针轴承

Inch Drawn Cup Caged Needle Roller Bearings



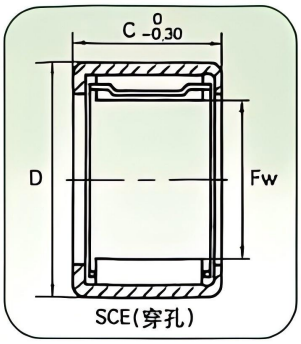


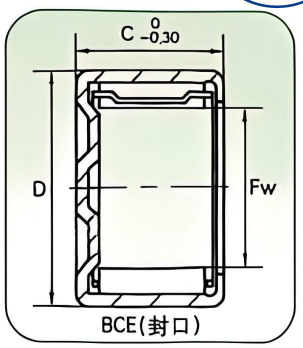
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	SCE 穿孔	BCE 封口		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
6.35	SCE44	BCE44	2.2	6.35	11.112	6.35	1602	1157	35000
	SCE45	BCE45	3.3	6.35	11.112	7.94	2536	2092	35000
7.938	SCE55	BCE55	3.2	7.938	12.7	7.94	2892	2625	29000
9.525	SCE65	BCE65	3.7	9.525	14.288	7.94	2892	2417	25000
	SCE66	BCE66	4.8	9.525	14.288	9.525	3900	3950	29500
	SCE67	BCE67	5.5	9.525	14.288	11.11	4361	4583	25000
11.112	SCE78	BCE78	6	11.112	15.875	12.7	6400	7800	25000
12.7	SCE87	BCE87	6.6	12.7	17.462	11.11	5918	7387	19000
	SCE88	BCE88	8	12.7	17.462	12.7	6897	9033	19000
	SCH87	BCH87		12.7	19.050	11.112	7340	7800	22000
	SCH88	BCH88		12.7	19.050	12.7	8500	9400	22000
	SCE810	BCE810	9.5	12.7	17.462	15.88	8811	12237	19000
14.288	SCE95	BCE95	5.2	14.288	19.050	7.94	4049	4717	18000
	SCE96	BCE96	6.3	14.288	19.050	9.52	5162	6408	18000
	SCE98	BCE98	8.6	14.288	19.050	12.7	7698	10769	18000
	SCE910	BCE910	11	14.288	19.050	15.88	9434	14017	18000
	SCE912	BCE912	13	14.288	19.050	19.05	10724	16465	18000
15.875	SCE105	BCE105		15.875	20.638	7.938	4300	5200	17600
	SCE107	BCE107		15.875	20.638	11.112	6600	9300	17600
	SCE107-1/2	BCE107-1/2	8.8	15.875	20.638	11.910	7100	10300	17600
	SCE108	BCE108	9.1	15.875	20.638	12.7	8743	12015	16000
	SCE1010	BCE1010	13	15.875	20.638	15.88	10368	16242	16000
	SCE1012	BCE1012	14	15.875	20.638	19.05	12015	19802	16000
	SCH108	BCH108		15.875	23.225	12.7	10000	12200	17600
	SCH1010	BCH1010		15.875	22.225	15.875	12700	16700	17600
17.462	SCE116	BCE116	7.5	17.462	22.225	9.52	5740	7876	15000
	SCE118	BCE118		17.462	22.225	12.7	8600	13200	16000
	SCE1112	BCE1112		17.462	22.225	19.050	12400	21000	16000
19.050	SCE128	BCE126		19.050	25.4	12.7	9800	12500	14700
	SCE1210	BCE1210	17	19.050	25.4	15.88	12682	17577	13000
	SCE1212	BCE1212	21	19.050	25.4	19.05	15352	22250	13000
20.638	SCE136	–		20.638	26.988	9.525	8100	8400	13600
	SCE1312	BCE1312	23	20.638	26.988	19.05	16020	23585	12000
22.225	SCE146	BCE146		22.225	28.575	9.525	8200	10700	12600
	SCE148	BCE148	17	22.225	28.575	12.7	11125	15797	11000
	SCE1412	BCE1412	25	22.225	28.575	19.05	16910	27145	11000
	SCE1416	BCE1416		22.225	28.575	25.4	22100	38000	12600
23.812	SCE1516	BCE1516	36	23.812	30.162	25.4	24030	43165	11000
25.4	SCE166	BCE166		25.4	31.75	9.525	7800	10200	11000
	SCE168	BCE168	19	25.4	31.75	12.7	12682	19135	10000
	SCE1612	BCE1612	31	25.4	31.75	19.05	18022	30260	10000
	SCE1616	BCE1616	38	25.4	31.75	25.4	24920	45390	10000

脂润滑极限转速为表列数值的60%；宽度偏差$^{0}_{-0.30}$mm，特殊要求订货时说明。

英制冲压外圈保持架滚针轴承

Inch Drawn Cup Caged Needle Roller Bearings



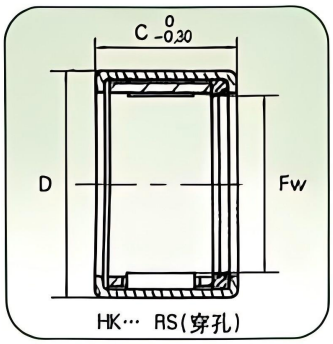


轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	SCE 穿孔	BCE 封口		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
28.575	SCE188	BCE188	21	28.575	34.925	12.7	12905	20247	9000
	SCE1812	BCE1812	32	28.575	34.925	19.05	18912	33375	9000
	SCE1816	BCE1816	43	28.575	34.925	25.4	25810	49395	9000
31.75	SCE208	BCE208		31.75	38.1	12.7	13500	22200	8800
	SCE2010	BCE2010	36	31.75	38.1	15.88	21137	39605	8000
	SCE2012	BCE2012		31.75	38.1	19.05	16500	29000	8800
	SCE2016	BCE2016	47	31.75	38.1	25.4	27145	54735	8000
33.338	SCE2110	–		33.338	41.275	15.875	21100	34000	8400
34.925	SCE228	BCE228		34.925	41.275	12.7	13600	23700	8000
	SCE2212	BCE2212	38	34.925	41.275	19.05	21360	42720	7500
	SCE2216	BCE2216	57	34.925	41.275	25.4	27590	59185	7500
	SCE2220	BCE2220		34.925	41.275	31.75	34000	77000	8000
38.1	SCE2416	BCE2416	87	38.1	47.625	25.4	38715	66305	6500
41.275	SCE2620	BCE2620		41.275	50.8	31.750	51000	97000	6800
44.45	SCE2812	BCE2812		44.45	53.975	19.050	31500	55000	6300
	SCE2816	BCE2816	99	44.45	53.975	25.4	41385	75650	6000
50.8	SCE3220	BCE3220	140	50.8	60.325	31.75	55180	115700	5000

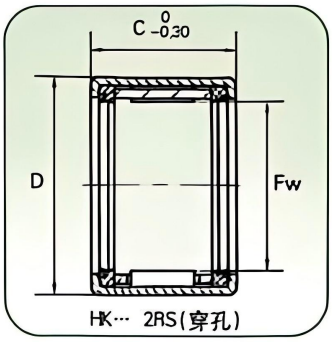
轴径 Shaft Diameter	轴承型号 Bearing Designation	别称 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions		
				Fw	D	C
mm			g	mm		
17	NB-101	BCH06604	13.5	17	23.8	17.462
	NB-102		14	17	23.8	20
	BA608		14.5	17	23.8	20.63
22.225	NB-107	SCH1413	31.5	22.225	30.16	20.63
17	NB-109	FC66217	27	17	23.8	31.5
9.53	NB-113	SCE65	3.5	9.53	14.288	7.94
11.1	NB-118	BCE78	6.5	11.1	15.88	12.7
17	NB-119		15.75	17	23.8	22
12	NB-201	HK1210	4	12	16	10
6	NB-203	HK0608	2	6	10	8
20.63	NB8303	SCE136	11	20.63	26.98	9.525

冲压外圈有密封圈滚针轴承

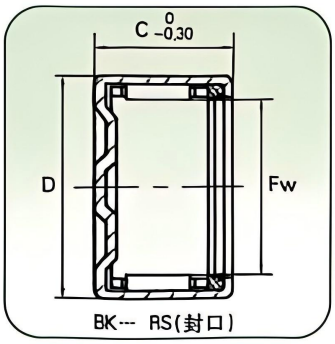
Sealed Drawn Cup Needle Roller Bearings



HK··· RS(穿孔)



HK··· 2RS(穿孔)



BK··· RS(封口)

轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
			Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm	现行的 Current	g	mm			N		rpm
8	HK0810RS	2.9	8	12	10	2750	2600	20000
	HK08122RS	3.5	8	12	12	2750	2600	20000
9	HK09 × 13 × 12RS	4	9	13	12	3800	4300	19000
10	HK1012RS	4.2	10	14	12	4400	5100	19000
	HK10142RS	5.2	10	14	14	4400	5100	17000
12	HK1214RS	10.7	12	18	14	6500	7300	17000
	HK12162RS	11.5	12	18	16	6500	7300	14000
14	HK1414RS	12	14	20	14	7100	8500	14000
	HK14162RS	14	14	20	16	7100	8500	12000
15	HK1514RS	12.6	15	21	14	7800	9800	12000
	HK15162RS	14.3	15	21	16	7800	9800	10000
	HK1518RS	16	15	21	18	10500	14400	11000
	HK15202RS	18	15	21	20	10500	14400	11000
16	HK1614RS	13.3	16	22	14	7600	9700	11000
	HK16162RS	15.1	16	22	16	7600	9700	11000
	BK1614RS	15.3	16	22	14	7600	9700	11000
	HK16202RS	16.8	16	22	20	10900	15300	11000
17	HK17 × 25 × 14RS	17.7	17	25	14	8000	9800	11000
	HK17 × 25 × 15.5RS	20	17	25	15.5	9320	10400	13000
	HK17 × 25 × 18RS	23.5	17	25	18	10500	12600	13000
	HK17 × 25 × 20RS	26.2	17	25	20	11600	13200	13000
18	HK18162RS	17	18	24	16	8100	10900	9500
20	HK20162RS	18.8	20	26	16	8600	12100	9000
	HK2018RS	21.4	20	26	18	12700	20100	8500
	HK20202RS	23.5	20	26	20	12700	20100	8500
	BK20 × 27 × 18RS	24.4	20	27	18	12700	20100	8500
	HK20 × 29 × 18RS	28.8	20	29	18	8700	9980	8000
22	HK22162RS	20.3	22	28	16	9100	13400	8000
	HK22202RS	25.5	22	28	20	13400	22100	8000
25	HK2518RS	31	25	32	18	15600	24000	7000
	HK25202RS	33.1	25	32	20	15600	24000	7000
	BK2518RS	35.3	25	32	18	15600	24000	7000
30	HK3018RS	36.6	30	37	18	17200	29000	6000
	HK30202RS	39.1	30	37	20	17200	29000	6000
35	HK35202RS	41.1	35	42	20	18700	33500	5000
45	HK45202RS	57.4	45	52	20	21300	43000	4000

脂润滑极限转速为表列数值的60%；宽度偏差$^{0}_{-0.30}$mm，特殊要求订货时说明。

推力滚针和保持架组件
连杆支承垫圈、推力滚针轴承、推力圆柱滚子轴承

Thrust Needle Roller Bearings and Cags Assemblies
Connecting Rod Supporting Washers, Thrust Needle Roller Bearings, Thrust Cylindrical Roller Bearings

1. 结构形式

AXW	带冲压中心套的推力滚针和保持架组件
AXK	推力滚针和保持架组件
AX	带控制圈的推力滚针轴承
K811,K812,K893,K874,K894	推力滚子和保持架组件
NTA,TRA,TRB,TRC,TRD	英制推力滚针和保持架组件

AXK型推力滚针和保持架组件是推力滚针轴承的主要元件。保持架用钢板成型,小尺寸保持架用塑料制成，采用G2级高精度滚针,以便确保负荷均匀分布。推力圆柱滚子和保持架组件和AXK型组件相似,它可以承受高推力负荷。

CZT也生产英制推力滚针保持架组件及配套使用垫片，如TC、TWA、TWB、TWC等系列。

AXW型推力滚针轴承由一个AXK型的推力滚针和保持架组件与一个冲压中心套组成。AX型推力滚针轴承的主要元件是AXK型组件和推力垫圈，并由控制圈二者连成一体。

推力垫圈

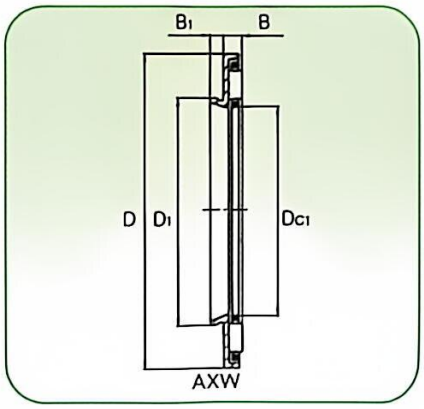
推力垫圈主要有AS型、WS型、GS型和LS型。

AS型推力垫圈是高质量弹簧钢带(板）冲压而成，厚度一般为0.8mm和1mm。滚道经淬硬和抛光。它主要用于相邻零件不能淬硬、但有足够的刚性和几何精度的场合，垫圈的支承面应得到完全支承。

轴圈(WS)、座圈(GS)和轴承垫圈(LS)是轴承钢经淬硬制成的实体垫圈，表面经磨削和抛光，座圈的外表面和轴圈的内孔也经磨削。实体垫圈一般与推力圆柱滚子和保持架组件配套使用。

垫圈带定心套的推力滚针轴承

Axial Needle Roller Bearing With Centring Spigot On The Bearing Washer



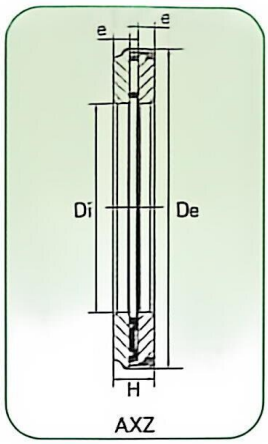
轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions					基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
			D_{c1}	D_1	D	B	B_1	动 Cr Dynamic	静 Cor Static	油润滑 [1] Oil
mm		g	mm					N		rpm
10	AXW10	8.3	10	14	27	3.2	3	9100	24000	14000
12	AXW12	9.1	12	16	29	3.2	3	8900	27800	13000
15	AXW15	10.1	15	21	31	3.2	3.5	10500	35000	11000
17	AXW17	11	17	23	33	3.2	3.5	10900	38800	10000
20	AXW20	14	20	26	38	3.2	3.5	12700	45600	8500
25	AXW25	19.5	25	32	45	3.2	4	13900	57500	7000
30	AXW30	22	30	37	50	3.2	4	15900	69500	6000
35	AXW35	26.6	35	42	55	3.2	4	17000	80100	5500
40	AXW40	39.2	40	47	63	4.2	4	27800	109000	4700
45	AXW45	43.4	45	52	68	4.2	4	29500	119900	4300
50	AXW50	49.2	50	58	73	4.2	4.5	31800	140900	3900

1)充分冷却下油润滑的极限转速，脂润滑极限转速为表列数值的25%。

1)Limiting speed for oil lubrication.
For grease lubrication, 25% of the values given in the table is permissible.

推力滚针和保持架组合

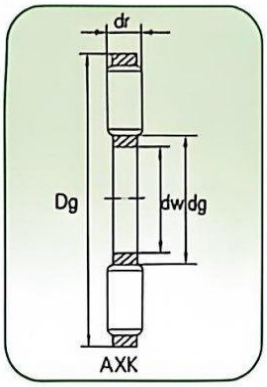
Axial Needle Roller And Assemblies

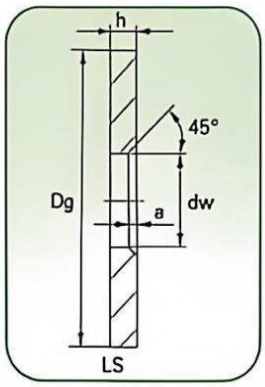


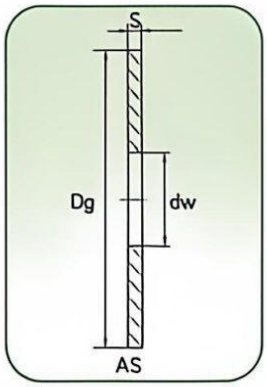
轴径 Shaft Diameter	轴承型号 Bearing Designation			重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions				基本额定负荷 Basic Load Rating		极限转速 Grenz-drah-zahl
					Di	De	H	e	动 Cr Dynamic	静 Cor Static	
mm	AXZ	ARZ	ARZ	g	mm				N		min^{-1}
5	AXZ 5,5 5 13			3,64	5	13	5,5	2	3000	5700	26000
6	AXZ 5,5 6 14			4,20	6	14	5,5	2	3150	6350	22000
7	AXZ 5,5 7 15			4,69	7	15	5,5	2	3550	7600	22000
8	AXZ 5,5 8 16			5,09	8	16	5,5	2	3700	8300	22000
9	AXZ 5,5 9 17			5,34	9	17	5,5	2	4050	9500	19000
10	AXZ 6 10 22,4			11,4	10	22,4	6	2	5000	10900	15500
		AXZ 6,5 10 22,4		12	10	22,4	6,5	2	8200	17900	15500
12	AXZ 6 12 26,4			16,7	12	26,4	6	2	6900	17700	13000
		AXZ 7 12 26,4		17	12	26,4	7	2	12700	29500	13000
15	AXZ 6 15 28,4			15,5	15	28,4	6	2	7400	20000	11500
		AXZ 7 15 28,4		19	15	28,4	7	2	14000	34000	11500
17	AXZ 6 17 30,4			17,5	17	30,4	6	2	7800	22000	10500
		AXZ 7 17 30,4		22	17	30,4	7	2	15000	39000	10500
20	AXZ 8 20 35,4			32,5	20	35,4	8	3	11800	39000	9000
		AXZ 10 20 35,4		38	20	35,4	10	3	22000	54000	9000
25	AXZ 8 25 43			47	25	43	8	3	13300	49000	7500
		AXZ 10 25 43		57	25	43	10	3	25500	70000	7500
			AXZ 11 25 53	122	25	53	11	4	32500	12200	6500
30	AXZ 8 30 48			54	30	48	8	3	14500	57000	6500
		AXZ 10 30 48		65	30	48	10	3	26500	77000	6500
			AXZ 14 30 61	196	30	61	14	5	46000	162000	5600
35	AXZ 8 35 54			66	35	54	8	3	18900	84000	5500
		AXZ 11 35 54		87	35	54	11	3	33800	94000	5500
			AXZ 14 35 69	246	35	69	14	5	51000	194000	4900
40	AXZ 8 40 61			84	40	61	8	3	20400	90000	5000
		AXZ 12 40 61		114	40	61	12	3	46000	129000	5000
			AXZ 17 40 79	387	40	79	17	6	71000	265000	4200
45	AXZ 8 45 66			92	45	66	8	3	21600	109000	4500
		AXZ 12 45 65	86	126	45	66	12	3	49000	143000	4500
			AXZ 22 45	595	45	86	22	8	92000	340000	3800
50	AXZ 10 50 71			100	50	71	8	3	22500	118000	4000
		AXZ 12 50 71		137	50	71	12	3	51000	157000	4000
			AXZ 22 50 96	756	50	98	22	8	10800	430000	3400
55			AXZ 22 55 106	917	55	106	22	8	125000	530000	3100
60	AXZ 10 60 85			194	60	86	10	4	31500	193000	3500
		AXZ 14 60 86		246	60	86	14	4	71000	255000	3500
			AXZ 22 60 111	977	60	111	22	8	130000	580000	2900
65			AXZ 22 65 116	1040	65	116	22	8	135000	620000	2800
70	AXZ 10 70 96			220	70	96	10	4	34500	223000	3000
		AXZ 14 70 96		279	70	96	14	4	77000	295000	3000
80	AXZ 80 80 106			256	80	106	10	4	36500	253000	2700
		AXZ 14 80 106		312	80	106	14	4	82000	330000	2700

推力滚针和保持架组件

Axial Needle Roller And Cage Assemblies



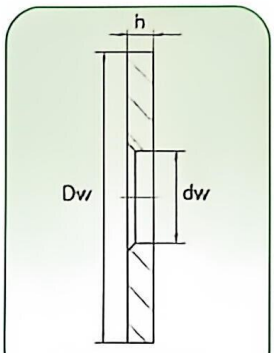




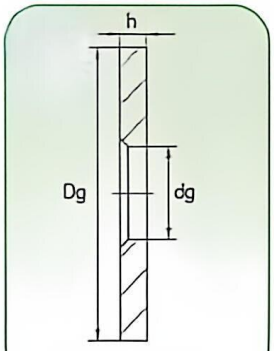
轴径 Shaft Diameter	轴承型号 Bearing Designation					外形尺寸 Boundary Dimensions								
	推力滚针和保持架组件 Axial Needl Roller and Cage Asserblies	推力垫圈 Shaft Loc. Washer	轴承垫圈 Bearing Washer	轴圈 Washer Shaft	座圈 Shaft Loc. Washer	dw	dg	Dw	Dg	dr	h	s	a	r_s min
mm						mm								
4	AXK0414TN					4	–	–	14	2				
5	AXK0515TN					5	–	–	15	2				
6	AXK0619TN					6	–	–	19	2				
8	AXK0821TN					8	–	–	21	2				
10	AXK1024	AS1024	LS1024	–	–	10	–	–	24	2	2.75	1	0.5	–
12	AXK1226	AS1226	LS1226	–	–	12	–	–	26	2	2.75	1	0.5	–
15	AXK1528	AS1528	LS1528	WS.81102	GS81102	15	16	28	28	2	2.75	1	0.5	0.3
17	AXK1730	AS1730	LS1730	WS.81103	GS81103	17	18	30	30	2	2.75	1	0.5	0.3
20	AXK2035	AS2035	LS2035	WS.81104	GS81104	20	21	35	35	2	2.75	1	0.5	0.3
25	AXK2542	AS2542	LS2543	WS.81105	GS81105	25	26	42	42	2	3	1	1	0.6
30	AXK3047	AS3047	LS3047	WS.81106	GS81106	30	32	47	47	2	3	1	1	0.6
35	AXK3552	AS3552	LS3552	WS.81107	GS81107	35	37	52	52	2	3.5	1	1	0.6
40	AXK4060	AS4060	LS4060	WS.81108	GS81108	40	42	60	60	3	3.5	1	1	0.6
45	AXK4565	AS4565	LS4565	WS.81109	GS81109	45	47	65	65	3	4	1	1	0.6
50	AXK5070	AS5070	LS5070	WS.81110	GS81110	50	52	70	70	3	4	1	1	0.6
55	AXK5578	AS5578	LS5578	WS.81111	GS81111	55	57	78	78	3	5	1	1	0.6
60	AXK6085	AS6085	LS6085	WS.81112	GS81112	60	62	85	85	3	4.75	1	1.5	1
65	AXK6590	AS6590	LS6590	WS.81113	GS81113	65	67	90	90	3	5.25	1	1.5	1
70	AXK7095	AS7095	LS7095	WS.81114	GS81114	70	72	95	95	4	5.25	1	1.5	1
75	AXK75100	AS75100	LS75100	WS.81115	GS81115	75	77	100	100	4	5.75	1	1.5	1
80	AXK80105	AS80105	LS80105	WS.81116	GS81116	80	82	105	105	4	5.75	1	1.5	1
85	AXK85110	AS85110	LS85110	WS.81117	GS81117	85	87	110	110	4	5.75	1	1.5	1
90	AXK90120	AS90120	LS90120	WS.81118	GS81118	90	92	120	120	4	6.5	1	1.5	1
100	AXK100135	AS100135	LS100135	WS.81120	GS81120	100	102	135	135	4	7	1	1.5	1
110	AXK100145	AS110145	LS110145	WS.81122	GS81122	110	112	145	145	4	7	1	1.5	1
120	AXK120155	AS120155	LS120155	WS.81124	GS81124	120	122	155	155	4	7	1	1.5	1
130	AXK130170	AS130170	LS130170	WS.81126	GS81126	130	132	170	170	5	9	1	1.5	1
140	AXK140180	AS140180	LS140180	WS.81128	GS81128	140	142	178	180	5	9.5	1	1.5	1
150	AXK150190	AS150190	LS150190	WS.81130	GS81130	150	152	188	190	5	9.5	1	1.5	1
160	AXK160200	AS160200	LS160200	WS.81132	GS81132	160	162	198	200	5	9.5	1	1.5	1

推力滚针和保持架组件

Axial Needle Roller And Cage Assemblies



WS.811，WS.812



GS.811，GS812

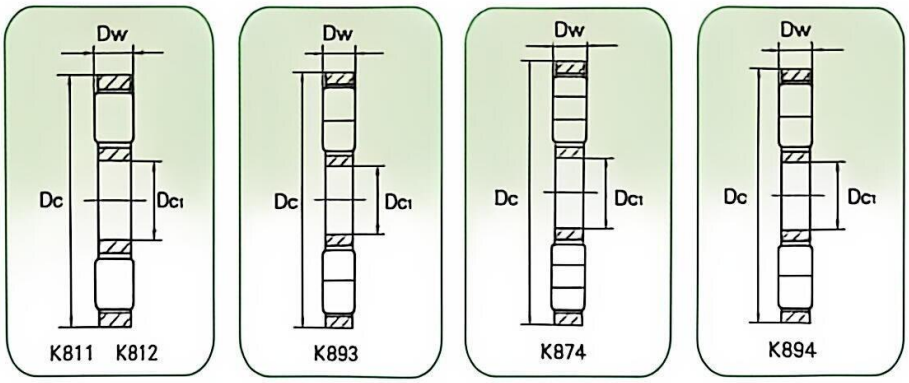
AXK+AS

重量 Mass				基本额定负荷 Basic Load Rating		极限转速 Limiting Speed	
推力滚针和保持架组件 Axial Needl Roller and Cage Assemblies	推力垫圈 Shaft Loc. Washer	轴承垫圈 Bearing Washer	轴圈或座圈 Washer Shaft	动 Cr Dynamic	静 Cor Static	脂润滑 Grease	油润滑 Oil
g				N		rpm	
0.7				4450	8000		18000
0.8				4750	9200		17000
1				6800	15500		16000
2				7800	19400		15000
2	3	7		9200	25500	14000	5000
3	3	8		9900	29000	13000	4800
3	3	9	10	11300	36000	11000	4500
3	4	9	11	11900	39500	10000	4300
5	5	13	14	13100	46500	8500	3600
6	7	19	21	14700	58000	7000	2800
7	8	22	23	16300	70000	6000	2400
8	9	29	32	17800	81000	5500	2000
16	12	40	43	28000	114000	4700	1800
18	13	50	54	30000	128000	4300	1600
20	14	55	59	32000	143000	3900	1400
26	18	88	94	38000	186000	3500	1200
35	22	97	106	44500	234000	3200	1100
36	24	115	125	46500	255000	3000	1000
55	25	123	133	54000	255000	2900	950
58	27	142	155	55000	265000	2700	900
60	28	151	165	56000	280000	2600	850
63	29	159	173	58000	290000	2400	850
81	39	234	253	73000	405000	2300	800
106	50	350	355	91000	560000	2000	700
117	55	385	385	97000	620000	1900	670
126	59	415	415	102000	680000	1700	630
198	65	663	666	133000	840000	1600	560
212	79	749	716	138000	900000	1500	530
225	84	796	761	143000	960000	1400	500
238	89	842	805	148000	102000	1300	480

TN=塑料保持架，允许工作温度：120℃连续地，180℃短期地，在充分冷却下油润滑的极限转速，脂润滑极限转速为表列数值的25%，特殊要求订货时说明。

推力圆柱滚子和保持架组件

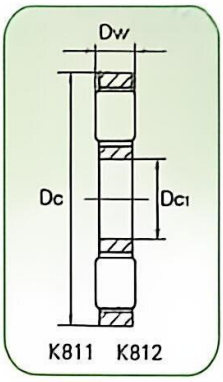
Axial Cylindrical Roller And Cage Assemblies

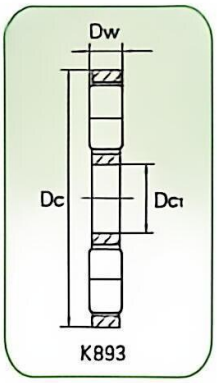


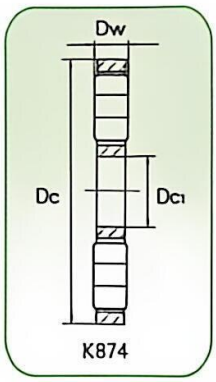
轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
			Dc1	Dc	Dw	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm		g	mm			N		rpm
15	K81102TN	6	15	28	3.5	14400	28500	11000
17	K81103TN	9	17	30	3.5	15900	33500	10000
20	K81104TN	13	20	35	4.5	24900	53000	8500
25	K81105TN	15	25	42	5	33500	76000	7000
30	K81106TN	17	30	47	5	35500	86000	6000
	K81206TN	33	30	52	7.5	64000	141000	6000
	K89306TN	40	30	60	5.5	69000	197000	5000
35	K81107TN	19	35	52	5	39000	101000	5500
	K81207TN	43	35	62	7.5	80000	199000	4900
	K89307TN	53	35	68	6	80000	237000	4600
	K89407TN	111	35	80	9	95500	430000	4200
40	K81108TN	31	40	60	6	56000	148000	4800
	K81208TN	81	40	68	9	107000	265000	4400
	K89308TN	98	40	78	7	122000	385000	4000
	K87408	127	40	90	6.5	135000	480000	3600
	K89408TN	200	40	90	10	200000	580000	3700
45	K81109TN	35	45	65	6	59000	163000	4400
	K81209TN	85	45	73	9	105000	265000	4000
	K89309TN	121	45	85	7.5	139000	445000	3600
	K87409	174	45	100	7	154000	560000	3200
	K89409TN	262	45	100	11	239000	700000	3300
50	K81110TN	38	50	70	6	61000	177000	4000
	K81210TN	98	50	78	9	117000	315000	3700
	K89310TN	175	50	95	8	167000	560000	3200
	K87410TN	256	50	110	8	200000	740000	2900
	K89410TN	360	50	110	12	295000	900000	3000
55	K81111TN	45	55	78	6	90000	300000	3600
	K81211TN	166	55	90	11	154000	405000	3300
	K89311TN	195	55	105	9	184000	600000	2900
	K87411	303	55	120	8	222000	870000	2600
	K89411TN	473	55	120	13	34000	105000	2700
60	K81112TN	82	60	85	7.5	103000	315000	3300
	K81212TN	176	60	95	11	172000	480000	3100
	K89312TN	210	60	110	9	196000	670000	2700
	K87412	380	60	130	9	260000	1000000	2500
	K89412TN	538	60	130	14	390000	1220000	2500
65	K81113TN	90	65	90	7.5	107000	340000	3100
	K81213TN	185	65	100	11	177000	500000	2900
	K89313TN	210	65	115	9	194000	670000	2600

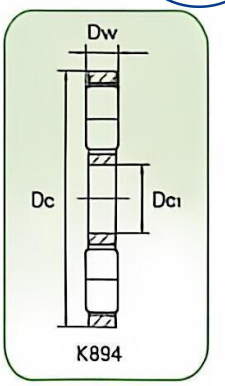
在充分冷却下油润滑的极限转速，脂润滑极限转速为表列数值的25%。

推力圆柱滚子和保持架组件
Axial Cylindrical Roller And Cage Assemblies







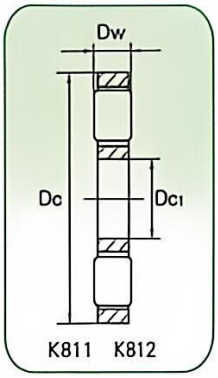


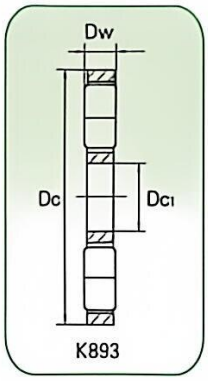
轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
			Dc1	Dc	Dw	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm		g	mm			N		rpm
65	K87431	470	65	140	10	300000	1140000	2300
	K89143TN	790	65	140	15	445000	1410000	2300
70	K81114TN	92	70	95	7.5	111000	365000	2900
	K81214TN	212	70	105	11	187000	550000	2700
	K89314TN	290	70	125	10	239000	830000	2400
	K87414	650	70	150	11	360000	1380000	2200
	K89414	920	70	150	16	450000	1390000	2100
75	K81115TN	96	75	100	7.5	105000	340000	2700
	K81215TN	195	75	110	11	172000	500000	2600
	K89315TN	375	75	135	11	285000	1010000	2200
	K87415	800	75	160	12	430000	1660000	2000
	K89415	1070	75	160	17	500000	1580000	2000
80	K81116TN	95	80	105	7.5	106000	350000	2600
	K81216TN	234	80	115	11	201000	630000	2400
	K89316TN	420	80	140	11	305000	1110000	2100
	K87416	880	80	170	12	450000	1810000	1900
	K89416	1410	80	170	18	560000	1770000	1900
85	K81117TN	118	85	110	7.5	112000	385000	2500
	K81217TN	280	85	125	12	217000	660000	2300
	K89317	540	85	150	12	325000	1140000	2000
	K87417	1030	85	180	13	485000	1920000	1800
	K89417	1610	85	180	19	620000	1980000	1800
90	K81118TN	150	90	120	9	141000	465000	2300
	K81218TN	542	90	135	14	290000	890000	2100
	K89318	620	90	155	12	330000	1200000	1900
	K87418	1130	90	190	13	510000	2090000	1700
	K89418	1870	90	190	20	680000	2200000	1700
100	K81120TN	250	100	135	11	199000	650000	2000
	K81220	600	100	150	15	285000	840000	1900
	K89320	810	100	170	13	380000	1400000	1700
	K87420	1660	100	210	15	680000	2800000	1500
	K89420	2400	100	210	22	850000	2850000	1500
110	K81122	325	110	145	11	195000	650000	1900
	K81222	685	110	160	15	300000	980000	1800
	K89322	1150	110	190	15	500000	1870000	1600
	K87422	2150	110	230	17	810000	3350000	1400
	K89422	3300	110	230	24	1000000	3400000	1400
120	K81124	340	120	155	11	203000	700000	1700
	K81224	730	120	170	15	310000	950000	1700

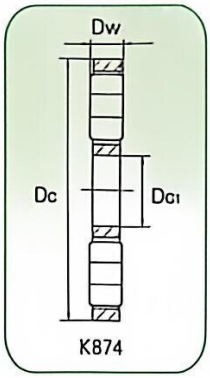
在充分冷却下油润滑的极限转速，脂润滑极限转速为表列数值的25%。

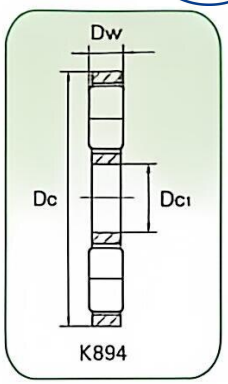
推力圆柱滚子和保持架组件

Axial Cylindrical Roller And Cage Assemblies







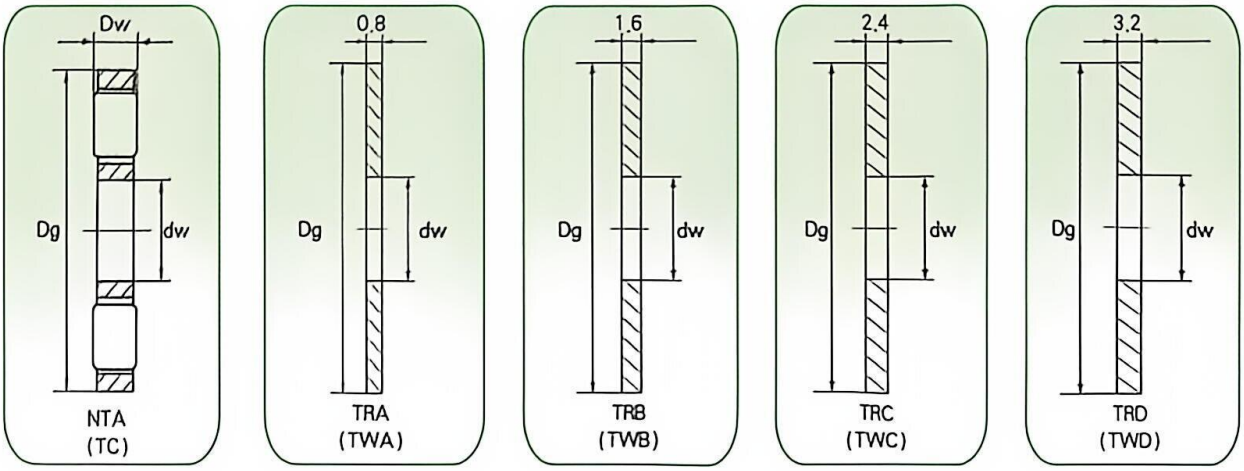


轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
			Dc1	Dc	Dw	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm		g	mm			N		rpm
120	K89324	1720	120	210	17	639500	2417600	1400
	K87424	2920	120	250	18	959600	4097900	1300
	K89424	4300	120	250	26	1159500	3987900	1300
130	K81126	414	130	170	12	232700	809600	1600
	K81226	1144	130	190	19	424500	1287900	1500
	K89326	1910	130	225	18	709600	2697900	1300
	K87426	3410	130	270	19	1049500	4549600	1200
	K89426	5000	130	270	28	1329700	4599800	1200
140	K81128	448	140	180	12	241800	865900	1500
	K81228	1197	140	200	19	444500	1449700	1400
	K89328	2390	140	240	19	819700	3198900	1200
	K87428	3680	140	280	19	1109800	4749800	1100
	K89428	6000	140	280	28	1379600	4949800	1100
150	K81130	474	150	190	12	249600	929700	1400
	K81230	1520	150	215	21	589600	1938900	1300
	K89330	2510	150	250	19	837900	3347900	1200
	K87430	4450	150	300	21	1259800	5497900	1000
	K89430	7100	150	300	30	1569500	5698900	1000
85	K81132	505	160	200	12	259600	989600	1300
	K81232	1603	160	225	21	599500	2028900	1200
	K89332	3150	160	270	21	969600	3898800	1100
	K87432	5330	160	320	22	1447800	6598800	1000
	K89432	8600	160	320	32	1778600	6498800	950

在充分冷却下油润滑的极限转速，脂润滑极限转速为表列数值的25%。

推力圆柱滚子和保持架组件

Axial Cylindrical Roller And Cage Assemblies

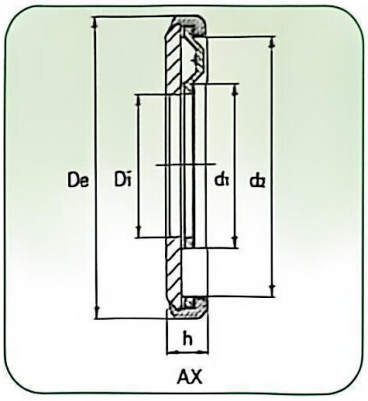


轴径 Shaft Diameter	轴承型号 Bearing Designation	外形尺寸 Boundary Dimensions						基本额定负荷 Basic Load Rating		极限转速 Limiting Speed	垫圈 Thrust Washer Designation TWA... TWB... TWC... TWD...
		dw/d		Dg/D		Dw		动 Cr Dynamic	静 Cor Static	油润滑 Oil	
mm		inch	mm	inch	mm	inch	mm	N		rpm	
1/4	NTA411	0.250	6.35	0.687	17.45	0.0781	1.984	1370	3000	16000	411
5/16	NTA512	0.312	7.94	0.750	19.05	0.0781	1.984	1560	3650	15000	512
3/8	NTA613	0.375	9.52	0.812	20.62	0.0781	1.984	1620	4000	15000	613
1/2	NTA815	0.500	12.70	0.937	23.80	0.0781	1.984	1920	5300	13000	815
5/8	NTA1018	0.625	15.88	1.125	28.58	0.0781	1.984	2170	6600	11000	1018
3/4	NTA1220	0.750	19.05	1.250	31.75	0.0781	1.984	2410	8000	9500	1220
7/8	NTA1423	0.875	22.22	1.437	36.50	0.0781	1.984	2900	10500	8500	1423
	NTA1427	0.875	22.22	1.687	42.85	0.0781	1.984	4400	18600	7500	1427
1	NTA1625	1.000	25.40	1.562	39.67	0.0781	1.984	3150	12100	7500	1625
1 1/8	NTA1828	1.125	28.58	1.750	44.45	0.0781	1.984	3850	16300	6500	1828
1 3/16	NTA1931	1.188	30.18	1.937	49.20	0.0781	1.984	4500	20500	6000	1931
1 1/4	NTA2031	1.250	31.73	1.937	49.20	0.0781	1.984	4500	20500	6000	2031
1 3/8	NTA2233	1.375	34.92	2.062	52.37	0.0781	1.984	4600	21600	5500	2233
1 1/2	NTA2435	1.500	38.10	2.187	55.55	0.0781	1.984	4850	23700	5000	2435
1 3/4	NTA2840	1.750	44.45	2.500	63.50	0.0781	1.984	5600	30000	4500	2840
2	NTA3244	2.000	60.80	2.750	69.85	0.0781	1.984	5800	32500	4000	3244
2 1/4	NTA3648	2.250	57.15	3.000	76.20	0.0781	1.984	6000	35000	3600	3648
2 1/2	NTA4052	2.500	63.50	3.250	82.55	0.0781	1.984	6200	37500	3000	4052
3	NTA4860	3.000	76.20	3.750	95.25	0.0781	1.984	6600	42500	2800	4860
3 1/4	NTA5266	3.250	82.55	4.125	104.78	0.1250	3.175	10900	61000	2600	5266
4 1/8	NTA6681	4.125	104.78	5.062	128.57	0.1250	3.175	14200	92000	2100	6681

在充分冷却下油润滑的极限转速，脂润滑极限转速为表列数值的25%。

推力滚针和保持架组件

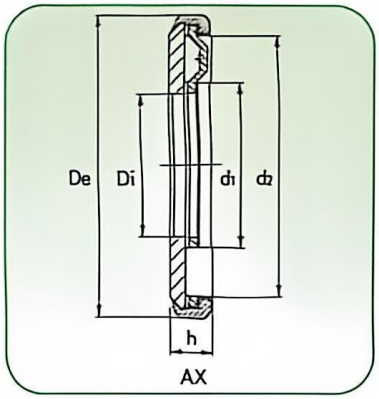
Axial Needle Roller And Cage Assemblies



轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions					基本额定负荷 Basic Load Ratings		极限转速 Limiting Speed
	AX Baureihe dunn	AX Baureihe dick		Di	De	h	d_1	d_2	动 Dyn. Ca	静 Stat. Coa	Grenzdreh-zahl
mm			g	mm					N		min^{-1}
5	AX 5 13	AX 3,5 5 13	1,3	5	13	2,3	6,3	10,9	3000	5700	25000
			2,3	5	13	3,5	6,3	10,9	3000	5700	25000
6	AX 6 14	AX 3,5 6 14	1,4	6	14	2,3	7,3	11,9	3150	6350	22000
			2,4	6	14	3,5	7,3	11,9	3150	6350	22000
7	AX 7 15	AX 3,5 7 15	1,7	7	15	2,3	8,3	12,9	3550	7600	22000
			2,9	7	15	3,5	8,3	12,9	3550	7600	22000
8	AX 8 16	AX 3,5 8 16	1,7	8	16	2,3	9,3	13,9	3700	8300	22000
			3	8	16	3,5	9,3	13,9	3700	8300	22000
9	AX 9 17	AX 3,5 9 17	2,1	9	17	2,3	10,3	14,9	4050	9500	19000
			3,5	9	17	3,5	10,3	14,9	4050	9500	19000
10	AX 10 22	AX 4 10 22	4	10	22	2,8	12	18,6	5000	10900	15500
			6,5	10	22	4	12	18,6	5000	10900	15500
12	AX 12 26	AX 4 12 26	6	12	26	2,8	15	22,6	6900	17700	13000
			10	12	26	4	15	22,6	6900	17700	13000
13	AX 13 26	AX 4 13 26	6	13	26	2,8	15	22,6	6900	17700	13000
			9,8	13	26	4	15	22,6	6900	17700	11300
15	AX 15 28	AX 4 15 28	6,9	15	28	2,8	17	24,6	7400	20000	11500
			9	15	28	4	17	24,6	7400	20000	11500
17	AX 17 30	AX 4 17 30	7,6	17	30	2,8	19	26,6	7800	22000	10500
			10	17	30	4	19	26,6	7800	22000	10500
19	AX 19 32	AX 4 19 32	8,6	19	32	2,8	21	28,6	8000	23300	10000
			13	19	32	4	21	28,6	8000	23300	10000
20	AX 20 35	AX 5 20 35	10,2	20	35	2,8	22	31,6	11800	39000	9000
			18	20	35	5	22	31,6	11800	39000	9000
25	AX 25 42	AX 5 25 42	11,5	25	42	2,8	27,7	37,4	13300	49000	7500
			25	25	42	5	27,7	37,4	13300	49000	7500
27	AX 27 44		12,1	27	44	2,8	30	39,5	13700	52000	7200
30	AX 30 47	AX 5 30 47	13,7	30	47	2,8	32,7	42,4	14500	57000	6500
			29	30	47	5	32,7	42,4	14500	57000	6500
35	AX 35 52	AX 5 35 52	18,5	35	52	2,8	37,2	49	18900	84000	5500
			35	35	52	5	37,2	49	18900	84000	5500
	AX 35 53	AX 5 35 53	19,3	35	53	2,8	37,2	49	18900	84000	5500
			36	35	53	5	37,2	49	18900	84000	5500
40	AX 40 60	AX 5 40 60	23,9	40	60	2,8	43	54,9	20400	96000	5000
			45	40	60	5	43	54,9	20400	96000	5000
45	AX 45 65	AX 5 45 65	24,7	45	65	2,8	48	59,9	21800	109000	4500
			50	45	65	5	48	59,9	21800	109000	4500

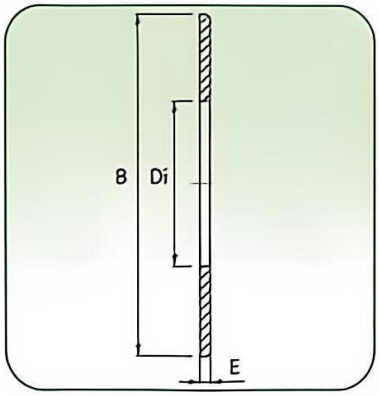
推力滚针和保持架组件

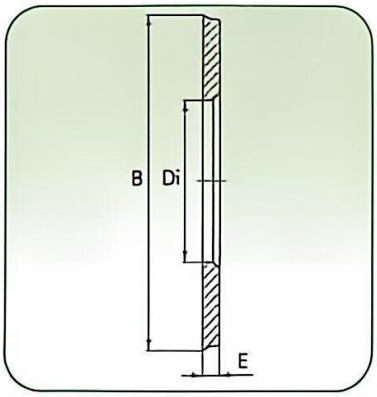
Axial Needle Rolller And Cage Assemblies



轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions					基本额定负荷 Basic Load Ratings		极限转速 Limiting Speed
	AX Baureihe dunn	AX Baureihe dick		Di	De	h	d1	d2	动 Dyn. Ca	静 Stat. Coa	Grenzdreh-zahl min⁻¹
mm			g	mm					N		
50	AX 50 70		25.5	50	70	2.8	53.3	55.7	19100	52000	4000
		AX 5 50 70	55	50	70	5	53.3	65.7	19100	52000	4000
55	AX 55 78		34	55	78	2.8	58.4	72.5	24000	72000	3800
		AX 5 55 75	80	55	78	6	58.4	72.5	24000	72000	3800
60	AX 60 85		40	60	85	2.8	63.5	79.2	26600	85000	3500
		AX 6 60 85	106	60	85	6	63.5	79.2	26600	85000	3500
65	AX 3.5 65 90		54	65	90	3.5	68.5	84.2	28000	92500	3200
		AX 6 65 90	114	65	90	6	68.5	84.2	28000	92500	3200
70	AX 3.5 70 95		61	70	95	3.5	73.5	89.2	28800	98000	3000
		AX 6 70 95	120	70	95	6	73.5	89.2	28800	98000	3000
75	AX 3.5 75 100		65	75	100	3.5	78.5	94.2	30200	106000	2800
		AX 6 75 100	127	75	100	6	78.5	94.2	30200	106000	2800
80	AX 3.5 80 105		69	80	105	3.5	83.5	99.2	30900	111000	2700
		AX 6 80 105	134	80	105	6	83.5	99.2	30900	111000	2700
85	AX 3.5 85 110		78	85	110	3.5	88.5	104.2	32300	119000	2600
		AX 6 85 110	147	85	110	6	88.5	104.2	32300	119000	2600
90	AX 4.5 90 120		117	90	120	4.5	94.2	112.9	49400	160000	2400
		AX 8 90 120	238	90	120	8	94.2	112.9	49400	160000	2400
100	AX 4.5 100 135		155	100	135	4.5	104.2	127.3	61000	216000	2000
		AX 9 100 135	314	100	135	9	104.2	127.3	61000	216000	2000
110	AX 4.5 110 145		168	110	145	4.5	114.2	137.3	65000	241000	2000
		AX 9 110 145	420	110	145	9	114.2	137.3	65000	241000	2000
120	AX 4.5 120 155		182	120	155	4.5	124.2	147.3	67600	259000	1800
		AX 9 120 155	454	120	155	9	124.2	147.3	67600	259000	1800
130		AX 11 130 170	660	130	170	11	135	151	89000	313000	1700
140		AX 11 140 180	670	140	180	11	145	171	93600	339000	1600
150		AX 11 150 190	740	150	190	11	165	181	97500	368000	1500
160		AX 11 160 200	760	160	200	11	165	191	99500	283000	1400
170		AX 12 170 215	1000	170	215	12	175	201	137000	508000	1300
180		AX 12 180 220	1050	180	225	12	185	217	144000	547000	1200
190		AX 14 190 240	1400	190	240	14	186	232	192000	714000	1200
200		AX 14 200 250	1500	200	250	14	206	242	198000	752000	1000
220		AX 14 220 270	1600	220	270	14	228	252	205000	810000	1000
240		AX 15 240 300	2300	240	300	15	246	288	222000	974000	800

推力垫圈
Thrust Gaskets





轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			轴承型号 Bearing Designation	
	CP Baureihe dunn	CP Baureihe dick		Di	B	E	AX Baureihe dunn	AX Baureihe dick
mm			g	mm				
5	CP 5 13		0,6	5	12,4	0,8	AX 5 13	AX 3,5 5 13
		CP 2 5 13	1,6	5	12,4	2		
6	CP 6 14		0,7	6	13,4	0,8	AX 6 14	AX 3,5 6 14
		CP 2 6 14	1,7	6	13,4	2		
7	CP 7 15		0,8	7	14,4	0,8	AX 7 15	AX 3,5 7 15
		CP 2 7 15	2	7	14,4	2		
8	CP 8 16		0,8	8	15,4	0,8	AX 8 16	AX 3,5 8 16
		CP 2 8 16	2,1	8	15,4	2		
9	CP 9 17		0,9	9	16,4	0,8	AX 9 17	AX 3,5 9 17
		CP 2 9 17	2,3	9	16,4	2		
10	CP 10 22		1,7	10	21,5	0,8	AX 10 22	AX 4 10 22
		CP 2 10 22	4,3	10	21,5	2		
12	CP 12 26		2,5	12	25,5	0,8	AX 12 26	AX 4 12 26
		CP 2 12 26	6,2	12	25,5	2		
13	CP 13 26		2,4	13	25,5	0,8	AX 13 26	AX 4 13 26
		CP 2 13 26	5,9	13	25,5	2		
15	CP 15 28		2,5	15	27,5	0,8	AX 15 28	AX 4 15 28
		CP 2 15 28	6	15	27,5	2		
17	CP 17 30		2,8	17	29,5	0,8	AX 17 30	AX 4 17 30
		CP 2 17 30	7	17	29,5	2		
19	CP 19 32		3,5	19	31,5	0,8	AX 19 32	AX 4 19 32
		CP 2 19 32	9	19	31,5	2		
20	CP 20 35		3,8	20	34,5	0,8	AX 20 35	AX 5 20 35
		CP 3 20 35	13	20	34,5	3		
25	CP 25 42		5,3	25	41,5	0,8	AX 25 42	AX 5 25 42
		CP 3 25 42	19	25	41,5	3		
27	CP 27 44		5,8	27	43,7	0,8	AX 27 44	
30	CP 30 47	CP 3 30 47	6	30	46,5	0,8	AX 30 47	AX 5 30 47
			22	30	46,5	3		
35	CP 35 52	CP 3 35 52	7	35	51,5	0,8	AX 35 52	AX 5 35 52
			26	35	51,5	3		
	CP 35 53	CP 3 35 53	7,4	35	52,5	0,8	AX 35 53	AX 5 35 53
			27	35	52,5	3		
40	CP 40 60	CP 3 40 60	9,3	40	59,5	0,8	AX 40 60	AX 5 40 60
			34	40	59,5	3		
45	CP 45 65	CP 3 45 65	10	45	64,4	0,8	AX 45 65	AX 5 45 65
			37	45	64,4	3		

向心滚针和保持架组件
连杆支承(曲柄销、活塞销)用滚针和保持架组件

Radial Needle Roller and Cage Assemblies
For Crank pin of Engine Connecting Rod
For Piston Pin of Engine Connecting Rod

1. 简介

向心滚针和保持架组件是独立的滚动元件，其保持架的两引导面间距宽广，既能精确引导滚针，又可保持滚针的正确位置。该类轴承适用于轴和座孔可作为滚道的场合，只须将轴和轴承座孔滚道加工至规定尺寸精度和几何精度，即可确保最小空间的高旋转精度。

2. 结构形式

表1

K	向心滚针和保持架组件
KK	双列向心滚针和保持架组件
K...D	向心滚针和保持架组件...剖分式
KK...D	双列向心滚针和保持架组件...剖分式

该类轴承的保持架结构型式主要有M型保持架和K型保持架，保持架材质一般使用优质碳素结构钢，也可根据需要采用15CrMo、20CrMo等低碳优质合金钢或塑料（增强尼龙）保持架。钢质保持架经化学处理后，具有足够的强度和耐磨性，塑料保持架允许运转温度为120℃，如短期运行可允许180℃。

滚针分组，在同一套组件中的滚针，其平均直径的上下偏差为2-3μm。

3. 轴和外壳座孔与组件配合处的技术要求

当向心滚针和保持架组件直接在轴和壳体之间运转时，支承的径向游隙取决于轴和壳体滚道的加工公差，当外壳孔的尺寸公差为G6时，轴的尺寸公差推荐于表 2 。

轴的公称尺寸

表2

轴的公称尺寸		径向游隙		
超过	到	小于正常	正常	大于正常
3	80	j5	h5	g6
80	250	h5	g5	f6

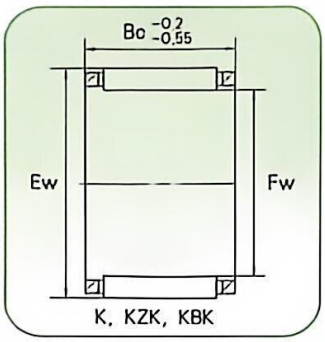
轴表面硬度必须达到58－64HRC，淬硬层深度0.6-1mm，表面粗糙度Ra不大于0．2μm。

4. KZK为连杆曲柄销用滚针和保持架组件

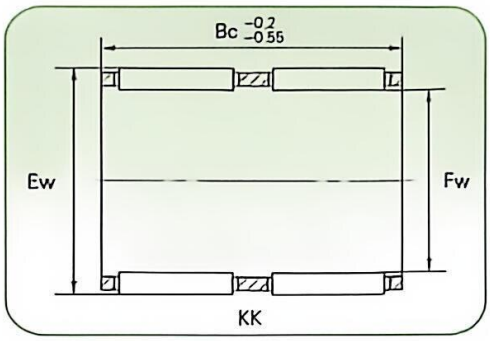
5. KBK为连杆活塞销用滚针和保持架组件

向心滚针和保持架组件

Radial Needle Roller And Cage Assemblies



K, KZK, KBK



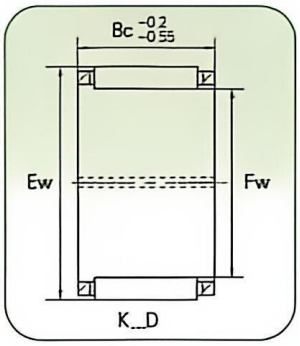
KK

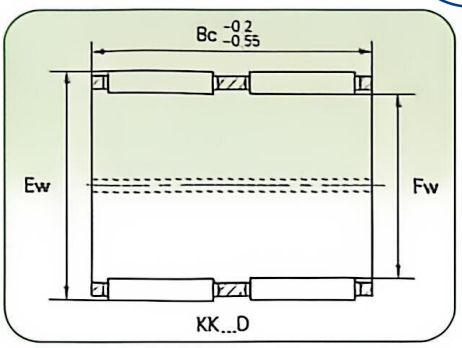
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	Ew	Bc	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
5	K5 × 8 × 8TN	29241/5	0.7	5	8	8	2300	1920	39000
	K5 × 8 × 10TN	39241/5	0.9	5	8	10	3000	2650	39000
6	K6 × 9 × 8TN	29241/6	0.8	6	9	8	2600	2280	37000
7	K7 × 10 × 8TN	29241/7	0.9	7	10	8	2850	2650	34000
8	K8 × 11 × 8TN	29241/8	1.1	8	11	8	3100	3000	32000
	K8 × 11 × 10TN	39241/8	1.7	8	11	10	3950	4100	32000
	K8 × 12 × 10TN	29242/8	1.3	8	12	10	5100	5800	32000
9	K9 × 12 × 10TN	39241/9	1.5	9	12	10	4500	5000	31000
10	K10 × 13 × 10TN	39241/10	1.6	10	13	10	4750	5500	29000
	K10 × 13 × 13TN	39241/10	2.1	10	13	13	6200	7800	29000
	K10 × 14 × 10TN	29242/10	2.2	10	14	10	5800	6000	29000
12	K12 × 15 × 10TN	39241/12	1.9	12	15	10	4900	6100	27000
	K12 × 16 × 8	19242/12	2.9	12	16	8	4200	4700	27000
	K12 × 16 × 13TN	39242/12	3.4	12	16	13	8000	9400	27000
	K12 × 18 × 12TN	19244/12	5	12	18	12	10000	9900	26000
14	K14 × 18 × 13	39241/14	6.3	14	18	13	8200	10100	25000
	K14 × 18 × 15	49241/14	7.3	14	18	15	10400	13900	25000
	K14 × 18 × 17	59241/14	8.1	14	18	17	10800	14400	25000
15	K15 × 18 × 17	–	6.4	15	18	17	9900	16100	25000
	K15 × 19 × 17	59241/15	8.8	15	19	17	11300	15600	24000
	K15 × 21 × 12	19243/15	10	15	21	12	10000	13000	24000
16	K16 × 20 × 17	59241/16	9.2	16	20	17	11700	16800	24000
	K16 × 22 × 12	19243/16	10.4	16	22	12	11500	12500	23000
	K16 × 22 × 16	–	13.7	16	22	16	14800	17500	23000
17	K17 × 21 × 10	29241/17	5.6	17	21	10	8100	10600	23000
18	K18 × 22 × 17	59241/18	10.8	18	22	17	12100	18000	22000
	K18 × 24 × 12	19243/18	11.6	18	24	12	11700	13300	22000
	K18 × 25 × 14	–	14.9	18	25	14	16800	19300	22000
19	K19 × 23 × 17	–	11.1	19	23	17	12500	19200	22000
20	K20 × 24 × 17	59241/20	11.2	20	24	17	12900	20400	21000
	K20 × 26 × 12	19243/20	13.2	20	26	12	13400	16200	21000
	K20 × 26 × 17	39243/20	18.2	20	26	17	19200	26000	21000
	K20 × 26 × 20	49243/20	22	20	26	20	21100	29000	21000
	K20 × 28 × 20	19245/20	26.8	20	28	20	23900	28500	20000
21	K21 × 25 × 13	–	9	21	25	13	10100	15100	21000
22	K22 × 26 × 10	29241/22	7.1	22	26	10	9100	13400	20000
	K22 × 26 × 17	59241/22	12.1	22	26	17	13700	22700	20000
	K22 × 27 × 13	29242/22	10.8	22	27	13	14500	23500	20000
	K22 × 28 × 17	39243/22	19.7	22	28	17	19400	27000	20000
	K22 × 29 × 16	19244/22	22.2	22	29	16	20000	25500	19000
24	K24 × 28 × 10	–	8.1	24	28	10	9600	14800	19000
	K24 × 28 × 13	–	10.1	24	28	13	11000	17600	19000
	K24 × 28 × 17	9243/24	13.2	24	28	17	14500	25000	19000
25	K25 × 29 × 13	39241/25	10.4	25	29	13	11300	18400	18000

TN=塑料保持架，允许的工作温度：120℃连续地。脂润滑极限转速为表列数值的60%，特殊要求订货时说明。

向心滚针和保持架组件

Radial Needle Roller And Cage Assemblies



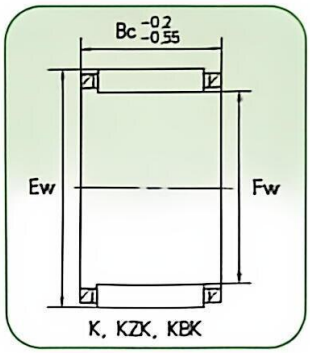


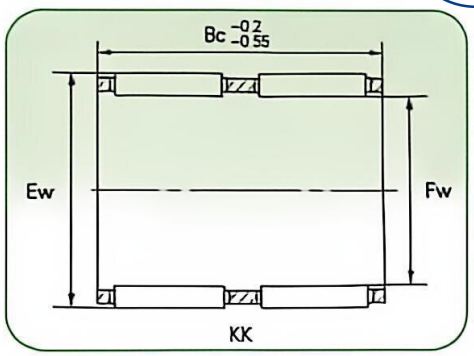
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	Ew	Bc	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
25	K25 × 30 × 13	29242/25	12.9	25	30	13	14600	21800	18000
	K25 × 30 × 26	SZ-436	21.6	25	30	26	21000	26800	18000
	K25 × 31 × 21	39243/25	26.2	25	31	21	24700	38000	18000
	K25 × 33 × 20	19245/25	32	25	33	20	28500	38000	17000
	K25 × 35 × 30	39245/25	65.5	25	35	30	47000	62000	16000
26	K26 × 30 × 17	–	15	26	30	17	15200	27500	18000
27	K27 × 32 × 17	–	29	27	32	17	16500	34500	18000
28	K28 × 33 × 13	29241/28	15.2	28	33	13	15300	24200	16000
	K28 × 33 × 17	49241/28	19.5	28	33	17	19700	33500	16000
	K28 × 34 × 17	39242/28	24.2	28	34	17	21800	33500	16000
	K28 × 35 × 20	29243/28	35	28	35	20	24000	34000	16000
30	K30 × 35 × 17	49241/30	21.3	30	35	17	19600	34000	15000
	K30 × 35 × 27	19241/30	33.3	30	35	27	30500	59000	15000
	K30 × 38 × 25	29244/30	43	30	38	25	16000	39000	13000
	K30 × 40 × 30	49243/30	78	30	40	30	49000	69000	15000
32	K32 × 37 × 13	29241/32	18.3	32	37	13	15500	25500	14000
	K32 × 38 × 20	49242/32	31	32	38	20	26500	45000	14000
	K32 × 39 × 16	19243/32	36.7	32	39	16	23800	35500	14000
	K32 × 40 × 20	19244/32	48	32	40	20	37000	40500	12000
35	K35 × 40 × 17	49241/35	25.3	35	40	17	20800	38500	13000
	K35 × 40 × 27	79241/35	28	35	40	27	28500	63000	13000
	K35 × 42 × 16	19243/35	34	35	42	16	24400	37500	13000
	K35 × 42 × 30	49243/35	62.4	35	42	30	39000	68000	13000
	K35 × 45 × 30	29245/35	80	35	45	30	53000	79000	12000
	K35 × 42 × 20...D	29243/35	41	35	42	20	29500	48500	11000
38	K38 × 43 × 27	79241/38	43.2	38	43	27	31500	68000	12000
	K38 × 46 × 20	19244/38	46	38	46	20	35500	57000	12000
40	K40 × 45 × 17	49241/40	27.4	40	45	17	21400	41500	12000
	K40 × 45 × 27	19241/40	46	40	45	27	33000	73000	12000
	K40 × 48 × 20	19244/40	57.7	40	48	20	36000	59000	11000
42	K42 × 47 × 13	29241/42	22.5	42	47	13	17800	33500	11000
	K42 × 47 × 27	79241/42	46.6	42	47	27	33500	75000	11000
	K42 × 50 × 20	19244/42	54	42	50	20	35000	57000	11000
45	K45 × 50 × 17	49241/45	25.5	45	50	17	22500	46000	10000
	K45 × 50 × 27	19241/45	50	45	50	27	34500	80000	10000
	K45 × 53 × 20	19244/45	62.2	45	53	20	39000	67000	10000
48	K48 × 54 × 19	39242/48	44	48	54	19	30500	61000	9500
50	K50 × 55 × 17...D	49241/50	35	50	55	17	21400	46500	7500
	K50 × 55 × 30	9243/50	59.4	50	55	30	39000	97000	9500
	K50 × 58 × 20	19244/50	64.9	50	58	20	35500	62000	9000
	K50 × 58 × 25	29244/50	81	50	58	25	44000	81000	9000
55	K55 × 61 × 20	49241/55	56	55	61	20	41000	11000	6500
	K55 × 63 × 25	29243/55	88	55	63	25	50000	100000	8500
60	K60 × 65 × 30	69241/60	71.2	60	65	30	42500	116000	8000

TN=塑料保持架、允许的工作温度：120℃连续地。脂润滑极限转速为表列数值的60%，特殊要求订货时说明。

向心滚针和保持架组件

Radial Needle Roller And Cage Assemblies



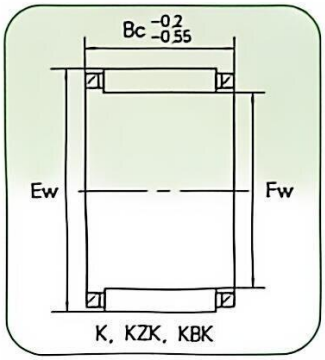


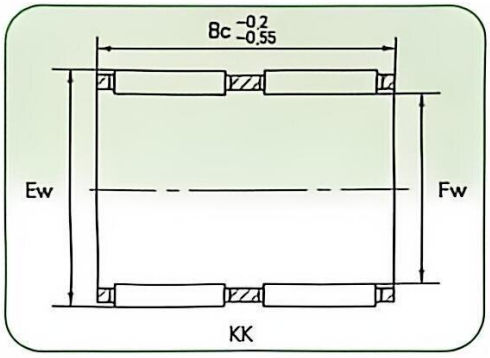
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	Ew	Bc	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
60	K60 × 68 × 20	19243/60	79	60	68	20	43500	85000	7500
	K60 × 68 × 25	29243/60	97	60	68	25	53000	111000	7500
65	K65 × 70 × 20	49241/65	49	65	70	20	30500	77000	7500
	K65 × 73 × 30	39243/65	126	65	73	30	57000	123000	7000
68	K68 × 74 × 30	69241/68	97	68	74	30	46500	118000	7000
70	K70 × 76 × 20	49241/70	70	70	76	20	36000	86000	6500
	K70 × 78 × 25	29243/70	115	70	78	25	52000	112000	6500
	K70 × 78 × 30	39243/70	136	70	78	30	60000	135000	6500
72	K72 × 80 × 20	19243/72	94	72	80	20	41500	85000	6500
75	K75 × 81 × 20	49241/75	72	75	81	20	37500	94000	6500
	K75 × 83 × 30	39243/75	147	75	83	30	62000	143000	6000
80	K80 × 86 × 20	49241/80	76	80	86	20	38500	98000	6000
90	K90 × 98 × 30	39242/90	172	90	98	30	68000	172000	5000
95	K95 × 103 × 30	39242/95	177	95	103	30	69000	178000	4900
100	K100 × 108 × 30	39242/100	190	100	108	30	71000	188000	4700
105	K105 × 113 × 30	39242/105	198	105	113	30	72000	197000	4500

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating	
	现行的 Current	原型号 Original Code		Fw	Ew	Bc	动 Cr Dynamic	静 Cor Static
mm			g	mm			N	
8	KZK8 × 12 × 8	19242/8	1.9	8	12	8	4700	4580
10	KZK10 × 14 × 10	29242/10	3.3	10	14	10	5000	5160
12	KZK12 × 15 × 13	49241/12	3.6	12	15	13	5300	7400
	KZK12 × 17 × 10	19243/12	5	12	17	10	7400	7400
	KZK12 × 18 × 10	19242/12	7.8	12	18	10	7400	7200
14	KZK14 × 18 × 10	29241/14	4	14	18	10	7100	8500
	KZK14 × 19 × 10	19242/14	5.5	14	19	10	7300	7600
15	KZK15 × 19 × 10	29241/15	6	15	19	10	7200	8400
	KZK15 × 20 × 10	19242/15	7.5	15	20	10	7800	9100
	KZK15 × 21 × 10	–	8.5	15	21	10	8400	10500
16	KZK16 × 20 × 10	29241/16	5.8	16	20	10	8200	9200
	KZK16 × 20 × 24	79241/16	6.3	16	20	24	8700	9400
	KZK16 × 21 × 10	19242/16	5.8	16	21	10	8800	9800
	KZK16 × 22 × 12	19243/16	9.5	16	22	12	11000	11900
17	KZK17 × 21 × 10	29241/17	6.7	17	21	10	7600	9000
18	KZK18 × 22 × 10	29241/18	6.9	18	22	10	7600	9800
	KZK18 × 24 × 11.6	19243/18	10	18	24	11.6	11600	13100
	KZK18 × 24 × 12	19243/18	10	18	24	12	11600	13100
	KZK18 × 24 × 15	29243/18	14	18	24	15	13200	15500
19	KZK19 × 28 × 14	–	20	19	28	14	12100	15000
20	KZK20 × 26 × 12	19243/20	9.6	20	26	12	10100	12500
	KZK20 × 26 × 14	–	12	20	26	14	12600	16700

向心滚针和保持架组件

Radial Needle Roller And Cage Assemblies

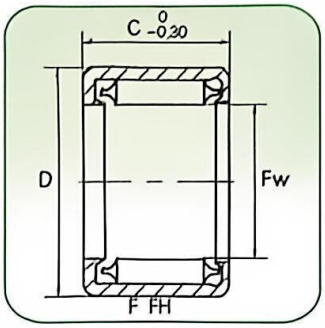


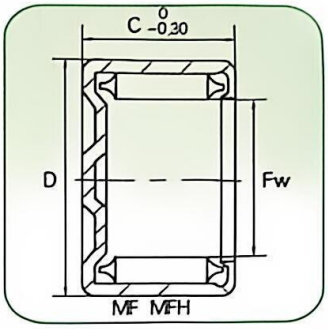


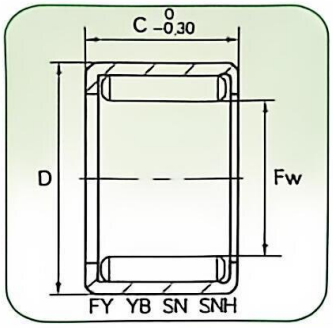
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating	
	现行的 Current	原型号 Original Code		Fw	Ew	Bc	动 Cr Dynamic	静 Cor Static
mm			g	mm			N	
20	KZK20 × 26 × 17	9246/20	17	20	26	17	12700	17600
22	KZK22 × 28 × 14	–	16	22	28	14	12600	16800
	KZK22 × 28 × 15	29242/22	16.7	22	28	15	13500	18500
	KZK22 × 28 × 16	29243/22K	18	22	28	16	14400	20100
	KZK22 × 29 × 16	19244/22	19	22	29	16	17800	21800
	KZK22 × 30 × 16	SZ-432	25.7	22	30	16	18700	22300
23.1	KZK23.1 × 28.1 × 14	29242/23.1	12.9	23.1	28.1	14	10600	15800
25	KZK25 × 30 × 28	69245/25	24	25	30	28	13300	15200
	KZK25 × 31 × 12	19243/25K	16	25	31	12	8700	8800
	KZK25 × 31 × 17	39243/25	23	25	31	17	9200	9750
	KZK25 × 31 × 20	49243/25	26	25	31	20	9700	10600
	KZK25 × 32 × 16	19244/25	22.7	25	32	16	18200	23100
26	KZK26 × 34 × 16	9248/26	25	26	34	16	11700	17500
28	KZK28 × 35 × 16	19243/28	27	28	35	16	18900	25000
30	KZK30 × 37 × 16	19243/30	29	30	37	16	21500	30500
32	KZK32 × 40 × 22	19244/32K	50	32	40	22	27800	39300
35	KZK35 × 42 × 20	29243/35	40	35	42	20	26000	40500
38	KZK38 × 46 × 20	19244/38	50	38	46	20	31100	43000
40	KZK40 × 48 × 20	19244/40	54	40	48	20	32500	51000
8	KBK8 × 11 × 10	39241/8	1.85	8	11	10	3500	4000
	KBK8 × 12 × 10	29242/8	2	8	12	10	3700	4100
9	KBK9 × 12 × 13	49241/9	2.75	9	12	13	4600	5800
	KBK9 × 13 × 12	39242/9	4.1	9	13	12	5300	5700
	KBK9 × 13 × 13	39242/9	5.1	9	13	13	5350	5600
10	KBK10 × 13 × 8	29241/10	2	10	13	8	4000	5000
	KBK10 × 13 × 10	39241/10	2.4	10	13	10	4200	5200
	KBK10 × 13 × 14.5	59241/10	5.1	10	13	14.5	5400	6600
	KBK10 × 14 × 10	29242/10	3.4	10	14	10	4400	4600
	KBK10 × 14 × 13	39242/10	5.4	10	14	13	5600	6200
12	KBK12 × 15 × 13	49241/12	4.6	12	15	13	5900	7700
	KBK12 × 15 × 15	59241/12	5.6	12	15	15	6000	7900
	KBK12 × 15 × 17	69241/12	6.3	12	15	17	7000	10000
	KBK12 × 16 × 13	39242/12	6.7	12	16	13	6900	7800
	KBK12 × 16 × 16	59241/12	8.5	12	16	16	8000	9500
	KBK12 × 16 × 17	59242/12	9.2	12	16	17	7900	9400
14	KBK14 × 18 × 10	29241/14	4.6	14	18	10	6260	7400
	KBK14 × 18 × 13	39241/14	7.6	14	18	13	7300	8700
	KBK14 × 18 × 15	49241/14	8.3	14	18	15	7600	8990
	KBK14 × 18 × 17	59241/14	10.1	14	18	17	9600	12400
	KBK14 × 18 × 20	69241/14	12	14	18	20	10500	11500
15	KBK15 × 19 × 10	29241/15Y	5	15	19	10	6500	8600
	KBK15 × 19 × 20	69241/15	12.9	15	19	20	11300	15500
16	KBK16 × 21 × 19	59242/16	16	16	21	19	13000	18700
18	KBK18 × 23 × 23	69242/18	20	18	23	23	10500	12000

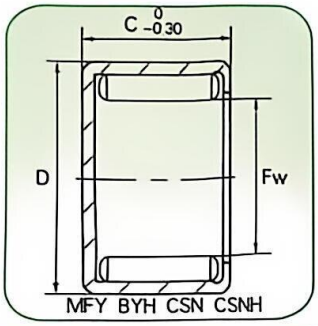
公英制冲压外圈满装滚针轴承
尖头滚针、平头滚针、穿孔型、封口型

Metic and Inch Drawn Cup Needle Roller Bearings Full Roller Complement
Open End. Closed End, Mechanically Retained Rollers, Grease Retained Rollers







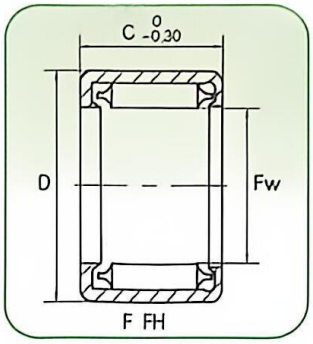


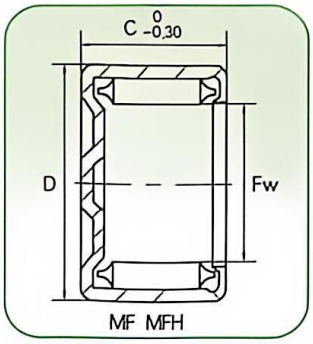
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
6	F-0608	30941/6	2.5	6	10	8	3080	5800	12000
3.175	F3.175 × 6.35 × 6.35	B-24	2.8	3.175	6.35	6.35	3200	5900	19000
4.762	F4.762 × 8.731 × 6.35	B-34	3	4.762	8.731	6.35	3400	6000	19000
6.35	F6.35 × 11.11 × 11.13	B-47	3.2	6.35	11.11	11.13	3500	6050	12000
	MF6.35 × 11.11 × 11.13	M-471	4.1	6.35	11.11	11.13	3500	6050	12000
8	F-0810	50941/8	3.7	8	12	10	4050	7150	13000
	FH-0810	941/8	7	8	14	10	5200	7150	7400
	FH-0812	942/8	9	8	14	12	4550	7150	7400
9	F-0910	50941/9	4	9	13	10	4900	8050	12000
	FH0910	941/9	6	9	15	10	8000	11500	7100
	FH9 × 15 × 13	942/9	8	9	15	13	8560	12800	7100
9.52	F9.52 × 14.29 × 12.7	B-68	7.5	9.52	14.29	12.70	9000	13300	7100
10	F-1010	50941/10	4.2	10	14	10	5700	9350	11000
	FH-1010	941/10	6.5	10	16	10	6350	10800	11000
	F10 × 16 × 15	942/10	12	10	16	15	6890	11500	7100
		943/10		10	16	17	6500	11000	7000
12	F-1212	60941/12	6	12	16	12	6380	10900	7100
	F12 × 17 × 12	941/12	8	12	17	12	8400	11900	7100
	F12 × 17 × 15	942/12	10.5	12	17	15	9000	12500	7100
	F12 × 17 × 18	943/12	13	12	17	18	9800	13500	7100
15	F15 × 20 × 12	941/15	10	15	20	12	8400	11900	7100
	F15 × 20 × 16	942/15	13.6	15	20	16	9500	12800	7100
	F15 × 20 × 20	943/15	17.2	15	20	20	10500	16000	7100
	FY15 × 20 × 20	Y152020	20	15	20	20	10500	16000	7100
	F-1512	30941/15	12	15	21	12	9700	15900	8100
16	F-1616	50941/16	17	16	22	16	14100	25900	7700
17	F-1712	30941/17	13	17	23	12	10600	21600	7300
	F-1714	941/17	15	17	23	14	12500	22500	7300
	F-1718	942/17	21	17	23	18	13800	24800	7300
		943/17		17	23	22	13500	24000	7100
18	F1816	50941/18	18	18	24	16	15000	29100	6900
20	F-2014	941/20	17	20	26	14	15800	40500	6900
	F-2020	942/20	26	20	26	20	18800	42500	6900
	F20 × 26 × 25	943/20	33	20	26	25	20500	35500	6300
25	F-2516	941/25	28	25	32	16	18700	37900	5100
	F-2522	942/25	40	25	32	22	11000	16500	5100
	F25 × 32 × 25	943/25	43	25	32	25	11500	18500	5100
	F25 × 33 × 08	Y253308	16.7	25	33	8	12200	16800	4300
28	F-2820	60941/28	118	28	35	20	25700	58300	4600
30	F-3020	60941/30	42	30	37	20	26800	62500	4300

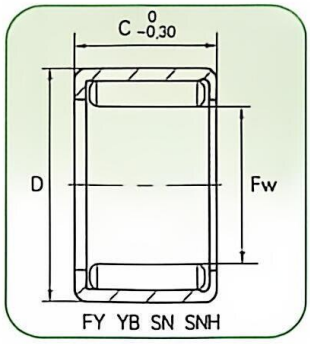
宽度偏差 $-^{0}_{0.30}$mm，特殊要求订货时说明。

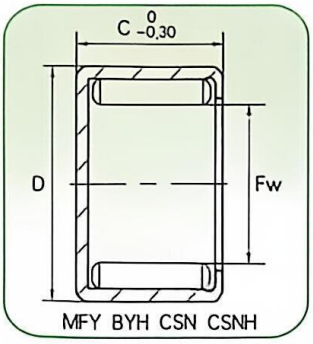
公英制冲压外圈满装滚针轴承
尖头滚针、平头滚针、穿孔型、封口型

Metic and Inch Drawn Cup Needle Roller Bearings Full Roller Complement
Open End. Closed End, Mechanically Retained Rollers, Grease Retained Rollers









轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
30	MF-3020	65941/30	48	30	37	20	26800	62500	4300
	F30 × 38 × 16	941/30	37.5	30	38	16	25500	57500	4600
	F30 × 38 × 24	942/30	37.5	30	38	24	28800	64500	4300
	F30 × 38 × 32	943/30	81.5	30	38	32	34500	78900	4300
32	F-3216	40941/32	35	32	39	16	25800	61500	4300
35	F-3520	60941/35	49	35	42	20	24000	69100	3700
	F35 × 43 × 16	941/35	41	35	43	16	23500	68000	3700
	F35 × 43 × 25	942/35	72	35	43	25	38700	86200	3200
	F35 × 43 × 32	943/35	90	35	43	32	40500	97800	3200
40	F-4020	60941/40	56	40	47	20	30300	82600	3300
	FH4032	942/40	88	40	50	32	42500	108000	2600
	MFH-4032	86942/40	95	40	50	32	42500	108000	2600
	FH40 × 50 × 38	943/40	105	40	50	38	44800	118500	2600
45	F-4520		62	45	52	20	30400	90100	2900
	FH45 × 55 × 38	943/45	140	45	55	38	45800	128000	2900
50	F-5020	50941/50	78	50	58	20	35800	98000	2600
	FH50 × 60 × 38	943/50	145	50	60	38	50500	145800	2600
60	F60 × 68 × 40	943/60	185	60	68	40	50200	145000	2600

脂润滑极限转速为表列数值的60%；宽度偏差$^{0}_{-0.30}$mm,特殊要求订货时说明。

向心滚针轴承
有挡边、无挡边、 单列双列、单密封、双密封

Radial Needle Roller Bearings With Ribs, Without Ribs;
Single Row, Double Row; With One Seal, With Two Seals

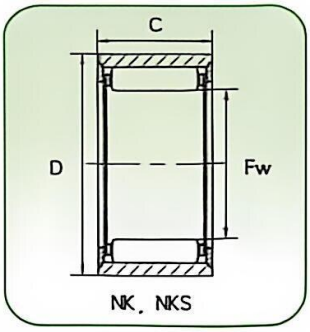
本公司提供下列结构滚针轴承

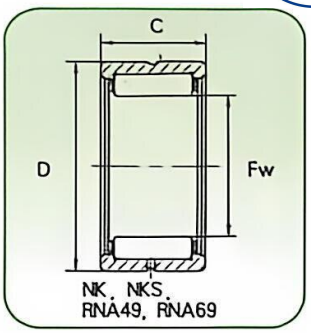
系列	结构说明
NK NKS	无内圈滚针轴承 轻系列、重系列
RNA49	无内圈滚针轴承 尺寸系列49
RNA69	无内圈双列滚针轴承 尺寸系列69
RNA48	无内圈滚针轴承 尺寸系列48
NKI NKIS	有内圈滚针轴承 轻系列、重系列
NA49	有内圈滚针轴承 尺寸系列49
NA69	有内圈双列滚针轴承 尺寸系列69
NA48	有内圈滚针轴承 尺寸系列48
RNA49...RS	无内圈滚针轴承 单面密封 尺寸系列49
RNA49...2RS	无内圈滚针轴承 双面密封 尺寸系列49
NA49...RS	有内圈滚针轴承 单面密封 尺寸系列49
NA49...2RS	有内圈滚针轴承 双面密封 尺寸系列49
NAO	内外圈无挡边滚针轴承
RNAO	无内圈外圈无挡边滚针轴承
RNAV	无内圈满装滚针轴承 尺寸系列40
NAV	有内圈满装滚针轴承 尺寸系列40

滚针轴承结构紧凑，径向尺寸小，载荷容量大，承受较大径向负荷。此类轴承有多种结构及尺寸系列，所组装的G2级滚针，分组批直径变动量2μm以内。除满装滚针轴承外，均采用高刚性保持架，能够正确地引导滚针平行于轴线。

无内圈滚针轴承

Radial Needle Roller Bearing Without Inner Ring





轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
5	NK5/10TN		2.9	5	10	10	2350	1920	39000
8	NK8/12TN		8.3	8	15	12	3950	4100	32000
10	NK10/12TN	4624097K	10	10	17	12	4750	5500	29000
		5624097	16.6	10	17	15	4860	7100	23500
12	NK12/12	644079	11.8	12	19	12	6400	7100	27000
		5624098	15.4	12	19	15	6400	7100	27000
	NK12/16		16.8	12	19	16	9000	11000	27000
14	NK14/16	4624900K	20.8	14	22	16	10100	11500	25000
	NKS14		27	14	25	16	14400	13800	24000
	RNA4900	4624900	24.4	14	22	13	8500	9200	25000
	RNA6900	6634900	29.1	14	22	22	8600	11600	25000
15	NK15/12	644800K	18.5	15	23	12	8600	10070	21000
		7948/15	16.1	15	22	12	8200	9800	9000
		644302	18.2	15	25	12	10600	13500	25000
16	NK16/16		20.8	16	24	16	11300	13900	23000
	NK16/20	624701	23.9	16	24	20	14400	18800	23000
	RNA4901	4624901	16.6	16	24	13	9400	10900	23000
	RNA6901	6634901	28.7	16	24	22	16000	21600	23000
	NKS16		30	16	28	16	15700	15800	22000
17	NK17/16	644903K	21.5	17	25	16	11900	15000	23000
18	NK18/20		30.5	18	26	20	15800	22000	22000
20	NK20/16	644802	25.7	20	28	16	13000	17500	21000
	NK202616		20.8	20	26	16	9600	10800	11000
	NKS20		46.8	20	32	20	23000	25000	20000
		6624101	24.3	20	28	25	11000	12900	21000
	RNA4902	4624902	20.5	20	28	13	10800	13600	21000
	RNA6902	6634902	35.4	20	28	23	17300	25500	21000
22	NK22/16	NK223016	29.2	22	30	16	14000	19000	20000
		NK223516	34.6	22	35	16	18600	21000	20000
	NKS22		60.2	22	35	20	24500	28000	18000
	RNA4903	4644903	20.7	22	30	13	11000	14600	20000
	RNA6903	6634903	39.8	22	30	23	18600	29000	20000
		624703	53	22	35	25	24500	28000	18000
		644704	27.4	22	28	16	11000	16000	17000
25	NK25/16	624904	30	25	33	16	14900	22400	18000
	NK25/20	644804	38.4	25	33	20	18800	30500	18000
	RNA4904	4644904	50.8	25	37	17	21000	25500	17000
	RNA6904	6634904	97.7	25	37	30	36000	51000	17000
	NKS25		65	25	38	20	27500	33500	17000
		624704	100.1	25	35	25	14900	23000	16000
		644804K	63	25	33	30	18800	31000	16000
26	NK26/16		30	26	34	16	15300	23600	17000
	NK25/20		40	26	34	20	19400	32000	17000
28		F3833	99.8	28	38	33	33000	57000	14000

TN=塑料保持架，允许工作温度：120℃连续地，180℃短期地。脂润滑极限转速为表列数值的60%，RNA6906以下尺寸可提供双列，特殊要求订货时说明。

无内圈滚针轴承

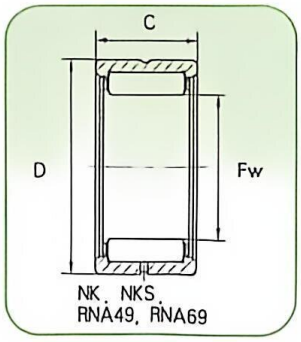
Radial Needle Roller Bearing
Without Inner Ring

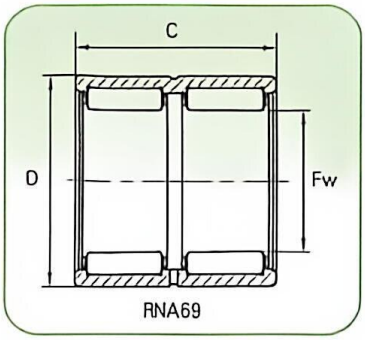
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
28	NKS28		80	28	42	20	28500	36500	15000
30	NK30/20	644805	57.9	30	40	20	22600	36000	15000
	NK30/30		95	30	40	30	33500	60000	15000
	RNA4905	4624905	57	30	42	17	23600	31500	14000
	RNA6905	6634905	106.5	30	42	30	39000	59000	14000
		624905K	68	30	42	20	21000	29000	14000
32	NK32/20	624705	75.4	32	42	20	23100	37500	14000
	RNA49/28	46449/32K	80	32	45	17	24400	33500	14000
	NKS32		100	32	47	22	33500	43500	13000
	RNA69/28		125	32	45	30	40500	63000	14000
		644906	42	32	38	11	11000	33500	14000
		644706	193	32	50	35	41000	63000	14000
35	NK35/20	644806	70	35	45	20	24300	41500	13000
	RNA4906	4624906	62.8	35	47	17	25000	35500	13000
	RNA6906	6634906	116	35	47	30	43500	71000	13000
		644907	161	35	51	32	44000	73000	13000
37		624706	154	37	52	22	28500	45500	11000
40	NK40/20		78.9	40	50	20	26000	47000	11000
	NK40/30		120	40	50	30	39000	79000	11000
	RNA69/32	66349/32	147	40	52	36	47000	82000	11000
42	NK42/20		83	42	52	20	26500	49000	11000
	NK42/30		125	42	52	30	39500	82000	11000
	RNA4907	4624907	99.3	42	55	20	31500	50000	11000
	RNA6907	6634907	160	42	55	36	48000	86000	11000
		644708	148	42	65	22	52000	65000	11000
43	NK43/30		126	43	53	30	40500	85000	11000
45	NK45/20	644808	81.5	45	55	20	27500	53000	10000
		624708	75.3	45	55	22	23000	51000	10000
		46449/38	80	45	58	20	27000	65000	10000
48	RNA4908	4644908	132	48	62	22	43000	67000	9000
	RNA6908	6634908	238	48	62	40	66000	116000	9000
50	NK50/25		167	50	62	25	38000	74000	9000
	NK50/35		236	50	62	35	55000	106000	9000
		624708K	328	50	65	34	45000	71000	9000
52	RNA4909	4624909	163	52	68	22	45000	73000	8500
	RNA6909	6634909	308	52	68	40	69000	127000	8500
55	NK55/25		167	55	68	25	40000	82000	8500
		624709	210	55	68	25	42000	84000	8500
58	RNA4910	4644910	161	58	72	22	47000	80000	8000
	RNA6910	6634910	296	58	72	40	73000	139000	8000
60	NK60/25		154	60	72	25	42000	90000	7500
63	RNA4911	4644911	241	63	80	25	58000	100000	7000
	RNA6911	6634911	430	63	80	45	90000	176000	7000
68	RNA4912	4644912	257	68	85	25	60000	108000	6500

TN=塑料保持架，允许工作温度：120℃连续地，180℃短期地。脂润滑极限转速为表列数值的60%，RNA6906以下尺寸可提供双列，特殊要求订货时说明。

无内圈滚针轴承

Radial Needle Roller Bearing Without Inner Ring



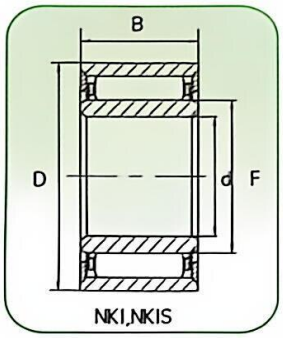


轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		Fw	D	C	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm			N		rpm
68	RNA6912	6634912	436	68	85	45	94000	191000	6500
72	RNA4913	4644913	300	72	90	25	61000	112000	6500
80	RNA4914	4644914	400	80	100	30	84000	156000	5500
	RNA6914	6634914	815	80	100	54	128000	265000	5500
85	RNA4915	4644915	472	85	105	30	86000	162000	5500
90	RNA4916	4644916	496	90	110	30	89000	174000	5000
	RNA6916	6634916	978	90	110	54	135000	300000	5000
96		SG-421	496	96	115	29	73000	137000	4600
100	RNA4917	4644917	608	100	120	35	111000	237000	4600
	RNA6917	6634917	1112	100	120	63	166000	406000	4600
105	RNA4918	4644918	713	105	125	35	114000	250000	4400
110	RNA4919	4644919	685	110	130	35	116000	260000	4200
	RNA6919	6634919	1325	110	130	63	174000	440000	4200
115	RNA4920	4624920	1006	115	140	40	128000	270000	4000
125	RNA4922	6634922	1200	125	150	40	132000	290000	3700
135	RNA4924	4644924	1760	135	165	45	181000	390000	3400

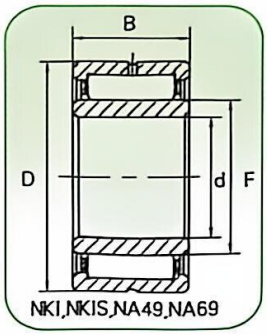
TN=塑料保持架，允许工作温度：120℃连续地，180℃短期地。脂润滑极限转速为表列数值的60%，RNA6906以下尺寸可提供双列，特殊要求订货时说明。

有内圈滚针轴承

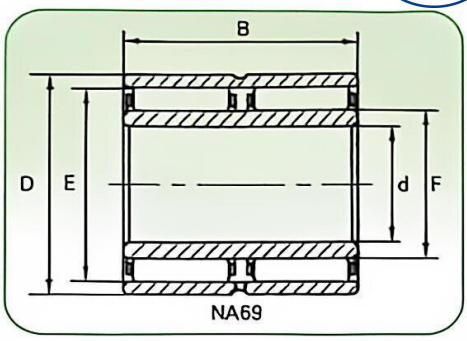
Radial Needle Roller Bearing
With Inner Ring



NKI,NKIS



NKI,NKIS,NA49,NA69



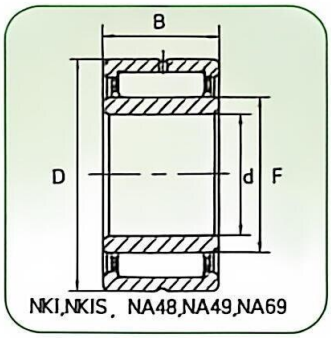
NA69

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions				基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		d	F	D	B	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm				N		rpm
8	NKIS 8		46	8	14	25	16	14400	13800	24000
9	NKI 9/12		14.6	9	12	19	12	6400	7100	27000
10	NKI 10/16		27.3	10	14	22	16	10100	11500	25000
	NA 4900	4524900	21	10	14	22	13	8500	9200	25500
	NA 6900	6534900	38.4	10	14	22	22	8600	12000	25500
12	NA 4901	4524901	25.1	12	16	24	13	9400	10900	23000
	NKI 12/20		39	12	16	24	20	14400	18800	23000
	NA 6901	6534901	44.5	12	16	24	22	16000	17000	23000
	NKIS 12		58	12	18	30	16	16800	17700	21000
15	NKI 15/16		38	15	19	27	16	13000	17400	22000
	NA 4902	4524902	32	15	20	28	13	10600	13600	21000
	NA 6902	6534902	61.6	15	20	28	23	17300	25500	21000
	NKIS 15		90	15	22	35	20	24500	28000	18000
17	NKI 17/16		41.4	17	21	29	16	13500	18700	21000
	NA 4903	4544903	32.8	17	22	30	13	11000	14600	20000
	NA 6903	6534903	68.2	17	22	30	23	18600	29000	20000
20	NKI 20/16		48.5	20	24	32	16	15000	22300	18000
	NA 4904	4524904	70.2	20	25	37	17	21000	25500	17000
	NKIS 20		119	20	28	42	20	28500	36500	15000
22	NKI 22/16		50	22	25	34	16	15300	23600	17000
	NA 49/22		76	22	28	39	17	22800	29500	15000
	NA 69/22		130	22	28	39	30	37500	55000	15000
25	NKI 25/20		79.4	25	29	38	20	21900	34000	15000
	NKI 25/30		115	25	29	38	30	32500	57000	15000
	NA 4905	4524905	76	25	30	42	17	33600	31500	14000
	NA 6905	6534905	138	25	30	42	30	29000	59000	14000
	NKIS 25		160	25	32	47	22	33500	43500	13000
		F-208277		25	32	47	22			
28	NA 69/28		170	28	32	45	30	40500	63000	14000
	NKI 28/20		96.5	28	32	42	20	23100	37500	14000
30	NKI 30/20		112	30	35	45	20	24300	41500	13000
32	NKI 32/20		118	32	37	47	20	24900	43500	12000
		TAFI324720		32	37	47	20			
	NA 49/32	45449/32	150	32	40	52	20	30500	47500	11000
	NA 69/32	66349/32	272	32	40	52	36	47000	82000	11000
35	NKI 35/30		165	35	40	50	30	39000	79000	11000
	NA 4907	4524907	151	35	42	55	20	31500	50000	11000
	NA 6907	6534907	301	35	42	55	36	48000	86000	11000
	NKIS 35		210	35	43	58	22	39000	57000	10000
40	NKI 40/20		124	40	45	55	20	27500	53000	10000
	NA 4908	4544908	123	40	48	62	22	43000	67000	9000
	NA 6908	6534908	401	40	48	62	40	66000	116000	9000
42	NKI 42/20		138	42	47	57	20	28500	56000	10000
45	NKI 45/25		218	45	50	62	25	38000	74000	9000

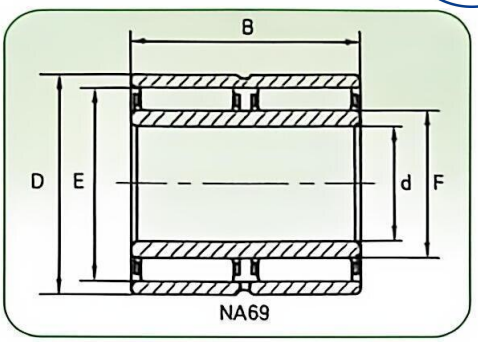
TN=塑料保持架，允许工作温度：120℃连续地，180℃短期地。脂润滑极限转速为表列数值的60%，NA6906以下尺寸可提供双列，特殊要求订货时说明。

有内圈滚针轴承

Radial Needle Roller Bearing
With Inner Ring



NKI,NKIS，NA48,NA49,NA69



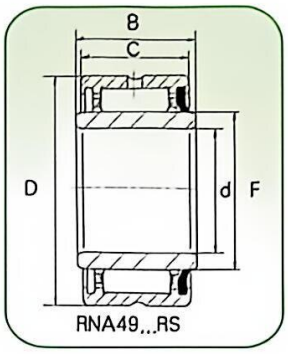
NA69

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions				基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	现行的 Current	原型号 Original Code		d	F	D	B	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm				N		rpm
45	NA 4909	4544909	260	45	52	68	22	45000	73000	8500
	NA 6909	6534909	479	45	52	68	40	69000	127000	8500
	NKIS 45		306	45	55	72	22	45000	74000	8000
50	NKI 50/25	TAFI506825	262	50	55	68	25	40000	82000	8500
	NA 4910	4544910	264	50	58	72	22	47000	80000	8000
	NA 6910	6534910	457	50	58	72	40	73000	139000	8000
	NKIS 50		510	50	60	80	28	63000	98000	7500
	NKI 50/35	TAFI506835	379	50	55	68	35	53000	118000	8500
55	NKI 55/35		357	55	60	72	35	56000	130000	7500
	NA 4911	4544911	386	55	63	80	25	58000	100000	7000
	NA 6911	6534911	760	55	63	80	45	90000	176000	7000
60	NKI 60/25		388	60	68	82	25	43500	89000	7000
	NA 4912	4544912	412	60	68	85	25	60000	108000	6500
	NA 6912	6534912	798	60	68	85	45	94000	191000	6500
	NKIS 60		550	60	70	90	28	68000	113000	6500
65	NA 4913	4544913	435	65	72	90	25	61000	112000	6500
	NA 6913	6534913	821	65	72	90	45	95000	198000	6500
	NKI 65/25		467	65	73	90	25	53000	100000	6500
70	NA 4914	4544914	712	70	80	100	30	84000	156000	5500
	NA 6914	6534914	1326	70	80	100	54	128000	265000	5500
	NKI 70/35		737	70	80	95	35	98000	193000	5500
75	NA 4915	4544915	765	75	85	105	30	86000	162000	5500
	NA 6915	6534915	1429	75	85	105	54	130000	275000	5500
80	NA 4916	4544916	870	80	90	110	30	89000	174000	5000
	NA 6916	6534916	1510	80	90	110	54	135000	300000	5000
	NKI 80/35		959	80	90	110	35	103000	208000	5000
85	NA 4917	4544917	1250	85	100	120	35	111000	237000	4600
	NA 6917	6534917	2200	85	100	120	63	166000	400000	4600
90	NA 4918	4544918	1312	90	105	125	35	114000	250000	4400
	NA 6918	6534918	2310	90	105	125	63	172000	425000	4400
95	NA 4919	4544919	1371	95	110	130	35	116000	260000	4200
	NA 6919	6534919	2500	95	110	130	63	174000	440000	4200
	NKI 95/36		1145	95	105	125	36	114000	250000	4400
100	NA 4920	4544920	1900	100	115	140	40	120000	274000	4000
	NKI 100/30		990	100	110	130	30	98000	210000	4200
110	NA 4922	4544922	2070	110	125	150	40	132000	290000	3700
	NA 4822		1080	110	120	140	30	94000	216000	3900
120	NA 4924	4544924	2860	120	135	165	45	181000	390000	3400
	NA 4824		1170	120	130	150	30	99000	239000	3600
130	NA 4926	4544926	3900	130	150	180	50	203000	470000	3100
	NA 4826		1810	130	145	165	35	118000	310000	3200
140	NA 4928	4544928	4150	140	160	190	50	209000	500000	2900
	NA 4828		1920	140	155	175	35	120000	325000	3000

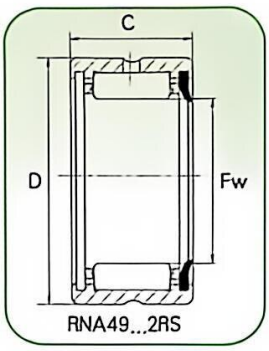
TN=塑料保持架，允许工作温度：120℃连续，180℃短期，脂润滑极限转速为表列数值的60%。

无内圈或有内圈的密封圈滚针轴承

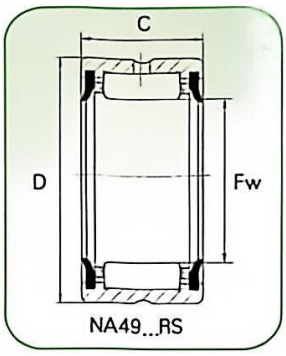
Sealed Radial Needle Roller Bearing With Or Without Inner Ring



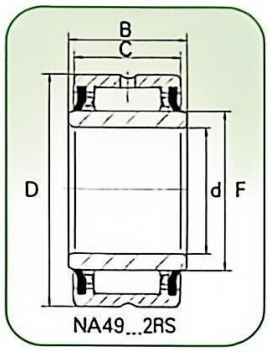
RNA49...RS



RNA49...2RS



NA49...RS



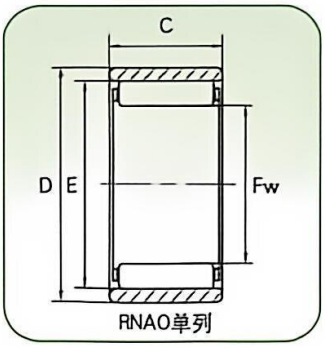
NA49...2RS

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions					基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
	单面密封 Sealed on one side	双面密封 Sealed on both sides		d	Fw F	D	C	B	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm			g	mm					N		rpm
无 内 圈											
14	RNA4900RS	RNA4900.2RS	16		14	22	13		6800	6900	13000
16	RNA4901RS	RNA4901.2RS	18		16	24	13		7600	8300	12000
20	RNA4902RS	RNA4902.2RS	21.5		20	28	13		8600	10300	10000
22	RNA4903RS	RNA4903.2RS	23		22	30	13		8800	11000	9000
25	RNA4904RS	RNA4904.2RS	56		25	37	17		17300	19900	7500
30	RNA4905RS	RNA4905.2RS	60		30	42	17		19300	24200	6500
35	RNA4906RS	RNA4906.2RS	69		35	47	17		21100	28500	5500
42	RNA4907RS	RNA4907.2RS	107		42	55	20		26500	39000	4800
48	RNA4908RS	RNA4908.2RS	154		48	62	22		36000	53000	4200
52	RNA4909RS	RNA4909.2RS	157		52	68	22		38000	59000	3900
58	RNA4910RS	RNA4910.2RS	160		58	72	22		40000	64000	3500
有 内 圈											
10	NA4900RS	NA4900.2RS	24.5	10	14	22	13	14	6800	6900	13000
12	NA4901RS	NA4901.2RS	27.5	12	16	24	13	14	7600	8300	12000
15	NA4902RS	NA4902.2RS	37	15	20	28	13	14	8600	10300	10000
17	NA4903RS	NA4903.2RS	40	17	22	30	13	14	8800	11000	9000
20	NA4904RS	NA4904.2RS	80	20	25	37	17	18	17300	19900	7500
25	NA4905RS	NA4905.2RS	89.5	25	30	42	17	18	19300	24200	6500
30	NA4906RS	NA4906.2RS	104	30	35	47	17	18	21100	28500	5500
35	NA4907RS	NA4907.2RS	175	35	42	55	20	21	26500	39500	4800
40	NA4908RS	NA4908.2RS	252	40	48	62	22	23	36000	53000	4200
45	NA4909RS	NA4909.2RS	290	45	52	68	22	23	38000	59000	3900
50	NA4910RS	NA4910.2RS	295	50	58	72	22	23	40000	64000	3500

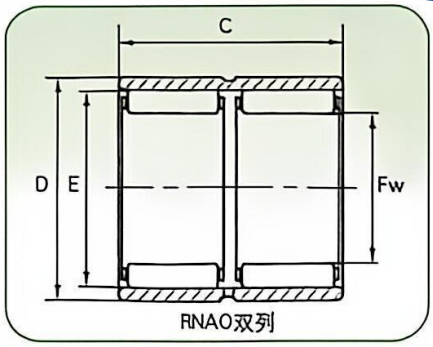
TN=塑料保持架，允许工作温度：120℃连续，180℃短期，脂润滑极限转速为表列数值的60%。

无挡边无内圈滚针轴承

Radial Needle Roller Bearing Without Ribs and Inner Ring



RNAO单列



RNAO双列

轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions				基本额定负荷 Basic Load Rating		极限转速 Limiting Speed
			Fw	D	C	E	动 Cr Dynamic	静 Cor Static	油润滑 Oil
mm		g	mm				N		rpm
5	RNAO5 × 10 × 8TN	2.8	5	10	8	8	2350	1920	39000
6	RNAO6 × 13 × 8TN	5	6	13	8	9	2600	2280	37000
7	RNAO7 × 14 × 8TN	5	7	14	8	10	2850	2650	34000
8	RNAO8 × 15 × 10TN	7.8	8	15	10	11	3950	4100	32000
10	RNAO10 × 17 × 10TN	9.1	10	17	10	13	4750	5500	29000
12	RNAO12 × 22 × 12TN	17.9	12	22	12	18	10000	9900	26000
15	RNAO15 × 23 × 13	18.5	15	23	13	19	8500	10900	24000
16	RNAO16 × 24 × 13	19.8	16	24	13	20	8900	11800	24000
	○ RNAO16 × 24 × 20	29.7	16	24	20	20	13300	19800	24000
17	RNAO17 × 25 × 13	21	17	25	13	21	10400	14600	23000
18	○ RNAO18 × 30 × 24	65	18	30	24	24	20100	26500	22000
20	RNAO20 × 28 × 13	24.5	20	28	13	24	9800	14300	21000
	○ RNAO20 × 28 × 26	48.1	20	28	26	24	16800	28500	21000
22	RNAO22 × 30 × 13	25.2	22	30	13	26	10400	15900	20000
	RNAO22 × 35 × 16	58	22	35	16	29	20000	25500	19000
25	RNAO25 × 35 × 17	49	25	35	17	29	14900	26000	18000
	○ RNAO25 × 35 × 26	67.8	25	35	26	29	19400	37000	18000
	RNAO25 × 37 × 16	59.2	25	37	16	32	21000	28000	17000
26	RNAO26 × 39 × 13	59	26	39	13	30	11600	19200	18000
30	RNAO30 × 40 × 17	59	30	40	17	35	19600	34000	15000
	RNAO30 × 42 × 16	49.9	30	42	16	37	23100	33500	15000
35	RNAO35 × 45 × 13	50	35	45	13	40	16200	28000	13000
	○ RNAO35 × 45 × 26	88	35	45	26	40	27500	56000	13000
	RNAO35 × 47 × 18	86	35	47	18	42	27500	43000	13000
	○ RNAO35 × 47 × 32	149	35	47	32	42	42000	75000	13000
37	RNAO37 × 52 × 18	115	37	52	18	44	28000	45500	12000
40	RNAO40 × 50 × 17	72	40	50	17	45	21400	41500	12000
	RNAO40 × 55 × 20	144	40	55	20	47	32500	57000	11000
	○ RNAO40 × 55 × 40	268	40	55	40	48	62000	118000	11000
42	RNAO42 × 57 × 20	132	42	57	20	50	36000	59000	11000
45	RNAO45 × 55 × 17	82.5	45	55	17	50	22500	46000	10000
	RNAO45 × 62 × 40	368	45	62	40	53	67000	135000	10000
50	RNAO50 × 62 × 20	140	50	62	20	55	26500	60000	9500
55	RNAO55 × 68 × 20	157	55	68	20	60	28500	66000	8500
60	RNAO60 × 78 × 20	253	60	78	20	68	43500	85000	7500
65	RNAO65 × 85 × 30	394	65	85	30	73	57000	123000	7000
70	RNAO70 × 90 × 30	488	70	90	30	78	60000	135000	6500
80	RNAO80 × 100 × 30	527	80	100	30	88	72000	179000	6000
85	RNAO85 × 105 × 25	449	85	105	25	93	57000	136000	5500
90	RNAO90 × 105 × 26	323	90	105	26	98	61000	150000	5000

TN=塑料保持架，允许工作温度：120℃连续，180℃短期，脂润滑极限转速为表列数值的60%。

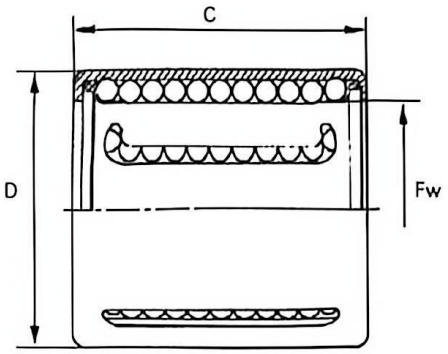
○ 双列

冲压外圈直线运动球轴承

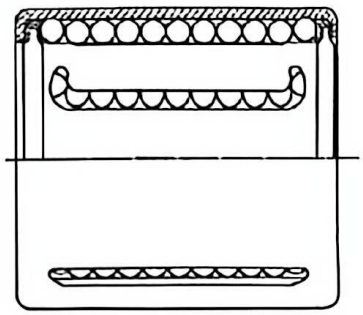
Drawn Cup Line Ball Bearings

CZT直线运动球轴承(冲压外圈循环式直线运动球轴承)，由一冲压且淬硬的外圈和带一组钢球的塑料导引保持架所构成一完整的装配单元，可直接压入座孔内。直线运动球轴承只能用于直线运动，不能作为旋转运动部件的支承。KH...2RS系列是带密封的直线运动球轴承。

CZT Linear ball bearings (drawn cup reciculating ball linear bearings) are made of hardness outer ring and plastic cage with a set of rolling ball. They can be pressed into the housing bore directly. Linear ball bearings are only suitable for linear motion. KH...2RS series are sealed linear ball bearings.



KH



KH...2RS

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions			基本额定负荷 Basic Load Rating	
	KH	KH...2RS		Fw	D	C	动 CrDynamic	静 Cor Static
mm			g	mm			N	
6	KH0622	KH06222RS	6.9	6	12	22	400	239
8	KH0824	KH08242RS	11.5	8	15	24	435	280
10	KH1026	KH10262RS	14.5	10	17	26	500	370
12	KH1228	KH12282RS	18.3	12	19	28	620	510
14	KH1428	KH14282RS	20.7	14	21	28	620	520
16	KH1630	KH16302RS	27.5	16	24	30	800	620
20	KH2030	KH20302RS	33	20	28	30	950	790
25	KH2540	KH25402RS	66	25	35	40	1990	1670
30	KH3050	KH30502RS	95	30	40	50	2800	2700
40	KH4060	KH40602RS	185	40	52	60	4400	4450
50	KH5070	KH50702RS	250	50	62	70	5500	6300

滚轮滚针轴承
平挡圈、带螺栓轴

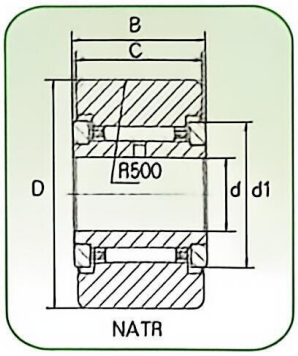
Yoke Type Track Rollers
Stud Type Track Rollers

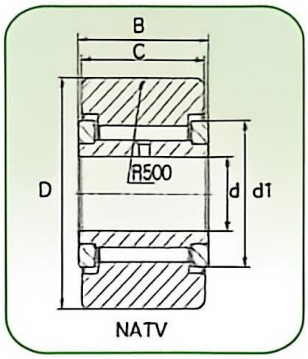
系列	说明
NATR NATR...PP	由平挡圈轴向引导支承滚轮 · 间隙密封 · 有内圈 支承滚轮 · 附加密封环
NATV NATV...PP	由平挡圈轴向引导支承滚轮 · 密装滚针式 · 间隙密封 · 有内圈 支承滚轮 · 附加密封环
NUTR	由滚动体轴向引导支承滚轮 · 密装滚子式 · 间隙密封 · 有内圈
KR KR...P KRE KRE...PP	由挡边和挡圈 轴向引导的曲线滚轮，间隙密封 带密封圈的曲线滚轮 带偏心套的曲线滚轮 带偏心套和密封圈的曲线滚轮
KRV KRV...PP KRVE KRVE...PP	由挡边的平挡圈 轴向引导的曲线滚轮，密封滚针式，具间隙密封 带密封圈的曲线滚轮 带偏心套的曲线滚轮 带偏心套和密封圈的曲线滚轮
NUKR NUKRE	由滚动体轴向引导的曲线滚轮、密装滚子式，具间隙密封 带偏心套的曲线滚轮

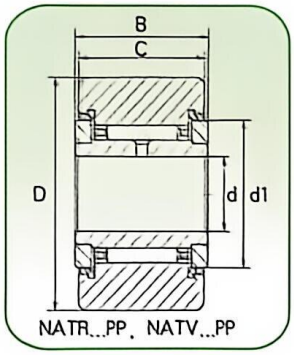
Series	Description
NATR NATR...PP	Yock type track rolers with axial guidance by washers, gap seal, with inner ring Yoke type track rollers with additional sealing rings
NATV NATV...PP	Yock type rolers with axial guidance by washers, full complement, gap seal, with inner ring Yoke type track rollers with additional sealing rings
NUTR	Yock type rolers with axial guidance by the rolling element, full complement, gap seal, with inner ring
KR KR...P KRE KRE...PP	Stud type track rollers with axial guidance by rib and washer, gap seals Stud type track rollers, with sealing rings Stud type track roller with eccentric collar Stud type track rollers with eccentric collar and sealing rings.
KRV KRV...PP KRVE	Stud type track rollers with axial guidance by rib and washer, full complement, gap seals Stud type track rollers, with sealing rings Stud type track roller with eccentric collar
KRVE...PP NUKR	Stud type track rollers with eccentric collar and sealing rings Stud type track rollers with axial gudance by the rolling elements, full complement, gap seals
NUKRE	Stud type track rollers with eccentric collar

有轴向引导支承滚轮

Yoke Type Track Roller With Axial Guidance







外径 Outside Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions						基本额定负荷 Basic Load Rating				极限转速 Limiting Speed
					d	D	B	C	r_1	d_1	动 Cr Dynamic	静 Cor Static	作为支承滚轮 Yoke Type Track Roller		nl grease =
mm		g		g						min	N		Cw	Cow	min⁻¹
16	NATR5	14	NATR5PP	14	5	16	12	11	0.15	12	3800	3750	3150	3300	*22000
	NATV5	15	NATV5PP	15	5	16	12	11	0.15	12	6400	8500	4850	6500	8500
19	NATR6	20	NATR6PP	20	6	19	12	11	0.15	14	4250	4600	3500	3900	*20000
	NATV6	21	NATV6PP	21	6	19	12	11	0.15	14	7300	10800	5500	7900	7000
24	NATR8	41	NATR8PP	41	8	24	15	14	0.3	16	6800	7700	5500	6400	*15000
	NATV8	42	NATV8PP	42	8	24	15	14	0.3	19	10400	15600	7800	11400	5500
30	NATR10	64	NATR10PP	64	10	30	15	14	0.6	23	8100	9700	6800	8400	*11000
	NATV10	65	NATV10PP	65	10	30	15	14	0.6	23	12200	19000	9500	14600	4500
32	NATR12	71	NATR12PP	71	12	32	15	14	0.6	25	8700	11000	6900	8800	9000
	NATV12	72	NATV12PP	72	12	32	15	15	0.6	25	13200	21700	9700	15400	3900
35	NATR15	103	NATR15PP	103	15	35	19	18	0.6	27	12900	19000	9700	14100	7000
	NATV15	105	NATV15PP	105	15	35	19	18	0.6	27	18300	35000	12800	23000	3400
40	NATR17	144	NATR17PP	144	17	40	21	20	1	32	14200	20400	10900	15500	6000
	NATV17	152	NATV17PP	152	17	40	21	20	1	32	21000	39500	14800	26500	2900
47	NATR20	246	NATR20PP	246	20	47	25	24	1	37	19500	32000	15500	25500	4900
	NATV20	254	NATV20PP	254	20	47	25	24	1	37	28000	59000	20600	42000	2600
52	NATR25	275	NATR25PP	275	25	52	25	24	1	42	21200	38000	15400	26500	3600
	NATV25	285	NATV25PP	285	25	52	25	24	1	42	31000	72000	20500	44000	2100
62	NATR30	470	NATR30PP	470	30	62	29	28	1	51	34000	59000	23600	38500	2600
	NATV30	481	NATV30PP	481	30	62	29	28	1	51	48500	108000	30500	63000	1700
72	NATR35	635	NATR35PP	635	35	72	29	28	1.1	58	37000	69000	25500	44500	2000
	NATV35	647	NATV35PP	647	35	72	29	28	1.1	58	53000	127000	33000	73000	1400
80	NATR40	805	NATR40PP	805	40	80	32	30	1.1	66	49000	94000	33000	59000	1700
	NATV40	890	NATV40PP	890	40	80	32	30	1.1	66	66000	159000	41000	90000	1300
85	NATR45	910	NATR45PP	910	45	85	32	30	1.1	72	51000	101000	32500	59000	1500
90	NATR50	960	NATR50PP	960	50	90	32	30	1.1	76	52000	108000	32000	59000	1300
	NATV50	990	NATV50PP	990	50	90	32	30	1.1	76	72000	191000	40500	93000	1000

★后缀“X”表示圆柱形外表面，例如：NATR5X或NATR5PPX。

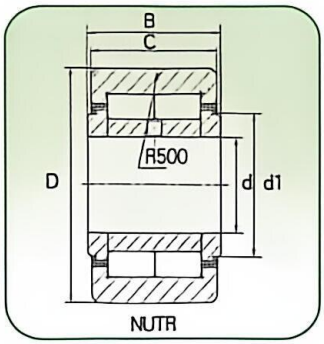
★当轴承外圈(具圆柱表面）装在具有一般配合的座孔中时，使用基本额定负荷C和Co；当作为支承滚轮时，使用额定负荷Cw和Cow

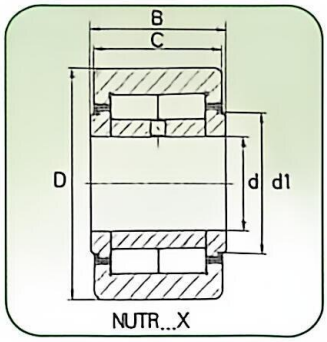
★使用油润滑，转速增加约30%，带密封的情况则例外。

＊对于密封型，Nl grease 应减低30%。

有轴向引导支承滚轮

Yoke Type Track Roller With Axial Guidance





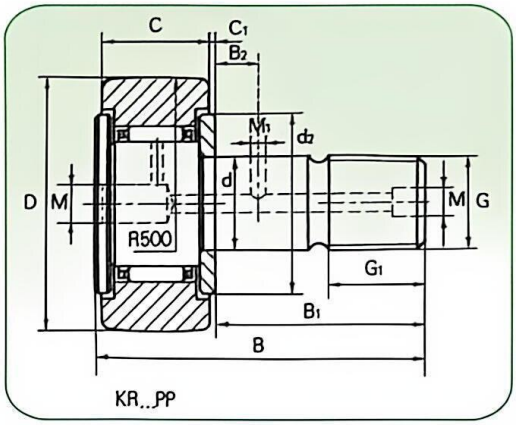
外径 Outside Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions						基本额定负荷 Basic Load Rating						极限转速 Limiting Speed
									动 Cr Dynamic	静 Cor Static	作为支承滚轮 Yoke Type Track Roller				
mm		g	d	D	B	C	r_s	d_1 min	N		动Cw	静Cow	Frpem	Forpem	n_1 grease - min^{-1}
35	NUTR15	99	15	35	19	18	0.6	0.3 20	23000	27000	16000	183000	8300	16400	6500
40	NUTR17	147	17	40	21	20	1	0.3 22	24800	31000	18500	22800	13200	22800	5500
42	NUTR1542	158	15	42	19	18	0.6	0.3 20	23000	27000	19400	23800	23900	23900	6500
47	NUTR1747	220	17	47	21	20	1	0.3 22	24800	31000	21300	28000	28000	28000	5500
	NUTR20	245	20	47	25	24	1	0.3 27	39000	50000	28000	35000	16500	33000	4200
52	NUTR2052	321	20	52	25	24	1	0.3 27	39000	50000	31500	41000	38500	41000	4200
	NUTR25	281	25	52	25	24	1	0.3 31	43500	60000	29000	37500	17300	34500	3400
62	NUTR2562	450	25	62	25	24	1	0.3 31	43500	60000	35500	50000	50000	50000	3400
	NUTR30	465	30	62	29	28	1	0.3 38	59000	79000	40000	51000	23600	47000	2600
72	NUTR3072	697	30	72	29	28	1	0.3 38	59000	79000	48000	65000	65000	65000	2600
	NUTR35	630	35	72	29	28	1.1	0.6 44	65000	93000	45000	61000	32000	61000	2100
80	NUTR3580	836	35	80	29	28	1.1	0.6 44	65000	93000	51000	72000	72000	72000	2100
	NUTR40	816	40	80	32	30	1.1	0.6 51	90000	134000	56000	76000	30500	60000	1600
85	NUTR45	883	45	85	32	30	1.1	0.3 55	95000	147000	56000	79000	31500	61000	1400
90	NUTR4090	1129	40	90	32	30	1.1	0.6 51	90000	134000	66000	96000	84000	96000	1600
	NUTR50	950	50	90	32	30	1.1	0.6 60	100000	161000	57000	81000	32000	63000	1300
100	NUTR45100	1396	45	100	32	30	1.1	0.6 55	95000	147000	72000	108000	106000	108000	1400
110	NUTR50110	1690	50	110	32	30	1.1	0.6 60	100000	161000	76000	121000	121000	121000	1300

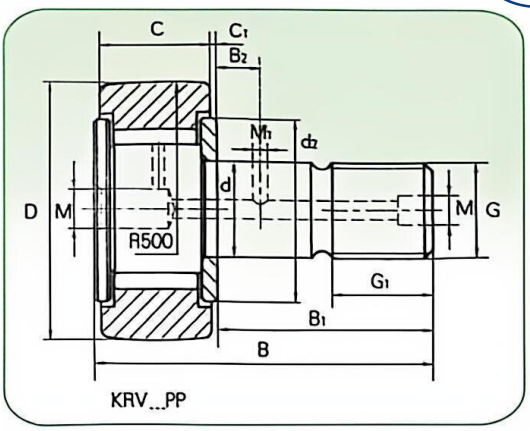
★后缀“X”表示圆柱形外表面，例如：NUTR40X。

★当轴承外圈(有外圆柱表面）装在具有一般轴承配合的座孔中时，使用基本额定负荷C和Co；当作为滚轮时，额定负荷使用Cw和Cow。

★使用油润滑，转速可增加约30%。

曲线滚轮
Stud Type Track Roller





外径 Outside Diameter mm	轴承型号 Bearing Designation	重量 Mass 近似 Approx g	带偏心套 With Eccentric Collar 型号 Bearing Designation	重量 Mass 近似 Approx g	外形尺寸 Boundary Dimensions D	d	C	r_s min	B	B_1	B_2	G	G_1	M	M_1	C_1	d_2
16	KR16	18	KRE16	20	16	6	11	0.15	28	16	–	M6	8	4 5)	–	0.6	12
	KR16PP	18	KRE16PP	20	16	6	11	0.15	28	16	–	M6	8	4 5)	–	0.6	12
	KRV16	20	KRVE16	22	16	6	11	0.15	28	16	–	M6	8	4 5)	–	0.6	12
	KRV16PP	20	KRVE16PP	22	16	6	11	0.15	28	16	–	M6	8	4 5)	–	0.6	12
19	KR19	28	KRE19	31.2	19	8	11	0.15	32	20	–	M8	10	4 5)	–	0.6	14
	KR19PP	28	KRE19PP	31.2	19	8	11	0.15	32	20	–	M8	10	4 5)	–	0.6	14
	KRV19	32	KRVE19	35.2	19	8	11	0.15	32	20	–	M8	10	4 5)	–	0.6	14
	KRV19PP	32	KRVE19PP	35.2	19	8	11	0.15	32	20	–	M8	10	4 5)	–	0.6	14
22	KR22	44	KRE22	48.3	22	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
	KR22PP	44	KRE22PP	48.3	22	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
	KRV22	45	KRVE22	49.3	22	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
	KRV22PP	45	KRVE22PP	49.3	22	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
26	KR26	58	KRE26	62.3	26	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
	KR26PP	58	KRE26PP	62.3	26	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
	KRV26	61	KRVE26	65.3	26	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
	KRV26PP	61	KRVE26PP	65.3	26	10	12	0.3	36	23	–	M10 × 1	12	4	–	0.6	17
30	KR30	87	KRE30	92.5	30	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
	KR30PP	87	KRE30PP	92.5	30	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
	KRV30	89	KRVE30	94.5	30	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
	KRV30PP	89	KRVE30PP	94.5	30	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
32	KR32	98	KRE32	103.5	32	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
	KR32PP	98	KRE32PP	103.5	32	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
	KRV32	100	KRVE32	105.5	32	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
	KRV32PP	100	KRVE32PP	105.5	32	12	14	0.6	40	25	6	M12 × 1.5	13	6	3	0.6	23
35	KR35	169	KRE35	181.5	35	16	18	0.6	52	32.5	8	M16 × 1.5	17	6	3	0.8	27
	KR35PP	169	KRE35PP	181.5	35	16	18	0.6	52	32.5	8	M16 × 1.5	17	6	3	0.8	27
	KRV35	171	KRVE35	183.5	35	16	18	0.6	52	32.5	8	M16 × 1.5	17	6	3	0.8	27
	KRV35PP	171	KRVE35PP	183.5	35	16	18	0.6	52	32.5	8	M16 × 1.5	17	6	3	0.8	27
	NUKR35	164	NUKRE35	176.5	35	16	18	0.6	52	32.5 4)	8	M16 × 1.5	17	6	3	0.8 4)	21 4)
40	KR40	247	KRE40	262.8	40	18	20	1	58	36.5	8	M18 × 1.5	19	6	3	0.8	32
	KR40PP	247	KRE40PP	262.8	40	18	20	1	58	36.5	8	M18 × 1.5	19	6	3	0.8	32
	KRV40	249	KRVE40	264.8	40	18	20	1	58	36.5	8	M18 × 1.5	19	6	3	0.8	32
	KRV40PP	249	KRVE40PP	264.8	40	18	20	1	58	36.5	8	M18 × 1.5	19	6	3	0.8	32
	NUKR40	242	NUKRE40	257.8	40	18	20	1	58	36.5 4)	8	M18 × 1.5	19	6	3	0.8 4)	23 4)

★后缀“X”表示为外圆柱面，例如：KR16X。

★当轴承外圈(有外圆柱表面）装入具有一般轴承配合的座孔中时，使用基本额定负荷C和Co；当用作滚轮时，使用额定负荷Cw和Cow。

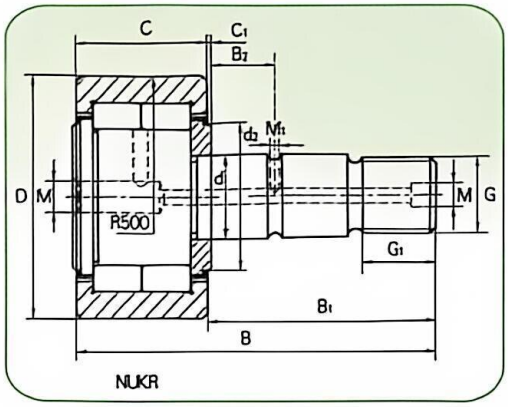
★油润滑的速度可增加约30%，密封情况例外。

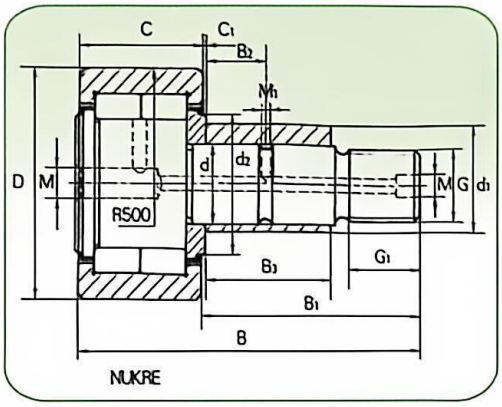
★NUKRE35 B_1=31.5; C_1=1.8; D_2=24

★NUKRE40 B_1=35.5; C_1=1.8; D_2=26

★油孔仅在螺栓挡边端面上。

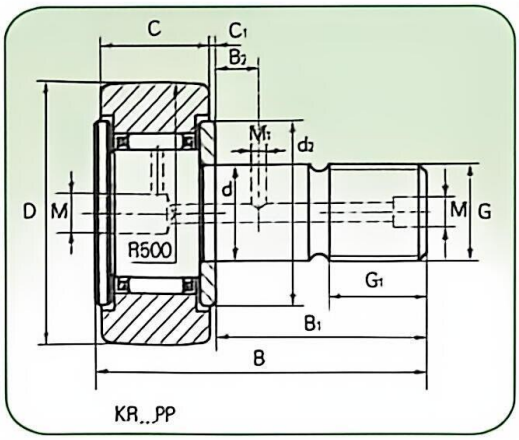
曲线滚轮
Stud Type Track Roller

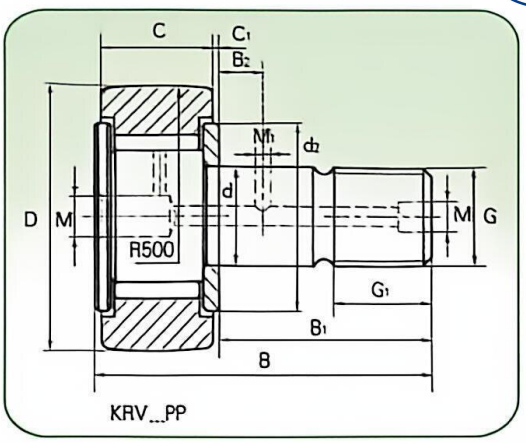




偏心套 Eccentric Collar			螺母拧紧力矩 Nut Tightening Torque	基本额定负荷 Basic Load Rating		作为曲线滚轮/Stud Type Track Roller				极限转速 Limiting Speed
d_1	B_3	e	M_A	动 Cr Dynamic	静 Cor Static	动 Cw Dynamic	静 Cow Static	$F_{r\ perm}$	$F_{or\ perm}$	油润滑 Oil
h9			Nm	N		N				min^{-1}
9	7	0.5	3	3800	3750	3150	3300	–	–	22000
9	7	0.5	3	3800	3750	3150	3300	–	–	16000
9	7	0.5	3	6400	8500	4850	6500	–	–	8500
9	7	0.5	3	6400	8500	4850	6500	–	–	8500
11	9	0.5	8	4250	4600	3500	3900	–	–	20000
11	9	0.5	8	4250	4600	3500	3900	–	–	14000
11	9	0.5	8	7300	10800	5500	7900	–	–	7000
11	9	0.5	8	7300	10800	5500	7900	–	–	7000
13	10	0.5	15	5700	6500	4450	6200	–	–	16000
13	10	0.5	15	5700	6500	4450	6200	–	–	11000
13	10	0.5	15	8600	12900	7300	11300	–	–	6000
13	10	0.5	15	8600	12900	7300	11300	–	–	6000
13	10	0.5	15	5700	6500	5100	5200	–	–	16000
13	10	0.5	15	5700	6500	5100	5200	–	–	11000
13	10	0.5	15	8600	12900	6300	9100	–	–	6000
13	10	0.5	15	8600	12900	6300	9100	–	–	6000
15	11	0.5	22	8100	9700	6800	8400	–	–	11000
15	11	0.5	22	8100	9700	6800	8400	–	–	8300
15	11	0.5	22	12200	19000	9500	14600	–	–	4500
15	11	0.5	22	12200	19000	9500	14600	–	–	4500
15	11	0.5	22	8100	9700	7100	9000	–	–	11000
15	11	0.5	22	8100	9700	7100	9000	–	–	8300
15	11	0.5	22	12200	19000	10000	15800	–	–	4500
15	11	0.5	22	12200	19000	10000	15800	–	–	4500
20	14	1	58	12900	19000	9700	14100	–	–	7000
20	14	1	58	12900	19000	9700	14100	–	–	7000
20	14	1	58	18300	35000	12800	23000	–	–	3400
20	14	1	58	18300	35000	12800	23000	–	–	3400
20	14	1	58	23000	27000	16000	18300	8300	16400	6500
22	16	1	87	14200	20400	10900	15500	–	–	6000
22	16	1	87	14200	20400	10900	15500	–	–	6000
22	16	1	87	21000	39500	14800	26500	–	–	2900
22	16	1	87	21000	39500	14800	26500	–	–	2900
22	16	1	87	24800	31000	18500	22800	13200	22800	5500

曲线滚轮
Stud Type Track Roller

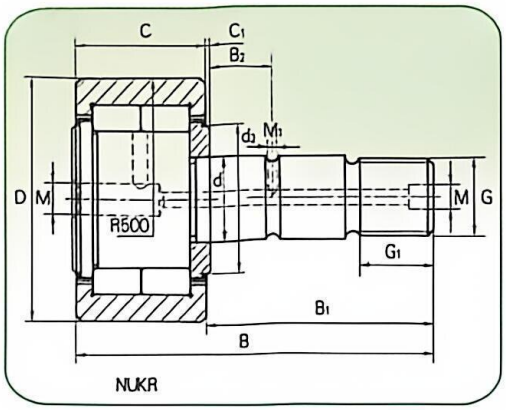


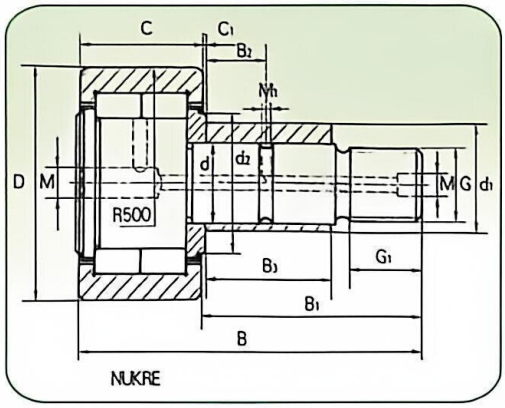


外径 Outside Diameter mm	轴承型号 Bearing Designation	重量 Mass 近似 Approx g	带偏心套 With Eccentric Collar 型号 Bearing Designation	重量 Mass 近似 Approx g	外形尺寸 Boundary Dimensions D	d	C	r_s min	B	B_1	B_2	G	G_1	M	M_1	C_1	d_2
47	KR47	386	KRE47	405.5	47	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	KR47PP	386	KRE47PP	405.5	47	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	KRV47	390	KRVE47	409.5	47	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	KRV47PP	390	KRVE47PP	409.5	47	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	NUKR47	380	NUKRE47	399.5	47	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	27
52	KR52	461	KRE52	480.5	52	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	KR52PP	461	KRE52PP	480.5	52	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	KRV52	465	KRVE52	484.5	52	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	KRV52PP	465	KRVE52PP	484.5	52	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	37
	NUKR52	450	NUKRE52	469.5	52	20	24	1	66	40.5	9	M20 × 1.5	21	8	4	0.8	31
62	KR62	790	KRE62	818.2	62	24	29	1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	KR62PP	790	KRE62PP	818.2	62	24	29	1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	KRV62	802	KRVE62	830.2	62	24	29	1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	KRV62PP	802	KRVE62PP	830.2	62	24	29	1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	NUKR62	795	NUKRE62	823.5	62	24	29	1	80	49.5	11	M24 × 1.5	25	8	4	0.8	38
72	KR72	1040	KRE72	1068.2	72	24	29	1.1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	KR72PP	1040	KRE72PP	1068.2	72	24	29	1.1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	KRV72	1045	KRVE72	1073.2	72	24	29	1.1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	KRV72PP	1045	KRVE72PP	1073.2	72	24	29	1.1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
	NUKR72	1200	NUKRE72	1038.2	72	24	29	1.1	80	49.5	11	M24 × 1.5	25	8	4	0.8	44
80	KR80	1550	KRE80	1610	80	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	KR80PP	1550	KRE80PP	1610	80	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	KRV80	1561	KRVE80	1621	80	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	KRV80PP	1561	KRVE80PP	1621	80	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	NUKR80	1800	NUKRE80	1600	80	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	47
85	KR85	1740	KRE85	1800	85	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	KR85PP	1740	KRE85PP	1800	85	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
90	KR90	1950	KRE90	2010	90	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	KR90PP	1950	KRE90PP	2010	90	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	KRV90	1970	KRVE90	2030	90	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	KRV90PP	1970	KRVE90PP	2030	90	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	53
	NUKR90	2300	NUKRE90	2020	90	30	35	1.1	100	63	15	M30 × 1.5	32	8	4	1	47

★后缀“X”表示为外圆柱面，例如：KR47X。
★当轴承外圈(有外圆柱表面）装入具有一般轴承配合的座孔中时，使用基本额定负荷C和Co；当用作滚轮时，使用额定负荷Cw和Cow。
★油润滑的速度可增加30%，密封情况例外。

曲线滚轮
Stud Type Track Roller





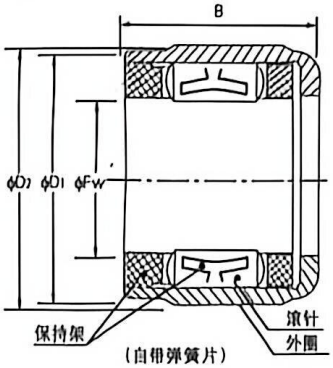
偏心套 Eccentric Collar			螺母拧紧力矩 Nut Tightening TOrque M_A Nm	作为曲线滚轮/Stud Type Track Roller						极限转速 Limiting Speed min-1
d_2	B_2	e		动 C	静 Co	动 Cw Dynamic	静 Cow Static	$F_{r\ perm}$	$F_{or\ perm}$	
h9				N		N				
24	18	1	120	19500	32000	15500	25500	–	–	4900
24	18	1	120	19500	32000	15500	25500	–	–	4900
24	18	1	120	28000	59000	20600	42000	–	–	2600
24	18	1	120	28000	59000	20600	42000	–	–	2600
24	18	1	120	39000	50000	28000	34500	16500	33000	4200
24	18	1	120	19500	32000	16800	28500	–	–	4900
24	18	1	120	19500	32000	16800	28500	–	–	4900
24	18	1	120	28000	59000	22500	48000	–	–	2600
24	18	1	120	28000	59000	22500	48000	–	–	2600
24	18	1	120	43500	60000	29000	37500	17400	34500	3400
28	22	1	220	30500	53000	26500	47500	–	–	3800
28	22	1	220	30500	53000	26500	47500	–	–	3800
28	22	1	220	41500	91000	34000	76000	–	–	2200
28	22	1	220	41500	91000	34000	76000	–	–	2200
28	22	1	220	59000	79000	40500	51000	24800	49500	2600
28	22	1	220	30500	53000	28000	53000	–	–	3800
28	22	1	220	30500	53000	28000	53000	–	–	3800
28	22	1	220	41500	91000	37000	85000	–	–	2200
28	22	1	220	41500	91000	37000	85000	–	–	2200
28	22	1	220	65000	93000	45000	61000	33500	61000	2100
35	29	1,5	450	45000	85000	39500	77000	–	–	2600
35	29	1,5	450	45000	85000	39500	77000	–	–	2600
35	29	1,5	450	60000	142000	49500	120000	–	–	1700
35	29	1,5	450	60000	142000	49500	120000	–	–	1700
35	29	1,5	450	95000	133000	67000	93000	44500	89000	1800
35	29	1,5	450	45000	85000	40500	80000	–	–	2600
35	29	1,5	450	45000	85000	40500	80000	–	–	2600
35	29	1,5	450	45000	85000	41500	83000	–	–	2600
35	29	1,5	450	45000	85000	41500	83000	–	–	2600
35	29	1,5	450	60000	142000	53000	130000	–	–	1700
35	29	1,5	450	60000	142000	53000	130000	–	–	1700
35	29	1,5	450	95000	133000	77000	110000	72000	11000	1800

小型单向轴承EWC、1WC型号特性

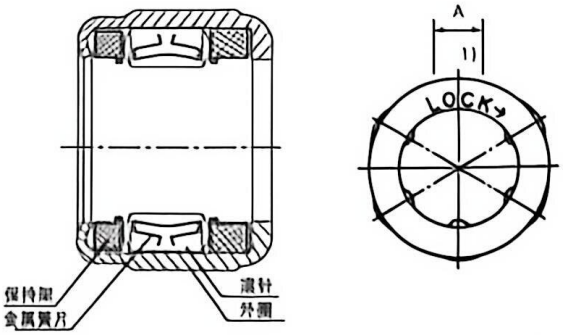
分 类	EWC系列（塑料弹簧）		1WC系列（金属弹簧）
	重型	轻型	重型
	EWC...C	EWC_A	1WC
扭 力	重负荷	轻负荷	重负荷
充许工作温度	-10－70℃		-10－90℃
止 动 寿 命	止动次数可以用100万次以上(在合适的扭力范围内)		
配 合 要 求	材料：树脂　齿轮精确度标准：齿轮精确度达到JGMA 6级		
备 注	单向离合器外壳采用镀镍防锈，滚针用不锈钢材料，性能和重型轴承相似。		

注：外壳可根据齿轮的形状，滑轮和凸轮轴的时限设计。

单向轴承EWC系列
Clutch Bearings EWC series



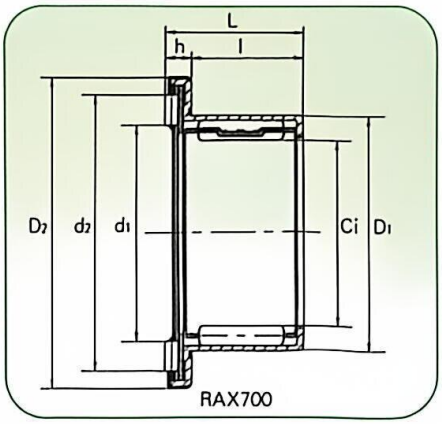
单向轴承1WC系列
Clutch Bearings 1WC series



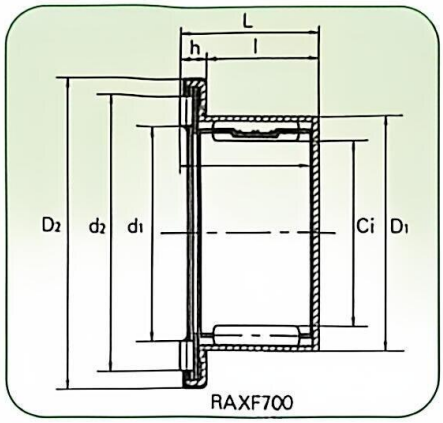
轴径 Shaft Diameter mm	轴承型号 Bearing Designation EWC series (with resin spring)	轴承型号 Bearing Designation 1WC series (with metal spring)	重量 Mass g EWC	重量 Mass g 1WC	外形尺寸 Boundary Dimensions Fw	D1	D2	B	A	传动力矩 Torque capacity (N・m)	传动力矩 Torque capacity (kgf・cm)
4	EWC0406A	—	1.0	—	4	8	8.4	6	2.6	0.08	0.8
	EWC0406C	—		—						0.15	1.5
6	EWC0606XA	—	1.4	—	6	10	10.4	6	2.8	0.19	1.9
	EWC0606XC	—		—						0.33	3.4
	EWC0608A	—	1.7	—				8		0.25	2.5
	EWC0608C	1WC0608		2.0						0.44	4.5
	—	1WC0612	—	3.0				12		0.88	9
8	EWC0809A	—	2.4	—	8	12	12.4	9	2.6	0.49	5
	EWC0809C	—		—						0.88	9
	EWC0812A	—	5.8	—	8	14.2	15	12	3.6	1.18	12
	EWC0812C	1WC0812		7.0						1.96	20
	—	1WC0815	—	8.0				14.5		2.65	27
10	EWC1007	—	5.2		10	16	17	7		1	10
	—	1WC100914	—	3.0	10	14	14.4	9	2.5	2.25	23
	EWC1010A	—	6.0	—	10	16	17	10	5	1.18	12
	EWC1010C	—		—						1.96	20
	EWC1012A	—	6.8	—				12		1.37	14
	EWC1012C	1WC1012		8.0						2.35	24
12	EWC1209C	—	6.2	—	12	18	19	9	5.1	3.04	31
	—	1WC1216		12				16		6.28	64

滚针－推力滚针轴承

Needle Roller-Needle Roller Thrust Bearings



RAX700

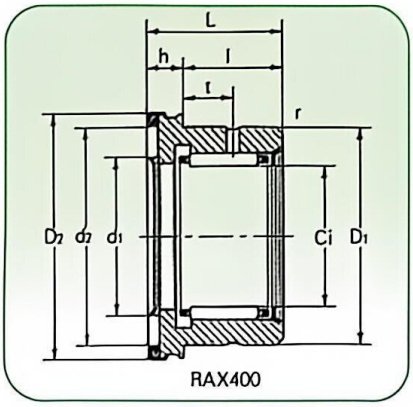


RAXF700

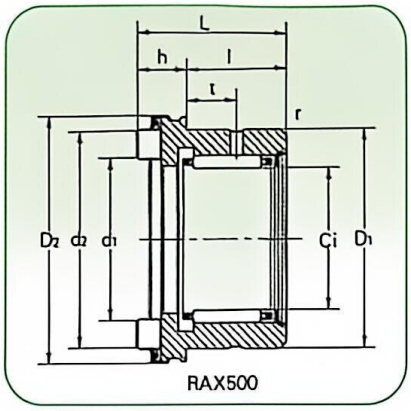
轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass		外形尺寸 Boundary Dimensions								基本额定负荷 Basic Load Rating				极限转速 Limiting Speed
	RAX700 系列	RAXF700 系列			Ci	D1	D2 max	l	h	L	d1	d2	径向 Radial 动 Dyn. Cr	径向 Radial 静 Stat. Cor	轴向 Axial 动 Dyn. Ca	轴向 Axial 静 Stat. Coa	
mm			g		mm								N				rpm
5	RAX705	–	4.5	–	5	9	15.5	7.7	3.3	11	7.2	11.2	1720	1560	2520	5080	25000
12	RAX712	RAXF712	16.5	17.5	12	18	27.5	10	4.2	14.2	15	22.6	5040	5760	5520	14100	13000
14	RAX714	RAXF714	18	20	14	20	29.5	10	4.2	14.2	17	24.6	5520	6800	5920	16000	11500
15	RAX715	RAXF715	20	22	15	21	31.5	10	4.2	14.2	19	26.6	5920	7440	6240	17600	10500
18	RAX718	RAXF718	27	30	18	24	33.5	14	4.2	18.2	21	28.6	9200	14100	7200	18400	10000
20	RAX720	RAXF720	31	35	20	26	36.5	14	4.2	18.2	22	31.6	9760	15600	9400	31200	9000
25	RAX725	RAXF725	55	60	25	33	45.5	18	4.2	22.2	30	39.6	16400	25600	10900	40600	7200
30	RAX730	RAXF730	63	70	30	38	50.5	18	4.2	22.2	35	44.7	17800	30000	11900	54000	6300
35	RAX735	RAXF735	75	84	35	43	56.5	18	4.2	22.2	39	50.9	19600	36000	15500	70400	5500
40	RAX740	RAXF740	86	96	40	48	61.5	18	4.2	22.2	43	54.9	20900	40800	16300	76800	5000
45	RAX745	RAXF745	88	99	45	52	66.5	18	4.2	22.2	48	59.9	19800	44000	17400	87200	4500

滚针－推力圆柱滚子轴承

Needle Roller-Cylindrical Roller Thrust Bearings



RAX400



RAX500

轴径 Shaft Diameter	轴承型号 Bearing Designation		重量 Mass	外形尺寸 Boundary Dimensions										基本额定负荷 Basic Load Rating				极限转速 Limiting Speed
														径向 Radial		轴向 Axial		
	RAX400 系列	RAX500 系列		Ci	D1	D2 max	l	h	L	t	r mini	d1	d2	动 Dyn. Cr	静 Stat. Cor	动 Dyn. Ca	静 Stat. Coa	
mm			g	mm										N				rpm
10	RAX410	–	26	10	19	22	14	5	19	6	0.35	12	18.6	4800	5700	4000	9800	15500
	–	RAX510	26	10	19	22	14	5.5	19.5	6	0.35	12.2	18.5	4800	5700	6500	14300	15500
12	RAX412	–	32	12	21	26	14	5	19	6	0.35	15	22.6	5200	6700	5600	14800	13000
	–	RAX512	33	12	21	26	14	6	20	6	0.35	14.8	22.9	5200	6700	10100	23600	13000
15	RAX415	–	34	15	24	28	14	5	19	6	0.35	17	24.6	7500	9300	6000	16600	11500
	–	RAX515	36	15	24	28	14	6	20	6	0.35	16.8	24.9	7500	9300	11200	27200	11500
17	RAX417	–	41	17	26	30	16	5	21	8	0.65	19	26.6	9400	13000	6400	18400	10500
	–	RAX517	44	17	26	30	16	6	22	8	0.65	18.8	26.9	9400	13000	12000	31200	10500
20	RAX420	–	66	20	30	35	18	6	24	9	0.85	22	31.6	11700	18200	9400	31200	9000
	–	RAX520	70	20	30	35	18	8	26	9	0.85	22	31.6	11700	18200	17600	43200	9000
25	RAX425	–	99	25	37	42	18	6	24	9	0.85	27.7	37.4	12800	22000	10600	39200	7500
	–	RAX525	105	25	37	42	18	8	26	9	0.85	27.7	37.4	12800	22000	20400	63000	7500
30	RAX430	–	111	30	42	47	18	6	24	9	0.85	32.7	42.4	16400	27200	11600	45600	6500
	–	RAX530	118	30	42	47	18	8	26	9	0.85	32.7	42.3	16400	27200	21200	61600	6500
35	RAX435	–	130	35	47	53	18	6	24	9	0.85	37.2	49	17600	31600	15100	67200	5500
	–	RAX535	146	35	47	53.4	18	9	27	9	0.85	37.8	47.8	17600	31600	27000	75200	5500
40	RAX440	–	150	40	52	60	18	6	24	9	0.85	43	54.9	19000	36000	16300	76800	5000
	–	RAX540	174	40	52	60.4	18	10	28	9	0.85	42.8	54.8	19000	36000	36800	103200	5000
45	RAX445	–	179	45	58	65	18	6	24	9	0.85	48	59.9	20200	40800	17400	87200	4500
	–	RAX545	206	45	58	65.4	18	10	28	9	0.85	47.8	59.8	20200	40800	39200	114400	4500
50	RAX450	–	205	50	62	70	21	6	27	11	1.3	53.3	65.7	22600	48800	18000	94400	4000
	–	RAX550	232	50	62	70.4	21	10	31	11	1.3	52.8	64.8	22600	48800	40800	125600	4000
60	RAX460	–	282	60	72	85	21	7	28	11	1.3	63.5	79.2	24800	57600	25200	154400	3500
	–	RAX560	327	60	72	85.4	21	11	32	11	1.3	63.5	79.5	24800	57600	56800	204000	3500
70	RAX470	–	386	70	85	95	21	7	28	11	1.3	75.5	89.2	30000	68800	27600	178400	3000
	–	RAX570	435	70	85	95.4	21	11	32	11	1.3	75.5	89.5	30000	68800	61600	236000	3000

组合式向心－推力轴承

Combined Radial-Trust Bearings

滚针和保持架组件、滚针轴承和冲压外圈滚针轴承皆为游动端轴承。当与止推挡圈及角接触球轴承组合时可以作为定位轴承，可承受一定的定位负荷。在安装空间较小时，采用JQ组合式向心－推力轴承是一种理想的选择。

The needle roller and cage assemby, needle roller bearing and drawn cup needle roller bearing are unfixed end bearings. When combined the locating snap ring with angular contact ball bearing, it is as orientaion bearing and can bear a certain extend load, for small space fitting, JQ combined radial - thrust bearings are recommended to choose.

滚针－角接触球轴承

这种滚针－角接触球轴承是特别节省空间的滚动轴承，用于承受径向重载荷和轴向轻载荷。滚针承受径向载荷，轴向载荷不能大于径向载荷的25%。

Needle Roller-Angular Contact Ball Bearings Series NKIA

Particularly space-saving rolling bearing arrangement is achieved and is suitable for heavy load and with axial light load. When the needle roller bears radial load, the axial load can't exceed 25% of radial load.

向心滚针－推力圆柱滚子轴承

ZARN系列NA－向心滚针－推力圆柱滚子轴承是双向推力轴承。中圈同时作为向心滚针轴承外圈。内圈的宽度同中圈和推力滚子相配合以便当拧紧锁紧螺母时能得到预定的轴向预负荷。

ZARN...L系列的一个轴承(定位)圈宽度加长，外径为阶梯形。该轴承最适合用于轴承（定位）圈的轴向支撑不够之处，或者用在由于受到轴承配置空间的限制而无法再在标准轴（定位）圈的径面上使用转动轴封之处。

ZARF系列轴承与ZARN不同之处为ZARF的中圈适用于法兰安装，并且带进油口和带出油口。

ZARF...L系列轴承与ZARN...L不同之处为ZARF...L的中圈适用于法兰安装，并且带进油口和出油口。

Radial Needle Roller-Threst Cylindrical Roller Bearings

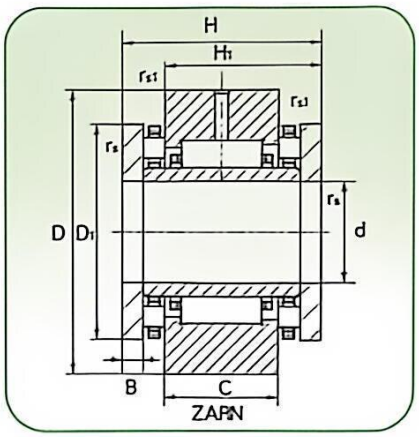
Series ZARN NA is radial needle roller-double direction thrust cylindrical roller bearing.The centre Ring is as the outer ring of radial needle roller bearing. The inner ring's width should be matched centre ring' and trust roller's, so that the axial load will be obtained during tightening nut.

The bearing's washer's width is prolonged and the outer diameter takes the shape of ladder for Series ZARN...L This bearing is suitable for less axial support or as special bearing.

Comparing series ZARF with ZARN series, the former's centre ring is suitable for flaged fitting, also with the inlet and outlet slot.

Comparing series ZARF...L with ZARN...L series,the former's centre ring is suitable for flanged fitting, also with the inlet and outlet slot.

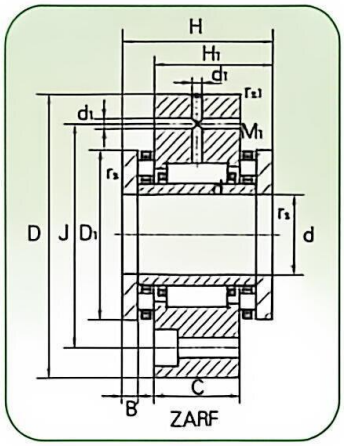
组合式向心－推力轴承
Combined Radial-Trust Bearings

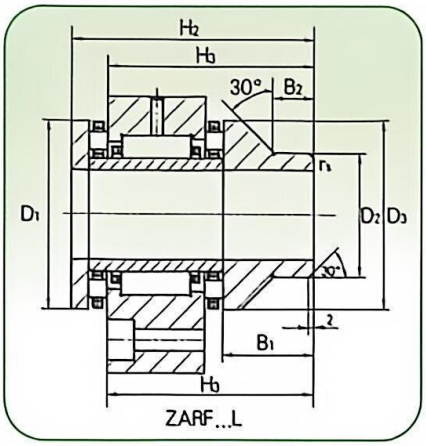


轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions											
					d	D	H	H_1	H_2	H_3	C	D_1	D_2	D_3	B	B_1
mm		Kg		Kg	mm											
20	ZARN2062TN	0.87	ZARN2062LTN	0.99	20	62	60	40	75	55	20	52	40	50	12.5	27.5
	ZARF2080TN	1.1	ZARF2080LTN	1.22	20	80	60	38	75	53	18	52	40	50	12.5	27.5
25	ZARN2572TN	1.17	ZARN2572LTN	1.32	25	72	60	40	75	55	20	62	48	60	12.5	27.5
	ZARF3080TN	1.6	ZARF2590LTN	1.75	25	90	60	38	75	53	18	62	48	60	12.5	27.5
30	ZARN3080TN	1.5	ZARN3080LTN	1.7	30	80	66	43	82	59	20	68	52	66	14	30
	ZARF30105TN	1.95	ZARF30105LTN	2.15	30	105	66	41	82	57	18	68	52	66	14	30
35	ZARN3585TN	1.65	ZARN3585 TN	1.8	35	85	66	43	82	59	20	73	60	73	14	30
	ZARF35110TN	1.6	ZARF35110LTN	1.85	35	110	66	41	82	57	18	73	60	73	14	30
40	ZARN4090TN	2.09	ZARN4090LTN	2.39	40	90	75	50	93	68	25	78	60	78	16	34
	ZARF40115TN	2.7	ZARF40115LTN	3.0	40	115	75	47.5	93	65.5	22.5	78	60	78	16	34
45	ZARN45105TN	3.02	ZARN45105LTN	3.42	45	105	82	53.5	103	74.5	25	90	70	88	17.5	38.5
	ZARF45130TN	3.9	ZARF45130TN	4.3	45	130	82	51	103	72	22.5	90	70	88	17.5	38.5
50	ZARN50110TN	3.3	ZARN50110LTN	3.75	50	110	82	53.5	103	74.5	25	95	75	93	17.5	38.5
	ZARF50140TN	4.2	ZARF50140LTN	4.65	50	140	82	51	103	72	22.5	95	75	93	17.5	38.5
55	ZARN55115TN	3.5	ZARN55115LTN	4.0	55	115	82	53.5	103	74.5	25	100	80	98	17.5	38.5
	ZARF55145TN	4.5	ZARF55145LTN	5.0	55	145	82	51	103	72	22.5	100	80	98	17.5	38.5
60	ZARN60120TN	3.7	ZARN60120LTN	4.85	60	120	82	53.5	103	74.5	25	105	90	105	17.5	38.5
	ZARF60150TN	4.7	ZARF60150LTN	5.35	60	150	82	51	103	72	22.5	105	90	105	17.5	38.5
65	ZARN65125TN	4.0	ZARN65125LTN	4.6	65	125	82	53.5	103	74.5	25	110	90	108	17.5	38.5
	ZARF65155TN	5.1	ZARF65155LTN	5.7	65	155	82	51	103	72	22.5	110	90	108	17.5	38.5
70	ZARN70130TN	4.1	ZARN70130LTN	4.85	70	130	82	53.5	103	74.5	25	115	100	115	17.5	38.5
	ZARF70160TN	5.2	ZARF70160LTN	5.95	70	160	82	51	103	72	22.5	115	110	115	17.5	38.5
75	ZARN75155TN	7.9	ZARN75155LTN	9.1	75	155	100	65	125	90	30	135	115	135	21	46
	ZARF75185TN	9.4	ZARF75185LTN	4.6	75	185	100	65	125	87	27	135	115	135	21	46
90	ZARN90180TN	11.8	ZARN90180L	13.2	90	180	110	72.5	135	97.5	35	160	130	158	22.5	47.5
	ZARF90210TN	13.7	ZARF90210L	15.1	90	210	110	69.5	135	94.5	32	160	130	158	22.5	47.5

★TN=塑料保持架，允许工作温度：120℃连续地，150℃临时地，180℃短期地。

组合式向心－推力轴承
Combined Radial-Trust Bearings



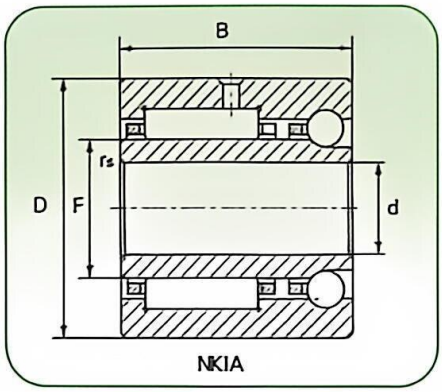


					固定螺丝 Fixed Screw	基本额定负荷 Basic Load Rating				极限转速 Limiting SPeed		螺母 Nut	
B7	r6 min	rts min	dt	J		轴向 Axial		径向 Radial		n loil ≈ min⁻¹	n lgrease ≈ min⁻¹	螺纹 Screw Thread	拧紧力矩 Tighting Torque MA NM
						动 Cr	静 Cor	动 Cr	静 Cor				
11	0.3	0.6	–	–	– – –	64000	141000	22600	36000	6000	1500	M20 × 1.5	38
11	0.3	0.6	3.2	63	M 6 12	64000	141000	22600	36000	6000	1500	M20 × 1.5	38
11	0.3	0.6	–	–	– – –	80000	199000	24300	41500	4900	1400	M25 × 1.5	55
11	0.3	0.6	3.2	73	M 6 12	80000	199000	24300	41500	4900	1400	M25 × 1.5	55
12	0.3	0.6	–	–	– – –	107000	265000	26000	47000	4400	1300	M30 × 1.5	75
12	0.3	0.6	3.2	85	M 8 12	107000	265000	26000	47000	4400	1300	M30 × 1.5	75
12	0.3	0.6	–	–	– – –	105000	265000	27500	53000	4000	1250	M35 × 1.5	100
12	0.3	0.6	3.2	88	M 8 12	105000	265000	27500	53000	4000	1250	M35 × 1.5	100
12	0.3	0.6	–	–	– – –	117000	315000	38000	74000	3700	1200	M40 × 1.5	120
12	0.3	0.6	6	94	M 8 12	117000	315000	38000	74000	3700	1200	M40 × 1.5	120
14	0.3	0.6	–	–	– – –	154000	405000	40000	82000	3300	1150	M45 × 1.5	150
14	0.3	0.6	6	105	M 8 12	154000	405000	40000	82000	3300	1150	M45 × 1.5	150
14	0.3	0.6	–	–	– – –	172000	480000	42000	90000	3100	1100	M50 × 1.5	180
14	0.3	0.6	6	113	M 10 12	172000	480000	42000	90000	3100	1100	M50 × 1.5	180
14	0.3	0.6	–	–	– – –	177000	500000	44000	98000	2900	1000	M55 × 1.5	220
14	0.3	0.6	6	118	M 10 12	177000	500000	44000	98000	2900	1000	M55 × 1.5	220
16	0.3	0.6	–	–	– – –	187000	550000	44500	92000	2700	950	M60 × 1.5	250
16	0.3	0.6	6	123	M 10 12	187000	550000	44500	92000	2700	950	M60 × 1.5	250
16	0.3	0.6	–	–	– – –	172000	500000	54000	104000	2600	900	M65 × 1.5	270
16	0.3	0.6	6	128	M 10 12	172000	500000	54000	104000	2600	900	M65 × 1.5	270
16	0.3	0.6	–	–	– – –	201000	630000	56000	119000	2400	800	M70 × 1.5	330
16	0.3	0.6	6	133	M 10 12	201000	630000	56000	119000	2400	800	M70 × 1.5	330
16	0.3	0.6	–	–	– – –	290000	890000	72000	132000	2100	700	M75 × 1.5	580
16	0.3	0.6	6	155	M 12 12	290000	890000	72000	132000	2100	700	M75 × 1.5	580
16	0.3	0.6	–	–	– – –	300000	940000	98000	210000	1800	700	M90 × 1.5	960
16	0.3	0.6	6	180	M 12 16	300000	940000	98000	210000	1800	700	M90 × 1.5	960

★TN=塑料保持架，允许工作温度：120℃连续地，150℃临时地，180℃短期地。

单向受力

Single-Direction Load Capabilitya



轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions					基本额定负荷 Basic Load Rating				极限转速[1] Limiting Speed
								径向 Axial		轴向 Radial		
mm		g	d	F	D	B	r_s min	动C N	静Co N	动C N	静Co N	n_{lim} min^{-1}
12	NKIA5901	40	12	16	24	16	0.3	7600	8300	2160	1940	23000
15	NKIA5902	50	15	20	28	18	0.3	10600	13600	2340	2370	21000
17	NKIA5903	56	17	22	30	18	0.3	10600	13600	2500	2750	20000
20	NKIA5904	103	20	25	37	23	0.3	21000	25500	3950	4200	17000
22	NKIA59/22	118	22	28	39	23	0.3	22800	29500	4250	4850	15000
25	NKIA5905	130	25	30	42	23	0.3	23600	31500	4350	5200	14000
30	NKIA5906	147	30	35	47	23	0.3	25000	35500	4750	6300	13000
35	NKIA5907	243	35	42	55	27	0.6	31500	50000	6000	8400	11000
40	NKIA5908	315	40	48	62	30	0.6	43000	67000	7400	10900	9000
45	NKIA5909X	375	45	52	68	30	0.6	45000	73000	7700	12000	8500
50	NKIA5910X	380	50	58	72	30	0.6	47000	80000	8100	13700	8000
55	NKIA5911	550	55	63	80	34	1	58000	100000	9700	16600	7000
60	NKIA5912	590	60	68	85	34	1	60000	108000	10000	17900	6500
65	NKIA5913X	635	65	72	90	34	1	61000	112000	10300	19300	6500
70	NKIA5914	980	70	80	100	40	1	84000	156000	13500	25000	5500

★ 球轴承的保持架由塑料制成，允许工作温度：120℃连续地。150℃临时地，180℃短期地。

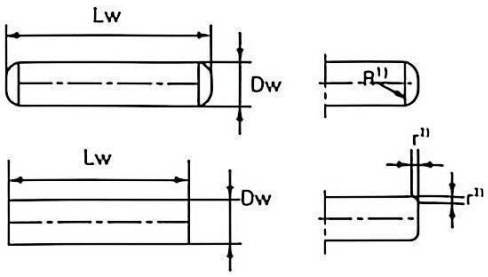
★ [1])脂润滑时，允许值为表中数值的60%。

滚针

Needle rollers

表1. 尺寸公差和几何精度/Table 1 Dimension Tolerance and Geomertrical Precision

质量等级 Quality Grade	偏差 Deviation μm	每个类别公差 Tolerance of Each Sort μm	类别偏差的分组 Group of Sort Deviation μm	圆度公差 Roundness Tolerance	长度公差 Length Tolerance
G2	0-10	2	0 -2, -1 -3, -2 -4,	0.8	h13
			-3 -5, -4 -6, -5 -7,		
			-6 -8, -7 -9, -8 -10		
G3	0-10	3	0 -3, -1.5 -4.5, -3 -6	1.2	
			-4.5 -7.5, -6 -9, -7 -10		
G5	0-10	5	0 -5, -3 -8, -5 -10	2	



规格 Spec mm	重量 Mass 每1000件 kg/1000Pcs	外形尺寸 mm Boundary Dimensions	
		Dw	Lw
NR1 × 5.8	0.034	1	5.8
NR1 × 6.8	0.042	1	6.8
NR1 × 7.8	0.047	1	7.8
NR1 × 9.8	0.059	1	9.8
NR1.5 × 5.8	0.08	1.5	5.8
NR1.5 × 6.8	0.094	1.5	6.8
NR1.5 × 7.8	0.108	1.5	7.8
NR1.5 × 9.8	0.136	1.5	9.8
NR1.5 × 11.8	0.164	1.5	11.8
NR1.5 × 13.8	0.191	1.5	13.8
NR2 × 6.3	0.14	2	6.3
NR2 × 7.8	0.19	2	7.8
NR2 × 9.8	0.24	2	9.8
NR2 × 11.8	0.29	2	11.8
NR2 × 13.8	0.34	2	13.8
NR2 × 15.8	0.39	2	15.8
NR2 × 17.8	0.44	2	17.8
NR2 × 19.8	0.49	2	19.8
NR2 × 21.8	0.54	2	21.8
NR2.5 × 7.8	0.3	2.5	7.8
NR2.5 × 9.8	0.38	2.5	9.8
NR2.5 × 11.8	0.45	2.5	11.8
NR2.5 × 13.8	0.53	2.5	13.8
NR2.5 × 15.8	0.61	2.5	15.8
NR2.5 × 17.8	0.69	2.5	17.8
NR2.5 × 19.8	0.76	2.5	19.8
NR2.5 × 21.8	0.84	2.5	21.8
NR2.5 × 23.8	0.92	2.5	23.8
NR3 × 9.8	0.54	3	9.8
NR3 × 11.8	0.65	3	11.8
NR3 × 13.8	0.76	3	13.8
NR3 × 15.8	0.87	3	15.8
NR3 × 17.8	0.99	3	17.8
NR3 × 19.8	1.1	3	19.8
NR3 × 21.8	1.21	3	21.8
NR3 × 23.8	1.32	3	23.8
NR3 × 25.8	1.43	3	25.8
NR3 × 27.8	1.54	3	27.8
NR3 × 29.8	1.61	3	29.8

规格 Spec mm	重量 Mass 每1000件 kg/1000Pcs	外形尺寸 mm Boundary Dimensions	
		Dw	Lw
NR3.5 × 11.8	0.91	3.5	11.8
NR3.5 × 13.8	1.05	3.5	13.8
NR3.5 × 15.8	1.19	3.5	15.8
NR3.5 × 17.8	1.35	3.5	17.8
NR3.5 × 19.8	1.51	3.5	19.8
NR3.5 × 21.8	1.67	3.5	21.8
NR3.5 × 23.8	1.85	3.5	23.8
NR3.5 × 25.8	1.96	3.5	25.8
NR3.5 × 27.8	2.1	3.5	27.8
NR3.5 × 29.8	2.25	3.5	29.8
NR3.5 × 34.8	2.65	3.5	34.8
NR4 × 15.8	1.55	4	15.8
NR4 × 17.8	1.75	4	17.8
NR4 × 19.8	1.95	4	19.8
NR4 × 21.8	2.14	4	21.8
NR4 × 23.8	2.33	4	23.8
NR4 × 25.8	2.53	4	25.8
NR4 × 27.8	2.62	4	27.8
NR4 × 29.8	2.95	4	29.8
NR4 × 34.8	3.4	4	34.8
NR4 × 39.8	3.9	4	39.8
NR5 × 19.8	3.03	5	19.8
NR5 × 21.8	3.36	5	21.8
NR5 × 23.8	3.58	5	23.8
NR5 × 25.8	3.98	5	25.8
NR5 × 27.8	4.18	5	27.8
NR5 × 29.8	4.6	5	29.8
NR5 × 34.8	5.4	5	34.8
NR5 × 39.8	6.15	5	39.8
NR5 × 49.8▸	7.5	5	49.8

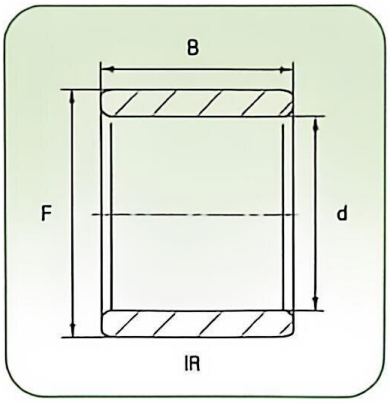
1)端头半径/Radius of End

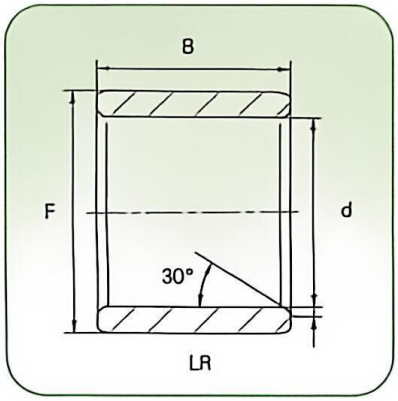
R在$\frac{Dw}{2}$和$\frac{Lw}{2}$之间　　R is between$\frac{Dw}{2}$and$\frac{Lw}{2}$

2)倒角尺寸/Dimension of Chamfer

直径/Diameter Dw 超过/Over	到/Less than	倒角尺寸/Chamfer Dimension r 最小/Min	最大/Max
–	3	0.1	0.6
3	5	0.1	0.9

内圈
Inner Ring





轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions		
			d	F	B
mm		g	mm		
5	IR5 × 8 × 12	2.79	5	8	12
	IR5 × 8 × 16	3.75	5	8	16
6	IR6 × 9 × 12	3.17	6	9	12
	IR6 × 9 × 16	4.3	6	9	16
	□ IR6 × 10 × 10	3.7	6	10	10
	■ IR6 × 10 × 12	4.6	6	10	12
7	IR/LR7 × 10 × 10.5	3.09	7	10	10.5
	IR7 × 10 × 16	4.9	7	10	16
7.8	IR06 × 12 × 10.5C		7.8	12.2	10.7
8	□ IR8 × 12 × 10	4.8	8	12	10
	IR/LR8 × 12 × 10.5	5	8	12	10.5
	■ IR8 × 12 × 12	5.7	8	12	12
	IR/LR8 × 12 × 12.5	5.9	8	12	12.5
9	IR9 × 12 × 16	6.1	9	12	16
10	IR/LR10 × 13 × 12.5	5.2	10	13	12.5
	□ IR10 × 14 × 12	7.3	10	14	12
	■ IR10 × 14 × 14	8	10	14	14
	IR10 × 14 × 20	11.6	10	14	20
12	IR12 × 15 × 12	5.8	12	15	12
	IR/LR12 × 15 × 12.5	6.1	12	15	12.5
	IR/LR12 × 15 × 16.5	8.1	12	15	16.5
	IR/LR12 × 15 × 22.5	10.9	12	15	22.5
	□ IR12 × 16 × 12	7.9	12	16	12
	IR12 × 16 × 13	8.7	12	16	13
	■ IR12 × 16 × 14	9.5	12	16	14
	IR12 × 16 × 20	13.5	12	16	20
	IR12 × 16 × 12(孔)		12	16	12
	IR12 × 17 × 22.5		12	17	22.5
14	R14 × 17 × 17	10	14	17	17
15	LR15 × 18 × 12.5	7.2	15	18	12.5
	IR15 × 19 × 20	16.4	15	19	20
	□ IR15 × 20 × 12	12.1	15	20	12
	■ IR15 × 20 × 14	14.7	15	20	14
	IR15 × 20 × 23	24.4	15	20	23
17	IR/LR17 × 20 × 16.5	11.1	17	20	16.5
	IR/LR17 × 20 × 30.5	20.6	17	20	30.5
	IR17 × 21 × 16	14.3	17	21	16
	IR17 × 21 × 20	18	17	21	20

轴径 Shaft Diameter	轴承型号 Bearing Designation	重量 Mass 近似 Approx	外形尺寸 Boundary Dimensions		
			d	F	B
mm		g	mm		
17	■ IR17 × 22 × 14	16.4	17	22	14
	IR17 × 24 × 20	33.6	17	24	20
20	IR20 × 24 × 16	16.5	20	24	16
	LR20 × 25 × 12.5	16.3	20	25	12.5
	□ IR20 × 25 × 16	21.1	20	25	16
	IR20 × 25 × 17	22.4	20	25	17
	■ IR20 × 25 × 18	24.3	20	25	18
	IR/LR20 × 25 × 20.5	28.2	20	25	20.5
	IR/LR20 × 25 × 26.5	36.1	20	25	26.5
	IR20 × 28 × 20	45.2	20	28	20
22	IR22 × 26 × 16	17.5	22	26	16
	IR22 × 28 × 17	29.8	22	28	17
	IR/LR22 × 28 × 20.5	36	22	28	20.5
	IR22 × 28 × 30	26.7	22	28	30
25	IR25 × 29 × 20	25.5	25	29	20
	□ IR25 × 30 × 16	26	25	30	16
	IR25 × 30 × 17	27.5	25	30	17
	■ IR25 × 30 × 18	29.8	25	30	18
	IR25 × 30 × 20	32.6	25	30	20
	IR/LR26 × 30 × 26.5	43.3	25	30	26.5
	IR/LR25 × 30 × 38.5	63.8	25	30	38.5
	IR25 × 32 × 22	51.7	25	32	22
28	IR28 × 32 × 17	24.5	28	32	17
	IR28 × 32 × 30	43.8	28	32	30
28.575	IRB1820		28.575	34.925	32
29	IR29 × 32 × 13	14.8	29	32	13
30	IR30 × 35 × 16	30.8	30	35	16
	IR30 × 35 × 20	40	30	35	20
32	IR32 × 37 × 20	42	32	37	20
33	IR33 × 37 × 13	21.9	33	42	13
35	□ IR35 × 42 × 20	63.9	35	42	20
40	IR40 × 45 × 17	42.5	40	45	17
	□ IR40 × 50 × 20	106	40	50	20
45	■ IR45 × 52 × 23	93	45	52	23
50	□ IR50 × 55 × 20		50	55	20
55	IR55 × 63 × 25	86	55	63	25
60	IR60 × 68 × 35	152	60	68	35
70	IR70 × 80 × 54	487	70	80	54
80	IR80 × 90 × 35	355	80	90	35

□带润滑孔　■无润滑孔，没有引导倒角