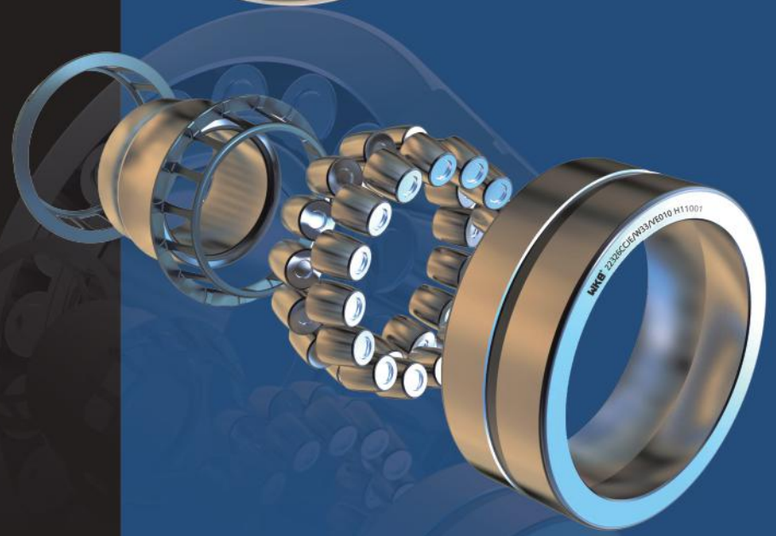
调心滚子轴承
Spherical Roller Bearing

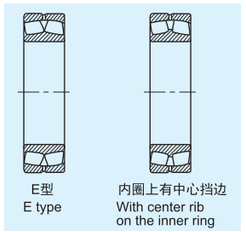


基本类型
Basic type

大部分外径320mm以下的调心滚子轴承为结构增强型E系列轴承。与其它轴承不同的是这些轴承内圈上没有中挡边，因此它们的滚子更长。这样E系列调心滚子轴承的额定载荷明显比其它普通调心滚子轴承大。
WKB调心滚子轴承有圆柱形孔或圆锥形孔。
圆锥孔的调心滚子轴承通过紧定套或退卸套安装到轴上。

Most of the Spherical roller bearings in OD less than 320mm are the structure reinforced E series bearings. Their difference from other bearings is that their inner ring has no center rib, therefore their roller is longer. The rated load of these E series spherical roller bearings is obviously more than other common Spherical roller bearing.
WKB Spherical roller bearings have the cylindrical bore or tapered bore.
The Spherical roller bearing with tapered bore is mounted on the shaft through adapter sleeve or withdrawal sleeve.

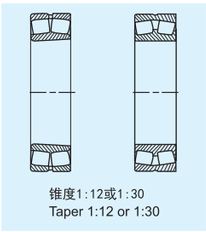
圆柱孔调心滚子轴承
Cylindrical bore Spherical roller bearing



E型
E type

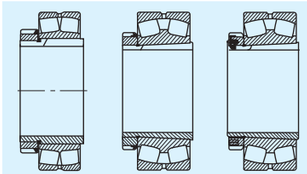
内圈上有中心挡边
With center rib on the inner ring

圆锥孔调心滚子轴承
Tapered bore Spherical roller bearing



锥度1:12或1:30
Taper 1:12 or 1:30

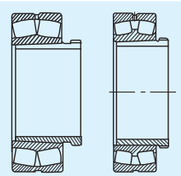
带紧定套的调心滚子轴承
Spherical roller bearing with adapter sleeve



紧定套，螺母和锁紧垫片
Adapter sleeve, nut and locking washer

紧定套，螺母和卡板
Adapter sleeve, nut and lock plate

带退卸套的调心滚子轴承
Spherical roller bearing with withdrawal sleeve



振动机械用调心滚子轴承
Bearings for Vibrating Machines

概述 Introduction

在工业生产过程中，往往需要将各种原料（如矿石、煤炭、石料等）和各种初级产品（如水泥、食盐、味精等）按物料粒度大小分成若干个级别，或将其中的水分、杂质等去除，以进行下一步的加工和提高产品品质，这就要求用到筛分机械。

In the production of industry, it's common to separate all kinds of material (for example ore , coal, stone etc) and preliminary products (like cerement, salt, and aginomoto etc) into several grades based on the dimension of particles. Sometimes, in order to proceed next process and improve the product quality, water or other disturbance have to been eliminated, in this case, screening machine will be applied.

振动筛是常见的筛分机械，它在各行各业有着极为广泛的应用。从矿山到冶金，从建材到电力，从筑路架桥到食品化工，到处都有振动筛在工作。可以毫不夸张地说，没有振动机械就无法制造出合格的、高品质的产品。

Vibrating screen is the most common screening machine which is applied in every industry field widely. From mining to metallurgy, from construction to electric power, from road & bridge construction to food chemical, vibrating screens operates everywhere. Frankly speaking, without vibrating machines, no qualified or high quality products can be produced.

振动筛是怎样工作的？它又是如何对物料进行筛分的呢？

How does vibrating screen work? How does it screen the materials?

我们都有这样的经验，当汽车转弯时，坐在汽车里的人的身体即向转弯的外侧倾斜，这便是离心力。振动筛正是依靠这一原理制成的惯性振动器来工作的。

We all have such experience that while the car turns, passengers in the car will lean over to the turning side which is called centrifugal force. Vibrating screen is produced based on this theory.

人们在轴上装上偏心体，用电动机（或其它动力机）带动其旋转，这时由偏心体产生一向外（相对于轴心）的力。（如同坐在车里的人一样）偏心体的质量越大，距轴心的距离越远，轴的转速越高，离心力越大。与汽车转弯不同的是，此偏心体做的圆周运动，产生的是沿圆周方向的连续的力。这就是振动器（或者叫激振器），将它以适当的方式，安装在筛机适当的位置，就能带动筛机做圆周运动，圆振动筛便产生了。

Eccentric body is mounted on the axle and motivates it with motor (or other power machine), in this condition, a kind of outward force (opposite to the axle center) occurs. It’ s the same as the passengers in the car, the more the mass of the eccentric body, the farer the distance to the axle center and the faster the axle rotates, the more the centrifugal force will be. It’ s different to the car turns, this eccentric body operates with circular motion and the force generated is a kind of continuous force in circumferential direction. The vibrating machine is mounted on the screening machine properly to motivate the screening machine to operate in circular motion. Round vibrating screen is invented accordingly.

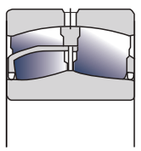
振动筛的主要配件除了振动电机之外就要数到轴承了，轴承的好坏直接影响到振动筛的质量。经过近几年的专心研究，我公司已经在振动筛上使用的调心滚子轴承取得很大的成绩，现在已经系列生产振动筛上使用的调心滚子轴承产品。

The major accessories of vibrating screen are bearings expect for motors. The quality of bearings will directly affect the function of vibrating screens. After several year study and research, WKB have made great progress in producing spherical roller bearings for vibrating screen. Now, WKB have produced spherical roller bearings in vibrating screen in series.

振动机械用调心滚子轴承 Spherical roller bearings applied in vibrating machines

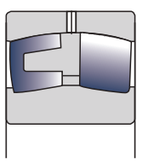
振动机械的轴承应用中，因振动筛或激振器，引起轴承中滚子和保持架的加速，这种工况大提高了对轴承设计的额外要求。为了满足振动应用调心滚子轴承可承受比相应的标准轴承高得多的加速，以及施加在轴承上大小、方向、偏心等多变的负荷。我们基于调心滚子轴承223系列的尺寸和性能相同的基础进行研发，生产出CCJA和CAFA型振动机械用调心滚子轴承。

In the application of bearings for the vibrating machines, since the vibrating screen or exciter cause the acceleration of the roller and cages in bearings, extra requirements for designing the bearings will be proposed. In order to meet the high requirements for high accelerating speed and various loads on the dimension, direction and eccentricity, WKB researched and developed the spherical roller 223 series based on the same dimension and functions, and produced CCJA and CAFA type spherical roller bearings especially applied in vibrating machines.



CCJA设计
CCJA Design

两个表面硬化的窗口式冲压保持架，内圈无挡圈和带有一个外引导环
Two surface hardened window type press cage, without collar on inner ring and with an outer guide ring.



CAFA设计
CAFA Design

由外圈滚道引导的叉型机削铜制保持架，内圈带有挡边。
A machined brass cage guided by outer ring raceway and with a collar on the inner ring.

以上两种设计均可提供1:12锥孔和圆柱孔轴承，为方便润滑，所有轴承均带有油槽油孔。
The above design both provide 1:12 tapered bore or cylindrical bore. For convenience of lubrication, all the bearings are with oil slot and oil bore.

一般资料和数据
General reference and data

尺寸 Dimension

调心滚子轴承的外形尺寸符合2011年的ISO 15标准。

The outer dimension meets ISO 15 standard issued in year 2011.

公差 Tolerance

用于振动应用的调心滚子轴承尺寸公差为特殊公差，如下表。形位公差为P5。

The tolerance for vibrating machine bearings is special one; please refer to the following table. The geometric tolerance is P5.

振动筛机械用调心滚子轴承尺寸公差表
Tolerance table for spherical roller bearings applied on vibrating machines

内圈 Inner ring				外圈 Outer ring			
公称内径 Nominal inner diameter mm		偏差Deviation Δ dmp μ m		公称内径 Nominal inner diameter mm		偏差Deviation Δ dmp μ m	
超过 Over	到 To	最大 max	最小 min	超过 Over	到 To	最大 max	最小 min
30	50	0	-7	80	150	-5	-13
50	80	0	-9	150	180	-5	-18
80	120	0	-12	180	315	-10	-23
120	180	0	-15	315	400	-13	-28
180	250	0	-18	400	500	-13	-30
250	315	0	-21	500	630	-15	-35
315	400	0	-23	630	800	-18	-40

内部游隙 Inner clearance

用于振动应用的调心滚子轴承标准生产带有C4游隙

C4 clearance is applied to standard spherical roller bearing for vibrating machines.

带圆柱孔的轴承径向游隙范围
Radial clearance scope for bearing with cylindrical bore

内径d(mm) Inner ring		径向游隙cr(μ m) Radial clearance	
大于 Over	包括 Include	最小 min	最大 max
80	100	135	180
100	120	160	210
120	140	190	240
140	160	220	280
160	180	240	310
180	200	260	340
200	225	290	380
225	250	320	420
250	280	350	460
280	315	370	500

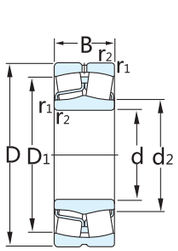
带圆锥孔的轴承径向游隙范围
Radial clearance scope for bearing with tapered bore

内径d(mm) Inner ring		径向游隙cr(μ m) Radial clearance	
大于 Over	包括 Include	最小 min	最大 max
80	100	140	180
100	120	170	220
120	140	200	260
140	160	230	300
160	180	260	340
180	200	290	370
200	225	320	410
225	250	350	450
250	280	390	490
280	315	430	540

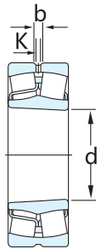
我公司现在生产适用于振动筛的调心滚子轴承
Spherical roller bearings applied in vibrating screen produced by ICAN

序号 No.	规格 Specification		
1	22312CCJA/W33/VE010	22312CCJAK/W33/VE010	
2	22312MA/W33	22312MAK/W33	
3	22313CCJA/W33/VE010	22313CCJAK/W33/VE010	
4	22313MA/W33	22313MAK/W33	
5	22314CCJA/W33/VE010	22314CCJAK/W33/VE010	
6	22314MA/W33	22314MAK/W33	
7	22315CCJA/W33/VE010	22315CCJAK/W33/VE010	
8	22315MA/W33	22315MAK/W33	
9	22316CCJA/W33/VE010	22316CCJAK/W33/VE010	
10	22316MA/W33	22316MAK/W33	
11	22317CCJA/W33/VE010	22317CCJAK/W33/VE010	
12	22317MA/W33	22317MAK/W33	
13	22318CCJA/W33/VE010	22318CCJAK/W33/VE010	22318MB/W33
14	22318MA/W33	22318MAK/W33	22318MBK/W33
15	22319CCJA/W33/VE010	22319CCJAK/W33/VE010	22319MB/W33
16	22319MA/W33	22319MAK/W33	22319MBK/W33
17	22320CCJA/W33/VE010	22320CCJAK/W33/VE010	22320MB/W33
18	22320MA/W33	22320MAK/W33	22320MBK/W33
19	22322CCJA/W33/VE010	22322CCJAK/W33/VE010	22322MB/W33
20	22322MA/W33	22322MAK/W33	22322MBK/W33

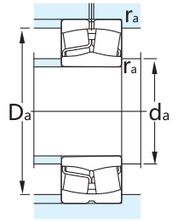
序号 No.	规格 Specification		
21	22324CCJA/W33/VE010	22324CCJAK/W33/VE010	22324MB/W33
22	22324MA/W33	22324MAK/W33	22324MBK/W33
23	22326CCJA/W33/VE010	22326CCJAK/W33/VE010	22326MB/W33
24	22326MA/W33	22326MAK/W33	22326MBK/W33
25	22328CCJA/W33/VE010	22328CCJAK/W33/VE010	22328MB/W33
26	22328MA/W33	22328MAK/W33	22328MBK/W33
27	22330CCJA/W33/VE010	22330CCJAK/W33/VE010	22330MB/W33
28	22330MA/W33	22330MAK/W33	22330MBK/W33
29	22332CCJA/W33/VE010	22332CCJAK/W33/VE010	22332MB/W33
30	22332MA/W33	22332MAK/W33	22332MBK/W33
31	22334CCJA/W33/VE010	22334CCJAK/W33/VE010	22334MB/W33
32	22334MA/W33	22334MAK/W33	22334MBK/W33
33	22336CCJA/W33/VE010	22336CCJAK/W33/VE010	22336MB/W33
34	22336MA/W33	22336MAK/W33	22336MBK/W33
35	22338CCJA/W33/VE010	22338CCJAK/W33/VE010	22338MB/W33
36	22338MA/W33	22338MAK/W33	22338MBK/W33
37	22340CCJA/W33/VE010	22340CCJAK/W33/VE010	22340MB/W33
38	22340MA/W33	22340MAK/W33	22340MBK/W33
39	22344CCJA/W33/VE010	22344CCJAK/W33/VE010	22344MB/W33
40	22344MA/W33	22344MAK/W33	22344MBK/W33

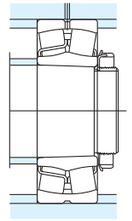


圆柱孔
Cylindrical bore



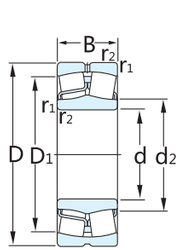
圆锥孔
Tapered bore



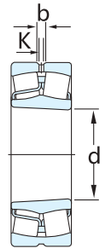


基本尺寸 Basic Size			基本额定负荷 Basic load rating 动态 dynamic	静态 static	疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed 参考转速 Reference Speed	极限转速 Limit Speed	型号Designation(Design) 圆柱孔Cylindrical bore	圆锥孔Tapered bore
d	D	B	C	C_o	P_u				
mm			kN		kN	r/min		-	
75	115	40	181	232	28.5	3800	5300	**24015CC/W33**	**24015CCK30/W33**
	130	31	217	240	26.5	4800	6300	**22215E**	**22215EK**
	160	37	291	325	34.5	4000	5600	**21315E**	**21315EK**
	160	55	462	475	48	3200	4300	**22315E**	**22315EK**
80	140	33	243	270	29	4300	6000	**22216E**	**22216EK**
	170	39	331	375	39	3800	5300	**21316E**	**21316EK**
	170	58	516	530	54	3000	4000	**22316E**	**22316EK**
85	150	36	291	325	34.5	4000	5600	**22217E**	**22217EK**
	180	41	331	375	39	3800	5300	**21317E**	**21317EK**
	180	60	577	620	61	2800	3800	**22317E**	**22317EK**
90	160	40	331	375	39	3800	5300	**22218E**	**22218EK**
	160	52.4	372	440	48	2800	3800	**23218CC/W33**	**23218CCK/W33**
	190	43	393	450	46.5	3600	4800	**21318E**	**21318EK**
	190	64	637	695	67	2600	3600	**22318E**	**22318EK**
95	170	43	393	450	45.5	3600	4800	**22219E**	**22219EK**
	200	45	433	490	49	3400	4500	**21319E**	**21319EK**
	200	67	699	765	73.5	2600	3400	**22319E**	**22319EK**
100	150	50	296	415	45.5	2800	4000	**24020CC/W33**	**24020CCK30/W33**
	165	52	385	490	53	3000	4000	**23120CC/W33**	**23120CCK/W33**
	165	65	468	640	68	2400	3200	**24120CC/W33**	**24120CCK30/W33**
	180	46	433	490	49	3400	4500	**22220E**	**22220EK**
	180	60.3	498	600	63	2400	3400	**23220CC/W33**	**23220CCK/W33**
	215	47	433	490	49	3400	4500	**21320E**	**21320EK**
	215	73	847	950	88	2400	3000	**22320E**	**22320EK**
110	170	45	326	440	46.5	3400	4300	**23022CC/W33**	**23022CCK/W33**
	170	60	437	620	67	2400	3600	**24022CC/W33**	**24022CCK30/W33**
	180	56	450	585	61	2800	3600	**23122CC/W33**	**23122CCK/W33**
	180	69	539	750	78	2200	3000	**24122CC/W33**	**24122CCK30/W33**
	200	53	572	640	63	3000	4000	**22222E**	**22222EK**
	200	69.8	626	765	76.5	2200	3200	**23222CC/W33**	**23222CCK/W33**
	240	80	989	1120	100	2000	2800	**22322E**	**22322EK**

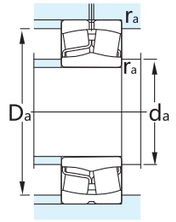
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation cefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
84.2	100	5.5	3	1.1	81	109	1	0.28	2.4	3.6	2.5	1.55
87.8	115	6	3	1.5	84	121	1.5	0.22	3	4.6	2.8	1.7
101	133	6	3	2.1	87	148	2	0.22	3	4.6	2.8	3.75
92.8	135	8.3	4.5	2.1	87	148	2	0.35	1.9	2.9	1.8	5.55
94.7	124	6	3	2	91	129	2	0.22	3	4.6	2.8	2.1
106	141	6	3	2.1	92	158	2	0.24	2.8	4.2	2.8	4.45
98.3	143	8.3	4.5	2.1	92	158	2	0.35	1.9	2.9	1.8	6.6
101	133	6	3	2	96	139	2	0.22	3	4.6	2.8	2.7
106	141	6	3	3	99	166	2.5	0.24	2.8	4.2	2.8	5.2
108	154	8.3	4.5	3	99	166	2.5	0.33	2	3	2	7.65
106	141	6	3	2	101	149	2	0.24	2.8	4.2	2.8	3.4
106	137	6	3	2	101	149	2	0.31	2.2	3.3	2.2	4.65
112	150	8.3	4.5	3	104	176	2.5	0.24	2.8	4.2	2.8	6.1
113	161	11.1	6	3	104	176	2.5	0.33	2	3	2	9.05
112	150	8.3	4.5	2.1	107	158	2	0.24	2.8	4.2	2.8	4.15
118	159	8.3	4.5	3	109	186	2.5	0.24	2.8	4.2	2.8	7.05
118	168	11.1	6	3	109	186	2.5	0.33	2	3	2	10.5
111	132	6	3	1.5	107	143	1.5	0.28	2.4	3.6	2.5	3.15
115	144	6	3	2	111	154	2	0.3	2.3	3.4	2.2	4.55
113	141	4.4	2	2	111	154	2	0.37	1.8	2.7	1.8	5.65
118	159	8.3	4.5	2.1	112	168	2	0.24	2.8	4.2	2.8	4.9
117	153	8.3	4.5	2.1	112	168	2	0.33	2	3	2	6.85
118	159	8.3	4.5	3	114	201	2.5	0.24	2.8	4.2	2.8	8.6
130	184	11.1	6	3	114	201	2.5	0.33	2	3	2	13.5
125	151	6	3	2	119	161	2	0.23	2.9	4.4	2.8	3.8
122	149	6	3	2	119	161	2	0.33	2	3	2	5
126	157	8.3	4.5	2	121	169	2	0.3	2.3	3.4	2.2	5.75
123	153	6	3	2	121	169	2	0.37	1.8	2.7	1.8	7.1
130	178	8.3	4.5	2.1	122	188	2	0.25	2.7	4	2.5	7
130	169	8.3	4.5	2.1	122	188	2	0.33	2	3	2	9.85
143	204	13.9	7.5	3	124	226	2.5	0.33	2	3	2	18.5

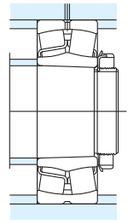


圆柱孔
Cylindrical bore



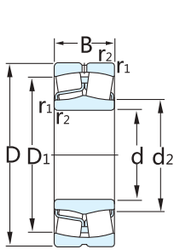
圆锥孔
Tapered bore



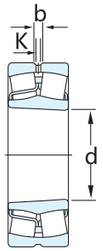


基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)		
			动态 dynamic	静态 static		参考转速 Reference Speed	根限转速 Limit Speed	圆柱孔Cylindrical bore		圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-		
mm			kN		kN	r/min				
120	180	46	366	500	52	3200	4000	**23024CC/W33**		**23024CCK/W33**
	180	60	456	670	68	2400	3400	**24024CC/W33**		**24024CCK30/W33**
	200	62	534	695	71	2600	3400	**23124CC/W33**		**23124CCK/W33**
	200	80	679	950	95	1900	2600	**24124CC/W33**	**24124MB/W33**	**24124CCK30/W33**
	215	58	652	765	73.5	2800	3800	**22224E**	**22224EK**	
	215	76	732	930	93	2000	2800	**23224CC/W33**	**23224MB/W33**	**23224CCK/W33**
	260	86	1019	1120	100	2000	2600	**22324CC/W33**	**22324MB/W33**	**22324CCK/W33**
130	200	52	452	610	61	2800	3600	**23026CC/W33**		**23026CCK/W33**
	200	69	569	815	81.5	2000	3000	**24026CC/W33**		**24026CCK30/W33**
	210	64	586	780	78	2400	3200	**23126CC/W33**	**23126MB/W33**	**23126CCK/W33**
	210	80	699	1000	100	1700	2400	**24126CC/W33**	**24126MB/W33**	**24126CCK30/W33**
	230	64	758	930	88	2600	3600	**22226E**	**22226MB/W33**	**22226EK**
	230	80	826	1060	104	1900	2600	**23226CC/W33**	**23226MB/W33**	**23226CCK/W33**
	280	93	1176	1320	114	1800	2400	**22326CC/W33**	**22326MB/W33**	**22326CCK/W33**
140	210	53	485	680	68	2600	3400	**23028CC/W33**	**23028MB/W33**	**23028CCK/W33**
	210	69	600	900	88	2000	2800	**24028CC/W33**	**24028MB/W33**	**24028CCK30/W33**
	225	68	659	900	88	2200	2800	**23128CC/W33**	**23128MB/W33**	**23128CCK/W33**
	225	85	796	1160	112	1600	2200	**24128CC/W33**	**24128MB/W33**	**24128CCK30/W33**
	250	68	743	900	86.5	2400	3200	**22228CC/W33**	**22228MB/W33**	**22228CCK/W33**
	250	88	962	1250	120	1700	2400	**23228CC/W33**	**23228MB/W33**	**23228CCK/W33**
	300	102	1357	1560	132	1700	2200	**22328CC/W33**	**22328MB/W33**	**22328CCK/W33**
150	225	56	531	750	73.5	2400	3200	**23030CC/W33**	**23030MB/W33**	**23030CCK/W33**
	225	75	680	1040	100	1800	2600	**24030CC/W33**	**24030MB/W33**	**24030CCK30/W33**
	250	80	883	1200	114	2000	2600	**23130CC/W33**	**23130MB/W33**	**23130CCK/W33**
	250	100	1054	1530	146	1400	2000	**24130CC/W33**	**24130MB/W33**	**24130CCK30/W33**
	270	73	898	1080	102	2200	3000	**22230CC/W33**	**22230MB/W33**	**22230CCK/W33**
	270	96	1129	1460	137	1600	2200	**23230CC/W33**	**23230MB/W33**	**23230CCK/W33**
	320	108	1539	1760	146	1600	2000	**22330CC/W33**	**22330MB/W33**	**22330CCK/W33**

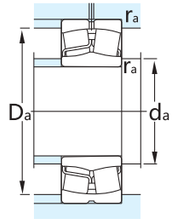
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation cefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
135	163	6	3	2	129	171	2	0.22	3	4.6	2.8	4.2
132	159	6	3	2	129	171	2	0.3	2.3	3.4	2.2	5.45
139	174	8.3	4.5	2	131	189	2	0.28	2.4	3.6	2.5	8
135	168	6	3	2	131	189	2	0.37	1.8	2.7	1.8	10.5
141	189	11.1	6	2.1	132	203	2	0.26	2.6	3.9	2.5	8.7
141	182	8.3	4.5	2.1	132	203	2	0.35	1.9	2.9	1.8	12
152	216	13.9	7.5	3	134	246	2.5	0.35	1.9	2.9	1.8	23
148	180	8.3	4.5	2	139	191	2	0.23	2.9	4.4	2.8	6
145	175	6	3	2	139	191	2	0.31	2.2	3.3	2.2	8.05
148	184	8.3	4.5	2	141	199	2	0.28	2.4	3.6	2.5	8.8
146	180	6	3	2	141	199	2	0.35	1.9	2.9	1.8	11
152	201	11.1	6	3	144	216	2.5	0.27	2.5	3.7	2.5	11
151	196	8.3	4.5	3	144	216	2.5	0.33	2	3	2	14.5
164	233	16.7	9	4	147	263	3	0.35	1.9	2.9	1.8	29
158	190	8.3	4.5	2	149	201	2	0.22	3	4.6	2.8	6.55
155	185	6	3	2	149	201	2	0.3	2.3	3.4	2.2	8.55
159	197	8.3	4.5	2.1	152	213	2	0.28	2.4	3.6	2.5	10.5
156	193	8.3	4.5	2.1	152	213	2	0.35	1.9	2.9	1.8	13.5
166	216	11.1	6	3	154	236	2.5	0.26	2.6	3.9	2.5	14
165	212	11.1	6	3	154	236	2.5	0.33	2	3	2	19
175	247	16.7	9	4	157	283	3	0.35	1.9	2.9	1.8	36.5
169	203	8.3	4.5	2.1	161	214	2	0.22	3	4.6	2.8	7.95
165	197	6	3	2.1	161	214	2	0.3	2.3	3.4	2.2	10.5
172	216	11.1	6	2.1	162	238	2	0.3	2.3	3.4	2.2	16
169	211	8.3	4.5	2.1	162	238	2	0.37	1.8	2.7	1.8	20
178	234	13.9	7.5	3	164	256	2.5	0.26	2.6	3.9	2.5	18
175	228	11.1	6	3	164	256	2.5	0.35	1.9	2.9	1.8	24.5
188	266	16.7	9	4	167	303	3	0.35	1.9	2.9	1.8	43.5

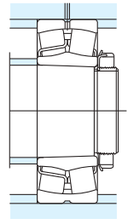


圆柱孔
Cylindrical bore



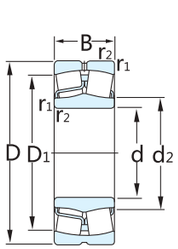
圆锥孔
Tapered bore



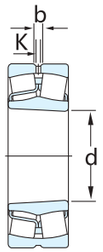


基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)	
			动态 dynamic	静态 static		参考转速 Reference Speed	极限转速 Limit Speed	圆柱孔Cylindrical bore	圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-	
mm			kN		kN	r/min			
160	240	60	614	880	83	2400	3000	**23032CC/W33**	**23032MB/W33** **23032CCK/W33**
	240	80	783	1200	114	1700	2400	**24032CC/W33**	**24032MB/W33** **24032CCK30/W33**
	270	86	1029	1370	129	1900	2400	**23132CC/W33**	**23132MB/W33** **23132CCK/W33**
	270	109	1227	1760	163	1300	1900	**24132CC/W33**	**24132MB/W33** **24132CCK30/W33**
	290	80	1043	1290	118	2000	2800	**22232CC/W33**	**22232MB/W33** **22232CCK/W33**
	290	104	1281	1660	153	1500	2200	**23232CC/W33**	**23232MB/W33** **23232CCK/W33**
	340	114	1680	1960	160	1500	1900	**22332CC/W33**	**22332MB/W33** **22332CCK/W33**
170	260	67	745	1060	100	2200	2800	**23034CC/W33**	**23034MB/W33** **23034CCK/W33**
	260	90	963	1460	137	1600	2400	**24034CC/W33**	**24034MB/W33** **24034CCK30/W33**
	280	88	1086	1500	137	1800	2400	**23134CC/W33**	**23134MB/W33** **23134CCK/W33**
	280	109	1270	1860	170	1200	1800	**24134CC/W33**	**24134MB/W33** **24134CCK30/W33**
	310	86	1183	1460	132	1900	2600	**22234CC/W33**	**22234MB/W33** **22234CCK/W33**
	310	110	1472	1930	173	1400	2000	**23234CC/W33**	**23234MB/W33** **23234CCK/W33**
	360	120	1863	2160	176	1400	1800	**22334CC/W33**	**22334MB/W33** **22334CCK/W33**
180	250	52	519	830	76.5	2600	2800	**23936CC/W33**	**23936CCK/W33**
	250	52	445	840	57	1850	3200	**23936MB/W33**	**23936MBK/W33**
	280	74	883	1250	114	2000	2600	**23036CC/W33**	**23036MB/W33** **23036CCK/W33**
	280	100	1134	1730	156	1500	2200	**24036CC/W33**	**24036MB/W33** **24036CCK30/W33**
	300	96	1263	1760	160	1700	2200	**23136CC/W33**	**23136MB/W33** **23136CCK/W33**
	300	118	1449	2160	196	1100	1600	**24136CC/W33**	**24136MB/W33** **24136CCK30/W33**
	320	86	1237	1560	140	1800	2600	**22236CC/W33**	**22236MB/W33** **22236CCK/W33**
	320	112	1557	2120	186	1300	1900	**23236CC/W33**	**23236MB/W33** **23236CCK/W33**
	380	126	2077	2450	193	1300	1700	**22336CC/W33**	**22336MB/W33** **22336CCK/W33**
190	260	52	499	800	76.5	2400	2600	**23938CC/W33**	**23938CCK/W33**
	260	52	470	890	62	1750	3150	**23938MB/W33**	**23938MBK/W33**
	290	75	916	1340	122	1900	2400	**23038CC/W33**	**23038MB/W33** **23038CCK/W33**
	290	100	1164	1800	163	1400	2000	**24038CC/W33**	**24038MB/W33** **24038CCK30/W33**
	320	104	1456	2080	183	1500	2000	**23138CC/W33**	**23138MB/W33** **23138CCK/W33**
	320	128	1652	2500	212	1100	1500	**24138CC/W33**	**24138MB/W33** **24138CCK30/W33**
	340	92	1342	1700	150	1700	2400	**22238CC/W33**	**22238MB/W33** **22238CCK/W33**
	340	120	1759	2400	208	1300	1800	**23238CC/W33**	**23238MB/W33** **23238CCK/W33**
	400	132	2232	2650	208	1200	1600	**22338CC/W33**	**22338MB/W33** **22338CCK/W33**

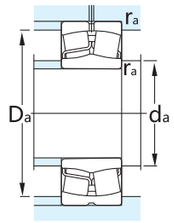
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation cefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
180	217	11.1	6	2.1	171	229	2	0.22	3	4.6	2.8	9.7
176	211	8.3	4.5	2.1	171	229	2	0.3	2.3	3.4	2.2	13
184	234	13.9	7.5	2.1	172	258	2	0.3	2.3	3.4	2.2	20.5
181	228	8.3	4.5	2.1	172	258	2	0.4	1.7	2.5	1.6	25
191	250	13.9	7.5	3	174	276	2.5	0.26	2.6	3.9	2.5	22.5
188	244	13.9	7.5	3	174	276	2.5	0.35	1.9	2.9	1.8	31
200	282	16.7	9	4	177	323	3	0.35	1.9	2.9	1.8	52
191	232	11.1	6	2.1	181	249	2	0.23	2.9	4.4	2.8	13
188	226	8.3	4.5	2.1	181	249	2	0.33	2	3	2	17.5
195	244	13.9	7.5	2.1	182	268	2	0.3	2.3	3.4	2.2	22
190	237	8.3	4.5	2.1	182	268	2	0.37	1.8	2.7	1.8	27.5
203	267	16.7	9	4	187	293	3	0.27	2.5	3.7	2.5	28.5
200	261	13.9	7.5	4	187	293	3	0.35	1.9	2.9	1.8	37.5
213	300	16.7	9	4	187	343	3	0.33	2	3	2	61
199	231	6	3	2	189	241	2	0.18	3.8	5.6	3.6	7.9
	230.9	9.5	4.8	2	188.8	241.2	2	0.2	3.42	5.09	3.34	8
204	249	13.9	7.5	2.1	191	269	2	0.24	2.8	4.2	2.8	17
201	243	8.3	4.5	2.1	191	269	2	0.33	2	3	2	23
207	259	13.9	7.5	3	194	286	2.5	0.3	2.3	3.4	2.2	28
203	253	11.1	6	3	194	286	2.5	0.37	1.8	2.7	1.8	34.5
213	278	16.7	9	4	197	303	3	0.26	2.6	3.9	2.5	29.5
211	271	13.9	7.5	4	197	303	3	0.35	1.9	2.9	1.8	39.5
224	317	22.3	12	4	197	363	3	0.35	1.9	2.9	1.8	71.5
209	240	6	3	2	199	251	2	0.16	4.2	6.3	4	8.3
	240.2	9.5	4.8	2	198.8	251.2	2	0.18	3.66	5.46	3.58	8.4
216	261	13.9	7.5	2.1	201	279	2	0.23	2.9	4.4	2.8	18
210	253	8.3	4.5	2.1	201	279	2	0.31	2.2	3.3	2.2	24.5
220	275	13.9	7.5	3	204	306	2.5	0.31	2.2	3.3	2.2	35
215	268	11.1	6	3	204	306	2.5	0.4	1.7	2.5	1.6	43
225	294	16.7	9	4	207	323	3	0.26	2.6	3.9	2.5	36.5
222	287	16.7	9	4	207	323	3	0.35	1.9	2.9	1.8	48
236	333	22.3	12	5	210	380	4	0.35	1.9	2.9	1.8	82.5

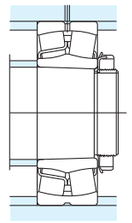


圆柱孔
Cylindrical bore



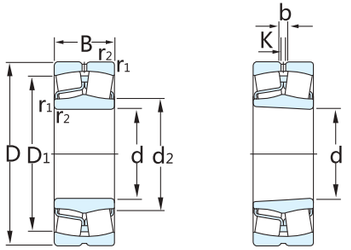
圆锥孔
Tapered bore





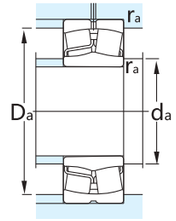
基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)		
			动态 dynamic	静态 static		参考转速 Reference Speed	根限转速 Limit Speed	圆柱孔Cylindrical bore		圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-		
mm			kN		kN	r/min				
200	280	60	651	1040	93	2200	2400	**23940CC/W33**		**23940CCK/W33**
	280	60	550	1070	71	1650	2800		**23940MB/W33**	**23940MBK/W33**
	310	82	1058	1530	137	1800	2200	**23040CC/W33**	**23040MB/W33**	**23040CCK/W33**
	310	109	1353	2120	186	1300	1900	**24040CC/W33**	**24040MB/W33**	**24040CCK30/W33**
	340	112	1665	2360	204	1500	1900	**23140CC/W33**	**23140MB/W33**	**23140CCK/W33**
	340	140	1865	2800	232	1000	1400	**24140CC/W33**	**24140MB/W33**	**24140CCK30/W33**
	360	98	1526	1930	166	1600	2200	**22240CC/W33**	**22240MB/W33**	**22240CCK/W33**
	360	128	1947	2700	228	1200	1700	**23240CC/W33**	**23240MB/W33**	**23240CCK/W33**
	420	138	2439	2900	224	1200	1500	**22340CC/W33**	**22340MB/W33**	**22340CCK/W33**
220	300	60	661	1080	93	2000	2200	**23944CC/W33**		**23944CCK/W33**
	300	60	610	1240	72	1460	2600		**23944MB/W33**	**23944MBK/W33**
	340	90	1261	1860	163	1600	2000	**23044CC/W33**	**23044MB/W33**	**23044CCK/W33**
	340	118	1628	2600	212	1200	1700	**24044CC/W33**	**24044MB/W33**	**24044CCK30/W33**
	370	120	1888	2750	232	1300	1700	**23144CC/W33**	**23144MB/W33**	**23144CCK/W33**
	370	150	2197	3350	285	850	1200	**24144CC/W33**	**24144MB/W33**	**24144CCK30/W33**
	400	108	1835	2360	196	1500	2000	**22244CC/W33**	**22244MB/W33**	**22244CCK/W33**
	400	144	2485	3450	285	1100	1500	**23244CC/W33**	**23244MB/W33**	**23244CCK/W33**
	460	145	2839	3450	260	1000	1400	**22344CC/W33**	**22344MB/W33**	**22344CCK/W33**
240	320	60	685	1160	98	1900	2000	**23948CC/W33**		**23948CCK/W33**
	320	60	640	1370	93	1310	2440		**23948MB/W33**	**23948MBK/W33**
	360	92	1340	2080	176	1500	1900	**23048CC/W33**	**23048MB/W33**	**23048CCK/W33**
	360	118	1663	2700	228	1100	1600	**24048CC/W33**	**24048MB/W33**	**24048CCK30/W33**
	400	128	2187	3200	255	1200	1600	**23148CC/W33**	**23148MB/W33**	**23148CCK/W33**
	400	160	2489	3900	320	750	1100	**24148CC/W33**	**24148MB/W33**	**24148CCK30/W33**
	440	120	2258	3000	245	1300	1800	**22248CC/W33**	**22248MB/W33**	**22248CCK/W33**
	440	160	3042	4300	345	950	1300	**23248CC/W33**	**23248MB/W33**	**23248CCK/W33**
	500	155	3229	4000	290	950	1300	**22348CC/W33**	**22348MB/W33**	**22348CCK/W33**
260	360	75	1055	1800	156	1700	1900	**23952CC/W33**		**23952CCK/W33**
	360	75	940	1940	108	1190	2100		**23952MB/W33**	**23952MBK/W33**
	400	104	1675	2550	212	1300	1700	**23052CC/W33**	**23052MB/W33**	**23052CCK/W33**
	400	140	2135	3450	285	1000	1400	**24052CC/W33**	**24052MB/W33**	**24052CCK30/W33**
	440	144	2664	3900	290	1100	1400	**23152CC/W33**	**23152MB/W33**	**23152CCK/W33**
	440	180	3086	4800	380	670	950	**24152CC/W33**	**24152MB/W33**	**24152CCK30/W33**
	480	130	2722	3550	285	1200	1600	**22252CC/W33**	**22252MB/W33**	**22252CCK/W33**
	480	174	3395	4750	360	850	1200	**23252CC/W33**	**23252MB/W33**	**23252CCK/W33**
	540	165	3680	4550	325	850	1100	**22352CC/W33**	**22352MB/W33**	**22352CCK/W33**

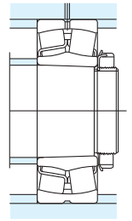
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation cefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
222	258	8.3	4.5	2.1	211	269	2	0.19	3.6	5.3	3.6	11.5
	256.9	12.2	6.3	2.1	210.2	269.8	2.1	0.2	3.42	5.09	3.34	11.8
228	278	13.9	7.5	2.1	211	299	2	0.24	2.8	4.2	2.8	23.5
223	268	11.1	6	2.1	211	299	2	0.33	2	3	2	31
231	293	16.7	9	3	214	326	2.5	0.31	2.2	3.3	2.2	43
226	284	11.1	6	3	214	326	2.5	0.4	1.7	2.5	1.6	53.5
238	313	16.7	9	4	217	343	3	0.26	2.6	3.9	2.5	43.5
235	304	16.7	9	4	217	343	3	0.35	1.9	2.9	1.8	58
249	351	22.3	12	5	220	400	4	0.33	2	3	2	95
241	278	8.3	4.5	2.1	231	289	2	0.16	4.2	6.3	4	12.5
	277.4	12.2	6.3	2.1	230.2	289.8	2.1	0.18	3.76	5.59	3.67	12.3
250	306	13.9	7.5	3	233	327	2.5	0.24	2.8	4.2	2.8	30.5
244	295	11.1	6	3	233	327	2.5	0.33	2	3	2	40
255	320	16.7	9	4	237	353	3	0.3	2.3	3.4	2.2	53.5
248	310	11.1	6	4	237	353	3	0.4	1.7	2.5	1.6	67
263	346	16.7	9	4	237	383	3	0.27	2.5	3.7	2.5	60.5
259	338	16.7	9	4	237	383	3	0.35	1.9	2.9	1.8	81.5
279	389	22.3	12	5	240	440	4	0.31	2.2	3.3	2.2	120
261	298	8.3	4.5	2.1	251	309	2	0.15	4.5	6.7	4.5	13.5
	297.8	12.2	6.3	2.1	250.2	309.8	2.1	0.17	4.05	6.04	3.96	13.9
271	326	13.9	7.5	3	253	347	2.5	0.23	2.9	4.4	2.8	33.5
265	316	11.1	6	3	253	347	2.5	0.3	2.3	3.4	2.2	43
277	348	16.7	9	4	257	383	3	0.3	2.3	3.4	2.2	66.5
271	336	11.1	6	4	257	383	3	0.4	1.7	2.5	1.6	83
290	383	22.3	12	4	257	423	3	0.27	2.5	3.7	2.5	83
286	374	22.3	12	4	257	423	3	0.35	1.9	2.9	1.8	110
303	423	22.3	12	5	260	480	4	0.31	2.2	3.3	2.2	155
287	331	8.3	4.5	2.1	271	349	2	0.18	3.8	5.6	3.6	23.5
	330.5	15	8	2.1	270.2	349.8	2.1	0.19	3.54	5.27	3.46	24.1
295	360	16.7	9	4	275	385	3	0.23	2.9	4.4	2.8	48.5
289	347	11.1	6	4	275	385	3	0.33	2	3	2	65.5
301	380	16.7	9	4	277	423	3	0.31	2.2	3.3	2.2	90.5
293	368	13.9	7.5	4	277	423	3	0.4	1.7	2.5	1.6	110
311	421	22.3	12	5	280	460	4	0.27	2.5	3.7	2.5	110
312	408	22.3	12	5	280	460	4	0.35	1.9	2.9	1.8	140
328	458	22.3	12	6	286	514	5	0.31	2.2	3.3	2.2	190



圆柱孔
Cylindrical bore

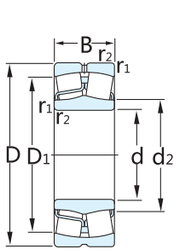
圆锥孔
Tapered bore



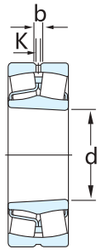


基本尺寸 Basic Size d mm			基本额定负荷 Basic load rating 动态 dynamic C kN		疲劳负荷极限 Fatigue load limit P_u kN	额定转速 Rated Speed 参考转速 Reference Speed	根限转速 Limit Speed r/min	型号Designation(Design) 圆柱孔Cylindrical bore	圆锥孔Tapered bore	
280	380	75	1016	1760	143	1000	1700	**23956CC/W33**		**23956CCK/W33**
	380	75	970	2040	129	1100	2000		**23956MB/W33**	**23956MBK/W33**
	420	106	1797	2850	224	1300	1600	**23056CC/W33**	**23056MB/W33**	**23056CCK/W33**
	420	140	2248	3800	285	950	1400	**24056CC/W33**	**24056MB/W33**	**24056CCK30/W33**
	460	146	2784	4250	335	1000	1300	**23156CC/W33**	**23156MB/W33**	**23156CCK/W33**
	460	180	3183	5100	415	630	900	**24156CC/W33**	**24156MB/W33**	**24156CCK30/W33**
	500	130	2795	3750	300	1100	1500	**22256CC/W33**	**22256MB/W33**	**22256CCK/W33**
	500	176	3425	4900	365	800	1100	**23256CC/W33**	**23256MB/W33**	**23256CCK/W33**
	580	175	4158	5200	365	800	1100	**22356CC/W33**	**22356MB/W33**	**22356CCK/W33**
300	380	60	656	1600	137	1400	1700	**23860CA/MA**		**23860CAK/MA**
	420	90	1413	2500	200	1400	1600	**23960CC/W33**		**23960CCK/W33**
	420	90	1270	2650	165	1000	1780		**23960MB/W33**	**23960MBK/W33**
	460	118	2219	3450	265	1200	1500	**23060CC/W33**	**23060MB/W33**	**23060CCK/W33**
	460	160	2821	4750	355	850	1200	**24060CC/W33**	**24060MB/W33**	**24060CCK30/W33**
	500	160	3368	5100	380	950	1200	**23160CC/W33**	**23160MB/W33**	**23160CCK/W33**
	500	200	3876	6300	465	560	800	**24160CC/W33**	**24160MB/W33**	**24160CCK30/W33**
	540	140	3239	4250	325	1000	1400	**22260CC/W33**	**22260MB/W33**	**22260CCK/W33**
	540	192	4052	5850	425	750	1000	**23260CC/W33**	**23260MB/W33**	**23260CCK/W33**
320	440	90	1480	2700	212	1400	1500	**23964CC/W33**		**23964CCK/W33**
	440	90	1310	2750	201	930	1700		**23964MB/W33**	**23964MBK/W33**
	480	121	2348	3800	285	1100	1400	**23064CC/W33**	**23064MB/W33**	**23064CCK/W33**
	480	160	2969	5100	400	800	1200	**24064CC/W33**	**24064MB/W33**	**24064CCK30/W33**
	540	176	3923	6000	440	850	1100	**23164CC/W33**	**23164MB/W33**	**23164CCK/W33**
	540	218	4395	7100	510	500	700	**24164CC/W33**	**24164MB/W33**	**24164CCK30/W33**
	580	150	3708	4900	375	950	1300	**22264CC/W33**	**22264MB/W33**	**22264CCK/W33**
	580	208	4607	6700	475	700	950	**23264CC/W33**	**23264MB/W33**	**23264CCK/W33**
340	460	90	1490	2800	216	1300	1400	**23968CC/W33**		**23968CCK/W33**
	460	90	1370	3000	198	860	1610		**23968MB/W33**	**23968MBK/W33**
	520	133	2812	4550	335	1000	1300	**23068CC/W33**	**23068MB/W33**	**23068CCK/W33**
	520	180	3621	6200	475	750	1100	**24068CC/W33**	**24068MB/W33**	**24068CCK30/W33**
	580	190	4450	6800	480	800	1000	**23168CC/W33**	**23168MB/W33**	**23168CCK/W33**
	580	243	5487	8650	630	430	630	**24168ECCJ/W33**	**24168MB/W33**	**24168ECCK30J/W33**
	620	224	5362	7800	550	560	800	**23268CA/W33**	**23268MB/W33**	**23268CAK/W33**

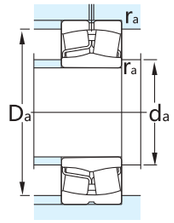
尺寸 Dimensions d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	挡肩及倒角尺寸 Abutment and chamfer dimensions d_a min	D_a max	r_a max	计算系数 Calculation cefficient e	Y_1	Y_2	Y_0	质量 Mass kg
308	352	11.1	6	2.1	291	369	2	0.16	4.2	6.3	4	25
	350	15	8	2.1	290.2	369.8	2.1	0.18	3.76	5.59	3.67	25.5
315	380	16.7	9	4	295	405	3	0.23	2.9	4.4	2.8	52.5
309	368	11.1	6	4	295	405	3	0.31	2.2	3.3	2.2	69.5
321	401	16.7	9	5	300	440	4	0.3	2.3	3.4	2.2	97
314	390	13.9	7.5	5	300	440	4	0.4	1.7	2.5	1.6	120
333	441	22.3	12	5	300	480	4	0.26	2.6	3.9	2.5	115
332	429	22.3	12	5	300	480	4	0.35	1.9	2.9	1.8	150
354	492	22.3	12	6	306	554	5	0.3	2.3	3.4	2.2	235
329	358			2.1	311	369	2	0.13	5.2	7.7	5	16.5
333	385	11.1	6	3	313	407	2.5	0.19	3.6	5.3	3.6	39.5
	384.6	17.7	9.5	3	312.4	407.6	2.5	0.2	3.42	5.09	3.34	40.6
340	414	16.7	9	4	315	445	3	0.23	2.9	4.4	2.8	71.5
331	400	13.9	7.5	4	315	445	3	0.33	2	3	2	97
345	434	16.7	9	5	320	480	4	0.3	2.3	3.4	2.2	125
338	422	13.9	7.5	5	320	480	4	0.4	1.7	2.5	1.6	160
354	477	22.3	12	5	320	520	4	0.26	2.6	3.9	2.5	135
356	461	22.3	12	5	320	520	4	0.35	1.9	2.9	1.8	190
354	406	11.1	6	3	333	427	2.5	0.17	4	5.9	4	42
	406.2	17.7	9.5	3	332.4	427.6	2.5	0.19	3.62	5.39	3.54	41.8
360	434	16.7	9	4	335	465	3	0.23	2.9	4.4	2.8	78
354	423	13.9	7.5	4	335	465	3	0.31	2.2	3.3	2.2	100
370	465	22.3	12	5	340	520	4	0.31	2.2	3.3	2.2	165
364	455	16.7	9	5	340	520	4	0.4	1.7	2.5	1.6	210
379	513	22.3	12	5	340	560	4	0.26	2.6	3.9	2.5	175
382	493	22.3	12	5	340	560	4	0.35	1.9	2.9	1.8	240
373	426	11.1	6	3	353	447	2.5	0.17	4	5.9	4	45.5
	426.7	17.7	9.5	3	352.4	447.6	2.5	0.18	3.85	5.73	3.76	43.7
385	468	22.3	12	5	358	502	4	0.24	2.8	4.2	2.8	105
377	453	16.7	9	5	358	502	4	0.33	2	3	2	140
394	498	22.3	12	5	360	560	4	0.31	2.2	3.3	2.2	210
383	491	16.7	9	5	360	560	4	0.4	1.7	2.5	1.6	280
427	528	22.3	12	6	366	594	5	0.35	1.9	2.9	1.8	295

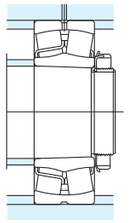


圆柱孔
Cylindrical bore



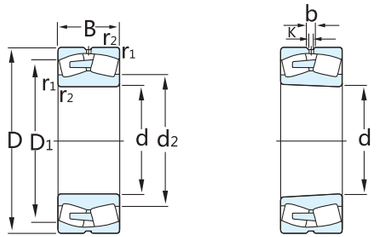
圆锥孔
Tapered bore





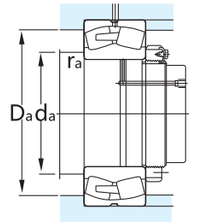
基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)		
			动态 dynamic	静态 static		参考转速 Reference Speed	根限转速 Limit Speed	圆柱孔Cylindrical bore		圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-		
mm			kN		kN	r/min				
360	480	90	1456	2750	220	1200	1300	**23972CC/W33**		**23972CCK/W33**
	480	90	1440	3200	210	800	1540		**23972MB/W33**	**23972MBK/W33**
	540	134	2850	4800	345	950	1200	**23072CC/W33**	**23072MB/W33**	**23072CCK/W33**
	540	180	3705	6550	490	700	1000	**24072CC/W33**	**24072MB/W33**	**24072CCK30/W33**
	600	192	4515	6950	490	750	1000	**23172CC/W33**	**23172MB/W33**	**23172CCK/W33**
	600	243	5737	9300	670	400	600	**24172ECCJ/W33**	**24172MB/W33**	**24172ECCK30J/W33**
	650	170	4430	6200	440	630	850	**22272CA/W33**	**22272MB/W33**	**22272CAK/W33**
	650	232	5663	8300	570	530	750	**23272CA/W33**	**23272MB/W33**	**23272CAK/W33**
380	520	106	2011	3800	285	1100	1200	**23976CC/W33**		**23976CCK/W33**
	520	106	1780	4000	265	750	1340		**23976MB/W33**	**23976MBK/W33**
	560	135	2984	5000	360	900	1200	**23076CC/W33**	**23076MB/W33**	**23076CCK/W33**
	560	180	3786	6800	475	670	950	**24076CC/W33**	**24076MB/W33**	**24076CC/K30W33**
	620	194	4561	7100	500	560	1000	**23176CA/W33**	**23176MB/W33**	**23176CAK/W33**
	620	243	5936	9800	710	360	530	**24176ECA/W33**	**24176MB/W33**	**24176ECAK30/W33**
	680	240	6126	9150	620	500	750	**23276CA/W33**	**23276MB/W33**	**23276CAK/W33**
400	540	106	2038	3900	290	1100	1200	**23980CC/W33**		**23980CCK/W33**
	540	106	1830	4150	270	710	1290		**23980MB/W33**	**23980MBK/W33**
	600	148	3511	5850	415	850	1100	**23080CC/W33**	**23080MB/W33**	**23080CCK/W33**
	600	200	4507	8000	560	630	900	**24080ECCJ/W33**	**24080MB/W33**	**24080ECCK30J/W33**
	650	200	4864	7650	530	530	950	**23180CA/W33**	**23180MB/W33**	**23180CAK/W33**
	650	250	6331	10600	735	340	500	**24180ECA/W33**	**24180MB/W33**	**24180ECAK30/W33**
	720	256	6881	10400	680	480	670	**23280CA/W33**	**23280MB/W33**	**23280CAK/W33**
	820	243	7832	10400	670	430	750	**22380CA/W33**	**22380MB/W33**	**22380CAK/W33**
420	560	106	2083	4150	300	1000	1100	**23984CC/W33**		**23984CCK/W33**
	560	106	1910	4450	300	660	1230		**23984MB/W33**	**23984MBK/W33**
	620	150	3541	6000	415	600	1100	**23084CA/W33**	**23084MB/W33**	**23084CAK/W33**
	620	200	4610	8300	585	530	900	**24084ECA/W33**	**24084MB/W33**	**24084ECAK30/W33**
	700	224	5919	9300	620	480	900	**23184CJ/W33**	**23184MB/W33**	**23184CKJ/W33**
	700	280	7577	12600	850	320	480	**24184ECA/W33**	**24184MB/W33**	**24184ECAK30/W33**
	760	272	7677	11600	765	450	630	**23284CA/W33**	**23284MB/W33**	**23284CAK/W33**

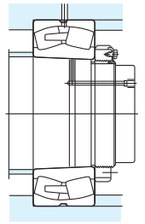
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation coefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
394	447	11.1	6	3	373	467	2.5	0.15	4.5	6.7	4.5	46.0
	447.1	17.7	9.5	3	372.4	467.6	2.5	0.17	4.05	6.04	3.96	46.5
404	483	22.3	12	5	378	522	4	0.23	2.9	4.4	2.8	110
397	474	16.7	9	5	378	522	4	0.31	2.2	3.3	2.2	145
418	524	22.3	12	5	380	580	4	0.30	2.3	3.4	2.2	220
404	511	16.7	9	5	380	580	4	0.40	1.7	2.5	1.6	280
454	568	22.3	12	6	386	624	5	0.26	2.6	3.9	2.5	255
449	552	22.3	12	6	386	624	5	0.35	1.9	2.9	1.8	335
419	481	13.9	7.5	4	395	505	3	0.17	4	5.9	4	69.0
	477.6	17.7	9.5	4	394.6	505.4	3	0.19	3.58	5.33	3.5	69.1
426	509	22.3	12	5	398	542	4	0.22	3	4.6	2.8	115
419	497	16.7	9	5	398	542	4	0.30	2.3	3.4	2.2	150
454	541	22.3	12	5	400	600	4	0.30	2.3	3.4	2.2	230
444	532	16.7	9	5	400	600	4	0.37	1.8	2.7	1.8	300
473	581	22.3	12	6	406	654	5	0.35	1.9	2.9	1.8	375
439	500	13.9	7.5	4	415	525	3	0.16	4.2	6.3	4	71.0
	499	17.7	9.5	4	414.6	525.4	3	0.18	3.71	5.52	3.63	72.9
450	543	22.3	12	5	418	582	4	0.23	2.9	4.4	2.8	150
442	527	22.3	12	5	418	582	4	0.30	2.3	3.4	2.2	205
475	566	22.3	12	5	426	624	5	0.28	2.4	3.6	2.5	265
467	559	22.3	12	6	426	624	5	0.37	1.8	2.7	1.8	340
500	615	22.3	12	6	426	694	6	0.35	1.9	2.9	1.8	450
534	697	22.3	12	7.5	432	788	6	0.30	2.3	3.4	2.2	650
459	520	16.7	9	4	435	545	3	0.16	4.2	6.3	4	74.5
	519.5	17.7	9.5	4	434.6	545.4	3	0.18	3.85	5.73	3.76	75.5
487	563	22.3	12	5	438	602	4	0.22	3	4.6	2.8	155
477	547	22.3	12	5	438	602	4	0.30	2.3	3.4	2.2	210
483	607	22.3	12	6	446	674	5	0.30	2.3	3.4	2.2	350
494	597	22.3	12	6	446	674	5	0.40	1.7	2.5	1.6	445
526	649	22.3	12	7.5	452	728	6	0.35	1.9	2.9	1.8	535



圆柱孔
Cylindrical bore

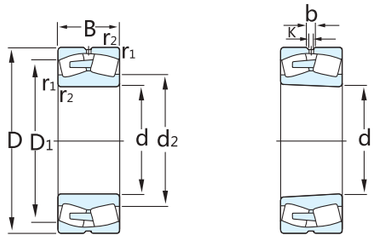
圆锥孔
Tapered bore





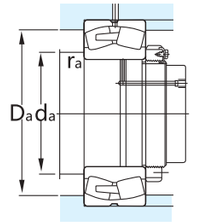
基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)		
			动态 dynamic	静态 static		参考转速 Reference Speed	根限转速 Limit Speed	圆柱孔Cylindrical bore		圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-		
mm			kN		kN	r/min				
440	600	118	2506	4900	345	950	1000	**23988CC/W33**		**23988CCK/W33**
	600	118	2230	5200	295	620	1130		**23988MB/W33**	**23988MBK/W33**
	650	157	3831	6550	450	560	1000	**23088CA/W33**	**23088MB/W33**	**23088CAK/W33**
	650	212	4987	9150	630	500	850	**24088ECA/W33**	**24088MB/W33**	**24088ECAK30/W33**
	720	226	6215	10000	670	450	850	**23188CA/W33**	**23188MB/W33**	**23188CAK/W33**
	720	280	7777	13200	900	300	450	**24188ECA/W33**	**24188MB/W33**	**24188ECAK30/W33**
	790	280	8150	12500	800	430	600	**23288CA/W33**	**23288MB/W33**	**23288CAK/W33**
460	580	118	2082	4900	345	630	1100	**24892CAMA/W20**		**24892CAK30MA/W20**
	580	118	1940	5100	330	325	1020		**24892MB/W33**	
	620	118	2558	5000	355	600	1000	**23992CA/W33**		**23992CAK/W33**
	620	118	2270	5400	370	590	1080		**23992MB/W33**	**23992MBK/W33**
	680	163	4065	6950	465	560	950	**23092CA/W33**	**23092MB/W33**	**23092CAK/W33**
	680	218	5401	10000	670	480	800	**24092ECA/W33**	**24092MB/W33**	**24092ECAK30/W33**
	760	240	6760	10800	680	430	800	**23192CA/W33**	**23192MB/W33**	**23192CAK/W33**
	760	300	8608	14600	1000	280	430	**24192ECA/W33**	**24192MB/W33**	**24192ECAK30/W33**
	830	296	8958	13700	880	400	560	**23292CA/W33**	**23292MB/W33**	**23292CAK/W33**
480	600	90	1440	3750	280	530	1100	**23896CAMA/W20**		**23896CAKMA/W20**
	650	128	2990	5700	405	560	1000	**23996CA/W33**	**23996MB/W33**	**23996CAK/W33**
	700	165	3996	6800	450	530	950	**23096CA/W33**	**23096MB/W33**	**23096CAK/W33**
	700	218	5524	10400	695	450	750	**24096ECA/W33**	**24096MB/W33**	**24096ECAK30/W33**
	790	248	7362	12000	780	400	750	**23196CA/W33**	**23196MB/W33**	**23196CAK/W33**
	790	308	9198	15600	1040	260	400	**24196ECA/W33**	**24196MB/W33**	**24196ECAK30/W33**
	870	310	9805	15000	950	380	530	**23296CA/W33**	**23296MB/W33**	**23296CAK/W33**
500	620	90	1480	4000	290	530	1000	**238/500CAMA/W20**		**238/500CAKMA/W20**
	620	118	2070	5700	265	290	930		**248/500MB/W33**	
	670	128	2967	6000	415	530	950	**239/500CA/W33**		**239/500CAK/W33**
	670	128	2600	6300	400	540	990		**239/500MB/W33**	
	720	167	4358	7800	510	500	900	**230/500CA/W33**	**230/500MB/W33**	**230/500CAK/W33**
	720	218	5777	11000	735	430	700	**240/500ECA/W33**	**240/500MB/W33**	**240/500ECAK30/W33**
	830	264	8037	12900	830	380	700	**231/500CA/W33**	**231/500MB/W33**	**231/500CAK/W33**
	830	325	10123	17000	1120	260	380	**241/500ECA/W33**	**241/500MB/W33**	**241/500ECAK30/W33**
	920	336	11183	17300	1060	360	500	**232/500CA/W33**	**232/500MB/W33**	**232/500CAK/W33**

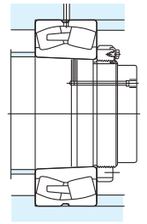
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation coefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
484	553	16.7	9	4	455	585	3	0.16	4.2	6.3	4	99.5
	552.8	23.5	12.5	4	454.6	585.4	3	0.18	3.66	5.46	3.58	101
511	590	22.3	12	6	463	627	5	0.22	3	4.6	2.8	180
499	572	22.3	12	6	463	627	5	0.30	2.3	3.4	2.2	245
529	632	22.3	12	6	466	694	5	0.30	2.3	3.4	2.2	360
516	618	22.3	12	6	466	694	5	0.37	1.8	2.7	1.8	460
549	676	22.3	12	7.5	472	758	6	0.35	1.9	2.9	1.8	590
505	541		7.5	3	473	567	2.5	0.17	4	5.9	4	75.5
	542.6	12.2	6.3	3	472.4	567.6	2.5	0.18	3.76	5.59	3.67	71
516	574	16.7	9	4	475	605	3	0.16	4.2	6.3	4	105
	573.3	23.5	12.5	4	474.6	605.4	3	0.18	3.85	5.73	3.76	111
533	617	22.3	12	6	483	657	5	0.22	3	4.6	2.8	205
524	601	22.3	12	6	483	657	5	0.28	2.4	3.6	2.5	275
555	666	22.3	12	7.5	492	728	6	0.30	2.3	3.4	2.2	440
543	649	22.3	12	7.5	492	728	6	0.37	1.8	2.7	1.8	560
574	706	22.3	12	7.5	492	798	6	0.35	1.9	2.9	1.8	695
521	566		7.5	3	493	587	2.5	0.13	5.2	7.7	5	61.0
537	602	16.7	9	5	498	632	4	0.18	3.8	5.6	3.6	125
549	633	22.3	12	6	503	677	5	0.21	3.2	4.8	3.2	215
542	619	22.3	12	6	503	677	5	0.28	2.4	3.6	2.5	285
579	692	22.3	12	7.5	512	758	6	0.30	2.3	3.4	2.2	485
564	678	22.3	12	7.5	512	758	6	0.37	1.8	2.7	1.8	605
602	741	22.3	12	7.5	512	838	6	0.35	1.9	2.9	1.8	800
543	587		7.5	3	513	607	2.5	0.12	5.6	8.4	5.6	62.0
	583.5	12.2	6.3	3	512.4	607.6	2.5	0.17	4	5.96	3.91	84.3
561	622	22.3	12	5	518	652	4	0.17	4	5.9	4	130
	619.3	23.5	12.5	5	518	652	4	0.17	3.9	5.81	3.81	132
573	658	22.3	12	6	523	697	5	0.21	3.2	4.8	3.2	225
566	644	22.3	12	6	523	697	5	0.26	2.6	3.9	2.5	295
605	726	22.3	12	7.5	532	798	6	0.30	2.3	3.4	2.2	580
588	713	22.3	12	7.5	532	798	6	0.37	1.8	2.7	1.8	700
633	779	22.3	12	7.5	532	888	6	0.35	1.9	2.9	1.8	985



圆柱孔
Cylindrical bore

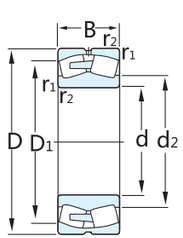
圆锥孔
Tapered bore



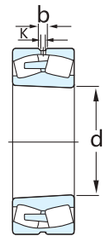


基本尺寸 Basic Size d	D	B	基本额定负荷 Basic load rating 动态 dynamic C	静态 static C_o	疲劳负荷极限 Fatigue load limit P_u	额定转速 Rated Speed 参考转速 Reference Speed	极限转速 Limit Speed	型号Designation(Design) 圆柱孔Cylindrical bore	圆锥孔Tapered bore
mm			kN		kN	r/min		-	
530	650	118	2124	5300	380	530	950	**248/530CAMA/W20**	**248/530CAK30MA/W20**
	650	118	2240	6400	370	260	880	**248/530MB/W33**	
	710	136	3308	6700	465	500	900	**239/530CA/W33**	**239/530CAK/W33**
	710	136	2850	6900	385	500	930	**239/530MB/W33**	
	780	185	5267	9300	610	450	800	**230/530CA/W33**	**230/530MB/W33** **230/530CAK/W33**
	780	250	6973	13200	830	400	670	**240/530ECA/W33**	**240/530MB/W33** **240/530ECAK30/W33**
	870	272	8526	14000	880	360	670	**231/530CA/W33**	**231/530MB/W33** **231/530CAK/W33**
	870	335	10909	19000	1220	240	360	**241/530ECA/W33**	**241/530MB/W33** **241/530ECAK30/W33**
	980	355	13268	20400	1220	320	480	**232/530CA/W33**	**232/530CAK/W33**
	980	355	10900	20900	1190	230	570	**232/530MB/W33**	**232/530MBK/W33**
560	680	118	2210	6300	390	250	840	**248/560MB/W33**	
	750	140	3571	7200	500	450	850	**239/560CA/W33**	**239/560CAK/W33**
	750	140	3100	7600	520	465	880	**239/560MB/W33**	
	820	195	5779	10200	670	430	750	**230/560CA/W33**	**230/560MB/W33** **230/560CAK/W33**
	820	258	7621	14600	980	380	630	**240/560ECA/W33**	**240/560MB/W33** **240/560ECAK30/W33**
	920	280	9596	16000	980	340	630	**231/560CA/W33**	**231/560MB/W33** **231/560CAK/W33**
	920	355	12366	21600	1340	220	320	**241/560ECJ/W33**	**241/560MB/W33** **241/560ECK30J/W33**
	1030	365	13940	22000	1320	280	430	**232/560CA/W33**	**232/560CAK/W33**
	1030	365	11700	22600	910	215	540	**232/560MB/W33**	**232/560MBK/W33**
600	730	98	1960	5300	350	435	980	**238/600MB/W33**	**238/600MBK/W33**
	730	128	2550	7300	440	228	780	**248/600MB/W33**	
	800	150	4022	8300	570	430	750	**239/600CA/W33**	**239/600CAK/W33**
	800	150	3450	8600	630	430	810	**239/600MB/W33**	
	870	200	6252	11400	735	400	700	**230/600CA/W33**	**230/600MB/W33** **230/600CAK/W33**
	870	272	8580	17000	1080	340	560	**240/600ECA/W33**	**240/600MB/W33** **240/600ECAK30/W33**
	980	300	10738	18000	1100	320	560	**231/600CA/W33**	**231/600CAK/W33**
	980	300	9000	19200	810	270	560	**231/600MB/W33**	
	980	375	13522	23600	1460	200	300	**241/600ECA/W33**	**241/600ECAK30/W33**
	980	375	11600	26000	1780	149	480	**241/600MB/W33**	
	1090	388	15652	25500	1460	260	400	**232/600CA/W33**	**232/600CAK/W33**
	1090	388	13000	25500	1720	196	495	**232/600MB/W33**	**232/600MBK/W33**
630	780	112	2545	6100	415	430	750	**238/630CAMA/W20**	**238/630CAKMA/W20**
	780	150	3200	9000	560	209	700	**248/630MB/W33**	
	850	165	4744	9800	630	400	700	**239/630CA/W33**	**239/630CAK/W33**
	850	165	4100	9900	710	405	740	**239/630MB/W33**	
	920	212	6898	12500	780	380	670	**230/630CA/W33**	**230/630MB/W33** **230/630CAK/W33**
	920	290	9150	18000	1120	320	530	**240/630ECJ/W33**	**240/630MB/W33** **240/630ECK30J/W33**
	1030	315	12600	20800	1220	260	530	**231/630CA/W33**	**231/630CAK/W33**
	1030	315	9800	20700	1420	255	530	**231/630MB/W33**	**231/630MBK/W33**
	1030	400	15001	27000	1630	190	280	**241/630ECA/W33**	**241/630ECAK30/W33**
	1030	400	13100	29500	1990	136	440	**241/630MB/W33**	
	1150	412	14400	28500	1350	181	465	**232/630MB/W33**	**232/630MBK/W33**

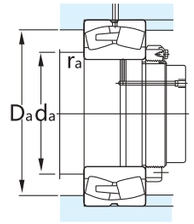
尺寸 Dimensions d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	挡肩及倒角尺寸 Abutment and chamfer dimensions d_a min	D_a max	r_a max	计算系数 Calculation coefficient e	Y_1	Y_2	Y_0	质量 Mass
mm								-				kg
573	612		7.5	3	543	637	2.5	0.15	4.5	6.7	4.5	86.0
	614.1	12.2	6.3	3	542.4	637.6	2.5	0.16	4.22	6.29	4.13	89.7
594	661	22.3	12	5	548	692	4	0.17	4	5.9	4	155
	656.5	23.5	12.5	5	548	692	4	0.18	3.85	5.73	3.76	160
613	710	22.3	12	6	553	757	5	0.22	3	4.6	2.8	310
601	687	22.3	12	6	553	757	5	0.28	2.4	3.6	2.5	410
638	763	22.3	12	7.5	562	838	6	0.30	2.3	3.4	2.2	645
623	748	22.3	12	7.5	562	838	6	0.37	1.8	2.7	1.8	830
670	836	22.3	12	9.5	570	940	8	0.35	1.9	2.9	1.8	1200
	824.4	23.5	12.5	9.5	570	940	8	0.38	1.77	2.64	1.73	1240
	644.6	12.2	6.3	3	542	638	2.5	0.15	4.47	6.65	4.37	92.7
627	697	22.3	12	5	578	732	4	0.16	4.2	6.3	4	175
	693.4	23.5	12.5	5	578	732	4	0.17	3.95	5.88	3.86	181
646	746	22.3	12	6	583	797	5	0.22	3	4.6	2.8	355
637	728	22.3	12	6	583	797	5	0.28	2.4	3.6	2.5	465
675	809	22.3	12	7.5	592	888	6	0.30	2.3	3.4	2.2	740
634	796	22.3	12	7.5	592	888	6	0.35	1.9	2.9	1.8	985
706	878	22.3	12	9.5	600	990	8	0.35	1.9	2.9	1.8	1350
	868.1	23.5	12.5	9.5	600	990	8	0.38	1.78	2.65	1.74	1397
	696.3	12.2	6.3	3	612.4	717.6	2.5	0.12	5.78	8.61	5.65	87
	691.5	12.2	6.3	3	612.4	717.6	2.5	0.15	4.4	6.56	4.31	116
671	744	22.3	12	5	618	782	4	0.17	4	5.9	4	220
	740.5	23.5	12.5	5	618	782	4	0.17	3.95	5.88	3.86	224
685	789	22.3	12	6	623	847	5	0.22	3	4.6	2.8	405
675	774	22.3	12	6	623	847	5	0.30	2.3	3.4	2.2	520
722	863	22.3	12	7.5	632	948	6	0.30	2.3	3.4	2.2	895
	852.6	23.5	12.5	7.5	632	948	6	0.31	2.2	3.27	2.15	929
702	845	22.3	12	7.5	632	948	6	0.37	1.8	2.7	1.8	1200
	833	23.5	12.5	7.5	632	948	6	0.38	1.79	2.67	1.75	1180
754	929	22.3	12	9.5	640	1050	8	0.35	1.9	2.9	1.8	1600
	919.5	23.5	12.5	9.5	640	1050	8	0.37	1.83	2.72	1.79	1634
682	738		9	4	645	765	3	0.12	5.6	8.4	5.6	120
	734.2	15	8	4	645	765	3	0.17	3.95	5.88	3.86	163
708	787	22.3	12	6	653	827	5	0.17	4	5.9	4	280
	784.5	23.5	12.5	6	653	827	5	0.18	3.8	5.66	3.72	292
727	839	22.3	12	7.5	658	892	6	0.21	3.2	4.8	3.2	485
697	823	22.3	12	7.5	658	892	6	0.28	2.4	3.6	2.5	645
755	918	22.3	12	7.5	662	998	6	0.30	2.3	3.4	2.2	1050
	896.2	23.5	12.5	7.5	662	998	6	0.31	2.21	3.29	2.16	1074
738	885	22.3	12	7.5	662	998	6	0.37	1.8	2.7	1.8	1400
	872.2	23.5	12.5	7.5	662	998	6	0.38	1.78	2.65	1.74	1393
	969.2	23.5	12.5	12	678	1102	10	0.37	1.8	2.69	1.76	1940

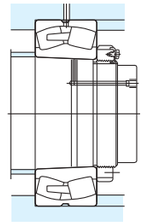


圆柱孔
Cylindrical bore



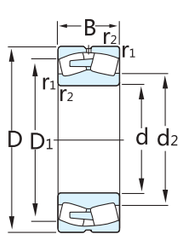
圆锥孔
Tapered bore



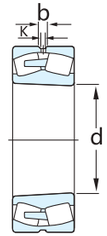


基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)		
			动态 dynamic	静态 static		参考转速 Reference Speed	根限转速 Limit Speed	圆柱孔Cylindrical bore		圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-		
mm			kN		kN	r/min				
670	820	112	2643	6400	430	400	700	**238/670CAMA/W20**		**238/670CAKMA/W20**
	820	112	2380	6900	445	380	810		**238/670MB/W33**	**238/670MBK/W33**
	820	150	3598	9500	655	400	700	**248/670CAMA/W20**		
	820	150	3350	9700	590	191	670		**248/670MB/W33**	
	900	230	5900	14900	940	174	580		**249/670MB/W33**	**249/670MBK30/W33**
	900	170	5146	10800	680	360	670	**239/670CA/W33**		**239/670CAK/W33**
	900	170	4300	10600	750	375	710		**239/670MB/W33**	**239/670MBK/W33**
	980	230	7919	14600	880	340	600	**230/670CA/W33**		**230/670CAK/W33**
	980	230	7200	15800	1100	350	630		**230/670MB/W33**	**230/670MBK/W33**
	980	308	10435	20400	1290	300	500	**240/670ECA/W33**		**240/670ECAK30/W33**
	980	308	9000	21500	1480	239	510		**240/670MB/W33**	**240/670MBK30/W33**
	1090	336	13101	22400	1320	240	500	**231/670CA/W33**		**231/670CAK/W33**
	1090	336	11000	23900	1560	230	495		**231/670MB/W33**	**231/670MBK/W33**
	1090	412	16381	29000	1760	180	260	**241/670ECA/W33**		**241/670ECAK30/W33**
	1090	412	14000	31500	2110	127	420		**241/670MB/W33**	**241/670MBK30/W33**
	1220	438	18650	30500	1700	220	360	**232/670CA/W33**		**232/670CAK/W33**
	1220	438	16000	32000	2130	165	430		**232/670MB/W33**	**232/670MBK/W33**
710	870	118	3013	7500	500	360	670	**238/710CAMA/W20**		
	870	118	2650	7500	540	355	770		**238/710MB/W33**	**238/710MBK/W33**
	870	160	3700	11000	780	175	610		**248/710MB/W33**	
	950	180	5702	12000	750	340	600	**239/710CA/W33**		**239/710CAK/W33**
	950	180	4800	12100	720	350	670		**239/710MB/W33**	**239/710MBK/W33**
	950	243	6860	15600	930	300	500	**249/710CA/W33**		**249/710CAK30/W33**
	950	243	6600	16900	1060	159	550		**249/710MB/W33**	**249/710MBK30/W33**
	1030	236	8669	16300	965	300	560	**230/710CA/W33**		**230/710CAK/W33**
	1030	236	7600	16900	1150	325	590		**230/710MB/W33**	**230/710MBK/W33**
	1030	315	11164	22800	1430	260	450	**240/710ECA/W33**		**240/710ECAK30/W33**
	1030	315	9600	23000	1560	223	480		**240/710MB/W33**	**240/710MBK30/W33**
	1150	345	14732	26000	1530	240	450	**231/710CA/W33**		**231/710CAK/W33**
	1150	345	12500	27000	1790	207	470		**231/710MB/W33**	**231/710MBK/W33**
	1150	438	17935	32500	1900	160	240	**241/710ECA/W33**		**241/710ECAK30/W33**
	1150	438	15600	35500	2290	116	395		**241/710MB/W33**	**241/710MBK30/W33**
	1280	450	21208	34500	2000	200	320	**232/710CA/W33**		**232/710CAK/W33**
	1280	450	17200	35500	2320	149	405		**232/710MB/W33**	**232/710MBK/W33**
750	920	128	3405	8500	550	340	600	**238/750CAMA/W20**		**238/750CAKMA/W20**
	920	128	3000	8700	600	330	720		**238/750MB/W33**	**238/750MBK/W33**
	920	170	4150	12500	740	160	570		**248/750MB/W33**	
	1000	185	6138	13200	800	320	560	**239/750CA/W33**		**239/750CAK/W33**
	1000	185	5200	13000	790	325	640		**239/750MB/W33**	**239/750MBK/W33**
	1000	250	7699	18000	1100	280	480	**249/750CA/W33**		**249/750CAK30/W33**
	1000	250	7200	18900	1170	143	510		**249/750MB/W33**	**249/750MBK30/W33**
	1090	250	10061	18600	1100	280	530	**230/750CA/W33**		**230/750CAK/W33**
	1090	250	8500	19100	1010	305	550		**230/750MB/W33**	**230/750MBK/W33**
	1090	335	12235	25000	1460	240	430	**240/750ECA/W33**		**240/750ECAK30/W33**
	1090	335	10800	26000	1740	204	445		**240/750MB/W33**	**240/750MBK30/W33**
	1220	365	16518	29000	1700	220	430	**231/750CA/W33**		**231/750CAK/W33**
	1220	365	14100	30500	1970	189	445		**231/750MB/W33**	**231/750MBK/W33**
	1220	475	20434	37500	2160	150	220	**241/750ECA/W33**		**241/750ECAK30/W33**
	1220	475	17800	41000	2600	104	360		**241/750MB/W33**	**241/750MBK30/W33**
	1360	475	22478	36500	2000	190	300	**232/750CAF/W33**		**232/750CAKF/W33**
	1360	475	19300	39500	2500	137	380		**232/750MB/W33**	**232/750MBK/W33**
800	980	136	3400	9900	680	305	660		**238/800MB/W33**	**238/800MBK/W33**
	980	180	4780	12900	830	320	560	**248/800CAMA/W20**		**248/800CAK30MA/W20**
	980	180	4650	14000	830	146	640		**248/800MB/W33**	
	1060	195	6595	14300	865	280	530	**239/800CA/W33**		**239/800CAK/W33**
	1060	195	5900	15100	1010	295	580		**239/800MB/W33**	**239/800MBK/W33**
	1060	258	8136	19300	1060	240	430	**249/800CA/W33**		**249/800CAK30/W33**
	1060	258	7700	20300	1360	133	480		**249/800MB/W33**	**249/800MBK30/W33**
	1150	258	10335	20000	1160	260	480	**230/800CA/W33**		**230/800CAK/W33**
	1150	258	9300	21200	1420	280	530		**230/800MB/W33**	**230/800MBK/W33**
	1150	345	13431	28500	1660	220	400	**240/800ECA/W33**		**240/800ECAK30/W33**
	1150	345	11600	28500	1790	188	420		**240/800MB/W33**	**240/800MBK30/W33**
	1280	375	18033	31500	1800	200	400	**231/800CA/W33**		**231/800CAK/W33**
	1280	375	14900	33500	1660	175	415		**231/800MB/W33**	**231/800MBK/W33**
	1280	475	21587	40500	2320	140	200	**241/800ECA/W33**		**241/800ECAK30/W33**
	1280	475	18700	43500	2430	96	345		**241/800MB/W33**	**241/800MBK30/W33**
	1420	488	20000	41500	1540	130	365		**232/800MB/W33**	**232/800MBK/W33**

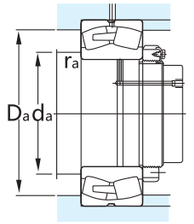
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation coefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
724	778		9	4	685	805	3	0.11	6.1	9.1	6.3	130
	777.2	15	8	4	684.6	805.4	3	0.12	5.72	8.51	5.59	129
726	772		9	4	685	805	3	0.16	4.2	6.3	4	172
	775.2	15	8	4	684.6	805.4	3	0.16	4.22	6.29	4.13	175
	826.5	23.5	12.5	6	693	877	5	0.24	2.81	4.19	2.75	433
752	835	22.3	12	6	693	877	5	0.17	4	5.9	4	315
	831.5	23.5	12.5	6	693	877	5	0.17	3.95	5.88	3.86	320
772	892	22.3	12	7.5	698	952	6	0.21	3.2	4.8	3.2	600
	888.7	23.5	12.5	7.5	698	952	6	0.22	3.01	4.48	2.94	600
758	866	22.3	12	7.5	698	952	6	0.28	2.4	3.6	2.5	790
	873.1	23.5	12.5	7.5	698	952	6	0.31	2.2	3.27	2.15	813
804	959	22.3	12	7.5	702	1058	6	0.30	2.3	3.4	2.2	1250
	948.2	23.5	12.5	7.5	702	1058	6	0.31	2.21	3.29	2.16	1279
782	942	22.3	12	7.5	702	1058	6	0.37	1.8	2.7	1.8	1600
	929.4	23.5	12.5	7.5	702	1058	6	0.37	1.83	2.72	1.79	1544
832	1028	22.3	12	12	718	1172	10	0.35	1.9	2.9	1.8	2270
	1030.7	23.5	12.5	12	718	1172	10	0.37	1.82	2.7	1.78	2317
766	826		12	4	725	855	3	0.11	6.1	9.1	6.3	153
	824.9	15	8	4	724.6	855.4	3	0.12	5.72	8.51	5.59	153
	821.2	15	8	4	725	855	3	0.16	4.22	6.29	4.13	215
794	882	22.3	12	6	733	927	5	0.17	4	5.9	4	365
	877.5	23.5	12.5	6	733	927	5	0.18	3.85	5.73	3.76	355
792	868	22.3	12	6	733	927	5	0.22	3	4.6	2.8	495
	871.7	23.5	12.5	6	733	927	5	0.24	2.81	4.19	2.75	494
816	941	22.3	12	7.5	738	1002	6	0.21	3.2	4.8	3.2	670
	938.8	23.5	12.5	7.5	738	1002	6	0.22	3.07	4.57	3	678
809	918	22.3	12	7.5	738	1002	6	0.27	2.5	3.7	2.5	895
	921.6	23.5	12.5	7.5	738	1002	6	0.3	2.26	3.37	2.21	903
851	1017	22.3	12	9.5	750	1110	8	0.28	2.4	3.6	2.5	1450
	1006.6	23.5	12.5	9.5	750	1110	8	0.3	2.25	3.34	2.2	1450
826	989	22.3	12	9.5	750	1110	8	0.37	1.8	2.7	1.8	1900
	980.2	23.5	12.5	9.5	750	1110	8	0.38	1.79	2.67	1.75	1818
875	1097	22.3	12	12	758	1232	10	0.35	1.9	2.9	1.8	2610
	1088.4	23.5	12.5	12	758	1232	10	0.37	1.83	2.72	1.79	2614
812	873		12	5	768	902	4	0.11	6.1	9.1	6.3	185
	872.1	15	8	5	768	902	4	0.12	5.61	8.36	5.49	186
	868.2	15	8	5	768	902	4	0.16	4.11	6.12	4.02	254
838	930	22.3	12	6	773	977	5	0.16	4.2	6.3	4	420
	923.2	23.5	12.5	6	773	977	5	0.17	3.95	5.88	3.86	426
830	916	22.3	12	6	773	977	5	0.22	3	4.6	2.8	560
	921.7	23.5	12.5	6	773	977	5	0.22	3.1	4.62	3.03	571
859	998	22.3	12	7.5	778	1062	6	0.21	3.2	4.8	3.2	795
	990.9	23.5	12.5	7.5	778	1062	6	0.22	3.01	4.48	2.94	806
855	970	22.3	12	7.5	778	1062	6	0.28	2.4	3.6	2.5	1070
	976.2	23.5	12.5	7.5	778	1062	6	0.3	2.26	3.37	2.21	1057
900	1080	22.3	12	9.5	790	1180	8	0.28	2.4	3.6	2.5	1700
	1067.4	23.5	12.5	9.5	790	1180	8	0.29	2.3	3.42	2.25	1754
875	1050	22.3	12	9.5	790	1180	8	0.37	1.8	2.7	1.8	2100
	1035.8	23.5	12.5	9.5	790	1180	8	0.38	1.76	2.62	1.72	2276
938	1163	22.3	12	15	808	1302	12	0.35	1.9	2.9	1.8	3050
	1154.1	23.5	12.5	15	808	1302	12	0.37	1.83	2.72	1.79	3136
	927.6	15	8	5	818	962	4	0.12	5.72	8.51	5.59	223
865	921		12	5	818	962	4	0.15	4.5	6.7	4.5	300
	925.4	15	8	5	818	962	4	0.16	4.11	6.12	4.02	301
891	986	22.3	12	6	823	1037	5	0.16	4.2	6.3	4	470
	983.7	23.5	12.5	6	823	1037	5	0.17	4.05	6.04	3.96	506
887	973	22.3	12	6	823	1037	5	0.21	3.2	4.8	3.2	640
	978.6	23.5	12.5	6	823	1037	5	0.23	2.98	4.44	2.92	650
917	1053	22.3	12	7.5	828	1122	6	0.20	3.4	5	3.2	895
	1050.9	23.5	12.5	7.5	828	1122	6	0.22	3.07	4.57	3	899
910	1028	22.3	12	7.5	828	1122	6	0.27	2.5	3.7	2.5	1200
	1034.1	23.5	12.5	7.5	828	1122	6	0.29	2.33	3.47	2.28	1199
949	1141	22.3	12	9.5	840	1240	8	0.28	2.4	3.6	2.5	1920
	1119.1	23.5	12.5	9.5	840	1240	8	0.29	2.32	3.45	2.26	1968
930	1111	22.3	12	9.5	840	1240	8	0.35	1.9	2.9	1.8	2300
	1099.5	23.5	12.5	9.5	840	1240	8	0.36	1.86	2.77	1.82	2530
	1211.4	23.5	12.5	15	858	1362	10	0.36	1.87	2.79	1.83	3377

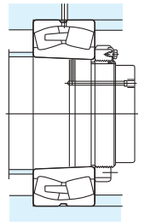


圆柱孔
Cylindrical bore



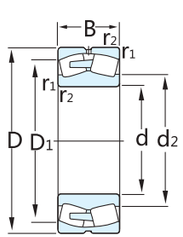
圆锥孔
Tapered bore



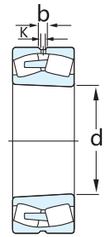


基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)	
			动态 dynamic	静态 static		参考转速 Reference Speed	极限转速 Limit Speed	圆柱孔Cylindrical bore	圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-	
mm			kN		kN	r/min			
850	1030	136	3882	10000	630	260	530	**238/850CAMA/W20**	**238/850CAKMA/W20**
	1030	136	3500	10600	710	285	620	**238/850MB/W33**	**238/850MBK/W33**
	1030	180	4850	14900	880	135	510	**248/850MB/W33**	
	1120	200	7072	15600	930	260	480	**239/850CA/W33**	**239/850CAK/W33**
	1120	200	6300	16400	960	275	550	**239/850MB/W33**	**239/850MBK/W33**
	1120	272	9390	22800	1370	220	400	**249/850CA/W33**	**249/850CAK30/W33**
	1120	272	8400	22500	1370	123	445	**249/850MB/W33**	**249/850MBK30/W33**
	1220	272	11291	21600	1250	240	450	**230/850CA/W33**	**230/850CAK/W33**
	1220	272	10300	23800	1540	255	490	**230/850MB/W33**	**230/850MBK/W33**
	1220	365	15183	31500	1900	200	360	**240/850ECA/W33**	**240/850ECAK30/W33**
	1220	365	12800	32000	2060	173	390	**240/850MB/W33**	**240/850MBK30/W33**
	1360	400	18300	34500	1900	180	360	**231/850CA/W33**	**231/850CAK/W33**
	1360	400	16100	36000	2290	164	385	**231/850MB/W33**	**231/850MBK/W33**
	1360	500	27636	45000	2500	130	190	**241/850ECAF/W33**	**241/850ECAK30F/W33**
	1360	500	21200	48500	3050	88	330	**241/850MB/W33**	**241/850MBK30/W33**
900	1090	140	3750	11600	760	260	590	**238/900MB/W33**	**238/900MBK/W33**
	1090	190	5428	15300	950	240	480	**248/900CAMA/W20**	**248/900CAK30MA/W20**
	1090	190	5200	16700	960	124	465	**248/900MB/W33**	
	1180	206	7652	17000	1000	240	450	**239/900CA/W33**	**239/900CAK/W33**
	1180	206	6500	17200	1010	260	520	**239/900MB/W33**	**239/900MBK/W33**
	1280	280	12002	23200	1320	220	400	**230/900CA/W33**	**230/900CAK/W33**
	1280	280	11100	26500	1620	235	455	**230/900MB/W33**	**230/900MBK/W33**
	1420	412	18000	40500	2550	149	365	**231/900MB/W33**	**231/900MBK/W33**
	1280	375	16185	34500	2040	190	340	**240/900ECA/W33**	**240/900ECAK30/W33**
	1280	375	14200	36500	2220	155	365	**240/900MB/W33**	**240/900MBK30/W33**
	1420	515	25310	49000	2700	120	180	**241/900ECAF/W33**	**241/900ECAK30F/W33**
950	1150	200	5700	18500	1030	114	430	**248/950MB/W33**	
	1250	224	8606	19600	1120	220	430	**239/950CA/W33**	**239/950CAK/W33**
	1250	224	7500	19900	1280	239	475	**239/950MB/W33**	**239/950MBK/W33**
	1250	300	10701	26000	1500	180	340	**249/950CA/W33**	**249/950CAK30/W33**
	1250	300	10300	28500	1700	101	385	**249/950MB/W33**	**249/950MBK30/W33**
	1360	300	14363	28500	1600	200	380	**230/950CA/W33**	**230/950CAK/W33**
	1360	300	12300	29500	1800	218	425	**230/950MB/W33**	**230/950MBK/W33**
	1360	412	17847	39000	2240	170	300	**240/950CAF/W33**	**240/950CAK30F/W33**
	1360	412	16200	42000	2550	142	335	**240/950MB/W33**	**240/950MBK30/W33**
	1500	545	27892	55000	3000	110	160	**241/950ECAF/W33**	**241/950ECAK30F/W33**
	1500	545	23700	54000	3100	81	300	**241/950MB/W33**	**241/950MBK30/W33**
1000	1220	165	5405	14300	850	220	400	**238/1000CAMA/W20**	**238/1000CAKMA/W20**
	1220	165	4900	14900	960	231	510	**238/1000MB/W33**	**238/1000MBK/W33**
	1220	218	6700	21500	1210	104	405	**248/1000MB/W33**	
	1320	315	11939	29000	1460	170	320	**249/1000CA/W33**	**249/1000CAK30/W33**
	1320	315	11400	31000	1850	95	370	**249/1000MB/W33**	**249/1000MBK30/W33**
	1420	308	14600	30500	1700	180	360	**230/1000CAF/W33**	**230/1000CAKF/W33**
	1420	308	13100	31500	1580	206	405	**230/1000MB/W33**	**230/1000MBK/W33**
	1420	412	18592	40500	2240	160	280	**240/1000CAF/W33**	**240/1000CAK30F/W33**
	1420	412	16400	42000	2550	138	330	**240/1000MB/W33**	**240/1000MBK30/W33**
	1580	462	25650	48000	2550	140	280	**231/1000CAF/W33**	**231/1000CAKF/W33**
	1580	462	22000	51000	3150	126	320	**231/1000MB/W33**	**231/1000MBK/W33**
	1580	580	31174	62000	3350	100	150	**241/1000ECAF/W33**	**241/1000ECAK30F/W33**
	1580	580	27500	64000	3950	70	275	**241/1000MB/W33**	**241/1000MBK30/W33**

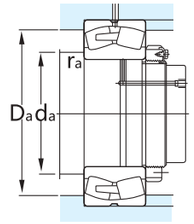
尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation coefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
912	981	-	12	5	868	1012	4	0.11	6.1	9.1	6.3	240
	978.1	15	8	5	868	1012	4	0.11	6.06	9.02	5.92	236
	973.9	15	8	5	868	1012	4	0.15	4.4	6.56	4.31	312
946	1046	22.3	12	6	873	1097	5	0.16	4.2	6.3	4	560
	1039.9	23.5	12.5	6	873	1097	5	0.16	4.11	6.12	4.02	579
940	1029	22.3	12	6	873	1097	5	0.22	3	4.6	2.8	740
	1033.9	23.5	12.5	6	873	1097	5	0.23	2.98	4.44	2.92	756
972	1117	22.3	12	7.5	878	1192	6	0.20	3.4	5	3.2	1050
	1113.5	23.5	12.5	7.5	878	1192	6	0.21	3.24	4.82	3.16	1078
957	1088	22.3	12	7.5	878	1192	6	0.27	2.5	3.7	2.5	1410
	1092.9	23.5	12.5	7.5	878	1192	6	0.29	2.33	3.47	2.28	1438
1013	1205	22.3	12	12	898	1312	10	0.28	2.4	3.6	2.5	2200
	1197.2	23.5	12.5	12	898	1312	10	0.29	2.35	3.5	2.3	2396
988	1182	22.3	12	12	898	1312	10	0.35	1.9	2.9	1.8	2770
	1171.7	23.5	12.5	12	898	1312	10	0.36	1.89	2.81	1.84	2948
	1036.1	15	8	5	918	1072	4	0.11	6.06	9.02	5.92	271
969	1029	-	12	5	918	1072	4	0.14	4.8	7.2	4.5	370
	1030.5	15	8	5	918	1072	4	0.15	4.4	6.56	4.31	382
996	1101	22.3	12	6	923	1157	5	0.15	4.5	6.7	4.5	605
	1098.8	23.5	12.5	6	923	1157	5	0.16	4.28	6.37	4.19	653
1025	1176	22.3	12	7.5	928	1252	6	0.20	3.4	5	3.2	1200
	1171.3	23.5	12.5	7.5	928	1252	6	0.22	3.14	4.67	3.07	1228
	1252.4	23.5	12.5	12	948	1372	10	0.29	2.33	3.47	2.28	2570
1015	1149	22.3	12	7.5	928	1252	6	0.26	2.6	3.9	2.5	1570
	1150.7	23.5	12.5	7.5	928	1252	6	0.28	2.45	3.64	2.39	1595
1043	1235	22.3	12	12	948	1372	10	0.35	1.9	2.9	1.8	3350
	1087.2	15	8	5	968	1132	4	0.15	4.4	6.56	4.31	431
1056	1164	22.3	12	7.5	978	1222	6	0.15	4.5	6.7	4.5	755
	1162.5	23.5	12.5	7.5	978	1222	6	0.16	4.22	6.29	4.13	769
1051	1150	22.3	12	7.5	978	1222	6	0.21	3.2	4.8	3.2	1020
	1155	23.5	12.5	7.5	978	1222	6	0.22	3.01	4.48	2.94	1031
1086	1246	22.3	12	7.5	978	1332	6	0.20	3.4	5	3.2	1450
	1244.7	23.5	12.5	7.5	978	1332	6	0.22	3.14	4.67	3.07	1493
1077	1214	22.3	12	7.5	978	1332	6	0.27	2.5	3.7	2.5	1990
	1216	23.5	12.5	7.5	978	1332	6	0.28	2.37	3.53	2.32	1993
1102	1305	22.3	12	12	998	1452	10	0.35	1.9	2.9	1.8	3540
	1306.7	23.5	12.5	12	998	1452	10	0.36	1.87	2.79	1.83	3819
1079	1161	-	12	6	1023	1197	5	0.12	5.6	8.4	5.6	410
	1158	17.7	9.5	6	1023	1197	5	0.12	5.72	8.51	5.59	413
	1151.4	17.7	9.5	6	1023	1197	5	0.16	4.28	6.37	4.19	546
1109	1212	22.3	12	7.5	1028	1292	6	0.21	3.2	4.8	3.2	1200
	1218.4	23.5	12.5	7.5	1028	1292	6	0.22	3.01	4.48	2.94	1212
1139	1305	22.3	12	7.5	1028	1392	6	0.19	3.6	5.3	3.6	1600
	1300.3	23.5	12.5	7.5	1028	1392	6	0.21	3.2	4.77	3.13	1590
1136	1278	22.3	12	7.5	1028	1392	6	0.26	2.6	3.9	2.5	2140
	1278.3	23.5	12.5	7.5	1028	1392	6	0.28	2.41	3.59	2.35	2108
1185	1403	22.3	12	12	1048	1532	10	0.28	2.4	3.6	2.5	3500
	1391.8	23.5	12.5	12	1048	1532	10	0.29	2.33	3.47	2.28	3474
1159	1373	22.3	12	12	1048	1532	10	0.35	1.9	2.9	1.8	4300
	1372.6	23.5	12.5	12	1048	1532	10	0.35	1.91	2.85	1.87	4429

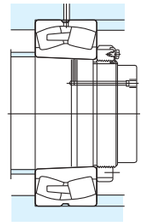


圆柱孔
Cylindrical bore



圆锥孔
Tapered bore





基本尺寸 Basic Size			基本额定负荷 Basic load rating		疲劳负荷极限 Fatigue load limit	额定转速 Rated Speed		型号Designation(Design)		
			动态 dynamic	静态 static		参考转速 Reference Speed	极限转速 Limit Speed	圆柱孔Cylindrical bore		圆锥孔Tapered bore
d	D	B	C	C_o	P_u			-		
mm			kN		kN	r/min				
1060	1280	165	5555	15000	865	200	380	**238/1060CAMA/W20**		**238/1060CAKMA/W20**
	1280	165	5100	16100	980	213	480		**238/1060MB/W33**	**238/1060MBK/W33**
	1280	218	6950	20000	1200	200	380	**248/1060CAMA/W20**		**248/1060CAK30MA/W20**
	1280	218	7000	22700	1270	97	385		**248/1060MB/W33**	
	1400	250	11333	26000	1430	180	360	**239/1060CAF/W33**		**239/1060CAKF/W33**
	1400	250	9900	26000	1420	202	420		**239/1060MB/W33**	**239/1060MBK/W33**
	1400	335	13354	32500	1800	160	280	**249/1060CAF/W33**		**249/1060CAK30F/W33**
	1400	335	12900	36000	2240	84	345		**249/1060MB/W33**	**249/1060MBK30/W33**
	1500	325	16000	34000	1830	170	320	**230/1060CAF/W33**		**230/1060CAKF/W33**
	1500	325	13700	34000	2110	193	375		**230/1060MB/W33**	
	1500	438	20724	45500	2450	150	260	**240/1060CAF/W33**		**240/1060CAK30F/W33**
	1500	438	18800	49500	2950	122	295		**240/1060MB/W33**	**240/1060MBK30/W33**
1120	1360	243	8300	24000	1400	180	340	**248/1120CAFA/W20**		**248/1120CAK30FA/W20**
	1360	243	8000	26000	1460	90	365		**248/1120MB/W33**	
	1460	335	13718	34500	1830	140	260	**249/1120CAF/W33**		**249/1120CAK30F/W33**
	1460	335	12800	35500	2180	83	340		**249/1120MB/W33**	**249/1120MBK30/W33**
	1580	345	14900	37500	2250	181	350		**230/1120MB/W33**	
	1580	462	22364	50000	2700	130	240	**240/1120CAF/W33**		**240/1120CAK30F/W33**
	1580	462	20900	55000	3250	113	280		**240/1120MB/W33**	**240/1120MBK30/W33**
1180	1420	180	6778	18600	1080	170	320	**238/1180CAFA/W20**		**238/1180CAKFA/W20**
	1420	180	6000	19200	1110	187	430		**238/1180MB/W33**	**238/1180MBK/W33**
	1420	243	8800	27000	1560	170	320	**248/1180CAFA/W20**		**248/1180CAK30FA/W20**
	1420	243	8400	28000	1540	83	335		**248/1180MB/W33**	
	1540	272	13076	31000	1660	150	300	**239/1180CAF/W33**		**239/1180CAKF/W33**
	1540	272	11300	31000	1770	177	370		**239/1180MB/W33**	**239/1180MBK/W33**
	1540	355	15751	40500	2160	130	240	**249/1180CAF/W33**		**249/1180CAK30F/W33**
	1540	355	14700	42000	2400	73	305		**249/1180MB/W33**	**249/1180MBK30/W33**
	1660	355	16600	42000	2470	166	330		**230/1180MB/W33**	
1250	1500	250	9000	30500	1220	76	320		**248/1250MB/W33**	
	1630	375	16000	45500	2700	69	295		**249/1250MB/W33**	**249/1250MBK30/W33**
	1750	375	21256	45000	2320	130	240	**230/1250CAF/W33**		**230/1250CAKF/W33**
	1750	375	18100	46500	2700	154	310		**230/1250MB/W33**	**230/1250MBK/W33**
1320	1600	280	11200	33500	1860	140	260	**248/1320CAFA/W20**		**248/1320CAK30FA/W20**
	1600	280	10300	35000	1900	71	295		**248/1320MB/W33**	
	1720	400	18714	49000	2500	110	200	**249/1320CAF/W33**		**249/1320CAK30F/W33**
	1720	400	17600	52000	2370	62	265		**249/1320MB/W33**	**249/1320MBK30/W33**
1400	1700	300	12100	41000	2220	63	270		**248/1400MB/W33**	
1500	1820	315	14684	45000	2400	110	220	**248/1500CAFA/W20**		**248/1500CAK30FA/W20**
	1820	315	13000	44500	2380	58	255		**248/1500MB/W33**	
1600	1950	345	16000	54000	3000	51	240		**248/1600MB/W33**	
1700	2060	355	17100	60000	2850	46	218		**248/1700MB/W33**	
1800	2180	375	20274	63000	3050	75	140	**248/1800CAFA/W20**		**248/1800CAK30FA/W20**
	2180	375	18700	67000	3400	42	201		**248/1800MB/W33**	

尺寸 Dimensions					挡肩及倒角尺寸 Abutment and chamfer dimensions			计算系数 Calculation coefficient				质量 Mass
d_2 ~	D_1 ~	b	k	$r_{1,2}$ min	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0	
mm								-				kg
1137	1219		12	6	1083	1257	5	0.11	6.1	9.1	6.3	435
	1218.6	17.7	9.5	6	1083	1257	5	0.11	6.18	9.2	6.04	435
1139	1210		12	6	1083	1257	5	0.14	4.8	7.2	4.5	570
	1212.7	17.7	9.5	6	1083	1257	5	0.15	4.54	6.75	4.43	599
1171	1305	22.3	12	7.5	1088	1372	6	0.16	4.2	6.3	4	1100
	1307.6	23.5	12.5	7.5	1088	1372	6	0.17	4.05	6.04	3.96	1081
1168	1286	22.3	12	7.5	1088	1372	6	0.21	3.2	4.8	3.2	1400
	1290.7	23.5	12.5	7.5	1088	1372	6	0.21	3.17	4.72	3.1	1436
1205	1378	22.3	12	9.5	1094	1466	8	0.19	3.6	5.3	3.6	1840
	1374.6	23.5	12.5	9.5	1094	1466	8	0.2	3.38	5.03	3.3	1896
1199	1349	22.3	12	9.5	1094	1466	8	0.26	2.6	3.9	2.5	2520
	1353.5	23.5	12.5	9.5	1094	1466	8	0.27	2.47	3.67	2.41	2524
1207	1282		12	6	1143	1337	5	0.15	4.5	6.7	4.5	735
	1285	17.7	9.5	6	1143	1337	5	0.15	4.47	6.65	4.37	791
1231	1350	22.3	12	7.5	1148	1432	6	0.20	3.4	5	3.2	1500
	1352.6	23.5	12.5	7.5	1148	1432	6	0.21	3.27	4.87	3.2	1545
	1445.4	23.5	12.5	9.5	1154	1546	8	0.2	3.42	5.09	3.34	2210
1268	1423	22.3	12	9.5	1154	1546	8	0.26	2.6	3.9	2.5	2930
	1429.7	23.5	12.5	9.5	1154	1546	8	0.28	2.45	3.64	2.39	2924
1264	1355		12	6	1203	1397	5	0.11	6.1	9.1	6.3	575
	1353.9	17.7	9.5	6	1203	1397	5	0.11	6.18	9.2	6.04	576
1268	1344		12	6	1203	1397	5	0.14	4.8	7.2	4.5	770
	1345	17.7	9.5	6	1203	1397	5	0.15	4.54	6.75	4.43	790
1305	1439	22.3	12	7.5	1208	1512	6	0.16	4.2	6.3	4	1400
	1438.3	23.5	12.5	7.5	1208	1512	6	0.17	4.05	6.04	3.96	1385
1297	1422	22.3	12	7.5	1208	1512	6	0.20	3.4	5	3.2	1800
	1428.9	23.5	12.5	7.5	1208	1512	6	0.22	3.14	4.67	3.07	1788
	1522.2	23.5	12.5	9.5	1214	1626	8	0.21	3.27	4.87	3.2	2513
	1423.5	17.7	9.5	6	1273	1477	5	0.14	4.67	6.96	4.57	918
	1510.5	23.5	12.5	7.5	1278	1602	6	0.21	3.24	4.82	3.16	2132
1415	1611	22.3	12	9.5	1284	1716	8	0.19	3.6	5.3	3.6	2840
	1607.6	23.5	12.5	9.5	1284	1716	8	0.2	3.34	4.98	3.27	2933
1422	1511		12	6	1343	1577	5	0.15	4.5	6.7	4.5	1160
	1512.8	23.5	12.5	7.5	1343	1577	5	0.15	4.4	6.56	4.31	1235
1449	1589	22.3	12	7.5	1348	1692	6	0.21	3.2	4.8	3.2	2500
	1595.5	23.5	12.5	7.5	1348	1640	6	0.22	3.1	4.62	3.03	2558
	1606.9	23.5	12.5	7.5	1428	1672	6	0.16	4.34	6.47	4.25	1470
1612	1719		12	7.5	1528	1792	6	0.15	4.5	6.7	4.5	1710
	1722.1	23.5	12.5	7.5	1528	1792	6	0.15	4.47	6.65	4.37	1660
	1846.9	23.5	12.5	7.5	1628	1922	6	0.15	4.54	6.75	4.43	2222
	1946.7	23.5	12.5	7.5	1728	2032	6	0.15	4.47	6.65	4.37	2573
1932	2060		12	9.5	1834	2146	8	0.15	4.5	6.7	4.5	2900
	2060	23.5	12.5	9.5	1834	2146	8	0.15	4.47	6.65	4.37	2992

剖分式调心滚子轴承
Split Spherical Roller Bearing

在难于接近的位置快速更换轴承
Quick-Replace of Bearing at An Unattainable Place

由于更换非剖分式调心滚子轴承需要大量附加工作（包括齿轮或联轴器的拆卸、传动装置的拆卸以及轴动力装置的拆卸），因此主要使用剖分式调心滚子轴承。
剖分式调心滚子轴承的使用降低了机器和设备的停机时间。

Replace non-split bearing will cause much extra work, like dismounting of gear, couplings, transmission and drive etc, therefore, in those places hard to attain, split bearing is the best choice.

节约成本 Cost-Saving

由于停机减少，剖分调心滚子轴承能够大大降低安装成本。
在新的设计中，剖分式调心滚子轴承在大多数情况下可以节约成本，这是因为简化了设备并且减少了所需的装配作业。

Due to reduced downtime of machine, split bearing can reduce the mounting cost greatly.

Those cost-saving is attributed to simplified equipment and less assembling work.

应用实例 Application Example

剖分式调心滚子轴承主要用于难于接近的几个点和位置所支撑的轴。典型应用范围包括输送设备、材料处理设备、通风设备、轧钢、船舶和造纸。

Split bearing is mainly used on the shafts which are supported by several unattainable points or positions, including transmission equipment, material processing equipment, ventilation equipment, milling, vessel and paper making industry.

采矿和材料加工领域的应用实例：
Example of mining and material processing:

斗轮挖掘机和取料机	Bucket wheel excavator and Reclaimer
绞盘各滑轮	Winch and Pulley
蜗杆输送机	Worm conveyer
斗轮和皮带输送机	Bucket wheel and Belt conveyer
混合和搅拌设备	Mixing equipment
磨机和破碎机	Grinder and crusher
烧结设备、鼓形窑	Sintering equipment
风扇和通风机	Fan and ventilator
除尘设备	Dust-cleaning equipment
传动装置和传动轴	Transmission apparatus and shaft

当量动载荷 Equivalent dynamic load

$P = 1.1 (F_r + Y_1 \cdot F_a)$ [kN] $F_a / F_r \le e$
$P = 1.1 (0.67 \cdot F_r + Y_2 \cdot F_a)$ [kN] $F_a / F_r > e$

当量动载荷 Equivalent dynamic load

$P0 = (F_{0r} + Y_0 \cdot F_{0a})$ [kN]

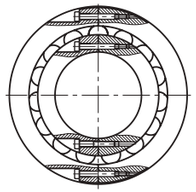
为防止内圈在轴的圆周方向滑动，P/Cr必须≤ 0.2。
若实际速度大大低于极限速度，则允许使用较高值。在这种情况下，请联系我们。

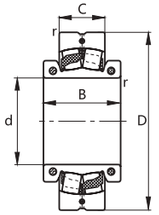
To prevent the sliding of the inner ring in the circum-ferential direction on the shaft, P/Cr must be ≤ 0.2。

A higher value is allowed to use only under the condition that the actual speed is greatly less than the limit speed. In this case, please contact us

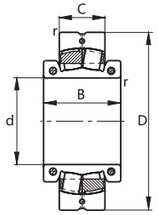
*） 对于不带轴向支撑的内圈
* *)若内部尺寸相同，轴承也可安装在其它制造商生产的轴承座中。
SNV轴承座的密封件、盖和定位环：请参见样本。
1） 不带吊环的轴承座

*)For the inner ring without axial support
* *)If internal dimensions of the bearing are the same, the bearing can also be mounted in other bearing housing.
Seals, shields and locating ring of SNV bearing housing: See catalogue--rolling bearings
1）Bearing block without hand ring

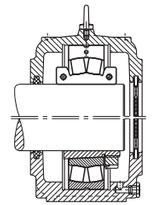




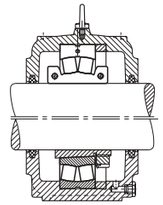
实体聚酰胺保持架
TVPA



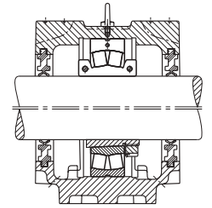
实体黄铜保持架
MA



非定位轴承
Non-locating bearing
S30



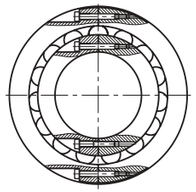
定位轴承
Locating bearing
S30

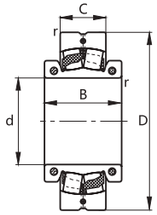


非定位轴承
Non-locating bearing
SD

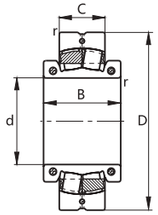
基本尺寸 Basic Size d	D	C	B	最小 min r	基本额定负荷 Basic load rating 动态 dynamic C	静态 static C_0	计算系数 Calculation factors e	Y_1	Y_2	Y_0	疲劳载荷极限值 Fatigue load limtited value C_{ur}	型号Designation
mm					kN		-					-
100	180	56	90	2	310	430	0.28	2.37	3.53	2.32	40	**231SM100-MA**
	200	53	92	2.1	360	465	0.24	2.84	4.23	2.78	39.5	**222SM100-TVPA**
110	180	46	86	2	270	390	0.23	2.9	4.31	2.83	29.5	**230SM110-MA**
	200	62	102	2	390	570	0.28	2.41	3.59	2.35	39	**231SM110-MA**
	215	58	98	2.1	455	585	0.25	2.71	4.04	2.65	47	**222SM110-TVPA**
115	200	52	90	2	305	455	0.22	3.04	4.53	2.97	35	**230SM115-MA**
	210	64	104	2	490	710	0.28	2.39	3.56	2.34	49.5	**231SM115-MA**
	230	64	104	3	540	720	0.25	2.71	4.04	2.65	53	**222SM115-TVPA**
125	210	53	94	2	390	600	0.23	2.95	4.4	2.89	44	**230SM125-MA**
	225	68	110	2.1	510	750	0.28	2.45	3.64	2.39	51	**231SM125-MA**
	250	68	110	3	630	880	0.26	2.62	3.9	2.56	60	**222SM125-TVPA**
135	225	56	100	2.1	405	620	0.22	3.07	4.57	3	46	**230SM135-MA**
	250	80	123	2.1	570	850	0.27	2.49	3.71	2.43	57	**231SM135-MA**
	270	73	122	3	735	1020	0.25	2.67	3.97	2.61	73	**222SM135-TVPA**
140	240	60	106	2.1	450	680	0.22	3.1	4.62	3.03	51	**230SM140-MA**
	270	86	135	2.1	710	1040	0.29	2.32	3.45	2.26	87	**231SM140-MA**
	290	80	124	3	850	1200	0.25	2.69	4	2.63	83	**222SM140-TVPA**
150	260	67	112	2.1	510	800	0.22	3.1	4.62	3.03	57	**230SM150-MA**
	280	88	133	2.1	710	1040	0.29	2.32	3.45	2.26	87	**231SM150-MA**
	310	86	128	4	965	1370	0.26	2.64	3.93	2.58	94	**222SM150-TVPA**
160	280	74	123	2.1	640	1000	0.23	2.98	4.44	2.92	96	**230SM160-MA**
	300	96	140	2.1	830	1220	0.29	2.32	3.45	2.26	100	**231SM160-MA**
	320	86	131	4	965	1370	0.26	2.64	3.93	2.58	94	**222SM160-TVPA**
170	290	75	120	2.1	780	1250	0.23	2.9	4.31	2.83	113	**230SM170-MA**
	320	104	142	2.1	915	1430	0.28	2.37	3.53	2.32	114	**231SM170-MA**
	340	92	142	4	1140	1630	0.25	2.71	4.04	2.65	111	**222SM170-TVPA**
180	310	82	134	2.1	800	1270	0.23	2.98	4.44	2.92	115	**230SM180-MA**
	340	112	160	3	1020	1530	0.29	2.32	3.45	2.26	119	**231SM180-MA**
	360	98	154	4	1140	1630	0.25	2.71	4.04	2.65	104	**222SM180-MA**
200	340	90	136	3	965	1530	0.23	2.9	4.31	2.83	136	**230SM200-MA**

尺寸 Dimensions d	允许的轴向载荷*) ermitted axial load*) 最大max F_a	根限转速 Limit Speed	螺钉锁紧扭矩 Screw tightening torque M_i	M_a	更换带适配套的非剖分调心滚子轴承 Replace non-split spherical roller bearing with withdrawal sleeves 轴承 Bearing	适配套 Withdrawal sleeves	适宜的轴承座**) Suitable bearing housing**)	质量 Mass
	kN	min^{-1}	Nm	Nm				kg
100	7.6	1100	14	4	23122K	H3122		6.8
	13.8	1500	35	14	22222K	H322	SNV200 1)	8.88
110	7.6	1100	14	4	23024K	H3024	S3024-H-N-FZ 1)	5.26
	14	1000	35	8	23124K	H3124		9.51
	13.8	1300	35	14	22224K	H3124	SNV215	10.6
115	7.6	1100	14	8.5	23026K	H3026	S3026-H-N-FZ 1)	9.5
	7.6	900	14	4	23126K	H3126		11.2
	13.8	1200	35	14	22226K	H3126	SNV230	14.3
125	7.6	950	14	4	23028K	H3028	S3028-H-N-FZ 1)	10
	13.8	850	35	8.5	23128K	H3128		13.5
	13.8	1100	35	14	22228K	H3128	SNV250	17.9
135	13.8	950	35	8.5	23030K	H3030	S3030-H-N-FZ 1)	13
	22.2	800	69	14	23130K	H3130		19.5
	22.2	1000	69	35	22230K	H3130	SNV270	24.1
140	13.8	900	35	8.5	23032K	H3032	S3032-H-N-FZ 1)	15.5
	21.7	700	69	12.4	23132K	H3132		25.8
	22.2	950	69	35	22232K	H3132	SNV290	28.5
150	13.8	800	35	8.5	23034K	H3034	S3034-H-N-FZ	17.4
	22	700	69	35	23134K	H3134	SD3134-H-TS	28
	22.2	900	69	35	22234K	H3134	SD534-N-FZ	35.5
160	22.2	750	69	14	23036K	H3036	S3036-H-N-FZ	24.4
	22	670	69	35	23136K	H3136	SD3136-H-TS	32.7
	22.2	900	69	35	22236K	H3136	SD536-N-FZ	37.6
170	22.2	700	69	14	23038K	H3038	S3038-H-N-FZ	23.6
	22	630	69	35	23138K	H3138	SD3138-H-TS	40.6
	22.2	800	69	35	22238K	H3138	SD538-N-FZ	43.6
180	22	670	69	14	23040K	H3040	S3040-H-N-FZ	30
	22	600	69	35	23140K	H3140	SD3140-H-TS	56.4
	22.2	600	69	35	22240K	H3140	SD540-N-FZ	52.7
200	22	630	69	35	23044K	H3044X	S3044-H-N-FZ	45

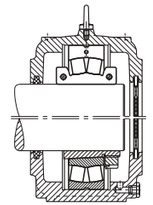




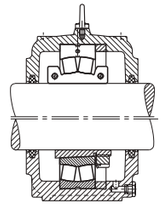
实体聚酰胺保持架
TVPA



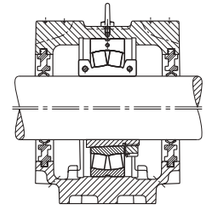
实体黄铜保持架
MA



非定位轴承
Non-locating bearing
S30



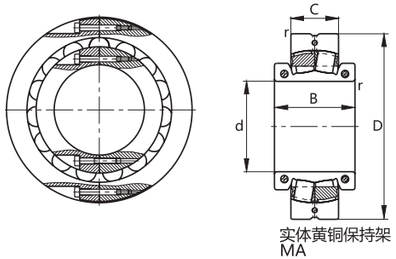
定位轴承
locating bearing
S30



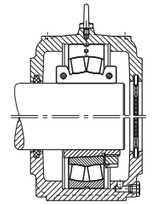
非定位轴承
Non-locating bearing
SD

基本尺寸 Basic Size d mm	D	C	B	最小 min r	基本额定负荷 Basic load rating 动态 dynamic C kN	静态 static C_0	计算系数 Calculation factors e -	Y_1	Y_2	Y_0	疲劳载荷极限值 Fatigue load limtited value C_{ur} -	型号Designation -
200 (cont.)	370	120	175	4	1320	2040	0.31	2.21	3.29	2.16	151	**231SM200-MA**
	400	108	162	4	1340	1900	0.25	2.69	4	2.63	121	**222SM200-MA**
220	360	92	156	3	1100	1830	0.23	2.9	4.31	2.83	152	**230SM220-MA**
	400	128	190	4	1630	2600	0.3	2.25	3.34	2.2	191	**231SM220-MA**
	440	120	170	4	1460	2080	0.25	2.71	4.04	2.65	126	**222SM220-MA**
240	400	104	160	4	1220	2120	0.22	3.04	4.53	2.97	177	**230SM240-MA**
	440	144	210	4	1860	3050	0.3	2.28	3.39	2.23	218	**231SM240-MA**
	480	130	200	5	1860	2600	0.26	2.64	3.93	2.58	157	**222SM240-MA**
260	420	106	170	4	1460	2450	0.23	2.95	4.4	2.89	200	**230SM260-MA**
	460	146	190	5	2280	3800	0.3	2.23	3.32	2.18	255	**231SM260-MA**
	500	130	200	5	2200	3100	0.25	2.67	3.97	2.61	182	**222SM260-MA**
280	460	118	176	4	1600	2800	0.22	3.04	4.53	2.97	228	**230SM280-MA**
	500	160	218	5	2320	3900	0.29	2.32	3.45	2.26	265	**231SM280-MA**
	540	140	200	5	2400	3550	0.24	2.79	4.15	2.73	212	**222SM280-MA**
300	480	121	186	4	1860	3200	0.23	2.9	4.31	2.83	255	**230SM300-MA**
	540	176	225	5	2750	4750	0.29	2.3	3.42	2.25	305	**231SM300-MA**
	580	150	212	5	2650	4050	0.24	2.84	4.23	2.78	228	**222SM300-MA**

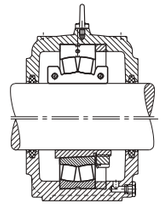
尺寸 Dimensions d	允许的轴向载荷*) ermitted axial load*) 最大max F_a kN	根限转速 Limit Speed min^{-1}	螺钉锁紧扭矩 Screw tightening torque M_i Nm	M_a Nm	更换带适配套的非剖分调心滚子轴承 Replace non-split spherical roller bearing with withdrawal sleeves 轴承 Bearing	适配套 withdrawal sleeves	适宜的轴承座**) Suitable bearing housing**)	质量 Mass kg
200 (cont.)	32	530	120	69	23144K	H3144X	SD3144-H-TS	61.8
	32	560	120	69	22244K	H3144X	SD544-N-FZ	69.6
220	32	560	120	35	23048K	H3048	S3048-H-N-FZ	42.6
	32	480	120	69	23148K	H3148X	SD3148-H-TS	86
	32	500	120	69	22248K	H3148X	SD548-N-FZ	90.9
240	32	560	120	69	23052K	H3052	S3052-H-N-FZ	57.4
	32	450	120	69	23152K	H3152X	SD3152-H-TS	118
	60	450	295	120	22252K	H3152X	SD552-N-FZ	136
260	32	500	120	35	23056K	H3056	S3056-H-N-FZ	63.6
	32	400	120	35	23156K	H3156X	SD3156-H-TS	109
	60	430	295	69	22256K	H3156X	SD556-N-FZ	147
280	32	480	120	69	23060K	H3060	S3060-H-N-FZ	96
	44	400	190	120	23160K	H3160HG	SD3160-H-TS	160
	60	430	295	120	22260K	H3160HG	SD560-N-FZ	157
300	32	430	120	69	23064K	H3064HG	S3064-H-N-FZ	108
	60	360	295	120	23164K	H3164HG	SD3164-H-TS	184
	60	380	295	120	22264K	H3164HG	SD564-N-FZ	214



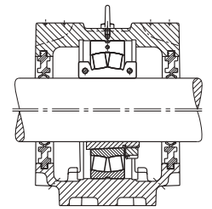
实体黄铜保持架
MA



非定位轴承
Non-locating bearing
S30



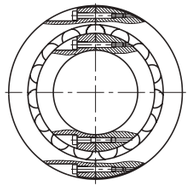
定位轴承
Locating bearing
S30

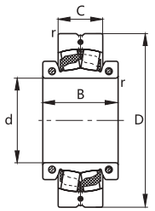


非定位轴承
Non-locating bearing
SD

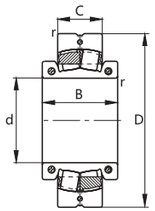
基本尺寸 Basic Size d mm	D	C	B	最小 min r	基本额定负荷 Basic load rating 动态 dynamic C kN	静态 static C_0	计算系数 Calculation factors e -	Y_1	Y_2	Y_0	疲劳载荷极限值 Fatigue load limtited value C_{ur}	型号Designation -
320	520	133	200	5	2040	3650	0.22	3.04	4.53	2.97	285	**230SM320-MA**
	580	190	258	5	3100	5200	0.3	2.26	3.37	2.21	325	**231SM320-MA**
	620	165	230	6	3100	4750	0.24	2.76	4.11	2.7	270	**222SM320-MA**
340	540	134	205	5	2360	4150	0.22	3.01	4.48	2.94	315	**230SM340-MA**
	600	192	270	5	3900	6800	0.3	2.25	3.34	2.2	410	**231SM340-MA**
	650	170	240	6	3450	5100	0.25	2.69	4	2.63	280	**222SM340-MA**
360	560	135	218	5	2550	4650	0.22	3.1	4.62	3.03	350	**230SM360-MA**
	620	194	270	5	3900	6950	0.3	2.28	3.39	2.23	420	**231SM360-MA**
380	600	148	225	5	2700	5100	0.21	3.2	4.77	3.13	390	**230SM380-MA**
	650	200	270	6	4050	7200	0.28	2.39	3.56	2.34	440	**231SM380-MA**
400	620	150	225	5	3100	5700	0.22	3.1	4.62	3.03	420	**230SM400-MA**
	700	224	285	6	4400	7650	0.28	2.39	3.56	2.34	480	**231SM400-MA**
410	650	157	225	5	3100	5850	0.21	3.2	4.77	3.13	425	**230SM410-MA**
420	650	157	235	5	3100	5850	0.21	3.2	4.77	3.13	425	**230SM420-MA**

尺寸 Dimensions d	允许的轴向载荷*) ermitted axial load*) 最大max F_a kN	根限转速 Limit Speed min^{-1}	螺钉锁紧扭矩 Screw tightening torque M_i Nm	M_a Nm	更换带适配套的非剖分调心滚子轴承 Replace non-split spherical roller bearing with withdrawal sleeves 轴承 Bearing	适配套 Withdrawal sleeves	适宜的轴承座**) Suitable bearing housing**)	质量 Mass kg
320	60	430	295	69	23068K	H3068HG	S3068-H-N-FZ	122
	60	340	295	190	23168K	H3168HG	SD3168-H-TSTS	226
	60	360	295	120	22268K	H3168HG		245
340	60	380	295	69	23072K	H3072HG	S3072-H-N-FZ	150
	60	300	295	70	23172K	H3172HG	SD3172-H-TS	314
	60	340	295	120	22272K	H3172HG		267
360	60	380	295	69	23076K	H3076HG	S3076-H-N-FZ	165
	60	300	295	69	23176K	H3176HG	SD3176-H-TS	292
380	60	380	295	120	23080K	H3080HG	S3080-H-N-FZ	187
	60	300	295	120	23180K	H3180HG	SD3180-H-TS	326
400	60	340	295	69	23084K	H3084XHG	S3084-H-N-FZ	214
	60	280	295	190	23184K	H3184HG	SD3184-H-TS	371
410	60	340	295	120	23088K	H3088HG	S3088-H-N-FZ	246
420	60.5	340	295	120	23088K	AHX3088GH 1)		246

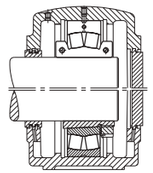




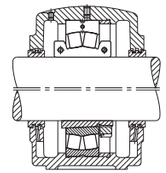
实体聚酰胺保持架
TVPA



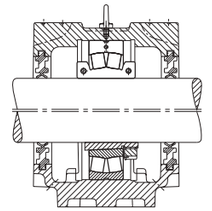
实体黄铜保持架
MA



非定位轴承
Non-locating bearing
SDAF



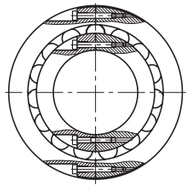
定位轴承
Locating bearing
SDAF

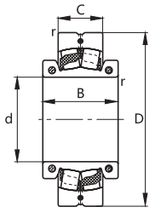


非定位轴承
Non-locating bearing
SNV

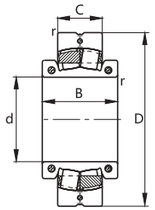
基本尺寸 Basic Size						基本额定负荷 Basic load rating		计算系数 Calculation factors				疲劳载荷极限值 Fatigue load limtited value	型号Designation
d	d	D	C	B	最小 min r	动态 dynamic C	静态 static C_o	e	Y_1	Y_2	Y_0	C_{ur}	-
mm	inch					kN		-					
100.013	3.9375	200	53	92	2.1	360	465	0.24	2.84	4.23	2.78	39.5	**222S.315**
101.6	4.0000	200	53	92	2.1	360	465	0.24	2.84	4.23	2.78	39.5	**222S.400**
106.363	4.1875	215	58	98	2.1	455	585	0.25	2.71	4.04	2.65	47	**222S.403**
112.713	4.4375	230	64	104	3	540	720	0.25	2.71	4.04	2.65	53	**222S.407**
114.3	4.5000	230	64	104	3	540	720	0.25	2.71	4.04	2.65	53	**222S.408**
125.413	4.9375	250	68	110	3	630	880	0.26	2.62	3.9	2.56	60	**222S.415**
125.413	4.9375	250	68	110	3	585	780	0.26	2.62	3.9	2.56	53	**222S.415-MA**
127	5.0000	250	68	110	3	630	880	0.26	2.62	3.9	2.56	60	**222S.500**
131.763	5.1875	270	73	122	3	735	1020	0.25	2.67	3.97	2.61	73	**222S.503**
138.113	5.4375	290	80	124	3	850	1200	0.25	2.69	4	2.63	83	**222S.507**
138.113	5.4375	290	80	124	3	780	1060	0.25	2.69	4	2.63	74	**222S.507-MA**

允许的轴向载荷*) ermitted axial load*) 最大max F_a	根限转速 Limit peed	螺钉锁紧扭矩 Screw tightening torque		更换带适配套的非剖分调心滚子轴承 Replace non-split spherical roller bearing with withdrawal sleeves			适宜的轴承座**) Suitable bearing housing**)		质量 Mass
		M_i	M_a	轴承 Bearing	适配套 Withdrawal sleeves	适配套 Withdrawal sleeves			
kN	min^{-1}	Nm	Nm						kg
13.8	1500	35	14	22222K	SNW22.315	H322.315	SAF522	SNV200	8.88
13.8	1500	35	14	22222K	SNW22.400	H322.400	SAF522/4	SNV200	8.83
13.8	1300	35	14	22224K	SNW24.403	H3124.403	SAF524	SNV215	11
13.8	1200	35	14	22226K	SNW26.407	H3126.407	SAF526	SNV230	14.7
13.8	1200	35	14	22226K	SNW26.408	H3126.408	SAF526/4.1/2	SNV230	14.4
13.8	1100	35	14	22228K	SNW28.415	H3128.415	SAF528	SNV250	17.8
13.8	850	35	14	22228K	SNW28.415	H3128.415	SAF528	SNV250	17.9
13.8	1100	35	14	22228K	SNW28.500	H3128.500	SAF528/5	SNV250	17.5
22.2	1000	69	35	22230K	SNW30.503	H3130.503	SAF530	SNV270	25.2
22.2	950	69	35	22232K	SNW32.507	H3132.507	SAF532	SNV290	28.9
22.2	750	69	35	22232K	SNW32.507	H3132.507	SAF532	SNV290	31.3

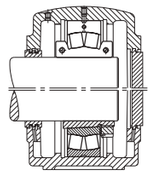




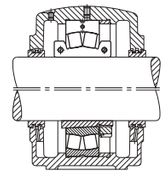
实体聚酰胺保持架
TVPA



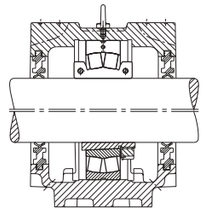
实体黄铜保持架
无后缀 MA
对于d≥ 70000inch
without suffix for d≥ 70000inch



非定位轴承
Non-locating bearing
SAF



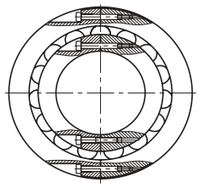
定位轴承
Locating bearing
SAF

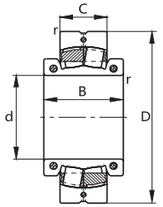


非定位轴承
Non-locating bearing
SNV

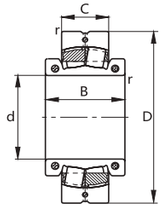
基本尺寸 Basic Size d mm	d inch	D	C	B	最小 min r	基本额定负荷 Basic load rating 动态 dynamic C kN	静态 static C_0	计算系数 Calculation factors e -	Y_1	Y_2	Y_0	疲劳载荷极限值 Fatigue load limtited value C_{ur}	型号Designation -
139.7	5.5000	240	60	106	2.1	450	680	0.22	3.1	4.62	3.03	51	**230S.508-MA**
139.7	5.5000	290	80	124	3	850	1200	0.25	2.69	4	2.63	83	**222S.508**
150.813	5.9375	310	86	128	4	965	1370	0.26	2.64	3.93	2.58	94	**222S.515**
152.4	6.0000	310	86	128	4	965	1370	0.26	2.64	3.93	2.58	94	**222S.600**
163.513	6.4375	280	74	123	2.1	640	1000	0.23	2.98	4.44	2.92	96	**230S.607-MA**
	6.4375	300	96	140	2.1	830	1220	0.29	2.32	3.45	2.26	100	**231S.607-MA**
	6.4375	320	86	131	4	965	1370	0.26	2.64	3.93	2.58	94	**222S.607**
165.1	6.5000	320	86	131	4	965	1370	0.26	2.64	3.93	2.58	94	**222S.608**
176.213	6.9375	340	92	142	4	1140	1630	0.25	2.71	4.04	2.65	111	**222S.615**
177.8	7.0000	290	75	120	2.1	780	1250	0.23	2.9	4.31	2.83	113	**230S.700**
182.563	7.1875	360	98	154	4	1140	1630	0.25	2.71	4.04	2.65	104	**222S.703**
190.5	7.5000	400	108	162	4	1340	1900	0.25	2.69	4	2.63	121	**222S.708**
201.613	7.9375	400	108	162	4	1340	1900	0.25	2.69	4	2.63	121	**222S.715**
203.2	8.0000	400	108	162	4	1340	1900	0.25	2.69	4	2.63	121	**222S.800**
214.313	8.4375	360	92	156	3	1100	1830	0.23	2.9	4.31	2.83	152	**230S.807**
215.9	8.5000	360	92	156	3	1100	1830	0.23	2.9	4.31	2.83	152	**230S.808**
228.6	9.0000	360	92	156	3	1100	1830	0.23	2.9	4.31	2.83	152	**230S.900**
239.713	9.4375	440	144	210	4	1860	3050	0.3	2.28	3.39	2.23	218	**231S.907**
241.3	9.5000	400	104	160	4	1220	2120	0.22	3.04	4.53	2.97	177	**230S.908**
260	9.9375	460	146	190	5	2280	3800	0.3	2.23	3.32	2.18	255	**231S.915**

允许的轴向载荷*) ermitted axial load*) 最大max F_a kN	根限转速 Limit peed min^{-1}	螺钉锁紧扭矩 Screw tightening torque M_i Nm	M_a Nm	更换带适配套的非剖分调心滚子轴承 Replace non-split spherical roller bearing with withdrawal sleeves 轴承 Bearing	适配套 Withdrawal sleeves	适配套 Withdrawal sleeves	适宜的轴承座**) Suitable bearing housing**)		质量 Mass kg
13.8	900	35	8.5	23032K	SNP3032.508	H3032.508	SAF032K/5.1/2		13.7
22.2	950	69	35	22232K	SNW32.508	H3132.508	SAF532/5.1/2	SNV290	28.6
22.2	900	69	35	22234K	SNW34.515	H3134.515	SAF534		35.5
22.2	900	69	35	22234K	SNW34.600	H3134.600	SAF534/6		36.5
22.2	750	69	14	23038K	SNP3036.607	H3038.607	SAF038K/6.7/16		24.4
22.2	670	69	35	23136K	SNP3136.607	H3136.607	SDAF3136K/6.7/16		34.4
22.2	900	69	35	22236K	SNW36.607	H3136.607	SAF536		37.5
22.2	900	69	35	22236K	SNW36.608	H3136.608	SAF536/6.1/2		37.8
22.2	800	69	35	22238K	SNW38.615	H3138.615	SAF538		44.2
22.2	700	69	14	23038K	SNP3038.700	H3038.700	SAF038K/7		21.1
22.2	600	69	35	22240K	SNW40.703	H3140.703	SAF540		59
32	560	120	69	22244K	SNW44.708	H3144X.708	SAF544/7.1/2		73.3
32	560	120	69	22244K	SNW44.715	H3144X.715	SAF544		75.4
32	560	120	69	22244K	SNW44.800	H3144X.800	SAF544/8		74.7
32	560	120	35	23048K	SNP3048.807	H3048.807	SAF048K/8.7/16		54.7
32	560	120	35	23048K	SNP3048.808	H3048.808	SAF048K/8.1/2		58.9
32	560	120	35	23048K	SNP3048.900	H3048.900	SAF048K/9		52.8
32	450	120	69	23152K	SNP3152.907	H3152X.907	SDAF3152K/9.7/16		113
32	560	120	69	23052K	SNP3052.908	H3052X.908	SAF052K/9.1/2		56.8
32	400	120	35	23156K	SNP3156.915	H3156X.915	SDAF3156K/9.15/16		116



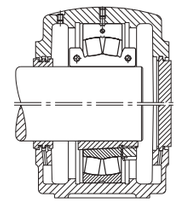


实体黄铜保持架
无后缀 MA
对于d≥ 70000inch
without suffix for d≥ 70000inch

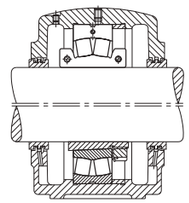


实体黄铜保持架
MA

基本尺寸 Basic Size d mm	d inch	D	C	B	最小 min r	基本额定负荷 Basic load rating 动态 dynamic C kN	静态 static C_o kN	计算系数 Calculation factors e -	Y_1 -	Y_2 -	Y_0 -	疲劳载荷极限值 Fatigue load limtited value C_{ur} -	型号Designation -
254	10	420	106	170	4	1460	2450	0.23	2.95	4.4	2.89	200	**230S.1000**
266.7	10.5	420	106	170	4	1460	2450	0.23	2.95	4.4	2.89	200	**230S.1008**
279.4	11	460	118	176	4	1600	2800	0.22	3.04	4.53	2.97	228	**230S.1100**
	11	500	160	218	5	2320	3900	0.29	2.32	3.45	2.26	265	**231S.1100**
304.8	12	480	121	186	4	1860	3200	0.23	2.9	4.31	2.83	255	**230S.1200**
	12	540	176	225	5	2750	4750	0.29	2.3	3.42	2.25	305	**231S.1200**
330.2	13	540	134	205	5	2360	4150	0.22	3.01	4.48	2.94	315	**230S.1300**
	13	600	192	270	5	3900	6800	0.3	2.25	3.34	2.2	410	**231S.1300**
355.6	14	560	135	218	5	2550	4650	0.22	3.1	4.62	3.03	350	**230S.1400**
	14	620	194	270	5	3900	6950	0.3	2.28	3.39	2.23	420	**231S.1400**
381	15	600	148	225	5	2700	5100	0.21	3.2	4.77	3.13	390	**230S.1500**
	15	650	200	270	6	4050	7200	0.28	2.39	3.56	2.34	440	**231S.1500**
406.4	16	650	157	225	5	3100	5850	0.21	3.2	4.77	3.13	425	**230S.1600**
	16	720	226	315	6	5400	9650	0.29	2.3	3.42	2.25	570	**231S.1600** [1)]

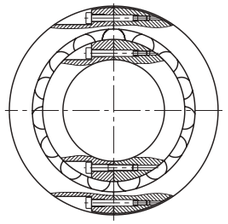


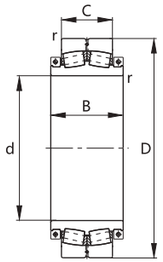
非定位轴承
Non-locating bearing
SDAF



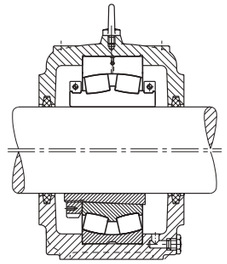
定位轴承
Locating bearing
SDAF

允许的轴向载荷[*)] ermitted axial load[*)] 最大max F_a kN	根限转速 Limit peed min^{-1}	螺钉锁紧扭矩 Screw tightening torque M_i Nm	M_a Nm	更换带适配套的非剖分调心滚子轴承 Replace non-split spherical roller bearing with withdrawal sleeves 轴承 Bearing	适配套 Withdrawal sleeves	适配套 Withdrawal sleeves	适宜的轴承座[**)] Suitable bearing housing[**)]	质量 Mass kg
32	500	120	35	23056K	SNP3056.1000	H3056.1000	SAF056K/10	71.2
32	500	120	35	23056K	SNP3056.1008	H3056.1008	SAF056K/10.1/2	59.7
32	480	120	69	23060K	SNP3060.1100	H3060.1100	SDAF060K/11	91.7
44	400	190	120	23160K	SNP3160.1100	H3160HG.1100	SDAF3160K/11	160
32	430	120	69	23064K	SNP3064.1200	H3064HG.1200	SDAF064K/12	96.5
60	360	295	120	23164K	SNP3164.1200	H3164HG.1200	SDAF3164K/12	184
60	380	295	69	23072K	SNP3072.1300	H3072HG.1300	SDAF072K/13	165
60	300	295	35	23172K	SNP3172.1300	H3172HG.1300	SDAF3172K/13	288
60	380	295	69	23076K	SNP3076.1400	H3076HG.1400	SDAF076K/14	158
60	300	295	69	23176K	SNP3176.1400	H3176HG.1400	SDAF3176K/14	273
60	380	295	120	23080K	SNP3080.1500	H3080HG.1500	SDAF080K/15	192
60	300	295	120	23180K	SNP3180.1500	H3180HG.1500	SDAF3180K/15	296
60	340	295	120	23088K	SNP3088.1600	H3088HG.1600	SDAF088K/16	225
96	260	580	120	23188K	SNP3188.1600	H3188HG.1600	SDAF3188K/16	547

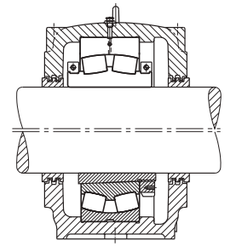




实体黄铜保持架
MA



定位轴承
locating bearing
S30



定位轴承
Locating bearing
SD

基本尺寸 Basic Size d mm	D	C	B	最小 min r	基本额定负荷 Basic load rating 动态 dynamic C kN	静态 static C_o	计算系数 Calculation factors e -	Y_1	Y_2	Y_0	疲劳载荷极限值 Fatigue load limtited value C_{ur}	型号Designation -
400	620	200	290	5	3750	8000	0.32	2.13	3.17	2.08	630	**240SM400-MA**
410	720	226	315	6	5400	9650	0.29	2.3	3.42	2.25	570	**231SM410-MA**
430	760	240	344	6	5500	10400	0.29	2.33	3.47	2.28	600	**231SM430-MA**
450	700	165	245	6	3650	6950	0.21	3.2	4.77	3.13	495	**230SM450-MA**
470	720	167	260	6	3600	7500	0.23	2.9	4.31	2.83	425	**230SM470-MA**
	830	325	420	7.5	7800	16000	0.39	1.75	2.61	1.71	1140	**241SM470-MA**
500	780	185	270	6	4150	8500	0.2	3.34	4.98	3.27	590	**230SM500-MA**
	870	335	450	7.5	8500	17600	0.39	1.73	2.58	1.69	1280	**241SM500-MA**
530	750	140	225	5	2750	6550	0.18	3.85	5.73	3.76	365	**239SM530-MA**
	820	195	300	6	4650	9650	0.23	2.95	4.4	2.89	700	**230SM530-MA**
	920	355	500	7.5	9150	19300	0.38	1.77	2.64	1.73	1390	**241SM530-MA**
560	800	150	235	5	2900	7100	0.17	3.95	5.88	3.86	530	**239SM560-MA**
600	850	165	250	5	3900	8800	0.18	3.66	5.46	3.58	540	**239SM600-MA**
630	980	230	355	7.5	6400	13700	0.22	3.01	4.48	2.94	950	**230SM630-MA**

基本尺寸 Basic Size d mm	允许的轴向载荷*) ermitted axial load*) 最大max F_a kN	根限转速 Limit peed min^{-1}	螺钉锁紧扭矩 Screw tightening torque M_i Nm	M_a Nm	更换带适配套的非剖分调心滚子轴承 Replace non-split spherical roller bearing with withdrawal sleeves 轴承 Bearing	适配套 Withdrawal sleeves	适宜的轴承座**) Suitable bearing housing**)	质量 Mass kg
400	60	190	295	69	24084K30	H24084HG		385
410	60	260	295	120	23188K	H3188HG	SD3188-H-TS	566
430	94.2	300	580	295	23192K	H3192HG		624
450	60	300	190	190	23096K	H3096HG	S3096-H-N-FZ	291
470	60	190	295	120	230/500K	H30/500HG		354
	60	530	1000	295	241/500K30	H240/500HG		725
500	60	300	295	120	230/530K	H30/530HG		344
	60	530	1000	295	241/530K30	H240/530HG		725
530	60	170	295	69	239/560K	H39/560HG		295
	94.2	160	580	120	230/560K	H30/560HG		556
	135	500	2000	295	241/560K30	H240/560HG		1380
560	60	170	295	69	239/600K	H39/600HG		347
600	60	160	295	69	239/630K	H39/630HG		411
630	94.2	160	1000	120	230/670K	H30/670HG		973