



山东十环轴承有限公司

Shangdong Ten rings Precision Bearing Manufacturing Co.,Ltd



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山东十环轴承有限公司

Shangdong Ten rings Precision Bearing Manufacturing Co.,Ltd

公司
建于

2010 年

占地
面积

28600 平方米

企业
员工

228R 人

年产
轴承

300 万套





山东十环轴承有限公司，成立于 1994 年，立足于地处长三角黄金地段。

我们是专业的中国滚子轴承制造商和定制球轴承供应商，专业生产高品质滚柱轴承、滚珠轴承和其他精密滚珠轴承。已成为集产品为一体的现代化公司

开发、设计、制造.....

“专业、创新、高效、慈善”是我们的公司理念，指引我们以快速成长和敏锐创造为使命。

未来，我们将一如既往的 16 年，准备迎接不断变化的挑战。

Shandong Ten Rings bearing Co., Ltd., established in 1994 stands right

at the prime location of the Yangtze River Delta.

We are a professional China roller bearings manufacturers and custom ball bearings suppli

Specialized in the production of high-quality roller bearings, ball bearings

and other precision ball bearings. It has emerged as a modern company integrating produc

development, design, manufacturing...

"Professional, creative, efficient, philanthropic" is our company philosophy which guides us

take the rapid growth and keen creation as mission.

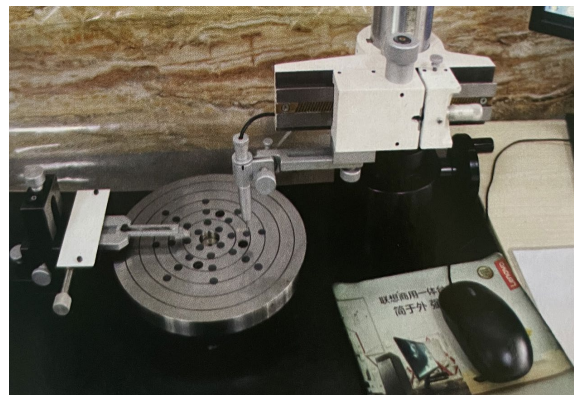
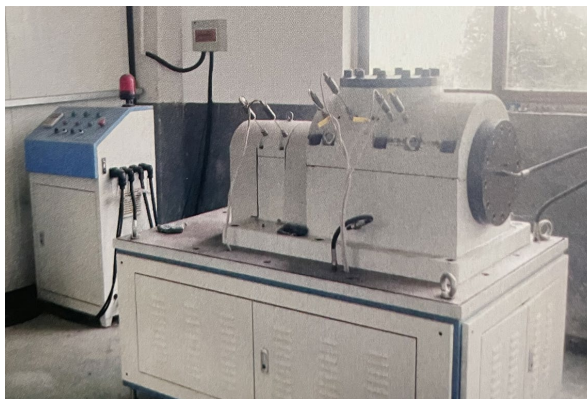
In future, we are ready to counter ever changing challenge, just like past 16 years.



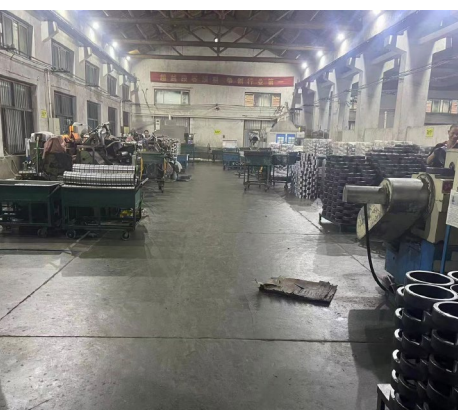
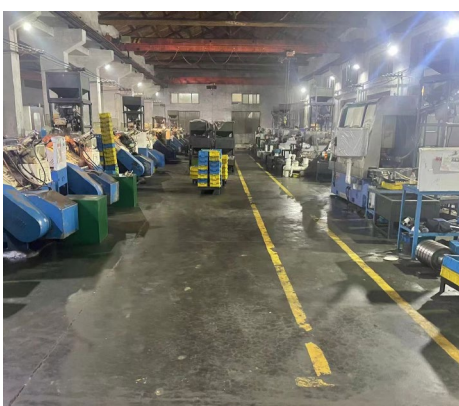
资质证书
Qualification Certificate

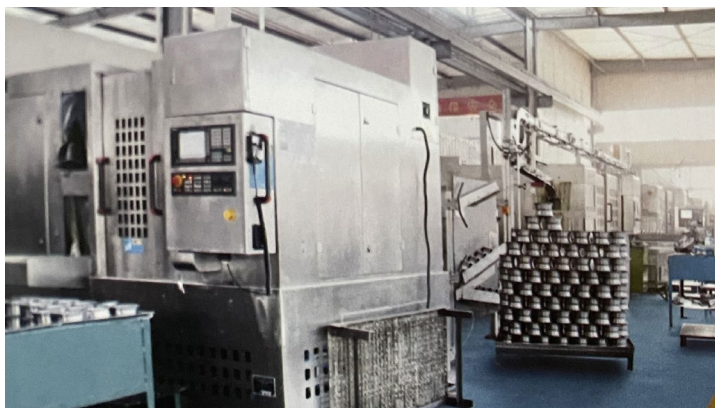


检测仪器 Testing Instrument



生产车间 Production Scenarios







圆锥滚子轴承

Taper Roller Bearing

圆锥滚子轴承属于分离型轴承，轴承的内、外圈均具有锥形滚道。该类轴承按所装滚子的列数分为单列、双列和四列圆锥滚子轴承等不同的结构型式。单列圆锥滚子轴承可以承受径向负荷和单一方向轴向负荷。当轴承承受径向负荷时，将会产生一个轴向分力，所以当需要另一个可承受反方向轴向力的轴承来加以平衡。

Tapered roller bearings are separable bearings, and both the inner and outer rings of the bearings have tapered raceways. This type of bearing is divided into single-row, double-row and four-row tapered roller bearings according to the number of rows of rollers installed. Single-row tapered roller bearings can withstand radial loads and axial loads in a single direction. When the bearing is subjected to radial loads, an axial force component will be generated, so another bearing that can withstand the axial force in the opposite direction is needed to balance it.

结构特点

圆锥滚子轴承的类型代号为 30000，圆锥滚子轴承为分离型轴承。一般情况下，尤其是在 GB/T307.1-94《滚动轴承 向心轴承公差》中所涉及到的尺寸范围内的圆锥滚子轴承外圈与内组件之间是百分之百可以通用互换使用的。

外圈的角度以及外滚道直径尺寸已与外形尺寸相同被标准化规定了。不允许在设计制造时更改。以致使圆锥滚子轴承的外圈与内组件之间可在世界范围内通用互换。

圆锥滚子轴承主要用于承受以径向载荷为主的径向与轴向联合载荷。与角接触球轴承相比、承载能力大，极限转速低。圆锥滚子轴承能够承受一个方向的轴向载荷，能够限制轴或外壳一个方向的轴向位移。

The type code of tapered roller bearings is 30000, and tapered roller bearings are separable bearings. In general, especially within the size range of GB/T307.1-94 "Rolling Bearings - Radial Bearing Tolerances", the outer ring and inner assembly of tapered roller bearings are 100% interchangeable.

The angle of the outer ring and the outer raceway diameter have been standardized and specified in the same way as the outer dimensions. Changes are not allowed during design and manufacturing. This makes the outer ring and inner assembly of tapered roller bearings interchangeable worldwide.

Tapered roller bearings are mainly used to withstand radial and axial combined loads, mainly radial loads. Compared with angular contact ball bearings, they have large load capacity and low limit speed. Tapered roller bearings can withstand axial loads in one direction and can limit the axial displacement of the shaft or housing in one direction.

轴承分类

Single row tapered roller bearings

Double row tapered roller bearings

Four-row tapered roller bearings

Multi-sealed double and four-row tapered roller bearings



特点和优势

Low friction, noise and vibration

Long service life

Increased operational reliability even under difficult conditions

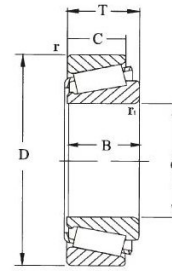
Run-in phase with reduced peak temperatures

Separable and interchangeable parts for easy installation, disassembly and maintenance



圆锥滚子轴承

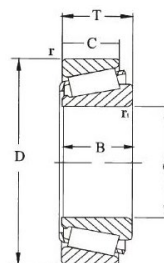
Taper Roller Bearing



Bearing No.	Boundary dimensions							Basic load rating(kN)		Limiting speed		Mass
	mm							Cr	Cor	Grease	Oil	Kg
	d	D	T	B	C	Rmin	rmin					
30202	15	35	11.75	11	10	0.6	0.6	11.9	13.5	9000	13000	0.053
30203	17	40	13.25	12	11	1	1	20.7	22.2	9000	13000	0.096
30204	20	47	15.25	14	12	1	1	28.2	30.9	8000	11000	0.128
30205	25	52	16.25	15	13	1	1	33.7	39.4	7500	10000	0.153
30206	30	62	17.25	16	14	1	1	43.3	50.6	6300	8500	0.232
30207	35	72	18.25	17	15	1.5	1.5	54.2	63.7	5300	7000	0.337
30208	40	80	19.75	18	16	1.5	1.5	63	74.1	4800	6300	0.422
30209	45	85	20.75	19	16	1.5	1.5	67	84	4500	6000	0.476
30210	50	90	21.75	20	17	1.5	1.5	76	97	4300	5600	0.538
30211	55	100	22.75	21	18	2	1.5	90	116	3800	5000	0.715
30212	60	110	23.75	22	19	2	1.5	103	132	3400	4500	0.905
30213	65	120	24.75	23	20	2	1.5	120	154	3000	4000	1.12
30214	70	125	26.25	24	21	2	1.5	132	174	3000	4000	1.26
30215	75	130	27.25	25	22	2	1.5	137	186	2800	3800	1.36
30216	80	140	28.25	26	22	2.5	2	160	213	2400	3400	1.67
30217	85	150	30.5	28	24	2.5	2	180	242	2200	3200	2.08
30218	90	160	32.5	30	26	2.5	2	199	270	2000	3000	2.53
30219	95	170	34.5	32	27	3	2.5	226	310	1900	2800	3.06
30220	100	180	37	34	29	3	2.5	253	351	1900	2800	3.72
30221	105	190	39	36	30	3	2.5	284	400	1800	2600	4.39
30222	110	200	41	38	32	3.5	2	314	445	1700	2400	5.21
30224	120	215	43.5	40	34	3	2.5	335	487	1600	2200	6.19
30226	130	230	43.75	40	34	4	3	364	525	1500	2000	6.94
30228	140	250	45.75	42	36	4	3	407	589	1400	1900	8.75
30230	150	270	49	45	38	4	3	449	651	1300	1800	10.8
30234	170	310	57	52	43	5	4	616	865	1000	1500	19
30236	180	320	57	52	43	5	4	583	815	1000	1500	20
30238	190	340	60	55	46	3	2.5	721	1000	950	1400	24
30240	200	360	64	58	48	5	4	792	1120	900	1300	25

圆锥滚子轴承

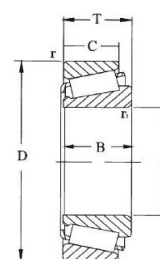
Taper Roller Bearing



Bearing No.	Boundary dimensions							Basic load rating(kN)		Limiting speed		Mass
	mm							Cr	Cor	Grease	Oil	Kg
	d	D	T	B	C	Rmin	rmin					
30302	15	42	14.25	13	11	1	1	22.9	21.7	9000	13000	0.096
30303	17	47	15.25	14	12	1	1	28.3	27.4	8500	12000	0.13
30304	20	52	16.25	15	13	1.5	1.5	33.2	33.3	8000	11000	0.166
30305	25	62	18.25	17	15	1.5	1.5	47	48.3	6700	9000	0.266
30306	30	72	20.75	19	16	1.5	1.5	59	63.9	5600	7500	0.391
30307	35	80	22.75	21	18	2	1.5	75.4	83.6	5000	6700	0.484
30308	40	90	25.25	23	20	2	1.5	90	108	4500	6000	0.751
30309	45	100	27.25	25	22	2	1.5	108	120	4000	5300	0.985
30310	50	110	29.25	27	23	2.5	2	130	159	3600	4800	1.28
30311	55	120	31.5	29	25	2.5	2	153	190	3200	4300	1.61
30312	60	130	33.5	31	26	3	2.5	170	211	3000	4000	1.95
30313	65	140	36	33	28	3	2.5	195	244	2600	3600	2.44
30314	70	150	38	35	30	3	2.5	187	220	2000	3000	2.99
30315	75	160	40	37	31	3	2.5	250	318	2200	3200	3.58
30316	80	170	42.5	39	33	3	2.5	278	356	2000	3000	4.27
30317	85	180	44.5	41	34	4	3	304	392	1900	2800	4.97
30318	90	190	46.5	43	36	4	3	341	445	1800	2600	5.79
30319	95	200	49.5	45	38	4	3	368	483	1800	2600	6.8
30320	100	215	51.5	47	39	4	3	402	490	1700	2400	8.2
30321	105	225	53.5	49	41	4	3	432	568	1600	2200	9.91
30322	110	240	54.5	50	42	4	3	471	619	1600	2200	11.5
30324	120	260	59.5	55	46	4	3	562	754	1500	2000	13.7
30326	130	280	63.75	58	49	5	4	639	864	1300	1800	17.1
30328	140	300	67.75	62	53	5	4	721	985	1200	1700	21.7
30330	150	320	72	65	55	5	4	825	1060	1100	1600	28.5
30332	160	340	75	68	58	5	4	880	1400	1100	1600	29
30334	170	360	80	72	62	5	4	1020	1340	950	1400	35

圆锥滚子轴承

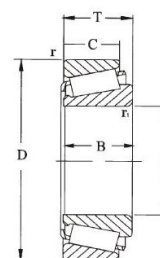
Taper Roller Bearing



Bearing No.	Boundary dimensions							Basic load rating(kN)		Limiting speed		Mass
	mm							Dynamic	Static	rpm		Kg
	d	D	T	B	C	Rmin	rmin	Cr	Cor	Grease	Oil	
31305	25	62	18.25	17	13	1.5	1.5	40.7	46	5600	7500	0.264
31306	30	72	20.75	19	14	1.5	1.5	47.3	50	5000	6700	0.393
31307	35	80	22.75	21	15	2	1.5	61.6	67	4500	6000	0.518
31308	40	90	25.25	23	17	2	1.5	81	96	4000	5300	0.727
31309	45	100	27.25	25	18	2	1.5	91	102	3400	4500	0.947
31310	50	110	29.25	27	19	2.5	2	106	120	3200	4300	1.22
31311	55	120	31.5	29	21	2.5	2	130	158	2800	3800	1.56
31312	60	130	33.5	31	22	3	2.5	145	176	2600	3600	1.91
31313	65	140	36	33	23	3	2.5	165	202	2200	3200	2.39
31314	70	150	38	35	25	3	2.5	218	274	2400	3400	2.95
31315	75	160	40	37	26	3	2.5	209	245	1900	2800	3.39
31316	80	170	42.5	39	27	3	2.5	224	265	1900	2800	4.05
31317	85	180	44.5	41	28	4	3	242	285	1800	2600	4.6
31318	90	190	46.5	43	30	4	3	264	315	1700	2400	5.9
31319	95	200	49.5	45	32	4	3	292	355	1700	2400	6.95
31320	100	215	56.5	51	35	4	3	374	465	1600	2200	8.6
31321	105	225	58	53	36	4	3	402	500	1500	2000	9.65
31322	110	240	63	57	38	4	3	457	585	1400	1900	12
31324	120	260	68	62	42	4	3	539	695	1200	1700	15.5
31326	130	280	72	66	44	5	4	605	780	1100	1600	18.5
31328	140	300	77	70	47	5	4	693	900	1000	1500	24.5
31330	150	320	82	75	50	5	4	781	1020	950	1400	29.5

圆锥滚子轴承

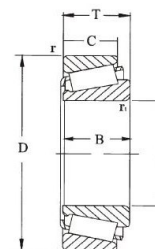
Taper Roller Bearing



Bearing No.	Boundary dimensions							Basic load rating(kN)		Limiting speed		Mass
	mm							Dynamic	Static	rpm		Kg
	d	D	T	B	C	Rmin	rmin	Cr	Cor	Grease	Oil	
32004	20	42	15	15	12	0.6	0.6	27.3	31.5	9700	13000	0.96
32005	25	47	15	15	11.5	0.6	0.6	27	32.5	8000	11000	0.115
32006	30	55	17	17	13	1	1	35.8	44	6700	9000	0.172
32007	35	62	18	18	14	1	1	42.9	54	6000	8000	0.227
32008	40	68	19	19	14.5	1	1	52.8	71	5300	7000	0.77
32009	45	75	20	20	15.5	1	1	58	80	4800	6300	0.329
32010	50	80	20	20	15.5	1	1	60	88	4500	6000	0.365
32011	55	90	23	23	17.5	1.5	1.5	80	116	4000	5300	0.55
32012	60	95	23	23	17.5	1.5	1.5	82	122	3800	5000	0.586
32013	65	100	23	23	17.5	1.5	1.5	84	127	3400	4500	0.627
32014	70	110	25	25	19	1.5	1.5	101	153	3200	4300	0.842
32015	75	115	25	25	19	1.5	1.5	106	163	3000	4000	0.887
32016	80	125	29	29	22	1.5	1.5	138	216	2600	3600	1.27
32017	85	130	29	29	22	1.5	1.5	140	224	2400	3400	1.33
32018	90	140	32	32	24	2	1.5	168	270	2200	3200	1.73
32019	95	145	32	32	24	2	1.5	168	270	2200	3200	1.8
32020	100	150	32	32	24	2	1.5	172	280	2000	3000	1.87
32021	105	160	35	35	26	2.5	2	201	335	1900	2800	2.38
32022	110	170	38	38	29	2.5	2	233	390	1800	2600	3.05
32024	120	180	38	38	29	2.5	2	242	415	1800	2600	3.2
32026	130	200	45	45	34	2.5	2	314	540	1600	2200	4.86
32028	140	210	45	45	34	2.5	2	330	585	1600	2200	5.19
32030	150	225	48	48	36	3	2.5	369	655	1500	2000	6.33
32032	160	240	51	51	38	3	2.5	429	780	1300	1800	7.53
32034	170	260	57	57	43	3	2.5	512	915	1100	1600	10.6
32036	180	280	64	64	48	3	2.5	644	1160	1100	1600	14.5
32038	190	290	64	64	48	3	2.5	660	1200	1000	1500	15
32040	200	310	70	70	53	3	2.5	748	1370	950	1400	19.5
32044	220	340	76	76	57	4	3	897	1660	900	1300	25.5
32048	240	360	76	76	57	4	3	935	1800	850	1200	27.5

圆锥滚子轴承

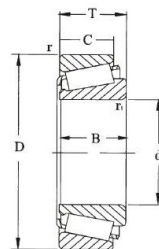
Taper Roller Bearing



Bearing No.	Boundary dimensions							Basic load rating(kN)		Limiting speed		Mass
	mm							Dynamic	Static	rpm		Kg
	d	D	T	B	C	Rmin	rmin	Cr	Cor	Grease	Oil	
32204	20	47	19.25	18	15	1	1	36.5	39.5	8000	11000	0.161
32205	25	52	19.25	18	16	1	1	42	47	7500	10000	0.184
32206	30	62	21.25	20	17	1	1	51.8	63.9	6300	8500	0.29
32207	35	72	24.25	23	19	1.5	1.5	70.6	89.7	5300	7000	0.45
32208	40	80	24.75	23	19	1.5	1.5	77	97	4800	6300	0.535
32209	45	85	24.75	23	19	1.5	1.5	80	105	4500	6000	0.584
32210	50	90	24.75	23	19	1.5	1.5	76	97	4300	5600	0.646
32211	55	100	26.76	25	21	2	1.5	108	144	3800	5000	0.86
32212	60	110	29.75	28	24	2	1.5	132	181	3400	4500	1.16
32213	65	120	32.75	31	27	2	1.5	160	224	3000	4000	1.54
32214	70	125	33.25	31	27	2	1.5	168	238	2800	3800	1.63
32215	75	130	33.25	31	27	2	1.5	169	244	2600	3600	1.75
32216	80	140	35.25	33	28	2.5	2	197	280	2400	3400	2.13
32217	85	150	38.5	36	30	2.5	2	226	325	2200	3200	2.69
32218	90	160	42.5	40	34	2.5	2	269	396	2000	3000	3.43
32220	100	180	49	46	39	3	2.5	340	513	1800	2600	3.72
32221	105	190	53	50	43	3	2.5	380	581	1800	2600	6.31
32222	110	200	56	53	46	3.5	2	430	668	1700	2400	7.43
32224	120	215	61.5	58	50	3	2.5	475	764	1600	2200	9.26
32226	130	230	67.75	64	54	4	3	549	895	1500	2000	11.5
32228	140	250	71.75	68	58	4	3	640	1060	1400	1900	14.4
32230	150	270	77	73	60	4	3	718	1190	1200	1700	18.2
32232	160	290	84	80	67	4	3	852	1440	1000	1400	21.1
32234	170	310	91	86	71	5	4	1010	1630	1000	1500	28.5
32236	180	320	91	86	71	5	4	998	1720	950	1400	29.8
32238	190	340	97	92	75	5	4	1110	1920	900	1300	36
32240	200	360	104	98	82	5	4	1210	2000	900	1300	42.7
32244	220	400	115	108	90	5	4	1530	2560	800	1100	58.3

圆锥滚子轴承

Taper Roller Bearing



Bearing No.	Boundary dimensions							Basic load rating(kN)		Limiting speed		Mass
	mm							Dynamic	Static	rpm		Kg
	d	D	T	B	C	Rmin	rmin	Cr	Cor	Grease	Oil	
33005	25	47	17	17	14	0.6	0.6	27.5	37	8000	10700	0.131
33006	30	55	20	20	16	1	1	39.5	59.5	6700	9100	0.208
33007	35	62	21	21	17	1	1	51.3	68	6200	8200	0.267
33008	40	68	22	22	18	1	1	60.4	84.6	5500	7400	0.322
33009	45	75	24	24	19	1	1	69.6	101	5000	6700	0.414
33010	50	80	24	24	19	1	1	73	110	4600	6100	0.452
33011	55	90	27	27	21	1.5	1.5	96.5	145	4100	5400	0.672
33012	60	95	27	27	21	1.5	1.5	101	162	3900	5200	0.713
33013	65	100	27	27	21	1.5	1.5	103	169	3600	4800	0.758
33014	70	110	31	31	25.5	1.5	1.5	134	208	3300	4400	1.11
33015	75	115	31	31	25.5	1.5	1.5	141	225	3200	4200	1.18
33019	95	145	39	39	32.5	2	1.5	226	382	2500	3300	2.3
33022	110	170	47	47	37	2.5	2	287	502	2100	2800	3.775
33205	25	52	22	22	18	1	1	47.3	56	6700	9000	0.23
33206	30	62	25	25	19.5	1	1	64.4	76.5	5600	7500	0.37
33207	35	72	28	28	22	1.5	1.5	84.2	106	4800	6300	0.522
33208	40	80	32	32	25	1.5	1.5	105	132	4300	5600	0.535
33209	45	85	32	32	24.5	1.5	1.5	108	143	4000	5300	0.82
33210	50	90	32	32	24.5	1.5	1.5	114	160	3800	5000	0.9
33211	55	100	35	35	27	2	1.5	138	190	3400	4500	1.2
33212	60	110	38	38	29	2	1.5	168	250	3000	4000	1.6
33213	65	120	41	41	32	2	1.5	194	270	2800	3800	2.05
33214	70	125	41	41	32	2	1.5	201	285	2600	3600	2.1
33215	75	130	41	41	31	2	1.5	209	300	2400	3400	2.25
33216	80	140	46	46	35	2.5	2	251	375	2200	3200	2.9
33217	85	150	49	49	37	2.5	2	286	430	2000	3000	3.7
33220	100	180	63	63	48	3	2.5	429	655	1700	2400	6.78



调心滚子轴承

Spherical Roller Bearing

调心滚子轴承是在有二条滚道的内圈和滚道为球面的外圈之间，组装着鼓形滚子的轴承。

Spherical roller bearings are bearings with drum-shaped rollers assembled between an inner ring with two raceways and an outer ring with spherical raceways.

Structural features

Spherical roller bearings have two rows of rollers, which mainly bear radial loads, and can also bear axial loads in any direction. They have high radial load capacity and are particularly suitable for working under heavy loads or vibration loads, but cannot bear pure axial loads. The outer ring raceway of this type of bearing is spherical, so its self-aligning performance is good and can compensate for coaxiality errors.

There are two rows of symmetrical spherical rollers, the outer ring has a common spherical raceway, and the inner ring has two raceways inclined at an angle to the bearing axis. They have good self-aligning performance. When the shaft is bent by force or installed out of center, the bearing can still be used normally. The self-aligning performance varies with the bearing size series. The generally allowed self-aligning angle is 1~2.5 degrees. This type of bearing has a large load capacity. In addition to being able to bear radial loads, the bearing can also bear bidirectional axial loads and has good impact resistance. Generally speaking, the operating speed allowed for spherical roller bearings is low.

Spherical roller bearing post code

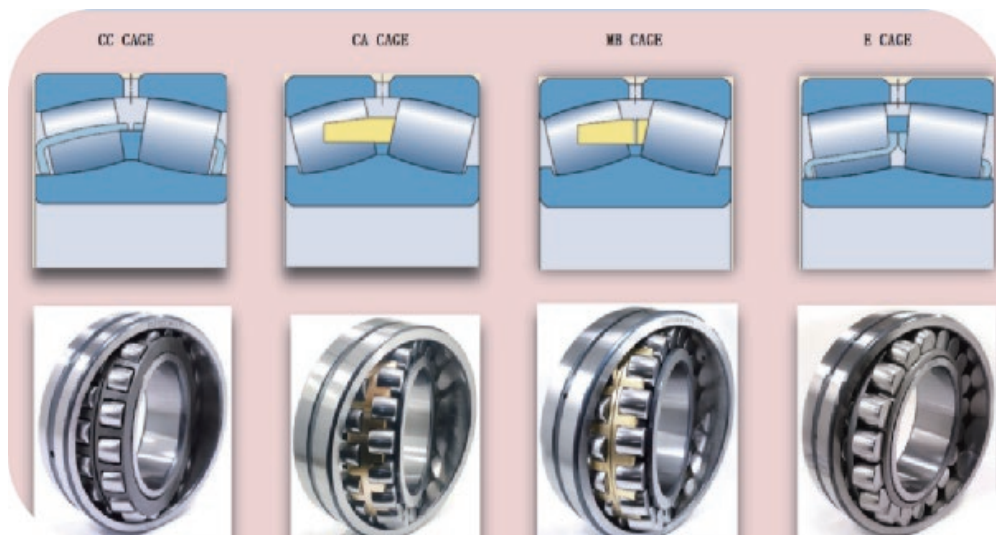
When the tapered bore spherical roller bearings with post-position codes K and K30 are installed on the matching adapter sleeve, they become post-position code K+H and K30+H bearings. This type of bearing can be installed on a plain shaft without a shoulder and is suitable for occasions where bearings need to be installed and removed frequently. In order to improve the lubrication performance of the bearing, an annular oil groove is machined on the outer ring of the bearing and three evenly distributed oil holes are drilled. Its post-position code is W33.

Specific classification

1. Spherical roller bearing (20000 CC type)
2. Spherical roller bearing with tapered hole (20000 CCK type)
3. Spherical roller bearing (20000 CC/W33 type)
4. Spherical roller bearing with tapered hole (20000 CCK/W33 type)

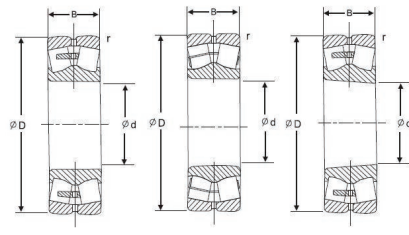
Features and benefits

1. High load carrying capacity
 2. Long service life
 3. Low friction
 4. Robust
 5. Sealed versions to meet the toughest challenges
 6. Increased service life in contaminated environments
 7. Minimum lubricant consumption
 8. Prelubricated and sealed – enables easy mounting
- Low maintenance and operating costs



调心滚子轴承

Spherocal Roller Bearing



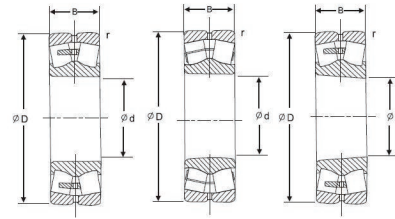
Bearing No.	Boundary dimensions				Basic load rating(kN)		Limiting speeds		Mass
	mm				Dynamic	Static	rpm		Kg
	d	D	B	rsmin	Cr	Cor	Grease	Oil	
21308	40	90	23	1.5	88	90	3,200	4,900	0.705
21309	45	100	25	1.5	102	106	2,900	4,400	0.927
21310	50	110	27	2	118	127	2,600	4,000	1.21
21311	55	120	29	2	145	163	2,400	3,700	1.71
21312	60	130	31	2.1	167	191	2,200	3,400	2.1
21313	65	140	33	2.1	194	228	2,000	3,100	2.55
21314	70	150	35	2.1	220	262	1,900	2,900	3.18
21315	75	160	37	2.1	239	287	1,800	2,700	3.81
21316	80	170	39	2.1	260	315	1,700	2,500	4.53
21317	85	180	41	3	289	355	1,600	2,400	5.35
21318	90	190	43	3	320	400	1,500	2,300	6.3
21319	95	200	45	3	335	420	1,400	2,100	7.1
21320	100	215	47	3	370	465	1,300	2,000	8.89
21322	110	240	50	3	495	615	1,200	1,800	11.2
22205	25	52	18	1	36.5	36	6,500	10,000	0.186
22206	30	62	20	1	49	49	5,700	8,800	0.287
22207	35	72	23	1.1	69.5	71	4,900	7,500	0.446
22208	40	80	23	1.1	79	88.5	4,300	6,600	0.526
22209	45	85	23	1.1	82.5	95	3,800	5,900	0.584
22210	50	90	23	1.1	86	102	3,500	5,300	0.63
22211	55	100	25	1.5	118	144	3,200	4,900	0.808
22212	60	110	28	1.5	115	147	2,900	4,500	1.15
22213	65	120	31	1.5	143	179	2,700	4,200	1.5
22214	70	125	31	1.5	154	201	2,500	3,900	1.55
22215	75	130	31	1.5	166	223	2,300	3,600	1.65
22216	80	140	33	2	213	277	2,200	3,400	1.99
22217	85	150	36	2	251	320	2,100	3,200	2.49
22218	90	160	40	2	292	385	1,900	3,000	3.24

Bearing No.	Boundary dimensions				Basic load rating(kN)		Limiting speeds		Mass
	mm				Dynamic	Static	rpm		Kg
	d	D	B	rsmin	Cr	Cor	Grease	Oil	
22219	95	170	43	2.1	294	390	1,800	2,800	4.1
22220	100	180	46	2.1	315	415	1,700	2,700	4.95
22222	110	200	53	2.1	410	570	1,600	2,400	7.2
22224	120	215	58	2.1	485	700	1,400	2,200	9.1
22226	130	230	64	3	570	790	1,300	2,000	11.2
22228	140	250	68	3	685	975	1,200	1,900	14
22230	150	270	73	3	775	1,160	1,100	1,700	18.1
22232	160	290	80	3	870	1,290	1,000	1,600	22.7
22234	170	310	86	4	1,000	1,520	980	1,500	28
22236	180	320	86	4	1,040	1,610	920	1,400	29.3
22238	190	340	92	4	1,160	1,810	860	1,300	36.6
22240	200	360	98	4	1,310	2,010	820	1,300	44
22244	220	400	108	4	1,580	2,460	730	1,100	60.4
22248	240	440	120	4	1,940	3,100	660	1,000	81.7
22252	260	480	130	5	2,230	3,600	610	930	106
22256	280	500	130	5	2,310	3,800	560	860	112
22260	300	540	140	5	2,670	4,350	510	790	141
22308	40	90	33	1.5	121	128	3,800	5,900	0.974
22309	45	100	36	1.5	148	167	3,400	5,300	1.33
22310	50	110	40	2	186	212	3,100	4,800	1.79
22311	55	120	43	2	204	234	2,800	4,400	2.3
22312	60	130	46	2.1	238	273	2,600	4,000	2.9
22313	65	140	48	2.1	265	320	2,400	3,700	3.45
22314	70	150	51	2.1	325	380	2,300	3,500	4.22
22315	75	160	55	2.1	330	410	2,100	3,200	5.25
22316	80	170	58	2.1	385	470	2,000	3,000	6.05
22317	85	180	60	3	415	510	1,900	2,900	7.1
22318	90	190	64	3	480	590	1,800	2,700	8.35
22319	95	200	67	3	500	615	1,600	2,500	9.76
22320	100	215	73	3	605	755	1,600	2,400	12.4
22322	110	240	80	3	745	930	1,400	2,200	17.1
22324	120	260	86	3	880	1,120	1,300	2,000	21.5
22326	130	280	93	4	1,000	1,290	1,200	1,800	26.8
22328	140	300	102	4	1,130	1,460	1,100	1,700	33.8
22330	150	320	108	4	1,270	1,750	1,000	1,600	42.7
22332	160	340	114	4	1,410	1,990	940	1,500	50.8
22334	170	360	120	4	1,540	2,180	880	1,400	59.8

Bearing No.	Boundary dimensions				Basic load rating(kN)		Limiting speeds		Mass
	mm				Dynamic	Static	rpm		Kg
	d	D	B	rsmin	Cr	Cor	Grease	Oil	
22336	180	380	126	4	1,740	2,560	830	1,300	70
22338	190	400	132	5	1,870	2,790	780	1,200	81
22340	200	420	138	5	2,040	3,050	740	1,100	93.2
22344	220	460	145	5	2,350	3,500	660	1,000	117
22348	240	500	155	5	2,720	4,100	600	930	148
22352	260	540	165	6	3,100	4,750	550	850	183
22356	280	580	175	6	3,500	5,350	500	780	224
22360	300	620	185	7.5	3,600	5,400	470	720	270
23022	110	170	45	2	282	455	1,800	2,800	3.71
23024	120	180	46	2	296	495	1,700	2,600	4.05
23026	130	200	52	2	375	620	1,500	2,300	5.9
23028	140	210	53	2	405	690	1,400	2,200	6.35
23030	150	225	56	2.1	445	775	1,300	2,000	7.73
23032	160	240	60	2.1	505	885	1,200	1,900	9.42
23034	170	260	67	2.1	630	1,080	1,100	1,800	12.7
23036	180	280	74	2.1	740	1,290	1,100	1,700	16.7
23038	190	290	75	2.1	755	1,350	1,000	1,600	17.7
23040	200	310	82	2.1	915	1,620	960	1,500	22.7
23044	220	340	90	3	1,060	1,920	870	1,300	29.9
23048	240	360	92	3	1,130	2,140	790	1,200	33.4
23052	260	400	104	4	1,420	2,620	720	1,100	48.5
23056	280	420	106	4	1,510	2,920	660	1,000	52.4
23060	300	460	118	4	1,890	3,550	610	940	72.4

调心滚子轴承

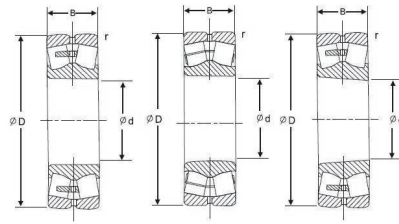
Spherocal Roller Bearing



Bearing No.	Boundary dimensions				Basic load rating(kN)		Limiting speeds		Mass
	mm				Dynamic	Static	rpm		Kg
	d	D	B	rsmin	Cr	Cor	Grease	Oil	
23120	100	165	52	2	310	470	1,700	2,600	4.3
23122	110	180	56	2	370	580	1,500	2,400	5.4
23124	120	200	62	2	455	705	1,400	2,100	7.7
23126	130	210	64	2	495	795	1,300	2,000	8.47
23128	140	225	68	2.1	540	895	1,200	1,800	10.2
23130	150	250	80	2.1	730	1,190	1,100	1,700	15.6
23132	160	270	86	2.1	840	1,370	1,000	1,600	19.8
23134	170	280	88	2.1	885	1,490	960	1,500	21.5
23136	180	300	96	3	1,030	1,730	900	1,400	25.1
23138	190	320	104	3	1,190	2,020	850	1,300	35.3
23140	200	340	112	3	1,350	2,270	800	1,200	43.3
23144	220	370	120	4	1,540	2,670	720	1,100	53.3
23148	240	400	128	4	1,730	3,050	650	1,000	65.8
23152	260	440	144	4	2,140	3,850	600	920	91.4
23156	280	460	146	5	2,300	4,250	550	850	97.7
23160	300	500	160	5	2,750	5,000	510	780	131

调心滚子轴承

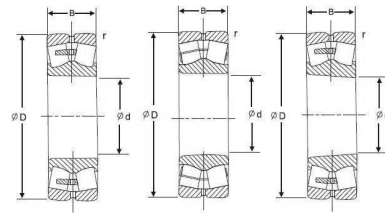
Spherocal Roller Bearing



Bearing No.	Boundary dimensions				Basic load rating(kN)		Limiting speeds		Mass
	mm				Dynamic	Static	rpm		Kg
	d	D	B	rsmin	Cr	Cor	Grease	Oil	
23218	90	160	52.4	2	315	455	1,800	2,800	4.45
23220	100	180	60.3	2.1	405	580	1,600	2,500	6.47
23222	110	200	69.8	2.1	515	760	1,400	2,200	9.71
23224	120	215	76	2.1	585	880	1,300	2,000	12.1
23226	130	230	80	3	685	1,060	1,200	1,900	14.3
23228	140	250	88	3	805	1,270	1,100	1,700	18.8
23230	150	270	96	3	935	1,460	1,000	1,600	24.1
23232	160	290	104	3	1,050	1,660	960	1,500	30
23234	170	310	110	4	1,180	1,960	910	1,400	36.8
23236	180	320	112	4	1,230	2,000	850	1,300	39
23238	190	340	120	4	1,400	2,330	790	1,200	47.6
23240	200	360	128	4	1,610	2,640	750	1,200	57.2
23244	220	400	144	4	2,010	3,350	670	1,000	80
23248	240	440	160	4	2,430	4,100	610	940	108
23252	260	480	174	5	2,760	4,700	560	860	141
23256	280	500	176	5	2,930	5,150	510	790	150
23260	300	540	192	5	3,450	6,000	470	730	193

调心滚子轴承

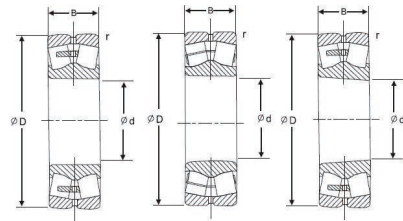
Spherocal Roller Bearing



Bearing No.	Boundary dimensions				Basic load rating(kN)		Limiting speeds		Mass
	mm				Dynamic	Static	rpm		Kg
	d	D	B	rsmin	Cr	Cor	Grease	Oil	
23936	180	250	52	2	440	835	1,200	1,800	8.21
23938	190	260	52	2	460	890	1,100	1,700	8.6
23940	200	280	60	2.1	545	1,100	1,000	1,600	12.1
23944	220	300	60	2.1	565	1,170	930	1,400	13.1
23948	240	320	60	2.1	565	1,190	840	1,300	14
23952	260	360	75	2.1	760	1,580	770	1,200	24
23956	280	380	75	2.1	830	1,750	710	1,100	26.4
23960	300	420	90	3	1,110	2,320	650	1,000	40
24024	120	180	60	2	390	670	1,500	2,300	5.48
24026	130	200	69	2	505	895	1,300	2,100	8.08
24028	140	210	69	2	510	945	1,200	1,900	8.57
24030	150	225	75	2.1	585	1,060	1,200	1,800	10.7
24032	160	240	80	2.1	650	1,200	1,100	1,700	13
24034	170	260	90	2.1	800	1,470	1,000	1,600	17.7
24036	180	280	100	2.1	965	1,770	950	1,500	23.3
24038	190	290	100	2.1	995	1,850	900	1,400	24.3
24040	200	310	109	2.1	1,160	2,140	850	1,300	31
24044	220	340	118	3	1,350	2,570	770	1,200	40.2
24048	240	360	118	3	1,410	2,770	700	1,100	43
24052	260	400	140	4	1,830	3,550	640	980	65.2
24056	280	420	140	4	1,950	3,950	590	900	69
24060	300	460	160	4	2,450	4,950	540	840	98

调心滚子轴承

Spherocal Roller Bearing



Bearing No.	Boundary dimensions				Basic load rating(kN)		Limiting speeds		Mass
	mm				Dynamic	Static	rpm		Kg
	d	D	B	rsmin	Cr	Cor	Grease	Oil	
24122	110	180	69	2	450	755	1,500	2,400	7.07
24124	120	200	80	2	575	945	1,400	2,100	10.3
24126	130	210	80	2	585	995	1,300	2,000	11
24128	140	225	85	2.1	670	1,150	1,200	1,800	13.3
24130	150	250	100	2.1	885	1,520	1,100	1,700	20.2
24132	160	270	109	2.1	1,040	1,780	1,000	1,600	26
24134	170	280	109	2.1	1,080	1,880	960	1,500	27.2
24136	180	300	118	3	1,250	2,210	900	1,400	34.3
24138	190	320	128	3	1,420	2,480	850	1,300	42.8
24140	200	340	140	3	1,630	2,900	800	1,200	53.4
24144	220	370	150	4	1,880	3,400	720	1,100	67
24148	240	400	160	4	2,110	3,800	650	1,000	82.2
24152	260	440	180	4	2,510	4,600	600	920	114
24156	280	460	180	5	2,730	5,200	550	850	120
24160	300	500	200	5	3,300	6,400	510	780	161



深沟球轴承

Deep Groove Bearing

深沟球轴承适用于高转速甚至极高转速的运行，而且非常耐用，无需经常维护。该类轴承摩擦系数小，极限转速高，尺寸范围与形式变化多样，应用在精密仪表、低噪音电机、汽车、摩托车及一般机械等行业，是机械工业中使用最为广泛的一类轴承。主要承受径向负荷，也可承受一定量的轴向负荷。

Deep groove ball bearings are suitable for high or even extremely high speed operation, and are very durable and do not require frequent maintenance. This type of bearing has a small friction coefficient, a high limit speed, and a variety of size ranges and forms. It is used in precision instruments, low-noise motors, automobiles, motorcycles, and general machinery. It is the most widely used type of bearing in the machinery industry. It mainly bears radial loads and can also bear a certain amount of axial loads.

Structural features

Deep groove ball bearings have a simple structure and are easier to achieve higher manufacturing precision than other types, so they are easy to mass produce in series, with lower manufacturing costs, and are widely used. In addition to the basic type, deep groove ball bearings also have various variant structures, such as deep groove ball bearings with dust covers, deep groove ball bearings with rubber seals, deep groove ball bearings with retaining grooves, deep groove ball bearings with large load capacity and ball-loading gaps, and double-row deep groove ball bearings.

Bearing type

1. Single-row deep groove ball bearing
2. Single-row deep groove ball bearing with dust cover
3. Single-row deep groove ball bearing with dust cover and sealing ring
4. Single-row deep groove ball bearing with retaining groove and retaining ring on the outer ring
5. Deep groove ball bearing with ball loading gap
6. Double-row deep groove ball bearing

According to the size of deep groove ball bearings, they can be divided into

(1) Miniature bearings - bearings with a nominal outer diameter range of less than 26mm;

(2) Small bearings - bearings with a nominal outer diameter range of 28-55mm;

(3) Small and medium-sized bearings - bearings with a nominal outer diameter range of 60-115mm;

(4) Medium and large bearings - bearings with a nominal outer diameter range of 120-190mm

(5) Large bearings - bearings with a nominal outer diameter range of 200-430mm;

(6) Extra large bearings: bearings with a nominal outer diameter range of 440 mm or more.



Features and benefits

Low friction and running temperatures, low noise and vibration

High running speeds

High quality and performance capabilities for your application

Accommodate radial loads and axial loads in both directions

Available with a variety of greases for most conditions, including food quality grease, high temperature grease and Solid Oil

Increased reliability and provide long bearing and lubricant service life





轮毂轴承

Hub bearing unit

汽车轮毂轴承的主要作用是承重和为轮毂的转动提供精确引导，它既承受轴向载荷又承受径向载荷，是一个非常重要的零部件。

传统的汽车车轮用轴承是由两套圆锥滚子轴承或球轴承组合而成的，轴承的安装、涂油、密封以及游隙的调整都是在汽车生产线上进行的。这种结构使得其在汽车生产厂装配困难、成本高、可靠性差，而且汽车在维修点维护时，还需要对轴承进行清洗、涂油和调整。轮毂轴承单元是在标准角接触球轴承和圆锥滚子轴承的基础上发展起来的，它将两套轴承做为一体，具有组装性能好、可省略游隙调整、重量轻、结构紧凑、载荷容量大、为密封轴承可事先装入润滑脂、省略外部轮毂密封及免于维修等优点，已广泛用于轿车中，在载重汽车中也有逐步扩大应用的趋势。

The main function of automobile wheel hub bearings is to bear weight and provide precise guidance for the rotation of the wheel hub. It bears both axial load and radial load and is a very important component.

Traditional automobile wheel bearings are composed of two sets of tapered roller bearings or ball bearings. The installation, oiling, sealing and clearance adjustment of the bearings are all carried out on the automobile production line. This structure makes it difficult to assemble in automobile factories, high cost and poor reliability. In addition, when the car is maintained at the repair point, the bearings need to be

cleaned, oiled and adjusted. The wheel hub bearing unit is developed on the basis of standard angular contact ball bearings and tapered roller bearings. It integrates two sets of bearings into one. It has the advantages of good assembly performance, omitting clearance adjustment, light weight, compact structure, large load capacity, grease can be pre-loaded for sealed bearings, omitting external wheel hub seals and free of maintenance. It has been widely used in cars and has a trend of gradually expanding its application in trucks.

Functions

1. Support wheels: connect wheels to suspension system and bear vertical and lateral loads.
2. Reduce friction: reduce rotational resistance through rolling elements (steel balls or rollers).
3. Ensure positioning accuracy: maintain the relative position of wheels and axles to avoid deviation.
4. Integrated function: modern models often integrate ABS sensors to monitor wheel speed.





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