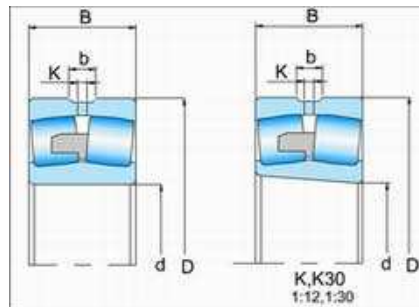


Spherical Roller Bearing



1. Spherical roller bearings are inherently self-aligning and very robust. The two rows of rollers make the bearings able to carry heavy loads. With the same center as the bearing, the spherically formed outer ring raceway can make self-alignment. Their rolling elements linearly come into contact with the raceways of inner ring and outer ring. The [Spherical Roller Bearings](#) can take great radial load. More recently a range of sealed spherical roller bearings has been added to the assortment. Split spherical roller bearings are usually based on the standard bearings but can be customized as required.

2. Spherical roller bearings are made for heavy-duty applications. They feature two rows of symmetrical barrel rollers which can align freely in the spherical outer ring raceway, thus compensating for shaft deflections and misalignment of the bearing seats. Spherical roller bearings have a maximum number of long rollers with a large diameter. The close contact between the rollers and raceways yields a uniform stress distribution and a high load carrying capacity. For particularly punishing applications, e.g. where vibratory stresses have to be accommodated, we offer special spherical roller bearings with narrow dimensional tolerances and an increased radial clearance.

3. Features:

- 1) Spherical roller bearings are principally provided with two rows of symmetrical spherical rollers and a common sphere raceway in out ring, the two inner ring raceways are included at an angle to the bearing axia
- 2) The bearings have good self-aligning ability and can operate when the shaft deflection under load or the shaft deflection under load or the shaft misaligning in mounting, and their permissible aligning angle is 1 to 2.5 degree
- 3) This type of bearings has heavy load carrying capacity and anti-impact ability, in addition to radial loads, they also can carry axial loads in

two directions

4) In general, this type of bearings permits a low limiting speed.

4. Applications:

Injection molding machines, crane hooks, vertical pumps.

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (rpm)		Mass (Kg)	Bearing Number
d	D	B	rs min	Cr	Cor	Grease	Oil	(Approx .)	
40	90	23	1.5	88	90	3,200	4,900	0.705	21308
40	90	23	1.5	88	90	3,200	4,900	0.694	21308K
40	90	23	1.5	88	90	3,200	4,900	0.694	21308KW33C3
40	90	23	1.5	88	90	3,200	4,900	0.705	21308W33C3
45	100	25	1.5	102	106	2,900	4,400	0.927	21309
45	100	25	1.5	102	106	2,900	4,400	0.912	21309K
45	100	25	1.5	102	106	2,900	4,400	0.912	21309KW33C3
45	100	25	1.5	102	106	2,900	4,400	0.927	21309W33C3
50	110	27	2	118	127	2,600	4,000	1.21	21310
50	110	27	2	118	127	2,600	4,000	1.19	21310K
50	110	27	2	118	127	2,600	4,000	1.19	21310KW33C3
50	110	27	2	118	127	2,600	4,000	1.21	21310W33C3
55	120	29	2	145	163	2,400	3,700	1.71	21311
55	120	29	2	145	163	2,400	3,700	1.69	21311K
55	120	29	2	145	163	2,400	3,700	1.69	21311KW33C3
55	120	29	2	145	163	2,400	3,700	1.71	21311W33C3
60	130	31	2.1	167	191	2,200	3,400	2.1	21312
60	130	31	2.1	167	191	2,200	3,400	2.07	21312K
60	130	31	2.1	167	191	2,200	3,400	2.07	21312KW33C3
60	130	31	2.1	167	191	2,200	3,400	2.1	21312W33C3
65	140	33	2.1	194	228	2,000	3,100	2.55	21313
65	140	33	2.1	194	228	2,000	3,100	2.51	21313K
65	140	33	2.1	194	228	2,000	3,100	2.51	21313KW33C3
65	140	33	2.1	194	228	2,000	3,100	2.55	21313W33C3
70	150	35	2.1	220	262	1,900	2,900	3.18	21314
70	150	35	2.1	220	262	1,900	2,900	3.14	21314K
70	150	35	2.1	220	262	1,900	2,900	3.14	21314KW33C3
70	150	35	2.1	220	262	1,900	2,900	3.18	21314W33C3
75	160	37	2.1	239	287	1,800	2,700	3.81	21315
75	160	37	2.1	239	287	1,800	2,700	3.76	21315K
75	160	37	2.1	239	287	1,800	2,700	3.76	21315KW33C3

75	160	37	2.1	239	287	1,800	2,700	3.81	21315W33C3
80	170	39	2.1	260	315	1,700	2,500	4.53	21316
80	170	39	2.1	260	315	1,700	2,500	4.47	21316K
80	170	39	2.1	260	315	1,700	2,500	4.47	21316KW33C3
80	170	39	2.1	260	315	1,700	2,500	4.53	21316W33C3
85	180	41	3	289	355	1,600	2,400	5.35	21317
85	180	41	3	289	355	1,600	2,400	5.28	21317K
85	180	41	3	289	355	1,600	2,400	5.28	21317KW33C3
85	180	41	3	289	355	1,600	2,400	5.35	21317W33C3
90	190	43	3	320	400	1,500	2,300	6.3	21318
90	190	43	3	320	400	1,500	2,300	6.21	21318K
90	190	43	3	320	400	1,500	2,300	6.21	21318KW33C3
90	190	43	3	320	400	1,500	2,300	6.3	21318W33C3
95	200	45	3	335	420	1,400	2,100	7.1	21319
95	200	45	3	335	420	1,400	2,100	7	21319K

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