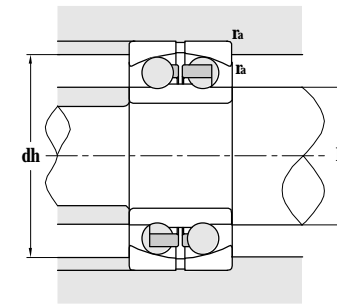
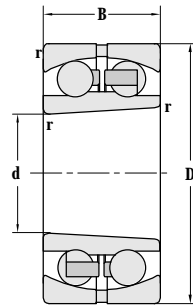
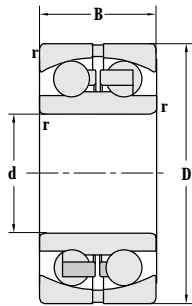


Self-aligning Ball Bearing



d 50-70 mm



Principal dimensions				Basic load ratings		Limit speed ratings		Designations		
d	D	B	r _{min}	C _r	C _{or}	Grease	Oil	Cylindrical bore	Tapered bore	
mm				kN		r/min				
50	90	20	1.1	25.7	8.88	7000	8500	1210	1210K	
	90	20	1.1	25.7	8.88	7000	8500	1210TN1	1210KTN1	
	90	23	1.1	32.8	10.9	6300	7500	2210	2210K	
	90	23	1.1	32.8	10.9	6300	7500	2210TN1	2210KTN1	
	110	27	2	43.5	14.0	5600	6700	1310	1310K	
	110	40	2	63.5	20.0	5300	6300	2310	2310K	
55	100	21	1.5	27.0	10.6	6300	7500	1211	1211K	
	100	21	1.5	27.0	10.6	6300	7500	1211TN1	1211KTN1	
	100	25	1.5	37.8	13.0	6000	7000	2211	2211K	
	120	29	2	51.5	18.0	5000	6000	1311	1311K	
	120	29	2	51.5	18.0	5000	6000	1311TN1	1311KTN1	
	120	43	2	75.0	23.5	4300	5000	2311	2311K	
60	110	22	1.5	31.0	11.8	5600	6700	1212	1212K	
	110	22	1.5	31.0	11.8	5600	6700	1212TN1	1212KTN1	
	110	28	1.5	47.5	16.5	5300	6300	2212	2212K	
	110	28	1.5	47.5	16.5	5300	6300	2212TN1	2212KTN1	
	130	31	2.1	58.5	21.3	4500	5300	1312	1312K	
	130	31	2.1	58.5	21.3	4500	5300	1312TN1	1312KTN1	
	130	46	2.1	86.5	27.7	4500	5300	2312	2312K	
	130	46	2.1	86.5	27.7	4500	5300	2312M		
	150	35	2.1	76.5	28.4	3800	4500	1412		
	150	35	2.1	73.5	26.7	3800	4500	1412M		
	65	120	23	1.5	34.0	13.6	5300	6300	1213	1213K
		120	23	1.5	34.0	13.6	5300	6300	1213TN1	1213KTN1
120		31	1.5	55.5	19.4	5000	6000	2213	2213K	
140		33	2.1	63.0	24.7	4300	5000	1313	1313K	
140		48	2.1	95.5	32.5	4000	4800	2313	2313K	
70	125	24	1.5	34.5	14.2	5000	6000	1214	1214K	
	125	31	1.5	44.0	17.0	4800	5600	2214	2214K	
	150	35	2.1	74.5	27.8	4000	4800	1314	1314K	
	150	51	2.1	109	37.5	3800	4500	2314		

Abutment and fillet dimensions			Axle load coefficient				Weight	
D _{smin}	dh _{max}	r _{amax}	e	Y1	Y2	Y0	Cylindrical bore	Tapered bore
mm			mm				kg	
56.5	83.5	1	0.2	3.13	4.85	3.28	0.547	0.527
56.5	83.5	1	0.2	3.13	4.85	3.28	0.535	0.515
56.5	83.5	1	0.29	2.2	3.41	2.31	0.618	0.598
56.5	83.5	1	0.29	2.2	3.41	2.31	0.567	0.547
59	101	2	0.24	2.68	4.14	2.8	1.21	1.18
59	101	2	0.42	1.49	2.3	1.56	1.66	1.58
63	95	1.5	0.2	3.23	4.99	3.38	0.708	0.683
63	95	1.5	0.2	3.23	4.99	3.38	0.681	0.656
63	95	1.5	0.28	2.26	3.5	2.37	0.824	0.794
64	111	2	0.23	2.7	4.18	2.83	1.57	1.53
64	111	2	0.23	2.7	4.18	2.83	1.51	1.47
64	111	2	0.41	1.53	2.36	1.6	2.10	2.00
68	102	1.5	0.19	3.39	5.25	3.56	0.892	0.872
68	102	1.5	0.19	3.39	5.25	3.56	0.870	0.850
68	102	1.5	0.28	2.27	3.51	2.38	1.16	1.12
68	102	1.5	0.28	2.27	3.51	2.38	1.09	1.05
71	119	2	0.23	2.8	4.33	2.93	1.98	1.93
71	119	2	0.23	2.8	4.33	2.93	1.92	1.87
71	119	2	0.4	1.56	2.41	1.63	2.61	2.41
71	119	2	0.4	1.56	2.41	1.63	2.68	
71	139	2	0.22	2.81	4.35	2.95	3.26	
71	139	2	0.22	2.81	4.35	2.95	3.31	
73	112	1.5	0.17	3.71	5.73	3.88	0.915	0.885
73	112	1.5	0.17	3.71	5.73	3.88	0.865	0.835
73	112	1.5	0.28	2.25	3.48	2.35	1.50	1.44
76	129	2	0.23	2.78	4.31	2.92	2.38	2.31
76	129	2	0.38	1.65	2.55	1.72	3.22	3.07
78	117	1.5	0.18	3.51	5.44	3.68	1.29	1.25
78	117	1.5	0.27	2.36	3.66	2.48	1.63	1.57
81	139	2	0.22	2.81	4.35	2.95	2.98	2.90
81	139	2	0.39	1.62	2.5	1.69	3.92	