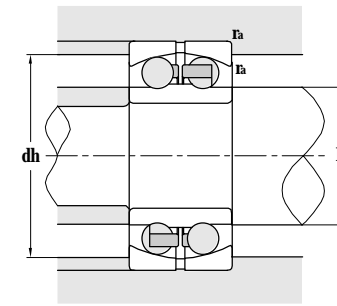
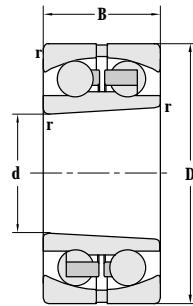
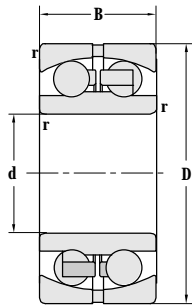


Self-aligning Ball Bearing

d 50-70 mm



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

Abutment and fillet dimensions			Axle load coefficient				Weight	
D <sub>smin</sub>	d <sub>hmax</sub>	r <sub>amax</sub>	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	118	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	