



Ball & Roller Bearings



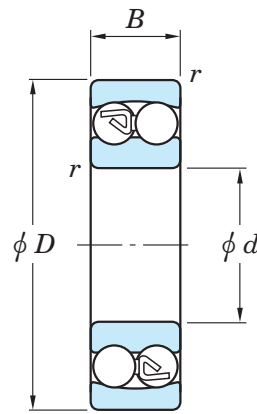
JTEKT

JTEKT CORPORATION

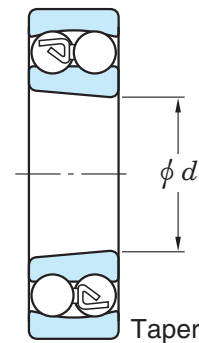
CAT. NO. B2001E-3

Self-aligning ball bearings open type

d 5 ~ (20) mm



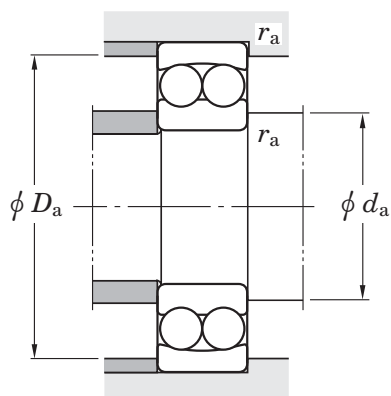
Cylindrical bore



Tapered bore

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		
d	D	B	$r_{\min.}$	C_r	C_{0r}	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	
5	19	6	0.3	2.55	0.48	30 000	37 000	135	—	
6	19	6	0.3	2.50	0.48	30 000	37 000	126	—	
7	22	7	0.3	2.65	0.56	27 000	33 000	127	—	
8	22	7	0.3	2.60	0.56	26 000	33 000	108	—	
9	26	8	0.6	3.80	0.80	23 000	29 000	129	—	
10	30	9	0.6	5.50	1.20	23 000	28 000	1200	—	
	30	14	0.6	7.40	1.60	23 000	29 000	2200	—	
	35	11	0.6	7.25	1.60	20 000	24 000	1300	—	
	35	17	0.6	9.30	2.10	18 000	24 000	2300	—	
12	32	10	0.6	5.60	1.25	21 000	26 000	1201	—	
	32	14	0.6	7.65	1.75	21 000	26 000	2201	—	
	37	12	1	9.40	2.15	18 000	22 000	1301	—	
	37	17	1	9.70	2.30	16 000	22 000	2301	—	
15	35	11	0.6	7.45	1.75	18 000	22 000	1202	—	
	35	14	0.6	7.70	1.85	18 000	22 000	2202	—	
	42	13	1	9.55	2.30	16 000	20 000	1302	—	
	42	17	1	12.1	2.90	14 000	20 000	2302	—	
17	40	12	0.6	7.90	2.00	16 000	20 000	1203	—	
	40	16	0.6	9.80	2.40	16 000	20 000	2203	—	
	47	14	1	12.5	3.20	14 000	17 000	1303	—	
	47	19	1	14.5	3.60	13 000	18 000	2303	—	
20	47	14	1	9.90	2.60	14 000	17 000	1204	1204K	
	47	18	1	12.6	3.30	14 000	17 000	2204	2204K	
	52	15	1.1	12.4	3.30	13 000	15 000	1304	1304K	

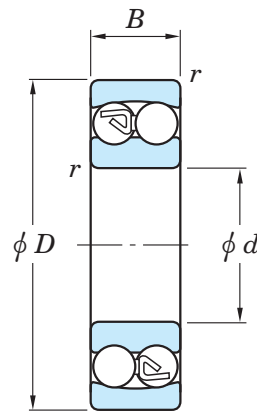
[Remark] Standard cage types used for the above bearings are described earlier in this section.



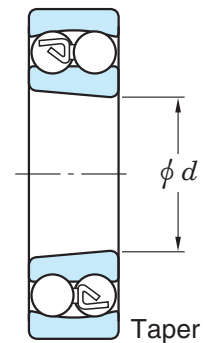
	Mounting dimensions (mm)			Con- stant e	Axial load factors			(Refer.) Mass (kg)	
	d_a min.	D_a max.	r_a max.		Y_1	Y_2	Y_0	Cylindrical bore	Tapered bore
	7	17	0.3	0.34	1.86	2.87	1.94	0.009	—
	8	17	0.3	0.34	1.86	2.87	1.94	0.009	—
	9	20	0.3	0.35	1.82	2.82	1.91	0.014	—
	10	20	0.3	0.35	1.82	2.82	1.91	0.014	—
	13	22	0.6	0.34	1.86	2.87	1.94	0.022	—
	14	26	0.6	0.33	1.92	2.97	2.01	0.034	—
	14	26	0.6	0.59	1.07	1.65	1.12	0.047	—
	14	31	0.6	0.34	1.85	2.87	1.94	0.058	—
	14	31	0.6	0.59	1.07	1.66	1.13	0.085	—
	16	28	0.6	0.33	1.89	2.93	1.98	0.040	—
	16	28	0.6	0.53	1.18	1.83	1.24	0.053	—
	17	32	1	0.36	1.77	2.74	1.86	0.067	—
	17	32	1	0.54	1.17	1.81	1.23	0.095	—
	19	31	0.6	0.33	1.90	2.95	2.00	0.049	—
	19	31	0.6	0.50	1.27	1.97	1.33	0.060	—
	20	37	1	0.34	1.86	2.88	1.95	0.094	—
	20	37	1	0.50	1.27	1.96	1.33	0.114	—
	21	36	0.6	0.31	2.03	3.14	2.12	0.073	—
	21	36	0.6	0.50	1.27	1.96	1.33	0.088	—
	22	42	1	0.33	1.92	2.97	2.01	0.130	—
	22	42	1	0.49	1.28	1.98	1.34	0.158	—
	25	42	1	0.29	2.16	3.35	2.27	0.120	0.118
	25	42	1	0.48	1.31	2.02	1.37	0.140	0.136
	26.5	45.5	1	0.30	2.12	3.28	2.22	0.163	0.161

Self-aligning ball bearings open type

d (20) ~ 50 mm



Cylindrical bore

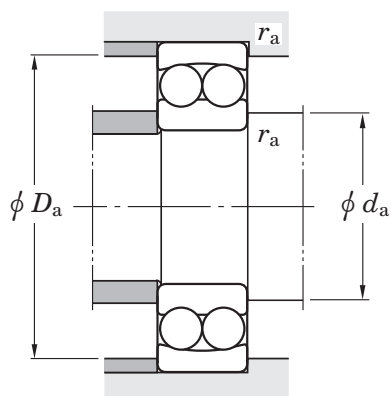


Taper 1/12

Tapered bore

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		
d	D	B	$r_{\min.}$	C_r	C_{0r}	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	
20	52	21	1.1	18.0	4.70	11 000	15 000	2304	2304K	
25	52	15	1	12.1	3.30	12 000	14 000	1205	1205K	
	52	18	1	12.6	3.50	12 000	15 000	2205	2205K	
	62	17	1.1	18.0	5.00	9 900	12 000	1305	1305K	
	62	24	1.1	24.4	6.60	9 400	13 000	2305	2305K	
30	62	16	1	15.6	4.65	9 900	12 000	1206	1206K	
	62	20	1	15.6	4.65	10 000	12 000	2206	2206K	
	72	19	1.1	21.3	6.30	8 700	11 000	1306	1306K	
	72	27	1.1	31.4	8.75	8 000	11 000	2306	2306K	
35	72	17	1.1	15.8	5.10	8 500	10 000	1207	1207K	
	72	23	1.1	21.6	6.60	8 500	10 000	2207	2207K	
	80	21	1.5	25.1	7.85	7 600	9 300	1307	1307K	
	80	31	1.5	39.4	11.3	7 100	9 800	2307	2307K	
40	80	18	1.1	19.2	6.50	7 500	9 200	1208	1208K	
	80	23	1.1	22.4	7.40	7 600	9 300	2208	2208K	
	90	23	1.5	29.5	9.70	6 900	8 400	1308	1308K	
	90	33	1.5	44.9	13.5	6 200	8 600	2308	2308K	
45	85	19	1.1	21.8	7.35	7 000	8 500	1209	1209K	
	85	23	1.1	23.3	8.15	7 000	8 500	2209	2209K	
	100	25	1.5	38.1	12.7	6 100	7 500	1309	1309K	
	100	36	1.5	54.4	16.7	5 600	7 700	2309	2309K	
50	90	20	1.1	22.7	8.10	6 500	7 900	1210	1210K	
	90	23	1.1	23.3	8.50	6 500	7 900	2210	2210K	
	110	27	2	43.4	14.1	5 600	6 800	1310	1310K	
	110	40	2	64.6	20.3	5 100	7 000	2310	2310K	

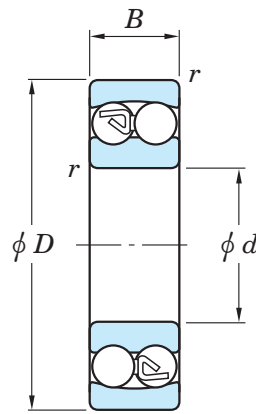
[Remark] Standard cage types used for the above bearings are described earlier in this section.



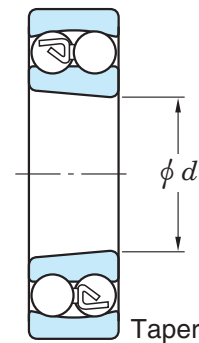
	Mounting dimensions (mm)			Con- stant e	Axial load factors			(Refer.) Mass (kg)	
	d_a min.	D_a max.	r_a max.		Y_1	Y_2	Y_0	Cylindrical bore	Tapered bore
	26.5	45.5	1	0.49	1.29	2.00	1.35	0.209	0.205
	30	47	1	0.28	2.28	3.52	2.39	0.141	0.138
	30	47	1	0.40	1.58	2.45	1.66	0.163	0.158
	31.5	55.5	1	0.27	2.31	3.57	2.42	0.257	0.252
	31.5	55.5	1	0.46	1.36	2.10	1.42	0.335	0.327
	35	57	1	0.25	2.55	3.94	2.67	0.220	0.216
	35	57	1	0.35	1.79	2.77	1.87	0.260	0.254
	36.5	65.5	1	0.26	2.40	3.72	2.52	0.387	0.381
	36.5	65.5	1	0.44	1.44	2.23	1.51	0.500	0.489
	41.5	65.5	1	0.23	2.71	4.20	2.84	0.323	0.317
	41.5	65.5	1	0.37	1.71	2.65	1.79	0.403	0.396
	43	72	1.5	0.25	2.48	3.84	2.60	0.510	0.502
	43	72	1.5	0.45	1.39	2.15	1.46	0.675	0.657
	46.5	73.5	1	0.22	2.83	4.38	2.97	0.417	0.411
	46.5	73.5	1	0.33	1.92	2.96	2.01	0.505	0.494
	48	82	1.5	0.25	2.57	3.98	2.69	0.715	0.704
	48	82	1.5	0.43	1.47	2.27	1.54	0.925	0.903
	51.5	78.5	1	0.21	2.94	4.56	3.09	0.465	0.459
	51.5	78.5	1	0.30	2.09	3.23	2.19	0.545	0.533
	53	92	1.5	0.25	2.56	3.95	2.68	0.957	0.942
	53	92	1.5	0.42	1.51	2.33	1.58	1.23	1.20
	56.5	83.5	1	0.21	3.07	4.76	3.22	0.525	0.515
	56.5	83.5	1	0.27	2.33	3.61	2.45	0.590	0.577
	59	101	2	0.23	2.70	4.17	2.83	1.21	1.19
	59	101	2	0.40	1.56	2.41	1.63	1.64	1.60

Self-aligning ball bearings open type

d 55 ~ (85) mm



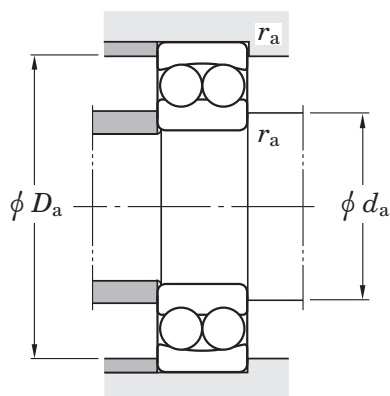
Cylindrical bore



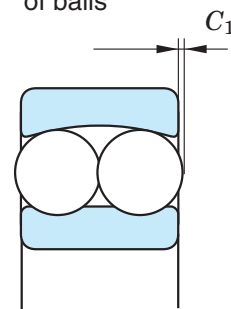
Tapered bore

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		
d	D	B	$r_{\min.}$	C_r	C_{0r}	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	
55	100	21	1.5	26.8	10.0	5 800	7 100	1211	1211K	
	100	25	1.5	26.8	10.0	5 800	7 100	2211	2211K	
	120	29	2	51.3	17.9	5 000	6 200	1311	1311K	
	120	43	2	75.3	24.0	4 600	6 400	2311	2311K	
60	110	22	1.5	30.2	11.5	5 200	6 400	1212	1212K	
	110	28	1.5	34.1	12.6	5 300	6 500	2212	2212K	
	130	31	2.1	57.2	20.8	4 500	5 500	1312	1312K	
	130	46	2.1	87.2	28.3	4 200	5 800	2312	2312K	
65	120	23	1.5	31.0	12.5	4 800	5 800	1213	1213K	
	120	31	1.5	43.5	16.4	4 900	5 900	2213	2213K	
	140	33	2.1	61.7	22.9	4 300	5 200	1313	1313K	
	140	48	2.1	95.8	32.5	3 800	5 300	2313	2313K	
70	125	24	1.5	34.6	13.8	4 600	5 700	1214	—	
	125	31	1.5	43.9	17.1	4 600	5 600	2214	—	
	150	35	2.1	74.0	27.7	4 000	4 900	1314	—	
	150	51	2.1	89.6	31.7	3 600	4 900	2314	—	
75	130	25	1.5	38.8	15.7	4 300	5 300	1215	1215K	
	130	31	1.5	44.2	17.8	4 300	5 300	2215	2215K	
	160	37	2.1	78.9	29.9	4 000	4 900	1315	1315K	
	160	55	2.1	103	36.8	3 400	4 600	2315	2315K	
80	140	26	2	39.8	17.0	4 000	4 900	1216	1216K	
	140	33	2	49.0	19.9	4 100	5 000	2216	2216K	
	170	39	2.1	88.1	33.1	3 500	4 300	1316	1316K	
	170	58	2.1	129	45.7	3 100	4 300	2316	2316K	
85	150	28	2	49.2	20.8	3 800	4 600	1217	1217K	

[Remark] Standard cage types used for the above bearings are described earlier in this section.



[Note] Protruding distance of balls



Balls of the following bearing protrude by C_1 from the bearing side.

	Mounting dimensions (mm)			Con- stant e	Axial load factors			(Refer.) Mass (kg)	
	d_a min.	D_a max.	r_a max.		Y_1	Y_2	Y_0	Cylindrical bore	Tapered bore
	63	92	1.5	0.20	3.19	4.94	3.34	0.705	0.693
	63	92	1.5	0.27	2.35	3.64	2.47	0.810	0.792
	64	111	2	0.23	2.70	4.18	2.83	1.58	1.56
	64	111	2	0.41	1.53	2.37	1.60	2.10	2.05
	68	102	1.5	0.19	3.37	5.22	3.53	0.900	0.885
	68	102	1.5	0.28	2.26	3.49	2.36	1.09	1.07
	71	119	2	0.22	2.91	4.50	3.05	1.96	1.93
	71	119	2	0.39	1.62	2.51	1.70	2.60	2.53
	73	112	1.5	0.17	3.67	5.68	3.84	1.15	1.13
	73	112	1.5	0.28	2.24	3.47	2.35	1.46	1.43
	76	129	2	0.23	2.73	4.23	2.86	2.45	2.41
	76	129	2	0.38	1.66	2.58	1.74	3.23	3.15
	78	117	1.5	0.18	3.48	5.38	3.64	1.26	—
	78	117	1.5	0.26	2.42	3.74	2.53	1.52	—
	81	139	2	0.22	2.84	4.40	2.98	2.99	—
	81	139	2	0.35	1.82	2.82	1.91	4.23	—
	83	122	1.5	0.17	3.60	5.58	3.77	1.36	1.34
	83	122	1.5	0.25	2.49	3.85	2.61	1.62	1.58
	86	149	2	0.23	2.80	4.33	2.93	3.56	3.51
	86	149	2	0.34	1.86	2.88	1.95	5.13	5.01
	89	131	2	0.16	3.90	6.03	4.08	1.67	1.64
	89	131	2	0.26	2.42	3.75	2.54	2.01	1.97
	91	159	2	0.22	2.90	4.49	3.04	4.18	4.12
	91	159	2	0.34	1.87	2.90	1.96	6.10	5.96
	94	141	2	0.17	3.61	5.59	3.78	2.07	2.04

Bearing No.	C_1 (mm)
2216	0.2 (approx.)