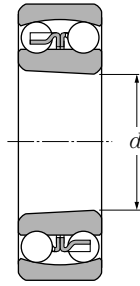
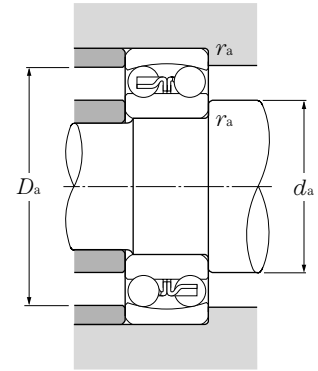


Cylindrical bore



Tapered bore
taper 1:12



d 10 ~ 35mm

d	Boundary dimensions			Basic load ratings				Limiting speeds		Bearing numbers		Abutment and fillet dimensions		
	D	B	r _{s min} ^①	dynamic kN	static kN	dynamic kgf	static kgf	grease	oil	cylindrical bore	tapered bore ^②	d _{a min}	D _{a max}	r _{as max}
10	30	9	0.6	5.50	1.19	560	122	21,000	24,000	1200		14	26	0.6
	30	14	0.6	7.30	1.59	745	162	19,000	23,000	2200		14	26	0.6
	35	11	0.6	7.25	1.62	740	165	18,000	21,000	1300		14	31	0.6
	35	17	0.6	10.1	2.15	1,030	219	17,000	20,000	2300		14	31	0.6
12	32	10	0.6	5.60	1.27	570	130	18,000	22,000	1201		16	28	0.6
	32	14	0.6	7.60	1.73	775	177	17,000	20,000	2201		16	28	0.6
	37	12	1	9.45	2.16	965	221	16,000	18,000	1301		17	32	1
	37	17	1	11.8	2.71	1,200	277	15,000	17,000	2301		17	32	1
15	35	11	0.6	7.45	1.75	760	178	16,000	19,000	1202		19	31	0.6
	35	14	0.6	7.70	1.85	785	188	15,000	18,000	2202		19	31	0.6
	42	13	1	9.55	2.30	975	234	13,000	16,000	1302		20	37	1
	42	17	1	12.0	2.90	1,230	295	13,000	15,000	2302		20	37	1
17	40	12	0.6	7.90	2.01	805	205	14,000	17,000	1203		21	36	0.6
	40	16	0.6	9.80	2.41	995	246	13,000	16,000	2203		21	36	0.6
	47	14	1	12.5	3.20	1,280	325	12,000	14,000	1303		22	42	1
	47	19	1	14.4	3.55	1,470	365	11,000	14,000	2303		22	42	1
20	47	14	1	9.90	2.61	1,010	266	13,000	15,000	1204	1204K	25	42	1
	47	18	1	12.6	3.30	1,280	335	12,000	14,000	2204	2204K	25	42	1
	52	15	1.1	12.4	3.35	1,270	340	11,000	13,000	1304	1304K	26.5	45.5	1
	52	21	1.1	18.1	4.70	1,850	480	10,000	12,000	2304	2304K	26.5	45.5	1
25	52	15	1	12.1	3.30	1,230	335	11,000	13,000	1205	1205K	30	47	1
	52	18	1	12.3	3.45	1,250	350	10,000	12,000	2205	2205K	30	47	1
	62	17	1.1	18.0	5.00	1,830	510	9,100	11,000	1305	1305K	31.5	55.5	1
	62	24	1.1	24.4	6.60	2,490	670	8,500	10,000	2305	2305K	31.5	55.5	1
30	62	16	1	15.6	4.65	1,590	475	9,200	11,000	1206	1206K	35	57	1
	62	20	1	15.2	4.50	1,550	460	8,600	10,000	2206	2206K	35	57	1
	72	19	1.1	21.3	6.30	2,170	645	7,700	9,100	1306	1306K	36.5	65.5	1
	72	27	1.1	31.5	8.75	3,200	895	7,200	8,500	2306	2306K	36.5	65.5	1
35	72	17	1.1	15.8	5.10	1,610	520	8,000	9,400	1207	1207K	41.5	65.5	1
	72	23	1.1	21.5	6.60	2,190	670	7,500	8,800	2207	2207K	41.5	65.5	1
	80	21	1.5	25.1	7.85	2,560	800	6,800	8,000	1307	1307K	43	72	1.5
	80	31	1.5	39.5	11.3	4,000	1,150	6,300	7,400	2307	2307K	43	72	1.5

① Smallest allowable dimension for chamfer dimension r. ② "K" indicates bearings have tapered bore with a taper ratio of 1: 12.

Equivalent bearing load dynamic

$$P_r = XF_r + YF_a$$

$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
X	Y	X	Y
1	Y_1	0.65	Y_2

static

$$P_{or} = F_r + Y_0 F_a$$

For values of e , Y_1 , Y_2 and Y_0 see the table below.

Constant	Axial load factors			Mass	
	e	Y_1	Y_2	Y_0	kg cylindrical bore tapered bore (approx.)
0.32	2	3.09	2.09	0.033	
0.64	0.98	1.52	1.03	0.047	
0.34	1.85	2.87	1.94	0.058	
0.67	0.95	1.46	0.99	0.083	
0.36	1.76	2.73	1.85	0.04	
0.58	1.09	1.69	1.14	0.051	
0.33	1.91	2.95	2	0.066	
0.61	1.03	1.59	1.08	0.091	
0.33	1.91	2.95	2	0.049	
0.50	1.25	1.94	1.31	0.06	
0.34	1.86	2.88	1.95	0.092	
0.52	1.22	1.88	1.27	0.114	
0.31	2.03	3.14	2.12	0.072	
0.51	1.23	1.90	1.29	0.088	
0.32	1.97	3.06	2.07	0.128	
0.52	1.22	1.88	1.28	0.156	
0.29	2.2	3.4	2.3	0.116	0.114
0.49	1.3	2.01	1.36	0.14	0.137
0.29	2.16	3.34	2.26	0.16	0.158
0.51	1.23	1.9	1.29	0.206	0.201
0.28	2.28	3.53	2.39	0.138	0.135
0.41	1.55	2.39	1.62	0.157	0.153
0.28	2.28	3.53	2.39	0.255	0.251
0.48	1.32	2.05	1.39	0.334	0.326
0.25	2.55	3.94	2.67	0.217	0.213
0.38	1.64	2.53	1.72	0.256	0.25
0.26	2.40	3.72	2.52	0.383	0.377
0.44	1.42	2.2	1.49	0.496	0.485
0.23	2.71	4.2	2.84	0.317	0.312
0.37	1.69	2.61	1.77	0.392	0.382
0.25	2.48	3.84	2.60	0.5	0.492
0.46	1.37	2.13	1.44	0.671	0.653

