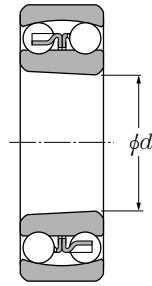
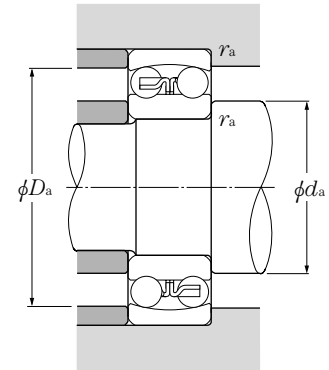


Cylindrical bore



Tapered bore



d 10 ~ 35mm

	Boundary dimensions				Basic load ratings				Limiting speeds		Bearing numbers		Abutment and fillet dimensions		
	mm				dynamic	static	dynamic	static	min ⁻¹		cylindrical bore	tapered ²⁾ bore	d_a	D_a	r_{as}
<i>d</i>	<i>D</i>	<i>B</i>	$r_{s \min}^{1)}$	C_r	C_{or}	C_r	C_{or}	grease	oil			min	max	max	
10	30	9	0.6	5.55	1.19	570	121	22 000	28 000	1200S	—	14.0	26.0	0.6	
	30	14	0.6	7.45	1.59	760	162	24 000	28 000	2200S	—	14.0	26.0	0.6	
	35	11	0.6	7.35	1.62	750	165	20 000	24 000	1300S	—	14.0	31.0	0.6	
	35	17	0.6	9.20	2.01	935	205	18 000	22 000	2300S	—	14.0	31.0	0.6	
12	32	10	0.6	5.70	1.27	580	130	22 000	26 000	1201S	—	16.0	28.0	0.6	
	32	14	0.6	7.75	1.73	790	177	22 000	26 000	2201S	—	16.0	28.0	0.6	
	37	12	1	9.65	2.16	985	221	18 000	22 000	1301S	—	17.0	32.0	1	
	37	17	1	12.1	2.73	1 240	278	17 000	22 000	2301S	—	17.0	32.0	1	
15	35	11	0.6	7.60	1.75	775	179	18 000	22 000	1202S	—	19.0	31.0	0.6	
	35	14	0.6	7.80	1.85	795	188	18 000	22 000	2202S	—	19.0	31.0	0.6	
	42	13	1	9.70	2.29	990	234	16 000	20 000	1302S	—	20.0	37.0	1	
	42	17	1	12.3	2.91	1 250	296	14 000	18 000	2302S	—	20.0	37.0	1	
17	40	12	0.6	8.00	2.01	815	205	16 000	20 000	1203S	—	21.0	36.0	0.6	
	40	16	0.6	9.95	2.42	1 010	247	16 000	20 000	2203S	—	21.0	36.0	0.6	
	47	14	1	12.7	3.20	1 300	325	14 000	17 000	1303S	—	22.0	42.0	1	
	47	19	1	14.7	3.55	1 500	365	13 000	16 000	2303S	—	22.0	42.0	1	
20	47	14	1	10.0	2.61	1 020	266	14 000	17 000	1204S	1204SK	25.0	42.0	1	
	47	18	1	12.8	3.30	1 310	340	14 000	17 000	2204S	2204SK	25.0	42.0	1	
	52	15	1.1	12.6	3.35	1 280	340	12 000	15 000	1304S	1304SK	26.5	45.5	1	
	52	21	1.1	18.5	4.70	1 880	480	11 000	14 000	2304S	2304SK	26.5	45.5	1	
25	52	15	1	12.2	3.30	1 250	335	12 000	14 000	1205S	1205SK	30.0	47.0	1	
	52	18	1	12.4	3.45	1 270	350	12 000	14 000	2205S	2205SK	30.0	47.0	1	
	62	17	1.1	18.2	5.00	1 850	510	10 000	13 000	1305S	1305SK	31.5	55.5	1	
	62	24	1.1	24.9	6.60	2 530	675	9 500	12 000	2305S	2305SK	31.5	55.5	1	
30	62	16	1	15.8	4.65	1 610	475	10 000	12 000	1206S	1206SK	35.0	57.0	1	
	62	20	1	15.3	4.55	1 560	460	10 000	12 000	2206S	2206SK	35.0	57.0	1	
	72	19	1.1	21.4	6.30	2 190	645	8 500	11 000	1306S	1306SK	36.5	65.5	1	
	72	27	1.1	32.0	8.75	3 250	895	8 000	10 000	2306S	2306SK	36.5	65.5	1	
35	72	17	1.1	15.9	5.10	1 620	520	8 500	10 000	1207S	1207SK	41.5	65.5	1	
	72	23	1.1	21.7	6.60	2 210	675	8 500	10 000	2207S	2207SK	41.5	65.5	1	
	80	21	1.5	25.3	7.85	2 580	800	7 500	9 500	1307S	1307SK	43.0	72.0	1.5	
	80	31	1.5	40.0	11.3	4 100	1 150	7 100	9 000	2307S	2307SK	43.0	72.0	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

$$P_{0r} = F_r + Y_0 F_a$$

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
				(approx.)
0.32	2.00	3.10	2.10	0.033
0.64	0.98	1.50	1.00	0.042
0.35	1.80	2.80	1.90	0.057
0.71	0.89	1.40	0.93	0.077
0.36	1.80	2.70	1.80	0.039
0.58	1.10	1.70	1.10	0.048
0.33	1.90	2.90	2.00	0.066
0.60	1.10	1.60	1.10	0.082
0.32	2.00	3.10	2.10	0.051
0.50	1.30	1.90	1.30	0.055
0.33	1.90	2.90	2.00	0.093
0.51	1.20	1.90	1.30	0.108
0.31	2.00	3.10	2.10	0.072
0.50	1.30	1.90	1.30	0.085
0.32	2.00	3.10	2.10	0.130
0.51	1.20	1.90	1.30	0.150
0.29	2.20	3.40	2.30	0.120
0.47	1.30	2.10	1.40	0.133
0.29	2.20	3.40	2.30	0.15
0.50	1.20	1.90	1.30	0.193
0.28	2.30	3.50	2.40	0.140
0.41	1.50	2.40	1.60	0.150
0.28	2.30	3.50	2.40	0.255
0.47	1.40	2.10	1.40	0.319
0.25	2.50	3.90	2.60	0.220
0.38	1.60	2.50	1.70	0.249
0.26	2.40	3.70	2.50	0.385
0.44	1.40	2.20	1.50	0.480
0.23	2.70	4.20	2.80	0.320
0.37	1.70	2.60	1.80	0.378
0.26	2.50	3.80	2.60	0.510
0.46	1.40	2.10	1.40	0.642

