



Cylindrical bore

Tapered bore

d 10 ~ 35mm

	Boundary dimensions			Basic load rating		Fatigue load limit kN <i>C<sub>u</sub></i>	Allowable speed		Bearing numbers		Installation-related dimensions		
	mm <i>d</i>	mm <i>D</i>	mm <i>B</i>	dynamic kN <i>C<sub>R</sub></i>	static kN <i>C<sub>0r</sub></i>		Grease lubrication	Oil lubrication	Cylindrical bore	Tapered bore <sup>2)</sup>	mm <i>d<sub>a</sub></i> Min.	mm <i>D<sub>a</sub></i> Max.	mm <i>r<sub>as</sub></i> Max.
10	30	9	0.6	5.55	1.19	0.049	22 000	28 000	1200S	—	14.0	26.0	0.6
	30	14	0.6	7.45	1.59	0.067	24 000	28 000	2200S	—	14.0	26.0	0.6
	35	11	0.6	7.35	1.62	0.074	20 000	24 000	1300S	—	14.0	31.0	0.6
	35	17	0.6	9.20	2.01	0.096	18 000	22 000	2300S	—	14.0	31.0	0.6
12	32	10	0.6	5.70	1.27	0.053	22 000	26 000	1201S	—	16.0	28.0	0.6
	32	14	0.6	7.75	1.73	0.089	22 000	26 000	2201S	—	16.0	28.0	0.6
	37	12	1	9.65	2.16	0.078	18 000	22 000	1301S	—	17.0	32.0	1
	37	17	1	12.1	2.73	0.120	17 000	22 000	2301S	—	17.0	32.0	1
15	35	11	0.6	7.60	1.75	0.072	18 000	22 000	1202S	—	19.0	31.0	0.6
	35	14	0.6	7.80	1.85	0.095	18 000	22 000	2202S	—	19.0	31.0	0.6
	42	13	1	9.70	2.29	0.081	16 000	20 000	1302S	—	20.0	37.0	1
	42	17	1	12.3	2.91	0.130	14 000	18 000	2302S	—	20.0	37.0	1
17	40	12	0.6	8.00	2.01	0.083	16 000	20 000	1203S	—	21.0	36.0	0.6
	40	16	0.6	9.95	2.42	0.130	16 000	20 000	2203S	—	21.0	36.0	0.6
	47	14	1	12.7	3.20	0.110	14 000	17 000	1303S	—	22.0	42.0	1
	47	19	1	14.7	3.55	0.160	13 000	16 000	2303S	—	22.0	42.0	1
20	47	14	1	10.0	2.61	0.110	14 000	17 000	1204S	1204SK	25.0	42.0	1
	47	18	1	12.8	3.30	0.140	14 000	17 000	2204S	2204SK	25.0	42.0	1
	52	15	1.1	12.6	3.35	0.140	12 000	15 000	1304S	1304SK	26.5	45.5	1
	52	21	1.1	18.5	4.70	0.210	11 000	14 000	2304S	2304SK	26.5	45.5	1
25	52	15	1	12.2	3.30	0.130	12 000	14 000	1205S	1205SK	30.0	47.0	1
	52	18	1	12.4	3.45	0.200	12 000	14 000	2205S	2205SK	30.0	47.0	1
	62	17	1.1	18.2	5.00	0.150	10 000	13 000	1305S	1305SK	31.5	55.5	1
	62	24	1.1	24.9	6.60	0.290	9 500	12 000	2305S	2305SK	31.5	55.5	1
30	62	16	1	15.8	4.65	0.190	10 000	12 000	1206S	1206SK	35.0	57.0	1
	62	20	1	15.3	4.55	0.260	10 000	12 000	2206S	2206SK	35.0	57.0	1
	72	19	1.1	21.4	6.30	0.190	8 500	11 000	1306S	1306SK	36.5	65.5	1
	72	27	1.1	32.0	8.75	0.380	8 000	10 000	2306S	2306SK	36.5	65.5	1
35	72	17	1.1	15.9	5.10	0.210	8 500	10 000	1207S	1207SK	41.5	65.5	1
	72	23	1.1	21.7	6.60	0.320	8 500	10 000	2207S	2207SK	41.5	65.5	1
	80	21	1.5	25.3	7.85	0.280	7 500	9 500	1307S	1307SK	43.0	72.0	1.5
	80	31	1.5	40.0	11.3	0.480	7 100	9 000	2307S	2307SK	43.0	72.0	1.5

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

Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
<i>X</i>	<i>Y</i>	<i>X</i>	<i>Y</i>
1	<i>Y</i> <sub>1</sub>	0.65	<i>Y</i> <sub>2</sub>

Static equivalent radial load

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

For values of *e*, *Y*<sub>1</sub>, *Y*<sub>2</sub> and *Y*<sub>0</sub> see the table below.

Constant	Axial load factors			Mass kg (approx.)
	<i>e</i>	<i>Y</i> <sub>1</sub>	<i>Y</i> <sub>2</sub>	
		<i>Y</i> <sub>0</sub>		
0.32	2.00	3.10	2.10	0.034
0.64	0.98	1.50	1.00	0.046
0.35	1.80	2.80	1.90	0.059
0.71	0.89	1.40	0.93	0.078
0.36	1.80	2.70	1.80	0.041
0.58	1.10	1.70	1.10	0.051
0.33	1.90	2.90	2.00	0.068
0.60	1.10	1.60	1.10	0.087
0.32	2.00	3.10	2.10	0.050
0.50	1.30	1.90	1.30	0.058
0.33	1.90	2.90	2.00	0.101
0.51	1.20	1.90	1.30	0.113
0.31	2.00	3.10	2.10	0.074
0.50	1.30	1.90	1.30	0.089
0.32	2.00	3.10	2.10	0.130
0.51	1.20	1.90	1.30	0.160
0.29	2.20	3.40	2.30	0.120
0.47	1.30	2.10	1.40	0.142
0.29	2.20	3.40	2.30	0.164
0.50	1.20	1.90	1.30	0.207
0.28	2.30	3.50	2.40	0.140
0.41	1.50	2.40	1.60	0.160
0.28	2.30	3.50	2.40	0.261
0.47	1.40	2.10	1.40	0.332
0.25	2.50	3.90	2.60	0.220
0.38	1.60	2.50	1.70	0.262
0.26	2.40	3.70	2.50	0.391
0.44	1.40	2.20	1.50	0.500
0.23	2.70	4.20	2.80	0.330
0.37	1.70	2.60	1.80	0.403
0.26	2.50	3.80	2.60	0.520
0.46	1.40	2.10	1.40	0.671