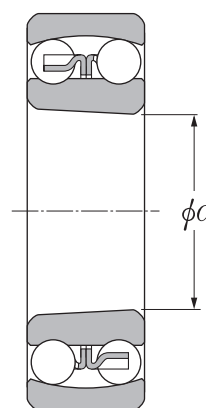


Cylindrical bore

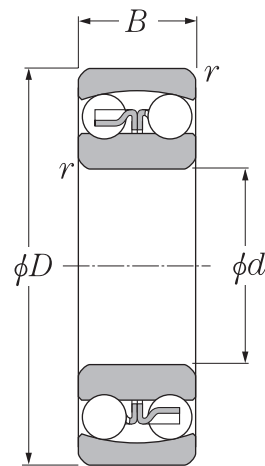


Tapered bore

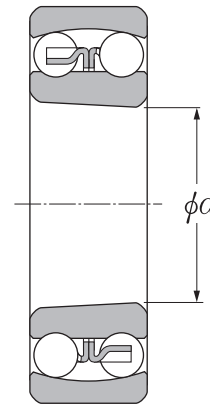
d 10~35mm

| d | Boundary dimensions | | | Basic load ratings | | | | Limiting speeds | | Bearing numbers | | Mass kg (approx.) |
|-----------|---------------------|----|--------------|--------------------|--------------|----------------|---------------|-----------------|--------|---------------------|-----------------|-------------------------|
| | D | B | $r_{s\ min}$ | dynamic kN | static kN | dynamic kgf | static kgf | grease | oil | cylindrical bore | tapered bore | |
| 10 | 30 | 9 | 0.6 | 5.55 | 1.19 | 570 | 121 | 22 000 | 28 000 | 1200 | — | 0.033 |
| | 30 | 14 | 0.6 | 7.45 | 1.59 | 760 | 162 | 24 000 | 28 000 | 2200 | — | 0.042 |
| | 35 | 11 | 0.6 | 7.35 | 1.62 | 750 | 165 | 20 000 | 24 000 | 1300 | — | 0.057 |
| | 35 | 17 | 0.6 | 9.20 | 2.01 | 935 | 205 | 18 000 | 22 000 | 2300 | — | 0.077 |
| 12 | 32 | 10 | 0.6 | 5.70 | 1.27 | 580 | 130 | 22 000 | 26 000 | 1201 | — | 0.039 |
| | 32 | 14 | 0.6 | 7.75 | 1.73 | 790 | 177 | 22 000 | 26 000 | 2201 | — | 0.048 |
| | 37 | 12 | 1.0 | 9.65 | 2.16 | 985 | 221 | 18 000 | 22 000 | 1301 | — | 0.066 |
| | 37 | 17 | 1.0 | 12.10 | 2.73 | 1 240 | 278 | 17 000 | 22 000 | 2301 | — | 0.082 |
| 15 | 35 | 11 | 0.6 | 7.60 | 1.75 | 775 | 179 | 18 000 | 22 000 | 1202 | — | 0.051 |
| | 35 | 14 | 0.6 | 7.80 | 1.85 | 795 | 188 | 18 000 | 22 000 | 2202 | — | 0.055 |
| | 42 | 13 | 1.0 | 9.70 | 2.29 | 990 | 234 | 16 000 | 20 000 | 1302 | — | 0.093 |
| | 42 | 17 | 1.0 | 12.30 | 2.91 | 1 250 | 296 | 14 000 | 18 000 | 2302 | — | 0.108 |
| 17 | 40 | 12 | 0.6 | 8.00 | 2.01 | 815 | 205 | 16 000 | 20 000 | 1203 | — | 0.072 |
| | 40 | 16 | 0.6 | 9.95 | 2.42 | 1 010 | 247 | 16 000 | 20 000 | 2203 | — | 0.085 |
| | 47 | 14 | 1.0 | 12.70 | 3.20 | 1 300 | 325 | 14 000 | 17 000 | 1303 | — | 0.130 |
| | 47 | 19 | 1.0 | 14.70 | 3.55 | 1 500 | 365 | 13 000 | 16 000 | 2303 | — | 0.150 |
| 20 | 47 | 14 | 1.0 | 10.0 | 2.61 | 1 020 | 266 | 14 000 | 17 000 | 1204 | 1204K | 0.120 |
| | 47 | 18 | 1.0 | 12.8 | 3.30 | 1 310 | 340 | 14 000 | 17 000 | 2204 | 2204K | 0.133 |
| | 52 | 15 | 1.1 | 12.6 | 3.35 | 1 280 | 340 | 12 000 | 15 000 | 1304 | 1304K | 0.150 |
| | 52 | 21 | 1.1 | 18.5 | 4.70 | 1 880 | 480 | 11 000 | 14 000 | 2304 | 2304K | 0.193 |
| 25 | 52 | 15 | 1.0 | 12.2 | 3.30 | 1 250 | 335 | 12 000 | 14 000 | 1205 | 1205K | 0.140 |
| | 52 | 18 | 1.0 | 12.4 | 3.45 | 1 270 | 350 | 12 000 | 14 000 | 2205 | 2205K | 0.150 |
| | 62 | 17 | 1.1 | 18.2 | 5.00 | 1 850 | 510 | 10 000 | 13 000 | 1305 | 1305K | 0.255 |
| | 62 | 24 | 1.1 | 24.9 | 6.60 | 2 530 | 675 | 9 500 | 12 000 | 2305 | 2305K | 0.319 |
| 30 | 62 | 16 | 1.0 | 15.8 | 4.65 | 1 610 | 475 | 10 000 | 12 000 | 1206 | 1206K | 0.220 |
| | 62 | 20 | 1.0 | 15.3 | 4.55 | 1 560 | 460 | 10 000 | 12 000 | 2206 | 2206K | 0.249 |
| | 72 | 19 | 1.1 | 21.4 | 6.30 | 2 190 | 645 | 8 500 | 11 000 | 1306 | 1306K | 0.385 |
| | 72 | 27 | 1.1 | 32.0 | 8.75 | 3 250 | 895 | 8 000 | 10 000 | 2306 | 2306K | 0.480 |
| 35 | 72 | 17 | 1.1 | 15.9 | 5.10 | 1 620 | 520 | 8 500 | 10 000 | 1207 | 1207K | 0.320 |
| | 72 | 23 | 1.1 | 21.7 | 6.60 | 2 210 | 675 | 8 500 | 10 000 | 2207 | 2207K | 0.378 |

K-Indicates bearings with tapered bore with ratio 1:12



Cylindrical bore

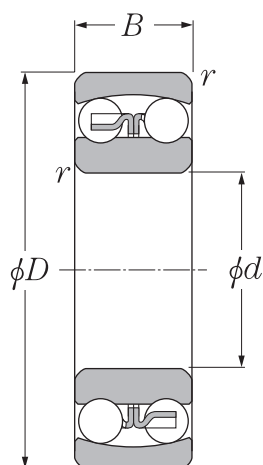


Tapered bore

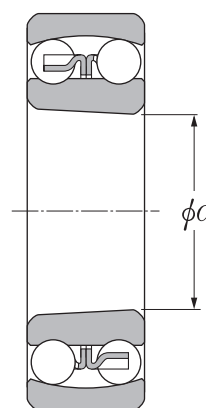
d 35~70mm

| d | Boundary dimensions | | | Basic load ratings | | | | Limiting speeds | | Bearing numbers | | Mass kg (approx.) |
|----|---------------------|----|--------------------|--------------------|-----------------|----------------|-----------------|-------------------|-------|------------------|--------------|-------------------------|
| | mm | | | dynamic | static | dynamic | static | min ⁻¹ | | cylindrical bore | tapered bore | |
| | D | B | r _{s min} | C _r | C _{or} | C _r | C _{or} | grease | oil | | | |
| 35 | 80 | 21 | 1.5 | 25.3 | 7.85 | 2 580 | 800 | 7 500 | 9 500 | 1307 | 1307K | 0.510 |
| | 80 | 31 | 1.5 | 40.0 | 11.30 | 4 100 | 1 150 | 7 100 | 9 000 | 2307 | 2307K | 0.642 |
| 40 | 80 | 18 | 1.1 | 19.3 | 6.50 | 1 970 | 665 | 7 500 | 9 000 | 1208 | 1208K | 0.415 |
| | 80 | 23 | 1.1 | 22.4 | 7.35 | 2 290 | 750 | 7 500 | 9 000 | 2208 | 2208K | 0.477 |
| | 90 | 23 | 1.5 | 29.8 | 9.70 | 3 050 | 990 | 6 700 | 8 500 | 1308 | 1308K | 0.715 |
| | 90 | 33 | 1.5 | 45.5 | 13.50 | 4 650 | 1 380 | 6 300 | 8 000 | 2308 | 2308K | 0.889 |
| 45 | 85 | 19 | 1.1 | 22.0 | 7.35 | 2 240 | 750 | 7 100 | 8 500 | 1209 | 1209K | 0.465 |
| | 85 | 23 | 1.1 | 23.3 | 8.15 | 2 380 | 830 | 7 100 | 8 500 | 2209 | 2209K | 0.522 |
| | 100 | 25 | 1.5 | 38.5 | 12.70 | 3 900 | 1 300 | 6 000 | 7 500 | 1309 | 1309K | 0.955 |
| | 100 | 36 | 1.5 | 55.0 | 16.70 | 5 600 | 1 700 | 5 600 | 7 100 | 2309 | 2309K | 1.200 |
| 50 | 90 | 20 | 1.1 | 22.8 | 8.10 | 2 330 | 830 | 6 300 | 8 000 | 1210 | 1210K | 0.525 |
| | 90 | 23 | 1.1 | 23.3 | 8.45 | 2 380 | 865 | 6 300 | 8 000 | 2210 | 2210K | 0.564 |
| | 110 | 27 | 2.0 | 43.5 | 14.10 | 4 450 | 1 440 | 5 600 | 6 700 | 1310 | 1310K | 1.250 |
| | 110 | 40 | 2.0 | 65.0 | 20.20 | 6 650 | 2 060 | 5 000 | 6 300 | 2310 | 2310K | 1.580 |
| 55 | 100 | 21 | 1.5 | 26.9 | 10.00 | 2 750 | 1 020 | 6 000 | 7 100 | 1211 | 1211K | 0.705 |
| | 100 | 25 | 1.5 | 26.7 | 9.90 | 2 720 | 1 010 | 6 000 | 7 100 | 2211 | 2211K | 0.746 |
| | 120 | 29 | 2.0 | 51.5 | 17.90 | 5 250 | 1 820 | 5 000 | 6 300 | 1311 | 1311K | 1.600 |
| | 120 | 43 | 2.0 | 76.5 | 24.00 | 7 800 | 2 450 | 4 800 | 6 000 | 2311 | 2311K | 2.030 |
| 60 | 110 | 22 | 1.5 | 30.5 | 11.50 | 3 100 | 1 180 | 5 300 | 6 300 | 1212 | 1212K | 0.900 |
| | 110 | 28 | 1.5 | 34.0 | 12.60 | 3 500 | 1 290 | 5 300 | 6 300 | 2212 | 2212K | 1.030 |
| | 130 | 31 | 2.1 | 57.5 | 20.80 | 5 900 | 2 130 | 4 500 | 5 600 | 1312 | 1312K | 2.030 |
| | 130 | 46 | 2.1 | 88.5 | 28.30 | 9 000 | 2 880 | 4 300 | 5 300 | 2312 | 2312K | 2.570 |
| 65 | 120 | 23 | 1.5 | 31.0 | 12.50 | 3 150 | 1 280 | 4 800 | 6 000 | 1213 | 1213K | 1.150 |
| | 120 | 31 | 1.5 | 43.5 | 16.40 | 4 450 | 1 670 | 4 800 | 6 000 | 2213 | 2213K | 1.400 |
| | 140 | 33 | 2.1 | 62.5 | 22.90 | 6 350 | 2 330 | 4 300 | 5 300 | 1313 | 1313K | 2.540 |
| | 140 | 48 | 2.1 | 97.0 | 32.50 | 9 900 | 3 300 | 3 800 | 4 800 | 2313 | 2313K | 3.200 |
| 70 | 125 | 24 | 1.5 | 35.0 | 13.80 | 3 550 | 1 410 | 4 800 | 5 600 | 1214 | 1214K | 1.300 |
| | 125 | 31 | 1.5 | 44.0 | 17.10 | 4 500 | 1 740 | 4 500 | 5 600 | 2214 | 2214K | 1.520 |
| | 150 | 35 | 2.1 | 75.0 | 27.70 | 7 650 | 2 830 | 4 000 | 5 000 | 1314 | 1314K | 3.190 |
| | 150 | 51 | 2.1 | 111.0 | 37.50 | 11 300 | 3 850 | 3 600 | 4 500 | 2314 | 2314K | 3.900 |

K-Indicates bearings with tapered bore with ratio 1:12



Cylindrical bore



Tapered bore

d 75~100mm

| d | Boundary dimensions | | | Basic load ratings | | | | Limiting speeds | | Bearing numbers | | Mass kg (approx.) |
|------------|---------------------|----|--------------------|----------------------|-----------------|-----------------------|-----------------|-------------------|-------|---------------------|-----------------|-------------------------|
| | mm | | | dynamic | static | dynamic | static | min ⁻¹ | | cylindrical bore | tapered bore | |
| | D | B | r _{s min} | C _r kN | C _{or} | C _r kgf | C _{or} | grease | oil | | | |
| 75 | 130 | 25 | 1.5 | 39.0 | 15.7 | 4 000 | 1 600 | 4 300 | 5 300 | 1215 | 1215K | 1.410 |
| | 130 | 31 | 1.5 | 44.5 | 17.8 | 4 550 | 1 820 | 4 300 | 5 300 | 2215 | 2215K | 1.600 |
| | 160 | 37 | 2.1 | 80.0 | 30.0 | 8 150 | 3 050 | 3 800 | 4 500 | 1315 | 1315K | 3.650 |
| | 160 | 55 | 2.1 | 125.0 | 43.0 | 12 700 | 4 400 | 3 400 | 4 300 | 2315 | 2315K | 4.770 |
| 80 | 140 | 26 | 2.0 | 40.0 | 17.0 | 4 100 | 1 730 | 4 000 | 5 000 | 1216 | 1216K | 1.730 |
| | 140 | 33 | 2.0 | 49.0 | 19.9 | 5 000 | 2 030 | 4 000 | 5 000 | 2216 | 2216K | 1.970 |
| | 170 | 39 | 2.1 | 89.0 | 33.0 | 9 100 | 3 400 | 3 600 | 4 300 | 1316 | 1316K | 4.310 |
| | 170 | 58 | 2.1 | 130.0 | 45.0 | 13 200 | 4 600 | 3 200 | 4 000 | 2316 | 2316K | 5.540 |
| 85 | 150 | 28 | 2.0 | 49.5 | 20.8 | 5 050 | 2 120 | 3 800 | 4 500 | 1217 | 1217K | 2.090 |
| | 150 | 36 | 2.0 | 58.5 | 23.6 | 5 950 | 2 400 | 3 800 | 4 800 | 2217 | 2217K | 2.480 |
| | 180 | 41 | 3.0 | 98.5 | 38.0 | 10 000 | 3 850 | 3 400 | 4 000 | 1317 | 1317K | 5.130 |
| | 180 | 60 | 3.0 | 142.0 | 51.5 | 14 500 | 5 250 | 3 000 | 3 800 | 2317 | 2317K | 6.560 |
| 90 | 160 | 30 | 2.0 | 57.5 | 23.5 | 5 850 | 2 400 | 3 600 | 4 300 | 1218 | 1218K | 2.550 |
| | 160 | 40 | 2.0 | 70.5 | 28.7 | 7 200 | 2 930 | 3 600 | 4 300 | 2218 | 2218K | 3.130 |
| | 190 | 43 | 3.0 | 117.0 | 44.5 | 12 000 | 4 550 | 3 200 | 3 800 | 1318 | 1318K | 5.940 |
| | 190 | 64 | 3.0 | 154.0 | 57.5 | 15 700 | 5 850 | 2 800 | 3 600 | 2318 | 2318K | 7.760 |
| 95 | 170 | 32 | 2.1 | 64.0 | 27.1 | 6 550 | 2 770 | 3 400 | 4 000 | 1219 | 1219K | 3.210 |
| | 170 | 43 | 2.1 | 84.0 | 34.5 | 8 550 | 3 500 | 3 400 | 4 000 | 2219 | 2219K | 3.870 |
| | 200 | 45 | 3.0 | 129.0 | 51.0 | 13 200 | 5 200 | 3 000 | 3 600 | 1319 | 1319K | 6.840 |
| | 200 | 67 | 3.0 | 161.0 | 64.5 | 16 400 | 6 550 | 2 800 | 3 400 | 2319 | 2319K | 9.010 |
| 100 | 180 | 34 | 2.1 | 69.5 | 29.7 | 7 100 | 3 050 | 3 200 | 3 800 | 1220 | 1220K | 3.820 |
| | 180 | 46 | 2.1 | 94.5 | 38.5 | 9 650 | 3 900 | 3 200 | 3 800 | 2220 | 2220K | 4.530 |
| | 215 | 47 | 3.0 | 140.0 | 57.5 | 14 300 | 5 850 | 2 800 | 3 400 | 1320 | 1320K | 8.460 |
| | 215 | 73 | 3.0 | 187.0 | 79.0 | 19 100 | 8 050 | 2 400 | 3 200 | 2320 | 2320K | 11.600 |