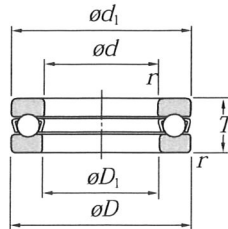


Thrust ball bearings

d 10 – 45 mm



| | Boundary dimensions (mm) | | | Basic load ratings (kN) | | Limiting speeds (min ⁻¹) | | Bearing No. | Dimensions (mm) | | (Refer.) Mass (kg) |
|-----|-----------------------------|-----|-----|----------------------------|-------|---|----------------|---|--------------------|---------------|--------------------------|
| | d | D | T | $r_{\text{min.}}$ | C_a | C_{0a} | Grease lub. | | Oil lub. | d_1 max. | |
| 10 | 24 | 9 | 0.3 | 10.0 | 14.0 | 6 500 | 10 000 | 51100 51200 | 24 | 11 | 0.020 |
| | 26 | 11 | 0.6 | 12.7 | 17.1 | 5 700 | 8 800 | | 26 | 12 | 0.030 |
| 12 | 26 | 9 | 0.3 | 9.65 | 14.0 | 6 500 | 10 000 | 51101 51201 | 26 | 13 | 0.022 |
| | 28 | 11 | 0.6 | 13.2 | 19.0 | 5 400 | 8 300 | | 28 | 14 | 0.034 |
| 15 | 28 | 9 | 0.3 | 9.95 | 15.4 | 6 100 | 9 400 | 51102 51202 | 28 | 16 | 0.024 |
| | 32 | 12 | 0.6 | 16.6 | 24.8 | 4 900 | 7 500 | | 32 | 17 | 0.046 |
| 17 | 30 | 9 | 0.3 | 10.8 | 18.2 | 6 100 | 9 400 | 51103 51203 | 30 | 18 | 0.028 |
| | 35 | 12 | 0.6 | 17.2 | 27.3 | 4 900 | 7 500 | | 35 | 19 | 0.053 |
| 20 | 35 | 10 | 0.3 | 14.2 | 24.7 | 5 100 | 7 900 | 51104 51204 | 35 | 21 | 0.040 |
| | 40 | 14 | 0.6 | 22.3 | 37.7 | 3 900 | 6 000 | | 40 | 22 | 0.082 |
| 25 | 42 | 11 | 0.6 | 19.5 | 37.2 | 4 400 | 6 800 | 51105 51205 51305 | 42 | 26 | 0.059 |
| | 47 | 15 | 0.6 | 27.8 | 50.4 | 3 600 | 5 500 | | 47 | 27 | 0.120 |
| | 52 | 18 | 1 | 35.7 | 61.4 | 3 100 | 4 800 | | 52 | 27 | 0.180 |
| 30 | 60 | 24 | 1 | 55.6 | 89.4 | 2 600 | 4 000 | 51405 51106 51206 51306 | 60 | 27 | 0.340 |
| | 47 | 11 | 0.6 | 20.4 | 42.2 | 4 300 | 6 600 | | 47 | 32 | 0.068 |
| | 52 | 16 | 0.6 | 29.4 | 58.2 | 3 400 | 5 200 | | 52 | 32 | 0.150 |
| | 60 | 21 | 1 | 42.8 | 78.7 | 2 700 | 4 200 | | 60 | 32 | 0.270 |
| 35 | 70 | 28 | 1 | 72.8 | 126 | 2 200 | 3 400 | 51406 51107 51207 51307 | 70 | 32 | 0.530 |
| | 52 | 12 | 0.6 | 21.2 | 47.2 | 3 900 | 6 000 | | 52 | 37 | 0.090 |
| | 62 | 18 | 1 | 39.2 | 78.2 | 2 900 | 4 500 | | 62 | 37 | 0.220 |
| 40 | 68 | 24 | 1 | 55.5 | 105 | 2 400 | 3 700 | 51307 51407 51108 51208 51308 | 68 | 37 | 0.390 |
| | 80 | 32 | 1.1 | 87.1 | 155 | 1 900 | 2 900 | | 80 | 37 | 0.790 |
| | 60 | 13 | 0.6 | 26.9 | 62.8 | 3 400 | 5 300 | | 60 | 42 | 0.120 |
| | 68 | 19 | 1 | 47.0 | 98.3 | 2 700 | 4 200 | | 68 | 42 | 0.270 |
| 45 | 78 | 26 | 1 | 69.3 | 135 | 2 100 | 3 300 | 51308 51408 51109 51209 51309 | 78 | 42 | 0.550 |
| | 90 | 36 | 1.1 | 113 | 205 | 1 700 | 2 600 | | 90 | 42 | 1.14 |
| | 65 | 14 | 0.6 | 27.8 | 69.1 | 3 200 | 5 000 | | 65 | 47 | 0.150 |
| 100 | 73 | 20 | 1 | 47.7 | 105 | 2 600 | 4 000 | 51209 51309 51409 | 73 | 47 | 0.320 |
| | 85 | 28 | 1 | 80.0 | 163 | 1 900 | 3 000 | | 85 | 47 | 0.690 |
| | 100 | 39 | 1.1 | 130 | 242 | 1 500 | 2 300 | | 100 | 47 | 1.47 |

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