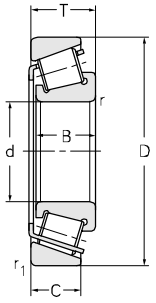
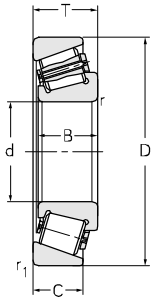
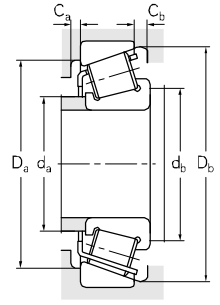
# Single-row Tapered Roller Bearing(Metric)

ZWZ

d 50~55 mm




| Principal dimensions | | | | | | | | | Basic load ratings | | Limit speed ratings | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | D | T | B | C | $r_{radial}$ | $r_{axial}$ | $r_{1radial}$ | $r_{1axial}$ | $C_r$ | $C_{or}$ | Grease | Oil |
| mm | | | | | | | | | kN | | r/min | |
| **50** | 82 | 21.5 | 21.5 | 17 | 3 | 3 | 0.5 | 0.5 | 81.6 | 100 | 3200 | 4300 |
| | 83 | 20.5 | 20.5 | 15.5 | 4 | 4 | 1 | 1 | 66 | 91 | 4500 | 6000 |
| | 83 | 20.5 | 20.5 | 15.5 | 4 | 4 | 1 | 1 | 66 | 91 | 4500 | 6000 |
| | 85 | 26 | 26 | 20 | 1.5 | 1.5 | 1.5 | 1.5 | 98.7 | 122 | 4400 | 5500 |
| | 90 | 32 | 32 | 24.5 | 1.5 | 1.5 | 1.5 | 1.5 | 119 | 160 | 3800 | 5000 |
| | 90 | 21.75 | 20 | 17 | 1.5 | 1.5 | 1.5 | 1.5 | 84.9 | 91.5 | 4300 | 5600 |
| | 90 | 23.75 | 20 | 19 | 1.5 | 1.5 | 1.5 | 1.5 | 79.5 | 96.5 | 4200 | 5500 |
| | 90 | 24.75 | 23 | 19 | 1.5 | 1.5 | 1.5 | 1.5 | 94 | 100 | 4300 | 5600 |
| | 90 | 25 | 23 | 19 | 1.3 | 1.3 | 1.3 | 1.3 | 62 | 77 | 4300 | 5600 |
| | 110 | 29.25 | 27 | 23 | 2.5 | 2.5 | 2 | 2 | 141 | 140 | 3600 | 4800 |
| | 110 | 29.25 | 27 | 23 | 2.5 | 2.5 | 2.5 | 2.5 | 141 | 140 | 3600 | 4800 |
| | 110 | 29.25 | 27 | 19 | 2.5 | 2.5 | 2 | 2 | 110 | 124 | 3200 | 4300 |
| | 110 | 42.25 | 40 | 33 | 2.5 | 2.5 | 2 | 2 | 173 | 214 | 3600 | 4800 |
| | 110 | 42.25 | 40 | 33 | 2.3 | 2.3 | 2.3 | 2.3 | 173 | 214 | 3600 | 4800 |
| **50.8** | 100 | 35 | 35 | 29 | 2 | 2 | 2 | 2 | 119 | 171 | 3900 | 4900 |
| **55** | 90 | 27 | 27 | 21 | 1.5 | 1.5 | 1.5 | 1.5 | 108 | 147 | 4000 | 5300 |
| | 90 | 23 | 23 | 17.5 | 1.5 | 1.5 | 1.5 | 1.5 | 92.4 | 116 | 4000 | 5300 |
| | 95 | 30 | 30 | 23 | 2 | 2.5 | 2 | 2.5 | 110 | 163 | 4000 | 5300 |
| | 95 | 30 | 30 | 23 | 1.5 | 1.5 | 1.5 | 1.5 | 100 | 163 | 3800 | 5000 |
| | 100 | 26.75 | 25 | 21 | 2 | 2 | 1.5 | 1.5 | 108 | 133 | 3800 | 5000 |
| | 100 | 26.75 | 25 | 21 | 2 | 2 | 1.5 | 1.5 | 98 | 133 | 3800 | 5000 |
| | 100 | 35 | 35 | 27 | 2 | 2 | 1.5 | 1.5 | 136 | 190 | 3400 | 4500 |
| | 100 | 35 | 35 | 27 | 2 | 2 | 1.5 | 1.5 | 136 | 190 | 3400 | 4500 |
| | 100 | 32 | 31 | 24.5 | 2 | 2 | 2 | 2 | 142 | 174 | 3400 | 4500 |
| | 100 | 22.75 | 21 | 18 | 2 | 2 | 1.5 | 1.5 | 102.8 | 106 | 3800 | 5000 |
| | 100 | 22.75 | 21 | 18 | 2 | 2 | 1.5 | 1.5 | 102.8 | 106 | 4000 | 5300 |
| | 100 | 26.75 | 25 | 21 | 6 | 6 | 1.5 | 1.5 | 108 | 133 | 3800 | 5000 |
| | 120 | 31.5 | 29 | 25 | 2.5 | 2.5 | 2 | 2 | 165 | 163 | 3200 | 4300 |
| | 120 | 31.5 | 29 | 25 | 2.5 | 2.5 | 2 | 2 | 165 | 163 | 3200 | 4300 |

| Designations | Abutment and fillet dimensions | | | | | | | Calculation coefficient | | | | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $da_{max}$ | $db_{min}$ | $Da_{min}$ | $Da_{max}$ | $Db_{min}$ | $Ca_{min}$ | $Cb_{min}$ | e | Y | Y0 | a | |
| | mm | | | | | | | | | | | kg |
| **30610** | 57 | 62 | 72 | 82 | 79 | 3 | 4.5 | 0.31 | 2 | 1.08 | 16 | 0.331 |
| **32010X3A/HAP5** | 57 | 64 | 73 | 79 | 80 | 4 | 5 | 0.36 | 1.7 | 0.92 | 17 | 0.430 |
| **32010X3A-SG** | 57 | 64 | 73 | 79 | 80 | 4 | 5 | 0.36 | 1.7 | 0.92 | 17 | 0.43 |
| **33110** | 56 | 55 | 72 | 80 | 82 | 4 | 6 | 0.41 | 1.46 | 0.8 | 20 | 0.581 |
| **33210** | 57 | 58 | 75 | 83 | 88 | 3 | 7.5 | 0.41 | 1.5 | 0.8 | 23 | 1.17 |
| **30210** | 58 | 57 | 79 | 83 | 86 | 3 | 5 | 0.42 | 1.4 | 0.79 | 20 | 0.55 |
| **30210X2-HQ** | 57 | 57 | 78 | 83 | 86 | 3 | 5.8 | 0.42 | 1.4 | 0.79 | 21 | 0.576 |
| **32210** | 58 | 57 | 78 | 83 | 85 | 3 | 5.5 | 0.43 | 1.4 | 0.8 | 21 | 0.640 |
| **32210A** | 60 | 59 | 76 | 90 | 86 | 3 | 6 | 0.42 | 1.4 | 0.78 | 21 | 0.612 |
| **30310-1** | 65 | 60 | 95 | 100 | 103 | 4 | 6 | 0.35 | 1.74 | 0.96 | 23 | 1.26 |
| **30310** | 65 | 60 | 95 | 100 | 103 | 4 | 6 | 0.35 | 1.7 | 0.96 | 23 | 1.26 |
| **31310** | 63 | 10 | 86 | 102 | 104 | 3 | 10 | 0.83 | 0.7 | 0.4 | 35 | 1.25 |
| **32310** | 61 | 60 | 90 | 100 | 102 | 5 | 9.5 | 0.35 | 1.7 | 0.96 | 27 | 1.26 |
| **32310/YA6** | 64 | 51 | 89 | 110 | 103 | 4 | 9.3 | 0.35 | 1.7 | 0.96 | 27 | 1.97 |
| **306/50.8** | 61 | 57 | 84 | 94 | 95 | 4 | 6 | 0.3 | 2 | 1.1 | 23 | 1.27 |
| **33011** | 62 | 65 | 78 | 83 | 87 | 4.5 | 5.5 | 0.31 | 1.92 | 1.06 | 19 | 0.839 |
| **32011** | 64 | 63 | 79 | 83 | 88 | 4.5 | 5.5 | 0.41 | 1.5 | 0.81 | 20 | 0.564 |
| **33111** | 64 | 63 | 81 | 88 | 92 | 3 | 7 | 0.37 | 1.6 | 0.88 | 22 | 0.881 |
| **33111/HA** | 64 | 63 | 81 | 88 | 92 | 3 | 7 | 0.37 | 1.6 | 0.88 | 22 | 0.881 |
| **32211** | 62 | 64 | 87 | 91 | 95 | 4 | 5.7 | 0.4 | 1.5 | 0.81 | 22 | 0.878 |
| **32211/HAP6X** | 62 | 64 | 87 | 91 | 95 | 4 | 5.7 | 0.4 | 1.5 | 0.81 | 22 | 0.878 |
| **33211** | 63 | 64 | 85 | 93 | 96 | 6 | 8 | 0.4 | 1.5 | 0.8 | 25 | 1.17 |
| **33211/HAP6X** | 63 | 64 | 85 | 93 | 96 | 6 | 8 | 0.4 | 1.5 | 0.8 | 25 | 1.17 |
| **33211X2A** | 64 | 64 | 85 | 92 | 97 | 4.5 | 7.5 | 0.4 | 1.5 | 0.81 | 24 | 1.01 |
| **30211** | 64 | 64 | 88 | 91 | 95 | 4 | 5 | 0.4 | 1.5 | 0.81 | 21 | 0.713 |
| **30211/YA** | 65 | 64 | 87 | 93 | 95 | 3 | 4.8 | 0.4 | 1.5 | 0.81 | 21 | 0.689 |
| **32211/YA6** | 65 | 74 | 85 | 93 | 95 | 3 | 5.8 | 0.4 | 1.5 | 0.81 | 22 | 0.875 |
| **30311** | 70 | 65 | 104 | 110 | 112 | 4 | 6.5 | 0.35 | 1.7 | 0.96 | 25 | 1.65 |
| **30311R** | 70 | 65 | 104 | 110 | 112 | 4 | 6.5 | 0.35 | 1.7 | 0.96 | 25 | 1.71 |