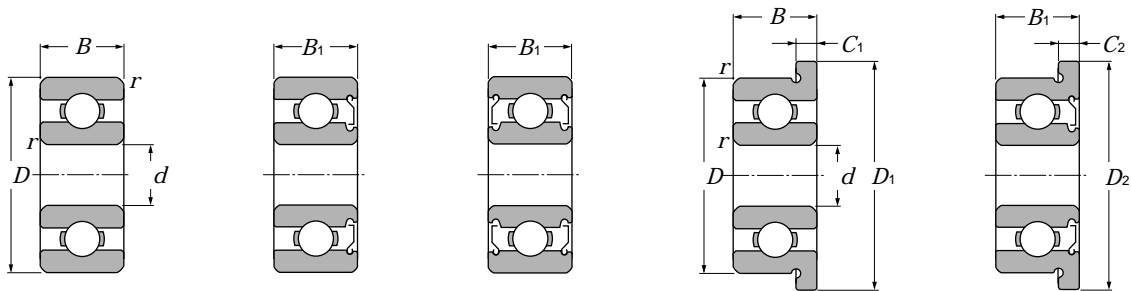


Miniature and Extra Small Ball Bearings

Metric series



Open type

With single shield (Z)

With double shield (ZZ)

Open type with flange (FL)

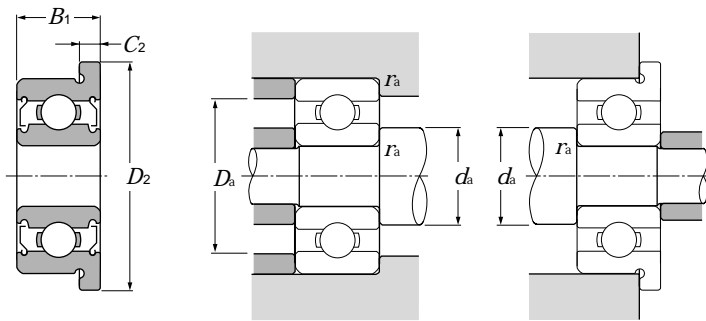
With flanged outer ring and single shield (FL...Z)

d 1.5 ~ 5 mm

| d | Boundary dimensions | | | | | | | | Basic load ratings | | | | Factor f_0 | Limiting speeds | |
|-----|---------------------|-----|----------------|----------------|----------------|----------------|----------------------------------|----------------|--------------------|---------------------------|----------------|---------------------------|-----------------|-----------------|---------|
| | D | B | B ₁ | D ₁ | mm | | r _{s min} ¹⁾ | C _r | dynamic N | static C _{0r} | dynamic kgf | static C _{0r} | | grease | oil |
| | | | | | D ₂ | C ₁ | | | | | | | | | |
| 1.5 | 4 | 1.2 | 2 | 5 | 5 | 0.4 | 0.6 | 0.15 | 102 | 29.0 | 10.0 | 3.00 | 13.6 | 88 000 | 100 000 |
| | 5 | 2 | 2.6 | 6.5 | 6.5 | 0.6 | 0.8 | 0.15 | 171 | 51.0 | 17.0 | 5.00 | 13.3 | 79 000 | 93 000 |
| | 6 | 2.5 | 3 | 7.5 | 7.5 | 0.6 | 0.8 | 0.15 | 274 | 86.0 | 28.0 | 9.00 | 12.3 | 71 000 | 84 000 |
| 2 | 4 | 1.2 | 2 | | | | | 0.05 | 104 | 37.0 | 11.0 | 4.00 | 14.8 | 83 000 | 98 000 |
| | 5 | 1.5 | 2.3 | 6.1 | 6.1 | 0.5 | 0.6 | 0.08 | 171 | 51.0 | 17.0 | 5.00 | 13.3 | 74 000 | 87 000 |
| | 5 | 2 | 2.5 | | | | | 0.1 | 171 | 51.0 | 17.0 | 5.00 | 13.3 | 74 000 | 87 000 |
| | 6 | 2.3 | 3 | 7.5 | 7.5 | 0.6 | 0.8 | 0.15 | 279 | 89.0 | 28.0 | 9.00 | 12.8 | 67 000 | 79 000 |
| | 6 | 2.5 | | 7.2 | | 0.6 | | 0.15 | 279 | 89.0 | 28.0 | 9.00 | 12.8 | 67 000 | 79 000 |
| | 7 | 2.5 | | | | | | 0.15 | 390 | 120 | 40.0 | 12.0 | 11.9 | 59 000 | 70 000 |
| | 7 | 2.8 | 3.5 | 8.5 | 8.5 | 0.7 | 0.9 | 0.15 | 380 | 125 | 39.0 | 13.0 | 12.4 | 62 000 | 73 000 |
| 2.5 | 5 | 1.5 | 2.3 | | | | | 0.08 | 153 | 59.0 | 16.0 | 6.00 | 15.0 | 70 000 | 82 000 |
| | 6 | 1.8 | 2.6 | 7.1 | 7.1 | 0.5 | 0.8 | 0.08 | 209 | 73.0 | 21.0 | 7.50 | 14.2 | 65 000 | 76 000 |
| | 7 | 3 | 3 | | 8.2 | 0.6 | 0.6 | 0.15 | 284 | 96.0 | 29.0 | 10.0 | 13.8 | 59 000 | 70 000 |
| | 7 | 2.5 | 3.5 | 8.5 | 8.5 | 0.7 | 0.9 | 0.15 | 284 | 96.0 | 29.0 | 10.0 | 13.8 | 59 000 | 70 000 |
| | 8 | 2.5 | 2.8 | 9.2 | | 0.6 | | 0.15 | 430 | 152 | 44.0 | 16.0 | 13.2 | 56 000 | 66 000 |
| | 8 | 2.8 | 4 | 9.5 | 9.5 | 0.7 | 0.9 | 0.15 | 550 | 174 | 56.0 | 18.0 | 11.5 | 56 000 | 66 000 |
| | 3 | 6 | 2 | 2.5 | 7.2 | 7.2 | 0.6 | 0.6 | 0.08 | 242 | 94.0 | 25.0 | 9.50 | 14.7 | 60 000 |
| 7 | | 2 | 3 | 8.1 | 8.1 | 0.5 | 0.8 | 0.1 | 390 | 130 | 40.0 | 13.0 | 13.0 | 58 000 | 68 000 |
| 8 | | 2.5 | | 9.2 | | 0.6 | | 0.15 | 560 | 180 | 57.0 | 18.0 | 11.9 | 54 000 | 63 000 |
| 8 | | 3 | 4 | 9.5 | 9.5 | 0.7 | 0.9 | 0.15 | 560 | 180 | 57.0 | 18.0 | 11.9 | 54 000 | 63 000 |
| 9 | | 2.5 | 4 | 10.2 | 10.6 | 0.6 | 0.8 | 0.15 | 635 | 219 | 65.0 | 22.0 | 12.4 | 50 000 | 59 000 |
| 9 | | 3 | 5 | 10.5 | 10.5 | 0.7 | 1 | 0.15 | 635 | 219 | 65.0 | 22.0 | 12.4 | 50 000 | 59 000 |
| 10 | | 4 | 4 | 11.5 | 11.5 | 1 | 1 | 0.15 | 640 | 224 | 65.0 | 23.0 | 12.7 | 50 000 | 58 000 |
| 4 | 7 | 2 | 2.5 | 8.2 | 8.2 | 0.6 | 0.6 | 0.08 | 222 | 88.0 | 23.0 | 9.00 | 15.3 | 54 000 | 63 000 |
| | 8 | 2 | 3 | 9.2 | 9.2 | 0.6 | 0.6 | 0.08 | 395 | 140 | 40.0 | 14.0 | 13.9 | 52 000 | 61 000 |
| | 9 | 2.5 | 4 | 10.3 | 10.3 | 0.6 | 1 | 0.15 | 640 | 224 | 65.0 | 23.0 | 12.7 | 49 000 | 57 000 |
| | 10 | 3 | 4 | 11.2 | 11.6 | 0.6 | 0.8 | 0.15 | 650 | 235 | 66.0 | 24.0 | 13.3 | 46 000 | 55 000 |
| | 11 | 4 | 4 | 12.5 | 12.5 | 1 | 1 | 0.15 | 715 | 276 | 73.0 | 28.0 | 13.7 | 45 000 | 52 000 |
| | 12 | 4 | 4 | 13.5 | 13.5 | 1 | 1 | 0.2 | 970 | 360 | 99.0 | 36.0 | 12.8 | 43 000 | 51 000 |
| | 13 | 5 | 5 | 15 | 15 | 1 | 1 | 0.2 | 1 310 | 490 | 134 | 50.0 | 12.4 | 42 000 | 49 000 |
| 5 | 8 | 2 | 2.5 | 9.2 | 9.2 | 0.6 | 0.6 | 0.08 | 217 | 91.0 | 22.0 | 9.50 | 15.8 | 49 000 | 57 000 |
| | 9 | 2.5 | 3 | 10.2 | 10.2 | 0.6 | 0.6 | 0.15 | 500 | 211 | 51.0 | 21.0 | 14.6 | 46 000 | 55 000 |
| | 10 | 3 | 4 | 11.2 | 11.6 | 0.6 | 0.8 | 0.15 | 715 | 276 | 73.0 | 28.0 | 13.7 | 45 000 | 52 000 |

1) Smallest allowable dimension for chamfer dimension r.

Miniature and Extra Small Ball Bearings



With flanged outer ring and double shield (FL...ZZ)

Dynamic equivalent radial load
 $P_r = X F_r + Y F_a$

| $\frac{f_0 \cdot F_a}{C_{or}}$ | e | $\frac{F_a}{F_r}$ | | $\frac{F_a}{F_r} > e$ | |
|--------------------------------|------|-------------------|---|-----------------------|------|
| | | X | Y | X | Y |
| 0.172 | 0.19 | | | | 2.30 |
| 0.345 | 0.22 | | | | 1.99 |
| 0.689 | 0.26 | | | | 1.71 |
| 1.03 | 0.28 | | | | 1.55 |
| 1.38 | 0.30 | 1 | 0 | 0.56 | 1.45 |
| 2.07 | 0.34 | | | | 1.31 |
| 3.45 | 0.38 | | | | 1.15 |
| 5.17 | 0.42 | | | | 1.04 |
| 6.89 | 0.44 | | | | 1.00 |

Static equivalent radial load

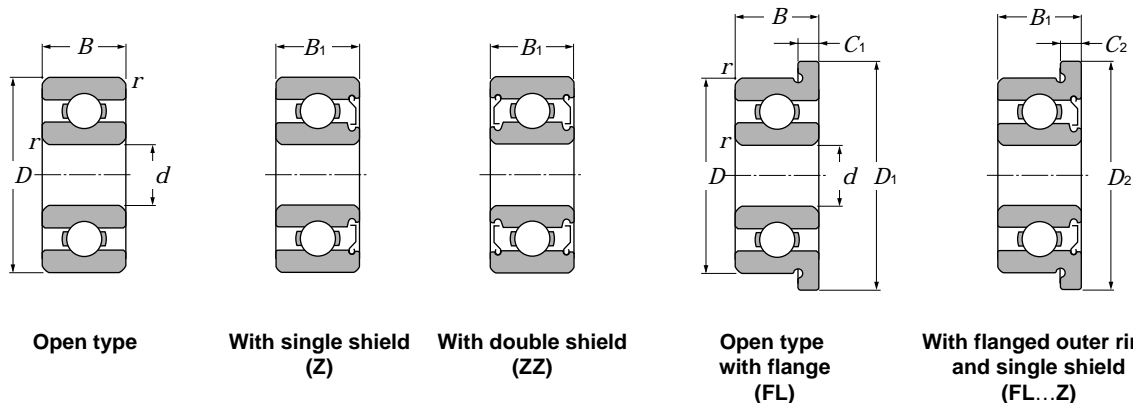
$$P_{or} = 0.6 F_r + 0.5 F_a$$

When $P_{or} < F_r$ use $P_{or} = F_r$

| Bearing numbers | | | | | | Abutment and fillet dimensions | | | | Mass (approx.) | |
|-----------------|--------------------|--------------------|---------------------------|-----------------------------------|-----------------------------------|--------------------------------|-------------------------|----------|------|-------------------|--------------------|
| open | with single shield | with double shield | unsealed type with flange | with flanged OR and single shield | with flanged OR and double shield | mm | | r_{as} | g | | |
| | | | | | | d_a min | d_a max ²⁾ | max | max | open | with flange |
| 68/1.5 | W68/1.5SA | SSA | FL68/1.5 | FLW68/1.5SA | SSA | 2.3 | 2.4 | 3.2 | 0.05 | 0.07 | 0.09 |
| 69/1.5A | W69/1.5ASA | SSA | FL69/1.5A | FLW69/1.5ASA | SSA | 2.7 | 2.9 | 3.8 | 0.15 | 0.18 | 0.24 |
| 60/1.5 | W60/1.5ZA | ZZA | FL60/1.5 | FLW60/1.5ZA | ZZA | 2.7 | 3.0 | 4.8 | 0.15 | 0.35 | 0.42 |
| 672 | | | | | | 2.5 | 2.6 | 3.5 | 0.05 | 0.06 | |
| 682 | W682SA | SSA | FL682 | FLW682SA | SSA | 2.8 | 2.9 | 4.2 | 0.08 | 0.13 | 0.17 |
| BC2-5 | WBC2-5SA | SSA | | | | 2.8 | 2.9 | 4.2 | 0.10 | 0.16 | |
| 692 | W692SA | SSA | FL692 | FLW692SA | SSA | 3.2 | 3.3 | 4.8 | 0.15 | 0.31 | 0.38 |
| BC2-6 | | | FLBC2-6 | | | 3.2 | 3.3 | 4.8 | 0.15 | 0.32 | 0.38 |
| BC2-7A | | | | | | 3.2 | 3.6 | 5.8 | 0.15 | 0.44 | |
| 602 | W602ZA | ZZA | FL602 | FLW602ZA | ZZA | 3.2 | 3.7 | 5.8 | 0.15 | 0.54 | 0.64 |
| 67/2.5 | W67/2.5ZA | ZZA | | | | 3.1 | 3.3 | 4.4 | 0.08 | 0.11 | |
| 68/2.5 | W68/2.5ZA | ZZA | FL68/2.5 | FLW68/2.5ZA | ZZA | 3.1 | 3.6 | 4.8 | 0.08 | 0.22 | 0.26 |
| | WBC2.5-7ZA | ZZA | | FLWBC2.5-7ZA | ZZA | 3.7 | 4.0 | 5.8 | 0.15 | 0.6 ³⁾ | 0.67 ³⁾ |
| 69/2.5 | W69/2.5SA | SSA | FL69/2.5 | FLW69/2.5SA | SSA | 3.7 | 4.0 | 5.8 | 0.15 | 0.43 | 0.53 |
| BC2.5-8 | WBC2.5-8ZA | ZZA | FLBC2.5-8 | | | 3.7 | 4.3 | 6.8 | 0.15 | 0.57 | 0.65 |
| 60/2.5 | W60/2.5ZA | ZZA | FL60/2.5 | FLW60/2.5ZA | ZZA | 3.7 | 4.1 | 6.8 | 0.15 | 0.72 | 0.83 |
| 673 | WA673SA | SSA | FL673 | FLWA673SA | SSA | 3.6 | 4.1 | 5.4 | 0.08 | 0.2 | 0.26 |
| 683 | W683ZA | ZZA | FL683 | FLW683ZA | ZZA | 3.9 | 4.1 | 5.8 | 0.1 | 0.33 | 0.38 |
| BC3-8 | | | FLBC3-8 | | | 4.2 | 4.4 | 6.8 | 0.15 | 0.52 | 0.6 |
| 693 | W693Z | ZZ | FL693 | FLW693Z | ZZ | 4.2 | 4.4 | 6.8 | 0.15 | 0.61 | 0.72 |
| BC3-9 | WBC3-9ZA | ZZA | FLBC3-9 | FLAWBC3-9ZA | ZZA | 4.2 | 5.0 | 7.8 | 0.15 | 0.71 | 0.79 |
| 603 | W603Z | ZZ | FL603 | FLW603Z | ZZ | 4.2 | 5.0 | 7.8 | 0.15 | 0.92 | 1 |
| 623 | 623Z | ZZ | FL623 | FL623Z | ZZ | 4.2 | 5.2 | 8.8 | 0.15 | 1.6 | 1.8 |
| 674A | WA674ASA | SSA | FL674A | FLWA674ASA | SSA | 4.6 | 5.0 | 6.4 | 0.08 | 0.28 | 0.35 |
| BC4-8 | WBC4-8Z | ZZ | FLBC4-8 | FLWBC4-8Z | ZZ | 4.8 | 5.0 | 6.8 | 0.08 | 0.38 | 0.46 |
| 684AX50 | W684AX50Z | ZZ | FL684AX50 | FLW684AX50Z | ZZ | 5.0 | 5.2 | 7.8 | 0.1 | 0.67 | 0.76 |
| BC4-10 | WBC4-10Z | ZZ | FLBC4-10 | FLAWBC4-10Z | ZZ | 5.2 | 6.0 | 8.8 | 0.15 | 1 | 1.1 |
| 694 | 694Z | ZZ | FL694 | FL694Z | ZZ | 5.2 | 6.4 | 9.8 | 0.15 | 1.8 | 2 |
| 604 | 604Z | ZZ | FL604 | FL604Z | ZZ | 5.6 | 6.6 | 10.4 | 0.2 | 2.1 | 2.3 |
| 624 | 624Z | ZZ | FL624 | FL624Z | ZZ | 5.6 | 6.2 | 11.4 | 0.2 | 3.2 | 3.5 |
| 634 | 634Z | ZZ | | | | 6 | 7.6 | 14 | 0.3 | 5.1 | |
| 675 | WA675Z | ZZ | FL675 | FLWA675Z | ZZ | 5.6 | 6.0 | 7.4 | 0.08 | 0.32 | 0.4 |
| BC5-9 | WBC5-9Z | ZZ | FLBC5-9 | FLWBC5-9Z | ZZ | 5.2 | 6.1 | 7.8 | 0.15 | 0.55 | 0.63 |
| BC5-10 | WBC5-10Z | ZZ | FLBC5-10 | FLAWBC5-10Z | ZZ | 6.2 | 6.4 | 8.8 | 0.15 | 0.88 | 0.97 |

2) This dimension applies to sealed and shielded bearings. 3) Values for double shielded bearings shown.

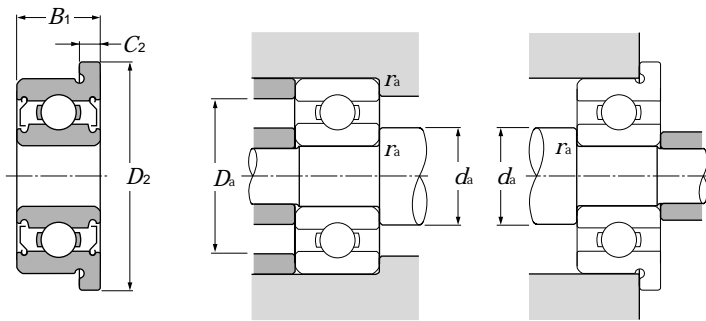
Miniature and Extra Small Ball Bearings



d 5 ~ 9 mm

| d | Boundary dimensions | | | | | | | | Basic load ratings | | | | Factor f_0 | Limiting speeds | |
|----------|---------------------|-----|----------------|----------------|----------------|----------------|----------------|-------------------|--------------------|---------------------------|----------------|---------------------------|-----------------|-----------------|--------|
| | D | B | B ₁ | mm | | | | $r_{s \min}^{1)}$ | dynamic N | static C _{0r} | dynamic kgf | static C _{0r} | | grease | oil |
| | | | | D ₁ | D ₂ | C ₁ | C ₂ | | | | | | | | |
| 5 | 11 | 4 | 4 | | 12.6 | | 0.8 | 0.15 | 715 | 282 | 73.0 | 29.0 | 14.0 | 43 000 | 51 000 |
| | 11 | 3 | 5 | 12.5 | 12.5 | 0.8 | 1 | 0.15 | 715 | 282 | 73.0 | 29.0 | 14.0 | 43 000 | 51 000 |
| | 13 | 4 | 4 | 15 | 15.2 | 1 | 1 | 0.2 | 1 080 | 430 | 110 | 44.0 | 13.4 | 40 000 | 47 000 |
| | 13 | 5 | 5 | | 15 | | 1 | 0.2 | 1 080 | 430 | 110 | 44.0 | 13.4 | 40 000 | 47 000 |
| | 14 | 5 | 5 | 16 | 16 | 1 | 1 | 0.2 | 1 330 | 505 | 135 | 52.0 | 12.8 | 39 000 | 46 000 |
| | 16 | 5 | 5 | 18 | 18 | 1 | 1 | 0.3 | 1 760 | 680 | 179 | 69.0 | 12.4 | 37 000 | 44 000 |
| | 19 | 6 | 6 | | | | | 0.3 | 2 340 | 885 | 238 | 90.0 | 12.1 | 34 000 | 40 000 |
| 6 | 10 | 2.5 | 3 | 11.2 | 11.2 | 0.6 | 0.6 | 0.1 | 465 | 196 | 47.0 | 20.0 | 15.2 | 43 000 | 51 000 |
| | 12 | 3 | 4 | 13.2 | 13.6 | 0.6 | 0.8 | 0.15 | 830 | 365 | 85.0 | 37.0 | 14.5 | 40 000 | 47 000 |
| | 13 | 3.5 | 5 | 15 | 15 | 1.0 | 1.1 | 0.15 | 1 080 | 440 | 110 | 45.0 | 13.7 | 39 000 | 46 000 |
| | 15 | 5 | 5 | 17 | 17 | 1.2 | 1.2 | 0.2 | 1 350 | 530 | 137 | 54.0 | 13.3 | 37 000 | 44 000 |
| | 16 | 6 | 6 | | | | | 0.2 | 1 770 | 695 | 181 | 71.0 | 12.7 | 36 000 | 42 000 |
| | 17 | 6 | 6 | 19 | 19 | 1.2 | 1.2 | 0.3 | 2 190 | 865 | 224 | 88.0 | 12.3 | 35 000 | 42 000 |
| | 19 | 6 | 6 | 22 | 22 | 1.5 | 1.5 | 0.3 | 2 340 | 885 | 238 | 90.0 | 12.1 | 34 000 | 40 000 |
| 7 | 11 | 2.5 | 3 | 12.2 | 12.2 | 0.6 | 0.6 | 0.1 | 555 | 269 | 56.0 | 27.0 | 15.6 | 40 000 | 47 000 |
| | 13 | 3 | 4 | 14.2 | 14.6 | 0.6 | 0.8 | 0.15 | 825 | 375 | 84.0 | 38.0 | 14.9 | 38 000 | 45 000 |
| | 14 | 3.5 | 5 | 16 | 16 | 1 | 1.1 | 0.15 | 1 170 | 505 | 120 | 51.0 | 14.0 | 37 000 | 44 000 |
| | 17 | 5 | 5 | 19 | 19 | 1.2 | 1.2 | 0.3 | 1 610 | 715 | 164 | 73.0 | 14.0 | 35 000 | 41 000 |
| | 19 | 6 | 6 | | | | | 0.3 | 2 240 | 910 | 228 | 93.0 | 12.9 | 34 000 | 40 000 |
| | 22 | 7 | 7 | | | | | 0.3 | 3 350 | 1 400 | 340 | 142 | 12.5 | 32 000 | 37 000 |
| 8 | 12 | 2.5 | 3.5 | 13.2 | 13.6 | 0.6 | 0.8 | 0.1 | 515 | 252 | 52.0 | 26.0 | 15.9 | 38 000 | 45 000 |
| | 14 | 3.5 | 4 | 15.6 | 15.6 | 0.8 | 0.8 | 0.15 | 820 | 385 | 84.0 | 39.0 | 15.2 | 36 000 | 43 000 |
| | 16 | 4 | 5 | 18 | 18 | 1 | 1.1 | 0.2 | 1 610 | 715 | 164 | 73.0 | 14.0 | 35 000 | 41 000 |
| | 19 | 6 | 6 | 22 | 22 | 1.5 | 1.5 | 0.3 | 1 990 | 865 | 202 | 88.0 | 13.8 | 33 000 | 39 000 |
| | 22 | 7 | 7 | 25 | 25 | 1.5 | 1.5 | 0.3 | 3 350 | 1 400 | 340 | 142 | 12.5 | 32 000 | 37 000 |
| | 24 | 8 | 8 | | | | | 0.3 | 4 000 | 1 590 | 410 | 162 | 11.7 | 31 000 | 36 000 |
| 9 | 14 | 3 | 4.5 | | | | | 0.1 | 920 | 465 | 94.0 | 48.0 | 15.5 | 36 000 | 42 000 |
| | 17 | 4 | 5 | 19 | 19 | 1 | 1.1 | 0.2 | 1 720 | 820 | 176 | 83.0 | 14.4 | 33 000 | 39 000 |
| | 20 | 6 | 6 | | | | | 0.3 | 2 480 | 1 090 | 253 | 111 | 13.5 | 32 000 | 38 000 |
| | 24 | 7 | 7 | | | | | 0.3 | 3 400 | 1 450 | 345 | 148 | 12.9 | 31 000 | 36 000 |
| | 26 | 8 | 8 | | | | | 0.6 | 4 550 | 1 960 | 465 | 200 | 12.4 | 30 000 | 35 000 |

1) Smallest allowable dimension for chamfer dimension r.



With flanged outer ring and double shield (FL...ZZ)

Dynamic equivalent radial load
 $P_r = X F_r + Y F_a$

| $\frac{f_0 \cdot F_a}{C_{or}}$ | e | $\frac{F_a}{F_r}$ | | $\frac{F_a}{F_r} > e$ | |
|--------------------------------|------|-------------------|---|-----------------------|------|
| | | X | Y | X | Y |
| 0.172 | 0.19 | | | | 2.30 |
| 0.345 | 0.22 | | | | 1.99 |
| 0.689 | 0.26 | | | | 1.71 |
| 1.03 | 0.28 | | | | 1.55 |
| 1.38 | 0.30 | 1 | 0 | 0.56 | 1.45 |
| 2.07 | 0.34 | | | | 1.31 |
| 3.45 | 0.38 | | | | 1.15 |
| 5.17 | 0.42 | | | | 1.04 |
| 6.89 | 0.44 | | | | 1.00 |

Static equivalent radial load

$P_{or} = 0.6 F_r + 0.5 F_a$

When $P_{or} < F_r$ use $P_{or} = F_r$

| Bearing numbers | | | | | | Abutment and fillet dimensions | | | | Mass (approx.) | |
|-----------------|--------------------|--------------------|---------------------------|-----------------------------------|-----------------------------------|--------------------------------|-------------------------|-----------|--------------|--------------------|---------------------------|
| open | with single shield | with double shield | unsealed type with flange | with flanged OR and single shield | with flanged OR and double shield | mm | | | g | | |
| | | | | | | d_a min | d_a max ²⁾ | D_a max | r_{as} max | unsealed type open | unsealed type with flange |
| - | WBC5-11Z | ZZ | | FLWBC5-11Z | ZZ | 6.2 | 6.8 | 9.8 | 0.2 | 1.8 | 2 |
| 685 | W685Z | ZZ | FL685 | FLW685Z | ZZ | 6.2 | 6.8 | 9.8 | 0.15 | 1.1 | 1.3 |
| 695 | 695Z | ZZ | FL695 | FL695Z | ZZ | 6.6 | 6.9 | 11.4 | 0.2 | 2.4 | 2.7 |
| - | WBC5-13Z | ZZ | | FLWBC5-13Z | ZZ | 6.6 | 6.9 | 11.4 | 0.2 | 3.4 ³⁾ | 3.7 ³⁾ |
| 605 | 605Z | ZZ | FL605 | FL605Z | ZZ | 6.6 | 7.4 | 12.4 | 0.2 | 3.5 | 3.9 |
| 625 | 625Z | ZZ | FL625 | FL625Z | ZZ | 7 | 7.6 | 14 | 0.3 | 4.8 | 5.2 |
| 635 | 635Z | ZZ | | | | 7 | 9.5 | 17 | 0.3 | 8 | |
| 676A | WA676AZ | ZZ | FL676A | FLWA676AZ | ZZ | 6.6 | 6.7 | 9.2 | 0.1 | 0.65 | 0.74 |
| BC6-12 | WBC6-12Z | ZZ | FLBC6-12 | FLAWBC6-12Z | ZZ | 7.2 | 7.9 | 10.8 | 0.15 | 1.3 | 1.4 |
| 686 | W686Z | ZZ | FL686 | FLW686Z | ZZ | 7.0 | 7.2 | 11.8 | 0.15 | 1.9 | 2.2 |
| 696 | 696Z | ZZ | FL696 | FL696Z | ZZ | 7.6 | 7.8 | 13.4 | 0.2 | 3.8 | 4.3 |
| BC6-16A | BC6-16AZ | ZZ | | | | 7.6 | 8.0 | 14.4 | 0.2 | 5.2 | |
| 606 | 606Z | ZZ | FL606 | FL606Z | ZZ | 8 | 8.6 | 15 | 0.3 | 6 | 6.5 |
| 626 | 626Z | ZZ | FL626 | FL626Z | ZZ | 8 | 9.5 | 17 | 0.3 | 8.1 | 9.2 |
| 677 | WA677Z | ZZ | FL677 | FLWA677Z | ZZ | 7.8 | 8.1 | 10.2 | 0.1 | 0.67 | 0.77 |
| BC7-13 | WBC7-13Z | ZZ | FLBC7-13 | FLAWBC7-13Z | ZZ | 8.2 | 8.9 | 11.8 | 0.15 | 1.4 | 1.5 |
| 687A | W687AZ | ZZ | FL687A | FLW687AZ | ZZ | 8.2 | 8.7 | 12.8 | 0.15 | 2.1 | 2.4 |
| 697 | 697Z | ZZ | FL697 | FL697Z | ZZ | 9 | 10.0 | 15 | 0.3 | 5.2 | 5.7 |
| 607 | 607Z | ZZ | | | | 9 | 10.4 | 17 | 0.3 | 8 | |
| 627 | 627Z | ZZ | | | | 9 | 12.2 | 20 | 0.3 | 13 | |
| 678A | W678AZ | ZZ | FL678A | FLAW678AZ | ZZ | 8.8 | 9.1 | 11.2 | 0.1 | 0.75 | 0.86 |
| BC8-14 | WBC8-14Z | ZZ | FLBC8-14 | FLWBC8-14Z | ZZ | 9.2 | 9.5 | 12.8 | 0.15 | 1.8 | 1.9 |
| 688A | W688AZ | ZZ | FL688A | FLW688AZ | ZZ | 9.6 | 10.0 | 14.4 | 0.2 | 3.1 | 3.5 |
| 698 | 698Z | ZZ | FL698 | FL698Z | ZZ | 10 | 10.6 | 17 | 0.3 | 7.3 | 8.4 |
| 608 | 608Z | ZZ | FL608 | FL608Z | ZZ | 10 | 12.2 | 20 | 0.3 | 12 | 13 |
| 628 | 628Z | ZZ | | | | 10 | 12.1 | 22 | 0.3 | 17 | |
| 679 | W679Z | ZZ | | | | 9.8 | 10.4 | 13.2 | 0.1 | 1.4 | |
| 689 | W689Z | ZZ | FL689 | FLW689Z | ZZ | 10.6 | 10.7 | 15.4 | 0.2 | 3.2 | 3.6 |
| 699 | 699Z | ZZ | - | - | - | 11 | 11.6 | 18 | 0.3 | 8.2 | |
| 609 | 609Z | ZZ | - | - | - | 11 | 13.1 | 22 | 0.3 | 14 | |
| 629X50 | 629X50Z | ZZ | - | - | - | 13 | 13.9 | 22 | 0.3 | 20 | |

2) This dimension applies to sealed and shielded bearings. 3) Values for double shielded bearings shown.