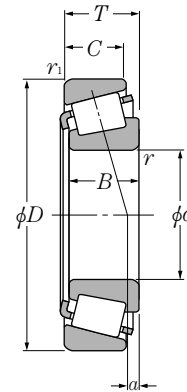


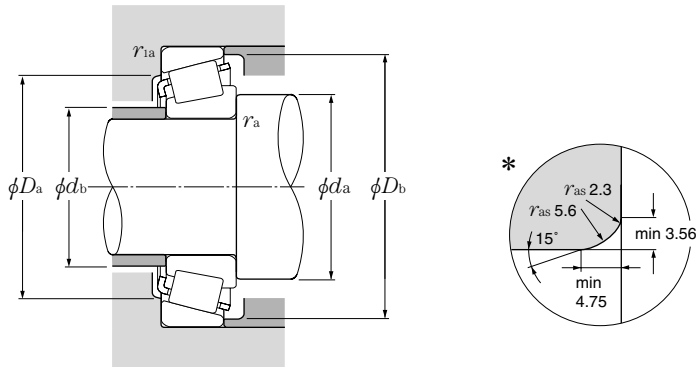
Inch series J series



d 31.750 ~ 34.925mm

| d | Boundary dimensions | | | | dynamic kN | Basic load ratings | | | Limiting speeds | |
|--------|---------------------|--------|--------|--------|----------------|--------------------|----------------|-----------------|-------------------|-------|
| | D | T | B | C | | static | dynamic | static | grease | oil |
| | mm | | | | | | kgf | | min ⁻¹ | |
| | | | | | C _r | C _{or} | C _r | C _{or} | | |
| 31.750 | 62.000 | 19.050 | 20.638 | 14.288 | 46.5 | 54.0 | 4 750 | 5 500 | 6 100 | 8 200 |
| | 66.421 | 25.400 | 25.357 | 20.638 | 69.0 | 81.5 | 7 050 | 8 300 | 5 700 | 7 600 |
| | 68.262 | 22.225 | 22.225 | 17.462 | 57.0 | 67.0 | 5 800 | 6 850 | 5 800 | 7 700 |
| | 68.262 | 22.225 | 22.225 | 17.462 | 57.0 | 67.0 | 5 800 | 6 850 | 5 800 | 7 700 |
| | 69.012 | 19.845 | 19.583 | 15.875 | 48.5 | 58.0 | 4 900 | 5 900 | 5 600 | 7 400 |
| | 69.012 | 19.845 | 19.583 | 15.875 | 48.5 | 58.0 | 4 900 | 5 900 | 5 600 | 7 400 |
| | 69.850 | 23.812 | 25.357 | 19.050 | 69.0 | 81.5 | 7 050 | 8 300 | 5 700 | 7 600 |
| | 69.850 | 23.812 | 25.357 | 19.050 | 69.0 | 81.5 | 7 050 | 8 300 | 5 700 | 7 600 |
| | 72.626 | 30.162 | 29.997 | 23.812 | 84.5 | 98.0 | 8 600 | 9 950 | 5 500 | 7 300 |
| | 72.626 | 30.162 | 29.997 | 23.812 | 84.5 | 98.0 | 8 600 | 9 950 | 5 500 | 7 300 |
| | 73.025 | 22.225 | 22.225 | 17.462 | 56.5 | 68.0 | 5 750 | 6 900 | 5 300 | 7 000 |
| | 73.025 | 22.225 | 23.812 | 17.462 | 62.5 | 75.5 | 6 400 | 7 700 | 5 200 | 7 000 |
| | 73.025 | 29.370 | 27.783 | 23.020 | 72.0 | 97.0 | 7 350 | 9 850 | 5 400 | 7 100 |
| | 73.812 | 29.370 | 27.783 | 23.020 | 72.0 | 97.0 | 7 350 | 9 850 | 5 400 | 7 100 |
| | 76.200 | 29.370 | 28.575 | 23.020 | 78.0 | 105 | 7 950 | 10 700 | 5 100 | 6 800 |
| | 79.375 | 29.370 | 29.771 | 23.812 | 93.0 | 114 | 9 450 | 11 600 | 4 900 | 6 600 |
| 33.338 | 68.262 | 22.225 | 22.225 | 17.462 | 56.5 | 71.0 | 5 750 | 7 250 | 5 700 | 7 500 |
| | 69.012 | 19.845 | 19.583 | 15.875 | 48.5 | 58.0 | 4 900 | 5 900 | 5 600 | 7 400 |
| | 69.850 | 23.812 | 25.357 | 19.050 | 69.0 | 81.5 | 7 050 | 8 300 | 5 700 | 7 600 |
| | 72.626 | 30.162 | 29.997 | 23.812 | 84.5 | 98.0 | 8 600 | 9 950 | 5 500 | 7 300 |
| | 73.025 | 29.370 | 27.783 | 23.020 | 72.0 | 97.0 | 7 350 | 9 850 | 5 400 | 7 100 |
| | 76.200 | 23.812 | 25.654 | 19.050 | 73.0 | 90.5 | 7 450 | 9 200 | 5 100 | 6 800 |
| | 76.200 | 29.370 | 28.575 | 23.020 | 78.0 | 105 | 7 950 | 10 700 | 5 100 | 6 800 |
| | 76.200 | 29.370 | 28.575 | 23.020 | 78.0 | 105 | 7 950 | 10 700 | 5 100 | 6 800 |
| 79.375 | 25.400 | 24.074 | 17.462 | 65.5 | 67.0 | 6 650 | 6 800 | 5 200 | 6 900 | |
| 34.925 | 65.088 | 18.034 | 18.288 | 13.970 | 46.5 | 56.0 | 4 750 | 5 700 | 5 700 | 7 600 |
| | 65.088 | 18.034 | 18.288 | 13.970 | 46.5 | 56.0 | 4 750 | 5 700 | 5 700 | 7 600 |
| | 69.012 | 19.845 | 19.583 | 15.875 | 48.5 | 58.0 | 4 900 | 5 900 | 5 600 | 7 400 |
| | 72.233 | 25.400 | 25.400 | 19.842 | 65.0 | 84.5 | 6 600 | 8 600 | 5 400 | 7 200 |
| | 72.238 | 20.638 | 20.638 | 15.875 | 48.0 | 58.5 | 4 900 | 5 950 | 5 300 | 7 000 |
| | 73.025 | 22.225 | 22.225 | 17.462 | 56.5 | 68.0 | 5 750 | 6 900 | 5 300 | 7 000 |
| | 73.025 | 22.225 | 22.225 | 17.462 | 56.5 | 68.0 | 5 750 | 6 900 | 5 300 | 7 000 |
| | 73.025 | 22.225 | 23.812 | 17.462 | 62.5 | 75.5 | 6 400 | 7 700 | 5 200 | 7 000 |
| | 73.025 | 23.812 | 24.608 | 19.050 | 71.0 | 85.0 | 7 200 | 8 700 | 5 300 | 7 100 |
| | 73.025 | 23.812 | 24.608 | 19.050 | 71.0 | 85.0 | 7 200 | 8 700 | 5 300 | 7 100 |
| | 73.025 | 23.812 | 25.654 | 19.050 | 73.0 | 90.5 | 7 450 | 9 200 | 5 100 | 6 800 |
| | 76.200 | 23.812 | 25.654 | 19.050 | 73.0 | 90.5 | 7 450 | 9 200 | 5 100 | 6 800 |

Note: 1. Chamfer dimensions on the back face of the inner and outer rings of the bearing are larger than maximum values for installation dimensions r_{as} and r_{1as} .
2. Chamfer dimensions of bearings marked " * " are shown in drawings.



Equivalent radial load dynamic

$$P_r = XF_r + YF_a$$

| $\frac{F_a}{F_r} \leq e$ | | $\frac{F_a}{F_r} > e$ | |
|--------------------------|---|-----------------------|-------|
| X | Y | X | Y |
| 1 | 0 | 0.4 | Y_2 |

static

$$P_{or} = 0.5F_r + Y_0F_a$$

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

For values of e , Y_2 and Y_0 see the table below.

| Bearing numbers | Abutment and fillet dimensions | | | | | | Load center mm | Constant e | Axial load factors | | Mass kg (approx.) |
|---------------------|--------------------------------|-------|-------|-------|-----------------|------------------|-------------------|-----------------|--------------------|------|-------------------------|
| | mm | | | | | | | | a | e | |
| | d_a | d_b | D_a | D_b | r_{as} max | r_{1as} max | | | | | |
| 4T-15126/15245 | 37 | 36.5 | 55 | 58 | 0.8 | 1.3 | 6.0 | 0.35 | 1.71 | 0.94 | 0.255 |
| 4T-2580/2520 | 38.5 | 37.5 | 57 | 62 | 0.8 | 3.3 | 9.1 | 0.27 | 2.19 | 1.21 | 0.409 |
| 4T-02475/02420 | 44.5 | 38.5 | 59 | 63 | 3.5 | 1.5 | 5.2 | 0.42 | 1.44 | 0.79 | 0.38 |
| 4T-02476/02420 | 39 | 38.5 | 59 | 63 | 0.8 | 1.5 | 5.2 | 0.42 | 1.44 | 0.79 | 0.383 |
| 4T-14124/14276 | 38.5 | 37.5 | 60 | 63 | 0.8 | 1.3 | 4.1 | 0.38 | 1.57 | 0.86 | 0.359 |
| 4T-14125A/14276 | 44 | 37.5 | 60 | 63 | 3.5 | 1.3 | 4.1 | 0.38 | 1.57 | 0.86 | 0.356 |
| 4T-2580/2523 | 38.5 | 37.5 | 61 | 64 | 0.8 | 1.3 | 9.1 | 0.27 | 2.19 | 1.21 | 0.454 |
| 4T-2582/2523 | 44 | 37.5 | 61 | 64 | 3.5 | 1.3 | 9.1 | 0.27 | 2.19 | 1.21 | 0.451 |
| 4T-3188/3120 | 40 | 39.5 | 61 | 67 | 0.8 | 3.3 | 9.9 | 0.33 | 1.80 | 0.99 | 0.603 |
| 4T-3193/3120 | 45.5 | 39.5 | 61 | 67 | 3.5 | 3.3 | 9.9 | 0.33 | 1.80 | 0.99 | 0.601 |
| 4T-02875/02820 | 45.5 | 39.5 | 62 | 68 | 3.5 | 3.3 | 3.9 | 0.45 | 1.32 | 0.73 | 0.451 |
| 4T-2879/2820 | 39.5 | 38.5 | 63 | 68 | 0.8 | 3.3 | 5.5 | 0.37 | 1.63 | 0.90 | 0.465 |
| 4T-HM88542/HM88510 | 45.5 | 42.5 | 59 | 70 | 1.3 | 3.3 | 6.0 | 0.55 | 1.10 | 0.60 | 0.622 |
| 4T-HM88542/HM88512 | 45.5 | 42.5 | 60 | 70 | 1.3 | 3.3 | 6.0 | 0.55 | 1.10 | 0.60 | 0.638 |
| 4T-HM89440/HM89410 | 45.5 | 44.5 | 62 | 73 | 0.8 | 3.3 | 5.8 | 0.55 | 1.10 | 0.60 | 0.686 |
| 4T-3476/3420 | 43 | 41 | 67 | 74 | 1.3 | 3.3 | 8.7 | 0.37 | 1.64 | 0.90 | 0.767 |
| 4T-M88048/M88010 | 42.5 | 41 | 58 | 65 | 0.8 | 1.5 | 2.9 | 0.55 | 1.10 | 0.60 | 0.378 |
| 4T-14130/14276 | 45 | 38.5 | 60 | 63 | 3.5 | 1.3 | 4.1 | 0.38 | 1.57 | 0.86 | 0.344 |
| 4T-2585/2523 | 45 | 39 | 61 | 64 | 3.5 | 1.3 | 9.1 | 0.27 | 2.19 | 1.21 | 0.435 |
| 4T-3196/3120 | 47 | 40.5 | 61 | 67 | 3.5 | 3.3 | 9.9 | 0.33 | 1.80 | 0.99 | 0.581 |
| 4T-HM88547/HM88510 | 45.5 | 42.5 | 59 | 70 | 0.8 | 3.3 | 6.0 | 0.55 | 1.10 | 0.60 | 0.604 |
| 4T-2785/2720 | 46 | 40 | 66 | 70 | 3.5 | 3.3 | 7.8 | 0.30 | 1.98 | 1.09 | 0.551 |
| 4T-HM89443/HM89410 | 46.5 | 44.5 | 62 | 73 | 0.8 | 3.3 | 5.8 | 0.55 | 1.10 | 0.60 | 0.668 |
| 4T-HM89444/HM89410 | 53 | 44.5 | 62 | 73 | 3.8 | 3.3 | 5.8 | 0.55 | 1.10 | 0.60 | 0.665 |
| 4T-43131/43312 | 51 | 42 | 67 | 74 | 3.5 | 1.5 | 1.4 | 0.67 | 0.90 | 0.49 | 0.568 |
| 4T-LM48548/LM48510 | 46 | 40 | 58 | 61 | * | 1.3 | 3.7 | 0.38 | 1.59 | 0.88 | 0.249 |
| 4T-LM48548A/LM48510 | 40.5 | 42 | 58 | 61 | 0.8 | 1.3 | 3.7 | 0.38 | 1.59 | 0.88 | 0.252 |
| 4T-14137A/14276 | 42 | 40 | 60 | 63 | 1.5 | 1.3 | 4.1 | 0.38 | 1.57 | 0.86 | 0.333 |
| 4T-HM88649/HM88610 | 48.5 | 42.5 | 60 | 69 | 2.3 | 2.3 | 4.6 | 0.55 | 1.10 | 0.60 | 0.489 |
| 4T-16137/16284 | 47 | 40.5 | 63 | 67 | 3.5 | 1.3 | 4.2 | 0.40 | 1.49 | 0.82 | 0.385 |
| 4T-02877/02820 | 48.5 | 42 | 62 | 68 | 3.5 | 3.3 | 3.9 | 0.45 | 1.32 | 0.73 | 0.422 |
| 4T-02878/02820 | 42.5 | 42 | 62 | 68 | 0.8 | 3.3 | 3.9 | 0.45 | 1.32 | 0.73 | 0.425 |
| 4T-2878/2820 | 42 | 41 | 63 | 68 | 0.8 | 3.3 | 5.5 | 0.37 | 1.63 | 0.90 | 0.434 |
| 4T-25877/25820 | 43 | 40.5 | 64 | 68 | 1.5 | 2.3 | 8.1 | 0.29 | 2.07 | 1.14 | 0.471 |
| 4T-25877/25821 | 43 | 40.5 | 65 | 68 | 1.5 | 0.8 | 8.1 | 0.29 | 2.07 | 1.14 | 0.474 |
| 4T-2793/2735X | 42 | 41 | 66 | 69 | 0.8 | 0.8 | 7.8 | 0.30 | 1.98 | 1.09 | 0.485 |
| 4T-2793/2720 | 42 | 41 | 66 | 70 | 0.8 | 3.3 | 7.8 | 0.30 | 1.98 | 1.09 | 0.536 |