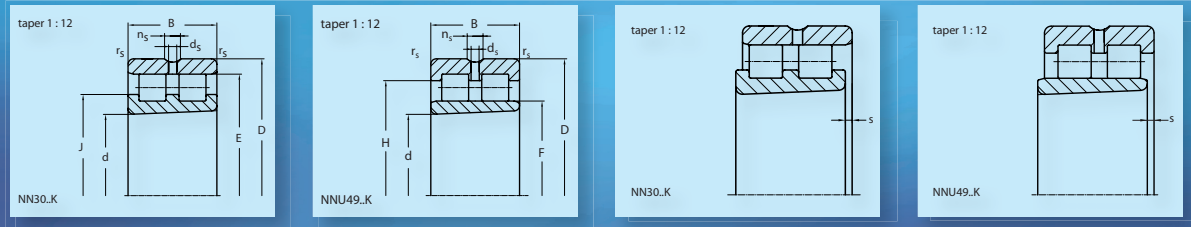


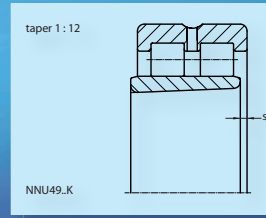
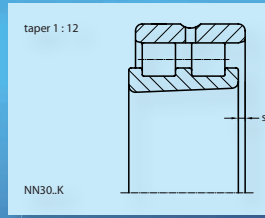
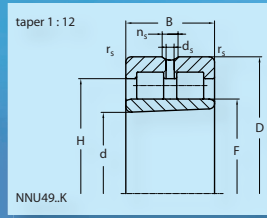
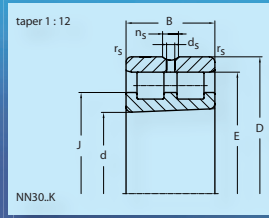
21. Measurement tables



21.2. High-precision cylindrical roller bearings, double-row

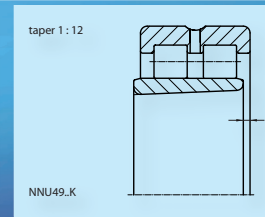
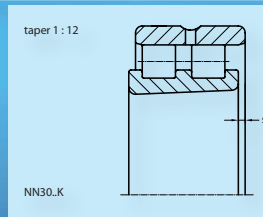
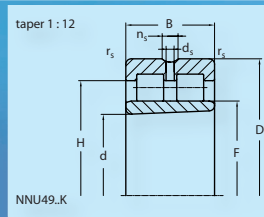
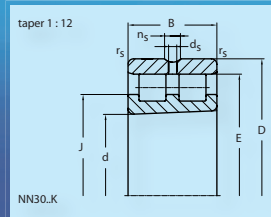
| Shaft | dimension (mm) | | | | | | | | | | | load rating (kn) | | speed limit (min ⁻¹) | | Code | weight |
|-------|----------------|-----|----|--------------------|-------|-------|-------|-------|----------------|----------------|-----|------------------|---------|----------------------------------|--------|---------------|--------|
| | d | D | B | r _s min | E | J | F | H | n _s | d _s | s | C dyn | Co stat | grease | oil | bearing | kg |
| 30 | 30 | 55 | 19 | 1,0 | 48,5 | 39,7 | | | 4,8 | 3,2 | 1,4 | 29 | 34 | 16 000 | 19 000 | NN3006K.M.HP | 0,191 |
| 35 | 35 | 62 | 20 | 1,0 | 55,0 | 45,4 | | | 4,8 | 3,2 | 1,4 | 36 | 44 | 14 000 | 17 000 | NN3007K.M.HP | 0,249 |
| 40 | 40 | 68 | 21 | 1,0 | 61,0 | 50,6 | | | 4,8 | 3,2 | 1,4 | 42 | 53 | 12 000 | 15 000 | NN3008K.M.HP | 0,303 |
| 45 | 45 | 75 | 23 | 1,0 | 67,5 | 56,3 | | | 4,8 | 3,2 | 1,7 | 54 | 72 | 11 000 | 14 000 | NN3009K.M.HP | 0,393 |
| 50 | 50 | 80 | 23 | 1,0 | 72,5 | 61,3 | | | 4,8 | 3,2 | 1,7 | 57 | 79 | 10 000 | 13 000 | NN3010K.M.HP | 0,426 |
| 55 | 55 | 90 | 26 | 1,1 | 81,0 | 68,2 | | | 4,8 | 3,2 | 1,9 | 71 | 100 | 9 000 | 11 000 | NN3011K.M.HP | 0,630 |
| 60 | 60 | 95 | 26 | 1,1 | 86,1 | 73,3 | | | 4,8 | 3,2 | 1,9 | 74 | 109 | 8 500 | 10 000 | NN3012K.M.HP | 0,674 |
| 65 | 65 | 100 | 26 | 1,1 | 91,0 | 78,2 | | | 4,8 | 3,2 | 1,9 | 77 | 114 | 8 000 | 9 500 | NN3013K.M.HP | 0,715 |
| 70 | 70 | 110 | 30 | 1,1 | 100,0 | 85,6 | | | 6,5 | 3,2 | 2,3 | 98 | 148 | 7 000 | 8 500 | NN3014K.M.HP | 1,04 |
| 75 | 75 | 115 | 30 | 1,1 | 105,0 | 90,6 | | | 6,5 | 3,2 | 2,3 | 99 | 155 | 6 700 | 8 000 | NN3015K.M.HP | 1,07 |
| 80 | 80 | 125 | 34 | 1,1 | 113,0 | 97,0 | | | 6,5 | 3,2 | 2,5 | 120 | 186 | 6 300 | 7 500 | NN3016K.M.HP | 1,50 |
| 85 | 85 | 130 | 34 | 1,1 | 118,0 | 102,0 | | | 6,5 | 3,2 | 2,5 | 125 | 201 | 6 000 | 7 000 | NN3017K.M.HP | 1,56 |
| 90 | 90 | 140 | 37 | 1,5 | 127,0 | 109,4 | | | 6,5 | 3,2 | 2,6 | 140 | 225 | 5 600 | 6 700 | NN3018K.M.HP | 2,05 |
| 95 | 95 | 145 | 37 | 1,5 | 132,0 | 114,4 | | | 6,5 | 3,2 | 2,6 | 144 | 234 | 5 300 | 6 300 | NN3019K.M.HP | 2,13 |
| 100 | 100 | 140 | 40 | 1,1 | | | 113,0 | 125,8 | 6,5 | 3,2 | 2,0 | 129 | 253 | 5 300 | 6 300 | NNU4920K.M.HP | 1,85 |
| | 100 | 150 | 37 | 1,5 | 137,0 | 119,4 | | | 6,5 | 3,2 | 2,6 | 148 | 243 | 5 300 | 6 300 | NN3020K.M.HP | 2,28 |
| 105 | 105 | 145 | 40 | 1,1 | | | 118,0 | 130,8 | 6,5 | 3,2 | 2,0 | 128 | 261 | 5 300 | 6 300 | NNU4921K.M.HP | 1,92 |
| | 105 | 160 | 41 | 2,0 | 146,0 | 125,2 | | | 6,5 | 3,2 | 2,6 | 195 | 314 | 4 800 | 5 600 | NN3021K.M.HP | 2,84 |
| 110 | 110 | 150 | 40 | 1,1 | | | 123,0 | 135,8 | 6,5 | 3,2 | 2,0 | 131 | 269 | 5 000 | 6 000 | NNU4922K.M.HP | 2,07 |
| | 110 | 170 | 45 | 2,0 | 155,0 | 132,6 | | | 6,5 | 3,2 | 2,9 | 222 | 361 | 4 500 | 5 300 | NN3022K.M.HP | 3,61 |
| 120 | 120 | 165 | 45 | 1,1 | | | 134,5 | 150,5 | 6,5 | 3,2 | 2,3 | 175 | 341 | 4 500 | 5 300 | NNU4924K.M.HP | 2,75 |
| | 120 | 180 | 46 | 2,0 | 165,0 | 142,6 | | | 6,5 | 3,2 | 3,1 | 242 | 416 | 4 300 | 5 000 | NN3024K.M.HP | 3,92 |
| 130 | 130 | 180 | 50 | 1,5 | | | 146,0 | 162,0 | 6,5 | 3,2 | 2,7 | 186 | 385 | 4 000 | 4 800 | NNU4926K.M.HP | 3,80 |
| | 130 | 200 | 52 | 2,0 | 182,0 | 156,4 | | | 9,5 | 4,8 | 3,1 | 296 | 498 | 3 800 | 4 500 | NN3026K.M.HP | 5,80 |
| 140 | 140 | 190 | 50 | 1,5 | | | 156,0 | 172,0 | 6,5 | 3,2 | 2,7 | 190 | 398 | 3 800 | 4 500 | NNU4928K.M.HP | 4,05 |
| | 140 | 210 | 53 | 2,0 | 192,0 | 166,4 | | | 9,5 | 4,8 | 3,4 | 299 | 520 | 3 600 | 4 300 | NN3028K.M.HP | 6,15 |
| 150 | 150 | 210 | 60 | 2,0 | | | 168,5 | 191,0 | 6,5 | 3,2 | 2,7 | 331 | 652 | 3 600 | 4 300 | NNU4930K.M.HP | 6,00 |
| | 150 | 225 | 56 | 2,1 | 206,0 | 178,8 | | | 9,5 | 4,8 | 3,8 | 336 | 592 | 3 400 | 4 000 | NN3030K.M.HP | 7,53 |
| 160 | 160 | 220 | 60 | 2,0 | | | 178,5 | 201,0 | 6,5 | 3,2 | 2,7 | 331 | 676 | 3 400 | 4 000 | NNU4932K.M.HP | 6,40 |
| | 160 | 240 | 60 | 2,1 | 219,0 | 190,2 | | | 9,5 | 4,8 | 4,3 | 376 | 669 | 3 200 | 3 800 | NN3032K.M.HP | 9,10 |

21. Measurement tables



| Shaft | dimension (mm) | | | | | | | | | | | load rating (kn) | | speed limit (min ⁻¹) | | Code | weight |
|-------|----------------|-----|-----|--------------------|-------|-------|-------|-------|----------------|----------------|------|------------------|---------|----------------------------------|-------|---------------|--------|
| | d | D | B | r _s min | E | J | F | H | n _s | d _s | s | C dyn | Co stat | grease | oil | bearing | kg |
| 170 | 170 | 230 | 60 | 2,0 | | | 188,5 | 211,0 | 6,5 | 3,2 | 2,7 | 339 | 700 | 3 200 | 3 800 | NNU4934K.M.HP | 6,68 |
| | 170 | 260 | 67 | 2,1 | 236,0 | 204,0 | | | 9,5 | 4,8 | 4,6 | 449 | 805 | 3 000 | 3 600 | NN3034K.M.HP | 12,5 |
| 180 | 180 | 250 | 69 | 2,0 | | | 202,0 | 222,0 | 9,5 | 4,8 | 3,2 | 404 | 856 | 3 000 | 3 600 | NNU4936K.M.HP | 9,89 |
| | 180 | 280 | 74 | 2,1 | 255,0 | 218,2 | | | 12,2 | 6,3 | 4,8 | 566 | 996 | 2 800 | 3 400 | NN3036K.M.HP | 16,4 |
| 190 | 190 | 260 | 69 | 2,0 | | | 212,0 | 236,0 | 9,5 | 4,8 | 3,2 | 413 | 885 | 2 800 | 3 400 | NNU4938K.M.HP | 10,2 |
| | 190 | 290 | 75 | 2,1 | 265,0 | 228,2 | | | 12,2 | 6,3 | 4,8 | 583 | 1039 | 2 600 | 3 200 | NN3038K.M.HP | 17,3 |
| 200 | 200 | 280 | 80 | 2,1 | | | 225,0 | 252,2 | 12,2 | 6,3 | 4,3 | 488 | 1040 | 2 600 | 3 200 | NNU4940K.M.HP | 14,5 |
| | 200 | 310 | 82 | 2,1 | 282,0 | 242,0 | | | 12,2 | 6,3 | 5,7 | 655 | 1190 | 2 400 | 3 000 | NN3040K.M.HP | 22,2 |
| 220 | 220 | 300 | 80 | 2,1 | | | 245,0 | 272,2 | 12,2 | 6,3 | 4,3 | 505 | 1139 | 2 400 | 3 000 | NNU4944K.M.HP | 15,7 |
| | 220 | 340 | 90 | 3,0 | 310,0 | 265,2 | | | 15,0 | 8,0 | 5,7 | 806 | 1454 | 2 200 | 2 800 | NN3044K.M.HP | 29,1 |
| 240 | 240 | 320 | 80 | 2,1 | | | 265,0 | 292,2 | 12,2 | 6,3 | 4,3 | 525 | 1206 | 2 200 | 2 800 | NNU4948K.M.HP | 16,8 |
| | 240 | 360 | 92 | 3,0 | 330,0 | 285,2 | | | 15,0 | 8,0 | 6,1 | 838 | 1577 | 2 000 | 2 600 | NN3048K.M.HP | 31,6 |
| 260 | 260 | 360 | 100 | 2,1 | | | 292,0 | 325,6 | 15,0 | 8,0 | 5,4 | 755 | 1690 | 2 000 | 2 600 | NNU4952K.M.HP | 29,3 |
| | 260 | 400 | 104 | 4,0 | 364,0 | 312,8 | | | 15,0 | 8,0 | 6,6 | 1073 | 2006 | 1 900 | 2 400 | NN3052K.M.HP | 46,2 |
| 280 | 280 | 380 | 100 | 2,1 | | | 312,0 | 345,6 | 15,0 | 8,0 | 5,4 | 764 | 1794 | 1 900 | 2 400 | NNU4956K.M.HP | 31,2 |
| | 280 | 420 | 106 | 4,0 | 384,0 | 332,8 | | | 15,0 | 8,0 | 6,9 | 1085 | 2093 | 1 800 | 2 200 | NN3056K.M.HP | 49,7 |
| 300 | 300 | 420 | 118 | 3,0 | | | 339,0 | 379,0 | 17,7 | 9,5 | 6,3 | 1040 | 2380 | 1 700 | 2 000 | NNU4960K.M.HP | 48,7 |
| | 300 | 460 | 118 | 4,0 | 418,0 | 360,4 | | | 17,7 | 9,5 | 7,5 | 1256 | 2402 | 1 600 | 1 900 | NN3060K.M.HP | 68,8 |
| 320 | 320 | 440 | 118 | 3,0 | | | 359,0 | 399,0 | 17,7 | 9,5 | 6,3 | 1084 | 2527 | 1 600 | 1 900 | NNU4964K.M.HP | 51,0 |
| | 320 | 480 | 121 | 4,0 | 438,0 | 380,4 | | | 17,7 | 9,5 | 8,0 | 1330 | 2600 | 1 600 | 1 900 | NN3064K.M.HP | 74,2 |
| 340 | 340 | 460 | 118 | 3,0 | | | 379,0 | 419,0 | 17,7 | 9,5 | 6,3 | 1095 | 2670 | 1 500 | 1 800 | NNU4968K.M.HP | 56,3 |
| | 340 | 520 | 133 | 5,0 | 473,0 | 409,0 | | | 17,7 | 9,5 | 8,8 | 1625 | 3220 | 1 400 | 1 700 | NN3068K.M.HP | 99,3 |
| 360 | 360 | 480 | 118 | 3,0 | | | 399,0 | 439,0 | 17,7 | 9,5 | 6,3 | 1137 | 2820 | 1 500 | 1 800 | NNU4972K.M.HP | 59,2 |
| | 360 | 540 | 134 | 5,0 | 493,0 | 429,0 | | | 17,7 | 9,5 | 8,8 | 1665 | 3350 | 1 400 | 1 700 | NN3072K.M.HP | 104 |
| 380 | 380 | 520 | 140 | 4,0 | | | 426,0 | 470,0 | 17,7 | 9,5 | 7,2 | 1434 | 3620 | 1 400 | 1 700 | NNU4976K.M.HP | 87,5 |
| | 380 | 560 | 135 | 5,0 | 513,0 | 449,0 | | | 17,7 | 9,5 | 9,1 | 1695 | 3480 | 1 300 | 1 600 | NN3076K.M.HP | 110 |
| 400 | 400 | 540 | 140 | 4,0 | | | 446,0 | 491,0 | 17,7 | 9,5 | 7,2 | 1490 | 3821 | 1 300 | 1 600 | NNU4980K.M.HP | 91,7 |
| | 400 | 600 | 148 | 5,0 | 549,0 | 477,0 | | | 17,7 | 9,5 | 9,5 | 2160 | 4500 | 1 200 | 1 500 | NN3080K.M.HP | 143 |
| 420 | 420 | 560 | 140 | 4,0 | | | 466,0 | 511,0 | 17,7 | 9,5 | 7,2 | 1546 | 4022 | 1 300 | 1 600 | NNU4984K.M.HP | 95,4 |
| | 420 | 620 | 150 | 5,0 | 569,0 | 497,0 | | | 17,7 | 9,5 | 10,0 | 2100 | 4520 | 1 200 | 1 500 | NN3084K.M.HP | 148 |
| 440 | 440 | 600 | 160 | 4,0 | | | 490,0 | 545,0 | 17,7 | 9,5 | 6,8 | 2010 | 5157 | 1 200 | 1 500 | NNU4988K.M.HP | 133 |
| | 440 | 650 | 157 | 6,0 | 597,0 | 520,0 | | | 23,5 | 12,5 | 10,2 | 2460 | 5120 | 1 100 | 1 400 | NN3088K.M.HP | 170 |

21. Measurement tables



| Shaft | dimension (mm) | | | | | | | | | | | load rating (kn) | | speed limit (min ⁻¹) | | Code | weight |
|-------|----------------|-----|-----|--------------------|-------|-------|-------|-------|----------------|----------------|------|------------------|---------|----------------------------------|-------|-----------------|--------|
| | d | D | B | r _s min | E | J | F | H | n _s | d _s | s | C dyn | Co stat | grease | oil | bearing | kg |
| 460 | 460 | 620 | 160 | 4,0 | | | 510,0 | 564,0 | 17,7 | 9,5 | 6,8 | 2092 | 5457 | 1 100 | 1 400 | NNU4992K.M.HP | 135 |
| | 460 | 680 | 163 | 6,0 | 624,0 | 544,0 | | | 23,5 | 12,5 | 10,9 | 2610 | 5395 | 1 100 | 1 400 | NN3092K.M.HP | 197 |
| 480 | 480 | 650 | 170 | 5,0 | | | 534,0 | 593,0 | 17,7 | 9,5 | 7,2 | 2326 | 6113 | 1 100 | 1 400 | NNU4996K.M.HP | 156 |
| | 480 | 700 | 165 | 6,0 | 644,0 | 564,0 | | | 23,5 | 12,5 | 11,2 | 2690 | 5860 | 1 000 | 1 300 | NN3096K.M.HP | 203 |
| 500 | 500 | 670 | 170 | 5,0 | | | 554,0 | 613,0 | 17,7 | 9,5 | 7,2 | 2258 | 5900 | 1 000 | 1 300 | NNU49/500K.M.HP | 161 |
| | 500 | 720 | 167 | 6,0 | 664,0 | 584,0 | | | 23,5 | 12,5 | 11,7 | 2600 | 5840 | 1 000 | 1 300 | NN30/500K.M.HP | 212 |