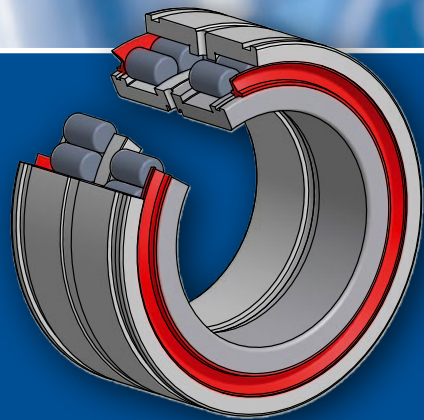
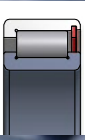




FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS

Due to their design with small construction height compared to the width, full complement cylindrical roller bearings are able to carry high loads while having small housing dimensions.

Using maximum cylindrical rollers instead of the cage creates different kinematic conditions when transferring the load and thus the bearing cannot achieve the high speeds that are possible when using cylindrical roller bearings with cage.

The range of single row, double row and sealed double row full complement cylindrical roller bearings is found in this catalogue.

Full complement cylindrical roller bearings are suitable for arrangements, where are the high requirements for load transfer in connection with low rotation speed.



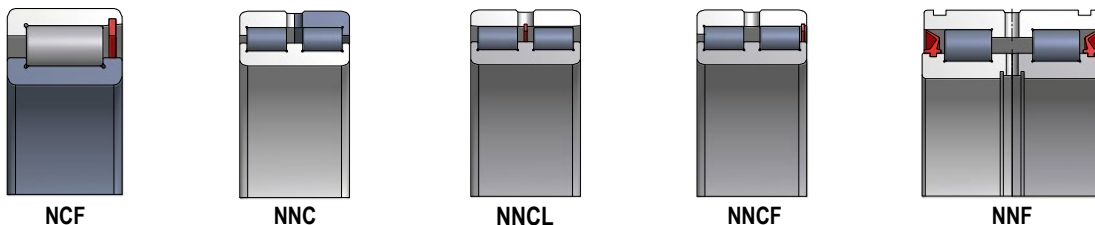
DESIGN SPECIFICATION

MAIN DIMENSIONS

Main dimensions of full complement cylindrical roller bearings are specified in the dimension tables and they are in accordance with the international standards ISO 15 with the exception of the NNF 50 range, where the width of the outer ring is 1 mm smaller. All other dimensions are the same.

STRUCTURE

Full complement cylindrical roller bearings have three main parts – the inner ring equipped with flanges, cylindrical rollers and the outer ring. According to the arrangement, snap rings, angle ring or seals are added.



THE FOLLOWING CONSTRUCTIONS ARE MOST COMMON

NCF

These are the most common full complement cylindrical roller bearings. The inner ring has two flanges, the outer ring has one flange on one side and a snap ring, which keeps the bearing assembled on the other side. NCF bearings are able to carry axial load from one side as they are able to accommodate certain minor axial displacement of the shaft. The permissible values for this displacement are in the dimension tables.

DOUBLE ROW BEARINGS

Double row full complement cylindrical roller bearings are all supplied with a lubrication groove with holes in the outer ring, which enables full lubrication access into the rolling space of each row of cylindrical rollers. The inner ring of the NNC, NNCL and NNCF design has three guiding flanges to ensure guiding accuracy of cylindrical rollers. They differentiate by the number of guiding flanges and snap rings in the outer ring. These components stop the rolling elements from falling out.

NNC

One side of outer ring is equipped with guiding flange, the other side has snap ring to keep the cylindrical rollers in place. These bearings can carry the axial load in both directions.

NNCL

NNCL bearings have the flangeless outer ring therefore certain axial bearing rings displacement against each other is accommodated.

NNCF

The outer ring has one flange and one snap ring. These components accommodate axial load transfer in one direction and also certain shaft displacement of the housing.

NNF

NNF bearings are produced with guiding flanges in the two-piece inner ring, which is held together by a retaining ring. The outer ring has a guiding flange. These bearings can also carry the axial load in both directions and as per bigger distance between individual rows of cylindrical rollers, they can transfer a tilting moments.

The outer ring of an NNF bearing is 1 mm narrower than the inner ring and has two snap ring grooves. These bearings are supplied as standard with seals on both sides and the inner space is filled with grease to enable the bearing operation in standard working conditions up to 110°C.

TOLERANCES

Full complement cylindrical roller bearings are produced as standard in tolerance class P0. Production of bearings with higher tolerance should be discussed in advance with the manufacturer. Dimension tolerances are in accordance with the international standards and they are specified in tables 10a to 13b of this catalogue. NNC design is the exception to above as it comes in variation of outer ring widths. They can vary up to double of the tolerance.

RADIAL CLEARANCE

Full complement cylindrical roller bearings are produced and supplied with normal radial clearance or alternatively in C3 clearance. The radial clearance C2 (smaller than standard clearance), alternatively C4, C5 (greater than standard and C3 clearance). Radial clearance values of full complement cylindrical roller bearings are valid for unassembled bearings and the ranges of radial clearances are in accordance with standard cylindrical roller bearings given in the table 24 of this catalogue.

STABILISATION FOR OPERATION AT HIGHER TEMPERATURE

For operating temperature higher than 120°C specially stabilized bearings with individually heat-treated components to ensure dimension and shape stability under long-term exposure to temperatures ranging from 150°C to 400°C (S0, S1, S2, S3 and S4) are supplied. Delivery of stabilized bearings should be discussed in advance.

MISALIGNMENT

The inner construction of rolling contact area allows the operation of cylindrical bearings with certain misalignment of both rings.

The standard values are:

3' – bearing series 18

2' – bearing series 22, 23, 29 and 30

EQUIVALENT DYNAMIC BEARING LOAD

If radial load is applied to the cylindrical bearing with no axial forces present, dynamic load is calculated as follows:

$$P_r = F_r$$

If both radial and axial load is applied on cylindrical bearing, dynamic load is calculated as follows:

$$P_r = F_r \quad \text{for } F_a/F_r \leq e$$

$$P_r = 0,92 \cdot F_r + Y \cdot F_a \quad \text{for } F_a/F_r > e$$

where:

e = calculation coefficient

$e = 0,15$ for double row bearings

$e = 0,2$ for bearing series 18

$e = 0,3$ for other bearings

Y = axial load coefficient

$Y = 0,6$ for bearing series 18

$Y = 0,4$ for other bearings

Simultaneous radial load needs to be applied for trouble free operation of cylindrical bearings carrying axial load, where F_a/F_r ratio should not exceed the value 0,5.

EQUIVALENT STATIC BEARING LOAD

If static load is applied to the cylindrical bearing, then:

$$P_{or} = F_r$$

MINIMUM BEARING LOAD

Certain load should be applied on the bearings when in operation to allow their safe running. The required load is calculated as follows:

$$F_m = k_r \left(6 + \frac{4n}{n_r} \right) \left(\frac{d_m}{100} \right)^2$$

where:

- F_m – minimum load
- k_r – minimum load coefficient
- k_r = 0,1 for bearing series 18
- = 0,2 for bearing series 29 a 48
- = 0,25 for bearing series 49
- = 0,3 for bearing series 22, 30
- = 0,35 for bearing series 23
- = 0,4 for bearing series NNF 50
- n – operating speed
- n_r – permissible speed for oil lubrication
- d_m – bearing mean diameter

If the minimum load imposed by bearing seating components weight is not sufficient, a subsequent load needs to be applied in an appropriate fashion – by tensioning the V-belt, etc.

LIMITING SPEED

The limiting speed specified in this catalogue represents the maximum number of revolutions acceptable for bearing to be able to operate trouble-free at certain safety level.

AXIAL DYNAMIC LOAD RATING

The bearings are able to transfer also axial forces. The axial dynamic load rating is in this case determined by the load rating of the contact areas of the rolling element and the guiding flange. It can be calculated with sufficient accuracy as follows:

$$F_{ap} = \frac{k_1 \cdot C_0 \cdot 10^4}{n (d + D)} - k_2 \cdot F_r$$

where:

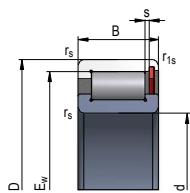
- F_{ap} = maximum permissible axial load
- C_0 = static load rating
- F_r = effective radial load
- N = operating speed
- d = bore diameter
- D = outer diameter
- k_1 = 1 for single row oil-lubricated bearings
- = 0,5 for single row grease-lubricated bearings
- k_2 = 0,3 for single row oil-lubricated bearings
- = 0,15 for single row grease-lubricated bearings
- k_1 = 0,35 for double row oil-lubricated bearings
- = 0,2 for double row grease-lubricated bearings
- k_2 = 0,1 for double row oil-lubricated bearings
- = 0,06 for double row grease-lubricated bearings

The above calculation is applicable if the permanent axial force is applied.

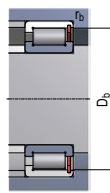
The load rating figure can double if the force is applied for a short period of time and triple if the load is applied at once. The maximum force should not exceed following values:

- 1,2 D^2 for permanent load
- 3,0 D^2 for intermittent load

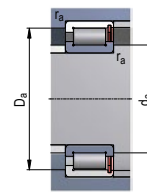
FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



NCF



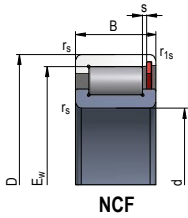
NCF



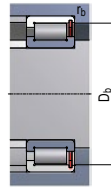
NCF

| Dimensions mm | | | | | Basic Load Rating kN | | Limiting Speed for Lubrication min ⁻¹ | | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | |
|---------------|-----|----|--------------------|---------------------|----------------------|--------|--|-------|---------------------|-----------|-----------------------------------|-----|--------------------|--------------------|--------------------|--------------------|--------------------|
| d | D | B | r _s min | r _{fs} min | | | | | | | E _w | s | d _b min | D _a max | D _b max | r _a max | r _b max |
| 20 | 37 | 11 | 0,3 | 0,3 | 16,00 | 17,00 | 3 500 | 8 500 | NCF2904V | 0,050 | 32,2 | 0,5 | 23 | 34 | 35 | 0,3 | 0,3 |
| 20 | 42 | 16 | 0,6 | 0,3 | 28,00 | 28,00 | 3 500 | 8 500 | NCF3004V | 0,110 | 37,8 | 1,5 | 24 | 38 | 40 | 0,5 | 0,3 |
| 20 | 47 | 18 | 1,1 | 0,6 | 30,00 | 39,00 | 3 300 | 8 600 | NCF2204V | 0,160 | 31,5 | 1 | 26 | 41 | 43 | 0,5 | 0,5 |
| 25 | 42 | 11 | 0,3 | 0,3 | 17,00 | 21,00 | 3 800 | 7 000 | NCF2905V | 0,060 | 37,3 | 0,5 | 27 | 40 | 41 | 0,3 | 0,3 |
| 25 | 47 | 16 | 0,6 | 0,3 | 31,00 | 33,00 | 3 800 | 7 000 | NCF3005V | 0,171 | 31,95 | 1,5 | 29 | 43 | 45 | 0,5 | 0,3 |
| 25 | 52 | 18 | 1,1 | 0,6 | 35,00 | 47,00 | 3 600 | 6 600 | NCF2205V | 0,180 | 36,6 | 1 | 30 | 47 | 48 | 0,5 | 0,5 |
| 30 | 47 | 11 | 0,3 | 0,3 | 19,00 | 25,00 | 3 200 | 6 000 | NCF2906V | 0,070 | 32,4 | 0,5 | 32 | 45 | 46 | 0,3 | 0,3 |
| 30 | 55 | 19 | 1,1 | 0,6 | 41,31 | 46,44 | 3 200 | 6 000 | NCF3006V | 0,190 | 39,6 | 2 | 35 | 50 | 51 | 0,5 | 0,5 |
| 30 | 62 | 20 | 1,1 | 0,6 | 61,00 | 66,00 | 3 000 | 5 500 | NCF2206V | 0,300 | 55,2 | 1 | 35 | 57 | 58 | 0,5 | 0,5 |
| 35 | 55 | 13 | 0,6 | 0,3 | 30,00 | 39,00 | 2 800 | 5 300 | NCF2907V | 0,120 | 39,8 | 0,5 | 39 | 51 | 53 | 0,5 | 0,3 |
| 35 | 62 | 20 | 1,1 | 0,6 | 47,97 | 55,79 | 2 800 | 5 300 | NCF3007V | 0,250 | 55,55 | 2 | 40 | 57 | 58 | 0,5 | 0,5 |
| 35 | 72 | 23 | 1,1 | 0,6 | 76,00 | 81,00 | 2 300 | 3 800 | NCF2207V | 0,330 | 63 | 1 | 40 | 67 | 68 | 0,5 | 0,5 |
| 40 | 62 | 14 | 0,6 | 0,3 | 33,00 | 42,00 | 2 300 | 3 800 | NCF2908V | 0,150 | 56,5 | 0,5 | 44 | 58 | 60 | 0,5 | 0,3 |
| 40 | 68 | 21 | 1,1 | 0,6 | 58,00 | 70,00 | 2 300 | 3 800 | NCF3008V | 0,310 | 61,8 | 2 | 45 | 63 | 64 | 0,5 | 0,5 |
| 40 | 80 | 23 | 1,1 | 0,6 | 88,29 | 100,79 | 2 000 | 3 500 | NCF2208V | 0,529 | 71 | 1 | 45 | 75 | 76 | 0,5 | 0,5 |
| 45 | 68 | 14 | 0,6 | 0,3 | 36,00 | 50,00 | 2 000 | 3 300 | NCF2909V | 0,180 | 61,8 | 0,5 | 49 | 64 | 66 | 0,5 | 0,3 |
| 45 | 75 | 23 | 1,1 | 0,6 | 72,00 | 92,00 | 2 000 | 3 300 | NCF3009V | 0,300 | 68,35 | 2 | 50 | 70 | 71 | 0,5 | 0,5 |
| 45 | 85 | 23 | 1,1 | 0,6 | 99,00 | 101,00 | 1 900 | 3 000 | NCF2209V | 0,590 | 73,5 | 1 | 50 | 80 | 81 | 0,5 | 0,5 |
| 50 | 72 | 14 | 0,6 | 0,3 | 38,00 | 56,00 | 1 900 | 3 000 | NCF2910V | 0,190 | 67 | 0,5 | 54 | 68 | 70 | 0,5 | 0,3 |
| 50 | 80 | 23 | 1,1 | 0,6 | 76,00 | 102,00 | 1 900 | 3 000 | NCF3010V | 0,330 | 73,85 | 2 | 55 | 75 | 76 | 0,5 | 0,5 |
| 50 | 90 | 23 | 1,1 | 0,6 | 99,30 | 122,38 | 1 700 | 3 600 | NCF2210V | 0,630 | 81,5 | 1 | 55 | 85 | 86 | 0,5 | 0,5 |
| 55 | 80 | 16 | 1,1 | 0,6 | 50,00 | 77,00 | 1 600 | 3 300 | NCF2911V | 0,270 | 73,1 | 0,5 | 60 | 75 | 76 | 0,5 | 0,5 |
| 55 | 90 | 26 | 1,1 | 0,6 | 98,00 | 131,00 | 1 600 | 3 300 | NCF3011V | 0,630 | 83,7 | 2 | 60 | 85 | 86 | 0,5 | 0,5 |
| 55 | 100 | 25 | 1,5 | 1,1 | 119,00 | 150,00 | 1 300 | 3 100 | NCF2211V | 0,870 | 89 | 1 | 63 | 92 | 95 | 1,1 | 0,5 |
| 60 | 85 | 16 | 1,1 | 0,6 | 55,00 | 83,00 | 1 600 | 3 300 | NCF2912V | 0,290 | 79,2 | 1 | 65 | 80 | 81 | 0,5 | 0,5 |
| 60 | 95 | 26 | 1,1 | 0,6 | 106,38 | 147,16 | 1 600 | 3 300 | NCF3012V | 0,690 | 86,9 | 2 | 65 | 90 | 91 | 0,5 | 0,5 |
| 60 | 110 | 28 | 1,5 | 1,1 | 138,00 | 183,00 | 1 300 | 3 100 | NCF2212V | 1,200 | 99,3 | 1,5 | 68 | 102 | 105 | 1,1 | 0,5 |
| 65 | 90 | 16 | 1,1 | 0,6 | 57,00 | 89,00 | 1 300 | 3 000 | NCF2913V | 0,310 | 83,3 | 1 | 70 | 85 | 86 | 0,5 | 0,5 |
| 65 | 100 | 26 | 1,1 | 0,6 | 107,00 | 151,00 | 1 300 | 3 000 | NCF3013V | 0,730 | 93,3 | 2 | 70 | 95 | 96 | 0,5 | 0,5 |
| 65 | 120 | 31 | 1,5 | 1,1 | 172,00 | 218,00 | 1 200 | 2 700 | NCF2213V | 1,600 | 106,6 | 1,5 | 73 | 112 | 115 | 1,1 | 0,5 |
| 70 | 100 | 19 | 1,1 | 0,6 | 77,00 | 118,00 | 1 300 | 3 000 | NCF2914V | 0,453 | 92,4 | 1 | 75 | 95 | 96 | 0,5 | 0,5 |
| 70 | 110 | 30 | 1,1 | 0,6 | 133,00 | 179,00 | 1 300 | 3 000 | NCF3014V | 1,020 | 102,1 | 3 | 75 | 105 | 106 | 0,5 | 0,5 |
| 70 | 125 | 31 | 1,5 | 1,1 | 179,00 | 232,00 | 1 100 | 2 600 | NCF2214V | 1,700 | 111,4 | 1,5 | 78 | 117 | 120 | 1,1 | 0,5 |
| 75 | 105 | 19 | 1,1 | 0,6 | 78,79 | 123,47 | 1 200 | 2 600 | NCF2915V | 0,495 | 97,4 | 1 | 80 | 100 | 101 | 0,5 | 0,5 |
| 75 | 115 | 30 | 1,1 | 0,6 | 137,00 | 188,00 | 1 200 | 2 600 | NCF3015V | 1,060 | 106 | 3 | 80 | 110 | 111 | 0,5 | 0,5 |
| 75 | 130 | 31 | 1,5 | 1,1 | 185,00 | 236,00 | 900 | 2 200 | NCF2215V | 1,800 | 116,2 | 1,5 | 83 | 122 | 125 | 1,1 | 0,5 |
| 80 | 110 | 19 | 1,1 | 0,6 | 83,00 | 133,00 | 1 200 | 2 600 | NCF2916V | 0,550 | 102,6 | 1 | 85 | 105 | 106 | 0,5 | 0,5 |
| 80 | 125 | 34 | 1,1 | 0,6 | 168,00 | 230,00 | 1 100 | 2 300 | NCF3016V | 1,330 | 117,2 | 3 | 85 | 120 | 121 | 0,5 | 0,5 |
| 80 | 130 | 33 | 2,1 | 1,5 | 218,00 | 286,00 | 900 | 2 200 | NCF2216V | 2,100 | 126,3 | 1,5 | 91 | 119 | 122 | 1,5 | 1,1 |
| 85 | 120 | 22 | 1,1 | 0,6 | 103,00 | 169,00 | 1 100 | 2 300 | NCF2917V | 0,810 | 112,5 | 1 | 90 | 115 | 116 | 0,5 | 0,5 |
| 85 | 130 | 34 | 1,1 | 0,6 | 173,00 | 232,00 | 1 100 | 2 300 | NCF3017V | 1,510 | 121,6 | 3 | 90 | 125 | 126 | 0,5 | 0,5 |
| 85 | 150 | 36 | 2,1 | 1,5 | 237,00 | 329,00 | 900 | 2 200 | NCF2217V | 2,700 | 133,7 | 1,5 | 96 | 139 | 142 | 1,5 | 1,1 |
| 90 | 125 | 22 | 1,1 | 0,6 | 105,46 | 191,35 | 1 100 | 2 300 | NCF2918V | 0,843 | 115,4 | 1 | 95 | 120 | 121 | 0,5 | 0,5 |
| 90 | 140 | 37 | 1,5 | 1,1 | 195,80 | 275,48 | 1 000 | 2 200 | NCF3018V | 1,970 | 130,3 | 3 | 98 | 132 | 135 | 1,1 | 0,5 |
| 90 | 160 | 40 | 2,1 | 1,5 | 279,00 | 376,00 | 900 | 2 200 | NCF2218V | 3,500 | 131,2 | 2,5 | 101 | 149 | 152 | 1,5 | 1,1 |
| 100 | 140 | 24 | 1,1 | 0,6 | 125,00 | 209,00 | 1 000 | 2 200 | NCF2920V | 1,130 | 128,2 | 1,5 | 105 | 125 | 126 | 0,5 | 0,5 |
| 100 | 150 | 37 | 1,5 | 0,6 | 212,00 | 313,00 | 950 | 2 000 | NCF3020V | 2,150 | 139,9 | 3 | 108 | 142 | 146 | 1,1 | 0,5 |
| 100 | 180 | 46 | 2,1 | 1,5 | 380,00 | 530,00 | 850 | 1 800 | NCF2220V | 5,100 | 163,3 | 2,5 | 111 | 169 | 172 | 1,5 | 1,1 |
| 110 | 150 | 24 | 1,1 | 0,6 | 145,98 | 245,89 | 900 | 1 900 | NCF2922V | 1,230 | 140,9 | 1,5 | 115 | 145 | 146 | 0,5 | 0,5 |

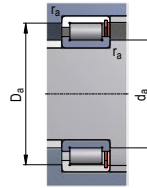
FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



NCF



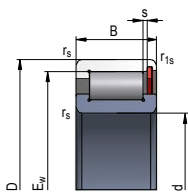
NCF



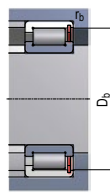
NCF

| Dimensions mm | | | | Basic Load Rating kN | | Limiting Speed for Lubrication min ⁻¹ | | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | | |
|---------------|-----|-----|--------------------|----------------------|----------|--|-----|---------------------|-----------|-----------------------------------|----------------|-----|--------------------|--------------------|--------------------|--------------------|--------------------|
| d | D | B | r _s min | r _{1s} min | C | Co | | | | | E _w | s | d _a min | D _a max | D _b max | r _a max | r _b max |
| 110 | 170 | 45 | 2,1 | 1,5 | 280,00 | 330,00 | 850 | 1 800 | NCF3022V | 3,500 | 156,3 | 5,5 | 121 | 159 | 162 | 1,5 | 1,1 |
| 110 | 200 | 53 | 2,1 | 1,5 | 432,00 | 613,00 | 700 | 1 500 | NCF2222V | 7,200 | 178,2 | 3 | 121 | 189 | 192 | 1,5 | 1,1 |
| 120 | 165 | 27 | 1,1 | 0,6 | 177,00 | 303,00 | 850 | 1 800 | NCF2924V | 1,730 | 153,8 | 1,5 | 125 | 160 | 161 | 0,5 | 0,5 |
| 120 | 180 | 46 | 2,1 | 1,5 | 293,00 | 336,00 | 800 | 1 700 | NCF3024V | 3,800 | 167,9 | 5,5 | 131 | 169 | 172 | 1,5 | 1,1 |
| 120 | 215 | 58 | 2,1 | 1,5 | 519,00 | 732,00 | 700 | 1 500 | NCF2224V | 9,000 | 192,9 | 3 | 131 | 204 | 207 | 1,5 | 1,1 |
| 130 | 180 | 30 | 1,5 | 1,1 | 201,32 | 370,50 | 750 | 1 600 | NCF2926V | 2,330 | 166,6 | 2 | 138 | 172 | 175 | 1,1 | 0,5 |
| 130 | 200 | 52 | 2,1 | 1,5 | 318,00 | 623,00 | 700 | 1 500 | NCF3026V | 5,800 | 183,2 | 5,5 | 141 | 189 | 192 | 1,5 | 1,1 |
| 130 | 230 | 64 | 3 | 2,1 | 603,00 | 873,00 | 650 | 1 300 | NCF2226V | 11,200 | 207,8 | 5 | 143 | 217 | 219 | 2,1 | 1,5 |
| 140 | 190 | 30 | 1,5 | 1,1 | 225,00 | 392,00 | 700 | 1 500 | NCF2928V | 2,320 | 179,4 | 2 | 148 | 182 | 185 | 1,1 | 0,5 |
| 140 | 210 | 53 | 2,1 | 1,5 | 331,00 | 686,00 | 670 | 1 300 | NCF3028V | 6,100 | 198,2 | 5,5 | 151 | 199 | 202 | 1,5 | 1,1 |
| 140 | 250 | 68 | 3 | 2,1 | 697,00 | 1 020,00 | 550 | 1 200 | NCF2228V | 13,300 | 222,6 | 5 | 153 | 237 | 239 | 2,1 | 1,5 |
| 150 | 190 | 20 | 1,1 | 0,6 | 108,00 | 197,00 | 700 | 1 500 | NCF1830V | 1,300 | 179,5 | 1,5 | 155 | 185 | 186 | 0,5 | 0,5 |
| 150 | 210 | 36 | 2,1 | 1,5 | 293,00 | 512,00 | 670 | 1 300 | NCF2930V | 3,730 | 193,9 | 2,5 | 161 | 199 | 202 | 1,5 | 1,1 |
| 150 | 225 | 56 | 2,1 | 1,5 | 363,00 | 717,00 | 630 | 1 300 | NCF3030V | 7,500 | 207,2 | 7 | 161 | 214 | 217 | 1,5 | 1,1 |
| 150 | 270 | 73 | 3 | 2,1 | 797,00 | 1 180,00 | 550 | 1 200 | NCF2230V | 18,300 | 237,3 | 6 | 163 | 257 | 269 | 2,1 | 1,5 |
| 160 | 200 | 20 | 1,1 | 0,6 | 112,00 | 209,00 | 670 | 1 300 | NCF1832V | 1,300 | 189 | 1,5 | 165 | 195 | 196 | 0,5 | 0,5 |
| 160 | 220 | 36 | 2,1 | 1,5 | 302,00 | 533,00 | 630 | 1 300 | NCF2932V | 3,910 | 205,1 | 2,5 | 171 | 209 | 212 | 1,5 | 1,1 |
| 160 | 240 | 60 | 2,1 | 1,5 | 530,00 | 828,00 | 600 | 1 200 | NCF3032V | 9,100 | 225,2 | 7 | 171 | 219 | 222 | 1,5 | 1,1 |
| 160 | 290 | 80 | 3 | 2,1 | 988,00 | 1 390,00 | 550 | 1 200 | NCF2232V | 23,000 | 267,1 | 6 | 173 | 277 | 279 | 2,1 | 1,5 |
| 170 | 215 | 22 | 1,1 | 0,6 | 139,00 | 272,00 | 630 | 1 300 | NCF1834V | 1,800 | 203,8 | 1,5 | 175 | 210 | 211 | 0,5 | 0,5 |
| 170 | 230 | 36 | 2,1 | 1,5 | 311,00 | 576,00 | 600 | 1 200 | NCF2934V | 3,300 | 215,3 | 2,5 | 181 | 219 | 222 | 1,5 | 1,1 |
| 170 | 260 | 67 | 2,1 | 1,5 | 681,00 | 1 080,00 | 560 | 1 100 | NCF3034V | 12,500 | 233,3 | 7 | 181 | 249 | 252 | 1,5 | 1,1 |
| 170 | 310 | 86 | 4 | 4 | 1 090,00 | 1 680,00 | 500 | 1 000 | NCF2234V | 28,700 | 281,9 | 7 | 176 | 294 | 194 | 3 | 3 |
| 180 | 225 | 22 | 1,1 | 0,6 | 153,00 | 290,00 | 600 | 1 200 | NCF1836V | 1,900 | 215,2 | 1,5 | 185 | 220 | 221 | 0,5 | 0,5 |
| 180 | 250 | 42 | 2,1 | 1,5 | 397,00 | 709,00 | 560 | 1 100 | NCF2936V | 6,200 | 231,3 | 2,5 | 191 | 239 | 242 | 1,5 | 1,1 |
| 180 | 280 | 74 | 2,1 | 2,1 | 788,00 | 1 270,00 | 560 | 1 100 | NCF3036V | 16,500 | 260,7 | 7 | 191 | 269 | 269 | 1,5 | 1,5 |
| 180 | 320 | 86 | 4 | 4 | 1 130,00 | 1 780,00 | 500 | 1 000 | NCF2236V | 29,800 | 293 | 7 | 196 | 304 | 304 | 3 | 3 |
| 190 | 240 | 24 | 1,5 | 1,1 | 176,00 | 330,00 | 560 | 1 100 | NCF1838V | 2,300 | 229 | 1,8 | 198 | 222 | 225 | 1,1 | 0,5 |
| 190 | 260 | 42 | 2,1 | 1,5 | 410,00 | 753,00 | 560 | 1 100 | NCF2938V | 6,500 | 233,5 | 2,5 | 201 | 249 | 252 | 1,5 | 1,1 |
| 190 | 290 | 75 | 2,1 | 2,1 | 809,00 | 1 330,00 | 530 | 1 000 | NCF3038V | 17,000 | 270,2 | 9 | 201 | 279 | 279 | 1,5 | 1,5 |
| 190 | 340 | 92 | 4 | 4 | 1 230,00 | 1 970,00 | 370 | 950 | NCF2238V | 35,700 | 309,5 | 7 | 206 | 324 | 324 | 3 | 3 |
| 200 | 250 | 24 | 1,5 | 1,1 | 179,00 | 333,00 | 560 | 1 100 | NCF1840V | 2,600 | 237,5 | 1,8 | 208 | 242 | 245 | 1,1 | 0,5 |
| 200 | 280 | 48 | 2,1 | 1,5 | 514,12 | 926,75 | 530 | 1 000 | NCF2940V | 9,100 | 262,4 | 3 | 211 | 269 | 272 | 1,5 | 1,1 |
| 200 | 310 | 82 | 2,1 | 2,1 | 925,00 | 1 530,00 | 500 | 950 | NCF3040V | 22,500 | 288,2 | 9 | 211 | 299 | 299 | 1,5 | 1,5 |
| 200 | 360 | 98 | 4 | 4 | 1 390,00 | 2 230,00 | 370 | 900 | NCF2240V | 33,100 | 325 | 7 | 216 | 344 | 344 | 3 | 3 |
| 220 | 270 | 24 | 1,5 | 1,1 | 188,00 | 377,00 | 530 | 1 000 | NCF1844V | 2,800 | 258 | 1,8 | 228 | 262 | 265 | 1,1 | 0,5 |
| 220 | 300 | 48 | 2,1 | 1,5 | 522,00 | 1 010,00 | 380 | 900 | NCF2944V | 9,510 | 282,5 | 3 | 231 | 289 | 292 | 1,5 | 1,1 |
| 220 | 340 | 90 | 3 | 3 | 1 110,00 | 1 830,00 | 350 | 850 | NCF3044V | 29,500 | 312,7 | 9 | 233 | 317 | 317 | 2,1 | 2,1 |
| 220 | 400 | 108 | 4 | 4 | 1 720,00 | 2 730,00 | 300 | 800 | NCF2244V | 58,000 | 356,2 | 8 | 236 | 384 | 384 | 3 | 3 |
| 240 | 300 | 28 | 2,1 | 1,5 | 249,85 | 494,00 | 380 | 900 | NCF1848V | 3,300 | 287 | 1,8 | 241 | 289 | 292 | 1,5 | 1,1 |
| 240 | 320 | 48 | 2,1 | 1,5 | 565,94 | 1 106,01 | 350 | 850 | NCF2948V | 10,600 | 302,6 | 3 | 241 | 309 | 312 | 1,5 | 1,1 |
| 240 | 360 | 92 | 3 | 3 | 1 170,00 | 2 010,00 | 330 | 800 | NCF3048V | 32,000 | 335,6 | 11 | 243 | 347 | 347 | 2,1 | 2,1 |
| 260 | 320 | 28 | 2,1 | 1,5 | 275,00 | 561,00 | 330 | 800 | NCF1852V | 3,700 | 307,2 | 1,8 | 271 | 309 | 312 | 1,5 | 1,1 |
| 260 | 360 | 60 | 2,1 | 1,5 | 763,00 | 1 390,00 | 300 | 750 | NCF2952V | 18,500 | 333,2 | 3,5 | 271 | 349 | 352 | 1,5 | 1,1 |
| 260 | 400 | 104 | 3 | 3 | 1 510,50 | 2 556,52 | 380 | 700 | NCF3052V | 46,700 | 376,3 | 11 | 273 | 387 | 387 | 2,1 | 2,1 |
| 280 | 350 | 33 | 2,1 | 1,5 | 315,00 | 682,00 | 300 | 750 | NCF1856V | 7,100 | 333 | 2,5 | 291 | 339 | 342 | 1,5 | 1,1 |
| 280 | 380 | 60 | 2,1 | 1,5 | 842,65 | 1 662,50 | 380 | 700 | NCF2956V | 19,700 | 358,9 | 3,5 | 291 | 369 | 372 | 1,5 | 1,1 |
| 280 | 420 | 106 | 3 | 3 | 1 630,00 | 2 770,00 | 360 | 670 | NCF3056V | 50,000 | 390,7 | 11 | 293 | 407 | 407 | 2,1 | 2,1 |
| 300 | 380 | 38 | 2,1 | 1,5 | 328,00 | 858,00 | 360 | 670 | NCF1860V | 10,000 | 363 | 3 | 311 | 369 | 372 | 1,5 | 1,1 |

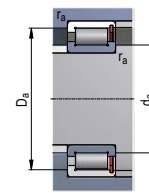
FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



NCF



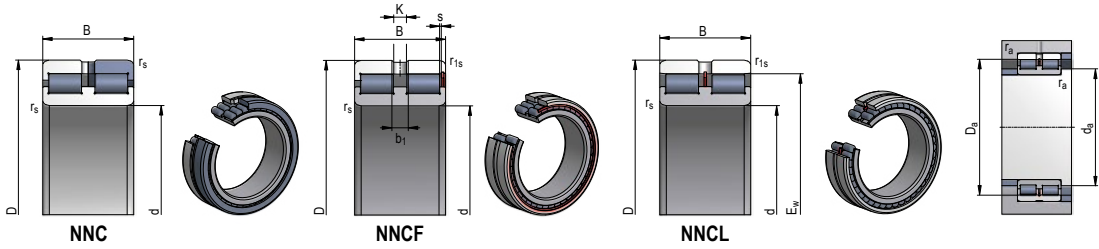
NCF



NCF

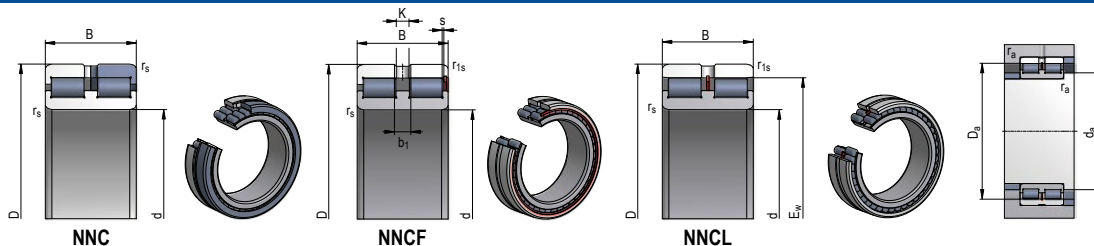
| Dimensions mm | | | | | Basic Load Rating kN | | Limiting Speed for Lubrication min ⁻¹ | | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | |
|---------------|------|-----|--------------------|----------------------|----------------------|----------|--|-----|---------------------|-----------|-----------------------------------|-----|--------------------|--------------------|--------------------|--------------------|--------------------|
| d | D | B | r _s min | r _{f1s} min | C | Co | | | | | E _w | s | d _b min | D _s max | D _b max | r _a max | r _b max |
| 300 | 420 | 72 | 3 | 3 | 1 073,50 | 2 118,50 | 330 | 630 | NCF2960V | 31,300 | 389,7 | 5 | 313 | 407 | 407 | 2,1 | 2,1 |
| 300 | 460 | 118 | 3 | 3 | 2 000,00 | 3 420,00 | 320 | 600 | NCF3060V | 69,000 | 431,7 | 13 | 313 | 447 | 447 | 2,1 | 2,1 |
| 320 | 400 | 38 | 2,1 | 1,5 | 332,00 | 912,00 | 330 | 630 | NCF1864V | 10,300 | 383 | 3 | 331 | 389 | 392 | 1,5 | 1,1 |
| 320 | 440 | 72 | 3 | 3 | 1 111,50 | 2 261,00 | 320 | 600 | NCF2964V | 33,000 | 410 | 5 | 333 | 427 | 427 | 2,1 | 2,1 |
| 320 | 480 | 121 | 3 | 3 | 2 050,00 | 3 530,00 | 300 | 560 | NCF3064V | 73,500 | 479,5 | 13 | 333 | 457 | 457 | 2,1 | 2,1 |
| 340 | 420 | 38 | 2,1 | 1,5 | 355,00 | 966,00 | 320 | 600 | NCF1868V | 11,000 | 403 | 3 | 341 | 409 | 412 | 1,5 | 1,1 |
| 340 | 460 | 72 | 3 | 3 | 1 149,50 | 2 394,00 | 300 | 560 | NCF2968V | 33,500 | 430,4 | 5 | 343 | 447 | 447 | 2,1 | 2,1 |
| 340 | 520 | 133 | 5 | 5 | 2 310,00 | 3 570,00 | 280 | 530 | NCF3068V | 100,000 | 481,5 | 13 | 350 | 500 | 500 | 4 | 4 |
| 360 | 440 | 38 | 2,1 | 1,5 | 368,00 | 1 010,00 | 300 | 560 | NCF1872V | 11,500 | 423 | 3,5 | 371 | 429 | 432 | 1,5 | 1,1 |
| 360 | 480 | 72 | 3 | 3 | 1 230,00 | 2 660,00 | 280 | 530 | NCF2972V | 36,500 | 450,8 | 5 | 373 | 467 | 467 | 2,1 | 2,1 |
| 360 | 540 | 134 | 5 | 5 | 2 330,00 | 3 600,00 | 260 | 500 | NCF3072V | 105,000 | 503,2 | 13 | 380 | 460 | 460 | 4 | 4 |
| 380 | 480 | 46 | 2,1 | 1,5 | 650,00 | 1 360,00 | 280 | 530 | NCF1876V | 19,500 | 457,5 | 3,5 | 391 | 469 | 472 | 1,5 | 1,1 |
| 380 | 520 | 82 | 4 | 4 | 1 431,53 | 3 002,00 | 260 | 500 | NCF2976V | 52,500 | 484,2 | 5 | 396 | 504 | 504 | 2,1 | 2,1 |
| 380 | 560 | 135 | 5 | 5 | 2 500,00 | 3 650,00 | 230 | 380 | NCF3076V | 110,000 | 520,3 | 13 | 400 | 540 | 540 | 4 | 4 |
| 400 | 500 | 46 | 2,1 | 1,5 | 663,00 | 1 390,00 | 260 | 500 | NCF1880V | 20,500 | 474 | 3,5 | 411 | 489 | 492 | 1,5 | 1,1 |
| 400 | 540 | 82 | 4 | 4 | 1 530,00 | 3 330,00 | 230 | 380 | NCF2980V | 53,500 | 507,2 | 5 | 416 | 524 | 524 | 3 | 3 |
| 400 | 600 | 148 | 5 | 5 | 2 980,00 | 5 520,00 | 220 | 350 | NCF3080V | 135,000 | 559 | 13 | 420 | 580 | 580 | 4 | 4 |
| 420 | 520 | 46 | 2,1 | 1,5 | 683,00 | 1 500,00 | 230 | 380 | NCF1884V | 21,000 | 499 | 3,5 | 431 | 509 | 512 | 1,5 | 1,1 |
| 420 | 560 | 82 | 4 | 4 | 1 570,00 | 3 510,00 | 220 | 350 | NCF2984V | 57,000 | 530,2 | 5 | 436 | 544 | 544 | 3 | 3 |
| 420 | 620 | 150 | 5 | 5 | 3 050,00 | 5 760,00 | 200 | 320 | NCF3084V | 150,000 | 578,1 | 15 | 440 | 600 | 600 | 4 | 4 |
| 440 | 540 | 46 | 2,1 | 1,5 | 697,00 | 1 560,00 | 220 | 350 | NCF1888V | 22,000 | 515,6 | 3,5 | 451 | 529 | 532 | 1,5 | 1,1 |
| 440 | 600 | 95 | 4 | 4 | 2 030,00 | 3 580,00 | 200 | 330 | NCF2988V | 80,500 | 565 | 6 | 456 | 584 | 584 | 2,1 | 2,1 |
| 440 | 650 | 157 | 6 | 6 | 3 300,00 | 6 380,00 | 180 | 380 | NCF3088V | 175,000 | 616,6 | 16 | 466 | 624 | 624 | 5 | 5 |
| 460 | 580 | 56 | 3 | 2,1 | 935,00 | 2 020,00 | 200 | 330 | NCF1892V | 33,000 | 553 | 5 | 473 | 567 | 569 | 2,1 | 1,5 |
| 460 | 620 | 95 | 4 | 4 | 2 070,00 | 3 600,00 | 190 | 300 | NCF2992V | 83,500 | 578,4 | 6 | 476 | 604 | 604 | 3 | 3 |
| 460 | 680 | 163 | 6 | 6 | 3 680,00 | 6 910,00 | 180 | 380 | NCF3092V | 195,000 | 633,5 | 16 | 486 | 654 | 654 | 5 | 5 |
| 480 | 600 | 56 | 3 | 2,1 | 965,00 | 2 100,00 | 190 | 300 | NCF1896V | 35,500 | 573,5 | 5 | 493 | 587 | 589 | 2,1 | 1,5 |
| 480 | 650 | 100 | 5 | 5 | 2 310,00 | 5 110,00 | 180 | 380 | NCF2996V | 98,000 | 605,4 | 7 | 500 | 630 | 630 | 4 | 4 |
| 480 | 700 | 165 | 6 | 6 | 3 770,00 | 7 210,00 | 170 | 360 | NCF3096V | 205,000 | 655,2 | 16 | 496 | 674 | 674 | 5 | 5 |
| 500 | 620 | 56 | 3 | 2,1 | 985,00 | 2 190,00 | 180 | 380 | NCF18500V | 36,500 | 593 | 5 | 513 | 607 | 609 | 2,1 | 1,5 |
| 500 | 670 | 100 | 5 | 5 | 2 380,00 | 5 300,00 | 170 | 360 | NCF29500V | 100,000 | 633 | 7 | 520 | 650 | 650 | 4 | 4 |
| 500 | 720 | 167 | 6 | 6 | 3 850,00 | 7 510,00 | 160 | 330 | NCF30500V | 215,000 | 676,8 | 16 | 526 | 694 | 694 | 5 | 5 |
| 530 | 650 | 56 | 3 | 2,1 | 1 010,00 | 2 310,00 | 170 | 360 | NCF18530V | 38,500 | 623,5 | 5 | 543 | 637 | 639 | 2,1 | 1,5 |
| 530 | 710 | 106 | 5 | 5 | 2 730,00 | 6 080,00 | 160 | 330 | NCF29530V | 120,000 | 672,6 | 7 | 550 | 690 | 690 | 4 | 4 |
| 560 | 680 | 56 | 3 | 2,1 | 1 030,00 | 2 330,00 | 160 | 330 | NCF18560V | 40,500 | 655 | 5 | 573 | 667 | 669 | 2,1 | 1,5 |
| 560 | 750 | 112 | 5 | 5 | 3 070,00 | 6 790,00 | 150 | 320 | NCF29560V | 130,000 | 709,2 | 7 | 580 | 730 | 730 | 4 | 4 |
| 600 | 730 | 60 | 3 | 2,1 | 1 070,00 | 2 610,00 | 150 | 320 | NCF18600V | 51,500 | 696 | 7 | 613 | 717 | 719 | 2,1 | 1,5 |
| 600 | 800 | 118 | 5 | 5 | 3 390,00 | 7 690,00 | 130 | 300 | NCF29600V | 170,000 | 753,3 | 7 | 620 | 780 | 780 | 4 | 4 |
| 630 | 780 | 69 | 3 | 3 | 1 290,00 | 3 080,00 | 130 | 300 | NCF18630V | 72,500 | 737 | 8 | 643 | 767 | 767 | 2,1 | 2,1 |
| 630 | 850 | 128 | 6 | 6 | 3 790,00 | 8 650,00 | 120 | 280 | NCF29630V | 205,000 | 807,1 | 8 | 656 | 824 | 824 | 5 | 5 |
| 670 | 820 | 69 | 3 | 3 | 1 330,00 | 3 290,00 | 130 | 280 | NCF18670V | 76,500 | 783 | 8 | 683 | 807 | 807 | 2,1 | 2,1 |
| 670 | 900 | 136 | 6 | 6 | 3 920,00 | 9 690,00 | 110 | 260 | NCF29670V | 235,000 | 853,8 | 10 | 696 | 874 | 874 | 5 | 5 |
| 710 | 870 | 74 | 3 | 3 | 1 590,00 | 3 890,00 | 120 | 260 | NCF18710V | 92,500 | 831,5 | 8 | 723 | 857 | 857 | 2,1 | 2,1 |
| 750 | 920 | 78 | 5 | 5 | 1 790,00 | 3 205,00 | 110 | 230 | NCF18750V | 110,000 | 880 | 8 | 770 | 900 | 900 | 4 | 4 |
| 800 | 980 | 82 | 5 | 5 | 1 970,00 | 4 560,00 | 100 | 220 | NCF18800V | 130,000 | 935,5 | 9 | 820 | 960 | 960 | 4 | 4 |
| 850 | 1030 | 82 | 5 | 5 | 2 090,00 | 5 290,00 | 90 | 210 | NCF18850V | 135,000 | 985,7 | 9 | 870 | 1010 | 1010 | 4 | 4 |
| 900 | 1090 | 85 | 5 | 5 | 2 280,00 | 5 880,00 | 80 | 200 | NCF18900V | 160,000 | 1033 | 9 | 920 | 1070 | 1070 | 4 | 4 |
| 950 | 1150 | 90 | 5 | 5 | 2 390,00 | 6 500,00 | 70 | 190 | NCF18950V | 185,000 | 1103 | 10 | 970 | 1130 | 1130 | 4 | 4 |
| 1000 | 1220 | 100 | 6 | 6 | 2 980,00 | 7 680,00 | 60 | 180 | NCF181000V | 230,000 | 1165 | 12 | 1026 | 1094 | 1094 | 5 | 5 |

FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



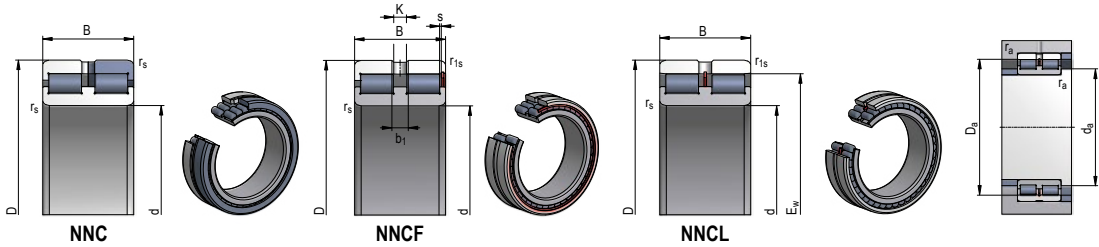
| Dimensions mm | | | | Basic Load Rating kN | | Limiting Speed for Lubrication min ⁻¹ | | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | | |
|---------------|-----|----|---------|----------------------|--------|--|-------|---------------------|-----------|-----------------------------------|-------|-----|-----|--------------------|--------------------|--------------------|-----|
| d | D | B | rs min. | r1s min. | C | Co | | | | Ew | s | K | b1 | d _a min | D _a max | r _a max | |
| 20 | 42 | 30 | 0,6 | 0,6 | 49,00 | 56,00 | 5 300 | 7 000 | NNCF5004V | 0,200 | 37,9 | 1 | 3 | 4,5 | 24 | 38 | 0,5 |
| 25 | 47 | 30 | 0,6 | 0,6 | 54,00 | 65,00 | 4 600 | 6 300 | NNCF5005V | 0,230 | 42 | 1 | 3 | 4,5 | 29 | 43 | 0,5 |
| 30 | 55 | 34 | 1 | 1 | 70,59 | 92,66 | 4 100 | 5 800 | NNCF5006V | 0,350 | 49,7 | 1,5 | 3 | 4,5 | 35 | 50 | 0,9 |
| 35 | 62 | 36 | 1 | 1 | 84,00 | 114,00 | 3 600 | 5 300 | NNCF5007V | 0,460 | 55,6 | 1,5 | 3 | 4,5 | 40 | 57 | 0,9 |
| 40 | 68 | 38 | 1 | 1 | 99,46 | 154,41 | 3 100 | 4 800 | NNCF5008V | 0,570 | 61,8 | 1,5 | 3 | 4,5 | 45 | 63 | 0,9 |
| 45 | 75 | 40 | 1 | 1 | 123,00 | 184,00 | 2 800 | 4 500 | NNCF5009V | 0,710 | 68,4 | 1,5 | 3 | 4,5 | 50 | 70 | 0,9 |
| 50 | 80 | 40 | 1 | 1 | 130,00 | 203,00 | 2 300 | 4 000 | NNCF5010V | 0,760 | 73,8 | 1,5 | 3 | 4,5 | 55 | 75 | 0,9 |
| 55 | 90 | 46 | 1,1 | 1,1 | 169,00 | 262,00 | 1 800 | 3 600 | NNCF5011V | 1,160 | 83,6 | 1,5 | 3,5 | 4,5 | 60 | 85 | 1 |
| 60 | 85 | 25 | 1 | 1 | 75,00 | 133,00 | 1 600 | 3 400 | NNCF4912V | 0,490 | 79 | 3,5 | 4,5 | 1 | 65 | 80 | 0,9 |
| 60 | 85 | 25 | 1 | 1 | 75,00 | 133,00 | 1 600 | 3 400 | NNCF4912V | 0,490 | 79 | 3,5 | 4,5 | - | 65 | 80 | 0,9 |
| 60 | 85 | 25 | 1 | 1 | 75,00 | 133,00 | 1 600 | 3 400 | NNCL4912V | 0,490 | 79 | 3,5 | 4,5 | 1 | 65 | 80 | 0,9 |
| 60 | 95 | 46 | 1,1 | 1,1 | 174,00 | 276,00 | 1 600 | 3 400 | NNCF5012V | 1,240 | 86,8 | 1,5 | 3,5 | 4,5 | 65 | 90 | 1 |
| 65 | 100 | 46 | 1,1 | 1,1 | 183,00 | 302,00 | 1 300 | 3 000 | NNCF5013V | 1,320 | 93,2 | 1,5 | 3,5 | 4,5 | 71,5 | 93,5 | 1 |
| 70 | 100 | 30 | 1 | 1 | 107,00 | 198,00 | 1 300 | 3 000 | NNCF4914V | 0,780 | 92,2 | 3,5 | 4,5 | 1 | 75 | 95 | 0,9 |
| 70 | 100 | 30 | 1 | 1 | 107,00 | 198,00 | 1 300 | 3 000 | NNCF4914V | 0,780 | 92,2 | 3,5 | 4,5 | - | 75 | 95 | 0,9 |
| 70 | 100 | 30 | 1 | 1 | 107,00 | 198,00 | 1 300 | 3 000 | NNCL4914V | 0,780 | 92,2 | 3,5 | 4,5 | 1 | 75 | 95 | 0,9 |
| 70 | 110 | 54 | 1,1 | 1,1 | 226,00 | 357,00 | 1 200 | 2 800 | NNCF5014V | 1,850 | 100,4 | 3 | 3,5 | 5 | 76,5 | 103,5 | 1 |
| 75 | 115 | 54 | 1,1 | 1,1 | 239,00 | 393,00 | 1 150 | 2 600 | NNCF5015V | 1,930 | 108 | 3 | 3,5 | 5 | 81,5 | 108,5 | 1 |
| 80 | 110 | 30 | 1 | 1 | 113,00 | 220,00 | 1 150 | 2 600 | NNCF4916V | 0,880 | 101,1 | 3,5 | 5 | 1 | 85 | 105 | 0,9 |
| 80 | 110 | 30 | 1 | 1 | 113,00 | 220,00 | 1 150 | 2 600 | NNCF4916V | 0,880 | 101,1 | 3,5 | 5 | - | 85 | 105 | 0,9 |
| 80 | 110 | 30 | 1 | 1 | 113,00 | 220,00 | 1 150 | 2 600 | NNCL4916V | 0,880 | 101,1 | 3,5 | 5 | 1 | 85 | 105 | 0,9 |
| 80 | 125 | 60 | 1,1 | 1,1 | 289,00 | 460,00 | 1 150 | 2 500 | NNCF5016V | 2,590 | 117,1 | 3,5 | 3,5 | 5 | 86,5 | 118,5 | 1 |
| 85 | 130 | 60 | 1,1 | 1,1 | 297,00 | 484,00 | 1 100 | 2 400 | NNCF5017V | 2,720 | 121,5 | 3,5 | 3,5 | 5 | 91,5 | 123,5 | 1 |
| 90 | 125 | 35 | 1,1 | 1,1 | 152,00 | 307,00 | 1 100 | 2 400 | NNCF4918V | 1,400 | 115,5 | 3,5 | 5 | 1,5 | 96,5 | 118,5 | 1 |
| 90 | 125 | 35 | 1,1 | 1,1 | 152,00 | 307,00 | 1 100 | 2 400 | NNCF4918V | 1,400 | 115,5 | 3,5 | 5 | - | 96,5 | 118,5 | 1 |
| 90 | 125 | 35 | 1,1 | 1,1 | 152,00 | 307,00 | 1 100 | 2 400 | NNCL4918V | 1,400 | 115,5 | 3,5 | 5 | 1,5 | 96,5 | 118,5 | 1 |
| 90 | 140 | 67 | 1,5 | 1,5 | 346,00 | 573,00 | 1 000 | 2 100 | NNCF5018V | 3,620 | 130,2 | 4 | 3,5 | 5 | 98 | 132 | 1,4 |
| 100 | 140 | 40 | 1,1 | 1,1 | 194,00 | 400,00 | 950 | 2 000 | NNCF4920V | 2,000 | 130 | 3,5 | 5 | 2 | 106,5 | 133,5 | 1 |
| 100 | 140 | 40 | 1,1 | 1,1 | 194,00 | 400,00 | 950 | 2 000 | NNCF4920V | 2,000 | 130 | 3,5 | 5 | - | 106,5 | 133,5 | 1 |
| 100 | 140 | 40 | 1,1 | 1,1 | 194,00 | 400,00 | 950 | 2 000 | NNCL4920V | 2,000 | 130 | 3,5 | 5 | 2 | 106,5 | 133,5 | 1 |
| 100 | 150 | 67 | 1,5 | 1,5 | 364,00 | 628,00 | 950 | 2 000 | NNCF5020V | 3,940 | 139,7 | 4 | 3,5 | 6 | 108 | 142 | 1,4 |
| 110 | 150 | 40 | 1,1 | 1,1 | 202,00 | 431,00 | 950 | 2 000 | NNCF4922V | 2,200 | 138,6 | 3,5 | 6 | 2 | 116,5 | 143,5 | 1 |
| 110 | 150 | 40 | 1,1 | 1,1 | 202,00 | 431,00 | 950 | 2 000 | NNCF4922V | 2,200 | 138,6 | 3,5 | 6 | - | 116,5 | 143,5 | 1 |
| 110 | 150 | 40 | 1,1 | 1,1 | 202,00 | 431,00 | 950 | 2 000 | NNCL4922V | 2,200 | 138,6 | 3,5 | 6 | 2 | 116,5 | 143,5 | 1 |
| 110 | 170 | 80 | 2 | 2 | 479,00 | 814,00 | 950 | 2 000 | NNCF5022V | 6,320 | 156,2 | 5 | 3,5 | 6 | 119 | 161 | 1,5 |
| 120 | 165 | 45 | 1,1 | 1,1 | 226,00 | 479,00 | 800 | 1 700 | NNCF4924V | 3,000 | 154 | 3,5 | 6 | 3 | 126,5 | 158,5 | 1 |
| 120 | 165 | 45 | 1,1 | 1,1 | 226,00 | 479,00 | 800 | 1 700 | NNCF4924V | 3,000 | 154 | 3,5 | 6 | - | 126,5 | 158,5 | 1 |
| 120 | 165 | 45 | 1,1 | 1,1 | 226,00 | 479,00 | 800 | 1 700 | NNCL4924V | 3,000 | 154 | 3,5 | 6 | 3 | 126,5 | 158,5 | 1 |
| 120 | 180 | 80 | 2 | 2 | 505,00 | 891,00 | 800 | 1 700 | NNCF5024V | 6,770 | 167,7 | 5 | 3,5 | 6 | 129 | 171 | 1,5 |
| 130 | 180 | 50 | 1,5 | 1,5 | 262,00 | 554,00 | 750 | 1 600 | NNCF4926V | 4,000 | 165,9 | 3,5 | 6 | 4 | 138 | 172 | 1,4 |
| 130 | 180 | 50 | 1,5 | 1,5 | 262,00 | 554,00 | 750 | 1 600 | NNCF4926V | 4,000 | 165,9 | 3,5 | 6 | - | 138 | 172 | 1,4 |
| 130 | 180 | 50 | 1,5 | 1,5 | 262,00 | 554,00 | 750 | 1 600 | NNCL4926V | 4,000 | 165,9 | 3,5 | 6 | 4 | 138 | 172 | 1,4 |
| 130 | 200 | 95 | 2 | 2 | 717,00 | 1 250,00 | 750 | 1 600 | NNCF5026V | 10,200 | 184 | 5 | 4 | 7 | 139 | 191 | 1,5 |
| 140 | 190 | 50 | 1,5 | 1,5 | 272,00 | 595,00 | 700 | 1 500 | NNCF4928V | 4,200 | 176,4 | 3,5 | 6 | 4 | 148 | 182 | 1,4 |
| 140 | 190 | 50 | 1,5 | 1,5 | 272,00 | 595,00 | 700 | 1 500 | NNCF4928V | 4,200 | 176,4 | 3,5 | 6 | - | 148 | 182 | 1,4 |
| 140 | 190 | 50 | 1,5 | 1,5 | 272,00 | 595,00 | 700 | 1 500 | NNCL4928V | 4,200 | 176,4 | 3,5 | 6 | 4 | 148 | 182 | 1,4 |
| 140 | 210 | 95 | 2 | 2 | 756,00 | 1 370,00 | 700 | 1 500 | NNCF5028V | 11,100 | 197,9 | 5 | 4 | 7 | 149 | 201 | 1,5 |
| 150 | 190 | 40 | 1,1 | 1,1 | 234,00 | 575,00 | 700 | 1 500 | NNCF4830V | 2,900 | 178,6 | 4 | 7 | 2 | 156,5 | 183,5 | 1 |
| 150 | 190 | 40 | 1,1 | 1,1 | 234,00 | 575,00 | 700 | 1 500 | NNCF4830V | 2,900 | 178,6 | 4 | 7 | - | 156,5 | 183,5 | 1 |

FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



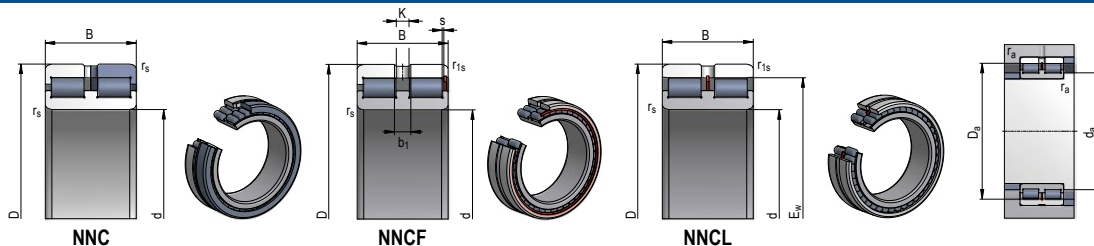
| Dimensions mm | | | | | Basic Load Rating kN | | Limiting Speed for Lubrication min ⁻¹ | | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | |
|---------------|-----|-----|---------|----------|----------------------|----------|--|-------|---------------------|-----------|-----------------------------------|---|---|----|--------------------|--------------------|--------------------|
| d | D | B | rs min. | r1s min. | C | Co | | | | | Ew | s | K | b1 | d _a min | D _a max | r _a max |
| 150 | 190 | 40 | 1,1 | 1,1 | 234,00 | 575,00 | 700 | 1 500 | NNCL4830V | 2,900 | 178,6 | 4 | 7 | 2 | 156,5 | 183,5 | 1 |
| 150 | 210 | 60 | 2 | 2 | 389,00 | 858,00 | 670 | 1 400 | NNCF4930V | 6,700 | 191,9 | 4 | 7 | 4 | 159 | 201 | 1,5 |
| 150 | 210 | 60 | 2 | 2 | 389,00 | 858,00 | 670 | 1 400 | NNC4930V | 6,700 | 191,9 | 4 | 7 | - | 159 | 201 | 1,5 |
| 150 | 210 | 60 | 2 | 2 | 389,00 | 858,00 | 670 | 1 400 | NNCL4930V | 6,700 | 191,9 | 4 | 7 | 4 | 159 | 201 | 1,5 |
| 150 | 225 | 100 | 2 | 2 | 793,00 | 1 430,00 | 670 | 1 400 | NNCF5030V | 13,300 | 206,9 | 6 | 4 | 7 | 159 | 216 | 1,5 |
| 160 | 200 | 40 | 1,1 | 1,1 | 243,00 | 616,00 | 670 | 1 400 | NNCF4832V | 3,100 | 190,1 | 4 | 7 | 2 | 166,5 | 193,5 | 1 |
| 160 | 200 | 40 | 1,1 | 1,1 | 243,00 | 616,00 | 670 | 1 400 | NNC4832V | 3,100 | 190,1 | 4 | 7 | - | 166,5 | 193,5 | 1 |
| 160 | 200 | 40 | 1,1 | 1,1 | 243,00 | 616,00 | 670 | 1 400 | NNCL4832V | 3,100 | 190,1 | 4 | 7 | 2 | 166,5 | 193,5 | 1 |
| 160 | 220 | 60 | 2 | 2 | 404,00 | 922,00 | 630 | 1 300 | NNCF4932V | 7,000 | 204,3 | 4 | 7 | 4 | 169 | 211 | 1,5 |
| 160 | 220 | 60 | 2 | 2 | 404,00 | 922,00 | 630 | 1 300 | NNC4932V | 7,000 | 204,3 | 4 | 7 | - | 169 | 211 | 1,5 |
| 160 | 220 | 60 | 2 | 2 | 404,00 | 922,00 | 630 | 1 300 | NNCL4932V | 7,000 | 204,3 | 4 | 7 | 4 | 169 | 211 | 1,5 |
| 160 | 240 | 109 | 2,1 | 2,1 | 909,00 | 1 660,00 | 630 | 1 300 | NNCF5032V | 16,200 | 224,9 | 6 | 4 | 7 | 171 | 229 | 1,5 |
| 170 | 215 | 45 | 1,1 | 1,1 | 265,00 | 651,00 | 630 | 1 300 | NNCF4834V | 4,100 | 201,7 | 4 | 7 | 3 | 176,5 | 208,5 | 1 |
| 170 | 215 | 45 | 1,1 | 1,1 | 265,00 | 651,00 | 630 | 1 300 | NNC4834V | 4,100 | 201,7 | 4 | 7 | - | 176,5 | 208,5 | 1 |
| 170 | 215 | 45 | 1,1 | 1,1 | 265,00 | 651,00 | 630 | 1 300 | NNCL4834V | 4,100 | 201,7 | 4 | 7 | 3 | 176,5 | 208,5 | 1 |
| 170 | 230 | 60 | 2 | 2 | 414,00 | 965,00 | 600 | 1 150 | NNCF4934V | 7,400 | 212,6 | 4 | 7 | 4 | 179 | 221 | 1,5 |
| 170 | 230 | 60 | 2 | 2 | 414,00 | 965,00 | 600 | 1 150 | NNC4934V | 7,400 | 212,6 | 4 | 7 | - | 179 | 221 | 1,5 |
| 170 | 230 | 60 | 2 | 2 | 414,00 | 965,00 | 600 | 1 150 | NNCL4934V | 7,400 | 212,6 | 4 | 7 | 4 | 179 | 221 | 1,5 |
| 170 | 260 | 122 | 2,1 | 2,1 | 1 170,00 | 2 160,00 | 600 | 1 150 | NNCF5034V | 23,000 | 243 | 6 | 4 | 7 | 181 | 249 | 1,5 |
| 180 | 225 | 45 | 1,1 | 1,1 | 272,00 | 685,00 | 600 | 1 150 | NNCF4836V | 4,300 | 211,3 | 4 | 7 | 3 | 186,5 | 218,5 | 1 |
| 180 | 225 | 45 | 1,1 | 1,1 | 272,00 | 685,00 | 600 | 1 150 | NNC4836V | 4,300 | 211,3 | 4 | 7 | - | 186,5 | 218,5 | 1 |
| 180 | 225 | 45 | 1,1 | 1,1 | 272,00 | 685,00 | 600 | 1 150 | NNCL4836V | 4,300 | 211,3 | 4 | 7 | 3 | 186,5 | 218,5 | 1 |
| 180 | 250 | 69 | 2 | 2 | 557,00 | 1 240,00 | 550 | 1 100 | NNCF4936V | 10,800 | 231 | 4 | 7 | 4 | 189 | 241 | 1,5 |
| 180 | 250 | 69 | 2 | 2 | 557,00 | 1 240,00 | 550 | 1 100 | NNC4936V | 10,800 | 231 | 4 | 7 | - | 189 | 241 | 1,5 |
| 180 | 250 | 69 | 2 | 2 | 557,00 | 1 240,00 | 550 | 1 100 | NNCL4936V | 10,800 | 231 | 4 | 7 | 4 | 189 | 241 | 1,5 |
| 180 | 280 | 136 | 2,1 | 2,1 | 1 350,00 | 2 540,00 | 550 | 1 100 | NNCF5036V | 30,500 | 260,4 | 8 | 4 | 8 | 191 | 269 | 1,5 |
| 190 | 240 | 50 | 1,5 | 1,5 | 314,00 | 784,00 | 550 | 1 100 | NNCF4838V | 5,700 | 225,4 | 4 | 7 | 4 | 198 | 232 | 1,4 |
| 190 | 240 | 50 | 1,5 | 1,5 | 314,00 | 784,00 | 550 | 1 100 | NNC4838V | 5,700 | 225,4 | 4 | 7 | - | 198 | 232 | 1,4 |
| 190 | 240 | 50 | 1,5 | 1,5 | 314,00 | 784,00 | 550 | 1 100 | NNCL4838V | 5,700 | 225,4 | 4 | 7 | 4 | 198 | 232 | 1,4 |
| 190 | 260 | 69 | 2 | 2 | 572,00 | 1 310,00 | 550 | 1 100 | NNCF4938V | 11,200 | 241,2 | 4 | 7 | 4 | 199 | 251 | 1,5 |
| 190 | 260 | 69 | 2 | 2 | 572,00 | 1 310,00 | 550 | 1 100 | NNC4938V | 11,200 | 241,2 | 4 | 7 | - | 199 | 251 | 1,5 |
| 190 | 260 | 69 | 2 | 2 | 572,00 | 1 310,00 | 550 | 1 100 | NNCL4938V | 11,200 | 241,2 | 4 | 7 | 4 | 199 | 251 | 1,5 |
| 190 | 290 | 136 | 2,1 | 2,1 | 1 390,00 | 2 660,00 | 550 | 1 100 | NNCF5038V | 31,500 | 269,9 | 8 | 4 | 8 | 201 | 279 | 1,5 |
| 200 | 250 | 50 | 1,5 | 1,5 | 322,00 | 825,00 | 550 | 1 100 | NNCF4840V | 5,900 | 236 | 4 | 7 | 4 | 208 | 242 | 1,4 |
| 200 | 250 | 50 | 1,5 | 1,5 | 322,00 | 825,00 | 550 | 1 100 | NNC4840V | 5,900 | 236 | 4 | 7 | - | 208 | 242 | 1,4 |
| 200 | 250 | 50 | 1,5 | 1,5 | 322,00 | 825,00 | 550 | 1 100 | NNCL4840V | 5,900 | 236 | 4 | 7 | 4 | 208 | 242 | 1,4 |
| 200 | 280 | 80 | 2,1 | 2,1 | 671,00 | 1 510,00 | 530 | 1 000 | NNCF4940V | 15,800 | 259,9 | 4 | 8 | 5 | 211 | 269 | 2 |
| 200 | 280 | 80 | 2,1 | 2,1 | 671,00 | 1 510,00 | 530 | 1 000 | NNC4940V | 15,800 | 259,9 | 4 | 8 | - | 211 | 269 | 2 |
| 200 | 280 | 80 | 2,1 | 2,1 | 671,00 | 1 510,00 | 530 | 1 000 | NNCL4940V | 15,800 | 259,9 | 4 | 8 | 5 | 211 | 269 | 2 |
| 200 | 310 | 150 | 2,1 | 2,1 | 1 590,00 | 3 080,00 | 530 | 1 000 | NNCF5040V | 41,000 | 287,9 | 9 | 4 | 8 | 211 | 299 | 2 |
| 220 | 270 | 50 | 1,5 | 1,5 | 338,00 | 906,00 | 530 | 1 000 | NNCF4844V | 6,400 | 257 | 4 | 7 | 4 | 228 | 262 | 1,4 |
| 220 | 270 | 50 | 1,5 | 1,5 | 338,00 | 906,00 | 530 | 1 000 | NNC4844V | 6,400 | 257 | 4 | 7 | - | 228 | 262 | 1,4 |
| 220 | 270 | 50 | 1,5 | 1,5 | 338,00 | 906,00 | 530 | 1 000 | NNCL4844V | 6,400 | 257 | 4 | 7 | 4 | 228 | 262 | 1,4 |
| 220 | 300 | 80 | 2,1 | 2,1 | 697,00 | 1 630,00 | 500 | 950 | NNCF4944V | 17,200 | 277,1 | 4 | 8 | 5 | 231 | 289 | 2 |
| 220 | 300 | 80 | 2,1 | 2,1 | 697,00 | 1 630,00 | 500 | 950 | NNC4944V | 17,200 | 277,1 | 4 | 8 | - | 231 | 289 | 2 |
| 220 | 300 | 80 | 2,1 | 2,1 | 697,00 | 1 630,00 | 500 | 950 | NNCL4944V | 17,200 | 277,1 | 4 | 8 | 5 | 231 | 289 | 2 |
| 220 | 340 | 160 | 3 | 3 | 1 900,00 | 3 680,00 | 500 | 950 | NNCF5044V | 52,500 | 312,4 | 9 | 4 | 8 | 233 | 327 | 2,5 |
| 240 | 300 | 60 | 2 | 2 | 506,00 | 1 310,00 | 500 | 950 | NNCF4848V | 10,000 | 282,4 | 4 | 8 | 4 | 249 | 291 | 1,5 |
| 240 | 300 | 60 | 2 | 2 | 506,00 | 1 310,00 | 500 | 950 | NNC4848V | 10,000 | 282,4 | 4 | 8 | - | 249 | 291 | 1,5 |

FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



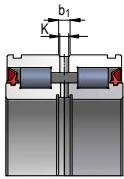
| Dimensions mm | | | | Basic Load Rating | | Limiting Speed for Lubrication min ⁻¹ | | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | | |
|---------------|-----|-----|---------------------|----------------------|----------|--|-----|---------------------|-----------|-----------------------------------|-------|----|----------------|--------------------|--------------------|--------------------|-----|
| d | D | B | r _s min. | r _{1s} min. | C | C ₀ | | | | E _w | s | K | b ₁ | d ₂ min | D ₂ max | r _a max | |
| 240 | 300 | 60 | 2 | 2 | 506,00 | 1 310,00 | 500 | 950 | NNCL4848V | 10,000 | 282,4 | 4 | 8 | 4 | 249 | 291 | 1,5 |
| 240 | 320 | 80 | 2,1 | 2,1 | 731,00 | 1 780,00 | 450 | 850 | NNCF4948V | 18,500 | 300 | 4 | 8 | 5 | 251 | 309 | 2 |
| 240 | 320 | 80 | 2,1 | 2,1 | 731,00 | 1 780,00 | 450 | 850 | NNC4948V | 18,500 | 300 | 4 | 8 | - | 251 | 309 | 2 |
| 240 | 320 | 80 | 2,1 | 2,1 | 731,00 | 1 780,00 | 450 | 850 | NNCL4948V | 18,500 | 300 | 4 | 8 | 5 | 251 | 309 | 2 |
| 240 | 360 | 160 | 3 | 3 | 2 000,00 | 4 030,00 | 450 | 850 | NNCF5048V | 56,000 | 335,3 | 9 | 5 | 9,4 | 253 | 347 | 2,5 |
| 260 | 320 | 60 | 2 | 2 | 529,00 | 1 430,00 | 430 | 820 | NNCF4852V | 11,000 | 304,7 | 4 | 8 | 4 | 269 | 311 | 1,5 |
| 260 | 320 | 60 | 2 | 2 | 529,00 | 1 430,00 | 430 | 820 | NNC4852V | 11,000 | 304,7 | 4 | 8 | - | 269 | 311 | 1,5 |
| 260 | 320 | 60 | 2 | 2 | 529,00 | 1 430,00 | 430 | 820 | NNCL4852V | 11,000 | 304,7 | 4 | 8 | 4 | 269 | 311 | 1,5 |
| 260 | 360 | 100 | 2,1 | 2,1 | 1 080,00 | 2 540,00 | 400 | 750 | NNCF4952V | 32,000 | 331,9 | 5 | 9,4 | 6 | 271 | 349 | 2 |
| 260 | 360 | 100 | 2,1 | 2,1 | 1 080,00 | 2 540,00 | 400 | 750 | NNC4952V | 32,000 | 331,9 | 5 | 9,4 | - | 271 | 349 | 2 |
| 260 | 360 | 100 | 2,1 | 2,1 | 1 080,00 | 2 540,00 | 400 | 750 | NNCL4952V | 32,000 | 331,9 | 5 | 9,4 | 6 | 271 | 349 | 2 |
| 260 | 400 | 190 | 4 | 4 | 2 720,00 | 5 270,00 | 400 | 750 | NNCF5052V | 85,500 | 376,2 | 9 | 5 | 9,4 | 276 | 384 | 3,5 |
| 280 | 350 | 69 | 2 | 2 | 691,00 | 1 890,00 | 400 | 750 | NNCF4856V | 16,000 | 332,9 | 4 | 8 | 4 | 289 | 341 | 1,5 |
| 280 | 350 | 69 | 2 | 2 | 691,00 | 1 890,00 | 400 | 750 | NNC4856V | 16,000 | 332,9 | 4 | 8 | - | 289 | 341 | 1,5 |
| 280 | 350 | 69 | 2 | 2 | 691,00 | 1 890,00 | 400 | 750 | NNCL4856V | 16,000 | 332,9 | 4 | 8 | 4 | 289 | 341 | 1,5 |
| 280 | 380 | 100 | 2,1 | 2,1 | 1 120,00 | 2 740,00 | 380 | 700 | NNCF4956V | 34,000 | 353,9 | 5 | 9,4 | 6 | 291 | 369 | 2 |
| 280 | 380 | 100 | 2,1 | 2,1 | 1 120,00 | 2 740,00 | 380 | 700 | NNC4956V | 34,000 | 353,9 | 5 | 9,4 | - | 291 | 369 | 2 |
| 280 | 380 | 100 | 2,1 | 2,1 | 1 120,00 | 2 740,00 | 380 | 700 | NNCL4956V | 34,000 | 353,9 | 5 | 9,4 | 6 | 291 | 369 | 2 |
| 280 | 420 | 190 | 4 | 4 | 2 800,00 | 5 540,00 | 370 | 690 | NNCF5056V | 90,500 | 390,5 | 9 | 5 | 9,4 | 296 | 404 | 3,5 |
| 300 | 380 | 80 | 2,1 | 2,1 | 810,00 | 2 170,00 | 380 | 700 | NNCF4860V | 23,000 | 357,3 | 5 | 9,4 | 6 | 311 | 369 | 2 |
| 300 | 380 | 80 | 2,1 | 2,1 | 810,00 | 2 170,00 | 380 | 700 | NNC4860V | 23,000 | 357,3 | 5 | 9,4 | - | 311 | 369 | 2 |
| 300 | 380 | 80 | 2,1 | 2,1 | 810,00 | 2 170,00 | 380 | 700 | NNCL4860V | 23,000 | 357,3 | 5 | 9,4 | 6 | 311 | 369 | 2 |
| 300 | 420 | 118 | 3 | 3 | 1 560,00 | 3 660,00 | 340 | 630 | NNCF4960V | 53,000 | 390,6 | 5 | 9,4 | 6 | 313 | 407 | 2,5 |
| 300 | 420 | 118 | 3 | 3 | 1 560,00 | 3 660,00 | 340 | 630 | NNC4960V | 53,000 | 390,6 | 5 | 9,4 | - | 313 | 407 | 2,5 |
| 300 | 420 | 118 | 3 | 3 | 1 560,00 | 3 660,00 | 340 | 630 | NNCL4960V | 53,000 | 390,6 | 5 | 9,4 | 6 | 313 | 407 | 2,5 |
| 300 | 460 | 218 | 4 | 4 | 3 430,00 | 7 110,00 | 340 | 630 | NNCF5060V | 130,000 | 431,8 | 9 | 5 | 9,4 | 316 | 444 | 3,5 |
| 320 | 400 | 80 | 2,1 | 2,1 | 840,00 | 2 330,00 | 340 | 630 | NNCF4864V | 24,000 | 380,2 | 5 | 9,4 | 6 | 331 | 389 | 2 |
| 320 | 400 | 80 | 2,1 | 2,1 | 840,00 | 2 330,00 | 340 | 630 | NNC4864V | 24,000 | 380,2 | 5 | 9,4 | - | 331 | 389 | 2 |
| 320 | 400 | 80 | 2,1 | 2,1 | 840,00 | 2 330,00 | 340 | 630 | NNCL4864V | 24,000 | 380,2 | 5 | 9,4 | 6 | 331 | 389 | 2 |
| 320 | 440 | 118 | 3 | 3 | 1 610,00 | 3 860,00 | 320 | 600 | NNCF4964V | 56,000 | 409,1 | 5 | 9,4 | 6 | 333 | 427 | 2,5 |
| 320 | 440 | 118 | 3 | 3 | 1 610,00 | 3 860,00 | 320 | 600 | NNC4964V | 56,000 | 409,1 | 5 | 9,4 | - | 333 | 427 | 2,5 |
| 320 | 440 | 118 | 3 | 3 | 1 610,00 | 3 860,00 | 320 | 600 | NNCL4964V | 56,000 | 409,1 | 5 | 9,4 | 6 | 333 | 427 | 2,5 |
| 320 | 480 | 218 | 4 | 4 | 3 510,00 | 7 440,00 | 320 | 600 | NNCF5064V | 135,000 | 447,1 | 9 | 5 | 9,4 | 336 | 464 | 3,5 |
| 340 | 420 | 80 | 2,1 | 2,1 | 861,00 | 2 450,00 | 320 | 600 | NNCF4868V | 25,500 | 397,4 | 5 | 9,4 | 6 | 351 | 409 | 2 |
| 340 | 420 | 80 | 2,1 | 2,1 | 861,00 | 2 450,00 | 320 | 600 | NNC4868V | 25,500 | 397,4 | 5 | 9,4 | - | 351 | 409 | 2 |
| 340 | 420 | 80 | 2,1 | 2,1 | 861,00 | 2 450,00 | 320 | 600 | NNCL4868V | 25,500 | 397,4 | 5 | 9,4 | 6 | 351 | 409 | 2 |
| 340 | 460 | 118 | 3 | 3 | 1 650,00 | 4 070,00 | 300 | 560 | NNCF4968V | 59,000 | 427,6 | 5 | 9,4 | 6 | 353 | 447 | 2,5 |
| 340 | 460 | 118 | 3 | 3 | 1 650,00 | 4 070,00 | 300 | 560 | NNC4968V | 59,000 | 427,6 | 5 | 9,4 | - | 353 | 447 | 2,5 |
| 340 | 460 | 118 | 3 | 3 | 1 650,00 | 4 070,00 | 300 | 560 | NNCL4968V | 59,000 | 427,6 | 5 | 9,4 | 6 | 353 | 447 | 2,5 |
| 340 | 520 | 243 | 5 | 5 | 3 933,00 | 8 683,00 | 300 | 560 | NNCF5068V | 185,000 | 481,6 | 11 | 5 | 9,4 | 360 | 500 | 4,5 |
| 360 | 440 | 80 | 2,1 | 2,1 | 889,00 | 2 600,00 | 300 | 560 | NNCF4872V | 27,000 | 420,4 | 5 | 9,4 | 6 | 371 | 429 | 2 |
| 360 | 440 | 80 | 2,1 | 2,1 | 889,00 | 2 600,00 | 300 | 560 | NNC4872V | 27,000 | 420,4 | 5 | 9,4 | - | 371 | 429 | 2 |
| 360 | 440 | 80 | 2,1 | 2,1 | 889,00 | 2 600,00 | 300 | 560 | NNCL4872V | 27,000 | 420,4 | 5 | 9,4 | 6 | 371 | 429 | 2 |
| 360 | 480 | 118 | 3 | 3 | 1 700,00 | 4 270,00 | 300 | 560 | NNCF4972V | 62,000 | 446,1 | 5 | 9,4 | 6 | 373 | 467 | 2,5 |
| 360 | 480 | 118 | 3 | 3 | 1 700,00 | 4 270,00 | 300 | 560 | NNC4972V | 62,000 | 446,1 | 5 | 9,4 | - | 373 | 467 | 2,5 |
| 360 | 480 | 118 | 3 | 3 | 1 700,00 | 4 270,00 | 300 | 560 | NNCL4972V | 62,000 | 446,1 | 5 | 9,4 | 6 | 373 | 467 | 2,5 |
| 360 | 540 | 243 | 5 | 5 | 4 390,00 | 9 460,00 | 300 | 560 | NNCF5072V | 195,000 | 503 | 11 | 5 | 9,4 | 380 | 520 | 4,5 |
| 380 | 480 | 100 | 2,1 | 2,1 | 1 300,00 | 3 660,00 | 280 | 530 | NNCF4876V | 46,000 | 456,4 | 5 | 9,4 | 6 | 391 | 469 | 2 |
| 380 | 480 | 100 | 2,1 | 2,1 | 1 300,00 | 3 660,00 | 280 | 530 | NNC4876V | 46,000 | 456,4 | 5 | 9,4 | - | 391 | 469 | 2 |

FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS

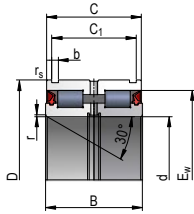


| Dimensions mm | | | | | Basic Load Rating kN | Limiting Speed for Lubrication min ⁻¹ | | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | | |
|---------------|-----|-----|---------|----------|----------------------|--|-----|---------------------|-------------|-----------------------------------|-------|----|-----|-----|--------------------|--------------------|--------------------|
| d | D | B | rs min. | r1s min. | C | Co | | | | | Ew | s | K | b1 | d _a min | D _a max | r _a max |
| 380 | 480 | 100 | 2,1 | 2,1 | 1 300,00 | 3 660,00 | 280 | 530 | NNCL4876V | 46,000 | 456,4 | 5 | 9,4 | 6 | 391 | 469 | 2 |
| 380 | 520 | 140 | 4 | 4 | 2 210,00 | 5 750,00 | 260 | 500 | NNCF4976V | 92,500 | 482 | 5 | 9,4 | 7 | 396 | 504 | 3,5 |
| 380 | 520 | 140 | 4 | 4 | 2 210,00 | 5 750,00 | 260 | 500 | NNC4976V | 92,500 | 482 | 5 | 9,4 | - | 396 | 504 | 3,5 |
| 380 | 520 | 140 | 4 | 4 | 2 210,00 | 5 750,00 | 260 | 500 | NNCL4976V | 92,500 | 482 | 5 | 9,4 | 7 | 396 | 504 | 3,5 |
| 380 | 560 | 243 | 5 | 5 | 4 490,00 | 9 870,00 | 260 | 500 | NNCF5076V | 200,000 | 520,2 | 11 | 5 | 9,4 | 400 | 540 | 4,5 |
| 400 | 500 | 100 | 2,1 | 2,1 | 1 330,00 | 3 790,00 | 260 | 500 | NNCF4880V | 48,000 | 471,1 | 5 | 9,4 | 6 | 411 | 489 | 2 |
| 400 | 500 | 100 | 2,1 | 2,1 | 1 330,00 | 3 790,00 | 260 | 500 | NNC4880V | 48,000 | 471,1 | 5 | 9,4 | - | 411 | 489 | 2 |
| 400 | 500 | 100 | 2,1 | 2,1 | 1 330,00 | 3 790,00 | 260 | 500 | NNCL4880V | 48,000 | 471,1 | 5 | 9,4 | 6 | 411 | 489 | 2 |
| 400 | 540 | 140 | 4 | 4 | 2 270,00 | 6 030,00 | 240 | 480 | NNCF4980V | 96,500 | 502,4 | 5 | 9,4 | 7 | 416 | 524 | 3,5 |
| 400 | 540 | 140 | 4 | 4 | 2 270,00 | 6 030,00 | 240 | 480 | NNC4980V | 96,500 | 502,4 | 5 | 9,4 | - | 416 | 524 | 3,5 |
| 400 | 540 | 140 | 4 | 4 | 2 270,00 | 6 030,00 | 240 | 480 | NNCL4980V | 96,500 | 502,4 | 5 | 9,4 | 7 | 416 | 524 | 3,5 |
| 400 | 600 | 272 | 5 | 5 | 5 320,00 | 11 640,00 | 240 | 480 | NNCF5080V | 270,000 | 558,9 | 11 | 5 | 9,4 | 420 | 580 | 4,5 |
| 420 | 520 | 100 | 2,1 | 2,1 | 1 360,00 | 3 990,00 | 240 | 480 | NNCF4884V | 50,000 | 493,1 | 5 | 9,4 | 6 | 431 | 509 | 2 |
| 420 | 520 | 100 | 2,1 | 2,1 | 1 360,00 | 3 990,00 | 240 | 480 | NNC4884V | 50,000 | 493,1 | 5 | 9,4 | - | 431 | 509 | 2 |
| 420 | 520 | 100 | 2,1 | 2,1 | 1 360,00 | 3 990,00 | 240 | 480 | NNCL4884V | 50,000 | 493,1 | 5 | 9,4 | 6 | 431 | 509 | 2 |
| 420 | 560 | 140 | 4 | 4 | 2 330,00 | 6 310,00 | 220 | 450 | NNCF4984V | 99,500 | 522,8 | 5 | 9,4 | 7 | 436 | 544 | 3,5 |
| 420 | 560 | 140 | 4 | 4 | 2 330,00 | 6 310,00 | 220 | 450 | NNC4984V | 99,500 | 522,8 | 5 | 9,4 | - | 436 | 544 | 3,5 |
| 420 | 560 | 140 | 4 | 4 | 2 330,00 | 6 310,00 | 220 | 450 | NNCL4984V | 99,500 | 522,8 | 5 | 9,4 | 7 | 436 | 544 | 3,5 |
| 440 | 540 | 100 | 2,1 | 2,1 | 1 400,00 | 4 180,00 | 220 | 450 | NNCF4888V | 52,000 | 515,1 | 5 | 9,4 | 6 | 451 | 529 | 2 |
| 440 | 540 | 100 | 2,1 | 2,1 | 1 400,00 | 4 180,00 | 220 | 450 | NNC4888V | 52,000 | 515,1 | 5 | 9,4 | - | 451 | 529 | 2 |
| 440 | 540 | 100 | 2,1 | 2,1 | 1 400,00 | 4 180,00 | 220 | 450 | NNCL4888V | 52,000 | 515,1 | 5 | 9,4 | 6 | 451 | 529 | 2 |
| 440 | 600 | 160 | 4 | 4 | 2 980,00 | 7 540,00 | 200 | 430 | NNCF4988V | 137,000 | 564,1 | 5 | 9,4 | 7 | 456 | 584 | 3,5 |
| 440 | 600 | 160 | 4 | 4 | 2 980,00 | 7 540,00 | 200 | 430 | NNC4988V | 137,000 | 564,1 | 5 | 9,4 | - | 456 | 584 | 3,5 |
| 440 | 600 | 160 | 4 | 4 | 2 980,00 | 7 540,00 | 200 | 430 | NNCL4988V | 137,000 | 564,1 | 5 | 9,4 | 7 | 456 | 584 | 3,5 |
| 460 | 580 | 118 | 3 | 3 | 1 570,00 | 4 680,00 | 200 | 430 | NNCF4892V | 76,000 | 543,9 | 5 | 9,4 | 7 | 473 | 567 | 2,5 |
| 460 | 580 | 118 | 3 | 3 | 1 570,00 | 4 680,00 | 200 | 430 | NNC4892V | 76,000 | 543,9 | 5 | 9,4 | - | 473 | 567 | 2,5 |
| 460 | 580 | 118 | 3 | 3 | 1 570,00 | 4 680,00 | 200 | 430 | NNCL4892V | 76,000 | 543,9 | 5 | 9,4 | 7 | 473 | 567 | 2,5 |
| 460 | 620 | 160 | 4 | 4 | 3 020,00 | 7 740,00 | 190 | 400 | NNCF4992V | 140,000 | 576,9 | 5 | 9,4 | 7 | 476 | 604 | 3,5 |
| 460 | 620 | 160 | 4 | 4 | 3 020,00 | 7 740,00 | 190 | 400 | NNC4992V | 140,000 | 576,9 | 5 | 9,4 | - | 476 | 604 | 3,5 |
| 460 | 620 | 160 | 4 | 4 | 3 020,00 | 7 740,00 | 190 | 400 | NNCL4992V | 140,000 | 576,9 | 5 | 9,4 | 7 | 476 | 604 | 3,5 |
| 480 | 600 | 118 | 3 | 3 | 1 610,00 | 4 900,00 | 190 | 400 | NNCF4896V | 79,000 | 567,8 | 5 | 9,4 | 7 | 493 | 587 | 2,5 |
| 480 | 600 | 118 | 3 | 3 | 1 610,00 | 4 900,00 | 190 | 400 | NNC4896V | 79,000 | 567,8 | 5 | 9,4 | - | 493 | 587 | 2,5 |
| 480 | 600 | 118 | 3 | 3 | 1 610,00 | 4 900,00 | 190 | 400 | NNCL4896V | 79,000 | 567,8 | 5 | 9,4 | 7 | 493 | 587 | 2,5 |
| 480 | 650 | 170 | 5 | 5 | 3 310,00 | 8 560,00 | 180 | 380 | NNCF4996V | 165,000 | 605,8 | 5 | 9,4 | 8 | 500 | 630 | 4,5 |
| 480 | 650 | 170 | 5 | 5 | 3 310,00 | 8 560,00 | 180 | 380 | NNC4996V | 165,000 | 605,8 | 5 | 9,4 | - | 500 | 630 | 4,5 |
| 480 | 650 | 170 | 5 | 5 | 3 310,00 | 8 560,00 | 180 | 380 | NNCL4996V | 165,000 | 605,8 | 5 | 9,4 | 8 | 500 | 630 | 4,5 |
| 500 | 620 | 118 | 3 | 3 | 1 640,00 | 5 060,00 | 180 | 380 | NNCF48/500V | 82,000 | 583,8 | 5 | 9,4 | 7 | 513 | 607 | 2,5 |
| 500 | 620 | 118 | 3 | 3 | 1 640,00 | 5 060,00 | 180 | 380 | NNC48/500V | 82,000 | 583,8 | 5 | 9,4 | - | 513 | 607 | 2,5 |
| 500 | 620 | 118 | 3 | 3 | 1 640,00 | 5 060,00 | 180 | 380 | NNCL48/500V | 82,000 | 583,8 | 5 | 9,4 | 7 | 513 | 607 | 2,5 |
| 500 | 670 | 170 | 5 | 5 | 3 400,00 | 9 000,00 | 170 | 360 | NNCF49/500V | 175,000 | 632,6 | 5 | 9,4 | 8 | 520 | 650 | 4,5 |
| 500 | 670 | 170 | 5 | 5 | 3 400,00 | 9 000,00 | 170 | 360 | NNC49/500V | 175,000 | 632,6 | 5 | 9,4 | - | 520 | 650 | 4,5 |
| 500 | 670 | 170 | 5 | 5 | 3 400,00 | 9 000,00 | 170 | 360 | NNCL49/500V | 175,000 | 632,6 | 5 | 9,4 | 8 | 520 | 650 | 4,5 |
| 530 | 650 | 118 | 3 | 3 | 1 690,00 | 5 360,00 | 170 | 360 | NNCF48/530V | 86,000 | 615,7 | 5 | 9,4 | 7 | 543 | 637 | 2,5 |
| 530 | 650 | 118 | 3 | 3 | 1 690,00 | 5 360,00 | 170 | 360 | NNC48/530V | 86,000 | 615,7 | 5 | 9,4 | - | 543 | 637 | 2,5 |
| 530 | 650 | 118 | 3 | 3 | 1 690,00 | 5 360,00 | 170 | 360 | NNCL48/530V | 86,000 | 615,7 | 5 | 9,4 | 7 | 543 | 637 | 2,5 |
| 530 | 710 | 180 | 5 | 5 | 3 820,00 | 9 910,00 | 160 | 350 | NNCF49/530V | 200,000 | 663,5 | 5 | 9,4 | 8 | 550 | 630 | 4,5 |
| 530 | 710 | 180 | 5 | 5 | 3 820,00 | 9 910,00 | 160 | 350 | NNC49/530V | 200,000 | 663,5 | 5 | 9,4 | - | 550 | 630 | 4,5 |
| 530 | 710 | 180 | 5 | 5 | 3 820,00 | 9 910,00 | 160 | 350 | NNCL49/530V | 200,000 | 663,5 | 5 | 9,4 | 8 | 550 | 630 | 4,9 |

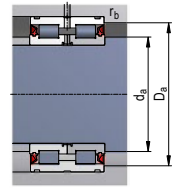
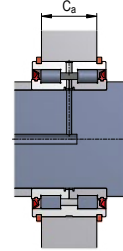
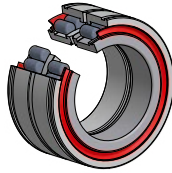
FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



NNF



NNF



NNF

| Dimensions mm | | | | | Basic Load Rating kN | Limiting Speed for Lubrication min ⁻¹ | Bearing Designation | Weight kg | Abutment and Fillet Dimensions mm | | | | | | | | | | | Corresponding Snap Ring Designation According to DIN 471 | |
|---------------|-----|-----|-----|--------|----------------------|--|---------------------|------------|-----------------------------------|--------|---------------------|---------------------|-----|----------------|-----|--------------------|--------------------|--------------------|--------------------|--|---------|
| d | D | B | C | rs min | | | | | E _w | b | C ₁ +0,2 | C ₂ -0,2 | K | b ₁ | r | d ₂ min | D ₂ max | r _s max | r _b max | | |
| 20 | 42 | 30 | 29 | 0,3 | 41,02 | 52,59 | 3600 | NNF5004-PP | 0,210 | 35,50 | 1,8 | 24,7 | 21 | 3 | 4,5 | 0,5 | 24 | 38 | 0,3 | 0,3 | 42x1.75 |
| 25 | 47 | 30 | 29 | 0,3 | 46,86 | 65,36 | 3000 | NNF5005-PP | 0,220 | 40,20 | 1,8 | 24,7 | 21 | 3 | 4,5 | 0,5 | 29 | 45 | 0,3 | 0,3 | 47x1.75 |
| 30 | 55 | 34 | 33 | 0,3 | 60,86 | 84,80 | 2600 | NNF5006-PP | 0,350 | 47,80 | 2,1 | 28,2 | 24 | 3 | 4,5 | 0,5 | 34 | 53 | 0,3 | 0,3 | 55x2 |
| 35 | 62 | 36 | 35 | 0,6 | 72,12 | 109,89 | 2200 | NNF5007-PP | 0,450 | 54,40 | 2,1 | 30,2 | 26 | 3 | 4,5 | 0,5 | 39 | 60 | 0,3 | 0,3 | 62x2 |
| 40 | 68 | 38 | 37 | 0,6 | 82,93 | 122,24 | 2000 | NNF5008-PP | 0,530 | 60,80 | 2,7 | 32,2 | 27 | 3 | 4,5 | 0,8 | 44 | 63 | 0,4 | 0,6 | 68x2.5 |
| 45 | 75 | 40 | 39 | 0,6 | 92,15 | 139,65 | 1800 | NNF5009-PP | 0,670 | 67,50 | 2,7 | 34,2 | 29 | 3 | 4,5 | 0,8 | 49 | 70 | 0,4 | 0,6 | 75x2.5 |
| 50 | 80 | 40 | 39 | 0,6 | 100,21 | 157,64 | 1700 | NNF5010-PP | 0,730 | 72,30 | 2,7 | 34,2 | 29 | 3 | 4,5 | 0,8 | 54 | 75 | 0,4 | 0,6 | 80x2.5 |
| 55 | 90 | 46 | 45 | 0,6 | 126,44 | 210,44 | 1500 | NNF5011-PP | 1,100 | 79,60 | 3,2 | 40,2 | 34 | 3,5 | 4,5 | 1 | 60 | 85 | 0,6 | 0,6 | 90x3 |
| 60 | 95 | 46 | 45 | 0,6 | 140,57 | 226,81 | 1400 | NNF5012-PP | 1,200 | 84,70 | 3,2 | 40,2 | 34 | 3,5 | 4,5 | 1 | 65 | 90 | 0,6 | 0,6 | 95x3 |
| 65 | 100 | 46 | 45 | 0,6 | 143,00 | 243,06 | 1300 | NNF5013-PP | 1,300 | 89,80 | 3,2 | 40,2 | 34 | 3,5 | 4,5 | 1 | 70 | 95 | 0,6 | 0,6 | 100x3 |
| 70 | 110 | 54 | 53 | 0,6 | 171,00 | 285,00 | 1200 | NNF5014-PP | 1,900 | 99,50 | 4,2 | 48,2 | 40 | 3,5 | 5 | 1 | 75 | 105 | 0,6 | 0,6 | 110x4 |
| 75 | 115 | 54 | 53 | 0,6 | 178,00 | 308,00 | 1100 | NNF5015-PP | 2,000 | 105,90 | 4,2 | 48,2 | 40 | 3,5 | 5 | 1 | 80 | 110 | 0,6 | 0,6 | 115x4 |
| 80 | 125 | 60 | 59 | 0,6 | 228,57 | 432,02 | 1000 | NNF5016-PP | 2,700 | 113,00 | 4,2 | 54,2 | 46 | 3,5 | 5 | 1,5 | 86 | 120 | 1 | 0,6 | 125x4 |
| 85 | 130 | 60 | 59 | 0,6 | 256,64 | 446,55 | 1000 | NNF5017-PP | 2,800 | 119,40 | 4,2 | 54,2 | 46 | 3,5 | 5 | 1,5 | 91 | 125 | 1 | 0,6 | 130x4 |
| 90 | 140 | 67 | 66 | 0,6 | 292,00 | 539,00 | 900 | NNF5018-PP | 3,800 | 127,10 | 4,2 | 59,2 | 51 | 3,5 | 5 | 1,5 | 96 | 135 | 1 | 0,6 | 140x4 |
| 95 | 145 | 67 | 66 | 0,6 | 297,00 | 559,00 | 900 | NNF5019-PP | 4,000 | 130,90 | 4,2 | 59,2 | 51 | 3,5 | 6 | 1,5 | 101 | 140 | 1 | 0,6 | 145x4 |
| 100 | 150 | 67 | 66 | 0,6 | 315,00 | 578,00 | 850 | NNF5020-PP | 4,100 | 137,70 | 4,2 | 59,2 | 51 | 3,5 | 6 | 1,5 | 106 | 145 | 1 | 0,6 | 150x4 |
| 110 | 170 | 80 | 79 | 0,6 | 389,00 | 711,00 | 750 | NNF5022-PP | 6,500 | 154,10 | 4,2 | 70,2 | 62 | 3,5 | 6 | 1,8 | 117 | 168 | 1 | 0,6 | 170x4 |
| 120 | 180 | 80 | 79 | 0,6 | 406,00 | 765,00 | 700 | NNF5024-PP | 6,900 | 163,60 | 4,2 | 71,2 | 62 | 3,5 | 6 | 1,8 | 127 | 175 | 1 | 0,6 | 180x4 |
| 130 | 190 | 80 | 79 | 0,6 | 421,00 | 820,00 | 670 | NNF130-PP | 7,500 | 173,20 | 1,8 | 71,2 | 63 | 3,5 | 6 | 1,8 | 137 | 185 | 1 | 0,6 | 190x4 |
| 130 | 200 | 95 | 94 | 0,6 | 582,00 | 1 062,00 | 630 | NNF5026-PP | 10,500 | 183,00 | 4,2 | 83,2 | 75 | 4 | 7 | 1,8 | 137 | 195 | 1 | 0,6 | 200x4 |
| 140 | 200 | 80 | 79 | 0,6 | 436,00 | 875,00 | 630 | NNF140-PP | 8,000 | 182,75 | 1,8 | 71,2 | 63 | 4 | 7 | 1,8 | 147 | 195 | 1 | 0,6 | 200x4 |
| 140 | 210 | 95 | 94 | 0,6 | 608,00 | 1 150,00 | 600 | NNF5028-PP | 11,000 | 195,10 | 5,2 | 83,2 | 73 | 4 | 7 | 1,8 | 147 | 205 | 1 | 0,6 | 210x5 |
| 150 | 210 | 80 | 79 | 0,6 | 457,00 | 957,00 | 600 | NNF150-PP | 8,400 | 197,09 | 2,1 | 71,2 | 61 | 4 | 7 | 1,8 | 157 | 205 | 1 | 0,6 | 210x5 |
| 150 | 225 | 100 | 99 | 0,6 | 697,00 | 1 300,00 | 560 | NNF5030-PP | 13,500 | 209,00 | 5,2 | 87,2 | 77 | 4 | 7 | 2 | 157 | 220 | 1 | 0,6 | 225x5 |
| 160 | 220 | 80 | 79 | 0,6 | 471,00 | 1 010,00 | 530 | NNF160-PP | 8,800 | 206,64 | 2,1 | 71,2 | 61 | 4 | 7 | 1,8 | 167 | 215 | 1 | 0,6 | 220x5 |
| 160 | 240 | 109 | 108 | 0,6 | 727,00 | 1 410,00 | 500 | NNF5032-PP | 16,500 | 222,40 | 5,2 | 95,2 | 85 | 4 | 7 | 2 | 167 | 235 | 1 | 0,6 | 240x5 |
| 170 | 230 | 80 | 79 | 0,6 | 484,00 | 1 060,00 | 500 | NNF170-PP | 9,300 | 216,20 | 2,7 | 71,2 | 61 | 4 | 7 | 1,8 | 177 | 225 | 1 | 0,6 | 230x5 |
| 170 | 260 | 122 | 121 | 0,6 | 934,00 | 1 800,00 | 480 | NNF5034-PP | 22,500 | 238,80 | 5,2 | 107,2 | 97 | 4 | 7 | 2 | 177 | 255 | 1 | 0,6 | 260x5 |
| 180 | 240 | 80 | 79 | 0,6 | 497,00 | 1 120,00 | 480 | NNF180-PP | 9,800 | 225,76 | 2,7 | 71,2 | 61 | 4 | 7 | 1,8 | 187 | 235 | 1 | 0,6 | 240x5 |
| 180 | 280 | 136 | 135 | 0,6 | 1 140,14 | 2 138,07 | 450 | NNF5036-PP | 30,000 | 258,70 | 5,2 | 118,2 | 108 | 4 | 8 | 2 | 187 | 275 | 1 | 0,6 | 280x5 |
| 190 | 260 | 80 | 79 | 0,6 | 516,00 | 1 200,00 | 450 | NNF190-PP | 12,700 | 240,10 | 2,7 | 73,2 | 63 | 4 | 7 | 1,8 | 197 | 255 | 1 | 0,6 | 260x5 |
| 190 | 290 | 136 | 135 | 0,6 | 1 150,00 | 2 270,00 | 430 | NNF5038-PP | 31,500 | 267,00 | 5,2 | 118,2 | 108 | 4 | 8 | 2 | 197 | 285 | 1 | 0,6 | 290x5 |
| 200 | 270 | 80 | 79 | 0,6 | 528,00 | 1 260,00 | 430 | NNF200-PP | 13,200 | 249,66 | 3,2 | 73,2 | 63 | 4 | 7 | 1,8 | 207 | 265 | 1 | 0,6 | 270x5 |
| 200 | 310 | 150 | 149 | 0,6 | 1 290,00 | 2 740,00 | 400 | NNF5040-PP | 42,000 | 283,60 | 6,3 | 128,2 | 116 | 4 | 8 | 2 | 207 | 305 | 1 | 0,6 | 310x6 |
| 220 | 300 | 95 | 94 | 1 | 698,00 | 1 630,00 | 400 | NNF220-PP | 19,500 | 276,64 | 3,2 | 83,2 | 73 | 6 | 8 | 2 | 227 | 294 | 1 | 0,6 | 300x5 |
| 220 | 340 | 160 | 159 | 1 | 1 520,00 | 3 140,00 | 360 | NNF5044-PP | 53,500 | 308,10 | 6,3 | 138,2 | 126 | 6 | 8 | 2 | 227 | 334 | 1 | 1 | 340x6 |
| 240 | 320 | 95 | 94 | 1 | 732,00 | 1 780,00 | 400 | NNF240-PP | 21,000 | 299,57 | 3,2 | 83,2 | 71 | 6 | 8 | 2 | 247 | 314 | 1 | 0,6 | 320x6 |
| 240 | 360 | 160 | 159 | 1 | 1 580,00 | 3 380,00 | 340 | NNF5048-PP | 57,500 | 327,20 | 6,3 | 138,2 | 126 | 6 | 9,4 | 2 | 247 | 354 | 1 | 1 | 360x6 |
| 260 | 340 | 95 | 94 | 1 | 833,00 | 1 920,00 | 360 | NNF260-PP | 22,500 | 322,27 | 4,2 | 83,2 | 71 | 6 | 8 | 3 | 289 | 334 | 1 | 0,6 | 340x6 |
| 260 | 400 | 190 | 189 | 1,1 | 2 200,00 | 4 720,00 | 300 | NNF5052-PP | 84,500 | 369,70 | 6,3 | 162,2 | 150 | 6 | 9,4 | 3 | 269 | 393 | 2 | 2 | 400x6 |
| 280 | 420 | 190 | 189 | 1,1 | 2 290,00 | 5 080,00 | 270 | NNF5056-PP | 90,000 | 392,60 | 7,3 | 163,2 | 149 | 6 | 9,4 | 3 | 289 | 413 | 2 | 2 | 420x7 |
| 300 | 380 | 95 | 94 | 1 | 887,00 | 2 350,00 | 320 | NNF300-PP | 25,500 | 358,60 | 4,2 | 83,2 | 71 | 6 | 8 | 3 | 309 | 374 | 1 | 0,6 | 380x6 |
| 300 | 460 | 218 | 216 | 1,1 | 2 880,00 | 6 210,00 | 240 | NNF5060-PP | 126,000 | 417,90 | 7,3 | 185,2 | 171 | 6 | 9,4 | 3 | 309 | 453 | 2 | 2 | 460x7 |

Note:

- 1) The values in C_a column are valid for assembly with rings according to DIN 471 only
- 2) Snap rings are not included

FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS

