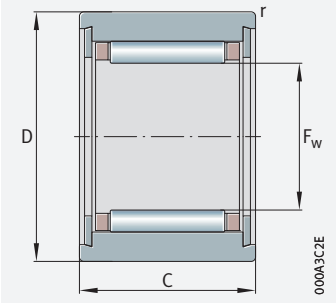
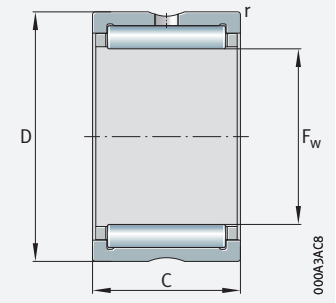
# Needle roller bearings with ribs

## Without inner ring
## Open




*NK ($F_w \leqq 10$ mm)*




*NK ($F_w \geqq 12$ mm), RNA49, RNA69*

## $F_w$ = 5 – 19 mm

| Main dimensions | | | Basic load ratings | | Fatigue limit load | Limiting speed | Speed rating | Mass | Designation |
|---|---|---|---|---|---|---|---|---|---|
| $F_w$ | D | C | dyn. $C_r$ | stat. $C_{0r}$ | $C_{ur}$ | $n_G$ | $n_{\vartheta r}$ | m | ➤*936* \| *1.12*<br>➤*937* \| *1.13*<br>X-life ➤*930* |
| | | | N | N | N | $min^{-1}$ | $min^{-1}$ | ≈ g | |
| **5** | 10 | 10 | 2 650 | 1 920 | 300 | 39 000 | 55 000 | 3,1 | **NK5/10-TV-XL**[2] |
| | 10 | 12 | 3 400 | 2 650 | 440 | 39 000 | 54 000 | 3,7 | **NK5/12-TV-XL**[2] |
| **6** | 12 | 10 | 2 950 | 2 280 | 360 | 36 500 | 48 500 | 4,7 | **NK6/10-TV-XL**[2] |
| | 12 | 12 | 3 800 | 3 150 | 530 | 36 500 | 47 500 | 5,7 | **NK6/12-TV-XL**[2] |
| **7** | 14 | 10 | 3 250 | 2 650 | 420 | 34 500 | 43 000 | 6,9 | **NK7/10-TV-XL**[2] |
| | 14 | 12 | 4 150 | 3 600 | 610 | 34 500 | 42 000 | 8,2 | **NK7/12-TV-XL**[2] |
| **8** | 15 | 12 | 4 450 | 4 100 | 700 | 32 500 | 37 000 | 8,7 | **NK8/12-TV-XL**[2] |
| | 15 | 16 | 5 800 | 5 800 | 990 | 32 500 | 36 500 | 12 | **NK8/16-TV-XL**[2] |
| **9** | 16 | 12 | 5 100 | 5 000 | 860 | 31 000 | 32 000 | 10,3 | **NK9/12-TV-XL**[2] |
| | 16 | 16 | 6 600 | 7 100 | 1 210 | 31 000 | 32 000 | 12,8 | **NK9/16-TV-XL**[2] |
| **10** | 17 | 12 | 5 300 | 5 500 | 940 | 29 500 | 29 000 | 10,1 | **NK10/12-TV-XL**[2] |
| | 17 | 16 | 7 000 | 7 800 | 1 330 | 29 500 | 28 500 | 13,3 | **NK10/16-TV-XL**[2] |
| **12** | 19 | 12 | 7 200 | 7 100 | 1 310 | 26 500 | 22 400 | 12,1 | **NK12/12-XL** |
| | 19 | 16 | 10 100 | 11 000 | 1 950 | 26 500 | 21 600 | 15,9 | **NK12/16-XL** |
| **14** | 22 | 16 | 15 400 | 17 100 | 2 900 | 24 600 | 16 800 | 21,4 | **NK14/16-D-XL** |
| | 22 | 16 | 11 400 | 11 500 | 2 140 | 24 600 | 18 600 | 20,7 | **NK14/16-XL** |
| | 22 | 20 | 14 500 | 15 600 | 2 750 | 24 600 | 18 300 | 25,5 | **NK14/20-XL** |
| | 22 | 13 | 9 600 | 9 200 | 1 660 | 24 600 | 17 800 | 16,5 | **RNA4900-XL** |
| **15** | 23 | 16 | 12 100 | 12 700 | 2 360 | 23 900 | 17 300 | 21,8 | **NK15/16-XL** |
| | 23 | 20 | 15 400 | 17 200 | 3 050 | 23 900 | 17 000 | 26,6 | **NK15/20-XL** |
| **16** | 24 | 16 | 12 800 | 13 900 | 2 600 | 23 200 | 16 200 | 22,4 | **NK16/16-XL** |
| | 24 | 20 | 16 300 | 18 800 | 3 350 | 23 200 | 15 900 | 28,4 | **NK16/20-XL** |
| | 24 | 13 | 10 600 | 10 900 | 1 970 | 23 200 | 15 300 | 17,4 | **RNA4901-XL** |
| | 24 | 22 | 18 100 | 21 600 | 3 850 | 23 200 | 14 300 | 31 | **RNA6901-XL** |
| **17** | 25 | 16 | 13 500 | 15 000 | 2 800 | 22 600 | 15 300 | 23,7 | **NK17/16-XL** |
| | 25 | 20 | 17 100 | 20 400 | 3 600 | 22 600 | 15 000 | 29,8 | **NK17/20-XL** |
| **18** | 26 | 16 | 14 100 | 16 200 | 3 050 | 22 100 | 14 400 | 24,9 | **NK18/16-XL** |
| | 26 | 20 | 17 900 | 22 000 | 3 900 | 22 100 | 14 100 | 31,4 | **NK18/20-XL** |
| **19** | 27 | 16 | 14 700 | 17 400 | 3 250 | 21 600 | 13 700 | 26,1 | **NK19/16-XL** |
| | 27 | 20 | 18 700 | 23 600 | 4 200 | 21 600 | 13 400 | 32,2 | **NK19/20-XL** |

***medias*** *https://www.schaeffler.de/std/1F9A*

[1] For unsealed needle roller bearings, dimensionally matched sealing rings of series G or SD can be used to provide protection against contamination.

[2] With closing rings, without lubrication hole and groove.