


Super linear bushings 

Super linear bushing with misalignment compensation

Super linear bushings, R0670 Closed

Super linear bushings, R0671 Open

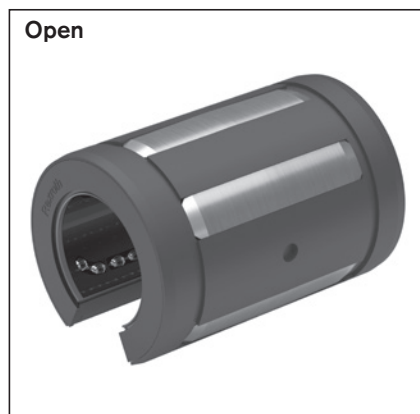
Design

- Ball retainer and outer sleeve made of PA or POM
- Hardened steel bearing plates with machined ball guide grooves
- Balls made of rolling bearing steel
- Compensate for misalignments of up to 30 ft
- No wiper seal
- Integrated wiper seals
- No initial lubrication



| Shaft Ø d (mm) | Material number | | Weight (kg) |
|----------------------|---------------------------|---|----------------|
| | No wiper seal KBA- ... | With two integrated wiper seals KBA- ... -DD | |
| 10 | R0670 010 00 | R0670 210 40 | 0.017 |
| 12 | R0670 012 00 | R0670 212 40 | 0.023 |
| 16 | R0670 016 00 | R0670 216 40 | 0.028 |
| 20 | R0670 020 00 | R0670 220 40 | 0.061 |
| 25 | R0670 025 00 | R0670 225 40 | 0.122 |
| 30 | R0670 030 00 | R0670 230 40 | 0.185 |
| 40 | R0670 040 00 | R0670 240 40 | 0.360 |
| 50 | R0670 050 00 | R0670 250 40 | 0.580 |

With an integrated wiper seal: R0670 1 ... 40.



| Shaft Ø d (mm) | Material number | | | Weight (kg) |
|----------------------|-----------------------------|---|---|----------------|
| | No wiper seal KBA-O- ... | with two integrated wiper seals KBA-O- ... -DD | with two integrated wiper seals and linear seal KBA-O- ... -VD | |
| 12 | R0671 012 00 | R0671 212 40 | R0671 212 45 | 0.018 |
| 16 | R0671 016 00 | R0671 216 40 | R0671 216 45 | 0.022 |
| 20 | R0671 020 00 | R0671 220 40 | R0671 220 45 | 0.051 |
| 25 | R0671 025 00 | R0671 225 40 | R0671 225 45 | 0.102 |
| 30 | R0671 030 00 | R0671 230 40 | R0671 230 45 | 0.155 |
| 40 | R0671 040 00 | R0671 240 40 | R0671 240 45 | 0.300 |
| 50 | R0671 050 00 | R0671 250 40 | R0671 250 45 | 0.480 |

With an integrated wiper seal: R0671 1 ... 40.

See Section "Customer-built housing" for separate wiper seals.

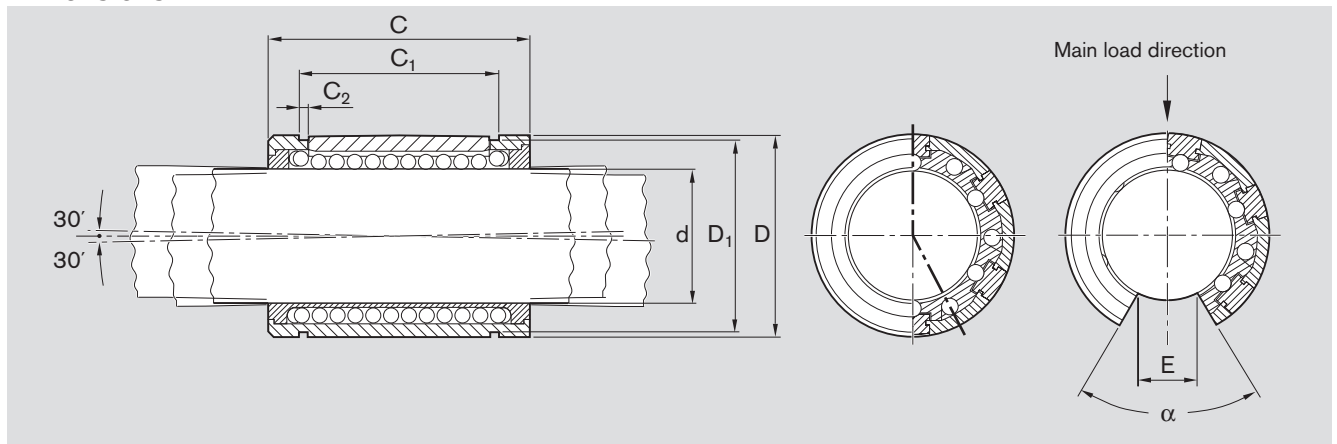
The dynamic load ratings are based on a total travel of 100,000 m.
When based on 50,000 m, the C values in the table are multiplied by 1.26.

Explanation of sample short product name

| KB | A | O | 20 | DD |
|----------------|---|------|------|-----------|
| Linear bushing | Super  | Open | Ø 20 | Two seals |

See page 38 for more information on short product names.

Dimensions



Closed

| Dimensions (mm) | | | | | | Rows of balls | Radial clearance (μm) | | | Load ratings (N) | | | |
|-----------------|----|-----|-------|-------|-------|---------------|------------------------------------|-----------|------------|------------------|--------|-------|-------------|
| $\varnothing d$ | D | C | C_1 | C_2 | D_1 | | Shaft/bore | | | min. | dyn. C | min. | stat. C_0 |
| | | h13 | H13 | | | | h6/H7 | h6/K7 | h6/M7 | | | | |
| 10 | 19 | 29 | 21.6 | 1.3 | 18.0 | 5 | +9 +36 | +21 -6 | +15 -12 | 600 | 820 | 330 | 480 |
| 12 | 22 | 32 | 22.6 | 1.3 | 21.0 | 5 | +38 +10 | +23 -5 | +17 -11 | 830 | 1,140 | 420 | 620 |
| 16 | 26 | 36 | 24.6 | 1.3 | 24.9 | 5 | +38 +10 | +23 -5 | +17 -11 | 1,020 | 1,400 | 530 | 780 |
| 20 | 32 | 45 | 31.2 | 1.6 | 30.5 | 6 | +43 +11 | +25 -7 | +18 -14 | 2,020 | 2,470 | 1,050 | 1,340 |
| 25 | 40 | 58 | 43.7 | 1.85 | 38.5 | 6 | +43 +11 | +25 -7 | +18 -14 | 3,950 | 4,820 | 2,180 | 2,790 |
| 30 | 47 | 68 | 51.7 | 1.85 | 44.5 | 6 | +43 +11 | +25 -7 | +18 -14 | 4,800 | 5,860 | 2,790 | 3,570 |
| 40 | 62 | 80 | 60.3 | 2.15 | 58.5 | 6 | +50 +12 | +29 -9 | +20 -18 | 8,240 | 10,070 | 4,350 | 5,570 |
| 50 | 75 | 100 | 77.3 | 2.65 | 71.5 | 6 | +50 +12 | +29 -9 | +20 -18 | 12,060 | 14,730 | 6,470 | 8,280 |

Open

| Dimensions (mm) | | | | | | Angle α ($^\circ$) | Rows of balls | Radial clearance (μm) | | | Load ratings ²⁾ (N) | |
|-----------------|----|-----|-------|-------|-------|-----------------------------|---------------|------------------------------------|-----------|------------|--------------------------------|-------------|
| $\varnothing d$ | D | C | C_1 | C_2 | E^1 | | | Shaft/bore | | | dyn. C | stat. C_0 |
| | | h13 | H13 | | | | | h6/H7 | h6/K7 | h6/M7 | | |
| 12 | 22 | 32 | 22.6 | 1.3 | 6.5 | 66 | 4 | +38 +10 | +23 -5 | +17 -11 | 1,060 | 510 |
| 16 | 26 | 36 | 24.6 | 1.3 | 9.0 | 68 | 4 | +38 +10 | +23 -5 | +17 -11 | 1,500 | 830 |
| 20 | 32 | 45 | 31.2 | 1.6 | 9.0 | 55 | 5 | +43 +11 | +25 -7 | +18 -14 | 2,570 | 1,180 |
| 25 | 40 | 58 | 43.7 | 1.85 | 11.5 | 57 | 5 | +43 +11 | +25 -7 | +18 -14 | 5,040 | 2,470 |
| 30 | 47 | 68 | 51.7 | 1.85 | 14.0 | 57 | 5 | +43 +11 | +25 -7 | +18 -14 | 5,020 | 2,880 |
| 40 | 62 | 80 | 60.3 | 2.15 | 19.5 | 56 | 5 | +50 +12 | +29 -9 | +20 -18 | 8,620 | 4,480 |
| 50 | 75 | 100 | 77.3 | 2.65 | 22.5 | 54 | 5 | +50 +12 | +29 -9 | +20 -18 | 12,500 | 6,620 |

Refer to the diagrams on page 41 for load in the direction of opening.

- 1) Minimum size in relation to $\varnothing d$
- 2) The load ratings apply for the main load direction.