

Closed Guide Bush with Sealing Rings

N 553



Suitability

- Design as for N 550, with sealing and stop rings fixed on both sides.
- When used in combination with shaft diameter d_w ISO-h3, preloading of the rotary stroke bearing is guaranteed.
 - Guide bush N 553 is designed for use in dirty environments.
 - The sealing rings prevent any dirt particles from penetrating. (The rubbing action of the sealing rings on the shaft affects the smooth running of the rotary stroke bearing slightly.)
 - Secure path limitation for the ball cage is ensured.

Features

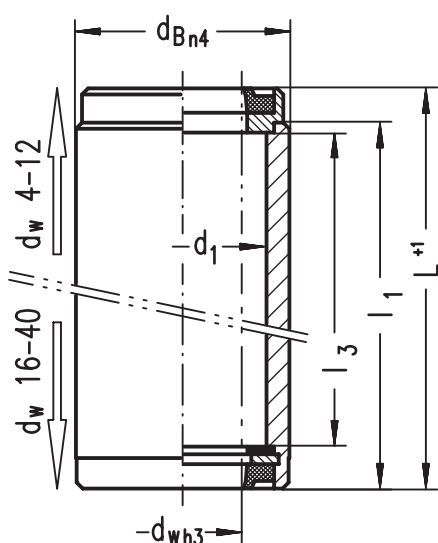
- Sealing and stop rings fixed on both sides.
- The closed guide bush and integrated ball cage form a separate component.
- Guide bore diameter d_1 is finely honed to ISO tolerance IT 3, R_z 0.5 – 1.5 μm depending on diameter.
- Roundness within 1/3 ISO-IT 3.
- Cylindricity within IT 1.
- Radial run-out of a shaft inserted under preloading is within 0.0005 mm.
- Outside diameter d_B n4 with radial run-out error within IT 4, ground to guide bore diameter d_1 , lead-in taper on one side.
- The maximum stroke path H_{max} of the rotary stroke bearing is determined from the length of guide bush l_3 and the length of the ball cage l_2 : $H_{\text{max}} = 2(l_3 - l_2)$.
- See page 37-41 for instructions on installation and servicing.

Material

- Special roller bearing steel 100 Cr 6 (1.2067 or 1.3505)
- Carefully heat-treated, hardness rating HRC 60–64/HV 720–815
- Steel stop rings
- Sealing rings NBR rubber in steel shell
- Maximum constant working temperature 100°C

Special designs

Other dimensions or designs based on workpiece drawings are available. These can also be produced using stainless steel (1.4112).



Order Information

Rotary stroke bearing consisting of:

Guide bush N 553/ d_w / d_1 / L

Order No. 5009 . . .

Ball cage N 501/ d_w / d_1 / l_2

Order No. 50010 . .

or

Ball cage N 500/ d_w / d_1 / l_2

Order No. 50000 . .