18 ► I MarMotion. High-precision rotary stroke bearings

Closed Guide Bush with Stop Rings

N 552



Suitability

Design as for N 550, with stop rings fixed on both sides.

- When used in combination with shaft diameter d_w ISO-h3, preloading of the rotary stroke bearings is guaranteed.
- The stop rings ensure the cage is effectively restricted for linear and rotary movements.
- Smooth running of the rotary stroke bearing is not impaired by the stop rings.

Features

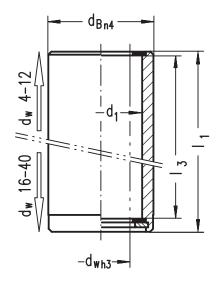
- Stop rings fixed on both sides.
- The closed guide bush and integrated ball cage form a separate component.
- Guide bore diameter d_1 is finely honed to ISO tolerance IT 3, $R_{_{\rm Z}}$ 0.5 1.5 μm depending on diameter.
- Roundness within 1/3 ISO-IT 3.
- Cylindricity within IT 1.
- Radial run-out 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} is determined from the length of guide bush I_3 and the length of the ball cage I_2 : $H_{max} = 2$ (I_3 - I_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

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 552/ $d_w/d_1/l_1$ Ball cage N 501/ $d_w/d_1/l_2$ Order No. 5003 . . . Order No. 50010 . .

or

Ball cage N 500/d_w/d₁/l₂ **Order No. 50000** . .