



DICHTOMATIK

## Radial shaft seal WBD



### DESCRIPTION

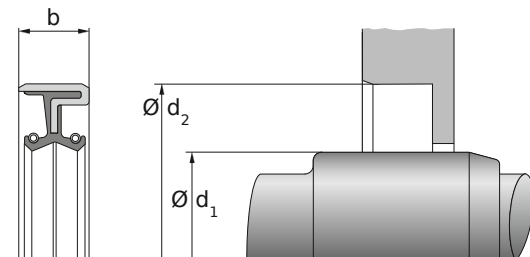
- With tension spring
- Opposed sealing lips
- Open metallic outer jacket
- Without protective lip

### FUNCTION

- Double-acting, primarily for the separation of different media
- Dynamic sealing of rotating shafts, independent of direction of rotation
- Good static seal between sealing lip and shaft at standstill
- Metallic outer jacket ensures tight and precise fit
- Limited sealing of low-viscosity and gaseous media and in split housings

### APPLICATIONS

- Sealing of rotating machine elements (shafts, hubs, axles)



### PRODUCT ADVANTAGES

- Tight and precise fit
- Long service life
- Reliable design with broad application spectrum for moderately demanding applications in general industry
- Good price/performance ratio
- Manufactured by certified external suppliers

### CONFORMITY AND CERTIFICATES

- Please consult the material data sheet valid for the respective material for current information on approvals and certificates, as this information depends on the compound and cannot be listed exhaustively here.

### DESIGN GUIDELINE

- Shaft must be provided with a chamfer for mounting
- Design of the installation space is recommended in accordance with DIN 3760.
- Roundness of shaft - tolerance class IT8 - free of twists, burrs and damage of any kind
- Shaft tolerance zone: ISO h11
- Hardness of shaft surface min. 45 HRC
- Housing surface roughness  $R_z = 10$  to  $20 \mu\text{m}$
- Housing tolerance zone: ISO H8



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### INSTALLATION GUIDELINE

- Clean the installation space carefully before installation, remove dust, dirt, metal chips, etc.
- Do not pull the seal over sharp edges, threads, or keyways during installation; cover with an installation sleeve if necessary
- Do not grease the seal or installation space for assembly
- The space between the sealing lips can be filled with approx. 40 % grease
- Careful installation on the shaft, tilting is not permitted

### STORAGE ADVISE

- Storage temperature <25°C
- No direct heat sources
- No direct sunlight
- No condensation in the storage room
- No exposure to ozone or ionizing radiation
- Recommendations based on the revision of ISO 2230 dated 16.09.1992

#### Pressure [MPa]

NBR

0.03

#### Speed [m/s]

NBR

6



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SEALING TECHNOLOGIES



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### Temperature [°C]

NBR

-40...80 (a)

a = short-term 100°C

The values given are based on a limited number of tests on standard test specimens (2 mm sample plates) from laboratory production. The data determined from finished parts may deviate from the above values depending on the manufacturing process and the part geometry.

The information provided herein is based on laboratory tests and on data sources deemed reliable. It constitutes general, non-binding guideline values and does not represent any guarantee of specific properties or suitability for a particular purpose. The suitability of a product for a specific application depends on the actual operating conditions and a variety of factors. Full testing and performance evaluation of the final product are the responsibility of the user. Freudenberg FST GmbH | [www.fst.com](http://www.fst.com)

