



WBD

Rotary shaft seal with an elastomer outer sheath and a metal insert as well as two spring-energised, back-to-back sealing lips. The WBD design is provided with a metal outer surface.

DESCRIPTION

Product group: rotary shaft seal

Design: B = outer surface metal

Ausführung: D = spring-energised sealing lips facing outwards

Seal material: NBR 70

Colour: black

Stiffening ring: non-alloy steel according to DIN EN 10139

Tension spring: non-alloy spring steel according to DIN EN 10270-1

MEDIA

Good chemical resistance to many mineral oils and greases.

AREAS OF APPLICATION

Sealing of rotating machine elements such as shafts, hubs and axles. Particularly for the separation of two media or extreme dirt accumulation from the outside.

FUNCTION

The WBD rotary shaft seal is used for the separation of two media or extreme dirt accumulation from the outside for rotating or pivoting shafts.

The WBD is a double-action rotary shaft ring for rotating or pivoting shafts. The elastomer outer sheath provides good static sealing, good thermal expansion balance e.g. in light-metal housings, better sealing with greater roughness and secure sealing for split housings as well as good static sealing with thin fluid or gaseous media.

Tight and accurate fitting is achieved by the metal outer casing. The WBD model has limited sealing action with thin fluid or gaseous media and in split housings. To guarantee high static sealing on the outer surface, better surface treatment of the housing bore is necessary or an additional coat of paint should be applied to the outer casing.

OPERATIONAL APPLICATION LIMITS

Pressure (Mpa/bar): $\leq 0.03/0.3$

Temperature (°C): -40 to $+100$

Peripheral speed (m/s): ≤ 6

INSTALLATION

Suitable tools should be used for installation. It is recommended that the installation housing is designed to provide the rotary shaft seal with axial support. The space between the sealing lips must be $2/3$ filled with grease.

REMARKS

The nominal widths mentioned on the following pages represent the standard dimensions. They are generally in stock or can be delivered at short notice. Other dimensions and different designs, e.g. springs or metal inserts made of other steel grades can be produced as well some special designs. Minimum quantities may be obligatory for dimensions outside of the standard. The WAD/WBD models can also be produced in fluoro rubber (FKM).

