

HBrinker Mechanical Seal

Elastomer Bellows Mechanical Seal HBT-PN



Mechanical Seal HBT-PN

Operating range

Shaft diameter: $d_1 = 8 \dots 40 \text{ mm}$ (0.31" ... 1.57")

Pressure: $p_1 = 12 \text{ bar}$ (174 PSI),

vacuum ... 0.5 bar (7.45 PSI)

Temperature: $t = -20 \text{ }^\circ\text{C} \dots +120 \text{ }^\circ\text{C}$ (-4 °F ... +248 °F)

Sliding velocity: $v_g = 10 \text{ m/s}$ (33 ft/s)

Materials

- Seal face: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Silicon carbide (Q1, Q6)
- Seat: Aluminium oxide (V), Steatite (X), Silicon carbide (Q1, Q6, Q7)
- Elastomers: NBR (P), FKM (V), EPDM (E)
- Metal parts: CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G)

Features

- Rubber bellows mechanical seals
- Unbalanced
- Single spring
- Independent of direction of rotation

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Recommended applications

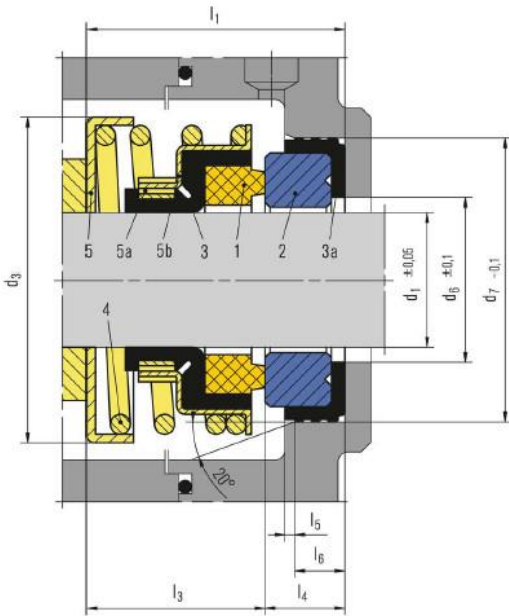
- Water and waste water technology
- Pool and spa applications
- Household appliances
- Domestic and garden pumps
- Whirlpool and swimming pool pumps
- Dishwasher pumps
- Submersible motors / pumps
- Water pumps / waste water pumps

Advantages

The HBTPN is a large series mechanical seal with a simple yet effective design that is easy to assemble. The special spring arrangement allows a short axial installation length. This advantage is combined with an increased working pressure capability of up to 12 bar (174 PSI). The spring is free from torque transmission.

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| Item | Description |
|------|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3 | Bellows |
| 3a | Gasket |
| 4 | Spring |
| 5 | Ring |
| 5a | Drive ring |
| 5b | collar |

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Dimension Table in millimeter

| d ₁ | d ₃ | d ₆ | d ₇ | l ₁ | l ₃ | tol | l ₄ | l ₅ | l ₆ |
|----------------|----------------|----------------|----------------|----------------|----------------|--------|----------------|----------------|----------------|
| 8.00 | 23 | 10 | 22.0 | 17.5 | 13.5 | ±1.0 | 4.0 | 0.5 | 3.5 |
| 8.00 | 23 | 10 | 25.4 | 19.0 | 13.5 | ±1.0 | 5.5 | 0.5 | 4.5 |
| 9.53 | 23 | 12 | 25.4 | 19.0 | 13.5 | ±1.0 | 5.5 | 0.5 | 4.5 |
| 10.00 | 23 | 12 | 25.4 | 19.0 | 13.5 | ±1.0 | 5.5 | 0.5 | 4.5 |
| 13.00 | 32 | 17 | 29.5 | 20.8 | 12.8 | +0.7/0 | 8.0 | 1.0 | 6.0 |
| 13.00 | 32 | 17 | 29.5 | 20.8 | 12.8 | +0.7/0 | 8.0 | 1.0 | 6.0 |
| 14.00 | 32 | 17 | 29.5 | 20.8 | 12.8 | +0.7/0 | 8.0 | 1.0 | 6.0 |
| 15.00 | 32 | 17 | 29.5 | 20.8 | 12.8 | +0.7/0 | 8.0 | 1.0 | 6.0 |
| 16.00 | 32 | 17 | 29.5 | 20.8 | 12.8 | +0.7/0 | 8.0 | 1.0 | 6.0 |
| 16.00* | 32 | 17 | 29.5 | 24.3 | 16.3 | +0.7/0 | 8.0 | 1.0 | 6.0 |
| 16.00* | 32 | 17 | 29.5 | 24.3 | 16.3 | +0.7/0 | 8.0 | 1.0 | 6.0 |
| 20.00 | 44 | 22 | 42.0 | 22.0 | 14.0 | ±1.0 | 8.0 | 1.0 | 6.0 |
| 20.00 | 44 | 22 | 42.0 | 22.0 | 14.0 | ±1.0 | 8.0 | 1.0 | 6.0 |
| 25.00 | 50 | 27 | 45.0 | 27.0 | 17.0 | ±1.0 | 10.0 | 1.0 | 8.0 |
| 30.00 | 60 | 33 | 52.0 | 32.0 | 22.0 | ±1.0 | 10.0 | 1.0 | 6.0 |
| 30.00 | 60 | 33 | 52.0 | 34.0 | 22.0 | ±1.0 | 12.0 | 1.5 | 8.5 |

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