

# 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

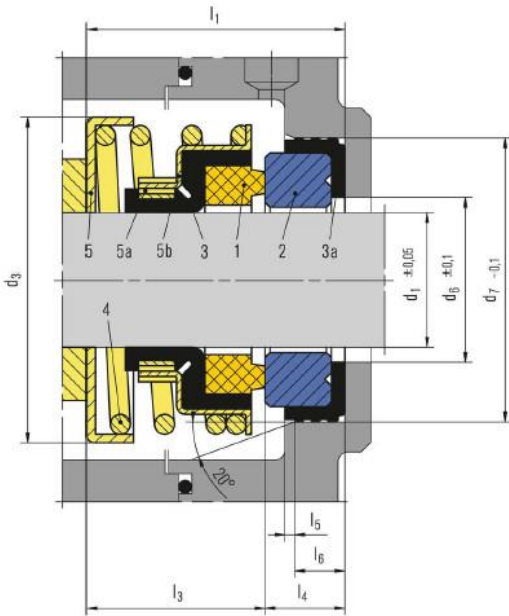
- Water and waste water technology
- Pool and spa applications
- Household appliances
- Domestic and garden pumps
- Whirlpool and swimming pool pumps
- Dishwasher pumps
- Submersible motors / pumps
- Water pumps / waste water pumps

### 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 <sub>1</sub>	d <sub>3</sub>	d <sub>6</sub>	d <sub>7</sub>	l <sub>1</sub>	l <sub>3</sub>	tol	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>
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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