

# HBrinker Mechanical Seal

Standard Cartridge Seal

Mechanical Seal HBTEX-SS



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### Operating range

Shaft diameter:  $d_1 = 25 \dots 80 \text{ mm}$  (1" ... 3.15")

Temperature:  $t^* = -40 \text{ }^\circ\text{C} \dots +220 \text{ }^\circ\text{C}$  (-40 °F ... +428 °F)

Pressure:  $p = 25 \text{ bar}$  (363 PSI)

Sliding velocity:  $v_g = 20 \text{ m/s}$  (66 ft/s)



### Materials

- Seal face: Carbon graphite antimony impregnated (A), Silicon carbide (Q1)
- Seat: Silicon carbide (Q1)
- Secondary seals: FKM (V), EPDM (E), FFKM (K)
- Bellows: Inconel® 718 (M6)
- Metal parts: CrNiMo steel (G), Duplex (G1)
- Throttle ring: PTFE carbon graphite reinforced (T12)
- Lip seal: NBR (P), PTFE carbon reinforced (T3)

### Features

- Single seal
- Cartridge
- Balanced
- Independent of direction of rotation
- Metal bellows
- Single seal with quench and lip seal (- QN) or throttle ring (-TN)
- Version available with multipoint injection ring (-QNM, -TNM)
- Supply connections for flush (A) and quench (B)

### Advantages

- Ideal seal for standardizations
- Universal applicable for packings conversions, retrofits or OEM
- No dimensional modification of the seal chamber necessary, small radial installation height
- Trouble-free running due to bellows unit with vibration dampers (essential in case of dry-running)
- No dynamically loaded O-Ring
- Self cleaning effect of the bellows
- Straightforward and easy installation due to pre-assembled unit (reduced downtimes)

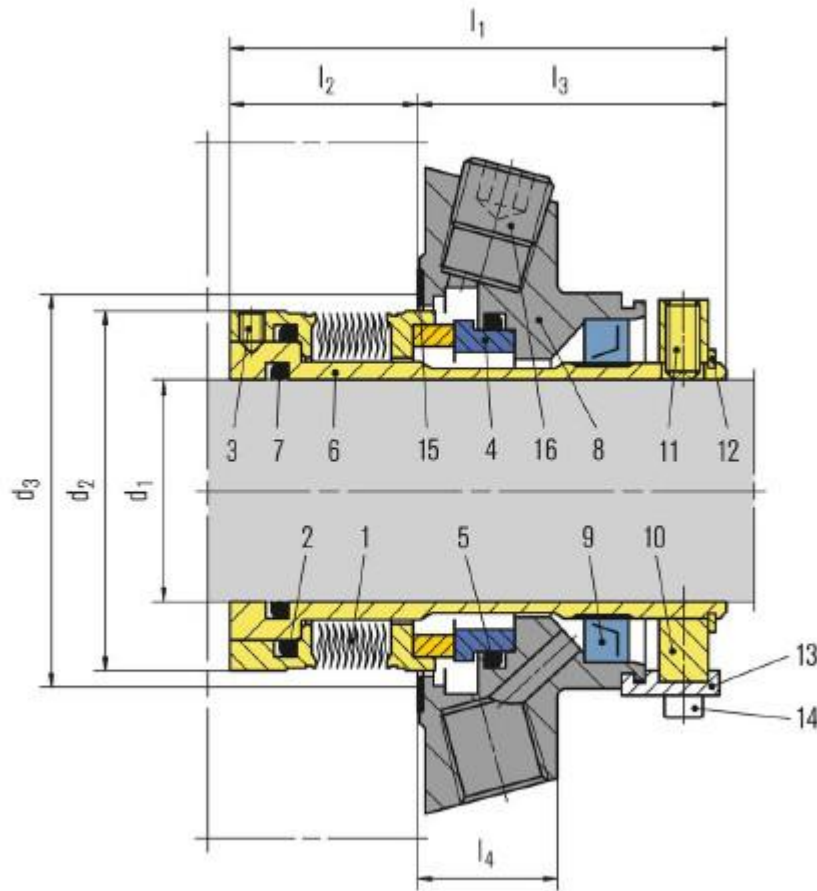
### Recommended applications

- Process industry
- Chemical industry
- Hot media
- Cold media
- Highly viscous media
- Pumps
- Special rotating equipment

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Item	Description	Item	Description
1	Bellows unit	9	Lip Seal
2, 5, 7	O-Ring	10	Drive Collar
3, 11	Set screw	12	Retaining ring
4	Seat	13	Assembly fixture
6	Shaft sleeve	14	Hex socket head screw
8	Cover	15	Gasket
		16	Screw plug

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Dimension Table in millimeter

d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub> min.	d <sub>3</sub> max.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	d <sub>a</sub>	a <sub>1</sub>	s
25	45.0	47.0	51.0	79.5	26.1	53.4	25.4	105.0	62.0	13.2
30	49.4	52.0	56.0	78.4	25.0	53.4	25.4	105.0	67.0	13.2
32	52.3	54.5	57.0	78.4	25.0	53.4	25.4	108.0	70.0	13.2
33	52.3	54.5	57.0	78.4	25.0	53.4	25.4	108.0	70.0	13.2
35	54.8	58.0	61.5	78.4	25.0	53.4	25.4	113.0	72.0	13.2
38	57.5	60.0	66.0	78.4	25.0	53.4	25.4	123.0	75.0	13.2
40	58.8	62.0	68.0	78.2	24.8	53.4	25.4	123.0	77.0	14.2
43	61.9	64.5	70.5	78.4	25.0	53.4	25.4	133.0	80.0	14.2
45	65.0	68.5	73.0	78.4	25.0	53.4	25.4	138.0	82.0	14.2
48	68.4	71.0	75.0	78.7	25.3	53.4	25.4	138.0	85.0	14.2
50	70.0	73.0	78.0	79.1	25.7	53.4	25.4	148.0	87.0	14.2
53	71.9	75.0	87.0	77.8	24.4	53.4	25.4	148.0	97.0	18.0
55	74.6	77.0	83.0	78.9	25.5	53.4	25.4	148.0	92.0	18.0
60	83.9	87.0	91.0	80.1	26.7	53.4	25.4	157.0	102.0	18.0
65	87.5	90.0	98.5	80.0	26.6	53.4	25.4	163.0	109.3	18.0
70	93.0	98.0	108.0	81.5	28.1	53.4	25.4	178.0	118.3	18.0
75	96.8	101.6	118.0	94.4	30.5	63.9	28.0	190.0	129.0	18.0
80	104.7	108.0	124.0	94.4	30.4	64.0	28.0	195.0	135.0	18.0

