

HBrinker Mechanical Seal

Standard Cartridge Seal

Mechanical Seal HBCartex Single Seal



Mechanical Seal HBCartex ANSI Single Seal



Operating range

Shaft diameter: $d_1 = 25 \dots 100 \text{ mm}$ (1.000" ... 4.000") Other sizes on request

Temperature: $t = -40 \text{ }^{\circ}\text{C} \dots 220 \text{ }^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$... 428 $^{\circ}\text{F}$) (Check O-Ring resistance)

Sliding face material combination BQ1

Pressure: $p_1 = 25 \text{ bar}$ (363 PSI)

Sliding velocity: $v_g = 16 \text{ m/s}$ (52 ft/s)

Sliding face material combination Q1Q1 or U2Q1

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

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

Axial movement: $\pm 1.0 \text{ mm}$, $d_1 \geq 75 \text{ mm} \pm 1.5 \text{ mm}$

Materials

- Seal face: Silicon carbide (Q1), Carbon graphite resin impregnated (B), Tungsten carbide (U2)
- Seat: Silicon carbide (Q1)
- Secondary seals: FKM (V), EPDM (E), FFKM (K), Perfluorocarbon rubber/PTFE (U1)
- Springs: Hastelloy® C-4 (M)
- Metal parts: CrNiMo steel (G), CrNiMo cast steel (G)

Features

- Single seal
- Cartridge
- Balanced
- Independent of direction of rotation
- Single seals without connections (- SNO), with flush (-SN) and with quench combined with lip seal (-QN) or throttle ring (-TN)
- Additional variants available for ANSI pumps (e.g. - ABPN) and eccentric screw pumps (-Vario)

Advantages

- Ideal seal for standardizations
- Universal applicable for packings conversions, retrofits or original equipment
- No dimensional modification of the seal chamber (centrifugal pumps) necessary, small radial installation height
- No damage of the shaft by dynamically loaded O-Ring
- Extended service life
- Straightforward and easy installation due to pre-assembled unit
- Individual adaptation to pump design possible
- Customer specific versions available

Recommended applications

- Process industry
- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Power plant technology
- Pulp and paper industry
- Water and waste water technology
- Mining industry
- Food and beverage industry
- Sugar industry
- Universally applicable
- Centrifugal pumps
- Eccentric screw pumps
- Process pumps

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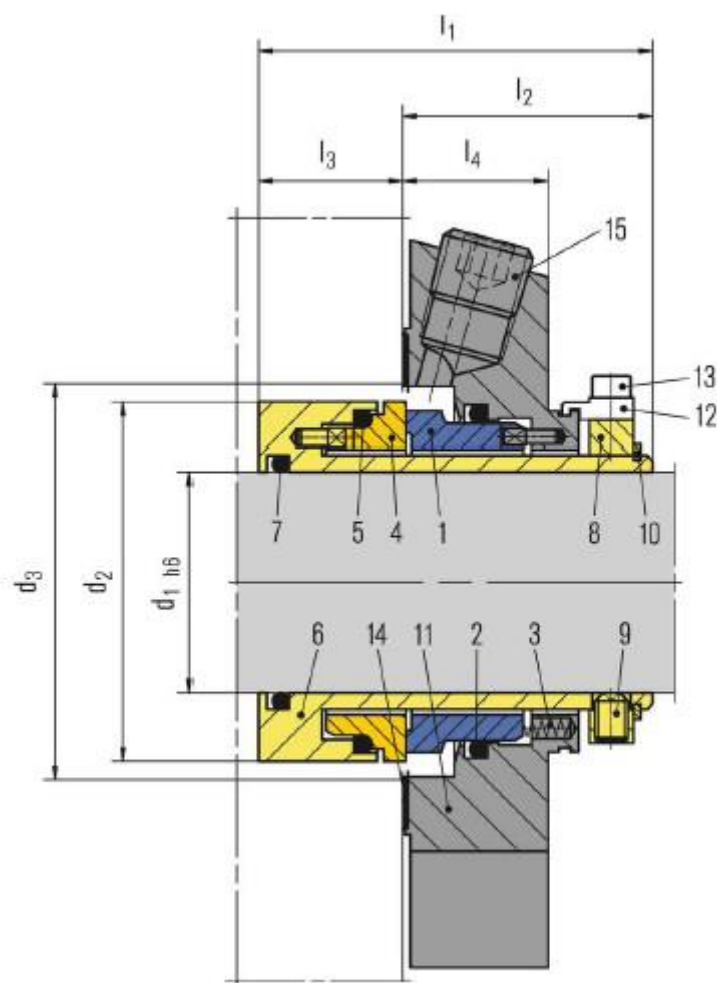
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H-Brinker

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Item	Description
1	Seal face
2,5,7	O-Ring
3	Spring
4	Seat
6	Shaft sleeve
8	Drive collar
9	Set Screw
10	Snap ring
11	Cover
12	Assembly fixture
13	Screw
14	Gasket
15	Screw Plug
16	Lip Seal

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Dimension Table in millimeter

d ₁	d ₂	d _{3min.}	d _{3max.}	l ₁	l ₂	l ₃	l ₄	l ₁₂	l ₁₃	l ₁₄	l ₁₅	l ₁₆	l ₁₇	a ₁	d _a	s
25	43.0	44.0	51.5	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	62	105	13.2
28	46.0	47.0	52.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	62	105	13.2
30	48.0	49.0	56.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	65	105	13.2
32	49.8	51.0	57.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	67	108	13.2
33	49.8	51.0	57.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	67	108	13.2
35	53.0	54.0	61.5	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	70	113	13.2
38	56.0	57.0	66.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	75	123	13.2
40	58.0	59.0	68.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	75	123	14.2
42	60.5	61.5	69.5	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	80	133	14.2
43	60.5	61.5	70.5	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	80	133	14.2
45	62.5	64.0	73.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	81	138	14.2
48	65.6	67.0	75.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	84	138	14.2
50	68.0	69.0	78.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	87	148	14.2
53	72.0	73.0	87.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	97	148	18.0
55	73.0	74.0	83.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	90	148	18.0
60	78.0	79.0	91.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	102	157	18.0
65	84.8	85.7	98.5	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	109	163	18.0
70	93.0	95.0	108.0	67	42.4	24.6	25.4	35.0	32.0	17.5	79.5	53.4	26.1	118	178	18.0
75	100.0	101.6	118.0	84	57.4	26.6	28.0	46.1	37.9	22.0	98.0	63.9	34.1	129	190	18.0
80	106.4	108.0	124.0	84	57.4	26.6	28.0	46.1	37.9	22.0	98.0	63.9	34.1	135	195	18.0
85	109.5	111.1	128.0	84	57.4	26.6	28.0	46.1	37.9	22.0	98.0	63.9	34.1	139	198	22.0
90	115.9	117.5	135.0	84	57.4	26.6	28.0	46.1	37.9	22.0	98.0	63.9	34.1	145	205	22.0
95	119.1	120.7	138.0	84	57.4	26.6	28.0	46.1	37.9	22.0	98.0	63.9	34.1	148	208	22.0
100	125.4	127.0	144.0	84	57.4	26.6	28.0	46.1	37.9	22.0	98.0	63.9	34.1	154	218	22.0