

HBrinker Mechanical Seal

Split seals

Mechanical Seal HBSplitex



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Operating range

Shaft diameter: $d_1 = 50 \dots 150 \text{ mm}$ (1.940" ... 6.000")

Pressure: $p_1 = 10 \text{ bar}$ (145 PSI)

Temperature: $t = -40 \dots +150 \text{ }^\circ\text{C}$ (- 40 ... + 300 $^\circ\text{F}$), above 80 $^\circ\text{C}$ (175 $^\circ\text{F}$)
flush is recommended

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

Axial movement: $\pm 1.5 \text{ mm}$ (1/16")

Radial movement: $\pm 0.8 \text{ mm}$ (1/32")

Materials

- Seal face: Carbon graphite antimony impregnated (A), Silicon carbide (Q6)
- Seat: Silicon carbide (Q6)
- Secondary seals: FKM (V), EPDM (E), NBR (P)
- Springs: CrNiMo steel (G)
- Metal parts: CrNiMo steel (G)

Features

- Fully split single seal, 2 x 2 segments, pre-assembled
- Semi-cartridge
- Balanced
- Stationary springs
- Bi-directional
- External pressurization
- Built-in flushing connections
- Installation and wear control

Advantages

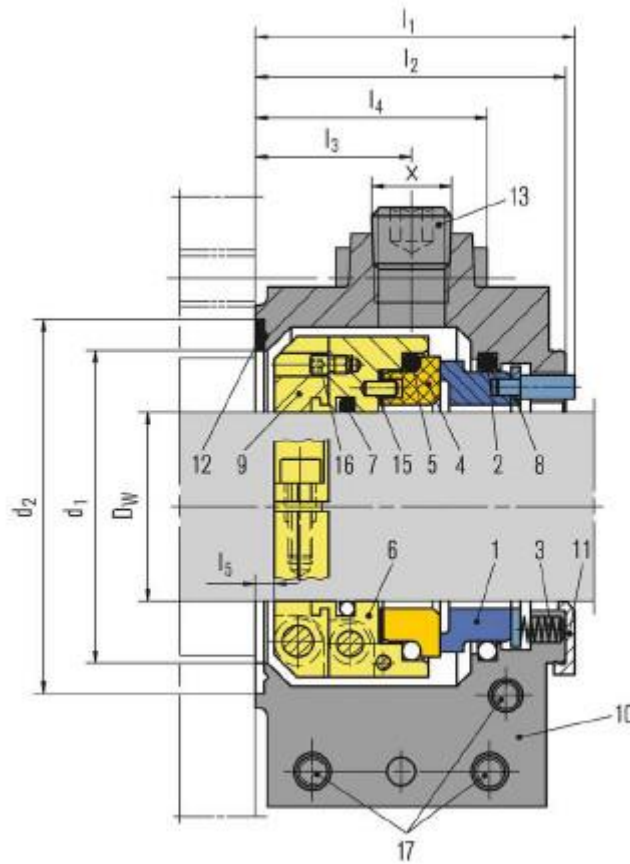
- Reduced repair and downtime: 2 x 2 preassembled design speeds up and simplifies installation because pump does not have to be disassembled.
- Long service life: precise pre-alignment because of pre-assembled segments. Stationary springs which are protected from the product prevent clogging.
- Greater flexibility during installation: no modification necessary because the seal is located outside of the stuffing box.
- Shaft protection: uniform torque transmission via clamping ring prevents damage caused by set screws.
- Dependable operation: mechanical decoupling of clamping ring (torque transmission) avoids distortion of the seat.
- Simple monitoring of the seal during operation because of mechanical wear indicator on the seal face.
- Low leakage: elimination of secondary seals eliminates leakage paths between split components.
- High tolerance to shaft deflections ensured by stationary design and elastic seat mounting (gasket).

Recommended applications

- Process industry
- Petrochemical industry
- Chemical industry
- Power plant technology
- Pulp and paper industry
- Centrifugal pumps
- Agitators
- Displacement pumps
- Conveying pulp with stock pumps
- Conveying timber to refiners with pumping screws
- Circulation of pulp-and-water mixtures in storage vessels
- Pump stations for waste water treatment
- Cooling water pumps for energy generation

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Item	Description
1	Seal face
2,5,7	O-Ring
3	Spring
4	Seat
6	Driver
8	Thrust ring
9	Clamp collar
10	Housing
11	Assembly fixture
12,15	Gasket
13	Head screw plug
14	Mounting plate
16	Set screw
17	Socket head screw

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Dimension Table in millimeter

d_w	d_w	d_1	d_2	d_a	a	s	l_1	l_2	l_3	l_4	l_5	X
50	1.969	75	84	138	88	15	63	61	30	45	3	3/8 NPT
60	2.362	89	101	149	105	17,5	64	62	30	46	3	3/8 NPT
70	2.756	98	113	176	118	20	64	62	30	46	3	3/8 NPT
80	3.150	110	132	191	135	20	65	63	31	47	3	3/8 NPT
90	3.543	121	140	203	145	22	72.5	70.5	31.5	50.5	3	1/2 NPT
100	3.937	131	150	216	155	22	72.5	70.5	31.5	50.5	3	1/2 NPT
110	4.331	142	165	230	170	22	72.5	70.5	31.5	50.5	3	1/2 NPT
120	4.724	152	175	240	180	22	72.5	70.5	31.5	50.5	3	1/2 NPT
125	4.921	162	185	268	190	26	89.5	87.5	43.5	62.5	4	1/2 NPT
140	5.512	175	200	303	205	26	89.5	87.5	43.5	62	4	1/2 NPT
150	5.906	188	215	308	220	26	89.5	87.5	43.5	62.5	4	1/2 NPT

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