

HBrinker Mechanical Seal

Agitator seal Mechanical Seal HBSM1



Mechanical Seal HBSM1

Operating range

Shaft diameter: $d_1 = 25 \dots 220 \text{ mm}$ (0,98" ... 8,66")

Pressure: $p_1 = \text{vacuum} \dots 6 \text{ bar}$ (87 PSI)

Temperature: $t_1 = -20 \text{ }^\circ\text{C} \dots +200 \text{ (250*) }^\circ\text{C}$ (-4 °F ... 392 (482*) °F)

Sliding velocity: $v_g = 0 \dots 2 \text{ m/s}$ (0 ... 6 ft/s)

Axial movement: $\pm 1.5 \text{ mm}$

Radial movement: $\pm 1.5 \text{ mm}$

Materials

- Seal face: Carbon graphite, FDA conform
- Seat: Silicon carbide
- Secondary seals and metal parts according to application and customer's specifications.

Features

- For top entry drives, Recommended applications on request side drive possible
- Dry-running
- Single seal
- Balanced
- Outboard mounted
- Multiple springs rotating
- Independent of direction of rotation

Advantages

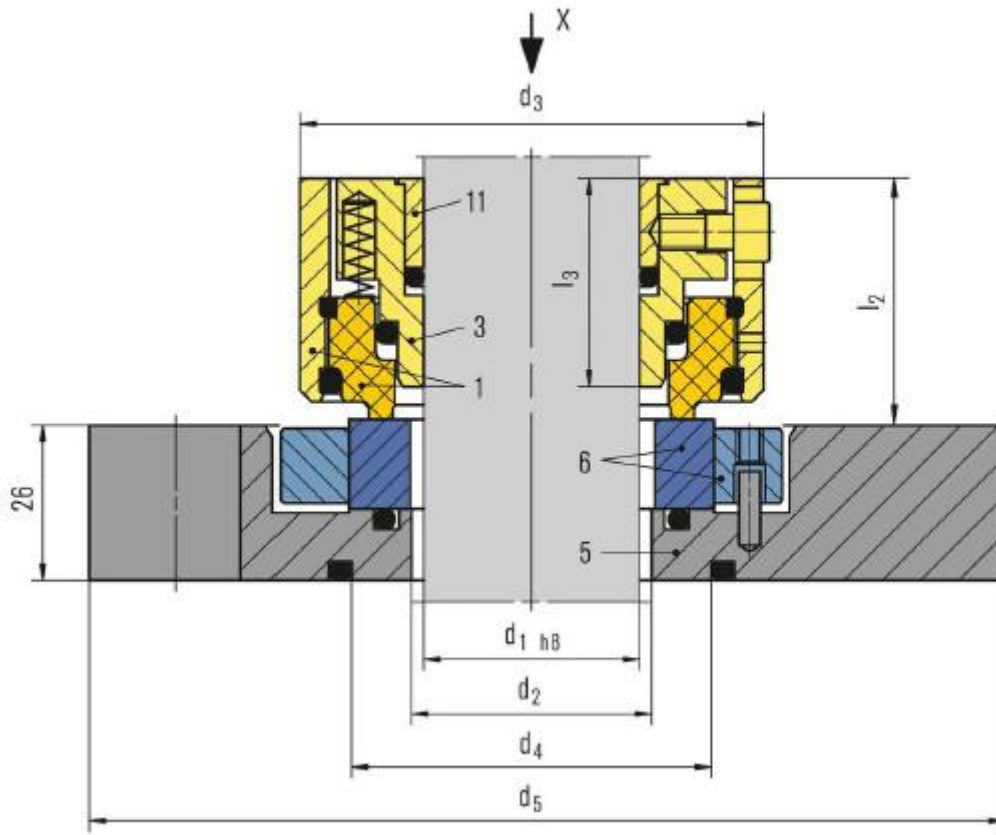
- Available as semi-cartridge with or without basic flange
- Suitable for vacuum operation
- Friction-locked connection to the shaft
- ATEX certification available on request
- Inherently safe, even without temperature monitoring

Recommended applications

- Chemical industry
- Petrochemical industry
- Pharmaceutical industry
- Food and beverage industry
- Non-toxic media
- Agitators
- Mixers
- Reactors

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Item	Description
1	Seal face with seal face housing
3	Drive collar
5	Flange
6	Seat with seat housing
11	Clamping ring

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Dimension Table

d ₁ (mm)	d ₁ (inch)	d ₂	d ₃	d ₄	d ₅	l ₂	l ₃	a ₁ (min)	a ₁ (max)	s
25	1.000	34	68	–	148	41.5	35	100	132	11
28	1.125	34	68	55	148	41.5	35	100	132	11
30	–	34	68	55	148	41.5	35	100	132	11
32	1.250	39	73	60	153	41.5	35	105	137	11
35	1.375	39	73	60	153	41.5	35	105	137	11
38	1.500	44	78	65	158	41.5	35	110	142	11
40	–	44	78	65	158	41.5	35	110	142	11
45	1.625	49	83	68	163	41.5	35	115	152	11
–	1.750	49	83	68	163	41.5	35	115	152	11
48	1.875	54	88	73	178	41.5	35	125	160	14
50	–	54	88	73	178	41.5	35	125	160	14
55	2.000	59	93	78	183	41.5	35	130	165	14
–	2.125	59	93	78	183	41.5	35	130	165	14
60	2.250	64	98	85	188	41.5	35	135	170	14
65	2.375	69	103	90	193	44.5	35	140	175	14
–	2.500	69	103	90	193	44.5	35	140	175	14
70	2.625	74	108	95	198	44.5	38	145	180	14
–	2.750	74	108	95	198	44.5	38	145	180	14
75	2.875	79	113	100	203	44.5	38	150	185	14
80	3.000	84	118	105	208	44.5	38	155	190	14
85	3.250	89	123	110	213	44.5	38	160	195	14
90	3.500	94	128	115	218	44.5	38	165	200	14
95	3.750	99	133	120	223	44.5	38	170	205	14
100	–	104	138	125	228	44.5	38	175	210	14
105	4.000	109	143	130	233	44.5	38	180	215	14
110	4.250	114	148	135	238	44.5	38	185	220	14
115	4.500	119	153	140	267	44.5	38	196	243	18
125	4.750	129	163	150	277	44.5	38	206	253	18
140	5.000	144	178	165	297	44.5	38	221	273	18
–	5.250	144	178	165	297	44.5	38	221	273	18
–	5.500	144	178	165	297	44.5	38	221	273	18
150	5.750	154	188	175	307	44.5	38	231	283	18
160	6.000	164	198	185	317	44.5	38	241	293	18
–	6.250	164	198	185	317	44.5	38	241	293	18