

HBrinker Mechanical Seal

Agitator seal Mechanical Seal HBGSZ



Mechanical Seal HBGSZ

Operating range

Shaft diameter: $d_1 = 40 \dots 220 \text{ mm}$ (1.6" ... 8.7")

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

$\Delta p = \text{min. } 3 \text{ bar}$ (44 PSI), $p_3 = 9 \text{ bar}$ (131 PSI)

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

Sliding velocity: $v_g = 0 \dots 5 \text{ m/s}$ (0 ... 16 ft/s),

higher velocities on request.



Materials

- Seal faces and seats: Silicon carbide, FDA conform
- Secondary seals and metallic parts acc. to application and customers' requirement.

Features

- For top entry drives
- Double seal
- Balanced
- Independent of direction of rotation
- Gas-lubricated
- Cartridge unit

Advantages

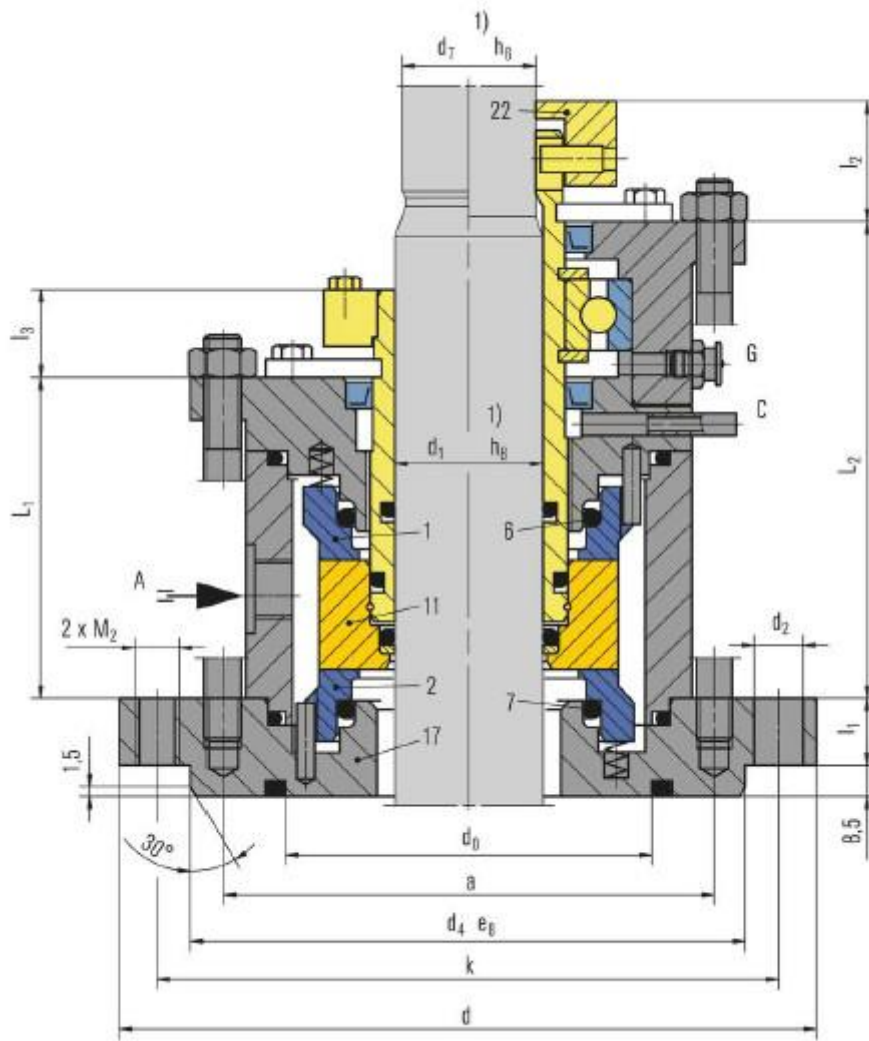
- Ready-to-fit and factory-tested unit
- Central rotating seat
- Torque transmission by clamping ring for large axial movements
- Non-contacting operation
- No friction on the seal faces, no heat generated at the seal or in the medium
- ATEX certification on request

Recommended applications

- Chemical industry
- Food and beverage industry
- Pharmaceutical industry
- Gases and liquids
- Media which require high purity
- Agitators
- Reactors

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Item	Description
1	Seal face, atmosphere side
2	Seal face, product side
6,7	O-Ring
11	Seat
17	Flange
22	Clamping ring

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Dimension Table

HBGSZ-461

d ₁ ¹⁾	d ₇ ¹⁾	Nominal size	Flange size ²⁾	d	nxd ₂	d ₄	nxd ₅	d ₆	d ₇	k ₁	k ₂	l ₁	l ₂	l ₁	l ₂	l ₃	l ₄	l ₅	M ₁	M ₂	A
40	38	40	E125	175	4×18	110	–	–	102	145	–	142	184	25	35	28	50	50	M12	M16	G3/8
50	48	50	E200	240	8×18	176	–	–	138	210	–	147	195	25	40	28	50	50	M12	M16	G3/8
60	58	60	E250	275	8×22	204	–	–	188	240	–	158	203	25	42	28	50	60	M12	M20	G3/8
80	78	80	E300	305	8×22	234	–	–	212	270	–	170	240	30	45	34	60	60	M16	M20	G1/2
100	98	100	E400	395	12×22	313	–	–	268	350	–	177	240	30	52	34	60	60	M16	M20	G1/2
100	98	100	E500	395	12×22	313	–	–	268	350	–	177	240	30	52	34	60	60	M16	M20	G1/2
125	120	125	E700	505	4×22	422	12×22	320	306	460	350	208	266	30	75	40	60	80	M20	M20	G1/2
140	135	140	E700	505	4×22	422	12×22	320	306	460	350	223	282	30	79	40	60	80	M20	M20	G1/2
160	150	160	E700	505	4×22	422	12×22	320	306	460	350	228	282	30	77	40	60	85	M20	M20	G1/2
160	150	160	E900	505	4×22	422	12×22	320	306	460	350	228	282	30	77	40	60	85	M20	M20	G1/2
160	150	161	E901	565	4×26	474	12×22	370	356	515	400	228	282	30	77	40	60	85	M20	M20	G1/2

Dimension Table

HBGSZ-481

d ₁ ¹⁾	d ₇ ¹⁾	d	nxd ₂	d ₄	d ₀	k	L ₁	L ₂	L _w ¹⁾	l ₁	l ₂	l ₃	A	M ₁	M ₂	A, B
40	38	175	4×18	110	90	145	81	137	143	15	35	28	122	M12	M16	G3/8
50	48	240	8×18	176	135	210	82.5	130.5	148	17	42	28	155	M12	M16	G3/8
60	58	240	8×18	176	135	210	78.5	128	158	18	39	28	176	M12	M16	G3/8
80	78	275	8×22	204	155	240	94.5	146	168	20	50	34	203	M16	M20	G1/2
100	98	305	8×22	234	190	270	95	156.5	178	20	56.5	34	228	M16	M20	G1/2
125	120	330	8×22	260	215	295	95	163.5	203	20	60	39	268	M20	M20	G1/2
140	135	395	12×22	313	250	350	97	168.5	208	20	82	41	285	M20	M20	G1/2
160	150	395	12×22	313	265	350	97	176.5	213	25	81	41	302	M20	M20	G1/2
180	170	445	12×22	364	310	400	–	–	233	25	–	–	332	M24	M20	G1/2
200	190	445	12×22	364	310	400	–	–	243	25	–	–	352	M24	M20	G1/2
220	210	505	16×22	422	340	460	–	–	263	25	–	–	–	M24	M20	G1/2