

# HBrinker Mechanical Seal

Agitator seal Mechanical Seal HBM461



## Mechanical Seal HBM461

### Operating range

Shaft diameter:  $d_1 = 40 \dots 160$  mm (1.57" ... 6.30")

Pressure:  $p_1 =$  vacuum ... 16 bar (232 PSI),

$p_3 =$  max. 18 bar (261 PSI)

Temperature:  $t_1 = -40 \text{ } ^\circ\text{C} \dots +200$  (250\*)  $^\circ\text{C}$  (-40  $^\circ\text{F} \dots +392$  (482\*)  $^\circ\text{F}$ )

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

### Materials

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

### Features

- Cartridge double seal for top entry drives
- For glass-lined vessels
- Liquid lubricated
- Self-closing on product side
- Unbalanced
- Independent of direction of rotation
- Multiple springs rotating

### Advantages

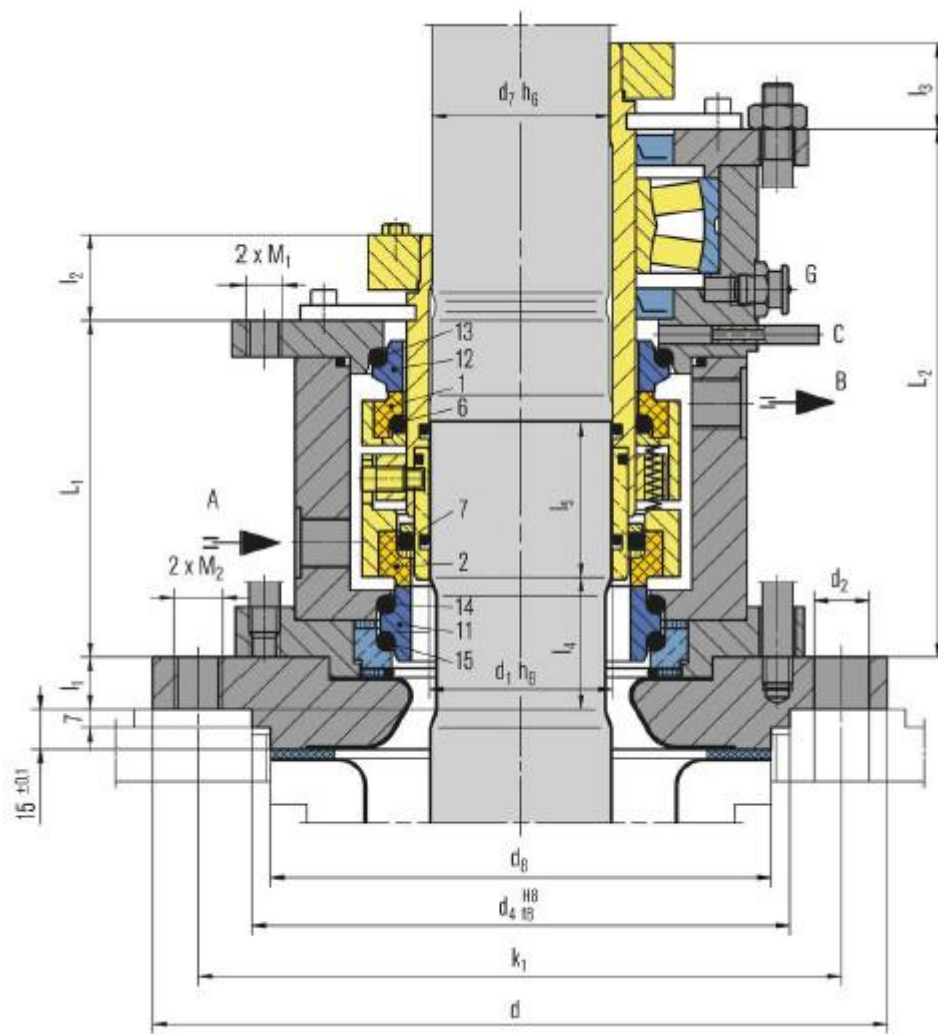
- Ready-to-fit and factory-tested unit
- Available with or without bearing
- Suitable for standardizations
- Seal can be applied at higher pressure and rotating speed than specified by DIN
- The seal can be lifted off the glass-lined flange as a complete cartridge. The sensitive glass lined basic flange remains mounted on the vessel.
- ATEX certification on request

### Recommended applications

- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Food and beverage industry
- Agitators
- Reactors

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Item	Description
1	Seal face, atmosphere side
2	Seal face, product side
6,7,13,14,15	O-Ring dynamic
11	Seat, product side
12	Seat, atmosphere side

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Dimension Table

$d_1^{1)}$	$d_7^{1)}$	Nominal size	Flange size <sup>2)</sup>	d	$n \times d^2$	$d_4$	$n \times d_5$	$d_6$	$d_7$	$k_1$	$k_2$	$L_1$	$L_2$	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$M_1$	$M_2$	A,B
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

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