

# HBrinker Mechanical Seal

Gus Lubricated seals Mechanical Seal HBSO-DN



## Mechanical Seal HBSO-DN

### Operating range

Shaft diameter:  $d_1 = 30 \dots 75 \text{ mm}$  (1,125" ... 2,625") (other dimensions on request)

Product pressure:  $p_1 = \text{max. } 22 \text{ bar}$  (319 PSI), (dependent on shaft diameter and sliding materials)

Barrier pressure:  $p_3 = \text{max. } 25 \text{ bar}$  (362 PSI),

Differential pressure:  $\Delta p = \text{min. } 3 \text{ bar}$  (44 PSI)

Temperature:  $t = -20 \text{ }^\circ\text{C} \dots +170 \text{ }^\circ\text{C}$  (-4 °F ... +338 °F) (dependent on resistance of O-Rings)

Sliding velocity:  $v_g = 16 \text{ m/s}$  (52 ft/s), with special design max. 25 m/s (82 ft/s)

Axial movement:  $\pm 0.2 \text{ mm}$

### Features

- $V_{\text{Seat}}$  rotating
- Stationary springs
- Double seal
- Balanced
- Standard version with V-grooves, Ugrooves optional (independent of direction of rotation)
- Gas-lubricated

### Materials

- Seal faces: Carbon graphite (A)
- Seat: Silicon carbide (Q1, Q2)
- Secondary seals: FKM (V), EPDM (E), FFKM (K)
- Springs: Hastelloy® C-4 (M)
- Metal parts: CrNiMo steel (G), Hastelloy® C-4 (M)

### Advantages

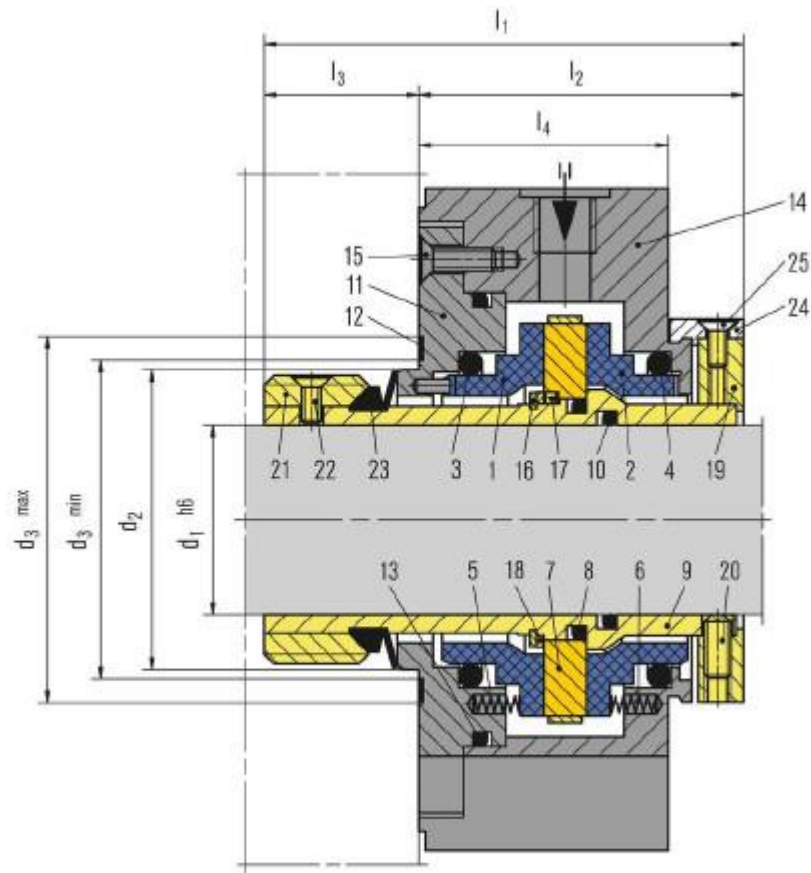
- Contact free operation
- Face-to-face
- Cartridge unit
- Does not open in the event of buffer pressure failure
- Self closing at pressure reversal
- No additional complex components to dissipate frictional heat

### Recommended applications

- Chemical industry
- Refining technology
- Gases and liquids
- Media which require high purity
- Environmental harmful media
- Blowers
- Fans
- Pumps

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Item	Description
1.2	Seal face
3,4,8,10,13	O-Ring
5,6	Spring
7	Seat
9	Shaft sleeve
11	Flange
12	Gasket
14	Cover
15,22,25	Countersunk screw
16	Retaining ring
17	Pin
18	Ring
19	Set ring
20	Set screw
21	Pumping ring
23	V-Seal
24	Assembly fixture

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Dimension Table in millimeter

Type	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub> min.	d <sub>3</sub> max.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	d <sub>a</sub>	a <sub>2</sub>	s
GSO-DN/30-00-R	30	46	49	59	85	55	30	39	104	69.7	14
GSO-DN/33-00-R	33	49	53	65	85.5	55.5	30	39.5	122	72.7	14
GSO-DN/35-00-R	35	51	52	65	85.5	55.5	30	39.5	124	74.7	14
GSO-DN/43-00-R	43	63	64	78	90.5	57.5	33	41.5	138	84.7	16
GSO-DN/48-00-R	48	69	69	80	90.5	57.5	33	41.5	145	89.7	16
GSO-DN/50-00-R	50	70	72	82	90.5	57.5	33	41.5	147	91.7	16
GSO-DN/53-00-R	53	73	73	87	92.8	57.8	35	41.8	148	94.7	18
GSO-DN/60-00-R	60	85	87	102	97.5	60.5	37	44.5	157	104	18
GSO-DN/65-00-R	65	90	91	107	100.5	59.5	41	43.5	178	109	18

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