

HBrinker Mechanical Seal

Agitator seal Mechanical Seal HBM481C



Mechanical Seal HBM481C

Operating range

Shaft diameter: $d_1 = 40 \dots 125 \text{ mm}$ (1.57" 4.92")

Pressure:

$p_1 = \text{vacuum} \dots 10 \text{ bar}$ (145 PSI),

$p_3 = \text{max. } 12 \text{ bar}$ (174 PSI)

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

Sliding velocity: $v_g = 0 \dots 3 \text{ m/s}$ (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

- Liquid-lubricated double seal for topenry drives
- Cartridge unit
- Self-closing on the product side
- For stepped and unstepped shafts
- Unbalanced
- Independent of direction of rotation
- Multiple springs rotating

Advantages

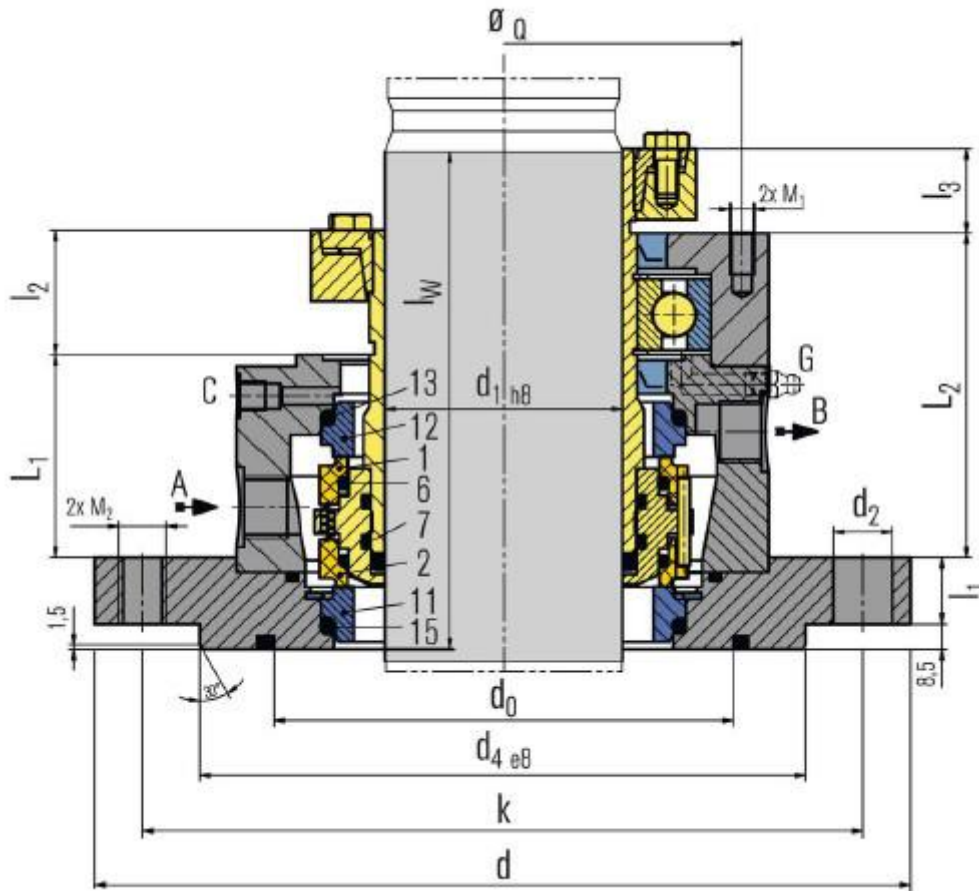
- Ready-to-fit and factory-tested units
- The M481C and its variants will remain closed even during pressure variations or pressure reversal. Operation is possible with buffer fluid ($p_{1\text{max}} = 6 \text{ bar}$ (87 PSI)) or pressurized with barrier fluid as double seal
- Available with or without bearing
- Metal-free on product side as option
- Suitable for standardizations
- Seal can be applied at higher pressure and rotating speed than specified by DIN

Recommended applications

- Refining technology
- 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 |
| 6,7,13,15 | O-Ring |
| 11 | Seat, product side |
| 12 | Seat, atmosphere side |

Dimension Table

| $d_1^{1)}$ | $d^{1)}$ | $n \times d_2$ | d_4 | d_0 | k | L_1 | L_2 | $L_w^{2)}$ | l_1 | l_2 | l_3 | a | M_1 | M_2 | A,B | C | G |
|------------|----------|----------------|-------|-------|-----|-------|-------|------------|-------|-------|-------|-----|-------|-------|------|------|------|
| 40 | 175 | 4×18 | 110 | 90 | 145 | 60.5 | 93.5 | 143 | 18.5 | 32.5 | 22.5 | 105 | M8 | M16 | G3/8 | G1/8 | M6 |
| 50 | 240 | 8×18 | 176 | 159 | 210 | 63 | 101.5 | 148 | 17.5 | 26 | 22 | 143 | M8 | M16 | G3/8 | G1/8 | M8X1 |
| 60 | 240 | 8×18 | 176 | 159 | 210 | 63 | 101.5 | 158 | 17.5 | 27 | 25 | 143 | M8 | M16 | G3/8 | G1/8 | M8X1 |
| 80 | 275 | 8×22 | 204 | 155 | 240 | 68.5 | 109.5 | 168 | 22.5 | 42 | 28.5 | 161 | M8 | M20 | G1/2 | G1/8 | M8X1 |
| 100 | 305 | 8×22 | 234 | 190 | 270 | 73.5 | 119 | 178 | 20 | 32 | 30.5 | 195 | M10 | M20 | G1/2 | G1/8 | M8X1 |
| 125 | 330 | 8×22 | 260 | 215 | 295 | 80.5 | 134 | 203 | 22.5 | 39 | 38 | 231 | M10 | M20 | G1/2 | G1/8 | M8X1 |