

HBrinker Mechanical Seal

Standard Cartridge Seal

Mechanical Seal HBA390



Mechanical Seal HBA390

Operating range

MA390:

Pressure: $p = \dots 20$ bar (290 PSI)

Temperature: $t = -20$ °C ...160 °C (-4 °F ... 320 °F) (oil), 0 °C ... 60 °C (32 °F ... 140 °F) (water)

Sliding velocity: $v_g = \text{max. } 20$ m/s (66 ft/s)

Viscosity: 0.5 Pa·s

Solids content: 0.3 %

MA391:

Pressure: $p = \dots 16$ bar (232 PSI)

Temperature: $t = -20$ °C ...160 °C (-4 °F ... 320 °F) (oil), 0 °C ... 60 °C (32 °F ... 140 °F) (water)

Sliding velocity: $v_g = \text{max. } 20$ m/s (66 ft/s)

Viscosity: 3 Pa·s

Solids content: 10 %

Materials

- Seal face (MA390): High density carbon graphite
- Seal face (MA391): Silicon carbide (Q1)
- Seat (MA390/391): Silicon carbide (Q1)
- Metal parts: CrNiMo steel (G)
- Secondary seals: FKM (V)

Features

- Cartridge
- Balanced
- Independent of direction of rotation
- Stationary multiple springs
- Springs and pin located on the atmospheric side

Advantages

- Ultra-thin compact design - the total length including the seal cover is only 33 mm
- Easy installing on the pumps without modifying the stuffing box
- Excellent followability due to no influence from run-out, squareness or vibration of the shaft
- Mounted outside the stuffing box for providing excellent air cooling performance
- Un-wetted springs and knock pins for protecting from lockout by liquid

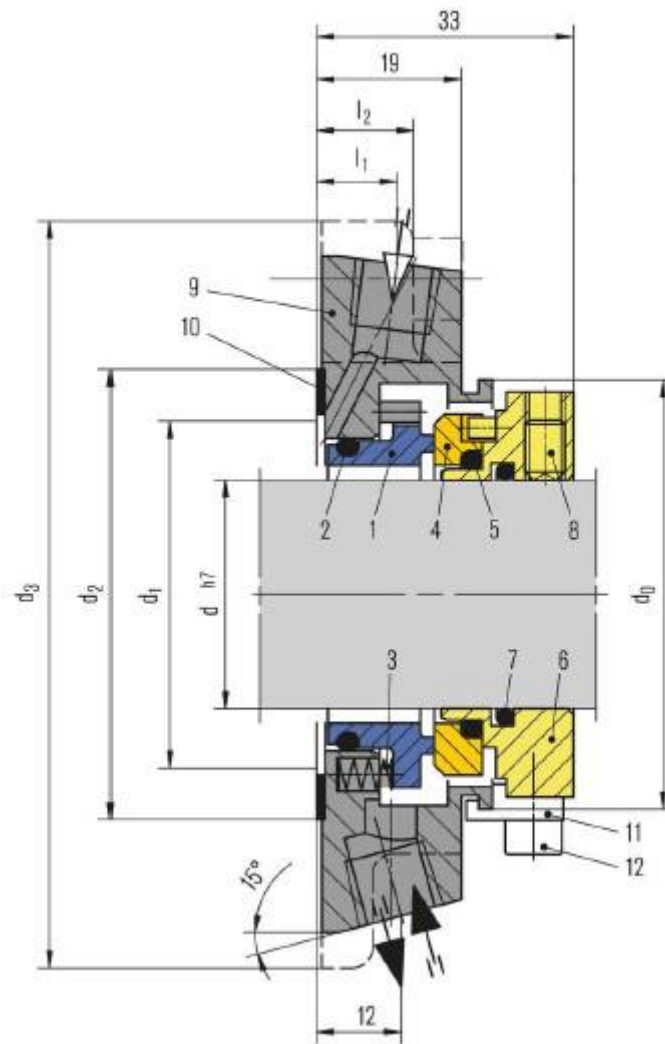
Recommended applications

- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Pulp and paper industry
- Water and waste water technology
- Food and beverage industry
- Universally applicable
- Centrifugal pumps
- Eccentric screw pumps
- Process pumps

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| Item | Description |
|-------|------------------|
| 1 | Seal face |
| 2,5,7 | O-Ring |
| 3 | Spring |
| 4 | Seat |
| 6 | Drive collar |
| 8 | Set Screw |
| 9 | Seal Cover |
| 10 | Gasket |
| 11 | Assembly fixture |
| 12 | HSH cap screw |

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Dimension Table in millimeter

| d | d ₀ | d ₁ min. | d ₁ max. | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ |
|----|----------------|---------------------|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 20 | 50 | 35 | 46 | 53 | 104 | 12 | 14 | 53 | 12 |
| 24 | 55 | 40 | 51 | 58 | 104 | 12 | 14 | 58 | 12 |
| 25 | 55 | 40 | 51 | 58 | 104 | 12 | 14 | 58 | 12 |
| 29 | 60 | 45 | 56 | 63 | 108 | 12 | 14 | 63 | 12 |
| 30 | 60 | 45 | 56 | 63 | 108 | 12 | 14 | 63 | 12 |
| 35 | 65 | 50 | 61 | 68 | 118 | 12 | 12 | 68 | 14 |
| 39 | 70 | 55 | 66 | 73 | 118 | 10 | 12 | 73 | 14 |
| 40 | 70 | 55 | 66 | 73 | 118 | 10 | 12 | 73 | 14 |
| 45 | 75 | 60 | 71 | 78 | 128 | 10 | 12 | 78 | 14 |

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