

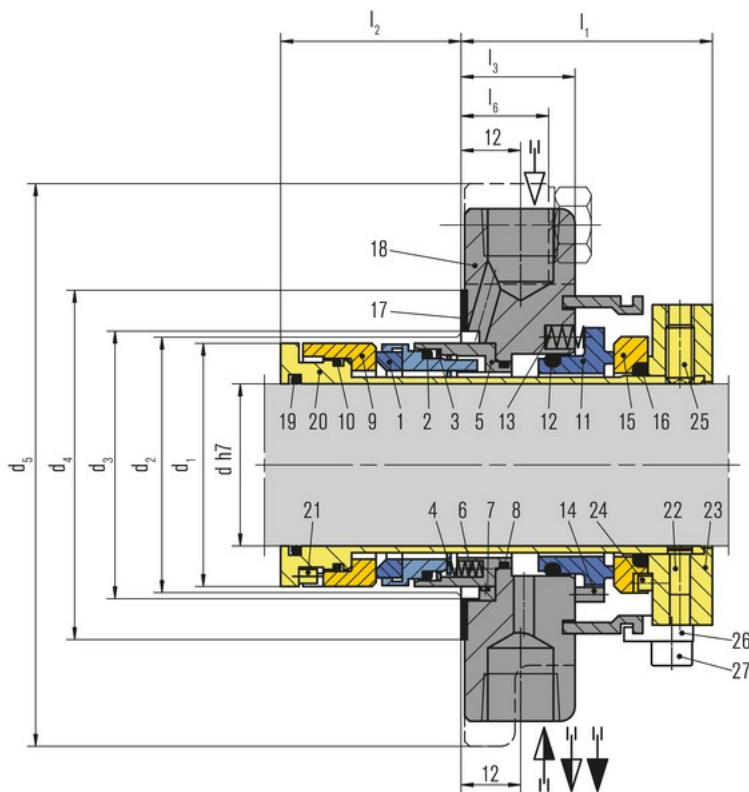
MD251

Features

- Cartridge design
- Balanced
- Double seal
- Independent of direction of rotation
- Springs do not contact the liquid
- Inboard seal can withstand both forward and back pressure

Advantages

- Equipped with flushing, quenching, and drainports as standard
- PTFE backup ring as standard



| Item | Description |
|----------------------|------------------|
| 1, 11 | Seal face |
| 2, 8, 10, 12, 16, 19 | O-Ring |
| 3 | Spacer |
| 4 | Thrust ring |
| 5 | Collar |
| 6, 13 | Spring |
| 7, 14, 21, 22, 24 | Pin |
| 9, 15 | Seat |
| 17 | Gasket |
| 18 | Seal cover |
| 20 | Shaft sleeve |
| 23 | Drive collar |
| 25 | Set screw |
| 26 | Assembly fixture |
| 27 | HSH cap screw |

MD251 (2)

Recommended applications

- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Pulp and paper industry
- Water and waste water technology
- Food and beverage industry
- Metal production and processing
- Acids
- Alkaline solutions
- Salt solutions
- Low viscosity oils
- Monomers
- Hydrocarbons
- Water
- Seawater
- Chemical pumps
- Process pumps

Operating range

Pressure: $p = \text{vacuum} \dots 16 \text{ bar (232 PSI)}$

Temperature:

$t = -20 \text{ }^\circ\text{C} \dots 160 \text{ }^\circ\text{C} (-4 \text{ }^\circ\text{F} \dots 320 \text{ }^\circ\text{F})$ (oil),

$0 \text{ }^\circ\text{C} \dots 80 \text{ }^\circ\text{C} (32 \text{ }^\circ\text{F} \dots 176 \text{ }^\circ\text{F})$ (water)

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

Viscosity: $\dots 1 \text{ Pa}\cdot\text{s}$

Solids content: $\dots 7 \%$

Materials

Seal face (inboard side): Silicon carbide (Q1)

Seal face (atmosphere side): High density carbon graphite

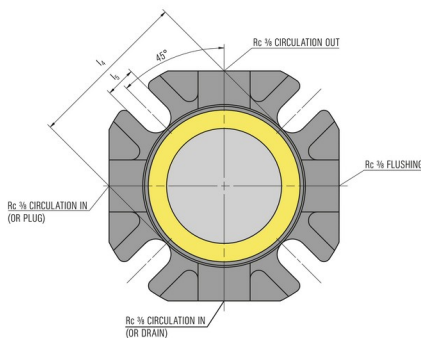
Seat: Silicon carbide (Q1)

Metal parts: CrNiMo steel (G)

Secondary seals: FKM (V)

Installation, Details, Options

Seal cover



26.02.2016 (c) EagleBurgmann

MD251 (3)

Dimensions

| d | d _{s1} | d _{2 min.} | d _{2 max.} | d ₃ | d ₄ | d ₅ | l ₁ | l ₂ | l ₃ | l ₄ | l ₅ | l ₆ |
|-----|-----------------|---------------------|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 20 | 34 | 36 | 51 | 38 | 58 | 104 | 49 | 42 | 23 | 60 | 12 | 18 |
| 25 | 39 | 41 | 51 | 43 | 58 | 104 | 49 | 42 | 23 | 60 | 12 | 18 |
| 30 | 44 | 46 | 56 | 48 | 63 | 108 | 49 | 42 | 23 | 65 | 12 | 18 |
| 35 | 49 | 51 | 66 | 53 | 73 | 118 | 49 | 42 | 23 | 75 | 14 | 16 |
| 40 | 56 | 58 | 66 | 60 | 73 | 118 | 49 | 42 | 23 | 75 | 14 | 16 |
| 45 | 61 | 63 | 71 | 65 | 78 | 128 | 49 | 42 | 23 | 80 | 14 | 16 |
| 50 | 68 | 70 | 81 | 72 | 88 | 138 | 51 | 42 | 23 | 90 | 14 | 16 |
| 55 | 73 | 75 | 81 | 77 | 88 | 138 | 51 | 42 | 23 | 90 | 14 | 16 |
| 60 | 78 | 80 | 96 | 82 | 103 | 164 | 54 | 45 | 23 | 105 | 18 | 14 |
| 65 | 84 | 86 | 96 | 88 | 103 | 164 | 54 | 45 | 23 | 105 | 18 | 14 |
| 70 | 90 | 92 | 102 | 94 | 109 | 178 | 54 | 45 | 23 | 111 | 18 | 14 |
| 75 | 99 | 102 | 114 | 104 | 121 | 193 | 57 | 45 | 23 | 123 | 18 | 14 |
| 80 | 104 | 107 | 114 | 109 | 121 | 193 | 57 | 45 | 23 | 123 | 18 | 14 |
| 85 | 109 | 112 | 124 | 114 | 131 | 208 | 57 | 45 | 23 | 133 | 20 | 13 |
| 90 | 114 | 117 | 124 | 119 | 131 | 208 | 57 | 45 | 23 | 133 | 20 | 13 |
| 95 | 119 | 122 | 134 | 124 | 141 | 218 | 57 | 45 | 23 | 143 | 20 | 13 |
| 100 | 124 | 127 | 134 | 129 | 141 | 218 | 57 | 45 | 23 | 143 | 20 | 13 |

Dimensions in Millimeter