

RELY ON EXCELLENCE

MF95N

Mechanical Seals | Mechanical seals for pumps | Metal Bellow seals



Features

- For unstepped shafts
- Rotating bellows
- Single Seal
- Balanced
- Independent of direction of rotation
- Roller bellows

Advantages

- For extreme temperature ranges
- No dynamically loaded O-Ring
- Very good self cleaning effect
- Suitable for low-end sterile applications

Operating range

Shaft diameter:

d1 = 14 ... 100 mm (0.55" ... 3.94")

Temperature:

t = -40 °C ... +220 °C (-40 °F ... +428 °F)

Pressure: p = 16 bar (232 PSI)

Sliding velocity: v_g = 20 m/s (66 ft/s)

Axial movement: ± 0.5 mm

Materials

Seal face: Silicon carbide (Q12), Carbon graphite resin impregnated (B), Carbon graphite antimony impregnated (A)

Seat: Silicon carbide (Q1)

Bellows: Hastelloy® C-276 (M5)

Metal parts: CrNiMo steel (G1)

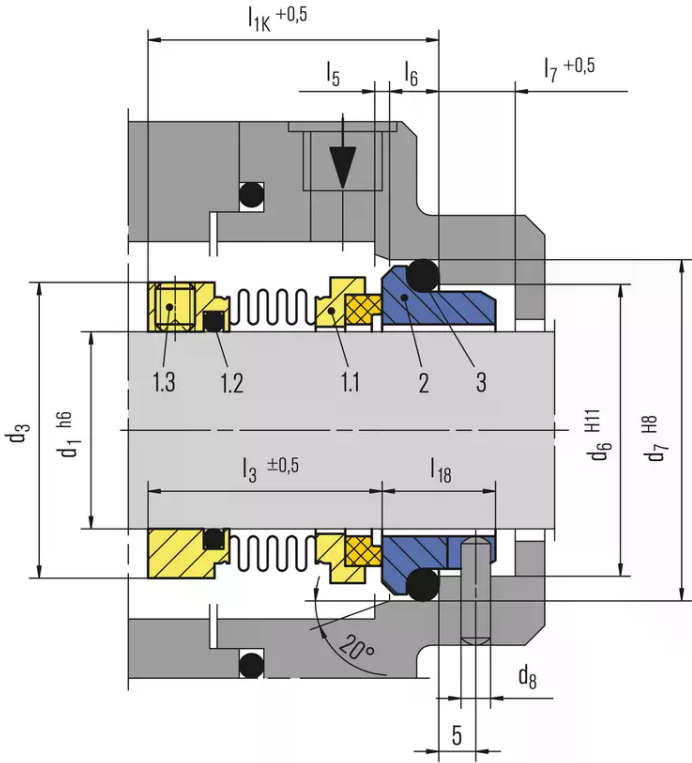
Standards and approvals

- EN 12756

Recommended applications

- Hot media
- Cold media
- Highly viscous media
- Process industry
- Oil and gas industry
- Refining technology
- Chemical industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry
- Pumps
- Special rotating equipment

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| Item | Part no.DIN 24250 | Description |
|------|-------------------|-----------------------------|
| 1.1 | 472/481 | Seal face with bellows unit |
| 1.2 | 412.1 | O-Ring |
| 1.3 | 904 | Set screw |
| 2 | 475 | Seat (G16) |
| 3 | 412.2 | O-Ring |

Product variants

MF90N
 Shaft diameter:
 $d_1 = 14 \dots 100 \text{ mm} (0.55" \dots 3.94")$
 Temperature:
 $t = -40 \text{ °C} \dots +220 \text{ °C} (-40 \text{ °F} \dots +428 \text{ °F})$
 Internally pressurized: $p = 10 \text{ bar} (145 \text{ PSI})$,
 stationary seat lock necessary.
 Sliding velocity: $v_g = 20 \text{ m/s} (66 \text{ ft/s})$
 Axial movement: $\pm 0.5 \text{ mm}$

RELY ON EXCELLENCE

Dimensions

| d ₁ | d ₃ | d ₆ | d ₇ | d ₈ | l _{1K} | l ₃ | l ₅ | l ₆ | l ₇ | l ₁₈ |
|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|
| 14 | 24 | 21 | 25 | 3 | 35.0 | 30.5 | 1.5 | 4 | 8.5 | 15.0 |
| 16 | 26 | 23 | 27 | 3 | 35.0 | 29.5 | 1.5 | 4 | 8.5 | 15.0 |
| 18 | 32 | 27 | 33 | 3 | 37.5 | 30.5 | 2.0 | 5 | 9.0 | 15.0 |
| 20 | 34 | 29 | 35 | 3 | 37.5 | 30.5 | 2.0 | 5 | 9.0 | 15.0 |
| 22 | 36 | 31 | 37 | 3 | 37.5 | 30.5 | 2.0 | 5 | 9.0 | 15.0 |
| 24 | 39 | 33 | 39 | 3 | 40.0 | 33.0 | 2.0 | 5 | 9.0 | 15.0 |
| 25 | 39 | 34 | 40 | 3 | 40.0 | 33.0 | 2.0 | 5 | 9.0 | 15.0 |
| 28 | 42 | 37 | 43 | 3 | 42.5 | 35.5 | 2.0 | 5 | 9.0 | 15.0 |
| 30 | 44 | 39 | 45 | 3 | 42.5 | 35.5 | 2.0 | 5 | 9.0 | 15.0 |
| 32 | 46 | 42 | 48 | 3 | 42.5 | 35.5 | 2.0 | 5 | 9.0 | 15.0 |
| 33 | 47 | 42 | 48 | 3 | 42.5 | 35.5 | 2.0 | 5 | 9.0 | 15.0 |
| 35 | 49 | 44 | 50 | 3 | 42.5 | 35.5 | 2.0 | 5 | 9.0 | 15.0 |
| 38 | 54 | 49 | 56 | 4 | 45.0 | 37.0 | 2.0 | 6 | 9.0 | 16.0 |
| 40 | 56 | 51 | 58 | 4 | 45.0 | 37.0 | 2.0 | 6 | 9.0 | 16.0 |
| 43 | 58 | 54 | 61 | 4 | 45.0 | 37.0 | 2.0 | 6 | 9.0 | 16.0 |
| 45 | 61 | 56 | 63 | 4 | 45.0 | 37.0 | 2.0 | 6 | 9.0 | 16.0 |
| 48 | 64 | 59 | 66 | 4 | 45.0 | 37.0 | 2.0 | 6 | 9.0 | 16.0 |
| 50 | 66 | 62 | 70 | 4 | 47.5 | 38.0 | 2.5 | 6 | 9.0 | 17.0 |
| 53 | 69 | 65 | 73 | 4 | 47.5 | 38.0 | 2.5 | 6 | 9.0 | 17.0 |
| 55 | 71 | 67 | 75 | 4 | 47.5 | 38.0 | 2.5 | 6 | 9.0 | 17.0 |
| 58 | 78 | 70 | 78 | 4 | 52.5 | 42.0 | 2.5 | 6 | 9.0 | 18.0 |
| 60 | 80 | 72 | 80 | 4 | 52.5 | 42.0 | 2.5 | 6 | 9.0 | 18.0 |
| 63 | 83 | 75 | 83 | 4 | 52.5 | 42.0 | 2.5 | 6 | 9.0 | 18.0 |
| 65 | 85 | 77 | 85 | 4 | 52.5 | 42.0 | 2.5 | 6 | 9.0 | 18.0 |
| 68 | 87 | 81 | 90 | 4 | 52.5 | 41.5 | 2.5 | 7 | 9.0 | 18.5 |
| 70 | 90 | 83 | 92 | 4 | 60.0 | 48.5 | 2.5 | 7 | 9.0 | 19.0 |
| 75 | 99 | 88 | 97 | 4 | 60.0 | 48.5 | 2.5 | 7 | 9.0 | 19.0 |
| 80 | 104 | 95 | 105 | 4 | 60.0 | 48.5 | 3.0 | 7 | 9.0 | 19.0 |
| 85 | 109 | 100 | 110 | 4 | 60.0 | 48.5 | 3.0 | 7 | 9.0 | 19.0 |
| 90 | 114 | 105 | 115 | 4 | 65.0 | 52.0 | 3.0 | 7 | 9.0 | 20.5 |
| 95 | 119 | 110 | 120 | 4 | 65.0 | 52.0 | 3.0 | 7 | 9.0 | 20.5 |
| 100 | 124 | 115 | 125 | 4 | 65.0 | 52.0 | 3.0 | 7 | 9.0 | 20.5 |

Dimensions in millimeter