MTX Single Seals

Standard Cartridge Metal Bellows Seals



Product Description

- 1. Single seal configuration
- 2. Balanced design
- 3. Independent of direction of rotation
- 4. Cartridge construction
- 5. Metal bellows design
- 6. Single seal with quench and lip seal (-QN) or throttle ring (-TN)
- 7. Connections for flush and quench available
- 8. Multipoint injection ring design for (-QNM, -TNM)

Technical Features

- 1. Ideal for use in process pump standardization
- 2. Dimensional modification of the stuffing box chamber is not required due to short radial installation height
- 3. Ideal to convert and retrofit pumps with packings and large volume OEM production
- Cartridge unit factory assembled for easy installation, which reduces downtime
- 5. Rugged design for long operating life
- 6. Bellows design efficiently ensure selfcleaning
- 7. Suitable for high temperature applications

Typical Industrial Applications

Refining technology Petrochemical industry Hot media Cold media Highly viscous media Pumps Special rotating equipment

Materials

Seal face: Carbon graphite antimony impregnated (A), Silicon carbide (Q1) Seat: Silicon carbide (Q1) Secondary seals: FKM (V), EPDM (E), FFKM (K) Bellows: Inconel[®] 718 (M6) Metal parts: CrNiMo steel (G), Duplex (G1) Throttle ring: PTFE carbon graphite reinforced (T12) Lip seal: NBR (P), PTFE carbon reinforced (T3)

Performance Capabilities

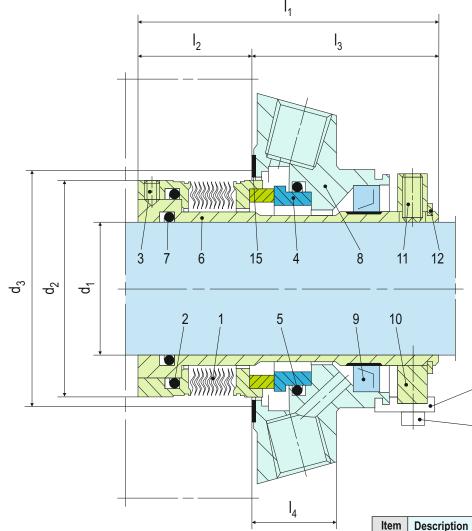
Shaft diameter: $d_1 = 25 \dots 80 \text{ mm} (1^* \dots 3.15^*)$ Temperature: $t^3 = -40 \text{ °C} \dots +220 \text{ °C}$ $(-40 \text{ °F} \dots +428 \text{ °F})$ Pressure: p = 25 bar (363 PSI)"Operating limits of O-rings to be observed

ltem	Description
1	Bellows unit
2, 5, 7	O-ring
3, 11	Set screw
4	Seat
6	Shaft sleeve
8	Cover

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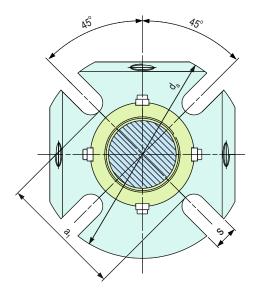
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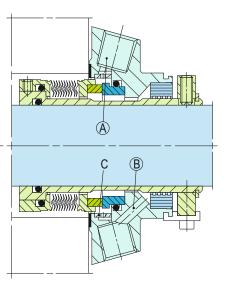
Item	Description
9	Lip seal (-QN) or throttle ring (-TN)
10	Drive collar
12	Retaining ring
13	Assembly fixture
14	HSH Cap Screw
15	Gasket



Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

Installation, Details, Options





MTX-QNM

Single seal, as MTX-QN with additional multipoint injection ring (item C).

Dimensional Data

MTX-TNM

Product Variants

Single seal, as MTX-TN with additional multipoint injection ring (item C).

Dimensions in millimeter da s \mathbf{d}_1 d_2 d₃ min. d₃ max. \mathbf{I}_1 l₂ 13 **I**4 a₁ 45.0 105.0 13.2 25 47.0 51.0 79.5 26.1 53.4 25.4 62.0 30 49.4 52.0 56.0 78.4 25.0 53.4 25.4 105.0 67.0 13.2 32 52.3 54.5 57.0 78.4 25.0 53.4 25.4 108.0 70.0 13.2 54.5 33 52.3 57.0 25.0 53.4 13.2 78.4 25.4 108.0 70.0 35 54.8 58.0 61.5 78.4 25.0 113.0 72.0 13.2 53.4 25.4 38 40 57.5 58.8 25.0 24.8 75.0 77.0 13.2 14.2 60.0 66.0 78.4 53.4 25.4 123.0 62.0 68.0 78.2 53.4 25.4 123.0 43 61.9 64.5 70.5 78.4 25.0 53.4 25.4 133.0 80.0 14.2 45 25.0 14.2 65.0 68.5 73.0 78.4 53.4 25.4 138.0 82.0 75.0 48 68.4 71.0 78.7 25.3 53.4 25.4 138.0 85.0 14.2 50 70.0 73.0 78.0 79.1 25.7 53.4 25.4 148.0 87.0 14.2 53 55 71.9 75.0 87.0 77.8 24.4 53.4 25.4 148.0 97.0 18.0 77.0 87.0 78.9 25.5 53.4 74.6 83.0 25.4 148.0 92.0 18.0 60 65 83.9 91.0 80.1 26.7 157.0 102.0 53.4 25.4 18.0 163.0 87.5 90.0 98.5 80.0 26.6 53.4 25.4 109.3 18.0 70 93.0 98.0 108.0 81.5 28.1 53.4 25.4 18.0 178.0 118.3 75 96.8 101.6 118.0 94.4 30.5 63.9 28.0 190.0 129.0 18.0 80 104.7 108.0 124.0 94.4 30.4 64.0 28.0 195.0 135.0 18.0

Note: Additional technical & dimensional information will be provided on request.