

RELY ON EXCELLENCE

Mtex Single seals

Mechanical Seals | Mechanical seals for pumps | Standard cartridge seals



Features

- Single seal
- Cartridge
- Balanced
- Independent of direction of rotation
- Metal bellows
- Single seal with quench and lip seal (-QN) or throttle ring (-TN)
- Version available with multipoint injection ring (-QNM, -TNM)
- Supply connections for flush (A) and quench (B)

Advantages

- Ideal seal for standardizations
- Universal applicable for packings conversions, retrofits or OEM
- No dimensional modification of the seal chamber necessary, small radial installation height
- Trouble-free running due to bellows unit with vibration dampers (essential in case of dry-running)
- No dynamically loaded O-Ring
- Self cleaning effect of the bellows
- Straightforward and easy installation due to pre-assembled unit (reduced down-times)

Operating range

Shaft diameter:

d1 = 25 ... 80 mm (1" ... 3.15")

Temperature:

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

Pressure: p = 25 bar (363 PSI)

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

* Operating limits of O-Rings to be observed

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:

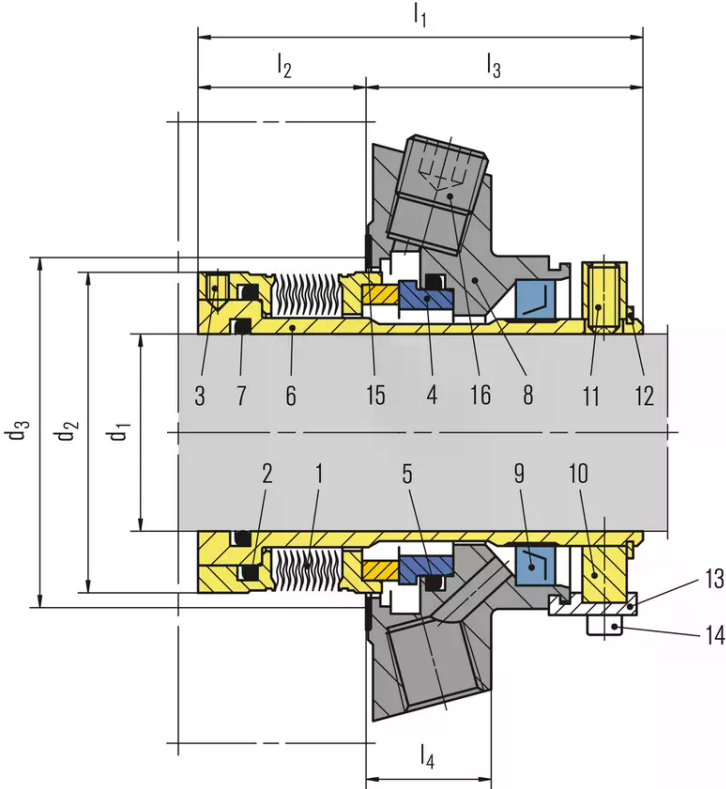
PTFE carbon graphite reinforced (T12)

Lip seal: NBR (P), PTFE carbon reinforced (T3)

Recommended applications

- Hot media
- Cold media
- Highly viscous media
- Process industry
- Chemical industry
- Pumps
- Special rotating equipment

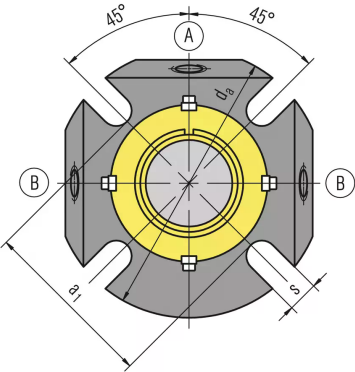
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Item	Description
1	Bellows unit
2, 5, 7	O-Ring
3, 11	Set screw
4	Seat
6	Shaft sleeve
8	Cover
9	Lip seal (-QN) or throttle ring (-TN)
10	Drive collar
12	Retaining ring
13	Assembly fixture
14	Hex socket head screw
15	Gasket
16	Screw plug

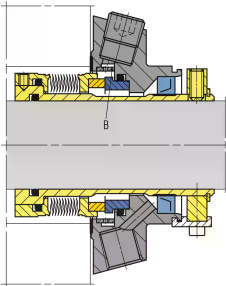
Installation, details, options

Seal cover

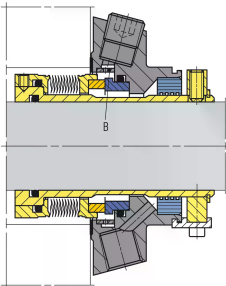


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Product variants



Mtex-QNM
Single seal, as Mtex-QN with additional multipoint injection ring (item B).



Mtex-TNM
Single seal, as Mtex-TN with additional multipoint injection ring (item B).

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Dimensions

d ₁	d ₂	d ₋₃ ~min.	d ₃ max.	l ₁	l ₂	l ₃	l ₄	d _a	a ₁	s
25	45.0	47.0	51.0	79.5	26.1	53.4	25.4	105.0	62.0	13.2
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
33	52.3	54.5	57.0	78.4	25.0	53.4	25.4	108.0	70.0	13.2
35	54.8	58.0	61.5	78.4	25.0	53.4	25.4	113.0	72.0	13.2
38	57.5	60.0	66.0	78.4	25.0	53.4	25.4	123.0	75.0	13.2
40	58.8	62.0	68.0	78.2	24.8	53.4	25.4	123.0	77.0	14.2
43	61.9	64.5	70.5	78.4	25.0	53.4	25.4	133.0	80.0	14.2
45	65.0	68.5	73.0	78.4	25.0	53.4	25.4	138.0	82.0	14.2
48	68.4	71.0	75.0	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	71.9	75.0	87.0	77.8	24.4	53.4	25.4	148.0	97.0	18.0
55	74.6	77.0	83.0	78.9	25.5	53.4	25.4	148.0	92.0	18.0
60	83.9	87.0	91.0	80.1	26.7	53.4	25.4	157.0	102.0	18.0
65	87.5	90.0	98.5	80.0	26.6	53.4	25.4	163.0	109.3	18.0
70	93.0	98.0	108.0	81.5	28.1	53.4	25.4	178.0	118.3	18.0
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

Dimensions in millimeter