

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 0-Ring
- Self cleaning effect of the bellows
- Straightforward and easy installation due to pre-assembled unit (reduced down-times)

Operating range

Shaft diameter:

 $d1 = 25 \dots 80 \text{ mm} (1" \dots 3.15")$

Temperature:

 $t^* = -40 \,^{\circ}\text{C} \dots +220 \,^{\circ}\text{C} (-40 \,^{\circ}\text{F} \dots +428 \,^{\circ}\text{F})$

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)

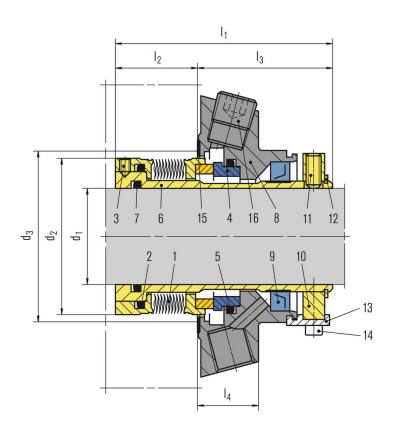
Recommended applications

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



a member of **EKK** and **FREUDENBERG**

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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)				

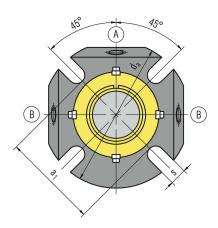
10 Drive collar
12 Retaining ring
13 Assembly fixture
14 Hex socket head screw

15 Gasket16 Screw plug

Item Description

Installation, details, options





only as guide values.

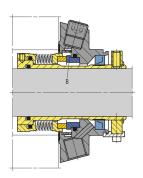
All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications, however, means that they can serve

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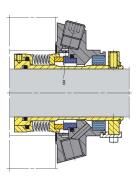
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Product variants



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.	d₃ max.	l ₁	l ₂	l ₃	14	da	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

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