

RELY ON EXCELLENCE

MFLWT

Mechanical seals | Mechanical seals for pumps | Metal bellows seals



Features

- For unstepped shafts
- Single Seal
- Balanced
- Independent of direction of rotation
- Metal bellows rotating

Advantages

- For extreme high temperature ranges
- No dynamically loaded O-Ring
- Self cleaning effect
- Short installation length possible
- Pumping screw for highly viscous media available (dependent on direction of rotation).

Operating range

Shaft diameter:
 $d_1 = 16 \dots 150 \text{ mm (0.63" \dots 6")}$
 Externally pressurized:
 $p_1 = \dots 25 \text{ bar (363 PSI)}$
 Internally pressurized:
 $p_1 < 120 \text{ °C (248 °F) } 10 \text{ bar (145 PSI)}$
 $p_1 < 220 \text{ °C (428 °F) } 5 \text{ bar (73 PSI)}$
 $p_1 < 400 \text{ °C (752 °F) } 3 \text{ bar (44 PSI)}$
 Stationary seat lock necessary
 Temperature:
 $t = -40 \text{ °C} \dots +400 \text{ °C}$
 $(-148 \text{ °F} \dots +752 \text{ °F})$
 Sliding velocity: $v_g = 20 \text{ m/s (66 ft/s)}$

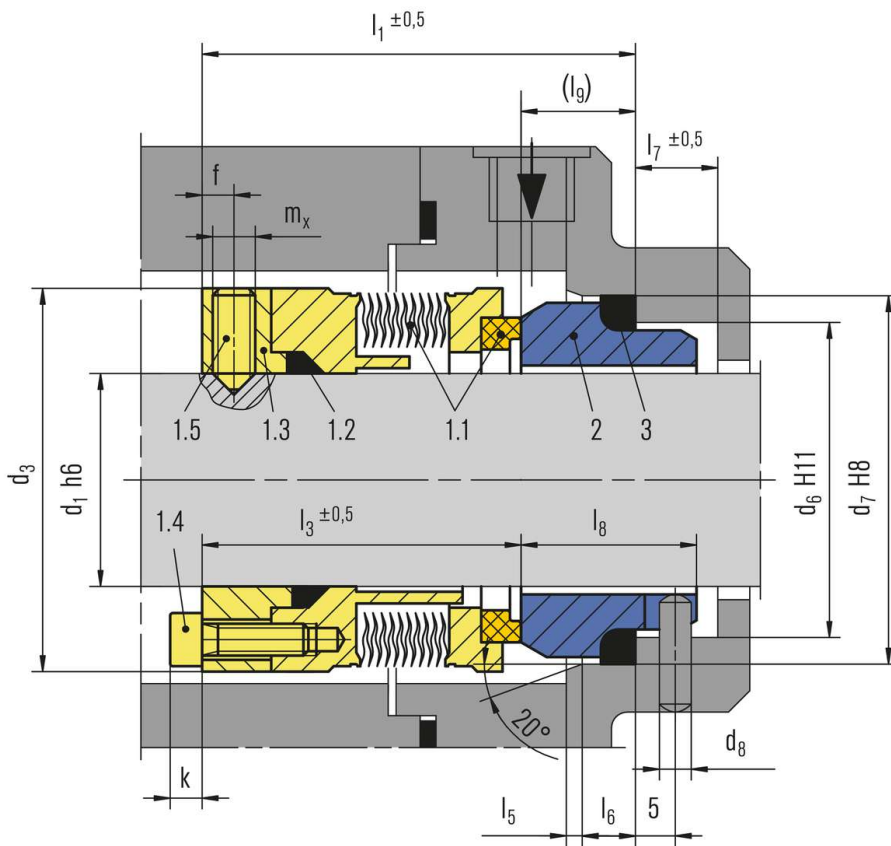
Materials

Seal face: Carbon graphite antimony impregnated (A), Silicon carbide (Q12)
 Seat: Silicon carbide (Q1)
 Bellows: Inconel® 718 hardened (M6), Hastelloy® C-276 (M5)
 Metal parts: CrNiMo steel (G), Duplex (G1), Carpenter® 42 (T4), Hastelloy® C-4 (M)

Recommended applications

- Process industry
- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Pulp and paper industry
- Hot media
- Highly viscous media
- Pumps
- Special rotating equipment

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Item	Part no. to DIN 24250	Description
1.1	472/481	Seal face with bellows unit
1.2	410	Sealing ring
1.3	474	Drive collar
1.4		Socket head screw
1.5	904	Set screw
2	475	Seat
3	412	Sealing ring

Product variants

MFLWT90

Shaft diameter:

d1 = 16 ... 150 mm (0.64" ... 6")

Internally pressurized:

p1 = ... 16 bar (232 PSI)

Externally pressurized:

p1 = 10 bar (145 PSI)

Temperature:

t = -20 °C ... +400 °C

(-4 °F ... +752 °F),

stationary seat lock necessary.

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

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Dimensions

d ₁	d ₃	d ₆	d ₇	d ₈	l ₁	l ₃	l ₅	l ₆	l ₇	l ₈	l ₉	f	k	m _x
16	38	29.0	35.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
18	40	31.0	37.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
20	42	34.0	40.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
22	44	37.0	43.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
24	46	37.0	43.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
25	47	39.0	45.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
28	50	42.0	48.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M6
30	52	44.0	50.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M6
32	54	49.0	56.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
33	55	49.0	56.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
35	57	51.0	58.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
38	60	54.0	61.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
40	66	56.0	63.0	4	61.5	47.5	2.0	6	9	22.0	14.0	5	6	M6
43	69	59.0	66.0	4	61.5	47.5	2.0	6	9	22.0	14.0	5	6	M6
45	71	62.0	70.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
48	74	65.0	73.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
50	76	67.0	75.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
53	79	70.0	78.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
55	81	72.0	80.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
58	85	75.0	83.0	4	68.0	53.0	2.5	6	9	23.0	15.0	5	6	M6
60	87	77.0	85.0	4	68.0	53.0	2.5	6	9	23.0	15.0	6	6	M8
63	90	81.0	90.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
65	92	83.0	92.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
68	95	88.0	97.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
70	97	88.0	97.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
75	102	95.0	105.0	4	71.0	52.8	3.0	7	9	26.2	18.2	6	6	M8
80	107	100.0	110.0	4	71.0	52.8	3.0	7	9	26.2	18.2	6	6	M8
85	112	105.0	115.0	4	71.0	52.8	3.0	7	9	26.2	18.2	6	6	M8
90	117	110.0	120.0	4	71.0	53.8	3.0	7	9	25.2	17.2	6	6	M8
95	122	115.0	125.0	4	71.0	53.8	3.0	7	9	25.2	17.2	6	6	M8
100	127	122.2	134.3	5	74.0	54.0	3.0	9	11	30.0	20.0	6	6	M8

Dimensions in millimeter