

## MFL65

Mechanical seals | Mechanical seals for pumps | Metal bellows seals



### Features

- Stationary bellows
- Single Seal
- Balanced
- Independent of direction of rotation

### Advantages

- For high temperature
- High sliding velocities
- No elastomer secondary seals

### Operating range

Shaft diameter:  $d_1 = 16 \dots 100 \text{ mm}$   
(0.63" ... 4"), (>100 mm on request)  
Externally pressurized:  $p_1 = 25 \text{ bar}$  (363 PSI), (higher pressure possible, please inquire)

Internally pressurized:  
 $p_1 < 120 \text{ °C}$  (248 °F) 10 bar (145 PSI),  
 $p_1 < 220 \text{ °C}$  (428 °F) 5 bar (72 PSI),  
 $p_1 < 400 \text{ °C}$  (752 °F) 3 bar (44 PSI)  
Stationary seat lock necessary.

### Temperature:

$t = -20 \text{ °C} \dots 400 \text{ °C}$  (-4 °F ... +752 °F)

Sliding velocity:  $v_g = 50 \text{ m/s}$  (165 ft/s)

### Materials

#### Bellows:

Inconel® 718 (M6), Hastelloy® C-276 (M5)

#### Seal face:

Carbon graphite antimony impregnated (A), Silicon carbide (Q12)

#### Seat:

Silicon carbide (Q1), Special cast CrMo steel (S)

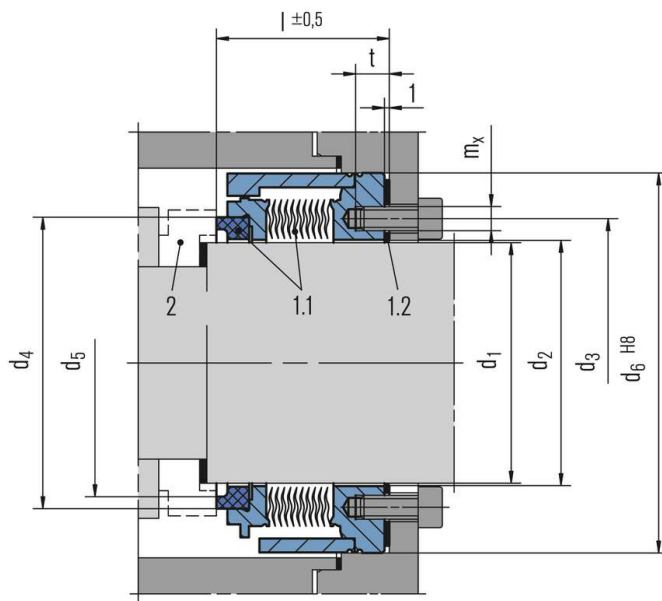
#### Metal parts:

Duplex (G1), Carpenter® 42 (T4), Hastelloy® C-4 (M)

### Recommended applications

- Process industry
- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Hot media
- High sliding velocities
- Pumps
- Special rotating equipment

## RELY ON EXCELLENCE



Item	Part	Description
	<b>DIN 24250</b>	
1.1	472 and 481	Seal face and bellows unit
1.2	400.1	Flat gasket
2	475	Seat

## Product variants

### MFL69

Shaft diameter:

$d_1 = 16 \dots 100 \text{ mm} (0.64" \dots 4")$ ,  
( $>100 \text{ mm}$  on request)

Internally pressurized:

$p_1 = 16 \text{ bar} (232 \text{ PSI})$ ,  
(higher pressure possible, please inquire)

Externally pressurized:

$p_1 = 10 \text{ bar} (145 \text{ PSI})$ ,  
stationary seat lock necessary.

Temperature:

$t = -20 \text{ °C} \dots +400 \text{ °C} (-4 \text{ °F} \dots +752 \text{ °F})$

Sliding velocity:

$v_g = 50 \text{ m/s} (165 \text{ ft/s})$

RELY ON EXCELLENCE

## Dimensions

d	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub>	l	n <sub>x</sub> mx	t
19	16-19	20.5	29	30.3	25.3	45.0	33.5	4xM4	6
24	20-24	25.5	35	38.8	33.8	49.0	33.5	4xM4	6
30	25-30	31.5	40	43.6	38.6	55.0	34.5	6xM4	6
35	31-35	36.0	45	45.8	40.8	59.0	33.0	6xM4	6
40	36-40	41.0	50	51.5	46.5	65.0	30.5	6xM4	6
45	41-45	46.0	55	55.2	50.2	69.0	35.5	6xM4	6
51	46-51	52.0	63	64.7	59.7	76.5	40.5	6xM5	7
60	52-60	61.0	70	70.6	65.6	84.0	32.0	6xM5	7
70	61-70	71.0	80	82.8	76.8	95.0	38.0	6xM5	7
82	71-82	83.5	95	98.0	92.0	112.0	41.0	6xM6	7
88	83-88	89.5	100	107.7	101.7	120.0	47.0	6xM6	7
100	89-100	101.0	112	112.7	106.7	130.0	47.0	6xM6	7

Dimensions in Millimeter