

# UFL650 Single Seals

# Standard Mechanical Seals - Metal Bellows Seals

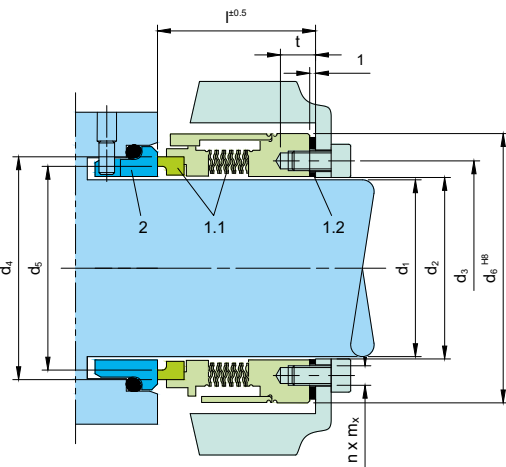


### Product Description

1. Single seal configuration
2. Balanced design
3. Independent of direction of rotation
4. Stationary metal bellows design

### Technical Features

1. Suitable for high temperature application
2. Can handle high sliding velocities
3. No elastomer secondary seals
4. Rugged design for long operating life
5. Bellows design efficiently ensure self-cleaning



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.

Item	Part no.	Description
1.1	472/481	Seal face with bellows unit
1.2	400.1	Flat gasket
2	475	Seat

**DIN 24250**

### Typical Industrial Applications

API & ISO Pumps	Fertiliser
Acids (some), Aqueous solutions, Aromatic fractionation products	Fuel oil, lubricating oil, gasoline, etc
Benzene, toluene, solvents, etc	Heat transfer fluids
Caustics & chemicals, Crude oil fractionation products	Highly viscous media
	Hydrocarbons
	Lubricating liquids
	Oil & gas
	Petrochemical Refining technology

### Performance Capabilities

Sizes	d <sub>1</sub> = Upto 100 mm (Upto 4.000")
Externally pressurized	p <sub>1</sub> = 25 bar (363 PSI), (higher pressure possible, please inquire)
Internally pressurized:	
	p <sub>1</sub> < 120 °C (248 °F) 10 bar (145 PSI),
	p <sub>1</sub> < 220 °C (428 °F) 5 bar (72 PSI),
	p <sub>1</sub> < 400 °C (752 °F) 3 bar (44 PSI)
Stationary seat lock necessary.	
Temperature	t = -20°C...+400°C (-4°F...+752°F)
Speed	50 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)

### Design Variations

#### UFL690

Shaft diameter: d<sub>1</sub> = Upto 100 mm (Upto 4.000"), (>100 mm on request)  
 Internally pressurized: p<sub>1</sub> = 16 bar (232 PSI), (higher pressure possible, please inquire)  
 Externally pressurized: p<sub>1</sub> = 10 bar (145 PSI), stationary seat lock necessary.  
 Temperature: t = -20°C...+400°C (-4°F...+752°F)  
 Speed = 50 m/s (165 ft/s)

### Dimensional Data

#### Dimensions in millimeter

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	nxmx	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

inch size available from size 0.625 to 4.000

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

The specifications, drawings, images etc included in this catalogue are intended to be generic and must be interpreted as equivalent or functionally equivalent, more specifically the performance capabilities mentioned in this catalogue is based on optimum values, however the performance of the product is dependent on size, material of construction, media, pressure, temperature, sliding velocity etc and it shall vary from size to size or application to application. Customers are requested to consult with Sealmatic before employing the product from this catalogue for any application.