

UFL650 Single Seals

Standard Mechanical Seals - Metal Bellows Seals

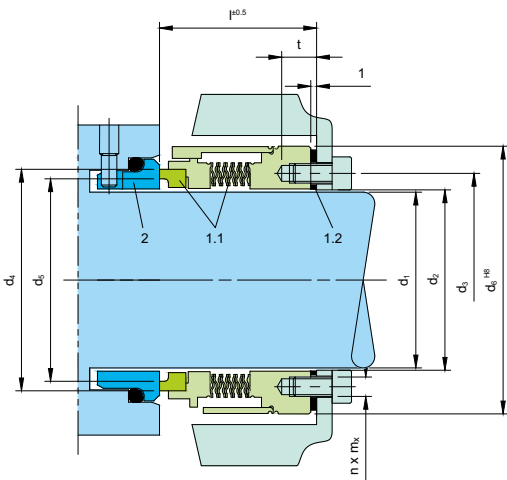


Product Description

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

Performance Capabilities

Sizes:	d_1 = Upto 100 mm (Upto 4.000")
Externally pressurized:	p_1 = 25 bar (363 PSI), (higher pressure possible, please inquire)
Internally pressurized:	
	$p_1 < 120^\circ\text{C}$ (248 °F) 10 bar (145 PSI),
	$p_1 < 220^\circ\text{C}$ (428 °F) 5 bar (72 PSI),
	$p_1 < 400^\circ\text{C}$ (752 °F) 3 bar (44 PSI)
Stationary seat lock necessary.	
Temperature:	$t = -20^\circ\text{C} \dots +400^\circ\text{C}$ (-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_1 = Upto 100 mm (Upto 4.000"), (>100 mm on request)
 Internally pressurized: p_1 = 16 bar (232 PSI), (higher pressure possible, please enquire)
 Externally pressurized: p_1 = 10 bar (145 PSI), stationary seat lock necessary.
 Temperature: $t = -20^\circ\text{C} \dots +400^\circ\text{C}$ (-4° F...+752°F)
 Speed = 50 m/s (165 ft/s)

Dimensional Data

Dimensions in millimeter

d	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	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.