# **UFLWT Single Seals**

## Standard Mechanical Seals - Metal Bellows Seals



### **Product Description**

- 1. Single seal configuration
- 2. Balanced design
- 3. Independent of direction of rotation
- 4. For plain shafts
- 5. Rotary metal bellows design

#### **Technical Features**

- 1. Suitable for very high temperature
- 2. No dynamically loaded O-ring
- 3. Pumping screw for media with higher viscosity also available
- 4. Short installation length possible
- 5. Rugged design for long operating life
- 6. Bellows design efficiently ensure self-

### Typical Industrial Applications

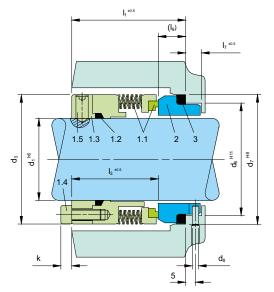
Chemical industry

Highly viscous media

Hot media

Power plant technology

Refining technology



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

# **Design Variations**

#### UFLWT900

Shaft diameter: d<sub>1</sub> = Upto150 mm (Upto 6.000") Internally pressurized: p<sub>1</sub> = ... 16 bar (232 PSI) Externally pressurized:  $p_1 = 10$  bar (145 PSI) Temperature: t=-20°C..+400°C (-4°F..+752°F) stationary seat lock necessary. Speed: = 20 m/s (66 ft/s)

Item	Part no.	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							
DIN 24250									

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)							
Performance Capabilities								

•										
Sizes d, Upto 150 mm (Upto 6.000")										
Externally pressurized:										
p,= 25 bar (363 PSI)										
Internally pressurized:										
p, <120 °C (248 °F) 10 bar (145 PSI)										
p <sub>1</sub> <220 °C (428 "F) 5 bar (73 PSI)										
p <sub>1</sub> <400 °C (752 °F) 3 bar (44 PSI)										
Stationary seat lock necessary										
t = -20 °C+400 °C(-4 °F+752 °F)										
20 m/s (66 ft/s)										

							Dimer	nsional C	)ata
Dimens	sions in millime	ter							
	d <sub>1</sub>	$d_3$	d <sub>6</sub>	d <sub>7</sub>	d <sub>8</sub>	I <sub>1</sub>	l <sub>3</sub>	l <sub>5</sub>	- 1
	16	38	29.0	35.0	3	58.0	46.5	2.0	Į.

d <sub>1</sub>	d <sub>3</sub>	d <sub>6</sub>	d <sub>7</sub>	d <sub>8</sub>	I <sub>1</sub>	l <sub>3</sub>	I <sub>5</sub>	16	l <sub>7</sub>	l <sub>8</sub>	l <sub>9</sub>	f	k	m <sub>x</sub>	
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 25	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 35 38	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 45	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	<u>/</u>	9	26.0	18.0	6	6	M8	
65 68	92	83.0	92.0	4	71.0	53.0	2.5		9	26.0	18.0	6	6	M8	
68	95	88.0	97.0	4	71.0	53.0	2.5		9	26.0	18.0	6	6	M8	
70	97	88.0	97.0	4	71.0	53.0	2.5	<u>/</u>	9	26.0	18.0	6	6	M8	
75 80	102	95.0	105.0	4	71.0	52.8	3.0		9	26.2	18.2	6	6	M8	
80	107	100.0	110.0	4	71.0	52.8	3.0	/	9	26.2	18.2	6	6	M8	
85	112	105.0	115.0	4	71.0	52.8	3.0	<u>/</u>	9	26.2	18.2	6	6	M8	
90 95	117	110.0	120.0	4	71.0	53.8	3.0	/	9	25.2	17.2	б	6	M8	
95	122	115.0	125.0	4	71.0	53.8	3.0	/	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	

127 122.2 inch size available from size 0.625 to 4.000

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