

UFL850N Single Seals

Standard Mechanical Seals - Metal Bellows Seals

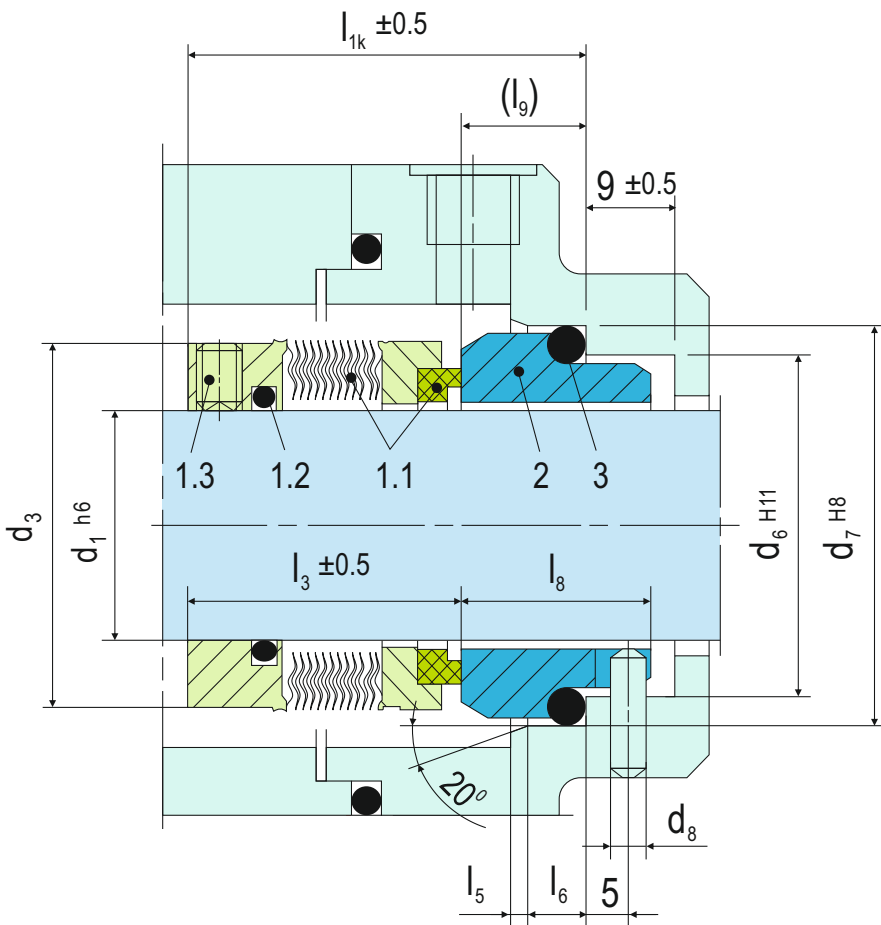


Product Description

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 high temperature application
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-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	412.1	O-ring
1.3	904	Set Screw
2	475	Seat (G9)
3	412.2	O-ring

DIN 24250

Typical Industrial Applications

- Chemical industry
- Cold media
- Highly viscous media
- Hot media
- Power plant technology
- Refining technology

Standards

EN 12756

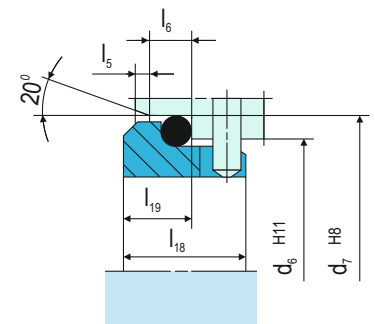
Performance Capabilities

Sizes: d_1 = Upto 100 mm (Upto 4.000")
 Externally pressurized:
 $p_1 = \dots$ 25 bar (363 PSI)
 Internally pressurized:
 $p_1 < 120$ °C (248 °F) 10 bar (145 PSI)
 $p_1 < 220$ °C (428 °F) 5 bar (72 PSI)
 Temperature: $t = -40$ °C...+220 °C (-40 °F...+428 °F)
 Stationary seat lock necessary.
 Speed = 20 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), Hastelloy® C-4 (M)

Stationary Seats



G16

(l_{1k} shorter than specified by EN 12756)

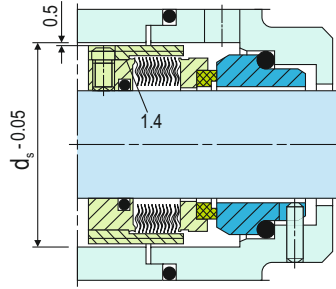
Design Variations

UFL900N

Shaft diameter: $d_1 =$ Upto 100 mm (Upto 4.000")
 Internally pressurized: $p_1 = \dots$ 16 bar (232 PSI),
 stationary seat lock necessary.
 Externally pressurized: $p_1 = 10$ bar (145 PSI)
 Temperature: $t = -40$ °C... +220 °C (-40 °F...+428 °F)
 Speed = 20 m/s (66 ft/s)

UFL850P / UFL900P

Version with pumping ring. Dependent on direction of rotation. Can be retrofitted.



UFL850F

Dimensions, items and description as for UFL850N, but with pumping screw (item no. 1.4). Dependent on direction of rotation. The pumping screw can be retrofitted.

Dimensional Data

Dimensions in millimeter

d_1	d_3	d_6	d_7	d_8	d_s	l_{1K}	l_3	l_5	l_6	l_8	l_9	l_{18}	l_{19}	b	s
16	30	23	27	3	38	42.5*)	32.5	1.5	4	17.5	10	-	-	1.6	9.0
18	32	27	33	3	39	42	30.5	2	5	14	11.5	15	7.0	1.6	10.0
20	33.5	29	35	3	41	42	30.5	2	5	14	11.5	15	7.0	1.6	10.0
22	36.5	31	37	3	44	42	30.5	2	5	14	11.5	15	7.0	1.6	10.0
24	39	33	39	3	47	40	28.5	2	5	19.5	11.5	15	7.0	1.6	8.2
25	39.6	34	40	3	48	40	28.5	2	5	19.5	11.5	15	7.0	1.6	8.5
28	42.8	37	43	3	51	42.5	31	2	5	19.5	11.5	15	7.0	1.6	9.0
30	45	39	45	3	53	42.5	31	2	5	19.5	11.5	15	7.0	1.6	8.5
32	46	42	48	3	55	42.5	31	2	5	19.5	11.5	15	7.0	1.6	9.2
33	48	42	48	3	56	42.5	31	2	5	19.5	11.5	15	7.0	1.6	9.2
35	49.2	44	50	3	58	42.5	31	2	5	19.5	11.5	15	7.0	1.6	9.5
38	52.3	49	56	4	61	45	31	2	6	22	14	16	8.0	1.6	9.2
40	55.5	51	58	4	64	45	31	2	6	22	14	16	8.0	1.6	9.2
43	57.5	54	61	4	67	45	31	2	6	22	14	16	8.0	1.6	9.2
45	58.7	56	63	4	69	45	31	2	6	22	14	16	8.0	1.6	9.5
48	61.9	59	66	4	72	45	31	2	6	22	14	16	8.0	1.6	9.2
50	65	62	70	4	74	47.5	32.5	2.5	6	23	15	17	9.5	1.6	10.5
53	68.2	65	73	4	77	47.5	32.5	2.5	6	23	15	17	9.5	1.6	10.5
55	70	67	75	4	80	47.5	32.5	2.5	6	23	15	17	9.5	1.6	10.0
58	71.7	70	78	4	83	52.5	37.5	2.5	6	23	15	18	10.5	3.0	14.0
60	74.6	72	80	4	85	52.5	37.5	2.5	6	23	15	18	10.5	3.0	14.0
63	79	75	83	4	88	52.5	37.5	2.5	6	23	15	18	10.5	3.0	14.0
65	84.1	77	85	4	95	52.5	37.5	2.5	6	23	15	18	10.5	3.0	14.0
68	87.3	81	90	4	96	52.5	34.5	2.5	7	26	18	18.5	11.0	1.6	10.0
70	87.3	83	92	4	96	60	42	2.5	7	26	18	19	11.5	3.0	17.0
75	95	88	97	4	104	60	42	2.5	7	26	18	19	11.5	3.0	16.0
80	98.4	95	105	4	109	60	41.8	3	7	26.2	18.2	19	11.5	3.0	16.0
85	104.7	100	110	4	114	60	41.8	3	7	26.2	18.2	19	11.5	3.0	16.0
90	111	105	115	4	119	65	46.8	3	7	26.2	18.2	20.5	13.0	3.0	21.0
95	114	110	120	4	124	65	47.8	3	7	25.2	17.2	20.5	13.0	3.0	21.0
100	117.4	115	125	4	129	65	47.8	3	7	25.2	17.2	20.5	13.0	3.0	20.0

*) Installation length is longer than l_{1K} specified by EN 12756
 inch size available from size 0.625 to 4.000

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