

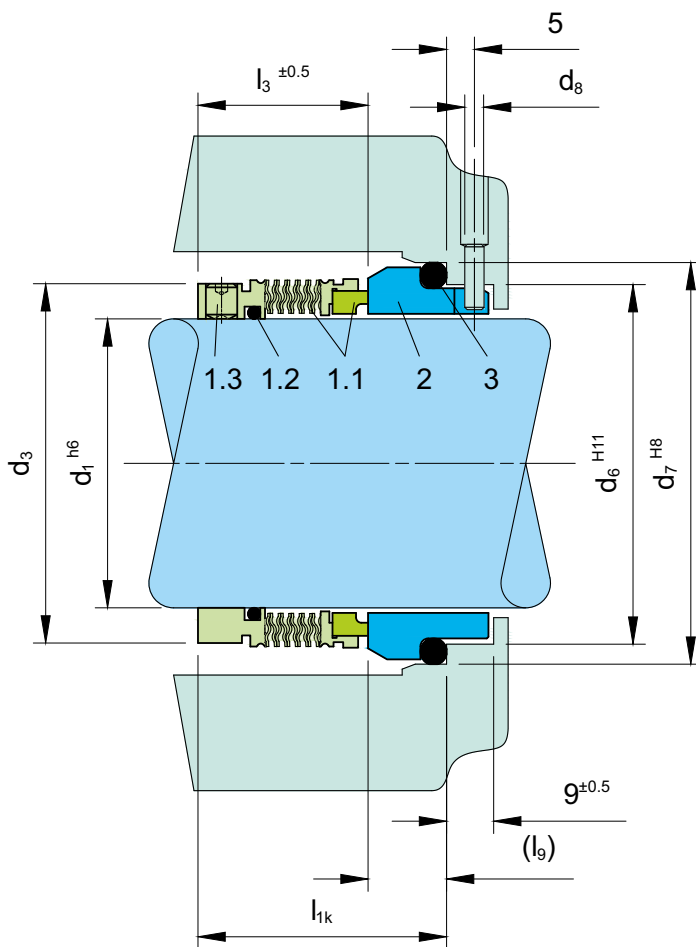


## Product Description

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

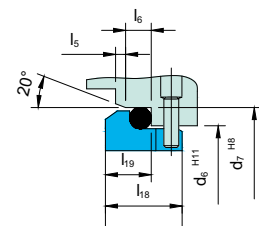
## Performance Capabilities

|                                 |   |
|---------------------------------|---|
| Sizes                           | d <sub>1</sub> = Upto 100 mm (Upto 4.000")  |
| Externally pressurized          | p <sub>1</sub> = ... 25 bar (363 PSI)   |
| Internally pressurized          | p <sub>1</sub> < 120 °C (248 °F) ,<br>10 bar (145 PSI)<br>p <sub>1</sub> < 220 °C (428 °F),<br>5 bar (72 PSI) |
| Temperature                     | t = -40°C...+220°C<br>(-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



(l<sub>8</sub> shorter than specified by EN 12756)

## Design Variations

### UFL900N

Shaft diameter:  $d_1$  = Upto 100 mm (Upto 4.000")

Internally pressurized:  $p_1$  = ... 16 bar (232 PSI), stationary seat lock necessary.

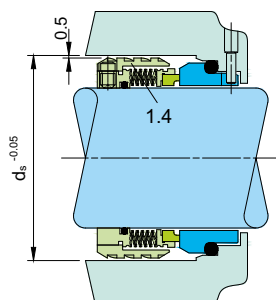
Externally pressurized:  $p_1$  = 10 bar (145 PSI)

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.

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.