

Sanitary Diaphragm Seal -Union Nut or Male Threaded **DS510 Series**

Features

- Laser and plasma double welding standard
- Std. DIN 11851, SMS 1145, APV-RJT, RTJ-IDF
- Wide hygienic application
- Stainless steel wetted parts
- Stainless steel body construction
- Hygienic process application
- Non toxic silicone liquid filling
- Easy cleaning and maintenance
- Pressure range -1..0, 0..1 up to 40 bar



Male threaded coupling



Threaded coupling union nut

Technical Specification



- Design configuration
Union nut and male fastening
- Fastening standard
DIN 11851, SMS 1145, IDF, APV-RJT
- Working temperature range
Process -10°..+130°C
Ambient -10°..+40°C
Please refer to filling selection table
- Design pressure range
-1 bar..0, 0..1 up to 40 bar
- Instrument Accuracy (Pressure gauge)
SF Series : Class 1.6
SF Series : Class 1.0
- Connection Size
Instrument connection G¹/₂, G³/₄ or NPT
- Wetted parts material
Stainless steel 316
- Diaphragm
Stainless steel 316L, double laser weld
- Accessories (*Option)
Stainless steel capillary (Swivel ring)
Cooling tube - Spring
Cooling tube - Mini
Cooling tube - Tube

Table Options for Filling Working Fluid

| Filling Fluid | Diaphragm Seal (°C) | Service |
|--------------------|---------------------|-------------------|
| Silicon (Standard) | -40°..+130° | Food and industry |
| Glycerine oil | -5°..+ 80° | Food |
| Propylene glycol | -30°..+100° | Food |

Model, Standard, Connection Characteristic and Size

| Model | Standard | Process Connection | Size |
|-------|-----------|-----------------------------|------------------------|
| DC511 | DIN 11851 | Threaded coupling union nut | DN25, DN32, DN40, DN50 |
| DC512 | DIN 11851 | Male threaded coupling | DN32, DN40, DN50 |
| DC513 | SMS 1145 | Threaded coupling union nut | 1", 1 1/2", 2" |
| DC514 | SMS 1145 | Male threaded coupling | 1 1/2", 2" |
| DC515 | APV - RJT | Threaded coupling union nut | 1 1/2", 2" |
| DC516 | APV - RJT | Male threaded coupling | 1 1/2", 2" |
| DC517 | RTJ - IDF | Threaded coupling union nut | 1 1/2", 2" |
| DC518 | RTJ - IDF | Male threaded coupling | 1 1/2", 2" |

Minimum Pressure and Compatibility

| Process thread | DN25 (1") | | DN32 | | DN40 (1 1/2") | | DN50 (2") | |
|----------------|-----------|------|--------|------|---------------|------|-----------|------|
| | Standard | Pmin | PN | Pmin | PN | Pmin | PN | Pmin |
| DIN 11851 | 0..2.5 | 40 | 0..1,6 | 40 | 0..1 | 25 | 0..1 | 25 |
| SMS1145 | N/A | N/A | 0..2,5 | 40 | 0..1 | 40 | 0..1 | 40 |
| APV-RJT | N/A | N/A | 0..6 | 40 | 0..1,6 | 40 | 0..1,6 | 40 |
| RJT-IDF | N/A | N/A | 0..2,5 | 40 | 0..1 | 40 | 0..1 | 40 |

Ordering Code



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DC ^① - **Size** ^② - **Instrument Connection** ^③ - **Filling** ^④ ***Option** ^⑤

| ① | Model and Standard |
|-----|--|
| 511 | DIN 11851, Threaded coupling union nut |
| 512 | DIN 11851, Male threaded coupling |
| 513 | DIN 1145, Threaded coupling union nut |
| 514 | DIN 1145, Male threaded coupling |
| 515 | APV - RJT, Threaded coupling union nut |
| 516 | APV - RJT, Male threaded coupling |
| 517 | RJT - IDF, Threaded coupling union nut |
| 518 | RTJ - IDF, Male threaded coupling |

| ② | DN Size |
|---|----------------|
| 2 | DN25 or 1" |
| 3 | DN32 |
| 4 | DN40 or 1 1/2" |
| 5 | DN50 or 2" |

| ③ | Instrument & Process Connection |
|----|--|
| G2 | G ¹ / ₂ " (Standard) |
| N2 | 1/2" NPT |
| G4 | G ³ / ₄ " |
| N4 | 1/4" NPT |

| ④ | Diaphragm Filling |
|---|--------------------------------|
| A | Standard silicone -40°..+130°C |
| B | Glycerine oil -5°..+ 80°C |
| C | Propylene glycol -30°..+100°C |

| ⑤ | Option |
|----|--------------------------------------|
| AC | Capillary (Meter), eg. AC5 -5 meters |
| C1 | Cooling tube AR100 (Spring) |
| C2 | Cooling tube AR200 (Mini) |
| C3 | Cooling tube AR 300 (Tube) |

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