

DF Flush Flanged Diaphragm Seal

FEATURES

- Flush mounted diaphragm seal prevents clogging
- Engineered to minimize the use of expensive wetted materials
- Continuous-duty construction
- Available with a wide range of wetted materials

TYPICAL USES

- Oil and gas
- Refineries
- Chemical and petrochemical
- Water and wastewater
- NACE Compliant processes
- Biogas and diesel



DF
Flanged Seal



SPECIFICATIONS

| | |
|-----------------------------|-------------------------------------|
| Connection Style: | Flanges, flush diaphragm |
| Process Connection Size: | 1, 1½, 2, 3 or 4 NPS |
| Instrument Connection Size: | ¼ or ½ NPT Female |
| Flange Ratings: | ASME 150, 300, 600, 900, 1500, 2500 |
| Flange: | Raised face or ring joint |
| Added Tolerance: | ±0.5% typical |
| Approvals and Certificates: | CRN, NACE, ATEX, PMI, EN10204 3.1 |

WETTED COMPONENTS

Diaphragm Materials

316 SS, Monel® 400, Tantalum, Hastelloy®C-276, Halar® coated 316L SS, Gold plated 316 SS

NON-WETTED COMPONENTS

Top Housing and Flange

316L Stainless Steel

KEY BENEFITS

- Compact design eliminates need for lower housing
- Protects process and instrumentation with materials to fit your application

ATEX

Conformity according to RL 94/9/EC appendix X for mechanical equipment in potential hazardous areas:

Optional marking

Ⓔ0044 ⒸEII 2 GD c II TX

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The temperature class will be determined by the used measuring device.

When selecting an instrument, refer to the [Min/Max Guide](#) for compatibility with this diaphragm seal or scan the QR code to the right.



Data Sheet

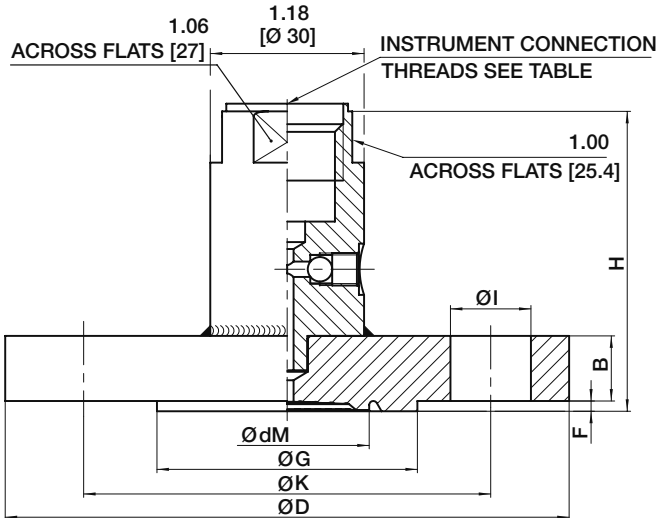
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| ORDERING CODE | Example: | 10 | A | DF | S | S | 02T | 150 | RF | XCK | MQ |
|---|----------|----|---|----|---|---|-----|-----|----|-----|----|
| Process Connection Size | | | | | | | | | | | |
| 10 - 1 NPS | | 10 | | | | | | | | | |
| 15 - 1½ NPS | | | | | | | | | | | |
| 20 - 2 NPS | | | | | | | | | | | |
| 30 - 3 NPS | | | | | | | | | | | |
| 40 - 4 NPS | | | | | | | | | | | |
| Flange Dimension Specification | | | | | | | | | | | |
| A - ASME B16.5 | | | A | | | | | | | | |
| Seal Type | | | | | | | | | | | |
| DF - Flush Diaphragm | | | | DF | | | | | | | |
| Diaphragm Material | | | | | | | | | | | |
| S - 316L Stainless Steel | | | | | S | | | | | | |
| P - Monel® 400 | | | | | | | | | | | |
| U - Tantalum | | | | | | | | | | | |
| H - Hastelloy® C-276 | | | | | | | | | | | |
| SH - Halar®-coated 316L Stainless Steel | | | | | | | | | | | |
| ST - Teflon®-coated 316L Stainless Steel | | | | | | | | | | | |
| W - Gold-plated 316L Stainless Steel | | | | | | | | | | | |
| Flange and top housing material | | | | | | | | | | | |
| S - 316L SS | | | | | | S | | | | | |
| Instrument Connection Size | | | | | | | | | | | |
| 02T - ¼ NPT Female | | | | | | | 02T | | | | |
| 04T - ½ NPT Female | | | | | | | | | | | |
| Flange Class | | | | | | | | | | | |
| 150 - ASME 150 class | | | | | | | | 150 | | | |
| 300 - ASME 300 class | | | | | | | | | | | |
| 600 - ASME 600 class | | | | | | | | | | | |
| 900 - ASME 900 class | | | | | | | | | | | |
| 1500 - ASME 1500 class | | | | | | | | | | | |
| 2500 - ASME 2500 class | | | | | | | | | | | |
| Flange Form (Contact Ashcroft for other range forms) | | | | | | | | | | | |
| RF - Raised Face | | | | | | | | | RF | | |
| RJ - Ring Joint | | | | | | | | | | | |
| Options (if choosing option(s) must include an "X") | | | | | | | | | | X_ | |
| Fill Fluid | | | | | | | | | | | |
| CK - Silicone 50cST | | | | | | | | | | CK | |
| DJ - Silicone 10cST | | | | | | | | | | | |
| CF - Halocarbon® | | | | | | | | | | | |
| HA - Syltherm® | | | | | | | | | | | |
| Optional Features | | | | | | | | | | | |
| 6B - Cleaned for oxygen service | | | | | | | | | | | |
| DU - Instrument welded to seal | | | | | | | | | | | |
| NH - Wired Stainless Steel tags | | | | | | | | | | | |
| C3 - EN 3.1 Traceability | | | | | | | | | | | |
| CD5 - NACE certificate | | | | | | | | | | | |
| MQ - Positive material identification | | | | | | | | | | | MQ |
| AT - ATEX approval | | | | | | | | | | | |

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DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings



| Process Connection Size inches | Pressure Class | ØD | B | ØG | ØdM | F | ØK | ØI | H | Weight (lbs) |
|--------------------------------|----------------|-------|------|------|------|----------|----------|----------|----------|--------------|
| 1 | 150 | 4.33 | 0.50 | 2.00 | 1.26 | 0.08 | 3.13 | 0.63 x 4 | 2.29 | 2.20 |
| | 300 | 4.92 | 0.63 | | | | 3.50 | 0.75 x 4 | 2.42 | 3.31 |
| | 400/600 | | 0.69 | | | | 1.00 x 4 | 2.68 | 4.41 | |
| | 900/1,500 | 5.91 | 1.13 | | | 4.00 | | 3.11 | 8.82 | |
| | 2,500 | 6.30 | 1.38 | | | 4.25 | 3.37 | 11.02 | | |
| 1½ | 150 | 4.92 | 0.63 | 2.87 | 1.73 | 0.08 | 3.87 | 0.63 x 4 | 2.42 | 4.41 |
| | 300 | 6.10 | 0.75 | | | | 4.50 | 0.87 x 4 | 2.54 | 6.61 |
| | 400/600 | | 0.88 | | | | 1.13 x 4 | 2.87 | 7.72 | |
| | 900/1,500 | 7.09 | 1.25 | | | 4.87 | | 3.24 | 13.23 | |
| | 2,500 | 8.07 | 1.75 | | | 5.75 | 1.25 x 4 | 3.74 | 23.15 | |
| 2 | 150 | 5.91 | 0.69 | 3.63 | 2.24 | 0.08 | 4.75 | 0.75 x 4 | 2.48 | 5.51 |
| | 300 | 6.50 | 0.81 | | | | 5.00 | 0.75 x 8 | 2.62 | 7.72 |
| | 400/600 | | 1.00 | | | | 1.00 x 8 | 2.99 | 9.92 | |
| | 900/1,500 | 8.46 | 1.50 | | | 6.50 | | 3.49 | 23.15 | |
| | 2,500 | 9.23 | 2.00 | | | 6.75 | 1.13 x 8 | 3.99 | 35.27 | |
| 3 | 150 | 7.48 | 0.88 | 5.00 | 3.46 | 0.08 | 6.00 | 0.75 x 4 | 2.67 | 12.13 |
| | 300 | 8.27 | 1.05 | | | | 6.63 | 0.87 x 4 | 2.85 | 15.43 |
| | 400/600 | | 1.25 | | | | 1.00 x 8 | 3.25 | 19.84 | |
| | 900 | 9.45 | 1.50 | | | 7.50 | | 3.49 | 29.76 | |
| | 1,500 | 10.43 | 1.88 | | | 8.00 | | 1.25 x 8 | 3.88 | 42.99 |
| | 2,500 | 12.01 | 2.63 | | | 9.00 | 1.37 x 8 | 4.61 | 77.16 | |
| 4 | 150 | 9.06 | 0.88 | 6.19 | 3.46 | 0.08 | 7.50 | 0.75 x 8 | 2.67 | 16.53 |
| | 300 | 10.04 | 1.19 | | | | 7.87 | 0.87 x 8 | 2.98 | 26.46 |
| | 400 | | 1.38 | | | | 1.00 x 8 | 3.37 | 30.86 | |
| | 600 | 10.83 | 1.50 | | | 9.25 | | 3.49 | 38.58 | |
| | 900 | 11.42 | 1.75 | | | 1.25 x 8 | 9.50 | 3.74 | 60.63 | |
| | 1,500 | 12.20 | 2.13 | | | | 1.37 x 8 | 4.11 | 66.14 | |
| | 2,500 | 13.8 | 3.00 | | | | | 10.75 | 1.63 x 8 | 4.99 |