# Diaphragm seals flanged types
# Model DF21

Flanged connections to ANSI/ASME or EN

**Features**

- Removable diaphragm seal capsule
- Metal diaphragms with Teflon gasket
- Removable top and bottom housing
- Variety of wetted parts materials



**Pressure rating**

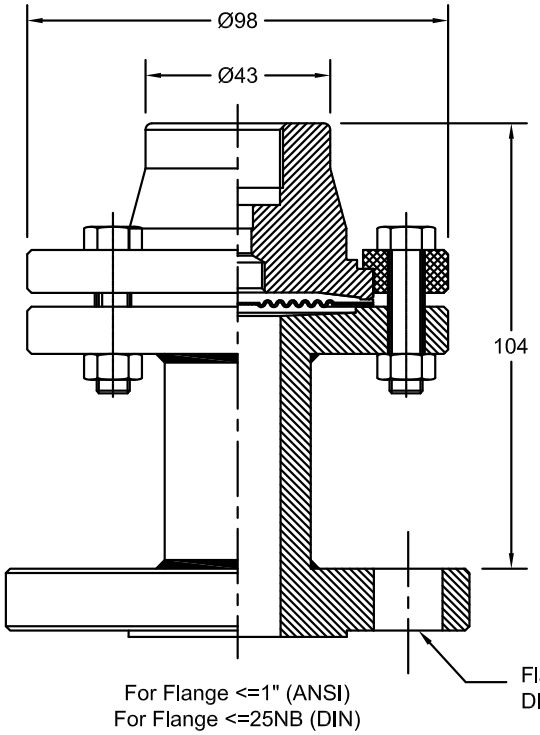
From 150 lbs up to 1500 lbs
From PN6 up to PN100

**Applications**

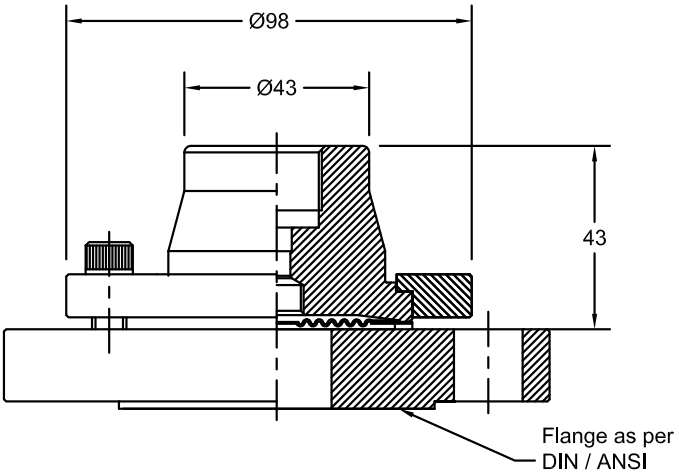
Chemical and petrochemical industry
Machine and apparatus construction
Offshore installations
Pulp and paper industry
Waste water treatment

| Technical specification | | DF21 |
|---|---|---|
| Process connection size, flanged | ANSI<br>DIN | 1/2", 3/4", 1", 1 ½", 2", 3"<br>DN15, DN25, DN40, DN50, DN80, others on request |
| Rating | ANSI<br>DIN | 150 lbs, 300 lbs, 600 lbs, 900 lbs, 1500 lbs<br>PN10, PN16, PN25, PN40, PN64, PN100, others on request |
| Construction<br>Fill port<br>Flushing connection<br>Flushing connection size | | Bolted top and bottom housing, removable for easy maintenance<br>At the side with stainless steel ball and set screw<br>Optional flushing<br>1/4" 1/2" NPT female |
| Maximum pressure<br>Metal bottom housing [lbs/PN]<br>Other bottom housing [lbs/PN] | | <br>1500/100<br>150/10 |
| Measuring principle | | Screwed capsule to top housing |
| Instrument connections [female] | | 3/8" BSP, 1/2" NPT, others on request |
| Material (wetted parts)<br>Bottom housing<br><br>Diaphragm (metal type) | | <br>Stainless steel 316, 316L, 316 with teflon protection, polypropylene, PVC, Hastelloy-C, Monel<br>Stainless steel 316L, 304L, Carpenter 20, Hastelloy B, Hastelloy C, Nickel, K-Monel, Tantalum |
| Material (non wetted parts)<br>Top housing<br>Clamps, rings<br>Bolts and nuts | | <br>Stainless steel 304, 316<br>Steel painted black, optional stainless steel<br>Stainless steel 300 series |
| Accuracy | | Additional 0,5 % to the specified tolerance of the mounted instrument |
| Filling liquids (temperature range) | | Glycerin (0/400 °F, -18/204 °C),<br>Silicone (-40/600 °F, -40/315 °C),<br>Halocarbon (-70/300 °F, -56/149 °C),<br>Syltherm 800 (-40/750 °F, -40/400 °C),<br>Vegetable oil (32/248 °F, 0/120 °C),<br>Others on request, also depending on selected material and configuration. |
| Mounting | | Direct or with capillary |
| Accessories, options | | NACE, pressure gauges, pressure switches, transducers, capillaries |

## General dimensions in mm




For Flange <=1" (ANSI)
For Flange <=25NB (DIN)




For Flange >1" (ANSI)
For Flange >25NB (DIN)

## Order information

| Process connection | Type | Diaphragm | Bottom housing material | Instrument connection | Rating | Flange facing | Filling fluid | Options |
|---|---|---|---|---|---|---|---|---|
| **ANSI Flanged**<br>**(05)** 1/2"<br>**(07)** 3/4"<br>**(10)** 1"<br>**(15)** 1 ½"<br>**(20)** 2"<br>**(30)** 3" | **DF21** | **(S)** 316L<br>**(C)** 304L<br>**(D)** Carpenter 20<br>**(G)** Hastelloy B<br>**(H)** Hastelloy C<br>**(N)** Nickel<br>**(P)** K-Monel<br>**(U)** Tantalum | **(S)** 316<br>**(L)** 316L<br>**(SP)** 316 with teflon lined[1)]<br>**(PP)** Polypropylene [3)]<br>**(V)** PVC [3)]<br>**(H)** Hastelloy C<br>**(M)** Monel | **(14T)** 3/8" BSP(F)<br>**(04T)** 1/2" NPT(F) | **ANSI**<br>**(150)** 150 lbs<br>**(300)** 300 lbs<br>**(600)** 600 lbs<br>**(900)** 900 lbs<br>**(1500)** 1500 lbs | **(FF)** Flat face [2)]<br>**(RF)** Raised face [2)]<br>**(RTJ)** Ring joint type [2)] | **(CG)** Glycerin (direct mounted, -18/204 °C)<br>**(CK)** Silicone (direct mounted or with capillary, -40/315 °C)<br>**(CF)** Halocarbon (direct mounted or with capillary, -56/149 °C)<br>**(HA)** Syltherm 800 (direct mounted or with capillary, -40/400 °C)<br>**(GZ)** Vegetable oil (direct mounted or with capillary, 0/120 °C) | **(NH)** Tagging wired<br>**(OF)** Oil free (only filled with halocarbon)<br>**(YT)** Stainless steel 316 top housing<br>**(SE)** Stainless steel clamp rings<br>**(SR4)** Spacer ring with 1/2" NPT flushing[5)]<br>**(SR2)** Spacer ring with 1/4" NPT flushing[5)]<br>**(CA)** Stainless steel armored capillary [4)]<br>**(CP)** Stainless steel armored capillary with PVC sleeving [4)]<br>4) Max length 30m, specify length in mm EG. CP1000 = CP with 1m |
| **DIN Flanged**<br>**(DN15)**<br>**(DN25)**<br>**(DN40)**<br>**(DN50)**<br>**(DN80)** | | | | | **DIN**<br>**(PN10)**<br>**(PN16)**<br>**(PN25)**<br>**(PN40)**<br>**(PN64)**<br>**(PN100)**<br>others on request | | others on request | |

1) Restricted to maximum temperature 200 °C, not available with option SR2, SR4 2) The DIN-flange facing depends on nominal size and nominal pressure
3) Max. Rating /temp limit: 200 psi/14 bar at 74 °F/23 °C; 125 psi/8.6 bar at 125 °F/52 °C; 80 psi/5,5 bar at 150 °F/65 °C
5) Not for (SP), (PP)& (V)

## How to order

| Process connection | Type | Diaphragm capsule material | Bottom housing material | Instrument connection | Rating | Flange facing | Filling fluid | Option |
|---|---|---|---|---|---|---|---|---|
| 15 | DF21 | S | S | 14T | 300 | RF | CK | CA1000 |

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