

Diaphragm seals pancake type Model DF52

ASME B40.100

Features

- Wafer "pancake" type construction
- Flushed diaphragm
- · Variety of wetted parts materials
- Suitable for slurry & high viscous service

Size

2" to 5" ASME/ANSI DN50 to DN125

Applications

Chemical and petrochemical industry Offshore installations Pulp and paper industry

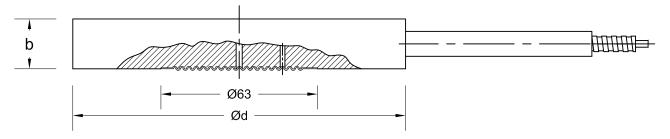


| Technical specification | | DF52 | | | | |
|---------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------|-------------|------------|--|
| Process connection size, flanged ASME B16.5 | ANSI | 2", 3", 4", 5" | | | | |
| EN 1092-1 | DIN | DN50, DN80, DN100, DN12 | 5 | | | |
| Back up flange Rating | ANSI | 150 lbs, 300 lbs, 600 lbs, 900 | 0 lbs, 1500 lbs | | | |
| | DIN | PN10, PN16, PN25, PN40, F | PN64, PN100, others o | n request | | |
| Construction | | Flush welded diaphragm | | | | |
| Fill port | | At the top with stainless stee | | | | |
| Flushing connection | | Flushing through spacer ring | 1 | | | |
| Flushing connection size | | 1/4" or 1/2" NPT female | | | | |
| Maximum pressure | | According to flange ratting | | | | |
| Measuring principle | | Metallic diaphragm | | | | |
| Instrument connections [female] | | 3/8" BSP(F) or 1/2" NPT(F) through capillary | | | | |
| Material (wetted parts) | | | | | | |
| Diaphragm & contact surface | | Stainless steel 316L, 316L with PTFE protection, Gold coated, Hastelloy-C276, Monel | | | | |
| Material (non wetted parts) | | | | | | |
| Counter Flange | | Stainless steel 304, 316, Carbon Steel | | | | |
| Filling liquids (temperature range) | | Glycerin (0/400 °F, -18/204 °C), | | | | |
| | | Silicone (-40/600 °F, -40/315 °C), | | | | |
| | | Halocarbon (-70/300 °F, -56/149 °C), | | | | |
| | | Syltherm 800 (-40/750 °F, -40/400 °C), | | | | |
| | | Vegetable oil (32/248 °F, 0/120 °C), | | | | |
| | | Food grade silicone (-13/400 °F, -25/200 °C), | | | | |
| | Others on request, also depending on selected material and configuration. | | | | | |
| Mounting | | With capillary | 011/12/100 | 411/1234400 | ==/5.1.40= | |
| Weight dry without capillary in kg | | 2"/DN50 | 3"/DN80 | 4"/DN100 | 5"/DN125 | |
| | | 1.4 | 2.5 | 3.5 | 5.0 | |
| Accessories, options | | NACE, pressure gauges, pressure switches, transducers, capillaries | | | | |

23/03/2019



General dimensions in mm



DIN FLANGE

| DN [mm] | PN | Dimensions [mm] | | | |
|------------|-------|-----------------|----|--|--|
| | [bar] | Ød | b | | |
| 50 | 10100 | 102 | 20 | | |
| 80 | 10100 | 138 | 20 | | |
| 100 | 10100 | 162 | 20 | | |
| 125 | 10100 | 188 | 22 | | |

ANSI FLANGE

| DN [in.] | PN | Dimensions [mm] | | | |
|-------------|---------|-----------------|----|--|--|
| | [class] | Ød | þ | | |
| 2 | 1501500 | 92 | 20 | | |
| 3 | 1501500 | 127 | 20 | | |
| 4 | 1501500 | 157 | 20 | | |
| 5 | 1501500 | 186 | 22 | | |

Order information

| Process Size | Туре | Diaphragm material | Bottom housing material | Instrument connection | Backup Flange Rating | Flange Facing | Backup Flange Material | Filling fluid | Options |
|----------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANSI Flanged (20) 2" (30) 3" (40) 4" (50) 5" DIN Flanged (DN50) (DN80) (DN100) (DN125) | DF52 | (S) 316L (SJ) 316 with teflon coating ¹⁾ (SG) 316 with GOLD coating (H) Hastelloy C 276 (M) Monel | S) 316 (L) 316L (SJ) 316 with teflon coating¹) (SG) 316 with GOLD coating (H) Hastelloy C 276 (M) Monel | (14T) 3/8" BSP(F) (04T) 1/2" NPT(F) | ANSI (NA) Not applicable (150) 150 lbs (300) 300 lbs (600) 600 lbs (900) 900 lbs (1500) 1500 lbs DIN (NA) Not applicable (PN10) (PN16) (PN25) (PN40) (PN64) (PN100) | (RF) Raised face ²) (RTJ) Ring joint type ²) | (NA) No backup flange (C) SS 304 (S) SS 316 (CS) Carbon steel | (CG) Glycerin (direct mounted, -18/204 °C) (CK) Silicone (direct mounted or with capillary, -40/315 °C) (CF) Halocarbon (direct mounted or with capillary, -56/149 °C) (HA) Syltherm 800 (direct mounted or with capillary, -40/400 °C) (GZ) Vegetable oil (direct mounted or with capillary, 0/120 °C) (CZ) Food grade silicone (direct mounted or with capillary, -25/200 °C) | (NH) Tagging wired (OF) Oil free (only filled with halocarbon) (SR4) Spacer ring with 1/2" NPT flushing ³⁾ (SR2) Spacer ring with 1/4" NPT flushing ³⁾ (CA) Stainless steel armored capillary 4) (CP) Stainless steel armored capillary with PVC sleeving 4) 4) Max length 30m, specify length in meter EG. CP1.0 = CP with the constant of the consta |

1) Restricted to temperature 200 °C 2) The DIN-flange facing depends on nominal size and nominal pressure

3) Not for (SJ) & (SG)

How to order

| Process Size | Туре | Wetted Parts | Instrument connection | Backup flange rating | Backup flange material | Filling fluid | Options |
|-----------------|------|--------------|-----------------------|----------------------|---------------------------|---------------|---------|
| 30 | DF52 | S | 14T | 300 | CS | CK | CA1.0 |