

Flush type flanged diaphragm seal

Model DF50

ASME B40.100

Features

- Welded diaphragm seal
- Variety of wetted parts material
- Filling port in the upper housing
- Suitable for pressure gauges, switches and transmitters

Size

1 ½", 2" & 3" ASME/ANSI
DN40, DN50 & DN80

Pressure Rating

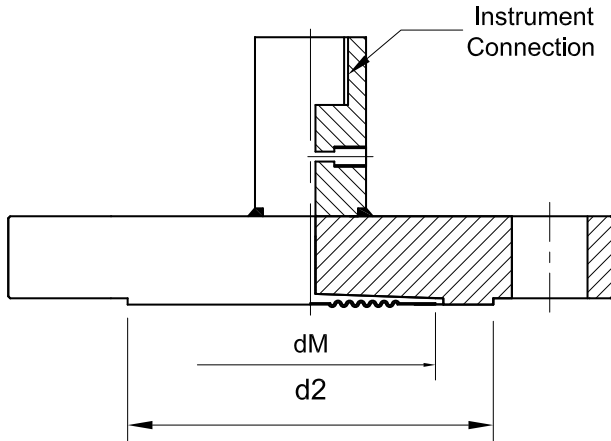
From 150 lbs up to 2500 lbs
From PN10 up to PN160

Applications

Chemical and petrochemical industry
Machine and apparatus construction
Offshore installations
Pulp and paper industry



Technical specification	DF50
Process connection size, flanged ASME B16.5 EN 1092-1	ANSI DIN 1 ½", 2", 3" DN40, DN50, DN80
Rating	ANSI DIN 150 lbs, 300 lbs, 600 lbs, 900 lbs, 1500 lbs, 2500 lbs PN10, PN16, PN25, PN40, PN64, PN100, PN160 others on request
Construction Fill port	Machined flange with welded flush diaphragm In upper housing side with stainless steel ball and set screw
Maximum pressure	According to flange rating
Measuring principle	Diaphragm welded to flange
Instrument connections [female]	3/8" BSP(F), Others on request
Sealing surfaces ANSI/ASME EN	B16.5 RF, optional RTJ EN 1092-1 Form B1
Material (wetted parts) Diaphragm & contact surface	Stainless steel 316L, Optional 316L with PTFE protection, Hasteloy-C276
Material (non wetted parts) Instrument connection Capillary and armor	Stainless steel 304 Stainless steel 316 and stainless steel 304
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.
Accuracy	Additional 0.5% to the specified tolerance of the mounted instrument
Mounting	Direct or with capillary
Weight dry in kg	Depending on flange size
Accessories, options	NACE, pressure gauges, pressure switches, transducers, capillaries

General dimensions in mm


SIZE	RATING	d2	dM	Min.Range Direct mounting (kg/cm ²)	Min.Range with Capillary (kg/cm ²)
1 1/2"	150 ~ 2500#	73	40	4	10
2"	150 ~ 2500#	92	63	1	1
3"	150 ~ 2500#	127	63	1	1
DN 40	PN 10 ~ 160	88	40	4	10
DN 50	PN 10 ~ 160	102	63	1	1
DN 80	PN 10 ~ 160	138	63	1	1

Order information

Process Size	Type	Diaphragm	Flange material	Instrument connection	Flange Rating	Flange Facing	Filling fluid	Options	
ANSI Flanged (15) 1 1/2" (20) 2" (30) 3"	DF50	(S) 316L	(S) 316	(14T) 3/8 BSP(F)	ANSI (150) 150 lbs (300) 300 lbs (600) 600 lbs (900) 900 lbs (1500) 1500 lbs (2500) 2500 lbs	(RF) Raised face ²⁾ (RTJ) Ring joint type ²⁾	(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) (CA) Stainless steel armored capillary ³⁾ (CP) Stainless steel armored capillary with PVC sleeving ³⁾	
		(SJ) 316L with Teflon Coating ¹⁾	(L) 316L						(SJ) 316 with PTFE coating ¹⁾
		(H) Hastelloy C	(H) Hastelloy C						
DIN Flanged (DN40) (DN50) (DN80)					DIN (PN10) (PN16) (PN25) (PN40) (PN64) (PN100) (PN160)				

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

How to order

Process Size	Type	Wetted Parts	Flange material	Instrument connection	Flange rating	Flange facing	Filling fluid	Options
20	DF50	S	S	14T	150	RF	CK	CA1.0