

# Diaphragm seals flanged types

## Model DF20

ASME B40.100

### Features

- Metal diaphragms with PTFE gasket
- Removable top and bottom housing
- Variety of wetted parts materials

### Pressure rating

From 150 lbs up to 1500 lbs

From PN10 up to PN100

### Applications

Chemical and petrochemical industry

Machine and apparatus construction

Offshore installations

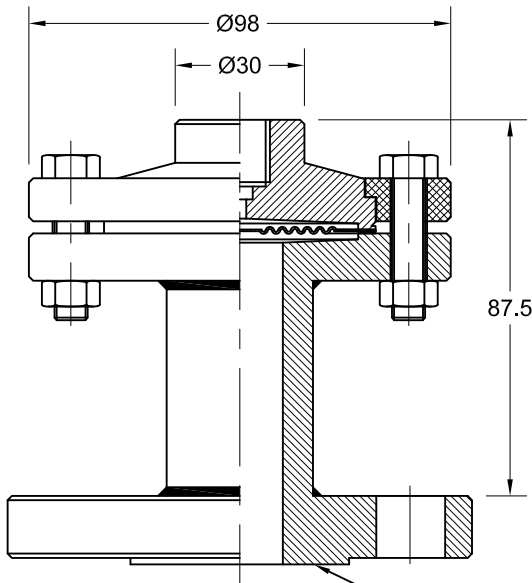
Pulp and paper industry

Waste water treatment

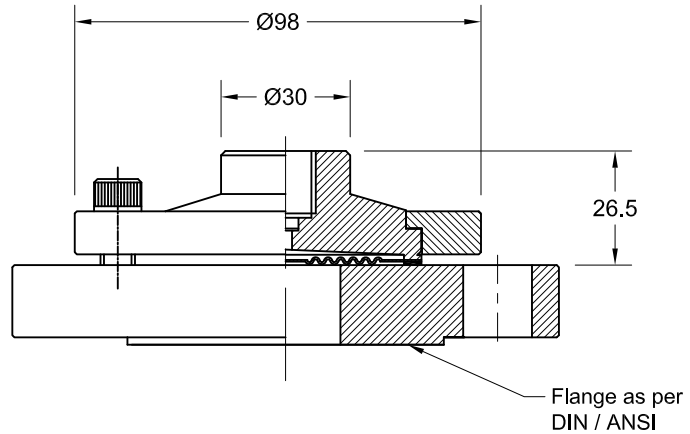


Technical specification	DF20	
Process connection size, flanged		
ASME B16.5	ANSI	1/2", 3/4", 1", 1 1/2", 2", 3"
EN 1092-1	DIN	DN15, DN25, DN40, DN50, DN80, others on request
Rating	ANSI	150 lbs, 300 lbs, 600 lbs, 900 lbs, 1500 lbs
	DIN	PN10, PN16, PN25, PN40, PN64, PN100, others on request
Construction		Bolted top and bottom housing, removable for easy maintenance
Fill port		At the side with stainless steel ball and set screw
Flushing connection		Optional flushing
Flushing connection size		1/4" 1/2" NPT female
Maximum pressure		
Metal bottom housing [psi / bar]		1500 / 100
Other bottom housing [psi / bar]		150 / 10
Measuring principle		Diaphragm welded to top housing
Instrument connections [female]		3/8" BSP, 1/2" NPT, others on request
Material (wetted parts)		
Bottom housing		Stainless steel 316L, Duplex, Hastelloy C276, 316L PTFE lined, polypropylene, PVC
Diaphragm (metal type)		SS 316L, SS321, Hastelloy C276, Inconel 625, Titanium, Tantalum
Diaphragm (other types)		Stainless steel 316L with PFA protection
Material (non wetted parts)		
Top housing		Stainless steel 304, 316L
Clamp rings		Steel painted black, optional stainless steel
Bolts and nuts		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), Silicone (-50/400 °F, -45/205 °C), Halocarbon (-50/320 °F, -45/160 °C), Syltherm 800 (-40/750 °F, -40/400 °C), Vegetable oil (32/248 °F, 0/120 °C), Food grade silicone (5/570 °F, -15/300 °C), 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	Length of Capillary
<b>ANSI Flanged</b> (05) 1/2" (07) 3/4" (10) 1" (15) 1 1/2" (20) 2" (30) 3"	DF20	(S) SS316L	(S) SS316L	(14T) 3/8" BSP(F)	<b>ANSI</b> (150) 150 lbs (300) 300 lbs (600) 600 lbs (900) 900 lbs (1500) 1500 lbs	(FF) Flat face <sup>2)</sup>	(CG) Glycerin (direct mounted, -18/204 °C)	(CA) Stainless steel armored capillary <sup>4)</sup>
		(321) SS321	(DU) Duplex S31803 (eq. F51)	(04T) 1/2" NPT(F)		(RF) Raised face <sup>2)</sup>	(CK) Silicone (direct mounted or with capillary, -45/205 °C)	(CP) Stainless steel armored capillary with PVC protection <sup>4)</sup>
		(SP) SS316L PTFE protected <sup>1)</sup>	(H) Hastelloy C276			(RTJ) Ring joint type <sup>2)</sup>	(CF) Halocarbon (direct mounted or with capillary, -45/160 °C)	<b>Options</b>
		(SJ) SS316L PFA coated <sup>1)</sup>	(SP) SS316L PTFE lined <sup>1)</sup>	(PP) Polypropylene <sup>3)</sup>			(HA) Syltherm 800 (direct mounted or with capillary, -40/400 °C)	(NH) SS wired tag
		(SG) SS316L Gold Plated	(V) PVC <sup>3)</sup>				(GZ) Vegetable oil (direct mounted or with capillary, 0/120 °C)	(OF) Oil free (only filled with halocarbon)
		(H) Hastelloy C276					(CZ) Food grade silicone (direct mounted or with capillary, -15/300 °C)	(YT) SS316L top housing
<b>DIN Flanged</b> (DN15) (DN25) (DN40) (DN50) (DN80)		(TI) Titanium <sup>5)</sup>			<b>DIN</b> (PN10) (PN16) (PN25) (PN40) (PN64) (PN100)			(YTI) Titanium top housing
		(U) Tantalum					(SE) Stainless steel rings and bolts	
							<b>Certificate</b>	
							(CD3) 3.1 Material Certi.	
							others on request	others on request

1) Restricted to maximum temperature 200 °C, not available with option SR2, SR4 <sup>2)</sup> The DIN-flange facing depends on nominal size and nominal pressure  
3) Only 1/4 and 1/2 NPT, 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  
4) Max length 30m, specify length in meter EG. CP1.0 = CP with 1m <sup>5)</sup> Titanium top housing required code YTI.

### How to order

Process connection	Type	Diaphragm	Bottom housing material	Instrument connection	Rating	Flange facing	Filling fluid	Length of Capillary	Options	Certificate
04	DF20	S	S	14T	150	RF	CK	CA1.0	NH	CD3

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