

# Diaphragm seals threaded types

## Model DS20

ASME B40.100

### Features

- Metal diaphragms with Teflon gasket
- Interchangeable components
- Removable top and bottom housing
- Variety of wetted parts materials

### Ranges

15 psi up to 1000 psi  
 1 kg/cm<sup>2</sup> up to 100 bar & kg/cm<sup>2</sup>  
 100 kPa up to 10000 kPa

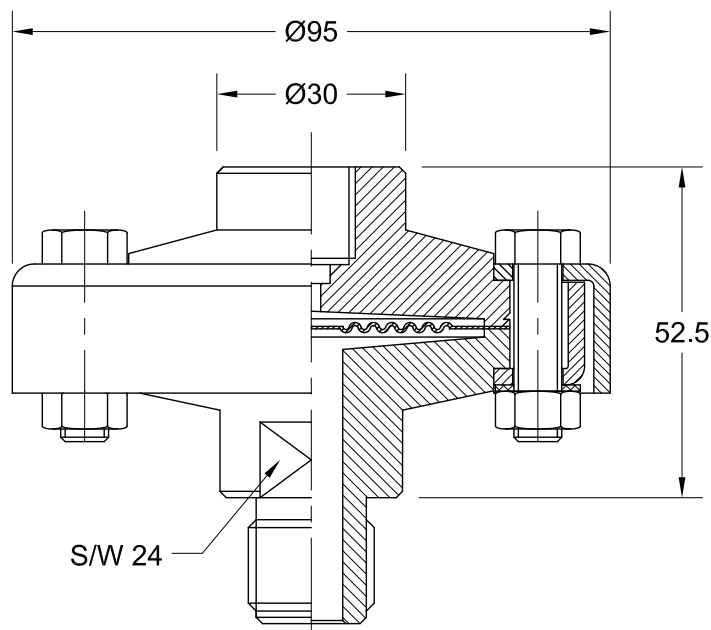
### Applications

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



Technical specification	DS20
Process connection size (ISO 228-1 / ASME B1.20.1)	1/4" 3/8" 1/2" BSP / NPT, M20x1.5, 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" 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 316, 316L, Polypropylene, PVC, SS 316 with Teflon protection, Hasteloy-C 276
Diaphragm (metal type)	Stainless steel 316L Optional Hasteloy-C276
Diaphragm (other types)	Stainless steel 316L with Teflon protection
Material (non wetted parts)	
Top housing	Stainless steel 304, optional 316
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 (-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	Direct or with capillary
Weight in kg	1.00
Accessories, options	NACE, pressure gauges, pressure switches, transducer, capillaries

## General dimensions in mm



## Order information

Process connection	Type	Diaphragm	Bottom housing material	Instrument connection	Filling fluid	Options
(06) 1" NPT(M)	DS20	(S) 316L	(S) 316	(14T) 3/8" BSP (F)	(CG) Glycerin (direct mounted, -18/204 °C)	(NH) Tagging wired
(05) 3/4" NPT(M)		(SP) 316L with teflon protection <sup>1)</sup>	(L) 316L	(04T) 1/2" NPT (F)	(CK) Silicone (direct mounted or with capillary, -40/315 °C)	(OF) Oil free (only filled with halocarbon)
(04) 1/2" NPT(M)		(SJ) 316L with teflon Coating <sup>1)</sup>	(SP) 316 with teflon lined <sup>1)3)</sup>		(CF) Halocarbon (direct mounted or with capillary, -56/149 °C)	(YT) Stainless steel 316 top housing
(03) 3/8" NPT(M)			(PP) Polypropylene <sup>1)2)</sup>		(HA) Syltherm 800 (direct mounted or with capillary, -40/400 °C)	(SE) Stainless steel clamp rings
(02) 1/4" NPT(M)			(V) PVC <sup>1)2)</sup>		(GZ) Vegetable oil (direct mounted or with capillary, 0/120 °C)	(PU) Flushing connection 1/4" NPT (F) <sup>5)</sup>
(18) 1" BSP(M)		(H) Hastelloy C	(H) Hastelloy C		(CZ) Food grade silicone (direct mounted or with capillary, -25/200 °C)	(CA) Stainless steel armored capillary <sup>4)</sup>
(17) 3/4" BSP(M)					others on request	(CP) Stainless steel armored capillary with PVC sleeving <sup>4)</sup>
(15) 1/2" BSP(M)						
(14) 3/8" BSP(M)						
(13) 1/4" BSP(M)						
(16) M20x1.5(M)						
(06T) 1" NPT(F)						
(05T) 3/4" NPT(F)						
(04T) 1/2" NPT(F)						
(02T) 1/4" NPT(F)						

1) Restricted to maximum temperature 200 °C, pressure 40 bar

2) Max. Rating / temperature 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

3) Not for process connection (02), (13), (06T), (05T), (04T), (02T), not available with option PU

5) Not for (SP), (PP) & (V)

## How to order

Process connection	Type	Diaphragm	Bottom housing material	Instrument connection	Filling fluid	Option
04	DS20	S	S	14T	CK	CA1.0

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