Flanged End Diaphragm Seal With Vent Cooling System

DS300V Series

Features

- Flanged end diaphragm processing type
- Standard to DIN 2501, ANSI B1.20, etc
- Vent cooling, for crystallizing and hot fluid
- Double laser welding diaphragm design
- Wide range corrosive applications
- Various diaphragm materials selection
- Diaphragm or wetted parts coating or lining
- Pressure range -1..0, -1..+24 to 0.. 40 bar
- Various liquid filling supported

Special

*Double welded diaphragm

Technical Specification

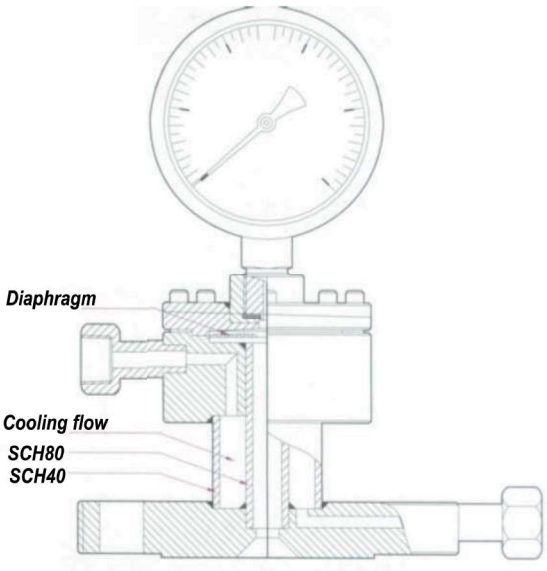
- Model and pressure configuration
  Pressure : 0..1 bar to 40 bar
  Vacuum : -1..0 bar
  Compound : -1..24 bar
- Diaphragm diameter
  Standard Ø 66 mm
- Instrument Connection Size
  Standard G½" or ½"NPT
- Process Connection Size
  Flanged end to DIN 2501, ASME B16.5, etc
  DIN 2501 : DN15..50, PN 2.5..40
  ASME B16.5 : ½"..2", Rating 150#..600#
  Finish Ra 3.2.. 6.3µm
- Working temperature range
  Working media -40°..+200°C
  Please refer to filling selection table

Material

- Upper / Lower body
  SS 316 (Standard) or * SS316L
- Diaphragm
  SS 316L (Standard),
  * *Optional Titanium, Monel, Hastelloy, Tantalum, or others*
- Sealing ring / gasket to diaphragm
  PTFE, *Viton, Nitrile, Rubber, Fluoroplastic
- Diaphragm filling
  Standard Silicone oil
- Optional Accessories in Stainless st
  Armoured capillary, max.15m
  Cooling tower AR100
  Overrange protector
  Angle tube
  Snubber

Dimension

in mm



DS300V With ANSI and ISO Flange Air Vent Cooling system

- ***Diaphragm filling reference***

Working Fluid	Working Temp.	Specific Gravity	Service
Silicone oil Std	-40°..+130°C	0.94 g/cm2	General industry
Silicone oil DC2	-30°..+200°C	1.07 g/cm2	High temperature
Fluorocarbon oil	-30°..+160°C	1.93 g/cm2	H2, O2, salt, acid
Glycerine	-5°.. + 70°C	1.27 g/cm2	Food, sanitary
Vegetable oil	-5°.. +100°C	0.93 g/cm2	Food, sanitary

- ***Flange Facing***

Standard	Flange Facing
ISO PN 10..40	Raised Face (RF), Flat Face (FF), Male tongue, Female groove, M/F spigot
DIN PN 20..40	Raised Face (RF) - RF de 1.6/6.4, Male tongue - Large/Small, Female groove
ASME Class 150..600	Ring Type Joint (RTJ), Female spigot - Large/Small, Male spigot - Large/Small

Ordering Code

DS300V - Diaphragm① - Flange Size② - Filling③ *Option④

①	Diaphragm Material
SS	SS 316 L
TI	Titanium
TA	Tantalum
HC	Hastelloy (H276C)
MO	Monel (Cu30Ni70)
XX	Other material

②	Flange Size and Rating
Please refer to flange size and rating table	

③	Diaphragm Filling	
A	Standard silicone oil	-40°..+130°C
B	Hi-temp. silicone oil	-30°..+200°C
C	Fluorocarbon oil	-30°..+160°C
D	Glycerine	-5°.. + 70°C
E	Vegetable oil	-5°.. +100°C

④	Option
AC	Capillary (Meter), eg. AC5 -5 meters
DC	PTFE diaphragm coating
DH	Halar coating
DF	PTFE diaphragm foil
DW	PTFE wetted part coating
DL	PTFE diaphragm lining
FL	PTFE wetted part lining
AX	Angle tube valve

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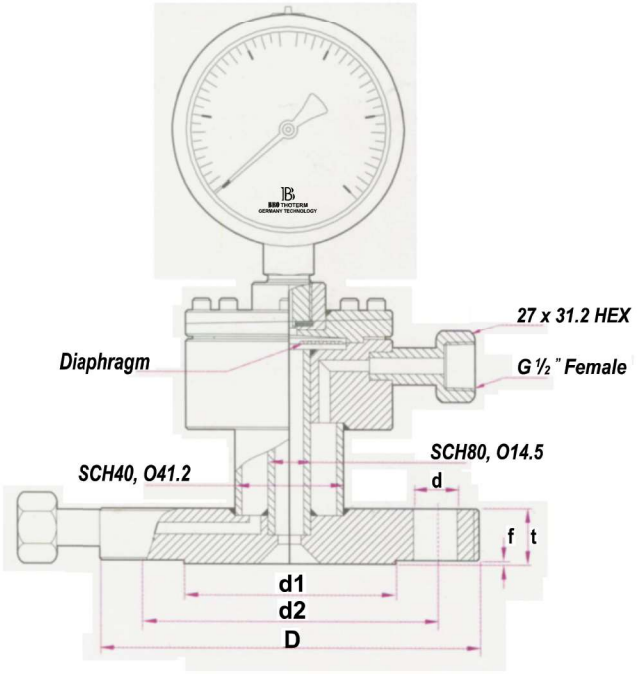
Flange Sizing and Dimension DS300V Series



• Process flanged according to ASME B16.5 Standard

Flange

Size	Class	D	t	f	d1	d2	d	
							Pcs	Size
½"	150	88.9	11.1	1.6	60.3	35.1	4	15.7
¾"	150	98.4	12.7	1.6	69.8	42.9	4	15.7
1"	150	108.0	14.2	1.6	79.2	50.8	4	15.7
1¼"	150	117.3	15.7	1.6	88.9	63.5	4	15.7
1½"	150	127.0	17.5	1.6	98.6	73.2	4	15.7
2"	150	152.4	19.1	1.6	120.7	91.9	4	19.1
½"	300	95.2	14.3	1.6	66.7	34.9	4	15.7
¾"	300	117.5	15.9	1.6	82.5	42.9	4	19.1
1"	300	124.0	17.5	1.6	88.9	50.8	4	19.1
1¼"	300	133.4	19.1	1.6	98.6	63.5	4	19.1
1½"	300	155.4	20.6	1.6	114.3	73.2	4	22.4
2"	300	165.1	22.4	1.6	127.0	91.9	8	19.1
½"	600	95.2	14.2	6.4	66.5	35.1	4	15.7
¾"	600	117.5	15.7	6.4	82.5	42.9	4	19.1
1"	600	124.0	17.5	6.4	88.9	50.8	4	19.1
1¼"	600	133.4	20.6	6.4	98.6	63.5	4	19.1
1½"	600	155.4	22.4	6.4	114.3	73.2	4	22.4
2"	600	165.1	25.4	6.4	127.0	91.9	8	19.1

• Process flanged according to DN 2501 Standard

Flange

DN	PN (Bar)	D	t	f	d1	d2	d	
							Pcs	Size
15	2.5.. 6	80	12	2	55	40	4	11
15	10.. 40	95	16	2	65	45	4	14
20	2.5.. 6	90	14	2	65	50	4	11
20	10.. 40	105	18	2	75	58	4	14
25	2.5.. 6	100	14	2	75	60	4	11
25	10.. 40	115	18	2	85	68	4	14
32	2.5.. 6	120	14	2	90	70	4	14
32	10.. 40	140	18	2	100	78	4	18
40	2.5.. 6	130	14	3	100	80	4	14
40	10.. 40	150	18	3	110	88	4	18
50	2.5.. 6	140	14	3	110	90	4	14
50	10.. 40	165	20	3	125	102	4	18

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