

Flanged End Diaphragm Seal

DS300 Series

Features

- Flanged end diaphragm processing type
- Standard to DIN 2501, ANSI B1.20, etc
- Applicable with most measuring instruments
- 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



*Double welded diaphragm



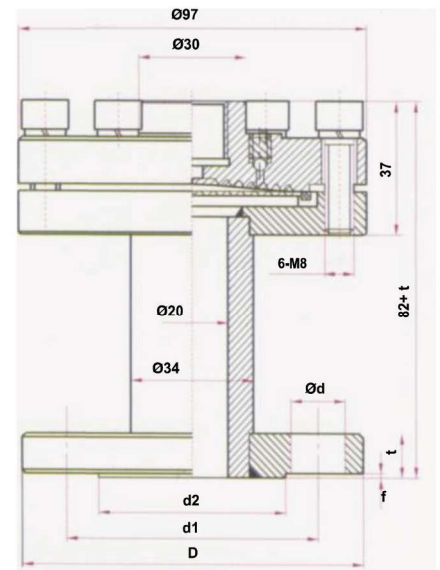
Technical Specification

- 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 G¹/₂" or ¹/₂"NPT
- Process Connection Size
Flanged end to DIN 2501, ASME B16.5, etc
DIN 2501 : DN15..50, PN 2.5..40
ASME B16.5 : ¹/₂"..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 steel
Armoured capillary, max.15m
Cooling tower AR100
Overrange protector
Snubber

Dimension



DS 301 With ANSI and ISO Flange

Please refer to 'Flange size table'

• 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



DS300 - Diaphragm^① - Flange Size^② - Filling^③ *Option^④

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

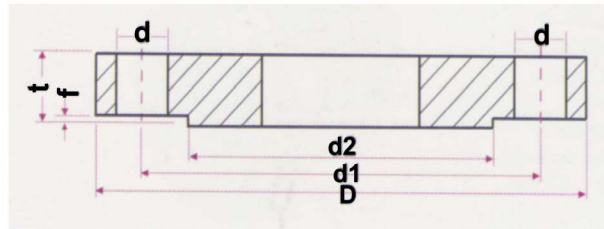
②	Flange Size and Rating
	Please refer to flange size and rating table

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	Cooling tower, AR100..AR300

Flange Sizing and Dimension (mm)

DS300 Series



- Process flanged according to ASME B16.5 Standard



Size	Class	D	t	f	d1	d2	d	
							Pcs	Size
1/2"	150	88.9	11.1	1.6	60.3	34.9	4	15.7
3/4"	150	98.6	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
1 1/4"	150	117.3	15.7	1.6	88.9	63.5	4	15.7
1 1/2"	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
1/2"	300	95.2	14.3	1.6	66.7	34.9	4	15.7
3/4"	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
1 1/4"	300	133.4	19.1	1.6	98.6	63.5	4	19.1
1 1/2"	300	155.4	20.6	1.6	114.3	73.2	4	22.4
2"	300	165.1	22.4	1.6	127.0	92.1	8	19.1
1/2"	600	95.3	14.3	6.4	66.5	35.1	4	15.7
3/4"	600	117.3	15.8	6.4	82.5	42.9	4	19.1
1"	600	124.0	17.5	6.4	88.9	50.8	4	19.1
1 1/4"	600	133.4	20.6	6.4	98.6	63.5	4	19.1
1 1/2"	600	155.4	22.4	6.4	114.3	73.2	4	22.4
2"	600	165.1	31.8	6.4	127.0	91.9	8	19.1

- Process flanged according to DN 2501 Standard



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	65	4	14
20	2.5.. 6	90	14	2	65	65	4	11
20	10.. 40	105	18	2	75	75	4	14
25	2.5.. 6	100	14	2	75	75	4	11
25	10.. 40	115	18	2	85	85	4	14
32	2.5.. 6	120	14	2	90	90	4	14
32	10.. 40	140	18	2	100	100	4	18
40	2.5.. 6	130	14	3	100	100	4	14
40	10.. 40	150	18	3	110	110	4	18
50	2.5.. 6	140	14	3	110	110	4	14
50	10.. 40	165	20	3	125	125	4	18