

Flanged End Diaphragm Seal - Blind hole **DS209 Series**

Features

- Flanged end, blind hole diaphragm processing type
- Flanged end to Standard DIN 2501 or ANSI B1.20
- Applicable with most measuring instruments
- Double laser welding diaphragm design
- Wide range corrosive applications
- Various diaphragm and wetted part materials
- Diaphragm or wetted parts coating or lining
- Pressure range 0.. 0.6 bar up to 100 bar
- Various liquid filling supported



* Double welded diaphragm



Technical Specification

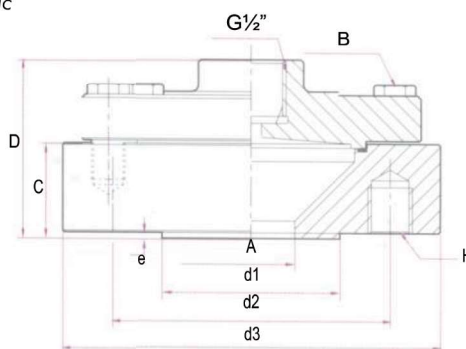
- Design pressure rating
Class 150..600 or PN25.. 100
- Pressure configuration
0.. 600 mbar up to 100 bar
- Instrument Connection Size
Standard G $\frac{1}{2}$ " (Standard) or $\frac{1}{2}$ "NPT
- Process Connection Size
Flanged end to DIN 2501, ASME B16.5, etc
DIN 2501 : DN15..40
ASME B16.5 : $\frac{1}{2}$ "..1 $\frac{1}{2}$ ", Rating 150#..600#
Finish Ra 3.2.. 6.3 μ m
- Working temperature range
Max. temperature up to 150°C (Viton)

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 or protection
Armoured capillary, max.10m
Cooling tower
Snubber
PTFE coating
PTFE lining



Dimension



Dimension and size on next page...

• Diaphragm filling reference

Working Fluid	Working Temp.	Specific Gravity	Service
Silicone oil Std	-40°. +130°C	0.94 g/cm ²	General industry
Silicone oil DC2	-30°. +200°C	1.07 g/cm ²	High temperature
Fluorocarbon oil	-30°. +160°C	1.93 g/cm ²	H ₂ , O ₂ , salt, acid
Glycerine	-5°. + 70°C	1.27 g/cm ²	Food, sanitary
Vegetable oil	-5°. +100°C	0.93 g/cm ²	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..420	Raised Face (RF) - RF de 1.6/6.4, Male tongue - Large/Small, Female groove
ASME Class 150..2500	Ring Type Joint (RTJ), Female spigot - Large/Small, Male spigot - Large/Small

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Ordering Code



DS209 - 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	

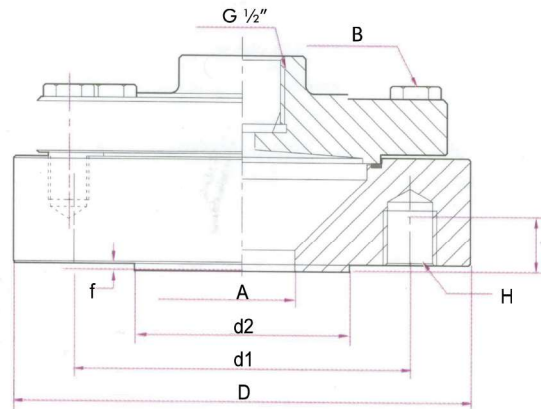
③	Diaphragm Filling
A	Standard silicone oil -40°. +130°C
B	Hi-tempo. silicone oil -30°. + 200°C
C	Fluorocarbon oil -30°. +160°C
D	Glycerine-Water -5°. + 70°C
E	Vegetable oil -5°. +100°C

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

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Flange Sizing and Dimension (mm)

DS209 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	73.0	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	191.9	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	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