

Diaphragm Seals are used to isolate a pressure measuring instrument like Gauges, Transmitters or Switches from the process media. It isolates and protects sensitive measuring Instruments and other system instrumentation from process fluid contamination and corrosion. Diaphragm seals create a barrier between the process media and the pressure sensing element, without compromising the instrument's sensitivity.

Diaphragm Seals are typically made from a thin pressure-sensitive film out of metal or PVDF based on the process media, they are either welded or threaded to the housing and then integrated to the instrument. The space between the diaphragm seal and the pressure sensing element is then vacuumed out and replaced with a non-compressible fluid. This accurately transfers the process pressure without direct contact with process fluids.

Protect measuring Instruments from freezing, suspended impurities & slurries. Reduce costs by replacing expensive gauges with low cost utility gauges.

Features

- ◆ High Displacement of Diaphragm
- ◆ Optimum Fill Fluid for Maximum Flexing of the Diaphragm
- ◆ Various Combinations of Top & Bottom Housing
- ◆ Various Diaphragm Materials to suit your Process Requirements
- ◆ Various options of Process and Instrument connections
- ◆ Removable top and Bottom Housing
- ◆ NACE MR-01-75 Compliant materials available on request
- ◆ 3.1 Certificates

Applications

- ◆ Liquid & Gaseous Medium
- ◆ Corrosive Environments
- ◆ Offshore Oil Rigs & Platforms
- ◆ Chemical & Petrochemical Plants
- ◆ Power & Utility
- ◆ Water & Waste Water Treatment Facilities
- ◆ Other Critical Process Industries



Options

Chamber / Flange Material :

SS 316

Diaphragm Materials Options :

SS 316L, Hastelloy C276, Monel, Super Duplex, Inconel

Pressure Rating Options :

Pressure ratings of upto 400 bar

Fill Fluid Options:

Various Fill Fluid options are available. Fill Fluids are selected based on the Process parameters.

Diaphragm Seals can be supplied with Integrated Remote Capillary and Siphons.

Model Selection Guide

Description	Coding
Model	1
Magwell Welded Flanged Diaphragm Seal	MDS32
Diaphragm Material (Wetted Part)	2
SS 316L	S
Hastelloy C-276	H
Monel 400	M
Inconel	C
Super Duplex	D
Flange Material	3
SS 316L	S
Hastelloy C-276	H
Monel 400	M
Inconel	C
Super Duplex	D
Flange Face	4
Flat Face	F
Ring-Type Joint	J
Raised Face	R
Flange Details	5
Refer to the next page	
Assembly	6
Direct	D
Capillary	C

Description	Code
Instrument Connection Size	7
3/8" F	3
1/2" F	2
1/4" F	4
Instrument Connection Thread	8
NPT	N
BSP	B
Capillary	9
Length in 1 m upto 10 m	XX
Capillary Armour	10
Stainless Steel	S
PVC Armoring	P
Consult the factory in case if integration with the Magwell Instruments like Pressure Gauge.	

Sample Model Selection Code

1	2	3	4	5	6	7	8	9	10
MDS32	S	S	R	-	D	2	N	2	P

Rev-05.01

ASME B16.5 - RF		
DN	Class	Weight
1"	150	1.4
	300	1.7
	600	1.9
	900	3.6
	1500	3.6
	2500	5
1 1/2"	150	1.6
	300	2.5
	600	3.5
	900	6
	1500	6
	2500	10.5
2"	150	3
	300	4
	600	6
	900	13.5
	1500	13.5
	2500	20
3"	150	6
	300	8
	600	11
	900	17
	1500	25
	2500	43

ASME B16.5 - RF		
DN	Class	Weight
1/2"	150	1.2
	300	1.2
	600	1.9
3/4"	150	1.4
	300	2
	600	2.6

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DIN EN 1992		
DN	PN	Weight
25	10/40	1.5
	63/100	2.5
40	10/40	2.6
	63/100	4
	160	4.5
	250	6.6
50	10/40	3.5
	63/100	5.5
	100	6.5
	160	7
	250	9.5
80	10/16	5
	25/40	6
	63	8
	100	11
	160	12
	250	19

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