

All SS Diaphragm Sealed Pressure Gauge With Direct Coupled 'I' Section Flange Type



Special Features

- External zero adjustment (optional)
- Stainless steel case & measuring system
- Socket directly welded to case
- Dry and liquid filled version
- Standard followed EN 837-3
- The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium

Application

- Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids that they may be corrosive, viscous, sedimentous and / or with a high temperature.
- Chemical & Petrochemical industries
- For aggressive, hot, corrosive, environmentally hazardous or toxic media
- Food & beverage
- Pharmaceutical
- Process industry

Gauge Specifications

Standard Version : 100 mm, 125 mm & 150 mm

Accuracy	: ±1.0% of F. S.
Ambient temperature	: -25°C to +65°C
Process temperature	: -40°C to 200°C or as per fill fluid
Operating pressure range	: 75% of Scale Value
Over pressure limit	: < 100 bar : 125% of Max. Scale Value
	: > 100 to < 250 bar : 115% of Max. Scale Value

Case & Bezel	: AISI 304 SS (Bayonet Type)
Bourdon	: AISI 316L SS
Socket	: AISI 316 SS (Directly Welded to Case) or AISI 316L SS if NACE Option Select
Movement	: AISI 304 SS
Joints	: Tig Argon Arc Welding

Protection	: IP 68 as per IS/IEC 60529:2001
Dial	: Aluminium, black graduation on white background
Pointer	: Aluminium, black coloured Micrometer zero adjustable
Window	: Toughened Glass
Blow off Disc	: Neoprene
Gasket & Filling Plug	: Neoprene

Sealed Unit Specifications

Seal type & Range	: S53 = -1 to 0 kg/cm² & 0 to 7 kg/cm² S38 = 10 kg/cm² to 250 kg/cm²
Instrument connection	: 3/8" BSP (F)
Process connection	: Flange
Fill fluid	: Silicon Oil - DC 200
Mounting	: Direct (without capillary) or Remote Mounting With Capillary Option

Diaphragm	: AISI 316L SS
Top Flange / Top Chamber	: AISI 304 SS
Bottom Flange	: AISI 316 SS
Nuts / bolts	: AISI 304 SS
Sealing gasket	: PTFE

Dry But Fillable Version (Option DFG)

Fillable Dampening Liquid	: Glycerine 99.7% (Option - DFG)
Ambient Temperature	: Maximum 65°C
Process Temperature	: Maximum 65°C
Window	: Toughened Glass
Other Features	: Refer Specification of Standard Version

Glycerine Filled Version (Option LFG)

Accuracy	: ±1.0% of F.S.
Ambient Temperature	: Maximum 65°C
Process Temperature	: Maximum 65°C
Window	: Toughened Glass
Dampening Liquids	: Glycerine 99.7% (others available as option)
Other Features	: Refer Specification of Standard Version

Temperature effect:

The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :- Formula : $\pm 0.04 \times (t_2 - t_1) \% \text{ of F. S.}$ where t_1 = reference temperature (+20°C) and t_2 = ambient temperature in °C.

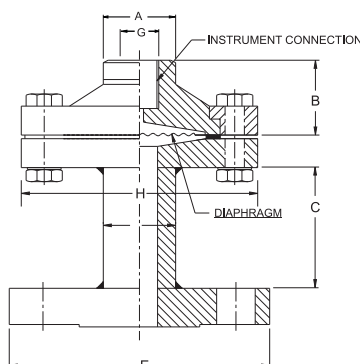


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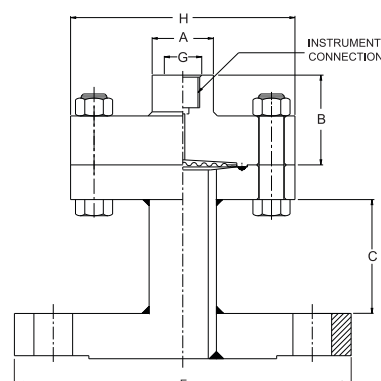
Dimensions - Flanged Seal Type

TYPE "S53"



Seal Type	Ranges	A	B	C	E	H	G
S53	-1 to 0 kg/cm ² 0 to 7 kg/cm ²	30	31	50	*	85	3/8" BSP (F)

TYPE "S38"

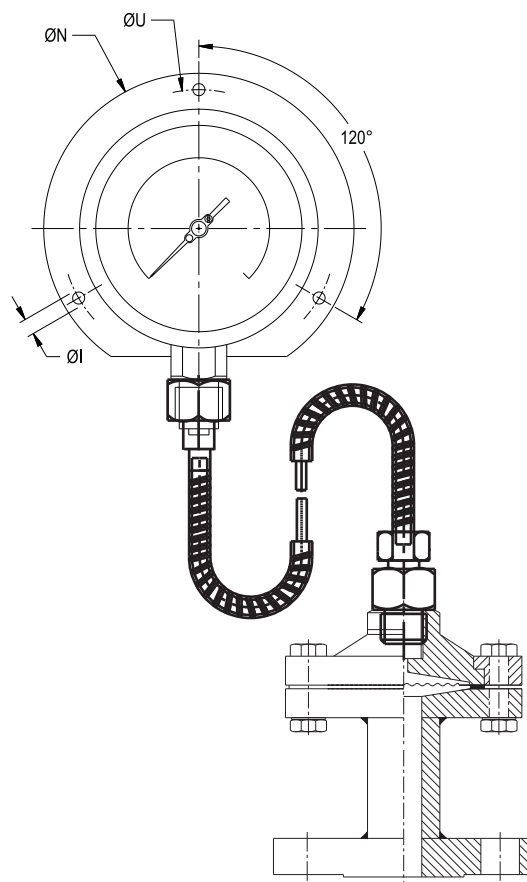
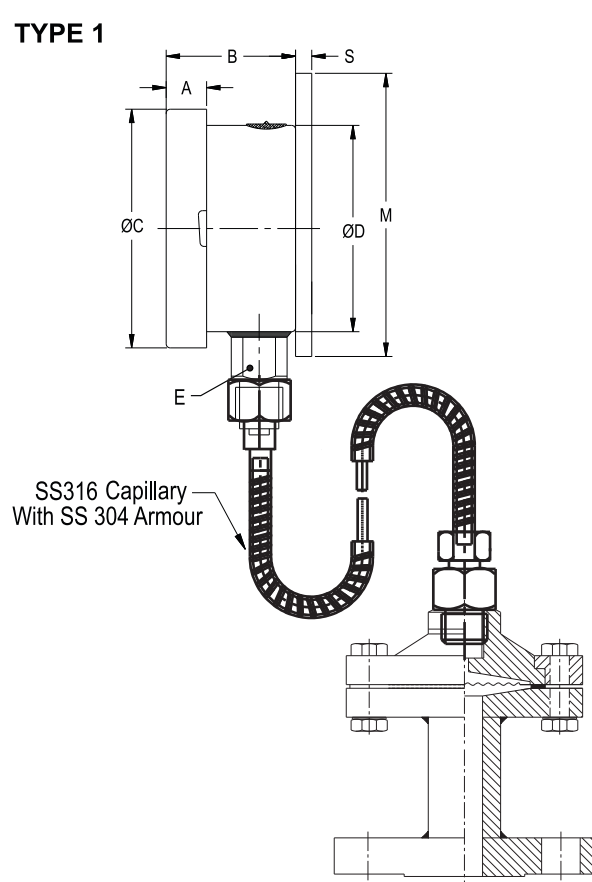


Seal Type	Ranges	A	B	C	E	H	G
S38	10 to 250 kg/cm ²	30	41	50	*	66	3/8" BSP (F)

* * As per standard flange table ANSI, DIN, BS, JIS, Etc.,

Dimensions - Standard Version

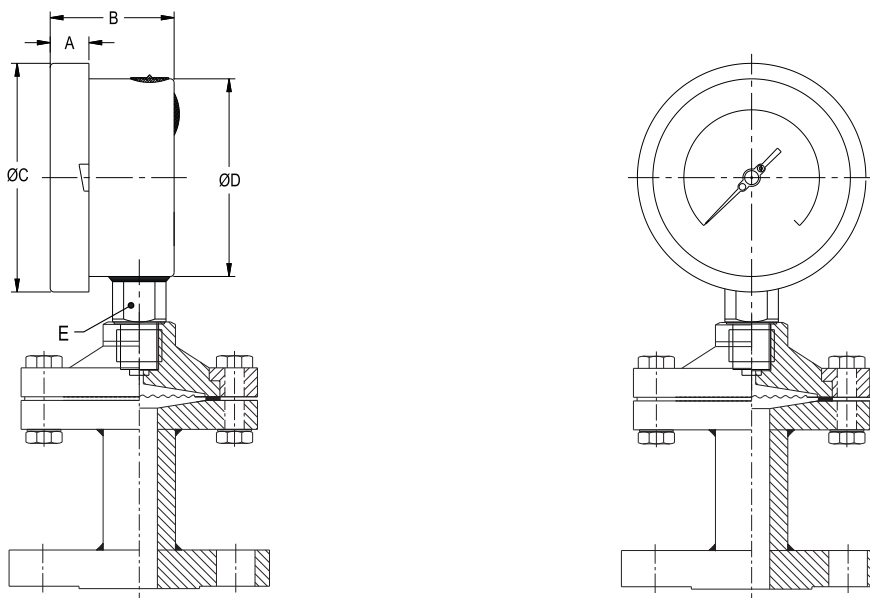
TYPE 1



NS	A	B	ØC	ØD	E	M	S	ØI	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	45	111	100	22	128	5	6	134	118	2400.0	2750.0
150	15	47	161	149	22	174.5	5	6	186	168	2800.0	3950.0
200	18	49	216	200	22	229	1.5	7	245	230	3500.0	4450.0
250	18	55	262	247	22	286.5	1.5	7	290	276	3950.0	4950.0

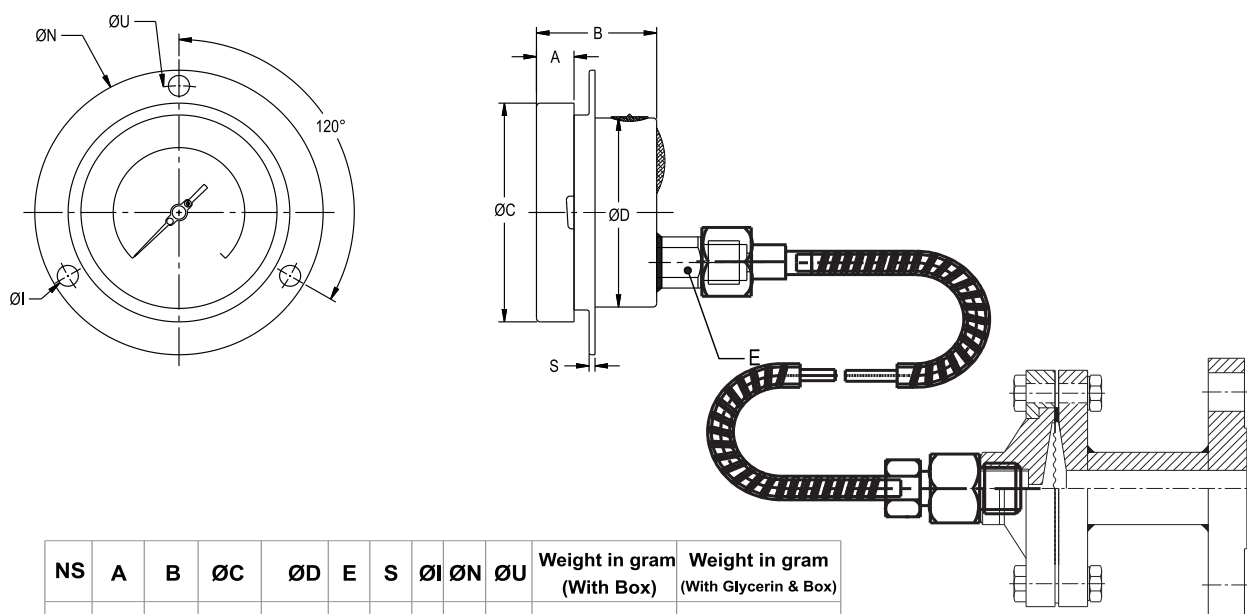
Dimensions - standard version

TYPE 2



NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	48	111	100	22	1950.0	2300.0
150	15	49	161	149	22	2350.0	3500.0
200	18	49	216	200	22	3050.0	4000.0
250	18	55	263	248	22	3500.0	4500.0

TYPE 5



NS	A	B	ØC	ØD	E	S	ØI	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	48	111	100	22	1	6	134	118	2400.0	2750.0
150	15	49	161	149	22	1	6	186	168	2800.0	3950.0
200	18	49	216	200	22	1.5	7	245	230	3500.0	4450.0
250	18	52	263	248	22	1.5	7	290	276	3950.0	4950.0



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Range Table

Note : We offer National / International Scales like kPa, MPa, bar, psi, kg/cm² & Dual Scale like kPa with psi, kPa with bar, bar with psi or Equivalent scales as per the requirement can be provided on request. Following are the example tables for kg/cm² & psi scales.

Pressure

Single Scale (kg/cm² or bar)

0/0.6	0/4	0/25
0/1	0/6	0/40
0/1.6	0/10	0/60
0/2.5	0/16	

Dual Scale (psi with kg/cm²)

psi	kg/cm ²	psi	kg/cm ²	psi	kg/cm ²
0/15	0/1	0/400	0/28		
0/30	0/2	0/500	0/35		
0/60	0/4	0/600	0/40		
0/100	0/7	0/1000	0/70		
0/150	0/10				
0/230	0/16				
0/300	0/20				

Vacuum & Compound

Dual Scale (inHg with psi & mmHg with kg/cm²)

inHg with psi	mmHg with kg/cm ²	inHg with psi	mmHg with kg/cm ²	inHg with psi	mmHg with kg/cm ²
- 30/0	- 760/0	- 30/60	- 760/4	- 30/200	- 760/14
- 30/15	- 760/1	- 30/100	- 760/7	- 30/300	- 760/21
- 30/30	- 760/2	- 30/150	- 760/10	- 30/350	- 760/25

Single Scale (kg/cm²)

- 1/0	- 1/1.5	- 1/5	- 1/15
- 1/0.6	- 1/3	- 1/9	- 1/24

Accessories (refer datasheet for complete specifications)

CT Cooling tower **GS** Over load protector (gauge saver)** **SN** In-Built Snubber

Note : For Any Non Standard or Special Scale Marking Consult Factory

Please contact us for other Variations, delivery and minimum order quantity.

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of designing.
Prior notification of changes in specifications is impracticable due to continuous improvement.