

SPG2

All SS (SS 304) Pressure Gauge
Bourdon type



Standard Version

Special Features

- Stainless steel case & measuring system
- Socket directly welded to case
- Dry and liquid filled version
- Standard followed EN 837-1 (for NS 100, 150 & 250 mm)

Application

- Cryogenics
- Pumps
- Diesel engines & Refrigerating plants
- Chemical & Petrochemical industries
- Conventional & nuclear power plants
- Environments & gaseous or liquid media that will not obstruct the pressure system.
- Hydro-cleaning machines
- Presses
- Engine compressors
- Turbines

Specifications

Standard Version : 100 mm, 125 mm, 150 mm, 200 mm & 250 mm

Accuracy	:	±1.0% of F. S.
Ambient temperature	:	- 25°C to + 65°C
Process temperature	:	Max 300°C
Operating pressure range	:	75% of Scale Value
Over pressure limit	:	< 100 bar : 125% of Max. Scale Value
	:	> 100 to < 600 bar : 115% of Max. Scale Value
	:	> 600 to < 1600 bar : 110% of Max. Scale Value
Case & Bezel	:	AISI 304 SS (Bayonet Type)
Bourdon	:	AISI 316L SS
Socket	:	AISI 304 SS (Directly Welded to Case)
Movement	:	AISI 304 SS
Joints	:	Tig Argon Arc Welding
Protection	:	IP 68
Dial	:	Aluminium, black graduation on white background
Pointer	:	Aluminium, black coloured Micrometer zero adjustable / W/o. Zero Adjustment Pointer for Option LGF
Window	:	Toughened Glass
Blow off Disc	:	Neoprene
Gasket & Filling Plug	:	Neoprene

Dry But Fillable Version

Fillable Dampening Liquid	:	Glycerine 99.7% (Option - DFG)
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 100°C
Window	:	Toughened Glass
Other Features	:	Refer Specification of Standard Version

Glycerine Filled Version

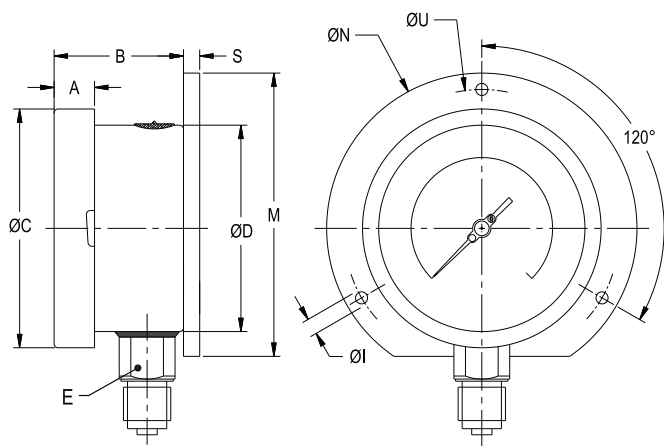
Accuracy	:	±1.0% of F.S.
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 100°C
Window	:	Toughened Glass
Dampening Liquids	:	Glycerine 99.7% (others available as option)
Other Features	:	Refer Specification of Standard Version

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.

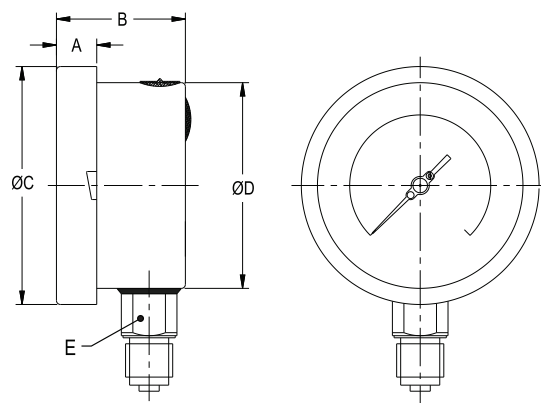
Dimensions - Standard Version

TYPE 1



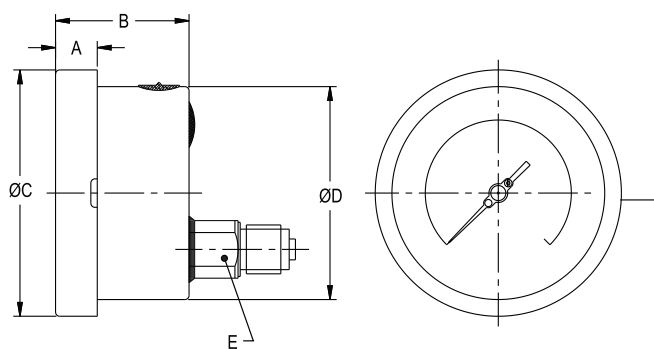
NS	A	B	ØC	ØD	E	M	S	ØI	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	45	111	100	22	128	5	6	134	118	720.0	1025.0
125	15	46	129	119	22	143	5	6	150	137	845.0	1165.0
150	15	47	161	149	22	174.5	5	6	186	168	1160.0	1895.0
200	18	49	216	200	22	229	1.5	7	245	230	2020.0	2780.0
250	18	55	262	247	22	286.5	1.5	7	290	276	2400.0	3220.0

TYPE 2



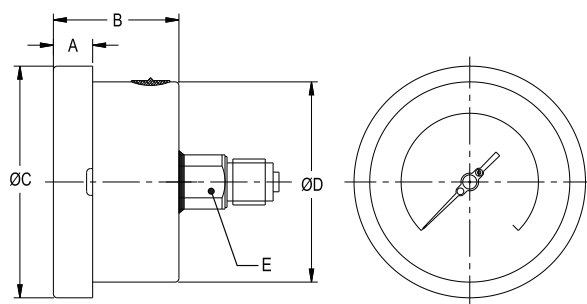
NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	48	111	100	22	640.0	935.0
125	15	48	129	119	22	750.0	1070.0
150	15	49	161	149	22	1020.0	1755.0
200	18	49	216	200	22	1720.0	2480.0
250	18	55	263	248	22	2000.0	2820.0

TYPE 3



NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	47	111	100	22	640.0	935.0
125	15	48	129	119	22	750.0	1070.0
150	15	49	161	149	22	1000.0	1735.0
200	18	49	216	200	22	1500.0	2260.0
250	18	52	263	248	22	1800.0	2620.0

TYPE 4

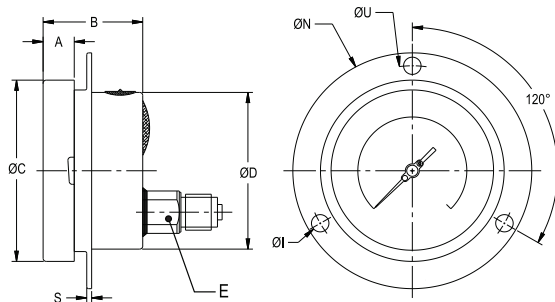


NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	47	111	100	22	640.0	935.0

Note : For Type 4 Back Side Blow Out Disc is Not Available

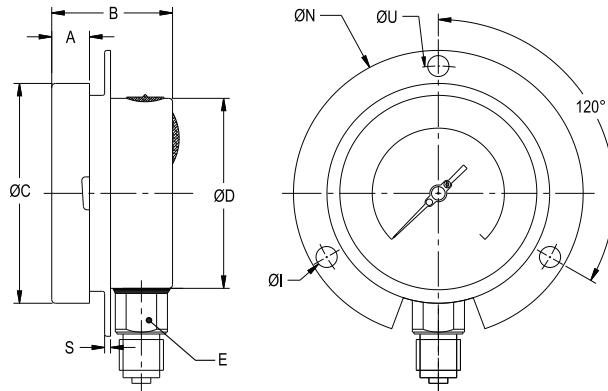
Dimensions - standard version

TYPE 5



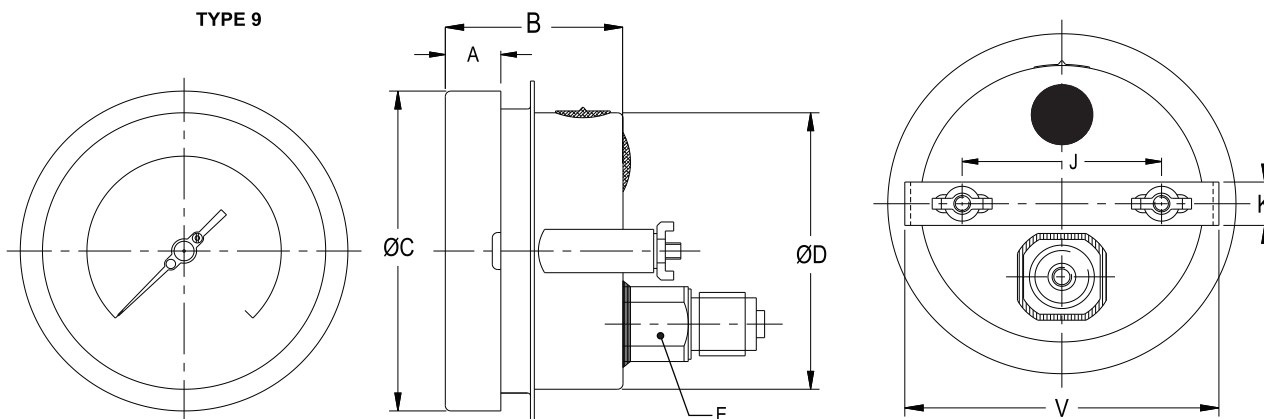
NS	A	B	ØC	ØD	E	S	ØI	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	48	111	100	22	1	6	134	118	695.0	990.0
125	15	48	129	119	22	1	6	150	137	850.0	1170.0
150	15	49	161	149	22	1	6	186	168	1100.0	1835.0
200	18	49	216	200	22	1.5	7	245	230	2000.0	2760.0
250	18	52	263	248	22	1.5	7	290	276	2250.0	3070.0

TYPE 11



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	730.0	1025.0
125	15	48	129	119	22	4	6	150	137	815.0	1135.0
150	15	49	161	149	22	5	6	186	168	1100.0	1835.0

TYPE 9



NS	A	B	ØC	ØD	E	J	K	V	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	48	111	100	22	62	16	108	740.0	1035.0
125	15	48	129	119	22	65	16	125	890.0	1210.0
150	15	49	161	149	22	100	16	166	1100.0	1835.0
200	18	49	216	200	22	165	16	208	1920.0	2680.0
250	18	52	263	248	22	180	30	270	2300.0	3120.0

Notes : • Drawings are not to scale. • All Dimensions are in mm . • NS = Nominal size
• Weights mentioned are approximate and for standard product. Weight can be different after selection of options.

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	0/160	0/1000
0/1	0/6	0/40	0/250	0/1600
0/1.6	0/10	0/60	0/400	
0/2.5	0/16	0/100	0/600	

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	0/4000	0/280
0/30	0/2	0/500	0/35	0/5000	0/350
0/60	0/4	0/600	0/40	0/6000	0/420
0/100	0/7	0/1000	0/70	0/10000	0/700
0/150	0/10	0/1500	0/100	0/15000	0/1000
0/230	0/16	0/2300	0/160	0/23000	0/1600
0/300	0/20	0/3000	0/200		

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

Receiver

Linear scale	Square root scale
(0 - 100% Internal Scale)	(0 - 10 Sq - Root Internal Scale)
External Scale	External Scale
0.2 - 1 kg/cm ² or 3 - 15 psi	0.2 - 1 kg/cm ² or 3 - 15 psi
(0-100% linear scale)	(0.2 - 1 kg/cm ²)

Freon (with temperature scale)

Ammonia (with temperature scale)

Note : For temperature scales, please provide refrigerant name.

Range (psi)	(kg/cm ²)	(psi)
-30 inHg - 150	0-300	-1to12.5
-30 inHg - 300	0-500	-1to16
		-1to25
		0 - 300

Accessories (refer datasheet for complete specifications)

CT Cooling tower	GS Over load protector (gauge saver)**	SN Snubber
GC Gauge cock	* Needle valve	SP Siphon

* Refer catalogue for Valves & Manifolds.

** For Pressure Ranges.

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