


**Special Features**

- Stainless steel case
- Rugged construction
- Dry or liquid filled
- Standard followed in general EN 837-1

**Application**

- Oil
- Water
- Pneumatics
- Hydraulics
- Pump
- Compressors
- Diesel engines
- Gaseous / Liquid media that will not obstruct the pressure system

**Specifications**
**Standard Version : 50 mm, 63 mm, 80 mm & 100 mm**

Accuracy	:	±1.6% of F. S. (For NS 63 mm, 80 mm & 100 mm) & ±2.5% of F. S. (For NS 50 mm)
Ambient temperature	:	- 20°C to + 65°C
Process temperature	:	Max 150°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	:	AISI 304 SS (Rolling Type)
Bourdon	:	Copper Alloy
Socket	:	Copper Alloy
Movement	:	Copper Alloy
Joints	:	Alloy Brazing / Soldering

Protection	:	IP 65
Dial	:	Aluminum, black graduation on white background
Pointer	:	Black coloured, Fixed
Window	:	Polycarbonate Glass for 63 mm & Plexi Glass for 50 mm & 100 mm
Filling Plug	:	Nitrile
Gasket	:	Neoprene for Bayonet type & Silicon rubber for rolling type
Blow off Disc	:	Neoprene (For 100 mm only)

**Dry But Fillable Version (Option FG)**

Fillable Dampening Liquid	:	Glycerine 99.7%
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 65°C
Other Features	:	Refer Specification of Standard Version

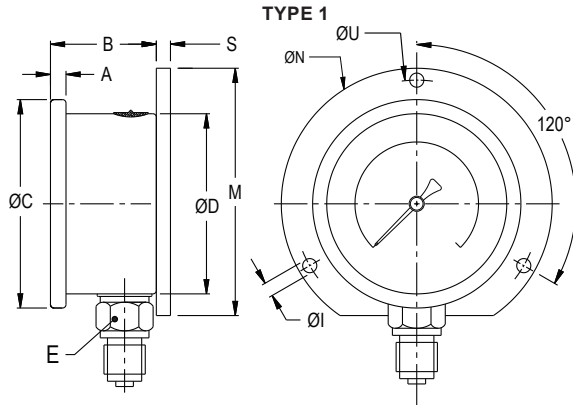
**Glycerine Filled Version (Option PY)**

Accuracy	:	±1.6% of F. S. (For NS 63 mm & 100 mm) & ±2.5% of F. S. (For 50 mm)
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 65°C
Window	:	Plexi Glass
Dampening Liquids	:	Glycerine 99.7%
Other Features	:	Refer Specification of Standard Version

**Temperature effect:**

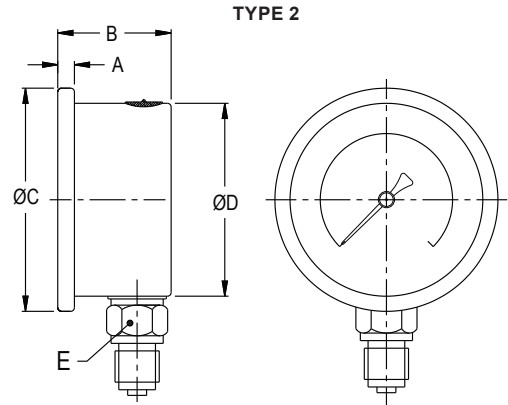
The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :- Formula :  $\pm 0.04 \times (t_2 - t_1) \% \text{ of F. S.}$  where  $t_1$  = reference temperature (+20°C) and  $t_2$  = ambient temperature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

**Dimensions - standard version**



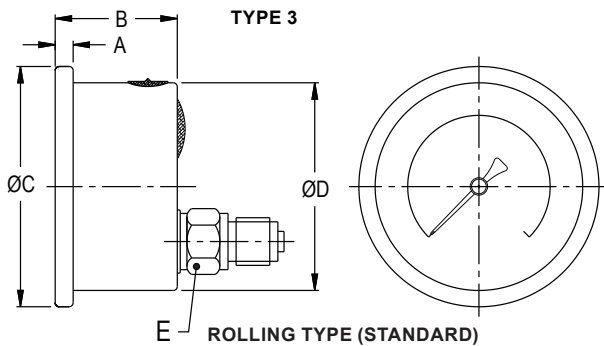
**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	S	ØN	ØI	ØU	M	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
63	6.5	30	68	62.5	A/F 14	6	134	5	76	80	195.0	255.0
100	7	35.5	110	100	A/F 17	4	150	6	118	128	465.0	575.0



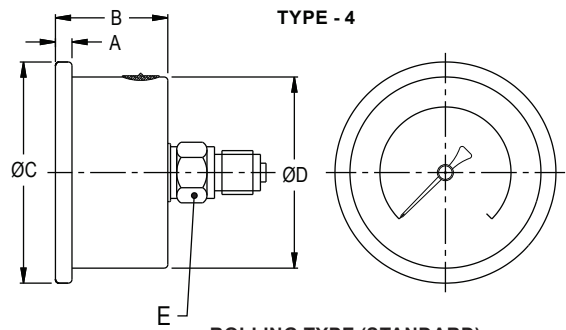
**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
50	5	29	57	51.5	A/F 14	125.0	185.0
63	6.5	30	68	62.5	A/F 14	155.0	215.0
100	7	35.5	110	100	A/F 17	390.0	500.0



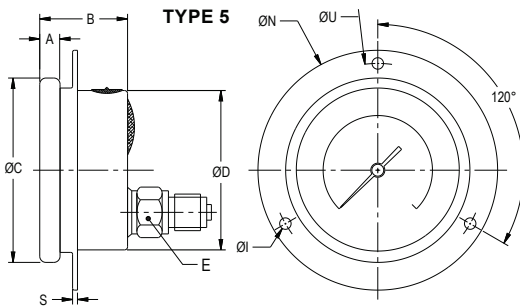
**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	7	35.5	110	100	A/F 17	410.0	520.0



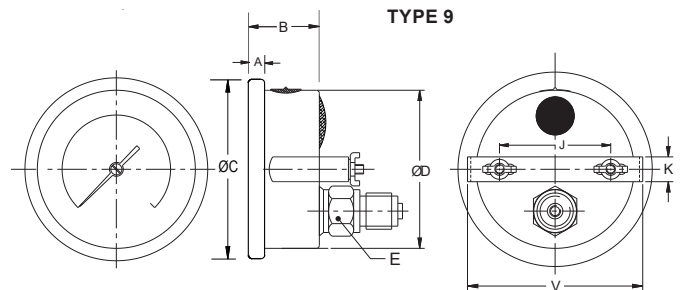
**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
50	4.5	29	57.5	51.5	A/F 14	118.0	180.0
63	6.5	30	68	62.5	A/F 14	155.0	215.0



**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	S	ØI	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
63	9	31	62	69.5	A/F 14	1	6	85.5	76	211.0	270.0
100	9	35.5	100	110	A/F 17	1	6	134	118	460.0	570.0

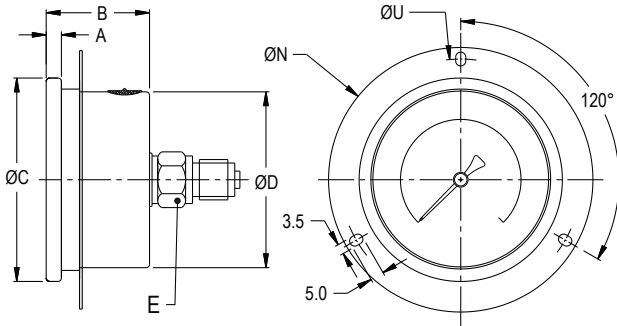


**ROLLING TYPE (STANDARD)**

NS	A	B	ØD	ØC	E	J	K	V	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	7	35.5	100	110	A/F 17	66.5	16	106	550.0	670.0

For other optional items, please contact factory for delivery and minimum quantity of order.

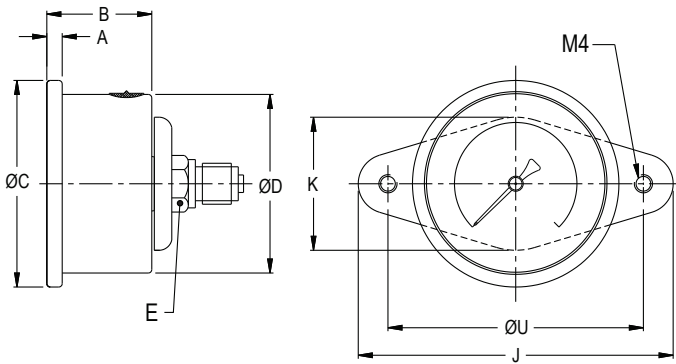
**Dimensions - standard version**



**TYPE - 12**

**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
63	6.5	30	68	62.5	A/F 14	85.5	76	216.0	276.0



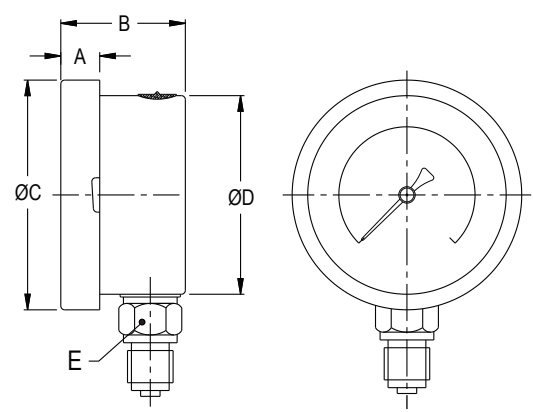
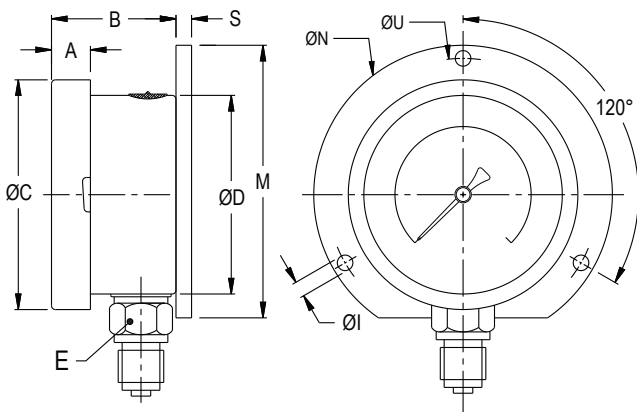
**TYPE - 13**

**ROLLING TYPE (STANDARD)**

NS	A	B	ØC	ØD	E	J	K	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
50	5	29	57	51.5	A/F 14	91	38	70.5	160.0	200.0
63	6.5	30	68	62.5	A/F 14	91	38	70.5	195.0	255.0

**TYPE 1**

**TYPE 2**



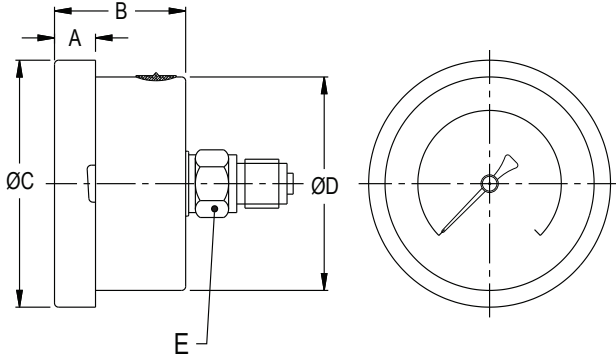
**BAYONET TYPE (OPTION - OS)**

**BAYONET TYPE (OPTION - OS)**

NS	A	B	ØC	ØD	E	S	ØN	ØI	ØU	M	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
63	10	30	69.5	62.5	A/F 14	5	88	5	76	80	207.0	267.0
80	11	35	89.5	80	A/F 14	4	110	5	94	95	300.0	380.0
100	12.5	39	110	100	A/F 17	6	134	6	118	128	510.0	630.0

NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
50	10	31	59	51	A/F 14	136.0	200.0
63	9	31	69.5	62.5	A/F 14	165.0	225.0
80	11	35	89.5	80	A/F 14	250.0	330.0
100	12.5	39	110	100	A/F 17	390.0	520.0

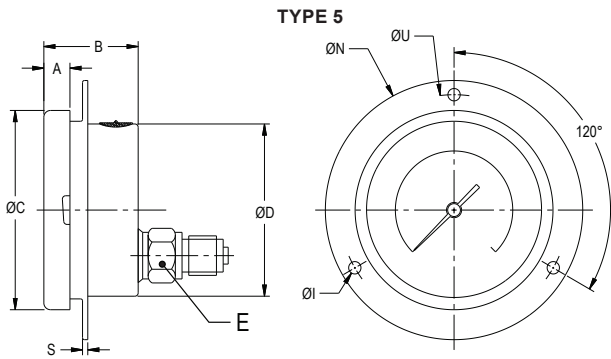
**Dimensions - standard version**



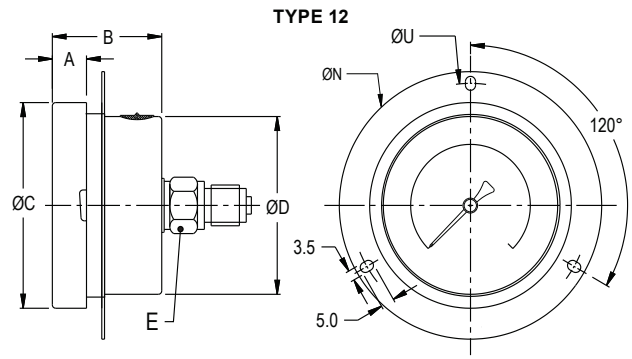
**TYPE - 4**

**BAYONET TYPE (OPTION - OS)**

NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
50	10	31	59	51	A/F 14	162.0	225.0
63	10	31	69.5	62.5	A/F 14	172.0	230.0
80	11	35	89.5	80	A/F 14	240.0	320.0



**TYPE 5**



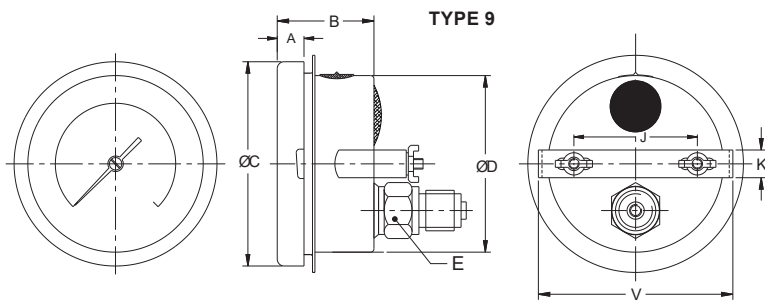
**TYPE 12**

**BAYONET TYPE (OPTION - OS)**

NS	A	B	ØC	ØD	E	S	ØI	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
63	9	31	62.5	69.5	A/F 14	1	6	85.5	76	211.0	270.0
100	12.5	35.5	100	110	A/F 14	1	6	134	118	460.0	600.0

**BAYONET TYPE (OPTION - OS)**

NS	A	B	ØC	ØD	E	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
63	9	31	69.5	62.5	A/F 14	85.5	76	211.0	280.0



**TYPE 9**

**BAYONET TYPE (STANDARD)**

NS	A	B	ØD	ØC	E	J	K	V	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	39	100	110	A/F 17	66.5	16	106	550.0	670.0

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

**Range Table**

Note : We offer Pressure ranges, Vacuum ranges and Compound ranges in Scales like kPa, MPa, bar, psi, kg/cm<sup>2</sup> & Dual Scale like kPa with psi, kPa with bar, bar with psi or scales as per the requirement can be provided on request. Following are the example tables for kg/cm<sup>2</sup> & psi scales

**Range with nominal sizes**

Nominal Sizes		50 mm	63 mm	80 mm	100 mm
Range (psi with kg/cm <sup>2</sup> )					
psi	kg/cm <sup>2</sup>	✓	✓	✓	✓
-30 inHg / 0	-760 mmHg / 0	✓	✓	✓	✓
0/15 psi	0/1 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/30 psi	0/2 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/60 psi	0/4 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/100 psi	0/7 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/150 psi	0/10 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/220 psi	0/16 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/300 psi	0/21 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/400 psi	0/28 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/500 psi	0/35 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/600 psi	0/42 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/1000 psi	0/70 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/1500 psi	0/100 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/2200 psi	0/160 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/3000 psi	0/210 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/4000 psi	0/280 kg/cm <sup>2</sup>	✓	✓	✓	✓
0/5000 psi	0/350 kg/cm <sup>2</sup>	×	✓	✓	✓
0/6000 psi	0/400 kg/cm <sup>2</sup>	×	✓	✓	✓
- 30inHg /15 psi	- 1/1 kg/cm <sup>2</sup>	×	✓	✓	✓
- 30inHg /30 psi	- 1/2 kg/cm <sup>2</sup>	×	✓	✓	✓
- 30inHg /60 psi	- 1/4 kg/cm <sup>2</sup>	×	✓	✓	✓
- 30inHg /100 psi	- 1/7 kg/cm <sup>2</sup>	×	✓	✓	✓
- 30inHg /150 psi	- 1/10 kg/cm <sup>2</sup>	×	✓	✓	✓
- 30inHg /200 psi	- 1/14 kg/cm <sup>2</sup>	×	✓	✓	✓
- 30inHg /300 psi	- 1/21 kg/cm <sup>2</sup>	×	✓	✓	✓

**Freon With Temperature Scale**

Note : For temperature scales, please provide refrigerant name.

- 30" Hg / 150 psi		×	✓	✓	✓
- 30" Hg / 300 psi		×	✓	✓	✓
0/300 psi		×	✓	✓	✓
0/500 psi		×	✓	✓	✓

**Accessories (Refer Datasheet For Complete Specifications)**

<b>EC</b>	Gauge cock	<b>EG</b>	Snubber
<b>ED</b>	Overload protector (gauge saver)**	<b>EH</b>	Siphon
*	Needle valve		

\* Refer catalogue for Valves & Manifolds

\*\* For Pressure Ranges.

**How To Order**
**Example**
**Basic Model**
**Code**

Nominal Size	50 mm	63 mm	80 mm	100 mm
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Code	C	D	E	F
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**Type of Mounting**

<b>1</b>	Wall/ surface/ projection mounting With bottom entry	×	✓	✓
<b>2</b>	Direct bottom entry	✓	✓	✓
<b>3</b>	Direct lower back entry	×	×	×
<b>4</b>	Direct center back entry	✓	✓	×
<b>5</b>	Lower back entry with front flange	×	✓	×
<b>9</b>	Lower back entry with mounting bracket	×	×	×
<b>12</b>	Center back entry with front flange	×	✓	×
<b>13</b>	Center back entry with mounting bracket	✓*	✓*	×

Note : \*Applicable for Rolling type design only.

Gauge Connection	C	D	E	F
<b>1BM</b> 1/8" BSP(M)	✓	✓	×	×
<b>1NM</b> 1/8" NPT(M)	✓	✓	×	×
<b>1TM</b> 1/8" BSPT(M)	✓	✓	×	×
<b>2BM</b> 1/4" BSP(M)	✓	✓	✓	✓
<b>2NM</b> 1/4" NPT(M)	✓	✓	✓	✓
<b>2TM</b> 1/4" BSPT(M)	✓	✓	✓	✓
<b>3BM</b> 3/8" BSP(M)	×	×	✓	✓
<b>3NM</b> 3/8" NPT(M)	×	×	✓	✓
<b>3TM</b> 3/8" BSPT(M)	×	×	✓	✓
<b>4BM</b> 1/2" BSP(M)	×	×	✓*	✓*
<b>4NM</b> 1/2" NPT(M)	×	×	✓*	✓*
<b>4TM</b> 1/2" BSPT(M)	×	×	✓*	✓*

\* These connections will be provided on request. Consult factory for minimum order quantity, price &amp; delivery.

Note : Connections like Metric/ PT/ PF/ Flaired/ UNF/ G/ R etc. can be provided on request.

**Range**

Refer range table

**Optional Extras**

<b>RH</b> Custom designed dial	<b>SX</b> SS tag plate
<b>SG</b> Oxygen service (for dry version)	<b>TB</b> Helium leak test
<b>PW</b> Five point calibration certificate	<b>FG</b> Fillable liquid glycerine
<b>PY</b> Dampening liquid glycerine filled	<b>FK</b> Integral dampening screw (brass)
<b>RI</b> 25 mm BOD (except mounting 4, 12 & 13)*	<b>ZC</b> Freon Range (with temperature scale)*
<b>OS</b> Case with bayonet type bezel***	<b>RX</b> Shatterproof glass/ safety glass (for bayonet type design)*
<b>RR</b> Enclosure protection IP 66***	<b>RZ</b> Toughened glass (for bayonet type design)*
<b>RE</b> Enclosure protection IP 67***	<b>SF</b> Movement with dampening jelly*

\* Applicable for NS 63 mm, 80 mm &amp; 100 mm.

\*\*\*Applicable for NS 50 mm, 63 mm &amp; 100 mm.

**Ordering Example: AT . X . X OR XX . XXX . 0/10 kg/cm<sup>2</sup> . XX**

For other optional items, please contact factory for delivery and minimum quantity of order.

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing .

Modifications may take place and materials specified may be replaced by others without prior notice.