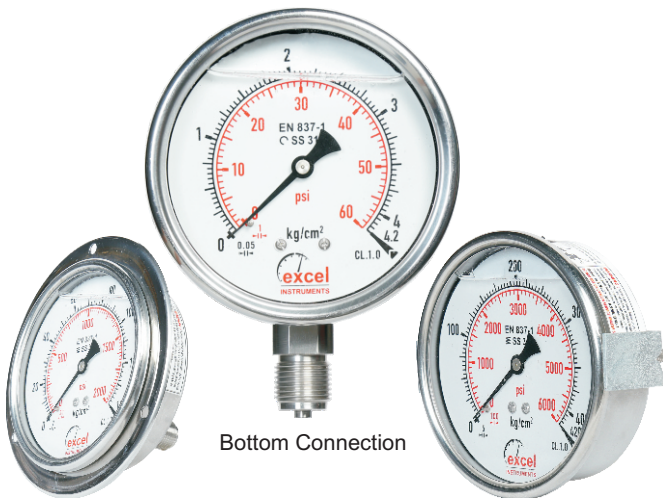


### Special Features

- Stainless steel case & measuring system
- Socket directly welded to case
- Liquid filled version
- Standard followed EN 837-1

### Application

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



Back Connection  
With 3 Hole Panel

Bottom Connection

Back Connection  
With 'C' Bracket

### Specifications

#### Standard Version : 100 mm & 150 mm

Accuracy	:	±1.6% 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 < 700 bar : 110% of Max. Scale Value

Case & Bezel	:	AISI 304 SS ( Crimp Type Bezel for NS 100 & Bayonet Bezel for NS 150 )
Bourdon	:	AISI 316 SS
Socket	:	AISI 304 SS (Directly Welded to Case)
Movement	:	Brass Plated ( Optional SS 304)
Joints	:	Tig Argon Arc Welding

Protection	:	IP 68
Dial	:	Aluminium, black graduation on white background
Pointer	:	Aluminium, black coloured
Window	:	Crystal Clear Acrylic / Plexi Glass for NS 100 & Sheet Glass For NS 150
Gasket & Filling Plug	:	Neoprene

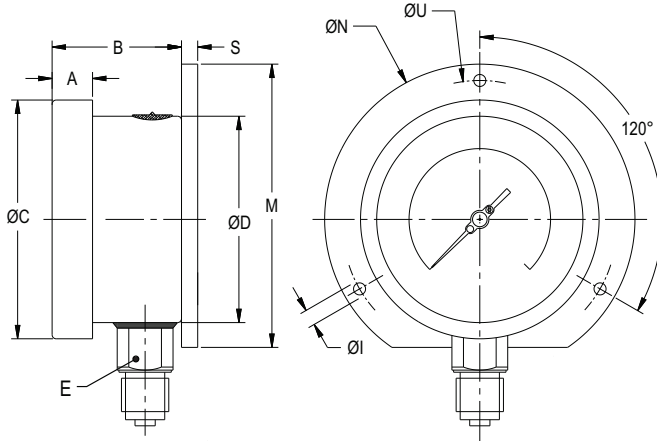
Dampening Liquids	:	Glycerine 99.7%
Ambient Temperature	:	Maximum 65°C
Process Temperature	:	Maximum 100°C

#### 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 :  $\pm 0.04 \times (t_2 - t_1) \%$  of F. S. where  $t_1$  = reference temperature (+20°C) and  $t_2$  = ambient temperature in °C.

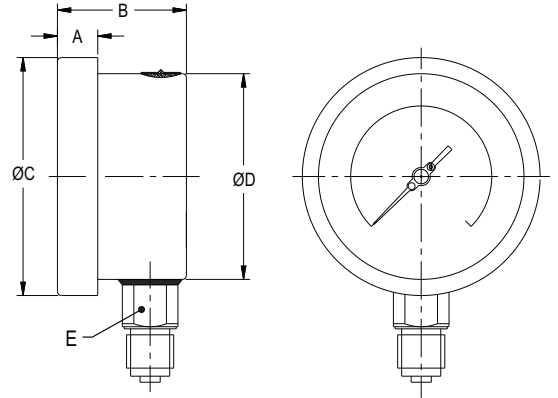
## Dimensions - Standard Version

TYPE 1



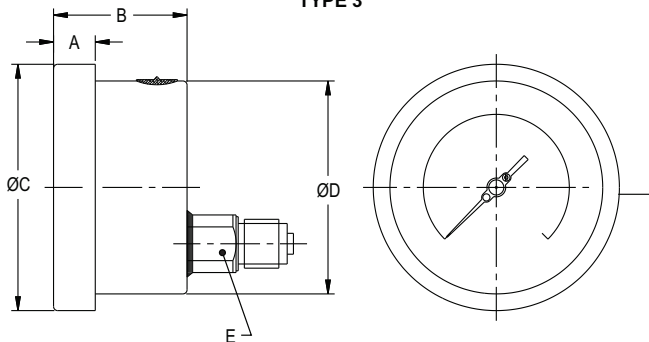
NS	A	B	ØC	ØD	E	M	S	ØI	ØN	ØU	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	6.5	35	111	100	17	128	5	6	134	118	450.0	650.00
150	15	40	161	149	17	174.5	5	6	186	168	850.0	1250.00

TYPE 2



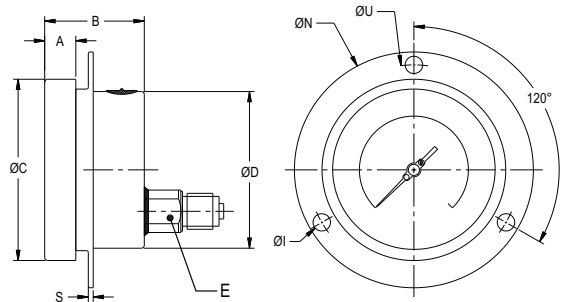
NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	6.5	35	111	100	17	430.00	630.00
150	15	40	161	149	17	800.00	1400.00

TYPE 3



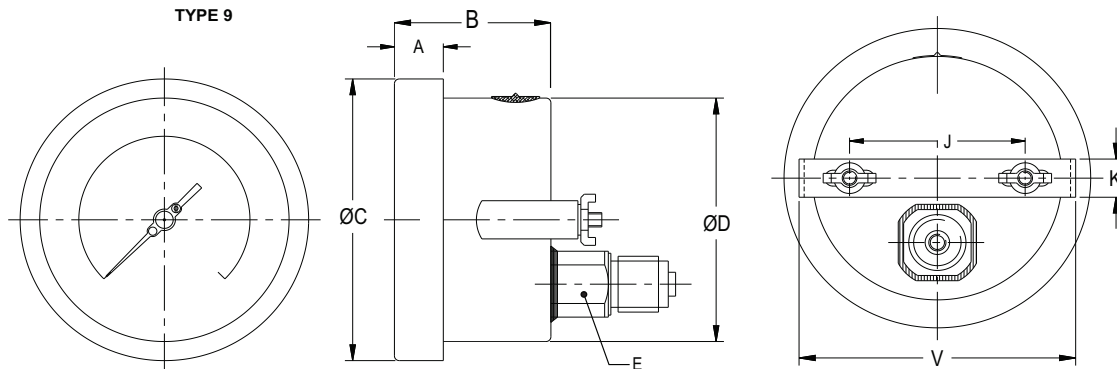
NS	A	B	ØC	ØD	E	Weight in gram (With Box)	Weight in gram (With Glycerin & Box)
100	12.5	35	111	100	17	430.00	630.00
150	15	40	161	149	17	800.00	1200.00

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	35	111	100	17	1	6	134	118	450.00	650.00
150	15	40	161	149	17	1	6	186	168	850.00	1250.00

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	35	111	100	17	62	16	108	450.00	650.00
150	15	40	161	149	17	100	16	166	850.00	1250.00

## Range Table

Note : We offer National / International Scales like kPa, MPa, bar, psi, kg/cm<sup>2</sup> & 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/cm<sup>2</sup> & psi scales.

### Pressure

#### Single Scale (kg/cm<sup>2</sup> or bar)

0/1	0/6	0/25	0/160
0/1.6	0/7	0/40	0/250
0/2.5	0/10	0/60	0/400
0/4	0/16	0/100	0/600

#### Dual Scale (psi with kg/cm<sup>2</sup>)

psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>
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		
0/230	0/16	0/2300	0/160		
0/300	0/20	0/3000	0/200		

### Vacuum & Compound

#### Dual Scale (inHg with psi & mmHg with kg/cm<sup>2</sup>)

inHg with psi	mmHg with kg/cm <sup>2</sup>	inHg with psi	mmHg with kg/cm <sup>2</sup>	inHg with psi	mmHg with kg/cm <sup>2</sup>
- 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/cm<sup>2</sup>)

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

### Freon (with temperature scale)

### Ammonia (with temperature scale)

Note : For temperature scales, please provide refrigerant name.

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

### Accessories (refer datasheet for complete specifications)

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

\* Refer catalogue for Valves & Manifolds.

\*\* For Pressure Ranges Only.

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

How To Order			Example
<b>Basic Model</b>			ESG
<b>Code</b>			
<b>Nominal Size</b>	<b>40</b>	<b>60</b>	XX
	100 mm	150 mm	
<b>Type of Mounting</b>			
1	Wall / surface / projection mounting with bottom entry		
2	Direct bottom entry		
3	Direct lower back entry		X
5	Lower back entry with front flange		or
9	Lower back entry with mounting bracket		XX
15	Lower back entry with Front Flange & mounting bracket Both ( Type 5 + Type 9 Both Combine )		
7	Direct bottom entry with mounting bracket		
* MOC of bracket and 'U' clamp will be steel (painted). Ask factory for drawings, if required.			
<b>Gauge Connection</b>			
	<b>Nominal Size &gt;</b>	<b>40</b>	<b>60</b>
<b>2BM</b>	¼" BSP (M)	✓	✓
<b>2NM</b>	¼" NPT (M)	✓	✓
<b>2TM</b>	¼" BSPT (M)	✓	✓
<b>3BM</b>	3/8" BSP (M) Standard	✓	✓
<b>3NM</b>	3/8" NPT (M)	✓	✓
<b>3TM</b>	3/8" BSPT (M)	✓	✓
<b>Note : Connections Above 3/8" Should Be Provided Through Adaptor if Required With Extra Cost..</b>			
<b>Range</b>			0/10
Refer range table ( Standard Ranges Should be in Dual Scale Kg/cm <sup>2</sup> & PSI )			kg/cm <sup>2</sup>
<b>Optional Extras</b>			
<b>OXS</b>	Oxygen service (for dry version)	<b>FRE</b>	Freon range (with temperature scale)
<b>CDD</b>	Custom designed dial	<b>AMO</b>	Ammonia range (with temperature scale)
<b>TRC</b>	Calibration certificate traceable to National/International standards	<b>DFG</b>	Dry But Fillable Version (Glycerin)
		<b>DFS</b>	Dry But Fillable Version (Silicon)
<b>Ordering Example: ESG - XX - X - XXX - 0/10 kg/cm<sup>2</sup> - XXX</b>			

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.