



### Special Features

- Economical version
- General purpose application

### Application

- HVAC
- Filter-Regulator-Lubricator (FRL) Units
- Water
- Air
- Allied process industries
- Hydraulic
- Pneumatics
- Valve positioner
- Sugar mills
- Irrigation Equipment

### Specifications

**Standard Version : 40 mm, 50 mm, 63 mm, 80 mm, 100 mm, 150 mm & 250 mm**

Accuracy	:	±1.6% of F. S. (For NS 63 mm, 80 mm, 100 mm, 150 mm & 250 mm)
	:	±2.5% of F. S. (For NS 40 mm & 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	:	Steel, Powder coated / painted (Push Fit Type)
Bourdon	:	Copper Alloy
Socket	:	Copper Alloy
Movement	:	Copper Alloy
Joints	:	Alloy brazing / soldering

Dial	:	Aluminium, black graduation on white background
Pointer	:	Black coloured, fixed
Window	:	Sheet glass

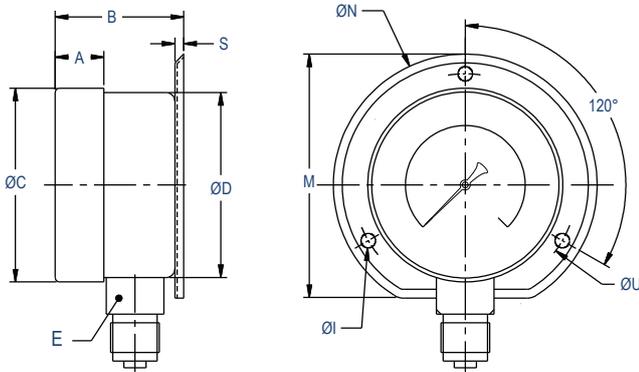
### Temperature effect :

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 :  $\pm 0.04 \times (t_2 - t_1) \% \text{ of F. S.}$

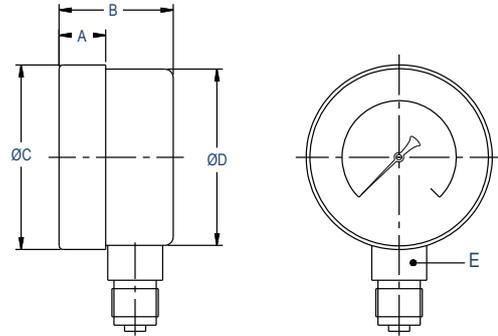
where  $t_1$  = reference temperature (+20°C) and  $t_2$  = ambient temperature in °C.

### Dimensions - Standard Version

TYPE - 1



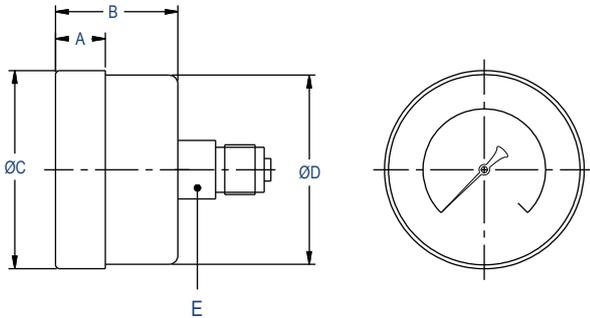
TYPE - 2



NS	A	B	ØC	ØD	E	M	S	ØN	ØU	ØI	Weight in gram (With Box)
40	10	26.5	44	42	12						82.0
63	12	30	63	62	14	80	5	88	76	5	160.0
80	12	40	78	76	14	100	5	115	98	5	250.0
100	13	36	99	97	17	117	1.2	132	118	6	405.0
150	16	47.5	155	154	17	181	7	195.5	-	-	730.0
250	37.5	55	252	249	22	280	8	288.5	-	-	2300.0

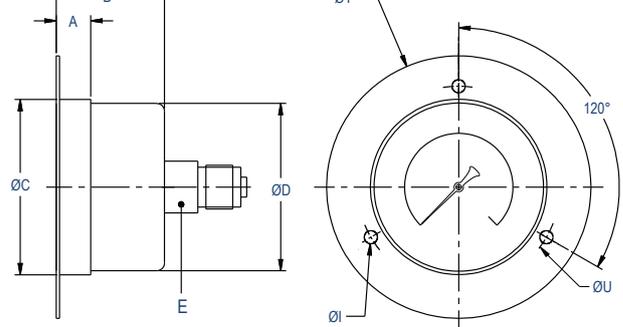
NS	A	B	ØC	ØD	E	Weight in gram (With Box)
40	10	26.5	44	42	12	82.0
50	10	29	53	52	14	101.0
63	12	29	63	62	14	120.0
80	12	35	78	76	14	195.0
100	13	35	99	97	17	343.0
150	16	43	155	154	17	695.0
250	37.5	51	252	249	22	2100.0

TYPE - 4



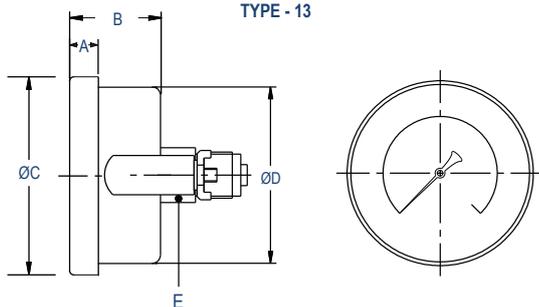
NS	A	B	ØC	ØD	E	Weight in gram (With Box)
40	7	24	42	41	11	69.0
50	11	29	54	52	14	148.0
63	12	29.5	67	65.5	14	174.0
80	12	35	78	76	14	190.0
100	13	36	99	97	17	343.0
150	16	43	155	154	17	663.0

TYPE - 12



NS	A	B	ØC	ØD	E	ØT	ØU	ØI	Weight in gram (With Box)
50	12	29	54	52	14	90	71	4	175.0
63	12	31	63	62	14	90	76	4	210.0
100	14	33	99	97	17	134	117	4	445.0
150	16	37	155	154	17	184	170	5	581.0

TYPE - 13



NS	A	B	ØC	ØD	E	Weight in gram (With Box)
50	11	29	54	52	14	210.0
63	12	29.5	67	65.5	14	240.0
100	13	36	99	97	17	390.0
150	16	43	155	154	17	700.0

Notes : • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size.

### 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

#### Range with nominal sizes

Nominal Sizes		40	50	63	80	100	150	250
Range (psi with kg/cm <sup>2</sup> )								
Range psi	Range kg/cm <sup>2</sup>							
<b>Vacuum</b>								
-30 inHg / 0	-760 mmHg / 0	✓	✓	✓	✓	✓	✓	✓
<b>Pressure</b>								
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>	×	✓	✓	✓	✓	✓	✓
<b>Compound</b>								
- 30 inHg/15	- 1/1 kg/cm <sup>2</sup>	×	×	×	×	✓	✓	✓
- 30 inHg /30	- 1/2 kg/cm <sup>2</sup>	×	×	×	×	✓	✓	✓
- 30 inHg /60	- 1/4 kg/cm <sup>2</sup>	×	×	×	×	✓	✓	✓
- 30 inHg /100	- 1/7 kg/cm <sup>2</sup>	×	×	×	×	✓	✓	✓
- 30 inHg /150	- 1/10 kg/cm <sup>2</sup>	×	×	×	×	✓	✓	✓
- 30 inHg /200	- 1/14 kg/cm <sup>2</sup>	×	×	×	×	✓	✓	✓
- 30 inHg /300	- 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>RC</b>	Gauge Cock	<b>RG</b>	Snubber	<b>RH</b>	Siphon
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# RAA

Utility Pressure Gauge  
Bourdon type

## How To Order Example

### Basic Model

Code RAA

Nominal Size (mm)	B	C	D	E	F	H	J	
	40 mm	50 mm	63 mm	80 mm	100 mm	150 mm	250 mm	X

### Type of Mounting

		B	C	D	E	F	H	J	
1	Wall/ surface/ projection mounting With bottom entry	×	×	✓	✓	✓	✓	✓	X OR XX
2	Direct bottom entry	✓**	✓	✓	✓	✓	✓	✓	
4	Direct center back entry	✓	✓	✓	✓	✓	✓	×	
12	Center back entry with front flange	×	✓	✓	×	✓	✓	×	
13	Center back entry with mounting bracket	×	✓*	✓*	×	✓	✓	×	

Note : \*These gauges will have crimped bezel / ring.

\*\* Minimum preferred quantity shall be 100 nos.

Gauge Connection	B	C	D	E	F	H	J	
1BM 1/8" BSP(M)	✓	✓	×	×	×	×	×	XXX
1NM 1/8" NPT(M)	✓	✓	✓#	×	×	×	×	
1TM 1/8" BSPT(M)	✓	✓	×	×	×	×	×	
2BM 1/4" BSP(M)	×	✓*	✓	✓	×	×	×	
2NM 1/4" NPT(M)	×	✓*	✓	✓	×	×	×	
2TM 1/4" BSPT(M)	×	✓*	✓	✓	×	×	×	
3BM 3/8" BSP(M)	×	×	×	✓	✓	✓	×	
3NM 3/8" NPT(M)	×	×	×	×	✓	✓	×	
3TM 3/8" BSPT(M)	×	×	×	×	✓	✓	×	
4BM 1/2" BSP(M)	×	×	×	×	✓*	✓*	✓	
4NM 1/2" NPT(M)	×	×	×	×	✓*	✓*	✓	
4TM 1/2" BSPT(M)	×	×	×	×	✓*	✓*	✓	
4MM M20 X 1.5(M)	×	×	×	×	✓*	✓*	✓	

\* These connections will be provided through adaptors or else for direct threads (without adaptor) minimum order quantity shall be 100 nos per range.

# Applicable for Freon ranges.

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

Range

Refer range table

Optional Extras (\*For NS 100 mm & above)

Note : Minimum preferred quantity for non standard items shall be 300 nos.

FK	Integral dampening screw (brass)	ZC	Freon range (with temperature scale)	XX
RH	Custom designed dial	SW	Dial tag marking*	
SG	Oxygen service	TB	Helium leak test	
PW	Five point calibration certificate	SX	SS tag plate	

Ordering Example: RAA . 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.