

APPROVALS



Directive 2014/34/UE (ATEX)

FEATURES

- SS measuring system
- Zero adjustment on dial
- Liquid filled version

APPLICATION

- Gaseous mediums
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Food & Beverages
- Nuclear power plants

**Capsule : AISI 316 SS
≥DN63**


EN 837-3

STANDARD PARAMETERS

Accuracy	:	Class 1,6%
Ambient temperature	:	-40...+65°C
Service temperature	:	100 °C
Pressure limits	:	Steady pressure up to FS value Fluctuating pressure up to 90% of FS value
Weld joint	:	TIG argon arc welding
Over pressure limit	:	110% of FSV

MATERIAL OF CONSTRUCTION

Sensing element	:	Capsule
Case & Ring material	:	AISI 304 SS [Bayonet type]
Capsule	:	AISI 316 SS
Shank	:	AISI 316L SS [Welded directly to case]
Movement mechanism	:	AISI 304 SS
Dial	:	Aluminum, black graduation on white background with external zero adjustment on dial
Pointer	:	Fixed, aluminum, black powder coated
Gaskets, Blow off disc & filling plug	:	NBR
Window	:	Sheet glass / Shatterproof Safety glass

STANDARD SPECIFICATIONS

Dial size	:	DN63 / DN100 / DN125 / DN150
Range	:	25 ... 600 mbar [or equivalent other units of pressure or vacuum ranges]
Range [DN150]	:	2.5...16 mbar [or equivalent other units of pressure or vacuum ranges]
Mounting pattern	:	Direct, Bottom connection
Process connection [DN63]	:	1/4" NPT (M) / 1/4" BSP (M)
Process connection [DN100, 125 & 150]	:	1/2" NPT (M) / 1/2" BSP (M)
Ingress protection	:	IP 54
Execution	:	Dry / Filled version (for range 100 mbar and up)

STANDARD SPECIFICATIONS : FILLED VERSION

Range	:	100...600 mbar
Accuracy	:	CL 2.5
Window	:	Shatterproof / Toughened Safety Glass
Dampening liquid	:	Glycerine + Water
Service temperature	:	-20...+65°C max.

TEMPERATURE EFFECT

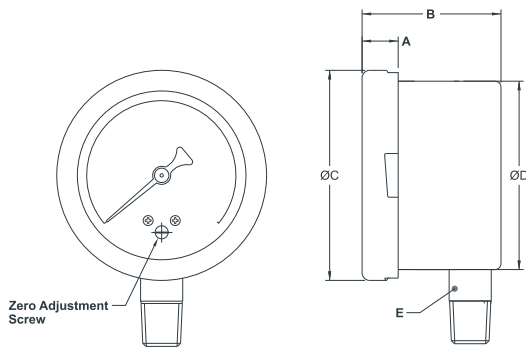
The variation of indication caused by effects of temperature is to be calculated as per the below formula; which is to be added in the specified accuracy while measurement :-

$$\text{Formula: } \pm 0.04 \times (t_2 - t_1) \% \text{ of Full Scale Value}$$

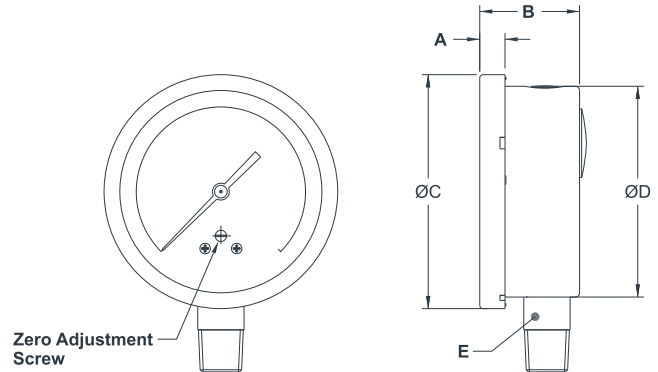
Where t_1 = reference temperature (+20°C) & t_2 = ambient temperature in °C.

DIMENSIONAL DRAWING

Type B0

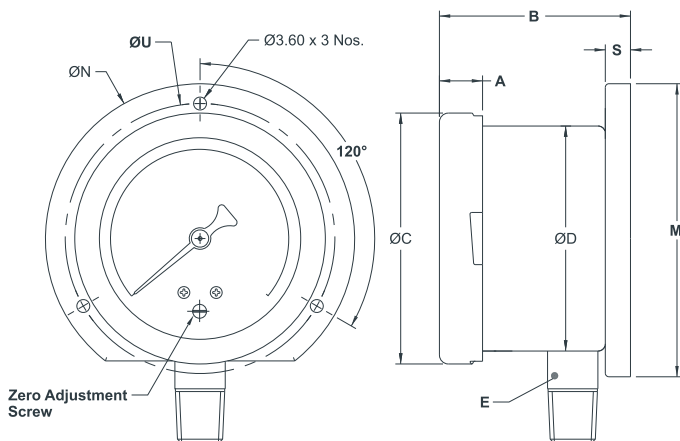


DN	A	B	ØC	ØD	E	Weight (grams)
63	12	43	70	62.5	SQ.14	230

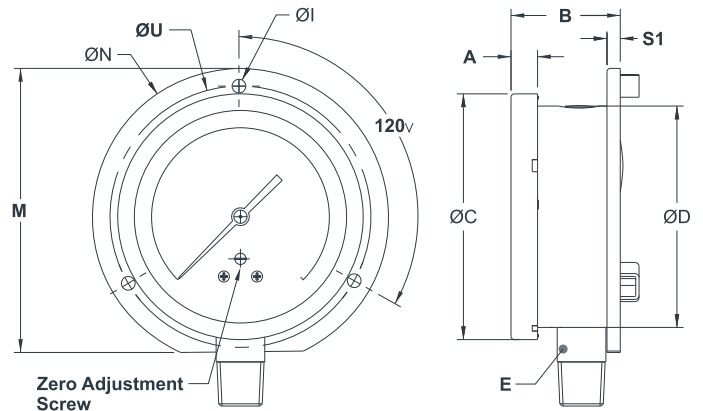


DN	A	B	ØC	ØD	E	Weight (grams)
100	12	48	111	100	SQ.22	523
125	15	48	129	118.5	SQ.22	714
150	15	48	161	149	SQ.22	932

Type B1

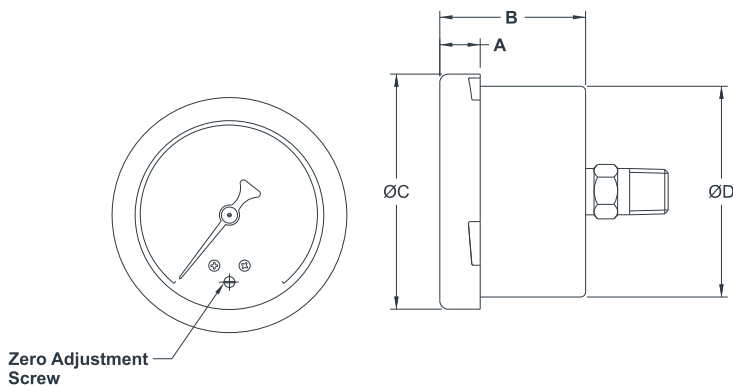


DN	A	B	ØC	ØD	E	ØN	ØU	M	S	Weight (grams)
63	12	48	70	62.5	SQ.14	86	75	77	7	284

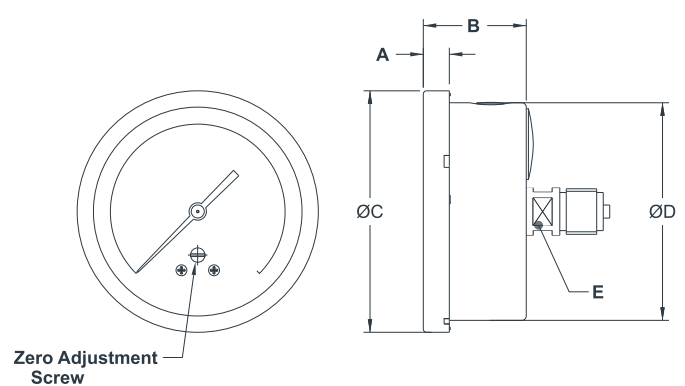


DN	A	B	ØC	ØD	E	ØI	M	ØN	S1	ØU	Weight (grams)
100	12	52	111	100	SQ.22	6	128	134	6	118	638
125	15	50	129	118.5	SQ.22	6	143.5	150	4	137	821
150	15	52	161	149	SQ.22	6	172.4	186	6	168	1105

Type R0



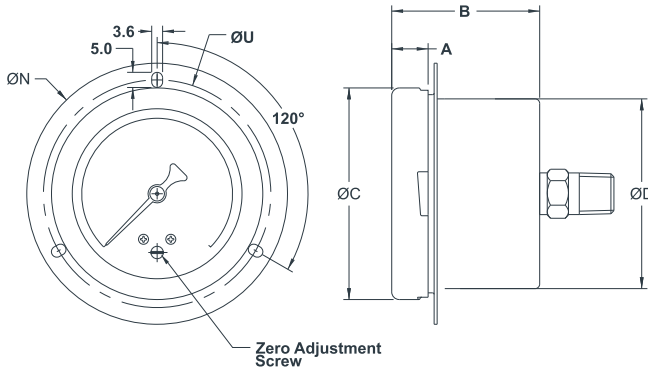
DN	A	B	ØC	ØD	Weight (grams)
63	12	43	69.7	62.5	230



DN	A	B	ØC	ØD	E	Weight (grams)
100	12	48	111	100	A/F18	520
125	15	48	129	118.5	A/F18	710
150	15	48	161	149	A/F18	925

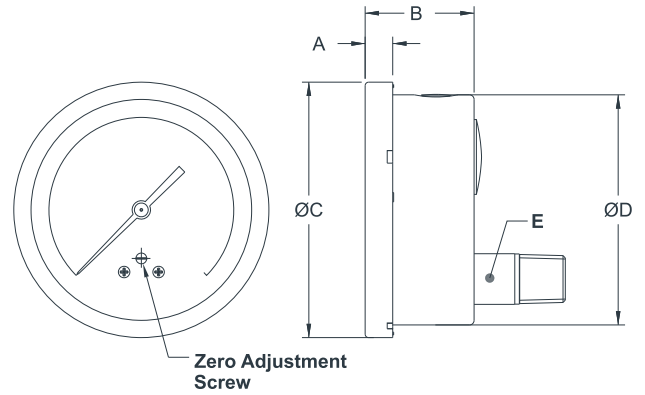
DIMENSIONAL DRAWING

Type R2



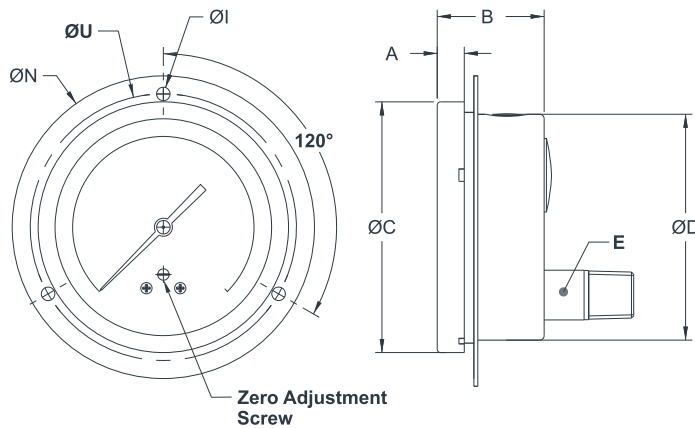
DN	A	B	ØC	ØD	ØN	ØU	Weight (grams)
63	12	43	69.7	62.5	86	75	240

Type L0



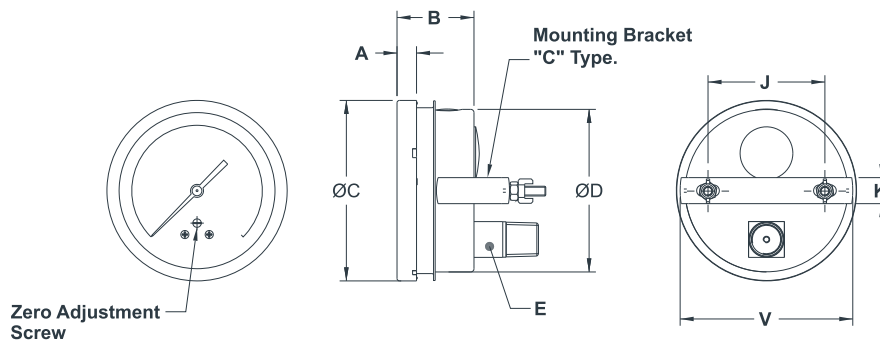
DN	A	B	ØC	ØD	E	Weight (grams)
100	12	48	111	100	SQ.22	523
125	15	48	129	118.5	SQ.22	714
150	15	48	161	149	SQ.22	932

Type L1



DN	A	B	ØC	ØD	E	ØI	ØN	ØU	Weight (grams)
100	12	48	111	100	SQ.22	6	134	118	605
125	15	48	129	118.5	SQ.22	6	150	137	814
150	15	48	161	149	SQ.22	6	186	168	2458

Type L2



DN	A	B	ØC	ØD	E	J	K	V	Weight (grams)
100	12	48	111	100	SQ.22	72	16	108	620
125	15	48	129	118.5	SQ.22	75	15	125	815
150	15	48	161	149	SQ.22	106.5	16	158.5	1091

RANGE TABLE

GUIDE TO MAKE RANGE CODE

1. While selecting the dual scales (mmWC/mbar), primary scale mmWC in "BLACK" and secondary scale mmWc in "RED" color.
2. **Approximate unit conversion**; 1 mbar = 10.197 mmWC = 0.401 Inch WC
3. **Equivalent scales** are available in UOMs like psi, bar, Inch WC, kPa/psi or custom dial design, contact ITEC.

UOM : SINGLE SCALE		UOM : DUAL SCALE
UOM	UOM	UOM
mbar	mm WC	mmWC/mbar
kPa	Inch WC	kPa/Inch WC
		mmWC/Inch WC

RANGES : PRESSURE in mbar [POSITIVE]				
RANGE	RANGE	RANGE	RANGE	RANGE
0...2.5*	0...10*	0...25	0...100	0...250
0...4*	0...16*	0...40	0...160	0...400
0...6*	0...20*	0...60	0...200	0...600

RANGES : PRESSURE in mbar [NEGATIVE]				
RANGE	RANGE	RANGE	RANGE	RANGE
-2.5...0*	-10...0*	-25...0	-100...0	-250...0
-4...0*	-16...0*	-40...0	-160...0	-400...0
-6...0*	-20...0*	-60...0	-200...0	-600...0

RANGES : COMPOUND in mbar		
RANGE	RANGE	RANGE
-10...15	-30...70	-50...200
-10...30	-40...120	-100...300
-20...40	-50...150	-200...400

RANGES : PRESSURE in mmWC [POSITIVE]				
RANGE	RANGE	RANGE	RANGE	RANGE
0...25*	0...100*	0...250	0...1000	0...2500
0...40*	0...160*	0...400	0...1600	0...4000
0...60*	0...200*	0...600	0...2000	0...6000

RANGES : PRESSURE in Inch WC [POSITIVE]				
RANGE	RANGE	RANGE	RANGE	RANGE
0...1*	0...4*	0...10	0...40	0...100
0...1.5*	0...6*	0...16	0...60	0...160
0...2.5*	0...8*	0...24	0...80	0...240

* Available in DN150

ORDERING CODES

1. DIAL SIZE

25	63 mm / 2½"	04	100 mm / 4"
05	125 mm / 5"	06	150 mm / 6"

04

2. RANGE

XXXX Refer "Range Table"

XXXX

3. MOUNTING PATTERN

B0	Direct, Bottom connection
B1	Wall/Surface/Projection mounting, Bottom connection
B2	2" Pipe/Yoke mounting, Bottom connection
B3	Panel Front flange mounting, Bottom connection
R0	Centre, Back connection
R2	Panel Front flange mounting, Centre back connection
L0	Lower, Back connection*
L1	Panel Front flange mounting, Lower Back connection*
L2	Panel bracket mounting, Lower Back connection*
R3	Panel bracket mounting, Center back connection (DN 63 only)

B0

4. PROCESS CONNECTION

12B	1/4" BSP (M)	12N	1/4" NPT (M)
13B	3/8" BSP (M)	13N	3/8" NPT (M)
14B	½" BSP (M)	14N	½" NPT (M)
14M	M20 X 1.5 mm (M)		

14N

Other thread sizes and standards are available on request.

5. INGRESS PROTECTION

EV IP 54

EV

6. EXECUTION

EA	Dry
EG	Dampening liquid filled, glycerine (0...100 mbar up to 0...600 mbar or equivalent)

EA

7. OTHER OPTIONS

BA	Case & Ring in AISI 316 SS (B0)
BB	Case & Ring in AISI 316 SS (B1)
BC	Case & Ring in AISI 316 SS (B2)
B0	2" Pipe / yoke mounting, SS304
B01	2" Pipe / yoke mounting, SS316
BD	Case & Ring in AISI 316 SS (B3)
BG	Case & Ring in AISI 316 SS (R0)
BI	Case & Ring in AISI 316 SS (R2)
BK	Case & Ring in AISI 316 SS (L0)
BL	Case & Ring in AISI 316 SS (L1)
BM	Case & Ring in AISI 316 SS (L2)
EN	Dampening screw, AISI 316 SS
GB	Plexi glass
ER	IP 65
GC	Shatterproof safety glass
RW	Vent plug, ON-OFF type
TA	5 - point calibration certificate
TC	Material test certificate 3.1
TO	Certificate for O ₂ Service & Acetylene
XF	SS tag plate, AISI 304 SS
XG	SS tag plate, AISI 316 SS
XR	Custom designed dial
XT	Dial Tag marking
RE	Drain hole Ø2.0 mm (for 63 mm Center Back Connection)
BG	4,5" Phenol case & Ring
GD	Toughened glass
TF	PMI test
XA	Accuracy class 1,0 [DN 100 & DN 150]
TE	ATEX certificate

XX

* Not available for 63 mm Dial

Ordering example : P601-04-XXXX-B0-14N-EV-EA

COMPATIBLE ACCESSORIES

CODE	DESCRIPTION
A101	Gauge cock
A102	Gauge siphon
A201	Gauge snubber / Pulsation dampener
A202	Gauge saver / Overload protector
A203	Cooling tower

CODE	DESCRIPTION
VXXX	Needle valves
A304	Adaptors
M102	Two valve manifolds
A635	Capillary extension / Impulse tube