



TEMPERATURE GAUGES



ELITE INSTRUMENTS

ISO 9001 COMPANY

PRESSURE GAUGE | THERMOMETER | DIAPHRAGM SEAL | ACCESSORIES

www.elite-instruments.com



the pressure equipment safety authority



NS : 40 / 50 / 63 / 80 /
100 / 125 / 160 /
200 / 250mm

Ranges
available up
to 60,000 psi

WETTED PARTS -AVAILABLE SS 316L , HASTELLOY-C276 , INCONEL 625 , MONEL 400

- Bourdon Tube - AS PER NACE MR 0175
- Socket - AS PER NACE MR 0175
- Bourdon Tube - Seamless Tube
- Tig Welding - Approved by TUV
- Leak Testing - Helium Leak Tested
- Movement - Silicone Jelly Movement
- Dial - White Aluminum
- Window - Safety Glass
- Gasket - NBR
- Blow out Disc - Temperature Compensated
- IP Protection - IP 68

*PLEASE REFER PRESSURE GAUGE CATALOGUE FOR DETAILS

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SPECIAL FEATURES

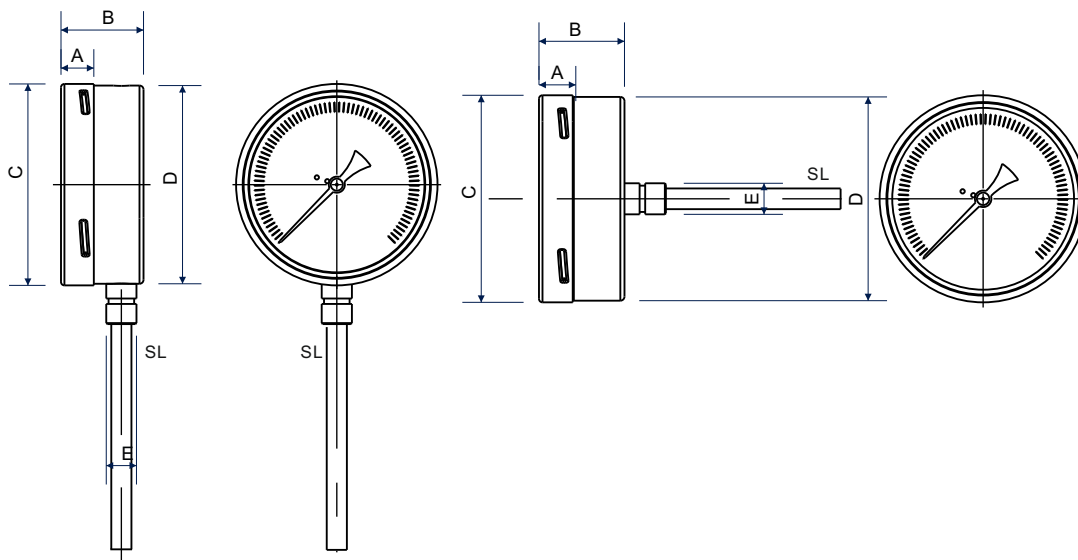
Inert Gas Filled Expansion System.
Stainless Steel Case & Stem
With or Without Thermowell
Standard Followed EN 13190.

SPECIFICATIONS

Accuracy : Class 1 as per EN 13190
Ambient Temperature: -13°F (-25°C) to 149°F (65°C)
Operating Pressure : 25bar (Without Thermowell)
Stem Diameter: 10mm
Case & Bezel: AISI 304 SS (Bayonet Type)
Stem Connection: AISI 316 SS
Joint: Tig Argon Arc Welding
Protection: IP 65
Dial: Aluminium
Pointer: Aluminium
Window: Safety Glass
Gasket: NBR

APPLICATIONS

All Stainless Steel Inert Gas Filled Thermometers
Areas suitable for Corrosive Media / Environments
In Process Industry Like Chemical , Food , Pharmaceutical,
Pulp & Paper Refinery, Cement & Many More.



RANGE TABLE

Nominal Range, Measuring Range & Limits of Error as per EN13190		
Nominal Range(°C)	Measuring Range(°C)	Limits of Error(+/-°C)
-20 to +40	-10 to +30	1
-20 to +60	-10 to +50	1
-20 to +120	-10 to +110	2
-30 to +30	-20 to +20	1
-30 to +50	-20 to +40	1
-30 to +70	-20 to +60	1
-40 to +40	-30 to +30	1
-40 to +60	-30 to +50	1
0 to 60	10 to 50	1
0 to 80	10 to 70	1
0 to 100	10 to 90	1
0 to 120	10 to 110	2
0 to 160	20 to 140	2
0 to 200	20 to 180	2
0 to 250	30 to 220	2.5
0 to 300	30 to 270	5
0 to 400	50 to 350	5
0 to 500	50 to 450	5
0 to 600	100 to 500	10

NS	A	B	ΦC	ΦD	ΦE
63	12	39	63.5	62	15
100	16.3	41	100	98.4	15

NS	A	B	ΦC	ΦD	ΦE
63	12	39	63.5	62	15
100	16.3	41	100	98.4	15

HOW TO ORDER

Example

NOMINAL SIZE	D	F	G	H	
	2.5 "(63mm)	4"(100mm)	5"(125mm)	6"(160mm)	

T-01

X

TYPE OF MOUNTING

- | | |
|--|---|
| 1 WALL /SURFACE /PROJECTION MOUNTING WITH BOTTOM ENTRY | 7 CENTER BACK ENTRY WITH FRONT FLANGE |
| 2 DIRECT BOTTOM ENTRY | 9 EVERY ANGLE CENTER BACK ENTRY |
| 4 DIRECT CENTER BACK ENTRY | 8 CENTER BACK ENTRY WITH MOUNTING BRACKET |

X

PROCESS CONNECTION

- | | |
|----------------------------------|-----------------------|
| 4BM 1/2"BSP(M) (Standard) | 6BM 3/4"BSP(M) |
| 4NM 1/2"NPT(M) | 4MM M20X1.5(M) |
| 4TM 1/2"BSPT(M) | |

XXX

PROCESS CONNECTION TYPE

- | | | |
|----------------------|-----------------|----------------------------|
| ZI Adjustable | ZJ Fixed | KJ Revolving/Swivel |
|----------------------|-----------------|----------------------------|

XX

STEM DIAMETER

- | | | | | | |
|---------------|------------------------|---------------|-----------------|----------------|----------------|
| 1U 6mm | 2M 1/4"(6.35mm) | 2C 8mm | 2I 9.5mm | 2J 10mm | 2K 12mm |
|---------------|------------------------|---------------|-----------------|----------------|----------------|

XX

STEM LENGTH (BELOW THREAD)

Minimum Stem Length : 120 mm
 Maximum Stem Length : 600 mm
 Stem Diameter : 10 mm

120mm

RANGE

Refer Range Table

0/100°C

TYPE

- | | |
|---------------------------|--------------------------|
| A1 With Rigid Stem | A2 With Capillary |
|---------------------------|--------------------------|

XX

CAPILLARY LENGTH (Max up to 25Mtrs.)

In Meters (Eg.1.5=1.5 Meters , 2.0=2 Meters)

3Mtrs

CAPILLARY COVERED WITH ARMOUR

- | | |
|-----------------------|-----------------------|
| PF AISI 304 SS | PH AISI 316 SS |
|-----------------------|-----------------------|

XX

OPTIONAL EXTRAS

- | | |
|---|--------------------------------------|
| PS AISI 316SS CASE & BEZEL** | RH CUSTOM DESIGN DIAL |
| PW FIVE POINT CALIBRATION CERTIFICATE | RX SHATTERPROOF /SAFETY GLASS |
| QA DAMPENING LIQUID SILICON OIL (-45/200 C) | RZ TOUGHENED GLASS |
| PY DAMPENING LIQUID GLYCERINE (UP TO 100 C) EXCEPT ELECTRICAL CONTACT | SW DIAL TAG MARKING |
| SJ MAXIMUM READING POINTER WITH PLEXI GLASS (FOR DRY VERSION OF 100mm to 150mm) | SX SS TAG PLATE |
| GH MATERIAL TEST CERTIFICATE | |
- *Gasket & Filling plug of NBR. Consult factory for Viton.
 **Available for NS 100mm to 150mm.Consult with Factory for Minimum order quantity and delivery.
 *Material Certificate according to EN 10204 3.1 B

XX

ELECTRIC CONTACTS (FOR NS 100 & 150 mm Only) (CE APPROVED)

(WITH IP PROTECTION UP TO Ip55 & WINDOW POLYCARBONATE DOME TYPE)

A) SINGLE INSULATED MAGNETIC SNAP ACTION TYPE*
(230 V AC, 1 Amp.) (48 V DC, 0.5 Amp.)

- | |
|---|
| RJ SINGLE; NORMALLY CLOSED (1 NC) |
| RK DOUBLE; NORMALLY CLOSED+ NORMALLY OPEN (1NC + 1NO) |
| RL SINGLE; NORMALLY OPEN (1 NO) |
| RM DOUBLE; NORMALLY OPEN + NORMALLY CLOSED (1 NO + 1 NC) |
| RN DOUBLE; NORMALLY CLOSED (BOTH NC) |
| RO DOUBLE; NORMALLY OPEN (BOTH NO) |
| RU BOOSTER WITH RELAY FOR CURRENT UPTO 5 Amp. |

B) INDUCTIVE TYPE (220 V AC , 0.4 Amp.)

- | |
|---|
| YW SINGLE; NORMALLY OPEN (1 NO) |
| YV SINGLE; NORMALLY CLOSED (1 NC) |
| YX DOUBLE; NORMALLY CLOSED + NORMALLY OPEN (1NC +1 NO) |
| YY DOUBLE; NORMALLY OPEN (BOTH NO) |
| YZ DOUBLE; NORMALLY CLOSED (BOTH NC) |
| ZA DOUBLE; NORMALLY OPEN + NORMALLY CLOSED (1 NO + 1 NC) |

*For Double Insulated Electrical Contacts , Consult Factory for Price & Delivery .

XX

Ordering Example: T-01-X-X-XXX-XX-XX-120mm-0/100°C-XX-3Mtr-XX-XX-XX

SPECIAL FEATURES

Stainless Steel Case & Stem
Bottom/Back/Every Angle Entry
Silicon Oil Filled (Optional)
With or Without Thermowell
External Zero Adjustable (Optional)
Standard Followed En13190.

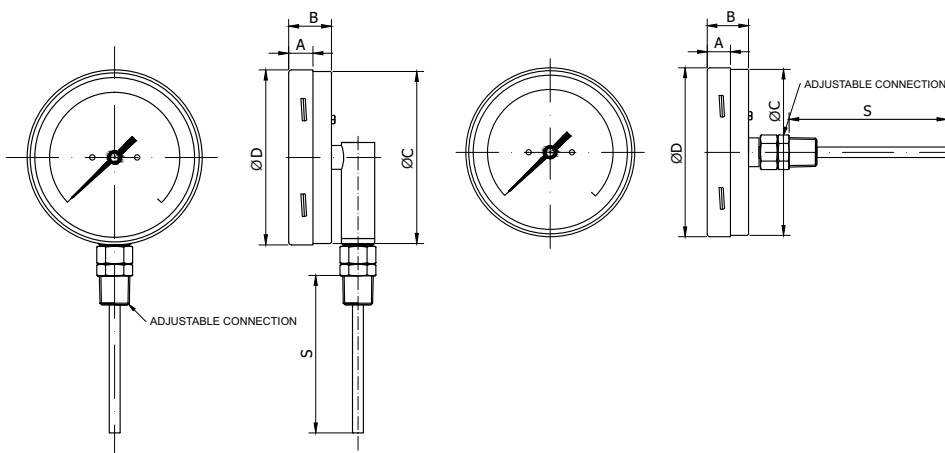
SPECIFICATIONS

Accuracy : 1 as per EN 13190
Ambient Temperature: -13°F (-25°C) to 108°F (60°C)
Operating Pressure : 25bar (Without Thermowell)
Stem Diameter: 8mm
Case & Bezel: AISI 304 SS (Bayonet Type)
Stem Connection: AISI 316 SS
Joint: Tig Argon Arc Welding
Sensing Element: Coiled Bimetal
Protection: IP 65(EN 60529/IEC529)
Dial: Aluminium
Pointer: Aluminium
Window: Safety Glass
Gasket: NBR



APPLICATIONS

Chemical / Refinery / Fertilizer / Petrochemicals /
Pharmaceutical / Power / Cement / Sugar /
Food & Beverages / Pulp & Paper & Allied
Process Industries which are having Corrosive
Media / Environment.

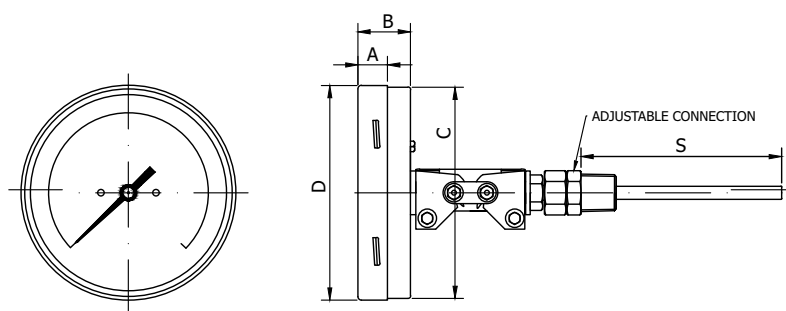


NS	A	B	ΦC	ΦD
63	13	23.5	62	63.5
80	13.5	26	78	80
100	13.5	26	99	100
125	18	29	126	128
160	18	29	157	160

NS	A	B	ΦC	ΦD
50	5.5	12.5	52	57
63	13	23.5	62	63.5
80	13.5	26	78	80
100	13.5	26	99	100
125	18	29	126	128
160	18	29	157	160

RANGE TABLE

Nominal Range, Measuring Range & Limits of Error as per En13190		
Nominal Range(°C)	Measuring Range(°C)	Limits of Error(+/-°C)
-20 to +40	-10 to +30	1
-20 to +60	-10 to +50	1
-20 to +120	-10 to +110	2
-30 to +30	-20 to +20	1
-30 to +50	-20 to +40	1
-30 to +70	-20 to +60	1
-40 to +40	-30 to +30	1
-40 to +60	-30 to +50	1
0 to 60	10 to 50	1
0 to 80	10 to 70	1
0 to 100	10 to 90	1
0 to 120	10 to 110	2
0 to 160	20 to 140	2
0 to 200	20 to 180	2
0 to 250	30 to 220	2.5
0 to 300	30 to 270	5
0 to 400	50 to 350	5
0 to 500	50 to 450	5
0 to 600	100 to 500	10



NS	A	B	ΦC	ΦD
63	13	23.5	62	63.5
80	13.5	26	78	80
100	13.5	26	99	100
125	18	29	126	128
160	18	29	157	160

HOW TO ORDER

NOMINAL SIZE	D	E	F	G	H
	2.5 "(63mm)	3"(80mm)	4"(100mm)	5"(125mm)	6"(160mm)

TYPE OF MOUNTING

- 2 BOTTOM ENTRY THROUGH ELBOW
- 4 DIRECT CENTER BACK ENTRY
- 8 EVERY ANGLE CENTER BACK ENTRY

PROCESS CONNECTION

3BM 3/8"BSP(M) (Stem Dia.Max. 9.5 & 10mm)	4MM M20X1.5 (M) (Stem Dia.Max.12mm)	6NM 3/4" NPT (M)
4BM 1/2"BSP(M) (Stem Dia.Max. 12mm)	4YN 1 1/2"TRICLOVER ** (Stem Dia.Max. 12mm)	8BM 1" BSP(M)
4NM 1/2"NPT(M) (Stem Dia.Max. 12mm)	6BM 3/4"BSP(M)	8NM 1"NPT(M)

PROCESS CONNECTION TYPE

ZI Adjustable	ZJ Fixed	KJ Revolving/Swivel
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STEM DIAMETER

1U 6mm	2M 1/4"(6.35mm)	2C 8mm	2I 9.5mm	2J 10mm	2K 12mm
---------------	------------------------	---------------	-----------------	----------------	----------------

STEM LENGTH (BELOW THREAD)

Minimum Stem Length : 60 mm
Maximum Stem Length : 1000 mm

RANGE

Refer Range Table

OPTIONAL EXTRAS

PS AISI 316SS CASE & BEZEL**	RS EXTERNAL ZERO ADJUSTMENT
PW FIVE POINT CALIBRATION CERTIFICATE	RX SAFETY GLASS
QA DAMPENING LIQUID SILICON OIL (-45/200 C)	RZ TOUGHENED GLASS
PY DAMPENING LIQUID GLYCERINE (UP TO 100° C) EXCEPT ELECTRICAL CONTACT	SX SS 304 TAG PLATE
RH CUSTOM DESIGN DIAL	GH MATERIAL TEST CERTIFICATE AS PER En10204 3.1#
SW DIAL TAG MARKING	SY SS 316 TAG PLATE

Ordering Example: T-02-X-X-XXX-XX-XX-100mm-0/100°C-XX

SPECIAL FEATURES

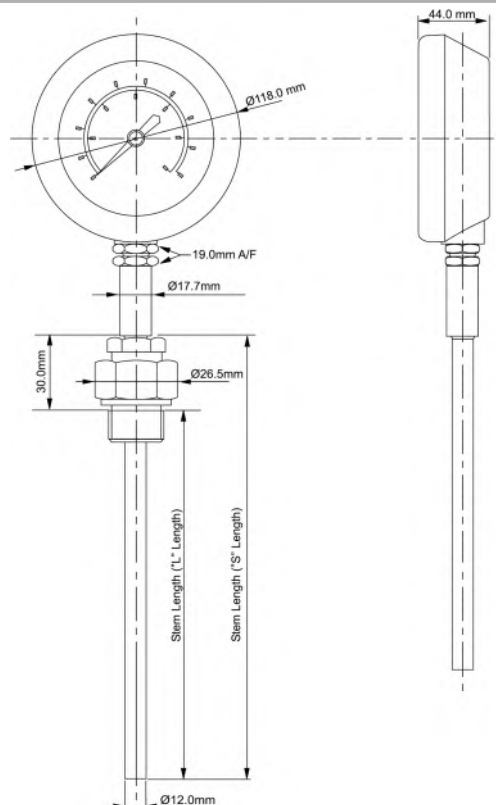
Resist to High Temperature & Excessive Vibration System
 Robust Construction
 Corrosion Wear & Tear Proof
 Silicon Oil Filled
 Accurate & Reliable

SPECIFICATIONS

Accuracy : 1 as per EN 13190
 Ambient Temperature: -72°F (-40°C) to 180°F (100°C)
 Process Temperature: Max 117°F(65°C)
 Stem Diameter: 12mm
 Case & Bezel: Die Cast Aluminium
 Stem Connection: AISI 316 SS
 Joint: Tig Argon Arc Welding
 Protection: IP 65
 Dampening Liquid: Silicon Oil
 Dial: Aluminium
 Pointer: Aluminium
 Window: Tempered Glass
 Gasket & Filling Plug: VITON

APPLICATIONS

This Nitrogen Filled Thermometer is the most widely specified Instrument for measuring Exhaust gas temperature in Diesel Engines. The Nitrogen Filled System is both reliable & accurate as well as environment friendly. The Instrument are protected against vibration using Silicon to ensure maximum life under the most severe conditions. The Instrument field applications are Refinery , Diesel, Power Generation, Sets ,Power, Pulp & Paper , Shipping , Offshore, DG Sets , Oil Engines & Allied Process Industries.



HOW TO ORDER

NOMINAL SIZE

F

4"(100mm)

TYPE OF MOUNTING

2 DIRECT BOTTOM ENTRY

PROCESS CONNECTION

4BM 1/2"BSP(M)

6BM 3/4"BSP(M) STANDARD

4NM 1/2" NPT (M)

PROCESS CONNECTION TYPE

ZI ADJUSTABLE (STANDARD)

STEM LENGTH

200mm

250mm

300mm

400mm

600mm

RANGE (STANDARD)

+50 TO 650°C WITH °F SCALE (Limits of Error +-10°C as per EN 13190)

OPTIONAL EXTRAS

PW FIVE POINT CALIBRATION CERTIFICATE

SX SS TAG PLATE

RH CUSTOM DESIGN DIAL

SW DIAL TAG MARKING

GH MATERIAL TEST CERTIFICATE*

Ordering Example: T-03-X-X-XXX-XX-200mm-50 TO 650°C-XX

Example

T-03

X

X

XXX

XX

200mm

50 TO
650°C

XX

SPECIAL FEATURES

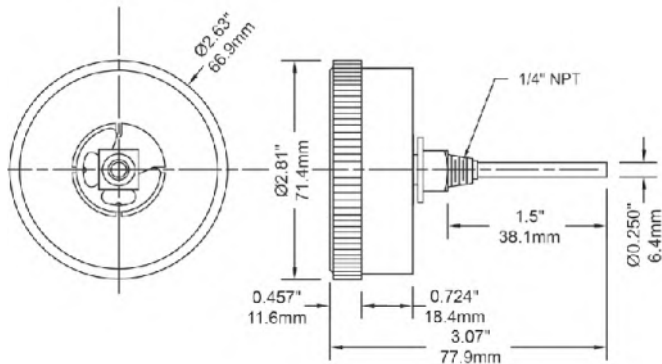
Single Port Installation for Pressure and Temperature Measurement
 Cost Effective
 Excellent For HVAC Industry
 Rustproof Design

SPECIFICATIONS

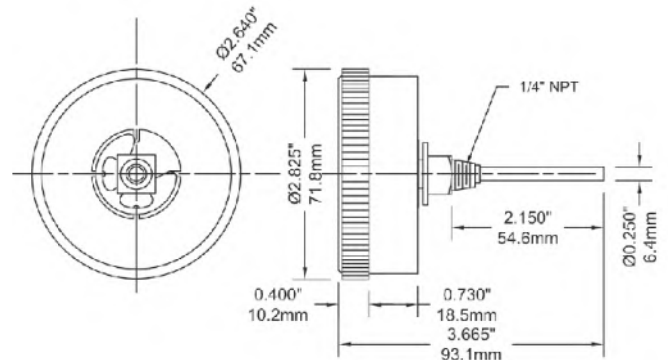
Accuracy : 2 %
 Case & Bezel: Black Steel/ ABS Plastic
 Pressure Element : Bourdon(Copper Alloy)
 Temperature Element: Bi-Metal Strip Coiled
 Stem Diameter: 6mm (Standard)
 Stem Material: AISI SS316
 Dial: Aluminium
 Pointer: Aluminium
 Movement: Copper Alloy
 Window: Sheet Glass



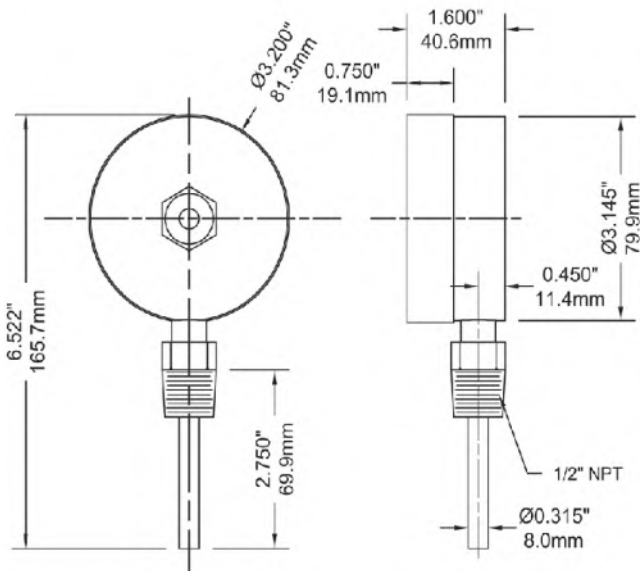
2.5" BACK CONNECTION, 1.5" STEM



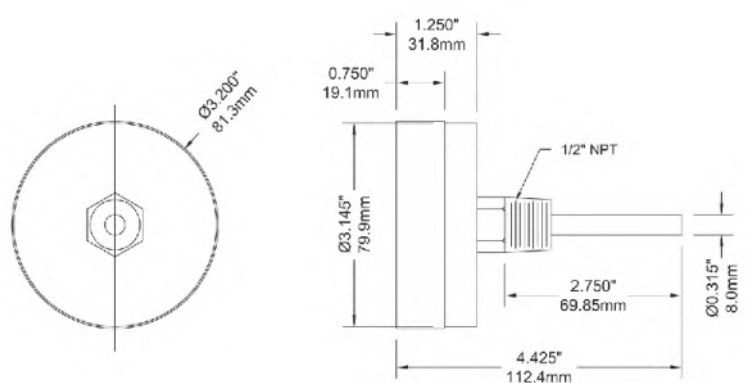
2.5" BACK CONNECTION



3" BOTTOM CONNECTION



3" BACK CONNECTION



HOW TO ORDER

TYPE OF MOUNTING

2 DIRECT BOTTOM ENTRY

4 DIRECT CENTER BACK ENTRY

PROCESS CONNECTION

3BM 3/8"BSP(M) (Stem Dia.Max. 9.5 & 10mm)

4BM 1/2"BSP(M) (Stem Dia.Max. 12mm)

4NM 1/2"NPT(M) (Stem Dia.Max. 12mm)

4MM M20X1.5 (M) (Stem Dia.Max.12mm)

4YN 1 1/2"TRICLOVER ** (Stem Dia.Max. 12mm)

6BM 3/4"BSP(M)

6NM 3/4" NPT (M)

8BM 1" BSP(M)

8NM 1"NPT(M)

STEM LENGTH (BELOW THREAD)

Please specify in mm (Stem Length 65mm to 150mm)

PRESSURE RANGE IN KG/CM²

06 0 to 6

07 0 to 7

10 0 to 10

16 0 to 16

21 0 to 21

25 0 to 25

40 0 to 40

TEMPERATURE RANGE IN °C

50 0 to 50°C

100 0 to 100°C

150 0 to 150°C

OPTIONAL EXTRAS

PW FIVE POINT CALIBRATION CERTIFICATE

RH CUSTOM DESIGN DIAL

SX SS TAG PLATE

SW DIAL TAG MARKING

Ordering Example: T-04-X-XXX-100mm-XX-XX-XX

Example

T-04

X

XXX

100mm

XX

XX

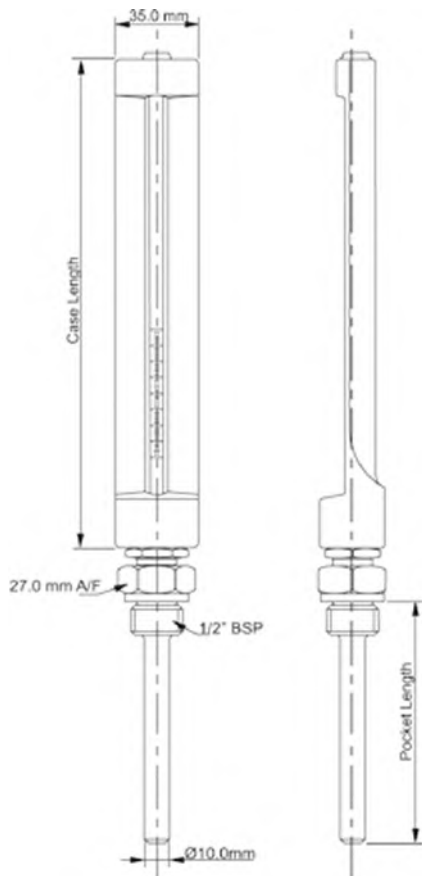
XX

SPECIFICATIONS

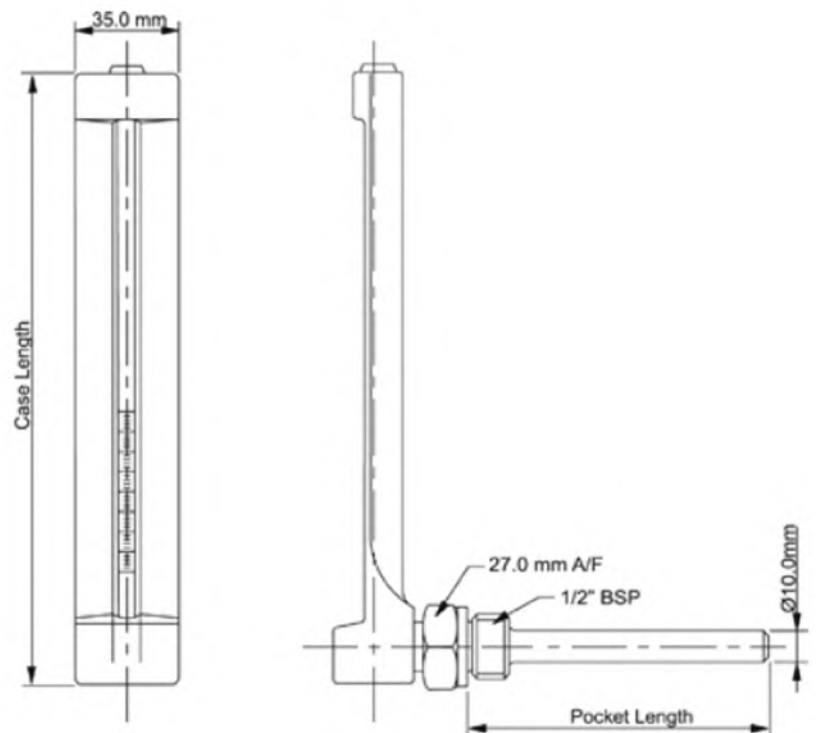
Case Length : 100mm, 150mm, 200mm
 Case Material: Aluminium with Golden Plated
 Color : Blue
 Type: Straight & Angle
 Stem Material : Brass or Steel
 Stem Diameter : 10mm
 Stem Length : 30mm, 40mm, 50mm, 100mm, 150mm
 Union : G1/2", M22X1.5, M27X2
 Scale : Single or Double Scale
 Accuracy: $\pm 2.0\%$
 Range : $-30+50^{\circ}\text{C}$, $0+50^{\circ}\text{C}$, $0+100^{\circ}\text{C}$, $0+120^{\circ}\text{C}$,
 $0+160^{\circ}\text{C}$, $0+200^{\circ}\text{C}$, $0+600^{\circ}\text{C}$



BOTTOM ENTRY

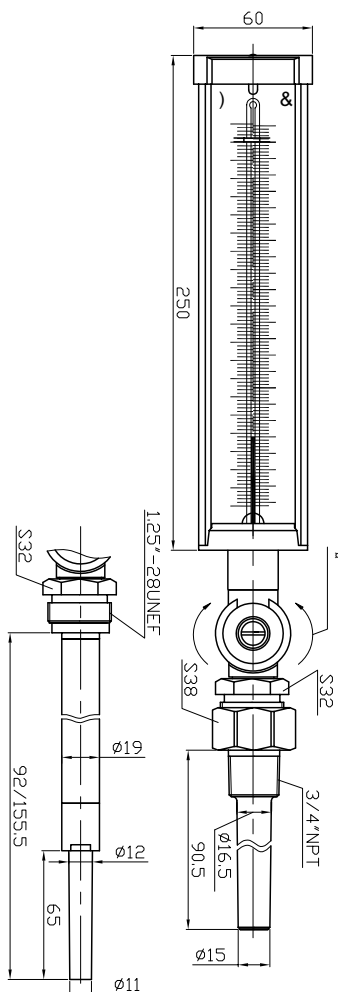


BACK ENTRY



SPECIFICATIONS

Case Material: 7" & 9" Plastic or Aluminium
 Window : Glass
 Dial : V-Shaped Aluminium
 Tube : Blue or Red Liquid Filled
 Type : Adjustable angle connection/Straight Connection
 Stem : Aluminium 0.433"(11mm), 3.5"(89mm)
 Standard Union : 1-1/4" UNF BRASS
 Scale : Single or Double Scale
 Accuracy: +-2.0%
 Range : -40-110°F/ -40-40°C
 0-120°F / -15-45°C
 0-160°F / -10-70°C
 30-180°F / 0-80°C
 30-240°F / 0-110°C
 30-300°F / 0-150°C
 50-400°F/ 20-200°C
 50-550°F / 25-275°C
 or Customize
 Thermowell : Brass



THERMOWELLS

- Manufacture from BAR STOCK
- Design Standard : PTC 19.3
- Available material: SS316L ,HASTELLOY C,MONEL,TITANIUM,TANTALUM, INCONEL 600
- Protection Coating: Available with PTFE for acid applications.
- Leak Testing : Helium gas and Hydro static pressure internal and external



FLANGE THERMOWELL



STRAIGHT THERMOWELL



TAPERED THERMOWELL



STEPPED THERMOWELL



ABOUT US:

Elite instruments company having 20,500 square meter manufacturing area with 350 employees.

Elite instruments have daily production capacity of 20,000 instruments Per day.

Elite instruments total invested over 12 million into our equipment and buildings.

Elite Instruments is an ISO 9000:2015 certified manufacturing company for Measuring instruments and its accessories.

We manufacture

- Pressure gauges,
- Ultra-high-pressure gauges,
- Temperature gauges
- Diaphragm seals
- Accessories
- Thermowells
- Valves and Manifolds.
- Pressure, temperature and level transmitters

Headquartered at China, Elite Instruments also have manufacturing locations at

- China
- Saudi Arabia
- Mexico
- India to better serve our customers.

We also have Distributors at

- TURKEY
- NETHERLANDS
- United States of America,
- CANADA
- MEXICO
- BRAZIL.

Elite instruments Established in 2010, we deliver over 8 million quality products per year 75 countries every year.

Currently Worldwide, estimated 6 million ELITE measuring instruments are in use. Elite serves a wide variety of industries worldwide, including:

- Oil and Gas
- Chemical and Petrochemical
- Food and Pharmaceutical
- Water and Wastewater
- Engineering and Process

Elite Instruments' customer service is fast and flexible. We always put our CUSTOMER FIRST.

Let us prove that we are the best choice for your manufacturer of measuring instruments.

Elite also specializes in developing custom-built OEM products as per customer exact requirements.

Our proficient team of engineers will work to bring your custom design products to life, or work with you to create new products designed to meet your exact needs.

Our customers have testified that the Quality, workmanship, appearance and packaging of Elite products are second to none.

Please visit our website www.elite-instruments.com or send your enquiry to sales@elite-instruments.com



Manufacturing Units

HANSHAN ELITE INSTRUMENTS CO.,LTD

No.27 Xudong Road, Small & Mirco Business Park ,Hanshan Economic
Development Zone Ma'anshan City,An Hui Province, China-238100
Tel. +86 555-4333999 Fax: +86 555-4333999 ,Mobile: +86 13586509674
Email :sales@elite-instruments.com/ snreddy@elite-instruments.com

ELITE INSTRUMENTS

Special Plot No.3 ,Phase-2 APIC Industrial Park,Peddapuram 533437-East Godavari
District,Andhra Pradesh,INDIA Tel. +91 08852-294678 Mobile: +91 90632 54469
Email :sales@elite-instruments.com /snreddy@elite-instruments.com

ELITE INSTRUMENTS PTE.LTD

3014A, MIT-KEPANG UBI, #03-06,
UBI ROAD 1, SINGAPORE, Zip Code: 408703 Tel: +65 9372 9989
Email :sales@elite-instruments.com /snreddy@elite-instruments.com

ADVANCED MEASURING INSTRUMENTS CO.LTD

Building No.2937, Road No.:114 PO Box 35938Al Jubail Industrial City 31961,
KingdomofSaudiArabiaTel. +966 133400405.
Email : sales@elite-instruments.com /snreddy@elite-instruments.com