



TEMPERATURE GAUGES



ELITE INSTRUMENTS

ISO 9001 COMPANY

PRESSURE GAUGE | THERMOMETER | DIAPHRAGM SEAL | ACCESSORIES

www.amieliteinstruments.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

Table of contents

SR NO.	MODEL NO.	DESCRIPTION	PAGE NO.
1	T-01	GAS FILLED THERMOMETER	1
2	T-02	INDUSTRIAL THERMOMETER BIMETAL	3
3	T-03	EXHAUST THERMOMETER	5
4	T-04	PRESSURE AND TEMPERATURE INDICATOR	7
5	T-05	V LINE THERMOMETER	9
6	T-06	EVERY ANGEL INDUSTRIAL THERMOMETER	10

SPECIAL FEATURES

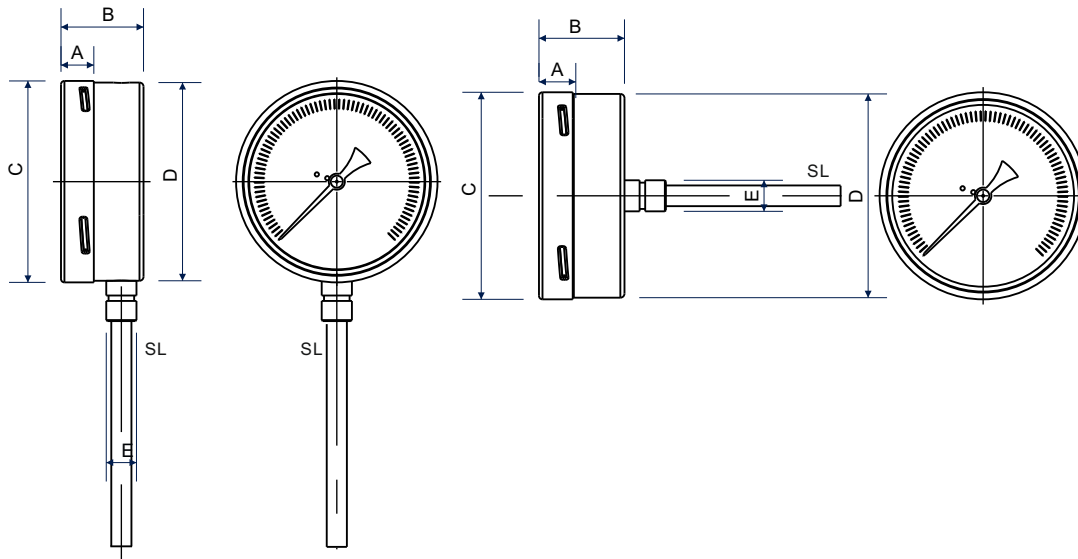
Inert Gas Filled Expansion System.
Stainless Steel Case & Stem
With or Without Thermowell
Standard Followed EN 13190.

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
-100 to +60	-80 to +40	2
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

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

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 |

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) | |

PROCESS CONNECTION TYPE

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

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

RANGE

Refer Range Table

TYPE

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

CAPILLARY LENGTH (Max up to 25Mtrs.)

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

CAPILLARY COVERED WITH ARMOUR

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

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

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 .

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.

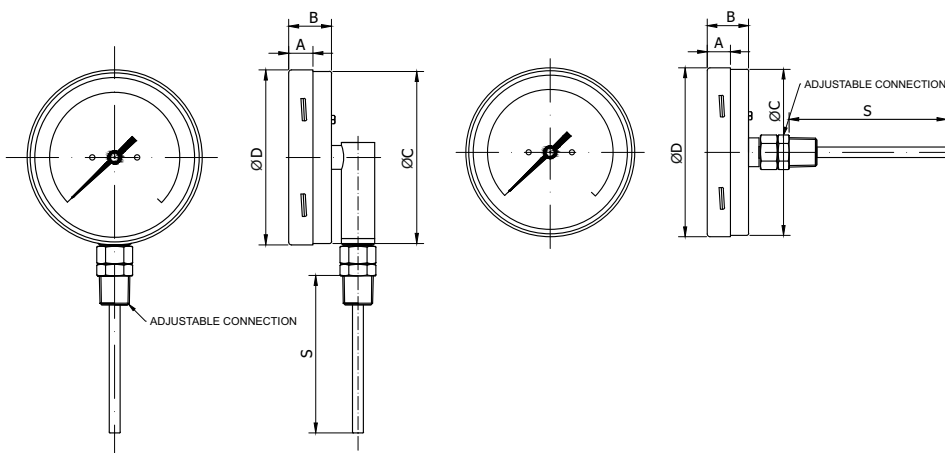
SPECIFICATIONS

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.

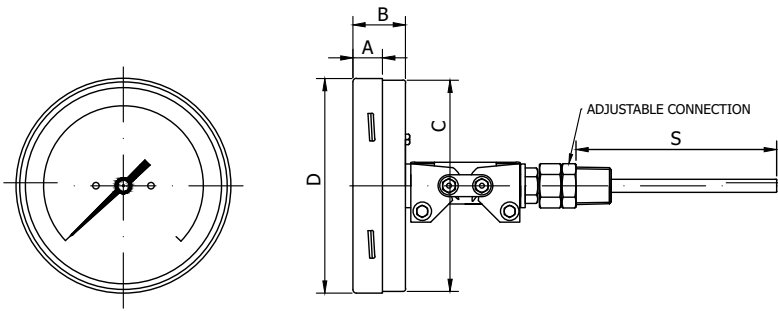


RANGE TABLE

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
-100 to +60	-80 to +40	2
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	ØC	ØD
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	ØC	ØD
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



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
----------------------	-----------------	----------------------------

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

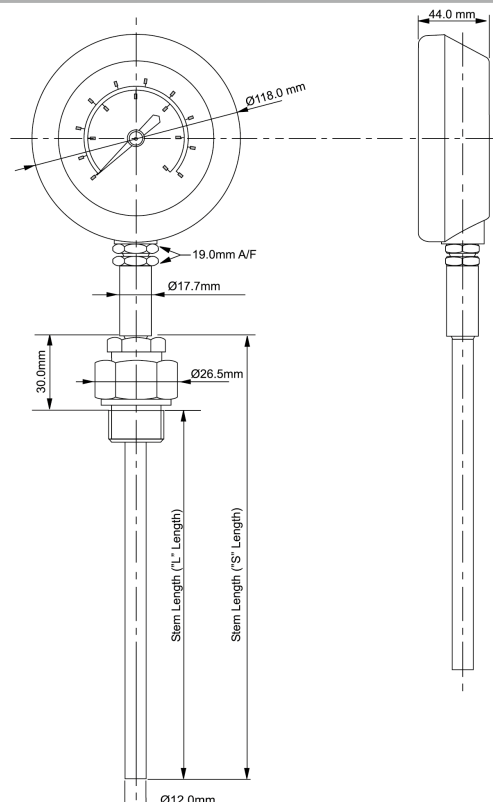
Resist to High Temperature & Excessive Vibration System
Robust Construction
Corrosion Wear & Tear Proof
Silicon Oil Filled
Accurate & Reliable

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

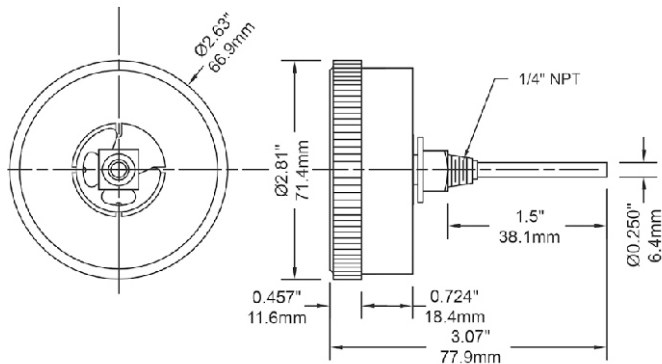
Single Port Installation for Pressure and Temperature Measurement
 Cost Effective
 Excellent For HVAC Industry
 Rustproof Design

SPECIFICATIONS

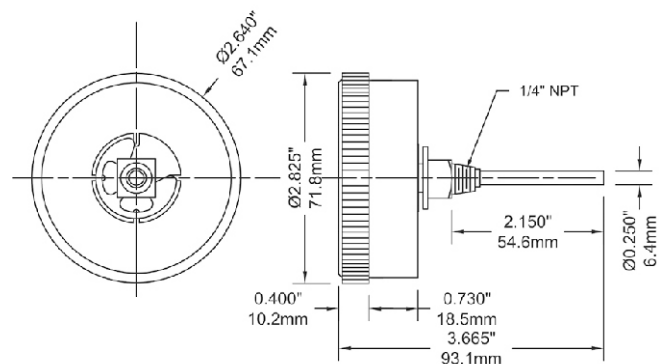
Accuracy : 2 %
 Case & Bezel: Black Steel/ ABS Plastic
 Pressure Element : Bourdon(Copper Alloy)
 Temperature Element: Bi-Metal Strip Coiled
 Stem Diameter: 6mm (Standard)
 Stem Material: AISI SS316
 Dial: Aluminium
 Pointer: Aluminium
 Movement: Copper Alloy
 Window: Sheet Glass



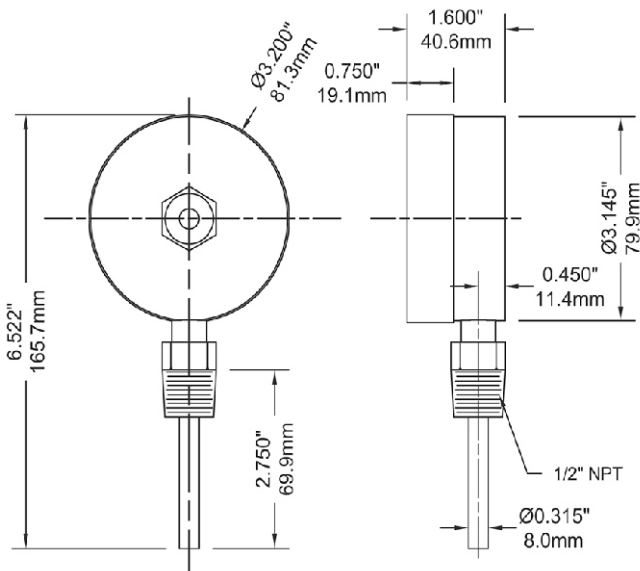
2.5" BACK CONNECTION, 1" STEM



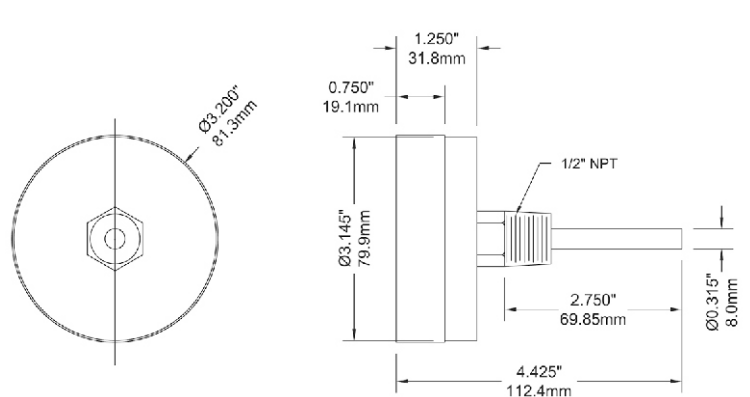
2.5" BACK CONNECTION



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) **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)

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 **SX** SS TAG PLATE
RH CUSTOM DESIGN DIAL **SW** DIAL TAG MARKING

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

Example

T-04

X

XXX

100mm

XX

XX

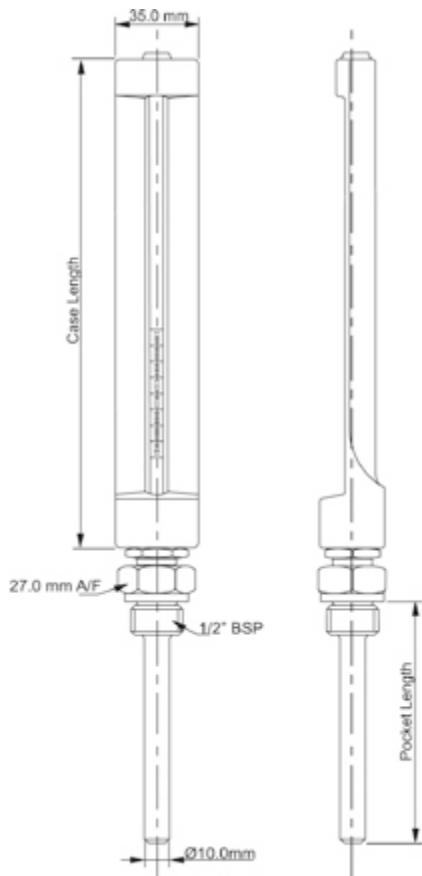
XX

SPECIFICATIONS

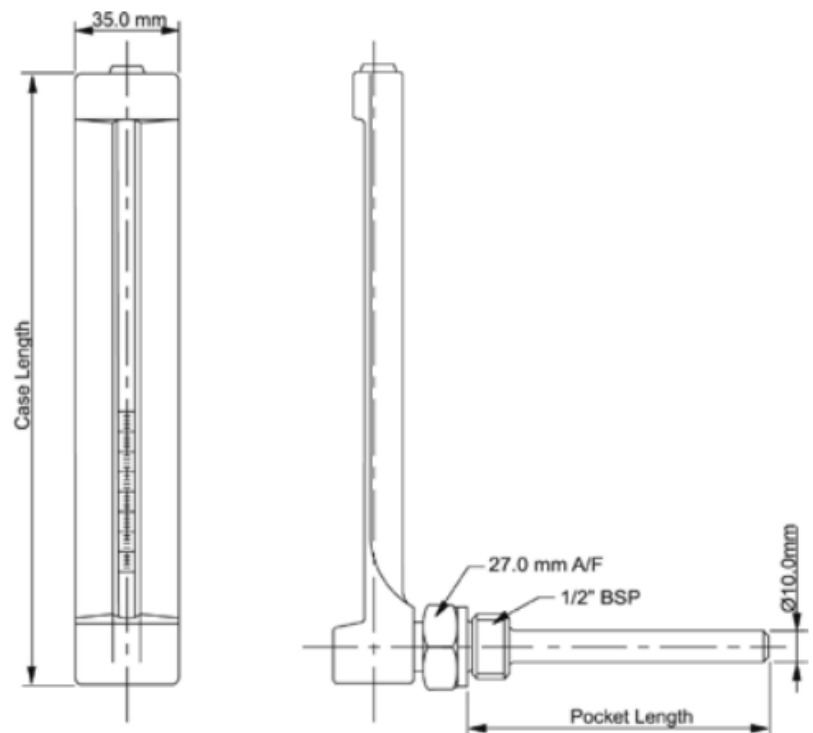
Case Length : 100mm, 150mm, 200mm
 Case Material: Aluminium with Golden Plated
 Color : Blue
 Type: Straight & Angle
 Stem Material : Brass or Steel
 Stem Diameter : 10mm
 Stem Length : 30mm, 40mm, 50mm, 100mm, 150mm
 Union : G1/2", M22X1.5, M27X2
 Scale : Single Scale °C
 Accuracy: $\pm 2.0\%$
 Range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



BOTTOM ENTRY

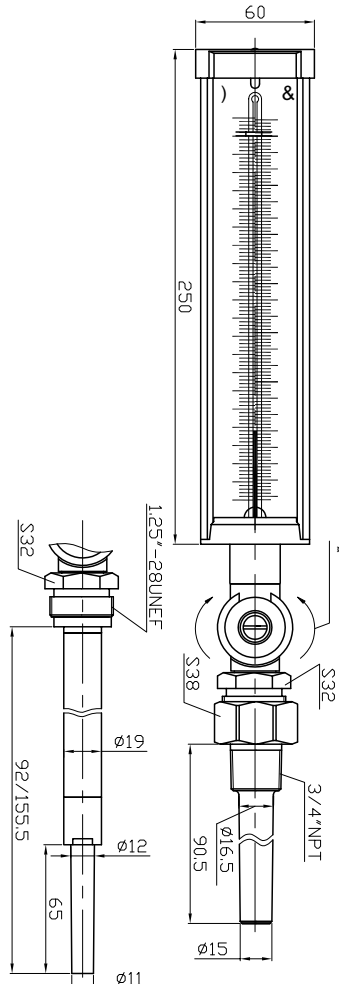


BACK ENTRY



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 : -40-110F / -40-40°C
 0-120F / -15-45°C
 0-160F / -10-70°C
 30-180F / 0-80°C
 30-240F / 0-110°C
 30-300F / 0-150°C
 50-400F / 20-200°C
 50-550F / 25-275°C
 or Customize
 Thermowell : Brass





ABOUT US:

Elite Instruments is a world class manufacturer of measuring instruments and accessories, including pressure gauges, thermometers, level gauges, pressure switches, RTD's, thermocouples and thermowells. We specialize in working together with our customers to develop comprehensive solutions in measurement technology and integrating those solutions into their processes.

Established in 2010, Elite Instruments delivers over 2 million quality products to over 50 countries every year. Worldwide, over 6 million ELITE measuring instruments are currently in use.

Headquartered in China, Kunshan Elite Instruments Company Ltd. also has locations in Singapore and India to better serve our customers,

Elite serves a wide variety of industries worldwide, including:

1. Oil and Gas
2. Chemical and Petrochemical
3. Food and Pharmaceutical
4. Water and Wastewater
5. Engineering and Process

Elite also specializes in developing custom built OEM products as per customer requirements. Our proficient team of engineers will work to bring your custom design to life, or work with you to create new products designed meet your exact needs.

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

Elite Instruments is ISO 9001 :2008 certified with many products holding ATEX approval, per 2014/34/EU Our state of the art production, testing and warehouse facilities ensure Elite exceeds customer expectations for quality and delivery.

Elite's commitment to quality is demonstrated by our investment in world class production and testing equipment.

Our commitment to quality is also demonstrated in our procedures. All Elite products undergo rigorous quality inspection before, during and post-production to ensure 100% of products meet customer demands and specifications.

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 supplier of measuring instruments.

Please visit our website www.elite-instrument.com or send your enquires to sales@elite-instrument.com

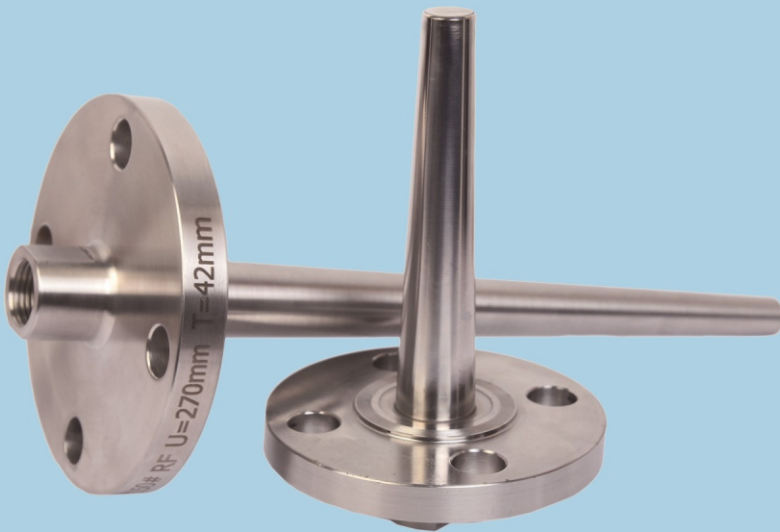
Please visit youtube page :

<https://youtu.be/72MgbJNO5fw>

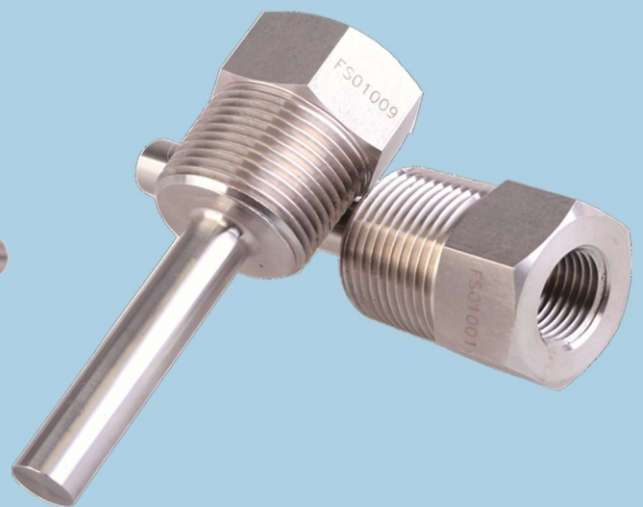
www.amieliteinstruments.com

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



Manufacturing Units

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