

BIMETAL THERMOMETER

TGI50-1

APPLICATIONS

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

FEATURES

- All stainless steel welded construction
- Follows EN 13190 / ASME B40.200
- Accuracy as per Class 1
- Dry / Fillable / Liquid filled



BIMETAL THERMOMETER, TGI50-1

DESCRIPTION

General

Design : EN 13190

Accuracy : $\pm 1.0\%$ of full scale

Ambient temperature : $-20 \dots +60^{\circ}\text{C}$

Over range limits : 110% full scale

Stem pressure rating : 25 bar (Without thermowell)

Weld joints : TIG argon arc welding

Material of construction

Sensing element : Coiled bimetal strip

Case & Ring material : AISI 304 SS

Stem material : AISI 316 SS

Process connection material : AISI 316 SS

Dial : Aluminum, black graduation on white background

Pointer : Zero adjustable, aluminum, black powder coated
[Fix pointer for 50 mm]

Gaskets : Neoprene / NBR

Window : Sheet glass

Temperature effect

When temperature of the measuring system deviates from reference temperature ($+20^{\circ}\text{C}$):
max $\pm 0.4\%$ / 10K of full scale value.

Standard version

Dial size : 50 mm / 63 mm / 80 mm / 100 mm / 150 mm

Range : -50 up to 600°C

Mounting pattern : Direct Bottom connection

Stem size : 6.0 mm / 8.0 mm / 9.5 mm / 12 mm

Ingress protection : IP 65

Stem length : 150 mm standard up to 1000 mm

Process connection type : Adjustable connection

Process connection : $\frac{1}{2}$ " NPT (M) / $\frac{1}{2}$ " BSP (M)

Filled versions

Glycerin

Window : Shatterproof safety glass

Dampening liquid : Glycerin 99.7% / 80% / 60%
[Max temperature range limit 100°C]

Silicon Oil

Window : Shatterproof safety glass

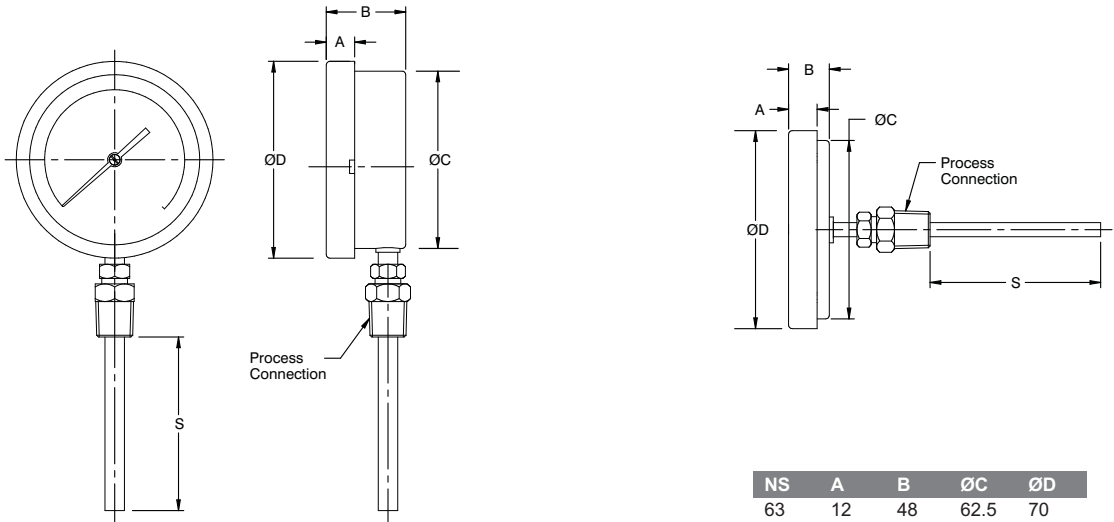
Gasket, Blow off disc & filling plug : NBR / Viton

Dampening liquid : Silicon oil DC 200
[Max temperature range limit 200°C]

BIMETAL TEMPERATURE GAUGE

TGI50-1

DIMENSIONAL DRAWING



- NOTES
- 1. Drawing not to scale. All dimensions are in mm.
 - 2. For other mounting details, Panel cut-out dimensions, kindly contact factory.

NS	A	B	ØC	ØD
63	12	48	62.5	70
80	9.5	48	80	89.5
100	12	48	100	111
125	15	48	118.5	129
150	15	48	149	161

ORDERING CODES

MODEL						TGI50-1		
TGI50-1 Bimetal thermometer								
DIAL SIZE								
D1	2" / 50 mm		D2	2.5" / 63 mm		D4		
D4	4" / 100 mm		D6	6" / 150 mm				
MOUNTING						M1		
M1	Direct bottom		M5	Direct center back				
CONNECTION						P8		
P4	1/4" NPT (M)		P20	3/8" NPT (M)				
P3	1/4" BSP (M)		P5	3/8" BSP (M)		P7	1/2" BSP (M)	
CASE FILLING						F1		
F1	Dry		F2	Dry but fillable			F3	Glycerin filled
F4	Silicon oil filled							
INGRESS PROTECTION						I1		
I1	IP 65		I6	IP 68				
STEM SIZE						B6		
B6	6 mm		B8	8 mm			B10	10 mm
B12	12 mm		B9	9.5 mm		B7	6.35 mm (1/4")	
STEM LENGTH						100		
XXXX	Please mention stem length in 'mm'							
RANGE						0-100°C		
0-100°C	Please mention range required with the measurement unit [TGI offer in all types of National & International measurement units, e.g. °C, °F, etc. with single or dual scales]							
OPTIONAL EXTRAS						E16/E27		
E33	AISI 316 SS case & ring		E01	Shatterproof safety glass			E46	External zero adjustment (> 63 mm)
E27	AISI 304 SS tag plate		E28	AISI 316 SS tag plate			E31	Custom designed dial
E32	Dial tag marking		E16	5 - point calibration certificate				

Ordering Example : TGI50-1-D4.M1.P8.F1.I1.B6/100/0-100°C/E16/E27