

# GAS FILLED TEMPERATURE GAUGE WITH EXTERNAL ZERO ADJUSTMENT

## TGI51-2

### 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



### GAS FILLED TEMPERATURE GAUGE- EZA- TGI51-2

## DESCRIPTION

### General

**Design :** EN 13190

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

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

**Storage temperature :**  $-50 \dots +70^{\circ}\text{C}$  without liquid dampening  
 $-20 \dots +60^{\circ}\text{C}$  with liquid dampening

**Over range limits :** 110% full scale

**Stem pressure rating :** 25 bar (Without thermowell)

**Weld joints :** TIG argon arc welding

### Material of construction

**Sensing element :** Inert Gas Filled sensor bulb

**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 :** Micro-zero adjustable, aluminum, black powder coated

**Gaskets :** Neoprene / NBR

**Window :** Sheet glass

### Temperature effect

When temperature of the measuring system deviates from reference temperature ( $+20$ ):

max  $\pm 0.4\%$  / 10K of full scale value.

### Standard version

**Dial size :** 100 mm / 150 mm / 250 mm

**Range :**  $-50$  up to  $800^{\circ}\text{C}$

**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 3000 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  $100^{\circ}\text{C}$ ]

#### Silicon Oil

**Window :** Shatterproof safety glass

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

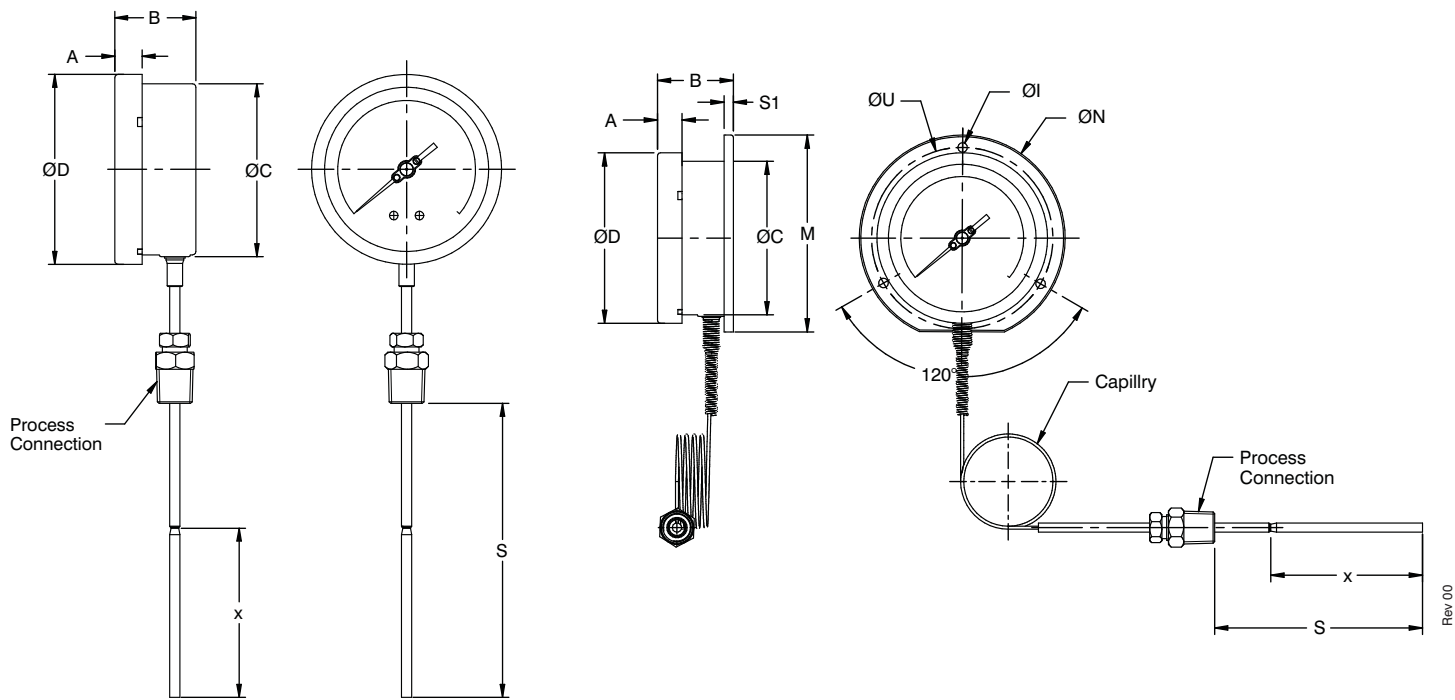
**Dampening liquid :** Silicon oil DC 200

[Max temperature range limit  $200^{\circ}\text{C}$ ]

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## TGI51-2

### 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	ØI	ØN	M	S1	ØU
100	12	48	100	111	6	134	128	6	118
150	15	48	149	161	6	186	172.4	6	168
250	18.5	52	250	263	7	290	286.5	1.5	276

### ORDERING CODES

MODEL						TGI51-2	
TGI51-2 Gas filled temperature gauge with External Zero Adjustment							
DIAL SIZE							D4
D4	4" / 100 mm	D6	6" / 150 mm	D10	10" / 250 mm		
MOUNTING							M1
Direct type (Rigid stem)							
M1	Direct bottom	M5	Direct center back	M12	Every angle center back entry		
M6	Direct lower back	M16	Bottom with Anti-vibration spring				
Remote type (Capillary extension)							
M2	Direct bottom with Back flange	MF	Direct lower back with front flange				
M8	Direct lower back with panel mounting clamp						
CONNECTION						P8	
P4	1/4" NPT (M)	P6	3/8" NPT (M)	P8	1/2" 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				

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## EXECUTION

R1	Direct	R2	Remote
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### STEM SIZE

<b>B6</b>	6 mm	<b>B8</b>	8 mm	<b>B10</b>	10 mm
<b>B12</b>	12 mm	<b>B9</b>	9.5 mm	<b>B7</b>	6.35 mm ( $\frac{1}{4}$ " )

### STEM LENGTH

XXXX Please mention stem length in 'mm'

## RANGE

**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]

## CAPILLARY

<b>S01</b>	AISI 304 SS	<b>S02</b>	AISI 316 SS
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**CAPILLARY**

<b>S01</b>	AISI 304 SS	<b>S02</b>	AISI 316 SS	<b>S16</b>	PVC [Ambient up to 65°C]
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### STEM LENGTH

XXXX Please mention stem length in 'mm'

### OPTIONAL EXTRAS

<b>E33</b>	AISI 316 SS case & ring	<b>E01</b>	Shatterproof safety glass	<b>E46</b>	External zero adjustment
<b>E27</b>	AISI 304 SS tag plate	<b>E28</b>	AISI 316 SS tag plate	<b>E31</b>	Custom designed dial
<b>E32</b>	Dial tag marking	<b>E16</b>	5 - point calibration certificate	<b>E14</b>	Rubber parts, Viton

**Ordering Example : TGI51-2-D4.M1.P8.F1.I1.R1.B6/100 mm/0-100°C/E16/E27**

R1

**B6**

100 mm

**0-100°C**

XXX

XXX

XXXX

E16/E27

Rev 00

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