

Model TSG

Digital Temperature Gauge / Switch

Description

TSG model contains Microprocessor in default. Moreover, it is a Temperature Gauge / Switch with characteristics of LED Display, 1~5VDC or 4~20mA(3wire) Analog Output, 2-Channel RELAY Output. Since it uses IP65 structure, there is no limitation with environmental conditions. As PT100, Indicator and Switch are integrated in order to realize providing it at low price.

Features

- ▶ IP65 Protection
- ▶ LED display(Height 10mm)
- ▶ Built-in amplifier circuit(1~5VDC, 4~20mA)
- ▶ Optional 2-channel Relay switching output
- ▶ Measuring range -50~400℃
- ▶ 0.8%FS accuracy
- ▶ 18~26VDC excitation voltage

Applications

- ▶ Chemical & Petrochemical
- ▶ Process Control & Monitoring
- ▶ Food & Pharmaceutical
- ▶ Plant utility monitoring

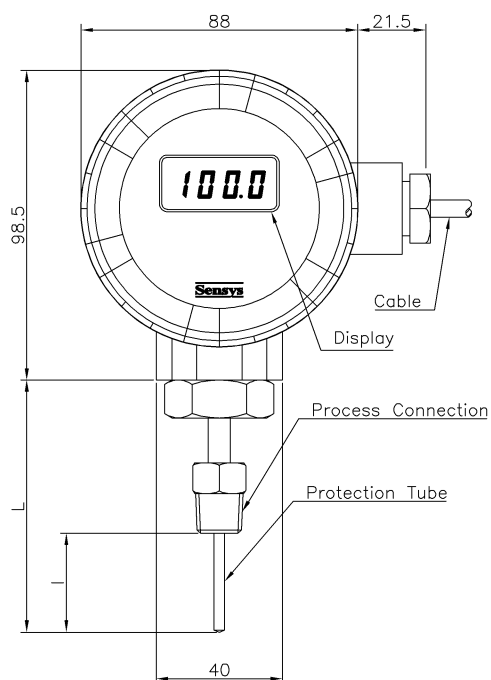


Specifications

	TSGA / C	TSGB / D
Range	-50~0, -50~50, 0~50, 100, 200, 300, 400℃	
Sensing Element	Sheathed RTD(PT100Ω)	
Performance		
Accuracy	±0.8%FS ± 1digit	
Ambient Temperature Range	-20 ~ 80℃	
Storage Temperature Range	-40 ~ 100℃	
Electrical		
Display	LED(Red Color)	
Max Readout	±1999(3 1/2)	
Height of Digits	10mm	
Excitation	18 ~ 26VDC	
Output		
Switching Signal	—	2-Channel Normal Open Relay (5A 28VDC / 10A 125VAC / 5A 250VAC)
Analog Signal	1~5VDC, 4~20mA(3Wire)	
Electrical Connection	Cable	DIN Connector
Physical		
Vibration	49.1m/s ² {5G}, 10~500Hz	
Shock	490m/s ² {50G}	
Process Connection	R(PT)1/2", Flange & Other Connection Available on Request	
Media-Wetted Materials	Stainless Steel 316, Other Available on Request	
Protection	IP65	
Weight	Approx. 700g (Standard type only)	

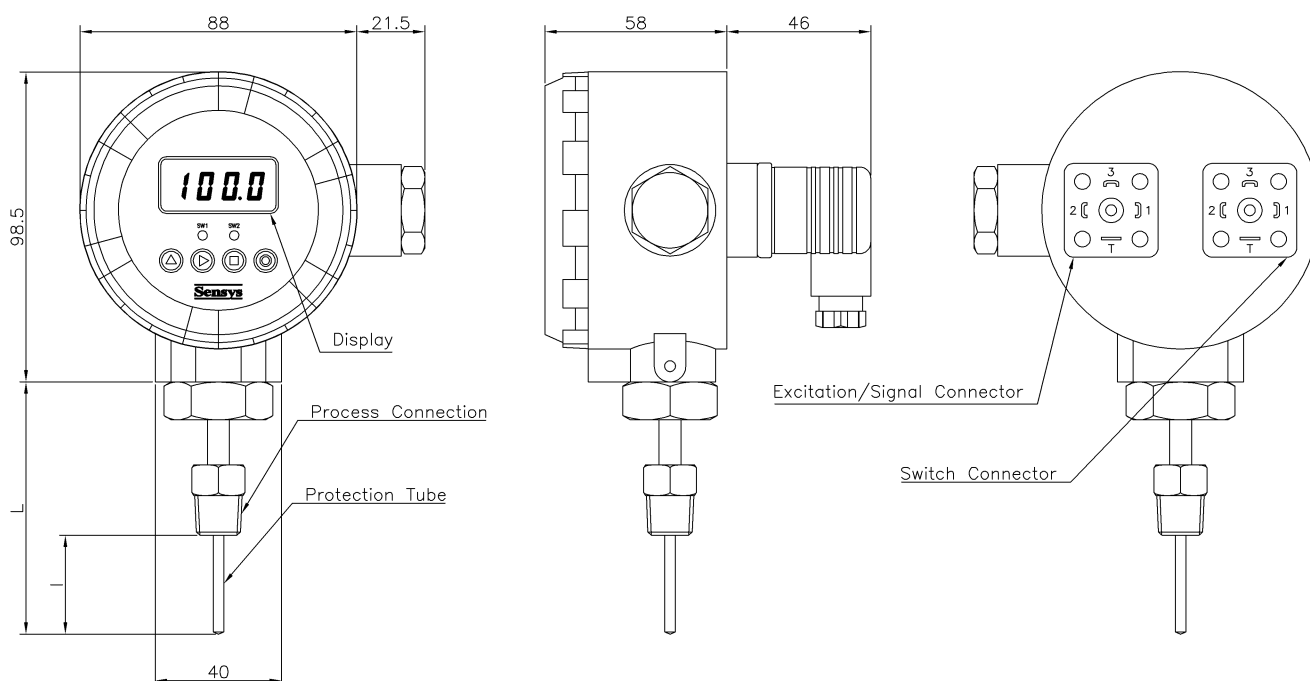
Dimension

► TSGA/C(Standard Type)



Wire Color	Connections
Red	Input ⊕
White	Common ⊖
Green	Output ⊕
Shield	Earth

► TSGB/D(Switch Output Type)



Excitation/Signal Pin No.	Connections	Switch Pin No.	Connections
1	Input ⊕	1	Switch 1
2	Common ⊖	2	Switch 1
3	Output ⊕	3	Switch 2
⊕	Earth	⊕	Switch 2

Ordering Information

TSG A 0010 C 48-100/50-G/A

Model Name

Output

A : 1~5V
B : 2-Ch. Relay, 1~5V
C : 4~20mA(3Wire)
D : 2-Ch. Relay, 4~20mA(3Wire)

Temperature Range

C050 : -50~0℃ 0200 : 0~200℃
±050 : -50~50℃ 0300 : 0~300℃
0050 : 0~50℃ 0400 : 0~400℃
0100 : 0~100℃

Temperature Unit

C : °C
F : °F

Sheath Out Diameter

32 : ϕ 3.2 64 : ϕ 6.4
48 : ϕ 4.8 80 : ϕ 8.0

Material of Protection Tube

A : STS316
B : STS316L
C : STS304
D : Titanium
E : Monel

Process Connection

A : R(PT)3/8" G : R(PT)1/8"
B : G(PF)3/8" H : G(PF)1/8"
C : R(PT)1/4" E : R(PT)1/2"
D : G(PF)1/4" Q : G(PF)1/2"

Insert Length

ℓ (mm)

Length

L(mm)