
Explosion Proof Type Temperature Transmitter with Indicating

Model : T700 (Standard head)
T710 (Miniature head)

WISE
SENSOR



Advantages

Explosion Proof transmitter for industrial applications

- Two wire 4~20mA current output signal
- RTD and thermocouple inputs
- Measuring ranges from -50 to 500 C
- Loop powered 4~20mA with LED local display
- Excellent accuracy and long term stability

Applications

These are recommended in applications requiring amplification of RTD or T/C signals to carry to a long distance or guard against heavy field electrical noise. The transmitter converts RTD or T/C inputs to an analog signal for direct interface with indicators, recorders, controllers, PLC, DCS systems can be used for a wide range of applications in process control, automatic machinery and hydraulic or pneumatic system design.



T700

T710

Certificate

Ex d IIC T6 (IP65)

Descriptions

T700/T710 series temperature transmitters are designed to fit into standard weather or explosion-proofed terminal heads used on RTD or thermocouple assemblies to provide a 4~20mA transmission signal.

It is cost effective solution for all temperature measurement and accurate, durable and reliable. Numerous configurations for measurement in many different mediums are offered.

Generally the transmitter produces a linear 4~20mA output carried on a two-wire system and optional voltage range of 1~5V DC can also be available. The transmitter is supplied factory calibrated, but also has zero and span potentiometers for field adjustment or calibration.

T700/T710 provides a loop powered 4~20mA/2-wire with LED local display and in the hazardous environment, explosion protected terminal head can be also available.

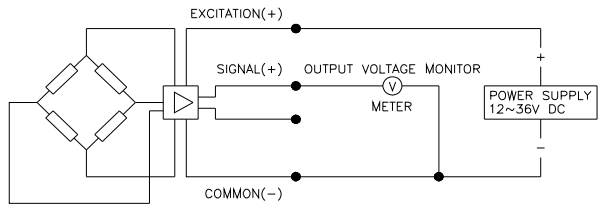
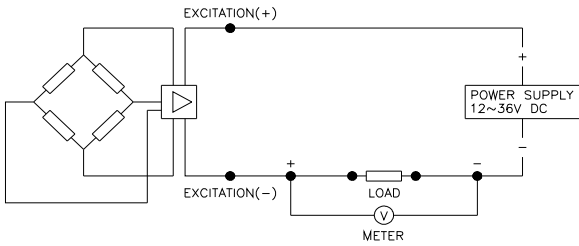
Specification

Input			
Technology	RTD (PT100 ohm, JIS-C-1604-1981)		
	Thermocouple Type <B, E, J, K, N, R, S, T> (Only available T700)		
Output			
	Current output		Voltage output
Electrical connection type	2-wire technique		3 or 4-wire technique
Full scale output signal	20mA	±0.2%	5V ±0.2%
Zero measured output	4mA	±0.03%	1V ±0.03%
	Other output signals available on request		
Electrical Specification			
Excitation voltage	12-36V DC		
Load resistance max @ 24V	500 Ω at 24V		
Influence of excitation	0.01% FSO/V		
Shock resistance	No change in performance after 10Gs for 11ms		
Response time(10-90%)	± 500 mSec.		
Adjustment	±20% FSO/zero and span		
Performance Specification			
Accuracy	≤±0.2% FSO		
Non-linearity	Better Than 0.10% FSO		
Repeatability	Better Than 0.05% FSO		
Long term stability	Better Than 0.05% FSO per month		
Cutoff frequency(-3 d B)	±2kHz		
Ambient temperature limits	-20 ~ 70 °C		
Ambient humidity limits	5 to 100% R.H		
Physical Specification			
Process connection	PT1/2" male thread		
	Flange & other connections available on request		
Process media	Gases and liquids compatible with stainless steel 316		
Materials wetted by process	Stainless steel 316L and other available on request		
Materials of terminal head	Aluminum Die-casting		
Local display range	4 digit		
Enclosure rating	IP65		
Explosion protection	Ex d IIC T6 (IP65)		
Influence of mounting position	Not critical		
Options	Protection well		

Note : CE certification applies only to T700 2-wire products

System connection for 2-wire transmitter

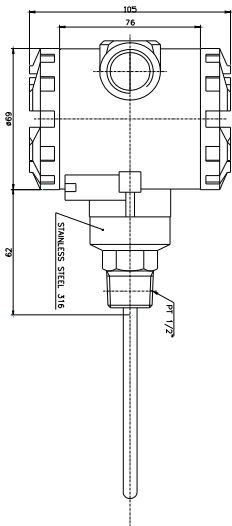
System connection for 3-wire transmitter



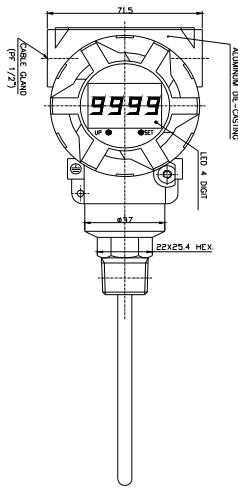
Dimension (mm)

Electrical connection

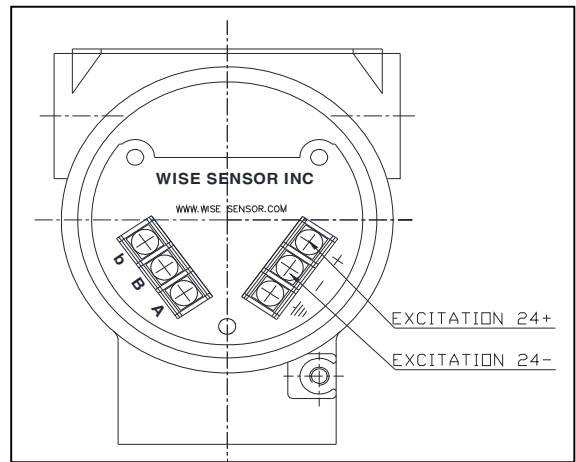
T700 Side view



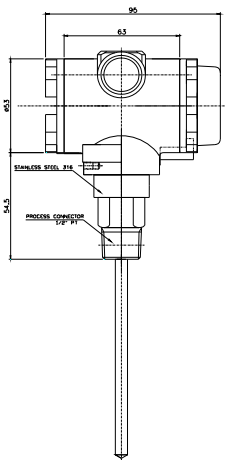
T700 Front view



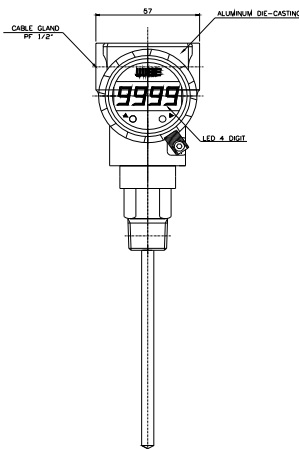
T700 Terminal view



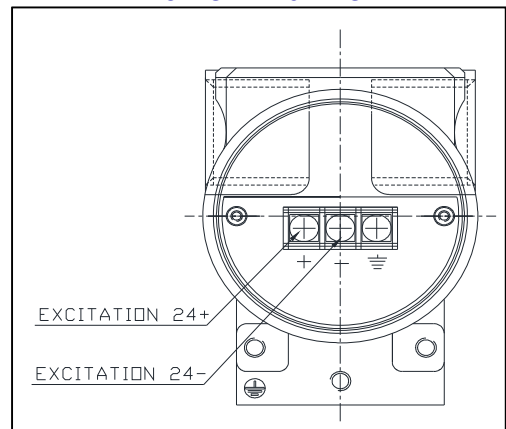
T710 Side view



T710 Front view



T710 Terminal view



Ordering Information

Explosion Proof Type Temperature Transmitter with Indicating

1. Base model

T700											Explosion Proof Standard Head
T710											Explosion Proof Miniature Head

2. Input signal

P											RTD (PT 100 Ω)
B											Thermocouple Type "B" (Only available T700)
E											Thermocouple Type "E" (Only available T700)
J											Thermocouple Type "J" (Only available T700)
K											Thermocouple Type "K" (Only available T700)
N											Thermocouple Type "N" (Only available T700)
R											Thermocouple Type "R" (Only available T700)
S											Thermocouple Type "S" (Only available T700)
T											Thermocouple Type "T" (Only available T700)
O											Other Input signal available on request

3. Process connection

M											Male thread mounted
F											Flange mounted

4. Process connection type

T											PT thread as standard
J											Flange per JIS
D											Flange per DIN
A											Flange per ANSI
X											Other process connections available on request

5. Process connection size

1											1/2"
2											1"
3											2"
X											Specify the flange unit clearly

6. Thermo-well

S											With protection thermo-well
N											Without protection thermo-well

7. Measuring range

01											-50 ~ 0 °C
02											-50 ~ 50 °C
03											-20 ~ 80 °C
04											-50 ~ 150 °C
05											0 ~ 50 °C
06											0 ~ 100 °C
07											0 ~ 150 °C
08											0 ~ 200 °C
09											0 ~ 300 °C
10											0 ~ 400 °C
11											0 ~ 500 °C
xx											Other calibration ranges available on request

8. Unit

C											Calibration in Celsius scale °C
F											Calibration in Fahrenheit scale °F

9. Output signal / Electrical connection type

A1											4~20mA, DC, 2-wire output
A2											4~20mA, DC, 4-wire output (Only available T700)
B1											1~5V, DC, 3-wire output
B2											1~5V, DC, 4-wire output (Only available T700)

10. Option

N											None options
M											2 inch pipe mounting bracket

T700	P	M	T	1	N	06	C	A1	N		Sample ordering code
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Specifications subject to change without notice