
General Type Temperature Transmitter

**Model : T990 (RTD input)
 T900 (Multi input)**

**WISE
SENSOR**

Advantages

- Two wire 4-20 mA current output signals
- RTD input (T990)
- Multi input (T900)
- Excellent accuracy and long term stability
- Low - cost

Applications

These are recommended in applications requiring amplification of signals to carry to a long distance or guard against heavy field electrical noise. The transmitter converts 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.



T990 / T900

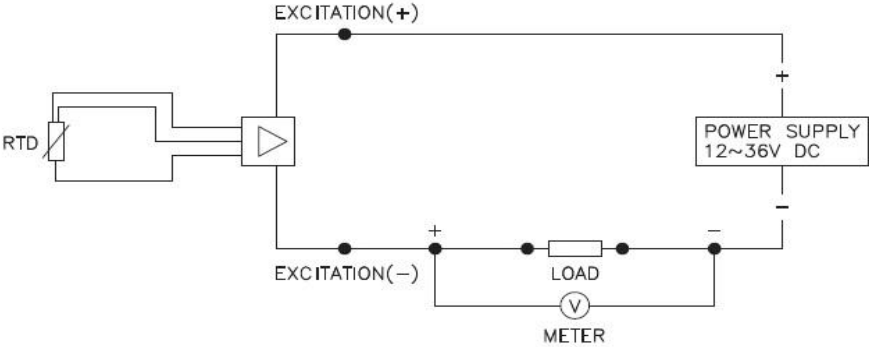
Descriptions

T9x0 series temperature transmitters are designed to fit into standard molded terminal heads used on RTD & multi input assemblies to provide a 4~20 mA transmission signal. It is a 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 4~20 mA output carried on a two-wire system. The transmitter is supplied factory calibrated, but also has zero and span potentiometers for field adjustment or calibration.

Specification

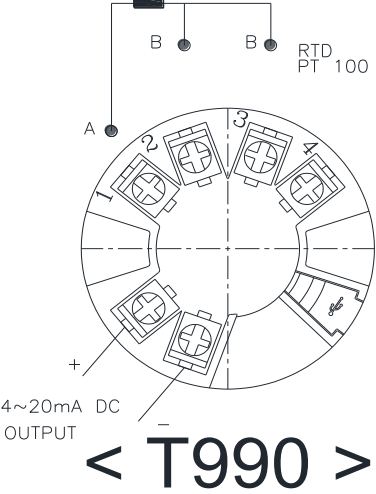
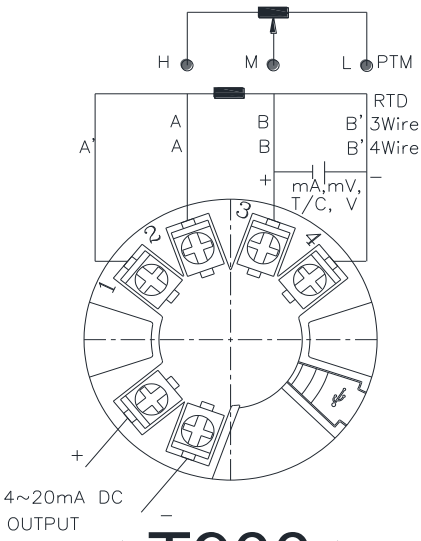
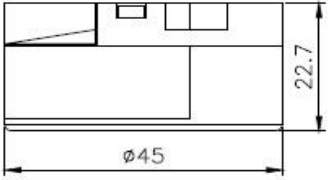
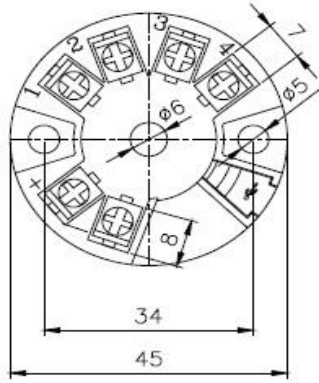
Input		
Measuring range		Pt100 ohm, JIS-C-1604-1981
		Thermocouple Type "B", 100 ~ 1820°C (Only T900)
		Thermocouple Type "E", -200 ~ 1000°C (Only T900)
		Thermocouple Type "J", -200 ~ 1200°C (Only T900)
		Thermocouple Type "K", -200 ~ 1370°C (Only T900)
		Thermocouple Type "N", -200 ~ 1300°C (Only T900)
		Thermocouple Type "R", 0 ~ 1760°C (Only T900)
		Thermocouple Type "S", 0 ~ 1760°C (Only T900)
		Thermocouple Type "T", -200 ~ 400°C (Only T900)
		mV DC, 0 ~ 999mV (Only T900)
		V DC, 0 ~ 10V (Only T900)
		mA DC, 0 ~ 30mA (Only T900)
Dedicated loader allows you to change input types and scope of use. (Only T900)		
Output		
		Current output
Electrical connection type		2-wire technique
Full scale output signal		20 mA $\pm$ 0.2%
Zero measured output		4 mA $\pm$ 0.03%
		Other output signals available on request
Electrical Specification		
Excitation voltage		18~30 V DC
Load resistance max @ 24V		500 Ω at 24V
Influence of excitation		0.01% FSO/V
Burnout		Upscale(approx. 23 mA DC) or downscale(approx. 4 mA DC)
Reverse polarity		Protected
Shock resistance		No change in performance after 10Gs for 11ms
Vibration		5 g (10 ~ 2000 Hz)
Response time(10~90%)		$\leq$ 0.5 seconds
Adjustment range		$\pm$ 15% FSO/zero and span
Performance Specification		
Accuracy		$\leq \pm 0.2\%$ 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)		± 2 kHz
Ambient temperature range		-20 ~ 70 °C
Ambient humidity limits		5 to 100% R.H
Physical Specification		
Material	Case	ABS resin
	Cover	ABS resin
Dimension		45(W) x 22.7(H) mm
Mounting		2 x M3 screw
Weight		100 g max

System connection for 2-wire transmitter



Dimension (mm)

Electrical connection



Ordering Information

Head Mounting Type Temperature Transmitter

1. Base model

T990										General temperature transmitter
T900										Multi input transmitter

2. Input signal

JP										JIS standard (JPt 100 ohm)
PT										DIN standard (Pt 100 ohm)
TB										Thermocouple Type B (Only available T900)
TE										Thermocouple Type E (Only available T900)
TJ										Thermocouple Type J (Only available T900)
TK										Thermocouple Type K (Only available T900)
TN										Thermocouple Type N (Only available T900)
TR										Thermocouple Type R (Only available T900)
TS										Thermocouple Type S (Only available T900)
TT										Thermocouple Type T (Only available T900)
MV										mV DC (Only available T900)
VV										V DC (Only available T900)
MA										mA DC (Only available T900)

3. Measuring range

10										0 ~ 100 °C
15										0 ~ 150 °C
20										0 ~ 200 °C
30										0 ~ 300 °C
50										None standard range

T990	PT	10								Sample ordering code
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Specifications subject to change without notice