
Head Mounting Type Multi input Temperature Transmitter
Model : T900 Series (Head Mounting Type)

WISE®

Advantages

- Two wire 4-20mA current output signals
- Universal input signals
 - RTD temperature sensor
 - T/C elements
 - mV, V, mA, DC signals
- Programmable function setting
 - Input signal type
 - Measuring range
 - Burnout Low/High setting
 - mA output offset
 - mA Calibration
- Excellent accuracy and a long term stability
- Low cost effective
- Miniature design



Applications

Applications for requiring an amplification of various signals to carry to a long distance or guard against heavy field electrical noise. Loader of the user can select and use a wide variety of separate inputs. For a direct interface with indicators, recorders, Controllers, PLC and DCS systems can be used for a wide range of applications in it's process control, automatic machinery and hydraulic or pneumatic system design.

Descriptions

T900 series temperature transmitters are designed to fit into a standard molded terminal heads used on RTD and Thermocouple assemblies to provide a 4~20mA transmission signals. It is a cost effective solution for all temperature measuring process. It is accurate, durable, and reliable. Numerous configurations for measurement in many deferent mediums are offered. Generally the transmitter produces a linear 4~20mA output carried on a two-wire system. The transmitter is supplied factory calibrated, but also has zero and span potentiometers for a field adjustment.

Specification

Input		
Temperature Sensor Type	See table "Sensor Type, Range and Accuracy"	
Signal source	See table "Sensor Type, Range and Accuracy"	
Output		
Current output	4 ~ 20 mA loop powered	
Electrical connection type	2-wire technique	
Full scale output signal	20mA \pm 0.2%	
Zero measured output	4mA \pm 0.03%	
Sensor Burnout	High (20.5mA DC) or Low (3.9mA)	
Electrical Specification		
Excitation voltage	15 ~ 30V DC (Noise range:20mVp-p)	
Load resistance max	600 Ω with 24V	
Influence of excitation	0.01% FSO/V	
Reverse polarity	Protected	
Shock resistance	No change in performance after 20Gs	
Vibration	0.1g max.	
Response time (10~90%)	\pm 500 mSec.	
Adjustment range	Free	
Performance Specification		
Accuracy	\pm 0.2% FSO	
Non-linearity	Better than \pm 0.10% FSO	
Repeatability	Better than \pm 0.05% FSO	
Long term stability	Better than \pm 0.05% FSO per month	
Cutoff frequency	\pm 1kHz	
Ambient temperature limits	-10 ~ 70 $^{\circ}$ C	
Ambient humidity limits	10 to 90% RH	
Physical Specification		
Material	Case	ABS resin
	Cover	ABS resin
Dimension	45(W) x 45(H) x 22.7(D) mm	
Mounting	2 x M3 Screw	
Weight	100g max.	
Options	Multi Type Program Loader	

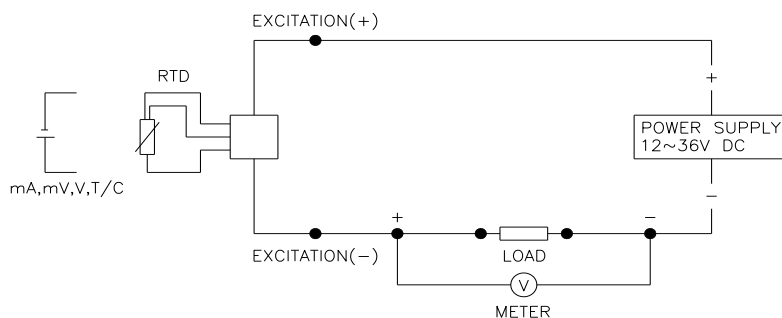
Sensor Type, Range, Accuracy

Resistance Temperature Detector(RTD)				
Input	Measuring range	Min. measured span	Calibration range	Analog Output (mA) Error
PT100	-200 to 850 $^{\circ}$ C	10 $^{\circ}$ C	-200 to 850 $^{\circ}$ C	0.2% of span
JPT100	-200 to 650 $^{\circ}$ C	10 $^{\circ}$ C	-200 to 650 $^{\circ}$ C	

Specification

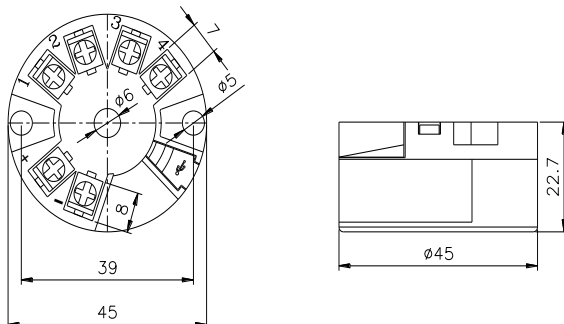
Thermocouple Elements(T/C)				
Input	Measuring range	Min. measured span	Calibration range	Analog Output (mA) Error
Type B	100 to 1820 °C	300 °C	100 to 400 °C	0.2% of span
		100 °C	400 to 1820 °C	
Type E	-200 to 1000 °C	50 °C	-200 to 1000 °C	
Type J	-200 to 1200 °C	50 °C	-200 to 1200 °C	
Type K	-200 to 1370 °C	50 °C	-200 to 1370 °C	
Type N	-200 to 1300 °C	50 °C	-200 to 1300 °C	
Type R	0 to 1760 °C	100 °C	0 to 1760 °C	
Type S	0 to 1760 °C	100 °C	0 to 1760 °C	
Type T	-200 to 400 °C	40 °C	-200 to 400 °C	
mV, V, mA Sensor				
Input	Measuring range	Min. measured span	Calibration range	Analog Output (mA) Error
mV	0 to 999 mV	2 mV	0 to 999 mV	0.2% of span
V	0 to 10 V	1 V	0 to 10 V	
mA	0 to 30 mA	4 mA	0 to 30 mA	
	Input resistor : 250 Ω (External)			

System connection for 2-wire transmitter

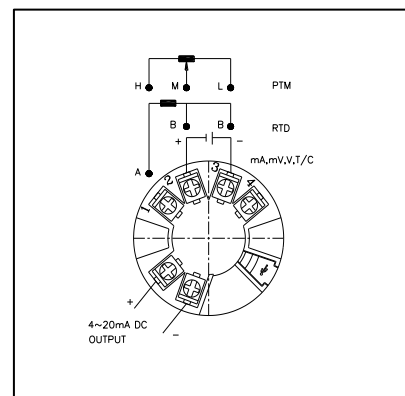


Dimension (mm)

Transmitter



Electrical connection



Ordering Information

Programmable Temperature Transmitter

T900							Head Mounting Type Multi input 2Wire Transmitter
	N						Normal Input (Standard)
	O						Order Input
		PT					Input signal RTD PT 100 Ω
		JP					JPT 100 Ω
		TR					R type
		TK					K type
		TE					E type
		TJ					J type
		TT					T type
		TB					B type
		TS					S type
		TN					N type
		mV					mV Input
		mA					mA Input
		DV					Voltage Input
			01				-50 ~ 0 °C
			02				-50 ~ 50 °C
			03				-20 ~ 80 °C
			04				-50 ~ 150 °C
			05				0 ~ 100 °C
			06				0 ~ 200 °C
			07				0 ~ 300 °C
			08				0 ~ 400 °C
			09				0 ~ 500 °C
			10				0 ~ 600 °C
			11				0 ~ 700 °C
			12				0 ~ 800 °C
			13				0 ~ 900 °C
			14				0 ~ 1000 °C
			XX				Other calibration ranges available on request
				C			Calibration in Celsius scale °C
				F			Calibration in Fahrenheit scale °F
					C		DC 4 ~ 20 mA current
					V		DC 1 ~ 5 V Voltage
					N		Non-output
					X		Other signal available on request
					N		Non option
					L		Multi Type Program Loader

T900	N	PT	01	C	C	N	Sample ordering code
------	---	----	----	---	---	---	----------------------