
Temperature Transmitter

Model : T156

WISE®

Advantages

- Two wire 4 ~ 20mA Loop powered design
- Resistance Temperature Detector
- Measuring ranges from -50°C to 400°C
- Electrical connection DIN connector
- Excellent accuracy and long term stability

Applications

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

- Industrial temperature measurement
- Power transmission engineering, hydraulics
- Machine building, plant and tank construction



T156

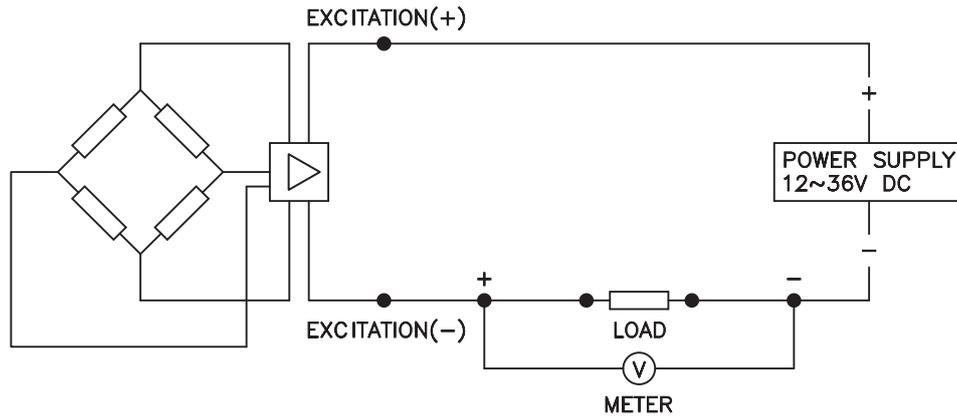
Descriptions

T156 series temperature transmitters are designed to fit into standard DIN connectors and used on RTD assemblies to provide a 4~20mA 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 4~20mA 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.

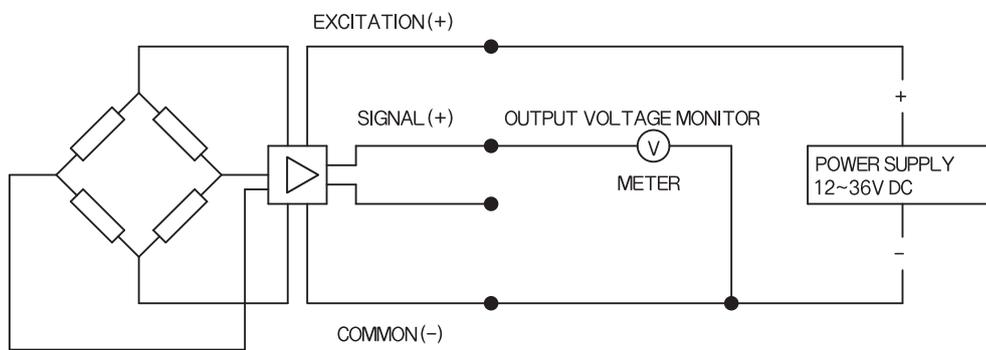
Specification

Input				
Measuring range	PT100 ohm			
	JPT100 ohm			
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 signal 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			
Burnout	Upscale(approx. 23mA DC) or downscale(approx. 4mA DC)			
Reverse polarity	Protected			
Shock resistance	No change in performance after 10Gs for 11ms			
Vibration	5g (10~2000Hz)			
Adjustment range	±20% FSO/zero and span			
Response time(10~90%)	±2 milliseconds			
Performance Specification				
Accuracy	±0.25% 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	-20~85°C			
Ambient operating humidity	5~100% RH			
Physical Specification				
Process connection	PT, NPT male thread			
	Other connections available on request			
Process media	Gases and liquids compatible with stainless steel 316			
Materials wetted by process	Stainless steel 316 and others available on request			
Enclosure rating	IP65			
Influence of mounting position	Not critical			
Option	Protection well			
Note				

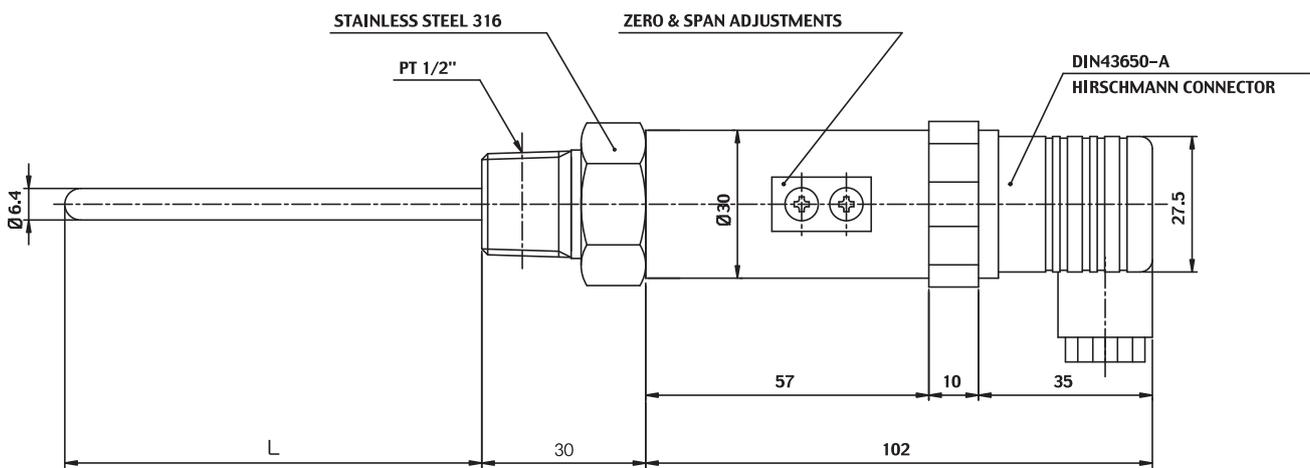
System connection for 2-wire transmitter



System connection for 3-wire transmitter



Dimension(mm)



* L : Sheath Length(mm)

Ordering Information

Temperature Transmitter

T156										DIN Connector	
	PT									Input signal RTD	PT 100 Ω
	JP									Process connection	JPT 100 Ω
		N									NPT thread
		P									PT thread
		G									G thread
		X									Non thread
			1							Thread size	1/4"
			2								3/8"
			3								1/2"
				N						None	
				C						Compression fitting	
				S						With protection thermo-well	
					1					Sheath length	25mm
					2						50mm
					3						75mm
					4						100mm
					5						160mm
					6						200mm
					7						250mm
					8						300mm
					9						400mm
					X					Other length available on request	
					01					Measuring range	-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
					xx					Other calibration ranges available on request	
						C				Calibration in Celsius scale°C	
						F				Calibration in Fahrenheit scale°F	
							A1			4~20mA, DC, 2-wire output	
							A2			4~20mA, DC, 4-wire output	
							B1			1~5V, DC, 3-wire output	
							B2			0~5V, DC, 3-wire output	
							B3			0~10V, DC, 3-wire output	
								N		Non-option	
								W		Weather protection rating IP67	

T156	PT	G	3	S	2	05	C	A1	N	Sample ordering code
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Specifications subject to change without notice