

Temperature Sensor



- Suitable for small pipe diameters and confined spaces
- Fast response time
- Different probe diameter and length optional



NEW!

Basic Features	Working principle	Non-contact temperature sensor				
	Housing	Cylindrical				
	Measurement range	-20°C~300°C	0°C~100°C	0°C~500°C	0°C~600°C	0°C~800°C
	Spectral range	8~14um				
	Resolution	1°C				
	Optical resolution	20:1				
	Emissivity	0.95				
Electrical data	Temperature accuracy	± 2% of measured value				
	Repeatability	± 1% of measured value				
	Response time	300ms				
	Operating voltage	12~24V DC				
	Current consumption	Current output series: ≤20mA; Voltage output series: ≤8mA				
	Analog output	Current output: 4~20mA; Voltage output: V1: 0~5V				
Environmental conditions	Operating temperature	0°C~60°C				
	Storage temperature	-20°C~80°C				
	Operating humidity	10-95%(Non-condensing)				
	Enclosure rating	IP65				
Mechanical data	Connection method	2m/4-core cable				
	Dimensions	M18x26.51mm				
	Material	Stainless steel				
	Weight	about 122g				
	Accessories	Nut				
Model		TTS-20300A	TTS-100A	TTS-500A	TTS-600A	TTS-800A
		TTS-20300V1	TTS-100V1	TTS-500V1	TTS-600V1	TTS-800V1

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- AI Image
- Code Readers
- Vibration
- Temperature**
- RFID
- Safety door lock
- Pressure Switch
- Communication
- Accessories

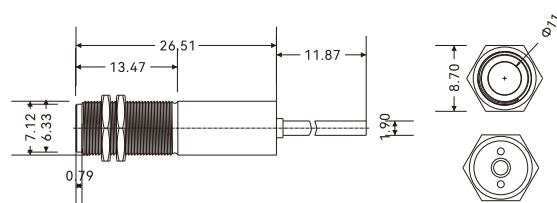
Guidance
Temperature Sensor

Circuit Diagram

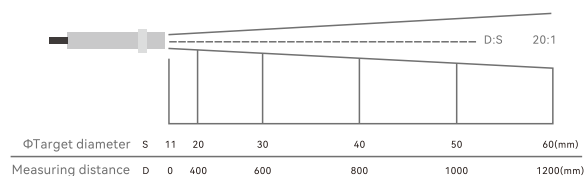
Current output 4~20mA	Red	Power supply (+)
	Blue	Signal output (+)
	Black	Common-
	Orange	Common-
	Transparent	Laser illumination control line
Voltage output 0~5V 0~10V	Transparent	Shielded
	Red	Power supply (+)
	Black	Common-
	White	Voltage output (+)
	Blue	Common-
Transparent	Shielded	

Dimensions

Unit: mm



Optical path diagram



D:S=20:1

Temperature Sensor

TSP Series

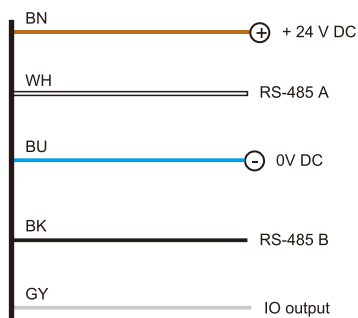


Basic Features	Working principle	Contact temperature sensor	
	Housing	Cylindrical	
	Measurement range	-30°C~150°C	
	Measurement element	1×Pt 1000	
	Medium	Liquid and gas mediums	
	Resolution	0.1°C	
Electrical data	Output mode	NPN or PNP collector open	
	Temperature accuracy	± 0.5%(FS)	
	Response time	<3 (s)/<8 (s)	
	Operating voltage	10~30V DC	
	Current consumption	<25mA	
	Load current	< 150mA	
	Protection circuit	Reverse polarity protection/surge protection/short circuit protection	
	Static electricity	± 4000V	
	Communication protocol	ModBus RTU	
Environmental conditions	Communication interface	RS-485	
	Operating temperature	Operating temperature: -25°C~80°C, Storage temperature: -20°C~70°C	
	Operating humidity	35~90%RH, Storage: 35~90%RH	
	Dielectric strength	±1000V 50/60Hz 60s	
	Vibration resistance	10 to 55 Hz, 1.5 mm amplitude, 2 hours for each X, Y, and Z directions	
	Enclosure rating	IP67	
Mechanical data	Probe diameter	6mm	
	Probe length	25mm	100mm
	Connection method	5-core cable	
	Dimension	M18x108mm	M18x183mm
	Material	Stainless steel 316L	
	Weight	about 122g	
	Accessories	Nut	
Model	TSP-30150D-25	TSP-30150D-100	

Guidance

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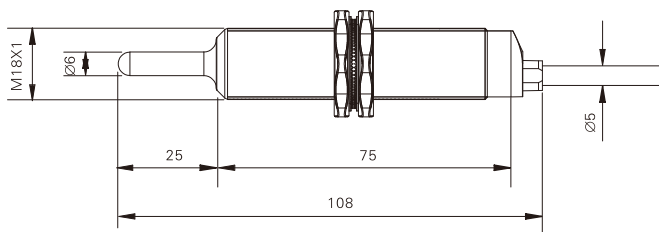
Circuit Diagram



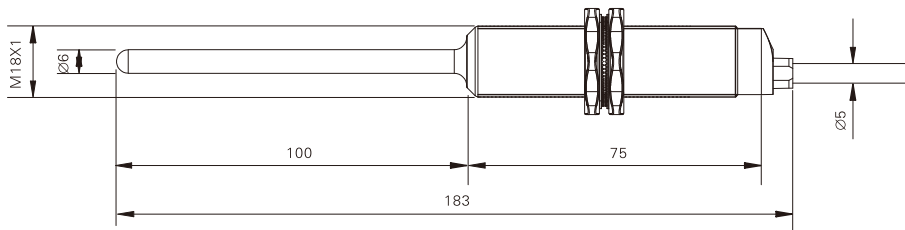
Dimensions

Unit: mm

TSP-30150D-25



TSP-30150D-100



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