MT1200 Platinum Thermistor Temperature Transmitter (gas/liquid/solid measurement)

MAIN FEATURES

- High precision cold end compensation circuit, absolute error of full temperature range ± 0.5° C;
- High flexibility: a variety of process connection forms and extension neck types
- High precision measurement: use PT100 temperature sensor conforming to IEC 60751 (Class A or higher);
- Sealed with epoxy resin, shock and humidity resistant, suitable for bad environment;
- Advanced nonlinear correction circuit, linear output signal with measured temperature;
- Built in drift self-tuning system to ensure the accuracy in the whole temperature measurement range;
- Unique anti dry circuit design, packing and sending device can work safely and reliably in the interference environment;
- Pressure spring type vibration resistance, proximity measurement design optional, good stability, high precision.

OVERVIEW

MT1200 series integrated platinum thermistor temperature transmitter is composed of imported thermistor and integrated amplifier circuit. Platinum thermistor temperature amplifier is composed of reference unit, R/V conversion unit, linear circuit, reverse protection, current limiting protection, V/I conversion unit, etc. After the thermo resistance signal is converted and amplified by the amplifier, the non-linear relationship between temperature and resistance is compensated by the linear circuit. After the V/I conversion circuit, a two-wire system 4-20mA current signal or a three wire system 1-10V voltage signal with a linear relationship with the measured temperature is output; The transmitter features stable performance, small volume, light weight, high frequency response, and convenient installation, which is widely used in petroleum, chemical industry, thermoelectricity, metallurgy, machinery, food and medical industry and scientific research fields.

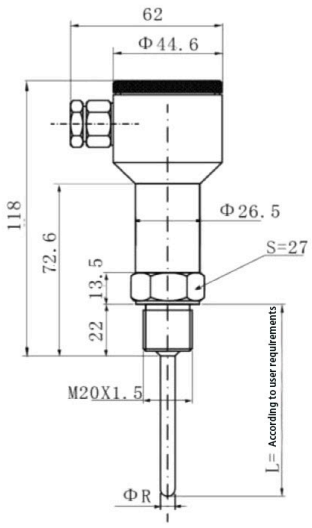
SPECIFICATION

Range	-200 ° C ~ 500 ° C
Accuracy	±0.1% F.S, ±0.2% F.S, ±0.5% F.S
Measuring medium	Liquid gas vapor solid surface
Working voltage	12 - 36VDC (Default 24VDC)
Insulation resistance	≥100MΩ/10-100VAC
Lead cable wire	two-wire system, three-wire system, four-wire system
Protective tube material	304 316L 1Cr18Ni9Ti
Response time	Φ10 t < 15s,Φ 8 t < 12 s,Φ6t < 10s, Φ3t < 3s
Probe outer diameter	Min.3mm max. 100mm
Insertion depth	10 mm - 2000 mm
Temperature drift	0.05%F.S/° C
Process connection	Thread, flange, chuck or other customized
Output signal	4-20mA 0-10VDC PT100 RS485
Protection level	IP65 Standard), IP66 (Custom)
Explosion-proof	ExdIICT6

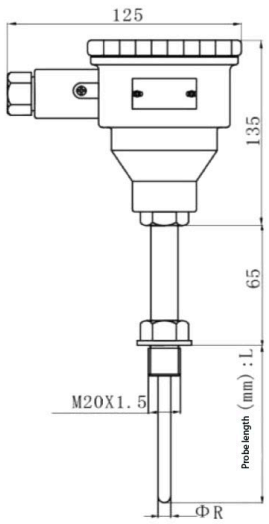
E-mail: info@cdsentec.com www.cdsentec.com

© ChengDu SenTec Technology Co., Ltd.
Information is deemed correct at issue and subject to change without prior notice.

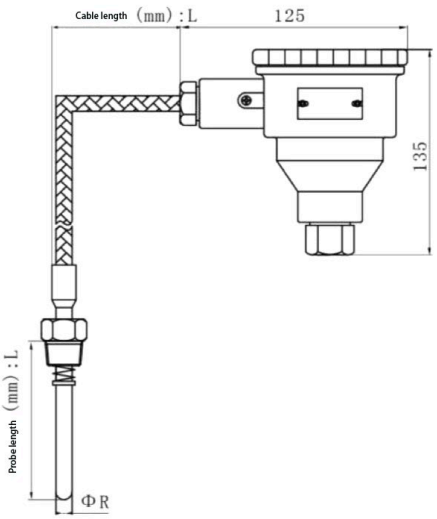
TYPICAL MODEL TYPE



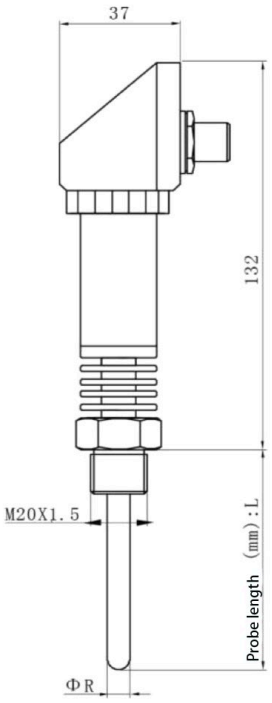
MT1201

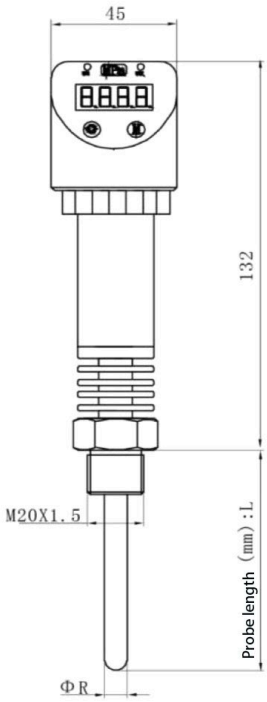


MT1202

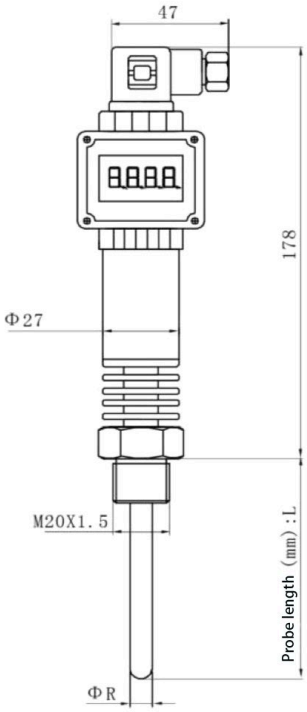


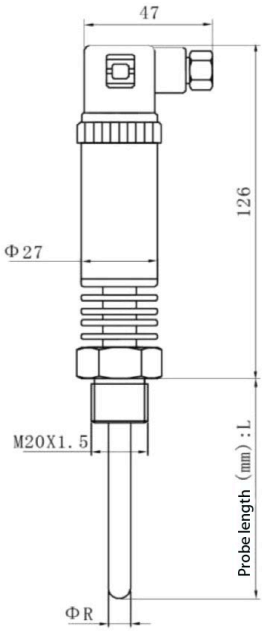
MT1203





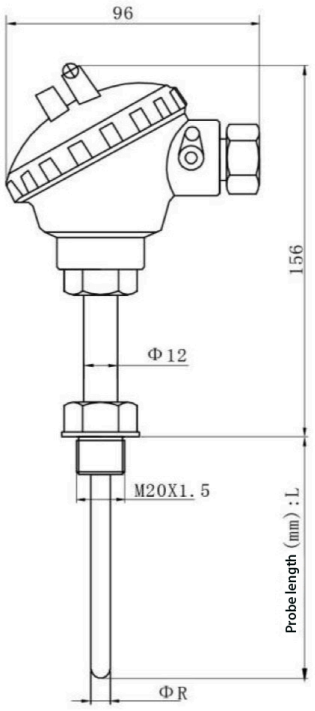
MT1204

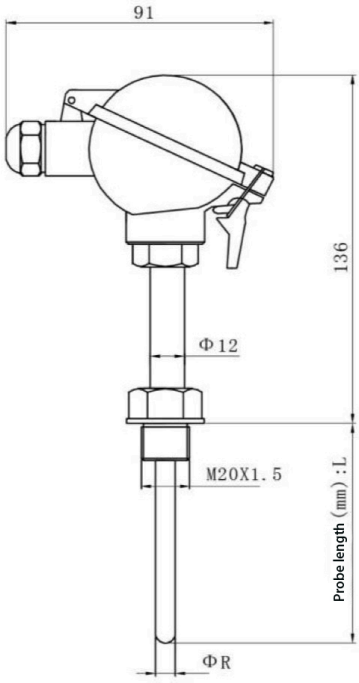




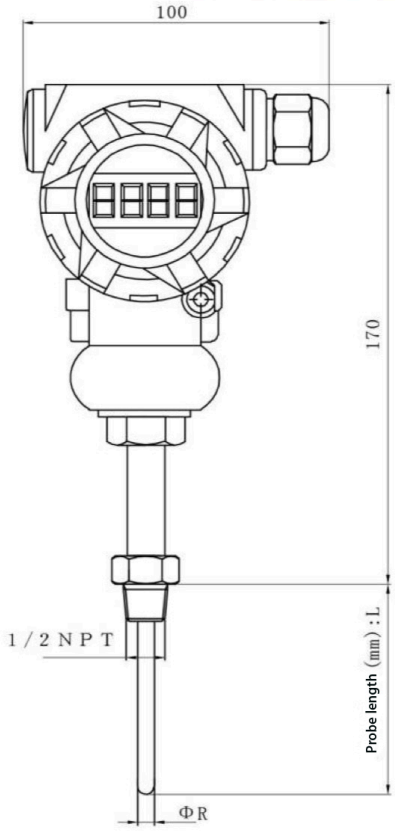
MT1205

© ChengDu SenTec Technology Co., Ltd.
Information is deemed correct at issue and subject to change without prior notice.





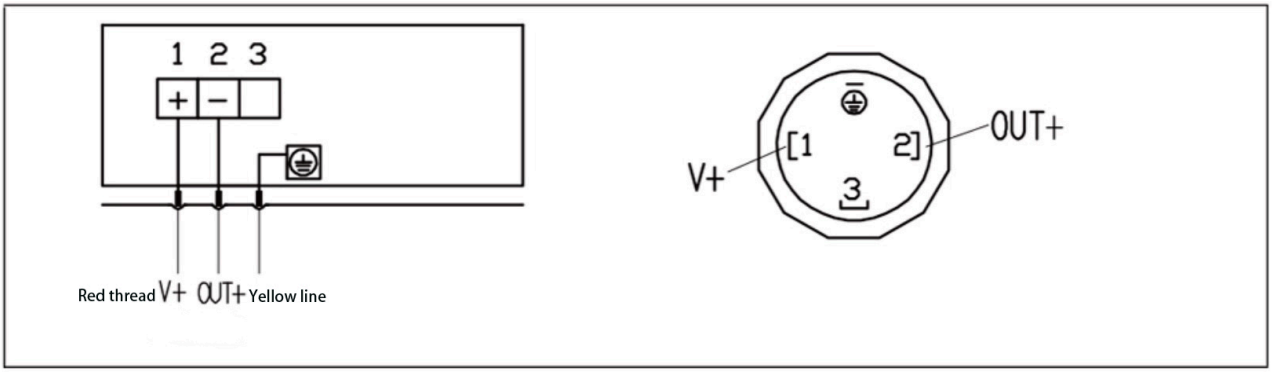
MT1206



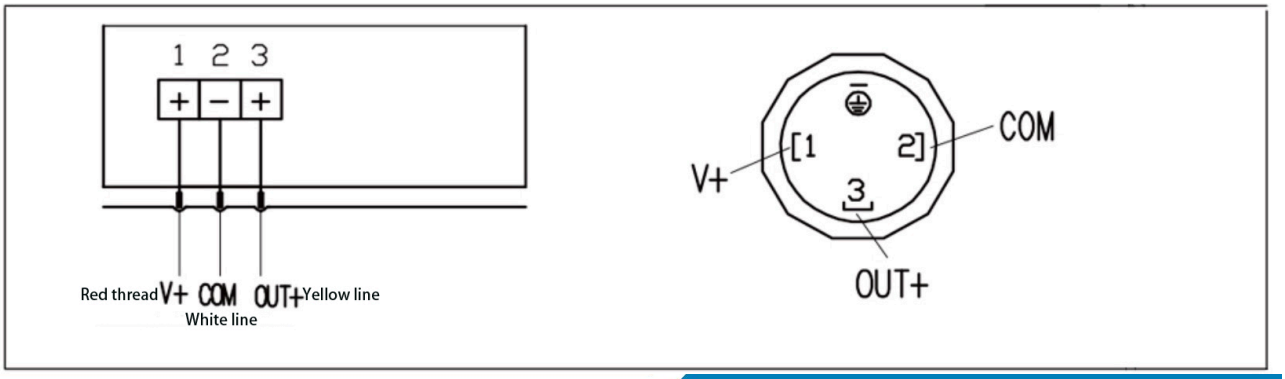
MT1207

ELECTRIC CONNECTION

Wiring diagram of two wire current signal of route plug

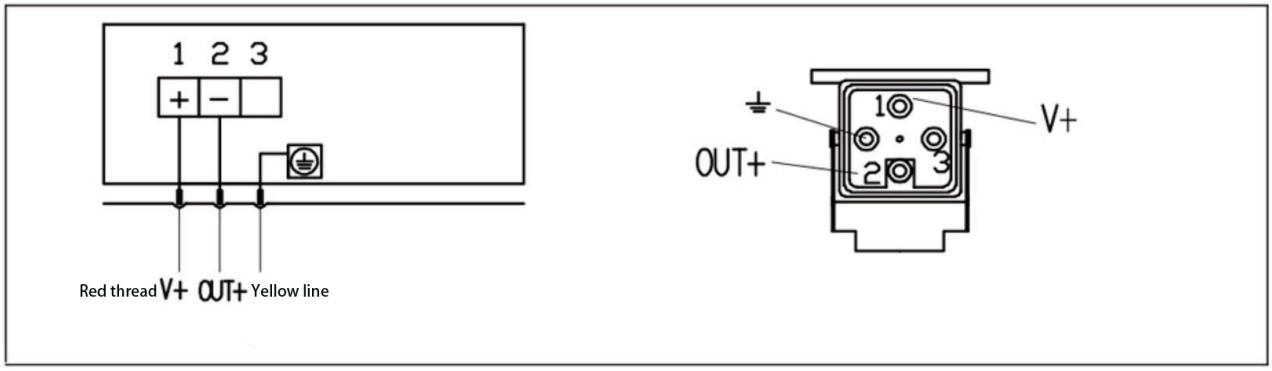


Wiring diagram of three wire current signal of route plug

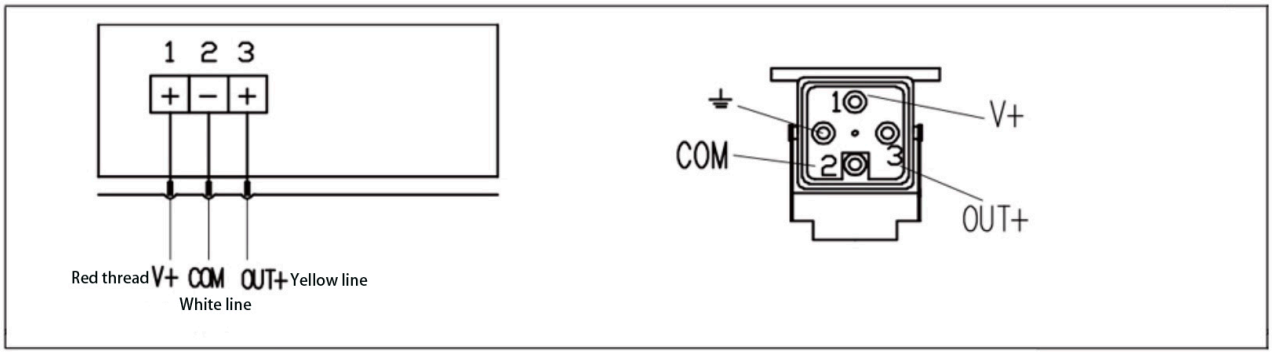


© ChengDu SenTec Technology Co., Ltd.
Information is deemed correct at issue and subject to change without prior notice.

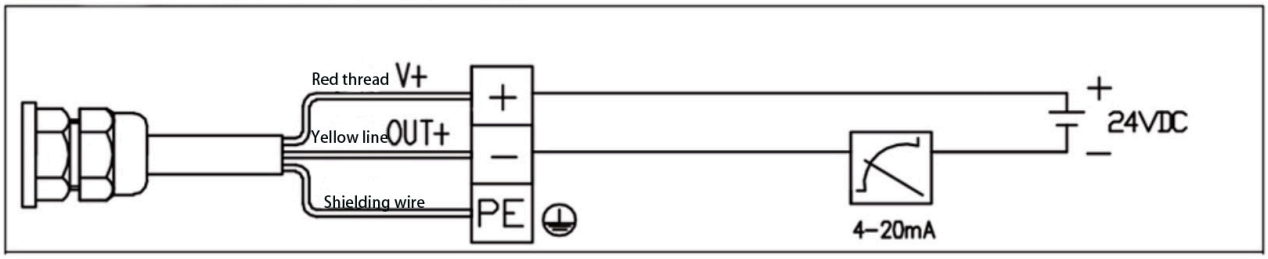
Two wire current signal wiring diagram of hesman connector



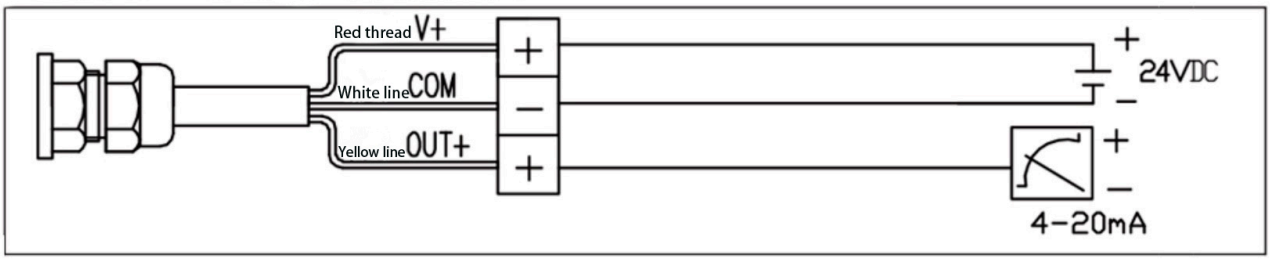
Three wire current signal wiring diagram of hesman connector



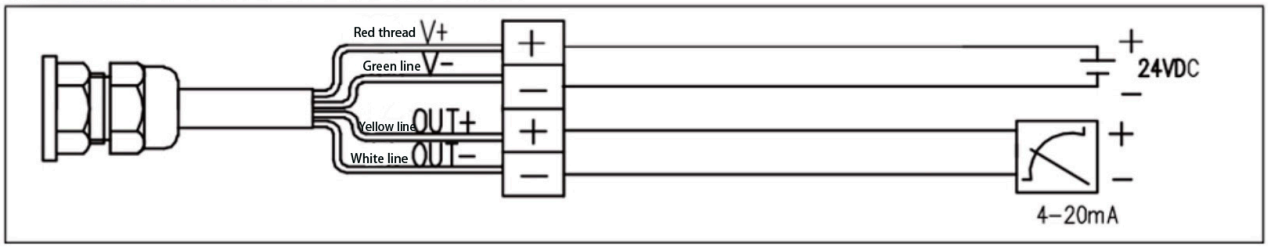
Wiring diagram of direct lead two wire system current signal



Wiring diagram of direct lead three wire voltage signal



Wiring diagram of direct lead four wire voltage signal



© ChengDu SenTec Technology Co., Ltd.
Information is deemed correct at issue and subject to change without prior notice.

ORDER CODE

MT1203	Temperature transmitter							
	CODE	Electrical form model type						
	A	Direct lead						
	B	M12 waterproof joint						
	C	Aerial connector						
	D	Hesman connector						
	E	Cast aluminum junction box						
	F	Cast aluminum explosion-proof junction box						
	G	All stainless steel explosion-proof junction box						
	H	Intelligent integrated (explosion-proof) junction box						
		CODE	Resistance form					
		R	Single branch 1 * PT100					
		S	Double branch 2 * PT100					
			CODE	Installation mode				
			P	Fixed thread (M20 * 1.5 as standard)				
			M	Movable ferrule thread (M20 * 1.5 as standard)				
			S	Spring loaded thread (M20 * 1.5 as standard)				
			C	Sanitary chuck (standard chuck outer diameter 50.5mm)				
			F	Flange (standard DN25)				
			N	No fixed installation				
			T	Surface mount type (standard thread M4)				
				CODE	Display			
				1	Square display			
				2	Inclined display			
				3	Bevel display controller			
				4	Cast aluminum case with display			
				0	No display			
					CODE	Signal output		
					A	PT100 A class (± 0.15° C)		
					B	4~20mA		
					C	RS485		
					D	0~10V		
						CODE	Accuracy	
						1	±0.1% F.S	
						2	±0.2% F.S	
						3	±0.5% F.S	
							CODE	Probe diameter & length
							C	Customized according to request
MT1203	A	S	S	1	B	2	C	Length:100mm, Diameter: 8mm

© ChengDu SenTec Technology Co., Ltd.
Information is deemed correct at issue and subject to change without prior notice.