HTM208 explosion-proof temperature transmitter

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Product Overview

HTM208 explosion-proof digital temperature transmitter uses PT100 or thermocouples as the signal measurement component. Highly reliable integrated circuit, specially developed for 4-20mA temperature transmitter, on-site display, simultaneous output of 4-20mADC, supports RS485 communication or HART communication and other remote signal transmission

The entire product has undergone rigorous testing and aging of components, semi-finished products and finished products. With its excellent reliability, wide adaptability, product flexibility and diversity, this product is widely used in on-site temperature measurement and control of industrial processes such as petroleum, chemical industry, metallurgy, electric power, hydrology, etc.

Features

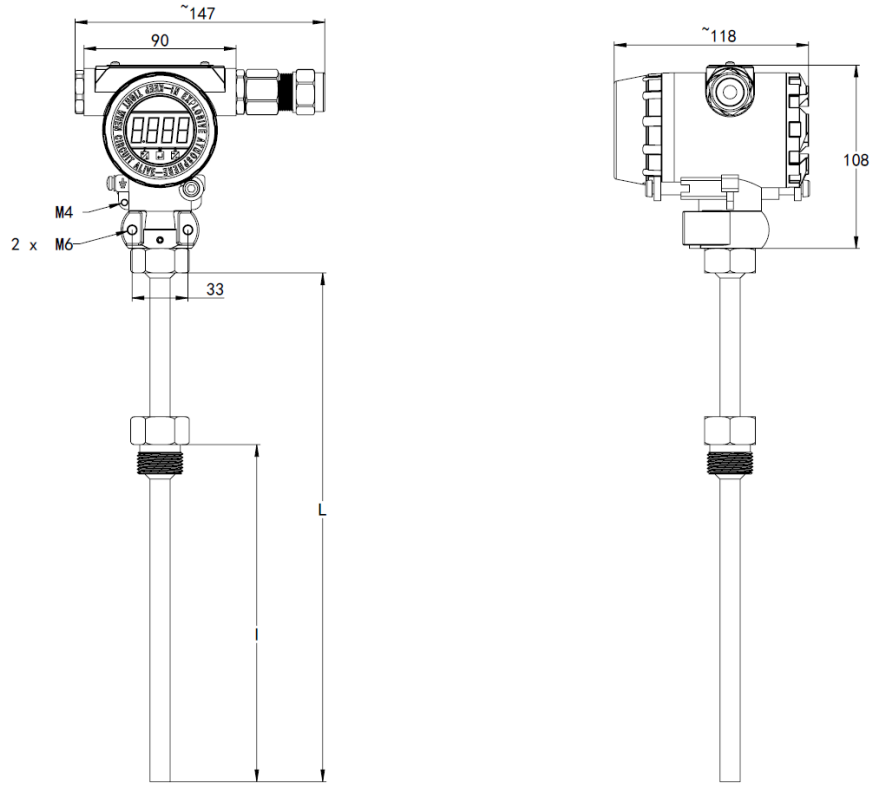
- Electronic housing is made of aluminum alloy, and the housing protection level is IP66
- Reverse polarity protection and instantaneous overcurrent and overvoltage protection measures, strong anti-interference, and good long-term stability
- High precision and good stability
- Reliable circuit and fast response speed

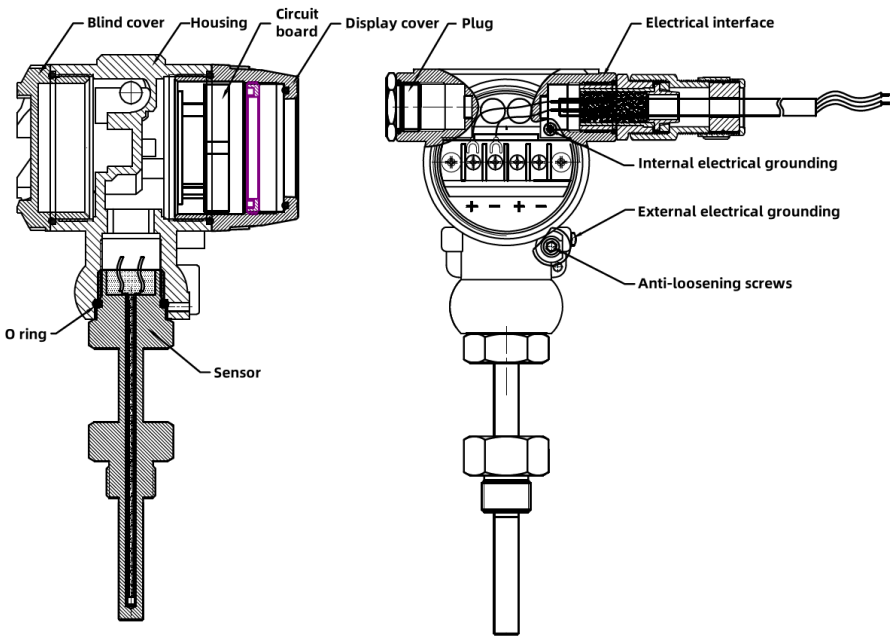
Technical Parameters

Measuring Temperature Range	-196…0~100…1500℃
Measuring Medium	various liquid, gas, or steam compatible with 304 or 316L stainless steel
Sensor	PT100, thermocouple, etc.
Accuracy	±0.5%FS
Long-term Stability	±0.2%FS/year
Insertion Depth	customization
Installment Thread	customization
Operation Temperature	-40~85℃(Normal model); -40~60℃(Explosion-proof model)
Storage Temperature	-40~85℃
Supply Voltage	DC12~28V (Normal model). DC12~26V (Explosion-proof model)
Output Signal	2-wire 4~20mADC， or RS485, switch signal etc
Allowable load resistance	0~600Ω (DC 24V, including cable resistance)
Protection Grade	IP65
Electrical Connection	Cables with cable gland
Working environment humidity	no more than 90% (+25℃)
Working altitude	no more than 2000m
Working atmospheric pressure	86~106Kpa

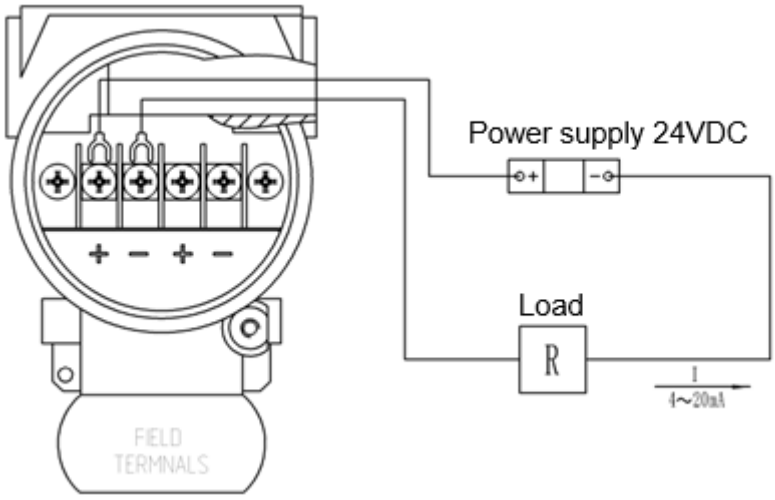
Explosion-proof	Ex db IIC T6 Gb Ex tb IIIC T80℃ Db ● Zone 1 and Zone 2 locations where explosive mixtures of Class IIA, IIB, IIC, and Group T1 to T6 combustible gases, steam, and air exist ● In an environment with explosive dust

Structure Drawings (Unit: mm)





Electrical Connection



On-site installation

◆ This product adopts thread installation, the typical thread is M20X1.5, and G1/2, M27X2 and other threads are optional; in addition, there are chuck, flange and other installation methods available.

◆ Check the explosion-proof housing cover before installation to ensure that it is tightened;

◆ Use a wrench to clamp it on the hexagon of the transmitter during installation. It is best to connect it to the measuring pipeline through a valve. The internal and external grounding screws must be reliably grounded.

◆ After the cable is connected to the terminal, the anti-loosening workpieces at both ends of the front and rear covers are tilted at a certain angle, and the anti-loosening screws are tightened. When the product is installed and used, the free end of the cable should be connected to an explosion-proof device that is suitable for the environment.

Precautions for Explosion-proof Model Usage

◆ The transmitter housing should be reliably grounded when in use;

◆ The operating environment temperature range of explosion-proof products is -40℃～+60℃;

◆ When using explosion-proof products on site, the principle of "opening the cover after power off" must be followed during maintenance;

◆ Users are not allowed to replace the product's electrical components and system connection status at will.

◆ The installation, use and maintenance of the product should also comply with the product instruction manual.

Ordering Guide

Model	Type								
HTM208	HTM208 digital temperature transmitter								
	Code	Installation							
	LW-G	Threaded installation							
	FL-G	Flange installation							
	KP	Clamp installation							
		Range	Measuring Range						
		(0 ~ X) ℃	Fill X directly						
			Code	Output singnal					
			B1	(4 ~ 20)mA					
			B7	RS485					
			B8	HART					
				code	Installation form				
				1	Fixed				
				2	Movable				
					Code	Process Connection			
					P1	M20×1.5			
					P4	G1/2			
					P17	M27×2			
					P22	M16×1.5			
					K1	1.5" clamp			
					K2	2" clamp			
					F20	DN20			
					F50	DN50			
						Code	Electronical Connection		
						C2	Cable		
							Code	Sensor type	
							P	PT100	
							K	K index thermocouple	
							S	S index thermocouple	
								Code	Others
								d	Exd IIC T6 Gb
								f	Ex tb IIIC T80℃ Db
								I	I=insertion depth(mm)
								L	L=Total length of protective tube(mm)
								ϕ	ϕ=Protection tube diameter(mm)
								F	Special anti-corrosion requirements
HTM208	LW-G	(0~300) ℃	B1	1	P1	C2	P	d I=200 L=350 ϕ=12	

Certification Information

Factory certification	
Certification organization	CQM
Quality management system	ISO 9001:2015
Certification scope	Research, development and manufacture of pressure transmitter and temperature transmitter
Certificate No.	00223Q21711R1S