

HTM108 Compact Temperature Transmitter



Nanjing Hangjia Electronic Technology Co., Ltd.

Overview

The HTM108 compact temperature transmitter uses high-quality, high-stability PT100 or PT1000 sensors as sensing elements, coupled with dedicated electronic conditioning circuitry, and is assembled and manufactured through a rigorous process. This product features an all-stainless-steel exterior, multiple electrical wiring options, and various output signals.

With its excellent reliability, wide adaptability, flexibility, and versatility, this product is widely used for on-site temperature measurement and control in industrial processes such as automated machinery, petroleum, chemical, metallurgy, and hydrology.

Features

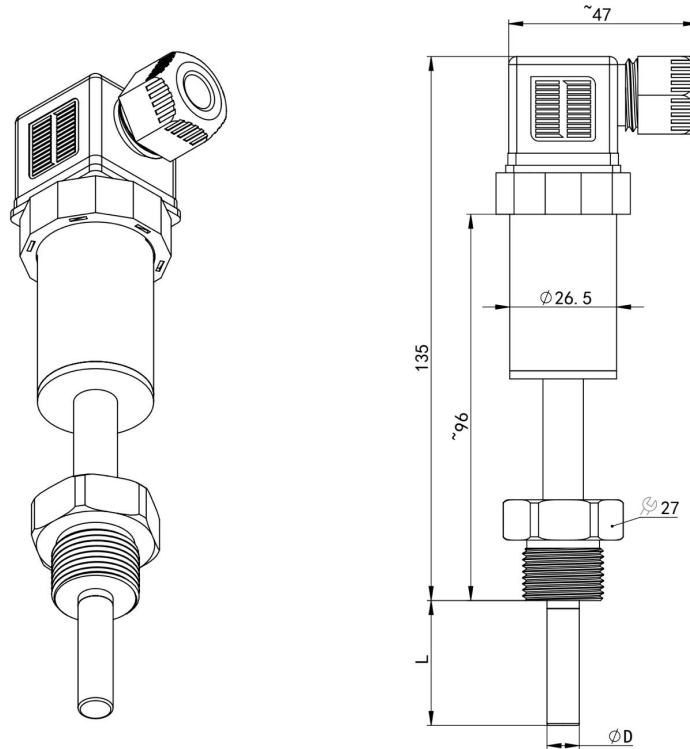
- ◆ Compact size, easy to install
- ◆ Suitable for temperature measurement of fluid media
- ◆ Shock-resistant, vibration-resistant, and corrosion-resistant
- ◆ Customization available

Technical Parameters

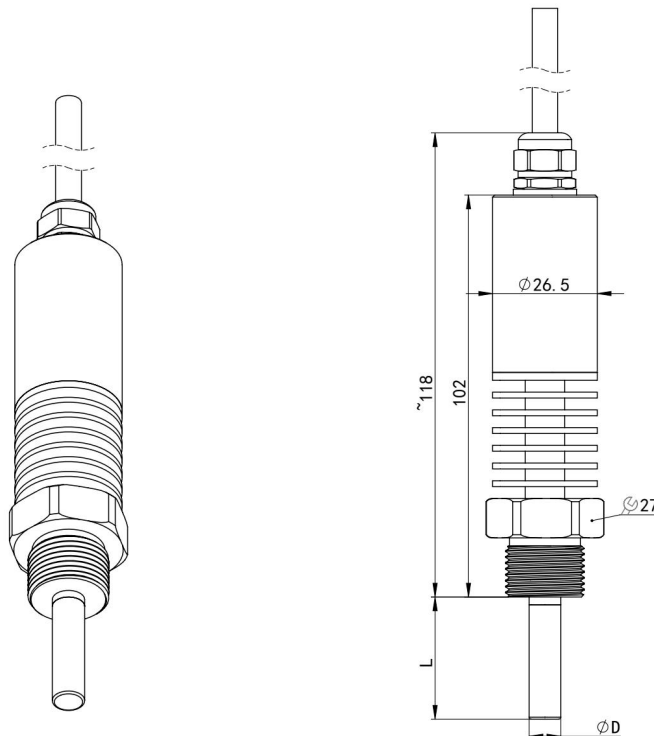
Temperature Range	-50...0~50...500℃
Measuring Medium	Various liquids compatible with contact materials
Stem Length	Length L is customizable, L≤3m
Cold End	T≤100℃: No cold end T>100℃: Requires heat sink or cold end structure; the number of heat sinks and the length of the cold end depend on the temperature.
Output Signal/Power supply	● 2-wire 4~20mA/ Vs=8~30V ● 2-wire 4~20mA +HART/ Vs=12~32V ● 3-wire 0~5V /Vs=8.5~30V or Vs=3.1~8V (Needs to be higher than the maximum output voltage of 0.4V at the same time) ● 3-wire 0~10V / Vs=12~30V ● 4-wire Modbus-RTU/RS485 / Vs=10~30V ● 2-wire one or two way relays / Vs=18~30V
Accuracy	±0.5℃ (-50℃≤range≤100℃) ±1.0℃ (-50℃≤range≤300℃) ±3.0℃ (-50℃≤range≤500℃) Other precision levels are customizable.
Ambient Temperature	-40~85℃
Storage Temperature	-40~85℃
Reverse polarity protection	No damage. Product will not work.
Protection grade	IP65
Insulation resistance	>100MΩ @500VDC
Insulation strength	Apply 500VAC 50Hz test voltage, no breakdown or arcing for 1 minute.

Structure Drawings (Unit: mm)

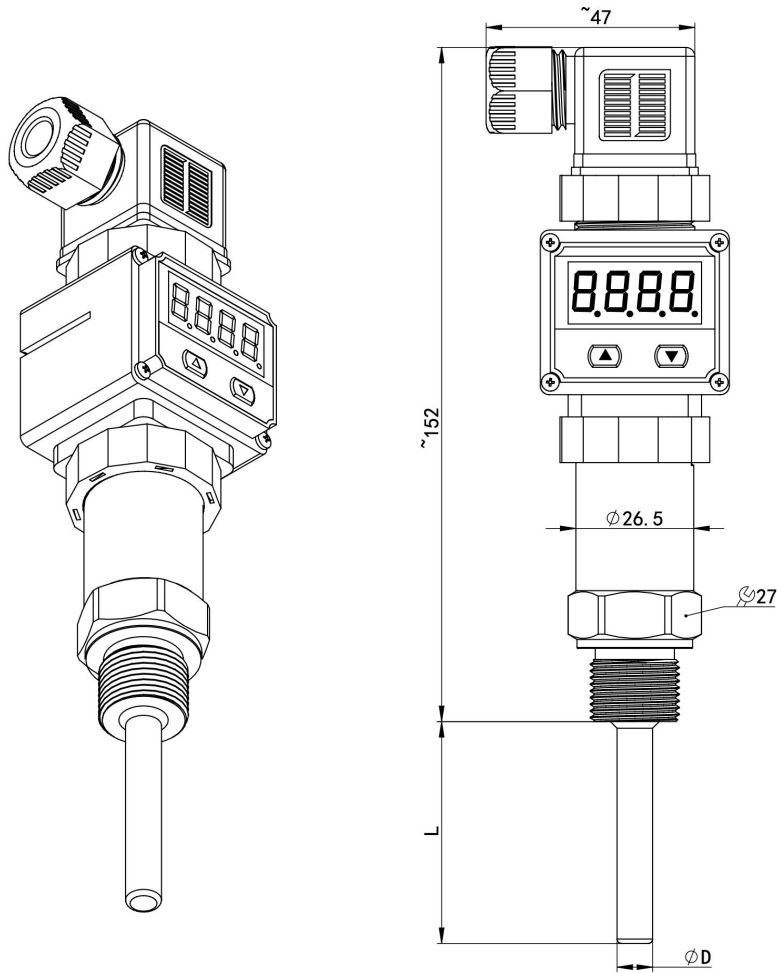
Hirschmann DIN43650 (Ordering code C1), cold end (Ordering code TG)



Cable outlet (Ordering code C2), 6 heatsinks (Ordering code T6)



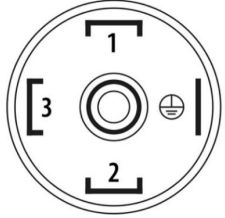
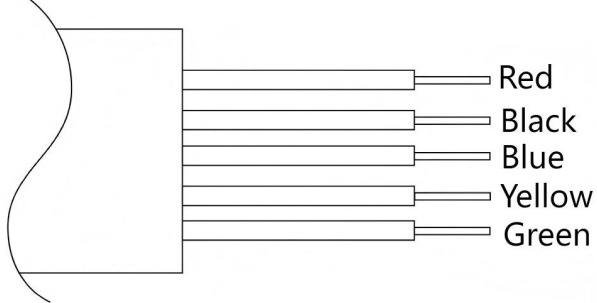
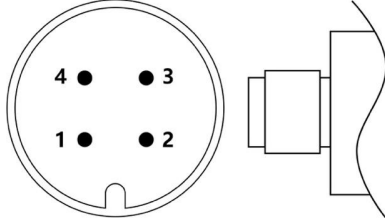
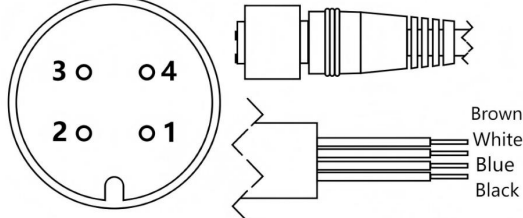
Hirschmann LED display (option code C1+LED), no cold end



Structural Materials

Ordering code	Part	Notes
S4	Stem	SS304 material
S6		SS316L material

Electrical Connection

Hirschmann/ DIN43650(Ordering code:C1)	Cable Outlet (Ordering code:C2)
	
M12*1 (Ordering code:C5)	M12*1, with cable (Ordering code:C5X)
	

2-wire 4~20mA current output		
Signal definition	Power+(+V)	Power- (0V/+OUT)
Cable outlet	Red	Black
Hirschmann DIN43650	1	2
M12×1	1	3
M12×1, with cable	Brown	Blue

3-wire 0~5V/10V voltage output			
Signal definition	Power+(+V)	Power- (GND)	Signal+(+OUT)
Cable outlet	Red	Black	Blue
Hirschmann DIN43650	1	2	3
M12×1	1	3	2
M12×1, with cable	Brown	Blue	White

4-wire Modbus-RTU/RS485				
	Power supply+(+V)	Power supply-(-V)	RS485A	RS485B
Cable outlet	Red	Black	Yellow	Green
Hirschmann DIN43650	1	2	3	$\perp$
M12×1	1	3	2	4
M12×1 (with cable)	Brown	Blue	White	Black

Ordering Guide

Code	Type								
HTM108	Temperature Transmitter								
	Range	Measuring Range							
	(T1 ~ T2)°C	T1 is the lower limit T2 is the upper limit							
		Code	Sensor Element						
		PT100	PT100						
		PT1000	PT1000						
		Code	Output Signal						
		B1	(4 ~ 20)mA						
		B3	(0 ~ 10)V						
		B4	(0 ~ 5)V						
		B6	(0.5 ~ 4.5)V						
		B7	RS485						
		B9	Relay						
		Code	Process Connection						
		P1	M20×1.5						
		G14	G1/4						
		G12	G1/2						
		P17	M27×2						
		K505	Tri-Clamp 1-1/2"						
		K640	Tri-Clamp 2"						
		Code	Electronic Connection						
		C1	DIN43650						
		C2	Cable outlet						
		C5	M12×1-4P						
		C5X	M12×1-4P with cable						
		Code	Stem Materials						
		S4	304						
		S6	316L						
		Code	Stem Length						
		I	I= Insertion length (mm)						
		Code	Sensor type						
		TG	Cold end structure						
		T3	3 pcs heat sinks structure						
		T6	6 pcs heat sinks structure						
		LED	LED display						
		LCD	LCD display						
eg: HTM108	(0 ~ 100)°C	PT100	B1	G14	C1	S6	I 50mm		

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

CE	
Certification Organization	ECM
Certification Scope	Temperature Transmitter
Mark	CE
Electromagnetic Compatibility Directive	2014/30/EU
Registration Number	6G241223.NHEWC81