

HTM708 Hygienic Temperature Transmitter



Nanjing Hangjia Electronic Technology Co., Ltd.

Product Overview

HTM708 hygienic temperature transmitter adopts an all-stainless steel structure design and is mounted on a chuck. It is a hygienic temperature transmitter dedicated to food, pharmaceutical and other industries. This product uses PT100 etc. as the signal measurement element, and the amplification circuit is in the stainless-steel shell to convert the sensor signal into a (4~20) mA current signal or another standard signal. 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 food, pharmaceuticals, environmental protection, machinery, and chemicals.

Features

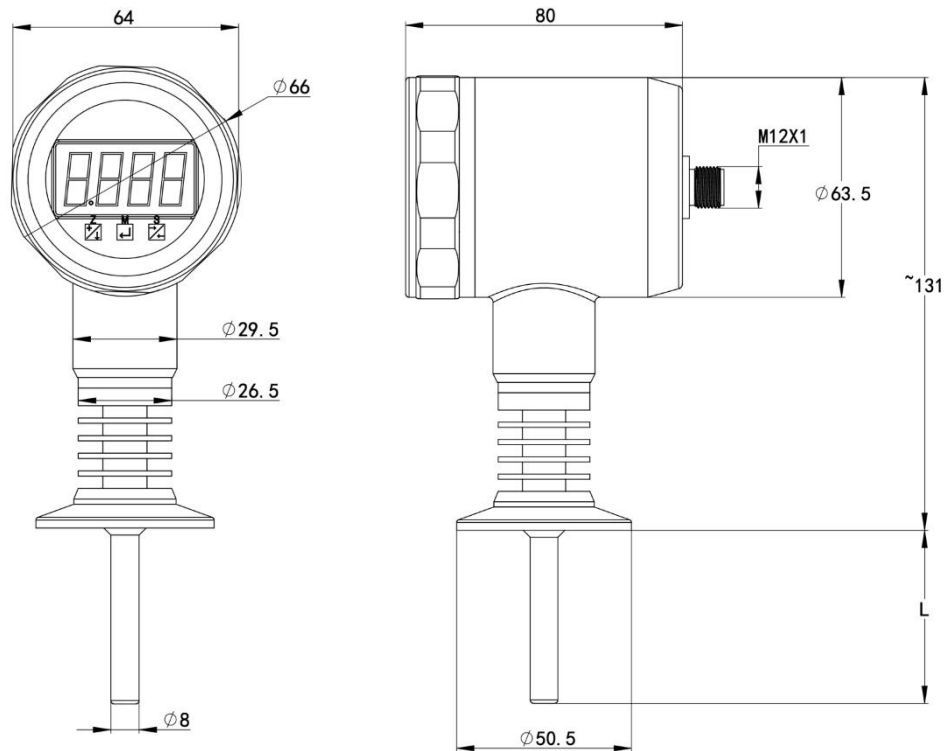
- ◆ Hygienic design
- ◆ All stainless steel 316L structure, no sanitary dead corners
- ◆ Standard clamp installation, easy to install and clean
- ◆ On-site display
- ◆ Isolated circuit design, strong anti-interference ability

Technical Parameters

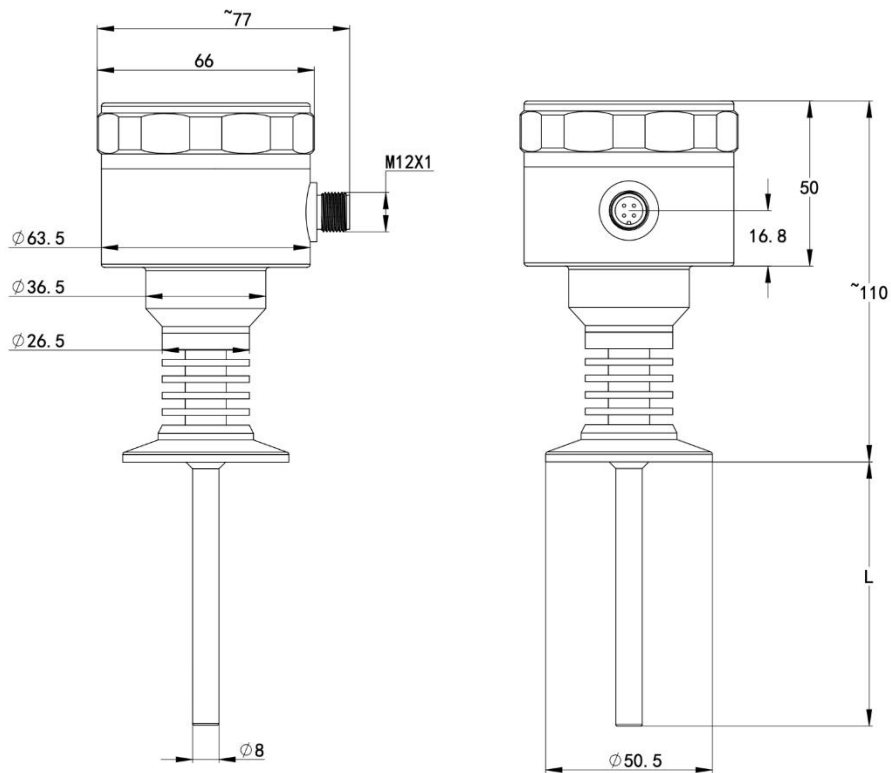
Measuring Temperature Range	-50~500℃ Note: Customized intermediate ranges are supported, such as 0~80℃.
Measuring Medium	Various liquids or gases compatible with contact materials
Probe length	Length L is customizable, $L \leq 3\text{m}$
Output signal/Power Supply	2-wire 4~20mA / $V_s=8\sim 30\text{V}$ 2-wire 4~20mA + HART / $V_s=12\sim 32\text{V}$ 3-wire 0~10V / $V_s=12\sim 30\text{V}$
Accuracy	$\pm 0.5^\circ\text{C}$ ($-50^\circ\text{C} \leq \text{range} \leq 100^\circ\text{C}$) $\pm 1.0^\circ\text{C}$ ($-50^\circ\text{C} \leq \text{range} \leq 300^\circ\text{C}$) $\pm 3.0^\circ\text{C}$ ($-50^\circ\text{C} \leq \text{range} \leq 500^\circ\text{C}$)
Ambient Temperature	-40~85℃
Storage Temperature	-40~85℃
Protection Grade	IP66
Short circuit protection	supported
Reverse polarity protection	No damage, circuit does not work
Insulation resistance	>20MΩ @500VDC
Insulation strength	<2mA 500VAC 1min
Vibration	10g(20~2000Hz)
Shock resistance	100g(11ms)

Structure Drawings (Unit: mm)

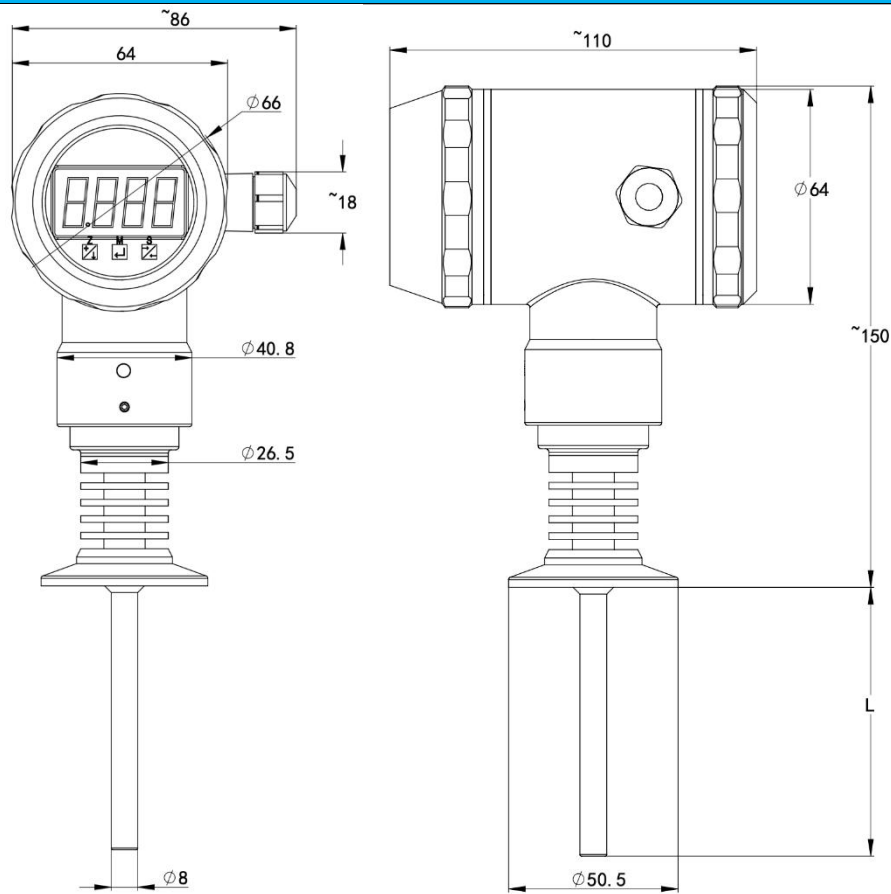
Side display (Ordering code Y7), M12x1 electrical interface (Ordering code:C5)



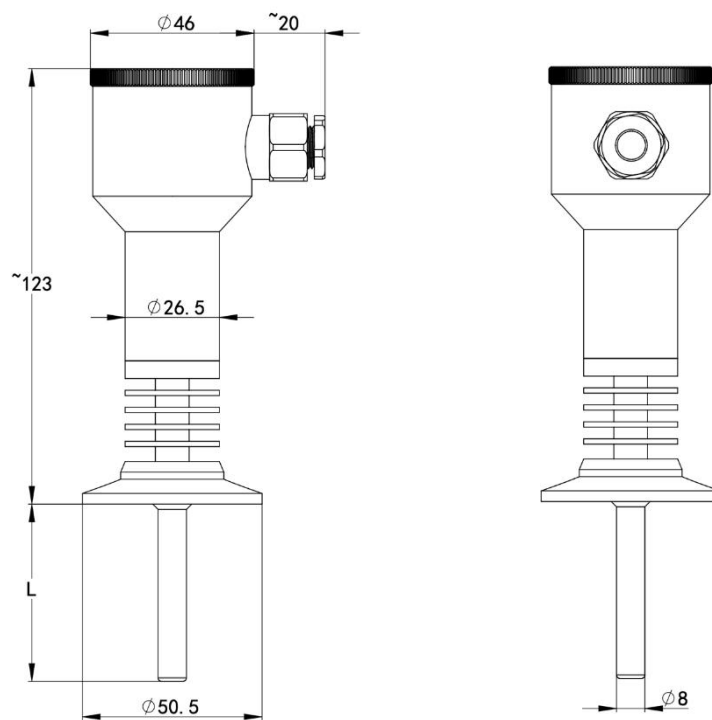
Top display (Ordering code Y6), M12x1 electrical interface (Ordering code C5)



Side display (Ordering code Y261), cable gland, housing with internal terminal block (Ordering code C9)



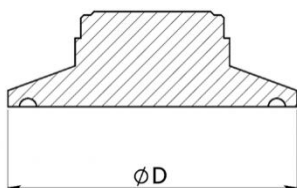
Stainless steel protective housing (Ordering code Y128), cable gland, housing with internal terminal block (Ordering code C9)



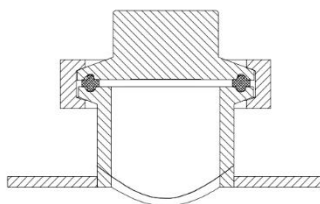
Process Connection

Ordering code K505、K640

Diameters



Installation diagram



Standard	Specification	Size(ϕD) (Unit:mm)	Ordering code
Tri-Clamp	1" 1-1/2"	50.5	K505
Tri-Clamp	2"	64	K640

Structural materials

Ordering code	Part	Notes
S4	Clamp and temperature probe	SS304
S6		SS316L

Electrical interface

M12×1	M12×1, with cable
<p>Cable gland, with wiring terminals inside the side display housing.</p>	<p>Cable gland, with terminal block inside the unexposed protective housing.</p>

Electrical Connection

2-wire 4~20mA output		
Signal definition	Power supply+ (+V)	Power supply- (0V/+OUT)
M12×1	1	3
M12×1 with cable	Brown	Blue
Cable gland, with terminal block inside the side display housing	OUT+	OUT-
Cable gland, without display, with terminal block inside the protective housing	+V	0V/+OUT

3-wire 0~5V/10V output			
Signal definition	Power supply+ (+V)	Power supply- (GND)	Signal+ (+OUT)
M12×1	1	3	2
M12×1 with cable	Brown	Blue	White
Cable gland, with terminal block inside the side display housing	OUT+	OUT-	TEST+
Cable gland, without display, with terminal block inside the protective housing	+V	GND	+OUT

Ordering Guide

Model	Type										
HTM708	hygienic temperature transmitter										
	Range	Measuring Range									
	(T1-T2) °C	T1 is the lowest range T2 is the highest range									
		Code	Temperature Sensor								
		PT100	PT100								
		PT1000	PT1000								
		Code	Output signal								
		B1	(4~20)mA								
		B3	(0~10)V								
		B4	(0~5)V								
		B8	HART								
		Code	Process Connection								
		K505	Tri-clamp 1-1/2"								
		K604	Tri-clamp 2"								
		Code	Electrical Connection								
		C5	M12×1								
		C5X	M12×1 with cable								
		C9	Cable gland								
		Code	Wetted Material								
		S4	S5304								
		S6	S5316L								
		Code	Probe Length								
		L	l=insertion depth(mm)								
		Code	Others								
		Y6	Top display housing								
		Y7	Side display housing								
		Y261	Side display, with cable gland housing								
		Y128	Without display housing								
		T4	4 pcs heat sinks								
			Other customization needs								
eg:HTM708	(0~100)°C	PT100	B1	K505	C5	S6	L=150mm	Y7 T4			