



principle and characteristics

T451 is a special temperature transmitter for food hygiene industry. It adopts high precision PT100 thermal resistor for temperature measurement. The signal is converted into standard electrical signal output after processing by the rear processing circuit. The shell design is all stainless steel, so that it will not pollute the measuring medium and the environment, special food hygiene chuck connection way, can ensure easy cleaning and disinfection do not leave a dead corner. HART output is optional, and display screen is optional according to the user.

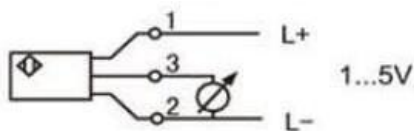
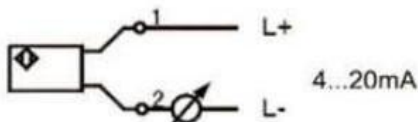
product application

- ◆ food industry
- ◆ pharmacy industry
- ◆ commercial unit
- ◆ water treatment
- ◆ Hydraulic lubrication

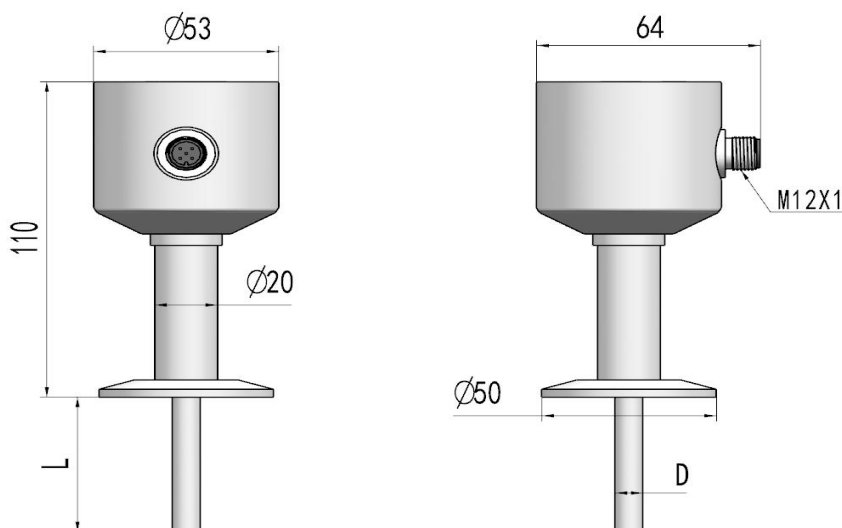
technical specification

- ◆ Measuring range: $-50^{\circ}\text{C} \dots 200^{\circ}\text{C}$
- ◆ Linear degree: $< 0.1\%$
- ◆ Accuracy: $\pm 0.2\text{K} + 0.2\%$ full scale
- ◆ Resolution: 0.1K
- ◆ Pressure: $\Phi 6$ type: probe 400bar, $\Phi 8$ type: probe 100bar
- ◆ Temperature effect: $0.1\text{K}/10\text{K}$
- ◆ Response time: 2.3 seconds
- ◆ Working voltage: 12... 30Vdc
- ◆ Electrical protection: anti-pole, overload protection
- ◆ Sensor: PT100
- ◆ Ambient temperature: $-25 \dots 80^{\circ}\text{C}$
- ◆ Protection grade: IP65
- ◆ Shell material: 304 stainless steel
- ◆ Contact part material: 304 stainless steel
- ◆ Electrical connection: Hersman /M12*1 connector

wiring diagram



Dimnsion figure



Selection table

T451-	A	L	K5	H	A	4	D1	A	specification
T451-									T451 series (sanitary type) integrated temperature transmitter
	A								Range - 50... 0 °C
	B								Range - 50... 50 °C
	C								Range 0... 50 °C
	D								Range 0... 100 °C
	E								Range 0... 120 °C
	F								Range 0... 150 °C
	G								Range 0... 200 °C
	H...								Customize the range, e.g. -20... 100 °C, Selection: H - 20.. 100
		L							The length of the neck tube is 50mm
		K							Threaded connection with movable sleeve
			K5						Sanitary chuck 50.5mm
			G2						Threaded interface G1/2
			G4						Threaded interface G1/4
			M2						Threaded interface M20*1.5
									Custom thread
				H					RA
					A				Probe length L 25mm (without thread)
					B				Probe length L 50mm (without thread)
					C				Probe length L is 75mm (without thread)
					D				Probe length L is 100mm (without thread)
					L...				Custom probe length L= mm (without thread)
						4			The analog range output is: 4... 20mA
						41			The armoured analog range output is: 4...
						0			The analog range output is :0... 10V
						1			The analog range output is :1... 5V
						H			HART protocol (customizable)
						F			LCD display (customizable)
							D1		The probe diameter is Φ6
							D2		The probe diameter is Φ8
							D12		Custom probe, for example diameter Φ 12
							K		Threaded connection with movable sleeve
								A	Connector type M12*1 (standard with 2 meters)
								E	Direct line

* The selection table is only available for parameter selection, and the corresponding code is delivered.