



PRODUCT OVERVIEW

TEMPERATURE MEASUREMENT

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MT100 Series High Performance Temperature Sensors



MT101
(Resistive signal type)



MT102
(Integrated Type)



MT103
(Integrated Isolated Type)



MT104
(Integrated Display Type)

Characters:

- ☆ Simple installation and multifarious-temp scope
- ☆ Gas and liquid medium available
- ☆ Medium compatible 316L stainless steel
- ☆ Excellent long time stability and lower consumption
- ☆ Smaller dimension and Compact structure
- ☆ Response fast and high accuracy
- ☆ Various linear analog signal output optional
- ☆ Highly-efficient RFI & EMI resistance
- ☆ Automotive compensation digital circuits
- ☆ And so on

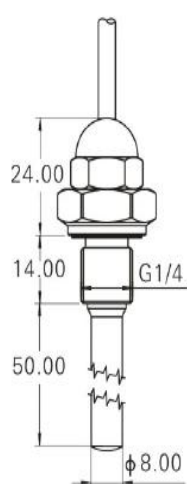
Applications:

- ★ pipeline and ventilation system
- ★ Hydraulic and pneumatic system
- ★ Petrochemical industry
- ★ Hydraulic and pneumatic systems
- ★ Cooling system
- ★ Heating system
- ★ Air Conditioning System (HAVC)
- ★ Automatic system temperature measurement and control
- ★ Agricultural Greenhouses application
- ★ And so on

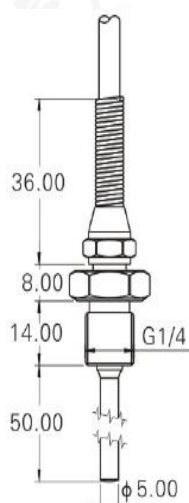
I . Specifications:

Model Parameter	MT101	MT102	MT103	MT104
Measurement range (°C)	-50~0; -50~50; 0~80;0~100;0~120;0~150, 0~200 optional		0~250; 0~300; 0~400 optional	-50 to 400 optional
Installation type	Insert type	Insert type	Insert type	Insert type
Probe length	50 mm or customized	50 mm or customized	50 mm or customized	50 mm or customized
Probe dimension	Φ6; Φ8 optional	Φ6; Φ8 optional	Φ6; Φ8 optional	Φ6; Φ8 optional
Sensor type	PT100; Pt1000	PT100; Pt1000	PT100; Pt1000	PT100; Pt1000
Signal output	Resistive signal	4-20 mA	0-5V	0-10V
Signal wires	2 wires or 3 wires	2 wires	3 wires	
Power supply	NA	9~30Vdc		18~30Vdc
Linear	±0.1%F.S; ±0.25%F.S; ±0.5%F.S Optional			
Working pressure	40Bar (standard); 300 Bar (customized)			
Long time stability	0.1%F.S.			
Response time	T=50 2.3S; T=90 5.4S			
Electronic proof	NA	Reverse polarity protection; Overload voltage protection (standard); surge protection (customized)		
Environment temp.	-40~85°C			
Storage temp.	-40~125°C			
Materials of housing	304 Stainless Steel			
Materials of process	304 Stainless Steel			
Water proof grade	IP65			

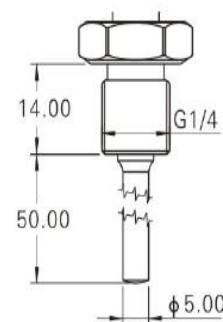
II . Dimension and Drawing:

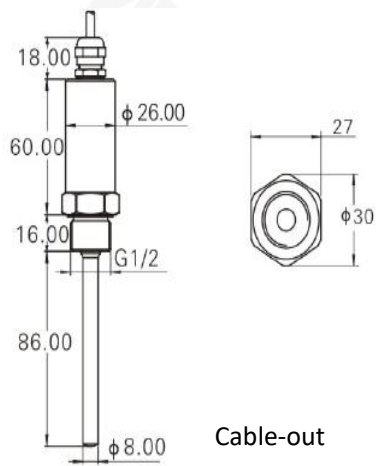


Cable-out

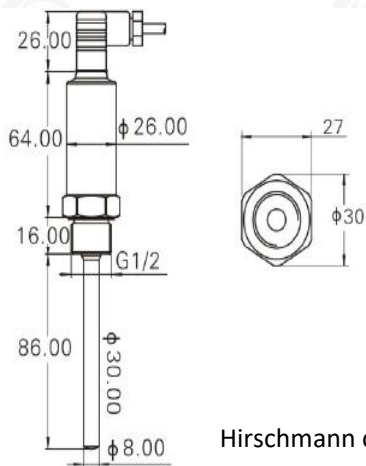


MT101 Dimension



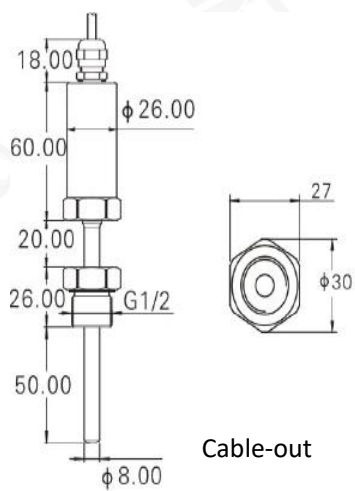


Cable-out

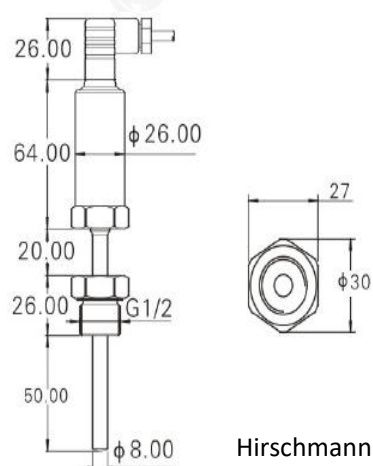


Hirschmann connector

MT102 Dimension

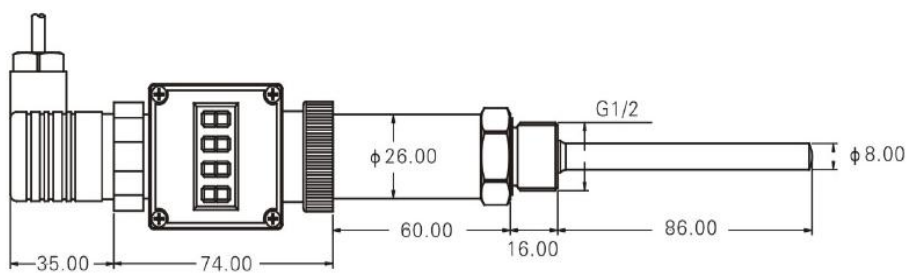


Cable-out



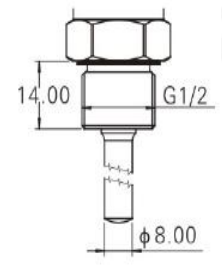
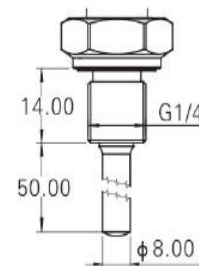
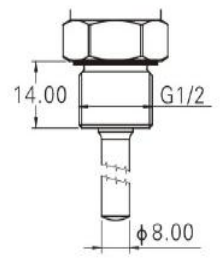
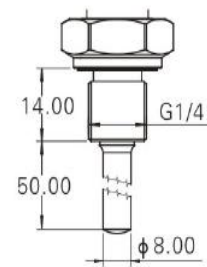
Hirschmann connector

MT103 Dimension



Hirschmann connector

MT104 Dimension



III. Model Code Selection Table:

MT		High Performance Temperature Sensors										
	101	Temperature Sensor (resistive signal type Ω)										
	102	Integrated Type Temperature Sensor										
	103	Integrated Isolated Type Temperature Sensor										
	104	Integrated With Local Display Type Temperature Sensor										
		Range Code	Temp range	Ref.	Range code	Temp range	Ref.					
		01	-50~0	101/102/104	06	0~200	101/102/104					
		02	-50~+50	101/102/104	07	0~250	101/102/104					
		03	0~80	101/102/104	08	0~300	103/104					
		04	0~100	101/102/104	09	0~400	103/104					
		05	0~150	101/102/104	10	By customized	103/104					
			Code	Accuracy								
			1	0.5%F.S. (standard type)								
			2	0.25%F.S. (customized type)								
				Code	Process connection							
				8	M20x1.5 male		9	G1/2" male				
				6	G1/4" male		3	1/4"NPT male				
				10	1/2"NPT male		X	By customized				
					Code	Signal Output & Power Supply						
					E0	1-5 V (3 wire) /11~33 V DC						
					E5	4-20 mA (2 wire) /12~33V DC						
					E6	0-5 V (3 wire) /12~33 V DC						
					E7	0-10 V (3 wire) /18~33 V DC						
					E8	0.5-4.5V (3 wire) /5 V DC						
					E29	Resistive Signal Ω						
					X	By Customized						
						Code	Electronic Connection					
						H	Hirschman Box IP65					
						M	M12 4Pins Connector IP65					
						D	Directly outlet cable IP67					
						P	Packard 3Pins Connector IP65					
						A	AMP Connector IP45					
							Code	Probe Length (mm)				
							050	50 mm				
							XXX	By customized				
								Code	Probe Diameter (mm)			
								6	6 mm			
								8	8 mm			
									Code	Temp Units		
									C	Degree C/ $^{\circ}\text{C}$		

									F	°F	
										Code	Cable Length (meter)
										003	3 meters
										XXX	By Customized
MT	102	04	1	2	E5	D	050	6	C	003	Others Remarks

Example Model Code: MT102-04-1-2-E5-D-050-6-C-003(3 Meters cable)