

*Temperature Transmitter*  
Measuring ranges from -50°C to 250°C

### Features

- Measuring ranges from -50°C to 250°C
- Accuracy: 0.5%FSO; 1.0%FSO
- Manufactured using PT100
- Variety of mechanical interface
- Output: 4~20mA, option RS485

### Application

- Rain spillway basin Chemical machinery temperature control
- Compressor temperature measurement
- Boiler temperature measurement and control



### Technical data

#### Measuring range

Nominal range [°C]	-50°C to 250°C
Sensor type	PT100/PT1000

#### Performance

Accuracy*	0.5%FSO(Typ.) 1.0%FSO(Max.)	*Linearity (best straight line) + Hysteresis + Repeatability
Vibration	10 g RMS(20 to 2000Hz)	
Shock	100 g(10ms)	
Cycles	10x10 <sup>5</sup>	
Long Term Stability	0.2 %FS	

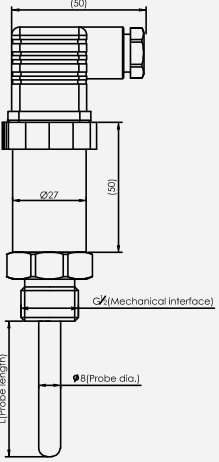
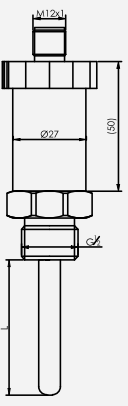
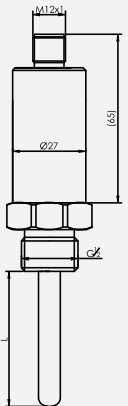
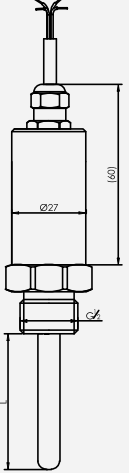
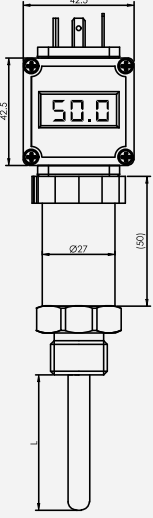
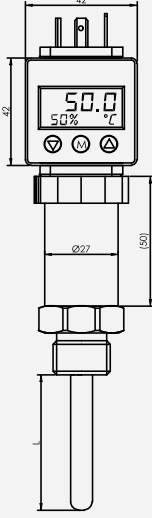
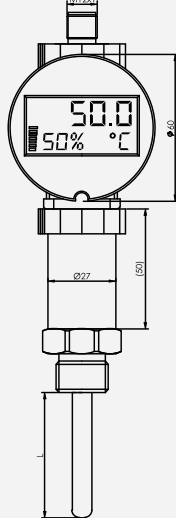
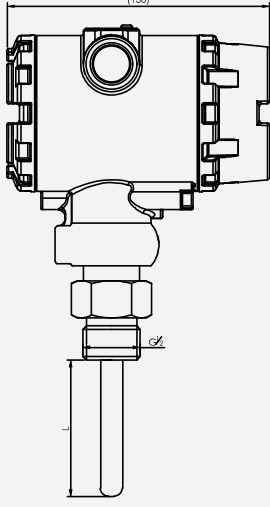
#### Electrical @25°C

Output signal / Supply	2-wire 4...20mA / V <sub>S</sub> = 9... 30VDC
	3-wire 1...5VDC / V <sub>S</sub> = 9... 30VDC
	3-wire 0.5...4.5VDC / V <sub>S</sub> = 9... 30VDC
	3-wire 0...10VDC / V <sub>S</sub> = 15... 30VDC
	4-wire MODBUS RTU / V <sub>S</sub> = 12...30VDC
Insulation Resistance	100 MΩ@100VDC
EMC Test	IEC61000-6-2/IEC61000-6-3
Reverse polarity protection	No damage - no function

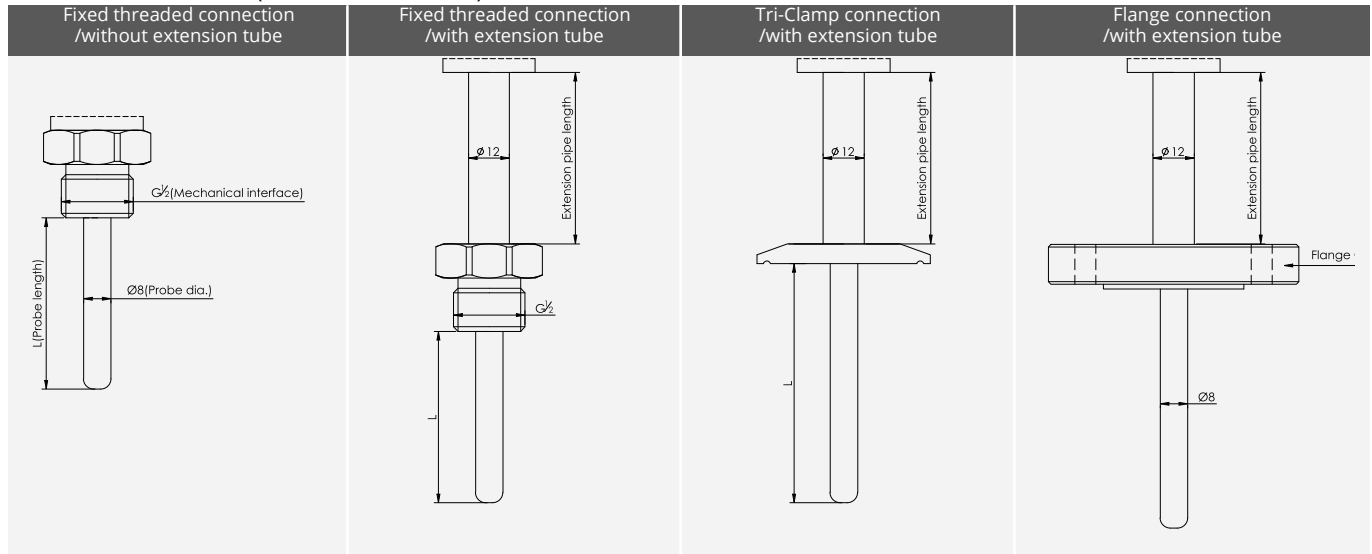
#### Physical Specifications

Housing	304 stainless steel
Probe diameter [mm]	Ø6,Ø8,Ø10,Ø12
Protection	IP65/IP66/IP67/IP68
Weight	~0.5kg (without cable)

**Dimensions** (All dimensions in mm)

Code E1 DIN175301-803A/DIN43650/IP65	Code E2 DIN175301-803A with Circular connector M12x1(4-pin)/IP65	Code E3 Circular connector M12x1(4-pin)/IP66	Code E4 Cable outlet, 1.5m/IP67
			
Code E5 DP-4 DIN43650 LED display head/ IP54	Code E6 DP-5 DIN43650 LCD display head/ IP54	Code E7 DP-6 DIN43650 LCD display head/ IP54	Code E8 2088 Electronic housing /IP65
			

### Mechanical interface (All dimensions in mm)



### Electrical connections

DIN175301-803-A	4...20mA 2-wire	1...5VDC 3-wire	0.5...4.5VDC 3-wire	RS485 4-wire
+Vcc	1	1	1	1
OUT	2	3	3	-
GND	-	2	2	2
RS485A	-	-	-	3
RS485B	-	-	-	⊕

Connector M12x1(4-pin)	4...20mA 2-wire	1...5VDC 3-wire	0.5...4.5VDC 3-wire	RS485 4-wire
+Vcc	1	1	1	1
OUT	3	4	4	-
GND	-	3	3	3
RS485A	-	-	-	2
RS485B	-	-	-	4

### Ordering code

Model	Range	Output	Accuracy	Electrical Connection	Pressure Connection
RIC500	<b>01</b> -50...+100°C	<b>42</b> 4...20mA	<b>A1</b> 0.25%FS	<b>E1</b> DIN175301-803A/DIN43650/IP65	<b>01</b> G¼ male
	<b>02</b> -50...+150°C	<b>15</b> DC1...5V	<b>A2</b> 0.5%FS	<b>E2</b> DIN175301-803A with Circular connector	<b>02</b> G½ male
	<b>03</b> -50...+200°C	<b>04</b> DC0.5...4.5V	<b>A3</b> 1.0%FS	<b>E3</b> Circular connector M12x1(4-pin)/IP66	<b>03</b> G1" male
	<b>04</b> -50...+250°C	<b>25</b> DC0.5...2.5V		<b>E4</b> Cable outlet,1.5m/IP67	<b>04</b> G1-¼ male
	<b>05</b> 0...+50°C	<b>05</b> DC0...5V		<b>E5</b> DP-4 DIN43650 LED display head/IP54	<b>05</b> G1-½ male
	<b>06</b> 0...+60°C	<b>01</b> DC0...10V		<b>E6</b> DP-5 DIN43650 LCD display head/IP54	<b>06</b> ½NPT male
	<b>07</b> 0...+100°C	<b>10</b> DC1...10V		<b>E7</b> DP-6 DIN43650 LCD display had/IP54	<b>07</b> ¼NPT male
	<b>08</b> 0...+150°C	<b>H2</b> 4...20mA+HART		<b>E8</b> 2088 Electronic housing/IP65	<b>08</b> 1"NPT male
	<b>09</b> 0...+200°C	<b>R4</b> MODBUS RTU			<b>09</b> PT¼ male
	<b>10</b> 0...+250°C				<b>10</b> PT½ male
	<b>99</b> Custom				<b>11</b> PT¾ male
					<b>12</b> R¼ male
					<b>13</b> R½ male
					<b>14</b> M20x1.5 male
					<b>15</b> M22x1.5 male
					<b>16</b> 1-½" Tri-Clamp connection
					<b>17</b> 2" Tri-Clamp connection
					<b>18</b> Flange (Please specify flange specifications)
					<b>99</b> - Custom requirements

Probe diameter	Probe length	Extension tube	Label	Accessory [Optional]
<b>D6</b> 6mm	<b>L1</b> 50mm	<b>T0</b> Without (For temperature range:-40°C to 85°C)	<b>S</b> Standard	<b>A1</b> Thermowell (Please specify the diameter and length of the thermowell when ordering.)
<b>D8</b> 8mm	<b>L2</b> 100 mm	<b>T1</b> Length=50mm,Ø12mm	<b>N</b> Neutral packing	
<b>D10</b> 10mm	<b>L3</b> 150 mm	<b>T2</b> Length=100mm,Ø12mm	<b>C</b> Custom label	
<b>D12</b> 12mm	<b>L4</b> 200 mm	<b>T3</b> Length=150mm,Ø12mm		
<b>99</b> Custom requirements	<b>99</b> Custom requirements	<b>T4</b> Length=200mm,Ø12mm		
		<b>99</b> Custom requirements		