M12 Stainless Steel RTD Temperature Transmitters

M12TXSS Series

1 YEAR WARRANTY **CE** **RoHS**

✔ **Programmable Transmitter**
✔ **M12 Connection**
✔ **4 to 20 mA Output**
✔ **-50 to 120°C (-58 to 248°F)**

RTD 100 Ω sensor with built-in transmitter is programmable by a computer. The configuration kit required for programming is M12TX-CONFIG. This unique probe is ideal for areas with space limitations where traditional head connections are too large to fit. The M12 thread design offers a secure industrial connection.

M12TXSS-PT100-13MM-1/8NPT

M12TXSS-PT100-24MM-1/8NPT

Both models shown actual size.

Specifications

Body: Stainless steel AISI 316L
Probe Length: 13 mm (0.51") and 24 mm (0.94")
Diameter: Ø3 mm (0.1")
Probe Type: Thermowell AISI 316L SS
Probe Minimum Bending Radius: Three-times the outer diameter [except the sensing tip which length is 30 mm (1.2")]
Connection: ⅛ NPT male thread
Sensor: RTD PT100 class A up to 300°C in accordance to IEC751
Range: -50 to 120°C (-58 to 248°F)
Tmax. Electronic: 80°C (176°F)
Sensor Break Monitoring:
　Selectable: Upscale (>21.0 mA) or downscale (<3.6 mA) action
　Sensor Short-Circuit: Fixed to downscale (<3.6 mA) action
Output:
　Signal: 4 to 20 mA
　Factory Default: 4 to 20 mA = 0 to 100°C (32 to 212°F)
　Permissible Load: 700 @ 24 Vdc [RLo= (Vsupply-8,5)/0,020]
Response Time (90%): <50 ms
Isolation In-Out: Non-isolated
Power Supply: 8.5 to 32 Vdc (polarity protected)
Environment Conditions:
　Temperature: -40 to 80°C (-40 to 176°F) for plastic body
　Relative Humidity: 0 to 100%
　EMC: In accordance to EN 61326

Degree of Protection: IP65 and IP67 in accordance to IEC60529
Accuracy:
　Transmitter: Maximum of ±0.2°C or ±0.2% of span
　Sensor: Class A in accordance to IEC751
Temperature Influence [Deviation from 20°C (68°F)]: Maximum of ±0.3°C/25°C (77°F) or ±0.3% of span/25°C (77°F)
Supply Voltage Influence: Negligible
Range Configurations: It is possible set the input temperature range (span) by the M12TX-CONFIG configuration kit (PC with OS Windows required)
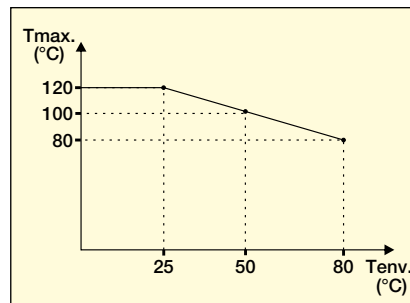**Zero Adjustments:** Any value between -50 to 50°C
Minimum Span: 50°C (122°F) [if the zero value is set between one of these values: -40°C (-40°F), -20°C (-4°F), 0°C (32°F), 20°C (68°F), 40°C (104°F), the minimum span is 20°C (68°F) rather than 50°C (122°F)]
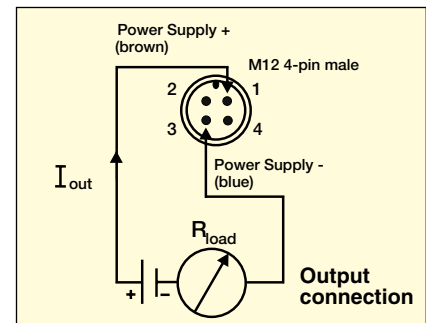**Sensor Error Compensation:** Over 2 points (maximum 1% of span)
Factory Setting: 0 to 100°C/sensor break >21 mA (upscale)
Response Time: Diameter 3 mm <3.5 seconds, diameter 6 mm <13 seconds (test in water to IEC751- time for reaching 63.2% of instantaneous temperature change)

M12TX-CONFIG Specifications

Interface: PC connection through the USB port with connection cable included in the kit
M12TX + Connection: Through extension cable with M12 female connector included in the kit
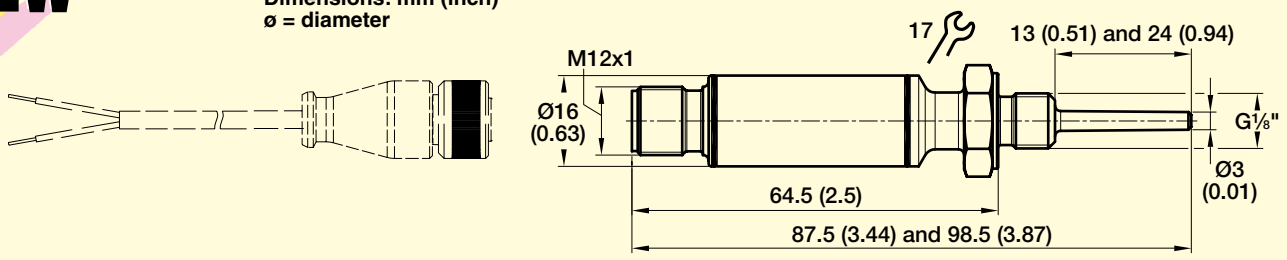*Note: The transmitter is powered from the USB interface*
Programming Software: M12TX + Configurator for Windows® 2000 (SP3), XP (SP2), Vista (32 and 64 bit), 7 (32 and 64 bit)
Configurable Parameters: Temperature range (-50 to 800°C), measurement unit (°C/°F/°K), sensor break monitoring (upscale/downscale), identifying name of the transmitter (16 alphanumeric characters), input sensor error compensation over one or two points
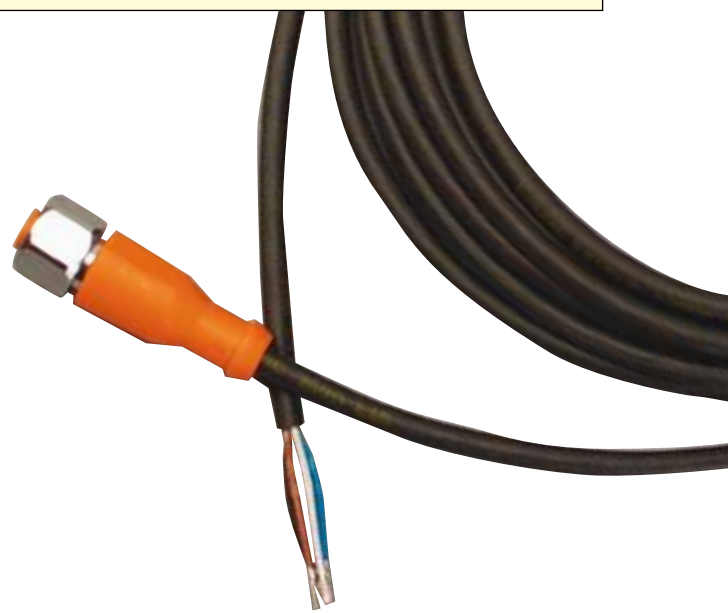**Supported Languages:** Italian, English, French, German, Swedish
Included in the Kit: Interface USB, connection cable between USB port and interface, connection cable between interface and M12TX + transmitter, memory-stick USB with installation software, introductive manual for software installation and USB

NEW®

Dimensions: mm (inch)
ø = diameter

M12x1

Ø16 (0.63)

17

13 (0.51) and 24 (0.94)

G⅛"

Ø3 (0.01)

64.5 (2.5)

87.5 (3.44) and 98.5 (3.87)

M12TX-CONFIG shown smaller than actual size.

M12C-PUR-4-S-F-5 shown smaller than actual size.

To Order	
Model No.	**Description**
M12TXSS-PT100-13MM-1/8NPT	Temperature transmitter with M12 input connector for Pt100, output 4 to 20 mA standard, 3 mm (0.118") diameter, 13 mm (0.51") long, ⅛ NPT
M12TXSS-PT100-24MM-1/8NPT	Temperature transmitter with M12 input connector for Pt100, output 4 to 20 mA standard, 3 mm (0.118") diameter, 24 mm (0.94") long, ⅛ NPT

Metric

Model No.	Description
M12TXSS-PT100-13MM-G1/8	Temperature transmitter with M12 input connector for Pt100, output 4 to 20 mA standard, 3 mm (0.118") diameter, 13 mm (0.51") long, G⅛ thread
M12TXSS-PT100-24MM-G1/8	Temperature transmitter with M12 input connector for Pt100, output 4 to 20 mA standard, 3 mm (0.118") diameter, 24 mm (0.94") long, G⅛ thread

Comes complete with operator's manual.

Accessories

Model No.	Description
M12C-PUR-4-S-F-10	Polyurethane cable, straight 4-pin M12 female connector one end, flying leads one end, 10 m (32.8') long
M12TX-CONFIG	Configuration kit for M12TXSS, USB serial interface, connection cables, programming software for Windows®