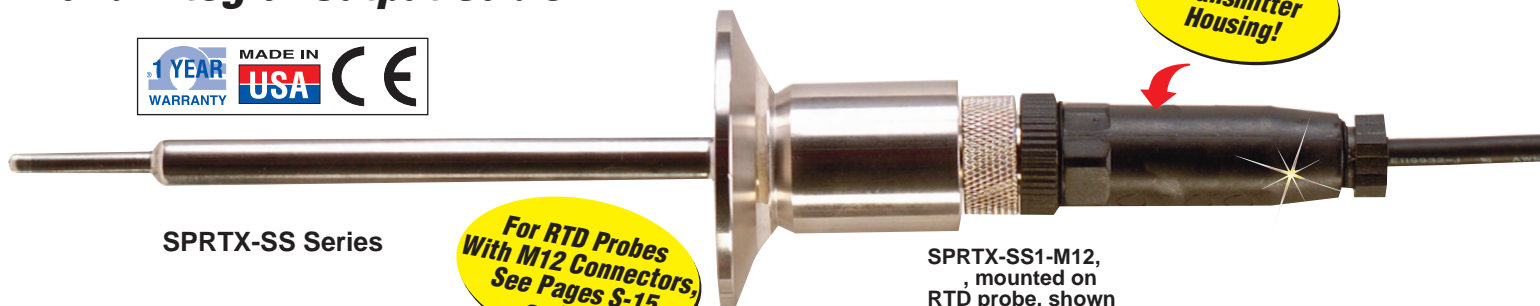


MINIATURE TEMPERATURE TRANSMITTER FOR SANITARY RTD PROBES AND SENSORS

With Standard M12 Connection, Splash-Proof Body and Integral Output Cable



SPRTX-SS Series

For RTD Probes With M12 Connectors, See Pages S-15 and S-16

SPRTX-SS1-M12, mounted on RTD probe, shown actual size.

Built-In Transmitter Housing!

U.S. Pat. No 7,259,686

- ✓ **Attaches Directly to Most 3- or 4-Wire, Pt100, 0.00385 Curve Sanitary Probes and Sensors with M12 Style Connector**
- ✓ **True 2-Wire Transmitter Operation, Loop Powered 4 to 20 mA Output**
- ✓ **Encapsulated Signal Conditioner with Water Tight Connector Housing**
- ✓ **High Performance, Repeatability, and Stability**
- ✓ **Factory Calibrated—No Field Adjustments Required**
- ✓ **Provides “Open Sensor Wire” Signal Indication and Compensates for Long Lead Wires**

Loop Powered!

The OMEGA® 2-wire SPRTX-SS Series temperature transmitters are high-performance, low-cost, industrial transmitters designed for direct connection to most CIP (clean-in-place) sanitary Pt100 probes and sensors that incorporate a M12 style connector. All models feature an encapsulated micro miniature signal conditioner built into a sealed connector housing. The signal conditioner converts the resistive change of a 100 Ω , 0.00385 RTD probe or sensor into an industry-standard 2-wire, 4 to 20 mA analog output across a dedicated temperature range.

SPECIFICATIONS

Supply Voltage: 9 to 24 Vdc @ 30 mA max
Max Load:
 $R_{max} (\Omega) = (V_{supply} - 9V) / 0.02 A$
Max Input Lead Resistance: 50V
Output: Linearized 4 to 20 mA

Accuracy: $\pm 0.5\%$ of FS @ 23°C (73°F) ambient

Repeatability: $\pm 0.25^\circ\text{C}$ ($\pm 0.5^\circ\text{F}$)

Temperature Effect: $\pm 0.00022 \text{ mA}/^\circ\text{C}$ ($\pm 0.00012 \text{ mA}/^\circ\text{F}$)

Range:

SPRTX-SS1: -99 to 208°C (-146 to 406°F)

SPRTX-SS2: 2 to 569°C (36 to 1056°F)

Input: 3-wire, Pt100 ($\alpha = 0.00385$), 4-wire compatible

Probe/Sensor Input Connection (SPRTX-SS1-M12, SPRTX-SS2-M12): M12, 4-pin female, (connects to RTD probes having a 12M, 4-pin male connection)

Transmitter Operating Temp: -40 to 85°C (-40 to 185°F)

Output Connection: 2-wire, shielded, polyurethane cable [4 m (12') included]

Approvals: CE marked

Dimensions: 76 L x 20 mm D (3 x 0.8") without cable

Weight: 110 g (0.25 lb) max with cable

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No.	Description
SPRTX-SS1-M12	Pt100 transmitter with -99 to 208°C (-146 to 406°F) range
SPRTX-SS2-M12	Pt100 transmitter with 2 to 569°C (36 to 1056°F) range
Accessories	
SCTX2-100	2-conductor shielded extension cable, 30 m (100')
PSR-24S	Regulated power supply, 24 Vdc, 400 mA, screw terminal
PSR-24L	Regulated power supply, 24 Vdc, 400 mA, UL, stripped leads
PSR-24L-230	Regulated power supply, 24 Vdc, 400 mA, stripped leads, 230 Vac input, CE
CAL-3	NIST traceable calibration with data

Note: The SPRTX-SS Series has not been designed for use in medical or nuclear applications, nor flammable or explosive environments.

Ordering Example: SPRTX-SS1-M12, 4 to 20 mA output transmitter with -99 to 208°C (-146 to 406°F) range, M12 style 4-pin male connection, PSR-24L, power supply.

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• Flow and Level

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