

Temperature Product Portfolio

Temperature Transmitters



RTT15S



RTT80



RTT15

Thermowells



Sensors



Temperature Measurements

With Foxboro RTT15, RTT15S, and RTT80 temperature transmitters, you choose the intelligence level you need, as well as multiple configuration options.



Total Solution

Foxboro by Schneider Electric is a total solution provider for industrial process temperature measurements. With three families of intelligent temperature transmitters and broad selections of sensors and thermowells, accurate and reliable measurements over a wide range of temperatures can be ensured in the harshest of environments. Inputs from Resistance Temperature Detectors (RTDs), Thermocouples (TCs), ohm, or mV sources are converted by Foxboro RTT15, RTT15S, and RTT80 transmitters into scaled analog and digital outputs.

Full Customization

Transmitters can be integrated with sensors and thermowells at the Foxboro factory and arrive at the measurement site configured with the desired output selections, temperature units, lower and upper range limits, and other configurable parameters.



Temperature Measurements

Transmitters

RTT15S with optical buttons is operable through the glass cover of its explosion-proof housing.



Foxboro's three families of temperature transmitters offer a differentiated selection of features to satisfy a wide variety of industrial process applications. Intrinsically safe, explosion-proof, and flame-proof agency certifications enable installation in the most hazardous locations.

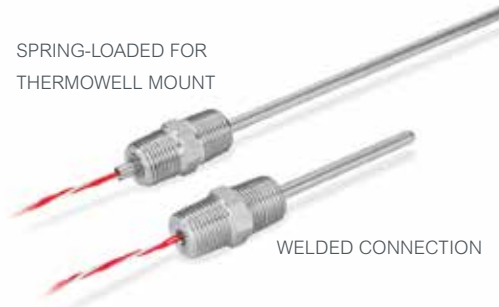
Sensors and Thermowells

Highly accurate platinum RTDs and a variety of TCs covering wide temperature ranges can be combined with threaded, welded, flanged, or sanitary thermowells and integrated with any of Foxboro's transmitters or connection heads for remote deployment in compliance with hazardous location requirements.

RTT80 has advanced features such as hot backup, sensor drift and corrosion detection, and SIL safety certification.



SPRING-LOADED FOR THERMOWELL MOUNT



WELDED CONNECTION

MODEL TF / FLANGED WELL



MODEL TT / THREADED WELL



MODEL TS SANITARY WELL



MODEL TW / WELD-IN WELL



RTT15 offers both Profibus digital communications and FOUNDATION Fieldbus.



Selection Guide

Temperature Transmitters



Model	RTT15	RTT15S	RTT80
Output	FOUNDATION Fieldbus and Profibus	4-20 mA and HART	4-20 mA, HART and FOUNDATION Fieldbus
Input Types	RTD, TC, ohm, or mV	RTD, TC, ohm, or mV	RTD, TC, ohm, or mV
Housing Options	DIN module only, connection head or universal with optional explosion-proof rating	DIN module only or universal with optional explosion-proof rating	DIN module only, universal or dual compartment with optional explosion-proof rating
Display Options	No display	Optional red or white backlit with optional optical configuration buttons	Optional LCD
Factory-Mounted Thermowells and Sensors	Yes	Yes	Yes
Configuration Options	Custom factory, DTM, or Handheld (Profibus through host system)	Optical button display, custom factory, DTM, Handheld	Custom factory, DTM, or Handheld
Digital Accuracy	Pt100 $\pm 0.1^{\circ}\text{C}$ TC (K) $\pm 0.5^{\circ}\text{C}$	Pt100 $\pm 0.1^{\circ}\text{C}$ TC (K) $\pm 0.5^{\circ}\text{C}$	Pt100 $\pm 0.14^{\circ}\text{C}$ TC (K) $\pm 0.32^{\circ}\text{C}$
A/D Accuracy (% of Span)	0.05	0.05	0.03
Dual-Channel Capability	Dual 2-wire RTD, TC; average, difference, hot backup	Dual 2-wire RTD, TC; average or difference	Dual 2- or 3-wire RTD, dual TC, TC/2- or 3-wire RTD; average, difference, switching, hot backup
Diagnostics	Sensor broken or shorted	Sensor broken or shorted	Sensor broken or shorted, drift detection, sensor corrosion
SIL2 Certifications	No	No	Yes
Certifications and Approvals	FM, CSA, ATEX, IECEx	FM, CSA, ATEX, IECEx, NEPSI, INMETRO	FM, CSA, ATEX, IECEx
Specifications*	PSS 2A-1F5 A	PSS 2A-1F5 B	PSS 2A-1F8 B

* Please use this term in our search window on www.schneider-electric.com to access more product details.

Selection Guide

Temperature Sensors and Thermowells



PR and PRMTA Series RTD ¹ Sensors	MT and PRMTA Series TC ² Sensors	Thermowells
Highest accuracy ($\pm 0.13^{\circ}\text{C}$ / $\pm 0.23^{\circ}\text{F}$)	Wide temperature ranges (-270°C to +1300°C / -454°F to +2372°F)	TT Series Thread: 1/2", 3/4" or 1" NPT
Platinum elements with 2-, 3-, or 4-wires	Types E, J, K, N, and T	TF Series Flanged: ANSI Class 150, 300 or 600
Custom linearization (Callendar van Dusen)	Lengths up to 914 mm (36") standard with custom longer lengths	TW Series Welded: 1.05" and 1.315" OD for 3/4" and 1" pipe socket weld
Lengths up to 914 mm (36") standard with custom longer lengths	316 Stainless Steel or Nickel alloy sheaths	TS Series Sanitary: 3/4", 1", 1-1/2", 2", and 4" Tri-Clamp
316 Stainless Steel or Nickel alloy sheaths	Welded connection or spring-loaded for thermowell mount	Straight, tapered, and stepped shanks available
Welded connection or spring-loaded for thermowell mount	MT Series Available in connection head for remote deployment	Lengths up to 914 mm (36") standard with custom longer lengths
PR Series available in connection head for remote deployment	MT Series* PSS 1-1B6 A	316 Stainless Steel standard or other materials by request
PR Series* PSS 1-1B1 A PRMTA Series* PSS 3-3E1 A	PRMTA Series* PSS 3-3E1 A	T Series* PSS 3-3D1 A

* Please use this term in our search window on www.schneider-electric.com to access more product details.

¹ Resistance Temperature Detectors

² Thermocouples