

Insertion/Submersion Conductivity Sensor

- SUITABLE FOR INSERTION/SUBMERSION/ FLOW-THROUGH installation.
- TEMPERATURE COMPENSATION element is provided as integral part of sensor.
- OPERATES IN HIGH PRESSURE SYSTEM to 175 psig at 100°F (38°C).
- SENSOR CONSTANTS OF 0.1, 0.5 and 1.0 are available.



FEATURES AND APPLICATIONS

The Rosemount Model 150 Insertion/ Submersion Sensor is available in sensor constants of 0.1, 0.5 or 1.0 for conductivity ranges from 0-10 to 0-10,000 μS when used with Models 54eC, 81C, 1054BC, 1181C, 2081C, and 3081C analyzers/transmitters. For optimal loop performance, connect the Model 150 sensor to instrument Models 54eC or 1054BC.

The Tefzel¹ housing has both rear-facing and forward-facing, 1 inch male pipe threads. The sensor can be threaded into a process line or the side of a tank, or be attached to a length of pipe for submersible installation. The Model 150 is available with a 1 inch CPVC tee (Code 16) for flow-through installation. An integral 10 foot cable is supplied for connection to the analyzer/transmitter or junction box.

This sensor is most appropriately used as a set-point detector in applications with a fairly broad control range. This sensor is a good choice for boiler blow-down and open recirculating cooling water. For applications that require high accuracy over a wide range of conductivity, a sensor from the ENDURANCE™ family (Model 400 series) or the toroidal family (Model 200 series) would be the ideal choice.

SPECIFICATIONS

Available Sensor Constants: 0.1, 0.5 and 1.0

Process Connection: 1 inch MNPT both front and rear threads

Wetted Materials: Electrodes: 316 stainless steel
Insulators: Tefzel and Viton¹

Temperature Compensation: 0 to 121°C (32 to 250°F)

Pressure/Temperature Rating: (see Figure 1)

Pressure	Temperature
1207 kPa abs (175 psig)	38°C (100°F)
345 kPa abs (50 psig)	121°C (250°F)

Junction Box: Code 17: ABS, meets NEMA 4X specifications

210 mm x 127 mm H x 102 mm D
(8-1/4 in. x 5 in. x 4 in.)

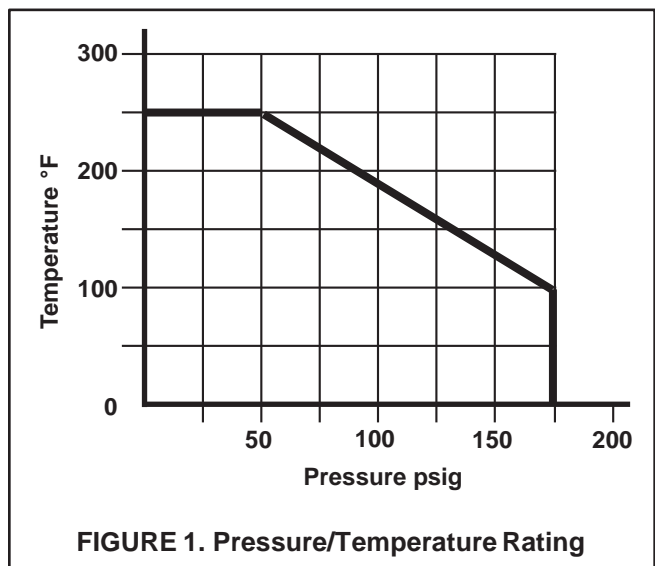
Integral Cable: 10 ft (250 cm), four conductors (20 ga.) shielded, provided with spade lugs.

For Code 54: 10 ft (250 cm), 5 connectors (22 ga.)
4 drains, shielded, provided with spade lugs.

Interconnect Cable (J-Box to instrument): Specify length, 5 conductors (22 ga.), 4 drains, shielded.

Weight/Shipping Weight: 0.5 kg/ 0.9 kg (1 lb/2 lb)

¹Tefzel and Viton are registered trademarks of E.I. du Pont de Nemours and Co.



ORDERING INFORMATION

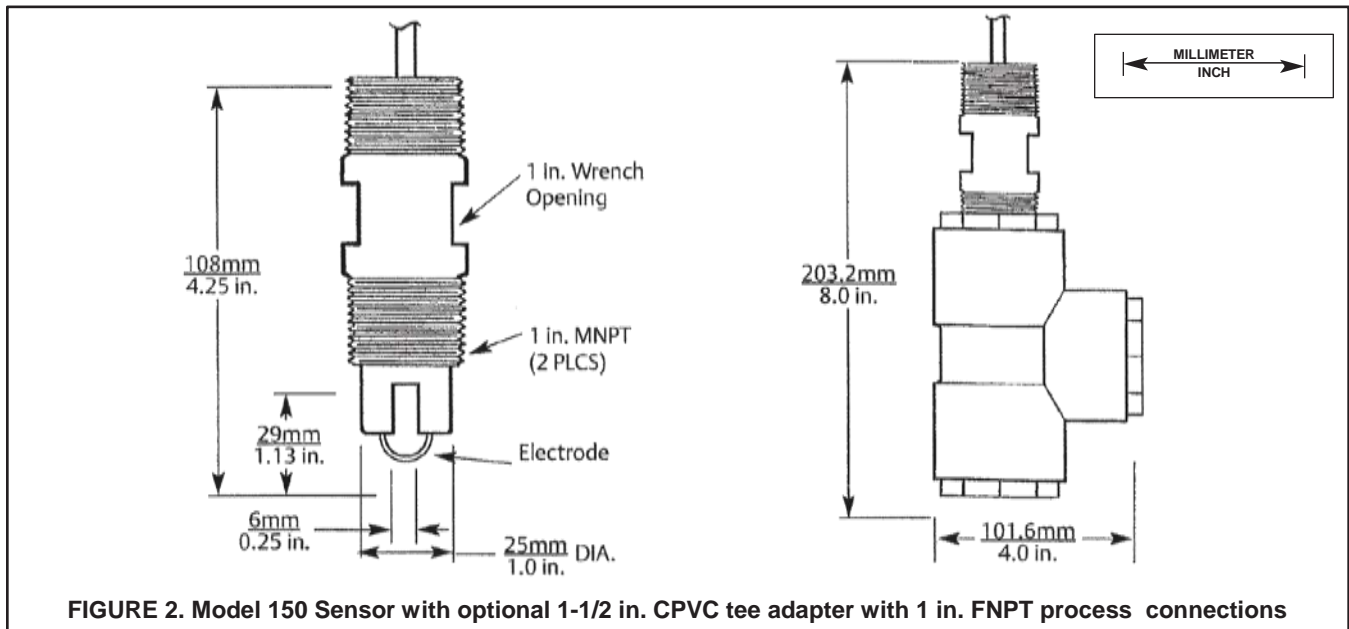
Model 150 Insertion/Submersion Conductivity Sensor is available in sensor constants of 0.1, 0.5 or 1.0, covering conductivity ranges from 0-10 to 0-10,000 μ S with selected instruments. The Tefzel housing is supplied with both rear facing and forward facing 1 in. MNPT's. The sensor can be threaded into a process line or the side of a tank or attached to a length of pipe for submersion installations. An integral 10 ft cable is supplied for connection to the analyzer/transmitter or junction box. Interconnect cable between J-Box and analyzer/instrument must be ordered separately (specify length). The Model 150 may be optionally supplied in a 1-1/2 in. CPVC tee with 1 in. process connections for flow-through installation (Code 16).

MODEL 150 Contacting Conductivity Sensor	
CODE	Cell constant
03	0.1/cm cell constant
06	1.0/cm cell constant
09	0.5/cm cell constant

Tee assembly	OPTIONS
-	No tee assembly included
16	PVC tee with 1 in. FPT process connections

Transmitter compatibility	
54	For use with Rosemount 1056, 56, 1066, 1057, and 5081 Transmitters ¹

Typical model number: 150-03_-54






¹ Also compatible with legacy transmitter models 54, 1054, 2054, 1055, 2081, 3081, 4081, and XMT.

Notes:

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