SIEMENS

Duct Point Temperature Sensor, 1000 ohm RTD

Product Description

The 1000 ohm RTD Duct Point Temperature Sensor (without transmitter) provides an input for temperature control to a controller.

Product Number

544-339   –40°F to 240°F (–40°C to 116°C) range

Required Tools

- Drill with 13/32-inch (10.3 mm) bit and No. 27 bit
- Power screwdriver with standard screw chuck or medium flat-blade screwdriver
- Wire cutter/stripper
- Three No. 10 sheet metal screws
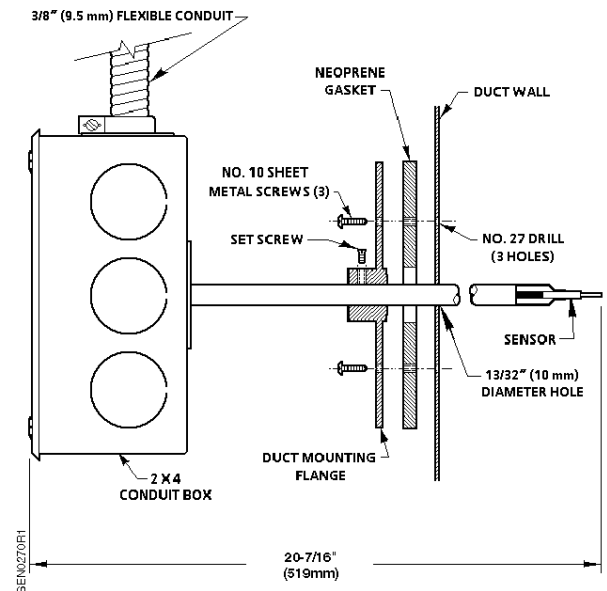
Expected Installation Time

45 minutes

Prerequisites

- Review the instructions before beginning.
- The appropriate field wiring, within the maximum wiring length, should be routed through the conduit.

Installation

NOTE: All wiring must comply with National Electric Code (NEC) and local regulations.

1. Drill a 13/32-inch (10.3 mm) hole into the duct at the desired location of the sensor. See Figure 1.

2. Using the duct mounting flange as a template, drill three holes with a No. 27 bit for the sheet metal screws.

3. Place the neoprene gasket against the duct, and align the three small holes in the duct with the holes in the gasket and duct mounting flange.
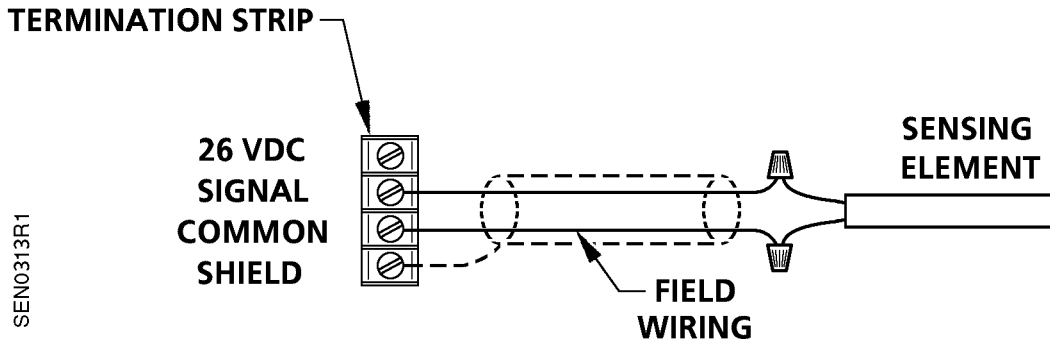

Figure 1. Duct Point Sensor Installation.

4. Using the three No. 10 sheet metal screws, fasten the gasket and duct mounting flange to the duct.

5. Loosen the set screws in the hub of the duct mounting flange and insert the sensor through the flange into the duct.

   NOTE: The sensor tip should protrude into the duct about 1/4 or 3/4 of the duct's diameter. These are the points of average airflow and average air temperature. The air velocity is high enough that the sensor response time is not a problem.

6. Tighten the set screw.

7. Remove the cover from the conduit box.

8. Attach the flexible conduit and field wiring to the conduit box. Ensure that the conduit and field wiring have enough length to allow the installation/removal of the sensor.

9. Using the wire nuts provided, attach the RTD wires to the field wiring in the conduit box.

10. Replace the conduit box cover.

11. Connect the field wires to the controller. See Figure 2.

The installation is now complete.

Figure 2. Wiring to the Controller.

NOTE: 1. Some Siemens Building Technologies controllers may require a shield termination.

2. For individual panel wiring details, refer to the appropriate hardware manual.

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