SIEMENS QBE3100UD100 Wet Differential Pressure Sensor Instruction Manual

Contents

SIEMENS

SIEMENS QBE3100UD100 Wet Differential Pressure Sensor

Product Description

The Siemens QBE Series Wet Differential Pressure Sensors utilize a well-proven ceramic technology making them an ideal choice across a broad spectrum of applications.

Product Numbers

Pressure Rating

CAUTION:

- The maximum manifold pressure rating is 250 psi.
- Exceeding the maximum differential pressure will damage the sensor.

Warning/Caution Notations

Contents

- Sensor
- Rubber gasket
- Conduit plug with cable gland
- 90° mounting bracket and mounting screws

Required Tools

- Thread Sealant
- (2) open-ended wrenches or (4) crescent wrenches: 1/2”, 5/8″, 11/16″, and 9/16”
- Small, Phillips screwdriver
- Small, flat-blade screwdriver

Installation Time

30 minutes

Prerequisites

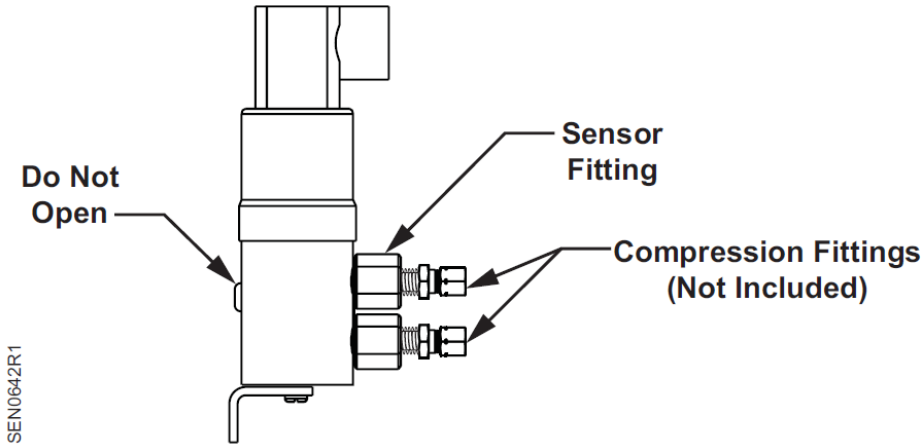
- Use two male connector compression fittings with 1/4”-18 NPT threads rated for system pressure for the HIGH and LOW pressure ports of the sensor (not included).
- Prepare the fittings with Loctite 565 Thread Sealant or equivalent anaerobic liquid to prevent leakage.

CAUTION:
Do not use putty, gasket-type material, or tape.

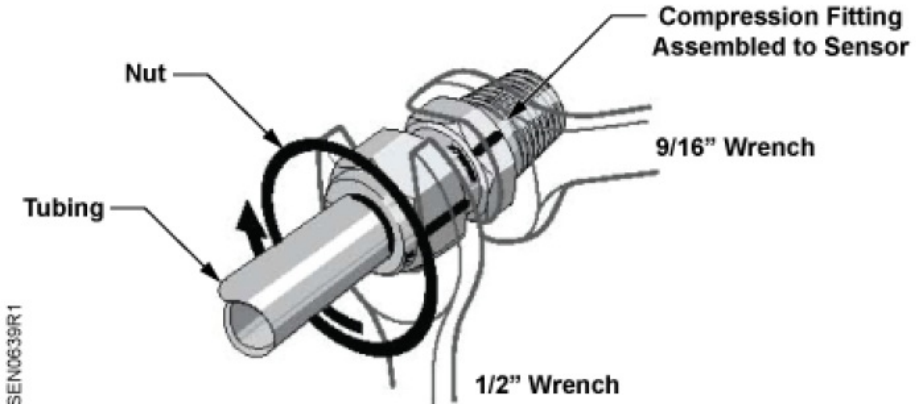
Installation

Installing the Sensor

1. Assemble compression fittings to the sensor finger-tight, and then tighten a minimum 2 to 3 turns with 5/8” wrench or to a maximum 25 ft-lbs (34 Nm) while holding the sensor fitting with the 11/16″ wrench.

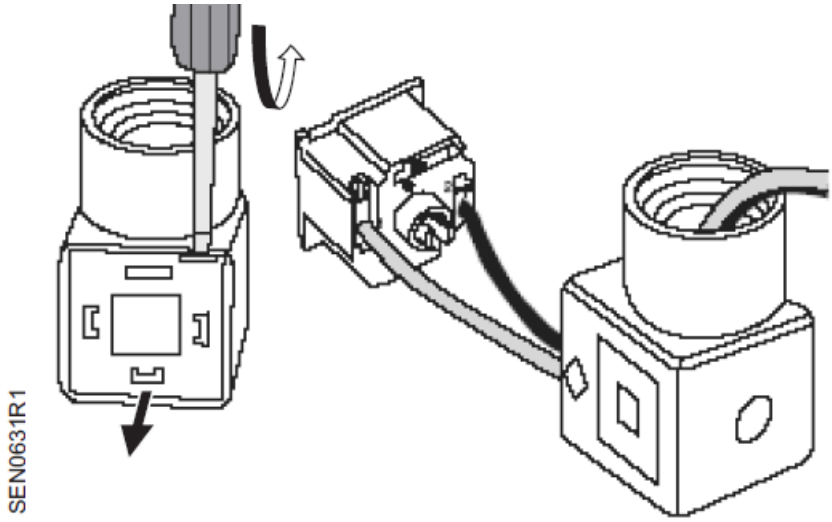


2. Insert the HIGH and LOW pressure lines into the appropriate compression fittings. Be sure to fully insert the pressure lines against the inside shoulder and finger-tighten the nut.
3. While holding the fitting body with the 9/16” wrench, tighten the nut 1-1/4 turn with the 1/2” wrench.



Wiring

1. Use a Phillips or flat-blade screwdriver to completely remove the mounting screw from the conduit cap.
2. Use a flat-blade screwdriver to pry up cover where indicated. (LIFT is embossed on the cover.)

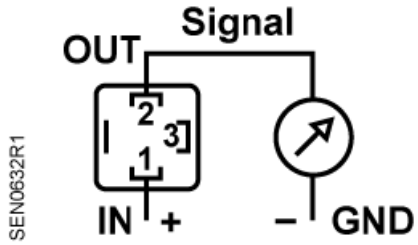


3. Feed wiring through the conduit cap and terminate wires as shown.

   NOTE:

   For non-conduit installations, insert plastic connection with gland before terminating wires.

Current Output



Terminal

1 (IN) Operating voltage 7.5 to 33 Vdc

2 (OUT) Output signal 4 to 20 mA

3 Not Used

4. Snap the termination board back into the conduit cap.

   NOTE: The termination board can be oriented in any direction.

5. Remove white, protective cap from sensor.
6. Insert rubber gasket onto sensor's metal leads. Observe the different slot sizes on the gasket.

   CAUTION:

Lead slots in the conduit cap must be oriented to the sensor's metal leads.

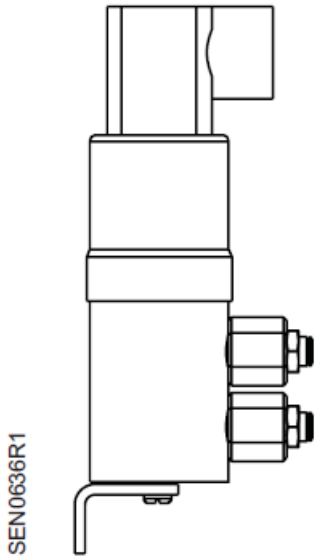
NOTE:

The ground lead may appear slightly bent, but do not attempt to straighten it. Insert the ground lead into the conduit cap first to correct any alignment issues.

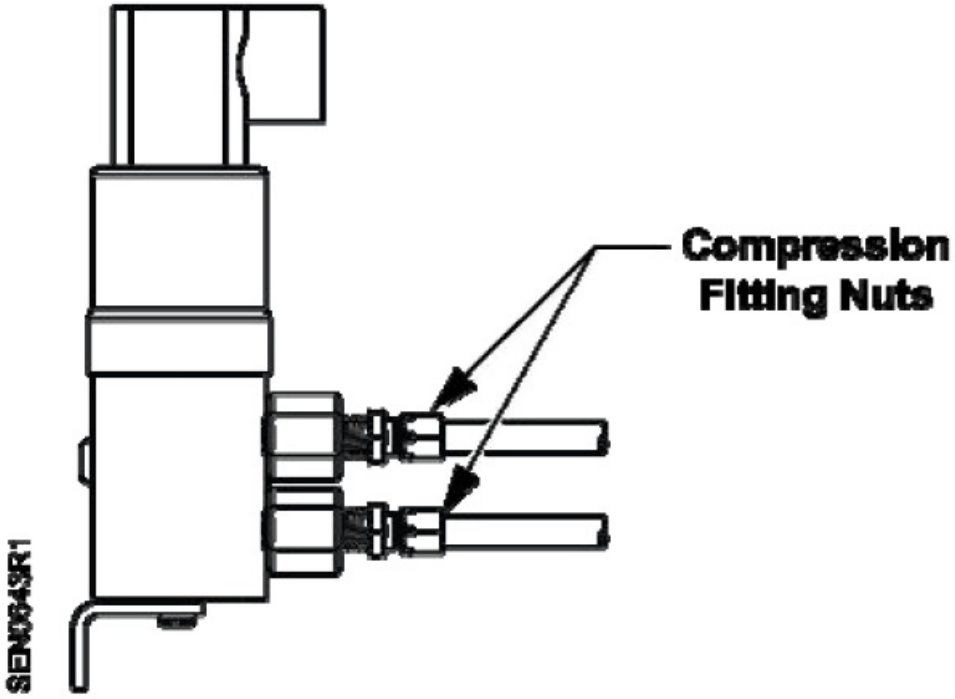
7. Snap conduit cap onto sensor.
8. Replace and secure with the mounting screw.

Mounting the Sensor

1. Use the two screws and washers provided with the mounting bracket to mount the sensor to the bracket.



2. Mount the bracket to the wall.
3. Ensure that the sensor is oriented to enable air bleeding, if necessary. The conduit cap may be positioned to face left, right, front or back.
4. If air bleeding is desired:
    - Carefully loosen the two nuts of the compression fittings assembled to the sensor.



NOTE :While holding the fitting body with the 9/16" wrench, loosen the nuts with the 1/2" wrench.

    - Carefully tighten the nut after bubble-free media flows out.

The installation is now complete.

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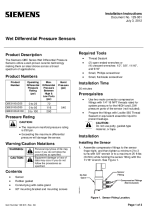
Documents / Resources

	SIEMENS QBE3100UD100 Wet Differential Pressure Sensor [pdf] Instruction Manual QBE3100UD100 Wet Differential Pressure Sensor, QBE3100UD100, Wet Differential Pressure Sensor, Pressure Sensor