

INTRODUCTION

This duct humidity transmitter uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels in a duct. The humidity sensor is encapsulated in a 60 micron HDPE filter at the end of a 230 mm (9") S/S probe and a compact enclosure. An optional temperature sensor is available.

BEFORE INSTALLATION

Read these instructions carefully before installing and commissioning the humidity transmitter. Failure to follow these instructions may result in product damage. Do not use in an explosive or hazardous environment, with combustible or flammable gases, as a safety or emergency stop device or in any other application where failure of the product could result in personal injury. **Take electrostatic discharge precautions during installation and do not exceed the device ratings.**

MOUNTING

The transmitter installs directly into any air duct with a minimum width/diameter of 25.5 cm (10"). Select a suitable installation area in the middle of the duct wall. To achieve the best reading, do not place in an area where air stratification may be present. Mount the sensor at least 1.5 m (5') in either direction from elbows, dampers, filters or other duct restrictions. Avoid areas where the transmitter is exposed to vibrations or rapid temperature changes.

Once a suitable spot is selected, drill a 15 -20 mm (0.6" - 0.75") hole for the probe.

Slide the probe in the drilled hole until the enclosure is flush against the duct. The airflow direction is not important. Secure the enclosure to the duct with two #10 x 1" (25 mm) self tapping screws (not provided). Tighten screws until the enclosure is tight against the duct so that there is no movement of the enclosure as shown in Figure 1.

A foam gasket is provided on the back of the enclosure that provides a tight seal against any air leaks.

The enclosure has a hinged cover with a latch. Open the cover by pulling slightly on the latch on the right side of the enclosure. At the same time pulling on the cover, as shown in Figure 2.

A 1/2" NPT threaded connection hole is provided in the bottom of the enclosure. Screw the EMT or cable gland connector in until tight. See Figure 3. It is recommended that weatherproof EMT or cable gland fittings be used. The E style enclosure includes 1/2" NPT to M16 thread adapter and cable gland fitting.

Make wire connections as per the "Wiring" illustrations on Page 2.

Swing door closed until securely latched. For added security, two screws are provided that may be installed in the integrated screw tabs. See Figure 4.

Figure 1

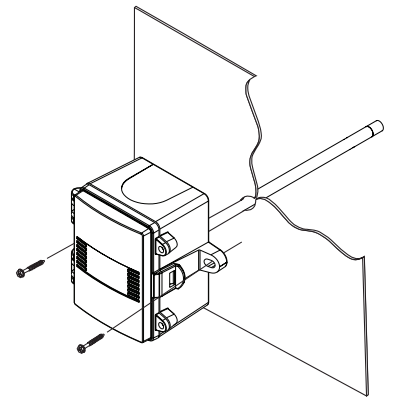


Figure 2

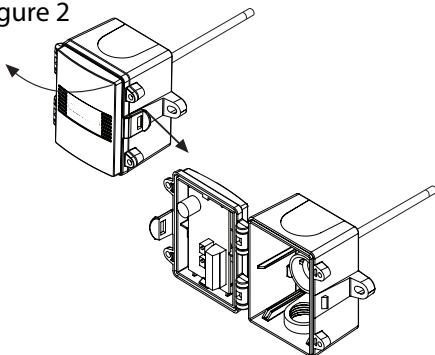


Figure 3

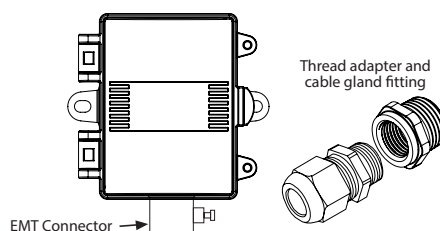


Figure 4

