

## **AIR-IQ PROBE**

### **INTERNAL MOUNT INSTALLATION**

#### OVERVIEW

This document provides the instructions necessary to install AIR-IQ Internal Mount Probes as shown in Figure 1. Internally mounted probes are installed inside of the damper sleeve. Installation consists of installing and securing the probes. For detailed probe information, refer to the Duct/Plenum Probe technical manual TM\_GP1 under separate cover. For detailed information on transmitter set up and operation of the complete airflow measurement station, refer to the associated transmitter technical manual under separate cover.

#### AIR-IQ INTERNAL MOUNTING

Figure 2 provides AIR-IQ Internal Mount probe installation details. Probes are installed from inside of the damper sleeve using the included brackets. AIR-IQ Internal mount probes are manufactured shorter to permit 0.75 in (19 mm) adjustment and allow for installation clearance. Convenient check boxes are provided at each step.



Figure 1. AIR-IQ Internal Mount Probe

1.  Loosen the Non-Cable End Adjustment Screws on both sides of the probe as shown in the detail of Figure 2 for AIR-IQ Probes to permit pivoting the probe and bracket.
2.  Carefully place the Non-Cable End bracket at the non cable end previously prepared location on the inside of the damper sleeve wall so that when the probe is installed, airflow will be in the direction of the arrows printed on the bracket and/or probe. For ease of installation, the probe can pivot within the bracket after loosening the Non-Cable End Adjustment screws (completed in step 1).

#### **NOTE:**

If the airflow direction labels are not visible on the bracket and/or probe, orient the probe so that the sensor SET SCREWS (two per sensor insert) face the DOWNSTREAM airflow direction. (There are no setscrews on the upstream side of the sensor inserts).

3.  Fasten the Non-Cable End mounting bracket to the damper sleeve at two places with appropriate field supplied fasteners, again making sure that printed airflow arrows on the bracket and/or probe are in the actual direction of duct air flow.
4.  Carefully route the probe cable through the cable exit hole, and pivot the cable end probe bracket to the previously prepared location on the damper sleeve wall.
5.  Fasten the cable end mounting bracket to the damper sleeve at two places with appropriate field supplied fasteners, again making sure that printed airflow arrows on the bracket and/or probe are in the actual direction of duct air flow.
6.  Slightly loosen the cable end probe Adjustment screws on both sides of the probe to permit probe movement within the bracket.

7. □ Carefully center the probe in the duct opening, and then tighten the probe Adjustment Screws on both sides of the cable end bracket, and then on both sides of the non-cable end bracket as shown in Figure 2 detail. (4 Adjustment Screws total).

**CAUTION**

Do not over-tighten the probe to bracket mounting screws. Carefully tighten them to prevent stripping the threads in the glass-filled nylon insert material.

8. □ Repeat steps 1 through 8 for all probes.

9. □ Connect all sensor probes to the transmitter supplied for the specific location. This completes probe installation. Complete the installation, wiring and set up of the associated transmitter as detailed in the separate Transmitter Installation Guide and Installation, Operation and Maintenance Technical Manual (each provided under separate cover).

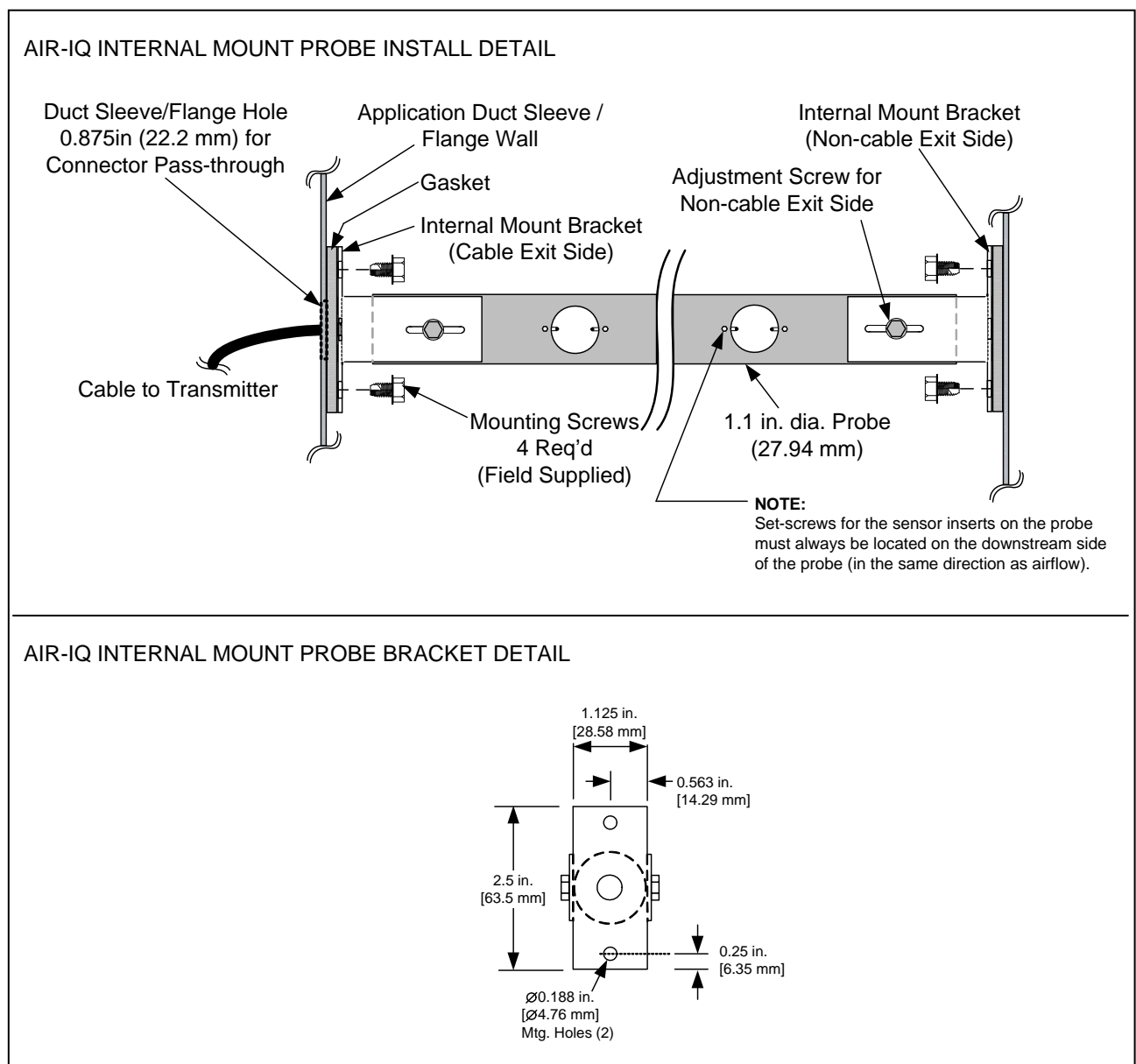


Figure 2. AIR-IQ Internal Mount Probe Mechanical Detail