-F Probe Installation (Flare Mounting)



Step 1. Select a location on the damper flare that allows clearance for probe placement and installation.

Single and dual inlet fan applications (-F/SI and -F/DI) use two probes per damper, one each LEFT and RIGHT. Fan array models (-F/An) can use either one or two probes per damper. If using one probe per damper it is recommended to install probes alternating LEFT and RIGHT starting with LEFT in fan 1.

It is recommended probes be installed vertically with sensors on horizontal centerline and cables exiting downward. Due to obstructions in the damper it may be necessary to rotate the probes to complete installation.

For Gold Series, install sensor probes at location (if provided) indicated on probe hang tag to optimize implementation of the EB-Link Reader and IAQ Enforcer[®] accessories.

Do not bend or modify the sensor probe assembly! If done this will void warranty, and could result in sensor probe and/or fan damage.

REFER TO FIGURE "A" WHEN COMPLETING STEPS 2 TO 16.

When installing probes, the sensor housing shroud should always be pointing toward the side of the damper indicated by the LEFT/RIGHT labels of the sensors. Figure "A" shows the LEFT side probe.

Step 2. Measure 'b' straight across the inner surface of the inner edge of the flare [2].

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Step 3. Use the following appropriate equation to calculate 'a' (the distance from the LEFT/RIGHT side of damper to the centerline of the mounting feet [3]):

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	TABLE 1 – PROBE PLACEMENT	
	Number of Probes	а
	1	(b/2) + 0.5 in. [13 mm]
	2	(b/4) + 0.5 in. [13 mm]

Step 4. Mark the location calculated in Step 3, on the flare surface of the damper [0].

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If installing a probe marked LEFT measure from the left side of the damper; if installing a probe marked RIGHT measure from the right side of the damper.

- Step 5. Mark a line 3/4 inch [[®]] from the inner edge of the flare [^②] for the lower mounting foot perpendicular to the mark made in Step 4.
- Step 6. Insert lower mounting rod [⁽)] into the hole of the sensor mounting block [⁽⁶⁾] closest to sensor housing [⁽)].

Both rods are identical to each other, and can be used in either the upper or lower location.

Step 7. Insert upper mounting rod [⑤] into the hole of the sensor mounting block [⑥] furthest from sensor housing [⑦].

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Tighten set screws in the probe only enough to hold the rods while marking.

- Step 8. Position the probe [⑦] so that the back of the lower mounting rod foot [③] is on the mark made in Step 5, both mounting feet [③] are centered on the lines that were marked in Step 4 and both rods are parallel to the inner edge of the flare [②].
- Step 9. Maintaining the position from Step 8, use the mounting feet [③] as a template to mark and drill the four pilot holes on the damper flare surface for the mounting screws [④] selected (screws not provided).
- Step 10. Confirm that the airflow directional arrow is pointing in the direction of airflow, and the cable is exiting downward.
- Step 11. Position the probe on the damper flare surface, and secure with four mounting screws [④] in the pre-drilled holes (screws not provided).

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Failure to properly install the probe can result in probe and/or damper damage.

- Step 12. If necessary, loosen set screws and position the sensor on the rods, so that it is on the centerline of the damper.
- Step 13. Once centered, tighten the set screws using the hex wrench provided.
- Step 14. Using the tie wraps [®] provided secure cable to mounting rod (minimum of two tie wraps [®] per probe).
- Step 15. If installing two probes in the damper, repeat Steps 4 to 14, otherwise, continue to Step 16.
- Step 16. For dual fan inlet or fan array applications, repeat steps above to install probes at the other damper opening(s).
- Step 17. Probe installation is complete! Figure "B" shows a completed two probe installation.

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