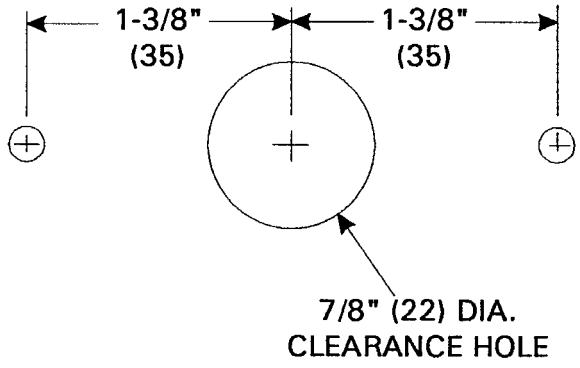
Installation Guide

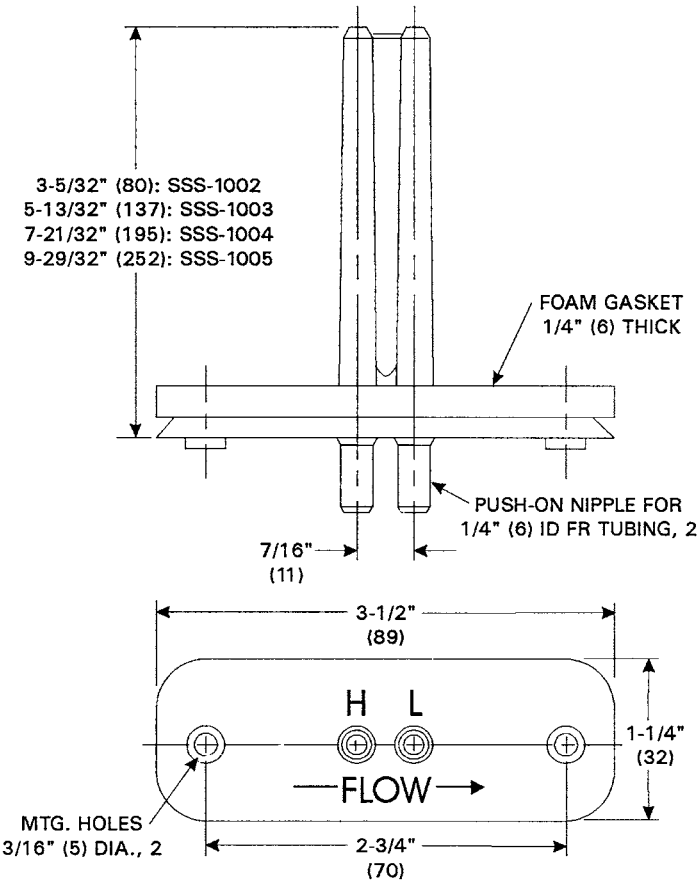
Mounting

1. Determine the duct's flow direction and install the SSS-1000 based on the unit's flow arrow imprint.

NOTE: The sensor must be mounted with the arrow pointing in the direction of the air flow.

2. Cut a 7/8" hole in the duct to accept the unit.
3. Attach using two self-tapping screws inserted in the 3/16" mounting holes.





Connections

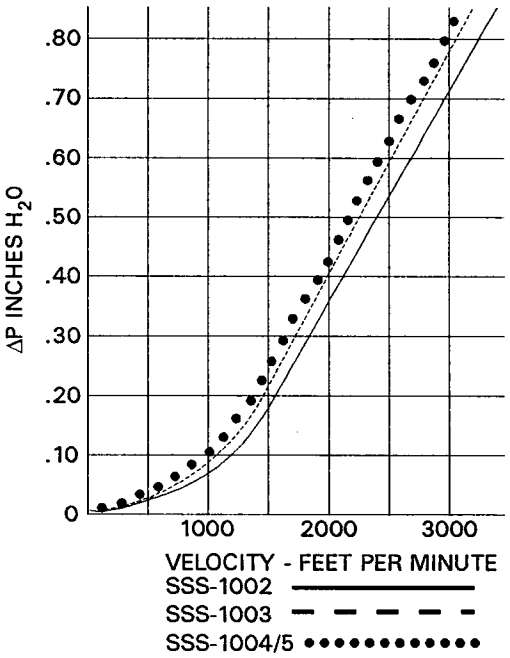
Connections use 3/8" OD polyethylene tubing. Check that there are **no sharp bends** in the tubing at any connection. Bends and creases may leak as tubing ages.

1. Connect the Port "H" to the "High" input on the VAV controller.
2. Connect the Port "L" to the "Low" input on the VAV controller.

NOTE: With **CSC-3000 series, CSP-4000/5000 series, KMD-7000 series, and BAC-7000 series controllers**, use a **3/8" to 1/4" barb union adapter** and appropriate polyethylene tubing to the sensor and controller. **For maximum accuracy in the CSP-5000 series, KMD-7000 series, and BAC-7000 series** controllers, the 3/8" OD tubing between the sensor and the adapter should be as short as possible, and the 1/4" OD tubing from the adapter to the controller should be 24" long (on both the High and the Low sides).

Specifications

Material	Light gray ABS/polycarbonate (UL94-5V)
Mounting	Integral flange with gasket
Connection	1/4" (6 mm) nipple for 3/8" (10 mm) OD polyethylene tubing
Temperature Limits	
Operating	40 to 120° F (4 to 49° C)
Shipping	–40 to 140° F (–40 to 60° C)



"Feet Per Minute" K Factors	
Sensor Model	**K**
SSS-1002	3450
SSS-1003	3300
SSS-1004	3200
SSS-1005	3200

Formulas for CSC-2000, CSC-3000, and CSP-4000 Series			
For Flow		**For Volume**	
$\Delta P = (FPM/K)^2$	**FPM = K x SQRT(ΔP)**	**$\Delta P = \left(\frac{CFM}{K \times Area}\right)^2$**	**CFM = K x SQRT(ΔP) x Area**
Feet Per Minute in a VAV box equals the (relevant model's) K factor times the square root of the differential pressure (in "wc").		Cubic Feet per Minute in a VAV box equals the relevant sensor model's K factor times the square root of the differential pressure (in "wc") times the cross-section area (in square feet).	
NOTE: These formulas are for CSC-2000 series, CSC-3000 series, and CSP-4000 series controllers with built-in "differential pressure" sensors. CEP-4000, CSP-5000, KMD-7000, and BAC-7000 operate differently—see their respective installation guides and application guides for more information. NOTE: CFM (cubic feet per minute) = FPM (feet per minute) times the duct cross-section area (in square feet).			

Important Notices

The material in this document is for information purposes only. **The contents and the product it describes are subject to change without notice.** KMC Controls, Inc. makes no representations or warranties with respect to this document. In no event shall KMC Controls, Inc. be liable for any damages, direct or incidental, arising out of or related to the use of this document.

Maintenance

Sensing orifices must be kept free of dust accumulation or debris. The sensors are designed for dependable, long-term reliability and performance.

KMC Controls, Inc.
19476 Industrial Drive
New Paris, IN 46553
574.831.5250
www.kmccontrols.com
info@kmccontrols.com