

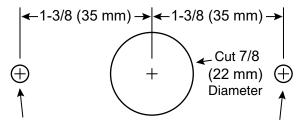
# **Installation Guide**

## **Mounting**

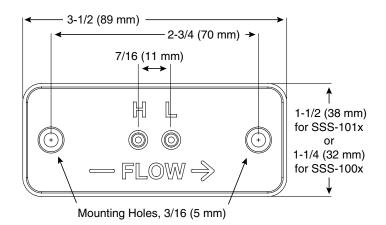
 Determine the duct's flow direction and install the sensor based on the sensor's flow arrow imprint.

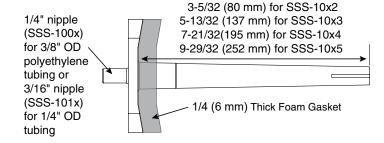
NOTE: The sensor must be mounted with the arrow pointing in the direction of the air flow.

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



Drill Two Holes for Self-Tapping Screws Inserted Through Sensor's 3/16 (4.76 mm) Mounting Holes





#### **Connections**

Connect the sensor to the controller using appropriately sized polyethylene tubing:

- For using SSS-100x sensors with CSC-3000 series, CSP-4000/5000 series, KMD-7000 series, and BAC-7000/8000/9000 series controllers, use a barb union adapter and appropriately sized 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).
- OR use the equivalent SSS-101x sensor and just 1/4" OD tubing (no adapter is necessary). For maximum accuracy in the CSP-5000 series, KMD-7000 series, and BAC-7000 series controllers, the

1/4" OD tubing from the sensor to the controller should be 24" long (on both the High and the Low sides).

**NOTE:** For other controllers, the length of the tubing should not be longer than necessary.

**NOTE:** CSC-2000 series controllers have ports for 3/8" tubing (the same as the SSS-10**0**x sensors).

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.

SSS-1000 Series 1 Installation Guide

## **Select Specifications**

Material Light gray (SSS-100x) or al-

mond (SSS-101x) ABS/polycar-

bonate (UL94-5V)

Connection 1/4" nipple (SSS-100x) for 3/8"

OD polyethylene tubing or 3/16" nipple (SSS-101x) for 1/4"

OD tubing

K Factors See the data sheet for addi-

tional information!

#### NOTE: For the appropriate sensor "K" factor:

- For VAV controllers needing K<sub>CFM</sub> for setup, see the "CFM" chart below and the device documentation for additional information. For rectangular ducts, K<sub>CFM</sub> = K<sub>FPM</sub> x (W" x H"/144) (with duct cross-section measurements in inches).
- For VAV controllers (needing K<sub>FPM</sub> for setup), see the "Feet Per Minute" chart below and the device documentation for additional information.

"Cubic Feet Per Minute (CFM)" K Factors				
Round Duct Size (Diameter)	K <sub>CFM</sub> Factor			
	SSS-10x2	SSS-10x3	SSS-10x4	SSS-10x5
4	301	NA	NA	NA
5	470	NA	NA	NA
6	677	648	NA	NA
7	922	882	NA	NA
8	1204	1152	1117	NA
9	1524	1458	1414	NA
10	1882	1800	1745	1745
12	2710	2592	2513	2513
14	3688	3528	3421	3421
16	4817	4608	4468	4468
18	6097	5832	5655	5655
22	9107	8711	8447	8447
24	10838	10367	10053	10053

"Feet Per Minute" K Factors			
Sensor Model	K <sub>FPM</sub>		
SSS-10x2	3450		
SSS-10x3	3300		
SSS-10x4	3200		
SSS-10x5	3200		

#### **Maintenance**

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

#### **More Information**

For **additional K factor** and other information, see the SSS-1000 Series Data Sheet on the KMC web site (www.kmccontrols.com).

### **Important Notices**

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

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