

PRESSURE



AIR SENSING SWITCH MODELS RH-3, RH-3-2

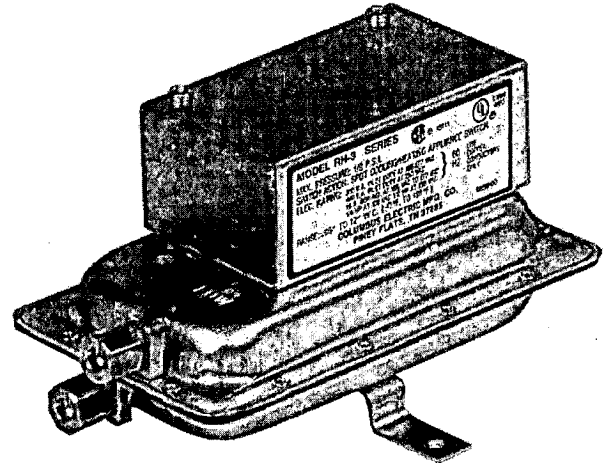
DESCRIPTION

Model RH-3 and RH-3-2 Air Sensing Switches monitor air pressure, vacuum, or differentials of air pressure and vacuum. These air sensing switches are commonly used to prove blower operation, sense dirty filters, and monitor coils.

Models RH-3 and RH-3-2 are shipped with 1/4" compression fittings, suitable for use with 1/4" OD copper or plastic tubing, and a 12" (30.48 cm) length of 1/4" plastic tubing.

OPERATION

When pressure is applied to the high side of the air flow switch or vacuum is applied to the low side, an internal diaphragm moves against and operates the lever of the snap-switch. When the air flow switch is at rest (not operating), the snap-switch N.C. (normally closed) contact is made to common. When an increase in differential pressure operates the snap-switch, the N.O. (normally open) contact is made to the common terminal. The action of the diaphragm on the snap-switch is the same whether pressure or vacuum is being sensed. The wiring from the air sensing switch to other devices depends upon the application.



SPECIFICATIONS

Set point range		Overpressure	0.5 psig (3.5 kPa)
RH-3	0.05" to 12.0" W.C. (12.5 to 2989 Pa)	Operating temp	-40° to 180°F (-40° to 82°C)
RH-3-2	0.05" to 2.0" W.C. (12.5 to 498 Pa)	Mounting position	Any vertical plane
Switch differential	0.02" (5.0 Pa) W.C. @ min setting, 0.8" (199.5 Pa) W.C. @ max setting	Pressure connection	1/4" compression, suitable for use with 1/4" OD copper or plastic tubing
Contacts	SPDT	Approval	UL, CSA
Electrical rating	300 VA pilot duty @ 125-277 VAC 15A resistive @ 125 VAC 1/4 hp @ 125 VAC 1/2 hp @ 250 VAC 2.4A @ 24 VAC 0.5A @ 24-125 VDC	Weight	2.0 lb (0.91 kg)

PRESSURE



AIR SENSING SWITCH MODELS RH-3, RH-3-2

INSTALLATION

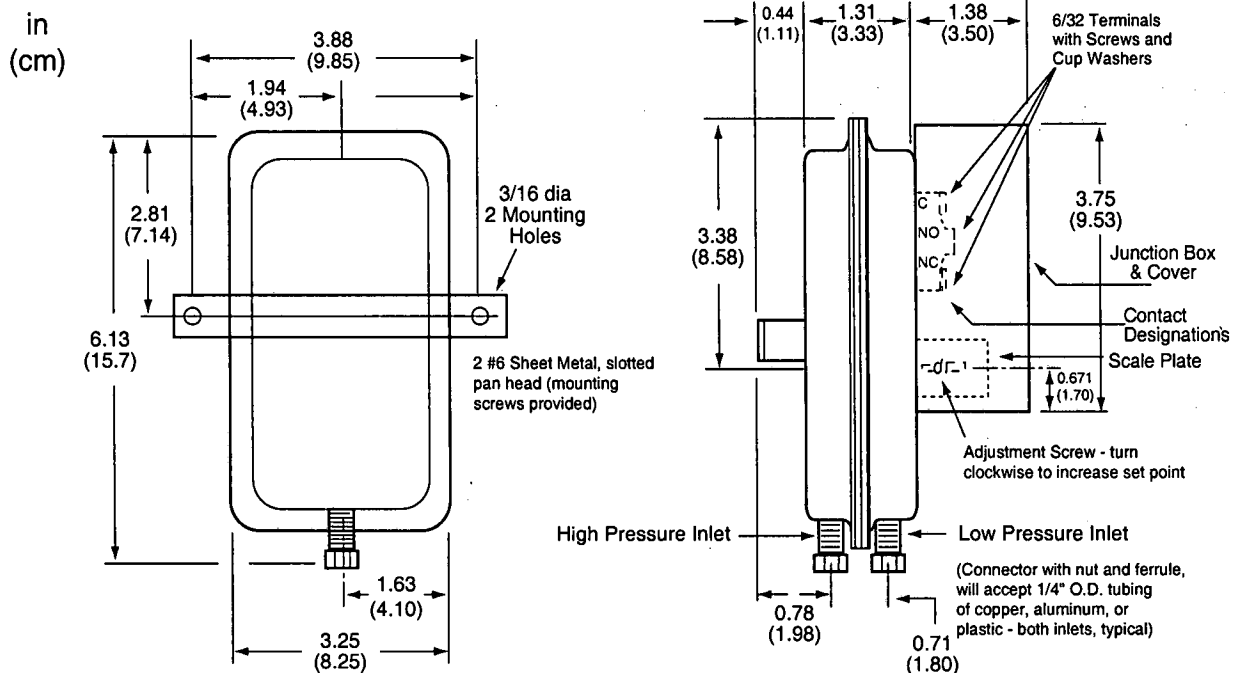
Mounting

The **RH-3** and **RH-3-2** may be used to sense pressure, vacuum, or differentials of pressure and vacuum. Using sheet metal screws, mount the control vertically on the duct or equipment. Avoid areas of high vibration. Connect the 1/4" tubing to the air flow switch using 1/4" compression fittings. Insert the other end of the tubing into area to be sensed. See Ordering Information for static pressure tips, duct impact (total pressure) tubes, and pitot tubes for use with **RH-3** and **RH-3-2** switches.

Adjustment

The adjusting screw located in the junction box may be used to change the operating point. The operating range is 0.05" to 12.0" W.C. for the **RH-3**, and 0.05" to 2.0" W.C. for the **RH-3-2**. The differential is 0.02" rising to 0.8" at highest setting. The switch will operate at 0.05" and reset before 0.03" on the low end. It will operate at 12.0" and reset before 11.2" on the high end. Rotate adjusting screw clockwise to increase setting.

DIMENSIONS

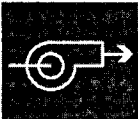


ORDERING INFORMATION

MODEL	RANGE
RH-3	0.05" to 12.0" W.C. (12.5 to 2.99 kPa)
RH-3-C	Kele Calibrated for Your Application (specify set point)
RH-3-2	0.05" to 2.0" W.C. (12.5 to 4.98 kPa)
RH-3-2-C	Kele Calibrated for Your Application (specify set point)

Related Products

#21121	Duct impact tube
A-301, A-302	Static pressure tip



FLOW

DIFFERENTIAL PRESSURE FLOW SENSORS SSS-1000 SERIES

DESCRIPTION

The **SSS-1000 Series** of economical air flow sensors sense differential (velocity) pressure of VAV units and other locations in main or branch ducts. Four different lengths allow selection of the sensor to yield accurate readings on terminal box inlet diameters from 4" to 20" (10.16 to 51.80 cm).

SPECIFICATIONS

Mounting	Integral flange with gasket
Connections	1/4" (6.4 mm) nipples for 3/8" (9.5 mm) OD polyethylene tubing
Weight	1.0 oz (31g) without packaging
Ambient limits	
Operating	40° to 120°F (4° to 49°C)
Shipping	-40° to 140°F (-40° to 60°C)

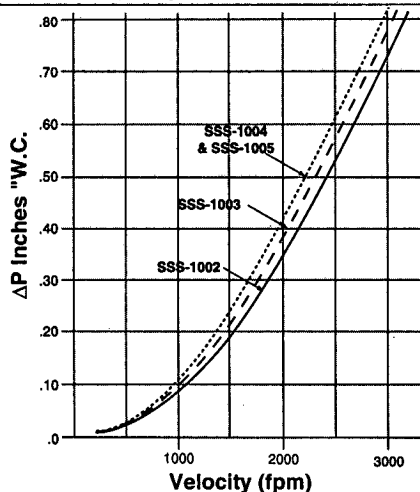
INSTALLATION

The **SSS-1000 Series** sensor requires a 7/8" (2.22 cm) diameter cutout for the insertion portion and two pilot holes for sheet metal screws or rivets to hold the flange against ductwork.

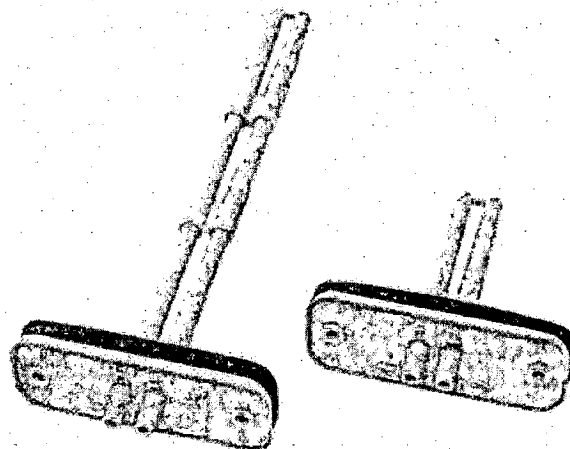
Sensors should be installed as level as possible to ensure accurate velocity pressure readings.

When connecting 3/8" (9.5 mm) OD polyethylene tubing, care should be taken to assure that sharp bends are not made at the sensor connection. This can cause leakage as tubing ages and stretches.

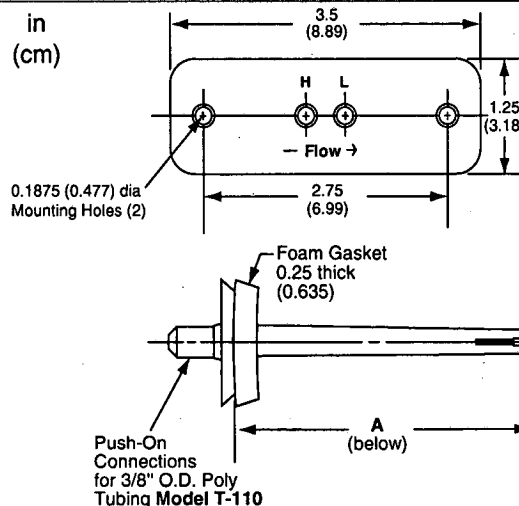
PERFORMANCE



SSS-1002	Velocity = $3450 \sqrt{\Delta P}$
SSS-1003	Velocity = $3300 \sqrt{\Delta P}$
SSS-1004	Velocity = $3200 \sqrt{\Delta P}$
SSS-1005	Velocity = $3200 \sqrt{\Delta P}$



DIMENSIONS



MODEL	DIMENSION A	SENSING POINTS
SSS-1002	3.16 (8.01)	1 SET
SSS-1003	5.41 (13.73)	2 SETS
SSS-1004	7.66 (19.44)	3 SETS
SSS-1005	9.91 (25.16)	4 SETS

ORDERING INFORMATION

MODEL	DESCRIPTION
SSS-1002	Flow Sensor, 3.16" Insertion
SSS-1003	Flow Sensor, 5.41" Insertion
SSS-1004	Flow Sensor, 7.66" Insertion
SSS-1005	Flow Sensor, 9.91" Insertion

	RELATED PRODUCTS
M30/40, T30/40	Modus differential pressure transmitter
M264	Setra differential pressure transmitter
XLdp	Ashcroft differential pressure transmitter