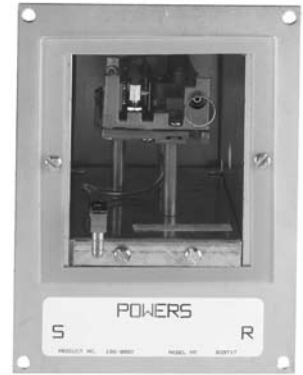


Room and Duct Humidity Transmitters



186-0043 Room Humidity Transmitter.



186-0089 Duct Humidity Transmitter.

Description

The 186 Room and Duct Transmitters are one-pipe, direct acting pneumatic instruments that sense space humidity and transmit a 3 to 15 psi (21 to 103 kPa) pneumatic signal to a remote receiver gauge and/or receiver-controller to read percent relative humidity.

Features

- Inorganic sensing element for rapid response to humidity changes
- Bimetal temperature compensation minimizes temperature effects
- Cover included with Room Transmitter
- Available for room mounting (vertical) and duct mounting that is at least 6-inches (152 mm) high and 6-1/2-inches (165 mm) deep

Applications

The 186 Room and Duct Humidity Transmitters operate on a force-balance principle with internal feedback to obtain linearity to accurately sense relative humidity.

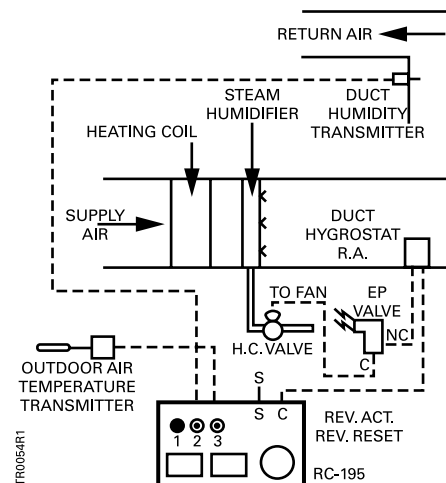
The transmitter output can be sent to a receiver-controller for control of an air conditioning or process control system.

Recommendation

Room: Air velocity must be at least 30 FPM (0.15m/s) and the transmitter should be located where it senses actual *room conditions* (away from doors, equipment, etc.).

Duct: Duct transmitters should be used whenever possible in the return air duct.

Application Drawing



Typical Application of Return Air Duct

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Controllers & Transmitters

186 Humidity Transmitters Specifications

Action Direct
RH Range 20 to 80% RH
Maximum Operating Temperature 135°F (57°C)
Supply Pressure
 Maximum 30 psi (207 kPa)
 Normal Operating 22± 1.0 psi (152± 6.89 kPa)
Effect of 10°F (5.6°C)
Temperature Change Shift of 1% RH
Air Consumption 35 scim (9.6 ml/s)
Output Pressure 3 to 15 psi (21 to 103kPa)
Air Connections 1/8" (3 mm)

Mounting

Room Wall terminal
 Duct Duct at least 6" H x 6.5" D
 (152 mm H x 165 mm D)

Standard Room Cover Finish Desert Beige, plastic

Duct Box

Material Galvanized Steel

Air Connections 1/4" (6 mm) barbed connection

Dimensions

Room 2.06" W x 3.19" H x 1.37 D
 (53 mm W x 81 mm H x 35 mm D)
 Duct 4.5" W x 5.87" W x 6" D
 (114 mm W x 149 mm W x 152 mm D)

Shipping Weights

Room 0.84 lb. (0.38 kg)
 Duct 3.14 lb. (1.42 kg)

186 Humidity Transmitters Product Ordering

Description	Part No.
Duct Humidity Transmitter	186-0089
Room Humidity Transmitter	186-0043

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