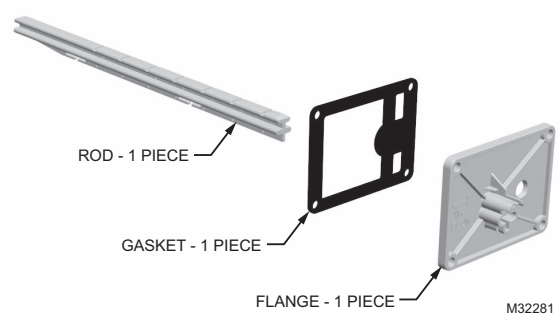
Honeywell

Duct Mounting Kit for JADE™ Economizer Sensors

INSTALLATION INSTRUCTIONS



PRODUCT DESCRIPTION

The duct mounting kit is used for mounting temperature and humidity sensors inside sheet metal ductwork.

A separate controller such as the JADE™ Economizer System (Model W7220) provides power and communications for the duct mounted sensors.

SPECIFICATIONS

Operating, Storage, and Shipping Temperature range:
-40 to 150 °F (-40 to 65 °C)

Dimensions:
Rod: H 0.58 in. (14.73 mm), W 0.45 in. (11.4 mm), L 9.84 in. (250 mm)
Gasket: H 2.36 in. (60 mm), W 3.15 in. (80 mm), L 0.06 in. (1.57 mm)
Flange: H 2.36 in. (60 mm), W 3.15 in. (80 mm), L 0.89 in. (22.5 mm)

NOTE: See Fig. 8 on page 4 for an exact size mounting template.

Kit Weight: 0.097 lb. (0.044 kg)

BEFORE INSTALLATION

Review the “Specifications” before installing the duct mounting kit.

When Installing This Product

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check ratings given in instructions and on the product to ensure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.

INSTALLATION

Mounting

IMPORTANT

Avoid mounting in areas where acid fumes or other deteriorating vapors can attack the metal parts of the sensor, or in areas where escaping gas or other explosive vapors are present.

IMPORTANT

The duct mounting must be must be located in a position that allows clearance for wiring, servicing, and removal of the sensor.

The sensor is mounted in the air stream using the duct mounting kit. Use #6 or #8 screws (screws are not provided and must be obtained separately). Use the dimensions listed in the “Specifications” and the template in Fig. 8 on page 4 as a guide.

The sensor must be mounted to allow air flow through the sensor housing vent slots on the end or side of the sensor. Refer to the airflow direction arrow on the flange and Fig. 4 on page 3 for the recommended orientation to the air stream.

Sensor Mounting

The sensor can be mounted directly onto the mounting rod in the duct mounting kit. See “Assembly and Mounting Procedure” on page 2.

The duct mounting kit contains a rod to hold the sensor in the duct airway, a flange to secure the sensor rod to the duct wall and to fill the access hole, and a gasket to prevent air from leaking through the duct wall and seal wires.

The rod has channels for threading the wire to prevent loose or hanging wire in the duct.

62-0334-01

The sensor length on the rod can be adjusted from 6 to 12 inches in increments of one inch. The flange has a relief tab for ease of adjusting the rod on the flange as shown in Fig. 5 on page 3. The rod and flange have two locking features (shown in Fig. 6 on page 4), to hold the sensor (which attaches to the end of the rod) in the airflow at the desired position:

- — a tab on the flange and detents on the rod
- — a cutout on the flange and seal/cotter pin holes on the rod are provided to secure the rod's position in the duct. The seal/cotter pin holes require a pin or seal which are *not* included in the kit.

Assembly and Mounting Procedure

1. Use the template in Fig. 8 on page 4 to cut the access hole in the sheet metal ductwork. It is important that you use the template so that the hole in the ductwork is sized correctly to allow for the four mounting holes on the flange.
2. Remove the protective film from the gasket and affix the gasket (glue side) onto the side of the flange that faces in toward the ductwork as shown in Fig. 1. The gasket provides an airtight seal for the sensor wires.

NOTE: The side of the flange that faces outward has the text, AIR FLOW, and an arrow printed on the flange.

3. Insert the rod into the slot on the underside of the sensor as shown in Fig. 2. The gasket will cover the wiring access hole. Refer to Fig. 4 on page 3 and the airflow text printed on the flange to ensure that the sensor orients correctly in the duct airflow.
4. Mount the flange onto the rod as shown in Fig. 3 on page 3.
5. Connect the sensor wiring to the sensor.
6. Route the sensor wiring along the rod and through the gasket material to maintain the seal with the duct. Use the cutouts on the bottom of the rod to securely route the sensor wiring as illustrated in Fig. 7 on page 4.
7. Using the release tab, adjust the rod length to allow for optimum positioning in the air stream as described in Fig. 5 on page 3.

NOTE: The release tab is slender. Do not use excessive upward force to release the tab from the rod.

8. Determine the locking feature that you wish to use. See Fig. 6 on page 4.
9. As necessary, you can cut off the excess length of the rod. See Fig. 7 on page 4.

NOTE: Do not try to break off the end of the rod by hand. Use a saw or cutting tool.

10. In addition to the detent locking feature, there is a hole at each detent position that can be used to secure the position of the rod with a seal or cotter pin (not supplied). See Fig. 6 on page 4.
11. Insert the sensor and rod into the ductwork.
12. Attach the assembly to the ductwork using four #6 or #8 screws. (Screws are not provided in the kit.)

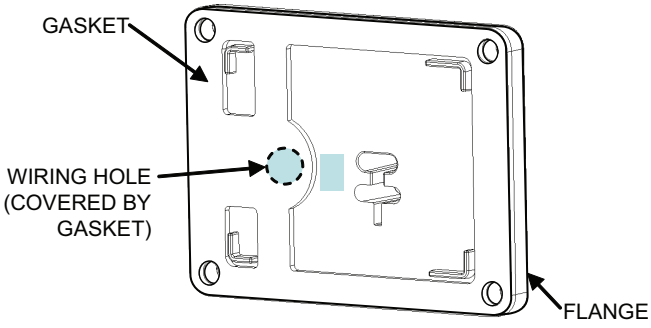
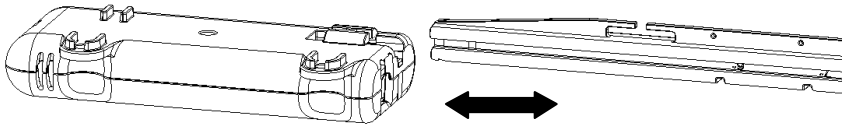
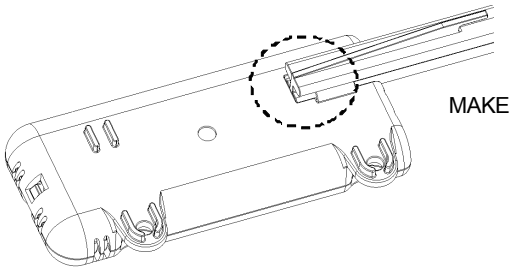


Fig. 1. Sealing gasket applied to flange.



PUSH/PULL THE ROD TO ASSEMBLE/DISASSEMBLE THE PARTS.



MAKE SURE THE ROD IS FULLY INSERTED.

Fig. 2. .Sensor attachment to rod.

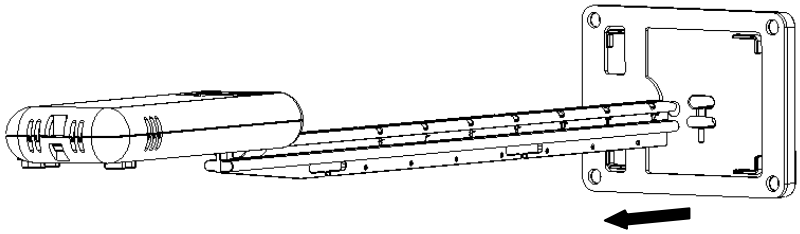


Fig. 3. Rod insertion into the flange.

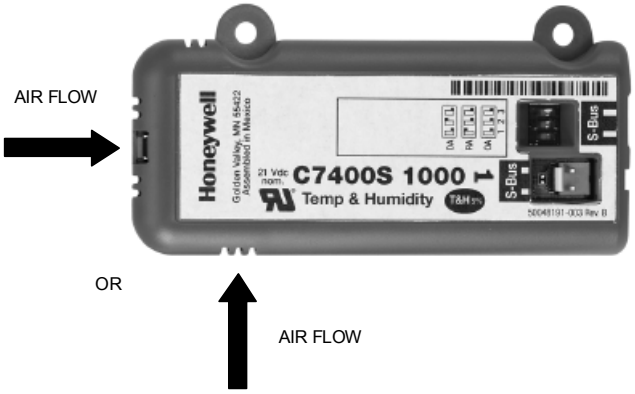


Fig. 4. Sensor orientation in the air stream.

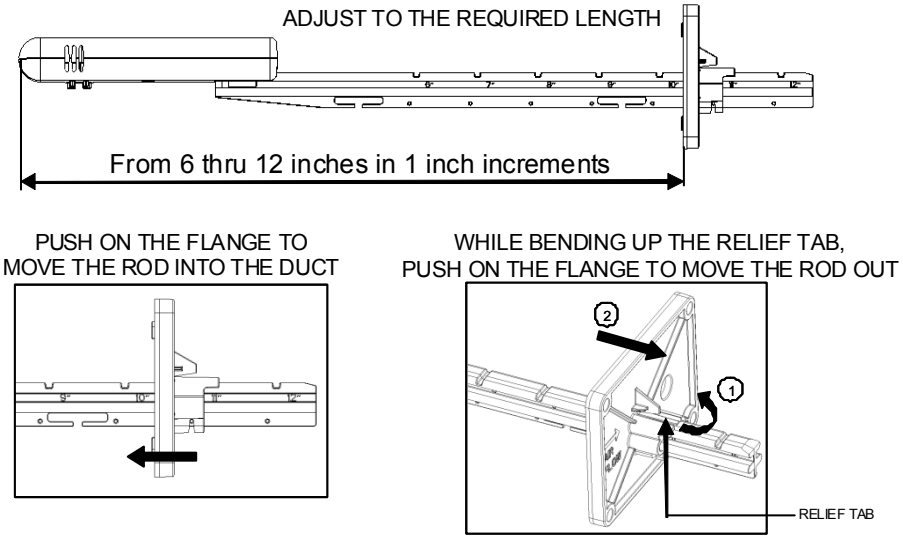


Fig. 5. Rod length adjustment.

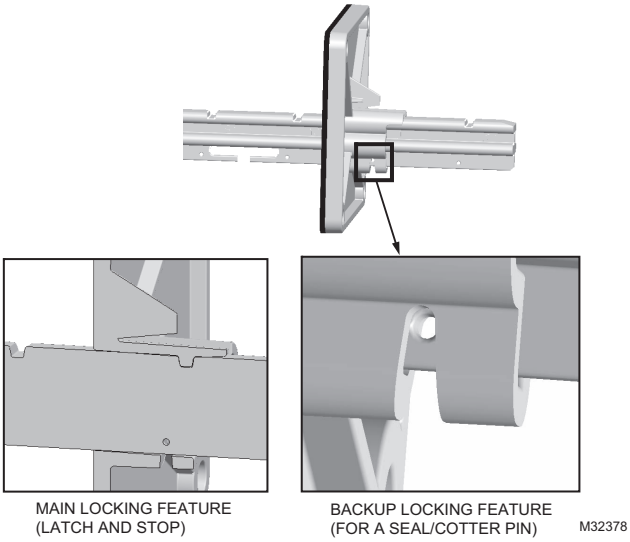


Fig. 6. Locking features.

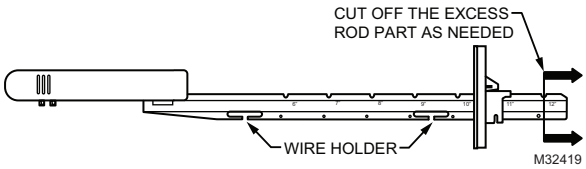


Fig. 7. Sensor wire routing and excess rod removal.

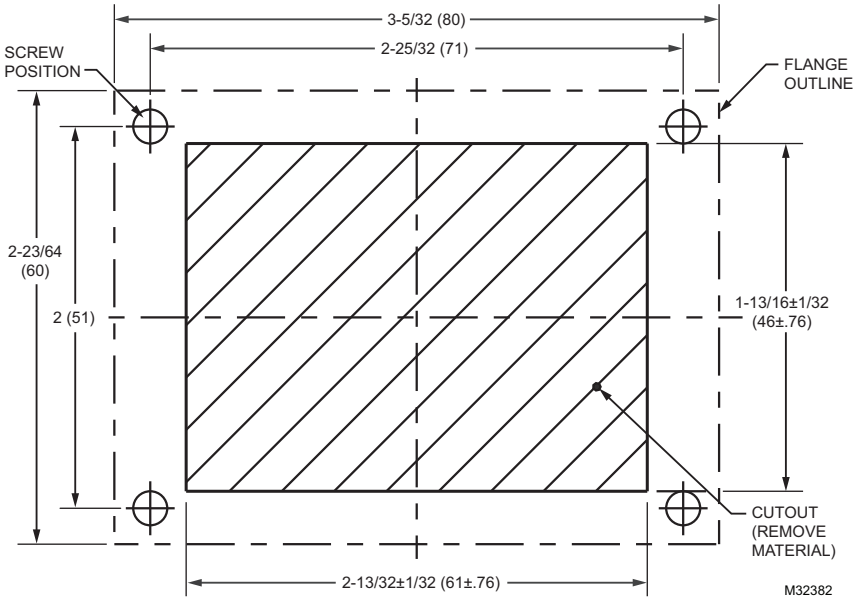


Fig. 8. Mounting Template to Scale (1 in. = 1 in.).

NOTE: Cut out and use the Mounting Template in Fig. 8 to make the access hole in the ductwork. The template is printed to scale where 1 inch = 1 inch.

JADE™ is a trademark of Honeywell, Inc.

Automation and Control Solutions
Honeywell International Inc.
1985 Douglas Drive North
Golden Valley, MN 55422

Honeywell Limited-Honeywell Limitée
35 Dynamic Drive
Toronto, Ontario M1V 4Z9
customer.honeywell.com

Honeywell

62-0334–01 M.S. 12-10
Printed in U.S.A.