

Installation Guide

Mounting

⚠ CAUTION

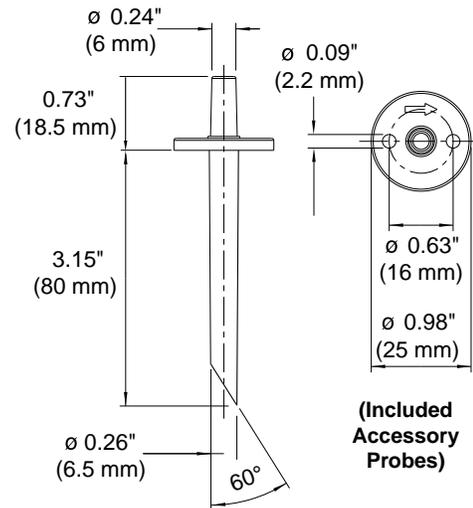
- Do not use in an explosive or hazardous environment, with combustible or flammable gases, as a safety or emergency stop device, or in any other application where failure of the product could result in personal injury.
- Do not exceed the switch ratings.
- Disconnect all power before connecting wiring to the terminals and follow all appropriate safety regulations.
- Do not use for U.S. FDA-controlled application areas.
- KMC Controls is not liable for any damage caused by improper use.

1. Select a mounting location that is free from vibration.
2. Align the unit vertically with the ports at the bottom (to drain any condensation moisture that might occur).

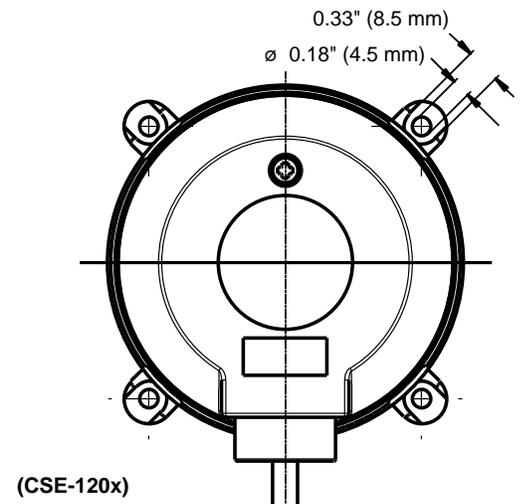
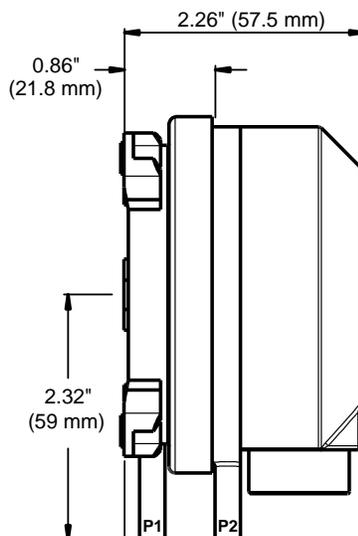
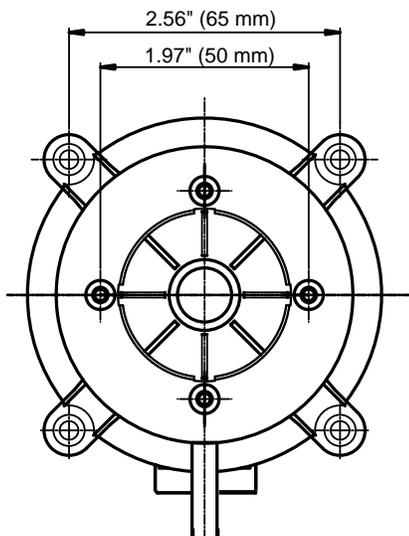
NOTE: The switch may be mounted horizontally (electrical connectors pointing upwards) **only if no condensate can form**. In this position, switching values are approximately 0.08 wc (20 Pa) higher than indicated on the scale.

3. Using the mounting holes, attach the base to the surface mounting location. (If not using the supplied screws, the maximum diameter of the screws must not be bigger than 0.31" or 8 mm.)
4. Using the NPT fitting, attach a 1/2" conduit and tighten to 22 in-lb. (2.5 Nm).

NOTE: See the CSE-1201/1202/1203 data sheet on www.kmcccontrols.com for complete specifications.



All dimensions are in inches (mm)



Sensor Probes

NOTE: For maximum accuracy, install the sensor probe a minimum of 1.5 duct diameters downstream from the air source. Install the end of the sampling probe as close to the center of the airstream as possible.

To install the included accessory sensor probe(s):

1. Drill holes in the ducting for the sensor tubes and mounting screws. (See the illustration on the previous page.)
2. Insert the sensor tubes into the duct with the molded arrows aligned with the air flow.
4. Attach the probes to the duct using screws.
5. Connect the probes with the included tubing.

Pressure Connections and Setting

1. Connect the desired port(s) with tubing to the sensor probe(s):
 - P1 (only) = Positive (over) pressure measurement (leave P2 open)
 - P2 (only) = Negative (vacuum) pressure measurement (leave P1 open)
 - P1 and P2 = Differential pressure measurement

NOTE: Inner hose diameter = 0.216" (5.5 mm) for optimal clamping.

NOTE: Before pressure is applied, the SPDT switch connects (Common) 3 and (Normally Closed) 1 terminals.

2. Remove the cover screw and cover.
3. On the setpoint dial, set the desired pressure that trips the switch and connects (Common) 3 and (Normally Open) 2 terminals at increasing pressure. (When the pressure falls below the switching differential, the switch returns to its Normally Closed position.)
4. With an ohmmeter on the terminals, check the trip and reset pressure by slowly increasing and decreasing pressure.

NOTE: For precise calibration, use a digital manometer or other measuring device to confirm the actual setpoint.

Maintenance

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

Wiring

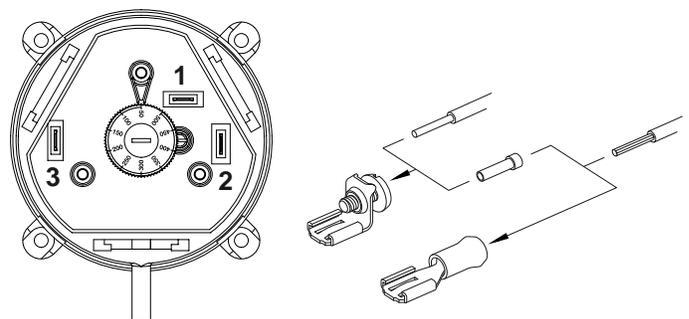
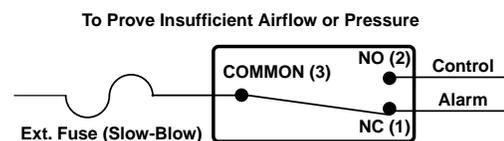
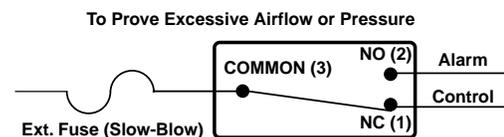
⚠ CAUTION

Do not restore power until wiring is complete and the housing is closed.

1. Run a three-wire cable with an outer diameter of no more than 0.395" (10 mm) through the conduit into the housing.
2. Connect wires to the spade plugs or the included screw terminal adapters. The connections are intended for 0.25" (6.3 mm) crimp-type sockets. Assemble stranded (with or without ferrules) and solid wires accordingly.

NOTE: Terminal 3 (COM) closes to 2 (NO) at increasing pressure and to 1 (NC) at decreasing pressure.

3. Protect the feed line to terminal 3 (COM) with a slow-blow fuse according to the voltage and load:
 - Resistive load—max. 1.0 A @ 250 VAC
 - Inductive load—max. 0.4 A @ 250 VAC
 - Low voltage—max. 0.1 A @ 24 VDC
4. Reinstall the cover and screw.



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