

Description and Application

These differential pressure switches are used to remotely sense over pressure, vacuum, and differentials of pressure.

Typical applications include sensing fan or blower operation in ducted ventilation systems, sensing pressure drop across filters, and sensing frost build-up on coils. The SPDT switch allows remote status/ alarm indication or operation of electrical circuits to other control devices.

The models have three different pressure ranges to meet nearly any need. (See the Models section below.)

Sensor probes, tubing, and screw terminal adapters are included. See the Accessories (Included) section.

Models

Model Number	Sensing Range		Switch Differential	
	Inches water colum (wc)	Pascals (Pa)	Inches water colum (wc)	Pascals (Pa)
CSE-1201	0.08 to 1.20	20 to 300	0.04	10
CSE-1202	0.20 to 2.00	50 to 500	0.08	20
CSE-1203	2.00 to 10.00	500 to 2500	0.60	150

Features

- ◆ The housing contains a diaphragm, a snap-acting SPDT switch, range adjustment knob with inches water column and Pascals increments
- ◆ The sample connections located on the side accept 6.35 mm (0.25 inches) OD tubing
- ◆ An enclosure cover guards against accidental contact with the live switch terminal screws and the setpoint adjusting dial
- ◆ Three optional pressure ranges
- ◆ Includes mounting screws, terminal screw connection adapters, two sensor probes, and PVC tubing—see the Accessories (Included) section



Specifications

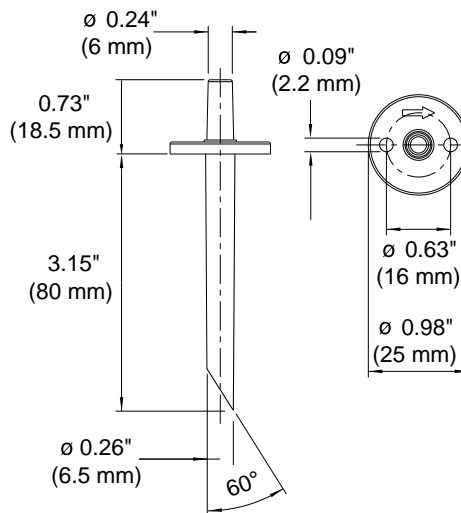
- Adjustment Range** See Models section
- Adj. Knob Markings** Scaled in inches water column and Pascals
- Switch Tolerance** ±15%
- Max. Operat. Press.** 1.45 psi (10 kPa) for all pressure ranges
- Medium** Air and non-combustible/non-corrosive gases
- Diaphragm Material** Silicone, tempered at 200° C, free of gas emissions
- Press. Connections** Two plastic pipe connections; external diameter of 6.0 mm (accept 6.35 mm or 0.25 inch) OD tubing; P1 for connection to higher pressure and P2 for connection to lower pressure
- Electrical Ratings**
 - Resistive Load Max. 1.0 A @ 250 VAC
 - Inductive Load Max. 0.4 A @ 250 VAC
 - Low Voltage Max. 0.1 A @ 24 VDC
- Switching Rate** Max. 6 cycles per minute
- Electric Connections**
 - Terminals Male spade terminals (AMP flat plug 6.3 mm x 0.8 mm) with push-on screw terminal adapters included
 - Access Port 1/2-inch NPT conduit fitting

Contact Type	SPDT, snap-acting
Mechanical Life	Over 10 million switching operations
Mounting Position	Vertically (with the pressure connections pointing downwards to drain any condensation)
Housing Materials	
Switch Body	Gray plastic (PA 6.6)
Cover	Clear plastic (polycarbonate)
Protection Category	IP54 with cover (NEMA 13)
Weight	5.6 ounce (160 g) with cover
Temperature Limits	
Medium/Ambient	-4 to 140° F (20 to 60° C)
Shipping/Storage	-40 to 185° F (-40 to 85° C)
Approvals	CE listed

NOTE: Not for use in U.S. FDA-controlled application areas.

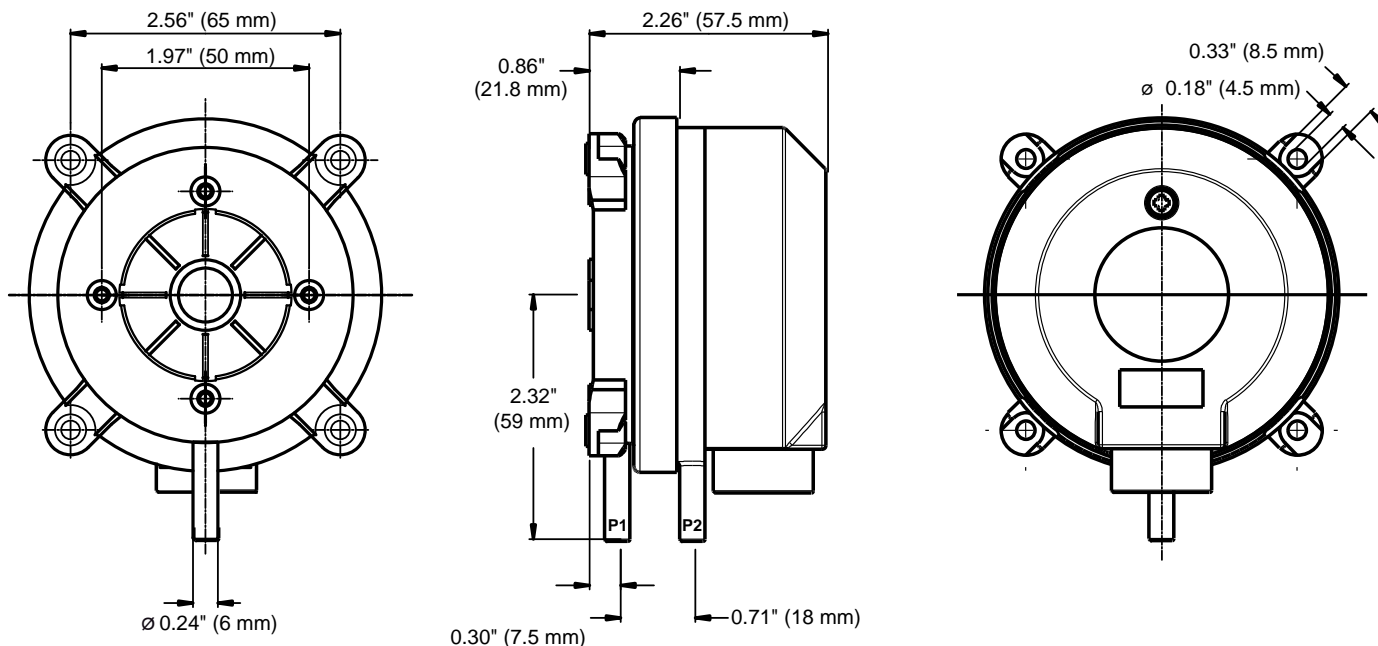
Accessories (Included)

- ◆ Terminal screw connection adapters, three
- ◆ Mounting screws, four
- ◆ PVC tubing, 6.56 feet (two meters)
- ◆ Sensor probes, two 3.15" (80 mm)—see dimensions below



Dimensions

All dimensions are in inches (mm)



More Information

For adjustable 0.05 ±0.02 to 12" wc (0.012 ±0.005 to 3 kPa) pressure switches, see the [CSE-1102](#) and (with a compression fit) the [CSE-1103](#).

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