Robertshaw®

2374-510
10-650

UNIVERSAL AIR PRESSURE SENSING SWITCH AND PROBE

**2374-510
Universal Air Pressure
Sensing Switch Kit**

**10-650
Sensing Probe Kit**

Universal Solutions

The Robertshaw offering of air pressure switches is *Simply the Right Choice*™ for flexibility, reliability, accuracy and ease-of-use. With a wide array of applications, the 2374-510 kit replaces hundreds of other manufacturers' air pressure switch models. HVAC contractors now have a one-stop option to meet all their air pressure switch needs.

This latest addition to the Robertshaw product line includes:
- High impact polycarbonate housing
- Works in a variety of harsh conditions
- Snap-acting switch with three male 90° quick connect terminals
- Field adjustable set points ranging from 0.10" to 10" W.C.
- Installer can use 10-650 sensing probe kit for hard to reach air streams

**2374-510
Kit Contents:**
Air Pressure Sensing Switch
Calibration springs (5 options)
Orifice flow (4 options)
Mounting brackets (2 options)
Calibration tool (hex wrench)

**10-650
Kit Contents:**
Universal probe, 7"
Mounting flange
Flange-locking set screw
3' vinyl tubing
Flange-mounting screw
Slip-on adapter

Features and Benefits

The new Robertshaw® Universal Air Pressure Sensing Switch and optional probe kit add a new level of flexibility and options to our pressure sensing switch offering. The available probe adds greater installation and application flexibility by allowing "remote" installation of the switch by significantly extending the reach of your air source.

- The new Universal Air Pressure Sensing Switch has field adjustable set points using the included adjustment tool.
- The Switch comes in a contractor kit that includes the hardware and replacement hose.
- Like other Robertshaw Air Pressure Sensing Switches, this switch is NEMA rated and is practically insensitive to temperature change with an operating range of -40 to +190°F (-40 to +88°C).
- The available Sensing Probe Kit works with the Universal Switch as well as the rest of the Robertshaw air pressure switch products to provide a form-fit extension from your air source to the switch, limiting the need to install the switch directly on the air source.

Typical Applications

- Conditioned air filters that accumulate particulate matter used to sense the differential pressure or airflow drop across the filter.
- Defrost cycle is initiated by sensing differential pressure or airflow drop across the refrigeration coils when they ice.
- On gas-fired units, the switch senses draft down from the blower; switch actuation allows ignition start-up or system shutdown upon insufficient draft.
- On air-supported structures and enclosures, sensing switches ensure proper inflation or internal pressure; switch actuation controls the blower to maintain pressure.
- Exhaust fans and fume hoods employ switches to sense draft down from the exhaust fan; switch actuation signals condition upon fan failure of insufficient draft.
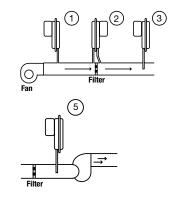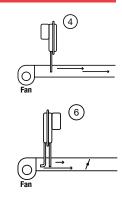
Robertshaw - *Simply the Right Choice*™

Robertshaw 2374-510 Cross Reference

Universal Robertshaw	Existing Robertshaw	Cleveland Controls	Antunes	Grainger	Honeywell	MPL	Endura
2374-510	**2374-510**	NS2-0000-08		6XPX7	IS2 SERIES	MPL 9370 SERIES	ES2000 SERIES
	2374-495	RSS-495-037	SMM-ALL	3ZM96	6000 SERIES 10000 SERIES		
	2374-498	RSS-498-038	SMM-ALL	3ZM97	6000 SERIES 10000 SERIES		

Typical Applications For Sensing Switch and Sensing Probe Kit

1	Positive static pressure increases as the filter gets dirty.
2*	Differential across filter changes as filter gets dirty.
3	Flow is reduced as filter gets dirty.
4	Fan operation or air flow with little or no static pressure.
5	Negative pressure increases as the filter gets dirty.
6*	Fan operation and true air flow with varying amounts of static pressure. Probes must be perpendicular to the air flow.

* Applications uses two (2) Sensing Probe Kits

Specifications

Mechanical Specifications
Mounting Position: Vertical
Set Point: Customer Set
Measured Media: Air
Operating Temperature Range: -40 to 190°F (-40 to 87.8°C)
Life: 100,000 Cycles Minimum at UL Test Parameters
Overpressure: 14" W.C.
Sample Line Connection:
 Straight Type for Use With 3/16" Flexible Rubber Tubing

Electrical Specifications
 Silver Contacts:
  SPDT, SPST Electrical Load: 1/10 HP @ 120 to 277 VAC;
  28VA Pilot Duty @ 24VAC; 125VA Pilot Duty @ 120 VAC
  SPST Electrical Load: 5 Amps Resistive @ 24, 120 to 277
VAC Terminal Connections:
 1/4" X .032 Quick Connect Terminals
Switching Action: Change Contact Position on Customer Setting
Contact Arrangement: SPDT
 Position of Contacts Before Pressure is Applied:

Uni-line Part No.	Description	Setpoint Range	Switch	Probe Length
2374-510	Universal Air Pressure Sensing Switch Kit	0.10" to 10.0" W.C.	SPDT	
10-650	Sensing Probe Kit			7"