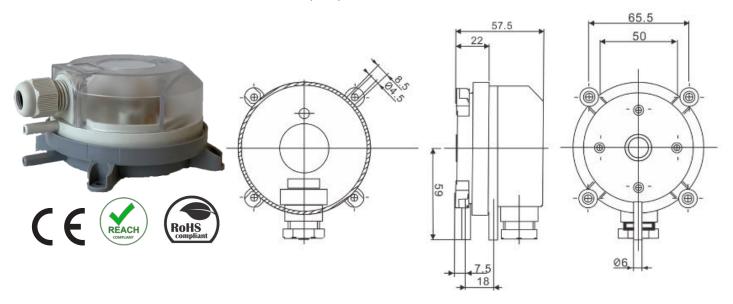
Commercial Differential Pressure Switch Instructions and Maintenance Manual

Dimensions (mm)



Specifications	
Housing Material	Grey colour Polyamide 6.6 plastic
Window Cover Material	Frosted Polystyrene resin
Deadband Accuracy	+/- 15% of upper and lower pressure ratings
Pressure Connection	2 x plastic pipe connection, 6.0mm (1/4") external diameter, labelled P1 & P2
Electrical Connection	Flat plug 6.3mm x 0.8mm or push-on screw terminals with PG-11 or M20x1.5 cable strain relief
Wetted Parts	Silicone based diaphragm, tempered at 392°F (200°C)
Set Point Adjustment	Field adjustable knob
Contact Rating	1.0A 250VAC output, 0.1A 24VDC (low voltage version)
Number of Contacts	Single-pole double-throw (SPDT)
Maximum Operating Pressure	1.45 psi (10 kPa)
Ambient/Process Temperature	-4°F to 185°F (-20°C to 85°C)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)
Enclosure Rating	IP54
Approvals	CE, RoHS & REACH compliant
Typical Life	Over 10 ⁶ switching operations
Weight	150g with cover, 110g without cover
Mounting Position	Vertical installation with pressure connections pointing downwards

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Transportation, Packaging and Storage

- Check the WPS Series switch for any damage that may have resulted during transportation. Any damage should immediately be reported
- Maintain packaging until time of installation. Packaging will provide protection during transport and storage
- Temperature is -40/185°F (-40/85°C)
- Protect the WPS product from moisture and dust

Installation

WARNING

Before installation and operation, ensure that the correct pressure switch has been selected, consider the pressure range, ambient and process conditions and the product is in good working order

- WPS Series is suitable for very low pressure ratings and is compatible with dry and clean air or non-corrosive gases
- Install the instrument in a location suitable for the specification of the switch and free of pulsation and vibration
- WPS Series switches are calibrated in the vertical position so they should be installed in the same manner to ensure accuracy
- Connect the WPS Series to the panel or electrical cabinet with the 3 provided metal screws
- The static pressure tips can be installed through the wall or panel to sense the pressure on either side of the filter
- Use the provided tubing to connect the static pressure tips to the WPS pressure connections

Pressure Connections

- Two push-on pressure connections are located on the front of the unit, labeled P1+ and P2-
- For best results, connect 3/16" I.D. push-on tubing to the pressure connections
- For differential pressure measurement, the higher pressure should be connected to the P1 pressure port and lower pressure to the P2 pressure port
- For positive pressure, the P2 pressure port should be left vented to atmospheric pressure
- For negative pressure measurement, the P1 pressure port should be vented to atmospheric pressure

NOTE

Pressure tubing cannot be kinked. If the hoses are kinked, the device will not function accurately.

Electrical Connection & Wiring

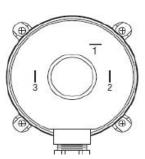
- Work on electrical installations must only be carried out by trained electricians
- Make sure that there is no voltage on the connecting cable while you are working on the electrical connections
- The connecting cable can be run to the pressure switch from three sides
- The screw cable connection has a plug-in design for this purpose. Rotate the protective cover accordingly
- The switching device in this pressure switch is designed as a change-over contact as can be seen from the wiring diagram below
- The rest position is shown below (pressure below the activation switch point on the dial)
- In the instance where Pole 3 (COM) closes to Pole 2, the pressure is increasing (NO)
- In the instance where Pole 3 (COM) closes to Pole 1, the pressure is decreasing (NC)











Options & Accessories



Each WPS Series includes the following accessories:
 1.2m clear pvc tube, 2 x plastic static tips, 4 x screws for tips, 3 x electrical terminal screws. For all other items, refer to the WPS Series datasheet.

General Maintenance and Calibration

- For general maintenance, periodically disconnect all pressure inputs and vent all process connections to atmosphere
- Recalibration or repair by the user is not recommended.
 For best results, return the WPS pressure switch to Winters Instruments.