

DIFFERENTIAL PRESSURE SWITCHES PS SERIES

Mechanical differential pressure switches for air

The PS series mechanical differential pressure switches offer a cost-effective solution for filter, fan and duct pressure monitoring in building automation systems in the HVAC/R industry. PS series products offer field selectable switching point adjustment and measurement units in Pa.



SIMILAR PRODUCTS

- DPI series electronic differential pressure switches
- DPT-R8 series 8-range differential pressure transmitters

APPLICATIONS

PS series devices are commonly used in HVAC/R systems for:

- fan, blower and filter monitoring
- pressure and flow monitoring
- valve and damper monitoring

MODEL SUMMARY

Description	Model	Product code	Measurement range (Pa)
Differential pressure switch	PS200	105.001.001	20...200 Pa
Differential pressure switch	PS300	105.002.001	30...300 Pa
Differential pressure switch	PS500	105.003.001	30...500 Pa
Differential pressure switch	PS600	105.004.001	40...600 Pa
Differential pressure switch	PS1500	105.005.001	100...1500 Pa
Differential pressure switch	PS4500	105.006.001	500...4500 Pa

For pricing or any further information, please contact Omni Instruments Ltd.

SPECIFICATIONS

Performance

Accuracy (at applied pressure)

At low limit (typical):

PS200: ± 8 Pa

PS300: ± 8 Pa

PS500: ± 8 Pa

PS600: ± 8 Pa

PS1500: ± 20 Pa

PS4500: ± 100 Pa

At high limit (max.):

PS200: ± 15 %

PS300: ± 15 %

PS500: ± 15 %

PS600: ± 15 %

PS1500: ± 15 %

PS4500: ± 15 %

Switching differential (typical):

PS200: 20 Pa

PS300: 25 Pa

PS500: 25 Pa

PS600: 35 Pa

PS1500: 80 Pa

PS4500: 250 Pa

Overpressure:

Proof pressure: 25 kPa

Burst pressure: 50 kPa

Technical Specifications

Media compatibility:

Dry air or non-aggressive gases

Measuring units:

Pa

Measurement range:

PS200: 20-200 Pa

PS300: 30-300 Pa

PS500: 30-500 Pa

PS600: 40-600 Pa

PS1500: 100-1500 Pa

PS4500: 500-4500 Pa

Environment:

Operating temperature: -20...60 °C

Storage temperature: -20...85 °C

Humidity: 0 to 95 % rH, non condensing

Physical

Dimensions:

Case: 105 x 73 x 63 mm

Weight:

150 g

Mounting:

2 each 4.3 mm screw holes, one slotted

Materials:

Case: ABS

Cover: PC

Membrane: Silicone

Duct connectors: ABS

Tubing: PVC

Protection standard:

IP54

Electrical connections:

3 screw terminals

Wire: 12-24 AWG (0.2-1.5 mm²)

Cable entry:

Strain relief: M16

Knockout: 16 mm

Pressure fittings:

Male \varnothing 5.0 mm

Electrical

Input:

24-250 VAC

Output:

NO / NC circuit

Electrical rating, resistive load:

3 A / 250 VAC (PS200: 0.1 A / 250 VAC)

Electrical rating, inductive load:

2 A / 250 VAC (PS200: -)

Conformance

Meets requirements for:

	CE:	UKCA:
EMC:	2014/30/EU	S.I. 2016/1091
RoHS:	2011/65/EU	S.I. 2012/3032
LVD/EESR:	2014/35/EU	S.I. 2016/1101
WEEE:	2012/19/EU	S.I. 2013/3113

COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO 9001 • ISO 14001



Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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