

Low Differential Pressure Sensor

PSE550 Series



How to Order

PSE550-□-□-□

Output specifications

NII	Voltage output type 1 to 5 V
28	Current output type 4 to 20 mA

Option 2 (Connector)

NII	None
C2	Connector for pressure sensor controller (1 pc.)

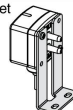


Note 1) Not applicable to the PSE200 series.

Note 2) The connector is not attached to the cable, but is included with the shipment.

Option 1 (Bracket)

NII	None
A	Bracket



Note) The bracket is not attached to the product, but is included with the shipment.

Option/Part No.

Description	Part no.	Note
Bracket	ZS-30-A	With M3 x 5L (2 pcs.)
Connector for pressure sensor controller	ZS-28-C	1 pc.

Refer to pages 11 and 12 for Pressure Switch Precautions. For details about the Specific Product Precautions, refer to the Operation Manual on the SMC website, <http://www.smcworld.com> Click [here](#) for details.

Specifications

Model	PSE550	PSE550-28
Rated differential pressure range	0 to 2 kPa	
Operating pressure range	-50 to 50 kPa ^{Note)}	
Extension analog output range	-0.2 to 0 kPa	—
Proof pressure	65 kPa	
Applicable fluid	Air/Non-corrosive gas/Non-flammable gas	
Power supply voltage	12 to 24 VDC $\pm 10\%$, Ripple (p-p) 10% or less (with reverse connection protection)	
Current consumption	15 mA or less	
Output specifications	Analog output: 1 to 5 VDC (within rated differential pressure range) 0.6 to 1 VDC (within extension analog output range) Output impedance: Approx. 1 k Ω	Analog output: 4 to 20 mA DC (within rated differential pressure range) Maximum load impedance: 500 Ω or less (at 24 VDC) 100 Ω or less (at 12 VDC)
Accuracy (Operating temperature at 25°C)	$\pm 1\%$ F.S. (within rated differential pressure range), $\pm 3\%$ F.S. (within extension analog output range)	
Linearity	$\pm 0.5\%$ F.S.	
Repeatability	$\pm 0.3\%$ F.S.	
Indicator light	Orange light is turned on. (When energized)	
Environment	IP40	
Enclosure	IP40	
Operating temperature range	Operating: 0 to 50°C, Stored: -20 to 70°C (No freezing or condensation)	
Operating humidity range	Operating/Stored: 35 to 85% RH (No condensation)	
Withstand voltage	1000 VAC (in 50/60 Hz) for 1 minute between terminals and housing	
Insulation resistance	50 M Ω or more (500 VDC measured via megohmmeter) between terminals and housing	
Temperature characteristics	$\pm 3\%$ F.S. (25°C reference)	
Port size	$\phi 4.8$ ($\phi 4.4$ in the end) resin piping (Applicable to I.D. $\phi 4$ air tubing)	
Materials of parts in contact with fluid	Resin pipe: Nylon, Piston area of sensor: Silicon	
Sensor cable	Oilproof heavy-duty vinyl cable (ellipse), 3 cores, 2.7 x 3.2, 3 m Conductor area: 0.15 mm ² , Insulator O.D.: 0.9 mm	Oilproof heavy-duty vinyl cable (ellipse), 2 cores, 2.7 x 3.2, 3 m Conductor area: 0.15 mm ² , Insulator O.D.: 0.9 mm
Weight	With sensor cable	75 g
	Without sensor cable	35 g
Standards	CE, UL/CSA (E216656), RoHS	

Note) Can detect differential pressure from 0 to 2 kPa within the range of -50 to 50 kPa.