

Low Differential Pressure Sensor

PSE550 Series




How to Order

PSE550-□-□-□

Output specifications


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

Option 2 (Connector)

Nil	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)

Nil	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 ±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 kΩ	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)	±1% F.S. (within rated differential pressure range), ±3% F.S. (within extension analog output range)		
Linearity	±0.5% F.S.		
Repeatability	±0.3% F.S.		
Indicator light	Orange light is turned on. (When energized)		
Environment	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 MΩ or more (500 VDC measured via megohmmeter) between terminals and housing		
Temperature characteristics	±3% F.S. (25°C reference)		
Port size	φ4.8 (φ4.4 in the end) resin piping (Applicable to I.D. φ4 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 (E216856), RoHS		

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

ZSE20
ISE20
ZSE30
ISE30
ZSE40
ISE40
ZSE10
ISE10
ISE70
ZSE80
ISE80
PS
ISA3
ISA2
ISE35
PSE
IS
ISG
ZSM1