

Compact Pneumatic Pressure Sensor

PSE540 Series




How to Order



Sensor range	
0	Positive pressure [0 to 1 MPa]
1	Negative pressure [0 to -101 kPa]
3	Compound pressure [-100 to 100 kPa]







Accuracy	
Nil	±2% F.S.
A	±1% F.S.



Option (Connector)

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

PSE54 **1** - **M3** -

Port size

M3	M3 x 0.5	
M5	M5 x 0.8	
01	R1/8 (with M5 female thread)	
N01	NPT1/8 (with M5 female thread)	
R04	ø4 reducer	
R06	ø6 reducer	

IM5	M5 female thread, through type	
IM5H	M5 female thread, through type (with mounting hole)	

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

Option/Part No.

Description	Part no.	Note
Connector for pressure sensor controller	ZS-28-C	1 pc.

Specifications

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.smworld.com> Click [here](#) for details.

Model		PSE540	PSE541	PSE543
Rated pressure range		0 to 1 MPa	0 to -101 kPa	-100 to 100 kPa
Extension analog output range		-0.1 to 0 MPa	10.1 to 0 kPa	—
Proof pressure		1.5 MPa	500 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 V (within rated pressure range), 0.6 to 1 V (within extension analog output range), Output impedance: Approx. 1 kΩ		
Accuracy (Ambient temperature at 25°C)		PSE54□: ±2% F.S. (within rated pressure range), ±5% F.S. (within extension analog output range) PSE54□A: ±1% F.S. (within rated pressure range), ±3% F.S. (within extension analog output range)		
Linearity		±0.7% F.S. or less	±0.4% F.S.	
Repeatability		±0.2% F.S.		
Power supply voltage effect		±0.8% F.S.		
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		±2% F.S. (25°C reference)		
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		
Standards		CE, UL/CSA (E216656), RoHS		

Piping Specifications

Model		M3	M5	01	N01	R04	R06	IM5	IM5H
Port size		M3 x 0.5	M5 x 0.8	R1/8 M5 x 0.8	NPT1/8 M5 x 0.8	ø4 reducer	ø6 reducer	M5 female thread, through type	M5 female thread, through type (with mounting hole)
Material	Case	Resin case: PBT Fitting: Stainless steel 303		Resin case: PBT Fitting: C3604BD		PBT		Resin case: PBT Fitting: A6063S-T5	
	Pressure sensing section	Pressure sensor: Silicon, O-ring: NBR							
Weight	With sensor cable	42.4 g	42.7 g	49.3 g	41.4 g	41.6 g	43.3 g	44.1 g	
	Without sensor cable	2.9 g	3.2 g	9.8 g	1.9 g	2.1 g	3.8 g	4.6 g	