

# Pressure Sensor For General Fluids

# PSE560 Series



## How to Order

### Sensor range

0	Positive pressure [0 to 1 MPa]
1	Vacuum [0 to -101 kPa]
3	Compound pressure [-100 to 100 kPa]
4	Positive pressure [0 to 500 kPa]

### Option (Connector)

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

Note 1) Current output type cannot be connected to the PSE200 series.  
Note 2) The connector is not attached to the cable, but is included with the shipment.

PSE56 0-01-□-□

### Port size

01	R1/8 (with M5 female thread)
02	R1/4 (with M5 female thread)
C01	Rc1/8
N01	NPT1/8 (with M5 female thread)
N02	NPT1/4 (with M5 female thread)
A2	URJ1/4 (Face seal fitting)
B2	TSJ1/4 (Compression fitting)

### Output specifications

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

### Option/Part No.

Description	Part no.	Note
Connector for pressure sensor controller	ZS-28-C	1 pc.
Adapter with restrictor Rc1/4	ZS-31-X175	1 pc.
Adapter with restrictor NPT1/4	ZS-31-X186	1 pc.
Adapter with restrictor Rc1/8	ZS-31-X188	1 pc.
Adapter with restrictor NPT1/8	ZS-31-X189	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	PSE560 (Positive pressure)	PSE561 (Vacuum)	PSE563 (Compound pressure)	PSE564 (Positive pressure)
Rated pressure range	0 to 1 MPa	0 to -101 kPa	-100 to 100 kPa	0 to 500 kPa
Extension analog output range	-0.1 to 0 MPa	10.1 to 0 kPa	—	-50 to 0 kPa
Proof pressure	1.5 MPa	500 kPa	500 kPa	750 kPa

Model	PSE56□-□	PSE56□-□-28	
Applicable fluid	Liquid or gas that will not corrode or attack stainless steel 316L		
Power supply voltage	12 to 24 VDC ±10%, Ripple (p-p) 10% or less (with reverse connection protection)		
Current consumption	10 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	Analog output: 4 to 20 mA DC (within rated pressure range) Maximum load impedance: 500 Ω or less (at 24 VDC) 100 Ω or less (at 12 VDC)	
Accuracy (Ambient temperature at 25°C)	±1% F.S. (within rated pressure range), ±3% F.S. (within extension analog output range)		
Linearity	±0.5% F.S.		
Repeatability	±0.2% F.S.		
Power supply voltage effect	±0.3% F.S.		
Environment	Enclosure	IP65	
	Operating temperature range	Operating: -10 to 60°C, Stored: -20 to 70°C (No freezing or condensation)	
	Operating humidity range	Operating/Stored: 35 to 85% RH (No condensation)	
	Withstand voltage	250 VAC for 1 minute between terminals and housing	
Insulation resistance	50 MΩ or more (50 VDC measured via megohmmeter) between terminals and housing		
Temperature characteristics	±2% F.S. (0 to 50°C; 25°C reference), ±3% F.S. (-10 to 60°C; 25°C reference)		
Sensor cable	PSE56□-□: Oilproof heavy-duty vinyl cable with air tubing, 3 cores, ø5.1, 3 m, Conductor area: 0.2 mm <sup>2</sup> , Insulator O.D.: 1.12 mm PSE56□-□-28: Oilproof heavy-duty vinyl cable with air tubing, 2 cores, ø5.1, 3 m, Conductor area: 0.2 mm <sup>2</sup> , Insulator O.D.: 1.12 mm		
Standards	CE, UL/CSA (E216656), RoHS		

## Piping Specifications

Model	01	02	N01	N02	C01	A2	B2	
Port size	R1/8 M5 x 0.8	R1/4 M5 x 0.8	NPT1/8 M5 x 0.8	NPT1/4 M5 x 0.8	Rc1/8	URJ1/4	TSJ1/4	
Material	Case: C3604 + Nickel plating, Piping port/Pressure sensor: Stainless steel 316L							
Weight	With sensor cable	193 g	200 g	194 g	201 g	187 g	203 g	193 g
	Without sensor cable	101 g	108 g	102 g	109 g	95 g	111 g	101 g