

Low Differential Pressure Sensor

Series PSE550



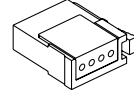
How to Order

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.) 

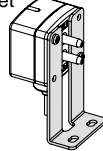
Note 1) Current output type cannot be connected to the PSE 200 and the PSE 300 series.

Note 2) At the factory, the connector is not attached to the cable, but packed together with it for shipment.

Option

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

Option 1 (Bracket)

Nil	None
A	Bracket 

Note) The bracket is not attached in the factory, but packed together for shipment.

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 power supply polarity protection)	
Current consumption		15 mA or less	—
Output specification		Analog output: 1 to 5 VDC (within rated differential pressure range) 0.6 to 1 VDC (with extension analog output range) Output impedance: Approx. 1 kΩ	Analog output: 4 to 20 mA DC (within rated differential pressure range) Allowable 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. or less (with rated pressure range), ±3% F.S. or less (with extension analog output range)	
Linearity		±0.5% F.S. or less	
Repeatability		±0.3% F.S. or less	
Indication light		Orange light is turned on. (When energized)	
Environmental resistance	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, 50/60 Hz for 1 minute between live parts and case	
	Insulation resistance	50 MΩ or more between live parts and case (at 500 VDC Mega)	
	Vibration resistance	10 to 150 Hz at whichever is smaller of 1.5 mm amplitude or 100 m/s ² acceleration, in X, Y, Z directions, for 2 hours each (De-energized)	
Impact resistance		300 m/s ² in X, Y, Z directions, 3 times each (De-energized)	
Temperature characteristics		±3% F.S. or less (Based on 25°C)	
Port size		ø4.8 (ø4.4 in the end) resin piping (Applicable to I.D. ø4 air tubing)	
Wetted parts material		Resin pipe: Nylon, Piston area of sensor: Silicon	
Sensor cable		Oil proof 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	Oil proof 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
Mass	With sensor cable	75 g	
	Without sensor cable	35 g	
Standards		Compliant with CE marking, UL (CSA)	

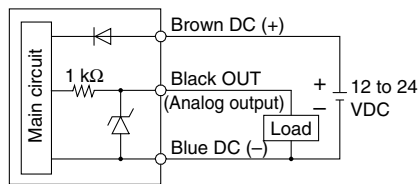
Note) Can detect differential pressure from 0 to 2 kPa within the range of -50 to 50 kPa.

Series PSE550

Internal Circuit

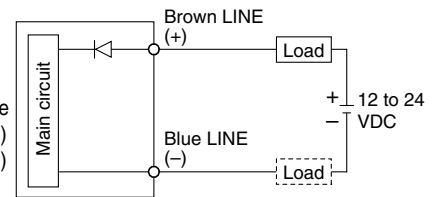
PSE550

Voltage output type
1 to 5 V
Output impedance
Approx. 1 k Ω



PSE550-28

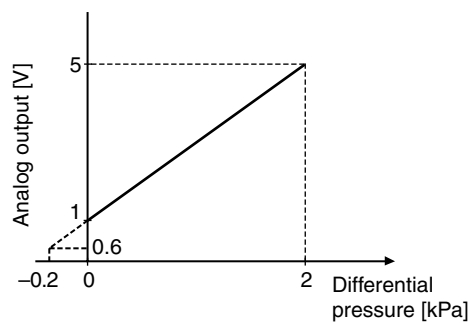
Current output type
4 to 20 mA
Allowable load impedance
500 Ω or less (at 24 VDC)
100 Ω or less (at 12 VDC)



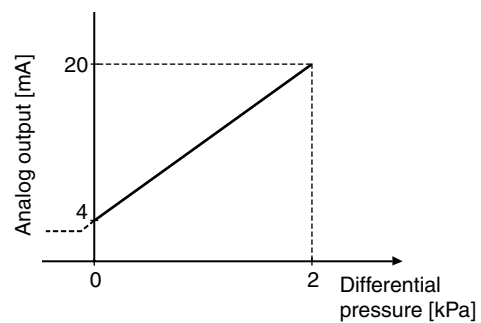
* Install the load either on the LINE (+) or LINE (-) side.

Analog Output

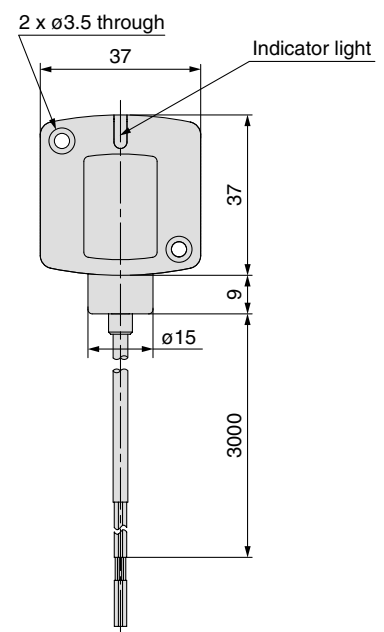
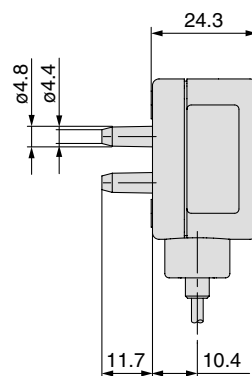
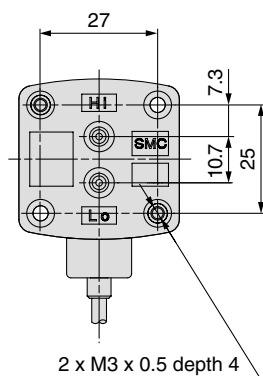
1 to 5 VDC



4 to 20 mADC



Dimensions



With bracket

