

# Series 10-PSE550

Remote Type Pressure Sensor/For Low Differential Pressure

## How to Order



### 10-PSE550

• Clean series

#### Output specifications

NII	1 to 5 V voltage output type
28	4 to 20 mA current output type

#### Option 1 (Bracket)

NII	Without bracket
A	Bracket

(Note) Brackets are packed together without being assembled.

#### Option 2 (Connector)

NII	Without connector
C2	Connector for PSE300, pressure sensor monitor: 1 pc.

Note 1) The current output type cannot be connected to series PSE300.  
Note 2) Connector is packed together without being connected to the cable.

#### Options/Part No.

Description	Part no.	Note
<b>Bracket</b>	10-ZS-30-A	With M3 x 5L (2 pcs.)
<b>Connector for PSE300 pressure sensor monitor</b>	10-ZS-28-C	1 pc.

## Specifications

Refer to the SMC website for Pressure Switches Precautions (M-E03-3) and Specific Product Precautions (Operation Manual).

Model	10-PSE550	10-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. (with rated pressure range), ±3% F.S. (with 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	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	Oilproof heavy-duty vinyl cable (ellipse), 3 cores, 2.7 x 3.2, 3 m Conductor area: 0.15 mm <sup>2</sup> , 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 <sup>2</sup> , Insulator O.D.: 0.9 mm
Weight	With sensor cable	75 g
	Without sensor cable	35 g
Standards	CE, UL/CSA (E216656), RoHS	
Cleanliness class (ISO class)	Class 4	

(Note) The differential pressure of 0 to 2 kPa can be detected within the range of -50 to 50 kPa.

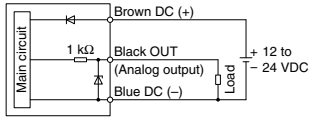
## Caution

This product is blown with air and double packed in a Class M3.5 (ISO Class 5) clean room.

**Internal Circuit**

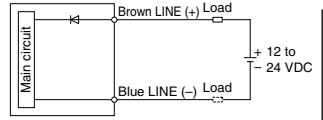
**10-PSE550**

Voltage output type  
1 to 5 V  
Output impedance  
Approx.1 kΩ



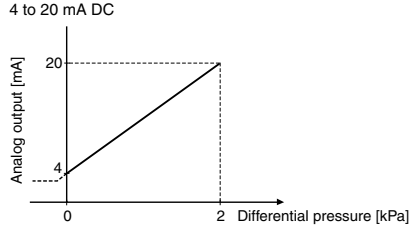
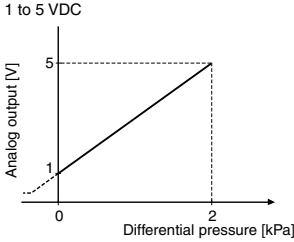
**10-PSE550-28**

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

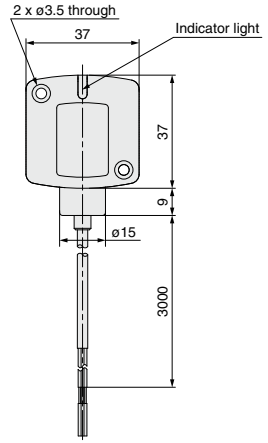
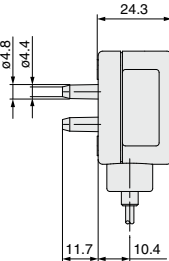
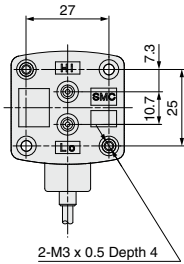


\* Install the load either on the LINE (+) or LINE (-) side.

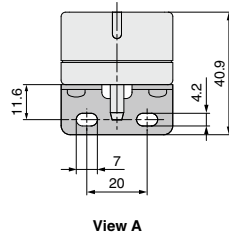
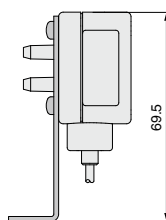
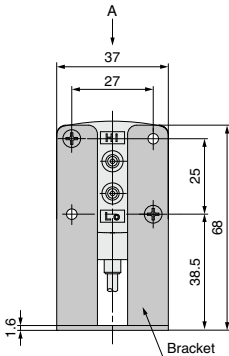
**Analog Output**



**Dimensions**



**With bracket**



View A

Directional Control Valves  
Air Cylinders  
Rotary Actuators  
Air Grippers  
Air Preparation Equipment  
Modular F. R.  
Pressure Control Equipment  
Fittings & Tubing  
Flow Control Equipment  
Pressure Switches/ Pressure Sensors