

Series 10-PSE530

Remote Type Pressure Sensor/For Compact Pneumatic Pressure

How to Order

RoHS



Clean series
10-PSE530 **0** **M5**

Pressure sensing range

0	High pressure [0 to 1 MPa]
1	Vacuum [0 to -101 kPa]
2	Low pressure [0 to 101 kPa]
3	Compound pressure [-101 to 101 kPa]

Port size

M5	M5 x 0.8
R06	ø6 reducer
R07	1/4-inch reducer

Option

When only optional parts are required, order using the part numbers listed below.

Description	Part no.	Note
Connector	10-ZS-28-C	1 pc. per set
Sensor cable	10-ZS-26-F	Cable length: 3 m
Connector for pressure sensor controller connection + Sensor cable	10-ZS-26-J	The connector is not connected to the cable at the time of shipment.

Option

	Without cable
Nil	Sensor cable (3 m)
L	
C2L	Connector for pressure sensor controller connection (1 pc.) + Cable for sensor (3 m)

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

Specifications

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

Model	10-PSE530 (Positive pressure)	10-PSE531 (Vacuum)	10-PSE532 (Low pressure)	10-PSE533 (Compound pressure)
Rated pressure range	0 to 1 MPa	0 to -101 kPa	0 to 101 kPa	-101 to 101 kPa
Extension analog output range	-0.1 to 0 MPa	10.1 to 0 kPa	-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 power supply polarity protection)			
Current consumption	15 mA or less (with no load)			
Output specification	Analog output 1 to 5 V (with rated pressure range), 0.6 to 1 V (with extension analog output range), Output impedance: Approx. 1 kΩ			
Accuracy (Ambient temperature at 25°C)	±2% F.S. (with rated pressure range), ±5% F.S. (with extension analog output range)			
Linearity	±1% F.S.			
Repeatability	±1% F.S.			
Power supply voltage effect	±1% F.S. based on the analog output at 18 V ranging from 12 to 24 VDC			
Environment	Enclosure	IP40		
	Temperature range	Operating: 0 to 50°C; Stored: -10 to 70°C (No freezing or condensation)		
	Withstand voltage	1000 VAC (in 50/60 Hz) for 1 minute between terminals and housing		
	Insulation resistance	5 MΩ or more (500 VDC measured via megohmmeter) between terminals and housing		
Temperature characteristics	±2% F.S. (25°C reference)			
Sensor cable/Option	Halogen-free heavy-duty cable, 3 cores, ø2.7, 3 m, Conductor area: 0.15 mm ² , Insulator O.D.: 0.8 mm			
Standards	CE, RoHS			
Cleanliness class (ISO class)	Class 4			

Piping Specifications

Model	M5	R06	R07
Port size	M5 x 0.8 male	ø6 reducer type	1/4-inch reducer type
Wetted parts material	Pressure sensor: Silicon, O-ring: FKM		
	Body: Stainless steel 304	Body: PBT	
Weight	With sensor cable (3 m)	41 g	38 g
	Without sensor cable	7 g	3.8 g

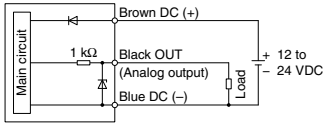
⚠ Caution

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

Internal Circuit

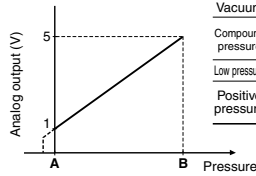
10-PSE53□

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



Analog Output

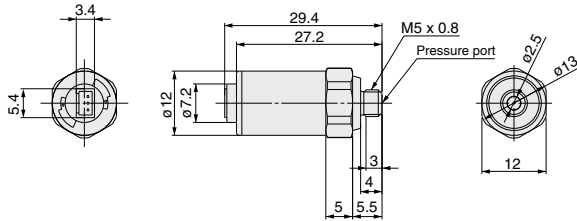
1 to 5 VDC



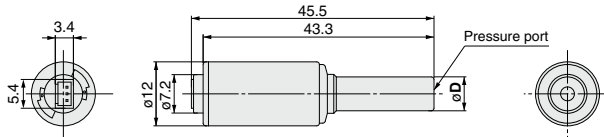
Range	Rated pressure range	A	B
Vacuum	0 to -101 kPa	0	-101 kPa
Compound pressure	-101 kPa to 101 kPa	-101 kPa	101 kPa
Low pressure	0 to 101 kPa	0	101 kPa
Positive pressure	0 to 1 MPa	0	1 MPa
	0 to 500 kPa	0	500 kPa

Dimensions

10-PSE53□-M5

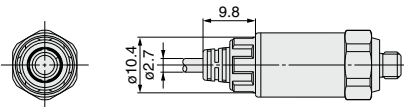


**10-PSE53□-R06
R07**



Model	Applicable fitting size (D)
10-PSE53□-R06	6
10-PSE53□-R07	1/4"

With sensor cable



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