Pressure Sensor
Series PSE530



How to Order

PSE53 0 – M5 –

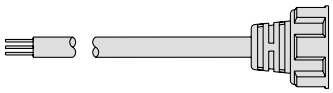
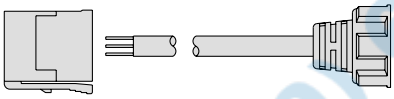
Sensor range

0	Positive 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

Nil	None
L	Sensor cable (3 m) 
C2L	Connector for pressure sensor controller (1 pc.) + Sensor cable (3 m) 

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

Option

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

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

Specifications

Model		PSE530 (Positive pressure)	PSE531 (Vacuum)	PSE532 (Low pressure)	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. or less (with rated pressure range), ±5% F.S. or less (with extension analog output range)			
Linearity		±1% F.S. or less			
Repeatability		±1% F.S. or less			
Power supply voltage effect		±1% F.S. or less based on the analog output at 18 V ranging from 12 to 24 VDC			
Environmental resistance	Enclosure	IP40			
	Temperature range	Operating: 0 to 50°C; Stored: –10 to 70°C (No freezing or condensation)			
	Withstand voltage	1000 VAC, 50/60Hz for 1 minute between live parts and case			
	Insulation resistance	5 MΩ or more between live parts and case (at 500 VDC Mega)			
	Vibration resistance	10 to 500 Hz 1.5 mm amplitude or 98 m/s² acceleration, X, Y, Z directions for 2 hours each (De-energized)			
	Impact resistance	980 m/s² in X, Y, Z directions, 3 times each (De-energized)			
Temperature characteristics		±2% F.S. or less (Based on 25°C)			
Sensor cable/Option		Halogen-free heavy-duty cable, 3 cores, ø2.7, 3 m, Conductor area: 0.15 mm², Insulator O.D.: 0.8 mm			
Standards		Compliant with CE marking			

Piping Specifications

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