

PSS Series

Compact, Non-indicating Pressure Sensors

■ Features

- Rated pressure
: negative pressure (-101.3 to 0.0kPa)
standard pressure (0 to 100.0kPa, 0 to 1,000kPa)
compound pressure (-101.3 to 100.0kPa)
- Compact design: W11.8×H29.3×L24.8mm (including pressure port)
- Analog output: Voltage (1-5VDC), current (DC4-20mA)
- Power supply: 12-24VDC ±10%



■ Ordering Information

PS	S	-	V	01	V	-	R1/8
							Pressure port
							Output
							Pressure range
							Pressure type
							Size
							Item

R1/8	Standard
V	Voltage (1-5VDC) output
A	Current (DC4-20mA) output
01	100kPa
1	1,000kPa
No-mark	Standard pressure type
V	Negative pressure type
C	Compound pressure type
S	Small (W11.8×H29.3×L24.8mm)
PS	Pressure Sensor

■ Specifications

Pressure type		Gauge pressure Negative pressure Standard pressure Compound pressure			
Model	Voltage output	PSS-V01V-R1/8	PSS-01V-R1/8	PSS-1V-R1/8	PSS-C01V-R1/8
	Current output	PSS-V01A-R1/8	PSS-01A-R1/8	PSS-1A-R1/8	PSS-C01A-R1/8
Rated pressure range		0.0 to -101.3kPa	0.0 to 100.0kPa	0 to 1,000kPa	-101.3 to 100.0kPa
Analog output range		5.0 to -101.3kPa	-5.0 to 110.0kPa	-50 to 1,100kPa	-101.3 to 110.0kPa
Max. pressure range		2 times of rated pressure	2 times of rated pressure	1.5 times of rated pressure	2 times of rated pressure
Applied fluid		Air, non-corrosive gas			
Power supply		12-24VDC= ±10% (ripple P-P: Max. 10%)			
Current consumption		Voltage output type: Max. 15mA, Current output type: —			
Effect by power supply		Max. ±0.3% F.S.			
Protection circuit		Reverse polarity protection circuit			
Analog output	Voltage output	•Output voltage: 1-5VDC= ±2% F.S.	•Linear: Max. ±1% F.S.	•Output impedance: 1kΩ	
	Current output	•Output current: DC4-20mA ±2% F.S.	•Linear: Max. ±1% F.S.		
Temp. characteristics of analog output		Max. ±2% F.S. of output voltage/current at 25°C within temperature range 0 to 50°C			
Insulation resistance		Over 50MΩ (at 500VDC megger)			
Dielectric strength		2000VAC 50/60Hz for 1 minute			
Vibration		1.5mm amplitude at frequency of 10 to 55Hz in each X, Y, Z direction for 2 hours			
Environment	Ambient temp.	0 to 50°C, storage: -10 to 60°C			
	Ambient humi.	35 to 85%RH, storage: 35 to 85%RH			
Protection structure		IP40 (IEC standard)			
Material		Front, Rear case: Polycarbonate, Pressure port: Nickel plated brass			
Cable		Ø3, 4-wire, 3m (AWG28, Core diameter: 0.08mm, Number of cores: 19, Insulator out diameter: Ø0.88mm)			
Sold separately		Sensor connector wire mount plug (CNE-P04-□)*1			
Approval		CE			
Weight*2		Approx. 60g (approx. 26g)			

※1: For more information about sensor connector wire mount plug, refer to '(G) Connector/Socket'.

※2: The weight includes packaging. The weight in parenthesis is for unit only.

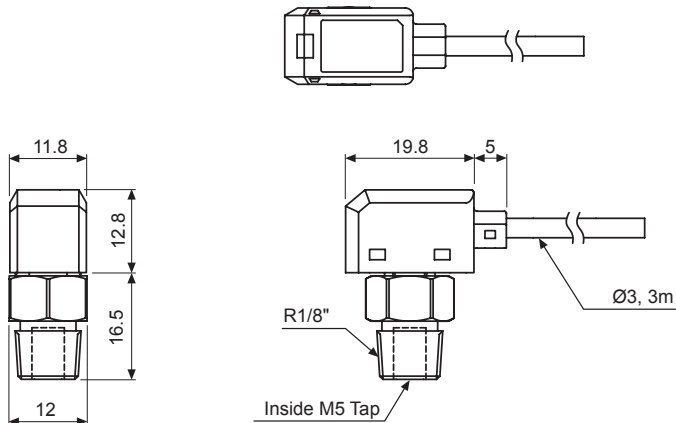
※F.S.: Rated pressure.

※Environment resistance is rated at no freezing or condensation.

Compact, Non-indicating Pressure Sensor

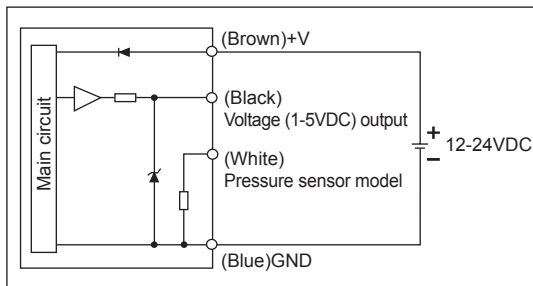
■ Dimensions

(unit: mm)

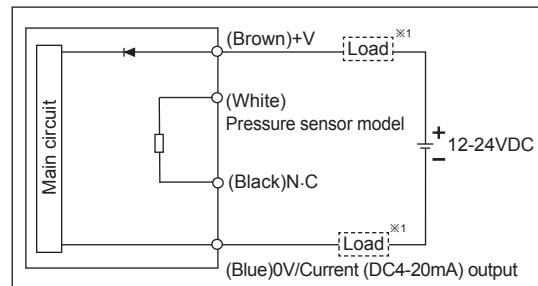


■ Connections

• Voltage (1-5VDC) output type



• Current (DC4-20mA) output type

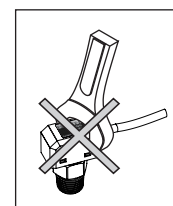
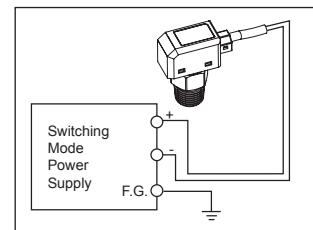
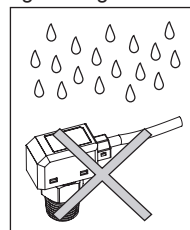


※1 : Load can be connected any directions.

※Allowable load impedance: Max. 100Ω for 12VDC power
Max. 500Ω for 24VDC power

■ Proper Usage

- Do not insert any sharp or pointed object into pressure port.
Failure to follow this instruction may result in malfunction and damage the sensor.
- Be sure that this unit must avoid direct touch with water, oil, thinner etc.
- It is ready to operate 3 sec after it is turned ON. Be sure not to use the product within 3 sec.
- When using switching mode power supply, frame ground (F.G.) terminal of power supply should be grounded.
- To avoid inductive noise, keep the wiring away from power line, high voltage line.
Failure to follow this instruction may result in malfunction.
- When moving this unit from warm place to cold place, please remove the humidity on the cover then use it.
- Do not use spanner to mounting this unit.
Tightening torque for one touch fitting should be below 10N·m.
- Do not apply a tensile strength in excess of 30N to the cables or connector.
- This product may be used in the following environments.
 - Indoors
 - Altitude max. 2,000m
 - Pollution degree 3
 - Installation category II



(A)	Photoelectric Sensors
(B)	Fiber Optic Sensors
(C)	Door/Area Sensors
(D)	Proximity Sensors
(E)	Pressure Sensors
(F)	Rotary Encoders
(G)	Connectors/ Connector Cables/ Sensor Distribution Boxes/Sockets
(H)	Temperature Controllers
(I)	SSRs / Power Controllers
(J)	Counters
(K)	Timers
(L)	Panel Meters
(M)	Tacho / Speed / Pulse Meters
(N)	Display Units
(O)	Sensor Controllers
(P)	Switching Mode Power Supplies
(Q)	Stepper Motors & Drivers & Controllers
(R)	Graphic/ Logic Panels
(S)	Field Network Devices
(T)	Software