

DIGITAL PRESSURE SENSOR

Series PS

Cat No PS - 01 - 01

Digital Pressure Sensor - 1/8

Features

- Set pressure selectable (Mpa, psi, kgf/cm², bar)
- Both upper and lower limits of pressure can be set independently
- Panel mountable
- Direct mountable
- Both PNP & NPN versions
- Two outputs



Technical Specifications

Ordering no.		PS0101504 *	PS0102504 *
Port size		R 1/8	
Rated pressure range		0 ~ 10 bar	
Operating / Setting pressure range		-1 ~ 10 bar	
Withstand pressure		1.5 times of rated pressure range	
Fluid		Air	
Set pressure resolution	Mpa	0.001	
	Kgf/cm ²	0.01	
	Bar	0.01	
	Psi	0.1	
Power supply voltage		12 to 24V DC \pm 10%, Ripple (P-P) 10% or less	
Current consumption		\leq 55 mA	
Switch output		NPN: open collector 2 outputs Max. load current: 80 mA Max. supply voltage: 30V DC Residual voltage: \leq 1V (load current 80 mA)	PNP: open collector 2 outputs Max. load current: 80 mA Max. supply voltage: 24V DC Residual voltage: \leq 1V (load current 80 mA)
Repeatability (Switch output)		$\leq \pm 0.2\%$ F.S. \pm 1 digit	
Hysteresis	Hysteresis mode	Adjustable	
	Window comparator mode	Fixed (3 digits)	
Response time		\leq 2.5ms (chattering-proof function: 24ms, 192ms and 768ms selections)	
Output short circuit protection		Yes	
7 segment LED display		3½ digit LED display (Sampling rate: 5 times/1sec.)	
Indicator accuracy		$\leq \pm 2\%$ F.S. \pm 1 digit (ambient temperature: 25 \pm 3°C)	
Indicator		Green LED (OUT1) Red LED (OUT2)	
Analog output		Output voltage: 1 to 5V $\leq \pm 2.5\%$ FS (within rated pressure range) Linearity: $\leq \pm 1\%$ F.S.	
Environment	Enclosure	IP40	
	Ambient temp. range	Operation : 0 ~ 50°C, Storage : -20 ~ 60°C (No condensation or freezing)	
	Ambient humidity range	Operation / Storage : 35 ~ 85% RH (No condensation)	
	Withstand voltage	1000VAC in 1-min (between case and lead wire)	
	Insulation resistance	50Mohm min. (at 500V DC M, between case and lead wire)	
	Vibration	Total amplitude 1.5mm, 10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X, Y and Z	
	Shock	980m/s ² (100G), 3 times each in direction of X, Y and Z	
Temperature characteristic		$\leq \pm 2\%$ F.S. of detected pressure (25°C) at temp. Range of 0~50°C	
Lead wire		Oil-resistance cable (0.15mm ²)	
Product weight		Approximate 105g (with 2-metre lead wire)	
Output circuit wiring graph			

* Optional spare parts

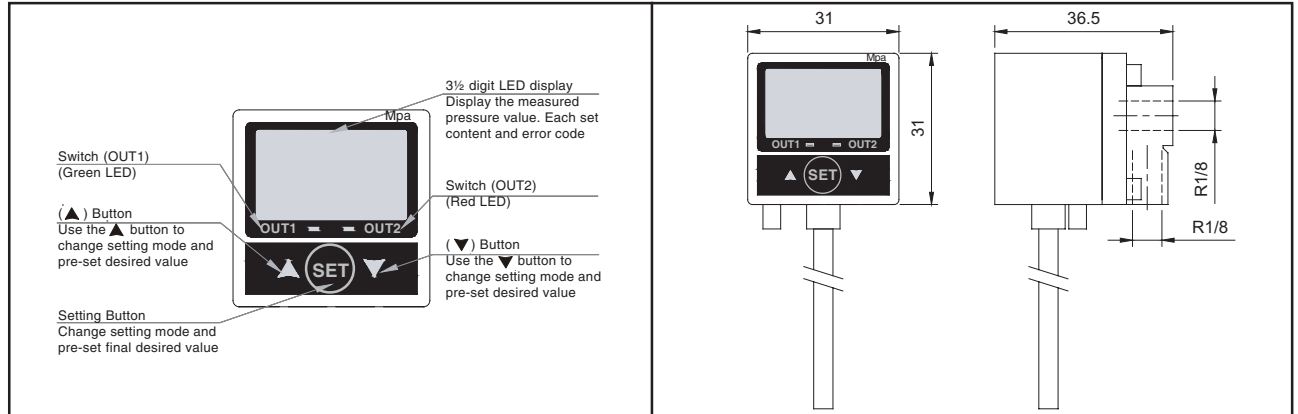
A : Mounting bracket, **B** : Panel adapter, **C** : Panel adapter + Front protective lid

DIGITAL PRESSURE SENSOR

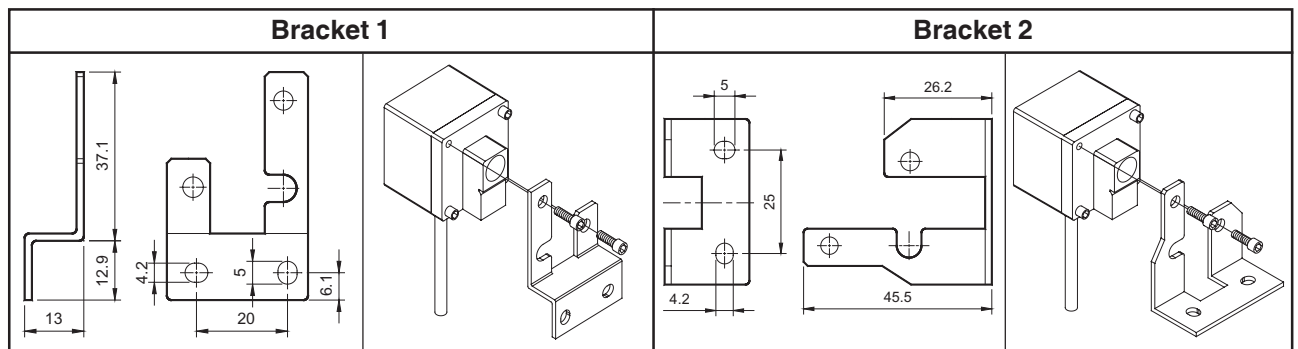
Series PS

Cat No PS - 01 - 01

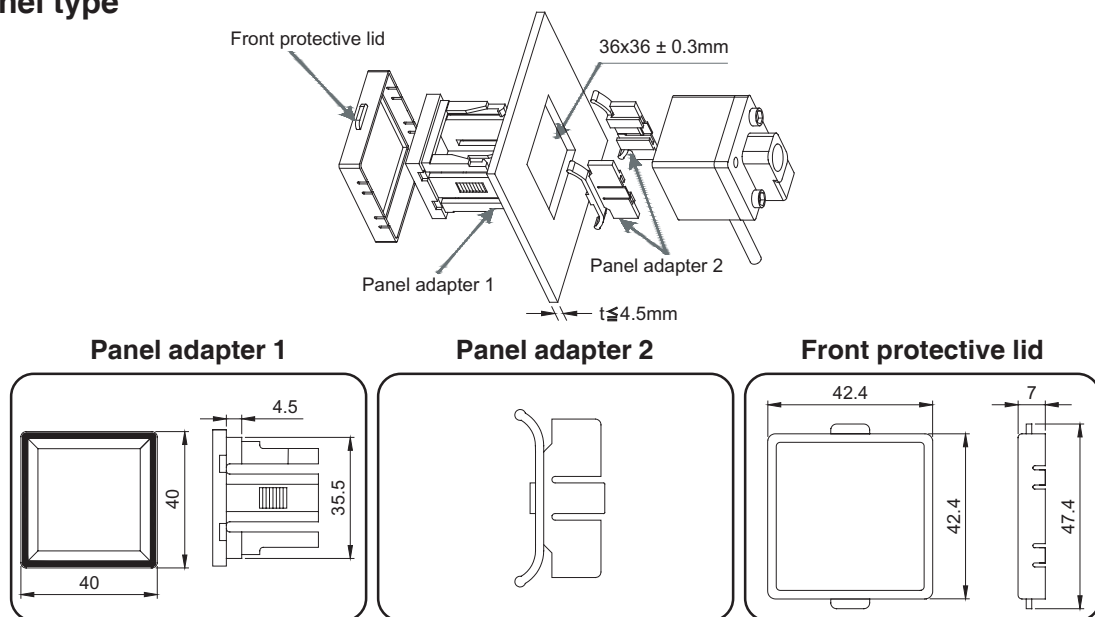
Dimension / Panel instructions



1. Mounting Bracket



2. Panel type



How to Order

While ordering Digital pressure sensor, mention the ordering number given in the corresponding tables.

Example : Pressure sensor NPN type with Panel adapter - **PS0101504B**

Subject to change