

PS30

Digital Display Pressure Switch



Product Features

- Compact appearance and easy to assemble.
- The current value and reference value are displayed simultaneously, and the reference value can be directly set.
- Dual screen, three color display of red, green, and orange.
- Digital display, more recognizable.

How to Order?

Series No.	Pressure Type	Output Type	Port Size
PS30: Economical type	P: Positive pressure C: Continuous pressure	NP: 1-circuit switching value, adjustable, its factory default NPN NPV: 1-circuit switching value, adjustable, its factory default NPN)+ 1-analog voltage output(1~5V) NPA: 1-circuit switching value, adjustable, its factory default NPN)+ 1-analog current output(4~20mA)	01: PT1/8(M5)

Installation Accessories: Sold Separately

Panel Installation bracket	MS-PS-01	PS30 and PS42 are interchangeable
Front protective cover	MS-PS-02	
Front protective cover	MS-PS-03	
L-shaped bracket	MS-PS-04	
Z-shaped bracket	MS-PS-05	

Product Profile

Type	Positive pressure	Continuous pressure
1000kPa		
100kPa		
-100kPa		
Rated pressure range	-0.1MPa~1.0MPa	-100kPa~100kPa
Set pressure range	-0.1MPa~1.0MPa	-100kPa~100kPa

Specifications

Models	Positive Pressure	Continuous Pressure
Type of pressure	Standard pressure	
Rated pressure range*	-0.1MPa~1.0MPa	-100kPa~100kPa
Set pressure range*	-0.1MPa~1.0MPa	-100kPa~100kPa
Pressure resistance	1.5MPa	500kPa
Applicable fluid	Non corrosive gas	
Supply voltage	12~24V DC \pm 5%	
Consumption current	24V 30mA Max	12V 60mA Max
Switch output	NPN O.C output:80mA/24VDCMax or PNP O.C output :80mA/24VDC	
Repetitive accuracy	\pm 0.2%F.S.	\pm 0.5%F.S.
Reaction time	Select through key operation:2.5ms,5ms,10ms,25ms,50ms,100ms,250ms,500ms,1000ms,5000ms	
Analog output	Voltage output	0.6V~5V (or slightly lower) Linearity: \pm 1%F.S. Output impedance: 1K Ω
	Current output	2.4mA~20mA(or slightly lower) Linearity: \pm 1%F.S. Maximum load impedance, when the supply voltage is 12V :300 Ω ; 24V power supply: 600 Ω minimum load impedance: 50 Ω
Range of temperature	Working temperature :0~50 $^{\circ}$ C Storage temperature :-10~60 $^{\circ}$ C (no condensation, no icing)	
Range of humidity	35~85%RH	
Temperature characteristics	\pm 1%F.S.(25 $^{\circ}$ C)	
Protection level	IP40	
Material	Outer shell: Nylon + glass fiber LCD display: Propylene Pressure port: External thread POM+ inlaid N5 copper Seal ring: H-NBR Keys: Silicone rubber	
Overall dimensions	30 x 30 x 25mm(plastic part)/30 x 30 x 43mm (including connectors)	
Weight	Approx 80g (barometer body + user interface connector)	

* Note: Due to the influence of temperature and linear compensation, there may be slight fluctuation near the upper/lower range of the barometer, which is positive Panel description

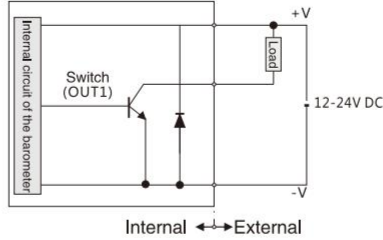
Digital Display Pressure Switch



I/O Circuit Diagram and Wiring Diagram

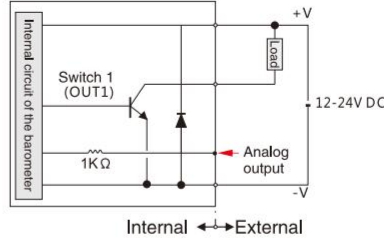
Output type without analog

Output type NPN

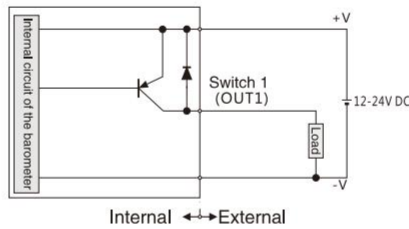


Output type with analog

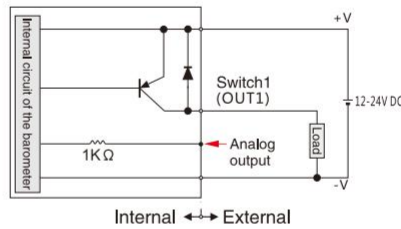
Output type NPN



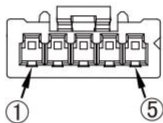
Output type PNP



Output type PNP

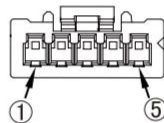


Terminal arrangement diagram



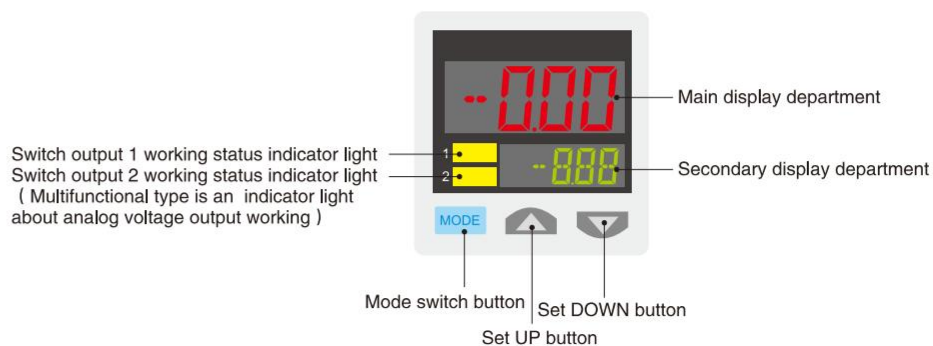
Connector Pin NO	Terminal name
① Brown	+V
② Black	Switch output1
③ White	-
④ Orange	-
⑤ Blue	0V

Terminal arrangement diagram



Connector Pin NO	Terminal name
① Brown	+V
② Black	Switch output1
③ White	-
④ Orange	Analog output
⑤ Blue	0V

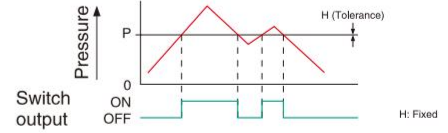
Panel Description



Input Mode and Output Mode

① EASYmode

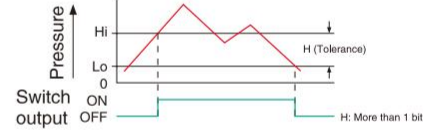
Mode for switch output ON/OFF control



(Note 1): The stress can be fixed at level 8.
 (Note 2): The auxiliary display unit displays "P-1" when the switch outputs 1
 Displayed "P-2" when switching output 2

② Lag mode

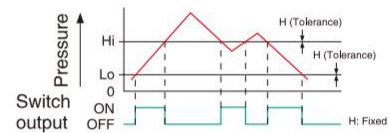
Mode for switch output ON/OFF control



(Note 1): The auxiliary display unit displays "Hi-1", "Lo-1" when the switch outputs 1
 Displayed "Hi-2", "Lo-2" when switching output 2

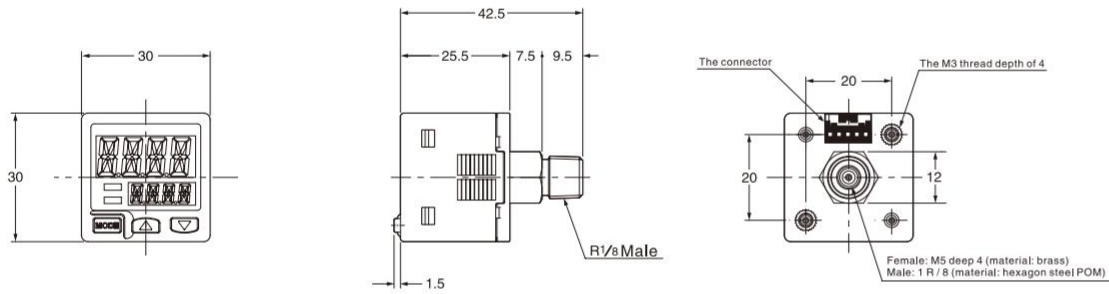
③ Window comparison mode

Set the switch to ON or OFF mode according to the pressure within the set range



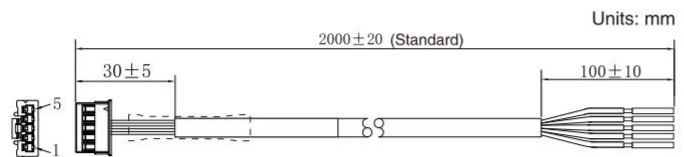
(Note 1): The stress can be fixed at level 8.
 (Note 2): The auxiliary display unit displays "Hi-1", "Lo-1" when the switch outputs 1
 Displayed "Hi-2", "Lo-2" when switching output 2

Outline Dimensional Drawing



Accessories Parts

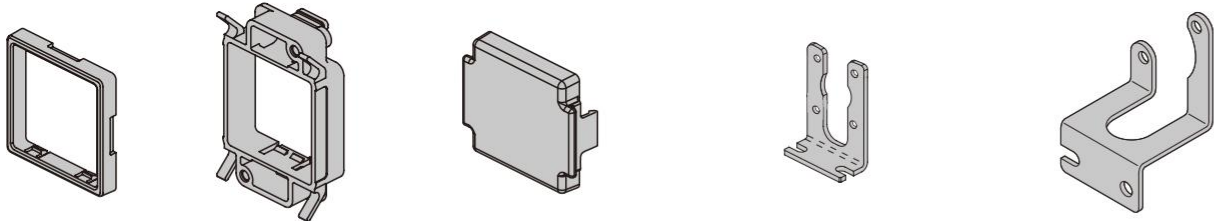
Accessories parts(1): cables



Please use the attached form a complete set of connecting cable with plug.

Note: remove, please hold the connection head part to be removed, otherwise it will cause cable bolt, connecting cable damage.

Accessories parts(2): the mounting bracket (sold separately)



Type 01 panel support (MS-PS-01)

Type 02 panel support (MS-PS-02)

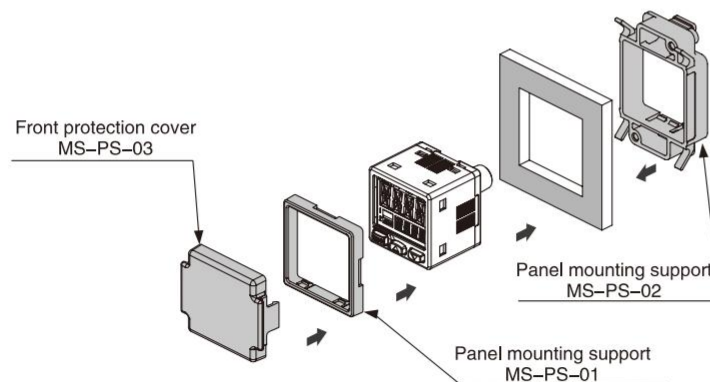
Type 03 front protection cover (MS-PS-03)

Type 04 sensor mounting support (MS-PS-04)

Type 05 sensor mounting support (MS-PS-05)

Product name	Type number	Type number
Sensor mounting bracket	MS-PS-04 MS-PS-05	Sensors can be mounted on the bottom or top side, or multiple sensors can be installed closely. The sensor can be mounted in the rear direction, or multiple sensors can be installed closely.
Panel mounting bracket	MS-PS-02 MS-PS-01	When used together, the sensor can be mounted on a panel with a thickness of 1 to 6mm, or multiple sensors can be installed closely.
Panel mounting bracket	MS-PS-03	Protect the adjusting surface of the sensor. (This protective cover can be installed when mounting the bracket using the panel.)

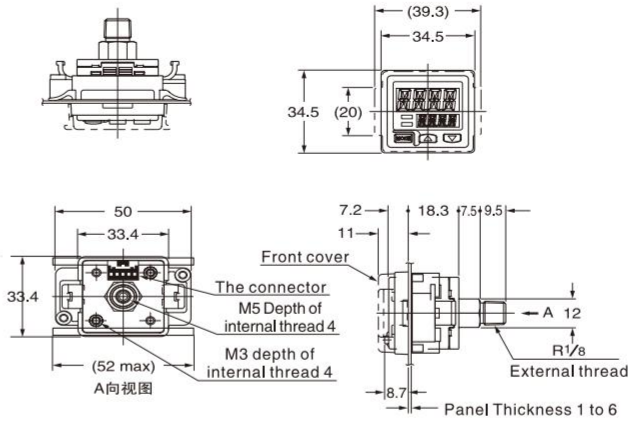
Insyallation Instruction



Digital Display Pressure Switch



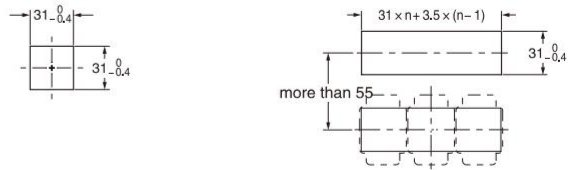
Bracket Size



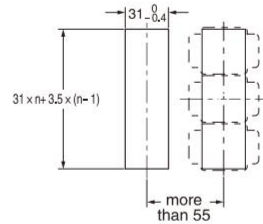
Material: POM panel mounting support
Polycarbonate (front protection cover)

Panel Dimensions

When installing one panel When continuous installing n Horizontally



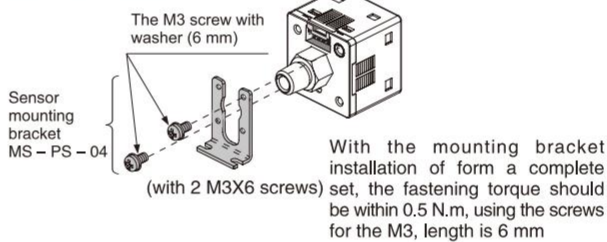
When continuous installing n Longitudinally



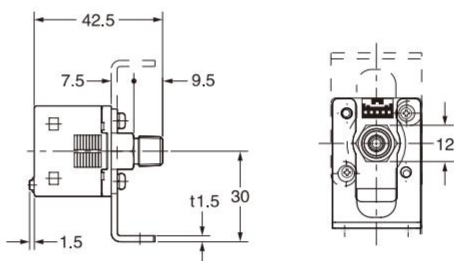
Note: The thickness of the panel should be 1~6mm.

Bracket Installation (MS - PS - 04)

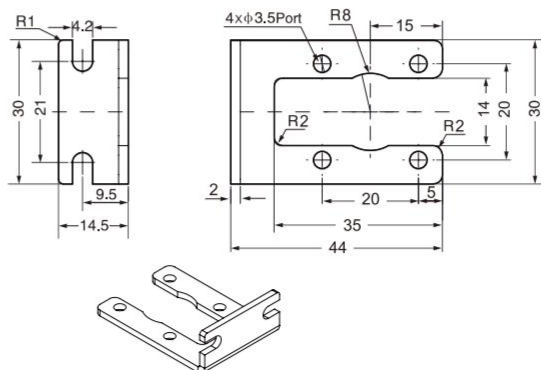
Installation instructions



Installation effect

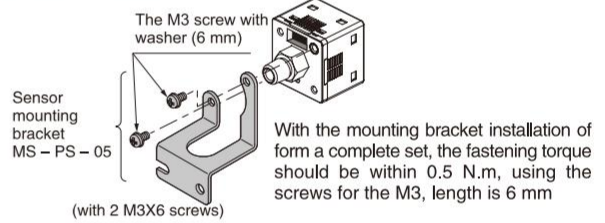


Bracket size

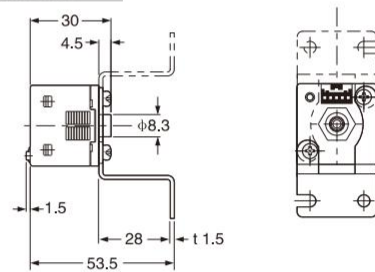


Bracket Installation (MS - PS - 05)

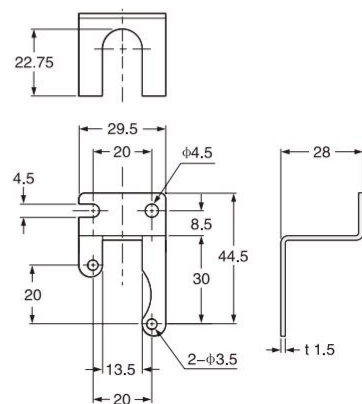
Installation instructions



Installation effect



Bracket size



5
Pressure Switch