

## PS42

Digital Display Pressure Switch ( RS485 )



### Product Features

- RS485 communication.
- Compact shape, easy installation.
- "Current value" and "reference value" display at the same time, reference value can be directly set.
- Double screen, 3 color display (red, green, orange).
- Digital display, More legible.

### How to Order?

Series No.	Category Code	Output Type	Port Size
PS42: Compact type	P: Positive pressure (-0.1MPa~1.0MPa) C: Continuous pressure (-100kPa~100kPa)		01: PT1/8(M5)
2NPV: 2 channel switching quantity (NPN/PNP adjustable, factory default NPN)+1 channel analog voltage output (1~5V) 2NPA: 2 channel switching quantity (NPN/PNP adjustable, factory default NPN)+1 channel analog current output (4~20mA) NPR: 1 channel switching quantity (NPN/PNP adjustable, factory default NPN)+RS485 communication			

### 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
Resistance to pressure	1.5MPa	500kPa
Applicable fluid	Non corrosive gas	
Non-corrosive gases	12~24V DC ± 5%	
Consumption current	24V 30mA Max	12V 60mA Max
Switch output	NPN O.C Output: 80mA/24VDC Max or PNP O.C output:	
Repeat accuracy	± 0.2%F.S.	± 0.5%F.S.
Reaction time	Select through key operation:2.5ms,5ms,10ms,25ms,50ms,100ms,250ms,500ms,1000ms,5000ms	
Analog quantity output	Voltage output	0.6V~5V(or slightly lower)
	Current output	2.4mA~20mA(or slightly lower)
Temperature range	Operating temperature: 0~50℃ Storage temperature: -10~60℃(no condensation, no icing)	
Humidity range	35~85%RH	
Temperature characteristic	± 0.5%F.S.(25℃)	
Protection class	IP40	
Material	1 Case: Nylon + fiberglass 2 LCD Display: Propylene 3 pressure port: External thread POM+ inlaid N5 Copper nut 4 seal ring :H-NBR 5 Keys: Silicone rubber	
Overall dimensions	30x 30x25mm(plastic part) /30x30x43mm (including fittings)	
Weight	About 80g (barometer body + user interface connector)	

※ Note: Due to the influence of temperature and linear compensation, there may be slight fluctuations around the upper/lower range of the barometer, which is normal.

### Product Profile

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

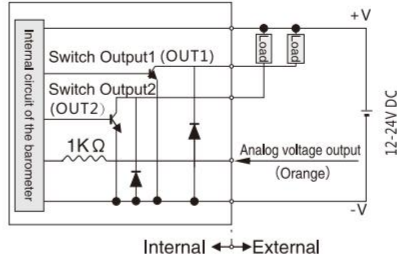
# Digital Display Pressure Switch



## I/O Circuit Diagram and Circuit Diagram

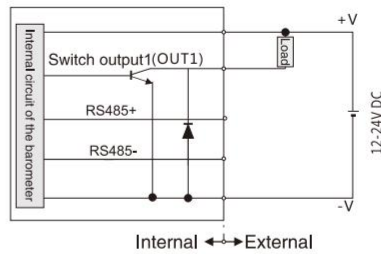
### Non-RS485 models

#### NPN output type

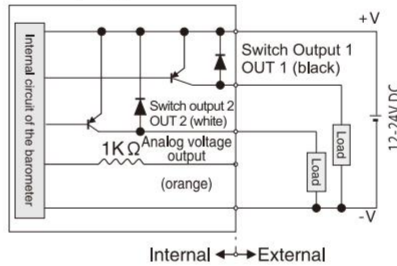


### RS485 model

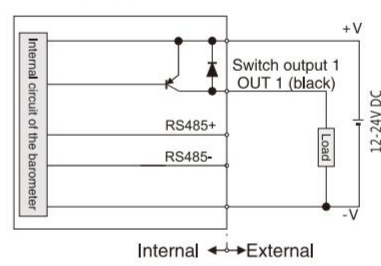
#### NPN output type



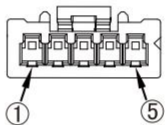
#### PNP output type



#### PNP output type

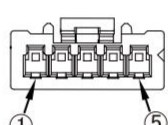


#### Terminal arrangement diagram



Connector needle	Terminal name
① Brown	+V
② Black	OUT1
③ White	OUT2
④ Orange	Analog quantity output
⑤ Blue	0V

#### Terminal arrangement diagram

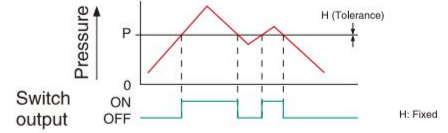


Connector needle	Terminal name
① Brown	+V
② Black	OUT1
③ White	RS485+
④ Orange	RS485-
⑤ Blue	0V

## Input Mode and Output Mode

### ① EASYmode

Mode for switch output ON/OFF control

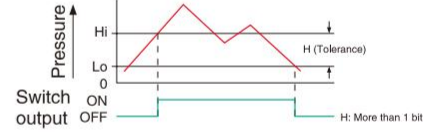


(Note 1): The stress can be fixed at level 8.

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

### ② Lag mode

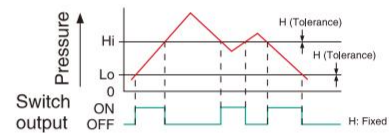
Mode for switch output ON/OFF control



(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

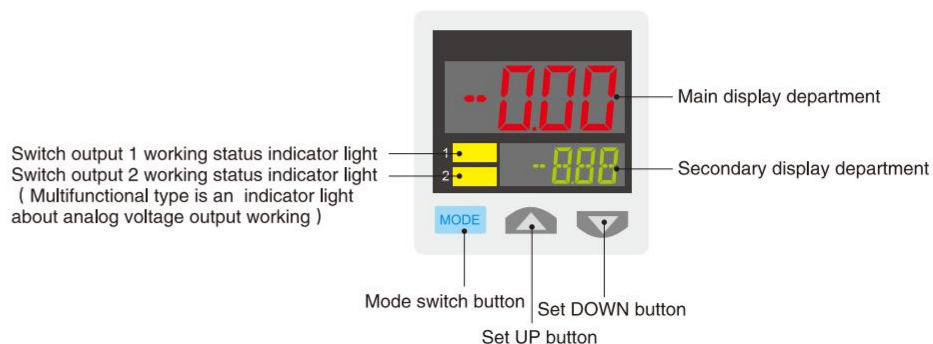
Set the switch to ON or OFF mode according to the pressure within the set range



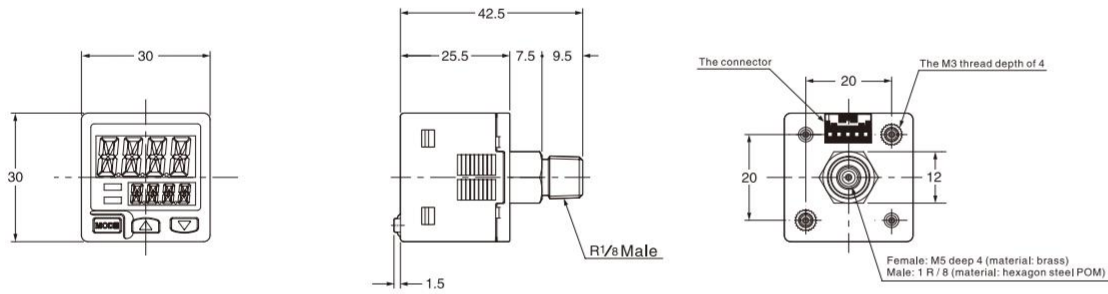
(Note 1): The stress can be fixed at level 8.

(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

## Panel Description

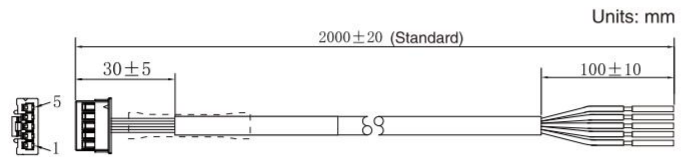


## Outline Dimensional Drawing



## Accessories Parts

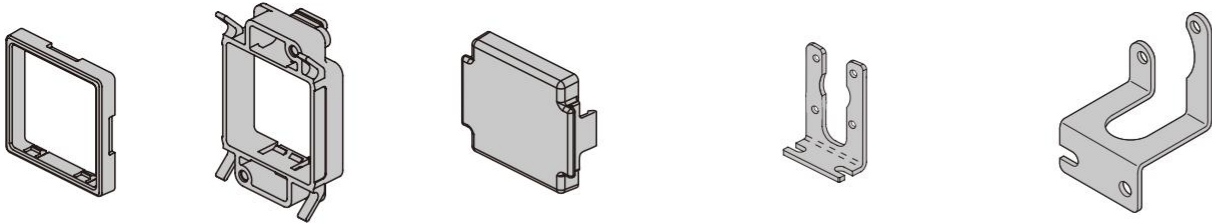
Accessories parts(1): cables



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)

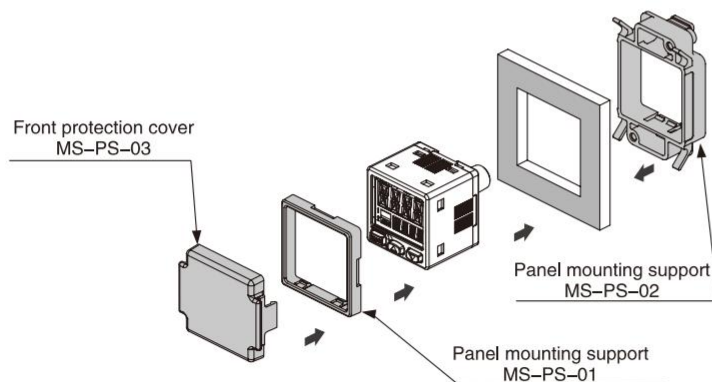
Type 03 front protection cover (MS-PS-03)

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	Sensors can be mounted on the bottom or top side, or multiple sensors can be installed closely.
	MS-PS-05	The sensor can be mounted in the rear direction, or multiple sensors can be installed closely.
Panel mounting bracket	MS-PS-02	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.
	MS-PS-01	
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.)

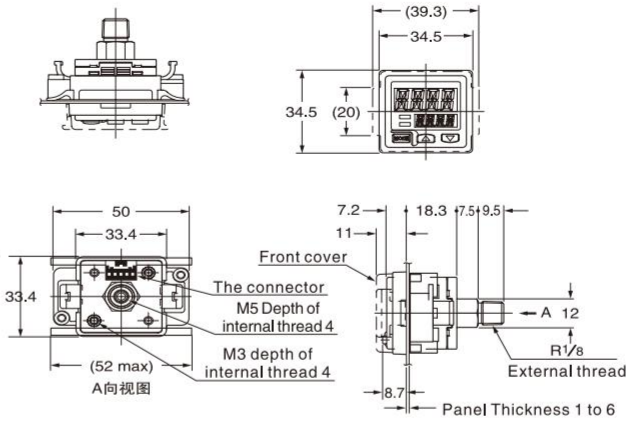
## Installation Instructions



# Digital Display Pressure Switch



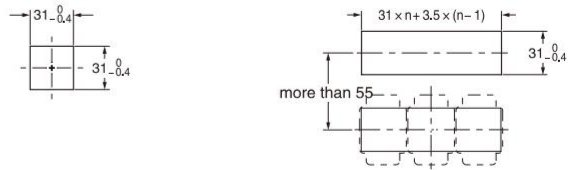
## Bracket Size



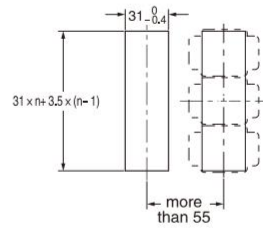
Material: POM panel mounting support  
Polycarbonate (front protection cover)

## Panel Dimensions

When installing one panel    When continuous installing n Horizontally



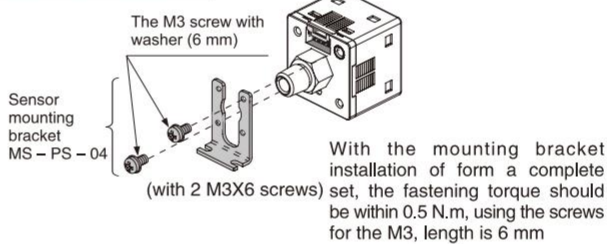
When continuous installing n Longitudinally



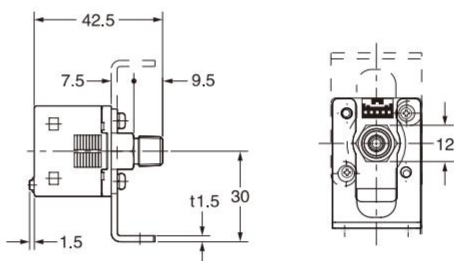
Note: The thickness of the panel should be 1~6mm.

## Bracket Installation (MS - PS - 04)

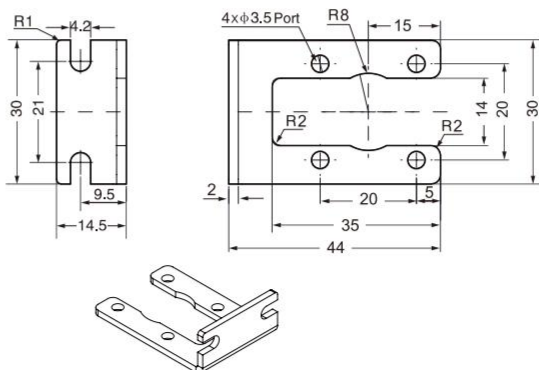
### Installation instructions



### Installation effect

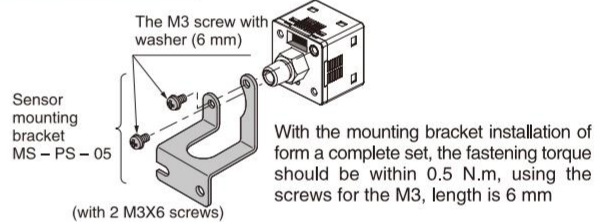


### Bracket size

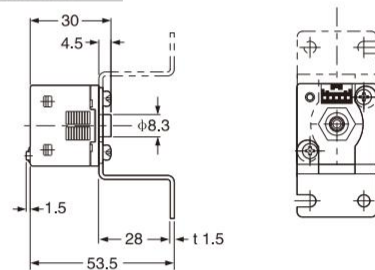


## Bracket Installation (MS-PS-05)

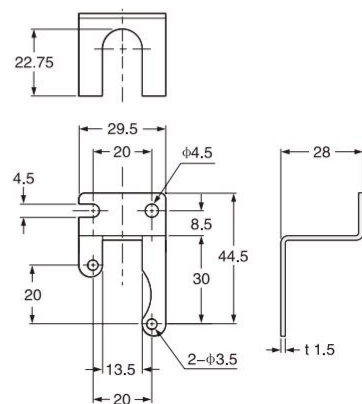
### Installation instructions



### Installation effect



### Bracket size



5  
Pressure Switch