



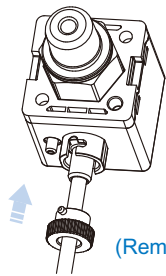
### Features

- 2-Color digital LCD display.
- Copy function.
- Programmable pressure unit: KPa, MPa, kgf/cm<sup>2</sup>, bar, psi, InHg.
- Sensor parts & fitting parts: Stainless steel 316L.
- Corrosive fluid or gas available.
- IP65 enclosure.

### ■ Features highlight

#### Quick installation

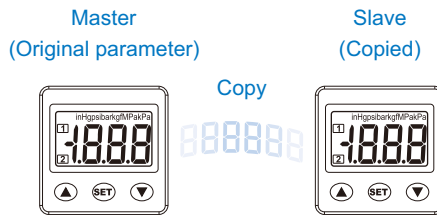
- Save installation time.
- Easy removal.



(Removable data cable)

#### Copy setting

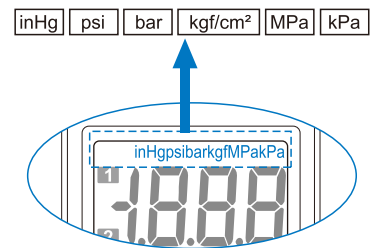
- Reduce setting time.
- Avoid setting errors.



Can copy the setting value from master to slave sensor.

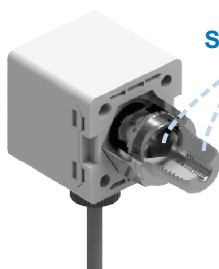
#### Easy unit identification

- Conversion unit is on display and easy to read.



#### Applicable for corrosive fluid or gas

- Sensor parts & fitting parts are SUS 316L, applicable for corrosive fluid or gas equipment.



SUS 316L

#### 2-Color display

- User programmable color mode, for different setting conditions.



	500	500	500	500
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

#### IP65 enclosure

- Protected against water and dust splash from all directions.



### Specification

Model		MP50P (Positive)	MP50H (High)	MP50V (Vacuum)	MP50C (Compound)
Rated pressure range		0 ~ 1.000 MPa	0.0 ~ 2.0 MPa	-101.3 ~ 0.0 kPa	-100.0~100.0 kPa
Setting pressure range		-0.1 ~ 1.000 MPa	-0.1 ~ 2.0 MPa	-101.3 ~ 10.0 kPa	-101.0~101.0 kPa
Allowable pressure		3 MPa		300 kPa	
Fluid		Fluids do not corrode stainless steel 316L			
Set pressure resolution	kPa	—	—	0.1	
	MPa	0.001	0.001(~1.999) 0.01(2.00~)	—	
	kgf/cm <sup>2</sup> / bar	0.01	0.01(~19.99) 0.1(20.0~)	0.001	
	psi	0.1	0.1(~199.9) 1(200~)	0.01	
	InHg	—	—	0.1	
Power supply voltage		12 to 24V DC ±10%, Ripple (P-P) 10% or less			
Current consumption		≤ 45mA (With no load)			
Switch output		NPN: open collector 2 outputs Max. load current : 125mA Max. supply voltage: 30V DC Residual voltage : ≤1.5V		PNP: open collector 2 outputs Max. load current : 125mA Max. supply voltage: 24V DC Residual voltage : ≤1.5V	
Repeatability (Switch output)		±0.3% F.S. ±1 digit			
Hysteresis mode One point set/ Hysteresis/ Window comparator		Adjustable (※1)			
Response time		≤2.5ms (chattering-proof function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selections)			
Output short circuit protection		Yes			
Display		3 1/2 digit, 7 segment (red/green)			
Indicator accuracy		≤ ±2% F.S. ±1 digit (ambient temperature: 25 ±3°C)			
Switch on indicator		Orange (1 & 2 Indicator) OUT1 / OUT2			
Analog output (Voltage Output) (※2)		Output Voltage: 1 to 5V ±2.5%F.S. (within rated pressure range) Linearity: ±1% F.S. Output impedance: about 1kΩ			
Analog output (Current Output) (※3)		Output Current: 4 to 20mA ≤ ±2.5%F.S. (within rated pressure range); Linearity: ±1% F.S. Max.Load Impedance: 250Ω at power supply of 12V, 600Ω at power supply of 24V Min.Load impedance: 50Ω			
Environment	Enclosure classification	IP65			
	Ambient temp. range	Operation: 0 ~ 50°C, storage: -10 ~ 60°C ( No condensation or freezing)			
	Ambient humidity range	Operation/Storage: 35 ~ 85% RH ( No condensation)			
	Withstand voltage	250V AC in 1-min. (between case and lead wire)			
	Insulation resistance	50MΩ (at 500V DC, between case and lead wire)			
	Vibration	Total amplitude 1.5mm or 10G,10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X, Y and Z			
	Shock	100m/s <sup>2</sup> (10G), 3 times each in direction of X, Y and Z			
Temperature characteristic		±3% F.S. of detected pressure 25°C (range of 0 ~ 50°C)			
Port size		F1: R1/4, M5			
Lead wire		Oil-resistance cable (0.15mm <sup>2</sup> )			
Weight		Approx. 110g (with 2 meter lead wire)			

※1. Hysteresis value is adjustable within 1~8 digits for one point set and window comparator mode.

※2. If analog voltage output is selected, the analog current output cannot be selected at the same time.

※3. If analog current output is selected, the analog voltage output cannot be selected at the same time.

# MP50 Dimensions

## HIGH PRECISION DIGITAL PRESSURE SWITCH



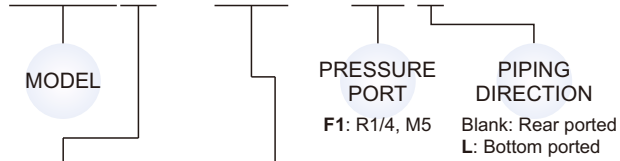
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### Output circuit wiring graph

Model	MP50□-010	MP50□-011	MP50□-02
Connect diagram			
Output method	2 NPN+Analog output(1~5V)	2 NPN+Analog output(4~20mA)	2 NPN+Copy function
Model	MP50□-030	MP50□-031	MP50□-04
Connect diagram			
Output method	2 PNP+Analog output(1~5V)	2 PNP+Analog output(4~20mA)	2 PNP+Copy function

### Order example

**MP50C - 010 - F1 L**



#### PRESSURE RANGE

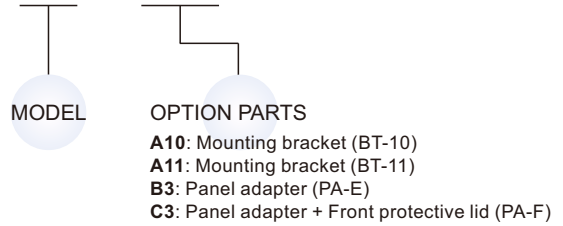
- P:** Positive (-0.1~1.000 MPa)
- H:** High (-0.1~2.000 MPa)
- V:** Vacuum (-101.3~10.0 kPa)
- C:** Compound (-101.0~101.0 kPa)

#### OUTPUT METHOD

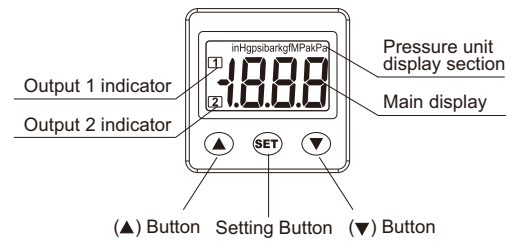
- 010:** 2 NPN output + 1 Analog output (1~5V)
- 011:** 2 NPN output + 1 Analog output (4~20mA)
- 02 :** 2 NPN output + Copy function
- 030:** 2 PNP output + 1 Analog output (1~5V)
- 031:** 2 PNP output + 1 Analog output (4~20mA)
- 04 :** 2 PNP output + Copy function

### Mounting accessories

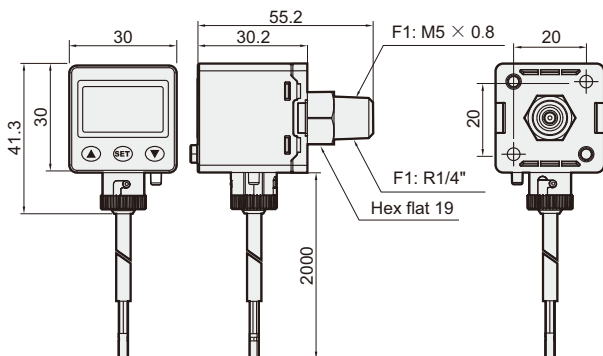
**MP - A10**



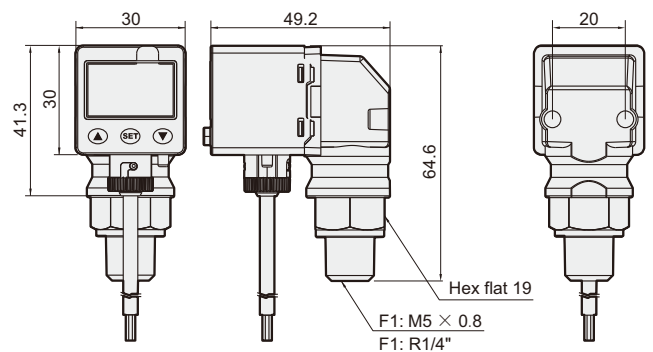
### Panel instructions



### Unit dimension (Rear ported)

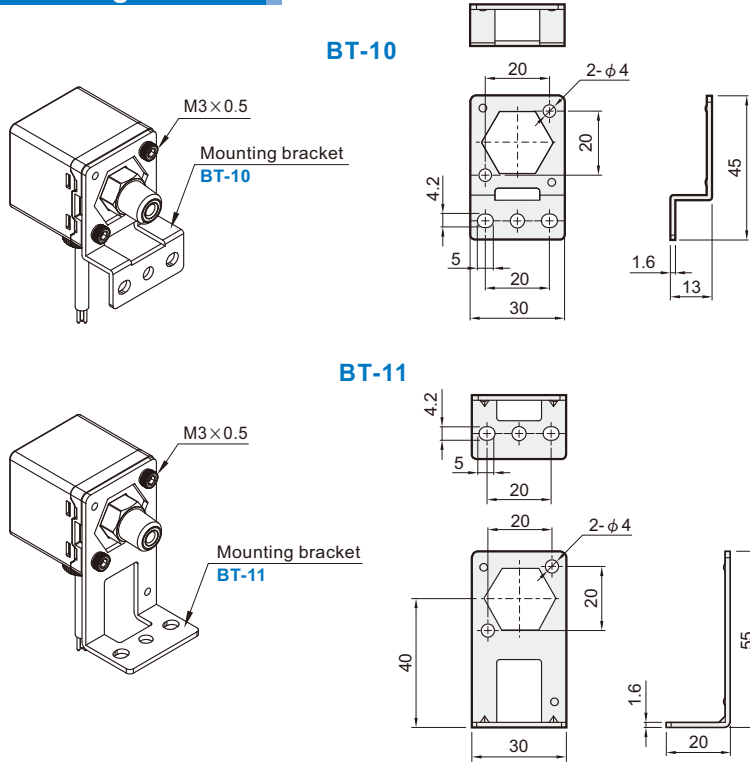


### (Bottom ported)

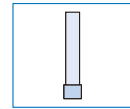
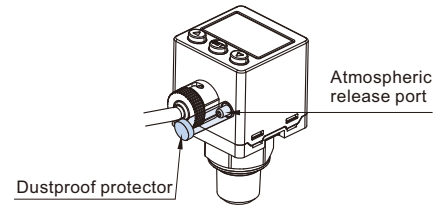


### Type of option parts / Dimension graph

#### Mounting bracket



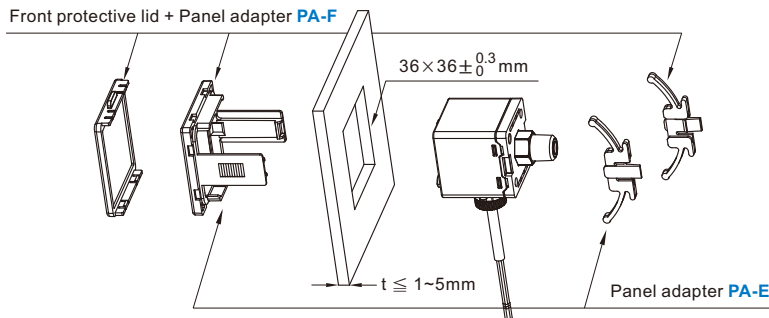
#### Dustproof protector



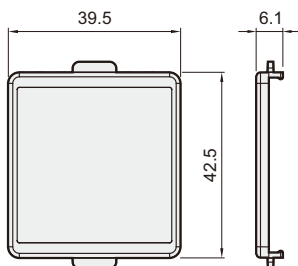
#### Caution

This device must be installed to maintain IP65 (dust and splash proof) enclosure rating.

#### Panel type



#### Front protective lid



#### Panel adapter

