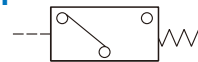




### Features

- 3 color digital LCD display.
- Copy function.
- Programmable pressure unit: kPa, MPa, kgf/cm<sup>2</sup>, bar, psi, mmHg, inHg.
- Dual LCD display allow setting value to be displayed.
- Key lock indicator.
- Power saving mode.
- Applicable for semiconductor manufacturing process, please consult us for further information.

### Symbol



### Features highlight

#### Quick installation

- Save installation time.
- Easy removal.

#### Copy setting

- Reduce setting time.
- Avoid setting errors.

#### Easy unit identification

- Conversion unit is on display and easy to read.

(Removable data cable)

Master (Original parameter)      Slave (Copied)

Copy

Can copy the setting value from master to slave sensor.

mmHg inHg psi bar kgf/cm<sup>2</sup> MPa kPa

### Setting Value Easy Indication

- User can easily observe the setting value from sub-display.

### 2-Color Main display

- User programmable color mode, for different setting conditions.

### OPS Quick Setting

- Sub-display allows changing the parameter directly, reduce setting step by 3/4.

Main/Sub-Display

Main Display

Sub-Display

	SoG	SoR	Grn	reD
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

Up/Down quick setting      Finished setting

### Specification

Model		MP43C (Compound)	MP43V (Vacuum)	MP43P (Positive)
Rated pressure range		-100.0~100.0 kPa	-101.3 ~0.0 kPa	0 ~ 1.0 MPa
Set pressure range		-101.0~101.0 kPa	-101.3 ~ 10.0 kPa	-0.1 ~ 1.0 MPa
Withstand pressure		300 kPa		1.5 MPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas		
Set pressure resolution	KPa / MPa	0.1 / —		— / 0.001
	kgf/cm <sup>2</sup> / bar	0.001		0.01
	psi	0.01		0.1
	mmHg	1		—
	InHg	0.1		—
Power supply voltage		12 to 24V DC ± 10%, Ripple (P-P) 10% or less		
Current consumption		≤ 40mA (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)		± 0.2% F.S. ±1digit		
Hysteresis Hysteresis mode / Window comparator mode		Adjustable(*1)		
Response time		≤2.5ms (chattering-proof function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selectable)		
Output short circuit protection		Yes		
7 segment LCD display		3½ digital, 7 segment LCD display ( Red / Green / Orange ) (Sampling rate: 5 times/sec.)		
Indicator accuracy		±2% F.S. ±1 digit (Ambient temperature: 25 ± 3°C)		
Switch ON Indicator		Orange indicator 1: OUT1 & Orange indicator 2: 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: 300Ω at power supply of 12V, 600Ω at power supply of 24V Min. load impedance: 50Ω		
Enclosure		IP40		
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)		
Environment	Withstand voltage	1000V AC in 1-min. (between case and lead wire)		
	Insulation resistance	50M Ω (at 500V DC, between case and lead wire)		
	Vibration	Total amplitude 1.5mm or 10G,10Hz-55Hz-10Hz scan for 1 minute, 2 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		±2.5% F.S. of detected pressure (25°C) at temp. Range of 0~50°C		
Port size		F1: R1/8, M5×0.8; F2: NPT1/8, #10~32UNF; F3: G1/8, M5×0.8		
Lead wire		ø4 Oil-resistance cable ( PVC ) - 26 AWG ( 0.15 mm <sup>2</sup> ) - 5 cores		
Weight		Approx. 80g (with 2 meter lead wire)		

\*1. Hysteresis value is adjustable within 1~8 digits for one point set mode 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.

# MP43 Dimensions

## HIGH PRECISION DIGITAL PRESSURE SWITCH

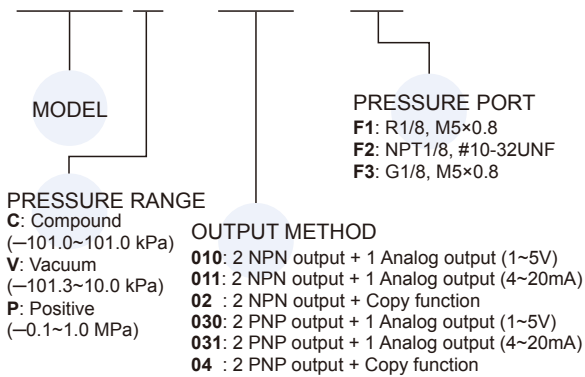


### Output circuit wiring graph

Model	MP43□-010	MP43□-011	MP43□-02
Connect diagram			
Output method	2 NPN+Analog(Voltage) output (1~5V)	2 NPN+Analog(Current) output (4~20mA)	2 NPN+Copy function
Model	MP43□-030	MP43□-031	MP43□-04
Connect diagram			
Output method	2 PNP+Analog(Voltage) output (1~5V)	2 PNP+Analog(Current) output (4~20mA)	2 PNP+Copy function

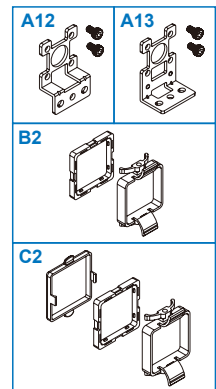
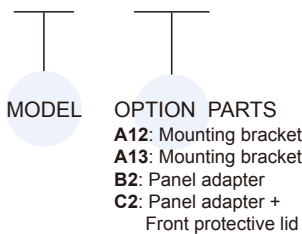
### Order example

**MP43C – 010 – F1**

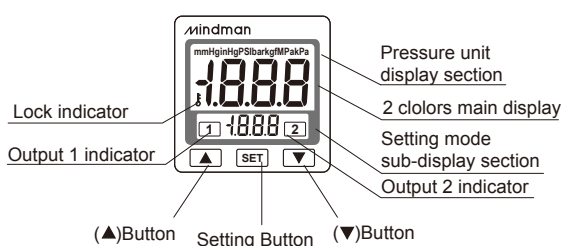


### Mounting accessories (Option)

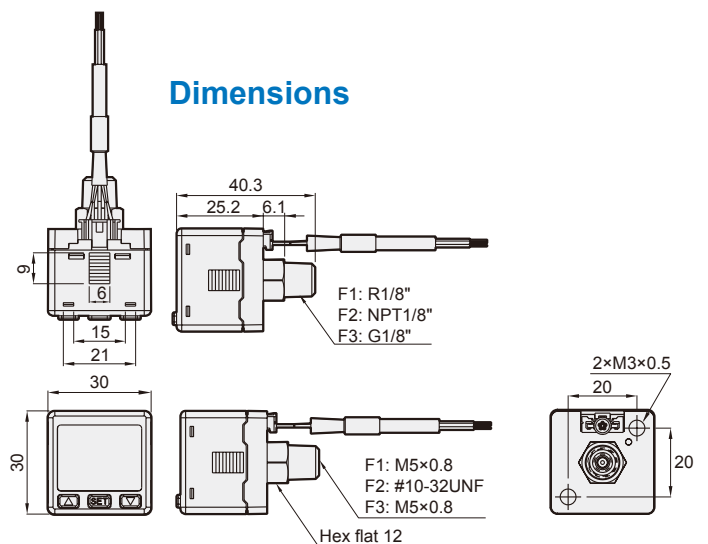
**MP – A12**



### Panel instructions

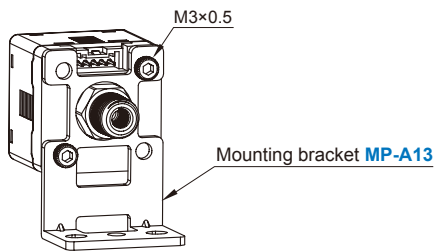
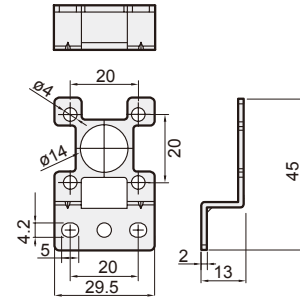
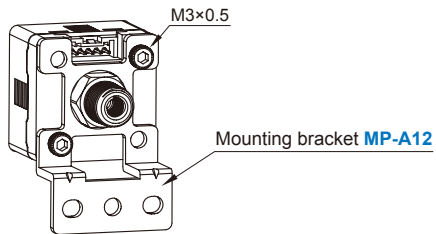


### Dimensions

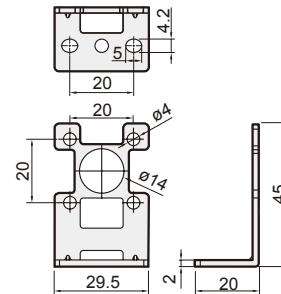


### Mounting bracket

#### MP-A12

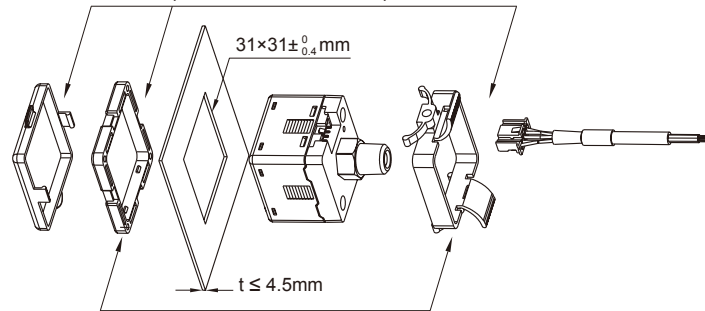


#### MP-A13



### Panel type

Front protective lid + Panel adapter **MP-C2**



Panel adapter **MP-B2**

