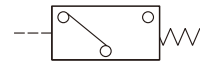




### Features

- 3-color digital LCD display.
- Main/Sub-Display, 4 digits 7 segment LCD display.
- Programmable pressure unit : kPa, MPa, kgf/cm<sup>2</sup>, bar, psi, inHg, mmHg.
- Dual LCD display allows setting value to be displayed.
- Key lock indicator.
- Power-save mode.
- Fine adjustment mode.
- Applicable for semiconductor manufacturing process, please consult us for further information.

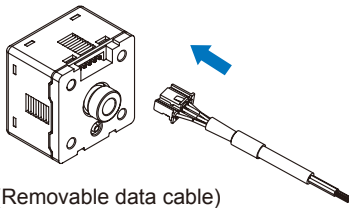
### Symbol



### Features highlight

#### Quick installation

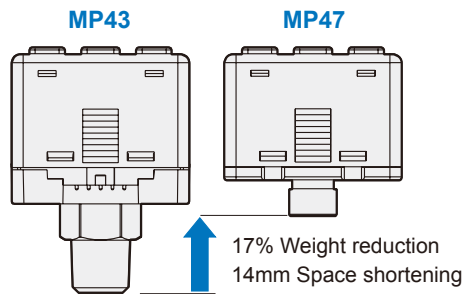
- Save installation time.
- Easy removal.



(Removable data cable)

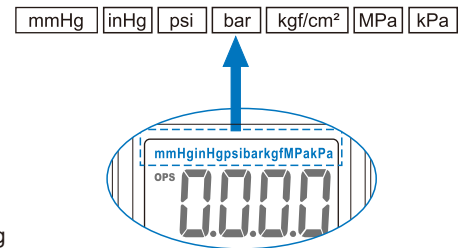
#### Compact design

- Compared with similar products, approx. 35% shorter.



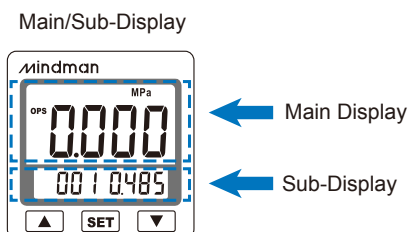
#### Easy unit identification

- Conversion unit is on display and easy to read.



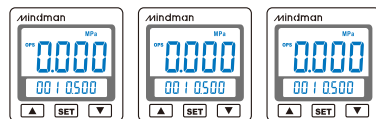
### Setting Value Easy Indication

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



### 2-Color Main display

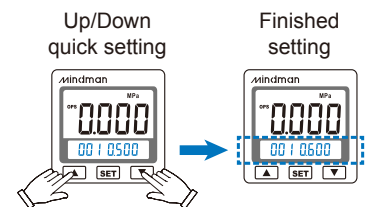
- User programmable color mode, for different setting conditions.



	SOU	SOR	URN	RED
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

### OPS Quick Setting

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



# MP47 Specification



## HIGH PRECISION DIGITAL PRESSURE SWITCH

Mindman

### Specification

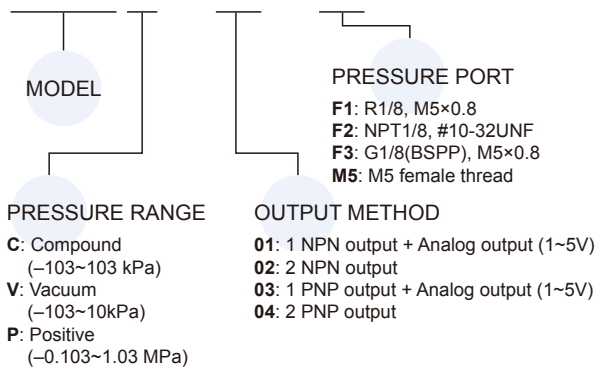
Model		MP47C (Compound)	MP47V (Vacuum)	MP47P (Positive)
Rated pressure range		-100 ~ 100 kPa	-101.3 ~ 0 kPa	-0.1 ~ 1.0 MPa
Setting pressure range		-103 ~ 103 kPa	-103 ~ 10 kPa	-0.103 ~ 1.03 MPa
Allowable pressure		500 kPa		1.5 MPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas		
Set pressure resolution	KPa	0.1		—
	MPa	—		0.001
	kgf/cm <sup>2</sup> / bar	0.001		0.01
	psi	0.01		0.1
	InHg / mmHg	0.1 / 1		—
Power supply voltage		12~24V DC ±10%, Ripple (P-P) 10% or less		
Current consumption		≤ 30mA (With no load)		
Switch output		NPN: open collector outputs Max. load current: 80mA Max. supply voltage: 30V DC Residual voltage: ≤ 1V	PNP: open collector outputs Max. load current: 80mA Max. supply voltage: 24V DC Residual voltage: ≤ 1V	
Repeatability(Switch output)		±0.3% F.S. ±1 digit		
Hysteresis	One point set mode	Adjustable (Hysteresis value is adjustable within 1~8 digits for one point set mode and window comparator mode.)		
	Hysteresis mode			
	Window comparator mode			
Response time		≤ 2.5ms (chattering-proof function: 25ms, 100ms, 250ms, 500ms, 1000ms, 1500ms selectable)		
Output short circuit protection		Yes		
Display	Display	4 digital, 7 segment LCD display ( Red / Green / Orange ) ( Sampling rate : 0.2, 0.5, 1 sec. / time )		
	Indicator accuracy	±1% F.S. ±1 digit (ambient temperature: 25 ± 3°C)		
	Switch ON Indicator	Orange indicator 1: OUT1 & Orange indicator 2: OUT2		
Analog output (within rated pressure range) (Voltage Output)		Output Voltage: 1 to 5V ±2.5% F.S. Linearity: ±1% F.S. Output impedance: about 1kΩ	Output Voltage: 0.6 to 5V 2.5% F.S. Linearity: ±1% F.S. Output impedance: about 1kΩ	
Environment	Enclosure classification	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)		
	Withstand voltage	1000V 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-150Hz-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% 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"(BSPP), M5×0.8; M5 female thread		
Lead wire		∅4 Oil-resistance cable ( PVC ) - 26 AWG ( 0.15 mm <sup>2</sup> ) - 4 cores		
Weight		Approx. 67g (with 2 meter lead wire)		

### Output circuit wiring graph

Model	MP47□-01	MP47□-03
Connect diagram		
Output method	1 NPN + Analog output (1~5V) (0.6~5V only positive)	1 PNP + Analog output (1~5V) (0.6~5V only positive)
Model	MP47□-02	MP47□-04
Connect diagram		
Output method	2 NPN output	2 PNP output

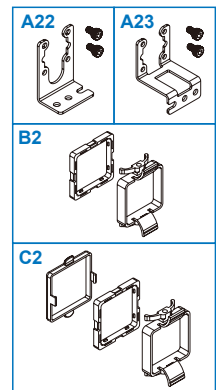
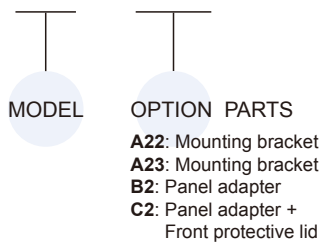
### Order example

**MP47C – 01 – F1**

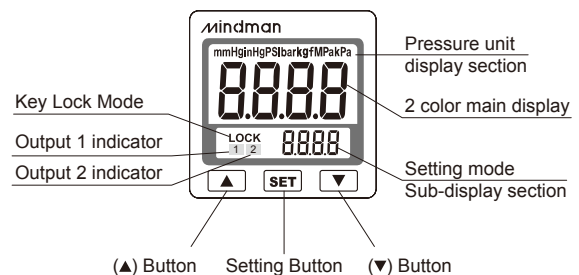


### Mounting accessories (Option)

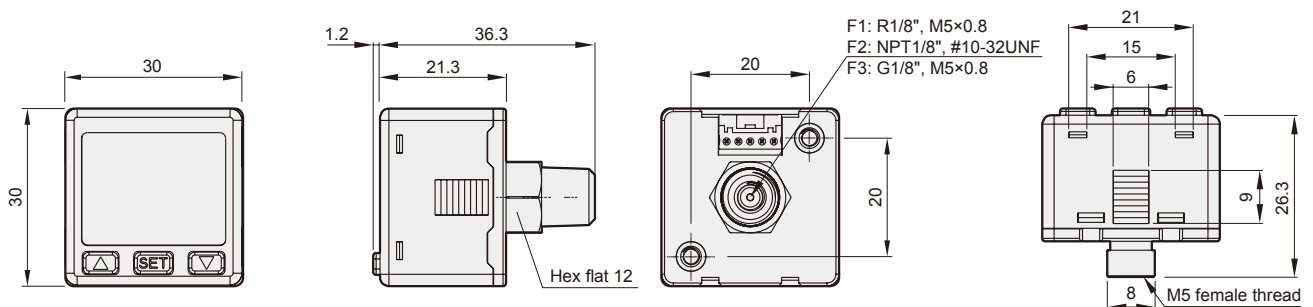
**MP – A22**



### Panel instructions

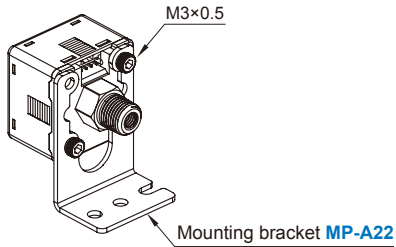


### Dimensions

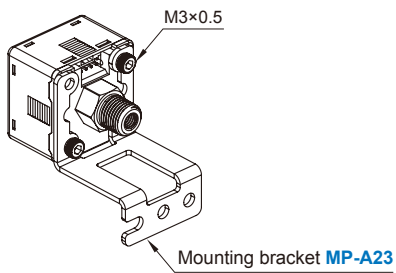
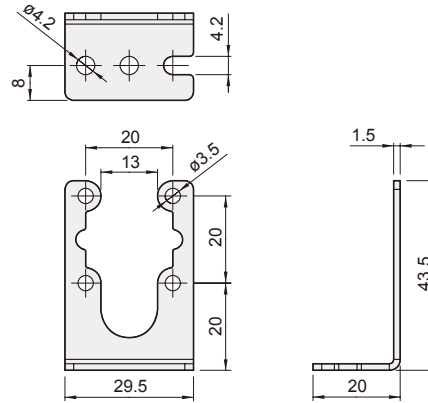


### Mounting accessories

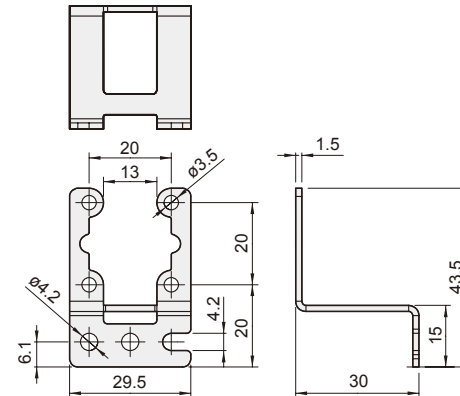
#### Mounting bracket



**MP-A22**



**MP-A23**



#### Panel type

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

