# MP40 series

# HIGH PRECISION DIGITAL PRESSURE SWITCH





### Features:

● Pressure range:Compound -100.0~100 kPa Vacuum 0~-101.3 kPa

Positive 0~1000 kPa.

- Two switch output & one analog output.
- Hysteresis adjustable.
- High accuracy and Resolution.
- Low cost.
- Pressure unit selectable : KPa,MPa,kgf/cm², psi, bar, mmHg, InHg.

# **Specification:**

Model		MP20C (Compound)	MP20V (Vacuum)	MP20P (Positive)	
Rated pressure range		—100.0∼100.0 kPa	0.0 ~ —101.3 kPa	0 ~ 1000 kPa	
Setting pressure range		—101.0~101.0 kPa	10.0 ~ —101.3 kPa	—100 ∼ 1000 kPa	
Withstand pressure		300 kPa		1500 kPa	
Fluid		Air, Non-corrosive gases ,incombustible gases			
Set pressure resolution	kPa	0.1		1	
	kgf/cm²/ bar	0.001		0.01	
	psi	0.01		0.1	
	mmHg	1		<del></del>	
	InHg	0	.1		
Power supply voltage		12 to 24VDC ±10%, Ripple (P-P) 10% or less			
Current consumption		≦45mA (With no load)			
Switch output		NPN open collector Max. load current : 125mA Max. supply voltage: 30VDC Residual voltage : ≦1.5V (load current 125mA)  Nax. load current : 125mA Max. supply voltage: 24VDC Residual voltage : ≦1.5V (load current 125mA)			
Repeatability (Switch output)		≦ 0.2% F.S. ±1 digit			
Hysteresis	Hysteresis mode/ Window comparator mode		Adjustable		
Response time		≤2.5ms (chattering-proof function: 24ms, 250ms,500ms,1000ms and 1500ms selections)			
Output short circuit protection		Yes			
7 segment LED display		Two color(Red/Green) display (Sampling rate: 5 times/1sec.)			
Indicator accuracy		≦±2% F.S. ±1 digit (ambient temperature: 25 ±3℃)			
Switch ON Indicator		Green OUT Indicator			
Analog output (Voltage Output)		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)		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			
Environment	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)			
	Withstand voltage	1000VAC in 1-min (between case and lead wire)			
	Insulation resistance	50Mohm min. (at 500VDC M, between case and lead wire)			
	Vibration	Total amplitude 1.5mm,10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X,Y and Z			
	Shock	100m/s² (10G),3 times each in direction of X,Y and Z			

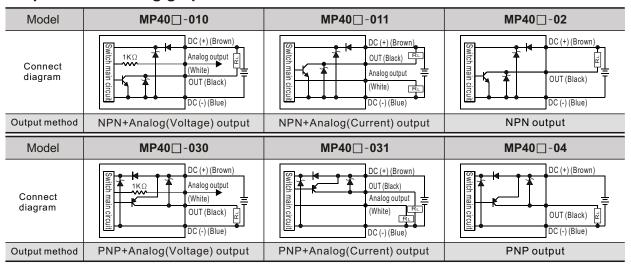


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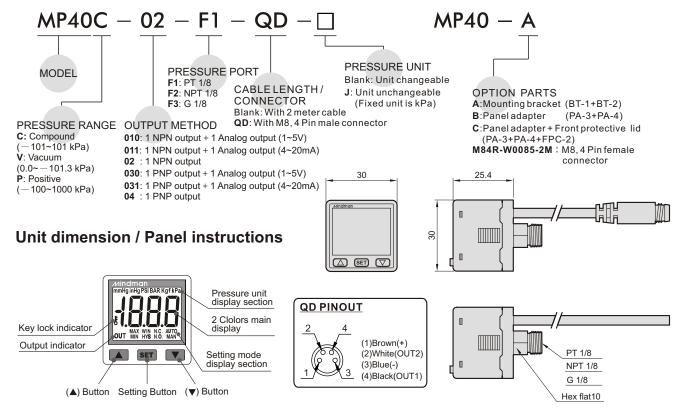
Model	MP20C (Compound)	MP20V (Vacuum)	MP20P (Positive)
Temperature characteristic	≦2% F.S. of detected pressure (25℃) at temp. Range of 0~50℃		
Port size	rt size F1:PT 1/8; F2:NPT 1/8; F3:G 1/8		
Lead wire	Oil-resistance cable(0.15mm²)		
Weight	Appro*75g(with 2-meter lead wire), Appro*45g(with male connector )		

#### **Output circuit wiring graph:**



#### Order example:

## Mounting accessories:



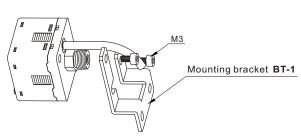
# MP40 Accessory

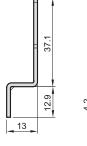
Mounting bracket



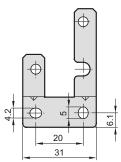
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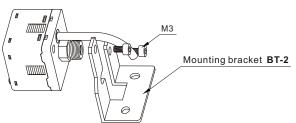
# Type of option parts / Dimension graph:

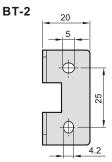


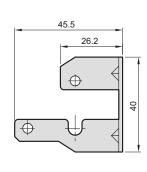


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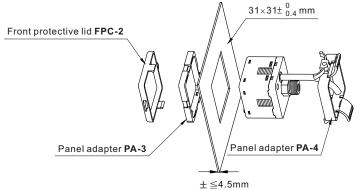


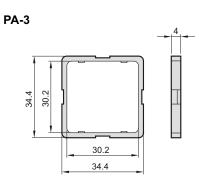


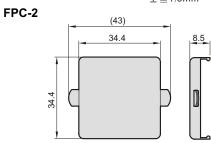


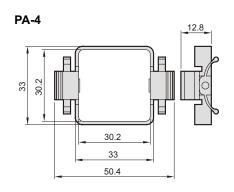


# Panel type









# M8 Female connector

