



User manual



Selection table



Features

- Pressure range: Compound -100.0~100 kPa
Positive 0~1 MPa
Vacuum -101.3~0 kPa.
- 2 switch output & one analog output.
- Hysteresis adjustable.
- High accuracy and Resolution.
- Low cost.

Symbol



Specification

Model		MP30C (Compound)	MP30V (Vacuum)	MP30P (Positive)
Rated pressure range		−100.0~100.0 kPa	−101.3 ~0.0 kPa	0.0 ~ 1.0 MPa
Operating / Setting pressure range		−100.0~100.0 kPa	−101.3~10.0 kPa	−0.1 ~ 1.0 MPa
Allowable pressure		300 kPa		1.5 MPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas		
Set pressure resolution	KPa	0.1	—	
	MPa	—	0.001	
	kgf/cm ² , bar	0.001	0.01	
	psi	0.01	0.1	
	InHg	0.1	—	
	mmHg	1	—	
	mmH ₂ O	0.1	—	
Power supply voltage		12 to 24V DC±10%, Ripple (P-P) 10% or less		
Current consumption		≤ 60mA		
Switch output		NPN or PNP open collector 2 outputs Max. load current : 100mA Max. supply voltage: NPN, 30V DC; PNP, 24V DC Residual voltage : ≤1V		
Repeatability (Switch output)		± 0.2% F.S. ±1digit		
Hysteresis	Hysteresis mode	Adjustable		
	Window comparator mode	Fixed (3 digits)		
Response time		≤2.5ms (chattering-proof function: 24ms, 192ms and 768ms selections)		
Output short circuit protection		Yes		
7 segment LED display		3½ digit, 7 segment LED display (Red) (Sampling rate: 5 times/sec.)		
Indicator accuracy		±2% F.S. ±1 digit (Ambient temperature: 25 ± 3°C)		
Indicator		Green indicator : OUT1 & Red indicator : OUT2		
Analog output *(Only type MP30□-01, MP30□-03)		Output voltage: 1 to 5V±5% F.S. (within rated pressure range) Linearity: ±1% F.S.	Output voltage: 1 to 5V ±2.5% F.S. (within rated pressure range) Linearity: ±1% F.S.	
Environment	Enclosure	IP40		
	Ambient temp. range	Operation: 0 ~ 50°C, storage: −20 ~ 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, 10Hz-55Hz-10Hz scan for 1 minute, 2 hours each direction of X, Y and Z		
	Shock	980m/s ² (100G), 3 times each in direction of X, Y and Z		

MP30 Dimensions

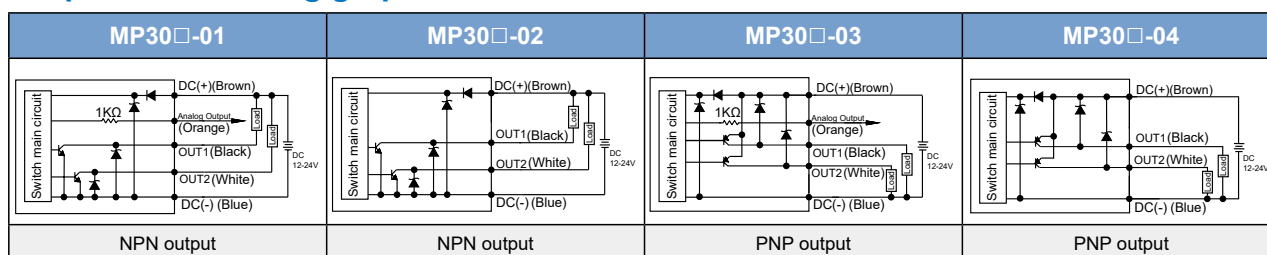
HIGH PRECISION DIGITAL PRESSURE SWITCH



Specification

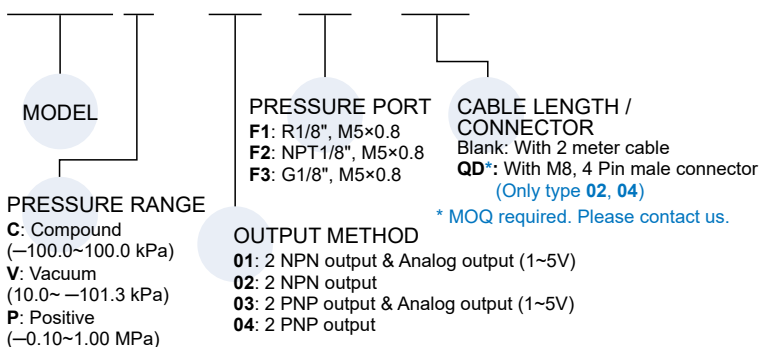
Model	MP30C (Compound)	MP30V (Vacuum)	MP30P (Positive)
Temperature characteristic	±2% F.S. of detected pressure (25°C) at temp. Range of 0~50°C		
Port size	F1: R1/8", M5×0.8; F2: NPT1/8", M5×0.8; F3: G1/8", M5×0.8		
Lead wire	ø4 Oil-resistance cable (PVC) - 26 AWG (0.15 mm ²) - 5 cores (01 / 03) , - 4 cores (02 / 04)		
Weight	Approx. 67 g (with 2 meter lead wire), Approx. 35 g (with M8 4Pin male connector)		

Output circuit wiring graph



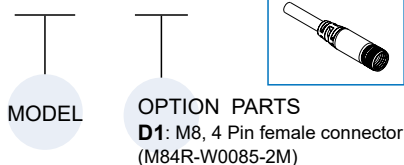
Order example

MP30C — 01 — F1 — QD



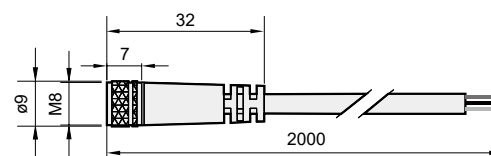
Mounting accessories (Option)

MP — D1

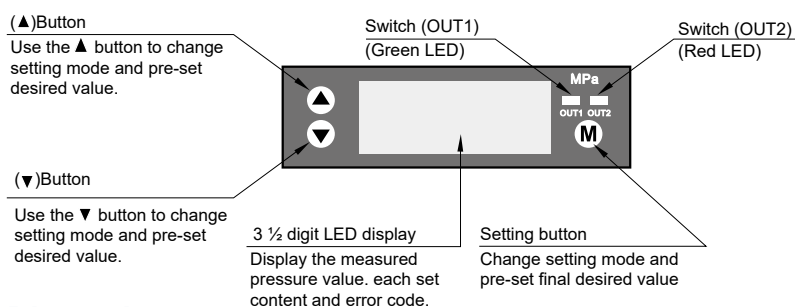


MP-D1

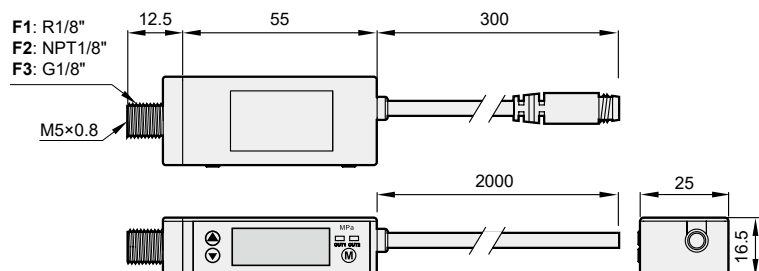
M8, 4 Pin female connector



Panel instructions



Dimensions



QD Pinout

