

For your safety, please read the following before using.

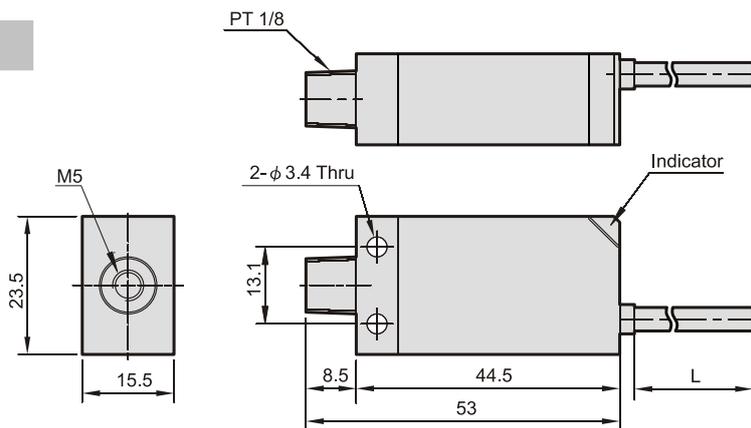
- ① Do not use corrosive or flammable gas or liquid with this product.
- ② Please use within the operating pressure range. Do not apply pressure beyond recommended maximum pressure, permanent damage to the pressure sensor may occur.
- ③ Do not drop, hit or allow excessive shock (1000m/s² or 100G). Even if switch body appears undamaged, internal components may be broken and can cause malfunction.
- ④ Turn power off before connecting wiring. Wrong wiring or short circuit will damage and / or cause malfunction.
- ⑤ Do not use in environment contains steam or oil vapor.
- ⑥ This product is not explosion-proof rated. Do not use in atmosphere containing flammable or explosive gases.
- ⑦ Wiring for pressure switch should avoid power source line and high voltage line. If use in th same circuit, noise may cause malfunction.

SPECIFICATIONS		MP1-1(Vacuum)	MP1-2(Low Pressure)	MP1-3(Positive)
Operating pressure range/Set pressure range		-101 to 0 kPa	0 to 100 kPa	0 to 1 Mpa
Withstand pressure		500kPa		1.5MPa
Fluid		Air, Non-corrosive/Non-flammable gas		
Power supply voltage		12 to 24VDC ±10%, Ripple (P-P) 10% or less		
Response time		5ms or less		
Repeatability		±1% F.S.		
Current consumption		1 output : NPN & PNP : 21mA MAX., 2 output : 25mA MAX.		
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	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	980m/s ² (100G), 3 times each in direction of X, Y and Z		
Temperature characteristic		±3% F.S. (Standard : 25 °C)		
Port size		1/8"PT, M5; 1/8"NPT, M5.		
Weight		50g(each including 1M lead wires)		

OUTPUT SPECIFICATIONS

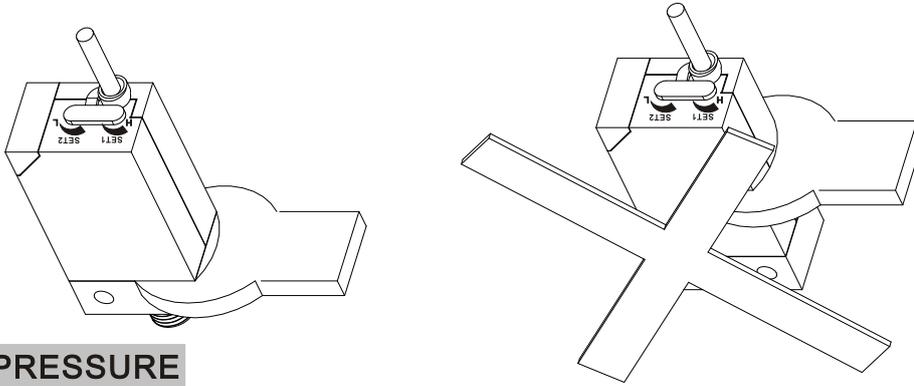
CONNECT DIAGRAM	MP1-□-01	MP1-□-02	MP1-□-03
CHARACTERISTICS			
Output method	NPN open collector 30V 80mA	PNP open collector 80mA	NPN open collector 30V 80mA
Hysteresis	1~10% of setting pressure (Adjustable)		3% F.S. or less (Fixed)
Setting points	1Point		2Point
Operation indicating Lamp	Light at ON (Red)		Light at ON (out1 Red, out2 Green)

DIMENSION



INSTALLATION PRECAUTIONS

When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor. Tightening torque is between 7~9 N.m (70~90 kgf.cm). Over tightening may cause damages to the port thread, mounting bracket and sensor. Under tightening may result leakage and fall off. Apply pressure and power after installation and make necessary adjustments and inspect any signs of leakage.



HOW TO SET PRESSURE

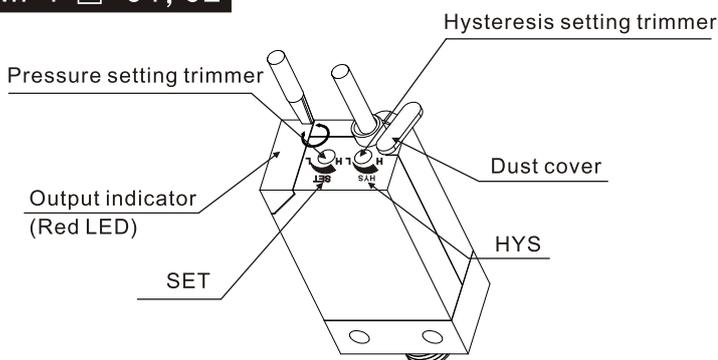
MP1-□-01, 02

- Remove dust cover to make any adjustments. Replace dust cover when finished to prevent foreign object from entering.
- Pressure setting trimmer (SET) is for setting the output (ON) pressure. Rotate SET trimmer counter-clockwise to increase (Pressure or vacuum) the ON point. Rotate clockwise will decrease the setting pressure.
- Hysteresis setting trimmer (HYS) is for changing the hysteresis. Rotate trimmer counter-clockwise to increase the range 1~10%.
- Use appropriate size screwdriver for the setting trimmers. Gently turn the screwdriver to make adjustments. Do not force the trimmer when it comes to a stop to prevent damage to the setting trimmer.

MP1-□-03

- Remove dust cover to make any adjustments. Replace dust cover when finished to prevent foreign object from entering.
- Pressure setting trimmer (SET 1, SET 2) is for setting the output (ON) pressure. Rotate SET trimmer counter-clockwise to increase (Pressure or vacuum) the ON point. Rotate clockwise will decrease the setting pressure.
- Hysteresis for models with two outputs is 3% fixed.

MP1-□-01, 02



MP1-□-03

