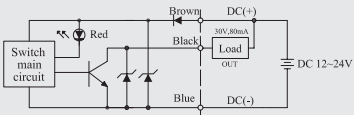
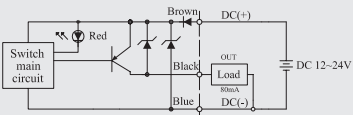
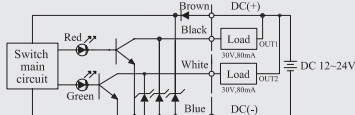


For your safety, please read the following before using.

- 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. 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 containing 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 the same circuit, noise may cause malfunction.

SPECIFICATIONS		P1-1(Vacuum)	P1-2(Low Pressure)	P1-3(Positive)
Setting pressure range		0 ~ -101kPa	0 ~ 100kPa	0 ~ 1MPa
Withstand pressure		300kPa		1.5MPa
Fluid		Air, Non-corrosive/Non-flammable gas		
Power supply voltage		12 to 24V DC $\pm 10\%$, Ripple (P-P) 10% or less		
Response time		5ms or less		
Repeatability		$\leq \pm 1\%$ F.S.		
Current consumption		1NPN & 1PNP output : 21mA max., 2 NPN 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	1000V AC in 1-min (between case and lead wire)		
	Insulation resistance	50Mohm min. (at 500V DC, 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		$\pm 3\%$ F.S. of detected pressure (25°C) at temp. Range of 0~50 °C		
Port size		1/8" PT, M5; 1/8" NPT, M5; G1/8" (BSPP), M5		
Lead wire		Oil-resistance cable (0.18mm ²)		
Weight		Approx. 50g (with 1-meter lead wire)		

CIRCUIT WIRING DIAGRAM	P1-□-01	P1-□-02	P1-□-03
CONNECT DIAGRAM			
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	1 Point		2 Point
Operation indicating Lamp	Red LED turn on		Out 1=Red; Out 2=Green

ORDERING INFORMATION

P 1 - 1 - 0 1 - 0 1 - P T

Pressure Range

1 : Vacuum (0 ~ -101kPa)
2 : Low Pressure (0 ~ 100kPa)
3 : Positive (0 ~ 1MPa)

Pressure Port

PT : 1/8" PT, M5
NPT : 1/8" NPT, M5
G : G1/8" (BSPP), M5

Output Specifications

01 : NPN Output
02 : PNP output
03 : 2 NPN output

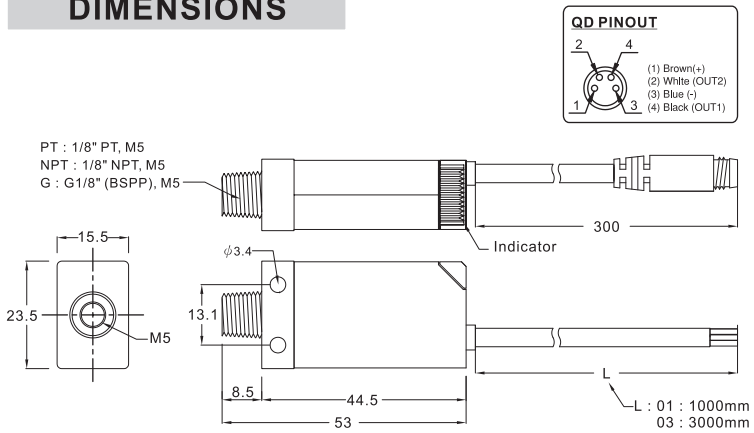
Cable Length/Connector

01 : With 1-meter cable
03 : With 3-meter cable
C : With M8, 4 Pin male connector

Optional Parts

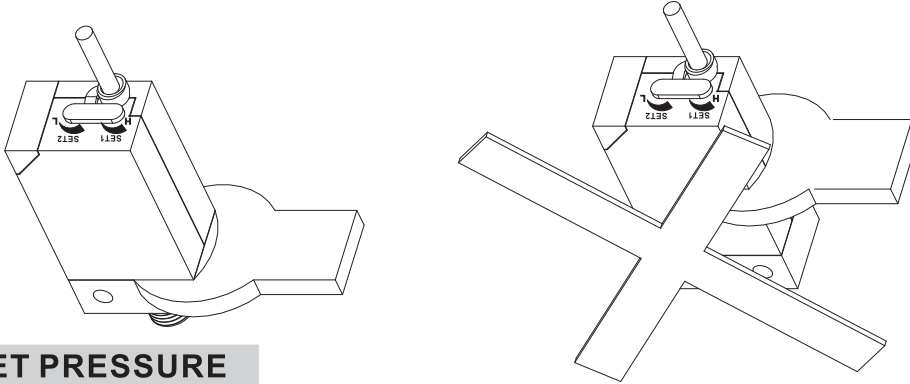
M84R-W0072-2M : 2M cable with M8, 4-Pin female connector

DIMENSIONS



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.
- Over tightening may cause damages to the port thread, mounting bracket and pressure sensor. Under tightening may result leakage.
- Apply pressure and power after installation and make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



HOW TO SET PRESSURE

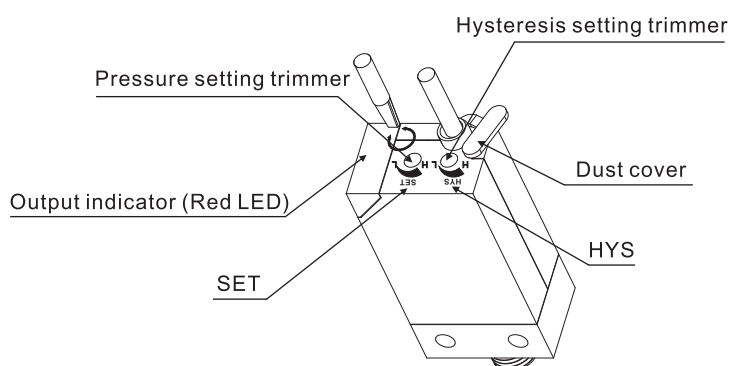
P1-□-01, 02

- 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.

P1-□-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.

P1-□-01, 02



P1-□-03

