

## **TECHNICAL SPECIFICATIONS**

## For your safety, please read the following before using.

- ① Do not use corrosive or flammable gas or liquid with this product.
- @ Please use within the setting 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.

- 🗇 Wiring for pressure sensor should avoid power source line and high voltage line. If use in the same circuit, noise may cause malfunction.
- ® ESD protection ±4KV.

SPECIFICATIONS		AP30	
Rated pressure range		0.0 ~ -101.3kPa	
Setting pressure range		10.0 ~ -101.3kPa	
Withstand pressure		300kPa	
Fluid		Air, Non-corrosive/Non-flammable gases	
Set pressure resolution	kPa	0.1	
	MPa	_	
	kgf/cm <sup>2</sup>	0.001	
	bar	0.001	
	psi	0.01	
	inHg	0.1	
	mmHg	1	
	$mmH_2O$	0.1	
Power supply voltage		12 to 24V DC ±10%, Ripple (P-P) 10% or less	
Current consumption		≦ 60mA	
Switch output		NPN: open collector 2 outputs Max. load current: 80mA Max. supply voltage: 30V DC Residual voltage: ≦ 1V	PNP: open collector 2 outputs Max. load current: 80mA Max. supply voltage: 24V DC Residual voltage: ≦ 1V
Repeatability(Switch output)		≦ ±0.2% F.S. ±1 digit	
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		3 ½ digit LED display (Sampling rate: 5 times/1sec.)	
Indicator accuracy		≦ ±2% F.S. ±1 digit (Ambient temperature: 25 ±3°C)	
Indicator		OUT1=Green, OUT2=Red	
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/s²(100G), 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		1/8"NPT, M5	
Lead wire		Oil-resistance cable (0.15mm²)	
Electrical Connection		Male, M8, 4 Pin	
Weight		Approx. 35g	

## M8 4 CONDUCTOR PIN OUT (24 VOLTS):

- (1) Brown (+) (2) White (OUT2) (3) Blue (-) (4) Black (OUT1)



