

Features

- 2 output & analog output (1~5V)
- 10mm width with compact size
- Key lock function
- Programmable pressure unit :
kPa 、MPa 、bar 、mmHg 、inHg 、kgf/cm² 、psi

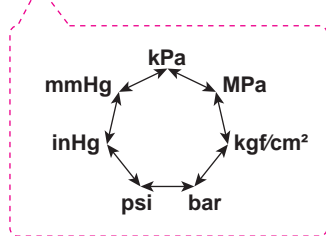


SPECIFICATIONS

TYPE	Compound	Vacuum	Positive
MODEL	AP90C	AP90V	AP90P
1.0 MPa			
100.0 kPa			
0			
-101.3 kPa			
Rated pressure range	-100.0 ~ 100.0 kPa (-14.50 ~ 14.50 psi)	0.0 ~ -101.3 kPa (0.0 ~ -29.9 inHg)	0.000 ~ 1.000 MPa (0.0 ~ 145.0 psi)
Setting pressure range	-101.0 ~ 101.0 kPa (-14.50 ~ 14.50 psi)	10.0 ~ -101.3 kPa (1.45 psi ~ -29.9 inHg)	-0.100 ~ 1.000 MPa (-14.5 ~ 145.0 psi)

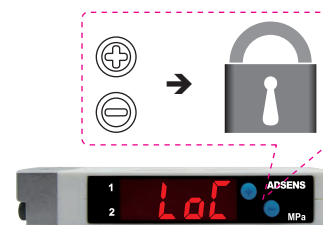
FEATURES HIGHLIGHT

1 Programmable pressure unit



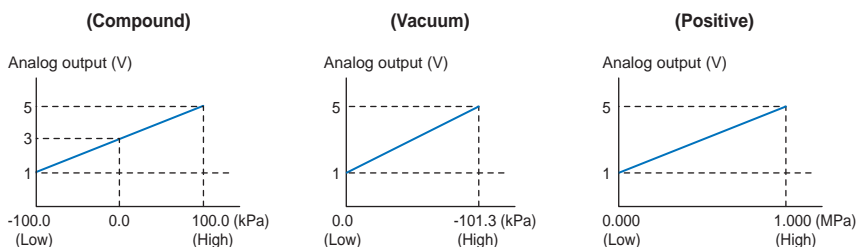
2 Key lock function

Key lock mode to prevent unauthorized adjustments
Press ⊕ and ⊖ button at the same time for 3 sec.

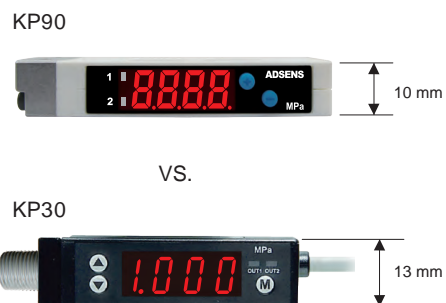


3 Analog output

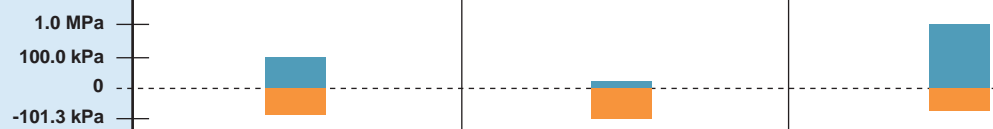
Output range 1 to 5V, proportional to the pressure range



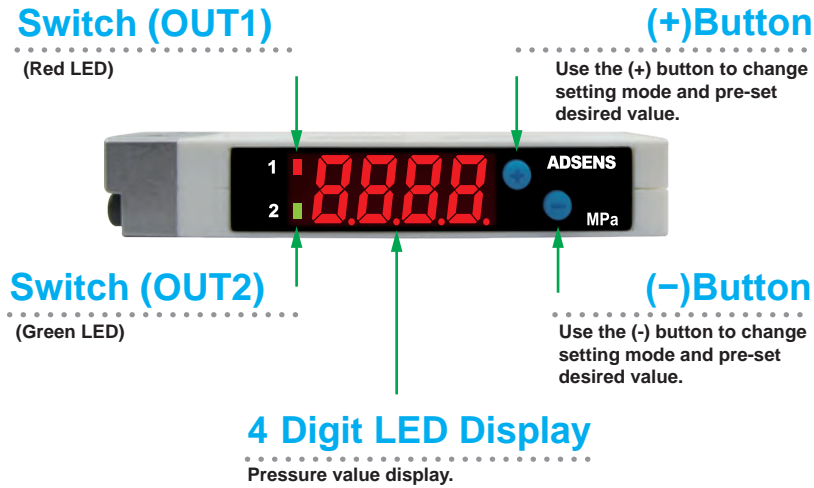
4 Compact size



■ SPECIFICATIONS

MODEL		AP90C (Compound)	AP90V (Vacuum)	AP90P (Positive)
				
Rated pressure range		-100.0 ~ 100.0 kPa (-14.50 ~ 14.50 psi)	0.0 ~ -101.3 kPa (0.0 ~ -29.9 inHg)	0.000 ~ 1.000 MPa (0.0 ~ 145.0 psi)
Setting pressure range		-101.0 ~ 101.0 kPa (-14.50 ~ 14.50 psi)	10.0 ~ -101.3 kPa (1.45 psi ~ -29.9 inHg)	-0.100 ~ 1.000 MPa (-14.50 ~ 145.0 psi)
Withstand pressure		500 kPa (72.5 psi)		1.5 MPa (217 psi)
Fluid		Filtered Air, Non-corrosive / Non-flammable gas		
Set pressure resolution	kPa	0.1		-
	MPa	-		0.001
	kgf/cm ²	0.001		0.01
	bar	0.001		0.01
	psi	0.01		0.1
	inHg	0.1		-
	mmHg	1		-
Power supply voltage		12 to 24V DC \pm 10% , Ripple (P-P) 10% or less		
Current consumption		\leq 40mA(With no load)		
Switch output		NPN: open collector 2 outputs Max. load current: 125mA Max. supply voltage: 30V DC Residual voltage: \leq 1.5V	PNP: open collector 2 outputs Max. load current: 125mA Max. supply voltage: 24V DC Residual voltage: \leq 1.5V	
Repeatability(Switch output)		\pm 0.2% F.S. \pm 1 digit		
Response time		\leq 2.5ms (chattering proof function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selectable)		
Output short circuit protection		Yes		
7 segment LED display		4 digit LED 7display (RED)		
Indicator accuracy		\pm 2% F.S. \pm 1 digit		
Switch ON Indicator		OUT1=RED , OUT2=GREEN		
Analog output (Voltage Output)		Output Voltage: 1 to 5V \pm 2.5% F.S. (within rated pressure range) Linearity: \pm 1% F.S. Output impedance: about 1k Ω		
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	1000V AC in 1-min (between case and lead wire)		
	Insulation resistance	50M Ω (at 500V DC, between case and lead wire)		
	Vibration	Total amplitude 1.5mm or 10G,10Hz-150Hz-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 2% F.S. of detected pressure (25°C) at temp. range of 0~50°C		
Port size		M5		
Lead wire		Oil-resistance cable(0.14mm ²)		
Weight		Approx. 53g (with 2 meter lead wire)		

■ PANEL DESCRIPTION



■ ORDERING INFORMATION

A P 9 0 P - 0 1 0 - M 5

Pressure Range

C : Compound (-101.0~101.0 kPa)
(-14.50 ~ 14.50 psi)

V : Vacuum (10.0~-101.3 kPa)
(1.45 psi ~29.9 inHg)

P : Positive (-0.100~1.000 MPa)
(-14.5 ~ 145.0 psi)

Output Specification

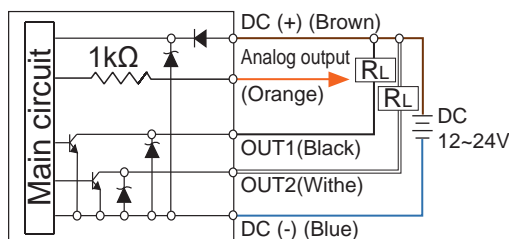
010 : 2 NPN output & Analog output(1~5V)

030 : 2 PNP output & Analog output(1~5V)

■ OUTPUT CIRCUIT WIRING DIAGRAMS

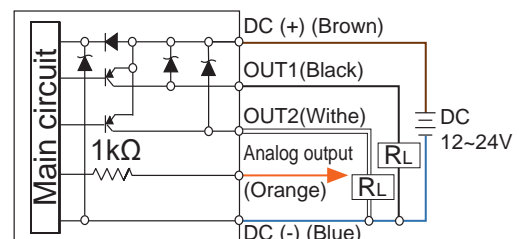
AP90 □ - 010 - M5

2 NPN Output & Analog Output (1~5V)



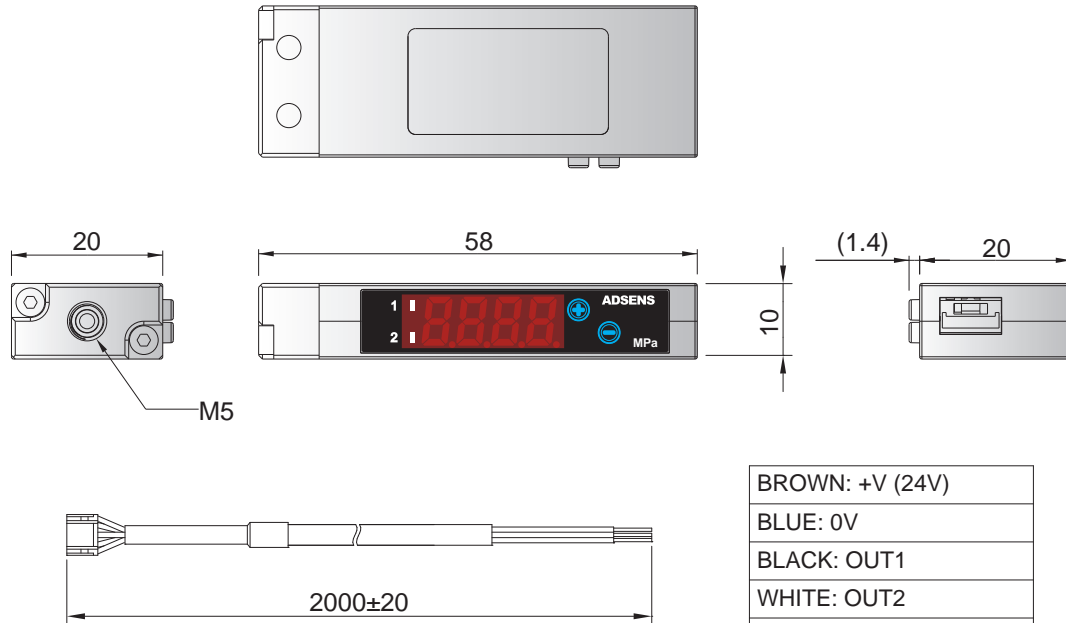
AP90 □ - 030 - M5

2 PNP Output & Analog Output (1~5V)



■ DIMENSIONS

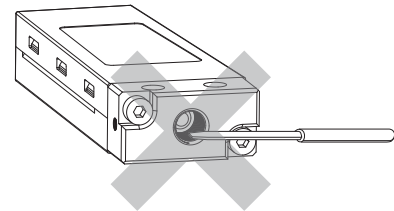
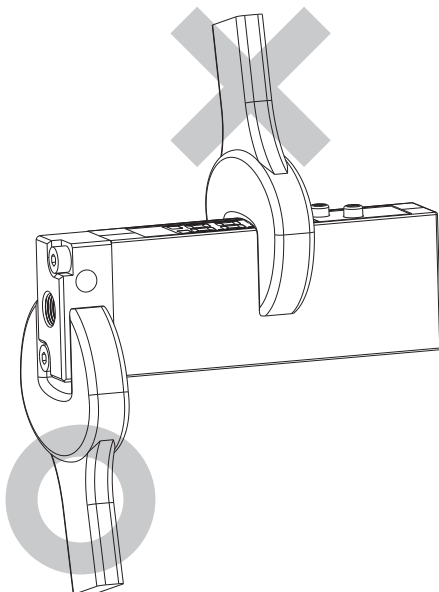
AP90□- □ - M5



Unit:mm

■ 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.
- Do not use a sharp tool to insert the pressure inlet to avoid damaging the sensor chip.



- Do not use the product in an environment that is exposed to the splash of water or dust. Otherwise failure or malfunction can result.

