Pressure Sensor

■ SPECIFICATIONS

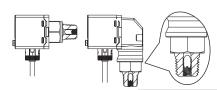
MODEL		AP50C (Compound)	AP50V (Vacuum)	AP50P (Positive)	AP50H (High)
2.0 MPa — 1.0 MPa — 100.0 kPa — 0 -101.3 kPa —					
Rated pressure range		-100.0 ~ 100.0 kPa (-14.50 ~ 14.50 psi)	0.0 ~ -101.3 kPa (0.0 ~ -29.9 inHg)	0.000 ~ 1.000 MPa (0.0 ~ 145.0 psi)	0.000 ~ 2.00 MPa (0.0 ~ 290 psi)
Setting pressure 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)	-0.100 ~ 2.00 MPa (-14.5 ~ 290 psi)
Withstand pressure		300 kPa (43.5 psi) 3 MPa (435 psi)			(435 psi)
Fluid		Fluids do not corrode stainless steel 316L			
Sealed liquid		Silicon oil			
	kPa	0.1		-	-
_	MPa	-		0.001	0.001(~1.999) 0.01(2.00~)
Set pressure	kgf/cm²	0.001		0.01	0.01(~19.99) 0.1(20.0~) 0.01(~19.99)
resolution	bar .	0.001		0.01	0.01(~19.99) 0.1(20.0~) 0.1(~199.9)
	psi	0.01		0.1	1(200~)
inHg		0.1			
Power supply voltage Current consumption		12 to 24V DC ±10%, Ripple (P-P) 10% or less ≤ 40mA(With no load)			
Switch output		NPN: open collector 2 outputs Max. load current: 125mA Max. supply voltage: 30V DC Residual voltage: ≤ 1.5V NPP: open collector 2 outputs Max. load current: 125mA Max. supply voltage: 24V DC Residual voltage: ≤ 1.5V Residual voltage: ≤ 1.5V			
Repeatability(Switch output)		±0.3% F.S. ±1 digit			
	One point set mode				
Hysteresis	Hysteresis mode	Adjustable(*1)			
	Window comparator mode				
Response time		≤ 2.5ms (chattering-proof function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selectable)			
Output short circuit protection		Yes			
7 segment LCD display		3½ digit, 7 segment (red/green)			
Indicator accuracy		±2% F.S. ±1 digit (ambient temperature: 25 ±3°C)			
Switch ON Indicator Analog output (Voltage Output) (*2)		Orange (1&2 Indicator) OUT1 OUT2 Output Voltage: 1 to 5V ±2.5% F.S. (within rated pressure range) Linearity: ±1% F.S. Output impedance: about 1kΩ			
Analog output (Current Output) (*3)		Output Current: 4 to 20mA ±2.5% F.S. (within rated pressure range) Linearity: ±1% F.S. Max.Load impedance: 250Ω at power supply of 12V , 600Ω at power supply of 24V Min.Load impedance: 50Ω			
Environment	Enclosure	IP 65			
	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	250V 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 or 10G,10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X, Y and Z			
	Shock	100m/s² (10G), 3 times each in direction of X, Y and Z			
Temperature characteristic		±3% F.S. of detected pressure (25°C) at temp. Range of 0~50°C			
Port size (*4)		F1 : R1/4", M5; F2 : NPT1/4", #10-32 UNF; F3 : G1/4"(BSPP), M5; F1C : Rc1/8"			
Lead wire		Oil-resistance cable(0.15mm²)			
Weight (with 2 meter lead wire)		Approx. 110g (Rear ported) , Approx. 145g (Bottom ported)			

[NOTE] *1 : Hysteresis value is adjustable within 1 ~ 8 digits for one point set mode and window comparator mode.
*2 : If analog voltage output is selected, the analog current output cannot be selected at the same time.

- *3 : If analog current output is selected, the analog voltage output cannot be selected at the same time.
- *4 : G port O-Ring material is NBR. if any special request, please contact ADSENS.

■ REMOVABLE SNUBBER INSTALLED

Pressure port equipped with snubber can avoid damage caused by sudden pressure surge of water or oil, improve product durability.



*When snubber is clogged with contaminants, please use a flat head screwdriver to remove the snubber, clean and reinstall.