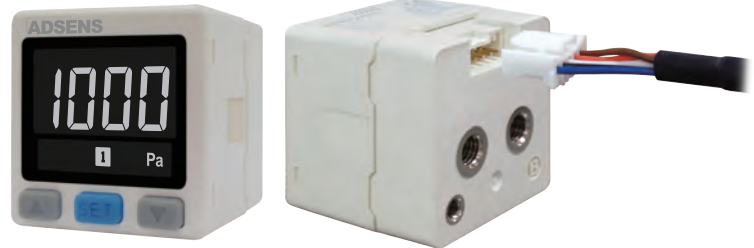


## Features

- Digital LCD display, easy readout
- Analog output : 1~5V, 4~20mA
- IP40 enclosure
- Pressure range 0~1kPa, 0~2kPa, 0~5kPa  
-1~1kPa, -2~2kPa, -5~5kPa



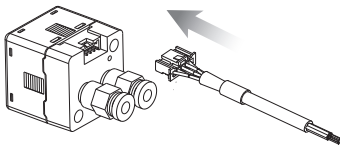
## SPECIFICATIONS

MODEL	AP801	AP811	AP802	AP812	AP805	AP815
Rated pressure range	0 ~ 1000 Pa (0 ~ 0.145 psi)	-1000 ~ 1000 Pa (-0.145 ~ 0.145 psi)	0.00 ~ 2.00 kPa (0 ~ 0.29 psi)	-2.00 ~ 2.00 kPa (0.29 ~ 0.29 psi)	0.0 ~ 5.00 kPa (0 ~ 0.725 psi)	-5.00 ~ 5.00 kPa (-0.725 ~ 0.725 psi)
Setting pressure range	-100 ~ 1000 Pa (-14.5 ~ 145 psi)	-1000 ~ 1000 Pa (-145 ~ 145 psi)	-0.20 ~ 2.00 kPa (-0.029 ~ 0.29 psi)	-2.00 ~ 2.00 kPa (-0.29 ~ 0.29 psi)	-0.50 ~ 5.00 kPa (-0.0725 ~ 0.725 psi)	-5.00 ~ 5.00 kPa (-0.725 ~ 0.725 psi)

## FEATURES HIGHLIGHT

### 1 Quick Installation

- Save Installation Time.
- Easy Removal.



( Removable data cable )

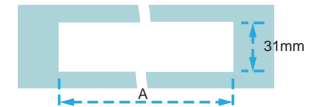
### 2 Key lock function

- Key lock icon is shown on the display when the function is enabled.



### 3 Save installation space

- Panel opening for multiple pressure controller



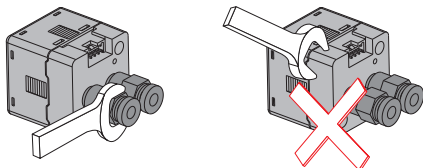
- Calculation factor (A) = (34.4 x n) - 3.4  
n = number of controller

- Actual dimension after installation



## INSTALLATION PRECAUTIONS

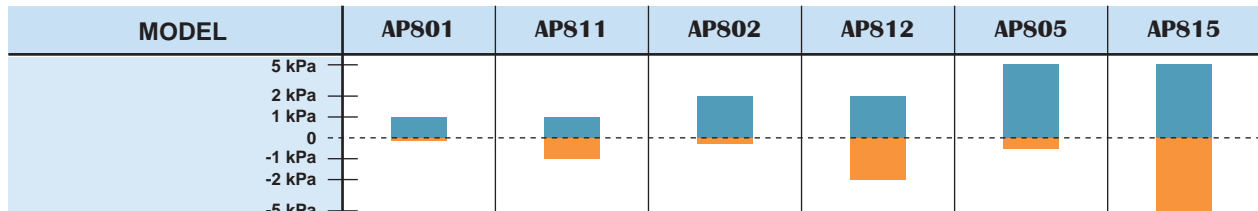
- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damages to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply pressure and power after installation and make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



## PANEL DESCRIPTION



### SPECIFICATIONS

MODEL		AP801	AP811	AP802	AP812	AP805	AP815
							
Rated pressure range		0 ~ 1000 Pa (0 ~ 0.145 psi)	-1000 ~ 1000 Pa (-0.145 ~ 0.145 psi)	0.00 ~ 2.00 kPa (0 ~ 0.29 psi)	-2.00 ~ 2.00 kPa (-0.29 ~ 0.29 psi)	0.0 ~ 5.00 kPa (0 ~ 0.725 psi)	-5.00 ~ 5.00 kPa (-0.725 ~ 0.725 psi)
Setting pressure range		-100 ~ 1000 Pa (-14.5 ~ 145 psi)	-1000 ~ 1000 Pa (-145 ~ 145 psi)	-0.20 ~ 2.00 kPa (-0.029 ~ 0.29 psi)	-2.00 ~ 2.00 kPa (-0.29 ~ 0.29 psi)	-0.50 ~ 5.00 kPa (-0.0725 ~ 0.725 psi)	-5.00 ~ 5.00 kPa (-0.725 ~ 0.725 psi)
Withstand pressure		3 kPa (0.435 psi)		6 kPa (0.87 psi)		15 kPa (2.175 psi)	
Fluid		Filtered air, Non-corrosive / Non-flammable gas					
Set pressure resolution	Pa	1		-			
	kPa	-		0.01			
Power supply voltage		12 to 24V DC $\pm 10\%$ , Ripple (P-P) 10% or less					
Current consumption		$\leq 40\text{mA}$ (With no load)					
Switch output		NPN: open collector 2 outputs Max. load current: 125mA Max. supply voltage: 30V DC Residual voltage: $\leq 1.5\text{V}$			PNP: open collector 2 outputs Max. load current: 125mA Max. supply voltage: 24V DC Residual voltage: $\leq 1.5\text{V}$		
Repeatability(Switch output)		$\pm 0.5\%$ F.S. $\pm 1$ digit					
Hysteresis	Hysteresis mode	Adjustable					
	Window comparator mode						
Response time		$\leq 2.0\text{ms}$ (chattering-proof function: 32ms, 128ms, 1024ms selectable)					
Output short circuit protection		Yes					
7 segment LCD display		One color(White) (Sampling rate: 0.1 ~ 3 sec select)					
Indicator accuracy		$\pm 2\%$ F.S. $\pm 1$ digit (ambient temperature: 25 $\pm 3^\circ\text{C}$ )					
Switch ON Indicator		White (1&2 Indicator) OUT1 OUT2					
Analog output (Voltage Output) (*1)		Output Voltage: 1 to 5V $\pm 2.5\%$ F.S. (within rated pressure range) Linearity: $\pm 1\%$ F.S. Output impedance: about 1k $\Omega$					
Analog output (Current Output) (*2)		Output Current: 4 to 20mA $\pm 2.5\%$ F.S.(within rated pressure range) Linearity: $\pm 1\%$ F.S. Max.Load impedance: 250 $\Omega$ at power supply of 12V 600 $\Omega$ at power supply of 24V Min.Load impedance: 50 $\Omega$					
Environment	Enclosure	IP 40					
	Ambient temp. range	Operation: 0 ~ 50 $^\circ\text{C}$ , Storage:-10 ~ 60 $^\circ\text{C}$ ( 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 $\Omega$ (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		100m/s $^2$ (10G), 3 times each in direction of X, Y and Z					
Temperature characteristic		$\pm 3\%$ F.S. of detected pressure (25 $^\circ\text{C}$ ) at temp. Range of 0-50 $^\circ\text{C}$					
Port size		M5					
Lead wire		Oil-resistance cable(0.15mm $^2$ )					
Weight		Approx. 75g (with 2 meter lead wire)					

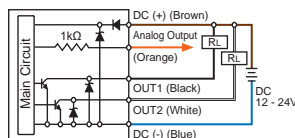
[ NOTE ] \*1 : If analog voltage output is selected, the analog current output cannot be selected at the same time.

\*2 : If analog current output is selected, the analog voltage output cannot be selected at the same time.

### OUTPUT CIRCUIT WIRING DIAGRAMS

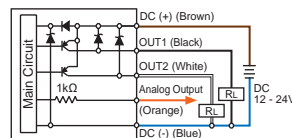
#### AP8□ - 010 - M5

2 NPN + Analog Output(1~5V)



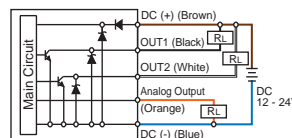
#### AP8□ - 030 - M5

2 PNP + Analog Output(1~5V)



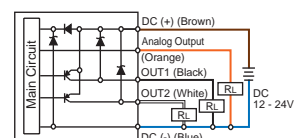
#### AP8□ - 011 - M5

2 NPN + Analog Output(4~20mA)



#### AP8□ - 031 - M5

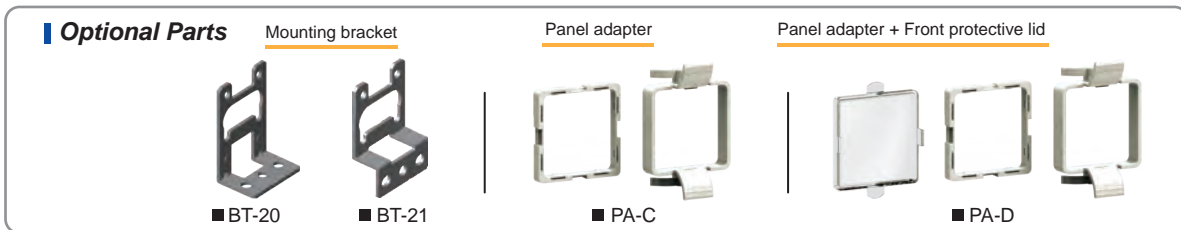
2 PNP + Analog Output(4~20mA)



## ORDERING INFORMATION

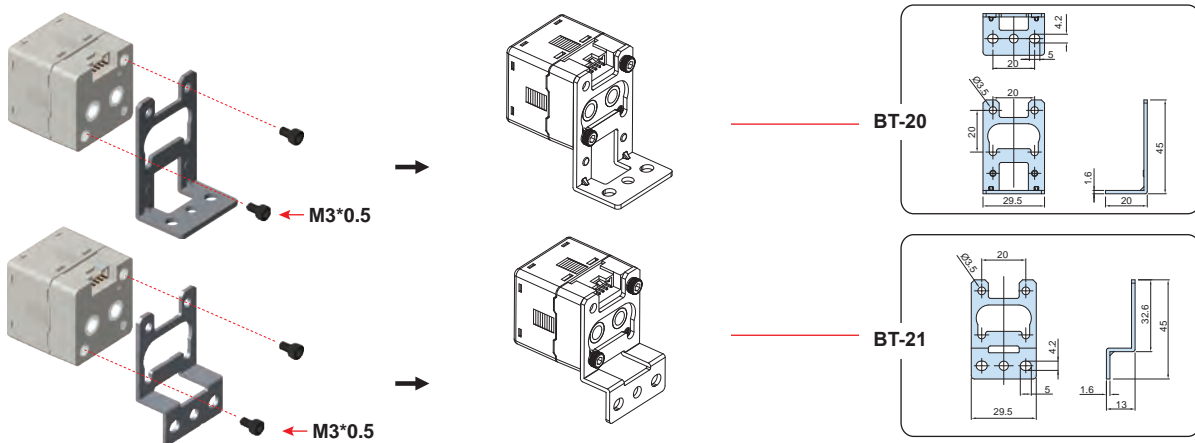
A P 8 0 1 - 0 1 0 - M 5

Pressure Range		Output Specifications
01 : (-100 ~ 1000 Pa) (-14.5 ~ 145 psi)	11 : (-1000 ~ 1000 Pa) (-145 ~ 145 psi)	010 : 2 NPN output + Analog output(1~5V)
02 : (-0.20 ~ 2.00 kPa) (-0.029 ~ 0.29 psi)	12 : (-2.00 ~ 2.00 kPa) (-0.0725 ~ 0.725 psi)	011 : 2 NPN output + Analog output(4~20mA)
05 : (-0.50 ~ 5.00 kPa) (-0.725 ~ 0.725 psi)	15 : (-5.00 ~ 5.00 kPa) (-0.725 ~ 0.725 psi)	030 : 2 PNP output + Analog output(1~5V)
		031 : 2 PNP output + Analog output(4~20mA)

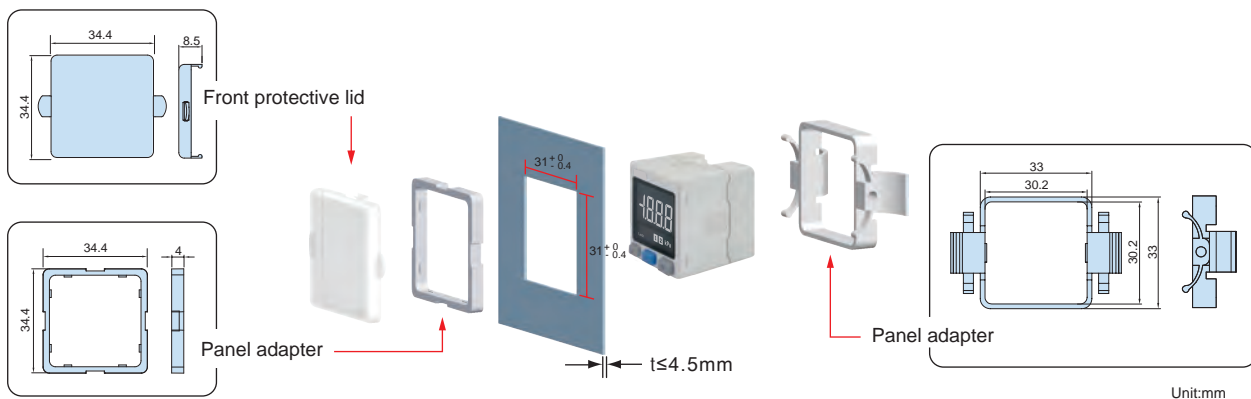


## OPTIONAL PARTS DIMENSIONS

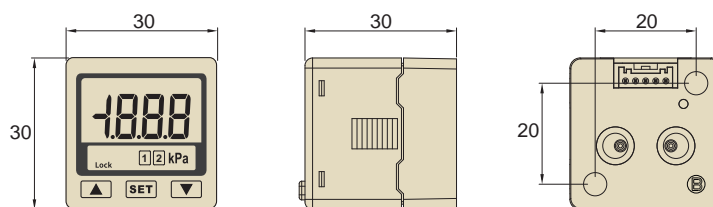
### 1 Mounting Bracket



### 2 Panel Mount Adapter + Front Protective Lid



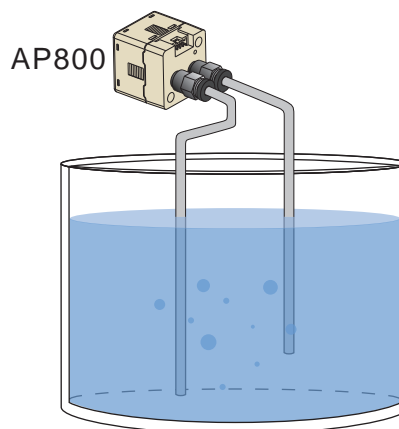
### ■ DIMENSIONS



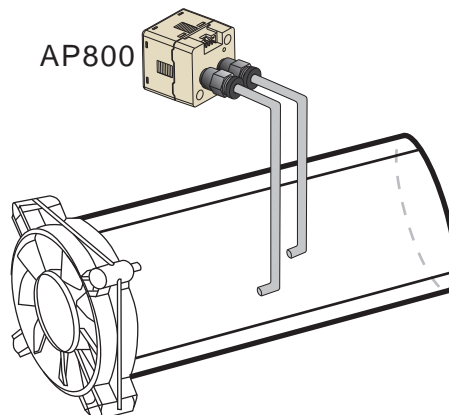
### ■ APPLICATION

#### 1. Liquid level detection

To detect the liquid level by sensing the change of line pressure.



#### 2. Air Flow detection



#### 3. Filter air monitoring

To monitor the clogging of filter by detecting the differential pressure.

