

Features

- 3-color digital LCD display
- Main/Sub-Display, 4 digits 7 segment LCD display
- Programmable pressure unit :
kPa 、MPa 、kgf/cm² 、bar 、psi 、inHg 、mmHg
- Dual LCD display allows setting value to be displayed
- Key lock indicator
- Power-save mode
- Fine adjustment mode



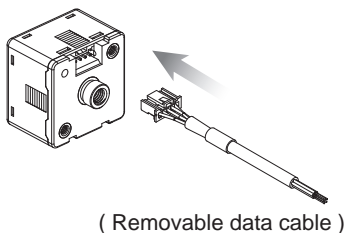
SPECIFICATIONS

TYPE	Compound	Vacuum	Positive
MODEL	AP47C	AP47V	AP47P
1.03 MPa			
103.0 kPa			
0			
-103.0 kPa			
Rated pressure range	-100.0 ~ 100.0 kPa (-14.5 ~ 14.5 psi)	0.0 ~ -101.3 kPa (0.0 ~ -29.9 inHg)	-0.100 ~ 1.000 MPa (-14.5 ~ -145.0 psi)
Setting pressure range	-103.0 ~ 103.0 kPa (-14.93 ~ 14.93 psi)	10.0 ~ -103.0 kPa (1.45 psi ~ -30.4 inHg)	-0.103 ~ 1.030 MPa (-14.93 ~ 149.3 psi)

FEATURES HIGHLIGHT

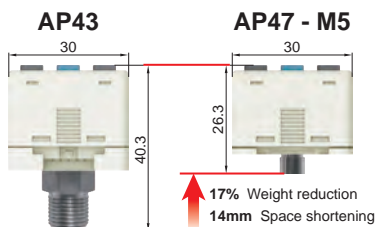
1 Quick Installation

- Save installation time
- Easy removal



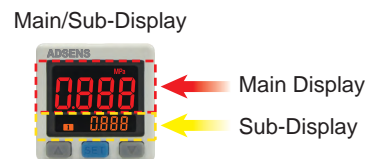
2 Compact design

- Compared with similar products, approx. 35% shorter



3 Setting Value Easy Indication

- User can easily observe the setting value from sub-display.



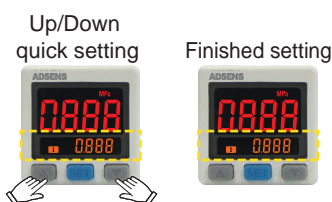
4 2-Color Main Display

- User programmable color mode, for different setting conditions.



5 OPS Quick Setting

- Sub-display allows changing the parameter directly, reduce setting step by 3/4.




6 Easy Unit Identification

- Conversion unit is on display and easy to read.



■ SPECIFICATIONS

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Withstand pressure		500 kPa (72.5 psi)		1.5 MPa (217.6 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		$\leq 30\text{mA}$ (With no load)		
Switch output		NPN: open collector 1 outputs Max. load current: 80mA Max. supply voltage: 30V DC Residual voltage: $\leq 1\text{V}$	PNP: open collector 1 outputs Max. load current: 80mA Max. supply voltage: 24V DC Residual voltage: $\leq 1\text{V}$	
Repeatability(Switch output)		$\pm 0.3\%$ F.S. ± 1 digit		
Hysteresis	One point set mode	Adjustable(*1)		
	Hysteresis mode			
	Window comparator mode			
Response time		$\leq 2.5\text{ms}$ (chattering-proof function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selectable)		
Output short circuit protection		Yes		
7 segment LCD display		Three color(Red/Green) main & unit display, Orange sub-display(Sampling rate : 0.2 , 0.5 , 1 seconds/time selectable)		
Indicator accuracy		$\pm 1\%$ F.S. ± 1 digit (ambient temperature: 25 $\pm 3^\circ\text{C}$)		
Switch ON Indicator		Orange (1 Indicator) OUT1		
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	Output Voltage: 0.6 to 5V $\pm 2.5\%$ F.S. (within rated pressure range) Linearity: $\pm 1\%$ F.S. Output impedance: about 1k Ω	
Environment	Enclosure	IP 40		
	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-55Hz-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		$\pm 2\%$ F.S. of detected pressure (25°C) at temp. Range of 0~50°C		
Port size		F1 : R1/8",M5; F2: NPT1/8",10-32 UNF ; F3: G1/8"(BSP),M5 ; M5 female thread		
Lead wire		Oil-resistance cable(0.15mm ²)		
Weight		Approx. 67g (with 2 meter lead wire)		

[NOTE] *1 : Hysteresis value is adjustable within 1 ~ 8 digits for one point set mode and window comparator mode.

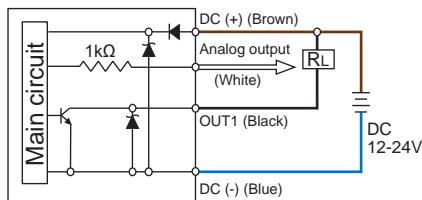
■ PANEL DESCRIPTION



■ OUTPUT CIRCUIT WIRING DIAGRAMS

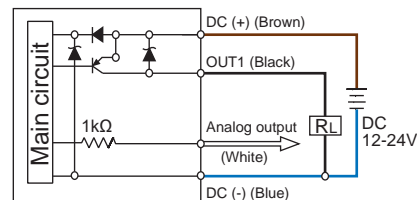
AP47 □ - 01 - □

1 NPN + Analog output (1~5V) (0.6~5V only positive)



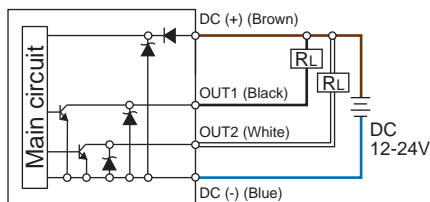
AP47 □ - 03 - □

1 PNP + Analog output (1~5V) (0.6~5V only positive)



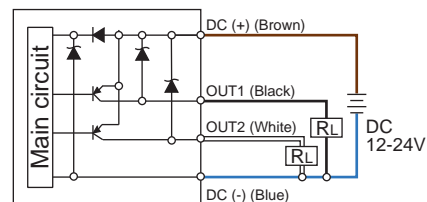
AP47 □ - 02 - □

2 NPN output



AP47 □ - 04 - □

2 PNP output



■ ORDERING INFORMATION

A P 4 7 C - 0 1 - F 1

Pressure Range

C : Compound (-103.0 ~ 103.0 kPa)
 (-14.93 ~ 14.93 psi)
V : Vacuum (10.0 ~ -103.0)
 (1.45 psi ~ -30.4 inHg)
P : Positive (-0.103 ~ 1.030 MPa)
 (-14.93 ~ 149.3 psi)

Output Specifications

01 : 1 NPN output + Analog output(1~5V)
02 : 2 NPN output
03 : 1 PNP output + Analog output(1~5V)
04 : 2 PNP output

Pressure Port

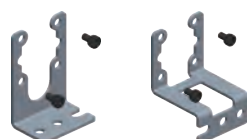
F1 : R1/8", M5
F2 : NPT1/8", #10-32UNF
F3 : G1/8"(BSPP), M5
M5 : M5 female thread

Optional Parts

BT-22 : Mounting bracket
BT-23 : Mounting bracket
PA-C : Panel adapter
PA-D : Panel adapter + Front protective lid

Optional Parts

Mounting bracket



■ BT-22

■ BT-23

Panel adapter



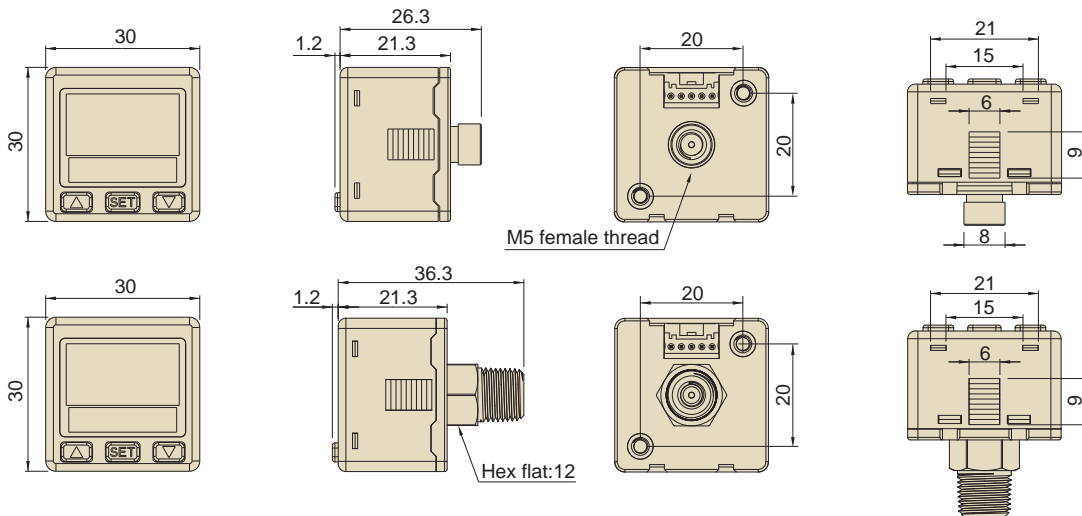
■ PA-C

Panel adapter + Front protective lid



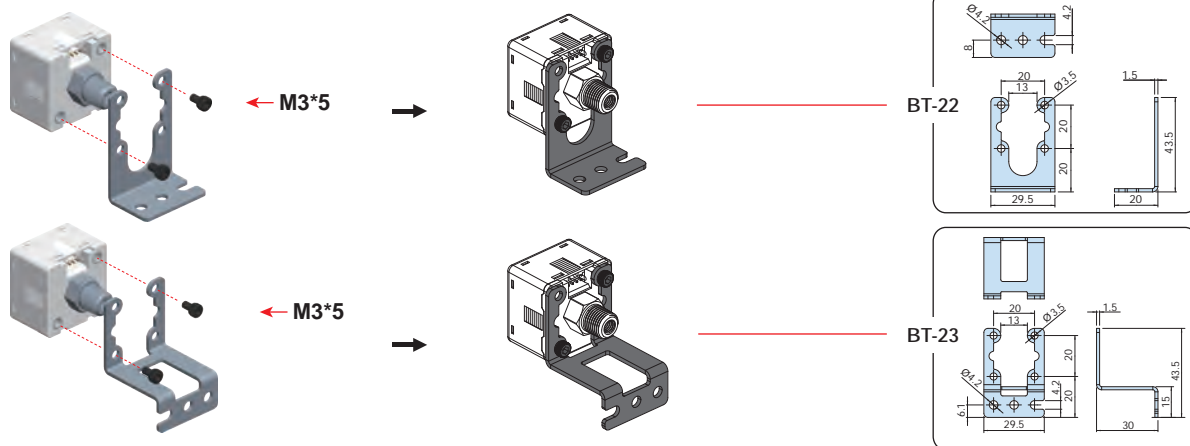
■ PA-D

■ DIMENSIONS

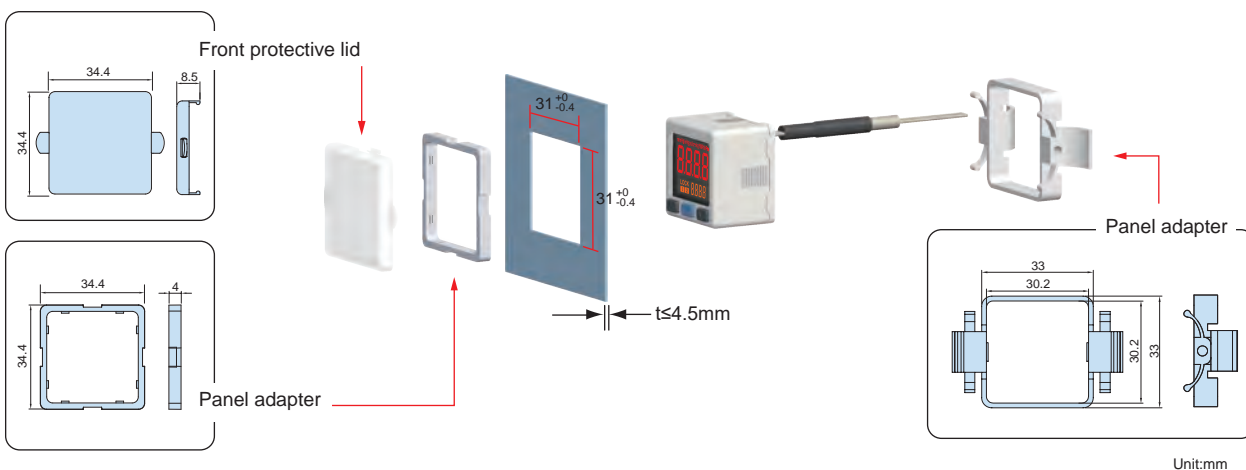


■ OPTIONAL PARTS DIMENSIONS

1 Mounting Bracket



2 Panel Mount Adapter + Front Protective Lid



Unit:mm