

Features

- Setting pressure range :
Compound : -100.0~100.0 kPa (-14.50~14.50 psi)
Vacuum : -101.3~10.0 kPa (-29.9 inHg~1.45 psi)
Positive : -0.100~1.000 MPa (-14.5~145.0 psi)
- Two switch outputs & One analog output (1~5V)
- Hysteresis adjustable
- High display accuracy : $\pm 0.2\%$ F.S.
- Programmable pressure unit :
kPa 、MPa 、kgf/cm² 、mmHg 、psi 、bar 、inHg 、mmH₂O
- IP65 enclosure, dust-proof and splash-proof

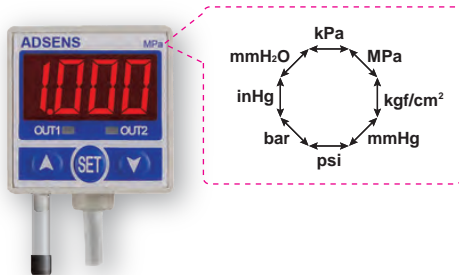


SPECIFICATION

TYPE	Compound	Vacuum	Positive
MODEL	AP25C	AP25V	AP25P
1.000 MPa (145.0 psi)			
100.0 kPa (14.5 psi)			
0			
-101.3 kPa (-14.7 psi)			
Rated pressure range	-100.0 ~ 100.0 kPa (-14.50 ~ 14.50 psi)	-101.3 ~ 0.0 kPa (-29.9 ~ 0.0 inHg)	0.000 ~ 1.000 MPa (0.0 ~ 145.0 psi)
Setting pressure range	-100.0 ~ 100.0 kPa (-14.50 ~ 14.50 psi)	-101.3 ~ 10.0 kPa (-29.9 inHg ~ 1.45 psi)	-0.100 ~ 1.000 MPa (-14.5 ~ 145.0 psi)

FEATURES HIGHLIGHT

1 Programmable pressure unit



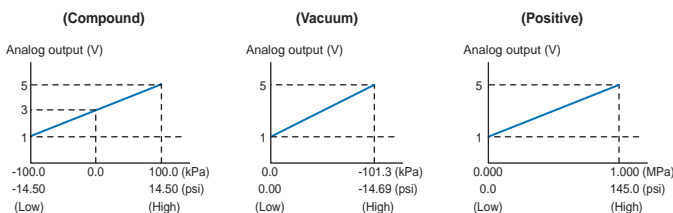
2 Dust-proof and splash-proof

Enclosure protection rating: IP 65



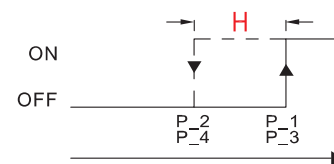
3 Analog output

Two sensor outputs & One analog output
Output range 1 to 5V, proportional to the pressure range




4 Hysteresis adjustable

Output hysteresis (H) is adjustable by user

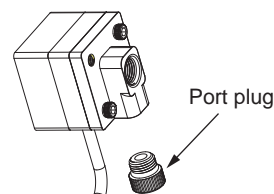


■ SPECIFICATION

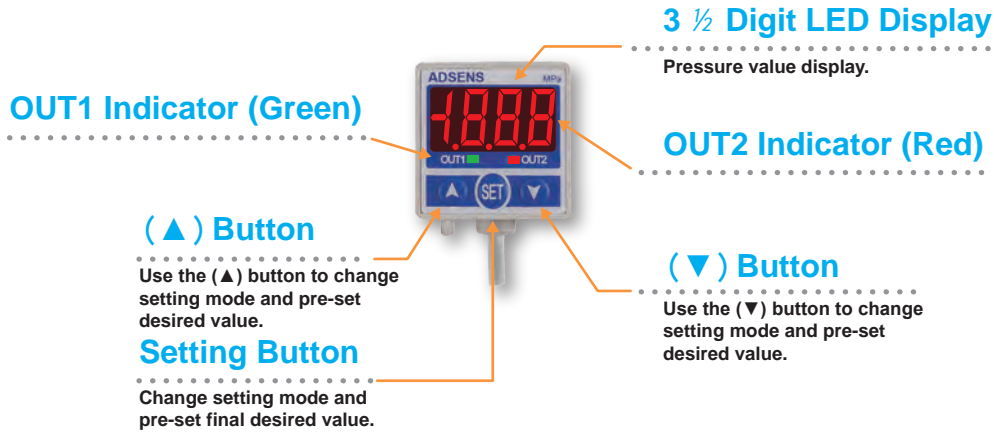
MODEL		AP25C (Compound)	AP25V (Vacuum)	AP25P (Positive)
				
Rated pressure range		-100.0 ~ 100.0 kPa (-14.50 ~ 14.50 psi)	-101.3 ~ 0.0 kPa (-29.9 ~ 0.0 inHg)	0.000 ~ 1.000 MPa (0.0 ~ 145.0 psi)
Setting pressure range		-100.0 ~ 100.0 kPa (-14.50 ~ 14.50 psi)	-101.3 ~ 10.0 kPa (-29.9 inHg ~ 1.45 psi)	-0.100 ~ 1.000 MPa (-14.50 ~ 145.0 psi)
Withstand pressure		300.0 kPa (43.5 psi)		1.500 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		-
	mmH ₂ O	0.1		-
Power supply voltage		12 to 24V DC ±10%, Ripple (P-P) 10% or less		
Current consumption		≤ 55mA		
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(Sensor 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 selectable)		
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		
Analog output (Only type AP25 □-01 - □, AP25 □-03 - □)		Output voltage : 1 to 5V ± 5%F.S. (within rated pressure range) Linearity : ±1% F.S.	Output voltage : 1 to 5V ± 2.5%F.S. (within rated pressure range) Linearity : ±1% F.S.	
Environment	Enclosure	IP65 (Dust proof protector installed)		
	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	50MΩ (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/s ² (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		F1:Rc1/8" ; F2:NPT1/8" ; F3:G1/8" (BSPP)		
Lead wire		Oil-resistance cable (0.15mm ²)		
Weight		Approx. 105g (with 2-meter lead wire), Approx. 71g (with M8, 4-pin male connector)		

■ INSTALLATION

- This product has two inlet pressure ports, select the one most convenient for installation.
- Please plug the unused inlet port with supplied port plug to prevent pressure leak.

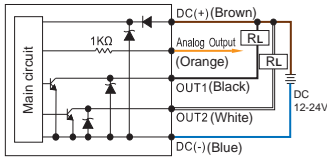


■ PANEL DESCRIPTION

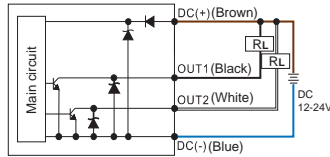


■ OUTPUT CIRCUIT WIRING DIAGRAMS

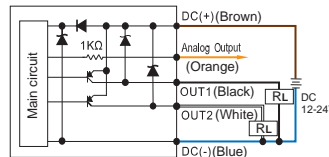
AP25 □ - 01 - □ - □
NPN Output & Analog Output



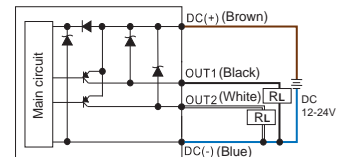
AP25 □ - 02 - □ - □
NPN Output



AP25 □ - 03 - □ - □
PNP Output & Analog Output



AP25 □ - 04 - □ - □
PNP Output



■ ORDERING INFORMATION

A P 2 5 C - 0 1 - F 1 - □

Pressure Range

- C : Compound -100.0~100.0 kPa (-14.50~14.50 psi)
- V : Vacuum -101.3~10.0 kPa (-29.9 inHg~1.45 psi)
- P : Positive -0.100~1.000 MPa (-14.5~145.0 psi)

Pressure Port

- F1 : Rc1/8"
- F2 : NPT1/8"
- F3 : G1/8" (BSPP)

Output Specification

- 01 : 2 NPN output & 1 Analog output(1-5V)
- 02 : 2 NPN output
- 03 : 2 PNP output & 1 Analog output(1-5V)
- 04 : 2 PNP output

Cable Length / Connector

- Blank : With 2-meter cable
- QD : With M8, 4-Pin male connector
- * (Only type AP25 □ - 02 - □, AP25 □ - 04 - □)

Optional Parts

- KM84R-PVC-2M / KM84R-PVC-5M : M8, 4-Pin female cordset
- BT-1 : Mounting bracket
- BT-2 : Mounting bracket
- PA-A : Panel adapter
- PA-B : Panel adapter+Front protective lid

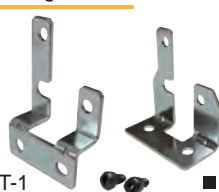
Optional Parts

M8, 4-Pin female cordset



■ KM84R-PVC-2M
KM84R-PVC-5M

Mounting bracket



■ BT-1 ■ BT-2

Panel adapter



■ PA-A

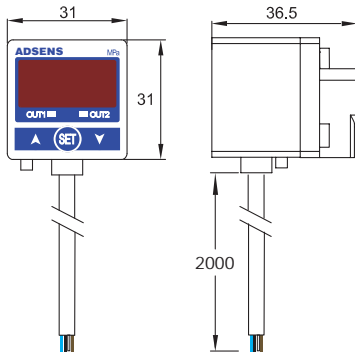
Panel adapter+Front protective lid



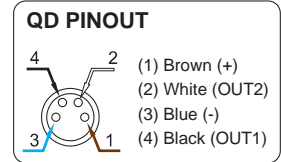
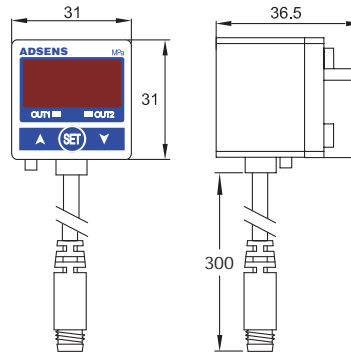
■ PA-B

DIMENSION

AP25□ - □ - □



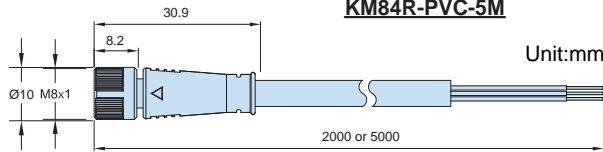
AP25□ - □ - □ - QD



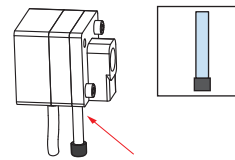
Unit:mm

OPTIONAL PARTS DIMENSIONS

1 M8 Female Cordset model : KM84R-PVC-2M
KM84R-PVC-5M



2 IP65 Protector

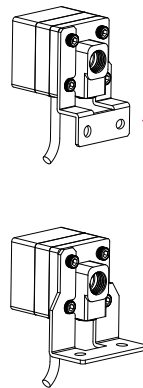
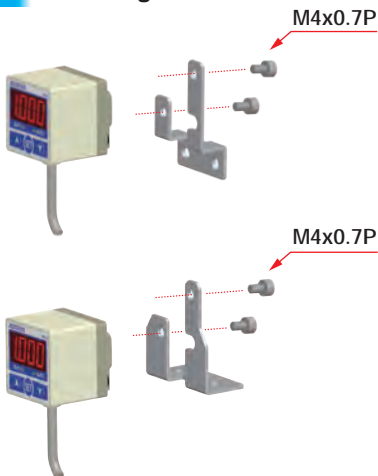


Dustproof protector



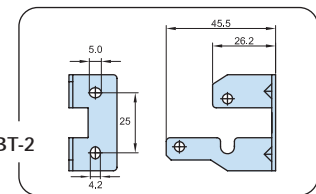
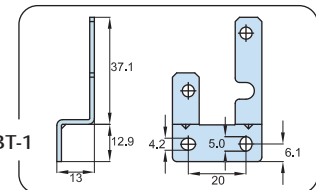
Caution:
 This device must be installed to maintain IP65(Dust and splash proof) enclosure rating.

3 Mounting Bracket



Mounting bracket BT-1

Mounting bracket BT-2



4 Panel Mount Adapter + Front Protective Lid

