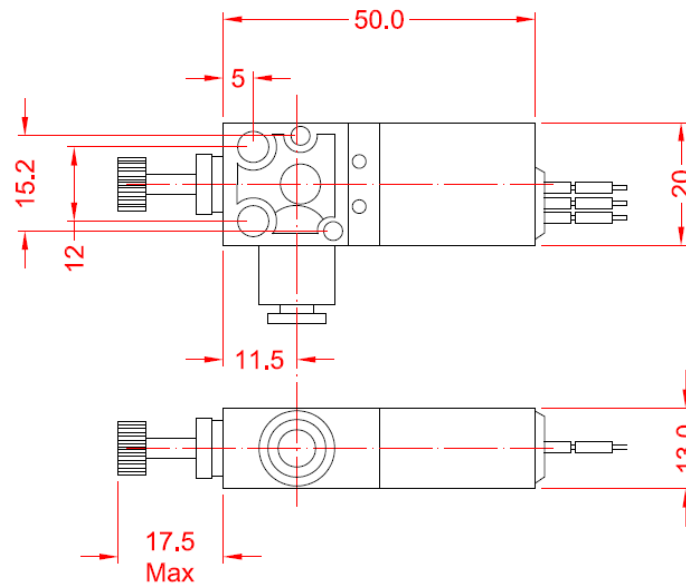




The VAS vacuum switch is a simple mechanical indicator of vacuum level achievement. Fully adjustable and with a simple push to connect fitting for vacuum connection the VAS switch is ideal for most part presence applications.



Model	VAS04	VAS06N
Minimum Set Value		12.0"Hg
Accuracy		1.5"Hg
Hysteresis		3"Hg
Electrical Rating		AC125V – 5A
Vacuum Connection	5/32"	1/4"

Features

- Pressure range : Compound -100~100kPa
Vacuum 0~-101.3kPa
Positive 0~1MPa
- Two switch output & one analog output.
- Hysteresis adjustable.
- High accuracy and Resolution.
- Selectable pressure unit: kPa, kgf/cm², bar, psi, mmHg
- Enclosure:IP 65



■ SPECIFICATION

TYPE		AP25C (Compound)	AP25V (Vacuum)	AP25P (Positive)
Rated pressure range		-100.0 ~ 100.0 kPa (-14.5 ~ 14.5 PSI)	0.0 ~ -101.3 kPa (0 ~ -29.9"Hg)	0.000 ~ 1.000 MPa (0 ~ 145 PSI)
Setting pressure range		-100.0 ~ 100.0 kPa (-14.5 ~ 14.5 PSI)	10.0 ~ -101.3 kPa(1.45 PSI ~ -29.9"Hg)	-0.100 ~ 1.000 MPa (-14.5 ~ 145 PSI)
Withstand pressure		300 kPa (43.5 PSI)		1.5 MPa (217.5 PSI)
Fluid		Air, Non-corrosive gases / 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 24VDC ±10%, Ripple (P-P) 10% or less		
Current consumption		≤55mA		
Switch output		NPN:open collector 2 outputs Max. load current : 80mA Max. supply voltage: 30VDC Residual voltage: ≤ 1V (load current 80mA)	PNP:open collector 2 outputs Max. load current : 80mA Max. supply voltage: 24VDC Residual voltage: ≤ 1V (load current 80mA)	
Repeatability(Switch output)		± 0.2% F.S. ±1digit		
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		3-1/2 digit LED display (Sampling rate: 5 times/sec.)		
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	IP 65		
	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	1000VAC in 1-min (between case and lead wire)		
	Insulation resistance	50Mohm min. (at 500VDC, 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		F1:1/8"PT, F2:1/8"NPT, F3: G1/8"		
Lead wire		Oil-resistance cable (0.15mm ²)		
Weight		Approx. 105g (with 2M lead wire), Approx. 71g (with M8 male connector)		

ORDERING INFORMATION

A P 2 5 C - 0 1 - F 1 - □

Pressure Range

C : Compound (-100.0~100.0KPa)
 V : Vacuum (0.0~101.3KPa)
 P : Positive (-0.100~1.000 MPa)

Output Specifications

01 : 2 NPN output & 1 Analog output
 02 : 2 NPN output
 03 : 2 PNP output & 1 Analog output
 04 : 2 PNP output

Wiring Type

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

Pressure Port

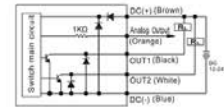
F1 : 1/8" BSPT
 F2 : 1/8" NPT
 F3 : G1/8" (BSPP)

Optional parts

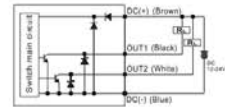
M84R-PVC-2M / M84R-PVC-5M : M8, 4-Pin female connector
 AP20-A : Mounting bracket (BT-1+BT-2)
 AP20-B : Panel adapter (PA-1+PA-2)
 AP20-C : Panel adapter + Front protective lid (PA-1+PA-2+FPC-1)

OUTPUT CIRCUIT WIRING DIAGRAMS

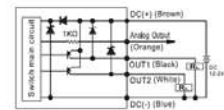
AP25□-01-□□
NPN output & Analog output



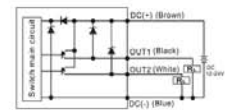
AP25□-02-□□
NPN output



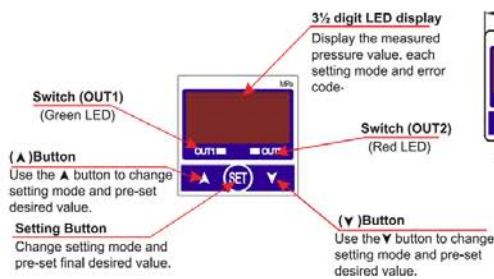
AP25□-03-□□
PNP output & Analog output



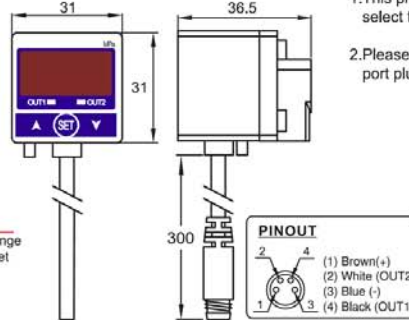
AP25□-04-□□
PNP output



PANEL DESCRIPTIONS

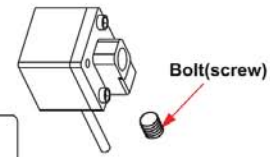


DIMENSIONS



INSTALLATION

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

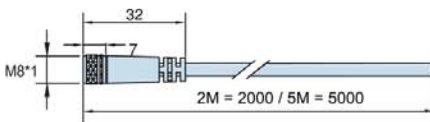


Unit:mm

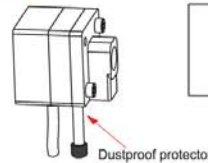
OPTIONAL PARTS DIMENSIONS

1 M8 Female Connector

M84R-PVC-2M / M84R-PVC-5M

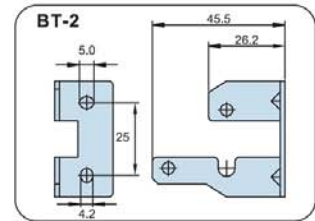
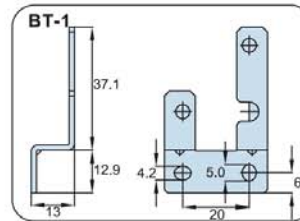
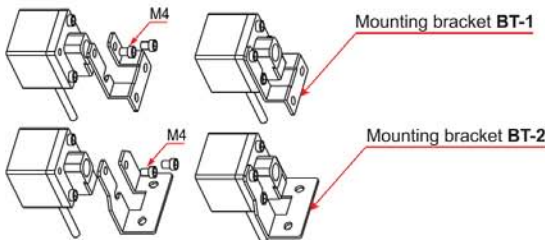


2 IP65 Protector



Caution:
 This device must be installed to maintain IP 65(Dust and splash proof) enclosure rating.

3 Mounting Bracket



4 Panel Mount Adapter + Front Protective Lid

