

GPS100 Series

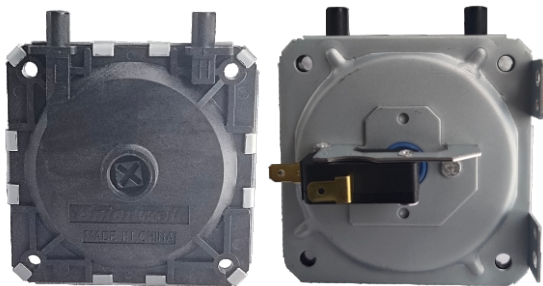
Air Pressure Switch

Application:

GPS100 Series pressure switches are especially designed for high volume OEM market. Typical applications include boilers, hot water heaters, HVAC and other industrial equipments.

These switches could be customized set points and can be used to positive pressure sensing, negative pressure sensing and differential pressure sensing.

A sensitive high reliability snap action switch is used as the main switching element. The snap action switch can provide a high switching capability up to 16A 125/250VAC.



Specifications:
Set Point:

Set-Point Range: 10-1500Pa
Operating Pressure Range: 25-1500Pa
Switch off Pressure Range: 10Pa Min
Fixed set-point calibrated in Factory.

Maximum Pressure Allowed:4000pa.

Switch Rating
0.1A 125/250VAC, 3A 125/250VAC
5A 125/250VAC, 16A 125/250VAC
(Resistive Load)
Switching Element
Snap Action Switch
SPDT, SPST-NO, SPST-NC
Measured Media: Air
Operating Temperature: -40~+90°C

Installation & Sample Line Connection

Mounting:

Always mount with the diaphragm in vertical plane in order to maintain the specified operating point fixed in the factory.

Avoid mounting with sample-line connections directed upward.

Positive Pressure Sensing Only:

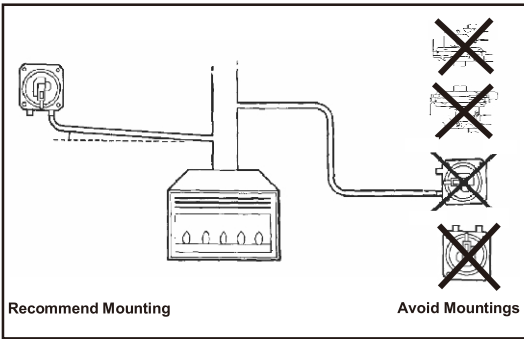
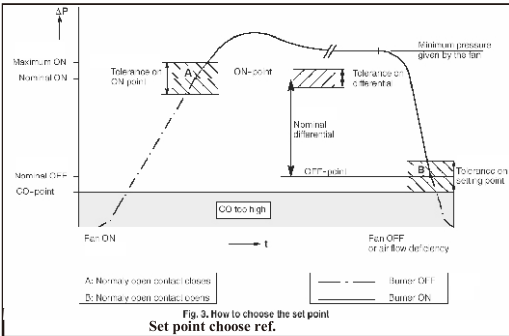
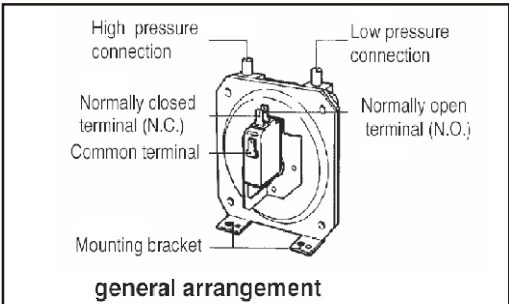
Connect the sample-line to H while L remains open to the atmosphere.

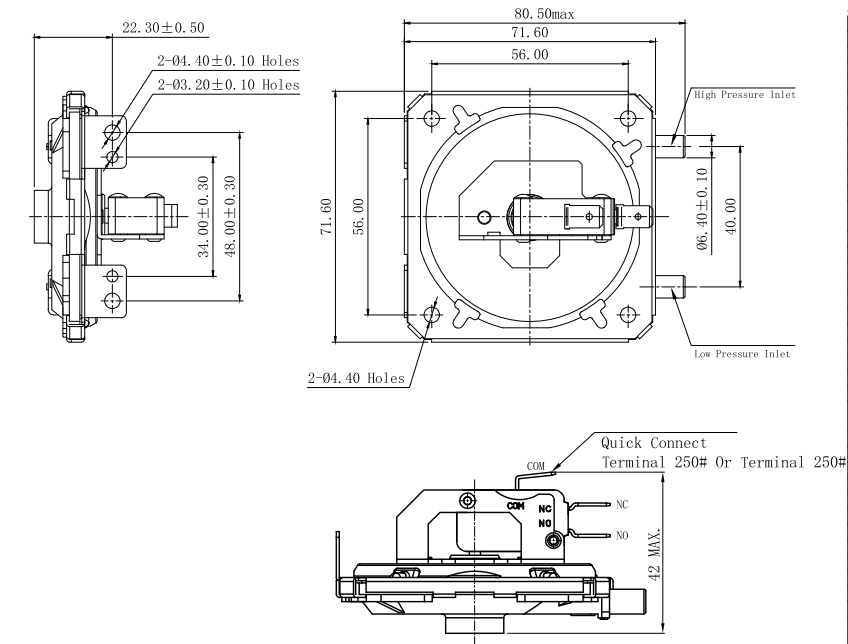
Negative Pressure Sensing Only:

Connect the sample-line to L while H remains open to the atmosphere.

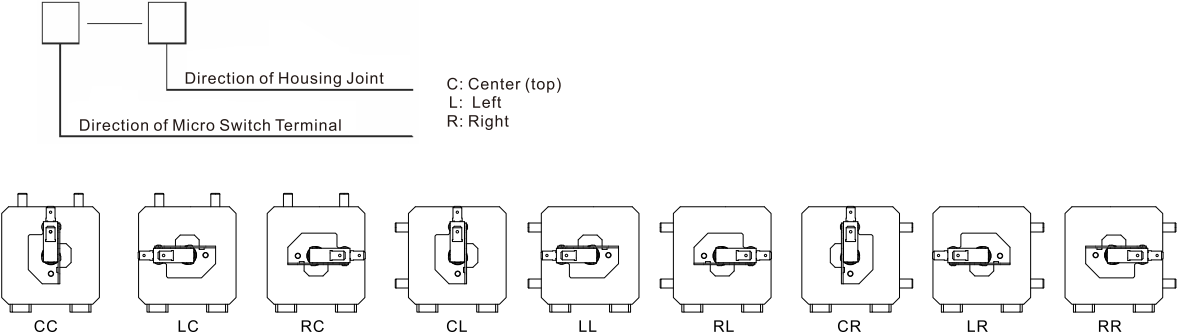
Differential Pressure Sensing:

Connect the higher pressure sample line to H and the lower pressure samples-line to L.





Assembled Shape:



Pressure Conversion Table

1Pa=	0.01	mbar
(pascal N/m²)	1×10 ⁽⁻⁷⁾	bar
	102×10 ⁽⁻⁷⁾	kg/cm²
	0.102	mm H2O
	0.0075	mm Hg
	145×10 ⁽⁻⁶⁾	psi
1mbar=	100	pa
(millibar)	0.001	bar
	102×10 ⁽⁻⁵⁾	kg/cm²
	10.2	mm H2O
	0.750	mm Hg
	0.0145	psi
1bar=	100 000	pa
	1000	mbar
	1.02	kg/cm²
	10 200	mm H2O
	750	mm Hg
	145.038	psi
1Kg/cm²=	98100	pa
kilogram per cm²	981	mbar
	0.981	bar
	10 000	mm H2O
	736	psi
	142.233	pa
1mm H2O=	9.81	pa
(mm water gauge)	0.098	mbar
	98.1×10 ⁽⁻⁶⁾	bar
	0.0001	kg/cm²
	0.0736	mm H2O
	0.001422	psi
1mm Hg=	133.3	pa
(mm mercury)	1.33	mbar
	0.00133	bar
	0.001359	kg/cm²
	13.59	mm H2O
	0.01934	psi
1psi=	6895.06	pa
(pounds per sq inch)	68.95	mbar
	0.06895	bar
	0.07031	kg/cm²
	703.01	mm H2O
	51.717	mm Hg

GPS100 Series Air Pressure Switch Ordering Instruction

GPS100	Switch Type	GPS100 Series Air Pressure Switch
	Off Pressure Set Point	According to Customer's Requirements
	On Pressure Set Point	According to Customer's Requirements
	Assembled Shape	Refer to "Assembled Shape"
	Electrical Rating	1 < 0.1A
	Terminal Type	6.30x0.80mm, 0.250"x0.032" 250# Quick Connect Terminals
	Circuitry	C SPST-NC
	Color of Micro Switch	G Grey
	Pressure Type	H Positive Pressure
	Custom Code	General
	LOGO	U Unionwell
		Other