

GPS100 系列/GPS100 Series

风压开关

Air Pressure Switch

GPS100 系列风压开关 /GPS100 Series

Application 应用:

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

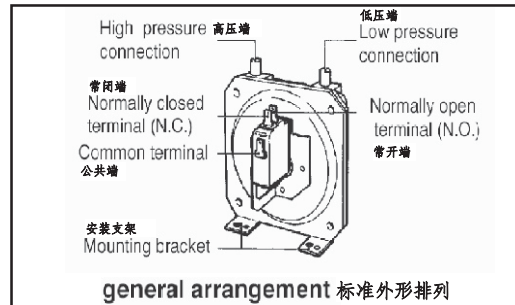
These switches could be customized set points and can be used to sense positive, negative or differential air pressure.

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.

GPS100系列压力开关特别为大量需求的OEM市场设计, 典型应用包括锅炉, 壁挂炉, 热水器, HVAC 和其他工业控制设备等。

本压力开关具有客户定制压力, 正压感测, 负压感测及压力差感测等特点

高度敏感和高可靠性的微动开关被用作为其主要的开关元件, 微动开关可提供高达16A 125/250VAC的负载控制能力



Specifications / 规格:

Set Point / 压力设定:

Set-Point Range/设定范围: 10-1500Pa

Operating Pressure Range/开启压力范围: 25-1500Pa.

Switching Pressure Range/关闭压力: 10 Pa Min.

Fixed set-point calibrated in factory.

压力设定需在工厂进行调校

Maximum Pressure Allowed /最大允许压力: 4000pa.

Switch Rating/开关额定值:

0.1A 125/250VAC, 3A 125/250VAC

5A 125/250VAC, 16A 125/250VAC

(Resistive Load 阻性负载)

Switching Element/开关部件:

Snap Action Switch/微动开关.

Circuit Configuration/电路形式:

SPDT, SPST-NO, SPST-NC.

Measured Media/介质: Air / 空气

Operating Temperature/操作温度范围: -40~+90°C

Installation & Sample Line Connection:

安装和取样气设置连接

Mounting/安装:

Always mount with the diaphragm in vertical plane in order to maintain the specified operating point fixed in the factory. 应保持开关隔膜总是处于垂直面安装来确保得到在出厂前已调校设置好的开启压力点。

Avoid mounting with sample-line connections directed upward. 应避免压力取样气管向上的安装方式

Positive Pressure Sensing Only 仅用于正压感测:

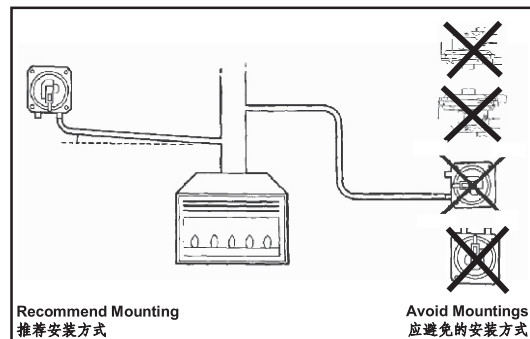
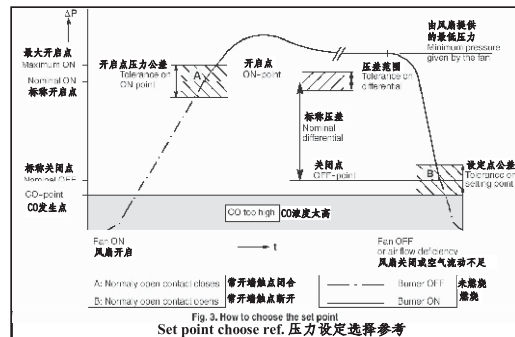
Connect the sample-line to H while L remains open to the atmosphere. 将压力取样气管连接至H标识端而L端与大气相通。

Negative Pressure Sensing Only 仅用于负压感测:

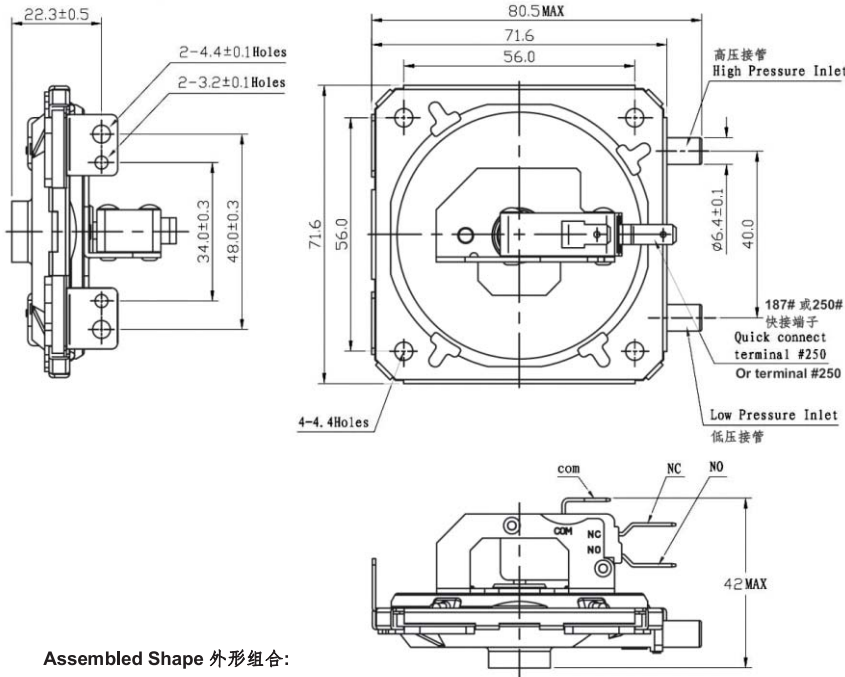
Connect the sample-line to L while H remains open to the atmosphere. 将压力取样气管连接至L标识端而H端与大气相通。

Differential Pressure Sensing 压差感测:

Connect the higher pressure sample line to H and the lower pressure samples-line to L. 将高压取样气管连接至H端而低压取样气管连接至L端。



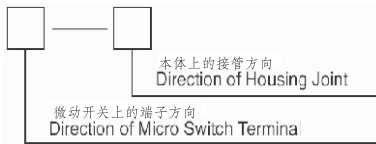
Outline Drawing 外形图



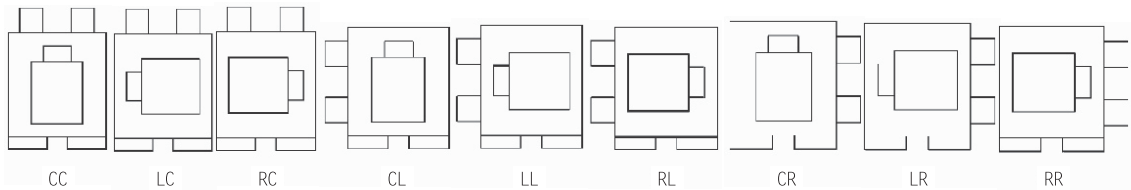
压力转换表 Pressure Conversion Table

| | | |
|------------------------------|--------------------------|--------------------|
| 1Pa= | 0,01 | mbar |
| (pascal N/m ²) | 1×10 ^(-^7) | bar |
| | 102×10 ^(-^7) | kg/cm ² |
| | 0,102 | mm H2O |
| | 0,0075 | mm Hg |
| | 145×10 ^(-^6) | psi |
| 1mbar= | 100 | pa |
| (millibar) | 0,001 | bar |
| | 102×10 ^(-^5) | kg/cm ² |
| | 10,2 | mm H2O |
| | 0,750 | mm Hg |
| | 0,0145 | psi |
| 1bar= | 100 000 | pa |
| | 1000 | mbar |
| | 1,02 | kg/cm ² |
| | 10 200 | mm H2O |
| | 750 | mm Hg |
| | 145,038 | psi |
| 1Kg/cm ² = | 98100 | pa |
| kilogram per cm ² | 981 | mbar |
| | 0,981 | bar |
| | 10 000 | mm H2O |
| | 736 | mm Hg |
| | 142,233 | psi |
| 1mm H2O= | 9,81 | pa |
| (mm water gauge) | 0,098 | mbar |
| | 98,1×10 ^(-^6) | bar |
| | 0,0001 | kg/cm ² |
| | 0,0736 | mm H2O |
| | 0,001422 | psi |
| 1mm Hg= | 133,3 | pa |
| (mm mercury) | 1,33 | mbar |
| | 0,00133 | bar |
| | 0,001359 | kg/cm ² |
| | 13,59 | mm H2O |
| | 0,01934 | psi |
| 1psi= | 6895,06 | pa |
| (pounds per sq inch) | 68,95 | mbar |
| | 0,06895 | bar |
| | 0,07031 | kg/cm ² |
| | 703,01 | mm H2O |
| | 51,717 | mm Hg |

Assembled Shape 外形组合:



C: Center (top) 中心, 向上
L: Left 左侧
R: Right 右侧



GPS100系列风压开关订货型号指引 GPS100 Series Air Pressure Switch Ordering Instruction

| GPS100 | 39 | 90 | CC | 1 | C | Z | G | L |
|---|---|---|---------------------------------------|---------------------------|---|----------------------|---------------------------------|---------------------------|
| 开关类别 Switch Type | 关闭压力点 Off Pressure Set Point | 开启压力点 On Pressure Set Point | 外形组合 Assembled Shape | 额定电流 Electrical Rating | 端子类型 Terminal Type | 接触形式 Circuit Code | 微动开关颜色 Color of Micro Switch | 压力类型 Pressure Type |
| GPS100系列风压开关 GPS100 Series Air Pressure Switch | 依客户指定 According to customer's requirements | 依客户指定 According to customer's requirements | 见“外形组合” Refer to "Assembled Shape" | 1 <0.1A | C 6.30x0.80mm 0.250"×0.032" 250#快接端子 250#Quick Connect Terminals | C SPST-NC 单极单投-常闭 | G 灰色Grey | H 正压 Positive Pressure |
| | | | | 2 ≥0.1A and ≤5A | E 4.70x0.5mm 0.187"×0.020" 187#快接端子 187#Quick Connect Terminals | P SPST-NO 单极单投-常开 | B 黑色Black | L 负压 Negative Pressure |
| | | | | 3 >5A and ≤16A | | Z SPDT 单极双投 | | |
| | | | | 4 >16A | | | | |