

PSI5801 Pressure Switch

Feature

- Whole stainless steel housing, IP67 protection
- OLED, pressure and switch state display
- Compact, body rotate 320°
- Protections for over-voltage, over-current and reversed polarity
- Anti-electromagnetic design under complex electromagnetic environment
- Analog output (4mA ~ 20mA DC) +2-way PNP, 2-way PNP, 2-way NPN, 1 relay output for options.
- 24V DC, 220V AC power supply for options
- Restore factory settings, manually cleared
- Support unit switchover among MPa, kPa, psi, bar and mbar



Instruction

PSI5801 pressure switch is an intelligent pressure controller combining pressure measurement, display and control together. The sensor output signal is amplified, noise reduced and conditioning through a highly integrated microprocessor to realize accurate pressure measurement, display and control of the switching output. The product adopts whole stainless steel housing, the protection is IP67. The indicator can be freely rotated within 320°. The product's amplifier circuit has over-voltage, over current and reversed polarity protection. It can be used in complex electromagnetic environment of industrial sites. MPM5881 supports 24V DC or 220V AC power supply. It has diversified output options including analog output (4mA ~ 20mA DC) +2 way PNP, 2-way PNP, 2-way or one-way relay. Also it supports manually cleared and switchover of the measuring unit. OLED screen displays real-time pressure value and switch status. It is with flexible installation, easy operation and simple menu. MPM5881 is safe and stable, and it be widely used in industries such as water utilities, petrochemical, metallurgy, transport, electricity, machinery manufacturing etc.

Specification

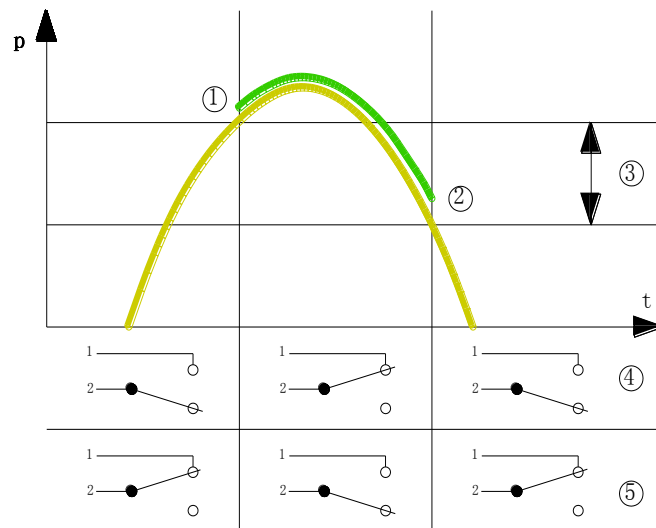
Power supply: (220±44)V AC 12V~36V DC (recommend 24V DC for relay output)	Transistor output: 2-way PNP or 2-way NPN Switch current: ≤0.4A
Overpressure: 1.5 time FS	Analog output: 4mA~20mA DC; Load resistance: ≤560Ω
Range: -100kPa...0kPa~10kPa... 60MPa	Relay output: one-way (SPDT)
Pressure type: gauge, absolute	Switch voltage: ≤ 250VAC/30VDC
Accuracy: ±0.25%FS、 ±0.5%FS	Switch current: ≤ 3A
Screen display: OLED with resolution 128×32 white readings in black ground Solution	Relay life: 10,000,000 times/ min. load, 100,000 times/max. load
Display refresh time: 1s, 0.5s, 0.2s(default), 0.1s	Media temperature: -20℃~80℃

Repeatability: $\leq \pm 0.1\%FS$
 Thermal drift: $\leq \pm 0.02\%FS/^{\circ}C$
 Switch setting: 0.5%FS~99.5%FS
 Switch time-delay: 0.0s~99.9s
 Response time: <30ms
 Gross weight: 280g

Storage temperature: $-40^{\circ}C \sim 80^{\circ}C$
 Working temperature: $-20^{\circ}C \sim 80^{\circ}C$
 Media compatibility:
 The gas or liquid which is compatible with stainless steel and viton.
 Electromagnetism compatibility:
 GB/T 17626.2/3-2006, GB/T 17626.4-2008
 Vibration: $\leq 20g/10Hz \dots 500Hz$ (GB/T 2423.10-2008)
 Impact: $\leq 50g/11ms$ (GB/T 2423.5-1995)
 Protection: IP67

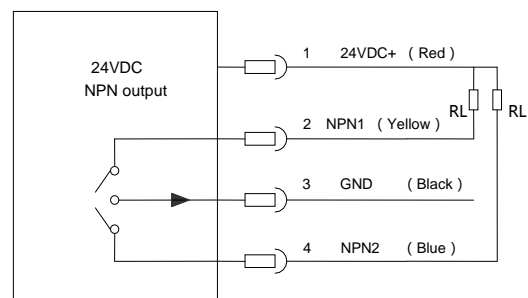
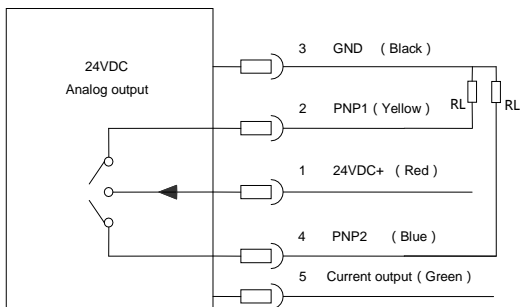
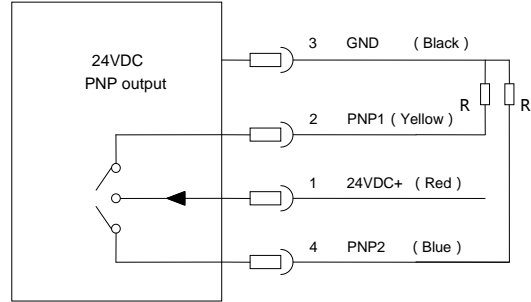
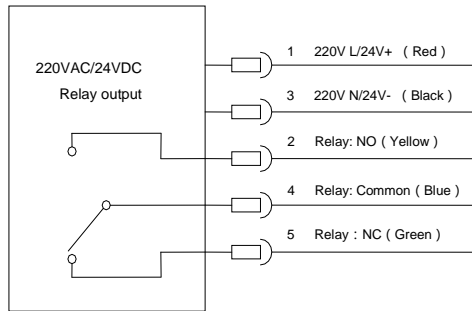
Switch Action

Hysteresis type



- ① Action Value
- ② Release Value
- ③ Difference between ① and ②/hysteresis
- ④ Output status of NO
- ⑤ Output status of NC

Electric Connection:



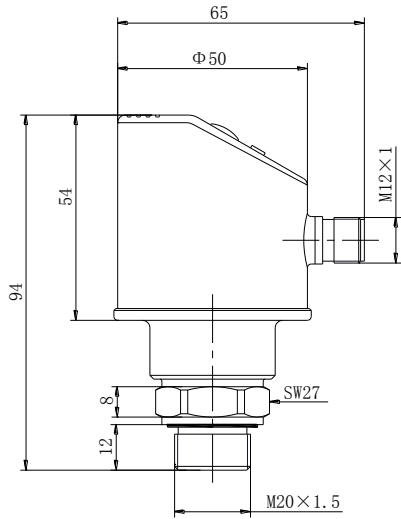
Electric Definition:

<p>M12 x 1</p>	Wire color	Pin No.	220V AC power supply	24V DC power supply
	Red	1	Power L	Power +
	Black	3	Power N	Power -
	Yellow	2	Relay NO	Relay NO, NPN1, PNP1
	Green	5	Relay NC	Relay NC, current output
	Blue	4	Relay common	Relay common, NPN2, PNP2

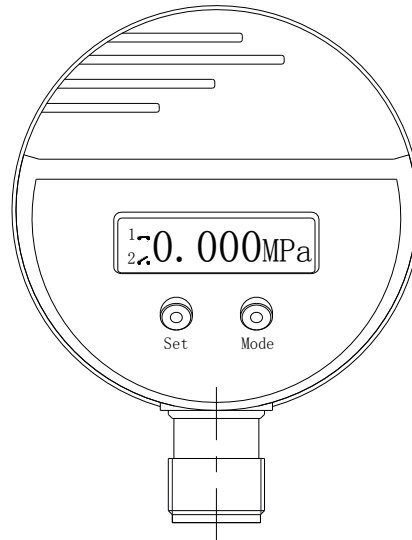
Outline Construction:

Unit: mm

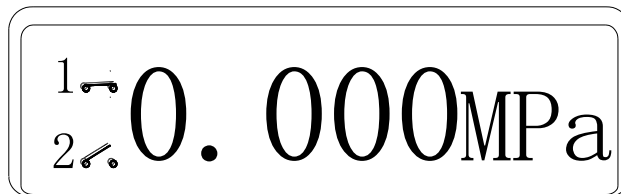
Dimension:



Outline:



Display sample:



Order Guide

PSI5801	Intelligent Pressure Switch					
	Range	Pressure range: -100kPa...0kPa~10kPa... 60MPa				
	[0~X]MPa	X: actual pressure range				
		Code	Power supply type			
		AC	220V AC(Relay only)			
		DC	12V~36V DC (recommend 24VDC for relay output)			
		Code	Output signal			
		P	2×PNP output			
		N	2×NPN output			
		J	1×relay output			
		E	Analog output (4mA~20mA DC) + 2×PNP			
		Code	Pressure port			
		C ₁	M20×1.5 male, face type seal			
		C ₂	G1/4 male			
		C ₃	G1/2 male			
		C ₅	M20×1.5 male, waterline seal			
		P C ₁	Flush diaphragm M20×1.5 male			
		P C ₃	Flush diaphragm G1/2 male			
		P D ₁	DN25 clamp connection			
		Code	Pressure type			
		G	Gauge			
		A	Absolute			
PSI5801	[0~2]MPa	DC	P	C ₅	G	Whole specification

Optional accessories: MS901, 2m 5-pin M12×1 female bending RVVP electric cable.

Notes

1. Please pay attention if the measuring media is compatible with contacting material.
2. If the user has special requirements or functions, please feel free to contact with our company and note clear in the contract.