

CS-PT623



Applications

- Mechanical
- Industry automatic control
- Pressure measurement for gas and liquid

Description

CS-PT623 is an intelligent pressure switch combining pressure measurement, local display and control together. It uses advanced industrial-grade MCU as core and high quality pressure sensor as sensing element. With well-designation and adjustment, CS-PT623 has quick reaction and good electro-magnetic compatibility for pressure control at the premise of accuracy. It can be widely used for industrial site pressure control in pump, hydraulic and pneumatic equipment. CS-PT623 is able to visually process the process pressure and switch contacts status through switch output, analog output and display screen. It has various output signals for different application. OLED display is very clear to read.

Features

- Relay output
- Over-voltage protected
- Reverse voltage protected
- SS304 casing
- IP65
- The switch head allowed to rotate 330°
- Switch point setting (separately for each)
- OLED display

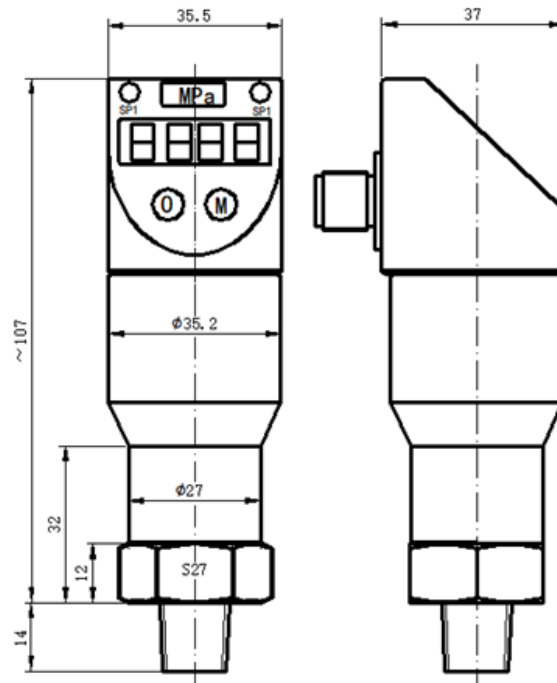
Performance Specifications

Temperature: 25℃; power supply: 24VDC; relative humidity: 45%~75%; ambient atmospheric pressure: 86KPa~106KPa

| | |
|------------------------------|----------------------------------------------------------------------|
| Pressure range | 0...0.3~600bar |
| Overload pressure | ≥150%F.S |
| Accuracy | ±0.5%F.S |
| Long-term stability. | ±0.25%FS/year |
| Response Time | ≤10ms |
| Output Signal | 4~20mA and Relay Output |
| Supply Voltage(U) | 24VDC default, allowed 24±5VDC |
| Current Output Load | $\leq (U-12) / 0.023 \Omega$ |
| Relay Output Load | ≤1000mA |
| Overvoltage | 32VDC |
| Reverse Voltage | -30VDC |
| Insulate Resistance | ≥100MΩ@100VDC |
| Pressure connector | G1/2, G1/4, M20*1.5, NPT1/2, NPT1/4 and others |
| connector material | 304 stain steel default, 316L stain steel and Titanium optional |
| Electrical connection | M12×1-5P |
| Operating Temperature | -20~60℃, but can't beyond the temperature of seal material |
| Storage Temperature | -20℃~60℃, but can't beyond the temperature of seal material |
| IP Rating | IP65 |
| Random Vibration | 10g, 5~2000Hz |
| Shock | X/Y/Z, 20g, sine 11ms |
| Seal material | NBR O-Ring default (-20℃~+100℃), FKM optional (-15℃~+135℃) or others |

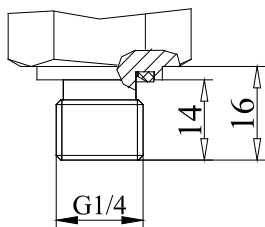
Structure and Dimension (mm)

M12-5P

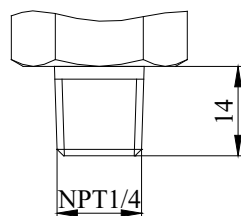


Pressure Connection

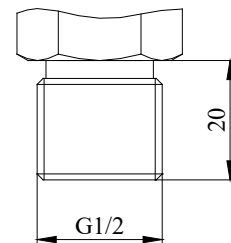
G1/4

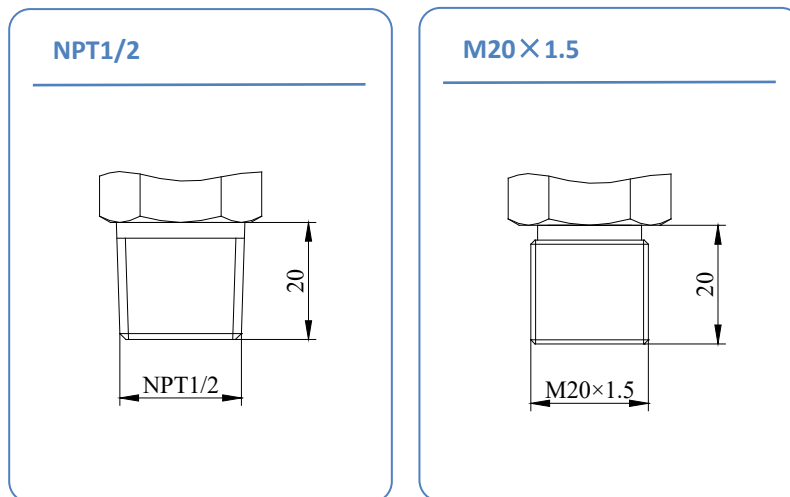


NPT1/4

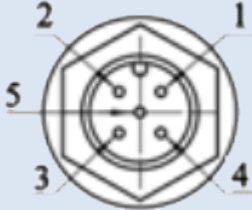


G1/2

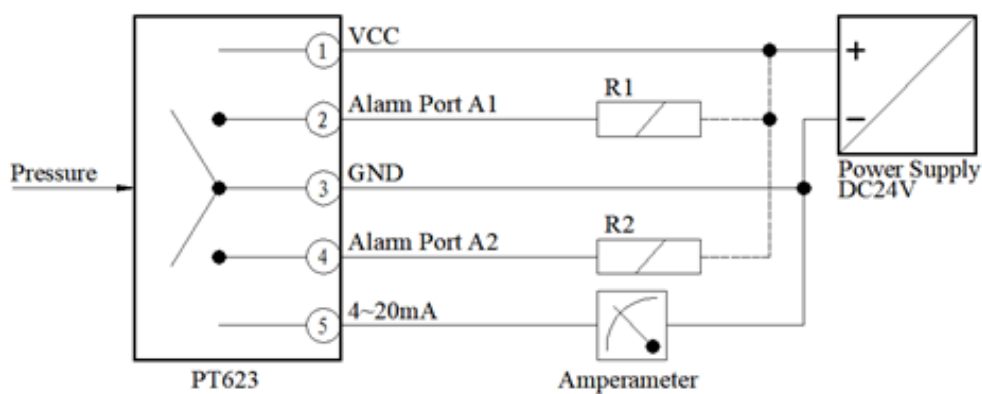




Electrical Connection

|  | Pin | Define | Color |
|------------------------------------------------------------------------------------|-----|---------------|-------|
| | 1 | VCC | Brown |
| | 2 | Alarm Port A1 | White |
| | 3 | GND | Blue |
| | 4 | Alarm Port A2 | Black |
| | 5 | 4~20mA Output | Gray |

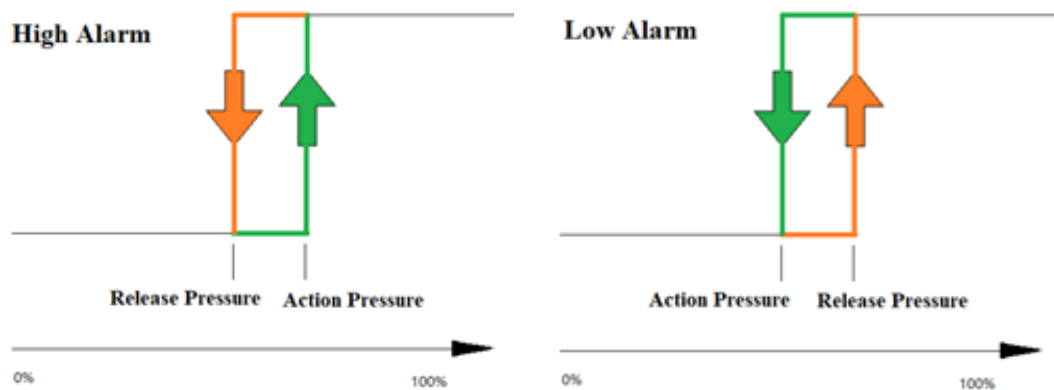
Schematic Diagram



The load R1 (or R2) should be connected between the alarm port A1 (or A2) and VCC port. The action pressure of each alarm port can be set separately.

★To make the pressure switch working well, the current output (port 5, 4~20mA) must be connected to GND or a current measuring port.

Switching Mode



Return Stroke Error = | Action Pressure - Release Pressure |

Adjust

See the *CS-PT623 Menu Instruction.pdf*.

Type Selected

| | |
|---------|----------------------------|
| PT623 | Electronic Pressure Switch |
| Mark | Pressure Range |
| X | Actual Pressure Range |
| Mark | Pressure Connection |
| G1/2 | G1/2 |
| G1/4 | G1/4 |
| M20×1.5 | M20×1.5 |
| NPT1/2 | NPT1/2 |
| NPT1/4 | NPT1/4 |
| Mark | Electrical Connector |
| M12(5) | M12X1-5P |
| Mark | Analogue Output |
| 420 | 4~20mA |
| Mark | Supply Voltage |

PT623 -X -G1/4 M12(5) -420 -24V -B -05 ⁻⁴⁰⁰⁺¹⁶₁ - LH

Notes

1. Only use the pressure switch to test the medium which have no corrosion to its housing and seal material.
2. Cannot use sharp tools to clean the pressure hole when the hole of the pressure switch is blocked.
The pressure switch shall be removed from system and put the pressure hole part into the fluid which can dissolve the blocking substance.
3. The switch should be installed in locations where they are not easily to be impacted or trampled.
4. Use beyond the overload pressure of the switch may cause damages.
5. In order to protect the transmitter used at areas with many lightning, suggest adding a lightning protection device and reliably connecting the shield line to EARTH.
6. Please contact factory for other needs.