CS-PT624 Electronic Pressure Switch

Features and Applications

- SS304 Shell and Pressure Connector
- Relay Output
- Over-voltage protected
- Reverse voltage protected
- Alarm Pressure can be Adjusted from 0 to Full
- IP65
- Air measurement and control

Description

The model CS-PT624 pressure switch for general purpose is the ideal solution for general industrial applications.

These measuring ranges can be combined in almost any way with relay output signal. When the pressure is higher than the alarm pressure point (at the case of high alarm), the LED turns on, and NO port is connected to COM port, NC port is isolated from COM port; and this situation will be kept, till the pressure is lower than the release pressure point.

Furthermore, it offers three options for the accuracy 0.5 % F.S, 0.25% and 1 %F.S.

All variants described in this data sheet are available on very short lead times. For particularly urgent demands, there is a sizeable stock available.

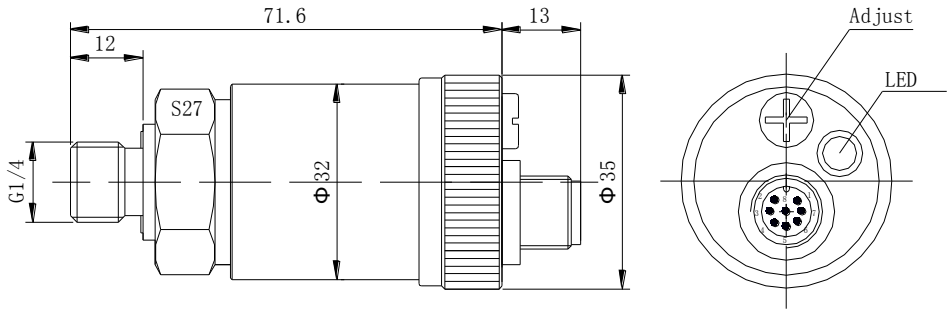
Performance specifications

Temperature: 25℃; power supply: 12VDC(or 24VDC, if the range of power supply does not include 12VDC); relative humidity: 45%~75%; ambient atmospheric pressure: 86KPa ~ 106KPa

Pressure range	0~1...500bar
Proof pressure	≥150%F.S
Accuracy	±0.5%F.S standard, ±0.25% F.S and ±1%F.S optional, include no-linearity, hysteresis, repeatability, and calibration error
Long-term stability.	±0.5％F.S/year
Response Time	≤10ms
Operating Temperature	-20℃ ~ 60℃, but can't beyond the temperature of seal material
Storage Temperature	-20℃ ~ 60℃
Output Signal note 1	Relay Output
Supply Voltage	(10~30)Vdc

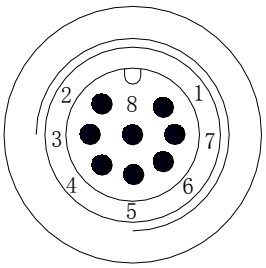
Current without Load	≤ 8 mA
Rated load for Relay	0.5A 120VAC or 1A 24VDC
Overvoltage	32VDC
Reverse Voltage	-30VDC
Insulate Resistance	≥100MΩ@100VDC
IP Rating	IP65
Random Vibration	10g，5～2000Hz
Shock	X/Y/Z, 20g, sine 11ms
Drop (any Axis)	1m
Pressure connector	G1/2, G1/4, M20*1.5, NPT1/2, NPT1/4 and others
connector material	304 stain steel default, 316L stain steel and Titanium optional
Electrical connection	M12（8P）
Seal material	NBR O-Ring default (-20℃～+100℃), FKM optional (-15℃～+135℃) or others

Dimensions(mm)



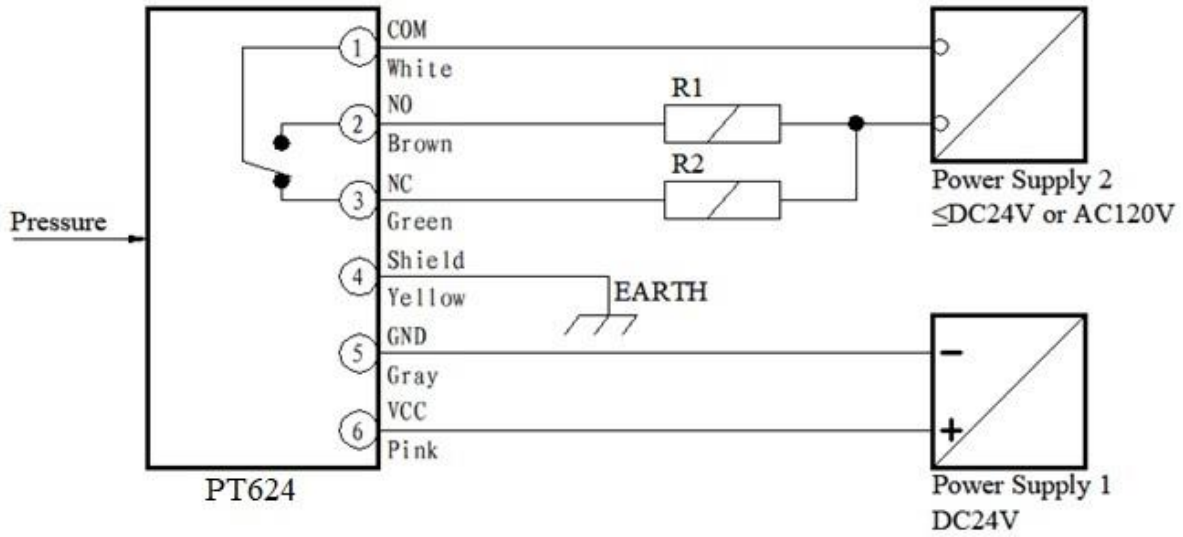
Electrical Connection

Connection



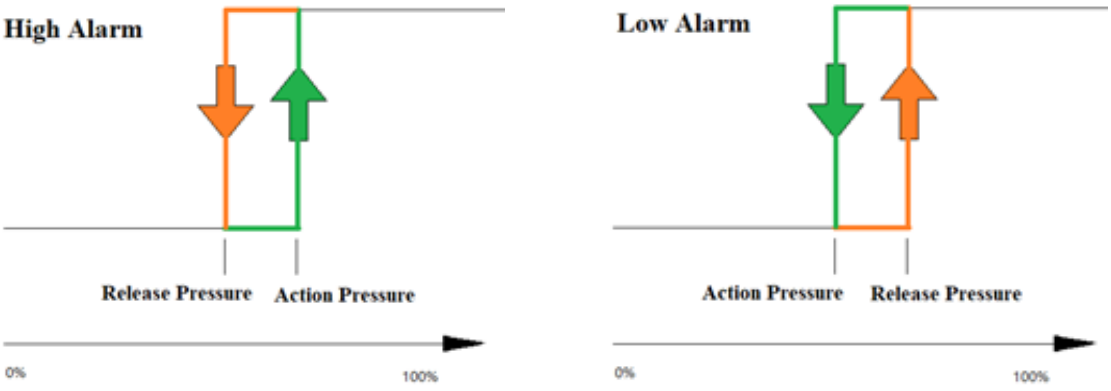
Pin	Define	Color
1	Common Contact(COM)	White
2	Normally-Open Contact(NO)	Brown
3	Normally-Closed Contact(NC)	Green
4	Shield	Yellow
5	GND	Gray
6	VCC	Pink
7		Blue
8		Red

Schematic Diagram



As shown above, the power supply 1 and 2 can be a same one, also can be unrelated. The power supply 1 is the power supply for this pressure switch. The power supply 2 is the power supply for the load, it should not exceed DC24V (or AC120V). The connection mode of the load is shown as R1 (or R2) in the figure. If the load requires the direction of the power supply (as current voltage), please follow the corresponding requirement.

Switching Mode



Return Stroke Error = | Action Pressure - Release Pressure |

Adjust

Turn left to release the screw above the adjusting knob, before you adjust the alarm pressure point. And Screw it after you finished it.

Turn left the adjusting knob to rise up the alarm pressure point, and Turn right the adjusting knob to drop down the alarm pressure point.

As the Alarm Direction is high alarm mode:

When Pv≥Ps，NO is connected to COM, NC is isolated from COM;

When Pv≤Ps-P0，NC is connected to COM, NO is isolated from COM;

As the Alarm Direction is low alarm mode:

When Pv≤Ps，NO is connected to COM, NC is isolated from COM;

When Pv≥Ps+P0，NC is connected to COM, NO is isolated from COM;

Pv: Real-time Pressure
Ps: Alarm Pressure (or Action Pressure)
P0: Return Stroke Error

Ordering Guide

PT624 Electronic Pressure Switch

Code	Measuring Range
X	X stands for actual pressure measuring range

Code	Pressure Connection
G1/2	G1/2
G1/4	G1/4
M20×1.5	M20×1.5
NPT1/2	NPT1/2
NPT1/4	NPT1/4

Code	Power Supply
12V	12VDC
24V	24VDC(Default)

Code	Seal Material
B	NBR
F	FKM

Code	Accuracy
03	±0.25%
05	±0.5%
10	±1.0%

Code	Action Pressure
Y	Y stands for Alarm pressure point （default：50% of range）

Code	Alarm Direction
H	High Alarm(default)
L	Low Alarm

PT624 -X - G1/2 - 24V -B 05 - Y -H

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 For other need contact factory.

Statement

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