

DATASHEET

Pressure

Digital Pressure Switch For General Industrial Applications Model PWP70

Applications

- Coal & Mine
- Environmental protection
- Chemical industry
- Oil & Gas
- Hydraulic pressure control
- Pharmaceutical, medical
- Water services

Features

- Accuracy: $\pm 0.1\%FS$, $\pm 0.25\%FS$, $\pm 0.5\%FS$
- High stability and reliability
- 150% safe overload
- Indicator: 4 bits LED display
- Operation method: Can rotate 0~350°
- Output: Switch + Current(2xPNP/NPN+4mA~20mA)
- Optional diaphragm materials for different medias



Pressure Switch PWP70

Description

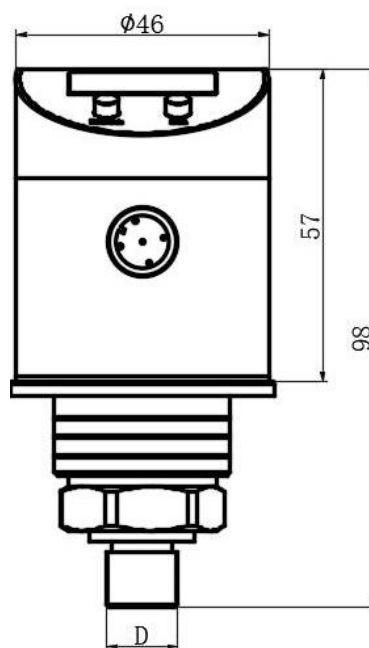
PWP70 is an intelligent pressure switch that integrates pressure measurement, display and control. With MCU as the core, selected with high-quality pressure sensors. After careful design and adjustment, the pressure switch can achieve high-speed response and good electromagnetic compatibility while ensuring accuracy.

It outputs industrial standard 4-20mA signals. At the same time, according to user application requirements, a comparator circuit with adjustable switch points is designed to output high and low level signals, which is conducive to the setting of alarm points. PWP70 has the advantages of wide measurement range, good stability, anti-interference, etc., and different from traditional digital pressure transmitters, it can realize rotation operation 0-350°.

Specifications

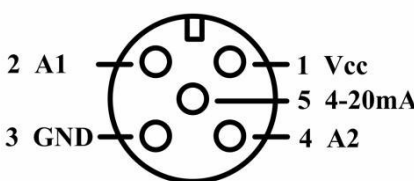
Model	PWP70	
Pressure Type	Relative (gauge) /Absolute pressure	
Pressure Range	-0.1MPa...0kPa~10kPa ...40MPa	
Safe Overload	≤1.5 times	
Electrical Connection	M12-5pins / GX12-5pins Connector	
Pressure Port	M22x1.5, M18x1.5, M14x1.5, M10x1.0	
IP Rating	IP66	
Accuracy	±0.5%FS, ±0.25%FS, ±0.1%FS	
Switch Signal	Switch + Current (2xPNP/NPN+4mA~20mA)	
Power Supply	24VDC	
Indicator	4 bits LED display	
Medium Compatible	Liquid compatible with SUS304, 316L or ceramic material	
Operation Method	Can rotate 0~350°	
Material of Diaphragm	316L, Titanium, Hastelloy, Tantalum Diaphragm	
Accuracy&Performance	0.25% Accuracy Class	0.5% Accuracy Class
Non-linear (%FS)	≤0.2	≤0.4
Hysteresis (%FS)	≤0.05	≤0.1
Repeatability (%FS)	≤0.05	≤0.1
Long-term Stability (%FS/year)	≤0.2	≤0.5
Zero Temp Drift (%FS/°C)	≤0.03	≤0.05
Compensation Temperature	0℃~+50℃(≤200kPa), -10℃~70℃(>200kPa)	
Working Temp.	Medium -40℃~+85℃; Environmental -40℃~+85℃	
Storage Temp.	-40℃~+85℃	
Vibration Environment	10g (@10Hz~2000Hz)	
Impact Resistance	100g/11ms	
Service Life	>10 million load cycles (within measurement range)	
EMC Standard	EN IEC 61326-1:2021; EN IEC 61326-2:2021	

Dimensions and Drawings



*Unit:mm. Above is typical structure. Other structures and dimensions can be customized.

Electrical Connection

	Terminal	Color	Wiring Definition
	1	Brown	24Vdc input
	2	Blue	A1 alarm terminal
	3	White	GND
	4	Grey	A2 alarm terminal
	5	Black	4-20mA