

DIGITAL PRESSURE SWITCH

PCM710



GENERAL FEATURES

- High precision
- Adjustable response time
- 2 switch outputs
- NPN, PNP compatible, free switching
- Button operation, shortcut button for zero calibration, fast unit switching
- OLED shows current pressure
- LED for node action, easy to observe

PCM710 pressure switch is an intelligent digital product for pressure measurement and control which integrates pressure measurement, display, output and control. The product is in full electronic structure. Piezoresistive silicon pressure sensor is adopted in the front end. The output signal is processed by the amplifier of high precision and low temperature drift, and then sent into high precision A/D converter. Through arithmetic processing by microprocessor, the output signal is displayed on site with 2-way switch quantity and $4\sim20\text{mA}$ analog quantity, accomplishing the measurement and control for the control system pressure.



PCM710 has advantages of flexible use, simple operation, easy commissioning and high safety and reliability. It is widely used in hydropower, tap water, petroleum, chemical, mechanical, hydraulic and other industries for the measurement, display and control of pressure of fluids.

APPLICATION FIELDS

- Hydropower
- Chemical industry
- City water supply
- Scientific research
- Accurate measurement and display of pressure of fluids







TECHNICAL SPECIFICATIONS

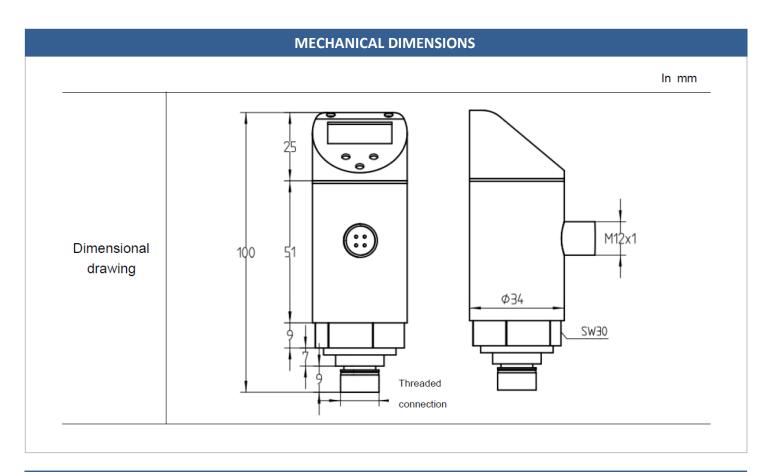
Electrical Performance Parameters Pressure range 0~0,1 Bar...600 Bar Overload capability 150~300%FS Accuracy ±0.2%FS, ±0.5%FS Supply 12 - 30V, 24V recommended Display mode OLED display of 4 digits Output mode 2-way switch quantity, NPN and PNP compatible + 4~20mA Load capacity ≤24V 1.2A Power consumption ≤15mA Operating temp. -25°C...80°C Storage temp. -40°C...100°C Response time ≤20ms Insulation 100MΩ/250VDC Protection IP65

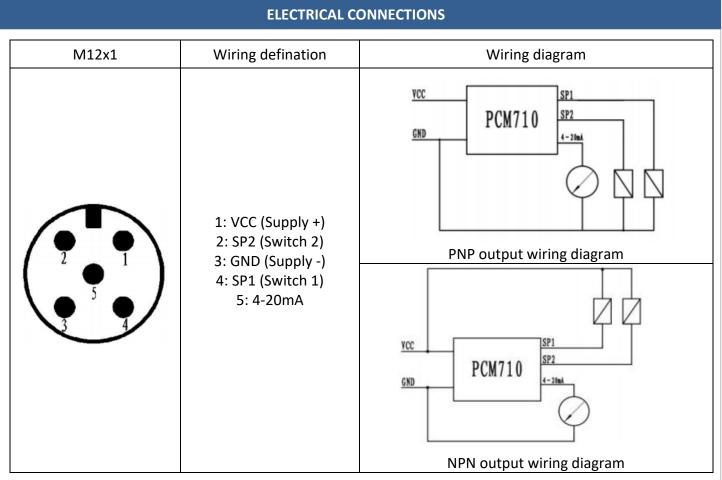
Structural Performance Parameters

Housing material 304

Medium compatibility Liquid contacting diaphragm 316L, pressure port 304

DS-PCM.002 Rev No:1



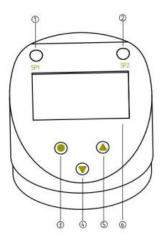


Notes:

- 1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.
- 2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product
- 3 Strictly follow the wiring method for wiring, otherwise it may cause product damage or other potential faults.
- 4 Misuse of the product may cause danger or personal injury.

FAST OPERATING MODE

When the system is under the normally displayed pressure, the functions of fast zero point correction and fast unit switchover can be realized by pressing $[\![\Delta]\!]/[\![\nabla]\!]$

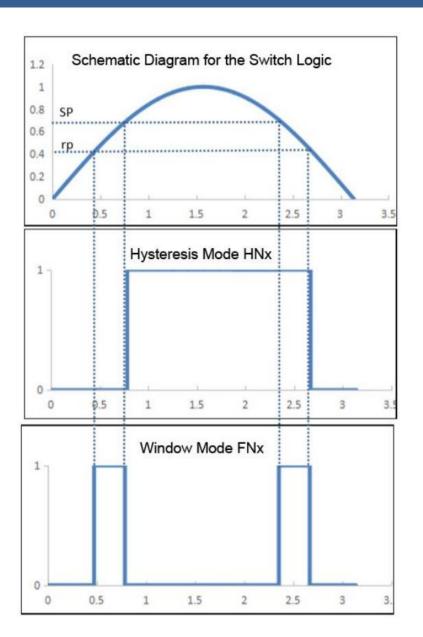


Operating Instructions for Keys

- -When the pressure is displayed normally;
- **3** [●] Short-press to call out the menu interface
- **4** [▼] Long-press the fast zero point correction
- **5** [▲] Short-press the fast unit switchover
- -When entering the menu interface;
- [●] OK/Exit

Long-press to edit data [▲]/[▼]

SWITCH ACTION CHARACTERISTICS



Supporting two kinds of switching modes

- 1.Hysteresis mode
- 2. Window mode

Normally open / normally closed options

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PRESSURE RANGE SELECTION Code Pressure reference Pressure range Overpressure %FS **Burst pressure %FS** 10k 0∼0,1 Bar 300 600 G 20k G 300 600 0∼0,2 Bar 35k 300 600 G, A 0~0,35 Bar 70k 300 600 G $0\sim$ 0,7 Bar 100k G, A 200 500 $0\sim$ 1 Bar 160k G, A 0∼1,60 Bar 200 500 250k G, A $0\sim$ 2,5 Bar 200 500 400k 200 500 G, A $0\sim$ 4 Bar 500 600k G, A, S $0\sim$ 6 Bar 200 $0{\sim}10~{\rm Bar}$ 1.0M G, A, S 200 500 1.6M S 200 500 $0\sim$ 16 Bar 2.5M S $0\sim$ 25 Bar 200 500 S 6M 200 400 $0\sim$ 60 Bar S 200 400 10M $0\sim$ 100 Bar S 16M 0∼160 Bar 200 400 S 300 25M 150 $0\sim$ 250 Bar 40M S 150 300 0∼400 Bar

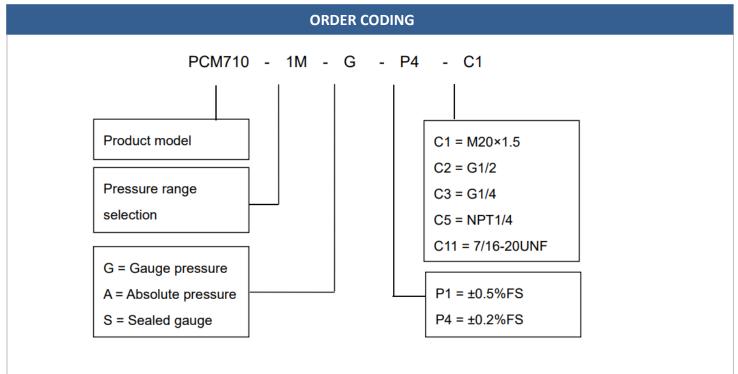
 $0\sim$ 600 Bar

150

300

Note: G: Gauge pressure, A: Absolute pressure, S: Sealed gauge pressure

S



Example: PCM710-1MGP4C1

PCM710 pressure switch, pressure range 10 Bar, gauge pressure, accuracy ±0.2%FS, threaded connection M20×1.5.

Ordering Tips:

60M

- 1. Ensure compatibility between measured media and contacting part of product.
- 2. Customization is available for special requirements on the appearance and performance parameters of the product.

Optional Accessories	
Name	Specification
M12×1 female with wire	M12×1 female 5-pin with wire 2m

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