



**Product model:** HPM5010 intelligent pressure controller

**Manufacturer:** Nanjing Hangjia Electronic Technology co., LTD

**Product category:** pressure controller

**Application:** hydropower, petroleum, chemical, machinery, hydraulic and other industries

## Overview

HPM5010 Intelligent pressure controller adopts high integration ARM and industrial grade MCU as the core and combines with high-accuracy AD converter and high-stability pressure sensor. It is carefully calibrated to ensure fast and accurate pressure measurement and switching action. Three large touch buttons with backlight and with display function design can make the field setting very conveniently. This product combines pressure switch, transmitter and display together and is equipped with two-way switch output (PNP or NPN), one-way analog output signal and one-way RS485 interface. It can be used to monitor pressure for liquid and gas. It is suitable for machinery manufacturing, machine tool system, hydraulic and pneumatic systems, pressure monitoring, pumps, compressors, and other general industrial fields.

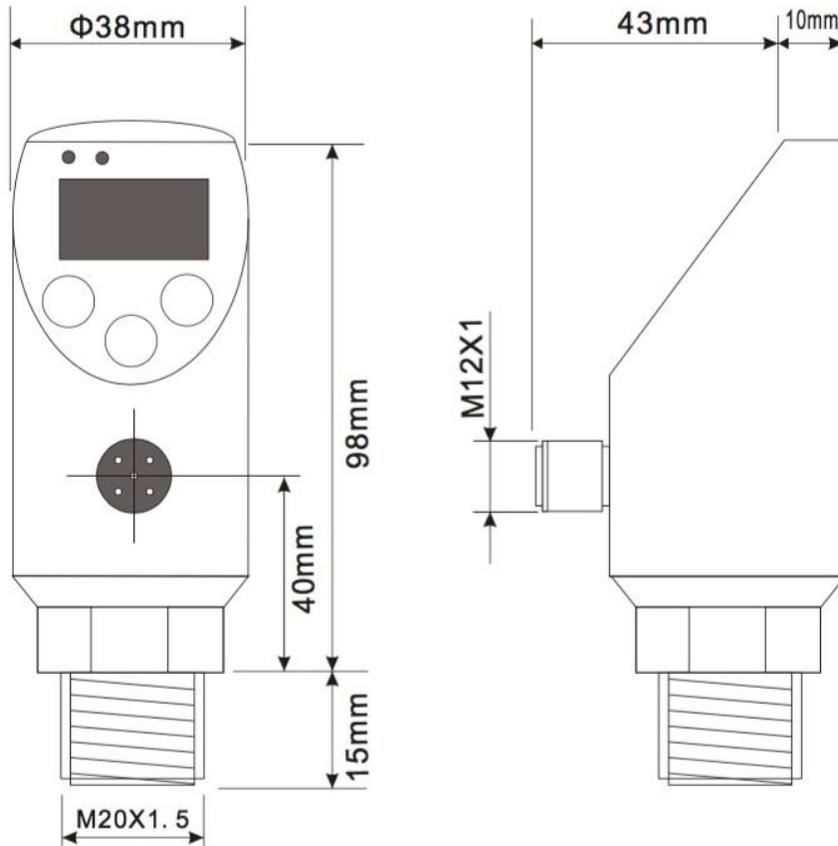
## Features

- electronic switch, voltage, current output
- the switching point can be set, and the switch can be set to normally open or normally close.
- the range can be migrated.
- OLED self-luminous display, display can be rotated 180°
- the main body rotates 330°, easy to observe.

## Technical Parameters

<b>Measuring Medium</b>	various liquid and gas compatible with 304 stainless steel
<b>Pressure Range</b>	-0.1...0~0.1MPa...60MPa
<b>Accuracy</b>	≤0.5%FS
<b>Supply Voltage</b>	24V DC
<b>Temperature shift</b>	±0.02% FS/°C (zero scale / full scale)
<b>Long-term Stability</b>	±0.3%FS/year
<b>Switch+Voltage+Communication</b>	2×PNP + 0V~5VDC/10VDC + MODBUS
<b>Switch+Current+Communication</b>	2×PNP + 0mA/4mA~20mA + MODBUS
<b>Switching Current</b>	1.0A(Max.)
<b>Switch Type</b>	normally open、normally close(can be set)
<b>Switch Reaction</b>	<10ms
<b>Switch Delay</b>	0.00s ~ 1000.0s
<b>Switch Motion Mode</b>	hysteresis mode or window mode
<b>Screen Display</b>	OLED
<b>Menu Language</b>	Chinese、English
<b>Switch Indicator</b>	2×red LED
<b>Display Unit</b>	psi、bar、mbar、Pa、kPa、MPa
<b>Key</b>	3×blue backlight touch key-press
<b>Instrumental Variable Display</b>	environment temperature、analog output value、minimal peak value、maximal peak value
<b>Operation Temperature</b>	-30°C ~ 80°C
<b>Medium Temperature</b>	-30°C ~ 80°C
<b>Storage Temperature</b>	-40°C ~ 80°C
<b>Electromagnetic compatibility</b>	GB/T 17626.2/3/4-2006
<b>Vibration</b>	≤10g/10Hz...500Hz(IEC 60068-2-6-2007)
<b>Impact</b>	≤50g/11ms(IEC 60068-2-27-2008)
<b>Ingress Protection</b>	IP65

## Structure Drawings



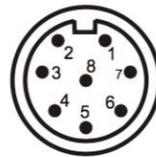
## Electrical Connection

M12X1 5 Pin



- 1 ( ) : VCC ( Power+)
- 2 ( ) : K1 ( Switch 1)
- 3 ( ) : GND ( Power-)
- 4 ( ) : K2 (Switch 2)
- 5 ( ) : AO ( Analog Output)

M12X1 8 Pin



- 1 (Brown): VCC (Power+)
- 2 (White): K1 (Switch1)
- 3 (Blue): GND (Power-)
- 4 (Pink): K2 (Switch2)
- 5 (Grey): AO (Analog Output)
- 6 (Yellow): A (RS485-A)
- 7 (Green): B (RS485-B)
- 8 (Red): NC

## Ordering Guide

Item NO.	Type					
HPM5010	Intelligent pressure controller					
	Pressure Range (0~X)kPa	Measuring Range				
		Fill out X directly				
		Code	Output Signal			
		B1	(4~20)mA			
		B3	(0~10)V			
		B4	(0~5)V			
		B5	(1~5)V			
		B7	RS485			
		B10	Transistor Output NPN			
		B11	Transistor Output PNP			
			Code	Thread Spec		
			P1	M20x1.5		
			P4	G1/2		
			Code	Electrical Connection		
			C5	M12*1		
			Code	Structure&Material		
				Diaphragm	Interface	Shell
			M1	316L	316L	Stainless Steel
			M2	316L	316L	316L
			M3	Tantalum	Hastelloy	316L
		M4	Titanium	Titanium	316L	
		Code	Additional Functions			
		G	Gauge Pressure (Default)			
		Kn	Numbers of Pressure Control Points, n=1~2			
		T	High-temperature Resistance Medium			
HPM5010	(0~400)kPa	B1 B11	P4	C5	M1	G K2

### Tips:

1. When ordering products controlled by pressure points, please specify the number of pressure points, the pressure value controlled, and the normally open or normally closed switching points
2. For other special requirements, please contact us and indicate in the order.