

## HPM288S Explosion-proof Pressure Switch



Nanjing Hangjia Electronic Technology Co., Ltd.

## Product Overview

HPM288S explosion-proof pressure switch adopts high-performance silicon piezoresistive pressure core body, which is converted by high-precision A/D, processed by microprocessor, displayed on site, and outputs one analog quantity and two switching quantities. The product integrates pressure measurement, display, output and control, and is widely used in industrial process control, petroleum, chemical, metallurgical and mining industries. This product complies with gb3836.1-2010 Explosive

Environment -- Part 1: General Requirements for Equipment gb3836.2-2010 Explosive Environment. Equipment protected by a flameproof Enclosure "D". Explosion-proof marks Exd II CT6, altitude and in the following environmental air temperature and relative humidity conditions, flameproof pressure sensor can be normal operation: altitude does not exceed 2000 m; Ambient air temperature -10°C ~ +60°C; Ambient relative humidity is 90% (+25°C).

## Features

- ✧ Segregation explosion-proof Exd II CT6 Gb, explosion-proof number CNE19.4440
- ✧ Switching value can be set arbitrarily from zero scale to full scale
- ✧ Shell with action nodes light emitting diode, easy to observe
- ✧ Key adjustable and field setting various parameters, easy to operate
- ✧ Two-way control point relay output
- ✧ Analog output (4 ~ 20 mA) (optional)

## Parameters

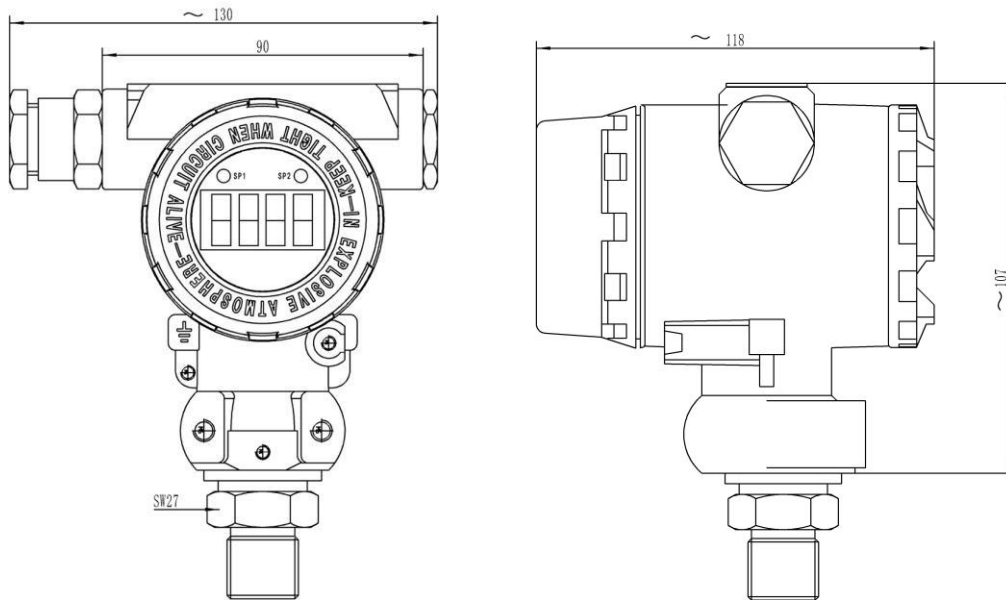
Measuring Medium	Liquid, Gas, Steam
Pressure Range	-100kPa...0~10kPa...100MPa
Overload	1.5 times pressure range of full scale
Pressure Type	Gauge, Absolute or Sealed Gauge
Accuracy	±0.25%FS (Representative), ±0.5%FS (Maximum)
Long-term Stability	±0.1%FS/year (Representative), ±0.2%FS/year (Maximum)
Temperature Coefficient of Zero	±0.03%FS/°C (Reference 25°C)
Temperature Coefficient of Full Scale	±0.03%FS/°C (Reference 25°C)
Working Temp	-30~85°C (Normal); -20~60°C (Explosion-proof)
Storage Temp	-40~120°C
Supply Voltage	8~32VDC (Relay Output), 18~32VDC (Relay output with 4~20mA output)
Output Signal	Two-way relay output, 4~20mADC (optional)

Display Mode	4-bit 0.36 inch LED (red), display range: -1999 ~ 9999
Insulation Resistance	100MΩ,500VD
Ingress Protection of Shell	IP65

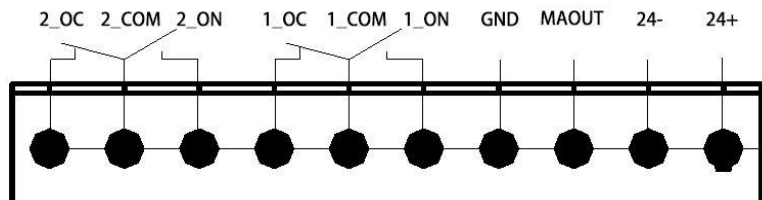
### Structure material

- ✧ Housing : aluminium alloy
- ✧ Pressure connection: Stainless Steel 1Cr18Ni9Ti Diaphragm: Stainless Steel 316L
- ✧ O ring: FKM

### Structure Drawings (Unit: mm)

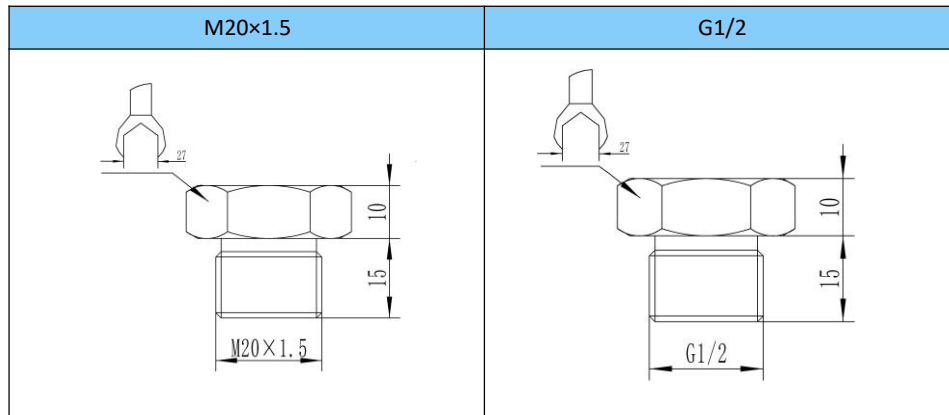


### Electrical Connection:



Terminal	24+	24-	1_OC	1_COM	1_ON	2_OC	2_COM	2_ON	MAOUT	GND
Electrical definition	S+	S-	First-way Relay			Second-way Relay			Output Signal+	Output Signal-
			Normal Close	Common	Normal Open	Normal Close	Common	Normal Open		

### Progress Connection



### Ordering Guide

Item NO.	Type				
HPM288S	Anti-explosion Pressure Switch				
	<b>Code</b>	<b>Spec</b>			
	AS	Thread, seal gauge or absolute			
	G	Thread, gauge			
	QP	Thread, flush film			
	G-F	Flange			
	KP	Clamp			
		<b>Pressure Range</b>	<b>Measuring Range</b>		
		(0 ~ X)kPa	Fill out X directly		
			<b>Code</b>	<b>Output Signal</b>	
			B1	4~20mA	
			B9	Relay	
			<b>Code</b>	<b>Thread Spec</b>	
			P1	M20x1.5	
			P4	G1/2	
			K1	1.5" Clamp	
			K2	2" Clamp	
			F20	DN20 Flange	
			F25	DN25 Flange	
			F50	DN22 Flange	

					Code	Electrical Connection			
					C2	Cable Outlet			
						Code	Structure&Material		
							Diaphragm	Interface	Shell Material
						M1	316L	Stainless Steel	Aluminum alloy
						M1A	316L	316L	Aluminum alloy
						M2	Titanium	Titanium	Aluminum alloy
						M3	Tantalum	Customization	Aluminum alloy
						M4	Hastelloy	Customization	Aluminum alloy
						X	Other		
	Code	Additional Features							
	d	Exd IIC T6 Gb							
	Kn	Number of pressure control points,n=1~2							
	D2	LCD Display							
HPM288S	AS	(0~10)MPa	B9	P1	C2	M1	d K2 D2		