

HPM718 Flat Film Hygienic Pressure Transmitter



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Overview

HPM718 Flat Film Hygienic Pressure Transmitter adopts imported ceramic capacitor pressure sensor as the sensitive element. It uses screw installation and flat film design. With the high elasticity, abrasion resistance, corrosion resistance, quick heat dissipation of ceramic, the transmitter has excellent heat stability, which can be normally used in the range of $-40-125^{\circ}\text{C}$ with low temperature excursion. The biggest characteristic of this product is can be span shifted to 10:1, and the minimal is 2kPa. In the small range, overload capacity can reach dozens of times of full-scale, which totally solves the problems for the defective overloaded capacity for other transmitters. So it is very suitable for measuring micro pressure. Also, as the core of ceramic sensor is without any filling liquid, no process pollution produced, so it is widely used in food and medicine industries.

Application fields: food, medicine, mechanical equipment, wind pressure, laboratory research, etc

Features

- .flat film structure design, medium won't be blocked
- .suitable for the medium which has wide temperature range, $-40\sim 125^{\circ}\text{C}$, extremely low temperature excursion
- .suitable for micro pressure measurement, the minimal range is 2kPa, high accuracy, overload can reach 50 times
- .the pressure core without filling liquid, suitable for food, medicine and other industries
- .the material connected with medium is ceramic, stainless steel and fluororubber with great corrosion resistance
- .unique positive and negative pressure measurement

Technical Parameters

Measuring Medium: various liquid, gas or steam compatible with ceramic
Pressure Range : -100kPa...0~2kPa...2MPa(Gauge pressure); 0~20kPa...2MPa(Absolute pressure)

Pressure Type: Gauge pressure, absolute pressure

Accuracy: $\pm 0.2\%FS$ (Representative); $\pm 0.5\%FS$ (Maximum)

Long-term Stability: $\pm 0.1\%FS/year$

Temperature Coefficient of Zero: $\pm 0.01\%FS/^\circ C$ (Reference $25^\circ C$)

Temperature Coefficient of Full Scale: $\pm 0.01\%FS/^\circ C$ (Reference $25^\circ C$)

Operation Temperature: $-20\sim 80^\circ C$

Medium Temperature: $-40\sim 125^\circ C$

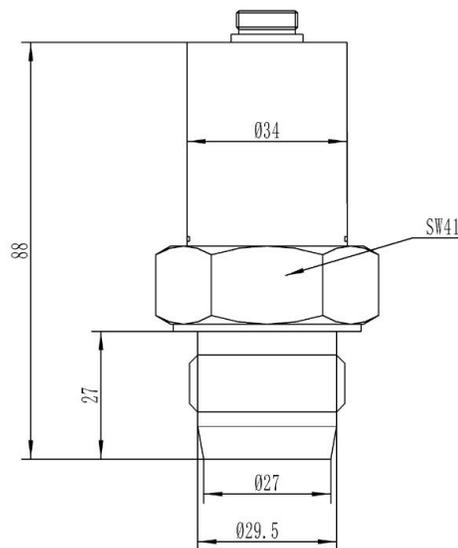
Supply Voltage : 24VDC

Output Signal: 4~20mADC, 0.5~4.5VDC, etc.

Ingress Protection of Shell: IP65

Electrical Connection: Aviation Connector and Cable Output, etc.

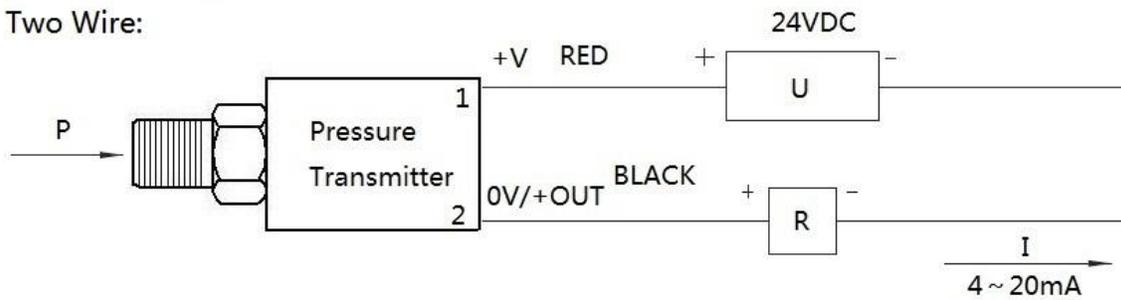
Structure Drawings



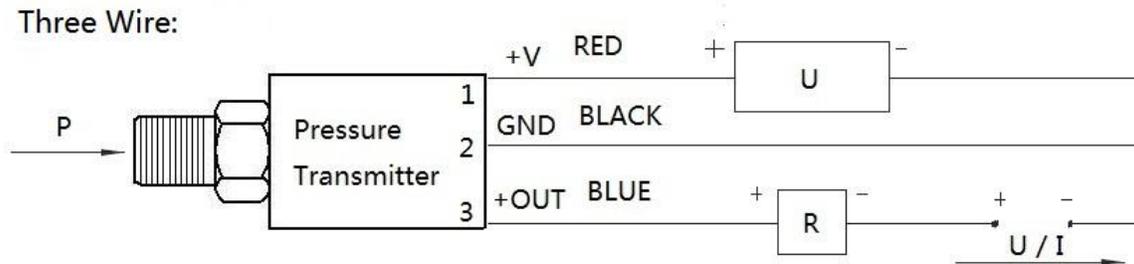
Electrical Connection

Cable Outlet	M12× 1	Hirschman	Two Wire	Three Wire
Red	1	1	Power + (+V)	Power + (+V)
Black	2	2	Power - (0V/+OUT)	Common Port (GND)
Blue	3	3	N/A	Output + (+OUT)

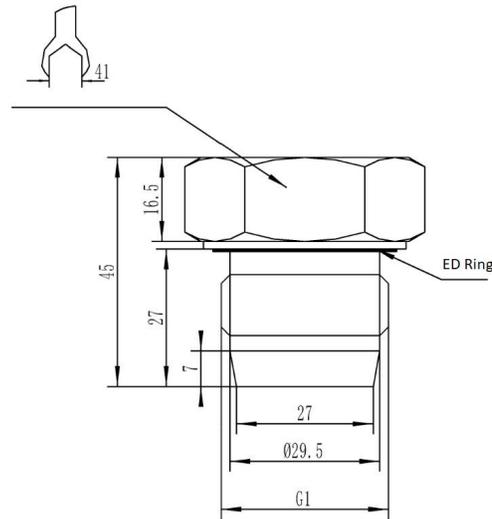
Two Wire:



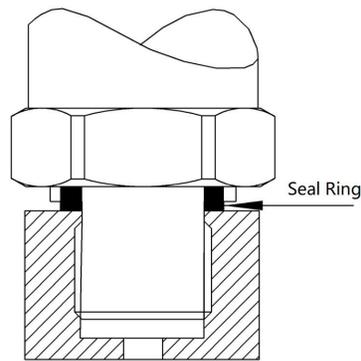
Three Wire:



Pressure Port



Process Connection



Tips:

1. The thread length of the pressure transmitter must be less than the depth of the base thread to ensure the effective seal of the root gasket
2. Flush film pressure transmitter front diaphragm can not touch the bottom of the base

Ordering Guide

Item NO.	Type					
HPM718	Flat Film Hygienic Pressure Transmitter					
	Pressure Range	Measuring Range				
	(0~X)kPa	Fill out X directly				
		Code	Output Signal			
		B1	(4~20)mA			
		B6	(0.5~4.5)V			
		Code	Thread Spec			
		P19	G1 External Thread			
		P20	M30×1.5 External Thread			
		P21	G1-1/2 Male Thread			
		Code	Electrical Connection			
		C1	DIN43650			
		C2	Cable Output			
		C5	M12×1			
		Code	Sensor Type			
		M6	Ceramic Capacitor			
		Code	Additional Functions			
		G	Gauge Pressure (Default)			
		A	Absolute Pressure			
		S4	Thread 304 Material			
		S6	Thread 316L Material			
HPM718	(0~20)kPa	B1	P19	C5	M6	GS6