

## HPM188 anti-explosion pressure transmitter



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## Overview

HPM188 anti-explosion pressure transmitter adopts all stainless steel welded structure, specially designed for explosion-proof occasions. The internal sensor USES the silicon pressure core with high precision and high stability as the sensitive element, and the built-in signal conditioning circuit converts the sensor signal into standard current or voltage signal output, which can be directly connected with the computer, control instrument and display instrument. The product has excellent overall performance, easy installation, good shock resistance and impact resistance, and can be used for a long time in explosion-proof environment.

## Application

chemical industry, coal mine, industrial process control and other flammable and explosive occasions.

## Features

- Compact and lightweight design. This series of products excel in flameproof performance while being compact, lightweight, and visually appealing.
- Robust stainless steel construction. The transmitter boasts corrosion resistance, high protection grade, and can operate continuously.
- Excellent precision and stability. The silicon piezoresistive chip ensures temperature drift within the precision range through compensation, providing long-term stability and reducing maintenance needs.
- Dependable circuit with fast response. Specially developed integrated circuit ensures high reliability for 4~20mA pressure transmitters.

## Technical Parameters

Measuring Medium: various liquid, gas or steam compatible with 304 or 316L stainless steel

Pressure Range: -100k...0~0.01...100MPa

Overload: 1.5 times pressure range of full scale

Pressure Type: Gauge pressure, absolute pressure or sealed gauge pressure

Accuracy:  $\pm 0.5\%FS$

Long-term Stability:  $\pm 0.2\%FS/year$

Temperature Coefficient of Zero:  $\pm 0.03\%FS/^\circ C$  (Reference  $25^\circ C$ )

Temperature Coefficient of Full Scale:  $\pm 0.03\%FS/^\circ C$  (Reference  $25^\circ C$ )

Working Temperature:  $-20\sim 60^\circ C$

Storage Temp:  $-40\sim 120^\circ C$

Supply Voltage: 5VDC, 24VDC

Output Signal: Two wire 4~20mADC, Three wire voltage etc.

Insulation Resistance: 100MΩ, 500VDC

Ingress Protection of Shell:IP65

Electrical Connection: Cable Outlet etc

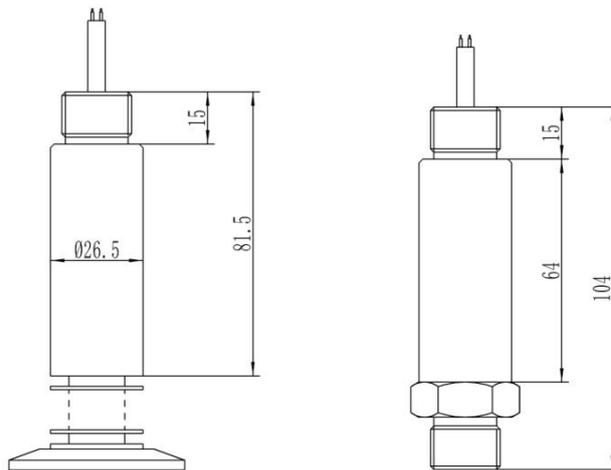
## Structure Material

Housing: stainless steel 1Cr18Ni9Ti or 316L

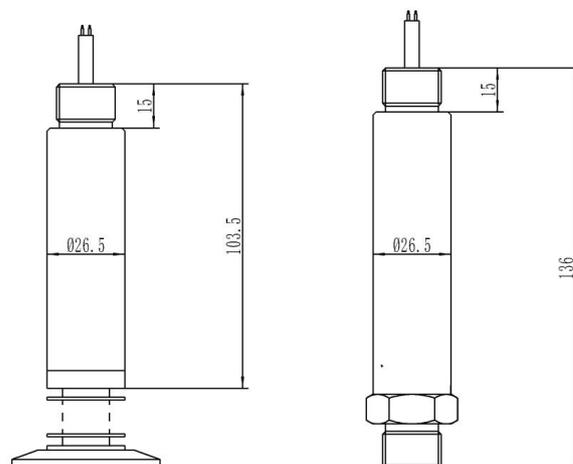
Diaphragm: stainless steel 316L

## Structure Drawings

Sealed Gauge/Absolute Pressure Transmitter



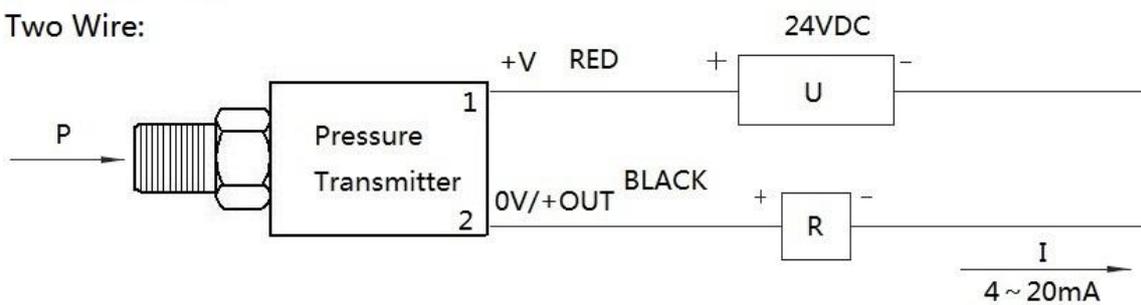
Gauge Pressure Transmitter



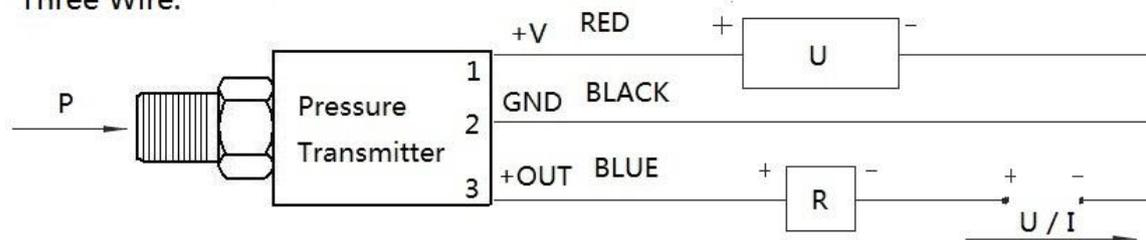
### Electrical Connection

Wire Color	Two Wire Current	Three Wire Voltage
Red	Power (+V)	Power (+V)
Black	Power (0V/+OUT)	Common Port(GND)
Blue		Output (+OUT)

Two Wire:



Three Wire:



## Ordering Guide

Item No.	Type					
HPM188	Anti-explosion Pressure Transmitter					
	Pressure Range (0~X)bar	Measuring Range Fill out X directly				
		Code	Output Signal			
		B1	(4~20)mA			
		B2	(0~10)mA			
		B3	(0~10)V			
		B4	(0~5)V			
		B5	(1~5)V			
		B6	(0.5~4.5)V			
		Code	Thread Spec			
		P1	M20x1.5			
		P3	G1/4			
		P4	G1/2			
		P8	NPT 1/2 M			
		Code	Electrical Connection			
		C2	Cable Output			
		Code	Structure&Material			
			Diaphragm	Interface	Shell	
		M1	316L	316L	Stainless Steel	
		M2	316L	316L	316L	
		M3	Tantalum	Hastelloy	316L	
		M4	Titanium	Titanium	316L	
		M9	316L	gold plating	Stainless Steel	
		Code	Additional Functions			
		G	Gauge Pressure (Default)			
		A	Absolute Pressure			
		S	Sealed Gauge Pressure			
		v	fluororubber O-Ring (Default)			
		J	NBR O-Ring			
		h	All-welded without O-Ring			
		V1	Supply Voltage 24VDC			
		V5	Supply Voltage 5VDC			
		Exd	Exd II CT4-T6 Gb			
HPM188	(0~25)bar	B1	P8	C1	M9	G V1Exd