

## HPM128 Explosion-proof Pressure Transmitter



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## Overview

HPM128 Explosion-proof Pressure Transmitter uses high stable and high reliably diffused silicon as signal measuring component. It is processed through automatic testing and laser trimming to achieve wide temperature compensation. The built-in signal modulation circuit can transform the millivolt signal of transmitter to standard current and voltage signal output, which also can be connected to computers, control instruments and display instruments to accomplish remote signal output. HPM128 adopts all stainless-steel structure with anti-explosion design, it can be used in hostile environment for a long time. This product can be widely used in petroleum industry, chemical industry, power enterprise, metallurgy industry, geological industry, hydrological industry, and shipping industry especially for the inflammable and explosive field.

Application fields: chemical machinery, petroleum machinery, CNG pipeline network, natural gas compressor and other industrial automation explosion proof places

## Features

- ◆ All stainless steel, various interfaces
- ◆ Intrinsically safe explosion-proof type Ex ia II C T6
- ◆ Wide pressure range, available to measure absolute pressure, gauge pressure and sealed gauge pressure
- ◆ Good sealing property, long-term stability
- ◆ High strength, anti-vibration

## Technical Parameters

<b>Measuring Medium</b>	various liquid, gas or steam compatible with 304 or 316L stainless steel
<b>Pressure Range</b>	-100kPa...0~10kPa...100MPa
<b>Overload</b>	1.5 times the full-scale pressure
<b>Pressure Type</b>	Gauge pressure, absolute pressure, or sealed gauge pressure
<b>Accuracy</b>	±0.5%FS (typical); ±0.2%FS (optional);±0.1%FS (optional),
<b>Long-term Stability</b>	±0.2%FS/year

<b>Temperature Coefficient of Zero</b>	$\pm 0.03\%FS/^{\circ}C$ (Reference $25^{\circ}C$ )
<b>Temperature Coefficient of Full Scale</b>	$\pm 0.03\%FS/^{\circ}C$ (Reference $25^{\circ}C$ )
<b>Operation Temperature</b>	$-40 \sim 60^{\circ}C$
<b>Storage Temperature</b>	$-40 \sim 100^{\circ}C$
<b>Supply Voltage</b>	24VDC
<b>Output signal</b>	4 ~ 20mA DC
<b>Insulation Resistance</b>	100M $\Omega$ , 500VDC
<b>Ingress Protection of Shell</b>	IP65
<b>Vibration</b>	20g(20 ~ 5000Hz)
<b>Electrical Connection</b>	Terminals inside the shell
<b>Intrinsic safety parameter</b>	Ui:28 VDC Ii:93 mA Pi:0.65W Ci:0.04 $\mu$ F Li:0
<b>Explosion-proof</b>	Ex ia II C T6 Ga

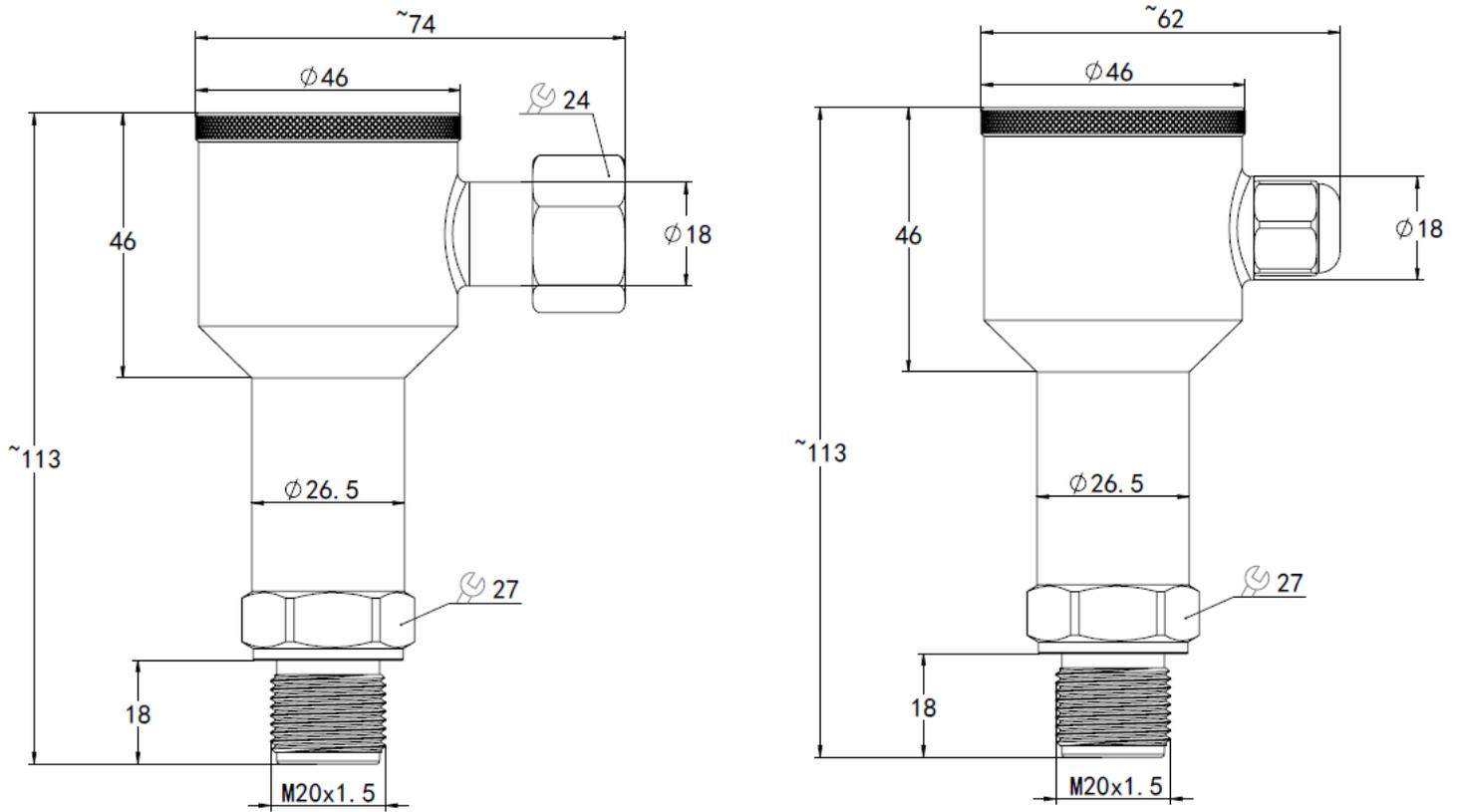
## Structure Material

Housing: stainless steel 304 or 316L

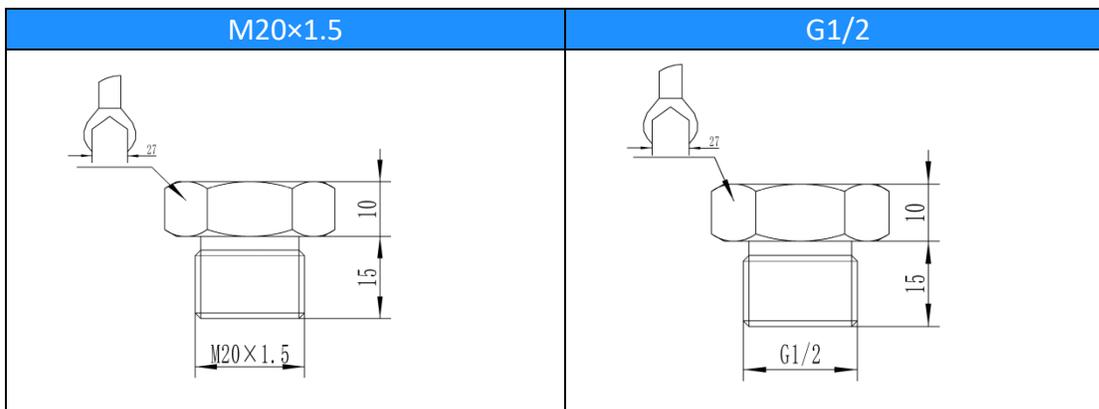
Diaphragm: stainless steel 316L

O-ring: NBR or FBR

**Structure Drawing (Unit: mm)**



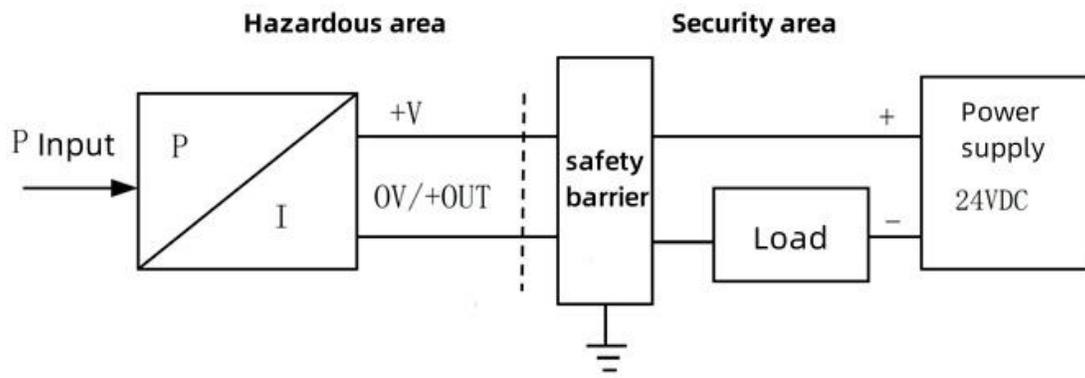
**Pressure Interface**



## Electrical Connection

Wire Color	Sign	Connection method
Red	+	Power supply + (+V)
Black	-	Power supply- (0V/+OUT)

## Electrical Wiring Diagram



## Precautions

For products that have passed the explosion-proof inspection, arbitrary replacement or modification of components and structures that affect the explosion-proof performance are not allowed.

## Explosion-proof requirements

- ▲ This product meets the relevant regulations of GB 3836.1-2010 and GB3836.4-2010.
- ▲ Under normal and fault conditions, the maximum surface temperature of its electrical components, wires and housing should be  $\leq 80^{\circ}\text{C}$
- ▲ The insulation between the intrinsically safe circuit and the shell can withstand the dielectric strength test of 500V, AC 50Hz, no breakdown or flashover for 1 minute, and the leakage current is not greater than 5mA.

## Ordering Guide

Item NO.	Type									
HPM128	Explosion-proof Pressure Transmitter									
	(0 ~ X)kPa	Measuring Range								
		Fill out X directly								
		Code	Output Signal							
		B1	(4 ~ 20)mA							
			Code	Thread Spec						
			P1	M20x1.5						
			P4	G1/2						
						Code	Electrical Connection			
						C9	Cable gland, terminals inside the shell			
						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 )				
					A	Absolute Pressure				
					S	Sealed Gauge Pressure				
					i	Intrinsic Safety Type , Exia II C				
HPM128	(0-100)kPa	B1	P1	C2	M1	Gi				

## Certification Information

Factory certification	
Certification organization	CQM
Quality management system	ISO 9001:2015
Certification scope	Research, development and manufacture of pressure transmitter and temperature transmitter
Certificate No.	00223Q21711R1S