HPM788 Ceramic Hygienic Pressure Transmitter

Nanjing Hangjia Electronic Technology Co. Ltd.

Overview

HPM788 Ceramic Hygienic Pressure Transmitter adopts imported ceramic sensor as sensitive element, and flat film encapsulation mode directly receives pressure signal. With the high elasticity, wear resistance, corrosion resistance, quick heat dissipation of ceramic, the transmitter has good heat stability and low temperature excursion. Meanwhile, the minimal range is 300Pa and the overload capacity can reach dozens of times of full-scale, which solves the problems for the defective overloaded capacity for the small range. So it is very suitable for measuring micro pressure. As the ceramic sensor has no filling liquid, so it won't create process pollution. And its dry-type ceramic diaphragm isn't effected by the way of installation. Because the exposed stress diaphragm at the end of clamp can directly receive the pressure, it can solve the problems like scale formation, in sanitation and blocking of viscous pressure. This product can be widely used in medicine, food, liquor-making and other hygienic industries or in the field where the measuring medium is easy to scale.
Application: medicine, food, brewing, dairy products, drinks and other viscous clog health requirements of convenient cleaning occasions;Environmental protection chemical coatings, polyurethane equipment, paint detection system

Features

.hygienic type design

.the pressure core without filling liquid, suitable for food, medicine and other industries

.flat film structure, easy to clear, and scale formation resistance

.with great vibration resistance and impact resistance

.suitable for measuring absolute pressure, gauge pressure and negative pressure

.optional various output signals , can be customized according to requirements

Technical Parameters

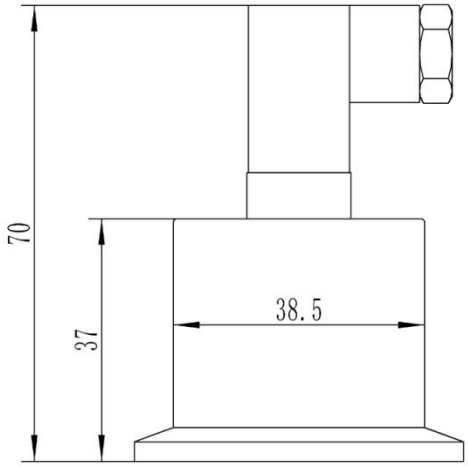
Measuring Medium：various liquid, gas or steam compatible with ceramic or 316L stainless steel
Pressure Range ：-100kPa...0~300Pa...7MPa(Gauge pressure); 0~10kPa...7MPa(Absolute pressure)
Pressure Type：Gauge pressure, absolute pressure or composite pressure

Accuracy： ±0.2%FS（Representative）；±0.5%FS（Maximum）
Long-term Stability： ±0.1%FS/year
Temperature Coefficient of Zero：±0.01%FS/℃（Reference 25℃）
Temperature Coefficient of Full Scale：±0.01%FS/℃（Reference 25℃）
Compensation Temperature：-20～80℃
Medium Temperature：-40～125℃

Supply Voltage ：24VDC
Output Signal：4～20mADC，0.5～4.5VDC etc.

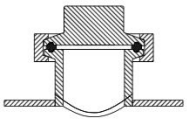
Ingress Protection of Shell：IP65
Electrical Connection：DIN43650，cable outlet, etc.

Structure Drawings (unit:mm)

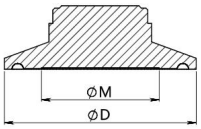


Pressure Port (unit:mm)

Installation Instruction



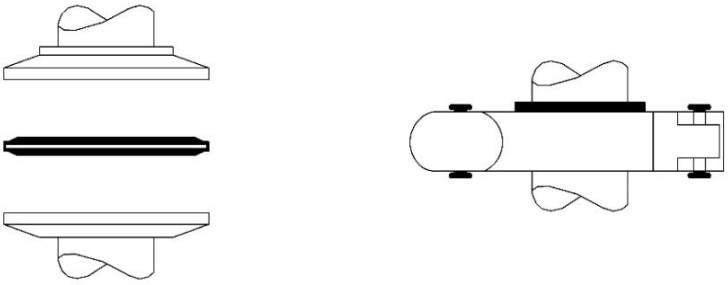
Dimensional Drawing



Standard	Spec	Dimension(ΦD)	Diaphragm Dimension(ΦM)
Tri-Clamp	1-1/2”	50.5	30
Tri-Clamp	2”	64	42

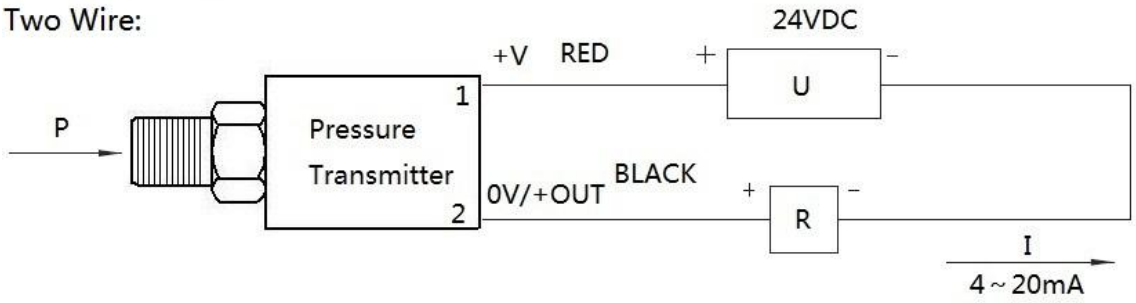
Process Connection

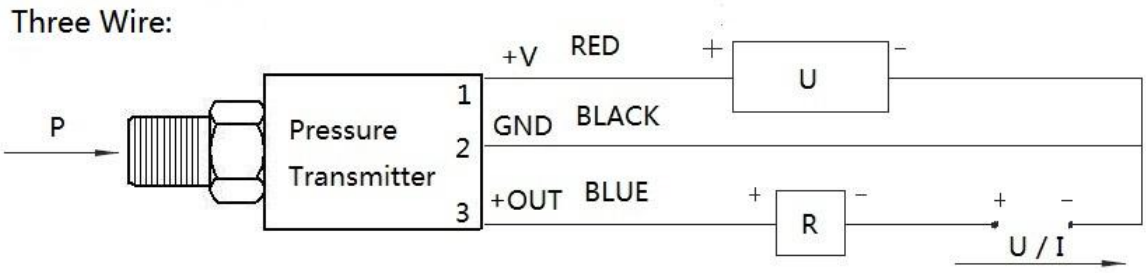
Clamp Installation: choose the gasket that conforms to the hygiene standard to avoid the measurement error caused by over-locking the clamp and squeezing the gasket and diaphragm



Electrical Connection

Cable Outlet	M12×1	Hirschman	Two Wire Current	Three Wire Voltage
RED	1	1	Power+（+V）	Power+（+V）
BLACK	2	2	Power-（0V/+OUT）	Common Port (GND)
BLUE	3	3	N/A	Output+（+OUT）





Ordering Guide

Item NO.	Type					
HPM788	Ceramic Hygienic Pressure Transmitter					
	Pressure Range	Measuring Range				
	(0~X)kPa	Fill out X directly				
		Code	Output Signal			
		B1	(4～20)mA			
		B3	(0～10)V			
		B4	(0～5)V			
		B5	(1～5)V			
			Code	Thread Spec		
			K1	Tri-Clamp 1-1/2" Quick Clamp		
			K2	Tri-Clamp 2" Quick Clamp		
			K3	DIN11851 DN25 Joint Nut		
			K4	DIN11851 DN40 Joint Nut		
			K5	SMS DN1-1/2" Joint Nut		
			K6	SMS DN2" Joint Nut		
			F20	DN20 Flange Connection		
				Code	Electrical Connection	
				C1	DIN43650	
				C2	Cable Outlet	
				C5	M12×1	
					Code	Structure&Material
					M6	Ceramic Capacitor
						Code / Additional Functions
						Y2 / Protective Shell
						Y5 / Delicate Protecting Jacket
						S4 / Thread 304 Material
						S6 / Thread 316L Material
HPM788	(0~1)kPa	B1	K1	C1	M6	Y5 S6