

MPM4503 Pressure Transmitter

Introduction

MPM4503 Pressure Transmitter is a cost-effective product which adopts micro-fused technology pressure sensor and special designed amplifier circuit. With linear correction and temperature compensation, it can effectively resist overpressure, the sensing part is made of stainless steel which can solve the problem of momentary overload pressure and also could meet different needs for pressure measurement and control in various environmental conditions. The product is batch produced in automatic production line and all the specifications are strictly controlled. The whole transmitter experiences a strict testing for sensing element, semi-finished and completed product and aging screening, which makes it more stable and has a good consistency. It could be widely used in the fields like lo VF constant pressure water supply, compressor, T terminal, energy & water treatment system and building automation system, etc.



Features

- Micro-fused technology, dry-type structure;
- Water hammer preventing and cracking resistant;
- Compact structure, high cost-effectiveness, wild range of application Temperature compensation and linear correction.

Application

- Energy & Water Treatment System
- Building Automation System
- IoT Terminal
- VF constant pressure water supply
- Compressor

Specification

1. Basic performance parameters

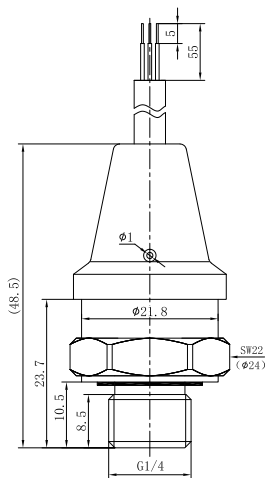
Pressure Range	0bar ~ 10bar、16bar、20bar、25bar、50bar
Overpressure	$\leq 2 \times FS$
Burst pressure	$\leq 5 \times FS$ (Max 100bar)
Accuracy	$\leq \pm 1\%FS$ (within compensated temperature range)
Compensated temperature	0°C ~ 70°C
Working temperature	-20°C ~ 100°C
Storage temperature	-40°C ~ 100°C
Vibration	5g, 10Hz ~ 500Hz
Shock	10g, 11ms
Insulation resistance	IP65 IP68 (Optional)
Weight	$\leq 100g$

2. Output parameters

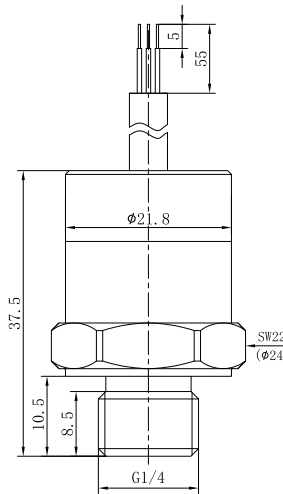
Output Signal	Power Supply	Output Format	Load Resistance	Transmission Distance
4mA~20mA DC (E)	10V~28V DC	2-wire	$\leq (U-10) / 0.02 (\Omega)$	< 1000m (@24V DC,load250Ω)
0.5V~4.5V DC(K2)	5V±0.1V DC	3-wire	$\geq 10k$	$\leq 5m$
0.5V~2.5V DC(W1)				
0.5V~2.5V DC(W2)	3.3V±0.1V DC			

Outline Construction

(unit:mm)



Common (IP65 Insulation resistance)



Customized (IP68 Insulation resistance)

Electrical Connection

Wire color	2-wire	3-wire
Red	Power (+V)	Power (+V)
Green	Null	Output+ (+OUT)
Black	Output+ (OV/+OUT)	Common (GND)

Structure Material

Medium contact part

Isolation diaphragm: stainless steel 17-4PH

Pressure port: stainless steel 304

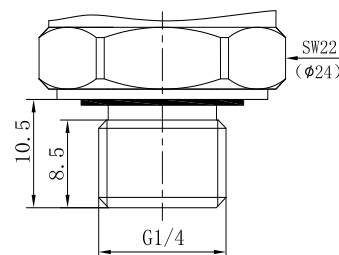
Sealing ring: NBR

Non-medium contact part

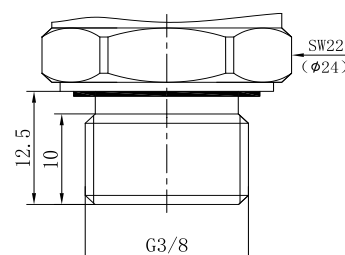
Cable: Polyurethane (5-core, φ5 mm)

Process Connection

(Unit:mm)



C2 (G1/4 male, face type seal)



C16 (G3/8 male, face type seal)

Order Guide

MPM4503	Pressure Transmitter		
	Range	0bar ~ 10bar、16bar、20bar、25bar、50bar	
	[0 ~ X]bar	X: Actual pressure range	
	Code	Electrical Connection	
	B2	Cable (Default 0.5m)	
	Code	Output Signal	
	E	4mA ~ 20mA DC	
	K1	0.5V~4.5V DC (5V±0.1V DC power)	
	W1	0.5V~2.5V DC (3.3V±0.1V DC power)	
	W2	0.5V~2.5V DC (5V±0.1V DC power)	
	Code	Process Connection	
	C2	G1/4male, face type sea	
	C16	G3/8male, face type sea	
MPM4503	[0 ~ 1]bar	B2 E C2	the whole spec.

Notes

1. The relationship of the power supply and the output signal is as followed;
2. If the user has special requirement, please feel free to contact our company.