

Pressure Transmitter MPM4503

Features

- Pressure Range:
0.3MPa, 0.6MPa, 1MPa, 1.6MPa, 2MPa, 2.5MPa, 5MPa optional
- Micro-fused technology, dry-type structure
- Water hammer preventing and cracking resistant
- Compact structure, high cost-effectiveness
- Temperature compensation and linear correction



Application

- IoT terminal
- Smart firefighting
- Smart agriculture irrigation
- Water pump, pipeline, water pressure control system

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 water hammer effect, 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 IoT terminal, smart firefighting, smart agriculture irrigation, water pump, pipeline and water pressure control system etc.

Specifications:

Pressure range: 0MPa~0.3MPa, 0.6MPa, 1MPa, 1.6MPa, 2MPa, 2.5MPa, 5MPa
 Accuracy: 1.0 (within compensated temperature range)
 Zero thermal error: ± 0.02 %FS/ $^{\circ}$ C Span thermal error: ± 0.02 %FS/ $^{\circ}$ C
 Over pressure: $2 \times$ FS Burst pressure: $5 \times$ FS (10MPa Max.)
 Power supply: 3.3V \pm 0.2V DC / 5V \pm 0.2V DC / 10V ~ 28V DC
 Output signal: 0.5V ~ 2.5V DC / 0.5V ~ 4.5V DC / 4mA ~ 20mA DC / I²C
 Compensated temperature: 0 $^{\circ}$ C~70 $^{\circ}$ C Storage temperature: -20 $^{\circ}$ C~100 $^{\circ}$ C
 Insulation resistance: $\geq 100\text{M}\Omega$ @250V DC
 Protection: IP67
 Media compatibility: the media compatible with 17-4PH SS and NBR

Construction Material

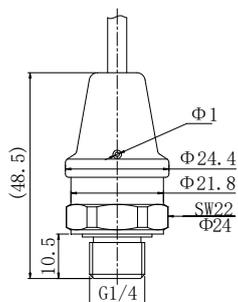
Housing: Stainless steel 304

O-ring: NBR

Pressure sensor: Stainless steel 17-4PH

Cable: Φ5.1mm Polyethylene special cable with three cores

Outline Dimension(unit: mm):



Electric Connection

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

Order Guide

MPM4503	Pressure Transmitter		
	Range	Measuring Range: 0MPa~0.3MPa, 0.6MPa, 1MPa, 1.6MPa, 2MPa, 2.5MPa, 5MPa	
	[0~X]MPa	X: Actual measuring range	
	Code	Power	
	V ₁	24V DC (default for the current output)	
	V ₆	5V DC	
	V ₇	3.3V DC	
	Code	Output Signal	
	E	4mA~20mA DC	
	K	0.5V~4.5V DC	
	W	0.5V~2.5V DC	
	C	I ² C (10%~90%) (customized outline optional)	
	Code	Others	
	B ₂	Cable (default length is 0.5meter, for more length of cable or other electrical connection, please indicate in the purchase order)	
	C ₂	G1/4 male	
	C ₆	NPT1/4 male	
	C ₇	NPT1/8 male	
	C ₁₆	G3/8 male	
MPM4503	[0~1]MPa	V ₆ K B ₂ C ₂	Complete Part Number

Order Notes:

1. The relationship of the power supply and the output signal

Power Supply	Output Signal
3.3V DC(V7)	0.5V~2.5V DC(W), IIC(C)
5V DC(V6)	0.5V~2.5V DC(W), 0.5V~4.5V DC(K), IIC(C)
24V DC(V1)	4mA~20mA DC(E)

2. Customization is available