MPM4730 Intelligent Pressure Transmitter

Features

·4～20mADC 2-wire current output;

·Digital compensation and non-linearity correction technics;

·-10℃～80℃ digital wider temperature compensation;

·RS485 communication interface or HART communication protocol（optional）;

·Netting available;

·Full stainless steel construction, compact size, light weight;

·Special requirement available;

·RoHS certificated;

Introduction

MPM4730 pressure transmitter is the highly accurate and stable intelligent pressure transmitter. It uses digital temperature compensation,non-linearity correction technics and the most advanced transmitter production technique, the whole product has compact size, high accuracy, light weight and wider pressure range, can be used for flow pressure precise measurement. The product will instead the 2-wire working 4~20mADC output analogous signal.

Specifications

Basic range（MPa）	-0.1	0.1	0.2	0.35	0.7	1.0	2.0	3.5	7	10	20	35	60	100
Overpressure（MPa）	-0.1	0.15	0.3	0.5	1.0	1.5	3.0	5.0	10	15	30	50	90	110

Note: the min.shrinked available pressure range is 1/5 of basic range;

For the pressure range between min.range and max.range, but not indicated in the above table, we enlarge the above basic pressure range to produce (overpressure unavailable);

Total accuracy ①	±0.075%FS（min.） ±0.15%FS（typ.） ±0.25%FS（max.）
Stability	±0.2%FS/year
Compensated temp. ②	(-10～80)℃
Operation/storage temp.	(-40～80)℃
Power supply	(8～28)VDC（RS485）/(12～30)VDC（HART）

Output	(4～20)mADC
	RS485/HART（optional）
Load	(4～20)mADC output,（U-8V/12V）/0.02A（Ω）
	RS485 bus line could connect with 99 transmitters
Electric connection	DIN43650　4-pin plug（RS485 socket inside）
	7-pin plug（for RS485 interface output at local place）
	Φ7.2mm shielding cable
Insulation	100MΩ/50V
Shock	20g，(20～5000)Hz
Impact	20g，11ms
Protection	IP65（B1、B2）　　IP63（B3）
Media compatibility	Diaphragm: SS 316L
	Housing: SS 1Cr18Ni9Ti
	O-ring: Viton
Weight	~160g

①Total accuracy: including linearity, hysteresis, repeatability and thermal error.

②For special temperature requirement, please feel free to contact our company.

Outline Construction

（Unit: mm）

B₁　　　　B₂　　　　B₃
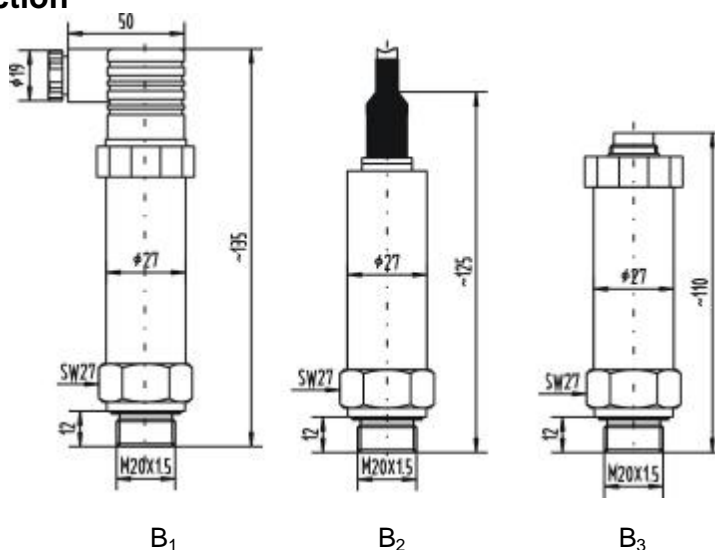
Electric Connection

Transmitter connecting the air through plug or cable:

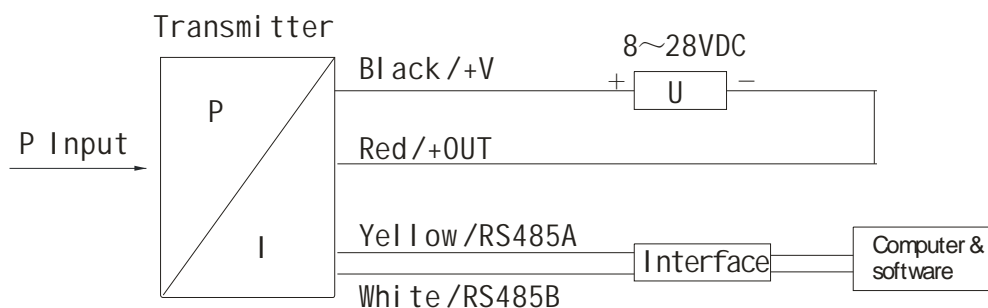| Function	Inner plug pin color	Outer plug connection		
		4-pin plug	Wire color	7-pin plug
+V	1（black）	1	Black	1
OUT/GND	2 （red）	2	Red	2
RS485B	4（white）	⏚	White	5
RS485A	5（yellow）	3	Yellow	4

a). Electric Connection for transmitter with 4～20mADC output
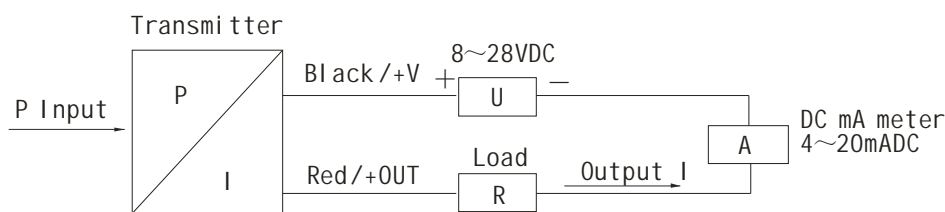
b). Electric connection for transmitter with RS485 interface
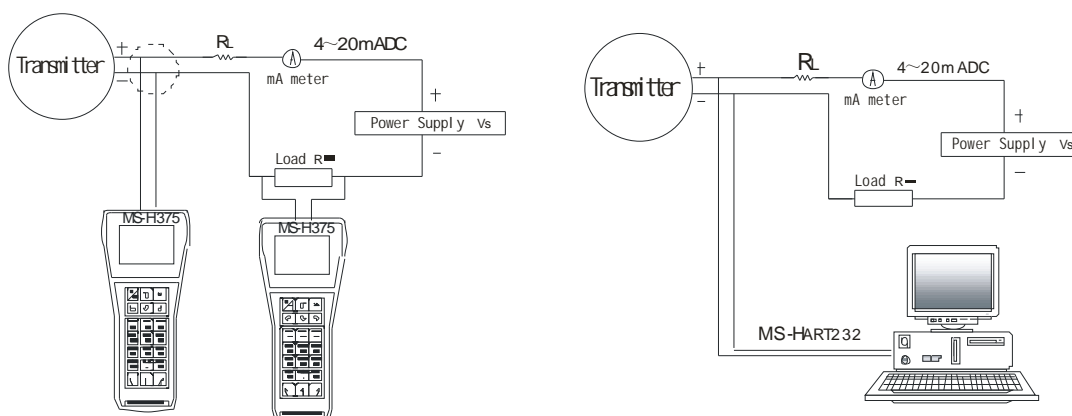
c). Wiring for HART®transmitter connecting with hand communicator

Assistant Software

a). Transmitter Software for RS485 Interface

MS Setonline Software

RS232/485 conversion module is used to communicate with RS485 interface, display actual pressure, set new zero, and analog output and transmitter address.

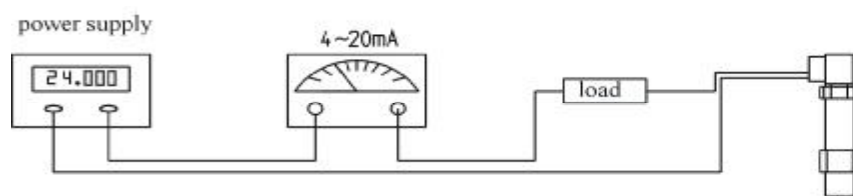Note: "MS Setonline" software could be downloaded from our website www.microsensor.cn

b). Software for HART® transmitter
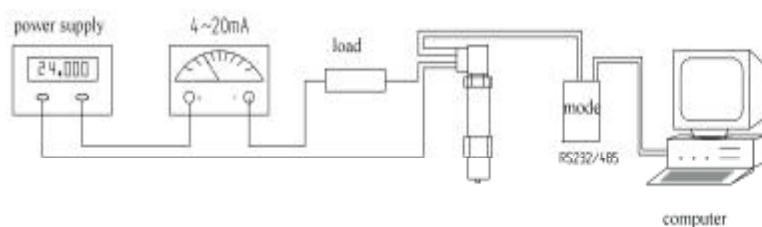
MS-C100A software

Through MS-HART232 conversion module, the user could calibrate and adjust HART® transmitter.
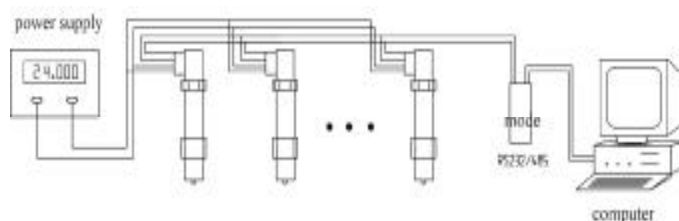
Local Application

2-wire local pressure measurement

Calibration with computer

Transmitter with RS485 interface

Order Guide

MPM4730	Intelligent Pressure Transmitter					
	Range	Messure range: kPa or MPa				
	[0～X]kPa	-0.1…0～0.01…100MPa, X=actual measure range				
		Code	Output signal			
		E	4～20mADC			
		R_4	RS485 communication interface			
		H	HART® communication protocol			
			Code	Construction material		
				Diaphragm	Pressure port	Housing
			22	SS 316L	SS	SS
			24	SS 316L	SS 316L	SS 316L
				Code	Others	
				B_1	4-pin Hirschmann plug connection	
				B_2	Cable connection, default cable length: 1.5m	
				B_3	7-pin plug connection	
				P	Flush diaphragm, G1/2 male	
				C_1	M20×1.5 male, face type seal	
				C_3	G1/2 male	
				C_4	G1/4 female	
				C_5	M20×1.5 male, waterline seal	
				G	Gauge	
				S	Sealed gauge	
				A	Absolute	
MPM4730	[0～100]kPa	ER_4	22	B_3C_1G	the whole spec	

Order Note

1. For RS485 interface transmitter, please select B2 cable connection output or B3 7-pin plug connection;

2. Flush diaphragm transmitter's pressure range: 0～70kPa…35MPa

3. If the user has special requirement, please feel free to contact our company.