

MPM486 Intelligent Pressure Transmitter



Features

- 4~20mA current output together with HART (2-wire);
- digital compensation and linearity correction;
- -10°C ~80°C digital wider temperature compensation;
- Local and long-distance zero, range adjustment;
- Local key operation, easy configuration;
- Protection IP65.

Introduction

MPM486 HART intelligent pressure transmitter is an intelligent pressure measurement product with high accuracy, high stability, multi-parameter and four and a half digits LCD display. It conforms to HART protocol. The users could manage, adjust or monitor the process variables by HART communicator, and it could also be configured by key-press at local working place.

The product uses the most advanced digital technique, temperature compensation, linearity correction and reliable ex-proof construction for production. The whole product has high accuracy, wider temperature compensation range and standard signal output to measure flow pressure precisely.

MPM486 transmitter is 2-wire instead of 4~20mA ADC analog output, can be communicated with Micro Sensor ROSEMOUNT 275 hand-communicator and MS-H375 hand-communicator together. Electromagnetic radiation conforms to IEC801 standard.

Specification

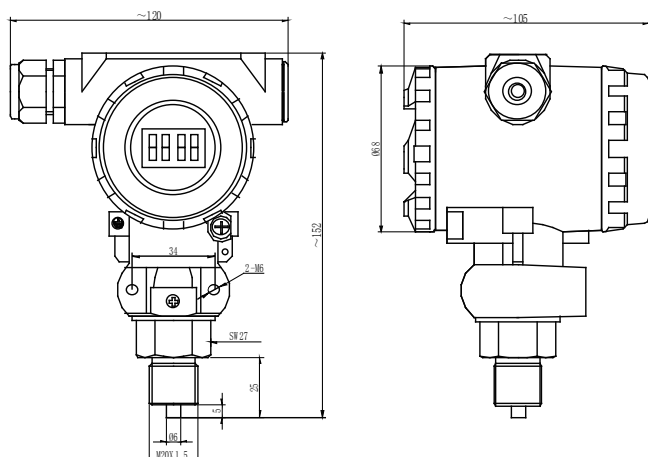
Code	02	03	07	08	09	10	12	13	14	15	17	18	19	20
Unit	kPa							MPa						
Pressure	0-20 ~ 0-70	0-30 ~ 0-100	0-60 ~ 0-200	0-100 ~ 0-350	0-200 ~ 0-700	0-0.3 ~ 0-1.0	0-0.6 ~ 0-2.0	0-1.0 ~ 0-3.5	0-2.0 ~ 0-7.0	0-1.0 ~ 0-10	0-4.0 ~ 0-20	0-8.0 ~ 0-35	0-16 ~ 0-70	0-20 ~ 0-100
Upper limit	70	100	200	350	700	1.0	2.0	3.5	7.0	10	20	35	70	100
Over pressure	100	150	300	500	1000	1.5	3.0	5.0	10	15	30	52	100	110

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

	Specification	Unit
Accuracy	±0.1(typ.) ±0.25(max.)	%FS
Zero Thermal error	≤±0.25(in the whole operation temp.range)	%FS
FS Thermal error	≤±0.25(in the whole operation temp.range)	%FS
Stability	≤±0.25	%FS/year
Compensation temp.	-10~80	°C
Operation temp.	-20~80	°C
Storage temp.	-40~85	°C
Power supply	12~36	VDC
Digital output	4~20mADC output+ HART®	
Display	LCD indicator, 2 or 3 keys to calibrate	
Damp	0~32	s
Load	(U-12V)/0.02A	Ω
Insulation	100MΩ/50V	
Shock	20g, 20~5000Hz	
Impact	20g,11ms	
Diaphragm	Stainless steel 316L/tantalum	
Pressure port	Stainless steel 1Cr18Ni9Ti/hastelloy	
O-ring	Viton	
Weight	~1.7kg	

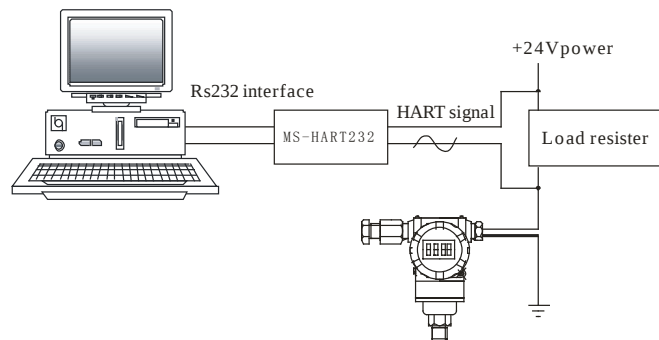
The min. available shrinked pressure range is 1/5 of basic pressure range.

Outline Construction (Unit: mm)

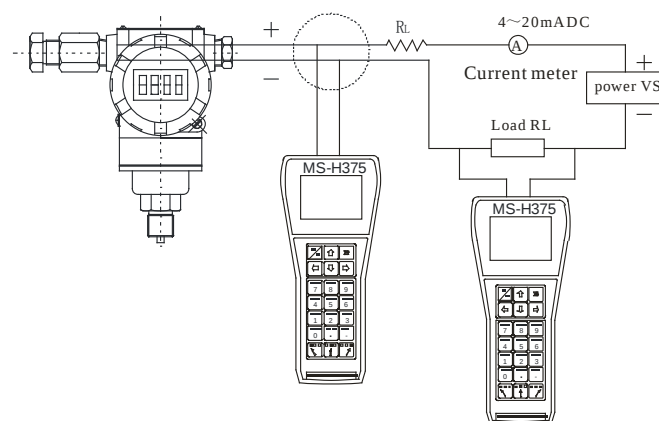


Electrical Connection

Transmitter Connecting with Computer

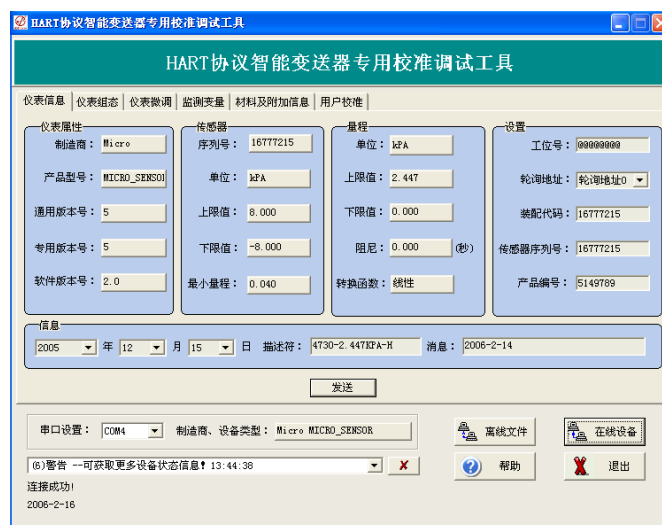


Transmitter Connecting with Hand-Communicator



Assistant Software

The user could calibrate and adjust transmitter with HART protocol through MS-HART232 transforming module.



Order Guide

MPM486		HART® Intelligent Pressure Transmitter						
	[0~X] kPa or MPa	Code	Pressure range kPa or MPa					
		02	0~20...70kPa			13	0~1.0...3.5MPa	
		03	0~30...100kPa			14	0~2.0...7.0MPa	
		07	0~60...200kPa			15	0~3.0...10.0MPa	
		08	0~100...350kPa			17	0~4.0...20.0MPa	
		09	0~200...700kPa			18	0~8.0...35.0MPa	
		10	0~0.3...1.0MPa			19	0~16.0...70.0MPa	
		12	0~0.6...2.0MPa			20	0~20.0...100.0MPa	
			Code	Output signal				
			E	4~20mADC + HART® communication protocol (2-wire)				
			Code	Construction material				
				Diaphragm	Pressure port	Housing		
				22	SS 316L	SS	Aluminum-alloy	
				25	Tantalum	SS	Aluminum-alloy	
				35	Tantalum	Hastelloy C	Aluminum-alloy	
				Code	Others			
				C ₁	M20×1.5 male, face type seal			
				C ₃	G1/2 male			
				C ₅	M20×1.5 male, waterline seal			
				P	Flush diaphragm, G1/2 male			
				G	Gauge			
				S	Sealed gauge			
				A	Absolute			
			</					

Notes

1. Flush diaphragm pressure range: 0~70kPa...35Mpa;
2. If the user has special requirement, please feel free to contact our company.