

# MPM486 HART<sup>®</sup> Intelligent Pressure Transmitter



## Features

- 4~20mA current output together with HART<sup>®</sup> (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<sup>®</sup> 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<sup>®</sup> protocol. The users could manage, adjust or monitor the process variables by HART<sup>®</sup> 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 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

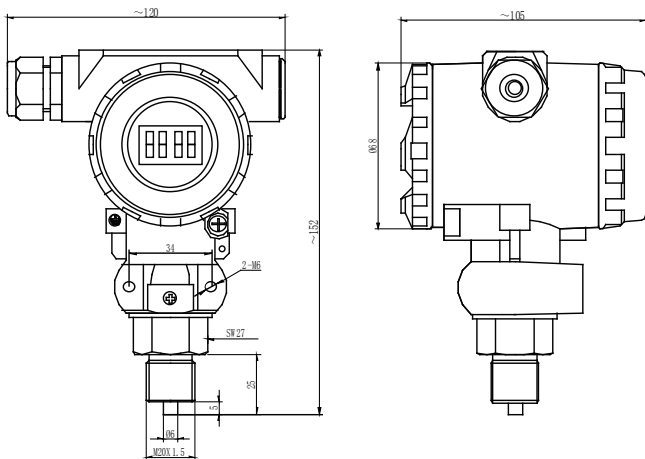
Code	02	03	07	08	09	10	12	13	14	15	17	18	19	20
Unit	bar													
Pressure	0-0.2 ~ 0-0.7	0-0.3 ~ 0-1	0-0.6 ~ 0-2	0-1 ~ 0-3.5	0-2 ~ 0-7	0-3 ~ 0-10	0-6 ~ 0-20	0-10 ~ 0-35	0-20 ~ 0-70	0-10 ~ 0-100	0-40 ~ 0-200	0-80 ~ 0-350	0-160 ~ 0-700	0-200 ~ 0-1000
Upper limit	0.7	1	2	3.5	7	10	20	35	70	100	200	350	700	1000
Over pressure	1	1.5	3	5	10	15	30	50	100	150	300	520	1000	1100

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.	-30~80	°C
Storage temp.	-40~85	°C
Power supply	13~36	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 304/hastelloy	
O-ring	Viton	
Weight	~1.7kg	

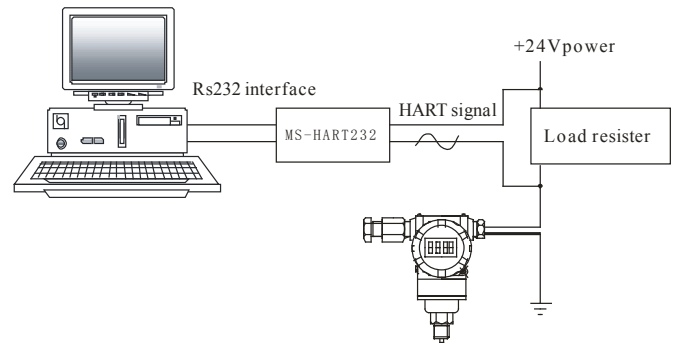
The min. available shrunked pressue range is 1/5 of basic pressure range.

### Outline Construction (Unit: mm)

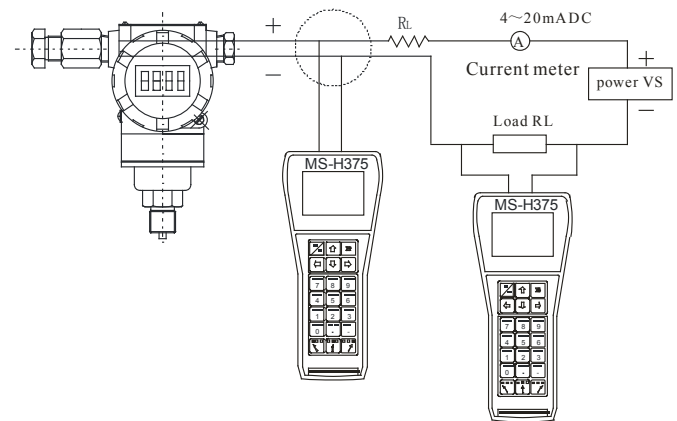


### Electrical Connection

#### Transmitter Connecting with Computer

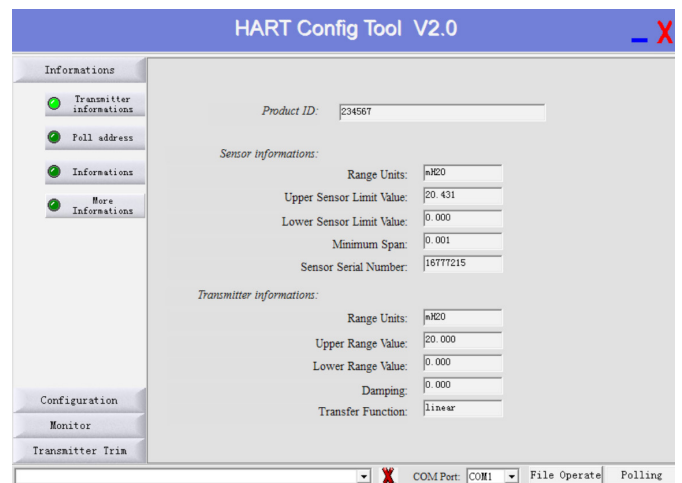


#### Transmitter Connecting with Hand-Communicator



### Assistant Software

The user could calibrate and adjust transmitter with HART<sup>®</sup> protocol through MS-HART232 transforming module.



## Order Guide

MPM486		HART® Intelligent Pressure Transmitter					
Code		Pressure range bar					
[0~X] kPa or MPa	02	0~0.2...0.7		13	0~10...35		
	03	0~0.3...1		14	0~20...70		
	07	0~0.6...2		15	0~30...100		
	08	0~1...3.5		17	0~40...200		
	09	0~2...7		18	0~80...350		
	10	0~3...10		19	0~160...700		
	12	0~6...20		20	0~200...1000		
		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 <sub>1</sub>	M20×1.5 male, face type seal				
		C <sub>3</sub>	G1/2 male				
		C <sub>5</sub>	M20×1.5 male, waterline seal				
		P	Flush diaphragm, G1/2 male				
		G	Gauge				
		S	Sealed gauge				
		A	Absolute				
MPM486	[0~2]bar	E	22	C <sub>1</sub> G	the whole spec.		

## Notes

1. Flush diaphragm pressure range: 0~0.7bar...350bar;
2. If the user has special requirement, please feel free to contact our company.