



Applications

Process control fields in petroleum, chemical, metallurgy, electric power, food, papermaking, medicine, machinery manufacturing, scientific experiments and aerospace industries

product description

PM800A intelligent pressure transmitter is a high-performance pressure transmitter developed with advanced MEMS pressure sensor technology and temperature compensation technology. The product adopts monocrystalline silicon MEMS suspension design and internal high-precision anti-surge circuit design to realize the perfect combination of pressure and temperature compensation, and can measure the pressure of gauge pressure or absolute pressure accurately and stably for a long time. Products are widely used in industrial process control, petroleum, chemical, gas, marine, electric power and other industries.

Features

- Using high stability composite silicon sensor
- Wide range coverage 0-0.5kPa ~ 100MPa
- Two-wire system, 4 ~ 20mA analog output, HART® protocol digital communication
- Smart LCD head with backlight
- Both remote and local zero and span adjustment
- Complete variety, high precision and good stability
- Flameproof shell structure, strong anti-frequency interference ability
- High static pressure overload protection
- No mechanical transmission parts, anti-vibration and durable
- Anti-surge protection circuit design

technical parameter

◊ Measuring range: -100kPa...0 ~ 1kPa...100MPa

◊ Pressure type: gauge pressure, absolute pressure

◊ Power supply output: 4 ~ 20mA+HART protocol (12V ~ 26V, 24V recommended)

◊ Accuracy: $\pm 0.075\%FS$; $\pm 0.1\%FS$; $\pm 0.3\%FS$

◊ Zero temperature drift: $\pm 0.1\%FS/70^{\circ}C$

◊ Full-scale temperature effect: $\pm 0.1\%FS/70^{\circ}C$

◊ Ambient temperature: $-30^{\circ}C \sim 80^{\circ}C$; with LCD head $-30^{\circ}C \sim 70^{\circ}C$

◊ Medium temperature: $-40^{\circ}C \sim 110^{\circ}C$

◊ Storage temperature: $0^{\circ}C \sim 45^{\circ}C$

◊ Insulation resistance: $\geq 100M\Omega/500VDC$ ($200M\Omega/250VDC$)

◊ Protection level: IP65/IP66

◊ Explosion-proof grade: Exd II CT6 Gb, Ex tDA21 T80°C

◊ Pressure overload: see range selection

◊ Response time: $\leq 5ms$ (up to 90%FS)

◊ Long-term stability: $\pm 0.1\%FS/year$

◊ Inlet pressure head material: 304 stainless steel

(316L stainless steel can be customized)

◊ Diaphragm material: 316L stainless steel (Ha C, tantalum can be customized)

◊ Shell material: Die-cast aluminum epoxy coating

◊ Electrical interface: M20X1.5

◊ Installation interface: M20X1.5

◊ Weight: 2kg (excluding options)

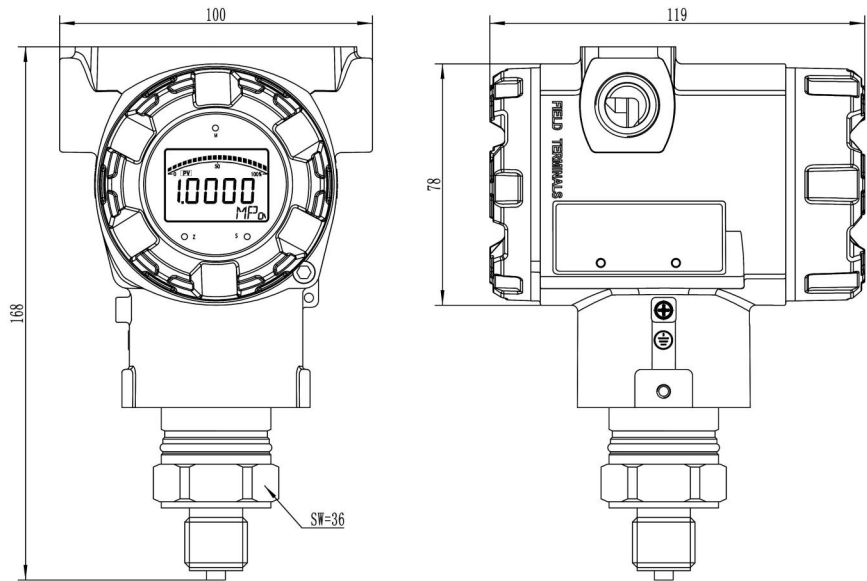
Signal output

signal type	signal
2-wire	4...20mA
3-wire	4...20mA
	HART

Wiring diagram

cross terminal			
	Function	2-wire	3-wire
	Positive power supply	1	1
	current positive	2	2
	HART		3

Dimensions (mm)



Range code

Standard range	Gauge Code	Absolute pressure code	Standard range	Gauge Code	Standard range	Range code
0...50 mbar	B005	A005	0...60 bar	B60	-10...10 KPa	F10
0...100 mbar	B01	A01	0...100 bar	B100	-50...50 KPa	F50
0...350 mbar	B035	A035	0...160 bar	B160	-100...100 KPa	F100
0...600 mbar	B06	A06	0...250 bar	B250	-100...0 KPa	F110
0...1 bar	B1	A1	0...400 bar	B400	-100...900 KPa	F900
0...2 bar	B2	A2	0...600 bar	B600		
0...6 bar	B6	A6	0...1000 bar	B1000		
0...10 bar	B10	A10	0...1500 bar	B1500		
0...25 bar	B25	A25	0...2500 bar	B2500		

Selection table

PM800A-	-	L	A	1	M20M	M20K	S	detail
PM800A								Intelligent pressure transmitter
	B005							Range (see range table for details)
		L						Sensor Diaphragm Material: 316L Stainless Steel
		H						Sensor Diaphragm Material: C276 Hastelloy
		T						Sensor diaphragm material: Ta tantalum diaphragm
			A					output signal:4~20mA+HART® protocol (12-24V)
			R					output signal:RS485
				075				Accuracy:0.075% FS
				1				Accuracy:0.1% FS
				2				Accuracy:0.2% FS
				3				Accuracy:0.3% FS
					M20M			Thread interface: M20*1.5 external thread
					G12M			Thread interface: G1/2 external thread
					N14M			Thread interface: NPT1/4 external thread
					N14K			Thread interface: NPT1/4 internal thread
						M20K		Electrical interface: M20*1.5 internal thread
						N12K		Electrical interface: NPT1/2 internal thread
						G		Electrical Gland
							S	No explosion proof
							E	Explosion-proof (ExdIIC T6)