Smart Pressure Transmitter PM800A

KATU卡图

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

Applications

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

technical parameter

◇ **Measurement range:**	-100kPa... 0 to 1 kilopascal... 40MPa	◇ **Flameproof rating:**	Exd II CT6 Gb、Ex tDA21 T80℃
◇ **Pressure type:**	Gauge pressure, absolute pressure	◇ **Pressure overload:**	See range selection
◇ **Power supply output:**	4-20mA + HART protocol (12V - 26V, recommended 24V)	◇ **Response time:**	≤ 5ms (rising to 90% FS)
◇ **Accuracy:**	±0.075% FS; ±0.1% FS; ±0.3% FS	◇ **Long-term stability:**	±0.1% FS/year
◇ **Zero point temperature drift:**	±0.1% FS at 70℃	◇ **Inlet pressure head material:**	304 stainless steel (316L stainless steel available upon customization)
◇ **Full-scale temperature influence:**	±0.1% FS at 70℃	◇ **Diaphragm material:**	316L stainless steel (hafnium C, tantalum available upon customization)
◇ **Ambient temperature:**	-30℃ - 80℃; with LCD display -30℃ - 70℃	◇ **Shell material:**	Cast aluminum with epoxy resin coating
◇ **Medium temperature:**	-40℃ - 110℃	◇ **Electrical interface:**	M20X1.5
◇ **Storage temperature:**	0℃ - 45℃	◇ **Installation interface:**	M20X1.5
◇ **Insulation resistance:**	≥100MΩ / 500VDC (200MΩ / 250VDC)	◇ **Weight:**	2kg (excluding accessories)
◇ **Protection class:**	IP65/IP66		

Signal output

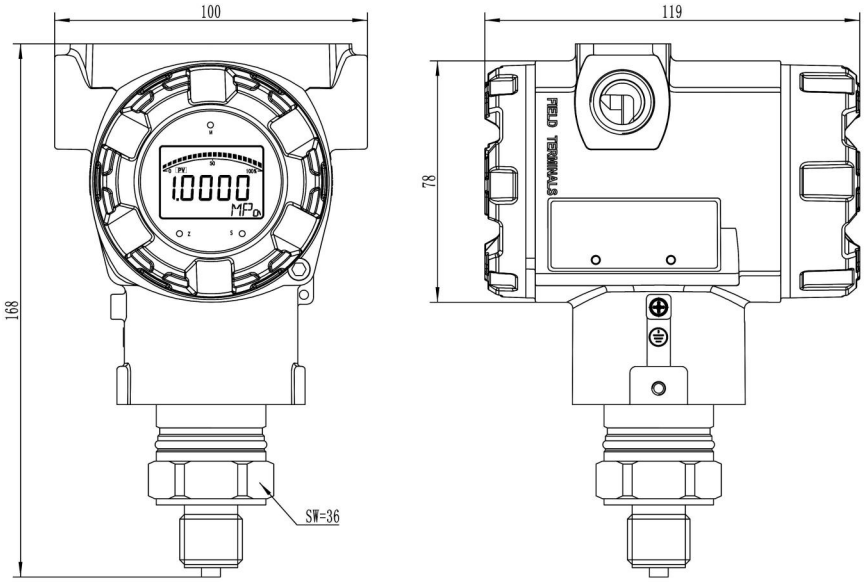
signal type	signal
2-wire	4...20mA
3-wire	4...20mA
	HART

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
0...50mbar	B005	A005
0...100mbar	B01	A01
0...350mbar	B035	A035
0...600mbar	B06	A06
0...1bar	B1	A1
0...2bar	B2	A2
0...6bar	B6	A6
0...10bar	B10	A10
0...25bar	B25	A25

Standard range	Gauge Code
0...60bar	B60
0...100bar	B100
0...160bar	B160
0...250bar	B250
0...400bar	B400

Standard range	Range code
-10...10KPa	F10
-50...50KPa	F50
-100...100KPa	F100
-100...0KPa	F110
-100...900KPa	F900

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
							E	Explosion-proof
							S	No explosion proof