

## PM431 Intelligent small outline digital pressure sensor

#### **MAIN FEATURES**

- Measuring range: 0~5kPa~100Mpa
- Stability: ≤ 0.1% FS/year, Temperature drift: ≤ 0.005%FS/°C
- Anti-electromagnetic interference design for harsh environments
- Parameters can be adjusted with buttons
- 4-digit LED display
- Small size, showing eye-catching
- 316L metal diaphragm, strong corrosion resistance

#### **OVERVIEW**

PM431 Intelligent small outline digital pressure transmitter adopts imported high-quality pressure sensor chip, builtin characteristic correction memory E2PROM to correct sensor temperature environment, pressure and input/output characteristics, and through CUP microprocessor operation, automatic temperature compensation, nonlinear correction, signal amplification, V / I conversion and A / D conversion, output 4 ~ 20mA or 1~5V standard signal. The transmitter's small form factor, excellent temperature characteristics, pressure characteristics and input and output characteristics can replace ordinary pressure transmitters. Widely used in the fields of automated detection and control of petroleum, chemical, electric power and environmental protection.

#### **SPECIFICATION**

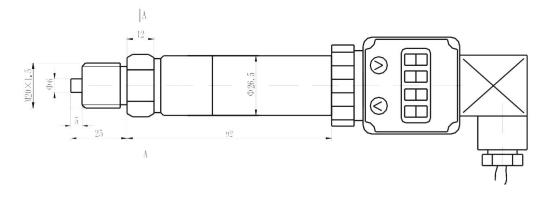
Items	Parameter			
Range	0~10kPa~100Mpa			
Output Signal	4~20mA(1~5V) 2 wire or customized			
Display	4-digit LED			
Accuracy	0.1	0.2	0.3	
Nonlinear, Hysteresis, Repeatability	≤0.1%FS	≤0.2%FS	≤0.3%FS	
Zero drift	≤0.05%FS/4h	≤0.1%FS/4h	≤0.2%FS/4h	
Zero point and sensitivity temperature drift	≤0.005%FS/°C	≤0.01%FS/°C	≤0.02%FS/°C	
Long-term stability	≤0.1%FS/year, ≤0.2%FS/year			
Operating Voltage	+12 ~ +36V (Default 24V)			
Working temperature	-20°C~+85°C			
Overload capability	300%			
Working life	Pressure cycle >1×10^8 (25°C)			
Load Resistance	( $\Omega$ )R=(U-12.5)/0.02-R <sub>D</sub> (U=Voltage, R <sub>D</sub> =Cable internal resistance)			
Response time	≤1(10~90%)ms			
Measuring medium	All corrosive media compatible with 316L			
Diaphragm material	316L stainless steel			
Housing material	1Cr18Ni9Ti or Aluminum alloy			
Interface	M20×1.5 or customized			
Protection level	IP67			

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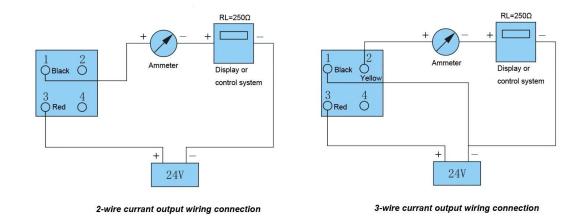


# **OUTLINE CONSTRUCTION AND CONNECTION**

Unit: mm



### **ELECTRIC CONNECTION**



### **ORDER CODE**

Code					Description
PM-					Model code
	В				Anti-corrosion gauge pressure
	G				Anti-corrosion absolute pressure
		FS			Pressure full scale
			I		Current output
			Х		External structure
				Z	Precision
				0	Other requirements
	G	FS	Z		Pressure full scale Current output External structure Precision

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