

## PE series engineering machinery special pressure sensor



### Features

- Measurement range: minimum 0-350KPa, maximum 0-70MPa can be customized
- 17-4PH or 316L stainless steel isolation, all stainless steel structure
- No O-ring in the pressure interface, no welding, no silicone oil, no leakage
- High precision: 0.25-0.5% (BFSL)
- High overload capacity and high reliability
- Diversified structure, small size
- Current / voltage multiple output options
- Multiple media compatible
- gauge pressure, absolute pressure
- Non-standard customization

### Product description

PE series engineering machinery special pressure sensor is based on silicon strain technology and traditional metal strain gauge principle. The new technology uses silicon strain gauge and high temperature sintering process, which makes the sensitivity of pressure sensor more than 5 times, and then cooperate with proprietary Digital amplifier circuits and digital temperature compensation circuits ensure that the electrical characteristics, temperature characteristics and long-term stability of the sensor are guaranteed. The sensor interface and housing are made of stainless steel for excellent corrosion resistance. This product can be widely used in various construction machinery, such as injection molding machines, die casting machines and so on.

### Performance parameters (@25°C)

Measuring range	Minimum 0-350KPa, maximum 0-70MPa (please contact factory for other ranges)
Precision	±0.5%FS (BFSL), ±0.25%FS (BFSL) (other precision optional)
Zero deviation	±0.5%FS
Full scale deviation	±0.5%FS
Long-term stability	±0.25% FS/year (typical)
Pressure cycle	>100 million full pressure cycles
Overload pressure	2 times rated pressure
Destruction pressure	5 times rated pressure (maximum 150MPa)
Comprehensive error	±1% FS (within the compensation temperature range)
Media contact material	17-4PH/316L
shell	304 stainless steel

*Note: Other parameters can be customized according to customer's special needs.*

## Electrical parameters

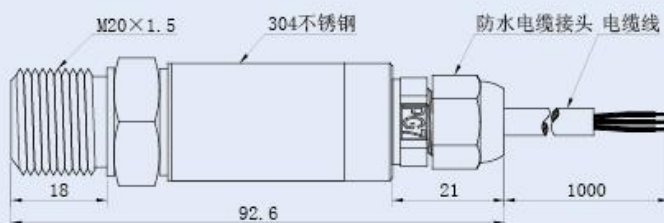
Output	4 ~ 20mA	1 ~ 5VDC, 1 ~ 6VDC	0 ~ 50mV, 0 ~ 100mV	Proportional output
powered by	10 ~ 30VDC	10 ~ 30VDC	5VDC	5VDC
Output impedance	> 10k Ohms	< 100 Ohms	2000 Ohms	< 100 Ohms
Supply current	< 24mA	< 10mA	< 5mA	< 10mA
Frequency response	(-3dB):DC to 250Hz	(-3dB):DC to 1kHz	(-3dB):DC to 5kHz min	(-3dB):DC to 1kHz
Zero deviation	< ±1% of FS	< ±1% of FS	< ±2% of FS	< ±1% of FS
Full scale deviation	< ±1% of FS	< ±1% of FS	< ±2% of FS	< ±1% of FS
Output load	0-1000 Ohms@10-30 VDC	> 100K Ohms	> 1M Ohms	> 100K Ohms
Reverse polarity protection	Have	Have	—	no

## Environmental requirements

range of working temperature	-40°C ~ 125°C
Compensation temperature range	0 ~ 70°C, -25°C ~ 85°C optional
Insulation resistance	>100M/250VDC
Shock	50g, 11msec, 1/2 sine wave
vibration	(Refer to MIL Standard 202F, Program 213B, Condition A)
Anti-electromagnetic / anti-RF	±20g (refer to MIL Standard 810C, Program 514.2, Figure 514.2-2, Curve L)

## Dimensions

### 输出类型 尺寸图



#### 毫伏输出

红线: 电源+  
黑线: 电源-  
白线: 输出+  
绿线: 输出-

#### 电压输出

红线: 电源+  
黑线: 电源-  
白线: 输出

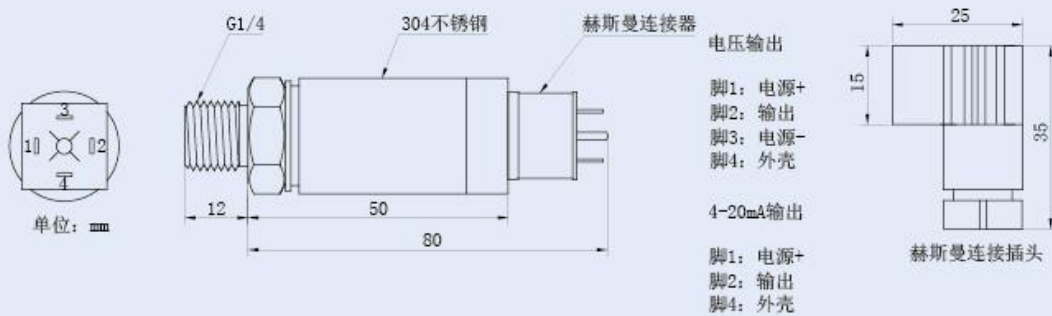
#### 4~20mA输出

红线: 电源+  
黑线: 输出

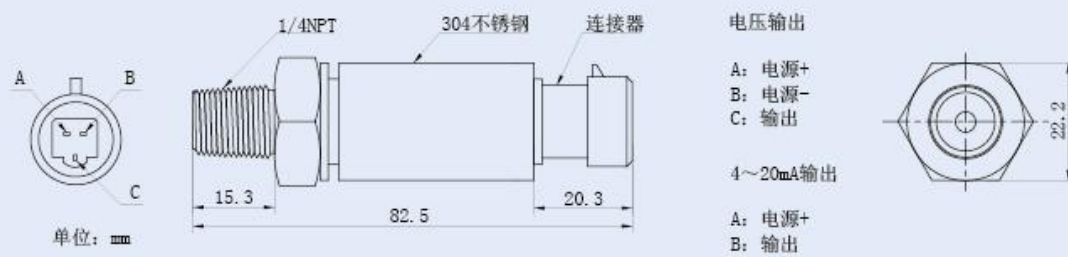


单位: mm

输出类型 尺寸图



输出类型 尺寸图



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