# DC series low cost pressure sensor

## Features

- Measurement range: minimum 0-350KPa, maximum 0-100MPa
- 17-4PH stainless steel isolation, all stainless steel structure
- No O-ring in the pressure interface, no welding, no silicone oil, no leakage
- High overload capability and high reliability
- Diversified shape and small size
- Current / voltage multiple output options
- Multiple media compatible

## Product description

DC series of low-cost industrial pressure sensors are fabricated using silicon strain technology and precision digital amplifier circuits. The stainless steel isolating diaphragm is optimized to ensure good corrosion resistance and long-term stability, and has good adaptability to pulsating pressure and overload pressure. The sensor is precision compensated at temperatures ranging from 0 to 55 °C. In addition to the universal 1/4NPT, G 1/4, M20*1.5 thread, the pressure port of the sensor can also be produced according to user requirements. Various types of amplified output can be selected, which are widely used in industrial process control systems, aviation, aerospace, automotive, refrigeration, medical equipment and other fields.

## Applications

- Air compressor, natural gas compressor
- Hydrogen, oxygen equipment, air conditioning and refrigeration equipment
- High-power diesel engine
- Industrial and civil water pumps
- Injection molding machine, die casting machine, construction machinery
- Pressure measurement in home appliances and other civilian equipment

## Parameter (@25°C)

| | |
|---|---|
| Measuring range | Minimum 0-350KPa, maximum 0-100MPa (please contact factory for other ranges) |
| Precision | ±0.5%FS (BFSL) (other precision optional) |
| 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 | ±2% FS (within the compensation temperature range) |
| Media contact material | 17-4PH |
| shell | 304 stainless steel |

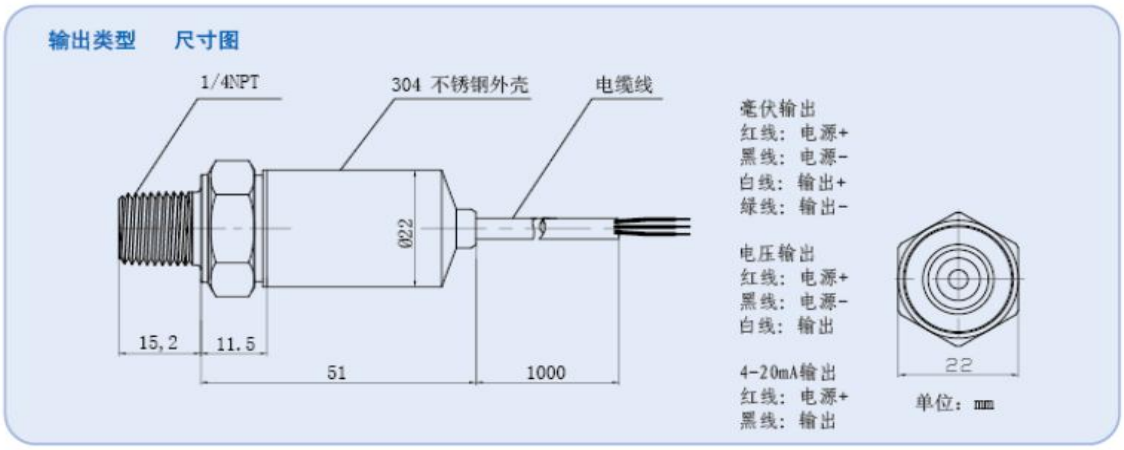
## Electrical parameters

| 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@10-30VDC | > 100K Ohms | > 1M Ohms | > 100K Ohms |
| Reverse polarity protection | Have | Have | — | no |

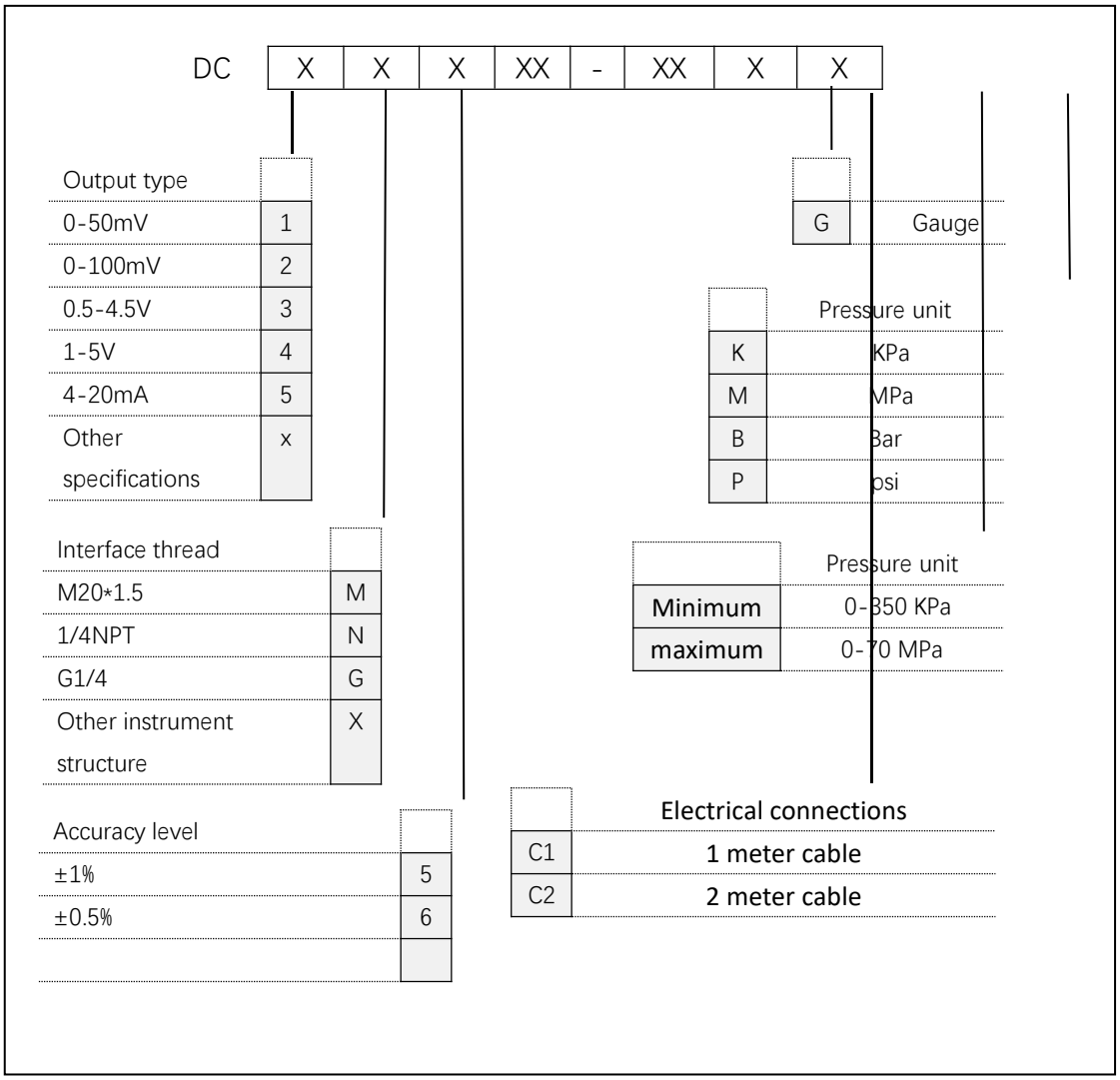
## Environmental requirements

| | |
|---|---|
| range of working temperature | —20℃ ~ 85℃ |
| Compensation temperature range | 0 ~ 55℃ |
| Insulation resistance | >100M/250VDC |
| Shock | 50g, 11msec, 1/2 sine wave (Refer to MIL Standard 202F, Program 213B, Condition A) |
| vibration | ±20g (refer to MIL Standard 810C, Program 514.2, Figure 514.2-2, Curve L) |
| Anti-electromagnetic / anti-RF | EN 50081-2 EN 50082-2(10V/M,26-1000MHz) EN 61326 |

## Dimensions



## Product model

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