

DYK Series Electronic Pressure Sensor

DYK系列电子压力传感器

Brief Introduction 概述

The series of pressure sensor adopts dry ceramic piezoresistive pressure sensitive components with high precision and good stability, and reliable Amplifier chip. It can change the pressure of tested medium into standard signal. Automatic SMD, laser adjustment technology and advanced assembly process are applied to guarantee its high quality. The series of pressure sensor is a new type with international advanced technology, which is applicable to pressure control for automobiles and HVAC&R Equipments. Voltage output or electrical current output can be designed to customers' choice.

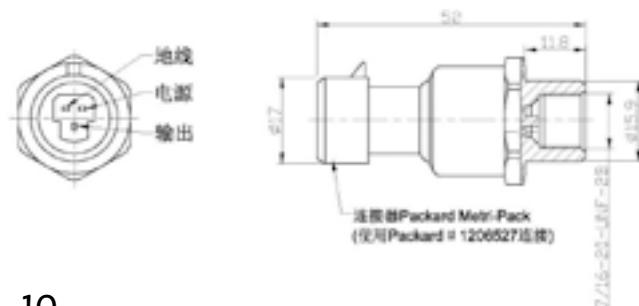
本系列压力传感器采用高精度、高稳定性的干式陶瓷压阻式压力敏感元件和高可靠性的放大芯片，将被测介质的压力转换成标准电信号。采用全自动贴片和激光调较技术及先进的装配工艺，确保了该产品的高品质。是一种具有国际先进技术水平的新型压力传感器。特别适用于汽车和空调制冷设备的压力控制。具有电压输出型和电流输出型供客户选择。

Features 产品特点

- ◆ Adopt advanced integration chip technology, with high precision, good consistency, perfect stability and quick response.
- ◆ Integrate the function of over-voltage and over-current protection and reverse protection, safe to use.
- ◆ Pass EMC test and have strong resistance to electromagnetic interference.
- ◆ With standard and cost-optimized design, the product is in smart size, easy to assemble, and with good quality at competitive price.

- ◆ 采用先进的整体化芯片技术，精度高、一致性好、稳定性好、响应速度快。
- ◆ 过压、过流及方向保护功能，使用安全可靠。
- ◆ 通过EMC试验，抗电磁干扰能力强。

Typical Outline Drawing 典型外形图

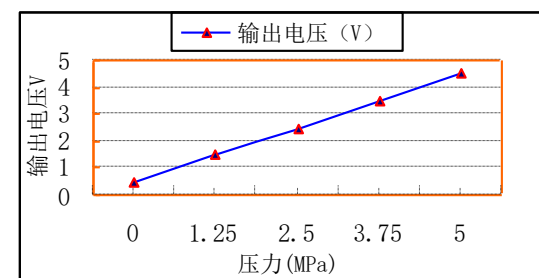


Designed Parameter 设计参数

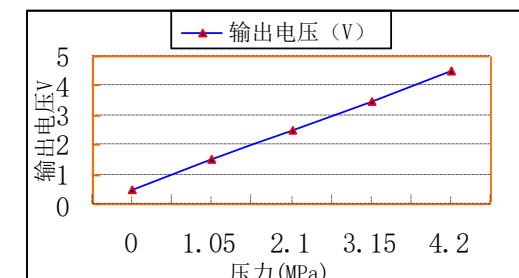
1. Measurement range: 0~50 bar.
2. Voltage of power Supply:
 - ◆ Voltage Input: 5±0.25VDC (voltage type). Positive overload protection at 16V and reverse protection at -14V.
 - ◆ Current Output: 8~30VDC; with reverse polarity protection
3. Output mode:
 - ◆ Voltage Output: Proportional voltage output 0.5~4.5V standard signal output.
 - ◆ Current Output: 4~20mA standard signal output.
4. Comprehensive Precision: ±2.5%FS
5. Working temperature: -40~125°C
6. Response time: < 1mS
7. Temperature shift: ±0.02% FS/°C
8. Linearity, delay and repeatability: < ±0.5% FS
9. Stability: better than 0.15% FS/year
10. Shell material: copper
11. Protection level of the shell: IP67
12. Thread connection: 7/16-20UNF (female flare type), designed to customers' choice.
13. Electrical connection: standard Packard Metri-Pack Connector.
14. Wire connection: three-wire voltage, red (+), black (ground) and green (output)

1. 量程范围: 0~50bar
2. 供电电压 输入电压: 5±0.25VDC(电压型); 16V正向过载保护, -14V方向保护
3. 输出方式 电压输出型: 比例电压输出0.5~4.5V标准信号输出
电流输出型: 8~30VDC; 带反极性保护
电流输出型: 4~20mA标准信号输出
4. 综合精度: ±2.5%FS
5. 工作温度: -40~125°C
6. 响应时间: <1mS
7. 温度漂移: ±0.02%FS/°C
8. 线性、迟滞、重复性: <±0.5% FS
9. 稳定性: 优于0.15%FS/年
10. 外壳材料: 铜
11. 外壳防护等级: IP67
12. 螺纹接口: 7/16-20UNF(内螺纹)用户可自选
13. 电器连接: 标准Packard Metri-Pack连接器
14. 接线方式: 三线制电压: 红(+黑(地)绿(输出))

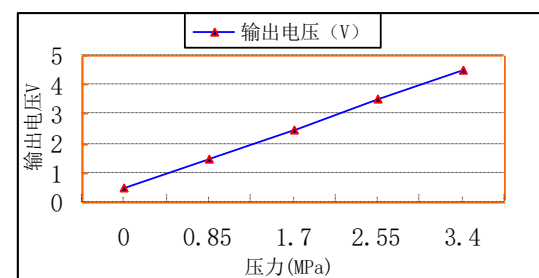
Typical relationship chart between Input Pressure and Output Signal of the pressure sensor 典型型号传感器输入压力与输出信号关系图



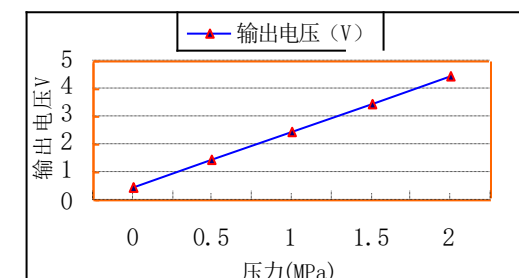
DYK BA050DV5-4.5



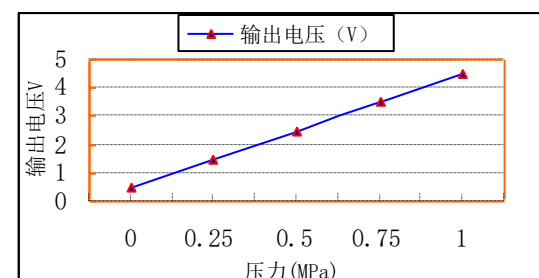
DYK BA042DV5-4.5



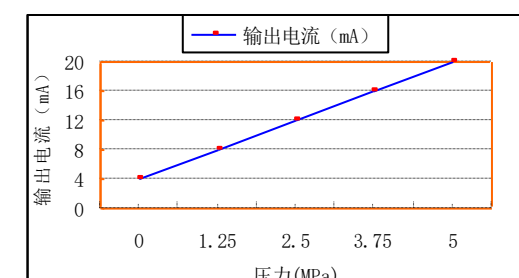
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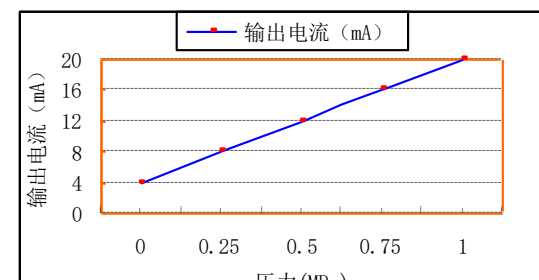
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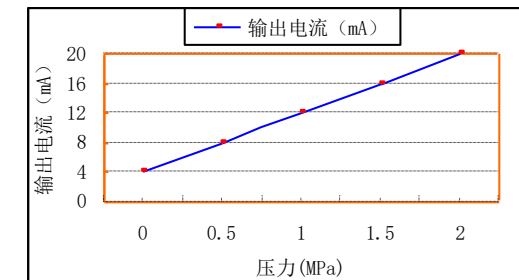
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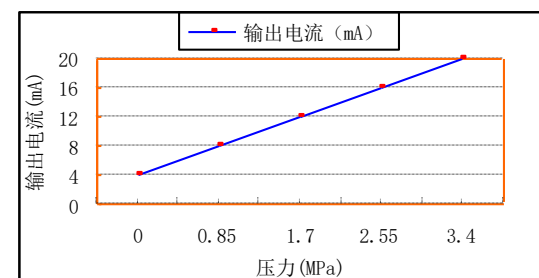
DYK BA050DV8-20I



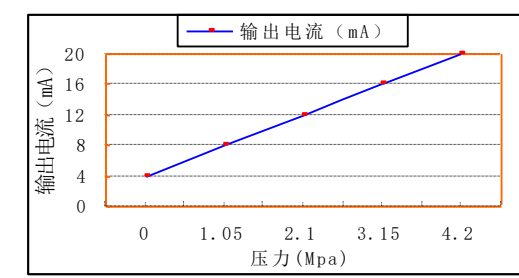
DYK BA010DV8-20I



DYK BA020DV8-20I



DYK BA034DV8-20I



DYK BA042DV8-20I