Pressure Transmitter NCP5A2

The NCP5 Series Pressure Transmitter utilizes a high-precision silicon piezoresistive sensor to convert pressure signals into a 0.5~4.5 VDC output. With advanced media isolation, temperature compensation, and nonlinearity correction technologies, the NCP5 delivers excellent performance, strong media compatibility, and superior environmental adaptability. It is widely used in applications such as railway systems and industrial control for pneumatic, hydraulic, and steam pressure monitoring.

Parameters

Operating Parameters

- Measurement Range: 0~250Psia
- Measured Media: Liquids, gases, or steam compatible with stainless steel
- Output Signal: 0.5~4.5VDC
- Supply Voltage: 5±0.25 VDC
- Operating Current: ≤20mA
- Overpressure Limit: ≥500Psia
- Burst Pressure: ≥1250Psia
- Max Output Impedance: 100Ω
- Operating Temperature Range: -40°C~+125°C
- Compensated Temperature Range: -20°C~+105°C
- Insulation Resistance: ≥20MΩ@500VDC (between external wiring and housing)
- Dielectric Strength: 500VAC/50 Hz/1min (leakage current≤1mA)

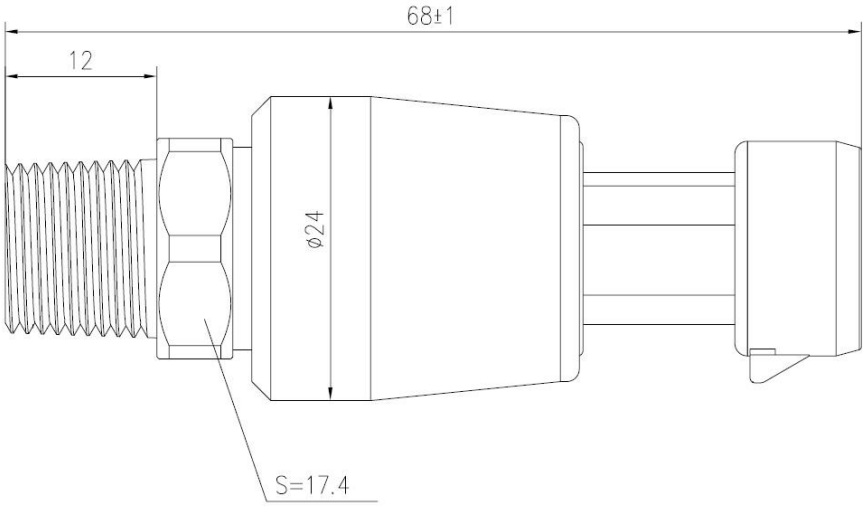
Accuracy & Dynamic Performance

- Accuracy: ±1%FS
- Non-Linearity: ≤0.5%FS
- Hysteresis: ≤0.25%FS
- Repeatability: ≤0.25%FS
- Long-term Stability: ≤0.1%FS

General Data

- Ingress Protection: IP68
- Housing Material: SUS316 stainless steel
- Protection Features: Reverse polarity protection & short-circuit protection
- Vibration & Shock Resistance: Compliant with GB/T 21563
- Electromagnetic Compatibility (EMC): Compliant with IEC 61000

Outline & Interface



- Mounting Interface: R1 1/4"
- Electrical Connector: 3-pin Packard connector, 3-wire system

PIN Configuration

PIN-A	Vcc
PIN-B	GND
PIN-C	Signal Output

Notes

- Ensure usage conditions remain within specified limits.
- Prior to installation, ensure pressure lines are clean and free from residue.
- Allow sufficient clearance around the unit for installation and maintenance.
- Do not exceed rated pressure range.
- Avoid contact with the sensor diaphragm using hard or sharp objects.
- Do not tighten or loosen the transmitter under pressure.
- Ensure the transmitter is securely installed before operation.