Pressure and Temperature Sensor



GPT200T

PRODUCT OVERVIEW ///

GPT200T pressure and temperature sensor adopts our high reliable pressure sensor and PT100 as core sensing components. After temperature compensation, digital circuit correction and signal conditioning, it can achieve real-time measurement of pressure and temperature. The product has high accuracy, fast response, steady output and reliable performance. Multiple output methods are available, and special demands can be customized. The shell is made of stainless steel and is widely used in the field of industrial automation control.

MAIN FEATURES ///

- Simultaneous acquisition of pressure and temperature parameters
- Quick response
- Strong anti-interference, high stability and low drift
- Multiple outputs are available

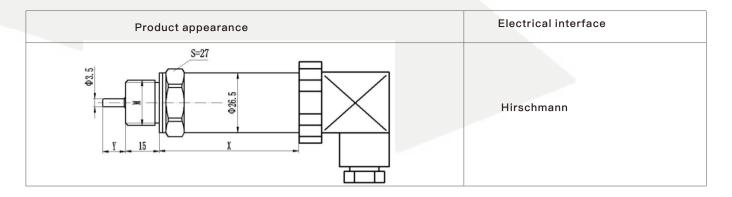
APPLICATION

- Fire water affairs
- Chemical production
- Intelligent manufacturing
- Process control system

DIMENSION



| Product appearance | Electrical interface |
|--------------------|-------------------------------------|
| S=27 Y 15 X | Cable connection Plug connection |
| S=27 Y 15 X (30) | Packard |



TECHNICAL PARAMETERS ///

| Pressure range (MPa) | 0MPa∼1MPa10MPa (OEM) | | | | |
|---|---|--------------------------|-------|--|--|
| Temperature parameter (℃) | -20~100℃ | | | | |
| Pressure type | Gauge,absolute pressure | | | | |
| | 4~20mA | | | | |
| Output signal | 0~5V, 0.5-4.5V, 0-10V | | | | |
| | RS485 | | | | |
| Temperature accuracy | ±1℃ | ±0.5℃ | ОЕМ | | |
| Pressure accuracy (FS%) | 0.1 (OEM) | 0.1 (OEM) 0.25 (OEM) | | | |
| Non linearity (FS%) | ≤0.1 | ≤0.2 | ≤0.4 | | |
| Hysteresis, repeatability (FS%) | ≤0.05 | ≤0.05 | ≤0.1 | | |
| Zero point and sensitivity temperature drift (%FS/°C) | ≤0.01 | ≤0.03 | ≤0.05 | | |
| Long-term stability(%FS/年) | ≤0.1 | ≤0.2 | ≤0.5 | | |
| Working voltage (VDC) | +12~+30 (The calibration value is +24) | | | | |
| Medium temperature | -40℃~+150℃ | | | | |
| Environment temperature | -40℃~+85℃ | | | | |
| Storage temperature | -40℃~+125℃ | | | | |
| Overload capacity | ≤2 times (<10MPa); ≤1.5 times (≥10MPa) | | | | |
| Load resistance (Ω) | Current (2线):R≤ (U-10) /0.02-RD (U: Supply voltage, RD: Cable internal resistance) | | | | |
| Response time | ≤3ms (10%~90%) | | | | |
| Measured medium | Fluids compatible with 316L stainless steel or ceramic | | | | |
| Diaphragm material | 316L stainless steel | | | | |
| Shell material | 304,316L | | | | |
| Protection grade | IP65 (OEM) | | | | |
| Vibration environment | 20g (@10Hz~2000Hz) | | | | |
| Impact resistance | 100g/11ms | | | | |
| Service life | >10 million load cycles | (within measuring range) | | | |

ORDERING GUIDE ///

| GPT200T | | | | | | | | | | |
|-----------|---------------------------------|---------------------------|-----------------------|-----------------------------------|--------------------|---------|---------|--------------------|--|--|
| | Code | Pressu | sure range | | | | | | | |
| | 0/X | −0.10~0.0110MPa/−20~100°C | | | | | | | | |
| | | Code | Pressure type | | | | | | | |
| | | G | Gauge | | | | | | | |
| | | S | Seal (| gauge p | ressure |) | | | | |
| | | Α | Absol | lute gau | ıge | | | | | |
| | | | Code Output | | | | | | | |
| | | | T1 | 4–20mA | | | | | | |
| | | | T2 0-5VDC T3 RS485 | | | | | | | |
| | | | | | | | | | | |
| | | | T4 | 0-10V | /DC | | | | | |
| | | | T5 | 5 0.5–4.5VDC | | | | | | |
| | | | | Code | Powe | r suppl | у | | | |
| | | | | V1 | 12VD | С | | | | |
| | | | | V2 | 24VD | С | | | | |
| | | V3 12-30VDC | | | | | | | | |
| | | | | V4 5V (T5 0.5–4.5VDC output only) | | | | output only) | | |
| | | | | | Code | Accı | ıracy | | | |
| | | | | | A1 | 0.1% | F.S. (C | DEM) | | |
| | | | | | A2 0.25%F.S. (OEM) | | | | | |
| | | | | | | | | | | |
| | | | | | | Code | Elec | trical interface | | |
| | | | | | | B1 | Hirs | chmann | | |
| | | | | | | В2 | Cabl | e connection | | |
| | | | | | | В3 | Plug | connection | | |
| | | | | | | В4 | Pack | kard | | |
| | | | | | | | Code | Pressure interface | | |
| | | | | | | | C1 | M20*1.5 | | |
| | | | | | | | C2 | G1/4 | | |
| | | | | | | | С3 | G1/2 | | |
| | | | | | | | C4 | 1/4NPT | | |
| | | | | | | | СХ | other | | |
| GPT200T0/ | T200T0/1MPa0/80°C A T2 V2 A1 B1 | | | B1 | C2 | | | | | |