

CS-PT1801



Applications

- Cold water screw unit
- Water source heat pump unit
- Ground source heat pump unit

Description

PT1801 pressure transmitter is a pressure transmitter specially developed for refrigerant pressure measurement. The selection of ceramic capacitive sensitive components and special calibration circuits can realize pressure measurement based on absolute vacuum or sealed gauge pressure. The product can withstand large destructive pressure, and also has the advantages of high accuracy at working temperature, high waterproof level, anti-condensation water, etc. It is an ideal choice for refrigerant pressure measurement

. We can supply you with different pressure units and process connections in short order to meet the requirements of your specific operating application.

Features

- Ceramic capacitor cell
- Good linearity, small temperature drift
- High overload
- Fully sealed, anti-condensation
- Protection level IP67
- Forward and reverse overvoltage
- Suitable for mass production



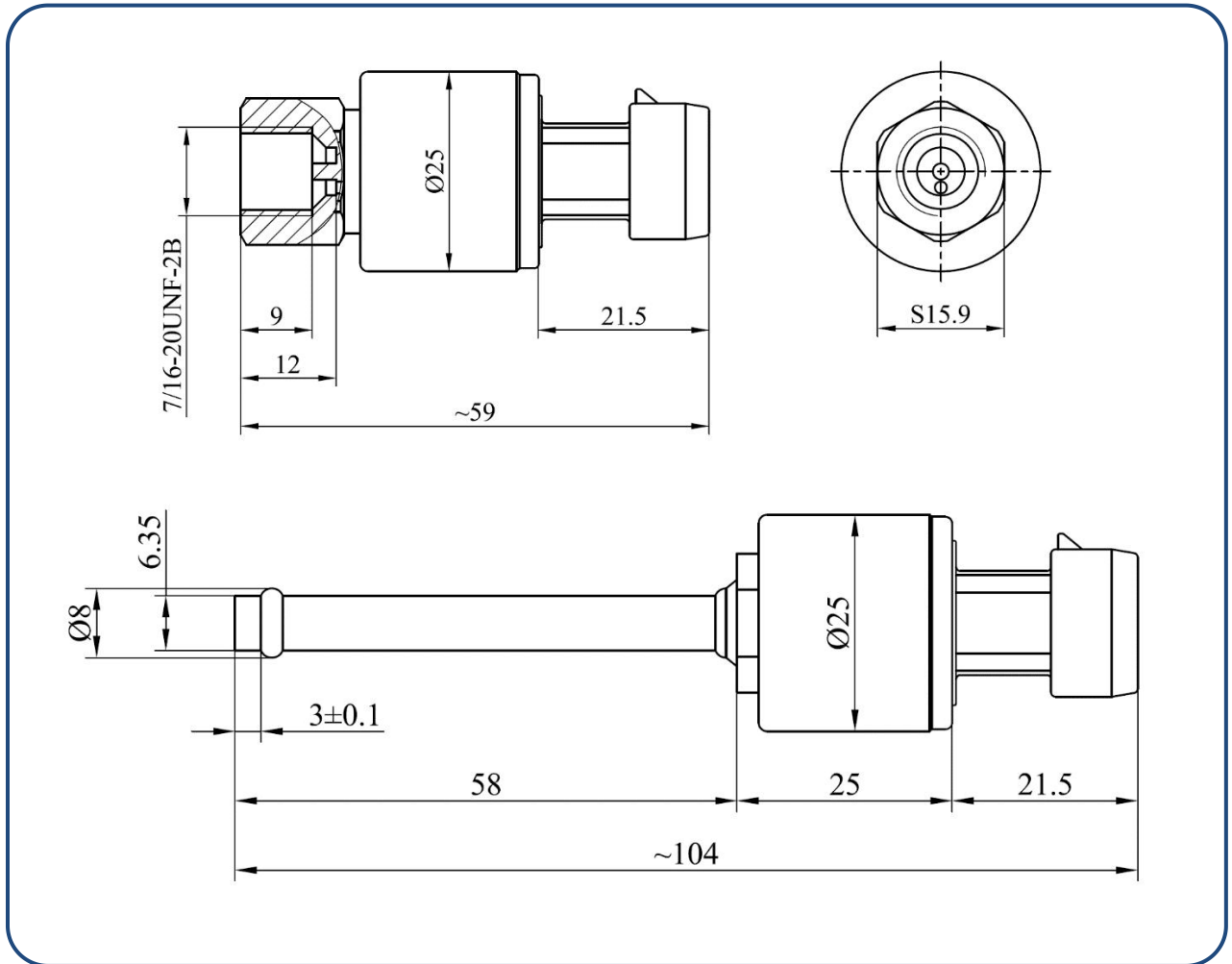
Performance Specifications

Temperature: 20~25℃; Power supply: 12VDC; Relative humidity: 45%~75%; ambient atmospheric pressure: 86KPa~106KPa;

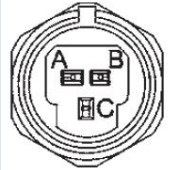
| | |
|--------------------------------------|---|
| Pressure range | 0~10bar...50bar (Sealed Gage) |
| Overload pressure | 200%F.S |
| Burst pressure | 300%F.S |
| Accuracy at 25℃ | ±1.0%F.S (include no-linearity, hysteresis, repeatability, and calibration error) |
| Total error accuracy | ±2.5%F.S (include no-linearity, hysteresis, repeatability, and calibration error) |
| Long-term stability | ±0.5%FS/year |
| Response Time | (10%~90%)≤10ms |
| Medium temperature | -35℃~105℃ |
| Ambient temperature | -35℃~105℃ |
| Storage Temperature | -35℃~105℃ |
| Output Signal | 4~20mA |
| Supply Voltage | 8~28VDC |
| Output Load | ≤ (U - 8) / 0.023 Ω (MAX:600Ω) |
| Overvoltage | 30VDC |
| Reverse Voltage | -30VDC |
| Insulate Resistance | ≥100MΩ@100VDC |
| Dielectric Strength | 500VDC@1min (no spark, arc, no damage) |
| ESD | Contact ±4kV, air ±8kV |
| EMC | EN 61000-6-2, EN 61000-6-3 |
| IP Rating | IP67 |
| Random Vibration | 10g, 5~2000Hz |
| Shock | X/Y/Z, 20g, half-sine 11ms |
| Drop (any Axis) | 1m |
| Pressure connector | 7/16-20UNF-2B, φ6.35 copper tube |
| connector material | Brass |
| Electrical connection | Packard Metri-Pack |
| Seal material | Neoprene |
| Applicable refrigerant medium | R12, R21, R22, R31, R32, R134a, R404a, R407C, R410a, R502, R507 |



Structure and Dimension (mm)



Electrical Connection

| Packard Metri-Pack | PIN | Two line (4~20mA) | Color of wire |
|---|-----|---------------------|---------------|
| | | Define | |
|  | A | Shield (PE) | Black |
| | B | Power Supply(U+) | Red |
| | C | Current Output (Io) | Green |



Model Selection Tips

| | | | | | | | |
|---------------|------------------------------------|--|----------------------------|------------------------------|---------------|---------------------|-----------------|
| PT1801 | Series Pressure Transmitter | | | | | | |
| | Code | Measuring Range | | | | | |
| | X | X stands for actual pressure measuring range | | | | | |
| | | Code | Pressure Connection | | | | |
| | | 7/16U(F) | 7/16-20UNF-2B | | | | |
| | | φ 6.35 | φ 6.35 copper tube | | | | |
| | | | Code | Electrical Connection | | | |
| | | | P | Packard Metri-Pack | | | |
| | | | | Code | Output | | |
| | | | | 420 | 4~20mA | | |
| | | | | | Code | Power Supply | |
| | | | | | 06 | 8~28 VDC | |
| | | | | | | Code | Accuracy |
| | | | | | | 10 | ±1.0% |

PT1801 -X -7/16U(F) -P -420 -06 -10

Notes

1. The transmitter must be used in a medium that is not corrosive to the sealing material and housing material.
2. When the pressure-guiding hole of the transmitter is blocked, it is strictly forbidden to use a sharp tool to clear the pressure-guiding hole. The transmitter should be removed and the pressure-guiding hole should be immersed in a liquid that can dissolve the blockage. After the blockage is dissolved, remove it fall out.
3. It is strictly forbidden to open the transmitter for calibration or maintenance by yourself.
4. If you are not sure whether the transmitter is suitable for the measurement medium used, please contact the factory.
5. The installation location of the transmitter should be selected in a place that is not easy to be bumped and stepped on.
6. Use beyond transmitter overload pressure may cause permanent damage.
7. Where there may be lightning, customers should consider lightning protection measures.



Disposal methods of hazardous wastes such as waste circuit boards and their components after the end of product life

After the end of the product life, each part shall be distinguished according to the “National hazardous waste list” to determine whether it is hazardous waste. Among them, the waste lithium battery not disassembled is not hazardous waste, and the waste circuit board (including components, chips, plug-ins, pins, etc. attached to the waste circuit board) belongs to hazardous waste.

The part that is not hazardous waste shall be treated as general industrial solid waste, and the lithium battery shall be handed over to the nearby renewable resource recovery department or sent to the product manufacturer for recycling.

Hazardous wastes must be handed over to legally qualified departments for disposal in accordance with national regulations, and shall not be dumped or stacked without authorization. If it is really necessary to store temporarily, protective measures meeting the national environmental protection standards must be taken, and the storage period shall not exceed one year. At the same time, the time and place of temporary storage and the protective measures taken shall be reported to the competent environmental protection department. Hazardous waste transfer activities can be arranged according to the actual production situation. The system shall be strictly implemented in the transfer process

Statement

The company reserves the right to modify the specifications and contents of this manual. Subject to modification without notice. Due to the update of the product, the individual details of this document may not match the product, please refer to the actual product. The interpretation right of this document belongs to our company.

