

## **DATASHEET**

## **Pressure**

# Pressure&Temperature Transmitter For Industry Process Control

**Model PWP350-PT** 

## **Applications**

- Power station
- Coal & mine
- Chemical industry
- Petroleum
- Agriculture, hydrology
- Shipbuilding, metallurgy
- Industrial process control

#### **Features**

- Pressure and temperature output
- Suits almost all industrial applications
- Equipped with 3 intelligent protection
- High stability, low drift
- Full sealed high stability impact design
- Variety choices for outputs, electrical connector and pressure port



**Pressure transmitter PWP350-PT** 

### **Description**

PWP350-PT pressure transmitter/transducer applies high quality Germany imported piezoresistive pressure sensor chip and PT100 as sensing elements, with a fully welded stainless steel housing. Equipped with 3 intelligent protection: Over-voltage, over-current and polarity protection. After temperature compensation, digital circuit correction and signal conditioning, it outputs standard industrial application and networking signals to realize measurement for both pressure and temperature.

PWP350-PT has high measurement accuracy, fast response speed, stable output and reliable performance. A variety of outputs are available, and special requirements can be customized on demand.

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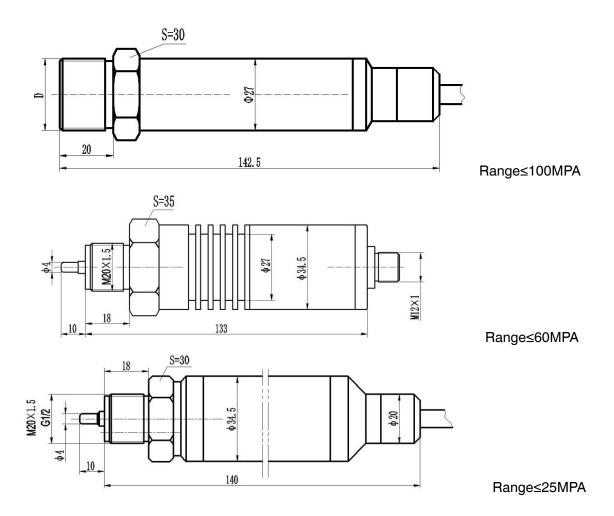


# **Specifications**

| Model                             | PWP350-PT   |                 |                     |              |
|-----------------------------------|---|-----------------|---------------------|--------------|
| Pressure Type                     | Relative (gauge) /Absolute pressure/Sealed gauge pressure   |                 |                     |              |
| Pressure Range                    | -0.1MPa 0kPa~10kPa100MPa  |                 |                     |              |
| Temperature range                 | -20℃~+100℃(can be customized)   |                 |                     |              |
| Safe Overload                     | ≤200%FS(<10MPa); ≤150%  | %FS(≥10MP       | a)                  |              |
| Burst Pressure                    | 300%FS  |                 |                     |              |
| Electrical Connection & IP Rating | Directly outlet cable IP67 DIN43650 Hirschmann Connector IP65   |                 |                     |              |
| Accuracy                          | Pressure: ±0.5%FS(Typical), ±0.25%FS Temperature: ±1.0°C(Typical), ±0.5°C   |                 |                     |              |
| Signal Output &                   | Dual 4-20mA   | Dual 0-5V/0-10V |                     | RS485 Modbus |
| Power Supply                      |   | 4 wires         |                     | 4 wires      |
|                                   |   | 8-24VDC/12      | 2-30VDC             | 5-30VDC      |
| Response Time                     | ≤3ms (10%~90%)  |                 |                     |              |
| Medium Compatible                 | Liquid compatible with ceramic and stainless steel SUS304, SS316L material  |                 |                     |              |
| Load Resistance(2 wires)          | R≤(U-10)/0.02-RD<br>(U: Power supply, RD: Internal resistance in the cable)   |                 |                     |              |
| Total current consumption         | Current signal(2wires): Max about 23mA  Voltage signal(3wires): <5mA  RS485(4wires): <5mA (Available to customize low consumption <1.1mA) |                 |                     |              |
| Accuracy&Performance              | 0.25% Accuracy Class  |                 | 0.5% Accuracy Class |              |
| Non-linear ( %FS )                | ≤0.2  |                 | ≤0.4                |              |
| Hysteresis ( %FS )                | ≤0.05   |                 | ≤0.1                |              |
| Repeatability (%FS)               | ≤0.05   |                 | ≤0.1                |              |
| Long-term Stability (%FS/year)    | ≤0.2  |                 | ≤0.5                |              |
| Zero Temp Drift ( %FS/℃ )         | ≤0.03   |                 | ≤0.05               |              |
| Compensation Temp.                | 0°C~+50°C (≤200kPa), -10°C~+60°C (>200kPa)  |                 |                     |              |
| Working Temp.                     | -20℃~+100℃  |                 |                     |              |
| Storage Temp.                     | -20℃~+100℃  |                 |                     |              |
| Vibration Environment             | 10g (@10Hz~2000Hz)  |                 |                     |              |
| Impact Resistance                 | 100g/11ms   |                 |                     |              |
| Service Life                      | >10 million load cycles (within measurement range)  |                 |                     |              |
| Explosion Proof                   | Exia II CT6 (optional)  |                 |                     |              |
| EMC Standard                      | EN IEC 61326-1:2021; EN IEC 61326-2:2021  |                 |                     |              |



# **Dimensions and Drawings**



<sup>\*</sup>Unit is mm. Above is typical structures. Other structures and dimensions can be customized.

# **Electrical Connection**

| Directly outlet cable  |            |                          |                           |                   |  |  |
|--|------------|--------------------------|---------------------------|-------------------|--|--|
| - ALICAN - A | Wire Color | Dual Current<br>(3wires) | Dual Voltages<br>(4wires) | RS485<br>(4wires) |  |  |
|  | Red        | Vcc                      | Vcc                       | Vcc               |  |  |
|  | Green      | Plout                    | GND                       | GND               |  |  |
|  | Yellow     | Tlout                    | PVout                     | RS485A            |  |  |
|  | Blue       | /                        | TVout                     | RS485B            |  |  |
|  | Black      | PE                       | PE                        | PE                |  |  |



## **How to Order**

## Example Part Number: 350PTC[10]BGT1S1C2A1M1001

| Model No.             | PWP350-PT                          | 350PT |  |
|-----------------------|------------------------------------|-------|--|
| Electronic Connection | C=Direct outlet cable              |       |  |
|                       | H=DIN43650 Hirschmann terminal box | С     |  |
|                       | 0=Customized                       |       |  |
| Pressure Range        | -0.1MPa 0kPa~10kPa 100MPa          | [40]  |  |
|                       | Directly write in []               | [10]  |  |
| Pressure Units        | B=bar P=Psi K=kPa M=MPa            | В     |  |
|                       | G= Gauge/Relative                  |       |  |
| Pressure Type         | A=Absolute                         | G     |  |
|                       | S=Sealed gauge pressure            |       |  |
|                       | T1=Dual 4-20mA for P+T (typical)   |       |  |
|                       | T2=Dual 0-5V for P+T               |       |  |
| Signal Output         | T3=Dual 0-10V for P+T              |       |  |
|                       | T4=RS485 Modbus RTU                |       |  |
|                       | T0=Customized                      |       |  |
|                       | S1=12-30VDC                        |       |  |
|                       | S2=8-24VDC                         | S1    |  |
| Power Supply          | S3=5-30VDC                         | 51    |  |
|                       | S0=Customized                      |       |  |
|                       | C1=M20x1.5 male                    |       |  |
| Pressure Connection   | C2=G1/2"male                       |       |  |
| Pressure Connection   | C3=M30 x 1.5 male                  |       |  |
|                       | C0=Customized                      |       |  |
| Accuracy              | A1=0.5%F.S.                        |       |  |
|                       | A2=0.25%F.S.                       |       |  |
|                       | A3=0.1%F.S.                        |       |  |
| Housing Material      | M1=SUS304(Typical)                 |       |  |
|                       | M2=316L                            |       |  |
|                       | M0=Customized                      |       |  |
| Cable Length          | 000=Non-cable                      |       |  |
|                       | 001= 1m cable                      | 001   |  |
|                       | 002= 2m cable                      |       |  |

<sup>\*</sup>Means to order: Pressure transmitter PWP350-PT directly cable outlet, 0~10 bar Gauge, dual 4-20mA, 12-30VDC, G1/2" male, 0.5%FS accuracy, SUS304 material, cable length is 1 meter.



# You may also Need

| Reference Picture | Description   | Product                      |
|-------------------|---|------------------------------|
| - 25.0<br>5 0.0   | To connect with pressure transmitter and to have a site indicator of the measured value, have high&low value alarms, record and control.  | Display/indicator/controller |
|                   | Cast aluminum material with IP67 protection level for submersible pressure transmitter. Moisture-proof sealing design, insulation protection against electric shock. To be placed in dry environment or in a cabinet. | Terminal box<br>0010         |

<sup>\*\*</sup>Tell us medium / which application / measuring range / working temperature / signal output / what you wanna to realize, our sales engineer will recommend suitable model for you.