# **Pressure Transmitter XY-PTMT200**

#### Typical Feature

| ☐ Small size for mount design, minimum size | M5*1 |
|---|------|
|---|------|

☐ High-precision maximum accuracy 0.25% FS

☐ Temperature stability index 0.02%/FS/ oC

☐ Wield measurement field, even corrosion, easy crystallize medium

☐ Stainless Steel material with fully sealed structure

☐ Customized structure diversification is available



#### **Brief Introduction**

XY-PTMT200 Pressure Transmitter is with small size, which can be minimum M5\*1. Special design and precision machining technology make it with excellent dynamic and static qualities; Stainless steel shell and laser-welded construction, IP65 or IP67 Ingress protection; Ultrathin and small pressure transmitter/transducer can be used in specific environment if the work condition is limited about test point size, or need to keep flow distribution. XUYAN offer customized type to against harsh rugged work condition by customer special requirements.

The Small size mounted type Precision Pressure Transmitter has excellent performance such as high precision, fast response, small size, light-weight, stable and reliable, strong overload capacity; designed for most medium in industry, such as air, oil, water and other fluid; Micro pressure transmitter is mainly applied in the followed situations: aerodynamics, aircraft and engine experiment, wind tunnel experiment, hydromechanics experiment, hydraulic modeling experiment, biomedicine experiment, chemical explosive and nuclear explosive blast experiment; Output 4 ~ 20mA or 0 ~ 5VDC standard electrical signal through regulation device; Measurement Range: 0-5 Kpa,0-100 Kpa,0-8000KPa. Thoughtful specialized electric circuit design, it's easy to install in microprocessor intelligent control system; calibrated by ultra-high precision absolute pressure calibration equipment, accuracy 0.2%; 0.5%; temperature stability index can be increased to 0.02%/FS/C by sensor temperature self-compensation and specialized circuit debugging.

#### Suggested Applications

- Aerodynamics
- Aircraft & Engine Experiment,
- Wind Tunnel Experiment,
- Hydromechanics Experiment,
- Hydraulic Modeling Experiment
- Biomedicine Experiment,
- Chemical Explosive

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- Nuclear Explosive Blast
- Experiment Specification

More details for XY-PTMT200, please contact us.

## Specification

| Model                         | XY-PTMT  |                         |                         |  |  |  |  |  |  |  |
|-------------------------------|--|-------------------------|-------------------------|--|--|--|--|--|--|--|
| iviodei                       | 100  | 200                     | 300                     |  |  |  |  |  |  |  |
| Cauga Prossura Rango          | 0~51001000KPa  | 0~51008000KPa           | Air pressure 0~20200KPa |  |  |  |  |  |  |  |
| Gauge Pressure Range          | U 51001000KPa  | U 51008000KPa           | Others 0~11050100MPa    |  |  |  |  |  |  |  |
| Pressure Type                 | Gauge Pressure Test  |                         |                         |  |  |  |  |  |  |  |
| Measurement Medium            | Gas or Liquid with Compatibility of SS 304, SS316 or Silicon |                         |                         |  |  |  |  |  |  |  |
| Accuracy                      | 0.2%FS; 0.5%FS addit   | ional conditioning circ | uit                     |  |  |  |  |  |  |  |
| Long-Term Stability/Year      | ±0.2%FS/Year   |                         |                         |  |  |  |  |  |  |  |
| Zero Temperature Drift        | Typical: ±0.02%FS/°C; Maximum ±0.05%FS/°C                    |                         |                         |  |  |  |  |  |  |  |
| Sensitivity Temperature Drift | Typical: 0.02% FS / °C; The Maximum: 0.05% FS / °C           |                         |                         |  |  |  |  |  |  |  |
| Overload Pressure             | 200%   |                         |                         |  |  |  |  |  |  |  |
| Operation Temperature         | -30~80 °C  |                         |                         |  |  |  |  |  |  |  |
| Compensation Temperature      | -10~70 °C  |                         |                         |  |  |  |  |  |  |  |
| Environmental Temperature     | -40~ 120 °C  |                         |                         |  |  |  |  |  |  |  |
| Power Supply                  | 5VDC   |                         |                         |  |  |  |  |  |  |  |
| Overvoltage Protection        | ≤3X; ≤5X; ≤10X (by Range)                                    |                         |                         |  |  |  |  |  |  |  |
| Signal Output                 | mV (>30mA@Full Scale)  |                         |                         |  |  |  |  |  |  |  |
| Response Time                 | Depend on measurement range and structure                    |                         |                         |  |  |  |  |  |  |  |
| IP Protection Class           | IP65; IP67   |                         |                         |  |  |  |  |  |  |  |

### Performance Parameter

| Performance Parameter                    | Α    | В    | С    | D    |  |
|--|------|------|------|------|--|
| Non-linear/±%FS                          | 1.00 | 0.50 | 0.20 | 0.1  |  |
| Non-redundant, hysteria /±%FS            | 0.20 | 0.15 | 0.10 | 0.04 |  |
| Zero temperature coefficient/X10-4/°C.FS | 5.00 | 3.00 | 2.00 | 1.00 |  |
| Sensitivity temperature                  | 5.00 | 3.00 | 2.00 | 1.00 |  |
| coefficient/X10-4/°C.FS                  | 3.00 | 3.00 | 2.00 | 1.00 |  |
| Zero time drift/%FS/8h                   | 0.20 | 0.15 | 0.10 | 0.10 |  |
| Accuracy%FS                              | 1.00 | 0.50 | 0.25 | 0.15 |  |

### Dimension(mm)

| Mode       | Size             |
|------------|------------------|
| XY-PTMT100 | Ф3mm-Ф8mm        |
| XY-PTMT200 | M5*1-M10*1       |
| XY-PTMT300 | Ф10*5mm-Ф30*10mm |

#### How To Order

| XY-PT | G                        | -    | KF                    | -              | 4M         | -        | 1          |        | А          | -     | P2            | -      | M3           | -                            | B1                 | - T1           | - L               |
|-------|--------------------------|------|-----------------------|----------------|------------|----------|------------|--------|------------|-------|---------------|--------|--------------|------------------------------|--------------------|----------------|-------------------|
|       | Type                     |      | ssure Connection      | Pressure Range |            | Accuracy |            | Outupt |            | Power |               | Thread |              | <b>Electrical Connection</b> |                    | dium Temperatı | Additional        |
| G     | General                  | None | General               | X              | (0-XKPa)   | 1        | 0.15%      | Α      | 4-20mA     | 1 [   | P1 5V         | М      | 1 M20*1.5    | Α                            | HIRSCHMANN         | T1 -20~80°C    | L With Display    |
| G     | Absolute Pressure        | Р    | Diaphragm Seals       | XE             | (0-XBar)   | 2        | 0.25%      | R      | RS485      | 1 [   | P2 24V        | М      | 2 G1/4       | В                            | Cable Outlet       | T2 -20~120°C   | I Explosion-Proof |
| D     | Differential Pressure    | DP   | Differential Pressure | ΧN             | 1 (0-XMPa) | 3        | 0.50%      | V1     | 0-10V      | 1 [   | P3 12-28V     | М      | 3 G1/2       | С                            | Circular Connector | T3 0~150°C     |                   |
| G     | R IoT                    | KF   | Clamp                 | CC             | Customized | 4        | 1.00%      | V2     | 0-5V       | 1 [   | P6 12V        | М      | 4 1/2NPT     | CC                           | Customized         | T9 Customized  |                   |
| G     | Temperature& Pressure    | DN   | Flange                |                |            | 9        | Customized | V3     | 0.5-4.5V   | 1 [   | P9 Customized | M      | 5 1/4NPT     |                              |                    |                |                   |
| M     | T Mini Thickness         | 1210 | Explosion Proof       |                |            |          |            | CC     | Customized |       |               | M      | 7 ZG1/4      |                              |                    |                |                   |
| M     | K Economic               | 9999 | Customized            |                |            |          |            |        |            |       |               | M      | 9 Customized |                              |                    |                |                   |
| H     | F High Frequency         |      |                       |                |            |          |            |        |            |       |               |        |              |                              |                    |                |                   |
| A     | Air Conditioning         |      |                       |                |            |          |            |        |            |       |               |        |              |                              |                    |                |                   |
| В     | Ink Corrosion Resistance |      |                       |                |            |          |            |        |            |       |               |        |              |                              |                    |                |                   |
|       | Air Compressor           |      |                       |                |            |          |            |        |            |       |               |        |              |                              |                    |                |                   |
| N     | Hydraulic Pressure       |      |                       |                |            |          |            |        |            |       |               |        |              |                              |                    |                |                   |
| W     | Water Pressure           |      |                       |                |            |          |            |        |            |       |               |        |              |                              |                    |                |                   |

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