

PM420 Miniture Pressure Transmitter

MAIN FEATURES

- Pressure Range: -0.1MPa...0kPa~10kPa...100MPa
- Stability: ±0.1%FS/year (typical), ±0.2%FS/year (maximum)
- Accuracy: 0.1% (custom), 0.25% (typical), 0.5% (maximum)
- Anti-jamming design
- Small body, easy installation
- Intrinsically safe explosion



OVERVIEW

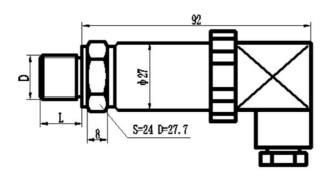
PM420 series anti-corrosion and explosion-proof small-profile pressure transmitter adopts high-precision, hightemperature qualitative force-sensitive chip with stainless steel metal diaphragm. After strict precision temperature compensation, signal amplification, V/I conversion, the pressure parameters are reliably converted into industry standard 4 ~20mA or 0~10mA signal output, widely used in petroleum, chemical, metallurgy, electric power, textile, environmental protection and other fields.

SPECIFICATION

| Items | Parameter |
|-------------------------------|---|
| Range | -0.1MPa0kPa~10kPa100MPa |
| Overload capability | Below 10MPa ≤ 2 times full scale 10MPa and above ≤1.5 times full scale |
| Pressure Type | G (gauge pressure), A (absolute pressure), S (sealed gauge pressure) |
| Accuracy | 0.1% (custom), 0.25% (typical), 0.5% (maximum) |
| Long-term stability | ±0.1%FS/year (typical), ±0.2%FS/year (maximum) |
| Zero temperature drift | ±0.03%FS/°C (≤100kPa), ±0.02%FS/°C (>100kPa) |
| Sensitivity temperature drift | ±0.03%FS/°C (≤100kPa), ±0.02%FS/°C (>100kPa) |
| Compensation temperature | 0°C~50°C(≤100kPa), -10°C~70°C(>100kPa) |
| Medium temperature | -40°C~80°C |
| Power supply | +12 ~ +36V (Default 24V) |
| Output Signal | 4mA~20mA, 0V~10V (output range can be customized) |
| Load Resistance | Current type: ≤ (U-12) / 0.02 (Ω) |
| Response time | ≤1(10~90%)ms |
| Measuring medium | All corrosive gases, liquids compatible with 316L |
| Diaphragm material | 316L stainless steel |
| Housing material | 1Cr18Ni9Ti |
| Interface | M20×1.5 or customized |
| Protection level | IP65 (customizable IP68) |



Unit: mm **TYPICAL DIMENSION**



| D (Dimension) | L (Length) | D (Dimension) | L (Length) |
|---------------|------------------|---------------|------------|
| M22*1.5 | 15 M10*1 | | 12 |
| G1/2 | 15 | G1/8 | 12 |
| M20*1.5 | 15 | 1/2NPT | 18 |
| M18*1.5 | M18*1.5 15 1/2PT | | 18 |
| G3/8 | 15 | 3/8PT | 15 |
| M16*1.5 | 15 | 3/8NPT | 15 |
| M14*1.5 | 15 | 1/4NPT | 14 |
| G1/4 | 14 | 1/4PT | 14 |
| M12*1 | 14 | 1/8NPT | 12 |

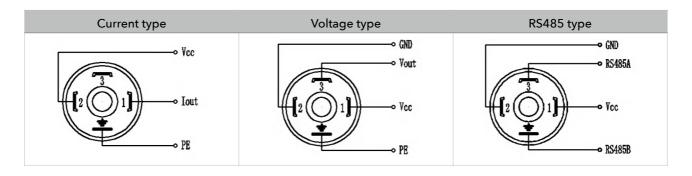
MORE RECOMMENDATION

| MODEL | FEATURE | OUTLINE CONSTRUCTION |
|-------|---|---|
| 4211 | 1. Standard Hirschmann connector 2. The full range of threads can be customized 3. Pressure interface materials can be customized 4. Protection grade IP65. | 92 S=24 D=27.7 |
| 4224 | 1. Waterproof metal joints 2. Flat membrane structure, easy to clean 3. Pressure interface M20 × 1.5, G1/2 optional 4. Protection grade IP66. | 55 1 X O Q J 15. 2 S=27 D=31. 2 |
| 4226 | 1. Compact type, outer diameter 22mm 2. Pressure interface material can be customized 3. Protection grade IP66 | |
| 4233 | 1. Aviation socket 2. Medium temperature range -40~150°C 3. The number of heat sinks, pressure interface materials can be customized 4. Protection grade IP65. | S=24 D=27.7 88 |
| 4244 | 1. High reliability liquid level outlet 2. Flat membrane structure, easy to clean 3. Pressure interface M20 × 1.5, G1/2 optional 4. Waterproof rating IP68 | \$\frac{12}{5\cdot 2} \\ \frac{1}{5\cdot 2} \\ \frac{1}{5\cdot 2} \\ \frac{1}{5\cdot 2} \\ \frac{12}{5\cdot 2} \\ \ |

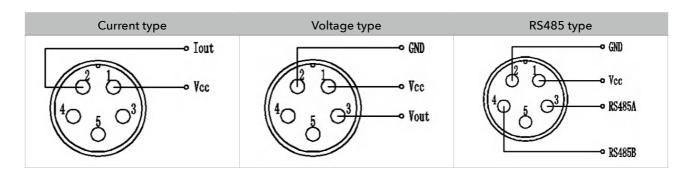


ELECTRIC CONNECTION

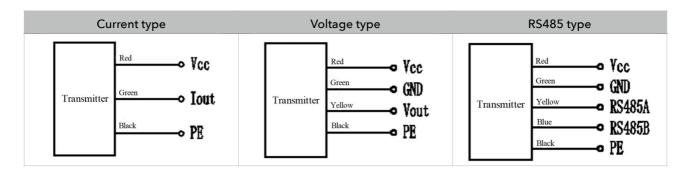
• Hirschmann socket electric connection



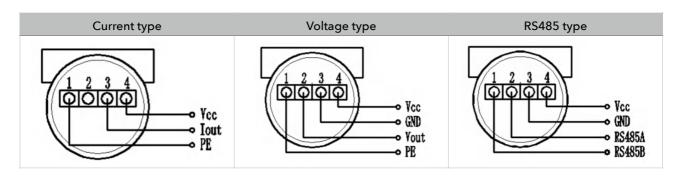
• Aviation socket electric connection



• Direct cable connection



• Industrial digital electric connection





ORDER CODE

| Code: | Α | _ | В | - | С | _ | D | _ | Е | _ | F | _ | G |
|--------|--------|---|---|---|---------|---|---|---|---|---|-------|---|----|
| Model: | PM4211 | _ | G | - | 0-50bar | _ | S | _ | L | _ | G 1/2 | _ | MA |

| Model | Code A | | |
|---|--------|--|--|
| Standard Hirschmann connector | 4211 | | |
| Direct cable connection, flat membrane | 4224 | | |
| Direct cable, small body | 4226 | | |
| Aviation socket, high temperature -40~150°C | 4233 | | |
| Flat membrane, fully sealed with IP68 | 4244 | | |
| Pressure type | Code B | | |
| Gauge pressure | G | | |
| Absolute pressure | Α | | |
| Sealed gauge pressure | S | | |
| Pressure Range(X=specific range) | Code C | | |
| -0.1MPa ~100MPa | X MPa | | |
| -1Bar ~1000Bar | X Bar | | |
| -15psi ~15000psi | X psi | | |
| Accuracy | Code D | | |
| | | | |
| 0.1% (custom) | С | | |
| 0.1% (custom) 0.25%(typical) | C T | | |
| | | | |
| 0.25%(typical) | Т | | |
| 0.25%(typical) 0.5%(standard) | T S | | |

| Process connection | Code F |
|------------------------|--------|
| M22*1.5 | M22 |
| G1/2 | G1/2 |
| M20*1.5 | M20 |
| M18*1.5 | M18 |
| G3/8 | G3/8 |
| M16*1.5 | M16 |
| M14*1.5 | M14 |
| G1/4 | G1/4 |
| M12*1 | M12 |
| M10*1 | M10 |
| G1/8 | G1/8 |
| 1/2NPT | 1/2NPT |
| 1/2PT | 1/2PT |
| 3/8PT | 3/8PT |
| 3/8NPT | 3/8NPT |
| 1/4NPT | 1/4NPT |
| 1/4PT | 1/4PT |
| 1/8NPT | 1/8NPT |
| Output signal | Code G |
| 4~20mA | MA |
| 0~10V | V1 |
| 0~5V | V5 |
| RS485 | RS |
| More output customized | С |

Remarks:

- 1. The structure and types of this series are so much. In order to recommend the most suitable product for you, please specify the use environment and measurement media when consulting.
- 2. The cable materials are available in PVC, PUR, PE, and ZRPVC. The default is PVC material. If you have special requirements, please specify when ordering.
- 3. Flat membrane product joint material is 316L, joints are always equipped with M20 \times 1.5, G1/2 two types joints. Please consult for special requirements.
- 4. More other size except above mentioned could be customized according to the drawings provided.
- 5. LOGO print is available once authorized.