



PZP501 Melt Pressure Transmitter



Introduction

The PZP501 melt pressure transducer and transmitter are based on metal foil strain gauge technology and are made from stainless steel material to high quality standard.

In PZP501, a full bridge strain gauge is bonded onto an stainless steel diaphragm where the measured pressure is introduced to, from the front-end of a rigid stainless steel stem via a capillary. The capillary is hermetically protected in the rigid stem. At the front-end of the rigid stem, the diaphragm will directly contact with high-temperature melt medium. The rigid stem can provide thermal isolation to strain gauge circuitry and associated electronics, so as to ensure the PZP501 functioning properly with high temperature media. PZP501 is based on PZP500 for melt pressure measurement and can measure the temperature of the pressure media through a thermocouple or Pt100 thermal resistor.

Zero & full span can be adjustable, with amplify signal can be connected with PLC. By short circuit, a shunt calibration resistor can be connected, which provides PZP501 with 80%fs self-calibration function at any time without need of external calibration facility. With the advantage of high precision and reliable pressure measuring and good quality.

Features

- Pressure range: 0~20, ..., 1500bar
- Pressure types: gauge
- Accuracy up to 0.3%fs
- Optional output signal
- Amplified output signal available with Zero and Span adjustment
- Internal shunt calibration signal of 80%fs

Applications

- Industrial process control
- Chemical fiber equipment
- Plastic and Rubber manufacturing equipment
- Packaging equipment
- Measure and Control all kinds of melt fluid

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PZP501 Melt Pressure Transmitter

Specifications

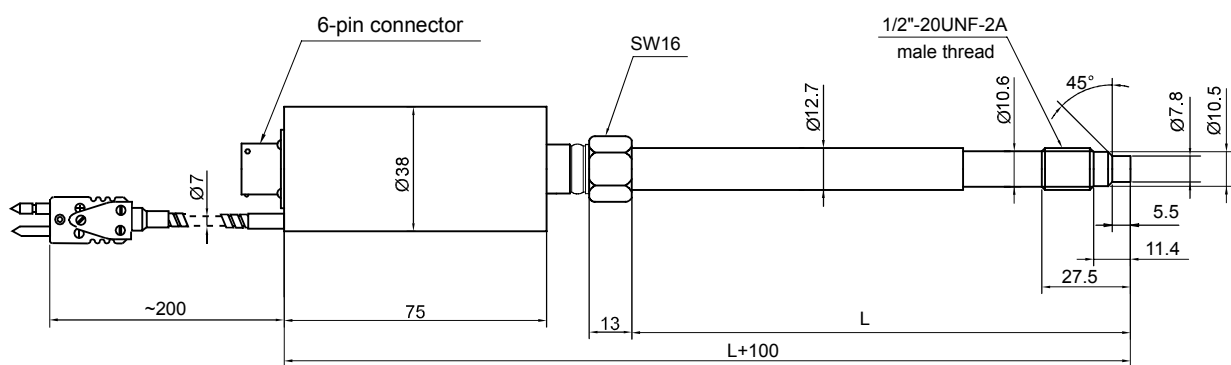
| Parameter | Units | Data | Notes |
|---------------------------------|-----------|---|-------|
| Pressure ranges and types | bar | Gauge(G): 0~20,~35,~50,~70,~200,~350,~500,~700,~1000,~1500 | |
| Overload pressure | %fs | 150 | [1] |
| Output signal | mV/V | 3.33 | |
| | / | 4~20 mA, 0~5 Vdc, 0~10 Vdc | |
| Accuracy | %fs | ≤ ±0.3, ≤ ±0.5 (standard), ≤ ±1 | [2] |
| Supply voltage | Vdc | 10 (8~12 acceptable) for 3.33 mV/V output | |
| | | 24 (12~36) for amplified output signal | |
| Long-term stability | %fs/year | ≤ ±0.2 | |
| Compensated temperature range | °C | 0 ~ +80 | |
| Max. temp. @ wetted parts | °C | 400 | |
| Temperature coefficient of zero | %fso/10°C | ≤ ±0.5 | |
| Temperature coefficient of span | %fso/10°C | ≤ ±0.5 | |
| Temperature sensor | / | type-J (standard),K, E thermocouple, pt100 thermal resistor | |
| Insulation resistance | MΩ | 500 @100Vdc | |
| Zero adjustment | %fs | ± 10 | |
| Span adjustment | %fs | ± 6 | |
| Environment protection | / | IP65 | |
| Electrical connection | / | 6-pin (standard) male tighten connector | |
| Pressure connection | / | 1/2"-20 UNF-2A (standard), M14x1.5, M18x1.5 | |
| Pressure diaphragm | / | 15-5PH SS | |
| Max. mounting torque | Nm | 50 | |
| Net weight | gram | ~500 | |

Notes:

[1]. "fs" refers to full scale pressure or rated pressure.

[2]. Accuracy = sqrt (non-linearity² + hysteresis² + repeatability²)

Dimensions:



Notes: All dimensions are in mm.

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Ordering Guide

model: melt pressure transmitter PZP501

| pressure ranges & types | | | |
|---|---|-------------------|---|
| 20 = 0~20 bar | G | 200 = 0~200 bar | G |
| 35 = 0~35 bar | G | 350 = 0~350 bar | G |
| 50 = 0~50 bar | G | 700 = 0~700 bar | G |
| 70 = 0~70 bar | G | 1000 = 0~1000 bar | G |
| 100 = 0~100 bar | G | 1500 = 0~1500 bar | G |
| customized range available as an option | | | |

| accuracy |
|---|
| 0.3 = 0.3 %fs, 0.5 = 0.5 %fs (standard) |
| 1 = 1 %fs |

| output signal |
|--|
| 3.33 mV/V, 4~20 mA (2-wire), 0~5 Vdc (4-wire), 0~10 Vdc (4-wire) |

| pressure connection |
|---|
| 1/2"-20 UNF-2A (standard), M14x1.5, M18x1.5 |

| Length of rigid stem | |
|----------------------|-----------------|
| 76=76 mm | 228=228 mm |
| 152=152 mm(standard) | or other length |

| temperature measurement | |
|--------------------------------------|----------------------------|
| J = J-thermocouple (standard,2-wire) | K = K-thermocouple(2-wire) |
| Pt = Pt100 thermal resistor (3-wire) | E = E-thermocouple(2-wire) |

| electrical connection |
|---|
| 6 pin = 6-pin male connector (standard) |
| 8 pin = 8-pin male connector |

| customized parameter |
|---|
| "(")" is necessary only for any customized parameter. |

PZP501-20-0.5-4~20mA-1/2-20UNF-152-J-6pin-(")

Examples of Ordering Code:

PZP501-350-0.5-4~20mA-1/2-20UNF-152-J-6pin

Order Note

Please pay attention to protect the diaphragm. Do not touch the diaphragm by finger and other hard objects, or it may be damaged.

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