Melt Pressure Transducer

Model: PT124G-113T (oil filled)

ZHYQ

Description

PT124G-113T Series Melt Pressure Transducer (rigid stem & sanitary), It is with thermocouple, can measure the pressure and temperature in one point, and it filled with environmental, avirulent medium silicon oil, If the melt pressure sensor diaphragm damaged during process, the leaking medium is no harm to the human body or ambient .can be widely used in Medicine & Food process equipment. Zero & span can be adjustable; with amplified signal can be connected with PLC. It has the advantages of high precision and reliable, good quality, internal 80% calibration.

Application

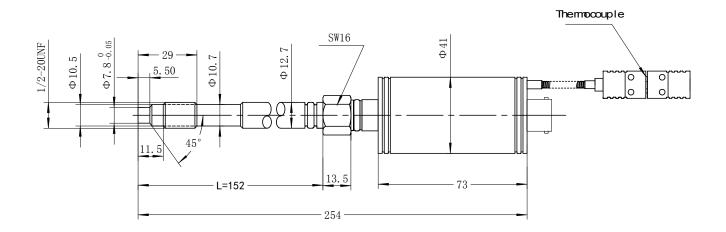
- Chemical fiber Equipment
- Plastic and Rubber manufacturing equipment
- Medicine & Food process equipment, etc
- Other pressure measure and control

Feature

- High-standard quality
- Stainless steel welding
- Simple installation
- Adopt environmental and non-toxic material
- 80% internal calibration
- Excellent stability and repeatability
- can measure the pressure and temperature in one point

Dimension





Melt Pressure Transmitter



| Specification | | | | | |
|-----------------------------------|---|--|--|--|--|
| Pressure range: | 010MPa to 0150MPa | | | | |
| Output: | 2mV/V , 3.33mV/V , | | | | |
| Input voltage: | 10V DC | | | | |
| Accuracy: | ±1.0%FS; ±1.5%FS (including linearity , Repeatability & Hysteresis) | | | | |
| Repeatability: | ±0.2% FSO | | | | |
| Construction: | Wheatstone bridge | | | | |
| Bridge resistance: | Input: 345 Ohms Minimum; Output: 350 Ohms±10% | | | | |
| Overload pressure: | 1.5×FSO | | | | |
| Internal shunt calibration: | 80%±1% | | | | |
| Insulation Resistance: | 200Megohms @100Vdc | | | | |
| Standard wetted Parts | Diaphragm coated 15-5PH SST | | | | |
| Mounting Torque | 500inch/lbs , maximum | | | | |
| Max. Operating Temp: | 0~260 ℃ | | | | |
| Electronic operating temperature: | -25℃ -85℃ | | | | |
| Electric connector: | 5PIN ,6 PIN | | | | |
| Rigid Length | 6",9" (Customer design) | | | | |
| Thermocouple type: | J,K,E,PT100 Optional | | | | |
| Process connector: | 1/2"-20UNF, M14×1.5, M18×1.5 (Customer design) | | | | |

Mounting hole

| | D1 | M22×1.5 | M28×1.5 | G3/4″ | PT3/8″ |
|------------------|----|---------|---------|-----------|---------|
| | D2 | Ф16.1 | Ф18.3 | Ф18.3 | Ф10.3 |
| | D3 | Ф20.1 | Ф26.1 | Ф24.2 | Ф14.9 |
| | М | Ф23 | Ф30 | Φ21 | Φ11 |
| | А | 11 | 12 | 12 | 14 |
| C B | В | 12 | 15 | 15 | 19 |
| Planar Sealed | С | 40 | 35 | 35 | 40 |
| | D1 | M12×1.5 | M14×1.5 | 1/2-20UNF | M18×1.5 |
| STITIC S | D2 | Ф8 | Ф8 | Ф8 | Ф10.1 |
| | D3 | Ф10.8 | Φ12.5 | Φ11.5 | Ф16.1 |
| | D4 | Φ12.5 | Φ14.5 | Φ13.1 | Ф20 |
| | А | 6 | 6 | 6 | 6.5 |
| 45° Slope Sealed | В | 9 | 9.5 | 9.5 | 10 |

| Ordering | Guide | | | | | | | |
|---|-------|--------|--------------|--------|------------|--------|----------|--------|
| Model | Range | Output | Rigid length | Screw | Electric | Thermo | Accuracy | Others |
| woder | (bar) | Output | (inch) | Thread | connection | Туре | | |
| PT124G- | | | | | | | | |
| 113T | | | | | | | | |
| Example: PT124G-113T-500Bar-3.33mV/V-6"-1/2-20UNF-6PIN-J-1.0%FS | | | | | | | | |
| ZHYQ sensor & control Page 2 of 4 | | | | | of 4 | | | |

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Attention for installation

1, Installation

Do not remove protective cap until ready to install. Prior to initial installation, verify correct machining of mounting hole. Install with aluminum gasket. The electronics housing should be secured, with the enclosed mounting bracket.

2, Remove

Make sure that there is no remained metal or plastic; remove all of the transducers from the equipment before you clean the extruder. You can remove the transducer only when the polymer is molten. And clean the diaphragm of the transducer with soft cloth as soon as you remove it. At the same time, you can use ZHYQ's cleaning tool kit to clean the remained material in the mounting hole in order to install easily next time.

3, Start-up

Bring system to operating temperature, and with no pressure, follow recommended procedures with instrumentation for zero and span adjustment. Make sure that there is sufficient "soak time" to assure that any material at the tip of the transducer is molten before process is started.

4, Electrical house

The tip of the transducer can endure high temperature, but the shell (electrical house) only endure temperature lower than 80 $^{\circ}$ C, so it should place in the room temperature. It can benefit for the accuracy and natural life of the transducer if you keep the shell from the high temperature.

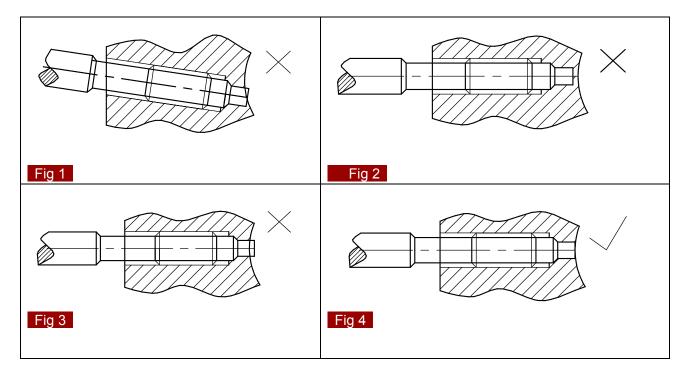
5, Overload effect

During the course of pressure measuring and controlling, it is better to make sure the transducer within the rated pressure, too long time overload the pressure will affect the accuracy and natural life of transducer, although the transducer own determinate overload ability.

6, Wiring

Use shielded cable, attach cable shield to ground at one end only. In order to prevent the jamming.

Select correct installation



Melt pressure transmitter



| Output | Function | Color | 5PIN | |
|---------------------|--------------|--------|------|---|
| 2mV/V; 3.33mV/V; | Signal + | Blue | 1 | |
| | Excitation + | Red | 2 | $\left(\begin{array}{c} \left(\begin{pmatrix} O & O \\ 2 & 1 \\ O & O \\ 4 & O \\ 3 \end{pmatrix} \right) \right)$ |
| | Signal - | White | 3 | |
| | Excitation - | Yellow | 4 | |
| | Calibration | Black | 5 | |
| Output | Function | Color | 6PIN | |
| 2mV/V; 3.33mV/V; | Signal + | Blue | А | |
| | Signal - | Green | В | |
| | Excitation + | Red | С | |
| | Excitation - | Yellow | D | |
| | Calibration | Brown | E | |
| | Calibration | Black | F | |

Wiring diagram

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ZHYQ sensor & control

Page 4 of 4