## **Melt Pressure Transducer**

### Model: PT124B-128 (space limited installation)

# ZHYQ

### Description

PT124B-128 Series melt pressure transducer is ideal for space restricted areas applications required, where mounting space is limited. It also has a free-spinning jam nut that simplifies installation. The series comes equipped with six or eight pin bendix connector. It can be interchangeable with the similar world standard products. It is suitable to measure and control the melt pressure in chemical fiber equipment, rubber and plastic machine and so on.

### Application

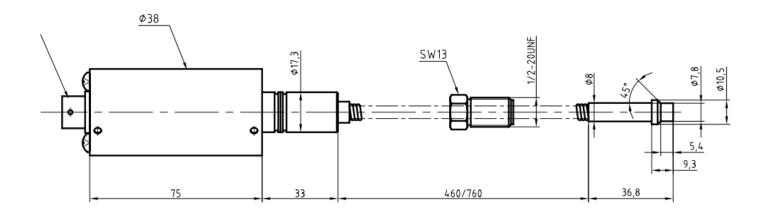
- Chemical fiber& spinning Equipment
- Polyester equipment
- Other pressure measurement and control

#### Feature

- High-standard quality
- Accuracy better than ±0.5%
- Stainless steel wetted parts
- Internal 80% Shunt Calibration
- Good stability and repeatability
- Exposed, bendable capillary

#### Dimension





# **Melt Pressure Transducer**

| Specification          |  |
|------------------------|--|
| Range:                 | 03.5MPa to 0150MPa                             |
| Output:                | 0~5V; 0~10V; 4-20mA                            |
| Accuracy:              | ±0.5%FS; ±1%FS                                 |
| Input Voltage:         | 24 (12-36) V DC                                |
| Repeatability:         | ±0.2%  |
| Construction:          | Wheatstone bridge                              |
| Bridge resistance:     | 350 ohms±10%                                   |
| Overload pressure:     | 1.5×FSO  |
| Internal calibration:  | 80%±1%   |
| Insulation Resistance: | 1000Megohms @50Vdc                             |
| Max Diaphragm Temp:    | <b>0~400</b> ℃                                 |
| Electric connector:    | 5PIN, 6PIN                                     |
| 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   |
| S S S S S S S S S S S S S S S S S S S | D3 | Ф20.1   | Ф26.1   | Ф24.2     | Ф14.9   |
|                                       | М  | Ф23     | Ф30     | Φ21       | Φ11     |
|                                       | А  | 11      | 12      | 12        | 14      |
|                                       | 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 |
|                                       | D2 | Ф8      | Ф8      | Ф8        | Ф10.1   |
|                                       | D3 | Ф10.8   | Φ12.5   | Φ11.5     | Ф16.1   |
|                                       | D4 | Φ12.5   | Φ14.5   | Φ13.1     | Ф20     |
| A.                                    | А  | 6       | 6       | 6         | 6.5     |
| с в<br>45° Slope Sealed               | В  | 9       | 9.5     | 9.5       | 10      |

### Ordering Guide

| Model              | Range(bar)     | Output      | Screw<br>Thread | Electric connection | Accuracy | Other requirement |
|--------------------|----------------|-------------|-----------------|---------------------|----------|-------------------|
| PT124B-128         |                |             |                 |                     |          |                   |
| Example: PT124B-12 | 28-500Bar-4/20 | 0mA-1/2-20l | JNF-6PIN-0.5    | 5%FS                |          |                   |

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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.

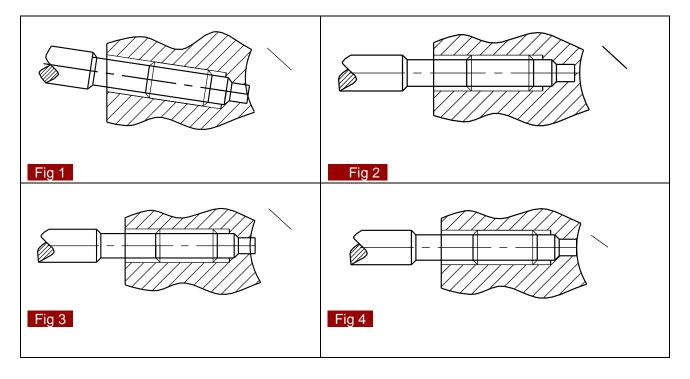
### 5, Overload effect

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





### Wiring diagram

| Output       | Function     | Color  | 5PIN |
|--------------|--------------|--------|------|
|              | Signal +     | Blue   | 1    |
|              | Excitation + | Red    | 2    |
| 0/5V, 0/10V; | Signal -     | White  | 3    |
|              | Excitation - | Yellow | 4    |
|              | Calibration  | Black  | 5    |
| Output       | Function     | Color  | 5PIN |
|              | Signal+      | Blue   | 1    |
| 4/20mA       | Excitation+  | Red    | 2    |
| 4/20MA       | Calibration  | Yellow | 4    |
|              | Calibration  | Black  | 5    |
| Output       | Function     | Color  | 6PIN |
|              | Signal +     | Blue   | А    |
|              | Signal -     | Green  | В    |
| 0 51/0 101/  | Excitation + | Red    | С    |
| 0-5V;0-10V;  | Excitation - | Yellow | D    |
|              | Calibration  | Brown  | E    |
|              | Calibration  | Black  | F    |
| Output       | Function     | Color  | 6PIN |
|              | E+/ S+       | Red    | А    |
| 4-20mA       | E-/ S-       | Blue   | В    |
| 4-20117      | Calibration  | Yellow | E    |
|              | Calibration  | Black  | F    |

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