

# Melt Pressure Transducer

Model: PT124G-121 (Flexible stem)



## Description

PT124G-121 Series Melt Pressure Transducer. This model adopts special construction and excellent alloy elastic membrane to reduce the thermal draft ,improve the accuracy, good anti-jamming performance andt built in 80% shunt calibration, it can match our N series pressure instrument also can match the pressure instrument or controller of other brand . It is suitable for pressure measuring and controlling in melt fluid medium, such as the plastic & polymer in the process equipments. Can replace Dynisco / Gefran /GP50 etc. international brand absolutely .

## Application

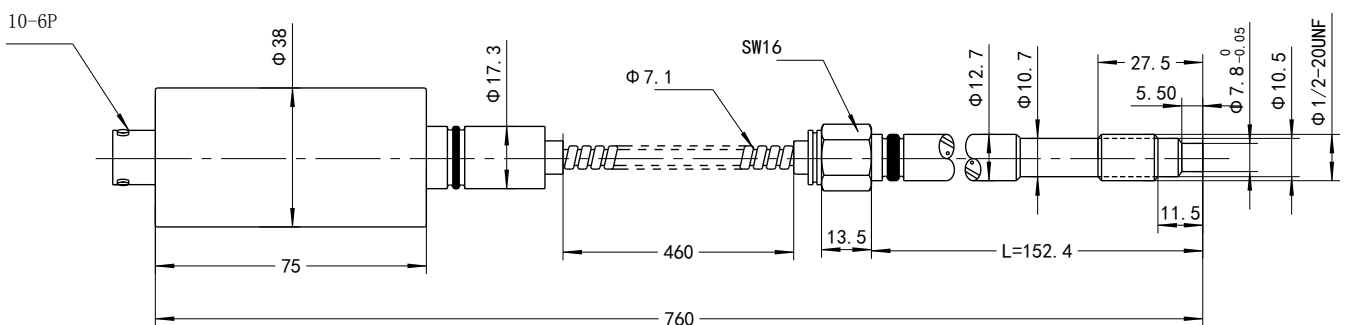
- ◆ Chemical fiber Equipment
- ◆ Plastic and Rubber manufacturing equipment
- ◆ Medicine & Food process equipment
- ◆ Measurement and Control all kinds of melt fluid

## Feature

- ◆ Stainless steel welding
- ◆ Easy to install
- ◆ Zero and span adjustable
- ◆ Various amplified signals optional
- ◆ Internal 80% shunt calibration
- ◆ Good stability and anti-jamming capability
- ◆ Excellent stability and repeatability



## Dimension



## Specification

|                                   |  |
|-----------------------------------|--|
| Pressure range:                   | 0...3.5 MPa to 0...150MPa  |
| Output:                           | 2mV/V; 3.33mV/V  |
| Input voltage:                    | 10 (6~12V) DC  |
| Accuracy:                         | ±1.0%FS ; ±1.5%FS<br>(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. Diaphragm Temp:              | 0~400°C  |
| Electronic operating temperature: | -25°C -85°C  |
| Electric connector:               | 5PIN ,6 PIN  |
| Rigid Length:                     | 6",9" (Customer design)  |
| Flexible Length:                  | 18" , 30" (Customer design)  |
| Process connection:               | 1/2"-20UNF, M14×1.5, M18×1.5 (Customer design)                           |

## Mounting Hole

|                      |                         |         |         |         |           |
|----------------------|-------------------------|---------|---------|---------|-----------|
| <p>Planar Sealed</p> | D1                      | M22×1.5 | M28×1.5 | G3/4"   | PT3/8"    |
|                      | D2                      | Φ16.1   | Φ18.3   | Φ18.3   | Φ10.3     |
|                      | D3                      | Φ20.1   | Φ26.1   | Φ24.2   | Φ14.9     |
|                      | M                       | Φ23     | Φ30     | Φ21     | Φ11       |
|                      | A                       | 11      | 12      | 12      | 14        |
|                      | B                       | 12      | 15      | 15      | 19        |
|                      | C                       | 40      | 35      | 35      | 40        |
|                      | <p>45° Slope Sealed</p> | D1      | M12×1.5 | M14×1.5 | 1/2-20UNF |
| D2                   |                         | Φ8      | Φ8      | Φ8      | Φ10.1     |
| D3                   |                         | Φ10.8   | Φ12.5   | Φ11.5   | Φ16.1     |
| D4                   |                         | Φ12.5   | Φ14.5   | Φ13.1   | Φ20       |
| A                    |                         | 6       | 6       | 6       | 6.5       |
| B                    |                         | 9       | 9.5     | 9.5     | 10        |

## Ordering Guide

| Model  | Range (bar) | Output | Rigid & flexible length (inch) | Screw Thread | Electric connection | Accuracy | Others |
|--|-------------|--------|--------------------------------|--------------|---------------------|----------|--------|
| PT124G-121   | ---         | ---    | ---                            | ---          | ---                 |          | ---    |
| <b>Example: PT124G-121-500Bar-2mV/V -6/18"-1/2-20UNF-5PIN-1.0%FS</b> |             |        |                                |              |                     |          |        |

## 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°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.

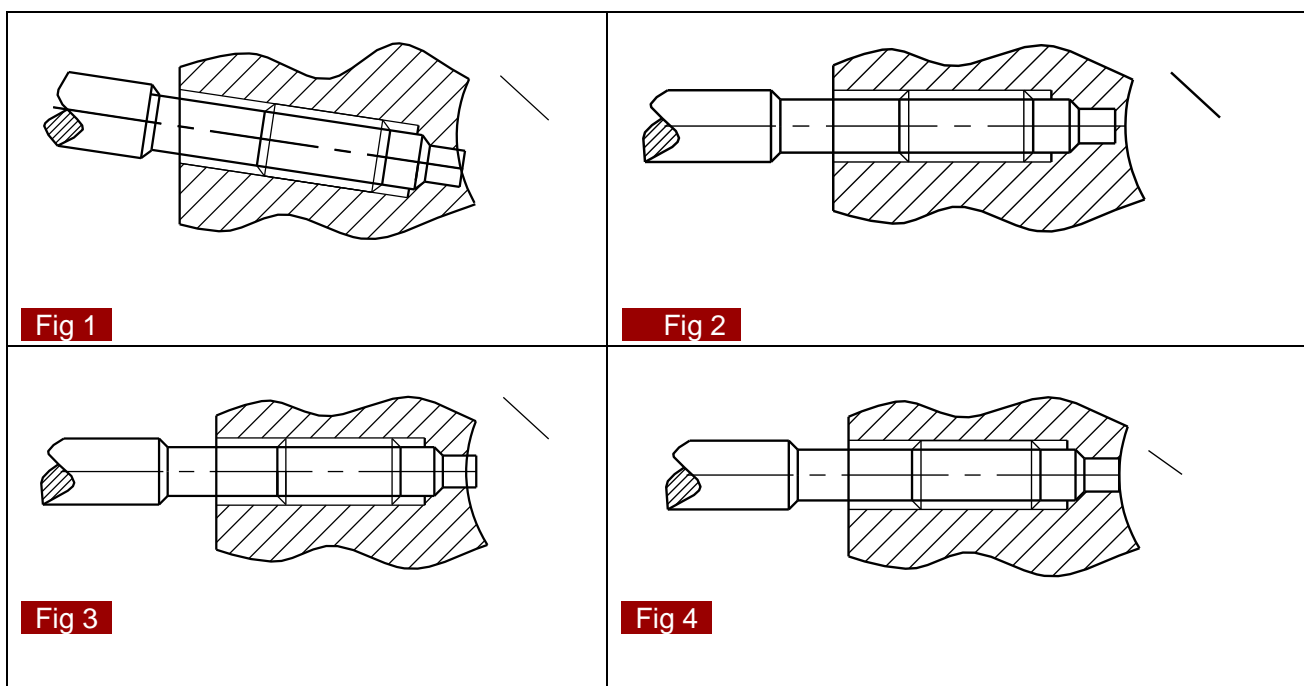
### 5, Overload effect

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 |
|--------------------|--------------|--------|------|
| 2mV/V;<br>3.33mV/V | Signal +     | Blue   | 1    |
|                    | Excitation + | Red    | 2    |
|                    | Signal -     | White  | 3    |
|                    | Excitation - | Yellow | 4    |
|                    | Calibration  | Black  | 5    |
| Output             | Function     | Color  | 6PIN |
| 2mV/V;<br>3.33mV/V | Signal +     | Blue   | A    |
|                    | Signal -     | Green  | B    |
|                    | Excitation + | Red    | C    |
|                    | Excitation - | Yellow | D    |
|                    | Calibration  | Brown  | E    |
|                    | Calibration  | Black  | F    |

## Shanghai Zhaohui Pressure Apparatus Co., Ltd

5-6F No.8 Building No.115 ,Lane 1276 Nanle Road Songjiang District Shanghai 201600 China  
 Tel:+86-21-51691919 67755189 Fax:+86-21-67755185  
 E-mail: info@zhyqsensor.com  
[www.zhyqsensor.com](http://www.zhyqsensor.com)

