

# High precision Melt Pressure Transducer Datasheet









PT124G-112

PT124G-112T

PT124B-123

PT124G-123T

Shanghai Zhaohui Pressure Apparatus Co., Ltd.

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# Model: PT124G-112 (High precision)



#### Description

PT124G-112 Series Melt Pressure Transducer can achieve the pressure and temperature measuring. This series adopt special material and alloy elastic membrane to low down temperature draft and improve accuracy. The zero & full span can be calibrated, with amplify signal be connected with PLC, and internal 80% calibration. It has the wide application in high-temp liquid pressure measurement and control such as Chemical & Fiber equipment, polyester equipment, etc.

### Application

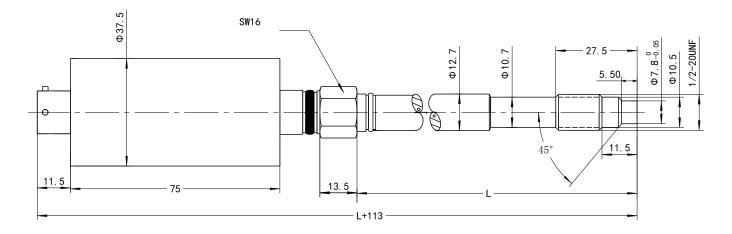
- Fiber Equipment
- Plastic and Rubber manufacturing equipment
- Other melt pressure measurement and Control

#### Feature

- High accuracy
- Stainless steel welding
- Easy to install
- Internal 80% calibration
- Excellent stability and repeatability

#### Dimension





Remarks: L=152, 228, 305

#### PT124G-112

# Model: PT124G-112T (High precision)



#### Description

The model PT124G-112T comes with thermocouple, it can measure the pressure and temperature at one point. It adopts special material and alloy elastic membrane to low down the temperature draft and improve accuracy. The zero & full span can be calibrated, with amplify signal be connected with PLC, and internal 80% calibration. It has the wide application in high-temp liquid pressure measurement and control such as Chemical & Fiber equipment, polyester equipment, etc.

### Application

- Fiber Equipment
- Plastic and Rubber manufacturing equipment
- Other melt pressure measurement and Control

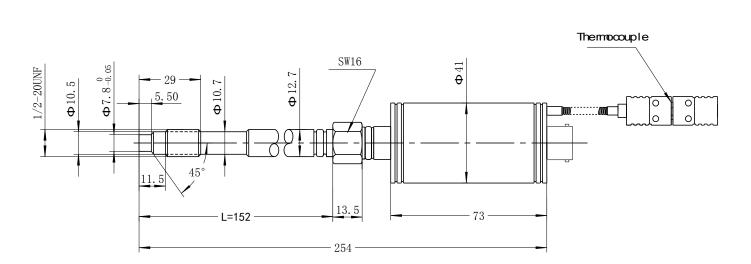
#### Feature

- High accuracy
- Stainless steel welding
- Easy to install

Dimension

- Internal 80% calibration
- Excellent stability and repeatability





L=152, 228, 305

PT124G-112T

# Model: PT124G-123 (High precision)

# ZHYQ

#### Description

PT124G-123 series melt pressure transducer adopts special construction and excellent alloy elastic membrane to reduce the thermal draft and improve the accuracy. Zero & full span can be adjustable, amplified signal can be connected with PLC, which is the international standard. It is suitable for pressure measuring and controlling in melt fluid medium, such as the plastic & polymer in the process equipments.

### Application

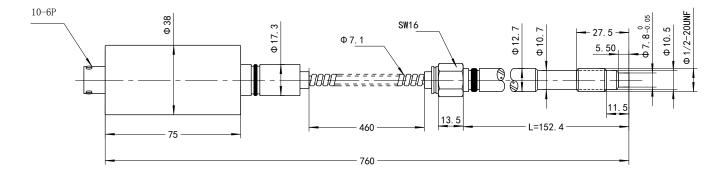
Chemical fiber & spinning Equipment Plastic and rubber, polyester process equipment Other pressure measurement and Control

#### Feature

High-standard quality Stainless steel Seal Simple Installation Completely interchange similar import products Internal 80% calibration Excellent stability



#### Dimension



L=152, 228, 305

### PT124G-123

# Model: PT124G-123T (High precision)

# ZHYQ

#### Description

PT124G-123T Series Melt Pressure Transducer (Flexible stem & High accuracy) comes with thermocouple, it can measure the pressure and temperature in one point. This series adopts special construction and excellent alloy elastic membrane to reduce the thermal draft and improve the accuracy. Zero & full span can be adjustable, amplified signal can be connected with PLC, which is the international standard. It is suitable for pressure measuring and controlling in melt fluid medium, such as the plastic & polymer in the process equipments.



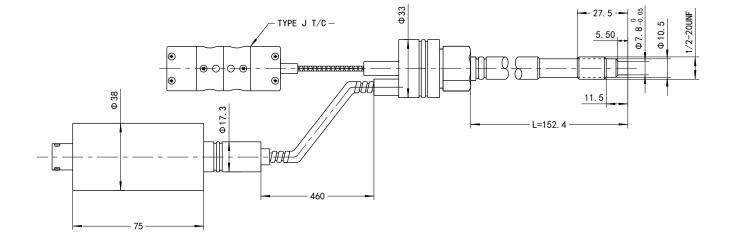
#### Application

- Chemical fiber & spinning Equipment
- Plastic and rubber, polyester process equipment
- Other pressure measurement and Control

#### Feature

- High-standard quality
- Stainless steel Seal
- Simple Installation
- Completely interchange similar import products
- Internal 80% calibration
- Excellent stability

### Dimension



#### PT124G-123T



### Specification

Range:	010MPa to 0150MPa (01500psi to 020000psi)
Output:	2mV/V; 3.33mV/V
Accuracy:	±0.5%FS
Input voltage:	10 (6~12V) 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> ℃
Thermocouple type:	J,K,E,PT100 Optional
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	Φ18.3	Ф18.3	Ф10.3
<u> </u>	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
45°	D2	Ф8	Ф8	Ф8	Ф10.1
	D3	Ф10.8	Ф12.5	Φ11.5	Ф16.1
	D4	Φ12.5	Ф14.5	Φ13.1	Ф20
<u>A</u>	А	6	6	6	6.5
45° Slope Sealed	В	9	9.5	9.5	10
Ordering Guide					

Ordering Guide

Model	Range(bar)	Output	Screw	Electric	Other requirement
			Thread	connection	
PT124G-123T					
Example: PT124G-123	3T-500Bar-3.3	3mV/V-1/2-2	0UNF-6PIN-	J	

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# Melt pressure transducer/transmitter

# **Operating instruction**

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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.

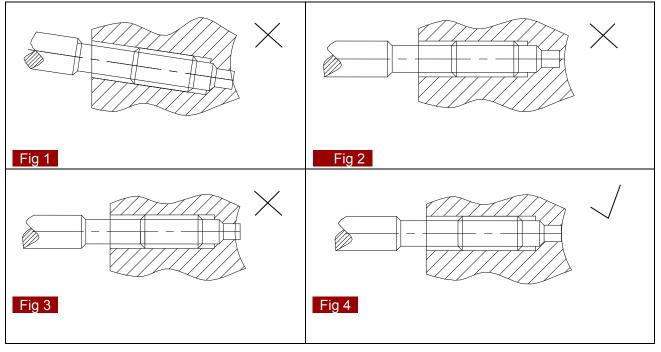
## 5, Overload effect

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.

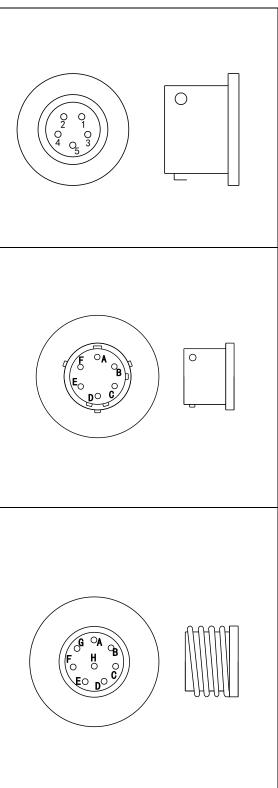
### Select correct installation



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## Wiring diagram

Output	Function	Color	5PIN
0/5V,1-5V;	Signal +	Blue	1
0/10V	Excitation +	Red	2
0/0.5V	Signal -	White	3
2.0mV/V	Excitation -	Yellow	4
	Calibration	Black	5
Output	Function	Color	5PIN
4/20mA	Signal+	Blue	1
	Excitation+	Red	2
	Calibration	Yellow	4
	Calibration	Black	5
Output	Function	Color	6PIN
0-5V;1-5V;	Signal +	Blue	А
0-10V;	Signal -	Green	В
0/0.5V	Excitation +	Red	С
3.33mV/V	Excitation -	Yellow	D
	Calibration	Brown	E
	Calibration	Black	F
Output	Function	Color	6PIN
4-20mA	E+/ S+	Red	А
	E-/ S-	Blue	В
	Calibration	Yellow	E
	Calibration	Black	F
Output	Function	Color	8PIN
0-5V;1-5V;	Excitation +	Red	А
0-10V;	Signal +	Blue	В
0/0.5V	Excitation -	Yellow	С
3.33mV/V	- · ·		
3.331117/7	Signal -	Green	D
3.331117/7	Signal -	Green /White	D
5.55117/7	Signal - Calibration		D E
5.55IIIV/V	Calibration Calibration	/White	E F
5.55mV/V	Calibration	/White Brown	E
Output	Calibration Calibration	/White Brown	E F
	Calibration Calibration Blank	/White Brown Black 	E F G, H
Output	Calibration Calibration Blank Function	/White Brown Black  Color	E F G, H 8PIN
Output	Calibration Calibration Blank Function E+/ S+	/White Brown Black  <b>Color</b> Red	E F G, H <b>8PIN</b> A



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