HIGHJOIN

HPM129A-112/112T Melt Pressure Transmitter Instruction Book

Nanjing Hangjia Electronic Technology Co.,Ltd.

Overview

HPM129A 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

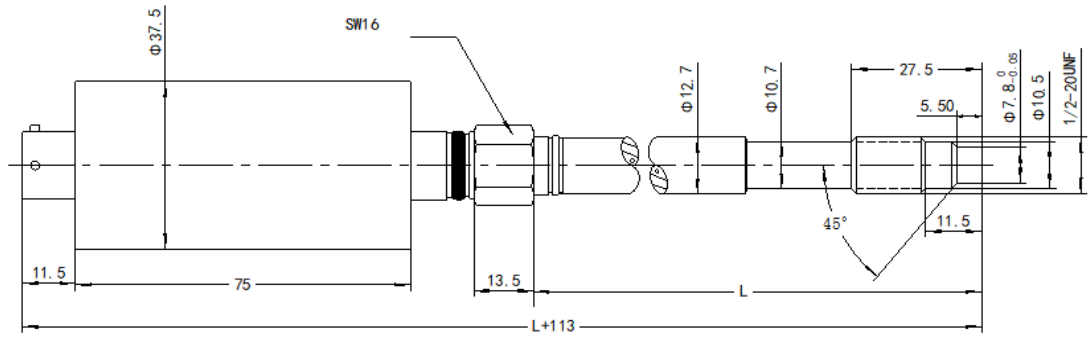
- Fiber Equipment
- Plastic and Rubber manufacturing equipment
- Other melt pressure measurement and Control

Feature

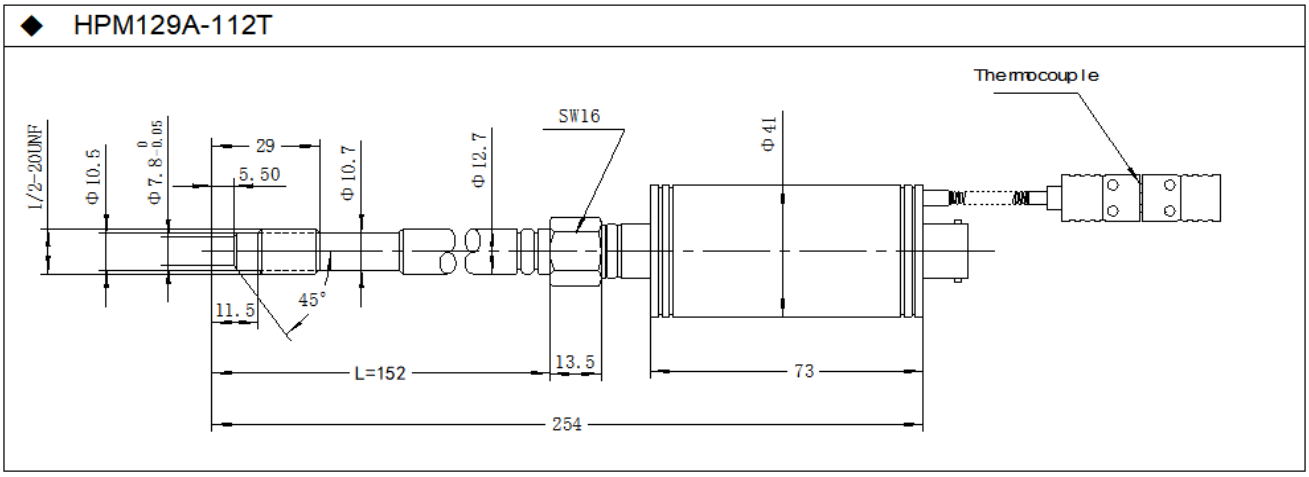
- High accuracy
- Stainless steel welding
- Easy to install
- Internal 80% calibration
- Excellent stability and repeatability

Dimension

◆ HPM129A-112



◆ HPM129A-112T

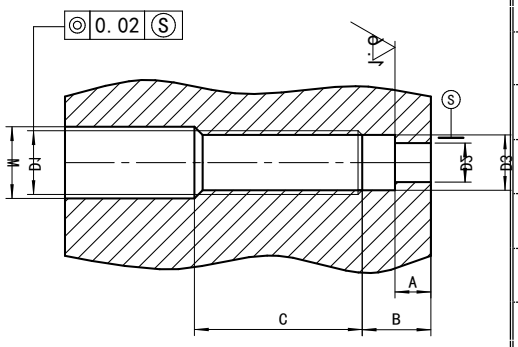


Remarks: L=152, 228, 305

Technical Parameters

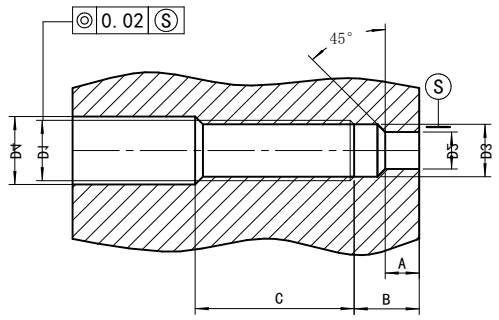
Range	0….10Mpa to 0….150MPa (0…1500psi to 0…20000psi)
Output	3.33mV/V; 2mV/V
Accuracy	±0.5%FS
Excitation	10VDC
Repeatability	±0.2%
Diaphragm material	15-5PH
Bridge resistance	350 ohms±10%
Overload pressure	1.5×FSO
Internal calibration	80%FSO±1%
Insulation Resistance	1000Megohms @50Vdc
Max. Diaphragm Temp	350℃
Electric connector	5PIN, 6PIN, 8PIN
Process connector	1/2″-20UNF, M14×1.5, M18×1.5（Customer design）

Mounting Hole



Planar Sealed

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



45°Slope Sealed

D1	M12×1.5	M14×1.5	1/2-20UNF	M18×1.5
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

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 HIGHJOIN'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℃, 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

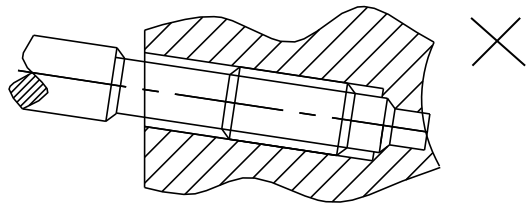


Fig 1

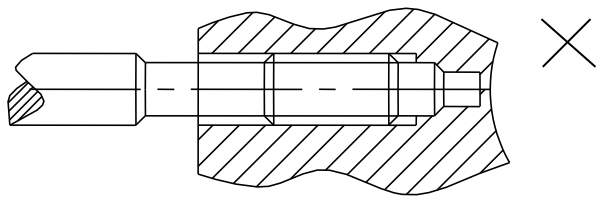


Fig 2

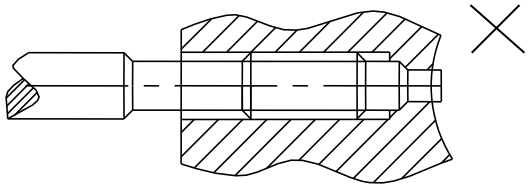


Fig 3

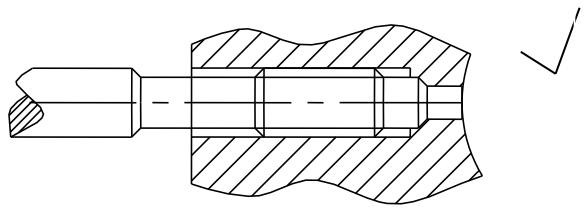
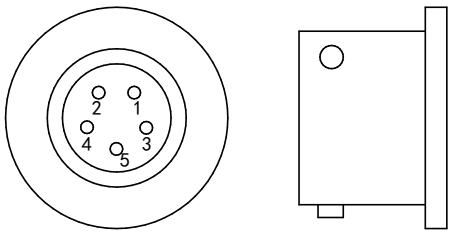
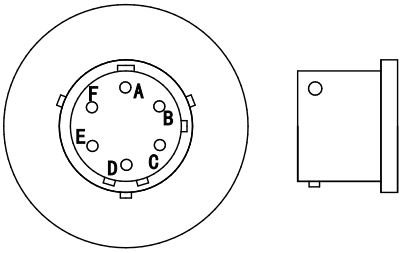
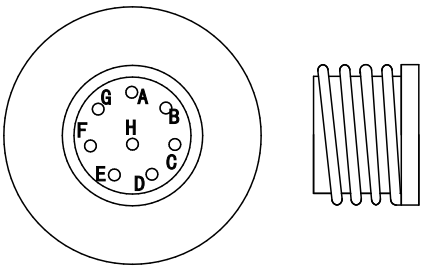


Fig 4

Wiring diagram

Output	Function	Color	5PIN	
0/5V,1-5V; 0/10V 0/0.5V 2.0mV/V	Signal +	Blue	1	
	Excitation +	Red	2	
	Signal -	White	3	
	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; 0-10V; 0/0.5V 3.33mV/V	Signal +	Blue	A	
	Signal -	Green	B	
	Excitation +	Red	C	
	Excitation -	Yellow	D	
	Calibration	Brown	E	
	Calibration	Black	F	
Output	**Function**	**Color**	**6PIN**	
4-20mA	E+/ S+	Red	A	
	E-/ S-	Blue	B	
	Calibration	Yellow	E	
	Calibration	Black	F	
Output	**Function**	**Color**	**8PIN**	
0-5V;1-5V; 0-10V; 0/0.5V 3.33mV/V	Excitation +	Red	A	
	Signal +	Blue	B	
	Excitation -	Yellow	C	
	Signal -	Green /White	D	
	Calibration	Brown	E	
	Calibration	Black	F	
	Blank	--	G, H	
Output	**Function**	**Color**	**8PIN**	
4-20mA	E+/ S+	Red	A	
	E+/ S+	Blue	B	
	Calibration	Yellow	E	
	Calibration	Black	F	

Ordering Guide

Item	Model No.
HPM129A	112
	112T（with temperature)

Measuring Pressure Range
0…3.5MPa~0…150MPa

Code	Output Signal
1	2mV/V
2	3.33mV/V

Code	Thread
P1	M14×1.5
P2	1/2-20UNF
P3	M18×1.5
P4	M22×1.5

Code	Rigid Probe Length
L6	6″（152mm）
L9	9″（230mm）
L12	12″（305mm）

Code	Electrical Connection
C1	5 Pin Plug
C2	6 Pin Plug
C3	Cable gland

Code	Temperature signal type
N	N/A
J	Type J
K	Type K
E	Type E
P	PT100
J5	0.5%FS

Example:HPM129A-112-5Mpa-3.33mV/V-1/2-20UNF-6PIN

HIGHJOIN

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