Version 2.0

Ziasiot

Operation Instructions

φ 100 digital melt pressure transmitter

PG112X/PG123X/PG133X series

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Shanghai Ziasiot Technology Co., Ltd.

www.ziasiot.com info@ziasiot.com 400-821-0137


Ziasiot
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01 Product introduction

φ 100 digital melt pressure transmitter is an instrument that measures the melt pressure in the high temperature area and can display the pressure value in the field with a signal output of 4-20 mA.

Follow the following instructions for storage and operation to ensure the maximum service life of the product.

02 Product Model and Specifications

Product model: PG112X (rigid type), PG123X (Rigid+flexible type), PG133X (With thermocouple type)

Case diameter: Φ100

Measuring range: (0-3.5) MPa, (0-5) MPa, (0-7) MPa, (0-10) MPa,
(0-20) MPa, (0-35) MPa, (0-50) MPa, (0-70) MPa,
(0-100) MPa, (0-200) MPa

Output signal: four-wire 4-20mA

Power supply voltage: optional 220VAC or 24VDC

Basic error: ±1.6%

03 Transportation and Storage

3.1 The product is normally packaged individually and when stored, please carefully repackage the packaging it originally came with.

3.2 At the front thread of the rigid rod, the induction diaphragm is protected by a protective cap, which should be tightened at any time during storage and only opened when using the installation. It is strictly prohibited to press the diaphragm with sharp materials.

3.3 Long-term storage needs to meet the following conditions:

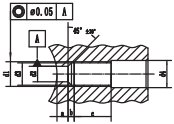
① Ambient temperature: -20~85℃, relative humidity: 0%~100%R.H

② Not exposed to rain or affected by water seepage/leakage.

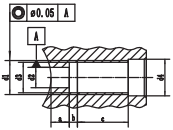
③ Vibration and shock kept to a minimum.

04 Product Installation Hole

Before installing the product, make sure that the mounting holes are machined to the correct size and that the holes are free of burrs.

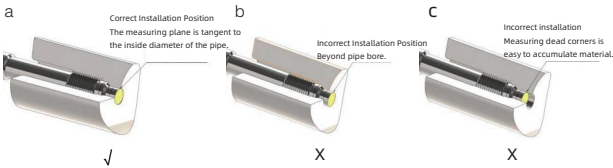


d1	d2	d3	d4	a	b	c
1/2-20UNF	Φ8	Φ11.5	Φ14	5.7	3.2	19
M18×1.5	Φ10	Φ16.5	Φ20	6	4	25
M10×1	Φ6.2	Φ9.1	Φ14	6.7	3.2	19
M14×1.5	Φ8	Φ12.5	Φ15	5.7	3.2	19
G1/4	Φ8	Φ11.7	Φ14	5.7	3.2	19
M12×1.5	Φ8	Φ10.5	Φ14	5.7	3.2	19



d1	d2	d3	d4	a	b	c
G3/8	Φ10	Φ15	Φ18	9	4	25
G3/4	Φ18.1	Φ24.5	Φ28	12	5	35
M22×1.5	Φ16	Φ20.5	Φ24	10	5	40
M20×1.5	Φ14	Φ18.5	Φ22	5.7	3	35

Correct Installation Mode



05 Product Installation

5.1 Before installing the product, please check whether the technical parameters on the nameplate are correct or not, mainly including mounting threads, pressure range, output signal, power supply requirements.The main parameters include mounting thread, pressure range, output signal and power supply requirements.

5.2 Ensure that the mounting holes are drilled to the correct dimensions. If the product is installed in a previously used mounting hole, professional cleaning tools should be used to ensure that the mounting hole is completely clean and free of any plastic residue.

5.3 Remove the protective cap from the front of the product.

5.4. Apply high-temperature anti-seize grease to the threaded surfaces of the product to prevent thread seizure. If you need to install a gasket when sealing the flat surface, please put the high temperature anti-seize grease on the surface. If you need to install a sealing gasket for flat sealing, please apply high-temperature anti-seize grease on the sealing gasket and stick the gasket on the product.

5.5 Place the product smoothly into the mounting hole, first manually, and then use a wrench to tighten it on the hexagon. If the product is to be mounted in a previously used mounting hole, it is recommended that the product be mounted under conditions of heating to the melting point of the plastic.

The recommended maximum mounting torque is 40 Nm.

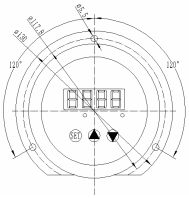
06 Product disassembly

6.1 Disassembly must be done under heated conditions (plastic melting point). When disassembling the sensor, make sure that the diaphragm is not contact pressure. The force for dismounting the sensor must be applied only to the shaft (hexagon) and not to the sensor head. Do not apply any force to the sensor head. If the mounting holes need to be blocked, seal them with a plug of the same mechanical size.

6.2 After disassembling the product, the diaphragm, sealing surfaces and threads must be quickly wiped clean with a soft cloth.

07 Product disassembly

Use our professional mounting bracket to fix the product, the fixing position should avoid vibration and installation in a strong magnetic environment, and should not be exposed to rain or water seepage/leakage, the temperature should not exceed 85℃.



Please strictly follow the operation instructions to install and disassemble the product, caused by misoperation damage, we does not assume the quality responsibility.

08 Wiring and Cabling

8.1, the cable should be used with a shielded cable, heat-resistant temperature of not less than 105 ℃, each core line connecting terminal should be heat-shrinkable The shielded cable should be connected with the plug-in metal, and special care should be taken when welding the cable, otherwise it may lead to signal transmission error or damage the product. Otherwise, it may cause signal transmission error or damage the product. Please refer to "Electrical Connection" for wiring definition.

8.2. If you use our welded cables, you only need to connect them according to the definition of "Electrical Connection".

8.3 Signal cable should be wired separately through the wiring channel, strong and weak power should be wired separately, please avoid high temperature when wiring.The recommended ambient temperature is below 85℃.

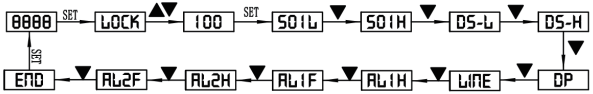
8.4. It is strictly prohibited to plug the cable into the electrical connection of the high-temperature melt pressure sensing/high-temperature melt pressure transmitter, The cable should not be pulled out of the wiring.
8.5 After the cable is connected, connect it to the terminal block of the signal receiving end according to our electrical connection definition. If there is any extra If there is any extra wire core, please wrap each wire core individually with insulating tape.

09 Product Calibration

After the product is installed and connected to the measuring instrument and powered on, and in the absence of any pressure, the system temperature has reached the operating temperature 30min to 60min, the product is calibrated.

After removing the meter cover, long press to reset

Table head operation instructions:



The password to enter the menu is "100". The menu is switched using the up and down keys, and the data is viewed using the SET key, which is also the confirmation key.

S01L: Transmit zero value
ds-L: Zero value of pressure display
Dp: Number of decimal places
AL1H: Relay 1 pull-in value
AL2H: Relay 2 pull-in value

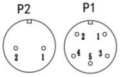
S01H: Transmit full value
ds-H: Full value of pressure display
Line: Linear correction
AL1F: Relay 1 release value
AL1F: Relay 2 release value

Note: The switch point is determined by the pull-in value and release value configuration. When the pull-in value is greater than the release value, the upper limit alarm is output (normally open function). When the pull-in value is less than the release value, the lower limit alarm is output (normally closed function). The difference between the pull-in value and the release value is the hysteresis of the switch point.

For example: To set switch point 1 as the upper limit alarm (normally open function), it will be closed at 4MPa and disconnected at less than 3.95MPa, switch point 2 as the lower limit alarm (normally closed function), it will be disconnected at 10MPa and closed below 9.95MPa
Enter the menu: set: AL1H=4.00, AL1F=3.95; AL2H=9.95, AL2F=10.00, and press SET in the END menu to exit.

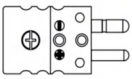
10 Electrical Connection

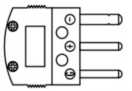
24VDC power supply				
Binding Posts		Code	Definition	Cable color
1		P1	Signal +	Blue
2			Power +	Red
3			Signal -	White
4			Power -	Yellow

24VDC power supply				
Binding Posts	P2 P1 	Code	Definition	Cable color
1		P2	Power L	Red
2			Power N	Black
1		P1	Signal +	Blue
3			Signal -	White

Relay output				
Code		Binding Posts	Definition	Cable color
AL-1		1		Green
		2		Red
		3		Yellow
AL-2		4		Black
		5		Gray
		6		White

Temperature signal output:

Thermocouple type		Thermocouple temperature signal		Cable color
K type thermocouple		+		Red
		-		Blue
E type thermocouple		+		Red
		-		Brown
J type thermocouple		+		Red
		-		Yellow

		Three-wire PT100		Cable color
		+		Red
		G		Red
		-		White

Ziasiot

Shanghai Ziasiot Technology Co., Ltd.

6th floor,18th Building,No.615, Lianying Road, Songjiang District, Shanghai,China.

Tel: 021-37635502 400-821-0137

Fax: 021-37635507

Email: info@ziasiot.com

Web: http://www.ziasiot.com(English) http://www.ziasiot.net(chinese)

Zias(Zhejiang) loT Technology Co.,Ltd.

3F305, R&D Building, No.1237Jjiachuang Road,Xiuzhou District,
Jiaxing City,Zhejiang province,China

Email: zias@ziasiot.com

Tel: 0573-83312892