Ziasiot
A Hogogroup Company

Extruder Measuring Equipment

Standard Melt Pressure Sensor

PT112B/PT123B/PT133B Series

One key to reset zero

4-20mA / 0-10V/0-5V Output

CE

Certification：

ISO9001-2015

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Content

1. Introduction

PT112B/PT123B/PT133B melt pressure transmitter is a kind of accurate measuring equipment, which adopts high performance core element, digital-analog integrated circuit design, realizes linear compensation through program, and can obtain 0.5% FSO measurement accuracy.

2. Application

This series can be used for pipe extrusion, sheet extrusion, recycled plastics, recycled plastics and other extrusion processes and simple control.

3. Product Features

Accuracy 0.5%FS

Stainless steel sealing

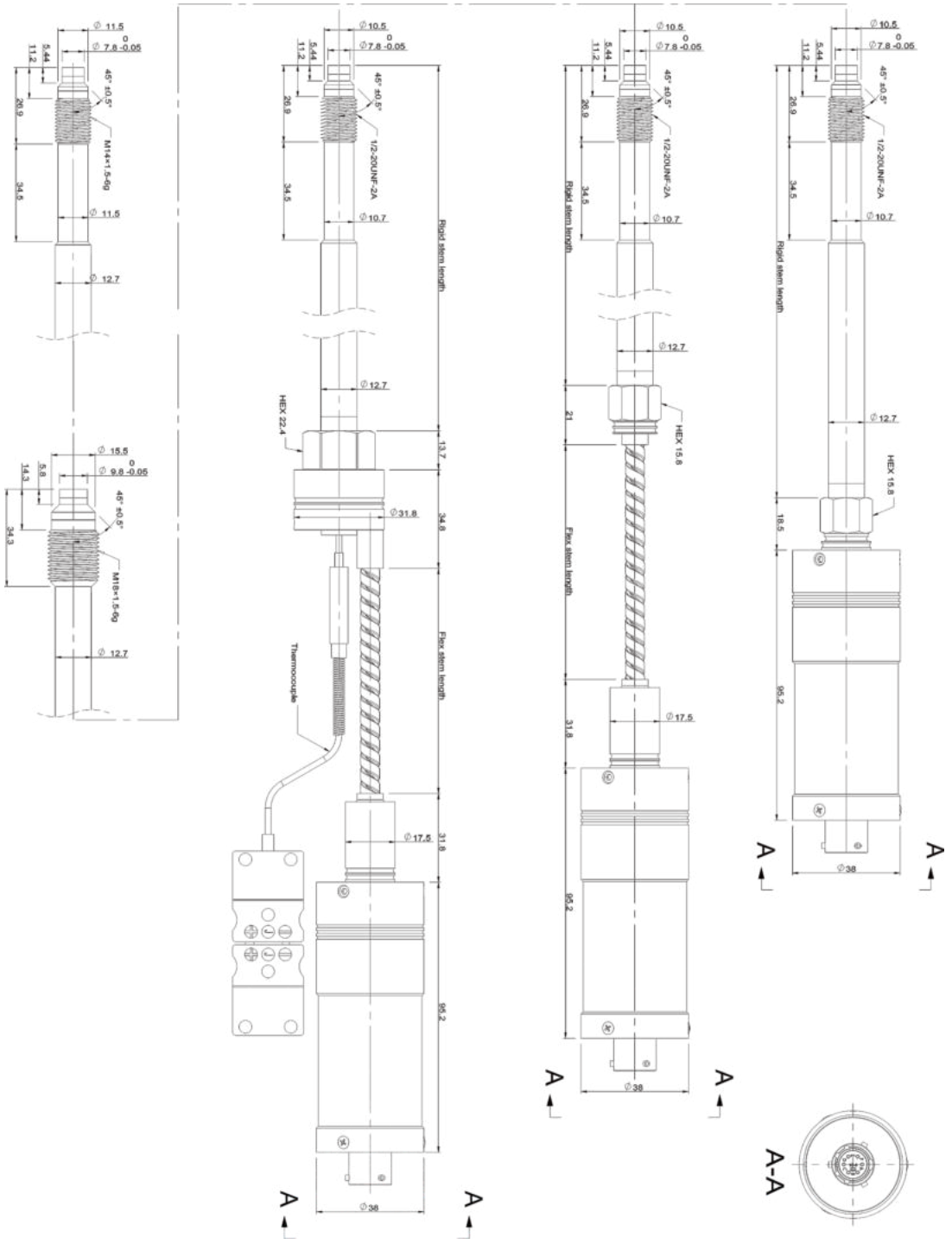
80% internal calibration

Good stability and repeatability

4. Technical Data

Pressure Range	0~100bar;0~2000bar	
Accuracy	±0.5%	
Over load Pressure	1.5FSO	
Bridge Resistance	350ΩWheatstone bridge	
Power	9 ~ 36Vdc (Standard24Vdc)	18 ~ 36Vdc
Output Signal	4 ~ 20mA	0 ~ 10Vdc,0 ~ 5Vdc
Load Resistance（Ω）	——	< （U-9）/0.02
Calibration	80%FSO	
Process Connection	M14×1.5、1/2-20UNF、M18×1.5	
Insulation Resistance（50Vdc）	1000MΩ	
Diaphragm Material	17-4PH、inconel718、C276	
Diaphragm max temp	300C°	
Film Material	TiAlN	
E-connection	6-pin connector(Standard)，8-pin connector	
Electrical Environment temp	-20C° ~ 85C°	
Thermocouple	J Type,E Type,K Type,pt100	
Protection degree	IP65	
Installation torque	< 30Nm	
Filling Material	Mercury filling	

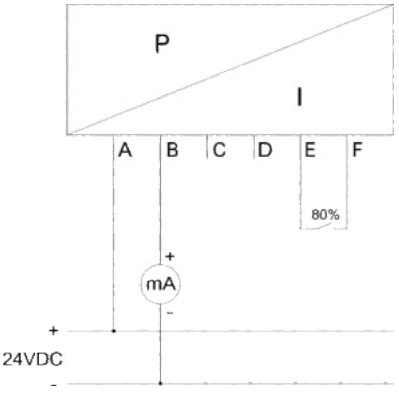
5. Dimensions



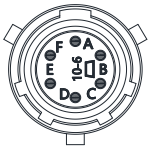
6. Electrical connection & Debugging

After the pressure transmitter has been installed on the pipeline, the electrical connection must be carried out in accordance with the connection the wiring diagram below. PT112B/PT123B/PT133B series pressure transmitter is equipped with an integrated amplifier circuit. The calibration process must be that the pipeline is heated and the pressure is zero. The zero point is adjusted by twisting the "Z" position screw" at the top of the shell with an object similar to a toothpick. Press button 3 seconds to reset zero (please do not touch S" point).

4···20mA (2-wire)

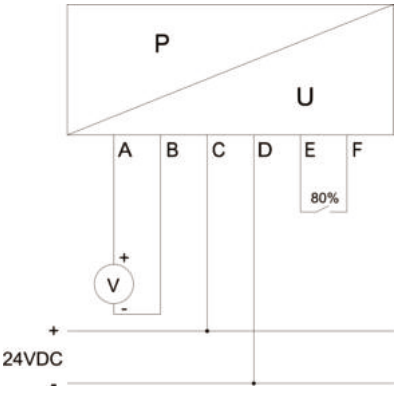


6-pin connector /PT02A-10-6P



PIN	Function	Wire Color
A	Power +	Red
B	Power −	Black
C		White
D		Green
E	80% +	Blue
F	80% −	Orange

0···5V/10V (4-wire)

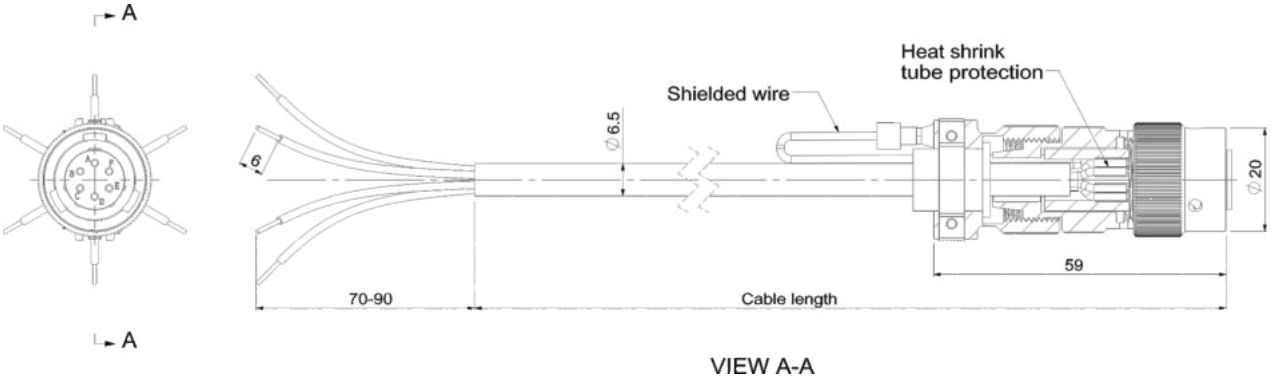


6-pin connector/PT02A-10-6P

PIN	Function	Wire Color
A	Signal +	Red
B	Signal −	Black
C	Power +	White
D	Power −	Green
E	80% +	Blue
F	80% −	Orange

* B and D pins are connected internally

The cable shall be covered with shielding layer cable, each core wire is about 0.3 mm2, temperature-resistance is not less than 105C°, each core wire connection column shall be insulated and protected by heat shrink tube isolation, shield wire shall be connected with plug-in metal, cable welding should be particularly careful, otherwise it may lead to signal transmission error or damage products, It is recommended to use Ziasiot welded special cable. For excess lines in the cable, each wire should be wrapped separately with insulating tape.



VIEW A-A

7. Ordering Guide

Serie No	PT	X	-	X	-	X	-	X		X	-	X	-	X	-	X	-	X	-	X
Product Type	Rigid Stem	112B																		
	Rigid+flexible stem	123B																		
	With thermocouple	133B																		
Pressure Range	3.5MPa 35bar 500psi			5C																
	10MPa 100bar 1500psi			1.5M																
	20MPa 200bar 3000psi			3M																
	35MPa 350bar 5000psi			5M																
	50MPa 500bar 7500psi			7.5M																
	70MPa 700bar 10000psi			10M																
	100MPa 1000bar 15000psi			15M																
	200MPa 2000bar 30000psi			30M																
Process Connection	1/2-20UNF					1/2														
	M14×1.5					M14														
	M18×1.5					M18														
Rigid stem Length	6" (152mm)							6												
	9" (229mm)							9												
	12.5" (318mm)							12												
	15" (381mm)							15												
	18" (460mm)							18												
Flexible stem Length	18" (460mm)									/18										
	24" (610mm)									/24										
	30" (760mm)									/30										
Output Signal	4 ~ 20mA											MA								
	0 ~ 10Vdc											10V								
E-connection	6-pin aviation Connector (p/n PT02A-10-6P)													--						
	8-pin aviation Connector (p/n PT02A-10-8P)													8P						
Thermocouple	J Type															J				
	K Type															K				
	E Type															E				
	Pt100															RTD1				
Accuracy	0.50%																	--		
	0.25%																	2A		
Diaphragm	17-4PH(Standard)																			--
	Inconel718 (anti-abrasive)																			I7
	C276 (Anti-corrosive)																			C2

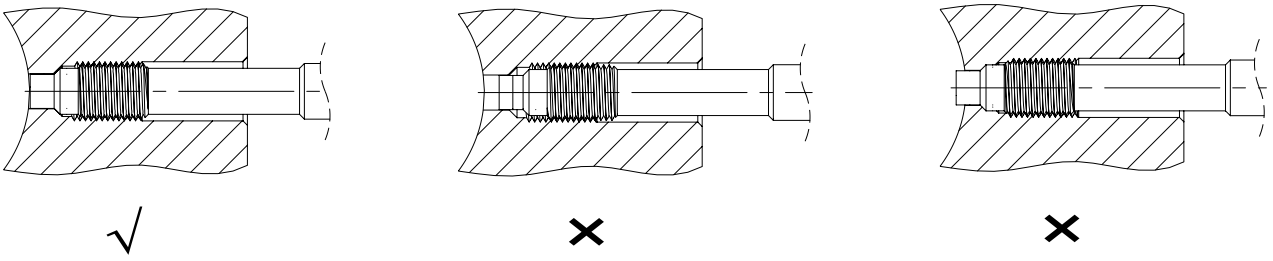
8. Installation & Removal

Installation

When installing the pressure transmitter, it must be noted that the transmitter hole is within the size requirement range indicated in the following drawings. The assembly accuracy can be checked by testing bolts. the figure "a" is the correct installation position, the figure" b" and "c" are the wrong installation position. Before installing the transmitter, first clean the impurities in the hole and between the thread teeth, then apply the heat resistant slurry on the transmitter thread, because the outer thread and inner thread of stainless steel material are easy to bite. The housing part of the transmitter needs to be away from the high temperature area.

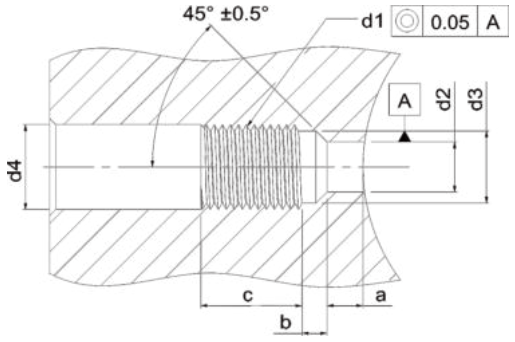
Maximum starting torque =1/2-20 UNF /M14×1.5:40 Nm

M18 x 1.5= maximum starting torque :50 Nm



Removal

The removal of the pressure sensor must be done under heating conditions (plastic melting point). When removing the sensor, please note that the diaphragm has no contact pressure. the force to unload the sensor must be applied only on the shaft (hexagon) and do not apply any force to the sensor head.



d1	M18×1.5	M14×1.5	1/2-20UNF-2A
d2	$Ø9.9^{+0.1}$	$Ø7.9^{+0.1}$	$Ø7.9^{+0.1}$
d3	$Ø16.1^{+0.1}$	$Ø11.7^{+0.1}$	$Ø10.7^{+0.1}$
d4	Ø20	Ø15	Ø14
a	$6.1^{-0.1}$	$5.7^{-0.1}$	$5.7^{-0.1}$
b	$4^{-0.2}$	$3.2^{-0.2}$	$3.2^{-0.2}$
c	25	19	19

9. Sensors cleaning

In order to clean the diaphragm, the sealing surface and thread of the transmitter must have the same temperature as the melting point of the plastic. The diaphragm and sealing surface can be cleaned with soft cloth, and the thread and rigid rod can be cleaned with steel brush or copper brush. (Do not touch diaphragm surface with steel brush).

10. Transport and storage

PT112B/PT123B/PT133B series is usually packaged separately. In the front thread of the rigid rod, the sensing diaphragm is protected by a protective cap. This protective cap should be tightened at any time during storage, and only opened during installation.

Note: Mounting brackets,extension cables,connectors,cleaning kits,drill kits,dummy plug etc accessories,please contact with us.