



PZP503 Melt Pressure Transmitter



Introduction

PZP503 melt pressure transducer and transmitter are based on metal foil strain gauge technology and are made from stainless steel material to high quality standard.

In PZP503, a full bridge strain gauge is bonded onto an stainless steel diaphragm where the measured pressure is introduced to, from the front-end of a rigid stainless steel stem via a capillary. The capillary is hermetically protected in the rigid stem. At the front-end of the rigid stem, the diaphragm will directly contact with high-temperature melt medium. The rigid stem can provide thermal isolation to strain gauge circuitry and associated electronics, so as to ensure the PZP503 functioning properly with high temperature media. PZP503 is based on PZP502 and can measure the temperature of the pressure media through a thermocouple or Pt100 thermal resistor.

Zero & full span can be adjustable, with amplify signal can be connected with PLC. By short circuit, a shunt calibration resistor can be connected, which provides PZP503 with 80%fs self-calibration function at any time without need of external calibration facility. With the advantage of high precision and reliable pressure measuring and good quality.

Features

- Pressure range: 0~20,...,1500bar
- Pressure type: gauge
- Accuracy up to 0.3%fs
- Optional output signal
- Amplified output signal available with Zero and Span adjustment
- Internal shunt calibration signal of 80%fs

Applications

- Industrial process control
- Chemical fiber equipment
- Plastic and Rubber manufacturing equipment
- Packaging equipment
- Measure and Control all kinds of melt fluid

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Specifications

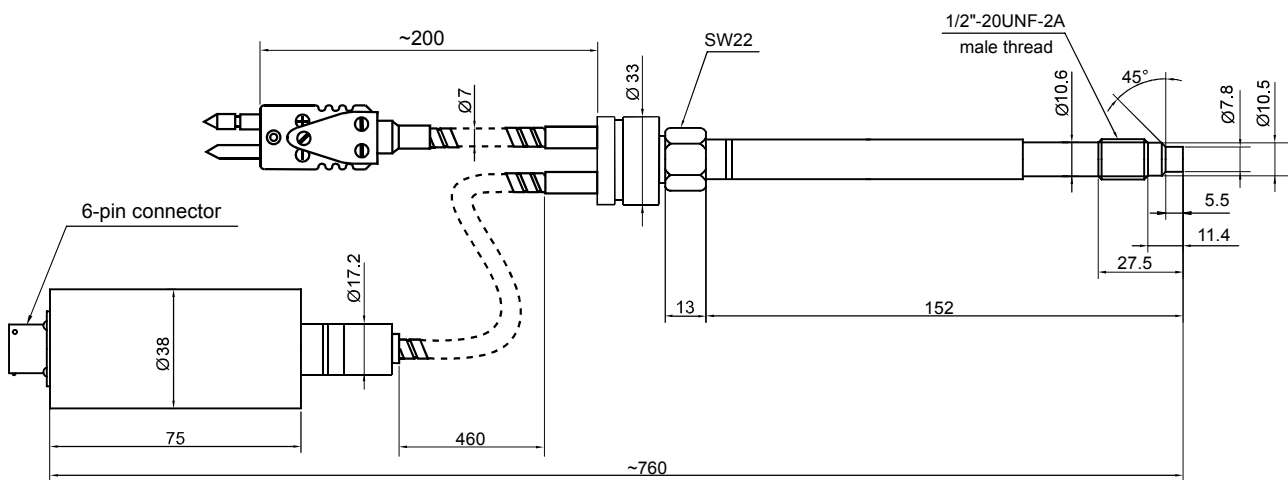
Parameter	Units	Data	Notes
Pressure ranges and types	bar	Gauge(G): 0~20,~35,~50,~70,~200,~350,~500,~700,~1000,~1500	
Overload pressure	%fs	150	[1]
Output signal	mV/V	3.33	
	/	4~20 mA, 0~5 Vdc, 0~10 Vdc	
Accuracy	%fs	≤ ±0.3, ≤ ±0.5 (standard), ≤ ±1	[2]
Supply voltage	Vdc	10 (8~12 acceptable) for 3.33 mV/V output	
		24 (12~36) for amplified output signal	
Long-term stability	%fs/year	≤ ±0.2	
Compensated temperature range	°C	0 ~ +80	
Max. temp. @ wetted parts	°C	400	
Temperature coefficient of zero	%fso/10°C	≤ ±0.5	
Temperature coefficient of span	%fso/10°C	≤ ±0.5	
Temperature sensor	/	type-J (standard),K, E thermocouple, pt100 thermal resistor	
Insulation resistance	MΩ	500 @100Vdc	
Zero adjustment	%fs	± 10	
Span adjustment	%fs	± 6	
Environment protection	/	IP65	
Electrical connection	/	6-pin (standard) male tighten connector	
Pressure connection	/	1/2"-20 UNF-2A (standard), M14x1.5, M18x1.5	
Pressure diaphragm	/	15-5PH SS	
Max. mounting torque	Nm	50	
Net weight	gram	~500	

Notes:

[1]. "fs" refers to full scale pressure or rated pressure.

[2]. Accuracy = sqrt (non-linearity² + hysteresis² + repeatability²)

Dimensions:



Notes: All dimensions are in mm.

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Ordering Guide

model: melt pressure transmitter PZP503

pressure ranges & types			
20 = 0~20 bar	G	200 = 0~200 bar	G
35 = 0~35 bar	G	350 = 0~350 bar	G
50 = 0~50 bar	G	700 = 0~700 bar	G
70 = 0~70 bar	G	1000 = 0~1000 bar	G
100 = 0~100 bar	G	1500 = 0~1500 bar	G
customized range available as an option			

accuracy
0.3 = 0.3 %fs, 0.5 = 0.5 %fs (standard)
1 = 1 %fs

output signal
3.33 mV/V, 4~20 mA (2-wire), 0~5 Vdc (4-wire), 0~10 Vdc (4-wire)

pressure connection
1/2"-20 UNF-2A (standard), M14x1.5, M18x1.5

Length of rigid stem	
76=76 mm	228=228 mm
152=152 mm (standard)	or other length

Length of flexible extension	
380=380 mm (standard)	760=760 mm
460=460 mm	or other length

temperature measurement	
J = J-thermocouple (standard,2-wire)	K = K-thermocouple(2-wire)
Pt = Pt100 thermal resistor (3-wire)	E = E-thermocouple(2-wire)

electrical connection
6 pin = 6-pin male connector (standard)
8 pin = 8-pin male connector

customized parameter
"(*)" is necessary only for any customized parameter.

PZP503-20-0.5-4~20mA-1/2-20UNF-152-380- J-6pin-(*))

Examples of Ordering Code:

PZP503-350-0.5-4~20mA-1/2-20UNF-152-380- J -6pin

Order Note

Please pay attention to protect the diaphragm. Do not touch the diaphragm by finger and other hard objects, or it may be damaged.

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