



PZP300 Silicon Pressure Transducer



Introduction

The PZP300 pressure transducer uses silicon piezoresistive pressure sensor with isolated stainless steel diaphragm as signal sensing element, through automatic testing and compensating zero and sensitivity in wider temperature range. The transducer can transfer pressure to linearization voltage signal. The material of housing and pressure port are stainless steel . Through strict component making, semi-finished product and all-finished product testing and aging, the transmitter is stable and reliable, having excellent flexibility, sensitivity and diversity.

The product is widely used for pressure measure and control of petroleum, chemi-industry, metallurgy, power station and hydrology, etc.

Features

- Wider pressure range
- Pressure types: gauge, absolute and sealed gauge
- Accuracy up to 0.25%fs
- Isolated construction to measure various media
- Full stainless steel construction
- Optional pressure port

Applications

- Industrial process control
- Liquid pressure system
- Gas, liquid pressure measurement
- Refrigeration equipment and air conditioner
- Pressure calibrator
- Mechanical engineering

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Basic Specification

Parameter	Units	Data (*)	Notes
Pressure types and ranges	bar	Gauge(G): -1~0, 0~0.2, ~0.35, ~0.7, ~1, ~2.5,~4,~6,~10,~16,~25,~40	[1]
		Absolute(A): 0~1, ~2.5, ~4, ~6, ~10, ~16, ~25	
		Sealed Gauge (S): 0~10,~16,~25,~60,~100,~160,~250,~400,~600	
Overload pressure	%fs	200 (\leq 200 bar), 150 (>200 bar)	[2]
Output signal	mV	\geq 60	
Zero offset	mV	\leq \pm 2	
Excitation	mA	Current: 1.5	
	V	Voltage: 10	
Accuracy	%fs	\leq \pm 0.25 (standard), \leq \pm 0.5	[3]
Long-term stability	%fs/year	\leq \pm 0.2	
Input resistance	k Ω	3~8	
Output resistance	k Ω	2.5~6	
Insulation resistance	M Ω	100 @ 100Vdc	
Compensated temperature range	$^{\circ}$ C	0~70	
Operating temperature range	$^{\circ}$ C	-20 ~ +85	
Storage temperature range	$^{\circ}$ C	-40 ~ +125	
Temperature coefficient of zero offset	%fso/ $^{\circ}$ C	\leq \pm 0.03(\leq 100kPa), \leq \pm 0.02(> 100kPa)	
Temperature coefficient of span	%fso/ $^{\circ}$ C	\leq \pm 0.03(\leq 100kPa), \leq \pm 0.02(> 100kPa)	
Environment protection	/	IP65 (standard), IP67 (only for cable connection)	
Pressure connection	/	G1/2 or other	
Electrical connection	/	plug connection or cable connection	
Pressure diaphragm	/	316L SS	
Wetted parts material	/	316 SS	
Electronics housing material	/	304 SS	
Filling oil	/	silicon oil	
Media compatibility	/	liquids and gases compatible with 316/316L stainless steel	
Response time (10% to 90%fs)	ms	\leq 1	
Life time	cycles	10×10^6	
Net weight	gram	~100	

Notes:

(*). Testing condition:Excitation=1.5 mA, Temp.=25 $^{\circ}$ C.

[1]. For customized pressure ranges, please consult Proza.

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

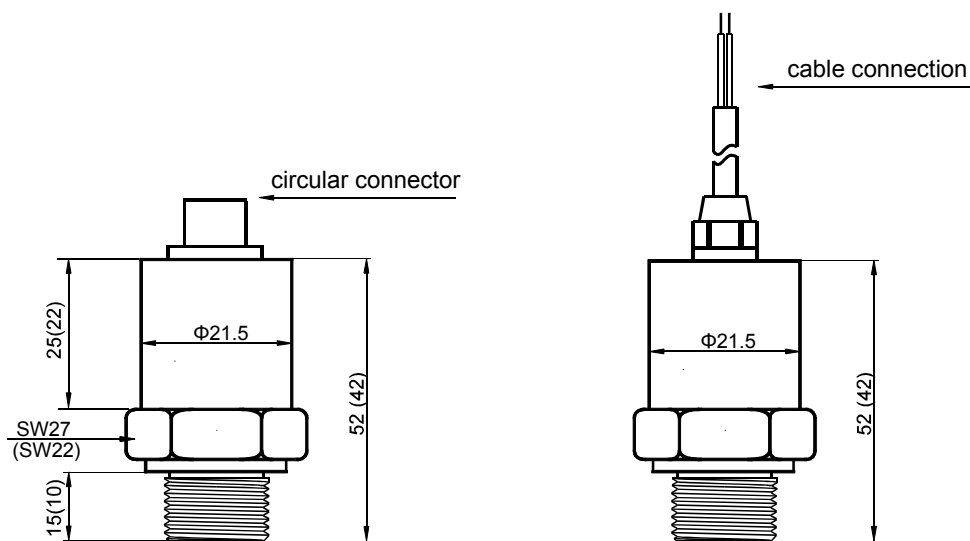
[3]. Accuracy = sqrt (non-linearity²+ hysteresis²+ repeatability²).

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Dimensions



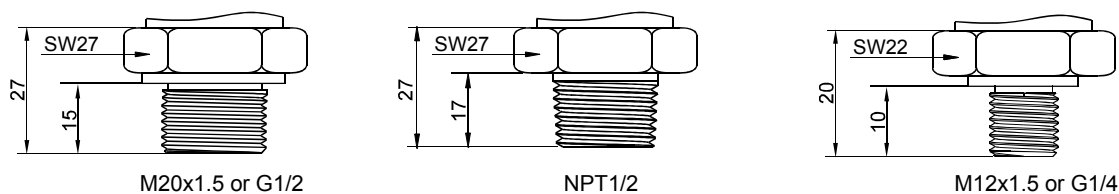
Electrical Connection



circular connector

pin	color	4-wires
1	red	excitation+
2	blue	excitation-
3	yellow	signal+
4	white	signal-

Pressure Connection



Notes: - All dimensions are in mm.

- If other types of interfaces are on request, consult us.

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Ordering Guide

model: silicon piezoresistive pressure transducer PZP300

pressure ranges				
(-1) = -1~0 bar	G	25 = 0~25 bar	G, A, S	
0.2 = 0~0.2 bar	G	40 = 0~40 bar	G	
0.35 = 0~0.35 bar	G	60 = 0~60 bar	S	
0.7 = 0~0.7 bar	G	100 = 0~100 bar	S	
1 = 0~1 bar	G, A	160 = 0~160 bar	S	
2.5 = 0~2.5 bar	G, A	250 = 0~250 bar	S	
4 = 0~4 bar	G, A	400 = 0~400 bar	S	
6 = 0~6 bar	G, A	600 = 0~600 bar	S	
10 = 0~10 bar	G, A, S	Customized ranges are available.		
16 = 0~16 bar	G, A, S			

pressure types
G = Gauge
A = Absolute
S = Sealed Gauge

accuracy
0.25 = 0.25 %fs(standard)
0.5 = 0.5 %fs

excitation
C = 1.5 mA (standard)
V = 10 Vdc

pressure connection
M20x1.5, G1/2, G1/4, NPT1/2, NPT1/4 or other

electrical connection
circular connector, cable connection (1m)

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

PZP300-10-G-0.25-V-G1/2-connector-(*)

Examples of Ordering Code

PZP300-30-G-0.25-V-G1/2-cable-(length=3m*)

(*): Customized cable length = 10 m.

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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