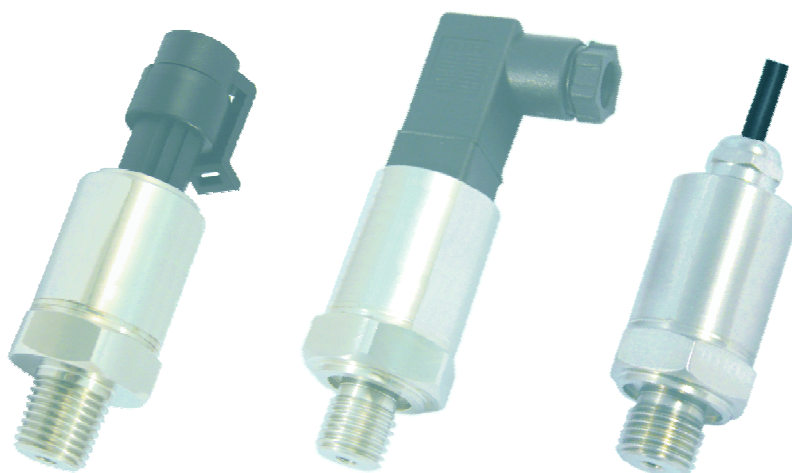


PZP330 Silicon Pressure Transmitter



Introduction

The PZP330 pressure transmitter is developed for automotive industry and refrigerator system, The PZP330 pressure transmitter 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 transmitter can transfer pressure to standard voltage and current 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 and diversity.

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

Features

- Pressure range: -1~0,0~0.1,...,600 bar
- Pressure types: gauge, absolute and sealed gauge
- Accuracy up to 0.5%fs
- Isolated construction to measure various media
- Full stainless steel construction
- Optional pressure port

Applications

- Automotive industry
- Refrigerator system
- Industrial process control
- Gas, liquid pressure measurement
- Pressure calibrator
- Mechanical engineering

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PZP330 Silicon Pressure Transmitter

Specifications

Parameter	Units	Data	Notes
Pressure types and ranges	bar	Gauge(G): -1~0, 0~0.1, ..., ~40	
	bar	Absolute(A): 0~1, ..., ~25	
	bar	Sealed Gauge(S): 0~10, ..., ~600	
Overload pressure	%fs	150	[1]
Accuracy	%fs	$\leq \pm 0.5$ (standard)	[2]
Long-term stability	%fs/year	$\leq \pm 0.2$	
Compensated temperature range	°C	-10 ~ +70	
Operating temperature range	°C	-20 ~ +85	
Storage temperature range	°C	-40 ~ +125	
Temperature coefficient of zero	%fso/°C	$\leq \pm 0.03$ ($\leq 100\text{kPa}$), $\leq \pm 0.02$ (> 100kPa)	
Temperature coefficient of span	%fso/°C	$\leq \pm 0.03$ ($\leq 100\text{kPa}$), $\leq \pm 0.02$ (> 100kPa)	
Output signal	mA	4~20 (standard)	
	Vdc	0.5~4.5 (ratiometric), 0~5, 1~5	
Power supply (U)	Vdc	12 < U < 36; 5 (for output = 0.5~4.5 V)	
Load resistance for voltage output	kΩ	> 5	
Load resistance for current loop	Ω	$\leq (U - 12V) / 0.02A$	
Insulation resistance	MΩ	100 @100Vdc	
Environment protection	/	IP65 (standard), IP67 (only for cable connection)	
Electrical connection	/	plug connection or cable connection	
Pressure connection	/	G1/4 or other	
Pressure diaphragm	/	316L SS	
Wetted parts material	/	316 SS	
Electronics housing material	/	304 SS	
Filling oil	/	silicone oil	
Media compatibility	/	liquids and gases compatible with 316/316L stainless steel	
Vibration resistance (20, ..., 5000 Hz)	g	20	
Response time (10% to 90%fs)	ms	≤ 1	
Seal	/	Viton O-ring	
Life time	cycles	10×10^6	
Net weight	gram	~80	

Notes: For any customized parameter, please consult Proza.

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

[2]. Accuracy = $\sqrt{\text{non-linearity}^2 + \text{hysteresis}^2 + \text{repeatability}^2}$.

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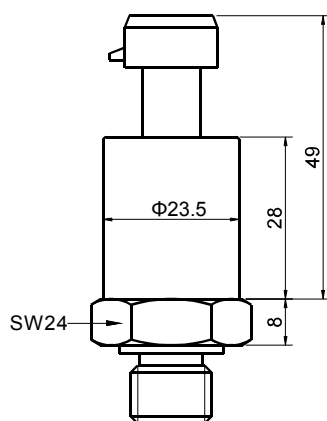


ProZa

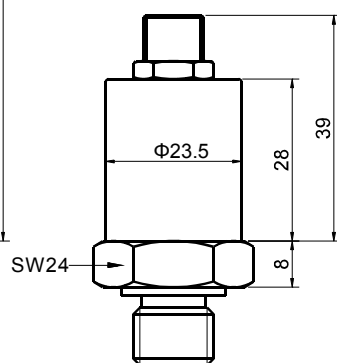
PZP330 Silicon Pressure Transmitter

Dimensions

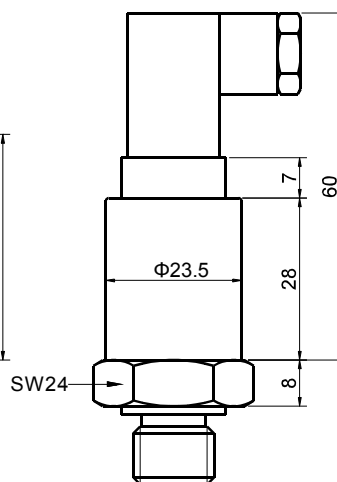
Packard connector



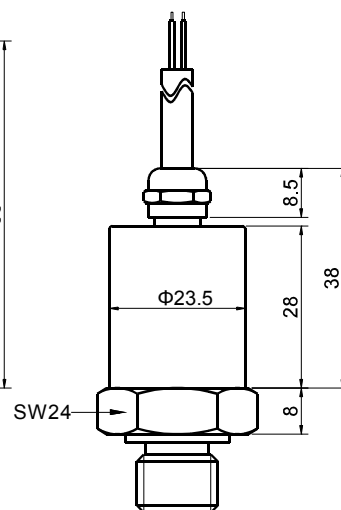
Circular connector



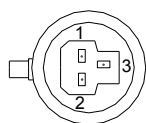
Hirschmann connector



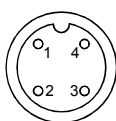
Cable connection



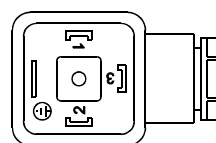
Electrical Connection



Packard connector



Circular connector



Hirschman connector

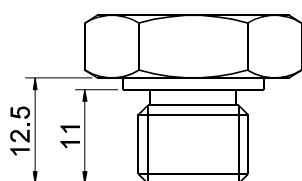
2-wires for current output

pin	color	2-wires
1	red	power+
2	green	signal+
3	/	/
4	/	/

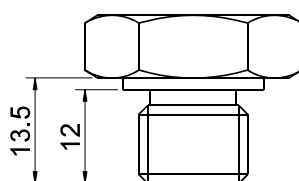
3-wires for voltage output

pin	color	3-wires
1	red	power+
2	blue	GND
3	yellow	signal+
4	/	/

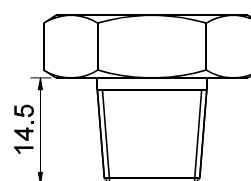
Pressure Connection



G1/4



M14X1.5, M12X1.5 or 3/8UNF



NPT1/4

Notes: - All dimensions are in mm.

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

Proza Electronic Technology

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ProZa

PZP330 Silicon Pressure Transmitter

Ordering Guide

model: silicon piezoresistive pressure transmitter PZP330

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

0.5 = 0.5 %fs(standard)

output signal

4~20mA, 0.5~4.5 Vdc, 0~5 Vdc, 1~5 Vdc

pressure connection

G1/4, M14x1.5, M12x1.5, NPT1/4, 3/8UNF or other

electrical connection

Packard ,Circular ,Hirschman connector or Cable connection (1m)

customized parameter

“(*)” is necessary only for any customized parameter.

PZP330-10-G -0.5-4~20mA-G1/4-Packard-(*)

Examples of Ordering Code

PZP330-(-1~30)bar-G-0.5-4~20mA-G1/4-Cable-(length=5m*)

(*): Customized range = -1~30bar, cable length=5m.

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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