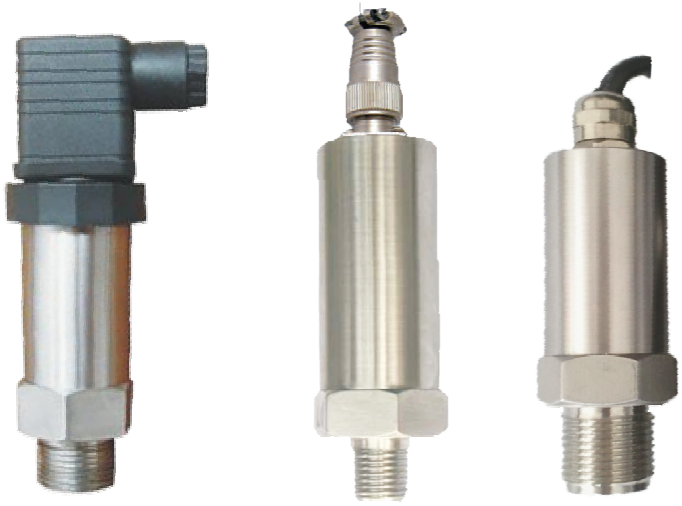
PZP310 Silicon Pressure Transmitter

ProZa



Introduction

The PZP310 pressure transmitter is diffused silicon piezoresistive pressure transmitter which is applicable to the measurement of the gauge , sealed gauge and absolute pressure of gases, vapour and liquids.

Thanks to the compact, light and rugged structure, it easily fits in most industrial pressure measurement application. The diaphragm, wetted part and housing are made from stainless steel with a choice of internal O ring seals to ensure PZP310 can be used to measure media compatible with stainless steel. By selecting electrical connection, the PZP310 is able to be the degree of protection from IP 65 to IP 67.

Every PZP310 is temperature compensated and calibrated and supplied with a traceable serial number and calibration certificate.

Features

- Measuring range: -1,..., 600bar
- Pressure types: gauge, sealed gauge and absolute
- Accuracy up to 0.25%fs
- Optional output signal
- Isolated construction to measure various media
- Full stainless steel construction
- Optional pressure and electrical connection

Applications

- Hydraulics & pneumatics
- Industrial process control
- Laboratory testing
- Mechanical engineering
- Environmental Engineering
- Automotive testing
- Tank gauging
- HVAC

Proza Electronic Technology

website: www.prozasensor.com
email: sales@prozasensor.com

Tel.: +86-029 89117729
Fax: +86-029 89117729

QiHangJiaYuan Plaza,Block A,12# Building,
Room 704, FengDong New Town,Xi'an

PZP310 Silicon Pressure Transmitter

ProZa

Specifications

Parameter	Units	Data	Notes
Pressure types and ranges	bar	Gauge(G): -1~0, 0~0.2, ..., ~40	
	bar	Absolute(A): 0~1, ~1.6, ..., ~25	
	bar	Sealed Gauge(S): 0~10, ~16, ..., ~600	
Overload pressure	%fs	150	[1]
Accuracy	%fs	≤ ±0.25 , ≤ ±0.5(standard)	[2]
Long-term stability	%fs/year	≤ ±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	≤ ±0.03(≤ 100kPa), ≤ ±0. 02(＞100kPa)	
Temperature coefficient of span	%fso/°C	≤ ±0.03(≤ 100kPa), ≤ ±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	≤ (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	/	G1/2 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, ..., 2000 Hz)	g	10	
Response time (10% to 90%fs)	ms	≤ 1	
Seal	/	Viton O-ring	
Life time	cycles	$10x10^6$	
Net weight	gram	~170	

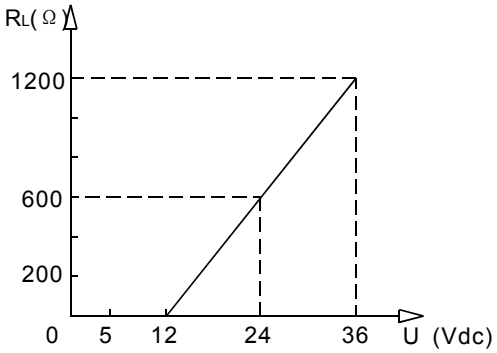
Notes: [1]. “fs” refers to full scale pressure or rated pressure.

[2]. Accuracy = sqrt (non-linearity^2 + hysteresis^2 + repeatability^2)

Load Characteristic

Load resistance for current loop:

$R_L \leq$ (U - 12V) / 0.02A (Ω)



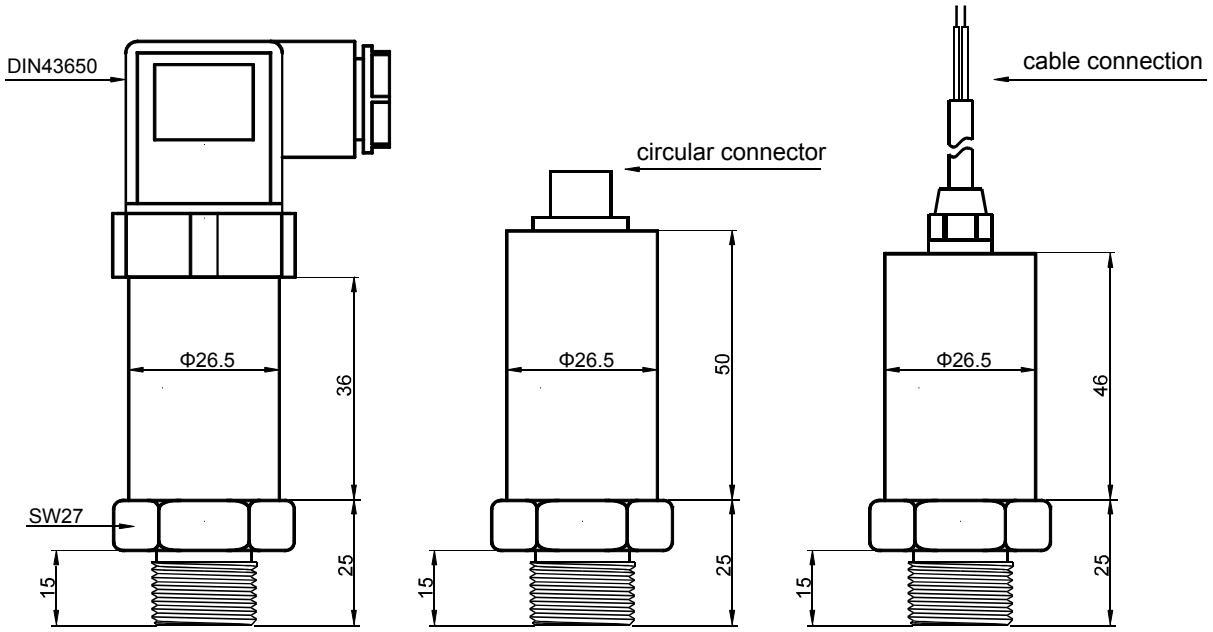
Proza Electronic Technology

website: www.prozasensor.com
email: sales@prozasensor.com
Tel.: +86-029 89117729
Fax: +86-029 89117729
QiHangJiaYuan Plaza,Block A,12# Building,
Room 704, FengDong New Town,Xi’an

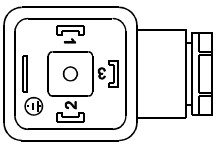
PZP310 Silicon Pressure Transmitter

ProZa

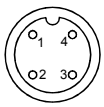
Dimensions



Electrical Connection



DIN43650
(standard)



circular connector

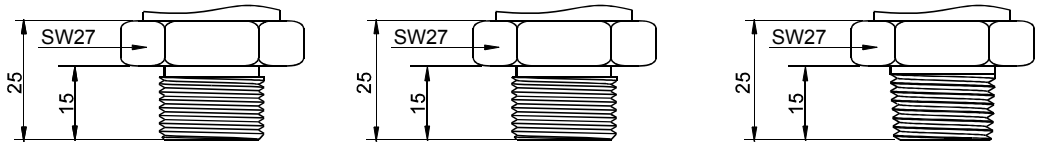
Connector Connection Wiring

pin	2-wires	3-wires
1	power+	power+
2	signal+	power-
3	null	signal+

Cable Connection Wiring

color	2-wires	3-wires
red	power+	power+
black	signal+	power-
yellow	null	signal+

Pressure Connection



M20x1.5 G1/2 or G1/4 NPT1/2 or NPT1/4

Notes: - All dimensions are in mm.

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

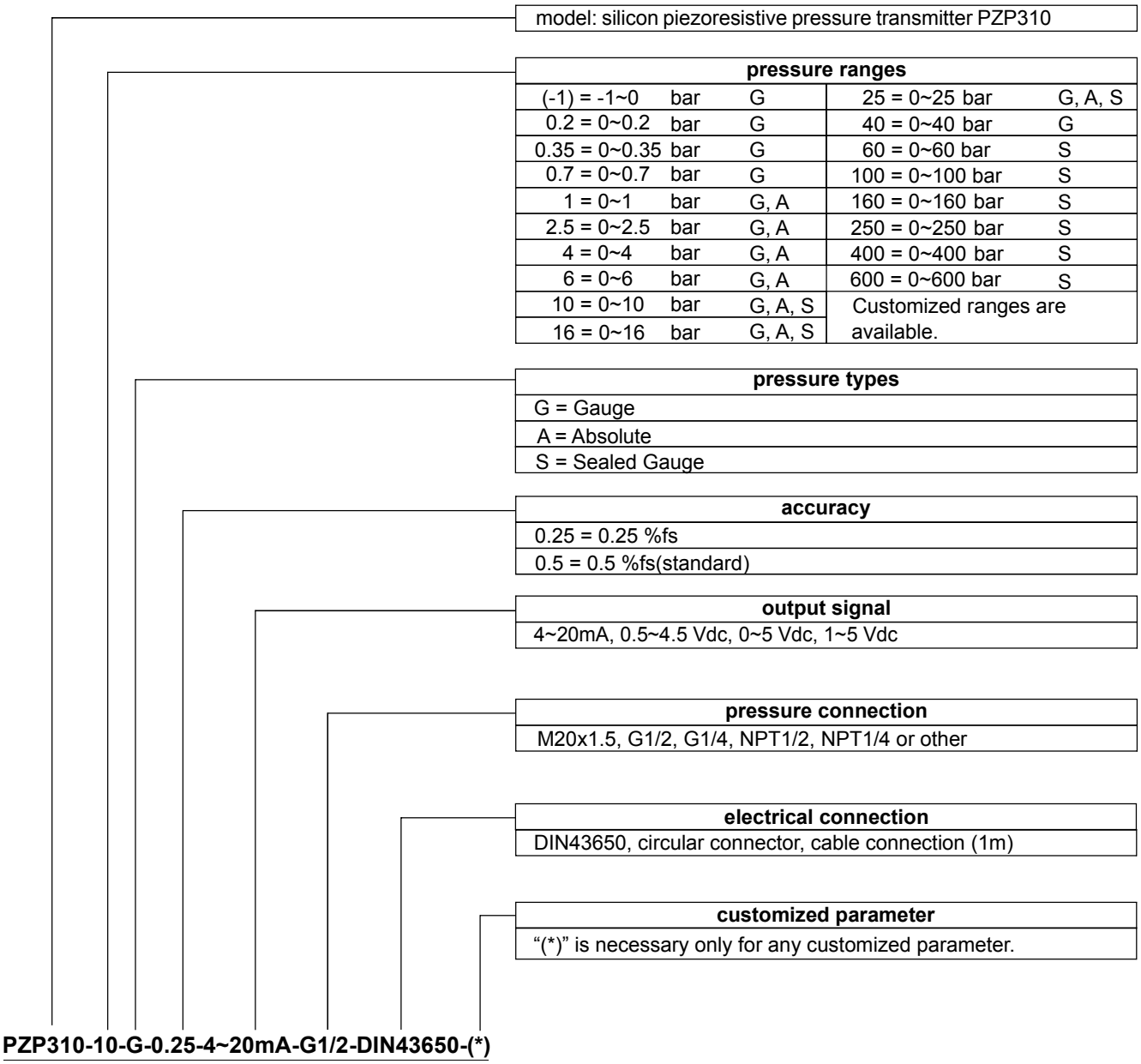
Proza Electronic Technology

website: www.prozasensor.com
email: sales@prozasensor.com
Tel.: +86-029 89117729
Fax: +86-029 89117729
QiHangJiaYuan Plaza,Block A,12# Building,
Room 704, FengDong New Town,Xi'an

PZP310 Silicon Pressure Transmitter

ProZa

Ordering Guide



PZP310-10-G-0.25-4~20mA-G1/2-DIN43650-(*)

Examples of Ordering Code

PZP310-30-G-0.25-4~20mA-G1/2-cable-(length=5m*)

(*): Customized cable length = 5 m.

Order Note

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

Proza Electronic Technology

website: www.prozasensor.com
email: sales@prozasensor.com
Tel.: +86-029 89117729
Fax: +86-029 89117729
QiHangJiaYuan Plaza,Block A,12# Building, Room 704, FengDong New Town,Xi'an