



# PZP410 Differential Pressure Transmitter

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## Introduction

The PZP410 differential pressure transmitter is consist of PROZA silicon piezoresistive differential pressure sensor model PZP200 and integrated circuit.

Thanks to the compact, light and rugged structure with optional male and female thread, it easily fits in most industrial differential pressure measurement application. The diaphragm, wetted part and housing are made from stainless steel with a choice of internal O ring seals to ensure PZP410 can be used to measure gases, vapour and liquids compatible with stainless steel. By selecting electrical connection, the PZP410 is able to be the degree of protection IP 65 or IP 66.

Every PZP410 is temperature compensated and calibrated and supplied with a traceable serial number and calibration certificate.

## Features

- Pressure range : 0~0.1bar, 0~0.35bar, ... , 0~20bar
- Static pressure : 500%fs or max 70bar  
( take the minimum value )
- Pressure types: differential
- Accuracy up to 0.25%fs
- Output signal: 4~20mA, 0~10/20mA, 0/1~5Vdc
- Material: 316L for pressure diagram,  
1Cr18Ni9Ti for housing
- Laser welded structure
- Optional pressure and electrical connection

## Applications

- Gases, vapour and liquids compatible with 316L SS
- Wind pressure and flow velocity in industrial process
- Piping and furnace pressure measurement
- Petroleum
- Chemical industry
- Power station
- Hydrology

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## Specifications

Parameter	Units	Data	Notes
Pressure ranges and type	bar	Differential(D): 0~0.1, ~3.5, ..., ~20	
Overload pressure ( differential )	%fs	150 or max 70bar ( take the minimum value )	[1]
Static pressure	%fs	500 or max 70bar ( take the minimum value )	
Accuracy	%fs	≤ ±0.25 ( standard ) , ≤ ±0.5 ( max )	[2]
Long-term stability	%fs/year	≤ ±0.5 ( ≤2bar ) , ≤ ±0.2 ( ≤20bar )	
Compensated temperature range	°C	0 ~ +70	
Operating temperature range	°C	-20 ~ +80	
Storage temperature range	°C	-40 ~ +120	
Temperature coefficient of zero & span	%fso/°C	≤ ±0.03 ( ≤1bar ) , ≤ ±0.02 ( >1bar )	
Output signal	mA	4~20 (2-wire), 0~10 (3-wire), 0~20 (3-wire)	
	Vdc	0~5 (3-wire), 1~5 (3-wire), 0~10Vdc (3-wire)	
Power supply (Us)	Vdc	15 < Us < 35	
Load resistance for voltage output	kΩ	> 5	
Load resistance for current loop	kΩ	0.35 ~ 1.1	
Insulation resistance	MΩ	100 @100Vdc	
Environment protection	/	IP65 (with connector), IP66 (with cable)	
Electrical connection	/	plug connection or cable connection	
Pressure connection	/	G1/4 female or other	
Pressure diaphragm	/	316L	
Wetted parts material	/	1Cr18Ni9Ti	
Electronics housing material	/	1Cr18Ni9Ti	
O-ring material	/	Fluororubber	
Media compatibility	/	dilute-liquids and gases compatible with stainless steel	
Electrical connection	/	DIN43650 or shield polythene cable in 1.5m length	
Net weight	gram	~ 350	

### Notes:

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

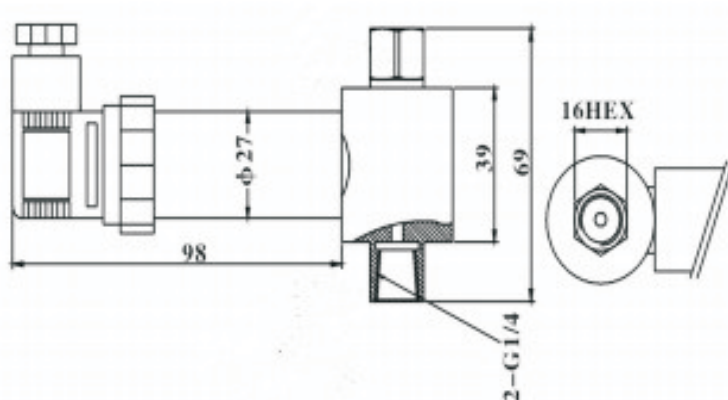
[2]. Accuracy =  $\sqrt{\text{non-linearity}^2 + \text{hysteresis}^2 + \text{repeatability}^2}$

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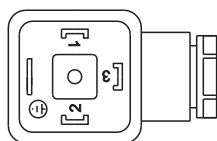
# PZP410 Differential Pressure Transmitter

## Dimensions



Notes: All dimensions are in mm.

## Electrical Connection



DIN43650  
(standard)

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+

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# PZP410 Differential Pressure Transmitter

## Ordering Guide

model: differential pressure transmitter PZP410

### pressure ranges & type

01 = 0~.01 bar	D
035 = 0~0.35 bar	D
07 = 0~0.7 bar	D
1 = 0~1 bar	D
3.5 = 0~3.5 bar	D
7 = 0~7 bar	D
10 = 0~10 bar	D
20 = 0~20 bar	D

customized range available as an option

### static pressure

500%fs or max 70bar ( take the minimum value )

### accuracy

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

### output signal

4~20mA,0~10mA, 0~20mA, 0~5 Vdc, 1~5 Vdc, 0~10Vdc

### pressure connection

G1/4 female or other

### electrical connection

DIN43650,cable connection (1.5m)

### customized parameter

“(\*)” is necessary only if any customized parameter is required, otherwise it is neglectable.

**PZP410-10-50bar-0.25-4~20mA-G1/4 female-DIN43650-(\*)**

### Examples of Ordering Code

**PZP410-10-50bar-0.25-4~20mA-G1/4 female-DIN43650-(\*)**

(\*): Customized range = 0~15 bar.

### 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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