



SmartGen
ideas for power

SGPT110-0.4
PRESSURE TRANSMITTER
USER MANUAL



SMARTGEN (ZHENGZHOU) TECHNOLOGY CO.,LTD.



Chinese trademark

SmartGen English trademark

SmartGen — make your generator *smart*

SmartGen Technology Co., Ltd

No. 28 Jinsuo Road

Zhengzhou City

P. R. China

Tel: 0086-371-67988888

0086-371-67981888

0086-371-67991553

0086-371-67992951

0086-371-67981000 (overseas)

Fax: 0086-371-67992952

Web: www.smartgen.com.cn

www.smartgen.cn

Email: sales@smartgen.cn

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Software Version

Date	Version	Content
2017-06-01	1.0	Original release.



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1 OVERVIEW

SGPT110-0.4 piezoresistive pressure transmitter is based on MEAS original advanced highly stable silicon piezoresistance transmitter, which is installed into a 304 stainless steel enclosure. With premium performance of compatibility, stability, reliability and accuracy, SGPT110 can be widely used for gas and liquid (compatible with stainless steel 304) pressure measurement.


2 PERFORMANCE AND CHARACTERISTICS

- 1) Measuring range: (0~0.4)MPa
- 2) Two-wire standard output: 4 mA ~20 mA
- 3) Wide working temperature range: (-40°C~125°C), with temperature compensation and common mode rejection functions.
- 4) Whole stainless steel structure
- 5) O-shape gasket
- 6) Pluggable connection, small volume, and low power consumption.

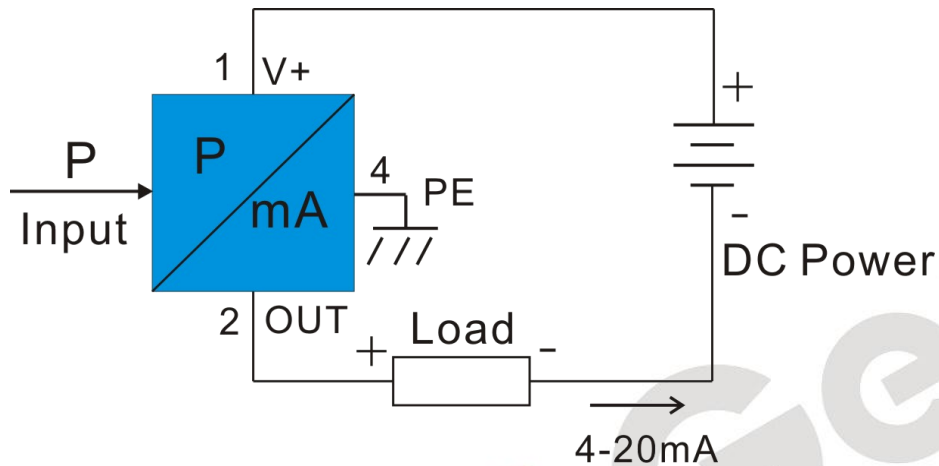
3 SPECIFICATION

Item	Content
Measuring range	(0~0.4)MPa
Overload capacity	250% Full Scale Pressure
Pressure type	Gauge pressure
Measuring dielectric	Gas and liquid which compatible with stainless steel 304.
Measurement Accuracy Class	Class 0.25
Working temperature	-40°C~125°C
Compensation temperature	-20°C ~85°C
Power supply range	DC 12V~36V (DC 24V)
Signal output	4 mA ~20 mA
Load resistance	$R_L \leq (V_+ - 7.5V)/20mA$
Enclosure protection	Hersman Plug-type(IP65)
Safety and explosion prevention	EXIA II CT5
Connector and enclosure	stainless steel 304
O-shape gasket	Fluororubber
Transmitter mebrane	Stainless steel 316L.
Weight	0.12kg

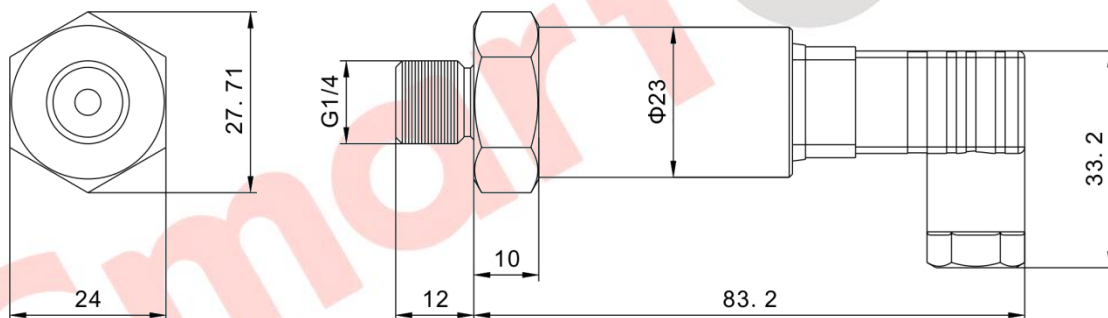
4 TERMINAL CONNECTION

	Port	Description
	1	Positive source: V+
	2	4mA~20mA output: OUT
	3	Not connected
	4	Shell ground (Shield ground)

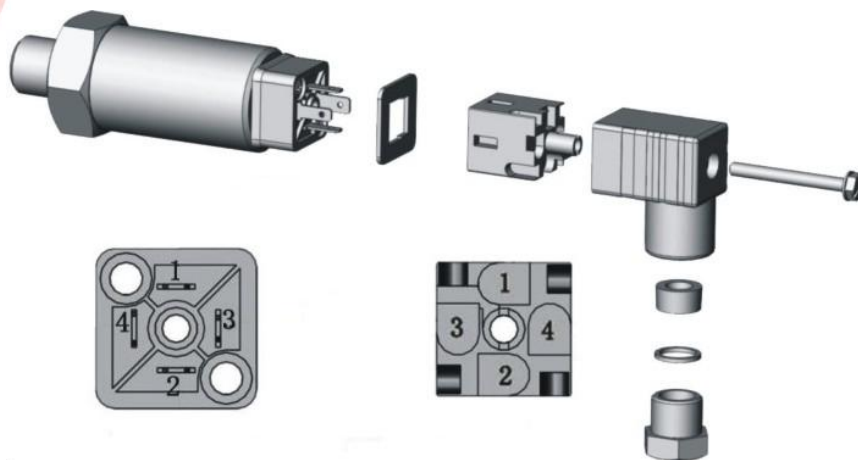
5 ELECTRICAL CONNECTION



6 OVERALL DIMENSION



7 INSTALLATION



As shown in above picture, separate connector assembly and connect them following the digital label.

8 ATTENTION

- a) During installation ensure that measuring range and wiring is correct.
- b) The enclosure of the pressure transmitter should usually be connected to the ground; signal cable and power cable must not be crossed over; strong electromagnetic interference in the vicinity of the sensor must be avoided.
- c) Transmitter in use must be regularly calibrated according to the industry standards.
- d) Do not expose the transmitter to overpressure for a long time.
- e) Do not throw foreign bodies into the pressure opening, it can influence measurement results.
- f) Avoid transmitter contact with over-corrosive or overheated medium.
- g) During liquid pressure measurement, transmitter must not be installed to the place exposed to liquid impact (water hammer phenomenon) in order to avoid damage.
- h) During liquid pressure measurement, pressure tapplings must be opened from the side of pipeline in order to avoid sediment slag accumulation.

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