SIER ELECTRONICS CO., LTD

SPT21T High Temperature Use Pressure Transmitter

Features

- Reliable performance, easy application
- Short protection and reverse polarity protection
- Gauge, absolute and sealed gauge optional
- Compact size
- Designed for higher temperature application
- Range shifting available by our hand-held device

Applications

- Petrochemical industry
- Power industry
- Metallurgical industry
- Aerospace
- Mechanical manufacturing

Introduction

The SPT21T high-temperature pressure transmitter adopts advanced sensing technology and circuit design, ensuring stability and accuracy in high-temperature environments. Its compact structure and sophisticated design facilitate easy installation and maintenance. Additionally, this transmitter features exceptional anti-interference capability and long-term stability, enabling it to consistently deliver accurate and reliable measurement data under various harsh operating conditions.

Specification

Pressure range	-1…0~0.1…1000bar
Over pressure	1.5 times FS or 1100bar (min. value is valid)
Pressure type	Gauge/absolute/sealed gauge optional
Accuracy	see Accuracy definition
Long term stability	≤±0.3%FS/year
Offset thermal drift	0.1%FS/℃(≤1bar); 0.05%FS/℃(> 1bar)
Span thermal drift	0.1%FS/℃(≤1bar); 0.05%FS/℃(> 1bar)
Compensated temp.	0~50℃ for range ≤2bar, -10~70℃ for range > 2bar
Media temp.	-40~250℃
Storage temp.	-40~120℃
Housing protection	IP65 default IP67/68(customized)

Accuracy

（Test condition: Environment temperature：25±5℃ Relative humidity：45%~75%）

Pressure Type	Range	Accuracy
Gauge (G)	0bar~0.1bar＜X＜0.35bar	±1%FS
	0.35bar≤X≤35bar	±0.5%FS（default）
		±0.25%FS
	-1bar~ -0.35bar＜X≤2bar	±0.5%FS
	-1bar~ -0.35bar＜X≤2bar~35bar	±0.25%FS
Absolute (A)	0bar~0.7bar＜X≤1bar	±1%FS
	1bar＜X≤10bar	±0.5%FS
	10bar＜X≤1000bar	±0.25%FS
		±0.5%FS（default）
Sealed gauge (S)	35bar＜X≤1000bar	±0.5%FS

Output Signals

2-wire current	4~20mA
3-wire current	4~20mA（default）
	0~20mA
3-wire voltage	DC 0~10V
	DC 0~5V
	DC 1~5V
	DC 0.5~4.5V
	DC 0.5~2.5V
	DC 0.1~2.1V
3-wire proportional voltage	DC 0.5~4.5V
RS485	

For other output requirements, please contact us.

Power Supply

Output signals	Power supply	
	Default	Optional
4~20mA	DC 11~28V	DC 8~32V
DC 0~10V	DC 11~28V	DC 11~32V
DC 0~5V	DC 11~28V	DC 11~32V
DC 1~5V	DC 11~28V	DC 11~32V
DC 0.5~4.5V	DC 5V±0.1V	DC 8~32V
DC 0.5~2.5V	DC 5V±0.1V	DC 8~32V、DC3.3V
DC 0.1~2.1V	DC 5V±0.1V	DC 8~32V、DC3.3V
DC 0.5~4.5V (proportional output)	DC 5V±0.5V	/
RS485	DC 11~28V	DC 5V±0.1V

Load Resistance(Ω)

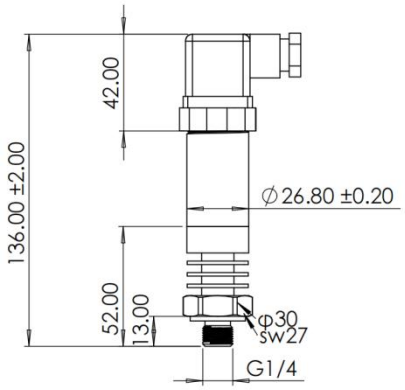
Current outout	≤（power supply-11V）/0.02A
Voltage output	≥10k

Material

Housing	SS304
Pressure port	SS304
Diaphragm	SS316L
Sealing gasket	NBR (default)

Outline Dimension（Unit:mm）

Hirschmann 4-pole plug-in type



Electrical Connection

Hirschmann			
		2-wire	3-wire
	U_B	1	1
	0V	2	2
	S+	-	3

Description
UB : Power +
0V : Power -
S+ : Analog output

Order Information

SPT21T	High Temperature Use Pressure Transmitter					
	Range	-1…0~0.1…1000bar				
	[0～X]bar	X：the actual measured pressure				
		Code	Output signal			
		E	4～20mADC			
		J	0～5VDC			
		V	0～10VDC			
			Code	Construction material		
				Diaphragm	Pressure port	Housing

			22	SS316L	SS304	SS304	
			24	SS316L	SS316L	SS316L	
				Code	Others		
				B1	DIN43650 connector①		
				B2	Cable exit		
				B3	M12 connector①		
				C2	G1/4 male thread		
				C3	G1/2 male thread		
					G	Gauge	
					S	Sealed gauge	
					A	Absolute	
SPT21T	[0～1bar]	E	22	B1C2	G	the whole spec	

Ordering Notes

1.When ' 1 ' in the selection table selects B1 / B3, if you need to lead out the cable, please note in the order ;

2, As for product accuracy, see page 2 ' accuracy ' ;

3.Product sealing ring material default for fluorine rubber, the minimum use temperature is-20 °C, if the product temperature is < -20 °C, need to be noted in the order temperature range ; other sealing schemes can be used on demand, such as ethylene propylene diene rubber sealing ring, the minimum use temperature is-40 °C ;

4,When ordering 5V DC/3.3V DC power products with cable connection, the cable length should be less than10m;

5, If accessories is needed, please contact us and specify it in the order;

6, If metrology verification certificate is needed or there are other requirements, please contact us and specify it in the order.

Contact

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