

SPT21Y String Gauge Pressure Transmitter-Flush

Features

- Compact structure
- Corrosion resistance
- Vibration resistance
- Resistance to hard particle impact
- Wide-range temperature compensation

Applications

- Chemical industry
- Pharmaceutical industry
- Water treatment industry
- Oil and gas industry
- Laboratory and scientific research hydraulic systems
- Propulsion systems
- Pressure control in sealed compartments
- Grouting systems



Introduction

The SPT21Y Gauge Pressure Transmitter-Flush utilizes a specially treated robust thick metal diaphragm as the measuring element. It operates based on mechanical transmission principles, sensing pressure in the measured medium through an isolation diaphragm. This transmitter features a compact structure, corrosion resistance, vibration resistance, hard particle impact resistance, and wide-range temperature compensation. Commonly referred to as a flat diaphragm pressure sensor, it is widely used in equipment such as shield tunneling machines, grouting machines, brick-making machines, earth pressure machines, and grouting systems. Its design ensures reliable performance in various harsh working environments.

Specification

Pressure range	0~10...300bar
Over pressure	1.5 times FS
Pressure type	Gauge/absolute/sealed gauge optional
Accuracy	see Accuracy definition
Long term stability	≤±0.3%FS/year
Offset thermal drift	0.1%FS/°C(≤1bar); 0.05%FS/°C(>1bar)
Span thermal drift	0.1%FS/°C(≤1bar); 0.05%FS/°C(>1bar)
Compensated temp.	0~50°C range≤1bar; -10~70°C range>1bar
Application temp.	-30~80°C

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
Sealed gauge (S)	0bar<X≤20bar	±0.5%FS
	20bar≤X≤3000bar	±0.5%FS(default)
		±0.25%FS

Output Signals

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

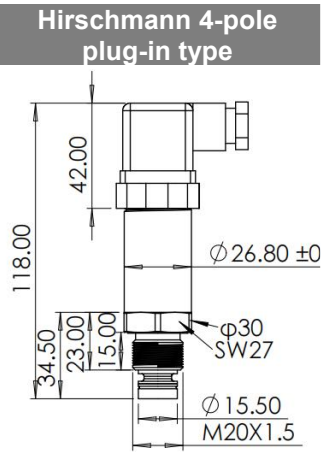
Load Resistance(Ω)

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

Material

Housing	SS304
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Outline Dimension (unit: mm)



Please contact us if you request anything else.

Electrical Connection

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

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

Order Information

SPT21Y	String Gauge Pressure Transmitter-Flush				
	Range	0~10...3000bar			
	[0~X]bar	X: the actual measured pressure			
		Code	Output signal		
		E	4~20mADC		
		J	0~5VDC		
		R	RS485		
			Code	Others	
			B2	Cable Exit	
			B3	M12 connector ^①	
SPT21Y	[0~1bar]	E	B3	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 than 10m;
- 5, If accessories are 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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