

SPT21WS1 Anti-corrosive Level Transmitter

Features

- Integrated construction, unnecessary to do outer adjustment
- Special Material, anti-corrosive
- Sensor housing protection IP68
- High reliability and stability
- Lower range available

Applications

- Chemical industry
- Pharmaceutical industry
- Water treatment industry
- Oil and gas industry
- Food & Beverage Industry



Introduction

SPT21WS1 is full sealed submersible level transmitter with special material for anti-corrosive application. It is made by building in high stable and reliable ceramic capacitive pressure sensor and high accurate circuit board into the PTFE housing. Integrated construction and standard signal provide the user easy and convenient application in the local working place. The special cable connects with housing, can be immersed into the media for a long time.

SPT21WS1 level transmitter is suitable for level measurement of corrosive liquid, especially advantage for lower level range application.

Specification

Range	0~1...5mH ₂ O	
Over pressure	2 times FS	
Accuracy	see Accuracy definition	
Output Signal	4~20mA. 0~5V. RS485. etc.	
Stability	±0.2%FS/year	
Thermal drift	0.05%FS/°C (offset)	0.05%FS/°C (span)
Application temp.	-10~80°C	
Storage temp.	-40~120°C	
Housing protection	IP68	

Accuracy

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

Pressure Type	Range	Accuracy
Gauge (G)	2mH ₂ O≤X≤5mH ₂ O	±0.5%FS (default)
		±0.25%FS
Absolute (A)	2mH ₂ O≤X≤5mH ₂ O	±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
	DC 0.5~4.5V
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)

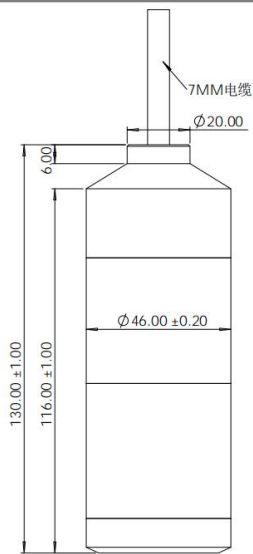
Current outout	≤ (power supply-11V) /0.02A
Voltage output	≥10k

Material

Housing	PTFE
Diaphragm	Ceramic
O-ring	FKM
Cable	φ7.5 mm Teflon shielded cable or customized cable

Outline Dimension (unit: mm)

Cable exit type



Electrical Connection

Air conduit cable			
		2-wire	3-wire
	U _B	red	red
	0V	black	black
	S+	-	Yellow

Description

UB : Power +

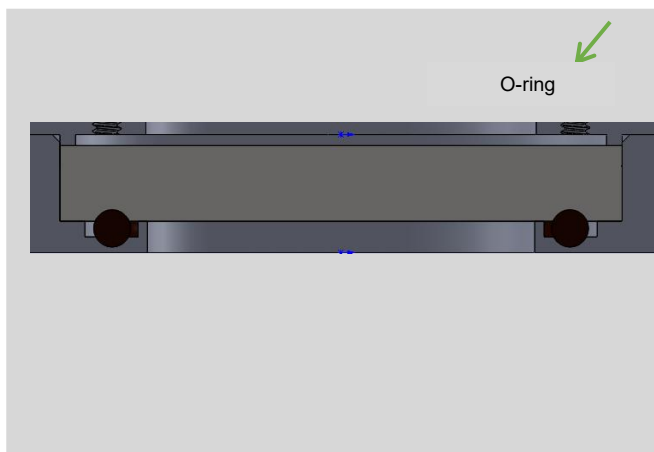
0V : Power -

S+ : Analog output

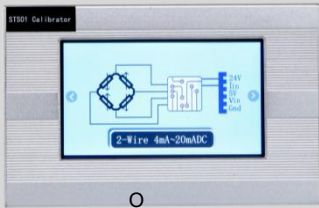
Sensor Sealing

O-ring Sealing

(O-ring material : fluorine rubber, ethylene propylene diene monomer, nitrile rubber)



Optional accessories

Name	Shape	Description
STS01 calibrator		Power supply : 220VAC Features : 4.5-inch LCD screen, touch buttons Functions : testing, calibration, zeroing, range migration, unit conversion   Operating Instructions Operating Video
SPT-LCD display		Display : 4 + 1 / 2 digit display Input : 2-wire 4 ~ 20mA Output : 2-wire 4 ~ 20mA Optional with control function
SPT-LED display		Display : 4 + 1 / 2 digit display Input : 2-wire 4 ~ 20mA Output : 2-wire 4 ~ 20mA Optional with control function

SD01 loop powered display		Display range -1999~9999 Input: 2-wire 4~20mA Output: 2-wire 4~20mA
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Order Guide

SPT21WS1	Anti-corrosive Level Transmitter		
	Range	0~1...5mH ₂ O	
	[0~XmH ₂ O] L	X:actual measurement range L: cable length suggested L-X= (1~2) m	
		Code	Output signal
		E	4~20mADC
		J	0~5VDC
		V	0~10VDC
		R	RS485 interface
SPT21WS1	[0~1mH ₂ O]L	E	the whole spec

Order Note

1. Please pay attention that the medium should be compatible with the contacted parts; please inform the density of the media (except water);
2. When the product is used in thunder storm area, we suggest the user to use protection device to protect the product and power grounding reliably;
3. For special requirement, please feel free to contact us.

Contact

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