

SIER ELECTRONICS CO., LTD

A: 2nd Floor, Building No.A2, Western sensor park, No.30 Jiangtan Xi Road, Baoji 721004, Shaanxi, China

Tel: +86 917 3652001

Fax: +86 917 3652001

Email: kenny@sierelectro.com

Web: www.sierelectro.com

SPT21C2 Sputtered Thin Film Pressure Transmitter

Features

- Exceptional Long-Term Stability
- Range from 3bar up to 2500bar
- Full welded construction
- SS 17-4PH wetted parts
- Short protection and reverse polarity protection
- Multiple output, process connection optional
- Compact size



Introduction

SPT21C2 series offer high levels of stability and reliability by using sputtered thin film pressure sensor and high-performance circuit. The sensor and electronic housing are all welded to pressure port. It also allows to use our mobile app to do transmitter range shifting and zero adjustment without pressure applied. This product can be used in aviation, ship building, rail transit equipment, engineering equipment, vehicle braking system, hydraulic system, engine pressure, industrial process automation system, etc.

Specification

Item	Specifications
Measuring Medium	Gas/Liquid
Range	0 ~ 5...2000bar
Accuracy	±0.1%FS. ±0.25%FS. ±0.5%FS
Long-term stability	≤±0.1% FS/year
Offset thermal drift	0.005%FS/°C
Span thermal drift	0.01%FS/°C
Medium temp	-70~200°C
Environmental temp	-55~155°C
Power supply	8~36VDC
Output signal	4~20mA.0-5V.RS485. etc
Response time	≤1ms
Product life	Designed 100M cycles
Protection class	IP65, IP67, IP68
Electrical connection	DIN43650/M12/cable
Weight	50-150grams

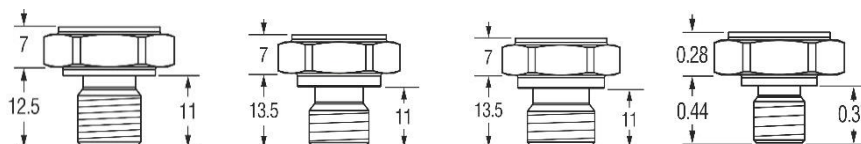
Pressure Capability

Pressure Range(bar)	Proof pressure (x Full scale)	Burst Pressure (x Full scale)
5....1000	2 x FS	10 x FS & ≤4000bar
1000...1600	1.5 x FS	≤4000bar
1600....2500	1.5 x FS & ≤3000bar	≤4000bar

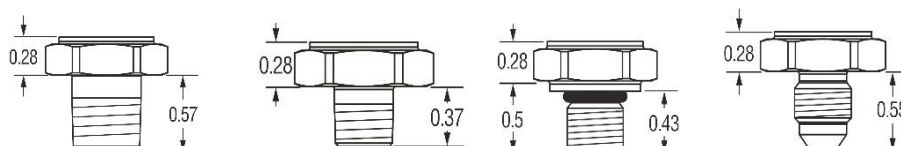
Construction material

Housing	SS304
Wetted parts	17-4PH
Sealing gasket	Viton
Plug	Plastic
Cable	PE/PVE/PUR

Pressure ports



Size	C2=G1/4-19A	M12x1.5	M14x1.5	3/8-24UNF
Torque	30-35NM	28-30NM	30-35NM	18-20NM

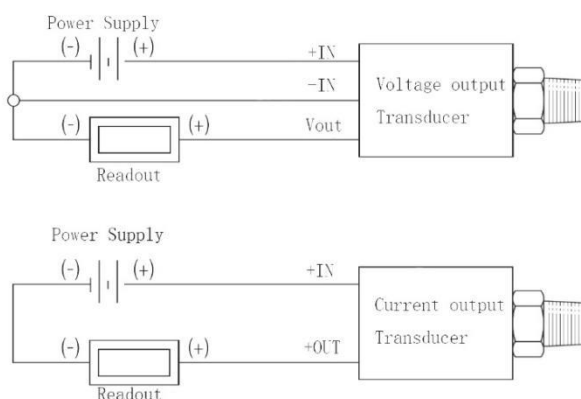


Size	1/4-18NPTF	1/8-27NPTF	7/16-20UNF	7/16-20UNF 37°
Torque	2-3TFFT*	2-3TFFT*	18-20NM	15-16NM

*NPT threads 2-3 turns from finger tight. Wrench tighten 2-3 turns.

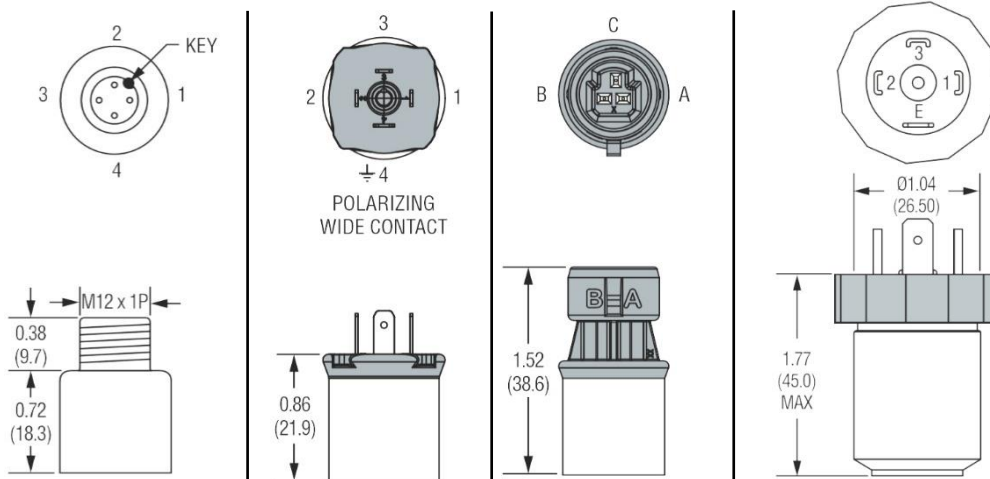
General notes: The diameter of all cans is 19mm; Hex is SW19.

Connection Schematic



Current version load resistance
 $Max. = (U-8)/0.02\Omega$
 U is the real supply voltage

Electrical Connection



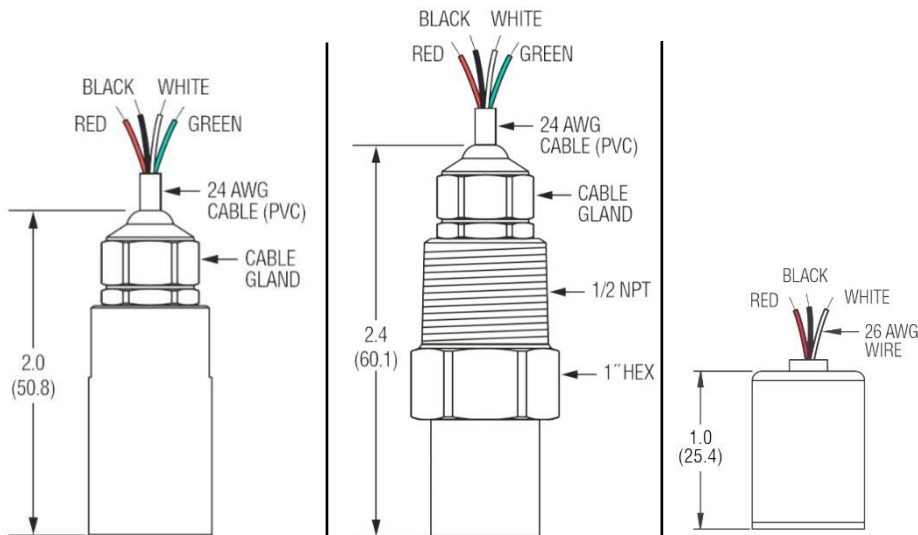
Pin	Current	Voltage	Current	Voltage	Current	Voltage	Current	Voltage
1	+IN	+IN	+IN	+IN	A+IN	A+IN	+IN	+IN
2	-IN	-IN	-IN	-IN	B-IN	B-IN	-IN	-IN
3	Null	Vout	Null	Vout	C Null	C Vout	Null	Vout
4	PE	PE	PE	PE	----	----	PE	PE

Cable wiring

CABLE EXIT

1/2 CONDUIT CONNECTION

FR



Color	Current	Voltage	Current	Voltage	Current	Voltage
Red	+IN	+IN	+IN	+IN	A+IN	A+IN
Black	-IN	-IN	-IN	-IN	B-IN	B-IN
Green	Null	Vout	Null	Vout	C Null	C Vout
White	PE	PE	PE	PE	----	----

Order Guide

SPT21C2	Sputtered Thin Film Pressure Transmitter				
		Range	0~5...2000bar		
		[0~X]bar	X: the actual measured pressure		
			Code	Output signal	
			E	4~20mADC	
			J	0~5VDC	
			V	0~10VDC	
			V1	0.5~4.5VDC	
				Code	Electrical connection
				B1	DIN43650 connector
				B2	Cable exit
				B3	M12 connector
				B4	DIN9.4mm connector
				B5	Cable exit PG7
				Code	Electrical connection
				C2	G1/4 male
				C5	NPT1/4 male
				C7	7/16-20UNF with 37°
				C11	7/16-20UNF
				C12	M12*1.5
				C13	M14*1.5
				C14	3/8-24 UNF
				C15	1/4-18 NPTF
				C16	1/8-27NPTF
				XX	01,02,03,04...(cable length in meters)
SPT21C2	[0~10bar]	E	B2	C2	the whole spec

Note:

1. Please pay attention that the media should be compatible with the contacted parts;
2. If any special requirements on function or specification, please contact with us freely.