SIER ELECTRONICS CO., LTD
A: No.1 Binhe nan road, Baoji, 721006,Shaanxi, China
Tel: +86 917 3652001 Fax: +86 917 3652001
Email: kenny@sierelectro.com Web: www.sierelectro.com

SPT21C2 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.

Specifications

Measuring Medium	Gas/Liquid	Accuracy(%FS)	0.1, 0.25, 0.5 optional
Long-term stability	±0.1%FS/year*	Response time	≤1ms
Offset thermal drift	0.005%FS/℃	Span thermal drift	0.01%FS/℃
Medium temp	-70~200℃	Environmental temp	-55~155℃
Power supply	8~36VDC	Output signal	4~20mA, 0~1···10V
Response time	≤1ms	Product life	Designed 100M cycles
Protection class	IP65, IP67, IP68*	Electrical connection	DIN43650/M12/cable
Weight	50-150grams		

*non-accumulative;

*protection class is different depends on electrical connection options.

Pressure Capability

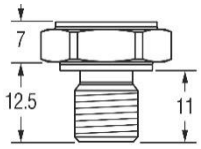
Pressure Range(bar)	Proof pressure (x Full scale)	Burst Pressure (x Full scale)
5....1000	2 x FS	10 x FS & ≤4000bar
1000...1600	1.5 x FS	≤4000bar
1600....2500	1.5 x FS & ≤3000bar	≤4000bar

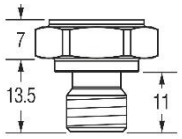
Construction and Outline Dimension

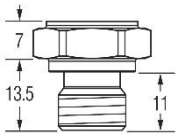
Construction material:

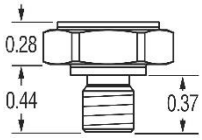
Housing	Wetted parts	Sealing gasket	plug	cable
304 SS	17-4PH	Viton	Plastic	PE/PVE/PUR

Pressure ports

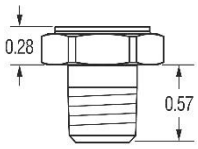


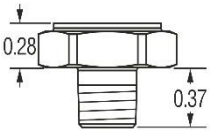


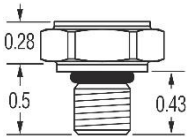


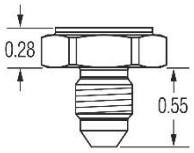


Size	C2=G1/4-19A	M12x1.5	M14x1.5	3/8-24UNF
Torque	30-35NM	28-30NM	30-35NM	18-20NM







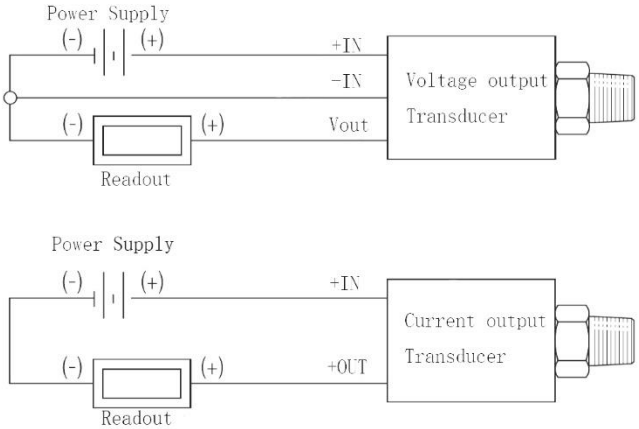


Size	1/4-18NPTF	1/8-27NPTF	7/16-20UNF	7/16-20UNF 37°
Torque	2-3TFFT*	2-3TFFT*	18-20NM	15-16NM

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

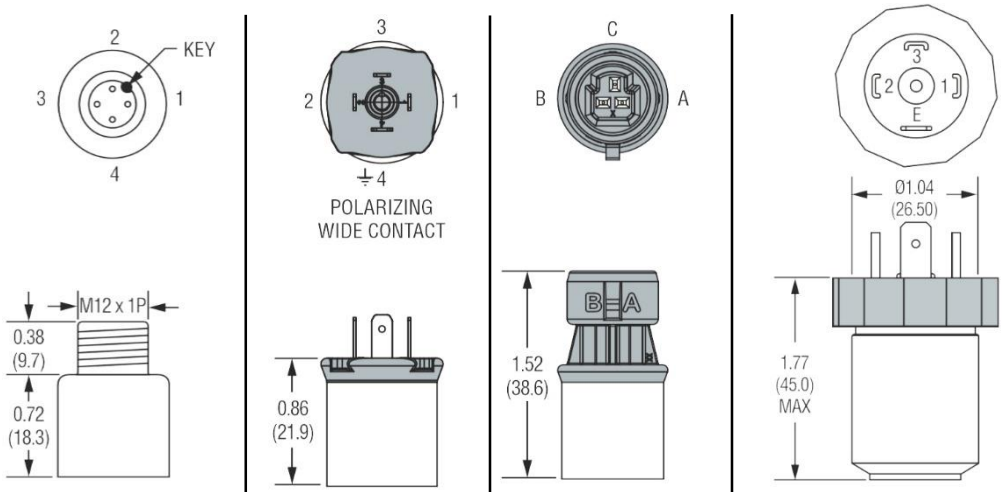
General notes: The diameter of all cans is 19mm; Hex is SW19.

Connection Schematic



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

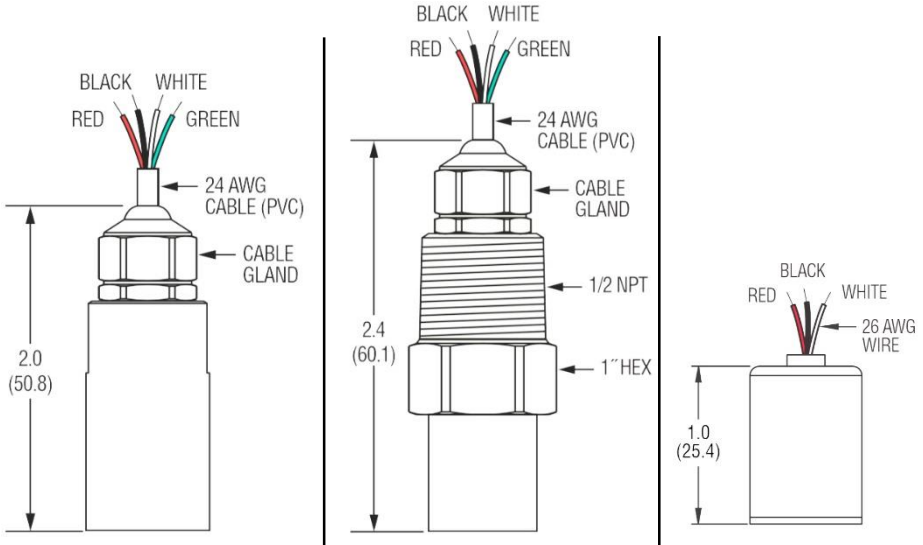
Electrical Connection



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	Thin Film Pressure Transmitter
Range	Pressure range:0～5…2500bar
[0～X]bar	X：the actual measured pressure

Code	Output signal
E	4～20mADC
J	0～5VDC
V	0～10VDC
V1	1～5VDC
V2	0.5～4. 5VDC

Code	Electrical connection
B1	DIN43650 connector
B2	Cable exit
B3	M12 connector
B4	DIN9.4mm connector
B5	1/2 Conduit connection
B6	Packard MetriPack

Code	Electrical connection
C_2	G1/4 male
C_5	NPT1/4 male
C_7	7/16-20UNF with 37°
C_{11}	7/16-20UNF
C_{12}	M12*1.5
C_{13}	M14*1.5
C_{14}	3/8-24 UNF
C_{15}	1/4-18 NPTF
C_{16}	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;