

SIER ELECTRONICS CO., LTD

SPT22 Intelligent Pressure Transmitter with LCD Display

Features

- Multiple measuring range options
- Digital temperature display
- Convenient zero-point and range adjustment
- Reverse polarity protection and current limiting protection
- Lightning and shock resistant
- Intrinsically safe and explosion-proof; compact size, attractive appearance, and high cost-effectiveness
- High precision, high stability, and high reliability



Applications

- Oil and Petrochemicals
- Power Industry
- Machinery Manufacturing
- Hydraulic and Pneumatic Control
- Pipeline Systems
- Hydrology and Water Resources

Introduction

The SPT22 intelligent digital display pressure transmitter uses computer-controlled laser trimming for temperature compensation and features an integrated junction box design. It has dedicated wiring terminals and a digital display, making installation, calibration, and maintenance convenient. This series of products is suitable for various enterprises and institutions in the petroleum, water conservancy, chemical, metallurgical, power, scientific research, and environmental protection industries, enabling the measurement of fluid temperature and applicable to various all-weather environments and corrosive fluids.

Specification

Pressure range	-100kPa...0kPa~10kPa...100MPa
Over pressure	≤1.5 times full scale pressure
Pressure type	Gauge/absolute/sealed gauge optional
Accuracy	see Accuracy definition
Long term stability	≤±0.3%FS/year
Display	5-digit LCD
Offset thermal drift	0.05%FS/°C(≤1bar); 0.03%FS/°C(>1bar)
Span thermal drift	0.05%FS/°C(≤1bar); 0.03%FS/°C(>1bar)
Power supply	18~36VDC
Output	4-20mA

Application temp.	-30~80℃
Storage temp.	-40~120℃
Load	$\leq (U-18) / 0.02\Omega$
Housing protection	IP65 (default)

Accuracy

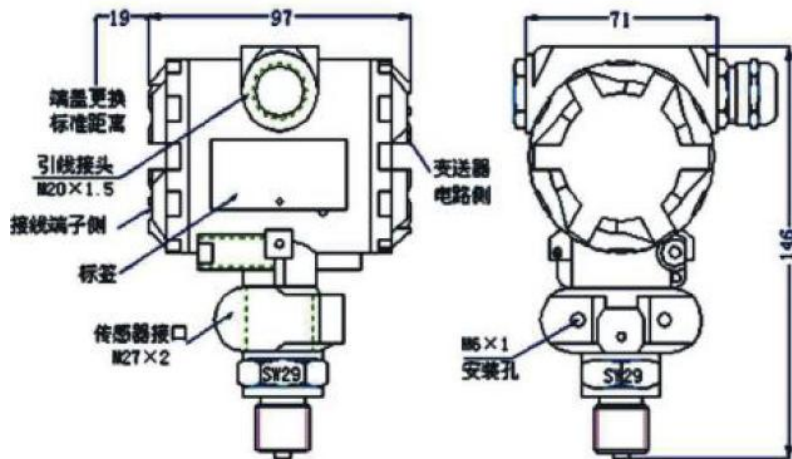
(Test condition: Environment temperature: 25±5℃ Relative humidity: 45%~75%)

Pressure Type	Range	Accuracy
Gauge (G)	0kPa~10kPa<X<35kPa	±1%FS
	35kPa≤X≤3.5MPa	±0.5%FS (default)
	-100kPa~ -35kPa<X≤200kPa	±0.25%FS
	-100kPa~ -35kPa<X≤200kPa~3.5MPa	±0.5%FS
Absolute (A)	0kPa~70kPa<X≤100kPa	±1%FS
	100kPa<X≤1MPa	±0.5%FS
	1MPa<X≤100MPa	±0.25%FS
		±0.5%FS (default)
Sealed gauge (S)	3.5MPa<X≤100MPa	±0.5%FS

Material

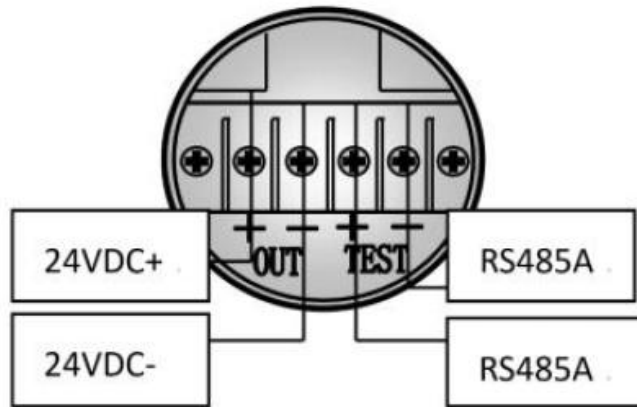
Housing	Aluminium die casting
Pressure port	SS304/SS316L/Hastelloy C/Titanium Alloy
Diaphragm	SS316L/Hastelloy C/Tantalum
Sealing gasket	NBR (default) / Viton

Outline Dimension (unit: mm)



Please contact us if you request anything else.

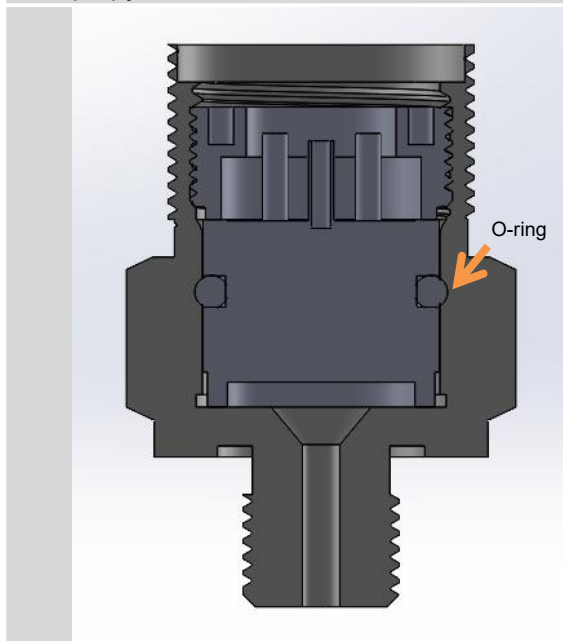
Electrical Connection



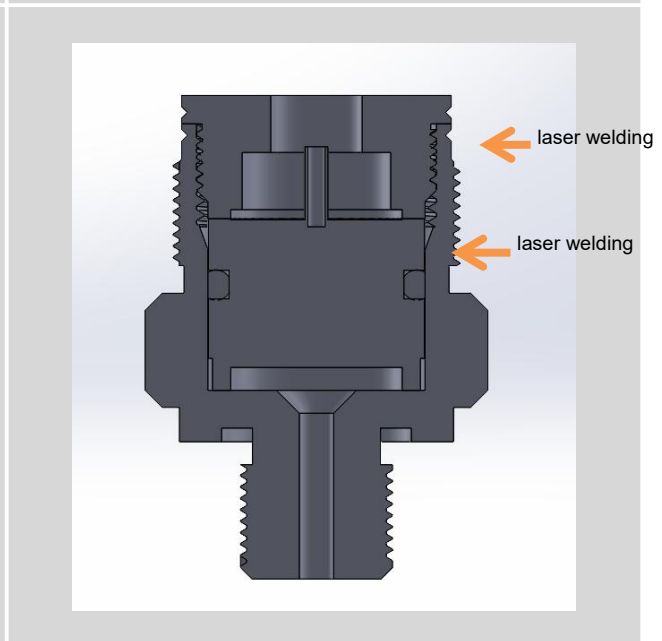
Sensor Sealing

O-ring Sealing

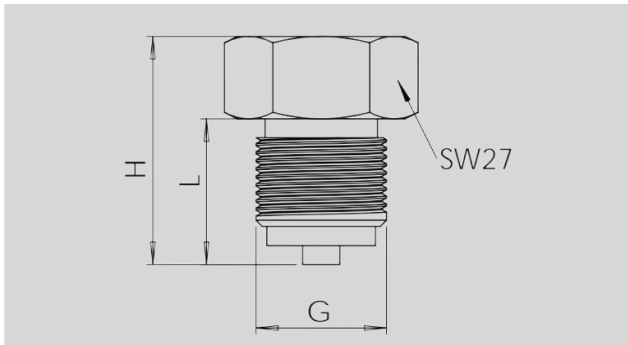
(O-ring material : fluorine rubber, ethylene propylene diene monomer, nitrile rubber)



Soldering

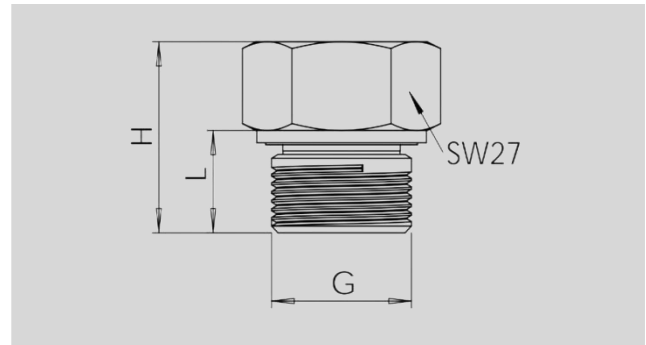


Process connection(Unit:mm)



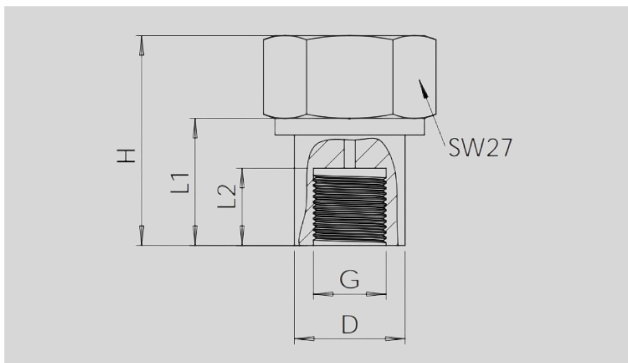
EN837

G	H	L
G _{1/8}	20	10
G _{1/4}	25	15
G _{3/8}	26	16
G _{1/2}	36	23
M20X1.5	36	23



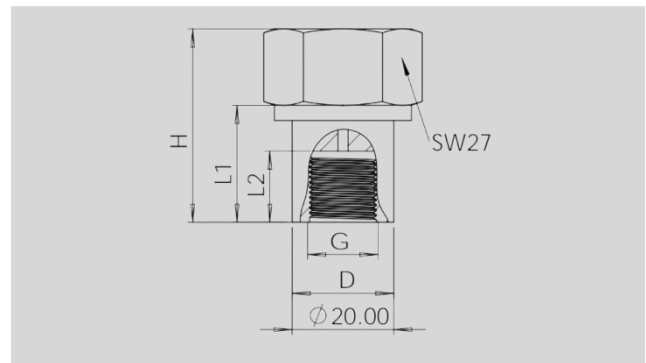
straight thread

G	H	L
G _{1/4}	28	15
G _{1/2}	28	15
M14X1.5	28	15
M20X1.5	28	15



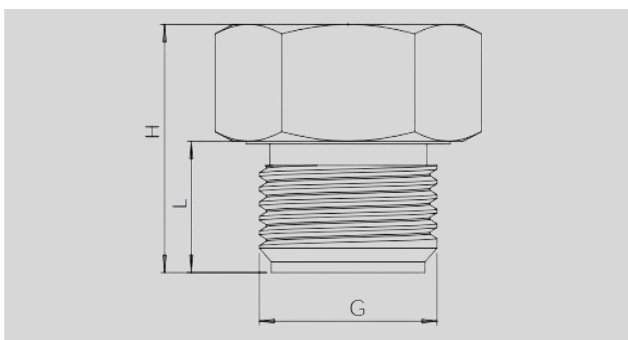
G female thread

G	H	L1	L2	D
G _{1/4}	38	23	14	φ20



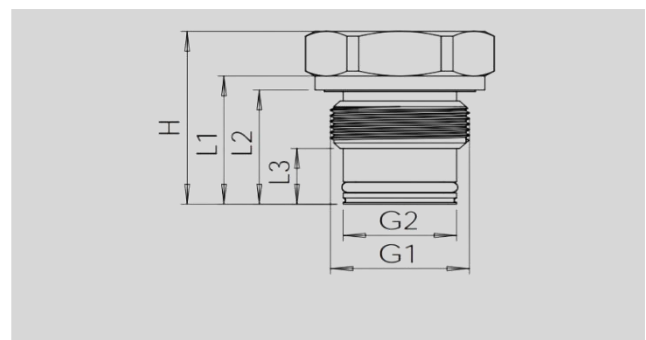
NPT female thread

G	H	L1	L2	D
NPT _{1/4}	38	23	14	φ20



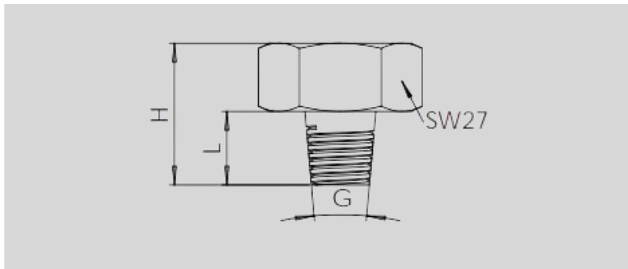
flush membrane

G	H	L	SW
G _{1/2}	25.5	13.5	27
G ₁	32.5	22.5	41



flush membrane front O-ring seal

G1	G2	H	L1	L2	L3	SW
G _{1/2}	Φ18	31	23	21	10	27
G ₁	Φ30	31	23	21	10	41



taper thread		
G	H	L
NPT _{1/8}	23	10
NPT _{1/4}	28	15
NPT _{1/2}	34	18
R _{1/4}	27	14
R _{3/8}	28	15
R _{1/2}	32	19
PT _{1/4}	27	14
PT _{3/8}	28	15
PT _{1/2}	32	19

Order Information

SPT22	Intelligent Pressure Transmitter with LCD Display				
	Range	-0.1...0~0.01...100MPa			
	[0~X]MPa	X: the actual measured pressure			
		Code	Output signal		
		E	4~20mADC		
		R	RS485		

