

SSPS-PSN10

Piezoresistive silicon pressure sensor with nipple



PRODUCTS FEATURES

- Applicable to harsh industrial environments
- Resistance to cavitation, liquid hit and pressure peak
- Housing and wetted parts are acid resistant 316L stainless steel
- High accuracy

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1. Product model code table

Example:

Series Piezoresistive silicon pressure with nipple, model 10:

SSPS-PSN10

SSPS-PSN10 G V1 C1 - "CODE"

Pressure reference		Output signal		Pressure connection	
G	Gauge pressure	V1	4~20mA	C1	G1/2
A	Absolute pressure	V2	1~5V	C2	G1/4
		V3	0~5V	C3	M14X1.5
		V4	0~10V	C4	NPT1/4
		V5	1~6V	C5	NPT1/2
		V6	1~10V		

CODE	Pressure range
100k	0~100kPa
160k	0~160kPa
250k	0~250kPa
400k	0~400kPa
0.6M	0~0.6MPa
1M	0~1MPa
1.6M	0~1.6MPa
2.5M	0~2.5MPa
6M	0~6MPa
10M	0~10MPa
16M	0~16MPa
25M	0~25MPa
60M	0~60MPa

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Technical Specifications

Pressure range	-100kPa~0~100kPa...60MPa		
Pressure reference	Gauge pressure, Absolute pressure		
Excitation	24V (9~32V)	24V (9~30V)	24V (15~30V)
Output signal	4~20mA	1~5V/0~5V/1~6V	0~10V/1~10V
Accuracy	±0.5%F.S.(typical)/±%1F.S. (max.)		
Nonlinearity	≤±0.2%F.S. (Best fit straight line)		
Hysteresis & Repeatability	≤±0.1%F.S.		
Zero temp. coefficient	±1.5%F.S. (-20°C~+85°C)		
Span temp. coefficient	±1.5%F.S. (-20°C~+85°C)		
Response time	Viscosity of liquid<100cSt	<4ms	
	gas	<35ms	
Overpressure	1.5*FS (max.90MPa)		
Burst pressure	2*FS (max.120MPa)		
Service life	>10x10 ⁶ (cycles)		
Ambient temp.	-40°C~+85°C		
Medium temp.	-40°C~+100°C		
Storage temp.	-50°C~+85°C		
Compensated temp.	0°C~+80°C		
EMC-interference	EN 61000-6-3		
EMC-immunity	EN 61000-6-2		
Insulation resistance	>200MΩ/250VDC		
Power frequency test	SEN 361503		
Vibration resistance	Sine curve	15.9mm-pp, 5Hz~25Hz	IEC 60068-2-6
		20g, 25Hz~2kHz	
Vibration resistance	Random	7.5grms, 5Hz~1Hz	IEC 60068-2-64
Shock resistance	Shock 500g/1ms		IEC 60068-2-27
	Free fall		IEC 60068-2-32

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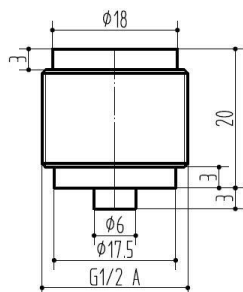
Piezoresistive silicon pressure sensor with nipple

Protection	IP65	
Material	Wetted part	ASTM:S31603 (AISI 316L)
	Housing	Stainless steel 304
	Electrical connection	PA6.6
Weight	Approximately 0.2kg	

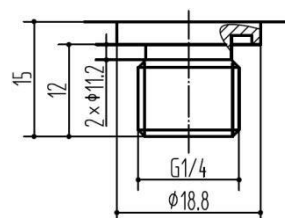
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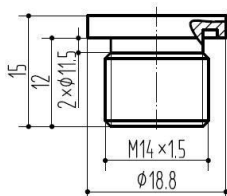
Mechanical dimensions



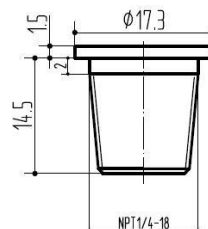
C1 – G1/2 (Recommended torque:30~35Nm)



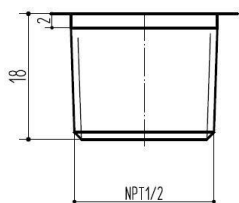
C2 – G1/4 (Recommended torque:30~35Nm)



C3 – M14x1.5 (Recommended torque:30~35Nm)



C4 – NPT1/4 (Recommended torque: After being tightened by fingers, twist 2 to 3 laps)



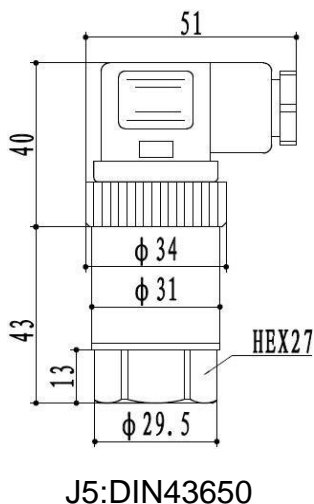
C5 – NPT1/2 (Recommended torque: After being tightened by fingers, twist 2 to 3 laps)

*All dimension in mm

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Electrical connection



Connection mode (current 2 wire)

PIN1	Excitation +
PIN2	Current output
PIN3	Suspended

Connection mode (voltage 3 wire)

PIN1	Excitation +
PIN2	Ground
PIN3	Voltage output