

SPS40E

Simple Process Explosion-Proof Pressure Sensor



The SPS40E is used to measure gauge pressure and compound pressure. A semiconductor pressure sensor is used as the pressure-sensing unit.

Features include compact size, light weight, high accuracy and high reliability. The structure meets with the safety requirements of special explosion-proof and general explosion-proof devices (Exdo II BT4X).

Specifications

Applicable media	Gases or liquids (except fluids which corrode the SUS316L pressure element)
Measuring range	±10% FS of nominal range
Ambient temperature	-10 to +60°C
Allowable pressure	1.1 times of measuring range
Response speed	400ms max.
Power	12/24Vdc
Power consumption	1W max. (including 4–20mA output)
Output	4 to 20mA _{dc} (3-wire type)
Load resistance	300Ω max.
Mass	0.75kg

Selection Guide I II III IV V VI VII Example: SPS40E00A1101-30

Segment	Model No. selection		Description
I	Basic No.	SPS40E	Flame-proof and special type explosion-protected sensor
II	Inlet	0	Inlet connection: Rc1/2 (PT1/2)
III	Output	0A	4 to 20mA output
IV	Range	☐ ☐ ☐	(Refer to Pressure Ranges table)
V	Power	1	12Vdc
		2	24Vdc
VI	Revision	-3	Engineering revision
VII	Additional process	0	None
		D	With inspection data
		Y	Traceability certification + inspection data

Pressure Ranges

• Gauge pressure range

Code	kPa
110	0 to 1
111	0 to 2
112	0 to 3
113	0 to 5
114	0 to 7
115	0 to 10
116	0 to 20
117	0 to 30
118	0 to 50
119	0 to 70

Code	kPa
120	0 to 1000
121	0 to 200
122	0 to 300
123	0 to 500
124	0 to 700
125	0 to 1000
126	0 to 2000
127	0 to 3000
180	20 to 100
181	0 to 3500

• Compound pressure range

Code	kPa
150	±1
151	±2
152	±3
153	±5
154	±7
155	±10
156	±20
157	±30
158	±50
159	±70

Code	kPa
160	-100 to +100
161	-100 to +200
162	-100 to +300
163	-100 to +500
164	-100 to +700
165	-100 to +1000
166	-100 to +2000
167	-100 to +3000
191	-100 to +3500
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Dimensions

(Unit: mm)

