Intelligent Pressure Sensor and Switch | SPS300A/B

The SPS300A/B intelligent pressure sensor and switch are microprocessor-based high-accuracy and high-function digital pressure detectors. A liquid-filled dual diaphragm (SUS316L) and semiconductor-based pressure sensing elements are incorporated into the pressure detection unit. These detectors are used for gauge pressure measurement.

The SPS300A is a pressure sensor with current output and relay contacts.

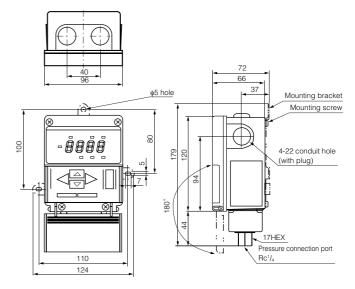The SPS300B is a pressure switch which offers two-stage relay contact (independent) outputs.

Specifications

Applicable fluids		Gas and liquid, except for fluids that will corrode the pressure receiving material (SUS316L)	
	Fluid temperature	-20 to +60 °C without freezing	
Pressure detection	Structure of pressure receiving unit	Barrier structure of oil-filled seal diaphragm	
	Pressure sensing element	Piezoresistive silicon	
	Basic model No.	SPS300A	SPS300B
Output	Output type	Current value (4 to 20 mA) + relay contact (SPDT)	Relay contact (SPDT) + relay contact (SPDT)
General specifications	Rated power supply voltage	100/200 Vac 50/60 Hz, 120/240 Vac 50/60 Hz Or 12 to 24 Vdc	
	Power consumption	7 W max.: at max. load and relay on or 20 mA output	
	Rating	JIS C 0920 class 3 rainproof (wall-mount type)	
	Weight	Approx. 1.1 kg	
	Standards compliance	EN 61010-1, EN 61326	

External dimensions

SPS300A/B□□□A: wall mount type (Unit: mm)

Model No. configuration

Ex.: SPS300A200A110

Basic model No.	Measurement range	Mounting	Rated power supply voltage	Additional treatment	Description
SPS300A					Intelligent pressure sensor (Current value (4 to 20 mA) + relay contact (SPDT))
SPS300B					Intelligent pressure switch (Relay contact (SPDT) + relay contact (SPDT))
Select from Table 1. ▶					
		A			Wall mount
		B			Panel mount
			1		100/200 Vac 50/60 Hz
			2		120/240 Vac 50/60 Hz
			5		12 to 24 Vdc 50/60 Hz
				10	None
				1D	With inspection results
				1T	With tropicalization
				1B	With inspection results + tropicalization
				1Y	With traceability certificate

Table 1. Range code and unit

Code	kPa	Code	bar	Code	MPa
200	0 to 100	800	0 to 1	–	–
201	0 to 200	801	0 to 2	–	–
202	0 to 500	802	0 to 5	–	–
203	0 to 1,000	803	0 to 10	903	0 to 1
204	0 to 2,000	804	0 to 20	904	0 to 2
205	0 to 3,500	805	0 to 35	905	0 to 3.5
206	-100 to +100	806	-1 to +1	–	–
207	-100 to +1,000	807	-1 to +10	907	-0.1 to +1
208	20 to 100	808	0.2 to 1	–	–
209	0 to 300	809	0 to 3	–	–
210	-100 to +2,000	810	-1 to +20	910	-0.1 to +2
211	-100 to +3,500	811	-1 to +35	911	-0.1 to +3.5

Optional parts (sold separately)

Name	Model No.
Siphon	J-14026
Cover packing replacement	81403871-001

1 DIGITAL CONTROLLERS

2 RECORDERS, INDICATORES

3 CONVERTERS

4 FLAME SAFEGUARD SYSTEM

5 ACTUATORS

6 SENSORS

7 GAS FLOW MEASUREMENT AND CONTROL PRODUCTS