

SPS300A, B

Digital Pressure Detectors

(Intelligent Pressure Sensor and Switch)



The SPS300A, B high-accuracy and high-function digital pressure detectors have a liquid-filled dual diaphragm (SUS316L) and a semiconductor-based pressure detection element incorporated into the pressure detection unit, used for gauge pressure measurement.

The SPS300A employs electric current and relay contact outputs, whereas the SPS300B offer two-stage relay contact (independent) outputs.

SENSORS

Specifications

| | | | |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| General | Power supply voltage | 100/200Vac: 82 to 110/164 to 220Vac 120/240Vac: 99 to 132/198 to 264Vac | |
| | Power consumption | 7W max. at relay on or 20mA output | |
| | Ambient temperature | -20 to +60°C (no freezing) | |
| | Ambient humidity | 40°C, 90%RH max. (no condensation allowed) | |
| | Weight | Approx. 1.1kg | |
| | Breakage pressure | 3 times the maximum pressure of range, but 1.5 times for the 0 to 300kPa, 0 to 3500kPa, -100 to +3500kPa, 0 to 3.5MPa, -0.1 to +3.5MPa, 0 to 3bar, 0 to 3.5bar, -1 to +35bar models | |
| Allowable pressure | 1.1 times the maximum pressure of range, but 1.0 times for the 0 to 300kPa, 0 to 3500kPa, -100 to +3500kPa, 0 to 3.5MPa, -0.1 to +3.5MPa, 0 to 3bar, 0 to 3.5bar, -1 to +35bar models | | |
| | | | |
| Output | Model | SPS300A | SPS300B |
| | Control mode | Current + relay contact (SPDT) | Relay contact (SPDT) + relay contact (SPDT) |
| | Cycle | 25ms | |
| | Accuracy | ± 0.25%FS ± 1 digit (0 to 50°C) | |
| | Display | Digital 4-digit, 7-segment LED's | |
| Indication and Setting | Respond speed | Indication output: 100ms, Current output: 50ms, Relay contact output: 50ms | |
| | Accuracy | ± 0.25%FS ± 1 digit (0 to 50°C) | |

Selection Guide

I II III IV V

Example: SPS300A100A1000

| Table | Selection | Description | | | |
|-------|----------------------|-----------------------------|----------------------------------------|-----------------------------|------------|
| | | SPS300A | | SPS300B | |
| I | Basic Model No. | Intelligent Pressure Sensor | | Intelligent Pressure Switch | |
| II | Range | Code | kPa | Code | MPa |
| | | 200 | 0 to 100 | - | - |
| | | 201 | 0 to 200 | - | - |
| | | 202 | 0 to 500 | - | - |
| | | 203 | 0 to 1000 | 903 | 0 to 1 |
| | | 204 | 0 to 2000 | 904 | 0 to 2 |
| | | 205 | 0 to 3500 | 905 | 0 to 3.5 |
| | | 206 | -100 to +100 | - | - |
| | | 207 | -100 to +1000 | 907 | -0.1 to +1 |
| | | 208 | 20 to 100 | - | - |
| | | 209 | 0 to 300 | - | - |
| 210 | -100 to +2000 | 910 | -0.1 to +2 | | |
| 211 | -100 to +3500 | 911 | -0.1 to +3.5 | | |
| III | Mounting method | A | Wall mount | | |
| | | B | Panel mount | | |
| IV | Power supply voltage | 1 | 100/200Vac 50/60Hz | | |
| | | 2 | 100/240Vac 50/60Hz | | |
| | | E | 120/240Vac 50/60Hz (Honeywell version) | | |
| V | Option | 00 | None | | |
| | | 0D | With test data | | |
| | | 0T | Tropicalization | | |
| | | 0B | With test data + tropicalization | | |

Dimensions

(unit:mm)

