CE

# SPS300A/B
## Intelligent Pressure Sensor/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 offers two-stage relay contact (independent) outputs.
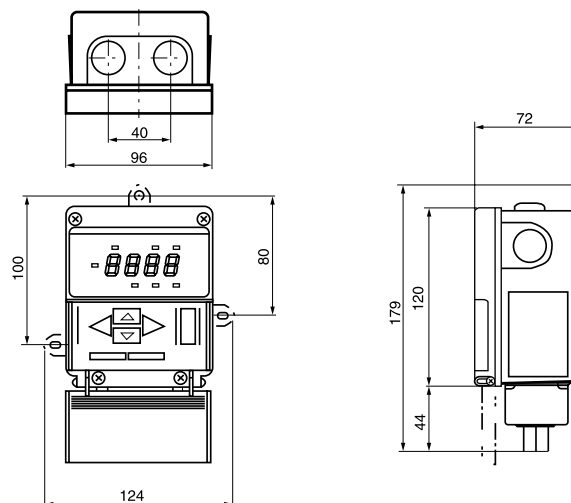
## Specifications

| General | Power | 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) |
| | Mass | 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) | |
| Indication and setting | Display | Digital 4-digit, 7-segment LEDs |
| | Response speed | Indication output: 100ms. Current output: 50ms. Relay contact output: 50ms. |
| | Accuracy | ± 0.25% FS ± 1 digit (0 to 50°C) |

### Accessories (sold separately)

| Model No. | Description |
| --- | --- |
| J-14026 | Siphon |
| 81403871-001 | Cover packing for replacement |

## Selection Guide

I II III IV V    Example: **SPS300A200A10**

| Segment | Model No. selection | | Description |
| --- | --- | --- | --- |
| I | Basic No. | SPS300A | Intelligent Pressure Sensor |
| | | SPS300B | Intelligent Pressure Switch |
| II | Range | | (Refer to Pressure Ranges table.) |
| III | Mounting method | A | Wall mount |
| | | B | Panel mount |
| IV | Power | 1 | 100/200Vac 50/60Hz |
| | | 2 | 100/240Vac 50/60Hz |
| V | Options | 00 | None |
| | | 0D | With inspection data |
| | | 0T | Tropicalization |
| | | 0B | Tropicalization + inspection data |

## Pressure Ranges

| 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 |

SENSORS

## Dimensions

(Unit: mm)