



ASCX15AN



Actual product appearance may vary.

Pressure Sensors: Measurement Type:
Absolute; 0 psia to 15 psia Operating
Pressure, Straight Port

Features

- 5.0 Vdc Supply
- High Level Voltage Output
- Field Interchangeable
- Calibrated and Temperature Compensated
- Small Form Factor
- Low Power
- Offset Adjust

Potential Applications

- Medical Equipment
- Industrial Controls
- Pneumatic Controls

Description

The ASCX Series is an signal-conditioned version of Honeywell's proven performer and industry leading SCX Series. The amplified ASCX device is in the same package as the SCX but it offers a high level output (4.5 Vdc span) on a very cost-effective basis. This family is fully calibrated and temperature compensated over a range of 0 °C to 70 °C [32 °F to 158 °F] but can be operated from -25 °C to 105 °C [-13 °F to 221 °F]. They are intended for use with non-corrosive, non-ionic working fluids such as air and dry gases.

Devices are available to measure absolute, differential and gage pressures from 1 psi (ASCX01) up to 150 psi (ASCX150). The absolute devices (A) have an internal vacuum reference and an output voltage proportional to absolute pressure.

Differential devices (D) allow application of pressure to either side of the sensing diaphragm and can be used for gage or differential pressure measurements.

The ASCX Series devices feature an integrated circuit (IC) sensor element and laser trimmed thick film ceramic housed in a compact solvent resistant case. It provides excellent corrosion resistance and isolation to external packaging stresses. The package has convenient mounting holes and pressure ports for ease of use with standard plastic tubing for pressure connection.

All ASCX devices are calibrated for span to within • 1 % (typically • 0.2 %) of FSO.

The devices are characterized for operation from a single 5 Vdc supply although sensitivity is ratiometric to the supply voltage and any dc supply from 5 Vdc to 16 Vdc is acceptable.

The ACSX series requires very low quiescent current compared to other signal conditioned pressure sensors, thus, this series is ideal for battery-powered applications. The 100 μ s response time makes this series an excellent choice for computer peripherals and pneumatic control applications.

| Product Specifications | |
|----------------------------------|--|
| Measurement Type | Absolute |
| Signal Conditioning | Amplified |
| Pressure Range | 0 psia to 15 psia |
| Maximum Overpressure | 30 psia |
| Supply Voltage | 4.5 Vdc min., 5.0 Vdc typ., 16.0 Vdc max. |
| Compensated | Yes |
| Output Calibration | Yes |
| Response Time | 100 •s |
| Termination | PCB |
| Port Style | Straight |
| Package Style | 6-pin SIP |
| Linearity | ± 1.0% span (± 0.2% typ.) |
| Typical Sensitivity | 0.3V/psi |
| Full Scale Span | 4.43 Vdc min, 4.5 Vdc typ., 4.57 Vdc max. |
| Null Offset | 0.180 Vdc min., 0.250 Vdc typ., 0.320 Vdc max. |
| Span Shift Over Temperature | ± 0.2% span typ., ± 1.0% span max. |
| Linearity, Hysteresis Error | ± 0.1 % Span Typ.; ± 0.5 % Span Max. |
| Repeatability & Hysteresis Error | ± 0.2 % span typ. |
| Repeatability | ± 0.2% span typ., ± 0.5% span max. |
| Offset Position Sensitivity | 0.205 Vdc min., 0.250 Vdc typ., 0.295 Vdc max. |
| Operating Temperature Range | 25 °C to 105 °C [-13 °F to 221 °F] |
| Compensated Temperature Range | 0 °C to 70 °C [32 °F to 158 °F] |
| Storage Temperature Range | -55 °C to 125 °C [-67 °F to 257 °F] |
| Media Compatibility | Clean, dry gases only. |
| UNSPSC Code | 411121 |
| UNSPSC Commodity | 411121 Transducers |
| Availability | Global |
| Series Name | ASCX |