ASH Series
High Performance Pressure Transducer Ranges Up to 150 psi

The ASH series of high performance pressure transducers have been designed specifically for extreme endurance and high temperature installations for motorsport and on-vehicle automotive applications.

They are ideal for high precision data acquisition or control systems. The transducers can be installed directly onto vehicles or as part of a test stand or dyno.

The ASH Series offer a high level of reliability and endurance, and are protected against the high vibration, shock and temperatures found in motorsport. Continuous operation up to 300°F allows for installations in hot zones.

The modular construction and programmable amplifier provide a fast delivery time for standard and custom configurations. Pressure ranges are available from 0-15 to 0-150 psi in either Absolute, Gauge or Sealed Gauge. Industry standard 3-wire electrical connections allow configuration with most common ECU’s and data logging systems.

**Technical Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Reference</td>
<td>Absolute, Gauge and Sealed Gauge</td>
</tr>
<tr>
<td>Standard Pressure Ranges (psi)</td>
<td>15, 17.5, 50, 75, 100, 115, and 150 psi (Compound ranges available)</td>
</tr>
<tr>
<td>Proof Pressure (overload)</td>
<td>300% of range</td>
</tr>
<tr>
<td>Burst Pressure</td>
<td>10xFS of range</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.08% FS combined linearity &amp; hysteresis (CNLH)</td>
</tr>
<tr>
<td>Thermal Effects</td>
<td>≤±0.25% FS TEB for Compensated Range</td>
</tr>
<tr>
<td>Output</td>
<td>0.5V to 4.5V (±0.25% of span)</td>
</tr>
<tr>
<td>Power Supply</td>
<td>5V (±0.5V) Ratiometric or 8-16Vdc</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40°F to 300°F (-40°C to +150°C)</td>
</tr>
<tr>
<td>Compensated Temperature Range</td>
<td>32°F to 250°F (0°C to +125°C)</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>0-1000Hz, 0-2000Hz, 0-5000Hz (Selectable at time of order)</td>
</tr>
<tr>
<td>Construction</td>
<td>Stainless Steel, Viton</td>
</tr>
<tr>
<td>Electrical Connection</td>
<td>20&quot;, 26AWG, 55spec Wire +DR25 Sleeve</td>
</tr>
<tr>
<td>Process Connection (Thread Size)</td>
<td>Please see Part Number Configurator - Page 2</td>
</tr>
<tr>
<td>Protection Class</td>
<td>IP67</td>
</tr>
<tr>
<td>EMC Protection &amp; Vibration</td>
<td>EN 50082-1 and up to 5KHz Sine at 100g</td>
</tr>
<tr>
<td>Weight</td>
<td>1.9oz (including cable)</td>
</tr>
<tr>
<td>Options</td>
<td>Cable Spec, Connector Fitted, Thread Size &amp; Labelling</td>
</tr>
</tbody>
</table>

PMC/KA Sensors adopts a continuous development program which sometimes necessitates specification changes without notice.
The KA configuration tool is used to specify a standard KA Sensor, other options are available.

**MECHANICAL DETAILS**

Dimensions in inches

- **Supply Voltage**
  - 5V Ratiometric
  - 8-16Vdc

- **Accuracy (CNLH)**
  - ±0.08% FS Combined Linearity & Hysteresis

- **Accuracy (Thermal Zero Shift)**
  - TEB for Compensated Range <±0.25% FS

- **Electrical Connection**
  - 26AWG, 55spec Wire + DR25 Sleeve

- **Process Connection**
  - 3/8 Inch 24 UNF Dash 3 (SAE J514)
  - 1/8 Inch NPT Male (ANSI B1.20.1)
  - M10 x 1 Male (ISO 6149-2)
  - M8 x 1 Male (ISO 6149-2)
  - 5/16 Inch 24 UNF - No Cone (SAE J514)
  - 3/8 Inch 24 UNF - No Cone (SAE J1926-2)
  - 5/16 Inch 24 UNF Dash 2 (SAE J514)
  - 7/16 Inch 20 UNF Dash 4 (SAE J514)
  - 7/16 Inch 20 UNF - No Cone (SAE J514)

- **Bandwidth**
  - 0 - 1000Hz
  - 0 - 2000Hz
  - 0 - 5000Hz

- **O-Ring Material (Internal)**
  - Viton
  - None

- **Cable Length**
  - 20 inches

- **Special Codes**
  - None

**Sensors For:**
- Temperature
- Acceleration
- Pressure
- Position
- Torque
- Speed
- Angle
- Force

**Services For:**
- Data Logging
- Telemetry
- Controls
- Wiring

**Contact Us**
KA Sensors
Division of PMC Engineering LLC
11 Old Sugar Hollow Rd
Danbury, CT 06810
USA
Tel: 203-792-8686
Fax: 203-743-2051
sales@pmc1.com
www.kasensors.com

**ELECTRICAL DETAILS**

<table>
<thead>
<tr>
<th>+Ve Supply</th>
<th>0V Supply</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Black</td>
<td>White</td>
</tr>
</tbody>
</table>