The ASH Series of High Performance Pressure Transducers have been designed for high temperature installations in motorsport and automotive applications; ideal for high precision data acquisition or control systems. These transducers can be installed directly onto vehicles, or as part of a test stand or dyno.

Offering a high level of reliability and endurance the ASH is protected against the high vibration, shock and high temperatures found in motorsport. Continuous operation up to 150°C allows for installations in hot zones. With a modular construction and programmable amplifier, this provides a fast delivery time for standard and custom configurations.

Pressure ranges are available between 1.2 to 400 Bar in either Absolute, Gauge or Sealed Gauge reference. Industry standard 3-wire electrical connections for the Pressure signal allow configuration with most common ECU’s and data logging systems. The ASH Series is race proven in many formulae around the world, offering a cost effective solution for professional engineers.

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Reference</td>
<td>Absolute, Gauge and Sealed Gauge</td>
</tr>
<tr>
<td>Standard Pressure Ranges (Bar)</td>
<td>Low Range: 1.2, 4 &amp; 10&lt;br&gt;High Range: 50, 100, 200 &amp; 400</td>
</tr>
<tr>
<td>Proof Pressure (Over range)</td>
<td>300% of Range / 150% of Range</td>
</tr>
<tr>
<td>Burst Pressure</td>
<td>&gt;1000% of Range / &gt;300% of Range</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.08% FS Combined Linearity &amp; Hysteresis (CNLH)&lt;br&gt;±0.2% FS Combined Linearity &amp; Hysteresis (CNLH)</td>
</tr>
<tr>
<td>Thermal Accuracy</td>
<td>&lt;±0.25% FS TEB within Compensated Range&lt;br&gt;Zero ±0.01% FS/°C (Sensitivity ±0.01% of Reading /°C)</td>
</tr>
<tr>
<td>Output</td>
<td>0.5V to 4.5V (±0.25%)</td>
</tr>
<tr>
<td>Supply</td>
<td>5V (±0.5V) Ratiometric or 8-16V d.c.</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40°C to +150°C</td>
</tr>
<tr>
<td>Compensated Temperature Range</td>
<td>0°C to +125°C</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>0-1000Hz, 2000Hz or 5000Hz (Select at time of Order)</td>
</tr>
<tr>
<td>Construction</td>
<td>Fully Welded Stainless Steel (with a Viton internal O-ring)</td>
</tr>
<tr>
<td>Electrical Connection</td>
<td>50cm 26AWG, 55 Spec Wire +DR25 Sleeve</td>
</tr>
<tr>
<td>Process Connection (Thread Size)</td>
<td>Please see Part Number Configurator</td>
</tr>
<tr>
<td>Protection Class</td>
<td>IP67</td>
</tr>
<tr>
<td>EMC Protection &amp; Vibration</td>
<td>EN E50082-1 and up to 5KHz Sine at 100g</td>
</tr>
<tr>
<td>Weight</td>
<td>54g (Including Cable)</td>
</tr>
</tbody>
</table>

KA Sensors adopts a continuous development program which sometimes necessitates specification changes without notice.
PART NUMBER CONFIGURATOR

Pressure Reference
- Absolute
- Sealed

Pressure Range
- 0.2 Bar to 100 Bar
- 0.5 Bar to 500 Bar
- 200 Bar to 400 Bar

Supply Voltage
- 5V

Process Connection
- 3/8 Inch 24 UNF Dash 3 (SAE J514)
- M10 x 1 Male (ISO 6169-2)
- M8 x 1 Male (ISO 6169-2)
- 5/16 Inch 24 UNF - No Cone (SAE J514)
- 3/8 Inch 24 UNF - No Cone (SAE J1926-2)
- 7/16 Inch 20 UNF Dash 4 (SAE J514)
- 7/16 Inch 20 UNF - No Cone (SAE J1926-2)

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

O-Ring Material (Internal)
- Viton (Only 10 Bar & Below)
- None

Special Code
- None
- 000

MECHANICAL DETAILS

26AWG 55SPEC CABLE
DR25 SLEEVE

Connection 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>

Contact us
KA Sensors Ltd
Unit 14 & 15
The Old Malthouse
Springfield Road
Grantham
Lincolnshire
United Kingdom
NG31 7BG

kasensors.com
sales@kasensors.com
+44(0)1476 568057

ASH 08.21

ENG: ENGINEERING LED | CONFIDENTIAL | EXPERIENCED | RESPONSIVE | DYNAMIC | FRIENDLY
PROCESS CONNECTIONS

M8 x 1.00-6g

F

DETAIL F

M10 x 1.00-6g

D

DETAI D

5/16-24UNF

I

DETAIL I

-2, 5/16-24UNF

K

DETAIL K

7/16-20 UNF

T

DETAIL T

-4, 7/16-20 UNF

L

DETAIL L

3/8-24UNF

J

DETAIL J

-3, 3/8-24UNF

A

DETAIL A

Contact us
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Services for:
- Data Logging
- Telemetry
- Controls
- Wiring

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