The KAA Series of miniature accelerometers offer a compact and rugged solution for motorsport and on-vehicle automotive testing applications.

The sensors offer 1 or 2 axis of measurement with integral signal conditioning to give a standard output of 0.5 to 4.5V which is ideal for most data acquisition systems.

Supply voltage can be 5 Vdc or 8-16 Vdc and low current consumption of less than 25mA.

With a bandwidth of 0 to 1500Hz these sensors are useful for applications within component and full vehicle testing and development programs.

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range (g)</td>
<td>Standard ranges: 2, 5, 10, 20, 50, 100 and 200</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>Range 2-10g: 0-1500Hz and range 20-200g: 0-400Hz</td>
</tr>
<tr>
<td>Resonant Frequency</td>
<td>5kHz</td>
</tr>
<tr>
<td>Safe Over Range</td>
<td>±4,000g</td>
</tr>
<tr>
<td>Accuracy</td>
<td>&lt;±0.3% FS linearity</td>
</tr>
<tr>
<td>Cross Axis Sensitivity</td>
<td>&lt;±2% FS (±5% for &gt;20g)</td>
</tr>
<tr>
<td>Thermal Effects</td>
<td>Zero ±0.0015% FS/°F (Sensitivity ±0.0015% of reading / °F)</td>
</tr>
<tr>
<td>Output</td>
<td>0.5V to 4.5V (Offset 2.5V)</td>
</tr>
<tr>
<td>Power Supply</td>
<td>5V (±0.5V) Ratiometric or 8-16Vdc</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-65°F to 250°F (-55°C to +125°C)</td>
</tr>
<tr>
<td>Compensated Temperature Range</td>
<td>32°F to 212°F (0°C to +100°C)</td>
</tr>
<tr>
<td>Noise</td>
<td>&gt;15mgV/Hz</td>
</tr>
<tr>
<td>Construction</td>
<td>Anodized Aluminum</td>
</tr>
<tr>
<td>Electrical Connection</td>
<td>20&quot;, 55spec, 26AWG cable +DR25 sleeve</td>
</tr>
<tr>
<td>Protection Class</td>
<td>IP66</td>
</tr>
<tr>
<td>EMC Protection</td>
<td>EN 50082-1</td>
</tr>
<tr>
<td>Weight</td>
<td>1oz (Excluding cable)</td>
</tr>
<tr>
<td>Options</td>
<td>Connector fitted and part number 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

### ELECTRICAL DETAILS

<table>
<thead>
<tr>
<th></th>
<th>+Ve Supply</th>
<th>0V Supply</th>
<th>Output X</th>
<th>Output Y</th>
<th>Output Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Axis</td>
<td>Red</td>
<td>Black</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual Axis</td>
<td>Red</td>
<td>Black</td>
<td>White</td>
<td>Blue</td>
<td>Green</td>
</tr>
</tbody>
</table>

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

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

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26AWG 55Spec Cable
DR25 Sleeve

Lid Side Up

Range (±g)
- 2: 002
- 5: 005
- 10: 010
- 20: 020
- 50: 050
- 100: 100
- 200: 200

Supply
- 5Vdc: 4
- 8-16Vdc: 5

Number of Axis
- 1X: 1X
- 1Y: 1Y
- 1Z: 1Z
- 2XY: 2XY

Cable Length: 20 inches, 55spec, 26AWG Cable+DR25 Sleeve

Special Code
None: A20

0.59" Ø 0.13" (4PLCS)
1.18" Ø 0.79"
0.98" Ø 0.98"