The ASMC Series of High Performance Pressure and Temperature 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 ASMC 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 2 to 250 Bar in either Absolute or Sealed Gauge reference. Industry standard 3-wire electrical connections for the Pressure signal and 2-wires for the Temperature signal allow configuration with most common ECU’s and data logging systems. The ASMC Series is race proven in many formulae around the world, offering a cost effective solution for professional engineers.

### ASMC SERIES MINIATURE PRESSURE & TEMPERATURE TRANSDUCER

**Pressure Reference**
- Absolute and Sealed Gauge

**Standard Pressure Ranges (Bar)**
- Low Range: 2, 5, 10 & 50
- High Range: 100, 200 & 250

**Proof Pressure (Over range)**
- 300% of Range / 150% of Range

**Burst Pressure**
- >1000% of Range / >300% of Range

**Accuracy**
- ±0.08% FS Combined Linearity & Hysteresis (CNLH)
- ±0.2% FS Combined Linearity & Hysteresis (CNLH)

**Thermal Accuracy**
- <±0.25% FS TEB within Compensated Range
  - Zero ±0.01% FS/°C (Sensitivity ±0.01% of Reading /°C)

**Outputs**
- Press: 0.5 to 4.5V (±0.5%)
- Temp: NTC, 2-Wire 10KΩ @ 25°C or 2-Wire PT1000

**Supply**
- 5V (±0.5V) Ratiometric or 8-16Vdc

**Operating Temperature Range**
- -40°C to +150°C

**Compensated Temperature Range**
- 0°C to +125°C

**Construction**
- Stainless Steel

**Electrical Connection**
- 50cm 26AWG, 55 Spec Wire + DR25 Sleeve

**Process Connection (Thread Size)**
- Please see Part Number Configurator

**Protection Class**
- IP67

**EMC Protection & Vibration**
- EN 50082-1 and Mil-Std-810C, Curve L, 20G

**Weight**
- 29g (Including Cable)

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

**Pressure Reference**
- Absolute
- Sealed Gauge

**Pressure Range**
- 2 Bar: 2000
- 5 Bar: 5000
- 10 Bar: 1002
- 50 Bar: 5002
- 100 Bar: 1003
- 200 Bar: 2003
- 250 Bar: 2503

**Supply Voltage**
- 8-16V
- 5V Reductor

**Process Connection**
- M10 x 1 Male (ISO 6439-2)
- 3/8 Inch 24 UNF - No Conic (SAE 31926-2)

**Temperature Sensor Type**
- NTC, 2-Wire 10KQ@25°C
- PT1000, 2-Wire Class A

**Special Code**
- None

---

**MECHANICAL DETAILS**

[Diagram showing mechanical details]

**CONTACT INFORMATION**

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

**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

---

**ASMC 08.21**

---

**ENGAGEMENT LED | CONFIDENTIAL | EXPERIENCED | RESPONSIVE | DYNAMIC | FRIENDLY**
### NTC 10KΩ / PT1000 Temperature Graphs

#### NTC 10KΩ Resistance/Temperature

<table>
<thead>
<tr>
<th>Temp °C</th>
<th>NTC 10KΩ Output Ω</th>
<th>PT1000 Output Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>-30</td>
<td>120370.00</td>
<td>882.20</td>
</tr>
<tr>
<td>-20</td>
<td>71668.00</td>
<td>921.60</td>
</tr>
<tr>
<td>-10</td>
<td>44087.00</td>
<td>960.90</td>
</tr>
<tr>
<td>0</td>
<td>27936.00</td>
<td>1000.00</td>
</tr>
<tr>
<td>10</td>
<td>18187.00</td>
<td>1039.00</td>
</tr>
<tr>
<td>20</td>
<td>12136.00</td>
<td>1077.90</td>
</tr>
<tr>
<td>25</td>
<td>10000.00</td>
<td>1097.30</td>
</tr>
<tr>
<td>30</td>
<td>8284.50</td>
<td>1116.70</td>
</tr>
<tr>
<td>40</td>
<td>5774.20</td>
<td>1155.40</td>
</tr>
<tr>
<td>50</td>
<td>4120.60</td>
<td>1194.00</td>
</tr>
<tr>
<td>60</td>
<td>2967.30</td>
<td>1232.40</td>
</tr>
<tr>
<td>70</td>
<td>2181.70</td>
<td>1270.80</td>
</tr>
<tr>
<td>80</td>
<td>1628.80</td>
<td>1309.00</td>
</tr>
<tr>
<td>90</td>
<td>1233.50</td>
<td>1347.10</td>
</tr>
<tr>
<td>100</td>
<td>946.59</td>
<td>1385.10</td>
</tr>
<tr>
<td>110</td>
<td>735.47</td>
<td>1422.90</td>
</tr>
<tr>
<td>120</td>
<td>578.10</td>
<td>1460.70</td>
</tr>
<tr>
<td>130</td>
<td>459.36</td>
<td>1498.30</td>
</tr>
<tr>
<td>140</td>
<td>368.75</td>
<td>1535.80</td>
</tr>
<tr>
<td>150</td>
<td>298.86</td>
<td>1573.30</td>
</tr>
</tbody>
</table>

#### PT1000 Resistance/Temperature

![PT1000 Graph]

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

ASMC 08.21