ASHT SERIES
HIGH PERFORMANCE
PRESSURE & TEMPERATURE TRANSDUCER

The ASHT Series feature both pressure and temperature sensors within a single transducer package. These high accuracy transducers have been designed for use in demanding motorsport and on-vehicle automotive testing industries. They are ideal for high precision data acquisition or control systems. The ASHT can also be installed directly onto vehicles or as part of a test stand or dyno.

Offering a high level of reliability and endurance the ASHT is protected against the high vibration, shock and high 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 between 0 - 75 psi to 0 -3000 psi in either Absolute, Gauge or Sealed Gauge reference.

The industry standard 3-wire electrical connections for the pressure and 2-wire for the temperature allow configuration with most common ECU’s and data logging systems. Also available with a fitted Hermetic Connector option.

The ASHT Series are race proven in many formula around the world. For OEM applications we have many options available to customize these transducers.

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Description</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>75, 150, 300, 750, 1500, 3000, 4500 and 6000</td>
</tr>
<tr>
<td>Proof Pressure (overload)</td>
<td>150% of range</td>
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<tr>
<td>Burst Pressure</td>
<td>&gt;300% of range</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.2% FS combined linearity &amp; hysteresis (CNLH)</td>
</tr>
<tr>
<td>Thermal Effects</td>
<td>Zero ±0.005% FS/°F (Sensitivity ±0.005% of reading /°F)</td>
</tr>
<tr>
<td>Outputs</td>
<td>Pressure: 0.5V to 4.5V (±0.5%) Temperature: NTC, 2-wire 10KΩ@25°C or 2-wire PT1000</td>
</tr>
<tr>
<td>Power Supply</td>
<td>5V (±0.5V) Ratiometric or 8-16Vdc</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-5°F to 300°F (-20°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>Construction</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Electrical Connection</td>
<td>20&quot;, 26AWG 55spec Wire + DR25 Sleeve or Connector</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 Mil-Std-810C, curve L, 20G</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.

**Pressure Reference**
- Absolute (A)
- Gauge (G)
- Sealed Gauge (S)

**Pressure Range**
- 75 psi (P075)
- 150 psi (P150)
- 300 psi (P300)
- 750 psi (P750)
- 1500 psi (P1K5)
- 3000 psi (P3K0)

**Supply Voltage**
- 5V Ratiometric (A)
- 8-16Vdc (B)

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

**Accuracy (Thermal Shift)**
- Zero ±0.005% FS/°F (Sensitivity ±0.005% of Reading /°F) (A)

**Electrical Connection**
- 26AWG, 55spec Wire + DR25 Sleeve (A)
- Hermetic Connector: 85TA1-Y02-05PN170 (A)

**Process Connection**
- 1/8 Inch NPT Male (ANSI B1.20.1) (B)
- M10 x 1 Male (ISO 6149-2) (D)
- M8 x 1 Male (ISO 6149-2) (F)
- 3/8 Inch 24 UNF - No Cone (SAE J1926-2) (J)

**Temperature Sensor Type**
- NTC, 2-Wire 10KΩ@25°C (A)
- PT1000, 2-Wire ClassA (F)

**Cable Length**
- 20 inches (A20)
- Special Codes
  - None (000)

**Dimensions in inches**
- 0.37”
- 0.66” NOM
- 0.98”
- 0.24”
- 0.12”
- 26AWG 55spec Cable
- DR25 Sleeve

**Sense Analyze Control**

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

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

**Contact Us**

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