The cylinder head temperature sensor is designed to take the place of one of the cylinder head bolts on a diesel engine. The sensor’s purpose is to measure the cylinder head temperature and to signal the vehicle’s operator if an engine overheats (that is, if an engine over temperature is taking place). The engine will be in danger of permanent damage if it continues to run at an elevated temperature.

**Applications**
- Engine cylinder head temperature
- Oil Temperature Sensor

**Features**
- High accuracy and long term stability @ 185°C
- Fast response time
- Cable designed to maintain flexibility in high vibration applications such as small diesel engines.
- Pigtail leaded design
- Field proven design
- Alternate RvT curves available
- Different geometries to meet package requirements
- Other resistance and beta values available
- Insulation Resistance: > 100Mohm @ 500 VDC
- Withstand Voltage: 1500 VAC for 1 second

Amphenol
Advanced Sensors
Specifications

**R @ 100°C**
2,040 ohms ± 5%

**B (25/85)**
3977K

**Operating Temperature**
-40°C to 185°C

**Storage Temperature**
-40°C to 185°C

**Response Time**
15 seconds (liquid to liquid)

**Temperature Accuracy**
± 1.77% @ 25°C
± 2.0% @ 100°C

**Lead Material**
Dual copper conductor, Polyurethane outer jacket

**Weight:**
~16 grams

**Connector**
Yazaki - 7283-5558-10

**Mating Connector**
Yazaki - 7282-5558-10

**Resistance vs. Temperature Data**

Resistance = 2040 Ohms at 100.00 °C Rtol. @ 25°C  5.0%

<table>
<thead>
<tr>
<th>Temp (°C)</th>
<th>Rnominal (Ohms)</th>
<th>Res. Tol. ±%</th>
<th>Rmin. (Ohms)</th>
<th>Rmax (Ohms)</th>
<th>Temp Tolerance + °C</th>
<th>Temp Tolerance - °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>-40</td>
<td>1,009,500</td>
<td>11.5</td>
<td>893,736</td>
<td>1,125,265</td>
<td>1.73</td>
<td>-1.73</td>
</tr>
<tr>
<td>-20</td>
<td>291.210</td>
<td>10.1</td>
<td>261.751</td>
<td>320.669</td>
<td>1.75</td>
<td>-1.75</td>
</tr>
<tr>
<td>0</td>
<td>97,950</td>
<td>9.0</td>
<td>89,171</td>
<td>106,729</td>
<td>1.77</td>
<td>-1.77</td>
</tr>
<tr>
<td>20</td>
<td>37,470</td>
<td>8.0</td>
<td>34,485</td>
<td>40,455</td>
<td>1.77</td>
<td>-1.77</td>
</tr>
<tr>
<td>25</td>
<td>30,000</td>
<td>7.7</td>
<td>27,678</td>
<td>32,322</td>
<td>1.77</td>
<td>-1.77</td>
</tr>
<tr>
<td>40</td>
<td>15,981</td>
<td>7.1</td>
<td>14,847</td>
<td>17,115</td>
<td>1.77</td>
<td>-1.77</td>
</tr>
<tr>
<td>60</td>
<td>7,464</td>
<td>6.3</td>
<td>6,991</td>
<td>7,937</td>
<td>1.77</td>
<td>-1.77</td>
</tr>
<tr>
<td>80</td>
<td>3,744</td>
<td>5.6</td>
<td>3,561</td>
<td>3,987</td>
<td>1.80</td>
<td>-1.80</td>
</tr>
<tr>
<td>100</td>
<td>2,040</td>
<td>5.0</td>
<td>1,938</td>
<td>2,142</td>
<td>2.00</td>
<td>-2.00</td>
</tr>
<tr>
<td>120</td>
<td>1,168</td>
<td>5.6</td>
<td>1,103</td>
<td>1,233</td>
<td>2.09</td>
<td>-2.09</td>
</tr>
<tr>
<td>140</td>
<td>704.4</td>
<td>6.1</td>
<td>661.5</td>
<td>747.3</td>
<td>2.51</td>
<td>-2.51</td>
</tr>
<tr>
<td>160</td>
<td>443.7</td>
<td>6.5</td>
<td>414.7</td>
<td>472.7</td>
<td>2.95</td>
<td>-2.95</td>
</tr>
<tr>
<td>180</td>
<td>290.4</td>
<td>7.0</td>
<td>270.3</td>
<td>310.6</td>
<td>3.43</td>
<td>-3.43</td>
</tr>
<tr>
<td>200</td>
<td>196.8</td>
<td>7.3</td>
<td>182.4</td>
<td>211.2</td>
<td>3.93</td>
<td>-3.93</td>
</tr>
<tr>
<td>220</td>
<td>137.4</td>
<td>7.6</td>
<td>126.9</td>
<td>147.9</td>
<td>4.45</td>
<td>-4.45</td>
</tr>
</tbody>
</table>