Thermistor Temperature Sensor

DESCRIPTION
A thermistor style heavy-duty analog temperature sensor with a padded resistor for improved linearity of the input curve. This steady-state sensor is intended for use in demanding industrial and off-highway equipment applications.

FEATURES
- Thermistor technology for low cost and reliability.
- Rugged design for durability in harsh conditions.
- Pigtail with connector for installation in tight places.
- Stainless steel body.

RATINGS

PERFORMANCE:
Sensing Temperature: -40°C to 150°C (-40°F to 300°F)
Output Signal: 5427.9 to 436.3 ohms
Accuracy: ±2°C from 30°C to 70°C
Sense Current: <10 mA at 25°C
Response Time 10% to 90%: <30 sec.
Nominal Output at 25°C: 4.3K ohms

INSTALLATION REQUIREMENTS:
Electrical Connection: Pigtail with Deutsch DTM04-2P Mating Connector: Deutsch DTM06-2S
Port Size: SAE #6
Torque: 48 ±5 Nm (35 ±3.5 ft.-lb.)

ENVIRONMENTAL RATINGS:
Operating Pressure: 10 bar (145 psi) maximum
Vibration: 20 grms (20 Hz to 20 KHz)
Weather Rating: IP67
O-Ring Material: Fluorocarbon
Short Circuit Protection: Short to +Batt may cause failure of the probe
Error Handling: Will sense open or short (>7K ohms or <400 ohms)

DIMENSIONS

Resistance of Thermistor at Key Temperature Points

<table>
<thead>
<tr>
<th>Temp °C</th>
<th>Resistance (Ohms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-40°</td>
<td>5427.9</td>
</tr>
<tr>
<td>-30°</td>
<td>5380.8</td>
</tr>
<tr>
<td>-20°</td>
<td>5305.4</td>
</tr>
<tr>
<td>-10°</td>
<td>5190.3</td>
</tr>
<tr>
<td>0°</td>
<td>5022.5</td>
</tr>
<tr>
<td>10°</td>
<td>4790.2</td>
</tr>
<tr>
<td>20°</td>
<td>4485.7</td>
</tr>
<tr>
<td>30°</td>
<td>4112.4</td>
</tr>
<tr>
<td>40°</td>
<td>3682.4</td>
</tr>
<tr>
<td>50°</td>
<td>3219.7</td>
</tr>
<tr>
<td>60°</td>
<td>2752.5</td>
</tr>
<tr>
<td>70°</td>
<td>2307.3</td>
</tr>
<tr>
<td>80°</td>
<td>1904.5</td>
</tr>
<tr>
<td>90°</td>
<td>1554.2</td>
</tr>
<tr>
<td>100°</td>
<td>1259.0</td>
</tr>
<tr>
<td>110°</td>
<td>1016.2</td>
</tr>
<tr>
<td>120°</td>
<td>819.7</td>
</tr>
<tr>
<td>130°</td>
<td>662.0</td>
</tr>
<tr>
<td>140°</td>
<td>536.3</td>
</tr>
<tr>
<td>150°</td>
<td>436.3</td>
</tr>
</tbody>
</table>

INCH / MILLIMETRE
All Dimensions for reference only.

0.187
9/16–18
ACROSS FLATS
0.687
17.45
2 Pins, Not Polarity-Sensitive. Connect either to + or –

TO ORDER

Temperature Sensor Model: ERT120-R-LD-06 Part No. 4206200
Mating Connector Kit Deutsch Model: DTM06-2S HF Part No. 4001970