AiM Infotech

Car/Bike Tire temperature sensor

Release 1.04
1

Introduction

This datasheet shows how to install the tire temperature sensor for car/bike applications. AiM loggers can measure tire temperature connecting to one or more temperature sensors directly connected to the measure points.

Sensor part number is: X05TTS01B0

2

Installation and connection

Use a self-built bracket to install the sensor; place it far from strong heat sources (the exhaust pipe for instance) and from electromagnetic interference sources. The best installation point is the internal part of the fender so to avoid that the sensor get damaged bumping stones or other stuff.
Dimensions, pinout and technical characteristics

The drawing here below shows the sensor dimensions in millimetres [inches].

The sensor technical characteristics are:
- Output signal: 0-5V
- Field of measure: 35°
- Working range: -20/120°C
- Sensor electrical range:
  - 820 mV/-20°C
  - 3230 mV/120°C
- Sensor dimensions: 26.6x17.2 mm
- IP rating: IP65
- Sensor cable length: 250 mm

The sensor ends with 4 pin male 719 Binder connector. Here below you see the connector pinout solder termination view as well as the connection table.

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Analog signal</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>Not connected</td>
</tr>
<tr>
<td>4</td>
<td>+Vreference</td>
</tr>
</tbody>
</table>
4 Extension cables

The sensor is sold with a 25 cm cable and standard lengths extension cables are available as optional; it is also possible to ask for specific length extension cables.

Extension cables part numbers change according to their length and to the device the sensor is to be connected to.

**Mandatory** extension cable for connection with:
- EVO4
- EVO4S
- Channel Expansion

Part numbers:
- **V02PCB05BTXG** – cable length: 500 mm
- **V02PCB10BTXG** – cable length: 1000 mm
- **V02PCB15BTXG** – cable length: 1500 mm
- **V02PCB20BTXG** – cable length: 2000 mm
- **V02PCB25BTXG** – cable length: 2500 mm
- **V02PCB30BTXG** – cable length: 3000 mm

Extension cable for connection with:
- MXG
- MXP
- MXS
- MXL2
- MXM
- EVO5
- MXL/Pista/Pro05

Part numbers:
- **V02PCB05B** – cable length: 500 mm
- **V02PCB10B** – cable length: 1000 mm
- **V02PCB15B** – cable length: 1500 mm
- **V02PCB20B** – cable length: 2000 mm
- **V02PCB25B** – cable length: 2500 mm
- **V02PCB30B** – cable length: 3000 mm