AiM Infotech

Car/Bike accelerometer

Release 1.01
1

Introduction

In addition to the built in G-meters, AiM devices can measure specific vehicle dynamic using an external accelerometer.

The accelerometer part number is: X05SNACCM30

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Installation notes

Thanks to its aluminium case AiM accelerometer is shockproof. For an appropriate use and to reduce critical vibrations AiM suggests to fix it using a strip of neoprene slightly pressed between the accelerometer and the installation point.

It is also recommended to install the sensor far from heat or electromagnetic interference sources and with the sensitive axle carefully aligned with the chassis axis. The example below shows how to measure the lateral acceleration.
3 Dimensions, pinout and technical characteristics

The image here below shows the accelerometer dimensions in mm [inches].

The accelerometer ends with a 4 pins Binder 719 male connector. The image below shows the connector pinout front view. Right of it is connection table.

<table>
<thead>
<tr>
<th>Binder connector pin</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accelerometer</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>Supply voltage</td>
</tr>
<tr>
<td>4</td>
<td>Not connected</td>
</tr>
</tbody>
</table>
The accelerometer electrical characteristics are:

- Working range: ±5g
- Accelerometer linearity: 1% of full scale
- Type: analogic mono-axial

The accelerometer **mechanical characteristics** are:

- Temperature working range: from 0°C to +70°C
- Weight: 60g with cable
- Case: anodized aluminium
- Cable length: 400mm
Extension cables

The accelerometer is sold with a 40 cm cable and standard extension cable are available as optional; specific length extension cables are also available. Extension cables part numbers change according to the cable length and to the device they have to be connected to.

Mandatory extension cable for connection with:
- EVO4
- EVO4S
- Channel Expansion
- MyChron 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
- MXS
- MXL2
- EVO5
- MXL Strada/Pista/Pro05

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