1 – Introduction

AIM instruments can measure and record the water temperature using a sensor (thermo resistor) positioned in the pipe from radiator to cylinder.

2 – Installation notes

The water temperature sensor should be positioned inside the pipe that connects the cylinder to the radiator.

To install the water thermo resistor cut the water pipe and use the proper inline water fitting: please connect the inline water fitting with the water pipe using two wiring wraps. Once the fitting connected with the pipe, screw the water thermo resistor in the M5 hole.

**WARNING:** be careful to keep the thermo resistor cable as far as possible from other cables (such as RPM or lap receiver cables) while running it along the chassis to minimize mutual cable interference.

It is suggested to use AIM connection for sensor installation.

3 – Inline water fitting (optional)

The draw here below represents the inline water fitting (optional), used to place the water thermo resistor in the pipe that goes from the radiator to the cylinder. AIM suggests to use two wiring wraps to firmly connect the fitting to the water pipe.

**Inline water fitting drawing – Dimensions in millimetres [inches]**

4 – Software

Once installed the thermo resistor the related channel needs to be on the configuration of the logger installed on the vehicle using AIM **Race Studio 2** software. Refer to Race Studio Configuration user manual for further information about the channels configuration.
5 – Part number

Thermo resistor M5 thread 3CVTRES2K0

6 – Dimensions, pinout and technical characteristics

6.1 – Pinout

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
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<tbody>
<tr>
<td>1</td>
<td>+ Temperature 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>+VRef from the logger</td>
</tr>
</tbody>
</table>

4 pins Binder 719 male connector solder termination view

Note: M5 thermo resistor is equipped with a 2 kΩ 1% resistor between pins 1 and 4.

6.2 – Technical characteristics

Temperature working range: from 0°C to 150°C – 32-302°F
Cable length 252 mm [9.8 inches]

Note 1: M5 water thermo resistor is supplied with a 250 mm long cable ending with a 4 pins male Binder 719 connector.

Note 2: Extension cables are available in standard lengths and, on request, in specific lengths.