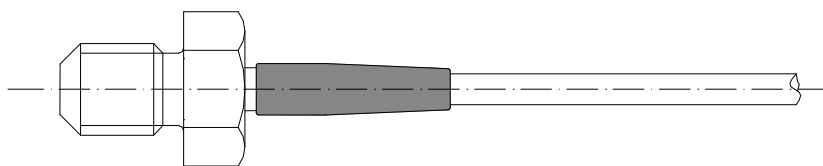**Figure 1:** water thermoresistor – 1/8" thread – Rotax engines (side view)

Introduction

Aim instruments can measure and record the water temperature using a sensor (thermoresistor) positioned in the pipe that goes from the radiator to the cylinder.

Installation notes

The water temperature sensor should be positioned inside the cylinder head: this sensor may be used only with engines which accommodate the thermoresistor.
To install the water thermoresistor you only need place it inside the 1/8" screwed hole located in the cylinder head.

ATTENTION: While running the thermoresistor cable along the chassis, be careful to keep it as far as possible from other cables (such as RPM or lap receiver cables) to minimize interference between cables.

Aim suggests employment of our connection in sensor's installation.

Software

Once the thermoresistor has been installed, it needs to be configured. To correctly do so, please use **Race Studio 2**, the software properly developed by Aim to configure its instruments and analyze stored data.

In **Race Studio 2** main window you can choose your Aim instrument. Once selected it, please press "System manager" button.
Please note: **MyChron 3 Basic** automatically recognizes the sensor and needs no sensor configuration.

Sensor configuration

Once reached "System manager" main window, please press "Channels" button to configure the sensor you have installed on your vehicle. The following screenshot appears.
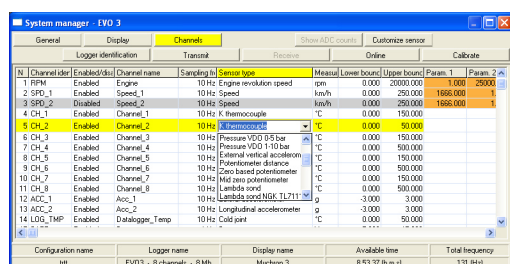
To configure the sensor, please double-click in the box corresponding to "Sensor type" column and to "Ch_x" row (where x represents the channel number where you wish to install the sensor): a pop up menu like the one reported in the previous screenshot appears.
Please, select "PT100 Thermoresistor" sensor.
It is now necessary to configure the visualization's lower and upper boundary values.
To set these values, double-click in the row corresponding to the channel where you have installed the thermoresistor and in the columns corresponding to the lower and upper boundary and fill the boxes with the correct temperature value.
Please remember: PT100 Thermoresistor needs no calibration.

Transmitting the configuration

Once the sensor has been correctly configured, please transmit the configuration to your gauge pressing "Transmit" button. **During transmission it is recommended not to switch off the gauge.**
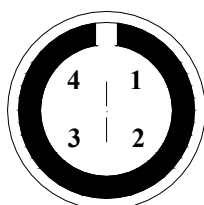
Dimensions

Ø8.9 [Ø0.35]

6.0 [0.24]

15.1 [0.59]

8.0 [0.32]
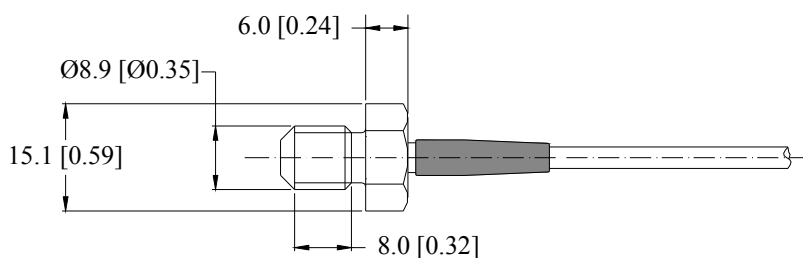
Pinout PT100 – MyChron 3 Kart

Pin	Function	Pin	Function
1	+ Temp. signal	3	Not connected
2	GND	4	Not connected

4 | **1**

3 | **2**

4 pins Binder 719 male connector: solder termination view

Pinout PT100 – MyChron 3 Car/Bike & Dash ST1

Pin	Function	Pin	Function
1	+ Temp. signal	3	Not connected
2	GND	4	Not connected

2000 Ω 1%

4 ● ▭ ● 1

3 ● ● 2

4 pins Binder 719 male connector: solder termination view

Note: the PT100 thermoresistor for MyChron 3 Car/Bike/XG and Dash ST1 is equipped with a 2 kΩ 1% resistor between pins number 1 and 4.
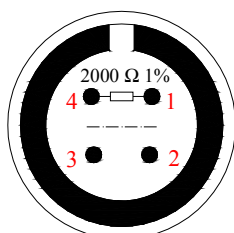
Technical characteristics

Description	Value
Temperature range	From 0° to 150°C [32° to 302°F]
Cable length	250 mm [9.8"]

Note 1: the water thermocouple is supplied with a 250 mm long cable terminated with a 4 pins male Binder 719 connector.

Note 2: extension cables are available in standard lengths and, on request, as specified dimensions.