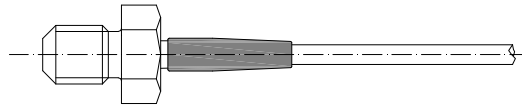


TECHNICAL DOCUMENTATION	15/06/2011	TEMPERATURE	Car/Bike/kart Water thermo resistor "M10 thread"
Notes: technical documentation, dimensions and pinout of M5 thermo resistor Version 1.02			



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 M10 hole.

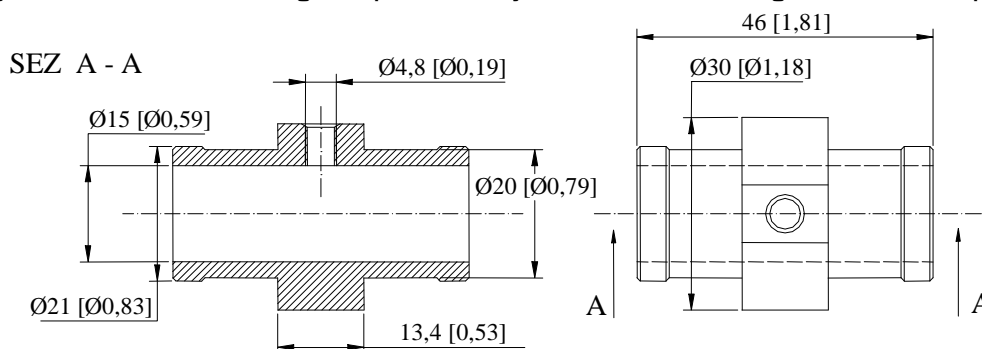
WARNING: be careful to keep the thermo resistor cable as far as possible from other cables (such as RPM or lap receiver cables) while running it along the chassis to minimize mutual cable interference.

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 of M10 thermoresistor and extension cables

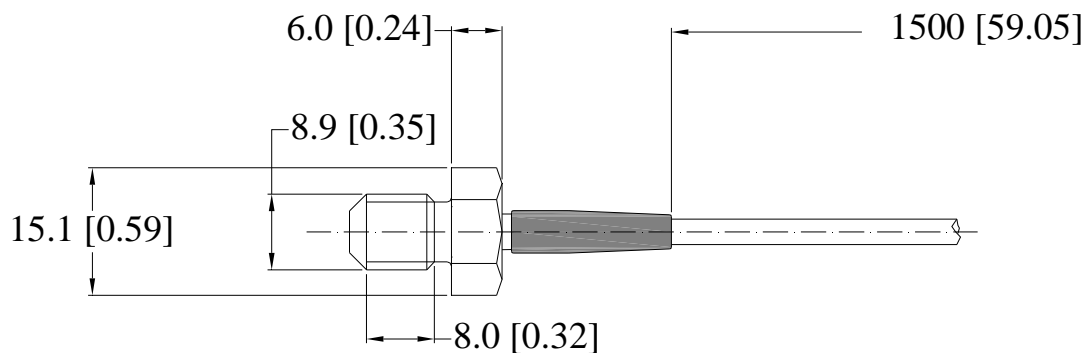
5.1 – M10 water Thermo resistor part numbers

Thermo resistor M10 thread for car/bike installation	3CVTRM1003C2K
Thermo resistor M10 thread for kart installation	3CVTRM1003C

5.2 – Extension cables part numbers

Extension cable for MyChron Expansion	V02552940
Extension cable for MyChron4+eBox (Gold/Extreme)	V02PCB15BTR
Extension cable for MyChron4-2T with thermocouple + thermo resistor	V0255711
Extension cable for MyChron4-2T with 2 thermo resistors	V0255708

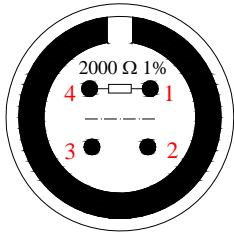
6 – Dimensions, pinout and technical characteristics



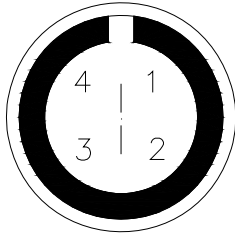
M10 thermo resistor – **Dimensions** in millimetres [inches]

6.1 – Pinout

Auto/Moto M10 Thermo resistor pinout		Kart M10 Thermo resistor pinout	
Pin	Function	Pin	Function
1	+ Temperature signal	1	+ Temperature signal
2	GND	2	GND
3	Not connected	3	Not connected
4	+VRef from the logger	4	Not connected



4 pins Binder 719 male connector solder termination view



4 pins Binder 719 male connector solder termination view

Note: M10 thermo resistor for car/bike installations has a 2kΩ 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: M10 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.