T12 Exhaust gas thermocouple CIK-FIA homologated

Release 1.03
This tutorial explains how to install T12 Exhaust Gas Temperature thermocouple (EGT) CIK-FIA homologated.

This sensor part number is: X05TCM12A1175M

1 Introduction

AiM loggers can measure exhaust gas temperature using a sensor – K type thermocouple – placed in the exhaust header pipe.

2 Installation notes

Exhaust Gas Temperature sensor (or EGT) should be installed in the dedicated point at the end of the pipe. To install it:

- make a hole in the header pipe – left image below – and insert the thermocouple in the pipe;
- screw the nut – image below on the right

**Warning:** when running the thermocouple cable along the chassis keep it as far as possible from other cables (like RPM cable or receiver one) to minimize possible interferences.
3 Dimensions, pinout and technical characteristics

The image here below show the thermocouple dimensions in mm [inches].

The image here below shows the Mignon male connector and its pinout.

<table>
<thead>
<tr>
<th>Mignon connector pin</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Temperature signal 0+50 mV</td>
</tr>
<tr>
<td>-</td>
<td>GND</td>
</tr>
</tbody>
</table>

The EGT thermocouple technical characteristics are:

- temperature working range: 0-1000°C (32-1832°F)
- cable: compensated
- cable length: 250 mm (9.8”)
4

Wiring compatibility

To connect this sensor to MyChron you can use extension cable with part number V03CCB15M shown here below. Cable length is 1500 mm – 59 inches.

The sensor is compatible with the following MyChron wiring

- Wiring with 1 thermocouples and 1 thermoresistor. Part number: V.02.557.110

- Wiring with two thermocouples. Part number: V.02.557.070