AiM Infotech

Long Life Exhaust gas thermocouple

Release 1.00

AiM

This tutorial explains how to install Long Life Exhaust Gas Temperature thermocouple (EGT). The sensor fits both kart and dragster installation.

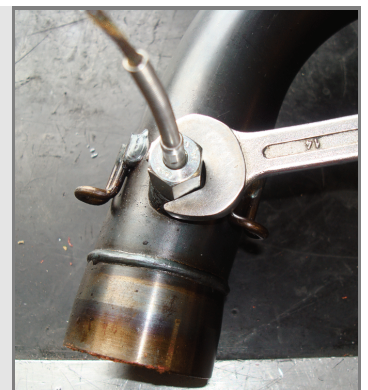This sensor **part number** is: **X05GAS12A4510M**

1
Introduction

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

2
Installation notes

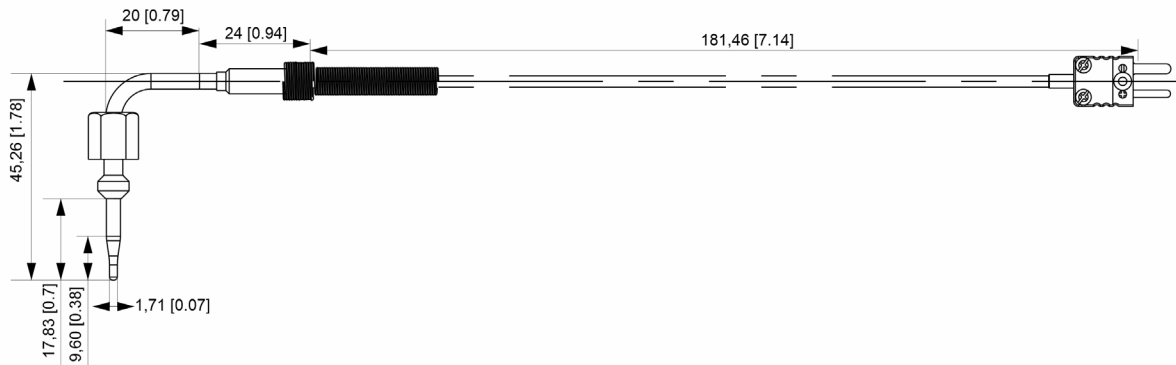Exhaust Gas Temperature sensor (or EGT) should be installed in the dedicated point at the end of the pipe. To install it:

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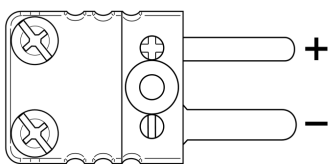• screw the nut – image below on the right.

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.

Mignon connector pin	Function
+	Temperature signal 0+50 mV
-	GND

The EGT thermocouple technical characteristics are:
- max temperature working range for kart installation: 750°C (1382F)
- temperature working range for dragster installation   1100°C (2012°F)
- cable: compensated
- cable length: 350 mm (13.78")

4
Wiring compatibility

The sensor is sold with a standard 35cm cable and standard length extension cables are available as optional. It is also possible to ask for specific length extension cables. Extension cable part numbers change according to the cable length.

Extension cable for:
• MyChron6
• MyChron6 2T
• MyChron5
• MyChron5S

Part number:
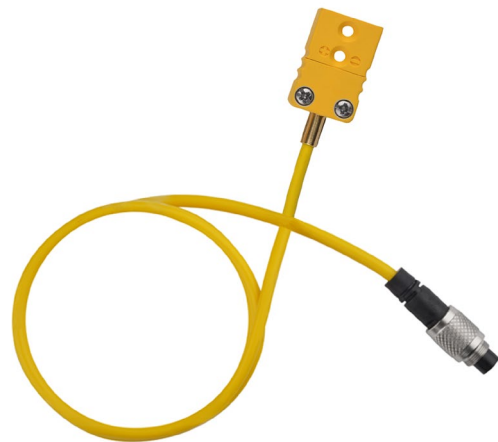**V03CCB05M** – cable length: 50cm
V03CCB10M – cable length: 50cm
V03CCB15M – cable length: 50cm
V03CCB20M – cable length: 50cm
up to
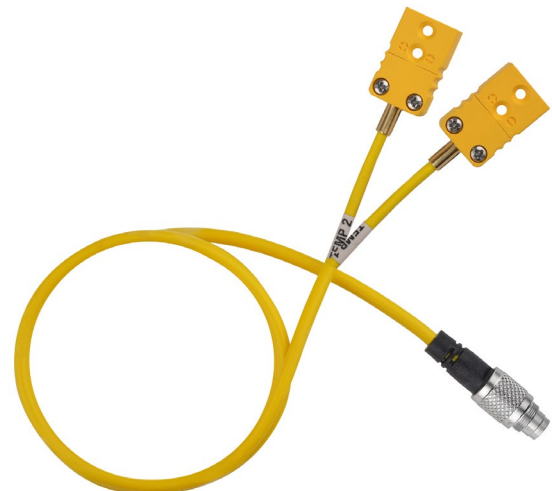**V03CCB60M** – cable length: 50cm

Extension cable for:
• MyChron6 2T – for wiring with two thermocouples
• MyChron5 2T – for wiring with two thermocouples
• MyChron5S 2T – for wiring with two thermocouples

Part number:
V02557070

Extension cable for:
- MyChron6 2T – for wiring with a thermocouple + a thermoresistor
- MyChron5 2T – for wiring with a thermocouple + a thermoresistor
- MyChron5S 2T – for wiring with a thermocouples + a thermoresistor

Part number: **V02557110**