AiM Infotech

Exhaust gas thermocouple
Car/bike/kart installations

Release 1.07

1
Introduction

AiM devices can measure exhaust gas temperature using a sensor – thermocouple – placed in the exhaust header pipe. All AiM thermocouples are K type sensor and fit car/bike/kart installations.

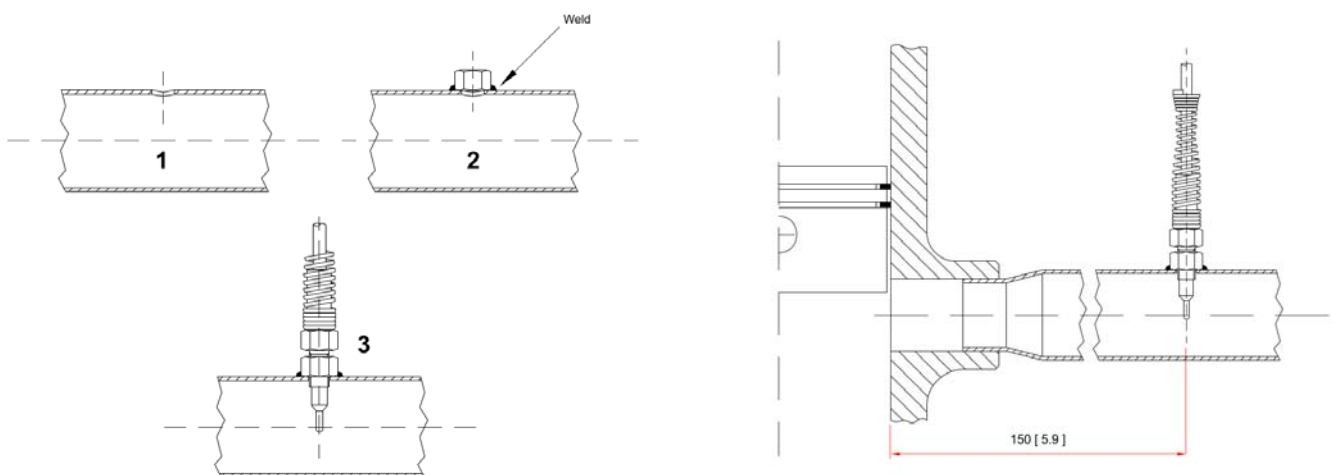This product **part number** is: **3CVGAS807**

2
Installation notes

Place the exhaust gas temperature sensor (EGT) in the header pipe at about 150 mm (5.9 inches) from the exhaust pipe. To install the sensor:
• make a 5mm hole in the header pipe at about 150mm (5.9 inches) from the exhaust pipe
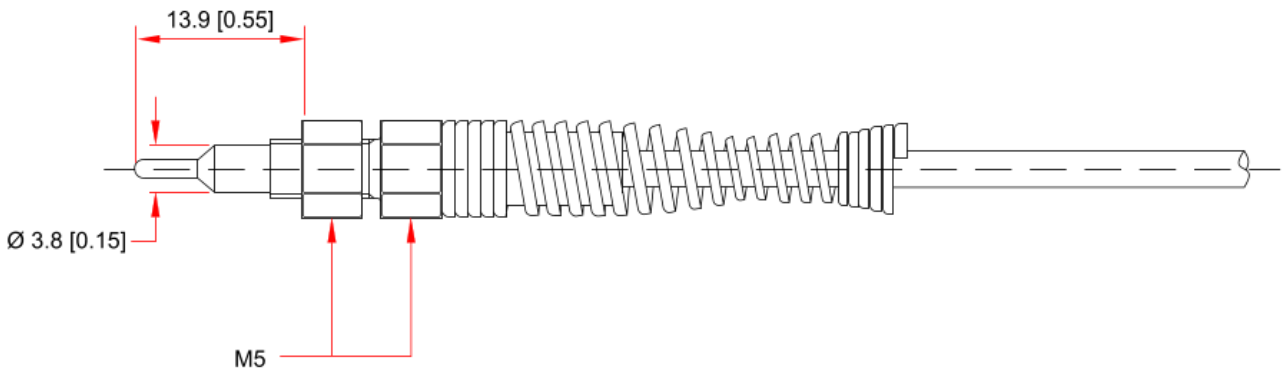• weld the sensor screw in the point where you made the hole.
The image here below shows the sensor installation steps on the left and the sensor installed on the right.
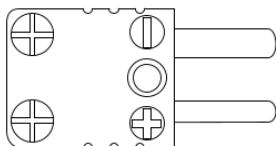
3
Dimensions, pinout and technical characteristics

The drawing here below shows the thermocouple dimensions in mm [inches].

The thermocouple ends with a male Mignon connector. The image here below shows the connector pinout top side view. Right of it is the connection table.

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

Exhaust gas temperature sensor **technical characteristics** are:

- Temperature working range: 0-1000°C [32-1832°F]
- Cable length   250 mm [9.8"]
- Cable type   compensated

4
Extension cables

Exhaust gas temperature thermocouple is sold with a standard 25 cm 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 and to the device the sensor is to be connected to.

Extension cable for:
* MyChron5
* TC Hub

Part number:
V03CCB05M – cable length: 50 cm
V03CCB10M – cable length: 100 cm
V03CCB15M – cable length: 150 cm
V03CCB20M – cable length: 200 cm...
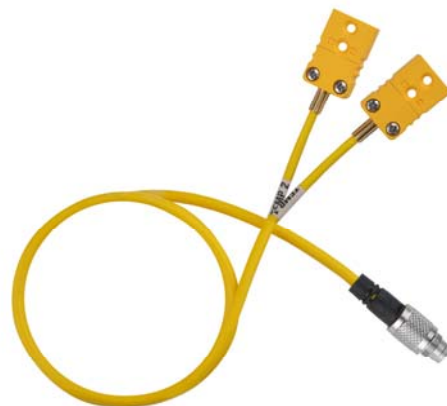up to
V03CCB60M – cable length: 600 cm

Extension cable for:
* MyChron5 2T – for wiring with two thermocouples.

Part number:
V02.557.070

Extension cable for:
- MyChron5 2T – for wiring with a thermocouple + a thermo resistor.

Part number:
V02.557.110

Extension for connection – through dedicated harness* – to:
- MXG/MXS
- MXL2
- MXL Strada/Pista/Pro05

Part numbers:
V02CCM05M – cable length: 50 cm
V02CCM10M – cable length: 100 cm
V02CCM15M – cable length: 150 cm
V02CCM20M – cable length: 200 cm...
up to
V02CCM45M – cable length: 450 cm

***Please note**: to connect the thermocouples to these AiM devices you need its dedicated harnesses:

- **V02573080**: MXL2/MXG/MXS harness for 22 pins connector with 1 thermocouple
- **V02573160**: MXL2/MXG/MXS harness for 22 pins connector with 2 thermocouples
- **V02573040**: MXL2/MXG/MXS harness for 37 pins connector with 1 thermocouple
- **V02573050**: MXL2/MXG/MXS harness for 37 pins connector with 2 thermocouples
- **V02586040**: EVO5 harness for 37 pins connector with 1 thermocouple
- **V02586050**: EVO5 harness for 37 pins connector with 2 thermocouples
- **V02554080**: MXL Strada/Pista harness with 1 thermocouple
- **V02554150**: MXL Strada/Pista harness with 2 thermocouples
- **V02554210**: MXL Pro05 harness for 37 pins connector with 2thermocouples.

Mandatory extension cable for:
- EVO4
- EVO4S

Part number:
V02PCB10MXG – cable length: 50 cm
V02PCB15MXG – cable length: 100 cm
V02PCB20MXG – cable length: 150 cm
V02PCB25MXG – cable length: 200 cm...
up to
V02PCB60MXG – cable length: 600 cm