AiM Infotech

Exhaust gas thermocouple with exposed junction

Release 1.00

In this datasheet you find all needed information to use an Exhaust gas temperature thermocouple with exposed junction
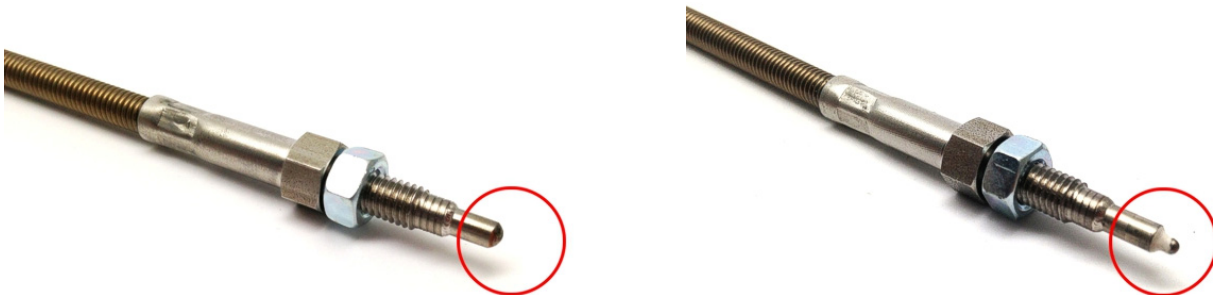
This product **part number** is: **3CVGGE007**

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.

This exhaust gas temperature (EGT) thermocouple, thanks to its exposed junction, is faster recording sampled data. Here below you can see EGT thermocouple on the right and EGT thermocouple with exposed junction on the left.
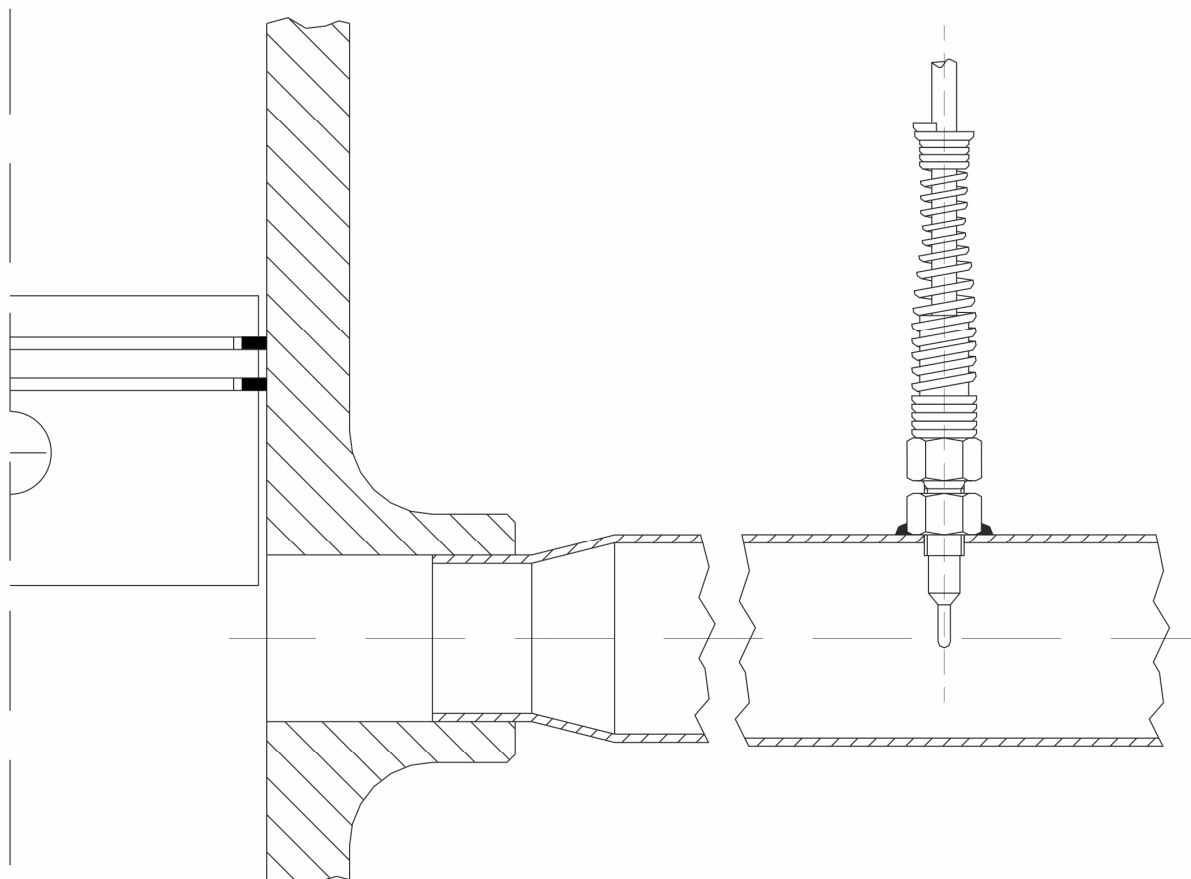
2
Installation notes

Place the EGT thermocouple with exposed junction 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
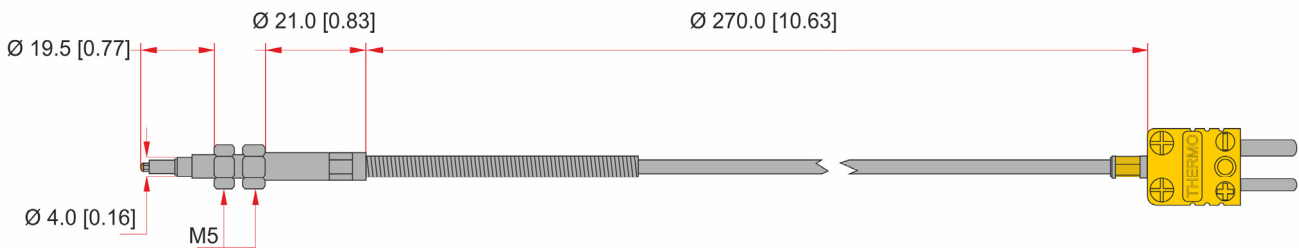- weld the sensor screw in the point where you made the hole.

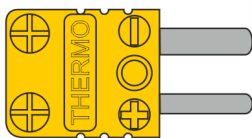The image here below shows the sensor correctly installed.

3
Dimensions, pinout and technical characteristics

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

Ø 19.5 [0.77]   Ø 21.0 [0.83]   Ø 270.0 [10.63]

Ø 4.0 [0.16]   M5

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
-	GND
+	Temperature signal 0-50 mV

Exhaust gas temperature with exposed junctionsensor **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 with exposed junction 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.

Please note: all AiM devices – MXL dedicated cables excluded – need an extension cable to connect with EGT thermocouple.

Extension cable for:
• EVO4.

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

Extension cable for:
• MXL Strada
• MXL Pista
• MXL Pro05
• MXL2
• MXG

Part number:
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

Extension cable for:
- MyChron4
- TC Hub

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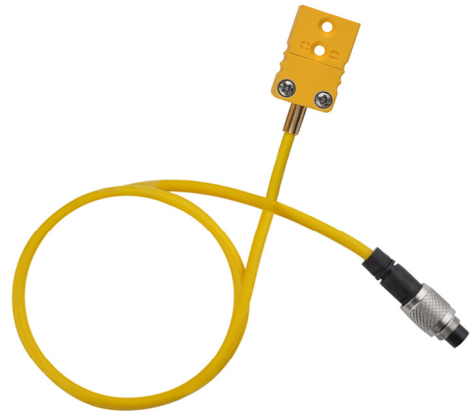**V03CCB05M** – cable length: 50 cm
V03CCB10M – cable length: 100 cm
V03CCB15M – cable length: 150 cm
V03CCB20M – cable length: 200 cm…
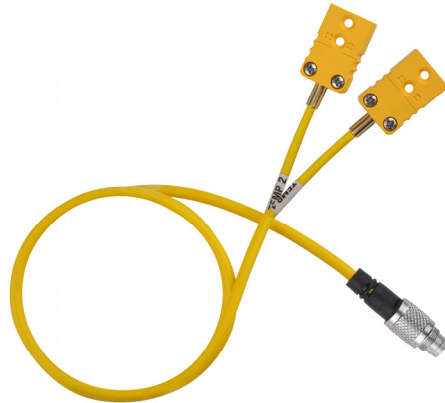up to
V03CCB60M – cable length: 600 cm

Extension cable for:
- MyChron4 2T – for wiring with two thermocouples.

Part number:
V02.557.070

Extension cable for:
- MyChron4 2T – for wiring with a thermocouple + a thermo resistor.

Part number:
V02.557.110