

AiM InfoTech

AiM UTV/ATV
Transmission Belt infrared
temperature sensor

Release 1.00



1

Introduction

This datasheet shows how to install the transmission belt temperature optical sensor for UTV/ATV applications. AiM loggers can measure the transmission belt operating temperature using an infrared sensor directly pointed to the measure points.

The sensor **part number** is:

- Belt temperature sensor

X05ITS01A01

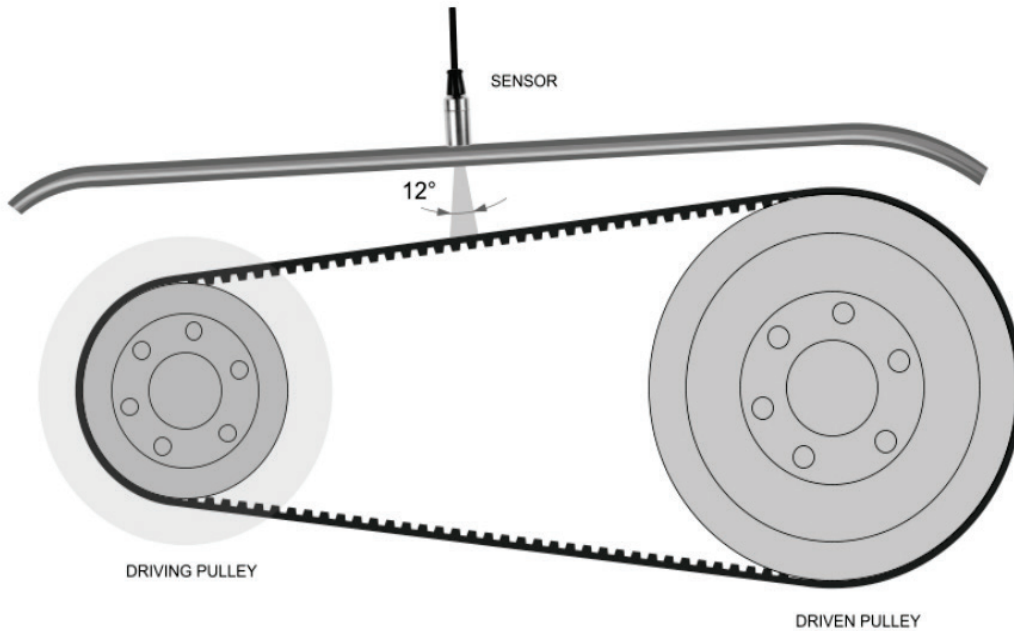
2

Installation and connection

The image below shows an infrared temperature sensor installed from top on the left and from bottom on the right.

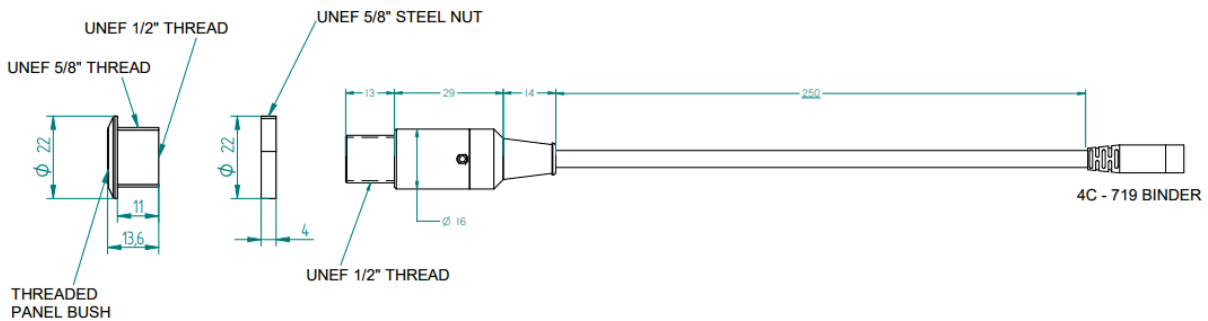


The image below shows the sensor field of measure.

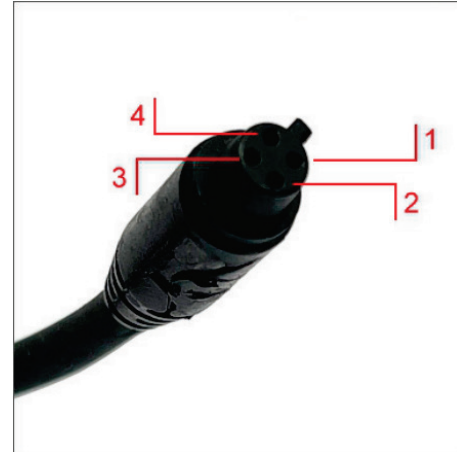
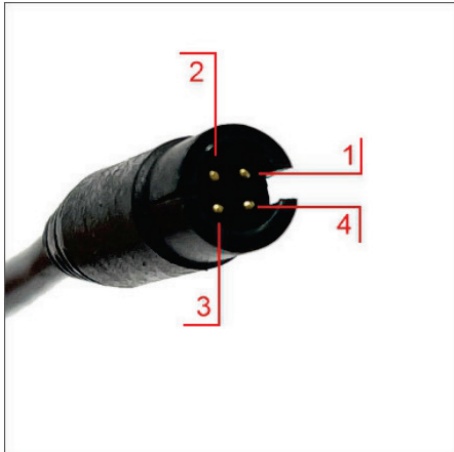


3 Dimensions, pinout and technical characteristics

The drawing here below shows the sensor dimensions in millimetres [inches].



The sensor ends with a 4 pins Binder 719 male connector. Here below the connector view – sensor side on the left and device side on the right – are shown, while in the following table is connector pinout.



Pin

- 1
- 2
- 3
- 4

Function

- Analog signal
- GND
- Not connected
- +VReference

The sensor technical characteristics are:

Technical feature

- Output signal
- Field of measure
- Working range
- Sensor electrical range
- Sensor dimensions
- IP
- Cable length

Value

- 0-5V
- 12°
- 20/250°C
- 820mV/-20°C
- 2880mV/250°C
- 57mm/22mm
- 65
- 250mm

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Extension cables

The sensor is sold with a 25 cm cable and standard lengths extension cables are available as optional; it is also possible to ask for specific length extension cables. Extension cable's part numbers change according to their length and to device the sensor is to be connected to.

Mandatory extension cable for connection with:

- EVO4S
- Channel Expansion
- IBTS (Infrared Belt Temperature Sensor)

Part numbers:

V02PCB05BTXG – cable length: 500 mm

V02PCB10BTXG – cable length: 1000 mm

V02PCB15BTXG – cable length: 1500 mm

V02PCB20BTXG - cable length: 2000 mm

V02PCB25BTXG - cable length: 2500 mm

V02PCB30BTXG - cable length: 3000 mm

Extension cable for connection with:

- MXG1.3/MXG1.2/MXG MXG1.3 Strada/MXG1.2 Strada
- MXS1.3/MXS1.3/MXS MXS1.3 Strada/MXS1.2 Strada/MXS Strada
- MXP1.3/MXP MXP1.3 Strada/MXP Strada
- MXm
- EVO5
- MXL2
- PDM32
- PDM08

Part numbers:

V02PCB05B – cable length: 500 mm

V02PCB10B – cable length: 1000 mm

V02PCB15B – cable length: 1500 mm

V02PCB20B - cable length: 2000 mm

V02PCB25B - cable length: 2500 mm

V02PCB30B - cable length: 3000 mm