

AiM InfoTech

AiM Transmission Belt  
infrared temperature sensor  
for UTV/ATV

Release 1.01

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# 1

## Introduction

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This datasheet explains 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

**X05ITS01A0**

# 2

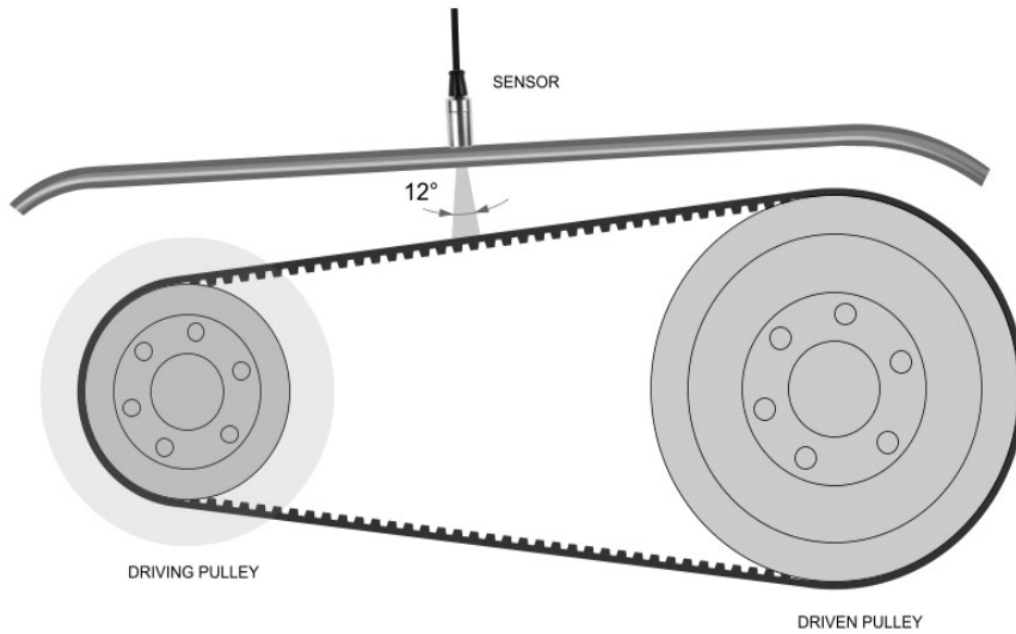
## Installation and connection

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

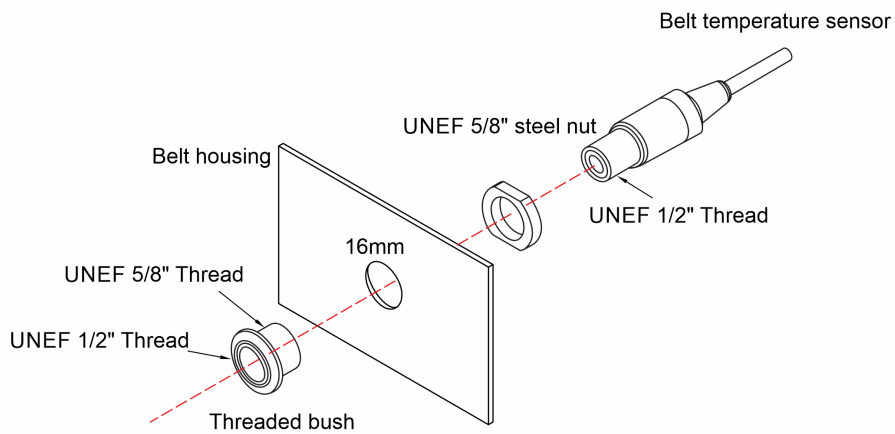


The image below shows the sensor field of measure.

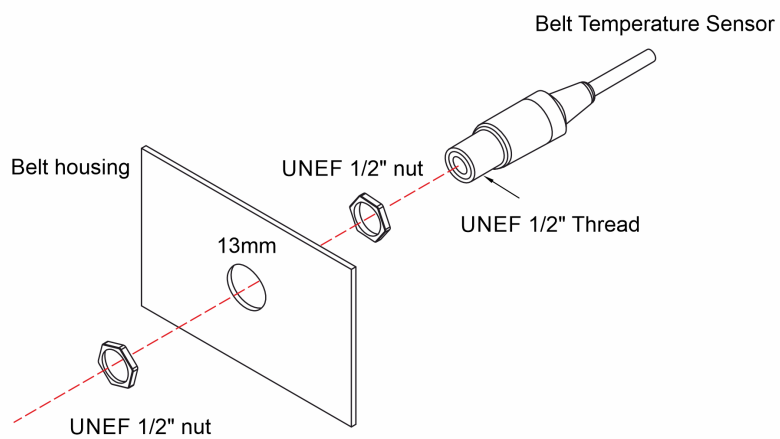


The image below shows how to install the sensor.

**Installation mode 1 - hole diameter: 16mm**



**Installation mode 2 - hole diameter: 13mm**

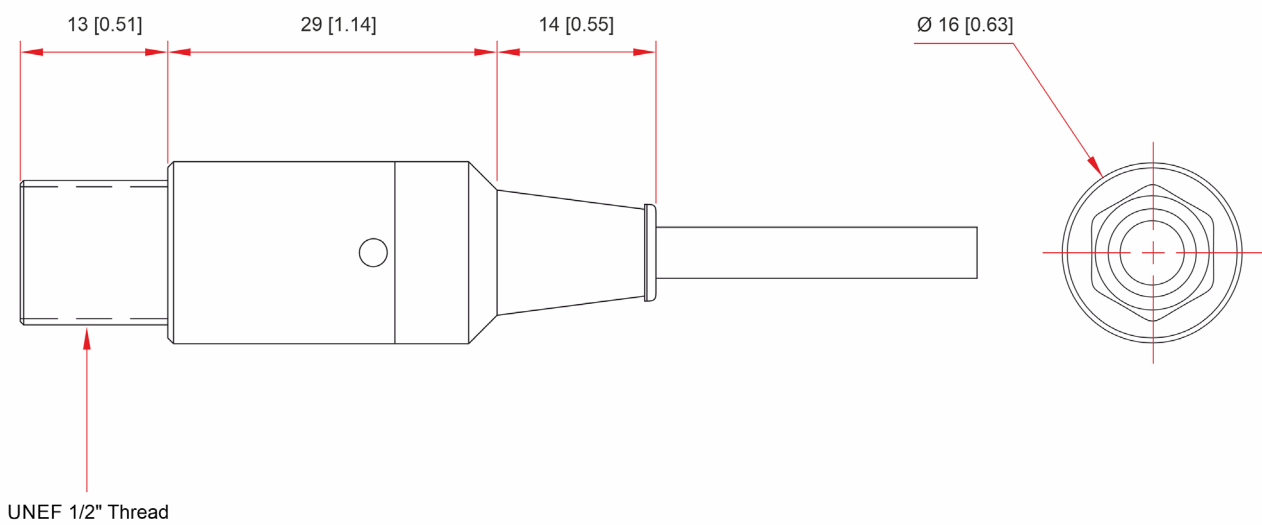


**Note:** threadlocker required for both installations

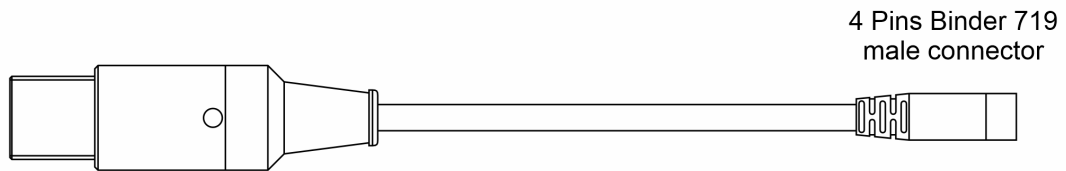
### 3

## 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 is shown the pinout front view.



4 Pins Binder 719 male connector

4 Pins Binder 719 male connector pinout front view



Pin	Function
1	Signal
2	GND
3	n.c.
4	Vref.

The sensor technical characteristics are:

Technical feature	Value
Output signal	0-5V
Field of measure	12°
Working range	-20/250°C
Sensor electrical range	820mV/-20°C 2880mV/250°C
Sensor dimensions	57mm/22mm
IP	65
Cable length	250mm

## 4

# Extension cables

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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:

- MXG/MXG Strada
- MXS/MXS Strada
- MXP/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