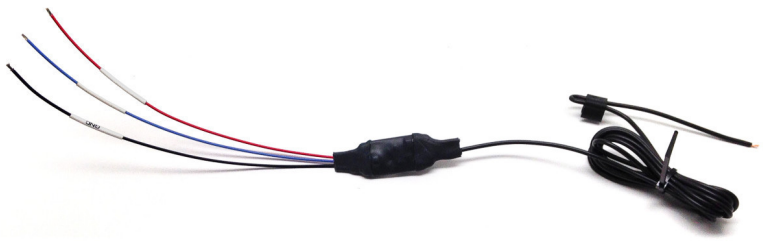
AiM Infotech

AiM pressure sensor 0-5 bar

Release 1.00



AiM Manuale Utente

Car/Bike Tire temperature sensor
Race Studio3 configuration

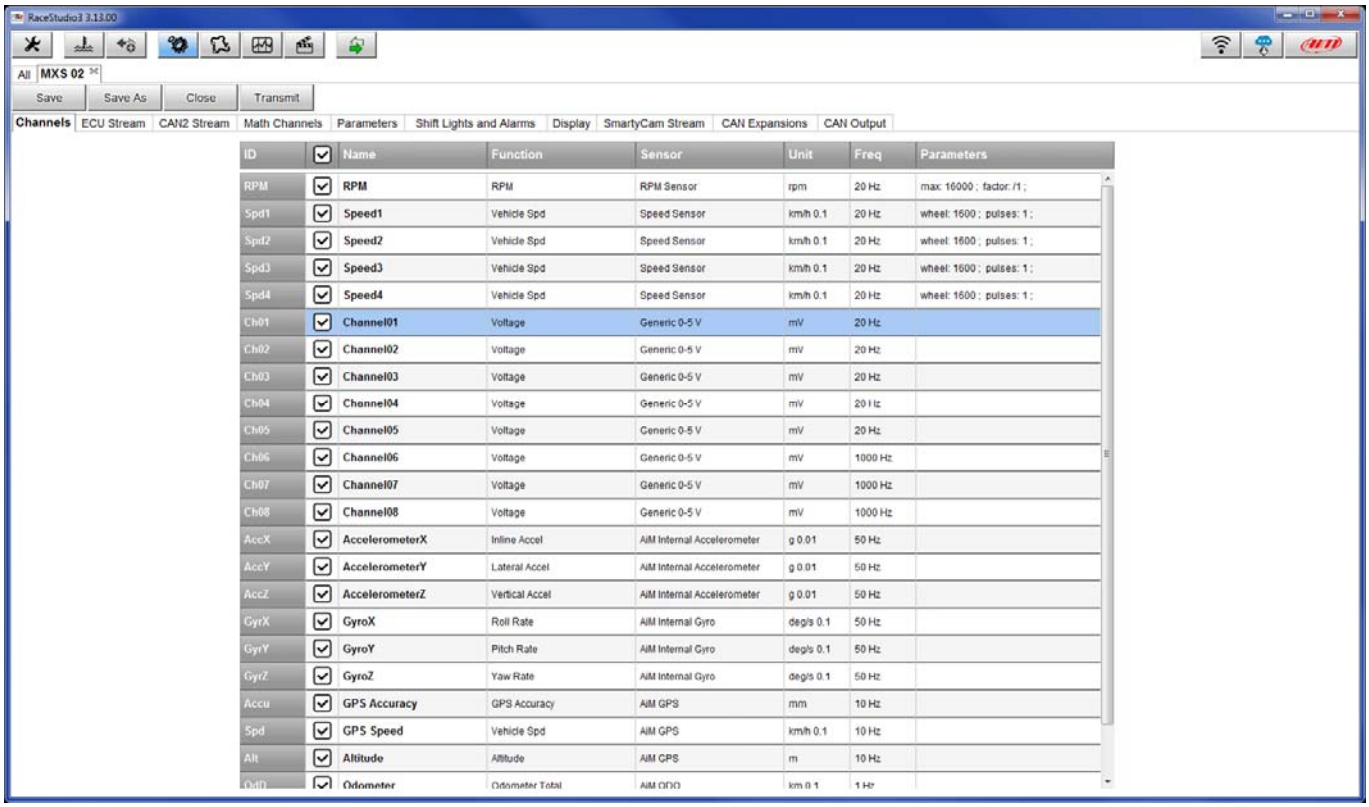
Release 1.00

1 Introduction

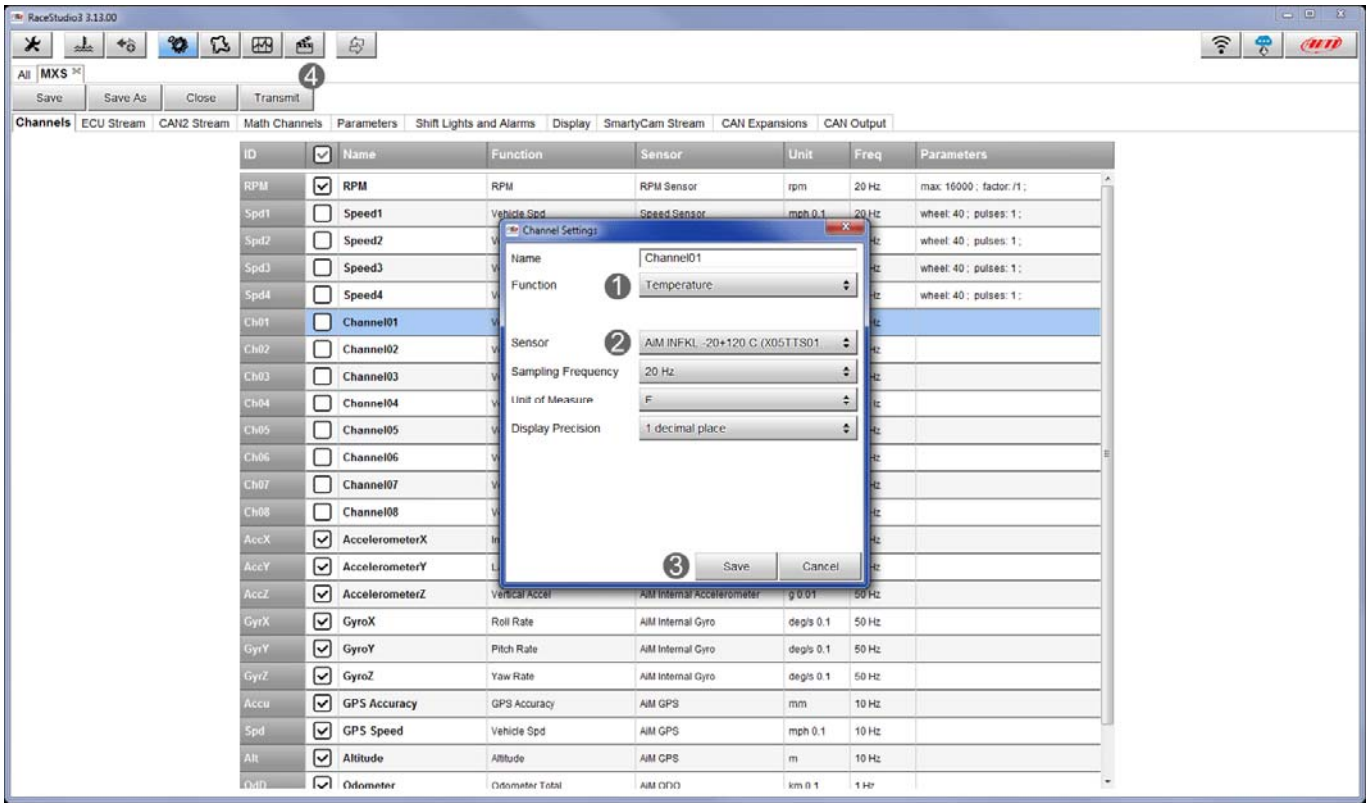
Once the tire temperature sensor in physically connected to one of the channels of AiM device it has to be loaded in the related configuration using AiM configuration software. In this datasheet it is loaded using **Race Studio 3** software.

2 Setup with Race Studio 3

- With the device switched on and connected to the PC run the software and select the device the sensor is connected to;
- select the configuration the sensor is to be loaded on or create a new one pressing "NEW" and select "Channels" layer as here below;
- select the channel where to set the sensor (in the example below channel01) and click on the related cell of "Sensor" column:



- a configuration panel shows up
- select: "Temperature" function as well as the kind of temperature to sample (**1**) among:
    - Water Temp
    - Exhaust Temp
    - Oil Temp
    - Head Temp
    - Temperature (generic temperature – as in the example)
- select the sensor "AiM INFKL -20+120 C (X05TTS01B0)" (**2**)
- press "Save" (**3**)
- press "Transmit" (**4**)



1 Introduction

This datasheet explains how to use AiM 0-5 bar pressure sensor.
The sensor **part number** is:

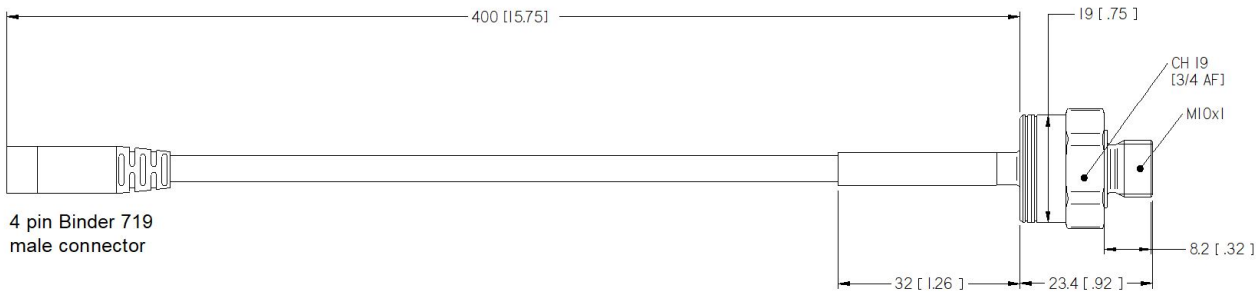
- Pressure sensor 0-5 bar M10 **X05PSA00005B10**
- Pressure sensor 0-5 bar 3/8 24 **X05PSA00005B38**

This sensor fits the measurement of oil and fuel pressure and needs a careful installation. This is why AiM suggest to address to a specialized workshop.

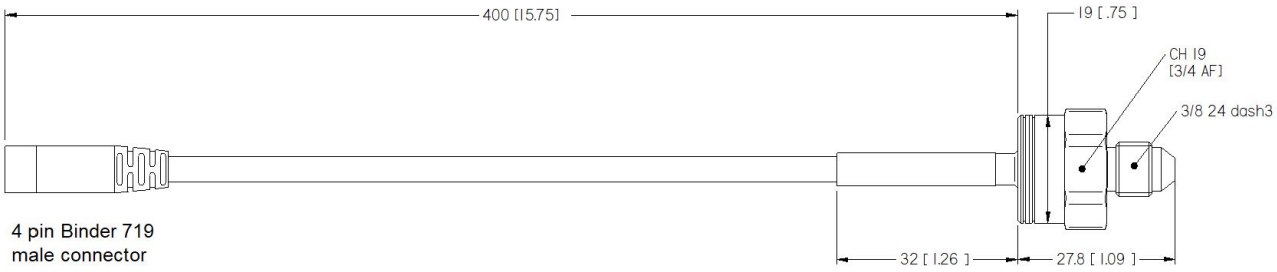
2
Dimensions, pinout and technical characteristics

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

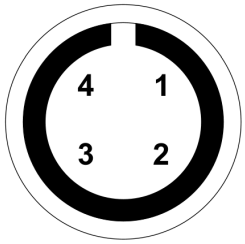
0-5 bar M10



0-5 bar 3/8 24



The sensor ends with a 4 pins Binder 719 male connector. The image below shows the connector pinout from solder termination side.



Pin	Function	Cable colour
1	Analog signal	White
2	GND	Black
3	+Vb	Red
4	Not connected	

The table here below shows the sensor electrical characteristics.

Technical characteristics	Value
Supply	8-16 V
Accuracy	< +/- 0.5% FS (CLNH – combined non-linearity and hysteresis)
Output signal	from 0.5 V to 4.5 V
Characterisation	500 mV/ 0 bar 4500 mV/ 5 bar
Consumption	< 10 mA
Temperature working range	from -20°C to 135°C
Sealing	IP66
Housing	316 stainless steel
Weight	30 g
Cable length	400 mm
Thread	M10 – 3/8 24

3
Extension cables

The sensor is sold with a 40 cm cable. Standard length extension cables are available, whose part number changes according to their length and to the product the sensor is to be connected to.

Extension cable for connection to:
- MXG/MXG 1.2/MXG 1.2 Strada
- MXS/MXS 1.2/MXS Strada/MXS 1.2 Strada
- MXP/MXP Strada
- MXL2
- MXm
- EVO5
- MXL Strada/Pista/Pro05

Part numbers:
V02PCB05B - cable length: 500mm
V02PCB10B - cable length: 1000mm
V02PCB15B - cable length: 1500mm
V02PCB20B - cable length: 2000mm
V02PCB25B - cable length: 2500mm
V02PCB30B - cable length: 3000mm

Extension cable for connection to:
- Channel Expansion
- EVO4
- EVO4S

Part numbers:
V02PCB05BTXG - cable length: 500mm
V02PCB10BTXG - cable length: 1000mm
V02PCB15BTXG - cable length: 1500mm
V02PCB20BTXG - cable length: 2000mm
V02PCB25BTXG - cable length: 2500mm
V02PCB30BTXG - cable length: 3000mm