

AiM Infotech

0-150 PSI
0-10 Bar
Pressure sensor

Release 1.03





This datasheet explains how to use 0-150 PSI (0-10 Bar) pressure sensor.

This sensor **part number** is: **X05SNP13441**

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Introduction

AiM devices can measure pressure with a proper sensor that needs an accurate installation. This is why we would strongly suggest you to address to a specialized workshop. Once the sensor installed you have to configure it using AiM Race Studio 2 software freely downloadable from Download Area -> software section of www.aim-sportline.com.

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Suggested installations

This sensor fits pressure measurement of liquid like oil, water or fuel. We recommend not to use it for brake pressure measurement.

2.1

Installation notes

When installing the sensor ensure to select a channel that has a +Vb output on your AiM device or harness. To say:

- EVO4: all channels from 1 to 5
- MXL Strada: channels from 4 to 8 if you are using an AiM optional harness – part number **V02.554.20**
- MXL Pista: channels from 4 to 8 if you are using an AiM standard harness – part number **V02.554.20**
- MXL Pro05: channels from 8 to 11 if you are using an AiM optional harness – part number **V02.554.02**
- MyChron Expansion: all channels from 1 to 4
- Channel Expansion: all channels from 1 to 4

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Sensor configuration for AiM devices

To make AiM devices sampling information supplied by the sensor it is necessary to physically connect the sensor to a channel, set in Race Studio 2 configuration software the channel this sensor is connected to and transmit the configuration to the system.

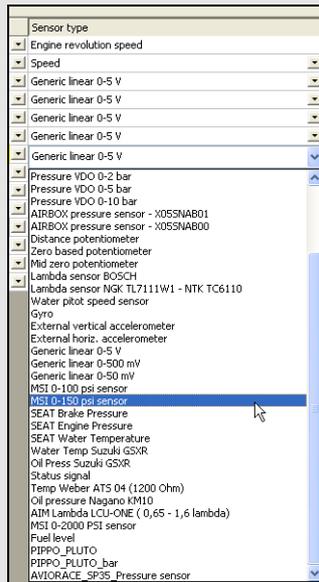
The procedure to perform is:

- open Race Studio 2 software;
- select the device you are using;
- select the configuration you want to set the sensor on or create a new one pressing “New”;
- select “Channels” layer shown here below;

The screenshot shows the RaceStudio 2.47.04 software interface. The 'System manager' window is open, displaying the 'Channels' configuration table. The table lists various sensors and their configurations.

Channel identifier	Enabled/Disabled	Channel name	Sampling Frequency	Sensor type	Measure unit	Low scale	High scale
SPD_1	Enabled	Speed_1	10 Hz	Single-revolution speed	rpm	0	20000
SPD_3	Enabled	Speed_3	10 Hz	Speed	rpm	-200.0	200.0
CH_1	Enabled	Channel_1	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CH_2	Enabled	Channel_2	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CH_3	Enabled	Channel_3	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CH_4	Enabled	Channel_4	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CH_5	Enabled	Channel_5	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CH_6	Enabled	Channel_6	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CH_7	Enabled	Channel_7	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CH_8	Enabled	Channel_8	10 Hz	Generic linear 0-5V	V	-1.0	5.0
CALC_GEAR	Disabled	Calculated Gear	10 Hz	Calculated Gear	#	0	9
ACC_L	Enabled	LatAcc	10 Hz	Lateral accelerometer	g	-3.00	3.00
LOG_TEMP	Enabled	DataLogger_Temp	10 Hz	Cool state	°C	-1.0	10
BATT	Enabled	Battery	1 Hz	Battery	V	-1.0	15.0

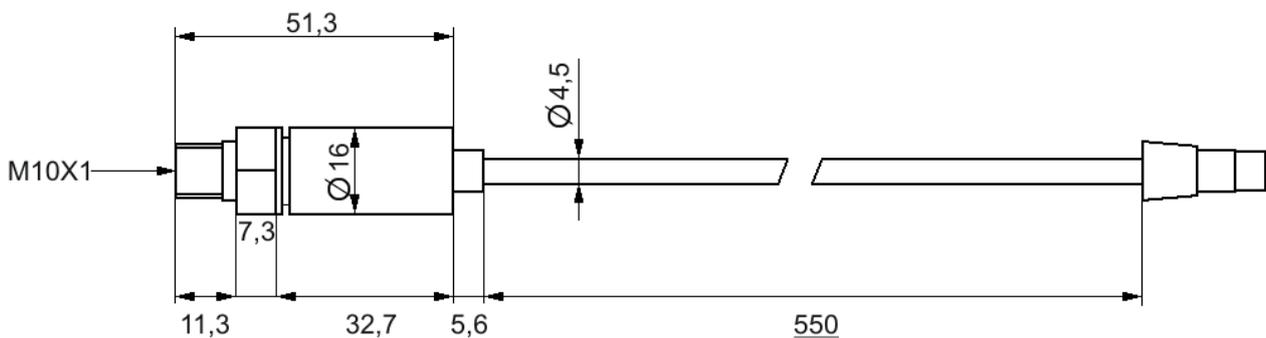
- set this sensor – identified as “MSI 0-150 psi sensor” – selecting it in “Sensor type” column shown below and press “Transmit” button on top of the window.



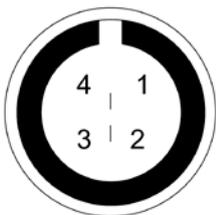
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Dimensions, pinout and technical characteristics

The drawing here below shows sensor dimensions in millimetres.



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



Binder connector pin	Function	Cable colour
1	Pressure signal 1-5V	White
2	GND	Black
3	Power 10-30V	Red
4	Not connected	–

0-150 PSI (0-10 Bar) pressure sensor has these technical characteristics:

- measure range: 0-150 PSI (0-10Bar)
- output signal: 1-5 V
- power: 10-30 V
- consumption: 2 mA
- installation thread: M10x1

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Extension cables

The sensor is sold with a 60 cm cable and standard lengths extension cables are available as optional: 0,5 m, 1m e 1,5 m; it is also possible to ask for specific length extension cables.

Extension cables part numbers change according to their length and to the device the sensor is to be connected to.

Extension cable for connection with:

- Channel Expansion
- MyChron Expansion
- EVO4.

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

Extension cable for connection with:

- MXL Strada
- MXL Pista
- MXL 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

