

AiM Infotech

AiM pressure sensor
0-50 PSI Absolute

Release 1.02



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Introduction

This datasheet explains how to use AiM 0-50 PSI absolute pressure sensor. Being able to read depressions up to -14.5 PSI compared with atmospheric pressure in addition to absolute pressures up to 35.5 PSI, it fits the measurement of manifold air pressure (MAP); it needs a careful installation. This is why AiM suggest to address to a specialized workshop. The sensor **part number** is:

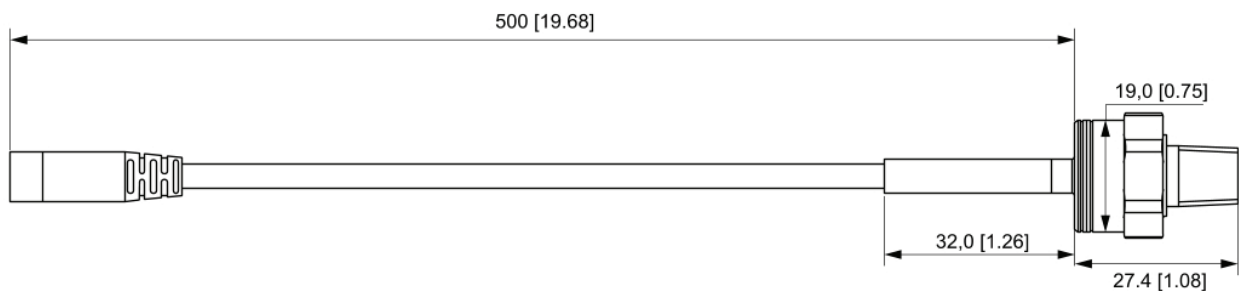
- Pressure sensor 0-50 PSI 1/8 NPT

X05PSA00050P18AK

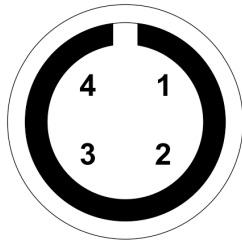
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Dimensions, pinout and technical characteristics

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



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	< $\pm 0.5\%$ FS (CLNH – combined non-linearity and hysteresis)
Output signal	from 0.5 V to 4.5 V
Characterisation	500 mV/ -14.5 PSI 4500 mV/ 35.5 PSI
Consumption	< 10 mA
Temperature working range	from -20°C to 135°C
Sealing	IP66
Housing	316 stainless steel
Weight	30 g
Cable length	500 mm
Thread	1/8 NPT

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Extension cables

The sensor is sold with a 50 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

