AiM Infotech

Pressure sensor 0-160 bar/0-2320 PSI

Release 1.01







1 Introduction

This datasheet explains how to use 0-160 bar (0-2320 PSI) pressure sensor. This sensor comes with a connection kit including:

- 0-160 bar (0-2320 PSI) pressure sensor with 50 cm cable
- connection kit including:
 - o two lock nuts
 - o 2 nipples
 - o 1 "T" brunch pipe female M10x1 thread

This sensor kit part number is: X05SNP31160R

This sensor fits brake pressure measurement and needs a careful installation. This is why AiM suggests to address to a specialized workshop.

2 Installation

To correctly install 0-160 bar brake pressure sensor use the included connection kit shown here below.

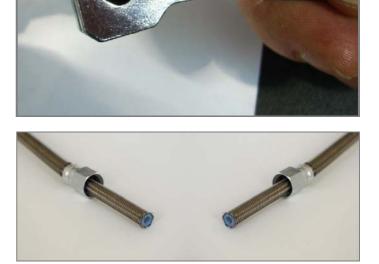




Please follow this procedure:

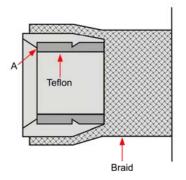
Cut the braking plant pipe in the point where you want to install the sensor and then repeat the operations here described on both edges of the pipe.

Insert the 2 locking nuts in the cut parts of the pipe.



Insert the nipple under the metallic braid.

Press the nipple until the contact with the internal part of the pipe ("**A**") is complete and then cover it with the metallic braid.





Place the junction so to determine the desired sensor position before tightening. We suggest to make a reference mark.



Tighten to 0,8 Kg (8 Nm).

Alternatively tighten the threads a quarter turn at a time until the right position is reached.

Please be careful: do not exceed 15 Nm

Install the sensor on the junction wrapping the thread with Teflon to guarantee its tightness.





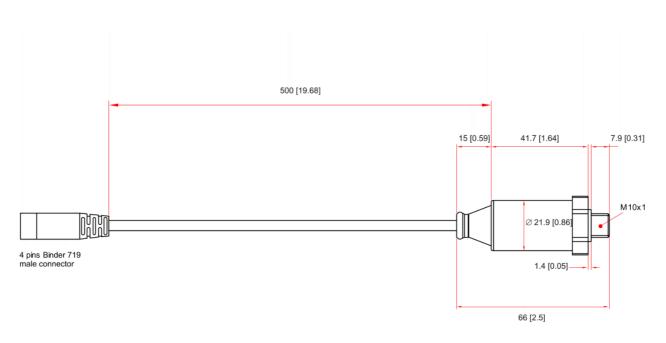
Warning: once the installation is over ensure that the brake circuit is cleared and check its tightness.



3

Dimensions, pinout and technical characteristics

The drawing here below shows sensor 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
4 1	1	Analog signal	White
	2	GND	Black
3 2	3	+Vb	Red
	4	Not connected	



The table here below shows the sensor electrical characteristics.

Technical characteristics	Value	
Accuracy	<+/1 0.5%	
Output signal	1-5 V	
Temperature working range	from -40° to 125°	
Sensor electrical range	1000Mv/0Bar 5000Mv/160Bar	
Sealing	IP66	
Excitation	10-32 VDC; 1-5 V	
Consumption	<10 mA	
Housing	304 stainless steel	
Weight	60g	
Sensor thread	M10*1	
Cable length	50 mm	



4 Extension cables

The sensor is sold with a 50 cm cable. Standard and custom length extension cables are available; standard length are: 0,5 m, 1m and 1,5 m.

Product part number changes according to their length and to the product the sensor is to be connected to.

Extension cable for connection to:

- MXG
- MXS
- MXL2
- EVO5
- MXS Strada
- 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



