40 Huntingwood Drive Huntingwood NSW 2148

Phone: (02) 8825 1999 Website: www.aeroflowperformance.com

INSTALLATION MANUAL

AEROFLOW PERFORMANCE

MAP SENSOR

WARNING!

BEFORE PROCEEDING WITH INSTALLATION PLEASE READ INSTRUCTIONS CAREFULLY. THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS. WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.

INTRODUCTION

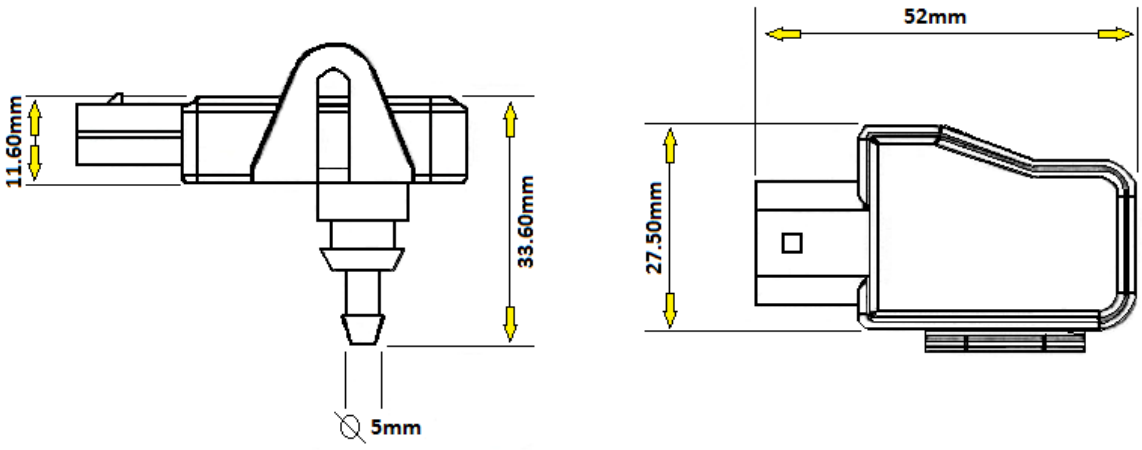
Congratulations on your purchase of Aeroflow Performance MAP sensor. Aeroflow Performance products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions? Please call technical support at +61 2 8825 1900 and have the product part number on hand when calling.

The Aeroflow Performance Manifold Absolute Pressure (MAP) sensor is a 3 bar MAP sensor. This sensor is used to determine engine load on forced induction engines. This sensor is intended to be used on engines producing positive manifold pressure up to 2 bar, or roughly 30psi of boost. This sensor is not recommended for use with engines that will not see boost above 1 bar, as it limits sensor resolution

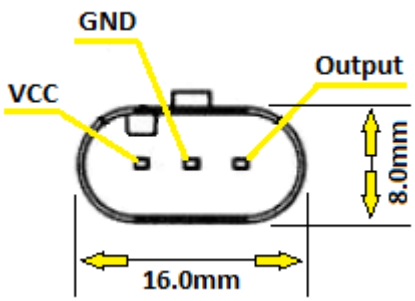
This sensor is a universal fitment with a 5mm barb for the vacuum source. It includes the plug and pins to easily wire into any application. This sensor is fully calibrated for high accuracy and designed for high stability across the temperature range.

WARNING: Please take care when wiring this sensor as incorrect wiring of this sensor will damage this sensor and warranty will be voided. **DO NOT** reverse the polarity of active sensors as sensor damage will occur and warranty will be voided.

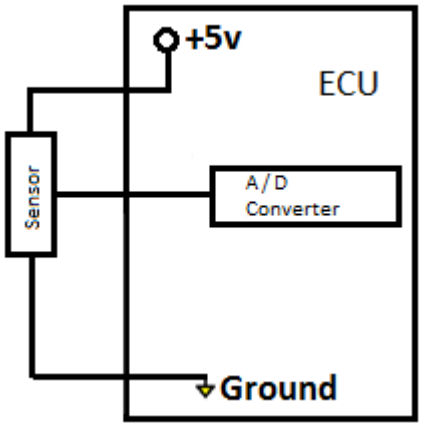
Dimension



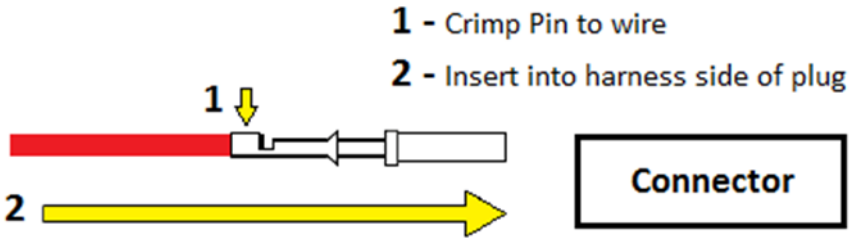
Characteristic	Minimum	Working	Maximum	Unit
Pressure Range	20		400	kPa
Supply Voltage	4.65	5	5.35	Vdc
Supply Current		6	10	mAdc
Minimum pressure offset (0 to 85 °C) at VS = 5.0 Volts	0.135	0.2	0.27	Vdc
Full-scale output (0 to 85 °C) at VS = 5.0 Volts	4.733	4.8	4.866	Vdc
Full-scale span (0 to 85 °C) at VS = 5.0 Volts	4.467	4.6	4.733	Vdc
Accuracy (0 to 85 °C)			±1.5	%Vfss
Sensitivity		12.1		mV/kPa
Response Time		1		ms
Warm-up Time		23		ms
Offset Stability		±0.25		%VFss



Circuit Schematic



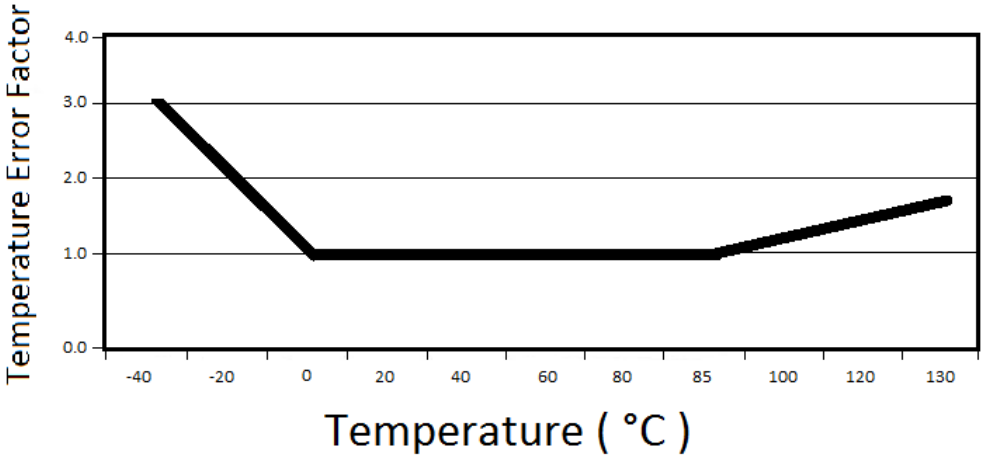
Crimping Wire



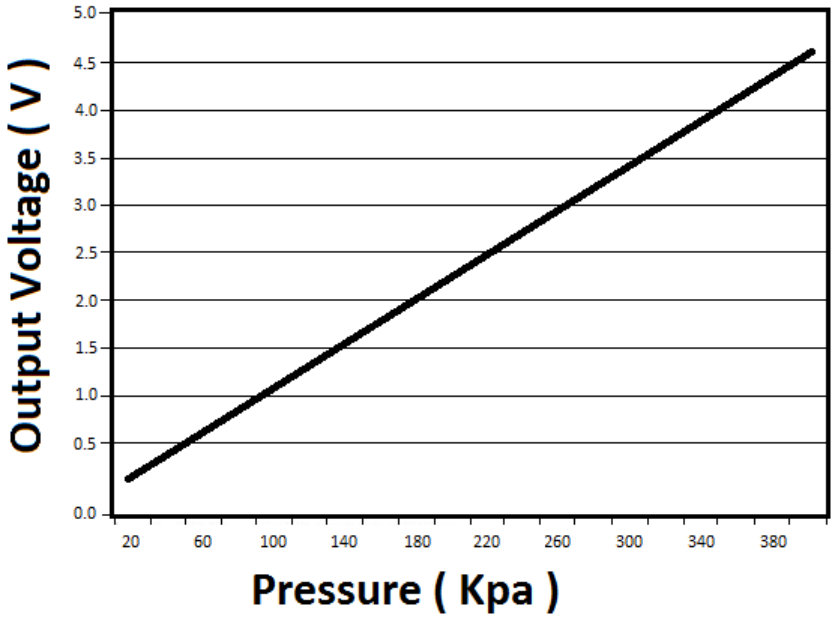
Pressure Error Chart

Pressure (kPa)	
Pressure	Error (kPa)
Pressure	Error (Max)
20 to 400 (kPa)	± 5.5 (kPa)

Temperature Error Chart



Output VS. Absolute Pressure Curve



Pressure (Bar)	-0.5	0	0.5	1	1.5	2	2.5	3
Voltage (V)	0.56	1.17	1.77	2.38	2.98	3.59	4.19	4.80
Absolute Pressure vs. Voltage								

Normal Transfer Value :

V OUT = Vs x (0.002421 x P – 0.00842)

± Pressure Error x Temperature Factor x 0.002421 x Vs

Vs = 5.0 ± 0.36 VDC ; Temperature = 0 to 85°C

For more information or technical enquires

Contact: Aeroflow Performance on

Phone: (02) 8825 1979 Website: www.aeroflowperformance.com