

Document Number		RG_SPEC-0006	
Title		Aero 8 Sensor	
Revision	Date	Prepared By	Change History
1.21	09/29/2011	Chris Brown	Updated weight.

Introduction

This sensor has 8 inputs measuring dynamic differential pressure compared to a single static reference port. Sensor output is a 0-5 volt variable voltage.

Mounting

This sensor should be mounted with soft Velcro to help absorb vibrations.

Specifications:

Part #: M AERO 8
 Output Method: 0 – 5 volt DC
 Resolution: 0.01 kPa
 Update Rate: > 1000 Hz
 Response Time: 0.001 sec
 Supply Voltage: 5 VDC
 Temp Range: -20° to 85° C
 Weight: 170 g

Calibration:

Δ -60" H₂O = -14.95 kPa = 0.25 vdc
 Δ -30" H₂O = -7.47 kPa = 1.25 vdc
 Δ 0" H₂O = 0.00 kPa = 2.25 vdc
 Δ 30" H₂O = 7.47 kPa = 3.25 vdc
 Δ 60" H₂O = 14.95 kPa = 4.25 vdc

Connection:

Mating connector: AS610-35SN
 pin 1 – Port 1
 pin 2 – Port 2
 pin 3 – Port 3
 pin 4 – Port 4
 pin 5 – Port 5
 pin 6 – Port 6
 pin 7 – Port 7
 pin 8 – Port 8
 pin 9 – 0 volts
 pin 10 – 5 volt, for using "Ratiometric" setup
 pin 11 – 5 volt, tied internally to pin 10
 pin 12 – no connection
 pin 13 – 6 to 20 volt, for "Absolute Voltage" setup

The M Aero 4 was designed to use only one voltage input. Use either pin #10 or pin #13, do not use both. When using pin #13, there is an internal 5 volt regulator which supplies voltage to the sensor.

