901 Hillside Drive Bensenville, IL 60106 USA Phone: 630 766 -4402 FAX: 630 766 -1715 High Performance Systems FirePower Racing Fuels Combustion Analysis Prototyping/Development

The enclosed 100psi pressure sensor provides accurate gauge pressure for hydraulic and pneumatic systems. Data logging rates up to 1kHz may be utilized with this sensor. To utilize this sensor properly, you must calibrate the sensor output to your logger. You may perform this two ways:

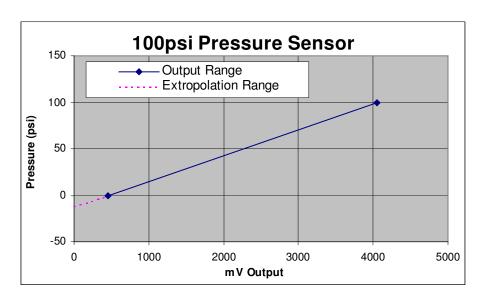
- 1) Creating and utilizing a "Custom Sensor" within the RaceStudio2 (preferred method) or
- 2) Establishing the sensor as a Linear Potentiometer Distance within RaceStudio2.

To use the first method, set the following parameters in the custom library:

$$450 \text{mV} = 0 \text{psi}$$
$$4050 \text{mV} = 100 \text{psi}$$

(The actual output value may vary by as much as 1%, due to inherent sensor variation)

If you chose to use the latter method, tell the software that you have a linear potentiometer with range = 139. You will then need to perform a calibration, with the vehicle in a known state of Opsi. This will index the sensor output (nominally 450mV) as a "zero" pressure value, with a pressure response slope of 27.8psi per volt. At 0 volts (sensor disconnected or unpowered), you may see an indication on dash or in the software of roughly –12.5psi. This is normal.



If you have any questions about the operation of these units, please contact us. We are here to help!