

#### **RIFE G-Series Shock Sensor Instructions**

P/N 52-1707 7.5" Travel

#### **Dimensions:**

Length Collapsed (center to center of eyelets): 13.5" Length Full Extended: 21.1" Travel length: 7.5"

Note: we recommend checking and double checking proper length before using these sensors. It is best to mock up outside and take your vehicle suspension through its full range of motion before mounting and testing. When comfortable, loosely mount on mounting hardware but check to make sure there is not unnecessary tension as you approach fully collapsed or fully extended orientation. Damage caused by bottoming out or over extending shock sensor will not be covered or warrantied and may result in a sensor that is not usable.

#### Wiring

- Red: +5v Sensor Power (Directly from ECU or Data Logger)
- White: Signal
- Black: Sensor Ground (Directly from ECU or data logger)

Please note: Sensor power and ground need to come directly from the ECU or data logger. These need to be sensor reference power and ground to insure a clean signal and proper configuration for sensor reading. Failure to do this may result in poor or no sensor data signal.

For best performance, we recommend using a shielded cable wiring directly to the ECU or datalogger to avoid outside noise.

Calibration Data: See Page 3

# RIFE*SENSORS*

#### Mounting:

#### Screw size eyelet on shock sensor: #10 (.190" or 3/16")

Proper mounting position/orientation: Mounting your G series sensor correctly will help insure long service life. The correct orientation is for the end with wiring, or the fixed end, to be facing upwards. This helps alleviate concerns of fluid and water runoff from the body entering the bushing area of the sensor which can cause moisture damage and premature sensor failure.

\*Note Avoid direct water drainage on to sensor, while we do our best to seal these sensors, water can enter through the push rod clearances and damage electronics.

\*Avoid excessive side loads as they may damage internal sensor and or bend the travel rod which will cause issues.

For a full list of mounting solutions check out our website: <a href="https://www.motionraceworks.com/collections/rife-shock-travel-sensors">https://www.motionraceworks.com/collections/rife-shock-travel-sensors</a>

#### **Need Tech Support?**

Email: <u>customerservice@motionraceworks.com</u> Toll Free: +1 (800) 878-9274 Text: (563) 202-6015

## RIFE*SENSORS*

### P/N 15-1707 RIFE G Series Shock Travel Sensor Data Calibration 7.5"

Calibration - 32 points:	
Length (in)	Voltage [V]
0.00	0.13
0.25	0.28
0.49	0.44
0.74	0.59
0.98	0.75
1.23	0.90
1.47	1.05
1.72	1.21
1.97	1.36
2.21	1.51
2.46	1.67
2.70	1.82
2.95	1.98
3.20	2.13
3.44	2.28
3.69	2.44
3.93	2.59
4.18	2.75
4.42	2.90
4.67	3.05
4.92	3.21
5.16	3.36
5.41	3.52
5.65	3.67
5.90	3.82
6.15	3.98
6.39	4.13
6.64	4.28
6.88	4.44
7.13	4.59
7.37	4.75
7.62	4.90

Calibration - 16 points:	
Length (in)	Voltage [V]
0.00	0.13
0.51	0.45
1.02	0.77
1.52	1.08
2.03	1.40
2.54	1.72
3.05	2.04
3.56	2.36
4.06	2.67
4.57	2.99
5.08	3.31
5.59	3.63
6.10	3.95
6.60	4.26
7.11	4.58
7.62	4.90

Calibration - 8 points:		
Length (in)	Voltage [V]	
0.00	0.13	
1.09	0.81	
2.18	1.49	
3.27	2.17	
4.35	2.86	
5.44	3.54	
6.53	4.22	
7.62	4.90	

Calibration - 2 points:		
Length (in)	Voltage [V]	
0.00	0.13	
7.62	4.90	