

**8341-7000
Series**

Rough Rider™ Electronic Fuel Level Sensor
for Heavy Duty Applications on Marine, Farm, Truck,
Construction/Off-Road, and Industrial Equipment

General Specifications

Mounting: Designed for top mount

Resistance Conformity: ±3% of full scale

Resistance Tolerance: At EMPTY +0, -2%; At FULL +2%, -0

Operating Temperature Range: -40°F to 176°F, -40C to 80C

Power Rating: 0.5 watts

Pressure: 16 psig rating

Vibration Test: 2g, 40Hz, 168 hours

Endurance Test, In Tank: 1.2g, 1.1Hz, 200 mA peak load,
4 million cycles

Materials Of Construction

Head and Support: Tempered aluminum, gold iridite finish

Card holder, insulators, contact carrier, pivot arm: Injection
molded plastic

Terminal Stud, and Bearings: Tin plated brass

Nuts and Flat Washer: Brass

Lock Washer: Stainless steel

Contacts: Silver

Contact Spring: Beryllium copper

Current Straps: Tin plated brass or copper

Float: Nitrile rubber

Float Wire: Stainless steel wire

Float Retaining Ring: Stainless steel

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The Measure of Excellence



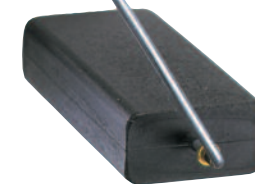
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U.S. & Foreign
Patents Pending

**Rough Rider™
Electronic Fuel
Level Sensor**

**Advanced -
Quality
Performance
Reliability**



**8341-7000 Series Fuel Level Sensor
for Heavy Duty Applications**

Rough Rider™ 8341-7000



Thick Film Element

- Profiled to shape of tank
- Laser trimmed for precision
- Lowest noise to signal ratio
- Extended wear characteristics

Features

- The head and support are made suitable for salt-water environments with the use of aluminum material with gold iridite finish.
- The contact carrier is isolated from the float arm cross shaft to eliminate the effects of dither.
- Massive double-ended bearing design provides maximum support to the cross stud/float arm subassembly in high vibration and high impact applications.
- Contact force against the ceramic card is closely controlled and unaffected by movement of the float arm due to jarring of the tank or sloshing of fuel.
- Dual wiper contacts bridge the ground path and resistance pad circuit (others use coil springs, wire or a pivoting spring-loaded cross stud against the support arm).
- Repeatability of the thick film card manufacturing process provides balanced electrical resistance loads when two tanks are gauged with one or two receivers.
- The close tolerances held on this 240-33 ohm thick film card provide the proper signal for any of the popular 2" panel mounted receivers.
- Both round or flat foam floats are produced fully molded providing a molded float rod hole which is much more durable than drilled holes.
- Materials have been carefully selected to minimize the galvanic voltage potential that exists between dissimilar metals thus reducing the potential for galvanic or electrolytic corrosion.
- A number 6 hole is provided as standard in the gauge head for an optional ground connection.

Electronic Fuel Level Sensor

for plastic, aluminum, and steel tanks

