

The measure of excellence

TECHNICAL DATA SHEET

## **APPLICATION**

These fuel senders were designed for top mounting in unpressurized aluminum or plastic fuel tanks in all types of marine vessels. They include special features and protection from corrosion problems (internal and external to the fuel tanks) which make them the quality standard for the industry.

## GENERAL INFORMATION AND FEATURES

This fuel sender incorporates a .120" diameter drill hole opposite the lead hole and outside of the bolt circle diameter, for use in connecting the necessary ground wire securely to the unit. A #40-416 stainless steel self-tapping screw and a #41-404 stainless steel lockwasher are provided to secure a ring or fork terminal (or a spade clip) to the sender head. Neither the ground wire and terminals, nor the spade clip, are supplied by Rochester.

Standard configuration, with the lead hole at 12:00,

has the float arm swinging at 3:00. However, by loosening the center stud hardware, the float arm can be rotated to the 6:00, 9:00 or 12:00 position and locked in place by tightening the center stud hardware. Detailed instructions available on request.

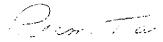
The float arm on this sender is 24" long, measured from the pivot point, allowing it to be cut to an appropriate length to gauge any tank depths of 6" to 24". The cork float and the washers are furnished unassembled to the float arm. The cutting and crimping process is to be done prior to float assembly.

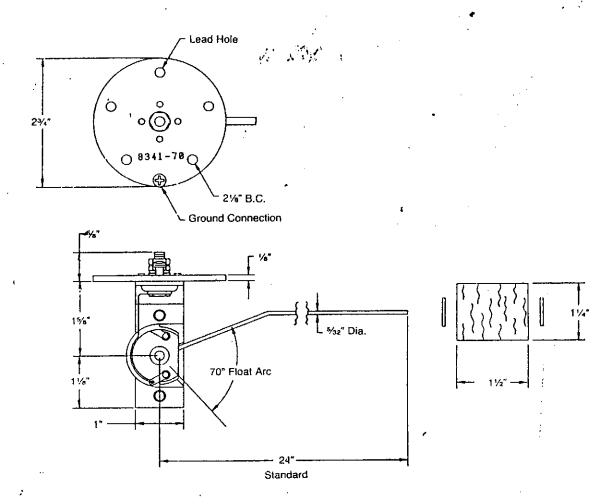
This fuel sender is equipped with a resistance coil with a range  $\frac{\partial}{\partial t}$  of 240 to 30 ohms only.

The recommended gasket for use under the head is made of Buna-N and must be ordered separately under part number 15-716.

See reverse side for materials of construction, qualification data and performance information.







## **GENERAL SPECIFICATIONS**

Mounting Recommended for top mounting only.

Materials of Construction

Head — Tempered aluminum, made to SAE pattern for fuel senders (2%" bolt circle for 5-#10 screws)

Support and Float Rod -- Tempered aluminum Coil Housing and Head Insulator -- Injection

molded thermoset plastic

Cross Stud and Ground Strap - Tin plated brass Center Stud, Nuts and Washers -- Brass

Resistance Element -- Nickel steel wire

Pushnut — Tin plated spring steel

Contact Spring — Tin plated phosphor bronze Contact - Solid silver

Float - Cork, epoxy coated

Ground Screw and Lockwasher - Stainless steel

Accuracy

Resistance accuracy ± 5% of full scale
Resistance versus float angle repeatability ± 2%
Accuracy depends on proper sizing of sender and
the tank configuration

Response

One-half second, typical

Temperature Range Standard is -30°F to 160°F

Vibration

Qualified at 11/2g, 31Hz for 100 hours

Shock

Contact continuity unaffected to 5g drop test

.5 Watts maximum dissipation. For use with minimum current for maximum safety. 10 MA to 100 MA normal operating range.

System Voltage 12 to 36 voits

Leak Test

Passes 0-20 psig test

Surst Fressure

Due to flange deflection, gasket may unseat at pressuros ábovo 50 psi.

External Pressure

Sea level to 30,000 feet attitude

Approvals U.L. recognized for marino service.

Passes BIA test for fire resistance.



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