



**ROCHESTER  
GAUGES, INC.**

***Magnetic Liquid-Level Gauges***

**HD6993**

ISO 9001:2008 CERTIFIED

### ***Application***

Model HD6993 gauges are designed for extended life and accurate readings of fuel levels in tanks aboard diesel locomotives and rail cars.

### ***General Information and Features***

Model HD6993 gauges are for side or angle mounting. Tank drawings and strapping tables should be submitted with all inquiries.

These gauges feature an easy-to-read 4" [100mm] fractional dial, or calibrated in gallons as an option, with an accuracy of  $\pm 2.5\%$ . A special calibration and functional check is performed on each gauge. A special close-tolerance pinion gear is included for minimum gear lash.

Stainless-steel materials have been selected for many components to ensure reliable service and maximum strength. Hard nickel coated gears and bearings minimize vibration-induced wear, and special construction reduces the amount of care necessary to prevent calibration changes during shipment, installation and service.

An optional support collar is available for gauges with unusually long supports and support pipes extending into the tank interior.



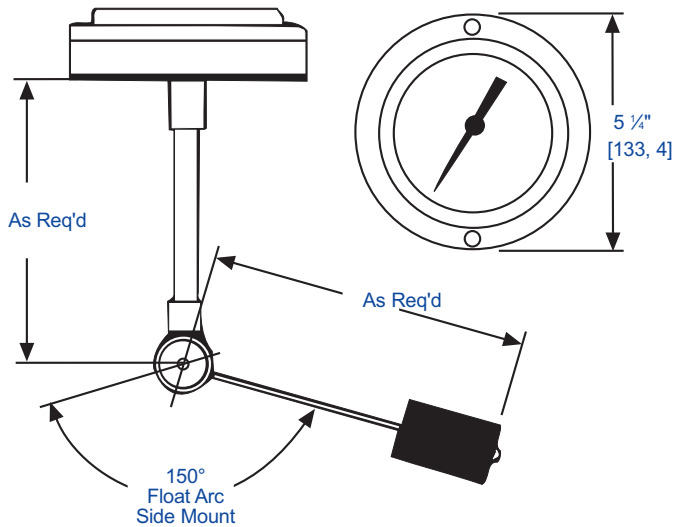
***Magnetic Liquid-Level Gauges***

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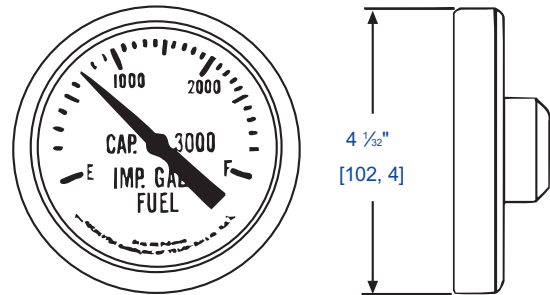
*See reverse side for dimensional data, materials of construction, performance, and advice on how to order.*

*The Measure of Excellence*

**Dimensional Data**



**Typical Gallonage Dial Chamber**



[METRIC]

**General Specifications\***

**Mounting**

Side or angle

**Dial Data**

Dials are hermetically sealed and tested in a 8" Hg vacuum. Fractional calibration is standard with gallonage calibration optional. Dial angles, computer generated, from customer supplied strapping tables are also an option. Fluorescent dials optional.

**Accuracy**

Depends on proper sizing of gauge and tank configuration. Direct accuracy is ± 2.5%. Maximum parallax error = 1.5%. Repeatability direct=1%. Sensitivity = 1%. Hysteresis is 2% including gear and pointer lag. Frictional loss = 1%. 100% conformity inspection optional.

**Temperature**

Standard range is -50°F to 200°F, -45 to 93C

**Shock**

Tested per MIL-S-901B, naval std. (Similar gauge)

**Vibration**

Tested per MIL-STD-167, naval std. (Similar gauge)

**Tank Pressure**

0 to 50 PSI, [0 to 3,4 Bar]

**Approvals**

U.L. listed for flammable liquids

**Materials of Construction\***

**Head**

Diecast aluminum. 4 1/4" [107, 9] B.C.

**Gasket**

Buna"N" 0015-00422

**Dial Chamber**

Aluminum w/ tempered glass crystal. Polycarbonate crystal optional.

**Drive Magnet**

Alnico

**Centershaft, Cross Stud, Gear Housing, Support and Float Arm**

Stainless spring steel

**Gear and Bearings**

Hard nickel-coated stainless steel

**Float**

Closed cell hard nitrile rubber

**Gear Housing**

Stainless steel

**Material trim for water service**

Optional

**When ordering, specify:**

All options desired. Always furnish tank drawing and strapping table.

\* Materials and specifications are subject to change without notice. Pressure ratings subject to change due to temperature and other environmental considerations.