



# ERL COMMERCIAL MARINE, INC.

AMERICA'S LEADING TANK BARGE EQUIPMENT PROVIDER

## RISING STICK ALARM

### RISING STICK GAUGE AND LIQUID LEVEL ALARM

#### FULL REGULATORY COMPLIANCE

The Rising Stick Alarm (RSA) is U.S. Coast Guard accepted. It satisfies 46 CFR 39.20 3(b), 39.20-(b), as well as OPA 90 regulations for overfill devices and is suitable for use on ABS classed vessels. The RSA utilizes the ERL L-40 alarm Reed switch which carries a UL approval for use in hazardous cargo locations.

#### SAFETY

Personnel are not exposed to hazardous cargo vapors on the tank top when using the reliable RSA Liquid Level Gauge. The hazard of overfill spills is greatly reduced when properly using the RSA. The RSA alarm operation can be checked by removing the weather cap, and lifting the stick until the High Level and Overfill alarms annunciate.

#### EASY INSTALLATION

Simply bolt the RSA to an 8" Class 150 flanged pipe stand located at or near the geometric center of the cargo compartment. The deck opening must be large enough for the 7" dia. float to pass through.

#### HEAVY DUTY CONSTRUCTION

All welded components are 300 series stainless steel. Powerful NEODYMIUM #38 rod magnets are used to insure superior coupling strength between the CERAMIN #8 float magnet and the tri-colored gauge rod. The tri-colored gauge rod, color coded to industry standards, is hermetically sealed by design, to provide extended service life.

#### SIMPLE, RELIABLE OPERATION

Stainless steel linear slide floats actuate the liquid level switches. The high level switch actuates (opens) when the cargo compartment is 95% full. Subsequently the overfill switch actuates (opens) when the cargo compartment is 98% full. With the Rising Stick Alarm connected to the loading dock's alarm/shutdown system and/or to barge mounted alarm annunciator panel, the risk of overfill spills are significantly reduced.

#### ADJUSTABLE SETPOINTS

Setpoints are set at the factory, and feature an adjustable High Level to Overfill range of 7.5".





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## **Excerpted from Federal Register, 21 Oct "94" 33CFR Part 155 Minimum Standards For Overfill Devices; Barges**

The Coast Guard will allow the owners and operators of tank barges to select one of three alternatives: (1) an overfill alarm on each tank which includes circuitry to sufficiently identify which individual tanks' overfill system is alarming, (2) an automatic shutdown system for the entire barge and transfer facility, or (3) a high level indicating device installed on each tank, such as a stick gauge.

*The ERL Rising Stick Alarm satisfies two of the CFR requirements for overfill devices.*

ERL's magnetically coupled rising stick gauge is designed to provide continuous visual liquid level indication on the cargo tank top. The length of indication is specified when ordering and can include full compartment depth configurations. One meter of indication reflecting the liquid level in the upper one meter of the cargo compartment is typical and fulfills the minimum requirements set forth in 46 CFR 39.20-3(b) as well as OPA 90 requirements for overfill devices. The tricolored gauge rod with a powerful magnet at its base is positioned inside a stainless steel pipe extending down from the tank top. A 7" diameter float with powerful magnets inside floats up and down the sealed pipe with changes in the liquid level. Due to the powerful magnetic coupling between the float and the internal gauge rod, they move together providing a continuous visual indication of liquid level on the tank top. When not in use, and with the tricolored gauge rod lowered within the stainless steel tube, a protective weather cap, with tether, is screwed in place. The operation is fully automatic, but the user must remove the weather cap prior to each use and replace the cap after each use.

