

## Rigid Magnetostrictive Probe, EPA Compliant\*



### Product Description

The MP 450S Level Gauging Probe utilizes proven Magnetostrictive technology for accuracy and reliability. When used in conjunction with the TMS, it provides the ability to perform EPA compliant in-tank leak tests in underground storage tanks. The probe is available in lengths up to eighteen feet.

### Applications

- Above and Below Ground Storage Tanks
- Bulk Storage Tanks
- Generator Sub Base Tanks
- Oil / Water Separators (See MP452S Series spec)
- All Petroleum Products
- Most Chemical Solvents

### Specifications

- Technology: Magnetostrictive, Dual Float, w/ reflection resolution doubling
- Accuracy (Minimum):
  - Product Level: 0.0005"
  - Water Level: 0.001"
  - Temperature: 0.001° F
- Materials:
  - Shaft: 316 SS
  - Floats: Urethane (Optional 316 SS or Buna-N)
- Riser Mount: Minimum 2" dia. riser, 4" dia. riser required for in-tank leak
- Direct Mount: Minimum 2" opening with bushing or flange mount
- Probe Lengths: 1' – 18'
- Temperature Sensing: 6 Thermistors; 5 in shaft, 1 in probe head
- Location Approval: UL Class I, Div 1, Groups C and D
- Operating Temperature: -40° to +175°F (-40° to +80° C)
- Operating Pressure: 150 PSIG
- Field Wiring: 22AWG, 2-Conductor twisted pair w/ shield  
Belden 8441, Belden 8761, Alpha 1736C or equiv., maximum length 3000' to 4600'

### Installation

Probes 15' or less in length can be installed into a vertical riser pipe with the probe foot contacting the tank bottom, or direct-mounted at the tank top via a 3/4" NPT compression fitting kit. Probes greater than 15' must be direct-mounted.

### Certifications/Approvals

- UL Approved\*, File #E139464, CSA approval pending
- Third-Party Approved, EPA-Compliant for In-Tank Leak Testing:\*
  - Up to 20,000 Gal. tank capacity, minimum tank inventory for test 20%
  - 0.2 GPH Leak Test: Pd = 99.9%, Pfa = 0.1%
  - 0.2 GPH Quick Test: Pd = 95%, Pfa = 5%
  - 0.1 GPH Precision Test: Pd = 95.3%, Pfa = 4.7%
  - Up to 75,000 Gal. tank capacity, minimum tank inventory for test 50%
  - 0.2 GPH Leak Test: Pd = 97.3%, Pfa = 2.7%

\* When used in conjunction with the TMS series controllers

Note: Specifications subject to change without notice. 1-14-2002