

LEAK DETECTOR

Model HD-A2-C (for use with TG-EL-D4A or TG-EL-D5 Tank Gauges)

The Model HD-A2-C leak detector uses a combination electro-optic technology, which reliably distinguishes between water and oil. The horizontal detector contains an infrared optical liquid detector and a set of stainless steel conductivity rings. Oils are detected by the optical liquid detector and water is detected by both the optical liquid detector and the conductivity rings.

Ruggedly constructed, with no moving parts, the solid-state HD-A2-C leak detector provides reliable and cost-effective performance. The system is suitable for all grades of oil, including No. 6 and gasoline.

Up to six HD-A2-C leak detectors can be connected to a single TG-EL-D4A tank gauge, up to 8 HD-A2-C connect to an FSC, and up to 12 leak detectors can be connected to a single TG-EL-D5 tank gauge. The detectors monitor for leaks through the inner-wall (oil) or outer-wall (groundwater) of double walled tanks; oil or water leakage into the piping annular space; ground water leakage into a sump. Typical installation areas include:

- Fiberglass or steel tank annular space
- Piping or containment sump
- Vault spaces

Water/ Oil Leak Discrimination

Upon the detection of oil or water in a monitored space, the HD-A2-C indicating transmitter will show an oil or water light and send a signal to the TG-EL-D4A or TG-EL-D5 tank gauges, or FSC.

Continuously Checked

The integrity of the leak monitoring control loop is continuously checked electronically. In normal standby operation, the loop is continuously powered with the light sensor seeing the light from the source. An open or short in the field wiring or failure of the light source or sensor will alert the plant operator by activating the visual/ audible leak alarm at the tank gauge.

Periodic Manual Testing

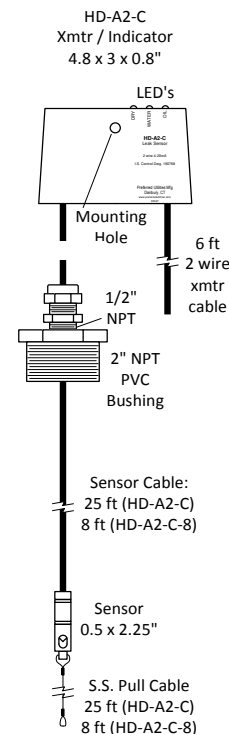
Recognizing that the HD-A2-C leak detector may not be required to automatically alarm for years, the HD-A2-C can be checked periodically by disconnecting power for 2-3 seconds. The sensor self-checks on restoration of power. The Fuel Sentry (TG-EL-D4A) tank gauge or FSC controller perform this self-test every 24 hours. The HD-A2 connecting wires, XMTR, and detector are fully tested.



HD-A2-C Leak Detector Transmitter



HD-A2-C Leak Detector Probe and Pull Cable



HD-A2-C Assembly Expanded View

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Specifications

Solid State:	No moving parts, fail safe
Leak Indications:	Red for oil, Yellow for water, Green for dry
Detector Test:	Continuous self test
Sensor Cable:	2 wire, shielded, suitable for direct burial or conduit installation, Max. length 800 feet
Splice Kit:	Waterproof
Water Detection:	Conductivity
Oil Detection:	Electro-optics
Wetted Parts:	Stainless Steel, Epoxy Resin or Polypropylene
Fluid Temperature:	135° F maximum
Transmitter	
Temperature:	-5° F to 122° F
Tank Mounting:	2" tank opening minimum. Other areas such as steel tank sumps, double wall pipe or tank vaults require 3/4" NPT minimum

Catalog Number: HD-A2-C

Order with TG-EL-D4A, TG-EL-D5 or FSC-based
tank gauge systems.

Ordering Information

Suggested Specifications

Provide and install leak detectors in the annular space within the double wall tank (the piping sump and double wall containment piping, etc., as shown on the drawing). The leak detectors shall be solid state and discriminate between oil and water, display the leak with (3) LED's on its indicating transmitter, and send an appropriate alarm signal to the tank gauge. All leak detectors shall be intrinsically safe, have continuous self checking, fail safe to an alarm condition, and have indicating transmitters with local indicators at grade level. The leak detectors shall be Preferred Utilities Mfg Corp., Danbury, CT, Model HD-A2-C.

When the leak detector is to be mounted in manways, piping sumps, steel tanks, floor or vault containment areas, include a leak detector guard. The HD-HSG leak detector guard shall protect the leak detector from mechanical damage and exposure to high ambient infrared light. Leak detector guard shall be Preferred Utilities Mfg Corp., Danbury, CT, Model HD-HSG.