

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 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 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

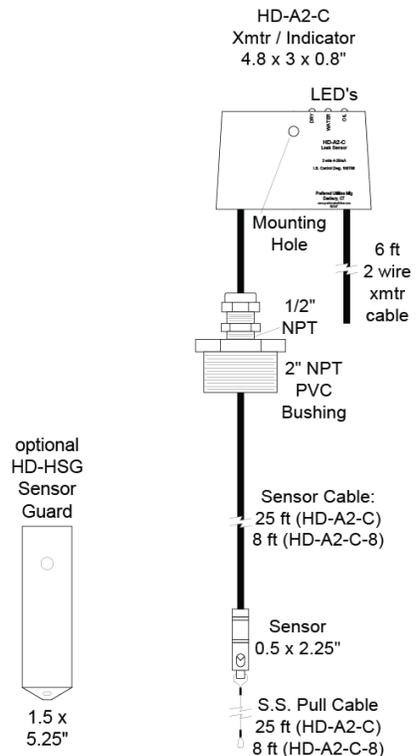
Upon the detection of oil or water in a monitored space, the HD-A2-C indicating transmitter will show an oil or water light and send a signal to the TG-EL-D4A or TG-EL-D5 Tank Gauges.

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.



HD-A2-C Leak Detector



HD-A2-C Assembly Expanded View

Fuel Specialties

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DRY RANGE

Oil Tanks have 20-40 year life spans and leaks may not occur until many years in the future. It is important to periodically test the Leak Detection system as a whole to ensure that the system is still functioning properly and that corrosion, aging, or other effects have not disabled the system.

Consult local codes to determine the local testing requirements, and testing frequency.

Fail-Safe: The HD-A2 is designed to be fail-safe. Any signal outside of the DRY range of 15.5 – 18.5mA should be considered to be a potential leak, field wiring open or short circuit, or an HD-A2 malfunction.

The HD-A2 should be periodically function tested to ensure that it's output is not malfunctioning and 'stuck' in the DRY signal range.

The TG-EL-D4A automatically performs the functional test every day at midnight and triggers an alarm if any dry HD-A2 fails this test. The test can also be manually activated from the TG-EL-D4A menu at any time.

Every few years: The HD-A2 sensor should be removed and inspected to determine if sludge or dirt built-up is preventing the flow of fluid to the optical sensor.

Specifications

Solid State:	No moving parts, fail safe
Leak Indications:	Red for oil, Yellow for water
Detector Test Switch:	Integral
Sensor Cable:	2 wire, shielded, suitable for direct burial or conduit installation, Max. length 800 feet
Splice Kit:	Sensor type
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 ¾" NPT minimum

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 (2) 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 electronic checking, fail safe to an alarm condition, and have indicating transmitters. Test systems that bypass the sensors or rely only on electronic simulation are unacceptable. 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 leak detector guard shall protect the leak detector from mechanical damage and exposure to direct sunlight. Leak detector guard shall be Preferred Utilities Mfg Corp., Danbury, CT, Model HD-HSG.

Ordering Information

Catalog Number: HD-A2-C
Order with TG-EL-D4A, TG-EL-D5 tank gauge systems.

HD-A2-C-8 with 8' Sensor Cable

or

HD-A2-C with 25' Sensor Cable

(these include Splice Kit - #190271)

For additional transmitter cable/splice kits: #92612