

# **EVO™ LLD LINE LEAK DETECTION**

EVO<sup>™</sup> LLD is a stand-alone precision electronic line leak detection solution designed to provide early detection of leaks in fuel lines. The system features automatic submersible pump shutdown in the event of a leak, minimizing the risks of costly spills and environmental cleanup. This pressure-based system utilizes line characteristics learned through AUTO-LEARN® to monitor for changes in pressure and determine if a line is tight or if there is a leak present.



## HIGHLIGHTS

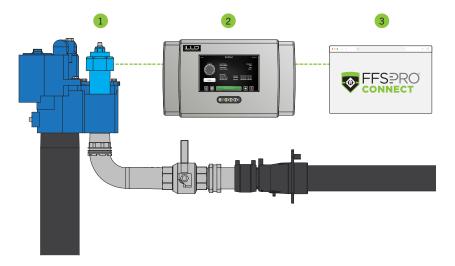
- Operates as a stand-alone kit solution, inclusive of all features and hardware, for ordering and installation simplicity.
- Facilitates automated 3 gph, 0.2 gph, and 0.1 gph line leak detection compliance testing.
- The AUTO-LEARN® feature enhances the setup process by automatically learning line characteristics, eliminating the manual entry of pipe lengths and diameters. This automated approach prevents human error and allows for unparalleled leak detection accuracy.
- AUTO-LEARN® safeguards the system against local manipulation as users are unable to falsify setup parameters to wrongly dismiss alarms, ensuring a secure and tamperproof setup.
- The Statistical Line Leak Detection (SLLD) feature provides a supplementary leak detection method to standard testing by continuously gathering line pressure data and employing a statistical analysis algorithm to identify leaks.

- Running in parallel with standard line leak testing, SLLD offers a solution for busy sites that are unable to accommodate the periods of no fueling required for standard line leak testing to achieve 0.2 gph (0.8 lph) precision leak testing.
- Positive submersible pump shutdown in the event of a leak.
- Monitors flexible, steel, and/or fiberglass pipelines in any combination up to certified maximum values.
- Works with submersible pumps generating 25 psi (1.7 bar) or more.
- Remote access to line pressure, test, and alarm information via the FFS PRO® Web Interface.

## **SPECIFICATIONS**

#### Operation

- 1 The EVO™ LLD Pressure Transducer is typically installed in the leak detector port of the submersible pump manifold. During the AUTO-LEARN® setup process, the EVO™ LLD learns the pressure decay curve characteristics of a calibrated leak.
- 2 During non-pumping periods, the EVO™ LLD will conduct line leak testing by comparing the line pressure changes to those learned during the AUTO-LEARN® process. A deviation in pressure, such as a drop beyond predefined thresholds, will be declared as a leak and shut down the associated submersible pump.
- With declaration of a leak, the system will notify the operator via the EVO™ LLD display with additional email or SMS notification through the FFS PRO® Connect Web Browser Interface.



# **SPECIFICATIONS CONTINUED**

Transducer dimensions	6¼" (159mm) × 2" NPT
Operating temperature	-40° F to 149° F (-40° C to 66° C)
Operating pressure	0 to 100 psi (0 to 6.89 bar)
Transducer cable	10' (3.0m) long three conductor cable with shield and polurethane jacket
Max cable length	500' (152.4 m) maximum transducer to EVO™ LLD console distance
Sensor port fitting	2" female NPT
Sensor material	Anodized aluminum body and stainless steel sensor
Approvals/Certifications	<ul><li>UL, cUL, ATEX, IECEx</li><li>Third party certification of leak detection capabilities</li></ul>
Fuel compatibility	Diesel with or without biodiesel blends up to 5% (B5), diesel with biodiesel blends between 6% - 20% (B6 - B20), diesel with biodiesel blends between 97% - 100% (B99 - B100), gasoline with ethanol blends up to 10% (E10), mid-range ethanol/gasoline blends of (E15-20), high-range ethanol/gasoline blends (E51-83) commercially sold as E85

### **Testing**

- Performs a 3.0 gph (11 lph) leak and pressure test after every dispense cycle or 45 min. Optional positive shutdown of the affected submersible pump on test failure.
- Performs a 0.2 gph (0.8 lph) monthly and 0.1 gph (0.4 lph) annual precision leak test during the thermally stable periods of dispensing. Optional positive shutdown of the affected submersible pump on test failure.
- Performs pressure up, catch pressure, and other additional checks. Alarm only on test failure.

## **ORDERING INFORMATION**

#### **EVO™ LLD Line Leak Detection**



Model	Description
EVO-LLDS/2	2-line EVO™ LLD kit complete with console, (2) pressure transducers, installation wiring
EVO-LLDS/3	3-line EVO™ LLD kit complete with console, (3) pressure transducers, installation wiring
EVO-LLDS/4	4-line EVO™ LLD kit complete with console, (4) pressure transducers, installation wiring

Included In the Kit:  $EVO^{\mathbb{M}}$  LLD console, pressure transducer(s), pressure transducer cable(s), needle valve kit(s), 3.0 gph (11.4 lph) leak generator kit.