



TS-LS5000 AUTOLEARN™ ELECTRONIC LINE LEAK DETECTION

TS-LS500 AutoLearn™ electronic line leak detection (ELLD) learns the characteristics of each line, eliminating possible configuration errors and ensures unparalleled leak detection accuracy. It is an optional feature of the EVO™ 550 and EVO™ 5000 fuel management systems. The TS-LS500 AutoLearn™ ELLD system includes a statistical line leak detection (SLLD) feature which can be activated at high throughput sites that cannot accommodate the prolonged downtime necessary for static line leak detection testing.

HIGHLIGHTS

- Automatically learns exact pipeline characteristics.
- No pipe type and length programming required.
- Monitors flexible, steel, and/or fiberglass pipelines in any combination up to certified maximum values.
- Works with submersible pumps generating 25 psi or more.
- Automatically performs 3.0 gph, 0.2 gph and 0.1 gph line tests, as well as other line pressure checks.
- Includes the industry's only statistical line leak detection (SLLD).
- Positive submersible pump shutdown in the event of a leak.
- Optional feature of the EVO™ 550 and EVO™ 5000.
- Intrinsically safe and explosion-proof options.
- Dispenser hook isolation and turbine pump interface (TPI) pump control options.
- Remote access to line pressure, test, and alarm information.
- Generator versions to prevent shut-down of critical systems (TS-ELLD-G software required).

Note: Product compatible with EVO™ 550 and EVO™ 5000 only.

SPECIFICATIONS

- Dimensions: 6¼" × 2" NPT
- Operating temperature: -40 °F to 149 °F (-40 °C to 66 °C)
- Operating pressure: 0 to 100 psi (0 to 689 kPa)
- Belden™ cable: #9363-22 AWG, #9364-20 AWG or #9365-18 AWG
- Maximum sensor to ATG cable distance: 500' (152.4 m)
- Sensor port fitting: 2" female NPT
- Sensor material: Anodized aluminum body and stainless steel sensor

Capabilities

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

Approvals

- TS-LSU500: UL, cUL, ATEX, IECEx
- TS-LSU500E: UL, cUL
- Third party certification of leak detection capabilities.

ORDERING INFORMATION

Minimum ATG Requirements

- EVO™ 550 and EVO™ 5000 automatic tank gauge
- TS-ELLD software options (TS-ELLD-G software option for generator-specific applications)
- TS-ACI, TS-420IB or TS-420EXP, *TS-RLY modules

*TS-RLY module is not required when utilizing turbine pump interface (TPI) communications.

Intrinsically Safe

For new installations where separate low voltage conduits can be used. Use TS-420IB module.

Model	Description
TS-LS500/1	1-line transducer kit, includes installation kit
TS-LS500/2	2-line transducer kit, includes installation kit
TS-LS500/3	3-line transducer kit, includes installation kit
TS-LS500/4	4-line transducer kit, includes installation kit

Each kit includes a leak generator needle valve kit (P/N TS-AFALNIP) required for installation.

Explosion Proof

For retrofit installations where only a high voltage conduit can be used. Use TS-420EXP module.

Model	Description
TS-LS500E/2	2-line transducer kit, explosion proof, includes installation kit
TS-LS500E/3	3-line transducer kit, explosion proof, includes installation kit
TS-LS500E/4	4-line transducer kit, explosion proof, includes installation kit

Each kit includes a leak generator needle valve kit (P/N TS-AFALNIP) required for installation.

Note: Using turbine pump interface (TPI) communications eliminates the need for a TS-RLY module; Franklin Fueling Systems intelligent controllers required.

Installation Accessories

Model	Description
TS-AFALNIP	Replacement leak generator needle valve kit



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