



# MLD+ MECHANICAL LEAK DETECTORS

FE Petro™ brand MLD+ mechanical leak detectors provide precise leak detection for standard fuel and biofuel applications on 4" submersible turbine pumps (STPs). This lineup of advanced mechanical leak detectors features reliable line leak detection capabilities and maximum product flow rates. The MLD+ features a compact, yet rugged design to reduce installation height and provide accurate, hassle-free operation.

## Highlights

- Two models to meet the needs of your standard fuel applications include the MLD+G (blue cover, copper vent tubing) for gasoline with up to 10% Ethanol and the MLD+D (gold cover, copper vent tubing) for diesel with up to 5% biodiesel.
- Two models to meet the needs of your biofuel applications include the MLD+AG (blue cover, stainless vent tubing) for gasoline with up to 85% Ethanol and the MLD+BD (gold cover, stainless vent tubing) for diesel with up to 20% biodiesel or 100% biodiesel.
- Piston style construction with reduced volume allows the MLD+ to react quickly and provide more accurate leak detection capabilities.
- A specialized metering pin unique to only the MLD+ provides precision leak detection for any type of pipework system including flexible, rigid or a combination of the two.
- Burnished piston chamber provides smooth operation and long service life.
- Color coded covers easily identify the model to the application (gold for diesel and blue for gas).
- Opens completely to allow maximum product flow during fueling operation and remains open with discharge pressure as low as 1 PSI (0.07 bar).
- Compatible with FE Petro™ brand STPs, as well as competitive STPs and line leak detector housings.

## Specifications

- All models are capable of detecting line leaks equivalent to 3 gph at 10 psi (11.4 lph @ 0.70 bar) when installed properly with the appropriate fuels - all models will signal detection of leaks by restricting product delivery to less than 3 gpm (11.4 lpm) and taking more than 4 seconds to open
- All models will remain in the open position during product delivery to manifold, with discharge pressures as low as 1 psi (0.07 bar) - all models will reset to "tripped" when line pressure delay is below 3 psi (0.21 bar) with pump off
- Detects leaks up to 10 feet (3 meters) above the point of installation
- Max. liquid viscosity of 70 SSU at 60 °F (15 °C)
- Gasoline models (blue cover, MLD+G and MLD+AG) are also listed for fuel mixtures containing 20% MTBE, 20% ETBE or 17% TAME with gasoline as well as diesel fuels, fuel oils, kerosene, Avgas and jet fuels.
- Diesel models (gold cover, MLD+D and MLD+BD) are also listed for kerosene applications

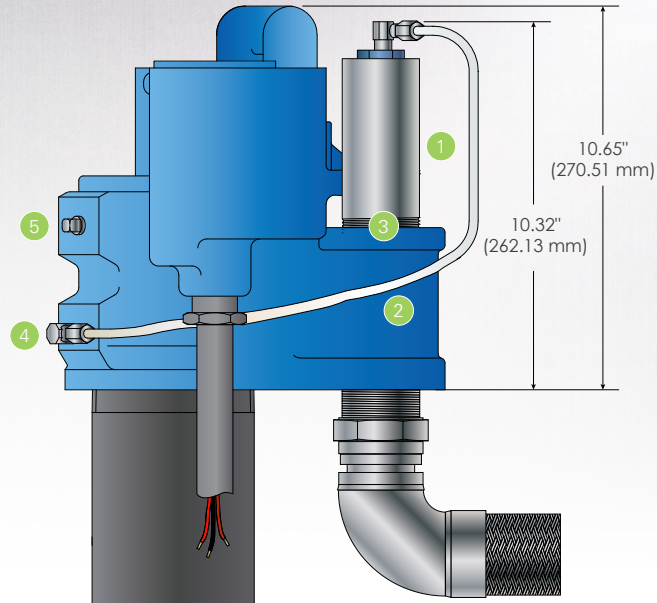
## Approvals/Certifications

- cULus listed.
- Third party certified to comply with US EPA requirements 280.41 (B) and 280.44 (A) for continuous monitoring of pressurized piping.
- Consult factory for other applicable approvals.

Specifications continued

Installation

- 1 MLD+
- 2 MLD+ vent tube
- 3 Line leak detector housing (2" NPT)
- 4 Tank port (vent tube must be connected here)
- 5 Syphon port



Submersible Pumping Systems

Ordering Information

Standard Fuel MLD+ Mechanical Leak Detectors

Model	Description
403168901	STP-MLD+G for gas, single pack (blue cover, copper vent tube, brass fittings)
403168903	STP-MLD+G for gas, three pack
403170901	STP-MLD+D for diesel, single pack (gold cover, copper vent tube, brass fittings)
403170903	STP-MLD+D for diesel, three pack
403172903	STP-MLD+D combo, three pack (contains two STP-MLD+G and one STP-MLD+D)

Biofuel MLD+ Mechanical Leak Detectors

Model	Description
403169901	STP-MLD+AG for alcohol-gas, single pack (blue cover, stainless steel tube and fittings)
403169903	STP-MLD+AG for alcohol-gas, three pack
403171901	STP-MLD+BD for biodiesel, single pack (gold cover, stainless steel tube and fittings)
403171903	STP-MLD+BD for biodiesel, three pack

Notes:

1. MLD+G are listed for compatibility with fuel mixtures containing up to 10% ethanol with gasoline, up to 5% biodiesel with diesel fuels, and 20% MTBE, 20% ETBE, or 17% TAME with gasoline.
2. MLD+D models are listed for compatibility with diesel fuels with up to 5% biodiesel and kerosene applications only.
3. MLD+AG models are listed for fuel mixtures containing up to 85% ethanol with gasoline and 20% MTBE, 20% ETBE, or 17% TAME with gasoline as well as diesel fuels, fuel oils, kerosene, Avgas and jet fuels.
4. MLD+BD models are listed for diesel with up to 20% biodiesel or 100% biodiesel and kerosene applications only.
5. All above models will only mount in the 2" NPT leak detector port of a 4" submersible turbine, including competitive models, or in a leak detector adapter tee (sold separately below).
6. MLD+ models are listed for use with rigid pipelines up to 165.1 gallon capacity, with flexible pipelines up to 109.8 gallon capacity, and with combination rigid/flexible pipelines up to 274.9 gallon capacity.

Ordering Information continued

**MLD+ Mechanical Leak Detector Repair Parts & Accessories**

Model	Description
400440101	Vent tube (for use with MLD+G and MLD+D)
400449901	Hardware pack (fittings and documentation for MLD+G and MLD+D)
403123001	Vent tube, stainless steel (for use with MLD+AG and MLD+BD)
400449904	Hardware pack (fittings and documentation for MLD+AG and MLD+BD)
400518001	Leak detector adapter tee

Submersible Pumping Systems



A Franklin Fueling Systems Brand

frankinfueling.com

3760 Marsh Rd. • Madison, WI 53718, USA  
 Tel: +1 608 838 8786 • Fax: +1 608 838 6433  
 Tel: USA & Canada +1 800 225 9787 • Tel: UK +44 (0)1473 243300  
 Tel: Mex 001 800 738 7610 • Tel: FR +33 (0)1 69 21 41 41 • Tel: CH +86 10 8565 4566

