

Volumetric Line Leak Detector

Definitive Volumetric Line Leak Monitoring

Model 327 Volumetric Line Leak Detector (VLLD) uses a flow sensor to capture accurate measurements of lost product volumes, delivering reliable leak monitoring of fuel lines.



Model 327 Volumetric Line Leak Detector

Utilizing a highly accurate flow sensor, the 327 Volumetric Line Leak Detector provides an industry-leading method for detecting and measuring leaks in fuel lines. The VLLD can test volumes for pipes measuring from 1.5 inches to 4 inches (3.8 cm to 10.2 cm) in diameter (the largest pipe in the industry), and can monitor rigid pipe, flexible pipe or a combination of both, making the VLLD the ideal leak detection solution for any site configuration.

Applications

- Able to perform >3 gph (11.4 L/hr) catastrophic line leak test, even if a submersible turbine pump motor is in continuous operation
- Capable of connecting three VLLD sensors via one three-conductor wire back to the building
- Can control up to four STP motors within a single-line manifold set



ACCURATE

Compared to pressure-decay methods that use algorithms and user data to determine flow rates, the VLLD reads actual flow volumes to provide a true volumetric line leak measurement



VERSATILE

The VLLD works with a combination of fiberglass and flex pipe and can measure leak rates for the largest pipes in the industry



ECONOMICAL

Line Leak Interface Module is mounted separately near STP motor relays to eliminate the need to run pump-control wires back to the tank gauge console



USER-FRIENDLY

Easy to install in the 2-inch (5.08 cm) STP leak detector port, the VLLD eliminates the need to know exact line lengths or diameters of underground pipes

Contact your OPW representative to learn more about the 327 Volumetric Line Leak Detector today! Phone: (708) 485-4200 • Fax: (708) 485-4630 • 6900 Santa Fe Drive • Hodgkins, Illinois USA 60525 • www.opwglobal.com



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327 Volumetric Line Leak Detector

Features

- Provides a true volumetric line leak test
- Capable of >3 gph (11.4 L/h) catastrophic line leak test, even if an STP relay fault condition occurs where the STP motor is in a continuous run state
- Installs into the 2-inch (5.1 cm) leak detector port on the submersible turbine pump (STP) motor
- Capable of connecting three (3) VLLD sensors via one (1) three-conductor wire back to the building
- Capable of testing the largest pipe volume in the industry [1.5-inch (3.8 cm), 2-inch (5.1 cm), 3-inch (7.6 cm), and 4-inch (10.2 cm) pipe]
- Capable of controlling up to four (4) STP motors within a single-line manifold set
- Capable of controlling two separate STP motors installed in the same tank
- Eliminates the need to know exact line lengths or diameters of underground pipe
- Works with a combination of fiberglass and flex pipe

Pipe Characteristics

- Configurable for STP motor control as a way to bring all tanks in a manifold set down evenly either by percent of volume in the tank or until a user-defined product level is reached before switching over to another tank in the manifold set
- Reduces installation cost Line Leak Interface Module (LIM) is mounted separately, near STP motor relays, to eliminate the need for running pump-control wires back to the tank-gauge console
- LIM is capable of controlling up to four (4) STP motors
- Will shut off STP motor if a low-level alarm or probe failure has occurred
- Programmable to run an optional monthly 0.2 gph (0.76 L/hr) or annual 0.1 gph (0.38 L/hr) compliance test
- Reduces installation time by eliminating the need to run a line-leak calibration test to determine the leak characteristics of the pipe
- Runs precision tests at the pump's operating pressure
- Reduces hydraulic hammering on the dispenser meters

Leak Test Certification

- → Leak rate of 3.0 gph (11.4 L/hr) at 10 psi with Pd = 100% and Pfa = 0%
- Leak rate of 0.2 gph (0.76 L/hr) at operating pressure with Pd = 100% and Pfa = 0%
- Leak rate of 0.1 gph (0.38 L/hr) at 1.5 times operating pressure with Pd = 97.9% and Pfa = 2.1%

Specifications

Type: Volumetric Line Leak

Material: Hardened Anodized Aluminum

Location: Hazardous, Class 1, Division 1, Group D

Temperature Range: -40°F to 140°F (-40°C to 60°C)

Data Cable: 1,000 ft (305 m) Belden 88760; 500 ft (152 m) maximum Belden 88761

Listings and Certifications



Pipe Diameter	Flex Pipe Length	Rigid Pipe Length
1.5 in (3.8 cm)	1,187 ft (362 m)	4,628 ft (1,411 m)
2 in (5.1 cm)	668 ft (204 m)	2,603 ft (793 m)
3 in (7.6 cm)	297 ft (91 m)	1,157 ft (353 m)

Integra[™] VSmart I.S. Barrier





Operation of OPW VLLD Precision Flow Sensor



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