



Optical Vapor Eliminator

Electronic Vapor Elimination for LPG Metering Systems



Benefits

- Easier installation
- Faster response time
- Less maintenance

Features

- Less piping
- Fewer moving parts
- No air check or differential valve required
- Optical sensor
- Designed to meet NEMA 4X

General Information

The Liquid Controls (LC) Optical Vapor Eliminator removes vapor from the inlet side of metering system during deliveries. Removing vapor from the metering system ensures that only liquid can pass through the meter for measurement, which improves the accuracy of the flow measurement.

An optical sensor, installed in the wall of the vapor eliminator housing, triggers the opening and closing of the S3 solenoid valve (located at the top of the vapor eliminator), and the electronically-actuated control valve (located on the outlet side of the meter). When the liquid level falls below the optical sensor, the sensor triggers the S3 valve to open and the control valve to close. While the S3 valve is open, vapor trapped inside the metering system vents into a supply or storage tank. While the control valve is closed, the flow of liquid through the metering system stops. As the vapor leaves the metering system, the liquid inside the vapor eliminator housing will rise. When the liquid rises and covers the optical sensor, the sensor triggers the S3 valve to close and the control valve to open, allowing liquid to flow through the system.

As long as the liquid level remains at or above the optical sensor, the S3 valve will remain closed and the control valve will remain open until the delivery is complete. When the delivery is complete, the control valve and the S3 valve will remain closed until they are needed during a new delivery.

LC Optical Vapor Eliminators are designed for LPG applications. They require a LectroCount® Electronic Register and an electronically-actuated control valve for proper operation. Optical Vapor Eliminators are designed with the same mounting dimensions as LC Mechanical Vapor Eliminators, so there are minimal plumbing changes required to retrofit existing meter installations.





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Specifications

Materials of Construction

OPTICAL VAPOR ELIMINATOR A8302

Body: Aluminum

Solenoid: Brass

OPTICAL VAPOR ELIMINATOR A8303

Body: Anodized Aluminum

Solenoid: Stainless Steel

Environmental Rating

NEMA 4X

Pressure Rating

Maximum non-shock working pressure

350 PSI (24.1 BAR)

Temperature Rating

-40 to 160° F (-40 to 71° C)

Solenoid (S3)

Voltage: +12 (± 2) VDC

Optional: +24 (± 4) VDC

Current: 1 A maximum

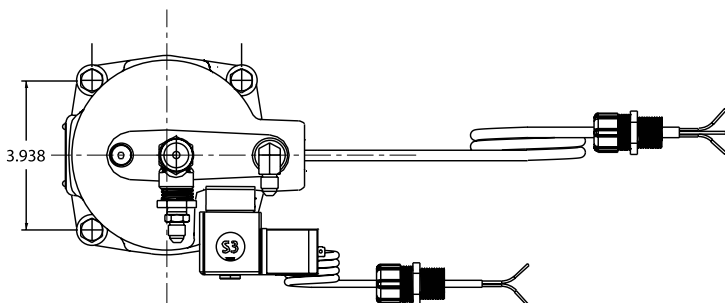
Optical Sensor

Voltage: +10 to +28 VDC

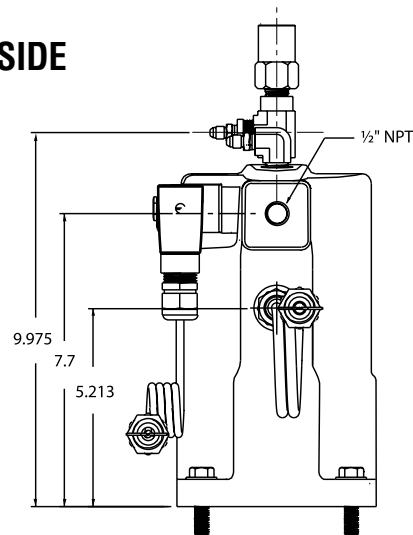
Current: 0.5 A maximum

Dimensions

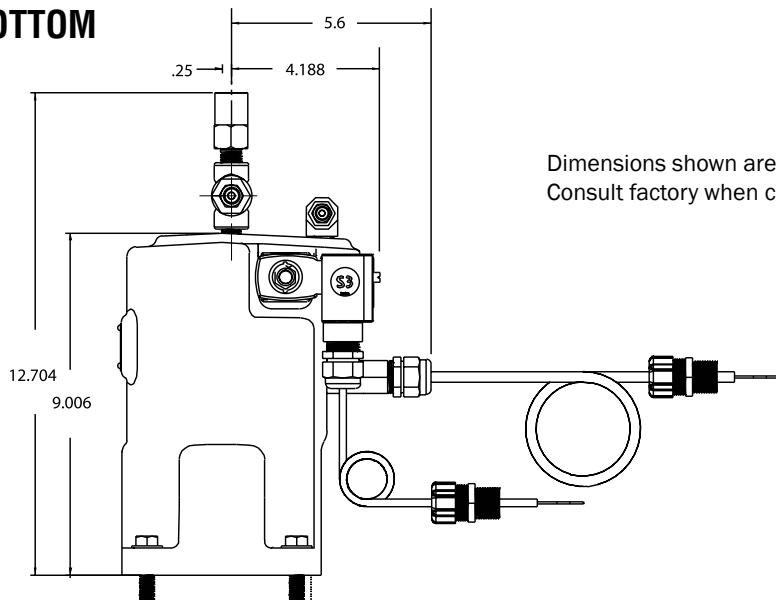
FRONT



SIDE



BOTTOM



Dimensions shown are not for construction use.
Consult factory when certified engineering drawings are required.

