



# Single Head Bulk Plant Air Eliminator with Optical Sensor

## Simple Bulk Plant Air Elimination



### Features

- Less piping
- Fewer moving parts
- No air check or differential valve required
- Optical sensor
- Low Mount Mechanical Air Eliminator
- Integral valve control  
*with MultiLoad or LectroCount electronics*
- Ideal for refined fuels offloading
- Designed to meet Class 1, Division 2 requirements

### Benefits

- Easier installation
- Faster response time
- Less maintenance

### General Information

The Single Head Bulk Plant Air Eliminator with Optical Sensor is a new bulk plant air elimination solution that provides faster response times, simplifies installations, and reduces maintenance. The Single Head Bulk Plant Air Eliminator with Optical Sensor marks the latest breakthrough in the four-decade long evolution of Liquid Controls' air eliminators. It is ideal for eliminating air from refined fuels applications where product is metered into storage from a truck-mounted pump.

To eliminate air from high flow rate loading and offloading applications, Liquid Controls has always provided mechanical bulk plant air eliminators in single and dual head configurations. Both of these mechanical air eliminators remove air from the system, using a high mount air eliminator, without stopping the product flow. Dual head bulk plant air eliminators incorporate a low mount air eliminator in addition to the high mount. The low mount air eliminator removes large slugs of air that can overwhelm the high mount air eliminator. The Single Head Bulk Plant Air Eliminator with Optical Sensor is an advanced alternative to the dual bulk plant air eliminator.

The Single Head Bulk Plant Air Eliminator with Optical Sensor also uses a high mount air eliminator to exhaust air without stopping the flow, but instead of a low mount mechanical air eliminator, it uses an optical sensor to identify large air slugs. When the optical sensor identifies a large air slug, it instantly signals an electronic preset or register (Toptech's MultiLoad presets or Liquid Controls' LectroCount registers). The electronic device closes a downstream control valve, stopping the product flow, and the air slug is quickly vented.

The optical sensor's response time is much faster than pneumatic-based mechanical air eliminators. It has no moving parts or piping requirements; therefore, the Single Head Bulk Plant Air Eliminator with Optical Sensor can shorten installation times, reduce maintenance costs, and provide you with a longer service life.



## Single Head Bulk Plant Air Eliminator with Optical Sensor

### Specifications

#### Sizes

3, 4, and 6"

#### Working Pressure

150 psi

#### Standard Material

Steel

#### Standard Endfittings

150# RF ANSI Flanged  
*Aluminum meters may require piping adaptation*

#### Temperature Range

-40° to 158° F (-40° to 70° C)

#### Power Input - Optical Sensor

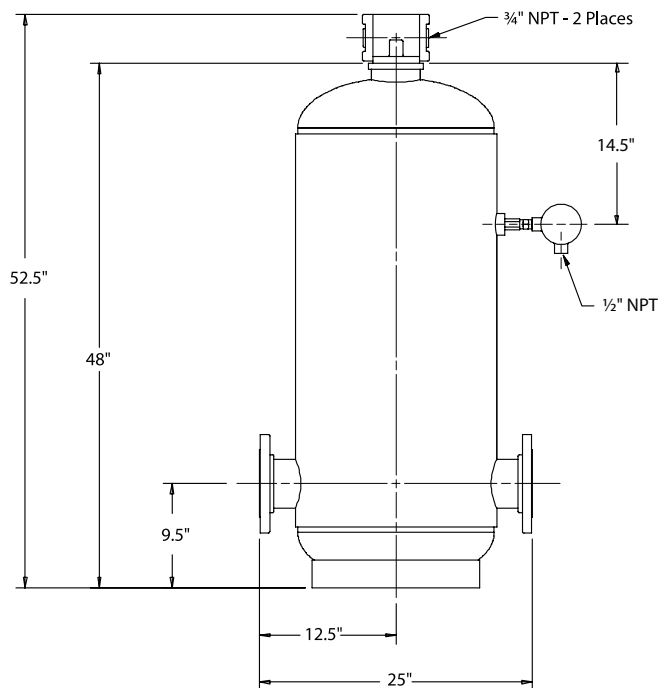
· 10.2 to 27.2VDC  
· 0.5A maximum

#### Air Elimination Rates

150ft<sup>3</sup>/min at 8 psig or 88ft<sup>3</sup>/min at 2 psig

### Dimensions

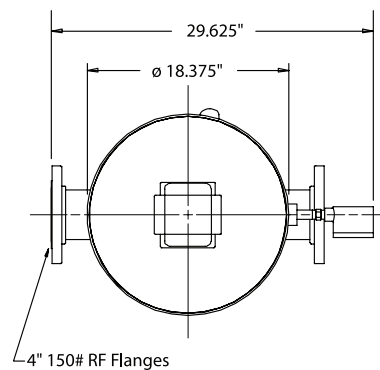
#### FRONT VIEW



#### Dimensions of 4" model shown

Consult the factory when certified engineering drawings are required. Dimensions shown are not suitable for construction or modifications.

#### TOP VIEW



### Part Numbers

#### A89501

3" 150# ANSI Flanged single head bulk plant air eliminator with optical sensor

#### A89541

4" 150# ANSI Flanged single head bulk plant air eliminator with optical sensor

#### A89561

6" 150# ANSI Flanged single head bulk plant air eliminator with optical sensor