



Bulk Plant Air Eliminators - Mechanical

Air Elimination for High Volume Applications



Benefits

- Protects positive displacement meters from excessive wear
- Assures accuracy by preventing air from being measured
- Low maintenance
- Extends the service life of the meter

Features

- Removes slugs of air from system
- Ideal for refined fuel offloading
- Available in 3", 4", and 6" single or dual head models

General Information

Liquid Controls Bulk Plant Air Eliminators improve metering accuracy in high volume refined fuel offloading applications. During offloading, air can enter become trapped inside the custody transfer system. If the trapped air is allowed to pass through the flowmeter's measuring chamber, the meter will measure the air as if it were product. The registered volume will be incorrect, and the error will become a permanent part of your inventory records. Bulk plant air eliminators remove air from high volume custody transfer systems before it can enter the measuring chamber and cause registration errors.

Single Head Bulk Plant Air Eliminators

Single Head Bulk Plant Air Eliminators consist of a large tank and a high mount air eliminator. The tank has a large cavity above the product flow where air trapped in the system can separate from the liquid naturally. The air is vented from the system through the high mount air eliminator. Single Head Bulk Plant Air Eliminators can be installed in systems with or without a differential valve.

Dual Head Bulk Plant Air Eliminators

Dual Head Bulk Plant Air Eliminators prevent large slugs of air, which can overwhelm Single Head Bulk Plant Air Eliminators, from passing through the meter system. Like single heads, dual heads use a high mount air eliminator to remove small pockets of air from the system. To remove large slugs of air from the system, dual heads are equipped with a low mount air eliminator. When a large slug of air enters the system, the low mount air eliminator opens a port, causing the differential valve—on the outlet side of the meter—to close and stop the product flow. Blocked from the meter's measuring chamber, the air slug separates from the liquid in the tank and is vented from the system. After the air slug is removed, the differential valve opens, and product flow resumes.

Dual Head Bulk Plant Air Eliminators can also lengthen the life of metering systems. When a differential valve closes at a high flow rate, the meter system receives a significant hydraulic shock. Repeated shocks of this nature can shorten the life of the metering system. Single Head Bulk Plant Air Eliminators—in systems with a differential valve—close the valve each time a small pocket of air is removed by the air eliminator. Dual Head Bulk Plant Air Eliminators remove small amounts of air through the high mount air eliminator without stopping the product flow, closing the valve only to remove large slugs of air.



Bulk Plant Air Eliminators - Mechanical

Specifications - Single Head

Sizes
3, 4, and 6"
8" and above also available - contact factory for details

Standard Material
Carbon Steel

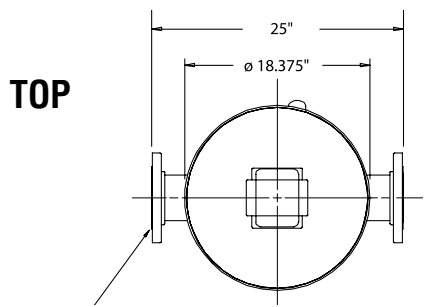
Standard Endittings
150# RF ANSI Flanged
Aluminum meters may require piping adaptation

Working Pressure
150 PSI

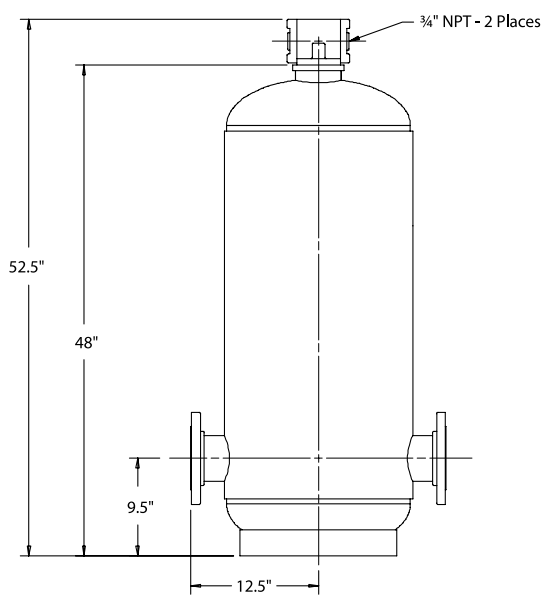
Temperature Range
-40 to 160° F (-40 to 71° C)

Air Elimination Rates
150 ft³/min at 8 psig or
88 ft³/min at 2 psig

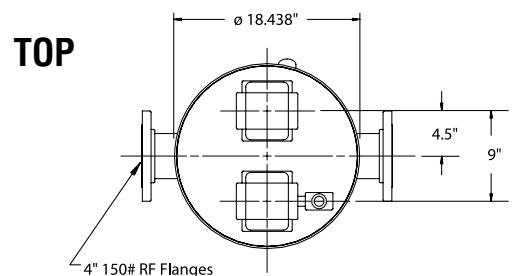
Dimensions - Single Head



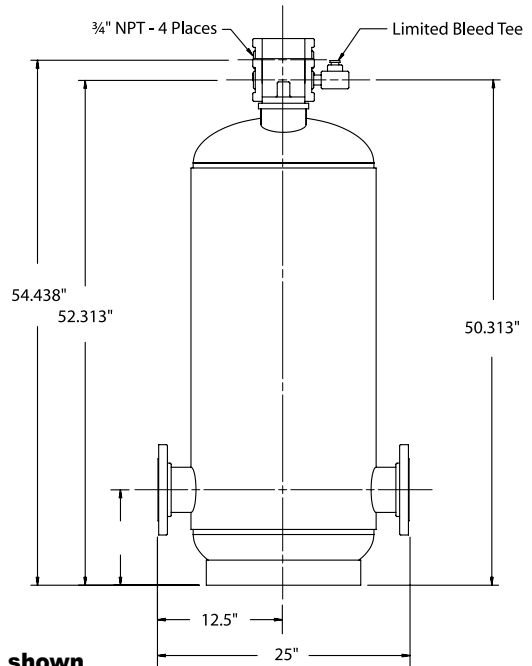
FRONT



Dimensions - Dual Head



FRONT



Dimensions of 4" model shown
Consult the factory when certified engineering drawings are required. Dimensions shown are not suitable for construction or modifications.

