



An Ovivo Company

## GAS CONTROL

### VAREC BIOGAS 248 Series CONDENSATE ACCUMULATOR

The Condensate Accumulator is designed to store large volumes of liquid condensed from biogas and allow the condensate to drain while preventing any gas from escaping.

#### Introduction

Biogas is usually hot and saturated when it leaves the digester. It continues to cool as it goes through the piping system causing water condensate to drop out. The removal of condensate from the biogas piping system is necessary to protect piping and equipment from possible damage caused by corrosion or water hammer.

The 248 Series Condensate Accumulator can store a significant amount of condensate. It is usually installed at the lowest point of the piping system.

#### Features

The simple design of the 248 Series permits easy and reliable maintenance and operation. The unit uses an internal drip leg and operates with a water seal under normal operating conditions. The height of the water seal should not expose the tip of the drip leg that is inside the vessel.

The drip leg is sized to prevent surges from expelling the liquid seal. As condensate from the gas is diverted to the accumulator, the drip leg will automatically drain the amount of condensate that is above the level of the water seal.

The drip leg exit connection must be properly piped using a tee to prevent syphoning. One end of the tee is to vent, and the other is to drain.

Two 1/2" NPT connections are provided for sight glass installation. It allows visual inspection of the water seal and condensate level during start-up and normal operation. A large 2-inch NPT blowout and drain connection is provided to remove entrained solids or sediment.



13 Gallon

#### Optional Accessories

##### Sight Glass

For a quick external check of the water seal and condensate level, a Varec Biogas Sight Glass should be specified for field installation. Varec Biogas Sight Glass assembly includes isolation and drain valves, glass and guard rods. The sight glass is supplied with stainless steel isolation valves, drain cock and guard rods.

##### Level Switch

316 SS wetted parts, SPST indication for high and low level indication.

#### Design Features

- Large Condensate Reservoir
- Simple Operation
- Optional Alarm Switches

**Specifications**

**Dimensions and Weights, inches [mm] and lbs. (kg)**

Size	13 Gal.	125 Gal.
<b>A</b>	49 [1245]	49 [1245]
<b>B</b>	43 1/4 [1099]	43 1/4 [1099]
<b>C</b>	19 [483]	42 [1067]
<b>D</b>	19 [483]	44 [1118]
Shipping Weight	100 (45)	250 (114)

**Inlet Connections**

4" 150 lbs. ANSI FF Flange Drilling Pattern

**Blow-Out or Drain Connections**

2" NPT

**Design Pressure**

35 psig (240 kPa)

**Maximum Operating Pressure**

20" WC (510mm WC)

**Materials of Construction**

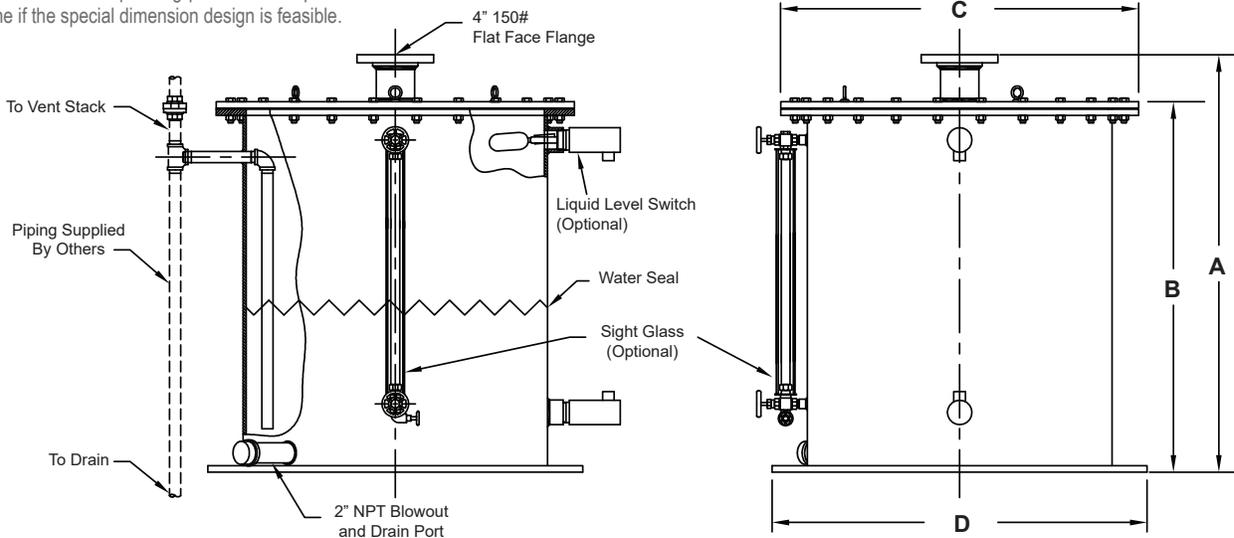
The Varec Biogas Model 248 Condensate Accumulator can be provided in the following materials of construction:

- Carbon Steel Construction with Epoxy Coated Internals and External Rust Inhibitive Primer Finish
- Stainless Steel

**Capacity**

13 Gallon [49 liters]  
125 Gallon [473 liters]

NOTE: Consult factory if special dimensions are required. The maximum operating pressure is required to determine if the special dimension design is feasible.



**Ordering Information**

Model	Description						
248	Condensate Accumulator						
	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>13 Gallons (49L)</td> </tr> <tr> <td>2</td> <td>125 Gallons (473L)</td> </tr> </tbody> </table>	Code	Size	1	13 Gallons (49L)	2	125 Gallons (473L)
Code	Size						
1	13 Gallons (49L)						
2	125 Gallons (473L)						
	<table border="1"> <thead> <tr> <th>Code</th> <th>Material of Construction</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Carbon Steel Construction with Epoxy Coated Internals and External Rust Inhibitive Primer Finish</td> </tr> <tr> <td>B</td> <td>316 Stainless Steel</td> </tr> </tbody> </table>	Code	Material of Construction	A	Carbon Steel Construction with Epoxy Coated Internals and External Rust Inhibitive Primer Finish	B	316 Stainless Steel
Code	Material of Construction						
A	Carbon Steel Construction with Epoxy Coated Internals and External Rust Inhibitive Primer Finish						
B	316 Stainless Steel						
	<table border="1"> <thead> <tr> <th>Code</th> <th>Sight Glass (Optional)</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>1/2" Sight Glass Assembly with SS Valves, SS Guard Rods &amp; Drain Cocks, PN: 2181-31</td> </tr> <tr> <td>3</td> <td>Not Required</td> </tr> </tbody> </table>	Code	Sight Glass (Optional)	2	1/2" Sight Glass Assembly with SS Valves, SS Guard Rods & Drain Cocks, PN: 2181-31	3	Not Required
Code	Sight Glass (Optional)						
2	1/2" Sight Glass Assembly with SS Valves, SS Guard Rods & Drain Cocks, PN: 2181-31						
3	Not Required						
	<table border="1"> <thead> <tr> <th>Code</th> <th>High / Low Level Switch</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>High &amp; Low Level Switch</td> </tr> <tr> <td>2</td> <td>Not Required</td> </tr> </tbody> </table>	Code	High / Low Level Switch	1	High & Low Level Switch	2	Not Required
Code	High / Low Level Switch						
1	High & Low Level Switch						
2	Not Required						

248 1 B 2 1 (Example)  
Example: 13 Gallon Condensate Accumulator, 316 SS Construction, Sight Glass Assembly and Level Switch Included.