Phase Separator

Pressure Adjustable

Stainless steel, vacuum jacketed vessels designed to store LN2 at user adjustable pressure and level.

**Phase Separator**

A Cryogas Phase Separator is used in specialized applications requiring extremely high quality, low pressure liquid nitrogen on demand, where precise temperature control at the end use point are required. Cryogas’s Phase Separator is a vacuum insulated reservoir holding tank for liquid nitrogen with a level sensor control system that operates a proportional inlet valve for level control. A one inch (1”) vent line with pressure control modulating vent valve allows the Phase Separator to maintain user’s required set pressure. Also, one can choose to use either StatiRigid, StatiFlex, or Dynaflex pipe to feed LN2 into the Phase Separator. Specialty triaxial pipe transports the pure LN2 from the Phase Separator to the application.

**Typical Applications**

- Test Handlers in IC Assembly and Test
- Environmental Chambers
- Bottling Lines and Packaging
- Food Freezing

**Features and Benefits**

- Consistent liquid nitrogen delivery, dramatically improving process control and efficiency.
- Available with 2 to 12 outlets.
- User friendly operator controls.
- Vacuum jacketed vessel for frost-free operation.
- Adjustable output pressure for all back pressure models.
- Digital display with liquid level and pressure readings.
# Phase Separator Specifications

<table>
<thead>
<tr>
<th>Materials</th>
<th>Operational Volume/Capacity</th>
<th>System Utilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless Steel Series 300</td>
<td>2 to 4 outlets: 5.8 gallons (22 liters)/10.5 gallons (40 liters)</td>
<td>Electricity: 80 - 240 VAC</td>
</tr>
<tr>
<td>Controller Dimensions</td>
<td>6 to 12 outlets: 12 gallons (46 liters)/21 gallons (80 liters)</td>
<td>Minimum GN₂</td>
</tr>
<tr>
<td>14&quot; H x 6.5&quot; D x 2.5&quot; W</td>
<td>Maximum Withdrawal Rate 29 gallons/minute</td>
<td>Pneumatic Valve Pressure 40 psig (2.7 bar)</td>
</tr>
<tr>
<td>Maximum Inlet Pressure</td>
<td></td>
<td>Certifications</td>
</tr>
<tr>
<td>150 psig (10 bar)</td>
<td></td>
<td>NEMA 4X, CE</td>
</tr>
<tr>
<td>Maximum Back Pressure</td>
<td></td>
<td>Options</td>
</tr>
<tr>
<td>87 psig (6 bar)</td>
<td></td>
<td>Custom sizes and ASME coded pressure vessels</td>
</tr>
<tr>
<td>Vessel MAWP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>175 psig (12 bar)</td>
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<td>No. of Outlets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 to 12</td>
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</tr>
<tr>
<td>Empty Condition</td>
<td>Maximum Back Pressure 87 psig (6 bar)</td>
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</tr>
<tr>
<td>60 - 85 lbs (27.2 - 38.6 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 - 163 lbs (45.4 - 73.9 kg)</td>
<td></td>
<td></td>
</tr>
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</table>

## Materials

- Stainless Steel Series 300

## Controller Dimensions

- 14" H x 6.5" D x 2.5" W

## Maximum Inlet Pressure

- 150 psig (10 bar)

## Maximum Back Pressure

- 87 psig (6 bar)

## Vessel MAWP

- 175 psig (12 bar)

## No. of Outlets

- 2 to 12

## Operational Volume/Capacity

- 2 to 4 outlets: 5.8 gallons (22 liters)/10.5 gallons (40 liters)
- 6 to 12 outlets: 12 gallons (46 liters)/21 gallons (80 liters)

## Maximum Withdrawal Rate

- 29 gallons/minute

## Weight

- Empty Condition: 60 - 85 lbs (27.2 - 38.6 kg)
- Full Condition: 100 - 163 lbs (45.4 - 73.9 kg)

## System Utilities

- Electricity: 80 - 240 VAC
- Minimum GN₂: 40 psig (2.7 bar)

## Certifications

- NEMA 4X, CE

## Options

- Custom sizes and ASME coded pressure vessels

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**Phase Separator C-22 / C-42 Dimension**

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<tr>
<th>Operational Volume/Capacity</th>
<th>System Utilities</th>
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<tbody>
<tr>
<td>2 outlets</td>
<td></td>
</tr>
<tr>
<td>8 outlets</td>
<td></td>
</tr>
</tbody>
</table>

**Materials**

- Stainless Steel Series 300

**Controller Dimensions**

- 24" x 12" x 12"

**Maximum Inlet Pressure**

- 150 psig (10 bar)

**Maximum Back Pressure**

- 87 psig (6 bar)

**Vessel MAWP**

- 175 psig (12 bar)

**No. of Outlets**

- 2 to 12

**Weight**

- Empty Condition: 60 - 85 lbs (27.2 - 38.6 kg)
- Full Condition: 100 - 163 lbs (45.4 - 73.9 kg)

**Maximum Withdrawal Rate**

- 29 gallons/minute

**System Utilities**

- Electricity: 80 - 240 VAC
- Minimum GN₂: 40 psig (2.7 bar)

**Certifications**

- NEMA 4X, CE

**Options**

- Custom sizes and ASME coded pressure vessels

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**Visit our website at:** www.cryogas.asia