Chart's ADF105 is a manual start, automatic shut off liquid nitrogen dewar filling station for standard (160 liter - 240 liter) dewars (liquid cylinders). The ADF105 uses cryogenic sensors to detect a "full" condition. Once full, dual cryogenic valves shut off the fill cycle maintaining the fill pressure inside the liquid cylinder. The liquid cylinder is ready for immediate use.

The ADF105 system is suitable for indoor and outdoor* installations. It is designed to fill portable low pressure (max 125 psi) liquid nitrogen cylinders from a piping system or bulk tank.

* It should not be in direct exposure to the elements. A cover or similar canopy should be used.

**Features**

- **Small footprint** – no large, bulky scale required to fill liquid cylinders
- **Robust, cryogenic sensing** – faster, safer, and more reliable fill sensing technology to automatically shut off the fill cycle
- **High pressure feed** – 125 psi (8.6 bar) inlet pressure
- **Easy, single button operation** – no multi-step process or re-calibration required to activate a fill. Push the button, walk away, and come back to a full liquid cylinder
- **Vent safety interlock** – vent lines must be properly installed on the liquid cylinder before the system will initiate a fill
- **Indoor or outdoor installation** – fill liquid cylinders where it is most convenient
- **2 year warranty** – rigorously tested and proven components ensure reliable service

**Key Benefits**

- **Eliminate Waste** – no more overfilling or loss of product with other filling methods
- **Increase Employee Safety** – create a safer work environment with max fill shut off timer, vent safety interlock, and security key switch features
- **Create Labor Efficiencies** – unattended filling eliminates wasted labor and downtime
- **Exponential Cost Savings** – control your costs with onsite, facility resources

ADF105™ Automatic Dewar Filling Station

ADF105 Controller
**ADF105 Technical Specifications**

<table>
<thead>
<tr>
<th>Fabrication</th>
<th>Exterior Case: Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electrical Enclosure: Weather Tight</td>
</tr>
<tr>
<td>Utilities</td>
<td>Electrical: Single phase 115v/3 amps, Optional 220v/1.5 amps</td>
</tr>
<tr>
<td>Certifications</td>
<td>NEMA 4X, CE</td>
</tr>
<tr>
<td>Specifications</td>
<td>Weight: 54 lbs (24.49 kg)</td>
</tr>
<tr>
<td></td>
<td>Dimensions: 26&quot; L x 15&quot; H x 10&quot; D (660.4 x 381 x 254 mm)</td>
</tr>
<tr>
<td></td>
<td>Min/Max operating pressure: 22-125 psi (1.5-8.6 bar)</td>
</tr>
<tr>
<td>Additional Components</td>
<td>Two 4' non-vacuum insulated flex hoses</td>
</tr>
</tbody>
</table>

**ADF105 Dimensions**

**ADF105 Diagram**

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**Your Local Representative**

Chart Inc.
46441 Landing Parkway • Fremont, CA 94538
Phone +1 800.371.3303 • Fax +1 408.577.1567 • Service +1 408.371.4932
www.chartindustries.com
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