F.S.2650® Manway Covers:
High flow rate venting simplified

F.S.2650® MANWAY COVERS:
Maximum Flow For Pneumatic-Filled Tanks.

Poly’s F.S.2650® combined manway and vent allows for unsurpassed tank venting. It is capable of relieving a volume flow rate of up to 2650 ACFM. When considering 2” & 3” fill connections are the most common sizes for pneumatic-filled tanks, the F.S. 2650® supplies a Factor of Safety (FS) of 2.9 on a 2” hose to 2” inlet pipe (910 ACFM) and a FS of 2.3 on a 3” hose to 2” inlet pipe (1120 ACFM). * Designed specifically for applications where fumes aren’t a concern. F.S.2650®:

- Is a cost effective combined vent and manway.
- Effective flow rates > 8” mechanical fitting.
- Includes a PE bug screen.
- Is available for 24-inch manways.

*Calculations for volume flow rates based on independent study to identify proper venting for PE tanks found on Poly Processing’s website.
VENTING REQUIREMENTS FOR POLYETHYLENE TANKS

**Mechanical Pump Fill**
- **IF ≤ 1,000 gallons**
  - Vent size should equal size of largest fill or discharge fitting
  - Maintain vent screen mesh size ≥ ¼” or no screen used
  - Emergency Pressure Relief Cover Required
- **IF > 1,000 gallons**
  - Vent size should exceed the largest fill or discharge fitting by 1”

**Pneumatic Fill**
- **IF – Vent length ≤ 3’**
  - Maintain vent screen mesh size ≥ ¼” or no screen used
  - Emergency Pressure Relief Cover Required
- **IF – Vent length > 3’ and ≤ 30’**
  - 3 or less 90° elbows with no other restrictions or reduction in pipe size
  - Emergency Pressure Relief Cover Required
- **IF – Scrubber application**
  - Vent pipe size throughout scrubber system CANNOT be reduced!
  - Centerline of dispersion pipe not to be submersed > 6”
  - Perforated dispersion pipe must be same diameter as vent or larger. Sum of perforations ≥ cross-sectional area of pipe

### Tanker Discharge - Inlet/Fitting Size - Minimum Vent Size

<table>
<thead>
<tr>
<th>Tanker Discharge</th>
<th>Inlet/Fitting Size</th>
<th>Minimum Vent Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2”</td>
<td>2”</td>
<td>4”</td>
</tr>
<tr>
<td>3”</td>
<td>2”</td>
<td>6”</td>
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</tr>
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### Minimum Vent Size

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</tr>
<tr>
<td>3”</td>
<td>8”</td>
</tr>
<tr>
<td>3”</td>
<td>10”</td>
</tr>
</tbody>
</table>

*Venting chart based on recommendation and criteria from Venting Design for ACFM Technical Paper*

**See our website for Detailed Venting Guidelines.**