FLUOR-O-FLO®
Nozzle Liners

Solid Virgin PTFE

• Complete Protection
Use our liners to protect nozzles of glass lined vessels:
• Prevent chipping from insertion and use of dip pipes, spargers, instrumentation, or dropped or mishandled tools
• Reduce scaling and buildup of solids.

Also use our liners to protect surfaces of unlined nozzles or tanks from corrosive fluids, abrasive slurries, or erosive high velocity fluid streams.

And you can use them to line bellows type expansion joints and flexible couplings:
• Eliminate erosion of bellows convolutes and of the rounded corners at I.D. of flared ends
• Eliminate caking and buildup of solids in convolutes.

• Widest Range of Sizes
Standard product line includes nominal sizes up to 18”, in the length you need.

We can also custom make virtually any special size you need to meet the widest range of requirements:
• Nonstandard diameters
• Heavy wall thicknesses
• Full face flanges.

For worksheet, see reverse side.

Nozzle Size
Standard liners fit nozzles from 1/2” to 18” pipe size. Special sizes available on request.

Length
Up to 4” nominal pipe size, lengths available to 15 feet. Over 4” nominal size, lengths available to 30’.

Flange Diameter
Minimum diameter of flange of standard liners corresponds to the raised face of ANSI Class 150 flanges. Full face or other special flange diameters available on request.

Thickness
Wall thickness of standard liners increases with liner size, from a minimum of 1/16” wall up to 1/4” wall. Nonstandard wall thickness available on request. Seal thickness equal to wall thickness standard, other seal thicknesses available on request.

End
Square cut end is standard. Diagonal cut available on request.
# Nozzle Liner Worksheet

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Sleeve O.D. (smaller than the nozzle I.D. by 1/8&quot; or more)</td>
<td>(max.—18&quot; pipe size)</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Sleeve wall thickness</td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Sleeve length (excluding flange)</td>
<td>(max.—30&quot;)</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>Flange O.D.</td>
<td>(max.—21&quot;)</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>Flange thickness</td>
<td></td>
</tr>
</tbody>
</table>

**Optional Data:**

- **F** Diagonal cut  
  - or -  
- **G** Diagonal angle