**Largest Free Passage**

**DESIGN FEATURES**
- Largest free passage in the original spiral nozzle invented by BETE and continuously improved!
- Passes particles equal to orifice size
- Clog-resistant
- One-piece, extra heavy construction
- High energy efficiency
- Male connection

**SPRAY CHARACTERISTICS**
- Wide range of flow rates
- Fine atomization

**Spray pattern:** Full Cone
   (Hollow Cone available by special order)

**Spray angles:** 90° and 120°

**Flow rates:** 3.0 to 3320 gpm

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**DESIGN FEATURES**

<table>
<thead>
<tr>
<th>Male Pipe Size</th>
<th>Nozzle Number</th>
<th>K Factor</th>
<th>10 PSI</th>
<th>20 PSI</th>
<th>30 PSI</th>
<th>40 PSI</th>
<th>50 PSI</th>
<th>60 PSI</th>
<th>80 PSI</th>
<th>100 PSI</th>
<th>200 PSI</th>
<th>400 PSI</th>
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<tbody>
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<td>3/8</td>
<td>TF12</td>
<td>0.949</td>
<td>3.00</td>
<td>4.24</td>
<td>5.20</td>
<td>6.00</td>
<td>6.71</td>
<td>7.35</td>
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<td>9.49</td>
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<td>19.0</td>
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<td>4.05</td>
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<td>52.2</td>
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</table>

**Spray Pattern:**
- 90° spray angle
- Full Cone
- 120° spray angle
- Wide range of flow rates

**Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.**

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**TFXP Flow Rates and Dimensions**

**Full Cone, 90° (XPN) and 120° (XP) Spray Angles, 3/8" to 4" Pipe Sizes**

**Flow Rate (GPM) = K / PSI**

**Free passage is 1.5" by BETE and approximate. Check with BETE for critical dimension application.**

**Standard Materials:** Brass, 316 Stainless Steel, PVC, Polypropylene, Cobalt Alloy 6, and PTFE.

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