**SF**

**Snap Release Nozzle System**

**DESIGN FEATURES**
- Nozzles can be quickly changed and aligned by hand without tools
- Clamp-on adapter fits any style nozzle
- Quick set-up system features special “Snap-in” tips
- Polypropylene, resistant to most acids and alkalis
- Double clamp base or adapter available for higher pressure operation

**SPRAY CHARACTERISTICS**
- Quick Set-up System can be provided with fan, hollow or full cone spray tips
- Full 45° alignment of spray without tools

**More SF Nozzle Systems:**
- Hollow Cone: page 48
- Flat Fan: page 68

**Flow rates:** 1.61 to 75.6 l/min
**Spray angles:**
- **Full Cone:** 35°, 65°, 80°

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**CLAMP-ON ADAPTER**
- Available for 1”, 1-1/4”, 1-1/2” and 2” pipe.
- Available with 1/8”, 1/4”, 3/8”, 1/2” NPT female threads; or 1/8” BSP female threads
- Available with single or double clamp.
- TO ORDER ADAPTER Specify: Pipe Size, thread size, thread type, number of clamps, materials.

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**SF Flow Rates and Dimensions**

**SF Full Cone 35°, 65° and 80° Spray Angles 1”, 1-1/4”, 1-1/2” and 2”**

<table>
<thead>
<tr>
<th>Nozzle Number</th>
<th>Available Spray Angle</th>
<th>K Factor</th>
<th>0.5 bar</th>
<th>0.7 bar</th>
<th>1 bar</th>
<th>2 bar</th>
<th>3 bar</th>
<th>5 bar</th>
<th>7 bar</th>
<th>10 bar</th>
<th>Pipe Size</th>
<th>Body Color A</th>
<th>Body Color B</th>
<th>Approx Dim. (mm)</th>
<th>Wt. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF31FC</td>
<td>35°</td>
<td>7.596</td>
<td>5.45</td>
<td>6.40</td>
<td>7.60</td>
<td>10.6</td>
<td>12.9</td>
<td>16.4</td>
<td>19.3</td>
<td>22.9</td>
<td>1&quot;</td>
<td>blue</td>
<td>83.8</td>
<td>43.2</td>
<td>62.4</td>
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<td>5.63</td>
<td>6.62</td>
<td>7.86</td>
<td>11.0</td>
<td>13.3</td>
<td>17.0</td>
<td>20.0</td>
<td>23.7</td>
<td>1-1/4&quot;</td>
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<td>86.4</td>
<td>48.3</td>
<td>62.4</td>
</tr>
<tr>
<td>SF102FC</td>
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<td>25.0</td>
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<td>42.4</td>
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<td>63.7</td>
<td>75.6</td>
<td>1-1/2&quot;</td>
<td>purple</td>
<td>91.4</td>
<td>50.8</td>
<td>62.4</td>
</tr>
<tr>
<td></td>
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<td>2&quot;</td>
<td>green</td>
<td>94.0</td>
<td>55.9</td>
<td>62.4</td>
</tr>
</tbody>
</table>

*Flow Rate (l/min) = K (bar)\(^{0.48}\)*

Standard Materials: Polypropylene, 302 Stainless Steel clamp, EPDM seal.
Optional Materials: 303 Stainless Steel clamp, Viton seal.

**NOTE:** Drill 16.7mm (21/32”) hole in pipe to install SF.
**NOTE:** Maximum recommended pressures for SF assemblies: With single clamp 5 bar for 1" pipe; 3.5 bar for 1-1/4" and 1-1/2" pipe; and 2 bar for 2” pipe; with double clamp up to 10 bar.

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

www.BETE.com
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**More SF Nozzle Systems:**
- Full Cone: page 31
- Flat Fan: page 68

**Flow Rates:** 2.42 - 72.1 l/min

**Spray Angles:**
- Fan: 40°, 50°, 65°, 80°, 95°
- Hollow Cone: 50°, 65°, 90°
- Full Cone: 35°, 65°, 80°

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**SF Flow Rates and Dimensions**

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<th>5 bar</th>
<th>7 bar</th>
<th>10 bar</th>
</tr>
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<tbody>
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<td>13.2</td>
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<td>22.9</td>
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<td>19.1</td>
<td>22.8</td>
<td>32.2</td>
<td>39.5</td>
<td>51.0</td>
<td>60.3</td>
<td>72.1</td>
</tr>
</tbody>
</table>

**Flow Rate (l/min) = K \sqrt{\text{bar}}**

**Standard Materials:** Polypropylene, 302 Stainless Steel clamp, EPDM seal.

**Optional Materials:** 303 Stainless Steel clamp, Viton seal.

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Full Cone: page 31
Hollow Cone: page 48

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Snap Release Nozzle System

SF Flow Rates and Dimensions

SF Fan 40°, 50°, 65°, 80° and 90° Spray Angles 1”, 1-1/4”, 1-1/2” and 2”

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<th>Nozzle Number</th>
<th>Available Spray Angles</th>
<th>K Factor</th>
<th>0.5 bar</th>
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<th>1 bar</th>
<th>2 bar</th>
<th>3 bar</th>
<th>5 bar</th>
<th>7 bar</th>
<th>10 bar</th>
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</thead>
<tbody>
<tr>
<td>SF10</td>
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<td>2.277</td>
<td>1.61</td>
<td>1.91</td>
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<td>3.22</td>
<td>3.94</td>
<td>5.09</td>
<td>6.03</td>
<td>7.20</td>
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<tr>
<td>SF20</td>
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<td>4.556</td>
<td>3.22</td>
<td>3.81</td>
<td>4.55</td>
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<td>6.832</td>
<td>4.83</td>
<td>5.72</td>
<td>6.83</td>
<td>9.66</td>
<td>11.8</td>
<td>15.3</td>
<td>18.1</td>
<td>21.6</td>
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<tr>
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<td>7.62</td>
<td>9.11</td>
<td>12.9</td>
<td>15.8</td>
<td>20.4</td>
<td>24.1</td>
<td>28.8</td>
</tr>
<tr>
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<td>8.06</td>
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<td>16.1</td>
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<td>25.5</td>
<td>30.2</td>
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<td>16.1</td>
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<td>39.4</td>
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</table>

Flow Rate (l/min) = \( K \sqrt{\text{bar}} \)

LITERS PER MINUTE @ BAR

<table>
<thead>
<tr>
<th>Approx. Orifice Dia. (mm)</th>
<th>Pipe Size</th>
<th>Body Color</th>
<th>Pipe O.D. (mm)</th>
<th>Approx. Dim. (mm)</th>
<th>Wt. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>1”</td>
<td>blue</td>
<td>33.40</td>
<td>83.8</td>
<td>43.2</td>
</tr>
<tr>
<td>2.8</td>
<td>1-1/4”</td>
<td>red</td>
<td>42.16</td>
<td>86.4</td>
<td>48.3</td>
</tr>
<tr>
<td>3.6</td>
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<td>91.4</td>
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<tr>
<td>4.0</td>
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<td>green</td>
<td>60.33</td>
<td>94.0</td>
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