Pneumatic atomizing nozzles

Atomization of viscous liquids
Cooling
Gas cooling
Humidification of air
Humidification of goods
Lubrication
Web dampening
and many others...
Pneumatic atomizing nozzles are available in various designs to generate specific spray and flow requirements:

- Pressure principle (supply from a pressurized source)
- Gravity principle (supply located above the nozzle)
- Siphon principle (self-aspirating)
- Internal or external mix
- Full cone or flat fan spray pattern
- Optional pneumatic valve (with Series 136) or standard pneumatic valve (on Series 176)

The Series 136 atomizing nozzles have a number of optional nozzle control attachments which can be used to adjust the liquid flow; affect droplet size; flush the nozzle (to prevent clogging); or control on-off operation of the flow. These accessories are listed on page 53.

Criteria for selecting pneumatic atomizing nozzles

1. Spray pattern

Pneumatic flat fan atomizing nozzles are appropriate for humidifying and cooling of product, for web dampening, or for whenever a broad linear coverage is required (such as applying paint or food toppings). Pneumatic full cone atomizing nozzles are appropriate when circular impact or coverage is required (such as for fluid injection into a duct or pipe).

2. Liquid supply source

Whenever liquid can be supplied under pressure, it is most appropriate to use nozzles which function by the liquid pressure principle. Use of pneumatic atomizing nozzles operating by the siphon or gravity principle is more appropriate when liquid is to be sprayed in very low quantities (such as spraying disinfectants) and little pressure is required.

3. Internal vs. external mix

In pneumatic nozzles, the supply of air or gas mixes with the liquid flow, breaking up the fluid into the smallest droplet particles, either inside (internal mix) or outside (external mix) the nozzle chamber. An internal mix nozzle is appropriate when water, low viscosity liquids, or liquids without solid matter are to be atomized. An external mix nozzle is more appropriate for atomizing viscous liquids which might otherwise tend to clog the nozzle. Low liquid pressures should be used with this type of nozzle due to its design.

4. Style of nozzle

Series 136 nozzles (AirMists) are most appropriate when there is a need to finely atomize low viscous fluids, such as water. These are also able to have any of the various attachments on page 53 applied to them. This includes the pneumatic valve, which can separately and remotely control on-off operations, especially when intermittent spraying is required. Series 176 nozzles (ViscoMists) are external mix nozzles only and are most appropriate for spraying more viscous fluids (such as syrups and heavy oils) than AirMists are designed for.

Series 166 AirMists include a solenoid for electronic activation of the nozzle through operation of a needle valve. This could be more appropriate if metered air is limited.

Lechler also offers additional atomizing nozzles which are not featured in this catalog. Please refer to page 59 for more information on the 150, 166, 170, 171 and 180 (Supersonic) series of Pneumatic atomizing nozzles.
AirMist pneumatic atomizing nozzles

Full cone, pressurized liquid supply, internal mix

Series 136.1

Fine full cone atomization and fogging with air or gas. Liquid pressure principle. Internal mixing of fluids.

Applications:
- Humidification of air
- Cooling

Example Type + Material no. (xx) = Ordering no.


For accessories for series 136, please refer to page 53.

Ordering no. Liquid Flow GPH (Gallons Per Hour) at Indicated Liquid Pressure
Air Flow SCFM (Standard Cubic Feet Per Minute)

<table>
<thead>
<tr>
<th>Type</th>
<th>Mat. no.</th>
<th>Maximum Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(in.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D2</td>
</tr>
</tbody>
</table>

For accessories and spare parts, see page 53 of this section.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

Additional flow rate data available upon request. The body is also available in a rectangular design.
AirMist pneumatic atomizing nozzles
Wide full cone, pressurized liquid supply, internal mix
Series 136.2

Fine full cone atomization and fogging with air or gas. Especially wide spray angle at 60°.

Applications:
• Humidification of air
• Cooling

Additional flow rate data available upon request. The body is also available in a rectangular design.

For accessibility and spare parts, see page 53 of this section.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.
AirMist pneumatic atomizing nozzles
Full cone, gravity/siphon liquid supply, external mix
Series 136.3

Particularly fine full cone atomization with air or gas. Siphon principle. External mixing of fluids.

Applications:
• Chemical industry
• Cooling
• Atomization of viscous liquids

Example Type + Material code (xx) = Ordering no.

<table>
<thead>
<tr>
<th>Spray angle</th>
<th>20°</th>
<th>26°</th>
<th>35°</th>
<th>46°</th>
<th>70°</th>
<th>87°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mat. no.</td>
<td>.016</td>
<td>.028</td>
<td>.028</td>
<td>.059</td>
<td>.098</td>
<td></td>
</tr>
<tr>
<td>Maximum Free Passage</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Air Pressure</td>
<td>Air Capacity</td>
<td>Gravity Head</td>
<td>Siphon Height</td>
<td>6&quot;</td>
<td>12&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>psi</td>
<td>SCFM</td>
<td>20</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>.36</td>
<td>.35</td>
<td>30</td>
<td>.25</td>
<td>.17</td>
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<td>20</td>
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<td>.40</td>
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<td>.31</td>
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<td>29</td>
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<td>.47</td>
<td>.35</td>
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<td>32</td>
<td>.52</td>
<td>.55</td>
<td>.52</td>
<td>.44</td>
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<td>70</td>
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<td>.59</td>
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<td>.52</td>
<td>.55</td>
<td>.52</td>
<td>.41</td>
<td>.40</td>
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<tr>
<td>12</td>
<td>20</td>
<td>1.5</td>
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<td>1.0</td>
<td>.93</td>
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<td>1.4</td>
<td>1.3</td>
<td>1.1</td>
<td>1.0</td>
<td>.93</td>
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<td>35</td>
<td>41</td>
<td>1.5</td>
<td>1.7</td>
<td>1.8</td>
<td>1.3</td>
<td>1.2</td>
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<tr>
<td>46</td>
<td>32</td>
<td>1.5</td>
<td>1.7</td>
<td>1.9</td>
<td>1.3</td>
<td>1.2</td>
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<tr>
<td>70</td>
<td>45</td>
<td>1.7</td>
<td>1.7</td>
<td>1.8</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>87</td>
<td>55</td>
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<td>1.5</td>
<td>1.6</td>
<td>1.3</td>
<td>1.2</td>
</tr>
</tbody>
</table>

For accessories for series 136, please refer to page 53.

For accessories and spare parts, see page 53 of this section. For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

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AirMist pneumatic atomizing nozzles
Wide flat fan, pressurized liquid supply, internal mix
Series 136.4

Particularly fine flat fan atomization with air or gas. Liquid pressure principle. Internal mixing of fluids.

Applications:
• Web dampening
• Cooling
• Humidification of goods

Example Type + Material no. (xx) =   Ordering no.

For accessories and spare parts, see page 53 of this section.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

For accessories for series 136, please refer to page 53.
AirMist pneumatic atomizing nozzles
Wide flat fan, pressurized liquid supply, internal mix
Series 136.4

<table>
<thead>
<tr>
<th>Spray angle</th>
<th>Type</th>
<th>Mat. no.</th>
<th>Liquid Flow GPH (Gallons Per Hour) at Indicated Liquid Pressure</th>
<th>Air Flow SCFM (Standard Cubic Feet Per Minute)</th>
<th>Spray Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>60°</td>
<td>136.425. xx. B2</td>
<td>0.020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>5.0</td>
<td>23</td>
<td>26</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>2.3</td>
<td>3.4</td>
<td>29</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>2.0</td>
<td>4.1</td>
<td>32</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>1.1</td>
<td>4.9</td>
<td>35</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>0.6</td>
<td>5.8</td>
<td>38</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>0.3</td>
<td>6.1</td>
<td>41</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>136.452. xx. B2</td>
<td>0.059</td>
<td></td>
<td></td>
<td></td>
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<td>15</td>
<td>3.1</td>
<td>1.2</td>
<td>26</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>2.1</td>
<td>1.4</td>
<td>29</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>1.4</td>
<td>1.6</td>
<td>32</td>
<td>3.2</td>
</tr>
<tr>
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<td>23</td>
<td>0.9</td>
<td>1.9</td>
<td>35</td>
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<td></td>
<td>38</td>
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<td>67</td>
<td>3.3</td>
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<td></td>
<td>44</td>
<td>1.2</td>
<td>2.9</td>
<td>78</td>
<td>1.7</td>
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</tbody>
</table>

Example Type + Material no. (xx) = Ordering no.

For accessories and spare parts, see page 53 of this section.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.
AirMist pneumatic atomizing nozzles
Wide flat fan, gravity/siphon liquid supply, internal mix
Series 136.5

Particularly fine flat fan atomization with air or gas.
Siphon principle.
Internal mixing of fluids.

Applications:
- Web dampening
- Cooling
- Humidification of goods

For accessories and spare parts, see page 53 of this section.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.
AirMist pneumatic atomizing nozzles
Flat fan, pressurized liquid supply, external mix
Series 136.6

Fine flat fan atomization with air or gas.
Liquid pressure principle.
External mixing of fluids.

Applications:
• Web dampening
• Cooling
• Humidification of goods
• Atomization of viscous liquids

Series 136.6

Weight brass: 0.44 lb.

Additional flow rate data available upon request. The body is also available in a rectangular design.

For accessories and spare parts, see page 53 of this section.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

continued on next page.
### AirMist pneumatic atomizing nozzles
Flat fan, pressurized liquid supply, external mix
Series 136.6

#### Example Type + Material no. (xx) =  Ordering no.

<table>
<thead>
<tr>
<th>Type</th>
<th>Mat. no.</th>
<th>Ordering no.</th>
<th>Liquid Flow GPH (Gallons Per Hour) at Indicated Liquid Pressure</th>
<th>Air Flow SCFM (Standard Cubic Feet Per Minute)</th>
<th>Spray Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 psi GPH</td>
<td>SCFM</td>
<td>2 psi GPH</td>
</tr>
<tr>
<td>60°</td>
<td>136. 626. xx. B2</td>
<td>o o .016</td>
<td>12 .48</td>
<td>1.7</td>
<td>12 .66</td>
</tr>
<tr>
<td></td>
<td>136. 645. xx. B2</td>
<td>o o .020</td>
<td>12 .72</td>
<td>1.7</td>
<td>12 .97</td>
</tr>
<tr>
<td></td>
<td>136. 664. xx. B2</td>
<td>o o .028</td>
<td>12 .72</td>
<td>1.6</td>
<td>15 .20</td>
</tr>
<tr>
<td></td>
<td>136. 673. xx. B2</td>
<td>o o .039</td>
<td>15 .38</td>
<td>4.5</td>
<td>20 .49</td>
</tr>
<tr>
<td></td>
<td>136. 682. xx. B2</td>
<td>o o .059</td>
<td>15 .59</td>
<td>4.4</td>
<td>20 .76</td>
</tr>
<tr>
<td></td>
<td>136. 691. xx. B2</td>
<td>o o .089</td>
<td>26 .13</td>
<td>9.6</td>
<td>35 .17</td>
</tr>
</tbody>
</table>

For accessories and spare parts, see page 53 of this section.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

### Diagram
- **A1**: Liquid supply line
- **A2**: Control air for pneumatic valve
- **A3**: Atomizing air supply line
- **1**: Pneumatically controlled valve
- **2**: AirMist pneumatic atomizing nozzle

Cereal dampening in a mixing drum
Regulating device and shut-off needle:
Shuts off flow and controls liquid supply — manually operated

Regulating device with quick-cleaning needle:
Combines orifice cleaning with liquid flow control — manually operated

Quick-cleaning device:
Does orifice cleaning with push-button pin — manually operated

Pneumatically controlled valve:
Opening pressure 30 psi, max. 180 cycles/min. Connects to separate air inlet for fast on/off operation — externally controlled

1A

Lockring for series 136/166
3A

095. 015. 7A. 03. 04
seal

for series 136

136. 000. 1Y. 00. 04
Locking plug
1E
for series 136/166
Locking plug
136. 000. 1Y. 00. 07

1B

UNEF 9/16"-24
Hex 11/16” AF

Locking plug
1E
for series 136/166

Locking plug
136. 000. 1Y. 00. 07

1C

UNEF 5/16"-24

Locking plug
1E
for series 136/166

Locking plug
136. 000. 1Y. 00. 07

1D

Weight: .07 lb.

Weight: .17 lb.

Weight: .12 lb.

Weight: .27 lb.

For all 136 series nozzles

<table>
<thead>
<tr>
<th>Assembly part no.</th>
<th>Mat. no.</th>
<th>Use the 6th digit to determine appropriate accessory</th>
<th>Needle diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>303 SS</td>
<td>16</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
<tr>
<td>303 SS</td>
<td>35</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
<tr>
<td>303 SS</td>
<td>016</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
<tr>
<td>303 SS</td>
<td>012</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
<tr>
<td>303 SS</td>
<td>016</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
<tr>
<td>303 SS</td>
<td>012</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
<tr>
<td>303 SS</td>
<td>016</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
<tr>
<td>303 SS</td>
<td>012</td>
<td>Example: 136.4141YB2</td>
<td>.085</td>
</tr>
</tbody>
</table>

Example for ordering:
013. 602. xx. 20 + 16 = 013. 602. 16. 20

Nozzle tips*:
Series 136.1/166.1
136. xxx. 1Y. 00. 03
Series 136.2/166.2
136. xxx. 1Y. 00. 03
Series 136.3/166.3
136. xxx. 1Y. 00. 03
Series 136.4/166.4
136. xxx. 1Y. 00. 03
Series 136.5/166.5
136. xxx. 1Y. 00. 03
Series 136.6/166.6
136. xxx. 1Y. 00. 03

Example:
136.41417B2

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* Use the 3 digits from the full nozzle assembly for the spare tip part number

Example:
136.41417B2

Example:
136.41417B2
Pneumatic atomizing nozzles
ViscoMist™ flat fan, external mix
Series 176

Versatile design with built-in pneumatic needle valve for liquid flow control and automatic clean-out. Three nozzle body configurations offer flexible tailoring to your specific application needs. Models feature individual controls for on-off operation, atomizing air, and fan air, allowing adjustments to droplet size and spray pattern as appropriate without compromising required flow. Has been newly redesigned for greater anti-bearding.

Applications:
- Spraying viscous fluids
- Coating
- Glazing
- Sanitizing
- Humidification
- Recirculating liquids

All nozzle inlet connections: 1/8” female NPT

The ViscoMist™ has greatly minimized the following problem, but it is still a situation to be aware of:

Bearding/Caking
- What is it—Build-up of material around the inside or outside of the orifice due to evaporation of the liquid being sprayed. This dried solid material blocks all or part of the nozzle orifice or internal flow passages.
- Symptoms
  - Reduced flow rate
  - Reduced spray angle
  - Irregular spray pattern
- Solution—Thoroughly clean nozzle, if necessary, using cleaners and solvents which will not affect the nozzle material.

Description of inlet ports and their symbols
The ViscoMist™ has three Nozzle Body styles available. For all styles, next to each inlet port on the nozzle is stamped one or more letters representing the spray aspect(s) that port controls. These spray aspects and the letter representing each are as follows:

**Atomizing Air (A)**
The Atomizing Air Port influences the atomization of the liquid into either small or large droplet sizes, simultaneously affecting spray distribution in the center of the spray pattern. To achieve finer liquid atomization, increase the atomizing air pressure.

**Fan Air (F)**
The Fan Air Port flattens the atomized liquid, thus giving it a flat fan spray distribution. With the appropriate nozzle body configuration, this distribution can be adjusted independently to control the liquid spray width. To achieve a wider spray distribution, increase the fan air pressure.

**Liquid (M)**
The liquid flow rate is directly proportional to the liquid pressure rate. Subsequently, the higher the liquid pressure rate is, the higher the liquid flow rate will be. The liquid “On” or “Off” cycle is dependent on the Piston-controlled Signal Air supply.

**Signal Air (P)**
Air supplied to this port actuates a piston located within the nozzle to retract or extend the Clean-Out/Liquid Shut-Off Needle. Retracting the needle allows the liquid to flow from the nozzle. A minimum of 40 psi air pressure to this port is required to operate the nozzle.

**Nozzle Body 4**
This configuration has four process connections: one for liquid, and three for air. One air connection controls atomizing air, one controls fan air, and the third controls signal air for on-off operations, so each aspect can be individually adjusted. Therefore, atomizing air can be set at less than 40 psi if desired without affecting the on-off operation, for instance.

For ViscoMist replacement kits, see page 58.
## Pneumatic Atomizing Nozzles
### ViscoMist Flat Fan, External Mix
#### Series 176

<table>
<thead>
<tr>
<th>Nozzle Body Configuration</th>
<th>Ordering no.</th>
<th>Liq. Capacity*</th>
<th>Air Capacity*</th>
<th>Spray Coverage (in.) at Indicated Distance from Nozzle</th>
<th>Fan Air Pressure (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inlet Press. (psi)</td>
<td>Inlet Press. (psi)</td>
<td>Inlet Air Press. (psi)</td>
<td>Inlet Air Press. (psi)</td>
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<tr>
<td></td>
<td></td>
<td>D1</td>
<td>D2</td>
<td>D3</td>
<td>D1</td>
</tr>
</tbody>
</table>

### For ViscoMist Replacement Kits, see page 58.

### For Various Configurations to Mount Your Pneumatic Air Nozzles, see the Lances and Nozzle Headers section beginning on page 141.

*These pressures are independently controlled so any combination of liquid, atomizing air, and fan air pressures can be selected.

Total SCFM output is the sum of the separate atomized air and fan air amounts for the individual inlet pressures used.

*A cone-shaped spray is most likely to be produced if the fan air function is not utilized.

Material: 316L SS – We reserve the right to deliver material 316 SS or 316L SS, if we show the material code 1Y.
### ViscoMist flat fan, external mix

**Series 176**

<table>
<thead>
<tr>
<th>Nozzle Body Configuration</th>
<th>Ordering no.</th>
<th>Liq. Capacity*</th>
<th>Air Capacity*</th>
<th>Spray Coverage (in.) at Indicated Distance from Nozzle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>4 176. 404. 1Y.01</td>
<td>.042</td>
<td>2.2 4.5 2.2 1.4 1.2</td>
<td>5 5 - - - 7 10 13 12 15 18 14 16 21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 176. 405. 1Y.01</td>
<td>.052</td>
<td>2.2 6.5 2.2 1.3 1.2</td>
<td>5 10 - - - - - - 14 18 24 19 23 22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 176. 406. 1Y.01</td>
<td>.067</td>
<td>2.2 11.0 2.2 .90 1.2</td>
<td>5 10 - - - - - - 14 18 24 19 23 22</td>
</tr>
</tbody>
</table>

* These pressures are independently controlled so any combination of liquid, atomizing air, and fan air pressures can be selected.

Total SCFM output is the sum of the separate atomized air and fan air amounts for the individual inlet pressures used.

A cone-shaped spray is most likely to be produced if the fan air function is not utilized.

For ViscoMist replacement kits, see page 58.

For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

Material: 316L SS — We reserve the right to deliver material 316 SS or 316L SS, if we show the material code 1Y.
ViscoMist flat fan, external mix
Series 176

Pneumatic atomizing nozzles

ViscoMist flat fan, external mix
Series 176

*These pressures are independently controlled so any combination of liquid, atomizing air, and fan air pressures can be selected. Total SCFM output is the sum of the separate atomized air and fan air amounts for the individual inlet pressures used.

* A cone-shaped spray is most likely to be produced if the fan air function is not utilized.

Material: 316L SS – We reserve the right to deliver material 316 SS or 316L SS, if we show the material code 1Y.

For ViscoMist replacement kits, see page 58.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

<table>
<thead>
<tr>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>176. 407. 1Y. 01</td>
<td>0.81</td>
<td>5</td>
<td>2.2</td>
<td>15.6</td>
<td>2.2</td>
<td>2.1</td>
<td>2.0</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>176. 408. 1Y. 01</td>
<td>0.93</td>
<td>5</td>
<td>2.2</td>
<td>20</td>
<td>2.2</td>
<td>1.6</td>
<td>2.0</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>176. 409. 1Y. 01</td>
<td>1.00</td>
<td>5</td>
<td>2.2</td>
<td>22</td>
<td>2.2</td>
<td>1.1</td>
<td>2.0</td>
<td>20</td>
<td>5</td>
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</tbody>
</table>

Material:
- 316L ss — We reserve the right to deliver material 316 SS or 316L SS, if we show the material code 1Y.

For ViscoMist replacement kits, see page 58.
For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.

www.LechlerUSA.com
Replacement Kits for the ViscoMist

For replacing the basic wear parts for the ViscoMist, order from the following list:

<table>
<thead>
<tr>
<th>Ordering no.</th>
<th>Fluid nozzle orifice size (in.)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>017. 601. 1Y. 01</td>
<td>.015</td>
<td>Wear Replacement Kit, Nozzle #1, 316 SS</td>
</tr>
<tr>
<td>017. 602. 1Y. 01</td>
<td>.023</td>
<td>Wear Replacement Kit, Nozzle #2, 316 SS</td>
</tr>
<tr>
<td>017. 603. 1Y. 01</td>
<td>.031</td>
<td>Wear Replacement Kit, Nozzle #3, 316 SS</td>
</tr>
<tr>
<td>017. 604. 1Y. 01</td>
<td>.042</td>
<td>Wear Replacement Kit, Nozzle #4, 316 SS</td>
</tr>
<tr>
<td>017. 605. 1Y. 01</td>
<td>.052</td>
<td>Wear Replacement Kit, Nozzle #5, 316 SS</td>
</tr>
<tr>
<td>017. 606. 1Y. 01</td>
<td>.067</td>
<td>Wear Replacement Kit, Nozzle #6, 316 SS</td>
</tr>
<tr>
<td>017. 607. 1Y. 01</td>
<td>.081</td>
<td>Wear Replacement Kit, Nozzle #7, 316 SS</td>
</tr>
<tr>
<td>017. 608. 1Y. 01</td>
<td>.093</td>
<td>Wear Replacement Kit, Nozzle #8, 316 SS</td>
</tr>
<tr>
<td>017. 609. 1Y. 01</td>
<td>.100</td>
<td>Wear Replacement Kit, Nozzle #9, 316 SS</td>
</tr>
</tbody>
</table>

Material: 316L SS

Note: Instructions for changing out any and all ViscoMist component parts come with each Replacement Kit purchased.

Nozzle fluid tips and spreaders (air caps) are interchangeable to provide various set-up combinations.

For replacing the wear parts and the spreader of the ViscoMist, order the following:

<table>
<thead>
<tr>
<th>Ordering no.</th>
<th>Fluid nozzle orifice size (in.)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>017. 601. 1Y. 00</td>
<td>.015</td>
<td>Capacity Replacement Kit, Nozzle #1</td>
</tr>
<tr>
<td>017. 602. 1Y. 00</td>
<td>.023</td>
<td>Capacity Replacement Kit, Nozzle #2</td>
</tr>
<tr>
<td>017. 603. 1Y. 00</td>
<td>.031</td>
<td>Capacity Replacement Kit, Nozzle #3</td>
</tr>
<tr>
<td>017. 604. 1Y. 00</td>
<td>.042</td>
<td>Capacity Replacement Kit, Nozzle #4</td>
</tr>
<tr>
<td>017. 605. 1Y. 00</td>
<td>.052</td>
<td>Capacity Replacement Kit, Nozzle #5</td>
</tr>
<tr>
<td>017. 606. 1Y. 00</td>
<td>.067</td>
<td>Capacity Replacement Kit, Nozzle #6</td>
</tr>
<tr>
<td>017. 607. 1Y. 00</td>
<td>.081</td>
<td>Capacity Replacement Kit, Nozzle #7</td>
</tr>
<tr>
<td>017. 608. 1Y. 00</td>
<td>.093</td>
<td>Capacity Replacement Kit, Nozzle #8</td>
</tr>
<tr>
<td>017. 609. 1Y. 00</td>
<td>.100</td>
<td>Capacity Replacement Kit, Nozzle #9</td>
</tr>
</tbody>
</table>

To just replace the O-ring in the ViscoMist, order the following:

<table>
<thead>
<tr>
<th>Ordering no.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>017. 600. xx. 01. 03</td>
<td>O-ring Replacement Kit</td>
</tr>
</tbody>
</table>

* 7A (Viton) is the standard material for the O-ring while 6C (EPDM) is optional.

For various configurations to mount your pneumatic air nozzles, see the Lances and Nozzle Headers section beginning on page 141.
Lechler offers several other atomizing nozzles besides those in this catalog which may be appropriate for your application. If a nozzle in either of the styles below is specified for a job of yours or you would just like more information about either one, please contact Lechler.

<table>
<thead>
<tr>
<th>Spray pattern</th>
<th>Mode of liquid supply</th>
<th>Occurrence of atomization</th>
<th>Series</th>
<th>Spray angle</th>
<th>Flow rate range</th>
<th>Application</th>
<th>More information</th>
</tr>
</thead>
</table>
| Full cone     | Pressure principle    | External mix              | 150    | 20°–30°     | .13–17 gph    | Chemical process engineering  
Cooling  
Atomization of viscous liquids | Please ask for our “Chemical” brochure |
| Flat fan      | Pressure principle    | Internal mix              | 166    | 20°–80°     | .11–25 gph    | Web dampening  
Cooling  
Humidification of goods  
Atomization of viscous liquids | Please ask for our “Chemical” brochure |
| Full cone     | Pressure principle    | Internal mix              | 170    | 15°         | 2.25–77 gph   | Gas cooling  
FGD  
Exhaust gas conditioning  
Dust control | Please ask for our “Chemical” brochure |