STYLE 4478, 4479 AKROFOAM NOZZLE
OPERATING INSTRUCTIONS

The following is intended to provide the basic instructions for operating the AkroFoam Nozzle. Read and understand these instructions before use.

PRODUCT RATINGS

Maximum Pressure: 200 psi/14bar
Nominal Flow ratings: 750/1000/1500/2000gpm (2900/3800/5700/2000lpm) @ 100psi (7bar)
Style 4479 Minimum Voltage at motor: 12 Volt Motor: 10 Volts at 15 amps
24 Volt Motor: 20 Volts at 7.5 amps
Style 4479 Maximum Motor Current Draw: 12 Volt Motor: 3 amps
24 Volt Motor: 1.5 amps

PRODUCT WARNINGS

⚠️ WARNING: Charge all lines slowly to facilitate a controlled water pressure build-up during start-up. Rapid charging can cause water hammer.

⚠️ WARNING: Drain the AkroFoam after use to prevent freeze damage.

⚠️ WARNING: At pressures below 100 psi, the nozzle will have reduced flow and reach. Be sure you have enough flow and pressure for the situation. (See IFSTA and NFPA manuals for guidelines).

⚠️ WARNING: Ensure the Akrofoam is aimed in a direction that is safe, prior to flowing.

⚠️ WARNING: Ensure the thread on the inlet is matched to the thread on the mating connection.

PRODUCT CAUTIONS

⚠️ CAUTION: Replace any tags or bands that become worn or damaged and cannot be easily read.

⚠️ CAUTION: The AkroFoam is designed for use with fresh water, sea water or standard fire fighting foams only. After use with foam or salt water, flush with fresh water.

⚠️ CAUTION: For fire fighting use only.

⚠️ CAUTION: Do not overtighten the nozzle onto the mating connection.

⚠️ CAUTION: The nozzle is configured for optimum performance. Do not alter in any manner.

⚠️ CAUTION: Operating the nozzle at pressure lower than 100 psi will provide for rich foam mixtures. The nozzle will stop educting foam at pressures significantly below 100 psi. Pressures higher than 100 psi will provide lean foam mixtures.

⚠️ CAUTION: Your nozzle should be inspected prior and after each use, to ensure it is in good operating condition. Periodically, an un-anticipated incident may occur where the nozzle is used in a manner that is inconsistent with standard operating practices and those listed in IFSTA. A partial list of potential misuses follows:
• Operating above maximum rated pressure and flow.
• Not draining, and allowing water to freeze inside the nozzle
• Dropping the nozzle from a height where damage is incurred.
• Prolonged exposure to temperatures above +130°F(+54°C), or below -25°F(-31°C)
• Operating in a corrosive environment
• Other misuse that might be unique to your specific fire fighting environment.

Typical indications that the nozzle may be in need of repair are:
• Controls that are either inoperable or difficult to operate
• Excessive wear.
• Poor discharge performance.
• Water leaks.

If any of the above situations are encountered, the nozzle should be taken out of service and repaired, plus tested by qualified nozzle technicians prior to placing back in service.

OPERATING INSTRUCTIONS
• The following flow limits are at 100 psi inlet pressure:

<table>
<thead>
<tr>
<th>Flow Setting</th>
<th>Water flow range</th>
<th>Total flow (water + concentrate) at noted %</th>
</tr>
</thead>
<tbody>
<tr>
<td>gpm (lpm)</td>
<td>gpm (lpm)</td>
<td></td>
</tr>
<tr>
<td>750 (2900)</td>
<td>663-705 (2510-2670)</td>
<td>708-755 (2680-2838) @ 6%</td>
</tr>
<tr>
<td>1000 (3800)</td>
<td>880-940 (3330-3560)</td>
<td>940-1006 (3560-3810) @ 6%</td>
</tr>
<tr>
<td>1500 (5700)</td>
<td>1394-1454 (5280-5500)</td>
<td>1439-1500 (5450-5680) @ 3%</td>
</tr>
<tr>
<td>2000 (2000)</td>
<td>1840-1940 (6970-7340)</td>
<td>1900-2006 (7190-7590) @ 3%</td>
</tr>
</tbody>
</table>

• The Akrofoam nozzle has a spring-loaded, adjustable flow baffle which allows selection of the above flow settings.
To change flow settings turn the water off, then push in and rotate the baffle head until the tabs on the foam stem align with the slots labeled with the desired flow rate.
• Style 4478: To change the pattern, rotate the pattern sleeve. While standing behind the nozzle, rotate the pattern sleeve clockwise for straight stream and counterclockwise for wide fog.
• Style 4479: Manual Override: Pull manual override knob out. Once out, rotate to the desired stream position.
  When finished, push and turn the override knob until it goes back into the stored position.
• Your Akrofoam may be supplied with 7 optional metering orifices and Orifice Storage Cup. To install the desired orifice, remove the foam pickup hose and place the orifice in the recess in the foam inlet port on the nozzle and reinstall the hose. The 6 remaining orifices may be stored in the Orifice Storage Cup. When the nozzle is not in use, store the seventh orifice in the foam inlet port and secure with the Cam Lok Cap.
• The Akrofoam nozzle has an optional adjustable foam metering valve. The indicating handle identifies the various foam percentages (1%, 3% or 6%) available for each flow rate (1000, 1250, 1500 and 2000GPM). Rotate the valve knob until the pointer aligns with the flow rate and percentage you want. Each setting has a detent for proper positioning.
• The AkroFoam nozzle has an optional adjustable foam metering valve. The indicator handle identifies the various foam percentages (1% , 3% , 6%) available for each flow rate (1000, 1250, 1500 and 2000GPM). Rotate the valve knob until the pointer aligns with the flow rate and percentage you want. Each setting has a detent for proper positioning.
• Flush the nozzle and pickup hose assembly with fresh water after use.

MAINTENANCE
• Under normal conditions, periodically flushing the nozzle with clean water and cleaning grit and dirt from around exterior moving parts will allow the nozzle to operate as designed.
• Periodically (at least annually), lubricate the cam groove in the nozzle body with Low-Temp Lubriplate by removing the cam nut on the side of the pattern sleeve. Also, lubricate the pattern sleeve o-ring by rotating the Pattern Sleeve into the straight stream position and lubricating the exposed inside surface of the pattern sleeve with Parker O-Lube. Rotate the pattern sleeve from straight stream to wide fog and back to straight stream several times. Finally wipe away an excess lubricant while the pattern sleeve is in wide fog position.
• Over time the O-Rings may need to be replaced. This can be accomplished by purchasing the appropriate O-Rings shown on the service parts list. Use qualified maintenance mechanics or return the nozzle to AkronBrass for repair.

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