AKROCHEM® 1250/2000 GPM NOZZLES
OPERATING INSTRUCTIONS

The following is intended to provide the basic instructions for operating an AkroChem 1250/2000 nozzle. Read and understand these operating instructions before use.

PRODUCT RATINGS

Flow: Style 4039 & 4040 1250 AkroChem  250 - 1250 GPM

Pressure: Rated 100 psi / 7 bar
Pressure: Maximum 200 psi / 14 bar

Voltage: Style 4040/4042 – Minimum output
12 Volt Motor: 10 Volts
24 Volt Motor: 20 Volts

Current: Style 4040/4042 – Maximum draw
12 Volt Motor: 3 amps
24 Volt Motor: 1.5 amps

Noise Emissions 4040: 88dB(A)@ 1 Meter Maximum Flow in Wide Fog
Noise Emissions 4042: 90dB(A)@ 1 Meter Maximum Flow in Wide Fog

PRODUCT WARNINGS

⚠️ WARNING: Charge all lines slowly to facilitate a controlled water pressure build-up during start-up. Open and close slowly. Rapid opening will produce a sudden thrust. Rapid opening and closing can cause water hammer. Have your monitor properly supported to control the reaction force created by the stream.

⚠️ WARNING: At pressures below that indicated on the label, 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 AkroChem is aimed in a direction that is safe, prior to flowing.

⚠️ WARNING: Do not use the AkroChem as a forcible entry tool. Doing so may damage it or make it inoperable.

⚠️ WARNING: Ensure the thread on the nozzle swivel is matched to the thread on the monitor.

PRODUCT CAUTIONS

⚠️ CAUTION: If any tags or bands on the nozzle are worn or damaged and cannot be easily read, they should be replaced.

⚠️ CAUTION: For use with fresh water or standard fire fighting foams only. Not recommended for use with salt water. After use with foam or salt water, flush with fresh water.

⚠️ CAUTION: For firefighting use only.

⚠️ CAUTION: Do not over tighten the nozzle onto the hose connection.

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

⚠️ CAUTION: Your nozzle should be inspected prior to and after each use, to ensure it is in good operating condition.

⚠️ CAUTION: Replace the red plug after discharging dry chemical, to ensure that the dry chemical does not become contaminated.

⚠️ CAUTION: Proper hearing protection required within 1 meter of the flowing nozzle.
Periodically, an unanticipated 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 degrees F, or below -25 degrees F.
- Operating in a corrosive environment.
- Other misuse that might be unique to your specific fire fighting environment.

There are many "tell tale" signs that indicate nozzle repair is in order, such as:

- 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. The nozzle should then be tested by qualified nozzle technicians, prior to placing it back in service.

**OPERATING INSTRUCTIONS**

**Style 4039/4041:** To change the spray pattern, rotate the pattern sleeve. Clockwise for straight stream or counterclockwise for a fog pattern.

**Style 4040/4042:** 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.

**Pressure Ratings:**

It is important to understand that the nozzle pressure ratings were determined with a surface pick-up gage for both nozzles.

The 2000 gpm AkroChem is rated at a 100 psi with a pressure pick-up in a 3.5” waterway.

The 1250 gpm AkroChem is rated at a 100 psi with a pressure pick-up in a 2.5” waterway. When using the optional 3.5” swivel with the 1250 gpm AkroChem additional pressure would be required to achieve the rated performance from the nozzle.

**Dry Chemical Port:**

The AkroChem nozzle comes with a 1.5” FNPT connection as a standard for the dry chemical port. Appropriate adapters can be provided if any other inlet port configuration is desired. The AkroChem nozzles are rated to flow up to 20 lb/sec of dry chemical. The dry chemical flow rate can vary depending on the set up of the dry chemical system. A red plastic plug is installed to prevent debris or water from entering the outlet of the dry chemical port. Do not remove the plug, it will automatically be discharged when the chemical port is pressurized. Replace the red plug with one of the provided replacement plugs when finished using dry chemical.

**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.
- Over time the seals may need to be replaced. This can be accomplished by purchasing the appropriate Akron repair parts. Use qualified maintenance mechanics or return the nozzle to Akron Brass for repair.
- Make sure the red cap is on dry chemical outlet.