PISTON INTAKE
MODEL NO. 9786 & 9787

These instructions are provided to allow safe and efficient use of this product.
All personnel expected to use this product should be trained with these operating procedures

Features

The 9786 Elk-O-Lite and 9787 Brass Piston Intake Valves are designed to maximize flow efficiency, safety, and durability for years of trouble-free service. These benefits are achieved through the following features.

- Durable Elk-O-Lite or cast brass construction
- Industry Leading Anode for superb corrosion resistance
- Large orifice design for reduced friction loss
- Free-swiveling inlets for both Storz and threaded connections to eliminate uncoupling due to the naturally occurring twisting effect when the hose is being charged
- Integral quick-dump relief valve which can be adjusted from 75 to 250 psi.
- Integral air bleeder valve
- Handwheel driven piston with slow (10 turn) open control to prevent pump damage due to water hammer
- Extremely tough nitrile seat to withstand even harsh water conditions
- 9786 finished with urethane enamel and hard anodized trim
- 9787 finished with urethane enamel and chrome trim

Optional Inlets and Outlets

<table>
<thead>
<tr>
<th>Model</th>
<th>Inlet</th>
<th>Thread Sizes</th>
<th>Outlet</th>
<th>Dimensions</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9786</td>
<td>4.0&quot; or 5.0&quot; Storz</td>
<td>3.5&quot;, 4.0&quot;, 4.5&quot;, 5.0&quot; or 6.0&quot; Male NHT 3.5&quot;, 4.0&quot;, 4.5&quot;, or 5.0&quot; Female NHT</td>
<td>4.5&quot;, 5.0&quot;, or 6.0&quot; Female NHT</td>
<td>11.375&quot; Length</td>
<td>22.5</td>
</tr>
<tr>
<td>9787</td>
<td>4.0&quot; or 5.0&quot; Storz</td>
<td>3.5&quot;, 4.0&quot;, 4.5&quot;, 5.0&quot; or 6.0&quot; Male NHT 3.5&quot;, 4.0&quot; or 4.5&quot; Female NHT</td>
<td>4.5&quot;, 5.0&quot;, or 6.0&quot; Female NHT</td>
<td>11.375&quot; Length</td>
<td>63.5</td>
</tr>
</tbody>
</table>
Installation:

On a piston intake valve the hose side of the valve is referred to as the inlet and the truck side of the valve is referred to as the outlet. The 9786 and 9787 may both be supplied with either 5.0 or 6.0 Female NHT outlets (refer to the chart on page 1). Installation is achieved by firmly threading the outlet of the Pistion Intake Valve to the large suction barrel of the pump. A rubber mallet may be used to tighten the female swivel on the male threads of the pump inlet.

Operation:

These valves are capable of controlling large volumes of water; consequently, caution should be taken when using them. Before placing into service set the adjustable quick-dump relief valve for no more than 90% of the service test pressure rating of the LDH hose you are using. Refer to NFPA 1962 for guidance.

Relief Valve Adjusting Instructions

The pressure relief valve has been factory set to open at 125 psi. This pre-set pressure may be altered by turning the adjusting screw to increases or decrease the opening pressure. Consult the drawing and chart to the right for the proper procedure.

1. Before attempting to turn the adjusting screw (item 1), release the locking screw (item 3) one turn only in the counter-clockwise direction, using an 1/8" hex Allen wrench. Note: Do not attempt to turn the adjustment bushing (item 2). This bushing is factory set and should not be moved.

2. Turn the adjusting screw (item 1) clockwise to increase the opening pressure and counter-clockwise to decrease the opening pressure. A 7/8" open-end or adjustable wrench will be needed for this. Factory setting is already 2 full turns clockwise from zero. “zero” setting is achieved when shoulder of adjusting screw (item 1) contacts compression washer (item 4) with no tension on spring (item 5).

3. When pressure adjustment is achieved, tighten the lock screw (item 3) snuggly (do not over tighten) by turning it in the clockwise direction with the 1/8" hex wrench. This will lock the adjusting screw at the desired pressure relief setting.

When connecting the supply hose to the inlet of the Piston Intake Valve, make sure the couplings are tightly connected (use proper wrenches for Storz couplings). After hooking-up properly, the inlet adapter of the Piston Intake Valve will continue to swivel freely preventing accidental uncoupling due to twisting hose while being charged.

While the incoming supply hose is being charged, open the air bleeder valve to let trapped air escape from the hose. When the air stops and a stream of water appears, close the bleeder
valve. Even through the piston in these valves is designed to be slow-closing (10 full turns from open to close) be cautious in operating the valve in either direction.

**MAINTENANCE AND CARE:**

These Piston Intake Valves are designed and manufactured to give years of trouble-free service. A special feature of the Elk-O-Lite Piston Intake Valve is a large anode bolted to the bottom of the stem. Corrosion will attack the self-sacrificing anode rather then the structural material of the valve. If the anode has deteriorated by more than 75% or appears to be approaching breakage, a replacement anode should be ordered (see attached drawings for part number details).

Piston Intake Valves are a vital link in your LDH supply system so periodic inspection and maintenance is vital to ensuring proper operation. The required inspection is broken down into daily inspections and every other month inspections.

**Daily Inspections**
- Remove any caps to ensure the valve is fully drained; storing the valve with water inside will greatly increase the possibility of corrosion damage.
- Open and close the valve at lease twice to ensure smooth actuation of the piston. If any binding occurs apply a thin film of petroleum based orange grease (Famous Lubricants Orange #25 or equivalent) to the stem and piston bore.
  - Note: use grease sparingly, excessive grease will attract dirt and other contaminates
  - Note: **DO NOT USE** WD-40 or other penetrating lubricants as they will attack o-rings causing binding and leakage.
- Check relief valve setting appropriately for the pressure rating of your hose.

**Every Other Month Inspections**
- Remove valve from the apparatus and check for corrosion deposits on the shaft or anode
  - If excessive corrosion deposits are found, water diluted CLR may be applied with a scrub brush to remove them. Rinse thoroughly with clean water once deposits are removed.
- Clean the gasket with light soap and water and spray with non-petroleum based silicone spray before reinstalling.
- Apply a thin film of petroleum based orange grease (Famous Lubricants Orange #25 or equivalent) to the stem and piston bore before re-installing.
  - Note: use grease sparingly, excessive grease will attract dirt and other contaminates
  - Note: **DO NOT USE** WD-40 or other penetrating lubricants as they will attack o-rings causing binding and leakage.
- Reinstall the Piston Intake Valve to the apparatus. A rubber mallet may be used to tighten the female swivel on the male threads of the pump inlet.