

# **SELF-EDUCTING** **Hydro-Foam<sup>®</sup> Nozzles**

Installation, Operating, &  
Maintenance Instructions



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# I. Product Safety



**Important:** Before installing and operating this equipment, read and study this manual thoroughly. In addition, the following points should be adhered to ensure the safety of equipment and personnel:

1. All personnel who may be expected to use this equipment must be thoroughly trained in its safe and proper use.
2. Before flowing water from this device, check that all personnel (fire service and civilian) are out of the stream path. Also, check to make sure stream direction will not cause avoidable property damage.
3. Become thoroughly familiar with the hydraulic characteristics of this equipment and the pumping system used to supply it. To produce effective fire streams, operating personnel must be properly trained.
4. Whenever possible, this equipment should be operated from a remote location. Do not needlessly expose personnel to dangerous fire conditions.
5. The nozzle must be properly mated and tightened. Failure to do so could result in leaks or may cause injury or death.
6. After each use and on a scheduled basis, inspect equipment per Maintenance on page 5 instructions.
7. To insure against damage from freezing, all water needs be removed from the assembly. The nozzle should be stored with the nozzle tip pointed downward to allow for water to drain.

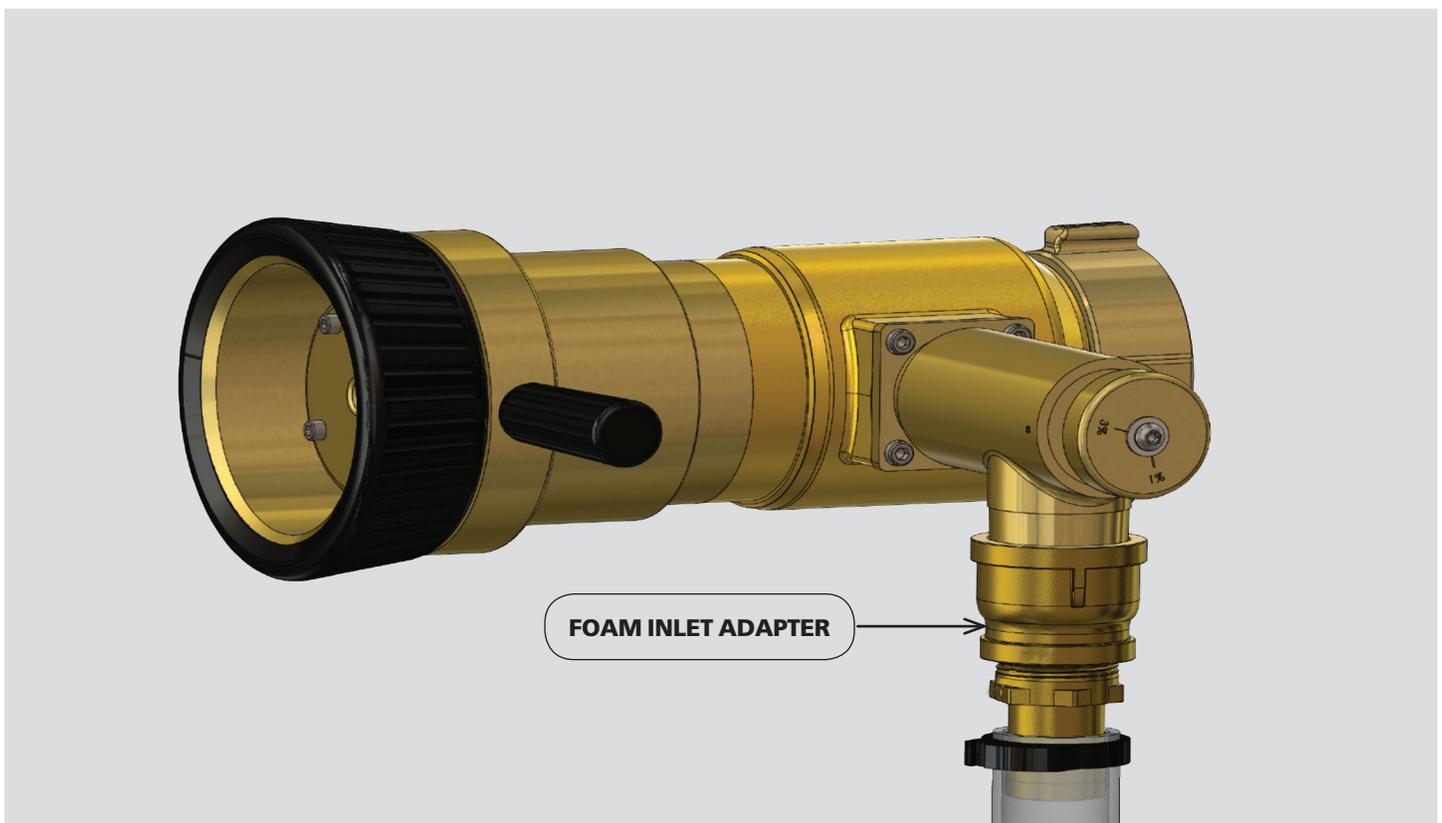
## II. Nozzle Operation

Inlet	Water: 2.5" NHT
	Foam: 1.5" NPT
Operating Pressure	100 PSI
Flow Rate	Model Specific
	750 GPM
	1000 GPM
Proportioning Rate	1% or 3%
Pickup Hose	1.25" ID X 10 Ft.

### HF13 with Proportioning Valve

**Proportioning Rate:** The proportioning rate on the HF13 can be adjusted while flowing water or with the water supply turned off.

1. Adjust the metering device to the correct setting by turning the indicator knob so that the selected foam percentage is aligned with the foam inlet adapter.
2. The valve is sized to allow for 1% or 3% inductance rates at the rated flow and operating pressure.



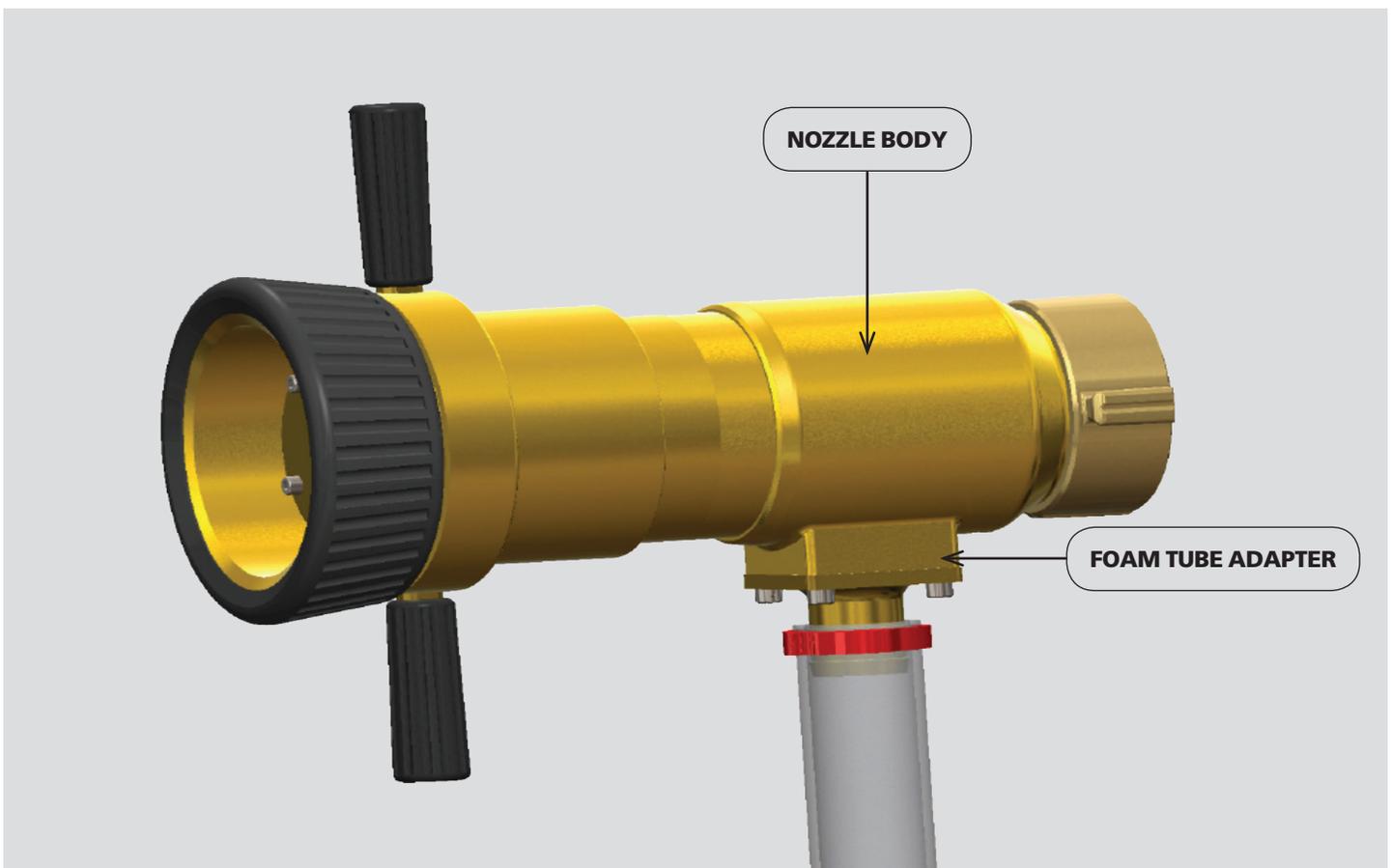
## HF13 with Proportion Disc

**Proportioning Rate:** The proportioning rate on the HF13 can be adjusted by switching the proportioning discs included with the nozzle at purchase.

### Proportioning Rate

1. The 1% proportioning disc is installed from the factory. If 3% proportioning is needed, remove the four securement screws that hold the foam tube adapter onto the nozzle body.
2. Remove the foam tube adapter from the nozzle body.
3. Remove the 1% proportioning disc from the foam tube adapter and replace with the 3% disc included with the nozzle.

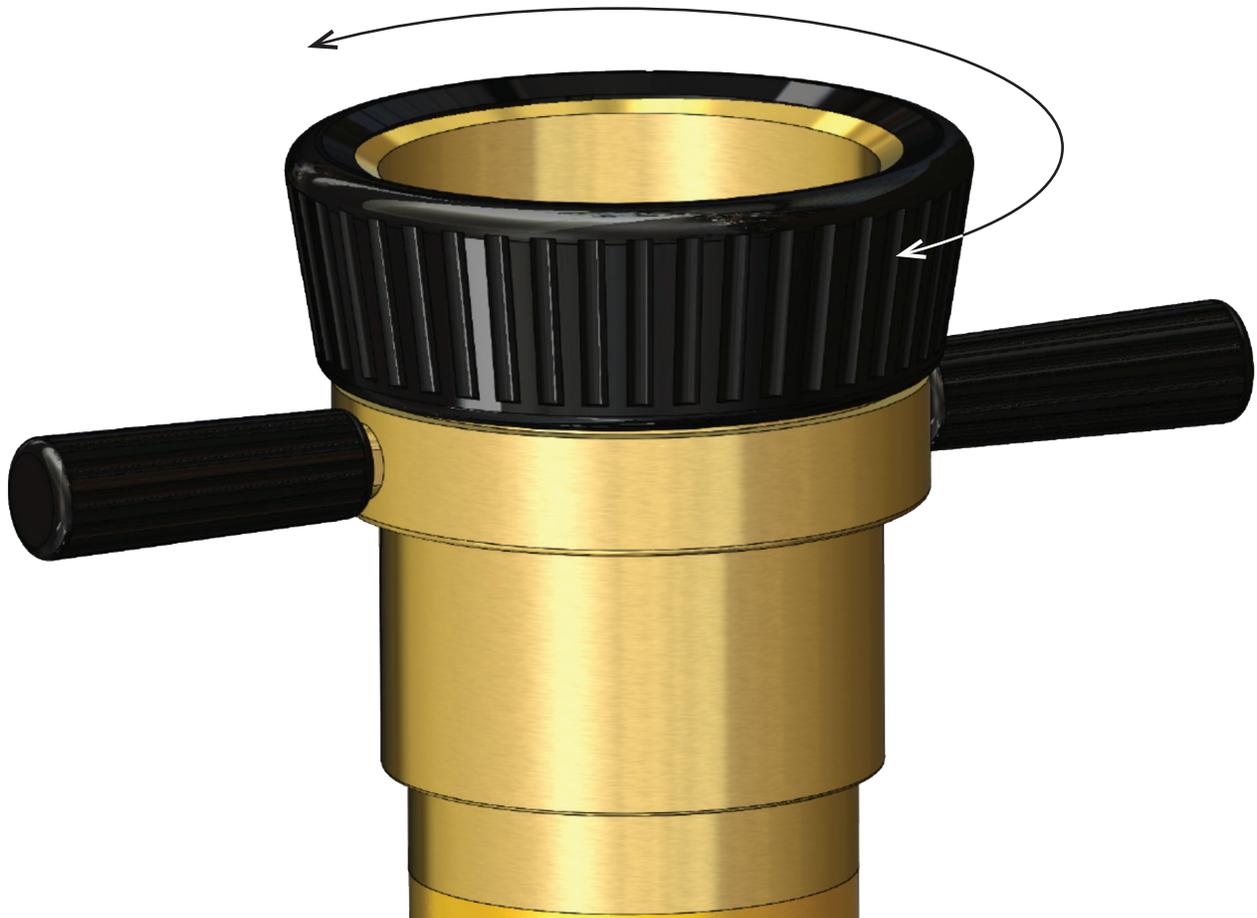
Check the foam tube adapter o-ring for any damage, reinstall the foam tube adapter into the nozzle body, and install the four securement screws using blue Loctite or an equivalent thread locker.



**Pattern Adjustment:** The pattern on the HF13 can be adjusted while flowing water or with the water supply turned off.

### **Pattern Adjustment:**

1. Pattern adjustment can be made by grasping the two hand grips.
2. Turn clockwise for straight stream. Rotate counter clockwise for fog.
3. The full pattern adjustment requires approximately one complete rotation of the hand grips.

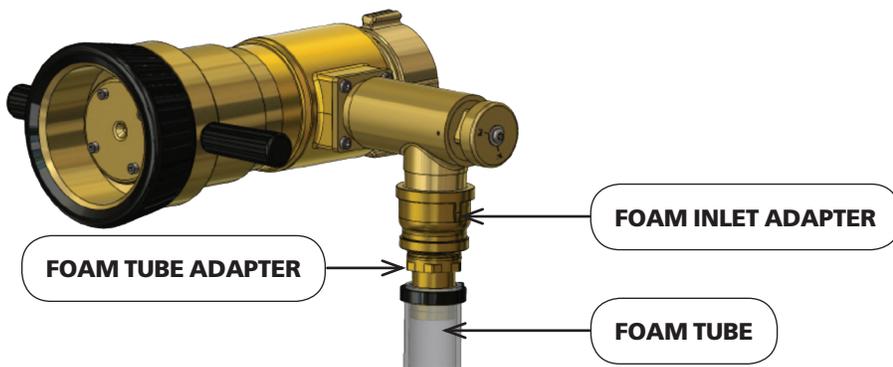


## Optional Drum Kit

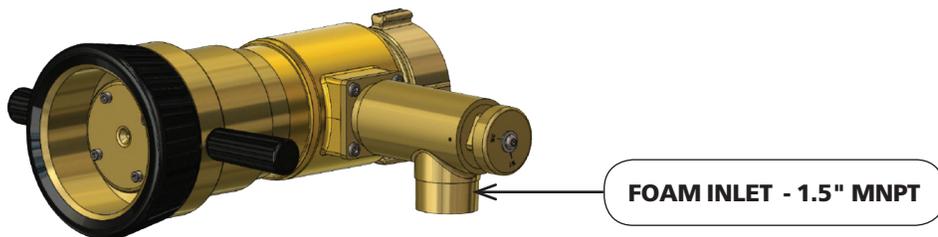
An optional drum kit is available. To install drum kit on either version of the HF13, instructions are included below:

### Proportioning Valve

1. Remove the foam inlet adapter, foam tube adapter, and foam tube on the HF13 proportioning valve.

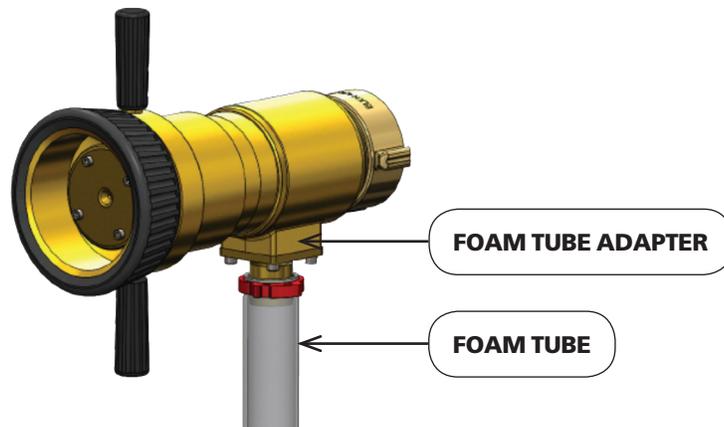


2. After assembling the drum kit, screw the remaining end of the foam tube provided with drum kit to the 1.5" MNPT on the foam inlet.

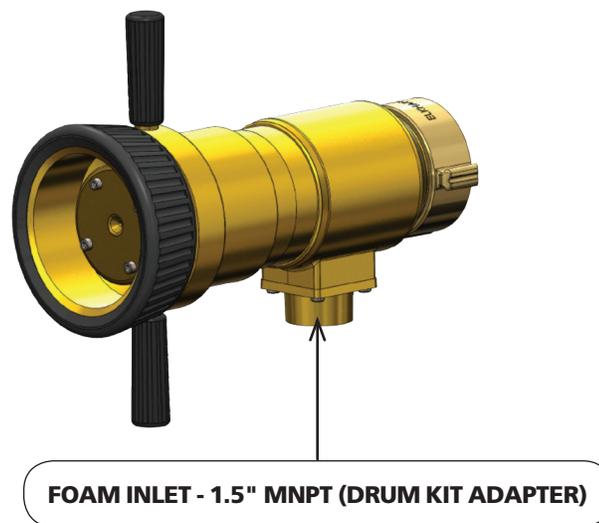


## Proportioning Disc

1. Remove the foam tube adapter, proportioning orifice, and foam tube on the HF13 nozzle.



2. Install the removed proportioning orifice into the provided drum kit adapter. Install the provided o-ring onto the drum kit adapter. Grease o-ring and secure the drum kit adapter to the foam inlet of the nozzle using the four (4) previously remove cap screws and Loctite 242 or equivalent.
3. After assembling the drum kit, screw the remaining end of the foam tube provided with drum kit to the 1.5" MNPT on the foam inlet.



## III. MAINTENANCE

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1. The nozzle should be flushed thoroughly after each use. This is accomplished by flowing the nozzle with a clean water source for both water and foam inlets. Ensure the nozzle is set to the largest proportioning rate during cleaning.
2. After use, the nozzle should be stored with the nozzle tip pointed downward to allow for water to drain from the assembly.
3. On a monthly basis, operate the pattern control through a full range of motion from fog to straight stream. If required, apply a light coating of lithium grease to the nozzle body in the area where it contacts the pattern control sleeve. Periodically check that fittings are leak free and replace gaskets and o-rings as required.



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