

# **Hydro-Foam Nozzle**

## HF-350, HF-350-A, HF-500, & HF-500-A Operating & Maintenance Instructions

The Hydro-Foam nozzle is one of the most efficient and effective tools for AFFF firefighting available today.

The nozzle's unique design, with built-in educator, allows it to be attached to any existing fixed monitor, portable monitor, or deck gun. The nozzle can also be used with plain water for cooling exposures or for fire attack. When the need arises for high application rates of AFFF, simply inserting the pick-up hose into your foam supply produces an instant AFFF foam system. In many cases, knock-down of large fires can be achieved while hand lines are being pulled for final extinguishment.

The proportioning rate of these nozzles can be changed easily in the shop or fire station. Remove the foam inlet adapter or nipple, and remove the previously installed foam metering washer. Note: the HF-350 & 350-A, 6% setting uses NO metering washer. The metering washers will be marked 500 or 350 and the percentage they are to be used for: ½%, 1%, or 3%. Insert new washer into the inlet nipple or adapter, and thread it back into the nozzle body. Loctite #262 should be used to secure adapter/nipple threads.

The HF nozzles are factory set with a 3% metering washer. A  $\frac{1}{2}$ % & 1% washer is also provided.

The HF-350 is factory set for 3% proportioning, for 6% use NO metering washer. Metering washers for ½% and 1% proportioning are provided. If you have chosen to use the optional 3-6% metering valve with your nozzle, DO NOT INSTALL any of these washers.

Illustrations on the back of this sheet show installation of the various available foam inlet



options. The quick connect coupling is a convenience option. It allows you to keep the suction hose stored until the need for foam arises. You can then quickly attach the hose and start foam operations. The quarter turn on/off valve allows you to keep the suction hose permanently attached to the foam supply and the instant you need foam you can open the valve. The 1-3% & 3-6% metering valves are ideal for quickly switching between two types of foam. (1-3% & 3-6% valves only available for HF-350 & 350-A)

#### MAINTENANCE INSTRUCTIONS

The HF-350 & 500 nozzles are constructed of rugged brass alloys (HF-350-A & 500-A are aluminum versions). The nozzle tip turns on a cam mechanism to easily change stream patterns. This cam should be lubricated periodically with a light petroleum base grease to insure smooth operation. If the tip becomes hard to rotate (change patterns), by removing the cam screw, you can slide the tip off the nozzle body. Clean the inside of the tip as well as the nozzle body and cam slot. Before reassembling, apply a light coating of grease to the O-rings in body and tip. Apply grease to cam slot. Clean excess grease from nozzle after assembly to prevent adhesion of dirt and grit to close clearance parts.

As with any other foam appliances, be sure to flush foam lines with clean water after each use.

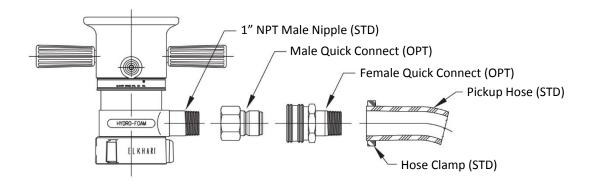
### **NOZZLE RATINGS**

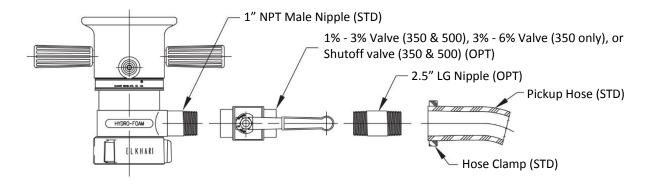
| Specifications       |            |       |                      |                         |        | ^ Effective Reach @ 100 PSI with foam |               |          |
|----------------------|------------|-------|----------------------|-------------------------|--------|---------------------------------------|---------------|----------|
| Model                | Flow Rate* | Inlet | Proportioning Rate** | Weight                  | Length | Straight<br>Stream                    | Narrow<br>Fog | Wide Fog |
| HF-350<br>(HF-350-A) | 350 GPM    | 2 ½"  | ½%, 1%, 3%, or 6%    | 12 ¾ lbs.<br>(4 ½ lbs.) | 7"     | 130′                                  | 65′           | 18′      |
| HF-500<br>(HF-500-A) | 500 GPM    | 2 ½"  | ½%, 1%, or 3%        | 12 ¾ lbs.<br>(4 ½ lbs.) | 7"     | 149′                                  | 72′           | 25′      |

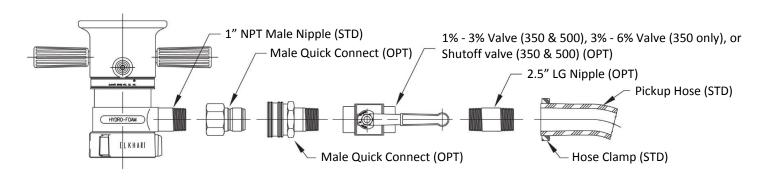
<sup>\*</sup>Nozzle is rated @ 100PSI but will pick up foam with as little as 50 PSI.

#### OPTIONAL HARDWARE LAYOUT FOR FOAM INLET LINE

**NOTE:** These drawings show typical combinations of valves & fittings. Other combinations can be provided upon request.







<sup>\*\*</sup>Nozzle is furnished with optional inserts so that proportioning can be changed to match concentrate used.

<sup>^</sup> Add 10% for water only.