# HYDRO FOAM NOZZLE FOR MONITOR

### MODEL - VARSHA HF60



#### **TECHNICAL DATA**

NOZZLE FLOW RANGE	As per Table-I		
WATER INLET CONNECTION	150 NB Flanged inlet		
FOAM CONCENTRATE CONNECTION	1½" or 2" BSP inlet		
INDUCTION	3%		
PICK UP TUBE	1½" or 2" clear PVC with SS dip tube.		
MATERIAL OF CONSTRUCTION	Bronze / Stainless Steel		
JET TO SPRAY PATTERN	About 100 degree spray angle		
MAXIMUM WORKING PRESSURE	12 bar (175 psi)		
WEIGHT (Approx)	Bronze Material - 52.6 kg Stainless Steel - 52 kg		

VARSHA HF60 - Hydro Foam Nozzles have been designed for wide flow range from 4750 to 7570 lpm (1250 to 2000 US gpm) for use with monitors. These are fixed flow nozzles, simple and rugged with superior stream and reach. The straight stream from maximum reach can be easily changed to wide fog pattern under flow condition by rotation of the pattern adjustment sleeve.

The nozzle is made out of hard coat anodized Aluminium. Bronze or Stainless Steel with SS internals. It is a self inducting nozzle equipped with a foam concentrate pick up tube of 3.5 meters long with swivel connection. The nozzle flow above 7500 lpm will be supplied with iet pump.

The nozzle can be used as water nozzle and when foam supply is established, it acts as a self inducting Foam Nozzle. The performance data shows effective stream trajectory in stand still air condition. The maximum overall reach of last drop is approximately 3-5% more than the effective stream performance data. The jet stream may get effected considerably with tail or head wind.

## **JET PUMP**

Jet pumps are modified inductors which handles a high pressure water stream and with venturi effect the increased velocity creates a negative pressure area. This negative pressure area draws the foam concentrate. The foam concentrate get mixed with the water stream in Jet pump at approximate 60:40 ratio of foam to water. This rich water foam solution is delivered to VARSHA HF60 Hydro Foam Nozzle from inductor port and accurately proportioned water foam solution flows through the Nozzle.



#### **MAINTENANCE**

The nozzle must be inspected regularly for possible damage or dirt around the moving parts. If any abnormal conditions observed such as poor discharge, excessive wear, water leak, corrossion effect, damage etc., then nozzle must be taken out of service and repaired by qualified technician.

The debris trapped in the nozzle may effect the nozzle performance. To remove trapped debris, the water flow must be stopped and thereafter carefully unscrew and remove the nozzle deflector. Clean the nozzle and reassemble. While reassembling the nozzle or as a normal preventive maintenance, water proof lubricant must be used on seal and moving parts for smooth operation. The nozzle must be operated periodically under full flow jet as well as under fog pattern.

Under normal condition water must be flown through the nozzle periodically and dirt from around exterior moving parts must be cleaned, allowing nozzle to operate properly. The nozzle must be inspected prior to and after each use. Greasing the moving parts and 'O' ring is required periodically. Over a time the seals may need to be replaced.

The owner is responsible for maintenance of the nozzle in proper operating condition. After use with foam, flush with fresh water.

#### CAUTION A

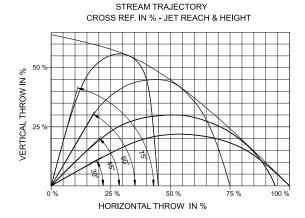


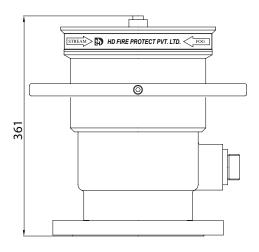
A trained personnel for fire fighting, with appropriate guidance and training must use the product to reduce the risk of injury. The nozzle must be fixed to the monitor carefully. The mismatched or damaged threads may cause leakage or uncouple the nozzle under operation. Application of water or foam on an electric appliance can cause serious injury by electrocution, as water is a conductor of electricity.

The water supply to the nozzle must be gradual. Sudden surge of water supply must be avoided. The monitor mounting must be supported properly to support the nozzle reaction force.

Maximum permissible suction lift is 2 meters.







#### PERFORMANCE DATA

TABLE - I

SET FLOW RATE    pm (gpm)	FOAM CONCENTRATE INDUCTION RATE	PRESSURE kg/sq.cm (psi)	ACTUAL FLOW RATE (gpm)	STRAIGHT STREAM FOAM RANGE METERS (feet)
4750 (1250)	3%	5.6 (80) 7.0 (100) 8.4 (120)	4250 (1125) 4750 (1255) 5200 (1375)	54.0 (177) 60.0 (197) 62.0 (204)
5680 (1500)	3%	5.6 (80) 7.0 (100) 8.4 (120)	5080 (1342) 5680 (1500) 6220 (1645)	55.0 (181) 61.0 (200) 62.0 (203)
6625 (1750)	3%	5.6 (80) 7.0 (100) 8.4 (120)	5925 (1565) 6625 (1750) 7260 (1920)	57.0 (187) 62.0 (203) 64.0 (210)
7570 (2000)	3%	5.6 (80) 7.0 (100) 8.4 (120)	6775 (1790) 7570 (2000) 8300 (2192)	62.0 (203) 65.0 (213) 67.0 (219)

PERFORMANCE DATA FOR FOAM STREAM RANGE ARE BASED AT 30 DEG. NOZZLE ELEVATION IN STILL AIR CONDITION AND WITH HD MONITOR. THE REACH IS FOR FOAM, WHEN USED AS WATER THE WATER REACH WILL INCREASE BY ABOUT 10%. THE ABOVE NOZZLE DATA IS WITH HD MONITOR VARUN 613 INLET PRESSURE.

#### LIMITED WARRANTY

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