

HYDRO FOAM NOZZLE FOR MONITOR MODELS - HF4V, HF4VJ



TECHNICAL DATA

NOZZLE MODEL	Varsha HF4V 500-750 Varsha HF4V 750-1000 Varsha HF4V 500-1000 Varsha HF4V 500-750-1000 Varsha HF4VJ 500-750 with JRCP Model JP4 Varsha HF4VJ 750-1000 with JRCP Model JP4 Varsha HF4VJ 500-1000 with JRCP Model JP4 Varsha HF4VJ 500-750-1000 with JRCP Model JP4
WATER INLET CONNECTION	Swivel female 4" BSP
FOAM CONCENTRATE INLET CONNECTION	Female 1 1/4" BSP
INDUCTION	3%
PICK UP TUBE	3.0 mtrs. long clear PVC with SS dip tube
MATERIAL OF CONSTRUCTION	Stainless Steel
MAXIMUM WORKING PRESSURE	12 bar (175 psi)
WEIGHT (Approx)	20.5 kg
APPROVAL	UL Listed with HD Monitor VARUN 443

APPLICATION

VARSHA HF4V – Hydro Foam Nozzles have been designed for wide flow range for use with HD Monitors. The HF4V-J series of Hydro Foam Nozzles are to be used with Jet Ratio Controller (JRCP Model JP4).

These are variable 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. It is a self inducing nozzle equipped with a foam concentrate pick up tube of 3.0 meters long with a swivel connection.

VARSHA HF4V nozzle can be used as a water nozzle and when foam supply is established, it acts as a self inducing foam nozzle. The nozzle can be fix-flow, variable flow with self-inducting mechanism. The premix water-foam solution can also be used. Foam concentrate can be proportioned at the nozzle for variable flow locally, or through the jet ratio controller and foam atmospheric concentrate storage tank. Nozzle is UL Listed with 3% AFFF foam concentrate.

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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 affected considerably with tail or head wind.

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, corrosion 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.

NOZZLE OPERATION INSTRUCTIONS

- a) In case of Variable Flow Nozzle Model HF4V, to change the flow, press the knob and rotate to match the arrow of knob and marking line on Nozzle. After flow setting, set the concentrate induction by rotating the knob of induction valve.
- b) To change spray angle, rotate the pattern sleeve clockwise for straight stream or anticlockwise to spray / fog pattern.
- c) For Self-Inducting variable flow, position the knob as per flow setting.
- d) When JRC is to be used the induction setting to be positioned on metering valve at JRC.

NOZZLE DUST PROTECTION CAP

Nozzle Dust Protection Cap for the monitor nozzle can be supplied optionally. This cap protects nozzles operating parts from dust and bird nesting. Please check with HD Sales team for further information..

CAUTION

A trained personnel for fire fighting, with appropriate guidance and training must use the product to reduce the risk or 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.

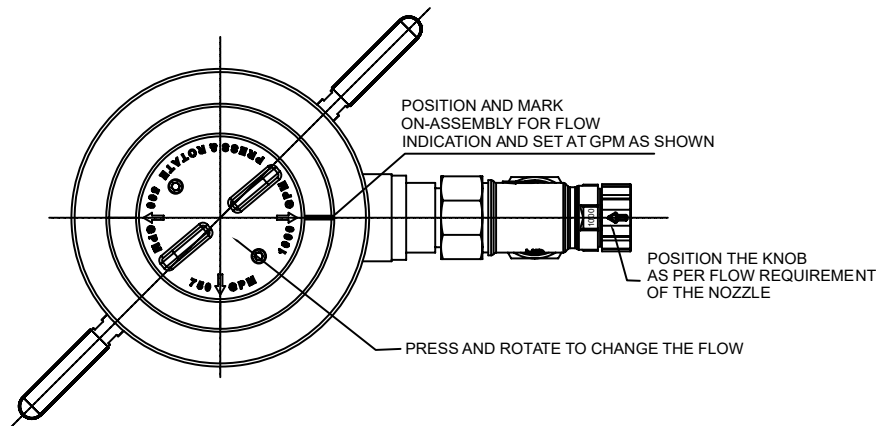
NOTE:

The Nozzle is UL-Listed with HD monitor VARUN 443

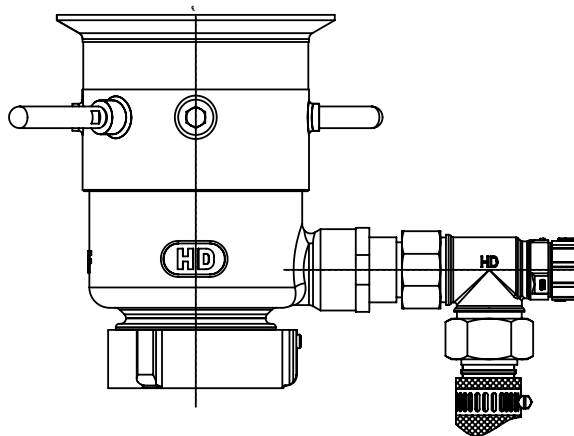
TABLE-I

SR.NO.	NOZZLE MODEL	FLOW AT 7 KG/SQ.CM MONITOR BASE PRESSURE	SELF INDUCTING	PREMIX FOAM SOLUTION	INDUCTION BY JRC
1	VARSHA HF4V 500-1000	VARIABLE FLOW	YES	YES	NO
2	VARSHA HF4V 750-1000	VARIABLE FLOW	YES	YES	NO
3	VARSHA HF4V 500-750	VARIABLE FLOW	YES	YES	NO
4	VARSHA HF4V 500-750-1000	VARIABLE FLOW	YES	YES	NO
5	VARSHA HF4VJ 500-1000 WITH JRCP MODEL JP4	VARIABLE FLOW	NO	YES	YES
6	VARSHA HF4VJ 750-1000 WITH JRCP MODEL JP4	VARIABLE FLOW	NO	YES	YES
7	VARSHA HF4VJ 500-750 WITH JRCP MODEL JP4	VARIABLE FLOW	NO	YES	YES
8	VARSHA HF4VJ 500-750-1000 WITH JRCP MODEL JP4	VARIABLE FLOW	NO	YES	YES

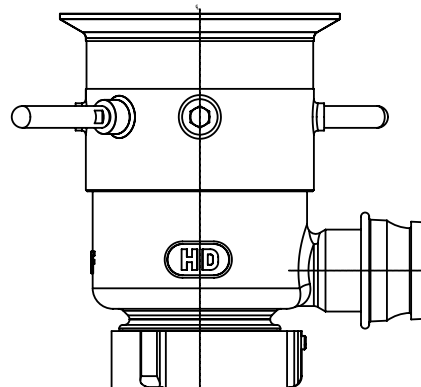
SELF INDUCTING VARIABLE FLOW FOAM NOZZLE - HF4V



VARIABLE FLOW FOAM NOZZLE - HF4V



VARIABLE FLOW FOAM NOZZLE - HF4VJ

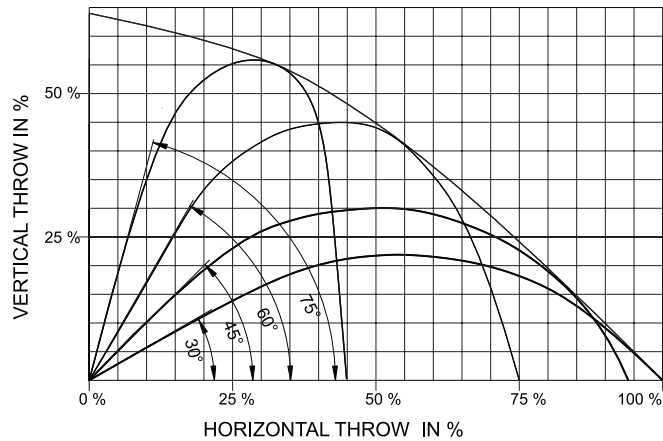


Note:

- 1) Flow is within $\pm 5\%$
- 2) Standard Supply - SS304/ASTM A-351-CF8
Optional Supply - A) SS316/ASTM A-351-CF8M B) SS316L/ASTM A-351-CF3M
- 3) Foam reach data is in still air condition at 30/35° Nozzle elevation

FLOW REACH DATA

STREAM TRAJECTORY
CROSS REF. IN % - JET REACH & HEIGHT



PERFORMANCE DATA

SET FLOW RATE GPM	CONCENTRATE INDUCTION RATE IN %	MONITOR BASE PRESSURE KG/SQ. CM	REACH IN STILL AIR (METERS)	
			WATER	FOAM
500	3	7	50	45
750	3	7	60	55
1000	3	7	65	60

LIMITED WARRANTY

HD FIRE PROTECT PVT. LTD. hereby referred to as HD FIRE warrants to the original purchaser of the fire protection products manufactured by HD FIRE and to any other person to whom such equipment is transferred, that such products will be free from defect in material and workmanship under normal use and care, for two (2) years from the date of shipment by HD FIRE. Products or Components supplied or used by HD FIRE, but manufactured by others, are warranted only to the extent of the manufacturer's warranty. No warranty is given for product or components which have been subject to misuse, improper installation, corrosion, unauthorized repair, alteration or un-maintained. HD FIRE shall not be responsible for system design errors or improper installation or inaccurate or incomplete information supplied by buyer or buyer's representatives. HD FIRE will repair or replace defective material free of charge, which is returned to our factory, transportation charge prepaid, provided after our inspection the material is found to have been defective at the time of initial shipment from our works. HD FIRE shall not be liable for any incidental or consequential loss, damage or expense arising directly or indirectly from the use of the product including damages for injury to person, damages to property and penalties resulting from any products and components manufactured by HD FIRE. HD FIRE shall not be liable for any damages or labour charges or expense in making repair or adjustment to the product. HD FIRE shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data & services. In no event shall HD Fire's product liability exceed an amount equal to the sale price. The foregoing warranty is exclusive and in lieu of all other warranties and representation whether expressed, implied, oral or written, including but not limited to, any implied warranties or merchantability or fitness for a particular purpose. All such other warranties and representations are hereby cancelled.

NOTICE :

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The information provided by us is to the best of our knowledge and belief, and consist of general guidelines only. Site handling and installation control is not in our scope. Hence we give no guarantee for result and take no liability for damages, loss or penalties whatsoever, resulting from our suggestion, information, recommendation or damages due to our product.

Product development is a continuous programme of HD FIRE PROTECT PVT. LTD. and hence the right to modify any specification without prior notice is reserved with the company.



HD FIRE PROTECT PVT. LTD.
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