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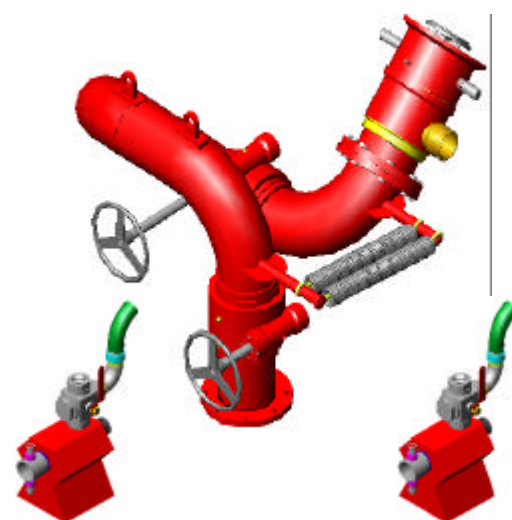
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## "UL LISTED - SHOOTFIRE-4000/2000" JRCP TYPE AQUA FOAM NOZZLE 4000/2000 Variable Flow Monitor Fixed at 4000/2000 GPM

### TECHNICAL DATA SHEET

#### 1. GENERAL DESCRIPTION

The manually operated non-aspirating Foam Monitor fully made of Stainless Steel, capable to discharging 4000 / 2000 US GPM (15140 / 7570 LPM) at 100 PSI (7 bar) inlet pressure over a range of 80 to 90 meters in horizontal direction and 40 to 45 meters in vertical direction. **The Foam Monitor has adjustable flow discharge capacity of 4000 US GPM / 2000 US GPM in single Nozzle.** Foam monitors are very compact in construction and gives good flexibility of the operation while fighting with fire. Foam proportioning 3 % is done with help of water operated Jet Ratio Controller Pump (JRCP) suitable for feeding foam concentrate solution to the monitor nozzle from a distance of 100 mtrs. The Foam Monitor has facility for converting Water/Foam jet to fog and vice-versa very quickly and easily, even during continuous operation. Foam Monitor is provided with two numbers of self-locking swivel gear bearing for rotation in horizontal and vertical direction through hand wheel operation even under high operating pressures. A single fire fighter can manually operate the Foam Monitor with large flow & long-range capability. The monitor assembly is designed to withstand the nozzle reaction force experienced during the operation of jet/ fog. **The MONITOR and JRCP having the variable discharge capacity of 4000 & 2000 GPM is approved & listed by UL (USA).**



#### ADJUSTMENT FOR AQUA FOAM NOZZLE

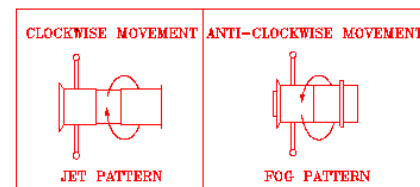
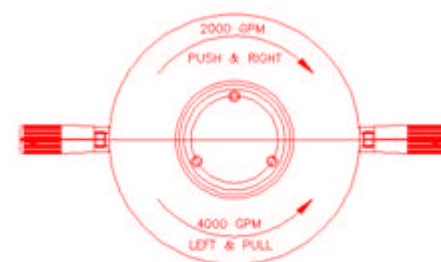
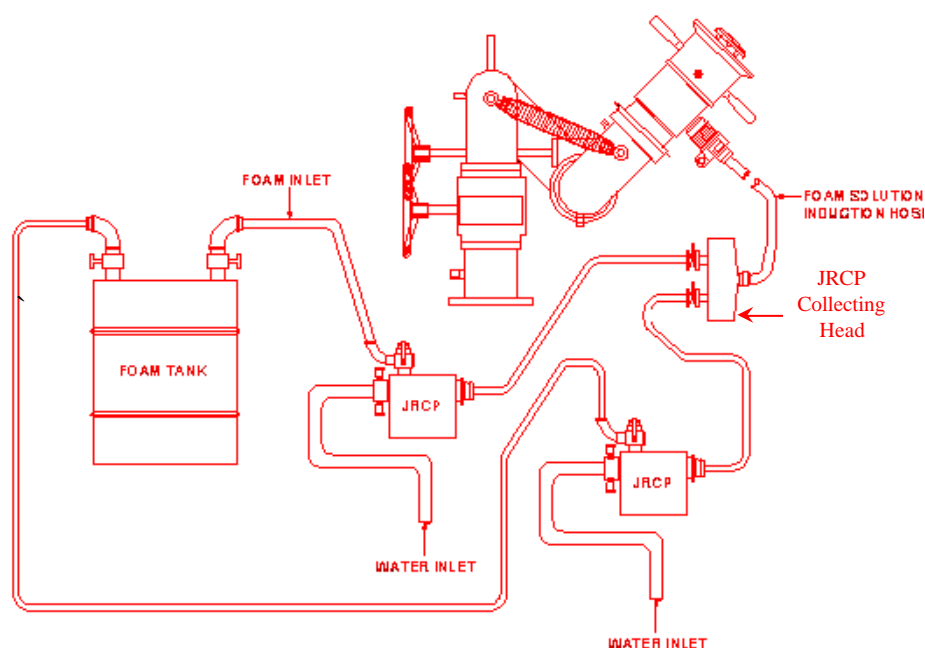


FIG.-1

FIG.-2



TOP VIEW OF DEFLECTOR



## General Arrangement Drawings for 4000/2000 GPM Foam Monitor.

### 1. SALIENT FEATURES

- ✚ **Certified and Approved by (UL) Underwriters Laboratory USA for use with variable flow.**
- ✚ High Discharge Capacity of 4000/2000 US GPM (15140 / 7570 LPM) at 100 PSI inlet pressure.
- ✚ Excellent Horizontal throw of 80 to 90 Meter long and above
- ✚ Excellent Full Fog & Semi Fog Coverage.
- ✚ **Variable flow of 4000 & 2000 GPM in single nozzle (benefit of two monitor in single monitor)**
- ✚ JRCP is Capable to induct foam from a distance of 100 to the monitor nozzle.
- ✚ Very compact in construction and gives good flexibility of the operation while fire fighting
- ✚ Low Expansion, so less loss of foam & more cooling effect on burning surface.
- ✚ Quick change over from jet to fog even under water pressure with single firefighter.
- ✚ Easy maneuverability in horizontal and vertical plane
- ✚ Fully Stainless Steel Construction
- ✚ Almost maintenance free
- ✚ Available In Fixed and Mobile Version
- ✚ Various Metallurgy Option

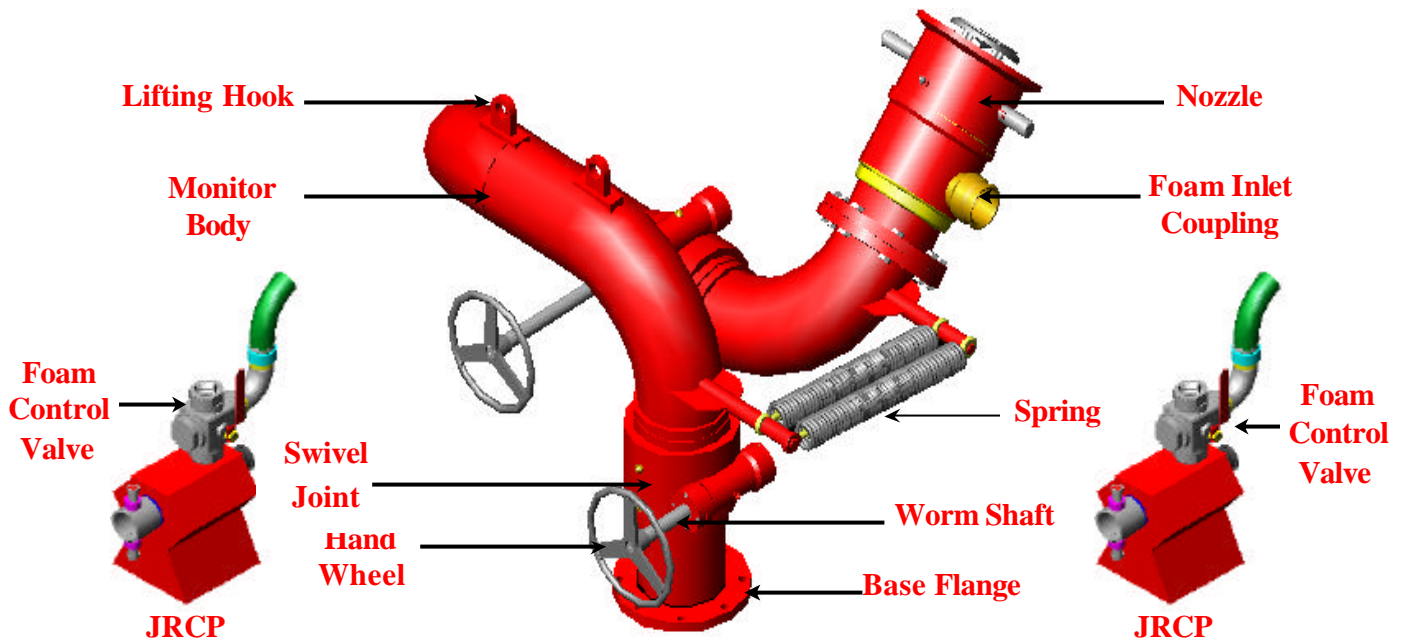
### 2. APPLICATION

The Monitor is highly effective with water and foam for fast knockdown of Fires at Oil & Gas Plants, Off-Shore & On Shore Platforms, Oil Refineries, Petroleum Storage Tanks & Depots, Chemical & Fertilizer Plants, Steel Plants, Power Plants, Ammunition Depots, Defense Stores, Naval Ships And Submarine, Ships & Oil tankers Ports & Jetties Etc.

### 3. TECHNICAL SPECIFICATION

✚ <b>Flow at 100 psi (7 bar) pressure</b>	:	<b>4000/2000 US GPM</b>
✚ Nozzle	:	Non-aspirating type
✚ Induction Type	:	JRCP Type
✚ Induction Rate	:	3 % (As Per UL Guidelines)
✚ Monitor Elevation	:	+ 90 <sup>0</sup> & -10 <sup>0</sup> Vertical
✚ Rotation	:	360 <sup>0</sup> Horizontal.
✚ Water way size	:	200 NB
✚ Inlet Flange Size	:	8" NB 150# S.O.R.F Flange
✚ Hydrostatic Test Pressure	:	21 bar.
✚ Finish/ Paint	:	Fire red shade of Epoxy / Powder Coating

#### 4. MATERIAL OF CONSTRUCTION FOR MONITOR AND NOZZLE



+	Base Flange	:	SS 304
+	Monitor Body	:	SS 304
+	Swivel joint	:	SS 304/ Gun Metal / Bronze
+	Worm Shaft	:	SS 304
+	Hand Wheel	:	SS 304
+	Neck Ring	:	SS 304
+	Foam Intake coupling	:	SS 304
+	Foam Nozzle	:	SS 304/ Bronze / Aluminum / Gun Metal
+	Lifting Hook	:	SS 304
+	JRCP	:	SS 304
+	Foam Control Valve	:	SS 304

**MONITOR ALSO AVAILABLE IN METALLURGY OF SS 316 FOR SPECIAL APPLICATION.**

#### AQUA FOAM JET CONTROL PUMP

Water operated foam pump (JRCP) is suitable for feeding foam concentrate solution to the monitor nozzle from a distance of 100 mtrs & above in horizontal plane. The inlet & outlet of JRCP are provided with 63 mm. Male & female coupling respectively. **The monitor comes with 2 Nos. of JRCP for its use at 4000 GPM and single JRCP for its use at 2000 GPM.**

1. Material of Aqua Powered Pump	:	SS 304
2. Inlet & Outlet Coupling	:	63mm Male/Female coupling (SS 304)
3. Foam Induction Rate	:	3% (as per UL Guidelines)
4. Pick up tube	:	PVC 3 Mtrs Long
5. Delivery Distance	:	Aqua Foam Jet Controller Pump is capable enough to feed foam solution to the monitor nozzle from a distance of 100 mtrs & above in horizontal plane.

#### 5. JRCP COLLECTING HEAD UNIT

The collecting Head unit is used for the control of foam induction at different flow of 2000 GPM and 4000 GPM. This unit consists of 2 no. of 63 mm coupling with valves as an input of rich foam solution from JRCP's and output is a single 4" coupling for hose connection to the monitor nozzle. Each unit of JRCP act as an foam induction for 2000 GPM to nozzle.

Hence 2000 GPM water output at the nozzle requires 1 JRCP in operation and 4000 GPM of water output requires 2 JRCP in operation.

#### **6. PERFORMANCE OF MONITOR AT 100 PSI (IN STILL AIR CONDITION) at Nozzle at 2000 GPM**

a) Water jet at 30° from Horizontal plane	:	80 mtrs.
b) Foam jet at 30° from Horizontal plane	:	75 mtrs.
c) Fog jet at 30° from Horizontal plane	:	20 mtrs.
d) water jet at 85° from Horizontal plane	:	40 mtrs.

#### **7. PERFORMANCE OF MONITOR AT 100 PSI (IN STILL AIR CONDITION) at Nozzle at 4000 GPM**

a) Water jet at 30° from Horizontal plane	:	90 mtrs.
b) Foam jet at 30° from Horizontal plane	:	85 mtrs.
c) Fog jet at 30° from Horizontal plane	:	30 mtrs.
d) water jet at 85° from Horizontal plane	:	45 mtrs.

#### **8. APPROVAL: UL LISTED WITH FOLLOWING FEATURES**

a) Nozzle	:	Non Air Aspirating Nozzle
b) Monitor Solution Flow	:	4000 / 2000 GPM
c) Operating Pressure	:	100 PSI
9. Induction	:	3% using JRCP to feed foam from a distance of 100 mtrs to nozzle. For 4000 gpm flow & for 2000 gpm flow, 2 JRCP & 1 JRCP respectively.