

MONITOR - M - ISI MARKED (CARBON STEEL, HOT DIP GALVANIZED)



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TECHNICAL DATA

MODEL	M
MAXIMUM RATED	12 BAR (175 PSI)
NOMINAL WATERWAY SIZE	65mm, 80mm & 100mm
SPECIFICATION	Reference : IS:8442 - 1977
FLOW AT 7 Kg. / Sq.Cm PRESSURE	65 MM - 1750 LPM 80 MM - 2580 LPM 100 MM - 3500 LPM
FACTORY HYDROSTATIC TEST PRESSURE	25 Kg / Sq.Cm
NOZZLE THURST REACTION IN Kg.	Flow in LPM X $\sqrt{\text{Pressure}}$ in Kg./Sq.Cm. X 0.0228
INLET FLANGE SIZE	65 MM - 100 NB 80 MM - 100 NB 100 MM - 100 NB / 150 NB Flange dimension as per IS 6392-1971 Table 17 & 28
NOZZLE	Straight stream nozzle of Bronze or Aluminium material
MONITOR ELEVATION	90 Deg. above horizontal 45 Deg. below horizontal
ROTATION	360 Deg. continuous
WEIGHT (Approx)	65MM - 33 Kg 80MM - 40 Kg 100MM - 69 Kg
FINISH	Fire Red Shade 536 of IS: 5-1961 painted from outside
ORDERING INFORMATION	Specify Monitor Model, Size and Inlet Flange Size
APPROVAL	ISI marked



The monitor has welded carbon steel water way. All steel parts are hot dip galvanized and painted for excellent corrosion resistance. The vertical and horizontal rotation is through corrosion resistant bronze swiveling joint with double row of stainless steel ball bearing. Both vertical and horizontal movements are controlled with handle with twist lock.

The monitor has large flow capability and can be manually operated by a single fire fighter. The design ensures to prevent jet reaction forces from effecting the horizontal and vertical position of the monitor. The monitor has the ability for 360 deg. continuous horizontal rotation and angle of elevation is adjustable with fix stop from +90 deg. above horizontal to -45 deg. below horizontal.

The water vanes in discharge tube reduces the turbulence and friction loss, thus increasing the nozzle performance to achieve greater range.

To ensure desired performance, the friction loss through monitor must be considered while selecting the nozzle and flow through the monitor with reference to available base pressure at inlet of the monitor. For flow and jet reach data refer table.

DESCRIPTION

The Monitor Model - M is durable manual controlled monitor for fixed installation as well as for trailer mounted unit. The monitor is generally used for protection of flammable liquid storage tanks, loading racks, dykes marine and many other industrial applications.

The Monitor possess several design features that provides ease of operation, minimum maintenance and resistance to normally destructive environments. The monitor is fitted with solid bore straight stream nozzle.



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INSTALLATION, TESTING AND MAINTENANCE

The monitor must be installed and operated carefully by a trained person, having good knowledge of the equipment. Before assembly of the monitor to the supply piping, thoroughly flush the piping with water to avoid sand, residue, welding slag or other debris hindering the proper functioning of the monitor.

After few initial successful tests, an authorized person must be trained to perform the inspection and testing of the monitor.

The monitor should be ready for use. To achieve this condition, scheduled inspection and maintenance operation should be performed and it must be recorded in the maintenance register book indicating the requirement or recommendation. The recommended maintenance, procedure must be followed as given in the manual and also as per the local authority having jurisdiction.

It is recommended to carry out weekly physical inspection of the monitor. The inspection should verify that no damage has taken place to any component and the monitor is ready for use. Carry out functional test every month for the flow, regular rotation in horizontal and vertical plane for the entire operating range to observe any leakage.

Periodic proper greasing through grease nipple provided on bearing, worm wheel and worm shaft must be ensured. Use water resistant low friction synthetic grease. Lubrication is required for smooth operation.

Each monitor must be operated with full flow in accordance to the guidelines of the organisation having local jurisdiction.

The owner is responsible for maintaining the equipment in proper operating condition.

CAUTION

A trained personnel for fire fighting must use the monitor. Appropriate guidance & training must be given to reduce the risk or injury.

The nozzle must be fixed to the monitor carefully. Do not over tighten the nozzle to the monitor. The flange bolts must be tightened uniformly.

The piping must be able to withstand the horizontal reaction force. Serious injury to personnel and equipment can result from improper installation.

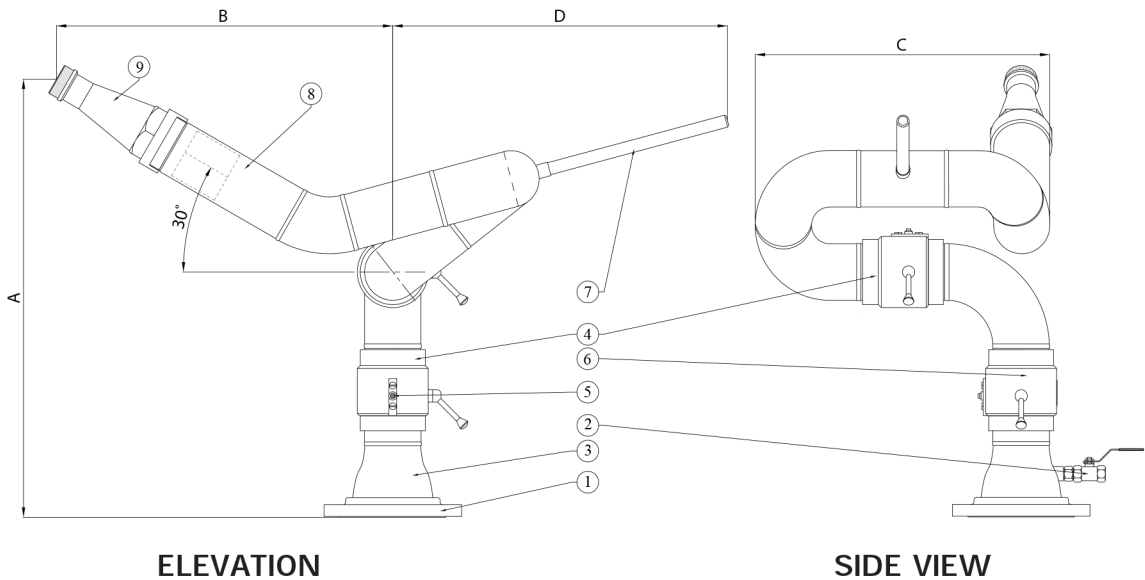
When installing monitor it is very essential that flange bolts are tightened uniformly to prevent cocking of the monitor relative to the flange or valve.

Before flowing water from monitor, check that all personnel are out of stream path and the stream direction will not cause avoidable property damage.

Application of water or foam on an electric appliance can cause serious injury.

The water supply to monitor must be increased / decreased gradually to prevent possible water hammer occurrence.

Do not exceed the maximum pressure or flow rating of the monitor. Exceeding the pressure or flow rating may cause injury or damage to the monitor.

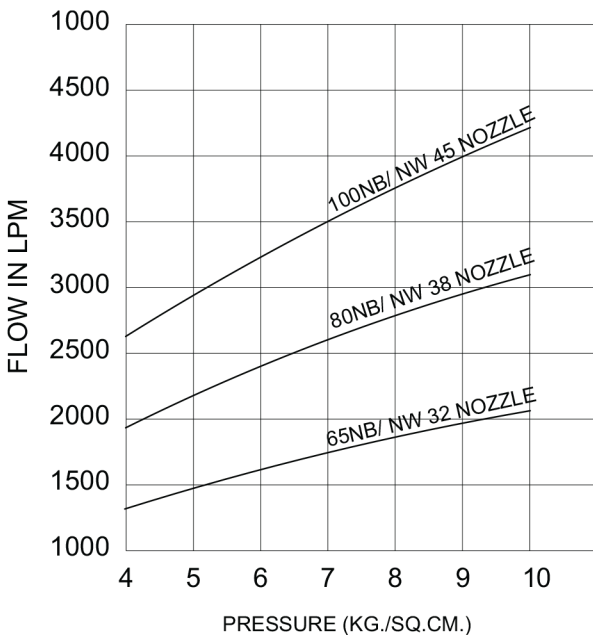

ELEVATION
SIDE VIEW

DIMENSION in millimeter (Approximate)

SIZE	A	B	C	D
65 NB	677	515	415	570
80 NB	720	560	470	620
100 NB	890	685	600	690

PART LIST

ITEM NO	QTY.	DESCRIPTION
1	1	BASE FLANGE
2	1	DRAIN VALVE
3	1	REDUCER
4	2	SWIVEL JOINT
5	4	GREASE NIPPLE
6	2	LOCK NUT
7	1	HANDLE
8	1	WATER BARREL
9	1	NOZZLE


HORIZONTAL STRAIGHT STREAM

MONITOR SIZE	NOZZLE MODEL	FLOW IN LPM	WATER JET IN MTRS.
65	NW 32	1750	53
80	NW 38	2580	60
100	NW 45	3500	64

Note:

Horizontal straight stream range is in still air with nozzle elevation at 30° to inlet flange at 1 to 1.5 meters above ground level and at 7 Kg./Sq.cm. monitor inlet pressure.