



HYDROFIRE ΕΠΕ

Buildings - Industry - Marine – Waterworks
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MONITOR - M 341 (STAINLESS STEEL)



TECHNICAL DATA

MODEL	M 341
NOMINAL SIZE	3 Inch (80 MM)
MAX. SERVICE PRESSURE	175 PSI (12 Bar)
MAXIMUM FLOW	800 GPM (3030 LPM)
FACTORY HYDROSTATIC TEST PRESSURE	35 Bar (500 PSI)
SWIVEL JOINT	Stainless Steel with double row of Ball Bearing and Grease Fittings
NOZZLE THRUST REACTION IN Kg.	Flow in LPM X $\sqrt{\text{Pressure}}$ in Kg./sq.cm. X 0.0228
INLET CONNECTION	3" OR 4" (80 OR 100NB) Flange to ANSI B 16.5 # 150, R.F.
OUTLET CONNECTION	3" BSP (M)
MONITOR ELEVATION	90 Deg. above horizontal & 45 Deg. below horizontal
MONITOR ROTATION	360 Deg. continuous
MONITOR MOVEMENT	Handle with twist lock
FINISH	Red RAL 3001
WEIGHT (Approx)	36 Kg
ORDERING INFORMATION	Specify Monitor Model and Inlet Flange Size
APPROVAL	FM Approved



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 the vertical position of the monitor. The monitor has the ability for 360 deg. continuous horizontal rotation and angle of elevation from 90 deg. above horizontal and 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 the flow through the monitor with reference to available base pressure at inlet of the monitor. For flow and jet reach data refer monitor nozzle data sheet.

DESCRIPTION

Corrosion resistant stainless steel monitor Model-M 341 is durable manual controlled monitor for fixed installation as well as 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 used with aspirating, non-aspirating and water nozzles with flow range upto 800 GPM (3030 LPM).

The monitor has welded stainless steel 3 inch (80MM) water way. The vertical and horizontal rotation is through stainless steel swiveling joints with double row of stainless steel ball bearing. Both vertical and horizontal movements are controlled by handle with twist lock.



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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 the 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, The flange bolts must be tightened uniformly.

The piping must be able to with stand 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 be 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 stream direction will not cause avoidable property damage.

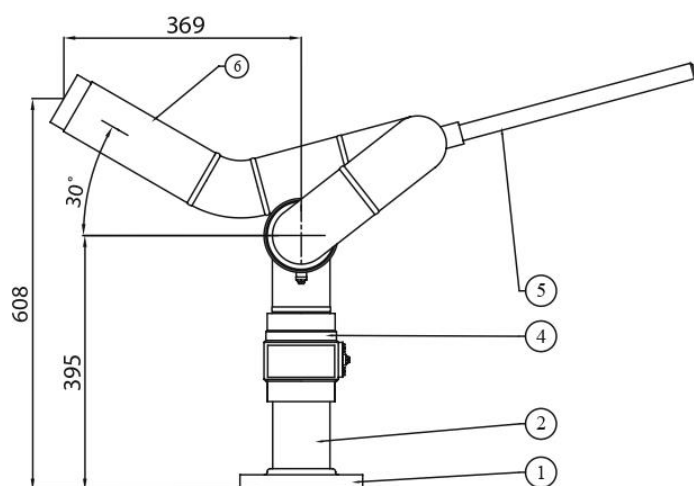
Application of water or foam on an electric appliance can cause serious injury.

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

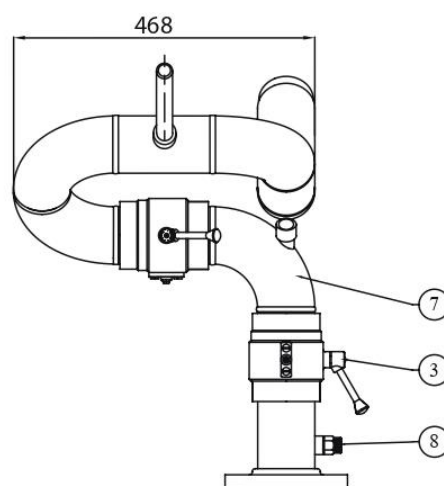


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ELEVATION



SIDE VIEW

PART LIST

SR NO	DESCRIPTION	MATERIAL SPECIFICATION
1	BASE FLANGE	STAINLESS STEEL
2	REDUCER	STAINLESS STEEL
3	LOCK V & H	STAINLESS STEEL
4	SWIVEL JOINT	STAINLESS STEEL
5	HANDLE	STAINLESS STEEL
6	BARREL PIPE	STAINLESS STEEL
7	ELBOW	STAINLESS STEEL
8	DRAIN VALVE	BRASS

Note :

- 1) Monitor inlet flange standard size is 80 NB (3") to ANSI B16.5, 150#, other sizes 100 NB (4") or 150NB (6") are optional.
- 2) All dimensions in mm and are approximate.
- 3) Nozzle suitable to this Monitor is VARSHA 40