



# LIFECO MG - 313 & 343

MANUAL MONITOR 80NB, WITH GEAR OPERATED  
FOR HORIZONTAL & VERTICAL MOVEMENT

**LIFECO MG - 313 & 343** monitors are durable manual controlled monitor of 80 NB size for industrial application for fixed installation as well as a trailer mounted unit. Flow rate is up to 3030 LPM ( 800 GPM).

**LIFECO MG - 313** monitor is made out of welded carbon steel waterway and are hot dip galvanized after fabrication to resist corrosion. **LIFECO MG - 343** monitor is with stainless steel waterway.

The horizontal and vertical rotation is through corrosion resistant bronze swiveling joint with double row of stainless steel ball bearings. The hand wheel is for easy horizontal and vertical rotation control through worm wheel and worm shaft. The monitors have the ability for 360° horizontal rotation and an elevation movement of +90° above horizontal and -65° below horizontal under flow condition.

The monitor outlet is 3" BSP male threads for the mounting of various nozzles.

The water vanes in elbow reduces turbulence and frictionloss, thus increasing the nozzle performance.

The design ensures to prevent jet reaction forces from effecting the horizontal and the vertical position of the monitor. The counterbalance is not required to offset the weight of the nozzle.

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 the inlet of the monitor.

THE MONITOR CAN BE USED AS WATER OR WATER-FOAM MONITOR DEPENDING ON THE NOZZOLE. FOR SELECTION OF FLOW, JET REACH, AND FOR APPLICATION AS WATER OR WATER FOAM REFER MONITOR NOZZLE DATA SHEET.

## INSTALLATION, TESTING & MAINTENANCE

The monitor must be installed and operated carefully by a trained person, having good knowledge of equipment. Before assembly of the monitor to the supply piping, flush thoroughly 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 angle to observe any leakage.

At least once in three months proper greasing through grease nipple provided on bearing, worm wheel and worm shaft must be ensured. 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, mismatched or damaged threads may cause leakage or uncouple the nozzle during operation.

Application of water or foam on an electric appliance can cause serious injury by way of electrocution, as water is a conductor of electricity.

The water supply to monitor must be increased gradually. A sudden surge of water supply to the monitor must be avoided.



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## TECHNICAL DATA :

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MODEL	(a) MG - 313-80 NB size (3") Carbon steel waterway (b) MG - 343-80 NB size (3") Stainless steel waterway
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MAXIMUM OPERATING OPERATING PRESSURE	12.2 Kg/cm.sq. (175 PSI)
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MAXIMUM FLOW	3030 LPM (800 GPM)
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INLET CONNECTION	100NB ANSI B16.5 #150
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OUTLET CONNECTION	3 INCH BSP(M)
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FACTORY HYDROSTATIC TEST PRESSURE	25 kg/cm.sq. (357 PSI)
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NOZZLE THRUST REACTION IN KG.	Flow in LPM X $\sqrt{\text{Pressure}}$ in kg/cm.sq x 0.0228
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MONITOR MOVEMENT	Manual handwheel for horizontal and vertical rotation.
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SWIVEL JOINT	Stainless Steel Ball Bearing type
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WORM SHAFT	Stainless Steel 304
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WORM WHEEL	Bronze IS:318 LTB II (BS1400 LG2/ASTM B62) (Optional - Phosphorous Bronze, BS 1400 PBI)
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MONITOR ROTATION	360° continuous
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MONITOR ELEVATION	+ 90° above horizontal - 65° below horizontal
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FINISH	Red Polyurethane
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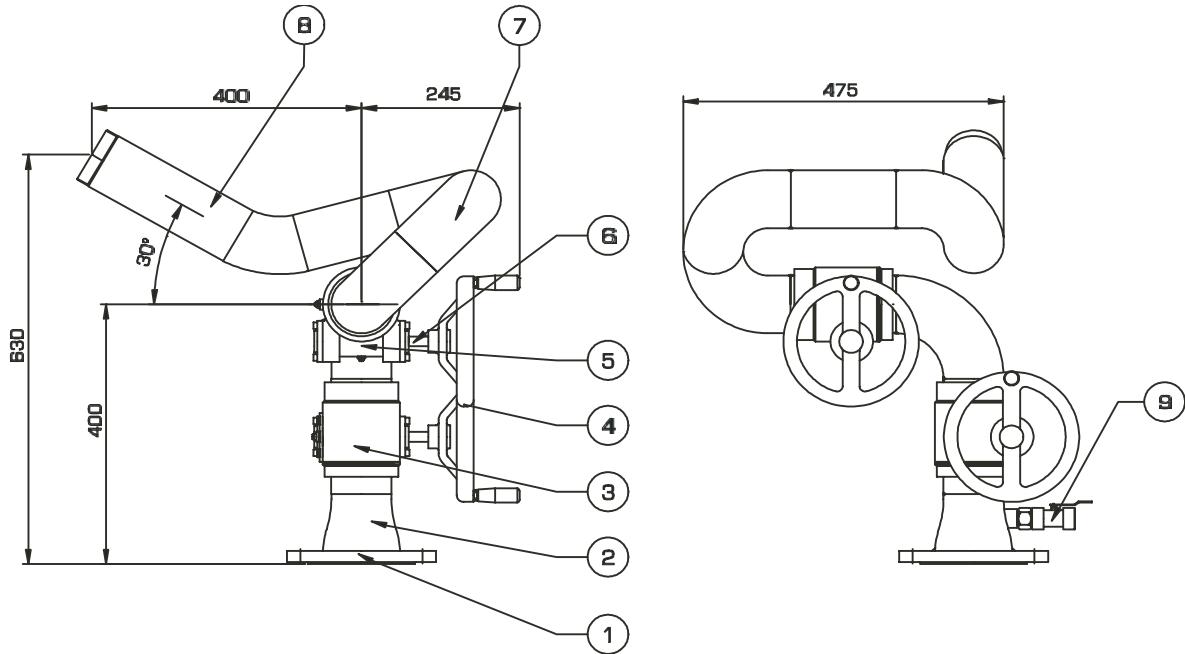
ORDERING INFORMATION	Specify Monitor Model, Size, Flange connection, Nozzle Model and Flow rate
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## PART LIST

SR.NO.	DESCRIPTION	MATERIAL SPECIFICATION	
		MG313	MG343
1	BASE FLANGE	ASTME A105	STAINLESS STEEL
2	REDUCER	ASTM A234 WPB SCH 40	STAINLESS STEEL
3	SWIVEL JOINT	BRONZE IS:318/ ASTM B62	BRONZE IS:318/ ASTM B62
4	HAND WHEEL	CAST IRON	CAST IRON
5	WORM WHEEL	BRONZE IS:318/ ASTM B62	BRONZE IS:318/ ASTM B62
6	WORM SHAFT	STAINLESS STEEL	STAINLESS STEEL
7	ELBOW	ASTM A234 WPB SCH 40	STAINLESS STEEL
8	BARREL PIPE	ASTM A106 SCH 40	STAINLESS STEEL
9	DRAIN VALVE	BRASS	BRASS

NOTE: Monitor inlet flange standard size is 100 NB (4") to ANSI B16.5, 150#, other sizes 80 NB (3") or 150NB (6") optional.



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## LIMITED WARRANTY

Products are warranted against defects in material and workmanship for a period of Two (2) years from the date of shipment.

LIFECO's obligation under this warranty is limited to replace or repair the products or its parts, which are shown to lifeco's examination to be in a defective condition attributable to LIFECO. No warranty is given for products or components which have been subject, to misuse, improper installation, corrosion, wear and tear, improper storage, modification or repaired. If the defect attributable to LIFECO cannot be rectified by repair or replacement, then LIFECO may elect to refund the purchase price of the equipment in complete discharge of its obligation under this Limited Warranty.

IN NO EVENT SHALL LIFECO BE LIABLE IN CONTRACT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY, FOR INCIDENTAL, IN-DIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING DAMAGES. FOR INJURY TO PERSON OR DEATH OR DAMAGE TO PROPERTY AND OR PENALTIES RESULTING FROM ANY PRODUCTS OR COMPONENT SUPPLIED BY LIFECO.

THIS IS LIMITED WARRANTY ONLY. LIFECO DISCLAIMS WITH RESPECT TO THE PRODUCTS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. THERE IS NO WARRANTY OF ANY NATURE MADE BY LIFECO BEYOND AS STATED ABOVE.

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## NOTICE :

The equipment presented in this bulletin is to be installed in accordance with the latest publication standards of NFPA or other similar organisations and also with the provision of government codes or ordinances wherever applicable.

The information provided by us are to the best of our knowledge and belief, and are general guidelines only. Site handling and installation control is beyond our reach. 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 LIFECO and hence the right to modify any specification without prior notice is reserved with the company.

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