

## **USER GUIDE MixRite LF-1000**

Tefen is pleased to welcome you as a new customer.

Please read this manual carefully before using the product and follow the safety guidelines. For additional information on our MixRite proportional dosing pumps please visit our wesite https://tefentech.com/downloads

or Scan the QR code below



### SYSTEM OVERVIEW

#### MixRite LF-1000

**Water Pressure** Flow Rate 0.2-8 bar 10-1000 I/h

Working Temp. Coupling 4-40° C 3/4"



#### **SAFETY**



#### **Warning:**

During operation, the operator must stay in front of the MixRite pump and wear protective eyewear, clothing and gloves.

Be extremely careful in the presence of hazardous substances (e.g. corrosives, toxins, solvents, acids, caustics, flammable, etc.). The user must adhere to the recommendations given by the chemical product manufacturer.



#### **Caution:**

Use proper tools. DO NOT USE METALLIC TOOLS. Use only plastic connectors.

It is the responsibility of the owner/operator to make sure water flow and pressure do not exceed the MixRite specifications. Before applying any aggressive chemicals, please consult your distributor to confirm compatibility with the dosing pump. When connecting a MixRite either to the public water supply or to its own water source, you must respect the regulations in force concerning protection of the source i.e.



#### **Important notes:**

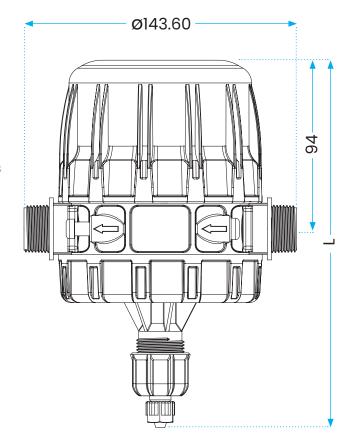
backflow prevention, etc.

Ensure water flow is according to the arrows on the unit.

Use 120 mesh-130 micron filter. For water with high particle content, use 250 mesh - 60 micron filter depending on your water quality. It is recommended to place an anti-siphon valve on the downstream side of the dosing pump in installations in which there is a risk of siphoning.

Do not operate your MixRite when the additive tank is empty.

For installations subject to water hammer/ excessive flow, a protection device such as a check valve or union ball check must be fitted (pressure/flow control system).



Model	L (Height)	
Fix	212.5 (8.36")	



#### 1. INSTALLATION

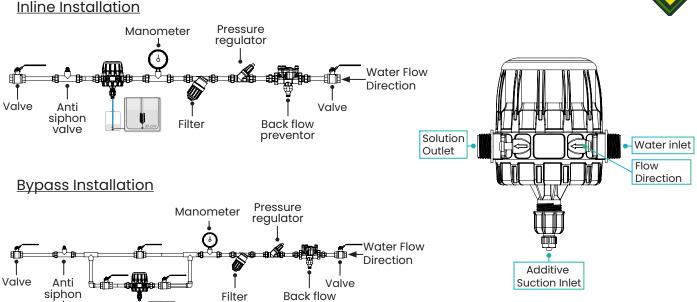


Fig. 2 - Installation illustration

preventor



## **Important!**

valve

If the water line is higher than the MixRite itself, there is a possible risk of water and additive flowing back through the MixRite (see Fig. 2). In such a case, installing a nonreturn valve downstream is necessary.

The strainer must be suspended at least 10 cm (4") above the bottom of the additive tank to avoid sucking up the insoluble particles that may damage the pump assembly. Do not put the strainer on the ground.

#### Water hammer/excessive flow:

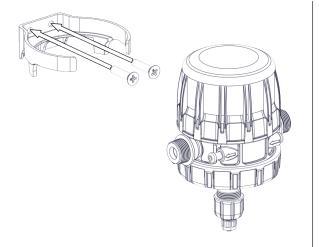
For installations subject to water hammer, a protection device such as a check valve or union ball check must be fitted (pressure/flow control system).

For automatic installations, slow opening and closing solenoid valves are preferable.

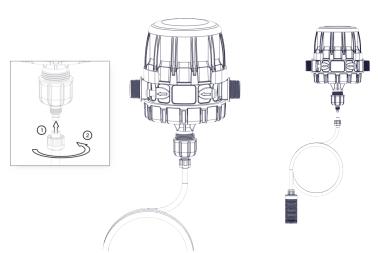
In an installation where the MixRite serves several sectors, the closing of one sector and the opening of another sector must be done at the same time (simultaneous operation of the solenoid valves).

# 2. INSTALLATION

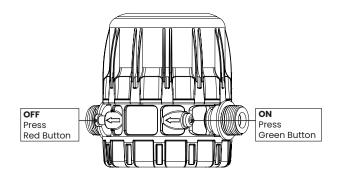








3 MixRite On/Off



## 3. MAINTENANCE



# **Important!**

To maintain the dosing pump in good condition, it is advisable to operate the pump with suction of clean water after each use.

Regular yearly maintenance will help extend the lifespan of your MixRite dosing pump. In addition, kit seals need to be replaced every year.

Regularly clean the water filter at the pump inlet and the additive suction filter.

If the pump is planned to be out of use for a long period of time, operate the pump for a few minutes with the suction tube immersed in a tank with clean water to remove additive residues from the pump, preventing them solidifying in the pump.



If there is a fear of frost, and the temperature falling below 4°C (39°F), empty the water from the pump. To do this, close the entry and exit valves securely. Open and dismantle record nut that connects the suction pipe. Press the backflow prevention valve using a finger or a thin rod, allowing all the water that has collected in the pump to drain out while pressing the air-release valve at the top of the pump.

It is advisable to carry out the maintenance of the pump body whenever soluble products are used. To carry out the maintenance, remove the pump body and wash it thoroughly with plenty of clean water. When finished and before reassembly onto the motor body, lubricate the seal with silicone.

An air inlet, impurity or chemical damage to a seal can interrupt the dosing function. It is recommended to periodically check that the solution is being correctly drawn up into the MixRite.

Change the suction tube as soon as it seems damaged by the chemical.

It is advised to relieve the pressure after use.

# 3.1 Rinsing and Cleaning the Unit

Rinsing of the MixRite is required when changing chemicals and before handling the MixRite, to avoid any contact with the chemical.

Rinse the MixRite as follows:

- 1. Rinse the unit by pumping clean water from the additive container.
- 2. Wash the external surface of the unit with clean water.

# 3.2 Cleaning and Refitting the Suction Check Valve

Before removing Suction Check Valve, turn off the water supply and allow the pressure to drop to zero.

Remove Suction Check Valve.

Rinse parts of Suction Check Valve with clean water, re-assemble them and ensure that the spring is in good working condition.

Re-assemble Suction Check Valve in the reverse order.

# 3.3 Action Frequency

Action	Frequency
General Check	After each use
Cleaning Cycle	Yearly
Replace Seals	Yearly
Replace Other Components	As needed

# 4. TROUBLESHOOTING

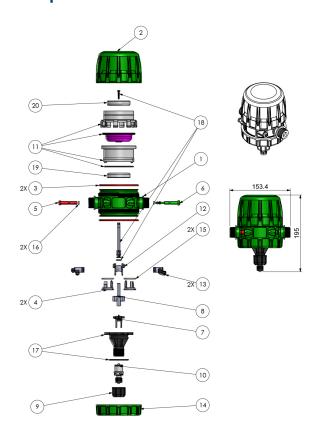
Subject	Check	Solution	
	Pump's arrows direction.	Pump's arrow align to water flow direction.	
The pump isn't working	Line water flow.	Clean the line filter. Inlet & outlet valves are open.	
	Bypass installation - Check Apressure.	Check the main line pressure.	
	Check Diaphragm.	Replace if dammaged.	
	Check Valves Seals.	Replace if dammaged.	
	Lubrication.	Lubricate according user manual instructions.	
No additive suction	Suction filter.	Clean the filter.	
	Check Suction Tube.	Replace Suction Tube if dammaged.	
	Suction Check Valve.	Open & clean. Replace Check Valve if Seal is dammaged.	
	Check Suction Seal.	Replace if damaged.	
	Suction Cylinder bore.	Replace if scratched and replace Suction Filter.	
Water flowing back to additive container	Suction Check Valve.	Open & Clean. Replace Check Valve if Seal is dammaged.	
Irregular Noise	Granular particles in additive solution.	Replace Suction Filter. Lubricate according User manual.	



## **5. SPARE PARTS**

Cat. No.	Kit # %	Suction Piston	Suction Tube	Check Valve	Cylinder	Diaphragm
39132200000	0.2% FIX	36130000010	36000000036	36000000260	36010000015	36130000016
Recommend per dosing pu		5/100	10/100	10/100	10/100	5/100

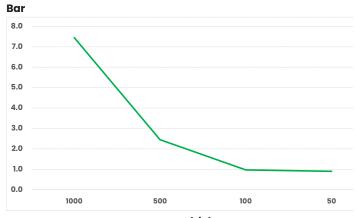
# **5.1 Exploded View**



ITEM NO.	PartNo	DESCRIPTION	QTY.
1	36107011317	MR1 D BODY 3/4' GREEN	1
2	36109011827	MR1 D MOTOR COVER GREEN	1
3	38022383231	Oring-238 PO	2
4	36102011102	MR1-Elliptical_Cover	2
5	36118011616	On-Off-Button MixRite-1	1
6	36119011717	On Button MixRite 1	1
7	36193008243	MixRite 1 PEEK Spring	1
8	36112011110	MR 1 Togle Frame	1
9	36012013221	Suction Valve 3/4" Nut	1
10	36000000260	Check Valve coonie - 8 Hose	1
11	36130000016	M3073_DiaphragmAssy_V8	1
12	36131011109	MR1 Double Toggle	1
13	36130000011	MR1-D Valves KIT	2
14	36136011806	MR1-D Bottom Cover - GREEN	1
15	38003032246	O RING 30X3	2
16	37080000080	O RING 2-009	2
17	36010000015	MR 1 Cylinder connector kit	1
18	36130000010	MR1 D PISTON BAR KIT	1
19	36131016123	MR1-D Diaphragm Mount Disc Bottom	1
20	36131016124	MR1-D Diaphragm Mount Disc Top	1

# **6. SPECIFICATIONS**

## **Pressure Loss**



Flow Rate (I/h)

#### 7. LIMITED WARRANTY

Tefen Flow and Dosing Technologies Ltd. ("Tefen") will replace all parts shown to be defective in material or workmanship during a period of twelve months from the date of purchase by the original purchaser ("Warranty Period"). Warranty shall be limited to Warranty Period and shall not be extended in any event. To obtain warranty replacement of a part, the MixRite must be returned with original proof of purchase receipt to Tefen or authorized distributor and thereafter recognized as defective after examination by the technical services of the manufacturer or distributor.

The MixRite must be flushed of any chemical and sent to the manufacturer or distributor prepaid but will be returned free of charge once repairs are made if found to be covered by the warranty.

This warranty only covers circumstances where the part has failed due to defects caused by the manufacturing process. This warranty is invalid if the defects are found to be due to the product's misuse, inappropriate use of tools, negligence, changes and/or alterations made in the Product not by Tefen, combination and/or use with other products not manufactured by Tefen, lack of maintenance and/or defective installation or environmental accidents or corrosion by foreign bodies and liquids found within or in proximity to the MixRite.

The seals and "O" rings are not covered under warranty, nor is damage to the MixRite caused by water impurities such as sand. A filter (200 Mesh) must be used in front of the unit for this warranty to be valid.

Tefen declines any responsibility if the MixRite is not used in compliance with the operating instructions and tolerances as indicated herein.

There are no warranties, express or implied, which will extend beyond those described above.

TEFEN OR AUTHORIZED DISTRIBUTOR SHALL NOT BE LIABLE FOR ANY LOSS OF USE, SALES OR PROFIT OR FOR ANY INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES CAUSED BY OR SUFFERED AS A RESULT OF THE SALE OR USE OF THE PRODUCT AND SHALL BE LIMITED TO THE CONSIDERATION ACTUALLY PAID BY YOU FOR THE PRODUCT. This warranty is personal, and you may not assign, transfer, sell, indorse, pledge its rights under this warranty to any third party without Tefen's prior written consent.

Any dispute arising in connection with this warranty shall be referred to the competent court in Tel Aviv Israel, which shall have exclusive jurisdiction in relation to all matters which may arise out of or in connection with this warranty. The provisions of the substantive law prevailing in Israel shall govern this warranty.