

MixRite

TF10 Series User Guide



MixRite pumps from DEMA Engineering Company are water-driven proportional dosing pumps engineered for precise additive injection directly into water or fluid lines. These units are versatile, operating within a specified range of flow rates, and are available in models that offer either fixed or variable injection rates. Constructed from durable engineered composite materials, MixRite pumps are designed to withstand harsh environmental conditions and are resistant to chemicals and acids, ensuring long-lasting performance.

Models	Dosage Rate %
TF.10.001CL.PAAON/OFF	0.1-1%
TF.10.002ON/OFF	0.2-2%
TF.10.005ON/OFF	1-5%

TECHNICAL DATA

MixRite Operational Conditions	
Minimum Flow Rate	2 GPM (7.5 LPM)
Maximum Flow Rate	45 GPM (170 LPM)
Minimum Temperature	39°F (4°C)
Maximum Temperature	104°F (40°C)
Operation Pressure Range	14.7 to 120 PSI (1 Bar to 8 Bar)



MixRite Parts Book

11.12.2024



ag.demaeng.com

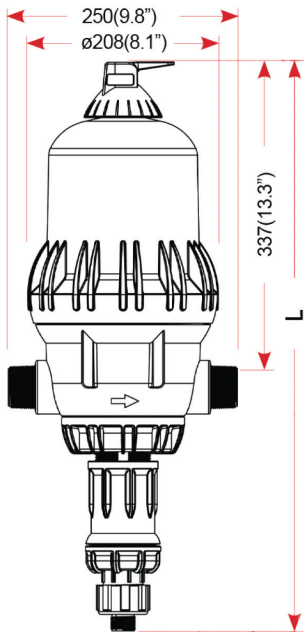
Tech Support
314.966.3533
demaeng.com

TABLE OF CONTENTS

Safety & Warnings	2
Installation	3-4
Maintenance	5
Troubleshooting	6
Warranty	7

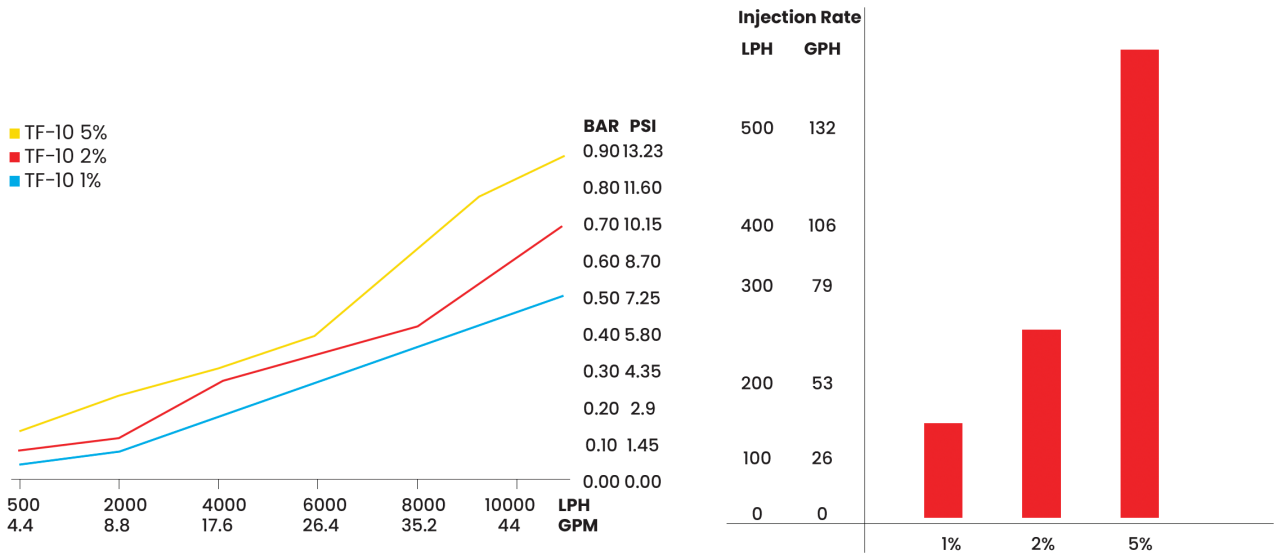
SAFETY & WARNINGS

- Take additional safety measures appropriate to the liquid being pumped and the temperature of the water.
- The operator must wear appropriate personal protection equipment during any maintenance of the MixRite pump.
- An air leak, impurity, or chemical damage to a seal can interrupt the dosing function. It is recommended to periodically check that the solution is correctly drawn into the MixRite.



L (Height)
On/Off
Max 26.7" (680mm)
Min 23" (585mm)

SPECIFICATIONS

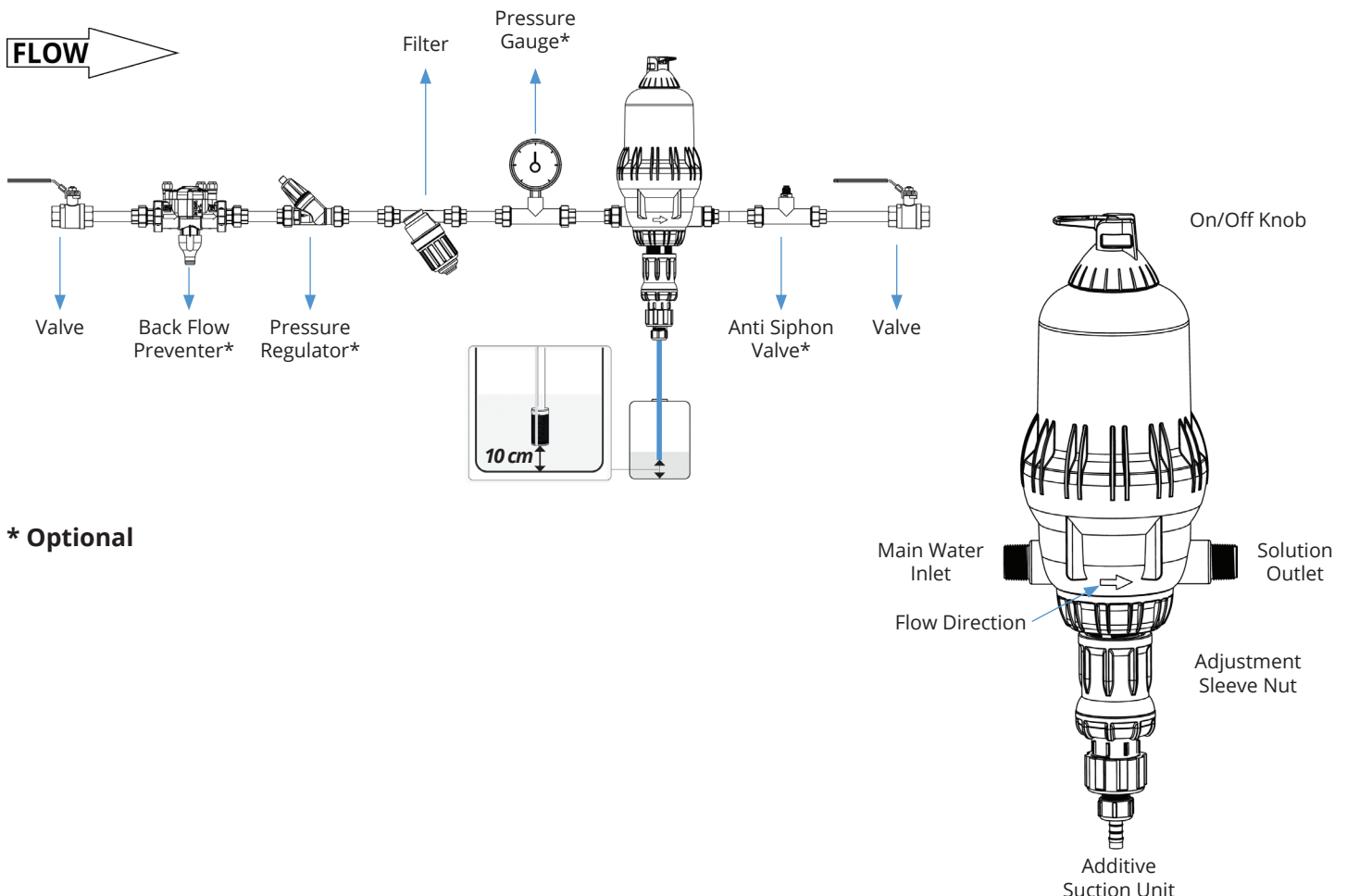


MIXRITE INSTALLATION

- When connecting a MixRite either to a public water supply or to its own water source, you must follow local plumbing and backflow regulations.
- Always use 120 mesh – 130 micron filter before the inlet of the unit.
- Ensure the water is flowing in accordance with the arrow molded into the body of the unit. If the water line is higher than the MixRite itself, there is a possible risk of water and additive flowing back through the MixRite. In such a case, installing a check valve near the MixRite is recommended.
- 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.
- The additive strainer should 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.

Water hammer/excessive flow :

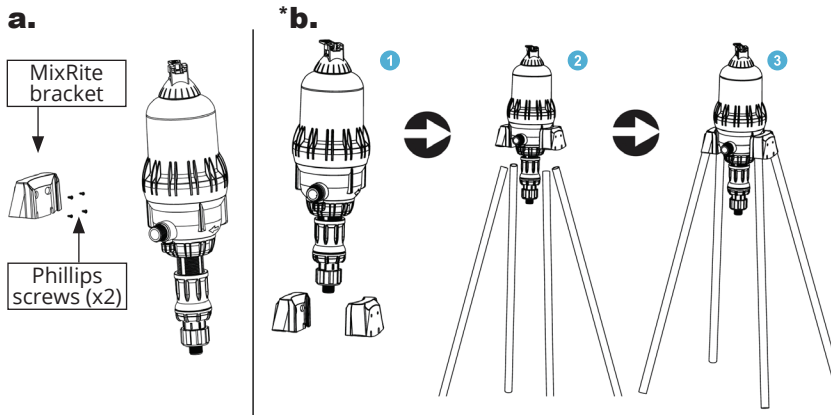
- For installations subject to water hammer, a protection device such as a water hammer arrestor is recommended.
- For automated installations, slow opening and closing solenoid valves are preferable.
- Flow rates exceeding 45 GPM will result in MixRite failure



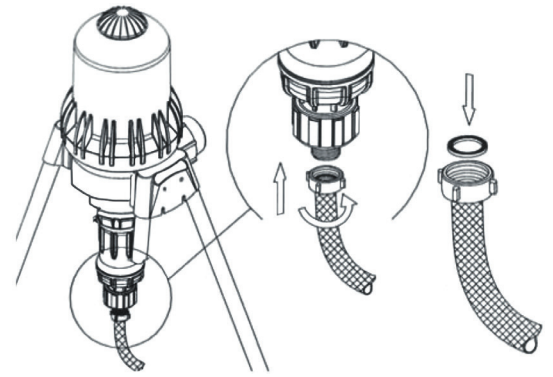
* Optional

INSTALLATION & OPERATION

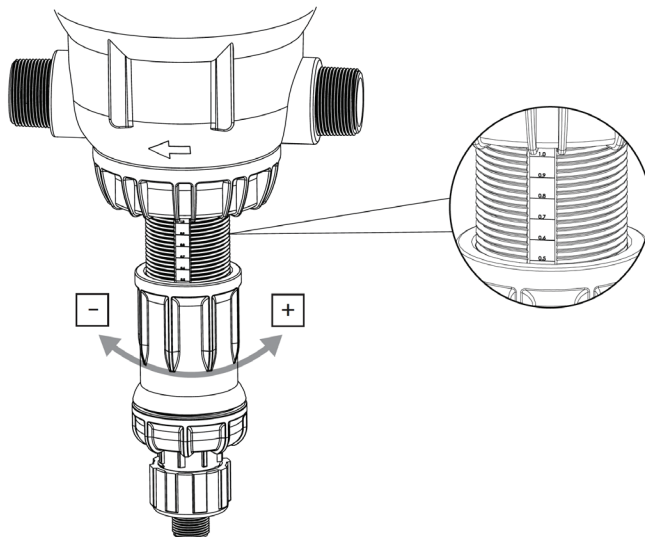
1 Mounting MixRite TF



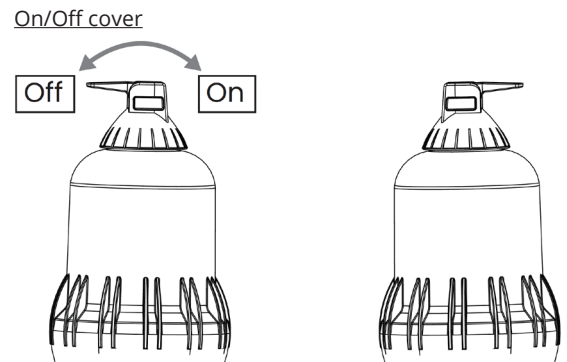
2 Connecting suction tube



3 Adjusting dosage



4 MixRite cover options



Legs not included.
To order:
Part Number
35125011872 (x4 for all four legs)

MAINTENANCE

- Regular maintenance will help extend the lifespan of your MixRite dosing pump. Lip Seals should be replaced periodically. Lip Seals are a normal wear item.
- Regularly clean the suction screen 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 fertilizer / chemical residues from the pump, preventing them from solidifying in the pump.
- If temperature falls below 39°F (4°C), empty the water from the pump.

Rinsing and Cleaning the Unit

Rinsing of the MixRite is required when changing chemicals and before handling the MixRite.

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.

Cleaning and Refitting the Suction Check Valve

1. Before removing Suction Check Valve, turn off the water supply and allow the pressure to drop to zero.
2. First remove the suction tubing, then remove the large black nut. The check valve should be able to be removed.
3. Rinse parts of Suction Check Valve with clean water, re-assemble them in the order shown and ensure that the spring is in good working condition.
4. Lubricate the rubber washer and O rings.
5. Re-assemble Suction Check Valve in the reverse order.
6. Replace the black nut.
7. Connect the suction tubing.

TROUBLESHOOTING

Subject	Check	Solution
The pump does not work.	Direction of arrow on the pump.	Install the pump so that the arrow point in direction of water flow.
	Inlet and outlet valves.	Open the valve.
	Inlet filter.	Clean the filter.
	Line's water pressure.	Make sure there is water pressure in the line – check the system input filter and make sure it is clean.
	Springs are not broken.	Change the engine.
	Cylinder is not scratched.	Change cylinder.
	Piston seals are not damaged.	Change the seals.
The pump has stopped working.	The water is not flowing at the appropriate pressure. Open the main valve. Open the nut locking the motor cover, remove the motor cover, and remove the mechanism. Check if the engine seals are defective.	Replace the engine seals.
	Check if the springs are broken.	Replace the engine.
	Check if one of the parts of the mechanism is broken.	Replace the engine.
MixRite does not draw additive.	The suction filter is blocked.	Clean the filter.
	Dismantle the pump unit and check if the suction seal is defective.	Replace the suction seal.
	The check valve is defective.	Replace the check valve.
MixRite makes scratching noises.	Check if there is liquid in the additive container.	Add liquid to the container.
	Check if the suction tube is immersed and not folded.	Straighten or change the tube.
	Check suction filter to see if it is blocked and if it is immersed in the additive tank.	Clean and rinse suction filter. Fill liquid into tank to cover filter.
Water flowing back into additive container.	Check valve.	Clean or replace the check valve.

WARRANTY

DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products which have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper voltage supply, physical abuse or misapplication. Rubber and synthetic rubber parts such as "O" rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval of DEMA, this warranty will be void. Defective units or parts should be returned to the MixRite dealer from which they were purchased with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. RMA number is required to return units for repair or replacement must be granted in advance of return.

RETURNS:

NO MERCHANDISE MAY BE RETURNED FOR CREDIT WITHOUT OUR WRITTEN PERMISSION.
RETURN MERCHANDISE AUTHORIZATION NUMBER REQUIRED IN ADVANCE OF RETURN.