

Dema Mix Rite Instruction manual
Water driven proportional dispensing system



Read this manual carefully before attempting to install or use the unit.

1. Contents of delivery

- a) MixRite pump
- b) Suction tubing with foot strainer
- c) Mounting bracket
- d) Instruction manual

2. Technical information.

Measurements H x D x W	: 450 x 135 (incl. Bracket) x 165mm (between connectors)
Ship weight	: 1.7 Kg's – 2.5 kg's depending on model
Capacity	: 0.2 – 2% Model 202502 : 0.4 – 4% Model 202504 : 3 – 10% Model 202510
Flow rate	: 10 – 2500 liters per hour
Temperature	: 4 – 50 °C
Pressure range	: 0.2 – 6 bar
Connections	: Male ¾" thread
Direction of flow	: Indicated by arrow on body
Mounting position	: With flow connectors horizontally
Maximum suction height	: 3 meters
Tubing connections	: PVC 6 x 4 mm
Included	: Suction tubing with strainer, mounting bracket
Housing parts	: Re-inforced PA 12, Polyethylene chemical cylinder
Spring material	: Stainless 302
Elastomer material	: EPDM as standard, Viton available on request

3. Operation description

The Dema Mix Rite proportional pump is driven by a built in water motor, which operates the suction piston. The piston draws chemical into the suction section of the pump and releases the chemical into the water stream of the pump. For units with external injection option the chemical is released directly to the outlet fitting of the unit.

The water motor works in direct proportion to the flow through the motor, the larger the flow the quicker the motor operates the suction piston. Consequently giving a very precise dosage of chemical into the water stream within a wide flow range.

4. Installation

NOTE! These systems must always be installed in accordance with EU or local plumbing directives. We recommend the usage of a BA back flow preventer to be installed ahead of the unit.

NOTE! The direction of flow is indicated on the pump body with an arrow pointing in the flow direction.

A minimum 200 mesh in line filter is also recommended prior to the unit.

Determine the area where the pumps shall be installed. Ensure that there is sufficient space available for maintenance and the chemical to be used.

Make sure that the water and ambient temperatures are not exceeded since this can cause damage to the unit.

Different installation options are shown on pages 4 to 6

The unit requires a minimum length of pipe to be cut off to be 165 mm plus the additional distance required for the connectors. The MixRite pump is equipped with male 3/4" BSP threads on both the inlet and outlet.

Caution not to overtighten the plastic fittings, especially if metal pipe fittings are to be used. The MixRite unit must be installed with the inlet-outlet in a horizontal position, with the suction side facing down. See figure 1.

Now place the suction tube, filter end, into the chemical drum and pull the tube to the fitting on the suction side. Cut off not needed tube and tighten by using the enclosed compression nut.

The unit is now ready for operation.

5. Starting to use the MixRite pump.

Remove the top-locking fork for the adjustment of the dosage. Turn the lower (ribbed) part of the suction chamber anti-clockwise to increase the induction and clockwise to decrease the induction. When the top of the ribbed section lines up with your desired percentage turn this so that the locking fork can be inserted to lock the induction rate. See figure 2.

Open the water valve and allow the pump to be slowly filled with water. Once this is done press down the air-release valve, on the top of the unit, and hold down until all air has escaped and only water is coming out of the bleed holes under the button. Release the button

Note! Water will flow and it is advised to have placed a bucket underneath the unit to collect this amount of water. See figure 3.

Let the water flow through the unit and ensure that chemical is being inducted via the suction tube. There will be a sound from the unit as long as the suction chamber is empty, which will disappear, once the suction chamber is filled with liquid.

Leave the unit running for a few minutes and check that there are no leaks around the pipe fittings or elsewhere on the unit.

Your Dema MixRite system is now ready for use, and will provide you with a long and reliable service provided that normal care is taken to maintain the unit.

1. Screw the MixRite bracket onto a wall or any stable vertical base.
2. Press the MixRite onto the bracket. The nipples on the MixRite must click into the holes in the side of bracket.



Figure 1

Adjusting the MixRite

Every stroke of the MixRite moves a predetermined volume of water with a predetermined volume of liquid additive. To adjust the volume of the liquid additive:

Preset the amount of additives according to the Percentage to Water Scale that is found on the proportioner.

Turn the Proportioning Adjuster clock-wise to increase the amount of additives.

Turn the Proportioning Adjuster counter clock-wise to decrease the amount of additives.

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Adjusting the MixRite

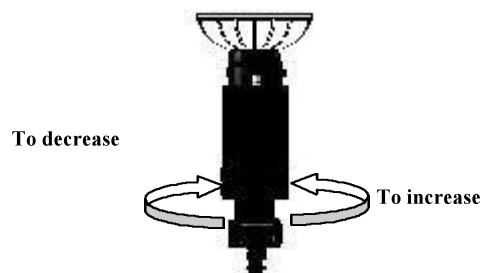
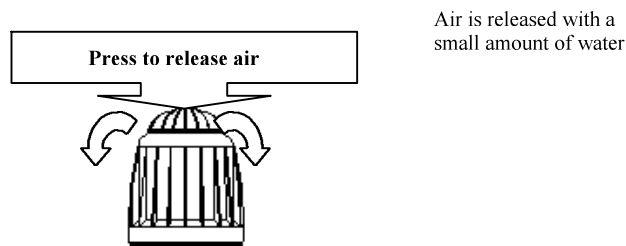


Figure 2

The Air-Bleed Valve for 2510

For proper operation, the MixRite should be free of air. Use the air-relief valve on the cap of the MixRite to release trapped air. After initial operation of the MixRite, apply pressure to the cap (the air release valve) for several seconds to open valve that allows trapped air to escape. This air release is accompanied by a slight loss of water. Release the pressure on the cap to close the valve.

Figure 3.



For 12510

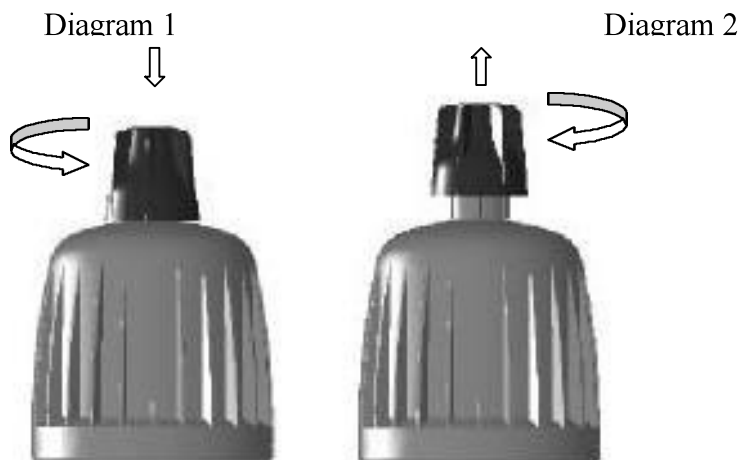
MixRite Models with "on/off" System

To Turn the dosage unit off and allow the free flow of water through the **MixRite**:

A: The handle must be turned and pushed in so that it is in the close state. (see diagram 1).

To Turn the dosage unit on and allow the flow of water through the **MixRite**:

B: The handle must be turned and pulled out so that it is in the open state. (see diagram 2).



Note

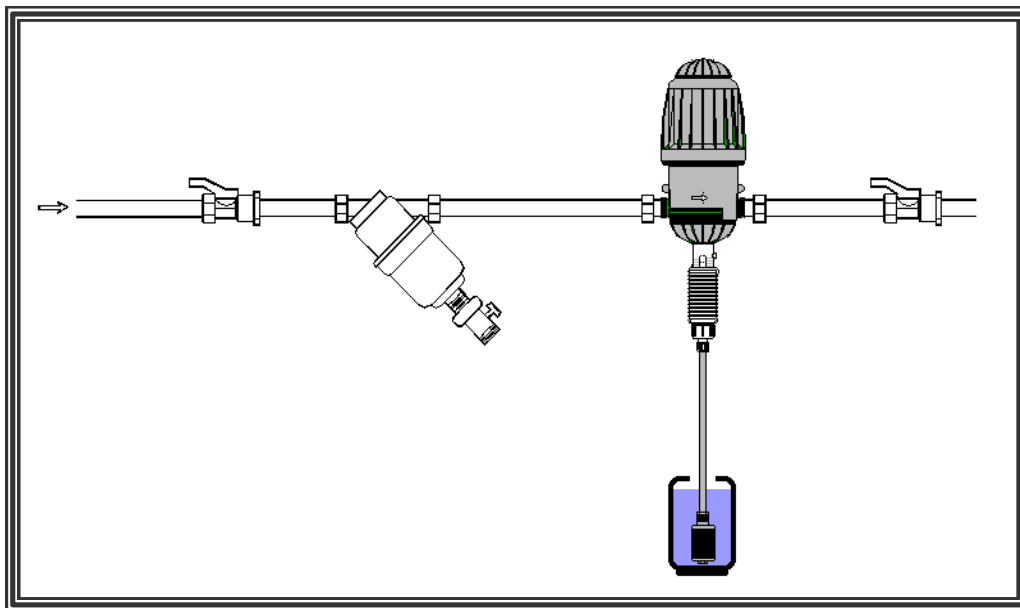
It is strongly recommended to turn off the MixRite dosage when dosage container is empty.

Trouble shooting guide.

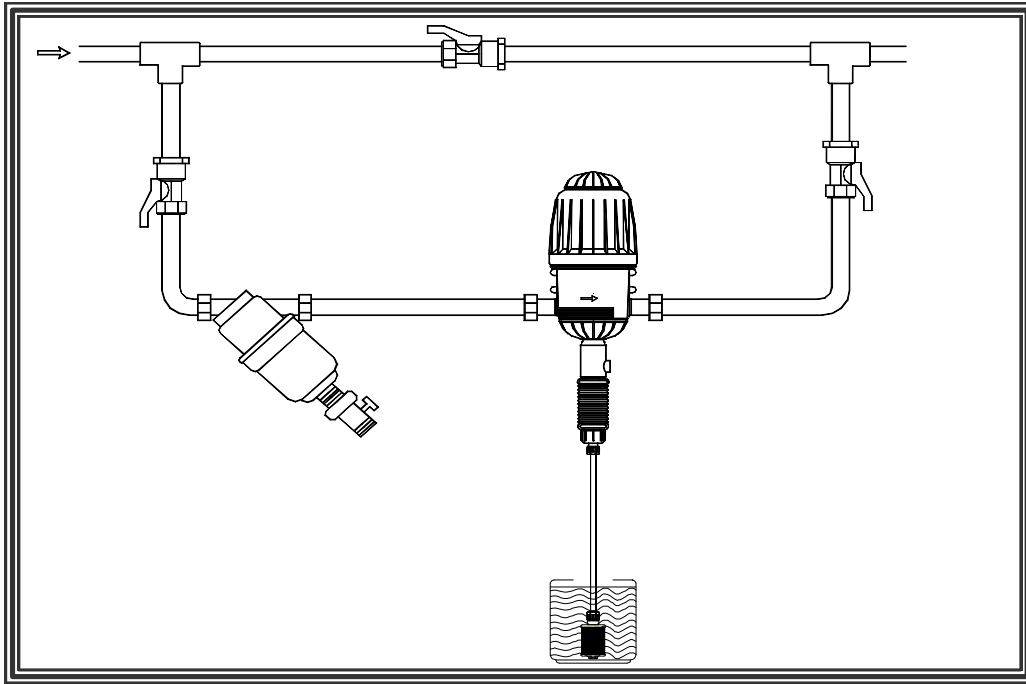
Problem	Check	Solution
Unit does not work	Intake and outlet valves are open	Open valves
	Water filter for clogging or build up	Clean filter
	Do you hear the “click” of the water motor	Disassemble the pump according to repair section
Chemical is not injected	Chemical drum empty or suction filter clogged	Replace drum or clean filter
	Suction seal is damaged	Replace the seal
The unit makes scratching noises	Check chemical container	Replace with a full container
	Check suction tube. if blocked	Replace suction tube
	Check suction filter for clogging	Clean filter

Installation examples

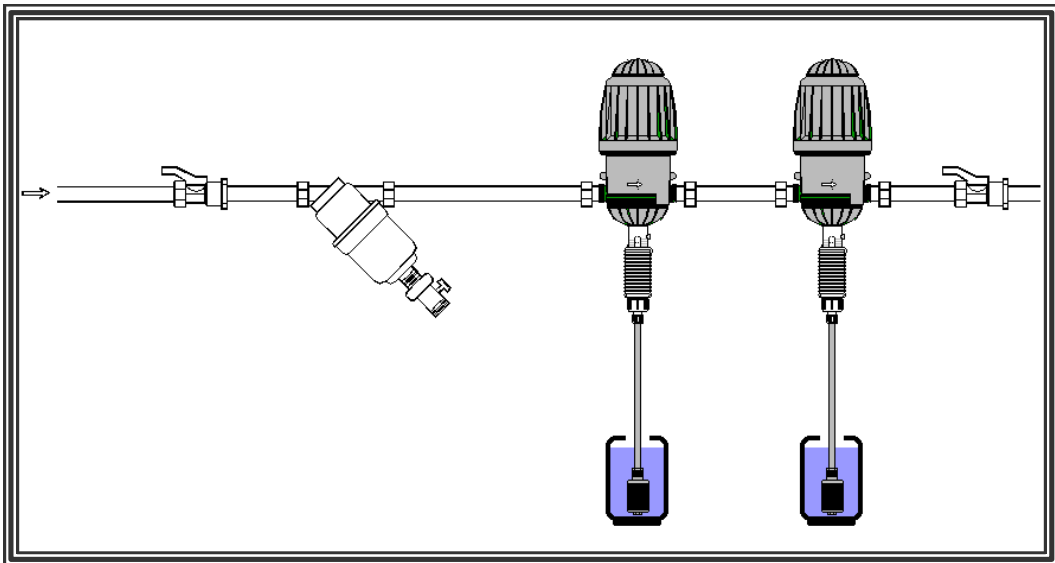
Direct in-line installation



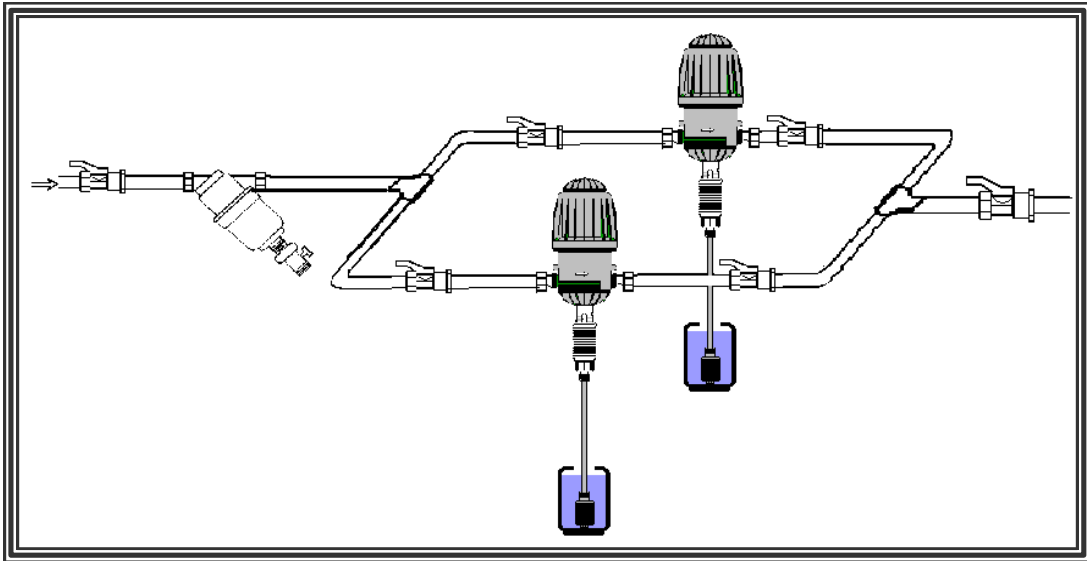
Bv-pass installation



Serial installation



Parallel installation



Return Policy

No merchandise may be returned for credit without DEMA Engineering Company's written permission. Return Merchandise Authorization (RMA) number required in advance of return.

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 factory 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. Return merchandise authorization number to return units for repair or replacement must be granted in advance of return.