



Superior
irrigation
protection

MixRite™ Dosing Pumps

March 2024 v1.0

/ Product Catalog



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About Netafim

Netafim is the global leader in precision irrigation for a sustainable future. With 33 subsidiaries and 17 manufacturing plants worldwide, Netafim delivers innovative, tailor-made irrigation and fertigation solutions to millions of farmers, allowing smallholders to large-scale agricultural producers, in over 110 countries, to grow more with less.

Founded in 1965, Netafim pioneered the drip revolution, creating a paradigm shift toward precision irrigation. Today, specializing in end-to-end solutions from the water source to the root zone, Netafim delivers turnkey irrigation and greenhouse projects, supported by engineering, project management and financing services.

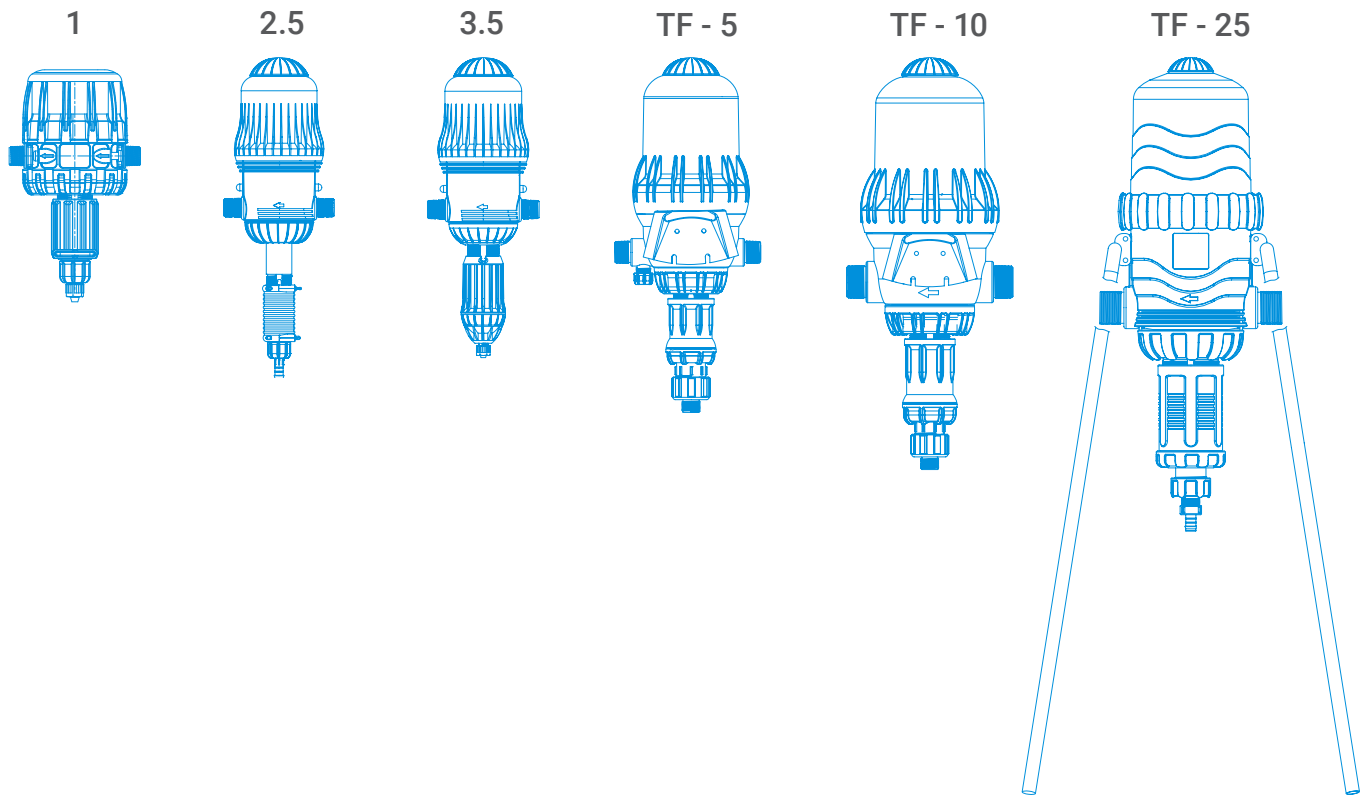
Netafim is also leading the way in digital farming, integrating real-time monitoring, analysis and automated control into one state-of-the-art system. In 2017, Orbia, a global leader in specialty products and innovative solutions acquired 80% of Netafim, Kibbutz Hatzerim holds the remaining 20%.

See how Netafim's solutions are changing the economics of agriculture and helping the world grow more with less at www.netafim.com



/ MixRite™ Dosing Pumps

→ The MixRite™ Range



/ Applications

→ Irrigation

The objectives of fertigation are to control water quantities and added nutrients necessary for optimum growth of crops. MixRite™ proportional injection technology means less waste, plus a better mix for fertilizers, pesticides and other water-soluble products.

→ Water Treatment

Water treatment is any process that improves the quality of water for a specific end-use such as drinking, industrial water supply, irrigation and many more. MixRite™ pumps offer optimal solution for chlorination and PH control process.

/ Features

- ✓ Mixes additive and water precisely
- ✓ The dosage can be adjusted easily and quickly
- ✓ Repair is simple and inexpensive
- ✓ Key internal parts are from the highest quality material available (hastelloy spring. Viton rubber seal)

→ Advantages

- ✓ Hydraulic, volumetric and non-electric
- ✓ Dosing proportional to water flow rate
- ✓ Excellent dosing repeatability and homogeneity
- ✓ Easy dosing adjustment
- ✓ Easy to install, operate and maintain

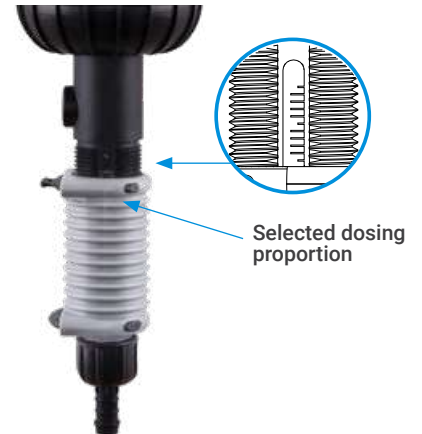
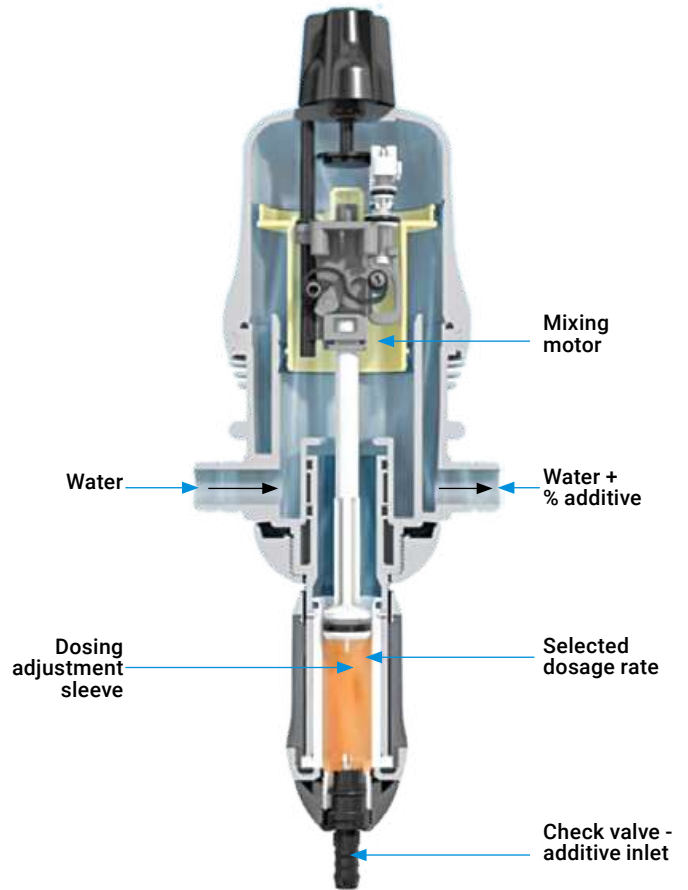
Determining the right MixRite™ model for each application is done according to the customer's needs and the system specifications

→ Adjusting the MixRite™ Pump

The injection rate is set up manually by rotating the sleeve to the desired proportion. The amount of injected concentrate is proportional to the amount of water flowing into the MixRite™ pump.

→ Operating Principle

The unit will automatically start working when water is flowing in the water line and continue until the flow stops; it is possible to control the suction (intake) operation with the On/Off system.



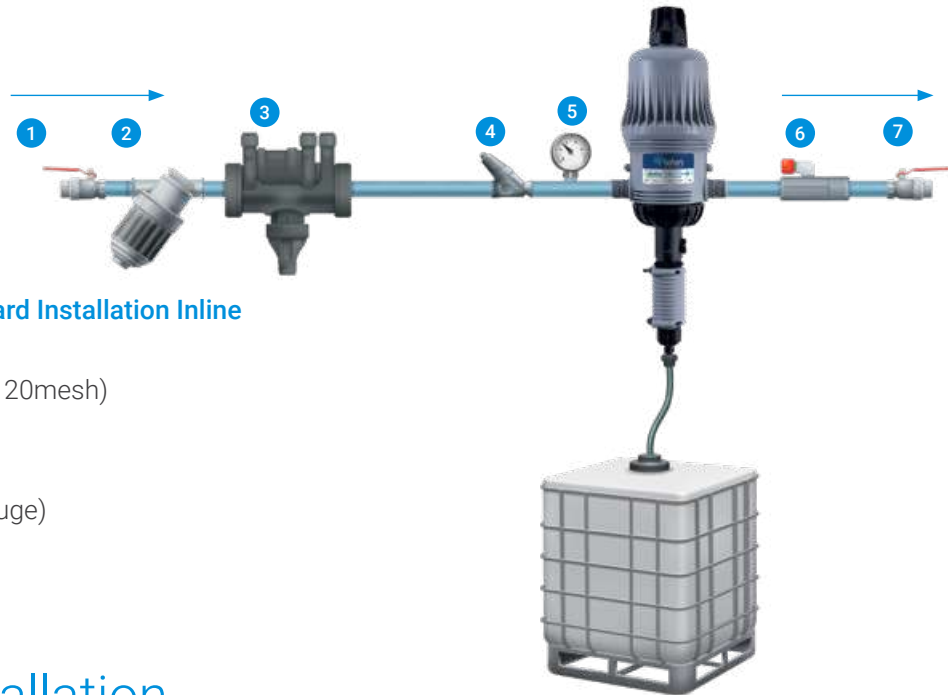
/ Simplicity by Design

→ Simple Installation

MixRite™ is a "Plug and Play" unit. Installation of MixRite™ can be done by using the instructions attached to each unit.

→ Simple Maintenance

MixRite™ is the most simple injector to use. Less maintenance is required and no technician is needed for changing spare parts.



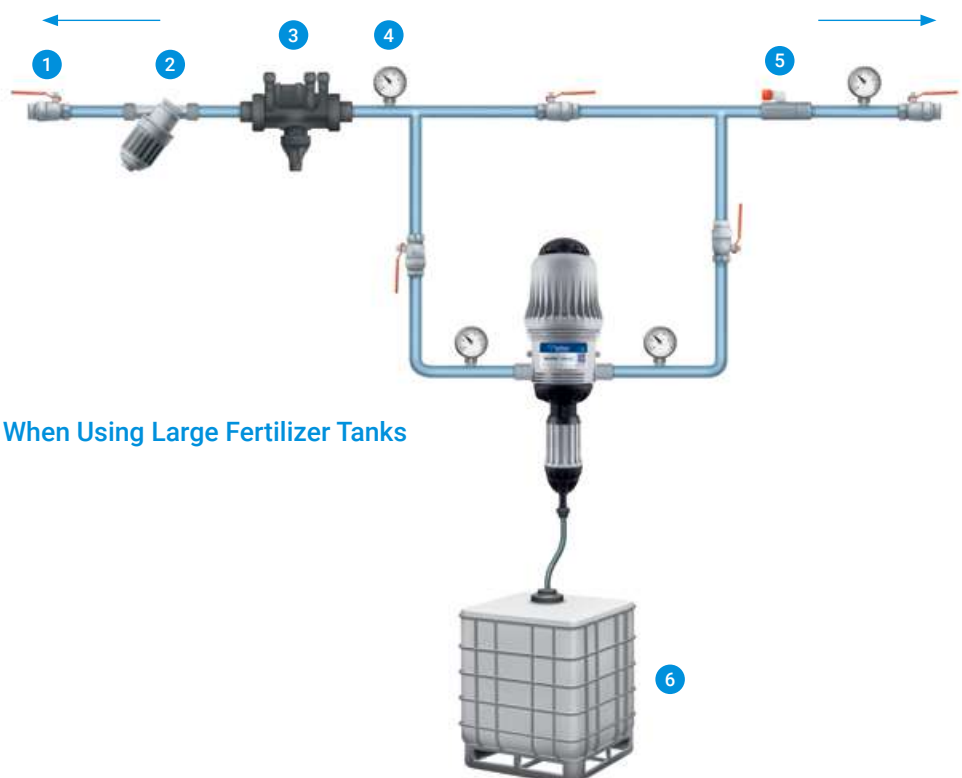
→ Recommended Standard Installation Inline

1. Main Valve
2. Filter - 130 Micron Min. (120mesh)
3. Back Flow Preventer
4. Pressure Regulator
5. Manometer (pressure gauge)
6. Anti Siphon Valve
7. Operation Valve

/ Typical installation

→ Available Option

Tefen's MixRite™ offers pumps for a variety of applications such as fertilizing, cleaning or disinfecting fluid lines, sanitizing water systems and more. MixRite™ offers a wide range of sizes and flow rates, and can be installed in a broad array of system configurations, besides being put.




→ Typical Bypass Installation When Using Large Fertilizer Tanks

1. Valve
2. Filter
3. Backflow Preventer
4. Manometer
5. Anti-Siphon Valve
6. Additive Tank

/ Accessories



3/4" Anti-Siphon Kit




Plastic Wall Mounting Bracket
For all 3/4" MixRite™ models




3/4" Water Filter



Manual ON/OFF Option




Hydraulic Remote Control ON/OFF Option



Leg
Compatible with 2.5 & 3.5 models




Pressure-Check Socket



Plastic Wall-Mounting Bracket and Stand Base
For MixRite™ TF5 & TF10 models



Stainless Steel Wall Mounting Bracket
For MixRite™ TF25 models



Pulse Transmitter

MixRite™ 2.5

(2.5m³/h)



Non-electric



Proportional dosing



User friendly

/ Benefits & Features

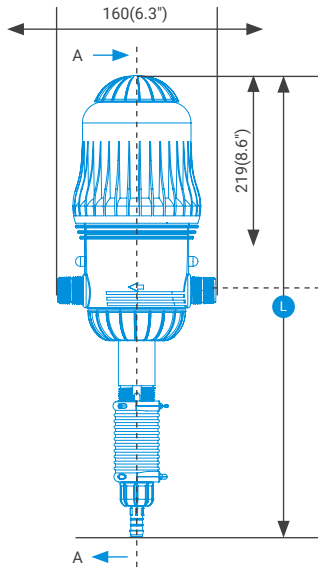
- **Non-electric** Fully hydraulic
- **Proportional dosing** To water flow rate
- **Repeatability and homogeneity** Precise dosing through the complete cycle
- **User friendly** Easy to install, operate and maintain

/ Specifications & Recommendations

- **Water Pressure** – 0.2 – 8 bar (2.9 – 116psi)
- **Flow Rate** – 10 – 2500l/h (0.44 – 11gpm)
- **Working Temp.** – 4 – 40°C (39.2 – 104°F)
- **Coupling** – 3/4"
- **Available Options** – Manual ON/OFF, Hydraulic ON/OFF, Electric ON/OFF

* Legs available upon request

→ Technical Dimensions

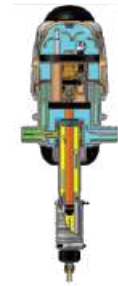


	L (Height)	
	On/Off	Air Release
Max.	528 (20.7')	496 (19.5')
Min.	497 (19.5')	457 (17.9')

→ Application Color Code

Application	Sleeve Color	Seal Material	Spring Material
Irrigation	Grey	NBR	SST
Acids	White	AFLAS	Hastelloy
Chlorine	Purple	Viton	Hastelloy
By-Pass	Yellow	EPDM, AFLAS	SST, Hastelloy

→ By Pass Model



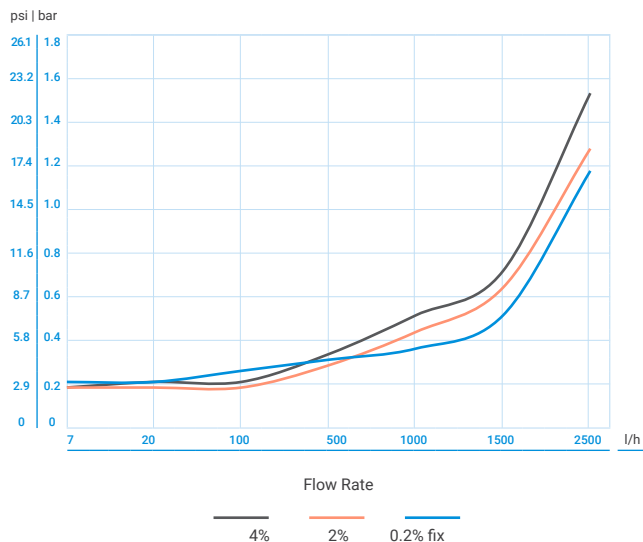
Internal bypass
*Yellow sleeve

→ Application Range

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Gross weight std unit
0.2% fix	10 - 2500l/h	0.2 - 8 bar	3/4" BSPT	0.02 - 5l/h	8mm	1.4kg
0.1% - 0.9%	10 - 2500l/h	0.2 - 8 bar	3/4" BSPT	0.01 - 22.5l/h	8mm	1.8kg
0.3% - 2%	10 - 2500l/h	0.2 - 8 bar	3/4" BSPT	0.03 - 50l/h	10mm	1.8kg
0.4% - 4%	10 - 2500l/h	0.2 - 8 bar	3/4" BSPT	0.04 - 100l/h	16mm	1.8kg
0.1% - 0.9% Internal bypass	20 - 2500l/h	0.2 - 8 bar	3/4" BSPT	0.02 - 22.5l/h	8mm	1.9kg
0.3% - 2% Internal bypass	20 - 2500l/h	0.2 - 8 bar	3/4" BSPT	0.06 - 50l/h	10mm	1.9kg
0.4% - 4% Internal bypass	20 - 2500l/h	0.2 - 8 bar	3/4" BSPT	0.08 - 100l/h	16mm	1.9kg

* Low flow 7l/h available in P0 model

→ Head Loss



MixRite™ 3.5

(3.5m³/h)



Non-electric



Proportional dosing



User friendly

/ Benefits & Features

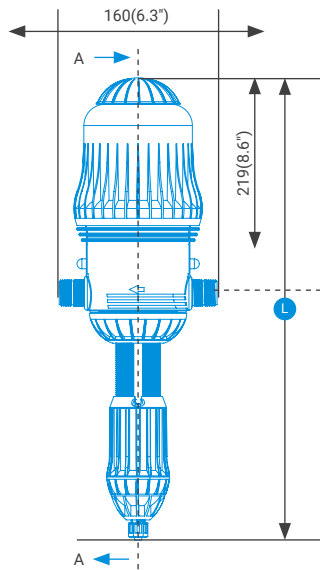
- **Non-electric** Fully hydraulic
- **Proportional dosing** To water flow rate
- **Repeatability and homogeneity** Precise dosing through the complete cycle
- **User friendly** Easy to install, operate and maintain

/ Specifications & Recommendations

- **Water Pressure** – 0.2 – 8 bar (2.9 – 116psi)
- **Flow Rate** – 10 – 2500l/h (0.44 – 11gpm)
- **Working Temp.** – 4 – 40°C (39.2 – 104°F)
- **Coupling** – 3/4"
- **Available Options** – Manual ON/OFF, Hydraulic ON/OFF, Electric ON/OFF

* Legs available upon request

→ Technical Dimensions



	L (Height)	
	On/Off	Air Release
Max.	551 (21.7")	486 (19.1")
Min.	471 (18.5")	447 (17.6")

→ Application Color Code

Application	Sleeve Color	Seal Material	Spring Material
Irrigation	Grey	NBR	SST
Acids	White	AFLAS	Hastelloy
Chlorine	Purple	Viton	Hastelloy
By-Pass	Yellow	EPDM, AFLAS	SST, Hastelloy

→ By Pass Model

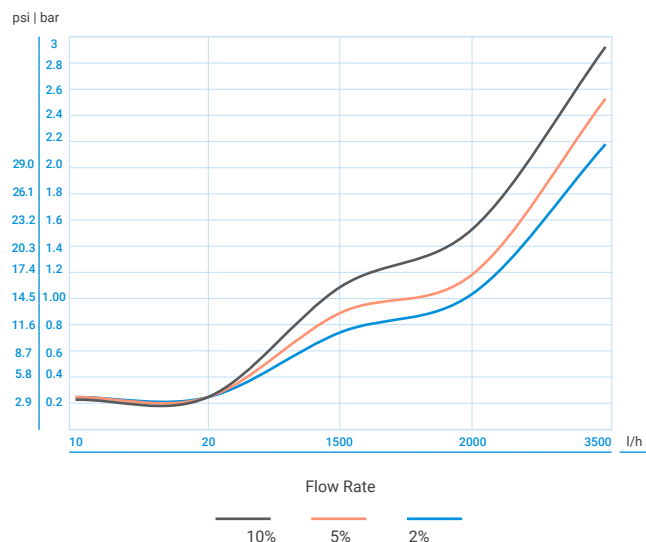


Internal bypass
*Yellow sleeve

→ Application Range

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Gross weight std unit
0.03% - 0.2%	10-3500l/h	0.2 - 8 bar	3/4" BSPT	0.003 - 7l/h	8mm	1.9kg
0.1% - 0.9%	10-3500l/h	0.2 - 8 bar	3/4" BSPT	0.01 - 31.5l/h	8mm	1.9kg
0.3% - 2%	10-3500l/h	0.2 - 8 bar	3/4" BSPT	0.03 - 70l/h	10mm	1.9kg
0.5% - 5%	10-3500l/h	0.2 - 8 bar	3/4" BSPT	0.05 - 175l/h	16mm	1.9kg
1% - 10%	50-3500l/h	0.2 - 8 bar	3/4" BSPT	0.5 - 350l/h	19mm	3.6kg
1% - 10% I.B.P	50-3500l/h	0.2 - 8 bar	3/4" BSPT	0.5 - 350l/h	19mm	3.6kg

→ Head Loss



MixRite™ TF-5

(5m³/h)



Non-electric



Proportional
dosing



User
friendly

/ Benefits & Features

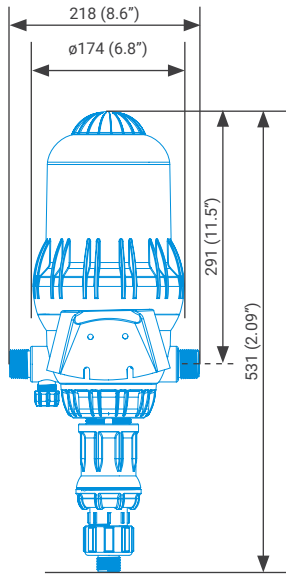
- Non-electric Fully hydraulic
- Proportional dosing To water flow rate
- Repeatability and homogeneity Precise dosing through the complete cycle
- User friendly Easy to install, operate and maintain

/ Specifications & Recommendations

- **Water Pressure** – 1 – 8 bar (14.5 – 116psi)
- **Flow Rate** – 0.1 - 5 m³/h (0.44 – 22gpm)
- **Working Temp.** – 4 – 40°C (39.2 – 104°F)
- **Coupling** – 1" or 32mm
- **Available Options** – Manual ON/OFF, Hydraulic ON/OFF, Electric ON/OFF

* Legs available upon request

→ Technical Dimensions



→ Application Color Code

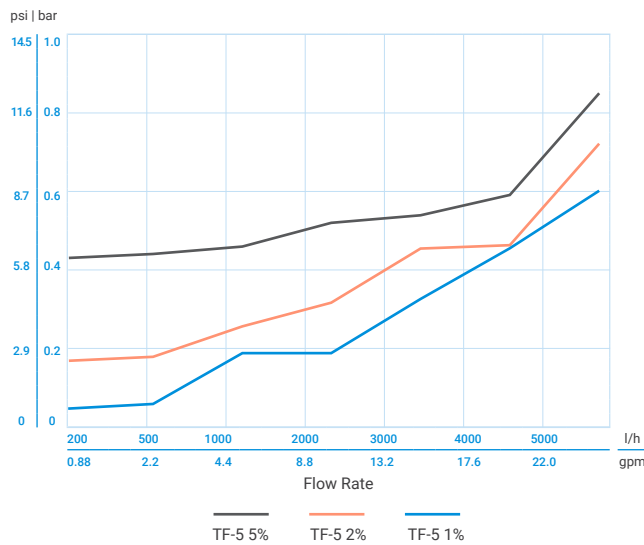
Application	Sleeve Color	Seal Material	Spring Material
Irrigation	Blue	NBR	SST, Hastelloy
Chlorine	Purple	Viton	Hastelloy

	L (Height)	
	On/Off	Air Release
Max.	680 (26.7")	595 (23.4")
Min.	585 (23")	545 (21.4")

→ Application Range

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Gross weight std unit
0.1% - 1%	0.1 - 5m ³ /h	1 - 8 bar	1" BSPT	0.1 - 50l/h	16mm	5kg
0.2% - 2%	0.1 - 5m ³ /h	1 - 8 bar	1" BSPT	0.2 - 100l/h	16mm	5kg
0.5% - 5%	0.1 - 5m ³ /h	1 - 8 bar	1" BSPT	0.5 - 250l/h	19mm	5kg

→ Head Loss



MixRite™ TF-10

(10m³/h)



Non-electric



Proportional dosing



User friendly

/ Benefits & Features

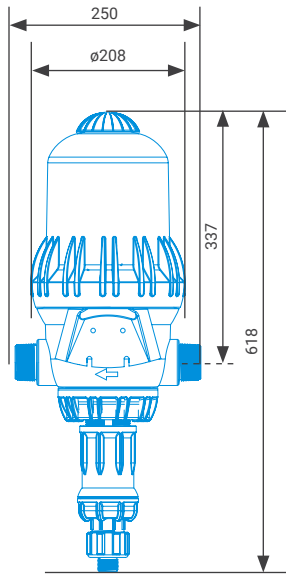
- **Non-electric** Fully hydraulic
- **Proportional dosing** To water flow rate
- **Repeatability and homogeneity** Precise dosing through the complete cycle
- **User friendly** Easy to install, operate and maintain

/ Specifications & Recommendations

- **Water Pressure** – 1 – 8 bar (14.5 – 116psi)
- **Flow Rate** – 0.1 - 10 m³/h (0.44 – 45gpm)
- **Working Temp.** – 4 – 40°C (39.2 – 104°F)
- **Coupling** – 1.5" or 50mm
- **Available Options** – Manual ON/OFF, Hydraulic ON/OFF, Electric ON/OFF

* Legs available upon request

→ Technical Dimensions



→ Application Color Code

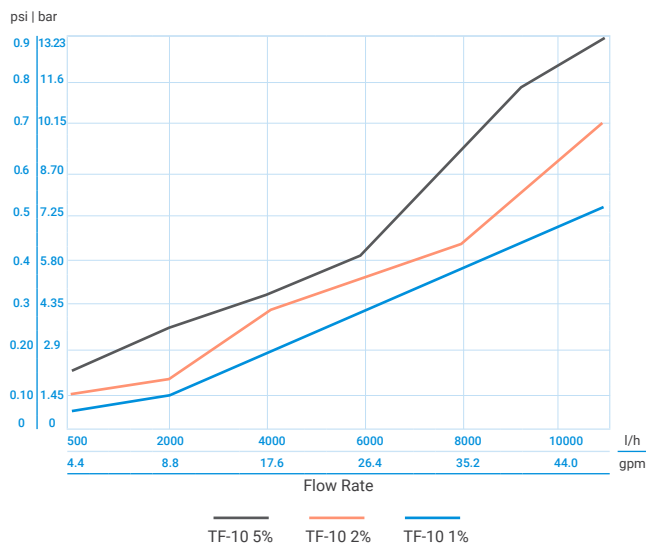
Application	Sleeve Color	Seal Material	Spring Material
Irrigation	Blue	NBR	SST, Hastelloy
Chlorine	Purple	Viton	Hastelloy

	L (Height)	
	On/Off	Air Release
Max.	760 (29.9")	660 (26")
Min.	720 (28.34")	625 (24.6")

→ Application Range

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Gross weight std unit
0.1% - 1%	0.1 - 10m³/h	1 - 8 bar	1½" BSPT	0.1 - 100l/h	19mm	7.3kg
0.2% - 2%	0.1 - 10m³/h	1 - 8 bar	1½" BSPT	0.2 - 200l/h	19mm	7.3kg
1% - 5%	0.1 - 10m³/h	1 - 8 bar	1½" BSPT	1 - 500l/h	19mm	7.3kg

→ Head Loss



MixRite™ TF-25

(25m³/h)



Non-electric



Proportional
dosing



User
friendly

/ Benefits & Features

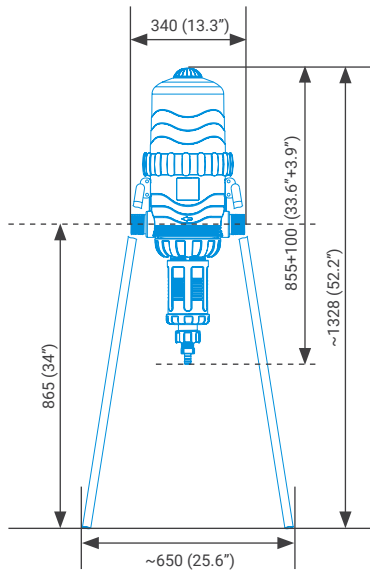
- **Non-electric** Fully hydraulic
- **Proportional dosing** To water flow rate
- **Repeatability and homogeneity** Precise dosing through the complete cycle
- **User friendly** Easy to install, operate and maintain

/ Specifications & Recommendations

- **Water Pressure** – 1 – 8 bar (14.5 – 116psi)
- **Flow Rate** – 0.2 - 25 m³/h (0.9 – 110gpm)
- **Working Temp.** – 4 – 40°C (39.2 – 104°F)
- **Coupling** – 2" or 63mm
- **Available Options** – Manual ON/OFF, Hydraulic ON/OFF, Electric ON/OFF

* Legs available upon request

→ Technical Dimensions



	L (Height)	
	On/Off	Air Release
Max.	1030 (40.5")	1000 (39.3")
Min.	880 (34.6")	900 (35.4")

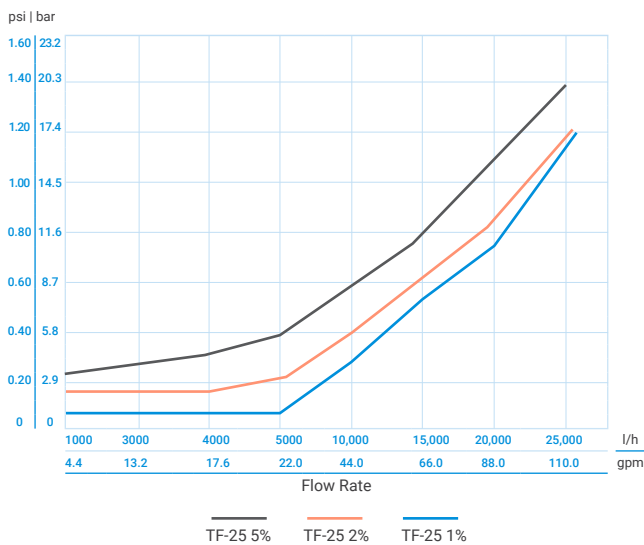
→ Application Color Code

Application	Sleeve Color	Seal Material	Spring Material
Irrigation	Blue	NBR	SST, Hastelloy
Chlorine	Purple	Viton	Hastelloy

→ Application Range

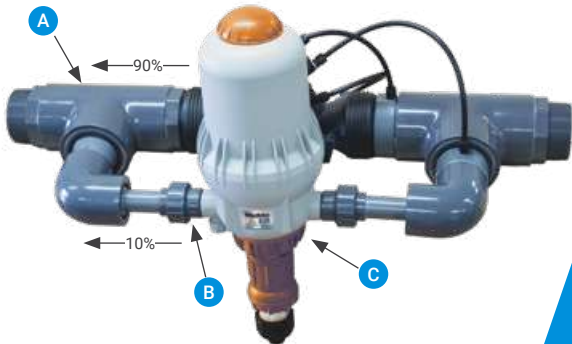
Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Gross weight std unit
0.1% - 1%	0.2 - 25m³/h	1 - 8 bar	2" BSPT	0.2 - 250l/h	25mm	18.5kg
0.3% - 2.5%	0.2 - 25m³/h	1 - 8 bar	2" BSPT	0.6 - 625l/h	25mm	18.5kg
1% - 5.5%	0.2 - 25m³/h	1 - 8 bar	2" BSPT	2.0 - 1375l/h	25mm	18.5kg

→ Head Loss



TreatRite

WATER TREATMENT LINE



Non-electric



Proportional dosing



User friendly

/ Benefits & Features

- **Non-electric** Fully hydraulic
- **Proportional dosing** To water flow rate
- **Repeatability and homogeneity** Precise dosing through the complete cycle
- **User friendly** Easy to install, operate and maintain

→ **Operating Principle**

- ✔ The pilot operating valve samples the pressure level at multiple points, and controls the opening condition of the diaphragm
- ✔ This operation governs the flow rates to generate a stable 1:10 ratio between lines

→ **Case Study (Water Treatment)**

- ✔ **Total water flow rate:** 67.3m³/h
- ✔ **Desired dosage rate:** 0.1%
- ✔ **Additive amount:** 67.3 x 0.1% = 0.0673m³/h
- ✔ **Relevant configuration:** 4", 1.5"
- ✔ **Main line water flow:** 67.3 x 0.9 = 60.57m³/h
- ✔ **By-Pass water flow:** 67.3 x 0.1 = 6.73m³/h
- ✔ **Relevant injector:** TF10 0.2% - 2%
- ✔ **Dosage setting on injector:** 0.0673 / 6.73 = 1%

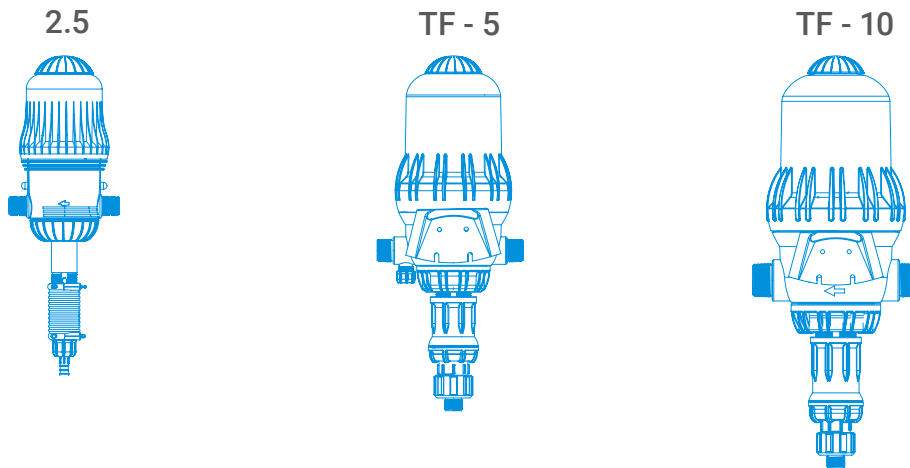
→ **Proportional and Automatic Bypass System**

The TreatRite™ system provides a proportional method between the mainline (A) and the sub-mainline (B), supported by a sophisticated innovative hydraulic system.

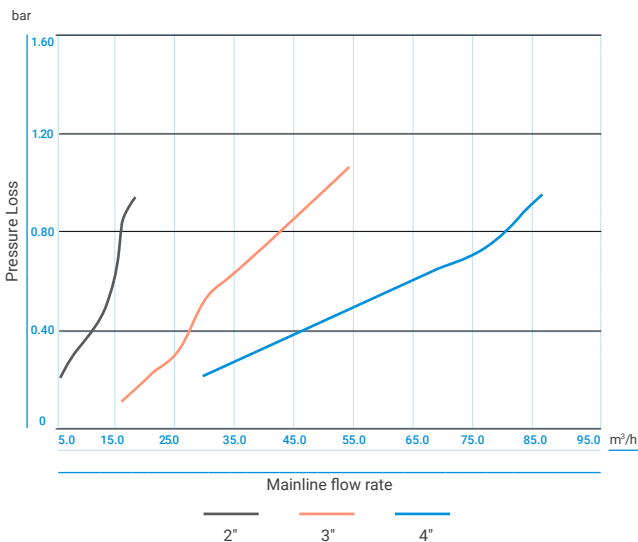
The MixRite™ pump is a volumetric, proportional unit. The combination between the MixRite™ Dosing Pump and the By-Pass unit creates a fully proportional dosing system.

This concept provides the user with a perfect solution for water treatment. The end user of the TreatRite™ system can dose common additives for water treatment, such as Sodium Hypochlorite, Chlorine Dioxide, and Hydrogen Peroxide.

→ **The MixRite™ Range**



→ **Head Loss**



→ **Application Range**

Flow Range (m ³ /h)	Dosage Range		A	B	C
	(%)	l/h			
6-25	0.003-1	0.18-250	2"	3/4"	MixRite™ 2.5/3.5
15-50	0.01-0.5	1.5-250	3"	1"	MixRite™ TF5
30-100	0.01-0.5	3-500	4"	1 1/2"	MixRite™ TF10

MixRite™ Electric Control



Automated
ON/OFF



Versatile



Two options

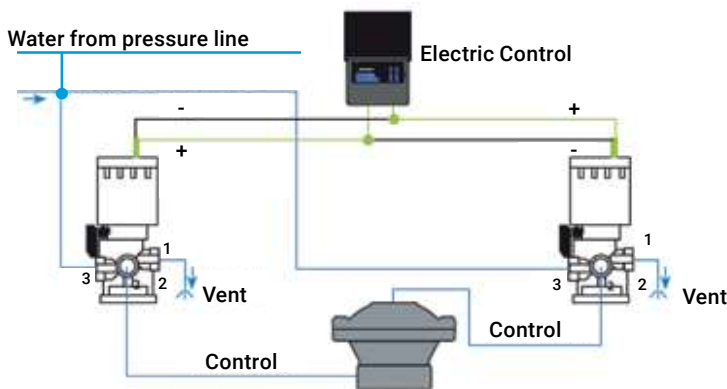
/ Benefits & Features

- **Automated ON/OFF** Can be turned on and off via the irrigation control system
- **Versatile** Suits irrigation with DC or AC
- **Two options** Hydraulic pump can be converted to electrically controlled one by replacing the cover

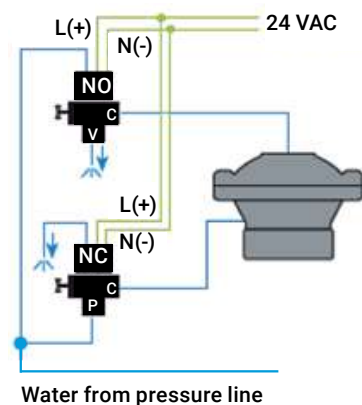
→ Available Models

- ✓ Hydraulic remote control On/Off for MixRite™ and TF models by Tefen
- ✓ Hydraulic Electric On/Off 24 VAC operated
- ✓ Hydraulic Electric On/Off 12 - 40 VDC latch or battery operated Irrigation controllers

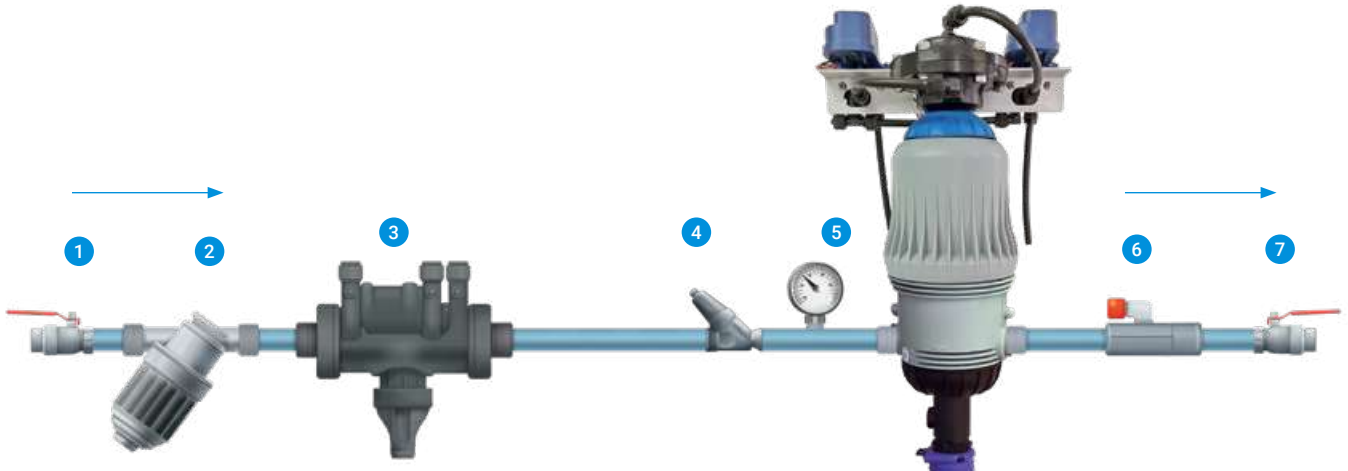
12-40 V DC Latch (pulse)



24 V AC Configuration



→ Directly installed MixRite™ Pump Can Be Controlled by Irrigation Control System



→ Recommended Standard Installation Inline

1. Main Valve
2. Filter
3. Back Flow Preventer
4. Pressure Regulator
5. Manometer (pressure gauge)
6. Anti-Siphon Valve
7. Operation Valve



MixRite™ E-300

Tefen's MixRite™ E-300 electric dosing pump directly injects liquid additives into water lines. The MixRite™ E-300 operates against water line-pressure of up to 5bar.



Automated
ON/OFF



Versatile



Two options

/ Benefits & Features

- **Versatile** Handles a variety of chemicals with a large range of flow rates
- **Efficient** Zero pressure loss along the water line
- **Versatile power** Can be powered using mains electricity or solar panels
- **User friendly** Easy to install, operate and maintain
- **Sturdy** Strong and durable external polycarbonate cover which is waterproof and UV-resistant

→ 2 Modes of Operation

Manual operation

- ✓ Pump can be operated at the desired level of injection
- ✓ Volume scale ranging between 10-100% of the maximum flow rate
- ✓ High repetition capabilities, maintaining the same volume until defined otherwise

Automatic option using irrigation controller*

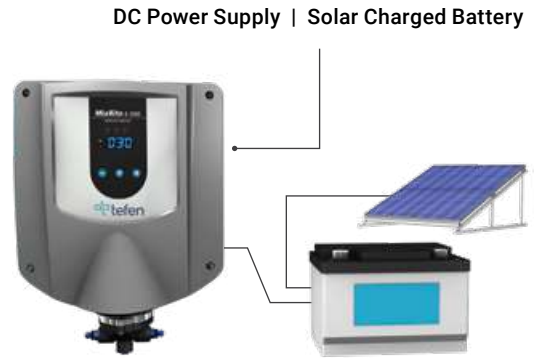
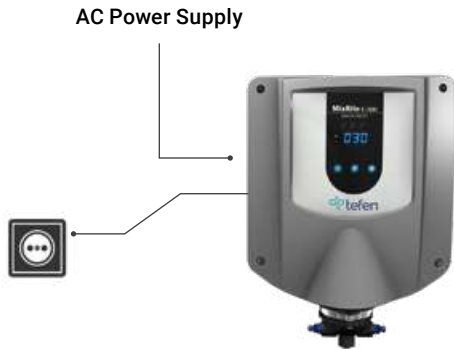
- ✓ Pump stops and starts according to operation of input
- ✓ The dosing will be fully proportional

* Irrigation Controller is not included in the kit

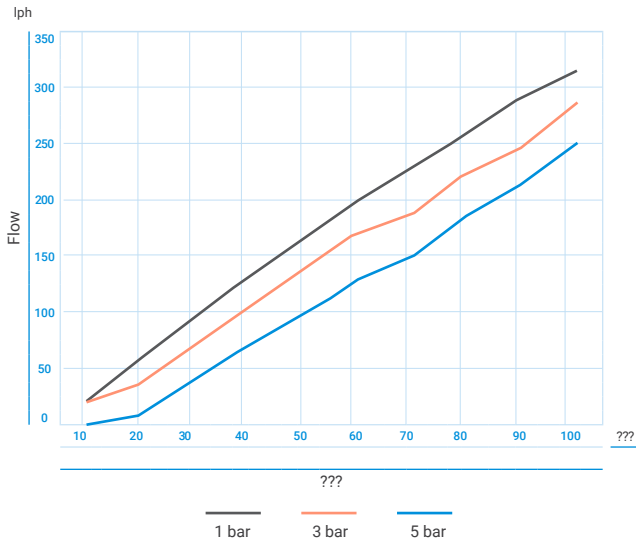
→ Each pump comes with:

1. 10m pipe (Ø12mm) with BSPT 1/2" connector
2. Input kit
3. Output kit with air release valve & check valve

→ Two Models



→ Head Loss M Type



→ Simple and Low Cost Installation



M Type l/h

Pump Value	2 bar	4 bar	5 bar
10	21		
20	49	32	
30	86	64	39
40	120	94	71
50	153	125	98
60	181	151	129
70	205	168	150
80	236	191	186
90	266	234	214
100	301	256	252

04-0324-PUMP-CAT0008-EN



www.netafim.com