









## **About TEFEN**

Tefen is a leading manufacturer of environmental friendly, non-electric volumetric equipment and flow products since 1973.

Tefen's MixRite line of water driven proportional dosing pumps, are used to ensure precise additive injection directly into the water or fluid line under various flow rates, feed ratios and different ranges of pressure. These pumps are extremely durable, manufactured from engineered composite materials to withstand the rigors of the elements, as well as chemicals and acids for injection.

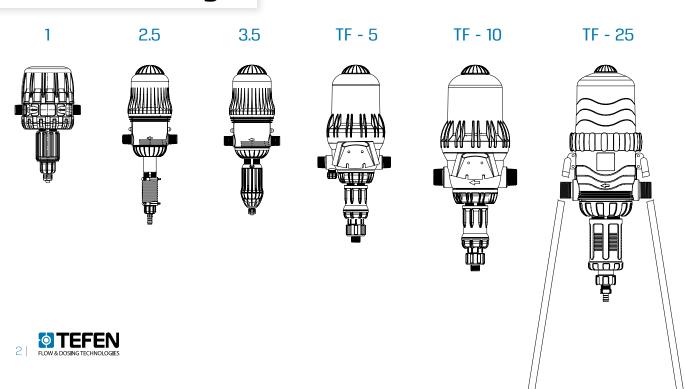
Tefen offers the MixRite pumps for a variety of applications such as medication for livestock, cleaning or disinfecting fluid lines, sanitizing water systems, car wash, cost effective fertilizing, and pest control for crops and plants. Tefen's pumps are adaptable simple to use and cost effective, while creating a long-lasting solution for your needs.

The Tefen MixRite water powered dosing pump has demonstrated its value in over 90 countries, by offering reliable, innovative & sustainable solution according to customers needs.

Tefen is certified by ISO 9001 2015



## MixRite Range







## Agriculture

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.

#### **Cutting Oil:**

Cutting oil is designed to extend the life of cutting and drilling equipment and improve their performance. MixRite water powered proportional pumps ensure injection of precise additive amount to the process.

#### Hygiene & Sanitation:

The sanitation and hygiene industry requires exceedingly accurate and reliable chemical mixing and injection solutions. MixRite injectors are used in market applications like hospitals, restaurants, food services, and supermarkets. MixRite pumps are easily installed in fixed or mobile installations often including static mixers, maturing tanks, flow meters, etc.

#### Car washing:

MixRite pumps are the perfect solution for car wash facilities of all types and sizes. It lowers the cost-per-car expense, while using less energy and chemical waste.











MixRite pumps for Animal Health guarantee control over doses of treatments injected through drinking water, which is the ideal distribution method, from the first day of the flock. In all kinds of Animal (poultry, pigs, cattle, rabbits, etc.), the MixRite proportional dosing pumps will enable you to dose Into the water line treatments such as: Medications, Vaccines, Disinfectants, Acidification, Chlorine, Supplements, Vitamins, Minerals.

The proportionality of MixRite pumps guarantees the correct dose independently by pressure and water flow variations (animal consumption).







## **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)

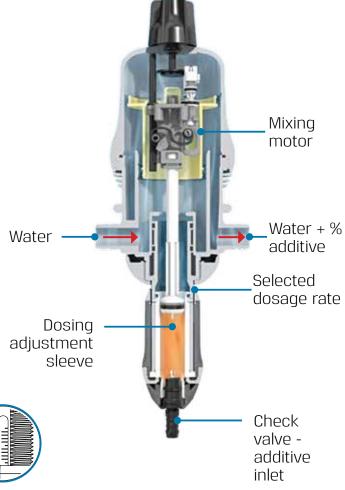
#### Operating principle

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

#### **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.



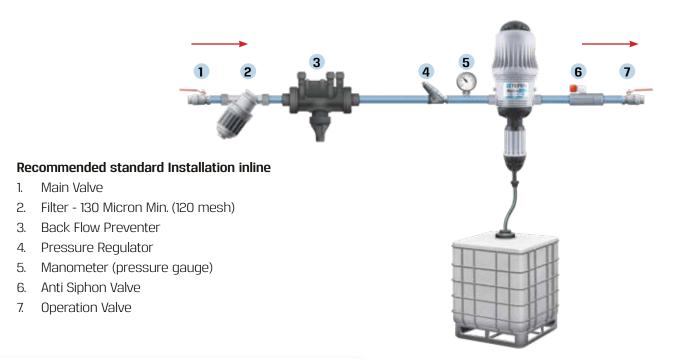
## Simplicity by design

#### Simple maintanance

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

#### Simple installation

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



## **MixRite Configurator**

PUMP CODE	1-2	3-4	5-6	7	8-9	10-11
Fixed prefix	28=Pumps	01=MixRite 1, 3/4" BSPT	01=0.1%-0.9%	0=air release	'00=Agriculture	00
Pump model + connectord thre (BSP/NPT/Compression)	ead	02=MixRite 2.5, 3/4" BSPT 03=TF5, 1" NPT 04=TF 5, 1" BSPT 05=TF5, 32mm 08=TF10, 11/2 NPT 09=TF10, 11/2 BSPT 10=TF10, 50mm 23=TF25, 2" NPT 24=TF25, 2" BSPT 25=TF25, 63mm 30=MixRite 3.5, 3/4" BSPT	02=0.3%-2% 04=0.4%-4% 05=0.5%-5% 10=1%-10% 11=1% Fix 21=0.03%-0.2% 22=0.2 Fix 28=0.8 Fix	1=ON/OFF	P0=Poultry C=Industry CL=Chlorine CW=Car wash IV=PVDF I0=Internal By Pass B0=External By Pass	01
Dosage %						
Cover option						
Application						
Additional information						

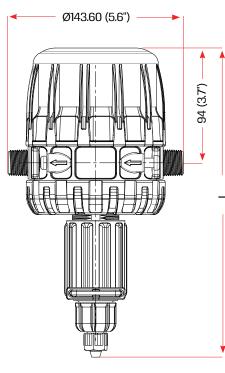
## 1 m<sup>3</sup>/h

#### MixRite 1

#### **Technical Information**

Working temp Coupling

Water pressure | 0.2 - 8 bar (2.9 - 116 psi) Flow Rate | 20 - 1000 l/h (0.09 - 4.4 GPM) 4-40° C (39.2-104° F) 3/4"



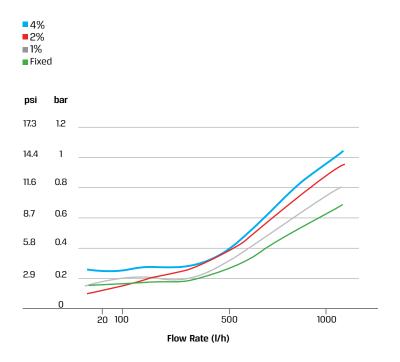
Model	L
Fix	212.5 (8.3")
Adjustable	254.0 (10")

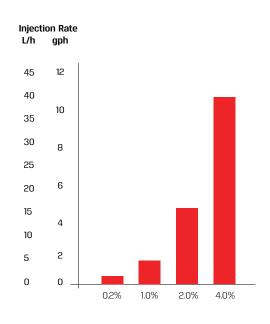


Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Domestic Landscaping (0.2% fix)		AG	NBR	SST
Chlorine / Industry		CL	Viton	Hastelloy

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia.Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Applications
0.2% Fix	20 - 1000 l/h	0.2 - 8 bar	3/4" BSPT	0.04 - 2 l/h	8 mm	Landscaping
0.1% - 1%	20 - 1000 l/h	0.2 - 8 bar	3/4" BSPT	0.02 - 10 l/h	8 mm	Landscaping / Chlorine / Industry
0.2% - 2%	20 - 1000 l/h	0.2 - 8 bar	3/4" BSPT	0.04 - 20 l/h	8 mm	Landscaping / Chlorine / Industry
0.4% - 4%	20 - 1000 l/h	0.2 - 8 bar	3/4" BSPT	0.08- 40 l/h	10 mm	Landscaping / Chlorine / Industry

#### **Pressure Loss**





## 2.5 m<sup>3</sup>/h

#### MixRite 2.5

#### Available options

Manual ON/OFF

Hydraulic Electric ÓN/OFF

ON/OFF







#### **Technical Information**

Water pressure Flow Rate Working temp Coupling

0.2 - 8 bar (2.9 - 116 psi) 10 - 2500 l/h (0.044 - 11 GPM) 4-40° C (39.2-104° F) 3/4"









External bypass \*Yellow sleeve

•	
A 160(6.3")	
	- 219(8.6")
	]
A	

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

Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Irrigation		AG	NBR	SST
Livestock		P0	NBR, EPDM	SST, Hastelloy
Acids		PVDF	AFLAS	Hastelloy
Chlorine		CL	Viton	Hastelloy
Industry		С	EPDM, AFLAS	SST, Hastelloy
Car Wash		CW	AFLAS	SST, Hastelloy
By-Pass		I / B	EPDM, AFLAS	SST, Hastelloy

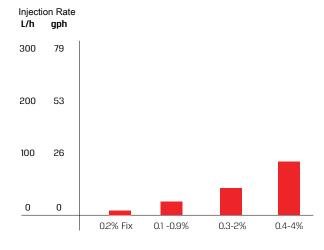
<sup>\*</sup> Legs available upon special request

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Applications	Gross weight std unit
0.2% fix	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.02 - 5 l/h	8 mm	Irrigation	1.4 KG
0.8% fix	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.08 - 20 l/h	10 mm	Irrigation / Livestock	1.5 KG
1% fix	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.01 - 25 l/h	10 mm	Irrigation / Livestock	1.8 KG
0.1% - 0.9%	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.01 - 22.5 l/h	8 mm	Irrigation / Livestock / Chlorine / Car Wash / Acid	1.8 KG
0.3% - 2%	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.03 - 50 l/h	10 mm	Irrigation/Livestock / Chlorine / Car Wash / Industry / Acid	1.8 KG
0.4% - 4%	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.04 - 100 l/h	16 mm	Irrigation/Livestock / Chlorine / Car Wash / Industry / Acid	1.8 KG
0.1% - 0.9% bypass	20 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.02 - 22.5 l/h	8 mm	Irrigation / Livestock / Chlorine / Acid	1.9 KG
0.3% - 2% bypass	20 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.06 - 50 l/h	10 mm	Irrigation / Livestock / Chlorine / Acid	1.9 KG
0.4% - 4% bypass	20 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.08 - 100 l/h	16 mm	Irrigation / Livestock / Chlorine /Acid	1.9 KG
0.1% - 0.9% Internal bypass	20 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.02 - 22.5 l/h	8 mm	Irrigation / Livestock / Chlorine / Acid	1.9 KG
0.3% - 2% Internal bypass	20 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.06 - 50 l/h	10 mm	Irrigation / Livestock / Chlorine /Acid	1.9 KG
0.4% - 4% Internal bypass	20 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.08 - 100 l/h	16 mm	Irrigation / Livestock / Chlorine /Acid	1.9 KG

<sup>\*</sup> Low flow 7 l/h available in P0 model

#### **Pressure Loss**

#### bar psi 4% -2% ■ 0.2% Fix ■ 1.80 26.1 1.60 23.2 1.40 20.3 1.20 17.4 1.00 14.5 0.80 11.6 0.60 8.7 0.40 5.8 0.20 2.9 0.00 0.00 20 100 500 1000 1500 2500 **l/h**



## MixRite dosing pumps

## 3.5 m<sup>3</sup>/h

#### MixRite 3.5

#### Available options

Manual ON/OFF

Hydraulic Electric ÓN/OFF

ON/OFF





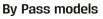


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#### **Technical Information**

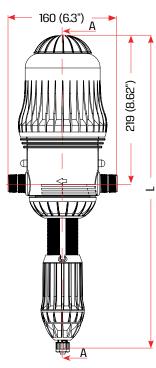
Flow Rate Working temp Coupling

Water pressure 0.2 - 8 bar (2.9 - 116 psi) 10 - 3500 l/h (0.04 - 15.4 GPM) 4-40° C (39.2-104° F) 3/4"





Internal bypass \*Yellow sleeve



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

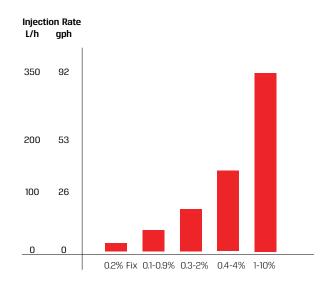
Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Irrigation		AG	NBR	SST
Livestock		P0	NBR, EPDM	SST, Hastelloy
Acids		PVDF	AFLAS	Hastelloy
Chlorine		CL	Viton	Hastelloy
Industry		С	EPDM, AFLAS	SST, Hastelloy
Car Wash		CW	AFLAS	SST, Hastelloy
By-Pass		I / B	EPDM, AFLAS	SST, Hastelloy

<sup>\*</sup> Legs available upon special request

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

#### **Pressure Loss**

#### 10% = 5% = 2% = bar psi 3 2.8 2.6 2.4 2.2 2.00 29.0 1.80 26.1 1.60 23.2 1.40 20.3 1.20 17.4 1.00 14.5 0.80 11.6 0.60 8.7 0.40 5.8 0.20 2.9 0.00 0.00 20 1500 2000 3500 **l/h**



## 5 m<sup>3</sup>/h

#### **MixRite TF-5**

#### Available models

Manual Hydraulic ON/OFF ON/OFF

Hydraulic Electric ON/OFF ON/OFF





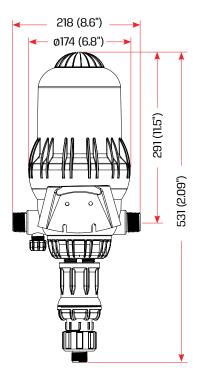


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#### **Technical Information**

Water pressure | 1 - 8 bar (14.5 - 116 PSI) Flow Rate | 0.1 - 5 m<sup>3</sup>/h (0.44 - 22 GPM) Working temp | 4-40° C (39.2-104° F) Coupling | 1" or 32 mm

<sup>\*</sup> Legs available upon special request



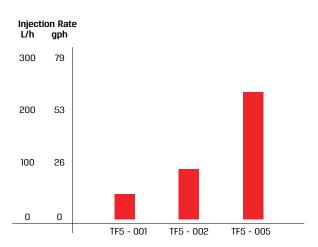
	L (Height)			
	On/Off	Air Release		
Max.	680 (26.7")	595 (23.4")		
Min.	585 (23")	545 (21.4")		

Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Irrigation		AG	NBR	SST, Hastelloy
Livestock		P0	EPDM	SST, Hastelloy
Chlorine		CL	Viton	Hastelloy

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Applications	Gross weight std unit
0.1% - 1%	0.1 - 5 m³/h	1 - 8 bar	1" BSPT	0.1 - 50 l/h	16 mm	Irrigation / Chlorine / Livestock	5 KG
0.2% - 2%	0.1 - 5 m³/h	1 - 8 bar	1" BSPT	0.2 - 100 l/h	16 mm	Irrigation / Chlorine / Livestock	5 KG
0.5% - 5%	0.1 - 5 m³/h	1 - 8 bar	1" BSPT	0.5 - 250 l/h	19 mm	Irrigation / Chlorine / Livestock	5 KG

#### **Pressure Loss**

#### TF-5 5% TF-5 2% TF-5 1% **bar psi** 1.00 14.5 0.80 11.6 0.60 8.7 0.40 5.8 0.20 2.9 0.00 0.00 200 0.88 1000 4.4 2000 8.8 3000 13.2 4000 5000 17.6 22.0 gpm



## 10 m<sup>3</sup>/h

#### **MixRite TF-10**

#### Available options

Manual ON/OFF

ON/OFF

Hydraulic Electric ON/OFF





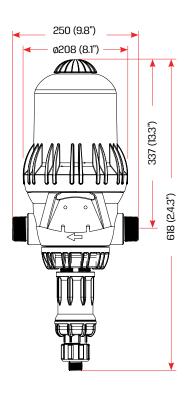


#### **Technical Information**

Water pressure Flow Rate Working temp Coupling

1 - 8 bar (14.7 - 116 PSI) 0.1 - 10 m3/h (0.44 - 45 GPM) 4-40° C (39.2-104° F) 1.5" or 50 mm

\* Legs available upon special request



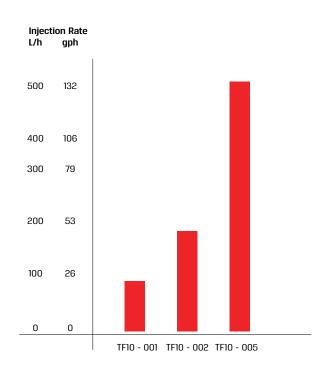
	L (Height)						
	On/Off	Air Release					
Max.	760 (29.9")	660 (26")					
Min.	720 (28.34")	625 (24.6")					

Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Irrigation		AG	NBR	SST, Hastelloy
Chlorine		CL	Viton	Hastelloy

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

#### **Pressure Loss**

#### TF-10 5% TF-10 2% TF-10 1% **bar psi** 0.90 13.23 0.80 11.60 0.70 10.15 0.60 8.70 0.50 7.25 0.40 5.80 0.30 4.35 0.20 2.9 0.10 1.45 0.00 0.00 500 4.4 2000 8.8 8000 35.2 4000 6000 10000 17.6 26.4 44.0 gpm



## MixRite dosing pumps

## 25 m<sup>3</sup>/h

#### **MixRite TF-25**

#### Available options

Manual Hydraulic Electric ON/OFF ON/OFF ON/OFF





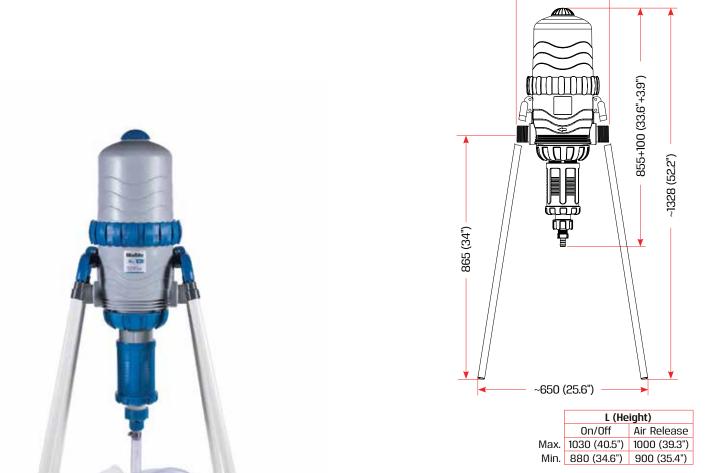


#### **Technical Information**

Water pressure | 1 - 8 bar (14.7 - 120 PSI) Flow Rate | 0.2 - 25 m3/h (0.9-110 GPM) Working temp | 4-40° C (39.2-104° F) Coupling | 2" or 63 mm

**4** 340 (13.3")

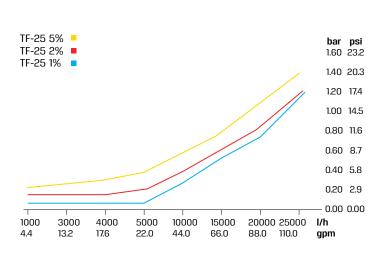
\* Legs - Standard supply

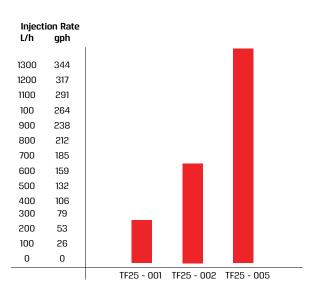


Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Irrigation		AG	NBR	SST, Hastelloy
Chlorine		CL	Viton	Hastelloy

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

#### Pressure Loss

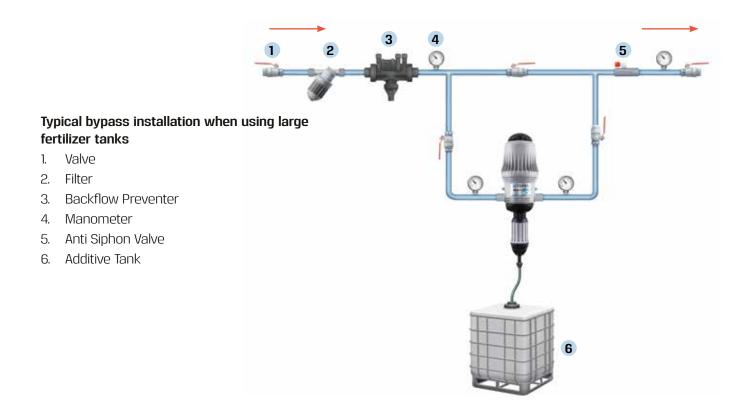




## **Typical installation**

#### **Available option**

Tefen's Mixrite offers pumps for a variety of applications such as: cost effective fertilizing, adding medication for livestock, cleaning or disinfecting fluid lines, car washing, 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.



#### **Accessories**



3/4" Pressure Regulator Cat. No. 38030200002



3/4" Hydraulic Normally Closed Valve Cat. No. 38000000011



Compatible with 2.5 & 3.5 models Cat. No. 35100000064



Suction Foot Valve Cat. No. 38005728104



Plastic Wall Mounting Bracket Cat No. 36030162765 For all "3/4 MixRite models



Pressure Check Socket



3/4" Static Pressure Regulator Cat. No. 38030200001



3/4" Water Filter Cat. No. 38000000172



Plastic Wall Mounting Bracket and Stand Base Cat No. 35125011872 For MixRite TF5 & TF10 models



3/4" Anti Siphon Kit Cat. No. 36073008002



3/4" Back Flow Preventor Cat. No. 38030200004



Stainless Steel Wall Mounting Bracket Cat No. 35000000010 For MixRite TF25 models



Manual ON/OFF Option



Hydraulic Remote Control ON/OFF Option

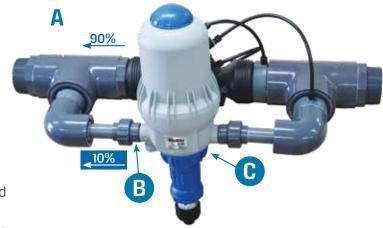


Pulse Transmitter

## MixRite Special Solutions

#### TreatRite - Water Treatment Line

## Proportional and Automatic Bypass System

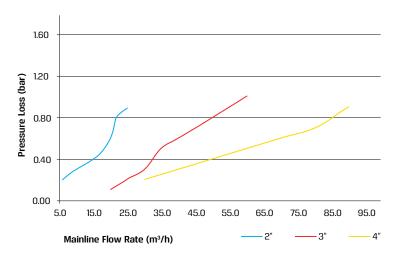


The TreatRite™ system provides a proportional method between the mainline (A) and the sub-mainline (B), supported by a sophisticated innovative hydraulic system.

The MixRite<sup> $\mathrm{IM}$ </sup> pump is a volumetric, proportional unit. The combination between the MixRite<sup> $\mathrm{IM}$ </sup> Dosing Pump and the By-Pass unit creates a fully proportional dosing system. This concept provides its user a perfect solution for water treatment. The end user of the TreatRite<sup> $\mathrm{IM}$ </sup> system can dose common additives for water treatment, such as: Sodium Hypochlorite, Chlorine Dioxide, and Hydrogen Peroxide.

The TreatRite™ system can be operated in various ranges as shown:

#### Pressure Loss VS. Flow Rate



Flow Range	Dosage Range		A	В	C
m3/h	m3/h (%) L/h	В	C		
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**™ range:

2.5



3.5



TF-10



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

#### Features and Benefits

- Keeps constant proportional flow rate
- ✓ Hydraulic, Volumetric and non-electric
- Dosing proportional to flowrate
- Precision: surface quality optimized with no waste
- ✓ Flow rate between main line and sub-main line will remain 10:1 at wide flow rates
- ✓ Working pressure up to 8 bar (116 PSI)
- ✓ High UV resistance
- ✓ High chemical resistance
- Supplied pre set. No need for calibration
- Excellent dosing repeatability and homogeneity
- Easy to install, operate and maintain, with no electricity risk

## MixRite Special Solutions

## Watch Guard - Ultra Lean Dilution

## Watch Guard Reservoir Float System and MixRite Water Driven Injectors

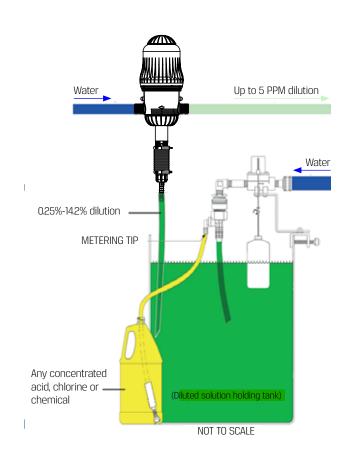
Watch Guard is the premier reservoir float valve dilution system designed to deliver diluted solutions into any drum, tote or other reservoir. Attached to a standard water supply, Watch Guard automatically activates and keeps the reservoir filled ensuring a constant supply of diluted solution for the MixRite system.

MixRite water driven injectors attach in-line to the water supply and use water pressure to accurately dilute solutions regardless of flow or pressure changes.

When the Watch Guard is used in combination with any MixRite, ultra-lean dilutions as low as 5 parts per million are achievable.

- ✓ Achieve accurate ultra-lean dilution in 2 easy steps
- Effective with acid, chlorine and most any chemical
- Watch Guard is simple to mount on any drum, tote or other reservoir
- Automatically activates to keep reservoir full of diluted solution
- ✓ Metering tip included for dilutions from 0.25% to 14.2%
- Includes ASSE 1055B approved action gap backflow preventer
- MixRite attaches in-line to the water supply
- Delivers accurate proportioning regardless of water flow or pressure changes
- Multiple models available for injection rates from 1% to 10% and water flow from 227 - 25000 liter per hour





#### Induction Ratios for Vicosities Shown

Metering Tip Color	1 cps	75 cps	200 cps
Tan	0.26%	0.20%	0.09%
Orange	0.33%	0.23%	0.14%
Turquoise	0.39%	0.26%	0.15%
Pink	0.61%	0.43%	0.24%
Clear	0.68%	0.52%	0.26%
Brown	0.78%	0.57%	0.29%
Red	1.08%	0.71%	0.35%
White	1.19%	0.78%	0.38%
Green	1.35%	0.95%	0.41%
Blue	1.67%	0.99%	0.42%
Yellow	2.38%	1.33%	0.44%
Black	3.57%	1.56%	0.45%
Purple	5.88%	1.89%	0.46%
Gray	7.69%	2.00%	0.49%
No tip	14.29%	2.50%	0.53%

#### MixRite Dilution Ratios when combined with Watch Guard unit

What is the dilution ration you are trying to achieve	ppm ppm ppm ppm ppm ppm ppm	5 8 13 50 26 32 39	8 12 20 31 39 49 59	16 23 39 61 78 98 118	22 32 54 84 108 134 163	33 50 83 130 167 208 253	154 231 385 601 769 962 1166	286 429 714 1116 1429 1786 2165	0.2% 0.3% 0.5% 0.8% 1.0% 1.3%	500-1 333-1 200-1 128-1 100-1 80-1 66-1	Set Mixrite to the following ratio / precentage
	ppm ppm	45 52	69 78	137 156	189 215	292 333	1350 1538	2506 2857	1.8%	57-1 50-1	
Use Watch Guard v		Tan	Turquoise	Brown	Red	Blue	Gray	No Tip	Precentage	Ratio	

Final Dilution with PPM is of the total chemical injected, not the active ingredient in chemical. For example, if chemical is 10% active ingredient and final dilution is 100 PPM, then active ingredient PPM is 10.

## MixRite Special Solutions

## **MixRite Electric Control**

# Electric On/Off Control for Hydraulic Pumps

- MixRite Dosing Pump can be turned on and off via the irrigation control system
- ✓ System suits irrigation systems with a direct flow (DC) or an alternative flow (AC)
- ✓ System includes electric on/off kit. The device kit is installed on the pump's cover.
- Electrically controlled hydraulic pump can be converted to electrically controlled pump by replacing the cover with a cover with electric on/off

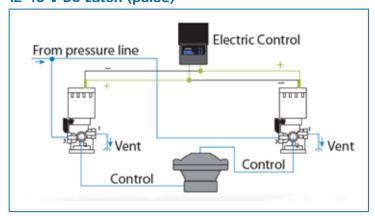


#### Available Models:

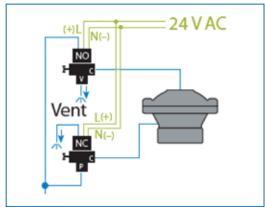
A. Hydraulic remote control On Off for MixRite and TF models by Tefen.

- B. Hydraulic Electric On Off 24 VAC operated.
- C. Hydraulic Electric On Off 12 40 VDC Latch or battery operated Irrigation controllers.

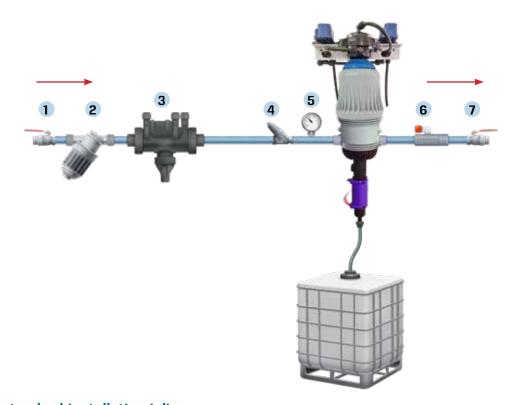
#### 12-40 V DC Latch (pulse)



#### 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 Electric Pumps

#### MixRite E-300

#### The electric dosing pump by Tefen Flow & Dosing Technologies.

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 7 Bar.



#### Main Advantages

- ✓ Handles a variety of chemicals with a large range of flow rates
- ✓ Input 12VDC, 16 AMP
- ✓ Zero pressure loss along the water line
- Can be powered using mains electricity 220 VAC or alternative network power sources, such as car battery and solar panel charged batteries
- Easy to install and operate
- Strong and durable external polycarbonate cover which is waterproof and UV-resistant
- Very low maintenance

#### Fertilizer Pump - 2 Modes of Operation

#### Manual operation

- ✓ The 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\*

- The 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

# Simple and Low Cost Installation



## Average Injection Flow Rate

	М Тур	е				
	350					
	300					
	250					
L/h]	200					
Flow [L/h]	150					
	100					
	50					
	0					
	2	20	40	60	8	0 100
			2 Bar —	mp Value 4 B		——7 Bar

M Type - L/H									
2 bar	4 bar	7 bar							
21									
49	32								
86	64	10							
120	94	29							
153	125	52							
181	151	69							
205	168	87							
236	191	116							
266	234	133							
301	252	153							
	2 bar 21 49 86 120 153 181 205 236 266	2 bar 4 bar 21 49 32 86 64 120 94 153 125 181 151 205 168 236 191 266 234							

#### Two Models:





## MixRite Electric Pumps

## InjectRite<sup>®</sup>

## Proportional Peristaltic Pump

#### Features and Benefits

- Ensures continuous and homogeneous solution during water system operation
- High accuracy and repeatability
- ✓ Fast dosage adjust-ability for both low and high flow rates
- Excellent aggressive chemical resistance
- Optional connection of additional pump to the water meter for parallel operation which enables usage of additive 2 types & ensures increased additive amount.
- Easy and fast maintenance easy tube replacement
- ✓ NOT affected by water quality
- ✓ Smart, simple electronic interface
- Error identification system for: overflow, lack of signal water meter
- ✓ Peristaltic pump set includes: squeeze tube, suction tube, check valve & discharge tube
- Sensor that indicates lack of flow is located in the suction tube (option)

Mainline flow rate I/h | 20 min, 2000 max (according to water meter signal output)

Dosage rates | 0.2%, 0.25%, 0.5%, 0.75%, 1.0%, 1.25%, 1.5%, 1.75%, 2.0%

Max. Counter pressure bar | 2

Max. injected volume | 10 l/h

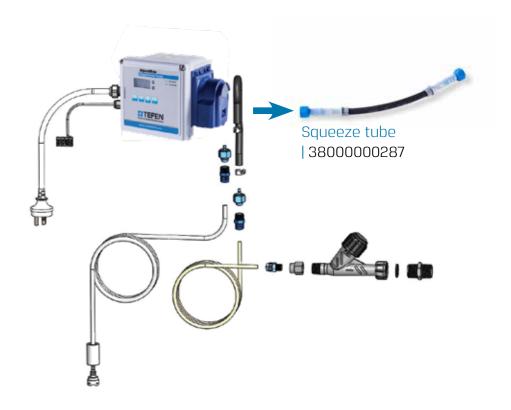
Hydraulic connections | 3/4" bspt

Power | 220v (110v)

Tube material | santoprene

Operation trigger | dry pulse (from water meter)

Water meter output | eu - 1 pulse per liter

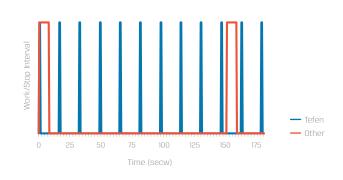


#### Choosing the Dosing Percentage

Dosage %	Injected Volume I/h					
2%	0.40	2.00	10.00			
1.75%	0.35	1.75	8.75			
1.5%	0.30	1.50	7.50			
1.25%	0.25	1.25	6.25			
1%	0.20	1.00	5.00	10.00		
0.75%	0.15	0.75	3.75	7.50		
0.5%	0.10	0.50	2.50	5.00	7.50	10.00
0.25%	0.05	0.25	1.25	2.50	3.75	5.00
0.2%	0.04	0.20	1.00	2.00	3.00	4.00
	20	100	500	1000	1500	2000
	Main Line Flow Rate - I/h					

#### Duty Cycle (at low flows)

Cycle of the pump @ low flows



Reading the pulses in high frequency provides optimal and homogeneous solution.







