## **MixRite**<sup>™</sup>

# DOSING PUMPS



IRRIGATION



**ANIMAL HEALTH** 



**INDUSTRIAL** 



**SANITATION** 



WATER TREATMENT



CUTTING OIL



CAR WASHING





Keep your business flowing. Tefenitely.



Tefen is a leading manufacturer of environmental friendly, non-electric volumetric equipment and flow products since 1970.

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, 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.

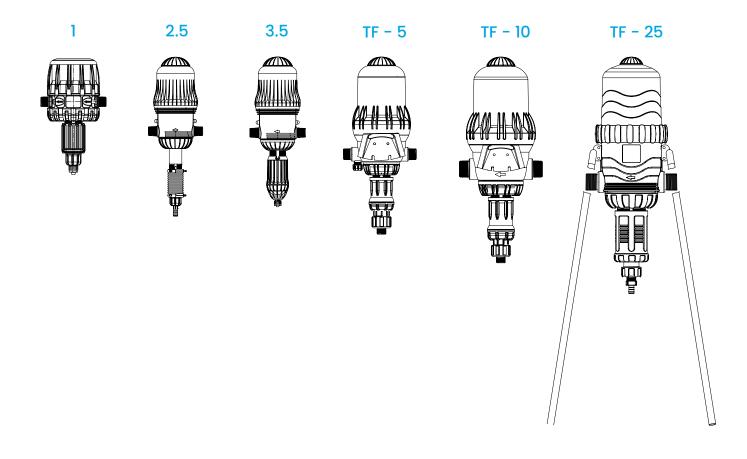
The Tefen MixRite™ water powered dosing pump has demonstrated its value in **over 90 countries**, by offering reliable, innovative & sustainable solution according to customers needs.

Tefen is certified by ISO 9001 2015





## MixRite™ Range



## **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.



MixRite™ Pumps are the perfect solution for various industrial applications.

They ensure automatic in line dosing of the required detergents, disinfectants, wax and other additives. MixRite™ dosing accuracy is not dependent on the pressure and flow variations in the network.



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).







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.



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.



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.



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.

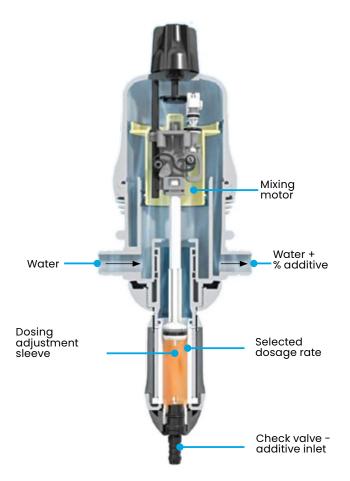
### Adjusting the MixRite™ pump

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 will stop; it is possible to control the suction (intake) operation by using the models with the On/Off system.



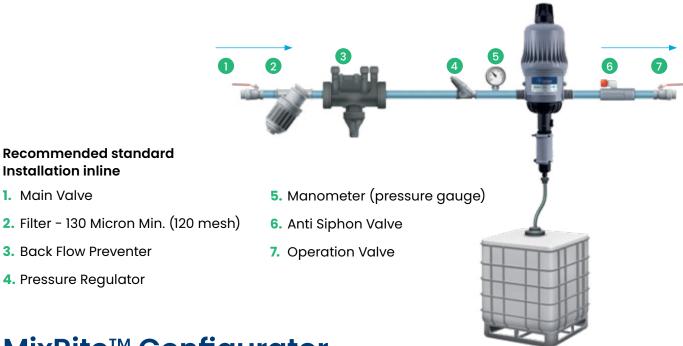
## Simplicity by design

### Simple maintanance

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

### Simple installation

MixRite<sup>™</sup> is a "Plug and Play" unit. Installation of MixRite<sup>™</sup> 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  Pump model + connectord (BSP/NPT/Compression)	28=Pumps	01=MixRite™ 1, 3/4" BSPT 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	01=0.1%-0.9% 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	release	'00=Standard 5B = Standard P0=Poultry C0=Industry CL=Chlorine CW=Car wash IV=PVDF I0=Internal By Pass B0=External By Pass HB=Hybrid	00
Dosage %						
Cover option						
Application						
Additional information						

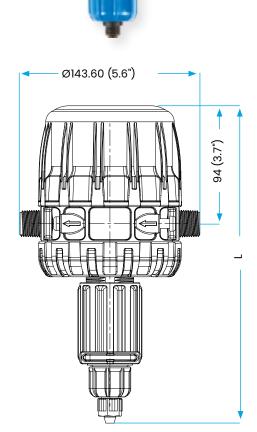
## 1 m³/h MixRite™ 1

#### **Technical Information**

Water pressure Flow Rate Working temp Coupling

0.2 - 8 bar (2.9 - 116 psi) 20 - 1000 l/h (0.09 - 4.4 GPM) 4-40° C (39.2-104° F)





## **Application Color Code**

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

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

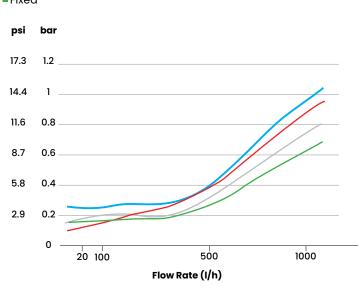
## **Application Range**

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 I/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 I/h	8 mm	Landscaping / Chlorine / Industry
0.2% - 2%	20 - 1000 l/h	0.2 - 8 bar	3/4" BSPT	0.04 - 20 I/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

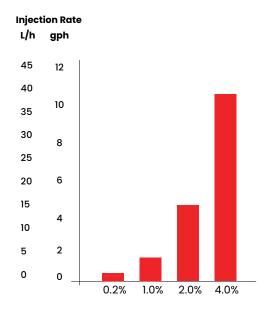
#### **Pressure Loss**



■ Fixed



## Max. injection rate/h



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

#### **Technical Information**

Water pressure Flow Rate Working temp Coupling

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

### **Available options**

Manual ON/OFF

Hydraulic ON/OFF

Electric ON/OFF





#### By Pass models







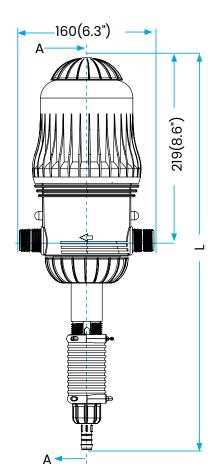
bypass \*Yellow sleeve

## **Application Color Code**

Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Irrigation		STD	NBR	SST
Livestock		PO	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

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





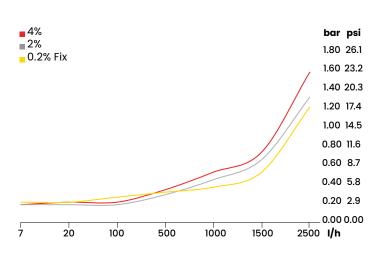
<sup>\*</sup> Legs available upon request

## **Application Range**

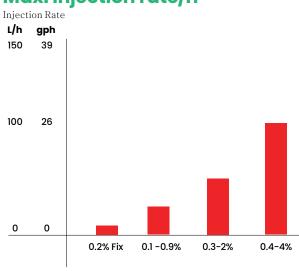
Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Applications	Gross weight std unit
0.2% fix	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.02 - 5 l/h	8 mm	Irrigation	1.4 KG
0.8% fix	10 - 2500 l/h	0.2 - 8 bar	3/4" BSPT	0.08 - 20 l/h	10 mm	Irrigation / 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 I/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 I/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		0.2 - 8 bar	3/4" BSPT	0.08 - 100 I/h	16 mm	Irrigation / Livestock / Chlorine /Acid	1.9 KG

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

#### **Pressure Loss**



## Max. injection rate/h



## **3.5 m³/h** MixRite™ 3.5

### **Technical Information**

Water pressure Flow Rate Working temp Coupling

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

### **Available options**

Maņual ON/OFF

Hydraulic ON/OFF

Electric ON/OFF







#### By Pass models



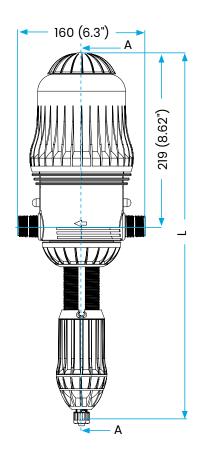


### **Application Color Code**

Application	Sleeve Color	TEFEN Code	Seal Material	Spring Material
Irrigation		STD	NBR	SST
Livestock		РО	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

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



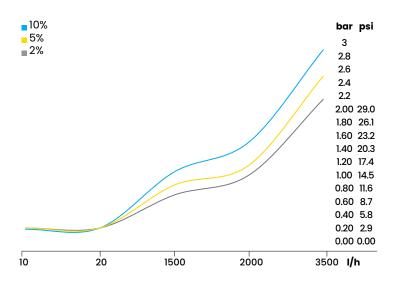


<sup>\*</sup> Legs available upon request

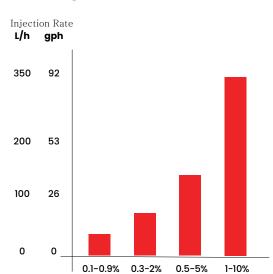
## **Application Range**

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 I/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 I/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**



## Max. injection rate/h





## MixRite™ TF-5

### **Technical Information**

 Water pressure
 1 - 8 bar (14.5 - 116 PSI)

 Flow Rate
 0.1 - 5 m³/h (0.44 - 22 GPM)

 Working temp
 4-40° C (39.2-104° F)

 Coupling
 1" or 32 mm

\* Legs available upon request

### **Available options**

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





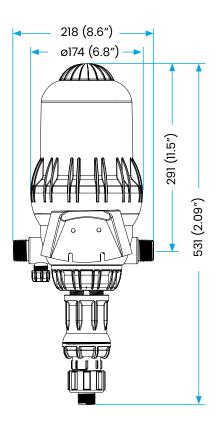




### **Application Color Code**

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

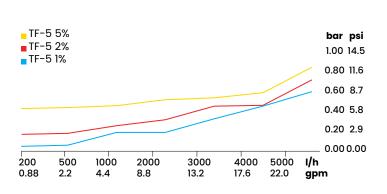
	L (Hight)				
	On/Off	Air Release			
Max.	680 (26.7")	595 (23.4")			
Min.	585 (23")	545 (21.4")			



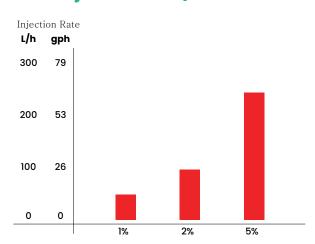
## **Application Range**

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	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**



## Max. injection rate/h



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

## MixRite™ TF-10

#### **Technical Information**

1 - 8 bar (14.7 - 116 PSI) Water pressure 0.1 - 10 m3/h (0.44 - 45 GPM) Flow Rate Working temp Coupling

4-40° C (39.2-104° F) 1.5" or 50 mm \* Legs available upon request

## **Available options**

Hydraulic Manual ON/OFF ON/OFF ON/OFF





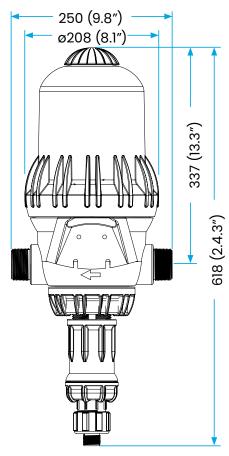




### **Application Color Code**

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

	L (H	light)
	On/Off	Air Release
Мах.	760 (29.9")	660 (26")
Min.	720 (28.34")	625 (24.6")



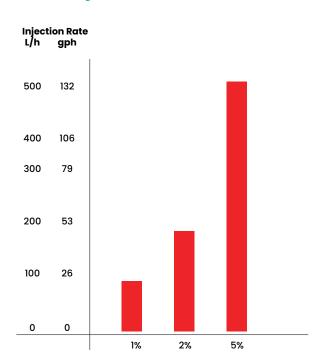
## **Application Range**

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection w 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 I/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**

#### **bar psi** 0.9013.23 TF-10 5% TF-10 2% 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 **I/h** 500 4.4 2000 8.8 4000 6000 26.4 8000 35.2 10000 17.6 44.0

## Max. injection rate/h



25 m³/h MixRite™ TF-25

#### **Technical Information**

1 - 8 bar (14.7 - 120 PSI) Water pressure 0.2 - 25 m<sup>3</sup>/h (0.9-110 GPM) Flow Rate 4-40° C (39.2-104° F) Working temp Coupling 2" or 63 mm

\* Legs - Standard supply

### **Available options**

Manual ON/OFF Hydraulic ON/OFF ON/OFF



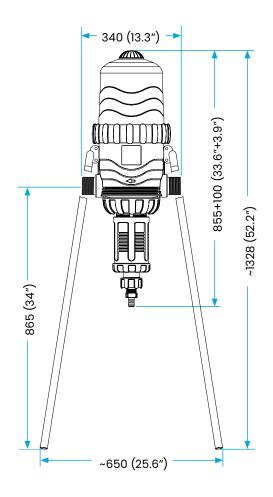




### **Application Color Code**

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

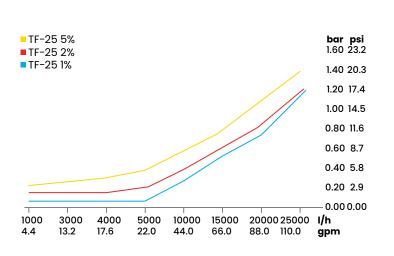
	L (H	light)
	On/Off	Air Release
Мах.	1030 (40.5")	1000 (39.3")
Min.	880 (34.6")	900 (35.4")



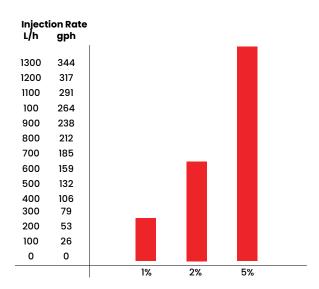
## **Application Range**

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 I/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 I/h	25 mm	Irrigation / Chlorine / Livestock	18.5 KG

#### **Pressure Loss**



## Max. injection rate/h

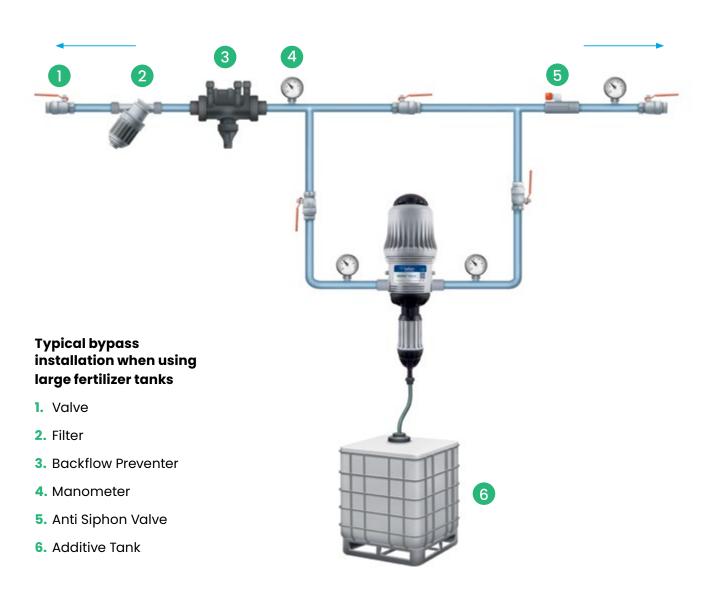


## **Typical installation**

### **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" Anti Siphon Kit** Cat. No. 36073008002



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



**3/4" Water Filter** Cat. No. 38000000172



Manual ON/OFF Option



Hydraulic Remote Control ON/OFF Option



**Legs**Compatible with 2.5 & 3.5 models
Cat. No. 35100000064



Pressure Check Socket



Plastic Wall Mounting Bracket and Stand Base

Cat No. 35125011872 For MixRite™ TF5 & TF10 models



Stainless Steel Wall Mounting Bracket Cat No. 35000000010

For MixRite™ TF25 models



**Pulse Transmitter** 

## MixRite™ Special Solutions

## TreatRite - Water Treatment Line

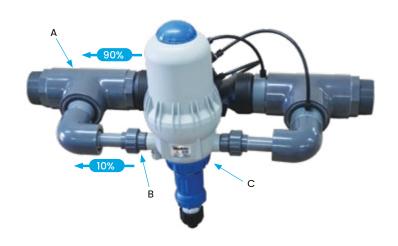
## Proportional and Automatic Bypass System

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

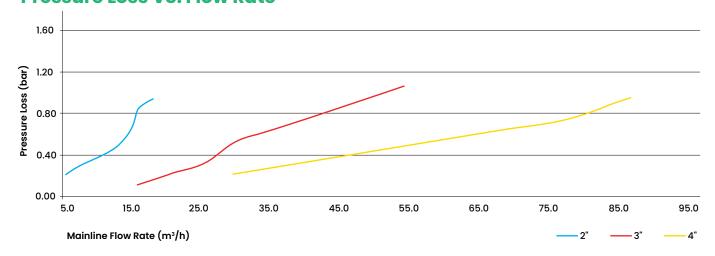
The MixRite™ pump is a volumetric, proportional unit. The combination between the MixRite™ Dosing Pump and the By-Pass unit creates a fully proportional dosing system.

This concept provides its user 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 TreatRite™ system can be operated in various ranges as shown:



#### **Pressure Loss VS. Flow Rate**



Flow Range	Dosage	e Range	_	_	
Flow Range m³/h	m³/h (%) L/h	A	В	С	
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"	11/2"	MixRite™ TF10

### MixRite™ range:

2.5



3.5



TF-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)

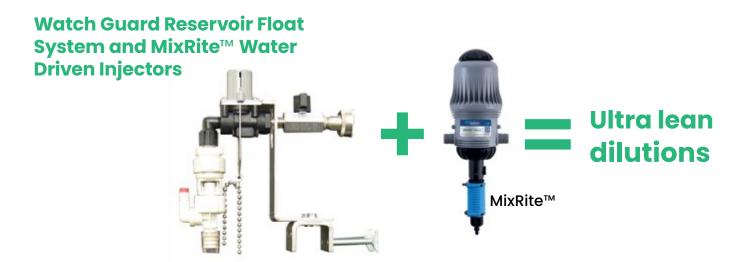
- Total water flow rate: 67.3 m³/h
- Desired dosage rate: 0.1%
- Additive amount: 67.3 x 0.1% = 0.0673 m³/h
- Relevant configuration: 4", 1.5"
- Main line water flow: 67.3 x 0.9 = 60.57 m³/h
- By-Pass water flow: 67.3 x 0.1 = 6.73 m³/h
- Relevant injector: TF10 0.2%-2%
- Dosage setting on injector: 0.0673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

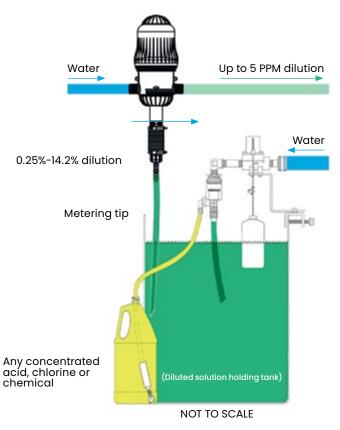
## Watch Guard - Ultra Lean Dilution



Watch Guard 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 wate 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

	ppm	5	8	16	22	33	154	286	0.2%	500-1	
	ppm	8	12	23	32	50	231	429	0.3%	333-1	
	ppm	13	20	39	54	83	385	714	0.5%	200-1	
What is the	ppm	50	31	61	84	130	601	1116	0.8%	128-1	Set MixRite™ to
dilution ration you are trying	ppm	26	39	78	108	167	769	1429	1.0%	100-1	the following ratio /
to achieve	ppm	32	49	98	134	208	962	1786	1.3%	80-1	precentage
	ppm	39	59	118	163	253	1166	2165	1.5%	66-1	
	ppm	45	69	137	189	292	1350	2506	1.8%	57-1	
	ppm	52	78	156	215	333	1538	2857	2.0%	50-1	
Use Watch Guard with corresponding tip		Tan	Turquoise	Brown	Red	Blue	Gray	No Tip	Precentage	Ratio	

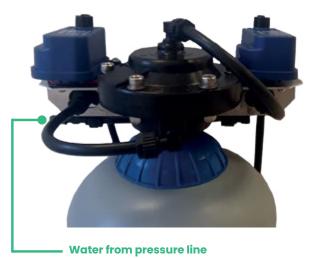
Final Dilution with PPM is of the total chemical injected, not the active ingredient in chemical. For example, if chemical is 10% active ingredient and final dilution is 100 PPM, then active ingredient PPM is 10.

## MixRite™ Special Solutions

## **MixRite™ Electric Control**

### **Electric On/Off Control** for Hydraulic Pumps

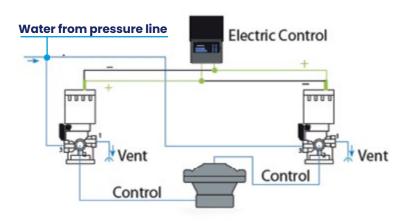
- MixRite™ Dosing Pump can be turned on and off via the irrigation control system
- System suits irrigation systems with a direct flow (DC) or an alternative flow (AC)
- System includes electric on/off kit. The device kit is installed on the pump's cover.
- Electrically controlled hydraulic pump can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



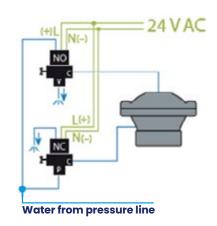
#### **Available Models:**

- 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)

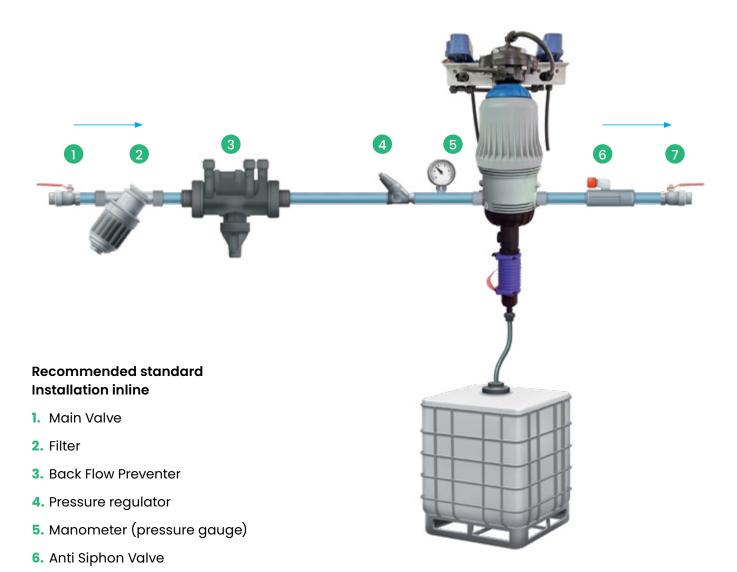


#### 24 V AC Configuration



## Directly installed MixRite™ Pump can be controlled by irrigation control system

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 5 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

<sup>\*</sup> 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**

	МТу	ре									
LPH	350										
Flow LPH	300										
ш	250									$-\!\!/$	
	200										
	150										
	100			//							
	50	_									
	0	10	20	30	40	50	60	70	80	90	100
		1	Bar	_	3 Bar	_	<b>—</b> 5 Baı	r	Pt	ump '	Value

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						

#### **Two Models**





## MixRite™ Electric Pumps

## **InjectRite™**

### **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



- 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)

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

Max. Counter pressure bar | 1.5

I 10 I/h Max. injected volume

**Hydraulic connections** | 3/4" bspt | 220v (110v) **Power Tube material** santoprene

**Operation trigger** I dry pulse (from water meter)

Water meter output | eu - 1 pulse per liter

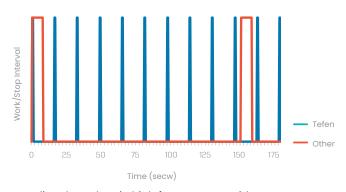


## **Choosing the Dosing Percentage**

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.





Tefen Flow & Dosing Technologies Ltd.

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