MixRite

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 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, 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.

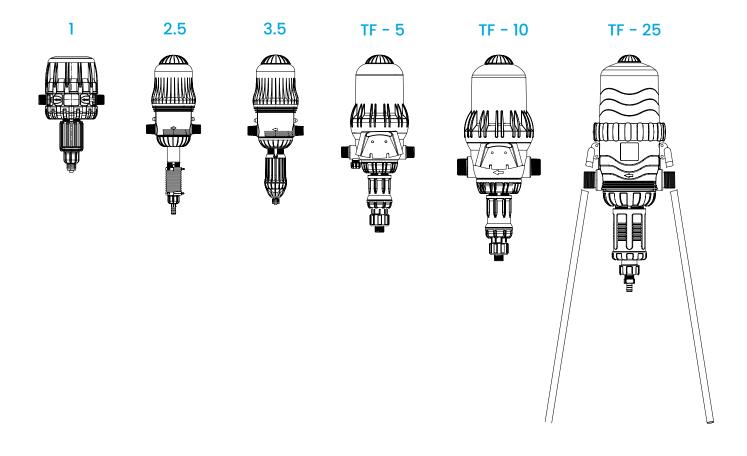
The Tefen MixRite water powered dosing pump has demonstrated its value in **over 90 countries**, by offering reliable, innovative & sustainable solution according to customers needs.

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.



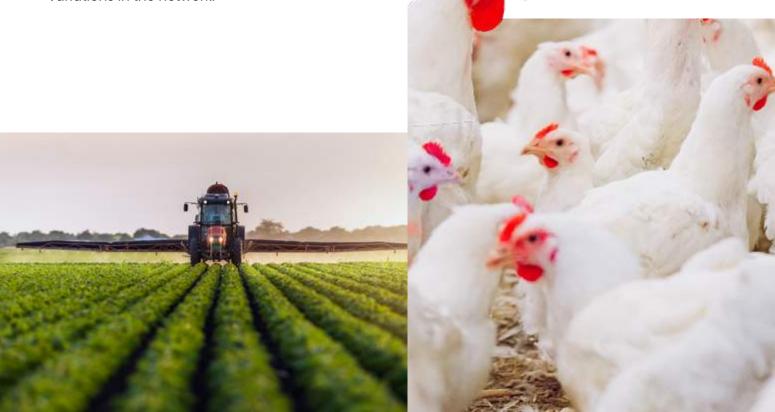
MixRite Pumps are the perfect solution for various industrial applications.

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.

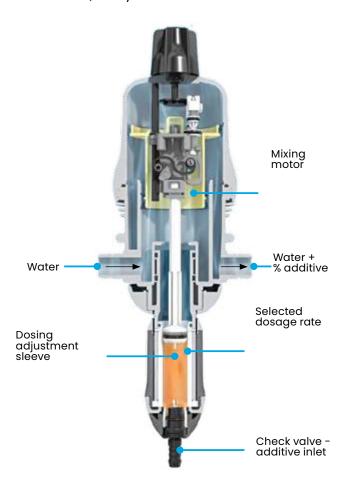
Adjusting the MixRite pump

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.



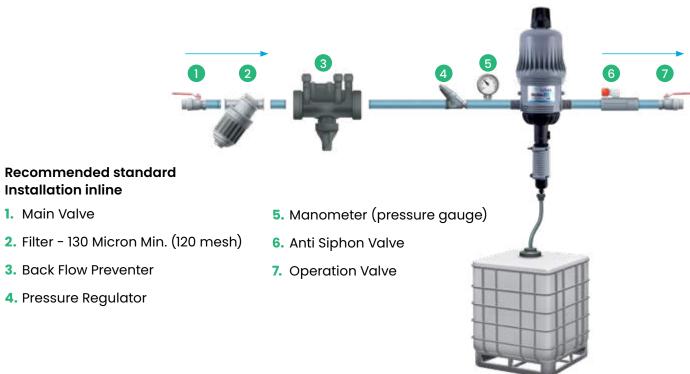
Simplicity by design

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 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 Pump model + connectord t (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 | - | '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

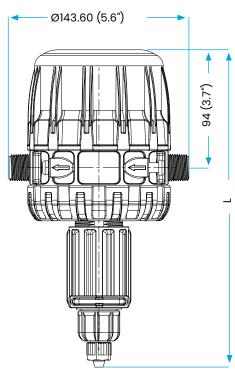
Technical Information

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") |

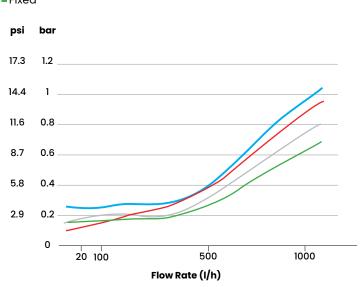
Application Range

| Dosage Rate % | Flow Rate Range | Pressure Range | Connectors Dia.Thread | Min-Max Injection Rate Per Hour | Suction Tube wDia. | 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 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 I/h | 0.2 - 8 bar | 3/4" BSPT | 0.08- 40 l/h | 10 mm | Landscaping / Chlorine / Industry |

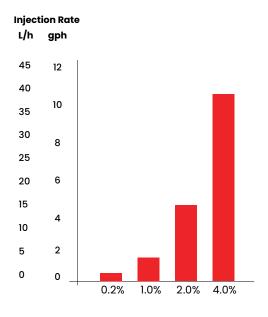
Pressure Loss



■ Fixed



Max. injection rate/h



2.5 m³/h MixRite 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



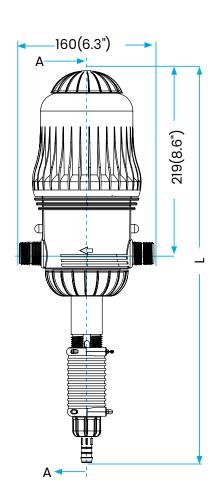




Application Color Code

| 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") | | | |



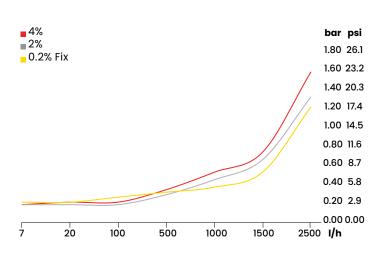
^{*} Legs available upon request

Application Range

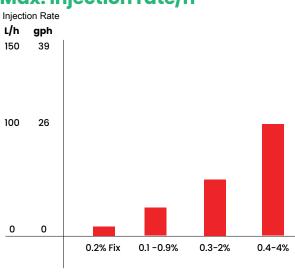
| Dosage Rate % | Flow Rate Range | Pressure Range | Connectors Dia. Thread | Min-Max Injection Rate Per Hour | Suction Tube Dia. | Applications | Gross weight std unit |
|--------------------------------|--------------------|-------------------|---------------------------|---------------------------------------|----------------------|---|-----------------------------|
| 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 I/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 I/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 I/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 | | 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 l/h | 16 mm | Irrigation / Livestock / Chlorine /Acid | 1.9 KG |
| | | | | | | | |

^{*} 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) 3/4"

Available options

Manual ON/OFF

Hydraulic ON/OFF

Electric ON/OFF







By Pass models



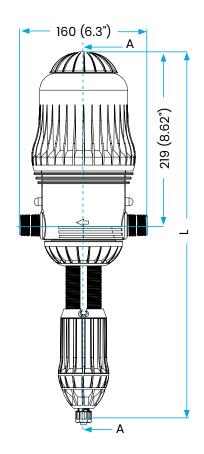


Application Color Code

| 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") | | |



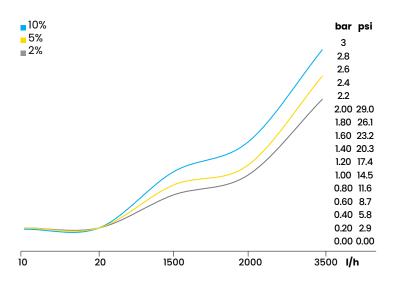


^{*} Legs available upon request

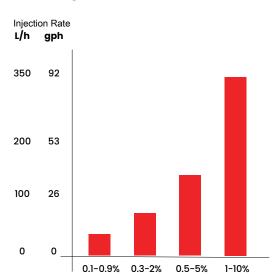
Application Range

| 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 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



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





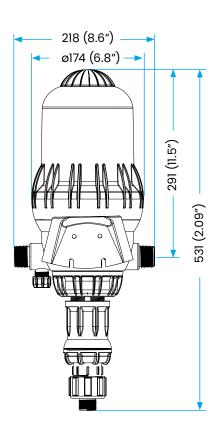




Application Color Code

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

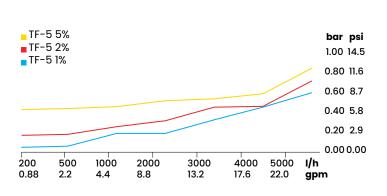
| | L (Hight) | | | | |
|------|-------------|-------------|--|--|--|
| | On/Off | Air Release | | | |
| Мах. | 680 (26.7") | 595 (23.4") | | | |
| Min. | 585 (23") | 545 (21.4") | | | |



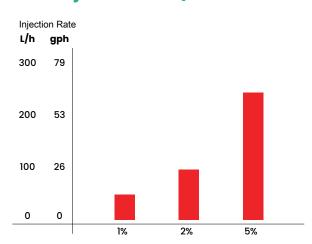
Application Range

| 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 m³/h MixRite TF-10

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

Available options

Hydraulic Manual ON/OFF ON/OFF ON/OFF





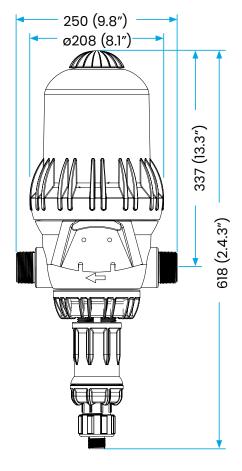




Application Color Code

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

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



^{*} Legs available upon request

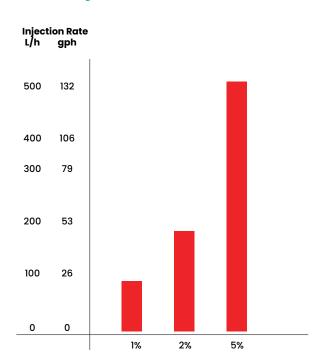
Application Range

| 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 | ı¹/2" 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 ¹ /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 ¹ /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% TF-10 1% 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 4000 6000 26.4 8000 35.2 10000 8.8 17.6 44.0

Max. injection rate/h





Technical Information

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

* Legs - Standard supply

Available options

Manual ON/OFF Hydraulic ON/OFF ON/OFF



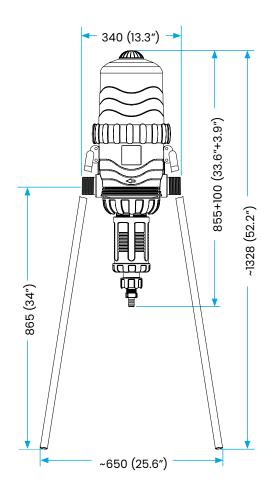




Application Color Code

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

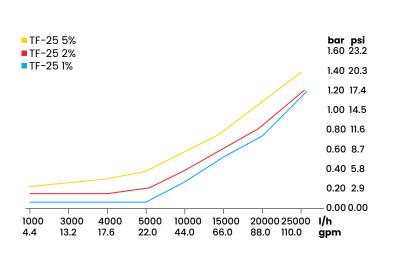
| | L (Hight) | | | | | | | |
|------|--------------|--------------|--|--|--|--|--|--|
| | On/Off | Air Release | | | | | | |
| Max. | 1030 (40.5") | 1000 (39.3") | | | | | | |
| Min. | 880 (34.6") | 900 (35.4") | | | | | | |



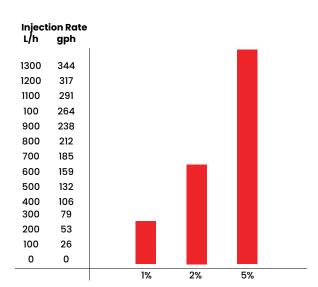
Application Range

| 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

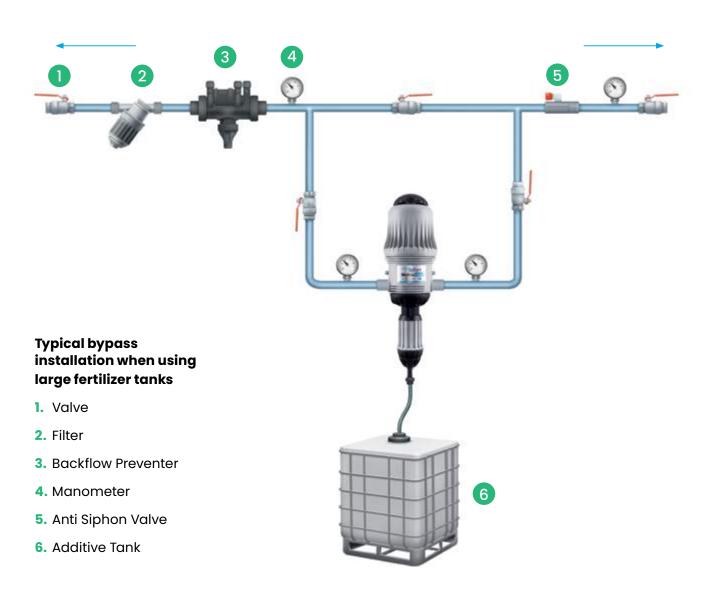


Typical installation

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



LegsCompatible 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

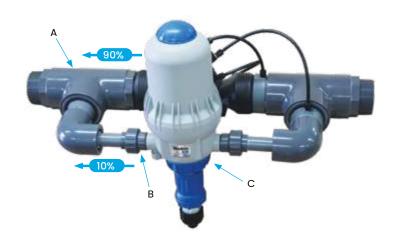
Proportional and Automatic Bypass System

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

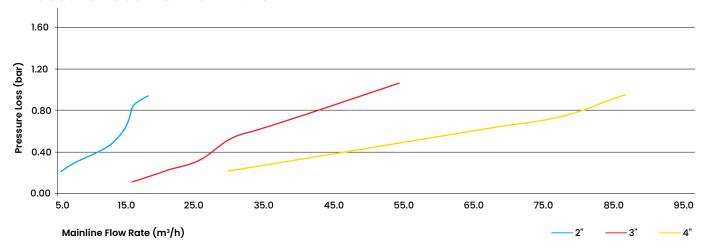
The MixRite™ pump is a volumetric, proportional unit. The combination between the MixRite™ Dosing Pump and the By-Pass unit creates a fully proportional dosing system.

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 | | n | • | |
|------------|---------------------------------------|----------|----|-------|------------------|--|
| m³/h | Flow Range Bosage Range 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









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)

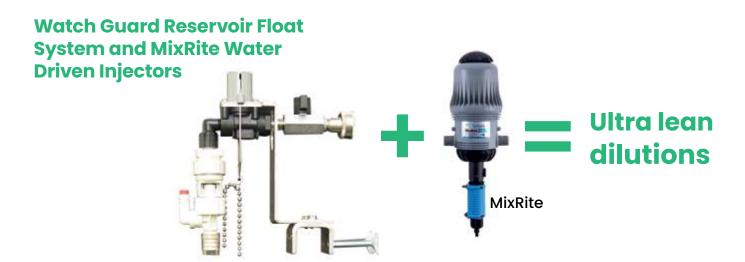
- Total water flow rate: 67.3 m³/h
- Desired dosage rate: 0.1%
- Additive amount: 67.3 x 0.1% = 0.0673 m³/h
- Relevant configuration: 4", 1.5"
- Main line water flow: 67.3 x 0.9 = 60.57 m³/h
- By-Pass water flow: 67.3 x 0.1 = 6.73 m³/h
- Relevant injector: TF10 0.2%-2%
- Dosage setting on injector: 0.0673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

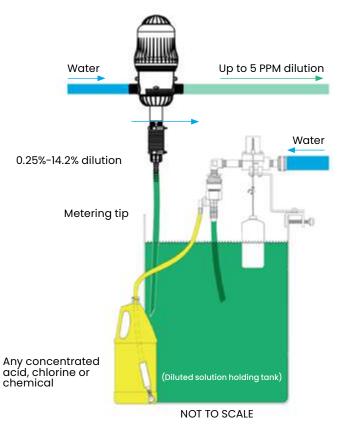
Watch Guard - Ultra Lean Dilution



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 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 dilution ration you are trying to achieve | ppm ppm ppm ppm ppm | 50 26 32 39 45 52 | 31 39 49 59 69 78 Turquoise | 61 78 98 118 137 156 | 84 108 134 163 189 215 Red | 130 167 208 253 292 333 Blue | 601 769 962 1166 1350 1538 Gray | 1116 1429 1786 2165 2506 2857 No Tip | 0.8% 1.0% 1.3% 1.5% 1.8% 2.0% Precentage | 128-1 100-1 80-1 66-1 57-1 50-1 | Set Mixrite to the following ratio / precentage |
|---|--|---------------------------------|----------------------------------|---|-------------------------------------|--|--|---|--|--|--|--|
| ppm 5 8 16 22 33 154 286 0.2% 500-1 | | ppm | 8 | 12 | 23 | 32 | 50 | 231 | 429 | 0.3% | 333-1 | |

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

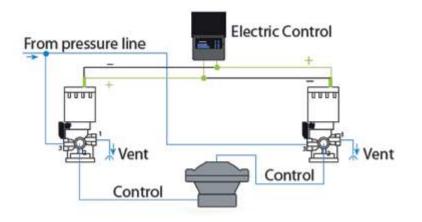
- MixRite Dosing Pump can be turned on and off via the irrigation control system
- System suits irrigation systems with a direct flow (DC) or an alternative flow (AC)
- System includes electric on/off kit. The device kit is installed on the pump's cover.
- Electrically controlled hydraulic pump can be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



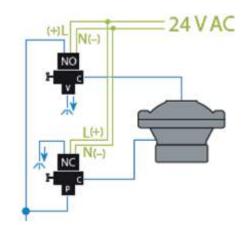
Available Models:

- A. A. Hydraulic remote control On Off for MixRite and TF models by Tefen.
- B. B. Hydraulic Electric On Off 24 VAC operated.
- C. C. Hydraulic Electric On Off 12 40 VDC Latch or battery operated Irrigation controllers.

12-40 V DC Latch (pulse)

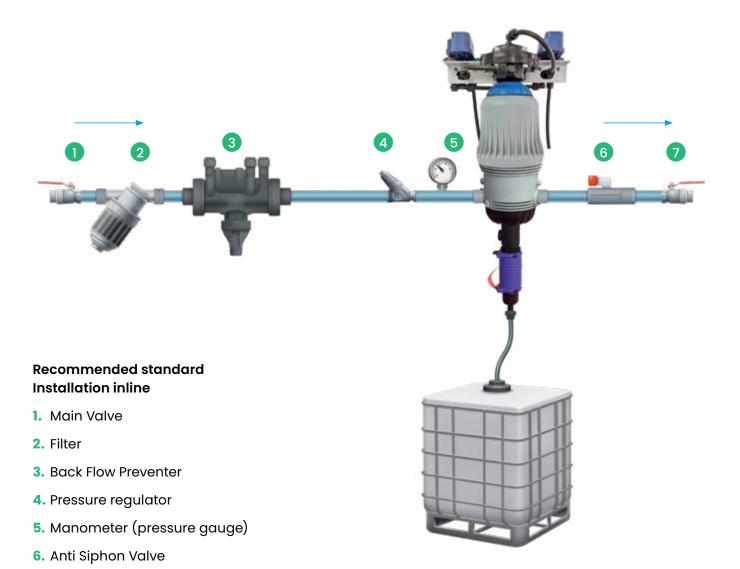


24 V AC Configuration



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

^{*} 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 | pe | | | | | | | | | |
|----------|-----|----|----|----|----|----|----|----|----|-----|-------|
| LPH | 350 | | | | | | | | | | |
| Flow LPH | 300 | | | | | | | | | | |
| ш | 250 | | | | | | | | | / | |
| | 200 | | | | | | | | | | |
| | 150 | | | | | | | | | | |
| | 100 | | | | | | | | | | |
| | 50 | | | | | | | | | | |
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| | | | | | | | | | Р | 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



- 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)

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

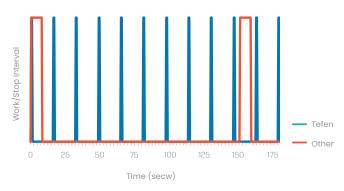


Choosing the Dosing Percentage

| 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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