

MixRite™

DOSING PUMPS



IRRIGATION



ANIMAL HEALTH



INDUSTRIAL



SANITATION



WATER
TREATMENT



CUTTING
OIL



CAR
WASHING



 **tefen**
Flow & Dosing Solutions

Keep your business flowing.
Tefenitely.



About TEFEN

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.

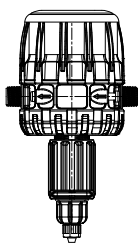
Tefen is certified
by ISO 9001 2015



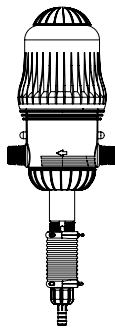


MixRite™ Range

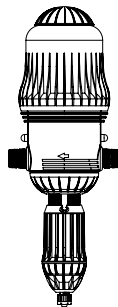
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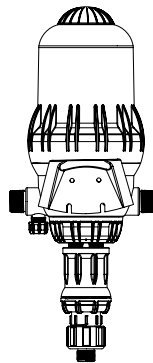
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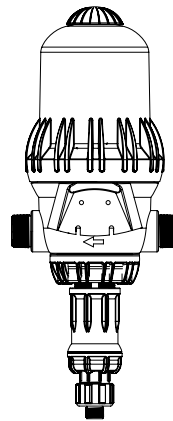
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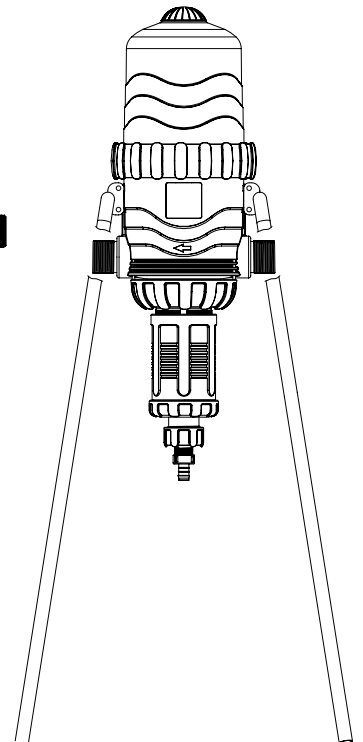
TF - 5



TF - 10



TF - 25



MixRite™ Dosing Pumps

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.



INDUSTRIAL

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.



ANIMAL HEALTH

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).





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.



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.



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.



MixRite™ Dosing Pumps

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)

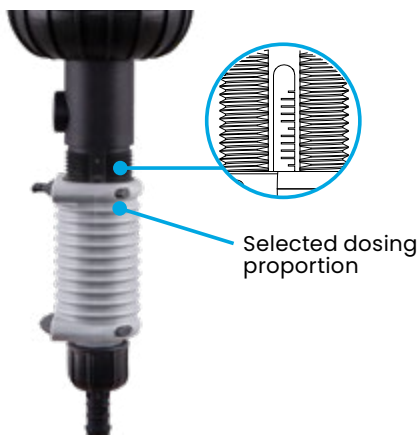
Advantages

- 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.

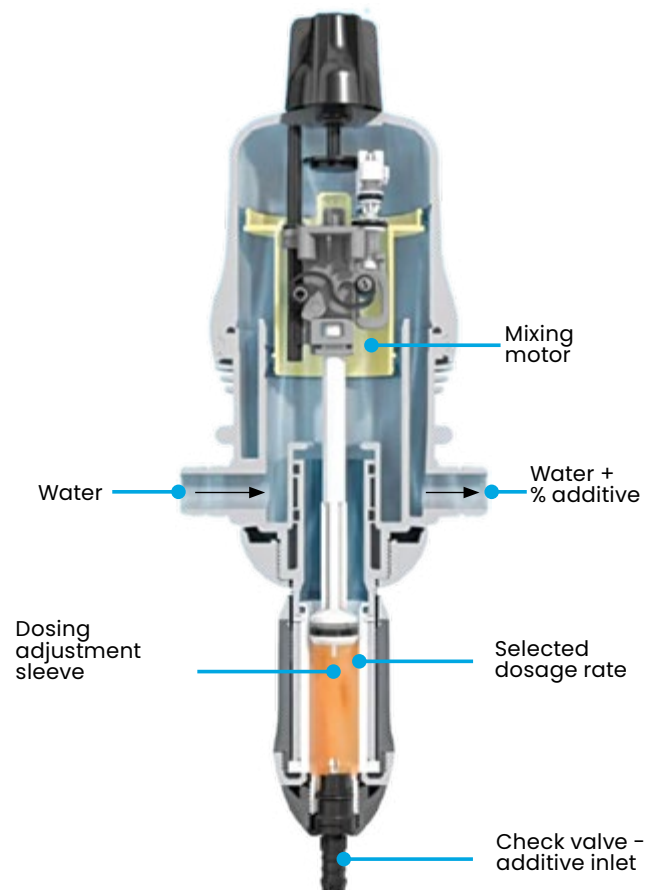
Adjusting the MixRite™ pump

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.



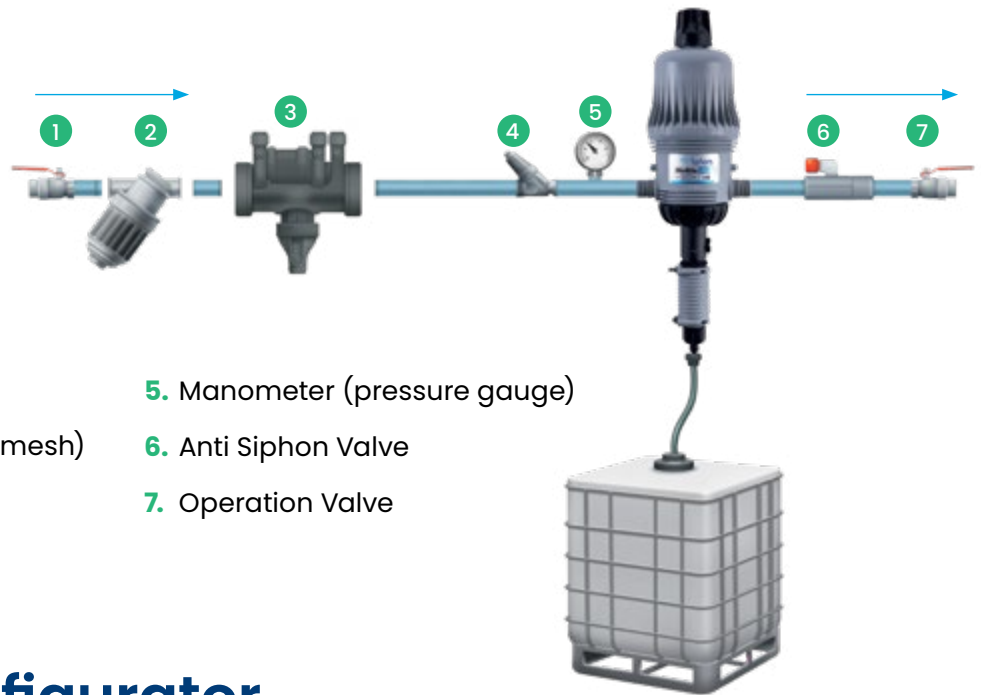
Simplicity by design

Simple maintenance

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.



Recommended standard Installation inline

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

MixRite™ Configurator

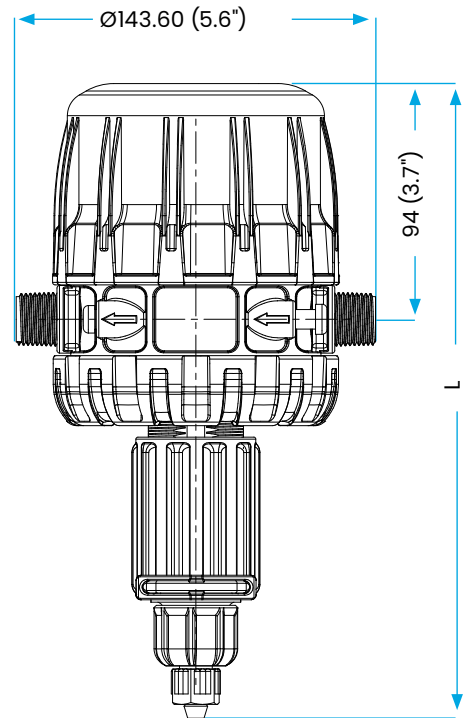
| PUMP CODE | 1-2 | 3-4 | 5-6 | 7 | 8-9 | 10-11 |
|--|----------|--|---|---------------------------|--|-------|
| Fixed prefix | 28=Pumps | 01=MixRite™ 1, 3/4" BSPT 02=MixRite™ 2.5, 3/4" BSPT 03=TF5, 1" NPT 04=TF 5, 1" BSPT 05=TF5, 32mm 08=TF10, 1 1/2 NPT 09=TF10, 1 1/2 BSPT 10=TF10, 50mm 23=TF25, 2" 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 | 0=air release 1=ON/OFF | '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 |
| Pump model + connector thread (BSP/NPT/Compression) | | | | | | |
| Dosage % | | | | | | |
| Cover option | | | | | | |
| Application | | | | | | |
| Additional information | | | | | | |

MixRite™ Dosing Pumps



1 m³/h MixRite™ 1

Technical Information

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



Application Color Code

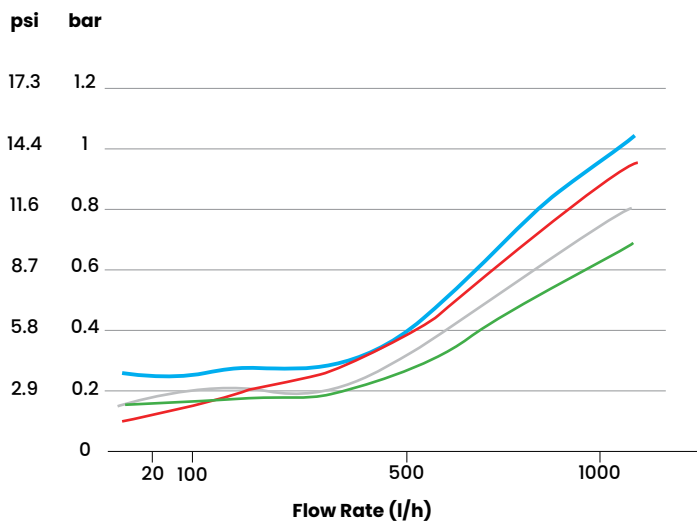
| Application | Sleeve Color | TEFEN Code | Seal Material | Spring Material | Model | L |
|---------------------------------|---|------------|---------------|-----------------|------------|--------------|
| Domestic Landscaping (0.2% fix) |  | STD | NBR | SST | Fix | 212.5 (8.3") |
| Chlorine / Industry |  | CL | Viton | Hastelloy | 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 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 |

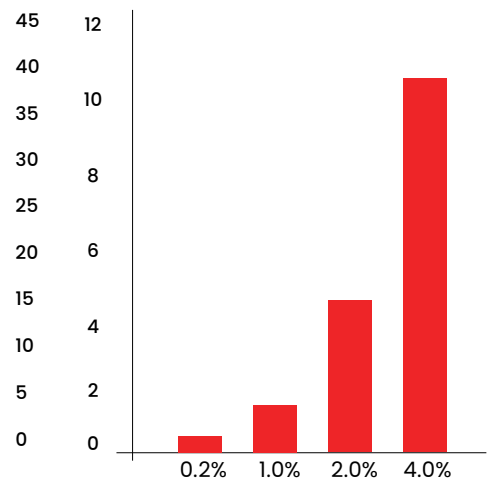
Pressure Loss

- 4%
- 2%
- 1%
- Fixed



Max. injection rate/h

Injection Rate
L/h gph



MixRite™ Dosing Pumps

2.5 m³/h

MixRite™ 2.5

Technical Information

Water pressure | 0.2 – 8 bar (2.9 – 116 psi)
 Flow Rate | 10 – 2500 l/h (0.044 – 11 GPM)
 Working temp | 4-40° C (39.2-104° F)
 Coupling | 3/4"

* Legs available upon request

Available options

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

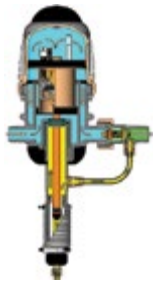


By Pass models



Internal bypass

*Yellow sleeve



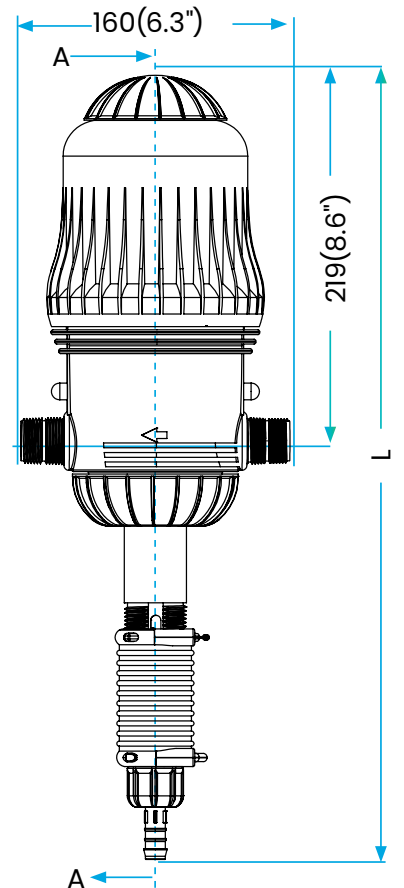
External bypass

*Yellow sleeve

Application Color Code

| Application | Sleeve Color | TEFEN Code | Seal Material | Spring Material |
|-------------|--------------|------------|---------------|-----------------|
| Irrigation | Grey | STD | NBR | SST |
| Livestock | Red | PO | NBR, EPDM | SST, Hastelloy |
| Acids | White | PVDF | AFLAS | Hastelloy |
| Chlorine | Purple | CL | Viton | Hastelloy |
| Industry | Black | C | EPDM, AFLAS | SST, Hastelloy |
| Car Wash | Cyan | CW | AFLAS | SST, Hastelloy |
| By-Pass | Yellow | I / B | EPDM, AFLAS | SST, Hastelloy |

| L (Height) | |
|------------------|-------------|
| on/off | Air Release |
| Max. 528 (20.7") | 496 (19.5") |
| Min. 497 (19.5") | 457 (17.9") |

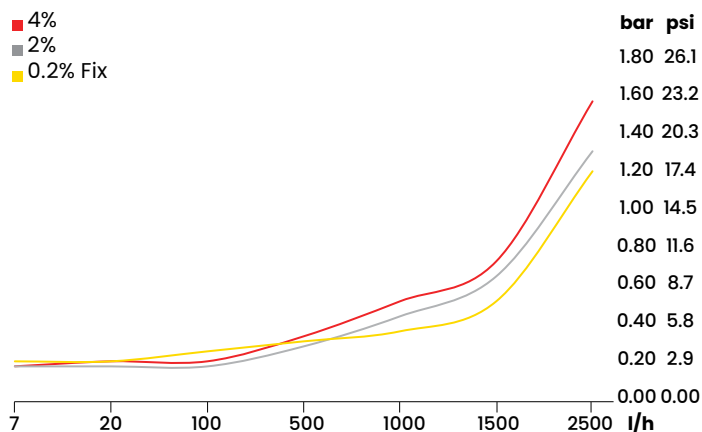


Application Range

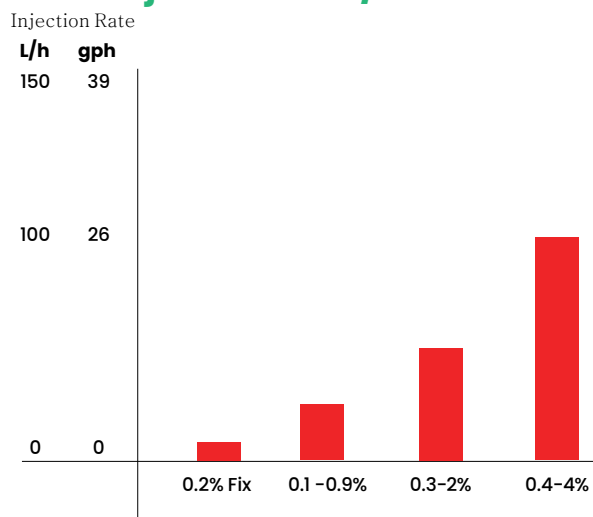
| Dosage Rate % | Flow Rate Range | Pressure Range | Connectors Dia. Thread | Min-Max Injection Rate Per Hour | Suction Tube Dia. | Applications | Gross weight std unit |
|-----------------------------|-----------------|----------------|------------------------|---------------------------------|-------------------|--|-----------------------|
| 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 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 |

* Low flow 7 l/h available in P0 model

Pressure Loss



Max. injection rate/h



MixRite™ Dosing Pumps

3.5 m³/h

MixRite™ 3.5

Technical Information

Water pressure | 0.2 – 8 bar (2.9 – 116 psi)
 Flow Rate | 10 – 3500 l/h (0.04 – 15.4 GPM)
 Working temp | 4–40° C (39.2–104° F)
 Coupling | 3/4"

* Legs available upon request

Available options

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



By Pass models



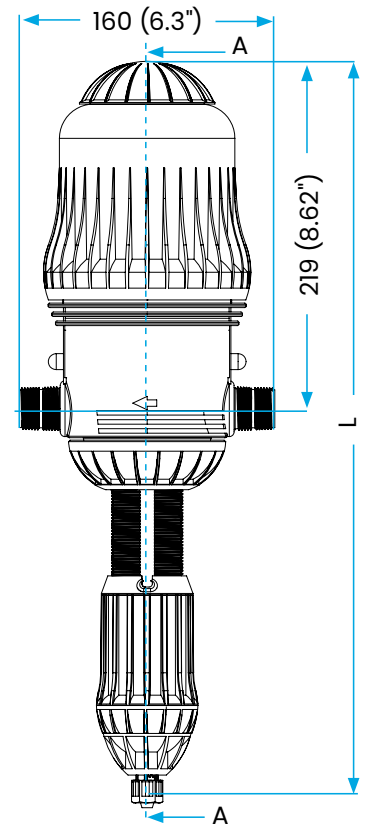
Internal bypass

*Yellow sleeve

Application Color Code

| Application | Sleeve Color | TEFEN Code | Seal Material | Spring Material |
|-------------|--------------|------------|---------------|-----------------|
| Irrigation | Grey | STD | NBR | SST |
| Livestock | Red | PO | NBR, EPDM | SST, Hastelloy |
| Acids | White | PVDF | AFLAS | Hastelloy |
| Chlorine | Purple | CL | Viton | Hastelloy |
| Industry | Black | C | EPDM, AFLAS | SST, Hastelloy |
| Car Wash | Cyan | CW | AFLAS | SST, Hastelloy |
| By-Pass | Yellow | I / B | EPDM, AFLAS | SST, Hastelloy |

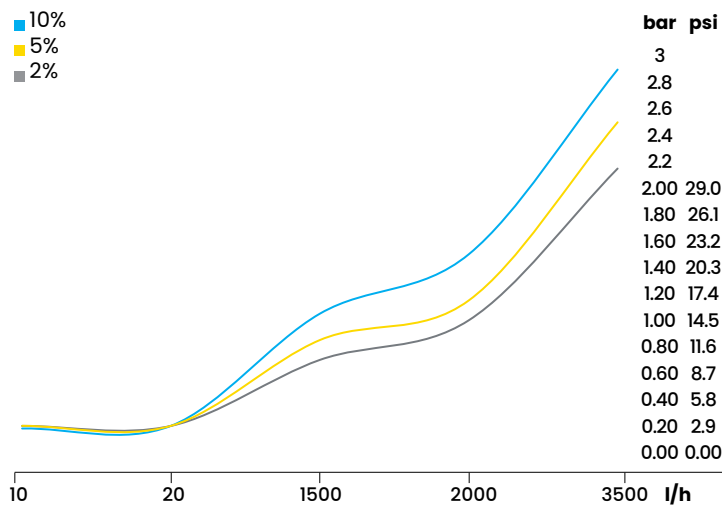
| L (High) | |
|------------------|-------------|
| On/Off | Air Release |
| Max. 551 (21.7") | 486 (19.1") |
| Min. 471 (18.5") | 447 (17.6") |



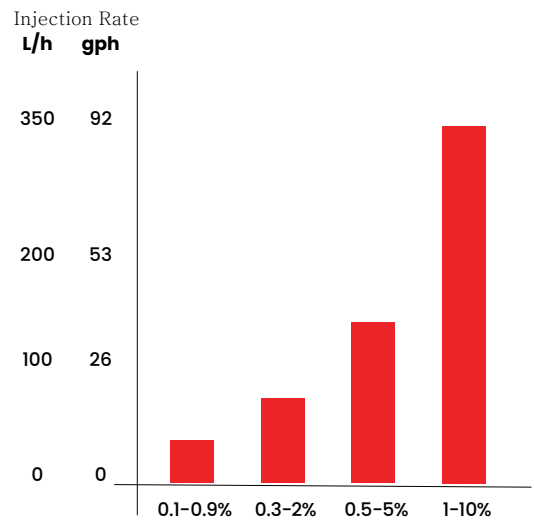
Application Range

| 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 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



Max. injection rate/h



MixRite™ Dosing Pumps



5 m³/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

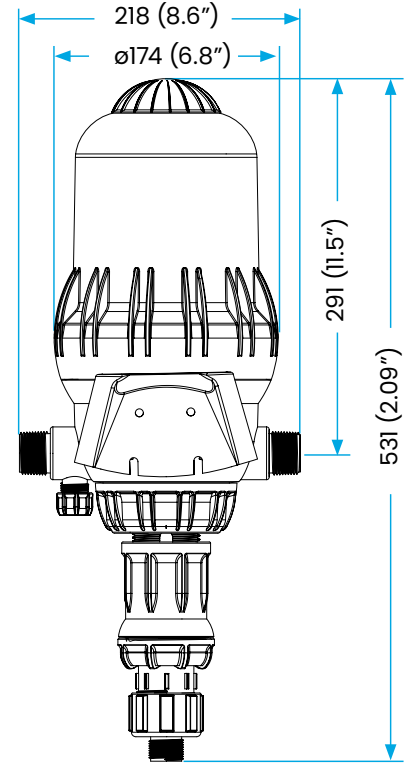
Manual ON/OFF Hydraulic ON/OFF Electric ON/OFF



Application Color Code

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

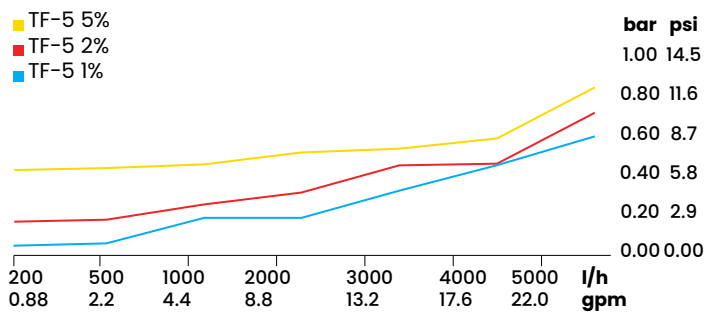
| L (Height) | |
|------------------|-------------|
| On/Off | Air Release |
| Max. 680 (26.7") | 595 (23.4") |
| Min. 585 (23") | 545 (21.4") |



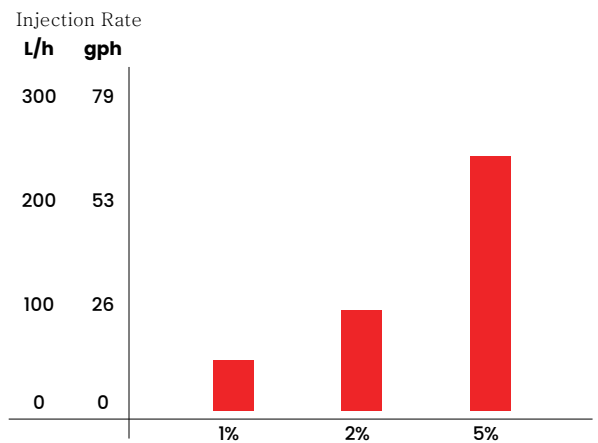
Application Range

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

Pressure Loss



Max. injection rate/h



MixRite™ Dosing Pumps

10 m³/h MixRite™ TF-10

Technical Information

| | |
|----------------|--|
| Water pressure | 1 - 8 bar (14.7 - 116 PSI) |
| Flow Rate | 0.1 - 10 m ³ /h (0.44 - 45 GPM) |
| Working temp | 4-40° C (39.2-104° F) |
| Coupling | 1.5" or 50 mm |



* Legs available upon request

Available options

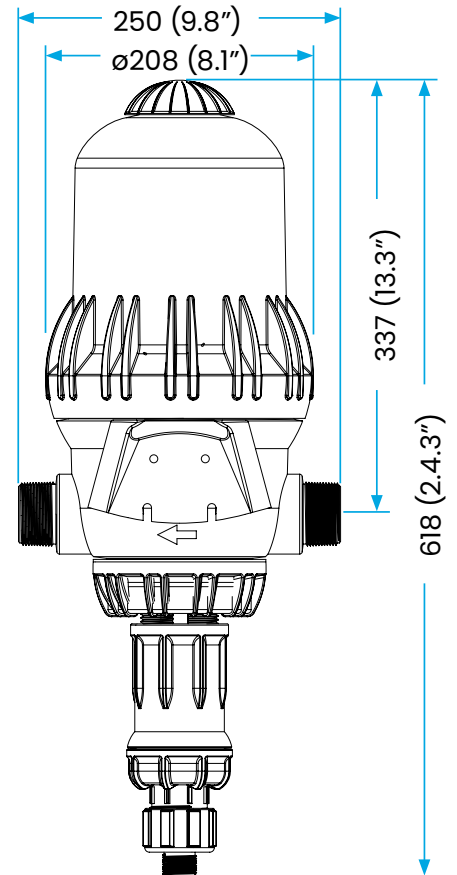
| | | |
|---|---|---|
| Manual ON/OFF | Hydraulic ON/OFF | Electric ON/OFF |
|  |  |  |



Application Color Code

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

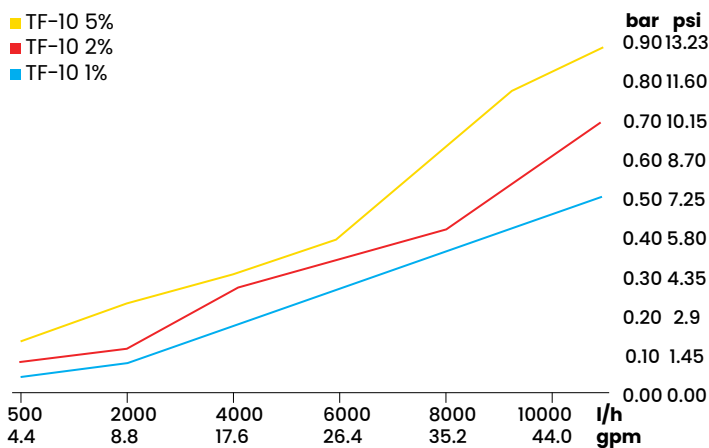
| L (Height) | |
|-------------------|-------------|
| On/Off | Air Release |
| Max. 760 (29.9") | 660 (26") |
| Min. 720 (28.34") | 625 (24.6") |



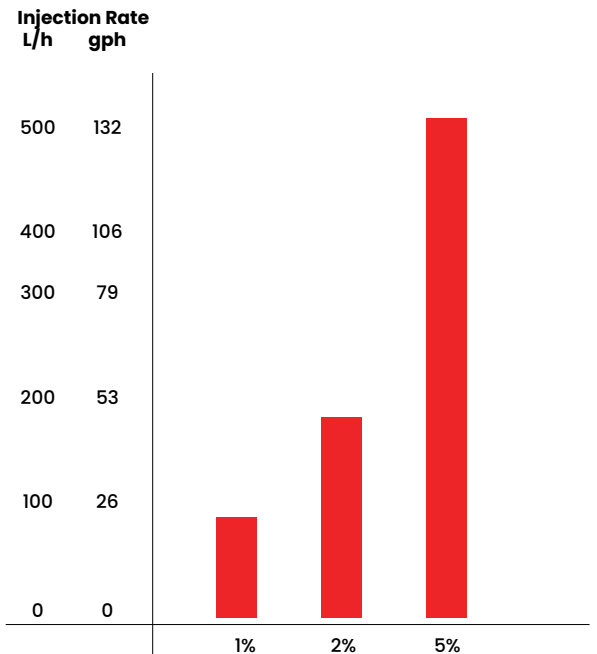
Application Range

| Dosage Rate % | Flow Rate Range | Pressure Range | Connectors Dia. Thread | Min-Max Injection w Rate Per Hour | Suction Tube Dia. | Applications | Gross weight std unit |
|---------------|----------------------------|----------------|------------------------|-----------------------------------|-------------------|-----------------------------------|-----------------------|
| 0.1% - 1% | 0.1 - 10 m ³ /h | 1 - 8 bar | 1 1/2" BSPT | 0.1 - 100 l/h | 19 mm | Irrigation / Chlorine / Livestock | 7.3 KG |
| 0.2% - 2% | 0.1 - 10 m ³ /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 m ³ /h | 1 - 8 bar | 1 1/2" BSPT | 1 - 500 l/h | 19 mm | Irrigation / Chlorine / Livestock | 7.3 KG |

Pressure Loss



Max. injection rate/h



MixRite™ Dosing Pumps

25 m³/h MixRite™ TF-25

Technical Information

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



* Legs - Standard supply

Available options

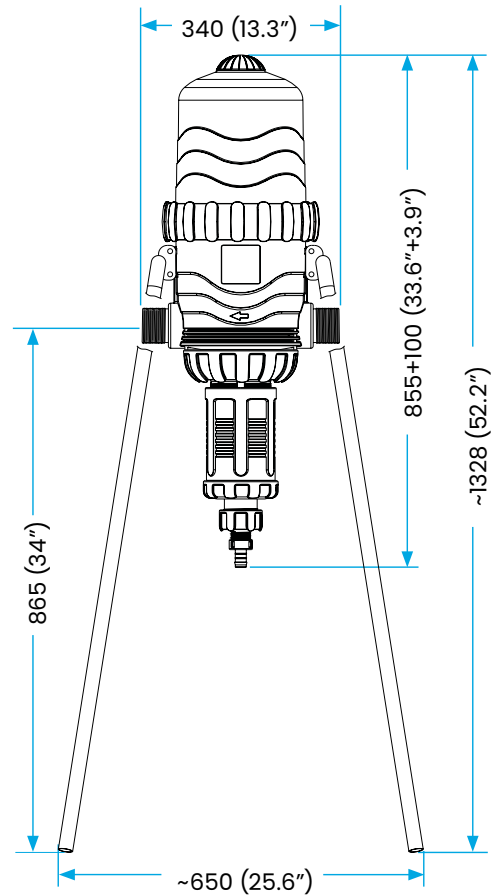
| | | |
|---|---|---|
| Manual ON/OFF | Hydraulic ON/OFF | Electric ON/OFF |
|  |  |  |



Application Color Code

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

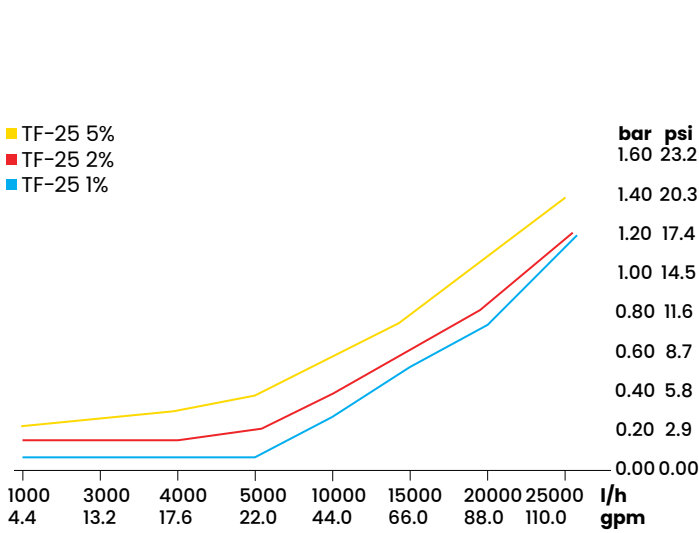
| | L (Height) | |
|------|--------------|--------------|
| | On/Off | Air Release |
| Max. | 1030 (40.5") | 1000 (39.3") |
| Min. | 880 (34.6") | 900 (35.4") |



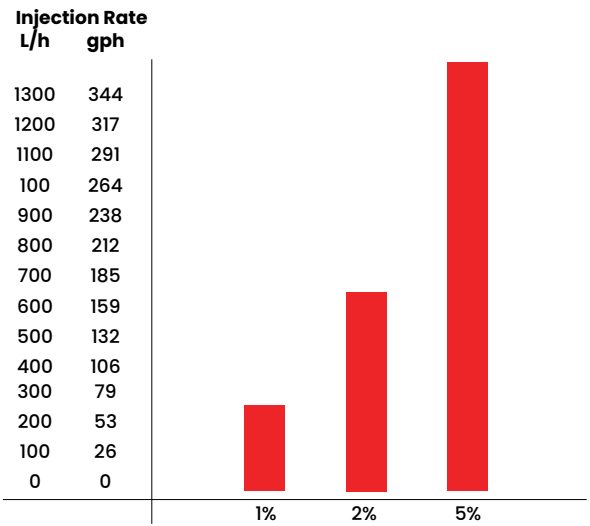
Application Range

| 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 m ³ /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 m ³ /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 m ³ /h | 1 - 8 bar | 2" BSPT | 2.0 - 1375 l/h | 25 mm | Irrigation / Chlorine / Livestock | 18.5 KG |

Pressure Loss



Max. injection rate/h



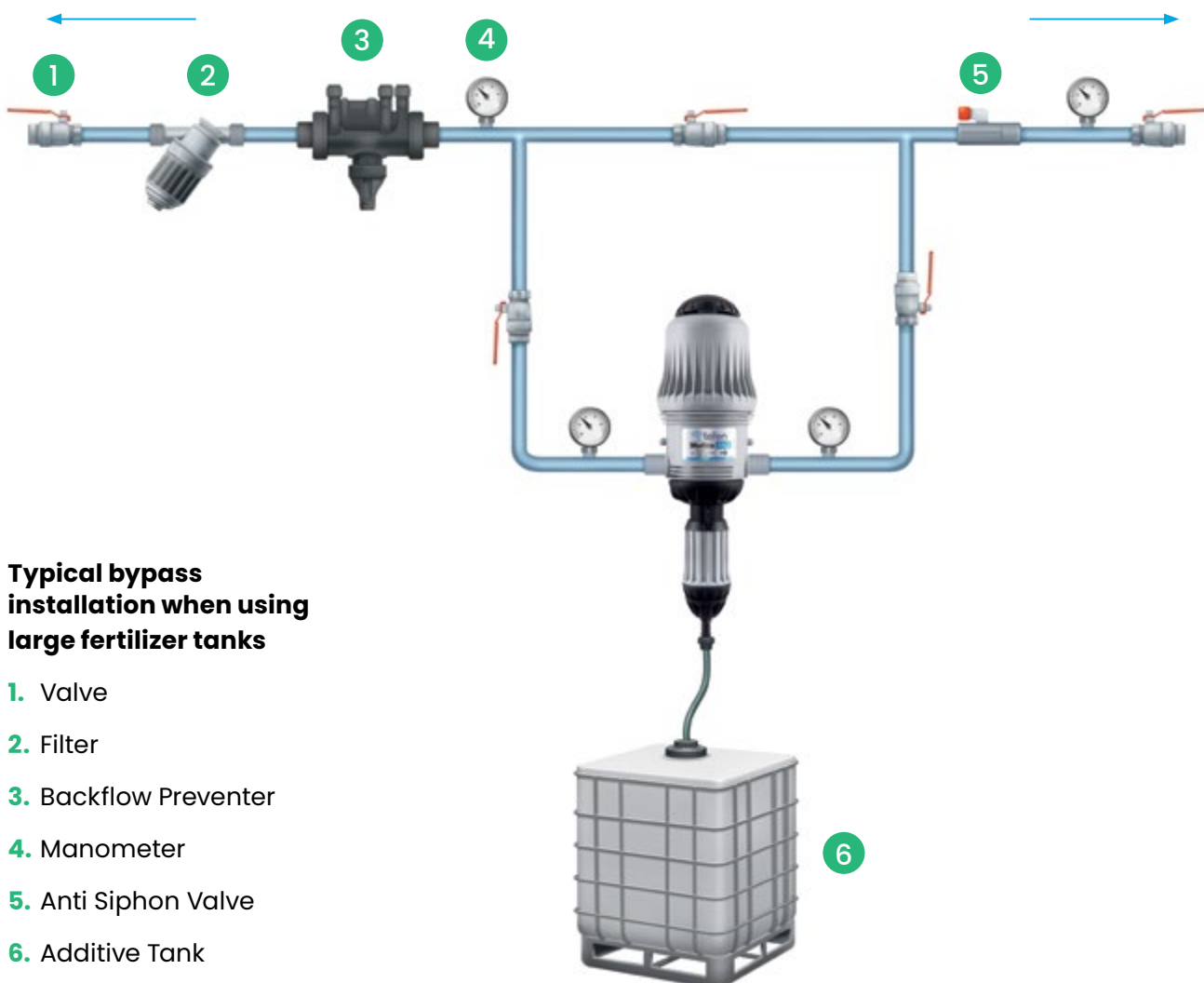
MixRite™ Dosing Pumps

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.



Typical bypass installation when using large fertilizer tanks

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

Accessories



3/4" Anti Siphon Kit

Cat. No. 36073008002



Legs

Compatible with 2.5 & 3.5 models
Cat. No. 35100000064



Plastic Wall Mounting Bracket

Cat No. 36030162765
For all 3/4 MixRite™ models



Pressure Check Socket



3/4" Water Filter

Cat. No. 38000000172



Plastic Wall Mounting Bracket and Stand Base

Cat No. 35125011872
For MixRite™ TF5 & TF10 models



Manual ON/OFF Option



Stainless Steel Wall Mounting Bracket

Cat No. 35000000010
For MixRite™ TF25 models



Hydraulic Remote Control ON/OFF Option



Pulse Transmitter

TreatRite – Water Treatment Line

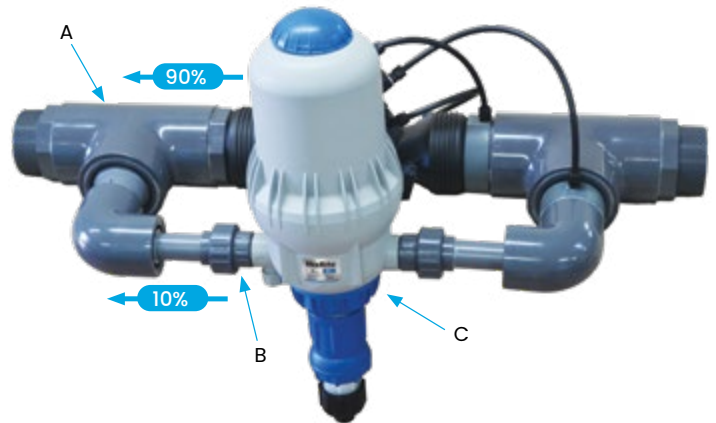
Proportional and Automatic Bypass System

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

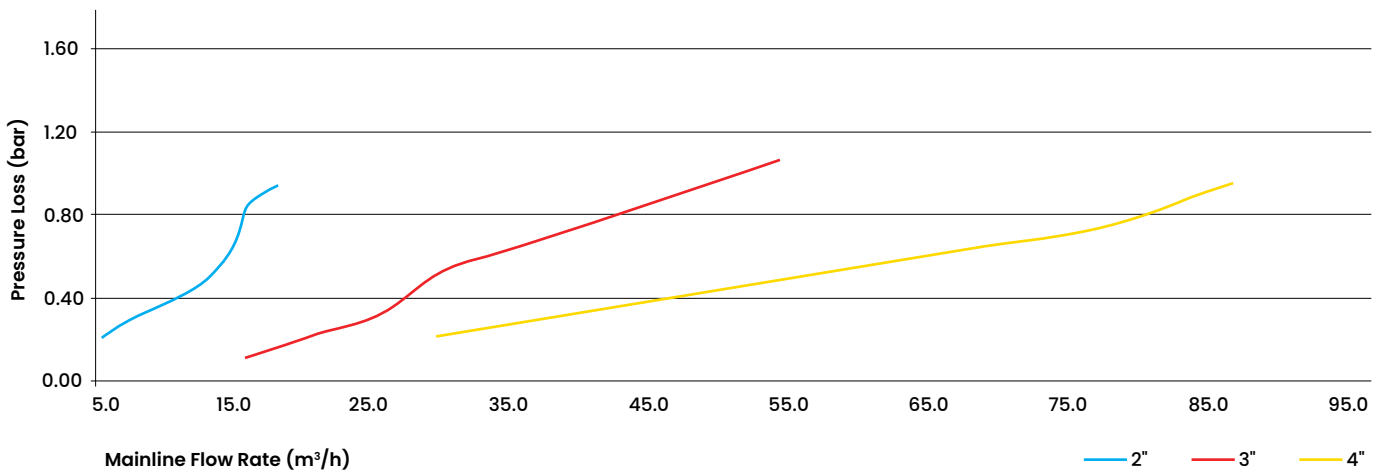
The MixRite™ pump is a volumetric, proportional unit. The combination between the MixRite™ Dosing Pump and the By-Pass unit creates a fully proportional dosing system.

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 m³/h | Dosage Range | | A | B | C |
|--------------------|--------------|----------|----|--------|------------------|
| | (%) | L/h | | | |
| 6-25 | 0.003-1 | 0.18-250 | 2" | 3/4" | MixRite™ 2.5/3.5 |
| 15-50 | 0.01-0.5 | 1.5-250 | 3" | 1" | MixRite™ TF5 |
| 30-100 | 0.01-0.5 | 3-500 | 4" | 1 1/2" | MixRite™ TF10 |

MixRite™ 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

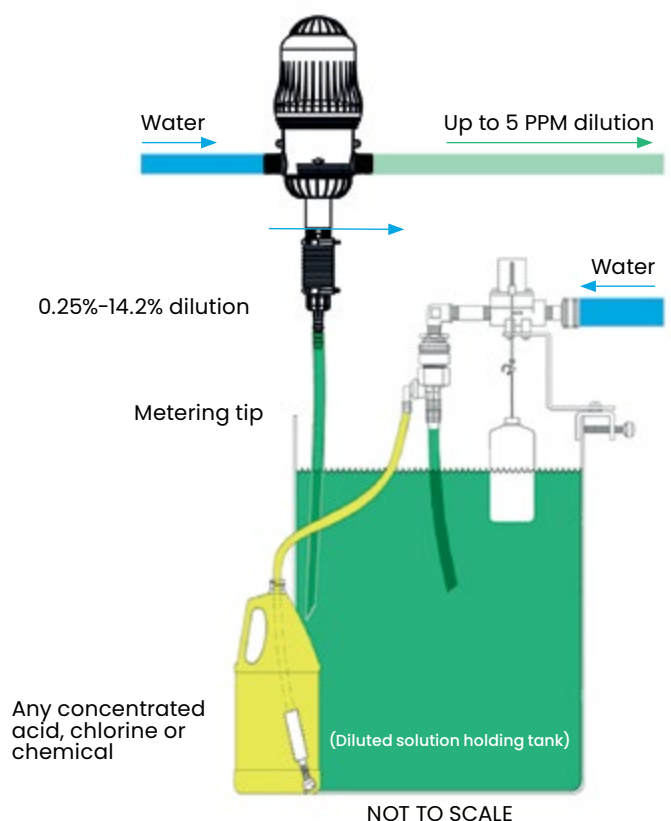
Watch Guard Reservoir Float System and MixRite™ Water Driven Injectors



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 Viscosities 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 | 5 | 8 | 16 | 22 | 33 | 154 | 286 | 0.2% | 500-1 | Set MixRite™ to the following ratio / percentage |
| | ppm | 8 | 12 | 23 | 32 | 50 | 231 | 429 | 0.3% | 333-1 | |
| | ppm | 13 | 20 | 39 | 54 | 83 | 385 | 714 | 0.5% | 200-1 | |
| | ppm | 50 | 31 | 61 | 84 | 130 | 601 | 1116 | 0.8% | 128-1 | |
| | ppm | 26 | 39 | 78 | 108 | 167 | 769 | 1429 | 1.0% | 100-1 | |
| | ppm | 32 | 49 | 98 | 134 | 208 | 962 | 1786 | 1.3% | 80-1 | |
| | 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 | Percentage | 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

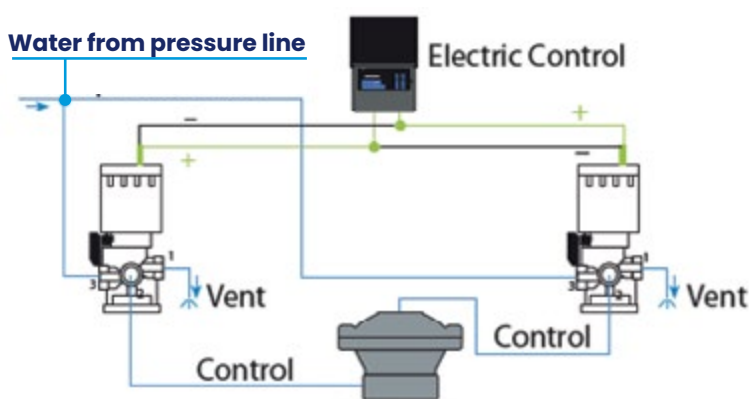
- MixRite™ Dosing Pump can be turned on and off via the irrigation control system
- System suits irrigation systems with a direct flow (DC) or an alternative flow (AC)
- System includes electric on/off kit. The device kit is installed on the pump's cover.
- Electrically controlled hydraulic pump can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



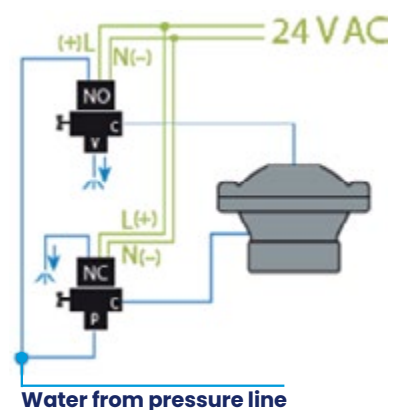
Available Models:

- 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.

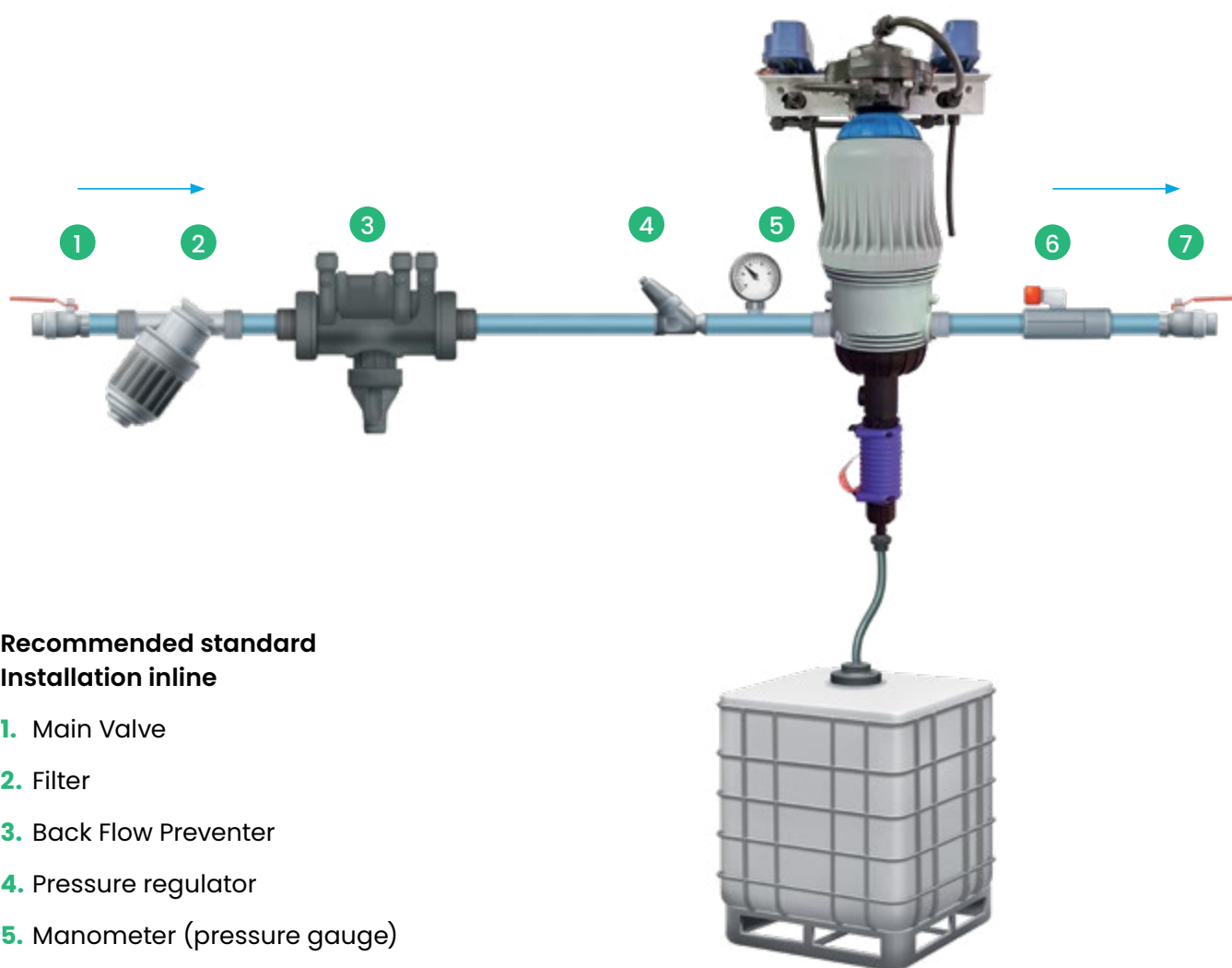
12-40 V DC Latch (pulse)



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 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:

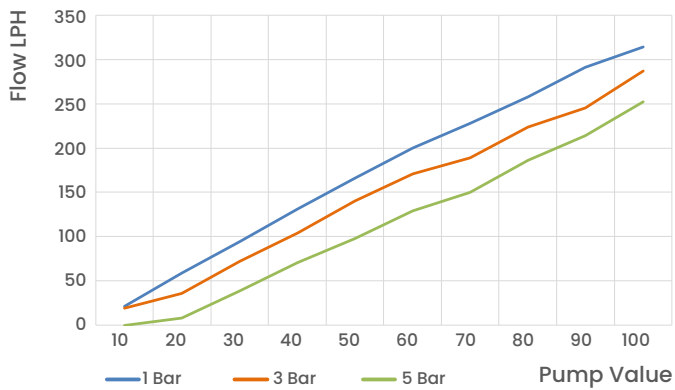
1. 10m pipe (Ø12mm) with BSPT 1/2" connector
2. Input kit
3. Output kit with air release valve & check valve

Simple and Low Cost Installation



Average Injection Flow Rate

M Type



| 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

AC Power Supply



DC Power Supply | Solar Charged Battery



MixRite™ Electric Pumps

InjectRite™

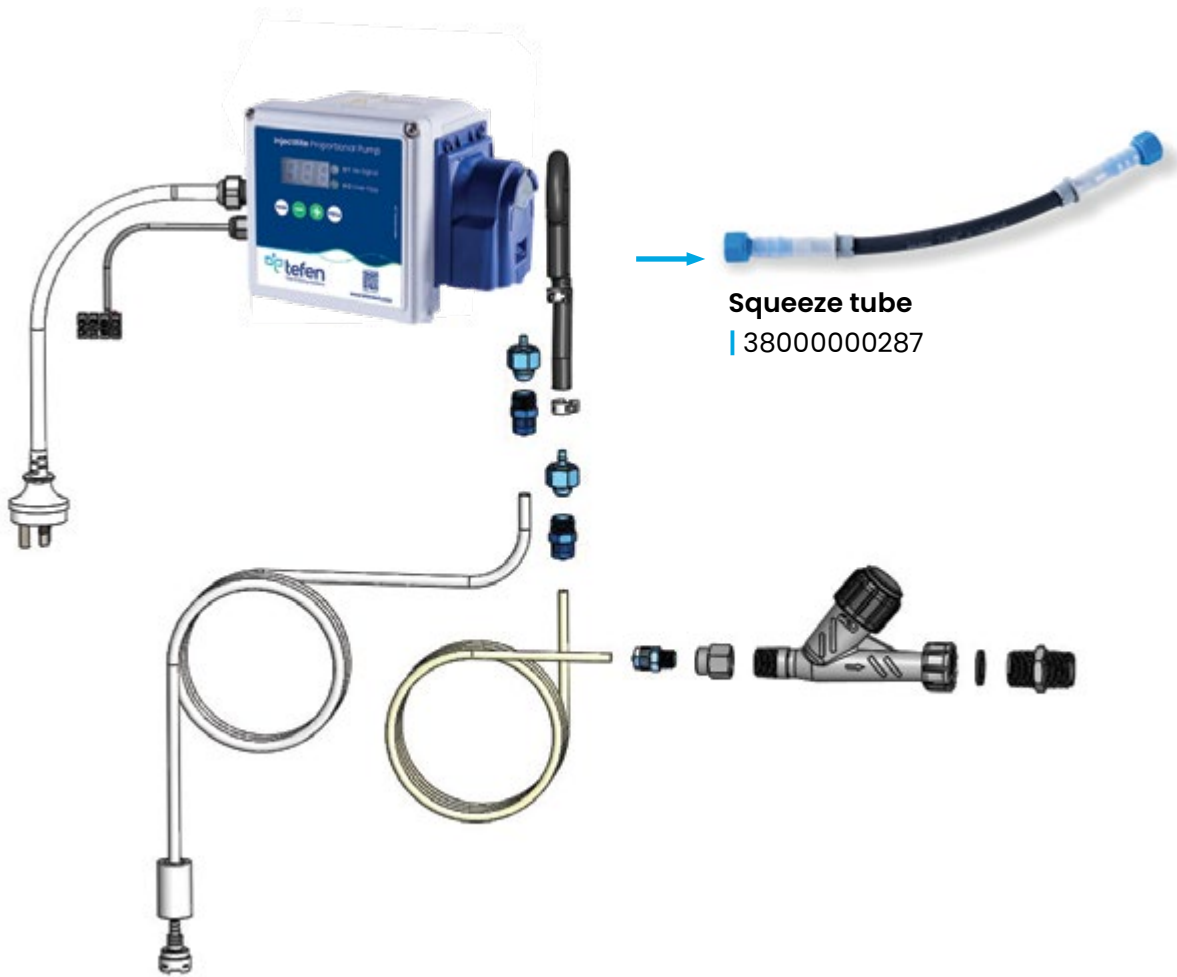
Proportional Peristaltic Pump

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 l/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 | 1.5 |
| 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 |

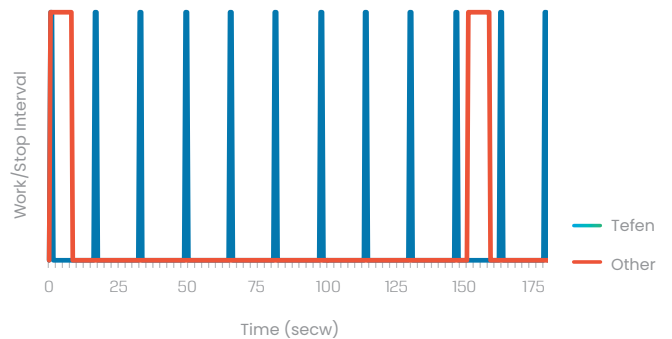


Choosing the Dosing Percentage

| Dosage % | Injected Volume l/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 - l/h | | | | | |

Duty Cycle (at low flows)

Cycle of the pump @ low flows



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



EDITION 07 EN 03/22



Tefen Flow & Dosing Technologies Ltd.

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