

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.

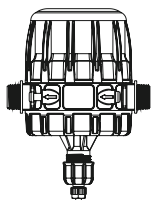
Tefen is certified
by ISO 9001 2015



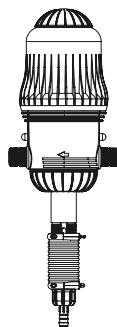


MixRite™ Range

LF - 1000



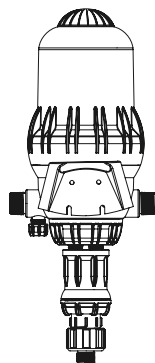
2.5



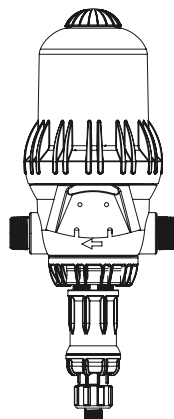
3.5



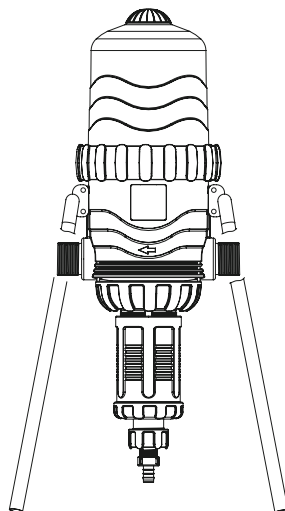
TF - 5



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)

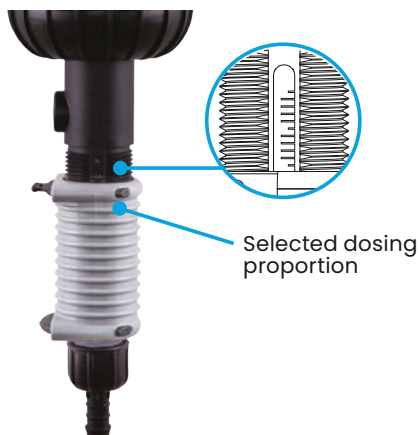
Advantages

- 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.

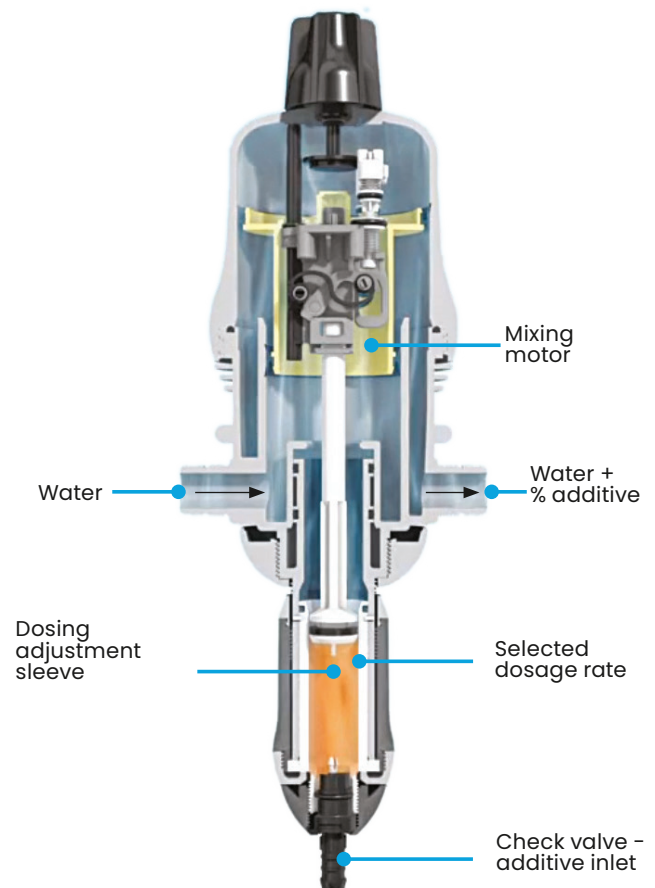
Adjusting the MixRite™ pump

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.



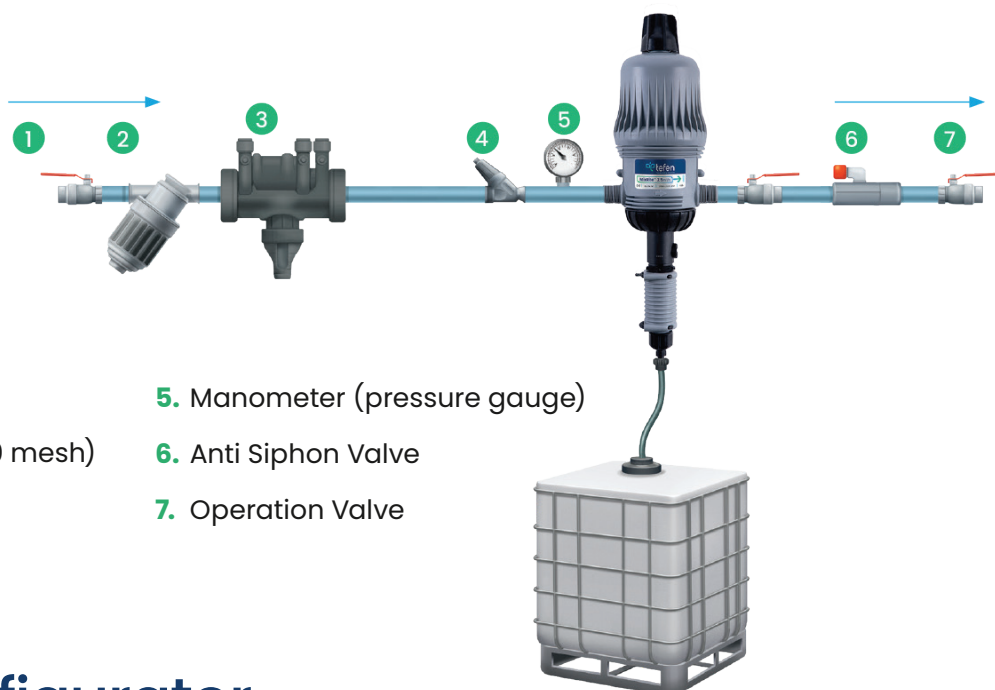
Simplicity by design

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	02=MixRite™ 2.5 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 40=LF-1000	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 P0=Poultry C0=Industry CL=Chlorine CW=Car wash IV=PVDF I0=Internal By Pass B0=External By Pass	00
Pump model + connectord thread (BSP/NPT/Compression)						
Dosage %						
Cover option						
Application						
Additional information						

MixRite™ Dosing Pumps

1 m³/h

MixRite™ LF-1000

Technical Information

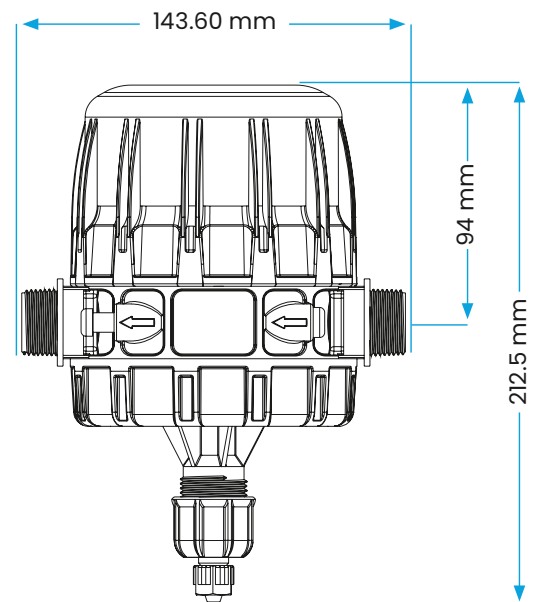
Operating water pressure	0.2 - 4 bar (2.9 - 58 psi)
Flow Rate	4 - 1,000 l/h (0.08 - 4.4 gpm)
Working temp	4 - 40°C
Coupling	3/4"

Application Color Code

Application	Sleeve Color	TEFEN Code	Seal Material
Domestic Landscaping (0.2% fix)	Green	STD	NBR
Livestock (0.2%-2%)	Red	PO	EPDM

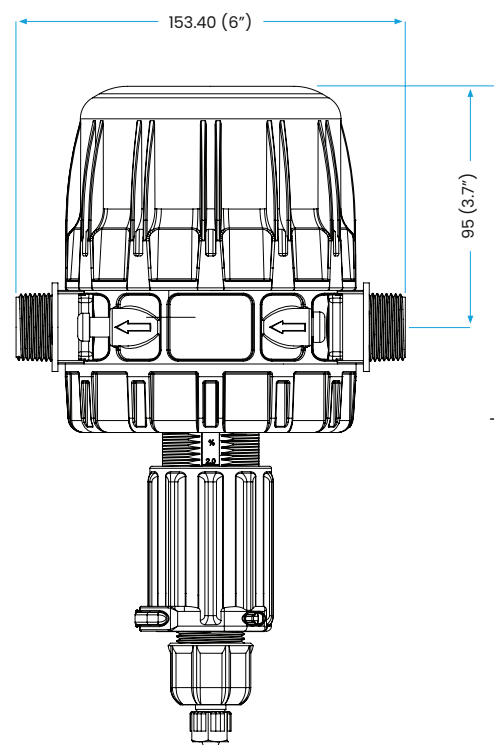
✓ **PATENTED**

Innovative low-flow
dosing technology

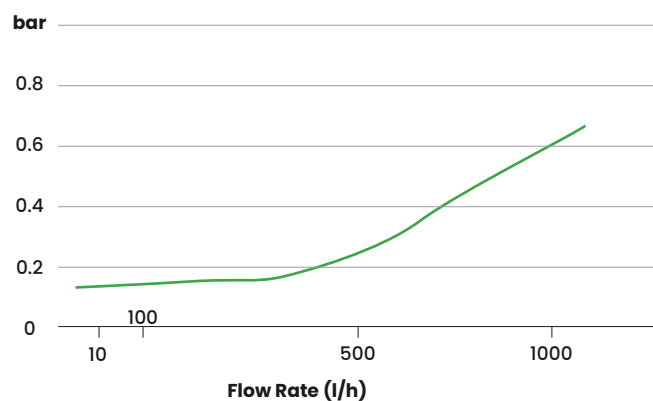


Application Range

Dosage Rate %	Flow Rate Range	Pressure Range	Dosage Rate	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube
0.2% fix	4-1,000 l/h	0.2 - 4 bar	0.2% fix	3/4" BSPT	0.008 - 2 l/h	8 mm
0.2% - 2%	4-1,000 l/h	0.2 - 4 bar	0.2% - 2%	3/4" BSPT	0.008 - 20 l/h	8 mm



Pressure Loss



L (Height)		
	On/Off	Air Release
Max.	384.5 (15.1")	345.5 (13.6")
Min.	369.5 (14.5")	342.5 (13.5")

MixRite™ Dosing Pumps

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 l/h (0.044 – 11 GPM)
 4–40° C (39.2–104° F)
 3/4"

* Legs available upon request

Available options

Manual
 ON/OFF



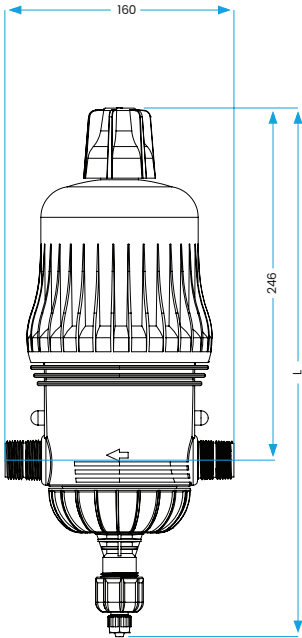
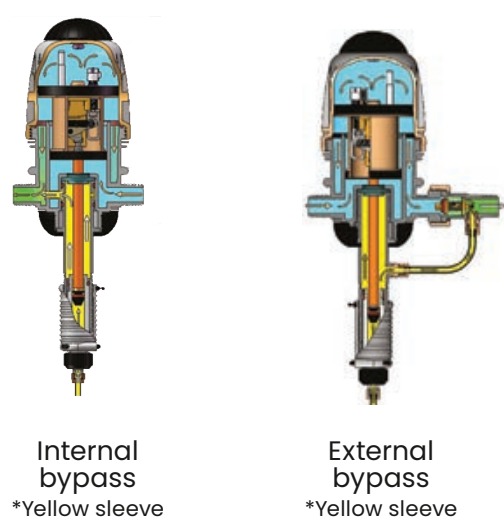
Hydraulic
 ON/OFF



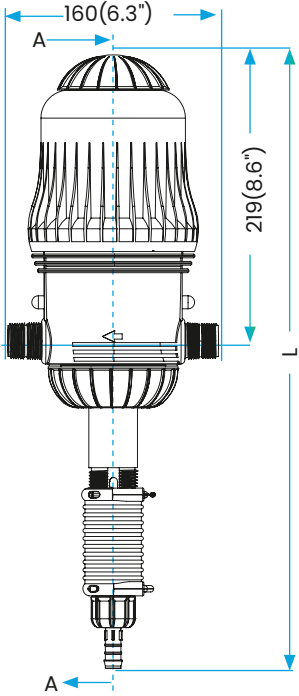
Application Color Code

Application	Sleeve Color	TEFEN Code	Seal Material
Irrigation		STD	NBR
Livestock		PO	EPDM
Acidification		PVDF	AFLAS
Water Treatment/ Chlorination		CL	VITON
Industry		C	EPDM
Car Wash		CW	AFLAS
By-Pass		I / B	EPDM

By Pass models



L (Hight)	
On/Off	Air Release
Max. 384.5 (15.1")	345.5 (13.6")
Min. 369.5 (14.5")	342.5 (13.5")



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

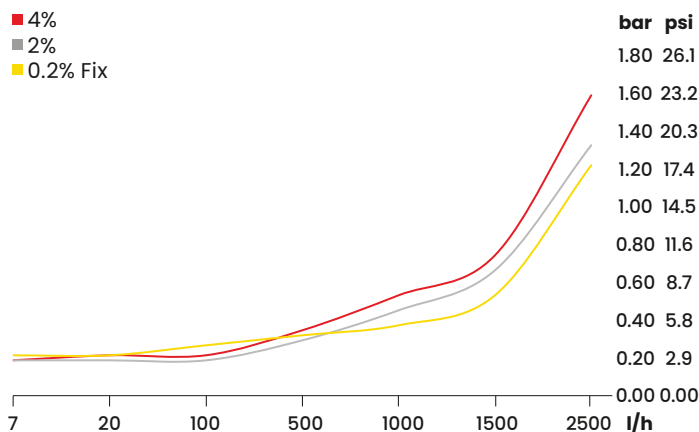


Application Range

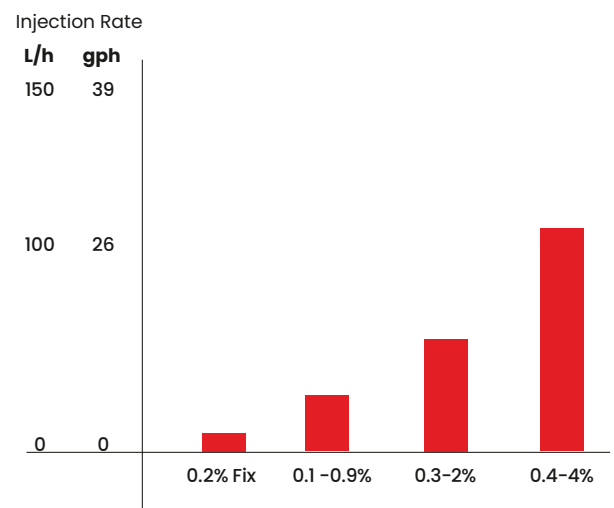
Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Gross weight std unit
0.2% fix	10 – 2500 l/h	0.2 – 8 bar	3/4" BSPT	0.02 – 5 l/h	8 mm	1.4 KG
0.8% fix	10 – 2500 l/h	0.2 – 8 bar	3/4" BSPT	0.08 – 20 l/h	10 mm	1.5 KG
1% fix	10 – 2500 l/h	0.2 – 8 bar	3/4" BSPT	0.01 – 25 l/h	10 mm	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	1.8 KG
0.3% – 2%	10 – 2500 l/h	0.2 – 8 bar	3/4" BSPT	0.03 – 50 l/h	10 mm	1.8 KG
0.4% – 4%	10 – 2500 l/h	0.2 – 8 bar	3/4" BSPT	0.04 – 100 l/h	16 mm	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	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	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	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	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	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	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

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"

* Legs available upon request

Available options

Manual
ON/OFF

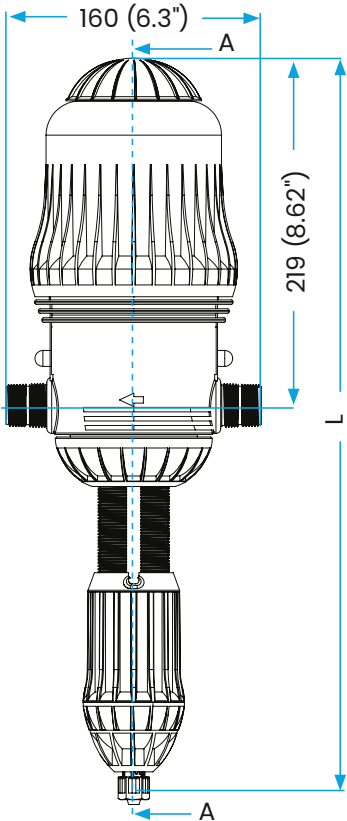
Hydraulic
ON/OFF






Application Color Code

Application	Sleeve Color	TEFEN Code	Seal Material
Irrigation		STD	NBR
Livestock		PO	EPDM
Acidification		PVDF	AFLAS
Water Treatment/ Chlorination		CL	VITON
Industry		C	EPDM
Car Wash		CW	AFLAS
By-Pass		I / B	EPDM

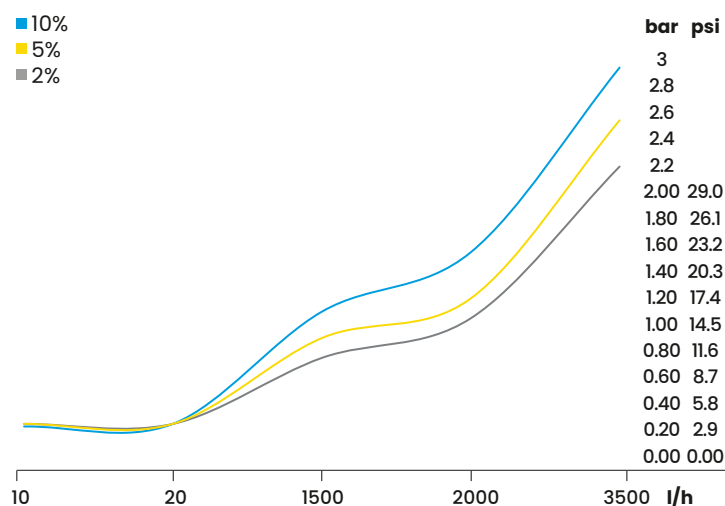


L (Hight)		
	On/Off	Air Release
Max.	551 (21.7")	486 (19.1")
Min.	471 (18.5")	447 (17.6")

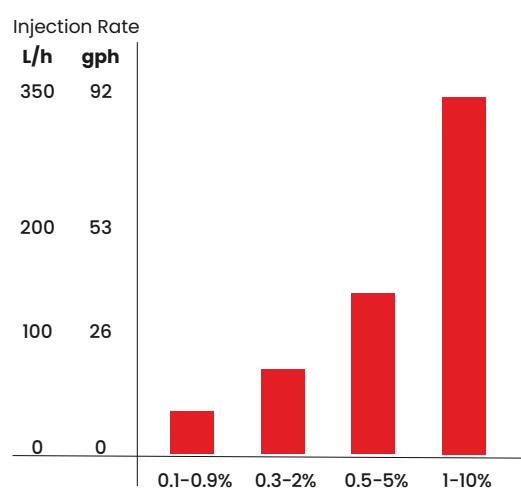
Application Range

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	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	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	1.9 KG
0.3% - 2%	10-3500 l/h	0.2 - 8 bar	3/4" BSPT	0.03 - 70 l/h	10 mm	1.9 KG
0.5% - 5%	10-3500 l/h	0.2 - 8 bar	3/4" BSPT	0.05 - 175 l/h	16 mm	1.9 KG
1% - 10%	50-3500 l/h	0.2 - 8 bar	3/4" BSPT	0.5 - 350 l/h	19 mm	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	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 m ³ /h (0.44 – 22 GPM)
Working temp	4–40° C (39.2–104° F)
Coupling	1" or 32 mm

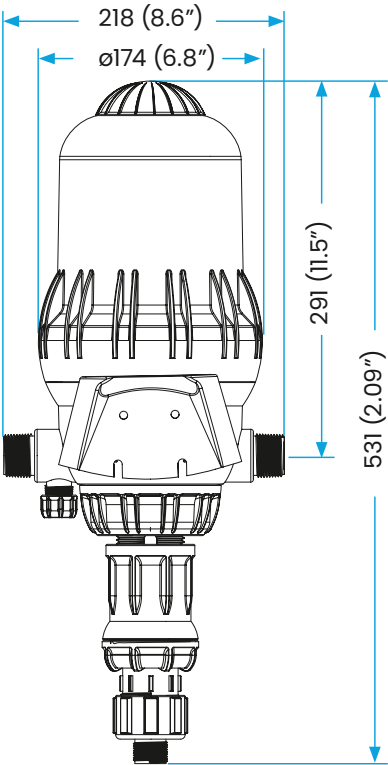
* Legs available upon request

Available options

Manual ON/OFF	Hydraulic ON/OFF
	

Application Color Code

Application	Sleeve Color	TEFEN Code	Seal Material
Irrigation		STD	NBR
Livestock		PO	EPDM
Water Treatment/Chlorination		CL	VITON

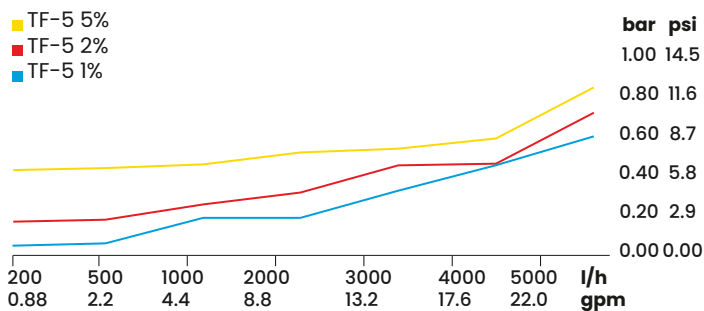


L (Hight)		
	On/Off	Air Release
Max.	680 (26.7")	595 (23.4")
Min.	585 (23")	545 (21.4")

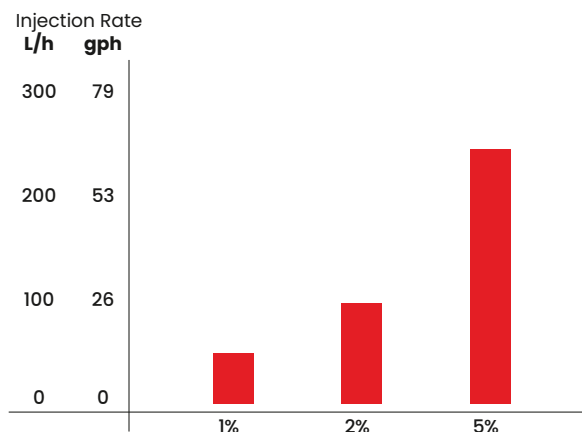
Application Range

Dosage Rate %	Flow Rate Range	Pressure Range	Connectors Dia. Thread	Min-Max Injection Rate Per Hour	Suction Tube Dia.	Gross weight std unit
0.1% - 1%	0.1 - 5 m³/h	1 - 8 bar	1" BSPT	0.1 - 50 l/h	16 mm	5 KG
0.2% - 2%	0.1 - 5 m³/h	1 - 8 bar	1" BSPT	0.2 - 100 l/h	16 mm	5 KG
0.5% - 5%	0.1 - 5 m³/h	1 - 8 bar	1" BSPT	0.5 - 250 l/h	19 mm	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 m3/h (0.44 - 45 GPM)
Working temp	4-40° C (39.2-104° F)
Coupling	1.5" or 50 mm

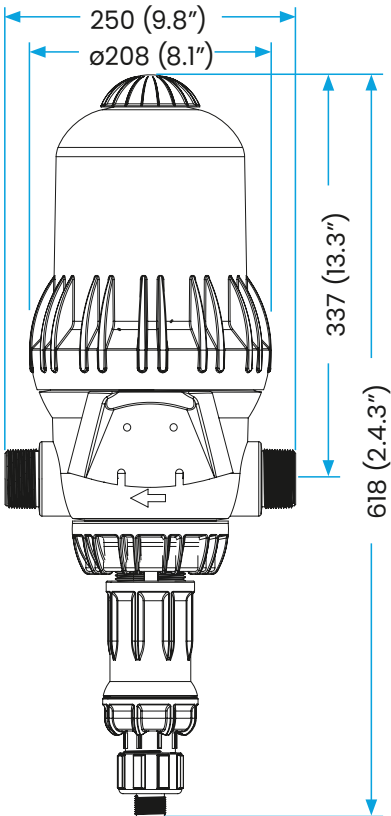
* Legs available upon request

Available options

Manual ON/OFF	Hydraulic ON/OFF
	

Application Color Code

Application	Sleeve Color	TEFEN Code	Seal Material
Irrigation		STD	NBR
Water Treatment/Chlorination		CL	VITON

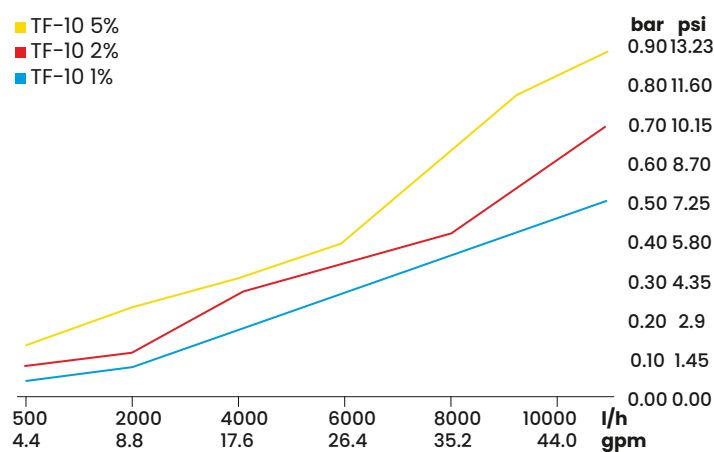


L (Hight)		
	On/Off	Air Release
Max.	760 (29.9")	660 (26")
Min.	720 (28.34")	625 (24.6")

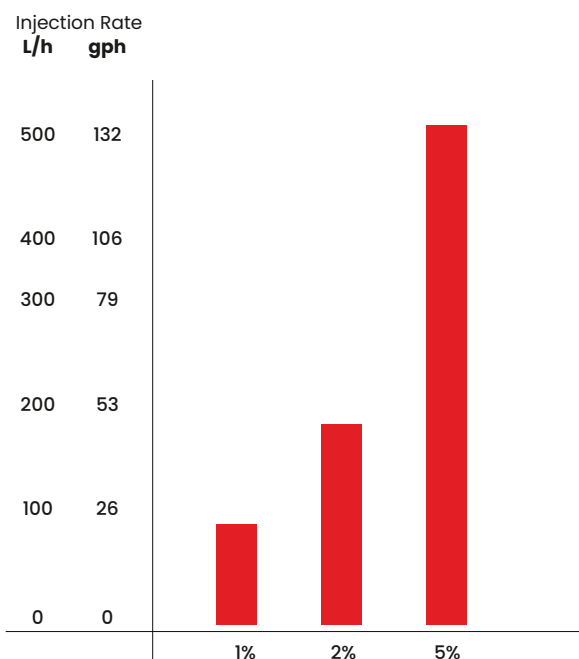
Application Range

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

Pressure Loss



Max. injection rate/h



MixRite™ Dosing Pumps

25 m³/h

MixRite™ TF-25

Technical Information

Water pressure

Flow Rate

Working temp

Coupling

* Legs – Standard supply

1 – 8 bar (14.7 – 120 PSI)

0.2 – 25 m³/h (0.9–110 GPM)

4–40° C (39.2–104° F)

2" or 63 mm

Available options

Manual
ON/OFF

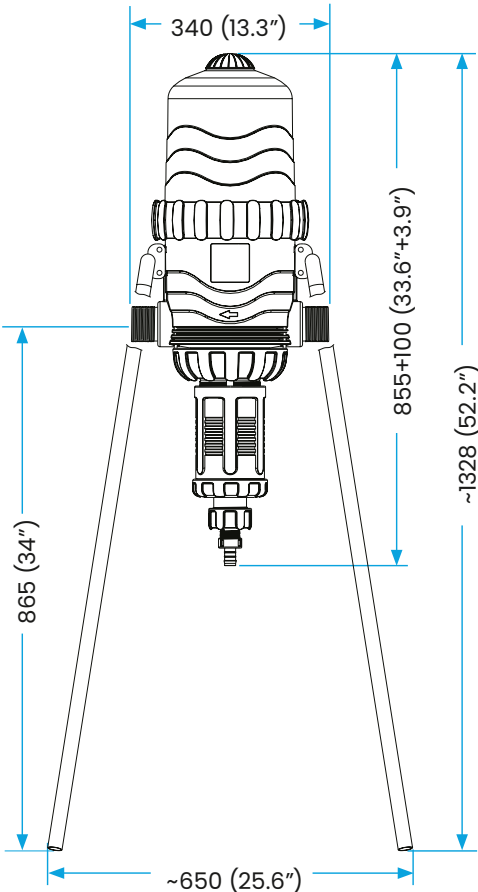
Hydraulic
ON/OFF






Application Color Code

Application	Sleeve Color	TEFEN Code	Seal Material
Irrigation		STD	NBR
Water Treatment/Chlorination		CL	VITON

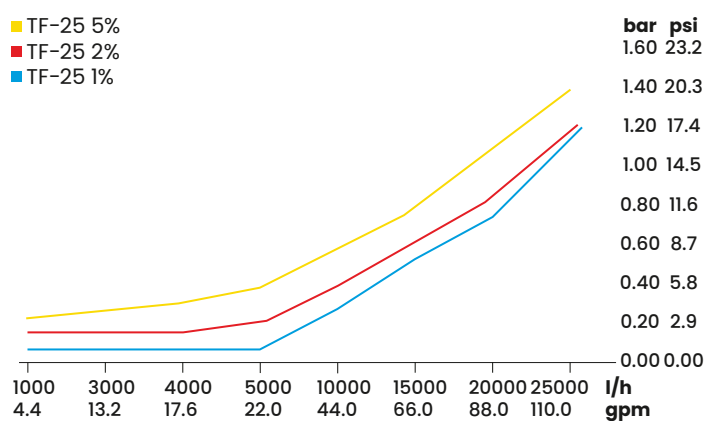


L (Hight)		
	On/Off	Air Release
Max.	1030 (40.5")	1000 (39.3")
Min.	880 (34.6")	900 (35.4")

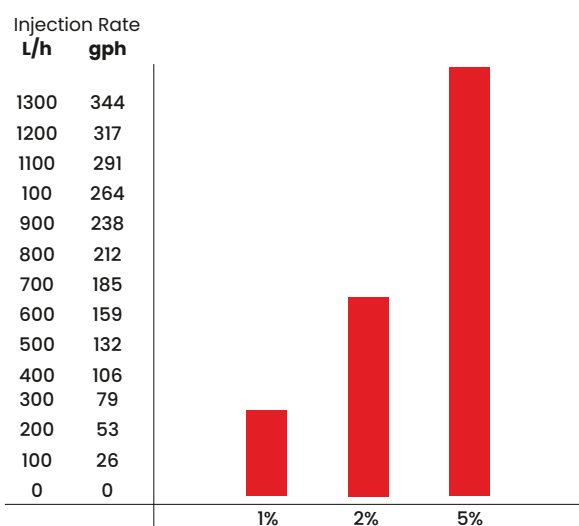
Application Range

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

Pressure Loss



Max. injection rate/h



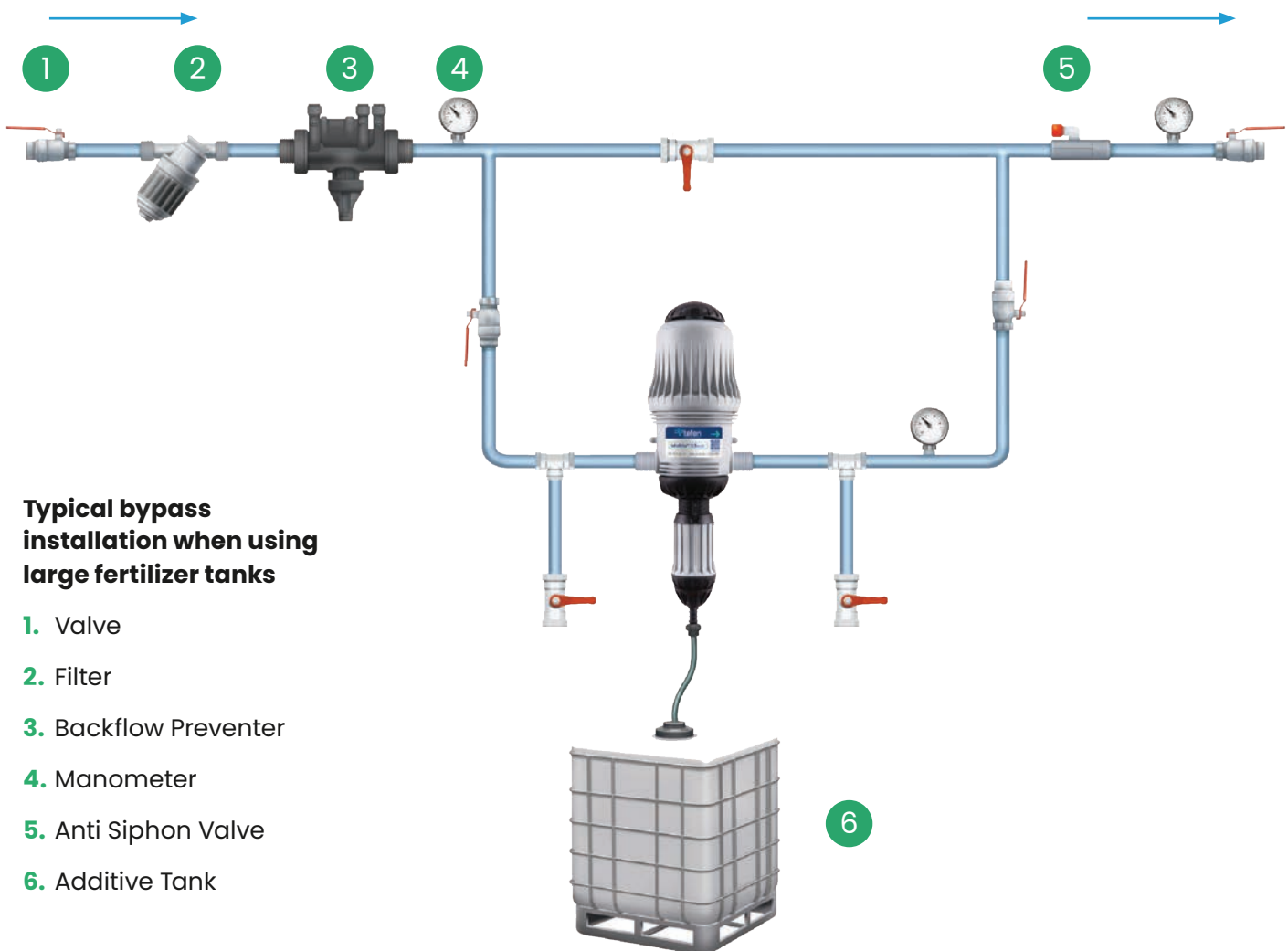
MixRite™ Dosing Pumps

Typical installation

Available option

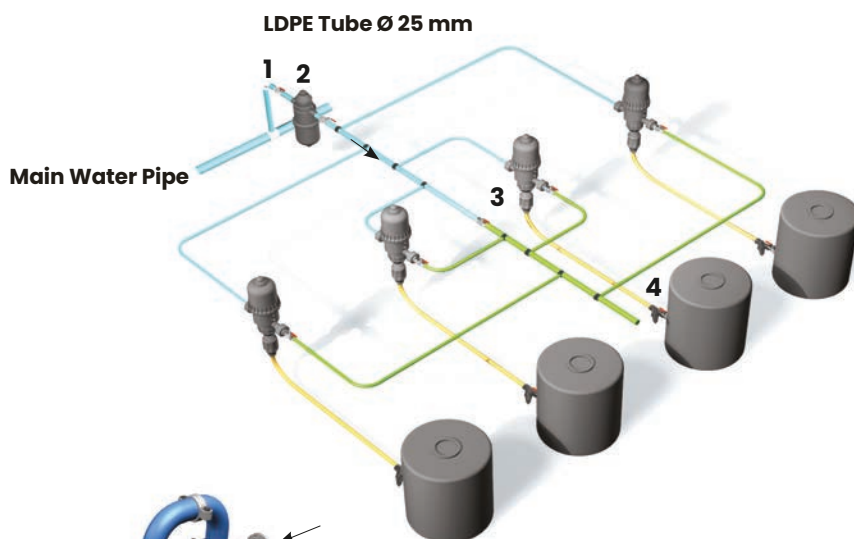
Tefen's MixRite™ offers pumps for a variety of applications such as: cost effective fertilizing, adding medication for livestock, cleaning or disinfecting fluid lines, car washing, sanitizing

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.



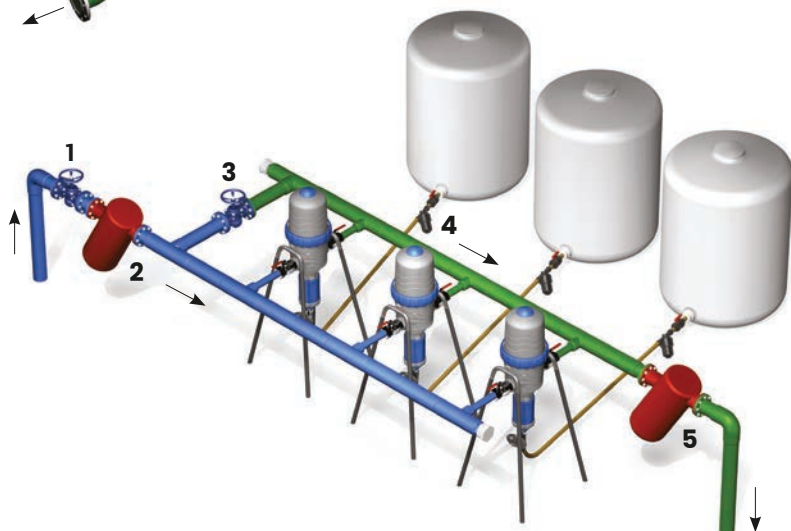
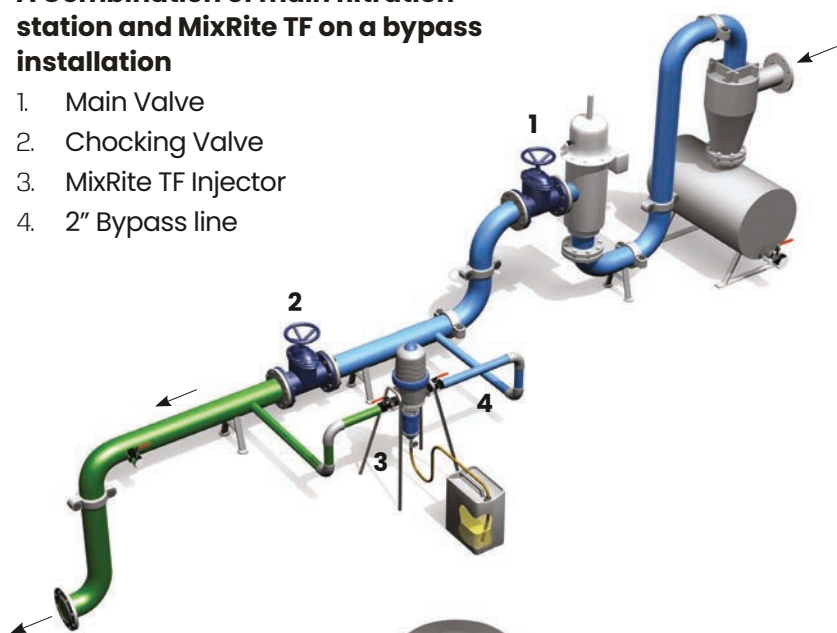
Bypass plastic piping installation with 4 different additives

1. Main Valve
2. Filter – 130 Micron Minimum
3. Chocking Valve
4. Fertilizer filter



A Combination of main filtration station and MixRite TF on a bypass installation

1. Main Valve
2. Chocking Valve
3. MixRite TF Injector
4. 2" Bypass line



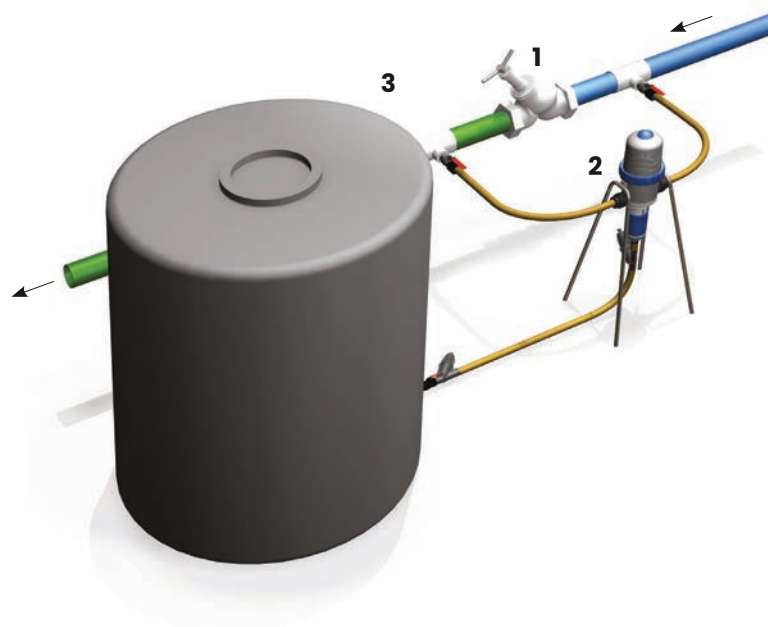
A Typical Bypass array installation for three MixRite TF

1. Main water valve
2. Main water filter
3. Chocking Valve
4. Fertilizer Solution Filter
5. Mixing chamber (Empty filter)

MixRite™ Dosing Pumps



A typical double inline installation for MixRite TF



A typical bypass installation for a single MixRite TF injector.

1. Chocking Valve
2. MixRite TF Injector
3. Fertilizer Reservoir Tank

Accessories



Barrel Metal Support for MixRite

Cat. No. 36000030110

* Supplied without pump



MixRite Cart

Cat. No. 36000000180

*Supplied without pumps



Legs

Cat. No. 35100000064

Compatible with 2.5 & 3.5 models



Plastic Wall Mounting Bracket

Cat. No. 36030162765

For all "3/4 MixRite™ models



3/4" Anti Siphon Kit

Cat. No. 36073008002



Pressure Check Socket

Cat. No. 22016204022

*available in other thread



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



Static Pressure Regulator

Cat. No 38030200001

MixRite™ Electric Pumps

MixRite™ E-300PRO

E-300PRO Electric Proportional Dosing Pump

The E-300PRO is an advanced electric dosing pump, designed for precise injection of fertilizers and additives directly into water lines.



Two Operating Modes

1. Automatic Mode – True Proportional Dosing

The pump maintains a constant dosing ratio (percentage) rather than a fixed injection rate.

Core Advantage

- Injection proportional to real-time water flow
- Maintains a constant dosing ratio even when flow and pressure change
- Full integration with external irrigation controllers (AC / DC)
- Dosing range: 0.1% – 1%

ⓘ Requirements for Proportional Dosing

To achieve true proportional dosing, the following sensors must be connected and configured:

1. Water Meter – measures the actual water flow in the main line
2. Additive Flow Sensor – measures the injected additive volume

2. Manual Mode

- Fixed injection rate based on motor output
- Manual adjustment from 20% – 100% motor power

Auto Mode – Proportional dosing

Set dosing	Injected Volume l/h at 5 bar						
0.10%	N/A	N/A	10	20	30	40	50
0.20%	N/A	10	20	40	60	80	100
0.30%	N/A	15	30	60	90	120	150
0.40%	N/A	20	40	80	120	160	200
0.50%	N/A	25	50	100	150	200	250
1.00%	10	50	100	200	N/A	N/A	N/A
	1,000	5,000	10,000	20,000	30,000	40,000	50,000
	Flow Rate (L/h)						

Manual Mode

Pump value	Injected volume (L/h) relative to line pressure		
	2 Bar	3 Bar	5 Bar
20	49	36	8
30	86	72	39
40	120	104	71
50	153	140	98
60	181	171	129
70	205	189	150
80	236	224	186
90	266	245	214
100	301	287	252

Specifications

Pump Design	Positive Displacement 3 Chamber Diaphragm Pump
Power Supply	60Hz-VAC @ 50 240-Input: 100
Motor	12VDC Nominal / Max 8A
Liquid Temperature	.77°C (170°F) Max
Ports	NPT Female -18"8/3
Material Of Construction	Plastics – Polypropylene Valves – Viton Diaphragm – Santoprene Fasteners – Zinc Plated Steel
Minimum Pulse Duration	(ms (DC Activation 60

Simple and cost-effective installation



Two Operating Modes





EDITION 14 EN 1026



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