

# MixRite Special Solutions

## TreatRite – Water Treatment Line

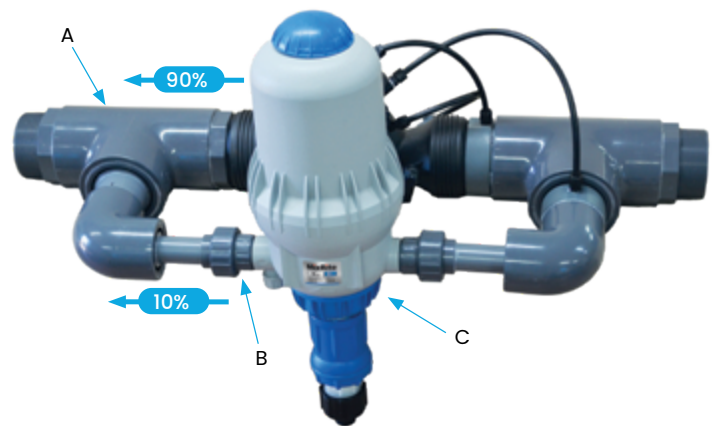
### Proportional and Automatic Bypass System

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

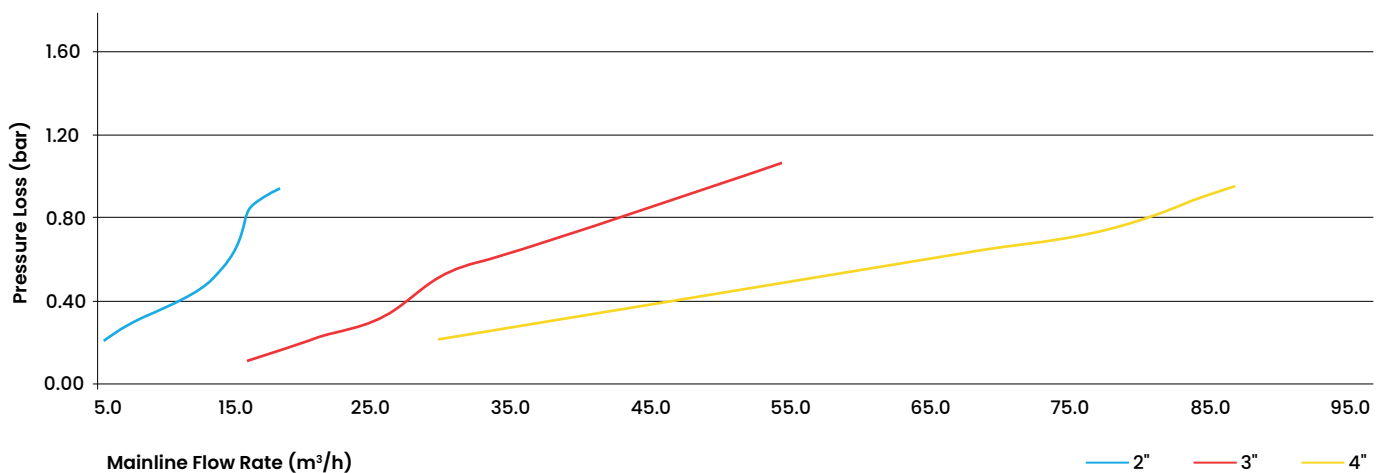
The MixRite™ pump is a volumetric, proportional unit. The combination between the MixRite™ Dosing Pump and the By-Pass unit creates a fully proportional dosing system.

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 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 m<sup>3</sup>/h
- Desired dosage rate: 0.1%
- Additive amount:  $67.3 \times 0.1\% = 0.0673 \text{ m}^3/\text{h}$
- Relevant configuration: 4", 1.5"
- Main line water flow:  $67.3 \times 0.9 = 60.57 \text{ m}^3/\text{h}$
- By-Pass water flow:  $67.3 \times 0.1 = 6.73 \text{ m}^3/\text{h}$
- 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



**Tefen Flow & Dosing Technologies Ltd.**

Kibbutz Nahsholim, 3081500 Israel | Tel. 972 4 6395554 | [info@tefentech.com](mailto:info@tefentech.com) | [tefentech.com](http://tefentech.com)

For the removal of any doubt, this document does not constitute an offer on the part of Tefen and/or any undertaking on its part. Tefen may change the content of this document and/or the technical specifications of the products and/or add and/or remove products and/or change prices and/or any terms and conditions specified in this document at any time and upon its sole discretion without any prior notice.