

## **DOSATRON®**



WATER POWERED DOSING TECHNOLOGY



# **functions**

#### **Dosing Technique:**

Non-electric proportional

#### **Energy Source:**

Water flow and pressure

#### Integrated functions:

- Metering: volumetric hydraulic

motor

- **Injecting**: continuous proportional

injection of liquid or soluble concentrate

- Regulating: proportionality servo-

controlled by the water

flow

integrated mixing - Mixing:

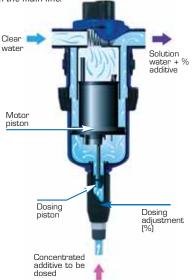
#### Package contents:

1 Dosatron, 1 wall bracket, 1 Suction tube 175 cm [69"] Ø 6 X 9 mm [1/4" id X 3/8"od] 1 Owner's manual.



## Operating principle

Installed directly in the water supply line, the Dosatron operates by using the flow of water as the power source. The water activates the Dosatron, which takes up the required percentage of concentrate directly from the container and injects it into the water. Inside the Dosatron, the concentrate is mixed with the water, and the water pressure forces the solution downstream. The dose of concentrate will be directly proportional to the volume of water entering the Dosatron, regardless of variations in flow or pressure, which may occur in the main line.



#### Proportional injection externally adjustable



The injection rate is set by lining up the top of the adjusting sleeve with the desired ratio on the scale. The amount of injected concentrate is proportional to the amount of water coming into the Dosatron: i.e. Adjustment at

1% = 1:100 = 1 Volume of concentrate into 100 Volumes of water.

#### Dosatron, a complete range

Dosatron develops, manufactures and markets a unique dosing technology that allows any liquid or soluble concentrate to be continuously and proportionally injected and mixed into water.

#### The 4.5 m<sup>3</sup>/h range

REF.	DOSAGE	PRESSURE	
EXTERNAL ADJUSTMENT			
D 45 RE 3000	0.033 - 0.1%	0.5 – 5 bar	
D 45 RE 1.5*	0.2 - 1.5 %	0.5 – 5 bar	
D 45 RE 3*	0.5 - 3 %	0.5 – 5 bar	
D 45 RE 8*	3 - 8 %	0.5 – 5 bar	
* exist in REIE			

Other product lines available to treat water flows up to  $1.5 \text{ m}^3/\text{h}$ ,  $2.5 \text{ m}^3/\text{h}$ ,  $8 \text{ m}^3/\text{h}$ ,  $20 \text{ m}^3/\text{h}$ ,  $30 \text{ m}^3/\text{h}$ ,  $60 \text{ m}^3/\text{h}$ m³/h,... For special models, accessories and particular systems: please consult us.

#### **DOSATRON INTERNATIONAL**

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#### **Specifications**

General  - Maximum operating water temperature: - Minimum operating water temperature: - Minimum operating water temperature: - Dosing rate: - Dosing rate: - Average dosing accuracy: - Average dosing accuracy: - Pressure loss: - Repeatability: - Pressure loss: - Other integrated functions - Internal motor filter: - Inlet/Outlet: - Built-in by-pass: - Built-in anti-siphon device: - Built-in anti-siphon device: - Motor - Motor - Motor capacity: - Mixing chamber: - Motor capacity: - Mixing chamber: - Dosage - Injection: - Injection check valve: - Spelf-priming: - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Strainer: - Very Clove (104° F) - So ([41° F] -				
- Minimum operating water temperature : - Dosing rate : - Dosing rate : - Average dosing accuracy : - Repeatability : - Pressure loss : - Other integrated functions - Internal motor filter : - Motor : - Built-in py-pass : - Built-in anti-siphon device : - Motor capacity : - Mixing chamber : - Mixing chamber : - Mixing chamber : - Injection check valve : - Dosing plunger : - Injection check valve : - Suff-priming : - Maximum viscosity of concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : -	General			
- Dosing rate : i.e. Adjustment at 1 % = 1:100 = 1 V concentrate into 100 V water + .7 S % (Charts on demand) + .7 3 % (API standard)7 S % (API st	- Maximum operating water temperature :	40°C [104°F]		
- Average dosing accuracy: - Repeatability: - Pressure loss: - Other integrated functions - Internal motor filter: - Inlet/Outlet: - Inlet/Outlet: - Built-in aby-pass: - Built-in anti-siphon device: - Built-in anti-siphon device: - Motor - Motor - Motor: - Motor capacity: - Mixing chamber: - Mixing chamber: - Dosage - Injection: - Dosing plunger: - Injection check valve: - Suff-priming: - Injection check valve: - Self-priming: - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concen	- Minimum operating water temperature :			
- Repeatability: - Pressure loss: - Cother integrated functions - Internal motor filter: - Inlet/Outlet: - Built-in by-pass: - Built-in airbleeder: - Built-in airbleeder: - Built-in anti-siphon device: - Motor: - Motor: - Motor capacity: - Mixing chamber: - Dosage - Injection: - Dosing plunger: - Injection check valve: - Suction - Self-priming: - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction	- Dosing rate :	i.e. Adjustment at 1 % = 1:100 = 1 V concentrate into 100 V water		
- Pressure loss : 0.1 - 1.7 bar [1.45 - 24.65 PS]] (depending on operating conditions)  Other integrated functions  - Internal motor filter : 1° 1/4 M : BSP- NPT Ø 33 x 42 mm - Inlet/Outlet : 1° 1/4 M : BSP- NPT Ø 33 x 42 mm - Built-in by-pass : yes - Built-in anti-siphon device : no  Motor  - Motor : differential hydraulic piston - Motor capacity : 0.8 L [0.2112 US gallons] (1 cycle) integrated  Dosage - Injection : internal at mid-cycle simple effect, injection on the upstream - Injection check valve : sping-loaded cone  Suction  - Self-priming : yes - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]	- Average dosing accuracy :	+/- 5 % (Charts on demand)		
- Pressure loss : 0.1 - 1.7 bar [1.45 - 24.65 PS]] (depending on operating conditions)  Other integrated functions  - Internal motor filter : 1° 1/4 M : BSP- NPT Ø 33 x 42 mm - Inlet/Outlet : 1° 1/4 M : BSP- NPT Ø 33 x 42 mm - Built-in by-pass : yes - Built-in anti-siphon device : no  Motor  - Motor : differential hydraulic piston - Motor capacity : 0.8 L [0.2112 US gallons] (1 cycle) integrated  Dosage - Injection : internal at mid-cycle simple effect, injection on the upstream - Injection check valve : sping-loaded cone  Suction  - Self-priming : yes - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]	- Repeatability :	+/- 3 % (API standard)		
Other integrated functions - Internal motor filter:	- Pressure loss :	0.1 - 1.7 bar [1.45 - 24.65 PSI]		
- Internal motor filter:		(depending on operating conditions)		
- Inlet/Outlet: 1" 1/4 M: BSP- NPT Ø 33 x 42 mm - Built-in by-pass: yes - Built-in airbleeder: yes - Built-in anti-siphon device: no  Motor  - Motor: differential hydraulic piston - Motor capacity: 0.8 L [0.211 2 US gallons] (1 cycle) integrated  Dosage - Injection: internal at mid-cycle simple effect, injection on the upstream - Injection check valve: spring-loaded cone  Suction - Self-priming: yes - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - 4 m [13 ft]				
- Built-in alribleeder: - Built-in airbleeder: - Built-in airbleeder: - Built-in anti-siphon device:  - Motor  - Motor: - Motor capacity: - Mixing chamber:  - Mixing chamber:  - Dosage - Injection: - Dosing plunger: - Dosing plunger: - Injection check valve: - Injection check valve: - Suction  - Self-priming: - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate: - Maximum vertical or horizontal suction of the concentrate:		1		
- Built-in airbleeder: - Built-in airbleeder: - Built-in anti-siphon device:  Motor  - Motor: - Motor capacity: - Mixing chamber:  Dosage  - Injection: - Dosing plunger: - Injection check valve: - Injection check valve: - Suction  - Self-priming: - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate vertical vertical vertical vertical vertical vertical ve	- Inlet/Outlet :	1" 1/4 M : BSP- NPT Ø 33 x 42 mm		
- Built-in anti-siphon device : no  Motor  - Motor : differential hydraulic piston - Motor capacity : 0.8 L [0.2112 US gallons] (1 cycle) integrated  Dosage - Injection : internal at mid-cycle simple effect, injection on the upstream - Injection check valve : spring-loaded cone  Suction  - Self-priming : yes - Maximum viscosity of concentrate : - Maximum vertical or horizontal suction of the concentrate : 4 mg [13 ft]		yes		
Motor  - Motor :	- Built-in airbleeder :	yes		
- Motor : differential hydraulic piston - Motor capacity : 0.8 L [0.2112 US gallons] (1 cycle) - Mixing chamber : integrated  Dosage - Injection : internal at mid-cycle - Dosing plunger : simple effect, injection on the upstream - Injection check valve : spring-loaded cone  Suction - Self-priming : yes - Maximum viscosity of concentrate : - Maximum vertical or horizontal suction of the concentrate : - 4 m [13 ft]	- Built-in anti-siphon device :	no		
- Motor capacity: - Mixing chamber:  Dosage - Injection: - Dosing plunger: - Dosing plunger: - Injection check valve: - Injection check valve: - Suction - Self-priming: - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate vertical ve	Motor			
- Mixing chamber : integrated  Dosage - Injection : internal at mid-cycle - Dosing plunger : simple effect, injection on the upstream - Injection check valve : spring-loaded cone  Suction - Self-priming : yes - Maximum viscosity of concentrate : - Maximum vertical or horizontal suction of the concentrate : - Maximum vertical or horizontal suction of the concentrate : - 4 m [13 ft]	- Motor :	differential hydraulic piston		
Dosage - Injection: internal at mid-cycle simple effect, injection on the upstream - Injection check valve: spring-loaded cone  Suction - Self-priming: yes - Maximum viscosity of concentrate: - Maximum vertical or horizontal suction of the concentrate: 4 m [13 ft]	- Motor capacity :	0.8 L [0.2112 US gallons] (1 cycle)		
- Injection : internal at mid-cycle simple effect, injection on the upstream spring-loaded cone  Suction - Self-priming :	- Mixing chamber :	integrated		
- Dosing plunger : simple effect, injection on the upstream spring-loaded cone  Suction  - Self-priming : yes - Maximum viscosity of concentrate : 400 cSt at 20°C [68 °F] - Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]				
upstream - Injection check valve : spring-loaded cone  Suction - Self-priming : yes - Maximum viscosity of concentrate : 400 cSt at 20°C [68 °F] - Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]				
- Injection check valve : spring-loaded cone  Suction  - Self-priming : yes - Maximum viscosity of concentrate : - Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]	- Dosing plunger :			
- Self-priming : yes - Maximum viscosity of concentrate : 400 cSt at 20°C [68 °F] - Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]	- Injection check valve :			
- Maximum viscosity of concentrate : 400 cSt at 20°C [68 °F] - Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]	Suction			
- Maximum vertical or horizontal suction of the concentrate : 4 m [13 ft]	- Self-priming :	yes		
of the concentrate : 4 m [13 ft]	- Maximum viscosity of concentrate :	400 cSt at 20°C [68 ° F]		
or the concentrate:				
- Strainer : yes – foot strainer with weight	of the concentrate :	4 m [13 ft]		
	- Strainer :	yes – foot strainer with weight		

#### Markets

Environment – Hygiene – Water treatment – Vehicle wash – Metal processing - Food processing - Graphic Arts - Horticulture

#### Principal applications:

Medication – Disinfecting – Cleaning – Fertigation – Phytosanitation – Supplementation – Lubrication – PH/TH Correction – Sanitation – Flocculation – Vehicle wash...

#### Installation

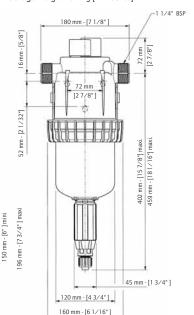
Regulations: Refer to local water regulations, prior to installing your

- To optimize your Dosatron, we advise to :
   Install a filter (300 mesh [60 microns]) upstream, depending on your water quality.
- Change the dosing seals once a year.
- Rinse as often as possible with clear water.
- Turn off the water supply and allow the pressure to drop to zero before adjusting the injection rate.

  Install necessary protections for excess flow, excess pressure and
- water hammer (anti-hammer flow/pressure device).
- Install your Dosatron on a total by-pass line. For all other installation advice, please consult us.

• Package size : 62 x 26 x 24.5 cm [24" 3/8 x 10" 1/4 x 9" 3/4]

• Package weight: 3.2 kg [ ~ 7 US lbs]



#### Standard material

Housing: polyacetal, EPDM

Motor piston: polypropylene,

polyamide, stainless steel, aflas, polyacetal

Injection area: polypropylene, polyethylene, hastelloy

(check valve spring)

Injection hose: PVC

### Available options

(■: Option ●: standard ★: not available for this model)

#### Optimized compatibility

- AF: Recommended seals for alkaline concentrate
- VF : Recommended seals for acid concentrate
- PVDF : Housing
- H: Hastelloy plunger rod
- IE: External injection
- ★ V : Kit for viscous concentrate
- Injection hose :

Special material hose and foot strainer available



PVDF housing.

#### Optimized installation

- BP : integrated by-pass
- Other fittings
- ★ Strap
- ★ Support legs
- Other: please contact us



The external injection allows dosing of certain corrosive concentrates

These options allow adapting your Dosatron to your needs. Contact our technical service to help determine what option you may need.

Each Dosatron unit is factory tested.

#### Sales contact: Mr.Awirut Leehasunont

CUSTOMER SERVICE - SERVICE CLIENTÈLE

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