

POSAT

WATER POWERED DOSING TECHNOLOGY

## DI 520 - 5 - 20 %





Injection Range :

**5 - 20 %** [1 : 20 - 1 : 5]

Water flow range\* : 10 l/h - 1.5 m<sup>3</sup>/h [0.16 l/mn - 25 l/mn] [1/3 US Pint/min - 7 US GPM]

Operating pressure :

**0.5 - 4 bar** [7 PSI - 57 PSI]

Concentrated additive injection : 0.5 I/h - 300 I/h [0.28 US Fl oz/min - 1.32 US GPM] \* For operating unit with other fluids than water, please contact us

## A unique technology associating all dosing 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 servocontrolled by the water flow
- Mixing : integrated mixing

Package contents :

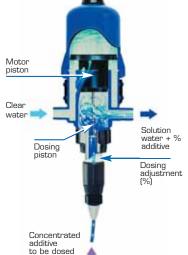
Dosatron, 1 wall bracket,
 Suction tube 120 cm [47"] Ø 20 x 27 mm
 [7/8" id x 1 1/16" od]
 Owner's manual.



# **1.5 m³/h - 5 - 20 %**

## **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

10.....

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 2.5 m<sup>3</sup>/h range

| REF.  | DOSAGE       | PRESSURE    |  |
|---|--------------|-------------|--|
| EXTERNAL ADJUSTMENT                                   |              |             |  |
| DI 1500   | 0.07 - 0.2 % | 0.3 - 6 bar |  |
| DI 2  | 0.5 - 2 %    | 0.3 - 6 bar |  |
| DI 16   | 0.2 - 1.6 %  | 0.3 - 6 bar |  |
| DI 150  | 1 - 5 %      | 0.3 - 6 bar |  |
| DI 110  | 1 - 10 %     | 0.5 - 4 bar |  |
| DI 520 (1.5 m <sup>3</sup> /h limit) 5 - 20 % 0.5 - 4 |              | 0.5 - 4 bar |  |
|   |              |             |  |

Other product lines available to treat water flows up to 1.5 m<sup>3</sup>/h, 4.5 m<sup>3</sup>/h, 8 m<sup>3</sup>/h, 20 m<sup>3</sup>/h, 30 m<sup>3</sup>/h, 60 m<sup>3</sup>/h,... For special models, accessories and particular systems: please consult us.

#### DOSATRON INTERNATIONAL

Rue Pascal - B.P. 6 - 33370 TRESSES (BORDEAUX) - FRANCE Tel. 33 (0)5 57 97 11 11 - Fax. 33 (0)5 57 97 11 29 / 33 (0)5 57 97 10 85 e.mail : info@dosatron.com - http://www.dosatron.com S.A. DOSATRON INTERNATIONAL au capital de 3 050 000 EUROS - SIRET BORDEAUX 418 826 822 00011 - APE 291 B - N° TVA/VAT : FR96418826822

## **Specifications**

| General  |  |
|--|--|
| - Maximum operating water temperature :  | 40° C [104° F]   |
| <ul> <li>Minimum operating water temperature :</li> </ul>  | 5°C[41°F]  |
| - Dosing rate :  | i.e. Adjustment at 1 % = 1:100 = 1 V<br>concentrate into 100 V water                             |
| <ul> <li>Average dosing accuracy :</li> </ul>  | +/- 5 % (Charts on demand)   |
| - Repeatability :  | +/- 3 % (API 675 standard)   |
| - Pressure loss :  | 1.2 - 1.7 bar [17.4 - 25 PSI]<br>(depending on operating conditions)                             |
| Other integrated functions   |  |
| Internal motor filter :  | 350 microns [50 mesh]  |
| Inlet/Outlet :   | 3/4" M : BSP-NPT Ø 20 x 27 mm  |
| Built-in by-pass :   | option   |
| Built-in airbleeder :  | yes  |
| Built-in anti-siphon device :  | no   |
| Motor  | ·  |
| Motor :  | differential hydraulic piston  |
| Motor capacity :   | 0.45   [0.118 US Gallons]  |
|  |  |
| Mixing chamber :   | integrated   |
| Mixing chamber :<br>Dosage   | 5  |
|  | integrated   |
| Dosage<br>Injection :<br>Dosing plunger :  | 5  |
| Dosage<br>Injection :  | internal at the outlet   |
| Dosage<br>Injection :<br>Dosing plunger :  | internal at the outlet<br>double effect  |
| Dosage<br>Injection :<br>Dosing plunger :<br>Injection check valve :   | internal at the outlet<br>double effect  |
| Dosage<br>Injection :<br>Dosing plunger :<br>Injection check valve :<br>Suction  | internal at the outlet<br>double effect<br>spring-loaded cone                                    |
| Dosage<br>Injection :<br>Dosing plunger :<br>Injection check valve :<br>Suction<br>Self-priming :  | internal at the outlet<br>double effect<br>spring-loaded cone<br>yes                             |
| Dosage           Injection :           Dosing plunger :           Injection check valve :           Suction           Self-priming :           Maximum viscosity of concentrate :           Maximum vertical or horizontal suction | internal at the outlet<br>double effect<br>spring-loaded cone<br>yes<br>400 cSt at 20°C [68 ° F] |

#### Markets

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

#### **Principal applications :**

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

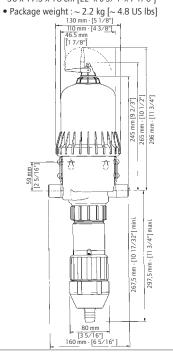
#### Installation

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

- 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 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.

#### Size :

- Package size :
- 56 x 17.5 x 18 cm [22" x 6 3/4" x 7 1/8"]



### Standard material

Housing : polyacetal, EPDM Motor piston : polypropylene, polyamide, stainless steel, aflas, polyacetal Injection area : polypropylene, polyethylene, hastelloy (check valve spring), steel 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



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

520-GB/02/

0

E

Each Dosatron unit is factory tested.

#### CUSTOMER SERVICE - SERVICE CLIENTÈLE