



# DOSATRON®

*Because life is powered by water*

## 30 m<sup>3</sup>/h - 132 GPM

D30 GL 02  
D30 GL 02 EC  
D30 GL 1  
D30 GL 1 EC



owner's manual





# **DOSATRON®**

*Because life is powered by water*

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SERVIÇO DE APOIO AO CLIENTE

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## The eco-design challenge

**By broadening the scope of its ISO 14001 certification and merging its design and development activities, DOSATRON has proudly implemented a real Eco-design process.**

As a result of this approach, the D30GL dosing unit is a clear example of our desire to create innovative and eco-friendly products based upon the following objectives:

- Reducing the number of parts of the overall design
- Developing a lighter product
- Designing cardboard packaging made of 100% recyclable materials
- Working closely with national and local suppliers in order to reduce transportation distances

The successful collaboration maintained with APESA (French Technology Centre for the Environment and Risk Management) has allowed all of our teams to perfectly integrate the principles and tools inherent to Eco-design\*.

Broadly speaking, Dosatron has undertaken a global environmental approach by means of concrete actions in order to reduce the impact of its products on the environment.

\* Sources APESA - Global Environmental Impact - Ecological Scarcity Method 2013

# English

EN

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**You have just become the owner of one of the latest in the line of DOSATRON water powered metering pumps and we congratulate you on your choice.**

**The development of this model is the result of over 40 years experience. Our engineers have placed the DOSATRON series at the forefront of technical development in the field of water powered metering pumps. This DOSATRON will, as time goes by, prove itself to be a most faithful ally.**

**A little care and attention, regularly spent, will guarantee you an operation in which the word breakdown has no place.**

**THEREFORE, PLEASE, READ THIS MANUAL CAREFULLY  
BEFORE PUTTING THE DOSATRON INTO OPERATION.**

**Important !**

**The complete model reference and the serial number of your DOSATRON is stamped on the pump body.**

**Please record this number in the space below and refer to it when you call your distributor for information, parts, and service.**

**Ref. ....**

**Serial .....**

**Purchase Date .....**



# Summary

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## SPECIFICATIONS

	D30 GL 02 D30 GL 02 EC	D30 GL 1 D30 GL 1 EC
Practical operating <b>flow range</b> :	8 m <sup>3</sup> /h mini - 30 m <sup>3</sup> /h maxi [40 US GPM - 132 US GPM]	
Operating <b>pressure</b> :		
<b>bar</b> PSI	<b>0.5 - 6</b> [7.25 - 87]	
<b>Externally adjustable or fixed injection rate</b> :		
% Ratio	<b>0.02 - 0.2</b> [1 : 5000 - 1 : 500]	<b>0.1 - 1</b> [1 : 1000 - 1 : 100]
<b>Concentrated additive injection</b> :		
<b>Mini l/h - Maxi l/h</b> US Fl. oz/min - MINI US GPM - MAXI	<b>1.6 - 60</b> 0.9 0.25	<b>8 - 300</b> 4.5 1.4
<b>Maximum operating temperature</b> :		
	<b>40° C [104° F]</b>	
<b>Connections</b> (NPT/BSP male):		
	<b>Ø 80x90 mm [3" M]</b>	
<b>Hydraulic motor capacity</b> (for every 2 clicks of the piston):		
	about <b>0.53 l</b> [0.14 US Gallons]	

**NOTE: The Dosatron is not preset, see chapter  
ADJUSTING THE INJECTING RATE**

## UNIT SIZE

Depth: <b>cm</b> ["]	<b>22.3</b> [8 13/16]
Total height: <b>cm</b> ["]	<b>91.3</b> [36 3/4]
Width: <b>cm</b> ["]	<b>65.2</b> [25 11/16]
Weight: ± <b>kg</b> [lbs]	<b>15</b> [33.07]

**PACKAGE SIZE:**

106 x 69 x 26 cm [41 47/64" x 27 11/64" x 10 15/64"]

**PACKAGE SIZE:** ± 19 kg [± 41.88 lbs]

**SHIPPING CONTENTS:** 1 Dosatron / 1 suction hose with strainer / 1 owner's manual / supplied with 2 x ISO - DN80 flange connections

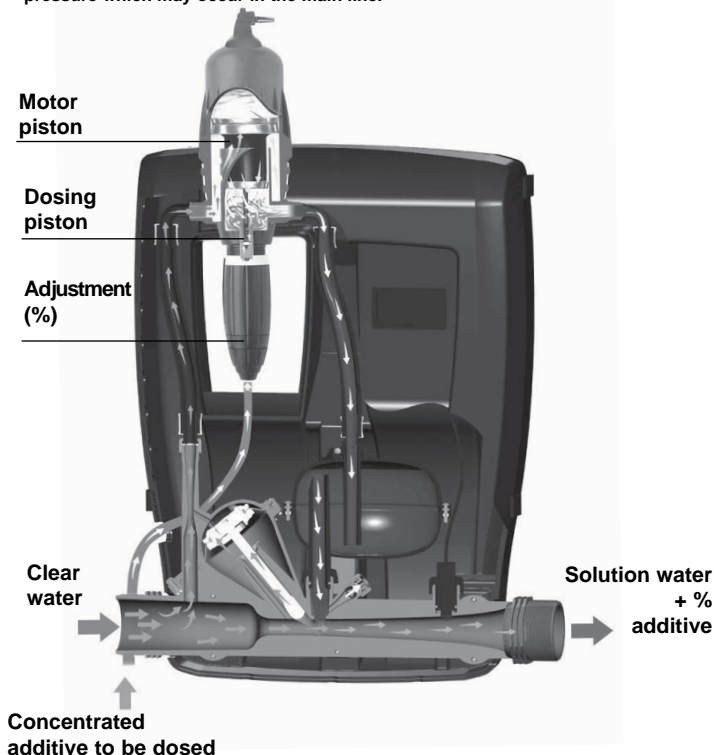
ZEN



# Precise, simple and reliable

A unique technology associating all dosing functions

Installed directly in the water supply line, the DOSATRON operates by using water pressure as the power source. The water activates the DOSATRON, which takes up the required percentage of concentrate. Inside the DOSATRON, the concentrate is mixed with the water. 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.



# Installation

## PRECAUTIONS

### 1 - GENERAL REMARKS

**- When connecting a DOSATRON either to the public water supply or to its own water source, you must respect the regulations in force concerning protection of the source i.e. backflow prevention, etc.**

- When connecting the DOSATRON to the water supply, ensure that the water flows in the direction of the arrows on the unit.

- In a case where the water installation is higher than the DOSATRON itself, there is a possible risk of water and concentrate flowing back through the DOSATRON. In this case, installing a non-return valve downstream is recommended.

- It is recommended that you should place an anti-siphon valve on the downstream side of the dosing pump in installations in which there is a risk of siphoning.

- Do not install the DOSATRON just above an acid container, (risk of acid fumes attacking the DOSATRON) and protect it from possible contact with corrosive products.

- Protect the DOSATRON from freezing temperatures by draining it and store it away from sources of excessive heat.

- Do not install the DOSATRON on the suction side of the supply pump (risk of siphoning).

**⚠ IMPORTANT !** Use no tool or metallic utensils.

- During any intervention the operator must stay in front of the DOSATRON and wear protective eyewear and gloves.

- It is the responsibility of the owner/operator to replace the injection seals annually to ensure precise injection.

The setting of the Dosatron's dosing rate is the sole responsibility of the user. The user has to respect the recommendations given by the manufacturer of the chemical product.

### **⚠ PRECAUTIONS**

When installing, operating, and maintaining the DOSATRON water powered metering pump, keep safety considerations foremost. Use proper tools, protective clothings, and eye protection when working on the equipment and install the equipment with a view toward ensuring safe operation.

## PRECAUTIONS (continued)

### 1 - GENERAL REMARKS(cont...)

Follow the instructions in this manual and take additional safety measures appropriate to the liquid being pumped and the temperature of the water that powers the DOSATRON. Be extremely careful in the presence of hazardous substances (e.g. corrosives, toxins, solvents, acids, caustic, flammables, etc.).

- Before applying any aggressive chemicals, please consult your distributor to confirm compatibility with the dosing pump.

#### IMPORTANT !

**It is the responsibility of the owner/operator to check that the flow and pressure of the installation do not exceed the DOSATRON characteristics.**

- Adjustment must be made when there is no pressure in the Dosatron.
- Turn off the water supply and allow the pressure to drop to zero.
- It is the responsibility of the owner/operator of the DOSATRON, to determine the correct amount of solution and injection ratio to obtain the desired result.
- An air inlet, an impurity or a chemical attack on the seal can interrupt the dosing function. It is recommended to periodically check that the solution is being correctly drawn up into the DOSATRON.
- Change the suction tube as soon as it seems damaged by the chemical.
- Relieve the pressure after use

(advised).

- Rinsing of the DOSATRON is required :
  - . when changing chemicals,
  - . before handling the DOSATRON, to avoid any contact with the chemical.
- All assembly should be done without tools, hand tighten only.

### 2 - WATER WITH HIGH PARTICLE CONTENT

- A (ex.: 80-130 microns - 200-120 mesh depending on your water quality) water filter must be installed upstream from the DOSATRON (see accessories), if a filter is not installed abrasive substances will cause the DOSATRON to deteriorate prematurely.


### 3 - WATER-HAMMER / EXCESSIVE FLOW

- For installations subject to water hammer a protection device such as a check valve or union ball check must be fitted (pressure/flow control system).
- For automatic installations, slow opening and closing solenoid valves are preferable.
- In an installation where a DOSATRON serves several sectors, the closing of one sector and the opening of another sector must be done at the same time (simultaneous operation of the solenoid valves).

### 4 - INSTALLATION LOCATION

- The location of the DOSATRON and concentrate container should be accessible, but should never present a risk of pollution or contamination.

- It is recommended to label all water lines with a warning about the injected solution i.e.

 **IMPORTANT ! Not For Human Consumption.**

## **5 - MAINTENANCE**

- Rinse the injection areas after using the DOSATRON. To do this, insert suction tube into a container of clean water and inject about 1/4 liter [8 1/2 US Fl.oz].

- Routine maintenance once a year will add to the life of your DOSATRON. Replace the injection seals as well as the suction hose annually to ensure proper injection.

## **6 - SERVICE**

- This DOSATRON was tested prior to packaging.

- Complete maintenance and seal kits are available.

- Call your DOSATRON distributor for service or parts.

## ASSEMBLING THE DOSATRON

### ASSEMBLY SHOULD BE CARRIED OUT WITHOUT THE USE OF TOOLS

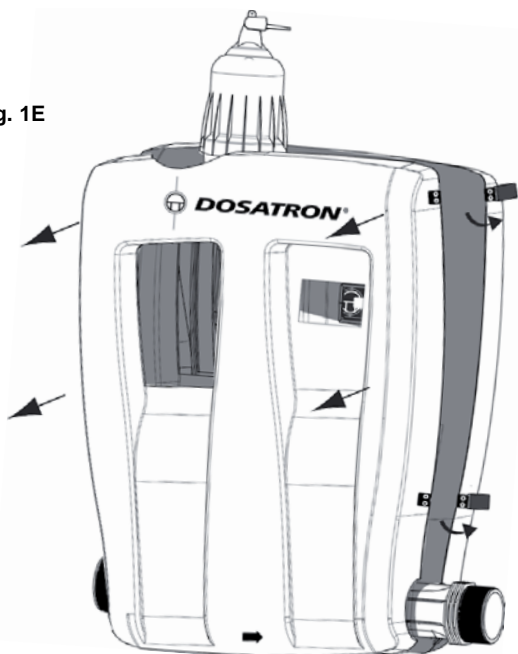
The DOSATRON is delivered with :

- 2 x ISO - DN80 flange connections
- a mounting bracket,
- a suction tube with a strainer
- 1 owner's manual

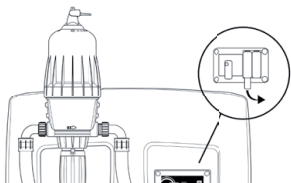
Remove the plastic caps which block the inlet and outlet of your DOSATRON before connecting to the water supply. (Fig. 1A/B/C)

- Open the Dosatron unit (Fig. 1E)
- Remove the plug (Fig. 1D)

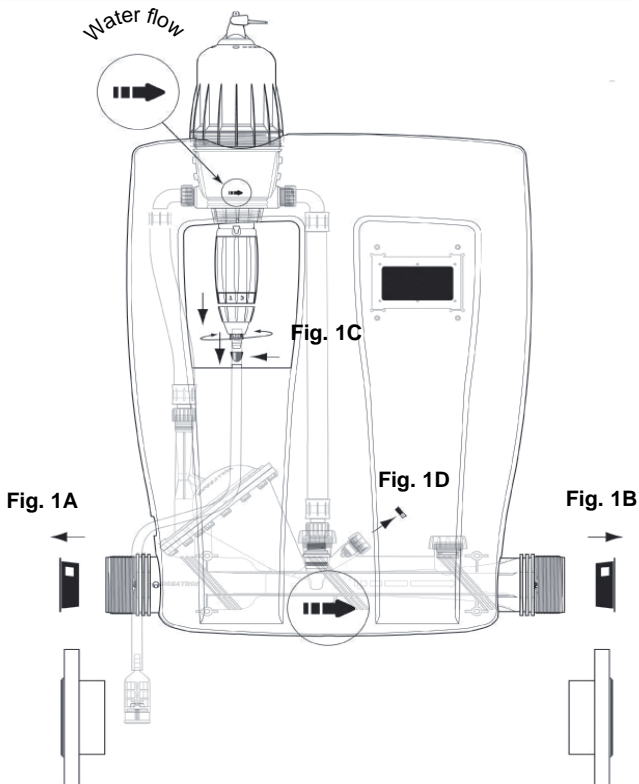
Fig. 1E



**⚠ WARNING:** If the version being used features an EC probe, open the EC reader and remove the battery protective tab



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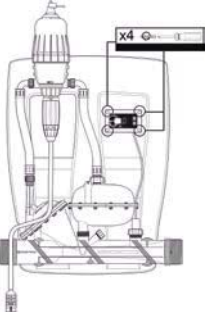
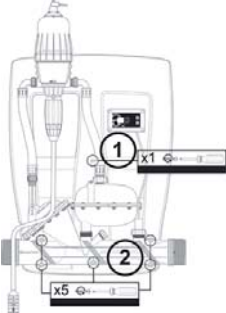
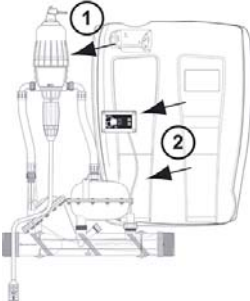
## ASSEMBLING THE DOSATRON (cont...)

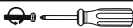
2 practical scenarios that may be encountered:

1. The direction of the water flow in the Dosatron unit is identical to that of your water supply system:

The unit can be directly installed without any preliminary work (please refer to "Warning! Remove the battery protective tab on the EC reader")

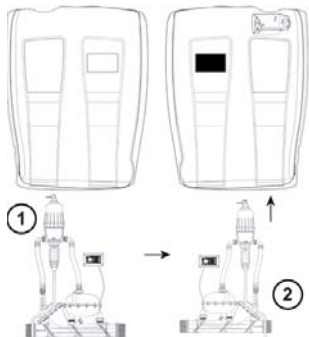
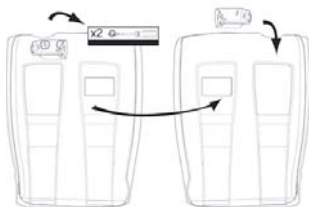
2. The water flows in the opposite direction:

	
<p>Open the casing fitted with toggle latches</p>	<p>Remove the EC reader</p>
	
<p>Unscrew the mixing unit ① Unscrew the Dosatron regulator ②</p>	<p>Unclip the dosing unit from bracket ① Release the casing components ②</p>



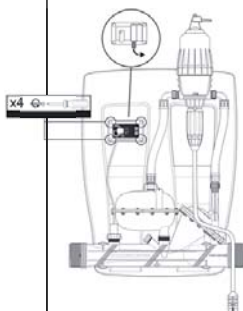
Tightening torque: 1 Nm, i.e. 0.1 kg

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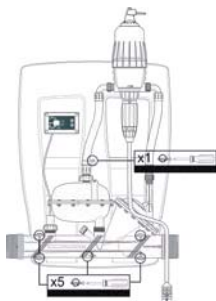


Unscrew the casing bracket and then screw it at the other end of the casing. Turn the EC reader shield the other way round

Turn components ① the other way round and fit them on the new face of casing ②. The original rear face of the casing is now facing forward and vice versa



Fit the EC reader onto the casing  
Remove the battery protective tab



Fit the Dosatron regulator  
Fit the mixing unit onto the casing



Close back the casing  
Install the Dosatron unit, as shown in the Quick Start-Up Guide

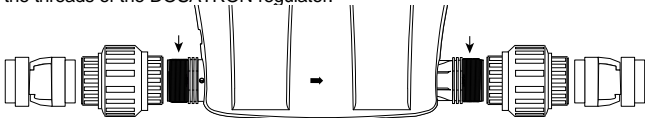


## INSTALLING THE DOSATRON UNIT (Cont.)

2 connection methods to choose from:

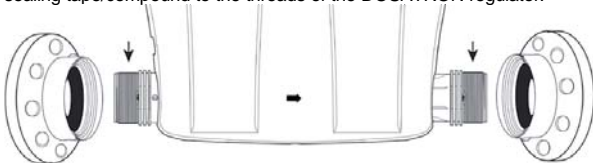
### A. Threaded connection

The D30GL unit features a 3" BSP thread male connector. Before screwing it to your water supply system, make sure that you apply sealing tape/compound to the threads of the DOSATRON regulator.



### B. Flange connection

The D30GL is supplied with 2 x ISO - DN80 flange connections that you can screw directly onto the DOSATRON regulator. Please make sure that you apply sealing tape/compound to the threads of the DOSATRON regulator.



## INSTALLATION HINTS

The DOSATRON is delivered with a suction tube (cut it to the needed length) enabling its use with a large capacity concentrate container.

The tube must be fitted with its strainer and weights.

The instructions for fitting the tube are to be found on page 50.

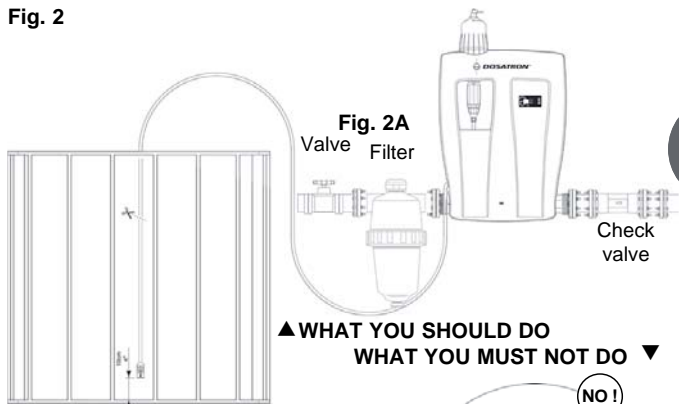
**NOTE :** The maximum suction height is 4 meters (13 vertical feet).

Fit the tube, equipped with its strainer and its weight, and immerse it in the concentrate solution to be injected.

**IMPORTANT ! - Do not put the suction tube strainer on the bottom of the stock solution container. The strainer must be suspended at least 10cm [4"] above the bottom of the tank to avoid sucking up the insoluble particles that may damage the injection assembly (Fig.2).**

- Do not put the strainer on the bottom.

**Fig. 2**

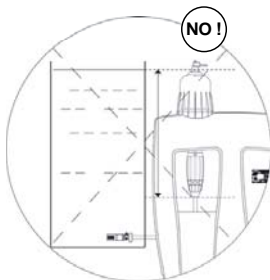


**▲ WHAT YOU SHOULD DO  
WHAT YOU MUST NOT DO ▼**

**Under no circumstance should the solution level be above the water inlet of the DOSATRON (to avoid siphoning situations).**

The DOSATRON can be connected to the main water line **directly** (Fig. 2A), recommended.

If your flow rate is above the operating limits of the DOSATRON, see EXCESSIVE FLOW.



To prolong the working life of the DOSATRON it is advisable to install a filter (ex.: 200-120 mesh - 80-130 microns depending on your water quality) upstream.

This is imperative if the water contains impurities or particles, especially if the water comes from a well.

**A filter is recommended and required for the warranty to be valid.**

**When connecting an installation to the public water supply, you must respect the rules and regulations in force in the country.**

**EXCESSIVE FLOW (as an indication)**

If your DOSATRON clicks more than **46 times**, that is **23 cycles in 15 seconds**, you are close to the superior flow limit. If you need more flow, you must install a DOSATRON with a superior capacity of flow (please ask advice).

# Putting the DOSATRON into order

## USING FOR THE FIRST TIME

The DOSATRON may be fitted in its upper part with the function by-pass (optional equipment) :

- By-pass in **ON**, the DOSATRON works and the concentrate is drawn up.
- By-pass in **OFF**, the DOSATRON is stopped and does not draw up the product.



- Open the water inlet valve slowly, the DOSATRON is self-priming.
- Operate the DOSATRON until the product to be injected is drawn up into the doser body (the product is visible through the plastic tube).
- The DOSATRON makes a characteristic “click-clack” noise when working.

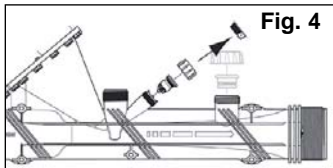
**NOTE:** The time required to prime the suction tube depends on the water flow-rate, the ratio setting and the length of the suction tube. To bleed the air from the suction tube and accelerate the priming, set the injection rate at maximum. Once the DOSATRON is primed, adjust to the required injection rate (see § ADJUSTING THE INJECTION RATE).

## PRODUCT AUTOMATIC ANTI-SIPHONING DEVICE

- It automatically restores the atmospheric pressure within the system in the event of accidental under pressure after the Dosatron.
- Remove the red cap in order to activate it (**Fig. 4**).

\*Example of use:

- Situation in which the outlet is lower than the inlet.
- Situation in which the water supply shut off valve is located upstream of the dosing unit.



# Maintenance

## RECOMMENDATIONS

1 - When using soluble products to be made up into solutions, we recommend the periodic dismantling of the entire dosing part (see : § **CLEANING AND REFITTING THE SUCTION VALVE, § CHANGING SEALS IN THE INJECTION ASSEMBLY**).

Thoroughly rinsing all the elements of the dosing part with water and re-assembling them after having previously lubricated the seal (**Fig. 5**) with a silicone lubricant, in the case of difficulty in re-fitting.

2 - Before putting the DOSATRON into operation after a non-use period, remove the motor piston and soak it into lukewarm water < 40° C [104° F] overnight. This helps to dissolve any deposits which may have dried onto the piston motor.

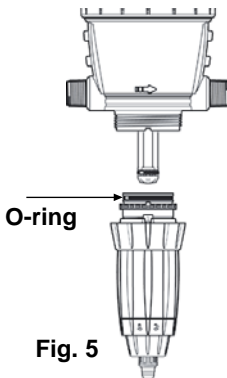


Fig. 5

## HOW TO DRAIN THE DOSATRON (in case of freezing temperature)



Fig. 6

- Turn off the water supply and let the pressure drop to zero.
- Open the D30GL unit (**Fig. 6**).
- Remove the injection assembly, see § CHANGING THE MOTOR PISTON.
- Remove the bell and the motor piston.
- Disconnect the water inlet and outlet fittings.
- Remove the lower pump body from the mounting bracket and empty any remaining water.
- The DOSATRON can now be reassembled, having first cleaned the seal.
- Close the D30GL unit (**Fig. 7**).



Fig. 7

## INTERNATIONAL CONVERSIONS

Principle : Setting at 1%  $\Rightarrow$   $1/100 = 1$  part of concentrate for 100 parts of water.

Ex. : Setting at 2%  $\Rightarrow$   $2/100 = 2$  parts of concentrate for 100 parts of water.

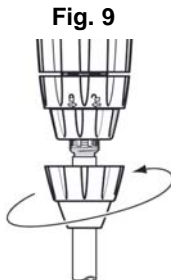
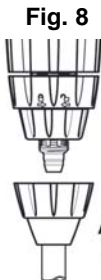
Ratio  $\Rightarrow$  1/50.

## FITTING THE SUCTION TUBE

If the DOSATRON has already been used, please imperatively refer to § PRECAUTIONS.

- Unscrew the nut (**Fig. 8**) at the bottom of the injection assembly and put it onto the tube.

- Push the tube onto the barbed fitting as far as it will go and screw on the nut by hand (**Fig. 9**).



## ADJUSTING THE INJECTION RATE (with pressure off)

**IMPORTANT ! Use no tools.**

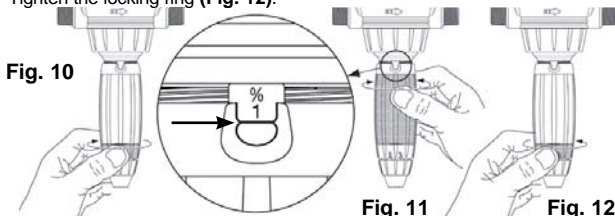
**Adjustment must be made when there is no pressure in the DOSATRON.**

- Turn off the water supply and allow the pressure to drop to zero.

- Unscrew the locking ring (**Fig. 10**).

- Screw or unscrew the adjusting nut in order to line up the 2 peaks of the eyelet with the desired ratio on the scale (**Fig. 11**).

- Tighten the locking ring (**Fig. 12**).



## CHANGING THE MOTOR PISTON (with pressure off)

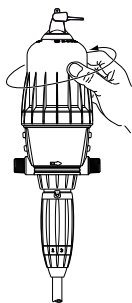


Fig. 13

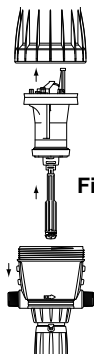


Fig. 14

- Turn off the water supply and allow the pressure to drop to zero.
- Open the D30GL unit (Fig. 6).
- Unscrew and remove bell-housing by hand (Fig. 13).
- Remove the motor piston (Fig. 14) by pulling it up.
- Rod and plunger piston are fixed to the motor piston and taken out simultaneously.
- Change and reassemble in the reverse order to the above.
- Refit the bell-housing (take care not to damage its seal) and tighten **by hand**.
- Close the D30GL unit (Fig. 7).

## CHANGING SEALS IN THE INJECTION ASSEMBLY (with pressure off)

Frequency : Once per year.

**IMPORTANT ! Use no tool or metallic utensils**

**ADVICE:** Before dismantling any part of the injection assembly it is advisable to operate the DOSATRON, injecting clean water so as to rinse through the injection system. In this way, risks of contact with concentrated solutions in the injection assembly are minimized.

During any such intervention, wear protective eyewear and gloves !

### METHOD OF REMOVING SEAL

**Fig. 15 :** Between finger and thumb, pinch the component and the seal ; push towards one side to deform the seal.

**Fig. 16 :** Increase the deformation to grip the part of the seal thus exposed and pull it out of its groove.

Clean the seal seating without any tools.

Refitting is done by hand.

It is very important that the seal is not twisted once in place as this would impair its efficiency.

Fig. 15



Fig. 16

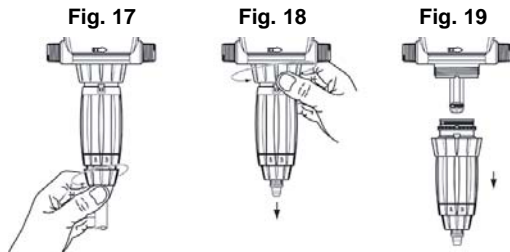


## CHANGING THE DOSING SEALS

Please refer to the drawings of the different models at the end of this manual

- **Change the seals once a year.**

- Turn off the water supply and allow the pressure to drop to zero.
- Open the D30GL unit (**Fig. 6**).
- Take off the suction tube of product (**Fig. 17**).
- Unscrew the retaining ring (**Fig. 18**).
- Pull downwards to remove the injection assembly (**Fig. 19**).
- Change the seals, the suction valve and the barbed fitting.
- Re-assemble in the reverse order to the above **by hand**.
- Close the D30GL unit (**Fig. 7**).

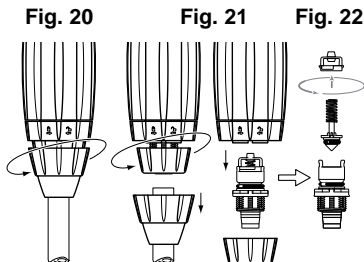


## CLEANING AND RE-ASSEMBLING THE SUCTION VALVE SEAL

- Turn off the water supply and allow the pressure to drop to zero.
- Open the D30GL unit (**Fig. 6**).
- Unscrew the nut and pull downwards to remove the suction tube (**Fig. 20**).

- Unscrew and take off the suction valve retaining nut (**Fig. 21**), pull out the valve assembly, dismantle the valve and thoroughly rinse the separate components in clean water.

- Put the valve components in the order shown in the diagram (**Fig. 22**).
- Re-assemble the components in the reverse order to the dismantling process.
- Close the D30GL unit (**Fig. 7**).



# EC PROBE

## Controller and conductivity sensor

ECTESTOC-3D-P DOSATRON SONDE 1R26-CTM-COS probe

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### INSTALLATION


Specially designed for the qualitative control of circulating fluids.

A 3-digit LED display provides a direct reading of the metering and calibration values.

A red light indicator makes it possible to check the internal battery charging level.

A probe featuring stainless steel electrodes provides a virtually unlimited service life under normal operating conditions. The temperature compensation is carried out using a NTC thermistor probe.

### READER SPECIFICATIONS

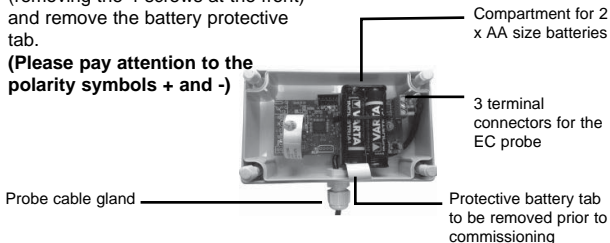
Automatic range	0.0 - 5.0 mS/cm
Measuring unit	Millisiemens
Resolution	0.1 mS/cm
Accuracy:	+/- 5% at full scale
Calibration	Automatic using a 1.413 mS conductivity buffer solution
Temperature correction	Automatic, 0 - 65°C (ref. temp.: 25°C, coefficient fixed at 2%/°C)
Power supply	2 x 1.5 V AA size batteries
Current consumption	30 mA/hr
Display	Display time: 20 seconds (measured values displayed in 3 digits)
Casing	IP65 rated waterproof enclosure, ABS material, dimensions: 130 x 80 x 50 cm
Probe connection	3 screw terminals
Specific functions	Low battery warning indicator: red light Instant reading button (20-second display) Probe calibration button
Markings	CE,  and serial No.



## PUTTING INTO ORDER

Both the EC reader and the probe are supplied already fitted.  
Open the EC reader housing (removing the 4 screws at the front) and remove the battery protective tab.

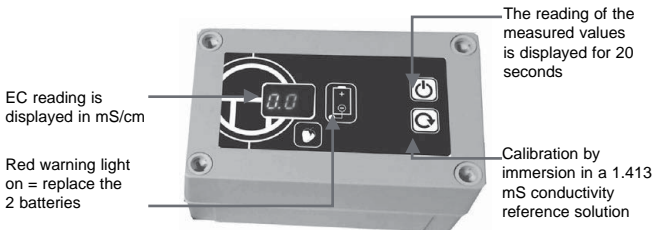
**(Please pay attention to the polarity symbols + and -)**



Close back the housing and the reader will be operational.

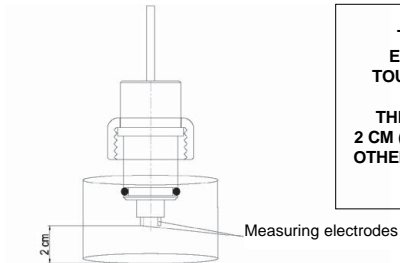
## OPERATION

Measurement shall only be accurate if the probe is in direct contact with the fluid. When the probe is in contact with the air, the measured value is close to 0.0 mS.



## CALIBRATION TO BE CARRIED OUT ONCE A YEAR

The calibration and correct operation check of the EC reader is done using a 1.413 mS conductivity reference solution. Place the probe in the reference solution (not supplied).



**PLEASE NOTE:  
THE STAINLESS STEEL  
ELECTRODES MUST NOT  
TOUCH THE BOTTOM OF THE  
CONTAINER.  
THEY MUST BE SUSPENDED  
2 CM (1 inch) FROM THE BOTTOM.  
OTHERWISE, THE MEASUREMENT  
PROVIDERS WILL BE  
INACCURATE.**

Press the calibration button for 5 seconds; the unit will automatically calibrate itself to 1.4 mS (+/- one digit)

If calibration fails, the EC reader will show (---). In this case, the device is likely to be faulty or the conductivity of the reference solution being used is not 1.4 mS. (Please refer to the next chapter)

## EC PROBE MAINTENANCE



In order to work properly, the 2 measuring electrodes of the EC probe must be clean and in good condition (not broken or bent).

When the EC probe has not been used for over 1 month, the two electrodes must be cleaned with fine grade emery cloth.

In case of failure, the probe cable must be checked using an ohmmeter

- One of the probe electrodes is connected to the white wire
- The other electrode is connected to the blue wire.
- The "NTC" thermistor probe is connected between the red and the white wires (10 K at 25°C)

If any of the three measurements shows incorrect readings, your EC probe is to be replaced.

**NOTE:** Measurements shall be made with the EC reader wiring disconnected.

## TROUBLESHOOTING AND SOLUTIONS FOR FAULTS OCCURRING DURING OPERATION

Fault symptoms	Causes and solutions
The unit does not power on	<ul style="list-style-type: none"> <li>- No batteries in the compartment.</li> <li>- Batteries installed the wrong way round.</li> <li>- Drained out batteries.</li> <li>- The front panel pushbutton is broken.</li> </ul>
The display keeps displaying 0.0	<ul style="list-style-type: none"> <li>- Probe suspended in the air.</li> <li>- Probe wiring is cut.</li> </ul>
Reading of the measured values is not stable	<ul style="list-style-type: none"> <li>- Poor fluid circulation.</li> </ul>
The measured values show incorrect readings	<ul style="list-style-type: none"> <li>- Check with a 1.413 mS conductivity reference solution.</li> <li>- Carry out the calibration process.</li> <li>- Clean the 2 stainless steel electrodes with fine grade emery cloth.</li> <li>- Double-check the measurement with a handheld meter.</li> </ul>
The display keeps displaying 9.9	<ul style="list-style-type: none"> <li>- Short-circuit in probe wiring.</li> </ul>
Calibration value does not show on the display (---)	<ul style="list-style-type: none"> <li>- Clean the 2 stainless steel electrodes with fine grade emery cloth. They must be clean and shiny.</li> <li>- Probe wiring is cut.</li> <li>- Short-circuit in probe wiring.</li> <li>- The reference solution is too old or in bad condition.</li> <li>- The reference solution conductivity is not 1.413 mS.</li> </ul>
The red warning light flashes	<ul style="list-style-type: none"> <li>- Replace the 2 1.5 V AA size batteries.</li> </ul>

## COMPLIANCE WITH EMC & ROHS DIRECTIVES

The ECTESTOC-3D-P DOSATRON SONDE 1R26-CTM-COS probe complies with the following directives and provisions:

Requirements regarding protection set forth in Directive 2004/108/EC on "electromagnetic compatibility".

Directive 2011/65/EU of the European Parliament regarding restrictions on the use of certain hazardous substances in electrical and electronic equipment.

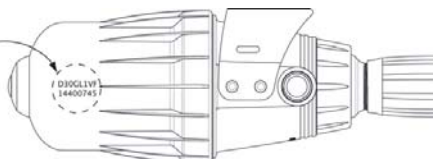
EU Declarations of Conformity are available upon request - please contact us.

# Reference Designation

REF.

D30GL1VF  
14400745

Serial #



REF. : ..... N° Série : .....

EXEMPLE D30 GL 0.2 EC BP V AF/VF V II

Type of Dosatron

GL : Green Line (fertigation)

Dosage (% or ratio)

Probe

BP : integrated by-pass

V : Viscous Products (> 400 cPs)  
(> 400 cPs)

Dosing Seals:

AF = PH 7-14

VF = PH 1-7

K = strong acids (>15%)

Color :

P = White [PVDF]

V = Green [PP]

Other extensions  
(consult us)

# Troubleshooting

SYMPTOM	CAUSE	SOLUTION
<b>Motor piston</b>		
DOSATRON does not start or stops	Piston stalled.	Reset piston, by hand.
	Air has not been bled from unit.	Bleed air from unit, by bleed button.
	Maximum flow exceeded.	1. Reduce flow, restart unit. 2. Unscrew the top cap. Take off the piston and check piston valves seals to ensure correct position.
	Motor piston is damaged.	Return unit to your service center for repair.
<b>Injection</b>		
Water flowing back into concentrate container.	Contaminated, worn, or missing check valve parts.	Clean or replace it.
No suction of concentrate.	The piston motor has stopped.	See <b>Motor piston</b> section.
	Air leak (inlet) in the suction tube.	Check the tightness between nut and suction hose.
	Blocked suction tube or clogged strainer.	Clean or replace it.
	Missing or worn suction check valve seal.	Clean or replace it.
	Missing or worn plunger seal.	Clean or replace it.
	Worn injection stem	Replace it.

<b>SYMPTOM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
<b>Injection</b>		
Under injection.	Suction of air.	1. Check the tightness of the nuts in the injection area. 2. Check suction tube.
	Dirty or worn check valve seal.	Clean or replace it.
	Maximum flow exceeded (cavitation).	Reduce flow.
	Worn plunger seal.	Replace it.
	Worn injection stem	Replace it.
<b>Leaks</b>		
Leaks in the vicinity of the fixing ring under the body housing.	Injector sleeve seal is damaged or positioned incorrectly.	Replace it.
Leaks between the setting sleeve and the locking ring.	Injector stem seal damaged, positioned incorrectly or missing.	Replace it.
Leaks between the body and screw-top.	Screw-top seal is damaged, positioned incorrectly or missing.	Unscrew the screw-top, clean the seal seating, replace or change the seal. Position correctly the screw-top.
<b>Regulator DOSATRON</b>		
Leak	Faulty sealing	Return the Dosatron unit to your service center for repair
<b>EC PROBE</b>		
Please refer to the EC PROBE section		

**THE MANUFACTURER DECLINES ALL RESPONSIBILITY IF THE DOSATRON IS USED IN CONDITIONS THAT DO NOT CORRESPOND TO THE OPERATING INSTRUCTIONS AS INDICATED IN THIS MANUAL**

# Limited warranty

DOSATRON INTERNATIONAL S.A.S. will provide for replacement of all parts shown to be defective in material or workmanship during a period of twelve months from the date of purchase by the original purchaser.

To obtain warranty replacement of a part, the DOSATRON must be returned with original proof of purchase receipt to the manufacturer or authorized distributor and thereafter recognized as defective after examination by the technical services of the manufacturer or distributor. The DOSATRON must be flushed of any chemical and sent to the manufacturer or distributor prepaid, but will be returned free of charge once repairs are made if found to be covered by the warranty. Any repairs made under warranty will not extend the initial warranty period.

This warranty only covers circumstances where the part has failed due to defects caused by the manufacturing process. This warranty is invalid if the defects are found to be due to the product's misuse, inappropriate use of tools, lack of maintenance or defective installation or environmental accidents or corrosion by foreign bodies and liquids found within or in proximity to the DOSATRON.

Before using any aggressive chemicals, please consult your distributor to confirm compatibility with the dosing pump.

The seals and "o-rings" are not covered under warranty, nor is damage to the DOSATRON caused by water impurities such as sand. A filter (ex.: 300 mesh - 60 microns depending on your water quality) must be used in front of the DOSATRON for the warranty to be valid.

DOSATRON INTERNATIONAL S.A.S. declines any responsibility if the DOSATRON is not used in compliance with the operating instructions and tolerances as indicated in this owner's manual.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. But any implied warranty or merchantability or fitness for a particular purpose applicable to this product is limited in duration to the time period of this written warranty or any implied warranty.

There is no warranty express or implied relating in any way to products used in conjunction with DOSATRON INTERNATIONAL S.A.S. products.

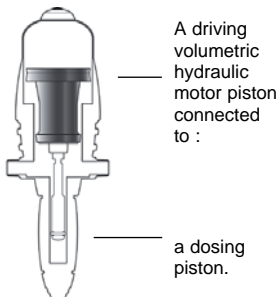
The manufacturer or authorized distributor shall not be liable for incidental or consequential damage, such as any economic loss, resulting from breach of this written warranty or any implied warranty.

There are no warranties, express or implied, which extend beyond those described above.

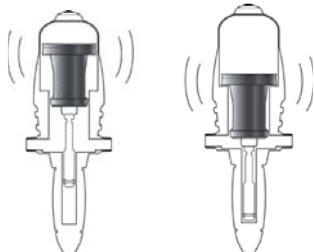
# KNOW YOUR FLOW

## A SIMPLE METHOD

THE DOSATRON IS COMPOSED OF:



In its up and down movement, you can hear the motor piston **click**:



2 clicks = 1 motor cycle = The stroke volume



Once in the up position

Once in the down position

The speed of the motor is proportional to the flow of water passing through the system.

### ■ Calculation of water flow in l/h =

$$\frac{\text{Number of clicks in 15 seconds}}{2} \times 4 \times 60 \times 0.53 \times 10$$

*Calculation for 1 minute* (points to 4)  
*Calculation for 1 hour* (points to 60)  
*Stroke volume in liters* (points to 0.53)  
*conversion liters en gallons* (points to 10)

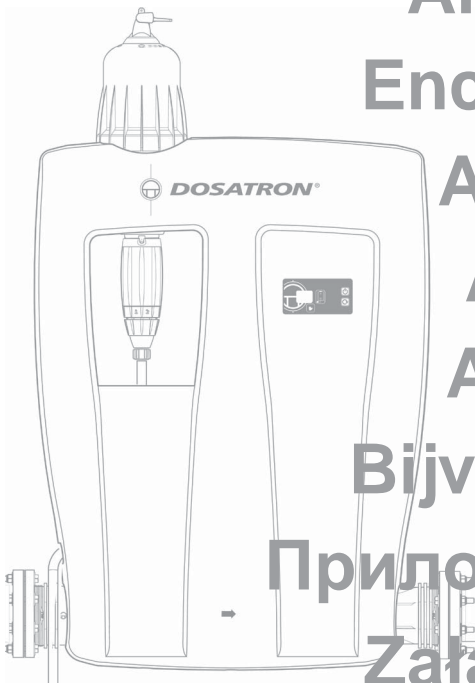
### ■ Calculation of water flow in GPM =

$$\frac{\text{Number of clicks in 15 seconds}}{2} \times 4 \times 0.53 \div 3.8 \times 10$$

*Calculation for 1 minute* (points to 4)  
*Stroke volume in litres* (points to 0.53)  
*conversion liters en gallons* (points to 3.8)

**NOTA** : This method of calculation cannot replace a flow meter. It is given only as an approximate guide.





Annexes  
Enclosure

Anhang

Anejos

Allegati

Bijvoegsel

Приложения

Załączniki

Anexos

**Courbes / Curves  
Diagramm / Curva  
Curvas / Grafiek  
Кривые / Krzywe  
Gráficos**

**35.....**

**Pertes de charge**

**Pressure loss**

**Druckverlust**

**Perdite di carico**

**Perdidas de carga**

**Drukverlies**

**Потери напора**

**Przepływ**

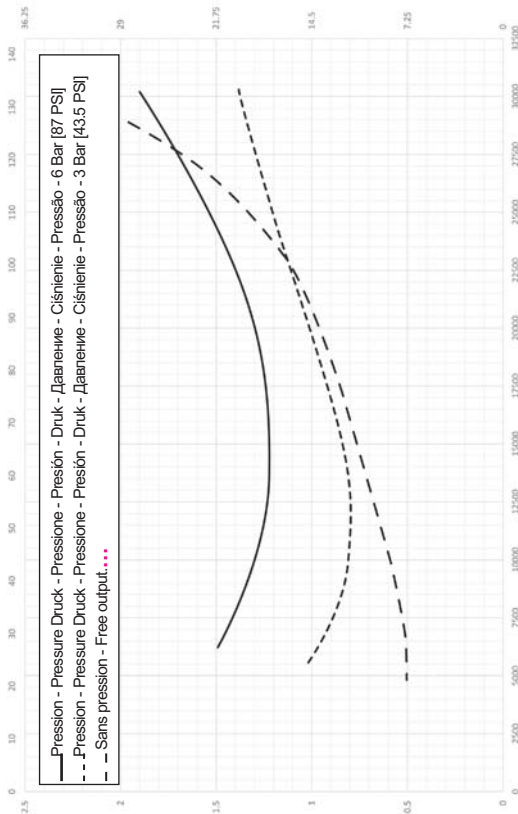
**Caudal**

.....36

# D30GL1/ D30GL1EC

Pertes de charges - Pressure loss - Druckverlust  
Perdite di carico - Perdidas de carga - Drukverlies - > in PSI

Débit - Water flow rate - Durchsatz - Portata - Caudal - Doorstroming > in GPM



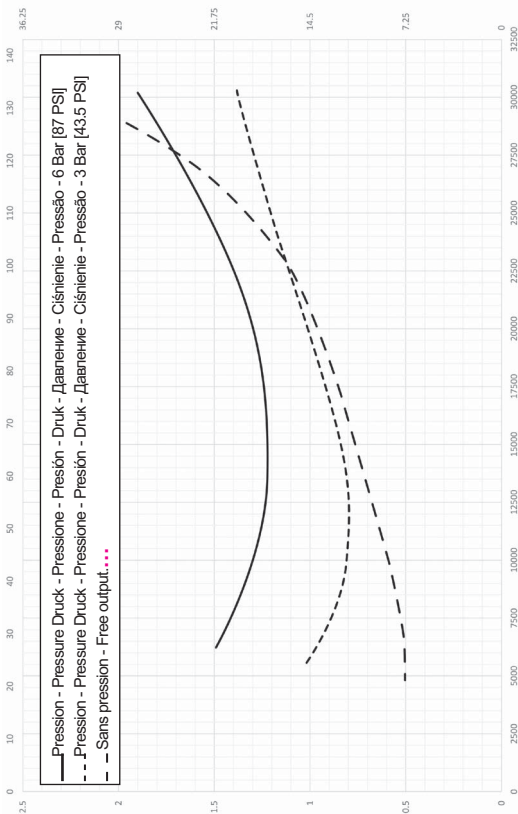
Расход - Przepływ - Caudal > in l/h - l/Std - l/u

Потери напора - Strata ciśnienia - Perdas de pressão > in Bar (kgf/cm<sup>2</sup>)

# D30GL02/ D30GL02EC

Pertes de charges - Pressure loss - Druckverlust  
 Perdite di carico - Perdidas de carga - Drukverlies - **> in PSI**

Débit - Water flow rate - Durchsatz - Portata - Caudal - Doorstroming **> in GPM**



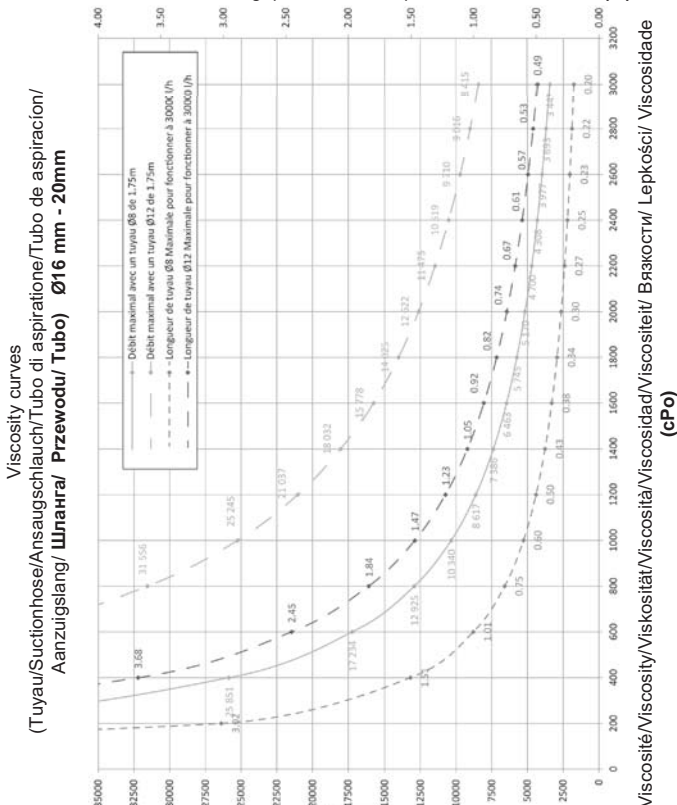
Расход - Przepływ - Caudal **> in l/h - l/Std - l/u**

Потери напора - Strata ciśnienia - Perdas de pressão **> in Bar (kgf/cm<sup>2</sup>)**

<b>Limite viscosité</b>	
<b>Viscosity curves</b>	
<b>Grenzwerte dickflüssige Konzentrate</b>	
<b>Curve di Viscosità</b>	
<b>Curvas de Viscosidad</b>	
<b>Grenswaarden viskeuze Concentraten</b>	
<b>Пределы вязкости</b>	
<b>Krzywe lepkości</b>	
<b>Limite de viscosidade</b>	
.....	<b>39</b>

# D30GL1EC

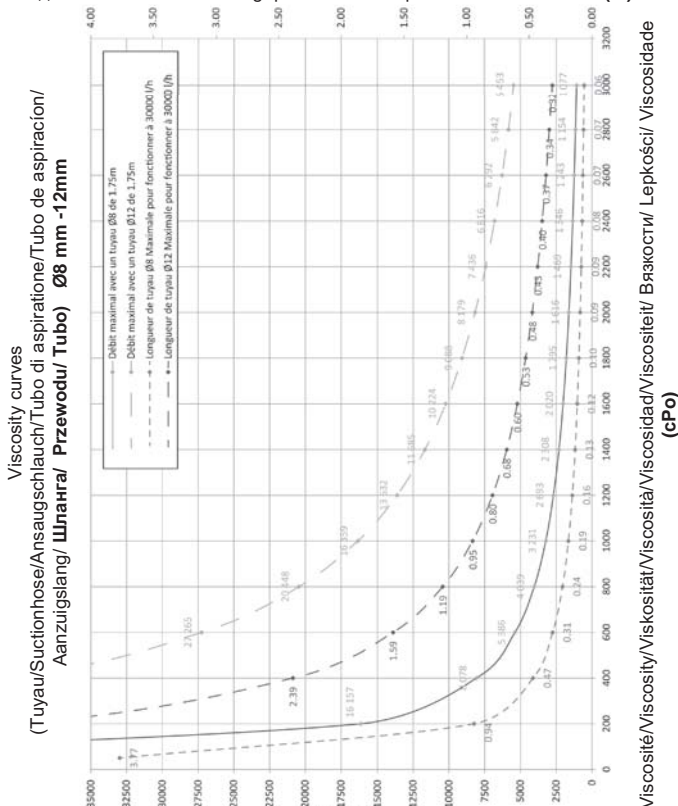
Max. Longueur tuyau/Suctionhose length/Ansaugschlauchlänge/Lunghezza tubo di aspirazione/Longitud tubo de aspiración/lengete aanzuigslang/ Макс. длина шланга/ Maks. długo. przewodu/ Comprimento máx. do tubo **(m)**



Max. Débit /Operating Waterflow /Betriebswasserdurchsatz /Portata d'acqua di funzionamento/Caudal de agua de funcionamiento/ Waterdoorstroming/ Макс. Расход/ Maks. przepływ/ Caudal máx. > l/h - l/Std- l/uur

# D30GL02EC

Max. Longueur tuyau/Suctionhose length/Ansaugschlauchlänge/Lunghezza tubo di aspirazione/Longitud tubo de aspiración/lengete aanzuigslang/ Макс. длина шланга/ Maks. długo. przewodu/ Comprimento máx. do tubo (m)



Max. Débit /Operating Waterflow /Betriebswasserdurchsatz /Portata d'acqua di funzionamento/Caudal de agua de funcionamiento/ Waterdoorstroming/ Макс. Расход/ Maks. przepływ/ Caudal máx. > l/h - l/Std- l/uur



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CE Conformity Statement Document  
N°DOCCED3OGL140701 – Directive CE –  
This Dosatron is in compliance with the European  
Directive 2006/42/CE. This declaration is only  
valid for countries of the European Community (CE).



# **DOSATRON®**

*Because life is powered by water*

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FABRIQUÉ PAR  
MANUFACTURED BY  
HERGESTELLT VON  
FABBRICATO DA  
FABRICADO POR  
GEPRODUCEERD DOOR  
ИЗГОТОВЛЕНО  
PRODUKCJA  
FABRICADO POR



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NT/D30/09/15