



**DOSATRON<sup>®</sup>**

An Ingersoll Rand Business



# Vehicle Wash Brochure

Chemical Delivery Made Easy

---

# Table of Contents

<b>1</b>	<b>DOSATRON - WATER-POWERED CHEMICAL PROPORTIONERS</b>	<b>01</b>
	<b>OPERATION</b>	<b>01</b>
	<b>HELPFUL SUGGESTIONS</b>	<b>02</b>
	<b>RECOMMENDED PROPORTIONERS</b>	<b>03</b>
	<b>PRE-PLUMBED SYSTEMS</b>	<b>04</b>
	<b>PROPORTIONER VENTURI / VBV VACUUM BREAKER VALVE KIT</b>	<b>06</b>
<b>2</b>	<b>ETATRON - ELECTRIC METERING PUMPS</b>	<b>07</b>
	<b>PKX SERIES</b>	<b>07</b>
	<b>eOne SERIES</b>	<b>08</b>
	<b>PRE-PLUMBED SYSTEMS</b>	<b>09</b>
<b>3</b>	<b>RECOMMENDED ACCESSORIES</b>	<b>10</b>



Scan the QR  
code for more  
information on  
Vehicle Wash.

# 1 Water-Powered Chemical Proportioners

Dosatron chemical proportioners compensate for flow and pressure changes providing consistent, repeatable results, and because they are water-powered there is no need for electricity or air. You can still wash cars even if your water booster pump fails!

- No Venturi Tips - No Clogs
- Metal-Free Piston
- Space-Saving Design
- Direct On-Demand Mixing

## Here's How It Works ▶

Mixing the Water and Chemical is as easy as 1, 2, 3!

- 1 When water enters the proportioner, it triggers the hydraulic piston, which begins moving up and down inside the body of the unit.
- 2 As it strokes, the Dosatron draws fluid up from the concentrate tank in an action similar to a hypodermic syringe.
- 3 The concentrate is then displaced into the mixing chamber, where it is mixed with the water flowing through the unit.



Scan the QR code to see how it works

# Helpful Suggestions



## Decreasing Cost-Per-Car

With the ball valve installed on the water supply side of the Dosatron, open the ball valve wide open and observe the coverage of the mixed chemical on the car.

If the coverage is adequate, close the ball valve slightly and check the coverage again. Continue this procedure until you see sufficient coverage on the car without “flooding” the surface and using unnecessary water and chemical.

For example: if you are diluting drying agent through a Dosatron and you find the best “break” on the car’s surface is at 400:1, lock the adjustment there.

If, with the ball valve wide open, the drying agent arch is flowing at 3 GPM, and you are able to reduce the flow to 1.5 GPM by closing the ball valve and you are still getting sufficient coverage on the car, you have effectively reduced the amount of chemical and water used on each car by half!



Doing this gives you **REAL** water and chemical savings you can measure and see!

Remember, your Dosatron will provide consistently mixed chemical regardless of the flow.

## Foaming Chemicals

**Dosatron offers consistent dilution, regardless of variations in pressure and flow**, but as the unregulated water pressure varies, the air to chemical pressure ratio at the foam generator will also vary, causing the foam “density” to change from wet to dry and back again.

When operating your Dosatron directly from city water pressure, installing the water pressure regulator and setting it at 1 - 2 PSI below the lowest, your water pressure drops will allow for an unvarying air-to-chemical pressure ratio at the foam generator.

This will also allow you to control the “density” of the foam and eliminate “spitting” at the arch by a simple adjustment of the air pressure to the foamer.







# Recommended Proportioners

Dosatrons are a perfect fit for presoaks, detergents, and acidic products. The water-powered Dosatron provides accurate car wash chemical dispensing while cutting your cost-per-car.




Dosatron Chemical Proportioners accurately inject:

Presoaks • Detergents • Polishes/Waxes • Bug Remover • Drying Agents

## For Car Wash

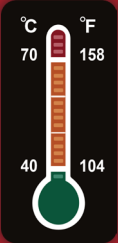



<b>PROPORTIONERS</b>				
<b>MODEL</b>	<b>D14MZ22VFDII</b>	<b>D14MZ5AFDII</b>	<b>D14MZ10AFDII</b>	<b>D14MZ3000VFDII</b>
<b>FLOW RANGE</b>	0.05 - 14 GPM	0.05 - 14 GPM	0.05 - 14 GPM	0.05 - 14 GPM
<b>DILUTION RANGE</b>	500:1 - 50:1	200:1 - 20:1	100:1 - 10:1	3000:1 - 333:1
<b>PRESSURE RANGE</b>	4.3 - 85 PSI	4.3 - 85 PSI	7 - 85 PSI	4.3 - 85 PSI
<b>CONNECTIONS</b>	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT

## For Truck Wash or Large Vehicles

<b>PROPORTIONERS</b>			
<b>MODEL</b>	<b>D40MZ22VFII</b>	<b>D40MZ5AFII</b>	<b>D40MZ3000VFII</b>
<b>FLOW RANGE</b>	2.2 - 40 GPM	2.2 - 40 GPM	2.2 - 40 GPM
<b>DILUTION RANGE</b>	500:1 - 50:1	100:1 - 20:1	3000:1 - 500:1
<b>PRESSURE RANGE</b>	4.3 - 116 PSI	7.2 - 116 PSI	4.3 - 116 PSI
<b>CONNECTIONS</b>	1 1/2" NPT	1 1/2" NPT	1 1/2" NPT

All units include: mounting bracket, suction hose, weighted strainer, and quick start guide. Maximum temperature: 104°F

## Hot-Water Dosatron Proportioners

			
<b>MODEL</b>	<b>D14TMZ5</b>	<b>D14TMZ10</b>	<b>D14TMZ3000</b>
<b>TEMPERATURE</b>	158 °F (70 °C)	158 °F (70 °C)	158 °F (70 °C)
<b>DILUTION RANGE</b>	200:1 - 20:1	100:1 - 10:1	3000:1 - 333:1
<b>PRESSURE RANGE</b>	4.3 - 85 PSI	7 - 85 PSI	4.3 - 85 PSI

All units include: mounting bracket, suction hose, weighted strainer, and quick start guide. Maximum temperature: 158 °F (70 °C).

## Pre-Plumbed Systems

Simplify your installation with Dosatron's custom panel systems. Our pre-plumbed systems include all the necessary accessories mounted on either aluminum diamond plate or black polypropylene panels.

### SINGLE PANEL SYSTEM

- 1 Dosatron Proportioner Unit
- Water & Air Solenoid Valves
- Water & Air Pressure Regulators & Gauges
- Filter

Part #: PS1A138  
(using D14MZ2VFDII)

Call for a quote  
1-800-523-8499  
[www.dosatron.com](http://www.dosatron.com)





## ▶ LOW-PRESSURE MODULAR SELF-SERVE SYSTEM

- 6 Bay with Air Version shown
- 1 Dosatron Proportioner Unit
- Chemical & Air Solenoid Valve Manifolds
- Water & Air Pressure Regulators & Gauges
- Filter

Part #: Call 1-800-523-8499 for specific part #.

## TRIPLE PANEL SYSTEM

- 3 Dosatron Proportioner Units
- Filter
- Water & Air Solenoid Valves
- Water & Air Pressure Regulators & Gauges

Part #: PSD5J138-138-138  
(using 3-D14MZ2VFDII)



Please contact us to discuss your Custom Panel System Configuration!

# Proportioner Venturi

Venturi proportioners, under constant pressure and flow conditions, provide an economical means of accurately diluting and dispensing chemicals.

## Features

- 12 large, easy-to-change, color-coded tips
- Chemical resistant construction
- Built-in check valve
- Backflush valve
- Suction valve and strainer
- A simple turn of the bypass handle changes function from dosing to rinsing

## Benefits

- The tips allow for injection rates from 1:100 to 1:2.3
- Flushes water through, for easy cleaning after each use
- Can handle hot water up to 160 °F



Part #: DSA-VENTURI

LOW COST - COMPACT PROPORTIONER  
with broad injection range!

## Specifications

- 3/4" Polypropylene proportioner
- 3" W x 5" H x 2" D
- Injection Rate 1:100 to 1:2.3
- Flow Rate:
  - 2 GPM at 58 PSI (in Dosing Mode)
  - 13 GPM at 58 PSI (in Rinse Mode)

# VBV Vacuum Breaker Valve Kit

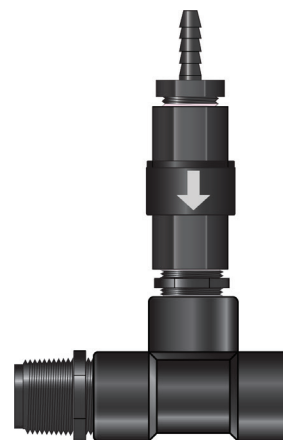
This simple **Vacuum Breaker Valve Assembly** when placed downstream from the injector, helps prevent chemical from being siphoned into the line.

If a vacuum occurs in the line, the check valve opens to allow air to enter the pipe and break the siphon.

As part of a regular system maintenance, it is recommended to verify the operation of the check valve by inserting a thin rod through the barb, then push down and release. Liquid may come out so be sure to wear the proper personal protective equipment such as gloves and goggles when performing this task.



Please meet all state and local requirements for back flow prevention.



Part #: VBV34



## 2 Electric Metering Pumps

Along with being easy to use, highly reliable, and compact in size, Etatron pumps provide constant dosing, save energy, and the low operating temperatures result in reduced mechanical stress.

Etatron Pumps **Operation** is **NOT Affected** by Water Quality!

### PKX Series

The PKX Solenoid Metering Pump is simple to use, highly reliable, and provides a compact design. Long-lasting, unique one-piece Teflon® diaphragm design. Works with reclaimed water!

Etatron PKX Pumps accurately inject:

- Presoaks
- Detergents
- Chlorine
- Waxes
- Drying Agents



#### PKX STANDARD FEATURES

Manual air bleed pump head for fast priming	Wall or foot mounting options
24 or 120V - 50/60 Hz	Polypropylene solenoid head for chemical resistance
Flashing LED indicates pump is operating	Manual control adjustable from 0 to 100%
Suction stops immediately when power is off	Hot water applications up to 140°F
Adjustable while running	IP65 acid resistant housing

### PKX Specifications Chart

VERSION	FLOW RATE	PRESSURE
NUMBER	Oz/Minute	PSI
0105	0.6	72
0206	1.1	87
0303	1.7	43
0505	2.8	72
0702	3.9	29
	5.6	14

# eOne Series

The eOne Electric Metering Pump provides consistent dosing, energy savings, and low operating temperatures resulting in reduced mechanical stress. Long-lasting, unique one-piece Teflon® diaphragm design. Works with reclaimed water!



Etatron eOne Pumps accurately inject:

- Presoaks
- Detergents
- Waxes
- Drying Agents

eOne STANDARD FEATURES	
Manual air bleed pump head for fast priming	Wall mounting options
Long-lasting, unique one-piece Teflon® diaphragm	Standard PVDF solenoid head
Proportional dosing with a 4-20 mA signal	120V or 230V - 50/60 Hz
Alarm to detect suction or discharge interruption	Reduced operating temperature to increase reliability
Digital control	Hot water applications up to 140°F
Level control alarm	IP65 acid resistant housing

## eOne Specifications Chart

VERSION	FLOW RATE	PRESSURE
NUMBER	Oz/Minute	PSI
0110	0.6	145
0216	1.1	232
0420	2.2	290
0607	3.4	101
0710	4.0	145
1012	5.6	174
1505	8.4	72
2007	11.3	101
3005	16.9	72

# Pre-Plumbed Systems

Make your installation easy with Etatron's custom panel installations. Our pre-plumbed systems include all the necessary accessories mounted on either aluminum diamond plate or black polypropylene panels.

## SIMPLE DIRECT FEED PANEL SYSTEM

Call for a quote  
1-800-523-8499  
[www.dosatron.com](http://www.dosatron.com)



## 4 - 20 mA PROPORTIONAL FEED PANEL SYSTEM

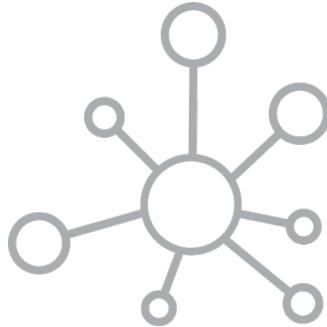


## 3 Recommended Accessories

These are the recommended accessories for your Water-Powered Proportioners and Electric Metering Pumps. Please note, for installation on all water systems, you must conform to all state, local, and federal laws concerning the use of chemical injection devices for backflow prevention.

PRODUCT	IMAGE	DESCRIPTION	PART #
<b>FILTER</b>		T-Type, 200 Mesh/80 Micron filter, 3/4" FNPT, polypropylene, industrial grade. Includes a cleanable, permanent, stainless steel cartridge.	AKF5AP11T
<b>CHECK VALVE</b>		3/4" check valve allows flow to go in one direction. Polypropylene & hastelloy.	CV34-PH
<b>SOLENOID VALVE</b>		3/4" chemical resistant solenoid valve. Polypropylene. 24 V or 120 V.	SV034P-24-G SV034P-110-G
<b>PRESSURE REGULATOR</b>		3/4" NPT pressure regulator with 2" stainless steel gauge. Includes a tamper-resistant cap.	PR34-NPT
<b>Vacuum Breaker Valve Kit (VBV)</b>		This simple Vacuum Breaker Valve Assembly, when placed downstream from the injector pump, helps prevent stock solution from being siphoned into the line.	VBV34 & VBV100

PRODUCT	IMAGE	DESCRIPTION	PART #
<b>LOCKING DEVICE FOR DOSATRON PROPORTIONER</b>		<p>Protects unauthorized access to your Dosatron settings. Includes lock and key set. Made of high impact strength polypropylene.</p> <p>Dosatron unit sold separately.</p>	DOSA-LOCK
<b>PRO HM DIGITAL TDS METER</b>		<p>Easily measures conductivity, TDS, and temperature of water.</p>	COM-100
<b>TDS CALIBRATION SOLUTION</b>		<p>Ready-to-use, individual liquid packets for optimized calibration.</p>	CP-1000
<b>PRO HM DIGITAL pH METER</b>		<p>Easily measures pH and temperature of water.</p>	PH-200
<b>pH CALIBRATION SOLUTION</b>		<p>Makes calibration easy with ready-to-use pH liquid packets.</p>	PH-P7
<b>pH STORAGE SOLUTION</b>		<p>Keeps probe hydrated, contains fungicide and helps probe last longer.</p>	PH-STOR



## CONNECT



**1-800-523-8499**

Give us a call, and we will be glad to answer any of your questions or take your order.



**CHAT**

with us at [www.dosatron.com](http://www.dosatron.com)  
just enter your question and we'll be happy to assist you





An Ingersoll Rand Business

2090 Sunnydale Blvd. • Clearwater, FL 33765  
1-800-523-8499 • 1-727-443-5404 • [www.dosatron.com](http://www.dosatron.com)