



Hydro
systems
A DOVER™ COMPANY

Irrigation & Horticulture



Software Dispersing Innovative Solutions



As the world's largest independent manufacturer of proportioning and dispensing systems Hydro has built long-lasting relationships with customers and offers custom, industry-leading solutions that positively impact their business. Hydro is committed to delivering superior customer support and ensuring unparalleled responsiveness to customers around the world. Our commitment to cutting edge technology, customer satisfaction and safer operations makes us a leader in the chemical proportioning and dispensing industry.

In addition to our North American corporate office, we have manufacturing and distribution facilities in the United Kingdom, China, Brazil, and Australia.

*“A broad choice
- whatever the
application”*

Hydration & Nutrition



Hydro Systems fertilizer injectors assure beautiful blooms, healthy crops, plants, woody ornamentals, turf and trees by consistent and accurate dosing - each and every time. Hydro's patented mixing chamber and proportional injection technology means less waste, plus a better mix for fertilizers, pesticides and other water-soluble products.

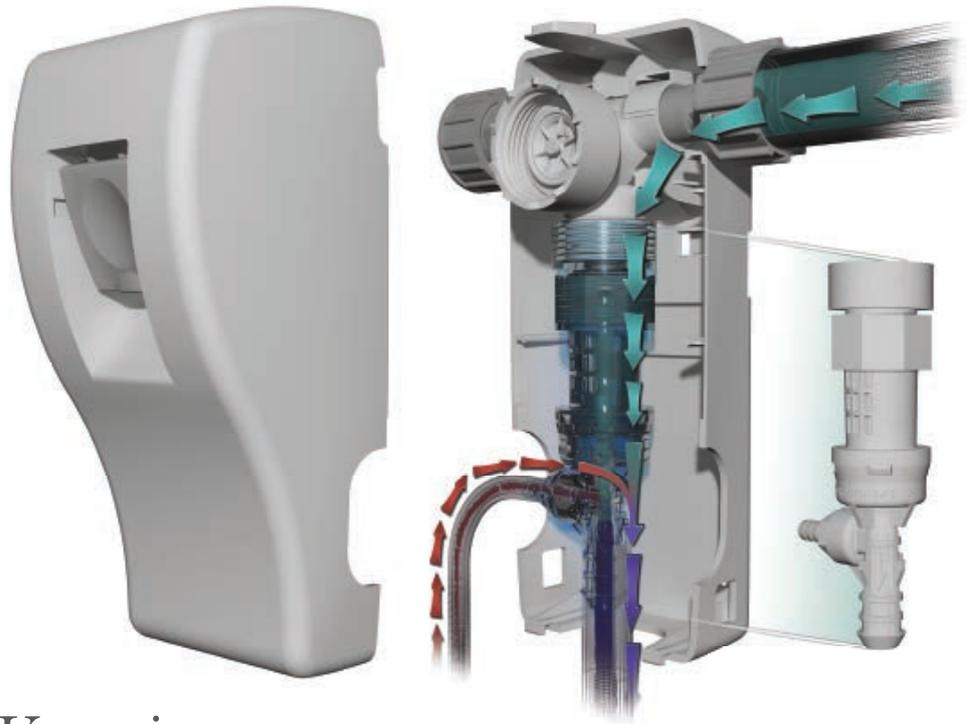
From boom irrigation fertigation to floral misting—and every application in between, Hydro's versatile non-electric injectors offer the widest range of flow and injection rates and sizes to accommodate your needs. It's no wonder more professional horticulturist turn to Hydro.

You can always count on change—whether it's a shift in the weather, location or injection requirement. That's why we developed our premier Mobile Cart Injection System. Order with our injectors for maximum flexibility along with the utmost accuracy and durability.

For over 25 years, Hydro has offered the best fertilizers and injectors for the horticulture, farming and florist professional.

Applications

- Fertigation
- Weed Control
- Field Crops
- Boom Irrigation
- Misting Systems
- Flower Preservation
- Sanitation
- Hydroponics
- Drip Irrigation
- Sprinklers
- Turf Care
- Bedding Plants
- Raised Beds
- Ebb & Flow Benches
- Pest & Insect Control
- Container Crops
- Tree Farms
- Hose & Wand
- pH control



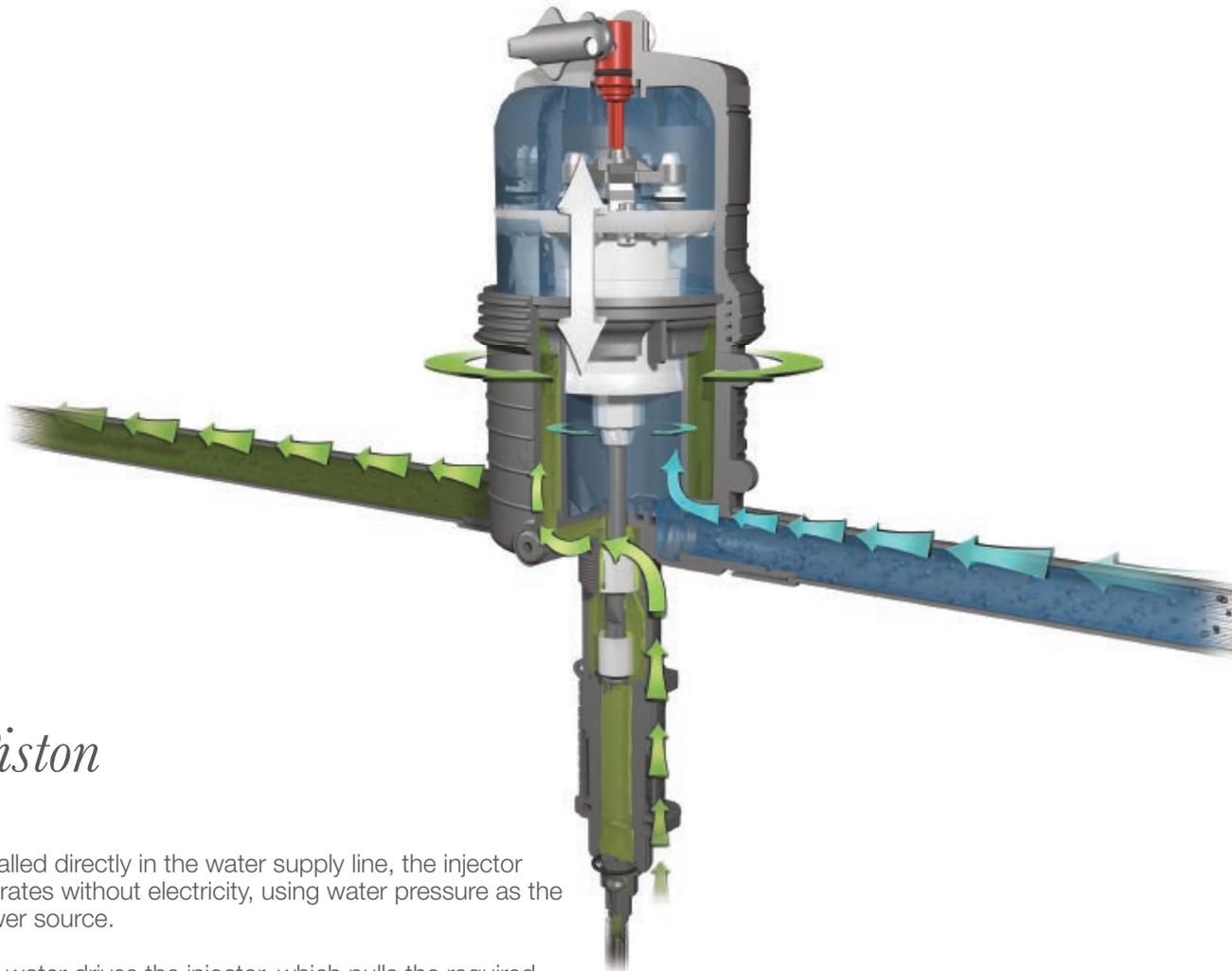
Venturi

Venturi technology (the vacuum created by manipulating the speed of a stream of water) is used to mix chemicals with water.

The incoming water stream is restricted by a nozzle, while the speed of the outgoing water is decreased by the inverted funnel shape at the bottom of the venturi. The result is a vacuum in the middle, where the chemical is sucked into the water stream.

The amount of chemical introduced is regulated by interchangeable metering tips that restrict chemical flow into the water stream.

The device does not require external electricity, batteries, pumps, or air; from ordinary water pressure available in most buildings.



Piston

Installed directly in the water supply line, the injector operates without electricity, using water pressure as the power source.

The water drives the injector, which pulls the required percentage of concentrate directly from the chemical solution container. The concentrate is mixed with the water inside the pump and the water pressure forces the mixed solution downstream.

The injection ratio of chemical concentrate stays constant and accurate regardless of variations in flow or pressure.

The injection rate is set by lining up the top of the ratio sleeve with desired ratio on the scale. The amount of injected concentrate is proportional to the amount of water coming into the injector: i.e. adjustment at 1% = 1:100 = 1 volume of concentrate + 100 volumes of water entering the injector.

SuperDos

Non-Electric, Fluid Driven Proportional Injector

SuperDos operates without electricity to precisely inject liquid concentrates into a water supply line using fluid flow as the power source.

SuperDos is designed with a patented internal mixing chamber that promotes homogeneous mixing, while segregating harsh chemicals from critical internal components.

SuperDos comes in various models that easily satisfy the demands of your most challenging applications.

- No extra cost for proprietary composite body, which exceeds PVDF for chemical compatibility and for mixing aggressive chemicals.
- No extra cost for built-in on/off switch (30 and 45 models only), which allows user to stop the injection - but not the system.
- Separate internal mixing chamber to prevent chemical contact with motor piston — for longer life and uniform mixing.
- Interchangeable lower ends and can adjust ratios while in operation.
- Highly-aggressive, chemical-resistant models available
- Diesel fuel-friendly models available



General Specifications

Housing	Proprietary engineered composite material
Average Dosing Accuracy	+/- 10%
Repeatability	+/-3%
Fluid Maximum Temperature	38°C
Fluid Minimum Temperature	1°C
Maximum Vertical Suction of Concentrate	3.6 m
Seal materials available*:	Aflas Viton EPDM Kalrez

*Contact your representative for specific chemical information



Basic installation



inline installation



dual remote injection installation



bypass installation

Model	Model #	Operating pressure (Bar)	Water Flow (lit./hr)	Dilution	
				%	Ratio
SuperDos 20 0.3%	113728RGB	0.4 - 6.9	11 - 4,500	0.025 - 0.3	1:4000 - 1:333
SuperDos 20 2.5%	113705GB	0.4 - 6.9	11 - 4,500	0.2 - 2.5	1:500 - 1:40
SuperDos 20 2.5% WSP	113705WSPGB	0.4 - 6.9	11 - 4,500	0.3 - 2.5	1:300 - 1:40
SuperDos 20 5%	113706GB	0.4 - 6.9	11 - 4,500	0.4 - 5.0	1:250 - 1:20
SuperDos 30 0.3%	113729RGB	0.4 - 6.9	34 - 6,800	0.025 - 0.3	1:4000 - 1:333
SuperDos 30 2.5%	113709GB	0.4 - 6.9	34 - 6,800	0.2 - 2.5	1:500 - 1:40
SuperDos 30 2.5% WSP	113709WSPGB	0.4 - 6.9	34 - 6,800	0.3 - 2.5	1:300 - 1:40
SuperDos 30 5%	113710GB	0.4 - 6.9	34 - 6,800	0.4 - 5.0	1:250 - 1:20
SuperDos 45 0.3%	113730RGB	0.4 - 6.9	57 - 10,000	0.025 - 0.3	1:4000 - 1:333
SuperDos 45 2.5%	113712GB	0.4 - 6.9	57 - 10,000	0.2 - 2.5	1:500 - 1:40
SuperDos 45 5%	113715GB	0.4 - 5.5	57 - 10,000	0.4 - 5.0	1:250 - 1:20

Other models are available

MiniDos

Non-Electric, Fluid Driven Proportional Injectors

MiniDos operates without electricity to precisely inject liquid concentrates into a water supply line using fluid flow as the power source.

MiniDos is designed with a patented internal mixing chamber that promotes homogeneous mixing, while segregating harsh chemicals from critical internal components.

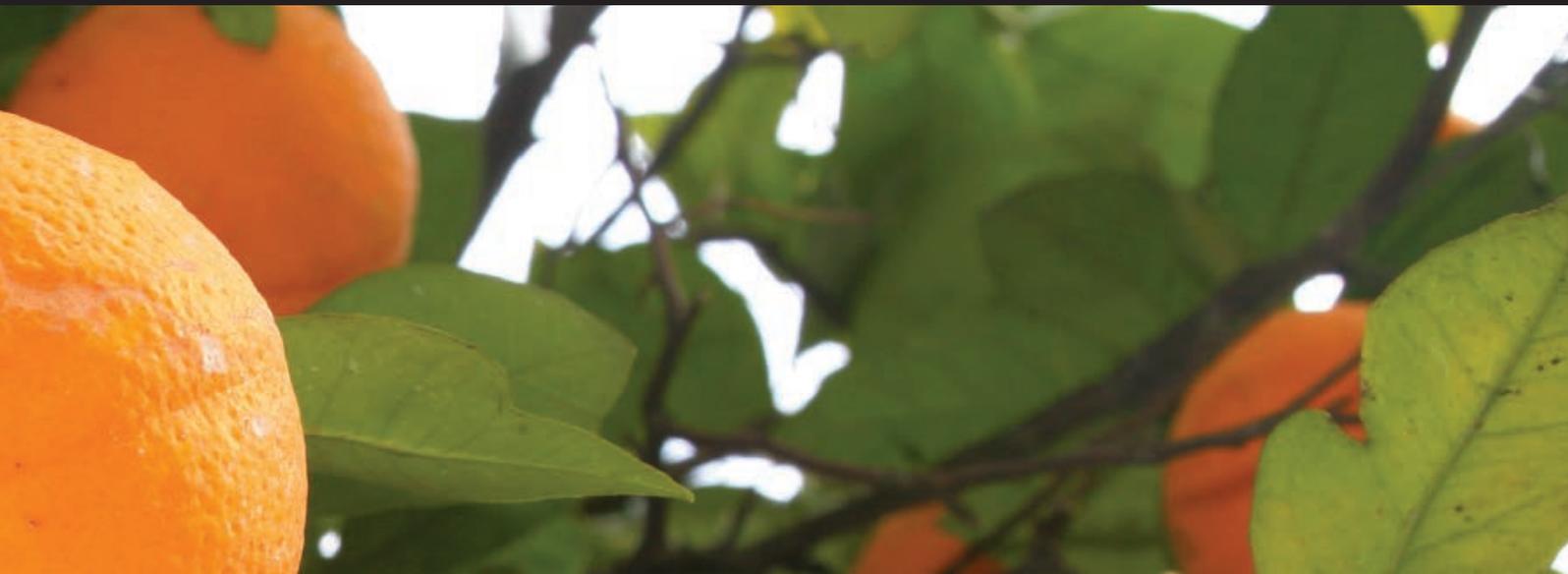
- Proprietary composite body, which exceeds PVDF for chemical compatibility and for mixing aggressive chemicals.
- Built-in on/off switch, which allows user to stop the injection, but not the system.
- Separate internal mixing chamber to prevent chemical contact with motor piston, for longer life and uniform mixing.
- Highest standard operating pressure in the industry, minimizing pressure surge damage.

General Specifications

Housing	Proprietary engineered composite material
Average Dosing Accuracy	+/- 5%
Repeatability	+/-3%
Fluid Maximum Temperature	38°C
Fluid Minimum Temperature	1°C
Maximum Vertical Suction of Concentrate	3.6 m
Seal materials available*:	Aflas Viton EPDM

*Contact your representative for specific chemical information





Basic Installation



bypass installation



inline installation



dual remote injection installation

Model	Model #	Operating pressure (Bar)	Water Flow (lit./hr.)	Dilution	
				%	Ratio
MiniDos 0.4%	112609GB	0.5 - 9.6	7 - 2,700	0.025 - 0.4	1:4000 - 1:250
MiniDos 1%	112601GB	0.5 - 9.6	7 - 2,700	0.2 - 1.0	1:500 - 1:100
MiniDos 2.5%	112603GB	0.5 - 9.6	7 - 2,700	0.5 - 2.5	1:200 - 1:40
MiniDos 5%	112605GB	0.5 - 9.6	7 - 2,700	1.0 - 5.0	1:100 - 1:20
MiniDos 10%	112607GB	0.5 - 4.5	16 - 2,200	2.0 - 10.0	1:50 - 1:10
MiniDos 20%	112621GB	0.5 - 4.5	16 - 1,500	4.0 - 20.0	1:25 - 1:5

Other models are available

MicroDos

Non-Electric, Fluid Driven Proportional Injectors

MicroDos offers the widest range of models in the industry with flow rates from 7 l/h to 795 l/h and injection ratios from 0,5% to 10%.

- No extra cost for proprietary composite body, which exceeds PVDF for chemical compatibility and for mixing aggressive chemicals.
- No extra cost for built-in on/off switch, which allows user to stop the injection—but not the system.
- Separate internal mixing chamber to prevent chemical contact with motor piston—for longer life and uniform mixing.
- Highest standard operating pressure in the industry, minimizing pressure surge damage.

Principle applications

Degreasing, Disinfecting, Dispersants, Inhibitors, Lubrication, Medication, Mistig Systems, Odor Control, Pesticides, PH/TH Correction, Rinsing, Sanitizing, Soaps & Foams, Surfactants, Weed Control





Basic installation



inline installation



dual remote injection installation



bypass installation

General Specifications

Housing	Proprietary engineered composite material
Average Dosing Accuracy	+/- 5%
Repeatability	+/-3%
Fluid Maximum Temperature	38°C
Fluid Minimum Temperature	1°C
Maximum Vertical Suction of Concentrate	3.6 m
Seal material available*:	Aflas Viton EPDM

*Contact your representative for specific chemical information

Model	Model #	Operating pressure (Bar)	Water Flow (lit./hr.)	Dilution	
				%	Ratio
MicroDos 2%	116381GB	0.5 - 6.9	7 - 795	0.5 - 2.0	1:200 - 1:50
MicroDos 5%	116383GB	0.5 - 6.9	7 - 795	2.0 - 5.0	1:50 - 1:20
MicroDos 1% Fixed	116384GB	0.5 - 6.9	7 - 795	1.00	1:100
MicroDos 2% Fixed	116382GB	0.5 - 6.9	7 - 795	2.00	1:50
MicroDos 10% Fixed	116385GB	0.5 - 4.5	7 - 795	10.00	1:10

TurboDos

Non-Electric, Fluid Driven Proportional Injectors

TurboDos is the Highest Flow Rate, Non-electric Chemical Injector in the Industry.

TurboDos can be used with 2" and 3" flange systems and with multiple installation options; making them ideal for high-flow injection applications.

TurboDos comes in various models that easily satisfy the demands of your most challenging applications.

- Dual injection capabilities reducing time and the need for multiple injectors.
- Vertical, horizontal and inverted operation.
- Highest standard operating pressure in the industry, minimizing pressure surge damage.
- Rotary design for increased efficiency at high flows.
- Compact dimensions, for easier installation.

Principal applications

Algicides, Acids, Chlorination, Cooling Water Additives, Decontamination, Disinfectants, Fertilizers, Fire Suppression Foaming Chemicals, Fungicides, Herbicides, Pesticides.



General Specifications

Housing	Proprietary engineered composite material
Average Dosing Accuracy	+/- 5%
Repeatability	+/-3%
Fluid Maximum Temperature	100°F/38°C
Fluid Minimum Temperature	34°F/1°C
Maximum Vertical Suction of Concentrate	13 Feet/3.6 m
Seal material available*:	Aflas Viton EPDM Teflon coated

*Contact your representative for specific chemical information

Model	Lower End Model	Flow Range		Operating Pressure		Injection Range	
		gpm	l/hour	psi	bar	%	ratio
TurboDos 100gpm Dual / Single	0.25%	25 - 100	5,700 - 22,000	20 - 120	1.3 - 8.2	0.025% - 0.25%	1:4000 - 1:400
TurboDos 100gpm Dual / Single	0.5%	25 - 100	5,700 - 22,000	20 - 120	1.3 - 8.2	0.1% - 0.5%	1:1000 - 1:200
TurboDos 100 gpm Dual / Single	1%	25 - 100	5,700 - 22,000	20 - 120	1.3 - 8.2	0.5% - 1%	1:200 - 1:100
TurboDos 200gpm Dual / Single	0.13%	45 - 200	10,000 - 45,000	30 - 120	2.0 - 8.2	0.05% - 0.13%	1:2000 - 1:800
TurboDos 200gpm Dual / Single	0.25%	45 - 200	10,000 - 45,000	30 - 120	2.0 - 8.2	0.05% - 0.25%	1:2000 - 1:400
TurboDos 200gpm Dual / Single	0.5%	45 - 200	10,000 - 45,000	30 - 120	2.0 - 8.2	0.25% - 0.5%	1:400 - 1:200
TurboDos 400gpm Dual / Single	0.13%	90 - 400	20,400 - 90,840	30 - 120	2.0 - 8.2	0.05% - 0.13%	1:2000 - 1:800
TurboDos 400gpm Dual / Single	0.25%	90 - 400	20,400 - 90,840	30 - 120	2.0 - 8.2	0.05% - 0.25%	1:2000 - 1:400
TurboDos 400gpm Dual / Single	0.5%	90 - 400	20,400 - 90,840	30 - 120	2.0 - 8.2	0.25% - 0.5%	1:400 - 1:200

Chemilizer

Consistent, fluid driven, chemical injection

The Chemilizer is a proportional liquid chemical injector that injects a precise amount of chemical in proportion to a volume of water.

The Chemilizer is driven by water flow, rather than electricity. It can run off water flows as low as 4L per hour and will work with gravity via as little as 1.5m. head of water.

The speed of the motor and pump are proportional to the water flow, ensuring Chemilizer will inject consistent amounts of chemical regardless of fluctuation in water pressure and flow. Chemilizer injectors are ideal for applications requiring a consistent level of chemical product to be injected into a water line, without the cost and hassle of an electric pump or filter.

- Chemilizer injectors are immune to electrical surge and power failure due to their water-powered motors
- Corrosion Resistant Construction – Silicone and Viton components available to withstand the most aggressive chemicals
- Chemical resistant – The chemical is injected after the motor; avoiding chemical contact with critical motor parts
- Works with any water source – the diaphragm water motor is unaffected by sand or minerals in the water
- Tailored to your specific dilution needs – Six dilution ratios available
- Easy and Low cost maintenance – typical maintenance is tool-free



General Specifications

Housing	Polypropylene
Fluid Maximum Temperature	100°F (38°C)
Fluid Minimum Temperature	34°F (1°C)
Maximum Vertical Suction of Concentrate	12 ft/3.6 m
Seal Material Available*	Silicone Viton
Recommended Accessories	Check valve, pressure regulator, flow restrictor
Thread Sizes Available	3/4" NPT, GHT, BSP

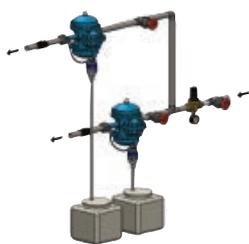
*Contact your representative for specific chemical information



Basic installation



inline installation



dual inline installation



bypass installation



tank feed installation

Model Number		Operating pressure (Bar)	Water Flow (Lit./hr)	Fixed Dilution Ratio	Fixed Dilution %
CH9000-209GB		0.2 - 5.8	5 - 2,500	1:128	0.78
CH9000-210GB		0.2 - 5.8	5 - 2,500	1:100	1.00

Model Number		Operating pressure (Bar)	Water Flow (Lit./hr)	Adjustable Dilution Range	Adjustable Dilution %
CH9000-AV1-BSPP	5%	0.2 - 5.8	5 - 2,500	1:20 - 1:64	1.5 - 5.0
CH9000-AV2-BSPP	2%	0.2 - 5.8	5 - 2,500	1:50 - 1:164	0.6 - 2.0
CH9000-AV3-BSPP	0.67%	0.2 - 5.8	5 - 2,500	1:150 - 1:500	0.2 - 0.67

HydroFoamer

Convenient cleaning and sanitising solutions

Outstanding value dispenser, delivers a rich, clinging foam for maximum cleaning performance.

HydroFoamer offers easy automatic dilution with convenient control of where and how solution is applied. On and off functions are finger-tip, trigger controlled on the spray nozzle. To rinse, the concentrate container is disconnected using an easy-to-operate quick coupler. This range of control helps personnel apply the solution where it's wanted.

- Built with Hydro's proven, reliable components – durability proven by years of use in the field
- Compact, easy to store
- Increased productivity of employees
- Enhanced safety (reduced exposure to concentrates)
- Non-electric, no installation required – just fill the concentrate container and connect the dispenser to a water source
- Maximum cleaning product performance
- Detachable clear water rinse wand included
- Small (1.4 l.) or large (2.8 l.) bottle
- Supplied ready-to-use
- Wide mouth bottles allow easy fill and no spillage
- Trigger gun operation
- Dilutes up to 125:1



Mo	Foamer bottle capacity	Rinse wand	Max flow rate	Approx. Dilution range H2O:Chem. (3 Bar, 1.0cp)
481GB	2.8 lit.	Yes	8 lit./min.	12:1 to 125:1
483GB	1.4 lit.	Yes	8 lit./min.	12:1 to 125:1

FoamMaster

Complete, ready to use, compressed air foam cleaning

FoamMaster power cleaning systems automatically dilute concentrated cleaning products with water, and use compressed air to generate a thick, rich, clinging foam.

Thanks to its small footprint, chemically-inert components and stainless steel surface, FoamMaster is ideal for use in cleaning and sanitising all locations including: food processing areas, restaurants, hospital areas, abattoirs, dairies and vehicles.

- Chemical-contact components are made of chemically - inert materials, allowing use with acids and aggressive cleaners
- Air and water flow can be controlled to deliver the foam thickness you need
- Built-in check valve prevents compressed air from forcing its way into the water line, allowing you to increase air flow for improved cleaning
- Clear water rinse facility allows you to rinse the area after cleaning without an additional hose
- Comes complete with 8 metres or 20 metres heavy duty discharge hose and brass foam/rinse nozzle with on/off valve.
- Also available on a cart, please contact us for this option.



Model	Products		Hose	Approx. Dilution range H2O:Chem. (3 Bar, 1.0cp)
890GB	1 + rinse	Wall mounted	8m. Red Goodyear	5:1 to 250:1
892GB	1 + rinse	Wall mounted	20m. Blue TPR	5:1 to 250:1
894GB	2 + rinse	Wall mounted	20m. Blue TPR	10:1 to 500:1

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