



a *PLAS-CONT* company



**Direct-Proportional-
Injectionpumps DPI**

Venturipumps

Spray-Systems

Peristaltic Pumps

ChemicalControlSystem

DosingSystems 2008



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Direct-Proportional-Injection Pump

For dosing chemical concentrates into water we offer our Proportional-Injection Pumps of the DPI-Serie. Using water pressure as the power source the chemical concentrate takes up the required percentage **strictly proportional** to the volume of water entering the dispenser. Inside the dispenser, the concentrate is mixed with water. The water pressure forces the solution downstream, where e.g. it can be filled into a container. The rate of additive can be constant or variable, depending on the DPI-model. Once set, the dispenser requires no further attention!

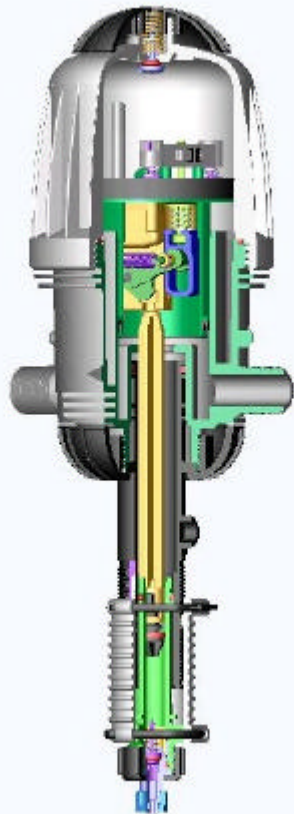
Advantages

- **Non-electric**-liquid dispenser, driven by water only
- Dose of concentrate will always be **strictly proportional** to the volume of water, whatever variations in flow or pressure may occur
- Pump-sealings made of **VITON**
- **On/Off-switch** to stop chemical-mixing
- **By-Pass-Model** for use of aggressive chemicals
- **Monitoring system** to achieve flow-parameters
- Eliminate any **risk of overdosing** because of the high metering accuracy which help safeguard the environment
- Applications:
 - Fertilization / Treatment (e.g. dosing of insecticides, pestcontrol)
 - Disinfection (e.g. dosing of acids)
 - Medication and disease prevention products
 - Hospitals (Hygiene, cleaning and disinfection solution)
 - Agro-Food Industry
 - Commercial kitchens
 - Dosing soluble oils for machine tools
 - Spraying concentrated (e.g. lubrication of bottle lines)



Operation
(On/Off)

Water inlet



Mixture outlet

Chemical Liquid
(Concentrate)
min. 0,2 – max.
10%





Specifications of following DPI-Pumps:

The Models of the DPI-Serie are operating with an on/off system or provide an air-release valve on top.

Technical specifications:

Water pressure: 0,2 bar to 6 bar

Volume flow: 30 l/h to 2.500 l/h

On/Off-switch (without switch on request)



DPI 12504 (Art.-No. 810137)

Variable rate of additive: 0,4% bis 4%

DPI 12505 (Art.-No. 810139)

Constant rate of additive: 5%

DPI 12510 (Art.-No. 810142)

Variable rate of additive: 3%-10%

Optional:

Back-Flow-Preventor, pressure reducing valve, filter, manometer, anti siphon valve are available.

As By-Pass:

For very aggressive chemicals they are injected with a by-pass before reach the mixing-body of the pump; all sealings are not get in touch with the aggressive medium.

DPI 12502 By-Pass (Art.-No. 810143)

Variable rate of additive: 0,2% to 2%

DPI 12504 By-Pass (Art.-No. 810144)

Constant rate of additive: 0,4% to 4%

As a monitoring unit of the Proportional-Injection-Pump we provide a brand new **Wash-Watch-System** (Art.-No. 810164).

Following parameters can monitor:

- Days remaining to the next wash (once the time has passed the warning light will blink)
- Amount of liters flowing through the pump during the wash cycle
- Date and amount of liters of the last wash
- Parameters of the last 10 cycles
- Battery voltage status

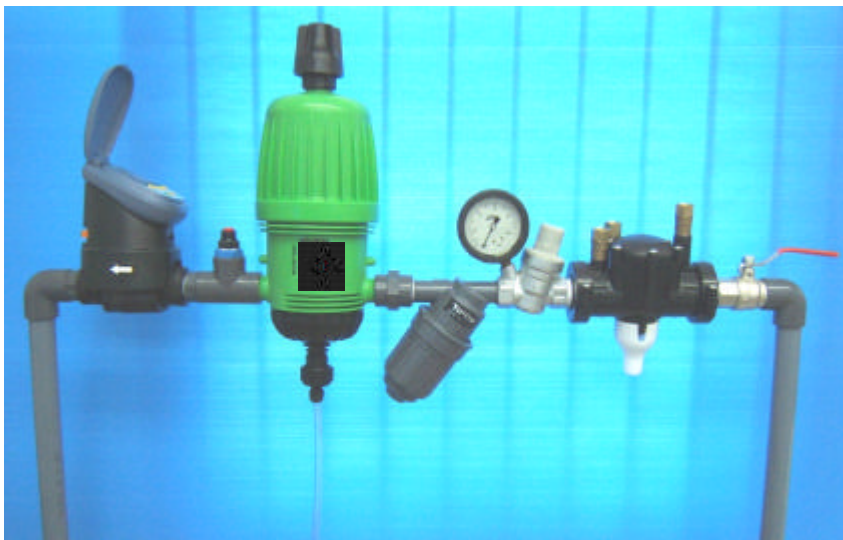
Wash-Watch provides a connection cable and an alert-light for the Proportional-Injektionspump.



Complete installation of DPI-unit:

We offer all individual requests with connections of your applications of DPI-pumps:

Flow-measurement-unit, anti siphon valve, DPI-Pump (0,8%), filter, manometer, back-flow-preventor, valve
(from left to right)



Applications of DPI-Pumps:





Controller Units for DPI-Pumps:

GALCON AC 24-8, model 800248

high-tech controller with 3 programs (A, B, C), weekly or cyclic;
each program can control up to 24 valves.
One box for 8 - 24 stations.
Programmable fertilizer valve and programmable lights control.
Numerous additional functions!



GALCON CONTROLLER 6001

for one station in DC, 8004 for 4 stations in AC with separate programming of each station. The model 6001 can be delivered together with a 3/4" or 1" valve.

- easy operation
- range for DC: up to a maximum of 5 metres
- range for AC: up to 1000 metres
- AC including transformer



REMOTE CONTROL, model 10.000

User-friendly programming by means of a dial, keys and a graphic LCD.
A remote control for an unlimited number of wireless controller modules.

- Memory capacity for up to 50 programs
- *independent of a power supply*

WIRELESS CONTROLLER MODULE

programmable and activated by remote control - model 10.000

- water-proof
- suitable for Dorot valves
- two 1.5 V batteries necessary
- minimum energy consumption



Venturipumps

For dosing chemicals simply into water we offer numerous Venturipumps. Using water pressure as the power source the chemical concentrate takes up the required percentage proportional to the nozzles (tips) on customers demand.

We separate Venturipumps to mix *one* chemical into water as well as *two* or *more* chemicals.

The exact mixture is dependant on various factors such as consumption of water, water pressure and viscosity of the chemical.

MEAT- and Food-Industry

We offer complete dosing equipment and accessories as e.g. CIP-solutions.

VENTURI SA25-2P (as well as complete Satellite Stations)

As we providing complete Satellite Stations we offer single satellites, pump-stations and portable pump mobile-stations.

All pump dosing unit provides an exact dosing of *one, two, three or four* chemicals (e.g. disinfection and foaming) due to separated **integrated stainless steel nozzle** (patented system). The working pressure allows up to max. 25 bar.

The entire dosing unit is made of stainless steel even the interior. Therefore a long lifetime of the unit is guaranteed. Further applications are available on request.



In each meat-plant there could be one or more areas functioning as *sanitary locks*. Such an area has to be equipped with some basic systems to ensure sanitary safety within the production areas. Selection of the units, of their types and number is determined mainly by expected number of people that will be using the lock and by the function of the rooms/ areas to be served.



Pump Stations

The pump unit is a basic element in the Central Cleaning System. Its main purpose is to increase the pressure of the water that is fed via piping system to satellite stations (SR). The framed version is designed for installations located beyond production areas.

Maximum number of stations working simultaneously are 2 satellites

Our ZRP-pumps consists of 2 or more pumps and provide pressure for 40 satellites or more simultaneously.

Further details on request.





Mobile Satellite Stations

Two in one – a mobile set: a pump with a built-in satellite station and the chemical container:

- Integral compressor to provide independence from any plant compressed-air systems
- A compartment for carrying required chemicals
- Modern and functional design
- Highest quality materials and components
- Handy operation
- Optional digital control panel and a self-retracting hose-reel
- Long-term and failure-free service

SM1KAV Mobile Main Station consist of a pump unit and an injector type dosing system. SM1KAV facilitates carrying out all hygienic functions (flushing, foam application, disinfection) directly within the production areas and also in those places where it is impossible to build an additional hydraulic installation.

Rated water flow: 30 ltr/min

Technical data:

Minimum inlet water pressure: 3 bar

Maximum outlet water pressure: 1 bar

Maximum inlet water temperature: 60C

Minimum inlet air pressure: 4 bar

Maximum outlet air pressure: 8 bar

Minimum air demand: 150 ltr/min

Water consumption during foaming: 7-9 ltr/min

Maximum water consumption: 1,5 m3/h

Flow-rate: 7-25 ltr/min

Dimensions:

Mass without accessories: 85 kg

Height: 1260 mm

Width: 600 mm

Length: 1000 mm

Power: 1,3[kW]

Voltage: 230 [V]



For further and detailed information to CIP-solutions please do not hesitate to contact us.

VENTURI SprayUnit

(Art.-No. 9402)

The SprayUnit is for dosing of *one* chemical liquid with water by e.g. filling a bucket. The unit is constructed for mounting onto a wall; quick release by direct coupling is convenient. The quantity of chemicals is determined by the diameter of the metering tip, which is adapted to the hose nipple of the suction hose.

When change the chemicals the user can **flush the pipes with clear water** as there may have built deposits inside couplings and hoses.

Advantages:

- back-flow-preventer is already integrated
- throughout the couplingsystem on the chemical side it is possible to work with 4 different chemicals or more;
- no cristalisation because of mix up chemcals inside the system

Body: Stainless steel

Dosing concentrate: 0,15% to 10,0%

(dependant on nozzle)

Working temperature: max. 60°C

Water pressure: Min. 2 bar / Max. 10 bar

Volume flow: 5-12 Liter/min

Incl. Accessories:

- 15m Hose (20bar/70°C)
- 2m Hose (20bar/70°C)
- Spray-nozzle with quick-release-coupling
- Installations-Kit

Optional:

Trolley-SprayUnit



VENTURI MiniMix I

(Art.-No. 9472)

The unit is constructed for mounting **directly onto a water tap** or mixing battery; quick release by direct coupling on to a hose.

Or the attached mounting set allows any wall mounting when necessary.

Accurate dosing concentrate: 0,15% to 10,0% (due to used Tip)

Temperature of liquid: max. 60°C

Working pressure: min. 2 bar / Max. 10 bar

Volume flow: 7-12 Liter/min

Body: stainless steel

Incl. Accessories:

- 2m hose (20bar/70°C)
with quick-release-coupling
- Installation-Kit



VENTURI MiniMix II

(Art.-No. 9477)

The dosing unit is optional approved with reflux protection device due to DVGW (E1919).



VENTURI MiniMix IV

(Art.-No. 9451)

Accurate mix of *four* chemicals from 0,15% to 10% in buckets, cleaning vans and cleaning machinery for optimum cleaning each time and saving on chemicals.

Temperature of liquid: max. 60°C

Working pressure: min. 2 bar / Max. 10 bar

Volume flow: 7-12 Liter/min

Body: stainless steel

Advantage:

Identification of chemicals facilitated with coloured hoses.



VENTURI 1 (Art.-No. 910130)

Mix of *one* chemical throughout different nozzles, which are insert into the chemical suction tube.

Concentrations:

1% to max. 43,6%

Temperature of liquid: max. 70°C

Advantage: The valves can easily cleaned by turning water-pressure backwards, *so the valve has not to be dismantled!*

Optional: magnetic valve and timer



III.: VENTURI 1 with magnetic valve

VENTURI 2 (Art.-No. 910174)

The dosing of additive starts by pushing the button. The button can fix in on-position once dosing time requires.



III: VENTURI 4

VENTURI 4 (Art.-No. 910175)

Four-doser for 4 different chemicals (basically similar to VENTURI 2)

Incl. 2m PVC-tube 5x1,5 mm with filter

FoamClean

With a *foam sprayer* connected directly to a tap combined with the use of a chemical agent, one can effectively clean all types of production lines and wet areas.

The method is simple:

- A layer of foam is dispensed via the sprayer
- Whilst the chemical soaks, the operator can treat other areas
- After a short interval, the foam is easily dispersed of through the use of SprayClean-sprayer, which has a fan spray option that "sweeps" all surfaces clean



FoamClean *ERGO*

This foamer is the *new* ergonomic line which is in function similar to SprayClean (see above).

For more details please ask our service.



Peristaltic Pumps

Peristaltic pumps are used when accurate and very exact volumes of chemicals have to be pumped in a water-circulation. This means e.g. in water cleaning processes such as professional dishwashing machines or washing machines used in bakery-production. The dosing can be optimized by a conductivity control unit inside the pumps.

VARIO D6.0 (VARIO R6.0)

This peristaltic pump is equipped with a speed-regulated motor (230V or 24VAC or 12VDC) due to protection class IP 55 for external use.

It is mainly used for chemicals (detergent/rinse aid) inserting into professional dishwashing machines.

Specifications:

Input: 230V (12V, 24V available), 4W

Volume flow: 0,0 to 6,0 l/h speed regulated

Tube material: Tecnoprene

Counter Pressure: 1 bar

(pump also available with 3 bar for rinse aid)

Protection Class: IP55

Incl. Accessories:

- Suction filter PVC 4m (5x1,5mm)
- Installation-Kit

Optional:

- Check valve, tank injector stainless steel, suction nozzle PVC, Spare parts



VARIO 6.6

This peristaltic pump based on the VARIO D6.0 and R6.0 for detergent and rinse aid chemicals. To simplify the mounting they are pre-installed on a plate and are for use mainly for tunnel machines, which are not providing any rinse pump.

Specifications:

Detergent pump:

Volume flow: 0,0 to 6,0 l/h speed regulated

Tube material: Tecnoprene

Counter Pressure: 1 bar

Rinse aid pump:

Volume flow: 0,0 to 6,0 l/h speed regulated

Tube material: Silicon

Counter Pressure: 3 bar

Protection Class: IP55

Incl. all accessories

Peristaltic Pump **REGO PS20 RN**

For internal using mainly in undercounter- and conveyor machines the REGO are time-regulated dosers due to IP42.

Specifications:

Volume flow: 0,28 to 2,8 l/h

Tubematerial: **Norprene** (pharma business)

Counter Pressure: 1 bar

Incl. Suction filter PVC 4m (5x1,5mm), tank injector stainless steel



Peristaltic Pump **REGO KLAR PS10RSi**

Volume flow: 0,14 to 1,4 l/h

Tubematerial: Silicon

Counter Pressure: 3 bar

Incl. Suction filter PVC 4m (5x1,5mm)



For further and detailed information for peristaltic pumps and their applications please contact us.

Dosing of chemicals with the permanent control system CCS

An evolution on the dosing market is the **unique control system for any chemical.**

The so-called chemical control system CCS is to supervise the usage of detergent and rinse aid.

This system is **a permanent control unit** for the type of liquid which has to be in use as well as for the fill-up-level of the container.



Innovations
...made in Germany!

Any failure is indicated by an optical and acoustical signal.

As soon as the chemical mixed up with a different one or the fill-up-level is near zero the pump stops and the alarm switch on. Throughout this control system the washing result can be absolutely re-produced!

This is a **novelty on the market.**



For further information please feel free to contact us:



Flughafenstraße 52a, Haus C
D-22335 Hamburg / Germany
Fon : +49 (0)40/53 00 360 Fax: /53 29 92 35
info@aquapump.de