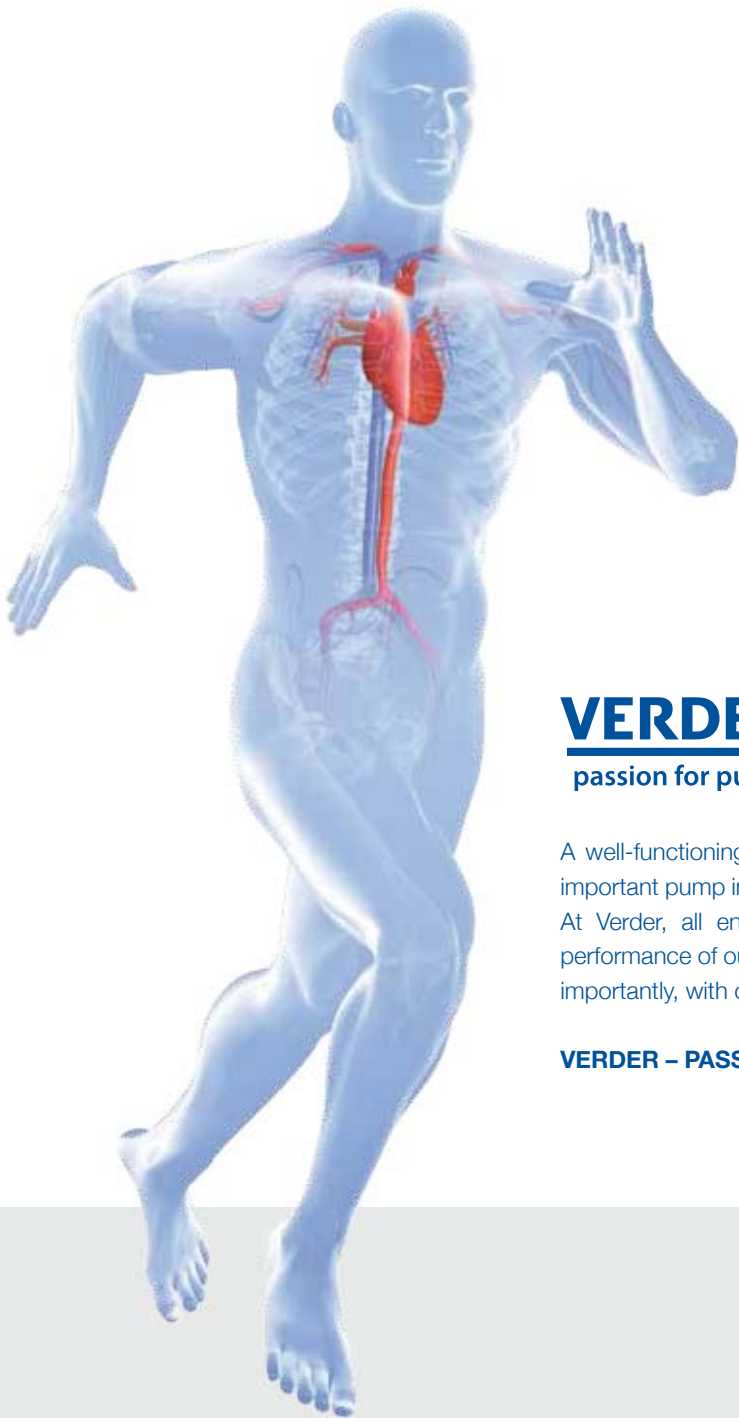




## VERDERDOS VE

Solenoid dosing pumps & dosing systems

VERDERDOS  
Solenoid dosing  
pumps & systems



## **VERDER**

passion for pumps

A well-functioning pump helps you succeed. That applies certainly to the most important pump in life, the human heart, but the same goes for pumps in business. At Verder, all energy and attention is focused on improving the quality and performance of our pump and service. We do so with energy, dedication and most importantly, with our heart.

**VERDER – PASSION FOR PUMPS**

## Verderdos

### Solenoid dosing pumps & dosing systems

*Verder has been established in the manufacture and sales of pumps for 55 years. In this time, Verder has become an excellent provider to key markets such as clean and waste water treatment, food processing and the environmental industries. Verder specializes in positive displacement pumps. The Verderdos dosing range consists of electromagnetic solenoid pumps and professional instruments.*



Verderdos dosing systems and dosing pumps are ideal pumps for precise dosing in many applications where accuracy is crucial. All products are CE certified. Recommended applications include water treatment, chemical dosing, cleaning/hygiene, vending machines, laboratories & analysis, bottle filling and other OEM applications.

Verder engineers are always seeking to further improve the user-friendliness and the accuracy of our dosing systems and panels through research and development with our customers.

In water treatment, Verderdos dosing pumps and systems are used for the dosing of chemicals to neutralize all kinds of polluted water.

Chemical dosing is most often used for the treatment of sewage, as part of the anaerobic digestion process for making energy from organic waste and for cleaning industrial effluent to be returned to the natural water course. Typical applications include pH buffering, chemical dosing, disinfection, removing phosphates and the dosing of lime.

#### **Verderdos industry sectors:**

- Municipalities
- Cleaning & hygiene
- Food & beverage
- Waste water treatment
- Dairy
- Agriculture
- Pool & spa
- Pharma

#### **Benefits:**

- Virtually wear-free drive (only 1 moving part)
- No lubrication on bearings or shafts
- Easy to maintain and to install
- Extremely low maintenance and repair costs
- Excellent flow characteristics



## Verderdos series VE1

Custom built solenoid powered diaphragm dosing pumps with flow rates from 1.5 up to 15 litres per hour and pressure range up to 12 bar. An extended program of materials and accessories is available for dosing almost all chemicals in all water treatment applications.

### Models:

#### → VE1-C model

Digital solenoid pump with manual adjustable flow rate. Potential free, adjustable from 0 to 180 pulses per minute via touch controls.

#### → VE1-I model

The "I" version is an electromagnetic dosing pump, for proportional pumping from pulses received from a water meter. Dosing function 1/n or 1xn, multiple dosing with memory function. Free programmable.

#### → VE1-MA model

Proportional dosing pump to an external 0/4-20mA signal, especially suitable for accurate and reliable dosing of chemicals in water treatment applications and for the process industry.

#### → VE1-PH model

The VE1-pH is a proportional dosing pump, digital adjustable, with built in pH controller. The VE1-pH pump is excellent for the pH control in water treatment but also for swimming pools.

#### → VE1-RX model

The VE1-Rx is a proportional dosing pump, digital adjustable, with built in Redox controller. The VE1-Rx pump is excellent for dispensing chlorine.

### VE1-series main features:

- Automatic recognition of the efficiency of the probe
- Suitable for dispensing from software
- Programmable
- Proportional range setting
- PVDF pump head, optional PP
- Manual bleed valve
- Protection class IP 65
- SCHUKO plug
- On/off switch



### Options:

- Probes (ph/Redox/Chlorine Cells)
- Probe holders
- Suction lances
- Mixers
- Tanks
- Water Meters



## Verderdos series VE3

Custom built solenoid powered diaphragm dosing pumps with flow rates from 2 up to 24 litres per hour and pressure range up to 18 bar. The Verderdos VE3 advanced solenoid pumps are suitable for multi-functional dosing. Available with digital flow rate reading, proportional range selection and internal controls for pH/ORP and chlorine.

### VE3-series main features:

- Built in controller
- Different function modes (Constant, ON/OFF, Proportional)
- Overdose alarm, set by software
- Start time delay setting
- Over range and under range signal
- Flow indication in % instant by instant
- Protection class IP 65
- SCHUKO plug
- On/off switch



### Models:

- VE3-MF  
Multi function digital dosing and metering pump through water meter and with several function modes.
- VE3 PH/RX  
Electromagnetic, digital proportional dosing pump for the control of pH or Redox (pH or Redox needs to be defined).
- VE3-CL  
Electromagnetic, digital proportional dosing pump for chlorine dosing.

### Options:

- Level probe predisposition
- Flow switch
- Probes (pH/Redox/Chlorine Cells)
- Probe holders
- Suction lances
- Mixers
- Tanks
- Water Meters

## Verderdos

### Control equipment

**Verderdos solenoid driven metering pumps can be used in combination with a professional digital microprocessor controller with LCD display for control of:**

- pH: 0-14 pH
- Redox: 0-999 mv
- Temperature: 0-99 °C
- Chlorine: 0-5 PPM
- Conductivity: 0-20 mS
- Amperometric and potentiostatic

#### Features:

- 2 rows LCD backlit display
- Relays dry contacts
- 0/4 - 20 mA proportional digital output
- Password protected
- Operating temperature -10 - +50°C
- Input for flow sensor
- 1 Frequency output



#### Technical data:

- Power supply 90-260 V ~
- No.1 frequency relay dry contact
- No.2 independent relay dry contact 8 A MAX
- No. 2 0/4 ÷ 20 mA proportional outputs max load of 600 Ohm
- Storage temperature -20/+ 60°C
- Max operating humidity 90%
- PP casing
- IP 65
- Ethernet Interface RJ45 optional

## Verderdos Accessories and ancillary equipment

**To enlarge the application areas of the Verderdos solenoid dosing pumps, an extended program of accessories and ancillary equipment is available.**

#### Pump parts

- Injection valve is either in Polypropylene (PP) or Stainless Steel (SS)
- PP injection valve with internal lip valve ½"
- PP injection valve with ball valve and Hastelloy spring ½"

#### Electrodes

Electrodes for controllers: pH Electrodes, Redox Electrodes, Conductivity Electrodes, Temperature Electrodes, Chlorine cell and Electrodes, Oxygen electrodes. Each electrode reads one measurement.

#### Probe and Probe holders

For all applications probe and probe holders are available for pH, Redox and conductivity. Coax cables and electrode holders, buffer solution and level probes are available in several models.

#### Mixers

A perfect solution to mix chemicals in small tanks (30-1000 litres). The shaft is made of stainless steel for maximum strength against mechanical stress. The mixers are available in two standard speeds: 70 rpm for slow rotation and 1400 rpm for fast rotation, depending on your application. Other speeds on request. The mixers can be equipped with single or 3 phase motor.

#### Tanks

High density polyethylene tanks.





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minute

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**Do you have questions?** If you have questions concerning our pumps or special applications, please do not hesitate to contact us. [www.verderdos.com](http://www.verderdos.com)

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