

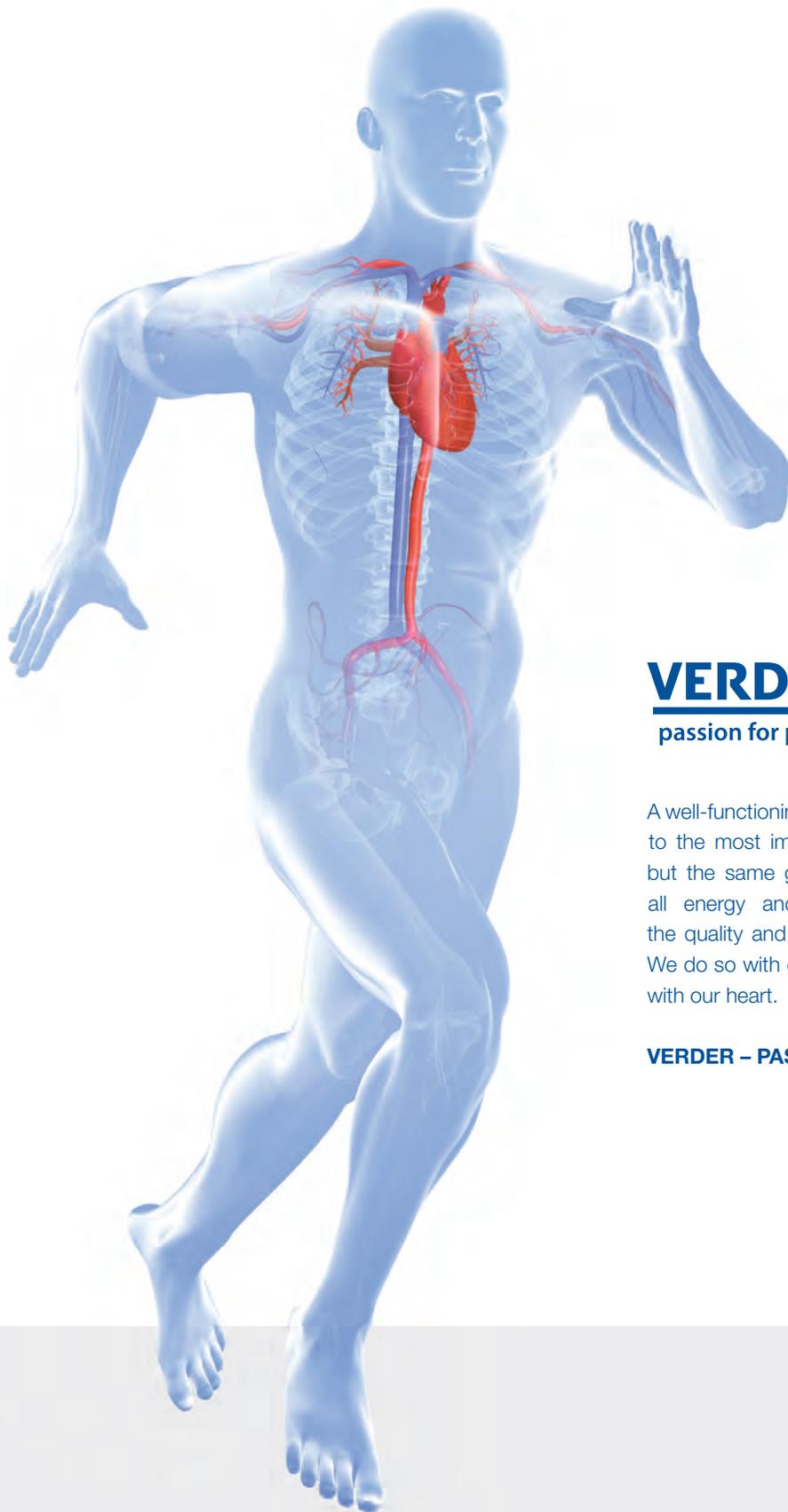
VERDERFLEX VANTAGE 5000

For the Biotech and Pharmaceutical Market



Benefits

- Simple
- Safe
- Secure



VERDER

passion for pumps

A well-functioning pump helps you succeed. That applies 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



THE VERDER GROUP

- 1 Company
- 27 Countries
- 55+ Years of expertise
- Global network
- Local distributors
- In-house service & maintenance
- A solution for every application

The Verder group is a family owned business formed over 55 years ago in the Netherlands; the group consists of a worldwide network of production and distribution companies. Group companies are involved in the development and distribution of industrial pumps, pumping systems, high-tech equipment for quality control, research, and development into solid material (solids sample preparation and analytical technologies). The Verder Group employs over 1600 people and has annual sales of \$ 450 million (€ 380 million).

Our US operation is headquartered in Macon, Georgia where Sales, Marketing, Engineering and Warehousing are located.

Verderflex peristaltic pumps

Verderflex is a core Verder group product, solving pumping problems in such varied industries as: chemical manufacturing, food production, environmental remediation, water treatment, biotech, pharmaceutical, and general manufacturing, while also developing custom OEM solutions.

Verderflex peristaltic pumps are manufactured in the UK within ISO 9001, ISO 14001 and ISO 18001 accredited facilities, and the products have a range of food and similar industry specific certifications.

Verderflex peristaltic hose and tube pumps are the ideal solution for demanding environments, as well as "difficult to pump" applications. These range from small OEM pump modules and precision metering tube pumps for shear sensitive cell cultures and broths to the world's largest high pressure hose pumps for dense, solids-laden slurries and highly abrasive, viscous, or corrosive liquids.

VERDERFLEX

VANTAGE 5000

Special features



✓ **State of the art**
High definition 4½" LCD Touch Screen

✓ **Dosing & batching**
Standard programs

✓ **Wide range of control options**

- Start the pump using switches or the touch screen
- Remotely control speed by 0-10 VDC, 4-20 mA, RS485, Modbus® & Profibus®

✓ **Leak detection**
Standard on every pump

✓ **Standard tube sizes**

- 1/8" (1.6 mm) & 3/32" (2.4 mm) wall thickness
- Color Coded Rotors eliminate errors

✓ **Simple Programming**
Icon based programming on touch screen



What are **your benefits** using a Verderflex Vantage 5000 pump?

Verderflex's precision pumps are a safe choice for your process.
The three core elements of every Verderflex pump are:

Simple

- *Icon based programming on touch screen*
- *Direct entry of flow or dose*
- *Control pumps using 4 to 20 mA, RS 485, 0-10 VDC, Profibus or even another Vantage 5000*

Safe

- *Real time clock time stamps events*
- *Back up the pump using USB port*
- *Import jobs to 2nd pumps to eliminate intra-pump variations*

Secure

- *Download job records*
- *Download pump operational history and settings*
- *Onboard storage via USB*



VERDERFLEX **VANTAGE 5000**

Powerful record keeping and control options

1. Record keeping

- Pump's onboard memory stores time-stamped activity records
- Download via USB for storage & import for further analysis in Excel for PAT

2. Compliant

Vantage 5000 meets US, EU and Canadian safety standards

3. Secure

Import, Export & Backup pump settings using USB v2 Socket

4. Safe

Grounding Point



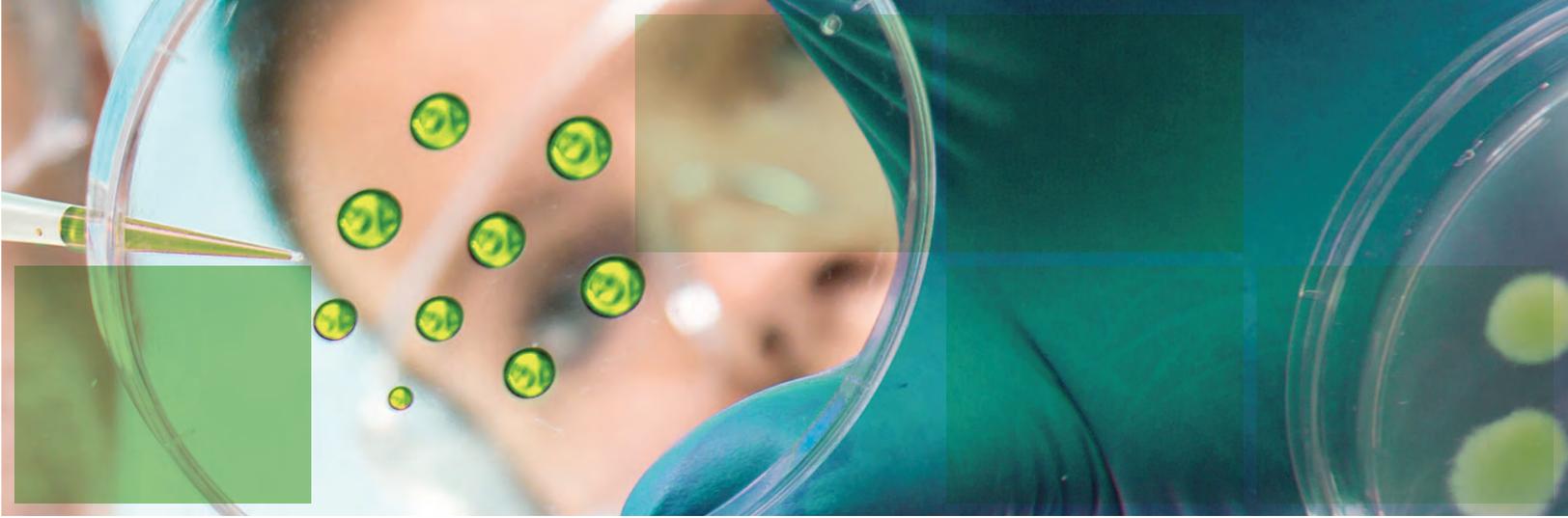
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5-40C / 41-104F
~100-240VAC 50/60Hz
230W IP66 NEMA 4X



UL61010-1
CSA C22.2 No 61010-1
E114173

VANTAGE 5000
Part No. 152.XXXX
SERIAL No.
XXXXXXX



No moving parts are in the liquids stream

- Aseptic pumping
- Eliminates the risk of cross contamination between product and pump
- Pump is easily and completely cleanable without disassembly - tubes can be sterilized by steam (SIP) or chemicals/detergents (CIP).
- Continuous tubing pumps up to 30 PSI (2 Bar)
or: Self contained Vantage 5000 tube elements with Quick Release Hose Barb and Tri Clamp connections.

Easy to control, precise dosing

- No internal backflow (or slip) and deliver accurate doses
- High resolution 4000:1 turndown drive provides precise dosing control
- Direct entry of flow or dose values, or pumps can be controlled using 4 to 20 mA, 0-10 VDC RS 485, Profibus or even another Vantage 5000



5. Analog feedback & control

- Remotely control pump operation & speed with external signals
- Outputs give real-time operational confirmation or
- 4 to 20mA Input & Outputs
7 x Dry Contact Inputs & 4 x Dry Contact Outputs

6. Communicate digitally

- Interface with the pump via computers or PLCs
- Modbus & RS 485 Control via M12 Port
- PROFIBUS via dedicated connector



How **Vantage 5000** in biotech applications

Tubing

A quality tube is at the heart of a peristaltic pump.

Verder produces a wide range of standard sized 30 PSI (2 Bar)

Rated materials include:

- Verderprene – a general purpose long-life tube and
- Platinum Cured Silicone – low residual Food Grade & USP rated tube

The tube is the only part of the pump that comes into contact with the media

Each roll of tube or tube assembly is supplied with:

- Batch specific Certificate of Conformity
- Batch specific bar coded label
- Ultra violet light protected packaging eliminating risk of tube degradation

For Platinum Cured Silicone a comprehensive material validation package is available.





pumps can help ...

Gentle pumping action, maintain cell structures

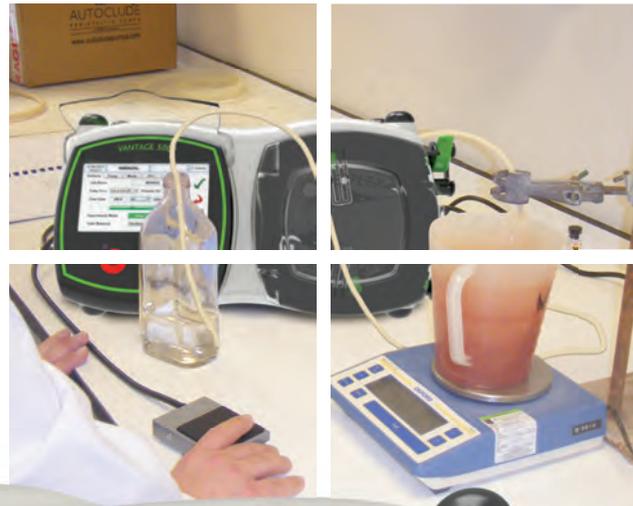
- Ideal for shear sensitive products, "live" broths and cell cultures
- No product damage
- Shear rate $<150 \text{ s}^{-1}$

Dry running

- No pump damage if the media source runs out, or the liquid flow is interrupted
- The tube is compressed between the pump head and the stainless steel rollers with integral bearings

Reversible rotation

- The pump can be used to empty lines or clear blockages





Contact Verder

If you would like to know more about Verderflex peristaltic pumps please visit our website www.verderliquids.com where you will find the full breakdown of our pump range as well as application stories, latest news, technical datasheets, and more.

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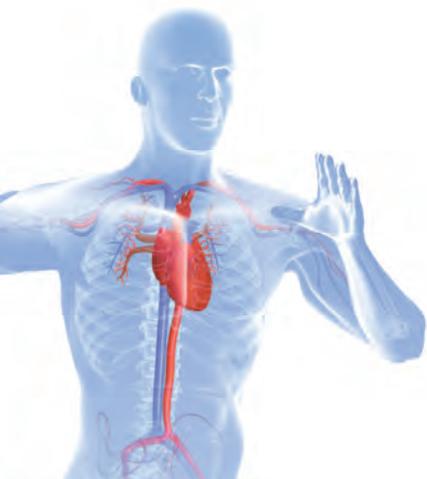
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If you want to know more about Verder, don't hesitate to contact us: info@verder-us.com or visit our website www.verderliquids.com



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