

**VERDERFLEX<sup>®</sup>**

# Peristaltic Cased Tube Pumps

Operating Manual

Verderflex Vantage 3000 B

EZ

Version 1.1v-01/2019

Print-No. 01



**VERDER**  
passion for pumps

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## Vantage 3000 B EZ



The information in this document is essential for the safe operation and servicing of Verderflex Vantage 3000 pumps. This document must be read and understood thoroughly prior to installation of unit, electrical connection and commissioning.

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# 1 About the product

 The Vantage 3000® range of pumps deliver highly accurate and repeatable flow rates with a quick and easy setup. Vantage 3000 B EZ is a manual control, easy tube load pump with a stackable pump head and requires low maintenance.

## 1.1 Key features

- Variable flow peristaltic pump
- Low maintenance replaceable brush motor
- Clockwise and anti-clockwise rotation
- Self priming
- Easy tube load pump head for quick tube change
- Stackable head options

# 2 Warranty

 The manufacturer does not accept any liability for damage resulting from disregard of this documentation.

This product is guaranteed to be free from defects in material or workmanship for a period of 24 months from date of purchase, excluding consumable items such as cartridges, tubing or rollers. Products out of guarantee period will be repaired for a nominal charge.

# 3 Pump returns

 All returned pumps must be decontaminated before being returned. The Decontamination Certificate is separately requested and must be returned before or with the pump delivery. For your protection, items returned must be carefully packed to prevent damage in transit and insured against loss.

# 4 'EC' Declaration

 The Vantage 3000® range, complies with EMC 2014/30/ EU as well as Machine Directive 2006/42/EC.

Installation of this pump into other equipment must be in accordance with relevant Directives/Standards and be carried out by a suitably competent person.

# 5 Safety

 The manufacturer does not accept any liability for damage resulting from disregard of this documentation.

## 5.1 Intended use

- Only use the pump to handle compatible fluids as recommended by the manufacturer.
- Adhere to the operating limits.
- Consult the manufacturer regarding any other use of the pump.

## 5.2 Prevention of obvious misuse

- Note the operating limits of the pump with regard to temperature, pressure, flow rate and motor speed.
- Do not operate the pump while the inlet/outlet valve is closed.
- Only install the pump as recommended in this manual. For example, the following are not allowed:
  - Installing the pump without proper support.
  - Installation in the immediate vicinity of extreme hot or cold sources.
- Do not use in conjunction with life support equipment
- Do not connect pump to the human body

 **DANGER**

### Risk of electrocution!

- ▶ Make sure that the electrical information on the rating plate agrees with the power supply.
- ▶ Isolate the main supply before replacing the tube /cartridge
- ▶ Isolate the main supply before removing the enclosure cover

## 6 Maintenance



Motor and Gearbox are lubricated for life and should not require attention. Rotor rollers are self-lubricated. Pump tubing will not last forever; establish suitable tube replacement schedule to prevent inconvenient tube failure

## 7 Installation



Vantage 3000® pump head has the advantage of quick and easy tube change. Depending on the application and requirement the tubes can be replaced or sterilised with a very short lead time

- Pump should be installed by suitably qualified personnel
- Pump should be sited on stable horizontal surface
- Allow free flow of air around pump
- Tube should not be allowed to kink.

## 7.1 Installing the tube

1. Flip the lugs on both sides of the pump head to lift the top section
2. Once the head is lifted as shown in figure, insert the tube over the rollers.
3. Flip the lugs on both sides of the pump head to lock the top section down.
  - Adjust the tube clamp to hold the tube in place and avoid slip
  - Adjust the tube clamp on both sides of the pump head to the tube diameter.
  - If a tube slip is observed, tighten the tension on the clamps
  - Alternately, if a reduced flow is observed, reduce the clamp tension.

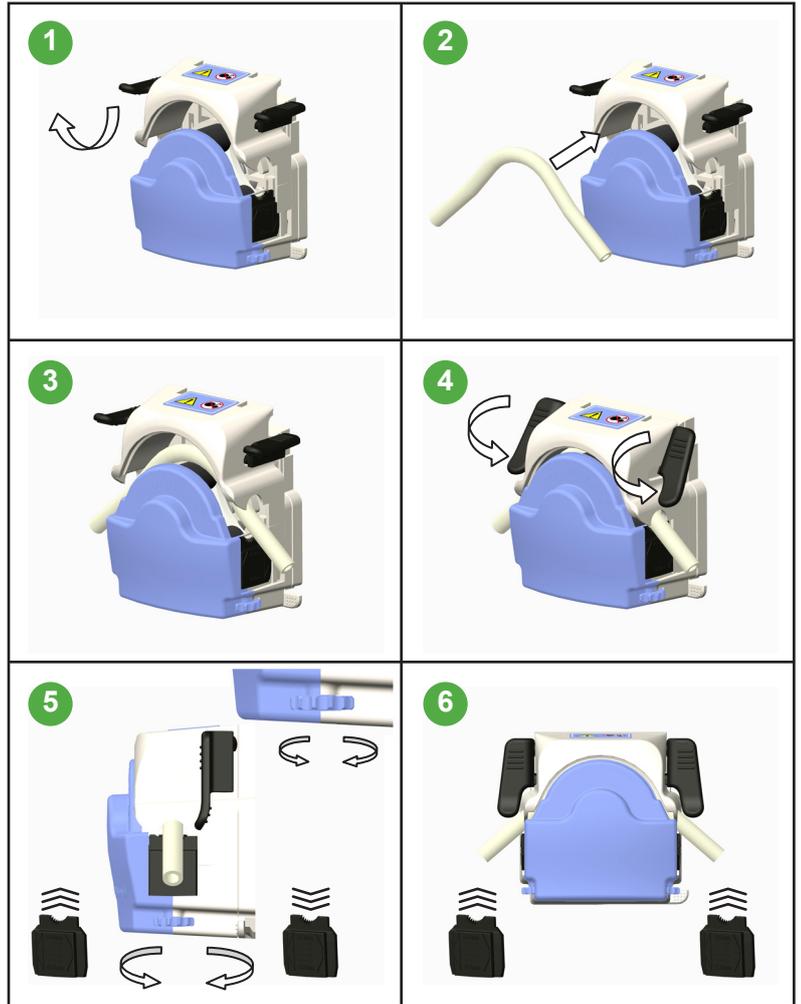


Table 1 Replacing the pump head

## 7.2 Replacing the pump head

1. Offer pump head to backplate at angle locating drive shaft and rotor shaft with pump head at approx 45° to vertical, locating backplate lugs in housing.
2. Push and twist until location lever clicks into position.
3. Remove by depressing location lever and twisting pump head counter clockwise 45°.

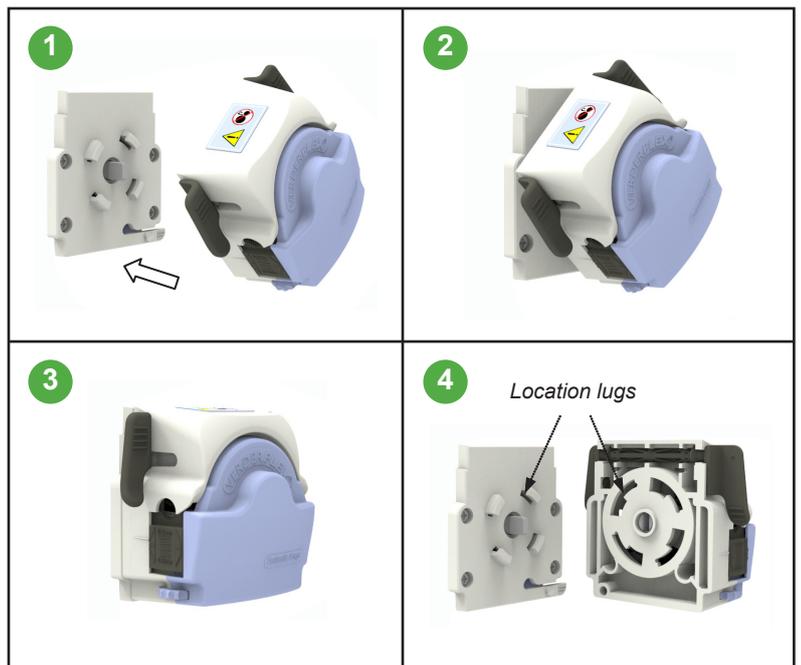


Table 2 Replacing pump head – EZ head

## 8 Operating the pump

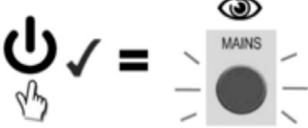
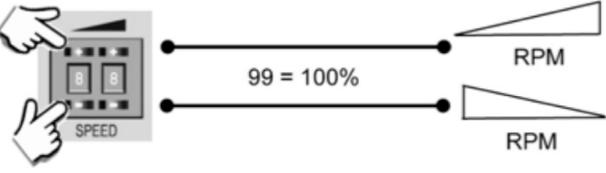
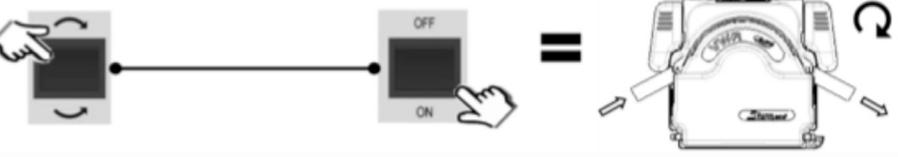
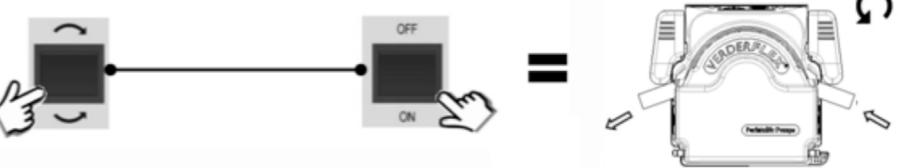
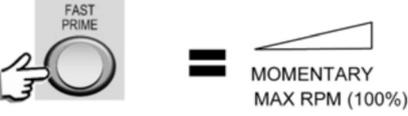
<p>1. Switch on the main power supply</p>	
<p>2. Set the dosing rpm</p>	
<p>3. For clockwise rotation, set to Clockwise and switch on the rotor</p>	
<p>4. For Counter clockwise rotation, set to Counter clockwise and switch on the rotor</p>	
<p>5. Press fast prime for momentary maximum speed.</p>	

Table 3 Operating the pump

## 9 Declaration of Conformity

<p><b>EC declaration of conformity according to machine directive, appendix II A</b></p> <p>We,                  VERDER Ltd., Unit 3 California Drive, Castleford                  hereby declare that the following machine adheres to the relevant EC directives detailed below</p> <p>Designation    <b>Vantage 3000 B EZ</b></p> <p>EC directives:</p> <ul style="list-style-type: none"> <li>• Machine Directive (2006/42/EC)</li> <li>• Low-voltage directive (2014/35/EU)</li> <li>• EMC directive (2014/30/EU)</li> </ul> <p>Applicable harmonized norms:</p> <ul style="list-style-type: none"> <li>• EN ISO 12100: 2010</li> </ul>		
<p><b>Manufacturer</b></p>	<p>VERDER Ltd.                  Unit 3 California Drive                  Castleford                  WF10 5QH                  UK</p>	
<p><b>Date: 01/ 01/ 2019</b></p>	<p><b>Company stamp / signature:</b></p> <p><i>Ben Allmond</i></p> <p><b>Ben Allmond</b>                  Head of Development/Construction</p>	<p><b>Company stamp / signature:</b></p> <p><i>Paul Storr</i></p> <p><b>Paul Storr</b>                  Head of Quality</p>

Table 4 Declaration of Conformity

## 10 Appendix

### Pump Specifications

#### 10.1 Specification Ratings

Size	Value
Operating temperature	+5 °C to +40 °C (41°F to 104 °F)
Storage temperature	-40 °C to +70 °C (40°F to 158 °F)
Humidity (non-condensing)	long—term ≤ 80 %
Maximum altitude	Setup height above sea level ≤ 2000 m (6560 ft)
Power consumption	<230 W
Supply voltage	100-240 VAC 50/60 Hz <230 W
Maximum voltage fluctuation	+/-10% of nominal voltage. A well regulated electrical mains supply is required along with cable connections conforming to the best practice of noise immunity
Installation category (overvoltage category)	II
Pollution degree	2
IP	IP66 to BS EN 60529
dB rating	<70dB(A) @ 1.0m *

Table 5 Specification Ratings

\* Sound pressure level is measured by the responsible body at both operators position in normal use and at whatever point 1.0m from the enclosure of the equipment that has the highest sound pressure rating.