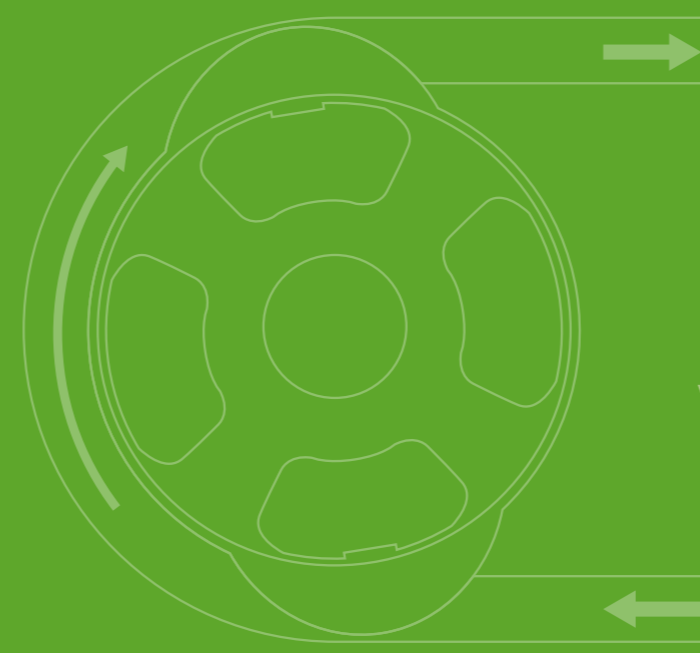


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**Any questions?** You may still have questions and/or comments after reading this brochure. Please feel free to contact us on +44 (0)1924 221 020. You can also respond via email to [info@verderflex.com](mailto:info@verderflex.com). For more information about Verderflex please visit our website [www.verderflex.com](http://www.verderflex.com)

## Peristaltic Pumps Overview



Verderflex®  
The Green  
Peristaltic Pumps

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**VERDER**  
passion for pumps



## We put our heart into 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. In our transparent Verder organization all energy and attention is focused on improving the quality and performance of our pumps and our service. We do so with energy, dedication and - most importantly - with our heart.

**VERDER – PASSION FOR PUMPS**

## Verderflex® Peristaltic Pumps

*Verderflex® is one of the largest manufacturers of peristaltic pumps used in multiple industries such as chemicals, food, environment, water, mining, OEM and general industry. Within these industries, pump requirements vary enormously, dependent upon the working environment and duty cycle. To ensure we provide the best solutions Verderflex® analyse and monitor industrial trends as well as maintain close relationship with customers.*



Verder Ltd have developed the Verderflex® range of peristaltic hose and tube pumps to dose, meter, transfer, re-circulate & dispense liquids and chemicals, solving many industrial and process issues. The comprehensive Verderflex® pump family ranges from the smaller OEM pumps, used in vending machines and similar equipment to the world's largest hose pumps used in the harshest industrial applications such as precious minerals production. In such diverse industries, Verderflex's reliable, innovative, high performance, peristaltic pumps solve difficult pumping problems in the toughest conditions.

### The advantages of working with Verderflex®

#### **Investment in technology**

Verderflex® continually invests a significant proportion of the company's turnover back into research and development so that the company remains at the cutting edge of technology. New developments include the Dura 55 patent pending port flange system and rotor stall protection,

Vantage 3000 cased drive tube pump with new features including 10 program dosing memory, plus the award winning Dura 5/Dura 7 High Pressure Low Volume (HPLV) Hose Pumps.

#### **Confidence**

Verderflex® has established a global network of pump partners providing a link between differing end user industry requirements and the design and development team in the UK. This network consists of a mixture of independent distribution partners and Verder Group offices, which has developed over the 50 year period to support Verderflex's sales in Europe, Africa, North and South America, Australasia, China and most recently, India.

#### **Single source solutions**

a wide and complementary range of pumps allows you to source your pumping needs from one company, reducing your costs.

Years of experience providing pumping solutions have given us valuable expertise and knowledge so Verderflex® can supply the most appropriate and reliable products.



## Key features of Verderflex® Peristaltic Pumps

### Abrasion resistant

Hose life is not related to a medium's abrasive qualities, unlike other pump types such as centrifugal and progressing cavity pumps.

### Dry running and self priming

Peristaltic pumps do not require pumped fluid to be continually present pumps can run dry, without costly downtime or repairs. The recovery of the hose or tube creates a powerful dry self-priming action.

### Pumps Off Gassing Liquids

Peristaltic pumps can easily move liquids containing entrapped air or that can 'offgas', such as yeast or sodium hypochlorite etc.

### Reversible

Peristaltic pumps are reversible and can be used to empty lines or clear blockages.

### Solids handling

Verderflex hose pumps can pump slurries containing up to 80% solid content with slurry SGs in excess of 2.0.

### Gentle pumping action

Peristaltic pumps have a gentle, low shear pumping action, ideal for shear sensitive products including flocculants and bacterial broths. They have even been used for pumping live fish.

### High suction lift

The powerful suction provided by the recovery of a re-enforced hose gives hose pumps suction lift capabilities up to 9.5m of water.

### Sealless design

Peristaltic pumps have no seals in the fluid path avoiding issues such as leaks of corrosive chemicals and ongoing maintenance.

### No slip

The pumps have no internal backflow giving accurate dosing without slip.

### Accurate dosing

The pumps are accurate in dosing, they have a repeatability of ±1% and metering capabilities of ±5%.



## Peristaltic Industrial Hose and Tube Pumps

*Verderflex® Industrial peristaltic pumps are extremely robust, ideal for heavy duty operations on continuous or intermittent duty cycles. They are simple to use, easy to control, versatile and a reliable way to pump liquids. There is a Verderflex® Industrial pump for most medium to high pressure pumping requirements.*

## Verderflex® VF hose pump

*The Verderflex® range of industrial hose pumps are a proven high quality family of peristaltic pumping solutions. These pumps reduce downtime, minimise maintenance costs and provide easy to operate and reliable solutions in difficult pumping situations.*



Flow rates	3 l/h to 90 m <sup>3</sup> /h
Pressures	up to 16 bar
Hoses	EPDM, NR, NBR, NBRF and CSM hoses
Additional	- EHEDG standards for use in food, sanitary and pharmaceutical industries
	- World's largest high pressure hose pump

### Applications

- Brewing
- Chemical processing
- Mining
- Water and wastewater
- Food
- Anaerobic digestion & biogas

### BENEFITS

- Specially designed hose construction to reduce fatigue, resulting in longer hose service life
- Disaster proof hose connection for easy maintenance
- Close coupled drive design
- Rigid pump housing design for heat dissipation and strength
- Proven Design





## Verderflex® Dura hose pump

The Verderflex® Dura is the first real advance in hose pump technology since the high pressure hose, combining the compactness of a close coupled pump with all the benefits of the traditional long coupled pump.

Flow rates	<1 l/h to 15.3 m <sup>3</sup> /h
Discharge press.	up to 16 bar
Hoses	NR, NBR, EPDM, NBRF, CSM and Verderprene
Feature	Air gap between pump casing and gearbox for zero risk of cross contamination

### Applications

- Brewing
- Chemical processing
- Mining
- Water and wastewater
- Ink transfer
- Fly ash slurry



### ADVANTAGES OF THE VERDERFLEX® DURA 5 - 35 HOSE PUMP

- One piece flange design
- Simple flange assembly reduces hose change downtime
- Air gap between pump casing and gearbox for zero risk of cross contamination
- Long coupled design with close coupled advantages
- 70% smaller footprint
- Quick and easy maintenance

### ADVANTAGES OF THE VERDERFLEX® DURA 45/DURA 55 HOSE PUMP

- Rotor supported independent of the gearbox
- Drain channel for gearbox protection
- Shimmable rotor shoes for precise control of discharge pressure and optimum hose life.
- Slip bush protects against a stalled rotor
- Fully supported rotor shoes



## Rapide Tube pumps

The Verderflex® Rapide is a range of simple to operate industrial tube pump. The family offer customers pump choices that are compact, simple to use and requires no special tools for a tube change.



Flow rates	0.25 ml/min to 17 l/min
Pressure range	2 bar
Options	Single phase motors/multi channel

### Applications

- Chemical processing
- General manufacturing
- Printing and packaging
- Original equipment Manufacture
- Process control systems

### BENEFITS

- Compact and easy to use
- Easily integrated into third party equipment, such as printing presses
- Designed for industrial environments including chemical, mining, printing and water treatment
- Duplex or multiple stackable heads versions available
- Rapide range can be used with variable frequency drives (VFDs) or inverters for variable flow applications
- 24 hour duty
- Very fast tube change





## Tube pumps

Verderflex® tube pumps provide accurate dosing and repeatability. The Smart and Vantage 3000 range are both fully programmable with multiple head options. Capable of handling viscous and chemically aggressive liquids as well as shear sensitive products, tube pumps are a hygienic pumping solution for dosing chemicals, inks, food and drinks.

## Smart Tube pumps

The easy to use Verderflex® Smart tube pump is capable of pumping viscous, abrasive and chemically aggressive liquids. Ergonomically designed, the Verderflex® Smart has a unique tube clamp design for quick and easy tube change. A wide selection of tube options are available.

Flow rates	32 ml/min to 17 l/min
Pressure range	2 bar
Features	tube changeover in seconds
Options	remote control, footswitch 0-10V, 4-20mA, RS-232 and SCADA

### BENEFITS

- Programmable dosing pump with high repeatability
- Easy fit tube saddle for quick and easy tube change
- Expandable to a maximum of 4 pump heads
- 3 Roller or optional low pulsation 6 Roller heads
- SSD Safety interlock stops the drive whenever tube is removed
- In-line tube arrangement, allows continuous tubing to be used
- Clear, easily read illuminated display



### Applications

- Chemical
- Food and beverage
- Pharmaceutical
- Printing and packaging
- Water and wastewater



## Vantage 3000 Cased Tube pumps

The programmable Vantage 3000 tube pump can dose single or repeat volumes, with a user defined time interval between jobs. The pump can be user calibrated to ensure high accuracy and has a run back option to prevent spillages of hazardous liquids. A wide selection of tube options are available.



Flow rates	0.25 ml/min to 3.25 l/min
Pressure range	2 bar
Features	Various head types
Options	Footswitch 0-10V, 4-20mA, RS-232

### Applications

- Benchtop laboratory processing
- Chemical
- Food flavouring
- Medical sampling
- Pharmaceutical

### BENEFITS

- Zero contamination - the fluid is hygienically contained within the pump tubing
- Gentle self priming pumping action, ideal for pumping shear sensitive cultures and broths
- Simple quick tube change over
- Stackable heads for easy expansion
- High repeatability - accuracy is  $\pm 0.5 - 2\%$  with minimum product slip
- Manual, remote control and dispensing options
- Brushless D.C. motor for 24 hour continuous applications
- Washdown IP66 enclosure option available for the harshest of environments
- Heavy duty versions with robust pump heads available
- Tubing can be sterilized by gamma irradiation, autoclaving or using ethylene oxide.





## Economy Tube pumps

The Verderflex® Economy range of peristaltic tube pumps are simple to use, cost effective range of cased drive tube pumps. Ideal for intermittent benchtop use in laboratories and process environments, this compact range is ideal for transferring, harsh, abrasive, shear sensitive or viscous fluids.

Flow rates	0.7 ml/min to 8 l/min
Pressure range	2 bar
Options	Wide range of motor power

### Applications

- Benchtop laboratory processing
- Chemical seed treatment
- Dairy CIP systems
- Ink transfer
- Paper and pulp



## BENEFITS

- Fast prime switch
- Variable speed control
- IP30 Chemical resistant epoxy polyester coating
- Ideal for transferring harsh, aggressive, or viscous products
- Highly accurate delivery with no product slip



## Peristaltic OEM Pumps

A selection of tube and hose pumps intended for use in Original Equipment Manufacture (OEM). The OEM panel mounted tube pumps can fit almost any application and are commonly used for dosing detergents, chemicals, medicines, accurately filling bottles or in drinks vending machines.

## Peristaltic OEM pumps

A selection of custom pump designs, motor options and tubing, the Verderflex® OEM range can be configured into an optimal solution for any high volume OEM pump requirement.



Options available include:

Flow rates	vary from 0.15 ml/min to up to 17 l/min
Motors	A.C. and D.C.
Tube options	Verderprene, Silicone, Tygon and Viton

### Applications

- Air conditioning units
- Aroma dispensing
- Chemical dosing
- Vending machines
- Washing machines
- Water sampling systems

## BENEFITS

- Various roller designs
- Wide selection of tubing materials
- Light and heavy duty designs
- A pump type to fit almost every application
- Special NSF listed versions





## Peristaltic OEM Pumps

Verderflex's range of peristaltic OEM pump heads offer both OEMs and design engineers the ideal solution to maximise performance and reliability, whilst also saving maintenance downtime.

### Mini-Load (NEW for 2015)

Max Flow rates	356 ml/min
Tube WT	1.6 mm
Max. ID	1.6 mm, 3.2 mm, 4.0 mm, 4.8 mm
Power Supply	24V DC
Features	Compact design with quick release tube head



### EZ Easy Tube Load

Max Flow rates	1.26 l/min
Tube WT	1.6 mm
Max. ID	8.0 mm
Power Supply	12/24V DC
Features	quick release tube head



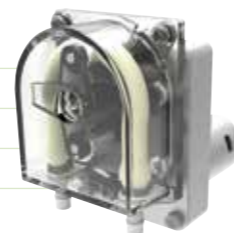
### M045

Max Flow rates	60 ml/min
Tube WT	1.6 mm
Max. ID	4.0 mm
Power Supply	12 & 24V DC & 230V 50Hz



### M500

Max Flow rates	730 ml/min
Tube WT	1.6 mm
Max. Bore	4.8 mm
Power Supply	12 & 24V DC 230V 50Hz



### M1500

Max Flow rates	2.2 l/min
Tube WT	2.4 mm
Max. ID	8.0 mm
Power Supply	12 & 24V DC & 230V 50Hz



#### Applications

- Chemical industry
- Medical industry
- Laboratories and analysis
- Cleaning
- Pools
- Industrial lapping
- Laundry



## New - Verderflex® Steptronic Range

The Verderflex® Steptronic offers a robust & reliable BLDC stepper drive with 4-20mA or 0-10V speed controls. Complete with our VF Mini-Load head for compact, accurate & reliable pumping. With options for dual stackable pump heads, IP66 rating and configurable speed range.



Flow rates	0.15 to 500 ml/min
Discharge press.	2 bar
Feature	Highly adaptable 4000:1 turn down ratio

#### Applications

- Laboratory
- Bio process
- Water treatment
- Industrial lapping
- Methadone dosing
- Chlorine monitoring

### ADVANTAGES OF THE VERDERFLEX® STEPTRONIC

- Speeds up to 400 rpm, 0.1% Speed Accuracy
- 12 bit analogue resolution, 4000:1 Turn down ratio
- Variable control via 0-10V or 4-20mA
- Quick release tube head
- Suitable for both panel mount & stand alone OEM applications



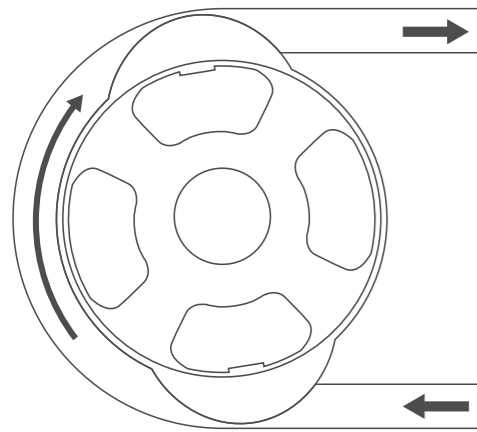
Image shown is single head unit with optional green powder coated case, available from mid 2015.



## Contact Verderflex®

*If you would like to know more about Verderflex® peristaltic pumps then please visit our website [www.verderflex.com](http://www.verderflex.com) where you will find the full breakdown of our pump range as well as application stories, latest news and technical datasheets.*

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You can find your local distributor on our website at <http://www.verderflex.com/contact-us>.

