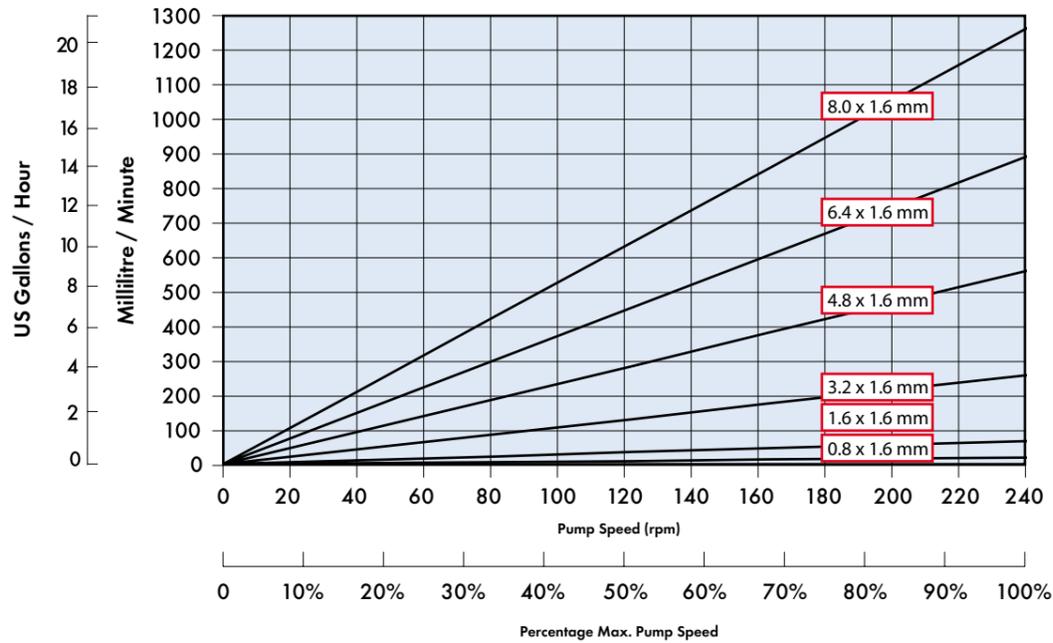


Verderflex® Scientific - EZ Series
Free Flow Curve - For 1.6mm Walled Tube

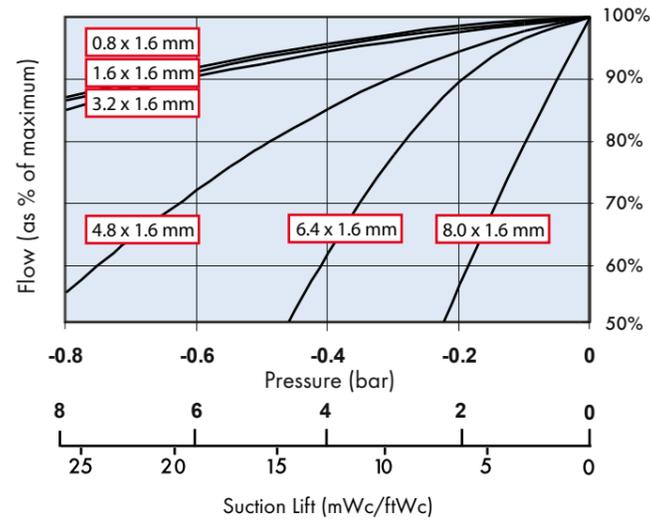


VERDERFLEX®
SCIENTIFIC

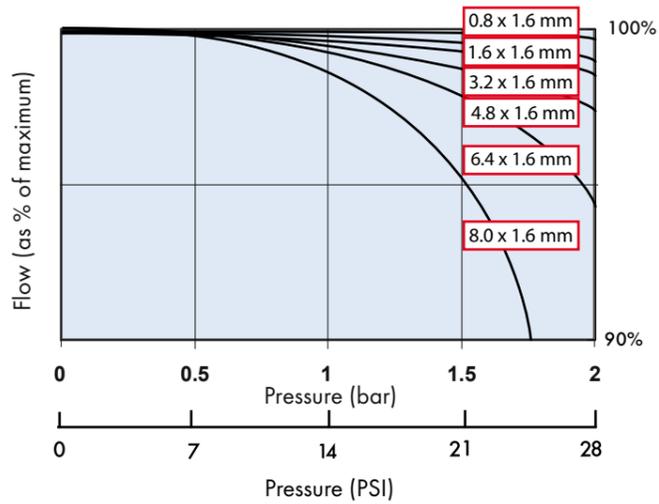
Verderflex® Scientific - EZ Series
Peristaltic tube pumps

Suction Performance

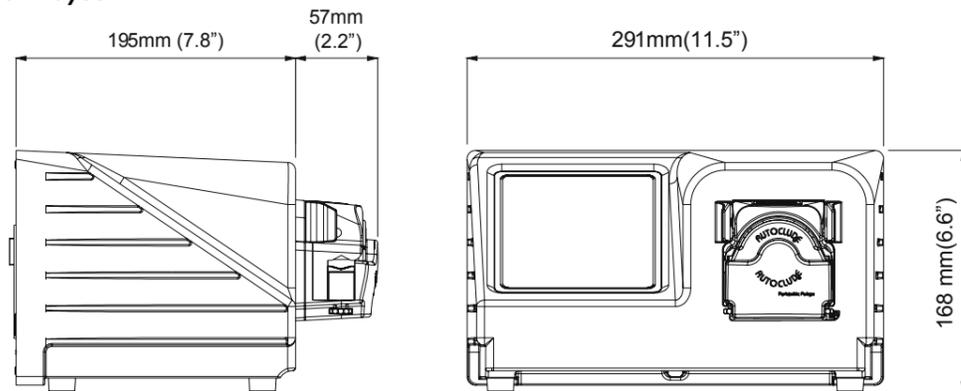
■ Capacity/Flow loss depends on suction head



Discharge Performance



General Arrangement Layout



VEDDER
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Solutions in Pumping Technology

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Peristaltic Pumps

Peristaltic pumps provide excellent problem solving pumping solutions especially when the product is particularly abrasive, corrosive, shear sensitive or viscous.

With the following features and benefits it's no wonder that peristaltic hose and tube pumps are one of the fastest growing pump types in the world.

Seal-less design

Only the tube comes into contact with the fluid.

Low maintenance costs

Minimal costs incurred to replace pump tubing.

Dry running

Can run dry without any additional lubrication.

Self priming

The pumps are capable of self-priming and can handle products that are likely to "air" or "gas".

Gentle pumping action

The gentle pumping action means that peristaltic pumps are ideal for shear sensitive products such as cells.

Suction lift

The pumps also have high suction capabilities of up to 8m of water.

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 $\pm 1\%$ and metering capabilities of $\pm 5\%$.

Verderflex® Scientific - EZ pump range

The Verderflex® Scientific - EZ range of pumps deliver highly accurate and repeatable flow rates from a few millilitres per minute up to 1.3 L/min with a quick and easy setup.

This tough desktop pump has a robust outer casing, simple and effective control options and a large tube selection to allow for the transfer of harsh, abrasive, shear sensitive and highly viscous fluids.

The pumped product is totally and hygienically contained within the sterile tubing and does not come into contact with any other moving parts of the pump, making this the ideal pump for laboratory conditions.

There are three control options: Manual, Auto and Programmable Dispenser.

Programmable versions can dose single or repeat volumes with a user defined time interval between jobs. Accuracy with viscous products can be achieved using the calibration mode with a run-back option to prevent spillages. RS232 digital signal connection gives Windows based remote computer control of the pump providing the additional capability to store different pump settings.



Challenge the Elements with the Verderflex® Scientific EZ pump range.

Advantages of the Verderflex® Scientific - EZ pump range.

- Quick and easy tube change
- Stackable heads with simple rotation lock feature
- Flow rates from a few ml/min up to 1.3 L/min
- Specially designed to dose harsh, aggressive, and viscous products
- Gentle pumping action, ideal for shear sensitive fluids
- Manual, analog and digital control options
- Highly accurate dosing with no product slip
- Zero contamination - the fluid is hygienically contained within the tubing of the pump
- Brushless D.C. motor for 24 hour low noise use
- Self priming for dry running without added lubrication
- Washdown IP66 enclosure option available for the harshest of environments

Manual Control



Auto Control



Programmable



Technical information

| Control Options | Manual | Auto | Programmable |
|---|------------|-------------|--------------|
| Variable speed | ✓ | ✓ | ✓ |
| Reversible | ✓ | ✓ | ✓ |
| Fast prime | ✓ | ✓ | ✓ |
| Alpha numeric | ✗ | ✓ | ✓ |
| Remote control | ✗ | ✓ | ✓ |
| Brushless DC motor | ✗ | ✓ | ✓ |
| Single or Repeat dose | ✗ | ✗ | ✓ |
| Calibration | ✗ | ✗ | ✓ |
| Manual, analog & digital signal control | ✗ | ✗ | ✓ |
| Run-back option | ✗ | ✗ | ✓ |
| Max. flow rate | 780 ml/min | 1310 ml/min | 1310 ml/min |

Capacity (ml/min) per channel

| Model | Tube ID x WALL (mm) | | | | | |
|--------------|---------------------|----------|----------|----------|----------|-----------|
| | 0.8mm | 1.6mm | 3.2mm | 4.8mm | 6.4mm | 8.0mm |
| Manual | 1.2 ~ 12 | 4.2 ~ 42 | 16 ~ 160 | 35 ~ 350 | 56 ~ 560 | 78 ~ 780 |
| Auto | 0.8 ~ 19 | 2.8 ~ 70 | 11 ~ 270 | 24 ~ 587 | 38 ~ 937 | 53 ~ 1312 |
| Programmable | 0.8 ~ 19 | 2.8 ~ 70 | 11 ~ 270 | 24 ~ 587 | 38 ~ 937 | 53 ~ 1312 |

Measured with water at 20°C without suction or delivery pressure

Pump specification

| Specification | |
|-------------------|--|
| Speed | Manual 15-150 rpm, Auto/Programmable 10-250 rpm |
| Motor Power | 50 Watts |
| Power Consumption | 100 VA |
| Voltage | 100-120/220-240V |
| Frequency | 50/60Hz |
| Temperature Range | Operating: 5°C to 40°C (41°F to 104°F) Storage: 0°C to 50°C (32°F to 122°F) |
| Dimensions | W291 x H168 x D252mm (11.5" x 6.6" x 9.9") |
| Weight | 4.0 kgs (8.8lbs) |

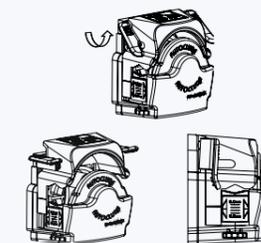
Materials of construction

| Description | Material |
|-------------|--|
| Enclosure | Noryl structured foam Aluminium Backplate |
| Finish | Polyurethane Paint |
| Pump Head | Acetal and Polyamide Stainless steel shafts Nylatron Rollers Ball race bearings |

Lightning Fast Tube Change

3 Simple steps provide quick and easy tube loading and adjustment.

- Turn lugs 90° to open
- Insert tube, return to the closed position
- Adjust tensioner to suit



Tube Selection

VERDER has a wide variety of purpose designed tubes which offer the ideal choice for every application. In our range we offer several standard materials with various diameters and thicknesses. Special tubes are available on request.

The following criteria are important when selecting a tube:

- Chemical resistance
- Food grade quality
- Tube life
- Physical compatibility
- Sterilisation methods

Please contact us to discuss your tube requirements.

