

# VERDERFLEX<sup>®</sup> SMART

Verderflex<sup>®</sup> Smart F40 Series  
Industrial Peristaltic Tube Pump

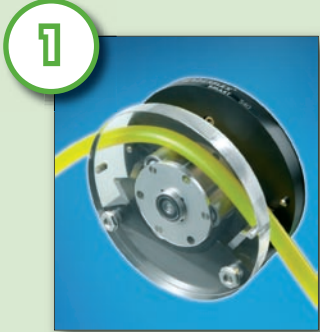


Solutions in Pumping Technology



## Lightning Fast Tube Change

The easy-fit tube saddle is designed for single handed operation and is based on the design of a ski boot fastener, allowing the tube to be loaded quickly and easily from above.



Insert the tube on top of the rollers



Fit the saddle to one set of dowels



Open up the lever and fit the claw over the other set of dowels



Push the lever down to lock the saddle into place

**Tube loading in less than 1 min!**

# Verderflex® Smart - F40 Series

The Verderflex® Smart F-Series is an excellent, low pressure dosing pump capable of handling viscous, abrasive and chemically aggressive media with total containment and leak free pumping.

The pump has a unique easy-fit top loading saddle which allows for simple and fast tube changes.

The F40 pump head provides flow rates from 0.46 - 27 l/min per channel and has the capability of expanding up to 4 channels on a single drive.



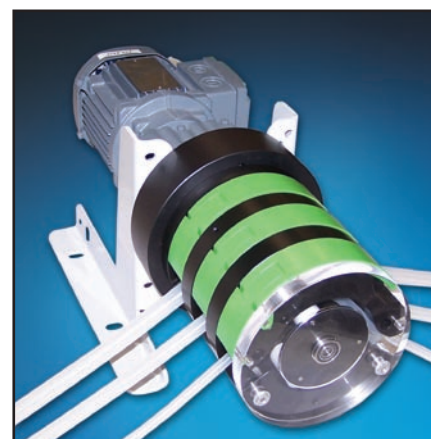
## The Solution is the Verderflex® Smart F-Series.

### Pump Head

- Easy-fit tube saddle for rapid tube changes
- Automatic tube clamp
- Manufactured from chemically resistant Polyoxymethylene (POM)
- Transparent front cover manufactured from Polymethylmethacrylate (PMMA)
- Can be expanded to a maximum of 4 pump heads
- Pressure range 0 - 4 bar (Special tubes and rotor are required for pressures above 1.5 bar)
- A choice of 3 roller, or low-pulsation 6 roller heads
- SSD Safety interlock to stop the drive whenever the saddle is opened or removed
- In-line tube arrangement, providing a kink free liquid path
- ATEX version certified to Group II category 2g T4 - available on request

### Drive

- 230/400V three-phase gear motor unit with speeds up to 240 rpm
- Option of either an integrated or separate frequency speed regulator
- Other voltages or frequencies & special motors - available on request



## Smart Technical Overview

F40	
Speed	Max. 240 rpm *
Regulating range	optional
Multi-channel	up to 4 channels
Protection class	IP55
Weight	12.5 kg
Voltage	230/400V
Frequency	50/60Hz
Installed Motor Power	0.25 kW / 1/3 HP
* Speed can be regulated by making use of an optional inverter control	

**“the Smart F-Series offers accurate dosing with absolute simplicity and ease of use”**

### Capacity (l/min) per channel

Hose ID x WALL (mm)	MIN l/min	US GPM	MAX l/min	US GPM
15.9 x 4.8	0.46	0.12	10.5	2.8
19.0 x 4.8	0.5	0.13	15.5	4.0
25.4 x 4.8	0.65	0.17	27	7.1

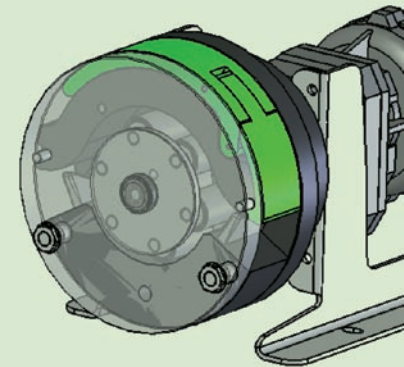
3.2mm tubes available as a special order option  
Measured with water at 20 °C without suction or delivery pressure

Material	
Description	F40
Backplate / Clampbase / Saddle	POM (Black)
Rotor	Machined Aluminium EN AW-6082 T6
Skiboot Handle & Catch	Machined Aluminium EN AW-6082 T6 (Extruded/Anodised) (RAL 6018 Green)
Clamp / Block / Adjustment Screw / Nut	Machined Aluminium EN AW-6082 T6 (Clear Anodised)
Drive Shaft / Coupling / Tiebar	Stainless Steel Grade EN1.4301 (304)
Saddle / Handle / Roller Pins	Stainless Steel Grade EN1.4571 (316)
Roller	Stainless Steel Grade EN1.4571 (316)
Frontplate	PMMA (Clear)
Magnet	Neodymium
Clamp Spring	BS 5216:1991 Spring Steel
Bearings	Stainless Steel EN1.4125 (440c)

\*ATEX version - Available on request

## Control System Interfacing

■ All Smart F-Series pumps can be optionally supplied with either a low cost panel mounted or a motor mounted inverter. Using industry standard parts allows proven control system interfaces to be easily linked to the pump and so simplifies integration of the pump into sophisticated SCADA networks.



## Multi-channel Expandability

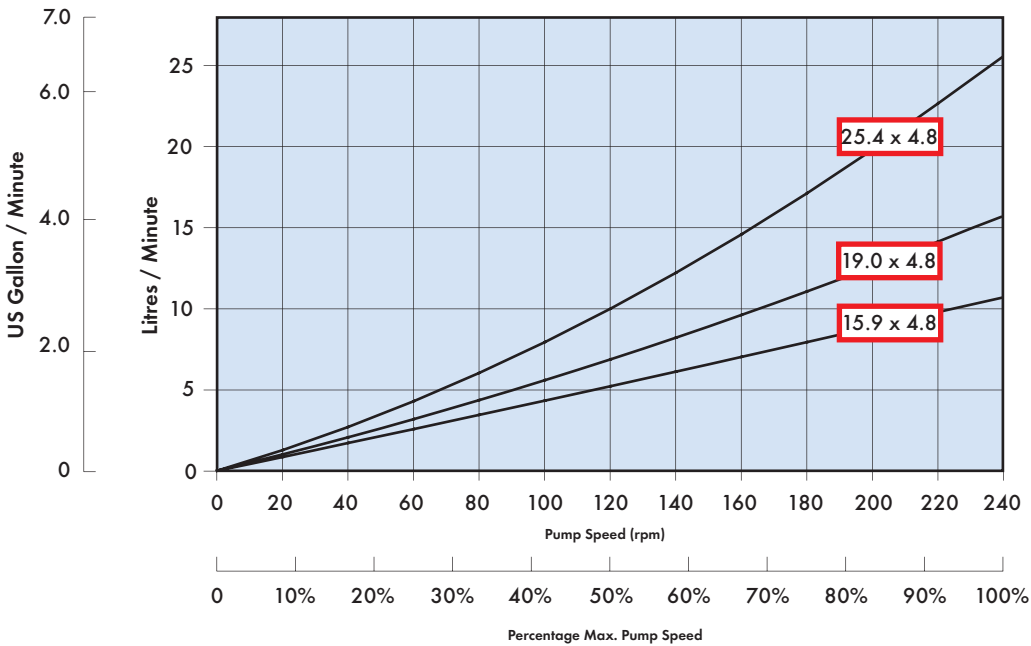
■ The Smart series offers the flexibility to add further pump heads, up to a maximum of four, which allows the user to operate several lines from the same pump, whilst the extended feet keep the pump stable.

■ If pulse-free operation is required, the flow can be split between two channels. This will significantly reduce the pulsation.



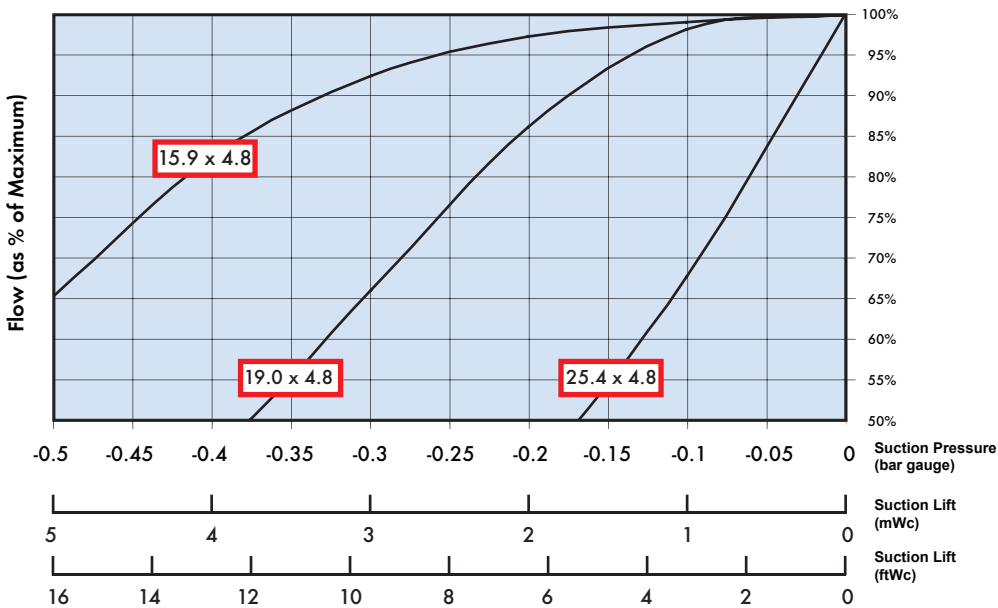
## Smart Smart S40 3 Roller Free Flow Curve For 4.8mm Walled Tube

The S40 Pump Head is supplied with a saddle for a 4.8mm wall thickness tube as standard

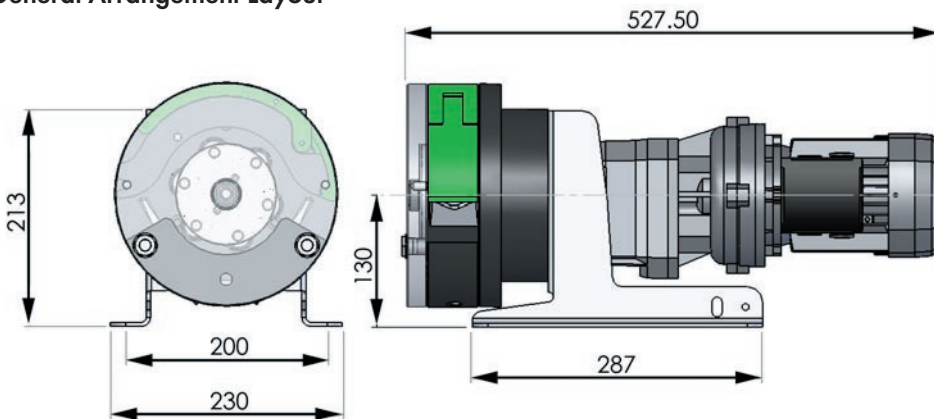


### Correction graphs for suction

- Capacity loss depending on suction head



### General Arrangement Layout



## Smart tube selection

VERDER has a wide variety of 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.

**Not all tubes are suitable for use in a peristaltic pump. The following criteria are important when selecting a tube:**

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

**The following tube materials are available:**

- Verderprene - General purpose
- Verderfuel - Process fluids
- Silicone - High temperature fluids
- Fluran - Aggressive chemicals

For more information on our range of tubing please refer to our tube selection guide or visit:

[www.verderflex.com](http://www.verderflex.com)

