

Introducing the new SF-10 reagent pump

The innovative SF-10 is a highly chemically resistant pump capable of:

- Smooth flow up to 10 bar pressure
- Flow rates between 0.02 mL/min and 10 mL/min
- Pumping light slurries
- Pumping gases
- Pumping Organometallics
- Operation as a pressure controller

Including:

- Pressure measurement and indication
- User selectable over pressure trip
- Self priming function



The pump is intended for general laboratory use with applications in the following areas:

- Precise reagent delivery into batch reactors
- Running gradients through normal phase columns
- Control of gas delivery for batch reactions or degassing operations
- Precise back pressure control in either liquid, liquid-gas or liquid-light slurry systems
- Chemical sampling from batch reactors (e.g. for flow NMR analytics)
- Controlled delivery of reagents for thin film evaporation or spray drying processes
- Delivery of reagents or wash phases for continuous extraction processes
- Precise delivery of reagents for continuous synthesis or continuous crystallisations



The SF-10 features five operating modes including:



Constant flow rate – flow can be set between 0.02 mL/min to 10 mL/min



Ramping flow rate - can be set by selecting the start flow rate, the end flowrate and the ramp time. The ramp time can be set between 6 seconds and 999 minutes



Volume dosing - The desired dose volume (mL) and flow rate (mL/min) can be selected



Pressure controller – desired upstream pressure can be selected by the user, speed of the pump is controlled to maintain the desired pressure

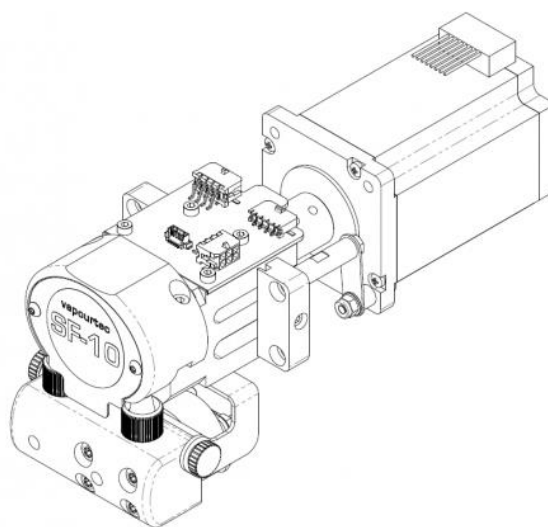


Gas delivery – gas flow is set by first entering the gas inlet pressure followed by the desired gas flow rate (SCC/min)

How does the Vapourtec SF-10 work ?

A standard peristaltic pump runs at a steady rotational speed whereas the SF-10 does not.

The exact rotational speed profile is complex and is a patented function of the flow rate, rotor position and pressure. The result of this advanced development is total simplicity for the user.



The SF-10 has a small footprint of 16cm (h) x 12 cm (w) x 27 cm (d).

Two different pump tubes (red and blue) are available allowing a wide range of chemicals to be pumped.