

# INTRODUCING THE NEW SF-10 REAGENT PUMP FROM VAPOURTEC

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.

