



FlexyScaleUp

The concept expansion up to 3 l



Advantages

- Proven and tested concept based on FlexyLab Fast Track system
- Reactors of different sizes (1.3 and 3 l) can be operated utilizing the same system
- Two parallel gravimetric dosing applications can be integrated
- Choice of pressurized valve dosing, peristaltic or membrane pumps
- Production related reactor design using bottom discharge valve
- Integrated high performance stirrer with torque and stirrer speed measurement capabilities
- Easy disassembly of the reactor by means of an individually adjustable pneumatic spring
- Wide temperature range from -80°C to $+280^{\circ}\text{C}$ controlled by a central cooling unit
- Modular design provides optional customer specific modifications



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1.3 l reactor (with jacket adapter) and 2 dosages with membrane and peristaltic pumps, propeller stirrer and gas tight magnetic coupling, speed 36 - 1800 rpm, torque up to 75 Ncm.

■ Flexibel compact design

A single system can operate either a 3 l reactor or a 1.3 l reactor by means of an adapter.

■ Simple and clean operation

The two-component reactor system with a hermetically sealed temperature jacket allows for an extremely simple operation. Charging and discharging of the reactor is easily performed using the adjustable pneumatic spring and the bottom discharge valve.

■ Heating and cooling

The independent electrical heating system covers a controlled temperature range within the jacket of up to +280°C. Cooling is effected with water or a cryostat that is designed for processing suitable cooling media to -100°C. With a single system it is therefore possible to ensure control over an extremely wide range of temperature.



■ Dosing

The modular gravimetric dosing unit allows the user of a variety of combinations, for instance membrane pump and valve dosing. The standard system can perform 2 gravimetric operations.

■ Control of stirrer speed

Stirrer speed can be individually controlled and measured. The high torque output, which can also be measured, ensures homogeneous mixing of every high viscosity liquids.

■ Simplest operation

Manual operation via monitor screen (parameters for temperature, dosing, stirrer speed etc. can be entered).

Automatic operation with programmed recipes. *FlexyScaleUp* can be integrated into existing *FlexyLab* systems and still permits individual recipe control.

■ Options

Expansion kits for the following modules are available:

- pH measurement and control
- Pressure and vacuum control
- Automated distillation
- Inertisation
- Pressure vessels constructed from steel or Hastelloy
- Gas dosing units
- Hydrogenation
- FTIR (mid-IR or NIR)
- Turbidity measurement
- Lasentec integration
- Isothermal heat-flow calorimetry (HFC)
- Sampling with liquid sampler

Please contact us for your individual modification requirements.

A FlexyScaleUp can be added into an existing FlexyLab system

