SENSIVATE

Post-Column Reactor

Sensitive Post-Column Derivitization at an Economical Price

The LabAlliance Sensivate represents a new level in post-column performance, size, and cost. Based on proven pump technology combined with a unique reactor design and disposable heating blocks, you can now achieve post-column derivitization with great performance at an economical price. Either add Sensivate to your existing LC, or use a complete LabAlliance HPLC-Post-Column system.

Sensivate Post-Column System

Common Applications:

Carbamates by OPA

Glyphosates by OPA

Aflatoxin by iodine

Amino acids by OPA

Amino acids by ninhydrin

SSI LabAlliance

SENSIVATE

Post-Column Reactor

Sensivate for environmental analyses

Pesticides

Aflatoxins

Herbicides

Features:

Fast & easy setup:

- One inlet connection (from column)
- One outlet connection (to detector)

Modular:

- 1 or 2 reactors (1 or 2 heated)
- 1 or 2 pumps

Proven pump technology with self-flush to improve seal life

Pulse damper for reduced pulsation

Reduced number of connections minimizes leaks

All connections accessible from front panel

Front panel displays each reagent's flow, pressure, set, and actual temperature

Pump flow and reactor temperature settable from front panel or RS232

Upper/lower pressure and temperature limits, and system shutdown relay

Modular cartridge reactor, 2 fluid connections, and one hold-down to change volume or reactor

Disposable reactor cartridges

Reactor designed to reduce band broadening—not just a coil

All PEEK fluid path

Pump Specification:

Flow rate: 0.01 – 0.30 mL/minute (limited by firmware except when priming)

Pressure: 0-2500 psi (172 bar) (upper limit limited by firmware)

Flow Precision: < 0.5% RSD

Flow Accuracy: ± 2% from set point

Materials: All-PEEK fluid path, including pump heads

Input: RS232 Interface for remote control and monitoring

Power: 120/230 Vac; 50/60 Hz

Features:

- Automatic piston wash (significantly improves seal life)
- Stepper motor drive, with electronic fast refill via flag and sensor
- Dual check valves (inlet & outlet) – ruby ball, sapphire seat
- Prime-Purge Valve (PEEK)
- Pulse Dampener (PEEK)
- Outlet Filter (0.5 m UHMW)
- Back Pressure Coil for proper Pulse Dampener operation (approx. 1000 psi @ 1.0 mL/min)
- Pressure Transducer (isolated in Pulse Dampener)
- Interactive front keypad with digital read-out:
  - Flow rate set points
  - Pressure readout
  - Set upper/lower pressure limit

Reactor Specification:

Volume accuracy: ±5%

Temperature Operating Range: 10° C above ambient to 150° C

Temp. Accuracy: ± 2° C over entire range (outlet fluid temperature vs. set point)

Temp. Repeatability: ± 1° C.

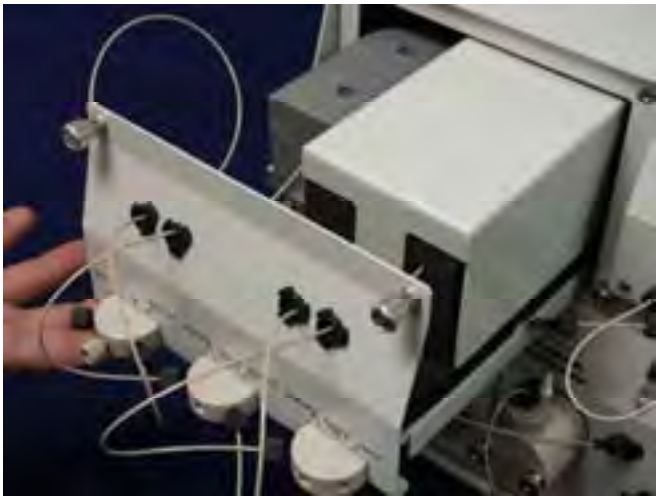
Safety Cutoff Temperature: 160° C

Stabilizing Time: 30 minutes to 150° C for "Ready" indication

Input: RS-232 Interface for remote control and status monitoring

Features:

- Continuous loop, fully sealed
- Multi-directional path for effective mixing
- Interactive front keypad control with digital read-out
  - Temperature set point
  - Temperature read-out (°C or °F)
  - Ready light



Reactor and pump modules are on slide-out drawers for easy replacement

The reactor module is available separately (see ordering information for details)

SENSIVATE

Post-Column Reactor

Ordering Information:

To configure part number, choose one number from columns 1 and 2. If second reactor is required, choose number from column 3. Examples: PCR1-R015; PCR2-R050-R050

Choose system	*Choose heated reactor volume*	*Choose unheated reactor volume (if required)*
PCR System	**Reactor Block 1 (heated)**	**Reactor Block 2 (ambient)**
PCR0—Post Column Reactor Unit	R015 (0.15 mL Reactor)	R015 (0.15 mL Reactor)
PCR1—Single Reagent Post Column System (1 pump)	R050 (0.50 mL Reactor)	R050 (0.50 mL Reactor)
PCR2—Dual Reagent Post Column System (2 pumps)	R070 (0.70 mL Reactor)	R070 (0.70 mL Reactor)
	R140 (1.4 mL Reactor)	R140 (1.4 mL Reactor)
	RXXX (XXX = reactor size in mL) custom reactor size	RXXX (XXX = reactor size in mL) custom reactor size

Optional:

N_2 sparger with bottle holder and low-pressure cut-off system (bottle not included)

SSI LabAlliance

349 N Science Park Rd
State College, PA 16803
Tel: (814) 234-7317; (800) 345-5557
Fax: 814-238-6072
E-mail: sales@laballiance.com

www.laballiance.com

Distributed by:

Rev 1, 3-9-05