

ReaXus SC Class

Reciprocating Pump for Liquid CO₂

*Reliable, Accurate and
Consistent Performance*

The SC Class reciprocating pump provides reliable, accurate and reproducible pumping of liquid CO₂ for SFC, SFE, and other applications. The SC Class is available with a maximum flow rate of 24 mL/min, and can reach pressures to 10,000 psi.

The SC Class is available in either Constant Pressure or Constant Flow configurations. The pump's constant pressure mode features a selectable pressure set point. The flow rate auto-adjusts to maintain pressure—ideal for extraction applications. Constant flow configuration provides precise CO₂ flow rates for supercritical fluid chromatography.

Easy Maintenance

The SC Class employs fully-integrated Peltier thermoelectric cooling modules to maintain consistent CO₂ temperatures during the pumping cycle. Its unique construction simplifies pump installation and eliminates the need for external water baths or chillers with associated tubing and maintenance.

Standard Features

- All-aluminum pump heads (for enhanced heat transfer)
- In-line electronic pressure transducer
- Simple front panel keypad controls with LED display
- Motor stall detector
- Inlet & Outlet filters



REAXUS

FLOW RATE

24.00 mL/min

PRESSURE

Up To 10,000 psi

FLUID PATH

Stainless Steel
(other than pump heads)

CONTROL

RS-232, Micro USB, Ethernet Serial
Communications, Run/Stop, TTL, Analog
flow control

SC Class Specifications

Flow Rate	0.01 – 24.00 mL/min.
Pressure	0 – 10,000 psi
Pressure Accuracy	± 2% of full scale pressure
Flow Accuracy	± 5% (based on gas volume measurements and back calculation to liquid)
Controls	USB and RS-232 Serial Com Port for complete control & status monitoring Run/Stop inputs (5 Volt TTL Type) Remote 0 – 10 Volt & Remote 4-20 mA flow rate control input
Constant Pressure	Pressure Monitoring (via transducer) with user-selected upper/lower pressure limits
Control Mode	Constant Pressure..... Flowrate auto-adjusts to maintain desired pressure. Constant Flow.....Settable flowrate for precise flowrates.
Dimensions	5.75" H x 11.125" W x 21.6" D (14.6 x 28.3 x 54.9 cm)
Weight	24 lbs. (10.8 kg)