

Where **Engineering**
Meets **Application**

Core | **Catalogue**

2022 v1.4

SCIMED[™]
 Core Separations

08. Core | Pumps (CL series)

upto 689 bar

Core Separations CL series pumps are ideal for high pressure liquid and CO₂ applications. The CL pumps are specifically designed to meet a demanding research environment where space is at a premium.

Using a tried and tested cam driven piston design, utilising a stepper motor for improved accuracy, the CL pumps can generate pressures up to 689 bar.

With the heads machined with an innovative groove allowing the addition of cooling fluid, these pumps can easily be used to pump both solvents and CO₂



Core | P50 Pump

Whether looking to deliver liquids into a high pressure autoclave or generate supercritical CO₂, the Core Separations P50 can deliver a maximum flow of 50g/min upto 689 bar. Ideal for reactors upto 500mL.

Flow Rate: 5 – 50g/min

Maximum Discharge Pressure: 689 bar (design)

Power: 208-240 V, 13 A



Core | P250 Pump

When research requires a boost the P250 is an ideal pump for generating high pressure liquid CO₂ at a maximum flow rate of 200g/min for either supercritical CO₂ reactions or extractions. Ideal for reactors upto 5L.

Flow Rate: 20 – 200g/min

Maximum Discharge Pressure: 689 bar (design)

Power: 208-240 V, 13 A

Pressure, bar
689

Flow Rate, g/min
upto 250

Media
CO₂, Solvent

Head Material
316

Number of Heads
2

Core | Features



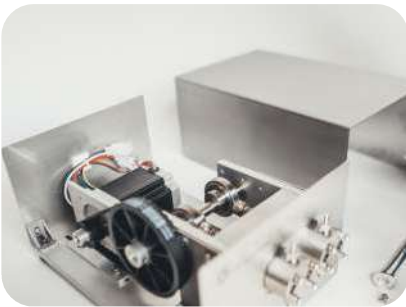
Core | Research

Our Laboratory pumps are designed with research in mind. A high tech and robust design with a host of upgradable options all packed into a compact shell. As with our industrial pumps we have taken the elements that make these pumps reliable and robust and built them into our laboratory pumps.



Core | Design

The Sapphire piston design reduces friction, resulting in less seal wear and lower maintenance. Dual stainless-steel heads with a cam driven piston assembly eliminates pulsed flow.



Core | Precision

Utilising either stepper or servo motors the CL pumps are capable of control, based on feedback from the pressure sensor or flow meter and can be regulated using a touch screen display, or via a PC through an ethernet connection.



SFX Control Software

When dealing with high pressure systems, pressure control is key. Core Separations developed APC (Advanced Pressure Control). This multilevel PID control achieves superior operational management while maintaining rapid pressure build up.



For more information: contact@coreseparations.com

Type
Piston

Piston Material
Sapphire

Control
Standalone, System

Mount
Rubber Feet

Certification
ASME, PED, UKCA