

# Model CP

## HPLC Column Packing Pump With Constant Pressure



**Model CP Constant Pressure Pump for Chromatography Column Packing**

LabAlliance's Model CP is a high pressure dual piston pump utilizing a constant pressure mode of operation to efficiently pack small diameter packing materials and columns of small diameters. The constant pressure pump allows constant packing pressures up to 10,000 psi and 12 mL/min.

The use of a variable ramp speed setting allows the user to choose the best flow profile for a given packing. The Model CP reduces turbulence and shear during the

packing process, leading to more uniform bed structures and less fines generation than traditional methods of packing using high-pressure pneumatic amplifier pumps. The packing pressure can be monitored during the process to verify performance.

The pump has RS 232 or simple keypad control and a digital stepper drive for precise flows and pressures. A column packing system is also available for use with the model CP. All LabAlliance pumps include a 3-year warranty.

# Model CP

## HPLC Column Packing Pump

### With Constant Pressure

#### SPECIFICATIONS

Flow Rates	0.01 - 12.0 mL/min
Pressure	0 - 9990 psi
Pressure Accuracy	± 1% of full scale
pressure	
Flow Accuracy	± 2%
Flow Precision	0.2% RSD
Dimensions	6" H x 11" W x
	18" D (15 x 26 x
	46 cm)
Weight	30 lbs (14 kg)

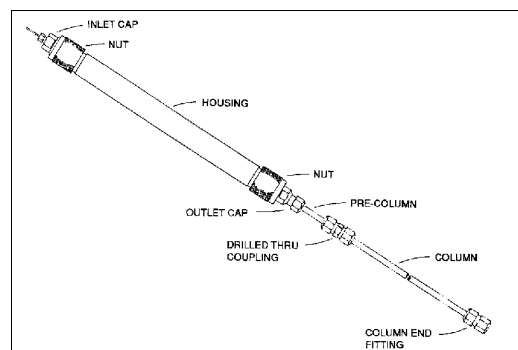
#### STANDARD FEATURES & CONTROLS

- ◆ Dual pump heads for reduced pulsation
- ◆ Real-time pressure monitoring with upper/lower pressure limits.
- ◆ Remote 0-10 volt & remote 0-10 kHz flow rate control input
- ◆ Simple front panel key pad controls with LED display
- ◆ Autoprime™ one button toggles flow rate to maximum for rapid solvent change
- ◆ Motor stall detector
- ◆ Dual ball and seat check valves for consistent flow performance
- ◆ Prime purge valve
- ◆ RS-232 serial COM port for complete control & status monitoring
- ◆ Run/stop inputs (5 volt TTL type)

#### ORDERING INFORMATION

Description	Part Number
Model CP Constant Pressure Pump, non-flush, 0.1-12 mL/min., 9990 psi, with transducer & RS-232 control, Stainless steel, 110V	LABPDF05SNXP001
Model CP Constant Pressure Pump, as above, 220V	LABPEF05SNXP001

#### Column Packing System



LabAlliance's column packing reservoir system provides fast, versatile, safe packing of efficient, reproducible columns.

An internal baffle prevents the inlet flow stream from impinging directly on the slurry in the reservoir. A conical outlet section promotes smooth transfer of the slurry to the column. The quick-change threaded reservoir closures help avoid slurry settling problems and promote more reproducible packings.

The modular design allows fast interchange of reservoir housings and column connectors. Knurled closure nuts and Kalrez® seals combine to allow fast, leak-tight changes to be made by hand – no tools required. Although designed for long, reliable service, the seals can be quickly and easily replaced when necessary. The column couplings are drilled to allow direct contact of the column to a pre-column of the same diameter. This allows the columns to be removed without disturbing the packing bed.

The system is designed for working pressures of 15,000 psi (103 Mpa). The threaded reservoir closures avoid the potential hazards of large compression fittings in high-pressure applications.

A complete system requires one inlet cap, two knurled closure nuts, one housing, one outlet cap, and one drilled-through coupling.

Inlet caps (with nut, ferrule, and O-ring seal): 1/16" inlet tubing OD	010241
Knurled closure nuts (2 required)	011185
Reservoirs	
20 mL capacity	011191
40 mL capacity	011192
80 mL capacity	011193
Outlet cap (with CPI nut, ferrule, and O-ring seal), 1/4" column OD	010228
Replacement O-ring seal, Kalrez®	901009