

# ReaXus CP Class

## Constant Pressure Dual Head Pumps

*Dual-headed, positive displacement piston pumps with constant pressure control, covering a wide range of flows, with pressures up to 18,000 psi.*

The high performance CP Class consists of dual-headed, positive displacement piston pumps with constant pressure control, covering a wide range of flows, with pressures up to 18,000 psi.

Standard fluid path materials are Stainless Steel, with optional Titanium and Hastelloy also available. Other optional features include jacketed pump heads for temperature-controlled applications.

The CP Class pumps are widely used for LC Column packing, as well as many process applications. The constant-pressure feedback loop automatically adjusts solvent flow to maintain constant system pressure and allows the user to select a wide range of process parameters, including desired pressure set point, ramp rate, and upper flow rate limit.

The CP Class is available as standalone units, and also with the SSI Column Packing System (called Pack-in-a-Box). Features include an integrated Prime-Purge Valve, interactive keypad control, advanced pressure control algorithms, and complete PC control and status through RS-232C, micro-USB, and Ethernet serial communications ports. With 12 mL/min, 24 mL/min, and 100 mL/min versions, the CP Class will meet most LC Column packing and process needs.



# REAXUS<sup>®</sup>

## Flow Rate

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12 mL/min  
24 mL/min  
100 mL/min

## Pressure

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Up To 18,000 psi  
(12 mL/min)

## Fluid Path

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Stainless Steel, Titanium, or Hastelloy

## Control

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RS-232, Micro USB, Run/Stop, Ethernet,  
Analog (0–10V, 4–20mA)

## CP Class Specifications

	12 mL/min	24 mL/min	100 mL/min
Flow Rate Range	0.001– 12.000 mL/min	0.01– 24.00 mL/min	0.1– 100.0 mL/min
Flow Rate Increment	0.001 mL/min	0.01 mL/min	0.1 mL/min
Pressure Accuracy	±2% of full-scale pressure		
Pressure Control Accuracy	Dependent on hydraulic system parameters. Pump automatically adjusts fluid flow to maintain constant system pressure under typical column-packing usage. Pump does not contain an automatic pressure-relief valve.		
Maximum Delivery Pressure	18,000 psi	10,000 psi	4,000 psi
Piston Displacement	31.4 µL	62.8 µL	251 µL
Piston Wash	Includes option for self-flushing pump heads—continuous wash without auxiliary pump		
Wetted Materials	<b>Stainless Steel pumps may include:</b> Incoloy A-286, 316 Stainless Steel, Silicon Carbide, Synthetic Ruby, Sapphire, Zirconia, ATZ, UHMWPE, PEEK, FFKM, PFA, PTFE, ETFE <b>Hastelloy pumps:</b> Hastelloy C-276, Synthetic Ruby, Sapphire, UHMWPE, FFKM, PFA, PTFE, ETFE		
Dimensions (H x W x D)	6.4" x 9.9" x 17.5" (16.3 x 25.1 x 44.5 cm) (Jacketed Hastelloy heads add 0.7" (1.7 cm) to length of pump)		
Weight	30 lbs (13.6 kg)		
Power	100 – 240 Vac (±10%), 50 – 60 Hz, 75 W		
Front Panel	5-digit LED to monitor flow rate, pressure, and indicate parameters and alarms. Run/Stop, Prime, and menu keys, seven status indicators, Increase/Decrease displayed parameters.		
Communication	RS-232, micro-USB, LAN (serial communications), Run/Stop TTL, Analog flow control (0–10 V, 4–20 mA)		
Viscosity*	0.5 – 10.8 cP		
Liquid Temperature	0 – 82 °C		
Environment	Indoor use only (Pollution degree 2)		
Altitude	Up to 2000 m (6500 ft)		
Ambient Temperature	10 – 30 °C		
Humidity	20 – 90% relative humidity		
CSA Certification	Compliant to UL Std 61010-1 3rd Edition and CSA Safety Standard 61010-1-12, Class 8721-06 and 8721-86 (5 mL and 12 mL models not included)		

\*Range of fluid viscosities where published pressure accuracy is maintained