



# CP CLASS

## Constant Pressure Dual Head Pumps

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 25,000 psi. Standard fluid path materials are Stainless Steel and optional Titanium. Other available features include jacketed heads for temperature controlled processes.

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-232 and Micro USB 2.0 ports. With 5 mL/min, 12 mL/min, 24 mL/min, 100 mL/min, and 300 mL/min versions, the **CP Class** will meet most LC Column packing and process needs.

**Components are also available in Kit Form for OEM Applications.**

### Enhanced Cosmetic Design



### Drip Tray & Leak Sensor



#### Flow Rate

**5 mL/MIN**  
**12 mL/MIN**  
**24 mL/MIN**  
**100 mL/MIN**  
**300 mL/MIN**

#### Pressure

Up To  
**25,000 PSI**  
(5 mL/MIN)

#### Fluid Path

**STAINLESS STEEL**  
**OR TITANIUM**

#### Control

**RS-232, MICRO USB,**  
**RUN/STOP,**  
**ANALOG (0-10V, 4-20mA)**

# CP CLASS - MODEL SELECTION MATRIX

Dual Head Constant Pressure Pumps for LC Column Packing and Many Process Applications

USE THE FOLLOWING LISTS OF OPTIONS AND OPTION CODES TO CONSTRUCT YOUR PUMP MODEL NUMBER.

PUMP CLASS	FLOW RATE	MATERIAL	SELF-FLUSH	PRESSURE & LEAK SENSORS	PISTON SEAL	INLET/OUTLET TUBING	SPECIAL OPTIONS
<u>CP</u> = CP Class	<u>005</u> = 5 mL/min (25,000 psi max.)*	<u>S</u> = Stainless Steel Fluid Path	<u>F</u> = w/ Self-Flush Piston Wash	<u>X</u> = Pressure & Leak Sensors *10,000 psi max (12 or 24 mL) *4,000 psi max (100 mL) *1,000 psi max (300 mL)	<u>1</u> = Standard Seal (SS Energizer)  <u>2</u> = Organic Seal (SS Energizer)	<u>A</u> = 1/8" OD (flexible) <u>B</u> = 1/8" OD (rigid) <u>C</u> = 1/8" OD (rigid) <u>E</u> = 1/4" OD (rigid) <u>G</u> = 1/8" OD (flexible)	<u>1/16"</u> OD <u>1/16"</u> OD <u>1/8"</u> OD (rigid) <u>1/8"</u> OD (rigid) <u>1/8"</u> OD (rigid)

I = Standard Product (leave blank for standard options & cabinet)  
X = Customer Special (Consult Factory)

EXAMPLE MODEL NUMBER: **CP012SFY1A**

Please Note: Some features and options are not available with certain configurations. Please refer to the Part Number Configurator (Excel) to verify model number before ordering. Download at: [www.ssiplc.com/configurator/](http://www.ssiplc.com/configurator/)

## CP CLASS - SPECIFICATIONS

Flow Rate Range and Max. Pressure Ratings*	0.000 - 5,000 mL/min (25,000 psi)** 0.00 - 12,000 mL/min (10,000 psi or 18,000 psi) 0.00 - 24.00 mL/min (10,000 psi) 0.0 - 100.0 mL/min (4,000 psi) 0.0 - 300.0 mL/min (1,000 psi)	Wetted Materials.....(See Above Options), Synthetic Ruby, Sapphire, UHMWPE, PTFE
Dimensions.....	6.3" H x 10" W x 17" D (16 x 25.4 x 43.2 cm)	Dimensions.....6.3" H x 10" W x 17" D (16 x 25.4 x 43.2 cm)
Weight .....	30 lbs. (13.6 kg)	Weight .....
Power.....	100-240 Vac ( $\pm$ 10%), 50-60 Hz	Power.....100-240 Vac ( $\pm$ 10%), 50-60 Hz
Control .....	RS-232, Micro USB, Run/Stop, Analog (0-10V, 4-20mA)	Control .....

\* Flow Rate is dependent on solvent selection and operating pressure. \*\* 5 mL/min (up to 18,000 psi) option rated for CSA.

Pressure Accuracy ..... $\pm$ 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.