



LD CLASS

Dual Piston Pumps for Low Pulsation Requirements

The versatile **LD Class** consists of dual-headed, positive displacement piston pumps, delivering unmatched performance for analytical, flash, and small-scale preparative chromatography applications. With the patented SSI low dead-volume Pulse Dampener, advanced cam technology and dual piston mechanism, the **LD Class** provides virtually pulse-free operation.

The pumps are designed for high flow rate accuracy and low pulsation required for Analytical Liquid Chromatography (HPLC). Standard fluid path materials are Stainless Steel and PEEK, in addition to optional Titanium. Other available features include jacketed heads for temperature controlled processes. With 12 mL/min, 24 mL/min, 36 mL/min, and 100 mL/min versions, reaching pressures up to 10,000 psi, these pumps will meet the performance requirements of demanding HPLC needs.

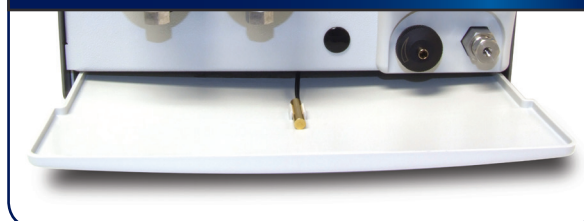
The high performance linear cams, along with automatic pressure compensation, provide precise flow rates for very accurate high pressure and low pressure gradients. Standard features include an integrated Prime-Purge Valve, Pulse Dampener, interactive keypad control, and complete PC control and status through RS-232 and Micro USB 2.0 ports. The **LD Class** provides the precise flow and low pulsation for the most challenging separations.

Components are also available in Kit Form for OEM Applications.

Several Fluid Path Materials Available



Drip Tray & Leak Sensor



Flow Rate

12 mL/MIN
24 mL/MIN
36 mL/MIN
100 mL/MIN

Pressure

Up To
10,000 PSI
(24 mL/MIN)

Fluid Path

STAINLESS STEEL,
PEEK OR
TITANIUM

Control

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

LD CLASS - MODEL SELECTION MATRIX

Dual Head Piston Pumps Specifically Designed for Analytical, Semi-Prep and Flash Chromatography

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

PUMP CLASS		FLOW RATE		MATERIAL		SELF-FLUSH		PULSE DAMPENER		PISTON SEAL		INLET/OUTLET TUBING		SPECIAL OPTIONS	
LD = LD Class	0 1 2 = 12 mL/min (6,000 psi max.)	S = Stainless Steel Fluid Path	F = w/ Self-Flush Piston Wash	P = Pulse Dampener Only No Pressure or Leak Sensors	1 = Standard Seal (SS Energizer)	A = 1/8" OD (flexible)	1 1/16" OD	= Standard Product (leave blank for standard options & cabinet) X X = Customer Special (Consult Factory)							
	0 2 4 = 24 mL/min (10,000 psi max.)	P = PEEK Fluid Path	N = No Self-Flush	T = Pulse Dampener w/ Pressure & Leak Sensors	2 = Organic Seal (SS Energizer)	B = 1/8" OD (rigid)	1 1/16" OD								
	0 3 6 = 36 mL/min (6,000 psi max.)	T = Titanium Fluid Path		N = No Pulse Dampener No Pressure or Leak Sensors	3 = Standard Seal (FP Energizer)	C = 1/8" OD (rigid)	1/8" OD (rigid)								
		J = Jacketed SS Pump Heads		X = No Pulse Dampener w/ Pressure & Leak Sensors	4 = Organic Seal (FP Energizer)	D = 1/8" OD (flexible)	1/8" OD (flexible)								
						G = 1/8" OD (flexible)	1/8" OD (rigid)								
Note: Inlet and Outlet Fittings are included with the pump for the specified tubing. For options A and D, the inlet tubing and filter are included.															

EXAMPLE MODEL NUMBER:

LD 0 1 2 S F P 3 A

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.ssihplc.com/configurator/

LD CLASS - SPECIFICATIONS

Flow Rate Range and Max. Pressure Ratings*	0.000 - 12.000 mL/min (6,000 psi) (5,000 psi PEEK) 0.00 - 24.00 mL/min (10,000 psi) (5,000 psi PEEK) 0.00 - 36.00 mL/min (6,000 psi) (5,000 psi PEEK) 0.0 - 100.0 mL/min (1,000 psi)	Flow Accuracy	Within 2% of set flow rate, 0.200 mL/min and above; 80:20 Water/IPA @ 1,000 psi (12 mL, 24 mL) Within 2% of set flow rate, 0.80 mL/min and above; 80:20 Water/IPA @ 1,000 psi (36 mL) Within 2% of set flow rate, 2.0 mL/min and above; 80:20 Water/IPA @ 500 psi (100 mL)
Pulsation**	≤0.5% @ 1 mL/min and 1,000 psi (12 mL) ≤2% @ 1 mL/min and 1,000 psi (24 mL, 36 mL) ≤4% @ 50 mL/min and 250 psi (100 mL)	Dimensions	6.3" H x 10" W x 17" D (16 x 25.4 x 43.2 cm)
Pressure Accuracy	±2% of full scale pressure	Weight	30 lbs. (13.6 kg)
Flow Precision	0.2% RSD (12 mL) 0.5% RSD (24mL, 36 mL, 100 mL)	Power	100-240 Vac (± 10%), 50-60 Hz
Wetted Materials	(See Above Options), Synthetic Ruby, Sapphire, UHMWPE, PTFE	Control	RS-232, Micro USB, Run/Stop, Analog (0-10V, 4-20mA)
* Flow Rate is dependent on solvent selection and operating pressure. ** Pulsation value with pulse dampener.			