# ReaXus LS Class

High Performance Isocratic Pumps

The reliable LS Class consists of single-headed, positive displacement piston pumps incorporating advanced cam designs for very low pulsation. With micro-stepping

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The pumps are ideal for a wide variety of HPLC applications (including Bio-



compatible separations), Semi-Prep LC, metering & dispensing, and general laboratory use. Standard fluid path materials are Stainless Steel and PEEK. Other available features include jacketed heads for temperature controlled processes. With 5 mL/min, 10 mL/min and 40 mL/min versions available, and pressure capability up to 6,000 psi, these versatile pumps will meet the most demanding applications.

Features include automatic pressure compensation, Pulse Dampener, integrated Prime-Purge Valve, interactive keypad control, and complete PC control and status through RS-232C, micro-USB, and Ethernet serial communications. The unique LS Class provides the highest performance/cost ratio in a compact package.





### FLOW RATE

5 mL/min 40 mL/min 100 mL/min

#### PRESSURE

Up To 6,000 psi (5 or 10 mL/min)

#### FLUID PATH

Stainless Steel or PEEK

#### CONTROL

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



## **LS Class Specifications**

	5 mL/min	10 mL/min	40 mL/min
Flow Rate Range	0.001 - 5.000 mL/min	0.01 - 10.00 mL/min	0.1 – 40.0 mL/min
Flow Rate Increment	0.001 mL/min	0.01 mL/min	0.1 mL/min
Flow Rate Accuracy*	±2% (0.500 - 5.000 mL/min; 80:20 Water/IPA; 1,000 psi)	±2% (1.00 - 10.00 mL/min; 80:20 Water/IPA; 1,000 psi)	±2% (4.0 – 40.0 mL/min; 80:20 Water/IPA; 1,000 psi)
Flow Reproducibility	1% RSD (0.500 – 5.000 mL/min; 80:20 Water/IPA; 1,000 psi)	1% RSD (1.00 – 10.00 mL/min; 80:20 Water/IPA; 1,000 psi)	1% RSD (0.5 – 40.0 mL/min; 80:20 Water/IPA; 1,000 psi)
Maximum Delivery Pressure	5,000 psi (PEEK) 6,000 psi (Stainless)	5,000 psi (PEEK) 6,000 psi (Stainless and Hastelloy)	1,500 psi
Pressure Accuracy	±50 psi		
Pulsation	≤1.5% @ 1 mL/min and 80:20 Water/IPA; 1,000 psi	≤1.5% @ 1 mL/min and 80:20 Water/IPA; 1,000 psi	≤2.0% @ 40 mL/min and 80:20 Water/IPA; 1,000 psi
Piston Displacement	25.1 µL	50.3 μL	201 μL
Piston Wash	Self-flushing pump heads — continuous wash without auxiliary pump		
Wetted Materials	PEEK pumps may include: PEEK, Synthetic Ruby, Sapphire, Zirconia, UHMWPE, FFKM, PFA, ETFE Stainless Steel pumps may include: 316 Stainless Steel, PEEK, Synthetic Ruby, Sapphire, Zirconia, UHMWPE, PFA, PTFE, ETFE		
Dimensions (H x W x D)	6.4" x 7.0" x 16.0" (16.3 x 17.8 x 40.6 cm)		
Weight	15.5 lbs (7.0 kg)		
Power	100 – 240 VAC (±10%), 50 – 60 Hz, 45 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 – 3.0 cP	0.5 - 5.0 cP	0.5 – 9.4 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		

<sup>\*</sup>Flow Rate is dependent on solvent selection and operating pressure

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<sup>\*\*</sup>Range of fluid viscosities where published flow accuracy is maintained