

ReaXus PR Class

High-Flow Dual Head Pumps

The rugged PR Class consists of dual-headed, positive displacement piston pumps that provide high, accurate flows and excellent pressure capability for a variety of uses. Standard fluid path materials are Stainless Steel and PEEK. Other available features include Hastelloy fluid path with

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jacketed pump heads for temperature controlled applications.

The pumps are designed for a wide range of Preparative and Semi-Prep Chromatography, as well as SMBC (simulated moving bed chromatography), and many process and industrial applications. With 100 mL/min and 300 mL/min versions, reaching pressures up to 4,000 psi, the pumps will meet the most demanding LC and process needs.

Features include an integrated Prime-Purge Valve, interactive keypad control, and complete PC control and status through RS-232C, micro-USB, and Ethernet serial communications. The PR Class provides the flow rates and pressures required for high throughput separations.



REAXUS

Flow Rate

100 mL/min
300 mL/min

Pressure

Up To 4,000 psi
(100 mL/min)

Fluid Path

Stainless Steel, PEEK, or Hastelloy

Control

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

PR Class Specifications

	100 mL	300 mL
Flow Rate Range	0.0–100.0 mL/min	0.0–300.0 mL/min
Flow Rate Increment	0.1 mL/min	0.1 mL/min
Flow Rate Accuracy*	±3% (2.0 mL/min and above; 80:20 Water/IPA; 1,000 psi)	±4% (5.0 mL/min and above; 80:20 Water/IPA; 500 psi)
Flow Reproducibility	0.5% RSD	0.5% RSD
Maximum Delivery Pressure	4,000 psi	1,000 psi
Pressure Accuracy	All 100mL pumps and PEEK 300mL: ±50psi SS and Hastelloy 300mL: ±12.5psi	
Pulsation	≤4.0% @ 50 mL/min and 500 psi (with pulse dampener)	
Piston Displacement	251 µL	565 µL
Piston Wash	Self-flushing pump heads—continuous wash without auxiliary pump	
Wetted Materials	<p>PEEK pumps may include: PEEK, Synthetic Ruby, Sapphire, Zirconia, Alumina, Titanium, UHMWPE, FKM, FFKM, PTFE, ETFE, PFA</p> <p>Stainless Steel pumps may include: 316 Stainless Steel, PEEK, Synthetic Ruby, Sapphire, Zirconia, Alumina, UHMWPE, PTFE, ETFE, PFA</p> <p>Hastelloy pumps may include: Hastelloy C-276, PEEK, Synthetic Ruby, Sapphire, Zirconia, Alumina, UHMWPE, FKM, PTFE, ETFE, PFA</p>	
Dimensions (H x W x D)	6.4" x 9.9" x 17.7" (16.1 x 25.1 x 45 cm) (Jacketed Hastelloy heads add 0.9" (2.1 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 (0–10V, 4–20 mA)	
Viscosity**	0.5–10.8 cP (to maintain published flow accuracy)	
Liquid Temperature	0–82 °C	
Environment	Indoor use only (Pollution degree 2)	
Altitude	Up to 2000m	
Ambient Temperature	10–30 °C	
Humidity	20–90% relative humidity	

*Flow Rate is dependent on solvent selection and operating pressure

**Range of fluid viscosities where published flow accuracy is maintained