

# ReaXus M1 Class

Single Piston Pumps with  
Excellent Capability at a Low Cost

The compact M1 Class consists of single-headed, positive displacement piston pumps that deliver high-performance and precision at an affordable price. Superior to Gear, Diaphragm, and Peristaltic pumps, the M1 Class provides

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Applications include precise chemical metering, dispensing, and specific HPLC separations.

Standard fluid path materials are Stainless Steel and PEEK.

With 10 mL/min, 40 mL/min, and 100 mL/min versions, reaching pressures up to 2,500 psi, these pumps capture the majority of typical laboratory fluid transfer applications.

Features include interactive keypad control, Outlet Filter, RS-232 Serial and Micro USB 2.0 ports for complete PC control and status, as well as hardware for laboratory stand mounting. Having the smallest possible footprint for a high pressure pump, the M1 Class will easily integrate into any laboratory or industrial environment.



# REAXUS

## FLOW RATE

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10 mL/min  
40 mL/min  
100 mL/min

## PRESSURE

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Up To 2,500 psi  
(10 mL/min)

## FLUID PATH

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Stainless Steel or PEEK

## CONTROL

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RS-232, Micro USB, Run/Stop

# M1 Class Specifications

	10 mL/min	40 mL/min	100 mL/min
<b>Flow Rate Range</b>	0.01 – 10.00 mL/min	0.1 – 40.0 mL/min	0.1 – 100.0 mL/min
<b>Flow Rate Increment</b>	0.01 mL/min	0.1 mL/min	0.1 mL/min
<b>Flow Rate Accuracy*</b>	±5% (0.5 – 10.0 mL/min; 80:20 Water/IPA; 1,000 psi)	±5% (1.0 – 36.0 mL/min; 80:20 Water/IPA; 250 psi)	±5% (10.0 – 100.0 mL/min; 80:20 Water/IPA; 100 psi)
<b>Flow Reproducibility</b>	1.5% RSD (0.3 – 10.0 mL/min; 80:20 Water/IPA; 1,000 psi)	1% RSD (1.0 – 36.0 mL/min; 80:20 Water/IPA; 250 psi)	1% RSD (2.0 – 100.0 mL/min; 80:20 Water/IPA; 100 psi)
<b>Maximum Delivery Pressure</b>	2,500 psi	500 psi	250 psi
<b>Pressure Accuracy</b>	N/A		
<b>Piston Displacement</b>	25.1 µL	100 µL	226 µL
<b>Piston Wash</b>	Self-flushing pump heads – continuous wash without auxiliary pump		N/A
<b>Wetted Materials</b>	<b>PEEK pumps may include:</b> PEEK, Synthetic Ruby, Sapphire, UHMWPE, FFKM <b>Stainless Steel pumps may include:</b> 316 Stainless Steel, PEEK, Synthetic Ruby, Sapphire, Alumina, UHMWPE, PTFE, ETFE		
<b>Dimensions (H x W x D)</b>	5.6" x 3.0" x 10.6" (14.2 x 7.6 x 26.9 cm)		
<b>Weight</b>	6 lbs (2.7 kg)		
<b>Power</b>	100 – 240 VAC (±10%), 50 – 60 Hz, 40 W		
<b>Front Panel</b>	4-digit LED to monitor flow rate and indicate alarms. Run/Stop and menu keys, two status indicators, Increase/Decrease displayed parameters.		
<b>Communication</b>	RS-232, micro-USB, Run/Stop TTL		
<b>Viscosity**</b>	0.5 – 7.0 cP	0.5 – 5.2 cP	0.5 – 6.0 cP
<b>Liquid Temperature</b>	0 – 82 °C		
<b>Environment</b>	Indoor use only (Pollution degree 2)		
<b>Altitude</b>	Up to 2000 m (6500 ft)		
<b>Ambient Temperature</b>	10 – 30 °C		
<b>Humidity</b>	20 – 90% relative humidity		

\*Flow Rate is dependent on solvent selection and operating pressure  
 \*\*Range of fluid viscosities where published flow accuracy is maintained

## M1 CLASS—Order Numbers

### CONSTANT FLOW

#### STAINLESS STEEL

Stainless Steel Fluid Path; with Pulse Dampener; Standard Seal (Stainless Steel Energizer); Constant-Flow Control Mode

- 0.01–10.00 mL/min; 2,000 psi .....# M1010SFP1XFTL
- 0.01–40.0 mL/min; 500 psi .....# M1040SFP1XFTL
- 0.01–100.0 mL/min; 100 psi .....# M1100SNN1XFTL

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