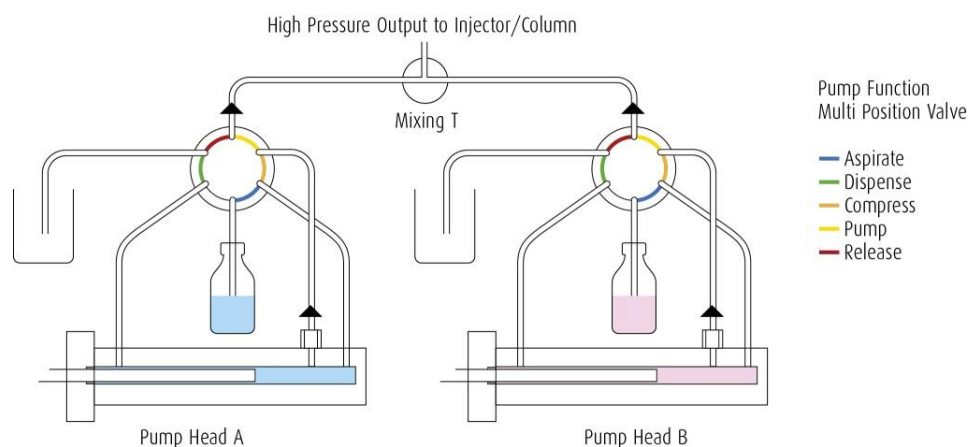


Increased LC/MS sensitivity, simplified.



Prolab's Zirconium Ultra Nano- and Micro-UHPLC System is a binary gradient pump with a vast range of split-less flow rates from 4 nl/min to 500 μ l/min at 1000 bar (15,000 psi). Methods can be scaled from conventional 2.1 mm ID columns down to 75 μ m ID while using the same pump all the way, thereby achieving more than 700x sensitivity gain. The high-resolution linear piston drives and optional flow sensors allow for highly precise gradient control at the lowest flow rates and highest pressures. Thanks to a unique pump head and active valve design it is now possible to completely automate all preparative and diagnostic functions, individual pre-compression of solvents for short equilibration times, and flow-through purging for automated solvent exchange and air removal. Comprehensive software support packages complete a UHPLC system which remains unmatched on the market today.



Patent pending

Specifications

	Zirconium Ultra	Zirconium SP
Flow range	4 nl/min – 500 µl/min	40 nl/min – 2000 µl/min
Max. operating pressure	15,000 psi (1000 bar)	4,500 psi (300 bar)
Stroke volume/channel	1350 µl	5500 µl
Pump operation modes	<ul style="list-style-type: none"> • Binary single-stroke gradient • Binary gradient with continuous flow (with staggered refill) • Dual single-channel single-stroke pumps (executing two methods at the same time independently) 	
Piston Control Modes	<ul style="list-style-type: none"> • Target speed • Target pressure • Target flow (with flow sensors option) 	
Temperature control	<ul style="list-style-type: none"> • Pump head/valves compartment: Ambient to 50 °C • Column (optional): Ambient to 90 °C 	
Software controls	<ul style="list-style-type: none"> • User-friendly stand-alone software and method editor • Software drivers for Chromatography Data Systems of various vendors • Software Development Kit (SDK) for custom/OEM integrations 	
PC connection	<ul style="list-style-type: none"> • RS232 • USB • Ethernet (TCP/IP) with integrated Ethernet switch and second port to connect further instruments 	
I/O Interfaces	<ul style="list-style-type: none"> • 4 digital inputs • 4 digital outputs (isolated) 	
Accessory interfaces	<ul style="list-style-type: none"> • Prolab column oven (controllable from LC method) • 2 multi-purpose switched 24V outputs (for Degassers or other accessories, controllable from LC method) 	
Wetted parts	Stainless steel, zirconium dioxide, Fluoroloy A09, fused silica, PEEK, HPFA, ETFE.	
Power Requirements	100-240V AC, 50/60 Hz, max. 120 W	
Dimensions (w x h x d)	268 mm x 92 mm x 558 mm	
Weight	19.5 kg	
Standards Conformance	<ul style="list-style-type: none"> • UL 61010-1, 3rd Edition • CAN/CSA-C22.2 No. 61010-1-12, 3rd Edition • Low-Voltage Directive 2006/95/EC • EMC Directive 2004/108/EC • DIN EN 61010-1:2010 • DIN EN 61326-1:2013 	



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Distributor



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