



Agilent 1260 Infinity Capillary Pump

Features, Specifications and Ordering Details



For capillary LC and LC/MS applications

The Agilent 1260 Infinity Capillary Pump is suited for capillary LC/UV and LC/MS applications, such as bio-pharmaceutical research, where sample volumes are limited and higher sensitivity is essential. It offers better control and flexibility of low flow rates. The capillary pump uses industry leading Electronic Flow Control (EFC) for accurate and precise gradient delivery, and ensures retention time reproducibility and is ideal for capillary flow rate from 1 $\mu\text{L}/\text{min}$ to 100 $\mu\text{L}/\text{min}$. It can also deliver a standard LC flow rate at up to 2.5 mL/min.

Features

- Reliable and reproducible results – using Electronic Flow Control (EFC) that provides real-time adjustment of the flow rate throughout the analysis; offers accurate flow rates even with solvent mixtures.
- Two pumps in one – use capillary mode for optimized flow rates from 1 $\mu\text{L}/\text{min}$ to 100 $\mu\text{L}/\text{min}$; use normal mode for flow rate up to 2.5 mL/min with easy hardware changes.
- Maximum performance – Retention time (RT) stability independent from column back pressure.
- Even more flexibility on solvent selection by using the built-in solvent selection valve that combines two out of four solvents for binary gradient formation, or select a different solvent for flushing the column.
- Low delay volume through the use of micro volume components.
- Low detector baseline noise and long-term stability using the included micro vacuum degasser.



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Specifications – Agilent 1260 Infinity Capillary LC Pump

Agilent 1260 Infinity Capillary Pump	
Hydraulic system	Two dual pistons in series, with proprietary servo-controlled variable stroke drive, floating pistons and active inlet valve, solvent selection valve and electronic flow control (EFC) for flow rates up to 100 $\mu\text{L}/\text{min}$.
Settable column flow range	0.01 – 20 $\mu\text{L}/\text{min}$, 0.01 – 100 $\mu\text{L}/\text{min}$ (with extended flow range kit), 0.001 – 2.5 mL/min (electronic flow control bypassed).
Recommended column flow range	1–20 $\mu\text{L}/\text{min}$, 10–100 $\mu\text{L}/\text{min}$ (with extended flow range kit).
Column flow precision	< 0.7 % RSD or 0.03 SD, whatever is greater (typically < 0.4 % RSD or 0.02 SD), at 10 $\mu\text{L}/\text{min}$ and 50 $\mu\text{L}/\text{min}$ column flow (based on RT, default settings).
Composition precision	< 0.2 % SD at 10 $\mu\text{L}/\text{min}$, 50 $\mu\text{L}/\text{min}$ (with extended flow range kit) and 1 mL/min (default settings).
Pressure range	up to 400 bar system pressure.
Delay volume	Typically 3 μL from EFC to pump outlet for flow rates up to 20 $\mu\text{L}/\text{min}$; 12 μL from EFC to pump outlet for flow rates up to 100 $\mu\text{L}/\text{min}$; 180–480 μL (system pressure dependant) without mixer for flow rates up to 2.5 mL/min; mixer delay volume 420 μL .
pH range	1.0 to 8.5 recommended.

Ordering Details – Agilent 1260 Infinity Capillary Pump

Agilent 1260 Infinity Capillary Pump and other recommended modules

Description	Product Number
Agilent 1260 Infinity Capillary Pump with micro vacuum degasser	G1382A
Agilent 1260 Infinity High Performance Micro Autosampler	G1377A
Agilent 1290 Infinity Thermostat for thermally labile samples	G1330B
Agilent 1290 Infinity Thermostatted Column Compartment and micro column switching option for column heating or enrichment method and/or 2D LC	G1316A G1316A#056
Agilent 1260 Infinity Diode Array Detector VL Plus	G1315C
Agilent 1260 Infinity Diode Array Detector VL	G1315D
80 nL flow cell	G1315-68716
500 nL flow cell	G1315-68724
Agilent 1200 Infinity Series Instant Pilot	G4208A

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