



Agilent SD-1 Solvent Delivery Module

Features, Specifications, and Ordering Details



To achieve high quality HPLC separations, solvent flow rates must be accurate and reproducible. With software-controlled, independent piston design, the Agilent SD-1 Solvent Delivery Module meets these exacting requirements. To maximize flow reproducibility, a pressure transducer in each pump head provides instant flow, and pressure feedback to the drives. The dual motor, high resolution drives ensure supremely accurate solvent delivery and the pulse free pump design extends column life.

An easy change of pump heads gives flow rates from 0.01 mL/min to 800 mL/min, up to 6,000 psi, showing that the SD-1 is ideal for use with analytical and preparative systems, providing seamless scale-up that is simple to achieve and economical in operation.

Features

- Outstanding retention time stability, day in and out is ensured by totally pulse-free flow
- Maximized versatility as isocratic and binary gradient configurations or injection pump
- Easy scale-up with flow rates from 0.01 mL/min to 800 mL/min using three different pump head configurations up to 200, 500, and 800 mL/min at pressures up to 6,000 psi
- Highly accurate flow rates delivered by a unique microprocessor-controlled rapid dual-drive and parallel pump heads with high-speed feedback to compensate precisely for refill and solvent compression effects
- Easy and faster scale up of your analytical method. The SD-1 pump is designed with scale-up in mind. The unique design allows an accurate gradient to be generated at any flow rate from 0.01 mL/min to 200 mL/min without any change of pump heads
- Extended column lifetime saves expensive preparative columns from the constant pressure-pulse pounding typical of other large piston and diaphragm pumps



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Specifications

Pump head (mL/min)	Flow range (mL/min.)	Accuracy	Precision	Flow noise	Maximum pressure ¹ Ti
200	0.01–200	0.3%	±0.1%	0.3%	6,000 psi
500	0.02–500	0.3%	±0.1%	0.3%	2,500 psi
800	0.02–800	0.3%	±0.1%	0.3%	1,500 psi

¹ 1Mpa = 10 bar = 145 psi

Display	Backlit LCD, 4 lines, 160 characters
Pressure display	psi bar, or MPa (user selectable)
Pressure limits	High, low (user adjustable)
Contacts out	6, rated for 24 VDC, 1 ampere
Contacts in	5 (stop, hold, transfer, inject, and mark)
Analog out	1 × 12-bit, 0 to 10 V
Analog in	2 × 18-bit, -0.5 to 2.5 V
Auxiliary power out	1 × 5 V DC, 47 Ohm resistance
Liquid contact	Fuorocarbons, UHMW polyethylene, PEEK, sapphire, titanium, TZP zirconia
Washing section	Standard on all heads
Operating temperature	15 °C to 30 °C ambient
Power	100–130/200–260 V, 50/60 Hz
Dimensions	40.6 cm (w) × 26.7 cm (h) × 55.9 cm (d) 16 in (w) × 10.5 in (h) × 22 in (d)
Weight	34 kg (75 lbs)

Ordering Details

Agilent SD-1 Solvent Delivery Module

Description	Part number
Agilent SD-1 Solvent Delivery Module	G9302A
Pump head kit 200 mL/min titanium with 2 heads, fittings and connectors	G9302A#107
Pump head kit 500 mL/min titanium with 2 heads, fittings and connectors	G9302A#108
Pump head kit 800 mL/min titanium with 2 heads, fittings and connectors	G9302A#109
SD-1/218 Pump head adapter kit 1/4"	G9302A#150
Kit 1/16" × 0.020" stainless steel plumbing	G9302A#120
Kit 1/16" × 0.030" stainless steel plumbing	G9302A#121
Kit 1/16" × 0.040" stainless steel plumbing	G9302A#122
Kit 1/16" × 0.020" PEEK plumbing	G9302A#123
Kit 1/16" × 0.030" PEEK plumbing	G9302A#124
Kit 1/8" × 0.080" stainless steel plumbing	G9302A#125
Kit 1/8" × 0.082" PEEK plumbing	G9302A#126

Agilent SD-1 Add-on Solvent Delivery Module

Description	Part number
Agilent SD-1 Add-on Solvent Delivery System	G9303A
Pump head kit 200 mL/min titanium with 2 heads, fittings and connectors	G9303A#107
Pump head kit 500 mL/min titanium with 2 heads, fittings and connectors	G9303A#108
Pump head kit 800 mL/min titanium with 2 heads, fittings and connectors	G9303A#109
SD-1/218 Pump head adapter kit 1/4"	G9303A#150
1.2 mL Dynamic mixer stainless steel	G9303A#144
1.2 mL Dynamic mixer titanium	G9303A#148
10 mL Dynamic mixer stainless steel	G9303A#145
Prep mast kit 218/SD-1, 200 mL analytical injector 1/16"	G9303A#164
Prep mast kit 218/SD-1, 200 mL preparative injector 1/16"	G9303A#165
Prep mast kit SD-1, 500 mL/800 mL preparative injector 1/8"	G9303A#166

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