

ProStar 210/PrepStar 218 HPLC Solvent Delivery Modules

A unique combination
of precision and
flexibility

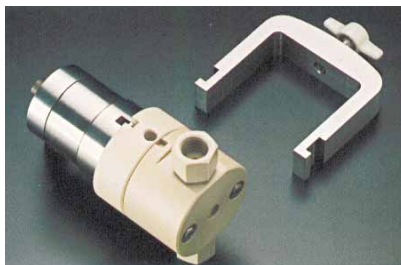


- Easy scale-up with flow rates from 10 $\mu\text{L}/\text{min}$ to 200 mL/min
- Economical and reliable operation
- Metal-free fluid paths for sensitive samples

With a wide range of flow rates, virtually all application needs are covered by either the ProStar 210 or PrepStar 218 solvent delivery modules. Smooth, precise solvent flow and system pressure are maintained with a built-in pressure unit.

The ProStar 210 is ideal for microbore, classic analytical, and preparative flow rates up to 100 mL/min. The PrepStar 218 is the choice for applications requiring higher flow rates up to 200 mL/min or back-pressures up to 8700 psi.

User-friendly pump heads are self-contained units that can be rapidly exchanged by simply loosening a finger-tight clamp.

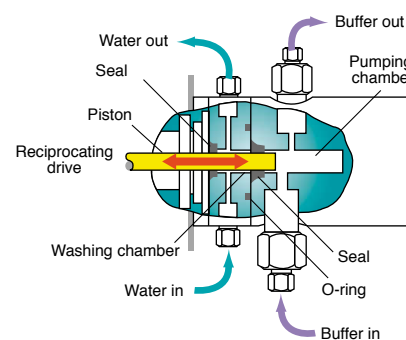


Move easily between applications with quick-release pump heads from 5 mL to 200 mL.

Reliable Operation

Engineered for continuous use, the rugged ProStar 210 and PrepStar 218 deliver dependable performance

using a single-piston, rapid-refill design with few moving parts.



Rugged, single-piston design saves time and seal replacement costs.

Piston wash option dramatically extends seal life in biochromatography applications with high concentration salt buffers.

Flow Path Material Options

PEEK and titanium pump heads are available to protect biological samples from trace amounts of metal ions that might be released from components in the fluid path.

Variety of Configurations

From isocratic to multi-module high-pressure gradient mixing systems, the ProStar 210 and PrepStar 218 are easily configured to fit your laboratory's needs. Depending on your requirements, add up to four solvent delivery modules for quaternary gradients.

NOTICE: This document contains references to Varian. Please note that Varian, Inc. is now part of Agilent Technologies. For more information, go to www.agilent.com/chem.

Module Control

Windows®-based Star® Workstation provides complete system control, data analysis, and multiple reporting options. Star Workstation includes tools to facilitate 21 CFR Part 11 compliance.

GLP

The ProStar 210 and PrepStar 218 modules are equipped with an internal diagnostic system that monitors piston, seal, and check valve wear. With the Star Workstation module log, users can

track seal and check valve replacement dates and flag components that should be replaced.

A complete IQ, OQ, and PQ documentation package and contracted services are available to help your laboratory meet regulatory requirements.

ProStar 210/PrepStar 218 Specifications

Flow Rates and Pressure Limits					
Head	Range (mL/min)	ProStar 210		PrepStar 218	
		SS and Ti (psi)	PEEK (psi)	SS and Ti (psi)	PEEK (psi)
5	0.01-5	8700 (600 bar)	n/a	8700	n/a
10	0.01-10	8700	4000 (275 bar)	8700	4000
25	0.025-25	4600 (315 bar)	4000	6000 (410 bar)	4000
50	0.05-50	2000 (137 bar)	2000	4000	4000
100	0.1-100	1200 (85 bar)	1200	4000	2000
200	0.2-200	n/a	n/a	3500 (240 bar)	n/a

Additional Flow Specifications

- Flow accuracy: ±1% of selected flow rate or ± 0.05% of maximum flow rate, whichever is larger (0.1% for 5 mL heads)
- Flow reproducibility: ±0.1% of selected flow rate or ±0.05% of maximum flow rate, whichever is larger (0.01% for 5 mL heads)

Module/Computer Interface

- Display: backlit LCD with 2 lines, 48 characters

- Programs: up to 100 methods with unlimited timed events
- Digital serial input/output channel (RS422)
- 3 programmable contact-closure relay outputs
- 5 contact-closure inputs
- Analog input (-0.5 to +2.5V), 18-bit A/D converter
- 1 programmable analog output (0 to 10V)

Dimensions and Weight

- Size: 7.8 in./20 cm (h) x 11.5 in./29 cm (w) x 18 in./46 cm (d)
- Weight: 48 lb/21.8 kg for ProStar 210
52 lb/23.6 kg for PrepStar 218

Ordering Information

Cat. No.	Description
393550001	ProStar 210 Solvent Delivery Module
393650001	PrepStar 218 Solvent Delivery Module
393552501	Analytical Pressure Module, Titanium
393552601	Semi-Prep Pressure Module, Titanium
393552701	Preparative Pressure Module, Titanium
393650501	200 mL/min Pressure Module, Titanium

PEEK configurations and a wide selection of pump head types and materials are also available.



VARIAN

Varian, Inc. • www.varianinc.com

• North America 800.926.3000, 925.939.2400

• Europe The Netherlands: 31.118.67.1000

• Asia Pacific Australia: 613.9560.7133

• Latin America Brazil: 55.11.3845.0444

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