

Smartline 1800 Preparative HPLC Pump

Overview

The Smartline 1800 HPLC Pump has been specifically designed for use in preparative chromatography. The standard pump is supplied with the pumphead of your choice.

Four Pumpheads

Four interchangeable pump heads are available offering maximum flowrates between 100 and 1000 ml/min. Built-in back-flushing capability gives greatly improved reliability for unattended operation.

Designed for Reliability

The Smartline 1800 HPLC Pump design ensures minimum downtime and constant precise flow rates for semi-preparative and preparative HPLC and for SMB systems.

Gradient Capability

The standard Smartline 1800 HPLC Pump contains all logic control needed for reliable and reproducible gradient operation without the need for an external PC. Multiple pumps can be used to form a high pressure gradient system for up to four solvents. A low pressure gradient system option for up to four solvents is also available.

Solvent Recycling

Adding an electric switching valve permits the use of solvent recycling or fraction collection features.

Easily Integrated into Systems

The Smartline 1800 HPLC Pump is of modular design, easy-to-use and easy-to-maintain, which allows it to be integrated easily into existing systems as a module.

Thermostated Heads

Both cooling and heating options for pump heads and the necessary thermostat connections are available upon request.



Specifications

Delivery System	Double-piston pump with Al ₂ O ₃ -pistons and electronic residual pulsation suppression			
Flow ranges (ml/min)	0.1-99.9 ml/min	0.1-249.9 ml/min	0.1-499.9 ml/min	0.1-999.9 ml/min
Pressure	max. 400 bar	max. 200 bar	max. 100 bar	max. 50 bar
Flow Rate Accuracy	±2 %, measured using methanol/water 80:20 V/V, RSD < 0,1 %			
Flow precision	RSD (Relative Standard Deviation) better than 0.1 %			
Display	LC-Display with 2 x 24 characters			
System Protection	Soft start with adjustable Pmin and Pmax			
Control	Knauer Net with 2 RS-232 connectors, 8 event outputs (TTL, OC, Relays), remote connections for Start and Error (The pump can be controlled using either Knauer Chromgate or Geminix CDS Software)			
GLP features	Recording of run time, pump cycles, total volume, installation data, maintenance and errors			
Other features	In combination with an electrical switching valve solvent-recycling and/or fraction collection is possible, 20 local control programs are available			
Dimensions	220 x 185 x 340 mm (W x H x D)			
Weight	10 kg			
All specifications may be subject to change for technical reasons.				

Ordering Information

A50501	Smartline 1800 Preparative Pump with 100 ml pump head, stainless steel
A50511	Smartline 1800 Preparative Pump with 250 ml pump head, stainless steel
A50521	Smartline 1800 Preparative Pump with 500 ml pump head, stainless steel
A50531	Smartline 1800 Preparative Pump with 1000 ml pump head, stainless steel
A4099	Valves for low pressure gradient for Smartline 1800 Pump, stainless steel
A4029	100 ml pump head, stainless steel
A4021	250 ml pump head, stainless steel
A4038	500 ml pump head, stainless steel
A4022	1000 ml pump head, stainless steel
A2034	Cooling device for pump heads A4029, A4021, A4022
A0895	RS232 cable for serial PC-interface
Accessories and Spare Parts, 100 ml Pump Heads	
A0684	Check valve unit
A0747	Piston rod, 1/4"
A0746	2 piston seals and 1 O-ring
A2003	Hydraulic connection set (10 tube fitting screws, 10 tube ferrules)
A1121	Option for peak recycling and SMB applications
Accessories and Spare Parts, 250 ml Pump Heads	
A1080	Check valve unit
A1017	Piston rod, 3/8"
A1046	2 piston seals and 1 O-ring
A2003	Set of hydraulic connection (10 tube fitting screws, 10 tube ferrules)
A1117	Option for peak recycling and SMB applications

Accessories and Spare Parts, 500 ml Pump Heads	
A1080	Check valve unit
A1478	Piston rod, 9/16"
A1479	2 piston seals and 1 O-ring
Accessories and Spare Parts, 1000 ml pump heads	
A1080	Check valve unit
A1015	Piston rod, 3/4"
A1077	2 piston seals and 1 O-ring