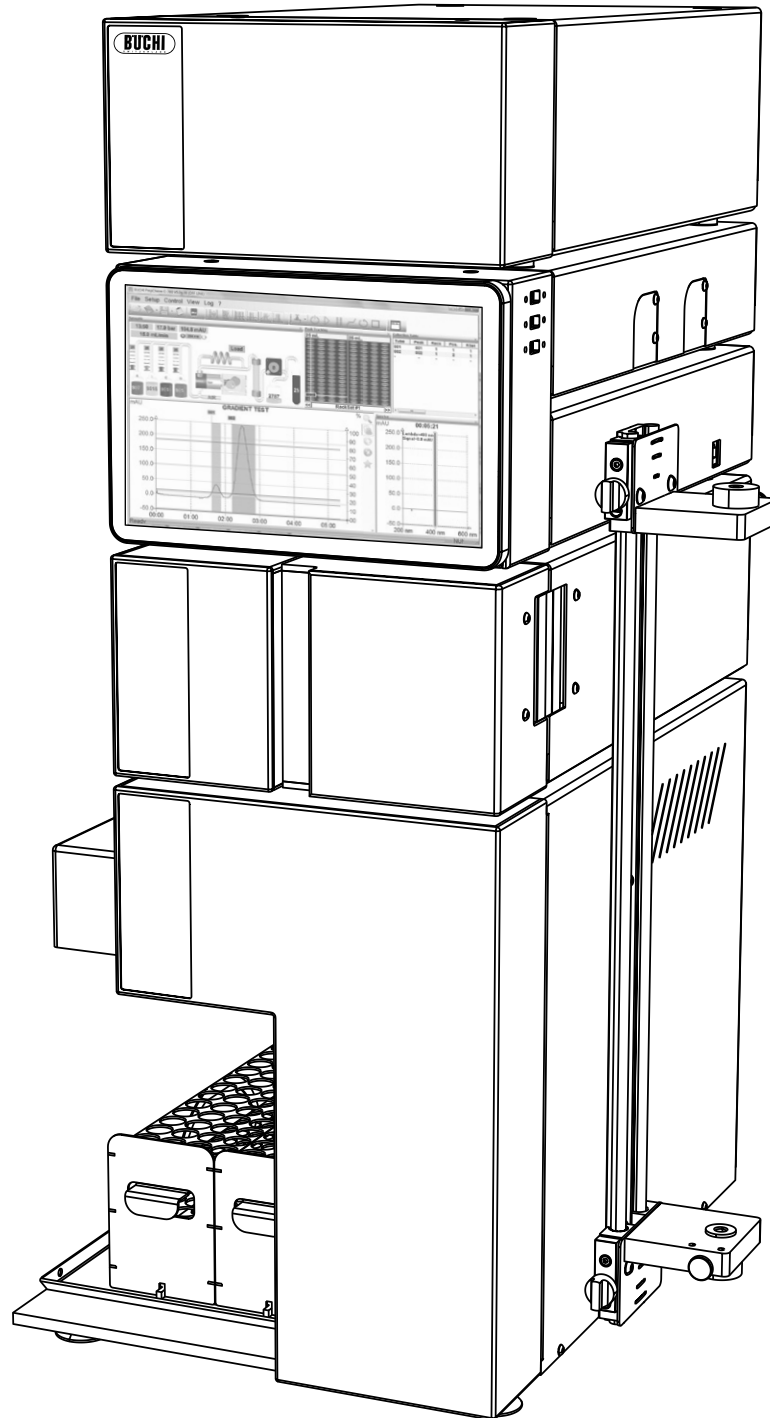




PrepChrom C-700

Technical data sheet

The PrepChrom C-700 offers an interactive user interface, and simultaneously enables an easy and fast purification process. The high performance preparative chromatography system allows running both flash and preparative HPLC separations.



Scope of delivery

Components	Qty
Pump module	1
Fraction collector	1
Detector module	1
Injection valve module	1
Computer with touch-screen	1
Column holder complete (incl. stainless steel connectors for prep HPLC)	1
Pre column holder complete (incl. stainless steel connectors for prep HPLC)	1
Rack for 18 x 150 mm or 18 x 180 mm tubes, 64 positions	2
Glass tubes, 18 x 180 mm	100
RS-232 cable male	3
RS-232 cable female	1
Power supply cable	5
Solvent aspiration tubing set, ETFE, 150 cm, 2.4 mm ID, equipped with spring, 4 pcs	1
Tubing, PEEK, pump outlet to valve port 4, 1.6 mm ID	1
Tubing, ETFE, column inlet to valve port 3, 1.6 mm ID	1
Tubing, PEEK, column inlet to valve port 3, 1.6 mm ID	1
Tubing, PEEK, pre-column outlet to valve port 5, 1.6 mm ID	1
Tubing, ETFE, pre-column outlet to valve port 5, 1.6 mm ID	1
Tubing, ETFE, valve port 6 to waste, 100 cm, 1.6 mm ID	1
Syringe adapter for injection port	1
Tubing, ETFE, column outlet to detector inlet, 1.6 mm ID, Stain Steel connectors	1
Tubing, ETFE, column outlet to detector inlet, 1.6 mm ID, PEEK connectors	1
Tubing, PEEK, pre-column inlet to valve port 2, 1.6 mm ID	1
Tubing, ETFE, pre-column inlet to valve port 2, 1.6 mm ID	1
Back pressure tube, PEEK, 70 cm, 0.5 mm ID	1
Stainless steel union for flash configuration	4
Semi-prep and prep adaptation kit	1
Fitting for cleaning discs connections (long nut + ferrule)	2
Adapter Luer Lock male to 1/4" - 28 male	2
Adapter 1/4" - 28 female to Luer Lock male	1
Stainless steel adapter luer lock female to 1/4" - 28 male	2
Male union, ETFE	1
Luer valve quick stop	1

Components	Qty
Injection loop, 2 mL	1
USB key with software	1
Wrench 1/4" - 5/16"	1
Wrench 3/8" - 7/16"	1
Clip holder and stylus	1
Operation manual C-700	1
Allen wrench 3 mm	1

Order code



PrepChrom C-700
 10 115V
 20 230V

Technical data

Dimensions (W × H × D)	355 x 890 x 495 mm
Weight	53 kg
Connection voltage	110 - 120 V / 220 - 240 V ± 10 %
Fuse 110 - 120 V	1 x TT5A L 250V 4 x TT2.5A L250V
Fuse 220 - 240 V	1 x TT2.5A L 250V 4 x TT1.25A L250V
Frequency	50 / 60 Hz
Power consumption	max. 350 W
Degree of protection	IP20
Overtoltage category	II
Pollution degree	2
Pressure range	up to 100 bar (1450 psi)
Flow rate range	5 - 250 mL/min
Flow rate accuracy at 10 - 250 mL/min	< 5 %
Flow rate repeatability at 10 - 250 mL/min	< 1 %
Gradient step tolerance at 80 mL/min, 80 bar (1160 psi)	< 3.5 %

Interfaces	9 x RS-232 (1 female, 8 male) 1 x RJ45 1 x solvent level sensor port 1 x analog port 2 x control signal ports
------------	---

Environmental conditions

Temperature	5 - 40 °C for indoor use only
Altitude	up to 2000 m
Humidity	Maximum relative humidity 80 % for temperature up to 31 °C decreasing linearly to 50 % relative humidity at 40 °C

Pump

Gradient	Quaternary gradient
Air inlet	Drying of flash cartridges
Mixing chamber	Static with adjustable volume
Protective elements	Pressure sensor (shutdown based on selected column and at 100 bar) Leak sensor
Material in contact with solvent	PEEK, sapphire, ceramic, FEP, ruby
Control signals	Start - In, Stop - In, Start - Out, Stop - Out, solvent level sensor
Interface	1 x RS-232 female

Detector

Wavelength range	200 - 600 nm
Accuracy of adjustment	± 1 nm
Reproducibility	± 0.5 nm
Flow cell path length	0.3 mm
Noise level at test cell	± 5 x 10 ⁻⁵ AU at 254 nm, TC 0.75 s
Drift at test cell (254 nm after 1 h)	1 x 10 ⁻³ AU/h
Time constant (T90)	1 s
Light source	Deuterium discharge lamp
Maximum flow rate	500 mL/min
Maximum pressure at the cell	20 bar / 290 psi
Output for integrator	1 V/AU (in digital form only)
Interface	1 x RS-232 male

Injection valve

Injection valve	6 way 2 - position injection valve with injection loop
Interface	1 x RS-232 female

Fraction collector

Collection area (W x D)	200 mm x 420 mm
Interface	1 x RS-232 female

PC - Module

Display	10.1" touch screen
Interface	5 x RS-232 (female) 4 x USB 1 x RJ45

Accessories

	Order number
Solvent level sensors set for 4 solvents and waste	11061270
Module for 2nd data acquisition channel	11061271
3-way stainless steel purge valve fo flash columns	11061263
3-way stainless steel purge valve for prep HPLC	11061797
Fume enclosure without extractor	11061274
Luer connection kit for larger columns	11061268
Ballasting kit for 1/8" tubing, 4 pcs	11061269
Back pressure regulator 2 bar	044337
Solvent tray	11061275
Switching valve for 2 columns selection	11061264
Backflush valve	11061265
Pre-column holder	11061237
Safety solvent caps, 4 pcs	11061267
Stand alone column holder for Prep HPLC column	11061272
Stand alone column holder for Flash column	11061273
Rack for 18 x 150 mm tubes or 18 x 180 mm tubes	11061256
Rack for 13 x 100 mm tubes	11061257
Rack for 16 x 150 mm tubes	11061258
Rack for 21 x 150 mm tubes	11061259

	Order number
Rack for 25 x 150 mm tubes	11061260
Rack for 28 x 150 mm tubes	11061261
Rack for 29.5 x 200 mm tubes	11061262
Injection loop, stainless steel, 100 μ L	11061238
Injection loop, stainless steel, 250 μ L	11061239
Injection loop, stainless steel, 500 μ L	11061240
Injection loop, stainless steel, 1 mL	11061241
Injection loop, stainless steel, 2 mL	11061224
Injection loop, stainless steel, 5 mL	11061242
Injection loop, stainless steel, 10 mL	11061243
Injection loop, stainless steel, 20 mL	11061244
Injection loop, stainless steel, 40 mL	11061245
Injection loop, stainless steel, 50 mL	11061246
ELS Detector C-650 (120 V/60 Hz)	11059106
ELS Detector C-650 (230 V/50 Hz)	11059105

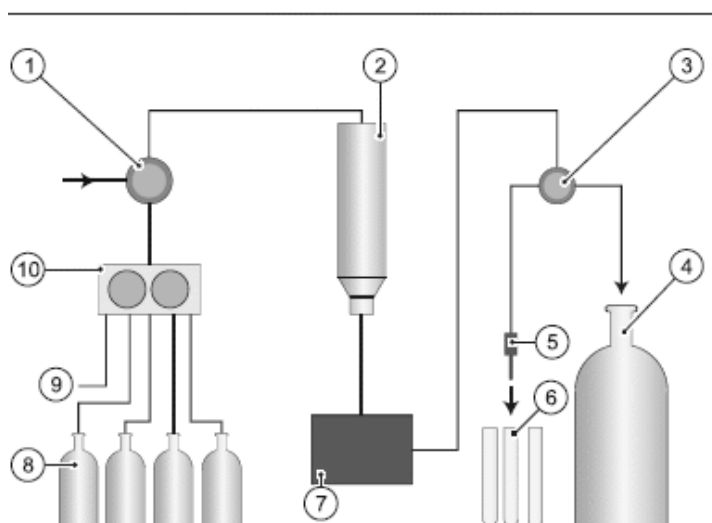
Functional principle

The pump module enables the formation of a quaternary gradient. Solvents (A, B, C and D) enter the pump heads via the aspiration tubing (input). The solvents are then pumped to the mixing chamber. The mixed solvent is then further pumped to the injection system and to the column.

The 6-way electric valve gives the possibility to load the sample to the loop, pre column or directly to the column. The UV detector provides the system with information on the light absorbance of the solvents and samples passing through the detector flow cell. The instrument can measure the change of the absorption of a sample at four selected wavelengths in a range from 200 to 600 nm.

After the detection of the signal, the eluent at the outlet of the column can be collected as fractions on the fraction collector. The waste valve allows the choice between collection and waste and minimizes the number of tubes needed.

After the run the flash column can be dried using the air purge (9) before being discarded.



- | | |
|------------------------|-----------------------|
| ① 6-way electric valve | ⑥ Glass tubes |
| ② Column | ⑦ UV Detector |
| ③ Waste valve | ⑧ Solvent bottles A-D |
| ④ Waste bottle | ⑨ Air purge |
| ⑤ Fraction collector | ⑩ Pump |