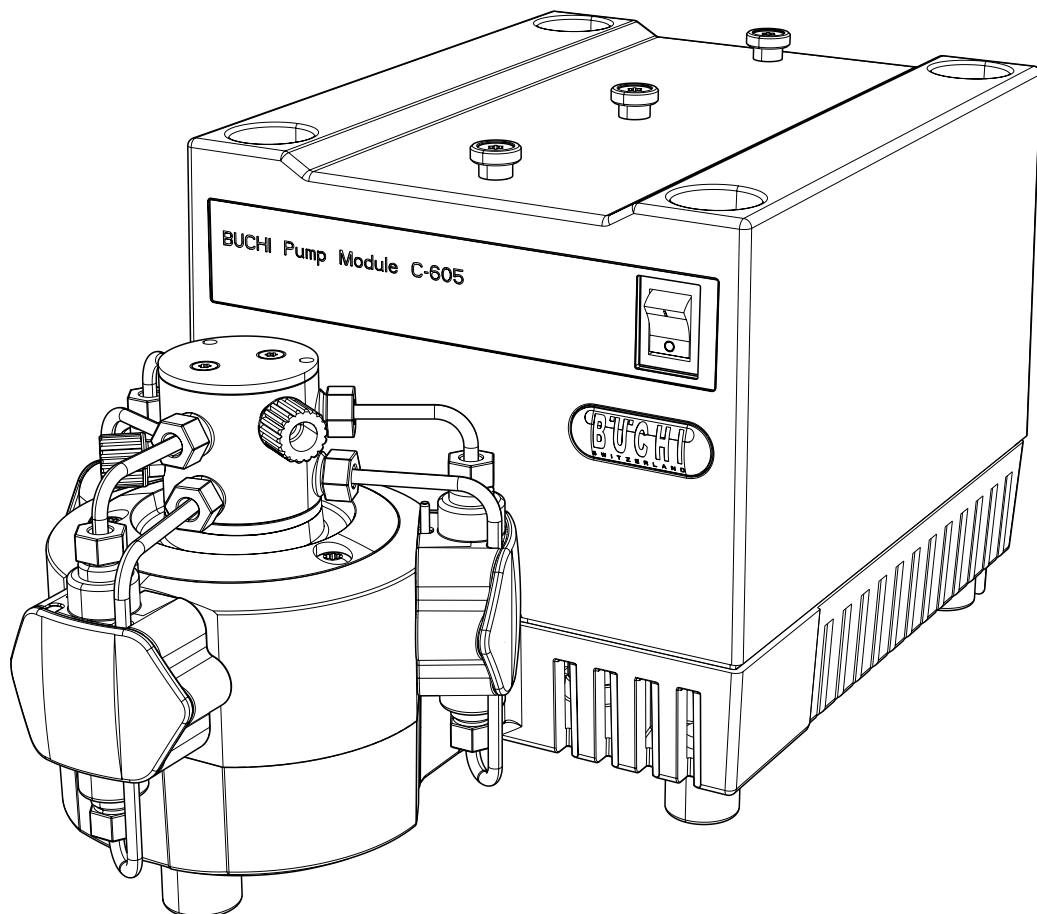




## Pump module C-601 / C-605

### Technical data sheet

The 3-piston pump module with a pulse-free flow rate from 2.5 – 250 mL/min guarantees fast separation at a maximum working pressure of 10 bar (145 psi) or 50 bar (725 psi) for isocratic or gradient mode. The chemically resistant and biocompatible pumps can be used with a wide range of organic solvents.



## Scope of delivery

Components	Qty
Connection cable RJ45, 0.3 m	1
Solvent filter	1
Screwdriver	1
Turix wrench	1
Fittings 1/8" (green)	5
Ferrules 1/8" (green)	5
Fittings D4 (white)	2
Ferrules D4 (white)	2
FEP pressure tubing 1/8" × 1/16", 1.5 m	1
FEP aspiration tubing 4 mm × 2.5 mm, 1.5 m	1
Torx allen wrench TX10	1
Torx allen wrench TX20	1
Power cable	1
Silicone tube D1.5/3.5	1
Operation manual	1

## Order code

0 5 4 1 0

### Pump module

- 1 C-601 (10 bar / 145 psi)
- 5 C-605 (50 bar / 725 psi)

## Dimensions and weight

	Dimensions (W × H × D)	Weight
Pump Module C-601 / 605	160 × 153 × 305 mm	4 kg
Pump Controller C-610	150 × 80 × 120 mm	< 1 kg
Pump Manager C-615	150 × 80 × 120 mm	< 1 kg

## Technical data

### C-601 / C-605

Connection voltage	100 – 230 V $\pm$ 15 %
Frequency	50/60 Hz
Power consumption	max. 75 W
Degree of protection	IP20
Overvoltage category	II
Pollution degree	2
Function	3 – piston pump chemically inert and biocompatible
Pressure range	0 – 10 bar (0 – 145psi) or 0 – 50 bar (0 – 725psi)
Pump Type	Radially arranged 3 – piston pump
Flow rate	2.5 mL/min – 250 mL/min
Flow rate accuracy	+/- 2 % of the set flow rate, calibration option for specific solvents and temperatures
Reproducibility	+/- 0.5 % of the set flow rate
Material in contact with solvent	PEEK, sapphire, ceramic, FEP, ruby
Pump head	Integrated piston back flushing

### Environmental conditions

Temperature	5 – 35 °C for indoor use only
Altitude	up to 2000 m
Humidity	maximum relative humidity 80 % for temperature up to 31 °C, and then lineary decreasing to 50 % at 40 °C

### C-610

Connection voltage	24 V DC
Function	Control unit for isocratic separation with one Pump Module C-601
Interfaces	1 x RS485 (Systembus) 1 x Mini Din (TTL In / Out for alarm supervision and / or extern. start)
Gradient function	none
Display	Illuminated LCD display (43 x 17 mm)
Dialog languages	none

## C-615

Connection voltage	24 V DC
Function	Control of up to two Pump Modules C-601 / C-605, which enables the simple creation of binary solvent gradients.
Interfaces	1 x RS232 (process data output) 1 x Mini DIN (TTL in/out for alarm supervision and/or extern. start) 1 x Mini DIN (pressure sensor) 2 x Mini DIN (optional level sensor) 2 x Mini DIN (solvent valves)
Gradient function	With two pump modules C-601 / C-605 from 0 % – 100 % B for total flow rate of 2.5 – 250 mL linearity $\pm 2$ %.
Display	Illuminated LCD display, 128 x 64 pixels (58 x 29 mm)
Dialog languages	en / de / sp / fr / it / jp / cn

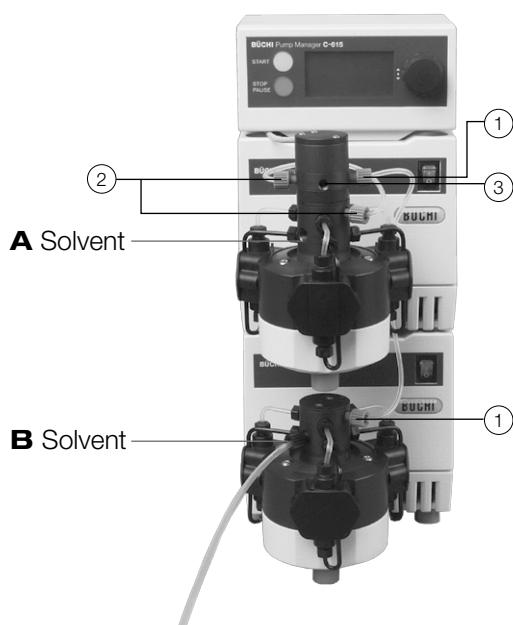
## Accessories

	Order number
Solvent valve set	044854
System stand for pump module	044855
Tubing fitting set	044021
Injection valve	044850
Single 4-way injection / purge device	054288
Single 6-way injection unit	054284
Sample loop 5 mL	045222
Sample loop 20 mL	044852
Sample loop 100 mL	044853
Solvent level sensor	045285
Pump Controller C-610	054111
Pump Manager C-615	054115
Column Module	054293

Pumping systems	Order number
Basic Flash Pump System	045221
Easy Synthesis Purification System	11059792
Easy Extract Purification System	11059793

## Functional principle

The use of two pump modules enables the formation of a binary gradient. The solvents enter the pump heads via the aspiration tubing (input) (solvent A and B). The FEP tubing guides the solvent to the mixing chamber with integrated pressure sensor and from there via the injection system on to the column via the pressure tubing (output). The Pump Manager C-615 regulates the flow rate of the pump modules 1 and 2 and monitors the current pressure. The maximum pressure for Pump Module C-601 is 10 bar (145 psi) and for Pump Module C-605 50 bar (725 psi). In addition, a variety of programs and settings enables the selection of flow rate, pressure, time and gradient of the solvents.



- A** Solvent: aspiration tubing (input)
- B** Solvent: aspiration tubing (input)

- ① connection between pump 1 and 2
- ② connection between pump and mixing chamber
- ③ output to cartridge or waste