

Technical data sheet

Pure Excellence Chromatography Systems

The Pure Excellence Chromatography systems offer a range of solutions for purifying complex samples. The four different instrument types include options for Flash and Prep chromatography, as well as UV and ELS detection. The intuitive interface guides you through the operating process, ensuring straightforward operation.



Scope of delivery

All configurations are supplied ready to use.



NOTE

The scope of delivery depends on the configuration of the purchase order.

Accessories are delivered as per the purchase order, order confirmation, and delivery note.

	C-905	C-910	C-915	C-950
Power cord, country-specific	1	1	1	1
Solvent line kit	1	1	1	1
Injection kit	1	1	1	2
Line kit stainless steel for Prep columns	-	-	-	1
Sample loop for Flash 2 mL	1	1	1	1
Sample loop for Prep 2 mL	-	-	-	1
Fraction collector exhaust hose, 25 mm/1.5 m	1	1	1	1
ELSD exhaust hose, 1.5 m	-	-	1	1
Magnetic holder	-	-	-	1
Magnetic tubing hook	1	1	1	1
Solvent filter	4	4	4	4
Operation manual	1	1	1	1
EC Declaration of conformity	1	1	1	1

Order code

Choose the configuration according to your needs:

1 1 C 9 0 0

Pure Excellence Chromatography Systems

- 05 Pure Excellence C-905, Flash (fixed 4 wavelengths UV)
- 10 Pure Excellence C-910, Flash (DAD UV-Vis)
- 15 Pure Excellence C-915, Flash (DAD UV-Vis, ELSD)
- 50 Pure Excellence C-950, Flash/Prep (DAD UV-Vis, ELSD)

1 1 C 1 0 0

Add-ons

- 01 External fraction collector

Technical data

Pure Excellence Chromatography Systems

Specification	C-905	C-910	C-915	C-950
Dimensions (W x D x H)	330 x 470 x 705 mm	330 x 470 x 705 mm	330 x 470 x 705 mm	330 x 470 x 705 mm
Weight	38 kg	40 kg	44 kg	48 kg
Power consumption	150 W	200 W	200 W	350 W
Connection voltage	100–240 VAC ± 10%	100–240 VAC ± 10%	100–240 VAC ± 10%	100–240 VAC ± 10%
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Fuse	T: 3.15 A H: 250 V	T: 4 A H: 250 V	T: 4 A H: 250 V	T: 6.3 A H: 250 V
Overvoltage category	II	II	II	II
Pollution degree	2	2	2	2
Min. clearance on all sides	200 mm	200 mm	200 mm	200 mm
User interface	15.6" capacitive touch screen, solvent resistant	15.6" capacitive touch screen, solvent resistant	15.6" capacitive touch screen, solvent resistant	15.6" capacitive touch screen, solvent resistant
Connections	2 x BUCHI BUS External devices connections (e.g. syringe pump) External detector IN/OUT 2 nd fraction collector OUT Analog detector connection 5x USB ports 1x LAN port (RJ45)	2 x BUCHI BUS External devices connections (e.g. syringe pump) External detector IN/OUT 2 nd fraction collector OUT Analog detector connection 5x USB ports 1x LAN port (RJ45)	2 x BUCHI BUS External devices connections (e.g. syringe pump) External detector IN/OUT 2 nd fraction collector OUT Analog detector connection 5x USB ports 1x LAN port (RJ45)	2 x BUCHI BUS External devices connections (e.g. syringe pump) External detector IN/OUT 2 nd fraction collector OUT Analog detector connection 5x USB ports 1x LAN port (RJ45)
Certification	CE, UL/CSA	CE, UL/CSA	CE, UL/CSA	CE, UL/CSA

Pump

Specification	C-905	C-910	C-915	C-950
Type	Flash, 3 pistons radially arranged	Flash, 3 pistons radially arranged	Flash, 3 pistons radially arranged	Flash/Prep, 3 pistons radially arranged
Pressure limit	50 bar	50 bar	50 bar	Flash: 50 bar Prep: 400 bar
Max. operational flow rate	300 mL/min	300 mL/min	300 mL/min	Flash: 300 mL/min Prep: 150 mL/min
Flow rate accuracy	±1 mL at < 50 mL/min ± 2% at > 50 mL/min	±1 mL at < 50 mL/min ± 2% at > 50 mL/min	±1 mL at < 50 mL/min ± 2% at > 50 mL/min	±1 mL at < 50 mL/min ± 2% at > 50 mL/min
Flow rate reproducibility	less than ±1% across entire flow rate range	less than ±1% across entire flow rate range	less than ±1% across entire flow rate range	less than ±1% across entire flow rate range
Gradient	Isocratic, linear, step, gradient (binary to quaternary)	Isocratic, linear, step, gradient (binary to quaternary)	Isocratic, linear, step, gradient (binary to quaternary)	Isocratic, linear, step, gradient (binary to quaternary)
Gradient accuracy	less than ±1% across entire flow rate range (binary gradient)	less than ±1% across entire flow rate range (binary gradient)	less than ±1% across entire flow rate range (binary gradient)	less than ±1% across entire flow rate range (binary gradient)
Solvent lines	4	4	4	4

UV detector

Specification	C-905	C-910	C-915	C-950
Technology	4 fixed wavelengths 254 nm, 275 nm 325 nm, 365 nm	DAD	DAD	DAD
UV Vis-range	-	200–800 nm	200–800 nm	200–800 nm
DAD scan	-	Entire range, 3D live	Entire range, 3D live	Entire range, 3D live
Light sources	LED	Halogen/Deuterium	Halogen/Deuterium	Halogen/Deuterium
Lamp lifetime	min. 2,000 h	4,000/2,000 h	4,000/2,000 h	4,000/2,000 h
Flow cell path	0.3 mm	0.3 mm	0.3 mm	0.3 mm

ELSD detector

Specification	C-905	C-910	C-915	C-950
Integration	-	Upgradeable	Integrated	Integrated
Technology	-	-	Nano-pulse injection	Nano-pulse injection
Sample loss	-	-	30 µL/min	30 µL/min
Light output laser	-	-	1 mW	1 mW
Pressure spray air	-	-	3–3.5 bar	3–3.5 bar
Flow rate air	-	-	2.5–3 L/min	2.5–3 L/min
Max. air pressure (purge)	8 bar	8 bar	8 bar	8 bar
Air quality	Standard (dry, oil- and dust-free air)	Standard (dry, oil- and dust-free air)	Standard (dry, oil- and dust-free air)	Standard (dry, oil- and dust-free air)

Fraction collector

Specification	C-9XX
Illuminated fraction collector bay	Standard; on/off function
Unique RFID reader for racks	Standard
Rack capacity	max. 2
Rack types	All racks with dimensions: max. length 320 mm max. width 113 mm
Max. collection capacity	Unlimited with funnel rack; 3.75 L with 18 x 150 mm rack
Max. number of fractions	150 with no rack exchange (18 x 150 mm racks)

Injection mode

Specification	C-905	C-910	C-915	C-950
Available modes	Liquid or solid	Liquid or solid	Liquid or solid	Liquid or solid
Liquid injection	Automatic via the sample injection valve and loop	Automatic via the sample injection valve and loop	Automatic via the sample injection valve and loop	Flash: automatic via the sample injection valve and loop Prep: automatic via the sample injection valve and loop (high pressure solvent path)
Solid loading	Connected to the automatic injection valve	Connected to the automatic injection valve	Connected to the automatic injection valve	Connected to the automatic injection valve (Flash only)

Flash cartridge sizes

Specification	C-9XX
Integrated cartridge holder	up to 330 g
Optional external cartridge support	up to 5 kg

Prep-HPLC column sizes

Specification	C-905	C-910	C-915	C-950
On instrument	-	-	-	up to 30 mm ID
External column support	-	-	-	up to 70 mm ID

Safety

Specification	C-9XX
Pressure sensor	Standard
Internal vapor sensor	Standard
Active solvent and waste level monitoring	Standard
Cartridge holder with integrated drainage system	Standard
Cartridge holder with release mechanism and safety brake	Standard
Fume enclosure with active ventilation	Standard
Leakage control in fraction collector bay	Standard
Solvent bottle platform	Optional

Ambient conditions

For indoor use only.

Specification	Value
Max. altitude above sea level	2,000 m
Ambient and storage temperature	5–40 °C
Max. relative humidity	80% for temperatures up to 31 °C decreasing linearly to 50% relative humidity at 40 °C

Spare parts and accessories

Use only genuine BUCHI consumables and spare parts in order to ensure correct, safe and reliable operation of the system.

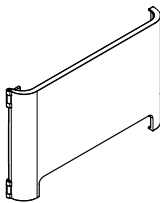
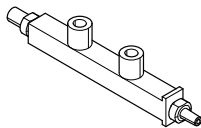
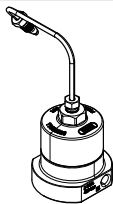
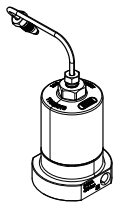
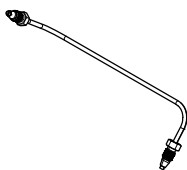
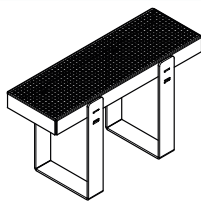
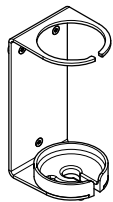
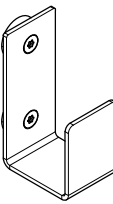


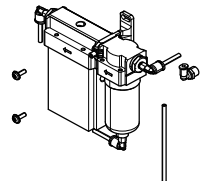
NOTE

Any modifications of spare parts or assemblies are only allowed with the prior written permission of BUCHI.

Accessories

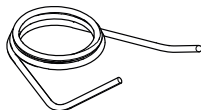
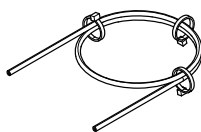
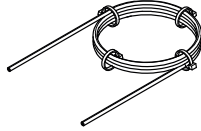
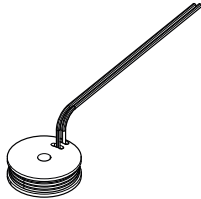
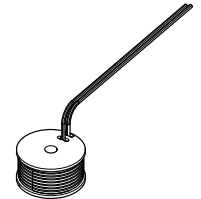
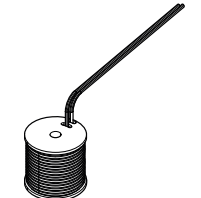
	Order no.	Image
Cartridge holder Supports Flash cartridges up to 5 kg	11065862	
V-Stand with rod Connects and supports cartridge holders for large Flash cartridges	11069158	
Large Prep-HPLC column holder Supports large Prep-HPLC columns up to 50 mm ID	11068467	
Inline solvent filter Prevents potential contaminants from entering the sensitive parts of the system	11059070	
Flow cell for UV-Vis detector 1.3 mm	11064149	
Flow cell for UV-Vis detector 2.3 mm	11064150	
Solvent bottle platform for two bottles (4 L each)	11080911	
Solvent bottle platform for four bottles (4 L each)	11082687	


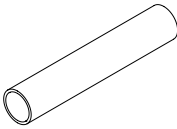
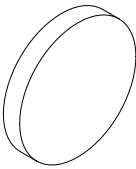
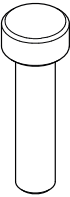
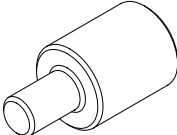
	Order no.	Image
Fraction collector door for funnel rack Special door to allow easy routing of lines outside the fraction collector bay	11075388	
Bypass for external cartridge/glass column setup	11080910	
Internal mixing chamber, 13 mL	11080871	
Internal mixing chamber, 22 mL	11080872	
Direct flow path in case no mixing chamber	11074907	
Dishwasher basket	11080916	
Magnetic holder Securely holds Prep-HPLC columns, solid loaders and sample coils	11076346	
Magnetic tubing hook Organizes tubing	11079798	
Solvent line kit	11080880	
Solvent bottle cap set (5 pcs.)	11084168	

	Order no.	Image
Drying unit for external gas sources Purify supplied air by removing oil, moisture and dust	11082688	

Dry air supply unit Integrated air supply for purging and sample transport in ELSD	11084381	
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Sample introduction accessories

	Order no.	Image
Stainless steel sample loop for Prep 2 mL	11068476	
Stainless steel sample loop for Prep 5 mL	11068205	
Stainless steel sample loop for Prep 10 mL	11068206	
Stainless steel sample loop for Prep 20 mL	11069768	
Sample loop for Flash 1 mL	11080867	
Sample loop for Flash 2 mL	11080868	
Sample coil for Flash 5 mL	11081812	
Sample coil for Flash 10 mL	11081816	
Sample coil for Flash 20 mL	11081815	

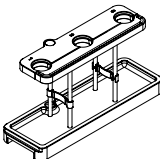
	Order no.	Image
Solid loader S	11068975	
Solid loader M	11070505	
Solid loader tubes S	11068971	
Solid loader tubes M	11068972	
Solid loader frits S	11068969	
Solid loader frits M	11068970	
Insertion rod S	11068973	
Insertion rod M	11068974	
Inject-T-piece	11080874	
For direct injection on the cartridge		
Injection set for SIV Flash	11080875	
No need to keep the syringe in the injection port		

Tubing

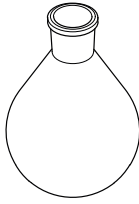
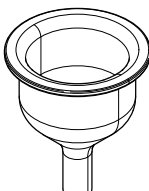
	Order no.
Tubing FEP	042908
oØ 3.2 mm, iØ 1.6 mm (length on demand)	
Tubing FEP	11068176
oØ 3.2 mm, iØ 1.6 mm, L = 1,800 mm	
Tubing FEP	11081851
oØ 3.2 mm, iØ 1.6 mm, L = 1,100 mm	
Tubing FEP	11081362
oØ 4.78 mm, iØ 3.18 mm (length on demand)	

Racks

	Order no.	Image
Stainless steel rack, for 96 tubes (12 x 75 mm, 5 mL)	11066672	
Stainless steel rack, for 90 tubes (13 x 100 mm, 8.5 mL)	11066673	
Stainless steel rack, for 65 tubes (16 x 125 mm, 15 mL)	11066674	
Stainless steel rack, for 36 tubes (25 x 150 mm, 50 mL)	11066677	
Stainless steel rack, for 65 tubes (16 x 100 mm, 14 mL)	11069242	
Rack for 75 tubes (18 x 150 mm, 25 mL)	11074055	
Rack for 75 tubes (16 x 150 mm, 20 mL)	11074056	
Funnel rack Incl. eight funnels, one waste vial and eight silicone tubings (2 m long)	11074402	
Jar rack For four square bottles of 480 mL (not included)	11074894	

	Order no.	Image
Rack for evaporation flasks Three evaporation flasks, max. 29.2/32, 500 mL	11074484	

Tubes and bottles

	Order no.	Image
Square bottles 480 mL (24 pcs.)	148623412	
Evaporating flask Glass, SJ 29.2/32, 500 mL	000434	
Replacement glass funnel set (8 pcs.)	11074939	
Glass tubes 13 x 100 mm (1,000 pcs.)	148623414	
Glass tubes 16 x 150 mm (1,000 pcs.)	148623416	
Glass tubes 18 x 150 mm (500 pcs.)	148623410	
Glass tubes 25 x 150 mm (500 pcs.)	148623411	

Adapter kits

	Order no.
Luer lock connection set	11068242
One-piece fitting 1/8" (2 pcs.)	11074308
Adapter 1/4-28 UNF female to 5/16-24 male To install the ISCO RediSep Rf solid loader	11073952
Prep column connectors (2 pcs.)	11080873

IQ/OQ and test kits

	Order no.
IQ/OQ	11080870
Repeating OQ set C-905 en	11084291
IQ/OQ set C-910 en	11084292
Repeating OQ set C-910 en	11084293
IQ/OQ set C-915 en	11084294
Repeating OQ set C-915 en	11084295
IQ/OQ set C-950 en	11084296
Repeating OQ set C-950 en	11084297

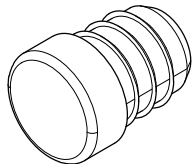
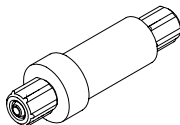
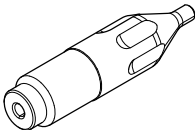
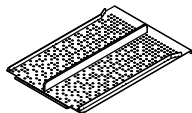
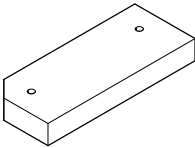
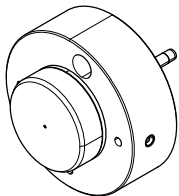
	Order no.
OQ Prep test mix	11068907
Solid loader test tubes	11069686

Instrument upgrade kits

Can only be performed by a service technician.

	Order no.
UV-Upgrade kit (C-905 to C-910)	11081943
ELSD-Upgrade kit (C-910 to C-915)	11081944

Spare parts

	Order no.	Image
Rubber foot replacement	11058379	
Pure air filter	11066049	
Fraction collector nozzle	11071980	
Fraction collector baseplate replacement	11072085	
Flow cell for UV-Vis detector 0.3 mm	11057949	
Flow cell for UV detector fixed wavelengths, 0.3 mm	11073975	
ELSD nebulizer replacement	11076660	

	Order no.	Image
Solvent filter set (2 pcs.)	11080175	
Injection kit	11080883	
Incl. luer adapter, fitting and overflow tubing		
Stainless steel tubing kit for Prep-HPLC columns	11080884	
Back pressure regulator (2 bar)	11083898	

