AZURA FPLC price list 2021





AZURA FPLC SYSTEMS

MASTER THE DIVERSE CHALLENGES OF YOUR EVERYDAY LABORATORY LIFE WITH THE FLEXIBLE POSSIBILITIES OF THE NEW AZURA FPLC SERIES. AZURA IS THE ONLY LC-PLATFORM ON THE MARKET THAT CAN MEET ALL YOUR NEEDS. NO MATTER WHETHER YOU OPERATE UHPLC, HPLC, FPLC OR PREPARATIVE HPLC.









AZURA affinity FPLC System

The AZURA® Bio compact AC system qualifies for fast and reliable affinity chromatography. The system offers outstanding performance and ease of use thanks to its compact design and user-friendly FPLC software PurityChrom®. Select your sample, your washing and elution buffer using the inlet valve. The system can easily be upgraded with a sample pump to fully automatize repetitive purification tasks.

Your proteins of interest are detected by UV and automatically collected via the fractionation valve. Pre-designed methods and cleaning steps are included in the software and can be easily adapted by changing the column volume.

Key Features:

- Automatic inlet valve for up to 8 buffers or samples
- Outlet valve (16 ports) for fractionation
- Flow rate: 0.01 50 ml/min; 1 40 ml/min (recommended)
- Variable single wavelength UV-detector (190 500 nm)
- Columns from all vendors can be used
- Intuitive PurityChrom® software
- System suitable for cold room usage
- Maximum system pressure: 50 bar (5.0 MPa)



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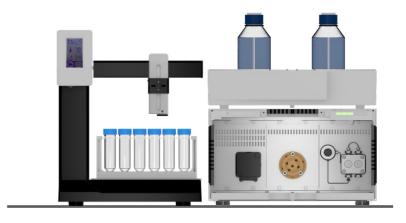
ArtNr.:	Description	
812 101 112	AZURA affinity FPLC System	



AZURA SEC FPLC System

The AZURA® Bio compact SEC system takes care of time-intensive SEC methods in your lab without blocking your fully-equipped FPLC system. Thanks to its compact design and intuitive FPLC software PurityChrom®, the system offers outstanding performance and ease of use. Pre-designed methods are included in the software and can be easily adapted by changing the column volume. AZURA Compact SEC supports all columns available on the market. The AZURA series is modular and can be flexibly configured or supplemented with further modules, e.g. for injection using a sample pump.

- Flow rate: 0.001-10 ml/min; 0.1 8.0 ml/min (recommended)
- Maximum system pressure: 240 bar (24.0 MPa)
- Injection valve for sample injection via sample loop
- Variable single wavelength UV detector (190-500 nm)
- Fraction collector for fractionation
- Compatible with columns from all vendors
- Intuitive PurityChrom® software
- System suitable for cold room usage
- Easily upgradeable to automatic sampling system



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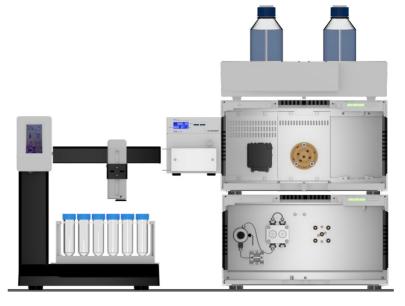
ArtNr.:	Description	
872 101 122	AZURA SEC FPLC System	
A221101	Column selection valve kit, peek, 5 column, bypass and reverse flow option	



AZURA Multi Method FPLC System LPG

The AZURA Bio Lab System is a gradient system for complex purifications of bio molecules in a laboratory scale. It is designed and optimized for all FPLC applications like affinity, ion exchange, hydrophobic interaction and size exclusion chromatography. All system modules can be freely exchanged and further modules can be added optionally, to give you the best configuration for your purification task.

- Flow rate: 0.001-10 ml/min; 0.1 8.0 ml/min (recommended)
- Maximum system pressure: 200 bar (20 MPa)
- Injection valve for sample injection via sample loop or sample pump
- Variable single wavelength UV detector (190-500 nm)
- Conductivity detector with pH-option
- Fraction collector for fractionation
- Compatible with columns from all vendors
- Compatible with SEC, AC, IEX and HIC methods
- Intuitive PurityChrom® software
- System suitable for cold room usageUpgradeable with sample pump



872 112 122

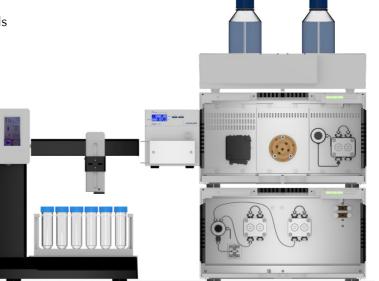
ArtNr.:	Description	
872 112 122	AZURA Multi Method FPLC System LPG	
A70091	pH measuring kit for conductivity monitor up to 80 ml/min. Volume 80 μl pressure limit 5 bar	
APG12EB	Sample pump, 10 ml/min, 50 bar, ceramic with pressure sensor	
A221101	Column selection valve kit, PEEK, 5 column, bypass and reverse flow option	
AZG10	Pressure Control biocompatible with two pressure sensors measures pressure difference for 1/16" and 1/8" with IFU	
A70093	Air sensor (1/8") with one airsensor and wiring for up to 4 airsensors. Excl. power supply	
AZS80SA	Distribution box 24 V Output 6 x 0.25 A for AZURA Click power plug 3-Pol, M2891 screw type plug, M8x1	



AZURA Multi Method FPLC System HPG

The AZURA Bio Lab System is a gradient system for complex purifications of bio molecules in a laboratory scale. It is designed and optimized for all FPLC applications like affinity, ion exchange, hydrophobic interaction and size exclusion chromatography. All system modules can be freely exchanged and further modules can be added optionally, to give you the best configuration for your purification task.

- Flow rate: 0.001-50 ml/min; 0.1 40 ml/min (recommended)
- Maximum system pressure: 200 bar (20.0 MPa)
- Injection valve for sample injection via sample loop or sample pump
- Sample pump, 0,1 50 ml/min
- Variable single wavelength UV detector (190-500 nm)
- Conductivity detector with pH-option
- Fraction collector for fractionation
- Compatible with columns from all vendors
- Compatible with SEC, AC, IEX and HIC methods
- Intuitive PurityChrom® software
- System suitable for cold room usage



862 113 122

ArtNr.:	Description	
862 113 122	AZURA Multi Method FPLC System HPG	
A70091	pH measuring kit for conductivity monitor up to 80 ml/min. Volume 80 µl pressure limit 5 bar	
A221101	Column selection valve kit, peek, 5 column, bypass and reverse flow option	
AZG10	Pressure Control biocompatible with two pressure sensors measures pressure difference for 1/16" and 1/8" with IFU	
A70092	Air sensor (1/16") with one airsensor and wiring for up to 4 airsensors. Excl. power supply	
A70093	Air sensor (1/8") with one airsensor and wiring for up to 4 airsensors. Excl. power supply	
AZS80SA	Distribution box 24 V Output 6 x 0.25 A for AZURA Click power plug 3-Pol, M2891 screw type plug, M8x1	

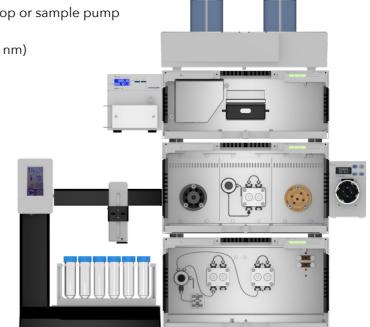


AZURA Advanced - twoSTEP purification System

The AZURA Bio Lab System Advanced is a gradient system for complex purifications of bio molecules in a laboratory scale. It is designed and optimized for all FPLC applications like affinity, ion exchange, hydrophobic interaction and size exclusion chromatography. All system modules can be freely exchanged and further modules can be added optionally, to give you the best configuration for your purification task.

In TwoStep mode, a column selection valve will allow you to switch between a multitude of different columns, which in combination with an optional outlet valve allows even for automated two step purifications.

- Flow rate: 0.001-50 ml/min; 0.1 40 ml/min (recommended)
- System pressure: 240 bar (24.0 MPa),
- System pressure: 50 bar (5.0 MPa) with column selection valve
- Injection valve for sample injection via sample loop or sample pump
- Sample pump, 0,1 50 ml/min
- Variable multi-wavelength UV detector (190-700 nm)
- Conductivity detector with pH option
- Fraction collector for fractionation
- Compatible with columns from all vendors
- Compatible with SEC, AC, IEX and HIC methods
- Intuitive PurityChrom® software
- System suitable for cold room usage

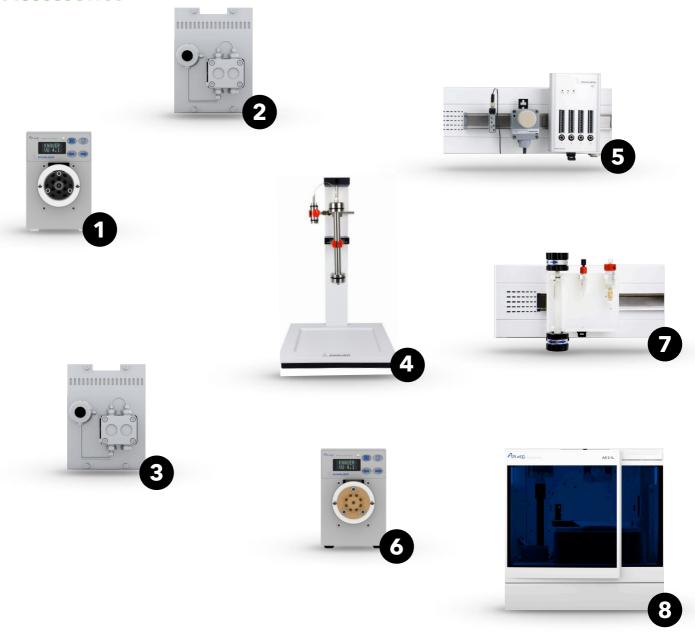


875 413 122

ArtNr.:	Description	
875 413 122	AZURA Advanced - twoSTEP purification System	
A70091	pH measuring kit for conductivity monitor up to 80 ml/min. Volume 80 μl pressure limit 5 bar	
AZG10	Pressure Control biocompatible with two pressure sensors measures pressure difference for 1/16" and 1/8" with IFU	
A70092	Air sensor (1/16") with one airsensor and wiring for up to 4 airsensors. Excl. power supply	
A70093	Air sensor (1/8") with one airsensor and wiring for up to 4 airsensors. Excl. power supply	
AZS80SA	Distribution box 24 V Output 6 x 0.25 A for AZURA Click power plug 3-Pol, M2891 screw type plug, M8x1	



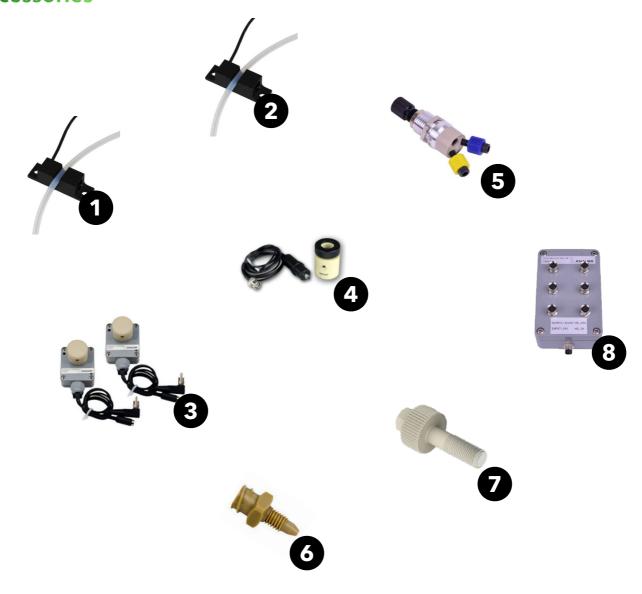
Accessories



#	ArtNr.:	Description	
1	A221101	Column selection valve kit, PEEK, 5 column, bypass and reverse flow option, 1/16"	
	A221102	Buffer selection valve kit, 8 Port, PEEK, 1/8", UNF 1/4"-28 conned	
2	DPG12FB	Sample pump, 50 ml/min, 50 bar, ceramic with pressure sensor	
3	DPG12EB	Sample pump, 10 ml/min, 50 bar, ceramic with pressure sensor	
4	A0070A	Multi Column Base for columns up to 50 mm ID	
5	A70089	AZURA Click rail for AZURA L devices for attaching IFU 2.1 air sensor, pressure control IFU2.1	
6	A221103	Outlet valve kit 16 Port, PEEK, 1/16", UNF 10-32	
7	A70085	AZURA Organizer Holder for AZURA Click for attaching falcons, columns (5 mm - 26 mm OD), pH electrode	
8	AAA20AA	AS 6.1L Biocompatible, 345 bar, 100µL loop	
	AAA21AA	AS 6.1L Biocompatible, 345 bar, Cool-Heat, 100µL loop	



Accessories



#	ArtNr.:	Description	
1	A70092	Air sensor (1/16") with one airsensor and wiring for up to 4 airsensors. Excl. power supply	
	A70092-1	additional air sensor for AZURA Bio LC for 1/16" tubing	
2	A70093	Air sensor (1/8") with one airsensor and wiring for up to 4 airsensors. Excl. power supply	
	A70093-1	additional air sensor for AZURA Bio LC for 1/8" tubing	
3	AZG10	Pressure Control PEEK, with two pressure sensors for 1/16" and 1/8" with IFU, UNF 1/4-28	
4	A70091	pH measuring kit for conductivity monitor up to 80 ml/min. Volume 80 µl pressure limit 5 bar	
5	A70087	Back-Pressure Regulator 1-20 bar, adjustable resistant up to 20 bar, UNF 10-32	
6	A1980	Luer Lock Adapter with UNF 10-32 thread tefzel	
7	A9646-1	K-Connect Fingertight Fitting, PEEK, long, UNF 10-32, Set of 10 incl. Biconical sealing rings	
8	AZS80SA	Power Supply, 24V Output, 6 x 0.25 A for AZURA Click, for air and pressure sensor	



FPLC - columns and media

Antibody Affinity Chromatography

ArtNr.:	Description	pcs.	
010X40USPZ	Sepapure Protein A FF 1 ml Prepacked 1 ml for antibody purification 100 µm, 3 bar	1 Stk	
020X40USPZ	Sepapure Protein A FF 5 ml Prepacked 1 ml for antibody purification 100 µm, 3 bar	1 Stk	
00GX40USPZ	Sepapure Protein A FF Resin 5 ml for Antibody Purification 100 μm, 3 bar	1 Stk	
00IX40USPZ	Sepapure Protein A FF Resin 25 ml for Antibody Purification 100 µm, 3 bar	1 Stk	
00JX40USPZ	Sepapure Protein A FF Resin 50 ml for Antibody Purification 100 µm, 3 bar	1 Stk	
00KX40USPZ	Sepapure Protein A FF Resin 100 ml for Antibody Purification 100 μm, 3 bar	1 Stk	
00NX40USPZ	Sepapure Protein A FF Resin 250 ml for Antibody Purification 100 μm, 3 bar	1 Stk	
00QX40USPZ	Sepapure Protein A FF Resin 1000 ml for Antibody Purification 100 μm, 3 bar	1 Stk	
010X40VSPZ	Sepapure Protein G FF 1 ml Prepacked 1 ml for antibody purification 100 µm, 3 bar	1 Stk	
020X40VSPZ	Sepapure Protein G FF 5 ml Prepacked 5 ml for antibody purification 100 µm, 3 bar	1 Stk	
00HX40VSPZ	Sepapure Protein G FF Resin 10 ml for Antibody Purification 100 μm, 3 bar	1 Stk	
00IX40VSPZ	Sepapure Protein G FF Resin 25 ml for Antibody Purification 100 μm, 3 bar	1 Stk	

Tag-Affinity Chromatography

ArtNr.:	Description	pcs.	
010X39FPSZ	Sepapure FF Ni-NTA 1 ml Prepacked 1 ml for His-tag purification 100 μm, 3 bar	1 Stk	
020X39FSPZ	Sepapure FF Ni-NTA 5 ml Prepacked 5 ml for His-tag purification 100 μm, 3 bar	1 Stk	
00IX39FPSZ	Sepapure FF Ni-NTA Resin 25 ml for His-Tag Purification 100 μm, 3 bar	1 Stk	
00KX39FPSZ	Sepapure FF Ni-NTA Resin 100 ml for His-tag purification 100 μm, 3 bar	1 Stk	
00NX39FPSZ	Sepapure FF Ni-NTA Resin 250 ml for His-Tag Purification 100 μm, 3 bar	1 Stk	
00PX39FPSZ	Sepapure FF Ni-NTA Resin 500 ml for His-Tag Purification 100 μm, 3 bar	1 Stk	
00QX39FPSZ	Sepapure FF Ni-NTA Resin 1000 ml for His-Tag purification 100 µm, 3 bar	1 Stk	
010X39PSPZ	Sepapure FF4 Glutathione 1 ml Prepacked 1 ml for GST-tag purification 100 µm, 3 bar	1 Stk	
020X39PSPZ	Sepapure FF4 Glutathione 5 ml Prepacked 5 ml for GST-tag purification 100 µm, 3 bar	1 Stk	
00GX39PSPZ	Sepapure FF4 Glutathione Resin 5 ml for GST-tag purification 100 µm, 3 bar	1 Stk	
00IX39PSPZ	Sepapure FF4 Glutathione Resin 25 ml for GST-tag purification 100 μm, 3 bar	1 Stk	
00KX39PSPZ	Sepapure FF4 Glutathione Resin 100 ml for GST-tag purification 100 µm, 3 bar	1 Stk	
00NX39PSPZ	Sepapure FF4 Glutathione Resin 250 ml for GST-tag purification 100 µm, 3 bar	1 Stk	
00PX39PSPZ	Sepapure FF4 Glutathione Resin 500 ml for GST-tag purification 100 µm, 3 bar	1 Stk	
00QX39PSPZ	Sepapure FF4 Glutathione Resin 1000 ml for GST-tag purification 100 μm, 3 bar	1 Stk	



FPLC - columns and media

Ion-Exchange Chromatography

Description	pcs.	
Sepapure DEAE FF6 1 ml Prepacked 1 ml weak anion exchange 100 µm, 3 bar	1 Stk	
Sepapure DEAE FF6 5 ml Prepacked 5 ml weak anion exchange 100 µm, 3 bar	1 Stk	
Sepapure DEAE FF6 Resin 25 ml weak anion exchange 100 µm, 3 bar	1 Stk	
Sepapure DEAE FF6 Resin 100 ml weak anion exchange 100 μm, 3 bar	1 Stk	
Sepapure DEAE FF6 Resin 500 ml weak anion exchange 100 μm, 3 bar	1 Stk	
Sepapure DEAE FF6 Resin 1000 ml weak anion exchange 100 μm, 3 bar	1 Stk	
Sepapure Q FF6 1 ml Prepacked 1 ml strong anion exchange 100 μm, 3 bar	1 Stk	
Sepapure Q FF6 5 ml Prepacked 5 ml strong anion exchange 100 µm, 3 bar	1 Stk	
Sepapure Q FF6 Resin 25 ml strong anion exchanger 100 μm, 3 bar	1 Stk	
Sepapure Q FF6 Resin 100 ml strong anion exchanger 100 µm, 3 bar	1 Stk	
Sepapure Q FF6 Resin 500 ml strong anion exchanger 100 µm, 3 bar	1 Stk	
Sepapure Q FF6 Resin 1000 ml strong anion exchanger 100 µm, 3 bar	1 Stk	
Sepapure CM FF6 1 ml Prepacked 1 ml weak cation exchange 100 μm, 3 bar	1 Stk	
Sepapure CM FF6 5 ml Prepacked 5 ml weak cation exchange 100 μm, 3 bar	1 Stk	
Sepapure CM FF6 Resin 25 ml weak cation exchanger 100 µm, 3 bar	1 Stk	
Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 μm, 3 bar	1 Stk	
Sepapure CM FF6 Resin 500 ml weak cation exchanger 100 μm, 3 bar	1 Stk	
Sepapure CM FF6 Resin 1000 ml weak cation exchanger 100 μm, 3 bar	1 Stk	
Sepapure SP FF6 1 ml Prepacked 1 ml strong cation exchange 100 µm, 3 bar	1 Stk	
Sepapure SP FF6 5 ml Prepacked 5 ml strong cation exchange 100 µm, 3 bar	1 Stk	
Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 μm, 3 bar		
Sepapure SP FF6 Resin 100 ml strong cation exchanger 100 μm, 3 bar		
Sepapure SP FF6 Resin 500 ml strong cation exchanger 100 µm, 3 bar		
Sepapure SP FF6 Resin 1000 ml strong cation exchanger 100 µm, 3 bar		
	Sepapure DEAE FF6 1 ml Prepacked 1 ml weak anion exchange 100 µm, 3 bar Sepapure DEAE FF6 5 ml Prepacked 5 ml weak anion exchange 100 µm, 3 bar Sepapure DEAE FF6 Resin 25 ml weak anion exchange 100 µm, 3 bar Sepapure DEAE FF6 Resin 100 ml weak anion exchange 100 µm, 3 bar Sepapure DEAE FF6 Resin 500 ml weak anion exchange 100 µm, 3 bar Sepapure DEAE FF6 Resin 500 ml weak anion exchange 100 µm, 3 bar Sepapure DEAE FF6 Resin 1000 ml weak anion exchange 100 µm, 3 bar Sepapure Q FF6 1 ml Prepacked 1 ml strong anion exchange 100 µm, 3 bar Sepapure Q FF6 S ml Prepacked 5 ml strong anion exchange 100 µm, 3 bar Sepapure Q FF6 Resin 100 ml strong anion exchanger 100 µm, 3 bar Sepapure Q FF6 Resin 500 ml strong anion exchanger 100 µm, 3 bar Sepapure Q FF6 Resin 1000 ml strong anion exchanger 100 µm, 3 bar Sepapure CM FF6 T ml Prepacked 1 ml weak cation exchange 100 µm, 3 bar Sepapure CM FF6 Resin 25 ml weak cation exchange 100 µm, 3 bar Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar Sepapure CM FF6 Resin 500 ml weak cation exchanger 100 µm, 3 bar Sepapure SP FF6 Resin 500 ml strong cation exchanger 100 µm, 3 bar Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar	Sepapure DEAE FF6 1 ml Prepacked 1 ml weak anion exchange 100 µm, 3 bar 1 Stk Sepapure DEAE FF6 5 ml Prepacked 5 ml weak anion exchange 100 µm, 3 bar 1 Stk Sepapure DEAE FF6 Resin 25 ml weak anion exchange 100 µm, 3 bar 1 Stk Sepapure DEAE FF6 Resin 100 ml weak anion exchange 100 µm, 3 bar 1 Stk Sepapure DEAE FF6 Resin 500 ml weak anion exchange 100 µm, 3 bar 1 Stk Sepapure DEAE FF6 Resin 500 ml weak anion exchange 100 µm, 3 bar 1 Stk Sepapure DEAE FF6 Resin 1000 ml weak anion exchange 100 µm, 3 bar 1 Stk Sepapure Q FF6 1 ml Prepacked 1 ml strong anion exchange 100 µm, 3 bar 1 Stk Sepapure Q FF6 5 ml Prepacked 5 ml strong anion exchange 100 µm, 3 bar 1 Stk Sepapure Q FF6 Resin 25 ml strong anion exchanger 100 µm, 3 bar 1 Stk Sepapure Q FF6 Resin 100 ml strong anion exchanger 100 µm, 3 bar 1 Stk Sepapure Q FF6 Resin 500 ml strong anion exchanger 100 µm, 3 bar 1 Stk Sepapure Q FF6 Resin 1000 ml strong anion exchanger 100 µm, 3 bar 1 Stk Sepapure Q FF6 Resin 1000 ml strong anion exchanger 100 µm, 3 bar 1 Stk Sepapure CM FF6 Resin 1000 ml strong anion exchanger 100 µm, 3 bar 1 Stk Sepapure CM FF6 Resin 25 ml weak cation exchanger 100 µm, 3 bar 1 Stk Sepapure CM FF6 Resin 25 ml weak cation exchanger 100 µm, 3 bar 1 Stk Sepapure CM FF6 Resin 500 ml weak cation exchanger 100 µm, 3 bar 1 Stk Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar 1 Stk Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar 1 Stk Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar 1 Stk Sepapure SP FF6 Resin 1000 ml strong cation exchanger 100 µm, 3 bar 1 Stk Sepapure SP FF6 Resin 100 ml strong cation exchanger 100 µm, 3 bar 1 Stk Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar 1 Stk Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar 1 Stk Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar 1 Stk



FPLC - columns and media

Size Exclusion Chromatography

ArtNr.:	Description	pcs.	
010X460SPZ	Sepapure Desalting 1 ml Prepacked 1 ml desalting column 20 -50 µm, 3 bar	1 Stk	
020X460SPZ	Sepapure Desalting 5 ml Prepacked 5 ml desalting column 20 - 50 μm, 3 bar	1 Stk	
00IX46SSPZ	Sepapure SEC 75 Resin 25 ml Size exclusion chromatography 35 μm, 3 bar	1 Stk	
00JX46SSPZ	Sepapure SEC 75 Resin 50 ml Size exclusion chromatography 35 μm, 3 bar	1 Stk	
00KX46SSPZ	Sepapure SEC 75 Resin 100 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk	
00LX46SSPZ	Sepapure SEC 75 Resin 150 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk	
00NX46SSPZ	Sepapure SEC 75 Resin 250 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk	
00PX46SSPZ	Sepapure SEC 75 Resin 500 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk	
00QX46SSPZ	Sepapure SEC 75 Resin 1000 ml Size exclusion chromatography 35 μm, 3 bar	1 Stk	
00IX46TSPZ	Sepapure SEC 200 Resin 25 ml size exclusion chromatography 35 μm, 3 bar	1 Stk	
00JX46TSPZ	Sepapure SEC 200 Resin 50 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk	
00KX46TSPZ	Sepapure SEC 200 Resin 100 ml size exclusion chromatography 35 µm, 3 bar	1 Stk	
00LX46TSPZ	Sepapure SEC 200 Resin 150 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk	
00NX46TSPZ	Sepapure SEC 200 Resin 250 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk	
00PX46TSPZ	Sepapure SEC 200 Resin 500 ml Size exclusion chromatography 35 μm, 3 bar	1 Stk	
00QX46TSPZ	Sepapure SEC 200 Resin 1000 ml Size exclusion chromatography 35 μm, 3 bar	1 Stk	

FPLC column kit's

ArtNr.:	Description	pcs.	
A66160NI	Sepapure FPLC columns His-Tag Purification Kit AC	1 Set	
A66160IEX	Sepapure FPLC columns Ion-Exchange Purification Kit IEX	1 Set	
A66160SP	Sepapure FPLC Columns Promotion Kit AC, IEX, Desalting	1 Set	





FPLC Pumps and Detectors





This most universal gradient pump can handle salt gradients and also solvents for denaturing protein purification. It uses metal-free ceramic pump heads and has integrated system pressure sensor in a PEEK housing. It delivers accurate flow rates at low and high backpressures. At all time the automatic piston backflush cleans the main sealings from any crystallization.

The most classic design with 2 pump heads (HPG type) is used if a big difference in both buffers is required and difficult miscibility occurs. The favorite version for common salt gradients is the version with PEEK/PTFE selection valves and one pump head (LPG type). Both pump types have 4 buffer inlets and can allow sample intake and cleaning buffers without manual changes at the solvent lines.

Due to its robust design the pump is delivering precisely buffer gradients for IEX as well as an isocratic mixture for SEC over a wide variety of solvents and all kind of buffers. The max. flow rate is either 10 ml/min or 50 ml/min with backpressures at 240 bar or 50 bar.

In PurityChrom® FPLC software all features of this system pump are supported including bubble sensors and additional pressure sensor. The pump automatically reduces rest pulsation to a minimum and the LPG type pump has a full 4-channel buffer blending included.



DAD 2.1L

The DAD 2.1L is a robust and highly sensitive diode array detector for multi-Wavelength operation (up to 4 distinct wavelengths) and 2- and 3-D real-time data. The complete temperature control of the optics ensures lowest possible noise and drift values and protects the sample.

With the help of the PressureProof
Titanium measuring cell, a very high light
throughput is achieved to get the best
possible sensitivity while maintaining the
highest possible resolution for detailed
3D analysis. High accuracy is maintained
through all operation modes and
working conditions.

Both the deuterium lamp and the flow cell are directly accessible on the instrument and allow easy and quick handling or maintaining of the instrument by the user.

The DAD2.1L features a wavelength range of 190 - 700 nm with 256 diodes. For using a range up to the NIR the DAD6.1L has a 1024 diode array featuring a range of 190 - 1000nm.





UVD 2.1S, CM2.1S and pH electrode

The UVD 2.1S is a robust and sensitive single variable wavelength detector with a perfect sensitivity for 260 and 280 nm wavelengths in biochromatography. The optics allow low noise and low drift data acquisition of other freely adjustable wavelength between 190 and 500 nm as well.

The measuring cells are available in different path lengths and thus allow the optimization of the detector. Default flow cell has 3 mm path length, 0.5 mm and 10 mm are available as well. For temperature sensitive setups fiber optic flow cells are available.

The flow cell is directly accessible on the instrument and allows easy and quick handling or maintaining of the instrument by the user.

The CM2.1S is a contact free conductivity monitor to online measure conductivity of buffer eluents and sample. It can be installed in the high-pressure or low pressure part of the system. The conductivity signal is temperature compensated.

The pH electrode is continously monitoring the pH at the end of the line. The electrode can easily be taken out for calibration purpose or to set offline.



Auxiliary instrument modules







Sample Pump P4.1S and Valves

Dedicated pump for sample introduction, column cleaning, or column filling in the time the system is doing another task.

The P4.1S pump is using the same pump technology than the system pump P6.1L without gradient. Ceramic pump heads are available in 10 ml (240 bar) and 50 ml (50 bar max. pressure) size.

Equipped with an independent pressure transducer, the Sample Pump can make use of the system bubble sensors, additional pressure sensor and solvent pre-selection valves.

Valves with automatic drive VU4.1

The universal valve drive VU4.1 has built-in RFID recognition for all compatible valves and allows maximum flexibility. An installed drive can be used with a 2-position valve to auto-inject samples. Or could be upgraded with the multiposition injection valve for FPLC. In the next configuration it can work as a fraction collector.

Refractive Index Detector 2.1L

The AZURA RID 2.1L is a sensitive and competitively priced differential refractometer. It is suitable for detecting compounds with little or no UV activity such as alcohols, sugars, lipids or polymers. This instrument is designed for use in analytical HPLC (high performance liquid chromatography) as well as all SEC (size exclusion chromatography) applications.

The intelligently designed optical unit with advanced temperature control ensures high sensitivity, excellent reproducibility and sample protection.

Furthermore, the long-life LED, highly pressure resistant flow cell, improved safety features and enhanced diagnostics functions guarantee easy handling and minimal maintenance.

The wide linear dynamic range, its low internal volume of 43 μ l from the inlet to the flow cell and 10 ml/min maximum flow rate make the AZURA RID 2.1L the perfect choice for most laboratory tasks.

Fraction Collector Foxy R1

The System Fraction Collector Foxy R1 supports fractionation into a variety of different media like falcon tubings 15 or 50 ml, vessels of 12, 13, or up to 20 mm diameter with variable height or micro titer or deepwell plates.

Like the whole system this fraction collector is cold-room compatible. It collects samples time or volume based and via software PurityChrom complex peak recognition can be defined as well.



Bio Autosamplers - Column Thermostat - Buffer Tray







AS 6.1L

The AZURA AS 6.1L bio autosampler is a pulled-loop autosampler designed specifically for the needs of modern FPLC systems.

Due to this injection system it has very little peak dispersion compared to a Flow-Through-Needle Design Sampler. Depending on the application, three different injection modes can be used: "full loop filling" (highest precision and reproducibility), "partial loop filling" (variable volumes, e.g. for dilution series) and "µl pickup" (loss-free injection of extremely small sample volumes).

The washing steps can be carried out parallel to the analysis after the injection. In addition to fast injection cycles, this also effectively prevents sample carryover. The injection valve specially developed for high-pressure injection has an intermediate pressure relief which prevents mixing of the sample with the eluent when switching from the injection position to the load position. This ensures excellent reproducibility.

Since neither high-pressure nor low-pressure needle seals are required, a cost-effective and low-maintenance operation is guaranteed.

The AZURA AS6.1L bio autosampler is used when high-throughput micro fractionation systems are configured.

CT 2.1

The powerful circulating air thermostat AZURA CT 2.1 with its large and easily accessible sample chamber offers sufficient space for up to eight C-18 columns or 1-2 prepacked glass columns. It allows temperature control in the range down to 5 °C and up to 85 °C and thus is appropriate for nearly any application.

The buffer preheating, which can be optimized for the flow rate, allows a temperature adjustment of the mobile phase to the column temperature and thus effectively prevents temperature gradients within the separation column.

A leakage management system ensures safe, unattended operation in the laboratory.

E 2.1L

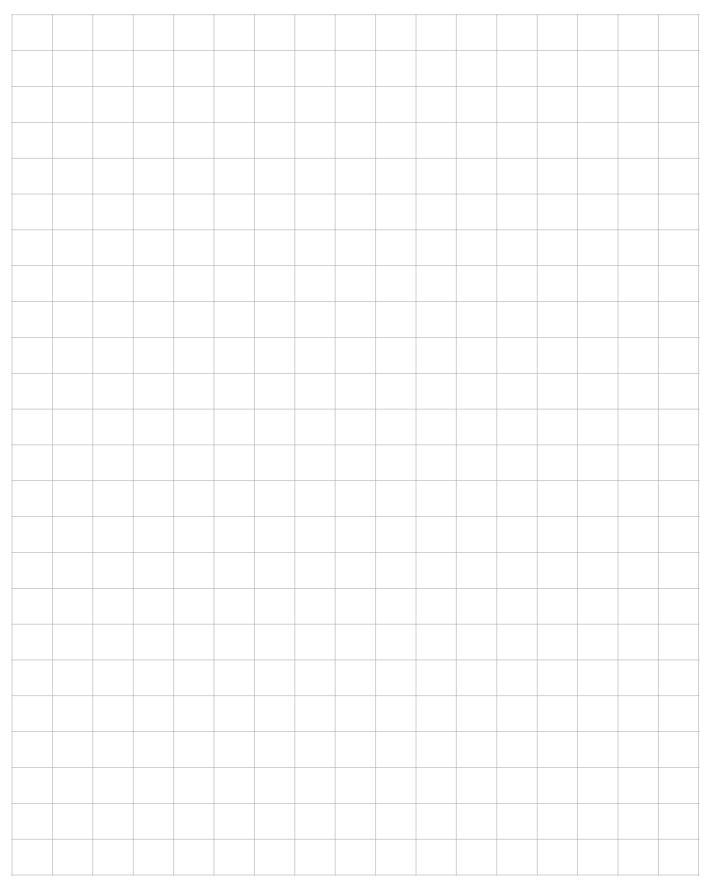
The buffer tray E 2.1L for AZURA devices with a capacity of 6×1000 ml bottles is stackable onto all AZURA devices.

The tray inlay is removeable. The buffer tray possesses a drainage system and a removable front that facilitates access to a capillary guide.

It is used for safekeeping of the buffers and connected to the leakage warning system.

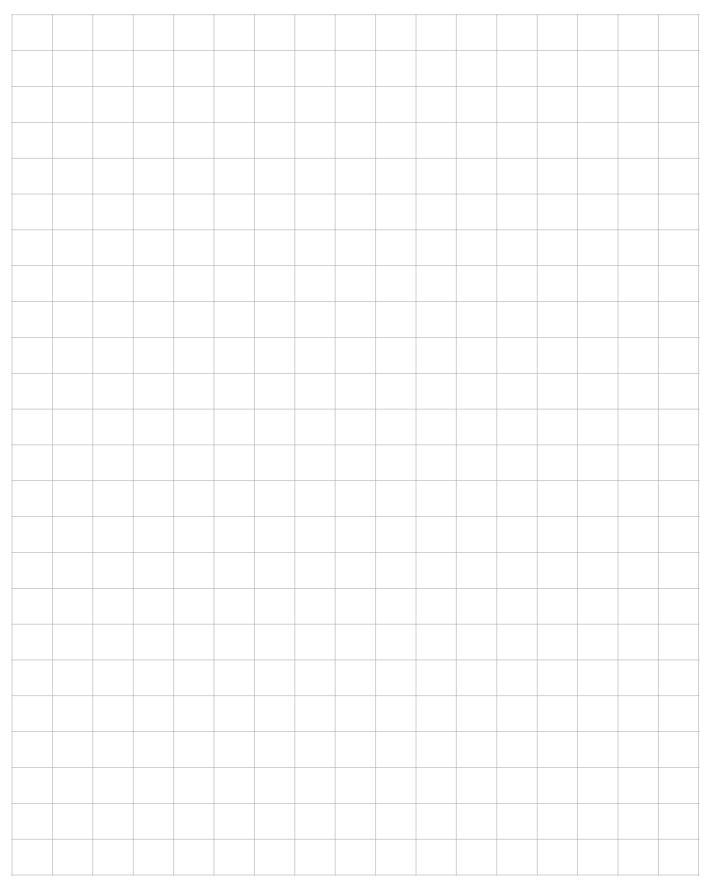


Notes





Notes

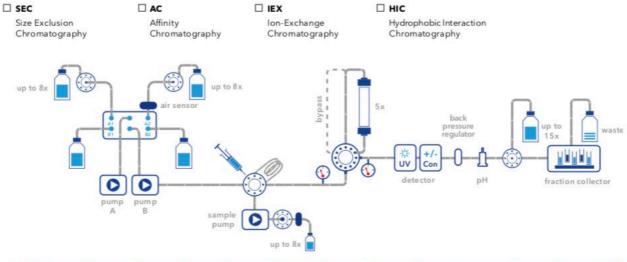




System configurator

Bio purification by KNAUER

METHOD



& DELIVERY	SAMPLE INJECTION	COLUMNSELECTION	DETECTION	FRACTION COLLECTION
□ 10 ml/min binary gradient pump P 6.1L □ 10 ml/min quaternary pump P 6.1L □ 50 ml/min binary gradient pump P 6.1L □ x 100 ml/min pump P 2.1L □ x 500 ml/min pump P 2.1L □ x 1000 ml/min pump P 2.1L □ Ternary gradient module for pump P 2.1L		Column selection valve up to 50 ml/min (5 columns, one bypass, reverse flow) Column selection (two columns or one bypass) Column selection high flow (5 columns, one bypass) Column selection high flow (7 columns, one bypass, reverse flow)	□ UV/VIS single wavelength □ UV/VIS multiwavelength □ Conductivity □ pH □ Fluorescence □ Refractive index □ Light Scattering □ Analog integration of further detectors	☐ Outlet valve ☐ Foxy fraction collector with fixed rack types ☐ Labocol fraction collector with individual rack type ☐ Rack for fraction collector
☐ Binary gradient module for pump P 2.1L x Buffer selection valve (8 further inlets)	COLUMNS & MEDIA SEC: Desalting ml SEC: SEC 75 ml SEC: SEC 200 ml	AC: Protein A ml AC: Protein G ml AC: Ni-NTA ml AC: Glutathione ml	☐ IEX: DEAE - Weak anion ☐ IEX: CM - Weak cation ☐ IEX: Q - Strong anion of IEX: SP - Strong cation	exchange ml

ACCESSORIES

- x Air sensor main pump x Tubing 1/16"
- x Air sensor feed pump
 - (2 pressure sensors)
- x Back pressure regulator
- ☐ AZURA Organizer

- x Tubing 1/8"
- x Tubing 1/4"

☐ Pressure control

☐ Workstation (Windows)

KNAUER Brochures



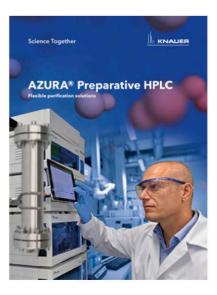
Please visit www.knauer.net/brochures to find more information about KNAUER products and systems.



AZURA® Analytical HPLC/UHPLC (Document no. V7852US)



AZURA® Bio purification (Document no. V7855US)



AZURA® Preparative HPLC (Document no. V7820US)



AZURA® SMB systems (Document no. V7741US)



Freezing point osmometry (Document no. V7716US)



KNAUER Column Selection Guide (Document no. V7803US)

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