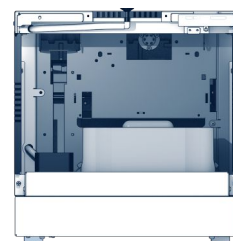
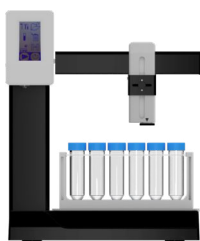
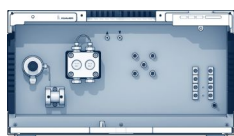


AZURA FPLC Systems overview



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.



thinkLC.thinkKNAUER.

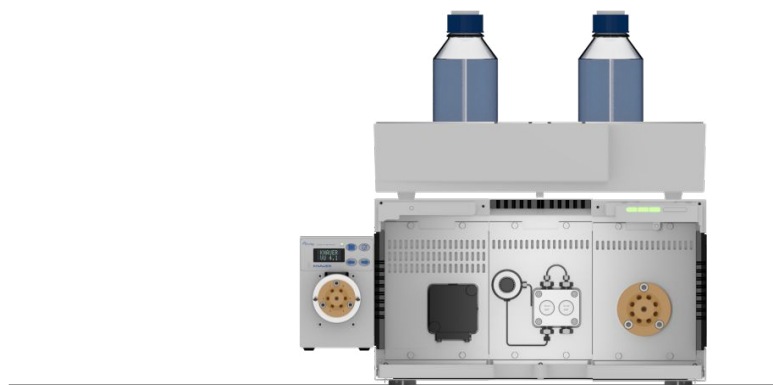
AZURA affinity FPLC System

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)



812 101 112

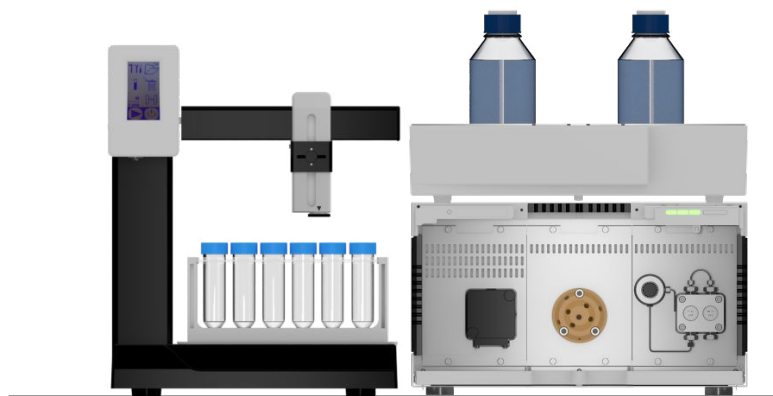
Art.-Nr.:	Description		
812 101 112	AZURA affinity FPLC System		

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.

Key Features:

- Flow rate: 0.001-10 ml/min; 0.1 - 8.0 ml/min (recommended)
- Maximum system pressure: 50 bar (5.0 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



872 101 122

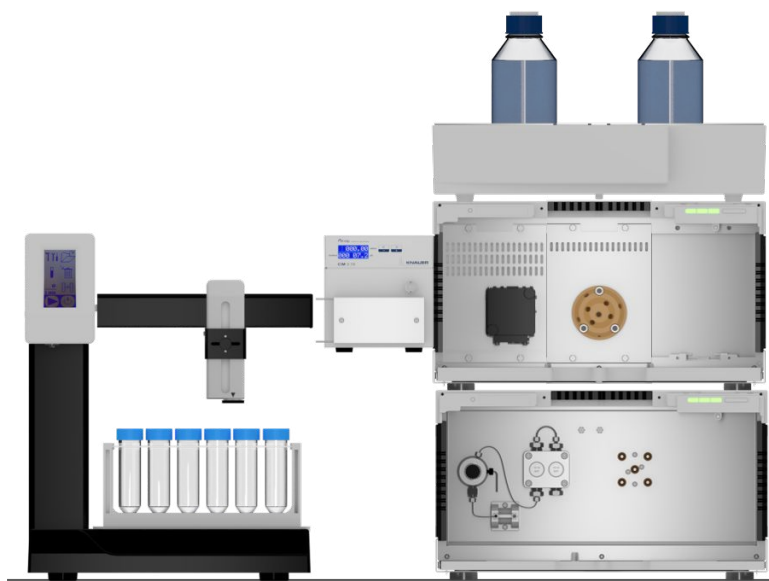
Art.-Nr.:	Description		
872 101 122	AZURA SEC FPLC System		
900001	Column selection valve kit, peek, 5 column, bypass and reverse flow option		

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.

Key Features:

- Flow rate: 0.001-10 ml/min; 0.1 - 8.0 ml/min (recommended)
- Maximum system pressure: 240 bar (24 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 usage
- Upgradeable with sample pump



872 112 122

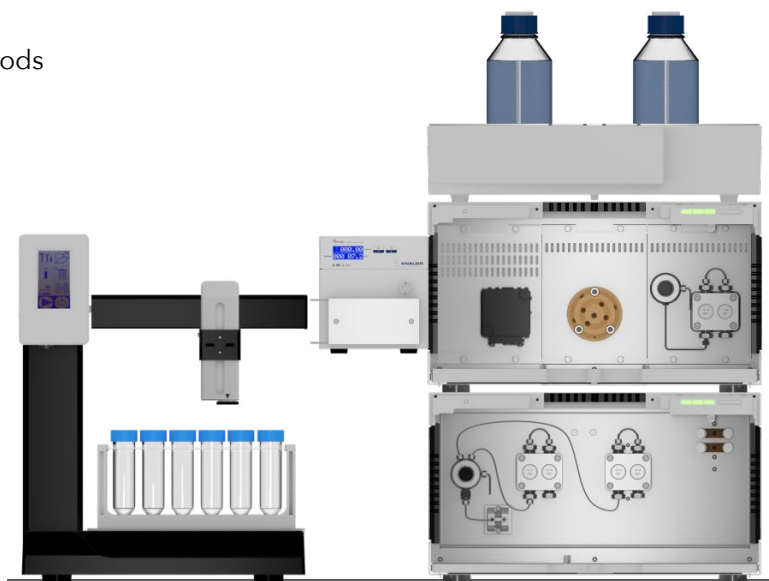
Art.-Nr.:	Description		
872 112 122	AZURA Multi Method FPLC System LPG		
A70091	pH measuring kit for conductivity monitor up to 80 ml/min. Volume 80 µl pressure limit 5 bar		
DPG12EB	Sample pump, 10 ml/min, 50 bar, ceramic with pressure sensor		
900001	Column selection valve kit, PEEK, 5 column, bypass 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 airsenser 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.

Key Features:

- Flow rate: 0.001-50 ml/min; 0.1 - 40 ml/min (recommended)
- Maximum system pressure: 240 bar (24.0 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

Art.-Nr.:	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		
900001	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 airsensord and wiring for up to 4 airsensors. Excl. power supply		
A70093	Air sensor (1/8") with one airsensord 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		

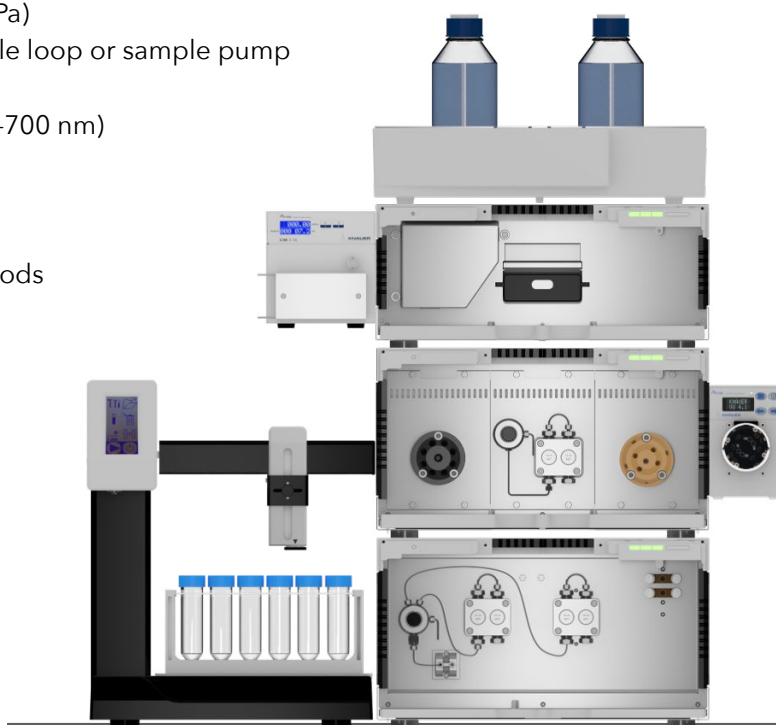
AZURA Advanced - twoSTEP purification System

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.

Key Features:

- Flow rate: 0.001–50 ml/min; 0.1 - 40 ml/min (recommended)
- Maximum system pressure: 240 bar (24.0 MPa)
- 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

Art.-Nr.:	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 airsenser and wiring for up to 4 airsensors. Excl. power supply		
A70093	Air sensor (1/8") with one airsenser 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



1



2



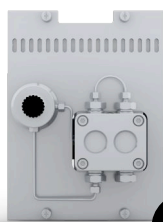
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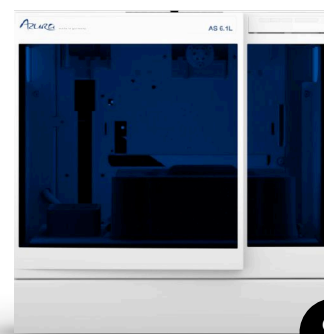
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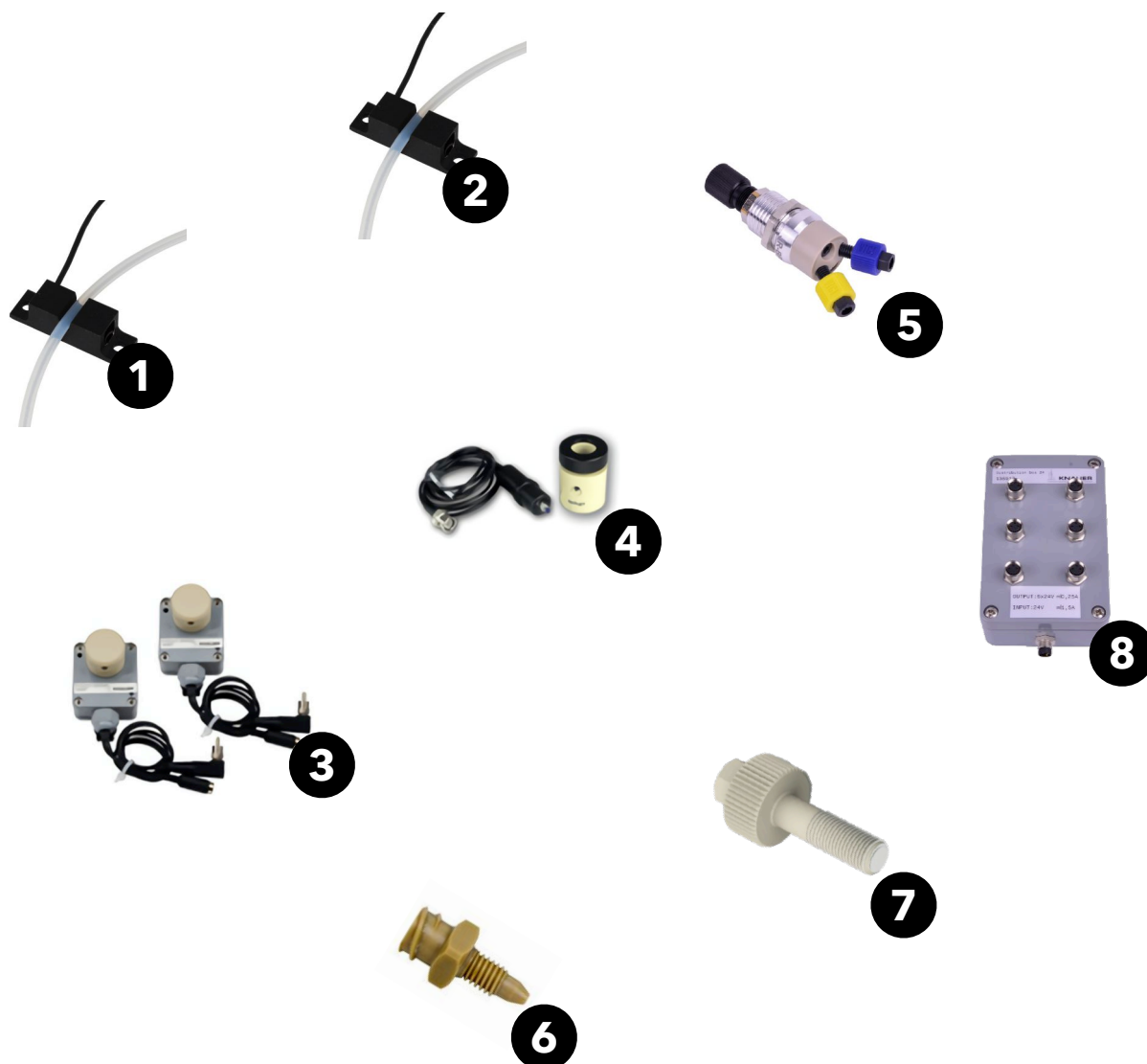
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8

#	Art.-Nr.:	Description		
1	900 001	Column selection valve kit, PEEK, 5 column, bypass and reverse flow option, 1/16"		
	900 007	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	900 002	Outlet valve kit 16 Port, PEEK, 1/16", UNF 10-31		
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



#	Art.-Nr.:	Description		
1	A70092	Air sensor (1/16") with one airsensord 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 airsensord 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

Art.-Nr.:	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

Art.-Nr.:	Description	pcs.		
010X39FPSZ	Sepapure FF Ni-NTA 1 ml Prepacked 1 ml for His-tag purification 100 µm, 3 bar	1 Stk		
020X39FPSZ	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

Art.-Nr.:	Description	pcs.		
010X15ISPZ	Sepapure DEAE FF6 1 ml Prepacked 1 ml weak anion exchange 100 µm, 3 bar	1 Stk		
020X15ISPZ	Sepapure DEAE FF6 5 ml Prepacked 5 ml weak anion exchange 100 µm, 3 bar	1 Stk		
00IX15ISPZ	Sepapure DEAE FF6 Resin 25 ml weak anion exchange 100 µm, 3 bar	1 Stk		
00KX15ISPZ	Sepapure DEAE FF6 Resin 100 ml weak anion exchange 100 µm, 3 bar	1 Stk		
00PX15ISPZ	Sepapure DEAE FF6 Resin 500 ml weak anion exchange 100 µm, 3 bar	1 Stk		
00QX15ISPZ	Sepapure DEAE FF6 Resin 1000 ml weak anion exchange 100 µm, 3 bar	1 Stk		
010X15HSPZ	Sepapure Q FF6 1 ml Prepacked 1 ml strong anion exchange 100 µm, 3 bar	1 Stk		
020X15HSPZ	Sepapure Q FF6 5 ml Prepacked 5 ml strong anion exchange 100 µm, 3 bar	1 Stk		
00IX15HSPZ	Sepapure Q FF6 Resin 25 ml strong anion exchanger 100 µm, 3 bar	1 Stk		
00KX15HSPZ	Sepapure Q FF6 Resin 100 ml strong anion exchanger 100 µm, 3 bar	1 Stk		
00PX15HSPZ	Sepapure Q FF6 Resin 500 ml strong anion exchanger 100 µm, 3 bar	1 Stk		
00QX15HSPZ	Sepapure Q FF6 Resin 1000 ml strong anion exchanger 100 µm, 3 bar	1 Stk		
010X15QSPZ	Sepapure CM FF6 1 ml Prepacked 1 ml weak cation exchange 100 µm, 3 bar	1 Stk		
020X15QSPZ	Sepapure CM FF6 5 ml Prepacked 5 ml weak cation exchange 100 µm, 3 bar	1 Stk		
00IX15QSPZ	Sepapure CM FF6 Resin 25 ml weak cation exchanger 100 µm, 3 bar	1 Stk		
00KX15QSPZ	Sepapure CM FF6 Resin 100 ml weak cation exchanger 100 µm, 3 bar	1 Stk		
00PX15QSPZ	Sepapure CM FF6 Resin 500 ml weak cation exchanger 100 µm, 3 bar	1 Stk		
00QX15QSPZ	Sepapure CM FF6 Resin 1000 ml weak cation exchanger 100 µm, 3 bar	1 Stk		
010X15RSPZ	Sepapure SP FF6 1 ml Prepacked 1 ml strong cation exchange 100 µm, 3 bar	1 Stk		
020X15RSPZ	Sepapure SP FF6 5 ml Prepacked 5 ml strong cation exchange 100 µm, 3 bar	1 Stk		
00IX15RSPZ	Sepapure SP FF6 Resin 25 ml strong cation exchanger 100 µm, 3 bar	1 Stk		
00KX15RSPZ	Sepapure SP FF6 Resin 100 ml strong cation exchanger 100 µm, 3 bar	1 Stk		
00PX15RSPZ	Sepapure SP FF6 Resin 500 ml strong cation exchanger 100 µm, 3 bar	1 Stk		
00QX15RSPZ	Sepapure SP FF6 Resin 1000 ml strong cation exchanger 100 µm, 3 bar	1 Stk		

FPLC - columns and media

Size Exclusion Chromatography

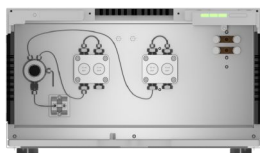
Art.-Nr.:	Description	pcs.		
010X460SPZ	Sepapure Desalting 1 ml Prepacked 1 ml desalting column 20 -50 µm, 3 bar	1 Stk		
020X460SPZ	Sepapure Desalting 5 ml Prepacked 5 ml desalting column 20 - 50 µm, 3 bar	1 Stk		
00IX46SSPZ	Sepapure SEC 75 Resin 25 ml Size exclusion chromatography 35 µm, 3 bar	1 Stk		
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

Art.-Nr.:	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



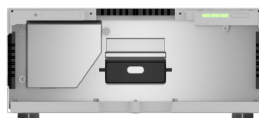
FPLC system pump P6.1L

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. Its two-lamp optics, using a high performance Polka Dot Beam splitter, allow a very high light output in the UV and VIS range. 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 continuously 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 multi-position injection valve for FPLC. In the next configuration it can work as a fraction collector.



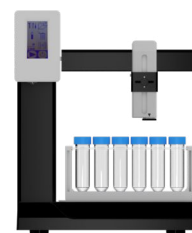
Refractive Index Detector 2.1L

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.

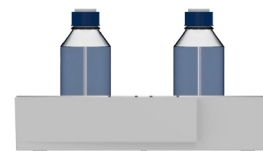


CT 2.1

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 preppacked 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 x 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.

System configurator

Bio purification by KNAUER

METHOD

SEC

Size Exclusion Chromatography

AC

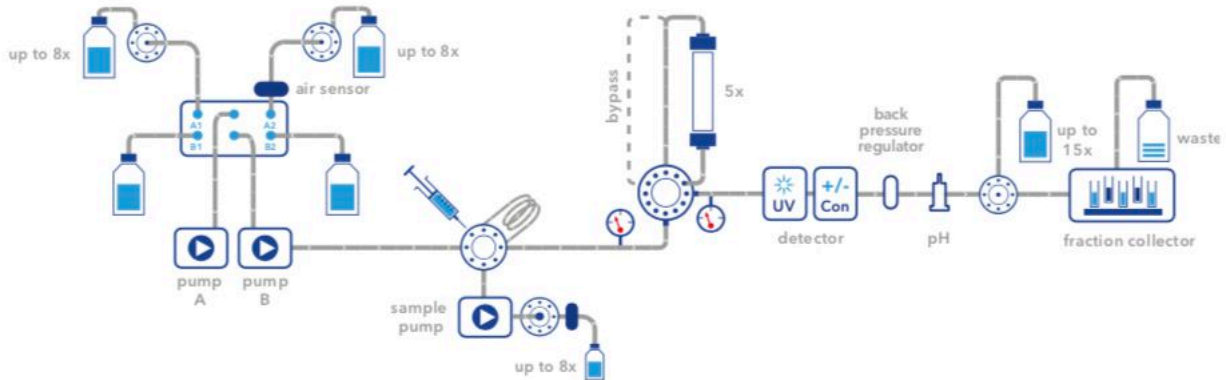
Affinity Chromatography

IEX

Ion-Exchange Chromatography

HIC

Hydrophobic Interaction Chromatography



BUFFER SELECTION & DELIVERY

- 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 250 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
- Binary gradient module for pump P 2.1L
- x Buffer selection valve (8 further inlets)

SAMPLE INJECTION

- Multi-Injection valve
- x Injection valve
- Sample pump module
- Sample selection valve: x inlets
- Biocompatible Autosampler AS 6.1L

COLUMN SELECTION

- 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)

DETECTION

- UV/VIS single wavelength
- UV/VIS multiwavelength
- Conductivity
- pH
- Fluorescence
- Refractive index
- Light Scattering
- Analog integration of further detectors

FRACTION COLLECTION

- Outlet valve
- Foxy fraction collector with fixed rack types
- Labocol fraction collector with individual rack type
- Rack for fraction collector

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 exchange ml
- IEX:** CM - Weak cation exchange ml
- IEX:** Q - Strong anion exchange ml
- IEX:** SP - Strong cation exchange ml

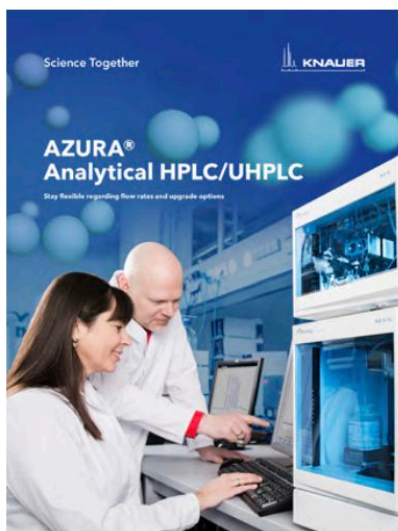
ACCESSORIES

- x Air sensor main pump
- x Air sensor feed pump
- x Tubing 1/16"
- x Tubing 1/8"
- x Tubing 1/4"
- Pressure control (2 pressure sensors)
- x Back pressure regulator
- Workstation (Windows)
- AZURA Organizer

KNAUER Brochures



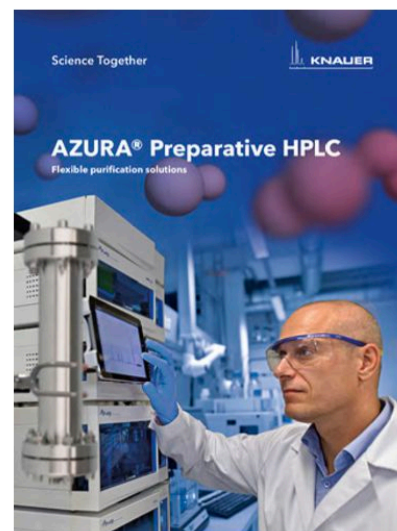
Please visit www.knauer.net/brochures to find more information about KNAUER products and systems.



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



AZURA® Bio purification
(Document no. V7855US)



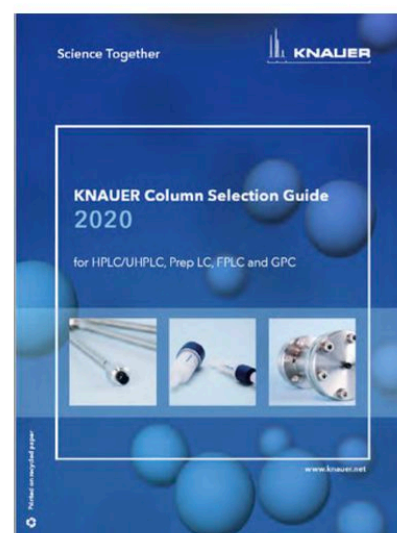
AZURA® Preparative HPLC
(Document no. V7820US)



AZURA® SMB systems
(Document no. V7741US)



Freezing point osmometry
(Document no. V7716US)



KNAUER Column Selection Guide
(Document no. V7803US)

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