

Article No.: 755203110

Articlename: AZURA Prep Pilot LC 100 HPG

AZURA Prep Pilot LC system, high pressure gradientPreparative HPLC System with 100 ml/min max. flow rate

The AZURA Pilot Prep LC 100 HPG system is a complete binary high pressure gradient (HPG) HPLC system for the purification of samples in the laboratory scale. It is designed and optimized for the purification of milligram to few gram samples. This system proposal consists of two preparative HPLC pumps, a UV/VIS detector and a freely customizable combination module. The AZURA P 2.1L pump covers a wide flow rate range and pressure capabilities. In the current setup, it supports max. pressures up to 400 bar at flow rates up to 100 ml/min. The integrated automatic recognition of the pump head with RFID technology allows fast adaptions of the pump for various applications. The HPG setup enables the precise formation of binary gradients. Besides, ternary and quaternary gradients are accessible by integration of additional preparative pumps. The AZURA UVD 2.1L represents a UV/VIS detector with a variable single wavelength for the detection of fast eluting peaks. The system is completed by an ATIIDA assistant ASM 2.1L for preparative

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stant module can be

Help

customized to individual requirements. For example, to enable automatic injection and fraction collection, the assistant module contains three integrated modules:

- Large sample volumes can be applied automatically via the integrated injection valve and feed pump.
- The integrated fractionation valve enables sample fractionation without an additional fraction collector.
- Under isocratic conditions, the consumption of solvent can be reduced by the use of solvent recycling at high flow rates. Peak recycling allows improving the resolution of a pair of closely eluting solutes (e.g., a pair of enantiomers) by automated repeated processing of the peaks.

The AZURA Preparative HPLC system comes with an eluent tray for safe storage of eluent bottles and an integrated leak management system with sensors. Columns (20 mm and 30 mm ID) can be attached with an optional AZURA mounting bracket at both sides of each AZURA element. A leak sensor and the capillary guidance as well as the optional Mobile Control with touch screen facilitate the safe and user friendly operation. Modern design with completely demountable fronts turn the system into a visual highlight.



TECHNICAL DATA

System specification

System type	Pilot
Max. flow rate	100 ml/min
Gradient	hpg
Maximum delivery pressure [psi]	5800 psi
Maximum delivery pressure [bar]	400 bar
Maximum delivery pressure [MPa]	40 MPa
Detector	Variable single wavelength detection UV/VIS
Injection	feed-pump
Fractionation	multi-position valve
Software	ClarityChrom

SYSTEM COMPONENTS



AZURA P 2.1L

Article No. APE20KA

AZURA® Pump P 2.1L with 100 ml pump head (stainless steel)

Max. flow rate: 100 ml/min

Pump head materials: Stainless Steel

Gradient: Isocratic

Pump features: Piston seal wash, Leak management, Purge valve (manual), RFID for automatic pump head detection, Active pulsation compensation, Integrated pressure sensor

Maximum delivery pressure [MPa]: 40 MPa



Pump head inlet

Article No. A9861

Pump head inlet for AZURA® Pump P 2.1L, BlueShadow 80P, 1/4" (NPT), stainless steel, max. flow 250 ml/min



AZURA Assistant ASM 2.2L

Article No. AY00562

Left module: Valve drive VU 4.1 - EWA04 Middle module: Valve drive VU 4.1 - EWA04 Right module: Pump P 4.1S, 10 ml, stainless steel - DPG22EA

Left module : Valve drive VU 4.1 - EWA04 Middle module : Valve drive VU 4.1 - EWA04

Right module: Pump P 4.1S, 10 ml, stainless steel -

DPG22EA



AZURA V 4.1 Valve

Article No. AVQ66AE

Multiposition valve, 16 Port, DLC stainless steel, PEEK, 1/16", 500 bar, 0.6 mm bore size

Operated: electrical by VU 4.1

Port number: 16

Positions: Multiposition

Material: Stainless steel

Capillary connection: 1/16"



AZURA V 4.1 Valve

Article No. AVD26AE

2-position valve, 6 Port, DLC stainless steel, PEEK, 1/16", 500 bar, 0.75 mm bore size

Operated: electrical by VU 4.1

Port number: 6
Positions: 2

Material: Stainless steel
Capillary connection: 1/16"



Inlet-bushing kit for pump head inlet AZURA

Article No. A58207

Inlet-bushing kit with 1/4"-PTFE Tubing and 20 μm stainless steel solvent filter (up to 250 ml/min)



AZURA UV/VIS Detector UVD 2.1L

Article No. ADA01XA

AZURA® Detector UVD 2.1L with deuterium lamp without flow cell, incl. test cell

Detector type: Variable single wavelength UV detector

Detection channels: 1

Wavelength range: 190 - 750 nm

Linearity: > 2.0 AU at 274 nm (ASTM E1657-98)



10 ml KNAUER VariLoop S for 1/16" tubings

Article No. A1054-2

KNAUER VariLoop S, 10 ml, 1/16", stainless steel, variable injection volume and multiple injections



Mounting bracket AZURA L

Article No. A9853-6

Mounting bracket AZURA® L for prep sample loop



AZURA Eluent tray E 2.1L

Article No. AZC00

AZURA® Eluent tray E 2.1L for AZURA® devices with a capacity of 6 x 1 l bottles or 4 x 2.5 l bottles or 2 x 5 l bottles, (delivery without bottles)

Type: Eluent tray



Mobile Control Tablet Mount

Article No. A9617

Mobile Control Mount - flexible tablet mount for tablets



Chromatography Workstation: PC plus monitor

Article No. A13120

Desktop PC (SFF) for PurityChrom® and ClarityChrom® with 24" monitor, English edition Windows 10 Prof. 64-bit English, Intel® Core™ i5, 8 GB RAM, 256 GB SSD, two network cards



Router 8-Port LAN, WiFi, EU version

Article No. A64809

WiFi router, 8x LAN GBit RJ-45 ports, 1x WAN GBit RJ-45 port



Preparative UV Flow Cell

Article No. A4069

 $0.5\ mm$ path length, 3 µl, 1/16", 200 bar, stainless steel, classical KNAUER flow cell

Flow cell type: Preparative UV flow cell

Path length: 0.5 mm

Capillary connection: 1/16" Max. flow rate: 250 ml/min Flow cell volume: 3 μ l



Tool kit AZURA

Article No. A1033-1

Tool Kit AZURA® for 1/16" systems (stainless steel)

Type: Tool kit



AZURA Capillary Start-up kit

Article No. A9849-1

AZURA® start-up kit 1/16", stainless steel, semi-prep, capillary kit



Dynamic mixer

Article No. A0581

Dynamic mixing chamber (250 V), stainless steel, preparative, 1/8", up to 250 bar, 5.9 ml mixing volume

Mixing volume: 5.9 ml

Pressure rating: max. 250 bar (25 MPa)
Recommended flow rate: < 100 ml/min



PurityChrom® Basic

Article No. A2650

Basic License for one system

Software name : $\mbox{\bf PurityChrom} \mbox{\bf @ 5}$

ACCESSORIES & SPARE PARTS



Mounting bracket AZURA

Mounting bracket AZURA® L for columns with 25 - 29 mm AD

Article No.: A9853-3



Metal capillary cutter for 1/16" capillaries

Article No.: A0681



Torque wrench Torque wrench basic tool, 1-25 Nm, without plug-in head

Article No.: X0219



Product riser AZURA

Product Riser AZURA®:
Set of 4 feet that lift the
device to a height of 28
mm for easy handling of
the waste tube of the
drainage system

Article No.: A9860



Installation Box Kit Installation Box Kit, Box for small parts, KNAUER file folder and support sticker

Article No.: A9862

DOCUMENTS AND MORE INFORMATION

AZURA SMB systems instructions EN (V6775)

Manual English

AZURA Präparatives System Installationskarte DE (V6800)

Manual German

AZURA pre-installation guide for analytical systems User Manual EN (V6802-Ana)

Manual English

AZURA Preparative HPLC brochure

AZURA Preparative HPLC brochure, V7820US

Brochure English

Peak recycling

Peak recycling elongates the separation length of the column. Technical note, VTN0001

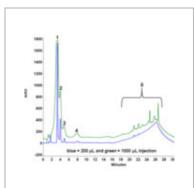
Application English

Recycle your peaks - A comparison of two recycling methods

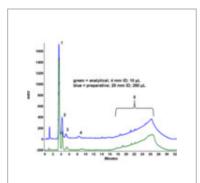
Technical note, VTN0007

Application English

APPLICATIONS FOR THIS PRODUCT



Preparative Separation of Apple Flavours from Extract



Scale-Up for Preparative Separation of Apple Flavours from Extract

RELATED PRODUCTS



AZURA Prep Pilot LC system, isocratic P 2.1L Pump with 250 ml/min pump head ASM 2.1L Assistant with feed pump, fractionation and injection valve UVD 2.1L Detector

Article No.: 744201010



AZURA Prep Pilot LC system, low pressure gradient

P 2.1L Pump with 250 ml/min pump head and LPG-block ASM 2.1L Assistant with UV-Detector and fraction valve Feed introduction via LPG-Channel or manual injection valve

Article No.: 741102010



AZURA Prep Pilot LC system, high pressure gradient

2 x P 2.1L Pump with 250 ml/min pump head ASM 2.1L Assistant with feed pump, fractionation and injection valve UVD 2.1L Detector

Article No.: 744203110



AZURA Prep Pilot LC system, isocratic

P 2.1L Pump with 100 ml/min pump head ASM 2.1L Assistant with feed pump, fractionation and injection valve UVD 2.1L Detector

Article No.: 755201110



AZURA Prep Pilot LC system, high pressure gradient

2 x P 2.1L Pump with 1000 ml/min pump head ASM 2.1L Assistant with feed pump and injection valve UVD 2.1L Detector

Article No.: 724203110



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