



Article No.: APE20KA  
Articlename: AZURA P 2.1L

## **AZURA P 2.1L**

### **Preparative HPLC pump with 100 ml/min pump head, stainless steel**

AZURA preparative HPLC pump P 2.1L covers wide flow rate range and pressure capabilities. It has been designed for purification of mg and gram samples. The Mobile Control allows intuitive control in stand-alone operation. The integrated automatic recognition of the pump head with RFID technology allows fast adaptations of the pump for various applications.

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## TECHNICAL DATA

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General information

Max. flow rate	100 ml/min
Flow rate increment	0.01 ml/min
Pressure range	<div><p>pressure [bar]</p><p>flow rate [ml/min]</p><p>100 ml pump head stainless st... recommended recommended (continuous)</p></div>
Maximum delivery pressure [psi]	5800 psi
Maximum delivery pressure [MPa]	40 MPa

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<b>Maximum delivery pressure [bar]</b>	400 bar
<b>Pump head materials</b>	Stainless Steel
<b>Maximum viscosity</b>	1000 cP
<b>Liquid temperature range</b>	4–60 °C (39.2–140 °F)
<b>Gradient</b>	Isocratic
<b>Leak management</b>	yes
<b>Wetted materials</b>	sapphire, ruby, GFP (graphite fiber reinforced PTFE), FFKM, PEEK, stainless steel, Zirconium oxide, Titanium
<b>Pump features</b>	Piston seal wash, Leak management, Purge valve (manual), RFID for automatic pump head detection, Active pulsation compensation, Integrated pressure sensor

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**Detailed information**

<b>Best working conditions</b>	1-80 ml/min
<b>Continuous working conditions</b>	1-40 ml/min
<b>Flow rate accuracy</b>	± 2 %
<b>Flow rate accuracy conditions</b>	measured at 5 - 50 % of flow range using ethanol/water 10:90
<b>Flow rate precision</b>	< 0.1 % RSD
<b>Flow rate precision conditions</b>	measured at 5 - 50 % of flow range using ethanol/water 10:90
<b>HPG: gradient accuracy</b>	± 2 % (5 - 95 %, measured at 5 - 50 % of flow range, water/caffeine tracer)
<b>HPG: gradient precision</b>	1 % RSD, based on retention time at constant room temperature
<b>LPG: gradient accuracy</b>	± 3 % (5 - 95 %, measured at 5 - 50 % of the flow range, water/caffeine tracer)
<b>LPG: gradient precision</b>	2 % RSD, based on retention time at constant room temperature
<b>Help</b>	

<b>Active piston seal wash</b>	<b>+</b>
<b>Piston seal washing</b>	<b>+</b>
<b>Pump Outlet thread</b>	Female M8 x 1 (coned)
<b>Pump head inlet (standard)</b>	M8 x 1 (flat bottom)
<b>Pump head outlet (standard)</b>	M8 x 1 (coned)

## Communication

<b>Control</b>	LAN; analog and event controlled
<b>Inputs</b>	flow rate
<b>Outputs</b>	pressure; 8 event outputs (TTL, OC, relays)
<b>Analog inputs</b>	0-10 V
<b>Analog outputs</b>	1, 2 or 5 V

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**General**

<b>Power supply</b>	100 - 240 V, 50 - 60 Hz
<b>Dimensions</b>	361 x 208,2 x 523 mm (W x H x D)
<b>Weight</b>	19 kg
<b>Leak sensor</b>	yes
<b>Ambient conditions</b>	temperature range: 10–40 °C; 50–104 °F air humidity: below 90 % humidity (non condensing)

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## ACCESSORIES & SPARE PARTS



**Pump head inlet**  
Pump head inlet for AZURA® Pump  
P 2.1L, BlueShadow 80P, 1/4"  
(NPT), stainless steel

**Article No.: A9861**



**Pump head 100 ml, stainless steel**  
Pump head 100 ml, stainless steel,  
400 bar

**Article No.: A4029-1**



**Pump head for SFC applications  
(stainless steel, 100 ml)**  
100 ml/min, stainless steel, 400  
bar, optimized for SFC applications,  
for AZURA Pump P 2.1L,  
BlueShadow Pump 80P, Smartline  
Pump 1800 and Smartline Pump  
1950, with accessories.

**Article No.: A4023V5**

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**AZURA LPG binary module for  
Pump P 2.1L**  
LPG module for Pump P 2.1L binary  
up to 800 ml/min (stainless steel)  
**Article No.: AZZ00AA**



**AZURA LPG ternary module for  
Pump P 2.1L**  
LPG module for Pump P 2.1L  
ternary up to 220 ml/min (stainless  
steel)  
**Article No.: AZZ00AB**



**Pump head cooling and heating  
device**  
Pump head cooling and heating  
device for 100/250/500/1000  
ml/min pump heads  
**Article No.: A2034-1**



**HPLC inline filter**  
for semi-prep LC applications

**Article No.: A3380**

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## DOCUMENTS AND MORE INFORMATION

### **AZURA Pumpe P 2.1L Benutzerhandbuch DE (V6840)**

Manual    German

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### **AZURA Pump P 2.1L User Manual EN (V6840)**

Manual    English

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### **List of supported devices in chromatography data systems EN (V1663)**

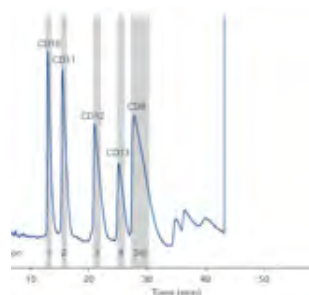
Device support in KNAUER CDS / KNAUER device support in 3rd party software

Information    English

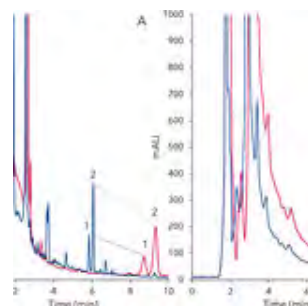
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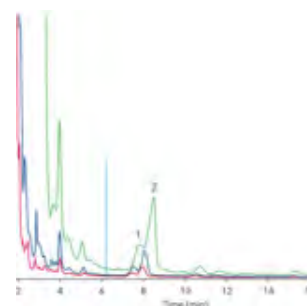
## APPLICATIONS FOR THIS PRODUCT



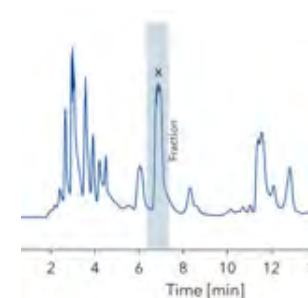
**Cyclodextrin  
purification Part 2**



**Scale-Up of an  
analytical HPLC  
method for steviol  
glycosides to a  
preparative  
approach**



**Evaluating  
preparative online  
SPE for the  
purification of stevia  
leave extracts**



**Purification of  
chamazulene by  
preparative HPLC  
and its scale-up**



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**Purify CBD and  
other cannabinoids  
by preparative HPLC**

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## RELATED PRODUCTS



**AZURA P 2.1L**  
AZURA® Pump P 2.1L with 100 ml  
pump head (titanium)

**Article No.: APE20KB**



**AZURA P 2.1L**  
AZURA® Pump P 2.1L with 250 ml  
pump head (stainless steel)

**Article No.: APE20LA**



**AZURA P 2.1L**  
AZURA® Pump P 2.1L with 250 ml  
pump head (titanium)

**Article No.: APE20LC**

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**AZURA P 2.1L**

AZURA® Pump P 2.1L with 500 ml  
pump head (stainless steel)

**Article No.: APE20MA**



**AZURA P 2.1L**

AZURA® Pump P 2.1L with 500 ml  
pump head (titanium)

**Article No.: APE20MC**



**AZURA P 2.1L**

AZURA® Pump P 2.1L with 1000 ml  
pump head (stainless steel)

**Article No.: APE20NA**

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**AZURA P 2.1L**  
AZURA® Pump P 2.1L with 1000 ml  
pump head (titanium)

**Article No.: APE20NB**

## RELATED FAQs

**What is the difference between a Dosing Pump and an HPLC System Pump?**

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In addition, we have extended documentation about all our products, including **CE Declarations of Conformity**.

[See all CE Declarations of conformity](#)

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### Do you need more details or a quote?

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