

iChrom Solutions  
542 Cross Keys Road  
Suite 3-376  
Sicklerville, NJ 08081-4367  
609-799-7250  
sales@iChrom.com



Part Number: APG90EB  
Base Pump: AZURA\*\* P 2.1S

## Compact pump without pressure sensor, 10 ml/min Hastelloy C pump head

For HPLC and dosing applications

With its small footprint, the compact dual-piston pump AZURA P 2.1S can be used for many different laboratory tasks. A pressure rating of up to 400 bar and chemical resistance to a wide range of eluents make it the perfect choice for LC and dosing applications. Pump heads with maximum flow rates of 10 and 50 ml/min are available.

Moreover – the exchangeable pump head allows adaptation of the pump for delivery of aggressive media and bioinert applications. The pump head can also be heated or cooled with optional accessories.



AZURA P 2.1S pump

## ACCESSORIES & SPARE PARTS



**Pump head 10 ml**  
Pump head 10 ml,  
stainless steel  
Article No.: AHB40



**Accessory kit AZURA  
P 2.1S and P 4.1S**  
included in shipkit  
Article No.: FPG



**Accessory kit AZURA  
small devices**  
cable kit for all devices  
with footprint "S"  
included in shipkit  
Article No.: FZA01



**Pump head cooling and  
heating device**  
for 10 and 50 ml pump  
heads  
Article No.: A2035-1

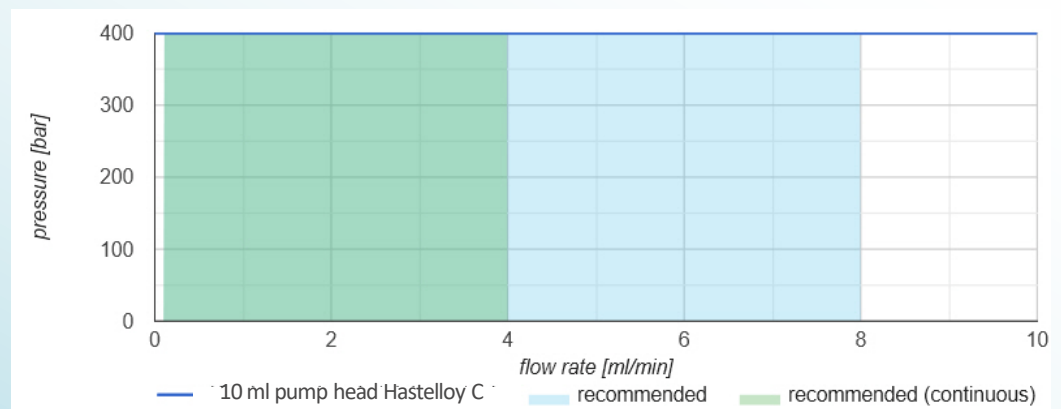
**\*\*AZURA® is a Registered Trademark of KNAUER Wissenschaftliche Geräte GmbH**

## TECHNICAL DATA

### General Information

|                                  |                 |
|----------------------------------|-----------------|
| Max. flow rate:                  | 10 ml/min       |
| Flow rate range:                 | 0.001-10 ml/min |
| Flow rate increment:             | 0.001           |
| Maximum delivery pressure [psi]: | 5800 psi        |
| Maximum delivery pressure [bar]: | 400 bar         |
| Maximum delivery pressure [MPa]: | 40MPa           |

### Pressure range:



|                           |                                                                                                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pump head materials:      | Hastelloy® C-276                                                                                                                                        |
| Maximum viscosity:        | 100 cp                                                                                                                                                  |
| Liquid temperature range: | 4-60 °C (39.2-140 °F)                                                                                                                                   |
| Gradient:                 | Isocratic                                                                                                                                               |
| Leak management:          | No                                                                                                                                                      |
| Wetted materials:         | FFKM, Zirconium oxide, GFP (graphite fiber-reinforced PTFE), ruby, sapphire, aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ), Hastelloy® C-276, KEL-F® |

## Detailed information

|                                 |                                                  |
|---------------------------------|--------------------------------------------------|
| Best working conditions:        | 0.1-8.0 ml/min                                   |
| Continuous working conditions:  | 0.1-4.0 ml/min                                   |
| Flow rate accuracy:             | ±5%                                              |
| Flow rate accuracy conditions:  | 5-50% of flow range using ethanol/water 10:90    |
| Flow rate precision:            | < 0.5% RSD                                       |
| Flow rate precision conditions: | Measured at 1/5 ml/min using ethanol/water 10:90 |
| Pulsation compensation:         | No                                               |
| Pump type:                      | Ultra-compact high pressure pump                 |
| Active Piston seal wash:        | No                                               |
| Piston seal washing:            | Yes                                              |
| System protection:              | $I_{\min}$ and $I_{\max}$ adjustable             |
| Pump head inlet (standard):     | 1/4"-28 UNF (flat bottom)                        |
| Pump head outlet (standard):    | 10-32 UNF (coned)                                |

## Communication

|                |                                  |
|----------------|----------------------------------|
| Interfaces:    | Display                          |
| Control:       | RS-232; analog; button on device |
| Analog inputs: | 0-10V                            |

## General

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Power supply:       | 100-240 V; 50-60 Hz                                                            |
| Dimensions:         | 121 x 129 x 220 mm                                                             |
| Weight:             | 2.3 kg                                                                         |
| Leak sensor:        | No                                                                             |
| Ambient conditions: | Temperature range: 10-40 °C; 50-104 °F<br>air humidity: <90 % (non condensing) |