

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



Part Number: APG20EF
Base Pump: AZURA** P 4.1S

Compact pump with pressure sensor, 10 ml/min ceramic pump head and Titanium connections

For HPLC and dosing applications

With its small footprint, the compact dual-piston pump AZURA P 4.1S 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 4.1S pump
with pressure sensor*

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

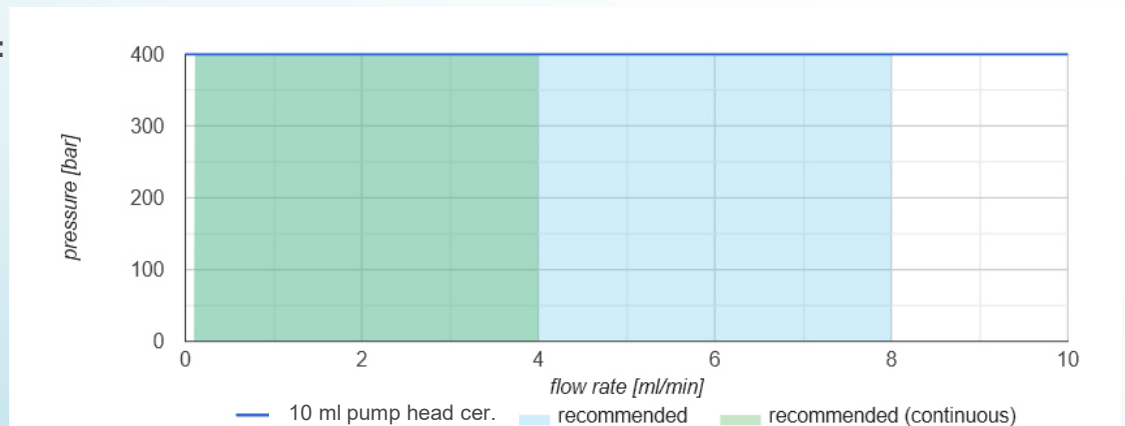
****AZURA® is a Registered Trademark of KNAUER Wissenschaftliche Geräte GmbH**

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:	Ceramic
Maximum viscosity:	100 cp
Liquid temperature range:	4-60 °C (39.2-140 °F)
Gradient:	Isocratic
Leak management:	No
Wetted materials:	GFP (graphite fiber-reinforced PTFE), Titanium, ruby, sapphire, aluminum oxide (Al ₂ O ₃), ceramic, FKM, PEEK, zirconium oxide
Note:	Pressure sensor membrane made of stainless steel; limited wetting in fluidic path

Detailed information

Best working conditions:	0.1-8.0 ml/min
Continuous working conditions:	0.1-4.0 ml/min
Flow rate accuracy:	±1%
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:	P_{min} and P_{max} adjustable; 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 air humidity: <90 % (non condensing)