COMPARISON TABLE:

KNAUER
AZURA P 4.1S Pump, 10 ml/min
(*with Pressure Sensor*)

With its small footprint, the compact dual piston pump AZURA P4.1S can be used for a wide range of 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, its exchangeable pump head allows adaptation of the pump for delivery of aggressive media and bioinert applications. The pump head can be heated or cooled with optional accessories.

For more information on this pump range contact us on info@rubiconscience.com.au

Rubicon Science

AZURA P 4.1S Pump, 10 ml/min (with Pressure Sensor)	Stainless steel pump head P/N APG20EA	Stainless steel pump head for water dosing P/N APG20EG	Ceramic pump head and Titanium connections P/N APG20EF	Ceramic pump head, for water dosing P/N APG20EH	Ceramic pump head, with PEEK connections P/N APG20EB	Hastelloy C pump head P/N APG20EC
Max. flow rate	10 ml/min	10 ml/min	10 ml/min	10 ml/min	10 ml/min	10 ml/min
Flow rate range	0.001 - 10 ml/min	0.001–10 ml/min	0.001–10 ml/min	0.001–10 ml/min	0.001–10 ml/min	0.001–10 ml/min
Flow rate increment	0.001 ml/min	0.001 ml/min	0.001 ml/min	0.001 ml/min	0.001 ml/min	0.001 ml/min
Maximum delivery pressure [psi]	5800 psi	5800 psi	5800 psi	5800 psi	5080 psi	5800 psi
Maximum delivery pressure [MPa]	40 Mpa	40 MPa	40 MPa	40 MPa	35 MPa	40 MPa
Maximum delivery pressure [bar]	400 bar	400 bar	400 bar	400 bar	350 bar	400 bar
Pump head materials	Stainless steel	Stainless steel	Ceramic	Ceramic	Ceramic	Hastelloy® C-276
Maximum viscosity	100 cp	100 cp	100 cp	100 cp	100 cp	100 cp
Liquid temperature range	4–60 °C	4–60 °C	4–60 °C	4–60 °C	4–60 °C	4–60 °C
Gradient	Isocratic	Isocratic	Isocratic	Isocratic	Isocratic	Isocratic
Leek management	No	No	No	No	No	No
Wetted materials	Zirconium oxide, stainless steel, sapphire, ruby, GFP (graphite fibre reinforced PTFE), FKM, aluminum oxide (Al2O3)	GFP (graphite fibre reinforced PTFE), ruby, sapphire, Titanium	GFP (graphite fibre reinforced PTFE), Titanium, ruby, sapphire, aluminium oxide (Al2O3), ceramic, FKM, PEEK, Zirconium oxide	GFP (graphite fibre reinforced PTFE), Titanium, ruby, sapphire, ceramic, FKM	GFP (graphite fibre reinforced PTFE), Titanium, ruby, sapphire, ceramic, FKM	GFP (graphite fibre reinforced PTFE), FFKM, KEL-F® (PCTFE), Hastelloy® C, Titanium, Zirconium oxide, ruby, sapphire
DETAILED INFORMATION						
Best working conditions	0.1–8.0 ml/min	0.1–8.0 ml/min	0.1–8.0 ml/min	0.1–8.0 ml/min	0.1–8.0 ml/min	0.1–8.0 ml/min
Continuous working conditions	0.1 – 4.0 ml/min	0.1–4.0 ml/min	0.1–4.0 ml/min	0.1–4.0 ml/min	0.1–4.0 ml/min	0.1–4.0 ml/min
Flow rate accuracy	± 1 %	± 1%	± 2%	± 1%	± 1%	± 2%
Flow rate accuracy conditions (using ethanol/water 10:90)	5 - 50% of flow range	5 - 50% of flow range	5 - 50% of flow range	5 - 50% of flow range	5 - 50% of flow range	5 - 50% of flow range
Flow rate precision (measured at 1 ml/min using ethanol/water 10:90)	≤ 0.5 % RSD	≤ 0.5 % RSD	< 0.5% RSD	< 0.5% RSD	< 0.5% RSD	< 0.5% RSD
Pulsation compensation	No	No	No	No	No	No
Active piston seal washing	No	No	No	No	No	No
Piston seal washing	Yes	Yes	Yes	Yes	Yes	Yes
System protection	Pmin and Pmax adjustable Imin and Imax adjustable	Pmin and Pmax adjustable Imin and Imax adjustable	Pmin and Pmax adjustable Imin and Imax adjustable	Pmin and Pmax adjustable Imin and Imax adjustable	Pmin and Pmax adjustable Imin and Imax adjustable	Imin and Imax adjustable
Pump head inlet (standard)	1/4"-28 UNF (flat bottom)	1/4"-28 UNF (flat bottom)	1/4"-28 UNF (flat bottom)	1/4"-28 UNF (flat bottom)	1/4"-28 UNF (flat bottom)	1/4"-28 UNF (flat bottom)
Pump head outlet (standard)	10–32 UNF (coned)	10–32 UNF (coned)	10–32 UNF (coned)	10–32 UNF (coned)	10–32 UNF (coned)	10–32 UNF (coned)
COMMUNICATION						
Interfaces	Display	Display	Display	Display	Display	Display
Control	RS-232; analog; button on device	RS-232; analog; button on device	RS-232; analog; button on device	RS-232; analog; button on device	RS-232; analog; button on device	RS-232; analog; button on device
Analogue inputs	0 – 10V	0 – 10V	0 – 10V	0 – 10V	0 – 10V	0 – 10V
GENERAL						
Power supply	100 - 240 V; 50 - 60 Hz	100–240 V; 50–60 Hz	100–240 V; 50–60 Hz	100–240 V; 50–60 Hz	100–240 V; 50–60 Hz	100–240 V; 50–60 Hz
Dimensions	121 x 129 x 220 mm	121 x 129 x 220 mm	121 x 129 x 220 mm	121 x 129 x 220 mm	121 x 129 x 220 mm	121 x 129 x 220 mm
Weight	2.3 kg	2.3 kg	2.3 kg	2.3 kg	2.3 kg	2.3 kg
Leak sensor	No	No	No	No	No	No
Ambient Conditions air humidity below 90 % humidity (non-condensing)	10 – 40 °C	10 – 40 °C	10 – 40 °C	10 – 40 °C	10 – 40 °C	10 – 40 °C