

COMPARISON TABLE:

KNAUER

AZURA P 4.1S Pump, 50 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

AZURA P 4.1S Pump, 50 ml/min (with Pressure Sensor)	Stainless steel pump head P/N APG20FA	Stainless steel pump head for water dosing P/N APG20FG	Ceramic pump head P/N APG20FB	Ceramic pump head, for water dosing P/N APG20FI	Hastelloy C pump head P/N APG20FC
Max. flow rate	50 ml/min	50 ml/min	50 ml/min	50 ml/min	50 ml/min
Flow rate range	0.01 - 50 ml/min	0.01–50 ml/min	0.01–50 ml/min	0.01–50 ml/min	0.01–50 ml/min
Flow rate increment	0.01 ml/min	0.01	0.01	0.01	0.01
Maximum delivery pressure [psi]	2180 psi	2180 psi	2180 psi	2180 psi	2180 psi
Maximum delivery pressure [MPa]	15 Mpa	15 MPa	15 MPa	15 MPa	15 MPa
Maximum delivery pressure [bar]	150 bar	150 bar	150 bar	150 bar	150 bar
Pump head materials	Stainless steel	Stainless steel	Ceramic	Ceramic	Hastelloy® C-276
Maximum viscosity	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
Gradient	Isocratic	Isocratic	Isocratic	Isocratic	Isocratic
Leak management	No	No	No	No	No
Wetted materials	GFP (graphite fibre reinforced PTFE), ruby, sapphire, Titanium	GFP (graphite fibre reinforced PTFE), ruby, sapphire, aluminium oxide (Al ₂ O ₃), FKM, PEEK, Titanium, stainless steel	GFP (graphite fibre reinforced PTFE), Titanium, sapphire, ruby, aluminium oxide (Al ₂ O ₃), ceramic, FKM, PEEK, Zirconium oxide	GFP (graphite fibre reinforced PTFE), ruby, sapphire, Titanium	GFP (graphite fibre reinforced PTFE), Titanium, FFKM, sapphire, aluminium oxide (Al ₂ O ₃), Hastelloy® C, KEL-F® (PCTFE), PEEK, ruby, Zirconium oxide
DETAILED INFORMATION					
Best working conditions	1.0 – 40.0 ml/min	1.0–40.0 ml/min	1.0–40.0 ml/min	1.0–40.0 ml/min	1.0–40.0 ml/min
Continuous working conditions	3 – 25 ml/min	3–25 ml/min	3–25 ml/min	3–25 ml/min	3–25 ml/min
Flow rate accuracy	± 2 %	± 2 %	±2%	±2%	±2%
Flow rate accuracy conditions (using ethanol/water 10:90)	5 - 50% of flow range	5 - 50% of flow range using	5 - 50% of flow range using	5 - 50% of flow range using	5 - 50% of flow range using
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
Pulsation compensation	No	No	No	No	No
Active piston seal washing	No	No	No	No	No
Piston seal washing	Yes	Yes	Yes	Yes	Yes
System protection	Pmin and Pmax adjustable Imin and Imax adjustable	P _{min} and P _{max} adjustable I _{min} and I _{max} 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
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)
Pump head outlet (standard)	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
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
Analogue inputs	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
Dimensions	121 x 129 x 220 mm (W x H x D)	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
Leak sensor	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

