

Pump Model	VIPR-3K	VIPR-7K	VIPR-10K
Maximum Pressure	3,500 psi (241 bar)	7,500 psi (517 bar)	10,000 psi (690 bar)
Flow Rate Range	0.0001-211 ml/min	0.0001-105 ml/min	0.0001-79 ml/min
Cylinder Volume	450.6 ml	223.5 ml	169.9 ml
Refill Time	2.15 min	2.15 min	2.15 min
Displacement Resolution	19.69 nL/step	9.78 nL/step	7.42 nL/step
Volume Error	0.20%	0.25%	0.30%
Pressure Accuracy	+/- 0.1% of Full Scale	+/- 0.1% of Full Scale	+/- 0.1% of Full Scale
Pressure Resolution	0.1 psi	0.1 psi	0.1 psi
Liquified Gases, e.g., CO <sub>2</sub>	Yes	Yes	Yes
Valve Options	Manual, Automated constant-volume or ball Valves	Manual, Automated constant-volume or ball Valves	Manual, Automated constant-volume or ball Valves
Wetted Parts	316 Stainless Steel or Hastelloy© C-276	316 Stainless Steel or Hastelloy© C-276	316 Stainless Steel or Hastelloy© C-276
Seal Materials	UHMW PE or PTFE	UHMW PE or PTFE	UHMW PE or PTFE
Dimensions (HxWxL) & Weight (excludes valves)	35" x 8" x 12" 58 lbs	35" x 8" x 12" 58 lbs	35" x 8" x 12" 58 lbs
Fluid Connection Fittings: Standard & (Optional)	1/4" AE Speed-Bite (3/8" NPT)	1/4" AE Speed-Bite	1/4" AE Speed-Bite
Power Requirement & Usage	100-240V / 47-63Hz 200 Watt max	100-240V / 47-63Hz 200 Watt max	100-240V / 47-63Hz 200 Watt max