VERITY® 3240 High Pressure Binary Gradient Pump with 150 mL Head

Designed for High Performance and High Throughput Preparative Chromatography

SPEC SHEET | PURIFICATION

HIGH-PRESSURE AND MULTI-SOLVENT PUMP FOR PREPARATIVE HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)

PURIFY WITH CONFIDENCE

The VERITY® 3240 Pump delivers reproducible and precise elution gradients to achieve repetitive isolations of targeted compounds with Gilson automated purification platforms.

SCALE UP CAPABILITIES

The VERITY 3240 Pump has been designed to effectively work with preparative HPLC columns from 10 mm to 50 mm ID allowing for scaling up purification from milligrams up to tens of grams on the same Gilson automated purification platform.

Figure 1
VERITY® 3240 High Pressure Binary Gradient Pump with 150 mL Head and Two Inlets Solvent Selectors

WORKHORSE IN THE LABORATORY

The large flow rate and pressure range allows the VERITY 3240 Pump to cover most semi-preparative to preparative HPLC purification needs.

SAFE AND EFFICIENT

The VERITY 3240 Pump has an optional leak detector to secure purifications. The optional inlet solvent selectors support high throughput purification on different column types and allow for quick column regeneration.

VERITY® 3240 HIGH PRESSURE BINARY GRADIENT PUMP SPECIFICATIONS

VERITY® 3240 High Pressure Binary Gradient Pump	
Specification	**Description**
Pump Type	High Pressure Binary Gradient Pump
Hydraulic System	Reciprocating Dual Piston Pumps
Flow Rate	**Range** 0.1-150 mL/min Recommended flow rate ≥3 mL/min **Increment** 0.1 mL/min
Flow Accuracy[1]	±1% with a minimum pressure of 10 bar
Flow Precision / Repeatability[1]	≤0.3% from 15 to 150 mL/min
Gradient	**Solvents** Two **Formation** High Pressure Mixing with Static Mixer as part of Pressure, Purge, and Mixing Module (PPMM) **Composition Increment** 0.1%
Gradient Accuracy[2]	±1%
Gradient Precision / Repeatability[2]	≤0.3%
Operating Pressure	5–420 bar (70–6090 psi) up to 110 mL/min 5–320 bar (70–4640 psi) from 110 to 150 mL/min
Priming	Manual with Built-in prime/purge valve via TRILUTION LC or Syringe
Communication	USB Serial Communication
Software Control	PC Control Via USB and TRILUTION LC V4.5 or higher
Electrical	**Line Voltage** 110–120 V~(Single-Phase, ±10%) (P/N 21144001, 21144002, and 21144003) or 220–240 V~(Single-Phase, ±10%) (P/N 21144004, 21144005, and 21144006) **Line Frequency** 50 or 60 Hz **Power Consumption** 220 W max. **Overvoltage Category** CAT II **Electrical Protection** Required at customer facility: differential circuit breaker 30 mA General: delayed action fuses 3.15A H 250V~, T-type 24VDC: delayed action fuses with different ratings, L 250V~, T-type

VERITY® 3240 HIGH PRESSURE BINARY GRADIENT PUMP SPECIFICATIONS

VERITY® 3240 High Pressure Binary Gradient Pump	
Specification	**Description**
Environmental	Indoor Use Only **Operating Temperature** 5°C to 40°C (41°F to 104°F) **Operating Relative Humidity** Up to 80% for temperatures up to 31°C, decreasing linearly to 50% at 40°C **Operating Altitude** Up to 2000 m **Temperature Of Liquid Pumped** 5°C to 40°C (41°F To 104°F) **Pollution Degree** Degree 2 (normally only nonconductive pollution occurs, temporary conductivity caused by condensation is to be expected)
Physical	**Dimensions (W X D X H)** 36 x 45.5 x 24 cm (14.2 x 17.7 x 9.4 in.) **Weight**: 30 kg (66 lbs.) **Shipping Weight:** 35 kg (77 lbs.)
Safety Devices	Overpressure Safety Leak Sensor (Optional) Colored Light For Pump Status
Airborne Noise Emission	LAS < 70 dB A frequency weighting, slow time constant, 1 m distance between front of the pump and sound level meter, pump at 150 mL/min – 320 bar – 100%A
Liquid Contact Materials	316 / 316l / 316 Ti Stainless Steel, PEEK, PFA, PTFE, ETFE, PCTFE, Ketron® CA30 PEEK, FFKM (Kalrez®, Perlast®), Inconel®, Ruby, Sapphire, Zirconium Oxide, GFP

[1] Flow specifications determined with a minimum pressure of 10 bar with H^2O degassed at 20°C, on average value from a batch of pumps

[2] Gradient specifications are determined for 5-95% with a minimum pressure of 50 bar, with water/water spiked with marker, on average value from a batch of pumps

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