pure99x®

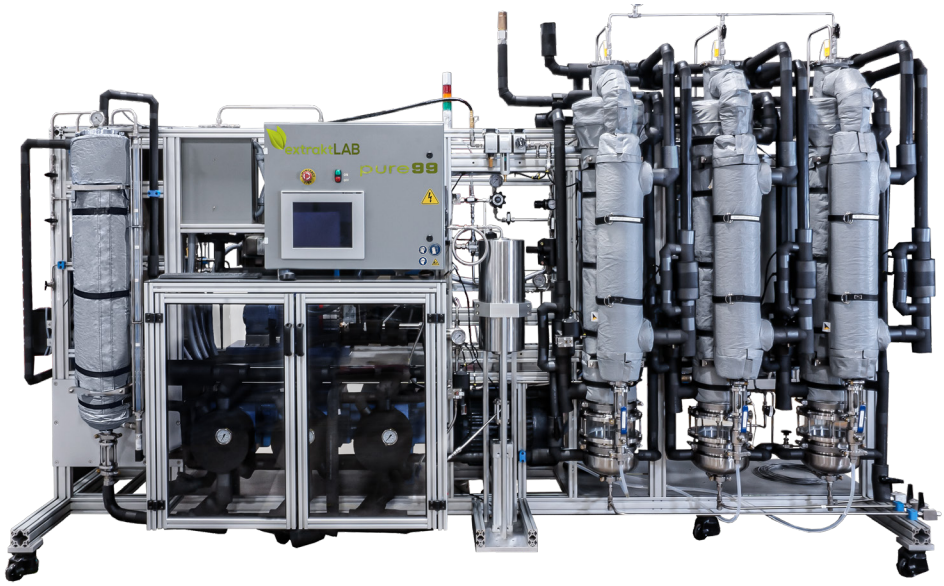
Botanical Separations

extraktLAB®

DESCRIPTION

The pure99 chromatography system was designed and optimized for on line preparative separations, with integrative closed loop solvent recovery. Preparative chromatography is used to separate complex mixtures into their pure components.

Based on decades of chromatography engineering experience, we offer a versatile chromatography system allowing you to develop separations methods for your mixture. The system may be used with many different types of eluents and column packings to help you achieve your desired separation. For separations of tens to hundreds of kg per month, the pure99 system is ideal for separations of major components of complex mixtures.



FEATURES

- **Closed Loop Solvent Recycling**
- **High Pressure Column**
- **Large Diameter Column for High Loadability**
- **Binary On Line Solvent Gradient Mixing**

EXTENDED

PROCESSING POWER

- Up to 7 L/min Flow Rate
- Diameter Column: 13.6 cm
- User Packable
- 2,500 psi High Pressure Columns
- Built-in Solvent Recovery Falling Film Distillation
- High Pressure Injection

PROCESS CONTROL

- Automated for Batch Operation
- Intrinsically Safe Thermocouples
- Allen Bradley User Interface
- Eluent Density Control
- Coriolis & Turbine Meter Flow Control
- Up to two UV/VIS Detectors
- Closed Loop Solvent Recycling
- Method & Sequence & Data Acquisition Software

GMP COMPLIANCE

- 21 CFR Part 11 Compliant Software
- Sensor Certifications
- Material Certifications
- Inert & Chemically Stable Polymeric Seals
- UL 698A, Listed
- ATEX II & C1D2 Compliant
- Normal, Chiral, and Reverse Phases

SPECIFICATIONS

ATTRIBUTE	VALUE
General Specifications: C1D2 Ex Proof	
Dimensions (w/o light mast, in)	L157 × W45 x H93
Unit Weight (lbs)	4500 lbs
Sound Pressure (db)	40-50 db
Footprint (sq ft)	98
Collection Volume (L)	30
Pressure Transducer	5
Flow Transducer	3
Electrical Specifications	
Voltage (VAC)	208-230/380
Frequency (Hz)	50/60
Full Load Amps (amps)	67
Phase	3
Certifications	UL 698A, Listed
Column: Insulated Adiabatic Column	
Separation Column Diameter (cm)	13.6
Separation Column Length (cm)	20
Column Pressure: ΔP max (psi)	2500.0
Volume Max	
Column Pressure ΔP max (psi)	2,500
Dynamic Axial Pressure (max psi)	3,000
Materials	316SS, passivated

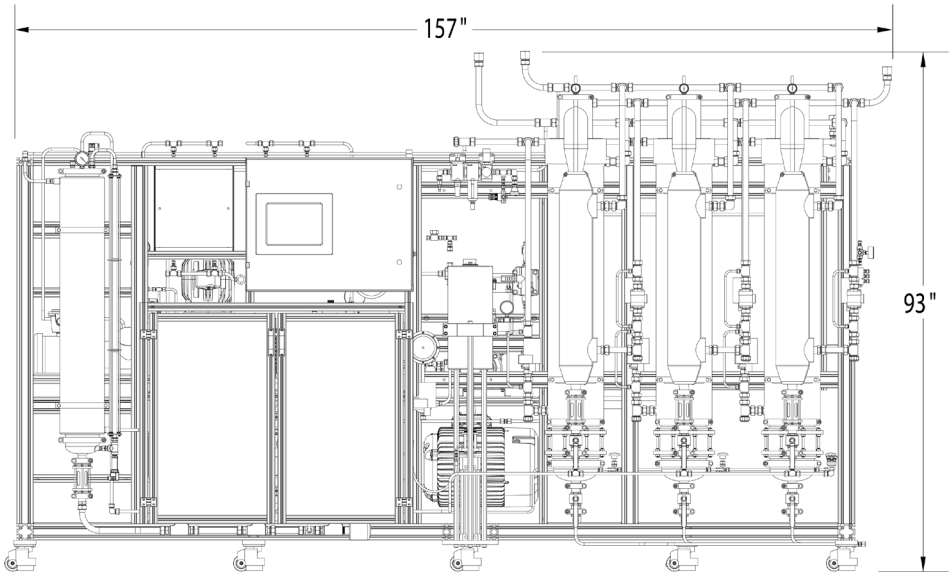
ATTRIBUTE	VALUE
Column Preheater	
Power (watts)	4,000
Construction	316SS
Max Pressure (psi)	5,000
Max Heater Output	Eluent pre-heating up to 100ºC
Column Bypass Loop	yes
Injector System	
High Pressure Pump Injection (psi)	up to 2,500
Material	PTFE (7 diaphragm)
Injector Loop	
Max Pressure (psi)	2,500
Injection Volume	variable (user selected)
Pump & Gradient Mixing System	
Gradient Forming Pump for on line gradient formulation	
Main Pumps	1 (3 head LEWA)
Gradient Pump	1
Pulse Damper	2
Flowmeter	2 Turbine, 1 Coriolis
Fractional Collection: 3 Fractions for Low Pressure Collection	
Chilling Capacity	52 kW
Heating Capacity	48 kW
Solvent Recovery and Recycling	Integrated

ATTRIBUTE	VALUE
Data System	Chromatography Software: Full Control Over Instrument; Method Builder; Data Collection, Integration & Report Builder
Detection	
Detector Range	210-600 nm variable wavelength UV-VIS
Lamp Construction	Deuterium
Flow Cell Pressure (max psi)	1,500
Flow Cell	Silica Window, 316SS, PTFE
Materials	
Wetted Materials	FDA approved, ASME 316SS
Automation Specifications	
User Interface (Alan Bradley)	Touch Screen 12"
Connectivity	WIFI
Signal Tower	1
Changeover Automation	Yes
Sequences	Yes
Built-in Recipes	Yes
Data Logging	Yes
Installation, Training, and Warranty	
Duration (months)	12
Quality and Labor	Parts & workmanship

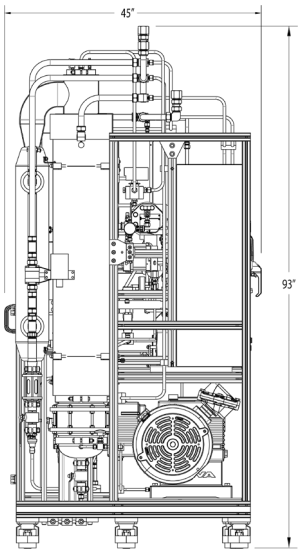
SOLD SEPARATELY:
Chiller Requirement: 52kW, 15 ton capacity, 460v/3ph/37 amp
Heater Requirement: 48kW, 200 GPM, 460v/3ph/80.6 amp
#80-9608 | GMP Equipment Commissioning & Training Package
#80-9606 | GMP Equipment Documentation Package
#80-9609 | Maintenance Package (12 months)

LINE DRAWINGS

FRONT VIEW



SIDE VIEW



To Order:
pure99: #10-0087 (208-230V) | #10-0149 (380V)
Chiller Kit, #10-1062 (208-230/380V)
Heater Kit, #10-1074 (208-230/380V)

extraktLAB®

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