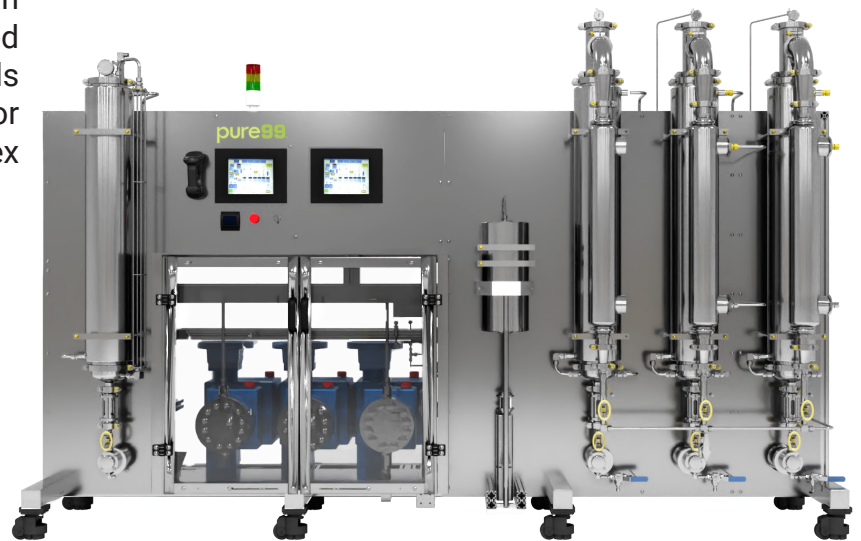


DESCRIPTION

The pure99 chromatography system was designed and optimized for on line preparative separations, with integrative solvent recovery. This system is an automated, high-pressure, chromatography separations module, for preparative chromatography. 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 systems are ideal for separations of major components of complex mixtures.



FEATURES

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

EXTENDED

PROCESSING POWER

- Up to 5 L/minute
- Diameter Column: 13.6 cm
- Exchange User Packable
- Up to 2,500 psi High Pressure Columns
- Multiple Column Systems available
- Built-in Solvent Recovery Falling Film Distillation
- Built-in Mixing Automation for Recycling
- High Pressure Injection

PROCESS CONTROL

- Automated for Batch Operation
- Allen Bradley User Interface
- Run by Machine Language and Software.
- 0 - 2,500 psi
- Custom Detectors
- Customized Feed & Fraction Collections
- Automated Solvent Removal

GMP COMPLIANCE

- CFR21 Part 11 Compliant Software
- UL 698A, Listed
- ATEX II Compliant
- C1D2 Compliant
- Normal Phase
- Chiral Phase
- Reverse Phase

SPECIFICATIONS

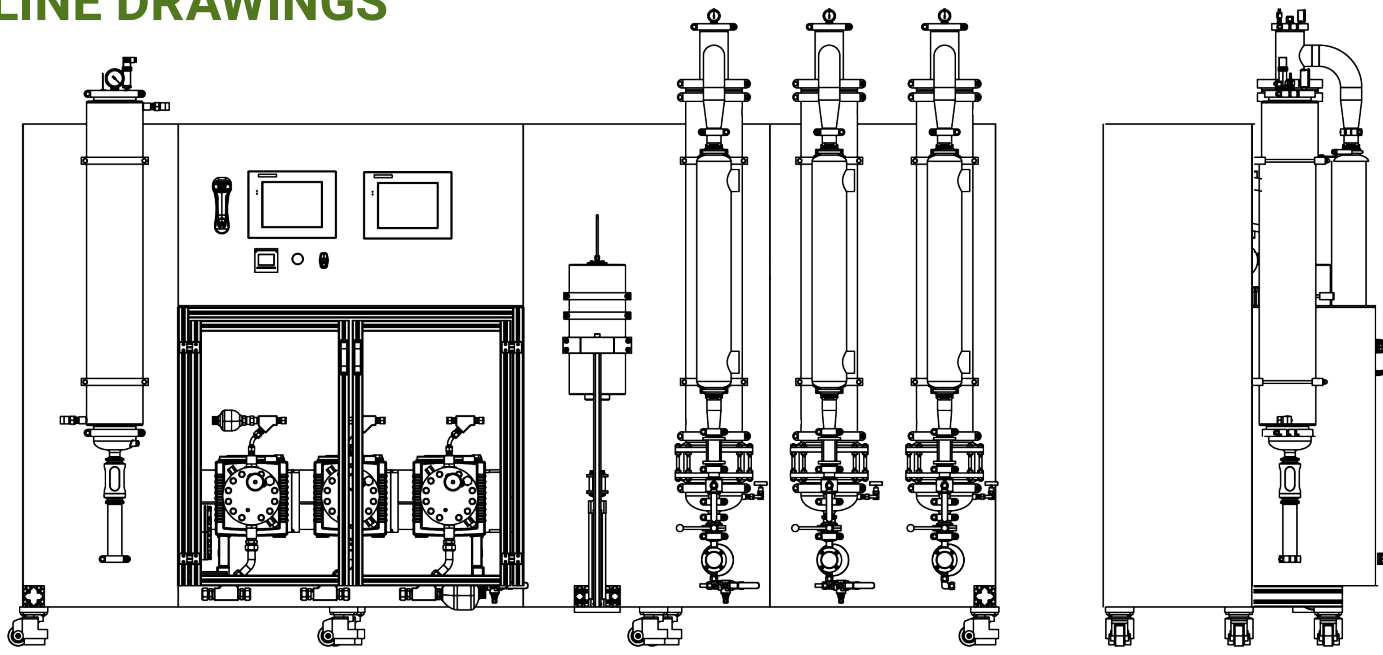
ATTRIBUTE	VALUE
General Specifications: C1D2 Ex Proof	
Dimensions (w/o light mast, in)	L151 x W42 x H81
Unit Weight (lbs)	6000 lbs
Sound Pressure (db)	40-50 db
Footprint (sq ft)	44
Collection Volume (L)	30
Pressure Transducer	5
Flow Transducer	3
Electrical Specifications	
Voltage (VAC)	208/240
Frequency (Hz)	60
Full Load Amps (amps)	90
Phase	3
Certifications	EX, UL 698A, Listed
Column: Insulated Adiabatic Column	
Separation Column Diameter (cm)	13.6
Column Cartridge Diameter (cm)	7
Column length is based on amount of stationary phase packed.	
Column Pressure ΔP max (psi)	2,500
Dynamic Axial Pressure (max psi)	3,000
Axial Pressure Media	Water
Pressure Vessel	ASME VIII Div 2 Certified
Materials	316 SS, 304 SS, passivated
Column Preheater	
Power	2,000 watts
Construction	316 SS
Max Pressure	5,000 psi
Eluent pre-heating up to 40°C	Eluent pre-heating up to 40°C
Column Bypass Loop	Column Bypass Loop

ATTRIBUTE	VALUE
Injector System	
Pure or High Pressure Pump Injection (psi)	2,500
2000 W heating up to 40°C equalized high pressure injection system	
Injector Loop	
Max Pressure (psi)	2,500
In volume (user selected)	variable
Pump & Gradient Mixing System	
5 Stage Diaphragm Binary Gradient Forming Pump for on line gradient formulation	
Main Pumps	3
Gradient Pump	1
Pulse Damper	2
Flow	2 Turbine, 1 Coriolis
Fractional Collection: 3 Fractions for Low Pressure Collection	
Chilling Capacity	52 kW
Heating Capacity	48 kW
Vacuum (in Hg)	22
Solvent Recovery and Recycling	Integrated
Data System	
Full Control Over Instrument; Method Builder; Data Collection, Integration & Report Builder	
Detection	
Detector Range	210-600 nm variable wavelength UV-VIS
Lamp Construction	Deuterium, mercury and halogen
Flow Cell Pressure (max psi)	2200
Flow Cell	Silica Windows
Materials	
Wetted Materials	FDA approved, ASME 304 and 316 SS
Regulatory Compliance	21 CFR Part 11, ATEX II, C1D2, 211, 177 and Health Canada equivalents, ASME DIV II VII-2 PED, CE marked, CRN number

ATTRIBUTE	VALUE
Separator Specifications	
Eluent Inlet Lines	2
Moving Type	high
Flow Rates Range (LPM)	0 - 6
Column Pressure Max (psi)	3,000
Collection & Cyclone Pressure Max (psi)	6
Operating Temperature (°C)	25 - 35
Column & Preheater Max Temp (°C)	35
Separation Temperature & Pre-heater Pressure Max (psi)	5,000
Automation Specifications	
User Interface (Alan Bradley)	Touch Screen 15"
Signal Tower	1
Changeover Automation	Yes
Sequences	Yes
Built-in Recipes	Yes
Data Logging	Yes, Built-in Yield Tracking
Barcode Tracking	Yes
Installation, Training, and Warranty	
Installation & Training Included (days)	2
Quality and Labor	Parts & Workmanship
Duration (years)	3
IQ/OQ	

Sold Separately
Heater Requirements: 48 kW, 200 GPM, 460v/3ph/65 amp
Chiller Requirements: 15 ton capacity, 460v/3ph/43 amp

LINE DRAWINGS



FRONT VIEW

SIDE VIEW



pure99

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