Technical Data Sheet
maxiLiLi-LC00200



Introduction

The maxiLiLi is a chromatography instrument that can be adapted to scale-up plants and low-volume production lines. Its design makes it mobile, so it is easy to set up and move once the job is done.

Solvent consumption: 3-60 $\left[\frac{l}{h}\right]$.

Injected sample: 2.5-250 $[g]$

Cell structure

The rotor of the device has a special z-cell design, which results in a higher plate number than the miniLiLi device and therefore a better separation capacity.

Scale Up

Methods developed on miniLiLi/midiLiLi devices can be applied to maxiLiLi or prepLiLi devices with simple scaling.

The scaling of the flow rate can be calculated from the following formula:

$$Q_{maxi} = Q_{mini} \cdot \left(\frac{V_{maxi}}{V_{mini}}\right)$$

$$Q - flow\ rate \left[\frac{ml}{min}\right]$$

$$V - volume\ [mm^3]$$

The injection volume can be calculated from the following formula:

$$\mathrm{m}_{\mathrm{maxi}} = m_{mini} \cdot \left(\frac{V_{maxi}}{V_{mini}}\right)$$

$$m - mass\ [g]$$

The rotation speed scaling can be calculated using the following formula:

$$n_{maxi} = n_{mini} \cdot \sqrt{\frac{r_{mini}}{r_{maxi}}}$$

$$n - rotation\ speed \left[\frac{1}{min}\right]$$

$$r - radius\ of\ rotor\ [mm]$$

Speed Correlation Between Machines				
	miniLiLi 600 [rpm]	miniLiLi 800 [rpm]	miniLiLi 1000 [rpm]	miniLiLi 1250 [rpm]
maxiLiLi [rpm]	335	445	555	695

Area of use

- In case of varying production volumes, maxiLiLi offers the possibility to build up chromatography capacity as needed.
- maxiLiLi is specifically recommended for pilot production and small pilot batches. It is designed for cases where the capacity of miniLiLi and midiLiLi is no longer sufficient.

Necessary Chromatography equipment:
The maxiLiLi includes all the accessories required for production, including injector, eluent transfer pumps, detector and fraction change valve

Why maxiLiLi?
maxiLiLi can provide you with an efficient chromatography system on a kilogram scale that can be set up in a short time.

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maxiLiLi-LC00200		
	Europe	**USA**
Power supply	230V 50 [Hz] 10 [A]	120V 60 [Hz] 15 [A]
Utilized materials	Steel - Stainless:1.4404, AISI 316L PTFE PEEK FFKM	
Flow rate	50-1000 [ml/min]	
Column volume	3.5 [l]	
Loading	2.5-250 [g]	
Cell type	Z	
Material of the inlet pipe	Steel - Stainless:1.4404, X2CrNiMo17-12-2, A4, AISI 316L	
Material of the outlet pipe	Steel-Stainless:1.4404, X2CrNiMo17-12-2, A4, AISI 316L	
Inlet pipe diameter ID/OD	ID=0.079"–0.087" (2-2.2 mm); OD=1/8" (3.2 mm)	
Outlet pipe diameter ID/OD	ID=0.079"–0.087" (2-2.2 mm); OD=1/8" (3.2 mm)	
Standard inlet and outlet connectors	5/16"-24	
Stationary phase retention	>80-90%	
Rotor radius	390 mm	
Rotational speed	0-600 rpm	
Recommended rotational speed	150-450 rpm	
Maximum pressure	2.5 MPa (725 psi)	
Operating pressure	0.2-1 MPa (29-145 psi)	
Dimensions (W × H × D)	790 x 1100 x 1200 mm (31.10 x 43.31 x 47.24 inch)	
Weight	290 kg (639.3 lb)	
Solvent compatibility chart	Organic solvents, Water, Compatible with organic acids up to 5%*, Compatible with organic bases up to 5%*, Sulfuric acid, Hydrochloric acid, Alkaline hydroxides, Not compatible with organometallic reagents	

***After use, it is recommended to flush the column with water**

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