

20L Triple Jacketed Electric Lift Reactor

Description:

The Goldleaf Scientific Electric Lift Glass Reactor makes your life easy. This unique design allows separation of the body and lid of the reactor by simply pressing a button. Now you can easily access and add or remove large solids into the body.

These reactors are very versatile laboratory machines. The outer jacket allows for vacuum insulation so that you can greatly increase efficiency and reduce temperature loss to the outside environment. This not only allows your chiller/heater to operate with greater efficiency it also allows you to keep constant view of the inner process material because the vacuum jacketing prevents fogging and condensate build up.

The inner jacket allows you to use a chiller or heater to circulate fluid so that you can keep the contents at your desired temperature for as long as needed. The PTFE impeller with high torque motor can stir and agitate your sample. A convenient drain valve with optional filter is on the bottom to drain liquids.

The combination of controlled heating/cooling and agitation is ideal for many laboratory applications including:

- Liquid to liquid extraction (hexane/saline washes)
- Solid to liquid extraction (cannabinoid extraction with ethanol, heptane, etc)
- Chemical reactions (precise temperature/agitation control, and all surfaces and parts are glass or PTFE for optimal chemical resistance)
- Bulk heating/cooling (degassing/decarbing or winterization)
- Distillation (can distill your solvent, i.e. recover your ethanol)
- Steam distillation (for large scale terpene extraction)
- **Crystallization** (ideal for large crystal growth)
- Cryo-extraction (can withstand and hold very hot or cold temperatures)
- Mix/refluxing material (great for carbon scrubs or mixing absorbents)



These reactors greatly speed up your processing times and quickly pay for themselves by increasing the process scale and reducing downtimes. For a brief video of the reactor and its uses, click here.

*Not recommended for pressure applications. Internal pressure can be relieved by using the reflux condenser. Always reduce concentration of residual flammable solvents from spent material to a safe level before removing from sealed machine.



	Туре	Electric Lifting Reactor
Basic Parameters	Item SKU	REA20E4TJEL
	Glass material	3.3 Borosilicate
	Number of Jackets	3
	Frame material	Steel
	Pipe material	304 stainless steel
	Moving method	Rolling wheels with locking brake
	Reactor Body Volume	20L
	Jacket capacity	6L
	Number of ports in reactor lid	Six
	Operating Temperatures	-80-250°C (do not rapidly cool/heat glass)
	Maximum Temp difference	50°C (ΔT=Glass temperature and temp of material inserted)
	Maximum Vacuum	5 Torr
	Maximum Pressure	8 PSI
	Stirring speed	0-450rpm
	Stirring rod diameter	12mm
Functions and Configurations	Speed regulation method	Electric stepless speed regulation
	Rotary speed display	LCD digital display
	Temperature display	PT100 sensor digital display
	Sealing method	PTFE sealing, ¢50 flange stirring opening
	Reflux Condenser	Vertical efficient double-coil condenser
	Addition Funnel	5L with 40# standard opening
	Pressure reducing valve Temperature measuring	34/45 joint with PTFE vacuum valve 24/40 Thermowell into body with PT100 inserted
	Solid feeding Discharging method	80mm OD threaded opening in PTFE lid 45/50 glass joint w/ PTFE piston on bottom reactor
	Vacuum display method	Oil Vacuum Gauge
	Stirring connection	Double axis pivot motor coupling w/ locking hex screw
	Stirrer	Stainless rod, coated by PTFE
	Main Frame	Steel with PTFE coating
	Collecting device	5L round bottom flask w/ 3 ports and drain
Optional Configurations	Frame parts	Plastic spraying, PTFE, or stainless steel
	Stirring seal	Ceramic bearing, mechanical seal
	Solvent recovery	Horizontal condenser, large receiving flask w/cart
	Lid of reactor	PTFE or glass, can customize any ports upon request
	Electrical	120V standard, can be converted to 230V
	Stirring Type	1-4 blades, multiple heads at different levels
	Explosion-proof	C1D1, or C1D2
	Stirring speed	Low Speed/high viscosity, or fast speed/low viscosity



Electrical Specs:

Stirring power Brushless DC 90W, with 3:1 gear reducer

Voltage/frequency (V/Hz) 120V/60Hz (230V upon request)

Lifting motor Brushless DC 40W, with 12.5:1 gear reducer

Degree of Protection: IP 30 (further protection available upon request)

Dimensions:

Exterior size (in) 36x29x84" (106" when fully raised)

Packing size (in) 77x25x41"
Gross Weight (lbs) 265lbs

Warranty:

Our products are warranted to be free from defects in materials or workmanship for one year from the date of purchase (original invoice date). Within this period, Goldleaf Scientific will, at its sole discretion, replace any components that fail in normal use.

Note: This warranty does not cover any glass parts or components, (all defective glass parts must be reported immediately after receiving) failures due to abuse, misuse, accident, unauthorized alteration or repairs or consumable products such as (but not limited to), heating elements, gaskets, and thermocouples.

Note: Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations may deviate from the original.