

# JGR-1L

## Jacketed Glass Reactor

Lab1st JGR-L series jacketed glass reactors are designed as a multi-purpose reaction platform with controlled temperature and pressure environment, for both laboratory and scale-up applications.

Each reactor consists of a corrosion resistant jacketed glass reaction vessel, PTFE coated variable speed stirrer system, temperature probe and digital display, and other accessories like feeding funnel, coiled condenser and bottom discharge valve.

The JGR-L series glass reactors come with vessels from 500mL to 200L. It also can be fully customizable to fulfill various needs, like high torque high speed agitation, baffled reaction vessel, programmable controller, explosion proof or air driven motor, and a insulation jacket or 3rd layer of glass vacuum jacket.

## Features

- Larger vessel opening design, easier to clean
- All PTFE seals to increase durability and longevity
- Rugged, High RPM stirring motor for superior stirring power
- Easily visual operation with digital speed and temperature displays
- Wide range of temperature from  $-80^{\circ}\text{C}$  to  $250^{\circ}\text{C}$
- Durable stainless steel supporting framework with casters for mobility and stability (only suitable for the vessel that is larger than 5L)



## Parameters

Model	JGR-1L
—— TECHNICAL DATA ——	
Glass Vessel Temperature Range	$-120^{\circ}\text{C}$ — $250^{\circ}\text{C}$
Working Pressure Range	$-0.1\text{Mpa}$ —Atm
Glass Material	High Borosilicate Glass
Vacuum Sealing	Machinery Seal
—— ELECTRICAL DATA ——	
Voltage [V]	110   220
Phase [P]	1
Frequency [HZ]	50/60
Total Power [W]	120W
—— GLASS VESSEL ——	
Volume	1L
Vessel Pressure	$-0.1\text{Mpa}$ —Atm
Jacket Volume	1L
Jacket Pressure	$\leq 0.05\text{Mpa}$
Interface between Vessel and Drain Valve	None

Drain Valve Port	13mm Barb
Jacket Port	12mm Barb
——REACTOR LID——	
Port 1 [Thermometer]	19mm Grinding Straight Joint
Port 2 on the Lid [Vacuum Suction]	24mm Grinding Straight Joint
Port 3 on the Lid [Solid Inlet]	None
Port 4 on the Lid [Constant Pressure Funnel]	29mm
Port 5 on the Lid [Reflux]	35mm Ball Mill Joint
Port 6 on the Lid [Stirring]	50mm Flange
——CONDENSER——	
Condenser Diameter [mm]	40
Condenser Height [mm]	350
Condenser Area [m <sup>2</sup> ]	0.5
Vacuum Port on the Condenser	12mm Barb
Condenser Liquid Inlet & Outlet Port	12mm Barb
Reflux Drain Port	12mm Barb
——COLLECTION FLASK——	
Collection Flask Number	N/A
Collection Flask Volume [L]	N/A
Continuous Collection Valve	N/A
——AGITATOR——	
Rotation Speed [rpm]	50~600
Rotation Controller	Electronic Speed Control
Motor Power	120W
Reduction Gearbox	None
Blade Layers	1 Layer
Blade Material	PTFE
——ACCESSORIES——	
Reflux Clamp	1pcs* [35mm Ball Mill Joint]
Agitator Port Clamp	1pcs* [50mm Flange]
Jacket Port Clamp	None
Thermometer Port Clamp	None
Drain Valve Clamp	None
Solid Inlet Clamp	None
——WEIGHT   DIMENSION——	
Installation Dimension [mm]	440×360×1325
Unit Weight [Kg]	40

## Packages

W (mm)

CBM (m3)

D (mm)

Weight (kg)

H (mm)

\* Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations can deviate from the original.