

# JGR-5F

## Glass Filter Reactor

Lab1st JGR-F (glass type) is a kind of jacketed filter reactor that has filter plate on the bottom. It can be used for both laboratory and scale-up applications.

A glass sand filter disc is installed at the bottom of the vessel body, which can complete the reaction and filtration in it to reduce the loss of materials. At the same time, the solvent can be recovered by means of a condenser in a vacuum environment. Each filter reactor consists of a filter plate, corrosion resistant jacketed reaction vessel, PTFE coated variable speed stirrer system, and other accessories like electric control cabinet.

The JGR-F series reactors 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 an insulation jacket or 3rd layer of 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°C to 250°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-5F
———— TECHNICAL DATA ————	
Glass Vessel Temperature Range	-120°C ~ 250°C
Working Pressure Range	-0.1Mpa ~ Atm
Glass Material	High Borosilicate Glass
Vacuum Sealing	Machinery Seal
Filter Plate Material	Glass Sand Core
Filter Pore Size	20~40µm
———— ELECTRICAL DATA ————	
Voltage [V]	110   220
Phase [P]	1
Frequency [HZ]	50/60
Total Power [W]	120W
———— GLASS VESSEL ————	
Vessel Volume	5L
Inner Vessel Pressure	-0.1Mpa ~ Atm

Jacket Volume	1.5L
Jacket Pressure	≤0.05Mpa
Drain Valve Port	12mm Barb
Jacket Interface	G 1/2" Male Thread
——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]	60
Condenser Height [mm]	450
Condenser Area [m <sup>2</sup> ]	0.15
Vacuum Port on the Condenser	12mm Barb
Condenser Liquid Inlet & Outlet Port	12mm Barb
——REFLUX FLASK——	
Reflux Drain Port	12mm Barb
——AGITATOR——	
Rotation Speed [rpm]	0~600
Rotation Controller	Electronic Speed Control
Motor Power	120W
Reduction Gearbox	1:3
Blade Layer	1 Layer
Blade Material	PTFE
——ACCESSORIES——	
Reflux Clamp	1pc* [35mm Ball Mill Joint]
Jacket Port Clamp	2pcs* [43mm Ball Mill Joint]
Thermometer Port Clamp	N/A
Drain Valve Clamp	N/A
Solid Inlet Clamp	N/A
——WEIGHT   DIMENSION——	
Installation Dimension [mm]	600×500×1750
Unit Weight [Kg]	55

## Packages

W (mm)	CBM (m3)
D (mm)	Weight (kg)

W (mm)

CBM (m3)

H (mm)

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