

Lab1st JGR-FK (glass type) jacketed filter reactors are designed as crystallization device with controlled temperature and pressure environment, for both laboratory and scale-up applications.

The system not only includes filter reactors who can make reaction and filtration in the same vessel to reduce the material losses, but also can recover the solvents with the help of condenser and collection tank in the 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-FK 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 a insulation jacket or 3rd layer of vacuum jacket.

The standard JGR-FK reactors come with vessels from 5L to 200L. Some popular models are in stock at USA warehouse, ready to ship.

## Glass Crystallization Reactor

### 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

### Technical Data:

Model	JGR-50FK
———— 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	40~80µm

ELECTRICAL DATA	
Voltage [V]	110   220
Phase [P]	1
Frequency [HZ]	50/60
Total Power [W]	120W
GLASS VESSEL	
Vessel Volume	50L
Vessel Pressure	-0.1Mpa ~ Atm
Jacket Volume	16L
Jacket Pressure	≤0.05Mpa
Drain Valve Port	12mm Barb
Jacket Interface	G 3/4" Male Thread
REACTOR LID	
Port 1 [Thermometer]	DN25 Flat Flange
Port 2 on the Lid [Vacuum Suction]	34mm Grinding Straight Joint
Port 3 on the Lid [Solid Inlet]	80mm Flange
Port 4 on the Lid [Constant Pressure Funnel]	40mm Grinding Straight Joint
Port 5 on the Lid [Reflux]	50mm Ball Mill Joint
Port 6 on the Lid [Stirring]	50mm Flange
MOTHER LIQUID COLLECTION	
Volume	50L
Port 1 [Vacuum]	
Port 2 [Air Exhaust]	
Port 3 [Condenser]	60mm Flat Flange
Port 4 [Discharge]	
CONDENSER 1 [on the Reactor]	
Condenser Diameter [mm]	100
Condenser Height [mm]	730
Condenser Area [m <sup>2</sup> ]	0.65
Vacuum Port on the Condenser	12mm Barb
Condenser Liquid Inlet & Outlet Port	15mm Barb
REFLUX FLASK	
Reflux Drain Port	12mm Barb
CONDENSER 2 [Mother Liquid Collection]	
Condenser Diameter [mm]	
Condenser Height [mm]	
Condenser Area [m <sup>2</sup> ]	
Condenser Interface with Mother Liquid Collection Flask	60mm Flat Flange
Vacuum Port on the Condenser	50mm Flat Flange
Liquid Inlet & Outlet Port on the Condenser	16mm Barb
AGITATOR	
Rotation Speed [rpm]	0~600
Rotation Controller	Electronic Speed Control
Motor Power	120W
Reduction Gearbox	1:3
Blade Layer	2 Layers
Blade Material	PTFE

ACCESSORIES	
Reflux Clamp	1pc* [50mm Ball Mill Joint]
Jacket Port Clamp	2pcs* [43mm Ball Mill Joint]
Thermometer Port Clamp	1pc* [25mm Flange]
Drain Valve Clamp	1pc* [80mm Flange]
Solid Inlet Clamp	1pc* [80mm Flange]
Feed Port Clamp [Mother Liquid Collection]	1pc* [50mm Flange]
Exhaust Port Clamp [Mother Liquid Collection]	1pc* [50mm Flange]
Discharge Port Clamp [Mother Liquid Collection]	1pc
Condenser Port Clamp [Mother Liquid Collection]	1pc* [60mm Flange]
Condenser Vacuum Port Clamp [Mother Liquid Collection]	1pc* [50mm Flange]
WEIGHT   DIMENSION	
Installation Dimension [mm]	1150×650×2450
Unit Weight [Kg]	155

## Package Information:

Length (cm)	Width (cm)
Height (cm)	CBM (m3)
Weight (kg)	Total capacity
Product Serial No. 9131	2023-06-02 14:54:19

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