

## JGR-10L

Lab1st JGR-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.



Jacketed Glass 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-10L                 |  |
|--------------------------------|-------------------------|--|
| ——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          |  |
| ——ELECTRICAL DATA——            |                         |  |
| Voltage [V]                    | 110   220               |  |
| Phase [P]                      | 1                       |  |
| Frequency [HZ]                 | 50/60                   |  |
| Total Power [W]                | 120W                    |  |

| ——GLASS VESSEL——                             |                              |
|--|------------------------------|
| Volume                                       | 10L                          |
| Vessel Pressure                              | -0.1Mpa—Atm                  |
| Jacket Volume                                | 3L                           |
| Jacket Pressure                              | ≤0.05Mpa                     |
| Interface between Vessel and Drain Valve     | 80mm Flat Flange             |
| Drain Valve Port                             | 32mm Barb                    |
| Jacket Port                                  | G 1/2" 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                  |
| CONDENSER                                    |                              |
| Condenser Diameter [mm]                      | 85                           |
| Condenser Height [mm]                        | 650                          |
| Condenser Area [m^2]                         | 0.25                         |
| 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                            | 1:3                          |
| Blade Layers                                 | 1 Layer                      |
| Blade Material                               | PTFE                         |
| ——ACCESSORIES——                              |                              |
| Reflux Clamp                                 | 1pcs* [50mm Ball Mill Joint] |
| Agitator Port Clamp                          | None                         |
| Jacket Port Clamp                            | 2pcs* [43mm Ball Mill Joint] |
| Thermometer Port Clamp                       | 1pcs* [25mm Flange]          |
| Drain Valve Clamp                            | 1pcs* [80mm Flange]          |
| Solid Inlet Clamp                            | 1pcs* [80mm Flange]          |
| WEIGHT   DIMENSION                           | 1                            |
| Installation Dimension [mm]                  | 700×600×2030                 |
| Unit Weight [Kg]                             | 90                           |

## **Package Information:**

| Length (cm) | Width (cm) |
|-------------|------------|
| Height (cm) | CBM (m3)   |

Weight (kg) Total capacity

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