

AKF-1L

Jacketed Glass Reactor

Double glazed reactor, also known as a jacketed glass reactor, adopts high borosilicate glass and PTFE composite sealing, with a temperature resistance of -120°C to +300°C, easily handling low-temperature crystallization to high-temperature synthesis.

It is equipped with an adjustable speed stirring system (maximum 1350 rpm) and five customizable ports, supporting continuous precise feeding, sampling, and vacuum operation. An optional insulation jacket effectively reduces heat loss and condensation, while an optional spray cleaning device makes maintenance easier and more relaxed.

Specially designed for chemical and pharmaceutical small-scale trials and process development, it ensures high reaction reproducibility, safe and reliable operation, and significantly reduces later scale-up risks and costs.

Features

Ultra-Wide Temperature — -120°C to +300°C with PT100 probe for precise control.

Chemical Resistant — High-borosilicate glass and fluorine-coated stainless steel paddle handle acids, bases, and solvents.

Efficient Stirring — 0-1350 rpm, smooth, low-vibration, and quiet operation.

Flexible Multi-Port — Five ports for funnels, sampling, probes, vacuum, gas, or condensers.

Reliable Sealing — PTFE composite rings and precision flanges prevent leaks.

Safety & Energy-Saving — Optional explosion-proof motor and insulated jacket minimize heat loss.

Easy Maintenance — Optional spray cleaning device for quick rinsing and residue removal.



Parameters

Specification	AKF-1L
Material Capacity	1 L
Jacket Capacity	0.8L
Voltage / Frequency (V/Hz)	220V / 50Hz
Speed Control	Electronic stepless control

Speed Display	Digital display
Stirring Speed (rpm)	0-1350
Stirring Power (W)	40
Stirring Shaft Diameter (mm)	8
Stirring Paddle / Impeller	Fluorine-coated stainless steel, three-blade/four-blade
Stirring Connection	Universal joint connection
Glass Material	High borosilicate glass (GG-17)
Base / Main Frame	Stainless steel + aluminum alloy
Jacket Inlet/Outlet	Low inlet / high outlet, 35mm flange, 15mm adapter
Top Ports / Number of Ports	Five ports (customizable)
Discharge Port Height (mm)	300
Reactor Temperature (°C)	-120~+300
Temperature Probe	PT100 sensor
Vacuum (mpa)	0.098
Vacuum Display	Vacuum gauge / pointer display
Sealing	PTFE component seal with 50mm flange stirring port
Condenser	Vertical 40×400mm, top 24# standard joint
Constant Pressure Funnel	250 mL, top 24# standard joint
Vacuum / Pressure Relief	19# standard joint pressure-reducing valve
Temperature Port	19# standard joint
Discharge Method	Inclined PTFE discharge valve, 60mm flange
Cover / Inner Cylinder / Outer Cylinder Diameter (mm)	150 / 100 / 150
Reactor Height (mm)	320
Explosion-Proof Motor / Control Box	Optional
Insulation Jacket	Optional
Base Plate Dimensions (mm)	325 × 345

Package Dimensions

L(mm)	400
W(mm)	480
H(mm)	1480

*For process optimization, technical specifications and details may vary. Actual parameters will be provided by technical support. Product images are for reference only and may not represent the final product.