Crystallization Reactor

Characteristic:

The GR series jacketed glass reactor is a multi-functional reactor. It have stirring paddle, the interlayer can be heated/cooled by cold and heat sources (such as coolant, water or silicone oil). At the set temperature, under normal pressure or negative pressure stirring, reaction, and can control the evaporation and reflux of the reaction liquid.

- The whole set of glass components are made of GG17 high borosilicate glass material.
- It can be used in the temperature range from -120°C to 200°C.
- The interlayer of the reactor passes through the hot oil and circulates, which can be used for heating reaction, and the refrigerant can be used for low temperature reaction.
- It can work under normal and negative pressure conditions, and the maximum vacuum degree can reach 0.095MPa.
- Stirring paddle can be optional propeller type, propulsion type or anchor type.
- Glass accessories support custom, such as PH drops, etc.
- The cooling or heating solution of the interlayer can be completely removed after the reaction.
- For IlB explosive environment, electrical equipment adopts EXdIIBT4 grade flameproof products to meet the requirements of safe use.



CE



Technical Parameters

Model	GR-10L	GR-20L	GR-30L	GR-50L	GR-80L	GR-100L	GR-150L	
Temp. range (°C)	-120°C~300°C							
Power supply	220V/110V, 50/60Hz							
Effective volume in reactor (L)	10	20	30	50	80	100	150	
Jacket volume (L)	3	6	10	16	24	30	35	
Condenser heat exchange area (m²)	N/A							
Feeding bottle volume (L)	0.5-2L Optional							
Recovered bottle volume (L)	5-50L Optional							
Stirring insertion hole	50#Flange							
Thermometer socket	40#Flange							
Condenser return port	50#Standard Ball							
Spare port	34#Standard ground							
Constant pressure funnel connection	40#Standard ground							
Solid feed port	80#Flange							
Glass assembly	High borosilicate glass 3.3							
Body frame	SUS304							
Stirring paddle	Paddle type impeller, stainless steel inside, PTFE outside, titanium							
Motor	For viscous materials, high power motors are available							
Temp. difference limit (°C)	≤60							
Tank pressure (MPa)	-0.1~0.1							
Jacket withstand pressure (MPa)	≤0.1							
Vacuum system boost rate	≤2kPa/h							
Stirring motor power (W)		120W/180W-EX				200W/370W-EX		
Range of rotation(rpm)	Frequency/0~600							
Temp. sensor Type	Pt100							
Insulation pipe interface	4 points external thread 6 points external thread							
Seal material	PTFE							
Discharge valve height (mm)	202~450 / customizable							