

JACKETED GLASS REACTOR

JRBT-1

Benchtop 1L Single Jacketed Glass Reactor

This benchtop 1L single-jacketed glass reactor is built for chemical synthesis, distillation, crystallization, extraction, and other batch reactions. GG-17 borosilicate glass rated from -80°C to 210°C and a jacket that connects to a circulating heater or chiller enable precise control of reaction temperatures in a compact size suited to R&D labs, universities, and small-scale pilot projects.

- ✓ **Borosilicate construction.** GG-17 borosilicate glass, 6.5mm ±0.5mm thick.
- ✓ **Wide temperature range.** Glass rated from -80°C to 210°C / -112°F to 410°F.
- ✓ **Jacketed temperature control.** 250ml jacket connects to a circulating heater or chiller.
- ✓ **Digital overhead stirring.** 50-1500RPM with digital speed, time, torque, and temp display.
- ✓ **Versatile ports.** 24/29, S35 ball, and 19/26 joints plus a 50mm flange stirring port.

MODEL JRBT-1



1L

VESSEL CAPACITY

-80 to 210 °C

GLASS TEMPERATURE RANGE

50 to 1500 rpm

ROTARY SPEED

25 Torr

LOWEST VACUUM LEVEL

250 ml

FLUID JACKET CAPACITY

Technical Specifications

Model JRBT-1

VESSEL

Vessel capacity	1L / 0.26Gal
Temperature range	-80°C to 210°C / -112°F to 410°F
Lowest vacuum level	0.0033 Mpa 25 Torr 25,000 Micron
Material flask	500ml
Receiving flask	1000ml (1L / 0.26Gal)
Left port	24/29 Joint
Right port	S35 Ball Joint
Front and rear ports	19/26 Joint
Bottom drain port	35MM - 1 3/8"
Condenser and feed valve barbs	10MM - 3/8"
Receiving flask barb	16MM - 5/8"

JACKET

Design	Single-jacketed
Capacity	250ml
Pressure	Maximum 11.6 psi, nominal 7.25 psi
Fluid connection	16MM - 5/8" barb or 1/2" NPT

STIRRING

Stirrer model	JRBT -STIRRER
Rotary speed	50-1500RPM
Stirring port	50mm Flange Port
Max torque	60 N.cm
Max viscosity	50000 mPas
Protection	Overload and motor auto stop; IP42

CONSTRUCTION

Glass material	GG-17 Borosilicate Glass
Glass thickness	6.5mm ±0.5mm
Connections	Standard glass joints and NPT connections

ELECTRICAL

Power requirements	110-120V 60Hz 15A
Stirrer wattage	120W

DIMENSIONS

External dimensions (LxWxH)	18 × 18 × 41"
Weight	72 lbs

IDEAL APPLICATIONS

Chemical synthesis Distillation Crystallization Extraction Batch reactions R&D labs

Specifications by Size

Model JRBT-1

Specification	Standalone JRBT-1L	Turnkey JRBT-1L-TK
Option	Standalone	Turnkey
Heater chiller		UHC-720, -20°C to 180°C, 7L, 220V
Chiller		UC-4/20, -20°C, 4L, 10L/Min
Diaphragm pump		USA-DVP-1.2, 1.2CFM, 110V

ORDERING INFORMATION

CATALOG NO.	DESCRIPTION	OPTION
JRBT-1L	Benchtop 1L Single Jacketed Glass Reactor Reactor only	Standalone 110-120V 60Hz 15A
JRBT-1L-TK	Benchtop 1L Single Jacketed Glass Reactor Turnkey With UHC-720 Heater Chiller, UC-4/20 Chiller, USA-DVP-1.2 Diaphragm Pump	Turnkey