ACS Material Equipment Series

MSG Universal Quick-Opening Mechanical Stirring Reactor

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Product Overview

MSG Universal Quick-Open Mechanical Stirring Reactor combines a mechanical stirring tank, a heating furnace, and an intelligent temperature controller into one unit. It is equipped with a 7-inch high-definition touchscreen for temperature, speed monitoring and control. Additionally, it features a USB communication interface that enables real-time recording of temperature, speed, and other parameters during the reaction process, with the ability to download and generate reports through a USB flash drive.

Product Features

- Safety Design - The main structure of the product is processed in one piece to ensure a sturdy construction. It adopts a mortise and groove-type main sealing structure, providing reliable sealing performance. It is equipped with an automatic power-off function for over-temperature protection, effectively avoiding safety issues caused by excessive temperature. The dual protection of Fitok safety valve and customized bursting valve further enhances safety.

- Efficiency - The equipment features a quick-opening structure, facilitating fast operation and maintenance. Equipped with assisted disassembly and assembly tools, it simplifies the disassembly process and improves work efficiency. The 7-inch large and sensitive touch screen and the concise and intuitive user interface make operation more convenient and straightforward. Equipped with a USB data download interface, it allows users to quickly export data for subsequent analysis.
- Convenience - The equipment adopts integrated and compact design, making it more convenient to operate. It features a customized coating V-type valve stem lightweight needle valve. While ensuring safety, it maximizes the reduction of the weight of the reactor.
- Precision - The product adopts intelligent PID temperature control mode, enabling precise temperature control and providing a stable reaction environment. The digital display and stepless stirring speed adjustment function allow free adjustment of the stirring speed as needed. The embedded heating module with faster heat transfer enhances heating efficiency and improves the precision of the reaction.

Product Specifications

Product Name	MSG Universal Quick-Open Mechanical Stirring Reactor
SKU#	ERMSG011
*Design Volume	10mL
Maximum Temperature	300℃
Heating Method	Embedded Stainless Steel Heating Module
Heating Power	1KW
Stirring Speed	400-1400rpm (adjustable)
Stirring Method	High Torque Magnetic Coupling Stirring
Design Pressure	Standard 207bar, maximum up to 345bar (optional)
Reactor Material	316L Stainless Steel, Hastelloy C-276, etc. (optional)
Intelligent Micro Reactor Control	Temperature, Speed, and USB Communication Interface
Customizable Options	Sampling Device, Reactor Cooling Coil, Pressure Feeding System, etc.
Dimensions	372*400*500mm

*Also available in volumes: 25mL, 50mL, 100mL, 1000mL.

Application Fields

MSG Universal Quick-Opening Mechanical Stirring Reactor is widely used in various fields such as laboratory research, chemical industry, pharmaceutical industry, food and beverage industry, biotechnology, petroleum, and chemical industry. It is used for applications such as chemical synthesis, catalytic reactions, small-scale experiments, pilot-scale stages, preparation of food additives, and catalyst research. It provides flexible and controllable solutions for small-scale reactions and mixing, offering convenience and support for research and production in various industries.