



Glass Fermenter FM-GF-A100

Overview

Glass Fermenter FM-GF-A100 is designed for high-performance bioprocessing applications. With a 5L total volume and a working volume of 2.5 to 3.5 L, this fermenter offers precise control. The system features robust construction with a glass vessel and a stainless steel 316L bottom, ensuring durability and ease of sterilization. It's ideal for microbial fermentation, cell culture, enzyme production, and biofuel research.

Specifications :

Capacity	5L
Working Volume	2.5 to 3.5L
Material	Borosilicate glass with stainless steel 316L bottom
pH control range	0.00 to 14.00 – 0.01
Auto control pH range	2.00 to 12.00 – 0.05
Dissolved oxygen control range	0 to 150 – 3%
Dissolved oxygen control precision	0.001
Temperature of cooling water	5°C to 80 °C – 0.2 °C
Temperature Control	Jacket at bottom
Motor	DC, 90 W
Stirring speed	50 to 1000 rpm – 5%
Agitator	Height-adjustable six-blade stirrer
Air Pressure	1.5 bar
Components of aeration system	Auto cleavable sterile filter, check valve, ring sparger
Air flow	1 vvm
Aeration filter	0.2 µm
Reflux Cooler	Yes
Temperature Range	4 to 60°C
Heating/Cooling	Heating finger and cooling water valve
Temperature Probe	Autoclavable
Feeding system	PID
PLC	Siemens S7-1200 series
Display	10-inch LCD touch screen
Modes	Manual and automatic control
Packing dimensions	1000 x900 x1100 mm
Net weight	110 Kg
Gross weight	130 Kg

Features :

- Efficient Agitation with a height-adjustable six-blade stirrer
- High-end aeration system
- Removes excess heat with a reflux cooler
- Prevents backflow and evenly distributes air through the ring sparger
- Temperature Probe, pH-Gel-Electrode, pO₂-Probe, Antifoam-Probe
- Provides an LCD interface for monitoring and control
- Danfoss Speed Regulator controls stirrer speed for precise agitation
- Solenoid Valve Regulates fluid flow accurately
- Peristaltic Pump ensures precise fluid transfer

Applications :

Glass fermenters are widely used across biotechnology, pharmaceuticals, food and beverage, biofuel, chemicals, environmental biotechnology, agriculture, academic and research institutions.