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AIRLIFT BIOREACTOR FOR MICROALGAE

TEC-BIO-P-3,0-AIR-LIFT-RM

Fermentations and Bioprocesses; Microalgae and cyanobacteria cultures; 2G Biomass, Biofuels and Ethanol; Production of compounds (vitamins, proteins, antioxidant lipids, etc.); Biological Control, Bioinoculants and Biofertilizers; Bioremediation and Waste Treatment.

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Technical Characteristics

TEC-BIO-P-3,0-AIR-LIFT-RM

- Agitation: Pneumatics by directional movement of the upward flow of gas (usually air) ;
- Vessel dimensions: D=220mm x H=470mm (without condenser) ;
- Cover entries: Well for temperature, pH, dO2, dCO2 or spectroradiometer sensors. 4 single inputs for addition of acid, base, antifoam and nutrients, adjustable foam level sensor, adjustable sampling output, 316L stainless steel septum and reflux condenser ;
- Sampling system: Syringe-based, contamination-free with autoclavable reservoir ;
- Cover: 316L stainless steel with 304 stainless steel knob closure ;
- Work temperature: Coolant +7°C to 60°C ;
- Thermostatization: Through water jacket on 316L stainless steel base ;
- Reaction vessel: Borosilicate glass with 316L stainless steel jacketed base ;
- Seal: FDA Approved Viton O-ring ;
- Total volume: 3.0 liters ;
- Useful volume: 2.0 liters ;

Benefits and Advantages

- Developed for Microalgae and Cyanobacteria due to the Photoperiod system
- It can be used for filamentous fungi and other microorganisms
- Patented dimensions that maximize oxygen transfer
- Work flexibility, using Air-Lift agitation (flow director) or bubble column
- Ideal for establishing protocols and initial studies with microalgae
- Gain in biomass, productivity and efficiency due to automation of control and asepsis during the cultivation process
- Study of the nutritional composition, metabolism and biochemistry of microalgae.

Related Products