

LeClafine® Depth Filtration Holder

Widely used for the removal of large cell debris and particulate impurities during bioprocessing, including cell culture clarification (in upstream operations) and intermediate filtration steps (in downstream purification). LeClafine® The LeClafine® depth filtration holder enables flexible primary and secondary clarification for monoclonal antibodies, delivering high dirt-holding capacity, superior filtrate quality, and improved product recovery.

Designed in compliance with stringent GMP and FDA requirements, the LeClafine® depth filtration holder is suitable for a wide range of biopharmaceutical manufacturing applications.



Product Features

- Easy installation and setup, user-friendly operation, equipped with lockable swivel casters.
- Optimized design with advanced technology, ensuring reliable performance, operational safety, and ease of maintenance.
- All product-contact components are made of sanitary-grade materials with full material traceability documentation.
- Compact footprint with intuitive, safe, and simplified operation.
- Delivered as a complete system; ready for operation after connection to pressure-rated tubing and pump.
- Adjustable movable plate and guide rods allow flexible configuration for different module quantities.
- Filter holder includes accessible mounting rods for quick and safe installation of pressure sensors and safety devices.
- Hydraulic compression system enables effortless installation of depth filter modules, reducing labor and setup time.
- Tri-clamp (TC) connection with standard TC50 interface, supplied with appropriate adapters for process integration.

Product Series

- Vertical manual depth filtration holder.
- Vertical hydraulic depth filtration holder.
- Horizontal manual depth filtration holder.
- Horizontal hydraulic depth filtration holder.

Typical Applications

- Biopharmaceutical intermediate processing.
- Vaccine production.
- Recombinant protein production.
- Monoclonal antibody manufacturing.

Product Introduction

- The LeClafine® depth filtration holder adopts a stacked configuration of lenticular modules in both vertical and horizontal orientations. Available in vertical and horizontal formats. The vertical configuration allows direct placement of modules onto the base plate, enabling simplified installation, loading, filtration, and removal. Compared with conventional stacked systems, it reduces cleaning validation and installation costs, offering a more cost-effective solution. The horizontal design ensures stable module alignment, minimizing hold-up volume and preventing air-lock formation during operation.
- Leveraging high-performance depth filtration media and proprietary module design, the LeClafine® system supports scalable processing volumes from 50 to 20,000 L and, supported by a comprehensive product portfolio, meets purification requirements from laboratory development to pilot and full-scale manufacturing while enhancing filtration efficiency, simplifying operations, and complying with pharmaceutical industry standards.

Product Features

- Compatible with mainstream depth filter modules on the market, supporting a full range of configurations (P-type, M-type, ST stacks).
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- Constructed from SS304 with surface finish $Ra < 0.8 \mu m$, ensuring cleanability and compliance with pharmaceutical cleanroom standards.
- Low hold-up volume design enables higher product recovery.



Technical Specifications

Product Configuration	Vertical Depth Filtration Holder	Horizontal Depth Filtration Holder
Module Capacity	Disc modules (1 m ²): 5 / 10 units	Cassette modules (1.1 m ²): 2 / 5 / 10 / 20 / 30 units
Frame Material	Stainless Steel 304 (SS304)	Stainless Steel 304 (SS304)
Surface Finish	Brushed finish, $Ra < 0.8 \mu m$	Brushed finish, $Ra < 0.8 \mu m$
Support Plate / Partition Plate	Not applicable	Polypropylene (PP)
Mobility	Four swivel casters with brakes	Four swivel casters with brakes
Caster Material	Polyurethane & stainless steel	Polyurethane & stainless steel
Connection Type	Tri-Clamp (TC connection)	Tri-Clamp (TC connection)

Ordering Information

Vertical Holders

Product Code	BTFSZ001	BTFSZ002	BTFSZ003	BTFSZ004
Description	Vertical Manual Holder	Vertical Hydraulic Holder	Vertical Manual Holder	Vertical Hydraulic Holder
Max. Module Capacity	5 units	5 units	10 units	10 units
Max. Filtration Area	5 m ²	5 m ²	10 m ²	10 m ²
Weight	200 kg	250 kg	200 kg	250 kg
Dimensions (L × W × H)	1000*800*1540 mm	1000*800*1540 mm	1000*800*2262 mm	1000*800*2096 mm
Lead Time	30 days	45 days	30 days	45 days

Horizontal Holders

Product Code	BTFSZ005	BTFSZ006	BTFSZ007	BTFSZ008	BTFSZ009
Description	Horizontal Hydraulic Holder	Horizontal Hydraulic Holder	Horizontal Hydraulic Holder	Horizontal Hydraulic Holder	Horizontal Hydraulic Holder
Max. Module Capacity	2 units	5 units	10 units	10 units	10 units
Max. Filtration Area	2.2 m ²	5.5 m ²	11 m ²	22 m ²	33 m ²
Weight	100 kg	230 kg	280 kg	560 kg	1000 kg
Dimensions (L × W × H)	950*705*900 mm	1380*705*900 mm	1880*880*900 mm	1880*880*1450 mm	1880*880*1690 mm
Lead Time	45 days	45 days	60 days	60 days	60 days