



EZ-Stream® Vacuum Filtration Pump

The laboratory filtration pump that transfers filtered liquids directly to waste

Microbiology

The new EZ-Stream® vacuum filtration pump is specifically designed for microbiology analysis. The compact design (W 20 cm – L 17 cm – H 22 cm) makes the pump ideal for use on both the work bench and in the laminar flow hood, where its small footprint saves precious laboratory space.

With the new EZ-Stream® pump, the vacuum is provided by a maintenance-free diaphragm and specific check valves that allow liquids to run through the pump. There is no need to use any waste containers normally associated with traditional air pumps or an in-house vacuum. This frees up space in the laboratory working area and eliminates the need for repeated emptying of heavy waste containers.

The EZ-Stream® pump is ideal for handling of both liquids and gases, making it suitable for many life science laboratory applications as well.

Benefits

- Direct transfer ensures no handling of liquid waste
- Complies with ISO Standard for microbiological analysis
- High-performance flow rate
- Noise reduction design
- Compact
- Maintenance-free technology

Regulatory Compliance

The ISO 8199 Standard for Water Quality (general guidance on the enumeration of microorganisms by culture) describes the conditions for membrane filtration. To comply with these guidelines, each individual EZ-Stream® pump is tested to ensure that the maximum vacuum delivered does not exceed 700 mBar, which is the recommended vacuum value for this standard.

A critical point in the microbiology laboratory, and aligned with GLP, is decontamination of equipment. The smooth design of the pump makes this operation easy and efficient. The EZ-Stream® pump has been qualified to be compatible with a range of decontamination agents.



Simple Setup Saves Time

The EZ-Stream® pump is simple to set up and therefore saves you precious time. Simply connect the pump to your manifold or filtration apparatus, place the discard tubing to drain, and you are ready to filter. There is no need to use additional containers to capture the waste liquid. This brings significant time savings versus traditional vacuum/pressure pumps or in-house vacuum, because the following steps are eliminated: disconnecting the waste containers, emptying liquid waste, cleaning/decontaminating and re-installing the waste containers.

Quiet Design

Noise is often an issue when using filtration pumps. The EZ-Stream® housing fully covers the pump mechanism and the assembly has been optimized to reduce the noise down to 60 dB, improving operator comfort.

High-Performance

Thanks to its innovative design, the EZ-Stream® pump can provide vacuum up to 600–700 mbar, and because it transfers liquids through the pump head, this translates to a high flow rate performance. The pump can easily handle a multiple head manifold for water or beverage testing, providing a comparable flow rate to conventional air pumps (vacuum/pressure pumps) and a better flow rate when compared to other liquid pumps.

The EZ-Stream® pump technology and the materials of construction provide reliable vacuum performance and make it maintenance-free. The diaphragm is made of highly durable chemically resistant polytetrafluoroethylene (PTFE).



Figure 1.

EZ-Stream® pump set up with EZ-Fit® three place Manifold and EZ-Fit® filtration units.

Filtration Time with Tap Water

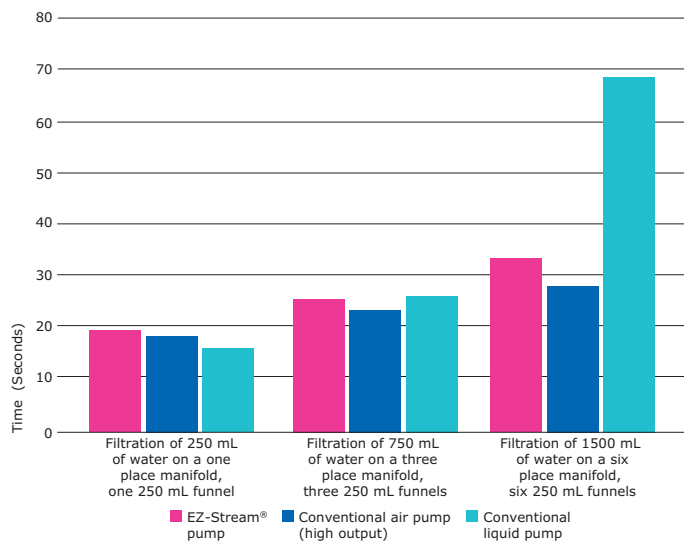


Diagram 1.

Water filtration time of EZ-Stream® pump, vs. conventionally available pumps.

Technical Specifications

Flow rate (measured with water at 20°C)	Minimum 3.5 L/min
Material in contact with the liquid filtered <i>Please check the compatibility of your fluids</i>	Polyoxymethylene (POM) Polytetrafluoroethylene (PTFE) Ethylene Propylene Diene Monomer (EPDM) Nitrile Butadiene Rubber (NBR) Polypropylene (PP)
Dimensions (W*L*H) in cm	(19.6 * 16.8 * 22.2)
Weight	1.9 kg
Tubing connection	Hose barb for approximately 10 mm ID tubings (NPS 3/8 or DN 10)
Electrical norms compliance	CE/PSE, for cUL consult Technical service
Protection type	IP64
Protection class	III



Regulatory Information

Merck certifies that the EZ-Stream® pump is designed and manufactured in application of:

- 2014/30/EU relating to electromagnetic compatibility
- 2014/35/EU relating to electrical equipment designed for use within certain voltage limits
- 2011/65/EU relating to the restrictions of the use of certain Hazardous Substances (RoHS) in electrical and electronic equipment

Related Products

Description	Qty/ Pk	Cat. No.
EZ-Fit® Manifold, 1 head, for Microfil® funnels	1	EZFITMIC01
EZ-Fit® Manifold, 3 heads, for Microfil® funnels	1	EZFITMIC03
EZ-Fit® Manifold, 6 heads, for Microfil® funnels	1	EZFITMIC06
EZ-Fit® Manifold, 1 head, for rubber stopper tulip	1	EZFITHOLD1
EZ-Fit® Manifold, 3 heads, for rubber stopper tulip	1	EZFITHOLD3
EZ-Fit® Manifold, 6 heads, for rubber stopper tulip	1	EZFITHOLD6
EZ-Pak® Dispenser Curve	1	EZCURVE01
100 mL Microfil® funnel dispenser	1	MIACFD101
250 mL Microfil® funnel dispenser	1	MIACFD201

Ordering Information

Description	Qty/Pk	Cat. No.
EZ-Stream® vacuum pump for liquid transfer. Box contains: Pump, Power supply	1	EZSTREAM1
5 meter autoclavable silicone tubing with 9.5 mm ID (internal diameter)	1	STREAMTUB
3 meter PVC tubing with 9.5 mm ID (internal diameter)	1	XX6700034

Please consult our website or contact a sales representative for access to the complete range of equipment and consumables for microbiological analysis: MerckMillipore.com/EZ

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt
Germany



Figure 2.
Sterilized Microfil® Funnels with EZ-Pak® Membranes.



Figure 3.
The EZ-Products Family.

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