



ISO 9001

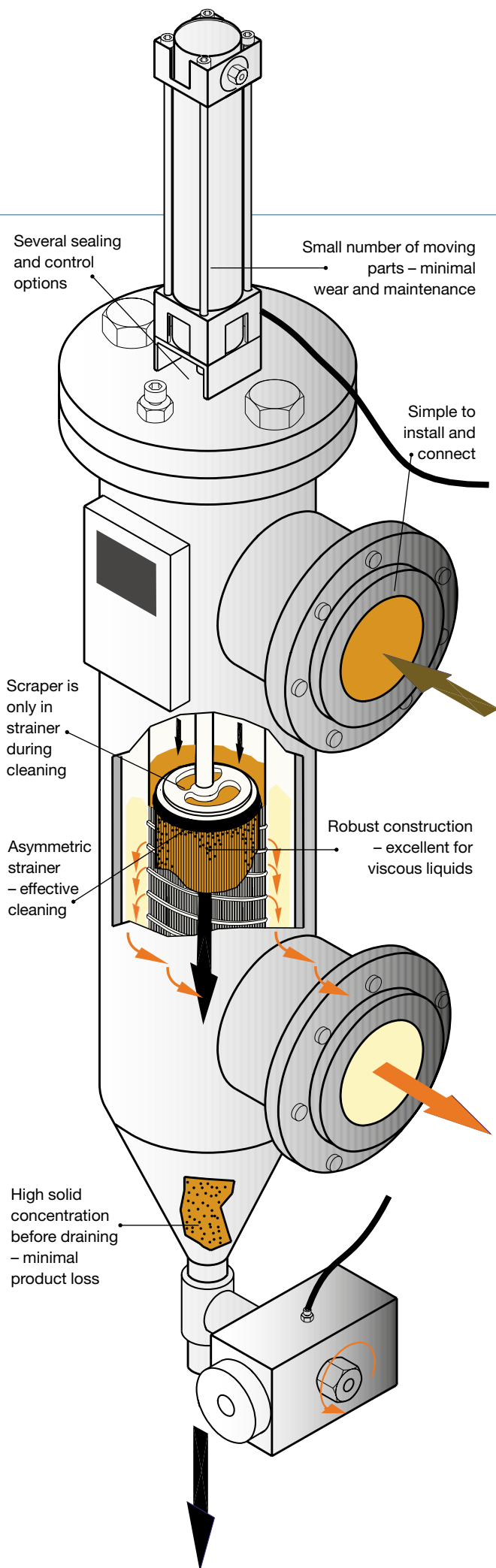
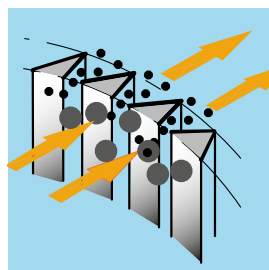
ATEX

PED

HiFlux Filtration A/S



Auto-line[®] Automatic self-cleaning filters



HiFlux Auto-line® is designed as a compact self-cleaning filter. Its robust construction makes it suitable for industrial applications where reliability and continuous operation are essential. The area of application is broad and includes filtration of many different types of liquid, such as highly viscous liquids, polymer suspensions, emulsions, process water and wastewater, where effective pre- or final filtration in the 30-2000 micron range is required.

Reduction in operational cost

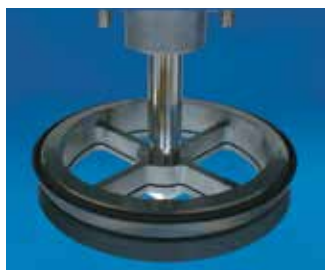
The Auto-line® continuously removes unwanted particles. This means that consumption of conventional filter bags or cartridges, as well as the time spent changing them, can be substantially reduced or eliminated altogether. As a result, operating costs are reduced and the need to handle problem waste in the form of filter cartridges or bags is minimized.

Function

The filtration principle is based on an asymmetric strainer, with the solid particles being retained on the inside of the filter element. In the cleaning process a plunger scrapes the solids into a sludge chamber in the bottom of the filter. The chamber is designed in such a way that a high concentration of solids can be retained before purging. The scraping action is activated either automatically by differential pressure across the filter or at fixed time intervals. The concentrated slurry is drained at appropriate intervals through the discharge valve at the bottom of the filter. Drainage is controlled individually by an electrically or pneumatically operated control system, which means that product loss is kept to an absolute minimum. Drainage in batch processes may also be controlled manually in cases where it is only required at the end of the batch.



Scraper inside the wedge wire element.



Widely applicable

Auto-line® filters can be used in almost any filtration process, including: Cooling water • Gel particles • Emulsion • Poly- and monomers • Wastewater • Process water • Oils and grease • Tea and coffee extracts • District heating water • Paint & varnish • Antibiotics • Pigments • Starch • Resins.

Not to mention a wide range of applications in the following industries: Dyes, paint and printing • Paper • Pharmaceuticals • Food • Beverages • Chemicals • Oil and petrochemicals • Power generation • Electroplating • Mechanical engineering

Whatever the application, professional advice and support will always be available. If required, a test filter can be installed with a view to evaluating results under specific operating conditions and obtaining reliable scaling data.

Versatile in operation

In batch operation, in continuous processes, with high or low solid loads and for separation or polishing purposes, the Auto-line® filter is the first choice. Changing the electronic controller parameters makes the filter very easy to adapt to any application. Its robust acidproof stainless steel construction ensures that the filter is reliable in all conditions and has a long life. A wide range of filter elements with grades from 30 to 2000 microns are available.



Laser bore and wedge wire elements.

This makes it easy to adapt the filter exactly to each particular application. By adjusting the set values on the electronic controller, hard, soft and fragile solids can be retained.

Intelligent design

In the design of the filter great importance was attached to making the construction robust and reliable. By limiting the number of moving components, wear and maintenance requirements are kept to a minimum. The simple construction makes the filter so easy to service that there is no need for external assistance.

There are several options when it comes to controlling filter function. Fully electronic differential pressure control with membrane pressure transmitters for filtration of viscous and food/pharmaceutical products, or where a high level of safety is required, including the need for remote alarm and signals. Simple timer control or simple continuous oscillating activation of the scraping function is mainly used for batch processes. Manual start of the scraper function and draining is used where the filter is under constant supervision during operation.

The Auto-line® filter also offers a choice of sealing principles and the best sealing materials to suit the specific application. An easy-to-change sealing box even makes custom solutions possible.

Only components that require no lubrication are used. This means a minimum of maintenance and no contamination of the liquid by the lubricant.

The Auto-line® filter represents more than 50 years of experience gained by HiFlux Filtration A/S in the field of particle filtration.

Electronic controller type EC II for L, XL and XXL.





Scraping
principle.

A cost effective solution for your filtration processes

Approvals and requirements

The filters are manufactured and supplied in accordance with current national and international statutes and regulations. This includes requirements in accordance with the European Pressure Equipment Directive (PED). The electronic controller is tested and approved in accordance with the EMC Directive.



Technical information

The filter is made of acid-proof stainless steel EN1.4404 and can be fitted with a filter element rated at 30, 35, 50, 75, 100, 150, 200, 300, 500, 1000 or 2000 microns. A filtered air supply at 5-7 bar is needed to operate the cylinder and drain valve. The design conforms to the European Pressure Equipment Directive PED 2014/68/EU, article 4, section 3 but is also available with approval according to category I, II, III or IV.

Auto-line® filters can be delivered for use in explosive atmospheres Category 2 (zone 1) and Category 3 (zone 2) according to directive 2014/34/EU.

Special versions can be supplied according to customer requirements – typically other temperatures and/or pressure levels.

Sealing materials

PTFE/Viton/EPDM/Isolast.

Special sealing solutions are created together with our project engineers.

Automation

Electronic microprocessor controller type EC II. Supply 240 VAC 50 Hz. / Simplex electronic timer controller. Supply 24-240 VAC 50-60 Hz. / Fully automatic pneumatic controller. Supply 5-7 bar filtered air. / Oscillating pneumatic controller. Supply 5-7 bar filtered air.

Sealing systems

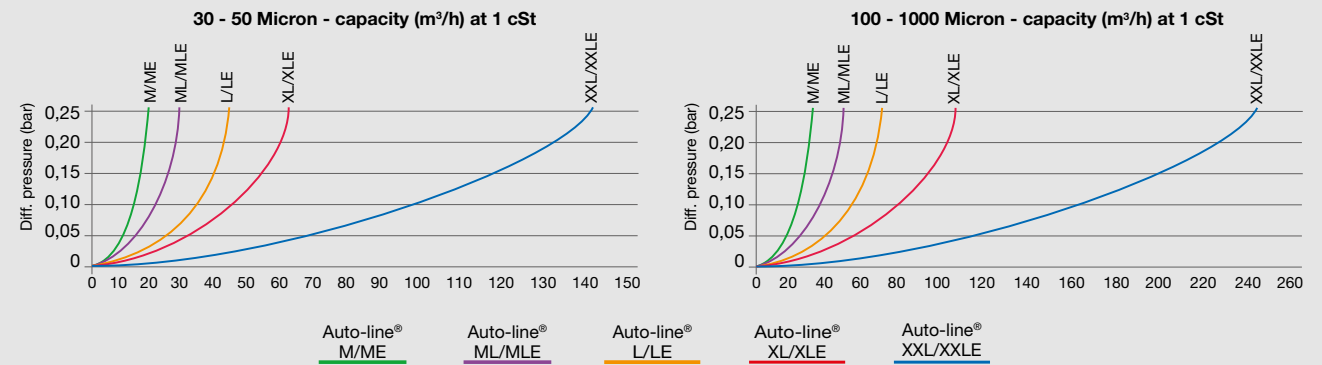
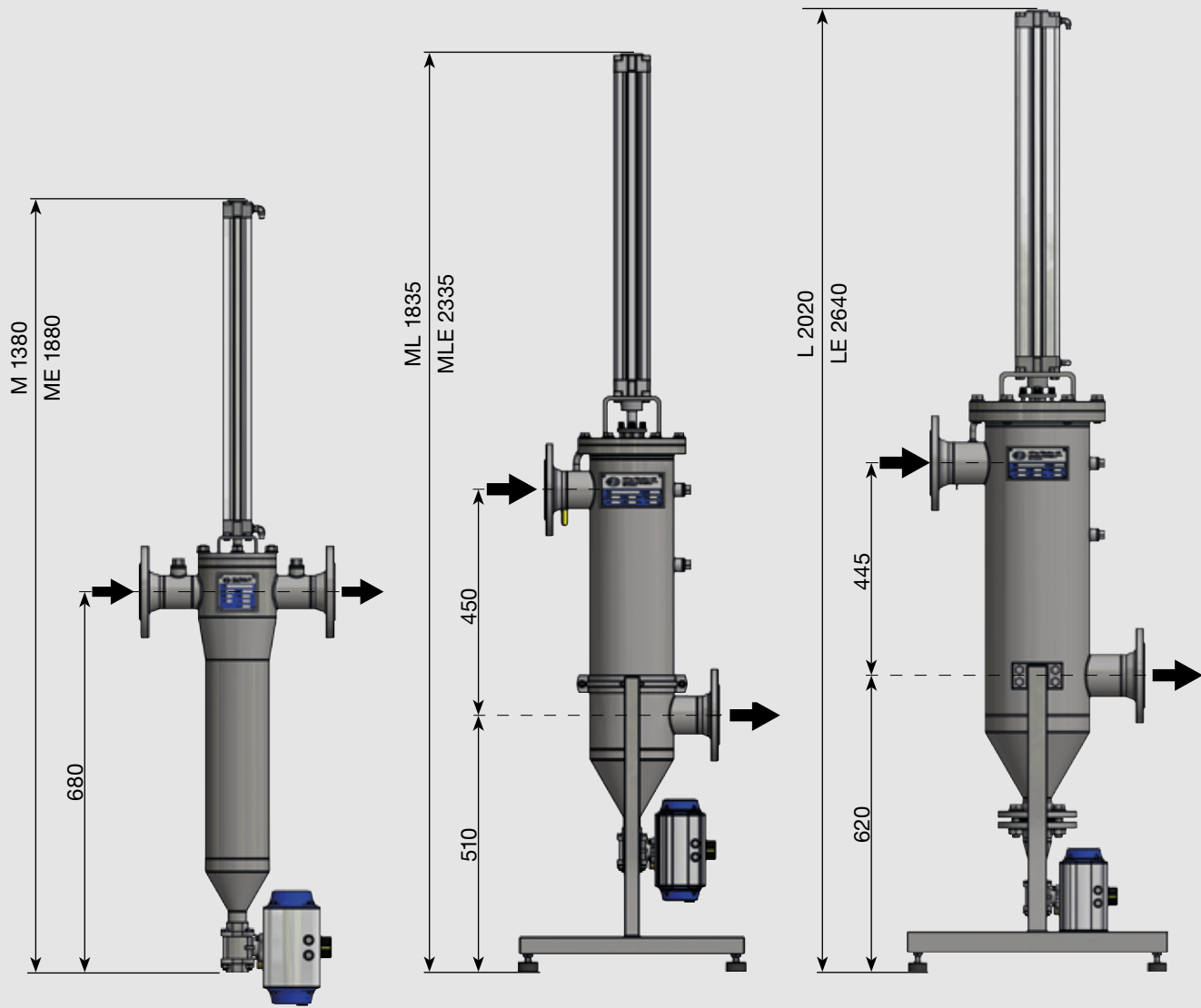
Sealing box with simple pressure seal / Chevron seal / Stuffing box / Special seals.

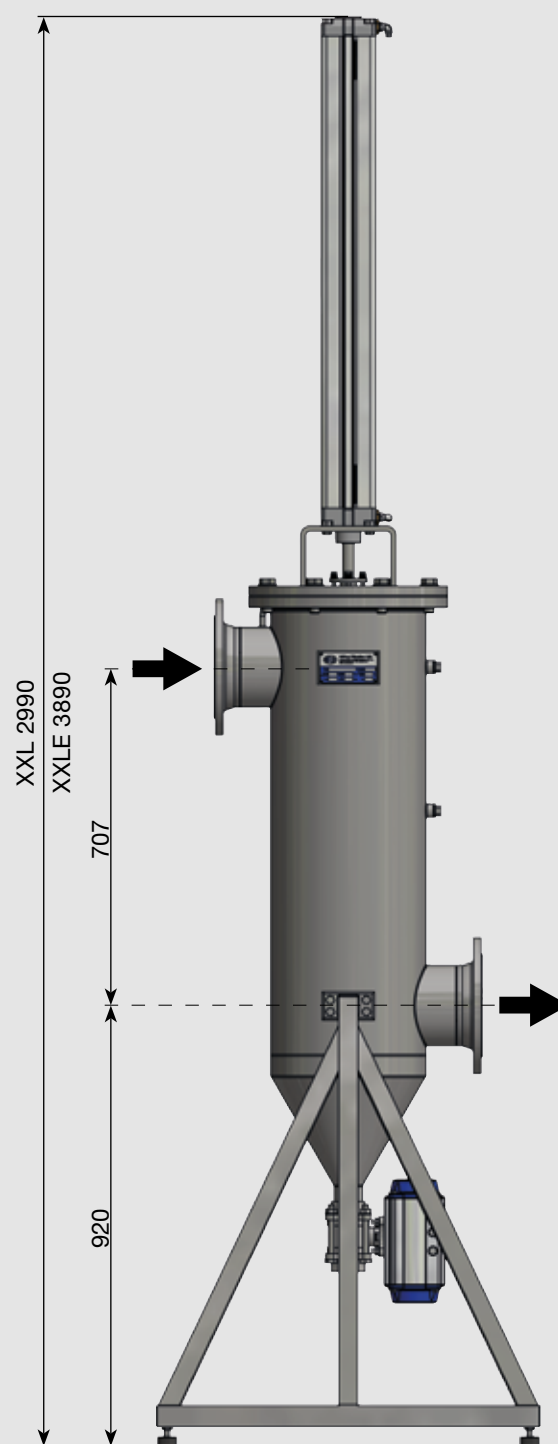
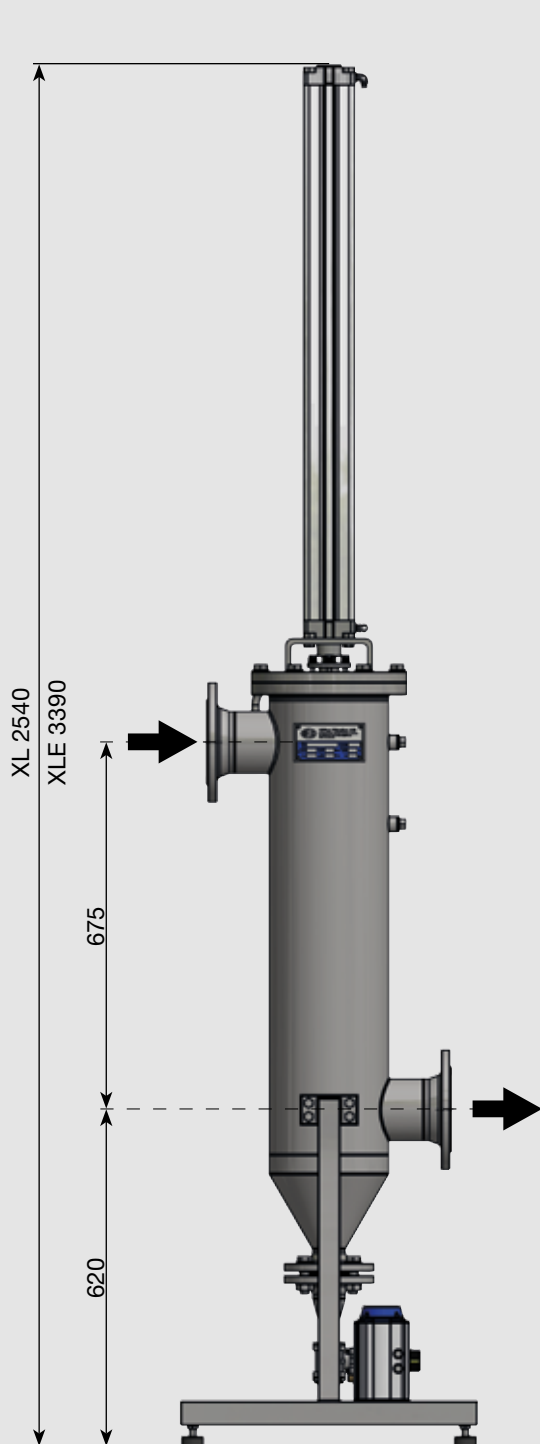
| SPECIFICATIONS | Auto-line® M/ME | Auto-line® ML/MLE | Auto-line® L/LE | Auto-line® XL/XLE | Auto-line® XXL/XXLE |
|--------------------------------------|-----------------|-------------------|-----------------|-------------------|---------------------|
| Capacity (1 cSt, Δp 0,2 bar, 100 μm) | 27 m³/h | 44 m³/h | 63 m³/h | 100 m³/h | 223 m³/h |
| Filtration area | 860 cm² | 1500 cm² | 2200 cm² | 3300 cm² | 4840 cm² |
| Connections inlet/outlet | DN50 | DN65 | DN80 | DN100 | DN150 |
| Max. differential pressure | 7 bar | 7 bar | 7 bar | 7 bar | 7 bar |
| Max. system pressure | 16 bar | 16 bar | 16 bar | 16 bar | 16 bar |
| Max. working temperature | 150° C | 150° C | 150° C | 150° C | 150° C |
| Volume | 6 liters | 15 liters | 27 liters | 35 liters | 89 liters |

Auto-line® M/ME

Auto-line® ML/MLE

Auto-line® L/LE





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QA System ISO 9001