



ISO 9001

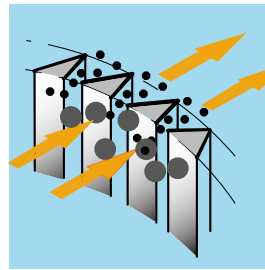
ATEX

PED

## HiFlux Filtration A/S



**Auto-line<sup>®</sup>** Rotating 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. This area of application is broad and includes the filtration of many different types of liquid, such as highly viscous liquids, paint & varnish, polymer suspensions, emulsions, process water and wastewater, where effective pre- or final filtration in the 30-2000 micron range is required.

## Reduction in operational costs

The Auto-line® filter continuously removes unwanted particles. This means that consumption of conventional filter bags or cartridges, including 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 a strainer where the solid particles being retained on the inside of the filter element. In the cleaning process a number of angled, positioned, rotating scrapers push the solid particles down into the sludge chamber. The rotating scrapers ensure that the filter has a very high dirt removal capacity due to the frequent scraping of the surface. The sludge chamber is designed in such a way that a high concentration of solids can be retained before purging. The filter may be supplied either with an electric driven motor - the R-E type, or a pneumatic driven motor type R-P. The concentrated slurry is drained at appropriated intervals through a discharge valve at the bottom of the filter. This means that the quantity drained and loss of process liquid is minimal. Drainage is controlled individually by an electrically or pneumatically operated control system. For some batch systems where the drain is opened at the end of the filtration process the filter is mounted with a manual valve.

## Widely applicable

Auto-line® filters can be used in almost any filtration process, including:

- Paint & varnish
- Cooling water
- Gel particles
- Emulsion polymers- and monomers
- Wastewater
- Process water
- Oils and grease
- Tea and coffee extracts
- District heating water
- 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, acid proof, stainless steel construction ensures that the filter is reliable in all conditions and has a long life.

A wide range of filter elements is available with grades from 30 to 2000 microns. This makes it easy to adapt the filter exactly to each particular application. By adjusting the set values on the controller, hard, soft and fragile solids can be retained.

Laser strainer and wedge wire strainer.



### Intelligent design

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

The Auto-line® filter offers a choice of sealing principles and the best sealing materials to suit the specific application. An easy-to-change sealing box even makes customized 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 the last 50 years of experience gained by HiFlux Filtration A/S in the field of particle filtration.

Auto-line® LR-E



Rotating  
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).

### 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, 100, 150, 200, 300, 500, 1000 or 2000 microns. 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<sup>®</sup> 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.

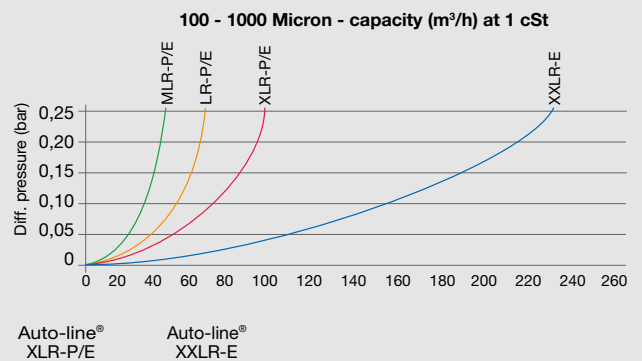
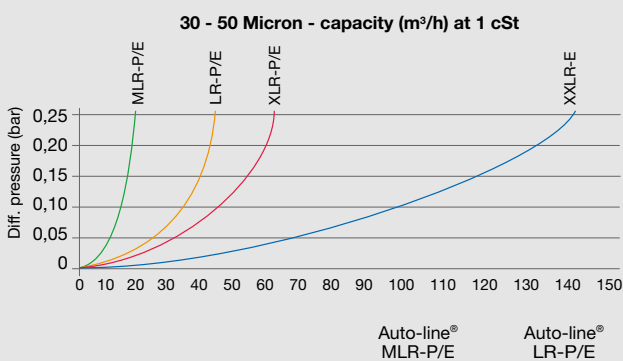
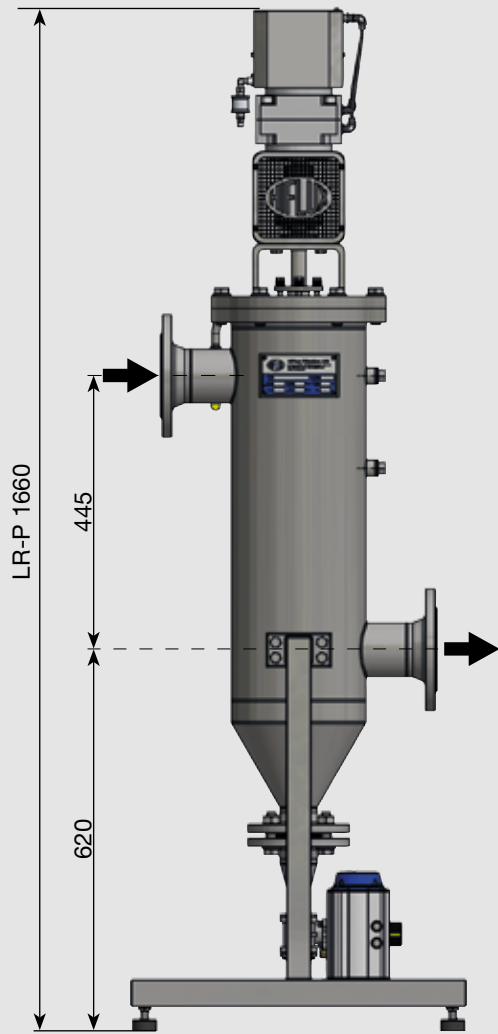
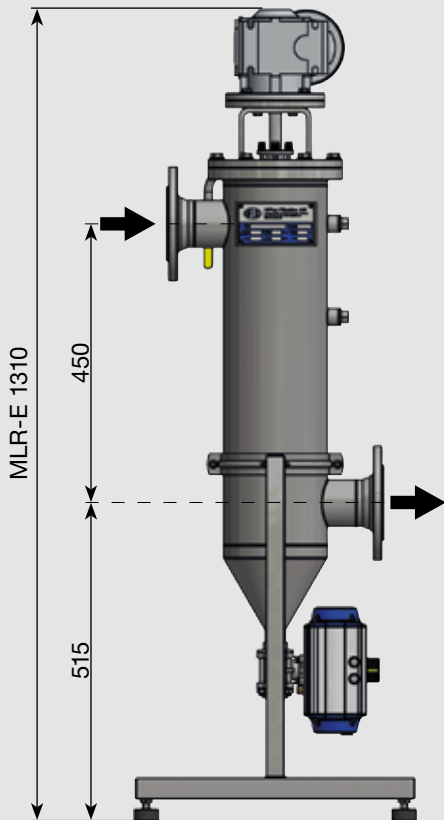
### Sealing systems

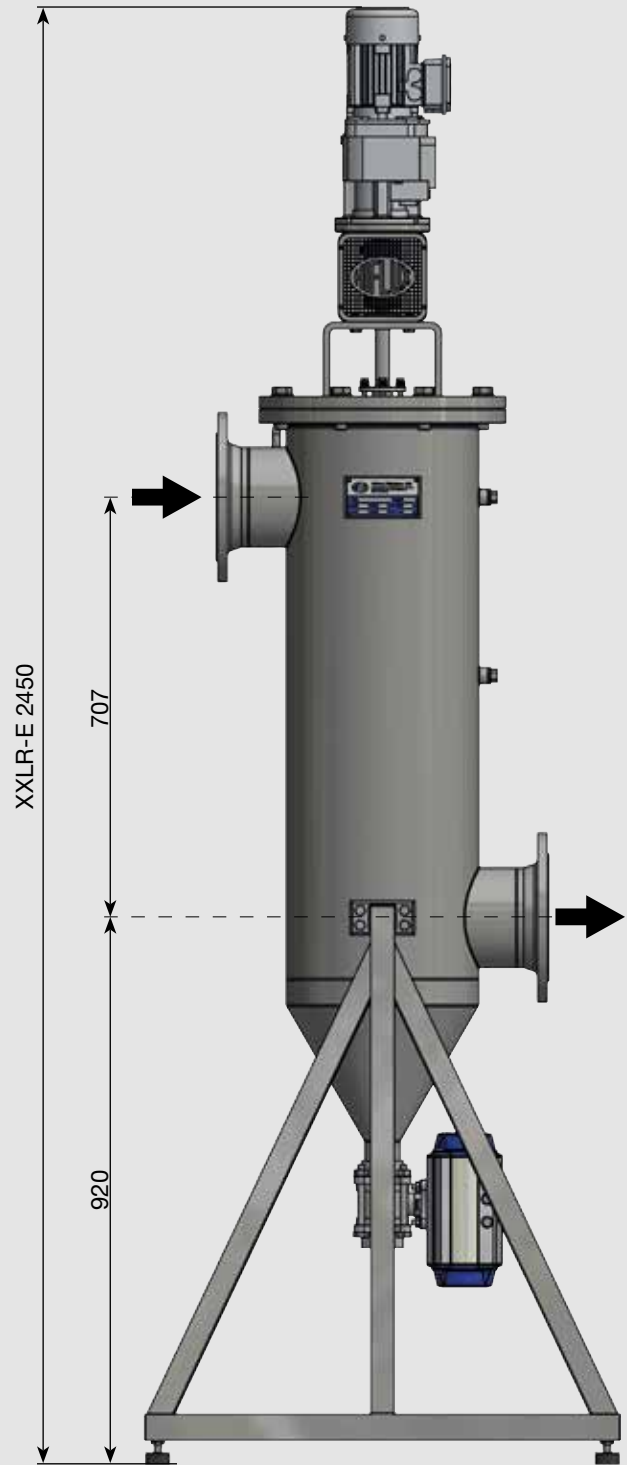
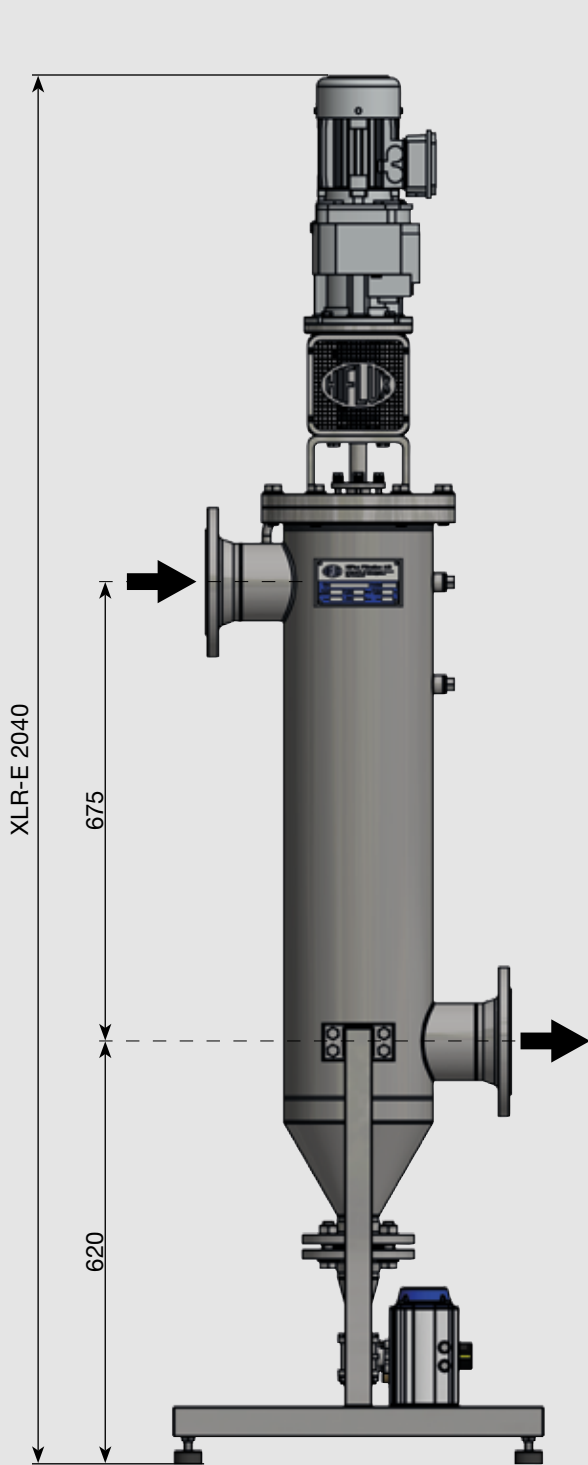
Sealing box with simple pressure seal / Chevron seal / Stuffing box / Special seals.

SPECIFICATIONS	Auto-line® MLR-P/E	Auto-line® LR-P/E	Auto-line® XLR-P/E	Auto-line® XXLR-E
Capacity (1 cSt, Δp 0,2 bar, 100 μm)	44 m³/h	63 m³/h	100 m³/h	223 m³/h
Filtration area	1500 cm²	2200 cm²	3300 cm²	4840 cm²
Connections inlet/outlet	DN65	DN80	DN100	DN150
Max. differential pressure	7 bar	7 bar	7 bar	7 bar
Max. system pressure	16 bar	16 bar	16 bar	16 bar
Max. working temperature	150° C	150° C	150° C	150° C
Volume	15 liters	27 liters	35 liters	89 liters

### Auto-line® MLR-P/E

### Auto-line® LR-P/E





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QA System ISO 9001