AEB LENTICULAR MODULES





Olive oil

Fields of application	Suggested AEB lenticular modules
After cold clarification and sedimentation of olive oil	A100

Fruit juices

Fields of application	Suggested AEB lenticular modules
After the clarification of clear juice	A300
For the final filtration during warm bottling	A11S

Liqueurs

Fields of application	Suggested AEB lenticular modules
Distillates	
Brandy, Whisky	A300
Rum	A300-A500-A700
Fruit spirits	A11S
Grappa	A11S
Vodka	A300-A500-A700
Gin	A300-A500 A700
Bitter	A300
Liqueurs	
With herbs	A200 A500 A700
With fruits	A300-A500-A700
With spices	

AEB LENTICULAR MODULES

Compact and hermetically closed solution for the filtration of all industrial liquids





AEB SPA

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AEB LENTICULAR MODULES



"→ TECHNICAL DESCRIPTION

The AEB lenticular modules offer a compact and hermetically closed solution for the filtration of all industrial liquids, with the time-tested technology of the filtration with filter sheets.

The AEB lenticular modules depth filter sheets are placed in a polypropylene structure composed by 16 cells with diameter 12" (332 mm) or 16" (410 mm). The FDA polypropylene structure has been designed to give the **maximum resistance**. The closing systems of the discs increases the lateral resistance and the rigidity of the entire frame. The passage of the liquid is facilitated by **wide conducting channels** which have the aim to reduce pressure drops inside the filter.

The AEB lenticular modules offer all the advantages of the traditional sheets, in a totally closed and sterile environment, preventing external contaminations and product losses.

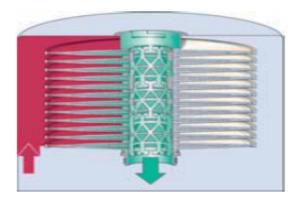
The AEB lenticular modules can be used for a wide range of applications, from the oenological field to the filtration of fruit juices and alimentary liquids and the filtration of pharmaceutical liquids, gelatines, cosmetics and water.

"→ TECHNICAL CHARACTERISTICS

The special design of polypropylene discs and sealing rings grant:

- uniformity in the passage of the liquid
- reduction of pressure drops in the module
- longer life of the filter
- reduction of filtration cycles
- higher homogeneity in the quality of the filtered product
- easy adaptability to all lenticular containers on the market, thanks to flat seals and terminal connections with double O-ring.

Direction of the flow



Technical information

The AEB lenticular modules are available with diameter 12'' (332 mm) or 16'' (410 mm), and the filter surface goes from 1,8 to 3,7 m² per module.

Each module is generally composed by 16 cells, each consisting in 2 discs or filter lens, shaped around an internal polypropylene shell.

The external edges of the discs are sealed by an injection-moulded polypropylene ribbon.

A polyester membrane covers each side of the filter discs in order to protect them during the handling. In case of counter-current washing, pay attention to the differential pressure (max ΔP 0,5 Bar).

The modules can be placed in single containers or overlaid up to a maximum of 4.

The end sealing is carried out with a flat gasket or bayonet coupling with double O-ring.

ADVANTAGES

- √ Easy to be used
- √ Reduction of replacement times
- √ Productivity increase
- √ Complete range of filter sheets, to satisfy different specific applications
- √ Air-tight system, ideal in case of critical conditions and risks of possible contaminations
- √ High rigidity and lateral resistance

AVAILABLE RANGE

AEB Filter sheets	Permeability of AEB sheets L/m²/minute	Nominal micrometer retention µm	Max ΔP filter input and output
300 XL	785	5,0-8,0	Max 3 bar
500 L	510	2,5-5,0	Max 3 bar
700 L	213	1,5-3,5	Max 3 bar
1100 Steril	113	0,7-1,0	Max 1,5 bar
1400 Steril	40	0,2-0,4	Max 1,5 bar

OPERATING CONDITIONS

- Max operating temperature 80°C
- Max Δp 2,4 bar
- Sterilization with steam at 125°C for 30 min. at 0,3 bar max (43 psid)
- Sanitation with hot water at 80°C for 20 min. (max)
- Cycles with hot water: max 30.

TECHNICAL SPECIFICATIONS

Code	Kind of filter sheet	Permeability in water in L/min/m² @ Δp 1 bar (14.5 psid)	Nominal retention Rating in µm	Content in ashes %	Level of endotoxins in EU/mL before rinsing
A14S	1400 St	40	0.2-0.4	51	NA
A11S	1100 St	113	0.7-1.0	46	NA
A700	700 L	213	1.5-3.5	46	NA
A500	500 L	510	2.5-5.0	46	NA
A300	300 XL	785	5.0-8.0	46	NA

NA - Not Applicable, as endotoxin content is not a measured criteria for these sheets.

PLASTIC COMPONENTS OF CONSTRUCTION

Composition of AEB Lenticular Modules	Polypropylene
O-rings	Silicone elastomer

All the plastic components utilized for the production are in accordance with In Vivo Biological Reactivity Tests for Class VI plastic (121°C), as indicated in the current version of USA Pharmacopoeia (USP). All modules and their components are completely traceable through a batch number.

FIELDS OF APPLICATION

Wine

Fields of application	Suggested AEB lenticular modules
After the clarification with sedimentation	A300-A500-A700
For the tight filtration before the sterilization of wines with residual sugars	A11S
For the final filtration during bottling	A14S