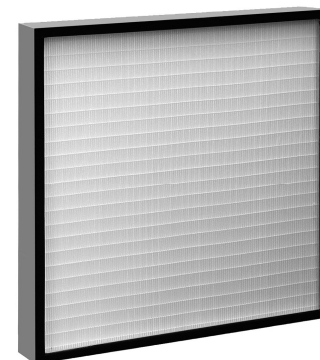


## High Efficiency Mini-Pleat EPA & HEPA Filters

**Type: FA-11/50; FA-13/50; FA-14/50; FA-14/503**



### Standards & Certificates

The filters conform to PN-EN 1822:2009. This has been proven by tests performed by the corporate laboratory and is evidenced by certificates of conformity, issued by the Central Worker Protection Institute (*Centralny Instytut Ochrony Pracy*), based on the following:

- Complete product testing for conformity with the standard performed by an independent laboratory;
- Audit of the manufacturing conditions.

The certificates qualify the product for the labelling with the **“B”** mark.

### Design

- Filter's frame: galvanized steel, resistant to moisture and microorganism growth, non-dusting; the special design provides adequate rigidity and physical strength.
  - Filter medium: Top quality glass fiber paper, non-hygroscopic
  - Filter pack : mini-pleat; when used as a separator of hot-melt adhesive trickles provides huge filtering surface with small filter depth; this results in good filtering: small flow resistance and large throughput.
  - Sealing: The filter pack is sealed in its enclosure with polyurethane resin; the filter's frame has a 8 mm thick flat gasket made from high quality neoprene (on the air inlet side as standard); the special mounting of the gasket ensures that the joint between the filter and the intake ventilator/enclosure is tight.

### Packing materials

Box made from rugged five-ply corrugated cardboard and PE film.

### Applications

Final filter in clean rooms for health care (operating rooms), pharmaceuticals, microelectronics, food industry, paint shops, etc.

Many years of experience have demonstrated that such establishments using our filters can obtain room purity class of up to, and including, A/B (100).

### Quality Assurance

**Manufacturing:** The manufacturing follows the ISO 9001:2008 Quality Management System monitored by our certifying body as part of the existing certificate for the “Manufacture of filters for HVAC equipment”.

**Laboratory testing:** Each HEPA filter is individually tested by the EUFILTER Research Laboratory using the testing procedures described in the Quality Book and audited under the ISO 9001:2008 certificate for “Research”.

**Third-party quality tests and certificates:** Each filter type has been tested by an independent/third-party laboratory and certificates corroborating the filters' classes

## Laboratory Tests on EPA & HEPA Filters

The tests are performed by the EUFILTER Research Laboratory. Once these are successfully passed, each filter is given a manufacturer's number and a quality certificate/test report.

Applicable tests:

- **Flow resistance measurement;**
- **Leak test acc. to PN-EN 1822-4, Annex A;**
- **Filtration efficiency acc. to PN-EN 1822-5;** test aerosol: DEHS; counted particle size 0.1-0.2  $\mu\text{m}$ , depending on MPPS for the specific filter type

## Quality Certificates & Testing Reports

According to PN-EN 1822:2009, each EPA or HEPA filter supplied to a Client has to be accompanied by an individual testing result document establishing the filter's class.

For class E11, the document contains the following information: mean values of filtration efficiency and flow resistance measured based on the procedure described in PN-EN 1822-5 4.4.

For class H13: mean values of filtration efficiency and flow resistance measured acc. to PN-EN 1822-5 4.4 and leak test results for each filter.

For class H14: results of measurements for each filter: filtration efficiency, flow resistance, leak test. On request: individual measurement of filtration efficiency also for classes E11 and H13.

## Note: Filter Validation

After installing a filter in the target system, the User should test the filter's mounting tightness and integrity according to PN-EN ISO 14644. This is the only way to make sure that the HEPA filter has not been damaged during handling and installation and is installed correctly.

EUFILTER offers a all-inclusive customer support:

- Manufacture of HEPA filters and laboratory testing before shipment;
- Filter installation on site;
- Testing filter mountings for tightness/integrity finalized with a written test report.

The uniqueness of this offer consists in our full responsibility for the end result including free of charge repair or replacement of damaged filters.

## Specifications

Type:	FA-11/50	FA-13/50	FA-14/50 <sup>1</sup>	FA-14/503 <sup>2</sup>
Filter class acc. to PN-EN 1822:2009	E11	H13	H14	H14
Rated throughput ( $\text{m}^3/\text{h} \times \text{m}^2$ face area)	2700	2700	1600	1600
Face velocity, (m/s)	0.75	0.75	0.45	0.45
Filtration efficiency acc. to MPPS, (%), min.	95	99,95	99,995	99,995

Operating temperature: 70 °C

RH: 100%

Final pressure drop : 500 Pa

<sup>2</sup> Type FA-14/503 features smaller flow resistance than FA-14/50; do not exceed the rated throughput

<sup>1</sup> Type FA-14/50 has higher flow resistance; class H14 is also achieved for velocities from 0.45 m/s to 0.75 m/s

Measurements performed by the EUFILTER Research Laboratory; Testing quality assurance: ISO 9001:2008 certificate No. NC-858 for „Research”

## Dimensions (mm); standard sequence of dimensions: B x H x T

T = Frame depth (thickness). We offer frames featuring the 69, 78/80, and 150 mm thicknesses for better fit to the Client's existing equipment.

Type	Dimensions, mm	Class	Rated volumetric flow, m <sup>3</sup> /h	Flow resistance, Pa, +/- 10%
FA-11/50	202x202	E11	100	155
FA-11/50	305x305	E11	250	150
FA-11/50	305x610	E11	500	145
FA-11/50	405x405	E11	440	140
FA-11/50	440x540	E11	650	140
FA-11/50	457x457	E11	560	135
FA-11/50	535x535	E11	770	130
FA-11/50	575x575	E11	890	125
FA-11/50	610x610	E11	1000	125
FA-11/50	762x610	E11	1250	125
FA-11/50	915x610	E11	1500	125
FA-11/50	1220x610	E11	2000	125

Type	Dimensions, mm	Class	Rated volumetric flow, m <sup>3</sup> /h	Flow resistance, Pa, +/- 10%
FA-13/50	202x202	H13	100	255
FA-13/50	305x305	H13	250	250
FA-13/50	305x610	H13	500	240
FA-13/50	405x405	H13	440	235
FA-13/50	440x540	H13	650	225
FA-13/50	457x457	H13	560	230
FA-13/50	535x535	H13	770	225
FA-13/50	575x575	H13	890	220
FA-13/50	610x610	H13	1000	220
FA-13/50	762x610	H13	1250	220
FA-13/50	915x610	H13	1500	220
FA-13/50	1220x610	H13	2000	220

Type	Dimensions, mm	Class	Rated volumetric flow, m <sup>3</sup> /h	Flow resistance, Pa, +/- 10%
FA-14/50	305x305	H14	150	175
FA-14/50	305x610	H14	300	170
FA-14/50	457x457	H14	330	165
FA-14/50	535x535	H14	460	155
FA-14/50	575x575	H14	530	150
FA-14/50	610x610	H14	600	150
FA-14/50	762x610	H14	740	150
FA-14/50	915x610	H14	890	150
FA-14/50	1220x610	H14	1200	150

Type	Dimensions, mm	Class	Rated volumetric flow, m <sup>3</sup> /h	Flow resistance, Pa, +/- 10%
FA-14/503	305x305	H14	150	150
FA-14/503	305x610	H14	300	145
FA-14/503	457x457	H14	330	140
FA-14/503	535x535	H14	460	130
FA-14/503	575x575	H14	530	130
FA-14/503	610x610	H14	600	125
FA-14/503	762x610	H14	740	125
FA-14/503	915x610	H14	890	125
FA-14/503	1220x610	H14	1200	125