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Air filtration

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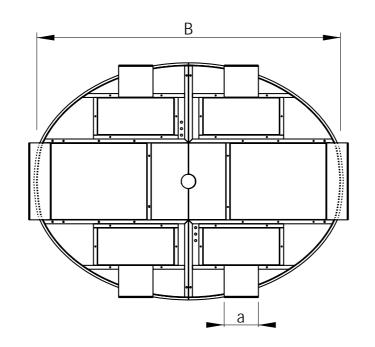


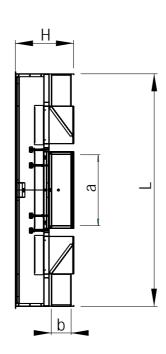
### **ELIPSO**

**DIMENSIONS** 

ELIPSO ceiling system uses absolute HEPA filters, with 99,95-99.995% MPPS and H13 or H14 efficiency, in accordance with UNI standard EN 1822. Each individual filter is produced using mini-pleat technology, with an aluminium frame, aluminium protection grid painted on both sides and semi-rounded continuous polyurethane fully airtight seal. Each individual filter is efficiency tested by scanning with an optical particle counter (OPC), in accordance with EN 1822. Each filter comes with a factory test certificate, as required by this standard.

They are tested and packaged in an ISO 5 class cleanroom.











**AIR FILTRATION** 

### **CEILING FILTRATION UNIT**

#### Casing H14 HEPA filter Air flow **Duct connection** Air flow velocity dimension Type dimension (mm) (m<sup>3</sup>/h) axb(mm) (m/s) BxLxH(mm) 1740 550 x 150 762 x 610 x 68 0.15 0.20 2320 (2 pcs.) (2 pcs.) **ELIPSO 2418** 2400 x 1800 x 450 220 x 150 610 x 305 x 68 0.25 2900 (4 pcs.) 0.30 3480 (4 pcs.) 550 x 200 915 x 610 x 68 0.15 2930 0.20 3900 (2 pcs.) (2 pcs.) **ELIPSO 3024** 3000 x 2400 x 525 450 x 200 762 x 610 x 68 0.25 4880 (4 pcs.) 0.30 5850 (4 pcs.) 1220 x 610 x 68 3780 550 x 200 0.15 0.20 5040 (2 pcs.) (2 pcs.) **ELIPSO 3526** 3500 x 2600 x 530 600 x 200 0.25 915 x 610 x 68 6300 (4 pcs.) (4 pcs.) 0.30 7560

### **ADVANTAGES**

- Easy to handle at the work site and install owing to its light and modular structure.
- Diffusers made of perforated stainless steel AISI 304, easy to remove to replace filters.
- Every system is supplied with a sampling port for measuring the pressure drop or for measuring the pollutant concentration upstream of the single filter.

#### MATERIAL AND FINISH

- Mounting structure in stainless steel.
- Aluminum HEPA filter housings.
- Polystyrene HEPA filter housings.

#### APPLICATION

- Conventional operating rooms in class ISO 7 or ISO 8, according to the ISO 14644 standard.
- Preparation rooms.
- Pharmacy aseptic suites.

#### VERSIONS

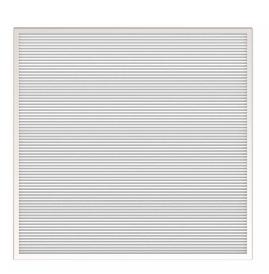
- LV model membrane diffusers.
- UPON REQUEST Setting for surgical light.

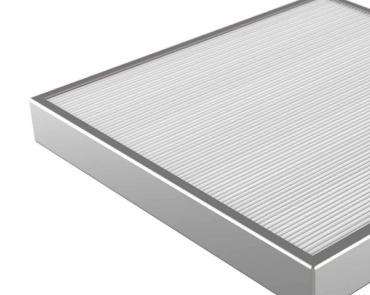














**Filters** 

Ordering key

Installation

### **Filters**

They can be of type LF13 or LF14 of the Klimaoprema range. Note that all the filters in our range are filters of standardized sizes with the aim of simplifying maintenance replacement operations and in order not to lock users into a single manufacturer.

Filters must be ordered separately!

AIR FILTRATION **FILTERS** 

### LF13 and LF14, thickness 68 mm

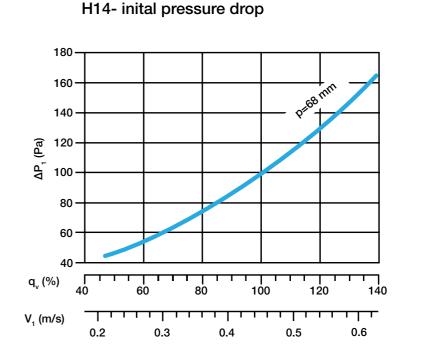
They consist of a frame in anodized aluminum profile 68 mm thick receiving he filter media (micro-fiber glass paper in mini-plies). A white lacquered metal grid protects the media on both sides during handling. The filters have been tested in accordance with EN 1822 and are effective, as desired:

- H13 (≥ 99.95% MPPS)
- H14 (≥ 99.995% MPPS)

Each filter, delivered in individual plastic packaging, in a rigid cardboard box, is supplied with its individual test certificate according to EN 1822 (MPPS 100% scanning) which must be given to the future user. A polyurethane gasket (continuously cast on the aluminum frame) ensures tightness during the mechanical tightening of the filter on the underside of the self-supporting frame.

# 160-140-120 -ΔP<sub>1</sub> (Pa) 60 -40 -100 V<sub>1</sub> (m/s) 0.2 0.3 0.5

H13- inital pressure drop

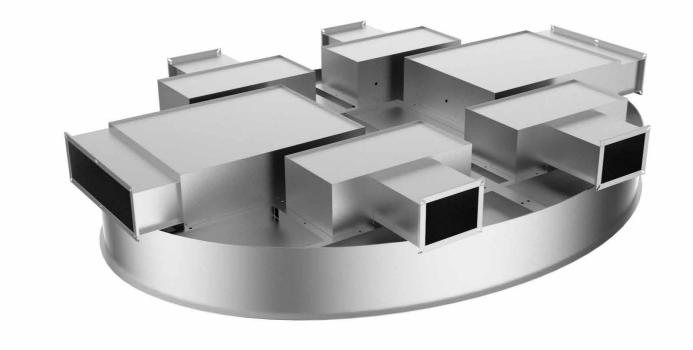












Ceiling filtration unit

<u>Filters</u>

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#### AIR FILTRATION ORDERING KEY

ORDERING KEY FOR ELIPSO	(1) Ceiling filter unit			(2) Dimension	(3	3) Material		(4) Tripod hole
		ELIPSO	-	2418	-	304	-	110
	(1)	Ceiling filter unit: ELIPSO (3)		Material: Stainless steel	304			
	(2)	Dimensions: 2418		Stainless steel	316L			
		3024 3526	(4)	Tripod hole: 110 *Optional				

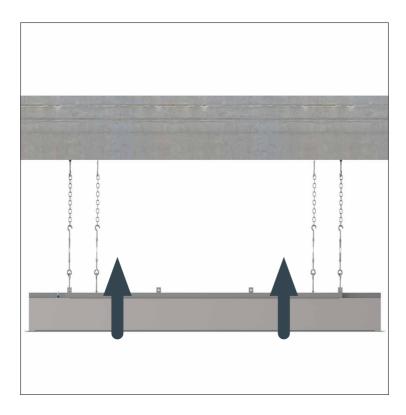
ORDERING KEY FOR FILTER	(1) HEPA filter type			(2) Dimensions			
		LF14 -		610 x 305 x 68			
	(1)	Hepa filter type: LF	LF14, *LF15 optional				
	(2)	Filter dimensions: 762 x 610 x 68 610 x 305 x 68 915 x 610 x 68 1220 x 610 x 68					

### **Installation instructions**

NOTE: Lighting support has to be installed prior the operating ceiling!

#### Installation

1. Drill the holes in concrete ceiling to mount M8 anchors and install suspension hooks. Install hooks into prepared holes on the operatin ceiling construction. Connect both hooks from device and ceiling with chain. Lift the ELIPSO up and allign it with suspended ceiling.

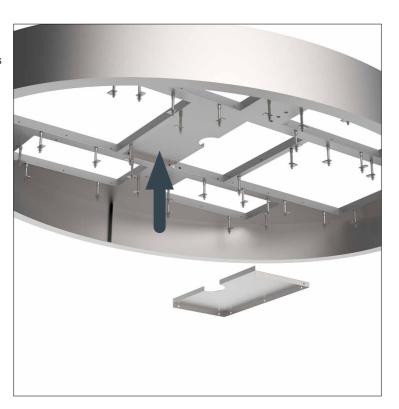




#### 2. Procedure of covering a Lamp column hole

After successful installation of operation ceiling, central opening for lamp support construction has to be closed. Use prepared cover plates and tighten them with M6 screws. Make sure that all gaps are sealed with antibacterial silicone seal.

**NOTE:** Prior the installation, supply air ducts has to be disabled and blown out. Air-tight dampers, if there are any, has to be closed also. As a final step of installation, each surface of operation ceiling must be wiped.











Ceiling filtration unit



<u>Filters</u>



Ordering key



**Installation** 

### INSTALLATION



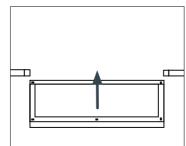


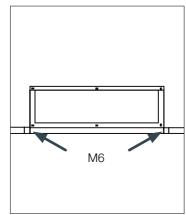


#### 3. Module installation

Lift the filter module up and secure it with M6 screws to ELIPSO housing.







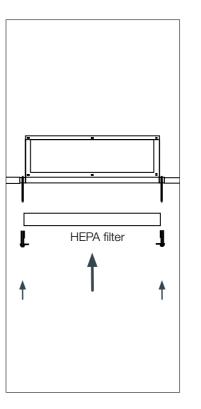
#### 4. Filter installation

Carefully allign HEPA filter between filter fasteners placed on the filter frame perimieter. While holding the filter, be careful not to touch media of HEPA filter because just slight force can easily damage it – hold it by aluminum frame. When the filter is alligned, use filter fasteners to thighten it.



Use gloves during installations to avoid contamination of the filters.





## Ceiling filtration unit









Installation

### INSTALLATION

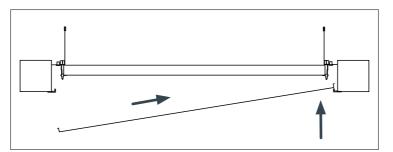




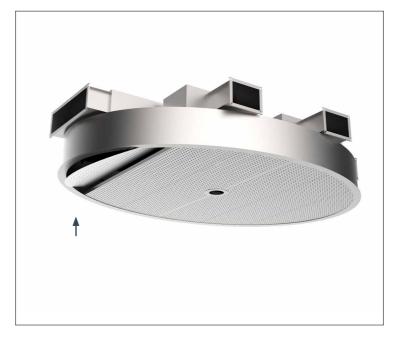


#### 5. Peforated plate installation

Installation is performed by lifting perforated ceiling plate and inserting it inside the housing. The centerpiece is an option and should be connected to the light mount. The other side should be inserted afterwards and whole plate should sit smoothly onto the housing frame. In the end, wipe the operation room ceiling surface.









Ceiling filtration unit



<u>Filters</u>



Ordering key



Installation

### INSTALLATION



# **AIR FILTRATION**

Projektiranje, proizvodnja i održavanje opreme za klimatizaciju, ventilaciju i čiste prostore. Design, production and service of Ventilation, Air-Conditioning and Cleanroom equipment.

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