



UV-TURBO HOODS

Product Brochure

Jeven

Top ventilation for top chefs

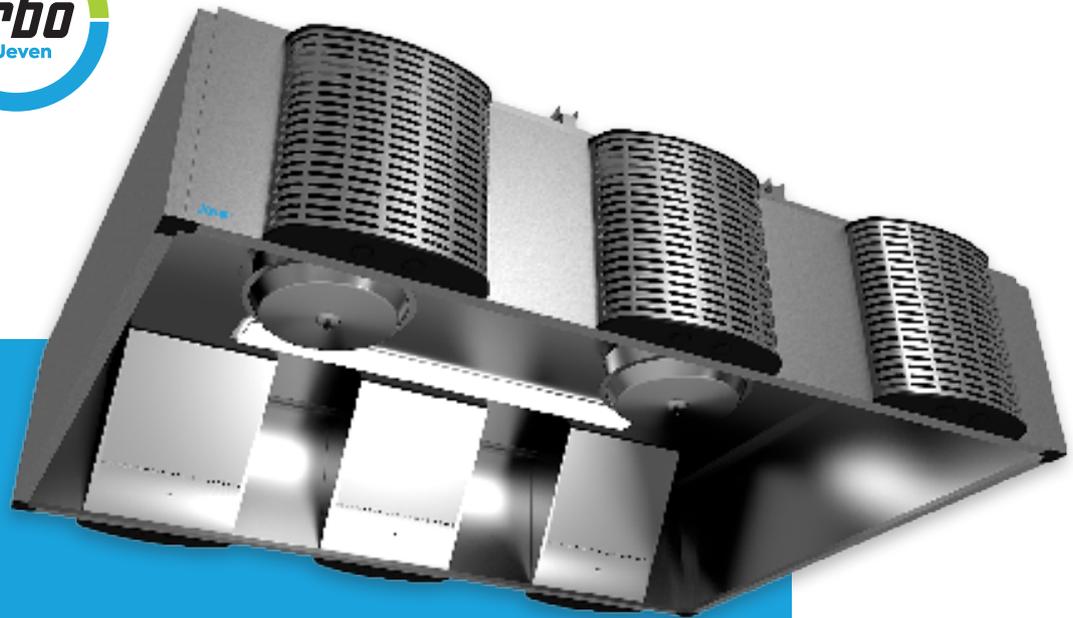


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UV-TURBO HOODS

—helping professionals to enjoy their work and give their best.

UV-Turbo hood have been developed for professional kitchens requiring energy efficiency and versatility, as well as a safe and comfortable kitchen climate for the staff. The excellent filtration efficiency of UV-Turbo keeps the ventilation ducts clean, even from the smallest particles of contamination and gaseous grease. UV grease filtering also significantly reduces the odours of cooking.

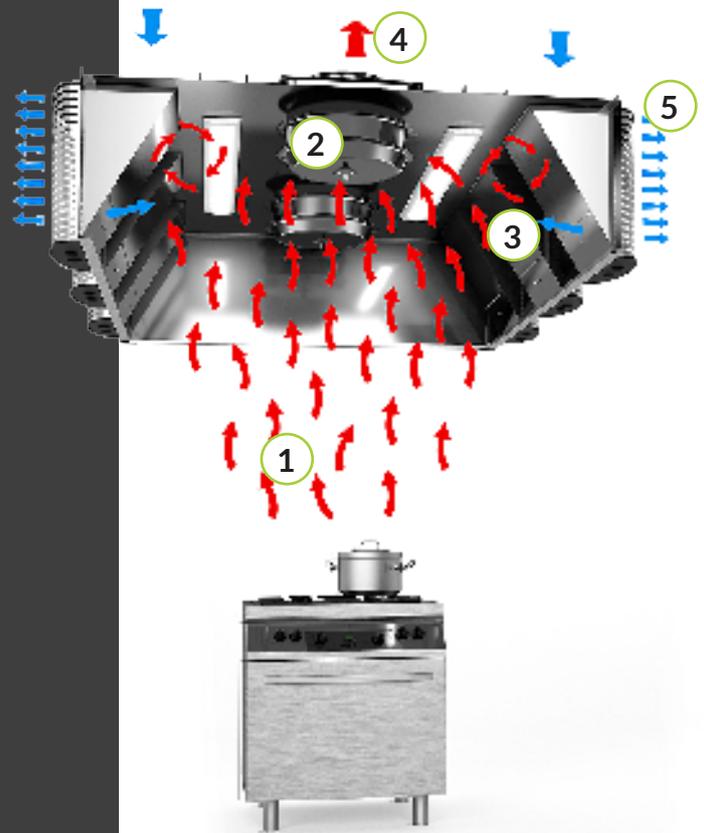
The UV light, in the grease filter unit, is an ozone-free, safe and environmentally friendly solution. UV-Turbo can be used to utilize variable air flow energy saving systems and kitchen exhaust air energy by heat recovery.



FUNCTIONING PRINCIPLE

- 1 Dirty air rises due to temperature differences against the ceiling of the hood.
- 2 Dirty air is exhausted immediately through the UV-Turbo units. Since UV-Turbo's air intake is placed close to the ceiling, the warmest dirty air is always exhausted through it. Ventilation efficiency is of the highest rate because of the correct position of UV-Turbo with respect to the kitchen equipment. When the separator plate of UV-Turbo rotates, the grease and impurities are separated into the collecting vessel.
- 3 Direction air prevents leakage and directs steam and impurities towards UV-Turbo.
- 4 The purified air flows in the catalyst-coated chamber, where UV light transforms remaining grease to carbon dioxide and water. Clean air is exhausted into the ducts.
- 5 Fresh and draught-free supply air is brought into the kitchen through the supply air columns placed on the outside walls of the supply air hood. This results in very effective ventilation in the kitchen.

SUPPLY AIR HOOD JSI-R-UV-TURBO

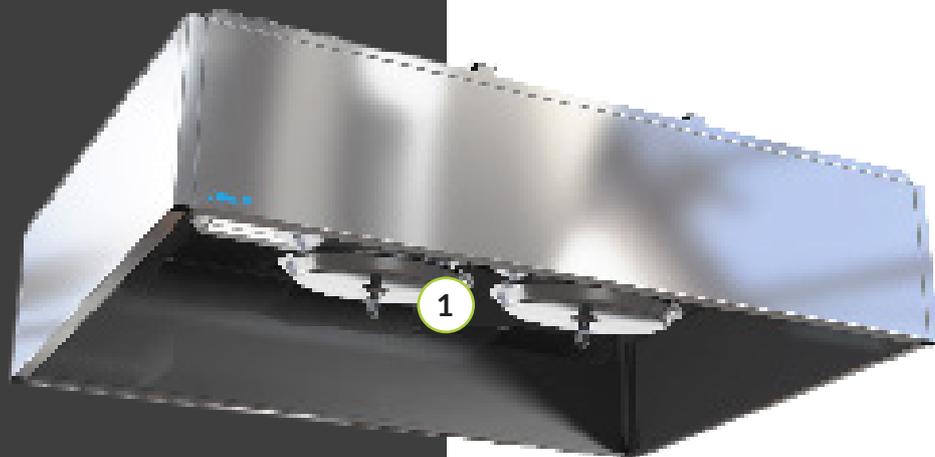


JLI-R-UV-TURBO



PRODUCT STRUCTURE

UV-TURBO HOODS



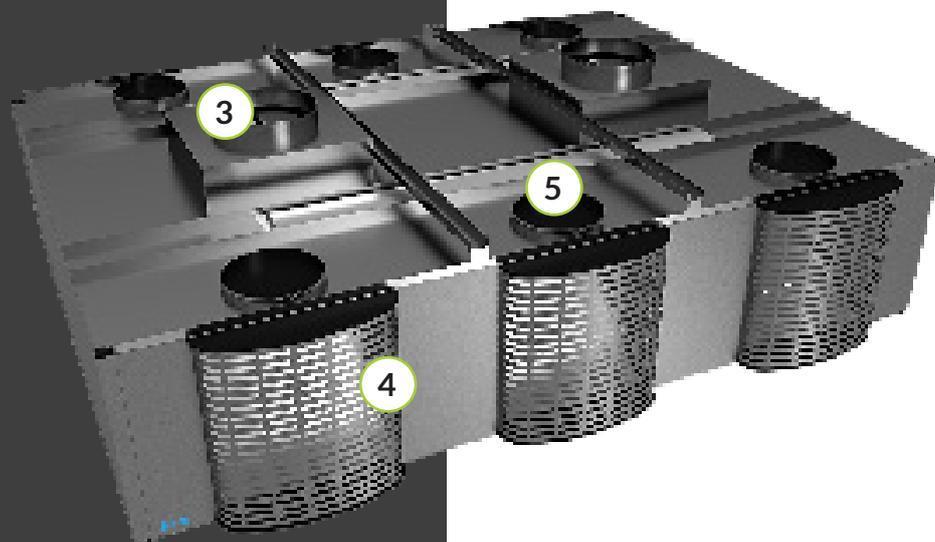
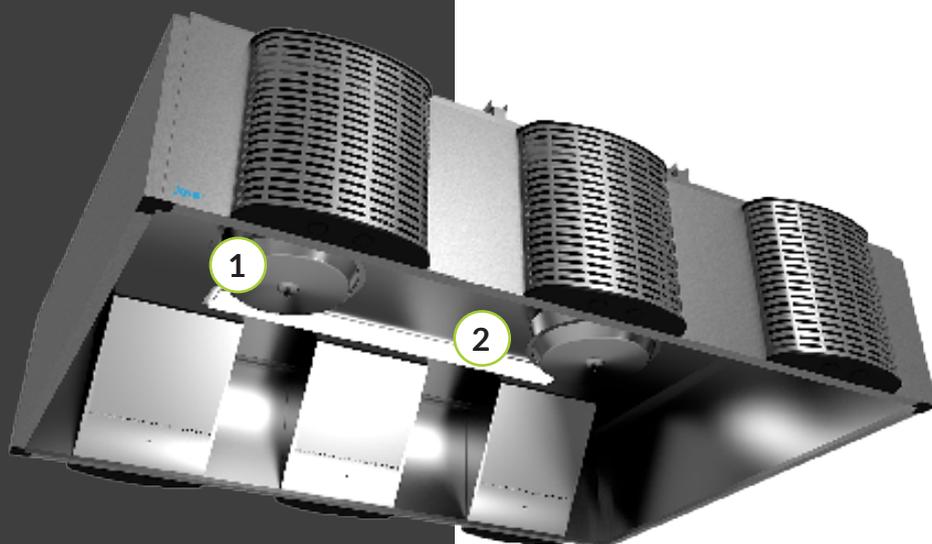
1 UV-Turbo grease filter

2 LED lights

3 Exhaust air connection and damper plates

4 Supply air unit with removable front panel

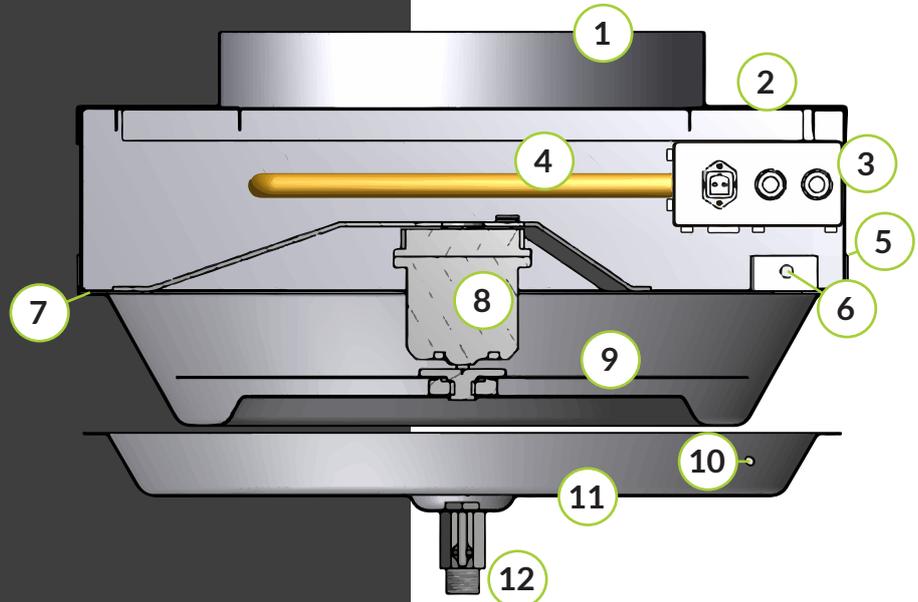
5 Supply air connection and damper unit



UV-TURBO GREASE FILTER



- 1 Collar saddle
- 2 Balancing dampers
- 3 Motor connection box
- 4 UV light
- 5 Limit switch
- 6 Signal light
- 7 Dome fixing
- 8 EC motor
- 9 Separation plate
- 10 Airflow measuring tap
- 11 Collection basin
- 12 Tap



See TurboSwing video in YouTube

An innovative solution for demanding grease filtration in professional kitchens

UV-Turbo consists of an effective mechanical TurboSwing® grease filter and UV light.

TurboSwing®, based on rotary motion, mechanically separates fat particles - even as small as 2 µm. The rapid rotating separating disc separates even small particles and throws them at a high speed to the outer edges of the separation chamber, from which grease and other impurities flow into the collection basin.

Thanks to ozone-free UV light and catalysts, the UV-Turbo grease filter also effectively removes small particles and gaseous grease. UV-Turbo significantly reduces cooking smells.

The UV light is housed in a TurboSwing® grease filter chamber coated with a catalyst. In a catalytic-coated chamber the grease is polymerized into a powder-like carbon compound, carbon dioxide and water as a result of UV light.

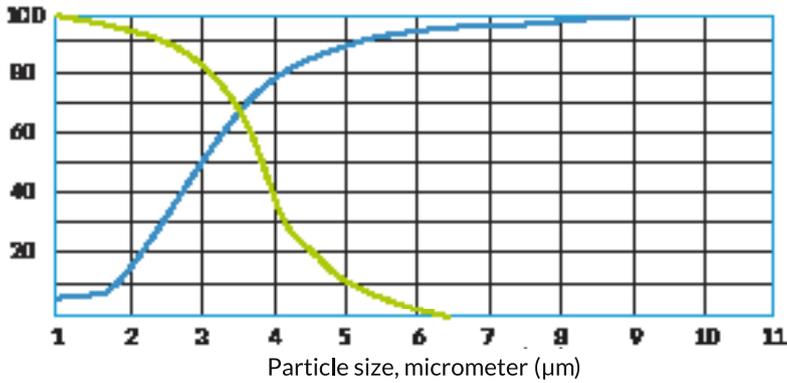
The catalyst used by UV-Turbo, is safe and nature-friendly catalyst.

Unlike ozone based solutions catalyst does not have any health hazards.

EXHAUST AIR

UV-TURBO GREASE FILTER

TurboSwing and UV light combined filtering efficiency



- TurboSwing separation rate 90-95 %
- UV light's effect to separation rate (ozone free UV light)

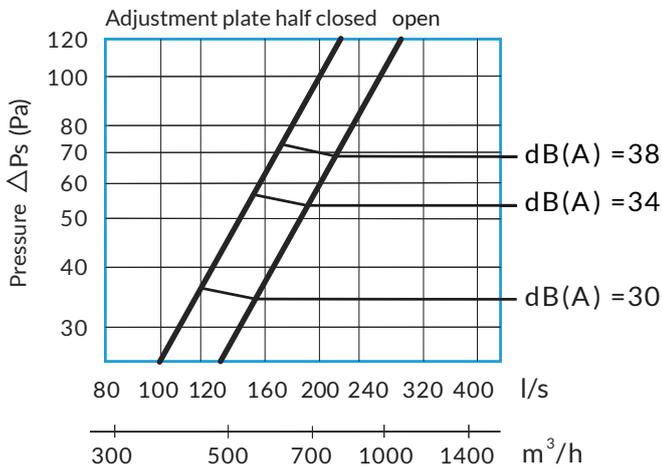
Combined separation rate 95-99%.
Kitchen equipment and manufacturing process affect separation rate.

Recommended exhaust flow/spigot

Spigot size ϕ	Exhaust flow		Pressure loss
	l/s	m ³ /h	
315	100-200	360-720	20-60

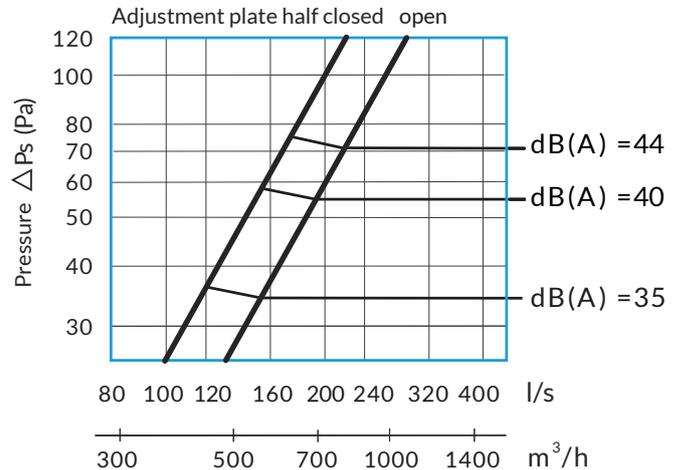
Pressure loss and sound data

TurboSwing 750 rpm



Sound pressure level 4 dB (A) with room suppression. Match 10 m²-sab total absorption.

TurboSwing 1100 rpm



Sound pressure level 4 dB (A) with room suppression. Match 10 m²-sab total absorption.

Sound Power level, Lw

Sound power level Lw in each octave band is computed by adding the corresponding factor, Kok to the sound power level LpA

$$Lw = LpA + Kok.$$

Factor, Kok

Hz	125	250	500	1000	2000	4000
Kok	7	-1	-5	-5	-7	-6
tol.	±3	±3	±2	±2	±3	±4

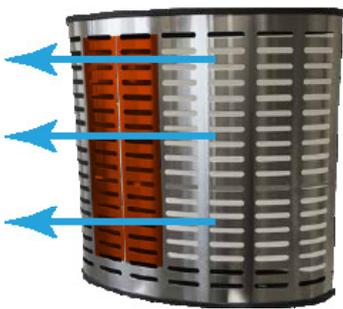
SUPPLY AIR

SUPPLY AIR HOOD JSI-R-UV-TURBO

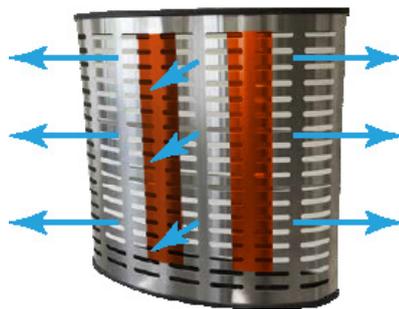
Even supply air columns deliver a controlled and flexible distribution of the supply air. It is possible to wash the supply air columns in a dishwasher and the inside of the supply air chambers is easy to clean.

Horizontal alignment of the supply air

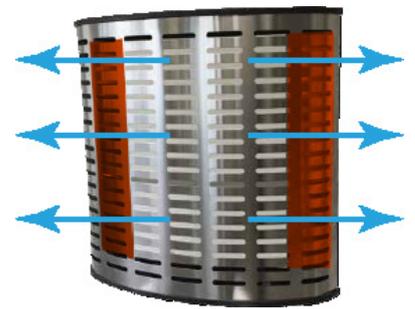
The supply air blow direction can be aligned left or right by moving the air control plates inside the supply air units. The air control plates are marked in red in the pictures.



Unidirectional thrown pattern



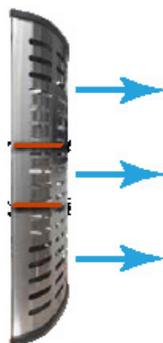
Displacement thrown pattern



Bidirectional thrown pattern

Vertical alignment of the supply air

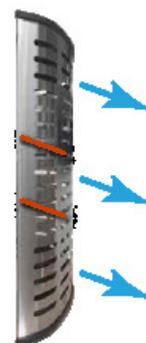
The supply air blow direction can be aligned up or down by turning the horizontal air control plates inside the supply air units. The air control plates are marked in red in the pictures.



Factory default



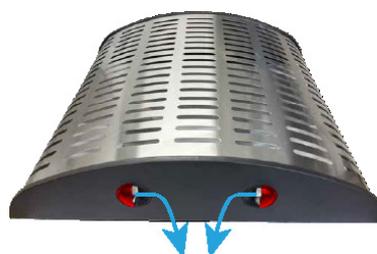
Blowing up



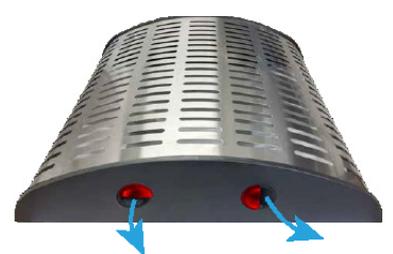
Blowing down

Air blow directions alignment nearby supply air column

Supply air blowing direction can be aligned by turning the rotatable blowing nozzles at the bottom of the supply air column. The rotatable nozzles are marked in red in the pictures.



Alignment down



Alignment in and sideways

SUPPLY AIR

SUPPLY AIR HOOD JSI-R-UV-TURBO

The canopies are supplied from the factory with suitable air flow rates for a pressure level of 25-35 Pa.

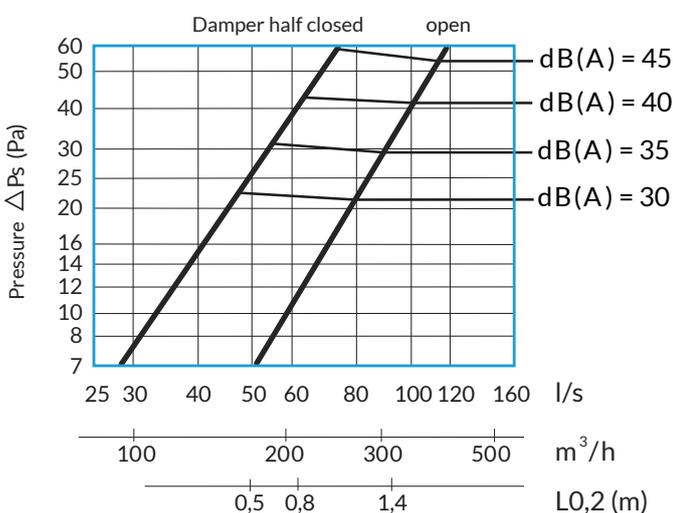
The amount of supply air/supply air unit

Hood height	Supply air unit width, B	
mm	200 mm	500 mm
330	-	50-90 l/s
540	40-70 l/s	100-150 l/s

Pressure loss, sound data & throw length/supply air unit

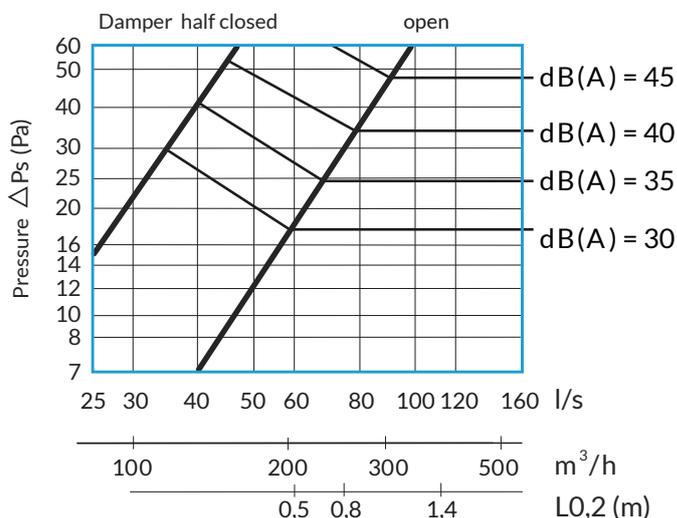
Spigot ø200 mm

Unit width 500 mm. Hood height 330 mm.
Measurement after 90° curve.



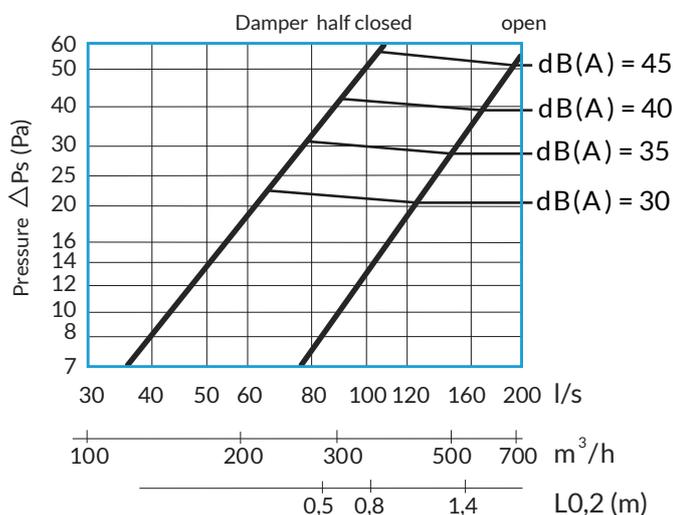
Spigot ø160 mm

Unit width 200 mm. Hood height 540 mm.
Measurement after 90° curve.



Spigot ø 250 mm

Unit width 500 mm. Hood height 540 mm.
Measurement after 90° curve.



The sound power level (Lw) in each octave band is computed by adding the corresponding factor Kok to the sound pressure level (LpA), as in

$$Lw = LpA + K_{ok}$$

Spigot ø200

Hz	125	250	500	1000	2000	4000
Kok	-2	7	4	-5	-19	-26
tol.	±6	±4	±2	±2	±3	±5

Spigot ø160

Hz	125	250	500	1000	2000	4000
Kok	-2	1	2	1	-7	-16
tol.	±3	±3	±2	±2	±3	±4

Spigot ø250

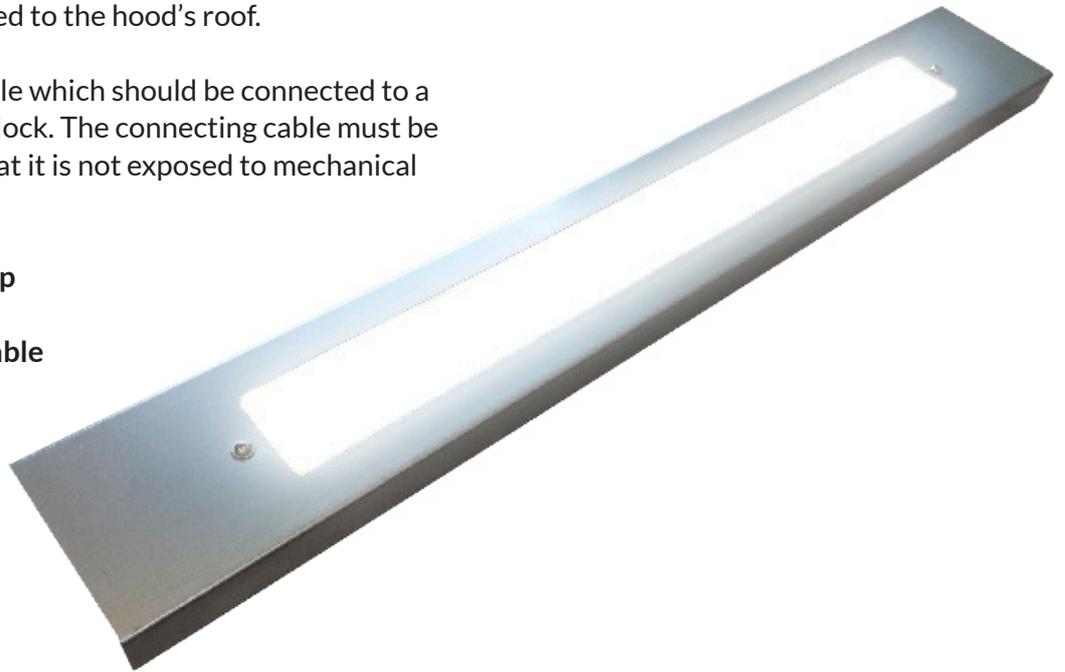
Hz	125	250	500	1000	2000	4000
Kok	6	8	4	-5	-10	-18
tol.	±3	±3	±2	±2	±3	±4

LIGHTS

By default, every hood module comes with an energy efficient LED light fixture integrated to the hood's roof.

The light fixture has a cable which should be connected to a junction box with a cable lock. The connecting cable must be positioned in such way that it is not exposed to mechanical or thermal stress.

IP 66 integrated LED lamp
4000 K, CRI >84
inc 2 m HF-connection cable
(Halogen Free,
type 3x1,5 mm²)

A close-up photograph of the interior of a kitchen hood. The hood is made of a light-colored, possibly stainless steel, material. The word "Jeven" is printed in a large, blue, sans-serif font on the side panel. The hood's interior is dark, and the lighting is soft, highlighting the texture of the metal and the logo.

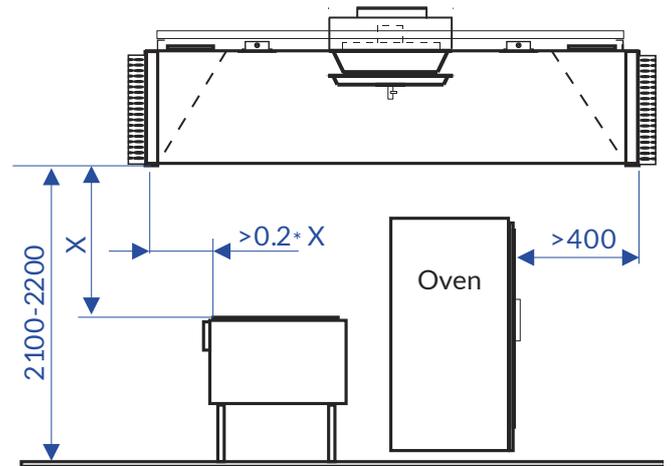
Jeven

POSITIONING

The size of the canopy is determined by the size of the kitchen equipment.

The overhang depends on the type of equipment and the distance between the hood and the equipment. For this type of equipment, the overhang should be at least 300 mm.

The typical distance between the hood side and the floor is 2100–2200 mm. If the equipment has any doors that open upwards, make sure there is enough distance to the canopy.



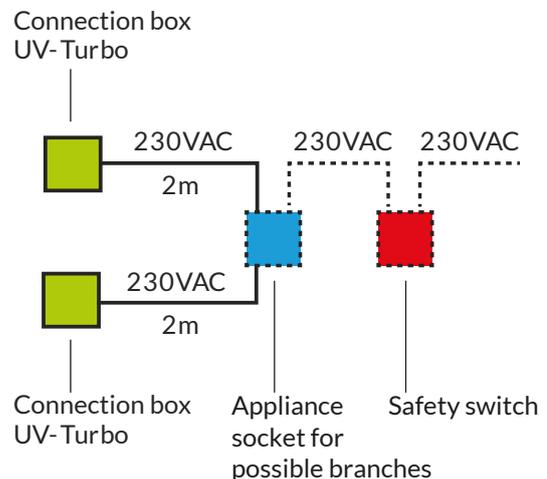
ELECTRICAL AND AUTOMATION PLANNING

The HPAC designer designates the types and locations of wired products in the plans.

The electrical designer designates to the plans, the location of the safety switch (compulsory), the necessary appliance sockets and the required wiring from the group switchboard or kitchen switch to the safety switch.

The Automation designer records, in the plans, that the running time of the UV-Turbo will match the running time of the exhaust fan.

A safety switch is compulsory and it should be situated close to the hood and in a visible place in the kitchen.

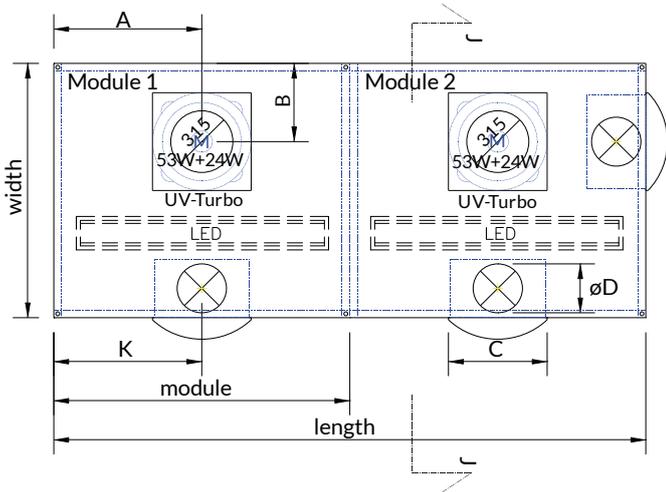


The safety switch, appliance sockets and the cables marked with the dotted line are not included in the Jeven delivery.

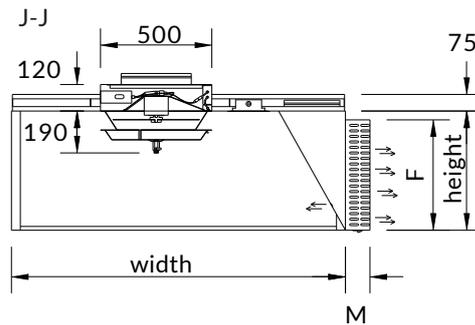
DIMENSIONS

UV-TURBO HOODS

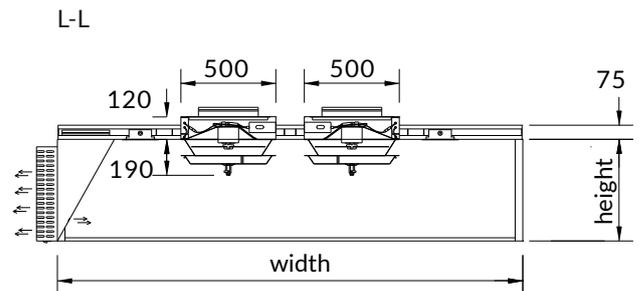
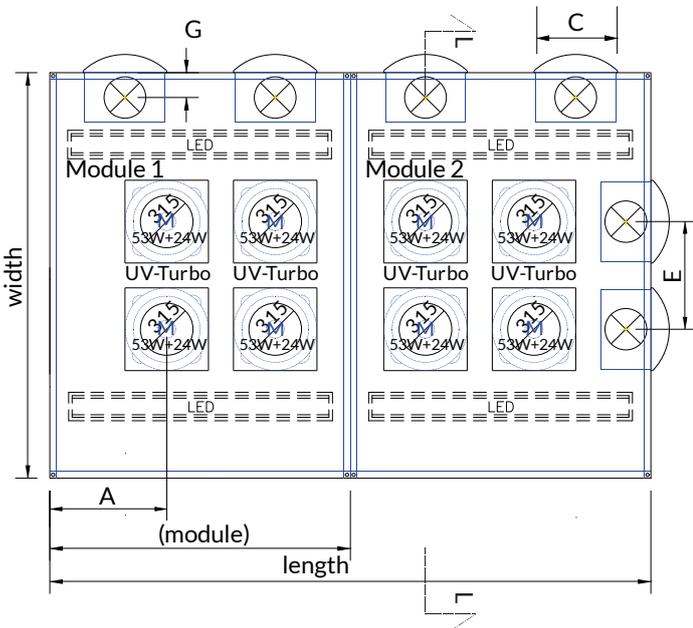
Wall hood



UV-Turbo hoods are made on a project-by-project basis, according to the planned dimensions. Hoods length and width can be chosen freely. A and B dimensions shall be at least 300 mm.



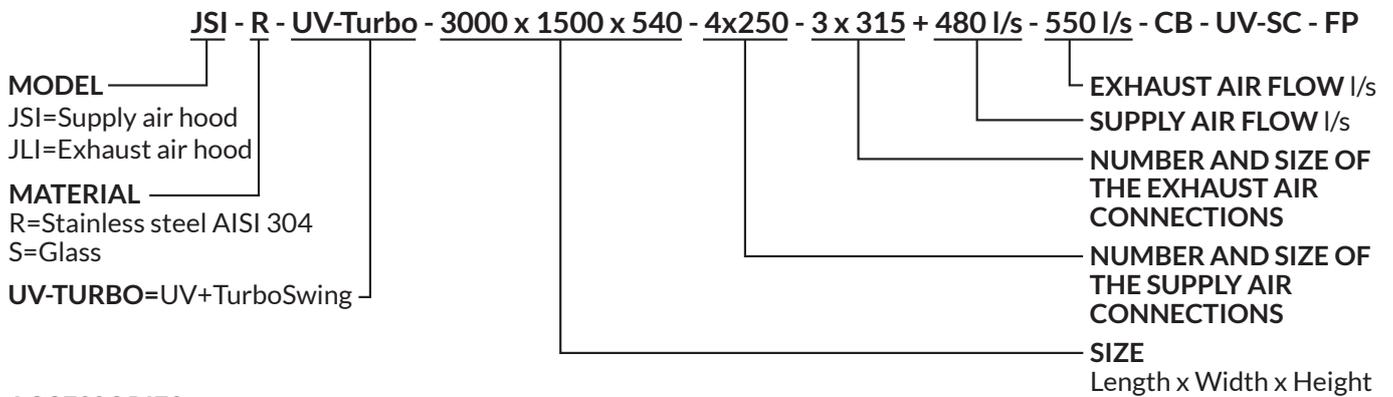
Island type hood



Size and placement of supply air units – supply air hood JSI-R-UV-Turbo

Hood height	C	F	ϕD	G	E min	K min	M
540	200	500	160	100	400	340	65
330	500	290	200	125	550	350	110
540	500	500	250	150	550	350	110

PRODUCT CODE



ACCESSORIES

CB=Covering boards between the top of the hood and the ceiling

UV-SC=UV-SwingControl

FP=Ansul R102 Fire Suppression System

- UV-Turbo hoods are equipped with TurboSwing filters, ozone free UV light and integrated LED lights.
- The canopy's base material is stainless steel, AISI 304
- The side panels can also be made of polycarbonate.

JEVEN DESIGNER SERVICE

You can have airflow calculations and project-specific product solutions quickly and easily for your project.

Our designer service will provide a proposal for your project, including hood blocks in MagiCAD or CADS format as well as airflow calculations.

[jeven.fi/en/designer-service >](https://jeven.fi/en/designer-service)



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