



TURBO HOODS

Product Brochure

Jeven

Top ventilation for top chefs

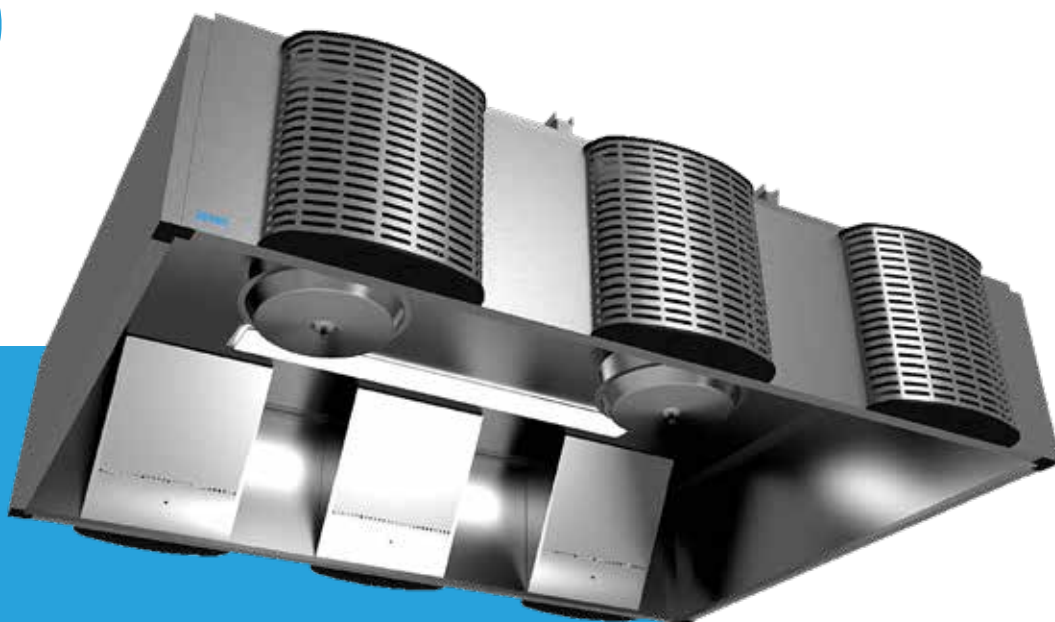


TABLE OF CONTENTS

FUNCTION	04
SPECIFICATION.....	05
CONSTRUCTION	06
TURBOSWING® Grease filter.....	07
TURBOSWING® Function.....	08
TURBOSWING® Separation and pressure/sound .	09
SUPPLY AIR DIFFUSER Description	10
SUPPLY AIR Flow, sound and pressure loss	11
DIRECTION AIR, Flow, sound and pressure loss...	13
EXHAUST AIR HOOD Dimensions	14
LIGHTING.....	15
DIMENSIONING OF HOODS	16
ELECTRIAL DATA AND CONNECTION	16



JEVEN TURBO HOODS

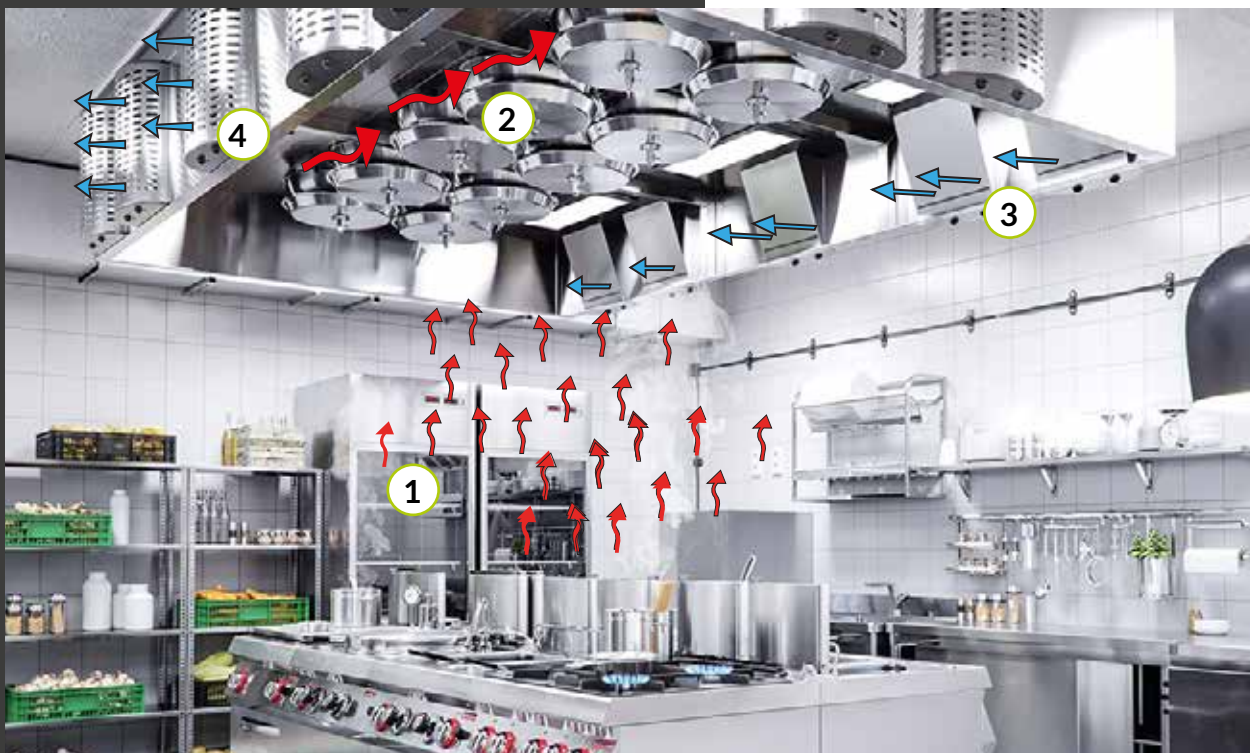
— helping professionals to enjoy their work and give their best.

JEVEN Turbo hoods have been developed for professional kitchens requiring energy efficiency and function, as well as a safe and comfortable kitchen climate for the staff. TurboSwing® has constant separation regardless of air flow and can be used to utilize variable air flow. The excellent filtration efficiency keeps the ventilation ducts clean, even from the smallest particles of contamination and gaseous grease.



FUNCTION

- 1 Contaminated air rises against the ceiling of the hood.
- 2 Since TurboSwing® filter's air intake is placed close to the ceiling, the warmest contaminated air is always exhausted through it.
- 3 In hoods with direction air devices (JSI and JVI), the osset is caught by the direction air beam, that directs the osset to the grease filter and prevents contaminated air from ending up outside the hood.
- 4 In hoods with supply air (JSI), air is supplied to the room draft-free by removable supply air devices.



SPECIFICATION

	JSI - R- Turbo - 3000 x 1500 x 540 - 4 x 250 - 3 x 315 + 480 l/s - 550 l/s
JSI=Supply air Hood	
JVI=Direction air Hood	
JLI=Exhaust air Hood	
Material	
R=Stainless steel	
S=Laminated Glass	
Grease filter	
Length	
Depth	
Height	
Number and size of the supply air connections	
Number and size of the exhaust air connections	
Supply airflow, l/s	
Exhaust airflow, l/s	



CONSTRUCTION

JEVEN TURBO HOOD



1 TurboSwing® grease filter

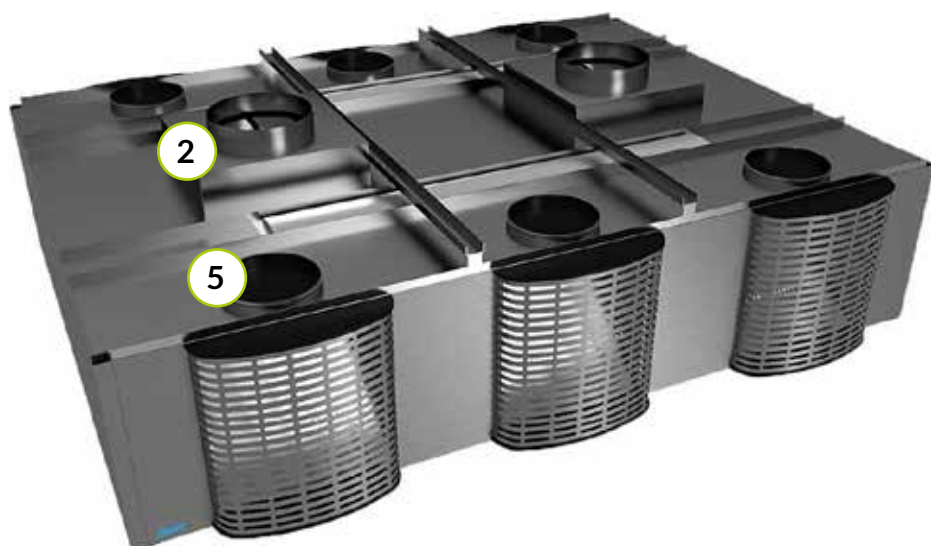
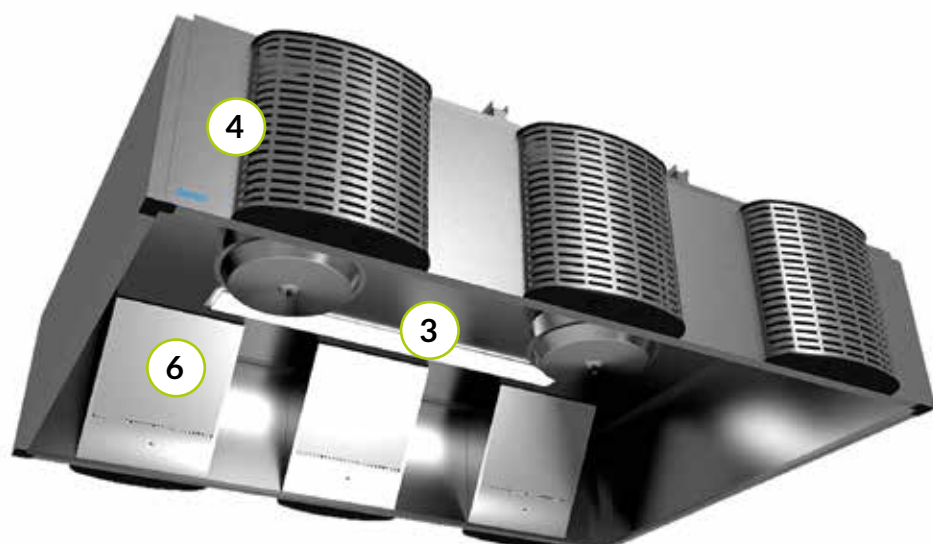
2 Exhaust air connection with damper plates.

3 LED lights

4 Supply air device with removable spreader (JSI)

5 Connection for supply- and direction air with silencer damper (JSI)

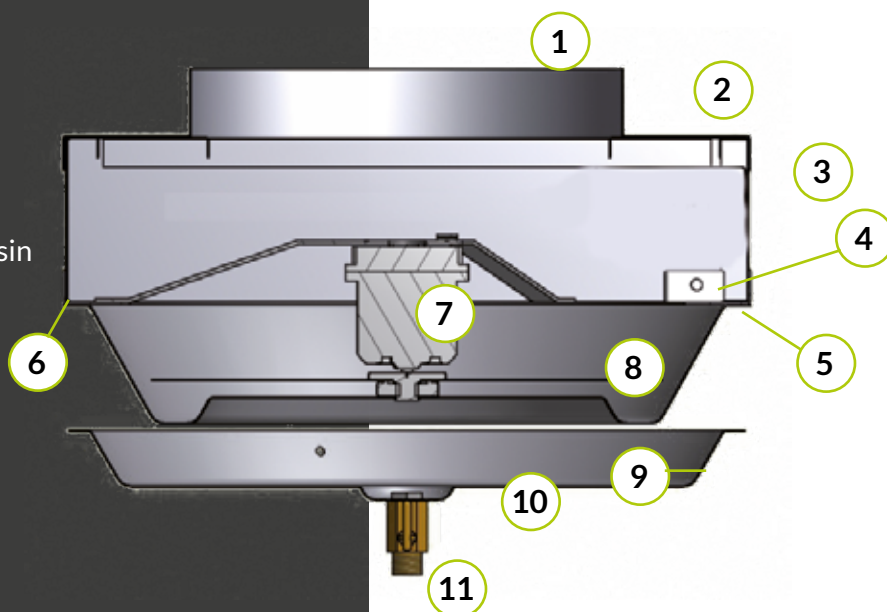
6 Direction air device (JSI, JVI)



TURBOSWING® GREASE FILTER



- 1 Spigot
- 2 Balancing dampers
- 3 Limit switch
- 4 Operation indicator
- 5 Dome fixing
- 6 Locking screw for collection basin
- 7 EC Motor
- 8 Separation plate
- 9 Air flow measuring tap
- 10 Collection basin
- 11 Valve for drain



An innovative solution for demanding grease filtration in professional kitchens.

TurboSwing®, based on rotary motion, mechanically separates fat particles. 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. Already at particle size over 5 μm , the separation rate is over 90%, which surpasses any other technology.

TurboSwing® is very well suited for energy saving applications with heat recovery from the kitchen and/or changing air flows. TurboSwing® filter efficiency remains very high even at low airflows.

THIS IS HOW THE TURBOSWING® GREASE FILTER WORKS.



Contaminated air is sucked into the filter



The air is sucked through a rotating perforated separation plate.



The particles collide with the rotating plate and are thrown toward the sides of the filter housing.

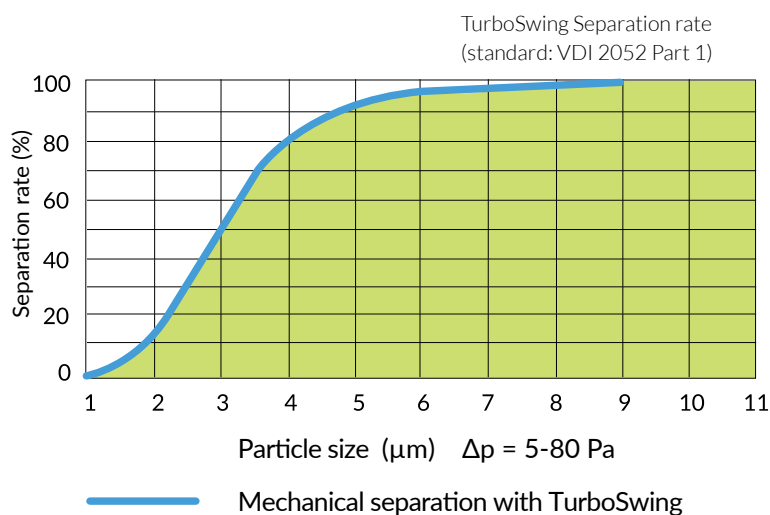


Liquid grease and impurities separated by TurboSwing® are removed with the opening of the tap.

EXHAUST AIR

TURBOSWING® GREASE FILTER

TurboSwing® separation rate

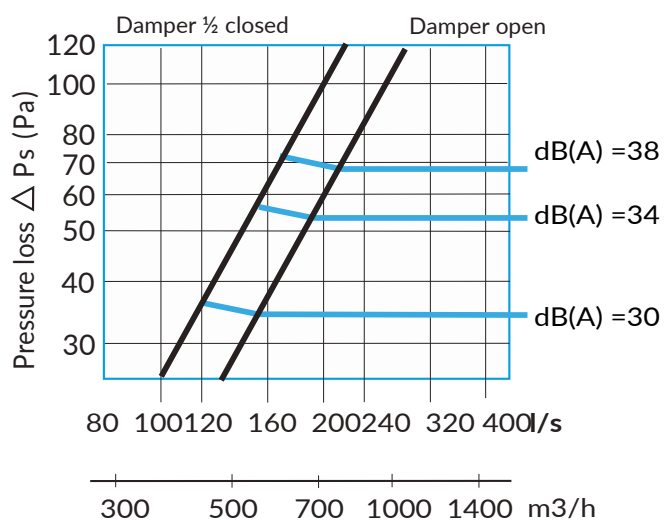


Recommended air flow

Spigot size	Extract air flow		Pressure loss
mm	l/s	m3/h	Pa
Ø 315	0-200	0-720	0-60

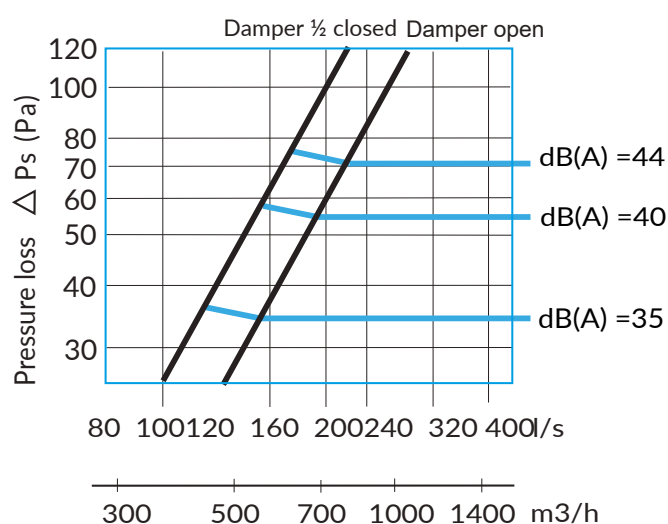
Pressure loss and sound data

TurboSwing® 750 rpm



Reported dB(A) values apply at 10 m2 Sabine, which corresponds to an attenuation of 4 dB.

TurboSwing® 1100 rpm



Reported dB(A) values apply at 10 m2 Sabine, which corresponds to an attenuation of 4 dB.

The sound power level **L_w** in each octave band is obtained by adding the correction factor **K_{ok}** to the actual sound level. **L_{pA}**

$$L_w = L_{pA} + K_{ok}$$

Correction factor K_{ok}

Hz	125	250	500	1000	2000	4000
K _{ok}	7	-1	-5	-5	-7	-6
tol.	±3	±3	±2	±2	±3	±4

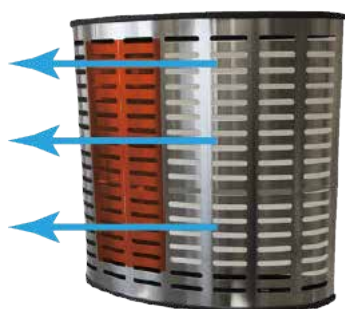
ADJUSTABLE SUPPLY AIR DEVICES

SUPPLY AIR HOOD JSI-R TURBO

Even supply air columns deliver a controlled and flexible distribution of the supply air. Since the supply air columns can be placed on all sides of the hood, air can be supplied to all parts of the kitchen. The number of supply air devices is determined by the total flow to be supplied to the hood. The supply air columns are easy to disassemble for cleaning in the dishwasher.

Horizontal alignment of the supply air

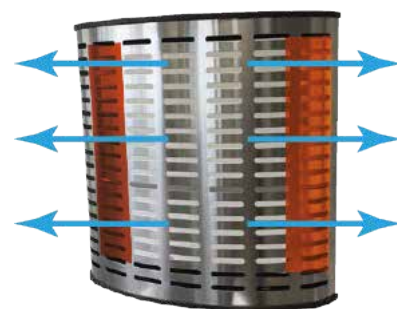
By adjusting the position of the vertical control plates in the spreader, the air can be adjusted laterally.



Unidirectional thrown pattern



Displacement thrown pattern



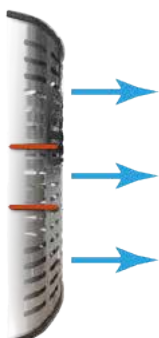
Bidirectional thrown pattern

Vertical alignment of the supply air

By adjusting the position of the horizontal control plates in the spreader, the air can be vertically regulated.



Horizontal control plates



The air is directed forward



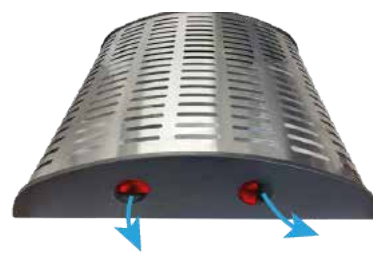
The air is directed upwards



The air is directed downwards

Adjustment of comfort nozzle

In each supply air column there is a comfort nozzle that can be adjusted to give the kitchen staff extra supply air.



SUPPLY AIR

SUPPLY AIR HOOD JSI TURBO

In each supply air devices there is a sound reducing damper plates for individual regulation of the supply air flow. The damper is adjusted from the factory for the current flow with a pressure loss of 25-35 Pa.

The patented damper plates is made of a sound-absorbing material

Recomended air flow

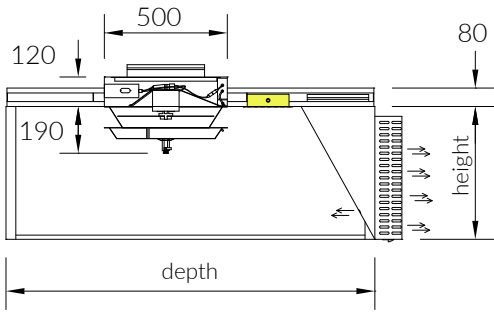
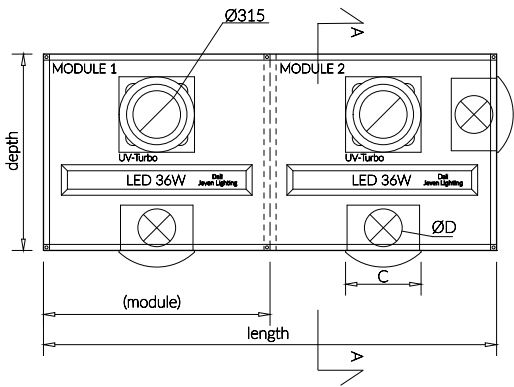
Hood height mm	Supply air unit widht	
	200 mm	500 mm
330	20-45 l/s	50-90 l/s
540	40-75 l/s	100-150 l/s

Sound reduction with open damper

dB		Hz					
Hood height	width	125	250	500	1K	2K	4K
330 mm	500 mm	17	10	10	11	18	24
540 mm	200 mm	24	8	5	12	17	24
	500 mm	16	9	7	11	16	23

DIMENSIONS

SUPPLY AIR HOOD JSI TURBO

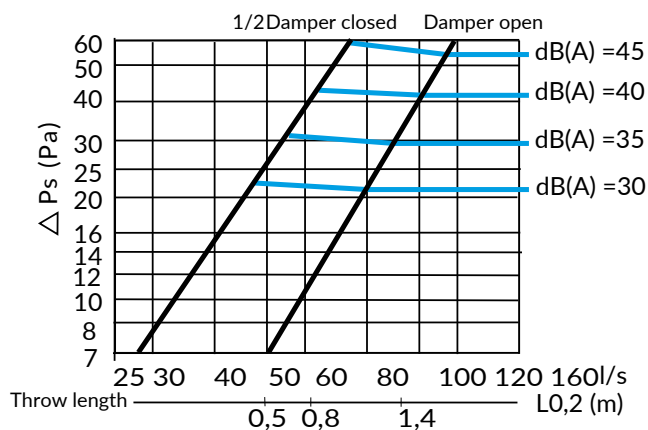


SUPPLY AIR

SUPPLY AIR HOOD JSI TURBO

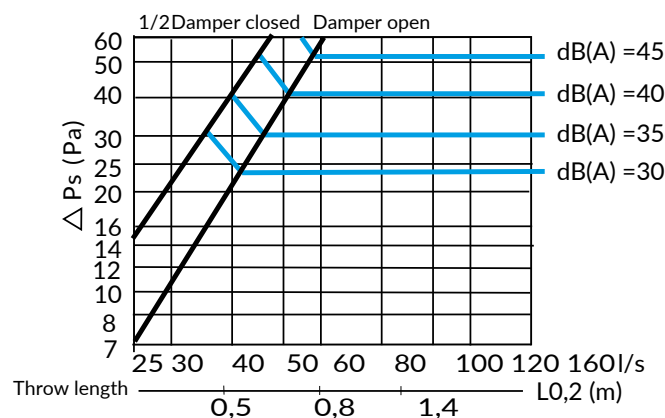
Pressure loss, sound data and throw length for supply air devices. Hood height 330 mm.

Unit width 500 mm, hood height 330 mm.
Spigot Ø 200 mm. LpA



Hz	125	250	500	1K	2K	4K
Kok	-2	7	4	-5	-19	-26
tol.	±6	±4	±2	±2	±3	±5

Unit width 200 mm, hood height 330 mm.
Spigot Ø 160 mm. LpA

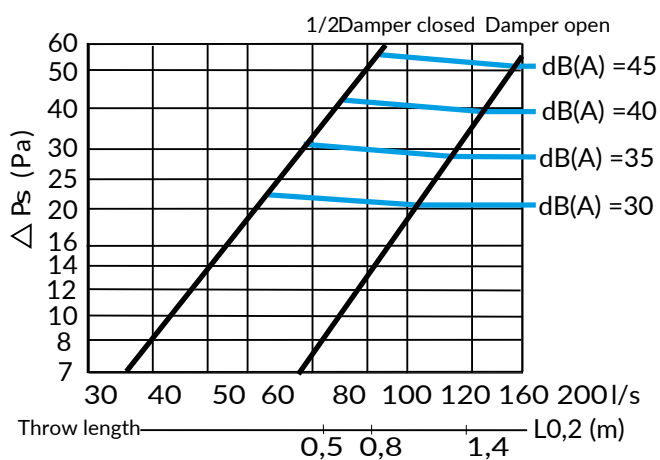


Hz	125	250	500	1K	2K	4K
Kok	-3	0	2	1	-6	-16
tol.	±3	±3	±2	±2	±3	±4

The sound power level (**Lw**) in each octave band is obtained by adding the correction factor (**Kok**) to the actual sound level. (**LpA**) $Lw = LpA + Kok$.

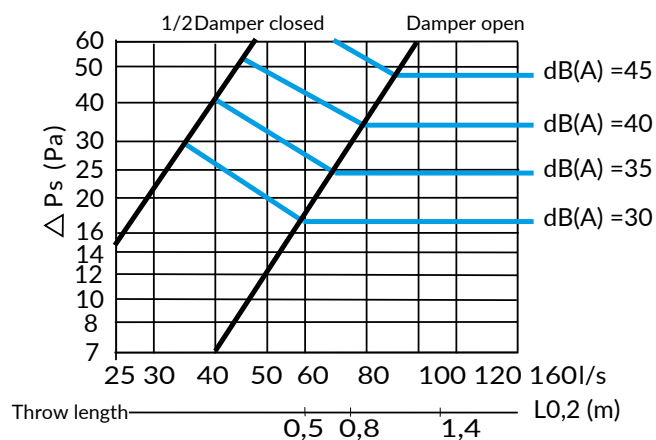
Pressure loss, sound data and throw length for supply air devices. Hood height 540 mm.

Unit width 500 mm, hood height 540 mm.
Spigot Ø 250 mm. LpA



Hz	125	250	500	1K	2K	4K
Kok	6	8	4	-5	-10	-18
tol.	±3	±3	±2	±2	±3	±4

Unit width 200 mm, hood height 540 mm.
Spigot Ø 160 mm. LpA

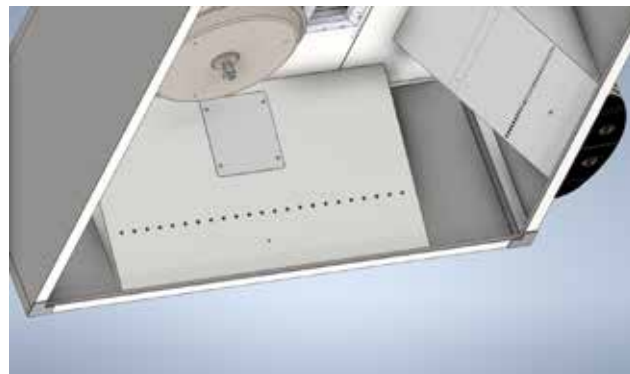


Hz	125	250	500	1K	2K	4K
Kok	-2	1	2	1	-7	-16
tol.	±3	±3	±2	±2	±3	±4

DIRECTION AIR

DIRECTION AIR HOOD JVI TURBO

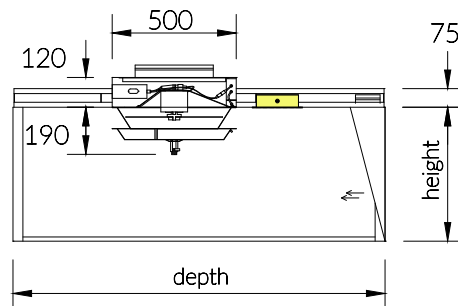
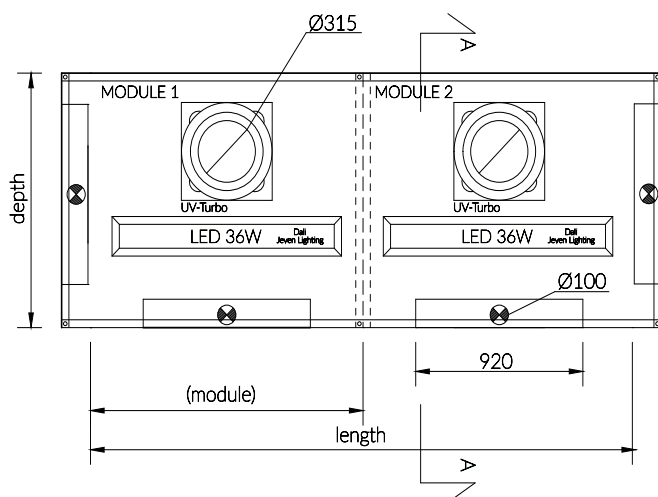
Jeven's direction air diffuser can be placed on all sides of the hood if needed. The direction air diffuser effectively captures the contaminated air and pushes it into the hood towards the grease filter. The direction air diffuser can also be mounted together with supply air devices in a supply air hood.



Direction air unit mounted on the short side in a supply air hood.

DIMENSIONS

DIRECTION AIR HOOD JVI TURBO

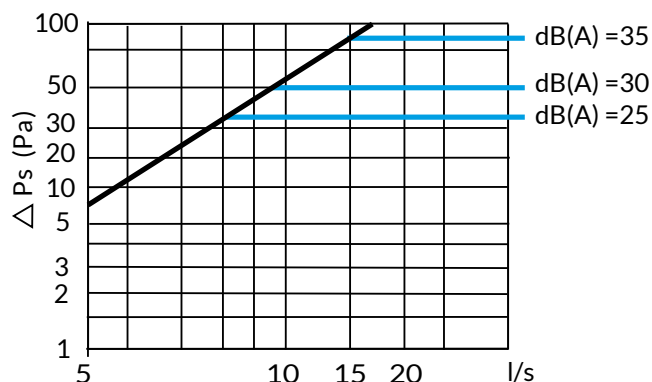


DIRECTION AIR

DIRECTION AIR HOOD JVI TURBO

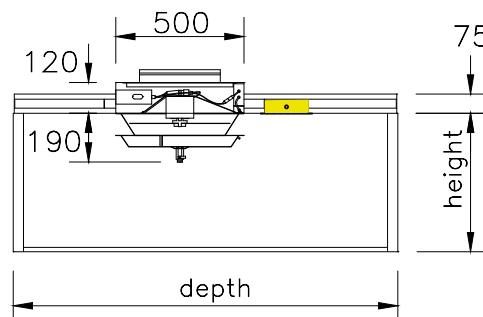
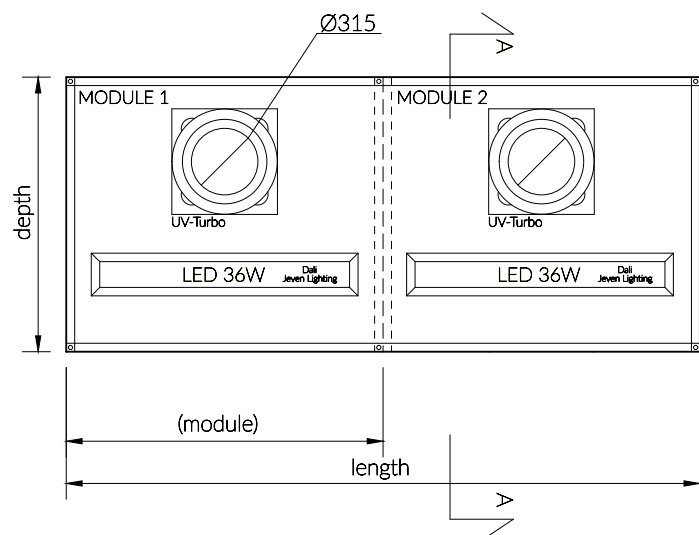
The recommended air flow for each direction air device is 8-15l/s.

Unit width 920 mm,
Hood height 330 or 540 mm.
Spigot Ø 100 mm. LpA



DIMENSIONS

EXHAUST AIR HOOD JLI TURBO



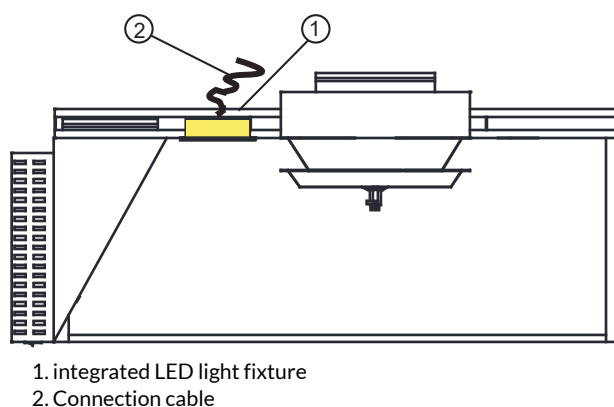
LIGHTING

JEVEN TURBO HOOD



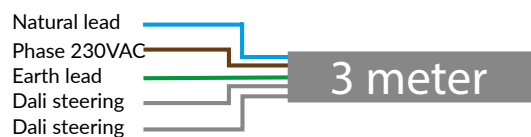
By default, every hood module comes with an energy efficient LED light fixture integrated to the hood's roof.

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



Technical data

Protection class: IP 65
Light sources: LED
Colour Temperature: 4000K
Connection: 3 m cable, type EKK 5x1,5

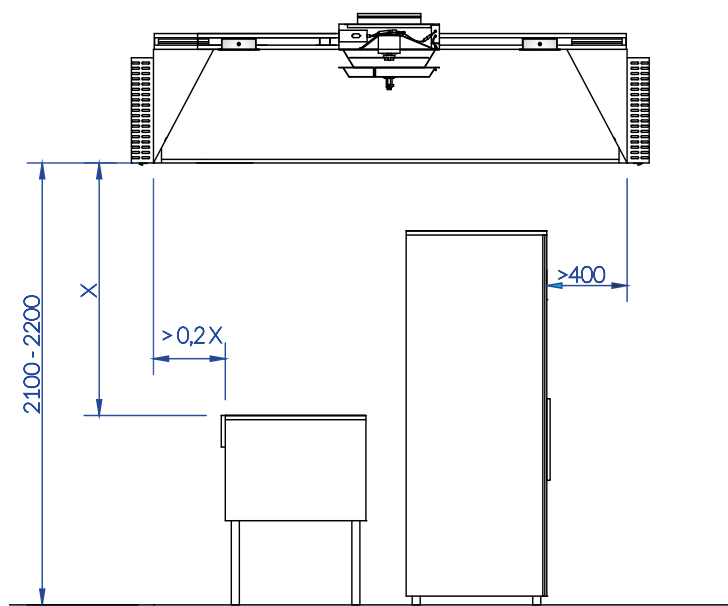


DIMENSIONING OF HOODS

The size of the hood depends on size and placement of the kitchen equipment.

The overhang depends on the type of equipment and the distance between the hood and the equipment. In general, for this type of equipment, the overhang of 400 mm is usually expected. For ovens, an overhang shall be sufficient to cover an open door.

The typical distance between the hood side and the floor is 2100-2200 mm.

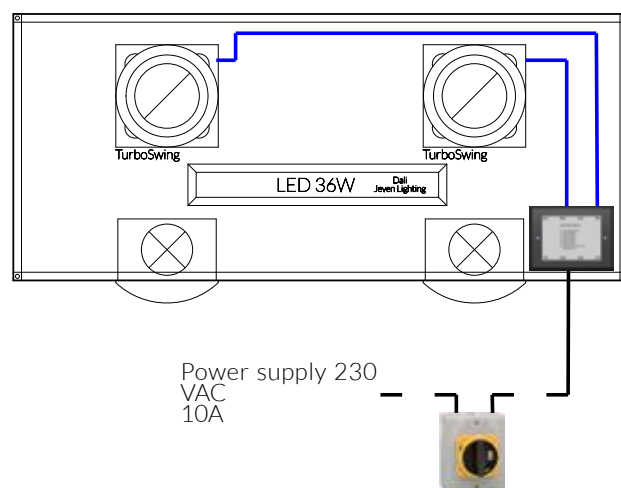


ELECTRICAL CONNECTION

TurboSwing® filter come with cable connected to a branch box on the roof of the hood. Each hood module is equipped with a branch box that handles up to six filters.

TurboSwing can be controlled for continuous operation, but it is recommended that it be switched on so that it operates in parallel with the extract air fan.

A safety switch must be mounted on supply line to ensure that service can be performed without power. Safety switches are not included in delivery from Jeven.



Electrical data TurboSwing®

Supply voltage: 230VAC
Current draw: 0,46 A
Power: 53W
Degree of protection: IP55
CE-confirmed

Turbo *by* **Jeven**

Jeven
Top ventilation for top chefs