



# UV-TURBO HOODS TURBO HOODS

Operating, maintenance and adjustment



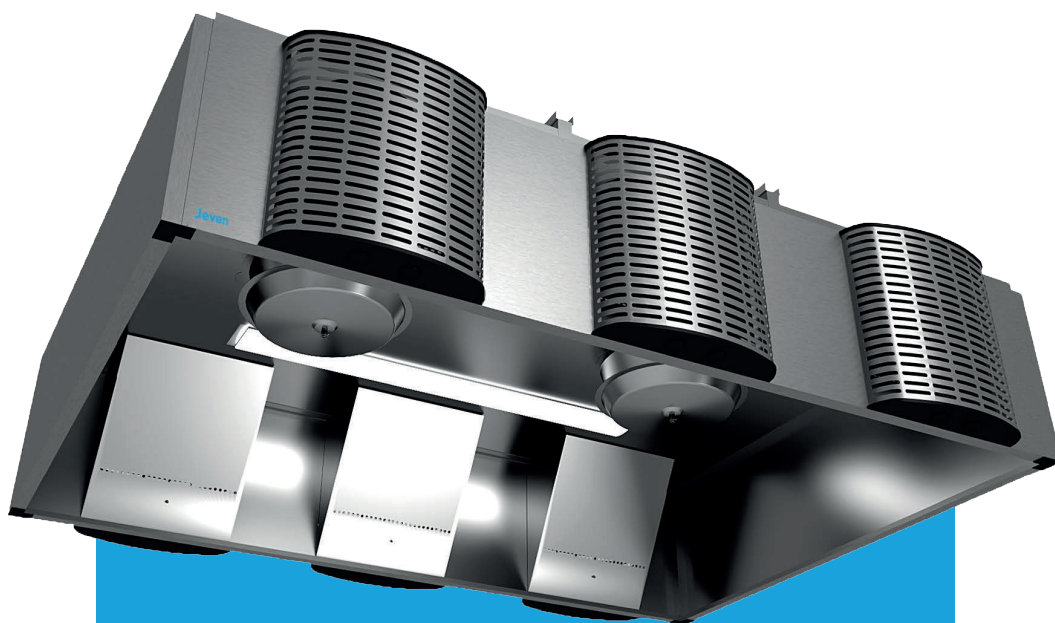
JSI-UV-Turbo  
JVI-UV-Turbo  
JLI-UV-Turbo



JSI-Turbo  
JVI-Turbo  
JLI-Turbo

## Jeven

*Top ventilation for top chefs*



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## JEVEN UV-TURBO® OCH TURBO HOODS

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

Jeven's hoods with TurboSwing® have been developed for professional kitchens requiring energy efficiency and function, as well as a safe and comfortable kitchen climate for the staff. The UV-TurboSwing® filter combines with the high-efficiency mechanical separation of TurboSwing® and the ozone-free UV light purification. TurboSwing® has a constant separation regardless of air flow and can be used to utilize variable air flow energy saving systems and kitchen extract air energy by heat recovery. The excellent filtration efficiency of TurboSwing keeps the ventilation ducts clean, even from the smallest particles of contamination and gaseous grease.



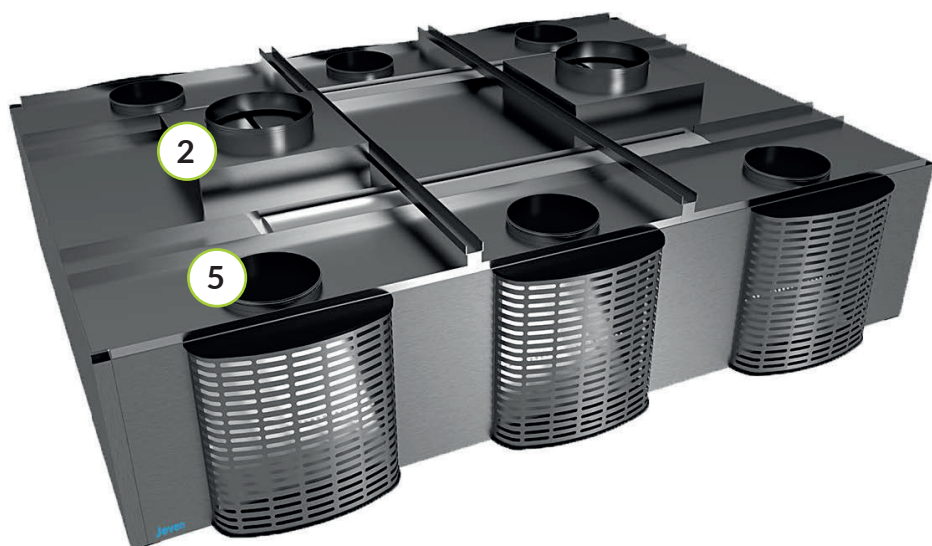
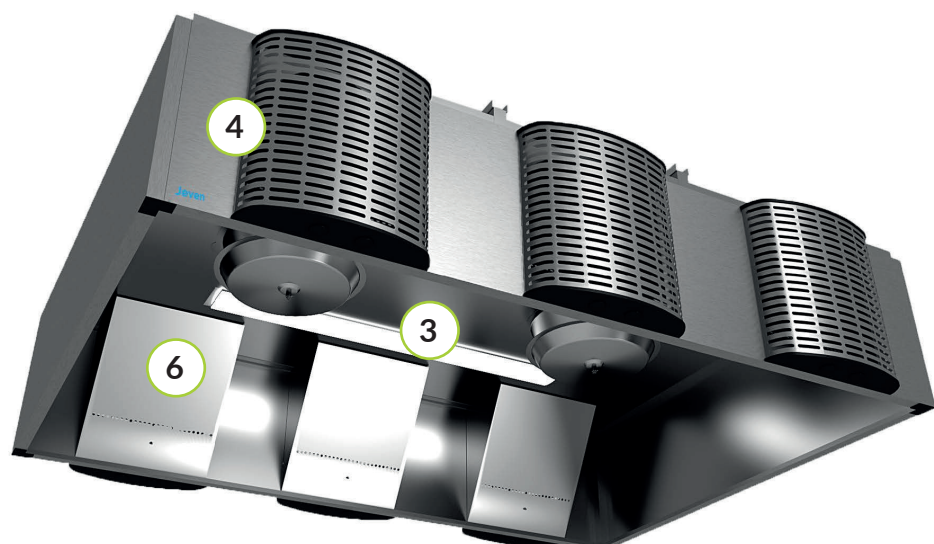


## CONSTRUCTION

### UV-TURBO OCH TURBO HOOD



- 1 UV-TurboSwing/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)





## MAINTENANCE

### EMPTYING AND EXTERNAL CLEANING OF THE GREASE FILTER

Grease that is separated into the TurboSwing filter is collected in a fat collection basin. This is emptied by opening the valve and allowing the grease to drain into a suitable vessel. This should be done daily in heavily loaded kitchens and more rarely in kitchens with lighter loads. While emptying, control the status on the UV light and filter engine by the built-in light indicators.



1. Open the valve.



2 Empty the contents of the filter into a suitable container. Close the valve



3 Wipe the outside of the filter with a soft cloth



4 Make sure that the indicators for Turbo-filter and any UV light purification is lit.



## MAINTENANCE

### CLEANING OF TURBOSWING GREASE FILTER

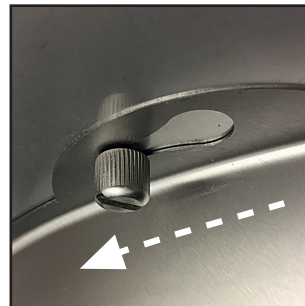
To ensure proper separation in the TurboSwing filter, it is important that the filter is cleaned internally. The filter contains one separation plate with small holes. This should be washed regularly. The interior cleaning of the TurboSwing should be done once a month in kitchens with lighter loads and once a week in kitchens with tougher loads. When servicing, be sure to always stand on solid ground. Always wait for the kitchen equipment to cool down.



- 1 Switch off the power with the safety switch. Check that the indicator light on the filter goes out.



- 2 Open the valve on filters. Empty the contents of a suitable vessel. Close the valve.



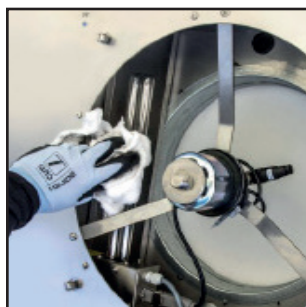
- 3 Loosen the screws that hold the collection basin. Turn the bin counter clockwise to release.



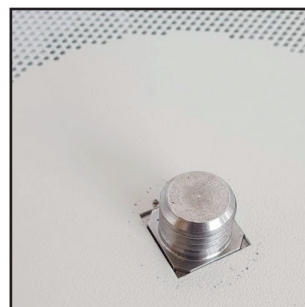
- 4 Remove the separation disc by loosening the nut in the center.



- 5 Wash the collecting basin and separation disc in a dishwasher



- 6 Wipe clean the UV light source with a damp cloth (TurboSwing only).



- 7 Reinstall the separation disc in the center of the motor shaft so that the square guide fits the hole in the disc. Tighten the big nut carefully.



- 8 Reassemble the collection bin by lifting it in place and turning clockwise. Tighten the screws. Check that the basin closes tightly against the ceiling of the roof.



## MAINTENANCE

### CLEANING OF SUPPLY AIR DIFFUSERS AND THE HOOD SURFACES

The supply air diffusers shall be cleaned in connection with the cleaning the kitchen hood. The diffuser can be washed by hand or in a dishwasher

The diffuser is easy disassembled by

- ① Lifting them up slightly
- ② Pull the lower part towards you.



The surfaces of the hood should be cleaned in connection with other cleaning of the kitchen or if necessary. Detergents for stainless steel sheet and soft cloths must be used.



## SERVICE

### CHANGE OF UV LIGHT SOURCE

The UV light in the UV-TurboSwing filter has a life span of about 8000 hours, which corresponds to 1-2 years of use in a kitchen. To ensure the cleaning function in the filter, the UV light should be replaced once a year or when any control systems (UV-control) indicates on lamp replacement. New UV light sources can be ordered from Jeven. Article No. 360200.

#### Important!

Replacement of UV light source may only be performed by a person with the necessary knowledge. Always wear protective gloves when removing and installing a UV light source.

To change the UV light source, first perform step 1-4 on page 6 in this instruction. Remove the old UV light source by pulling it straight out of the luminaire. Mount the new UV light source by pushing it into the luminaire. Then reassemble the filter as shown in figure 7-8 on page 6 in this instruction.



### CHANGE OF ENGINE

Begin with the steps 1-4 on page 6. Then continue with the steps below:



- 5 Unplug the motor cable from the quick coupling



- 6 Remove the engine mounts by loosening them 3 screws in the filter house.

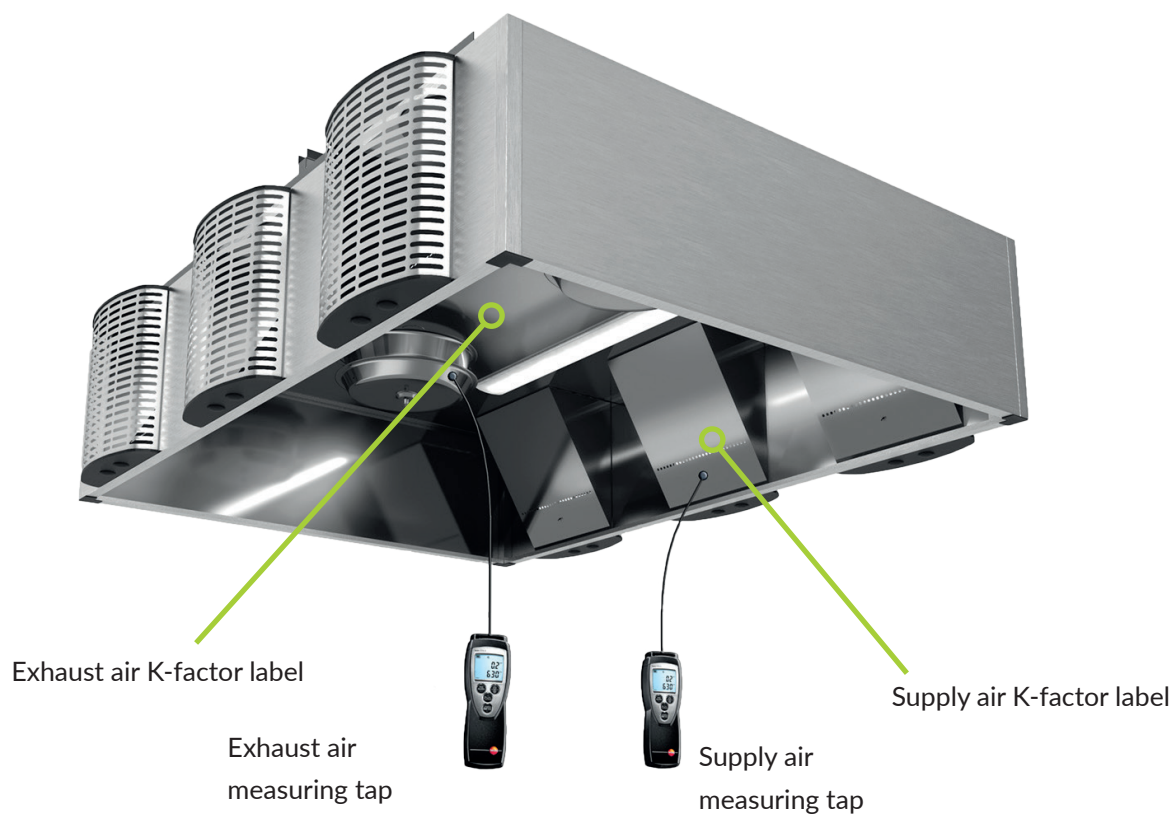


- 7 Reassemble the engine and then continue with step 6-8 on page 6.



## ADJUSTMENT

### PLACEMENT OF MEASURING TAP AND LABELING WITH K-FACTORS



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## ADJUSTMENT

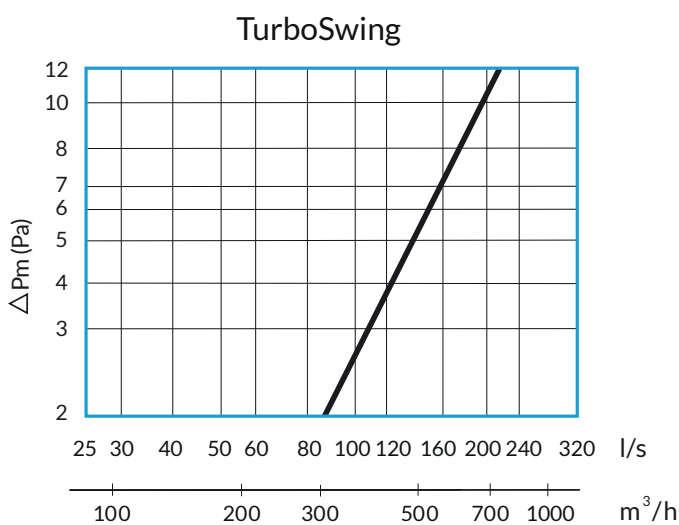
### EXHAUST AIR

TurboSwing should be in operation during measurement.

Measure the pressure in the measuring tap on the collection basin.

Calculate current flow of data and formula from table or retrieve data from diagrams.

$\Delta P_m$ (Pa) Pressure loss measured in the measuring tap.

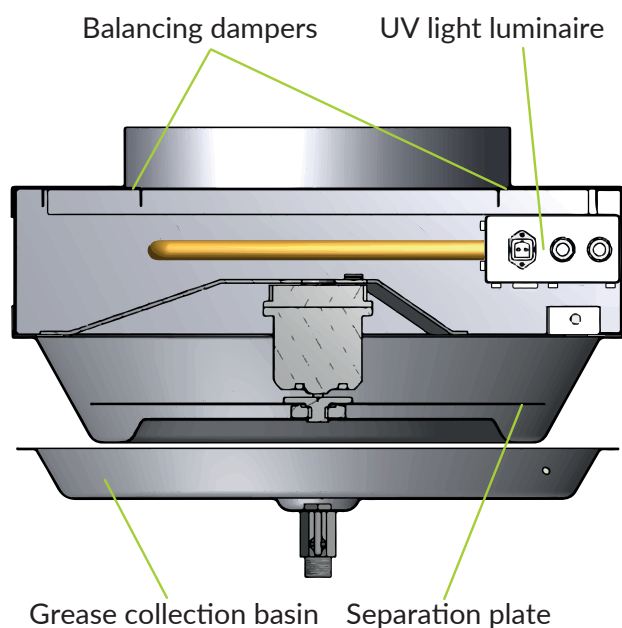


#### K-factor of TurboSwing / UV-TurboSwing

K1 (m³/h) = 218

K2 (l/s) = 60,5

$$Q = K \sqrt{P_m} \quad P_m = (Q/K)^2 \quad \text{Pa}$$



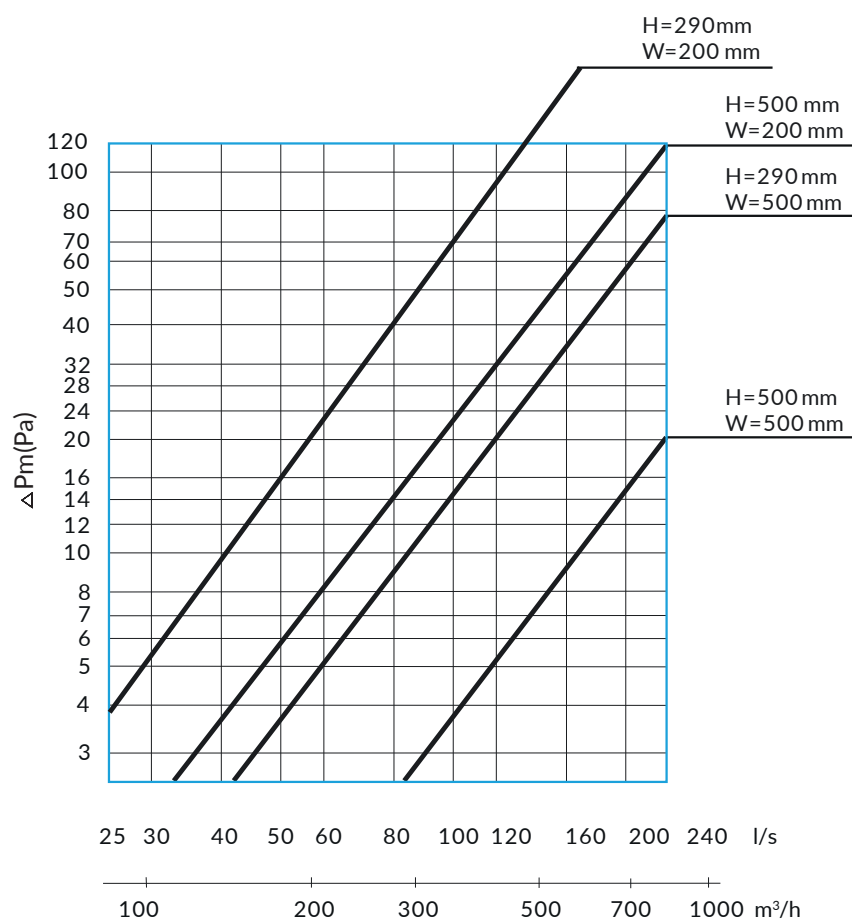
The adjusting damper is reached after disassembling collection basin and separation plate. /See page 7). The air flow is adjusted by pushing together the damper plates.

The damper acts as an adjustment damper to get equal flow over the filter of the hood. The total flow of the hood should be adjusted by a damper in the main duct.

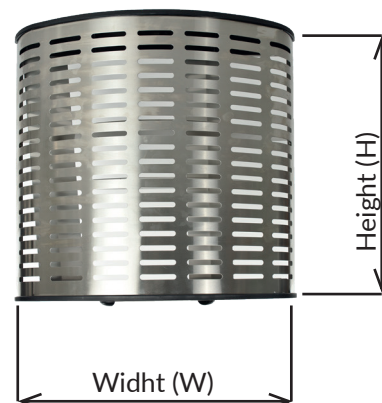


## ADJUSTMENT

### SUPPLY AIR FLOW: JSI UV-Turbo, JSI Turbo



$\Delta P_m(\text{Pa})$  = Pressure measured in the measuring tap



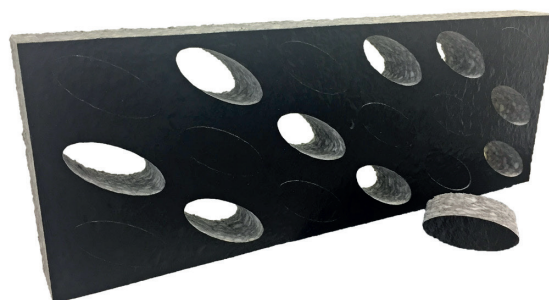
	Hood height mm			
Supply air unit	540	540	330	330
Width (mm)	200	500	200	500
Height (mm)	500	500	290	290
K1 (m³/h)	77.0	192	45.0	96.0
K2 (l/s)	21.4	53.3	12.5	53.3

$$Q = K \times \sqrt{P_m}$$

$$P_m = (Q/K)^2$$

When measuring pressure, the supply air units must be mounted in the supply air device.

The hood is supplied from factory with a preset pressure loss on the supply air of 25-35 Pa for the current flow. The damper is adjusted by removing the supply air units and by adapting the number of open holes in the damper,



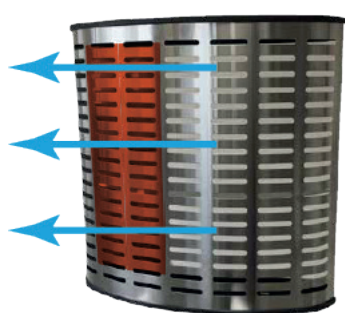
## ADJUSTMENT OF SUPPLY AIR DEVICE

### SUPPLY AIR HOOD: JSI UV-Turbo, JSI Turbo

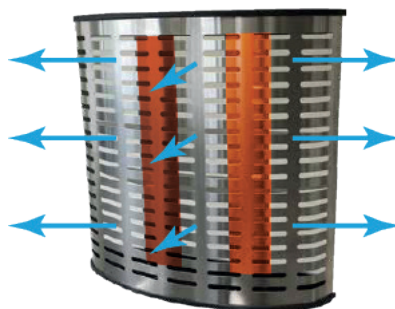
Seven supply air columns deliver a controlled and flexible distribution of the supply air.

#### Horizontal alignment of supply air

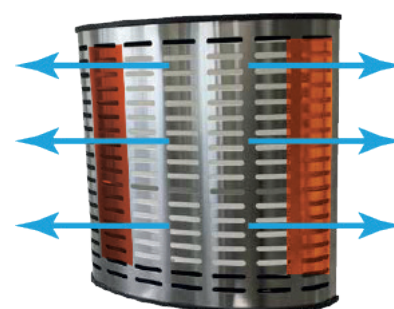
By adjusting the position of the vertical control plates in the spreader, the air can be adjusted laterally.



Unidirectional throw



Displacement  
throw pattern



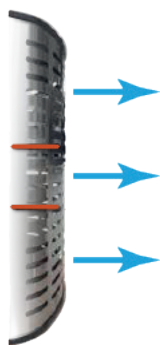
Bidirectional throw

#### 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



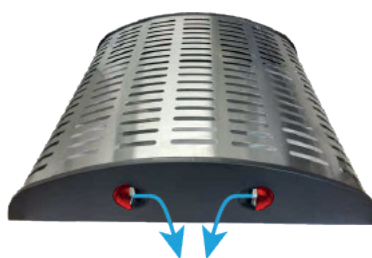
The air is directed  
upwards



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.





## ADJUSTMENT

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DIRECTION AIR FLOW: JVI UV-Turbo, JVI Turbo

Direction air chamber Width (mm)	200	1000
K1 (m³/h)	3.2	6.5
K2 (l/s)	0.9	1.8

$$Q = K \times \sqrt{P_m}$$

$$P_m = (Q/K)^2$$

