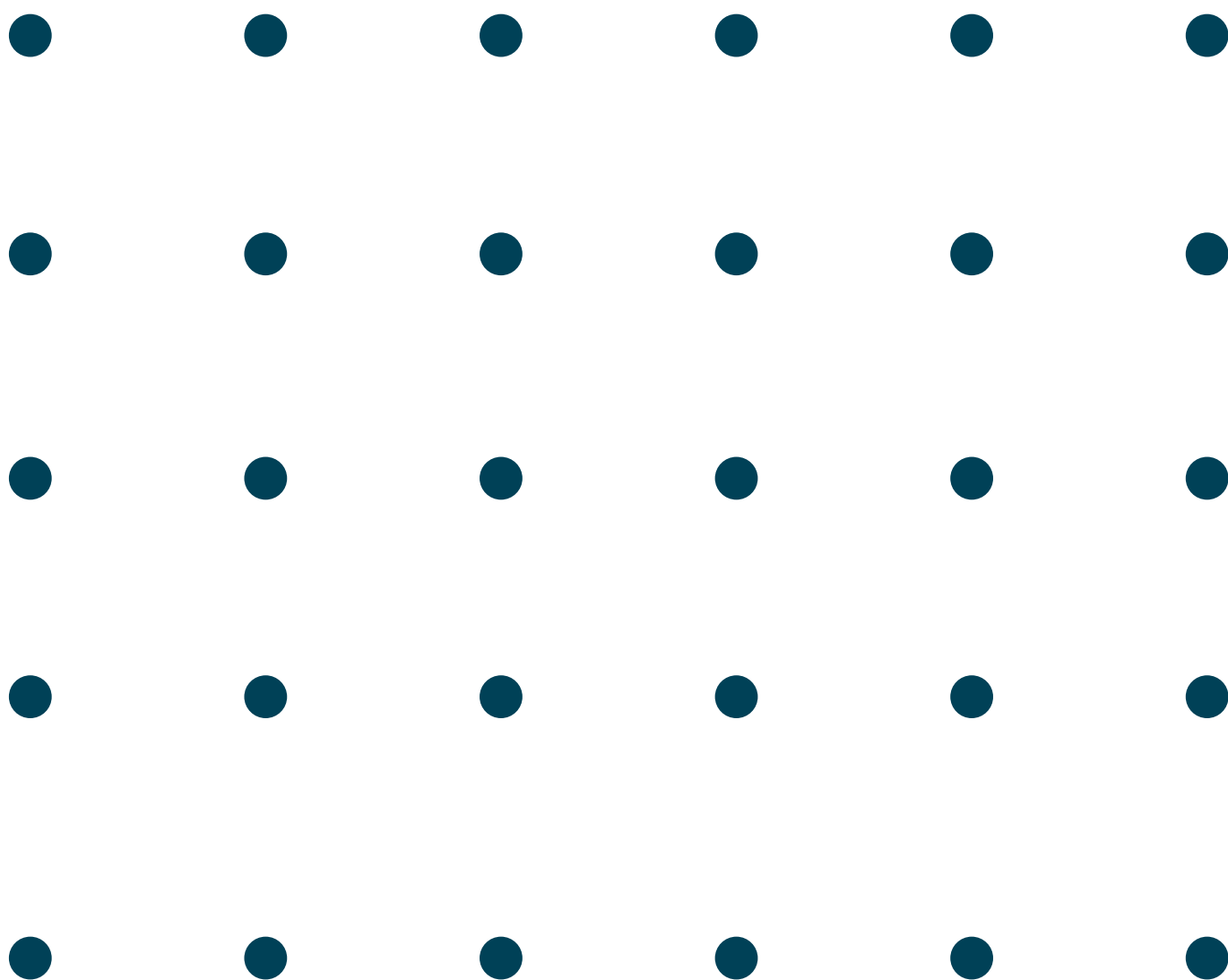


Cyklotec Cyclone filter

Installation, commissioning and maintenance



Efficient filtration even at variable air flows
The constant pressure drop always gives the right exhaust air flow
Increased fire safety

Description

The Cyklotec cyclone filter consists of a filter housing with circular flange, damper and measurement socket and a number of filter cartridges. Each cartridge consists of ten cyclones (spiral-shaped cylinders). A filter cartridge can be replaced with a cover plate.

Installing the filter housing

1. Connect the filter housing to the exhaust duct. Screw the filter housing with up to three cyclone cartridges into the exhaust air duct. Larger filter housings are suspended from the kitchen ceiling.
2. Filter cartridges are inserted into the filter housing's rail system as shown on the right. If a cover plate (replacing a filter cartridge) is supplied, it is fitted in the same way.
3. Adjust the exhaust air flow. Measurement sockets are located on the front of the filter housing.
4. Remove any protective film over sheet metal surfaces when assembly is complete.
5. Clean and polish all metal surfaces.

Cleaning the cyclone filter

Filters should be cleaned as needed. How often depends on the amount and level of hood use, i.e. if the cooking process generates a lot of grease.

The filter cartridges are easily removed from the filter housing for cleaning. Grasp the handle on the front of the cartridge and hold the other hand under the cartridge. Gently pull the cartridge towards you. Pour out any liquid grease from the bottom of the cartridge. The filter cartridge should then be cleaned, upside down, in a dishwasher.



The cyclone filter's measurement socket is located at the top left of the filter housing



Push a filter cartridge into the filter housing



Check that the filter cartridge is fully inserted in the filter housing

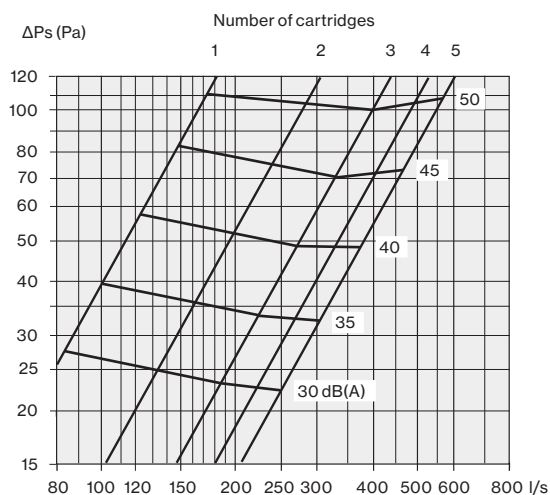
Exhaust air

The number of filter cartridges in Cyklotec cyclone filters is determined by the exhaust air flow. For effective filtering, a pressure drop across Cyklotec of at least 20 Pa is recommended, which corresponds to the lower exhaust air flow rate in the table below. At the higher airflow, the pressure drop is 80-90 Pa.

Exhaust air l/s	Number of cartridges	ØD _c mm	L _c mm
60 - 150	1	250	295
120 - 250	2	315	400
170 - 340	3	400	620
215 - 430	4	400	840
250 - 520	5	400	1060

Air flow - Pressure drop - Noise level

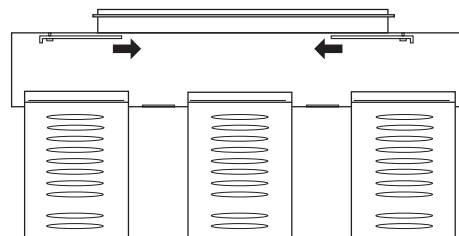
Reported dB(A) values are for 10 m² Sabine, which corresponds to a room attenuation of 4 dB.



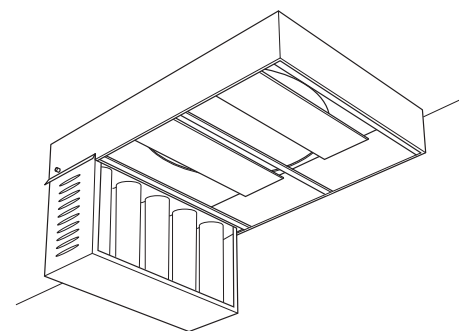
Commissioning of exhaust air

In filter housings with cyclone filters, the exhaust air connection is equipped with a lockable sliding baffle. All sliding baffles are fully open upon delivery. To shift the damper slide to another position, loosen the first the screw on the slide.

All filter cartridges must be installed in the filter housing before commissioning begins. Measure the pressure in the measuring socket on the filter housing.



The slide is located in the filter housing just below the support opening. Push baffle slides sideways



To adjust the damper in the filter housing, some filter cartridges must be temporarily removed. Adjust the damper, put the cartridges back and measure the pressure.

K-factors

The pressure ΔP (Pa) is measured at the measurement outlet. Using the K-factor, the air flow rate q (l/s) is then calculated using the following formula.

$$q \text{ (l/s)} = K \cdot \sqrt{\Delta P}$$

Number of cartridges	K-factor
1	19,2
2	35,1
3	52,7
4	68,6
5	93,2

