

MOVEX[®]

CFE



Dust filter for large airflows with on-demand cleaning.

MOVEX CFE is suitable for filtration of dry particles, dust and welding smoke for mechanical industry.

The filter is manufactured in modules with 2, 4, 6 and 8 horizontally placed filter cartridges for airflows from 600 cfm to 5500 cfm. For larger airflows more filters can be placed parallel in the same system.

Continuous self-cleaning of the filter cartridges with efficient power pulse valves and aerodynamically designed deflectors increase filter media life considerably. The filter cartridges are optimized with maximum filter area in relation to cost. High pressure air cleaning is governed by a programmable system of on-demand filter cleaning during operation and by one or more cleaning cycles when the plant stops for breaks and after the working day.

All components for controlling the cleansing are placed on the clean air side, or recessed in the housing well protected from any outside influences.

When changing the filter there is a system allowing filter replacement without contact with the dirty filter.

The Movex range also includes fans, accessories, automatic control and filters for local extraction

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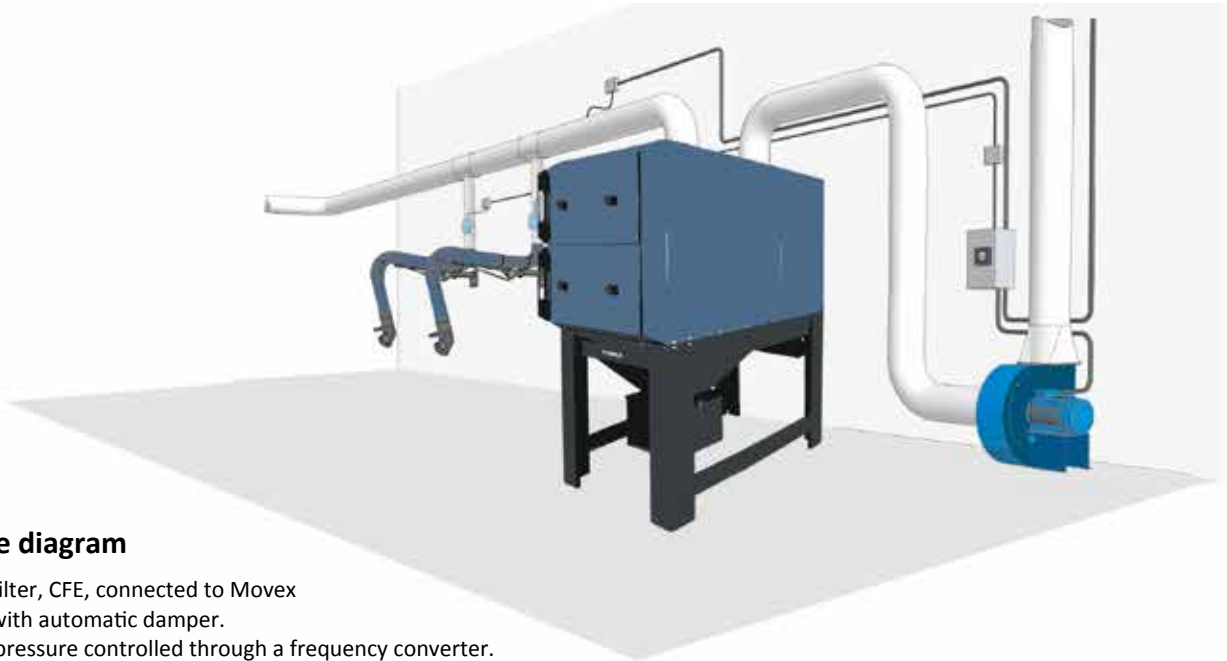
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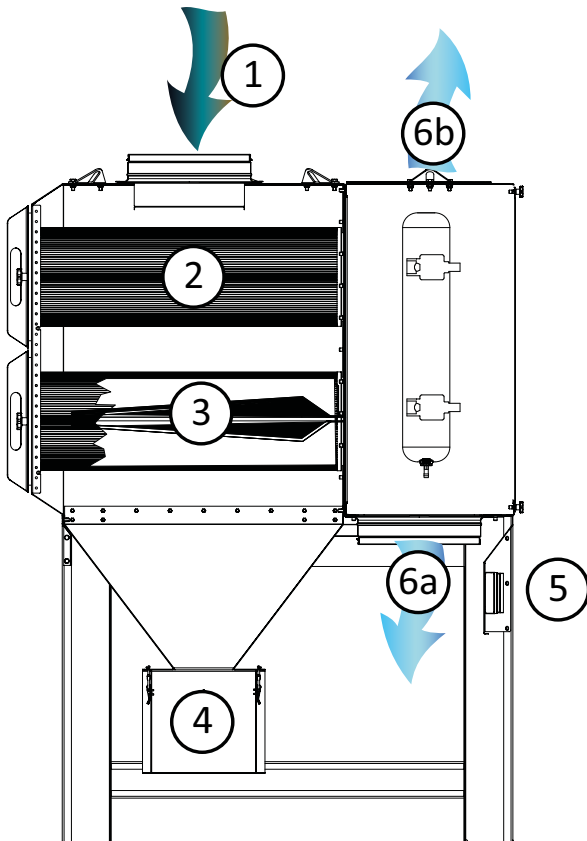
LOCAL EXTRACTORS
Pure advantages



Principle diagram

Cartridge filter, CFE, connected to Movex extractor with automatic damper. The fan is pressure controlled through a frequency converter.

How the cartridge filter works



1. Polluted air enters the filter through the top inlet. The dust naturally falls downwards through the filter.
2. The filter cartridge removes dust with a high separating degree. The horizontal placement of the cartridges facilitates accessibility during service. Filter exchange can be done without contact to the dirty filter.
3. A time controlled diaphragm valve provides high pressure air pulses that dislodge dust particles that collect on the cartridge. A specially designed deflector is used for optimal cleaning of the entire cartridge.
4. The dust particles dislodged from the filter cartridges accumulate in the hopper and are carried down into the dust collector.
5. Controls for on-demand cleaning. Online cleaning means cleaning during operation. Offline cleaning cleans when the plant is not in operation.
6. The clean, filtered air is evacuated through the air outlet. The outlet connector as standard downward 6a but can also be delivered with the connection upwards 6b. Outlet direction can also be changed on site.

Filter types

For normal usage the standard filter CF 195P is recommended.

For demanding applications (gas and plasma cutting), the high quality filter CD 168PH is recommended.

CF 195P	
Standard filter. Used for welding smoke and for dust from stone and metal.	
Material: Type:	Polyester Pleated filter material for optimal efficiency.
Max temp, process air:	140 °F
Filter efficiency:	> 99,9% (DIN EN 60335-2-69)
Dust class.:	M (BIA)
Active filter area:	210 ft ²
Also available in Teflon impregnated polyester and aluminized polyester.	

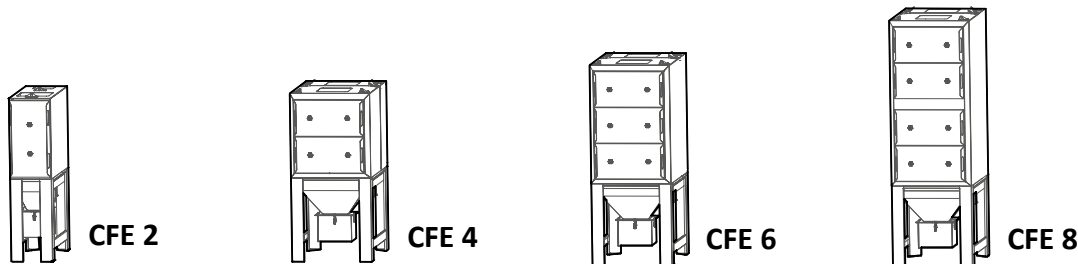
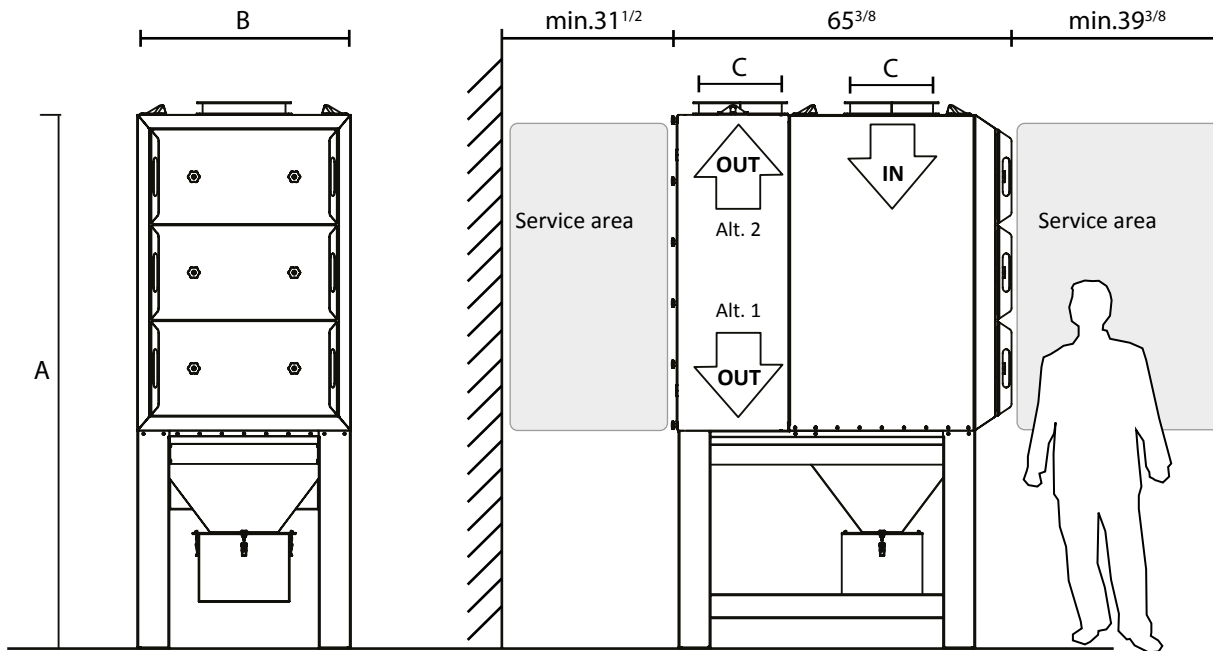
CF 168PH	
High quality filter for demanding applications like gas and plasma cutting. Also suitable for demanding dust filtration with high concentrations of dust.	
Material: Type:	Polyester Corrugated filter material for optimum efficiency at the lowest pressure drop.
Max temp, process air:	140 °F
Filter efficiency:	> 99,9% (DIN EN 60335-2-69)
Dust class.:	M (BIA)
Active filter area:	180 ft ²
Also available with antistatic filter media (<10 ⁸ Ohm).	

Controls for on-demand cleaning



Automatic control of filter cleaning with continuous pressure drop measurement over the filter cartridges.

- On-demand cleaning through pressure sensors over the filter cartridges.
- Cleaning of one cartridge at a time for minimal compressed air usage.
- On-demand cleaning of filter during operation when the pressure drop exceeds the set value, (online cleaning). Ensures stable air-flow.
- Cleaning of the filter after the fan has stopped during breaks and after the working day (offline cleaning). Particles fall into the dust collector.
- The pressure drop over a filter can be read during operation.
- Controls are placed internally in the filter or recessed in housing or framework well protected from any outside influences
- A door is placed on the clean side for service.



Designation	Quantity cartridges	Filter type Area ft ²		A in	B in	C in	Weight lb
		CF 195P	CF 168PH				
CFE 2	2	420	360	84 1/4	21 5/8	Ø10	595
CFE 4	4	840	720	85 13/16	42 1/8	Ø15 3/4	882
CFE 6	6	1260	1080	104 15/16	42 1/8	Ø15 3/4	1146
CFE 8	8	1680	1440	128 3/4	42 1/8	Ø15 3/4	1587

Technical data

CFE filter

Maximum operating pressure... 20 in/wg (negative pressure)
 Dust container volume 13 gal

Material

Module Casing and frame are made from powder coated sheet steel.

Compressed air

Air consumption 7 - 17,5 cfm dur
 Max pressure 100 psi
 Normal working pressure 50 psi

Controls

Pulse time 0,08 – 0,12 sec
 Ambient temperature 15 °F to 120 °F
 Voltage 115 V
 Voltage valves 24 VAC
 Protection class IP 65

Delivery

Filters are always delivered fully assembled and test run. Each module is equipped with lifting eyebolts for easy handling.

Installation.

The CFE filter is intended to be assembled before the fan. The filter should be weather proofed with a built-in or lean-to roof. Connection should be made to a circular, air tight duct.

Air volume filter

Adjustment can be made with Movex pressure controls or flow controls.

Compressed air

Air quality: Clean and non-oily air, free from condensation at current operating temperature.

