Photo:
High vacuum unit type HFU

Photo:
High vacuum unit type HFU-F

Compact high vacuum unit that can be used as central vacuum cleaner for cleaning or hand tool connection. Compressed-air cleaned filter unit with timer control built together with side channel blower in sound enclosed cabinet and mounted on strong transport platform.

Plug & Play model HFU-F is with built-in frequency converter and motor with thermal fuse.

HFU/HFU-F:	Air volume:	Up to 1,100m³/h
	Vacuum:	Up to 38,000Pa
	Filter area:	13m²

Description filter unit type CJF

- Polluted air is led into unit through tangential inlet in raw air chamber top. Hereby downflow and preseparation by cyclone effect are ensured, which contributes to load reduction on the filter media itself.
- Air is filtered through vertical-placed filter cartridge with internal filter core, which optimizes cleaning effect.
- Timer-controlled filter cleaning by integrated compressed-air system with pressure tank and jet valve.
- The clean air is led out through ø125mm-connection (muff measurement) in cabinet top. Sound is damped by channel silencers on outlet integrated in unit.
- Dust is collected in dust container in unit bottom. Quicklock-adjustable dust container system suspended in ø400mm system flange.

Description side channel blower type VBH

- Side channel blower is placed on vibration absorbers in sound enclosed cabinet.
- Vacuum limiter mounted on inlet.
- Guided cooling air by cooling ribs in cabinet.

Optimized moveable vacuum cleaner solution with long operation times

Side channel blower as vacuum pump and automatic filter cleaning by compressed-air enable continually operation. The compact construction on strong transport platform ensures that the vacuum cleaner unit can be moved from one production place to another and do not occupy much space.

Moveable unit
Built on a strong transport platform. Easy to move by hand pallet truck or fork lift by fork pockets.

Easy connection
230V-electrical cable with plug and ø8mm-compressed-air hose are located on unit front.

Plug & Play-unit HFU-F
CEE-plug as well as start/stop-switch for side channel operation by frequency converter are placed on unit front (except HFU-F 20000). Frequency converter is read through front door window.

All maintenance done through front door
Maintenance incl. dust container emptying is done from unit front. Quicklock-adjustable dust container on 4 wheels ensures user-friendly dust container service.

Filters:
- Filter cartridge ø325mm. Length: 660mm

Filter control:
- Type Tec 33-timer control without automatic after-cleaning. 230V AC (constant) Should be connected with delayed disconnection in relation to fan stop to obtain after-cleaning
- Compressed-air: 5.5 - 6.0 bar dry compressed-air. Unit equipped with ø8mm pneumatic hose
- Differential pressure displayed in integrated manometer
- 1”-jet valve connected to central compressed-air tank in clean air chamber

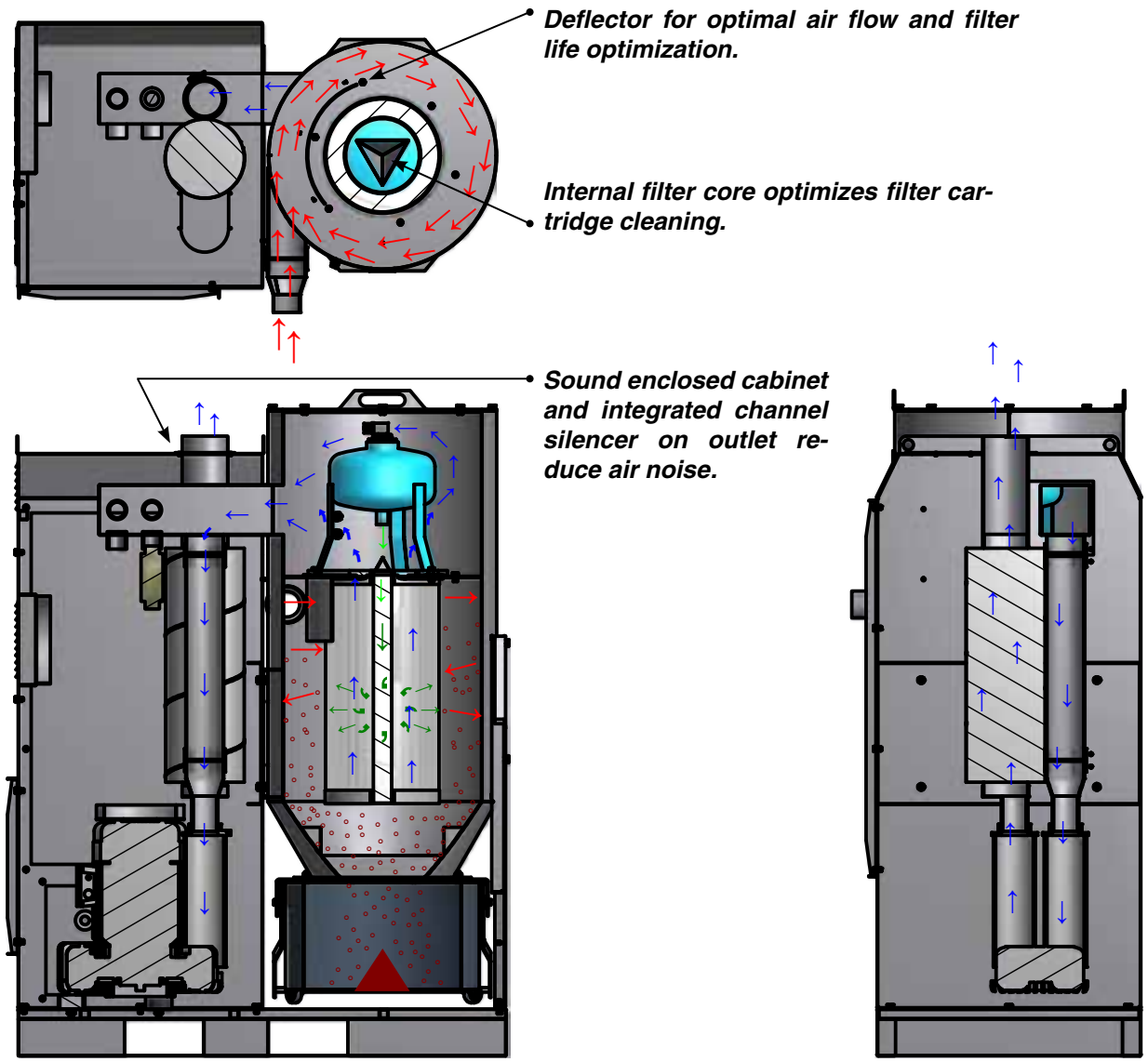
Filter change: Standard from clean air chamber top

Filter material:

Standard	Material	Used for
G102	Polyester flake	Dry not-static loaded or hygroscopic dust particles > 0.2µm
Alternative		
G105	Cellulose/Polyester	Welding/soldering
G113	Polyester flake with PFPT-coating, antistatic	Static-loaded or hygroscopic particles
G115A	Polyester flake with teflon membrane	Finer dust sorts, e.g. cutting smoke from plasma, flame and laser cutting
G116A	Polyester flake with teflon membrane, antistatic	Finer static-loaded dust sorts

The filters meet demands for extraction degree for dust class M according to DIN EN 60335-2-69 Appendix AA (extraction degree > 99.9%).

Principle sketch for flow through high vacuum unit type HFU/HFU-F:



Construction/surface:
High vacuum unit type HFU/HFU-F is constructed according to:

- Machine directive 2006/42/EU
- EMC-directive 2004/108/EU
- Directive 97/23/EU about pressure equipment
- Low voltage directive 2006/95/EU
- Harmonized standards: EN 349, EN 4414, EN 12100, EN 60204-1, EN ISO 13857
- Further standards: ISO 3746

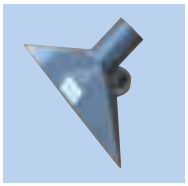
Filter cabinet is made in 2mm black steel plate
Surface powder enamelled RAL 5007/7011 structure

Rev. 10.15

Further is available:

- Version in hot-galvanized, enamelled steel plates for outdoor mounting
- Filter replacement from unit side
- Filter control type BA, differential pressure control automatic after-cleaning
- Sack holder for 72L dust container
- ½"-water separator with manometer and pressure reducing valve
- Various high-pressure piping, fittings and coupling for fixed unit assembly
- Various sliding dampers and flap valves that possibly can be equipped with micro-switch for extraction start
- Various controls and system surveillances
- Various pin-point extractions, hoods, slot nozzles, plastic adapters for valves, hoses and cleaning equipment
- Explosion-protected/-reliefed version for installation in ATEX-zones (see ATEX data sheet)

Various high-vacuum components and ABB-frequency converters are available.



Flap valve type KV (left) and slot nozzle type VSPL with magnet - see product group 6.

High vacuum unit type HFU/HFU-F is available in the sizes as stated in the forms below.

Please, contact us for assistance in selecting the optimal unit taking into consideration air volume, dust type and volume, operation times etc.

High vacuum unit type HFU:

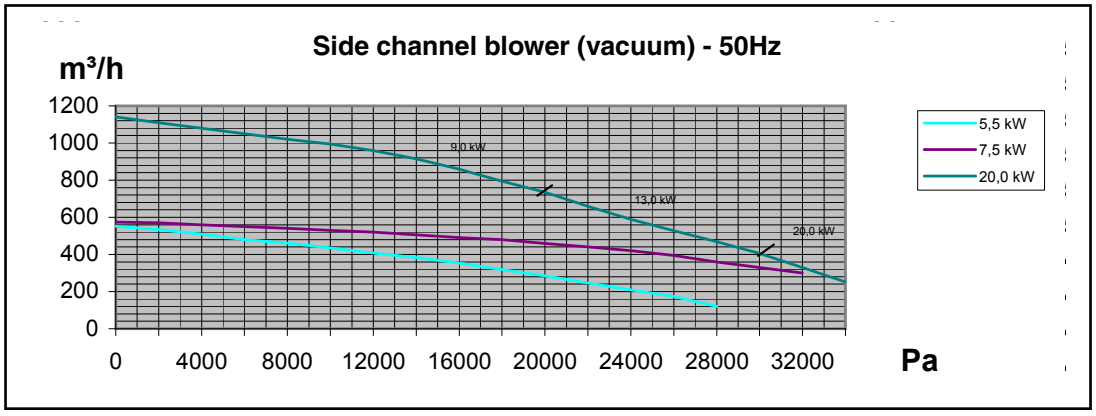
Type	Order no.	△ P start/end [2] [Pa]	At 50Hz [kW / Amp] [3]	Number filter cartridge	G102 filter area [m²]	G105 filter area [m²]	Compressed air [L/min.]	Dust container [L]	Weight [kg]
HFU 5500	04 510 000	200/2000	5.5 / 12.0	1 [1]	13	21	30	72	360
HFU 7500	04 511 000	200/2000	7.5 / 15.6	1 [1]	13	21	30	72	370
HFU 9000	04 512 000	200/2000	9.0 / 20.8	1 [1]	13	21	30	72	375
HFU 13000	04 513 000	200/2000	13.0 / 27.0	1 [1]	13	21	30	72	380
HFU 20000	04 514 000	200/2000	20.0 / 38.6	1 [1]	13	21	30	72	395

High vacuum unit type HFU-F with built-in frequency converter:

Type	Order no.	△ P start/end [2] [Pa]	At 60Hz [kW / Amp] [3]	Frequency converter [kW]	Number filter cartridge	G102 filter area [m²]	G105 filter area [m²]	Compressed air [L/min.]	Dust container [L]	Weight [kg]
HFU-F 5500	04 510 300	200/2000	6.3 / 15.3	7.5	1 [1]	13	21	30	72	380
HFU-F 7500	04 511 300	200/2000	8.6 / 19.6	11.0	1 [1]	13	21	30	72	390
HFU-F 9000	04 512 300	200/2000	11.0 / 21.4	11.0	1 [1]	13	21	30	72	395
HFU-F 13000	04 513 300	200/2000	15.0 / 30.0	15.0	1 [1]	13	21	30	72	400
HFU-F 20000	04 514 300	200/2000	23.0 / 44.0	30.0	1 [1]	13	21	30	72	415

[1] Filter cartridge ø325 x 660mm/ø13.5mm, 13m², G102 (08 128 100) as well as delivered with 1 piece jet valve
[2] Pressure drop stated over filter cartridge
[3] Motor voltage: 3 x 400/690V

Side channel blower for high vacuum unit type HFU (50Hz):



Side channel blower for high vacuum unit type HFU-F (60Hz):