



Compact filter unit with manual Roto-cleaning for tasks of shorter duration and with smaller material volume . Suitable for filtration of air from dust and chip making processes with short operation intervals, e.g. in connection with grinding machines and smaller blast cabinets, it is an anvantageous solution that easily does the job.

Is available with mounted fan, type CFR03/VT500 or CFR05/VL750 on top of unit.

### CFR

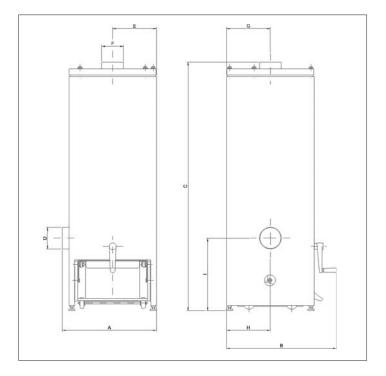
Air volume : Vacuum : Filter surface :

#### CFR-V

Air volume : Vacuum : Filter surface : Up to 5000 Pa 3 to 3.75 m<sup>2</sup>

Up to 560 m3/h

Up to 560 m³/h Up to 40000 Pa 3 to 3.75 m²



#### Functioning :

- Polluted air is led by inlet on the left unit side into pre-separator chamber, where larger dust particles / chips are separated to dust container below in unit.
- Air is led up and filtrated by vertical-placed filter cartridge.
- Manual filter cleaning by Roto-cleaning. When outside handle is turned, filter pleatings are touched from the inside, and dust and chips are thus shaken free. Filter cleaning may only be operated/ activated at operation stop.
- Clean air is led out through top unit outlet.
- Dust and chips are collected in dust container below in unit. Dust container is mounted by Quicklock-adjust-able dust container system and equipped with 4 pcs. external wheels ø50 mm.



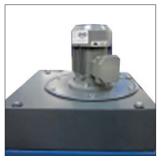
After use the filter is easily cleaned by turning the external handle 5 - 10 times.



Easy emptying of dust bucket Quick-lock-adjustable dust bucket on 4 wheels ensures user-friendly handling.

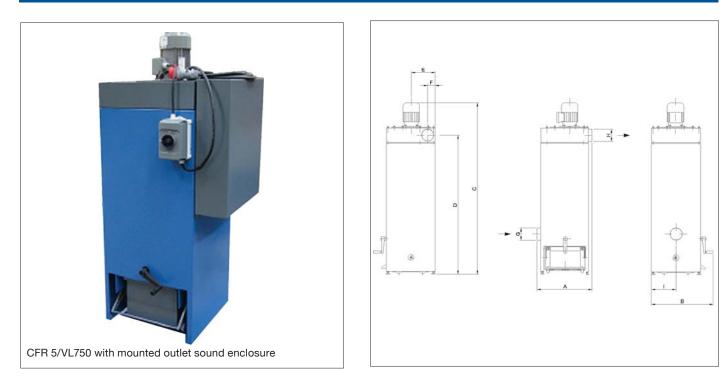


Easy filter replacement from unit top Top plate with integrated outlet is dismounted and cartridge can be replaced.



**CFR-unit fan top mounting** which makes it a very compact and space-saving unit (not possible on the CFR-V version).





### Dimensions :

Туре	Α	В	С	D	Е	F	G	Н	I
	(mm)								
CFR 3	435	505	1110	Ø100	202	Ø100	202	202	328
CFR 5	535	605	1180	Ø125	252	Ø125	252	252	392
CFR 3/VT500	465	505	1385	1134	198	63	Ø100	Ø100	202
CFR 5/VL750	565	605	1500	1207	273	71	Ø125	Ø125	252
CFR 3-V	435	510	1150	76	202	76	202	202	334
CFR 3-V	535	610	1120	108	252	108	252	252	398

## Filter unit CFR (max. 5000Pa):

Туре	Delta P <sup>1)</sup> Start/stop	Filter area (m²)	Dust bucket (L)	Weight (kg)
CFR 3	300/2000	3.00 <sup>2</sup> )	13.0	30.0
CFR 5	300/2000	3.75 <sup>3)</sup>	21.0	50.0
<sup>1)</sup> Pressure drop stated over filter cartridge		<sup>2)</sup> Staubmaster ø320x500 mm, 3.00 m³, G101	<sup>3)</sup> Staubmaster ø400x50	10 mm, 3.75 m³, G101

### Filter unit CFR with top-mounted fan (max. 5000Pa) :

Туре	Motor power <sup>4)</sup> (kW)	Delta P <sup>1)</sup> Start/stop	Filter area (m²)	Dust bucket (L)	Weight (kg)
CFR 3/VT500	0.37	300/2000	3.00 <sup>2)</sup>	13	55.0
CFR 5/VL750	0.75	300/2000	3.75 <sup>3)</sup>	21	85.0

<sup>1)</sup> Pressure drop stated over filter cartridge <sup>2)</sup> Staubmaster ø320x500 0mm, 3.00 m<sup>3</sup>, G101

<sup>3)</sup> Staubmaster ø400x500 mm, 3.75 m³, G101 <sup>4)</sup> 3x400 V, 2800 rpm

### Filter unit CFR-V (max. 40000Pa) :

Туре	Delta P <sup>1)</sup> Start/stop	Filter area (m²)	Dust bucket (L)	Weight (kg)
CFR 3-	/ 300/2000	3.00 <sup>2)</sup>	13	30.0
CFR 5-V	/ 300/2000	3.75 <sup>3)</sup>	21	50.0
1)			3)	

<sup>1)</sup> Pressure drop stated over filter cartridge

<sup>2)</sup> Staubmaster ø320x500 mm, 3.00 m³, G101 <sup>3</sup>

<sup>3)</sup> Staubmaster ø400x500 mm, 3.75 m<sup>3</sup>, G101



CFR & CFR-V: OUTLÊT OUTLÊT OUTLET OUTLET

Working principle of flow through filter unit CFR & CFR-V and CFR with fan :

### Filter media :

Filter cartridge type Staubmaster ø320 or ø400 mm, length: 500 mm

Model	Туре	Material	Application
G101	Standard	Polyester flake	Dry not-static loaded or hygroscopic dust particles > 0.2 $\mu$ m
G113	optional	Polyester flake with PFPT- coating, antistatic	Static-loaded or hygroscopic particles
G116A	optional	Polyester flake with teflon membrane, antistatic	Finer static-loaded dust sorts

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

### **Options:**

- Hot-galvanized, enamelled steel plates for outdoor mounting
- Reductions for inlet and outlet
- Outlet sound enclosure (for CFR-unit with fan)
- Filter guard (pressure sensitive switch) for measuring differential pressure above filter

## Surface :

FA.T09.FILTERS.2022.NSV4.2.EN

The filter cabinet is made in 2 mm black steel plate. Surface powder enamelled RAL 5007/7011.

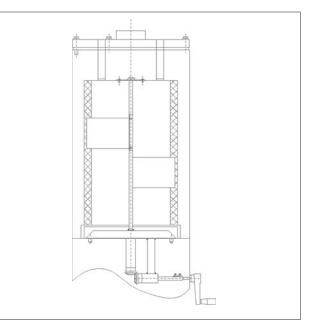
### **Construction :**

- Filter unit type CFR & CFR-V is constructed according to :
- Machine directive 2006/42/EU
- EMC-directive 2014/30/EU
- Directive 2014/68/EU about pressure equipment
- Low voltage directive 2014/35/EU
- Harmonized standards : EN 349, EN 4414, EN 12100, EN 60204-1, EN ISO 13857
- Further standards: ISO 3746

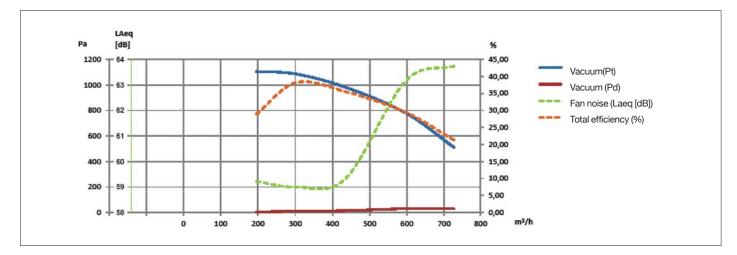


## Filter cleaning :

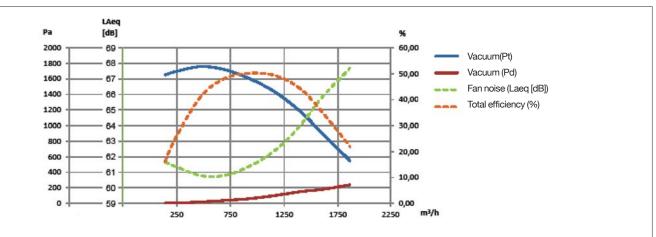
Filter cartridge is cleaned manually after stopped use by activating Roto-cleaning, which operates by rotating plastic strips cleaning the filter on the inside - also between the pleatings. Is activated by turning outside handle 5 -10 times, when fan has stopped.



## Fan type VT500 functioning curves at 2800 rpm



### Fan type VL750 functioning curves at 2800 rpm





### **CFRS** cartridge Roto-filters



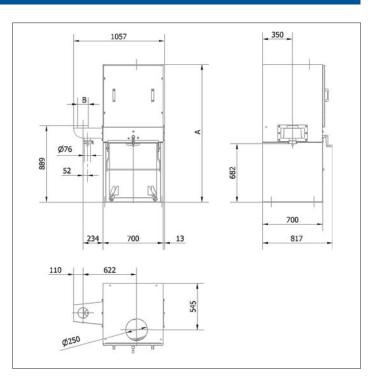
Filter unit with manual or automatic Roto-cleaning (CFRS-MAN or CFRS-AUT). Suitable for use in schools and in smaller workshops, where the filter can be used to extract from machines and use tap for cleaning. Available as single cabinet with 10 to 20 m<sup>2</sup> filter surface or as double cabinet with 40 m<sup>2</sup> filter surface.

Air volume : Vacuum : Filter surface: Up to 6000 m<sup>3</sup>/h Up to 10000 Pa 10 to 40 m<sup>2</sup>

Fans type VL, VE as well as VPH or RVH can be built on top of CFRS 10 to 20 (single cabinet).

#### Simple filter unit with several application possibilities

With a CFRS filter unit you obtain a simple filter solution that with its compact design easily can be adapted to the production area and connected to several different chip and dust making machine types in both the wood as well as the metal industry and at the same time be used for cleaning purposes. Requires no compressed-air connection, but cleans easily by Roto-cleaning.



#### Functioning :

- Loaded air is led by 90° inlet (vertical connection) on the left filter unit side into preseparator chamber, where larger dust particles/ chips are separated to dust container below in unit. Inlet can alternatively be place on the right side.
- Air is led up and filtrated by vertical-placed filter cartridge.
- Manual or automatic filter cleaning by Roto-cleaning that works by touching the filter pleatings inside with rotating plastic strips, whereby dust and chips are shaken free. Manually it happens by turning the outside handle, alternatively a gear motor is engaged to Roto-cleaning is activated automatically. Filter cleaning may only be activated/operated at operation stop.
- Clean air is led out through top unit outlet.
- Dust and chips fall down into container (72/150 L) or 240/380 L sack suspended in sack cabinet below in unit.
- Built-in ø76mm flap valve for cleaning around unit after dust container emptying or other service.



**Easy filter cleaning** After use the filter is easily cleaned by turning the external handle 5 - 10 times.



Easy emptying of dust bucket Quick-lock adjustable dust bucket on 4 wheels ensures user-friendly handling.



Easy filter replacement from unit front Front plate with integrated handles is dismounted and cartridge can be replaced.

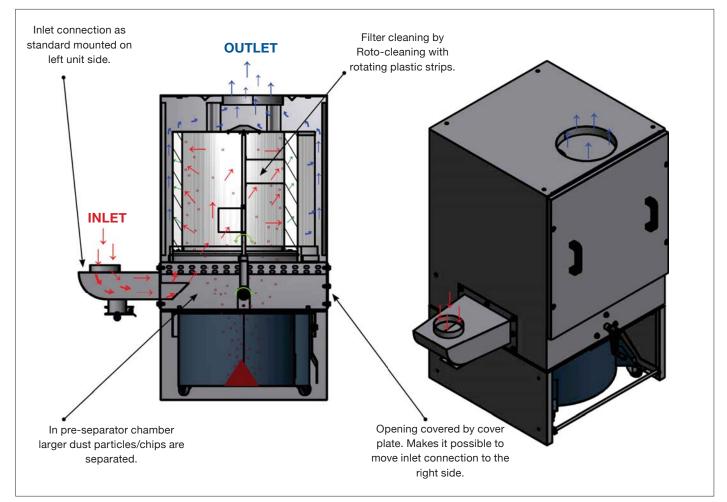


**Cleaning tap** Built-in flap valve Ø76 mm on inlet connection for cleaning around unit af-ter service and dust con-tainer emptying.



## CFRS cartridge Roto-filters

### Working principle of flow through CFRS filter unit:



### Filter unit CFRS :

Туре	Delta P <sup>4)</sup> Start/stop	# of cartridges	Filter area (m²)	Dust bucket (L)	A (mm)	Ø B (mm)	Weight <sup>6)</sup> (kg)
CFRS 10/072	200/2000	1 1)	10	1 x 72	1275	125	118
CFRS 15/072	200/2000	1 2)	15	1 x 72	1525	160	134
CFRS 20/072	200/2000	1 3)	20	1 x 72	1775	200	150
CFRS 40/072	200/2000	2 <sup>3)</sup>	40	2 x 72	1870	250	267
CFRS 10/150 5)	200/2000	1 1)	10	1 x 150	1603	125	137
CFRS 15/150 5)	200/2000	1 2)	15	1 x 150	1853	160	153
CFRS 20/150 5)	200/2000	1 3)	20	1 x 150	2103	200	169
CFRS 40/150 5)	200/2000	2 <sup>3)</sup>	40	2 x 150	2198	250	305
CFRS 10/380 5)	200/2000	1 <sup>1)</sup>	10	1 x 380 <sup>7)</sup>	2100	125	160
CFRS 15/380 5)	200/2000	1 2)	15	1 x 380 <sup>7)</sup>	2650	160	176
CFRS 20/380 5)	200/2000	1 3)	20	1 x 380 <sup>7)</sup>	2600	200	192
CFRS 40/240 5)	200/2000	2 <sup>3)</sup>	40	2 x 240 <sup>7)</sup>	2319	250	295

 $^{1)}$  Staubmaster ø600 x 500 mm, 10 m², G101

<sup>4)</sup> Pressure drop stated over filter cartridge

 $^{7)}$  No dust bucket, only a sack rack with sack

 $^{2)}$  Staubmaster ø600 x 750 mm, 15 m², G101  $^{5)}$  Delivered incl. sack

 $^{3)}$  Staubmaster ø600 x 1000 mm, 20 m², G101

 $^{6)}$  Weight specifications for MAN-versions. +4kg per gear motor at AUT-versions



### **CFRS cartridge Roto-filters**

### **Options:**

- Hot-dipped galvanized version, enamelled steel plates for outdoor mounting
- Sack and sack holder for 72 L dust bucket (150 L standard with sack and sack holder)
- CFRS 10 20: 380 L bag hanging behind door in cabinet bottom, held by suspensiton flange with Quick-lock band. CFRS 40 with 2 x 240 L bags
- Automatic-box for Roto-cleaning with gear motor (CFRS/AUT)
- Built-on fans type VPH or RVH in VBS sound enclosure (only CFRS 10 20)
- M7-built-on fans (type VL, VE, VPH or RVH) in VBS sound enclosure (only CFRS 10 - 20)
- Tapers on inlet and outlet
- Connection to transfer pipe
- Connection to FA-edge
- Fill-level sensor type OEM-K (monitors dust bucket filling)
- Filter guard (pressostat) for differential pressure measurement above filter
- · Signal device with constant or blitz light (yellow)

### **Construction :**

Filter unit type CFRS & CFRS-V is constructed according to :

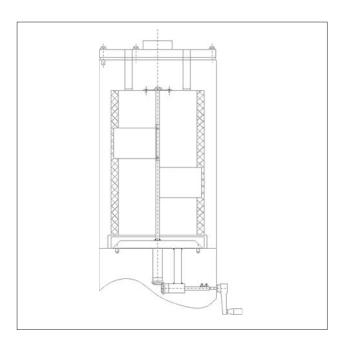
- Machine directive 2006/42/EU
- EMC-directive 2014/30/EU
- Directive 2014/68/EU about pressure equipment
- Low voltage directive 2014/35/EU
- Harmonized standards : EN 349, EN 4414, EN 12100, EN 60204-1, EN ISO 13857
- Further standards: ISO 3746

#### Surface :

The filter cabinet is made in 2 mm black steel plate. Surface powder enamelled RAL 5007/7011.

### Filter cleaning :

Filter cartridge is cleaned manually after stopped use by activating Roto-cleaning, which operates by rotating plastic strips cleaning the filter on the inside - also between the pleatings. Is activated by turning outside handle 5 -10 times or by connecting gear motor and control automatic that ensure uniform filter cleaning after each application. Roto-cleaning may only be activated, when fan has stopped.



#### Filter media :

Cartridge filter type Staubmaster ø600 mm. Length: 500 / 750 / 1000 mm

Model	Туре	Material	Application
G101	Standard	Polyester flake	Dry not-static loaded or hygroscopic dust particles > 0.2 µm
G113	optional	Polyester flake with PFPT- coating, antistatic	Static-loaded or hygroscopic particles
G116A	optional	Polyester flake with teflon membrane, antistatic	Finer static-loaded dust sorts

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