



Photo:  
Cyclone filter type ACF 234H with mirrored connections

Energy-optimized unit for larger filtration tasks. Is used for filtration of welding smoke, grinding dust, cutting smoke and dusty air containing metal, rocks, plastic etc. or from handling various powder mix

**ACF/ACF-T:** Air volume: Up to 40,000m<sup>3</sup>/h  
Vacuum: Up to 5,000Pa  
Filter area: 39 - 756m<sup>2</sup>

**ACF-V:** Air volume: Up to 20,000m<sup>3</sup>/h  
Vacuum: Up to 40,000Pa  
Filter area: 39 - 756m<sup>2</sup>

### Description

- 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.
- Differential pressure controlled cleaning of filter cartridges through integrated compressed-air system incl. automatic after-cleaning for optimized regeneration of filter cartridges.
- Clean air is led out through connection in the side (ACF/ACF-V)/the top (ACF-T) of unit.
- Dust is collected in dust container in unit bottom. Quick-lock-adjustable dust container system suspended in ø400mm system flange.

### Lower operation costs

Inlet with downflow, preseparation by cyclone effect as well as optimized filter cleaning ensure lower differential pressure above the filter cartridge. Hereby longer operating times with fewer shutdowns as well as lower operation costs (filter materials, power and compressed-air consumption) are obtained.

### Simple mounting, connection and operation

Filter unit is delivered fully assembled, is raised and connected. Compressed-air connection made easy on unit front. Easily accessible differential pressure reading in digital display of filter control placed countersunk on unit front. Filters are easily replaced through front doors on unit side. Quicklock-adjustable dust container on 4 turnable wheels ensures user-friendly dust container service.



#### Service

Compressed-air tank and all automatic control are countersunk in top/front of unit.



#### Dust container

Cone bottom is finished with ø400mm system flange. Standard 72L dust container (excl. sack holder) with 4 turnable wheels.



#### Easy filter replacement with limited dust generation

Cartridge replacement is performed by bayonet suspension, which is loosened from clean air chamber and inserted into sack. Access by front door.



#### Service bar grating

For the largest units (from and with ACF 78H) a bar grating is welded in cone also tread plate. At larger material volumes unit can be delivered without bar grating and wind deflector.

# CYCLONE FILTER

# TYPE ACF/ACF-T/ACF-V

- Filters:**
- Filter cartridge ø325mm. Length: 660/1320mm
- Filter control:**
- Differential pressure control type BA with automatic after-cleaning. 230V AC (constant)
  - Compressed-air: 5.5 - 6.0 bar dry compressed-air by cejn-coupling incl. ø10mm hose nipple
  - Differential pressure can be seen in digital display, placed countersunk on front
  - 1"-jet valves connected to central compressed-air tank in clean air chamber

**Filter change:** Cartridge replacement made easily and dust-reduced by filter bayonet suspension that is loosened from clean air chamber and inserted into sack. Access by front door.

**Filter material:**

Standard	Material	Used for
G102	Polyester flake	Dry not-static loaded or hygroscopic dust particles > 0.2µm
<b>Alternative</b>		
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%).

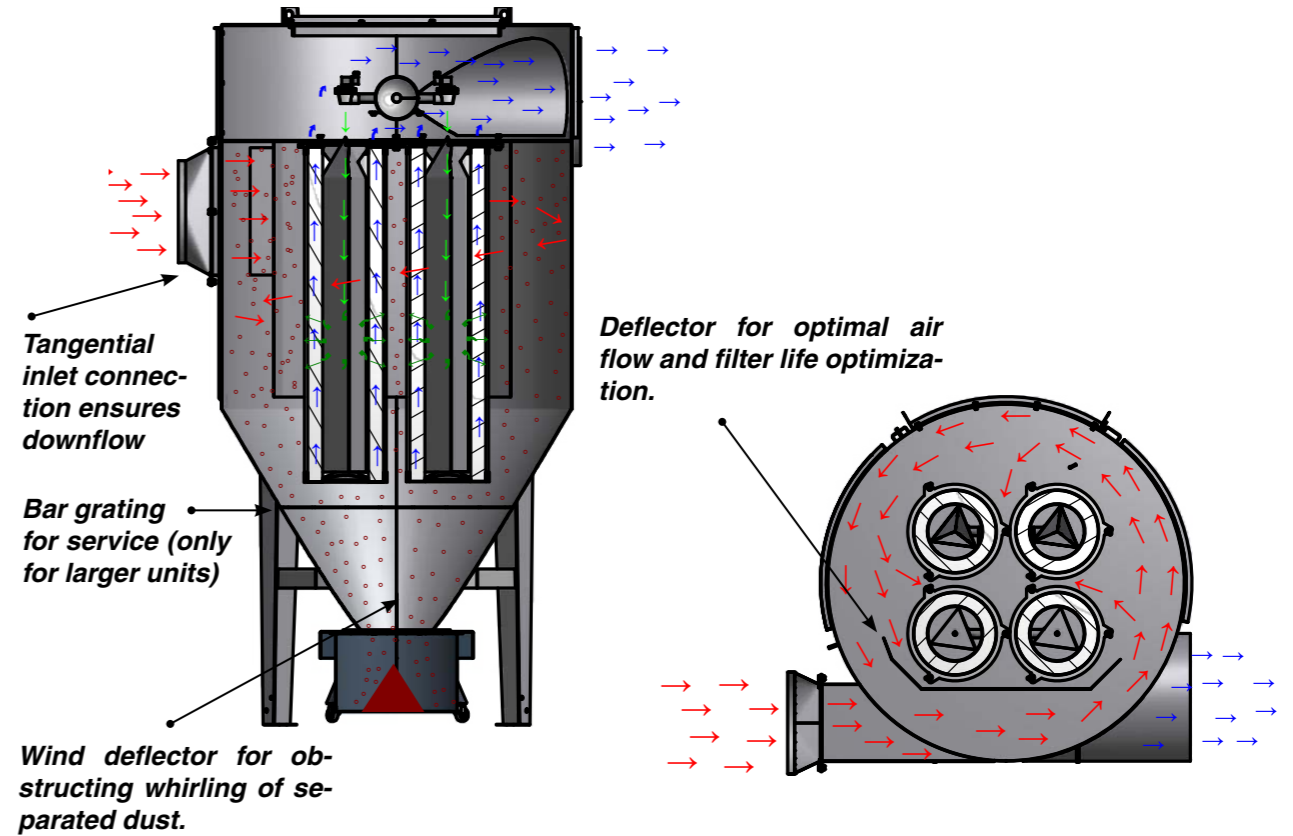
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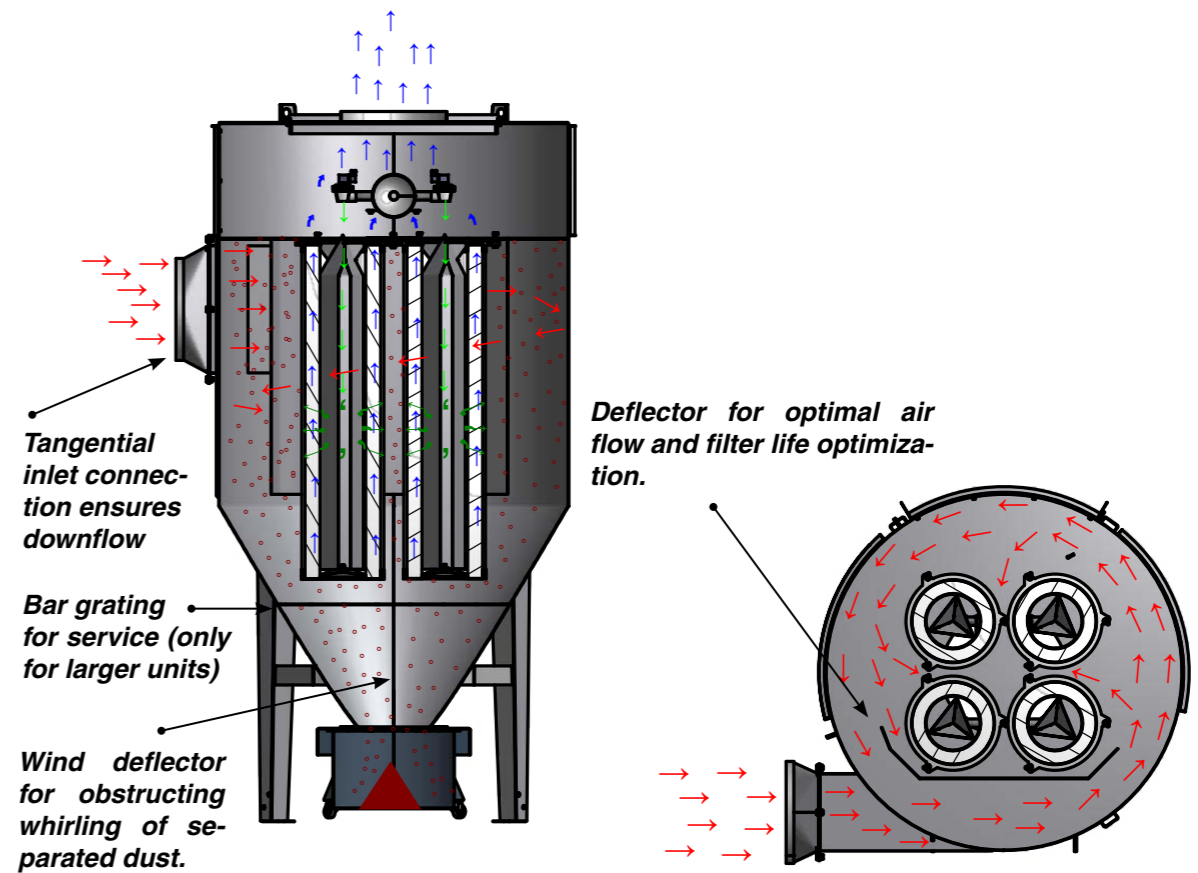
# CYCLONE FILTER

# TYPE ACF/ACF-T/ACF-V

Principle sketch for flow through cyclone filter type ACF/ACF-V:



Principle sketch for flow through cyclone filter type ACF-T:



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# CYCLONE FILTER

# TYPE ACF/ACF-T/ACF-V

### Construction/surface:

Cyclone filter type ACF/ACF-T/ACF-V 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

### Further is available:

- Version in hot-galvanized, enamelled steel plates for outdoor mounting
- Mirrored connections on inlet/outlet
- Outlet in top lid (for ACF-T)
- Gram fans for ACF-T or top for building-on other fan (no Gram product)
- Backdraft damper type KTR for piping placement
- Sack holder for 72L dust container
- 150L dust container with sack holder\*
- Underframe and connections for bulk bag and drop pipe for customer specific containers (see sketch next page)
- ½"-water separator with manometer and pressure reducing valve
- Temperature sensor type RT101 as well as alarm devices
- Leak detector type DTC/TC 30
- Precoat unit type PCA
- Precoat 11.5kg in sack
- Explosion-protected/-relieved version for installation in ATEX-zones (see ATEX data sheet)
- Unit designed for filtration of welding smoke class W3 (see data sheet for W3-version)

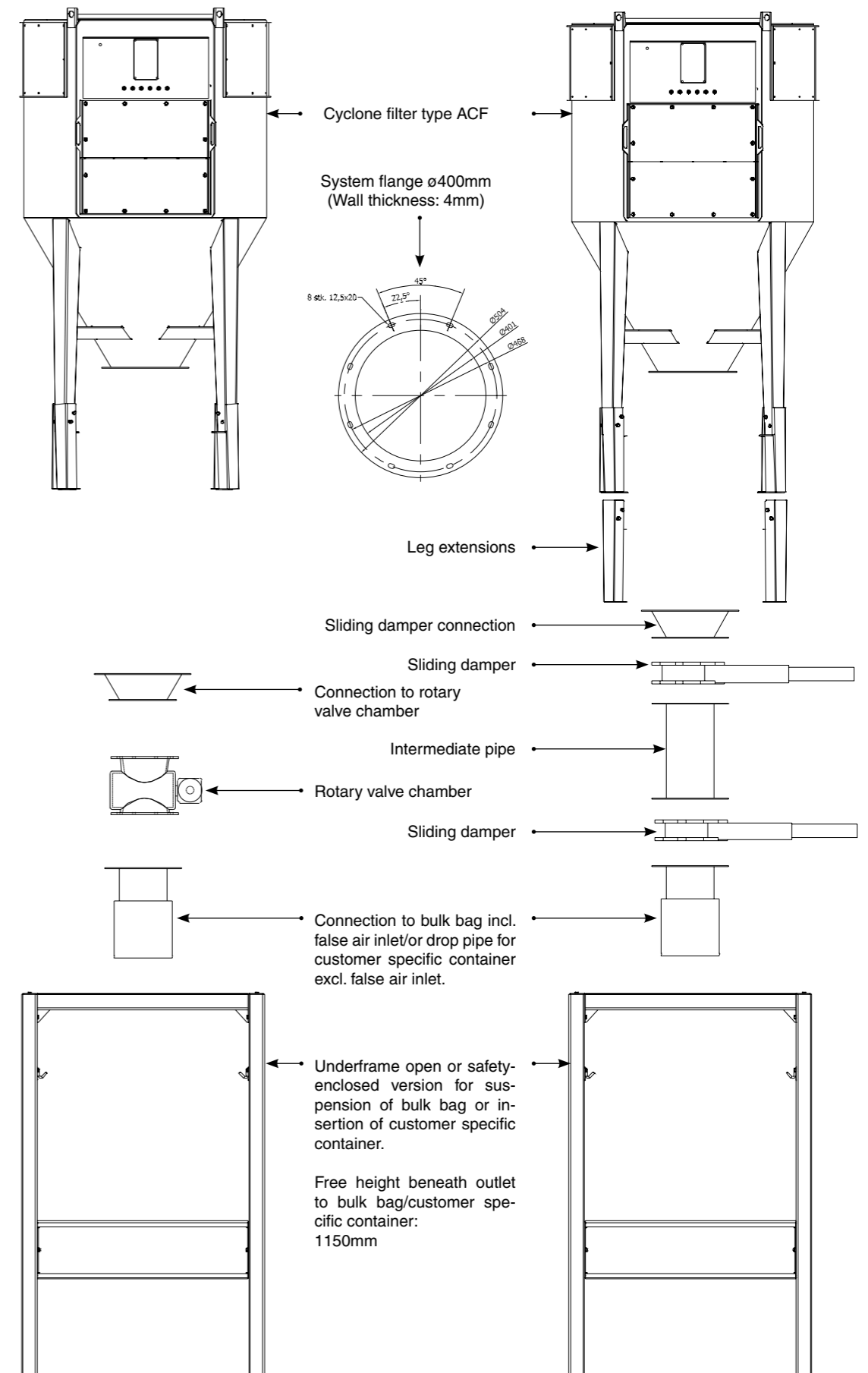
\* Note: Unit height is increased by 330mm



# CYCLONE FILTER

# TYPE ACF/ACF-T/ACF-V

### Principle sketch for accessories for cyclone filter type ACF/ACF-T/ACF-V:



We refer to the Gram price list for the complete program!

# CYCLONE FILTER

# TYPE ACF/ACF-T/ACF-V

Cyclone filter type ACF/ACF-T/ACF-V 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.

- **ACF/ACF-V** has as standard side mounted inlet and outlet
- **ACF-T** has side mounted inlet and outlet in top (prepared for built-on fan)
- **ACF-V** is for high vacuum application

## Cyclone filter type ACF (max. 5,000Pa):

Type	Order no.	$\Delta$ P start/end <sup>3)</sup> [Pa]	Number filter cartridges	Number jet valves	G102 filter area [m <sup>2</sup> ]	G105 filter area [m <sup>2</sup> ]	Compressed-air [L/min.]	Number dust container (stand.) [L]	Number dust container (option <sup>4)</sup> ) [L]	Weight [kg]
ACF 39 <sup>5)</sup>	04 033 750	200/2000	3 <sup>1)</sup>	3	39	63	30	1x72	1x150	290
ACF 52 <sup>5)</sup>	04 034 000	200/2000	4 <sup>1)</sup>	4	52	84	30	1x72	1x150	360
ACF 52 H <sup>5)</sup>	04 032 500	200/2000	2 <sup>2)</sup>	2	52	84	30	1x72	1x150	270
ACF 78 H	04 033 500	200/2000	3 <sup>2)</sup>	3	78	126	30	1x72	1x150	350
ACF 104 H	04 034 500	200/2000	4 <sup>2)</sup>	4	104	168	30	1x72	1x150	420
ACF 130 H	04 037 500	200/2000	5 <sup>2)</sup>	5	130	210	30	1x72	1x150	500
ACF 182 H	04 040 500	200/2000	7 <sup>2)</sup>	7	182	294	30	1x72	1x150	650
ACF 234 H	04 043 500	200/2000	9 <sup>2)</sup>	9	234	378	30	1x72	1x150	740
ACF 260 DH	04 046 500	200/2000	10 <sup>2)</sup>	10	260	420	60	2x72	2x150	990
ACF 364 DH	04 049 500	200/2000	14 <sup>2)</sup>	14	364	588	60	2x72	2x150	1290
ACF 468 DH	04 052 500	200/2000	18 <sup>2)</sup>	18	468	756	60	2x72	2x150	1470

## Cyclone filter type ACF-T (max. 5,000Pa):

Type	Order no.	$\Delta$ P start/end <sup>3)</sup> [Pa]	Number filter cartridges	Number jet valves	G102 filter area [m <sup>2</sup> ]	G105 filter area [m <sup>2</sup> ]	Compressed-air [L/min.]	Number dust container (stand.) [L]	Number dust container (option <sup>4)</sup> ) [L]	Weight [kg]
ACF-T 39 <sup>5)</sup>	04 033 770	200/2000	3 <sup>1)</sup>	3	39	63	30	1x72	1x150	290
ACF-T 52 <sup>5)</sup>	04 034 770	200/2000	4 <sup>1)</sup>	4	52	84	30	1x72	1x150	360
ACF-T 52 H <sup>5)</sup>	04 032 780	200/2000	2 <sup>2)</sup>	2	52	84	30	1x72	1x150	270
ACF-T 78 H	04 033 780	200/2000	3 <sup>2)</sup>	3	78	126	30	1x72	1x150	350
ACF-T 104 H	04 034 780	200/2000	4 <sup>2)</sup>	4	104	168	30	1x72	1x150	420
ACF-T 130 H	04 037 780	200/2000	5 <sup>2)</sup>	5	130	210	30	1x72	1x150	500
ACF-T 182 H	04 040 780	200/2000	7 <sup>2)</sup>	7	182	294	30	1x72	1x150	650
ACF-T 234 H	04 043 780	200/2000	9 <sup>2)</sup>	9	234	378	30	1x72	1x150	740
ACF-T 260 DH	04 046 780	200/2000	10 <sup>2)</sup>	10	260	420	60	2x72	2x150	990
ACF-T 364 DH	04 049 780	200/2000	14 <sup>2)</sup>	14	364	588	60	2x72	2x150	1290
ACF-T 468 DH	04 052 780	200/2000	18 <sup>2)</sup>	18	468	756	60	2x72	2x150	1470

- <sup>1)</sup> Filter cartridge  $\phi 325 \times 660\text{mm}/\phi 13.5\text{mm}$ , 13m<sup>2</sup>, G102 (08 128 100)  
<sup>2)</sup> Filter cartridge  $\phi 325 \times 1320\text{mm}/\phi 13.5\text{mm}$ , 26m<sup>2</sup>, G102 (08 129 000)  
<sup>3)</sup> Pressure drop stated over filter cartridge  
<sup>4)</sup> Please, note that unit height is increased by 330mm.  
<sup>5)</sup> Unit delivered without bar grating/with wind deflector

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# CYCLONE FILTER

# TYPE ACF/ACF-T/ACF-V

Cyclone filter type ACF-V (max. 40,000Pa):

Type	Order no.	$\Delta$ P start/end <sup>3)</sup> [Pa]	Number filter cartridges	Number jet valves	G102 filter area [m <sup>2</sup> ]	G105 filter area [m <sup>2</sup> ]	Compressed-air [L/min.]	Number dust container (stand.) [L]	Number dust container (option <sup>4)</sup> ) [L]	Weight [kg]
ACF-V 52 H <sup>5)</sup>	04 032 650	200/2000	2 <sup>2)</sup>	2	52	84	30	72	150	273
ACF-V 78 H	04 033 660	200/2000	3 <sup>2)</sup>	3	78	126	30	72	150	354
ACF-V 104 H	04 034 650	200/2000	4 <sup>2)</sup>	4	104	168	30	72	150	431
ACF-V 130 H	04 037 650	200/2000	5 <sup>2)</sup>	5	130	210	30	72	150	525

- <sup>1)</sup> Filter cartridge  $\phi 325 \times 660\text{mm}/\phi 13.5\text{mm}$ , 13m<sup>2</sup>, G102 (08 128 100)  
<sup>2)</sup> Filter cartridge  $\phi 325 \times 1320\text{mm}/\phi 13.5\text{mm}$ , 26m<sup>2</sup>, G102 (08 129 000)  
<sup>3)</sup> Pressure drop stated over filter cartridge  
<sup>4)</sup> Please, note that unit height is increased by 330mm.  
<sup>5)</sup> Unit delivered without bar grating/with wind deflector

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