



Energy-efficient unit for larger filtration tasks. Suitable for filtration of welding fumes, grinding dust, cutting fumes and dusty air containing metal, rock, plastic etc. or from handling various powder mixes.

**QFG:** Air volume: Up to 45,000m³/h

Vacuum: Up to 5,000Pa

Filter area: 104 - 840m²

### Description

- Polluted air enters filter unit by raw air chamber. Hereby downflow and pre-separation is 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.
- The clean air is led out through connection in unit top.
- Dust is collected in dust container in unit bottom. Quick-lock-adjustable dust container system suspended in ø400mm system flange.

### Lower operating costs

Inlet with downflow and pre-separation as well as optimized filter cleaning ensure lower differential pressure above the filter cartridge. Therefore longer operation times with less shutdowns as well as lower operating costs (filter materials, electricity and compressed-air consumption) are achieved. One-cone version, which minimizes unit costs in connection with waste management.

### Simple mounting, connection and operation

Filter unit is delivered in two modules that are assembled on the installation site by external flanges. Filter cartridges and control are delivered mounted. Compressed-air connection is easily connected on unit front. Easily accessible reading of differential pressure in digital display of filter control placed on unit service side. Filters are replaced through front door in unit side. Quicklock-adjustable dust container on 4 turnable wheels ensures user-friendly dust container service.



#### Service

Unit is delivered with cejn-coupling incl. connection for easy compressed-air coupling. Control is placed on unit at service height.



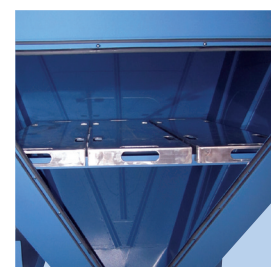
#### Dust container

Cone bottom is finished with ø400mm system flange. Standard 70L dust container (excl. sackholder) 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 step grating

Dust-repellent fixtures for insertion of step grate for use at filter replacement incl. external storage fitting.

## Filters:

- Filter cartridge ø325mm. Length: 1320mm

## Filter control:

- Differential pressure control type ECO-S 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 is visible in digital display, placed on unit at service height
- 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.

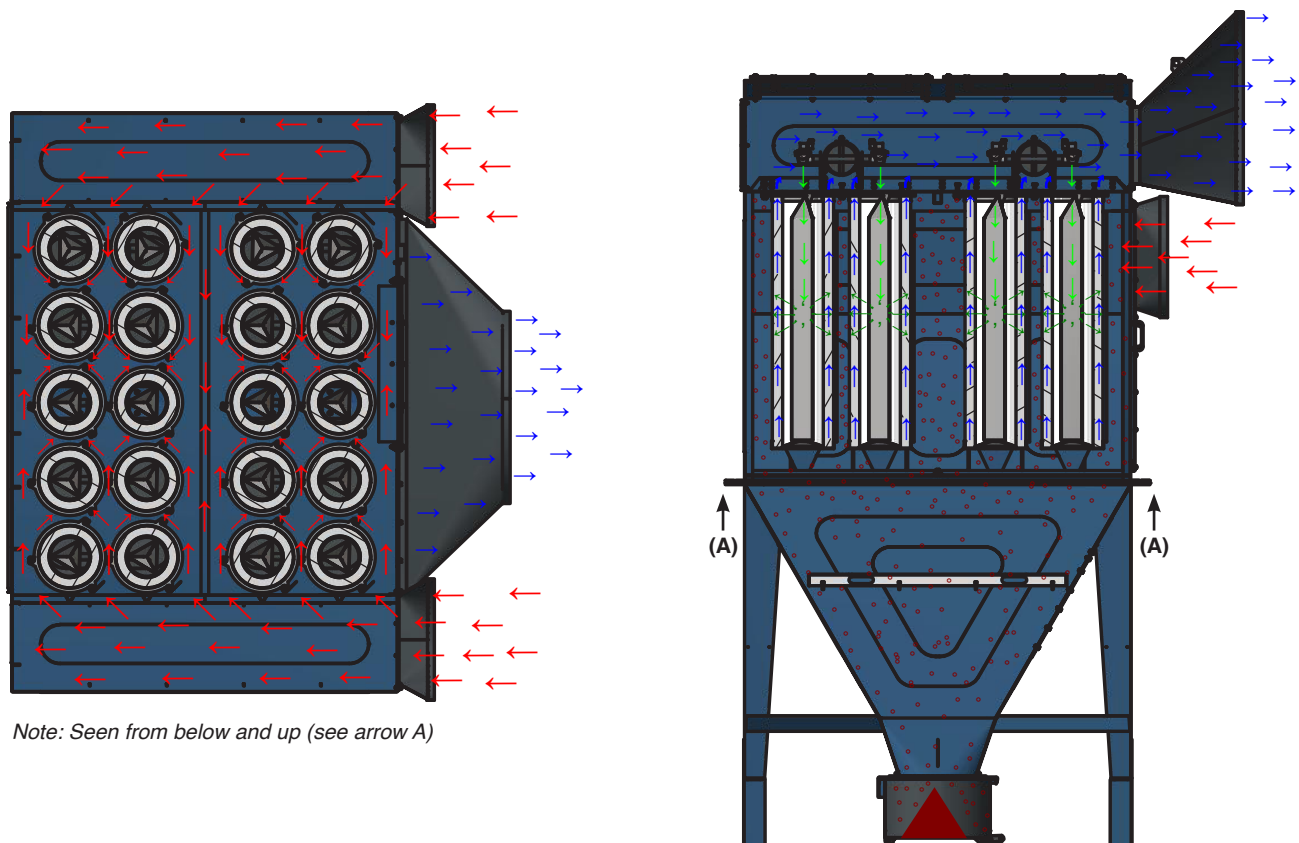
## Filter material:

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
G107	Cellulose/Polyester Nano	Smoke and soot particles
G113	Polyester flake with PFPT-coating, antistatic	Static-loaded or hygroscopic particles
G115A	Polyester flake with teflon membrane	Finer dust sorts, e.g. cutting fume from plasma, flame and laser cutting
G116A	Polyester flake with teflon membrane, antistatic	Finer static-loaded dust sorts



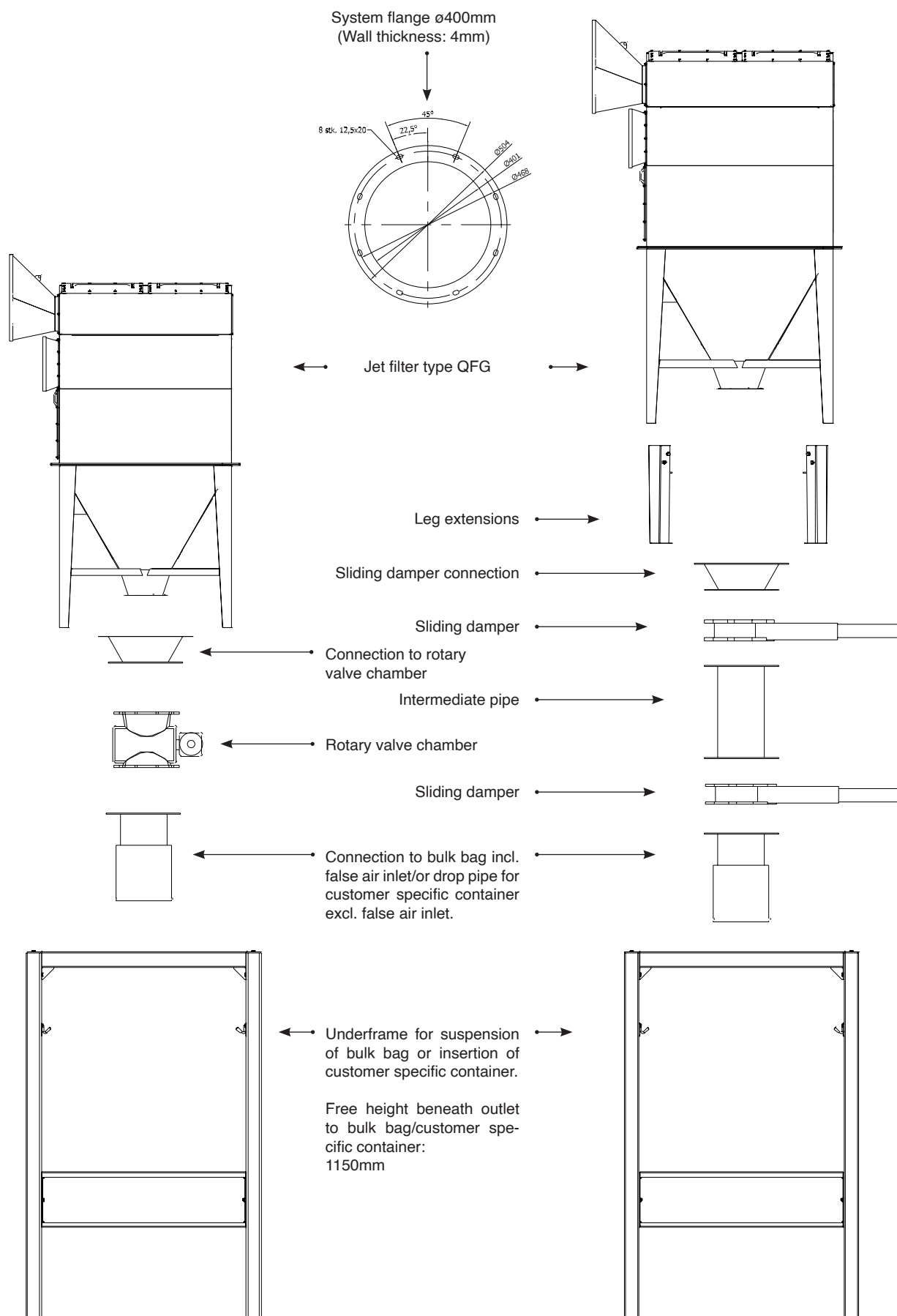
The filters meet demands for extraction degree for dust class M according to DIN EN 60335-2-69 Appendix AA (extraction degree > 99.9%).

## Principle sketch for flow through jet filter type QFG:



Note: Seen from below and up (see arrow A)

Principle sketch for equipment for jet filter type QFG:



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

**Construction/surface:**

Jet filter filter type QFG 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 13854, 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
- Backdraft damper type KTR for piping placement
- 148L dust container with sack holder\*
- Underframe and connections for bulk bag and drop pipe for customer specific containers
- ½"-pressure regulator with manometer and pressure reducing valve
- Temperature sensor type RT101 as well as alarm devices
- Precoat unit type PCA
- Precoat 11.5kg in sack

\* Note: Unit height is increased by 330mm

Jet filter filter type QFG is available in the sizes as stated in the form below.

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

**Jet filter type QFG (max. 5,000Pa):**

Type	Gram no.	$\Delta$ P start/stop <sup>2)</sup> [Pa]	Filter element <sup>1)</sup> [pc.]	Valve [pc.]	G102 filter area [m <sup>2</sup> ]	G105 filter area [m <sup>2</sup> ]	Com- pressed- air [L/min.]	Container (stand.) [L]	Container (option <sup>3)</sup> ) [L]	[kg]
QFG 104	04 547 000	200/2000	4	4	104	168	30	1x70	1x148	559
QFG 156	04 548 000	200/2000	6	6	156	252	30	1x70	1x148	727
QFG 208	04 549 000	200/2000	8	8	208	336	30	1x70	1x148	838
QFG 312	04 550 000	200/2000	12	12	312	504	30	1x70	1x148	1211
QFG 416	04 551 000	200/2000	16	16	416	672	30	1x70	1x148	1490
QFG 520	04 552 000	200/2000	20	20	520	840	30	1x70	1x148	1659

<sup>1)</sup> Filter cartridge  $\phi 325 \times 1320\text{mm}/\phi 13,5\text{mm}$ , 26m<sup>2</sup>, G102 (08 129 000)

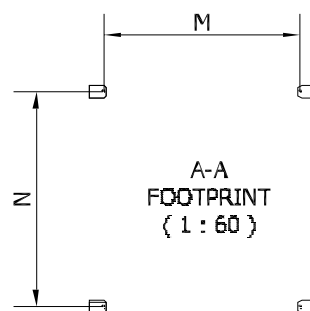
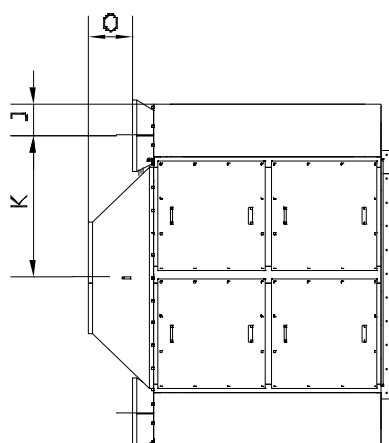
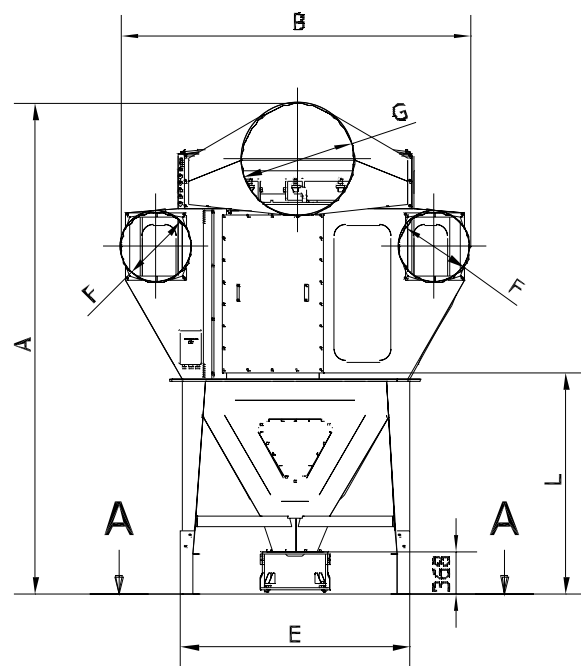
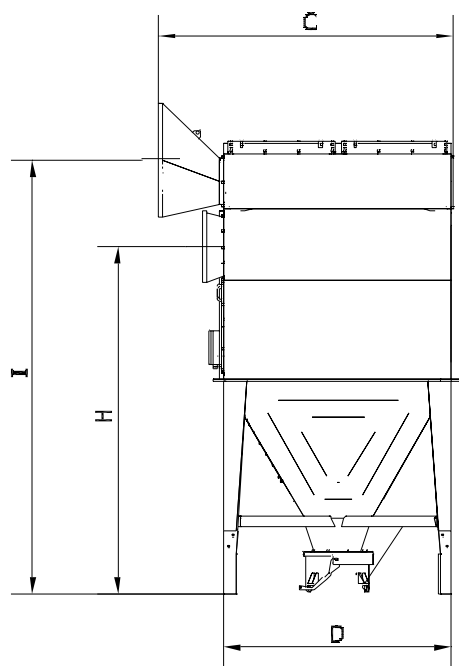
<sup>2)</sup> Pressure drop above filter cartridge.

<sup>3)</sup> Please note that unit heights is increased by 330mm.

Data is subject to alterations

Rev. 04.24

Jet filter type QFG 104 - 520:



Type	Gram no.	A	B	C	D	E	F	G	H	I	J	K	L	M	N
QFG 104	04 547 000	2898	1438	1606	1039	1039	1x ø400	1x ø500	1965	2615	177	683	1038	920	920
QFG 156	04 548 000	3253	1438	2006	1439	1039	1x ø400	1x ø500	2313	2963	177	683	1386	920	1320
QFG 208	04 549 000	3553	1503	2406	1839	1039	1x ø500	1x ø630	2613	3263	177	683	1686	920	1720
QFG 312	04 550 000	3962	2280	2607	2010	1209	1x ø630	1x ø710	3068	3647	272	430	1957	940	1904
QFG 416	04 551 000	3962	2680	2607	2010	1609	2x ø500	1x ø800	3068	3647	272	830	1957	1340	1904
QFG 520	04 552 000	4340	3080	2607	2010	2009	2x ø630	1x ø1000	3068	3840	272	1230	1957	1740	1904