



CQFG cartridge filters

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.

Air volume : Up to 45000 m³/h
Vacuum : Up to 5000 Pa
Filter surface: 312 to 840 m²

Lower operating costs

Inlet with downflow and pre-separation as well as optimized filter cleaning ensure lower differential pressure above the filter cartridge ensure longer operation times with less shutdowns as well as lower operating costs. Only one hopper which minimizes unit costs in connection with waste management.

Functioning:

- a loaded 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 bucket in unit bottom. Quick-lock-adjustable dust bucket system suspended in ø400 mm system flange for quick release.

Simple mounting, connection and operation

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



Unit is delivered with cejn-coupling for easy compressed-air connection.



Cone bottom is finished with ø400 mm system flange. Standard 72 L dust bucket with 4 turnable wheels.



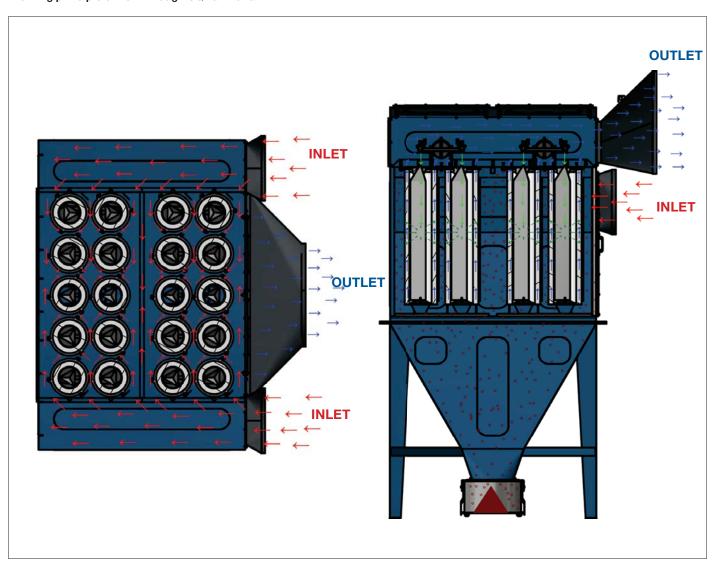
Easy filter replacement performed by bayonet suspension, which is loosened from clean air chamber with limited dust generation and inserted into sack.



Dust-repellent fixtures for insertion of step grate for use at filter replacement.



Working principle of flow through CQFG filter unit:



Filter unit CQFG (max. 5000 Pa):

Туре	Delta P ²⁾ Start/stop	# of cartridges ¹⁾	Cartridge size	Filter area G102 (m²)	Filter area G105 (m²)	Dust bucket (L)	Weight (kg)
CQFG 312	200/2000	12	325 x 1320	312	504	1 x 72	1211
CQFG 416	200/2000	16	325 x 1320	416	672	1 x 72	1490
CQFG 520	200/2000	20	325 x 1320	520	840	1 x 72	1659

 $^{^{1)}}$ Filter cartridge ø325 x 1320 mm/ø13,5 mm, 26 m², G102

Dimensions:

Туре	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Ø F (mm)	Ø G (mm)	H (mm)	l (mm)	J (mm)	K (mm)	L (mm)	M (mm)	N (mm)
CQFG 312	3962	2280	2607	2010	1209	1x 630	710	3068	3647	272	430	1957	940	1904
CQFG 416	3962	2680	2607	2010	1609	2x 500	800	3068	3647	272	830	1957	1340	1904
CQFG 520	4340	3080	2607	2010	2009	2x 360	1000	3068	3840	272	1230	1957	1740	1904

²⁾ Pressure drop stated over filter cartridge



Filter media:

Filter cartridge ø325 mm. Length: 1320 mm

Model	Туре	Material	Application				
G102	Standard	Polyester flake	Dry not-static loaded or hygroscopic dust particles $> 0.2 \ \mu m$				
G105	optional	Cellulose/Polyester	Welding/soldering				
G107	optional	Cellulose/Polyester nano	Smoke and soot particles				
G113	optional	Polyester flake with PFPT- coating, antistatic	Static-loaded or hygroscopic particles				
G115A	optional	Polyester flake with teflon membrane	Finer dust sorts, e.g. cutting smoke from plasma, flame and laser cutting				
G116A	optional	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%).

Supply:

- Differential pressure control type ECO-S with automatic aftercleaning. 230V AC.
- Compressed-air: 5.5 6.0 bar dry compressed-air by cejncoupling 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.

Surface:

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

Construction:

Filter unit type CQFG 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

Options:

- Hot-galvanized, enamelled steel plates for outdoor mounting
- Backdraft damper type KTR for piping placement
- 150 L dust container with sack holder (H increased by 330 mm)
- Underframe and connections for bulk bag and drop pipe for customer specific containers
- \bullet 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 11.5 kg in sack



Overview of accessories for cyclone filter type CQFG:

