Nederman

FMC(Z) cartridge filter

Compact cartridge filter equipped with explosion membranes for solving combustible dust problems within a wide range of industries.

The FMCZ200 filter is a compact cartridge filter equipped with explosion membranes. The filter is ideal for solving dust problems within a wide range of industries where there is dust with a potential explosion hazard (St1, St2 or St3 dust up to KSt-value = 600 bar*m/s). The filter is designed for an outdoor location.
The FMCZ200 filter is designed for explosive dust and contains a type certificate by a Notified Body under the ATEX directive. The certificate identifies the interior raw gas section of the filter as zone 20 and the interior clean gas section as zone 22. The filter allows a pred,max up to 0,3 bar.

- Antistatic cartridges mandatory: CA 140
- Inspection and change of the filter cartridges can take place within a few minutes.
- Front service of the cleaning valves, the controller, the compressed air tank and the filter cartridges.
- Intelligent ECO-efficient filter controller minimize maintenance and energy costs.
- Quick release waste bin

Product name	FMC(Z) cartridge filter
Compressed air requirement	6 bar
Compressed air consumption	45 Nl per cleaning pulse
Material	Housing in galvanised sheet steel (2mm)
Suitable for combustible dust	True
Filter cleaning method	Pulse jet
Application	Fumes, Dust
Working pressure (kPa)	-6,0 to 1,5. Operation of the filter with overpressure only allowed if it is a silo top version.
Dustbin volume (l)	50 or 100 or without
Capacity (max airflow m3/h)	21000
Operating Temperature	-20 to 70 Deg. C.
Filter type	Cartridge

Fumes   Dust   CE Ex

FMC(Z) cartridge filter

Description	Number of filter elements	Filter material	Model
FMCZ 200-2L	8	Polyester (std)	FMC(Z)200-2Ls
FMCZ 200-2L	8	Cellulose	FMC(Z)200-2Lc
FMCZ 200-4L	16	Polyester (std)	FMC(Z)200-4Ls
FMCZ 200-4L	16	Cellulose	FMC(Z)200-4Lc
FMCZ 200-6L	24	Polyester (std)	FMC(Z)200-6Ls
FMCZ 200-6L	24	Cellulose	FMC(Z)200-6Lc
FMCZ 200-8L	32	Polyester (std)	FMC(Z)200-8Ls
FMCZ 200-8L	32	Cellulose	FMC(Z)200-8Lc
FMCZ 200-2A	8	Polyester (std)	FMC(Z)200-2As
FMCZ 200-2A	8	Cellulose	FMC(Z)200-2Ac
FMCZ 200-4A	16	Polyester (std)	FMC(Z)200-4As
FMCZ 200-4A	16	Cellulose	FMC(Z)200-4Ac
FMCZ 200-6A	24	Polyester (std)	FMC(Z)200-6As
FMCZ 200-6A	24	Cellulose	FMC(Z)200-6Ac
FMCZ 200-8A	32	Polyester (std)	FMC(Z)200-8As
FMCZ 200-8A	32	Cellulose	FMC(Z)200-8Ac

FMC(Z) cartridge filter

	Accessory	Part No
	Damper type NFUS3	5501395
	Discharge bin 50 l with wheels	5501274
	Discharge bin 50 l without wheels	5501273
	Discharge bin 100 l with wheels	5501275
	Adaptor for bin with bag	5505033
	Adaptor for 50 l bin with bag incl. fitting	5505034
	Adaptor for 100 l bin with bag incl. Fitting	5505035
	Hose set for bin balancing	5505041
	Single backpack for 4 modules	5509660
	Single backpack for 4 modules round inlet from the top	5501138
	Single backpack for 8 modules round inlet from the top pos L	5501169
	Double backpack for 4 modules	5509661
	Double backpack for 4 modules round inlet from the top	5501142
	Double backpack for 8 modules and round inlet from the top	5501175
	DUAL silencer for FM600 series fan with air grille	5501813
	DUAL silencer for FM6800 series fan with air grille	5501830
	DUAL silencer for FM1000 series fan with air grille	5501854
	DUAL silencer for FM600 series fan with air grille and rain cover	5501814
	DUAL silencer for FM6800 series fan with air grille and rain cover	5501832
	DUAL silencer for FM1000 series fan with air grille and rain cover	5501855
	DUAL silencer for FM600 series fan with flanged outlet for duct connection	5501815
	DUAL silencer for FM6800 series fan with flanged outlet for duct connection	5501833

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	Accessory	Part No
	DUAL silencer for FM1000 series fan with flanged outlet for duct connection	5501856
	Isolation box for FM pressure tank, 2 modules	5501317
	Isolation box for FM pressure tank, 4 modules	5501318
	Isolation box for FM pressure tank, 6 modules	5501319
	Isolation box for FM pressure tank, 6 modules	5501320
	Level sensor with beacon, 230V	5504475
	Cable gland M40 for levelsensor	5512245
	Noise enclosure for FM800 fan	5501783

FMC(Z) cartridge filter

Type	Number of cartridges	Filter area in m²	Max. air flow in m³/h*	Max. amount of ex. membranes	Max. Silo volume** St1 in m³	Standard no. of ex. membranes Std.***	
						St1	St2
FMCZ200-2L	8	32	3200	5	10	1	2
FMCZ200-4L	16	64	6400	7	15	2	2
FMCZ200-6L	24	96	9600	9	20	2	3
FMCZ200-8L	32	128	12800	11	25	2	3
FMCZ200-2A	8	53	5300	5	10	2	2
FMCZ200-4A	16	106	10600	7	15	2	2
FMCZ200-6A	24	159	15900	9	20	2	3
FMCZ200-8A	32	212	21200	11	25	2	3

* Max. Air flow is dependent on the actual dust type.
** Max. extra possible relieved volume (for St1 dust), when FMCZ200 silo version is mounted directly on a silo. (Attention: this is only an example with system L/D = 1, pred,max = 0,3 bar - special calculation is required for every case).

Standard explosion vents 410x410.

Filter body and hopper :
St1, Kst = max.200 bar x m/s and Pmax = 9 bar.
St2, Kst = max.300 bar x m/s and Pmax = 9 bar.
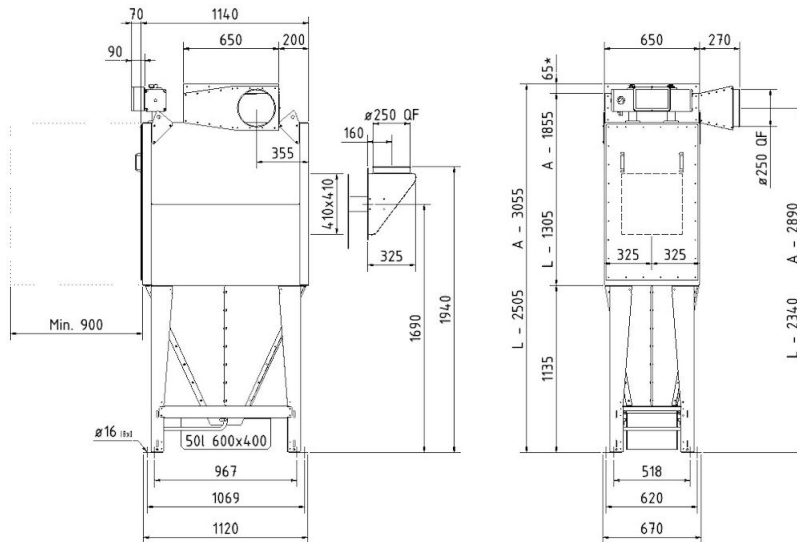St3, Kst = max.600 bar = special order.
When ordering please specify:
• Dust characteristics Kst and Pmax.
• Zone-rating of place for installation
(Non-zone or Zone 22)

Marking
• The St1 version is marked EX II D St1.
• The FMCZ200 filter body in the St2 version is
marked: EX II D St2.
• The marking is based on product certification
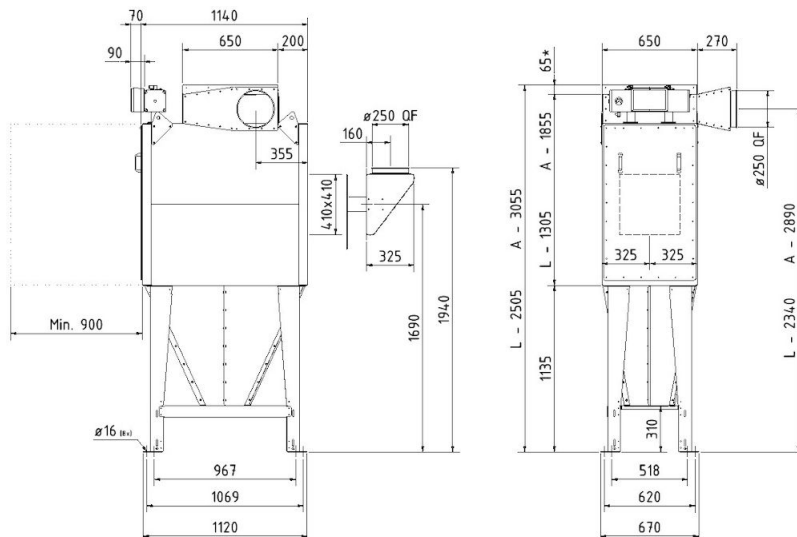by FTZU No. 1026

FMC(Z) cartridge filter

FMC200-2L and 2A with bin for discharge

All dimensions in mm.
If 50 liter bin with rollers, add 90 mm.
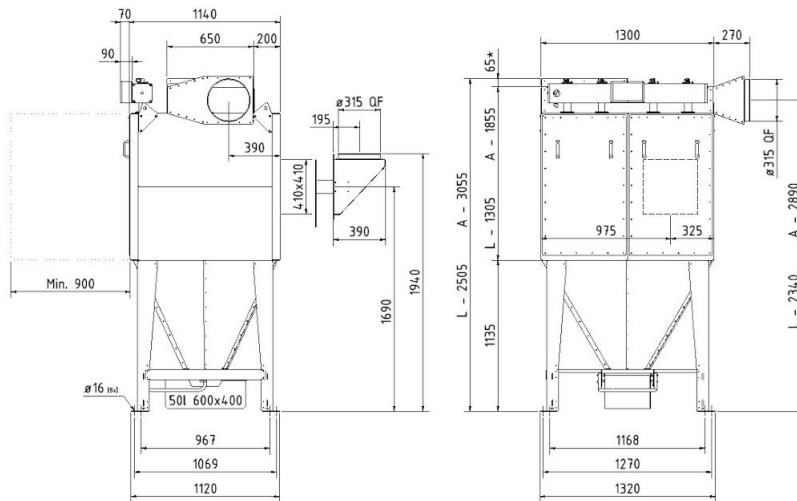* 65 mm to be included at top mounted fan.

FMC200–2L and 2A hopper with flange for discharge

All dimensions in mm.
* 65 mm to be included at top mounted fan.

FMC(Z) cartridge filter
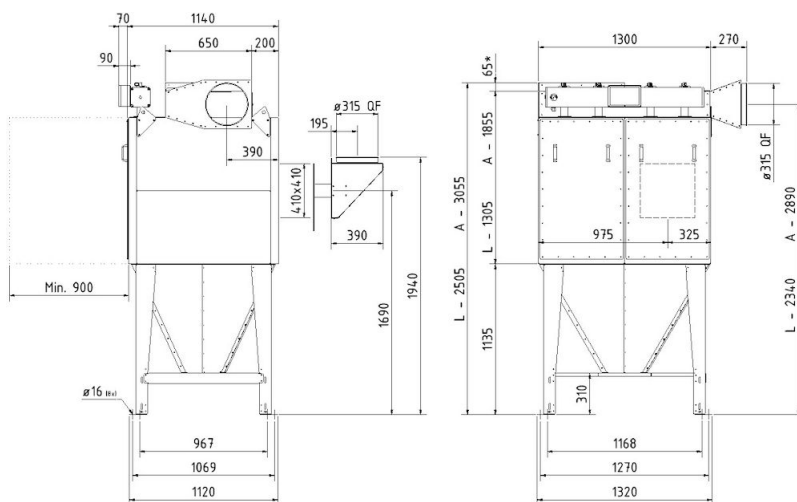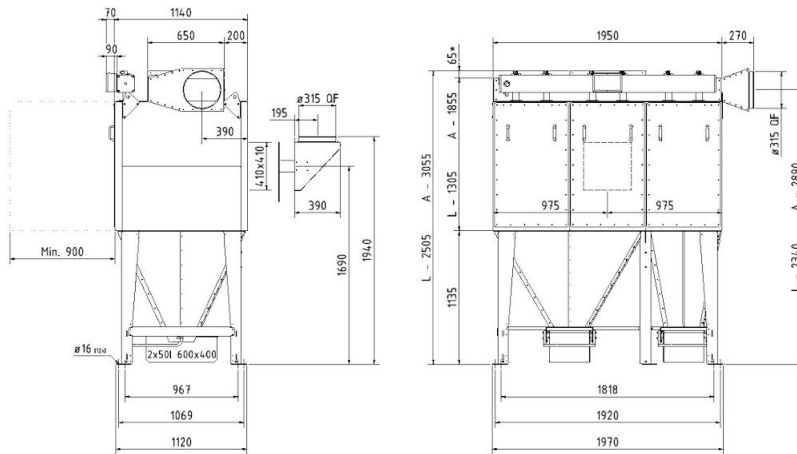

FMC200-4L and 4A with bin for discharge

All dimensions in mm.
If 50 liter bin with rollers, add 90 mm.
* 65 mm to be included at top mounted fan.

FMC200–4L and 4A hopper with flange for discharge

All dimensions in mm.
* 65 mm to be included at top mounted fan.

FMC(Z) cartridge filter
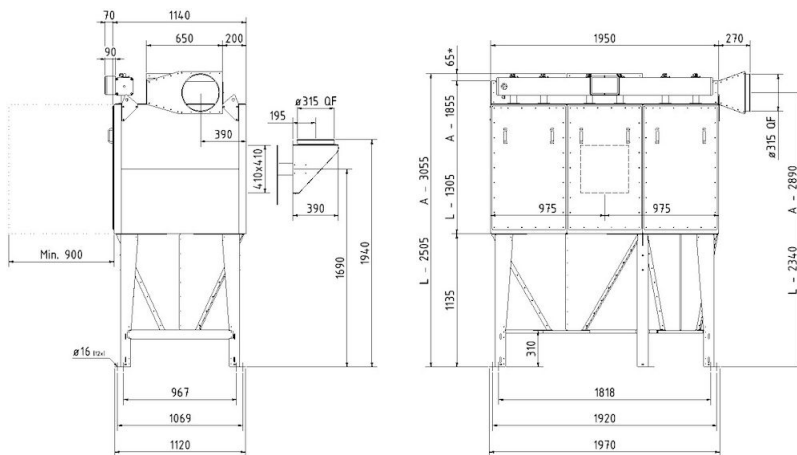

FMC200-6L and 6A with bin for discharge

All dimensions in mm.
If 50 liter bin with rollers, add 90 mm.
* 65 mm to be included at top mounted fan.
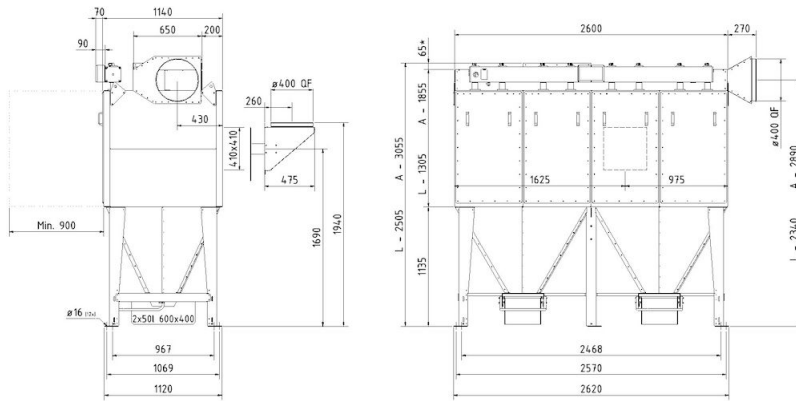

FMC200–6L and 6A hopper with flange for discharge

All dimensions in mm.
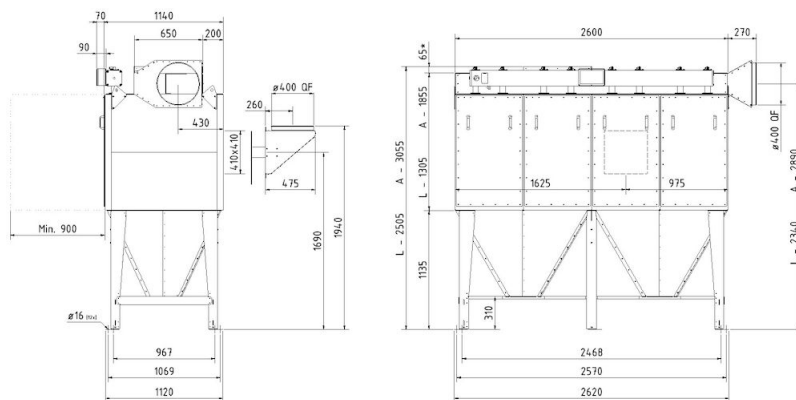* 65 mm to be included at top mounted fan

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FMC200-8L and 8A with bin for discharge

All dimensions in mm.
If 50 liter bin with rollers, add 90 mm.
* 65 mm to be included at top mounted fan.

FMC200–8L and 8A hopper with flange for discharge

All dimensions in mm.
* 65 mm to be included at top mounted fan.