



For special applications the filter can be manufactured to clients requirements. Individual housing segments are manufactured with high precision allowing different fixing positions; as a result it is possible to achieve various inlet- and outlet positions as well as explosion vent locations. Filtering cloth and manufacturing of sleeves assure electrostatic safety.

Technical data

Working negative pressure	up to 0,5 bar (0,05 MPa)
Working positive pressure	up to 0,05 bar (0,005 MPa)
Reverse jet filter resistance	0,01-0,018 bar (0,001-0,0018 MPa)
Sleeve resistance	0,005-0,01 bar (0,0005-0,001 MPa)
Maximum dust concentration in supplied air	300g/m ³
Unit load of filtering cloth (according to design depending on product, finess, etc.)	1-8 m ³ /min/m ²
Compressed air pressure	6+1 bar (0,6+0,1 MPa)
Dust removing efficiency	99,8%
Duration beetwen impulses	10-600 s
Valve opening time	0,1-2 s



Application

The FP SPOMAX's Reverse jet Filters are used for removing the dust from air in general exhaust applications as well as in pneumatic conveying systems. They can work as independent machines or in group systems.

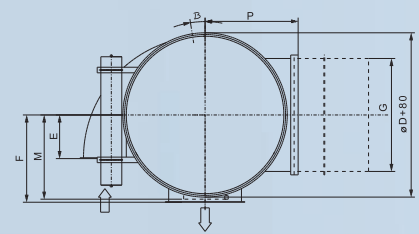
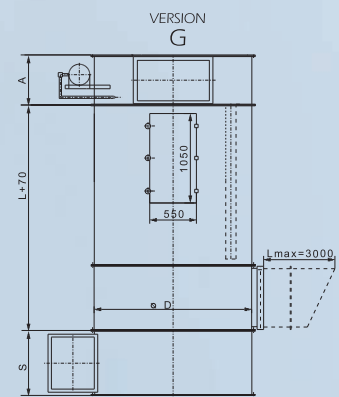
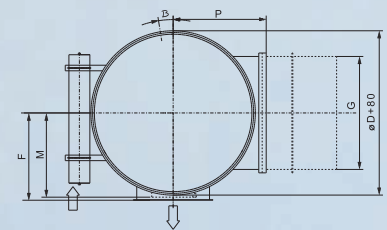
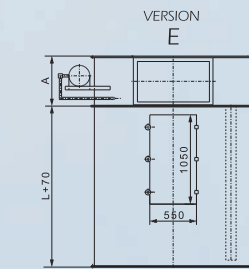
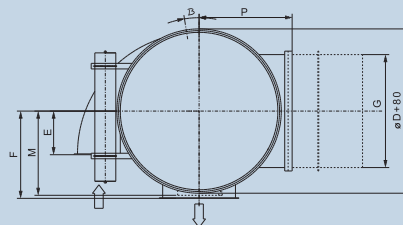
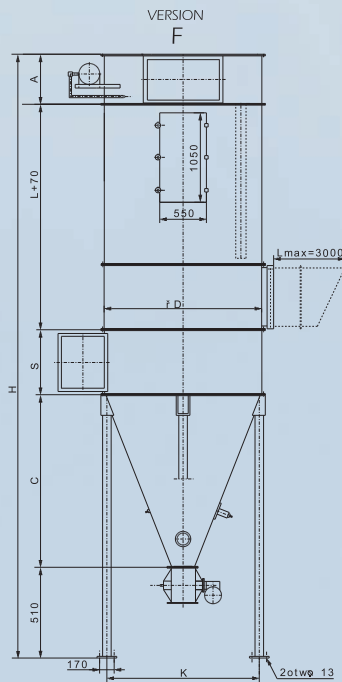
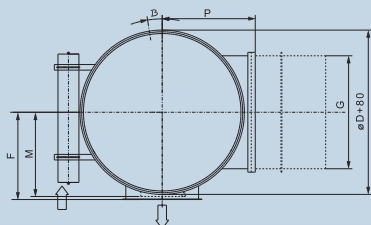
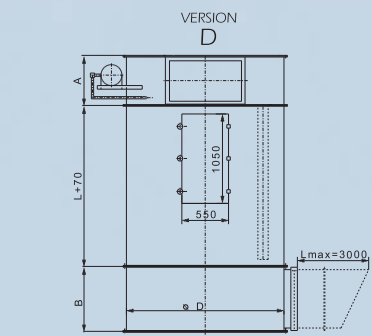
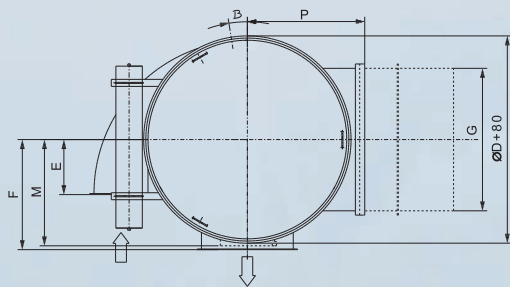
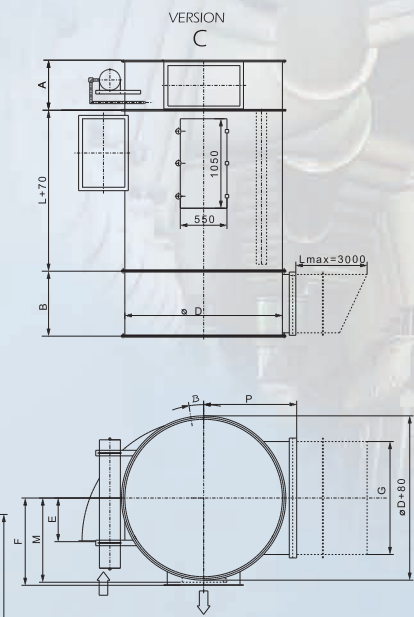
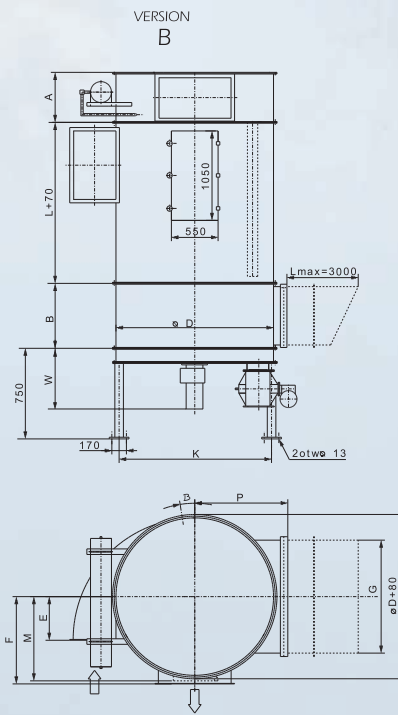
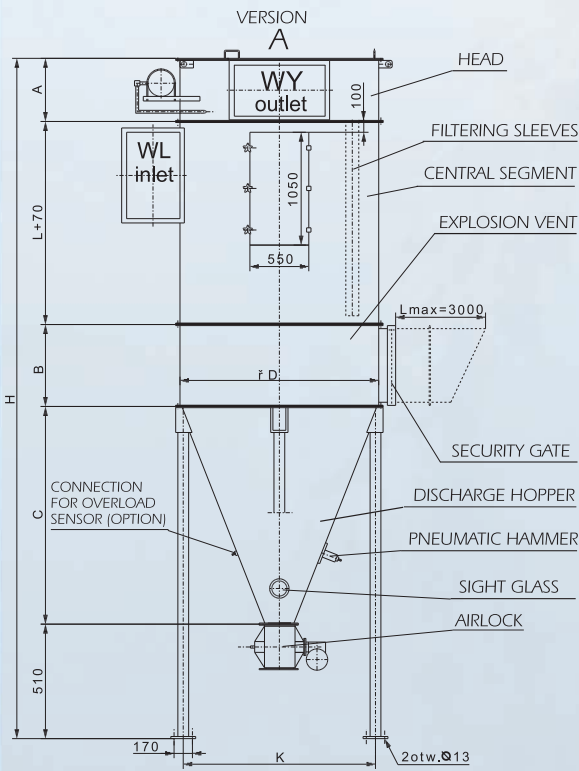
Bag filters are applied in systems with following working pressure:

- with negative pressure up to 0,5 bar (0,05 MPa)
- with positive pressure up to 0,05 bar (0,005 MPa)

Operation

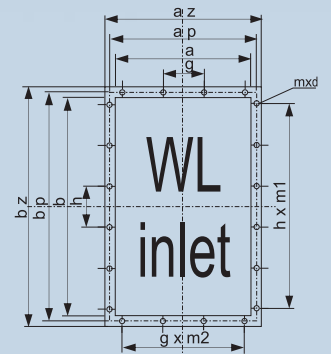
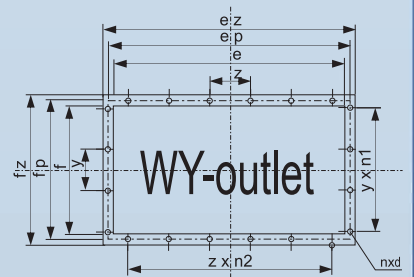
The dusty air travels to reverse jet filter via inlet opening which is located tangentially (version A,B,C). As a result of centrifugal force there occurs pre-clearing of air by precipitating of lager particles, which fall down to the cone outlet opening. The air passes through filtering sleeves, the cleaned air is directed to the outlet and then outside the filter. Fine dust particles accumulate on external surface of the filtering sleeves. From time to time the filtering sleeves are regenerated (cleaned) as a group or individually by means of a sharp pulse of cleaning air flowing from cleaning injectors, after the electro-valve is opened. The thrown off dust particles fall down to the outlet of hopper (version A) or round discharger (version B) and is discharged thought the airlock. In versions C, D, E the dust particles are discharged directly to the bin aspirated by the reverse jet filter.





Parameters	Type and size	FRW 0410	FRW 0415	FRW 1010	FRW 1015	FRW 1020	FRW 1815	FRW 1820	FRW 2620	FRW 2625	FRW 3920	FRW 3925	FRW 5225	FRW 7820	FRW 7825	FRW 10425	FRW 10430	
Quantity of sleeves $\phi 120$	pcs	4	4	10	10	10	18	18	26	26	39	39	52	78	78	104	104	
Length of sleeve	L	1000	1500	1000	1500	2000	1500	2000	2000	2500	2000	2500	2500	2000	2500	2500	3000	
Filtering surface	m ²	1,4	2,1	3,5	5,0	7,0	9,5	13,0	19,0	23,5	28,5	35,5	47,5	57,0	71,5	95,0	115,0	
Air demand	dm ³ /min	17	25	42	60	84	114	156	228	282	342	426	570	684	858	1140	1380	
Total height (version A)	H	2830	3330	3290	3790	4290	4420	4920	5130	5630	5470	5970	6260	6300	6800	6940	7440	
Cylindrical segment	ϕD	500		750			1000		1140		1340		1500	1840		2020		
Height of head	A	375		440									570					
Height of explosion vent	B	375					570				600		670		750			
Height of cone	C	500		700			1200		1380		1650		1860	2400		2540		
Inspection door location	M	285		410			535		605		705		785	955		1045		
Inlet location	E	150		190			230		270		300		360		500			
Outlet location	F	325		450			600		670		770		850		1020		1110	
Standard inlet N	a x b	75x150		145x250			215x400		270x500		300x650		360x750		500x800			
Enlarged inlet D	a, x b ₁	75x450		145x600			215x750		270x850		300x1100		360x1250		500x1250		500x1550	
Standard outlet N	D ₁ , ex f	$\phi 150$		$\phi 250$			$\phi 400$		$\phi 450$		$\phi 500$		$\phi 650$		850x470		1070x470	
Enlarged outlet D	D ₂ , e, x f ₁	$\phi 225$		$\phi 360$			$\phi 500$		570x470		870x470		1130x470		1560x470		1980x470	
Explosion vent outlet	G x G ₁	375x220					594x494				926x592				1076x596		1656x596	
Explosion vent outlet location	P	380		530			680		730		830		910		1080		1180	
Sight glass	ϕd						100						140		215			
Unloading surface	m ²	0,07							0,289				0,54		0,578		0,867	
Distance between support	K	500		740			940		1080		1280		1440		1780		1960	
Scale β /quantity of screws	%/pcs			30°/12					15°/24				11,25°/32		9°/40			
Airlock type		SLU 2215-M						SLU 2222-M						SLU 2830-M				
Installed power	kW							0,37						0,55				
Permissible working temperature	°C													(-20)÷(+60)				
Net weight version A	kg	407	456	603	615	675	891	921	1026	1086	1277	1367	1548	2047	2157	2532	2647	

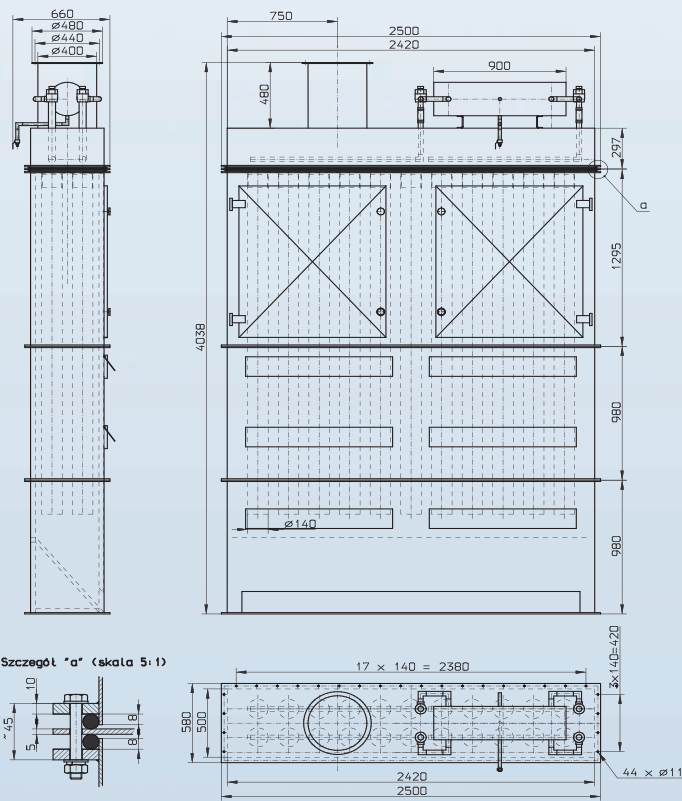
Size of flange	Dimension	FRW 04	FRW 10	FRW 18	FRW 26	FRW 39	FRW 52	FRW 78	FRW 104	
WL-N/D	m ₁	1/4	2/4	3/5	3/5	4/7	4/8	5/8	5/10	
	h	100/100	100/125	100/125	150/150	150/150	150/150	150/150	150/150	
	m ₂	-	1/1	1/1	2/2	2/2	2/2	3/3	3/3	
	g	-	100/100	100/100	100/100	125/125	150/150	150/150	150/150	
	ap	105/105	175/175	245/245	300/300	330/330	390/390	540/540	540/540	
	az	135/135	205/205	275/275	330/330	360/360	420/420	580/580	580/580	
	bp	180/480	280/630	430/780	530/880	680/1130	780/1280	840/1290	840/1590	
	bz	210/510	310/660	460/810	560/910	710/1160	810/1310	880/1330	880/1630	
	mx d	4x $\phi 10/8x\phi 10$	10x $\phi 10/10x\phi 14$	14x $\phi 12/16x\phi 12$	14x $\phi 12/18x\phi 12$	16x $\phi 12/21x\phi 12$	16x $\phi 12/24x\phi 12$	20x $\phi 12/26x\phi 12$	20x $\phi 12/30x\phi 12$	
	WL-S	h	40	45	70	85	70	80	90	110
m ₂		1	2	2	2	3	3	3	3	
g		40	45	70	85	70	80	90	110	
ap		110	145	190	220	260	300	330	380	
az		140	175	220	250	290	330	360	410	
bp		110	145	190	220	260	300	330	380	
bz		140	175	220	250	290	330	360	410	
mx d		10x $\phi 10$	10x $\phi 10$	12x $\phi 10$	12x $\phi 12$	16x $\phi 12$	16x $\phi 12$	16x $\phi 12$	16x $\phi 12$	
WY-N		β	45	36	22,5	22,5	22,5	18	-	-
		zd	8x $\phi 10$	10x $\phi 10$	16x $\phi 12$	16x $\phi 12$	16x $\phi 12$	20x $\phi 12$	-	-
	ϕp	180	280	430	480	530	680	-	-	
	ϕz	210	310	460	510	560	710	-	-	
	n ₁	-	-	-	-	-	-	3	3	
	y	-	-	-	-	-	-	125	125	
	n ₂	-	-	-	-	-	-	5	7	
	z	-	-	-	-	-	-	150	150	
	fp	-	-	-	-	-	-	510	510	
	fz	-	-	-	-	-	-	550	550	
WY-D	ep	-	-	-	-	-	-	890	1110	
	ez	-	-	-	-	-	-	930	1150	
	nxd	-	-	-	-	-	-	20x $\phi 12$	24x $\phi 12$	
	β	45	36	22,5	-	-	-	-	-	
	zd	8x $\phi 10$	10x $\phi 10$	16x $\phi 12$	-	-	-	-	-	
	ϕp	255	390	530	-	-	-	-	-	
	ϕz	285	420	560	-	-	-	-	-	
	n ₁	-	-	-	3	3	3	3	3	
	y	-	-	-	125	125	125	125	125	
	n ₂	-	-	-	3	5	7	10	13	
z	-	-	-	150	150	150	150	150		
fp	-	-	-	500	500	500	510	510		
fz	-	-	-	530	530	530	550	550		
ep	-	-	-	600	900	1160	1600	2020		
ez	-	-	-	630	930	1190	1640	2060		
nxd	-	-	-	16x $\phi 12$	20x $\phi 12$	24x $\phi 12$	30x $\phi 12$	36x $\phi 12$		



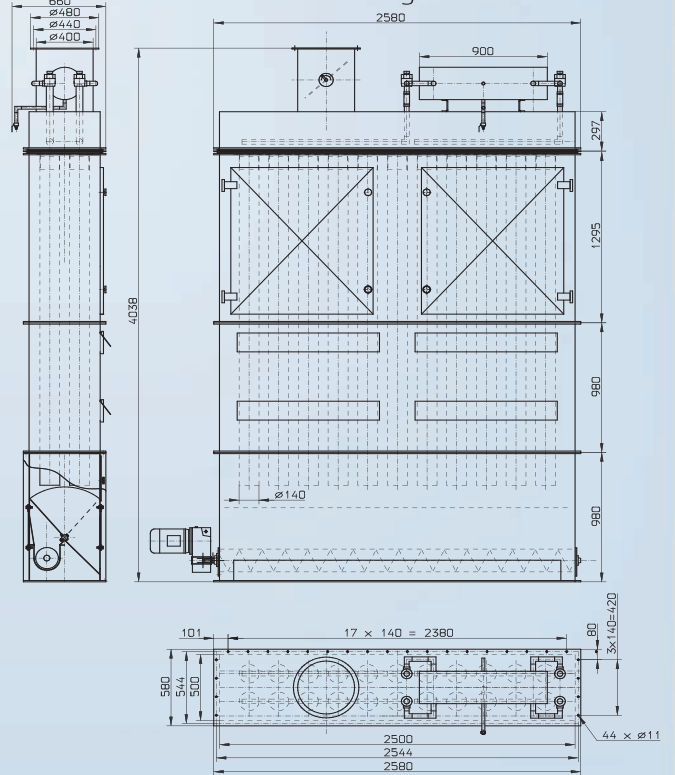
Examples of Reverse Jet Filters

Reverse Jet Filters for the intake section

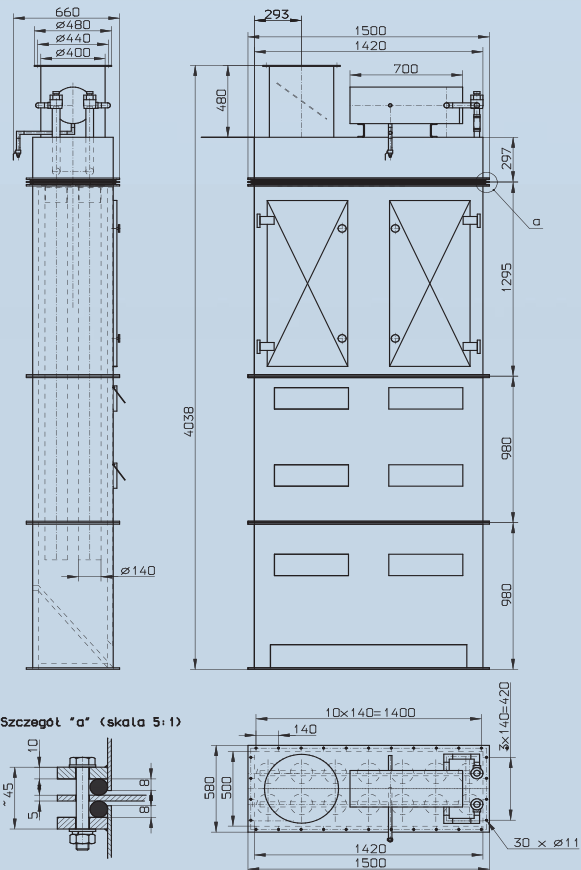
FRW 2225PP Filtering surface 24m²



FRW 2225P Filtering surface 24m²

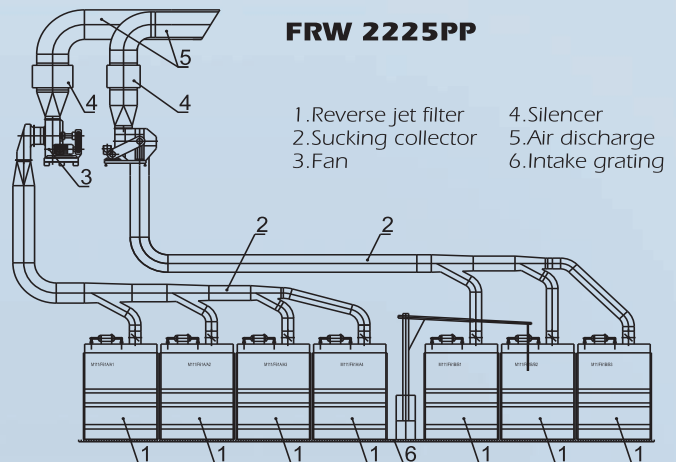


FRW 1425PP Filtering surface 15m²



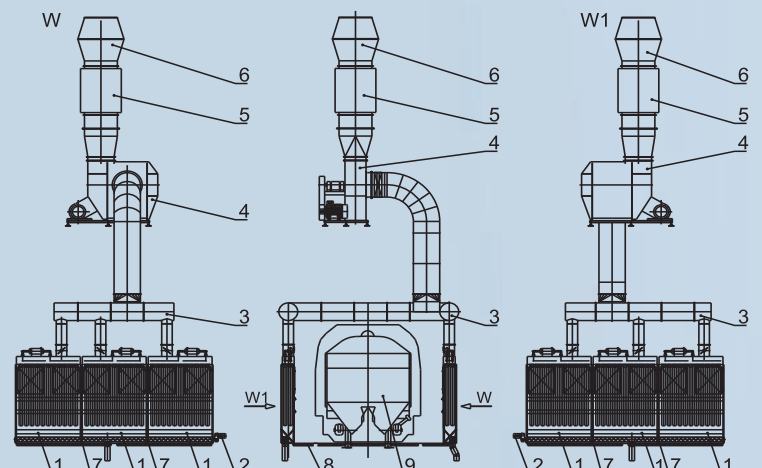
Examples of application

FRW 2225PP



1. Reverse jet filter
2. Sucking collector
3. Fan
4. Silencer
5. Air discharge
6. Intake grating

FRW 2225P



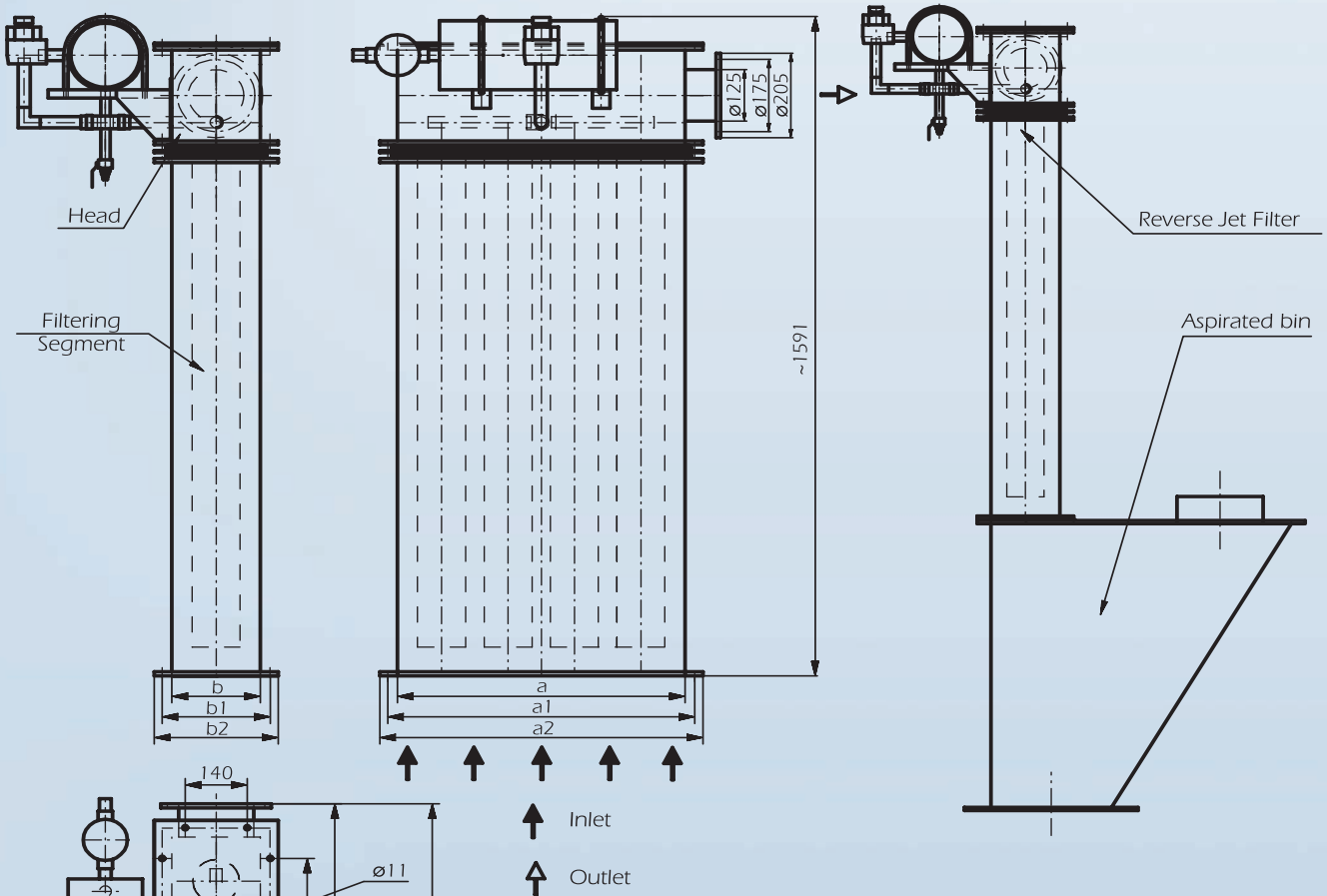
1. Reverse jet filter
2. Screw conveyor PSK 160
3. Sucking collector
4. Fan
5. Silencer
6. Roof discharger
7. Special connector
8. Intake grating
9. Unloaded vehicle

FRW 1825PP (filtering surface 19,5 m²) also available.

Examples of Reverse Jet Filters

Reverse Jet Filters for bin or hopper mounting

FRW 0312D, FRW0412D



- Working negative pressure: up to 0,05 MPa
- Reverse jet filter resistance: 800÷1200 Pa
- Sleeve resistance: 500÷1000 Pa
- Allowed dust concentration in supplied air: 300 g/m³
- Unit load of filtering cloth (according to design, depending on product, fines, etc.): recommended 6 m³/min/m²
- Compressed air pressure: 0,6÷0,7 MPa
- Dust removing efficiency: 99,8%
- Duration between impulses: 10÷600 s
- Valve opening time: 0,1÷2 s
- Quantity of sleeves/diameter: FRW0312D - 3/120 mm
FRW0412D - 4 pieces/120 mm
- Filtering surface: FRW0312D – 1,35 m²
FRW0412D – 1,8 m²
- Air demand: FRW0312D - 17 dm³/min
FRW0412D – 22 dm³/min

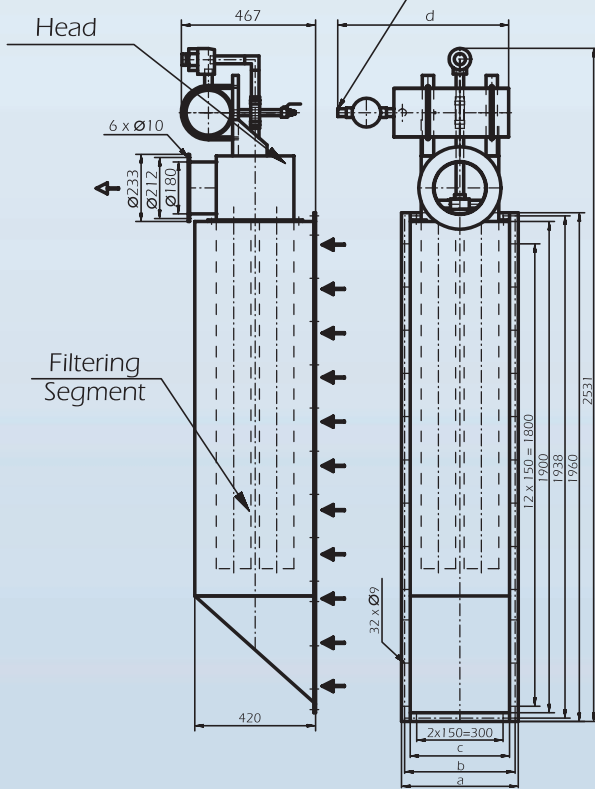
Version	a	a1	a2	b	b1	b2	G1	G2	n	Weight
	[mm]									[kg]
FRW0312D	495	539	575	200	244	280	614	620	3	80
FRW0412D	665	709	745					785	4	95

Examples of Reverse Jet Filters

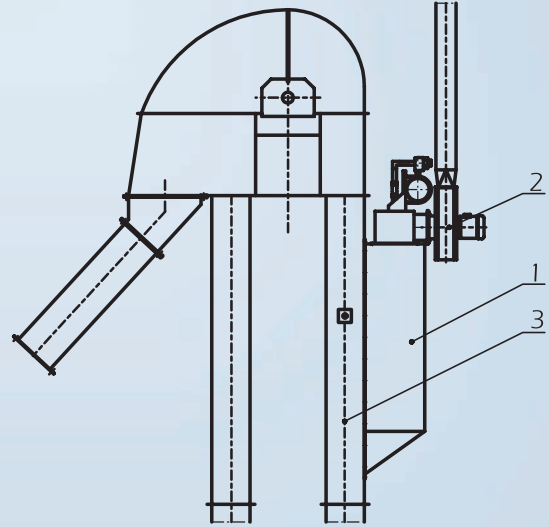
Reverse Jet Filters for bucket elevator and for chain conveyor

FRW 0412D-K

Compressed air pressure 0,6-0,7 MPa



↑ - Inlet
↑ - Outlet



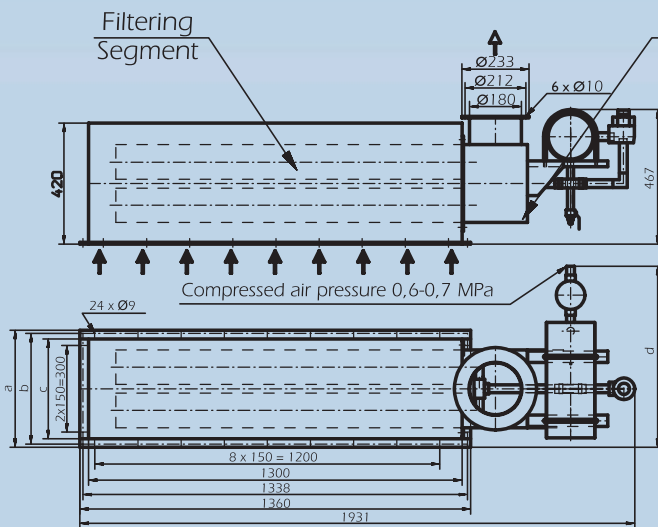
Poz. 1. Filter FRW0412D-K
Poz. 2. Fun Q=10m³/min P=1800Pa
Poz. 3. Bucket elevator

FRW 0412D-K

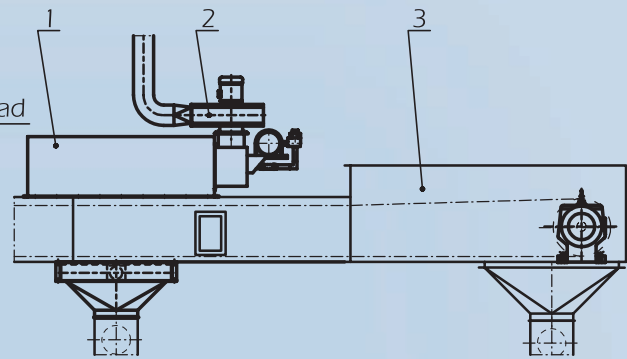
a	b	c	d	Weight
[mm]				[kg]
406	384	346	628	95

- Working negative pressure: up to 0,05 MPa
- Reverse jet filter resistance: 800÷1200 Pa
- Sleeve resistance: 500÷1000 Pa
- Allowed dust concentration in supplied air: 300 g/m³
- Unit load of filtering cloth (according to design, depending on product, fines, etc.): recommended 6 m³/min/m²
- Compressed air pressure: 0,6÷0,7 MPa
- Dust removing efficiency: 99,8%
- Duration between impulses: 10÷600 s
- Valve opening time: 0,1÷2 s
- Quantity of sleeves/diameter: 4 pieces/120 mm
- Filtering surface: 1,8 m²
- Air demand: 22 dm³/min

FRW 0412D-R



↑ - Inlet
↑ - Outlet



Poz. 1. Filter FRW0412D-R
Poz. 2. Fun Q=10m³/min P=1800Pa
Poz. 3. Chain conveyor

FRW 0412D-R

a	b	c	d	Weight
[mm]				[kg]
406	384	346	628	80