Scheda tecnica

FilterMax F

Modular dust collector with integrated pre-separator

FilterMax F is a complete filter solution for the entire workshop. With it's integrated preseparator the FilterMax F is ideal for applications with fume and coarse particles. FilterMax F is an efficient and compact filter with capacity up to 10 000 m³/h (6000 cfm) The FilterMax F is designed for industrial handling of none explosive dry dust and fume. The compact and efficient intgrated pre-separator captures up to 80% of coarse particles and heavy sparks which will extend the lifetime of the filter cartridge.

With it's sturdy design, smooth inner surfaces, optimized angles of repose and digital control system, the filter fulfils stringent demands for continuous operation and effective filtration.

The modular design makes it easy to to expand the capacity of an installed system and will also make transportation, handling and installation as easy as possible.

To simplify use and guarantee optimum performance, FilterMax F is equipped with Nederman's automatic cleaning system. The pulse-jet system shoots short, powerful jets of air into the filter cartridges. The dirt is released from the filter surface and falls down into a container. The pulse-jet system cleans the filter cartridges in sequence while the filter is in operation. The FilterMax F can also be cleaned after operation if so desired.
The FilterMax F cartridge is a high performance, compact filter cartridge. The design is optimized for efficient media use and good cleaning properties. The small inner volume in combination with the air distributing support cage gives efficient cleaning. Shallow open pleats allows efficient removal of dust. The cartridges is available in different materials. The flat pocket shaped minimizes the area of the "lost" media on top of the cartridge.

- Automatic control system
- Pulse-jet cleaning system
- Dust-free filter replacemnet
- Integrated pre-separator / spark trap

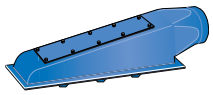
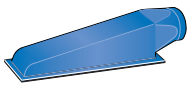
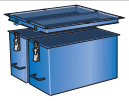
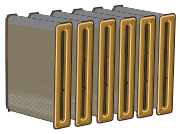
Models

Description	Indoor usage (FI)	Outdoor usage (FO)	Part No
FILTERMAX FI 30	x		12603067
FILTERMAX FO 30		x	12603567
FILTERMAX FI 60	x		12606067
FILTERMAX FO 60		x	12606567
FILTERMAX FI 90	x		12609067
FILTERMAX FO 90		x	12609567

Please note:
Does not include filter cartridges, inlets, outlets and dust handling system. These items must be ordered separately.

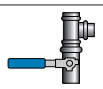
System Parts

To get a complete system you need to choose your system parts

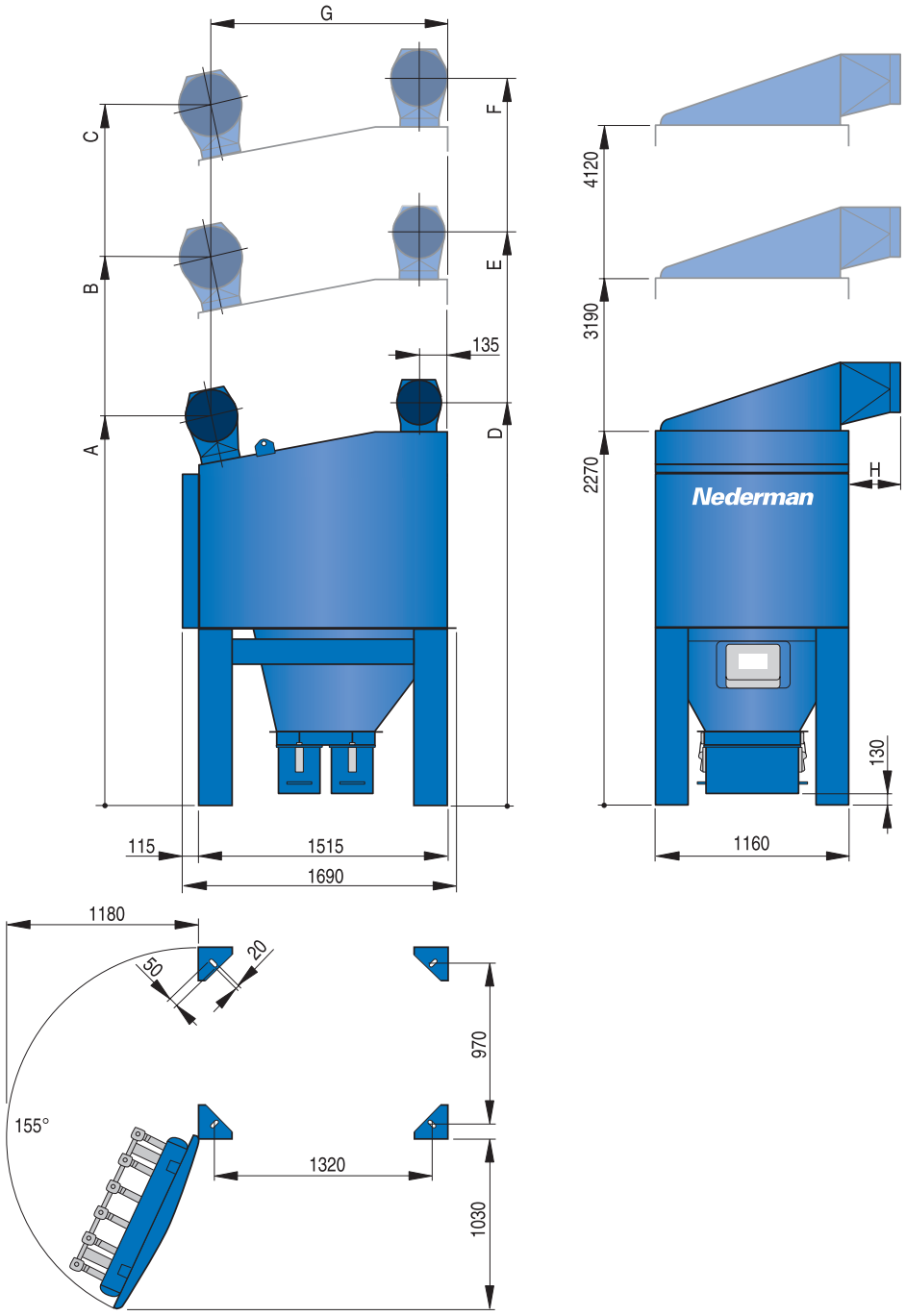
Description	FilterMax FI Part. No	FilterMax FO Part. No	
Inlet. Connection diameter Ø250 mm / 10”	12372070	12373561	
Inlet . Connection diameter Ø315 mm / 12”	12372071	12373562	
Inlet . Connection diameter Ø400 mm / 16”	12372072	12373563	
Inlet. Connection diameter Ø500 mm / 20”	12372073	12373564	
Outlet. Connection diameter Ø315 mm / 12”	12372057	12373565	
Outlet. Connection diameter Ø400 mm / 16”	12372058	12373566	
Outlet. Connection diameter Ø500 mm / 20”	12372059	12373567	
Dust handling system. Container kit 2 x 40 lit / 2 x 10.5 gal Including adapter.	12372140	12373881	
Dust handling system Container kit on wheels, 2 x 100 lit / 2 x 26.5 gal Including adapter and extension legs.	12372067	12373897	
Filter cartridge, 10m² / 108 ft², PW NS-75-10-6, (6-pack) / W3 PTFE impregnated (Non-Stick), spun bound polyester. Suitable for fumes and fine to medium dust. Washable. Efficiency 99% at 0.5 µm.	12373161*	12373161*	
Filter cartridge, 10m² / 108 ft², PW-PTFE-75-10-6 (6-pack) PTFE membrane, laminated to spun bound polyester. Suitable for fine to medium particles. Washable. Efficiency 99.9% at 0.5 µm	12373162*	12373162*	

** Only for ordering with a FilterMax F. Part numbers for replacement filter cartridges can be found in the instruction manual or www.nederman.com.*

Accessories

Description	FilterMax FI Part. No	FilterMax FO Part. No	
Extra dust container 40 lit / 10.5 gal	12373898	12373898	
Extra dust container (incl. lid) 100 lit / 26.5 gal	12373899	12373899	
dP Control kit Is used for controlling the cleaning more efficiently and with better supervision. Saves pressured air in some applications with intermittent load. Equipped with alarm functions for high fall of pressure for filter.”	12373603	12373603	
Shut off valve An air venting type. Should be installed in the compressed air pipe line. Is used to shut off the compressed air supply before any service on the system is done.	12372083	12372083	
Pressure switch for compressed air Protects the filter from damage during use without compressed air. Must not be placed in explosion risk areas.	12372142	12372142	
Filter regulator Is used for setting the correct air pressure. Separates dust in the pressured air why it also protects the valves. Should be installed in the compressed air pipe line. Must be positioned in a frost free environment.	12372064	12372064	
Pressure gauge kit Measures the pressure drop over the filter cartridges. Is mounted on the FilterMax stand.	12372063	12372063	
Filter module Filter module for additional capacity, max 4 modules in one unit.	12373947	12373946	
FilterMax F W3 kit The kit includes dP Control kit, filter regulator, shut off valve, flashlight and plastic bags for the dust containers. With this kit the FilterMax F is BGIA-certified for the highest available welding fume category (W3). Welding fume category W3 means that the unit is able to reliably extract and clean low, medium and high alloyed steels, e.g. containing a part of nickel and chrome of 30% and more with a separation efficiency of ≥ 99%. With this kit the FilterMax F is certified according to the international effective standard DIN EN ISO 15012-1 (2005) that controls industrial and health protection for welding and related processes and the requirements, examination and identification of air cleaning systems.	12375079	12375079	

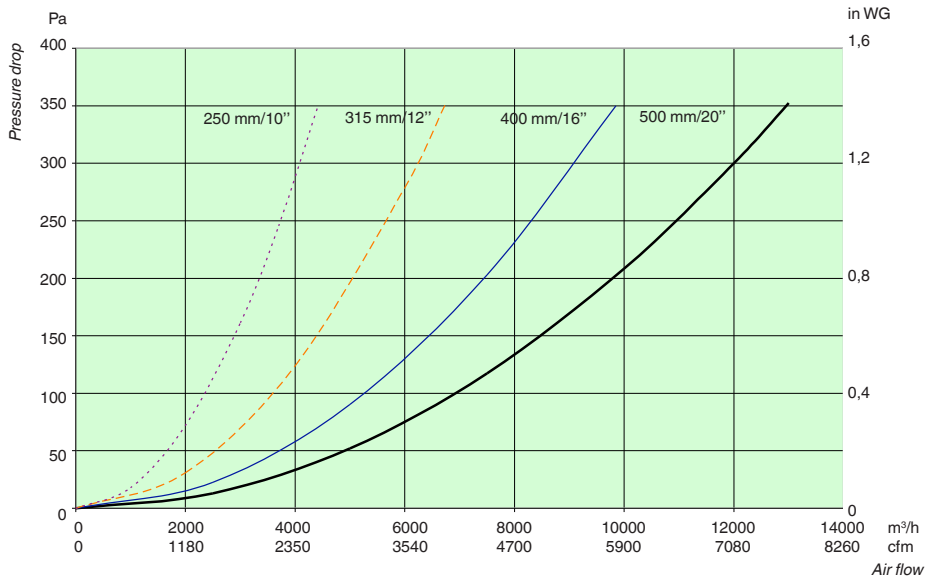
Dimensions



Inlet/Outlet inner diameters (mm / inch)				
	250 / 10	**315 / 12**	**400 / 16**	**500 / 20**
A	-	2375 / 93 ½	2440 / 96	2565 / 101
B	-	3300 / 130	3365 / 132 ½	3490 / 137 ½
C	-	-	4290 / 169	4415 / 174
D	2450 / 96 ½	2560 / 101	-	-
E	3370 / 133	3480 / 137	3540 / 139 ½	-
F	-	4410 / 174	4470 / 176	4600 / 181
G	-	1430 / 56 ½	1445 / 57	1465 / 57 ½
H	275 / 11	325 / 13	395 / 15 ½	445 / 17 ½

** The height dimensions are valid with a 40 l / 10.5 gallon bin.*
If a 100 l / 26.5 gallon bin is used add 450 mm / 18”

Pressure drop for inlet plus outlet



Actual working pressure will depend on application and dimensioning.

Environmental data

Model	F 30	F 60	F 90
Weight (kg/lbs)	630 / 1386	900 / 1980	1200 / 2640
Noise, LpAeq pulse and air flow *	50 dBA	63 dBA	73 dBA
Recovery level % of weight	94%	93%	93%

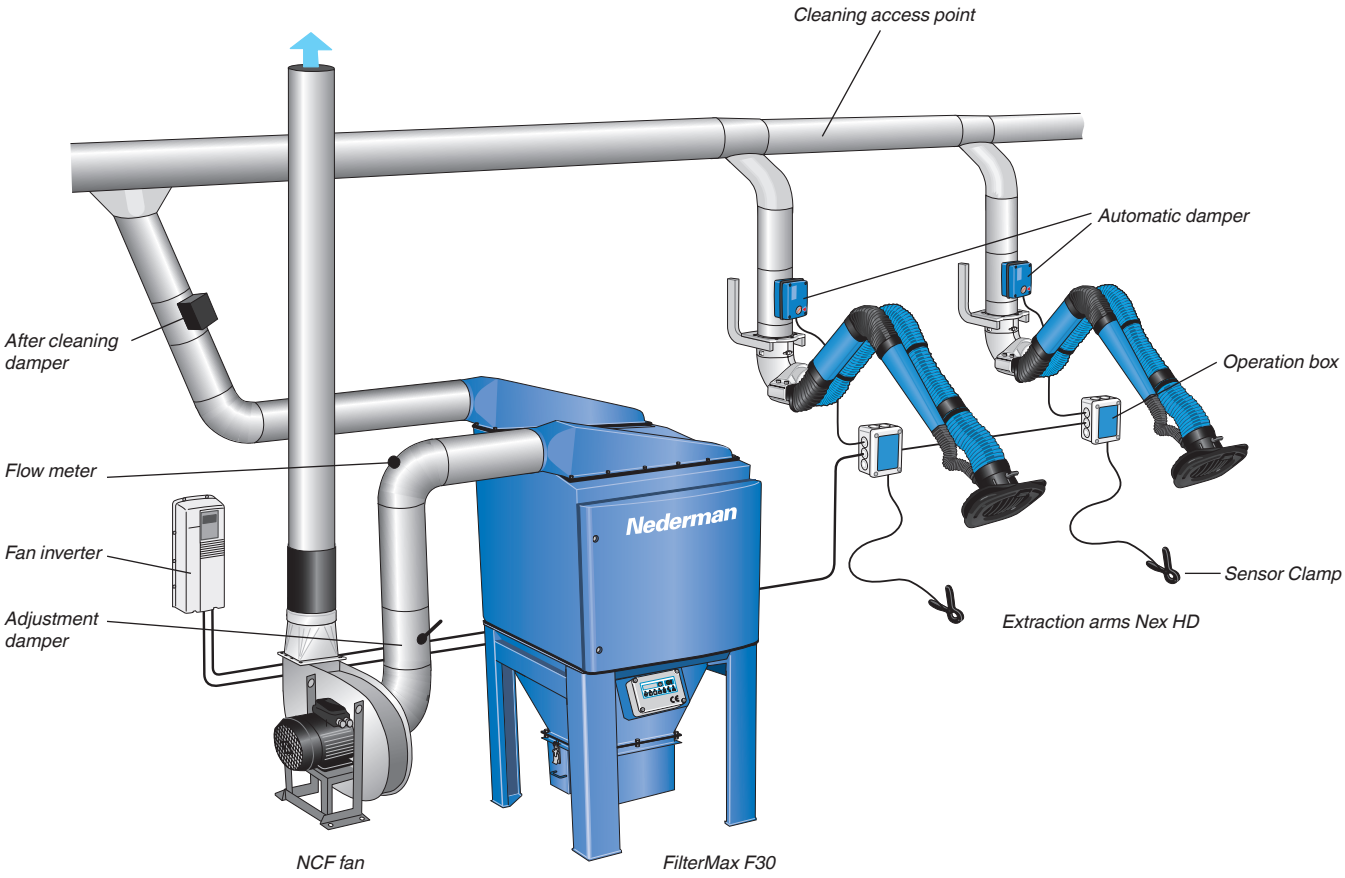
**According to ISO 11203*

Technical Data

Model	F 30	F 60	F 90
Weight	630 kg / 1386 lbs	900 kg / 1980 lbs	1200 kg / 2640 lbs
Number of filter cartridges	6	12	18
Total filter area	60 m^2 / 648 ft^2	120 m^2 / 1296 ft^2	180 m^2 / 1944 ft^2
Airflow (depending on load and application)	1500 - 3500 m^3/h 900 - 2100 cfm	3000 - 7000 m^3/h 1770 - 4100 cfm	4500 - 10000 m^3/h 2700 - 6000 cfm
Compressed air requirements	4 - 6 bar / 60 - 90 psi, water and oil free		
Compressed air consumption	70 N-litres/min at 30 sec intervals, 35 N-litres/cleaning pulse / 2.5 cfm/min at 30 sec intervals, 1.25 cfm/cleaning pulse		
Voltage supply	100 V, 120 V, 230 V, 50/60 Hz		
Ambient temperature	-20°C to +60°C / -5°F to 140°F		
Process air (dry) temperature	0°C to +60°C / 32°F to 140°F, Not condensing		
Dimensioned pressure drop*	1200 Pa / 5" WG		
Filtration	99% or 99.9% (PTFE-filter) at 0.5 µm (after some time in operation), BIA class M**		
Material description	3 mm painted steel (FilterMax FI, FO), epoxy based zinc primer and top coat (FO only))		
Environment classes ***	C2 = low corrosion risk, indoors, unheated air varying temperature (FilterMax FI) C4 = high corrosion risk, outdoors polluted urban areas and coastal areas (FilterMax FO)		
Installation	Indoor / outdoor		
Protection class	IP 54		
Relay voltage, accessory	24 V AC, maximum 60 VA		
Working pressure	0 to -5 kPa, not overpressure		
Pulse noise	50 dB Lp Aeq, 30 s		
Noise level	F30: 50 dBA, F60: 63 dBA, F90: 73 dBA		

**Not including inlet/outlet **According to EN 60335-2-69 ***According to EN ISO 12944*

System installation



- *To avoid pressure losses and dust deposits in the system it is important to use the correct duct diameter. The transport velocity shall be at least 10-12 m/s (2000-2400 ft/min) for fume and 15-20 m/s (3000-4000 ft/min) for dust. Take velocity into account when choosing the duct diameters. The velocity must never decrease on the way to the FilterMax. Use large radius bends and 30° branches.*
- *If the filtered air shall be recirculated, we recommend that you install a safety filter between the fan and the FilterMax, for example the FilterMax SFC.*
- *Take the fire risk into account when you are working with oily materials or themal cutting.*
- *Use a pre-separator/spark trap before the filter if there is a risk of sparks reaching the filter (grinding, cutting).*
- *Use pre-coating and install a fire extingusher system if you are working with a heavily oiled material.*

Model	Inlet (mm / Inch)	Outlet (mm / Inch)
FilterMax F 30	Ø 250/315 / 10”/12”	Ø 315/400 / 12”/16”
FilterMax F 60	Ø 315/400 / 12”/16”	Ø 400/500 / 16”/20”
FilterMax F 90	Ø 400/500 / 16”/20”	Ø 500 / 20”

KOMSA
www.komsa.it