

# FilterMax C25

# A compact multi purpose dust collector with built-in fan



FilterMax C25 is a complete integrated filter solution for the entire workshop. FilterMax C25 handles the air polution from metal industries as well as non explosive dust from other industries. The filter has the capacity to handle up to 2750 m³/h (1620 cfm). A wide range of cartridges for different purposes are available.

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.

To simplify use and guarantee optimum performance, FilterMax C25 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 C25 can also be cleaned after operation if so desired.

The FilterMax C25 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.

- A powerful filtration solution for continous operation
- Compact unit with small floor space requirements
- Quiet cleaning system for a good work environment
- Integrated fan and control system for simple mechanical and electric installation

## **Models**

Description	v	Phase	Hz	Α	Part No.
FilterMax C25 400V 50Hz	400	3	50	6.1	12630167
FilterMax C25 208V 60Hz EPAct motor	208	3	60	11	12630367
FilterMax C25 460V 60Hz	460	3	60	5	12631467
FilterMax C25 575V 60Hz	575	3	60	4	12630467
FilterMax C25 220/380/440V 60Hz Brazil	220/380/440	3	60	11.8 / 6.9 / 5.9	12631867

#### Models including PW NS filters, 12 m<sup>2</sup>

Description	V	Phase	Hz	Α	Part No.
FilterMax C25 400V 50Hz (without filter)	400	3	50	6.1	12630767
FilterMax C25 460V 60Hz EPAct motor (without filter)	460	3	60	5	12630967
FilterMax C25 575V 60Hz (without filter)	575	3	60	4	12631067

#### Models not including filters. Choose filters from list of accessories

Description	V	Phase	Hz	Α	Part No.
Rebuilding Kit for FilterMax C25 from 400V to 230V, 3-phase, 50Hz	230	3	50	6.1	12374563

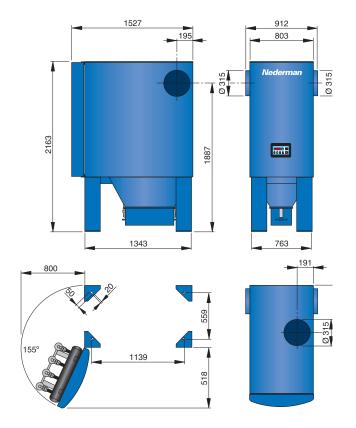
# **Accessories**

Description	Part. No	
Filter cartridge, 12 m² / 130 ft², PW NS-95-12-4 (4-pack) / W3 PTFE impregnated (Non-Stick), spun bound polyester. Suita ble for fumes and fine to medium dust. Washable. Efficiency 99% at 0.5 μm.	12373270*	
Filter cartridge, 12 m² / 130 ft², PW PTFE-95-12-4 (4-pack) PTFE membrane, laminated to spun bound polyester. Suitable for fine to medium particles. Washable. Efficiency 99.9% at 0.5 μm.	12376526*	
Filter cartridge, 10 m² / 108 ft², Antistatic, PWA-95-10-4, (4-pack) Aluminium coated spun bound polyester. Suitable for ignition sencitive, medium to coarse particles. Washable. Efficiency 99% at 0.5 μm.	12373303*	
Filter cartridge, 10 m² / 108 ft², Antistatic PTFE, PWA PTFE-95-10-4, (4-pack) Aluminium coated spun bound polyester, laminated with a PTFE membrane. Suitable for ignition sencitive, medium to coarse particles. Washable. Efficiency 99.9% at 0.5 μm.	12373335*	
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	
Shut off valve for compressed air  An air venting type. Should be installed in the compressed air pipe line. Is used to turn off the compressed air supply before any service on the system is done. When ordered connected to delivery this accessory is mounted on factory.	12372083	
Pressure gauge kit Measures the pressure drop over the filter cartridges. Is mounted on the FilterMax' stand. Can be combined with a pressure switch to get LED no. 3 indicated, which indicates time to change filter cartridges. When ordered connected to delivery this accessory is mounted on factory.	12372063	500 500
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 pressure drop over the filter cartridge.	12373321	
Safety Switch For FilterMax C 25.	12372076	
FilterMax C25 W3 kit  The kit includes dP Control kit, filter regulator, shut off valve, flashlight and plastic bags for the dust container.  With this kit the FilterMax C25 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 steel, e.g. containing a part of nickel and chrome of 30% and more with a separation efficiency of ≥ 99%.  With this kit the FilterMax C25 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.	12375078	BGIA 095033

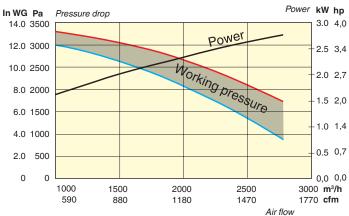
\*Only for ordering with a FilterMax C25. Part numbers for replacement filter cartridges can be found in the instruction manual or www.nederman.com. A number of different types of filter cartridges are available, for details please contact your nearest Nederman dealer.



## **Dimensions**



#### **Suction pressure**



Actual working pressure will depend on application and dimensioning.

## **Technical data**

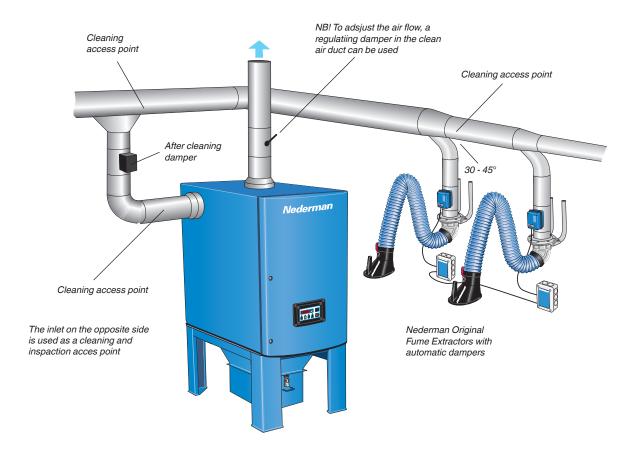
Model	C25
Weight	454 kg / 1000 lbs
Number of filter cartridges	4
Total filter area	48 m² / 520 ft² (Poly Web filter)
	40 m² / 430 ft² (Poly Web antistatic filter)
Airflow (depending on load and application)	1500 - 2750 m³/h 900 - 1600 cfm
Compressed air requuirements	4 - 6 bar / 60 - 90 psi, water and oil free
Compressed air consumption	64 N-litres/min at 30 sec intervals, 32 N-litres/cleaning pulse 2.3 cfm/min at 30 sec intervals, 1.15 cfm/cleaning pulse
Ambient temperature	-20°C to +50°C / -4°F to 122°F
Process air (dry) temperature	0°C to +60°C / 32°F to 140°F, Not condensing
Dimvensioned pressure drop	1200 Pa / 5" WG
Filtration	99% or 99.9% (PTFE-filter) at 0.5 μm (after some time in operation)
Bin capacity	30 lit. / 8 gal.
Material description	3 mm painted steel plate
Installation	Indoor
Fan motor	3 kW (4 hp)
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	66 dB(A)

#### **Environmental data**

Model	C25	
Weight (kg/lbs)	454 / 1000	
Noise, LpAeq pulse and air flow *	66 dBA	
Recovery level % of weight	88%	



### 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 should never decrease en route to FilterMax C25. The following duct diameters can be used for the connection to FilterMax C25: Ø250 mm (10") for the inlet and Ø315 mm (12") for the outlet.
- Use long radius bends and no t-pieces.
- Install plenty of cleaning access points in the ducting system before FilterMax C25.
- If the dust is abrasive it may be necessary to use thick walled (or rubber coted) material in bends and other exposed areas.
- To avoid pressure losses the ducting system should be as short as possible and designed with two or more branches.

- Use larger diameters on the clean side to reduce pressure losses.
- Use fire dampers when the duct system is passing from one fire zone to another. NB! Fire dampers do not stop explosions!
- Install a flow meter in the outlet duct, at least 3 m (10 ft.) from the filter outlet.
- If there is a significant fire risk, it is better to install several small systems then one large system.
- Install a sparktrap to prevent sparks or burning/glowing material from entering the FilterMax C 25.
- At welding work on oiled material the filter cartridges should be treated with fine lime powder (approx. 60 g) before the first start.

