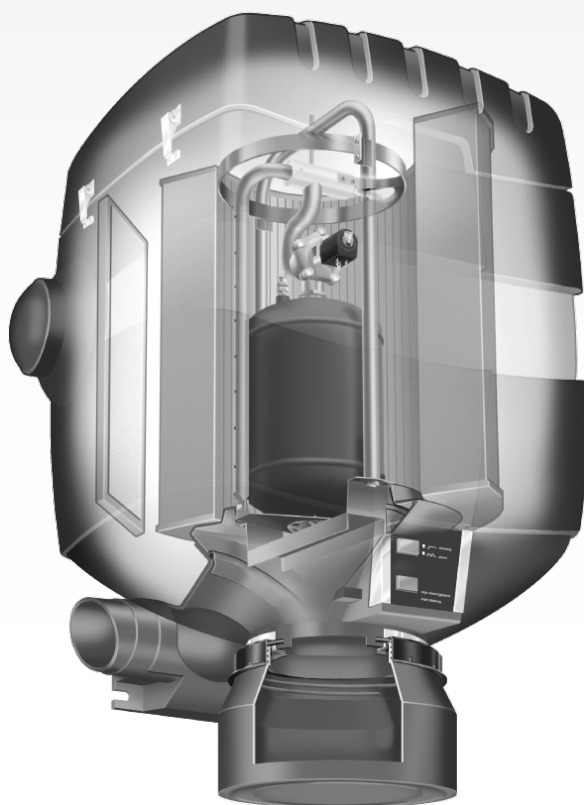


Stationary unit with self-cleaning filter

SFS



EN

Installation and user manual

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EN | ORIGINAL INSTRUCTION

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To improve comprehension for people whose first language is not English, we have written parts of this manual in Simplified Technical English (STE). STE is a controlled language originally developed for aerospace industry maintenance manuals. It offers a carefully limited and standardized subset of English, along with specific writing rules.










PREFACE

Using this manual

This manual is intended to be used as a work of reference for professional, well trained and authorised users to be able to safely install, use, maintain and repair the product mentioned on the cover of this document.

Pictograms and symbols

The following pictograms and symbols are used in this manual:

	TIP Suggestions and recommendations to simplify carrying out tasks and actions.
	ATTENTION A remark with additional information for the user. A remark brings possible problems to the user's attention.
	CAUTION! Procedures, if not carried out with the necessary caution, could damage the product, the workshop or the environment.
	WARNING! Procedures which, if not carried out with the necessary caution, may damage the product or cause serious personal injury.
	CAUTION! Denotes risk of electric shock.
	WARNING! Fire hazard! Important warning to prevent fire.
	WARNING! Explosion hazard! Important warning to prevent explosions.
	Personal protective equipment (PPE) Instruction to use respiratory protection when you do service, maintenance and repair jobs, as well as during functional testing. We recommend to use a half-face respirator according to EN 149:2001 + A1:2009, class FFP3 (Directive 89/686/EEC).
	Personal protective equipment (PPE) Instruction to use protective gloves when you do service, maintenance and repair jobs.

Text indicators

Listings indicated by "-" (hyphen) concern enumerations.
Listings indicated by "•" (bullet point) describe steps to perform.

Service and technical support

For information about specific adjustments, maintenance or repair jobs which are not dealt with in this manual, please contact the supplier of the product. He will always be willing to help you. Make sure you have the following specifications at hand:

- product name
- serial number

You can find these data on the identification plate.

1 INTRODUCTION

1.1 Identification of the product

The identification plate contains, among other things, the following data:

- product name
- serial number



- supply voltage and frequency
- power consumption

1.2 General description

The SFS is a stationary welding fume filter for use with one extraction arm and fan. The filter cartridge is provided with a precoat to extend the lifespan and efficiency of the filter.

The SFS is fitted with the RoboClean™ system for automatic, sectionwise cleaning of the filter cartridge by (externally supplied) compressed air. The dirt and dust particles are collected in the dust barrel.

The SFS is supplied with an external prefilter (spark arrester) in a separate box.

1.3 Options and accessories


The following product can be obtained as an option and/or accessory:

- CKS | Connection kit
For connection of the SFS to a FAN-28 or FAN-42. Consisting of a flexible hose 1 m Ø 160 mm and two hose clamps.

1.4 Product combinations


You can use the SFS in various configurations with an extraction arm and a fan, including control equipment.

In any case, you must order a separate CB (control box) to arrange the 24 VAC supply for the filter cleaning system.

	Refer to the available product data sheet for the possible product combinations.
--	--

1.5 Technical specifications

Physical dimensions and properties	
Material	polypropylene
Weight:	
- filter unit	67 kg (148 lbs.)
- prefilter box	10 kg (22 lbs.)
Capacity of dust barrel	18 litres (4.75 gallon)
Connection cable	NCW-11 (11 m/36 ft)
Filter cartridge	
Type	FCC-30
Filter material	phenol impregnated cellulose
Filter surface area	30 m ² (325 ft ²)
Filter class	C
Treatment	SurfacePlus precoat
Prefilter box	
Filter material	aluminium
Filter surface	0,14 m ² (1.5 ft ²)
RoboClean™ filter cleaning system	
Required compressed air quality	dry and oil-free according to ISO 8573-3 class 6
Required pressure	4-5 bar (60-75 PSI)
Compressed air connection	quick connect coupling ¼ inch
Compressed air consumption	max. 60 NI/min. per pulse
Performance	
Airflow	max. 1100 m ³ /h (647 CFM)

	Refer to the available product data sheet for detailed product specifications.
---	--

1.5.1 Dimensions

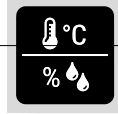
Refer to Fig. I on page 10.



1.6 Pressure drop

Refer to Fig. II on page 10.

1.7 Ambient and process conditions



Operating temperature:	
- min.	5°C (41°F)
- nom.	20°C (68°F)
- max.	45°C (113°F)
Max. relative humidity	80%
Suitable for outdoor use	no

1.8 Transport of the unit

You cannot hold the manufacturer liable for any transportation damage after delivery of the product.

2 PRODUCT DESCRIPTION

2.1 Components

The product consists of the following main components and elements:

Fig. 2.1

- A Filter cover
- B Magnetic valve (24 VAC)
- C Filter body
- D Control panel
- E Outlet opening (left and right)
- F Dust barrel
- G Prefilter box
- H Inlet opening (left and right)
- I Mounting plate
- J Filter cartridge
- K Cleaning unit with quick air relief valve

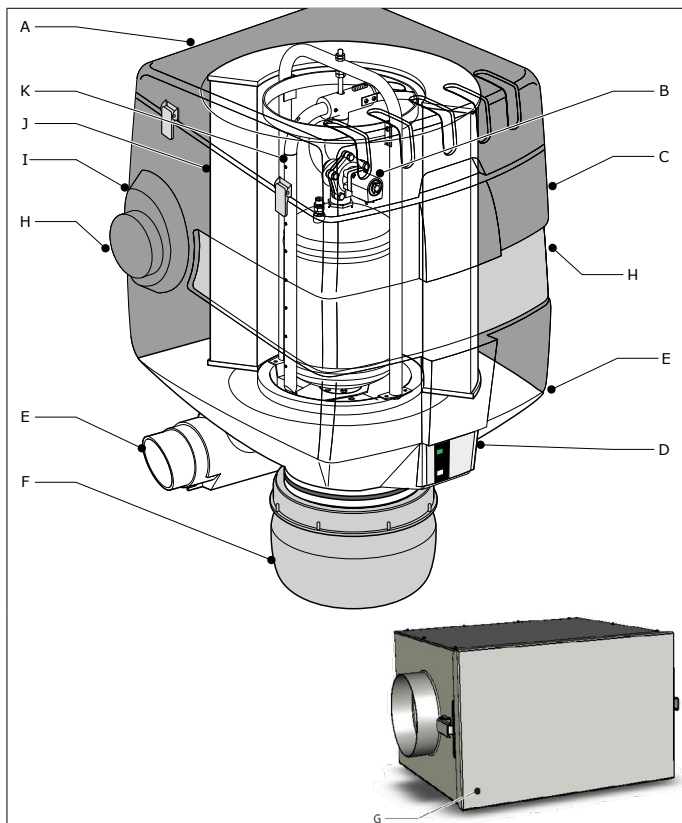


Fig. 2.1 Main components and elements

2.2 Operation



The SFS works in accordance with the recirculation principle. Welding fume is extracted through the hood of the connected extraction arm by a fan. The polluted air first passes the prefilter box that separates the larger particles and sparks, if any. Subsequently the air enters the filter unit. The welding fume particles are collected at the outside of the filter cartridge inside the filter housing. The cleaned air is returned in the workshop through the outlet of a fan or exhausted to the atmosphere via an outlet duct.



The arrows in Fig. I on page 10 indicate the inlet and outlet directions.

2.2.1 Filter cleaning system

When the filter cartridge becomes saturated – and consequently the extraction capacity strongly reduces – a pressure difference switch activates the RoboClean™ filter cleaning system that cleans the filter cartridge sectionwise by compressed air jets from the inside out.

The dust and dirt particles fall into the plastic dust barrel underneath the filter housing.



Refer to paragraph 5.3 for more details about the activation of the cleaning system.

3 SAFETY INSTRUCTIONS

General



The manufacturer does not accept any liability for damage to the product or personal injury caused by ignoring of the safety instructions in this manual, or by negligence during installation, use, maintenance, and repair of the product mentioned on the cover of this document and any corresponding accessories.

Specific working conditions or used accessories may require additional safety instructions. Immediately contact your supplier if you detect a potential danger when using the product.

The user of the product is always fully responsible for observing the local safety instructions and regulations. Observe all applicable safety instructions and regulations.

User manual

- Everyone working on or with the product, must be familiar with the contents of this manual and must strictly observe the instructions therein. The management should instruct the personnel in accordance with the manual and observe all instructions and directions given.
- Do not change the order of the steps to perform.
- Keep the manual with the product.

Users

- The use of this product is exclusively reserved to authorised, trained and qualified users. Temporary personnel and personnel in training can only use the product under supervision and responsibility of skilled engineers.
- Stay alert and keep your attention to your work. Do not use the product when you are under the influence of drugs, alcohol or medicine.
- The product is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Children must be supervised not to play with the product.

Intended use¹

The product has been designed exclusively for extracting and filtering gases and particles which are released during the most common welding processes. Using the product for other purposes is considered contrary to its intended use. The manufacturer accepts no liability for any damage or injury resulting from such use. The product has been built in accordance with state-of-the-art standards and recognised safety regulations. Only use this product when in technically perfect condition in accordance with its intended use and the instructions explained in the user manual.

Technical specifications

Do not change the specifications given in this manual.


Modifications



Modification of (parts of) the product is not allowed.

Installation

- The installation of this product is exclusively reserved to authorised, trained and qualified engineers.
- The electric connection must be executed in accordance with the local codes and requirements. Ensure compliance with the EMC regulatory arrangements.
- During installation, always use Personal Protective Equipment (PPE) to avoid injury. This also applies to persons who enter the work area during installation.
- Use sufficient climbing gear and safety guards when working on a higher level than 2 metres (local restrictions may apply).
- Do not install the product in front of entrances and exits which must be used for emergency services.
- Do not install the unit where it is exposed to vibrations or heat radiation from heat sources.
- Mind any gas and water pipes and electric cables.
- Make sure that the workspace is well illuminated.
- Stay alert and keep your attention to your work. Do not install the product when you are under the influence of drugs, alcohol or medicine.
- Air containing particles such as chromium, nickel, beryllium, cadmium, lead etc., should never be recycled. This air must always be brought outside the working area.

Use





	<p>WARNING! Fire hazard! Do not use the product for:</p> <ul style="list-style-type: none"> - polishing applications in combination with grinding, welding or any other application that generate sparks (fibers from polishing or abrasive flap disks are highly flammable and pose a high risk of filter fires when exposed to sparks) - arc-air gouging - extracting and/or filtering flammable, glowing or burning particles or solids or liquids - extracting and/or filtering of aggressive fumes (such as hydrochloric acid) or sharp particles - extracting and/or filtering dust particles which are released when welding surfaces treated with primer - sucking cigarettes, cigars, oiled tissues, and other burning particles, objects, and acids
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	<p>WARNING! Explosion hazard! Do not use the product for explosion-hazardous applications, e.g.:</p> <ul style="list-style-type: none"> - aluminium laser cutting - grinding aluminium and magnesium - explosive environments or explosive substances/gases
	<p>WARNING! Do not use the product for:</p> <ul style="list-style-type: none"> - extraction of hot gases (more than 70°C/158°F continuously) - flame spraying - oil mist - heavy oil mist in welding fume - extraction of cement, saw dust, wood dust etc.

- Inspect the product and check it for damage. Verify the functioning of the safety features.
- During use, always use Personal Protective Equipment (PPE) to avoid injury. This also applies for persons who enter the work area.
- Check the working environment. Do not allow unauthorised persons to enter the working environment.
- Protect the product against water and humidity.
- Make sure the room is always sufficiently ventilated; this applies especially to confined spaces.
- Make sure that the workshop, in the vicinity of the product, contains sufficient approved fire extinguishers (suitable for fire classes ABC).
- Do not leave any tools or other objects in or on the unit.

Service, maintenance and repairs

- Obey the maintenance intervals given in this manual. Overdue maintenance can lead to high costs for repair and revisions and can render the guarantee null and void.
- Always use Personal Protective Equipment (PPE) to avoid injury. This also applies for persons who enter the work area.
- Make sure the room is sufficiently ventilated.
- Use tools, materials, lubricants and service techniques which have been approved by the manufacturer. Never use worn tools and do not leave any tools in or on the product.
- Use sufficient climbing gear and safety guards when working on a higher level than 2 metres (local restrictions may apply).
- Clean the area afterwards.

	<p>ATTENTION Service, maintenance and repairs must be performed in accordance with directive TRGS 560 and TRGS 528 by authorised, qualified and trained persons (skilled) using appropriate work practices.</p>
	<p>ATTENTION Before you carry out service, maintenance and/or repair jobs, fully disconnect the unit from the mains.</p>
	<p>Personal protective equipment (PPE) Wear respiratory protection and protective gloves during service, maintenance and repairs.</p>
	<p>WARNING The industrial vacuum cleaner that you use during service and maintenance must meet dust class H according to EN 60335-2-69 or HEPA class (efficiency ≥99.97% at 0.3 µm).</p>

1. "Intended use" as explained in EN-ISO 12100-1 is the use for which the technical product is suited as specified by the manufacturer, inclusive of his directions in the sales brochure. In case of doubt it is the use which can be deduced from the construction, the model and the function of the technical product which is considered normal use. Operating the machine within the limits of its intended use also involves observing the instructions in the user manual.

4 INSTALLATION

4.1 Tools and requirements

You need the following tools and requirements to install the unit:

- basic tools
- wall mounting hardware



Optionally:

- pressure reducing valve

4.2 Unpacking

Make sure that the product is complete. The package contains:



- welding fume filter (SFS)
- mounting plate
- connection cable (NCW-11)
- cable gland (PG7)
- prefilter box (kit)
- electrical diagram

If parts are missing or damaged, contact your supplier.

4.3 Mounting

The SFS has been designed to be used in a configuration with only **one** extraction arm and **one** extraction fan (FAN-28 or FAN-42). Do **not** connect the SFS to more than one extraction arm or extraction fan. Only connect the SFS to the CB control box.



ATTENTION!

The SFS functions only if the harmful fumes are **blown** directly through an extraction fan into the filter. Therefore, do **not** connect the SFS to the extraction opening of the fan.

General installation instructions

Fig. 4.1

- Install the SFS (E) in such a way that the inlet opening (D) is horizontally in line with the outlet opening (B) of the fan (A).
- In the standard set-up the SFS (E) is positioned on the right side of the fan (A).
- Leave enough space above the unit²; refer to Fig. III (H) on page 11.
- Mind the correct airflow through the prefilter box (C).

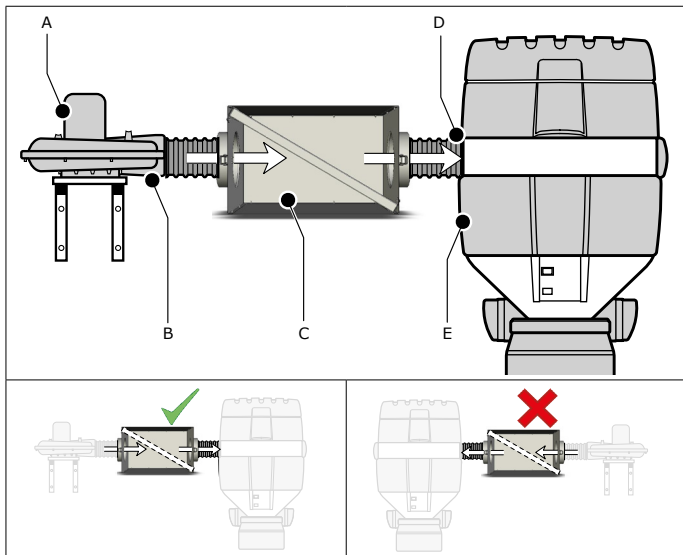


Fig. 4.1 General installation instructions

2. You must remove the filter cover to exchange the filter cartridge

4.3.1 Mounting plates



ATTENTION!

Before you install the mounting plates, make sure that the wall or mounting structure is strong and rigid enough. The weight of the SFS unit is 67 kg (148 lbs.).

The type of hardware to install the mounting plates depends on the wall type.



Refer to Fig. III on page 11 for the recommended installation height and position of the mounting plates.

Fig. 4.2

- Install the mounting plate of the SFS (B).
- Install the mounting plate of the prefilter box (A).

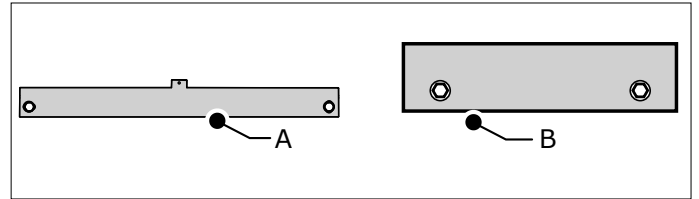


Fig. 4.2 Mounting plates



Fig. 4.1

For mounting the (NMB or TNB) wall mounting bracket + extraction fan, refer to the corresponding manuals.

4.3.2 SFS unit

Fig. 4.5

Factory-wise, the inlet and outlet openings are prepared as follows:

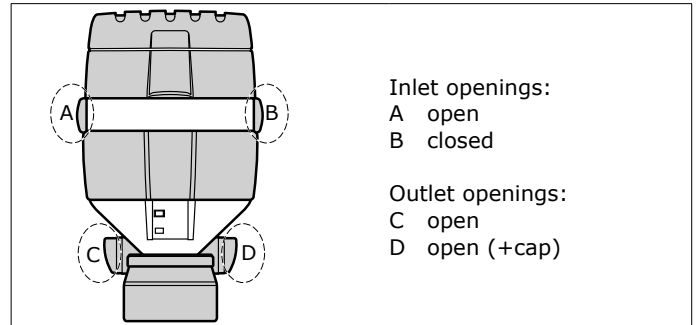


Fig. 4.5 Inlet and outlet openings

- Determine the desired inlet and outlet positions. Make sure to have:
 - **one** inlet opening (A **or** B)
 - **one or two** outlet openings (C **and/or** D)

Fig. 4.6

- Put the SFS (A) over the mounting plate (B).
- Connect the inlet opening (ref. Fig. 4.5A or B) of the SFS to:
 - a CKS (flexible hose with two hose clamps; option); or
 - a spiralo-tube (Ø 160 mm [6.3 in.]), over the T-profile
- If desired, connect the outlet opening(s) (ref. Fig. 4.5C or D) to an air duct system.
- Make sure that the complete extraction system is airtight.
- Insert two bolts in the slotted holes in the filter body to secure the complete filter unit.

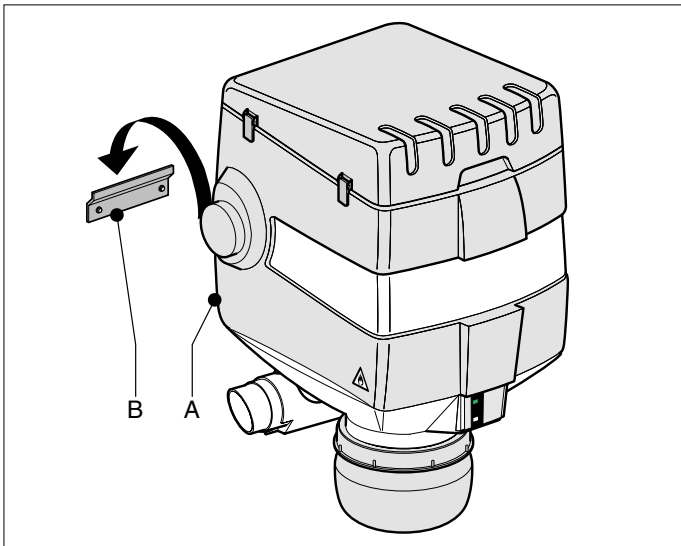


Fig. 4.6 Mounting of the SFS

4.4 Commissioning checklist



#	Check	Ref. par.	OK
1.	Is the direction of rotation of the connected fan correct?		
2.	Is the filter unit connected to the compressed air supply?	4.3.4	
3.	Is the compressed air pressure correct?	4.3.4	
4.	Is the entire system airtight?	4.3.2	

ATTENTION!
If it is not allowed to recycle the air, connect the outlet opening(s) to an air duct system that leads the air to the outside.

4.3.3 Prefilter box

To install the prefilter box, refer to the instruction sheet that is supplied with the product.

4.3.4 Compressed air connection



WARNING
Prevent damage to the cleaning mechanism. The compressed air must be dry and oil-free according to ISO 8573-3 class 6.

The filter cleaning system functions on compressed air with a recommended working pressure of 4-5 bar (60-75 psi). Preferred pressure: 4,5 bar (65 psi).

- If necessary, install a pressure reducing valve to prevent unwanted activation of the safety valve.
- Connect the compressed air hose to the reducing nipple (1/4" internal) on the bottom left side of the SFS.

4.3.5 Electric connection



The CB control box provides 24 VAC power to the RoboClean™ filter cleaning system. For this purpose you need the connection cable (NCW-11) and the cable gland (PG7).

- Connect the connection cable (NCW-11) to the three-pin connection block on the rear of the SFS.
- Connect the other side of the cable on the CB. Refer to the corresponding manual for detailed instructions.

WARNING
Prevent damage. Mind the colour codes of the cable.

WARNING
Before you connect the cable, sure the that CB is disconnected from the mains.

5 USE



WARNING!
Fire hazard! Do **not** use the product for polishing applications in combination with grinding, welding or any other application that generate sparks. Refer to chapter 3 / Safety instructions / Use.

5.1 Control panel

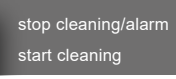
The control panel contains the following controls and indicators:

Fig. 5.1

A Indicator (orange)

Blinking pattern	Means
 cleaning	The filter cleaning process is active
 alarm	- The filter cartridge is clogged and cannot be cleaned anymore; or - the compressed air pressure is too low to clean the filter

B Reset/start button (black)

Button	Functions
	- To reset the filter cleaning alarm (orange indicator) - To activate and stop the filter cleaning process manually

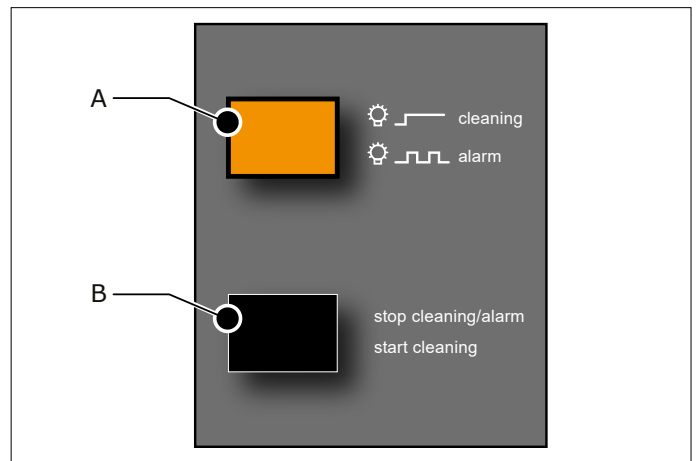


Fig. 5.1 Control panel

5.2 Use



For use of the connected extraction arm and control equipment, refer to the corresponding manuals.

5.3 Filter cleaning system

5.3.1 Normal operation

During normal operation³ the SFS functions fully independently; the extraction fan blows the welding fume into the filter unit.

As soon as, as a result of clogging, the airflow reaches a minimum value, a pressure difference switch activates the RoboClean™ filter cleaning system. This system subsequently cleans the filter cartridge sectionwise by compressed air jets. The dust and dirt particles fall into the dust barrel.

During this (self) cleaning process the orange indicator (ref. Fig. 5.1A) is on. It goes off when the cleaning cycle is finished. In the meantime, the fan continues to run.

5.3.2 Manual activation

To activate the filter cleaning system manually, do the following.

- Push the black reset/start button (ref. Fig. 5.1B).

Subsequently:

- The connected extraction fan starts running or remains on.
- The orange indicator (ref. Fig. 5.1A) goes on.

The indicator remains on during the full cleaning cycle (approx. 40-50 min. = 40 jets of compressed air).

You can stop the cleaning cycle at any moment by pushing the reset/start button again. The cleaning system then returns to normal operation.

5.3.3 Saturation of the system

When the filter cleaning system is unable to clean the filter cartridge in a sufficient way, the orange indicator (ref. Fig. 5.1A) starts blinking. This means that the filter cartridge becomes saturated and that you must replace it⁴.

- Push the black reset/start button (ref. Fig. 5.1B) to stop the orange indicator from blinking.
- Replace the filter cartridge (refer to paragraph 6.2).
- Empty the dust barrel (refer to paragraph 6.3)

6 MAINTENANCE

6.1 Periodic maintenance



The product has been designed to function without problems for a long time with a minimum of maintenance. In order to guarantee this some simple, regular maintenance and cleaning activities are required which are described in this chapter. If you observe the necessary caution and carry out the maintenance at regular intervals, any problems occurring will be detected and corrected before they lead to a total breakdown.



WARNING
Overdue maintenance can cause fire.

3. This means with a clean, non-saturated filter cartridge

4. The fan continues to run so you can finish the welding job first

The indicated maintenance intervals can vary depending on the specific working and ambient conditions. Therefore we recommend to thoroughly inspect the complete product once every year beside the indicated periodic maintenance. For this purpose contact your supplier.

The maintenance activities in the table below indicated by [¹] can be carried out by the user; other activities are strictly reserved for well-trained and authorised service engineers.

Component	Action	Frequency: every X months		
		X=1-3	X=3	X=6
Filter unit				
Inside	Clean with an industrial vacuum cleaner and remove dust from the filter housing		X [¹]	
Filter cartridge	Check for damage, clogging and saturation. Replace if necessary; refer to paragraph 6.2	X [¹]		
Filter cleaning system	Check the functioning via manual operation (turning, leakage)			X
Prefilter box				
Inside	Clean with an industrial vacuum cleaner	X [¹]		
Aluminium filter	Check for damage, clogging and saturation. Replace if necessary; refer to paragraph 6.2	X [¹]		
Outside	Clean with a non-aggressive detergent			X [¹]
Dust barrel				
Inside	Check the contents of the barrel. Empty if necessary; refer to paragraph 6.3	X [¹]		
*) During use, you must check the level of contents in the dust barrel regularly. The emptying frequency depends on the intensity of use and will be a matter of experience. In the initial stage, do a check on the level of contents of the dust barrel 2 times per month.				

6.2 Filter replacement



		Personal protective equipment (PPE) Wear respiratory protection and protective gloves when you replace any filter.
	WARNING Do not replace any filter while the fan is running. De-energize the fan before any filter replacement.	

6.2.1 Filter cartridge

You must replace the filter cartridge:

- when it is damaged;
- when the extraction capacity remains insufficient;
- when the orange indicator keeps blinking, while the cleaning mechanism is running.

You will learn from experience when you must replace the filter cartridge, since the lifespan strongly depends on the composition of the welding fumes, the humidity, etc.

To replace the filter cartridge, do the following.

Fig. 6.1

- Loosen the star knob (D) and the four clips (C).
- Remove the filter cover (A).

- Remove the filter cartridge (B) and put it in the plastic sack in which the replacement filter cartridge is supplied. Seal the sack securely.
- Clean the filter housing with an industrial vacuum cleaner.
- Install a new filter cartridge.
- Install the filter cover. Fasten the four clips and the star knob.
- Dispose of the used filter cartridge in accordance with federal, state or local regulations.

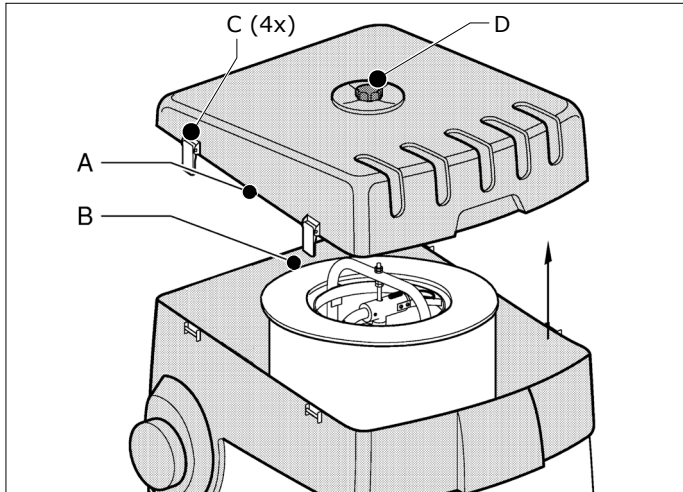



Fig. 6.1 Filter replacement

6.2.2 Prefilter box




- You must replace aluminium filter inside the prefilter box:
- when it is clogged or saturated and cannot be cleaned with an industrial vacuum cleaner; or
 - when it is damaged.

 In case the aluminium filter is damaged, we recommended to replace the filter cartridge as well.

To replace the aluminium filter, do the following:

- Loosen the two clips.
- Remove the filter cover.
- Remove the filter and put it in the plastic sack in which the replacement filter is supplied. Seal the sack securely.
- Clean the inside of the prefilter box with an industrial vacuum cleaner.
- Install a new filter.
- Install the filter cover and fasten the two clips.
- Dispose of the used filter in accordance with federal, state or local regulations.

6.3 Emptying the dust barrel

		Personal protective equipment (PPE) Wear respiratory protection and protective gloves when you empty the dust barrel.
	WARNING Do not empty the dust barrel: - while the fan is running - while a filter cleaning cycle takes place. Make sure that the orange indicator (ref. Fig. 5.1A) is off .	

You must empty the dust barrel:

- when it is full
- (preferably) when you have replaced the filter cartridge

To empty the dust barrel, do the following.

Fig. 6.2

- Loosen the dust barrel (C) from the filter housing (A).
- Empty the dust barrel in a plastic sack. Seal the sack securely.
- Install the dust barrel. Make sure to install the sealing ring (B) to make the connection airtight.
- Dispose of the plastic sack in accordance with federal, state or local regulations.

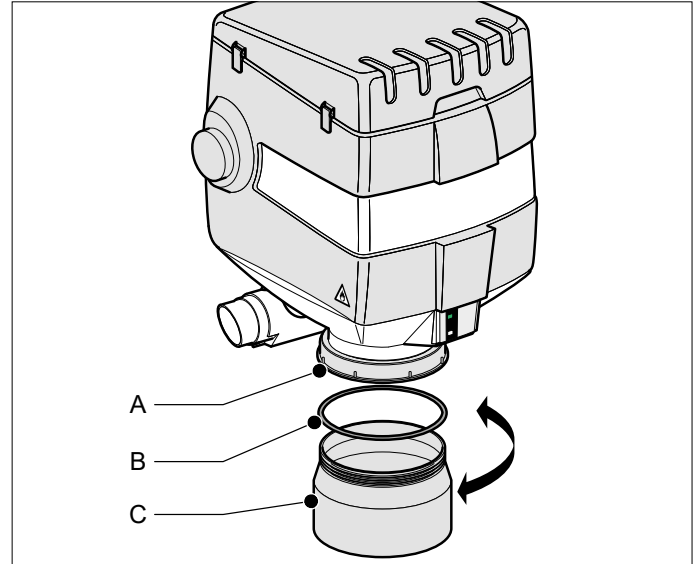


Fig. 6.2 Emptying the dust barrel

7 TROUBLESHOOTING

If the unit does not function (correctly), consult the checklist below to see if you can remedy the error yourself. Should this not be possible, contact your supplier.



WARNING

Obey the safety regulations that are written in chapter 3 when you carry out the activities below.

Symptom	Problem	Possible cause	Solution
Poor extraction capacity	The unit does not function properly	The shut-off damper in the connected extraction arm is (partly) closed	(Fully) open the shut-off damper
		Inverted direction of rotation of the connected fan (3ph only)	Change the direction of rotation of the fan; refer to the corresponding manual
		Clogged filter cartridge	Replace the filter cartridge; refer to paragraph 6.2
Pollution of the facility	Filter cartridge ripped or placed incorrectly	Aluminium filter inside the prefilter box is clogged	Clean or replace the aluminium filter; refer to paragraph 6.2
			Replace the filter cartridge or place it correctly

Symptom	Problem	Possible cause	Solution
Dust or smoke from inlet opening	Pollution of the facility	Outlet(s) blocked	Remove obstructions from the outlet opening(s) and/or the connected ductwork
		Clogged filter cartridge	Replace the filter cartridge; refer to paragraph 6.2
		Aluminium filter inside the prefilter box is clogged	Clean or replace the aluminium filter; refer to paragraph 6.2
Dust or smoke from dust barrel	Air leakage	Sealing of the dust barrel is damaged	Replace the sealing of the dust barrel
Orange indicator (ref. Fig. 5.1A) is off during filter cleaning	No correct status indication	Indicator defective	Replace the indicator
		control PCB is defective	Replace the control PCB
		24 VAC supply defective	Repair the 24 VAC supply
Orange indicator (ref. Fig. 5.1A) keeps blinking, even after filter cleaning	Poor extraction	Clogged filter cartridge	Replace the filter cartridge; refer to paragraph 6.2
		Cleaning mechanism defective:	
		- Loose compressed air connection	- Repair the compressed air connection
		- No compressed air available or air pressure too low	- Connect or repair the compressed air supply
		- Magnetic valve defective	- Replace the membrane
			- Replace the magnetic valve
		- Replace the coil	
		- control PCB is defective	- Replace the control PCB
- Pressure difference switch defective	- Replace the pressure difference switch		
- Cleaning mechanism is defective or worn	- Replace the cleaning mechanism		
Hissing sound	No filter cleaning	Magnetic valve defective or worn	Replace the magnetic valve
SFS does not react to reset/start button (black)	The unit does not function properly	Reset/start button defective	Replace the reset/start button
		Control PCB is defective	Replace the control PCB
		24 VAC supply defective	Repair the 24 VAC supply

8 SPARE PARTS

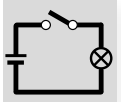
8.1 Filter unit

The following spare parts are available for the filter unit;
- refer to exploded view Fig. IV on page 12



9 ELECTRICAL DIAGRAM

Refer to the separately supplied electrical diagram.



10 DISPOSAL

Dismantling and disposal of the unit must be done by qualified persons.



Personal protective equipment (PPE)
Wear respiratory protection and protective gloves when you dismantle and dispose of the unit.

10.1 Dismantling

To safely dismantle the unit, obey the safety instructions that follow.

Before dismantling of the unit:

- disconnect it from the mains
- disconnect it from the compressed air
- clean the outside

During dismantling of the unit:

- make sure that the area is sufficiently ventilated, e.g. by a mobile ventilation unit

After dismantling of the unit:

- clean the dismantling area

10.2 Disposal

Dispose of the pollutants and dust, together with the used filter cartridge, in a professional manner in accordance with federal, state or local regulations.

CE DECLARATION

CE declaration of conformity for machinery

We, Plymovent Manufacturing B.V., Koraalstraat 9, 1812 RK Alkmaar, Netherlands, herewith declare, on our own responsibility, that the product:
- SFS



which this declaration refers to, is in accordance with the conditions of the following Directives:

- EMC 2014/30 EU

Signature:

Name: M.S.J. Ligthart
Position: Product Manager
Date of issue: 15th December 2019

Fig. I Dimensions

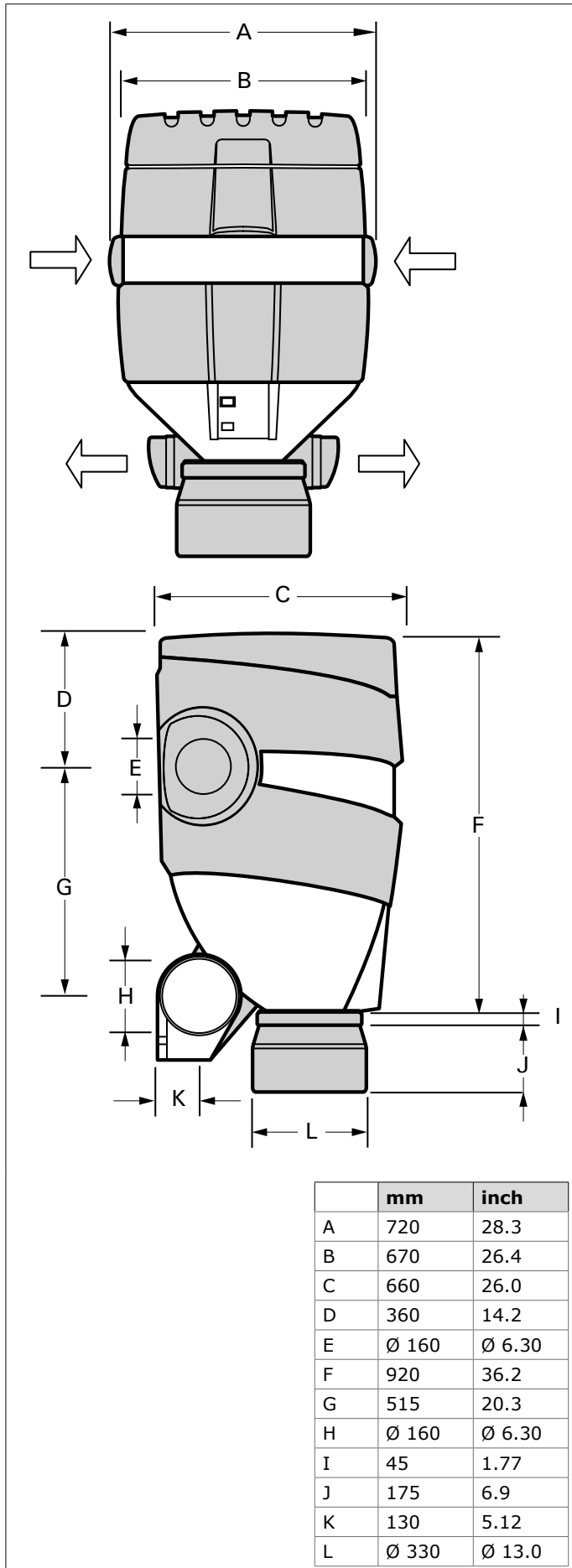


Fig. II Pressure drop

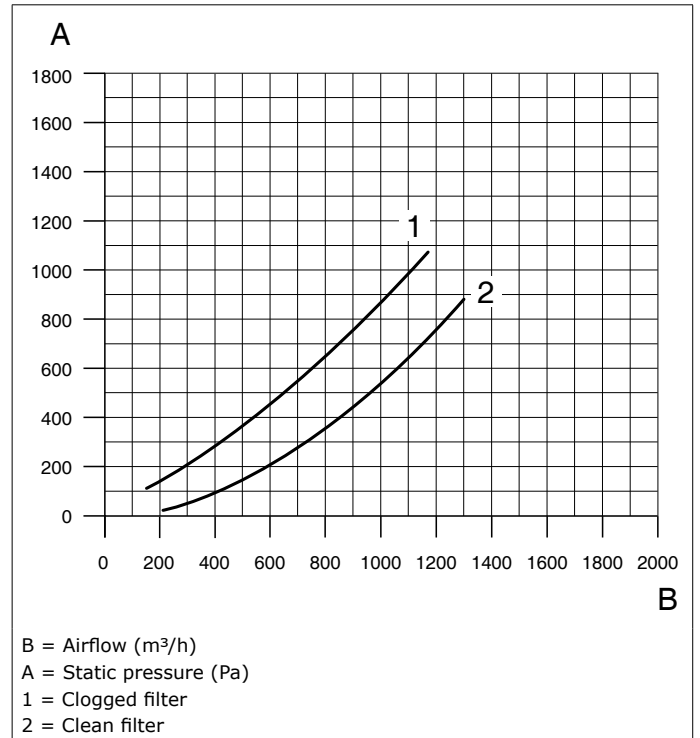


Fig. III Installation measurements

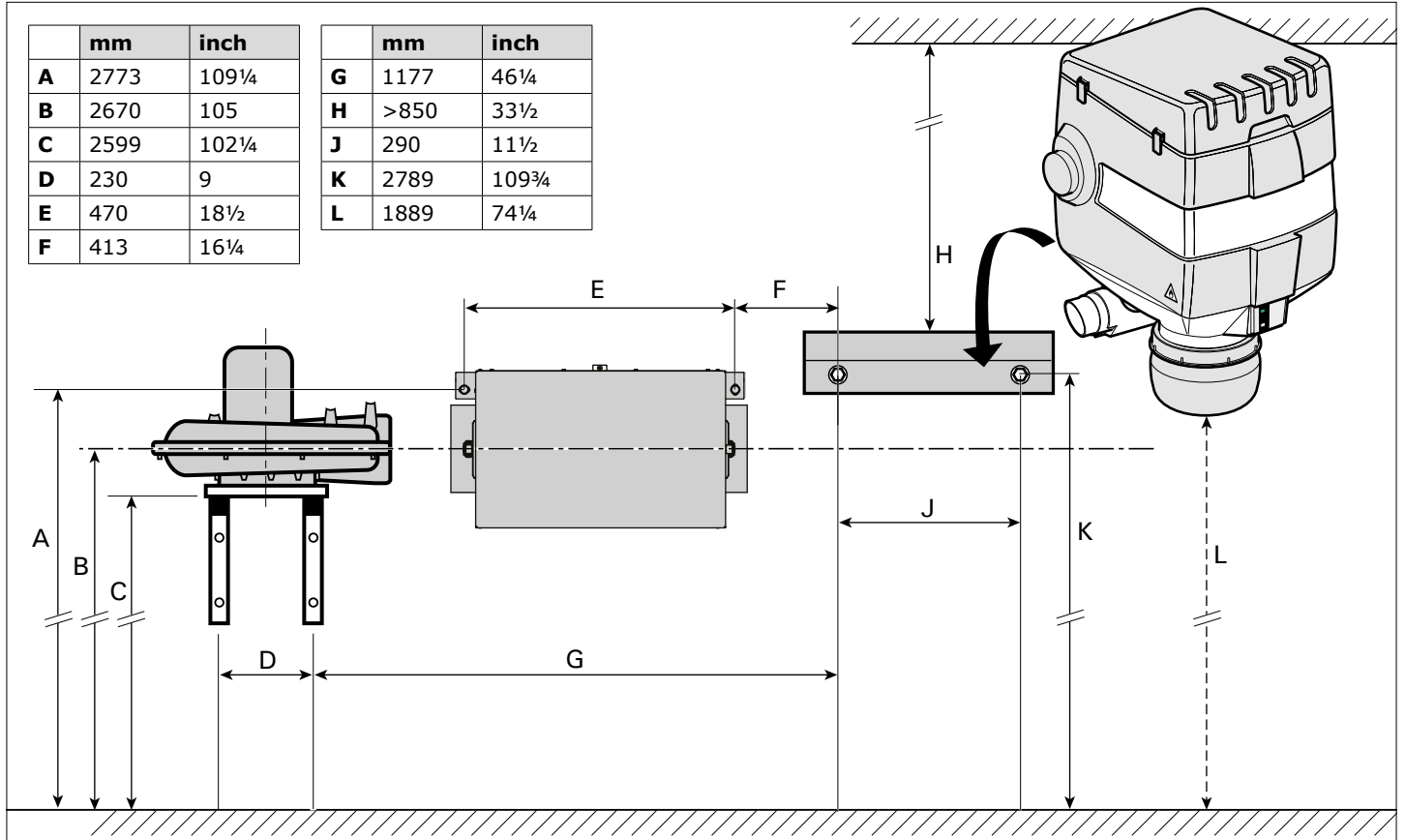
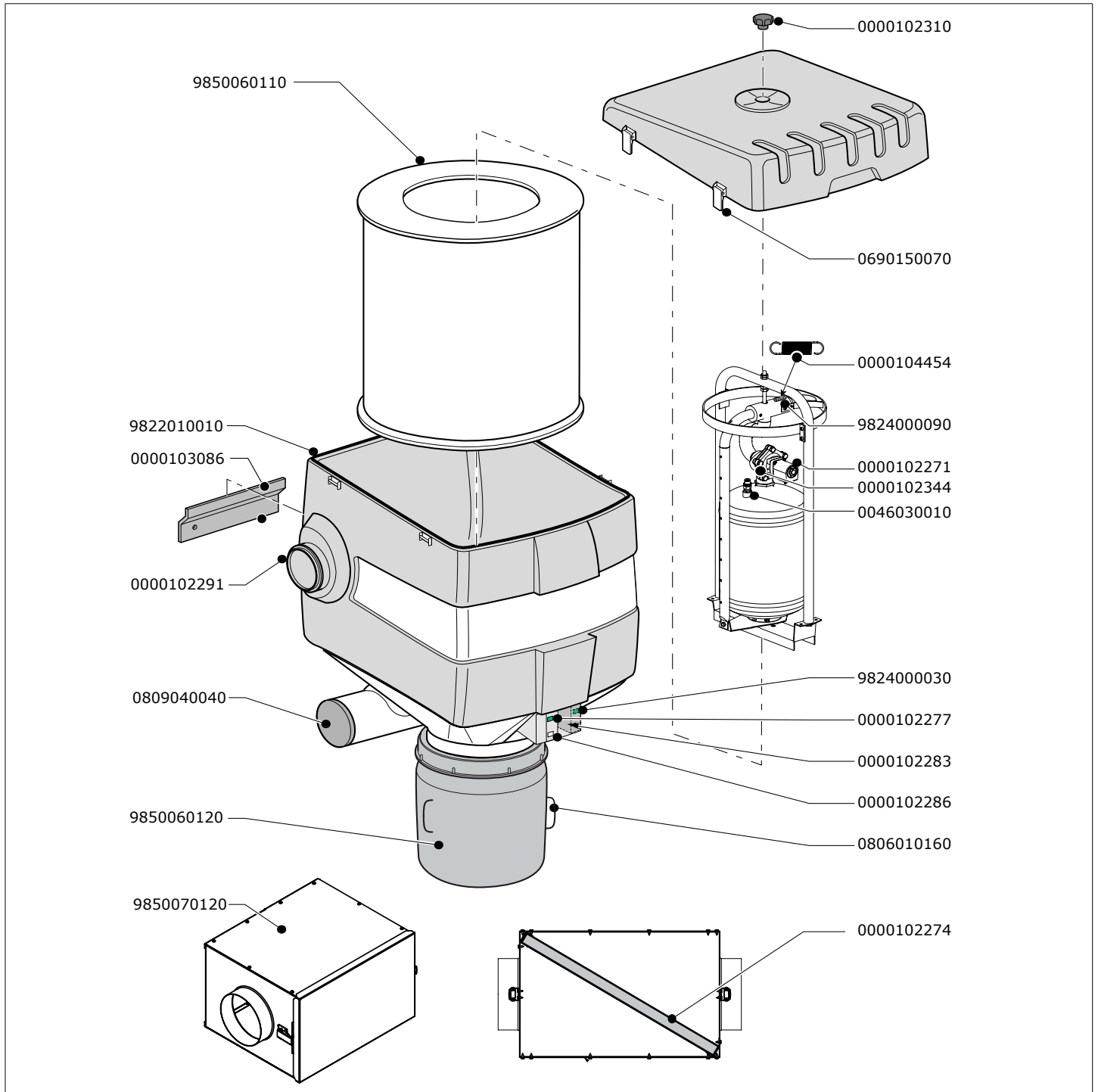


Fig. IV Exploded view



Art. no.	Description
0000102271	Magnetic valve 3/4 inch AC
0000102274	Spark arrester
0000102277	Control lamp 28V, yellow
0000102283	PC board control MFS/SFS
0000102286	Reset/start button
0000102291	Sealing ring
0000102310	Star knob M8
0000102344	Membrane + spring of magnetic valve
0000103086	Mounting strip
0000104454	Tension spring
0000117906	Coil 24V AC incl. connector [not shown]

Art. no.	Description
0000117908	Membrane (square) + spring for magnetic valve [not shown]
0046030010	Safety valve 6-10 bar for compressed air tank
0690150070	Lock
0806010160	Handle barrel
0809040040	Cover Ø 160 mm
9822010010	Sealing (2,5 m)
9824000030	Pressure difference switch (670 Pa)
9824000090	Piston mechanism
9850060110	DuraFilter FCC-30
9850060120	Barrel 15L for filter residue (reusable)
9850070120	Prefilter box

