

User Manual

WF-ECO F9 Jet-Pulse Extractor Filter.

Welding Fume and Dust.

WF-Eco F9 Jet-Pulse wall filter is an efficient and economical solution for light welding smoke and light dust extraction.

Economical and Easy to Mount.

Just mount the WF-Eco F9 Jet-Pulse filter on the wall and attach it to electricity and compressed air. Mount an 1.5m, 2m or 3m Flexi FLT Extraction Arm directly on the bottom of the box and the equipment is ready for use.

Stainless Steel Welding.

WF-Eco F9 Jet-Pulse can be equipped with a HEPA H13/W3 Filter on top of the filter unit, for light Stainless Steel welding. A HEPA FILTER ADAPTER is then needed. The HEPA Filter-Box has to be replaced when full. The F9 Filter works then like a Pre-Filter to increase the life time of the HEPA Filter. The prefilter can be cleaned 50-100 times with the built in compressed air cleaning system.

Flexible and Strong

WF-Eco F9 Jet-Pulse is robustly built and with aluminium impeller. A 1.5m, 2m or 3m Flexi FLT Extraction-Arm can be mounted directly on the bottom side of the unit. Longer Extraction-Arms have to be mounted on the wall and then connected to the WF-Eco F9 inlet at the bottom. The Flexi arms are designed with the most modern parallelogram technology which makes them extremely flexible and position stable.

The WF-Eco can be equipped with a **Silencer** on top of the unit. It is not needed when the MF-Eco is equipped with a HEPA Filter Box.

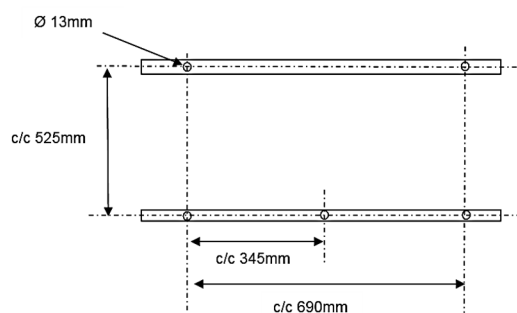
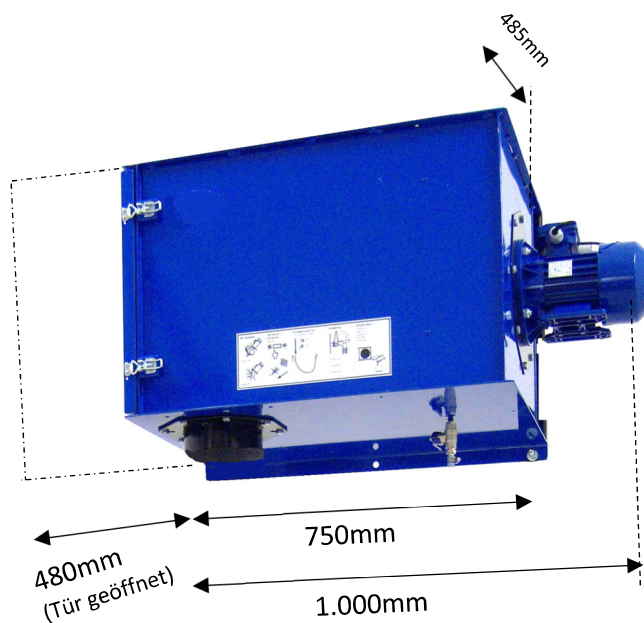


Jet-Pulse Cleaning

WF-Eco F9 Jet-Pulse filter has a very efficient built-in compressed air cleaning system. In just a few minutes you clean the F9 Filter Cartridge. Then just open the door and empty the dust bin and it is ready for use again!

	Art. No.
WF-Eco F9 Jet Pulse Extractor Filter. ~1/1.1kW/220V/50Hz. Extraction Arm not included.	P-549
WF-Eco F9 Jet Pulse Extractor Filter ~3/1.1kW/400V/50Hz. Extraction Arm not included.	P-547
Flexi FLT Extraction Arm 1.5m with Turning Flange.	P-051
Flexi FLT Extraction Arm 2m with Turning Flange.	P-052
Flexi FLT Extraction Arm 3m with Turning Flange.	P-053
F9 Replacement Filter Cartridge 9m ² .	P-541
Silencer for WF-ECO	P-552
HEPA Filter Adapter. Needed for mounting HEPA Filter on Top of WF-ECO.	P-553
HEPA H13/W3 Filter Box 23m ²	P-554
Outlet Adapter Ø 250mm for WF-Eco (To send the cleaned air out of the building).	P-557

WF-Eco F9 Jet Pulse Measures.



Technische Daten	
Spannung/Phasen	230 Volt / 1~
Leistung	0,75 kW
Stromaufnahme	5,15 A
Umdrehung	2.900 U/min
Frequenz	50Hz
Schutzart	IP 54
Gewicht	70 kg
ISO – Klasse	F
Filtereinsatz	1 Filterpatrone
Filterfläche der Filterpatrone	9m ²
Abscheideleistung	>99 %
Schalldruckpegel (gemessen nach DIN 45635 T1)	ca. 70 dB(A)
Umgebungstemperatur	+5° C bis +35° C

JET-Pulse Cleaning System

The **Jet-Pulse cleaning** system is developed in the United states for cleaning of filter cartridges. It is better than ordinary "Back-Pulse" cleaning systems. The **Jet-Pulse cleaning** is faster and more efficient.

The heart of the **Jet-Pulse cleaning** system is a specially designed oscillating rubber nozzle. It is oscillating under 6 Bar compressed air pressure inside the filter cartridge. It is hammering the inside of the filter cartridge so that dust on the surface is falling off. At the same time it is blowing out the fine dust which has penetrated the surface of the filter cartridge. The result is a cartridge almost as clean as new after just a few minutes.

Explosion safety.

To minimise the risk of explosions in a filter unit many countries have now laws saying you have to empty the dust bin after every cleaning. The Plymoth filter units with built in **Jet-Pulse Cleaning** systems have all a lightweight dustbin which is very handy and fast to empty after the cleaning process.

As an extra safety feature all Plymoth Filter units with built in cleaning have the electrical parts outside the unit to avoid that electricity can get in contact with dust or gas.

State of the art Hood design.

All Plymoth extractor arms are equipped with state of the art inlet hoods to optimize its ability to catch smoke and dust as far from the hood as possible.

Field of Operation.

The WF-Eco F9 units are dust collectors for collecting dust, welding smoke and other dry pollutants.

Filter Cartridge Cleaning.

The unit has a built in filter cleaning system, "**Jet Pulse**", which cleans the cartridge with compressed air. The particles fall down into a Tray which you empty after every cleaning.

HEPA Filter.

WF-Eco F9 can be equipped with a HEPA H13/W3 Filter Box (P-554) on the top of the unit. A HEPA Filter Adopter is then needed. (P-553). When equipped with a HEPA H13/W3 Filter Box the unit can be used for Light Stainless Steel welding fume. The F9 Filter Cartridge, which can be cleaned 50-100 times, work then as an efficient Pre Filter, to increase the lifetime of the HEPA Filter. The HEPA Filter has to be replaced when it is full.

Compressed Air Supply for Jet-Pulse Filter Cleaning System.

Constant 6 bar pressure is recommended. Not under 5.5 Bar and not over 6.5 Bar.

Reasonably clean and dry air is required. Oil and/or water will reduce lifetime of the filter.

Connect the included compressed air hose to the compressed air system. Test by opening the valve 5-10 seconds. You should hear a vigorous "**Jet-Pulse**" oscillation from the filter unit all the time.

If you don't hear the oscillation, your air supply is not maintaining the 800 l/m flow rate required to operate the "Jet Pulse" cleaning system. Check the compressed air system.

When shall I use the Jet-Pulse Cleaning?

When the filter gets dirty the airflow volume will drop off to a level where capture of contaminants is not adequate. Then activate the **Jet-Pulse cleaning in the following way:**

1. Turn unit off. Disconnect electric power.
2. Connect the compressed air hose to the air system.
3. Open the valve on the unit **Slowly** and count to **10** and close. Repeat 3 times with at least 30 seconds pause between.
4. Open the door and take out the dust tray and dispose of material in accordance with local regulations. Put the dust tray in again and close the door.
5. Restart the unit. In many applications cleaning once a day or once a week is sufficient or even less often. In some applications multiple cleanings per day may be needed.

Replacement of Filter.

At some point all filters will retain enough non-removable dust such that even Jet-Pulse cleaning becomes ineffective. Filter replacement is required at that point. Check "**Jet-Pulse**" rubber nozzle at the same time. **Wear personal protective equipment!**

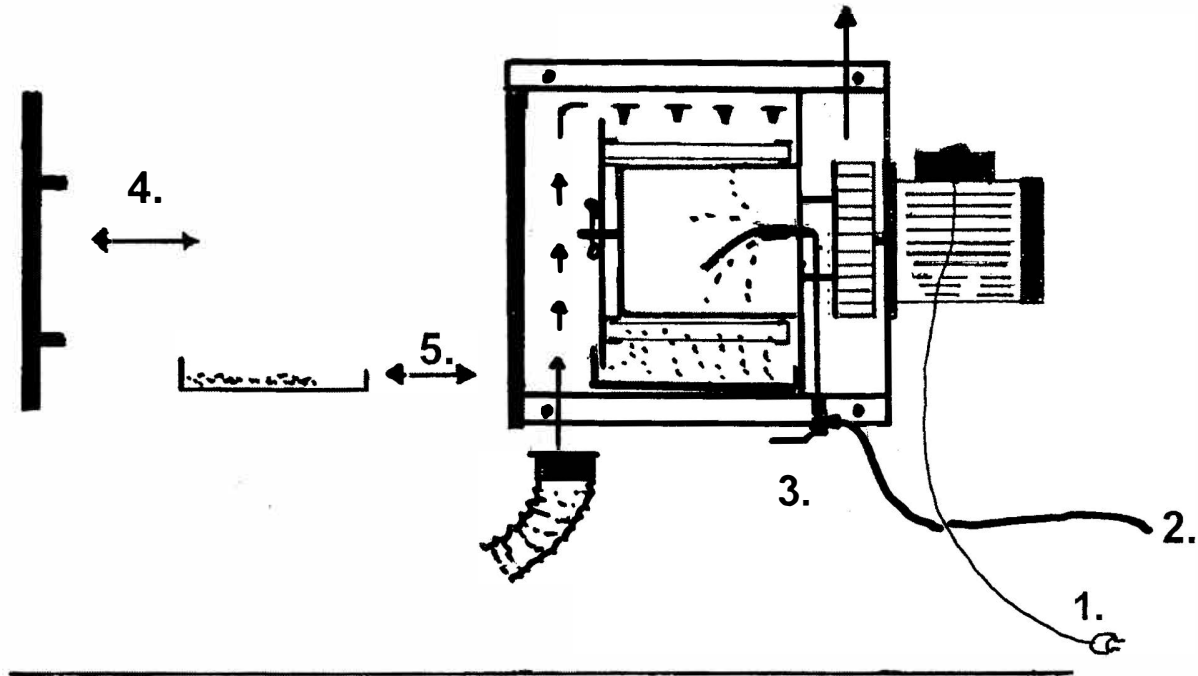
1. Turn unit off. Disconnect electric power, disconnect compressed air.
2. Open door and loosen knob in center of filter. Remove filter from unit.
3. Remove dust bin and dispose of material and filter cartridge in accordance with local regulations.
4. While the filter cartridge is out, inspect the Jet-Pulse rubber nozzle for cracks, splits, or degrading. Conical end wear is normal. The whole rubber nozzle (thinner+thicker part) should be approximately 165mm long. Replace a rubber nozzle that does not appear normal or which is worn to less than 150mm **See below!**
5. Install new filter Cartridge.

Replacement of Jet-Pulse Rubber Nozzle.

The "**Jet-Pulse**" cleaning nozzle inside the filter cartridge will eventually wear reducing cleaning performance. Check for signs of excessive wear when doing normal filter service (See above) or if a decrease in filter cleaning effectiveness is observed. The nozzle should be replaced when it has worn to a length of 150mm. Replacement is a simple operation. Proceed as follows:.

1. Turn the unit off. Disconnect electric power, disconnect compressed air.
2. Open door.
3. Remove filter cartridge from unit.
4. Remove the nozzle with a wrench and take it out. Put a new in. The rubber hose shall hang slightly downwards.
5. Install the Filter Cartridge again. Close the door.
6. Start the unit and check that you hear a vigorous oscillation when you test the cleaning.

WF-Eco F9 has built in Compressed air Cleaning.



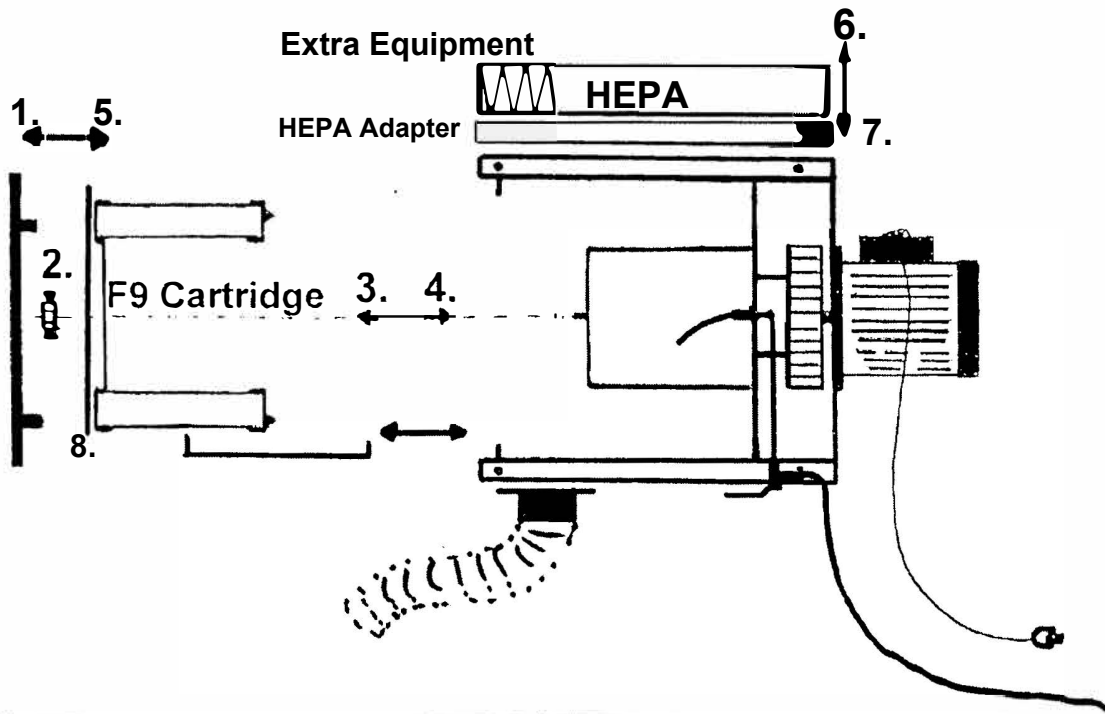
When the extraction is not good enough you clean the F9 Filter Cartridge with the built in compressed air cleaning system.

1. Take the electric plug out of the wall.
2. Connect the hose to compressed air. 5.5-6.5 Bar. Not more not less.
3. Open the valve on bottom of the unit SLOWLY. When open count to 10 and close the valve quickly. Repeat 3 times with at least 30 seconds between.
4. Wait a couple of minutes and then open the door.
5. Pull out the tray with the dust. Empty it according to local regulations for the type of dust you have extracted. Put the dust tray back in place and mount the door.

During the cleaning process some smoke/dust will come out of the hood of the extraction-arm. It is the same for all compressed air cleaning systems. To have the hood close to the floor helps.

The extraction power is now back to almost the same as for a new F9 Filter cartridge. Depending on how the WF-Eco is used you can clean 50-100 times before the cartridge needs to be replaced. WF-Eco can be equipped with a HEPA H13/W3 Filter box on top of the unit. Has to be ordered separately (P- 554). A HEPA Adapter is then also needed (P-553).

WF-Eco F9 Replacement of Filters.



When the Extraction is not good Enough after Cleaning:

Disconnect the Plug from the contact!

1. Take off the Door (1.).
2. Loosen Wing Nut (2.).
3. Pull out the Cover Plate (8.) and the Filter-Cartridge.
4. Put in a Replacement F9 Filter Cartridge and the Cover Plate (8.).
5. Mount the Wing Nut (2.) and tighten it.
6. Mount the Door (5.).
7. Connect the plug to an electric contact. The WF-Eco is ready for use again.

If the WF-Eco is equipped with a HEPA Filter Box and the Extraction is not good enough after replacement of the F9 Filter:

DISCONNECT THE PLUG FROM THE CONTACT!

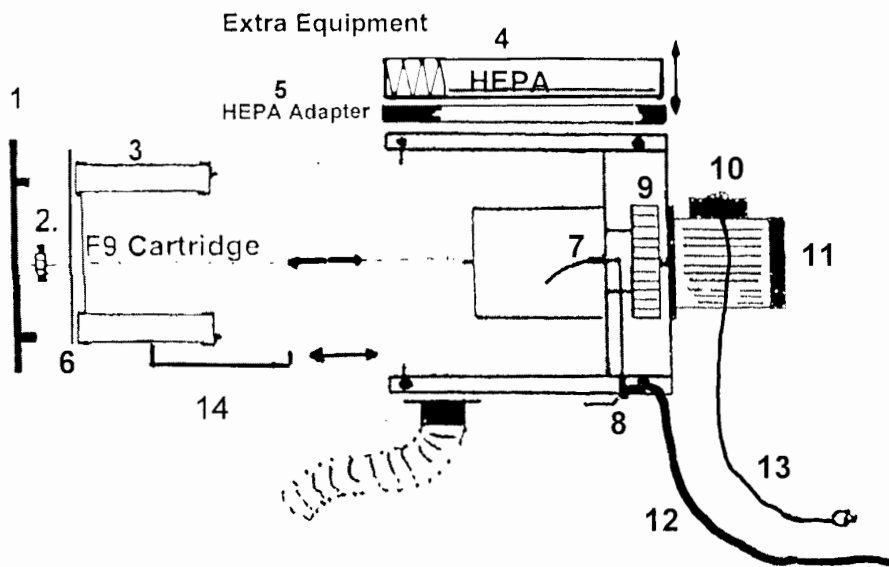
Loosen the HEPA Filter Box (6.)

Replace it with a new HEPA Filter Box (7.) with the Seal Downwards!

Connect the Plug to the electric contact. The WF-Eco is ready for use again.

PLEASE NOTE THAT THE USED FILTERS HAVE TO BE TAKEN CARE OF ACCORDING TO LOCAL LAWS.

WF-Eco F9 Spare Parts.



Please specify Product Name, Sparepart No. and Name and Quantity when ordering Spare Parts.

1. Door complete.
2. Wing Nut M10.
3. F9 Filter Cartridge P-541.
4. HEPA Filter Box P-554 (Extra Equipment)
5. HEPA Adapter P-553 (Extra Equipment).
6. Spark Plate.
7. Rubber Nozzle Set complete assembled.
8. Compressed Air Valve Complete.
9. Impeller.
10. Switch with Thermal overload.
11. Electric Motor 1.1kW/1-Phase/220V/50Hz.
12. Compressed Air Hose.
13. Electric Cable with Plug.
14. Dust Tray.

Flexi FLT Extraction-Arms for Wall-Filters.

General Information.

The Flexi FLT Extraction-Arms(1-3m), for Ceiling mounting or Wall-Filters, are designed to extract dust, fume and gases. They have a swivel which allows the Arm to be rotated 360 degrees. The flame-proof flexible hose, with covered steelspiral, has a parallelogram system inside to balance the hose and hood. This makes the Hood extremely easy to move to a new position and will stay there.

The Flexi steel hood is black painted and can be turned 90 degrees in all directions. It can easily be positioned at any point within the working area.

The Flexi FLT Extraction-Arms(1-3m) for Ceiling and Wall-Filters can be mounted directly to the bottom side of a WF/WF-Eco Wall-Filter. Longer Extraction-Arms have to be mounted on the wall and the hose connected to the inlet on the bottom of the Wall-Filter.

Max temperature of the exhausted air is 70 Degrees Celsius.

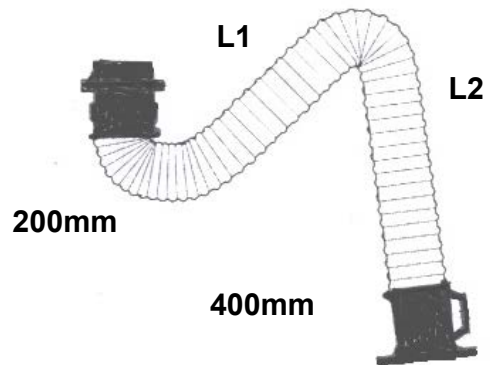
Flexi FLT Measures.

Wall-Filter Extraction-Arms.

Length 1.5m, 2m, 3m.

Dia. 160/200

Both diameters have the same length measures.



Arm	L1	L2	Weight	Max. Length
1,5 m	500 mm	400 mm	14 kg	1500 mm
2,0 m	800 mm	600 mm	15 kg	2000 mm
3,0 m	1400 mm	1200 mm	17 kg	3000 mm

Flexi FLT General Information.

The Flexi FLT Extraction-arms (1.5-3m Models), for Ceiling mounting or for mounting at the bottom side of MF/MF-Eco filter units, are designed for extraction of dust, fume and gases. They have a swivel which allows the Arm to be rotated 360 degrees. The flame-proof flexible hose, with covered steespiral, has a parallelogram system inside to balance the hose and hood. This makes the Hood extremely easy to move to a new position and it will stay there.

The Flexi Steel Hood is black painted and can be turned 90 degrees in all directions. It can easily be positioned at any point within the working area. With it's rectangular form it has the ability to catch fume, dust and gases in the most efficient way.

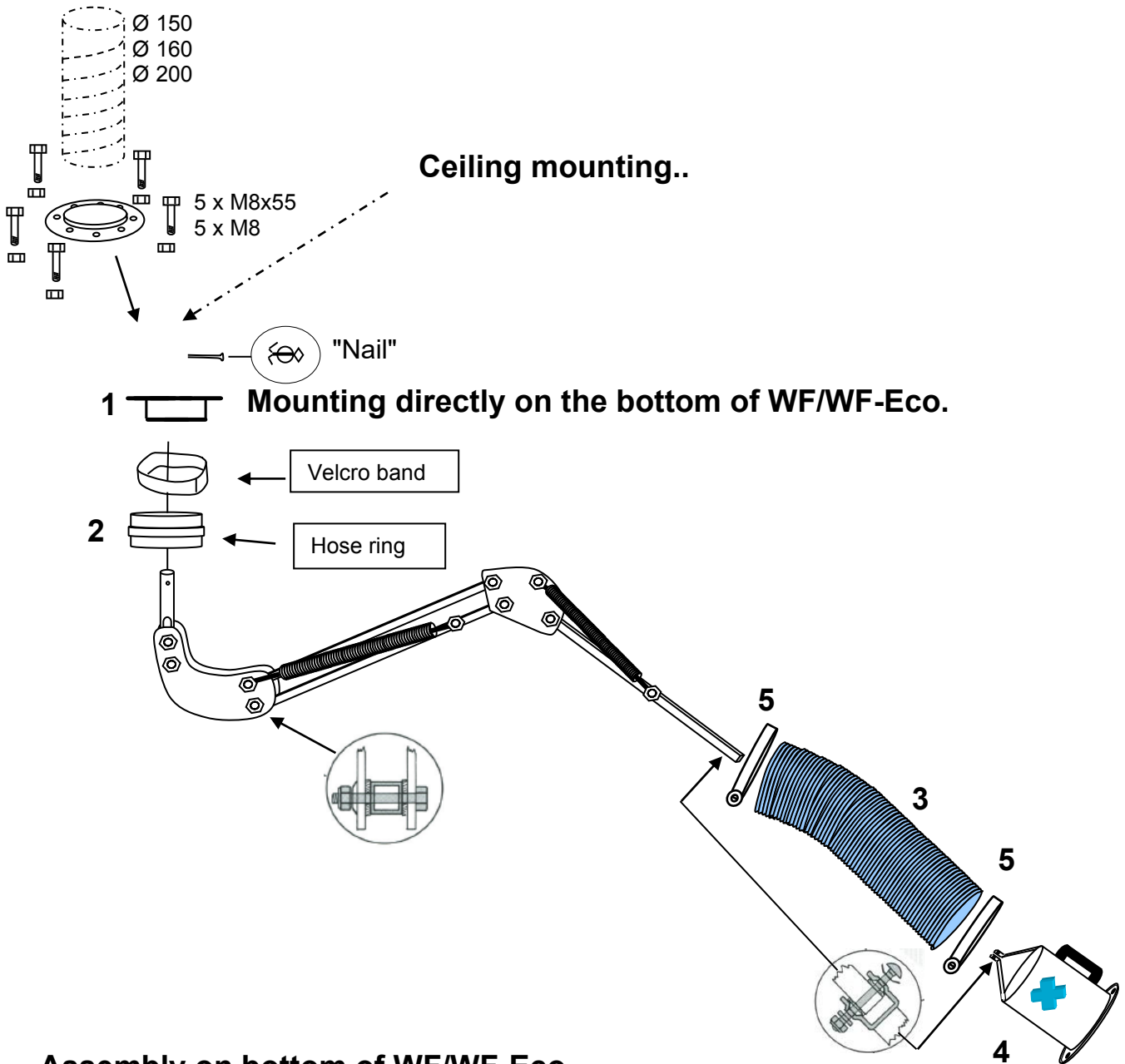
The Flexi FLT Extraction-Arms (1.5-3m Models) shall be mounted directly to the prepared holes around the inlet on the bottom side of MF/MF-Eco filter units.

Longer Extraction-Arms have to be mounted on the wall and the connected to the WF/WF-Eco unit.

Max. temperature for the exhausted air is 70 degrees Celsius.

Assembling Instruction FLT.

Assembling instruction for Flexi FLT Ceiling/Wall-Filter Extraction-Arms
1.5-3m. Dia.160/200mm.



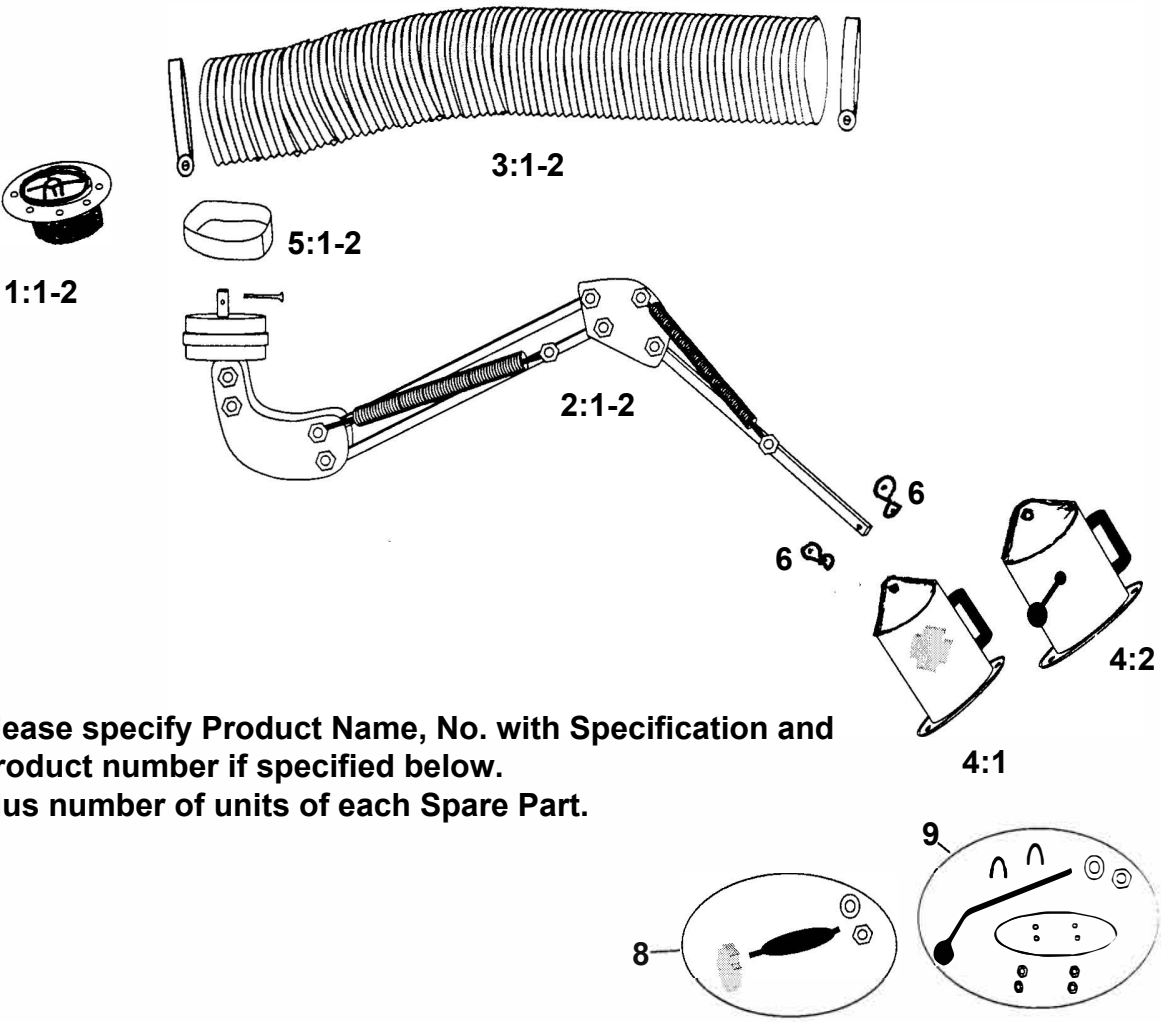
Assembly on bottom of WF/WF-Eco.

1. Mount the Swivel.
2. Mount the parallelogram arm. Fix with "Nail".
Don't tighten the joints. They are factory adjusted.
3. Pull the hose over the parallelogram arm.
4. Mount the hood
5. Fasten the hose with the hose clamps.

5. Spare Parts Flexi FLT Extractor-Arms 1.5-3m.

Spare parts **Flexi FLT Ø 160/200mm**

Only use original Spare parts to maintain the status of the installation



Please specify Product Name, No. with Specification and Product number if specified below. Plus number of units of each Spare Part.

No	Specification	Flexi		
		1,5m	2m	3m
1:1	Vertical Bracket Dia.160mm			
1:2	Vertical Bracket Dia. 200mm			
2:1	Parallelogram Ø 160mm	R-148	R-150	R-152
2:2	Parallelogram Ø 200	R-149	R-151	R-153
3:1	Hose set Ø 160mm	R-075	R-075	R-076
3:2	Hose set Ø 200mm	R-082	R-082	R-083
4:1	Hood ø 160 mm	R-155	R-155	R-155
4:2	Hood ø 200 mm	R-156	R-156	R-156
5:1	Velcro band Ø 160mm	R-157	R-157	R-157
5:2	Velcro band Ø 200mm	R-158	R-158	R-158
6	Joint Set complete	-	-	-
8	Damper set Ø 160mm	R-159	R-159	R-159
9	Damper set Ø 200mm	R-160	R-160	R-160



Declaration of conformity

We, J. Plymoth AB, declare under our sole responsibility that the product lines **WF-Eco, MF-F9/HEPA, MF-Active Carbon, MF-HEPA/W3 18M2, MF-Eco/F9, MF-Eco/HEPA, MF-Filter-Tables, MF-Eco**

Filter-Tables, FK-Mesa Backdraft Filter-Tables, MKF Filter-Tables, Labbe, MF-Lab, MF-Eco Lab, CF Central Filters, Mobo-Oil, Denta-Flex, Fica-Flex and VBF-Office to which this declaration relates is in conformity with Directives 2006/42/EC, 2014/30/EU, 2011/65/EU and Standards EN 60204-1:2006, EN ISO 12100:2010, EN ISO 15012-1:2013, EN 61000-6-2005, EN 61000-6-3:2007, EN ISO 20607:2019.

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Jenny Nilsson
Verkställande Direktör

2023-01-01



Declaration of conformity

We, J. Plymoth AB, declare under our sole responsibility that the product lines **Flexa, Chemikus, Flexi, Super-Max and Super-Vac** to which this declaration relates is in conformity with Directives 2006/42/EC and Standards EN ISO 12100:2010 and EN ISO20607;2019.

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