EVOTEC

MADE IN GERMANY

Fume and dust extraction
FEX 3000.1 and 3000.2

Learn more

EVO PRODUCTS

**INNOVATIVE
EXTRACTION TECHNOLOGY**

ISO 9001 ZERTIFIZIERTES QUALITÄTSMANAGEMENT

ISO 14001 ZERTIFIZIERTES UMWELTMANAGEMENT

Fume and dust extraction FEX 3000.1 and 3000.2

MADE IN GERMANY

- Process-adaptable extraction system for extracting smoke, vapors, or suspended dust
- Powerful EC turbine suitable for continuous operation (24/7), large air volume, infinitely variable volume flow control
- Modern control technology with device status display and filter messages
- Reliable filtration thanks to a multi-stage combination filter system
- Connection for remote ON/OFF control
- FEX 3000.2 with silencer and exhaust diffuser for extra low noise level

Versions:

M | M

H | H

AK | AK

W3 | IFA-geprüftes Schweißrauch-Absauggerät | W3

Ex

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Process-adaptable extraction system, suitable for welding fumes, soldering fumes, vapors, or airborne dust

Convenient filter replacement via 3-cartridge system with **independently replaceable filter cartridges.**

Reliable filtration of airborne particles through the use of a **triple-stage combined filter system.**
Optional activated carbon content in the main filter reduces odors in the exhaust air. **Suitable for extracting laser fumes, welding and soldering fumes, cutting fumes as well as various vapors and solvents.**

Continuous-duty EC-turbine for extracting **large air volumes** to capture airborne dust.

Extraction with up to **two hoses or one extraction arm**, hose connection at the rear or on top.

Easily and comfortably **adaptable to individual requirements** via intuitive control panel.

Clear graphic display and large, multi-colored LEDs for a **quick overview of device status or settings.**

Standard version:
Initial filter equipment set consisting of:
- Storage filter frame with F9 + M5 insert
- HEPA particulate filter H13/H14

Upgrade:
ATEX explosion-protected for safe extraction in Zone 22:
device equipment and components electrostatically conductive.
Initial filter equipment set (with grounding lug) consisting of:
- Expanded metal filter
- Storage filter frame with F9 + M5 insert
- HEPA particulate filter H13/H14

Upgrade:
W3-compliant version including expanded metal filter as a spark arrestor to prevent fire hazards.
Initial filter equipment set consisting of:
- Expanded metal filter
- Storage filter frame with F9 + M5 insert
- HEPA particulate filter H13/H14

Upgrade:
ESD version - EX-protected with ESD powder coating and ESD castors.
Initial filter equipment set consisting of:
- Expanded metal filter
- Storage filter frame with F9 + M5 insert
- HEPA particulate filter H13/H14

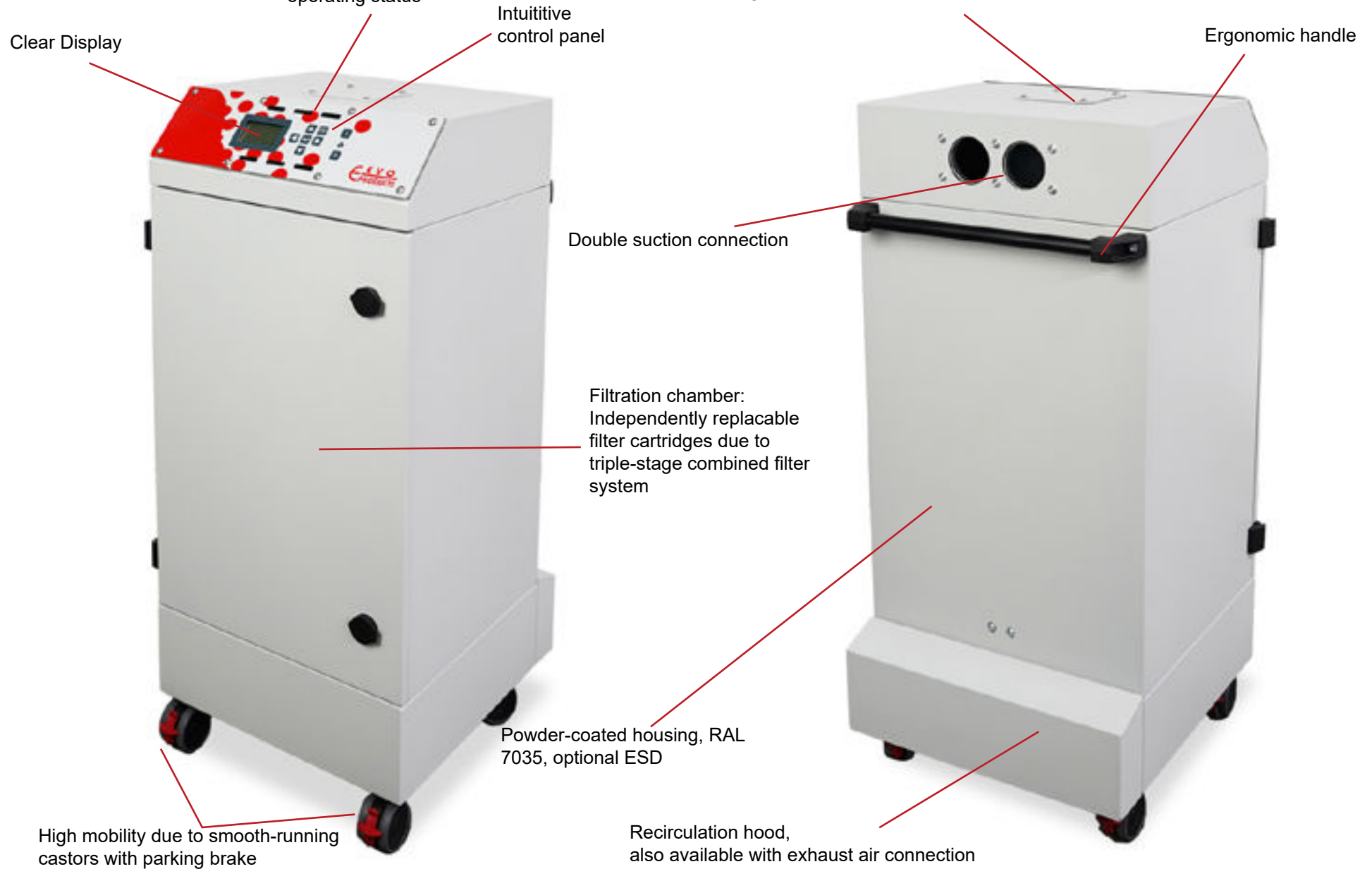| Modell		FEX 3000.1	FEX 3000.2
Voltage at 50/60 Hz.	Volt	230 (or 110)	230 (or 110)
Engine power	Watt	1.100	2 x 1.100
Max. air flow free-blowing at turbine	m³/h	460	920
Max. air flow in operating condition *)			
with 3m suction hose Ø 50	m³/h	260	360
with 3m suction hose Ø 80	m³/h	340	560
with 2 x 3m suction hose Ø 50	m³/h	2 x 180	2 x 240
Max. usable suction hose length	m	12 (Ø 50 mm)	12 (Ø 50 mm)
Max. vacuum.	Pa	10.000	10.000
Max. vacuum in operating condition. *)	Pa	9.000	9.000
1. filter stage: storage filter frame F9 + M5	m²	2,5 + 0,8	2,5 + 0,8
2. filter stage: HEPA filter H13/H14	m²	2,8	2,8
3. filter stage: activated carbon adsorption filter	kg	6,0	6,0
Noise level *(depending on power setting)*	dB(A)	52 - 69	55 - 66
Weight	kg	29 (+20 Filter)	38 (+20 Filter)
Dimensions L x B x H	mm	400 x 430 x 957	590 x 430 x 1025
Protection class		IP 55	IP 55
Operating temperature	°C	5 - 40	5 - 40
Operating humidity (non-condensing)	%	10 - 90%	10 - 90%
Color		RAL 7035	RAL 7035
Housing		Stahl, powder-coated	Stahl, powder-coated
Standard version	**SKU**	**710-1140**	**710-1141**
Upgrade: EX-protected	**SKU**	**054-8049**	**054-8049**
Upgrade: W3 version	**SKU**	**054-8050**	**054-8050**
Upgrade: ESD version - EX-protected	**SKU**	**054-8051**	**054-8051**

*) Operating data including standard filter equipment in operating condition without additional options such as activated carbon filter, spark trap, pipework, etc. The operating point varies due to the power setting and pipe design (Ø, length) as well as measurement at the suction point.

FEX 3000.1

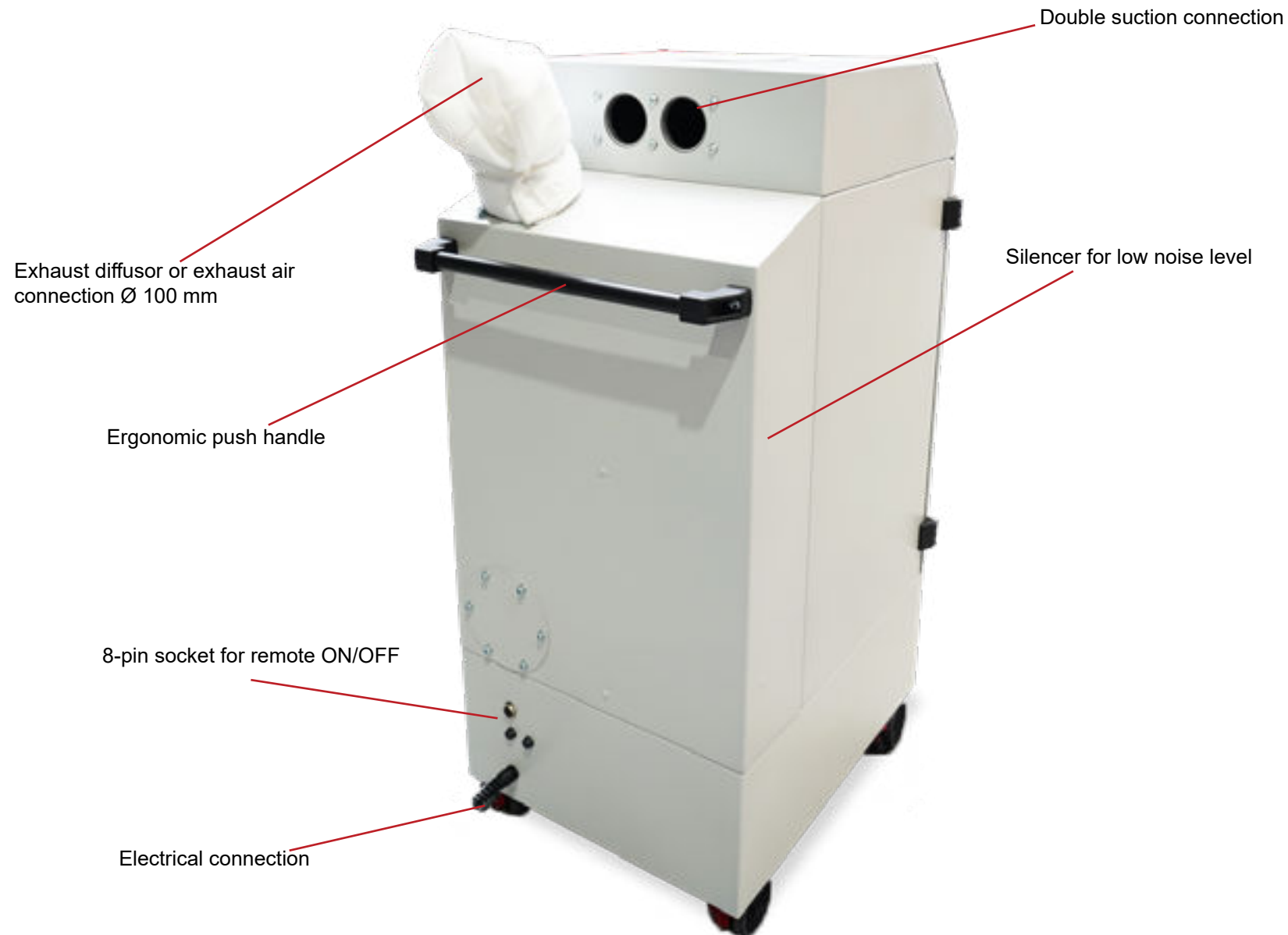Highly visible LEDs to indicate the operating status

Intuititive control panel

Clear Display

Options:

- Suction connection Ø 50 mm or Ø 80 mm
- Connection for extraction arms

Ergonomic handle

Double suction connection

Filtration chamber: Independently replacable filter cartridges due to triple-stage combined filter system

Powder-coated housing, RAL 7035, optional ESD

High mobility due to smooth-running castors with parking brake

Recirculation hood, also available with exhaust air connection

FEX 3000.2 with silencer and exhaust air diffusor

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Double suction connection

Exhaust diffusor or exhaust air connection Ø 100 mm

Silencer for low noise level

Ergonomic push handle

8-pin socket for remote ON/OFF

Electrical connection

Control technology

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Powerful extraction technology requires **optimal control technology,** which is why our FEX series is equipped with a **configurable control system** that can be adapted to your extraction process. It can be operated via a clear and **intuitive control panel.**

- **Test routine** for motor, buttons, LEDs, and more ensures comprehensive functionality for **maximum safety**
- Comprehensive types of fault messages and filter status messages—**with pictograms and error codes**
- **Error log** for traceability—to provide the **best possible service**
- **Filter fill level is displayed** in real time—separately for each filter

Connection for on/off remote control

Connection to external controllers or devices:
8-pin socket for remote on/off switching. Operating status and fault signals can be transmitted potential-free or with 24 V.
The matching mating connector is available as an accessory.

- **Various user roles** with different permissions and individual passwords
- **Real-time fill level display** individually adjustable to your suction material – **for maximum accuracy**
- Individually adjustable run-on time to ensure the **highest possible suction rate**
- **Alarm configuration** according to relevance in your suction process

Upgrade: Gas and particle sensor (072-0618)

- Signals filter breakthrough – can initiate immediate shutdown if necessary
- Sensitivity and much more can be configured in the user menu
- Test function to ensure functionality
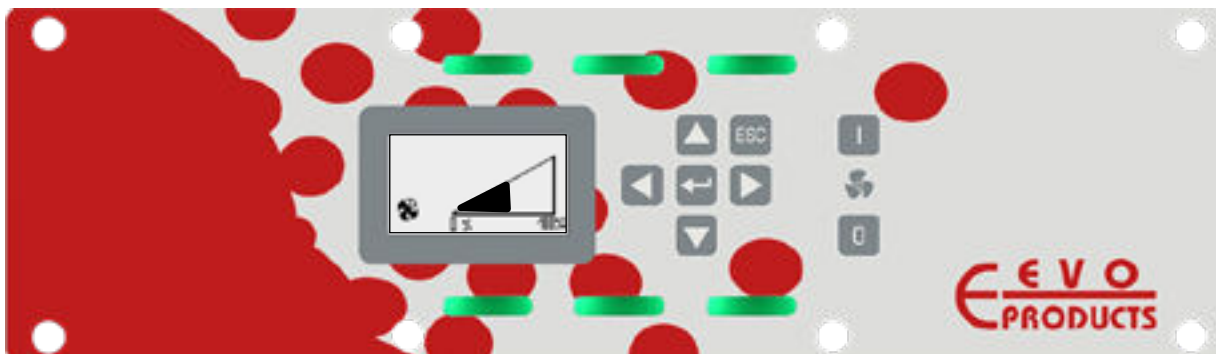
Discover all features

Replacement filters

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Heavy-duty filters and adsorption filters consist of a sturdy MDF box with a seal and are completely incinerable. The separate design allows them to be combined as required depending on the application and disposed of separately depending on the load.

As a storage filter, an empty frame can be equipped with suitable filter inserts depending on requirements. For the W3 version, the use of an expanded metal filter is required. (In combination with storage filter frame+ filter insert + expanded metal filter)

Standard version:
Storage filter frame
with F9 + M5 filter
Free internal height = 75 mm
Total height = 146 mm
SKU 074-20176

| M5-Filter 0,8 m² |
| F9-Filter, 2,2 m² |

Static dissipative version:
Storage filter frame
with F9 + M5 filter
and Expanded metal filter
Free internal height = 60 mm
Total Height = 146 mm
SKU 074-20177

| Expanded metal filter |
| M5-Filter 0,8 m² |
| F9-Filter, 2,2 m² |

Inlets for storage filter frame:

Expanded metal filter
Height 15 mm - **074-20058**

G4 fleece mat
Height 14 mm - **074-20082**

G4-Z-Line 0,3 m² - Cardboard frame

G4-Z-Line 0,3 m² - Cardboard frame

M5 filter 0,8 m² - Cardboard frame
Height 48 mm - **074-20084**

F9 filter, 2,2 m² - Plasic profile, Height 48 mm - **074-20085**

HEPA filter
H13/H14 cartridge
5,6 m² filter surface,
Height 146 mm incl. sealing
SKU 074-20064

Adsorption filter
Activated carbon cartridge
ca. 6 kg AC,
Height 146 mm incl. sealing
SKU 074-20063

Filter replacement kit
for low-contamination disposal:
Covering cardboard for filters, disposal bags,
disposable gloves, dust mask

SKU 072-0632

Filtration technology

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Three independently replaceable filter cartridges
MDF frame, completely incinerable

Filter stage 1, storage filter:
M5 + F9 filter of synthetic pleat and glass fiber fleece,
filter area 0.8 m²/ 2.2 m²

Upgrade: EX-protected and
Upgrade: Static dissipative design with EX-protection: Expanded metal filter to ensure conductivity, storage filter frame with M5 + F9 filter and expanded metal filter, equipped with grounding braid for use in ATEX Zone 22.

Optionally, the storage filter can be supplemented with replaceable inserts in various filter qualities.

Filter stage 2, HEPA filter: HEPA H13/14, filter area 5.6 m²

Filter stage 3, Adsorption filter: Activated carbon, 5.8 kg

W3 upgrade:
Includes spark arrestor grid to prevent fire hazards

The dust class of the device is determined by the filters used.

User-friendly, low-contamination filter replacement. The cover cardboard and insert cardboard supplied with the replacement filter prevent contamination inside the device.
A replacement kit consisting of a filter cover cardboard, disposal bag, dust mask, and disposable gloves is available separately for easy filter replacement.

Smooth-running lever mechanism for lowering the filter cartridges – then easy removal via handle groove and rail system

Filter replacement video ⎘

Options and accessories

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Hoses and connections FEX

	Vacuum hose PUR black antistatic Contact and surface resistance < 109 Ohm linear meter Ø 50 mm **072-10007** **End sleeve electrically conductive** for PUR-vacuum hose, 1 piece Ø 50 mm **072-10025**
	Vacuum hose PP for W3-design linear meter (not suitable for EX) Ø 50 mm **072-10003** **Fitting** for PP-vacuum hose, 1 piece Ø 50 mm **072-10001**
	Additional extraction port Panel with 2 openings á Ø 50 mm, sealing, closing plug, for the connection of further vacuum hoses 2 x Ø 50 mm **072-0607**
	Closing plug For closing of vacuum openings not neededko Ø 50 mm **072-0609**

Hoses and connections FEX

	Adapter for connection vacuum hose For installation on top of the device, including hose clamp Ø 50 mm **072-0620** Ø 80 mm **072-0603**
	Exhaust air or vacuum hose PUR black antistatic Can be used as exhaust air or vacuum hose, throughput and surface resistance < 10^9 Ohm linear meter Ø 80 mm **072-10011** Ø 100 mm **072-10035**
	Exhaust air hood with exhaust hose connection Exhaust air hood with connection for exhaust hose Ø __ mm **072-0655**
	Wire clamps single For vacuum or exhaust air hoses, galvanized steel Ø 50 mm **054-10090** Ø 80 mm **054-10091** Ø 100 mm **054-10092**

Options and accessories

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Options FEX

	Spark trap with knitted metal inlay prevents sparks from being sucked in. For integration in pipe system or hose Ø 50 mm **072-0626** Ø 80 mm **0720628** **Matching metal knitted inlay for** Ø 50 mm **072-0626-01** Ø 80 mm **072-0628-01**
	Bracket for spark trap included in delivery. For variable attachment of the spark trap to beams at all angular degrees.
	Expanded metal filter as a spark arrester to prevent fire hazard, suitable for use in storage filters Piece **074-20058**
	Cyclone pre-separator ESD for the pre-separation of larger quantities of fine dust. 28-l dirt container made of stainless steel, cyclone made of ESD plastic, connections Ø 50 mm Piece **053-1045**

Options FEX

	Triangular socket wrench Piece **074-20016**
	Stand Set For increased stability of the system, e.g. for operation with vacuum arm Set **072-0350**
	Power supply cable with angled cold appliance plug, 5 meters with EU Schuko plug **072-0343** open at the end **072-01300**

Options and accessories

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Options FEX

Mating connector for 8-pin female connector

for connection to external controllers or devices for remote control, without cable

Piece   **072-0621**

Gas and particle sensor

as supporting monitoring unit for damaged filters or saturated activated carbon **Attention:** The unit must be ordered together with machine

Board unit   **072-0618**

Test aerosol

Test spray for functional testing of gas and particle sensors

Can   **072-0625**

Protective coating
in the upper housing area, recommended for the extraction of acidic vapours
Attention: To be ordered together with machine

FEX 1000.1   **072-0619-01**
FEX 3000/ .1/ .2   **072-0619-02**

Extraction arms

Extraction arms enable spot extraction directly at the point of origin. The self-supporting construction with three stable joints makes it easy to handle and position.

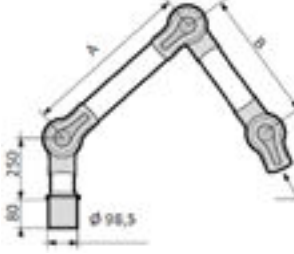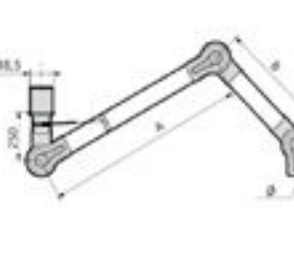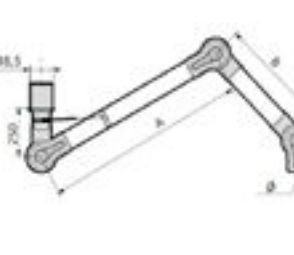**Standard version: Aluminium with polypropylene joints.**
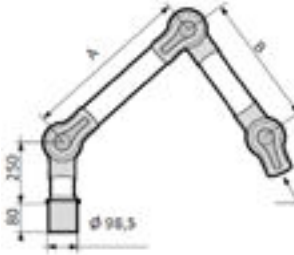
ESD version: for ESD areas (electrostatic discharge, certified according to IEC 61340-5-1). Ideal for use in laboratories, electronics manufacturing, pharmaceutical industry, etc.

+ Energy saving
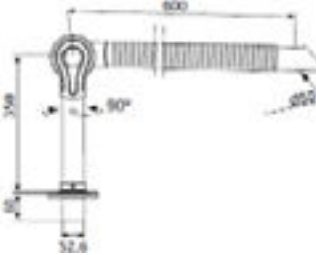**+ Low noise**
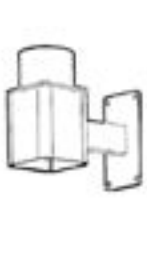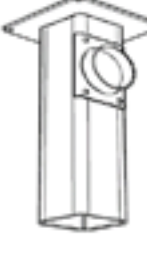**+ Low pressure drop**

Extraction arm for table mounting
Includes bracket for plate feed-through

Figure:
Standard version
Ø 50 mm - Range 1,300 mm
Option: hood tube and flat hood

Extraction arm for ceiling or wall mounting
without bracket

Figure:
ESD/ATEX version
Ø 50 mm - Range 1,300 mm
Option: hood tube and flat hood
Option: small wall bracket

Options and accessories
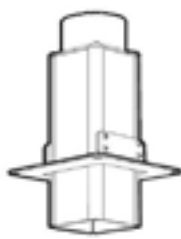
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Extraction arms and consoles

Standard vacuum arm for table mounting
Including console for panel feed-through

Ø 50 mm
Length 1.300 mm   **072-0400**
Length 1.500 mm   **072-0401**

Ø 75 mm
Length 1.300 mm   **072-0402**
Length 1.500 mm   **072-0403**

ESD vacuum arm for table mountingIncluding console for panel feed-through

Ø 50 mm
Length 1.300 mm   **072-0400-ESD**
Length 1.500 mm   **072-0401-ESD**

Ø 75 mm
Length 1.300 mm   **072-0402-ESD**
Length 1.500 mm   **072-0403-ESD**

Standard vacuum arm for ceiling or wall mounting, without console

Ø 50 mm
Length 1.300 mm   **072-0404**
Length 1.500 mm   **072-0405**

Ø 75 mm
Length 1.300 mm   **072-0406**
Length 1.500 mm   **072-0407**

ESD vacuum arm for ceiling or wall mounting, without console

Ø 50 mm
Length 1.300 mm   **072-0404-ESD**
Length 1.500 mm   **072-0405-ESD**

Ø 75 mm
Length 1.300 mm   **072-0406-ESD**
Length 1.500 mm   **072-0407-ESD**

Extraction arms and consoles

Flexible ESD vacuum arm for table mounting
Including console for panel feed-through

Ø 50 mm
Length 600 mm   **072-0400-ESD**

Flexible table console
Flexible holder for mounting on table tops or shelves. Supplied complete with two screw clamps. Suitable for Suitable for
For 072-0400-ESD: **072-0409-ESD**

Universell for Ø 50 mm and Ø 75 mm

Standard   **072-0428**
ESD   **072-428-ESD**

Wall console
Universal console for vacuum arm for wall mounting
.
Suitable for Ø 50 mm and Ø 75 mm

Standard   **072-0427**
ESD   **072-0427-ESD**

Ceiling console
The holder also functions as an exhaust air duct. Universally suitable for Ø 50 mm and Ø 75 mm

Standard, Length 250mm   **072-0418**
ESD, Length 250mm   **072-0418-ESD**
Standard, Length 1000mm   **072-0421**
ESD, Length 1000mm   **072-0421-ESD**
→ Other designs/Lengths auf Anfrage

Options and accessories

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Hoods and nozzes	
	Flat hood 300 x 200 mm Especially suitable for gases and vapours. High vacuum efficiency in vertical position to the table surface, including hood tube Standard Ø 50 mm **072-0414** **ESD** Ø 50 mm **072-0414-ESD** Standard Ø 75 mm **072-0415** **ESD** Ø 75 mm **072-0415-ESD**
	Vacuum tip, length 300 mm For smaller, concentrated sources of pollutants; cantilevered vacuum tip for increased vacuum efficiency Standard Ø 50 mm **072-0410** **ESD** Ø 50 mm **072-0410-ESD** Standard Ø 75 mm **072-0411** **ESD** Ø 75 mm **072-0411-ESD**
	Flexible vacuum tip, length 600 mm, ESD High efficiency paired with high flexibility **ESD** Ø 50 mm **072-0412** **ESD** Ø 75 mm **072-0413**
	Round hood Metal hood Ø 250 mm, including hood tube Standard Ø 50 mm **072-0432** **ESD** Ø 50 mm **072-0432-ESD** Standard Ø 75 mm **072-0433** **ESD** Ø 75 mm **072-0433-ESD**

Accessories extracion arms	
	Telescopic ceiling console length up to 1000 mm The holder also functions as an exhaust air duct. Universally suitable for Ø 50 mm and Ø 75 mm Standard **072-0426** **ESD** **072-0426-ESD**
	Straight hood tube Spare part for hood, also suitable as straight inlet nozzle Standard Ø 50 mm **072-0429** **ESD** Ø 50 mm **072-0429-ESD** Standard Ø 75 mm **072-0430** **ESD** Ø 75 mm **072-0430-ESD**
	Reduction Material PP Standard Ø 100-50 mm **072-0416** **ESD** Ø 100-50 mm **072-0416-ESD** Standard Ø 100-75 mm **072-0417** **ESD** Ø 100-75 mm **072-0417-ESD**
	Protective guard For mounting in Ø 75 mm joint Standard Ø 75 mm **072-0431** **ESD** Ø 75 mm **072-0431-ESD**