# EVOTEC

MADE IN GERMANY

## Mobile Fume Extraction
## FEX 3000

EVO PRODUCTS

**INNOVATIVE
EXTRACTION
TECHNOLOGY**

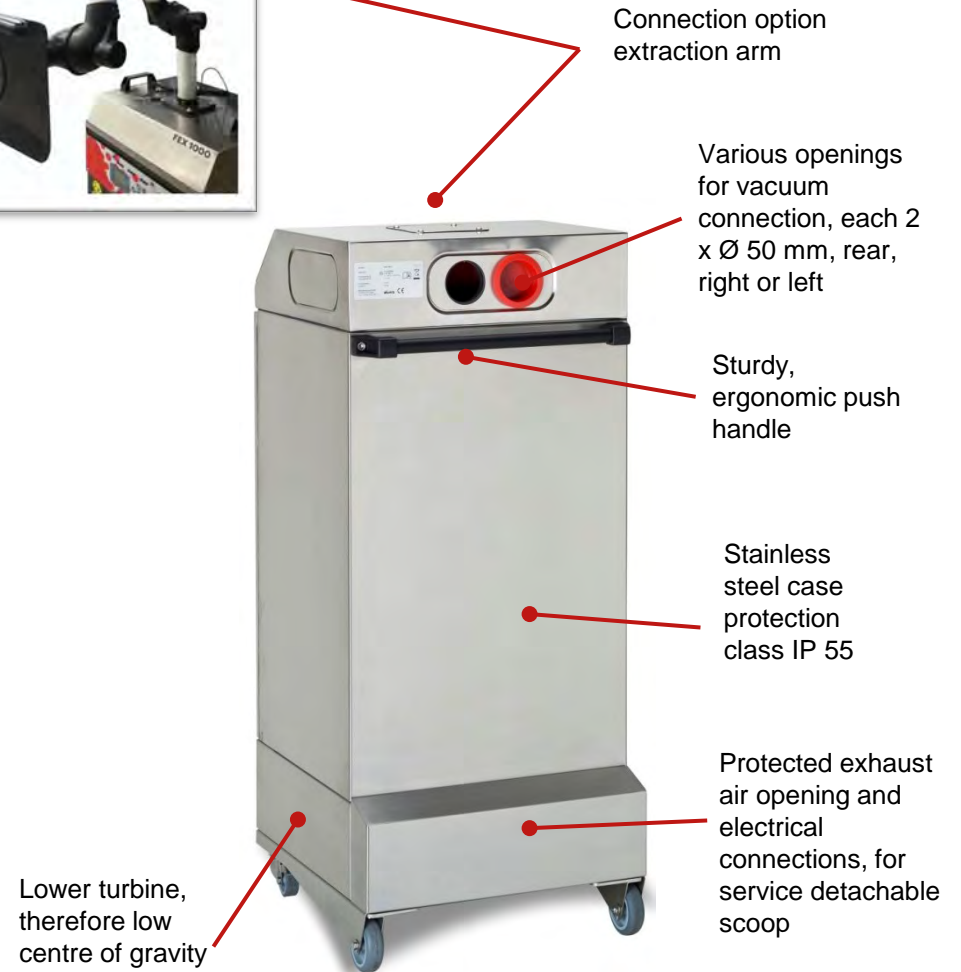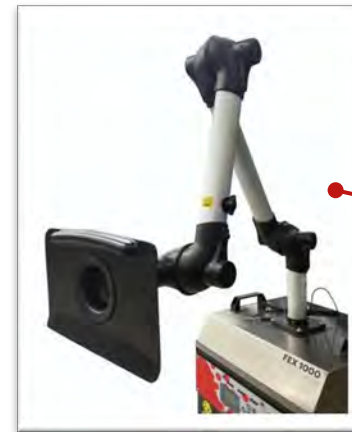# Mobile fume extraction FEX 3000

**EVOTEC**

MADE IN GERMANY

★ Process-adapted extraction system for vacuuming of smoke, vapours, aerosols and odours

★ Powerful EC-Turbine suitable for continuous operation (24/7), large air volume, stepless airflow control

★ Modern control technology with display of unit status and error messages

★ Reliable filtration due to graduated combi filter system

★ Connection for ON/OFF remote control

★ **Stainless steel body (VA 1.4301)**

**FEX 3000**

Versions:

| W3 | IFA-geprüftes Schweißrauch-Absauggerät | W3 |
|----|----|----|

M 🔶 ⚠ 📖 M

H 🔶 ⚠ 📖 H

🚫 Zone 22 ✓   Ex   ⚡

# FEX 3000

Highly visible LEDs to indicate the operating status

Clear display

Intuitive control panel

Connection option extraction arm

Various openings for vacuum connection, each 2 x Ø 50 mm, rear, right or left

Individually exchangeable filter cassettes, 3-fold graduated combination filter system

Sturdy, ergonomic push handle

Stainless steel case protection class IP 55

Operating lever for lowering the filter cassettes when changing filters

Lower turbine, therefore low centre of gravity

Protected exhaust air opening and electrical connections, for service detachable scoop

High mobility due to smooth-running castors with parking brake

# FEX 3000

# EVOTEC

**Process-adapted extraction system for vacuuming of smoke, vapours, aerosols and airborne particles**

High quality standards - suitable for **3-shift operation.**

Comfortable filter change by **3-cassette-system**, each individually removable.

**Reliable filtration** of airborne particles by the use of an graduated kombi filter system. Activated carbon in the main filter reduces odours in the exhaust air.

For the extraction of laser fumes, welding- and soldering fumes, cutting fume as well as different steams and solvents.

EC-Turbine can be used for **continuous operation**, for the extraction of large air volumes to collect airborne particles.

Easy and comfortable adaption to the individual needs by an **intuitive control panel.**

Clear graphic display and large, multicolour LEDs for a quick **overview of the device status,** settings or error sources.

**ESD and EX-protected according to ATEX**
for the secure extraction in Zone 22:
Equipment and parts of the device electrically conductive.
**Included in delivery:**
Initial equipment set filter according to individual configuration.

**W3-design –**
**IFA certified**
including expanded metal filter as spark trap to avoid fire hazard
**Included in delivery:**
Initial equipment set filter:
- Storage filter frame F9
- HEPA filter H13/H14
- Activated carbon-Filter

\*) **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.

| Model | | FEX 3000 |
|---|---|---|
| Voltage 50/60 Hz. | Volt | 230 (or 110) |
| Engine power | Watt | 1.100 |
| Max. air flow free blowing at turbine | m³/h | 460 |
| Max. air flow in operating condition*) | m³/h | 260 |
| Maximal length of vacuum hose | m | 12 (Ø 50 mm) |
| Negative pressure max. | Pa | 10.000 |
| Negative pressure in operating condition max.*) | Pa | 9.000 |
| 1st filter stage storage filter frame with F9 | m² | 2,5 |
| 2nd filter stage HEPA filter H13/H14 | m² | 5,6 |
| 3rd filter stage activated carbon | kg | 5,8 |
| Noise level | dB(A) | 62 |
| Weight | kg | 25 (+20 Filter) |
| Dimensions L x W x H | mm | 430 x 400 x 996 |
| Protection class | | IP 55 |
| Operating temperature | °C | 5 – 40 |
| Operating humidity (non condensing) | % | 10 – 90% |
| Stainless steel quality | VA | 1.4301 |
| **ESD and EX-protection** (electrostatic conductive) | **Item No.** | **710-1131** |
| **W3-Design** (Welding fumes) | **Item No.** | **710-1132** |

# FEX 3000

## Control technology:

**Intuitive operation via keypad**

Unit parameter individually adaptable

Continuously variable control of the vacuum power during operation.

Display of unit status and warning messages in easy understandable, intuitive pictograms:
- Filter status - Filter warning at 80% fill level
- Fill level warnings
- Unit errors, e.g. hose blocked, door open etc.
- Messages of filter break (optional)
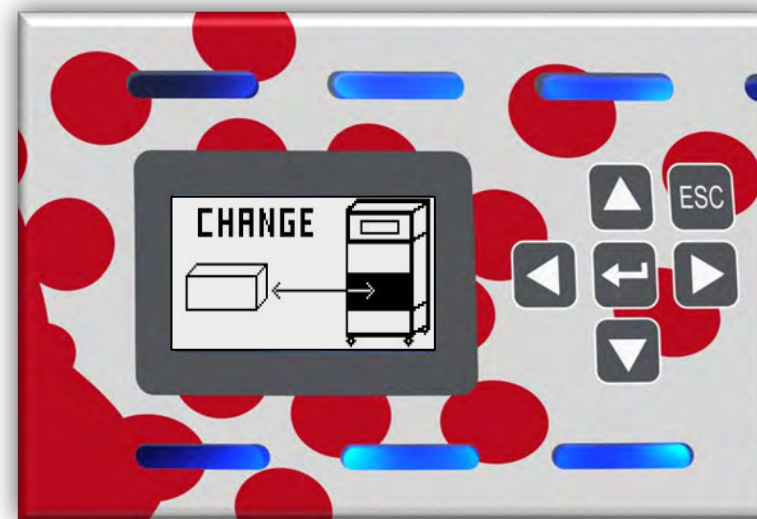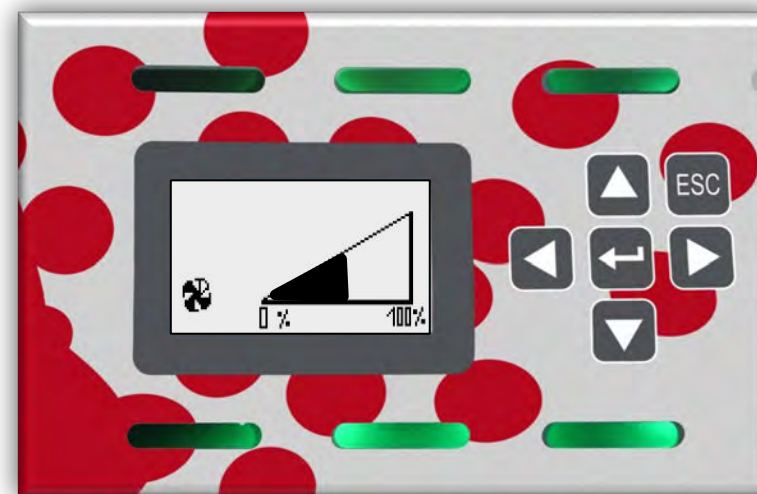- Messages of saturation activated carbon (optional)

Errors and warnings visible at a glance by changing of the LED colours.

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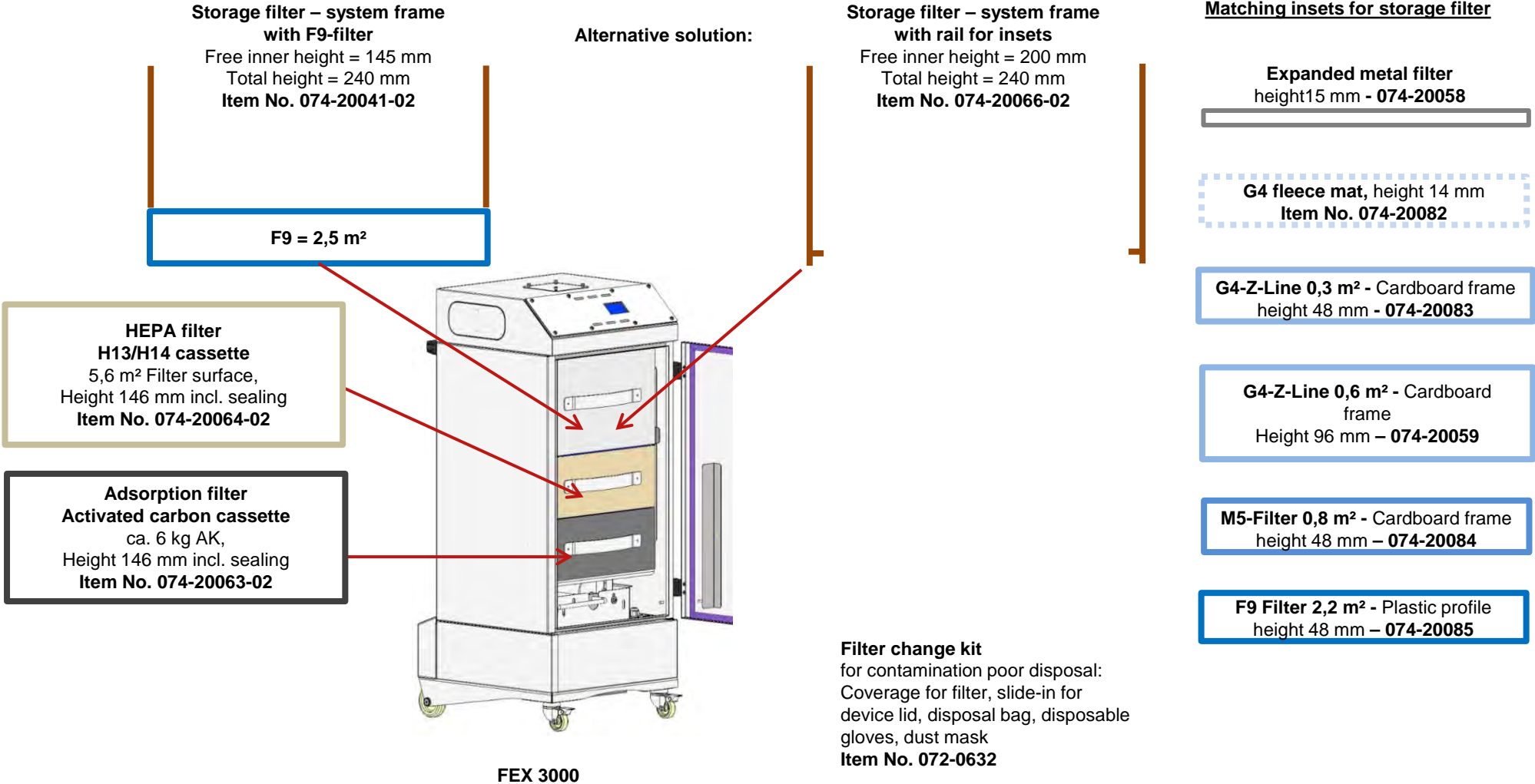The matching mating connector is available as an accessory.

# Replacement filters for FEX 3000

**EVOTEC**

HEPA filter and adsorption filter consist of a sturdy MDF-box with sealing and are fully incinerable. Due to the separate variant, the filters can be combined depending on the application and be disposed separately depending on the filter load.

As storage filter, different variants can be chosen: ready-to-use combi filter cassette F9/M5 or diverse system frames, which can be equipped with different filter insets depending on the application.

**Storage filter – system frame with F9-filter**
Free inner height = 145 mm
Total height = 240 mm
**Item No. 074-20041-02**

**Alternative solution:**

**Storage filter – system frame with rail for insets**
Free inner height = 200 mm
Total height = 240 mm
**Item No. 074-20066-02**

**Matching insets for storage filter**

**Expanded metal filter**
height15 mm **- 074-20058**

**G4 fleece mat,** height 14 mm
**Item No. 074-20082**

**F9 = 2,5 m²**

**HEPA filter
H13/H14 cassette**
5,6 m² Filter surface,
Height 146 mm incl. sealing
**Item No. 074-20064-02**

**G4-Z-Line 0,3 m² -** Cardboard frame
height 48 mm **- 074-20083**

**G4-Z-Line 0,6 m² -** Cardboard frame
Height 96 mm **– 074-20059**

**Adsorption filter
Activated carbon cassette**
ca. 6 kg AK,
Height 146 mm incl. sealing
**Item No. 074-20063-02**

**M5-Filter 0,8 m² -** Cardboard frame
height 48 mm **– 074-20084**

**F9 Filter 2,2 m² -** Plastic profile
height 48 mm **– 074-20085**

**Filter change kit**
for contamination poor disposal:
Coverage for filter, slide-in for
device lid, disposal bag, disposable
gloves, dust mask
**Item No. 072-0632**

**FEX 3000**

# FEX 3000



## Filter technology:

Three individual removable filter cassettes
MDF-frames, fully incinerable

**1st filter step**, storage filter:
M5/F9-combination of synthetic pleat and glass fibre fleece,
filter surface 1,2 m² / 5,0 m²
Optionally, the storage filter may be supplemented by
changeable replacement-insets in different filter qualities.

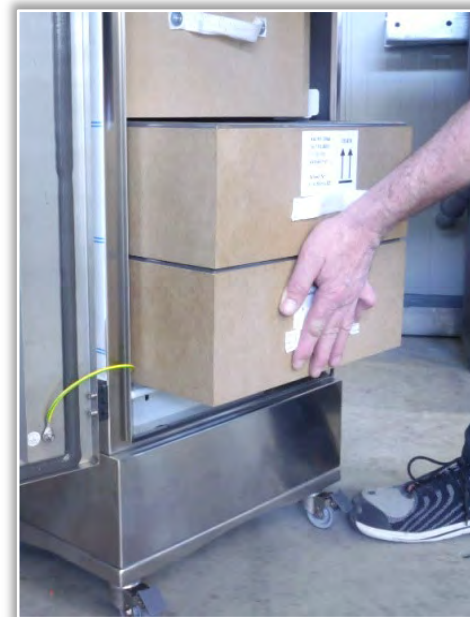**2nd filter step**, HEPA filter:
HEPA H13/H14, filter surface 5,6 m²

**3rd filter step**, adsorption filter:
activated carbon filling, 5,8 kg

Available for welding fume extraction: Expanded metal filter
as spark protection.

**User-friendly, low contamination** filter change. The
cardboard cover and slide-in cardboard supplied with the
replacement filter prevent soiling inside the unit.

For an easy filter change, an additional filter change kit is
available. Consisting of: Filter coverage, disposal bag, dust
mask and disposable gloves.

# Options and accessories FEX 3000

**EVOTEC**

## Vacuum hose and connections FEX 3000



**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 only for FEX 3000**

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 needed

Ø 50 mm **072-0609**

## Vacuum hose & exhaust hoses FEX 3000



**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 < 10⁹ 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 80 mm **072-0610**

Ø 100 mm **072-0637**



**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 FEX 3000

**EVOTEC**

## Options FEX 1000/2000

| | |
|---|---|
|  | **Spark trap with knitted metal inlay** prevents sparks from being sucked in. For integration in pipe system or hose<br><br>Ø 50 mm **072-0626**<br>Ø 80 mm **072-0628**<br>**Matching metal knitted inlay for**<br>Ø 50 mm **072-0626-01**<br>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**<br>as a spark arrester to prevent fire hazard, suitable for use in storage filters<br>**Piece 074-20058** |
|  | **Cyclone pre-separator ESD**<br><br>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<br><br>28 litres container **053-1045** |

## Options FEX 3000

| | |
|---|---|
|  | **Triangular socket wrench**<br>for FEX 3000 front door<br>Piece **074-20016** |
|  | **Stand Set**<br>For increased stability of the system, e.g. for operation with vacuum arm<br>Set **072-0350** |
|  | **Power supply cable**<br>with angled cold appliance plug, 5 meters<br><br>with EU Schuko plug **072-0343**<br>open at the end **072-0130** |
| | |

# Options and accessories FEX 3000

**EVOTEC**

## Options FEX 3000



**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 3000                        **072-0619-02**

## Vacuum 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**



**Vacuum 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



**Vacuum 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

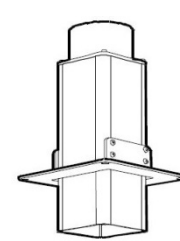# Options and accessories FEX 3000

## Vacuum arms



**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 mounting**
Including 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**

## Vacuum arms and consoles



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

Ø 50 mm
Range 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

For 072-0400-ESD:     **072-0409-ESD**

Universal 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 on request

# Options and accessories FEX 3000

## Hoods and nozzles



**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 vacuum arm



**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** |

# NOTES

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