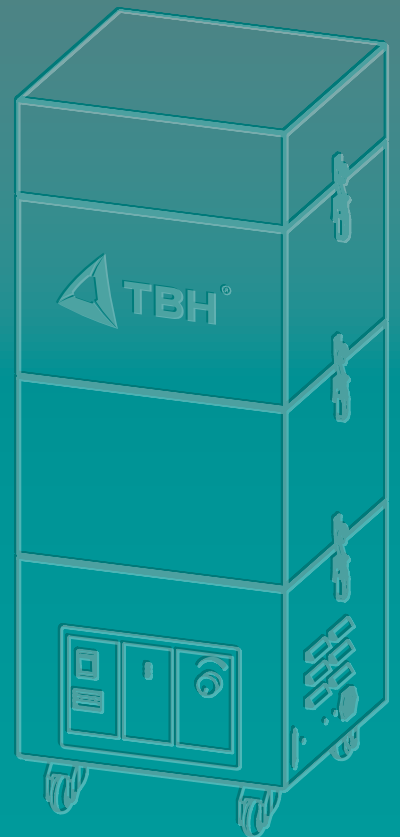
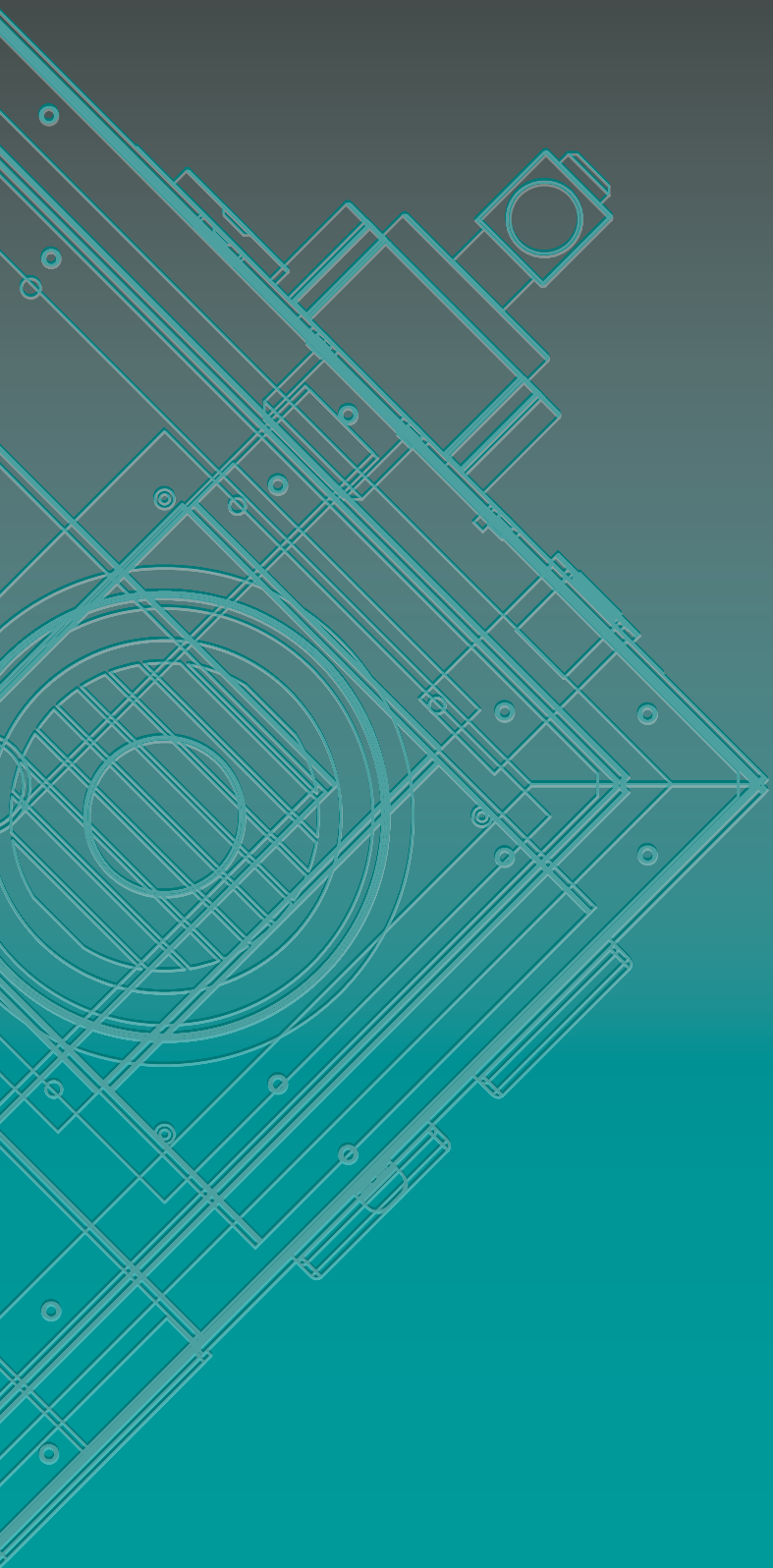


BF-SERIES

EXTRACTION / FILTER / POLLUTION CONTROL // TECHNOLOGY



APPLICATION

The products of the BF series (BASIC FILTRATION) were specially designed as basic models and include all of the essential functions of an extraction and filter system, combined with an excellent price-performance ratio.

The devices are available with different motor concepts, filter equipment and operating options. The TBH modular device design and all of its advantages were also used as the focus during the development of this device series.



Similar to image

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction, compact lasers)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases

THE SYSTEM INCLUDES NUMEROUS FEATURES:

- Modular design
- Easy filter replacement
- Differential pressure indicator for monitoring the saturation filters
- Interface with basic functions
- Products of the BF series with blowers are particularly energy-saving

FUNCTIONAL PRINCIPLE

The contaminated air is collected by the collection unit (extractor hood, suction arm, hose, etc.) and transported into the filter unit directly or through a pipe or flexible hose. In the filter unit, the contaminant particles are filtered into different filter levels according to their size. Filter units that are equipped with a molecular sieve (for example activated carbon filters/BAC) remove the majority of gaseous contaminants. Afterwards the purified air can either be circulated back into the work area or diverted outdoors through an exhaust duct. Recirculating the air in the work area is a way to easily reduce energy costs.

PRODUCT FEATURES

MODULAR DESIGN

The service handling is a big PLUS of the modular design concept. In case of servicing, only the malfunctioning motor module (and not the entire system) has to be examined. A replacement module can also be provided during the repair period. This reduces the costs for any production downtime that may be incurred.



EASY FILTER REPLACEMENT

The filter is replaced by simply removing it from above. This ensures simple, clean filter replacements for the employees or maintenance service staff.



FILTER MONITORING

The system includes a differential pressure indicator for monitoring the saturation filter (Figure 1,(3) Page 5). This shows when a defined value is reached to indicate that the filters need replacing, since the extraction level dissipates with increasing filter saturation.

INTERFACE WITH BASIC FUNCTIONS

The systems of the BF series are equipped with an interface that has the following basic functions:

- Start/stop system
- Filter full
- Preselection for run/stand-by when the system is started up

The extraction and filter system can be easily integrated in the customer's system.

ENERGY-SAVING

The use of special blowers in the BF5 and BF10 allow for particularly energy-saving system configurations (< 0.2 kW).

OPERATING ELEMENTS:

- 1) Power switch
- 2) Operating hour meter
- 3) Filter saturation indicator
- 4) Manual speed control



Figure 1

BF SERIES WITH TURBINE

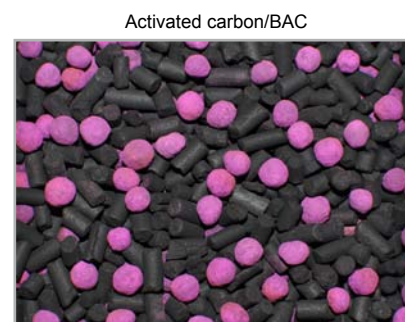
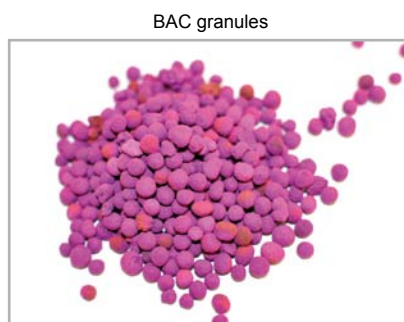
The units in the BF series generate especially high negative pressure. This makes them ideal for extracting with small collection elements or even the customer's own equipment or through long extraction ducts. This also allows for decentralised positioning of the extraction system for multiple extraction sites (e.g. manual workstations). If you need an effective design for special applications, please contact the TBH sales team.

BF SERIES WITH BLOWER

These devices of the BF series have a compact design and are particularly energy-saving. They are especially suited as table units for single or double workstations with a suction arm in areas with soldering fumes (for example). Due to the working concept of these devices, you always have to make sure that the intake area is large enough (in contrast to the LN series).

ADSORPTION OF GASEOUS SUBSTANCES

Two complimentary filter materials are used for the adsorption of gaseous substances. The activated carbon facilitates the physical adsorption process while the BAC granules facilitate a chemical adsorption process. Neutralisation of specific gaseous substances is achieved through chemical binding with the reaction substance that is deposited on the carrier material. Because the physical and chemical adsorption processes are complementary, an extremely wide range of gases and odours can be collected.



TECHNICAL DATA BF 5/10



Similar to image

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction tubes, or compact laser cabinets)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases

INCLUDES:

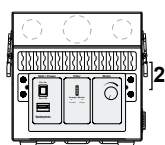
- Fully assembled (with device feet respectively wheels for mobile use)
- Filter equipment
- Power cable

| TECHNICAL SPECIFICATIONS | UNIT | BF 5 | BF 10 |
|--------------------------|-------------------|-----------------|-------------|
| Unimpeded air flow rate | m ³ /h | max. 130 | max. 230 |
| Effective air flow rate | m ³ /h | 20-100 | 20-200 |
| Max. static pressure | Pa | 1900 | 3500 |
| Voltage | V | 100-260 | 230 |
| Frequency | Hz | 50/60 | 50/60 |
| Power input | kW | 0.04 | 0.2 |
| Protection class | - | 1 | 1 |
| Motor and drive system | - | brushless motor | |
| Noise level | db(A) | ca. 58 | ca. 62 |
| Serial interface | D-sub | 25-pin | 25-pin |
| Weight | kg | 17 | 24 |
| Dimensions (HxWxD) | mm | 315x300x300 | 510x300x300 |
| DN 50 intake socket | number | 2 | 2 |
| Colour (cabinet) | RAL | 7035 | 7035 |
| Colour (top cover) | RAL | 7037 | 7037 |

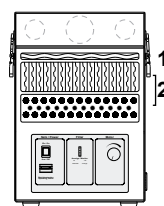
FILTER CONFIGURATION

| | | |
|--|---|---|
| Pre-filter mat (F5) | - | ✓ |
| 2-stage filter (particle filter (H13)+activated carbon filter) | ✓ | ✓ |

ORDER DATA BF 5/10



BF 5



BF 10

| DESCRIPTION | ART.-NO. |
|-------------------------------|----------|
| BF 5* 100-260V 50/60Hz | 90344 |

* With speed control

| DESCRIPTION | ART.-NO. |
|----------------------------|----------|
| BF 10* 230V 50/60Hz | 90345 |

| REPLACEMENT FILTERS | |
|--|----------------|
| Pre-filter mat | - |
| 2-stage filter (particle filter + activated carbon filter) | 15119 2 |

| REPLACEMENT FILTERS | |
|--|----------------|
| Pre-filter mat | 11141 1 |
| 2-stage filter (particle filter + activated carbon filter) | 11140 2 |

| COVER MODULE | |
|---|--------|
| Exhaust arm system 50, length 850 mm, 3 joints | 15357* |
| Exhaust arm system 50 FLEX, length 900 mm, 2 joints | 15354* |
| Exhaust arm system 50 FLEX, length 600 mm, without joints | 15355* |
| Top cover with socket center DN 80 | 15356* |

* factory measures

TECHNICAL DATA BF 100/200



Similar to image

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction tubes, or compact laser cabinets)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases

INCLUDES:

- Fully assembled (with wheels for mobile use)
- Filter equipment
- Power cable

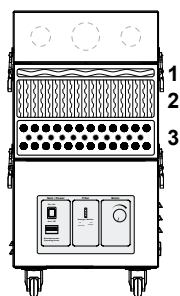
| TECHNICAL SPECIFICATIONS | UNIT | BF 100 | BF 100R* | BF200 | BF200R* |
|--------------------------|-------------------|-----------------|----------|-----------------|---------|
| Unimpeded air flow rate | m ³ /h | max. 280 | | max. 280 | |
| Effective air flow rate | m ³ /h | 230 | 30-230 | 260 | 30-260 |
| Max. static pressure | Pa | 11000 | | 11000 | |
| Voltage | V | 230/120 | | 230/120 | |
| Frequency | Hz | 50/60 | | 50/60 | |
| Power input | kW | 1.1 | | 1.1 | |
| Protection class | - | 1 | | 1 | |
| Motor and drive system | - | brushless motor | | brushless motor | |
| Noise level | db(A) | ca. 59 | | ca. 59 | |
| Serial interface | D-sub | 25-pin | | 25-pin | |
| Weight | kg | ca. 40 | | ca. 55 | |
| Dimensions (HxWxD) | mm | 700x350xx350 | | 1050x350x350 | |
| DN 50 intake socket | number | 2 | | 2 | |
| DN 80 intake socket | number | 1 | | 1 | |
| Colour (cabinet) | RAL | 7035 | | 7035 | |
| Colour (top cover) | RAL | 7037 | | 7037 | |

* With speed control for individual adjustment

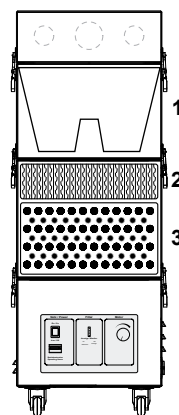
FILTER CONFIGURATION

| | | |
|-----------------------------|----------|----------|
| Pre-filter mat (F5) | ✓ | - |
| MP-TEC filter (F7) | - | ✓ |
| Particle filter (H13) | ✓ | ✓ |
| Activated carbon/BAC filter | 10 liter | 18 liter |

ORDER DATA BF 100/200



BF 100/100R*



BF 200/200R*

| DESCRIPTION | ART.-NO. |
|------------------------------|----------|
| BF 100 230V 50/60Hz | 90301 |
| BF 100 120V 50/60Hz | 90303 |
| BF 100R* 230V 50/60Hz | 90302 |
| BF 100R* 120V 50/60Hz | 90304 |

* With speed control for individual adjustment

| DESCRIPTION | ART.-NO. |
|------------------------------|----------|
| BF 200 230V 50/60Hz | 90305 |
| BF 200 120V 50/60Hz | 90307 |
| BF 200R* 230V 50/60Hz | 90306 |
| BF 200R* 120V 50/60Hz | 90308 |

| REPLACEMENT FILTERS | |
|----------------------|----------------|
| Pre-filter mat | 10040 1 |
| MP-TEC filter | - |
| Particle filter | 10013 2 |
| Activated carbon/BAC | 10004 3 |

| REPLACEMENT FILTERS | |
|----------------------|----------------|
| Pre-filter mat | - |
| MP-TEC filter | 13333 1 |
| Particle filter | 10013 2 |
| Activated carbon/BAC | 10007 3 |

TECHNICAL DATA BF 1000/1200



Similar to image

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction tubes, or compact laser cabinets)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases

INCLUDES:

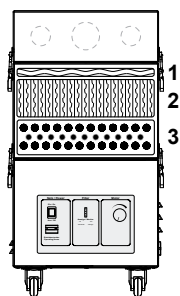
- Fully assembled (with wheels for mobile use)
- Filter equipment
- Power cable

| TECHNICAL SPECIFICATIONS | UNIT | BF 1000 | BF 1000R* | BF1200 | BF1200R* |
|--------------------------|-------------------|-----------------|-----------|-----------------|----------|
| Unimpeded air flow rate | m ³ /h | max. 280 | | max. 280 | |
| Effective air flow rate | m ³ /h | 230 | 30-230 | 260 | 30-260 |
| Max. static pressure | Pa | 11000 | | 11000 | |
| Voltage | V | 230/120 | | 230/120 | |
| Frequency | Hz | 50/60 | | 50/60 | |
| Power input | kW | 1.1 | | 1.1 | |
| Protection class | - | 1 | | 1 | |
| Motor and drive system | - | brushless motor | | brushless motor | |
| Noise level | db(A) | ca. 58 | | ca. 58 | |
| Serial interface | D-sub | 25-pin | | 25-pin | |
| Weight | kg | ca. 70 | | ca. 90 | |
| Dimensions (HxWxD) | mm | 750x350x655 | | 1130x350x655 | |
| DN 50 intake socket | number | 2 | | 2 | |
| DN 80 intake socket | number | 1 | | 1 | |
| Colour (cabinet) | RAL | 7035 | | 7035 | |
| Colour (top cover) | RAL | 7037 | | 7037 | |

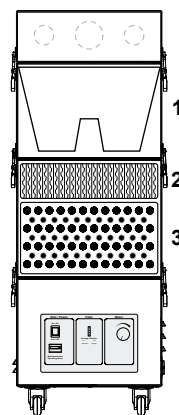
* With speed control for individual adjustment

| FILTER CONFIGURATION | | |
|-----------------------------|----------|----------|
| Pre-filter mat (F5) | ✓ | - |
| MP-TEC filter (F7) | - | ✓ |
| Particle filter (H13) | ✓ | ✓ |
| Activated carbon/BAC filter | 25 liter | 45 liter |

ORDER DATA BF 1000/1200



BF 1000/1000R*



BF 1200/1200R*

| DESCRIPTION | ART.-NO. |
|-------------------------------|----------|
| BF 1000 230V 50/60Hz | 90309 |
| BF 1000 120V 50/60Hz | 90311 |
| BF 1000R* 230V 50/60Hz | 90310 |
| BF 1000R* 120V 50/60Hz | 90312 |

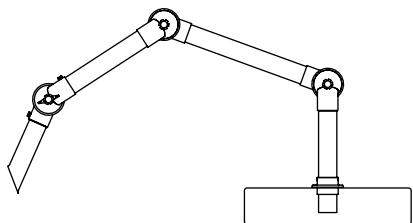
| DESCRIPTION | ART.-NO. |
|-------------------------------|----------|
| BF 1200 230V 50/60Hz | 90313 |
| BF 1200 120V 50/60Hz | 90315 |
| BF 1200R* 230V 50/60Hz | 90314 |
| BF 1200R* 120V 50/60Hz | 90316 |

* With speed control for individual adjustment

| REPLACEMENT FILTERS | |
|----------------------|----------------|
| Pre-filter mat | 10001 1 |
| MP-TEC filter | - |
| Particle filter | 10009 2 |
| Activated carbon/BAC | 10046 3 |

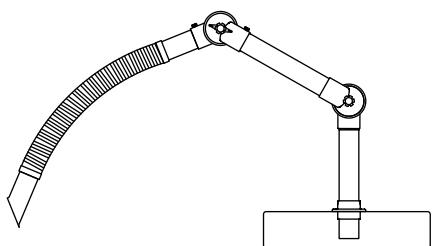
| REPLACEMENT FILTERS | |
|----------------------|----------------|
| Pre-filter mat | - |
| MP-TEC filter | 13310 1 |
| Particle filter | 10009 2 |
| Activated carbon/BAC | 12052 3 |

ACCESSORIES



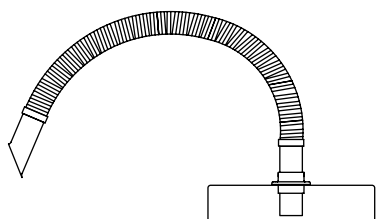
| DESCRIPTION | USE | ART.-NO. |
|--|-------------|----------|
| Exhaust arm SYSTEM 50, length 850 mm, 3 joints | BF 5, BF 10 | 15392* |

* upgrading existing systems



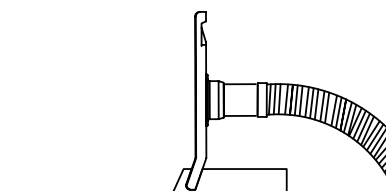
| DESCRIPTION | USE | ART.-NO. |
|---|-------------|----------|
| Exhaust arm SYSTEM 50 FLEX, length 900 mm, 2 joints | BF 5, BF 10 | 15393* |

* upgrading existing systems

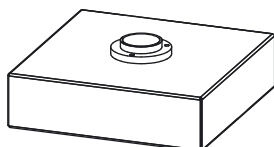


| DESCRIPTION | USE | ART.-NO. |
|---|-------------|----------|
| Exhaust arm SYSTEM 50 FLEX, length 600 mm, without joints | BF 5, BF 10 | 15394* |

* upgrading existing systems

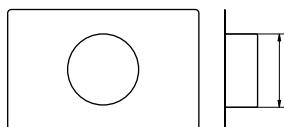


| DESCRIPTION | USE | ART.-NR. |
|---|-------------|----------|
| Flat screen kit SYSTEM 50, with an extraction hose length of 1.25 m | BF 5, BF 10 | 15397 |



| DESCRIPTION | USE | ART.-NO. |
|------------------------------------|-------|----------|
| Top cover with socket center DN 80 | BF 10 | 15395* |

* upgrading existing systems



EXHAUST PLATE

| DN (mm) | USE | ART.-NO. |
|---------|-----------------------|----------|
| 80 | BF 100/200, 1000/1200 | 11709 |
| 100 | BF 100/200, 1000/1200 | 12839 |
| 125 | BF 100/200, 1000/1200 | 12232 |

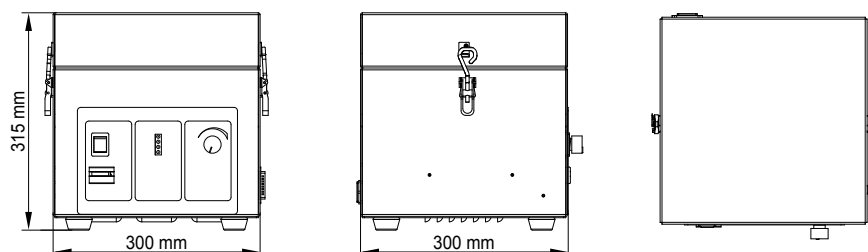
Connection plate with connection pieces for targeted air removal through the hose

ELECTRONIC CONTROLS

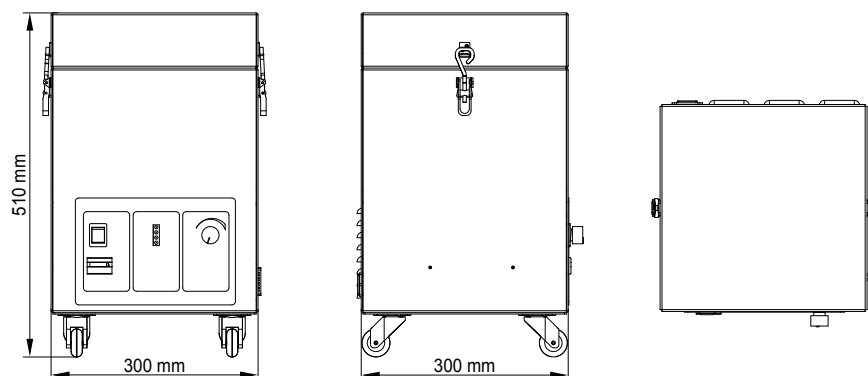
| FUNCTION | BF 100/200, 1000/1200 | BF 5/10, 100R/200R, 1000R/1200R |
|--|-----------------------|---------------------------------|
| Fully adjustable speed control | - | ✓ |
| Automatic speed readjustment | ✓ | ✓ |
| Visual signal when filter is saturated | ✓ | ✓ |
| Real-time operating hour meter | ✓ | ✓ |

| INTERFACE FUNCTIONS | BF 100/200, 1000/1200 | BF 5/10, 100R/200R, 1000R/1200R |
|------------------------------------|-----------------------|---------------------------------|
| Interface | D-sub | D-sub |
| Start/stop operation via interface | ✓ | ✓ |
| Filter saturation signal (100%) | ✓ | ✓ |

TECHNICAL DRAWINGS

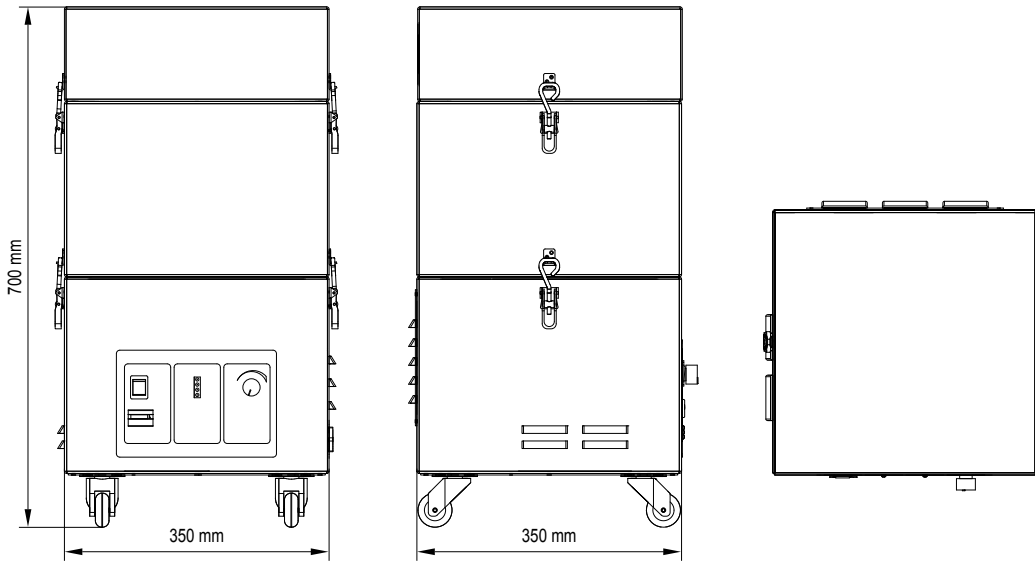


BF 5

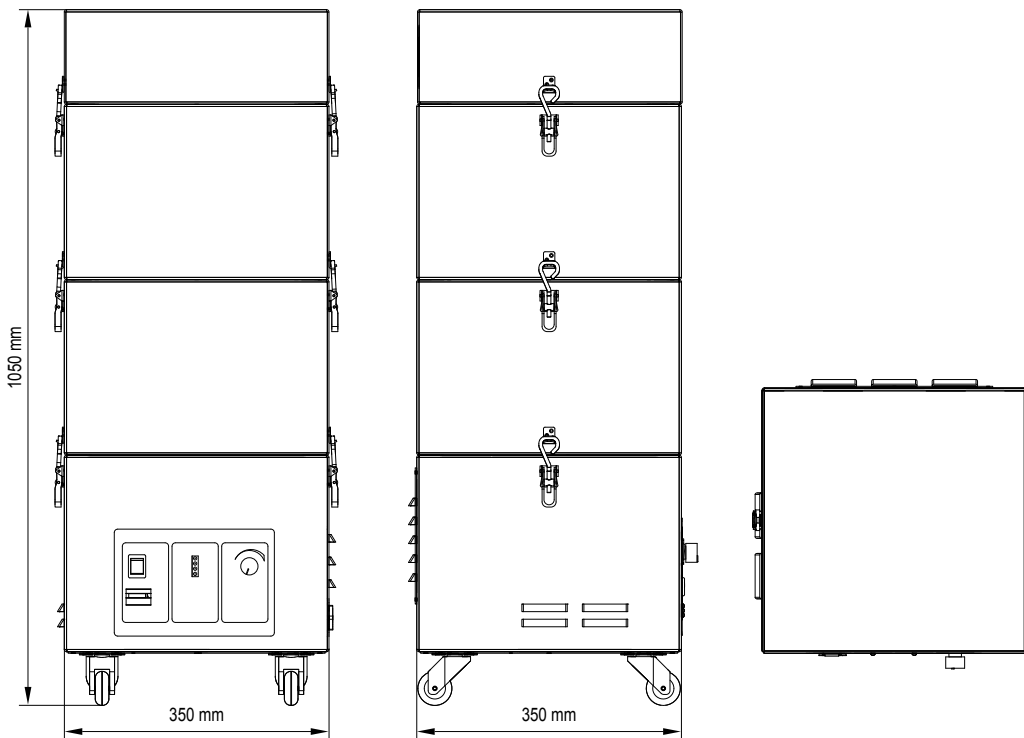


BF 10

TECHNICAL DRAWINGS

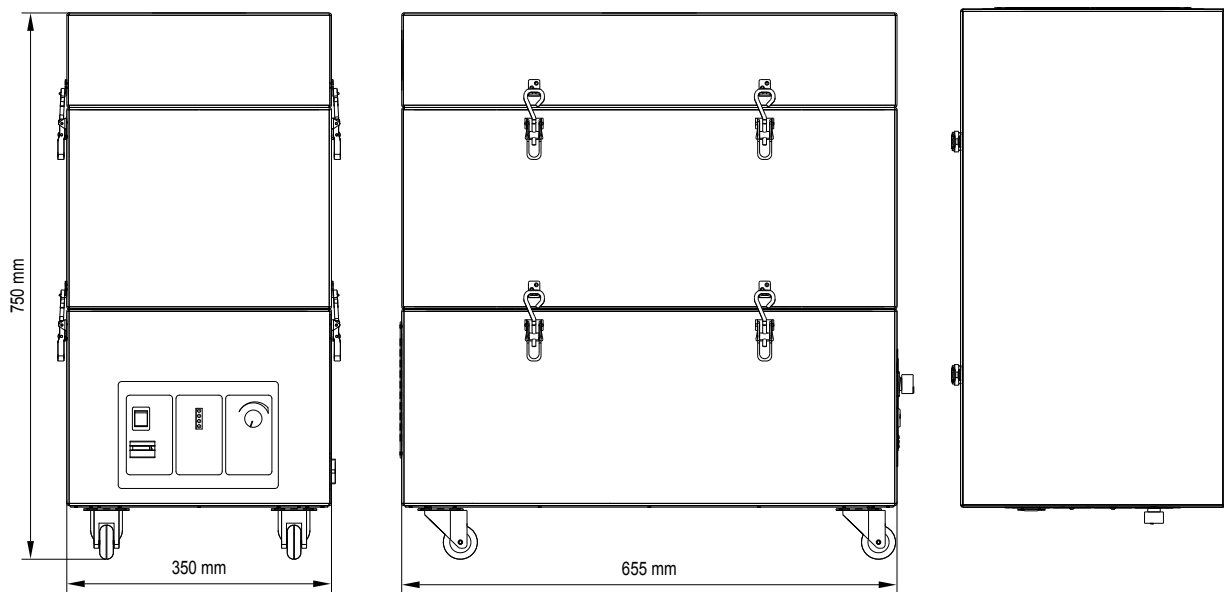


BF 100/100R*

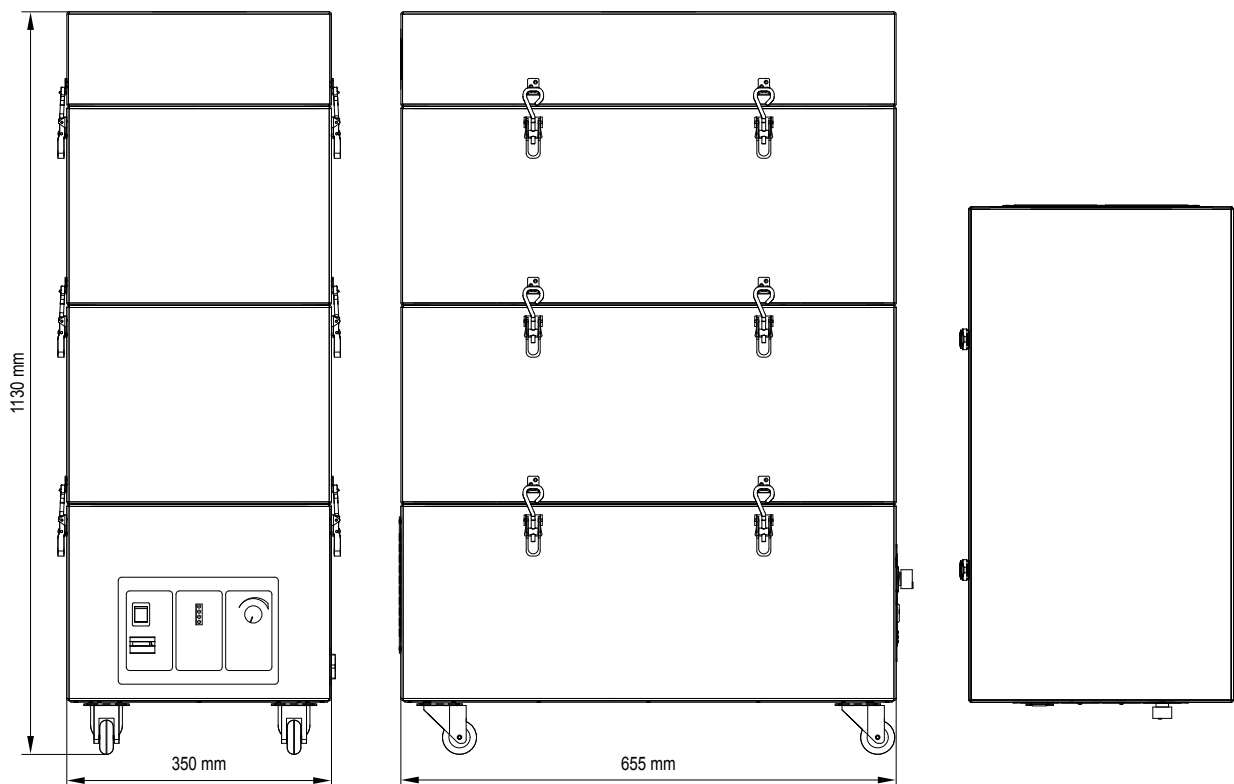


BF 200/200R*

** With speed control for individual adjustment*



BF 1000/1000R*



BF 1200/1200R*

** With speed control for individual adjustment*



TBH GmbH

EXHAUST- AND FILTRATION TECHNOLOGY

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