

## Safety Cabinets - Classes I, II and III for protection of operator, product and environment



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## Further safety cabinets from FASTER in our programme:

### Isolators – detailed information and prices on request.



#### GloveFAST CytoPharma

Class 3 ISO/FDIS 14644-7 negative pressure isolator systems with vertical laminar airflow.

Widely used in hospital pharmacies and oncology clinics, for safe aseptic handling of cytotoxic drugs, manipulation of antineoplastic chemotherapeutics and CMR.

Available in three sizes, equipped with H14 HEPA/ULPA filters, 2 hatches and up to 4 gloves.



#### GloveFAST Cyto

Compact versions of the GloveFAST CytoPharma cabinets.

Available in three sizes, equipped with H14 HEPA/ULPA filter, 1 hatch and up to 4 gloves.



#### GloveFAST Aseptic

Class 3 ISO/FDIS 14644-7 positive pressure isolator systems.

Particularly designed for product protection of non-hazardous drugs which have to be tested in an aseptic environment.

Available in three sizes, equipped with H14 HEPA/ULPA filter, 2 hatches and up to 4 gloves.

### ChemFAST Fume Cupboards – protection from chemicals, vapours, and aerosol. Separate price list with detailed information on request!



- In compliance with the requirements of BS 7258-1, EN 61010-1, and EN 61326-1.
- To be used in many laboratories, including those in chemistry, Q.C., biotechnology, pharmaceutical and food industry, petrochemical, photographic laboratories, and more.
- **ChemFAST Top** is designed to meet all the routine safety requirements encountered by both the operator and the environment through the use of chemical reagents.
- **ChemFAST Elite** is designed with a microprocessor controlled system for a range of data such as type and code number of the filter, installation date, maximum time allowance for filter use, and a warning date for its replacement.
- Wide range of activated charcoal adsorbing **filters** for applications that use chemicals such as hydrocarbons, formalin, glutaraldehyde, radioactive iodine labelled compounds etc.
- Highly effective protection from toxic vapours, large adsorption capacity.
- Cabinets with pre-filter(s) with efficiency equal to 75 % - 80 % dust weight arrestance (ASHRAE).

Further safety cabinets of all classes and prices for replacement filters available on request!

## Microbiological Safety Cabinets - Class II

### SafeFAST Elite

These units belong to the latest generation of class II microbiological cabinets from FASTER. High quality materials and construction together with modern vertical laminar airflow technology guarantee conformity to the strictest safety standards (EN12469:2000). The cabinets have been adopted worldwide for operator, environment, and product protection while handling harmful agents pathogenic to human beings and/or animals for microbiological or cell culture applications.



- Equipped with two H14 HEPA/ULPA filters, with an efficiency of > 99.995 % MPPS (EN 1822)
- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Perforated work surface in stainless steel, consisting of sections, removable, autoclavable
- Sloped safety glass front, electrically operated, working aperture = 200 mm, maximum aperture = 440 mm
- User-friendly practical keyboard with LCD display shows information such as laminar airflow velocity, inside and outside temperature, residual lifetime of HEPA filter, total number of hours of operation
- Audio-visual alarms such as incorrect laminar airflow velocity, faulty front window position, clogging of HEPA filter, power failure, fan-motor malfunction
- All models equipped with 1 x gas tap and 1 x vacuum tap
- Electrical socket(s) (quantity depending on model)
- Interior lighting
- Optional: magnetic and removable UV lamp with timer
- **On request SafeFAST Elite also available as class I, Class II B2 (Total Exhaust) or class III safety cabinet**

Technical Specifications	Elite 209 S/D	Elite 212 S/D	Elite 215 S/D	Elite 218 S/D
External dimensions w x h x d [mm]	1045 x 1545 x 855	1350 x 1545 x 855	1655 x 1545 x 855	1960 x 1545 x 855
Internal dimensions w x h x d [mm]	887 x 740 x 580	1192 x 740 x 580	1497 x 740 x 580	1802 x 740 x 580
Weight	approx. 170 kg	approx. 195 kg	approx. 225 kg	approx. 260 kg
Exhaust flow rate	290 m <sup>3</sup> /h	390 m <sup>3</sup> /h	485 m <sup>3</sup> /h	585 m <sup>3</sup> /h
Noise level	< 53 dB(A)	< 54 dB(A)	< 55 dB(A)	< 56 dB(A)
Electrical socket	1	1	2	2

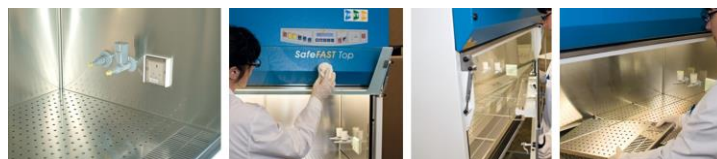
Cat. No.	Description
F00002100000	<b>SafeFAST Elite 209S, <u>single</u></b> centrifugal fan
F00002130000	<b>SafeFAST Elite 212S, <u>single</u></b> centrifugal fan
F00002160000	<b>SafeFAST Elite 215S, <u>single</u></b> centrifugal fan
F00002190000	<b>SafeFAST Elite 218S, <u>single</u></b> centrifugal fan
F00002090000	<b>SafeFAST Elite 209D, <u>double</u></b> centrifugal fan
F00002120000	<b>SafeFAST Elite 212D, <u>double</u></b> centrifugal fan
F00002150000	<b>SafeFAST Elite 215D, <u>double</u></b> centrifugal fan
F00002180000	<b>SafeFAST Elite 218D, <u>double</u></b> centrifugal fan
<b>Optional accessories:</b> (further accessories on request such as stand with castors, sockets for data (RS232/RS485/USB), additional taps for gas or water)	
FX0002124600	UV lamp for SafeFAST Elite 209/212 S/D
FX0002154600	UV lamp for SafeFAST Elite 215/218 S/D
FX0002094500	Epoxy powder coated modular stand for SafeFAST Elite 209 S/D
FX0002124500	Epoxy powder coated modular stand for SafeFAST Elite 212 S/D
FX0002154500	Epoxy powder coated modular stand for SafeFAST Elite 215 S/D
FX0002184500	Epoxy powder coated modular stand for SafeFAST Elite 218 S/D
FX0002xx4520	<b>Electrical</b> modular stand for SafeFAST Elite 209, 212, 215, 218 S/D
FX0021254000	Additional electrical socket (for Germany, further countries on request)

## SafeFAST Top

These class II microbiological safety cabinets (EN 12469:2000) with **vertical** laminar flow have a **single piece stainless steel work chamber** that provides easy and safe **cleaning**. The cabinets are equipped with H14 HEPA/ULPA filter, with an efficiency of > 99.995 % MPPS (EN 1822).



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Negative pressure plenum “biodynamic sealing”
- Available with single or double centrifugal fan:
  - S models: single centrifugal fan
  - D models: double centrifugal fan (main and exhaust)
- Perforated work surface in stainless steel, consisting of sections, removable, autoclavable
- User-friendly practical keyboard with LCD display shows information such as laminar airflow velocity, inside and outside temperature, residual lifetime of HEPA filter, total number of hours of operation
- Audio-visual alarms such as incorrect laminar airflow velocity, faulty front window position, clogging of HEPA filter, power failure, fan-motor malfunction
- Hinged safety glass front, working aperture = 200 mm, maximum aperture = 430 mm
- All models equipped with 1 x gas tap, 1 x vacuum tap, and 1 x electrical socket
- Interior lighting
- Optional: UV lamp and further accessories (see below)
- **On request SafeFAST Top also available as class I, Class II B2 (Total Exhaust) or class III safety cabinet**



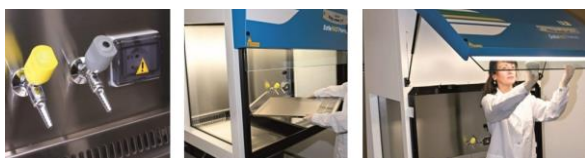
Technical Specifications	Top 209 S/D	Top 212 S/D	Top 215 S/D	Top 218 S/D
External dimensions w x h x d [mm]	1015 x 1470 x 785	1320 x 1470 x 785	1625 x 1470 x 785	1930 x 1470 x 785
Internal dimensions w x h x d [mm]	885 x 660 x 580	1190 x 660 x 580	1495 x 660 x 580	1800 x 660 x 580
Weight	approx. 185 kg	approx. 215 kg	approx. 260 kg	approx. 300 kg
Exhaust flow rate	290 m <sup>3</sup> /h	390 m <sup>3</sup> /h	485 m <sup>3</sup> /h	585 m <sup>3</sup> /h
Noise level	< 57 dB(A)	< 58 dB(A)	< 59 dB(A)	< 60 dB(A)
Electrical sockets	1	1	1	1

Cat. No.	Description
F00001050000	<b>SafeFAST Top 209S, <u>single</u></b> centrifugal fan
F00001060000	<b>SafeFAST Top 212S, <u>single</u></b> centrifugal fan
F00001070000	<b>SafeFAST Top 215S, <u>single</u></b> centrifugal fan
F00001080000	<b>SafeFAST Top 218S, <u>single</u></b> centrifugal fan
F00000050000	<b>SafeFAST Top 209D, <u>double</u></b> centrifugal fan
F00000060000	<b>SafeFAST Top 212D, <u>double</u></b> centrifugal fan
F00000070000	<b>SafeFAST Top 215D, <u>double</u></b> centrifugal fan
F00000080000	<b>SafeFAST Top 218D, <u>double</u></b> centrifugal fan
<b>Optional accessories:</b> (further accessories on request such as stand with castors, compact working surface, etc.)	
FX0000064600	UV lamp for SafeFAST Top cabinets
FX0000054500	Epoxy powder coated modular stand for SafeFAST Top 209 S/D
FX0000064500	Epoxy powder coated modular stand for SafeFAST Top 212 S/D
FX0000074500	Epoxy powder coated modular stand for SafeFAST Top 215 S/D
FX0000084500	Epoxy powder coated modular stand for SafeFAST Top 218 S/D
FX0000064900	Additional electrical socket
FX0000064710	Additional vacuum tap



## SafeFAST Premium

These class II microbiological cabinets (EN 12469:2000) with **vertical** laminar flow provide outstanding performances in terms of **low power consumption** (84.4 Watt at operational mode), **very low noise level** (e.g. 42,5 dB(A) for Premium 212) and **very low CO<sub>2</sub> emission** (163 kg/year). The SafeFAST Premium models are equipped with two H14 HEPA/ULPA filters, with an efficiency of > 99.995 % MPPS (EN 1822).



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Low noise level
- Power consumption: 84.4 Watt at operational mode
- CO<sub>2</sub> emission: 163 kg/year
- Perforated work surface in stainless steel, consisting of sections, removable, autoclavable
- Sloped safety glass front, electrically operated, working aperture = 160 mm, maximum aperture = 440 mm
- User-friendly practical keyboard with LCD display shows information such as laminar airflow velocity, inside and outside temperature, residual lifetime of HEPA filter, total number of hours of operation
- Audio-visual alarms such as incorrect laminar airflow velocity, faulty front window position, clogging of HEPA filter, power failure, fan-motor malfunction
- Electrical socket(s) (quantity depending on model)
- All models equipped with 1 x gas tap and 1 x vacuum tap
- Interior lighting
- Double centrifugal fan

Technical Specifications	Premium 209	Premium 212	Premium 215	Premium 218
Ext. dimensions w x h x d [mm]	1045 x 1545 x 855	1350 x 1545 x 855	1655 x 1545 x 855	1960 x 1545 x 855
Int. dimensions w x h x d [mm]	887 x 740 x 580	1192 x 740 x 580	1497 x 740 x 580	1802 x 740 x 580
Weight	approx. 170 kg	approx. 195 kg	approx. 225 kg	approx. 260 kg
Exhaust flow rate	290 m <sup>3</sup> /h	390 m <sup>3</sup> /h	485 m <sup>3</sup> /h	585 m <sup>3</sup> /h
Noise level	< 41 dB(A)	< 42,5 dB(A)	< 47 dB(A)	< 49 dB(A)
Electrical sockets	1	1	2	2

Cat. No.	Description
F00024900000	<b>SafeFAST Premium 209, <u>double</u></b> centrifugal fan
F00025200000	<b>SafeFAST Premium 212, <u>double</u></b> centrifugal fan
F00025500000	<b>SafeFAST Premium 215, <u>double</u></b> centrifugal fan
F00025800000	<b>SafeFAST Premium 218, <u>double</u></b> centrifugal fan
<b>Optional accessories:</b> (further accessories on request such as stand with castors, electrical modular stands, arm rests, compact working surface, etc.)	
FX0002124600	UV lamp for SafeFAST Premium 209/212
FX0002154600	UV lamp for SafeFAST Premium 215/218
FX0002094500	Epoxy powder coated modular stand for SafeFAST Premium 209
FX0002124500	Epoxy powder coated modular stand for SafeFAST Premium 212
FX0002154500	Epoxy powder coated modular stand for SafeFAST Premium 215
FX0002184500	Epoxy powder coated modular stand for SafeFAST Premium 218
FX0021254000	Additional electrical socket (for Germany, further countries on request)
FX0002124710	Additional vacuum tap
FX0021255***	Additional socket for data (RS232, RJ45, or USB)
FX0002094020	Additional exhaust HEPA filter for SafeFAST Premium 209
FX0002124020	Additional exhaust HEPA filter for SafeFAST Premium 212
FX0002154020	Additional exhaust HEPA filter for SafeFAST Premium 215
FX0002184020	Additional exhaust HEPA filter for SafeFAST Premium 218
FX0002xx4030	Exhaust charcoal filter (without collar) for SafeFAST Premium 209/212
FX00021x4030	Exhaust charcoal filter (without collar) for SafeFAST Premium 215/218

## SafeFAST Classic

Class II microbiological safety cabinets (EN 12469:2000) with **vertical** laminar airflow, equipped with two H14 HEPA/ULPA filters, with an efficiency of > 99.995 % MPPS (EN 1822).



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Rear wall in epoxy coated steel
- Perforated work surface in stainless steel, consisting of sections, removable, autoclavable
- Front window and side panels made of safety glass
- Sloped front window, electrically operated, working aperture = 200 mm, maximum aperture = 490 mm
- User-friendly practical keyboard with LCD display, shows information such as laminar airflow velocity, inside and outside temperature, residual lifetime of HEPA filter, total number of hours of operation
- Audio-visual alarms such as incorrect laminar airflow velocity, faulty front window position, clogging of HEPA filter, power failure, fan-motor malfunction
- Single fan (double fan also available for each model)
- Electrical socket(s) (quantity depending on model)
- Interior lighting
- Optional: UV lamp and further accessories (see below)



Technical Specifications	Classic 209	Classic 212	Classic 215	Classic 218
Ext. dimensions w x h x d [mm]	1045 x 1545 x 810	1350 x 1545 x 810	1655 x 1545 x 810	1960 x 1545 x 810
Int. dimensions w x h x d [mm]	887 x 740 x 580	1192 x 740 x 580	1497 x 740 x 580	1802 x 740 x 580
Weight	approx. 170 kg	approx. 195 kg	approx. 225 kg	approx. 260 kg
Exhaust flow rate	290 m <sup>3</sup> /h	390 m <sup>3</sup> /h	485 m <sup>3</sup> /h	585 m <sup>3</sup> /h
Noise level	< 53 dB(A)	< 54 dB(A)	< 55 dB(A)	< 56 dB(A)
Electrical sockets	1	1	2	2

Cat. No.	Description
F00001110000	<b>SafeFAST Classic 209</b>
F00001140000	<b>SafeFAST Classic 212</b>
F00001170000	<b>SafeFAST Classic 215</b>
F00001200000	<b>SafeFAST Classic 218</b>
<b>Optional accessories:</b>	
(further accessories on request such as stand with castors, arm rests, compact working surface, manual nitrogen tap, etc.)	
FX0002124600	UV lamp for SafeFAST Classic 209/212
FX0002154600	UV lamp for SafeFAST Classic 218
FX0002094500	Epoxy powder coated modular stand for SafeFAST Classic 209
FX0002124500	Epoxy powder coated modular stand for SafeFAST Classic 212
FX0002184500	Epoxy powder coated modular stand for SafeFAST Classic 218
FX0002xx4520	Electrical modular stand
FX0021254000	Additional electrical socket (for Germany, further countries on request)
FX0011247000	Gas tap with electrovalve
FX0000204710	Manual gas tap
FX0011247100	Manual vacuum tap
FX0011247400	Manual water tap

## SafeFAST Light

The most compact class II microbiological safety cabinet from FASTER, equipped with one H14 HEPA/ULPA filter, with an efficiency of > 99.995 % MPPS (EN 1822). Vertical laminar airflow.



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Compact safety cabinet with vertical laminar airflow, overall width approximately 83 cm only
- Stainless steel rear wall and working surface, working surface removable and autoclavable
- Front window and side panels made of safety glass
- Sloped front window, hinged, working aperture = 200 mm, maximum aperture = 440 mm
- User-friendly practical keyboard with LCD display
- Single centrifugal fan
- 1 x electrical socket
- Noise level: approx. 53,5 dB(A)
- Interior lighting
- Weight: approx. 90 kg
- External dimensions (w x h x d): 830 x 980 x 652 mm
- Internal dimensions (w x h x d): 732 x 580 x 380 mm
- Optional: UV lamp (see below)

Cat. No.	Description
F00014400000	<b>SafeFAST Light, <u>single</u></b> centrifugal fan
<b>Optional accessories:</b> (further accessories on request such as stand with castors, arm rests, gas taps, etc.)	
FX0014446000	UV lamp for SafeFAST Light
FX0002124900	Additional electrical socket
FX0012145000	Epoxy powder coated modular stand for SafeFAST Light

## SafeFAST RBH (Robot Biohazard)

Special customized class II microbiological safety cabinets conceived **to house automatic laboratory robots**, equipped with H14 HEPA/ULPA filter, with an efficiency of > 99.995 % MPPS (EN 1822).



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Front and side windows made of polycarbonate
- Hinged front window (maximum aperture: 600 mm)
- Reinforced stainless steel working surface for heavy loads
- User-friendly practical keyboard with LCD display
- Audio-visual alarms
- Double centrifugal fan
- 2 x electrical sockets, interior lighting
- With epoxy powder coated stand
- Further models and optional accessories on request

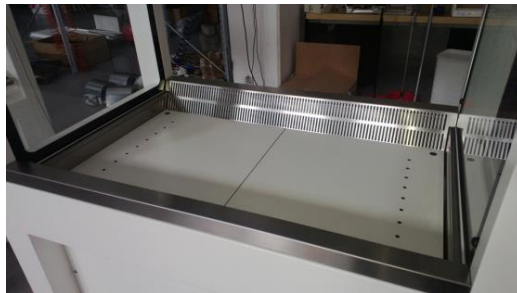
Cat. No.	Description
RBH 12-10	<b>SafeFAST RBH 12-10</b> , external/internal dimensions (w x h x d): 1332/1190 x 1885/1000 x 1190/1000 mm
RBH 15-10	<b>SafeFAST RBH 15-10</b> external/internal dimensions (w x h x d): 1637/1495 x 1885/1000 x 1190/1000 mm
RBH 18-10	<b>SafeFAST RBH 18-10</b> external/internal dimensions (w x h x d): 1942/1800 x 1885/1000 x 1190/1000 mm
RBH 22-10	<b>SafeFAST RBH 22-10</b> external/internal dimensions (w x h x d): 2398/2256 x 1885/1000 x 1190/1000 mm

## SafeFAST Hyper

Dual Front Class II vertical laminar airflow cabinet, particularly designed for the **handling of animal cages** (EN 12469:2000). It is a microbiological safety cabinet that offers triple protection to the operator, product, and environment, equipped with H14 HEPA/ULPA filter, with an efficiency of > 99.995 % MPPS (EN 1822) and G4 pre-filter (EN 779).



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Dual access front allows working of two operators at the same time
- All panels made of safety glass (6 mm)
- Both front windows hinged, working aperture = 300 mm, maximum aperture = 580
- TRESPA<sup>®</sup> work surface
- Electrical lifting system allows lifting up of the whole cabinet that eases working upright (work surface raise from 800 – 1100 mm)
- Handle bar on both sides
- Adjustable LED lighting (> 1000 lux)
- User-friendly practical keyboard with LCD display, shows information such as laminar airflow velocity, inside and outside temperature, residual lifetime of HEPA filter, total number of hours of operation
- Audio-visual alarms such as incorrect laminar airflow velocity, faulty front window position, clogging of HEPA filter, power failure, fan-motor malfunction
- Noise level < 58 dB(A)
- Electrical lifting system allowing lifting up of the whole cabinet that eases working upright (surface raise from 800 to 1100 mm)
- 1 x electrical socket
- External dimensions (w x h x d): 1250 x 1980 x 795 mm
- Internal dimensions (w x h x d): 1050 x 706 x 530 mm



Cat. No.	Description
F00027000000	<b>SafeFAST Hyper</b>
<b>Optional accessories:</b>	
FX0027040100	UV lamp, only on aluminium closure
FX0027040200	Exhaust charcoal filter
FX0027040300	Double keyboard (keyboard for second front)
FX0027040400	Sealing kit for decontamination
FX0027040500	Knee rest panel
FX0002124900	Additional electrical socket
FX0002124940	Volt free contact



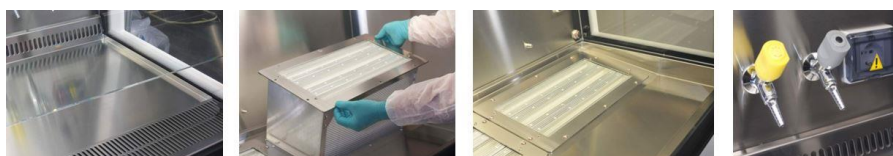
## Cytotoxic Safety Cabinets - Class II

### CytoFAST Elite

The cabinets are designed and built to performance requirements of the standards EN 12469:2000 and DIN 12980:2005-06. They are equipped with three HEPA/ULPA filters (H14, according to EN1822). 100 % of the air is filtered via the main filter below the work surface, 70 % of the circulating air in the cabinet is filtered by the second HEPA/ULPA filter and 30 % is discharged through the third (exhaust) filter. The cabinets can be used for the **preparation and handling of cytotoxic drugs and antineoplastic chemotherapeutics**.



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Solid work surface in stainless steel, removable, autoclavable (optionally available as perforated work surface)
- Stainless steel internal rear wall (AISI 304 L)
- Side panels and front window made of safety glass
- Sloped front window, electrically operated, working aperture = 200 mm, maximum aperture = 420 mm
- User-friendly practical keyboard with LCD display, shows information such as laminar airflow velocity, inside and outside temperature, residual lifetime of HEPA filter, total number of hours of operation
- Audio-visual alarms such as incorrect laminar airflow velocity, faulty front window position, clogging of HEPA filter, power failure, fan-motor malfunction
- Double motor fan
- DEHS inlet port
- Electrical socket(s) (quantity depending on model)
- 1 x safety service connection for gas and for vacuum
- Interior lighting
- Floor standing model
- Optional UV lamp
- Optional activated charcoal filter under the work surface (instead of the HEPA filter)
- **Further class II cytotoxic safety cabinets on request: CytoFAST Top, with front stratified hinged safety glass and stainless steel side panels**



Technical Specifications	CytoFAST Elite 209	CytoFAST Elite 212	CytoFAST Elite 215	CytoFAST Elite 218
Ext. dimensions w x h x d [mm]	1045 x 2345 x 855	1350 x 2345 x 855	1655 x 2345 x 855	1960 x 2345 x 855
Int. dimensions w x h x d [mm]	887 x 740 x 580	1192 x 740 x 580	1497 x 740 x 580	1802 x 740 x 580
Weight	approx. 215 kg	approx. 245 kg	approx. 285 kg	approx. 325 kg
Exhaust flow rate	290 m <sup>3</sup> /h	390 m <sup>3</sup> /h	485 m <sup>3</sup> /h	585 m <sup>3</sup> /h
Noise level	< 53 dB(A)	< 54 dB(A)	< 55 dB(A)	< 56 dB(A)
Electrical sockets	1	1	2	2

Cat. No.	Description
F000211A0000	<b>CytoFAST Elite 209</b>
F000214A0000	<b>CytoFAST Elite 212</b>
F000217A0000	<b>CytoFAST Elite 215</b>
F000220A0000	<b>CytoFAST Elite 218</b>
<b>Optional accessories:</b>	
(further accessories on request such as additional connections for gas, exhaust charcoal filters, arm rests, etc.)	
FX0002124600	UV lamp for CytoFAST Elite 209/212
FX0002154600	UV lamp for CytoFAST Elite 215/218

## Horizontal Laminar Airflow Cabinets

### FlowFAST H

The ISO Class 3 **horizontal** laminar airflow cabinets maintain excellent **product protection** and are particularly designed to **handle no-risk cell cultures and non-pathogenic biological specimens**. They are equipped with H14 HEPA/ULPA filters with an efficiency of > 99.995 % MPPS (EN 1822) and G3 pre-filters (EN 779). The cabinets offer an economical and valid alternative to clean-rooms since they provide uncontaminated, particle-free and sterile conditions for materials in the work-space.



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Solid stainless steel work surface, one piece, optionally available: work surface of non-reflective plastic laminated panel
- Side walls made of safety glass
- Open front (PVC shutter optionally available)
- User-friendly practical keyboard (without display, available on request)
- 1 x electrical socket (all models)
- Interior lighting
- Optional: UV lamp with PVC shutter
- **On request also available as “total exhaust” cabinet with reverse flow for operator and environment protection: FlowFAST H Reverse Flow.**

Technical Specifications	FlowFAST H 09	FlowFAST H 12	FlowFAST H 15	FlowFAST H 18
External dimensions w x h x d [mm]	945 x 1195 x 925	1250 x 1195 x 925	1555 x 1195 x 925	1860 x 1195 x 925
Internal dimensions w x h x d [mm]	885 x 734 x 600	1190 x 734 x 600	1495 x 734 x 600	1800 x 734 x 600
Weight	approx. 95 kg	approx. 128 kg	approx. 175 kg	approx. 188 kg
Noise level	< 60 dB(A)	< 60 dB(A)	< 60 dB(A)	< 60 dB(A)
Electrical sockets	1	1	1	1

Cat. No.	Description
F00000190000	FlowFAST H 09 with stainless steel work surface
F00000200000	FlowFAST H 12 with stainless steel work surface
F00000210000	FlowFAST H 15 with stainless steel work surface
F00000220000	FlowFAST H 18 with stainless steel work surface
<b>Optional accessories:</b> (further accessories on request such as stands with castors, display, etc.)	
FX0000194600	UV lamp with PVC shutter for FlowFAST H 09*
FX0000204600	UV lamp with PVC shutter for FlowFAST H 12*
FX0000214600	UV lamp with PVC shutter for FlowFAST H 15*
FX0000224600	UV lamp with PVC shutter for FlowFAST H 18*
FX0000194580	PVC shutter for front aperture for FlowFAST H 09
FX0000204580	PVC shutter for front aperture for FlowFAST H 12
FX0000214580	PVC shutter for front aperture for FlowFAST H 15
FX0000224580	PVC shutter for front aperture for FlowFAST H 18
FX0000194500	Epoxy powder coated modular stand for FlowFAST H 09
FX0000204500	Epoxy powder coated modular stand for FlowFAST H 12
FX0000214500	Epoxy powder coated modular stand for FlowFAST H 15
FX0000224500	Epoxy powder coated modular stand for FlowFAST H 18
FX0000204900	Additional electrical socket
FX0011247100	Manual vacuum tap
FX0000204710	Manual gas tap

\* factory fitted

## Vertical Laminar Airflow Cabinets

### FlowFAST V

The ISO Class 3 **vertical** laminar airflow cabinets (ISO 14644-1 and EN-61010:2001) offer uncontaminated, particle-free and sterile conditions and are an economical and valid alternative to clean-rooms. Using positive pressure and equipped with G3 pre-filters with an efficiency of 80 % to 90 % (ASHRAE) and HEPA/ULPA filters with an efficiency of > 99.995 % MPPS (EN 1822), the cabinets guarantee a high **product protection**.



- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Rear wall in epoxy coated steel
- Solid stainless steel work surface, fixed in one piece
- Sloped front window (safety glass), working aperture = 250 mm, maximum aperture = 480 mm
- Side walls made of safety glass
- User-friendly practical keyboard (without display, available on request)
- Electrical socket(s) (quantity depending on model)
- Interior lighting
- Optional: UV lamp with aluminium front closure
- **Also available: special models with negative pressure and fully made of stainless steel**



Technical Specifications	FlowFAST V 12	FlowFAST V 15	FlowFAST V 18
External dimensions w x h x d [mm]	1350 x 1500 x 760	1655 x 1500 x 760	1960 x 1500 x 760
Internal dimensions w x h x d [mm]	1198 x 755 x 609	1503 x 755 x 609	1808 x 755 x 609
Weight	approx. 165 kg	approx. 195 kg	approx. 225 kg
Noise level	< 60 dB(A)	< 60 dB(A)	< 60 dB(A)
Electrical sockets	1	2	2

Cat. No.	Description
F00001120000	FlowFAST V 12
F00001150000	FlowFAST V 15
F00001180000	FlowFAST V 18
<b>Optional accessories:</b> (further accessories on request such as stands with castors, display, electrical modular stands, etc.)	
FX0011246000	UV lamp with aluminium front closure for FlowFAST V 12
FX0011546000	UV lamp with aluminium front closure for FlowFAST V 15
FX0011846000	UV lamp with aluminium front closure for FlowFAST V 18
FX0011246100	Aluminium front closure for FlowFAST V 12
FX0011546100	Aluminium front closure for FlowFAST V 15
FX0011846100	Aluminium front closure for FlowFAST V 18
FX0002124500	Epoxy powder coated modular stand for FlowFAST V 12
FX0002154500	Epoxy powder coated modular stand for FlowFAST V 15
FX0002184500	Epoxy powder coated modular stand for FlowFAST V 18
FX0021254000	Additional electrical socket (for Germany, further countries on request)
FX0011247100	Manual vacuum tap
FX0011247200	Manual compressed air tap
FX0011247300	Manual gas tap

## SmartFAST – particularly for PCR applications

Compact Class ISO 3 **vertical** laminar airflow cabinet for **product protection** (ISO 14644-1), suitable to handle nucleic acids used in thermocycling, DNA amplifications, PCR applications, non-pathogenic microbiological and cell culture applications. Equipped with HEPA/ULPA filter H14 with an efficiency of > 99.995 % MPPS (EN 1822).



- Standard operation mode with positive pressure, can also be used as negative pressure cabinet (by closing panel on the cabinet top)
- ECS<sup>®</sup> Eco microprocessor controlling system
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Rear wall made of stainless steel
- Perforated stainless steel work surface, fixed in one piece
- Sloped front window (safety glass), hinged, working aperture = 200 mm, maximum aperture = 440 mm
- Side walls made of safety glass, with holes and caps for optional taps installation such as for gas, etc.
- User-friendly practical keyboard (without display, available on request)
- 1 x electrical socket
- Interior lighting
- Noise level: approx. 53 dB(A)
- External/internal dimensions (w x h x d): 830/732 x 925/580 x 652/380 mm
- Weight: approx. 85 kg
- Optional: UV lamp with aluminium front closure

Cat. No.	Description
F00012100000	<b>SmartFAST, <u>without</u> UV lamp</b> , with HEPA filter
<b>Optional accessories:</b> (further accessories on request such as stands with castors, display, exhaust filter for negative pressure, gas taps, etc.)	
FX0012146000	UV lamp with aluminium front closure
FX0012146100	Aluminium front closure
FX0012145000	Epoxy powder coated modular stand

## SmartFAST Mini

Small, portable Class ISO 3 workstation suitable for handling products that need to be protected against non-pathogenic airborne contamination (ISO 14644-1). Equipped with HEPA/ULPA filter with an efficiency of > 99.995 % MPPS (EN 1822) and G3 pre-filter with an efficiency of 80 % to 90 % (ASHRAE).



- Vertical airflow
- Can easily be moved and positioned
- External structure in epoxy powder coated cold-rolled steel, with anti-bacterial coating (ALESTA<sup>®</sup>)
- Stainless steel work surface, fixed in one piece, perforated, removable, autoclavable
- Front and side windows made of safety glass
- Front window working aperture = 200 mm
- Noise level: approx. 53 dB(A)
- Weight: approx. 36 kg
- External/internal dimensions (w x h x d): 642/580 x 830/376 x 340/315 mm

Cat. No.	Description
F00012200000	<b>SmartFAST Mini</b> , with HEPA and pre-filter