



**Faster BH-EN and BHG**  
Class II Microbiological Safety Cabinets



Protection, safety, reliability. And more.

## FASTER BH-EN and BHG APPLICATIONS

**BH-EN and BHG Class II Microbiological Safety Cabinets** have been adopted worldwide for product, personnel and environmental protection while handling harmful agents pathogenic to human beings and/or animals as defined in the appropriate international standards, in a wide range of applications such as: **Microbiology, Virology, Haematology, Cell culture, Genetics, Handling of hazardous agents to human beings or animals.**



FASTER BH-EN and BHG  
**BEYOND MINIMUM  
SAFETY  
REQUIREMENTS**

**BH-EN and BHG Microbiological Safety Cabinets** belong to the latest generation of laminar airflow systems manufactured by FASTER S.r.l., in which the choice of materials of construction of the highest quality guarantees conformity to the strictest safety standards. BH-EN and BHG vertical laminar flow cabinets are Class II Microbiological Safety Cabinets - designed and built to performance requirements of the EN-12469:2000 European Standard, with 70% of the air re-circulated via the main H14 HEPA filter within the cabinet, whilst the remaining 30% is discharged through an exhaust H14 HEPA filter.

**Safety Cabinets with automatic regulation and microprocessor based monitoring systems.** These cabinets are suitable for handling micro-organisms and pathogens as defined by the appropriate European and other International Standards, current health and safety guidelines and legislation aimed at safeguarding health and safety of operators at work.



*BH-EN fitted with hinged frontal safety glass-sash window.*

*BHG cabinet features an ergonomically angled sloping-front, fitted with electrically operated vertically sliding safety-glass sash window, the framework of which is also hinged and can be opened up for easy access during cleaning and maintenance.*

## FASTER BH-EN and BHG SUPERIOR FEATURES



**Stratified safety-glass front sash window - and work chamber in stainless steel AISI 304L**, designed to conform to requirements and pass the “cleanability tests” according to EN12469:2000.



**UV sterilizing lamp** (optional) installed on the front closure-panel of the BH-EN model and on the rear wall of the work chamber of the BHG model, complete with two switch-off countdown timers, one variable on a 0÷3 hours scale (1 minute steps), the other set to 3 fixed hours.

**Work Surface** in stainless steel AISI-316L, consisting of sections which are easily removable for carrying out routine cleaning and/or require autoclaving sterilization procedures; perforated to ensure an optimum degree of laminarity of the airflow, together with a high resistance factor to the most effective chemical agents used for disinfection.



### Re-circulating and extractor fans:

BH-EN and BHG Microbiological Safety Cabinets 'S'-Series are supplied with single centrifugal fan, whilst models of the 'D' Series with double centrifugal fan to provide complete operator, product and environmental protection. Moreover the 'D' models fitted with double motor-fan are designed and are also suitable to discharge the filtered air outside the laboratory through a ducting system if required.

### Microprocessor based monitoring system:

full status report provided via 2-line digital display by the new generation microprocessors - which automatically control all functions and all safety alarm systems ensuring that performance characteristics are maintained to EN12469:2000 requirements.

The user-friendly practical keyboard and the rear-lit LCD will continuously display all required data keeping the user constantly informed of the cabinet conditions in operation - and in particular respect:

- display of laminar airflow velocity and frontal air barrier velocity
- display of inside and outside temperature
- display of residual lifetime of HEPA filters, UV Lamp and activated carbon filter (if fitted)
- display of total number of hours of operation
- display of saturation level of HEPA filters.

### Audio-visual alarms provided for:

- Out of range or incorrect laminar airflow velocity and frontal air barrier velocity
- front sash-window open
- saturation of HEPA filters
- end of life-cycle of UV lamp and saturation of activated carbon filter (if fitted)
- blockage in the exhaust duct
- signal of fan-motor malfunction
- power failure.



# FASTER BH-EN and BHG

## TECHNICAL SPECIFICATIONS

	Code	Dimension (mm)		Power Kw	Supply VHz	Weight Kg	Front Aperture Height mm	Noise dBA	Vibrations mmRMS	Lighting Lux	Exhaust Duct diameter mm ø	Temperature rise °C
		Usefull WxHxD	Overall WxHxD									
BH-EN 2003-S	F74 600110	885	1090	0.7		181						
BH-EN 2004-S	F74 600120	1190	1395	1.0		213						
BH-EN 2005-S	F74 600130	1495	1700	1.2		260						
BH-EN 2006-S	F74 600140	1800	2005	1.4		298						
BH-EN 2003-D	F74 600210	885	1090	0.85	230/50	186	2000/250	< 59	< 0.004	> 1000	200	< 4°
BH-EN 2004-D	F74 600220	1190	1395	1.1		218						
BH-EN 2005-D	F74 600230	1495	1700	1.3		265						
BH-EN 2006-D	F74 600240	1800	2005	1.5		304						
BHG 2003-S	F74 700110	885	1090	0.7		191						
BHG 2004-S	F74 700120	1190	1395	1.0		223						
BHG 2006-S	F74 700140	1800	2005	1.4		310						
BHG 2003-D	F74 700210	885	1090	0.85	230/50	196	200	< 59	< 0.004	> 1000	200	< 4°
BHG 2004-D	F74 700220	1190	1395	1.1		228						
BHG 2006-D	F74 700240	1800	2005	1.5		314						

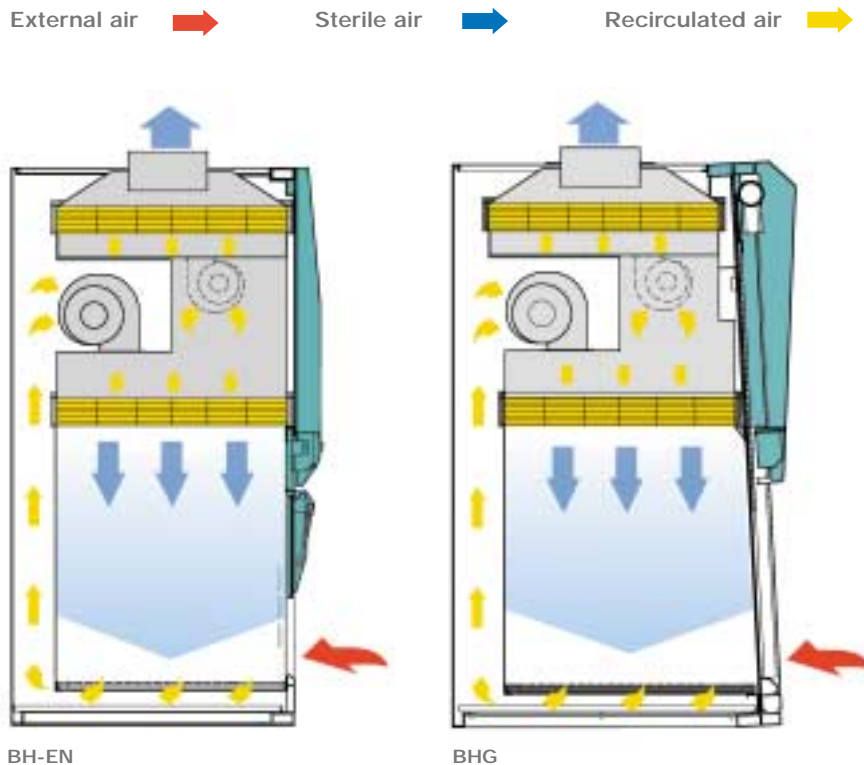
## ACCESSORIES

F74 600500	UV lamp for BH-EN
F74 700500	UV lamp for BHG
F74 501010	Epoxy powder painted modular stand for BH-EN 2003 S/D
F74 501015	Epoxy powder painted modular stand for BH-EN 2004 S/D
F74 501025	Epoxy powder painted modular stand for BH-EN 2005 S/D
F74 501020	Epoxy powder painted modular stand for BH-EN 2006 S/D
F74 700910	Epoxy powder painted modular stand for BH-G 2003 S/D
F74 700920	Epoxy powder painted modular stand for BH-G 2004 S/D
F74 700940	Epoxy powder painted modular stand for BH-G 2006 S/D
F72 701050	3-Drawers unit on pivoting wheels
F72 702020	Additional exhaust carbon filter for BH-EN and BHG (only D model)
F72 799521	Additional exhaust HEPA filter for BH-EN and BHG (only D model)
F72 799510	Anti-blowback valve
F72 702050	Additional service connection for electrical power
F72 702060	Additional service connection for gas/vacuum (manual tap)
F72 709077	Volt free contact
F72 709176	Stainless steel bar for bags to be fitted on BH-EN/BHG 2003 S/D
F72 709177	Stainless steel bar for bags to be fitted on BH-EN/BHG 2004 S/D
F72 709178	Stainless steel bar for bags to be fitted on BH-EN/BHG 2005 S/D
F72 709179	Stainless steel bar for bags to be fitted on BH-EN/BHG 2006 S/D
F74 500800	Formalin vaporiser

## OPERATIONAL PRINCIPLES

The ambient air is drawn in from the slots at the stainless-steel base of the front opening and it then passes under the work surface, from where it is drawn up and blown into the plenum of the re-circulating and exhaust fan(s).

The "bio-dynamic sealing system" of the negative pressure plenum ensures that all contaminated particles are kept inside the system and are automatically drawn to the plenum or pressure chamber to be captured by the main re-circulating and exhaust HEPA filters. The fan system assures that no part of the cabinet comes ever under positive contaminated pressure to the laboratory, thus protecting and preserving the environment and operating personnel from exposure to agents of bio-contamination. 70% of the filtered air is re-circulated (after passing through a H14 HEPA) in a ISO 5 laminar flow pattern downwards into the work chamber and the remaining 30% is exhausted to atmosphere through another H14 HEPA filter.



EN ISO 9001:2000 quality assured firm  
Certificate n°112



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