

BECOME ACF fume cupboards



Application

The BECOME ACF fume cupboard is intended for handling hydrofluoric acid. Recommended for the evacuation of fumes and aerosols generated in reactions with hydrofluoric acid handled in the work area, in order to avoid contaminating the laboratory atmosphere. Not recommended for use with compounds emitting ionising radiation, large amounts of solvents or pathogens.

Safe Product

Range certified under European standard EN 14175 parts 2 and 7. The design of the BECOME ACF fume cupboard makes it possible to ensure safety and operating objectives when handling hydrofluoric acid, and avoid dangerous concentrations and deposits in the work area. Cabinet interior made of polypropylene in one piece, sash made of transparent methacrylate for acids or hydroxides in the work area.

Models



1. BECOME ACF



2. BECOME ACFL

Materials

- Resistant to Chemical Stress: Standard with the best quality on the market in terms of materials. Cabinet made of 10 mm polypropylene welded without joints and with a 20 mm worktop with integrated sink. The worktop has a front ridge to prevent possible spillages.
- Resistant to Mechanical Stress: Great robustness provided by side structural elements.

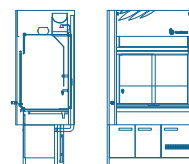
Optional accessories

- Motorised sash.
- VAV control with a valve for a group of fume cupboards.
- Waste collection.
- Gas scrubber.
- Neutraliser.
- Motorised sash.
- VAV control with a valve for a group of fume cupboards.
- Waste collection.
- Storage under the fume cupboard.

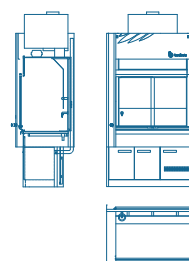
**For more details, see the chapter on "Accessories for fume cupboards".*

Planos

BECOME ACF



BECOME ACFL



Technical data

External dimensions

Width (mm)	1.500 1.800
Depth (mm)	950
Height (mm) (*)	2.500

(*) Minimum recommended laboratory height for BACF: 3,000 mm See lower heights.
Minimum recommended laboratory height for BACFL: 3,300 mm See lower heights.

Interior dimensions

Width (mm)	1.225 1.525
Depth (mm)	740/620
Height (mm)	1.215

All dimensional data Tol: +/- 5mm.

Technical data

Work dimensions

Work height (mm)	900
Maximum operational height (mm) (*)	400
Recommended distance from sash (area directly behind the sash) (mm)	150
Recommended free space between bulky equipment and the interior walls of the fume cupboard (mm)	100
Recommended elevation of large equipment over the surface of the worktop (mm)	25 to 50

(*) When working, keep the sash as low as possible or closed, for th greater protection of the user and lower energy consumption. In the case of installing bulky equipment inside fume cupboards, it is recommended that in situ tests are carried out to ensure containment in these circumstances.

Technical Characteristics

Models	BACF/ BACFL 1500	BACF/ BACFL 1800
Frame	Side frames made of steel pipe, with sheet metal lids, coated with polyester resin. Lower frame.	
Worktop	White, 20 mm thick worktop, with a ridged edge for retaining liquids. Interior of the cabinet welded without joints.	
Interior of the cabinet	10 mm thick polypropylene. Resistant to chemical account. Interior of the cabinet welded without joints.	
Optional: Interior of the cabinet made of PVDF	Worktop and interior of the cabinet fully welded without joints made of 5 mm thick PVDF.	
Sash	10 mm methacrylate sash.	
No. of sashes	1	
No. of Horizontal Rails	2	
Trap for concentrated acids (BACF)	Prevents condensate that may be produced during extraction from returning to the fume cupboard.	
Extraction trap Gas scaffold (BACFL)	Adapted for the installation of a gas scrubber in the fume cupboard.	
Services (**)		
LED lighting (20W)	2	2
230V/16A IP55 power sockets	4	
Magneto-thermal protection	1 x 16A	
Optional services (**)		
Sink	Made of PP, integrated into the worktop.	
Water tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Brass body and EPDM seal. Maximum working pressure of 10 bar.	
Combustible gas tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Taps with safety lock. Brass body, ceramic seal with a nitrile gasket. Maximum working pressure of 07 bar.	
Instrumental gas tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Brass body, fine adjustment valve, PTFE shut-off. Acid-resistant epoxy powder coating.	
Pressure reducers for instrumental gasses	Compact design, brass body, with shut-off and control valve and pressure display. Maximum input pressure of 20 bar, output pressure of 1.0 bar to 8.0 bar. Optional tap for fine tuning.	

Pressure reducers for corrosive gases	Compact design, stainless steel body, with shut-off and control valve and pressure display. Maximum input pressure of 20 bar, output pressure of 1.0 bar to 8.0 bar. Optional tap for fine tuning.
Power sockets (***)	Socket voltage 230V - 16A.
	Socket voltage 230V - 13A.
	Computer socket.
Thermal-magnetic cut-outs	Telephone socket.
	Voice and data socket.
	16A single-phase thermal magnetic circuit breaker.
Socket power (**)	16A three-phase thermal magnetic circuit breaker.
	20A single-phase thermal magnetic circuit breaker.
	20A three-phase thermal magnetic circuit breaker.
	Single-phase power socket (3 poles) 230V - 16A.
Start / stop for accessories in fume cupboard	Single-phase power socket (3 poles) 230 - 32A.
	Three-phase power socket (5 poles) 400V - 16A.
	Three-phase power socket (5 poles) 400V - 32A.
Emergency stop button.	

(**) The services will be located on the side and front panels, the configuration will be carried out according to the needs of each customer. Models will be adjusted to the regulations in each country.
 (***) Optionally, electrical outlets will be installed inside the fume cupboard with an externally-operated safety keypad.

Technical Installations

Models	BACF/ BACFL 1500	BACF/ BACFL 1800
Height of the extraction outlet from the ground (mm) BACF/BACFL	2.470/ 2.850	
Diameter of the extraction outlet (mm) (*)	1 x Ø250	1 x Ø250
Fume Cupboard Control	EO 25 (For details, see the chapter on accessories).	
Test flow rate (**)	467m ³ /hx min.	
Maximum pressure in the duct	600Pa.	
Electricity	The installation of shielded hoses and super-immunised protection is recommended for the feed to a fume cupboard or group of fume cupboards	
Installation for condensate trap	Water flow solenoid valve.	
	Input water flow regulator.	
	Ø 32 mm propylene extraction pipe.	

(*) The diameters of the outlet may vary depending on the installation.

(**) The flow rate data provided refers to that obtained in the tests in accordance with EN14175 part 7, taking the limit values set by the German conglomerate BG Chemie and the French research institute INRS as a reference for containment. It must not be used to calculate the dimensions of ducts or the HVAC system. Check nominal flow rates.