

VACUUBRAND®



BioChem- VacuuCenter

Fluid aspiration systems:
BVC basic, BVC control, BVC professional

www.vacuubrand.com

BioChem-VacuuCenter

Fluid aspiration system BioChem-VacuuCenter (BVC)



- Safe, sensitive and efficient aspiration of liquid supernatants
- Suitable for biological protection levels 1 (S1) to 3 (S3)
- Chemical-resistant and modular
- Compact, space-saving and whisper-quiet

Your safeguard for working with infectious liquids at the safety cabinet

Our BioChem-VacuuCenter (BVC) fluid aspiration systems offer uncompromising safety and convenience when working. Depending on safety requirements, BVC systems are available with a variety of options and can be safely used in biological safety areas of protection levels 1 (S1) to 3 (S3). Our equipment is designed to be placed outside the workbench. This saves space on the work surface and the low-turbulence air flow of the safety cabinet remains

unaffected. Another advantage: All components of our systems are ideally matched to each other. Individually created, non-standard fluid setups may pose unexpected risks in this respect.

Technical highlights

A safe solution

All components of the BVC are designed for use in the biochemical laboratory. The result is a well thought-out, vacuum-tight system with safe connections. BVC's are available with a vacuum-tight, autoclavable 4l PP bottle or, for working with aggressive disinfectants such as chlorine bleach, with a 2l borosilicate glass bottle. You can easily and safely disconnect and reconnect the BVC's collection bottle for disposal of liquid biological waste. The components can easily accommodate extensive cleaning and disinfection.

Efficient and easy-to-use

In addition to the safety benefits, the BVC system is also ergonomic and easy to operate. We designed the ergonomic suction VHCpro handset with input and experience from many users. The result: the handset fits perfectly in the hand and provides the ideal conditions for fatigue-free work. With the BVC professional and BVC control, you can regulate the suction force easily and precisely via a touch panel. Continuous suction can also be set for larger quantities of liquid. The ease of use is further enhanced by the fact that the chemical-resistant diaphragm pump switches on and off automatically as required. This further reduces the already low operating noise.

Flexible and economical solutions

Select your BVC as a complete system with an integrated vacuum pump or for use with an existing vacuum source: Our powerful chemically resistant diaphragm vacuum pump has long service intervals - even when working with aggressive disinfectants. That's why our BVC system works reliably over the long term with minimal maintenance. Depending on your safety requirements, the BVC is available in a variety of options to allow use in biological safety areas with protection levels 1 (S1) to 3 (S3). Accessories such as the self-closing quick couplings or a second handset for economical dual use of the device can be added at any time.





Non-contact level sensor
(BVC professional only) - wear-free,
overflowing protection

Quick-release couplings PVDF autoclavable,
high chemical resistance (standard with the
BVC professional, available as an accessory
item for other variants)



Version with glass bottle -
for aggressive media and
fast autoclaving



Fully autoclavable, ergonomically
designed, patented handset



Safe containment
Easy and safe bottle change

Accessory items e.g. table stand,
BVC shuttle or 8-channel adapter



Product options

BVC professional

Fluid aspiration system with integrated chemistry diaphragm pump and ergonomic VHCpro handset for safe suction of liquid supernatants. The suction force can be precisely adjusted via touch panel.

The BVC professional includes a non-contact level sensor, a disinfection routine for the suction hose and self-closing quick couplings for maximum safety and optimal biocontainment.



BVC control

Fluid aspiration system with integrated chemistry diaphragm pump and ergonomic VHCpro handset for safe suction of liquid supernatants. The suction force can be precisely adjusted via touch panel.



BVC basic

For safe aspiration of liquid supernatants the BVC basic fluid aspiration system is equipped with an ergonomic VHCpro handset and is designed to connect to an external vacuum source. A mechanical pressure switch with integrated check valve prevents the pressure in the collection bottle from dropping too far. An additional electrical connection is not necessary.



BVC - At a glance

	Standard version with 4 liter PP bottle G versions with 2 liter borosilicate glass bottle					
	professional	professional G	control	control G	basic	basic G
Patented VacuuHand Control VHCpro handset	+	+	+	+	+	+
Pressure switch	+	+	+	+	+	+
Collecting bottle	+	+	+	+	+	+
Protective filter 0.2 µm	+	+	+	+	+	+
Rack, without vacuum pump	+	+	+	+	+	+
Chemistry diaphragm pump	+	+	+	+		
Automatic pump on/off	+	+	+	+		
Adjustable suction force	+	+	+	+		
Touch panel	+	+	+	+		
Non-contact electronic level sensor	+	+				
Disinfection routine	+	+				
Quick release couplings PVDF	+					



Find the right vacuum pump with the Vacuum Pump Selection Guide!

www.vacuubrand.com/vpsg

Technical data

		BVC basic	BVC basic G
Dimensions (L x W x H), approx.	mm	250 x 200 x 490	230 x 180 x 430
Collection bottle		4l PP	2l glass
Weight, approx.	kg	2.8	3.2
Order number		20727000	20727100
		BVC control	BVC control G
Vacuum pump		ME 1C	ME 1C
Dimensions (L x W x H), approx.	mm	408 x 194 x 500	408 x 194 x 430
Collection bottle		4l PP	2l glass
Weight, approx.	kg	7.7	8.1
Order number 230 V ~ 50-60 Hz 100-115 V ~ 50-60 Hz 120 V ~ 60 Hz	CEE / CH / UK / IN / CN US	20727200 / 20727201 / 20727202 / 20727202 / 20727206 20727203	20727300 / 20727301 / 20727302 / 20727302 / 20727301 20727303
		BVC professional	BVC professional G
Vacuum pump		ME 1C	ME 1C
Dimensions (L x W x H), approx.	mm	408 x 194 x 500	408 x 194 x 430
Collection bottle		4l PP	2l glass
Weight, approx.	kg	7.7	8.1
Order number 230 V ~ 50-60 Hz 100-115 V ~ 50-60 Hz 120 V ~ 60 Hz	CEE / CH / UK IN / CN US	20727400 / 20727401 / 20727402 20727402 / 20727401 20727403	20727500 / 20727501 / 20727502 20727502 / 20727501 20727503



For more country-specific variants, see:

www.vacuubrand.com/bvc

Accessories

VacuuHandControl VHCpro

20688061

Ergonomically shaped, patented suction handset with pipette holder and adapter for various pipettes and tips. Control lever for manual suction and rotary knob for permanent suction setting. With 2.5 m suction hose. Fully autoclavable.



Table stand VHCpro

20635680

The Stainless steel table stand for the VHCpro allows for convenient and stable placement of the handset during cell culture work.



Replacement hose VHC / VHCpro

20636156

Silicone hose (sold by the meter).



Quick coupling VHC / VHCpro - bottle

20635807

Quick coupling made of PVDF with adapter for connecting a VHC / VHCpro to a collection bottle, very good chemical resistance, complete with inlet tube for minimized aerosol and foam formation.



**VHCpro 8-channel adapter
for pipette tips with ejector**

20635679

This adapter is designed for parallel aspiration with eight pipette tips (size 2-200 μl or 5-300 μl) from 96-well microtiter plates of standardized size. It is equipped with an ejector for removing the pipette tips.



Extension kit for second VHC / VHCpro

20699943

Set of connection parts with hose nozzle and inlet tube for minimized aerosol and foam formation, without VHC / VHCpro (For BVC professional with 4l PP bottle please order article 20635807 instead).



BVC shuttle

20696880

The BVC shuttle is a mobile underframe for all BVC control and BVC professional models. It is used to easily pull the BVC out from under the safety cabinet for cleaning and changing bottles.



Protective filter 0.2 μm

20638266

Hydrophobic protective filter with pore size 0.2 μm , for protecting the pump unit and the environment. Autoclavable up to 20 times.



**2l collection bottle made
of borosilicate glass**

20635809

2l collection bottle made of borosilicate glass with very high chemical resistance. Plastic shatter protection outside coating to minimize liquid loss in case of glass breakage. Special bottle cap for minimized aerosol and foam formation. Hose nozzle for connection of a VacuuHandControl VHCpro. Additional port to connect a second VHCpro (optional). Filter element 0.2 µm with hydrophobic membrane to protect pump, lines and environment with hose for connecting to a BVC. Completely autoclavable.



**4l collection bottle made
of polypropylene (PP)**

20635810

4l collection bottle with high chemical resistance (PP). Special bottle cap for minimized aerosol and foam formation. Hose nozzle for connection of a VacuuHandControl VHC / VHCpro. Additional port to connect a second VHCpro (optional). Protective filter 0.2 µm with hydrophobic membrane to protect pump, lines and environment with hose for connecting to a BVC. Completely autoclavable.



Quick coupling bottle - pump

20635808

Quick-connect coupling made of PVDF for connecting a collection bottle to a BVC. Very good chemical resistance and vacuum-tight closing of the collection bottle when disconnected. Autoclavable.



Adapter for 2l glass bottle

20635839

Holds the 2l glass bottle in the BVC control or BVC professional pump units (included with the complete system for BVC control G and BVC professional G).



FAQ

For which safety levels are the BVC systems suitable?

Basically, suitability always depends on the applicable regulations for the respective work area. Depending on the requirements and equipment, the BVC systems can be used in laboratories of safety levels 1 to 3. The BVC professional offers the highest level of safety. It is additionally equipped with safety-relevant accessories such as a non-contact level sensor and self-closing quick couplings. For work with critical substances, the BVC systems also have a connection on the rear side where exhaust air can be discharged separately.

What is the difference between BVC control and BVC professional?

Both systems have an integrated chemistry diaphragm pump. The suction force can be precisely adjusted via touch panel. The BVC professional is also equipped with a non-contact level sensor, a disinfection routine for the suction hose and self-closing quick couplings for maximum safety and optimal bio-containment.

Are the components autoclavable?

Both the VHCpro handle and the collection bottle with connectors are autoclavable. The filter can also be autoclaved up to 20 times. When autoclaving, you must ensure that the pressure between the collection bottle and the autoclave is equalized. This is done by simply loosening the screw cap.

Which collection bottle should I use?

The choice between the PP and the glass bottle depends on the media that will be aspirated. In most cases, the chemical resistance of the PP bottle is quite sufficient. The glass bottle is also suitable for working with particularly aggressive disinfectants such as chlorine bleach. The bottle is made of borosilicate glass and has a coating for shatter and leak protection.

Are there multiple adapters for the VHCpro handset?

An 8-channel adapter for pipette tips with ejector is available as an accessory. It is designed for parallel aspiration with eight pipette tips (size 2-200 µl or 5-300 µl) from 96-well microtiter plates of standardized size. It is equipped with an ejector for removing the pipette tips.

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VACUUBRAND®

VACUUBRAND is part of the Brand group, a manufacturer of high-quality and innovative laboratory equipment and vacuum technology with a global team of approx. 1,000 employees.

With highly motivated and qualified employees, we manufacture the world's most comprehensive product family for vacuum generation, measurement and control for the rough and fine vacuum range in the laboratory.

All with one goal:

Enabling our customers to run reliable, safe and efficient processes. This is why we commit ourselves to continuous innovation, first-class performance, and outstanding quality.

Engineering excellence is central to our ability to deliver products and solutions renowned for their quality, durability, and reliability. Innovative technology, high quality materials and extensive testing deliver unmatched performance - engineered and manufactured in Germany.

Together with you, our experts will find the best solution for your application and provide you with first-class service along the way.

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