

# **FLUID ASPIRATION SYSTEMS**

BVC basic, BVC control, BVC professional



**Technology for Vacuum Systems** 

## FLUID ASPIRATION SYSTEMS



BVC - the compact BioChem-VacuuCenter offers the perfect solution for safe, sensitive and efficient aspiration of supernatants or filtration in all application areas. The BVC basic is intended for connection to an external vacuum source. The BVC control and the BVC professional are equipped with a high performance, chemically resistant diaphragm pump. The vacuum level and thus the suction force at the hand control can be sensitively adjusted via a touch panel. In addition, the BVC professional features are a non-contact liquid level sensor and self-closing quick couplings (4l PP bottle version). All systems are available either with a vacuum-resistant, autoclavable 4l PP bottle or with a 2l borosilicate glass bottle, e.g. for working with aggressive disinfectants such as chlorine bleach. All versions are ready for connection of a second hand control.

#### Safety

- BVC professional includes a liquid-level sensor to prevent aspiration of liquids into pump. Self-closing couplings
  (4l PP bottle version) for safe removal of bottle for change and transport
- Security containment: collection flask made of PP or coated borosilicate glass completely autoclavable, with 0.2 micron protection filter
- 2l borosilicate glass flask for high chemical resistance, with splinter-proof coating for safety and leakage protection
- patented, ergonomic and functionally designed hand set VHC<sup>pro</sup>, with flow through suction tube, second mode for permanent suction and fully autoclavable
- 0.2 µm hydrophobic protection filter extra safety against contamination of the environment, additional overflow protection and 20 times autoclavable

## Flexibility and comfort

- 4l PP or 2l glass bottle for a perfect fit with process protocols (2l borosilicate glass bottle, e.g. for working with aggressive disinfectants such as chlorine bleach)
- compact size with control handle for flexible, space-saving setup with perfect ergonomics, BVC shuttle to the relief of the laboratory cleaning
- very low noise levels in operation to work comfortably in daily routine
- sensitive suction power adjustment via touch panel for sample protection and reproducible results, automatically on/off switching of the vacuum pump

## **Economic efficiency**

- powerful chemical-resistant diaphragm vacuum pump with a very long service life, even when working with aggressive disinfectants minimal costs for maintenance and spare parts
- ready to accept a second hand controller double use for lower cost per user
- high-quality components for trouble-free operation in continuous professional use



Patented, fully autoclavable, ergonomic hand set



Complimentary range of accessories including table stand, tip ejector and BVC shuttle or adapter for eight pipette



Quick-couplings PVDF - autoclavable, high chemical resistance (Standard only integrated with the BVC professional, available as an accessory for other variants)





Version with glass bottle - for aggressive media, smaller quantities and quick autoclave



Non-contact liquid level sensor (only BVC professional) - wearfree, simple bottle exchange



Safety-containment

# PRODUCT VARIANTS



#### **BVC** basic

- mechanical vacuum regulator to provide optimum working vacuum and minimize the vapor load on the vacuum network
- designed for connection to an existing external vacuum source, electricityfree operation
- autoclavable collection bottle designed to reduce aerosol and foam formation; autoclavable quick-couplings available as accessory
- aspiration hand set VacuuHandControl (VHC<sup>pro</sup>) with flow-through suction tube - no contamination of handle by aspirated media
- hydrophobic 0.2 micron sterilizable filter contamination risks for the vacuum pumping system are greatly reduced



### **BVC** control

- powerful and long-lasting chemistry diaphragm pump for universal economical use
- easy operation due to electronically adjustable suction power via touch panel, for strong or sensitive suction
- autoclavable collection bottle designed to reduce aerosol and foam formation; autoclavable quick-couplings available as accessory
- ready to accept a second aspiration hand controller (VHC<sup>pro</sup>) to support two users



# **BVC** professional

- with all the advantages of the BVC control
- non-contact sensor for electronic monitoring of the liquid level in the collection bottle
- disinfection routine for the suction tubing for drawing in disinfectant after switching off the pump
- self-closing quick couplings (as optional accessory to the BVC professional G) for convenient and safe bottle change, e.g. for work with biohazards

# **BVC** - At a glance

Standard version with 4l PP-collection bottle G-version with 2l borosilicate glass bottle	basic	basic G	control	control G	professional	professional G
patented hand set VacuuHandControl VHC <sup>pro</sup>	•	•	•	•	•	•
pressure switch	•	•	•	•	•	•
collection bottle	•	•	•	•	•	•
micron protection filter 0.2 μm	•	•	•	•	•	•
rack, without vacuum pump	•	•	•	•	•	•
chemistry diaphragm pump			•	•	•	•
automatically on/off switching of the pump			•	•	•	•
adjustable suction power			•	•	•	•
touch panel			•	•	•	•
non-contact liquid level sensor					•	•
disinfection routine					•	•
self-closing quick couplings PVDF					•	

# Technical data / ordering information

	BVC basic	BVC basic G	
Dimensions (L x W x H), approx. mm	250 x 200 x 490	230 x 180 x 430	
Collection flask	4l PP	2l glass	
Weight, approx. kg	2.8	3.2	
Ordering number	20727000	20727100	

		BVC control	BVC control G
Diaphragm pump		ME 1C	ME 1C
Dimensions (L x W x H), approx.	mm	408 x 194 x 500	408 x 194 x 430
Collection flask		4l PP	2l glass
Weight, approx.	kg	7.3	7.7
Ordering number			
230 V ~ 50-60 Hz	CEE / CH / UK	20727200 / 20727201 / 20727202	20727300 / 20727301 / 20727302
100-120 V ~ 50-60 Hz	US	20727203	20727303

		BVC professional	BVC professional G
Diaphragm pump		ME 1C	ME 1C
Dimensions (L x W x H), approx.	mm	408 x 194 x 500	408 x 194 x 430
Collection flask		4l PP	2l glass
Weight, approx.	kg	7.3	7.7
Ordering number			
230 V ~ 50-60 Hz	CEE / CH / UK	20727400 / 20727401 / 20727402	20727500 / 20727501 / 20727502
100-120 V ~ 50-60 Hz	US	20727403	20727503

Other country-specific versions are available on our website www.vacuubrand.com/bvc  $\,$ 

## **ACCESSORIES**

Patented, ergonomic aspiration hand set with tip holder and adapter to accept a variety of common pipettes and tips. Level for manual suction control, rotary knob for permanent aspiration. With 2.5 m tubing.

VacuuHandControl VHCpro 20688061

The stainless steel stand for the VHC<sup>pro</sup> enables to place the tipped suction handset conveniently and stable during work with cell cultures.

Table stand for VHCpro 20635680

Silicone tubing (minimum order quantity 2m).

Spare tubing for VHC / VHCpro 20636156

This adapter is designed for pipette tips 2 - 200 µl and has got a tip ejector to remove the used pipette tip.

Adapter for pipette tips with tip ejector 20635638

This adapter allows parallel operation of eight pipette tips (size 2 - 200  $\mu$ l or 5 - 300  $\mu$ l). It is designed to match the dimensions of standardized 96-well microplates and has got a tip ejector to remove the used pipette tips.

VHCpro 8-channel tip adapter with ejector 20635679

Hose nozzle and inlet tube for minimized foam and aerosol formation (VHC / VHC<sup>pro</sup> not included). For BVC professional with 4l bottle PP please order article 20635807 instead

Extension kit second VHC / VHCpro connection 20699943

The BVC shuttle is a mobile underframe for all models BVC control and BVC professional. It serves to pull out the BVC easily from under the safety cabinet for cleaning and removal of bottle for change.

BVC shuttle 20696880

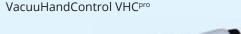




Table stand for VHCpro



Spare tubing for VHC / VHCpro



Adapter for pipette tips with tip ejector



VHC<sup>pro</sup> 8-channel tip adapter with ejector



Extension kit second VHC / VHCpro connection



**BVC** shuttle



Hydrophobic 0.2 µm protection filter, to protect pump system and work environment. Autoclavable up to 20 times.

Protection filter 0.2 µm 20638266

Protection filter 0.2 micron



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

Quick coupling VHC / VHCpro - bottle 20635807

Quick coupling VHC / VHCpro - bottle



Quick coupling made of PVDF, to connect a collection bottle to a BVC unit. Very good chemical resistance. Autoclavable. When disconnected, the collection bottle closes vacuum tight.

4l heavy-walled, vacuum-proof collection bottle with high chemical resistance (PP). Special bottle head for minimized

VacuuHandControl VHC / VHCpro and additional port to connect a second VHC / VHC<sup>pro</sup> (optional). Hydrophobic filter element 0.2 µm to protect pump and environment. Hose

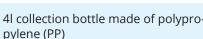
Quick coupling set connection bottle - pump 20635808

foam and aerosol formation, with hose nozzle for

for connection to BVC. Fully autoclavable.

4l collection bottle made of polypro-

Quick coupling set connection bottle - pump





4l collection bottle made of polypropylene (PP) 20635810

2l borosilicate glass collection bottle with high chemical resistance, with splinter-proof coating, special bottle head for minimized foam and aerosol formation, hose nozzle for VacuuHandControl VHC<sup>pro</sup> and additional port to connect a second VHC<sup>pro</sup> (optional), hydrophobic filter element 0.2 µm to protect pump and environment, hose for connection to pump unit BVC or BVC basic; fully autoclavable.

2l collection bottle made of borosilicate glass 20635809

Holder for 2 liter glass bottle for BVC control or BVC professional (included in BVC control G and

Adapter for 2l glass bottle 20635839

BVC professional G).

2l collection bottle made of borosilicate glass



Adapter for 2l glass bottle



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