



# Logic+

Logic+

PURIFIER<sup>®</sup> LOGIC+ CLASS II  
BIOSAFETY CABINETS



**Fisher  
Scientific**



*Protecting your  
laboratory environment*

**LABCONCO<sup>®</sup>**

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

DESIGNED FOR THE HUMAN EXPERIENCE

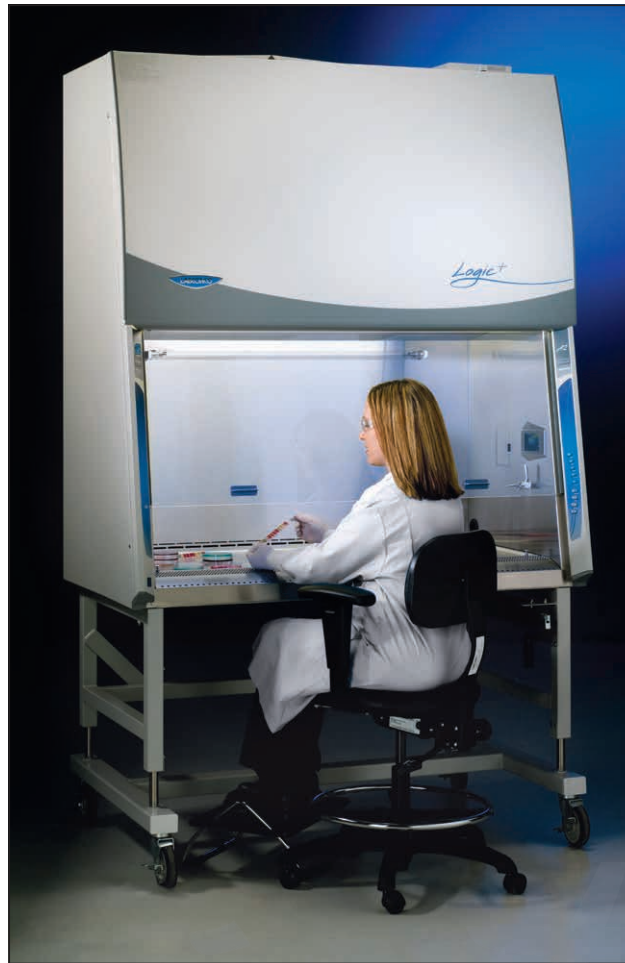


*The good news is that most biological safety cabinet manufacturers build their cabinets to NSF\* International specifications and have NSF listing. Biosafety cabinets, by their NSF definition, are designed to be safe:*

*“A ventilated cabinet for personnel, product, and environmental protection having an open front with inward airflow for personnel protection, downward HEPA filtered laminar airflow for product protection, and HEPA filtered exhaust air for environmental protection.”*

*The news gets better. Labconco has added features to its newest generation of Purifier Logic+ Biosafety Cabinets that resets the bar for not only safety but also comfort. Unlike other cabinets, the Purifier Logic+ was designed for the human body and habits that goes beyond ergonomics. We call it Inclination™ Technology—design that caters to human behavior. You experience less fatigue, fewer distractions and a more comfortable working environment. Your work demands precision, attention to details and constant vigilance to safe practices. We believe the more comfortable you are, the safer you will be.*

*For total comfort, effortless operation and maximum safety, the Purifier Logic+ Biosafety Cabinet is your logical choice. Read more about the difference a human-designed biosafety cabinet makes.*



## Performance

Nothing enhances the human experience more than a biosafety cabinet that allows you to work confidently and with peace of mind. Unique to the Purifier Logic+ Biosafety Cabinet is its built-in intelligence to accurately maintain proper airflow, even as the HEPA filters load. Accuracy is achieved with an **Electronically Commutated Motor (ECM)** coupled with Labconco's exclusive **Constant Airflow Profile™ (CAP) Technology**.

### The benefits of ECM:

- **Energy efficiency (see Table 1).** The ECM consumes 60% less energy than conventional motors.
- **Comfortable working temperature.** The ECM generates less heat than conventional motors for cooler working conditions.
- **Quiet (< 63 dBA).** The ECM operates as much as 50% quieter than conventional motors.
- **Reliable.** The time-tested ECM has a long life (50,000 hour average motor life) and reliable operation.
- **More power for longer lasting filters.** Because it has greater torque than conventional motors, the ECM overcomes more resistance as HEPA filters load so filters last longer.

- **Performance of Constant Airflow Profile™**
- **Safety of MyLogic™**
- **Comfort of Inclination™ Technology**

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

DESIGNED FOR THE HUMAN EXPERIENCE

**Constant Airflow Profile™ (CAP) Technology** is built-in intelligence that works with the ECM to precisely control airflow without the need for airflow sensors. During operation, the ECM is constantly adjusting its speed and torque to accurately maintain its programmed airflow. Tests confirm that airflow is maintained within 1%.

Using CAP Technology to monitor and provide accurate airflow has advantages over relying on differential pressure gauges or airflow sensors. Biosafety cabinets that solely rely on pressure gauges require manual adjustment by a certifier when readings indicate a decline in airflow performance. Likewise, airflow sensors have a known standard of deviation exceeding safe airflow requirements in Class II cabinets. A certifier can verify safe airflow for a single moment in time. CAP Technology maintains safe airflow all the time.

## Sustainable Design

As a member of the U.S. Green Building Council (USGBC), Labconco is committed to designing environmentally-responsible products. The Logic+ is one example. Since Logic+ uses less energy and lowers the heat load compared to cabinets with conventional motors, it contributes toward satisfying EA Credit 1 under LEED. New construction buildings with the Logic+ cabinets installed can earn from one to 19 LEED points for energy use reduction. The 8.5% pre-consumer and 54.5% post-consumer recycled content of the Logic+ can contribute towards satisfying MR Credit 4. Buildings that incorporate recycled materials may be awarded from one to two LEED points. When it is time to remove a Logic+ from service, its recyclable content is 94.9%, another measure of its contribution toward preserving our environment.

\*LEED® is a registered trademark owned by the U.S. Green Building Council and is used with permission.

## Performance Features & Benefits:

- **Reliable ECM** provides energy-efficient operation.
- **CAP Technology** assures consistent delivery of precise air volume, even as filters load. No sensors are needed.
- **Low lifetime cost (see Table 1)**. Energy efficiency and lower maintenance costs add up to a lower total lifetime cost.
- **Air-Wave™ Entry System**, consisting of aerodynamic angles surrounding the access opening, provides less airflow resistance for better containment.
- **Contain-Air™ Negative Pressure Channel** draws air in, preventing loss of containment at the top of the sash.
- **Smart-Start™ System** automates routine start up and shut down functions, assuring consistent operation regardless of the user and saves time.
- **Night-Smart™ System** idles the blower at 30% speed when the sash is fully closed to help maintain a clean environment inside the cabinet during periods of non-use while saving energy. When the sash is raised, the blower automatically resumes normal operation.
- **5 year warranty**

Table 1. 4' Purifier Logic+ Biosafety Cabinet Energy Usage and Operating Costs & Comparison

	Logic+	Other Cabinet A	Other Cabinet B	Other Cabinet C
Motor Type/Technology	DC ECM	AC PSC	AC-3Ø	DC
<b>8 hrs/day (2,080 hrs/year)*</b>				
Energy Used (kWh/yr)	603	1206	861	339
Annual Cost - Commercial	\$60	\$121	\$86	\$34
Annual Cost - Industrial	\$41	\$81	\$58	\$23
<b>24 hrs/day (8,736 hrs/year)*</b>				
Energy Used (kWh/yr)	2533 (803**)	5067	3617	1424
Annual Cost - Commercial	\$253 (\$80**)	\$507	\$362	\$142
Annual Cost - Industrial	\$170 (\$54**)	\$341	\$243	\$96
<b>15-Year Life Cycle Costs<sup>†</sup> Operational Costs</b>				
Annual Certification	\$2,250	\$2,250	\$2,250	\$2,250
Energy Cost - 8 hrs/day (Industrial)	\$609	\$1,217	\$869	\$342
Energy Cost - 24 hrs/day (Industrial)	\$2,557 (\$811**)	\$5,115	\$3,651	\$1,438
<b>Total Operational Cost (8 hr/day)</b>	<b>\$2,859</b>	<b>\$3,467</b>	<b>\$3,119</b>	<b>\$2,592</b>
<b>Total Operational Cost (24 hr/day)</b>	<b>\$4,807 (\$3,061**)</b>	<b>\$7,365</b>	<b>\$5,901</b>	<b>\$3,688</b>
<b>Maintenance Costs</b>				
HEPA Filter Costs	\$800	\$1,600	\$1,600	\$2,400
Service Cost <sup>††</sup>	\$3,000	\$3,450	\$3,450	\$4,350
Replacement Parts	\$700	\$1,100	\$1,100	\$2,500
<b>Total Maintenance Cost</b>	<b>\$2,250</b>	<b>\$3,900</b>	<b>\$3,900</b>	<b>\$7,000</b>
<b>Total Lifetime Cost (8 hr/day)</b>	<b>\$5,109</b>	<b>\$7,367</b>	<b>\$7,019</b>	<b>\$9,592</b>
<b>Total Lifetime Cost (24 hr/day)</b>	<b>\$7,057 (\$5,311**)</b>	<b>\$11,265</b>	<b>\$9,801</b>	<b>\$10,688</b>

\*Using a Commercial Business Energy use cost of \$0.0988/kWh and an Industrial Energy use cost of \$0.0673/kWh. \*\*Continuous operation of cabinet utilizing Night-Smart™ reduced flow setback mode. Calculations based on using Night-Smart™ idle setback 16hr/day for 5 days/wk and 24 hr/day for 2 days/week, 52 week calendar year. <sup>†</sup>Costs of HEPA filters, service and replacement parts are approximations, not an estimate or guarantee of any kind. <sup>††</sup>Service cost includes annual certification (\$150/yr), decontamination (\$450/incident), and incidentals.

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

DESIGNED FOR THE HUMAN EXPERIENCE

## Safety

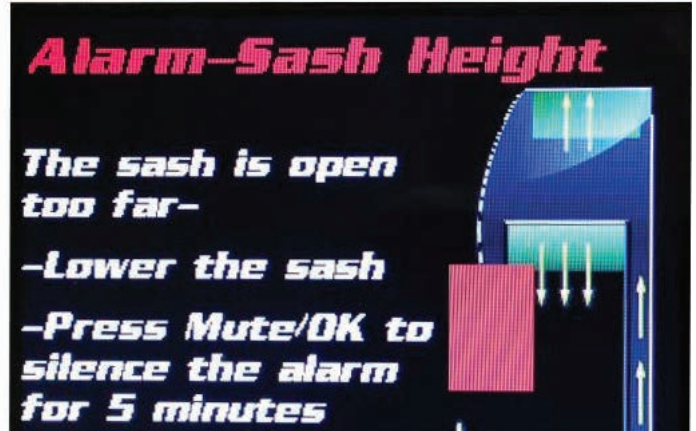
The most important reason to choose the Purifier Logic+ is safety. You simply won't find another biosafety cabinet with a more comprehensive safety package than the Logic+. Purifier Logic+ Biosafety Cabinets meet or exceed all minimum requirements set by NSF International including 99.99% efficient HEPA filters and nominal inflow of 105 fpm. The Logic+ goes well beyond the NSF Standard by providing the user with peace of mind that airflow is within normal limits and the HEPA filters are working properly. A full color, line-of-sight LCD information center, which is in constant communication with the ECM, continuously monitors and displays the cabinet's performance.

### The benefits of the LCD information center:

- **Easy readability with MyLogic™ OS.** The large full color display runs on MyLogic™ OS that provides user-friendly programming and feedback. Mounted on the interior right side wall of the user's line of sight *while seated*, the display shows cabinet function, filter loading and systems in use.
- **Descriptive feedback in easy-to-understand full sentences leaves nothing to interpretation.** Step-by-step instruction guides you when programming features such as Smart-Start and Night-Smart.
- **"Filter Remaining" bar graph.** A bar graph depicts percent of HEPA filter life remaining to provide assurance and allow you to accurately and confidently plan for future filter replacement. Alerts warn when the filter life diminishes to 20% and 0%.
- **Alerts and Alarms.** Visual and audible alarms warn users of cabinet errors, explain the meaning of the alarm, diagram where the cabinet has been affected, and provide intuitive troubleshooting tips.
- **Durable construction.** The display is constructed of UV-opaque safety glass and stainless steel for easy decontamination.



*Bar graph displays percent of HEPA filter life remaining*



*Various alert and alarm messages may be displayed and provide clear feedback and instruction.*

### Safety Features & Benefits:

- **Line-of-sight Information Center with MyLogic™ OS** provides at-a-glance assurance that your cabinet is operating safely.
- **Fully-closing, tempered safety glass sash.** An audible/visual alarm indicates when the sash is opened above its working height.
- **Reserve-Air™ Inflow Slots** on the inlet grille draw air into the cabinet to maintain safe airflow should the user inadvertently block portions of the grille while resting arms.
- **NSF-approved Vacu-Pass™ Cord & Cable Portal**, available on some models, safely allows passage of electrical cords and tubing through the side of the cabinet without air leakage or airflow disruption. See page 9 for more information.
- **Electronic security lock**, when enabled, prevents operation of the cabinet by unauthorized users.
- **NSF listed\***

\* Applies to Purifier Logic+ Class II, Type A2 and B2 Biosafety Cabinets

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

DESIGNED FOR THE HUMAN EXPERIENCE



*Inclination Technology has been applied throughout the cabinet. While seated, the LCD information center is within sight and the touchpad controls are within reach. Greater comfort lessens the risk of accidents and personal injury.*

## Comfort

Labconco's **Inclination™ Technology**—features that reinforce what humans are inclined to do—is nothing new to us. We've been at the forefront of designing ergonomics and comfort features into our biosafety cabinets for decades. For example, in 1983, we pioneered the use of an angled sash, which allows closer, more comfortable viewing without glare. We thoughtfully design every feature to ensure that form follows function and the shape of the human body.



*The curved inlet grille provides a comfortable surface for forearms resting on it. No additional armrest is needed. Reserve-Air™ Inflow Slots draw air into the cabinet should the operator inadvertently block portions of the inlet grille, maintaining safe airflow.*



*The electrical outlet cover may be opened with one finger and then gently and slowly self closes. It mounts flush and flat against the side wall for easy cleaning.*



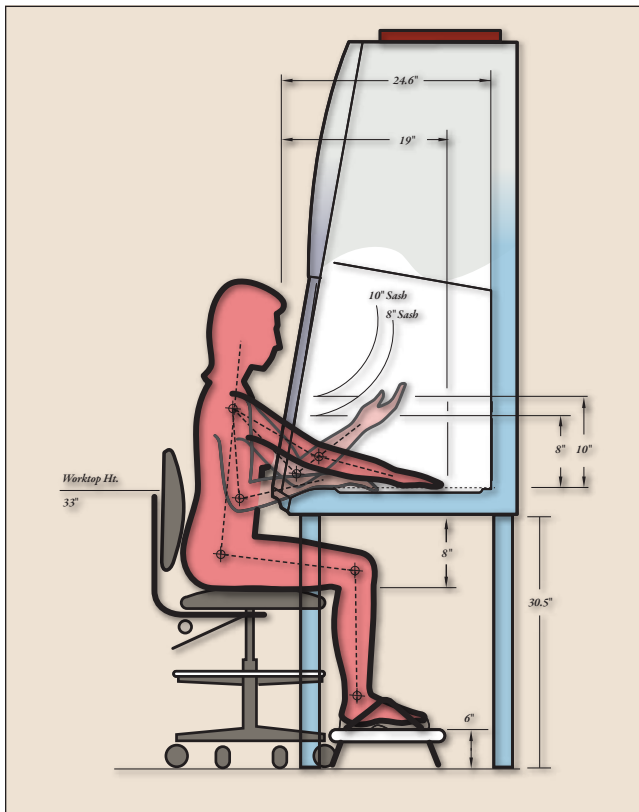
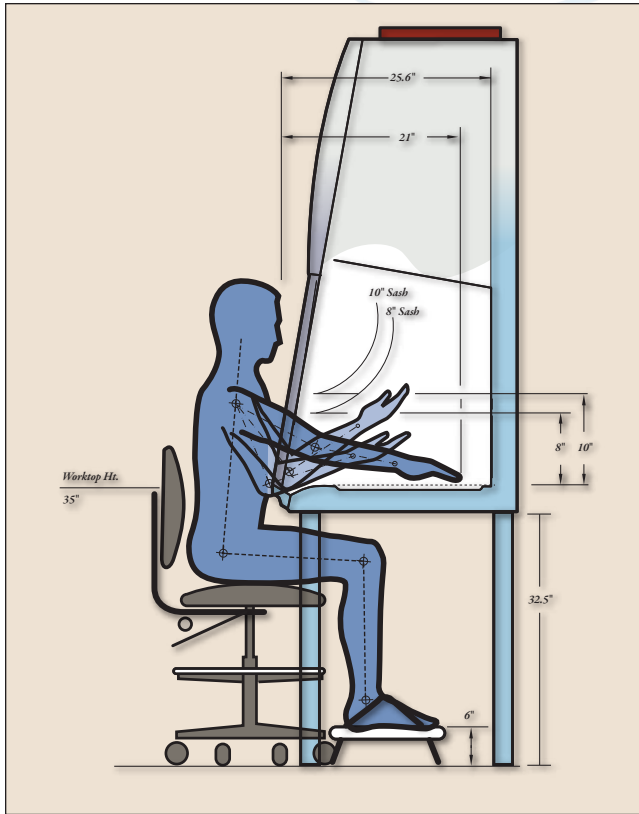
*Unobtrusive lift knobs on the front corners of the dished stainless steel work surface allow it to be quickly lifted for cleaning.*



*Scan this code to view a brief video showing some of the Inclination Technology features in action.*

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

DESIGNED FOR THE HUMAN EXPERIENCE



Ergonomic principles were applied to the design of the Purifier Logic+ Biosafety Cabinet to ensure that humans of all sizes maintain a healthy posture, and have good visibility and range of motion while using the cabinet. The illustrations above show an adult male of an average height of 5' 9.1" and an adult female of an average height of 5' 3". The accessory base stand, chair and footrest work together to achieve the proper height for individuals using the cabinet.

## Comfort Features & Benefits:

- ECM is quieter and cooler than comparable PSC motors.
- Line-of-sight, full color LCD information center is visible to the user while seated at the cabinet.
- ADA-compliant, easy-to-clean touchpad controls allow manual activation of blower, timer, audible alarm mute and menu selection.
- ADA-compliant service fixtures, available factory- or user-installed, are mounted within easy reach on the side walls, 8.5" (20 cm) above the work surface to maximize usable surface area, permit free arm movement and allow easy removal of the work surface. See page 9 for more information.
- Curved inlet grille gently supports the user's forearms without the need for uncomfortable, hard-to-clean armrests.
- Flush-mounted electrical duplex covers have dampened hinges that close slowly rather than snapping shut on fingers. Surfaces are easy-to-clean stainless steel.
- Counterweighted sliding sash with anti-racking mechanism may be raised and lowered with minimal effort.
- Large interior work area offers more cubic feet than any other brand.
- Inclined sash is sloped at 10° for closer, more comfortable viewing than vertical sashes offer. Two small, sculptured sash handles on the outside surface of the sash do not obstruct the view of the interior.
- Over 27" (69 cm) of viewing height gives greater visual accessibility.
- Bright, glare-free fluorescent lighting with timer provides 90-100 footcandles at the work surface, exceeding NSF requirements.

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

TYPE A2 & B2 — WHICH DO YOU CHOOSE?

## Select the right Purifier Logic Biosafety Cabinet for your application

**Purifier Logic+ Class II Biosafety Cabinets come in Type A2 and Type B2 configurations.** The airflow diagrams below illustrate the differences between the two Types. Which configuration you choose is determined by your application. Both Type A2 and B2 cabinets are suitable for work with agents that require Biosafety Level 1, 2 or 3 containment. Other appropriate applications include work with antineoplastic drugs, genetic material, carcinogens, allergens and additional substances that generate hazardous airborne particulates.

**Purifier Logic+ Class II, Type A2 Biosafety Cabinets** are designed to discharge HEPA-filtered exhaust air directly into the

laboratory, or into an exhaust system through the optional Canopy Connection. When canopy-connected, the biosafety cabinets may be used for applications involving volatile toxic chemicals and radionuclides as an adjunct to microbiological research. These benchtop cabinets are available in 3', 4', 5' and 6' nominal widths. **See pages 10-11 for ordering information.**

**Purifier Logic+ Class II, Type B2 Biosafety Cabinets** are designed to be hard ducted to the outside. Since none of the air is recirculated, these cabinets may be used for work with agents treated with volatile toxic chemicals and radionuclides. These benchtop cabinets are available in 4' and 6' nominal widths. **See pages 12-13 for ordering information.**



### Class II, Type A2 Airflow

During operation, room air is drawn into the inlet grille. The air in the plenum beneath the work surface is a mixture of unfiltered room air, and air that has just passed through the work area. This contaminated air is drawn by the blower through the back plenum of the cabinet, where approximately 70% of the air is recirculated through the supply HEPA filter and back over the work area. The balance of the contaminated air is discharged to the environment after passing through the exhaust HEPA filter.



### Class II, Type B2 Airflow

During operation, room air is drawn through the top of the cabinet. This air is HEPA filtered, and then flows downward through the work area. Room air is also drawn into the inlet grille. All of the contaminated air is drawn under the work surface or through the rear grille, then up the rear plenum, and through the exhaust HEPA filter. A dedicated exhaust system and remote blower draw 100% of the filtered exhaust air out of the laboratory. The ductwork and remote blower are required for operation and sold separately.



# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

## OPTIONAL FEATURES & BENEFITS

### Specialized work requires special features

Cell research often involves using a microscope, keeping the cells at the proper temperature for viability, or both. At the same time, the work must be conducted in a biological safety cabinet to protect the cells, researcher and environment. The Purifier Cell Logic+ Biosafety Cabinet has special features that address the unique needs of cell research.



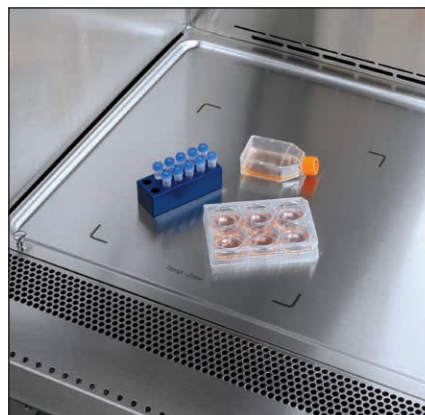
### Cell Logic+ Features & Benefits:

- **Scope-Ready™ package option.** Models are available that allow a customer-supplied microscope to be integrated into the cabinet. The sash has a 7.0" wide x 10.5" high (18 x27cm) cutout that accommodates most microscopes' eyepieces.
- **The Pure-Vu™ Seal,** made of flexible and clear material, surrounds the cutout preventing contaminants from escaping while providing ergonomic visibility into the cabinet. Modified ASHRAE 110 and NSF 49 testing confirms that this unique teardrop collar design keeps contaminants contained. An accessory Pure-Vu™ XL Seal is available to accommodate forward-mounted microscopes.
- **The Stand-Still™ Isolation Platform** completes the Scope-Ready™ package and is sold separately. The platform supports the microscope on the cabinet's work surface and reduces vibration threefold. Modified ASHRAE 110 and NSF 49 testing confirms this elevated aerodynamic base maintains safe airflow. Constructed of seamless Type 304 stainless steel, the non-porous platform is easy to clean and autoclavable. The platform is available in two sizes and is sold separately.
- **Temp-Zone™ package option.** Models are available that include a temperature-controlled area on the work surface, 10.5" wide x 12.0" deep (7.0" wide x 12.0" deep on 3' models). Warmed or chilled samples may be transferred to the Temp-Zone and kept at optimum temperature. Quick connection fittings on the left side of the cabinet attach to a user-supplied circulator that continually delivers chilled or heated liquid to the Temp-Zone area. Uniform temperature distribution is maintained on the surface. Easy-Clean™ Prop Rods allow for hands-free elevation of the work surface for ease of cleaning and access to the channels and drain.

\* American Society of Heating, Refrigerating and Air-Conditioning Engineers, Atlanta, GA



The accessory Pure-Vu Seal and Stand-Still XL Isolation Platform accommodate forward-mounted microscopes such as stereo scopes.



The Temp-Zone package option includes the temperature-controlled area of the work surface (shown above left) and the Easy-Clean Prop Rods (shown above right).





# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

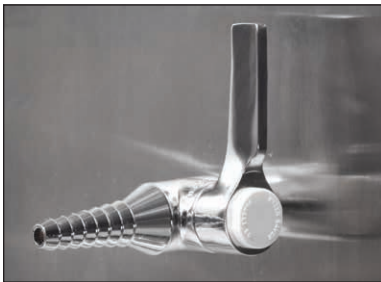
OPTIONAL FEATURES, BENEFITS & ACCESSORIES

## Accessory Package adds functionality to your biosafety cabinet

The optional **Accessory Package** caters to your unique biosafety cabinet wants and needs. Three features are factory-installed so that you can put them to immediate use: UV lamp, service fixture and Vacu-Pass Cord & Cable Portal.



The **254 nm UV lamp** provides secondary decontamination while the cabinet is not in use. An interlocked switch permits the UV light to operate only when the sash is completely closed.



The **service fixture** supplies water, vacuum, air or noble gases to the cabinet interior. It has a ball-type valve that provides smooth operation at pressures up to 40 psi. The serrated hose tip valve with

quarter turn control handle is mounted 8.5" (20 cm) above the work surface to maximize usable surface area. One service fixture is mounted on the right-hand side on 3', 4' and 5' models with Accessory Package. Two service fixtures, one on each side, come with 6' models with Accessory Package.



The **Vacu-Pass™ Cord & Cable Portal** combines safety and convenience. The portal allows passage of cords through the side wall of the cabinet so that cords are kept out of the way of the user's work area.

The NSF-approved port does not disrupt the cabinet's airflow or allow leakage to occur. One portal comes mounted on the right-hand side interior on models with Accessory Package. A plug seals the opening when not in use.



## Telescoping Base Stand (non-welded)

For ease of ordering, some models of the Purifier Logic+ and Cell Logic+ Biosafety Cabinets include the **Telescoping Base Stand**. The stand is shipped unassembled allowing it to be sent in the same package with the biosafety cabinet. The base stand includes a free shelf and has telescoping legs so that the appropriate height for your application and user can be selected during installation.



## Ventus™ Canopy Connection provides ducting for your Class II, Type A2 cabinet

Certain applications, such as working with malodorous samples, small amounts of volatile toxic chemicals and tracer quantities of radionuclides, require the connection of your Class II, Type A2 cabinet to an exhaust system. The NSF-approved **Ventus Canopy Connection** mounts above the biosafety cabinet to allow thimble ducting to the outside. Unlike canopies that rely on imprecise pressure or airflow sensors, the Ventus has an uncomplicated mechanical design that ensures safe and reliable operation. In less than one second after a low flow event is detected, the alarm on the LCD alerts the user while the blower speeds to full capacity to maximize personal safety. The low profile Ventus adds only 1.25" to the overall height of the cabinet.

---

*These accessories and more are also available for on-site installation. See Accessories and Base Cabinets Ordering Information starting on page 15.*

---

# PURIFIER® LOGIC+ CLASS II, TYPE A2 BIOSAFETY CABINETS

## CATALOG NUMBER CONFIGURATOR

Use this key to configure the **nine digit catalog number** to order your Purifier Logic+ or Cell Logic+ Class II, Type A2 Biosafety Cabinet. For example, a 302-311-100 is a 3' Purifier Logic+ Class II, Type A2 Biosafety Cabinet with 10" sash opening, service fixture, UV lamp, Vacu-Pass Portal, non-welded base stand and North America, 115 volt electrical receptacle and plug.

**STEP 1:** Select the **Cell Logic+ package(s)** option. This number is the second digit of your catalog number.

- 0** = None. Logic+ only.
- 2** = Temp-Zone Package. Fifth digit is **9** and sixth digit is **1**.
- 3** = Scope-Ready Package. Fifth digit is **9** and sixth digit is **1**.
- 4** = Temp-Zone & Scope-Ready Packages. Fifth digit is **9** and sixth digit is **1**.

**3**

**2**

**STEP 2:** Select the **width** of your cabinet. This number is the fourth digit of your catalog number.

- 3** = 3' (Actual width = 42.3"/107.4 cm)
- 4** = 4' (Actual width = 54.3"/137.9 cm)
- 5** = 5' (Actual width = 66.3"/168.4 cm)
- 6** = 6' (Actual width = 78.3"/198.9 cm)

**STEP 3:** Select the **sash opening height**. This number is the fifth digit of your catalog number.

- 1** = 10" (25.4 cm). Logic+ only.
- 8** = 8" (20.3 cm). Logic+ only.
- 9** = 9" (22.9 cm). Cell Logic+ only.

**STEP 4:** Select the **Accessory Package option: service fixture(s), UV lamp and Vacu-Pass™ Cord & Cable Portal**. This number is the sixth digit of your catalog number.

- 0** = None. Logic+ only.
- 1** = Includes a right-side mounted factory-installed service fixture (two on 6' models, one on each side), UV lamp with timer (UV lamp not included with Scope-Ready), and right-side wall Vacu-Pass Portal. Comes standard on all Cell Logic+ models.

**STEP 5:** Select **non-welded telescoping base stand option**.

This number is the seventh digit of your catalog number.

- 0** = None
- 1** = Includes an non-welded telescoping base stand shipped with the cabinet.

**STEP 6:** Select the **electrical receptacle and plug type**.

This number is the eighth and ninth digits of your catalog number.

- 00** = North America, 115 volts (15 amps for 3' and 4' models. 20 amps for 5' and 6' models)
- 10** = North America, 230 volts
- 20** = Japan, 100 volts (15 amps for 3' and 4' models. 20 amps for 5' and 6' models)
- 30** = Schuko, 230 volts
- 40** = China/Australia, 230 volts
- 50** = British (UK), 230 volts
- 70** = India, 230 volts

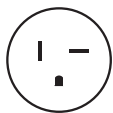
### Electrical Receptacle & Plug Configurations

North America,  
115 volts, 15 amps  
Japan, 100 volts,  
15 amps



For Catalog  
Numbers ending  
in 00 & 20

North America,  
115 volts, 20 amps  
Japan, 100 volts,  
20 amps\*



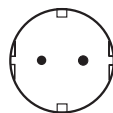
For Catalog  
Numbers ending  
in 00 & 20

North America,  
230 volts



For Catalog  
Numbers  
ending in 10

Schuko,  
230 volts



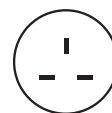
For Catalog  
Numbers  
ending in 30

China/Australia,  
230 volts



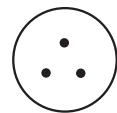
For Catalog  
Numbers  
ending in 40

British (UK),  
230 volts



For Catalog  
Numbers  
ending in 50

India, 230 volts



For Catalog  
Numbers  
ending in 70

### Technical Specifications

Nominal Width	3'	4'	5'	6'
Actual Width	42.3" (107.4 cm)	54.3" (137.9 cm)	66.3" (168.4 cm)	78.3" (198.9 cm)
Shipping Weight	510 lbs. (231 kg)	585 lbs. (265 kg)	715 lbs. (324 kg)	805 lbs. (365 kg)
Shipping Weight including stand	585 lbs. (265 kg)	670 lbs. (304 kg)	810 lbs. (367 kg)	905 lbs. (411 kg)
Exhaust Volume, 10" Sash Opening	253-279 CFM	339-370 CFM	420-462 CFM	503-554 CFM
Exhaust Volume, 8" Sash Opening	203-223 CFM	269-296 CFM	336-370 CFM	403-443 CFM
Exhaust Volume, 9" Sash Opening	228-251 CFM	304-333 CFM	378-416 CFM	453-498 CFM

Electrical Configuration	Amperage			
115 volts, 60 Hz	12	12	16	16
100 volts, 50/60 Hz	12	12	16	16
230 volts, 50/60 Hz	6	6	8	8

Contact Fisher Scientific for ordering information on models that are EN 12469 compliant.

\* Plug is 20 amps. Receptacle is 15 amps. \*\*Exhaust volume is for cabinets exhausting back into the room. See the Ventus Canopy Connection description on page 17 for exhaust volumes for cabinets with canopy exhaust.

# PURIFIER® LOGIC+ CLASS II, TYPE A2 BIOSAFETY CABINETS

## SPECIFICATIONS



Purifier Logic+ Class II, Type A2  
Biosafety Cabinet 302-411-100



### Performance Features

- Electronically Commutated Motor (ECM)
- ✚ Constant Airflow Profile™ (CAP) Technology airflow monitoring system that communicates with the ECM to deliver the precise volume of air as required and automatically adjust as filters load without relying on airflow sensors
- ✚ Air-Wave™ Entry System\*
- ✚ Contain-Air™ Negative Pressure Channel\*
  - Smart-Start™ System that allows the user to program start up and shut down operations
  - Night-Smart™ System that idles the blower when the sash is fully closed
  - Built-in interval or elapsed timer for experiment monitoring, fluorescent light or UV light control (on models with UV light)
  - Digital clock
  - Removable towel catch located under work surface
  - Bright, 90-150 footcandle, glare-free fluorescent lighting located outside the contaminated work area
- Five year warranty

### Safety Features

- ✚ LCD information center with “Filter Life Remaining” bar graph, status line for alarm conditions and alerts to warn when filter life diminishes to 20% and 0%
- Electronic security lock (optional activation) that requires code to operate the cabinet
- Two electrical duplex receptacles, (single outlets on 230 volt models), located one on each side, with ground fault interruption (115 volt models)
- Intrinsically safe negative pressure design
- Fully-closing, clear 1/4" tempered safety glass sash
- Stainless steel inlet grille with Reserve-Air™ Secondary Airflow Slots\*
- Supply and exhaust 99.99% efficient HEPA filters. Contact Labconco for optional 99.999% efficient ULPA filters.
- Leak-tight stainless steel interior

### Comfort Features

- ✚ Interior-mounted, line-of-sight, full color LCD information center with easy-to-understand MyLogic™ OS
- ✚ 22.6" (57 cm) maximum sash opening height and 27.0" (69 cm) viewing height
- ✚ Curved inlet grille for forearm support
- ✚ Flush-mounted stainless steel electrical receptacle covers with dampened hinges
  - Removable, seamless type 304 stainless steel, dished work surface with lift out knobs
  - 10° Angled sash with counterbalanced, anti-racking mechanism for ease of lifting
  - ADA-compliant touchpad control on right-hand side post for manual activation of blower, light(s), timer, electrical receptacles, audible alarm mute and menu selection
  - Noise level < 63 dBA
  - Heat load 990 BTU/hour (4' models)

### Specifications

- Nominal inflow velocity of 105 feet per minute (fpm) (0.5 m/sec)
- Nominal downflow velocity of 55 fpm (0.3 m/sec)
- Approximately 70% air recirculation
- Powder-coated steel exterior
- NSF International listed (Logic+ models). NSF International and modified ASHRAE 110 compliant (Cell Logic+ models).
- ETL listed
- CE conformity marking (230 volt models)
- Class 5 conditions per ISO 14644-1 and 2 (formerly Class 100)
- Overall depth x height: 31.2" x 61.7" (79.2 x 156.7 cm)
- 10' (3 m) power cord with plug

### Options

- ✚ Non-welded, NSF-Approved, powder-coated steel telescoping base stand with fixed feet
- ✚ Accessory Package: 254 nm UV lamp, ADA-compliant service fixture(s) with ball-type valve(s), and NSF-Approved Vacu-Pass™ Cord & Cable Portal
- ✚ Cell Logic+ Packages: Scope-Ready™ Package consisting of 7.0" wide x 10.5" high (18 x 27 cm) sash cutout and Pure-Vu™ Seal with powder-coated steel collar. **Stand-Still™ Isolation Platform is required and sold separately. See page 16.** Temp-Zone™ Package consisting of temperature-controlled work area, 10.5" (27 cm) wide x 12.0" (30 cm) deep (7.0" x 12.0" on 3' models) located on the left side of the work surface. **Circulator is required (not included).** Circulator requirements: minimum flow rate of 0.4-0.5 GPM (1.5-1.9 LPM), typical volume of 6 liters, and temperature of 0-50° C (chiller/heater).
- ✚ Ventus™ Canopy Connection, NSF-Approved, with low flow design and audio/visual alarms (adds 1.25" to overall cabinet height)

### Required Accessory

- Supporting base if non-welded stand option is not selected

✚ Exclusive Labconco feature \*U.S. Patent No. 6,368,206

✚ Complies with Americans with Disabilities Act Standard for height of controls and receptacles

See Dimensional Data on page 14, Accessories on pages 15-17,  
and Base Stands on pages 18-20.

# PURIFIER® LOGIC+ CLASS II, TYPE B2 BIOSAFETY CABINETS

## CATALOG NUMBER CONFIGURATOR

Use this key to configure the **nine digit catalog number** to order your Purifier Logic+ or Cell Logic+ Class II, Type B2 Biosafety Cabinet. For example, a 303-481-100 is a 4' Purifier Logic+ Class II, Type B2 Biosafety Cabinet with service fixture, UV lamp, Vacu-Pass Portal, non-welded base stand and North America, 115 volt electrical receptacle and plug.

**STEP 1:** Select the **Cell Logic+ package(s)** option. This number is the second digit of your catalog number.

- 0 = None. Logic+ only.
- 2 = Temp-Zone Package. Sixth digit is 1.
- 3 = Scope-Ready Package. Sixth digit is 1.
- 4 = Temp-Zone & Scope-Ready Packages. Sixth digit is 1.

3

3

**STEP 2:** Select the **width** of your cabinet.

This number is the fourth digit of your catalog number.

- 4 = 4' (Actual width = 54.3"/137.9 cm)
- 6 = 6' (Actual width = 78.3"/198.9 cm)

8

**STEP 3:** Select the **Accessory Package option: service fixture(s), UV lamp and Vacu-Pass™ Cord & Cable Portal**. This number is the sixth digit of your catalog number.

- 0 = None. Logic+ only.
- 1 = Includes a right-side mounted factory-installed service fixture (two on 6' models, one on each side), UV lamp with timer (UV lamp not included with Scope-Ready), and right-side wall Vacu-Pass Portal. Comes standard on all Cell Logic+ models.

**STEP 4:** Select **non-welded telescoping base stand option**.

This number is the seventh digit of your catalog number.

- 0 = None
- 1 = Includes an non-welded telescoping base stand shipped with the cabinet.

**STEP 5:** Select the **electrical receptacle and plug type**.

This number is the eighth and ninth digits of your catalog number.

- 00 = North America, 115 volts (15 amps for 4' models. 20 amps for 6' models)
- 10 = North America, 230 volts
- 20 = Japan, 100 volts (15 amps for 3' and 4' models. 20 amps for 5' and 6' models)
- 30 = Schuko, 230 volts
- 40 = China/Australia, 230 volts
- 50 = British (UK), 230 volts
- 70 = India, 230 volts

### Electrical Receptacle & Plug Configurations

North America,  
115 volts, 15 amps  
Japan, 100 volts,  
15 amps



For Catalog  
Numbers ending  
in 00 & 20

North America,  
115 volts, 20 amps  
Japan, 100 volts,  
20 amps\*



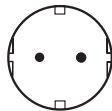
For Catalog  
Numbers ending  
in 00 & 20

North America,  
230 volts



For Catalog  
Numbers  
ending in 10

Schuko,  
230 volts



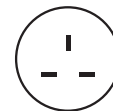
For Catalog  
Numbers  
ending in 30

China/Australia,  
230 volts



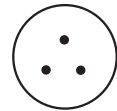
For Catalog  
Numbers  
ending in 40

British (UK),  
230 volts



For Catalog  
Numbers  
ending in 50

India, 230 volts



For Catalog  
Numbers  
ending in 70

### Technical Specifications

Nominal Width	4'	6'
CBV†	734 CFM @ 1.7"	1191 CFM @ 2.1"
Shipping Weight	650 lbs. (295 kg)	840 lbs. (381 kg)
Shipping Weight including stand	730 lbs. (331 kg)	940 lbs. (426 kg)

Electrical Configuration	Amperage	
115 volts, 60 Hz	12	12
100 volts, 50/60 Hz	12	12
230 volts, 50/60 Hz	6	8

\* Plug is 20 amps. Receptacle is 15 amps.

† Concurrent Balance Values (CBV) are obtained using a Pitot or thermal anemometer traverse of the exhaust duct. Static pressure is the amount of vacuum required at the cabinet connection plus 0.7" for HEPA filter loading.

# PURIFIER® LOGIC+ CLASS II, TYPE B2 BIOSAFETY CABINETS

## SPECIFICATIONS



Purifier Logic+ Class II, Type B2  
Biosafety Cabinet 303-481-100



### Performance Features

- Electronically Commutated Motor (ECM)
- ✚ Constant Airflow Profile™ (CAP) Technology airflow monitoring system that communicates with the ECM to deliver the precise volume of air as required and automatically adjust as filters load without relying on airflow sensors
- ✚ Air-Wave™ Entry System\*
- ✚ Contain-Air™ Negative Pressure Channel\*
  - Smart-Start™ System that allows the user to program start up and shut down operations
  - Built-in interval or elapsed timer for experiment monitoring, fluorescent light or UV light control (on models with UV light)
  - Digital clock
  - Removable towel catch located under work surface
  - Bright, 90-150 footcandle, glare-free fluorescent lighting located outside the contaminated work area
  - Five year warranty

### Safety Features

- ♿ ✚ LCD information center with "Filter Life Remaining" bar graph, status line for alarm conditions and alerts to warn when filter life diminishes to 20% and 0%
- Electronic security lock (optional activation) that requires code to operate the cabinet
- Two electrical duplex receptacles, (single outlets on 230 volt models), located one on each side, with ground fault interruption (115 volt models)
- Intrinsically safe negative pressure design
- Fully-closing, clear 1/4" tempered safety glass sash with 8" (20 cm) working height opening
- Stainless steel inlet grille with Reserve-Air™ Secondary Airflow Slots\*
- Supply and exhaust 99.99% efficient HEPA filters. Contact Labconco for optional 99.999% efficient ULPA filters.
- Leak-tight stainless steel interior

### Comfort Features

- ✚ Interior-mounted, line-of-sight, full color LCD information center with easy-to-understand MyLogic™ OS
- ✚ 22.6" (57 cm) maximum sash opening height and 27.0" (69 cm) viewing height
- ✚ Curved inlet grille for forearm support
- ✚ Flush-mounted stainless steel electrical receptacle covers with dampened hinges
  - Removable, seamless type 304 stainless steel, dished work surface with lift out knobs
  - 10° Angled sash with counterbalanced, anti-racking mechanism for ease of lifting
  - ADA-compliant touchpad control on right-hand side post for manual activation of blower, light(s), timer, electrical receptacles, audible alarm mute and menu selection
  - Noise level < 63 dBA
  - Heat load 990 BTU/hour (4' models)

### Specifications

- Nominal inflow velocity of 105 feet per minute (fpm) (0.5 m/sec)
- Nominal downflow velocity of 55 fpm (0.3 m/sec)
- 0% air recirculation
- Powder-coated steel exterior
- NSF International listed (Logic+ models). NSF International and modified ASHRAE 110 compliant (Cell Logic+ models).
- ETL listed
- CE conformity marking (230 volt models)
- Class 5 conditions per ISO 14644-1 and 2 (formerly Class 100)
- Overall depth x height: 31.2" x 61.7" (79.2 x 156.7 cm)
- 10" diameter exhaust outlet with air-tight damper
- 10' (3 m) power cord with plug

### Options

- ♿ Non-welded, NSF-Approved, powder-coated steel telescoping base stand with fixed feet
- ♿ Accessory Package: 254 nm UV lamp, ADA-compliant service fixture(s) with ball-type valve(s), and NSF-Approved Vacu-Pass™ Cord & Cable Portal
- Cell Logic+ Packages: Scope-Ready™ Package consisting of 7.0" wide x 10.5" high (18 x 27 cm) sash cutout and Pure-Vu™ Seal with powder-coated steel collar. **Stand-Still™ Isolation Platform is required and sold separately. See page 16.** Temp-Zone™ Package consisting of temperature-controlled work area, 10.5" wide x 12.0" deep (27 x 30 cm) located on the left side of the work surface. **Circulator is required (not included).** Circulator requirements: minimum flow rate of 0.4-0.5 GPM (1.5-1.9 LPM), typical volume of 6 liters, and temperature of 0-50° C (chiller/heater).

### Required Accessory

- ♿ Supporting base if non-welded stand option is not selected
- Remote Blower

✚ Exclusive Labconco feature \*U.S. Patent No. 6,368,206

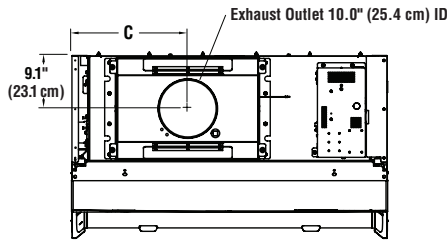
♿ Complies with Americans with Disabilities Act Standard for height of controls and receptacles

See Dimensional Data on page 14, Accessories on pages 15-17,  
and Base Stands on pages 18-20.

# PURIFIER® LOGIC+ CLASS II, BIOSAFETY CABINETS

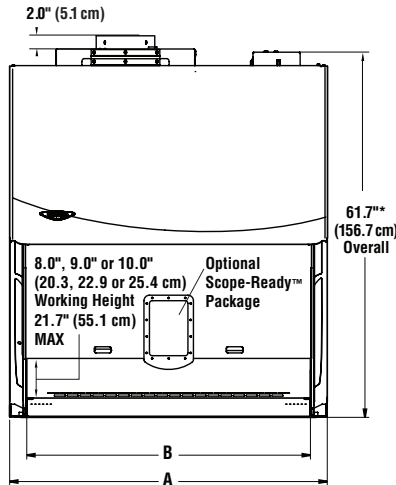
## DIMENSIONAL DATA

### Class II, Type A2

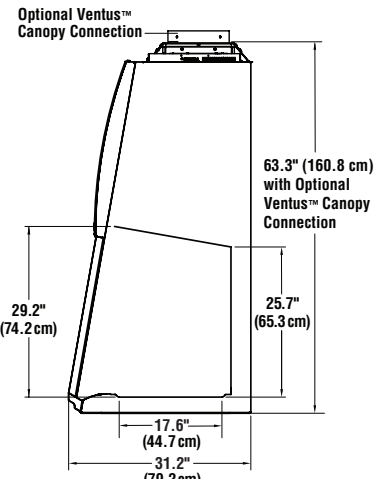


TOP

Nominal Width	A Inches/cm	B Inches/cm	C Inches/cm
3'	42.3/107.4	36.5/92.7	13.6/34.5
4'	54.3/137.9	48.5/123.2	19.9/50.5
5'	66.3/168.4	60.5/153.7	26.9/68.3
6'	78.3/198.9	72.5/184.2	32.9/83.6



FRONT

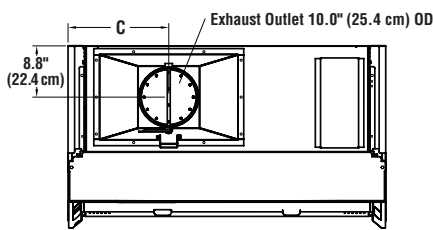


SIDE

Sash opening working height varies. All Purifier Cell Logic+ Class II, Type A2 Biosafety Cabinets have a 9.0" working height. Remaining cabinets have either an 8.0" or 10.0" working height depending on the model.

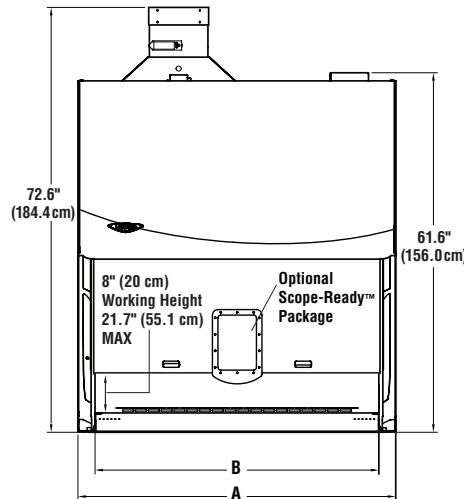
\*Exhaust collar is 2.0" high (5.0 cm).

### Class II, Type B2

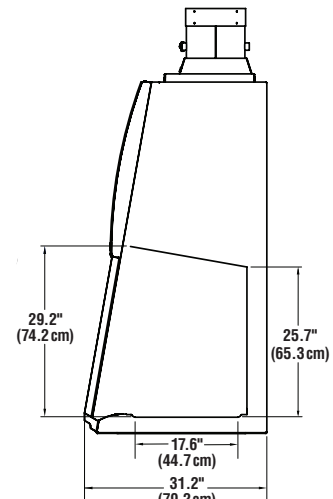


TOP

Nominal Width	A	B	C
4'	54.3" (137.9 cm)	48.5" (123.2 cm)	17.2" (43.7 cm)
6'	78.3" (198.9 cm)	72.5" (184.2 cm)	28.9" (73.4 cm)



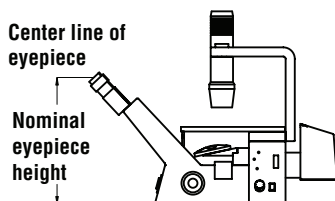
FRONT



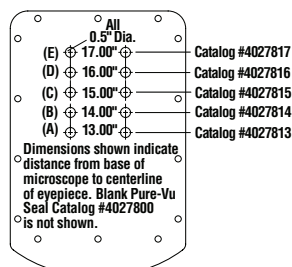
SIDE

### Select the Pure-Vu® Seal that's right for you.

1. To determine placement of the cutouts, measure from the centerline of the eyepieces to the base of your microscope.

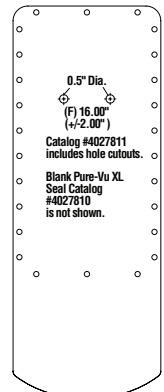


2. For inverted scopes with relatively stationary eyepiece height, select a Pure-Vu Seal corresponding with the nominal eyepiece height in the drawing below.



Pure-Vu® Seal

3. For stereo scopes or inverted scopes requiring frequent eyepiece height adjustment, select a Pure-Vu XL Seal (shown at right). Pure-Vu XL Seals are designed to be pleated when installed to allow for eyepiece height flexibility of +/-2.0" (5 cm). The Pure-Vu XL Seals extend 5.5" (14 cm) below the collar.



Pure-Vu® XL Seal

4. Refer to the ordering information on page 16 for Pure-Vu and Pure-Vu XL Seals recommended for specific microscope models.

# PURIFIER® LOGIC®+ CLASS II, BIOSAFETY CABINETS

ACCESSORIES FOR ALL MODELS



## IV Bar Kits

Include IV bar, mounting hardware and four hangers. **Installation is required.**

Catalog #	For use with	Shipping Wt.
10-269-250	3-Ft Class II, Type A2 & B2	3 lbs. (1 kg)
10-269-251	4-Ft Class II, Type A2 & B2	4 lbs. (2 kg)
10-269-252	5-Ft Class II, Type A2 & B2	5 lbs. (2 kg)
10-269-253	6-Ft Class II, Type A2 & B2	6 lbs. (3 kg)



## 16-101-006 Ergonomic Chair with Armrests

6-way articulating seat and back control for personalized adjustment. Pneumatic mechanism adjusts seat height from 18.25" to 25.75" (46 x 64 cm). Five-leg reinforced composite base with 2" (5 cm) diameter ball-bearing casters. Aluminum support ring. Removable armrests. Black vinyl upholstery. Shipping weight 35 lbs. (16 kg)



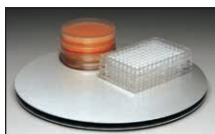
## 16-305-88 Adjustable Footrest

Elevates feet and permits angle repositioning while in use. 18.5" w x 11.5" d x 8.0" (47 x 29 x 20 cm). Shipping weight 6 lbs. (3 kg)



## 16-317-87 Logic Cart

Drawer and compartments provide convenient storage. Top left side compartment with cutouts and hinged panel that pivots down for loading. High density polyethylene and ABS construction. Overall dimensions: 25.0" w x 19.0" d x 27.0" h (64 x 48 x 69 cm). Shipping weight 50 lbs. (23 kg)



## 10-269-254 Turntable

"Lazy Susan" rotates 360° to bring items within easy reach. Stainless steel surface and ball bearings. 12" (30 cm) diameter. Autoclavable. Shipping weight 5 lbs. (2 kg)



## 10-269-256 Cord Management System

Includes three stainless steel mounting hooks and three carabiners. The hooks mount to the rear grille and the carabiners secure power cords and tubing along the rear wall to keep them contained and away from the work area. Shipping weight 3 lbs. (1 kg)



## 10-269-255 Interior Shelf

Stainless steel shelf, 8.0" x 5.0" (20 x 13 cm), mounts to rear grille. Weight capacity: 2.2 lbs. (1 kg). Shipping weight 3 lbs. (1 kg)

## 34-055-00 Inflow and Downflow Sensor Kit

Allows display of inflow and downflow velocities on the LCD information center. Includes sensor, wiring harness and hardware. Not for use on Class II, Type B2 cabinets. **Installation and certifier calibration are required.** Contact Labconco about factory-installed sensors. Shipping weight 3 lbs. (1 kg)

## RS 232 Connection Kits

For connecting the biosafety cabinet to a data recorder or building monitoring system. Include the PC board, cable and hardware.

Catalog #	For use with	Shipping Wt.
38-583-10	Kit contains cable with 9-pin connection	1 lb. (0.5 kg)
38-583-11	Kit contains cable with 25-pin connection	1 lb. (0.5 kg)



## 34-028-00 Vacu-Pass® Cord & Cable Port Kit

Allows passage of a cable through the right-side interior wall to the exterior. With 4 closed-cell neoprene plugs with holes for cords/cables with diameters of 1/8", 1/4", 3/8" and 1/2", and blank plug. NSF-approved port does not disrupt airflow or cause leakage. **Installation is required.** Shipping weight 2 lbs. (1 kg)



## 09-681-310 Sash-Glider Kit

For cleaning both sides of the sash while it remains closed, to avoid contamination risks. Includes magnetic blades, 2 microfibre sheets and 10 disposable scrubbing strips. Shipping weight 5 lbs. (2 kg). Replacement strips, Catalog# 09-681-311, package of 25. Shipping weight 2 lbs. (1 kg)



## VACUUBRAND® BVC Basic Fluid Aspiration Systems

For connection to an external vacuum source such as a diaphragm pump. Mechanical vacuum controller opens when needed to limit gas consumption from the vacuum source. Include a coated steel base, an autoclavable collection bottle, aspiration hand set with flow-through suction tube and PTFE 0.2 micron filter. Shipping weight 6.2 lbs. (3 kg)

Catalog #	Aspiration System includes:	Dimensions (L x W x H)
3850310**	4 Liter Polypropylene Collection Bottle	9.9 x 7.9 x 19.3"
3850320**	2 Liter Borosilicate Glass Collection Bottle	9.1 x 7.1 x 17.0"



## VACUUBRAND® BVC Control Fluid Aspiration Systems

Chemical-resistant PTFE diaphragm pump, capable of drawing 12 L/minute and achieving ultimate vacuum of 150 mBar/112 Torr, is included. Mechanical vacuum controller opens when needed to limit gas consumption from the vacuum source. With coated steel base, adjustable suction power control via touch panel from 150 to 850 mBar, an autoclavable collection bottle, aspiration hand set with flow-through suction tube and PTFE 0.2 micron filter. Shipping weight 17 lbs. (8 kg)

## Systems with 4 Liter Polypropylene Collection Bottle Dimensions (L x W x H): 16.1" x 7.6" x 19.7" (41 x 19 x 50 cm)

Catalog #	Electrical Requirements	Plug Type
3850330**	115 volts, 50/60 Hz	115 volts, 15 amps
3850331**	230 volts, 50/60 Hz	North America, 230 volts
3850332**	230 volts, 50/60 Hz	Schuko
3850333**	230 volts, 50/60 Hz	China/Australia
3850334**	230 volts, 50/60 Hz	British (UK)
3850335**	230 volts, 50/60 Hz	India

## Systems with 2 Liter Borosilicate Glass Collection Bottle Dimensions (L x W x H): 16.1" x 7.6" x 16.9" (41 x 19 x 43 cm)

Catalog #	Electrical Requirements	Plug Type
3850340**	115 volts, 50/60 Hz	115 volts, 15 amps
3850341**	230 volts, 50/60 Hz	North America, 230 volts
3850342**	230 volts, 50/60 Hz	Schuko
3850343**	230 volts, 50/60 Hz	China/Australia
3850344**	230 volts, 50/60 Hz	British (UK)
3850345**	230 volts, 50/60 Hz	India

\*VACUUBRAND® is a registered trademark of VACUUBRAND GMBH + CO KG  
\*\*Contact Fisher Scientific for ordering information.

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

ACCESSORIES FOR ALL MODELS



## 16-305-31 Service Fixture Kit

Includes serrated hose tip valve with ball valve, quarter turn control handle and hardware. Mounts on left or right side interior. Cabinets are factory-prepared for up to four fixtures: two forward mounted 8.5" above surface and two back mounted 10" above surface. **Installation is required.** Shipping weight 4 lbs. (2 kg)

## Ultraviolet Lamp Kits

Include 254 nm UV lamp and ballast. Not recommended for Cell Logic+ Biosafety Cabinets with Scope-Ready package. **Installation is required.**

Catalog #	For use with	Shipping Wt.
10-269-261	115 Volt Class II, Type A2 & B2	5 lbs. (2 kg)
10-269-262	100 Volt Class II, Type A2 & B2	5 lbs. (2 kg)
10-269-263	230 Volt Class II, Type A2 & B2	5 lbs. (2 kg)

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

ACCESSORIES FOR CELL LOGIC+ MODELS

## Pure-Vu™ Seals

Each Cell Logic+ Biosafety Cabinet with Scope-Ready Package comes with two clear blank membranes (one each 16-317-139 and one each 16-317-146), which may be cut with 0.5" diameter holes or punched with Pure-Vu Punch Kit 16-317-140 to fit your microscope's eyepieces. Convenient, pre-punched seals may be ordered separately. See instructions and drawings on page 14 for reference. Microscope examples are provided below. Please contact Labconco for ordering assistance for seals to fit microscopes not listed. Shipping weight 0.5 lb. (0.2 kg)

Reference	Catalog #	Nominal Eye Piece Height*	Fits Microscope:
not shown	16-317-139	Universal Pure-Vu. Blank.	
(A)	16-317-141	13.0" (33.0 cm)	
(B)	16-317-142	14.0" (35.6 cm)	Zeiss <sup>†</sup> Axiovert <sup>†</sup> 40
(C)	16-317-143	15.0" (38.1 cm)	Nikon <sup>†</sup> Eclipse <sup>†</sup> TS 100, Olympus <sup>†</sup> CKX31
(D)	16-317-144	16.0" (40.6 cm)	Leica <sup>†</sup> DM IL LED
(E)	16-317-145	17.0" (43.2 cm)	Leica <sup>†</sup> DM 6000 B
not shown	16-317-146	Universal Pure-Vu XL. Blank.	
(F)	16-317-147	16.0" (+/-2.0") (40.6 cm, +/- 5.1 cm)	Leica <sup>†</sup> MZ9, Nikon <sup>†</sup> SMZ 1500 Olympus <sup>†</sup> SZX 16

\* When selecting a seal for a Cell Logic+ Class II, Type B2 Biosafety Cabinet, add one inch to your eyepiece height and use the chart above.

<sup>†</sup> Zeiss<sup>®</sup> and Axiovert<sup>®</sup> are registered trademarks Carl-Zeiss-Stiftung DBA Carl Zeiss Corporation. Nikon<sup>®</sup> and Eclipse<sup>®</sup> are registered trademarks of Nikon, Inc. Olympus<sup>®</sup> is a registered trademark of Olympus Corporation. Leica<sup>®</sup> is a registered trademark of Leica Technology.

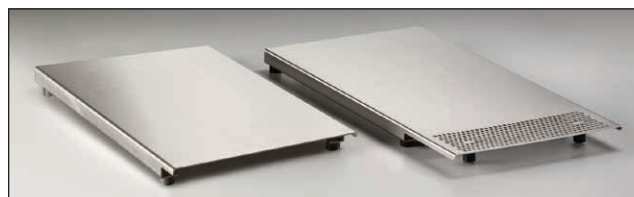
## 16-317-140 Pure-Vu™ Punch Kit

For punching accurate eyepiece holes in blank Pure-Vu seals. Includes 1/2" (12.7 mm) diameter hole punch, cutting pad and instructions. Shipping weight 1 lb. (0.5 kg)



## Aluminum Tube Racks

Blue anodized aluminum blocks hold tubes upright and promote conduction of heat or cold from the Temp-Zone™ area to help maintain sample temperature.



## Stand-Still™ Isolation Platforms

Required for supporting microscopes on Cell Logic Biosafety Cabinets with Scope-Ready™ package. Designed to promote proper airflow through the cabinet. Reduces vertical and horizontal vibrations threefold. Constructed of seamless, non-porous, autoclavable Type 304 stainless steel base with isolation pads. 1.5" high (0.4 cm). Select the platform that best fits your microscope's dimensions.

Catalog #	Description	Shipping Wt.
16-317-149	Stand-Still Platform, 12.0 x 18.75" (30.5 x 47.6 cm)	8 lbs. (4 kg)
16-317-148**	Stand-Still XL Platform, 14.0 x 22.75" (35.6 x 57.8 cm)	10 lbs. (5 kg)

\*\*Requires use of Pure-Vu XL Seal 16-317-146 or 16-317-147.



## Universal Tube Baths

Blue anodized aluminum blocks hold tubes of various sizes in an aluminum bead bath. Aluminum promotes the conduction of heat or cold from the Temp-Zone™ area to help maintain sample temperature. Thermally-conductive beads are sold separately.

Catalog #	Description	Shipping Wt.
16-317-136	Small Bath, 0.25 L capacity 2.0" w x 4.0" d x 3.0" h (50.8 x 101.6 x 76.2 mm)	2 lbs. (1 kg)
16-317-137	Large Bath, 0.5 L capacity 4.0" w x 4.0" d x 3.0" h (101.6 x 101.6 x 76.2 mm)	2 lbs. (1 kg)
16-317-138	Lab Armor <sup>††</sup> Beads, 0.75 liter	5 lbs. (2 kg)

Catalog #	Tube Size/Description	Tube Capacity	Dimensions (w x d x h)	Shipping Weight
16-317-124	0.5 ml microcentrifuge, 7.5 mm	18	1.5 x 6.0 x 1.3" (38 x 152 x 32 mm)	2 lbs. (1 kg)
16-317-125	0.5 ml microcentrifuge, 7.5 mm	96	6.0 x 8.0 x 1.5" (152 x 203 x 38 mm)	8 lbs. (3 kg)
16-317-126	1.5 ml microcentrifuge, 10.5 mm	18	2.0 x 6.0 x 1.5" (51 x 152 x 38 mm)	2 lbs. (1 kg)
16-317-127	1.5 ml microcentrifuge, 10.5 mm	96	8.0 x 8.0 x 1.5" (203 x 203 x 38 mm)	9 lbs. (4 kg)
16-317-128	1.5 ml flat bottom, 10 mm	12	1.5 x 4.0 x 1.3" (38 x 102 x 32 mm)	1 lb. (0.5 kg)
16-317-129	5 ml flat bottom, 12 mm	12	2.0 x 5.0 x 2.5" (51 x 127 x 64 mm)	3 lbs. (1 kg)
16-317-130	6 ml flat bottom, 13 mm	12	2.0 x 5.0 x 2.5" (51 x 127 x 64 mm)	3 lbs. (1 kg)
16-317-131	15 ml round, 16-17 mm	12	2.0 x 6.0 x 3.0" (51 x 152 x 76 mm)	4 lbs. (2 kg)
16-317-132	15 ml conical, 16-17 mm	12	2.0 x 6.0 x 4.0" (51 x 152 x 102 mm)	5 lbs. (2 kg)
16-317-133	50 ml round, 28 mm	4	1.5 x 6.0 x 4.0" (38 x 152 x 102 mm)	3 lbs. (1 kg)
16-317-134	50 ml conical, 28 mm	4	1.5 x 6.0 x 4.0" (38 x 152 x 102 mm)	3 lbs. (1 kg)
16-317-135	microtiter well plate, 3.4" x 5.0" (86 x 127 mm)	1	6.0 x 8.0 x 1.5" (152 x 203 x 38 mm)	5 lbs. (2 kg)
	1.5 ml microcentrifuge	12		
	0.5 ml microcentrifuge	12		



# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

FILTERS, DUCTWORK & BLOWERS

## Screen Prefilter Starter Kits

Each kit consists of a washable/reusable, metal screen-type prefilter and hardware including bracket for installing on the towel catch. **Installation is required.**

Catalog #	For use with	Shipping Wt.
34-061-00	3-Ft Biosafety Cabinet	4 lbs. (2 kg)
34-061-01	4-Ft Biosafety Cabinet	5 lbs. (2 kg)
34-061-02	5-Ft Biosafety Cabinet	6 lbs. (3 kg)
34-061-03	6-Ft Biosafety Cabinet	7 lbs. (3 kg)

## G4 Prefilter Starter Kits & Replacement Prefilters

Pleated disposable filter with Merv 8 rating. Kits include prefilter, hardware and bracket for installing on the towel catch. **Installation is required.**

Kit Catalog #	Repl. Prefilter Catalog #	For use with
34-060-00	34-062-00	3-Ft Biosafety Cabinet
34-060-01	34-062-01	4-Ft Biosafety Cabinet
34-060-02	34-062-02	5-Ft Biosafety Cabinet
34-060-03	34-062-03	6-Ft Biosafety Cabinet



## Ventus™ Canopy Connection

For thimble ducting Class II, Type A2 Biosafety Cabinets. Canopy provides an air gap to allow room air to enter the ductwork and mix with the filtered air

being exhausted to the outside. Inadequate exhaust activates the switch in less than one second and signals the LCD to display an alarm and the motor to increase to maximum speed for personal safety. Adds only 1.25" to the overall height of the cabinet. Powder-coated steel. Outlet is 10" (25.4 cm) ID. **Exhaust connection is required. Damper 16-305-24 and Remote Blower 16-090-11 or 16-090-12 are recommended (not included).** Contact Labconco for information on factory installation. Shipping weight 60 lbs. (27 kg)

Catalog #	For use with	Total Exhaust Volume (Safety Cabinet and Room Air)		
		8" Sash Opening	9" Sash Opening	10" Sash Opening
38-892-00	3-Ft Class II, Type A2	223-323	248-351	273-379
38-892-01	4-Ft Class II, Type A2	289-396	324-433	359-470
38-892-02	5-Ft Class II, Type A2	356-470	398-516	440-562
38-892-03	6-Ft Class II, Type A2	423-543	473-598	523-654



## 16-305-24 Air-Tight Damper

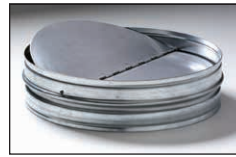
Mounts atop the Canopy Connection to adjust exhaust airflow and closes for decontamination procedures. Manually adjustable. Type 304 stainless steel. 10" (25.4 cm) high with 10" (25.4 cm) diameter OD inlet and outlet. Shipping weight 13 lbs. (6 kg)



## Remote Blowers

**Required for Type B2 cabinets and recommended for canopy-ducted Type A2 cabinets.** Phenolic-coated impeller and housing, powder-coated steel base and weather cover, belt-drive motor with adjustable sheave and self-adjusting gravity belt tightener. Contact Labconco for dimensions and blowers of other sizes and electrical configurations.

Catalog #	For use with	Electrical Requirements	HP	Shipping Weight
16-090-11	3-Ft & 4-Ft Type A2 Cabinets	115 volts, 60 Hz, 1 phase, 4.0 amps	1/6	92 lbs. (42 kg)
16-090-12	5-Ft & 6-Ft Type A2 Cabinets	115 volts, 60 Hz, 1 phase, 4.4 amps	1/4	92 lbs. (42 kg)
10-269-273	4-Ft & 6-Ft Type B2 Cabinets	230/460 volts, 60 Hz, 3 phase, 5.8/2.9 amps	2	100 lbs. (45 kg)



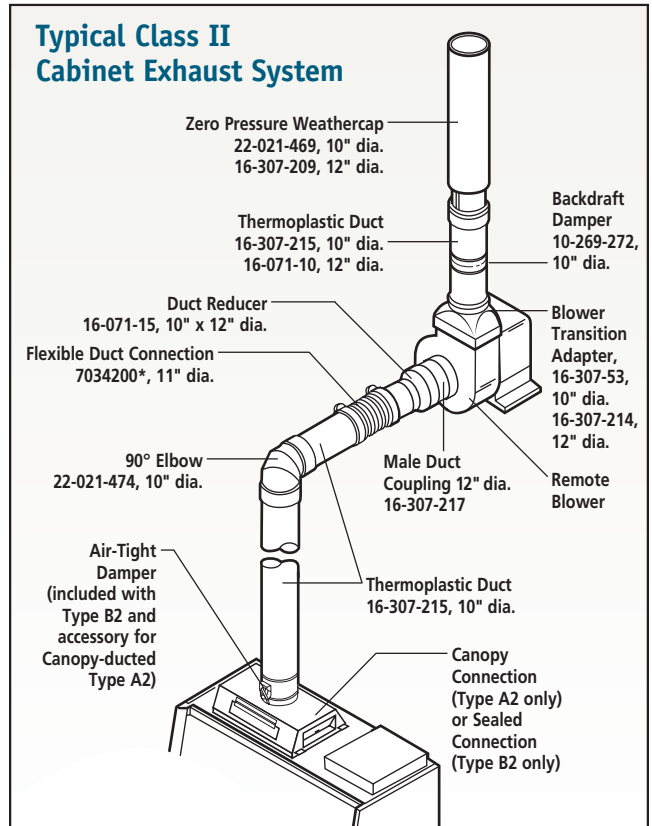
## 10-269-272 Backdraft Damper

Mounts in vertical duct run to prevent reverse pressurization of the exhaust system. 3.0" (8 cm) high with 10" (25.4 cm) diameter OD inlet and outlet. Shipping weight 5 lbs. (2 kg)

## Flexible Hose Kits

For connection between the Ventus™ and exhaust ductwork. 10" nominal diameter. Include spiral flexible tubing and clamps.

Catalog #	Hose Length	Shipping Wt.
7034200*	1' (30.5 cm)	2 lbs. (1 kg)
70-342-01	3' (91.4 cm)	5 lbs. (2 kg)
70-342-02	6' (182.9 cm)	10 lbs. (5 kg)
70-342-03	10' (304.8 cm)	20 lbs. (9 kg)



Contact Labconco at 800-821-5525 or 816-333-8811 for ordering information and technical assistance in selecting the right ductwork for your installation.

	16-090-11 & 16-090-12	10-269-273
<b>Inlet</b>	10.87" (27.6 cm) ID	12.25" (31.1 cm) OD
<b>Outlet</b>	5.5" d x 10.0" w (14 x 25 cm)	7.0" x 13.5" (18 x 34 cm)
<b>Blower Transition Adapter Required</b>	16-307-53	16-307-214

\*Contact Fisher Scientific for ordering information.

# PURIFIER® LOGIC®+ CLASS II BIOSAFETY CABINETS

TELESCOPING BASE STANDS (NON-WELDED)

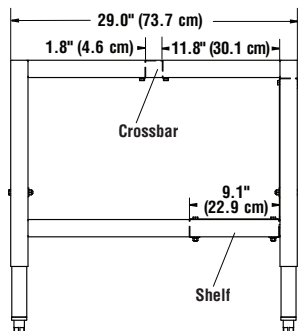
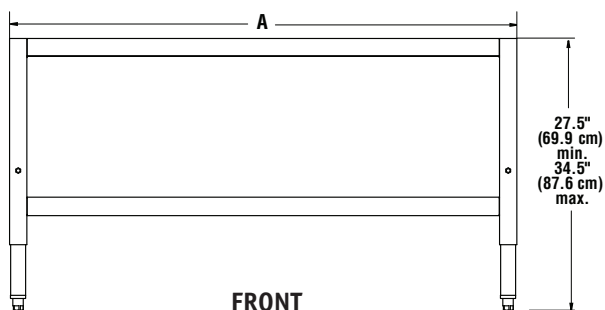
These stands have telescoping legs so that they may be adjusted to eight height positions.\*

## Standard Features

- NSF-approved. Meet NSF Standard for stability and construction.
- Support Purifier Logic Biosafety Cabinets.
- Support loads up to 1000 pounds.
- ADA-compliant.
- Durable 1.75" tubular, powder-coated steel frame with back panel support.
- Telescoping legs are adjustable to eight height positions at installation in 1" (2.5 cm) increments to provide a working height from 30" (76 cm) to 37" (94 cm).\*
- 9" (23 cm) shelf is included.
- Four fixed leveling feet are provided.
- Unassembled. May be easily assembled with simple hand tools.

\*Height selection and adjustment are required **before** the enclosure is installed on the stand.

Catalog #	Nominal Width	A
34-010-03	3-Ft	38.5" (97.8 cm)
34-010-04	4-Ft	50.5" (128.3 cm)
34-010-05	5-Ft	62.5" (158.8 cm)
34-010-06	6-Ft	74.5" (189.2 cm)



Telescoping Base Stand (non-welded) 34-010-04

## Telescoping Base Stands (non-welded)

Nominal Width	Catalog #	Shipping Weight
3-Ft	34-010-03	117 lbs. (53 kg)
4-Ft	34-010-04	125 lbs. (57 kg)
5-Ft	34-010-05	133 lbs. (60 kg)
6-Ft	34-010-06	149 lbs. (68 kg)

\*\* Enclosures supported by mobile Base Stands will require special modifications to incorporate flexible ducting, wiring and plumbing when applied.

Comply with height and knee clearance guidelines outlined in ADA Standards for Accessible Design.



### 10-269-356 Caster Kit

For converting Telescoping Base Stands with Fixed Feet to mobile stands. Kit includes four 5" diameter, non-marking polyurethane casters with toe locks. Load rating for each caster is 250 pounds. Casters have bearings for quiet operation. Casters replace the fixed feet included with Telescoping Base Stands. Casters add 11" (28 cm) to the overall depth of the base stand. **Installation is required.** Not for use with stands that support Purifier Logic Class II, Type B2 Safety Cabinets. Shipping weight 10 lbs. (5 kg)



### 10-269-302 Seismic Bracket Kit

For securing the Telescoping Base Stand to the floor in earthquake-prone regions. Includes four stainless steel seismic brackets and hardware for attachment to the stand. **Hardware to attach to the floor and installation are required.** Shipping weight 10 lbs. (5 kg)



### Laptop Computer Arms

Securely support a laptop computer within easy view of an operator at the Cell Logic+. Mount to front leg of front leg of Telescoping Base Stands or front of SoLo Base Stands (see back cover). Articulating arm raises, lowers and pivots to a steady position. Include powder-coated steel arm and support surface with cloth loop fasteners and mounting hardware. Not for use with other Hydraulic Lift Base Stands. **Installation is required.**

Catalog #	For use with	Shipping
10-269-258	Telescoping Base Stand	12 lbs. (5 kg)
10-269-257	Solo Hydraulic Lift Base Stand	12 lbs. (5 kg)

Contact Labconco for ordering information on welded telescoping base stands.

# PURIFIER<sup>®</sup> LOGIC<sup>+</sup> CLASS II BIOSAFETY CABINETS

## HYDRAULIC LIFT BASE STANDS

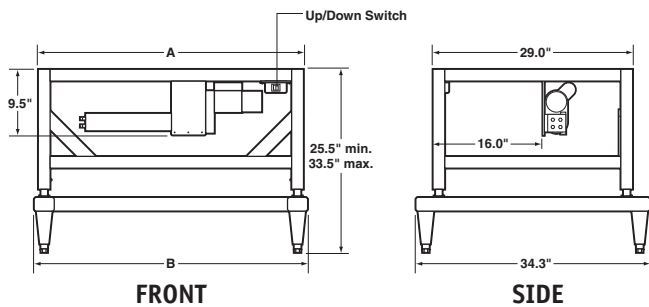
These stands have a built-in hydraulic lift so that height may be adjusted at any time. They allow the user to position the stand and the safety cabinet it supports to accommodate persons of different heights and wheelchair-bound users, to transport equipment through doorways, and for easier access to services.

### Standard Features

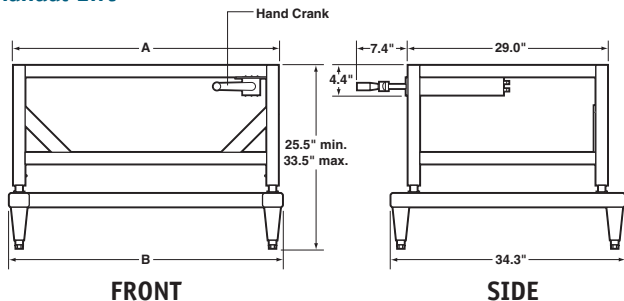
- Meet NSF Standard for stability and construction.
- Support Purifier Logic Biosafety Cabinets.
- Support loads up to 1000 pounds.
- ADA-compliant.
- Durable 1.75" (4.4 cm) tubular, epoxy-coated steel frame with rear crossbar supports. Sub-frame has 2.0" (5.1 cm) x 3.0" (7.6 cm) rectangular tubing.
- Height is infinitely adjustable from 25.5" (64.8 cm) to 33.5" (85.1 cm) high.
- Include four powder-coated, die-cast feet with levelers.
- Include front-accessible up/down switch (Electric Lift models)
- Include front-accessible hand crank. Turning the crank clockwise raises the stand; counterclockwise lowers it. The handle may be disengaged and folded under, out of the way, when not in use. (Manual Lift models)
- Shipped fully assembled.

Catalog Numbers	Nominal Width	A	B
09-040-131, 3780103*, 16-101-132	3-Ft	38.5"	39.7"
16-101-142, 3780104*, 16-101-133	4-Ft	50.5"	51.7"
16-318-07, 16-318-08, 16-318-06	5-Ft	62.5"	63.9"
09-040-133, 3780105*, 09-040-134	6-Ft	74.5"	75.7"

### Electric Lift



### Manual Lift



Hydraulic Lift Base Stand 16-101-133.

Nominal Width	Catalog #	Description	Shipping Weight
3-Ft	09-040-131	Electric. 115 volts, 60 Hz, 2.4 amps	170 lbs. (77 kg)
3-Ft	3780103 <sup>†</sup>	Electric. 230 volts, 50/60 Hz, 0.8 amp	170 lbs. (77 kg)
3-Ft	16-101-132	Manual	170 lbs. (77 kg)
4-Ft	16-101-142	Electric. 115 volts, 60 Hz, 2.4 amps	185 lbs. (84 kg)
4-Ft	3780104 <sup>†</sup>	Electric. 230 volts, 50/60 Hz, 0.8 amp	185 lbs. (84 kg)
4-Ft	16-101-133	Manual	185 lbs. (84 kg)
5-Ft	16-318-07	Electric. 115 volts, 60 Hz, 2.4 amps	215 lbs. (98 kg)
5-Ft	16-318-08 <sup>‡</sup>	Electric. 230 volts, 50/60 Hz, 0.8 amp	215 lbs. (98 kg)
5-Ft	16-318-06	Manual	215 lbs. (98 kg)
6-Ft	09-040-133	Electric. 115 volts, 60 Hz, 2.4 amps	225 lbs. (102 kg)
6-Ft	3780105 <sup>†</sup>	Electric. 230 volts, 50/60 Hz, 0.8 amp	225 lbs. (102 kg)
6-Ft	09-040-134	Manual	225 lbs. (102 kg)



### 16-101-153 Caster Kit

Includes four 5" (13 cm) diameter, non-marking polyurethane casters with toe locks and bearings.

Load rating for each caster is 250 pounds. Casters replace the fixed feet and add 11" (28 cm) to the overall depth of the base stand. **Installation is required.**\*\* Not for use with stands that support Type B2 Safety Cabinets. Shipping weight 10 lbs. (5 kg)



### 16-317-150 Support Shelf

Provide a work surface to support remote equipment. Powder-coated steel shelf mounts to left-side tubular frame of base stand. 12.0" w x 22.0" deep (26 x 30 cm). **Installation is required.** Shipping weight 23 lbs. (10 kg)

\*Contact Fisher Scientific for ordering information.

\*\*Enclosures supported by mobile Base Stands will require special modifications to incorporate flexible ducting, wiring and plumbing when applied.

<sup>†</sup> International electrical configuration

<sup>‡</sup> Complies with Americans with Disabilities Act Standard for height of controls and receptacles

# PURIFIER® LOGIC+ CLASS II BIOSAFETY CABINETS

## SOLO™ BASE STANDS

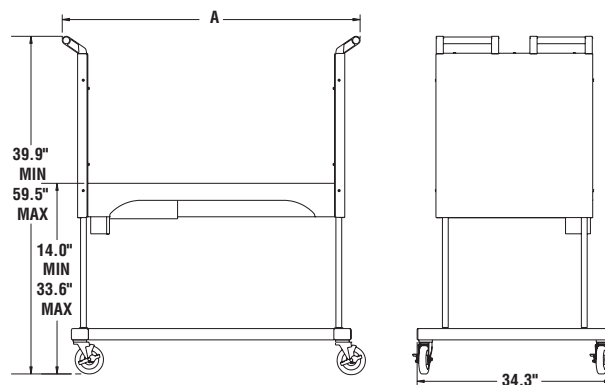
SoLo™ Hydraulic Lift Base Stands are specifically designed to support Purifier Logic+ and Cell Logic+ Class II, Type A2 Biosafety Cabinets. The hydraulic lift system permits the stand to be lowered allowing the safety cabinet to be rolled through standard doorways as low as 78" (198 cm) high. Casters provide mobility and lock in place for stability.

### Standard Features

- Meet NSF Standard for stability and construction.
- Support any Purifier Logic+ or Cell Logic+ Class II, Type A2 Safety Cabinet.
- ADA-compliant.
- Durable powder-coated steel construction.
- Support loads up to 1300 pounds (590 kg).
- Built-in hydraulic lift is operated by a remote control with buttons for upward and downward movement. Height adjustment positions the enclosure for persons of different statures, wheel-chair bound users, transport through doorways, and easier service access to upper components.
- Infinitely adjustable height provides work surface heights from 17.2" (43.7 cm) to 36.8" (93.5 cm) and overall enclosure height as low as 76.2" (193.5 cm).
- 5" (13 cm) diameter, toe-locking, non-marking polyurethane casters with bearings for quiet operation.
- Two handle bars on each side facilitate transport. Bars are durable PVC-coated steel tubes with polyamide brackets.
- Accommodate Laptop Computer Arm 10-269-257, sold separately. See page 18.
- Shipped fully assembled.



SoLo Hydraulic Lift Base Stand 16-101-177.



Nominal Width	Actual Width (A)	Catalog #	Electrical Requirements	Plug Type	Additional Load Capacity*	Shipping Weight
3-Ft.	53.5"	16-101-175	115 volts, 60 Hz, 2 amps	115 volts, 15 amps	700 lbs. (318 kg)	395 lbs. (179 kg)
3-Ft.	53.5"	16-101-176	230 volts, 50/60 Hz, 3 amps	North America, 230 volts	700 lbs. (318 kg)	395 lbs. (179 kg)
3-Ft.	53.5"	3780334*	230 volts, 50/60 Hz, 3 amps	Schuko, 230 volts	700 lbs. (318 kg)	395 lbs. (179 kg)
4-Ft.	65.5"	16-101-177	115 volts, 60 Hz, 2 amps	115 volts, 15 amps	600 lbs. (272 kg)	435 lbs. (197 kg)
4-Ft.	65.5"	16-101-178	230 volts, 50/60 Hz, 3 amps	North America, 230 volts	600 lbs. (272 kg)	435 lbs. (197 kg)
4-Ft.	65.5"	3780335*	230 volts, 50/60 Hz, 3 amps	Schuko, 230 volts	600 lbs. (272 kg)	435 lbs. (197 kg)
5-Ft.	77.5"	16-101-179	115 volts, 60 Hz, 2 amps	115 volts, 15 amps	500 lbs. (227 kg)	460 lbs. (209 kg)
5-Ft.	77.5"	16-101-180	230 volts, 50/60 Hz, 3 amps	North America, 230 volts	500 lbs. (227 kg)	460 lbs. (209 kg)
5-Ft.	77.5"	3780336*	230 volts, 50/60 Hz, 3 amps	Schuko, 230 volts	500 lbs. (227 kg)	460 lbs. (209 kg)
6-Ft.	89.5"	16-101-181	115 volts, 60 Hz, 2 amps	115 volts, 15 amps	350 lbs. (159 kg)	600 lbs. (272 kg)
6-Ft.	89.5"	16-101-182	230 volts, 50/60 Hz, 3 amps	North America, 230 volts	350 lbs. (159 kg)	600 lbs. (272 kg)
6-Ft.	89.5"	3780337*	230 volts, 50/60 Hz, 3 amps	Schuko, 230 volts	350 lbs. (159 kg)	600 lbs. (272 kg)

\*Contact Fisher Scientific at 800-766-7000 for ordering information on Schuko models as well as British (UK) and China/Australia electrical configurations (not shown).



© 2014 Thermo Fisher Scientific Inc. All rights reserved.  
Trademarks used are owned as indicated at [www.fishersci.com/trademarks](http://www.fishersci.com/trademarks).

**In the United States:**  
For customer service, call 1-800-766-7000  
To fax an order, use 1-800-926-1166  
To order online: [www.fishersci.com](http://www.fishersci.com)

**In Canada:**  
For customer service, call 1-800-234-7437  
To fax an order, use 1-800-463-2996  
To order online: [www.fishersci.ca](http://www.fishersci.ca)



A Thermo Fisher Scientific Brand



© 2015 by Labconco Corporation • Printed in the U.S.A. • Rev 050515  
Product design subject to change without notice.

BN0430131