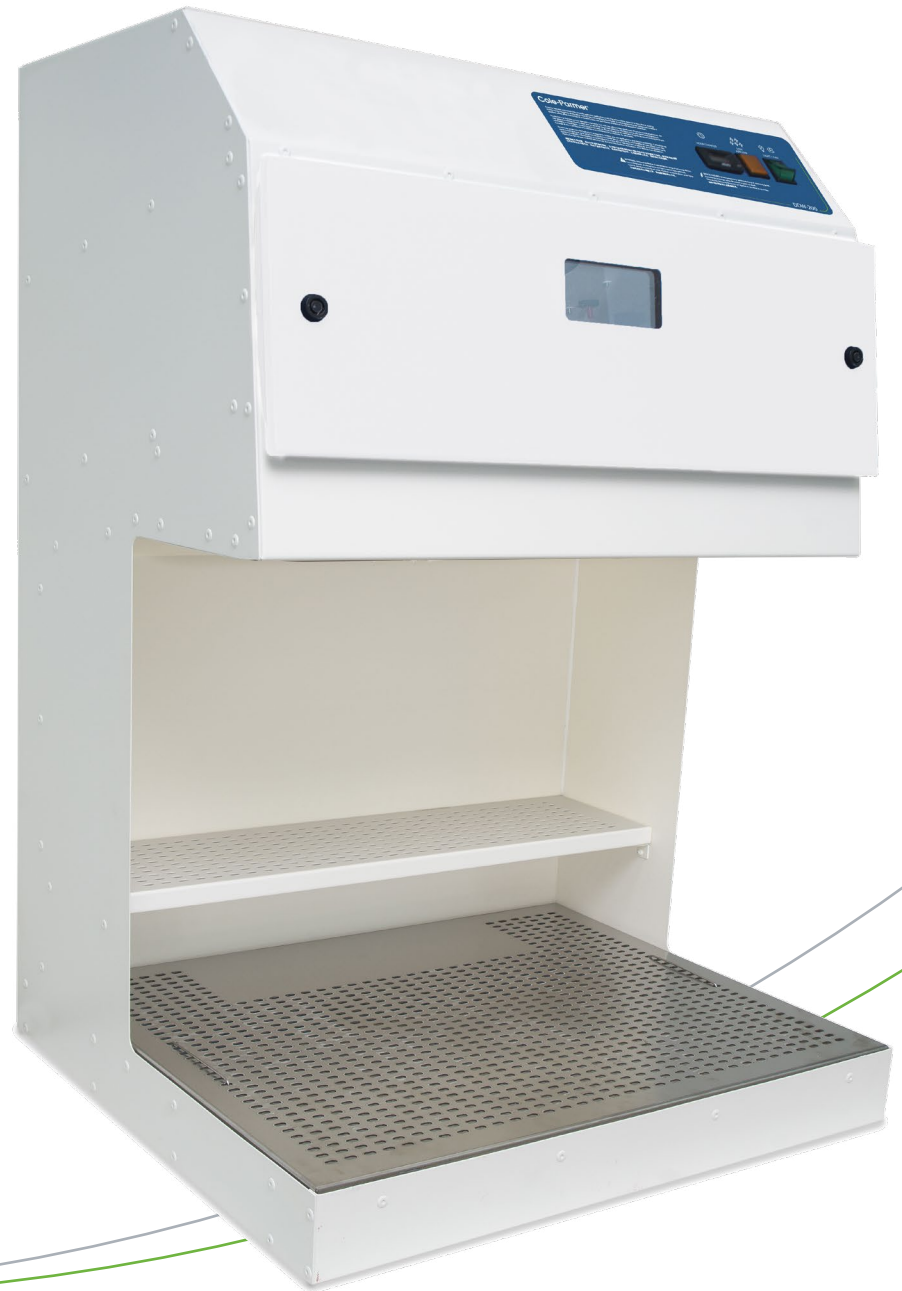


## Cole-Parmer® Ductless Downflow Workstations - DDW-200 Series

- Provides feature-rich operator safety & facilitates operative-intensive applications with unrestricted access

*Model DDW-200-24 offers a redesigned interior, featuring increased interior height, energy efficient Belong fan, LED lighting and a standard rear storage shelf, while delivering negative airflow to the work surface to capture and direct vapors to a carbon filter.*



# Cole-Parmer® Ductless Downflow Workstations - DDW-200 Series

## Introduction

Cole-Parmer® DDW-200 Series Downflow Workstations are high efficiency ductless fume hoods designed to protect the user and the environment from hazardous vapors generated on the work surface. Unrestricted front and side access facilitates applications requiring complex and intensive operator involvement, while downward airflow in the chamber protects the operator.

## Applications

Using innovative filtration technology, the DDW-200 Series Downflow Workstations create a safe work environment over the widest range of applications in the industry.

Chemical \ Dental \ Forensic \ Histology \ Industrial \ Microscopy \ Pharmaceutical \ Powder Fingerprinting \ Veterinary



## Key features

- Downward airflow protects operator from fume and particle hazards.
- Unrestricted front and side access to work area.
- Redesigned DDW-200 Series offers increased internal height.
- Easy to change high capacity filters.
- Improved filter clamping eliminates bypass leakage.
- Filter blockage alarm.

## Performance advantages

### The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted fume hoods for a broad range of applications.

**Environmental Benefits.** Cole-Parmer ductless fume hoods isolate and trap chemical vapors to prevent ecological impact through release into the environment.

**Versatile.** Each filtration system is selected for its specific application. Carbon filters are available in many configurations for use with vapors of organic solvents, acids and formaldehyde. HEPA/ULPA filters can be added for biological safety.

**Easy to Install.** The ductless fume hood is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

**Energy Efficient.** Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

**Cost Effective.** Facility ductwork, HVAC and construction costs are eliminated.

**Safe to Use.** Cabinet airflow and face velocity protect users from incidental exposures to fumes.

**Self-Testing.** Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



*Model DDW-200-24 offers a wide, high-visibility work area with easy access to the perforated negative pressure work surface.*

# Cole-Parmer® Ductless Downflow Workstations - DDW-200 Series



Model DDW-200, shown with optional mobile cart.

## Design Features

- A. Filter I.D. Window: A convenient, strategically placed front cover window shows the installed filter part number and installation date to encourage timely filter replacement.
- B. Control Panel: Electronic controls and displays include switches for the blower, filter blockage alarm.
- C. Filter Blockage Alarm: Continuously monitors filter loading and alerts user when service is needed.
- D. Steel Support Frame: The chemical resistant epoxy coated steel frame adds mechanical strength.
- E. Work Surface: Under the perforated stainless steel internal work surface is a polypropylene tray to retain any spillage.
- F. Rear Shelf: Epoxy-coated steel rear perforated shelf provides additional storage space for operator tools and analysis materials.
- G. Electrostatic Pre-Filter: The electrostatic pre-filter is accessible from inside the chamber and 91% effective down to 1-3 microns.
- H. Filter Door Key: Filter access keys prevent unauthorized removal or accidental exposure to dirty filters.
- I. Internal Manual Speed Controller: Authorized personnel set the centrifugal fan motor speed as desired.
- J. Internal LED Lighting: A vapor proof LED lamp illuminates the interior of the workstation.

## Additional Features

270 Degree Visibility: Unrestricted user access to the front and sides of the workstation also admits ambient illumination and provides an unobstructed view of its contents.

# Cole-Parmer® Ductless Downflow Workstations - DDW-200 Series

Each Cole-Parmer downflow workstation includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

## Performance

The Cole-Parmer filtration series offers a range of options for high performance protection.

- Filter configuration permits a customized combination of filter media for a broad range of chemical families and biological agents if required.

## Design

Professional quality Cole-Parmer downflow workstations comply with current technical and safety regulations.

The frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Cole-Parmer filter assembly is easy to access, easy to change, plus a unique filter clamping design eliminates bypass leakage outside the cabinet.

Wider units, comprising two or more workstations can be positioned side-by-side with junction connections option.

## Reliability

Internal systems are isolated from fumes, extending product life.

Energy-efficient ebm-papst brand centrifugal blowers promote long life and dependable performance of DDW-200 Series downflow workstations.



24

## Selection

DDW-200 Series products are available in 3 standard sizes, in metal or polypropylene construction, totaling 6 standard models.

## Control

The control panel includes an On/Off switch, Hour Counter and Filter Blockage alarm.



Control Panel

# Cole-Parmer® Ductless Downflow Workstations - DDW-200 Series

## Filtration

At the heart of the DDW-200 Series product line is innovative filtration technology. The filtration system consists of a pre-filter, main activated carbon or HEPA/ULPA filter and safety activated carbon or HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Cole-Parmer **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

## Filter Configuration

The DDW-200 permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The DDW-200 Series can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA can also be added.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

- P.** Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.
- C.** Activated Carbon Main Filter: A single, blended, or stacked filter configuration.
- H.** HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.995% at 0.3 microns and 99.9995% at 0.12 microns respectively.

FILTRATION SYSTEM, SUMMARY

Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical within Cleanroom
Primary Filter	C	H	H C	H C
Pre-Filter	P	P	P	P

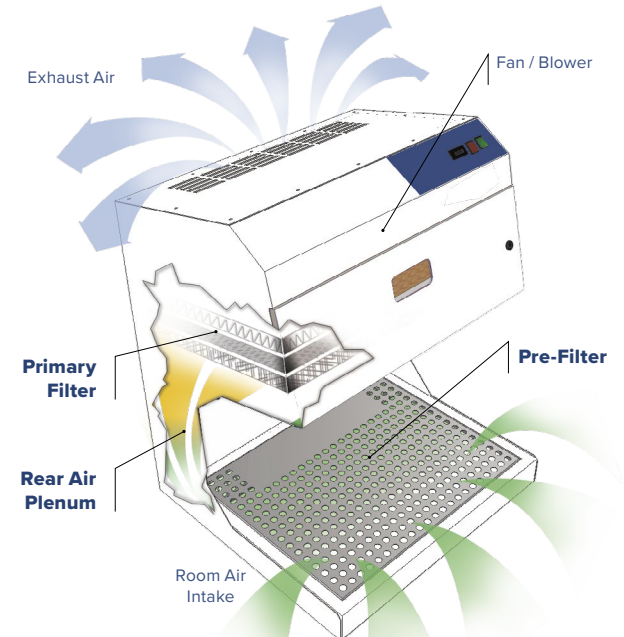
*The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.*

## Airflow

The DDW-200 Series Downflow Workstations maintain a constant face velocity of 80 fpm at the work surface in compliance with USA and international standards for safety and performance. Contaminated air is pulled through the filtration system where activated carbon adsorbs chemical vapors and/or particulates if HEPA/ULPA filters are used. Clean air is returned to the room.

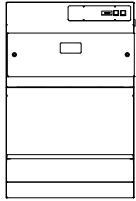
**The main filter** is easy to replace with no tools required. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

**⚠️ The pre-filter** may be changed from below the work surface while unit is running.

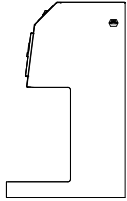


# Cole-Parmer® - DDW-200 Series Specifications

Front View



Side View



Model	Dimensions			Weight (LBS/KG)	
	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship

**Models**

<b>78902-60</b>	18.17" / 462 mm	24" × 22.81" × 37.55" / 610 × 580 × 954	40" × 40" × 48" / 1016 × 1016 × 1219 mm	120 / 55	160 / 73
<b>78902-61</b>					

## Product Specifications

**Filtration**

Face Velocity	80 fpm
---------------	--------

**Construction**

Finish	
Blower	<... Belong fan. ...>
Controls	
Electrical	
Monitoring	

**Efficiency**

Power Consumption <sup>1</sup>	49 watt
Lighting	
Noise, dBA <sup>2</sup>	< 60

<sup>1</sup>All measurements are with Filter Type ASTM-030.

<sup>2</sup>Measured 12" (30 cm) from the cabinet front and 15" (38 cm) above

## Filter Specifications

**Model**

Primary Filter*	(1)
Pre-Filter*	(1)

\* For specific examples refer to Multiplex filtration system summary on

# Cole-Parmer® Ductless Downflow Workstations Warranty, Standards & Compliance

Standards and Compliance	
Quality Management Systems	ISO 9001: 2015
Electrical Safety	UL-C-61010-1 CAN/CSA C22.2 61010-1-12 EN 61010-1:2010 CE Mark
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001: 2015 ENERGY STAR® Partner

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USA:  
+1.800.323.4340  
+1.847.549.7600

Canada: +1.800.363.5900  
China: +86.21.5109.9909  
France: +33 (0) 1486 37800  
Germany: +49 (0) 9377 92030

India: +1.800.266.1244  
Italy: +39 (0) 1313 89513  
UK: +44 (0) 1480 272279  
All other countries: +1.847.549.7600

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