



Thermo Scientific HERASAFE KS and KSP
Class II Biological Safety Cabinets

Setting new Standards for Safety
Containment · Comfort · Convenience

Thermo Scientific Herasafe KS and KSP Setting new standards for safety

Thermo Scientific biological safety cabinets are backed by our global reputation and commitment to provide the safest and most reliable biological safety cabinets available for every lab and customer application.

We deliver decades of market leadership and technology innovations with unmatched quality.

Our philosophy is grounded in compliance with the most stringent regulatory standards in the world that ensure your safety.

Thermo Scientific – moving science forward.

*Decades of Market
Leadership*

NSF

• **NSF/ANSI 49**

The entire Herasafe® KS line is independently tested and certified to NSF/ANSI 49 for Class II, Type A2 biological safety cabinets. NSF/ANSI 49 is recognized as the preeminent safety cabinet standard in North America, Latin America, and parts of Asia Pacific.

TÜV NORD
GS

• **EN 12469**

Our complete line of Herasafe KS and KSP products are independently tested and certified to EN 12469 standard for Class II biological safety cabinets by TÜV Nord, the leading testing agency in Europe.

TÜV NORD
GS

• **DIN 12980**

Our Herasafe KSP cabinets with single piece worksurface are independently tested and certified to the DIN 12980 standard "Safety Cabinets for Handling Cytotoxic Substances", requiring the highest personnel, product and environmental protection.



*Thermo Scientific biological
safety cabinet evolution*

1965

Launch of our first line of clean air products

1976

*NSF publishes first ANSI 49 standard for
Class II biological safety cabinets*

1978

*Launch of our first NSF certified biological
safety cabinet*

1985

*Introduction of the world's first TÜV certified
biological safety cabinet*

1993

*Launch of the world's first safety cabinet
with motorized front window and aerosol
tight window sealing*

1995

*Launch of our first LNE certified
biological safety cabinet*

1996

*Launch of the first DIN 12980 certified biological safety
cabinet designed for preparing and handling
hazardous drugs*

CONTAINMENT

Our experience brings innovation to you

Herasafe KS and KSP Class II biological safety cabinets deliver maximum safety, comfort and convenience. Featuring an advanced design for easy operation and maximum safety, our Herasafe KS and KSP cabinets may be used wherever protection is of paramount importance in safety levels 1 to 3, including research, pharmaceutical quality control labs, pharmacies, and clinics/hospitals.

- **Superior Personnel and Product Protection** with best-in-class air flow and filter technology
- **Exceptionally Comfortable** ergonomic design prevents user fatigue and promotes safe working habits
- **Maximized Energy Efficiency** for environmental protection and significant cost savings

CONTAINMENT
COMFORT
CONVENIENCE

ENT



Europe harmonizes EN 12469, "Performance Criteria for Microbiological Safety Cabinets"

Launch of the **world's first** safety cabinet with innovative brushless DC motor technology

Launch of the Thermo Scientific 1300 Series A2 into the North American market

Launch of the advanced Herasafe KS and KSP biological safety cabinets

2000

2002

2007

2009

Model KS 12 shown with optional electric stand, gas and service valves in side and rear walls.

Second to None in Containment

Unique technologies adapted for Thermo Scientific biological safety cabinets ensure safe air filtration, avoiding sample contamination or environmental hazards. Thermo Scientific Herasafe KS and KSP meet the latest worldwide standards for applications with stringent safety requirements.

KS

CONTA

Motorized front window offers comfortable working conditions at a 10 inch working aperture for the KS, and 8 inch for the KSP. The window height can be easily adjusted with only a finger tip.

SampleGuard aerosol-tight window sealing offers additional personnel and sample protection when the KS or KSP biological safety cabinet is set to Night-set-back mode.

Interior eye level display at the rear wall of KS and KSP models allows convenient line of sight monitoring of safety parameters, including:

- Performance Factor PER*
- downflow air velocity
- cabinet malfunctions
- time of day
- operating time of optional UV-C lights
- total operating hours
- timer for delayed start
- stop-watch function

***Performance factor PER** provides important information on the cabinets' current safety performance:

- 60-100, cabinet is safe
- 30-59, cabinet is safe but time for service
- 0-29, cabinet should not be used

Models are available in 4 sizes

KS/KSP 9	0.9 m (3 ft)
KS/KSP 12	1.2 m (4 ft)
KS/KSP 15	1.5 m (5 ft)
KS/KSP 18	1.8 m (6 ft)



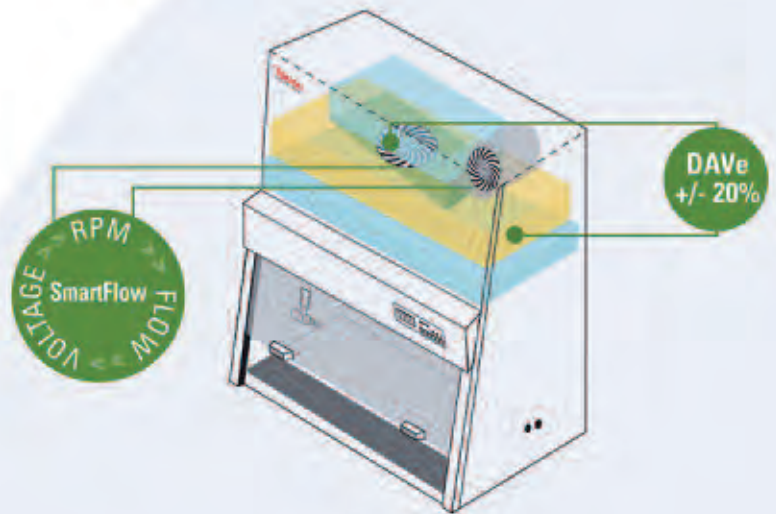
Model KS 12 (1.2m/4ft) shown with optional electric stand, cross-beam UV, gas and service valves in side and rear walls.



Herasafe KSP for handling cytotoxic substances

The Herasafe KSP is ideal for pharmacies preparing hazardous drugs or for pharmaceutical control labs. Robust construction and excellent ergonomic design are combined with significantly more effective air filtration, resulting in exceptional protection for personnel, product and environment

Exceptional design for superior safety



SmartFlow™

maintains a safe working environment.

Independent supply and exhaust blowers automate balancing of downflow and inflow/exhaust velocities to ensure continuous safe working conditions. Our smart DC motors monitor and control fan speed in real-time to maintain user protection at the access opening, even as the filters load or the line voltage fluctuates.

Digital Airflow Verification (DAVe) validates product and personnel protection.

Independent pressure sensors detect changes in pressure across the exhaust and downflow plenums. An alarm signals when a 20% change in inflow/exhaust or downflow occurs to alert the user that safety is compromised. Downflow velocity is displayed on the control panel for monitoring and recording.

Model KSP 12 (1.2 m/4 ft) shown with optional cross-beam UV, gas and service valves in side and rear walls.



The unique Herasafe KSP design provides easy filter changes within a safe negative pressure environment.

The Herasafe KSP triple filter system provides 100,000 times better air filtration. Interlocking H14 HEPA filters directly below the work area, protect inner air ducts, plenums and fans from contamination and provide a cumulative filtration efficiency of 99.9999975% to the downflow and exhaust airflow.

Unmatched ergonomic design

A comfortable cabinet design promotes user safety. The 10° sloped front allows an ergonomic, fatigue-free working posture. With its frameless front sash and side glass windows, the Herasafe KS and KSP offer an unobstructed view of the complete work area from all angles.

The Herasafe KS and KSP offer advanced flexibility for users with impairments in physical mobility, sight and hearing, meeting or exceeding the requirements of the American Disabilities Act (ADA).

The programmable electric adjustable stand allows more legroom under the cabinet with only the touch of a finger. A line of sight interior display eliminates the need for the user to adjust seating position to view safety alarms. The hand held controller ensures that programmability of the cabinet functions is always within easy reach of any user.*

Second to None in Comfort



Users may select either the electric adjustable height stand or manual adjustable height stand options. The optional manual adjustable stand (not shown) for Herasafe KS can be set from 30-37 inches working height in 2 inch increments.

The optional electric stand for Herasafe KS is adjustable with a programmable controller. You can change the height infinitely from a seated to a standing working position, and save settings for easy user set up.

The full working height of 37 inches provides a very comfortable standing working position, even for tall workers.

The electric stand with cable control memorizes stand height adjustment for up to 9 different positions.

*The Master Switch is also available as a redundant system for controlling the main working procedures of the cabinet

Bright, open chamber

The transparent side glass windows maximize light and visibility inside the cabinet, providing a bright and open working environment. The transparent side walls facilitate training of lab personnel.



Secure armrests enhance your comfort during extended work sessions and prevent carpal tunnel syndrome. Located just above the intake grill, they also ensure that the air vents are not inadvertently obstructed.

10 inch working aperture on the KS allows most comfortable handling of your samples.

30 inch interior height of the working chamber provides high flexibility for your work inside the cabinet.

ORT

Innovative design for convenient sample preparation

CONVENIENCE

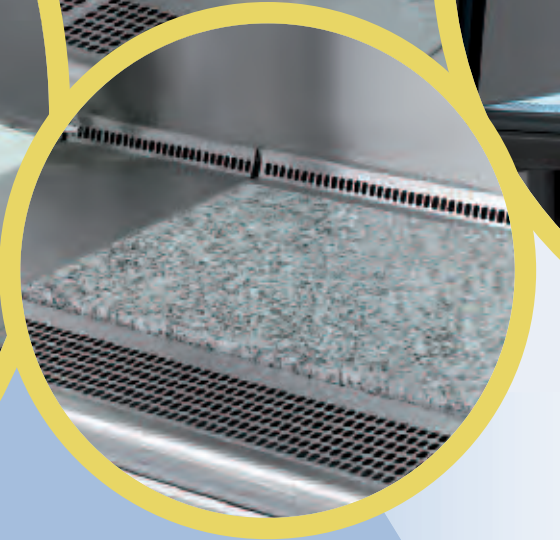
Thermo Scientific safety cabinets are the perfect choice for labs seeking the highest levels of work efficiency. Our cabinets offer extremely low vibration, making them perfect for use in sensitive weighing applications*. Additional options and accessories provide flexibility to configure the workspace to exactly match your application for enhanced work efficiency.

Second to None in Convenience

Customized work surfaces

Scratch-free, 316 stainless steel work surfaces are available as single or segmented modules and are easy to clean or autoclave. The indented work modules easily trap spilled liquids.

Minisink segment option holds liquids that can be drained into the pan beneath the worktray.



Optional vibration damped worksurface section with granite plate for maximized stability.

Even the standard worksurface is suitable for sensitive weighing applications.

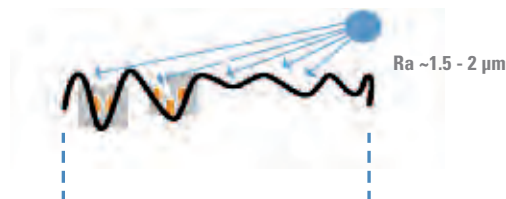
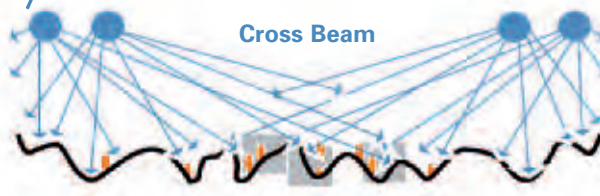
*The standard Herasafe KS and KSP configuration is proven to work with microbalances down to 10^{-5} readings, and depending upon installation environment, may work down to 10^{-7} readings. Optional vibration-dampened worksurfaces are available to provide additional stability.

LENIOR

Efficient disinfection

Powerful cross-beam UV disinfection system is installed in both side walls and illuminates the entire working area without causing shadows. This ensures thorough disinfection of the complete chamber for maximum sample protection.

Powerful UV disinfection



Shaded surface areas

High performance UV-C irradiators, built in vertically in the left and right sides, ensure highest disinfection efficiency.



Our *SmartClean™ Plus* hinged front window can be fully opened for easy and thorough cleaning of all interior surfaces. Rounded edges inside the cabinet facilitate effective disinfection and maximize contamination prevention.

The fully raised front window provides easy access to the work chamber for loading and unloading of large items and accessories.

Advanced technology for maximum energy efficiency

Thermo Scientific Herasafe KS and KSP feature advancements in brushless DC motor technology for dramatically improved energy efficiency, safety performance and reliability. We pioneered the use of brushless DC motors in our biological safety cabinets in 2002, and now use them across our full line.

Good for you, good for the environment

Superior DC motor technology

Due to its lower energy consumption DC motors offer significant environmental advantages over traditional AC motors. The operating life of a DC motor is nearly twice as long as an AC motor.

Minimized heat emittance to the lab

Lower heat output results in a more comfortable working environment and lower air conditioning costs.

Maximized cost savings

The Herasafe KS and KSP consume hundreds of kilowatts less energy than competing cabinets. Not only is our Herasafe KS and KSP the preferred cabinet for enhanced containment, comfort, and convenience – but it saves your lab money and reduces your lab's overall carbon footprint.



Night-set-back mode saves energy

while maintaining a clean work area. When the front sash is closed, our intelligent speed control automatically reduces blower speed to 30%, extending HEPA filter life and ensuring a sterile working environment even when the cabinet is not in use. This reduced flow mode uses less than 40W (4 foot cabinet) to operate, and is 75% more energy efficient than similar features on competing biological safety cabinets.

DC Motors

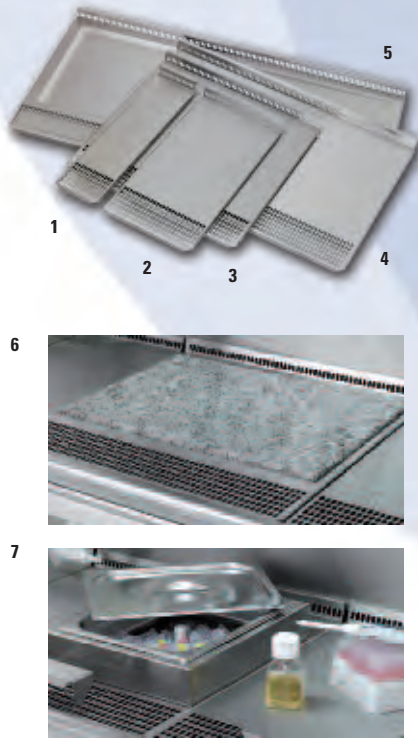
- reduce energy costs
- increase reliability
- reduce air conditioning costs
- optimize environmental protection

Thermo Scientific biological safety cabinets are available in the broadest selection of energy saving models for any application or budget. Visit www.thermo.com/bsc to learn more about the independent validation of our energy saving calculations.

An accommodating workspace is a safer workspace

The Herasafe KS is stocked in a standard configuration to simplify ease of ordering and shipment. The stocked version includes a one-piece indented worksurface, cross-beam UV and battery back up for motorized front window.

Worksurface options are available in a variety of sizes and configurations



Ordering Information for Stocked Models

Model	Size	Order number
KS 9	3 foot (0.9 m) cabinet	51027116
KS 12	4 foot (1.2 m) cabinet	51027117
KS 15	5 foot (1.5 m) cabinet	51027118
KS 18	6 foot (1.8 m) cabinet	51027120

Customized Models

Both the Herasafe KS and KSP are fully customizable to accommodate any unique work task*. Follow these simple steps to Customize your Herasafe KS or KSP:

- 1 Order the base model of the Herasafe KS or KSP.** The Herasafe KS base model includes a 300 mm segmented worksurface without other options. The Herasafe KSP base model includes a one-piece indented worksurface, cross-beam UV light, and manual adjustable height base stand.
- 2 Add the option for "KS/KSP without worksurface".** The Base model utilizes the 300 mm segmented worksurface. When this option is chosen, a price reduction will be honored that may be used toward the purchase of other worksurface modules.
- 3 Add other options.** Select worksurface options that add up to the internal width of the cabinet selected. Add in any other options or accessories as needed.

	Base model KS, order	Without worksurface, order	Worksurface modules must equal
KS 9 – 3 foot cabinet	51022485	51900651	900 mm
KS 12 – 4 foot cabinet	51022486	51900652	1200 mm
KS 15 – 5 foot cabinet	51022487	51900653	1500 mm
KS 18 – 6 foot cabinet	51022488	51900654	1800 mm

* Custom configured cabinets require slightly longer lead time than our stocked models. The Herasafe KSP is not stocked and base model differs slightly from Herasafe KS. Refer to specification table on page 15 and 16 for details.

Options and Accessories

Herasafe KS and Herasafe KSP Options and Accessories

Order No.	Description	Factory Installed Option	Accessory	Image
Worksurfaces				
51900651	KS/KSP 9 (3 ft) without worksurface (required for installation of non-standard worksurface options)	x		
51900652	KS/KSP 12 (4 ft) without worksurface (required for installation of non-standard worksurface options)	x		
51900653	KS/KSP 15 (5 ft) without worksurface (required for installation of non-standard worksurface options)	x		
51900654	KS/KSP 18 (6 ft) without worksurface (required for installation of non-standard worksurface options)	x		
50073666	Flat worksurface module 150 mm wide		x	1
50072685	Flat worksurface module 300 mm wide		x	2
50073667	Flat worksurface module 600 mm wide		x	3
50076398	Flat worksurface module 900 mm wide		x	4
50073668	Indented worksurface module 600 mm wide		x	
50073669	Indented worksurface module 900 mm wide		x	
50073670	Indented worksurface module 1200 mm wide		x	5
50073671	Indented worksurface module 1500 mm wide		x	
50078750	Indented worksurface module 1800 mm wide		x	
50073757	Vibration damped worksurface 300 mm width. Constructed in stainless steel with granite plate. For weighing equipment and microscopy (not for use with Herasafe KSP)		x	6
50076162	Vibration damped worksurface 600 mm width. Constructed in stainless steel with granite plate. For weighing and microscopy equipment (not for use with Herasafe KSP)		x	6
50084339	Vibration damped granite block 300 mm width. For weighing equipment and microscopy equipment for HERAsafe KSP only. (To be placed on top of standard worksurface)		x	6
50084350	Vibration damped granite block 600 mm width. For weighing and microscopy equipment for HERAsafe KSP only. (To be placed on top of standard worksurface)		x	6
50078875	Minisink tabletop insert 300 mm. Holds ~3 liters (Not for use with Herasafe KSP).		x	7

Options and Accessories

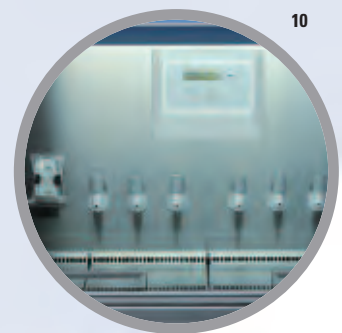
Herasafe KS and Herasafe KSP Options and Accessories				
Order No.	Description	Factory Installed Option	Accessory	Image
Side and Rear Walls				
51900648	Powder-coated rear wall instead of stainless steel	x		
51900644	Left side wall stainless steel plate instead of glass	x		
51900645	Right side wall stainless steel plate instead of glass	x		
51900646	Left side wall polycarbonate instead of glass	x		
51900647	Right side wall polycarbonate instead of glass	x		
51900786	Battery backup for motorized front window	x		
Exhaust transitions				
50078796	Thimble Duct Exhaust Transition for KS/KSP 9 (3 ft) cabinet. Connection diameter 8 inch.		x	9
50073770	Thimble Duct Exhaust Transition for KS/KSP 12 (4 ft) or KS/KSP 15 (5 ft) cabinet. Connection diameter 8 inch.		x	9
50078795	Thimble Duct Exhaust Transition for KS/KSP 18 (6 ft) cabinet. Connection diameter 8 inch.		x	9
UV irradiation				
51900642	Cross-beam UV Light Option in side walls with protective cover	x		8
Sidewall utilities				
1911308	Combustible gas tap for side wall		x	14
1911309	Noncombustible gas tap for side wall		x	14
1911310	Vacuum tap for side wall		x	14
1911311	Water tap for side wall		x	14
50059017	Hose connection to fit through side wall access port, fits 0.5 inch (10-13 mm) diameter tubing		x	11
50076408	Hose connection to fit through side wall access port, fits 0.1 inch (3 mm) inner diameter tubing		x	12
Universal Piping				
51900981	Rear wall 3 service tap connections, NPT 3/8, left side of cabinet	x		10
51900982	Rear wall 3 service tap connections, NPT 3/8, right side of cabinet	x		10
51900984	Rear wall 6 service tap connections, NPT 3/8, 3 on left and 3 on right side of cabinet (May not be used with KS/KSP 9 (3 ft) cabinet)	x		10
1911304	Combustible gas tap for rear wall		x	13
1911305	Noncombustible gas tap for rear wall		x	13
1911306	Vacuum tap for rear wall		x	13
1911307	Water tap for rear wall		x	13



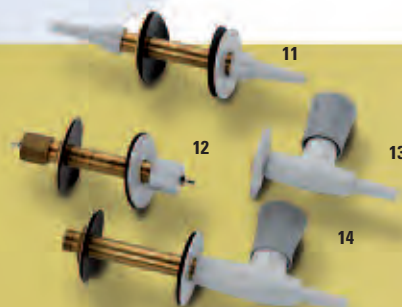
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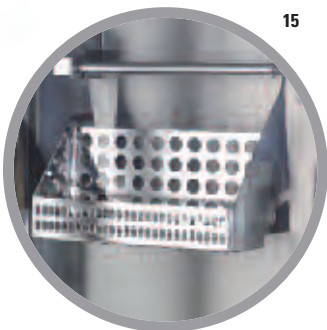
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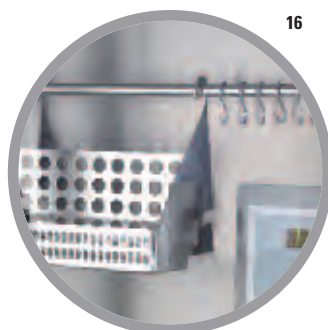
Options and Accessories

Herasafe KS and Herasafe KSP Options and Accessories

Order No.	Description	Factory installed options	Accessory	Image
Filters				
51900658	Additional exhaust Carbon filter for all models	x		17
50078783	Additional exhaust Carbon filter for KS/KSP 9 (3 ft) cabinet, field installed		x	
50073773	Additional exhaust Carbon filter for KS/KSP 12 (4 ft) and KS/KSP 15 (5 ft) cabinet, field installed		x	
50078784	Additional exhaust Carbon filter for KS/KSP 18 (6 ft) cabinet, field installed		x	
51900781	Activated carbon filter that fits under KSP 9 (3 ft) cabinet worksurface	x		18
51900782	Activated carbon filter that fits under KSP 12 (4 ft) cabinet worksurface	x		18
51900783	Activated carbon filter that fits under KSP 15 (5 ft) cabinet worksurface	x		18
51900784	Activated carbon filter that fits under KSP 18 (6 ft) cabinet worksurface	x		18
User convenience equipment				
50078900	Utility basket for use with hanging bars 50073943 or 50073944		x	15
50078901	2 Utility baskets including additional hanging bar		x	like 15
50073943	Hanging bar with set of 6 hooks for KS/KSP 9 (3 ft) cabinet only		x	like 16
1911312	Hanging bar with set of 12 hooks for KS/KSP 12, 15, 18 (3, 4, 5 ft) cabinets		x	like 16
50073663	Replacement stainless steel armrest (set of 2)		x	19
191127	Adjustable foot rest. For ergonomic foot and posture support.		x	22
Stand options for Herasafe KS (Manual adjustable floorstand is automatically included with Herasafe KSP; must be ordered separately for Herasafe KS)				
50116443	Manual adjustable floor stand (3 ft), 750 (30") to 950 mm (37") working height in 50 mm (2") increments		x	like 20
50109312	Manual adjustable floor stand (4 ft), 750 (30") to 950 mm (37") working height in 50 mm (2") increments		x	20
50116444	Manual adjustable floor stand (5 ft), 750 (30") to 950 mm (37") working height in 50 mm (2") increments		x	like 20
50109313	Manual adjustable floor stand (6 ft), 750 (30") to 950 mm (37") working height in 50 mm (2") increments		x	like 20
50119096	Electric adjustable floor stand (3 ft) 120V with cable remote control, 750 (30") to 950 mm (37") working height		x	like 21
50119126	Electric adjustable floor stand (4 ft) 120V with cable remote control, 750 (30") to 950 mm (37") working height		x	21
50119127	Electric adjustable floor stand (5 ft) 120V with cable remote control, 750 (30") to 950 mm (37") working height		x	like 21
50119128	Electric adjustable floor stand (6 ft) 120V with cable remote control, 750 (30") to 950 mm (37") working height		x	like 21
50109977	Castor set (may not be used with electric stands; no height adjustment possible)		x	



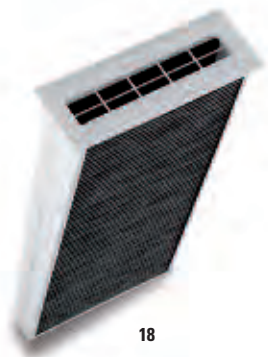
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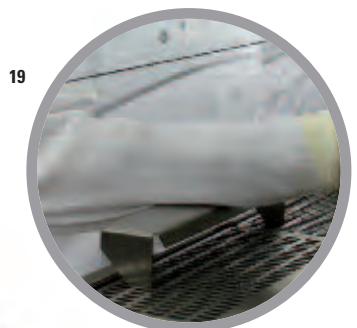


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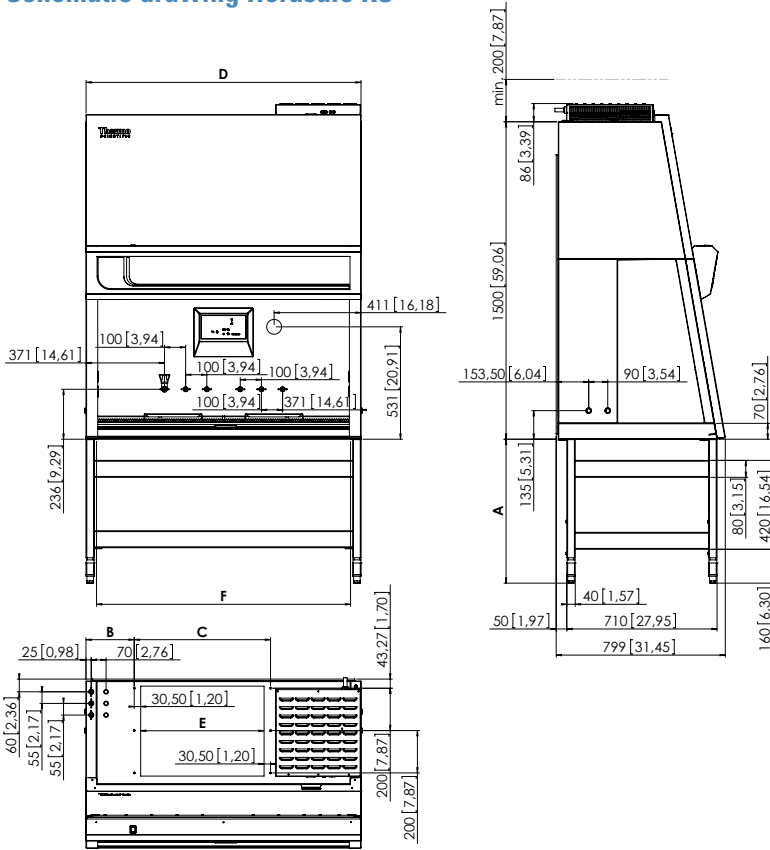


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Schematic drawing Herasafe KS

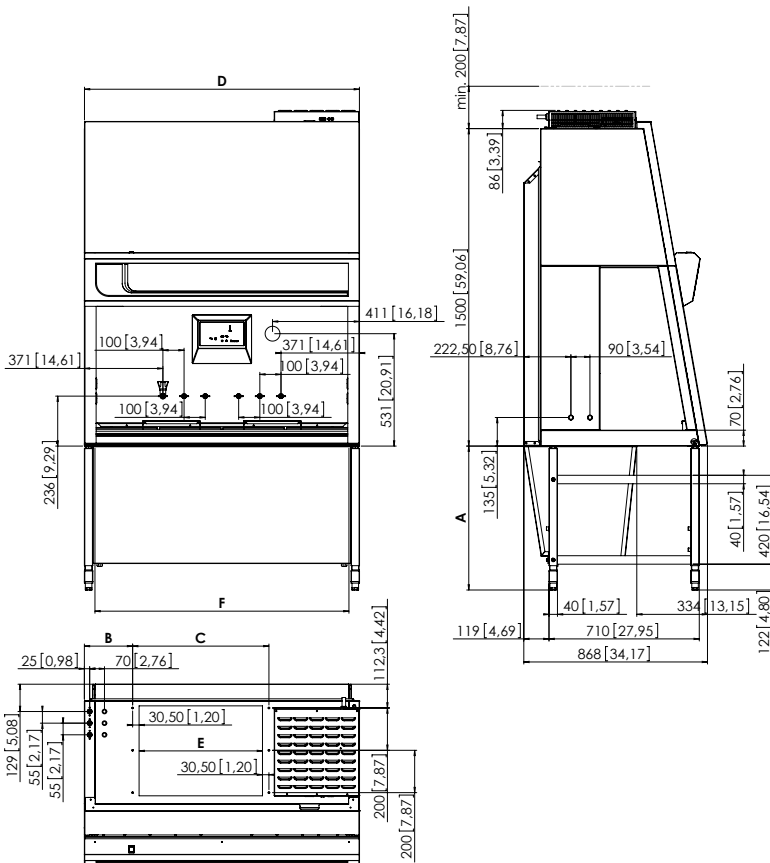


		A	
seated work position minimum	mm	680	
seated work position minimum	inch	26,77	
standing work position maximum	mm	880	
standing work position maximum	inch	34,65	

		B	C	D	E	F
KS 9	mm	81	491	1000	430	900
	inch	3,19	19,33	39,37	16,93	35,43
KS 12	mm	228	644	1300	583	1200
	inch	8,97	25,35	51,18	22,95	47,24
KS 15	mm	478	644	1600	583	1500
	inch	18,82	25,35	62,99	22,95	59,05
KS 18	mm	474,5	951	1900	890	1800
	inch	18,68	37,44	74,80	35,04	70,86

Attention:
When using service valves in the side walls, you must plan for wider footprint (dimension D).

Schematic drawing Herasafe KSP



		A	
seated work position minimum	mm	680	
seated work position minimum	inch	26,77	
standing work position maximum	mm	880	
standing work position maximum	inch	34,65	

		B	C	D	E	F
KSP 9	mm	81	491	1000	430	900
	inch	3,19	19,33	39,37	16,93	35,43
KSP 12	mm	228	644	1300	583	1200
	inch	8,97	25,35	51,18	22,95	47,24
KSP 15	mm	478	644	1600	583	1500
	inch	18,82	25,35	62,99	22,95	59,05
KSP 18	mm	474,5	951	1900	890	1800
	inch	18,68	37,44	74,80	35,04	70,86

Attention:
When using service valves in the side walls, you must plan for wider footprint (dimension D).



Thermo Scientific Herasafe KS, Class II, Type A2 Biological Safety Cabinet

Model	Unit	KS 9	KS 12	KS 15	KS 18
Stocked configuration*		51027116	51027117	51027118	51027120
Base Model (no options, segmented worktray standard)		51022485	51022486	51022487	51022488
Description: Biological Safety Cabinet		Class II, Type A2	Class II, Type A2	Class II, Type A2	Class II, Type A2
		0.9 m (3 ft)	1.2 m (4 ft)	1.5 m (5 ft)	1.8 m (6 ft)
Dimensions					
Exterior Dimensions H/W/D	mm	1586/1000/800	1586/1300/800	1586/1600/800	1586/1900/800
Exterior Dimensions H/W/D	inches	62,2/39,4/31,5	62,2/51,2/31,5	62,2/63/31,5	62,2/74,8/31,5
Usable Work Area/Interior H/W/D	mm	780/900/465	780/1200/465	780/1500/465	780/1800/465
Usable Work Area/Interior H/W/D	inches	30,7/35,4/18,3	30,7/47,2/18,3	30,7/59,1/18,3	30,7/70,9/18,3
Worksurface Height	mm/inches	750-950/30-37	750-950/30-37	750-950/30-37	750-950/30-37
Working Height of front window	mm/inches	250/10	250/10	250/10	250/10
Maximum Opening Height of front window	mm/inches	773/30,4	773/30,4	773/30,4	773/30,4
Shipping Dimensions H/W/D ¹⁾	mm	1760/1110/925	1760/1410/925	1760/1710/925	1760/2010/925
Shipping Dimensions H/W/D ¹⁾	inches	69,3/43,7/36,4	69,3/55,5/36,4	69,3/67,3/36,4	69,3/79,1/36,4
Weight					
Net Weight	kg/lbs	170/375	200/441	230/507	280/617
Shipping Weight ¹⁾	kg/lbs	190/419	225/496	260/573	315/694
Max. load capacity of one-piece worksurface	kg/lbs	50/110	50/110	50/110	50/110
Max. load capacity of single segmented worksurface per 30 cm segments ⁴⁾	kg/lbs (Total load)	25/55 (50/110)	25/55 (50/110)	25/55 (75/165)	25/55 (75/165)
Ventilation system					
Exhaust/inflow air volume	CFM	255	341	427	513
Exhaust volume thimble connection	CFM	322	444	556	668
Heat emission / at 25 °C room temperature					
Operation mode (non-vented)	W/BTU	210/717	275/938	350/1194	435/1484
Reduced flow mode (non-vented)	W/BTU/hr	40/136	40/136	70/239	70/239
Filter Specification					
Supply/exhaust air filter		H14 HEPA EN 1822, 99.995% at the most penetrating particle size (MPPS)			
Ergonomics					
Noise pressure level ²⁾	dB (A)	65	65	65	65
Lighting power	lx/fc	>800/74	>850/79	>1250/116	>1300/121
Electrical data					
Voltage	V	120	120	120	120
Frequency	Hz	50/60	50/60	50/60	50/60
Energy Consumption, Nominal set point ³⁾	W	210	275	350	435
Energy Consumption, reduced flow mode	W	40	40	70	70
Protection Class		I/IP 20	I/IP 20	I/IP 20	I/IP 20
Features					
Receptacles		One duplex on each side wall. The receptacles have a load capacity of up to 5 A and are protected with T 5 A fuses. When all receptacles are in use simultaneously they must not exceed the maximum total load capacity of 5 A			
Access Ports		4 standard (2 on each side wall)			
Service Valves		Up to 4 may be installed through access ports (2 on each side wall) Up to 6 more may be factory installed on rear wall (optional)			

¹⁾ Export packaging dimensions and weight on request

²⁾ Tested according to NSF/ANSI 49

³⁾ Clean filters, fans operating at nominal set point, interior lighting activated

⁴⁾ The total load on overall working area must not exceed the indicated weight

* Standard configuration includes cabinet, factory installed cross-beam UV, one-piece indented worktray and battery back-up for front window. Stands are sold separately.



Thermo Scientific Herasafe KSP, Class II Biological Safety Cabinet

Model	Unit	KSP 9	KSP 12	KSP 15	KSP 18
Base Model (one-piece indented work-surface, UV, manual adjustable base stand)		51023651	51023652	51023653	51023654
Description: Biological Safety Cabinet		Class II, acc. to EN12469 and DIN 12980 with triple filter system	Class II, acc. to EN12469 and DIN 12980 with triple filter system	Class II, acc. to EN12469 and DIN 12980 with triple filter system	Class II, acc. to EN12469 and DIN 12980 with triple filter system
Dimensions					
Exterior Dimensions H/W/D	mm	1586/1000/870	1586/1300/870	1586/1600/870	1586/1900/870
Exterior Dimensions H/W/D	inches	62,2/39,4/34,3	62,2/51,2/34,3	62,2/63/34,3	62,2/74,8/34,3
Usable Work Area/Interior H/W/D	mm	780/900/465	780/1200/465	780/1500/465	780/1800/465
Usable Work Area/Interior H/W/D	inches	30,7/35,4/18,3	30,7/47,2/18,3	30,7/59,1/18,3	30,7/70,9/18,3
Worksurface Height (adjustable)	mm/inches	750-950/30-37	750-950/30-37	750-950/30-37	750-950/30-37
Working Height of front window	mm/inches	200/8	200/8	200/8	200/8
Maximum Opening Height of front window	mm/inches	773/30,4	773/30,4	773/30,4	773/30,4
Shipping Dimensions H/W/D ¹⁾	mm	1760/1110/925	1760/1410/925	1760/1710/925	1760/2010/925
Shipping Dimensions H/W/D ¹⁾	inches	69,3/43,7/36,4	69,3/55,5/36,4	69,3/67,3/36,4	69,3/79,1/36,4
Weight					
Net Weight	kg/lbs	200/441	240/529	280/617	330/728
Shipping Weight ¹⁾	kg/lbs	220/485	265/584	310/683	365/805
Max. load capacity of one-piece worksurface	kg/lbs	50/110	50/110	50/110	50/110
Max. load capacity of single segmented worksurface per 30 cm segments ⁴⁾	kg/lbs (Total load)	25/55 (50/110)	25/55 (50/110)	25/55 (75/165)	25/55 (75/165)
Ventilation system					
Exhaust/inflow air volume	m ³ /h/CFM	288/170	386/227	483/284	580/341
Exhaust volume, thimble connection	m ³ /h/CFM	375/221	501/295	628/369	754/444
Heat emission at 25 °C room temperature					
Operation mode (non-vented)	W/BTU/hr	200/682	240/819	305/1041	420/1433
Reduced flow mode (non-vented)	W/BTU	40/136	40/136	70/239	70/239
Filter Specification					
Primary/Supply/exhaust air filters		H14 HEPA EN 1822, 99.995% at the most penetrating particle size			
Ergonomics					
Noise pressure level ²⁾	dB (A)	56	56	58	58
Lighting power	lx/fc	>800/74	>850/79	>1250/116	>1300/121
Electrical data					
Voltage	V	120	120	120	120
Frequency	Hz	50/60	50/60	50/60	50/60
Energy Consumption, operating set point ³⁾	W	200	240	305	420
Energy Consumption, reduced flow mode	W	40	40	70	70
Protection Class		I/IP 20	I/IP 20	I/IP 20	I/IP 20
Features					
Receptacles		One duplex on each side wall. The receptacles have a load capacity of up to 5 A and are protected with T 5 A fuses. When all receptacles are in use simultaneously they must not exceed the maximum total load capacity of 5 A			
Access Ports		4 standard (2 on each side wall)			
Service Valves		Up to 4 may be installed through access ports (2 on each side wall) Up to 6 more may be factory installed on rear wall (optional, pre-plumbed to top of cabinet)			

¹⁾ Export packaging dimensions and weight on request

²⁾ Tested according to EN 12469

³⁾ Clean filters, fans operating at nominal set point, interior lighting activated

⁴⁾ The total load on overall working area must not exceed the indicated weight

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