



**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



• **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.



• **DIN 12980**

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



• **NSF/ANSI 49**

The Herasafe® KS line is also compliant with NSF/ANSI 49 for Class II biological safety cabinets. NSF/ANSI 49 is recognized as the preeminent safety cabinet standard in North America, Latin America, and parts of Asia Pacific.



*Thermo Scientific biological safety cabinet evolution*

1965

*We launch our first line of clean air products*

1976

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

1978

*First NSF-certified Thermo Scientific biological safety cabinet is launched*

1985

*We introduce the world's first TÜV certified biological safety cabinet*

1993

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

1995

*We launch our first LNE certified safety cabinet*

1996

*We launch the first DIN 12980 certified safety cabinet designed for preparing and handling cytotoxic drugs*

# CONTAINM

# 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"  
We launch the **world's first** safety cabinet with innovative brushless DC motor technology

2000

We launch the advanced Thermo Scientific Herasafe KS and KSP biological safety cabinets

2008



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

# Best-in-class containment

The most important factor in selecting a biological safety cabinet is the security of particulate containment. Unique technologies adapted for Thermo Scientific safety cabinets ensure safe air filtration, avoiding sample contamination or environmental hazards.

# CONTAINMENT

*Second to None  
in Containment*

**H14 HEPA filters** guarantee maximum filtration efficiency of 99.995% at the most penetrating particle size (MPPS) for KS and KSP models. The supply and exhaust HEPA filters ensure superior contamination prevention while maximizing filter life.

**Motorized front window** offers comfortable working conditions at a 250 mm working aperture for the KS, and 200 mm for the KSP. The window height can be easily adjusted with only a finger tip.

**Aerosol-tight window sealing** offers additional personnel and sample protection when the KS or KSP biological safety cabinet is set to stand-by mode.

# KS



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

# Exceptional design for personnel, product and environmental protection

The Herasafe KSP meets the latest European and worldwide standards for applications with stringent safety requirements. Robust construction and excellent ergonomic design are combined with significantly more effective air filtration, resulting in exceptional protection for personnel, product and environment.

## 100,000 times better air filtration

An additional segmented H14 HEPA filter system is used directly below the work area of the Herasafe KSP, protecting inner air ducts, plenums and fans from contamination and providing a cumulative filtration efficiency of 99.9999975% to the downflow and exhaust airflow.

**The Herasafe KSP is ideal for pharmacies preparing cytotoxic drugs and in pharmaceutical control labs.**

**SmartFlow™** uses digital technology for KS and KSP models to maintain constant airflow during normal filter loading or temporary airflow obstruction from foreign objects.

**Pressure sensor monitoring** ensures safe airflow across the entire work surface of KS and KSP cabinets. Independent alarm systems immediately alerts to any airflow obstruction.

**Interior eye level display** at the rear wall of KS and KSP models allows convenient "at a glance" 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

**Interlocking H14 HEPA filters** under the KSP work surface provide easy and safe HEPA filter changes in the work area under safe negative pressure.

Model KSP 12 shown with, optional gas and service valves in side and rear walls.





# 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.

## **Adjustable stand options for convenient working positions**

Available with electric or manual adjustment, our stands are equipped with levelling feet to securely position the cabinet.

## **Hand-held control for ease of use**

Our hand-held control is designed for use inside the cabinet and eliminates the need to change your gloves before changing cabinet settings.

## *Second to None in Comfort*



The optional manual adjustable stand for Herasafe KS can be set from 750 - 950 mm working height in 50 mm increments. The optional foot rest allows a convenient seated working position.



The optional electric stand for Herasafe KS is adjustable with an easy to use controller. You can change the height infinitely from a seated to a standing working position.



The full working height of 950 mm provides a very comfortable standing working position, even for tall workers.

The electric stand with cable remote control provides comfortable height adjustment.



**Bright, open chamber**

The transparent side glass windows maximize light and visibility inside the cabinet, providing a bright and open working environment.



Secure and comfortable 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.

250 mm working aperture on the KS allows most comfortable handling of your samples.

780 mm interior height of the working chamber provides high flexibility for your work inside the cabinet.

ORT

# Innovative design for convenient sample preparation

Thermo Scientific safety cabinets are the perfect choice for labs seeking the highest levels of work efficiency. Our standard 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, high-quality 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.



**Optional vibration damped work surface section with granite plate for maximized stability.**

**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.



# CONVENIENCE

## Easy cleaning

The 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.

## Efficient disinfection

Powerful cross beam UV-irradiation in both side walls (optional) illuminates the entire working area without causing shadows. This ensures thorough disinfection of the complete chamber for maximum sample protection.



Schematic of Unique Cross Beam UV-irradiation.

Optional UV-irradiator for chamber disinfection can be mounted on the optional hanging bar.

The fully opened front window allows convenient posture for thorough cleaning and disinfection.

The large working aperture provides full access to the work chamber for loading and unloading of large items and accessories like our optional UV light on stand.



# Advanced technology for maximum energy efficiency

## Superior DC motor technology

We introduced the first innovative DC motor technology to the biological safety cabinet market. DC motors offer significant environmental advantages over traditional AC motors.

## Minimized heat emittance to the lab

DC motors are designed to use energy in an efficient manner, not only consuming less energy to operate the unit, but emitting less heat back into the lab. Lower heat output also means a more comfortable working environment and lower air conditioning costs.

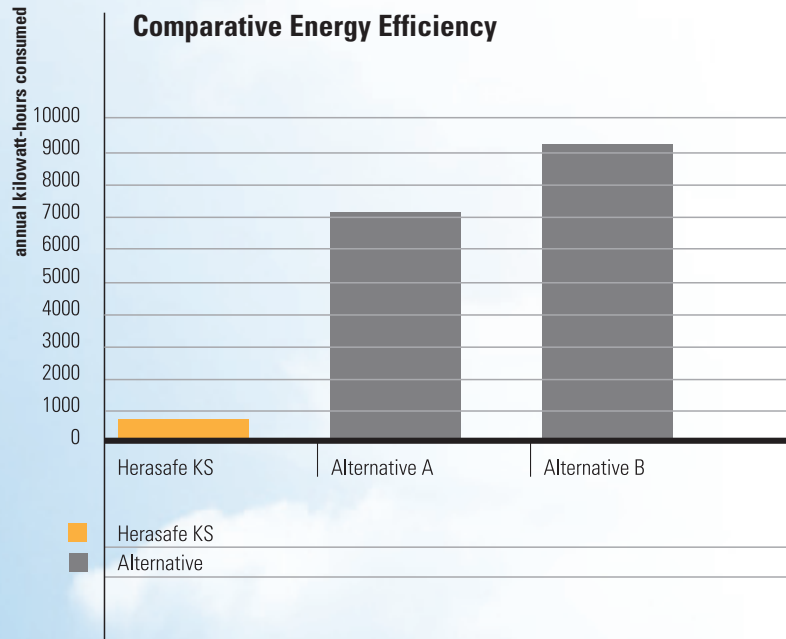
## Maximized cost savings

Combined with the Night-Set-Back mode (reduced blower speed when the window is closed), 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.

*Good for you, good for the environment*

## Less energy consumption delivers

- reduced energy costs
- lower heat output
- reduced air conditioning costs
- comfortable working environment
- environmental protection

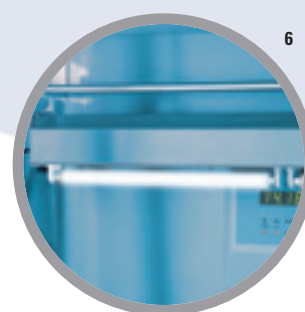
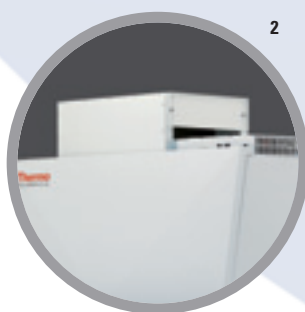


	Herasafe	Alternative A	Alternative B
Operational Energy (W)	210	810	1120
Reduced Flow (W)	40	710	1020
Operational Hours per year (5 days x 8 hours x 52 weeks)	2080	2080	2080
Non-operational hours	6656	6656	6656
Operational kW-hours	437	1685	2330
Reduced Flow kW-hours	266	4726	6789
Total Annual kW-hrs	703	6411	9119

\* Data provided above is based on internal performance testing and has been independently verified in customer applications.

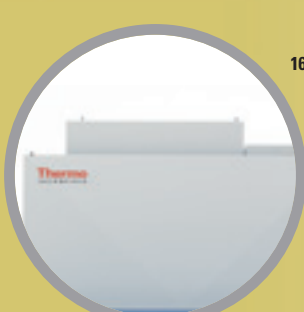
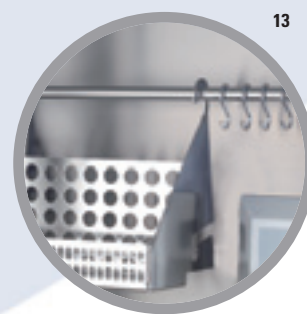
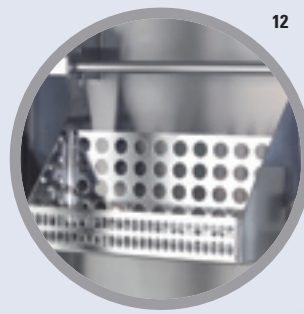
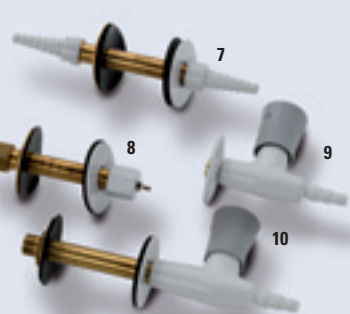
## Options and Accessories

Herasafe KS and Herasafe KSP Options and Accessories				
Order No.	Description	Factory Installed Option	Accessory	Image
<b>Country versions with local sockets and plugs</b>				
51900300	Country version Switzerland	x		
51900303	Country version UK	x		
51900306	Country version Italy	x		
51900448	Country version France	x		
51900449	Country version Australia	x		
51900481	Country version Denmark	x		
51900771	Country version B/CZ/SK/PL	x		
51900900	Country version China	x		
<b>Chamber equipment</b>				
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		
51900651	KS/KSP 9 without worksurface (required for installation of non-standard worksurface options)	x		
51900652	KS/KSP 12 without worksurface (required for installation of non-standard worksurface options)	x		
51900653	KS/KSP 15 without worksurface (required for installation of non-standard worksurface options)	x		
51900654	KS/KSP 18 without worksurface (required for installation of non-standard worksurface options)	x		
51900786	Battery backup for motorized front window	x		
<b>Exhaust transitions</b>				
50078791	Direct Duct Exhaust Transition for 0.9 m cabinet. Connection diameter 200 mm.		x	1
50073771	Direct Duct Exhaust Transition for 1.2 and 1.5 m cabinet. Connection diameter 200 mm.		x	1
50078790	Direct Duct Exhaust Transition for 1.8 m cabinet. Connection diameter 200 mm.		x	1
50078796	Thimble Duct Exhaust Transition for 0.9 m cabinet. Connection diameter 200 mm.		x	2
50073770	Thimble Duct Exhaust Transition for 1.2 and 1.5 m cabinet. Connection diameter 200 mm.		x	2
50078795	Thimble Duct Exhaust Transition for 1.8 m cabinet. Connection diameter 200 mm.		x	2
50078873	Exhaust cooling device for 1.2 m and 1.5 m cabinets		x	3
50078874	Exhaust cooling device for 1.8 m cabinet		x	3
<b>UV irradiation</b>				
51900642	Cross-beam UV Light Option in side walls (comes with protective cover)	x		4
50048696	Mobile UV Light on stand (must also order UV-socket 51900643 or 50109996)		x	5
50073962	Mobile UV Light, hanging from rear wall (may not be used with 0.9 m cabinet) (must also order UV-socket 51900643 or 50109996 and hanging bar 50073944)		x	6
51900643	UV socket for mobile UV light option	x		
50109996	UV socket for mobile UV light option, for retro-fit in existing cabinet		x	



## Options and Accessories

Herasafe KS and Herasafe KSP Options and Accessories					
Order No.	Description	Factory Installed	Option	Accessory	Image
<b>Utilities</b>					
50046015	Combustible gas tap for side wall, yellow (we recommend to also order 50074905 solenoid valve)			x	10
50045959	Noncombustible gas tap for side wall, black			x	10
50044678	Vacuum tap for side wall, grey			x	10
50044679	Water tap for side wall, green			x	10
50059017	Hose connection to fit through side wall access port, fits 10-13 mm diameter tubing			x	7
50066668	Hose connection to fit through side wall access port, fits 3 mm diameter tubing			x	8
51900649	Rear wall 3 service taps, left side of cabinet	x			11
51900711	Rear wall 3 service taps, right side of cabinet	x			11
51900722	Rear wall 6 service taps total, 3 on left and 3 on right side of cabinet (may not be used with 0.9m cabinet)	x			11
50068235	Combustible gas tap for rear wall, yellow (we recommend to also order 50074905 solenoid valve)			x	9
50068234	Noncombustible gas tap for rear wall, black			x	9
50068232	Vacuum tap for rear wall, grey			x	9
50068233	Water tap for rear wall, green			x	9
51900650	Magnehelic pressure gauge	x			
50074905	Solenoid valve for combustible gas tap			x	
51900641	Drain pan valve (standard on 120V NSF version)	x			
<b>Filter</b>					
51900657	Additional exhaust HEPA filter for all models, factory installed	x			16
51900658	Additional exhaust Carbon filter for all models, factory installed	x			16
50078857	Additional exhaust HEPA filter for 0.9 m cabinet, field installed			x	14
50073772	Additional exhaust HEPA filter for 1.2 and 1.5 m cabinet, field installed			x	14
50078856	Additional exhaust HEPA filter for 1.8 m cabinet, field installed			x	14
50078783	Additional exhaust Carbon filter for 0.9 m cabinet, field installed			x	
50073773	Additional exhaust Carbon filter for 1.2 and 1.5 m cabinet, field installed			x	
50078784	Additional exhaust Carbon filter for 1.8 m cabinet, field installed			x	
50076846	Grid pre-filter for 0.9 and 1.2 m (Herasafe KS only)			x	
50076921	Grid pre-filter for 1.5 and 1.8 m (Herasafe KS only)			x	
51900781	Activated carbon filter that fits under 0.9 m cabinet worksurface (KSP models only)	x			15
51900782	Activated carbon filter that fits under 1.2 m cabinet worksurface (KSP models only)	x			15
51900783	Activated carbon filter that fits under 1.5 m cabinet worksurface (KSP models only)	x			15
51900784	Activated carbon filter that fits under 1.8 m cabinet worksurface (KSP models only)	x			15
<b>User convenience equipment</b>					
50073943	Hanging bar with set of 6 hooks (for 0.9 m cabinet only)			x	13
50073944	Hanging bar with set of 12 hooks (may not be used with 0.9 m cabinet)			x	like 13
50078900	Utility basket for use with hanging bars 50073943 or 50073944			x	12
50078901	2 Utility baskets including additional hanging bar			x	like 12
50073663	Replacement stainless steel armrest (set of 2)			x	17





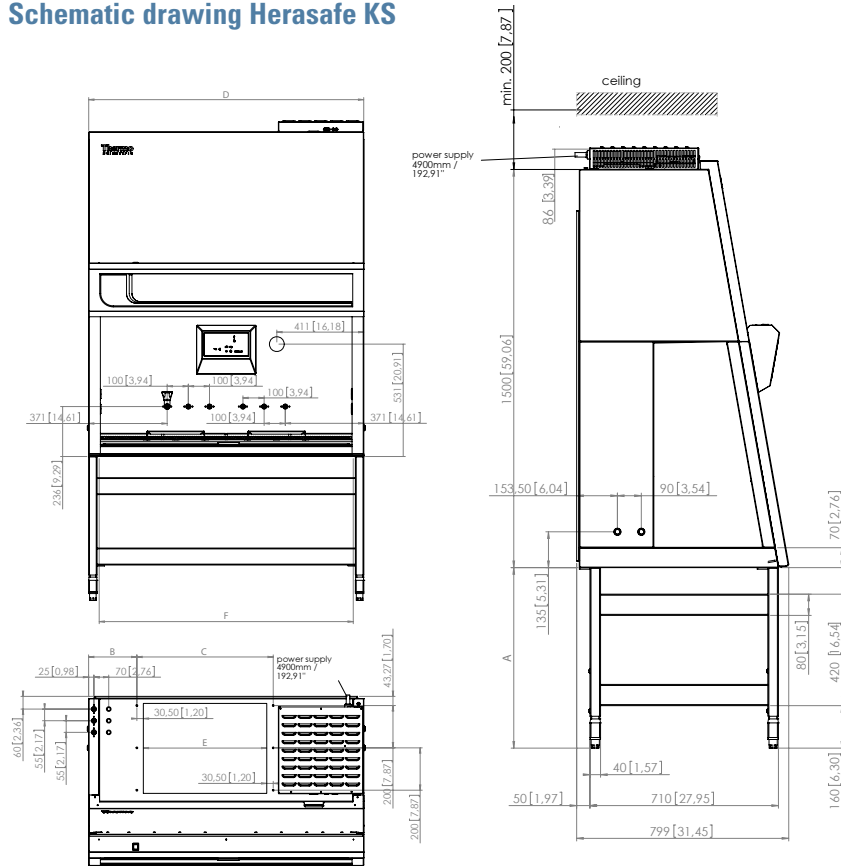
## Options and Accessories

### Herasafe KS and Herasafe KSP Options and Accessories

Order No.	Description	Factory Installed Option	Accessory	Image
<b>Work surfaces</b>				
50073666	One-piece flat worksurface module 150 mm wide		x	18
50072685	One-piece flat worksurface module 300 mm wide		x	19
50073667	One-piece flat worksurface module 600 mm wide		x	20
50076398	One-piece flat worksurface module 900 mm wide		x	21
50073668	One-piece indented worksurface module 600 mm wide		x	like 22
50073669	One-piece indented worksurface module 900 mm wide		x	like 22
50073670	One-piece indented worksurface module 1200 mm wide		x	22
50073671	One-piece indented worksurface module 1500 mm wide		x	like 22
50078750	One-piece indented worksurface module 1800 mm wide		x	like 22
50073757	Vibration damped work surface 300 mm width. Constructed in stainless steel with granite plate. For weighing equipment and microscopy (not for use with Herasafe KSP)		x	24
50076162	Vibration damped work surface 600 mm width. Constructed in stainless steel with granite plate. For weighing and microscopy equipment (not for use with Herasafe KSP)		x	like 24
50084339	Vibration damped granite block 300 mm width. For weighing equipment and microscopy equipment for triple filter cabinets only. (To be placed on top of standard worksurface)		x	like 24
50084350	Vibration damped granite block 600 mm width. For weighing and microscopy equipment for triple filter units only. (To be placed on top of standard worksurface)		x	like 24
50078875	Mini sink tabletop insert 300 mm, requires drain pan valve 51900641 to also be fitted. Holds ~3 liters.		x	23
<b>Stand options for Herasafe KS (Manual adjustable floorstand is included with Herasafe KSP)</b>				
50116441	Fixed height floor stand 0.9 m, 750 mm working height		x	25
50109309	Fixed height floor stand 1.2 m, 750 mm working height		x	25
50116442	Fixed height floor stand 1.5 m, 750 mm working height		x	25
50109311	Fixed height floor stand 1.8 m, 750 mm working height		x	25
50116443	Manual adjustable floor stand 0.9 m, 750 to 950 mm working height in 50 mm increments		x	like 25
50109312	Manual adjustable floor stand 1.2 m, 750 to 950 mm working height in 50 mm increments		x	like 25
50116444	Manual adjustable floor stand 1.5 m, 750 to 950 mm working height in 50 mm increments		x	like 25
50109313	Manual adjustable floor stand 1.8 m, 750 to 950 mm working height in 50 mm increments		x	like 25
50117449	Electric adjustable floor stand 0.9 m with cable remote control, 750 to 950 mm working height		x	27
50109314	Electric adjustable floor stand 1.2 m with cable remote control, 750 to 950 mm working height		x	27
50117450	Electric adjustable floor stand 1.5 m with cable remote control, 750 to 950 mm working height		x	27
50109325	Electric adjustable floor stand 1.8 m with cable remote control, 750 to 950 mm working height		x	27
50051982	Footrest bar 0.9 m (not to be used with electric stand)		x	26
50051983	Footrest bar 1.2 m (not to be used with electric stand)		x	26
50051984	Footrest bar 1.5 m (not to be used with electric stand)		x	26
50051985	Footrest bar 1.8 m (not to be used with electric stand)		x	26
50109977	Castors for fixed height floor stands only (not to be used with electric stands)		x	



Schematic drawing Herasafe KS

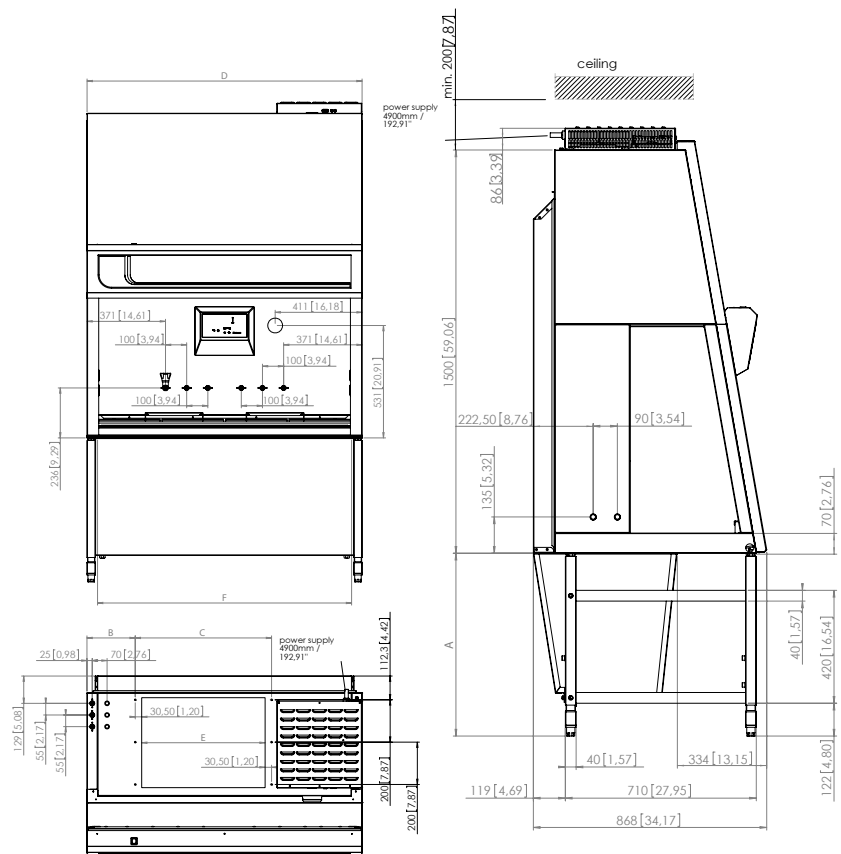


		A
seated work position minimum	mm	680
seated work position minimum	inch	26,77
standing work position maximum	mm	880
standing work position maximum	inch	34,65

		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:  
With additional gas valves in the side walls, you must plan with more width (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
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KSP 18	mm	474,5	951	1900	890	1800
	inch	18,68	37,44	74,80	35,04	70,86

Attention:  
With additional gas valves in the side walls, you must plan with more width (dimension D).

# SPECIFICATIONS AND ORDERING INFORMATION

## Thermo Scientific Herasafe KS, Class II Biological Safety Cabinet



Model	Unit	KS 9	KS 12	KS 15	KS 18
<b>Order number EN models (230V)</b>		51022481	51022482	51022483	51022484
<b>Order number NSF models (120V)</b>		51023770	51023772	51023774	51023776
<b>Description: Biological Safety Cabinet</b>		Class II (NSF: Type A2)	Class II (NSF: Type A2)	Class II (NSF: Type A2)	Class II (NSF: Type A2)
		0.9 m (3 ft.)	1.2 m (4 ft.)	1.5 m (5 ft.)	1.8 m (6 ft.)
<b>Dimensions</b>					
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
Work Surface Height (with adjustable stand)	mm/inches	750-950/30-37	750-950/30-37	750-950/30-37	750-950/30-37
Work Surface Height (with fixed stand)	mm/inches	750/30	750/30	750/30	750/30
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 <sup>1)</sup>	mm	1760/1110/925	1760/1410/925	1760/1710/925	1760/2010/925
Shipping Dimensions H/W/D <sup>1)</sup>	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
<b>Weight</b>					
Net Weight	kg/lbs	170/375	200/441	230/507	280/617
Shipping Weight <sup>1)</sup>	kg/lbs	190/419	225/496	260/573	315/694
Max. load capacity of one-piece work surface	kg/lbs	50/110	50/110	50/110	50/110
Max. load capacity of single segmented worksurface per 30 cm segments <sup>4)</sup>	kg/lbs (Total load)	25/55 (50/110)	25/55 (50/110)	25/55 (75/165)	25/55 (75/165)
<b>Ventilation system</b>					
Exhaust/inflow air volume EN models	m <sup>3</sup> /h	366	490	613	737
Exhaust/inflow air volume NSF models	CFM	255	341	427	513
Exhaust volume, thimble connection EN models	m <sup>3</sup> /h	476	637	797	958
Exhaust volume thimble connection NSF models	CFM	322	444	556	668
<b>Heat emission at 25 °C room temperature</b>					
Operation mode (non-vented)	W/BTU/hr	170/580	210/717	275/938	350/1194
Reduced flow mode (non-vented)	W/BTU/hr	40/136	40/136	70/239	70/239
<b>Filter Specification</b>					
Supply/exhaust air filter		H14 HEPA EN 1822, 99.995% at the most penetrating particle size (MPPS)			
<b>Ergonomics</b>					
Noise pressure level EN/NSF <sup>2)</sup>	dB (A)	58/65	58/65	60/65	60/65
Lighting power	lx/ftc	>800/74	>850/79	>1250/116	>1300/121
<b>Electrical data</b>					
Voltage EN/NSF	V	230/120	230/120	230/120	230/120
Frequency	Hz	50/60	50/60	50/60	50/60
Energy Consumption, EN models, Nominal set point <sup>3)</sup>	W	170	210	275	350
Energy Consumption, NSF models, Nominal set point <sup>3)</sup>	W	210	275	350	435
Energy Consumption, reduced flow mode	W	40	40	70	70
Max Current Consumption	A	7,3	7,3	8,7	8,7
Protection Class		I/IP 20	I/IP 20	I/IP 20	I/IP 20
<b>Features</b>					
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)				

<sup>1)</sup> export packaging dimensions and weight on request

<sup>2)</sup> tested according to EN 12469 and NSF/ANSI 49

<sup>3)</sup> Clean filters, fans operating at nominal set point, interior lighting activated

<sup>4)</sup> The total load on overall working area must not exceed the indicated weight

# SPECIFICATIONS AND ORDERING INFORMATION



## Thermo Scientific Herasafe KSP, Class II Biological Safety Cabinet

Model	Unit	KSP 9	KSP 12	KSP 15	KSP 18
<b>Order No.</b>		51023606	51023607	51023608	51023609
<b>Description: Biological Safety Cabinet</b>		Class II, with triple filter system	Class II, with triple filter system	Class II, with triple filter system	Class II, with triple filter system
<b>Dimensions</b>					
Exterior Dimensions H/W/D	mm	1580/1000/870	1580/1300/870	1580/1600/870	1580/1900/870
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
Work Surface 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 <sup>1)</sup>	mm	1760/1110/925	1760/1410/925	1760/1710/925	1760/2010/925
Shipping Dimensions H/W/D <sup>1)</sup>	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
<b>Weight</b>					
Net Weight	kg/lbs	200/441	240/529	280/617	330/728
Shipping Weight <sup>1)</sup>	kg/lbs	220/485	265/584	310/683	365/805
Max. load capacity of one-piece work surface	kg/lbs	50/110	50/110	50/110	50/110
Max. load capacity of single segmented worksurface per 30 cm segments <sup>4)</sup>	kg/lbs (Total load)	25/55 (50/110)	25/55 (50/110)	25/55 (75/165)	25/55 (75/165)
<b>Ventilation system</b>					
Exhaust/inflow air volume	m <sup>3</sup> /h/CFM	288/170	386/227	483/284	580/341
Exhaust volume, thimble connection	m <sup>3</sup> /h/CFM	375/221	501/295	628/369	754/444
<b>Heat emission at 25 °C room temperature</b>					
Operation mode (non-vented)	W/BTU/hr	200/682	240/819	305/1041	420/1433
Reduced flow mode (non-vented)	W/BTU/hr	40/136	40/136	70/239	70/239
<b>Filter Specification</b>					
Primary/Supply/exhaust air filters		H14 HEPA EN 1822, 99.995% at the most penetrating particle size			
<b>Ergonomics</b>					
Noise pressure level <sup>2)</sup>	dB (A)	56	56	58	58
Lighting power	lx/fc	>800/74	>850/79	>1250/116	>1300/121
<b>Electrical data</b>					
Voltage	V	230	230	230	230
Frequency	Hz	50/60	50/60	50/60	50/60
Energy Consumption, operating set point <sup>3)</sup>	W	200	240	305	420
Energy Consumption, reduced flow mode	W	40	40	70	70
Max Current Consumption	A	7,3	7,3	8,7	8,7
Protection Class		I/IP 20	I/IP 20	I/IP 20	I/IP 20
<b>Features</b>					
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)				

<sup>1)</sup> export packaging dimensions and weight on request

<sup>2)</sup> tested according to EN 12469

<sup>3)</sup> Clean filters, fans operating at nominal set point, interior lighting activated

<sup>4)</sup> The total load on overall working area must not exceed the indicated weight

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