



Air filtration and clean room units

Salus-X (Hepa/Ulpa Filter Unit)

At Gerhman we are driven by a strong desire to continuously generate improvements. We do that by developing products and systems that are easy to use and energy efficient, together with industry-leading knowledge, support, logistics and efficient availability.



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#### Air filtration and clean room units

#### Salus-X

## **Hepa/Ulpa Filter Terminal Unit**

The Salus-X is terminal unit for ceiling or wall installation for the final filtration of Clean Room.

#### Key features and applications

For Cleanrooms in hospitals and laboratories

Radial, swirl or low turbulent flow patter

H10, H13 and H14 class standard and high airflow HEPA filters available

Suitable for both supply and exhaust air.

Fully-perforated front plate for vertical air supply or exhaust

Antibacterial epoxy-polyester powder paint finishing to prevent microbial growth

Easy filter change through the front panel

Pressure difference transmitter to inform the user when to change the filter (optional).

Test probe for measuring the filter pressure loss

Test probe for measuring particle concentration above the filter



#### Air filtration and clean room units

### Salus-X

## **Unit Options**

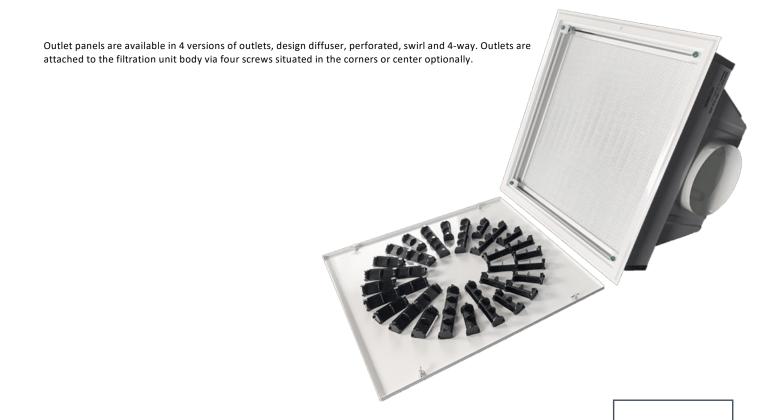
	Options		
	Code	Detail	
	Salus-X	DKP Steel + Epoxy Polyester Powder Coated	
Ususina	Salus-X.Al	Alumium + Epoxy Polyster Powder Coated	
Housing	Salus-X.SS304	SS304 Stainless Steel	
	Salus-X.SS316	SS316 Stainless Steel	
	Sw-01	DKP Steel + Epoxy Polyester Powder Coated+ABS Blades	
	Sw-01.Al	Alumium + Epoxy Polyster Powder Coated+ABS Blades	
	Sw-01.SS304	SS304 Stainless Steel+ABS Blades	
	Sw-01.SS316	SS316 Stainless Steel+ABS Blades	
	Sw-08	DKP Steel + Epoxy Polyester Powder Coated	
	Sw-08.Al	Aluminum + Epoxy Polyester Powder Coated	
Diffusor	Sw-08.SS304	SS304 Stainless Steel	
Diffuser	Sw-08.SS316	SS316 Stainless Steel	
	CD-04	Aluminum + Epoxy Polyester Powder Coated	
	PD-01	DKP Steel + Epoxy Polyester Powder Coated	
	PD-01.Al	Aluminum + Epoxy Polyester Powder Coated	
	PD-01.SS304	SS304 Stainless Steel	
	PD-08.SS316	SS316 Stainless Steel	
	H13.MDF	H13 Class MDF Casing	
Hono Filtor	H13.ALU	H14Class Aluminum Casing	
Hepa Filter	H14.MDF	H13 Class MDF Casing	
	H14.ALU	H14 Class Aluminum Casing	

Sample coding

Salus-X+Sw-01+H14.ALU

### Outlets

#### Salus-X Diffuser





PD-01SS (optional) Stainless steel perforated diffuser



Sw-01 (standard) Swirl diffuser



Sw-08 Design diffuser



CD-4 4 way diffuser

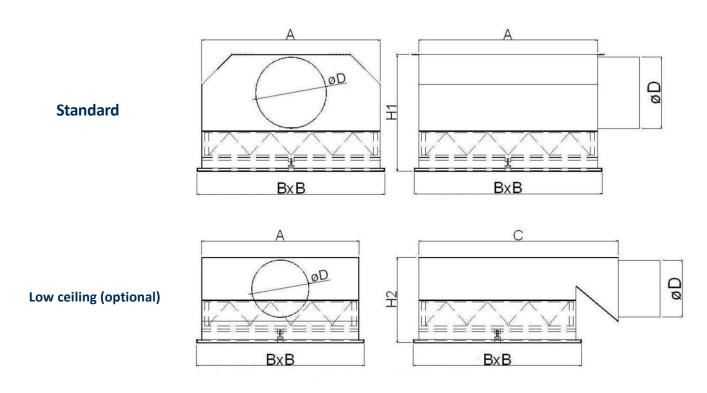


PD-01 Perforated diffuser

### Quick selection and dimensions

### Salus-X

Filter size (mm)	ØD (mm)	A (mm)	B x B Diffuser size (mm)	C (mm)	H1 (mm)	H2 (mm)	Suggested max. Air volume (m3/h)	Start Pressure Drop (Pa)
305*305*78	Ø148	325	360*360	475	345	245	290	250
305*305*150	Ø148	325	360*360	475	402	245	290	250
457*457*78	Ø198	477	510*510	630	405	295	660	250
457*457*150	Ø198	477	510*510	630	462	295	660	250
535*535*78	Ø198	477	595*595	705	465	295	900	250
535*535*150	Ø198	555	595*595	705	522	295	900	250
575*575*78	Ø248	595	630*630	750	465	345	900	250
575*575*150	Ø248	595	630*630	750	522	345	900	250
610*610*78	Ø248	630	665*665	790	420	345	1200	250
610*610*150	Ø248	630	665*665	790	477	345	1200	250



#### Filter selection

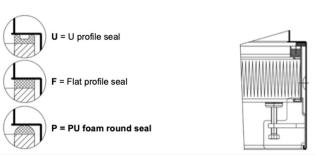
# Salus-X Hepa



### **Filters**

Filtration units are equipped with HEPA filters of class H13, H14 or U15 available in two versions of sealing: polyurethane or gel. Frame is made of extruded aluminum or mdf, while the filter media is protected against damages by a steel epoxy varnished mesh situated at the pure side. Optionally.

Please contact with our technical department for all filter options and technical details.



fluid seal

## Filter selection

# Salus-X Hepa

Filter insert [mm]	Air flow velocity m/s (150 Pa)	<b>Q</b> m <sup>3</sup> /h (150 Pa)	Filter class
305/305/78	0.15	50	H13
305/305/78	0.3	100	H13
305/305/78	0.45	150	H13
457/457/78	0.15	110	H13
457/457/78	0.3	220	H13
457/457/78	0.45	330	H13
575/575/78	0.15	180	H13
575/575/78	0.3	360	H13
575/575/78	0.45	540	H13
610/610/78	0.15	200	H13
610/610/78	0.3	400	H13
610/610/78	0.45	600	H13

Filter insert [mm]	Air flow velocity m/s (250 Pa)	<b>Q</b> m <sup>3</sup> /h (250 Pa)	Filter class
305/305/78	0.51	170	H13
305/305/78	0.63	210	H13
305/305/78	0.78	260	H13
457/457/78	0.56	420	H13
457/457/78	0.71	530	H13
457/457/78	0.85	640	H13
575/575/78	0.59	700	H13
575/575/78	0.74	880	H13
575/575/78	0.89	1060	H13
610/610/78	0.6	800	H13
610/610/78	0.75	1000	H13
610/610/78	0.9	1200	H13

Filter insert [mm]	Air flow velocity m/s (125 Pa)	<b>Q</b> m <sup>3</sup> /h (125 Pa)	Filter class
305/305/78	0.45	150	H14
457/457/78	0.45	340	H14
575/575/78	0.45	530	H14
610/610/78	0.45	600	H14

Filter insert [mm]	Air flow velocity m/s (155 Pa)	<b>Q</b> m <sup>3</sup> /h (155 Pa)	Filter class
305/305/78	0.45	150	U15
457/457/78	0.45	340	U15
575/575/78	0.45	530	U15
610/610/78	0.45	600	U15

Filter insert [mm]	Air flow velocity m/s (250 Pa)	<b>Q</b> m <sup>3</sup> /h (250Pa)	Filter class
305/305/80	0.51	170	H13
305/305/80	0.63	210	H13
305/305/80	0.78	260	H13
457/457/80	0.56	420	H13
457/457/80	0.71	530	H13
457/457/80	0.85	640	H13
575/575/80	0.59	700	H13
575/575/80	0.74	880	H13
575/575/80	0.89	1060	H13
610/610/80	0.6	800	H13
610/610/80	0.75	1000	H13
610/610/80	0.9	1200	H13

Filter insert [mm]	Air flow velocity m/s (125 Pa)	<b>Q</b> m <sup>3</sup> /h (125 Pa)	Filter class
305/305/78	0.45	150	H14
457/457/78	0.45	340	H14
575/575/78	0.45	530	H14
610/610/78	0.45	600	H14

Filter insert [mm]	Air flow velocity m/s (155 Pa)	<b>Q</b> m <sup>3</sup> /h (155 Pa)	Filter class
305/305/78	0.45	150	U15
457/457/78	0.45	340	U15
575/575/78	0.45	530	U15
610/610/78	0.45	600	U15

### **Options**

### Salus-X



Blue-S Off

Manuel Shut-off
damper



## Balancing and shut-off dampers

Blue-S Off+

Motorized shut-off damper



Filtration units can be equipped with a manual or motorized shut-off and balancing damper, which is possible to be operated from the room side. Having a flap in a close position filter replacement can be carried out without stopping the air handling unit.

## Measuring tube

It serves two purposes: measurement of pressure drop on the filter (clogging) and application of test aerosol (measuring concentration).



#### Installations

#### Salus-X

Insert filter into the housing up to the corners with the clamps.

Press the filter carefully in the frame and tighten the holder screws only "somewhat". Seal thereby touches the frame

Finally, subsequently tighten the holder screws – always turn one screw revolution at a time.

The leak test can be performed either with a probe or with a particle counter along the filter frame.



#### Estimation of the filter integrity:

Air tightness is not longer given if no vacuum is ensured with a 60 kPa pressure difference. Leaks are not permitted.

Do not exceed the local values for the porosity or the permeability of filter inserts according to EN 1822.

#### **ATTENTION**

Damage to the unit!

Only filters with a U-profile seal allow a pressure test of the filter clamping tightness.

Damage to the unit!

If you determine a leak during the inspection, turn the screws one after the other by half a screw rotation.

If, after renewed measurements, the filter nonetheless leaks, exchange the filter seal or the entire filter insert.



