

Ducted HEPA filter units for critical requirements

Type F360: without prefilter casing

Type F370: with prefilter casing

- » Duct casing for installation into ductwork, with or without prefilter
- » Double-groove service board for contamination-free filter change
- » The basic units can be combined into a filter unit system with entry and exit spigots



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Detail



Ducted HEPA filter unit

Application

- » Duct casing for installation into ductwork.
- » Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses, and bacteria from the supply or extract air.

Material

- » Duct casing made of sheet steel with decontaminable powder coating RAL 9010 and clamping mechanism made of stainless steel.

Construction

- » Type F360:
Without prefilter casing
- » Type F370:
With prefilter casing

Equipment

- » Casing with rigid, connecting flanges with return edges.
- » Clamping mechanism which guarantees a uniform seal between the casing and the HEPA filter element. The clamping device can only be closed when the filter element is properly seated.
- » Cover plate with profiled gasket and four clamping screws with star grips.
- » Pressure measuring points for each filter unit are part of the supply package but must be set up on site by others.

Construction

- » With prefilter casing: to accommodate minipleat filter panels as fine dust filters.
- » With double-groove service board and plastic service bag for contamination-free filter element change.
- » With sealing integrity test facility for HEPA filter elements.
- » With horizontal supply and discharge spigots and support legs, available as filter unit system of up to six filter units side by side in a single row.

Unit size

- » The basic units can be combined into a filter unit system.

Associated TROX filter elements

- » Associated filter elements to be ordered separately.

Installation and maintenance

- » Supplied as a factory assembled filter unit system including the fitted spigot configurations as specified. For combinations of four or more filter casings the filter installations are divided into smaller packages for transport.
- » Filter change: Easy removal of the HEPA filter element from the casing using a special mechanism.

Suitable filter elements

Minipleat filter panels as fine dust filters (F7/8/././..)

- » Types: F756 (F6), F757 (F7), F759 (F9), frame depth 60 mm.
- » Construction: Frame made of MDF, galvanised sheet steel, or stainless sheet steel.

Minipleat filter cells or minipleat filter panels as HEPA filters (F7/7/././.. and F7/9/././..)

- » Types: F780 (E11), F781 (H13), F782 (H14).
- » Construction: Frame made of MDF, galvanised sheet steel, or stainless sheet steel.

HEPA filter cells (F7/12/././..)

- » Types: F770 (E11), F771 (H13).
- » Construction: Frame made of MDF, galvanised sheet steel, or stainless sheet steel.

Activated carbon filter cells (F7/1/././..)

- » Type F760.
- » Filter media: activated carbon in the form of small sticks.

Other filter elements

- » Upon request.

Ducted HEPA filter unit



Photo 1: Ducted HEPA filter unit with spigots

Order code

<table border="1" style="margin: auto;"> <tr> <td>F</td><td>3</td><td>6</td><td>0</td><td>A</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td colspan="4" style="text-align: center;">1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td colspan="5" style="text-align: center;">7</td> </tr> </table>		F	3	6	0	A	0	1	1	1	0	0	0	0	0	1				2	3	4	5	6	7				
F	3	6	0	A	0	1	1	1	0	0	0	0	0																
1				2	3	4	5	6	7																				
1	Type F360 without prefilter casing Type F370 with prefilter casing	4	Equipment: 0 Without service board 1 With service board																										
2	Unit suitable for filter element sized: A 305 x 610 x 150 mm B 610 x 610 x 150 mm C 305 x 610 x 292 mm D 610 x 610 x 292 mm E 762 x 610 x 292 mm	5	Spigot: 0 Casing without spigot 1 Spigots for 1 casing 2 Spigots for 2 casings 3 Spigots for 3 casings 4 Spigots for 4 casings 5 Spigots for 5 casings 6 Spigots for 6 casings																										
3	Surface finish: 0 Powder coating RAL 9010 (Standard) 1 Powder coating, other colour from RAL Classic collection E Stainless steel construction	6	Code number for spigot arrangement: 0 Casing without spigot 1 Supply air at top left, extract air at bottom right 2 Supply air at top right, extract air at bottom left 3 Supply air at top right, extract air at bottom right 4 Supply air at top left, extract air at bottom left																										
		7	Zeros																										

Example of single casing without spigot

- » **F360** without prefilter casing
- » **B** Unit suitable for filter element sized 610 x 610 x 150 mm
- » **0** Surface finish RAL 9010
- » **1** Equipment with service board
- » **0** Code number for spigot size
- » **0** Spigot arrangement without spigot

F 3 6 0 B 0 1 0 0 0 0 0 0 0 0

Example of filter unit system with spigots

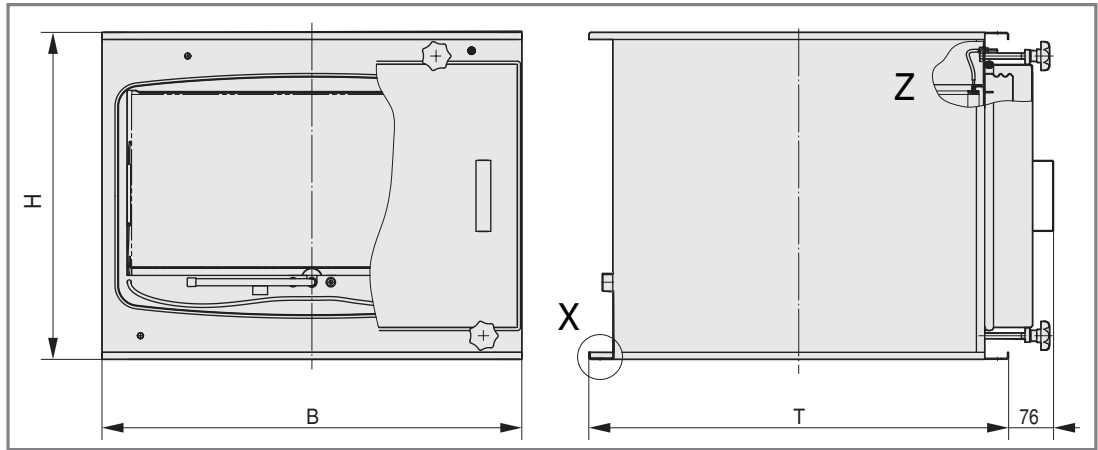
- » **F370** with prefilter casing
- » **D** Unit suitable for filter element sized 610 x 610 x 292 mm
- » **E** Stainless steel construction
- » **0** Equipment without service board
- » **3** Code number for spigot size
- » **4** Spigot arrangement, supply air at top left, extract air at bottom left

F 3 7 0 D E 0 3 4 0 0 0 0 0 0

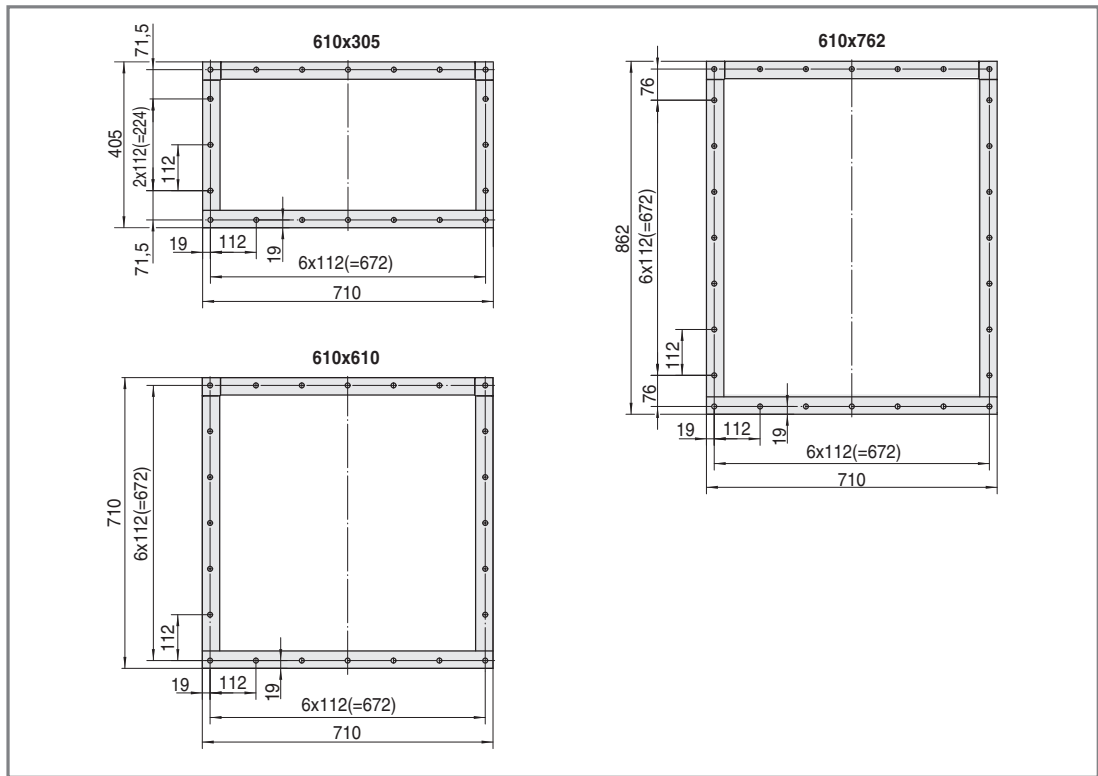
Ducted HEPA filter unit

Technical data

Individual units to be installed either as shown or after a 90° rotation.



Detail drawing 1: Ducted HEPA filter unit without prefilter casing: F360



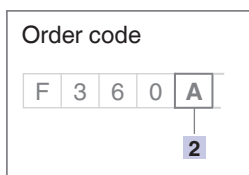
Detail drawing 2: Flange dimensions for each filter element size

Dimensions of ducted HEPA filter unit without prefilter casing: F360

Unit size ②	Filter size mm			Nominal volume flow rate ¹⁾		Dimensions of unit mm			Weight ≈ kg
	B	H	T	l/s	m ³ /h	B	H	T	
A	305	610	150	150/270	540/980	710	411	405	40.0
B	610	610	150	310/585	1100/2100	710	411	710	50.0
C	305	610	292	325/470	1165/1700	710	563	405	55.0
D	610	610	292	695/945	2500/3400	710	563	710	65.0
E	762	610	292	880/1180	3160/4250	710	563	862	70.0

Table 1: Technical data for F360

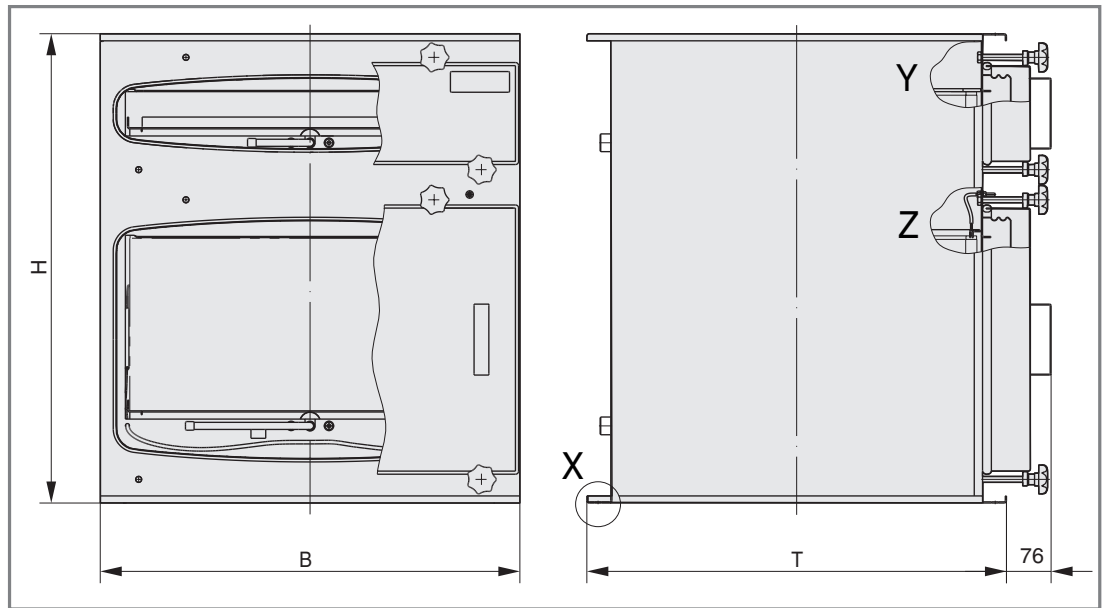
¹⁾ HEPA filters with various nominal volume flow rates depending on construction.
HEPA filters H13, the lowest and highest volume flow rates are shown.



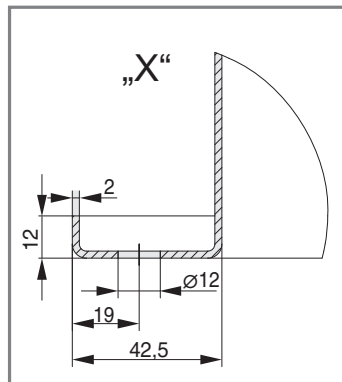
All weights are net, without packaging.

Technical data

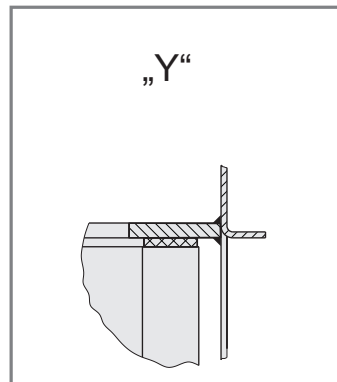
Individual units to be installed either as shown or after a 90° rotation.



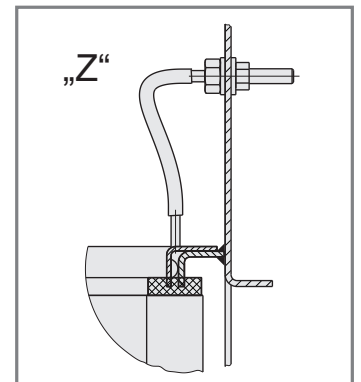
Detail drawing 3: Ducted HEPA filter unit with prefilter casing: F370



Detail drawing 4: Detail "X"



Detail drawing 5: Detail "Y"



Detail drawing 6: Detail "Z"

Dimensions of ducted HEPA filter unit with prefilter casing: F370

Order code

F	3	7	0	A
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2

All weights are net, without packaging.

Unit size ②	Filter size mm			Nominal volume flow rate ¹⁾		Dimensions of unit mm			Weight ≈ kg
	B	H	T	l/s	m ³ /h	B	H	T	
A	305	610	150	150/270	540/980	710	652	405	60.0
B	610	610	150	310/585	1100/2100	710	652	710	70.0
C	305	610	292	325/470	1165/1700	710	794	405	70.0
D	610	610	292	695/945	2500/3400	710	794	710	85.0
E	762	610	292	880/1180	3160/4250	710	794	862	95.0

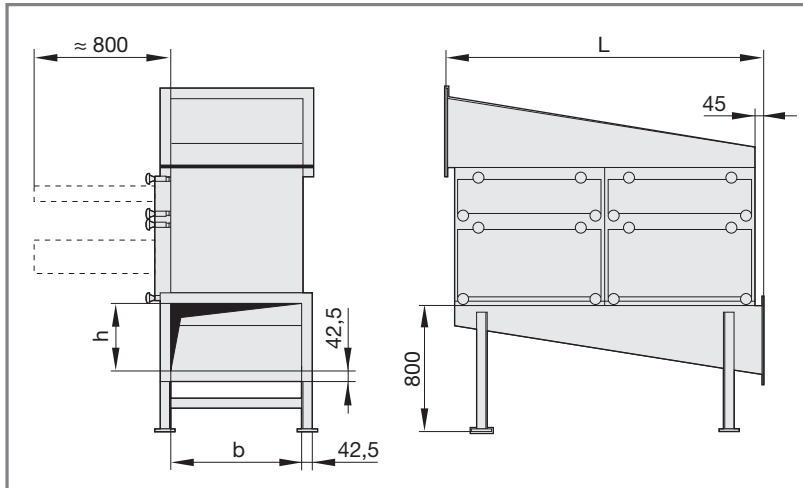
Table 2: Technical data for F370

1) HEPA filters with various nominal volume flow rates depending on construction. HEPA filters H13, the lowest and highest volume flow rates are shown.

Filter unit system

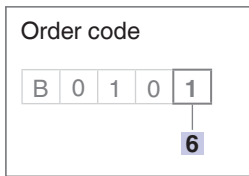
Technical data

Basic units can be combined into a filter unit system.



Detail drawing 8: Ducted HEPA filter unit system with spigots

Code number for spigot arrangement.



With horizontal supply and discharge spigots and support legs.

Spigot arrangement	Code no. 6
	1
	2
	3
	4

→ Direction of air flow

Table 3: Spigot selection for filter unit systems

Technical data

Suitable filter elements to be ordered separately.

All weights are net, without packaging.

Unit size	Filter units Quantity	Filter size mm			Nominal volume flow rate ¹⁾		Dimensions of unit mm			Weight ²⁾ ≈ kg
		B	H	T	l/s	m ³ /h	L	b	h	
B	1	610	610	150	310/585	1100/2100	800	625	200	45.0
D	1	610	610	292	695/945	2500/3400	800	625	200	45.0
E	1	762	610	292	880/1180	3160/4250	800	785	200	50.0
B	2	610	610	150	620/1170	2200/4200	1510	625	315	60.0
D	2	610	610	292	1390/1890	5000/6800	1510	625	315	60.0
E	2	762	610	292	1760/2360	6320/8500	1510	785	315	65.0
B	3	610	610	150	930/1755	3300/6300	2220	625	400	80.0
D	3	610	610	292	2085/2835	7500/10200	2220	625	400	80.0
E	3	762	610	292	2640/3540	9480/12750	2220	785	400	85.0
B	4	610	610	150	1240/2340	4400/8400	3020	625	500	120.0
D	4	610	610	292	2780/3780	10000/13600	3020	625	500	120.0
E	4	762	610	292	3520/4720	12640/1700	3020	785	500	125.0
B	5	610	610	150	1550/2925	5500/10500	3730	625	630	145.0
D	5	610	610	292	304725	12500/17000	3730	625	630	145.0
E	5	762	610	292	4400/5900	15800/21250	3730	785	630	155.0
B	6	610	610	150	1860/3510	6600/12600	4440	625	710	180.0
D	6	610	610	292	4170/5670	15000/20400	4440	625	710	180.0
E	6	762	610	292	5280/7080	18960/25500	4440	785	710	190.0

Table 4: Technical data for filter unit systems

1) HEPA filters H13 with various nominal volume flow rates depending on construction.

2) Weight of spigots.

Specification text

Ducted HEPA filter units:

- » Duct casing for installation into ductwork
- » Fitting of filter elements for the separation of suspended particles
- » Duct casing made of sheet steel with decontaminable powder coating RAL 9010
- » Clamping mechanism which guarantees a uniform seal between the casing and the filter element
- » Stainless steel clamping mechanism
- » Cover plate with profiled gasket and four clamping screws with star grips

Construction of Type F360:

- » Without prefilter casing

Construction of Type F370:

- » With prefilter casing

Construction:

- » With double-groove service board and plastic service bag for contamination-free filter element change.
- » With sealing integrity test facility for HEPA filter elements.

Spigots:

- » Horizontal air entry and air discharge, with support legs, assembled on the filter unit system
- » Spigots made of sheet steel with decontaminable powder coating RAL 9010

Technical data:

Nominal volume flow rate _____ l/s (m³/h)

Dimensions of ducted HEPA filter unit _____ mm

Net weight _____ kg

Order no. _____

Make: TROX

Technical data for spigot:

Net weight _____ kg

Order no. _____

Make: TROX

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The art of handling air

Filters

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