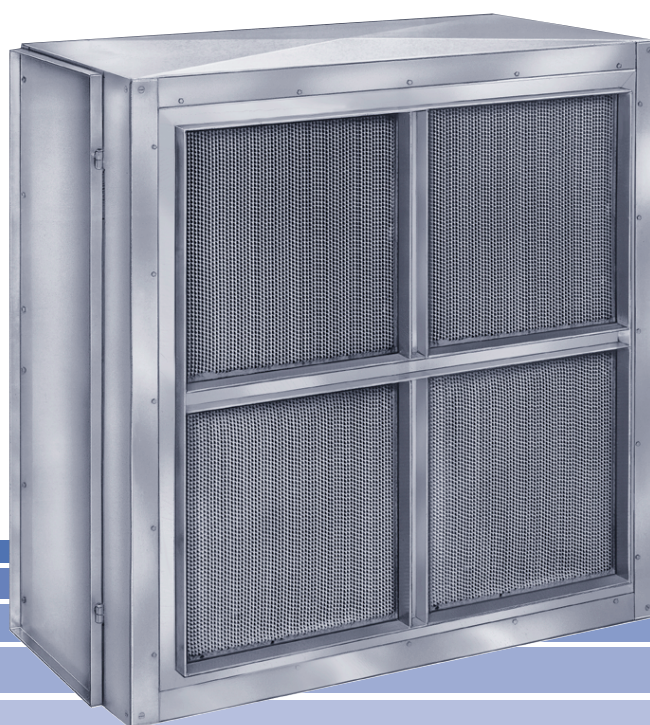


Particulate Filters

in a Ducted Casing



TROX[®] TECHNIK

Contents · Description · Installation

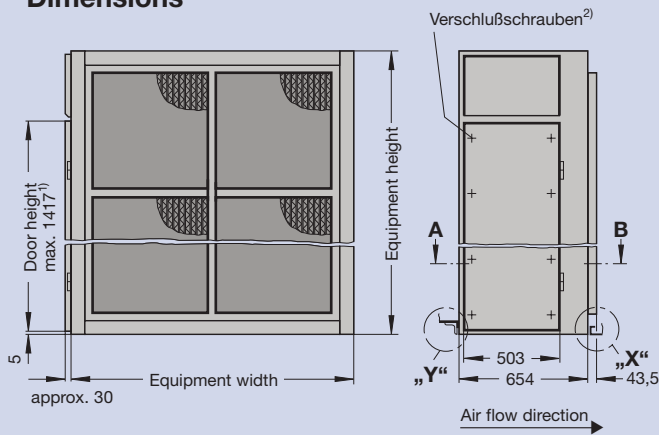
Description	2
Installation	2
Selection Table	3
Filter Technical Data	4
Order Information	5

The particulate filters in a ducted casing are in galvanised sheet steel with service door on the side for changing filter cells. Position of door is optional, left or right hand side, with respect to air flow direction. The casing frame with its wide sealing surface serves at the same time as the connecting frame for equipment or ducting. In addition to the standard sizes available, the ducted casing can be manufactured to match specific sizes appropriate to a particular installation.

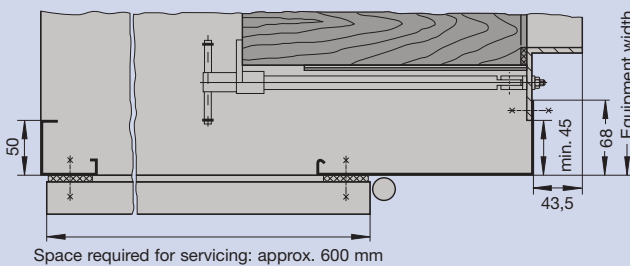
The location and fixing of the filter cells inside the casing is by means of a frame system in welded aluminium sections. Ange supports and turnbuckle clamp ensures correct cell alignment and good sealing between cell face and mounting.

The ducted casings for all standard sizes are factory assembled.

Dimensions

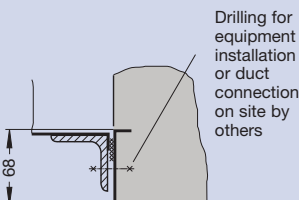


Section A-B

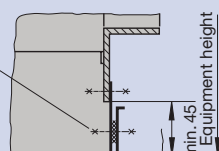


Examples showing simple methods of mounting or duct connection.

Detail "Y"



Detail "X"



Ducted casing with support angles and thumbclamps

Installation position of ducted casing as illustrated.

Pressure measuring tube stubs for each filter unit are supplied for connection on site.

Top, bottom and side of casing (without service door) are domed (diamond breaks). Dome height approx. 20 mm.

¹⁾ Dimension for height of 3 filter cells one upon the other.

²⁾ Standard construction with hexagonal head screws. As an option locking screws can be fitted with special handles.

Selection Table

Selection Table for Dimensions and Volume Flow

Height in mm	Width in mm		804	1428	2052	2676	
	Filter cell: ▼ No. of Vert. cells	No. of Horiz. cells ►	1	2	3	4	
Air Volume for Filter cells 610 x 610 x 292 mm							
804	1	F770 K03 / F771 K03 F780 W61 / F781 W61	in l/s (m ³ /h)	580 (2100) 830 (3000)	1160 (4200) 1660 (6000)	1740 (6300) 2490 (9000)	2320 (8400) 3320 (12000)
		Total number of filter cells Weight in kg Order number		1 40 F383 A11	2 55 F383 A12	3 70 F383 A13	4 85 F383 A14
1428	2	F770 K03 / F771 K03 F780 W61 / F781 W61	in l/s (m ³ /h)	1160 (4200) 1660 (6000)	2320 (8400) 3320 (12000)	3480 (12600) 4980 (18000)	4640 (16800) 6640 (24000)
		Total number of filter cells Weight in kg Order number		2 55 F383 A21	4 70 F383 A22	6 90 F383 A23	8 110 F383 A24
2052	3	F770 K03 / F771 K03 F780 W61 / F781 W61	in l/s (m ³ /h)	1740 (6300) 2490 (9000)	3480 (12600) 4980 (18000)	5220 (18900) 7470 (27000)	6960 (25200) 9960 (36000)
		Total number of filter cells Weight in kg Order number		3 70 F383 A31	6 90 F383 A32	9 110 F383 A33	12 135 F383 A34
2676	4	F770 K03 / F771 K03 F780 W61 / F781 W61	in l/s (m ³ /h)		4640 (16800) 6640 (24000)	6960 (25200) 9960 (36000)	9280 (33600) 13280 (48000)
		Total number of filter cells Weight in kg Order number			8 110 F383 A42	12 135 F383 A43	16 160 on request ¹⁾

¹⁾Note: Special sizes.
Total width is 2856 mm.
Therefore delivered in two sections, width 1428 mm.

All data given for air volumes have been rounded upwards.
For pressure differential variation with air volume see the graph on page 4.

Weights are for ducted casing without filter cells and without packing.

Filter Technical Data

Filter Media Data

Particulate filter cells are high efficiency filters for use in applications where the most stringent requirements exist for clean air.

Cell standard construction comprises of a moisture resistant particleboard or fibreboard frame, complete with a neoprene seal on one face. The filter media is moisture resistant glass fibre paper with corrugated aluminium spacers or textile thread.

A gastight seal is formed between the media, spacers and the cell perimeter by means of a neoprene sealing compound.

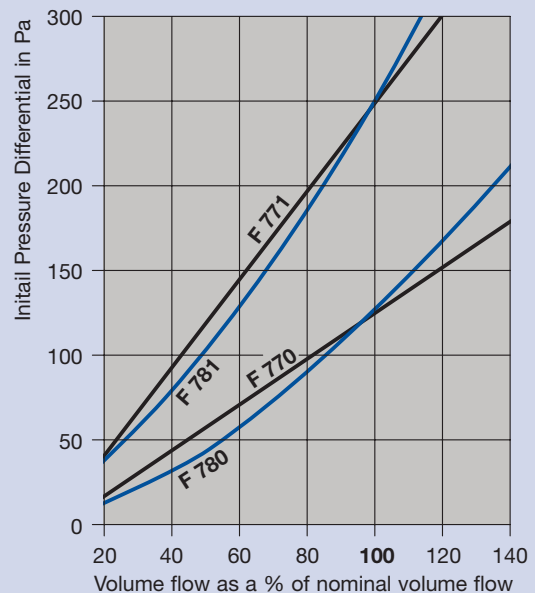
The particulate filter cells, each individual cell type tested to EN 1822 leak tested Filter Class H13, are packed in damage resistant cartons.

Particulate filter cells in other constructions for special applications or working conditions on request.

Technical Data

Filter Cell Type		F770	F771	F780	F781
Dimensions W x H x D	in mm	610 x 610 x 292	610 x 610 x 292	610 x 610 x 292	610 x 610 x 292
Nominal Air Volume	in l/s	580	580	830	830
	in m ³ /h	2100	2100	3000	3000
Initial Pressure Differential at Nominal Air Volume	in Pa	125	250	125	250
Recommended Final Pressure Differential	in Pa	300	600	300	600
Filter class to EN 1822 ¹⁾		H11	H13	H11	H13
Dust Extraction Efficiency based on EN 1822	in %	> 95	> 99.95	> 95	> 99.95
Max. Operating Temperature	in °C	100	100	80	80
Max. Relative Humidity ²⁾	in %	100	100	100	100
Weight	in kg	18	18	15	15
Order Number		F770 K03	F771 K03	F780 W61	F781 W61

Initial Pressure Differential



¹⁾ EN 1822: Particulate Filter (HEPA and ULPA).

²⁾ When the air used is below dew point it must be noted that the separation of condensed water by the cells can cause an increase in pressure differential. The materials employed are moisture resistant and can be used again after drying. The relative humidity should not exceed a maximum of 95 % in the vicinity of particulate filter cells.

