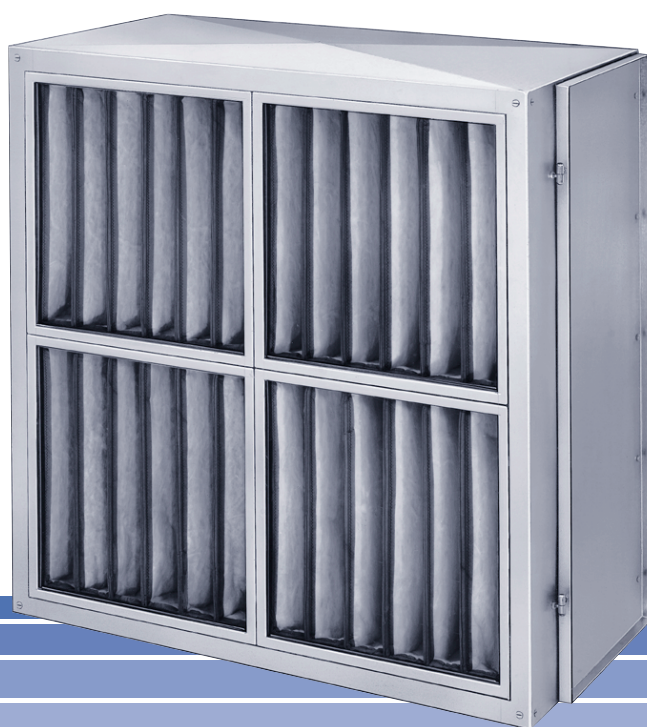


Ducted Bag Filters



TROX[®] **TECHNIK**

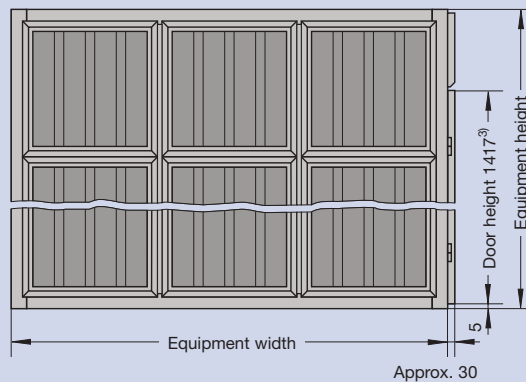
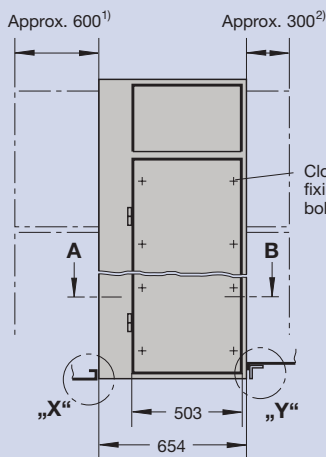
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Ducted Bag Filters consists of a strong duct housing of galvanized sheet steel, with a side access door for changing the filter media. The door can be fitted on the left or right in relation to the air flow direction. The housing frame with wide sealing surfaces serves as connecting frame for equipment or ducting. In addition to the standard sizes available Ducted Bag Filters can also be manufactured with housing dimensions to match installation requirements.

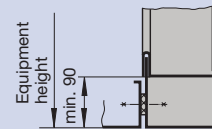
The bag filter inserts are supported and fixed to the housing in standard cell frames with perimeter sealing strips and quick release clamps. This system ensures an efficient seal between cell frame and front header of the bag filter inserts, insert changes can be simply carried out by use of the quick release clamps.

Dimensions

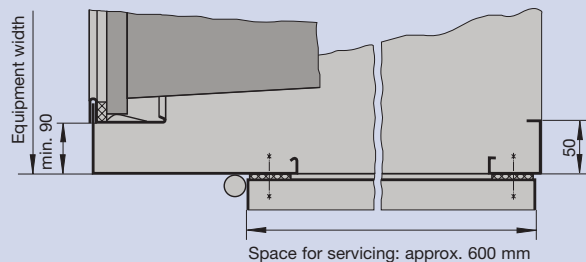


Possible methods of mounting or duct connections

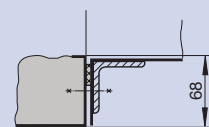
Detail "X"



Section A-B



Detail "Y"



Drilling for equipment installation or duct connection – by others

Pressure measuring connections for each filter unit are supplied for connection on site by others.

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

- 1) Additional space required for bag inserts when dirty side filter change facility is specified.
- 2) Additional space required for bag inserts of longer than standard dimensions, available as special items.
- 3) Dimensions for door height for more than 3 cell frames.
- 4) Standard design with hexagonal head bolts. Fixing bolts with star handles available at customer option.



Ducted bag filter with standard cell frames

Selection Table

For volume flows greater than those given in the table, two units can be installed side by side. The access doors for filter media change would then be arranged right and left. Other combinations available on request.

For smaller units, the ducted bag filters are supplied ready assembled. However sizes 2676 x 2357 and above, due to transport considerations, are supplied in component form ready for assembly. The construction system ensures easy and correct assembly.

Coding for Ducted Bag Filters

Bag Filter Type	F742	F743	F745	F744	F746	F748	F749
Ducted Bag Filter	F342	F343	F345	F344	F346	F348	F349

Selection Table for Dimensions and Volume Flow \dot{V} in l/s (m^3/h)

Equip-ment height in mm	Equipment width in mm		804	1109	1428	1733	2052	2357	2676
	No. of Cell Frames horizontally ► vertically ▼	Air Volume	1 x 610/610	1 x 610/610 + 1 x 305/610	2 x 610/610	2 x 610/610 + 1 x 305/610	3 x 610/610	3 x 610/610 + 1 x 305/610	4 x 610/610
804	1 x 610/610	in l/s in m^3/h	950/1200 3400/4300	1425/1800 5100/6500	1900/2400 6800/8600	2375/ 3000 8500/10800	2850/ 3600 10200/12900	3325/ 4200 11900/15100	3800/ 4800 13600/17200
	Total Number of Cell frames Weight in kg Code Number		1 35 A01	1 + 1/2 45 A02	2 50 A03	2 + 1/2 60 A04	3 70 A05	3 + 1/2 80 A06	4 85 A07
1109	1 x 610/610 + 1 x 305/610	in l/s in m^3/h	1425/1800 5100/6500	1900/2400 6800/8700	2850/ 3600 10200/13000	3325/ 4200 11900/15200	4275/ 5400 15300/19500	4750/ 6000 17000/21700	5700/ 7200 20400/26000
	Total Number of Cell frames Weight in kg Code Number		1 + 1/2 45 B01	1 + 2/2 60 B02	2 + 2/2 70 B03	2 + 3/2 80 B04	3 + 3/2 90 B05	3 + 4/2 100 B06	4 + 4/2 110 B07
1428	2 x 610/610	in l/s in m^3/h	1900/2400 6800/8600	2850/ 3600 10200/13000	3800/ 4800 13600/17200	4750/ 6000 17000/21600	5700/ 7200 20400/25800	6650/ 8400 23800/30200	7600/ 9600 27200/34400
	Total Number of Cell frames Weight in kg Code Number		2 55 C01	2 + 2/2 70 C02	4 75 C03	4 + 2/2 90 C04	6 100 C05	6 + 2/2 115 C06	8 120 C07
1733	2 x 610/610 + 1 x 305/610	in l/s in m^3/h	2375/ 3000 8500/10800	3325/ 4200 11900/15200	4750/ 6000 17000/21600	5700/ 7200 20400/26000	7125/ 9000 25500/32400	8075/10200 28900/36800	9500/12000 34000/43200
	Total Number of Cell frames Weight in kg Code Number		2 + 1/2 65 D01	2 + 3/2 80 D02	4 + 2/2 90 D03	4 + 4/2 105 D04	6 + 3/2 120 D05	6 + 5/2 135 D06	8 + 4/2 145 D07
2052	3 x 610/610	in l/s in m^3/h	2850/ 3600 10200/12900	4275/ 5400 15300/19500	5700/ 7200 20400/25800	7125/ 9000 25500/32400	8550/10800 30600/38700	9975/12600 35700/45300	11400/14400 40800/51600
	Total Number of Cell frames Weight in kg Code Number		3 70 E01	3 + 3/2 90 E02	6 100 E03	6 + 3/2 120 E04	9 130 E05	9 + 3/2 145 E06	12 155 E07
2357	3 x 610/610 + 1 x 305/610	in l/s in m^3/h		4750/ 6000 17000/21700	6650/ 8400 23800/30200	8075/10200 28900/36800	9975/12600 35100/45300	11400/14400 40800/51900	13300/16800 47600/60400
	Total Number of Cell frames Weight in kg Code Number			3 + 4/2 100 F02	6 + 2/2 115 F03	6 + 5/2 135 F04	9 + 3/2 145 F05	9 + 6/2 165 F06	12 + 4/2 180 F07 ¹⁾
2676	4 x 610/610	in l/s in m^3/h		5700/ 7200 20400/26000	7600/ 9600 27200/34400	9500/12000 34000/43200	11400/14400 40800/51600	13300/16800 47600/60400	15200/19200 54400/68800
	Total Number of Cell frames Weight in kg Code Number			4 + 4/2 110 G02	8 125 G03	8 + 4/2 145 G04	12 155 G05	12 + 4/2 180 G06	16 190 G07 ¹⁾

All data for air volumes have been rounded upwards.

Weights are for ducted filters net, excluding packing.

¹⁾Supplied in components.

Filter Media Data

Bag filters can be supplied with various types of media and related dust extraction efficiencies, to meet specific requirements.

Bag filter inserts from chemical fibre media for separating fine dust, especially suitable for application in air conditioning systems where arduous operating conditions exist.

Bag filter inserts from high-quality glass fibre media for separation of fine dusts and aerosols.

Long service life due to large dust holding with high and constant extraction efficiencies, even in arduous conditions.

As aerosols and suspended particles are precipitated by the bag filters, use with air at high relative humidities (near dew point) is to be avoided. When below the dew point, collected water droplets can cause an increase in the pressure differential.

The materials employed are moisture-resistant and can be used again after drying.

For replacement media, see price list.

The bag filters have been tested to ASHRAE standard 52-76 by an independent centre, the Material and Testing Institute Northrhine-Westfalia. Comprehensive test certificates have been issued and abridged versions are available as separate leaflets.

In addition, Trox Bag Filters ensure a guaranteed high margin of safety, even in extreme operating conditions.

Technical Data

Bag filter type	Chemical fibre media			Glass fibre media			
	F742	F743	F745	F744	F746	F748	F749
Filter class to EN779 ¹⁾	G3	G4	F5	F5	F6	F7	F8
Average synthetic dust weight arrestance approx.	82 %	90 %	96 %	98 %	> 98 %	> 98 %	> 98 %
Average atmospheric dust spot efficiency approx.	-	-	47 %	55 %	65 %	85 %	95 %
Bag filter length ²⁾	360 mm	360 mm	650 mm	600 mm	600 mm	600 mm	600 mm
Initial pressure differential at 950 l/s / 3400 m ³ /h (full filter insert) at 475 l/s / 1700 m ³ /h (half filter insert)	25 Pa	35 Pa	70 Pa	50 Pa	80 Pa	100 Pa	140 Pa
Initial pressure differential at 1200 l/s / 4300 m ³ /h (full filter insert) at 600 l/s / 2200 m ³ /h (half filter insert)	35 Pa	50 Pa	100 Pa	70 Pa	110 Pa	130 Pa	190 Pa
Recommended final pressure differential	200 up to 250 Pa			200 up to 250 Pa		250 up to 350 Pa	
Temperature stability	up to +90 °C			- 30 up to +90 °C			

¹⁾EN 779: "Particle air filters for general ventilation and air conditioning purposes".
(Equivalent to ASHRAE STANDARD 52-76).

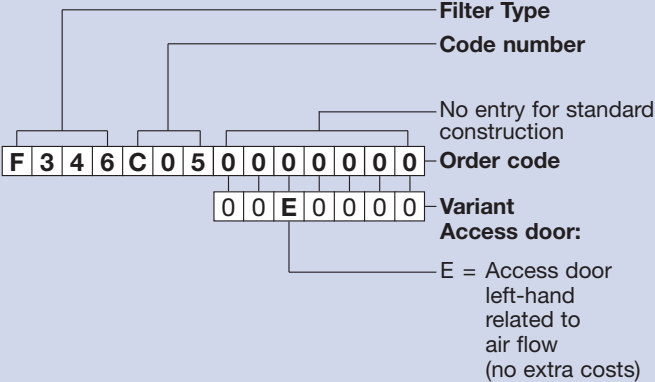
²⁾Ducted bag filters with filter inserts in other than standard dimensions available as special items on request.

Order Information

Order Example

Ducted bag filter _____ Filter Type **F346**
 with bag filter insert _____ Bag filter type **F746**
 for volume flow 5700 l/s (20400 m³/h)

Equipment width 2052 mm – Code number **C05**
 Equipment height 1428 mm (see table
 “Volume Flow”)



Specification Example

Item	Qty.	Description
		<p>Trox Ducted Bag Filter, comprising: duct housing in galvanized sheet steel with side access door for changing filter media positioned on right or left hand side related to air flow.</p> <p>Standard cell frame with sealing strip and quick release clamps for the fitting and tight sealing of the bag filter inserts.</p> <p>Depending on equipment size: a) Ducted bag filter is supplied completely assembled. or b) Supplied in component form with fixing and sealing materials, and assembly instructions.</p> <p>Detailed operating instructions, non-returnable packing. 1 set filter media</p> <p>Special accessories: Access door with locking screws complete with handles.</p>
		<p>Technical Data:</p> <p>Air Volume _____ l/s (m³/h)</p> <p>Equipment width _____ mm</p> <p>Equipment height _____ mm</p> <p>Initial pressure differential at rated air volume _____ Pa</p> <p>Filter class to EN 779/EN 1822 _____</p> <p>Average synthetic dust weight arrestance _____ %</p> <p>Average atmospheric dust spot efficiency _____ %</p> <p>Max. operating temperature _____ °C</p> <p>Max. relative humidity _____ %</p> <p>Net weight _____ kg</p> <p>Order No. _____</p> <p>Manufacture: Trox</p>
		Price/Assembly

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