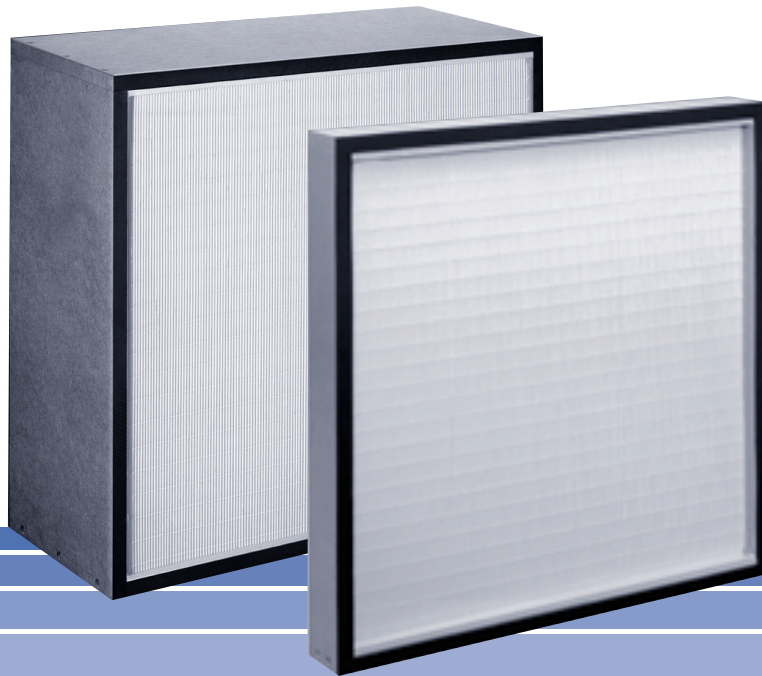


Minipleat Filter Panels

F757 and F759: Filter classes F7 and F9 in accordance with EN779
F780 and F781: Filter classes H11 and H13 in accordance
with EN 1822



TROX[®] TECHNIK

Contents · Description

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Minipleat Filter Panels are installed as pre and main filters for extracting fine dust particles or as high efficiency filters for extracting suspended particles such as aerosols, toxic dusts, viruses, germs etc., from supply and extract air.

Special features of the filter panels are the co-ordination of filter size, nominal volume flow, pressure differential, dust holding capacity and service life. Direction of air flow and servicing side is optional.

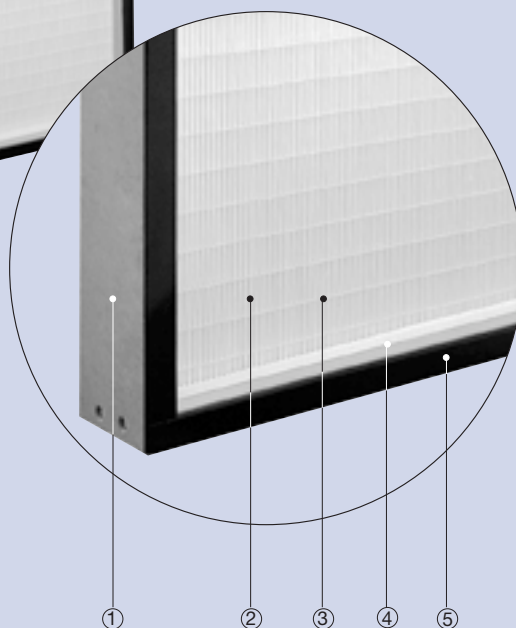
Filter Panels F757 and F759 are used as pre-filters in e.g.:

- **Trox KSF Filters** with pre-filter housing: supplied in various sizes as a single unit or multiple assembly (see leaflet: F3/4/EN/.)

Filter Panels F780 and F781 are used as main filters in e.g.:

- **Trox KSF Filters:** supplied in various sizes as a single unit or multiple assembly (see leaflet: F3 / 4 / EN / .).
- **Trox High Efficiency Terminal Filters** supplied in a range of sizes and constructions, alternatively with integrated airtight flap valve conforming to DIN 1946 part 4. (see leaflet F6/1/EN/.)

Minipleat Filter Panels



- ① Filter casing (wood or metal)
- ② Filter media (glass fibre paper)
- ③ Spacer (thermoplastic adhesive)
- ④ Bonding (two-pack polyurethane adhesive)
- ⑤ Neoprene gasket (flat or U-profile)

Filter Technical Data

Filter Media

The filter media used is high quality glass fibre paper with various degrees of dust extraction efficiencies, the construction and composition of which can meet the stipulated temperature and humidity requirements.

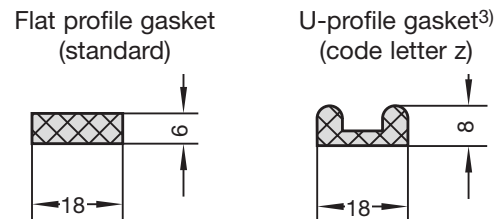
The glass fibre paper is folded into closely spaced shallow pleats, with thermoplastic adhesive spacers to ensure an optimum pleating geometry.

Filter Casing

Depending on requirement filter casing of fibreboard, galvanized sheet steel, stainless sheet steel or aluminium extrusion. The components are machine-assembled to guarantee high stability.

Sealing

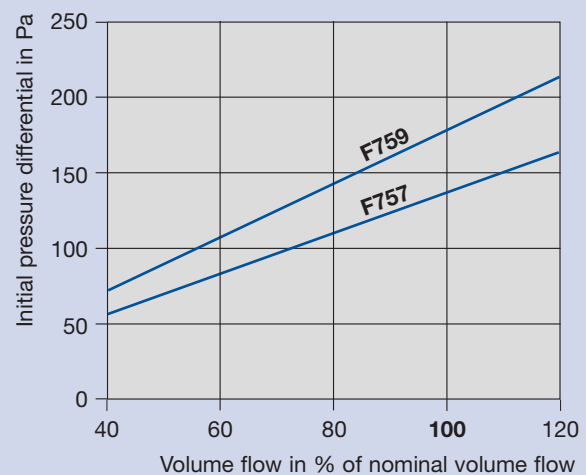
With the exception of code numbers 15 and 16 the Minipleat Filter Panels are supplied with a continuous neoprene gasket as standard which provides an air tight seal between the filter casing and the holding frame. Filter Panels F780 and F781 can be supplied with a U-profile gasket on request. No seal is necessary on Minipleat Filter Panels code numbers 15 and 16 as the holding frame (e.g. Trox Standard Cell Frame) is equipped with a seal.



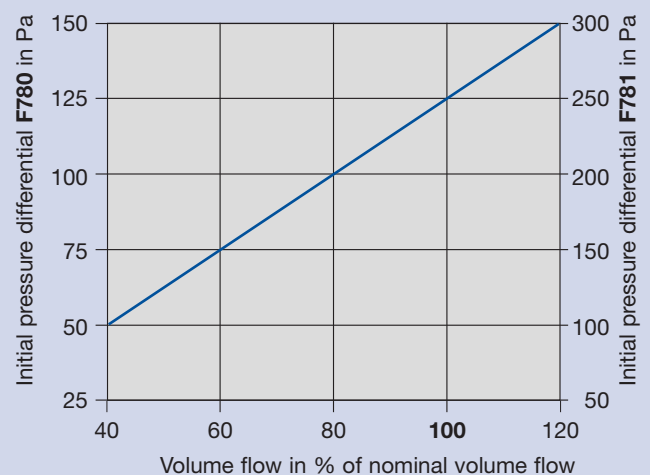
3) Maximum operating temperature 70 °C

Filter Data

Filter Type	F 757	F 759
Filter class to EN 779 ¹⁾	F 7	F 9
Average Efficiency in %	85	95
Initial pressure differential at nominal volume flow in Pa	140	180
Recomm. final pressure diff. in Pa	450	450
Max. operating temperature in °C	80	80
Max. relative humidity in %	100	100
Casing:	Construction	
- Fibre board	W	W



Filter Type	F 780	F 781
Filter class to EN 1822 ²⁾	H 11	H 13
Abscheidegrad nach EN 1822 in %	> 95	> 99,95
Initial differential pressure at nominal volume flow in Pa	125	250
Recomm. final pressure diff. in Pa	300	600
Max. operating temperature in °C	80	80
Max. relative humidity in %	100	100
Casing:	Construction	
- Fibre board	W	W
- Aluminium extrus. (depth 30 mm)	N	N
- Aluminium extrus. (depth 78 mm)	Z	Z
- Aluminium extrus. (with fluid seal)	-	U
- Galvanized sheet steel	M	M
- Stainless sheet steel	E	E



¹⁾ EN 779: Particulate air filter for general clean room technology.

²⁾ EN 1822: High efficiency terminal filters (HEPA and ULPA).

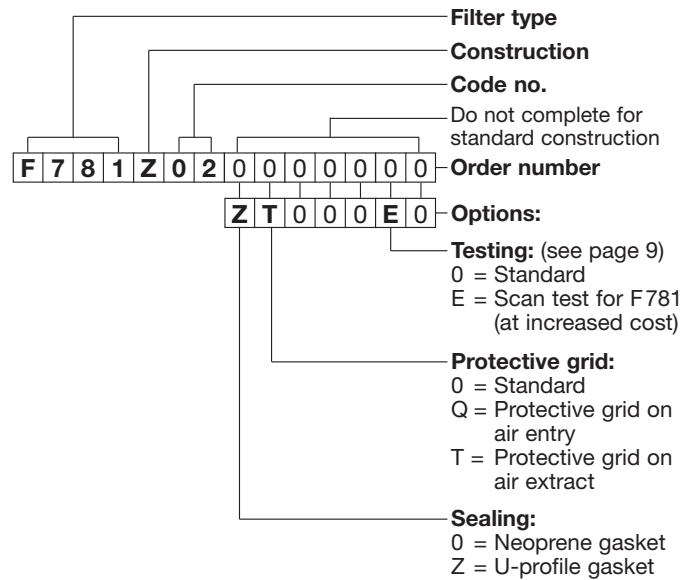
Deviation from the nominal volume flow within the range shown has no influence on filter performance. However, service life will increase at reduced volume flow.

F 780 and F 781 Constructions N, Z and U

Minipleat Filter Panels Order code

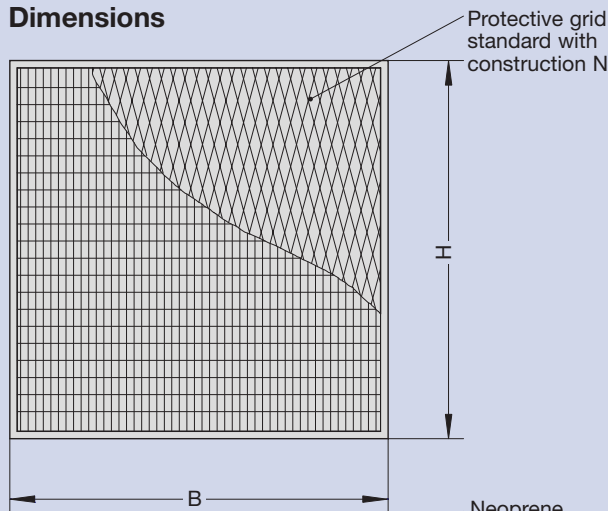
Filter class H13 _____ Filter type:
 Aluminium extrusion filter casing ___ Construction:
 Dimensions 610 x 610 x 78 mm ___ Code no.:
 Oil-mist test _____ Standard:
 Neoprene gasket _____ Standard:

F781
Z
02
0
0

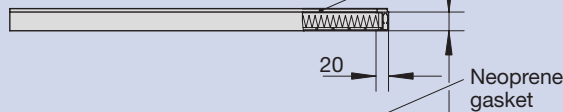


All volume flow figures in l/s have been rounded off, then converted to m³/h.
 Weights are net excluding packaging;
 Weight of packing per unit approx. 0.5 kg.

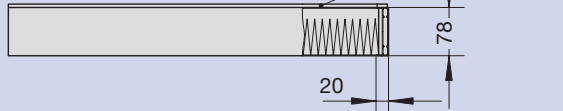
Dimensions



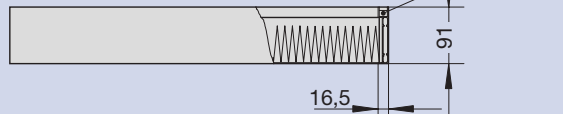
Construction N



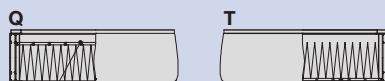
Construction Z



Construction U



Construction



Protective grid on air entry

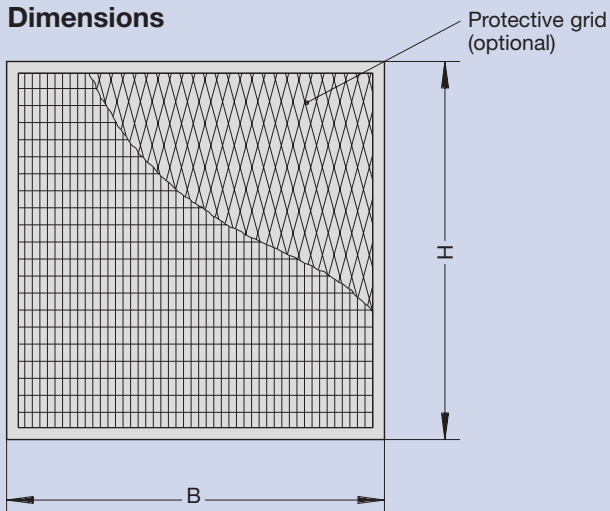
Protective grid on air extract

Dim. toleran. + 0 mm
 - 1 mm

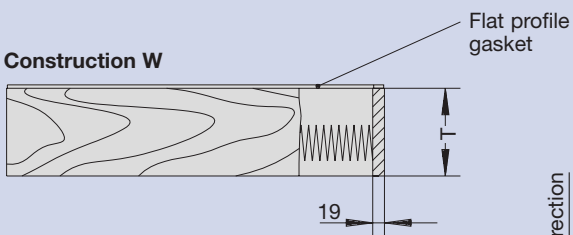
Kenn-ziffer	Dimensions in mm			Nominal volume flow		Approx. weight in kg
	B	H	T	in l/s	in m ³ /h	
Construction N						
14	610	610	30	150	535	2,8
04	762	610	30	180	660	3,2
23	915	610	30	220	800	3,8
24	1220	610	30	300	1100	5,0
03	762	762	30	240	850	4,0
Construction Z						
33	305	305	78	70	250	1,5
13	457	457	78	170	600	2,5
46	535	535	78	240	850	3,1
47	835	535	78	360	1300	4,2
48	1135	535	78	500	1800	5,2
49	575	575	78	270	970	3,4
01	305	610	78	150	540	2,5
02	610	610	78	310	1100	3,5
05	762	610	78	390	1400	4,0
06	915	610	78	470	1700	4,5
07	1220	610	78	610	2200	5,7
08	1525	610	78	760	2750	7,5
09	1830	610	78	920	3300	8,5
21	762	762	78	490	1750	5,5
20	915	762	78	580	2100	6,4
30	1220	762	78	780	2800	8,0
26	1525	762	78	970	3500	10,0
27	1830	762	78	1170	4200	12,0
22	915	915	78	690	2500	6,5
25	1220	915	78	930	3350	11,5
28	1525	915	78	1150	4150	13,0
29	1830	915	78	1390	5000	15,5
Construction U						
33	305	305	91	70	250	1,5
13	457	457	91	170	600	2,5
46	535	535	91	240	850	3,1
47	835	535	91	360	1300	4,2
48	1135	535	91	500	1800	5,2
49	575	575	91	270	970	3,4
02	610	610	91	310	1100	3,5

F780 and F781 Construction W

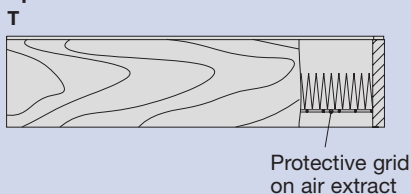
Dimensions



Construction W



Option



Dimensions

F780/F781 with standard filter area (Code no. 000)

Code no.	Dimensions in mm			Nominal volume flow		Approx. weight in kg
	B	H	T	in l/s	in m ³ /h	
Construction W						
33	305	305	78	70	250	1,5
13	457	457	78	170	600	2,5
46	535	535	78	240	850	3,1
47	835	535	78	360	1300	4,2
48	1135	535	78	500	1800	5,2
49	575	575	78	270	970	3,4
01	305	610	78	150	540	2,5
02	610	610	78	310	1100	3,5
05	762	610	78	390	1400	4,0
06	915	610	78	470	1700	4,5
07	1220	610	78	610	2200	5,7
08	1525	610	78	760	2750	7,5
09	1830	610	78	920	3300	8,5
21	762	762	78	490	1750	5,5
20	915	762	78	580	2100	6,4
30	1220	762	78	780	2800	8,0
26	1525	762	78	970	3500	10,0
27	1830	762	78	1170	4200	12,0
22	915	915	78	690	2500	6,5
25	1220	915	78	930	3350	11,5
28	1525	915	78	1150	4150	13,0
29	1830	915	78	1390	5000	15,5

All volume flow figures in l/s have been rounded off, then converted to m³/h.

Weights are net excluding packaging;

Weight of packing per unit approx. 0.5 kg.

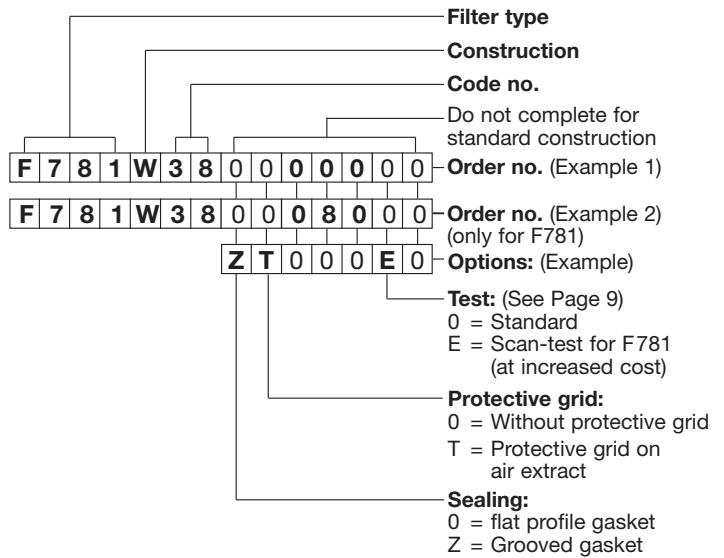
Dimensional tolerance + 0 mm
- 1 mm

Minipleat Filter Panels Order Code (Example 1)

Filter class H 13 _____ Filter type: **F781**
 Fibreboard filter casing _____ Construction: **W**
 Dimensions 610 x 610 x 150 mm _____ Code no: **38**
 With flat profile gasket _____ Standard: **0**
 Without protective grid _____ Standard: **0**
 With standard filter area _____ Code no: **000**
 Oil mist test _____ Standard: **0**

Minipleat Filter Panels (Example 2) with large filter area

Filter class H 13 _____ Filter type: **F781**
 Fibreboard filter casing _____ Construction: **W**
 Dimensions 610 x 610 x 150 mm _____ Code no: **38**
 With flat profile gasket _____ Standard: **0**
 Without protective grid _____ Standard: **0**
 With large filter area _____ Code: **080**
 Oil mist test _____ Standard: **0**



Dimensions

F780/F781 with standard filter area (Code no. 000)

Code no.	Dimensions in mm			Nominal volume flow		Approx. weight in kg
	B	H	T	in l/s	in m ³ /h	
	Construction W					
31	305	305	150	70	250	3,3
32	457	457	150	170	600	5,3
36	575	575	150	270	970	7,0
37	305	610	150	150	540	4,8
38	610	610	150	310	1100	7,5
39	762	610	150	390	1400	8,8
40	915	610	150	470	1700	10,0
41	1220	610	150	610	2200	12,7
42	1525	610	150	760	2750	16,5
43	1830	610	150	920	3300	19,0
44	762	762	150	485	1750	10,5
45	915	762	150	585	2100	11,8
50	1220	762	150	780	2800	14,0
51	1525	762	150	970	3500	17,3
52	1830	762	150	1165	4200	21,0
53	915	915	150	695	2500	13,5
54	1220	915	150	930	3350	16,2
55	1525	915	150	1150	4150	19,8
56	1830	915	150	1390	5000	23,5

Dimensions

F781 with large filter area (Code no. 080)

Code no.	Dimensions in mm			Nominal volume flow		Approx. weight in kg
	B	H	T	in l/s	in m ³ /h	
	Construction W					
31	305	305	150	90	330	3,4
32	457	457	150	225	805	5,6
36	575	575	150	370	1325	7,6
37	305	610	150	195	700	5,2
38	610	610	150	415	1500	8,1
39	762	610	150	530	1900	9,6
40	915	610	150	640	2300	11,0
41	1220	610	150	860	3100	14,0
42	1525	610	150	1070	3850	16,9
43	1830	610	150	1290	4650	21,0
44	762	762	150	665	2400	11,5
45	915	762	150	810	2910	13,0
50	1220	762	150	1090	3920	16,0
51	1525	762	150	1350	4870	18,2
52	1830	762	150	1635	5880	23,0
53	915	915	150	980	3530	15,5
54	1220	915	150	1320	4750	18,0
55	1525	915	150	1640	5900	21,0
56	1830	915	150	1980	7130	25,4

Dimensions

F781 with standard filter area (Code no. 000)

Code no.	Dimensions in mm			Nominal volume flow		Approx. weight in kg
	B	H	T	in l/s	in m ³ /h	
	Construction W					
57	305	305	292	130	460	6,3
58	457	457	292	315	1130	10,0
59	305	610	292	270	980	9,0
60	457	610	292	430	1540	10,5
63	610	610	292	585	2100	14,0
64	762	610	292	740	2660	17,0

All volume flow figures in l/s have been rounded off, then converted to m³/h.
 Weights are net excluding packaging;
 Weight of packing per unit approx. 0.5 kg.

Testing · Specification Text

Testing of particulate filters

EN 779: Particulate air filters for general room air-conditioning

This Norm is concerned with the performance testing of particulate air filters with an Efficiency against atmospheric dust of up to 98% (see leaflet: F0/2/EN/.) The particulate filters are divided into filter grades F5 to F9 according to their test results to EN 779.

Testing of high efficiency particulate filters EN 1822: High efficiency particulate filters (HEPA and ULPA)

This new European Norm testing procedure is based on particle counting using a liquid test aerosol of varying particle sizes.

The filters are rated by filter class according to extract efficiency or penetration.

Leak test

Tests are carried out in accordance with an oil mist test to EN 1822, a local scan test to verify the filters are free from leaks.

Trox offers the following:

- F781:** Filter panels individually tested for leaks
O = Standard with oil mist test
 or at increased price:
E = Scan test (particle counting)

Specification Text

Item	No.	Specification
		<p>Trox Minipleat Filter Panels F757 and F759 consisting of: Fibre board or particle board casing; Filter media of high grade moisture resistant glass fibre paper with textile spacer. The Minipleat Filter Panels are packed in damage-resistant cartons for transportation.</p> <p>Trox Minipleat Filter Panels F780 and F781 consisting of Casing of fibreboard, galvanized sheet steel, stainless sheet steel or aluminium extrusion; Filter media of high quality moisture resistant glass fibre paper with thermoplastic adhesive spacer. Minipleat filter panel F781 is type tested for leaks by oil-mist test at factory. Minipleat filter panels F780 and F781 are packed in damage-resistant cartons for transportation.</p> <p>Technical data: Filter class to EN 779 _____ Average Efficiency _____ % Filter class to EN 1822 _____ Extraction efficiency to EN 1822 _____ % Dimensions (B x H x T) _____ mm Nominal volume flow _____ l/s (m³/h) Initial pressure differential _____ Pa Max. operating temperature _____ °C Max. relative humidity _____ % Net weight _____ kg Order number _____ Manufacture: Trox</p>
		Price / Each