

Duct pre-filter units KPF

Application

Duct pre-filter units KPF are built in supply air installations before rooms, which demand higher air cleanliness. KPF units extend the service life of HEPA filters, because larger dirty particles are removed by pre-filters, which are built in the system before HEPA filters.

Description

KPF unit comprises filter of B x H x L dimensions, filter frames and bag filters of Coarse 50% - ePM1 80% filter class according to ISO 16890 (old designation G3 to F9). Filter housing is made of sheet metal, air-tight welded according to DIN 1946 and coloured in RAL 9010. Housing is fitted with connections for measuring of pressure drop. Galvanized steel sheet KPF possible (not airtight).

Installation

Basic frames are being fitted into the KPF units via the side opening. The procedure requires 1000 mm of free space (Fig. 1). KPF housing is fitted into the duct network via the self-locking flange.

Accessories

See chapter Accessories.

Technical data

See chapter filters, subchapter Bag filters.

Filter lifetime

Filter pollution is controlled by means of a differential manometer. The connections for plastic tubes are already fitted on the duct pre-filter units KPF.

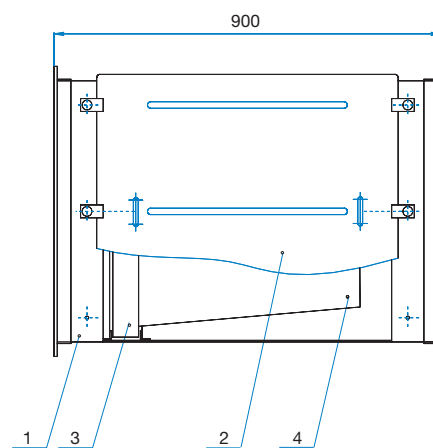


Fig. 1: Overview

1. Housing
2. Cover plate
3. Frame
4. Filter

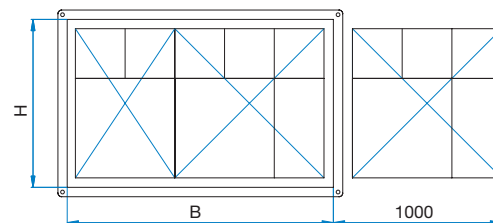
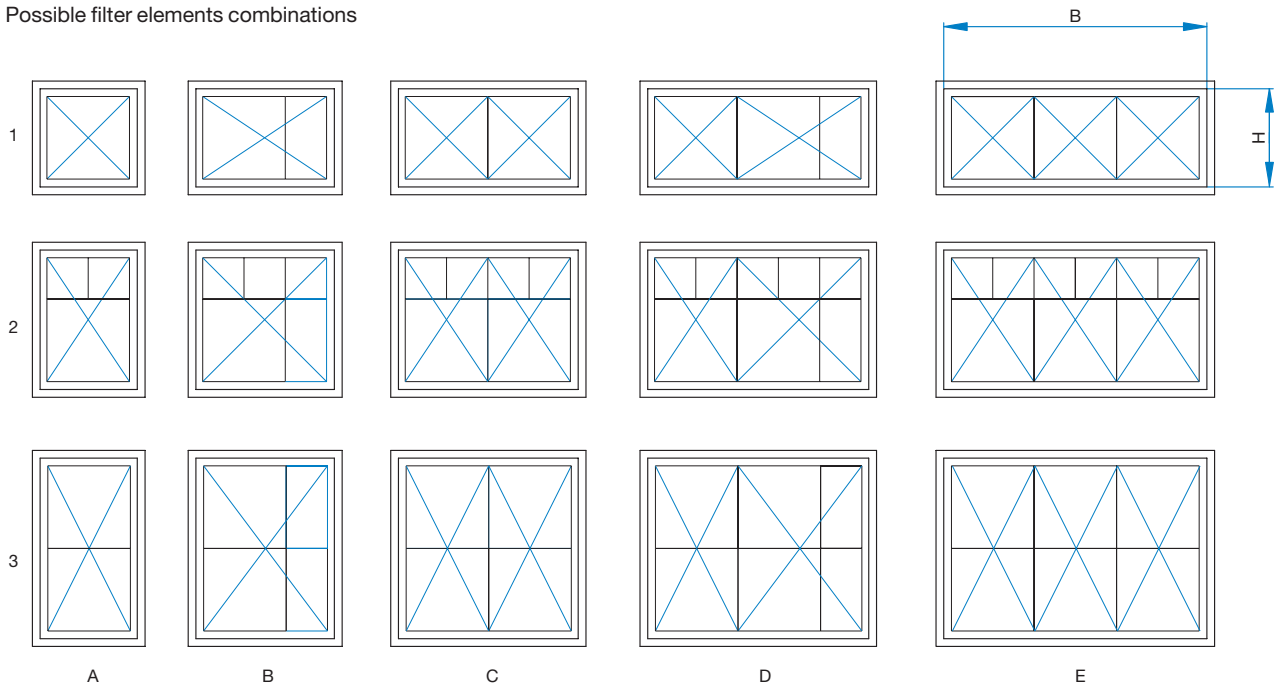


Table 1: Pre-filter unit size, quantity and size of bag filters

Size x	Weight (kg)	H (mm)	B (mm)	Bag filter, bag length 630 mm		
				592 x 592	287 x 592	287 x 287
1A	40	618	618	1	–	–
1B	52	618	925	1	1	–
1C	63	618	1232	2	–	–
1D	75	618	1539	2	1	–
1E	82	618	1846	3	–	–
2A	53	925	618	1	–	2
2B	68	925	925	1	1	3
2C	82	925	1232	2	–	4
2D	91	925	1539	2	1	5
2E	110	925	1846	3	–	6
3A	63	1232	618	2	–	–
3B	81	1232	925	2	2	–
3C	93	1232	1232	4	–	–
3D	110	1232	1539	4	2	–
3E	123	1232	1846	6	–	–

Fig. 2: Possible filter elements combinations


Ordering key

KPF-FV / G3 / 1A / POC

1 2 3 4

1 Filter type

FV	Bag filter
KA	Panel filters (on customer's request)

2 Filter class

G3-F9	Filter class acc. to EN 779:2012
Coarse 50% - ePM1 80%	Filter class according to ISO 16890

3 Filter size

1A	618 x 618 ... housing dimensions H x B
1B	618 x 925
1C	618 x 1232
1D	618 x 1539
1E	618 x 1846
2A	925 x 618
2B	925 x 925
2C	925 x 1232
2D	925 x 1539
2E	925 x 1846
3A	1232 x 618
3B	1232 x 925
3C	1232 x 1232
3D	1232 x 1539
3E	1232 x 1846

4 Finish

POC	Galvanized steel
RAL	Colored in RAL (standard color RAL 9010)

Note:

On request it is possible to produce also KPF units for other dimensions, types and classes of filters.
 Manometers have to be ordered separately.