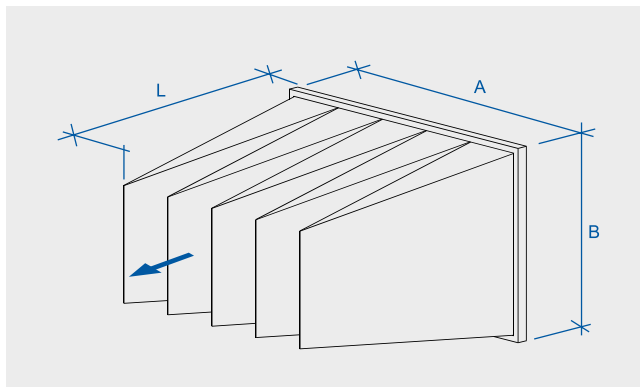
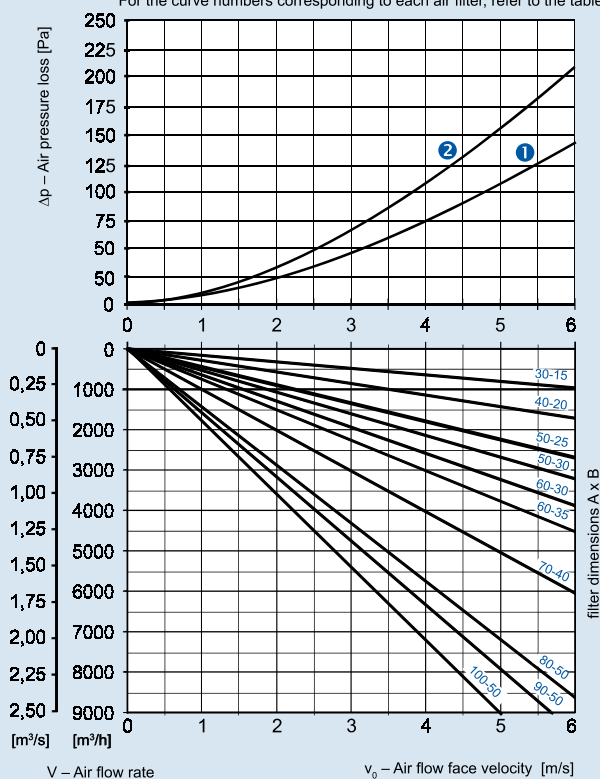


KF3 Bag Filters



Air Pressure Loss of KF3 Bag Filters Clean filter inserts

For the curve numbers corresponding to each air filter, refer to the table



Application

KF3 bag filters are designed to be used in KFD filter cassettes. They are used for single-stage air filtration in simpler air-handling systems or as pre-filters for the first filtration stage to separate coarser dust particles.

Operating Conditions and Position

Maximum temperature of the transported air can be up to +100 °C while air relative humidity is not limited (it can be up to 100 %).

Dimensional and Type Range

KF3 bag filters are manufactured in all ten dimensional ranges, from 30-15 to 100-50.

Materials

Filtration bags are made of unwoven, thermally and mechanically reinforced 100 % polyether textile of 150 g/ m² surface density. After inflating, the geometric shape of the filter bags is maintained by plastic braces which enable maximum utilization of the bag filtration surface. The fixing frame is made of galvanized sheets. The filter bags are fixed to the frame and sealed with a PE strip.

Installation, Maintenance and Service

The filters require regular inspections for fouling. During operation, pressure loss gradually rises due to the filter fouling with dust. Final air pressure loss at the nominal air flow is 250 [Pa]. At air flow rates different from the nominal air flow rate we recommend replacing the filter if the actual air pressure loss is double that of the clean filter pressure loss. After reaching the final pressure loss, replace the filter with a new one⁽¹⁾.

Filtration bags
Filter frame
Frame sealing



Example of designation

KF3 60 - 35

Cassette flange connection B dimension (cm)
Cassette flange connection A dimension (cm)
G3 class bag filter

Filter Type		KF3									
A-B dimensions	[cm]	30-15	40-20	50-25	50-30	60-30	60-35	70-40	80-50	90-50	100-50
L dimension	[cm]	42	42	52	52	52	52	60	68	68	68
Filtration Class - ČSN EN 779	[-]	G 3									
Mean rate of synthetic dust separation A _m	[%]	83,3									
Filtration area	[m ²]	0,49	0,66	1,28	1,49	1,54	1,75	2,79	3,91	3,98	4,15
Number of bags	[ks]	3	3	4	4	4	4	5	5	5	5
Weight	[kg]	1,5	1,5	2	2,5	2,5	3	3	3,5	3,5	4
Rated (nominal) air flow	[m ³ /h]	670	900	1740	2030	2090	2380	3790	5320	5410	5644
Initial pressure loss ⁽²⁾	[Pa]	114	71	101	68	54	52	68	67	57	61
Clean state pressure loss	Curve No.	2	2	2	1	1	1	1	1	1	1
Final pressure loss ⁽²⁾	[Pa]	250	250	250	250	250	250	250	250	250	250
Holding capacity	[g]	216	291	565	657	679	772	1231	1725	1756	1830
Thermal resistance	[°C]	max. + 100									
Combustibility class	[-]	F1 (according to DIN 53 438)									
Recoverability	[-]	Limited via a dry process (impaired filter properties can be expected)									

⁽¹⁾ Fouled filter can only be partly recovered via a dry process (dusted or vacuumed); however, impaired filter properties can be expected after the filter recovery.

⁽²⁾ At the nominal air flow