Hepatex JG, JK and JP High Efficiency Cylindrical Air Filters

CLEAN AIR

POWER GENERATION

CLEAN ROOM

INDUSTRIAL

The JG, JK and JP are cylindrical filters designed to filter particles such as bacteria, viruses or general contaminants suspended in air, compressed air or gases. The JP is a fine dust filter and the JG and JK are HEPA filters.

A wide variety of sizes and casing types are available, making these filters usable in a vast field of applications such as medical technique, research and industry.

The media, casings, sealing compounds and gaskets are manufactured under close supervision. The filtration media are tested for separation efficiency, pressure drop, tensile strength, weight and water repellancy. Each completed JK and JG high efficiency filter must pass the DIN 24184 oil mist test after manufacture. JP fine dust filters are subjected to visual inspection after manufacture.

KEY FACTS

- Compact space-saving design: Simple to install
- Low pressure drop: Reduces energy consumption and lower operating costs
- Available in a wide variety of sizes and casing types: Suitable for a vast array of applications
- Large filter medium area: Provides a long life service
- Individually tested and leak-free: For assured performance
- Corrosion resistant (JK) with synthetic material casing (JKG-W): Ideal for use in demanding applications

Hepatex JG, JK and JP Efficiency Ranges and Guide Specifications

Filtering Efficiencies / Quality Classifications / Temperature Ranges

Initial Efficiency[1]	Filter type	JP	JG	JK
	Medium	Cellulose	Glass fibre	Glass fibreJP
MPPS Test[2] as per EN1822	%	–	99.99	99.99
Sodium Flame Test B. S. 3928	%	–	> 99.995	> 99.995
DOP-Test, Mil-Std-282	%	–	> 99.99	> 99.99
Efficiency to ASHRAE 52–76/B.S. 6540/ DIN 24185	%	> 95	–	–
Maximum Relative Humidity of Air	%	< 85	< 100	< 100
Classification to EUROVENT/SWKI 84	–	F9	H13	H13
Classification to DIN 24185/184	–	F9	S	S
Max. Continuous Temperature[3]	°C	90	90	90
Max. Final Pressure Drop	Pa	500	1,000	1,000

1) At nominal air flow 2) Test aerosol approx. 0.15 µm 3) For short period (approx. 1 h) max. 105 °C permissible

GUIDE SPECIFICATIONS

JP – Cylindrical fine dust filter class F9 (EN779).
Filtermedia made of cellulose fibres. Flanges made of elastic plastic material, serving as gaskets.

- Max. Admissible RH 85 %
- Max. Continuous Temp. 90 °C
- Separation Efficiency (EN779) 95 %

JG – Cylindrical HEPA filters to class H13 (EN1822).
Filtermedia out of submicron glass fibres, metal parts of aluminium. Connection threading 1" (brass).

a) Execution without cover protective
b) Execution with steel cover, gasproof lacquered, 1 connection
c) Execution with sheet steel casing, gasproof lacquered, 2 connections

- Max. Admissible RH 100 %
- Max. Continuous Temp. 90 °C
- Separation Efficiency (EN1822) 99.99 %
- Accessory Locknut R1" incl. gasket for connection of filter.

JK – Cylindrical HEPA filters to class H13 (EN1822).
Filtermedia out of submicron glass fibres. Ring and bottom disc made of Resocel.

- Max. Admissible RH 100 %
- Max. Continuous Temp. 90 °C
- Separation Efficiency (EN779) 99.99 %
- Accessories. Clamp for installation of the filter, consisting of: connecting ring, wedge (brass) and gasket made of EPR (ethylene propylene rubber).

JKG-W CASING
Plastic filter casing JKG-W 19/... for installation in air duct systems or for similar applications.

- Connection Diameter: 125 mm
- Casing to Accommodate a HEPA Filter Type JK 19/...
- Direction of Air Flow horizontal/vertical, downward/upward.
- Fitted with condensate drain, gasket and brackets for installation on wall or ceiling.

Hepatex JK

JK are cylindrical HEPA filters available in heights from 50 to 400 mm and in diameters of 150 or 190 mm. Each filter is leak tested and leak free.

MOUNTING

With clamps in a cut-out of diameter "D4" (see on page 79) or by means of a special gasket in filter casing JKG-W (see on page 82).

FILTER LIFE

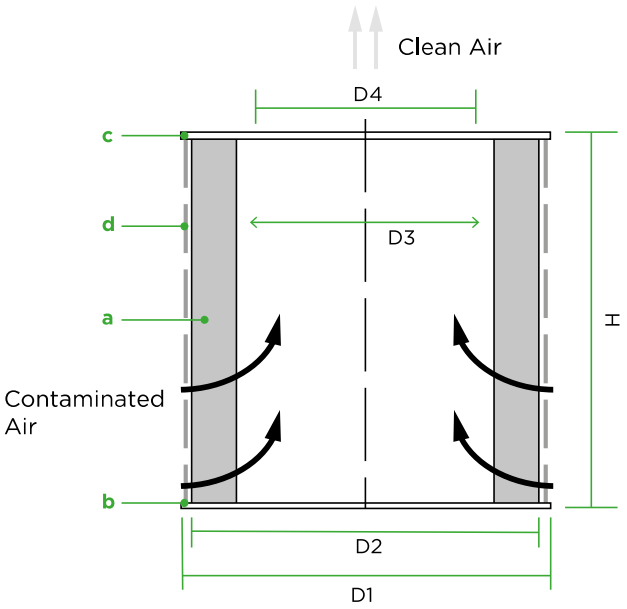
Depending on dust load and air flow. The filter should be changed if it has reached about 3 times the initial pressure drop, however latest at a final pressure drop of 1,000 Pa.

MATERIAL SPECIFICATIONS

a = Filter media: glass paper
b = sealant: synthetic resin
c = ring and bottom disc: Resocel
d = aluminium protection grid

DIMENSIONAL SKETCH

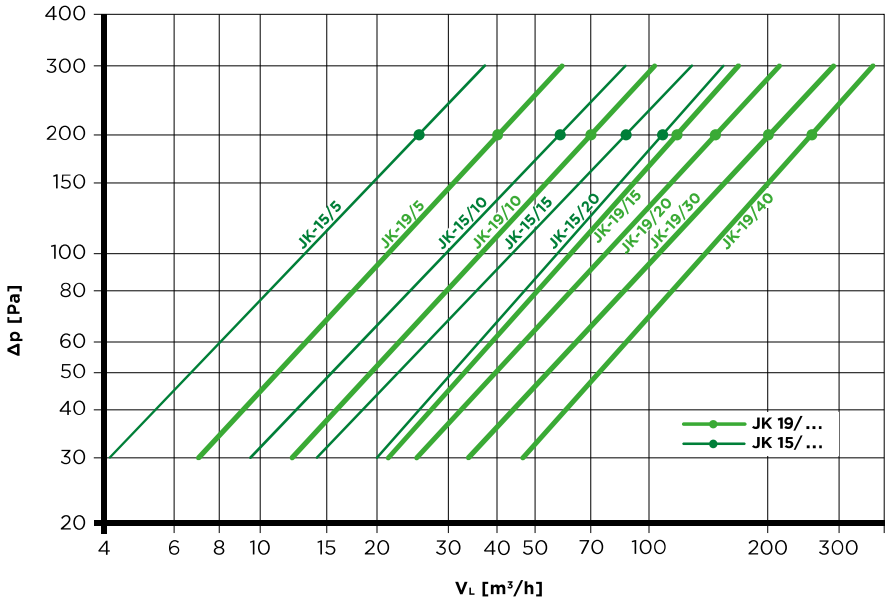
Dimensions in mm



Normal air flow [1]

INITIAL PRESSURE DROP

[Δp] as function of air flow [V_L]



Hepatex JK Technical Data and Part Number

Type	Dimensions [mm]					Rated Air Flow V_N [m³/h]	Δp a V_N [Pa]	Active Filter Surface [m²]	Filter Weight [kg]
	D1	D2	D3	D4	H				
JK 15/5	155	150	110	95	50	25	200	0.2	0.11
JK 15/10	155	150	110	95	100	55	200	0.5	0.16
JK 15/15	155	150	110	95	150	80	200	0.8	0.21
JK 15/20	155	150	110	95	200	110	200	1.1	0.25
JK 19/5	200	190	150	130	50	40	200	0.3	0.20
JK 19/10	200	190	150	130	100	70	200	0.6	0.24
JK 19/15	200	190	150	130	150	115	200	1.0	0.33
JK 19/20	200	190	150	130	200	150	200	1.3	0.39
JK 19/30	200	190	150	130	300	200	200	1.9	0.55
JK 19/40	200	190	150	130	400	250	200	2.5	0.70

ACCESSORIES

Clamp for JK 15 filter (incl. gasket)
Clamp for JK 19 filter (incl. gasket)
Tool for installation[2] of JK 19 clamp

CLAMP

for installation of JK filters in a cut-out of D4 ± 0.5 mm diameter.

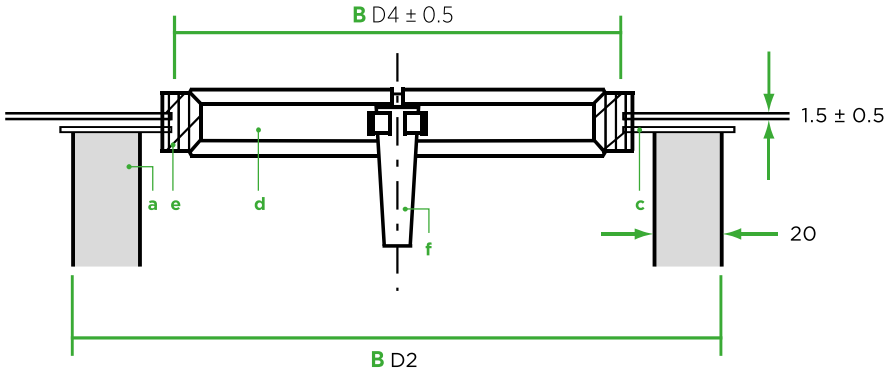
SPECIALS

At request JK-filters may also be supplied in other filter efficiencies, heights, diameters and with supporting grill.

Remarks

1) Reverse air flow is permitted and may be an advantage when filtering toxic or radioactive dust (filter serves as a dust container).
2) For fast and easy mounting of filters.
3) Guide specifications see on page 77.

CUT-OUT ON SITE



MATERIAL SPECIFICATIONS[3]

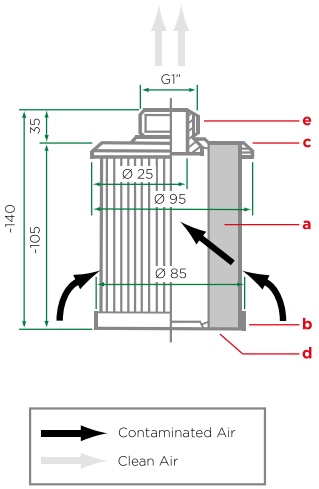
a = filter media: glass paper
c = flange: Resocel
d = connecting ring: brass
e = gasket: synthetic material
f = wedge: brass

Hepatex JG

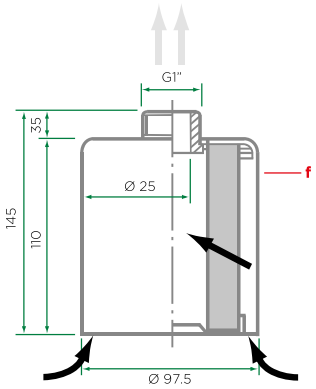
DIMENSIONAL SKETCH

Dimensions in mm

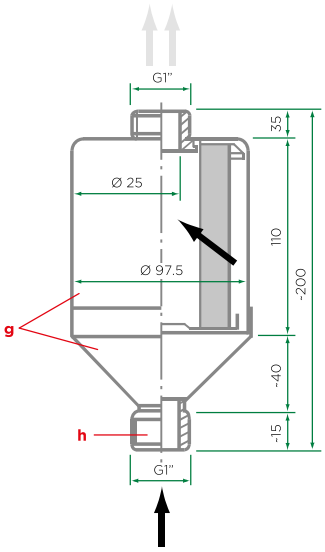
JG without Protective Cover



JG with Protective Cover

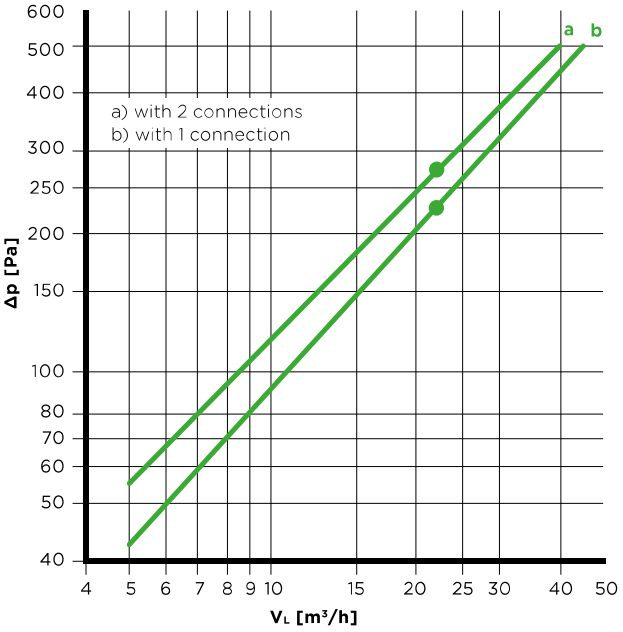


JG with Casing



INITIAL PRESSURE DROP[1)]

[Δp] as Function of Air Flow [V_L]



ASSEMBLY

The threaded connection on the clean air side "e" is to be inserted through a cut-out of min. 35 mm diameter and fastened by means of a gasket and locknut.

Attention: the filter should not be screwed-in holding filterpart "c", "f" and "g".

MATERIAL SPECIFICATION[2)]

a = Filter Media: Glass Bres
b = Sealant: Synthetic Material
c = Flange: Aluminium
d = Base: Aluminium
e = Connection Socket: Brass
f = Protective Cover: Mild steel, gas proof laquered
g = Casing (2 connections): mild Steel, gasproof laquered
h = Connection Socket: Brass

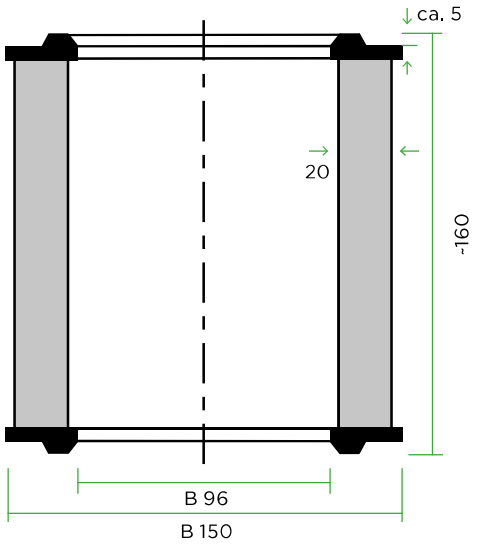
Remarks

1) Recommended final pressure drop approx. 3 times the initial pressure drop, but max. 1,000 Pa.
2) For guide specifications see on page 77.
3) Max. differencial pressure at 20 °C: PB(max.) = 1.5 bar.

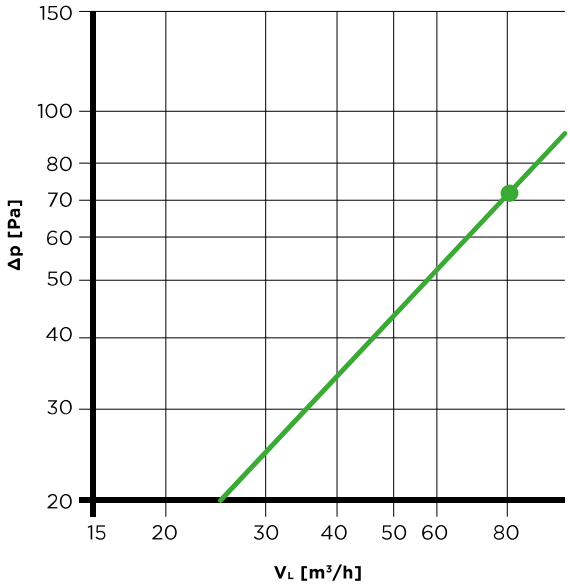
Technical Data/ Part Number	Air Flow Rating V_N [m³/h]	Δp[1)] at V_N [Pa]	Active Filter Surface [m²]	Weight [kg]
Filter Type JG, without cover	22	230	0.3	0.30
Filter Type JG, with cover	22	230	0.3	0.40
Filter Type JG, with casing [3)]	22	280	0.3	0.68
Accessory Lock nut G1" incl. gasket				

Hepatex JP

DIMENSIONAL SKETCH
Dimensions in mm



INITIAL PRESSURE DROP[1)]
[Δp] as Function of Air Flow [V_L]



JP are cylindrical fine dust filters with elastic, pliable flanges, serving simultaneously as a gasket.

MATERIAL SPECIFICATIONS [2)]
Filter Media: Cellulose Paper
Flanges: Elastomer (elastic and pliable)
Clamp: Aluminium
Coupling/End cover: Galvanized Steel

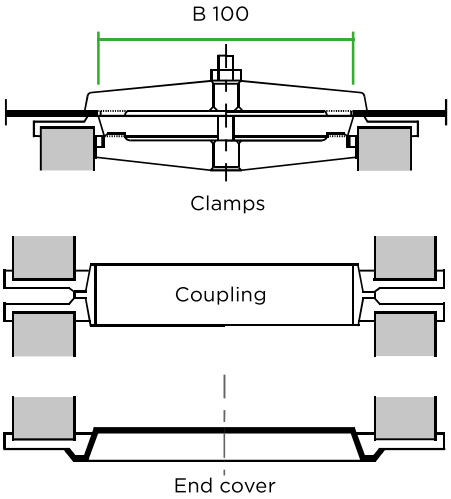
Technical Data / Part Number	Air Flow Rating V_N [m³/h]	Δp[1)] at V_N [Pa]	Active Filter Surface [m²]	Weight [kg]
Filter type JP-Blue	80	70	1.3	0.30

ACCESSORIES
Clamp, End cover, Coupling.

CLAMPS
consisting of clamping cross for 96 mm diameter hole and spacing ring. Suitable for assembly of JP filter in a cut-out of 100 mm diameter.

COUPLING
for the joining of two filter cells (series connection).

END COVER
suitable for bottom aperture of 96 mm diameter.



Remarks
1) Recommended final pressure drop approx. 3 times the initial pressure drop, however max. 500 Pa.
2) For guide specifications see on page 77.

Hepatex JKG-W

JKG-W casing is a cylindrical synthetic material casing for all JK19 filters (see on pages 78 + 79). It can be installed directly into the piping system and is easy to mount on walls and ceilings.

APPLICATION

Suitable for all systems where small quantities of air are to be effectively filtered, especially inlet- and outlet air of laboratories, water reservoirs, various containers, working places and as bleed filter.

MATERIAL SPECIFICATIONS[1)]

g = Casing: plastic (welded)
h = Gasket: synthetic elastomer
i = Connection for condensate extraction pipe

EXTENT OF SUPPLY

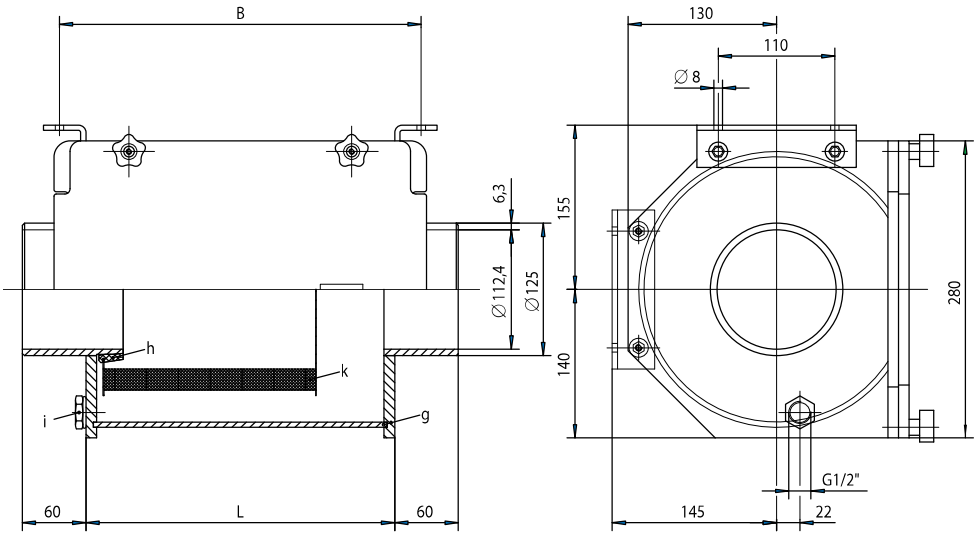
Case equipped with gasket, condensate drain and brackets for installation on wall or ceiling.

LIMITS

Temperature: T (max.) = 50 °C
Differential pressure: PB (max.) = ± 14 000 Pa } at 20 °C
PB (Max.) = ± 0.14 bar

DIMENSIONAL SKETCH

Dimensions in mm



Combinations/dimensions/part number

Casing Type	Matching Filter Type	Dimensions		Weight of Casing [kg]
		L (mm)	B (mm)	
JKG-W 19/20	JK 19/20	291	341	5.2
JKG-W 19/30	JK 19/30	391	341	7.0
JKG-W 19/40	JK 19/40	491	341	9.4
2 Sleeves (B 125 mm) with 4 Clips				

Remarks

1) For guide specifications see on page 77.
2) Reversed air flow permitted (see to remark 1 on page 79).