for wall and ceiling installation LF



Simple to install components for effective solutions

The controlled intake of outside air is essential for creating a good ventilation system and meeting the regulations in most cases. The purification of supply air is a must nowadays. For this purpose, HELIOS offer simple and effective components for various installation conditions.

■ Accessories for air filters

Complete kit to monitor the pressure drop and thus the contamination of air filters. The gold coated connector makes it suitable for BMS applications. Pressure range 50 – 500 Pa, ambient temperature from –20 to +85 °C and air flow temperature from –20 to 85 °C.

Differential pressure switch
DDS Ref. No. 0445

■ Model LF.., for wall and ceiling installation

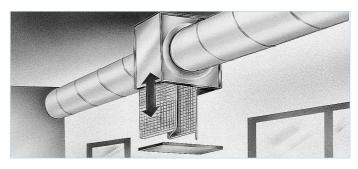
Stylish design to cover ventilation openings. Air flow volumes from 200 to 4000 $\,\mathrm{m}^3/\mathrm{h}$.





■ LFB.., Filter box for duct connection For in-line installation of circular ducting with dimensions from

ducting with dimensions from 100 to 400 mm ø and air flow volumes from 100 to 4000 m³/h.



KLF.., Rectangular air filter for direct installation into ducting. Dimensions fit rectangular fan range. Air flow volumes up to 5000 m³/h.



Air filter LF

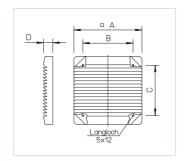
for wall and ceiling installation

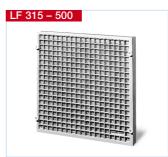
Specifically designed to cover internal ventilation and duct openings on the wall and ceiling. Egg crate grilles superimposed on frames are made of high quality, light grey polymer. Complete flow through of filter mat. Large cross section area of filter reduces the pressure drop and increases the dust storing capacity.

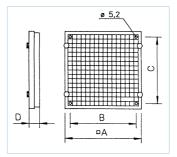
- □ Filter mat made of washable synthetic fibre, class G 2, thermally bonded, 100 g/m², fire resistant to DIN 53438: F1. 67% particle separation, dust storage capacity: 380 g/m².
- ☐ Installation via four concealed holes in the frame, can be doweled in any position.
- □ Cleaning Depending on the system a filter replacement is necessary if the pressure drop exceeds approximately 1, 5-2 times of the original value. Remove the filter mat after loosening the egg crate grille and clean both parts in soapy water. Afterwards reinsert it and fix with the four plastic nuts.
- ☐ Spare filter mats Due to decay, the mat may need to be replaced after several times of cleaning. See the chart for ordering information of spare filters.

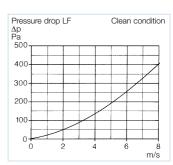
 Contents: 5 pieces.











☐ Pressure drop

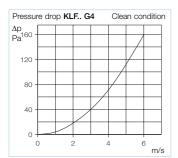
Air filters generate a resistance, as shown on the curve above, which must be considered when designing the system.

Туре	Ref. No.	Fits fan nominal size	Maximum dimensions of opening	Dimensions A B C D				Nominal weight	Spare filter mats (Contents = 5 pieces) Type Ref. No.	
			or opening	Λ	D	U	D	weigiii	Турс	1101. 140.
		mm	mm	mm	mm	mm	mm	kg		
LF 200	0743	200	ø 200	287	210	210	39.0	0.80	ELF 200	0737
LF 250	0744	250/280	ø 300	337	240	240	39.0	1.00	ELF 250	0738
LF 315	0745	315	330 x 300	390	343	317	39.0	0.85	ELF 315	0739
LF 355	0746	355	380 x 350	440	393	367	39.0	0.95	ELF 355	0740
LF 400	0747	400	355 x 400	490	443	417	31.5	1.85	ELF 400	0741
LF 500	0748	450/500	475 x 450	540	493	467	31.5	2.25	ELF 500	0742

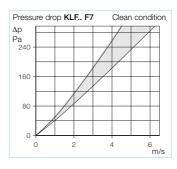


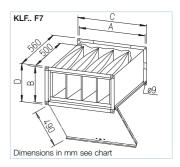






Dimensions in mm see chart





■ Rectangular air filter KLF.. Air filter with flanges at both ends for in-duct installation.

□ Casing

Made of galvanised steel. The cover is detachable in order to remove filters by means of quick release fasteners.

☐ Bag filter cassette

Held in a frame that is made of galvanised steel. Filter bags with a large cross section area for high dust storage capacity.

Models KLF.. G4 with filter class G4, made of washable synthetic fibre, highly strengthened, 190 g/m². DIN 53438 F1, self extinguishing. 91,3% particle separation, dust storage capacity: 354 g/m².

Models KLF.. F7 with filter class F7, made of synthetic fibre, DIN 53438 F1, self extinguishing. Particle separation rate: ca. 98%. Dust storage capacity: 88.6 g/m².

Note

The integration of the filter with F7 filter class and differential pressure switch DDS (Ref. No. 0445) in external air systems comply with the requirements of VDI 6022.

■ Installation

KLF.. G4

Horizontal and vertical (topdown air flow direction) in-duct installation. A free space must be allowed for easy removal of the filter. For areas with restricted space the cover can be detached without tools by an opening angle of more than 45°.

□ Cleaning

Depending on the system a filter replacement is necessary if the pressure drop exceeds approximately 1.5 – 2 times of the original value.

The filter cassette can be easily removed through the opening on the casing cover. After cleaning or replacement, the filter cassette should be reinserted; by closing the cover the filter cassette is pinched automatically to the casing gaskets.

□ Spare filter cassettes

Due to decay, the filter cassette may need to be replaced after several times of cleaning. See the chart for ordering information.

☐ Pressure drop

Air filters generate a resistance as shown on the curve above; the grey coloured area demonstrates the air filter resistance of different sizes that must be considered when designing the system.

Accessories Differential pressure switch

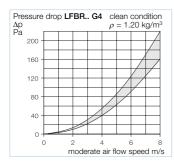
DDS Ref. No. 0445 Complete kit to monitor air filters. Pressure range: 50 – 500 Pa.

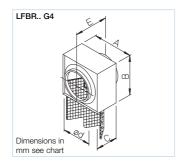
Туре	Def No	Fits fan nominal size NG cm		Dimensio	ns in mm	Nominal	Spare filter mats (Contents = 2 pieces)			
	Ref. No.		Α	В	С	D	weight ca. kg		lef. No.	
Rectangular air filter KLF G4, filter class G4										
KLF 40/20 G	4 8720	40/20	420	220	440	240	4.5	EKLF 40/20 G4	8724	
KLF 50/25-3	0 G4 8721	50/25-30	520	270/320	540	340	6.0	EKLF 50/25-30 G4	8725	
KLF 60/30-3	5 G4 8722	60/30-35	620	320/370	640	390	7.0	EKLF 60/30-35 G4	8726	
KLF 70/40 G	4 8723	70/40	720	420	740	440	8.5	EKLF 70/40 G4	8727	
KLF 80/50 G	4 8670	80/50	820	520	840	540	13.0	EKLF 80/50 G4	8673	
KLF 100/50 (G4 8671	100/50	1020	520	1040	540	15.0	EKLF 100/50 G4	8674	
Rectangular air filter KLF F7, filter class F7										
KLF 40/20 F7	7 8644	40/20	420	220	440	240	6.5	EKLF 40/20 F7	8635	
KLF 50/25-3	0 F7 8645	50/25-30	520	270/320	540	340	8.5	EKLF 50/25-30 F7	8636	
KLF 60/30-3	5 F7 8646	60/30-35	620	320/370	640	390	10.5	EKLF 60/30-35 F7	8637	
KLF 70/40 F7	7 8647	70/40	720	420	740	440	13.5	EKLF 70/40 F7	8638	
KLF 80/50 F7	7 8654	80/50	820	520	840	540	20.5	EKLF 80/50 F7	8639	
KLF 100/50 F	F7 8655	100/50	1020	520	1040	540	24.0	EKLF 100/50 F7	8659	











Pressure drop LFBR.. F7 clean condition $\rho = 1.20 \text{ kg/m}^3$ Pa $\rho = 1.20 \text{ kg/m}^3$ Pa $\rho = 1.20 \text{ kg/m}^3$ $\rho = 1.20 \text{ kg/m}^$



Air filter box LFBR..

For in-line installation with circular ducting. Spigots on both ends are fitted with double lip rubber seals, matching nominal size ducting.

□ Casing

Made of galvanised steel. Access panel fitted with clamp for easy filter change.

☐ Filter

Models LFBR.. G4 made of

washable plastic fibre, class G4. Temperature resistant up to +100°C. Fire resistant to DIN 53438 F1, self extinguishing, can be regenerated 10-15 times. 93,8% particle separation, dust storage capacity: 122 g/m².

Models LFBR.. F7 bag filter, class F7, made of synthetic polymer, 64 g/m². 98% particle separation, dust storage capacity: 88.6 g/m².

■ Installation

Suitable for installation in any position. A free space for a size of B must be allowed for easy removal of the filter.

□ Cleaning

Depending on the system a filter replacement is necessary if the pressure drop exceeds approximately 1.5 – 2 times of the original value. After remonving the casing-cover pull out the filter element.

☐ Spare filter mats

Due to decay, the mat may need to be replaced after several times of cleaning.

☐ Pressure drop

Air filters generate a resistance as shown on the curve above; the grey coloured area demonstrates the air filter resistance of different sizes that must be considered when designing the system.

Accessories

Differential pressure switch
DDS Ref. No. 0445
Complete kit to monitor air filters.
Pressure range: 50 – 500 Pa.

Туре	Ref. No.	Connection	D	imensions in mr	ions in mm			Spare filter (Contents = 5 pieces)		
		Connection- ø d	А	В	С	Е	weight ca. kg	Type	Ref. No.	
Air filter box LFBR G4, filter class G4										
LFBR 100 G4	8576	100	205	170	120	227	1.5	ELFBR 100 G4	8585	
LFBR 125 G4	8577	125	215	205	140	252	1.8	ELFBR 125 G4	8586	
LFBR 160 G4	8578	160	265	235	155	267	2.4	ELFBR 160 G4	8587	
LFBR 200 G4	8579	200	315	275	180	302	3.0	ELFBR 200 G4	8588	
LFBR 250 G4	8580	250	365	325	230	352	4.2	ELFBR 250 G4	8589	
LFBR 315 G4	8581	315	425	390	330	452	7.5	ELFBR 315 G4	8590	
LFBR 355 G4	8583	355	515	495	455	587	12.0	ELFBR 355 G4	8592	
LFBR 400 G4	8582	400	515	495	455	587	12.0	ELFBR 400 G4	8591	
Air filter box l	Air filter box LFBR F7, filter class F7 (Contents = 5 pieces)									
LFBR 100 F7	8530	100	204	204	400	480	3.5	ELFBR 100 F7	8300	
LFBR 125 F7	8531	125	204	204	400	480	3.5	ELFBR 125 F7	8301	
LFBR 160 F7	8532	160	294	295	400	480	4.3	ELFBR 160 F7	8302	
LFBR 200 F7	8533	200	294	295	400	480	4.3	ELFBR 200 F7	8303	
LFBR 250 F7	8534	250	424	385	480	600	5.2	ELFBR 250 F7	8304	
LFBR 315 F7	8535	315	424	385	480	600	5.2	ELFBR 315 F7	8305	
LFBR 355 F7	8536	355	504	505	600	720	6.6	ELFBR 355 F7	8306	
LFBR 400 F7	8537	400	504	505	600	720	6.6	ELFBR 400 F7	8307	

Note

The integration of the filter with F7 filter class and differential pressure switch DDS (Ref. No. 0445) in external air systems comply with the requirements of VDI 6022.