



## Compact Filter Grille KGF



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## Compact Filter Grille KGF

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## Compact Filter Grille KGF

### Description

The compact filter grille type KGF can be used in both supply and return air installations. Owing to its **compact construction**, the front frame, blades for air distribution and the hit-and-miss damper for air volume control consist of a single component, as a result of which the compact filter grille requires only a **small mounting depth**. This small mounting depth reduces vortex formation at the hit-and-miss damper, thus ensuring **uniform air intake** over the entire diffuser surface of the grille. This means that, compared with grilles equipped with air throttle dampers, the **air flow capacity is more than 20% higher** at the same sound power level. Accordingly, smaller or fewer grilles can be used.

Moreover, the compact construction gives the grille **very high stability** and **torsional rigidity**. Its special frame shape, angled on both sides, allows the compact filter grille to sit flush with the ductwork. Modern production methods allow the compact grille to be **manufactured free of welding spots**, thus **minimising the susceptibility to corrosion** of the compact grille.

The modern design of the **cover frame** allows concealed mounting of the grille. The grille KGF is fitted with an integrated filter insert ISO Coarse > 45% (dry layer filter mat). To replace the filter mat the blades have to be removed from the front side.

**Unless stated otherwise, the KGF grille will be supplied as galvanised sheet steel model!**

### Construction

Filter

- Dry layer filter mat

Grilles

- Galvanised sheet steel
- Galvanised sheet steel, painted on the front to the RAL colour 9010 (white)

### model

For installation in rectangular ductwork

KGF-Q-08-... - Horizontal air deflection blades, with filter insert ISO Coarse > 45%

For installation in sheet metal / spiral ductwork

KGF-R-08-... - Horizontal air deflection blades, with filter insert ISO Coarse > 45%

### Accessories

Plenum box (-AK)

- Galvanised sheet steel (only for KGF-Q-...)

Cover frame (-BR) for KGF-Q-...

- Natural colour anodised aluminium (E6/EV1)
- Aluminium painted to RAL colour 9010 (white)

Rubber lip seal (-GD1)

- Special rubber

Internal insulation (-Ii)

- thermal insulation at the inside of the plenum box

External insulation (-Ia)

- thermal insulation at the outside of the plenum box

### Fastening

Screw mounting (-SM)

- Standard, screws must be provided on site

Concealed mounting

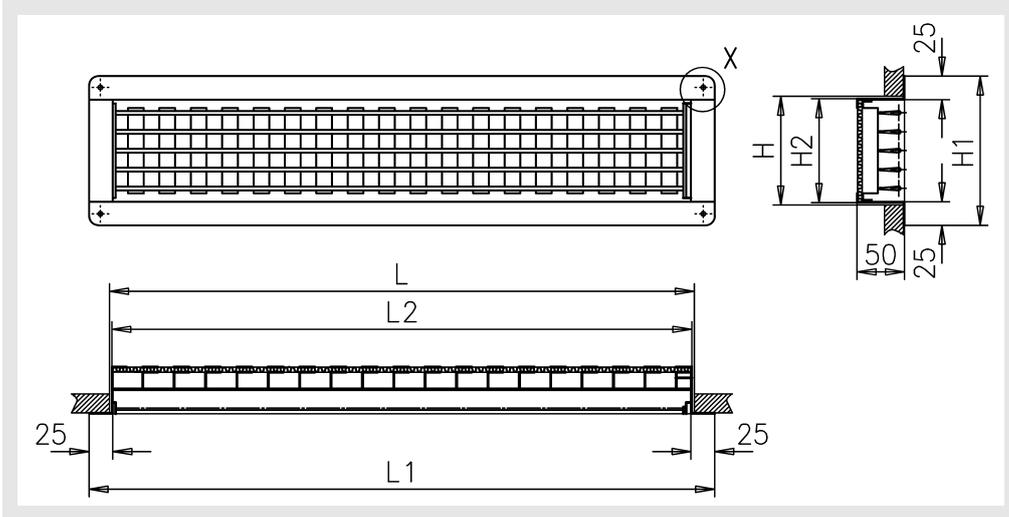
- at an extra charge, with cover frame (only possible with type KGF-Q-...)

# Compact Filter Grille KGF

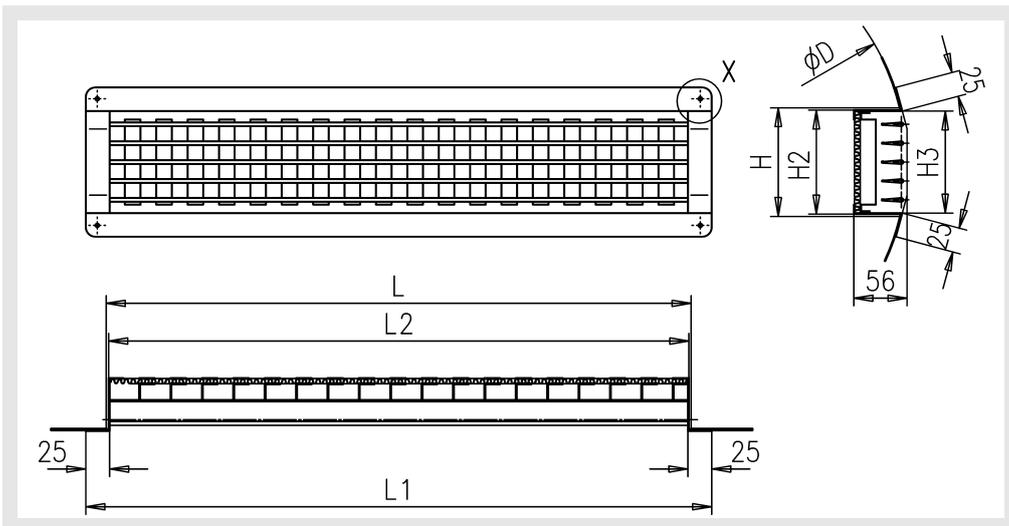
## Models and dimensions

### Dimensions

#### KGF-Q-08-...



#### KGF-R-08-...

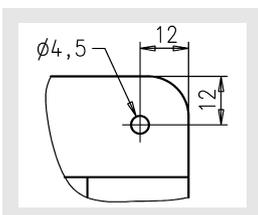


### Available sizes

L	L1	L2	H	H1	H2	H3
315	358	312	115	158	112	108
415	458	412	215	258	212	208
515	558	512	315	358	312	308
615	658	612				

All combined lengths and heights available!  
Special dimensions are not possible!

### Detail X

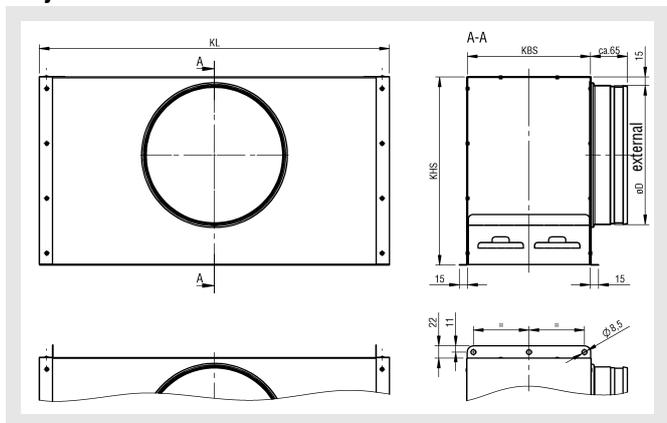


## Compact Filter Grille KGF

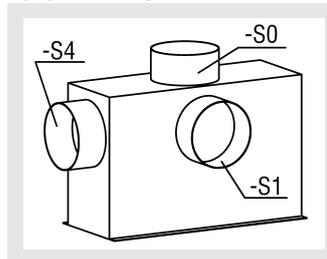
### Dimensions of accessories

Plenum box (-AK) with lateral spigot (-S1)

Only for KGF-Q-...



### Spigot arrangement



- Lateral spigot (-S1, standard)
- Spigot from above (-S0)
- Spigot front side (-S4)

Dimensions and prices for spigot from above (-S0) and spigot front side (-S4) upon request.

### Available sizes AK -S1

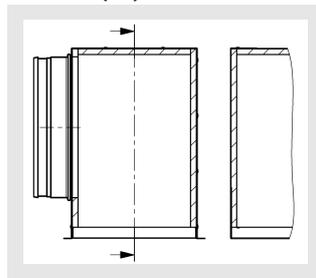
L	H	KL	KBS	KHS	ød	a
315	115	320	118	245	158	138
415		420		245	158	
515		520		245	158	
615		620		245	158	

L	H	KL	KBS	KHS	ød	a
315	215	320	218	285	198	180
415		420		285	198	
515		520		285	198	
615		620		335	248	

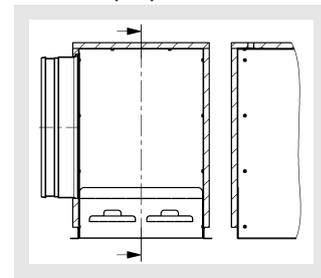
L	H	KL	KBS	KHS	ød	a
315	315	320	318	335	248	230
415		420		335	248	
515		520		335	248	
615		620		400	313	

### Insulation for plenum box AK

internal (-li)

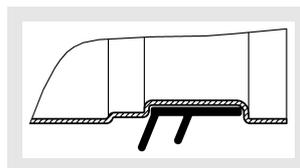


external (-la)



### Rubber lip seal (-GD1)

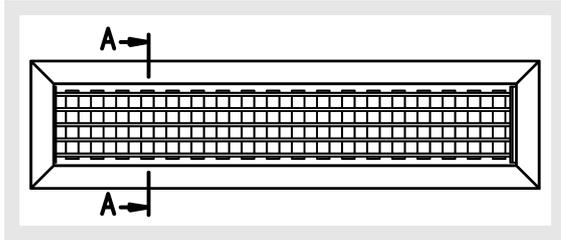
Detail Y



Ceiling opening in the length / height with plenum box  
L+10 / H+10

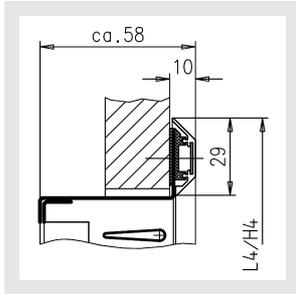
## Compact Filter Grille KGF

### Cover frame (-BR)



The cover frame is only available for type KGF-Q-...!  
 A cover frame has been developed to allow concealed mounting (VM), which can be attached easily, after sliding two plastic parts onto the longitudinal side of the grille. This can also easily be done on grilles which have already been installed.

### Section A-A



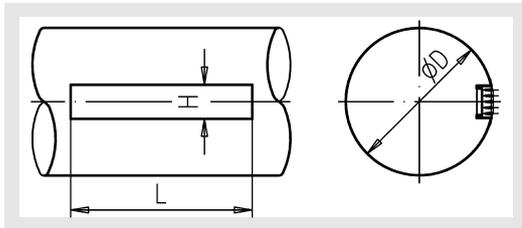
### Available sizes

L	L4	H	H4
315	368	115	168
415	468	215	268
515	568	315	368
615	668		

All combined lengths and heights available!

## Installation

### Installation situation KGF-R-...



### Duct diameter

KGF-R-... H	ød		
	min.	ideal	max.
115	300	500	800
215	600	750	1250
315	900	1000	1250

The curved flange and the three height dimensions, apart from providing high stability and torsional rigidity, allow optimum adaptation of the compact filter grille type KGF-R-... to sheet metal and spiral ducts. The selection of the grille height depends on the duct measures shown in the table. The grille frames only make optimum contact when the ideal duct diameter is used.

## Compact Filter Grille KGF

### Order code KGF

01	02	03	04	05
Type	model	Blades	Length	Height
<b>Example</b>				
KGF	-Q	-08	-615	-115

06	07	08	09	10
Air throw pattern	Material	Paint	cover frame	Installation frame
-L000	-SV	-0000	-BR	-ERO

#### Sample

#### **KGF-Q-08-615-115-L000-SV-0000-BR-ERO**

Compact filter grille type KGF | grille for duct and box installation | pivoting horizontal air deflection blades on the front side, additionally with hit-and-miss damper and filter insert | grille length 615 mm | grille height 115 mm | blade position straight | galvanised steel | without paint | with cover frame | without mounting frame

#### Order details

##### 01 - Type

KGF = Compact filter grille type KGF

##### 02 - Model

Q = Grille for duct and box installation  
R = Grille for duct installation

##### 03 - Blades

08 = Supply and return air grille with horizontal blades, additionally with hit-and-miss damper and filter insert (ISO Coarse > 45%)

##### 04 - Length

315 = Grille length 315 mm  
415 = Grille length 415 mm  
515 = Grille length 515 mm  
615 = Grille length 615 mm

##### 05 - Height

115 = Grille height 115 mm  
215 = Grille height 215 mm  
315 = Grille height 315 mm

##### 06 - Air throw pattern

L000 = Blade position straight (standard)  
L044 = Blade position 44° diverging  
L084 = Blade position 84° diverging

##### 07 - Material

SV = Galvanised sheet steel (standard)  
SB = Sheet steel (only available with paint)

##### 08 - Paint

0000 = Without paint (standard)  
9010 = RAL colour 9010 (white)  
xxxx = RAL colour can be freely selected (always with 4 digits)

##### 09 - Cover frame

BN = Without cover frame (standard)  
BR = With cover frame made of natural colour anodised aluminium as standard with SV, otherwise aluminium painted to the RAL colour of the grille (not available for KGF-R-...)

##### 10 - Mounting frame

ERO = Without mounting frame (standard)  
ER1 = With mounting frame (not available in connection with AK, not for KGF-R-...)  
ER2 = With mounting frame with wall anchors (not available in connection with AK, not for KGF-R-...)

## Compact Filter Grille KGF

### Order code AK KGF

01	02	03	04	05	06	07
Accessories	Air diffuser	Length	Height	Single / band design	Fastening	Material
<b>Example</b>						
AK	-51	-00415	-215	-N	-SM	-SV

08	09	10	11	12	13	14
Damper	Rubber lip seal	Insulation	Height of plenum box	Width of box	Spigot diameter	Spigot position
-DK1	-GD1	-I0	-KHS	-KBS	-SDS	-S1

#### Sample

#### AK-51-00415-215-N-SM-SV-DK1-GD1-I0-KHS-KBS-SDS-S1

Plenum box, rectangular design | suitable for diffuser type KGF | length 415mm | height 215mm | standard length | screw mounting | galvanised sheet steel | with damper | with rubber lip seal | without box insulation | standard height of box | standard width of box | standard spigot diameter | lateral spigot

#### Order details

##### 01 - Type

AK = Plenum box, rectangular design

##### 02 - Air diffuser

51 = Compact filter grille type KFG

##### 03 - Length

00315 = Length 315 mm

00415 = Length 415 mm

00515 = Length 515 mm

00615 = Length 615 mm

##### 04 - Height

115 = Height 115 mm

215 = Height 215 mm

315 = Height 315 mm

##### 05 - Single / band design

N = Standard length (standard)

##### 06 - Fastening

SM = Screw mounting (standard, screws must be provided on site)

##### 07 - Material

SV = Galvanised sheet steel (standard)

##### 08 - Damper

DK0 = without damper (standard)

##### 9 - Rubber lip seal

GD0 = Without rubber lip seal (standard)

GD1 = with rubber lip seal

##### 10 - Insulation

I0 = Without insulation (standard)

Ii = With box insulation inside

Ia = With box insulation outside

##### 11 - Height of plenum box

KHS = Height of plenum box standard

xxx = Height of box in mm (minimum height = spigot diameter +72 mm)

##### 12 - Width of box

KBS = Standard width of box

xxx = Width of box in mm (minimum width = spigot diameter +30 mm)

##### 13 - Spigot diameter

SDS = Standard spigot diameter

xxx = Spigot diameter in mm

##### 14 - Spigot position

S0 = Spigot from above

S1 = Lateral spigot on the box (standard)

S4 = Spigot front side

## Compact Filter Grille KGF

### Specification texts

Compact filter grille **type KGF-Q-08-...** for supply and return air, for installation in rectangular ductwork. This model consists of a front frame with visible screw mounting (SM), with pivoting horizontal air deflection blades and integrated hit-and-miss damper for air volume regulation. With integrated filter insert ISO Coarse > 45% (dry layer filter mat). Blade insert removable from the front side.

Product: SCHAKO **type KGF-Q-08-...**

- Compact filter grille made of
  - Galvanised sheet steel
  - Galvanised sheet steel, front side painted to RAL colour 9010 (white)

Accessories:

- With plenum box (-AK) made of galvanised sheet steel
  - With rubber lip seal (-GD1) at the connection spigot
  - with thermal insulation
    - internal (-li)
    - external (-la)
- with cover frame (-BR), for concealed mounting (VM), made of
  - aluminium natural colour anodised E6/EV1
  - aluminium painted to RAL colour 9010 (white)

Compact filter grille **type KGF-R-08-...** for supply and return air, for installation in sheet metal / spiral ductwork. This model consists of a front frame with visible screw mounting (SM), with pivoting horizontal air deflection blades and integrated hit-and-miss damper for air volume regulation. With integrated filter insert ISO Coarse > 45% (dry layer filter mat). Blade insert removable from the front side.

Product: SCHAKO **type KGF-R-08-...**

- Compact filter grille made of
  - Galvanised sheet steel
  - Galvanised sheet steel, front side painted to RAL colour 9010 (white)