

EKOVENT®



EKO-SRBG1

Fire Damper

FIRE DAMPER

EKO-SRBG1



Quick facts

- Fire resistance EI 60/EI 60 S
- Mounted Actuator 24V or 230V
- Sizes from Ø100 mm to 630 mm
- Mounting without wall to damper caulking
- CE-approved
- Available in MagiCAD

Description

The EKO-SRBG1 is a fire damper with fire resistance EI 60/EI 60 S. The damper has a factory-mounted electrical actuator with spring return, end position contacts and thermal sensor.

Control and monitoring system is done with EKO-MKE/SKE, EKO-KE, EKO-TME/TSE, EKO-MME/SME, EKO-PRO-M/S system or equivalent.

Sizes

EKO-SRBG1 is manufactured in 9 standard sizes from Ø100 to Ø630 mm.

Material

The standard EKO-SRBG1 is made of Zinc Magnesium ZM120 (C4) with mounting components in C2. Alternative options include Zinc Magnesium ZM310 (C5), Zinc Magnesium ZM120 (C4), or stainless steel EN 1.4404 (C5), all with mounting components in C4.

Material specification for installation in shaft wall

EKO-SRBG1 for installation in shaft walls is supplied as standard in Zinc Magnesium ZM120 with mounting components in C2. An alternative option is stainless steel sheet EN 1.4016 (C4).

Product data

Sizes Ø100 – Ø630 mm.

Nipple connection in accordance with Swedish standard.

Material: Zinc Magnesium ZM120, Zinc Magnesium ZM310, or stainless steel

Fire resistance in compliance with SS-EN 15650:2010 EI 60 (ve ho i ↔ o) SC_{20 000}

Testing and classification in compliance with EN 1366-2 and EN 13501-3.

CE-marking 0402-CPR-SC0845-13.

The damper conforms to air tightness class 2 and the casing conforms to air tightness class C according to EN 1751:2014.

The damper conforms to air tightness class 2 and pressure class B according to AMA VVS & Kyl 16.

The differential pressure over a closed damper can be 2500 Pa, corresponding to pressure class B.

Fulfills to environmental class C2.



Mounting

In order for CE-approval to be valid, the mounting must be done in accordance with the supplied mounting instructions. The wall opening for fire damper installation is either duct size + max 10 mm or +55 mm. The blade axis of the damper can be installed at any angle.

The following minimum dimensions must be observed when mounting:

- Minimum distance between dampers: 200 mm.
- Minimum distance to wall/floor: 75 mm.

Actuators

The EKO-SRBG1 is supplied with a 24V or 230V electrical safety actuator supplemented with a thermal sensor and a test button for on-site manual function testing. If the temperature exceeds 72°C inside or outside the damper, the sensor cuts off the power to the actuator and the fire damper is closed. The same thing happens in the event of a power cut.

A 24V actuator is used together with the monitoring units EKO-KE2-16 and EKO-TME/TSE. A 230 V actuator is used for the EKO-MKE/SKE, EKO-PRO M/S monitoring unit. Fire damper in dimension Ø100 - Ø400 mm are supplied with actuator BFL and fire damper in dim Ø500 - Ø630 mm with actuator BFN.

Accessories

EKO-NRS	Wire mesh grille.
EKO-FNS	Extension adapter with wire mesh grille.
EKO-UG8-O	Smoke detector for duct mounting
EKO-GIS	Plasterboard wall sleeve, excl. fire sealant kit.

How to order the EKO-SRBG1

Fire Damper EKO-SRBG1-A-B-C-0-0-0

A – Size

Nominal diameter Ød, mm

B – Material

1 = Zinc Magnesium ZM120 (C4) -Standard

4 = Stainless EN 1.4404 (C5)

5 = Zinc Magnesium ZM310 (C5)

8 = Stainless EN 1.4016 (C4)

9 = Zinc Magnesium ZM120 (C4) *)

*) For installation in a shaft wall, refer to the material specification under “Installation in Shaft Wall

C – Actuator

1 = Actuator 24V

2 = Actuator 230V

Accessories:

Accessories are specified separately

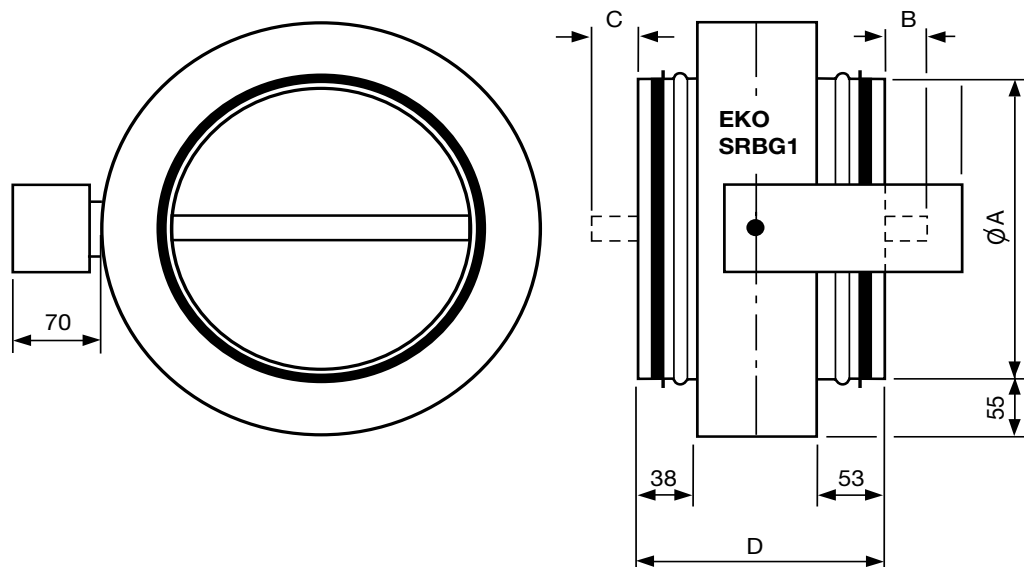
Example: EKO-SRBG1-200-1-1-0-0-0

*) See material specification

Technical Data

Dimensions

EKO-SRBG1



Standard sizes and weights

EKO-SRBG1	ØA	B	C	D	Weight*
100	100	–	–	181	3,3
125	125	–	–	181	3,6
160	160	–	14	181	4,1
200	200	–	35	181	4,7
250	250	15**	60	181	5,7
315	315	48**	92	181	7,1
400	400	91**	136	181	8,8
500	500	141**	156	211	14
630	630	206**	221	211	17

* Weight in kg, including actuator

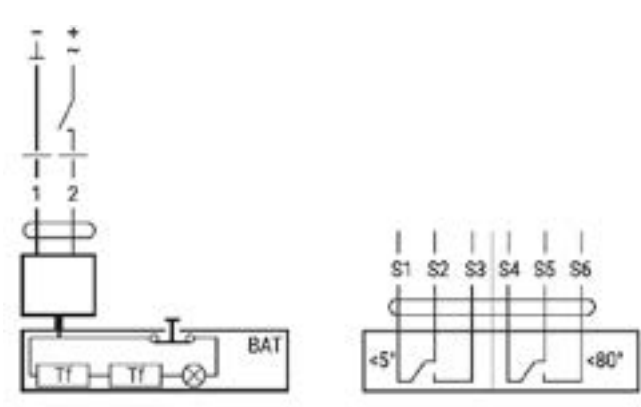
** Extension adapter required for short connection sleeve

Technical data	BFL24-T	BFL230-T
Supply voltage	AC 24 V 50/60 Hz, DC 24 V	AC 230 V 50/60 Hz
Power consumption	2,5 W	3,5 W
Rating	4 VA	6,5 VA
Protection class	IP 54	
Break points	5°/80°	
Connection supply / control	Cable 1 m, 2 x 0,75 mm ² (halogen-free)	
Connection auxiliary switch	Cable 1 m, 6 x 0,75 mm ² (halogen-free)	
Angle of rotation	95° Spring initial tension	
Axle connection	12 mm Square	
Torque	Actuator min 4 Nm Spring return min 3 Nm	
Running time	Actuator <60 s Spring return approx. ca 20 s	
Direction of rotation	Selectable with right or left mount	
Position indication	Mechanical	
Ambient temperature	-30... +55 °C	
Safety temperature	-30... +75 °C	
Sound level	Actuator max 43 dB (A) Spring 62 dB (A)	
Maintenance	Maintenance-free	
Weight	1200 g	

Technical data	BFN24-T	BFN230-T
Supply voltage	AC 24 V 50/60 Hz, DC 24 V	AC 230 V 50/60 Hz
Power consumption	4 W	5 W
Rating	6 VA	10 VA
Protection class	IP54	
Break points	5°, 80°	
Connection	1 m, 2 x 0,75 mm ² and 6 x 0,75 mm ²	
Angle of rotation	95° Spring initial tension	
Axle connection	12 mm Square	
Torque	Actuator min 9 Nm Spring return min 7 Nm	
Running time	<60 s / 90°	
Running time fail-safe	20 s@ -10...55° / <60 s @ -30...-10°C	
Direction of rotation	Selectable with right or left mount	
Position indication	Mechanical	
Ambient temperature	-30... +55 °C	
Safety temperature	Safety temperature up to max +75 °C	
Sound level	Actuator max 55 dB (A) Spring 67 dB (A)	
Maintenance	Maintenance-free	
Weight	1400 g	1500 g

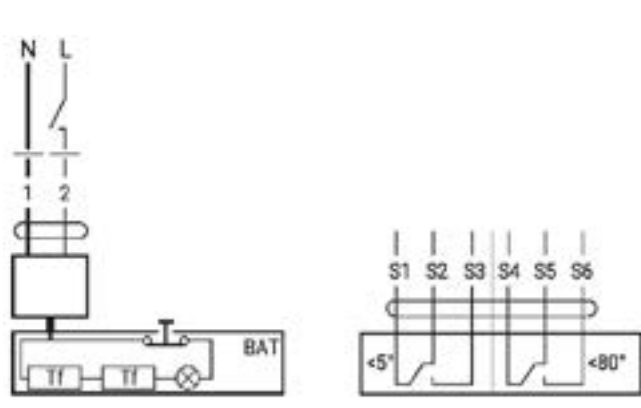
Wiring diagram

AC/DC 24V, open/close



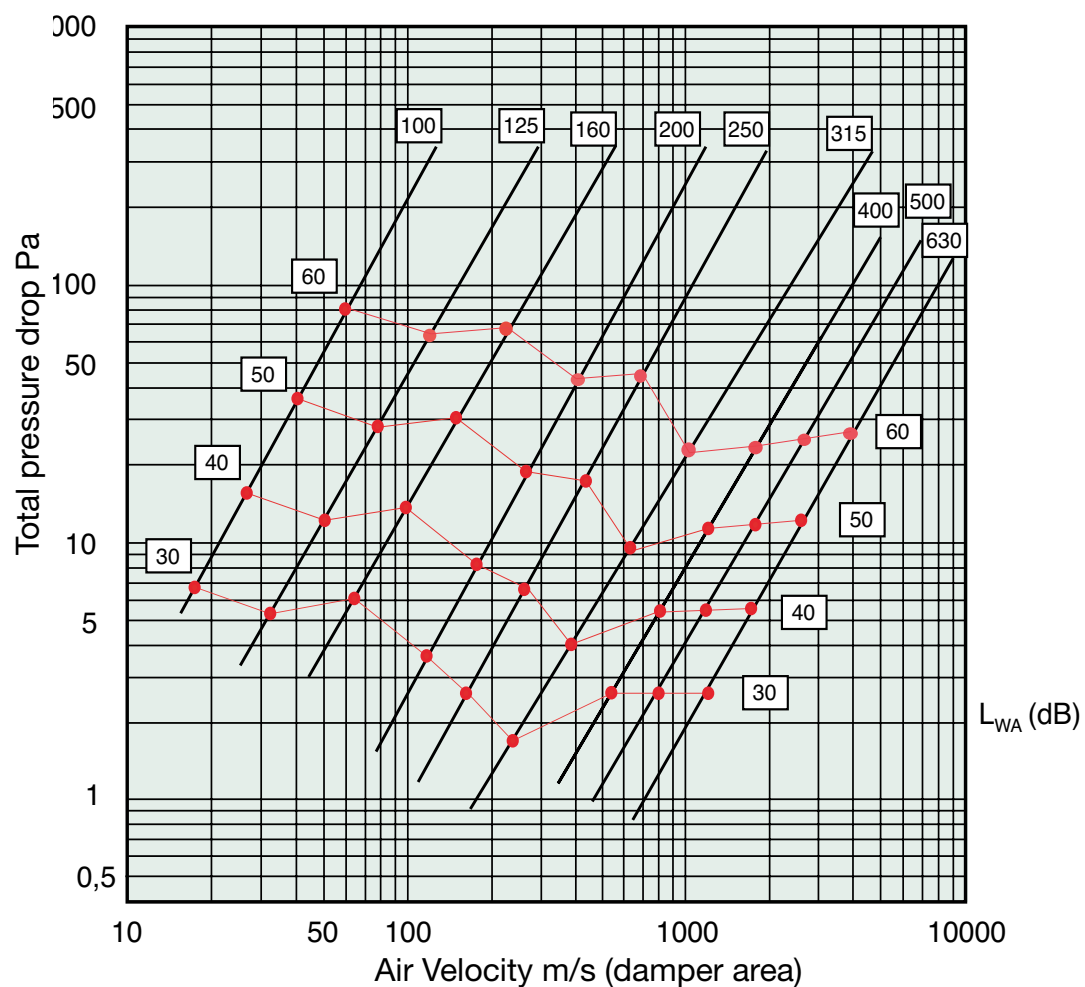
BFL24-T	BFL24-T
1 Black	1 Black
2 Red	2 Red
S1 Violet	S1 Violet
S2 Red	S2 Red
S3 White	S3 White
S4 Orange	S4 Orange
S5 Pink	S5 Pink
S6 Gray	S6 Gray

AC 230 V, open/close



BFL230-T	BFL230-T
1 Blue	1 Blue
2 Brown	2 Brown
S1 Violet	S1 Violet
S2 Red	S2 Red
S3 White	S3 White
S4 Orange	S4 Orange
S5 Pink	S5 Pink
S6 Gray	S6 Gray

Dimensioning diagram

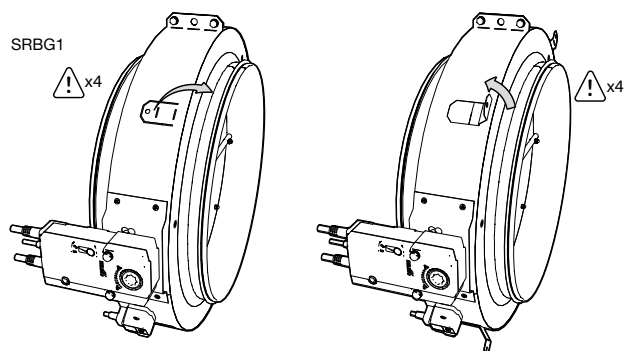


Correction of sound power level in octave bands. $L_{WAOK} = L_{WA} + K_{OK\ 90^\circ}$

EKO-SRBG1	Centre frequency (Hz)							
Octave band	63	125	250	500	1k	2k	4k	8k
Correction, $K_{OK\ 90^\circ}$	6	6	2	-4	-8	-10	-13	-20
Tolerance $\pm$ dB	–	2,5	1,5	1	1	1	1	2

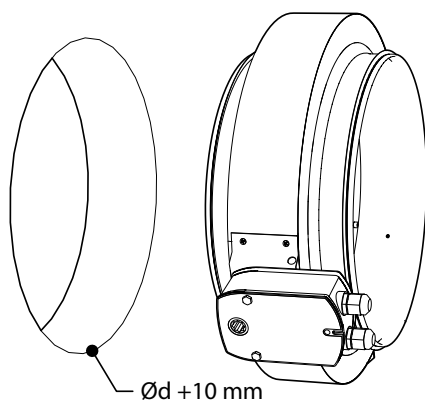
Sound power levels, pressure drop and air flow measured on a fire damper according to ISO 5135.
Standard deviation (tolerance) in accordance with EN ISO 3741:2010.

Wall Opening – Mounting on Supporting Construction



Mounting WITHOUT wall damper caulking

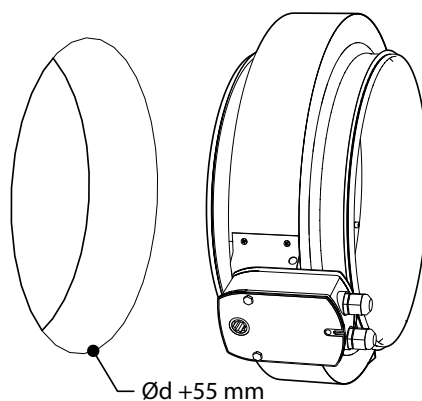
- Supporting construction, flexible wall of plasterboard or equivalent with fire resistance EI 60.
- Supporting construction, wall or floor of concrete, brick or aerated concrete with fire resistance EI 60.



Wall opening for fire damper installation:
Duct size Ød + 10 mm.

Mounting WITH wall damper caulking

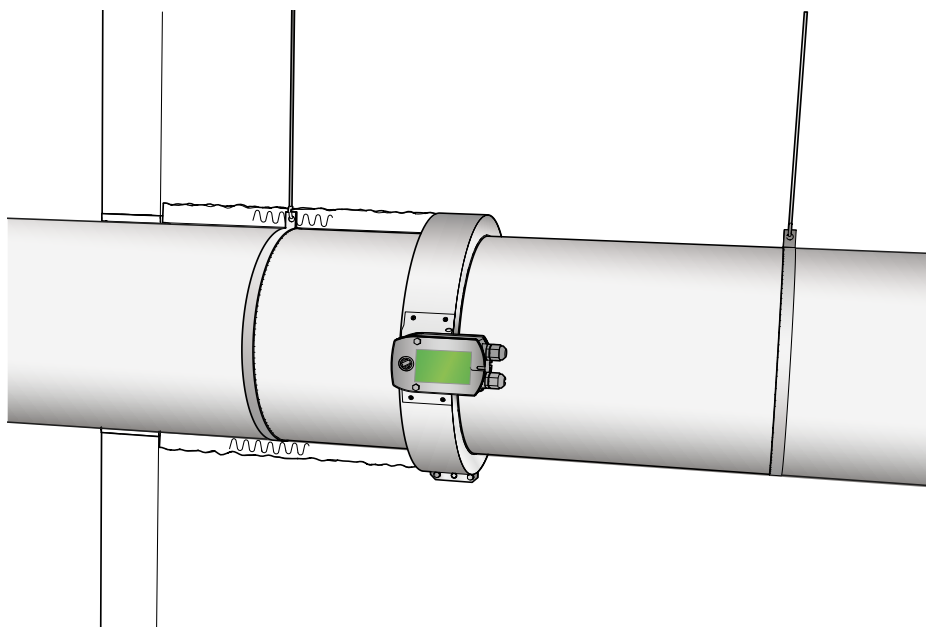
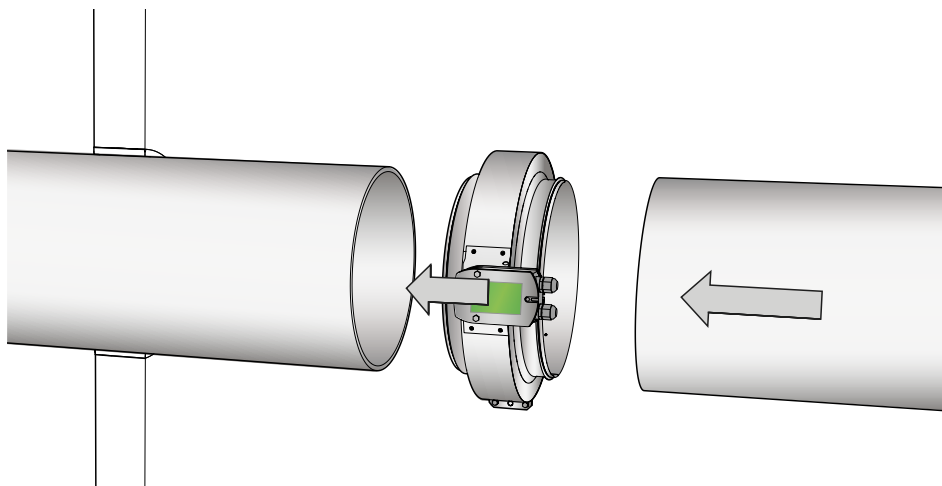
- Supporting construction, flexible wall of plasterboard or equivalent with fire resistance EI 60.
- Supporting construction, wall or floor of concrete, brick or aerated concrete with fire resistance EI 60.



Wall opening for fire damper installation:
Duct size Ød + 55 mm.

Installation in Duct

- Supporting construction, wall or floor with fire resistance EI 60

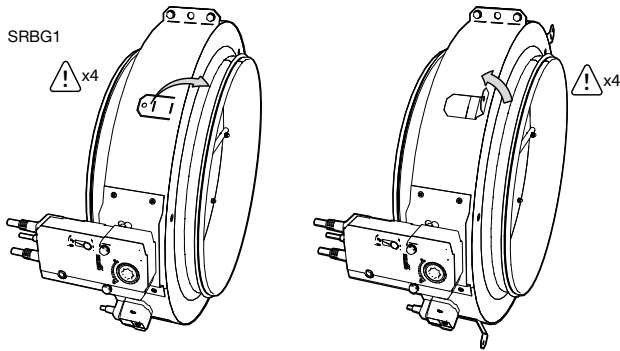


Insulation of the ventilation duct must be done in accordance with general regulations. Refer to the installation instructions.

NOTE! The insulation does not need to cover the damper

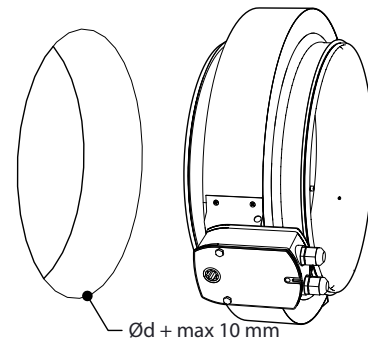
Installation on Shaft Wall

Fire Resistance Class EI60 (ve i -> o) S.

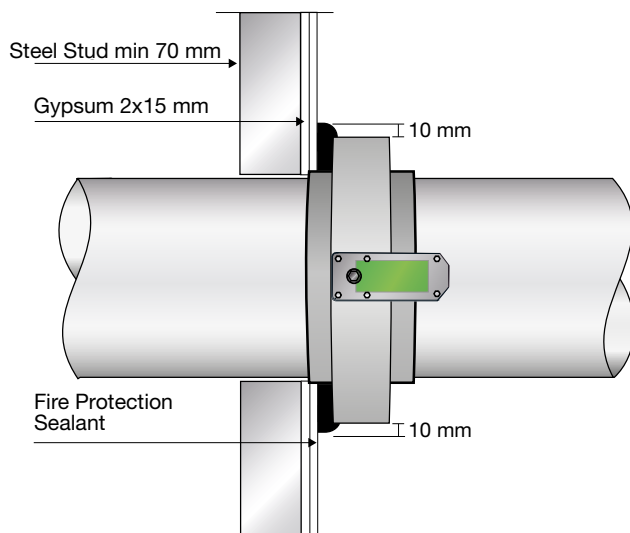


Mounting WITHOUT wall damper caulking

- Supporting construction, flexible wall of plasterboard with steel studs corresponding to fire resistance class EI60.
- Dampers must always be installed with a horizontal axis.
- If the damper is installed as an end device, EKO-NRS or EKO-FNS must be installed.
- Duct systems must be suspended in accordance with applicable regulations. Ensure that the suspensions and duct systems do not interfere with the damper's movement.



Wall opening for installation: Duct size
Ød + max 10 mm.



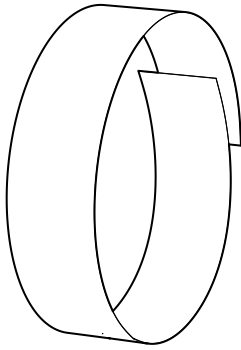
Material specifications

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Installation Accessories

Flexible wall sleeve EKO-GIS

Used at duct size $\varnothing d + 55$ mm.



Installation kit EKO-MOV*

* Included in EKO-SRBG1 delivery

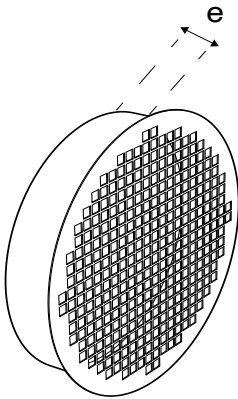


Duct bracket x 4

Only when mounting WITHOUT wall damper caulking

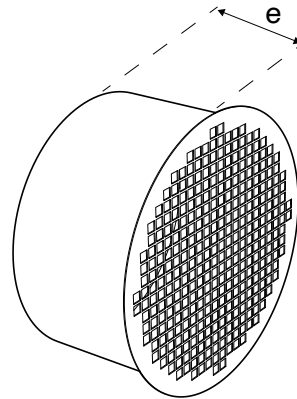
Wire mesh grille EKO-NRS

Used for EKO-SRBG1 100–250 mm



Extension adapter EKO-FNS with wire mesh grille

Used for EKO-SRBG1 250–630 mm and for all sizes when mounting to sleeve in wall.



Sizes	e (mm)
NRS-100	72
NRS-125	72
NRS-160	72
NRS-200	72
NRS-250	72

Sizes	e (mm)
FNS-250	90
FNS-315	120
FNS-400	160
FNS-500	210
FNS-630	275