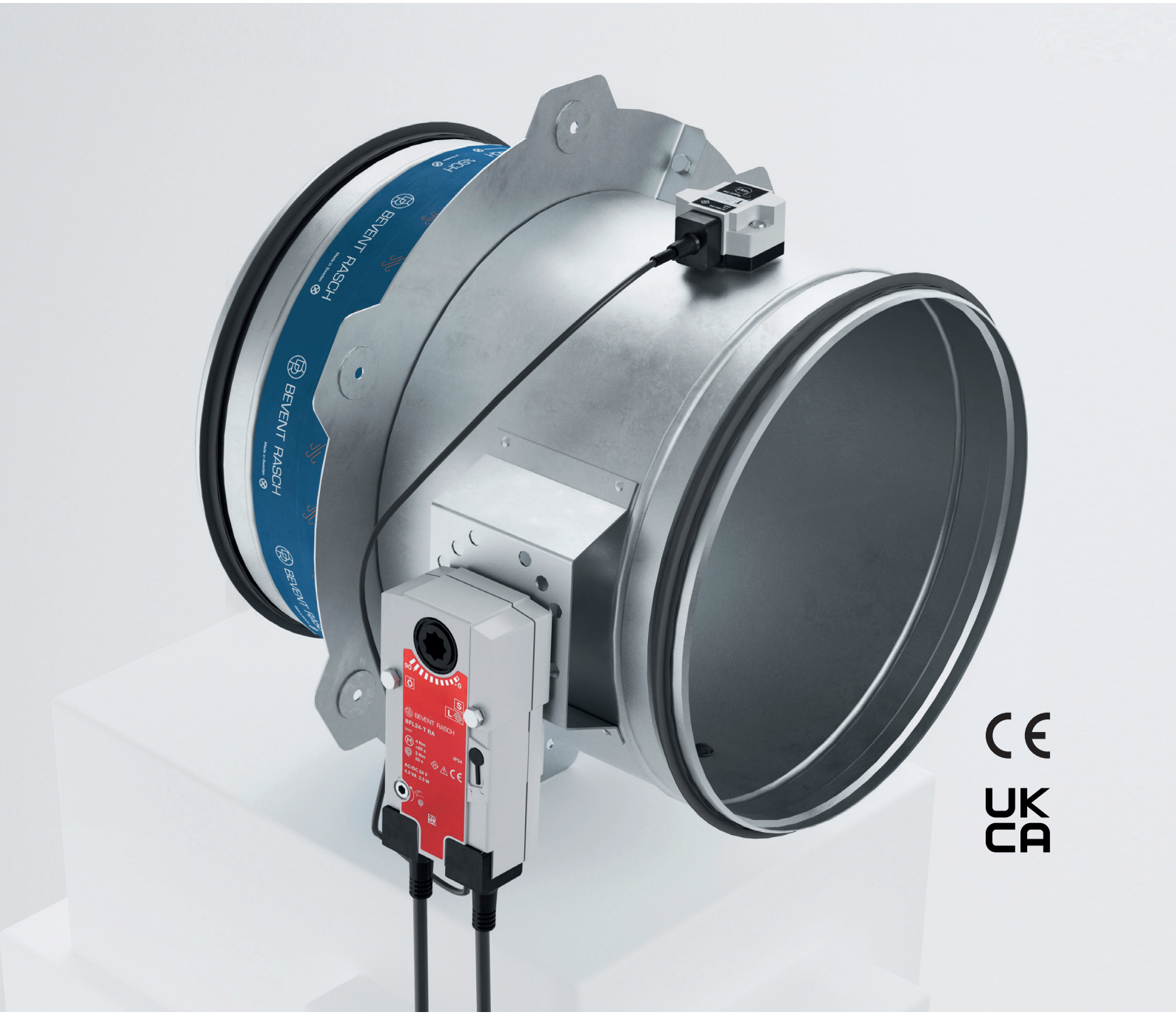
OPTIMUS 60R®

Circular regulating fire damper
EI60S

FIRE SAFETY



16/11/2026

www.bevent-rasch.com

BEVENT RASCH



Key Facts

- Fire resistance classification EI60S
- Sizes from 100 mm to 630 mm
- Designed for reuse
- Installed without fire stopping sealant or mineral wool packing
- No remedial sealing required
- Easy installation from one side of the fire compartment separating building element
- Available in MagiCAD

Two Dampers and Actuators in One!

Bevent Rasch has developed a fire/smoke damper with fire resistance classification EI60/EI60S equipped with a modulating actuator. This allows the airflow to be regulated from 0–100% using a 2–10V control signal, enabling the damper to function as a balancing damper or boost damper while providing full protection against the spread of fire and smoke gases.

Application

The damper, in combination with walls or floor slabs, is used for fire compartmentation of heating, ventilation and air conditioning (HVAC) installations in buildings, in accordance with the European standard EN 15650:2010. When installed in accordance with the associated documentation and installation instructions, and when used in combination with a smoke detector and monitoring system (FENIX, MRB, SIOX) or equivalent, the damper prevents the spread of fire and smoke gases. No additional measures to prevent the spread of fire and smoke gases are required.

Performance

CoCP (Certificate of Constancy of Performance)
EN 15650:2010
0402-CPR-C500380



Fire Resistance Classification according to EN 13501-3
EI 60 (ve ho) i <–> o [VH] S CMOD

For the complete classification, see the Declaration of Performance (DoP).

Installation

OPTIMUS is installed against a fire compartment separating building element or in horizontal insulated ductwork. Installation shall be carried out in accordance with the accompanying installation instructions. Installation outdoors or in exposed environments shall be carried out in consultation with Bevent Rasch. The damper should not be installed outdoors or in damp environments.

Actuator

OPTIMUS is always supplied with an electric safety actuator with spring return, complete with a thermal sensor and push button for local manual function testing. The sensor disconnects the power supply to the actuator if the temperature exceeds 72°C either inside or outside the damper. When used together with the FENIX, MRB or SIOX monitoring systems, a 24V actuator is always used.

Activation

According to the Swedish Building Regulations (BBR), a smoke detector certified in accordance with SS-EN 54-7 is required for damper activation. The mandatory thermal sensor closes the damper at 72°C in accordance with ISO 10294-4.

Inspection and Monitoring

When the damper is used to prevent the spread of fire and smoke gases, it shall close upon receiving a signal from a smoke detector. The detector shall be installed in the ventilation duct in the vicinity of the damper or in another suitable location. Smoke detectors are monitored via Bevent Rasch's monitoring systems FENIX, MRB and SIOX. Bevent Rasch monitoring systems perform automatic functional testing in accordance with applicable requirements.

For further information, visit www.bevent-rasch.se.

Size Ø100-630 mm.

Design

OPTIMUS is supplied complete with a safety actuator. The actuator is equipped with position indication contacts and a thermal sensor. The damper is supplied as standard with spiral duct connections. The control signal may be supplied by, for example, a room controller, air quality sensor, or other equipment providing a 2–10V DC output signal. The actuator provides a 2–10V DC feedback signal corresponding to the damper position. In the event of a power failure, the damper closes automatically by means of the actuator's spring return.

Materials and Surface Finish

- Casing and components made of galvanized sheet steel in accordance with corrosion category C3
- Duct seal made of EPDM
- Blade seal made of PE/PP
- Blade made of calcium silicate

Accessories

OPTIMUS-SK	Shaft Collar
RCKD/-RD	Smoke Detectors
SX:UNO/SX:ACCESS	SIOX System, max. 200 dampers
FENIX2	Max. 2 dampers
FENIX4 / FENIX+	Max. 16 dampers
FENIX 0-10V	For local control of 0–10V dampers

Specification

Example:

Fire/Smoke Damper **OPTIMUS60R - 400 - 1 - 0**

Size, Nominal diameter ØD mm

Material

Galvanized sheet steel = 1
Stainless steel EN 1.4016 = 3
Magnelis ZM120 = 5

Actuator

Electric 24V = 0
Electric 24V incl. SX:UNO = 6

Note: Factory-mounted actuators are always included.

Specification – Accessories

Example:

OPTIMUS-SK Shaft Collar **OPTIMUS-SK - 400**

Size, Nominal diameter ØD mm

Note: Required for installation in lightweight shaft wall constructions. See the installation instructions.

Specification Example According to AMA HVAC & Refrigeration

QJC

Dampers for protection against the spread of fire and smoke gases.

QJC.2

Fire/smoke dampers in accordance with SS-EN 15650, fire resistance class EI60, equipped with a 24V safety actuator and thermal sensor, pressure class B. Smoke detector and monitoring according to section U.

BBGS101-dim

Manufacturer: Bevent Rasch OPTIMUS60R - 400 - 1 - 1 3 pcs

Installation Options for OPTIMUS 60R

Size	Fire Resistance Classification	Gypsum Wall EI60 Group A, SS-EN 1363-1	Solid Wall	Floor Slab*	Duct	Shaft Wall
Ø100 - Ø630	EI60S	√	√	√	√	√

*125 mm aerated concrete

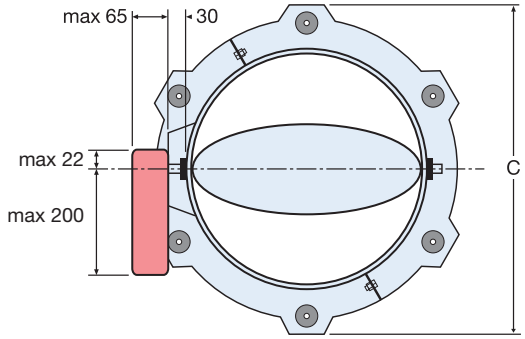
Product Data for OPTIMUS 60R

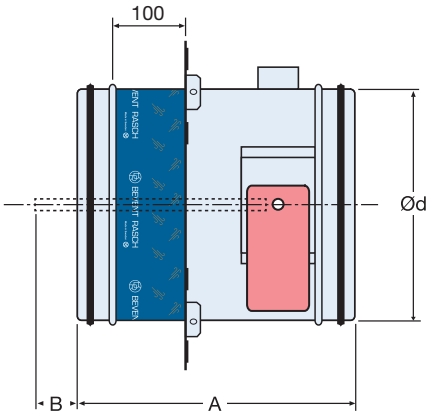
Size	Pressure Class AMA HVAC & Refrigeration 19	Casing Leakage Class SS-EN1751	Blade Leakage Class SS-EN1751	Actuator Type
Ø100 - Ø315	B	C	3**	Belimo BFL-SR-T
Ø400 - Ø630	B	C	3	Belimo BFN-SR-T

Pressure Class B: 2500 Pa

**Size Ø100–Ø125: Class 2

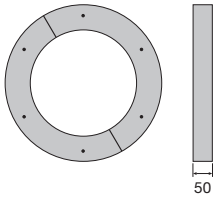
Dimensions and Weight





Size Ø mm	A	B	C	Weight, kg
100	375	–	237	2,7
125	375	–	262	3,0
160	375	–	295	3,4
200	375	–	335	3,9
250	375	21	385	4,6
315	375	84	450	5,6
400	477	95	534	9,7
500	477	145	634	12,7
630	477	210	764	16,6

OPTIMUS-SK Shaft Collar



** If required, the actuator can be rotated through 90°.*

Actuator – Damper Sizes

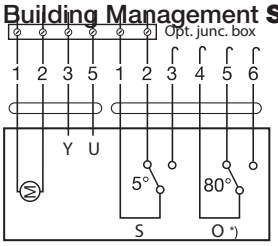
The BFL-SR-T actuator is supplied for dampers in sizes Ø100–315 mm.
The BFN-SR-T actuator is supplied for dampers in sizes Ø400–630 mm.

Electrical Data

Actuator Type	BFL...	BFN...
Sizing, max.	6,5 VA	8,5 VA
Running Time – Motor opening, max. – Spring return, max.	60 s ca 20 s	60 s 20 s at -10 to +55°C < 60 s vid -30 to -10°C
Enclosure Rating	IP54 in all mounting positions	
Supply Voltage	24V~ ±20%, 50/60Hz	
Control Signal Y	DC 0-10V	
Operating Range	DC 2-10V	
Position Feedback U	DC 2-10V	
Power Consumption	Imax 8,3A @ 5ms	
Ambient Temperature	-30° to +55°C	
Thermal Sensor Release Temperature	72°C	
Position Indication Contacts (Load Rating)	1mA...3 (0,5 inductive) A, AC250V	
Sound Level During Opening	< 43 dB (A)	< 55 dB (A)
Sound Level During Closing	< 62 dB (A)	< 67 dB (A)
Maintenance	Maintenance-free	

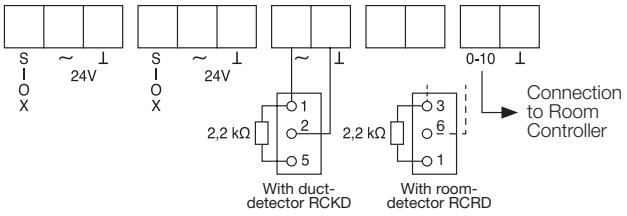
Wiring Diagram

Option 1 – Connection to Building Management **System (BMS)**

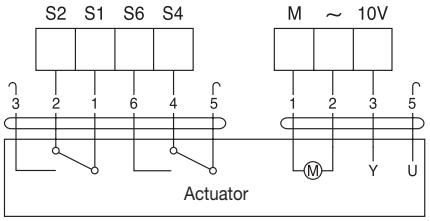


Actuator

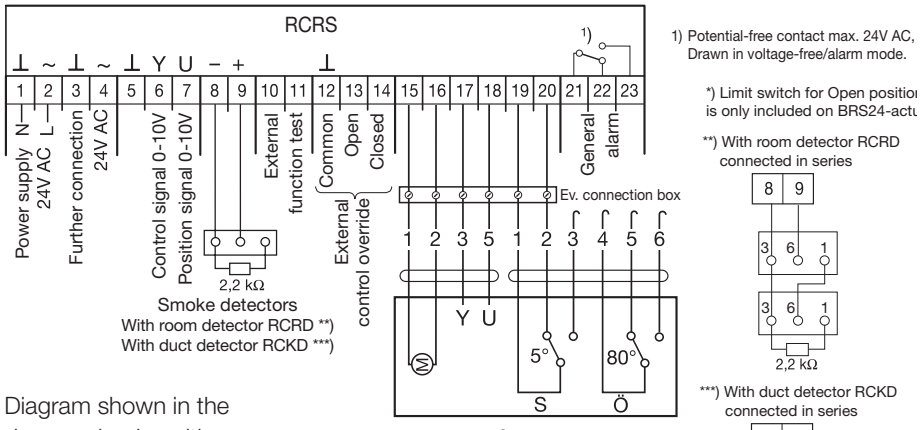
Option 2 – Connection to RCTU



BF24-SR, BRS24, BFL24-SR, BFN24-SR



Option 3 – Connection to RCRS



1) Potential-free contact max. 24V AC, Drawn in voltage-free/alarm mode.

*) Limit switch for Open positio is only included on BRS24-act

**) With room detector RCRD connected in series

***) With duct detector RCKD connected in series

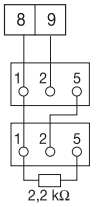
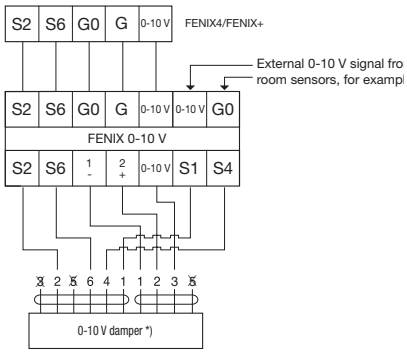


Diagram shown in the de-energised position.

Note:

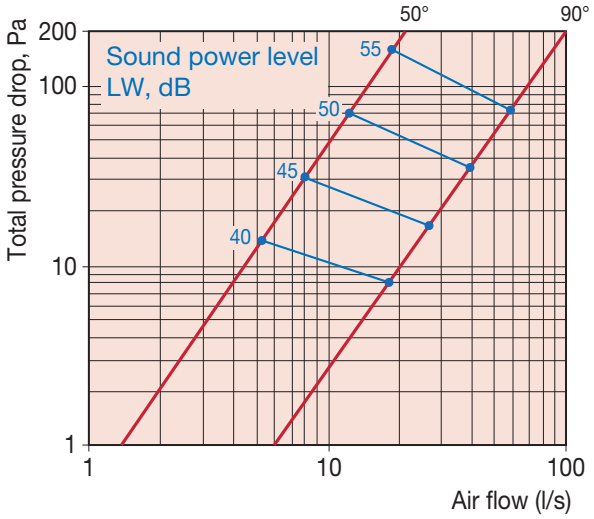
- For 2-position operation: The damper moves to the minimum position when the control signal is 0V or interrupted, and to the maximum position when a 10V input signal is applied or when 24V AC is connected directly to terminal 6.
- The supply voltage and control signal shall be connected to a common system neutral.

Option 4 – Connection to FENIX 0–10V Module

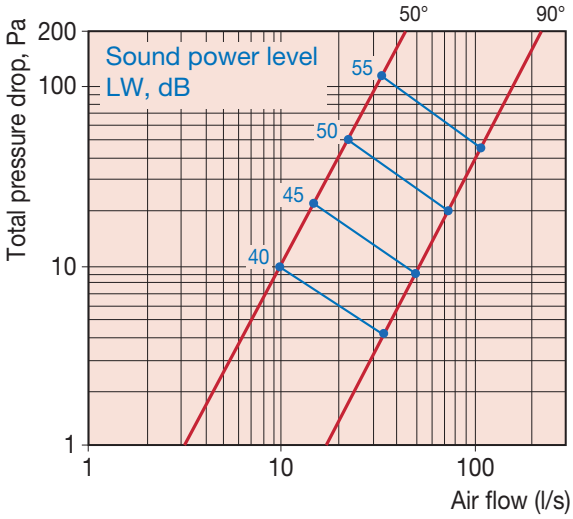


Dimensioning diagram

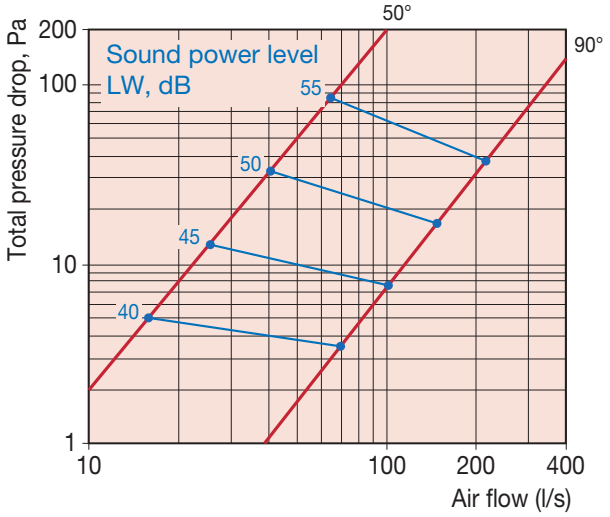
Size - 100



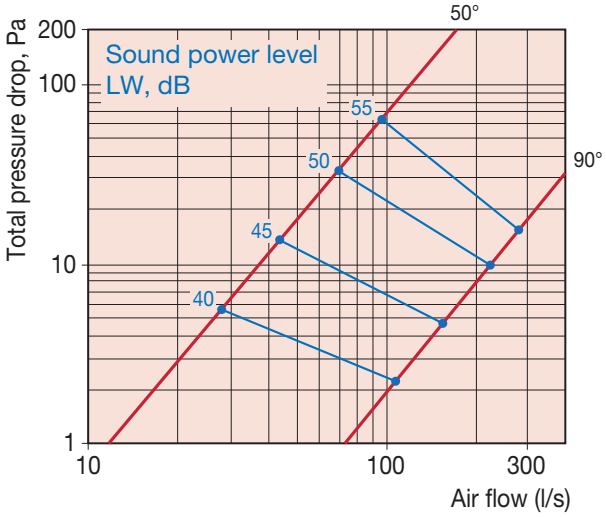
Size - 125



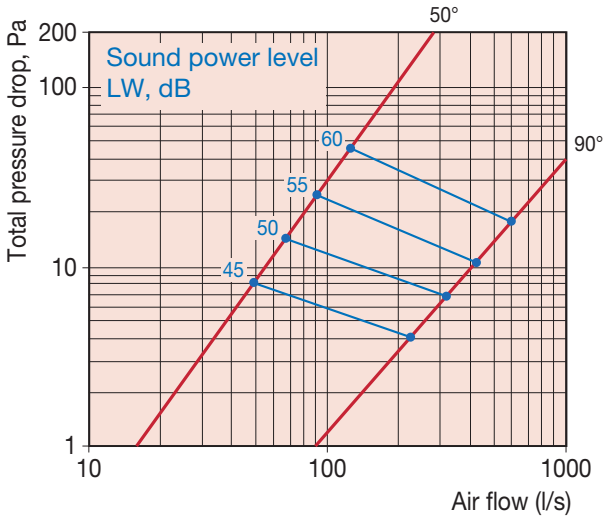
Size - 160



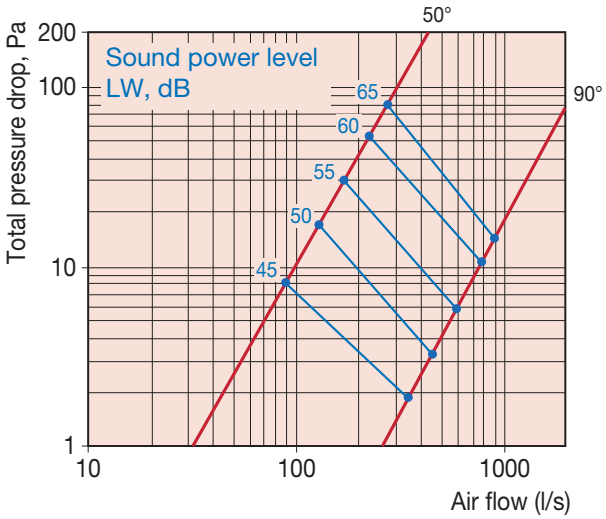
Size - 200



Size - 250

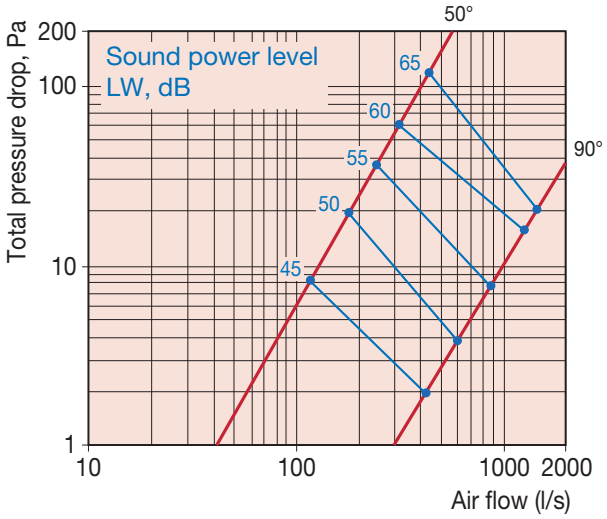


Size - 315

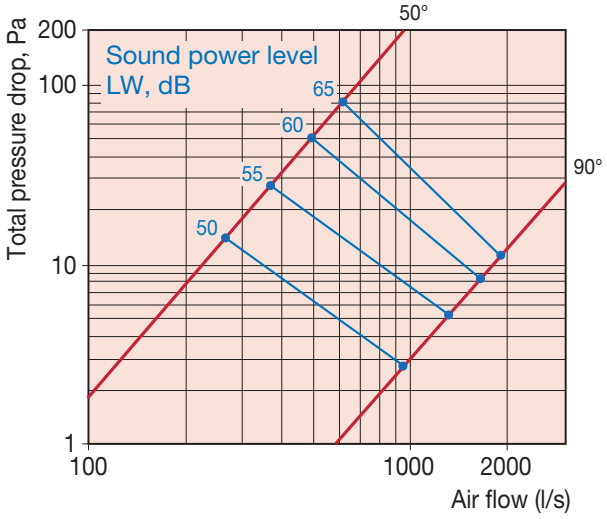


Dimensioning diagram contd.

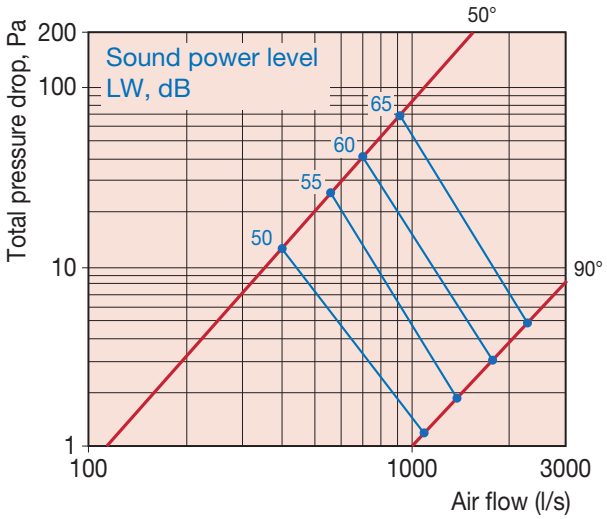
Size - 400



Size - 500



Size - 630



Ljuddata

Korrektion av ljudeffektnivå, L_{Wok}, i oktavband

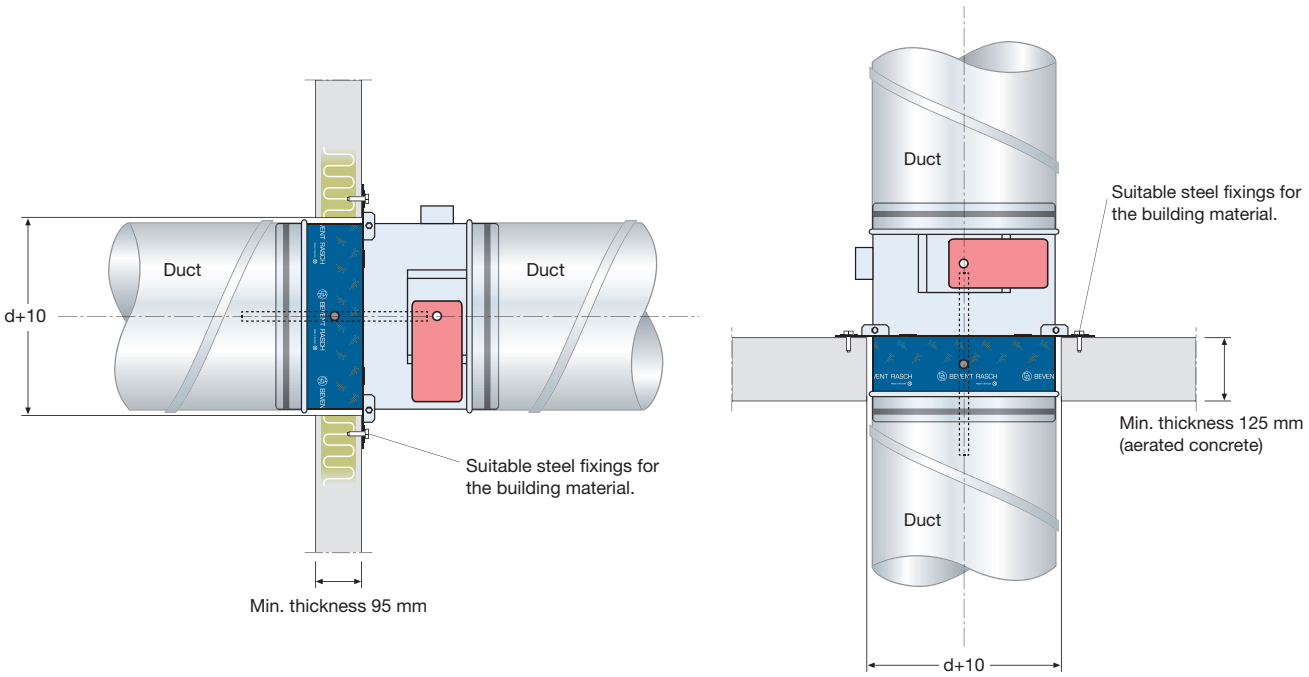
$L_{wok} = L_w + K_{ok}$

Korrektion, K_{ok}

Dimension Ø mm	Mittfrekvens Hz							
	63	125	250	500	1000	2000	4000	8000
100	-4	-9	-10	-10	-10	-15	-18	-22
125	-4	-8	-8	-9	-10	-15	-21	-22
160	-4	-7	-9	-11	-14	-16	-20	-25
200	-2	-8	-11	-14	-15	-18	-23	-25
250	-2	-11	-11	-14	-14	-21	-27	-28
315	-1	-12	-14	-16	-15	-23	-29	-29
400	-2	-10	-13	-15	-15	-21	-28	-29
500	-1	-11	-14	-17	-18	-24	-31	-32
630	-1	-11	-15	-17	-17	-25	-28	-31
Tol. ± dB	1	2	5	6	6	4	3	4

Installation Instructions – No Packing or Remedial Sealing Required

Installation in Wall, Floor or Floor Slab
Fire Resistance Classification of the Damper: EI 60 (ve ho) i↔o [VH] S CMOD.
EC Certificate: 0402-CPR-C500380



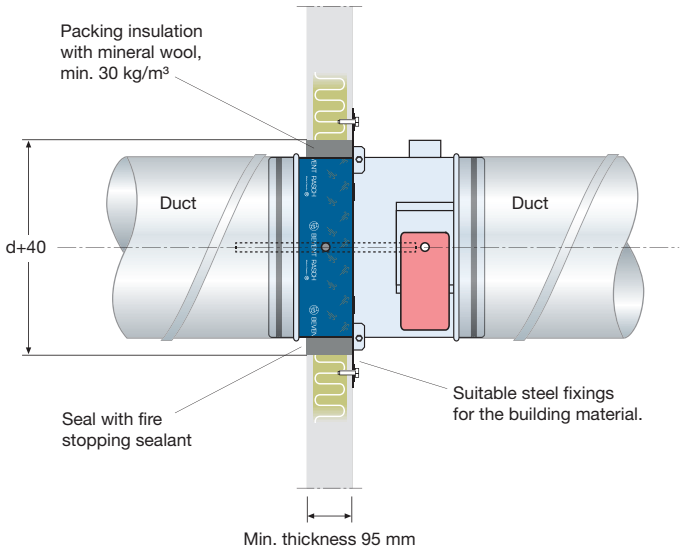
– Installation from one side only
– No fire stopping sealant required
– No packing insulation required
– No remedial sealing required

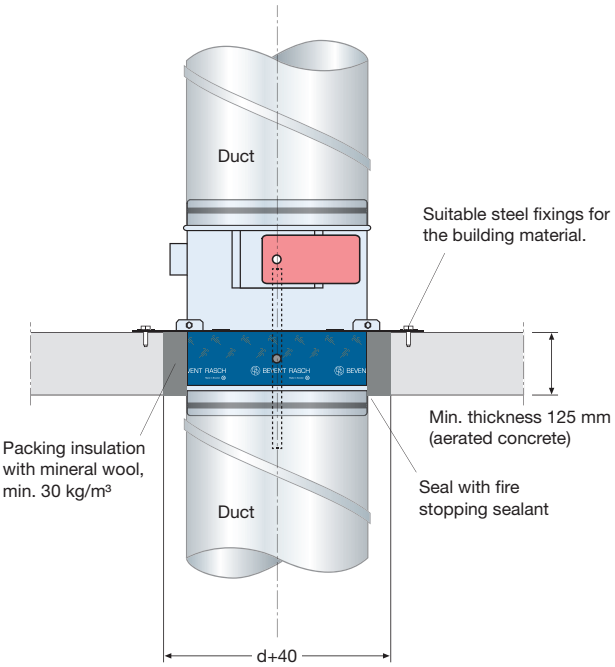
1. GCut an opening of the required size (d + 10 mm).
2. Secure the damper to the duct and fasten the mounting flange flush against the building element. Use suitable fixings for the relevant building material. Ensure that the damper casing is not deformed during installation.
3. If required, the damper can be rotated after installation by loosening the screws in the mounting flange. Rotate the damper to the desired position and retighten the screws. The actuator can also be rotated to the desired position.
4. When installed without a duct connection, the damper shall be fitted with a non-combustible grille. Please note that the damper blade extends beyond the casing in the open position from size Ø250 mm and above.
5. The duct system shall be suspended in accordance with applicable requirements. Ensure that hangers and ductwork do not interfere with the movement of the damper blade.

- *Damper for installation in walls, floors or floor slabs.*
- *Minimum distance between dampers: 200 mm.*
- *Minimum distance to adjacent structures: 75 mm.*
- *Damper shaft may be positioned freely.*

Installation Instructions – With Packing and Remedial Sealing

Installation in Wall, Floor or Floor Slab
Fire Resistance Classification of the Damper: EI 60 (ve ho) i↔o [VH] S CMOD.
EC Certificate: 0402-CPR-C500380



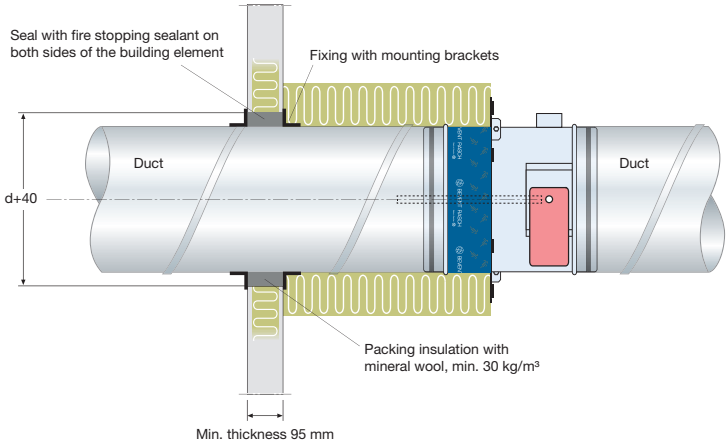


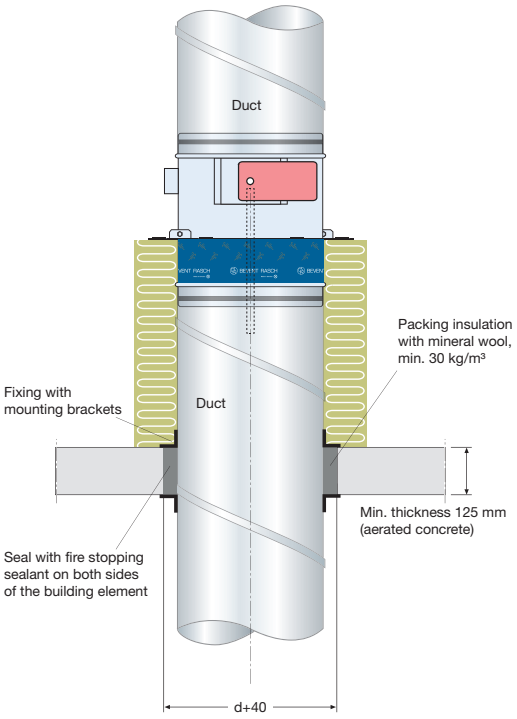
1. Cut an opening of the required size (max. d + 40 mm).
2. Secure the damper to the duct and fasten the mounting flange flush against the building element. Use suitable steel fixings for the relevant building material. Ensure that the damper casing is not deformed during installation.
3. If required, the damper can be rotated after installation by loosening the screws in the mounting flange. Rotate the damper to the desired position and retighten the screws. The actuator can also be rotated to the desired position.
4. Fill the gap between the damper casing and the building element with packing insulation, mineral wool min. 30 kg/m³, and seal with a fire stopping sealant.
5. When installed without a duct connection, the damper shall be fitted with a non-combustible grille. Please note that the damper blade extends beyond the casing in the open position from size Ø250 mm and above.
6. The duct system shall be suspended in accordance with applicable requirements. Ensure that hangers and ductwork do not interfere with the movement of the damper blade.

- *Damper for installation in walls, floors or floor slabs.*
- *Minimum distance between dampers: 200 mm.*
- *Minimum distance to adjacent structures: 75 mm.*
- *Damper shaft may be positioned freely.*

Installation Instructions

Installation in Ductwork
Fire Resistance Classification of the Damper: EI 60 (ve ho) i↔o [VH] S CMOD.
EC Certificate: 0402-CPR-C500380



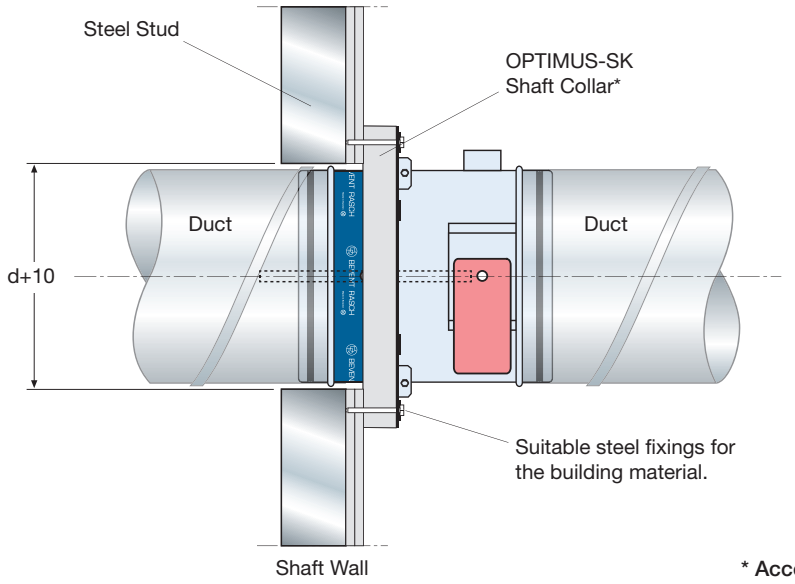


1. Cut an opening of the required size (max. d + 40 mm).
2. Fill the gap between the duct and the building element with packing insulation, mineral wool min. 30 kg/m³. Seal both sides of the building element with a fire stopping sealant. Secure the duct with four mounting brackets on each side of the building element.
3. When installed without a duct connection, the damper shall be fitted with a non-combustible grille.
4. Insulate the duct from the building element up to the damper mounting flange using a type-approved insulation system rated EI60 for horizontal ducts and EI120 for vertical ducts, such as Rockwool Conlit Fire Mat or equivalent.
5. The duct system shall be suspended in accordance with applicable requirements. Ensure that hangers and ductwork do not deform the damper or interfere with the movement of the damper blade.

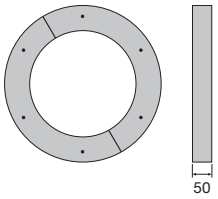
- *Damper for installation in horizontal or vertical duct systems.*
- *Minimum distance between dampers: 200 mm.*
- *Minimum distance to adjacent structures: 75 mm.*
- *Damper shaft may be positioned freely.*

Installation Instructions

Installation in Lightweight Shaft Wall Construction
Fire Resistance Classification of the Damper: EI 60 (ve) i↔o [VH] S CMOD.
EC Certificate: 0402-CPR-C500380



*** Accessory:**
OPTIMUS-SK Shaft Collar



– No sealant required
– No packing insulation required
– No remedial sealing required

1. Cut an opening of the required size (d + 10 mm).
2. Install the OPTIMUS-SK Shaft Collar between the damper mounting flange and the wall. Secure the damper using suitable steel fixings for the relevant building material. Ensure that the damper casing is not deformed during installation.
3. If required, the damper can be rotated after installation by loosening the screws in the mounting flange. Rotate the damper to the desired position and retighten the screws. The actuator can also be rotated to the desired position.
4. When installed without a duct connection, the damper shall be fitted with a non-combustible grille.
5. The duct system shall be suspended in accordance with applicable requirements. Ensure that hangers and ductwork do not interfere with the movement of the damper blade.

- *Damper for installation in shaft walls.*
- *Minimum distance between dampers: 200 mm.*
- *Minimum distance to adjacent structures: 75 mm.*
- *Damper shaft may be positioned freely.*

OPTIMUS 60R_ENG / Nov. 2026 hydria.se