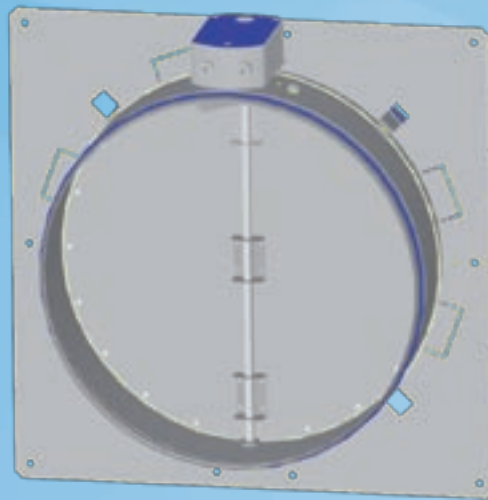


SDE

Circular Smoke and Fire Damper



- Construction based on EN1366-2-certified fire damper FDE (E120, ES90, EIS15).
- SITAC (Sweden) approval as E120 'Brandgassjäll'.
- Possibility of use as an EI60/EI120 damper with additional duct insulation (National Building Code, Sweden).
- Installation in separating concrete or masonry walls and ceilings and lightweight plasterboard walls.
- Installation in circular ducts with diameter 100 to 500 mm.
- Manufactured in accordance with the ISO 9001 quality standard.
- External quality control management by VTT, the Technical Research Centre of Finland.
- Damper casing complying with the tightness requirements for Class C, EN 1751.
- Inlet and outlet spigots with integral rubber gaskets.
- Suitability for use in ducts with a maximum pressure of 3300 Pa.

Product models and Accessories

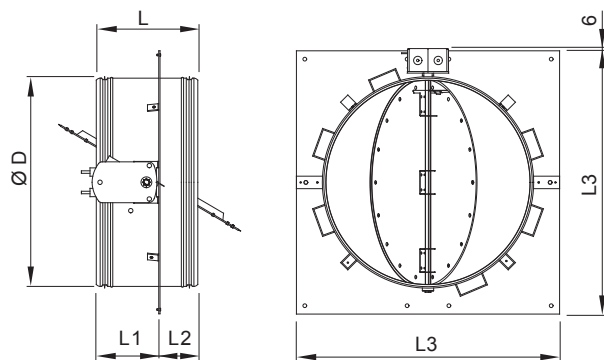
- Damper is equipped with electric spring-return actuator.
- Actuator has a visual position indicator.
- Damper Power-Off position is closed.

MATERIAL

PART	MATERIAL
Casing	Galvanised steel
Blade	Galvanised steel
Blade gaskets	Ceramic cloth
Installation frame	Galvanised steel
Closing springs	Stainless steel
Duct gaskets	1C-polyurethane hybrid

DIMENSIONS

When the damper is installed on a concrete or masonry wall or ceiling, the size of the installation hole is $\text{ØD} + 50 \text{ mm}$.



NS	ØD	L	L1	L2	L3
100	99	145	105	40	180
125	124	145	105	40	205
160	159	145	105	40	240
200	199	145	105	40	280
250	249	145	105	40	330
315	314	145	105	40	395
400	399	245	135	110	550
500	499	245	135	110	630

ACCESSORIES AND PRODUCT MODELS

ACCESSORY	CODE	DESCRIPTION
Mesh on one side	N1	
Mesh on both sides	N2	
Microswitch	MS	Closed position indication, enclosure class IP 65

Actuators

Belimo BLF24 HI, operating voltage AC/DC 24 V
(contains a microswitch), B7

Belimo BLF230 HI, operating voltage AC 230 V
(contains a microswitch), B8

Function

The SDE is a motorised circular smoke damper that prevents fire and smoke from spreading in ventilation ducts. If the power in the motorised actuator is switched off by the system, the blade closes automatically (Fail-safe Closed).

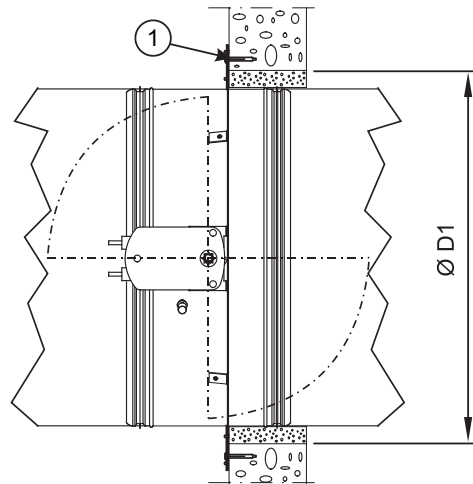
The smoke damper is made of fireproof materials, with a non-combustible ceramic blade gasket. Once the damper has closed, the blade and sealing close the duct tightly, effectively preventing the spreading of fire and smoke.

The SDE smoke damper shall be connected to the MSH control and testing system. The MSH system enables the use of smoke detectors in ductwork or room spaces. The SDE smoke damper may be connected to common building automation systems also.

Installation

Detailed installation instructions, as well as an installer's installation certificate form, are supplied with each product. See also the section 'Documents / Installation Instructions'.

Installation on concrete or masonry walls



- 1 Screw and fixing plug
 ØD1 Product size + about 50 mm

When the smoke damper is installed on a concrete or masonry wall or ceiling between fire compartments, there are no restrictions on the damper position or air flow direction.

An opening always is left in the separating element for the smoke damper, and the product subsequently is grouted into this. The size of the installation opening is $D+50$ mm.

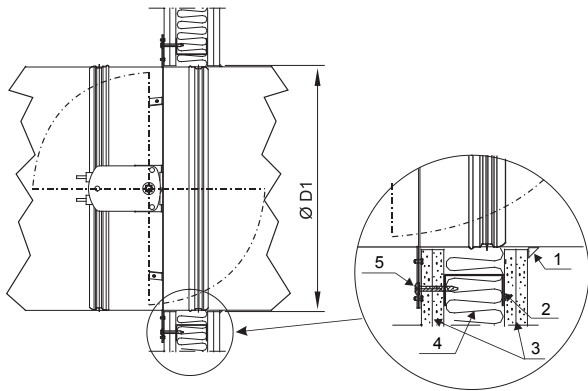
To make installation easier, all products come with an installation flange, which is used to attach the smoke damper to the concrete surface with screws before grouting.

The damper and actuator shall be protected during installation with, e.g., a plastic cover.

The damper shall be cleaned after installation.

The correct operation of the smoke damper must be ensured before and after grouting.

Installation on lightweight plasterboard walls



- ØD1 Product size + about 5 mm
- 1 Fireproof sealing mass
- 2 Steel frame
- 3 Plasterboard
- 4 Mineral wool
- 5 Screw

When the smoke damper is installed on a lightweight plasterboard wall between fire compartments, a small opening for the smoke damper must be left in the plasterboard walls.

There are no restrictions on the damper position or air flow direction.

An installation frame shall be installed around the opening.

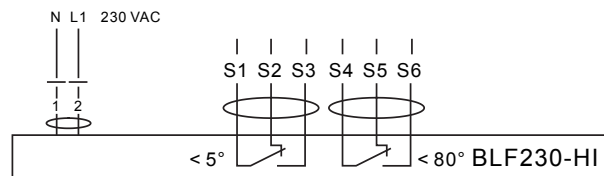
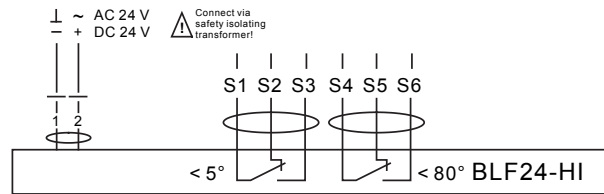
To make installation easier, the smoke damper comes with an installation flange, which is used to fasten the damper to, e.g., the steel frame of the panel wall.

The space between the smoke damper and the plasterboard wall is grouted with fire prevention mastic. During installation, the smoke damper and actuator shall be protected with, e.g., a plastic cover. The correct operation of the smoke damper shall be ensured after installation.

Insulation to comply with thermal insulation criterion (I)

The SDE unit may be applied as an EI30...120 damper through the use of additional ductwork fire insulation in accordance with the appropriate national building code.

Electric actuator wiring diagram



Servicing

No regular maintenance is required for the product.

Regular testing with the MSH control and testing system is recommended.

Upon failure during testing of the smoke evacuation damper, maintenance service shall be ordered from an authorised Halton representative to ensure appropriate operation of the product.

Suggested specifications

Circular smoke damper with electric spring-return actuator and position indicator (Construction based on certified fire damper FDE; E120; EN 1366-2). The Power-Off damper position shall be closed.

The casing and blades of the smoke and fire damper shall be made of galvanised steel.

The closing blade shall be equipped with a non-combustible ceramic blade gasket.

The smoke and fire damper casing shall have inlet and outlet spigots with integral rubber gaskets and comply with the tightness requirements for Class C, EN 1751.

The smoke and fire damper shall be approved both for installation in separating concrete or masonry walls and ceilings and for installation on lightweight plasterboard walls.

Product code

SDE-D

D = Diameter of duct connection

100, 125, 160, 200, 250, 315, 400, 500

Specifics and accessories

RE = Release type

B7 BLF24 HI (Damper closed when power off, no fuse)

B8 BLF230 HI (Damper closed when power off, no fuse)

MA = Material

CS Galvanised steel

AC = Accessories

N1 Safety mesh, 1 side, installed in actuator side

N2 Safety mesh, 2 sides

Code example

SDE D-100, B1=MA, MA=CS, AC=N1