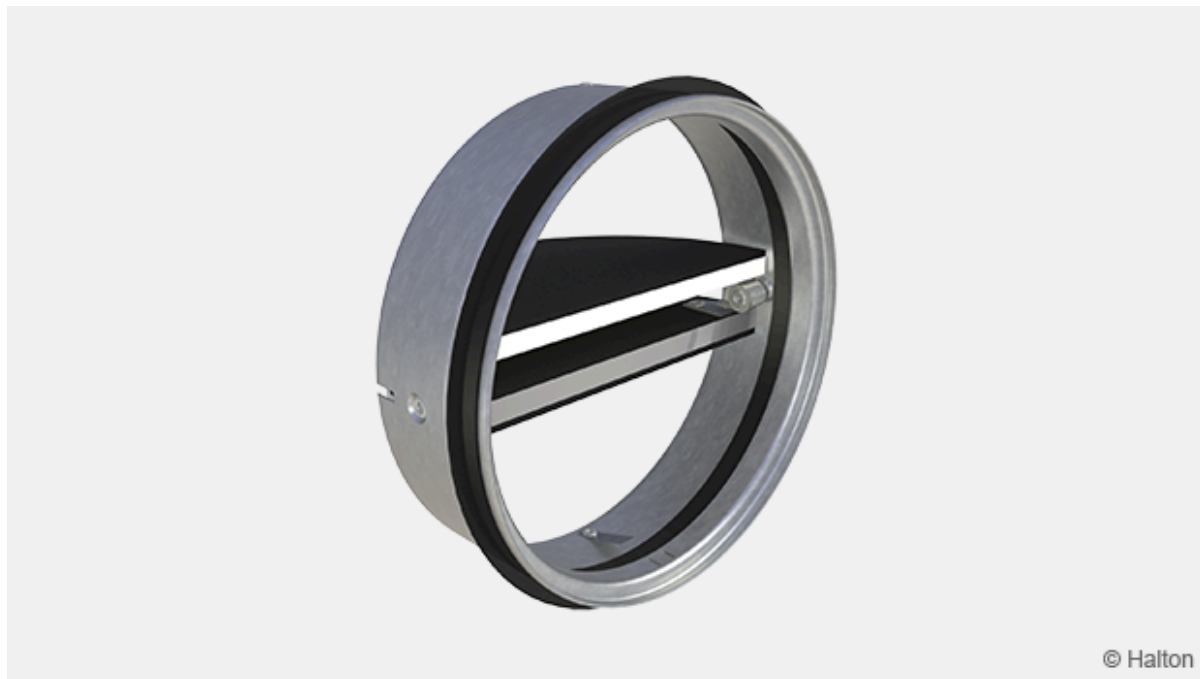


Halton Exe EFC – Fire damper (EI 120 S)



Overview

This fire damper model has the shortest depth of any fire damper in the market so utilizing minimal space. It is suitable for both vertical and horizontal installation in concrete, masonry or lightweight structures. The fire damper can be also installed inside the duct near with e.g. supply or exhaust valve. The fire resistance class is provided up to EI 120 S requirements.

Features

- Supplied with mechanical spring release (failsafe)
- Sizes from Ø100 mm up to Ø200 mm are available
- Maximum air velocity through fire damper in open position is 12 m/s
- Suitable for use in ducts with a maximum pressure difference of 1500 Pa
- Galvanised steel frame construction
- No spare parts or additional installation frames needed, regardless of installation method

Installation options

- Suitable for vertical (wall) installation up to EI 120 S
- Suitable for vertical (wall) and horizontal (ceiling/floor) installation EI 60 S
- Spindle of the blade and the mechanical spring release can be installed in any position (360°) in wall installation
- CE marked for installation in concrete, masonry or lightweight constructions with fire resistance classes of EI 120, EI 90 or EI 60
- Limit switch available as an accessory

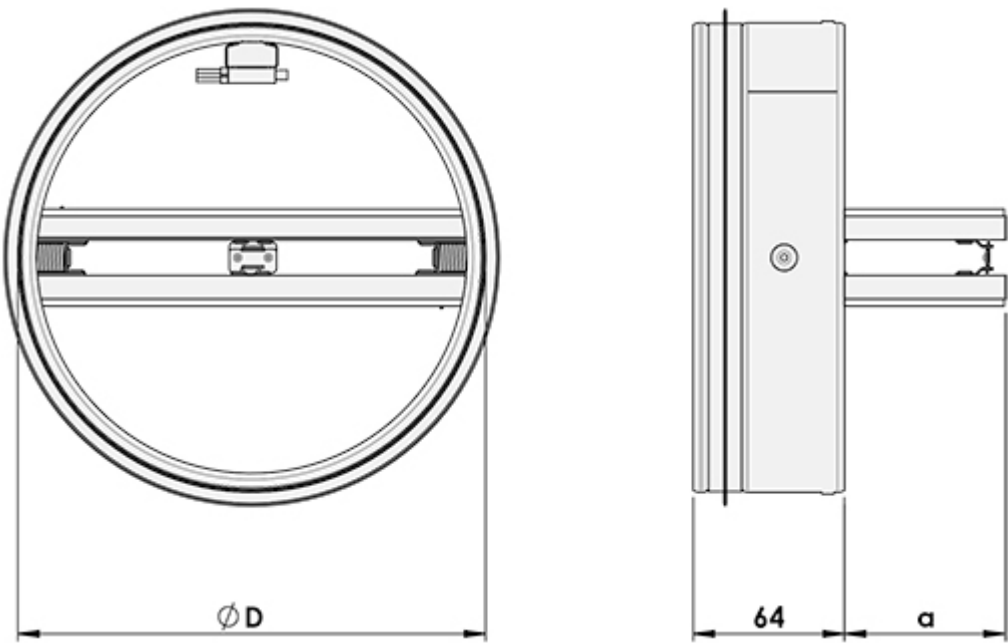
Standards

This product complies with the following standards:

- CE certified according to product standard EN 15650
- Fire classification according to EN 13501-3+A1 standard
EI 120 (v_e i↔o) S, EI 60 (v_e h_o i↔o) S
- Fire testing according to EN 1366-2
- CE certificate of Constancy of Performance 1391-CPR-2018/0205
- Declaration of Performance No:10028-EFC-2019/01/01
- Leakage through closed fire damper fulfils class 2 according to EN 1751
- Damper casing tightness class is the same as the tightness class of duct according to EN 1751

Dimensions and weight

Fire resistance classes, EI 60 S and EI 120 S



NS	ØD
100	98
125	123
160	158
200	198

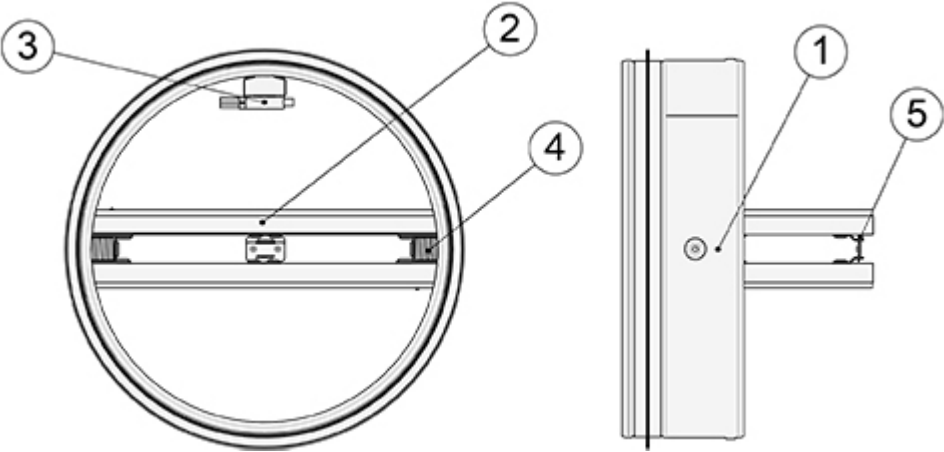
Overlap of blade (mm)

NS	α
100	17.5
125	30.2
160	48.0
200	68.0

Weight (kg)

NS	With mechanical spring release
100	0.3
125	0.4
160	0.6
200	0.8

Material



Key	Part	Material	Note
1	Casing	Galvanised steel	–
2	Blade	Asbestos free boards made of mineral fibre, both sides coated with special expansion coating	EI 120 S
		Asbestos free boards made of mineral fibre, one side coated with special expansion coating	EI 60 S
3	Limit switch	–	Accessory
4	Shutting spring	Stainless steel	–
5	Fuse	Sheet brass	–

Operating model

Mechanical spring release (failsafe)

In Halton Exe Fold Circular fire damper with mechanical spring release, the fuse reacts to the rise of temperature (72 °C) and the mechanical spring closes the damper blade. It needs to be opened manually.

The limit switch (accessory, see Fig.1.) indicates the damper blade position. When the damper blade is open (safe position), the limit switch indicates this position. If the damper blade is closed (failsafe), the limit switch sends an impulse to the monitoring system. This system triggers an alarm and/or stops/starts fans, depending on the designed system. The limit switch has no influence on the thermal fuse or release mechanism.

Fuse can be replaced by removing the fire damper from the duct and placing it back after adjusting.

The maximum operating voltage and current is 230 V, 5A.

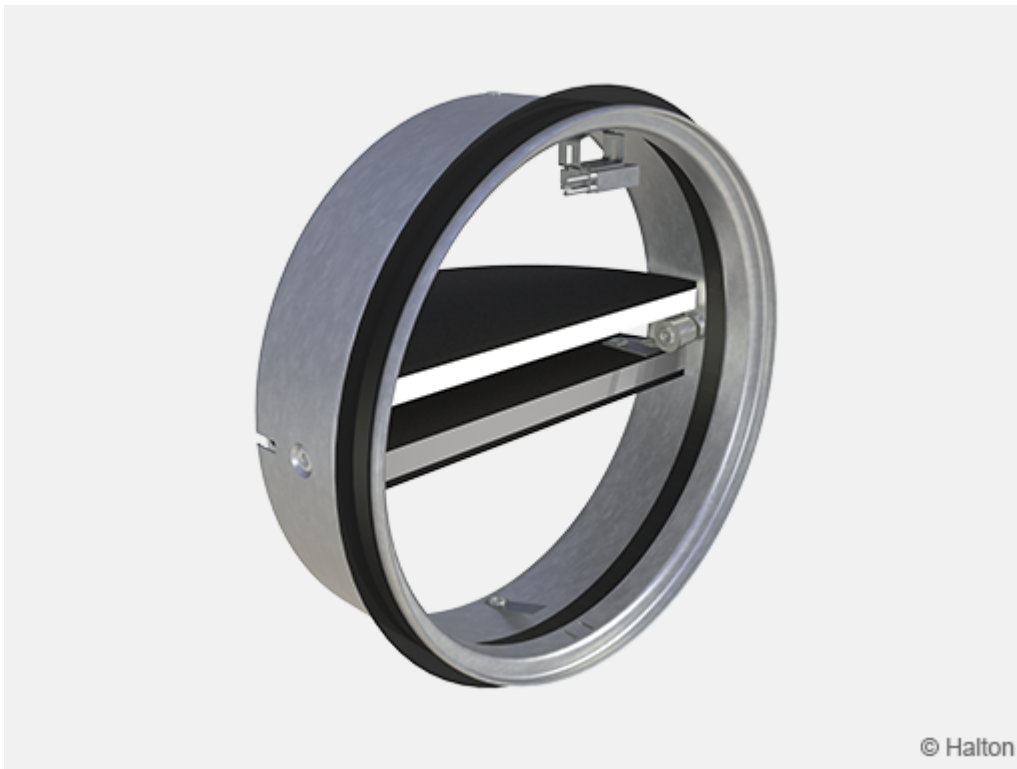


Fig.1. Halton Exe Fold Circular equipped with a limit switch

Function

The Halton Exe Fold Circular fire damper is CE certified for vertical (v_e) installation in concrete, masonry or lightweight walls fulfilling the fire resistance class up to **EI 120 ($v_e h_o i \leftrightarrow o$) S** requirements. Also certified for horizontal (h_o) installation in concrete or masonry ceilings/floors fulfilling the fire resistance class requirements **EI 60 ($v_e h_o i \leftrightarrow o$) S**.

Fire dampers are shutters in ventilation duct systems and prevent spreading of the fire and smoke from one fire department to the other.

The fuse reacts to a rise in temperature, causing a spring-return damper blade to close position. Once the fire damper has closed, the blade and sealing close the duct tightly, effectively preventing the spreading of flue gases and fire.

The mechanical spring release fuse release temperature is 72 °C. It needs to be opened manually.

The fire damper with limit switch (as accessory) can also be connected to common building automation systems.

Installation

Please see/download Installation Guide for this fire damper from section Downloads.

Servicing

No regular maintenance is required for the product.

To ensure proper operation of fire dampers, an inspection must be carried out regularly according to local building codes. The minimum recommended inspection period is **every 6 months**.

Documentation of testing must be saved for future needs.

If the fuse of a fire damper with a mechanical spring release (failsafe) is worn out it must be replaced.

Fuse can be replaced by removing the fire damper from the duct and placing it back after adjusting.

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

Specification

The fire damper is CE certified and marked according to the standard EN15650 and fire tested according to the EN 1366-2 standard.

A fire damper of maximum fire resistance class **EI 120 (v_e i ↔ o) S** requirements (vertical installation) or of maximum fire resistance class **EI 60 (v_e h_o i ↔ o) S** requirements (vertical and horizontal installation).

The fire damper casing complies with duct tightness requirements.
Leakage through closed fire damper fulfils class 2 according to EN 1751.

The casing of the fire damper is made of galvanised steel.
The blades of the fire damper are made of fire-resistant asbestos free boards (mineral fibre).

The fire damper can be installed both vertical and horizontal positions in concrete, masonry or lightweight structures.

The spindle of the blade and the operating model mechanical spring release can be installed in any position (360°) in wall installation.

The fire damper can be installed inside a duct near valve.

The fuse activation temperature corresponds to the specifications (72 °C).

Order code

EFC-D, MA-OP-FU-LS-ZT

D = Diameter of duct connection (mm)

100, 125, 160, 200

Other options and accessories

MA = Material

GS Galvanised steel

OP = Operating Model

MA Mechanical spring release

FU = Fuse release temperature

72 72 °C

FR = Fire resistance class

60 EI 60 S (for vertical and horizontal installation)

120 EI 120 S (for vertical installation)

LS = Limit switch

NA Not assigned

LS1 Limit switch (closed)

ZT = Tailored product

N No

Y Yes (ETO)

Code example

EFC-100, MA=GS, OP=MA, FU=72, LS=NA, ZT=N