

FD-C Series



Circular Single Blade Externally Resettable Combination Fire and Volume Control Damper

- Conforms to fire damper product standard EN15650
- ES classified fire dampers with reduced smoke leakage characteristics EN 13501-3
- Aerodynamically Air Control tested to BS EN 1751
- Tested installation methods in differing supporting constructions (BS EN 1366-2)
- Integrated volume control capability
- Replaceable fusible link from outside of the ductwork
- Commissioning friendly
- External blade position indicator
- Damper casing sizes and tolerances conform to BS EN 1506



MANUFACTURERS OF AIR, FIRE AND SMOKE CONTROL PRODUCTS



FD-C Series

Single Blade Circular Fire Dampers - Introduction

The FD-C Series

The FD-C Manual Operation Single Blade Fire Damper with volume control facility has been designed specifically for installations where space is at a premium.

The testing and resetting of the damper and thermal fuse external of the duct allows for ease of commissioning and maintenance.

NB: Access panels may be required to comply with DW145 G.3.1.5.

The installation plate, with its engineered installation perforations, acts as a template to allow the marking of the fixing positions on the surface of the structure to which the plate will be affixed, allowing for a quick and efficient install.

Introduction

What is a fire damper and why might they be needed?

The FD-C Series Single Blade Circular Fire Damper is designed to stop the spread of fire through ducts, walls and floors.

The product range has many features and options to meet the requirements of specifiers, contractors, local and national authorities. Dampers are available to suit both low and medium velocity applications.

What are the 'E' and 'ES' classifications?

To achieve the classifications to EN13501-3, fire dampers and fire and smoke dampers shall meet product standard 15650 be tested to EN1366-2 where a 300Pa pressure difference is applied across the damper. During the fire test period, the integrity of the seal between the damper and the structure shall not have any gaps larger than 6mm x 150mm. There shall not be any sustained flaming. The largest size of damper to be manufactured for sale as a single section shall be fire tested.

E = Integrity

The maximum leakage permissible at 300Pa corrected to 20°C is 360m³/hr/m² (100 l/s/m²) throughout the fire test period.

ES = Integrity with Smoke Leakage Performance

The maximum leakage permissible at 300Pa corrected to 20°C is 200m³/hr/m² (55.5 l/s/m²) at ambient prior to the fire test and throughout the fire test period. In addition, for the ES classification to be attained, the smallest damper must also meet the 200m³/hr/m² maximum ambient leakage with a 300Pa pressure across the damper. (This is equivalent to just 0.55 l/s on a 100 dia. damper).

Fire dampers should be installed as tested.



Testing and Conformities

CE marked to EN1366-2

See installation details for full details.

Tested and achieved classification to:

ES Classification (BS EN 1366-2/BS EN 13501-3)

- BSB FD-C fitted with Installation Plate
 - ES120 (ve i ↔ O) - Blockwork/Masonry wall
 - ES90 (ve i ↔ O) - Dry Partition wall
 - ES120 (ho i → O) - Concrete floor
 - ES120 (ve i ↔ O) - Batt Wall

FD-C Blade leakage (BS EN 1751)

- Class 2

FD-C Case leakage

- Eurovent 2.2 Class C

Corrosion testing (BRE)

- Tested and satisfies LPS1162
- Complying with test method BS EN 60068-2-11

Leakage Classification

Blade leakage classification is given numerically 1 - 4 and case leakage classification is given using capital letters A - C of EN1751 (sections C.2 and C.3).

The FD-C series damper meets Class 3 blade leakage section C.2 refers and Class C case leakage section C.3 of the EN1751 standard, section C.2 refers.

Normal operating conditions - not exceeding 1100Pa, Classes A, B & C of DW 144 2016 Specification will apply.

The FD-C Series Range

The BSB FD-C series is available in the following case diameters:

FD-C100 - 100mm diameter	FD-C200 - 200mm diameter
FD-C125 - 125mm diameter	FD-C250 - 250mm diameter
FD-C150 - 150mm diameter	FD-C300 - 300mm diameter
FD-C160 - 160mm diameter	FD-C315 - 315mm diameter

FD-C Features and Benefits

- Tested and certified installation variants of the FD-C are available for dry walls, masonry walls and concrete floors.
- All BSB tested installation methods give at least a E90 classification.