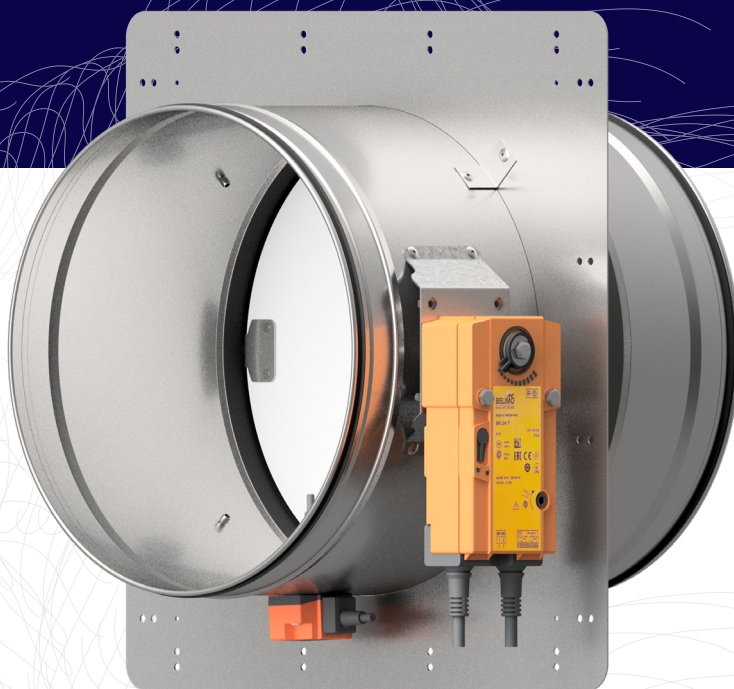


MFD-IC Series

Motorised Fire Damper

Insulated Circle



- EIS Tested to BS EN 1366-2.
- EIS Classified to BS EN 13501-3.
- CE Marked in accordance with BS EN 15650.
- Replaceable thermal fuse element from outside of the duct.
- Volume control capability (via modulating actuator).
- Commissioning friendly.
- External blade position indicator.
- IP54 rated actuator.
- Test switch for periodic damper testing.
- LED green indication when lit indicates that a supply voltage is present and that the temperature fuse is operational.
- CE marked complying with the requirements of EN 15650.
- Actuator can be installed in three different positions to aid installation.



Scan the QR code to register for full details once available

The MFD-IC Series

The MFD-IC Motorised Single Blade combination EIS rated fire damper has been designed specifically for installations where space is at a premium. The installation plate, with its pre-formed fixing positions, can act as a template to allow the marking of the fixing positions on the surface structure to which the plate will be affixed, ensuring quick and efficient install.

Size Range

Model	Diameter
MFD-IC 100	100mm
MFD-IC 125	125mm
MFD-IC 150	150mm
MFD-IC 160	160mm
MFD-IC 200	200mm
MFD-IC 250	250mm
MFD-IC 300	300mm
MFD-IC 315	315mm

Damper Weight (Inc Actuator, Approx)

Nominal Diameter (mm)	Total Weight (kg)
100	2.81
125	3.13
150	3.46
160	3.59
200	4.17
250	4.93
300	5.76
315	6.02

Free Area

Model	Free Area (%)
MFD-IC 100	73%
MFD-IC 125	79%
MFD-IC 150	82%
MFD-IC 160	84%
MFD-IC 200	87%
MFD-IC 250	90%
MFD-IC 300	91%
MFD-IC 315	91%

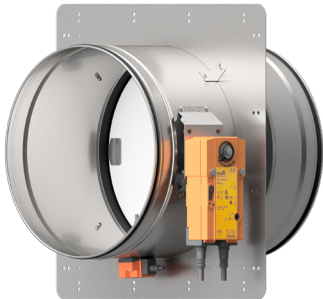
Fire Testing

The BSB MFD-IC Motorised Fire Damper has been subject to comprehensive fire testing where dampers were installed into a series of constructions as detailed on p4 in the classification section. See p6-9 for the CE marked installation methods.

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). In accordance with EN 1751 the MFD-IC series damper meets: Class 2 blade leakage, Class C case leakage. Normal operating conditions - not exceeding 1100Pa, Classes A, B & C of DW 144 2016 Specification will apply.

Construction



Casing

Casing is supplied in 0.8mm thick galvanised steel, rolled and formed with a safety edge and integrated duct seal.

Blade

Blade is machined to suit the required case diameter with centralised axial rotation for optimum blade placement.

Linkage

The drive shaft and pivoting linkage deliver precise motion control from actuator to the blade assembly.

Installation Plate

The Installation plate enables fixing of the damper to the compartment barrier, and includes preformed holes, easy fix™, designed to accommodate both masonry and flexible constructions, simplifying installation.

Thermal Fuse

A momentary push test switch is included within the thermal fuse head for periodic testing of the damper.

The thermal fuse is a secondary safety feature in normal operating conditions, and is designed as a one-time fuse in a fire condition which is non-resettable once activated.



Installation Plate

The installation plate allows the damper to be fixed into place from one side only. The plate has two rows of holes to allow fitment to either masonry or flexible wall construction.

All fixing positions must be used.

Case

Galvanised mild steel to BS EN 10346 DX51D+Z275
0.8mm Damper casing.

BFL Actuator

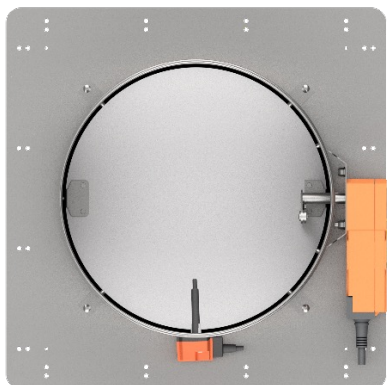
The BFL actuator is a spring return actuator, available as 24 volt, 24 volt modulating and 230 volt options.

Thermal Fuse

Thermal Fuse rated at 72°C is factory fitted and is replaceable external to the damper case. The thermal fuse is fitted with a green LED indication light which provides a quick visual check that the actuator is receiving power and that the thermal fuse is operational. A manual momentary push test switch for periodic testing of the damper is also included.

Blade Seal

Central intumescent blade seal ensures minimum blade thickness, reducing pressure loss, whilst providing an effective seal in fire conditions and compliance to BS EN1366-2.

**Blade**

Calcium Silicate, 20mm thick, affixed to linkage assembly.

Classifications

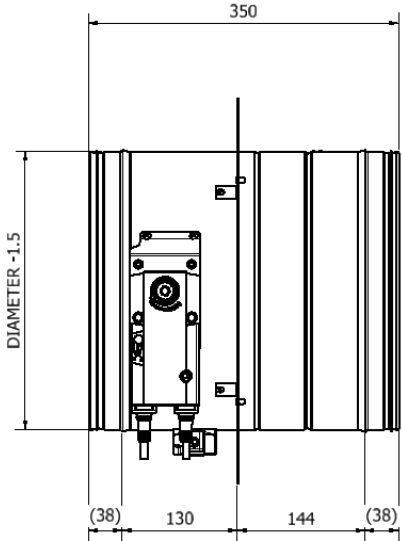
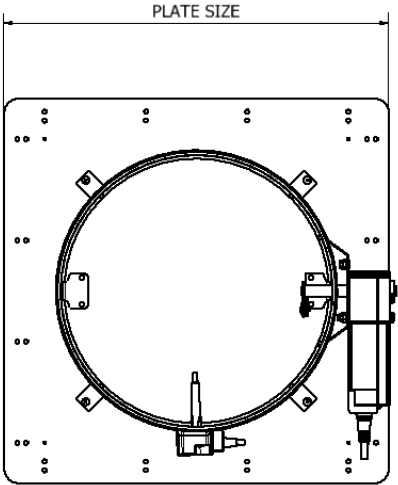
1366-2 Fire Resistance Testing

Installation Drawing	Supporting Construction	Minimum Construction	Min/Max Diameter Size (mm)	Case/Blade Materials	Classifications
MFD-IC M9	Drywall Partition	Group A 50mm Steel Stud. 2 Layers of 12.5mm Type F Board Each Side (EI 90 Fire Resistance)	Ø100 – Ø315	Galvanised Mild Steel Case. Calcium Silicate Blade	EI 90 (ve i <-> o) S EI 60 (ve i <-> o) S
MFD-IC M10	Masonry Wall	100mm Thick Masonry Density 600kg/m ³	Ø100 – Ø315	Galvanised Mild Steel Case. Calcium Silicate Blade	EI 90 (ve i <-> o) S EI 60 (ve i <-> o) S
MFD-IC M11	Masonry Floor Batt infill	150mm Thick Concrete Density 600kg/m ³	Ø100 – Ø315	Galvanised Mild Steel Case. Calcium Silicate Blade	EI 60 (ho i <-> o) S
MFD-IC M15	Masonry Floor Mortar Infill	150mm Thick Concrete Density 600kg/m ³	Ø100 – Ø315	Galvanised Mild Steel Case. Calcium Silicate Blade	EI 90 (ho i <-> o) S EI 60 (ho i <-> o) S

MFD-IC

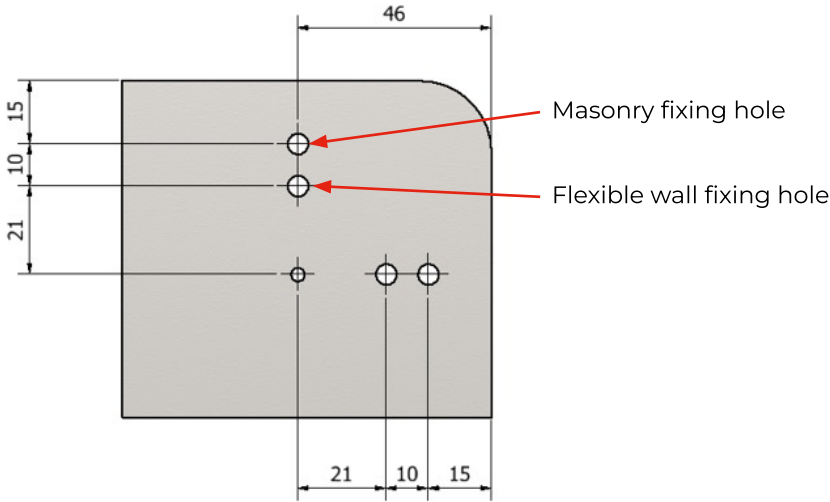
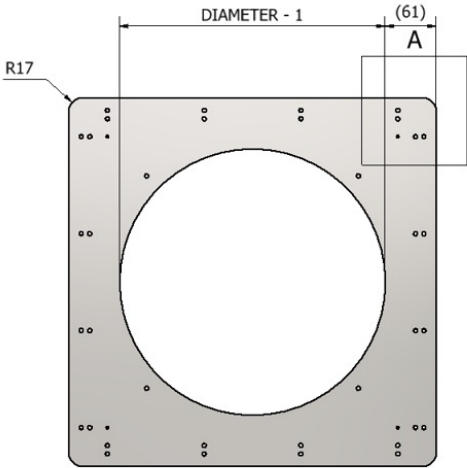
Motorised Fire Damper Insulated Circle – Product Dimensions

Model	Dia. (mm)	Plate Size (mm)
MFD-IC 100	100	220 x 220
MFD-IC 125	120	245 x 245
MFD-IC 150	150	270 x 270
MFD-IC 160	160	280 x 280
MFD-IC 200	200	320 x 320
MFD-IC 250	250	370 x 370
MFD-IC 300	300	420 x 420
MFD-IC 315	315	435 x 435



Installation Plate

Installation Plate Fixing Hole Detail

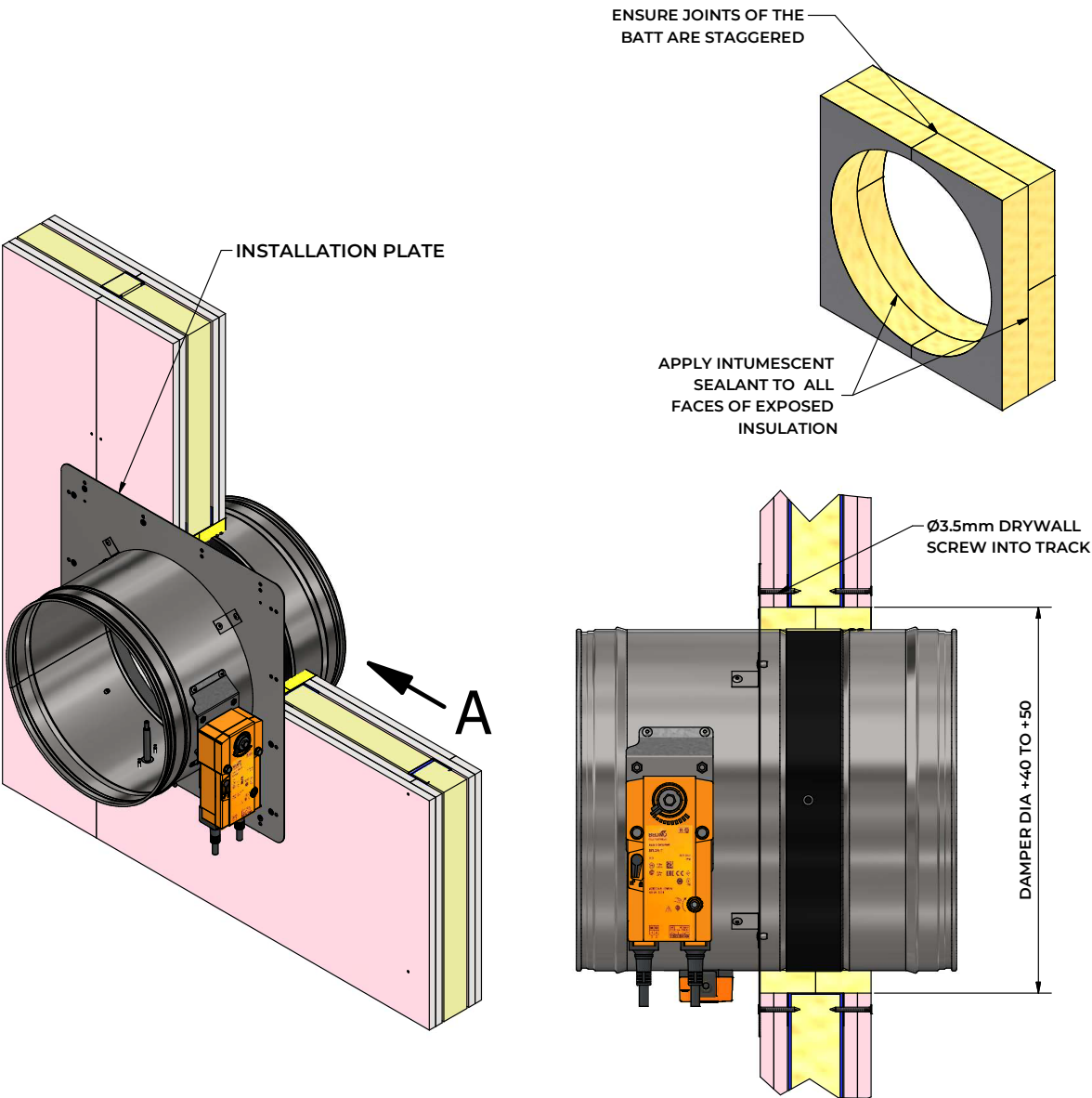




I, O + M

INSTALLATION METHOD: DRY WALL BATT INSTALL

REFER TO INSTALLATION, OPERATING AND MAINTENANCE DOCUMENT (I, O + M) FOR DETAILED INFORMATION. MINIMUM SEPARATION: 200mm FROM CASING AND 75mm TO ANY CONSTRUCTION EDGE (SEE DAMPER SEPARATION DRAWING FOR FURTHER INFORMATION). ANY OTHER TESTED SEPARATION WILL BE SHOWN BELOW IF APPLICABLE.



VIEW A

TO SECURE THE DAMPER TO THE DRY WALL USE THE ROW OF FIXING HOLES BEST ALIGNED WITH THE STEEL TRACK. THE OPENING IN THE WALL MUST NOT BE LINED. ALL FIXING HOLES MUST BE USED.

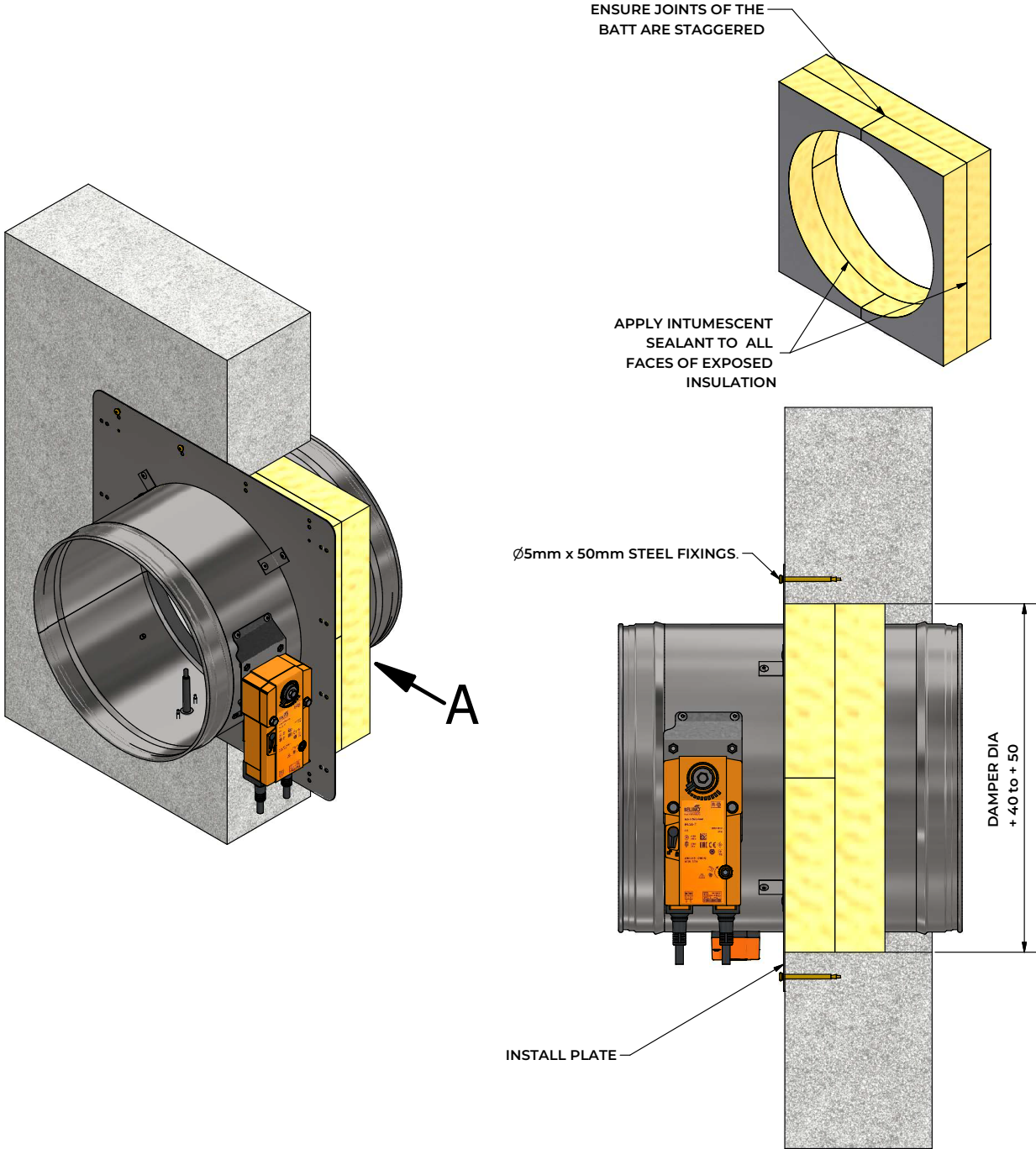
MINIMUM SUPPORTING CONSTRUCTION	CASE / BLADE MATERIAL	MAXIMUM LEVEL AND / OR CLASSES
Group A 50mm Steel Stud 2 Layers of 12.5mm Type F Board Each Side (EI 90 Fire Resistance) 2 layers of 50mm Ablative coated BATT Density 160Kg/m³	Galvanised Steel/ Calcium Silicate	EI 90 (ve i o) S
TESTED INSTALLATION METHOD SHOWN (EN1366-2, CLASSIFICATION: EN13501-3). DIFFERING INSTALLATION METHODS TO THIS, MUST BE ACCEPTED BY THE BUILDING CONTROL AUTHORITY (BCA) BEFORE PROCEEDING. THEY WILL NEED TO REFER TO THIS DOCUMENT AND ASSOCIATED I, O & M IN ORDER TO CONSIDER APPROVAL.		
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DECLARATION: CE DOP-MFD-IC		CE
DRAWING: MFD-IC M9		SHEET: 1 of 1

INSTALLATION METHOD: MASONRY WALL BATT INSTALL



I, O + M

REFER TO INSTALLATION, OPERATING AND MAINTENANCE DOCUMENT (I, O + M) FOR DETAILED INFORMATION. MINIMUM SEPARATION: 200mm FROM CASING AND 75mm TO ANY CONSTRUCTION EDGE (SEE DAMPER SEPARATION DRAWING FOR FURTHER INFORMATION). ANY OTHER TESTED SEPARATION WILL BE SHOWN BELOW IF APPLICABLE.



TO SECURE THE DAMPER TO THE MASONRY WALL, USE THE OUTER ROW OF HOLES. ALL FIXING HOLES MUST BE USED.

VIEW A

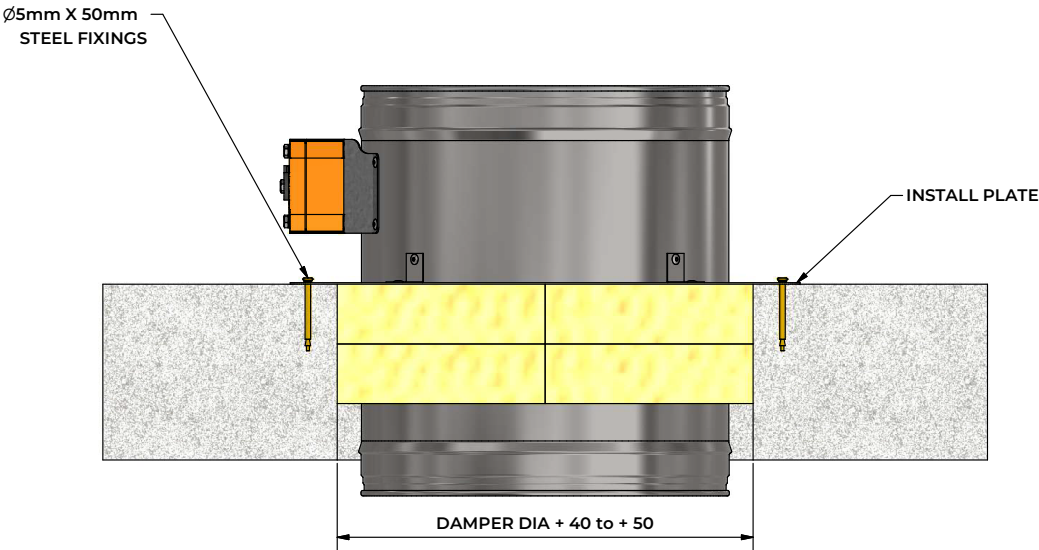
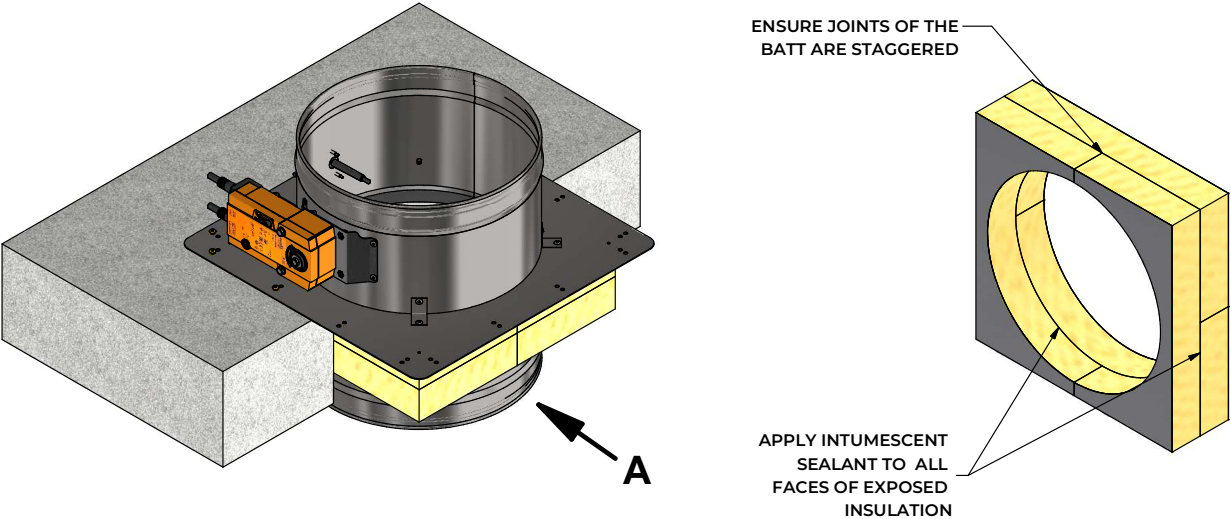
MINIMUM SUPPORTING CONSTRUCTION	CASE / BLADE MATERIAL	MAXIMUM LEVEL AND / OR CLASSES
100mm THICK MASONRY DENSITY 600 Kg/m² 2 layers of 50mm Ablative BATT density 160 Kg/m²	Galvanised Steel/ Calcium Silicate	EI 90 (ve i ↔ o) S
TESTED INSTALLATION METHOD SHOWN (EN1366-2, CLASSIFICATION: EN13501-3). DIFFERING INSTALLATION METHODS TO THIS, MUST BE ACCEPTED BY THE BUILDING CONTROL AUTHORITY (BCA) BEFORE PROCEEDING. THEY WILL NEED TO REFER TO THIS DOCUMENT AND ASSOCIATED I, O & M IN ORDER TO CONSIDER APPROVAL.		
BSB Engineering a Safer Tomorrow bsb-dampers.co.uk		DECLARATION: CE DOP-MFD-IC
REV: 0 ISSUED: 27/05/2026 ECN: 0326		DRAWING: MFD-IC M10
		CE SHEET: 1 of 1

INSTALLATION METHOD: MASONRY FLOOR BATT INSTALL



I, O + M

REFER TO INSTALLATION, OPERATING AND MAINTENANCE DOCUMENT (I, O + M) FOR DETAILED INFORMATION.
MINIMUM SEPARATION: 200mm FROM CASING AND 75mm TO ANY CONSTRUCTION EDGE (SEE DAMPER SEPARATION DRAWING FOR FURTHER INFORMATION). ANY OTHER TESTED SEPARATION WILL BE SHOWN BELOW IF APPLICABLE.



VIEW A

TO SECURE THE DAMPER TO THE MASONRY FLOOR USE THE OUTER ROW OF FIXING HOLES.
DAMPER MAY BE INSTALLED WITH BLADE AXIS IN ANY ORIENTATION. ALL FIXING HOLES MUST BE USED.

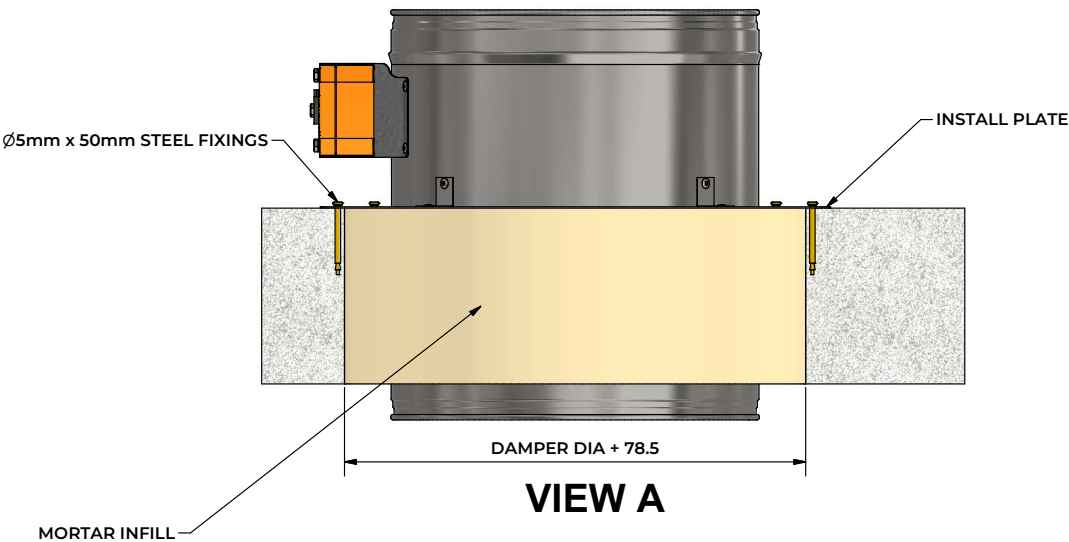
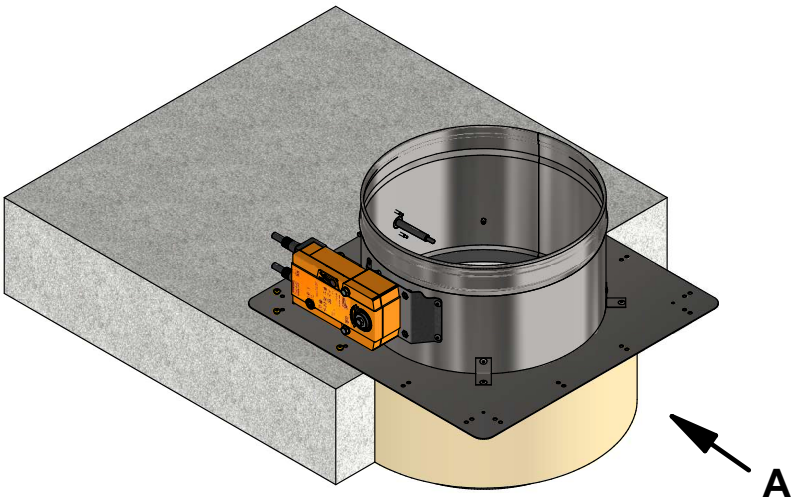
MINIMUM SUPPORTING CONSTRUCTION		CASE / BLADE MATERIAL		MAXIMUM LEVEL AND / OR CLASSES			
150mm Thick Masonry Density 600Kg/m ³ 2 layers of 50mm Ablative coated BATT Density 160Kg/m ³		Galvanised Steel/ Calcium Silicate		EI 60 (ho i ↔ o) S			
TESTED INSTALLATION METHOD SHOWN (EN1366-2, CLASSIFICATION: EN13501-3). DIFFERING INSTALLATION METHODS TO THIS, MUST BE ACCEPTED BY THE BUILDING CONTROL AUTHORITY (BCA) BEFORE PROCEEDING. THEY WILL NEED TO REFER TO THIS DOCUMENT AND ASSOCIATED I, O & M IN ORDER TO CONSIDER APPROVAL.	 bsb-dampers.co.uk		© THE CONTENT OF THIS DRAWING MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF BSB ENGINEERING SERVICES LTD.		DECLARATION: CE DOP-MFD-IC		
			REV: 0				
			ISSUED:		DRAWING: MFD-IC M11		SHEET: 1 of 1
			ECN: 0326				

INSTALLATION METHOD: MASONRY FLOOR MORTAR INFILL



I, O + M

REFER TO INSTALLATION, OPERATING AND MAINTENANCE DOCUMENT (I, O + M) FOR DETAILED INFORMATION. MINIMUM SEPARATION: 200mm FROM CASING AND 75mm TO ANY CONSTRUCTION EDGE (SEE DAMPER SEPARATION DRAWING FOR FURTHER INFORMATION). ANY OTHER TESTED SEPARATION WILL BE SHOWN BELOW IF APPLICABLE.



TO SECURE THE DAMPER TO THE MASONRY FLOOR USE THE OUTER ROW OF FIXING HOLES. THE VOID BETWEEN DAMPER AND FLOOR IS FILLED WITH MORTAR. DAMPER MAY BE INSTALLED WITH BLADE AXIS IN ANY ORIENTATION. ALL FIXING HOLES MUST BE USED.

Table with 3 columns: MINIMUM SUPPORTING CONSTRUCTION, CASE / BLADE MATERIAL, MAXIMUM LEVEL AND / OR CLASSES. It includes technical specifications, BSB logo, a declaration, and sheet information.

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PREVIEW



Scan the QR code to
register for full details
once available

MFD-IC

Motorised Fire Damper Insulated Circle – Order Codes

MFD-IC

315

BFL24-T

Model:

MFD-IC

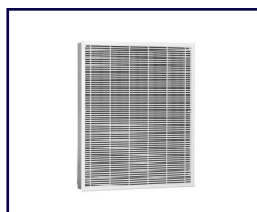
Diameter:

100 - 100mm Diameter
125 - 125mm Diameter
150 - 150mm Diameter
160 - 160mm Diameter
200 - 200mm Diameter
250 - 250mm Diameter
300 - 300mm Diameter
315 - 315mm Diameter

Application / Motor Type:

BFL24-T - 24v Spring return actuator, with Thermal Fuse
BFL230-T - 230v Spring Return Actuator with Thermal Fuse
BFL24-SRT - 24v Spring return Modulating actuator with Thermal Fuse

Other Air, Fire and Smoke Control Products in the BSB Range:



LD and LDN Series
Lobby Dampers



FD Series
Fire Dampers



FD-C Series
Circular Fire Dampers



FSD-C Series
Circular Dampers



FSD-TD Series
Fire/Smoke Dampers



BD Series
Backdraught Dampers



HD Series
Heavy Duty Dampers



SS Series
SlimSeal Dampers



A60 Series
Marine Fire Damper



Control Systems

For full details of the complete BSB Product Range, please refer to our individual product brochures, sales office or website.