CE Marked ‘E’ Rated Curtain Bladed Fire Dampers used to prevent the spread of fire maintaining compartmentation
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CE Marking

Following the introduction of the new Construction Products Regulation (CPR) on the 1st July 2013, Actionair, a brand of Swegon Air Management, offer a comprehensive range of CE marked fire dampers together with approved installation methods.

Under the CPR, manufacturers of construction products which are covered by harmonised European standards (hENs) are required to affix the CE mark and make a Declaration of Performance (DoP) for their products. CE marked fire dampers must fully comply with the product standards: EN 15650:2010 Ventilation for Buildings - Fire Dampers and compliance is verified through assessment by a “Notified Body”.

The full and intensive assessment process includes:
- Fire testing to the latest European standards - EN 1366-2
- Classified to EN 13501-3
- Corrosion testing to EN 60068-2-52
- Thermal fuse testing to ISO 10294-4
- Factory production control which includes a continuous program of cyclic and leakage testing of production dampers to ensure full compliance of every product

Companies must also be ISO 9001:2008 accredited and every product must be CE marked with all known characteristics. It must be supplied with comprehensive installation, operation and maintenance instructions.

Greater legal responsibility for ensuring compliance with the harmonised standards will also be imposed on importers, distributors, specifiers and builders.

FireShield

The FireShield range of CE Marked ‘E’ Rated Fire Dampers are used to prevent the spread of fire. The Stainless Steel folding blade curtain is housed in a galvanised steel fully welded spigotted casing suitable for square, rectangular, circular and flat oval connections. They are supplied with a choice of various successfully tested installation methods;

Installation Frame (I/F)
DWFX-C (Dry Wall Fix Cleats)
DWFX-F (Dry Wall Fix Flange)

Specifically for inclusion into concrete / masonry walls and floors or dry wall partitions.

Optional 230V AC or 24V AC and DC Electro Magnet fail-safe releases and Micro Switches are available.

The Range

The Actionair FireShield range of quality engineered dampers are suitable for air conditioning and ventilation systems requiring up to 4 hour fire protection.

These stainless steel bladed Actionair FireShield Dampers fail-safe closed and are supplied with the innovative, easy Single-Handed Reset Self Latching Removable Release Mechanism Cassette.

Ordinary steel curtain fire dampers involve a complex pull and lift curtain opening operation, further complicated by having to hold the curtain in the fully open position against the constant tension of closure springs whilst attempting to reset or replace the fusible link unsighted.

Specification

FireShield

The Actionair FireShield curtain fire dampers comprise of a stainless steel folding curtain having unbroken movable joints with stainless steel constant tension closure springs for positive closure.

The Self Resettable, Latching Removable Release Mechanism Cassette, shall ensure the closure of the stainless steel curtain under full fire conditions. All housed in a galvanised steel fully welded spigotted type casing suitable for square, rectangular, circular or flat oval connections.

A Fire Rated Damper in accordance with British Standard BS9999:2008 should be held in the Open Position by means of a Thermally Actuated Device set to operate at approximately 74 °C. All FireShield Stainless Steel Curtain Fire Dampers are Fire Rated Dampers as they are held in the Open Position by a Thermally Actuated cassette operating at a temperature of approximately 72 °C ± 4 °C.
**Selection Guide**

<table>
<thead>
<tr>
<th>SPIGOT CONNECTIONS</th>
<th>Square / Rectangular</th>
<th>Circular</th>
<th>Flat Oval</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
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</table>

<table>
<thead>
<tr>
<th>Series</th>
<th>FS101</th>
<th>FS201</th>
<th>FS301</th>
<th>FS401</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blades partly in airstream</td>
<td>Blades effectively out of airstream</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSTALLATION METHOD</th>
<th>I/F</th>
<th>DWFX-C</th>
<th>DWFX-F</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Image" /></td>
<td></td>
<td><img src="image6" alt="Image" /></td>
<td><img src="image7" alt="Image" /></td>
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</table>

<table>
<thead>
<tr>
<th>Concrete / Masonry Wall</th>
<th>Page 9</th>
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</thead>
<tbody>
<tr>
<td>Concrete / Masonry Floors</td>
<td>Page 10</td>
</tr>
<tr>
<td>Dry Wall fix Cleats (typically fixed prior to encasement by the dry wall partition)</td>
<td>Page 13</td>
</tr>
<tr>
<td>Dry Wall fix Flange and Cleats (typically fixed into existing dry wall partition)</td>
<td>Page 15</td>
</tr>
<tr>
<td>Dry Wall</td>
<td>Page 13</td>
</tr>
</tbody>
</table>
Blade Features

The Type 1.4016 (430) Ferritic Stainless Steel folding blade curtain, providing maximum strength, forms a fire shield. The wide profile blades maximise the damper free area and ensure compact grouping to minimise blade stacking height.

Stainless Steel Closure Springs

Stainless Steel constant tension springs are fitted and positioned out of the airstream to close and latch the damper, regardless of vertical or horizontal operation.

Casing Features

Spigotted Casing

The spigotted casing with continuously welded corners and spigot connections, makes these dampers suitable for inclusion into air distribution systems to the test methods of Eurovent Class A, B & C and HVCA Ductwork specification DW144.

These galvanised casings are manufactured with either Square, Rectangular, Circular or Flat Oval duct connections.

Features

- Patented design.
- Made of Polyphenylene sulphide (PPS) resin reinforced with 40% glass (GF-PPS).
- Technically advanced engineering polymer.
- PPS is stable at temperatures up to 200 °C.
- Cassette construction is of very high strength and has excellent creep and fatigue resistance.
- Low smoke and toxic emissions in fire conditions.
- Halogen free.
- PPS has a very low moisture absorption.
- PPS is corrosion resistant.
- The Cassette construction is environmentally friendly (recyclable material).
- The new Cassette is retrofittable to existing FireShield Dampers (by use of a simple optional adaption bracket). Part Number: CNNN01981
- One Cassette to suit all damper material options.

Cassette Details

Features

- Patented design.
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- One Cassette to suit all damper material options.

External Visual Blade Position Indication

An external indicator is factory fitted to the access (cassette) side of the damper casing giving visual indication of damper blade position.

A spring steel actuator ensures automatic resetting of the external indicator in either horizontal or vertical applications.

The external indicator is especially beneficial at the system balancing and commissioning stage eliminating the necessity of internal duct inspection to determine the fire damper open or closed position.

Fluorescent Red Display

Indicating damper blades in closed position.

Note: External visual blade position indication is not available with certain multiple assemblies, miscellaneous Damper configurations and due to physical size limitations is not available below 125mm dia. on Series 301 Dampers.
The cassette mechanism is completely removable from the FireShield Damper by manually releasing the retaining clip. This allows replacement of the cassette without the use of tools.

Simple hand operation enables the damper curtain to be reset and latched in the fully Open Position.

This increases the ease and speed with which the FireShield Damper can be reset following periodic functional testing in accordance with British Standard BS9999:2008 Code of Practice for fire safety.

The thermal actuator in the form of a helical memory metal compression spring is produced from a special Cu-Zn-Al brass alloy.

On temperature rise this expands and at 72 °C, causes the FireShield damper blades to release.

On cooling, the spring reverts to the close-coiled state offering the significant advantage of repeated operation, unless it has reached temperatures in excess of 170 °C, where it will remain extended, preventing reset.

Cassettes are only available for 72 °C. For Dampers where alternative thermal link temperatures are required a chain-link can be offered in place of a cassette. Electrical release is only available with a cassette i.e. 72 °C. Please refer to Actionair Sales Office.

Please note: For dampers with dimensions of 150mm and below ensure that there is adequate access to enable re-setting.
Remote Electrical Fail-Safe Releases

Electro Magnet Releases

230V AC and 24V AC and DC Electro magnet releases are available.

**230V AC**

- BROWN
- BLUE
- GREEN/YELLOW

**Supply**

- 230V
- 1PH 50Hz
- 10mA
- Continuous Loads

**24V AC and DC**

- BROWN
- BLUE
- GREEN/YELLOW

**Supply**

- 24V
- 1PH 50Hz
- 120mA
- Continuous Loads

Indication Micro Switches

All FireShield CE Marked ‘E’ Rated Curtain Fire Dampers are available with factory fitted single or double pole micro switches as optional extras to provide remote electrical indication of damper status and/or controls interface.

Micro Switch options include:

- **C Type**
  - Cassette Single Pole 230V Micro Switch

- **MSSP Type M**
  - Single Pole 230V Micro Switch

- **MSSP Type T**
  - Heavy Duty Single Pole 230V Micro Switch

- **MSDP Type T**
  - Heavy Duty Double Pole 230V Micro Switch

Please contact our Sales Office on 01227 276100 for further details.

**Terminal blocks supplied by others.**
The data presented is from the Laboratory Determination of Acoustic and Aerodynamic Performance of FireShield Stainless Steel Curtain Fire Dampers.

A programme of extensive tests was carried out in the Reverberation Chamber and North Transmission Chamber of Sound Research Laboratories Limited, Holbrook Hall, Sudbury, Suffolk, generally in accordance with BRITISH STANDARDS Nos., 4196, 4773, 4856, 4857 and 4954.

This independent test facility is approved under the NAMAS Scheme.

For a selection of duct velocity within the operational parameters of the dampers a resultant pressure drop can be determined and the sum of these two components applied to the Velocity X Pressure Drop Vs Sound Power Level Graph. The Sound Power Level Graphs are a result of a full range of acoustic tests on FireShield Series 101, 201 and 301 dampers. The Spectrum Correction Data is applied to the number obtained from the graph and a complete Sound Spectrum of Flow Generated Noise for both Breakout (casing radiated) and Outlet (in duct) is obtained.

### Velocity (m/s) X Pressure Drop (Pa) Vs Sound Power Level (dBW)

![Velocity X Pressure Drop Graph]

### Pressure Drop Vs Velocity

![Pressure Drop Vs Velocity Graph]

### FireShield Breakout Spectrum Correction

<table>
<thead>
<tr>
<th>Octave band</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1K</th>
<th>2K</th>
<th>4K</th>
<th>8K</th>
<th>Hz</th>
<th>dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 101</td>
<td>-10</td>
<td>-7</td>
<td>-3</td>
<td>-9</td>
<td>-13</td>
<td>-20</td>
<td>-30</td>
<td>-35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Series 201</td>
<td>-10</td>
<td>-7</td>
<td>-3</td>
<td>-9</td>
<td>-13</td>
<td>-20</td>
<td>-30</td>
<td>-35</td>
<td>-dB</td>
<td></td>
</tr>
<tr>
<td>Series 301</td>
<td>-13</td>
<td>-10</td>
<td>-3</td>
<td>-7</td>
<td>-11</td>
<td>-12</td>
<td>-26</td>
<td>-42</td>
<td>-dB</td>
<td></td>
</tr>
</tbody>
</table>

### FireShield Outlet (Induct) Spectrum Correction

<table>
<thead>
<tr>
<th>Octave band</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1K</th>
<th>2K</th>
<th>4K</th>
<th>8K</th>
<th>Hz</th>
<th>dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 101</td>
<td>-4</td>
<td>-12</td>
<td>-16</td>
<td>-18</td>
<td>-22</td>
<td>-29</td>
<td>-32</td>
<td>-38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Series 201</td>
<td>-4</td>
<td>-11</td>
<td>-17</td>
<td>-19</td>
<td>-22</td>
<td>-30</td>
<td>-33</td>
<td>-40</td>
<td>-dB</td>
<td></td>
</tr>
<tr>
<td>Series 301</td>
<td>-4</td>
<td>-10</td>
<td>-16</td>
<td>-18</td>
<td>-21</td>
<td>-24</td>
<td>-30</td>
<td>-38</td>
<td>-dB</td>
<td></td>
</tr>
</tbody>
</table>
FireShield

I/F

CE Marked ‘E’ Rated Fire Dampers c/w HEVAC / HVCA Installation Frame. Typically installed into concrete/masonry walls and floors

- HEVAC / HVCA Installation frame (I/F)
- CE marked to EN 15650
- Classified to EN 13501-3: E 120 (Ho Ve i ← → o) S
- Fire tested to EN 1366-2
- LPCB Type approved
- Successfully fire tested up to 4 hours integrity
FireShield and I/F Installation (Vertical)

Vertical in block work/Masonry wall HEVAC/HVCA Installation frame (I/F)

1. Measure the positions of the building ties on the HEVAC frame.

2. Mark up the lintel at the top of the hole in the wall to give positions that match to the building ties. Drill into the lintel and fit stud anchors or similar steel fixings (min diameter 6.5mm x 60mm).

3. Turn out the building ties on the damper and offer the damper into position, supporting from underneath with a block of wood or board, which will need to be removed when the mortar is in position. If 4 hour Integrity is required pockets in the wall will be required and wall ties turned out into them.

4. Using a steel wire, wrap this round the building ties and the stud anchors in the lintel at the top, to hold the damper in position. (Note: This will also maintain the quality of the link between the damper, the infill mortar and the wall should a fire occur).

5. Add mortar from both sides of the damper and infill to the HEVAC frame.

6. In accordance with EN 1366-2 Minimum masonry between builders hole cutouts for installation frames is 200mm. Minimum masonry between wall, floor or slab and builders hole cutout is 75mm.

NOTE:

- Dimensions flexible; bear in mind building tie wall pockets dimensions used to attain 4 hour rating.
- Injecting ductwork omitted for clarity.
FireShield and I/F Installation (Horizontal)

Horizontal in floor slab HEVAC / HVCA Installation frame (I/F)

1. Measure the positions of the building ties on the HEVAC frame.

2. Mark up the inside edges of the hole in the slab to give positions that match to the building ties. Drill into the floor slab and fit stud anchors (or similar) – leaving them protruding into the opening.

3. Turn out the building ties on the damper and offer the damper into position.

4. Using steel wire (min diameter 1.5mm), wrap this round the building ties and the stud anchors to hold the damper in position. (Note: This will also maintain the quality of the link between the damper, the infill mortar and the floor slab should a fire occur).

5. Shutter beneath the damper (if required) and add mortar from the top of the slab and infill to the HEVAC frame.

6. When the mortar is firm remove the shuttering (if applied) and infill with more mortar to the HEVAC frame from below the slab. Take care not to infill past the line on the interface shroud if the motor is to be fitted below the slab.

7. In accordance with EN 1366-2 Minimum masonry between builders hole cutouts for installation frames is 200mm. Minimum masonry between wall, floor or slab and builders hole cutout is 75mm.
<table>
<thead>
<tr>
<th>Base Dampers</th>
<th>HEVAC / HVCA I/F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Series 101</strong>&lt;br&gt;FireShield Dampers with blades partly in airstream (Damper spigots 5mm under duct size) 100 - 249 high, blades effectively outside airstream</td>
<td>OVERALL WIDTH OF INSTALLATION FRAME IS DUCT WIDTH + 114</td>
</tr>
<tr>
<td><img src="image" alt="Series 101 Diagram" /></td>
<td><img src="image" alt="Series 101 Diagram" /></td>
</tr>
<tr>
<td><strong>Series 201</strong>&lt;br&gt;FireShield Dampers with blades effectively outside airstream (Damper spigots 5mm under duct size) 100 - 249 high, use Series 101 Damper as blades effectively outside airstream</td>
<td>OVERALL WIDTH OF INSTALLATION FRAME IS DUCT WIDTH + 114</td>
</tr>
<tr>
<td><img src="image" alt="Series 201 Diagram" /></td>
<td><img src="image" alt="Series 201 Diagram" /></td>
</tr>
<tr>
<td><strong>Series 301</strong>&lt;br&gt;FireShield Dampers with blades effectively outside airstream (Damper spigots 3mm under duct size)</td>
<td>OVERALL WIDTH OF INSTALLATION FRAME IS DUCT WIDTH + 114</td>
</tr>
<tr>
<td><img src="image" alt="Series 301 Diagram" /></td>
<td><img src="image" alt="Series 301 Diagram" /></td>
</tr>
<tr>
<td><strong>Series 401</strong>&lt;br&gt;FireShield Dampers with blades effectively outside airstream (Damper spigots 3mm under duct size)</td>
<td>OVERALL WIDTH OF INSTALLATION FRAME IS DUCT WIDTH + 114</td>
</tr>
<tr>
<td><img src="image" alt="Series 401 Diagram" /></td>
<td><img src="image" alt="Series 401 Diagram" /></td>
</tr>
</tbody>
</table>
FireShield

DWFX-C

CE Marked ‘E’ Rated Fire Dampers c/w Dry Wall Fix Cleats. Typically installed prior to encasement by the dry wall partition

- Dry wall fix ‘Cleats’ Typically fixed prior to encasement by the dry wall partition
- CE marked to EN 15650
- Classified to EN 13501-3: E 120 (Ve i ← →o)
- Fire tested to EN 1366-2
- LPCB Type approved
FireShield and DWFX-C Installation

Enclosure by drywall partition (DWFX-C)

1. Fit track (of partition) to the ceiling.
2. Suspend the damper from the ceiling through the centre of the partition ceiling track using 10mm studding drop rods.
3. Frame out the damper using tracks and studs lined with board. This is done with a lined track above the damper crossing between the nearest two full height studs, two vertical lined studs as close to the damper as possible (outside the cleats)
4. Build the partition to the track and stud framework, coming as close to the damper as possible.
5. Insulate the wall with mineral/stone wool.
6. Seal the damper to the partition with intumescent sealant and add patresses to both sides down to the damper spigot. Seal these to the damper spigot with intumescent sealant.
7. Finish the wall as standard practice.
8. In accordance with EN 1366-2 Minimum partition between builders hole cutouts for dampers is 200mm. Minimum partition between wall, floor or slab and builders hole cutout is 75mm.
FireShield

DWFX-F

CE Marked ‘E’ Rated Fire Dampers c/w Dry Wall Fix Flange and Cleats Typically installed into existing dry wall partition

- Dry wall fix ‘Flange & Cleats’ Typically fixed into existing dry wall partition
- CE marked to EN 15650
- Classified to EN 13501-3: E 120 (Ve i ← →o)
- Fire tested to EN 1366-2
- LPCB Type approved
FireShield and DWFX-F Installation

Existing drywall partition (DWFX-F)

1. Measure the overall damper casing size, but do not include the peripheral flange.

2. Calculate the finished hole size by adding 25mm ± 5mm to both width and height.

3. Calculate the hole to cut size by adding two board thicknesses to the finished hole width and height.

4. Mark out the hole on the partition and cut it out, cutting the top and bottom edges first to maintain stability.

5. Frame out the hole with stud and line the hole with one layer of board. Finish edges with joint filler.

6. Drill clearance holes in the damper flange at 150mm centres and such that they will allow screws to pull into the stud and track around the hole.

7. Install the damper and fasten.

8. Back fill with mineral/stone wool and patress over this down to the spigot.

9. In accordance with EN 1366-2 Minimum partition between builders hole cutouts for installation frames is 200mm. Minimum partition between wall, floor or slab and builders hole cutout is 75mm.
FireShield and DWFX-F Installation

INSTALLATION DETAIL

SECTION THROUGH A-A

2-OFF 12.5mm GYPSUM FIRE BOARDS TYPE F (EN520) BOTH SIDES
STONE WOOL MIN 45kg/m³
DRYWALL STUDDING UT72 TOP & BOTTOM CS70 VERTICALS 600mm CTRS

APPROX 10mm BEAD ROCKWOOL ACCOUSTIC INTUMESCENT SEALANT BOTH SIDES, ALL ROUND
ROCKWOOL FIREPRO GLUE AROUND PERIMETER & ALSO WHEN JOINING BATT TO BATT EDGES

ROCKWOOL ABLATIVE BATT

UP TO 2400mm ROCKWOOL ABLATIVE BATT

ROCKWOOL ABLATIVE BATT

UP TO 2400mm ROCKWOOL ABLATIVE BATT

SECTION THROUGH A-A

APPROX 15mm BEAD ROCKWOOL ACCOUSTIC INTUMESCENT SEALANT BOTH SIDES, ALL ROUND

ROCKWOOL FIREPRO GLUE AROUND PERIMETER & ALSO WHEN JOINING BATT TO BATT EDGES

ROCKWOOL ABLATIVE BATT

UP TO 2400mm ROCKWOOL ABLATIVE BATT

BLOCK WORK / MASONRY WALL

APPROX 15mm BEAD ROCKWOOL ACCOUSTIC INTUMESCENT SEALANT BOTH SIDES, ALL ROUND

ROCKWOOL FIREPRO GLUE AROUND PERIMETER & ALSO WHEN JOINING BATT TO BATT EDGES

ROCKWOOL ABLATIVE BATT

UP TO 2400mm ROCKWOOL ABLATIVE BATT

SECTION THROUGH A-A

CE

CE

actionair
FireShield and DWFX-F Installation

NOTE: DAMPERS SUPPLIED WITH CLEATS WELDED TO TOP FLANGE TO ASSIST WITH INSTALLATION ONLY

CONNECTING DUCTWORK OMITTED FOR CLARITY
## FireShield and DWFX-F Installation Dimensional Data

### Base Dampers

<table>
<thead>
<tr>
<th>Series 101</th>
<th>FireShield Dampers with blades partly in airstream (Damper spigots 5mm under duct size) 100 – 249 high, blades effectively outside airstream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duct Width</td>
<td>100mm – 1250mm</td>
</tr>
<tr>
<td>Duct Height</td>
<td>25 mm</td>
</tr>
</tbody>
</table>

### Series 201

| FireShield Dampers with blades effectively outside airstream (Damper spigots 5mm under duct size) 100 – 249 high, use Series 101 Damper as blades effectively outside airstream |
| Duct Width | 100mm – 1250mm                                                                                                                     |
| Duct Height| 25 mm                                                                                                                             |

### Series 301

| FireShield Dampers with blades effectively outside airstream (Damper spigots 3mm under duct size) |
| Duct Diameter | 125mm – 1000mm                                                                                                                     |
| Duct Height    | 25 mm                                                                                                                             |

### Series 401

| FireShield Dampers with blades effectively outside airstream (Damper spigots 3mm under duct size) |
| Duct Diameter | 125mm – 1000mm                                                                                                                     |
| Duct Height    | 25 mm                                                                                                                             |
## FireShield Ordering Information

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Series</th>
<th>Blade Construction</th>
<th>Casing Construction</th>
<th>Duct Size</th>
<th>Installation Option</th>
<th>Visual Blade Position Indicator</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>FS201</td>
<td>430 Stainless Steel</td>
<td>Galvanised</td>
<td>100 (w) x 600 (h)</td>
<td>IF</td>
<td>YES</td>
<td>EM230</td>
</tr>
</tbody>
</table>

**Number of units required**

- FS101: Square/Rectangular (blades partly in airstream)
- FS201: Square/Rectangular (blades outside airstream)
- FS301: Circular (blades outside airstream)
- FS401: Flat Oval (blades outside airstream)

**Blades**

- **430**: Ferritic Stainless Steel Blades (supplied as standard)
- **316**: Austenitic Stainless Steel Blades

**Casing**

- Galvanised Steel Casing (supplied as standard)
- 430 Ferritic Stainless Steel Casing
- 316 Austenitic Stainless Steel

**Duct Size**

- 100 (w) x 600 (h)

**Installation Option**

- IF Installation Frame
- DWFX-C™ Drywall Fix Cleat
- DWFX-F™ Drywall Fix Flange plus Cleats

**Visual Blade Position Indicator**

- YES

**Accessories**

- EM230: 230V AC Electromagnet release
- EM24: 24V AC and DC Electromagnet release
- C Type: Single Pole Cassette Microswitch
- MSSP: “M” Type Single Pole Microswitch “T” Type
- Heavy Duty Single Pole Microswitch
- MSDP: “T” Type Heavy Duty Double Pole Microswitch

**Nominal Damper Spigot Size**

- Yes (fitted as standard)
- No

**Please Note:** FireShield Curtain Dampers will be supplied with Standard 430 Ferritic Stainless Steel Blades, Galvanised Steel Casings, with DWFX-F Drywall Fix Flange plus Cleats installation method and Visual Indicators as standard. If no options are advised, please ensure the ordering information is completed in full so that your requirements along with any options are met in full.
Customer Service

Actionair provides quality products backed by a dedicated team committed to providing the very best in customer service. Offering experienced technical backup, comprehensive sales and administrative customer support, product commissioning and maintenance service.

Maintenance

The FireShield Dampers are designed for applications in normal dry filtered air systems.

Adequate access must be provided to fire dampers to enable inspection, maintenance and cleaning. This would normally be in the form of access panels/doors. At least one access point is required for access, but access both sides may be required for cleaning (refer to the relevant ductwork cleaning standards) Dampers require cleaning and light oil lubrication.

Regular testing/inspection by suitably qualified personnel shall be undertaken. The requirements in BS 9999 should be checked, as these products may form some part of a controlled system that responds to alarms. Some automatic systems may allow more frequent testing (48 hours or less), but physical inspection is still required at the prescribed intervals. Some systems, where cleanliness is an issue due to site conditions, may require more frequent inspection, testing and cleaning. All such inspections should be recorded.

For further application, technical and pricing information, please refer to Actionair Sales Office.

Approvals

Fire Shield Approvals:
CE marked to Product Standard EN 15650:2010
Fire tested to EN 1366-2
Classified to EN13501-3 - E Rated
Thermal fuse tested to ISO 10294
Factory Production Control to EN15650
This includes: Daily blade and casing leakage testing
Corrosion tested to EN 60068-2-52: 1996

Classified ‘E’ in vertical and horizontal test installations.
Fire tested in vertical and horizontal applications under dynamic conditions by The Loss Prevention Council. Complies with the latest DW 144 casing leakage specification.

EC DECLARATION OF PERFORMANCE

RAM-F-024 B

Fire Shield DWFX-F fire damper
Fire Shield DWFX-C fire damper
Fire Shield I/F fire damper

Complying with the following EU Regulation:
305/2011/EEC : Construction Products Regulation

Swegon Air Management LTD
Actionair, South Street, Whitstable, Kent CT5 3DU

System 1
BRE Global Limited - NB0832
Performed the determination of the product type on the basis of type testing (including sampling), and the initial inspection of the manufacturing plant and of factory production control and continuous surveillance, assessment and evaluation of factory control under system 1 and issued the certificate of constancy of conformity of the factory production control (0832-CPR-P0001)

Declared performance according to:
BS EN 15650 'Ventilation for buildings: Fire Dampers'

Please refer to www.actionair.co.uk for full current DoP containing all essential performance characteristics.
FireShield Dampers are designed for application in normal dry filtered air systems. If exposed to fresh air intakes and/or inclement conditions the damper should be subject to a planned inspection programme. Any specialists and/or aggressive applications (e.g. swimming pools) may invalidate our warranty, please refer to Actionair Sales Office.

### Approximate Weights (Kg)

<table>
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<tr>
<th>Square or Circular</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
<th>400</th>
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<th>850</th>
<th>900</th>
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<tbody>
<tr>
<td>Duct Size (mm)</td>
<td></td>
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<tr>
<td>Series 101</td>
<td>1.6</td>
<td>2.1</td>
<td>2.8</td>
<td>3.5</td>
<td>4.2</td>
<td>5.0</td>
<td>5.7</td>
<td>6.9</td>
<td>7.5</td>
<td>8.6</td>
<td>9.5</td>
<td>10.9</td>
<td>12.0</td>
<td>13.1</td>
<td>13.8</td>
<td>15.2</td>
<td>16.7</td>
<td>18.1</td>
<td>19.0</td>
</tr>
<tr>
<td>Series 101+ I/F</td>
<td>3.8</td>
<td>4.6</td>
<td>5.7</td>
<td>6.8</td>
<td>8.0</td>
<td>9.2</td>
<td>10.7</td>
<td>11.8</td>
<td>12.9</td>
<td>14.1</td>
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<td>20.2</td>
<td>21.3</td>
<td>23.3</td>
<td>25.2</td>
<td>27.4</td>
<td>29.2</td>
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<tr>
<td>Series 201</td>
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<td>4.6</td>
<td>5.4</td>
<td>6.0</td>
<td>7.1</td>
<td>8.0</td>
<td>9.3</td>
<td>10.5</td>
<td>12.1</td>
<td>12.7</td>
<td>14.4</td>
<td>16.0</td>
<td>17.5</td>
<td>19.0</td>
<td>20.5</td>
<td>22.0</td>
<td>29.8</td>
<td>32.0</td>
<td></td>
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</tbody>
</table>
| Please use series 101 dampers for duct heights below 250mm
| Series 201 + I/F   | 7.4  | 8.5  | 9.6  | 10.4 | 12.6 | 13.8 | 15.3 | 16.8 | 18.0 | 20.3 | 21.7 | 23.6 | 25.5 | 27.6 | 29.8 | 32.0 |      |      |
| Series 301         | 2.3  | 3.0  | 4.0  | 5.4  | 6.5  | 7.6  | 8.8  | 10.2 | 11.7 | 13.2 | 14.9 | 16.9 | 18.7 | 20.5 | 22.4 | 24.5 | 26.7 | 28.8 | 31.0 |
| Series 301 + I/F   | 4.4  | 5.5  | 6.9  | 9.0  | 10.4 | 11.7 | 13.6 | 15.5 | 16.5 | 18.5 | 20.3 | 22.2 | 24.5 | 27.8 | 30.4 | 32.8 | 35.2 | 38.9 | 42.0 |
The Swegon research and development academy at Whitstable provides state of the art facilities for testing a complete range of products. It was designed in accordance with BSRIA recommendations and benefits from third party annual assessment. It has a well equipped demonstration area where tests can be witnessed by contractors, consultants and end clients. Third part witnessing by BSRIA is available if required.

The test facility is fitted with the latest equipment and exceeds the requirements of BS EN 12238:2001 (for air terminal devices aerodynamic testing and rating for mixed flow applications) with a test room size of 7.5m long x 5.6m wide x 2.8m high. Ceiling heights and floor voids can also be adjustable depending on the test regime required.

A purpose designed air handling system is able to supply conditioned air across a wide temperature range in both heating and cooling modes with volumes up to the equivalent of 20 air changes per hour being available.

Sophisticated measuring and logging equipment is able to monitor air volumes, velocities, pressures and temperatures as well as airflow pattern visualisation via the use of smoke generation within the test laboratory.
The statements made in this brochure or by our representatives in consequence of any enquiries arising out of this document are given for information purposes only. They are not intended to have any legal effect and the company is not to be regarded as bound thereby. The company will only accept obligations, which are expressly negotiated for and agreed and incorporated into a written agreement made with its customers.

Due to policy of continuous product development the specification and details contained herein are subject to alteration without prior notice.