

NEW

*action*air

SERIES FB

GALVANISED BLADED CURTAIN FIRE DAMPERS



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SPECIFICATION

Galvanised steel bladed curtain fire dampers, having stainless steel constant tension closure springs with chain and bar type fusible link. Housed in a galvanised steel, spigotted type casing. Optional galvanised installation frames available.

**APPROVALS: BS 476 PART 20 1987, (4 HOURS).
CONFORMS TO DW144 .**

The Range

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

These galvanised steel bladed Actionair Series FB Fire Dampers fail-safe closed & are supplied with the new innovative, even easier Single-Handed Reset Self Latching Removable Release Automatic Locking Mechanism Cassette, which permits single handed reset.

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.

Application Parameters

Actionair Series FB Fire 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.

Blade Features

The Type galvanised Steel folding blade curtain, providing maximum strength, form a fire shield. The wide profile blades maximise the damper free area and ensure compact grouping to minimise blade stacking height.

Optional blade construction
Type 430/304/316 Stainless Steel.

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.

Spigotted Casing Features

The spigotted casing with continuously welded corners and spigot connections,

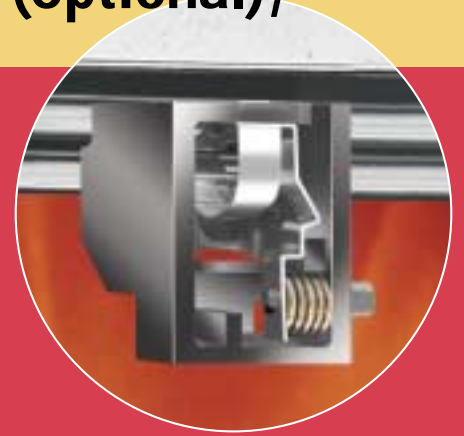
makes these dampers suitable for inclusion into air distribution systems to the test methods of Eurovent Class A, B & C and HVCA Ductwork specification DW144.

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

As an option, casings can be manufactured in Type 1.4016 (430) Ferritic or Type 1.4401 (316) Austenitic Stainless Steel.

Ordinary steel curtain fire dampers for low or medium velocity operation and having the blades and/or part of the casing frame in the airstream may not have casings of continuous welded airtight construction.

Innovative cassette (Optional),



Cassette Details

- Patented design.
- Made of Polyphenylenesulphide (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 Fire/Shield Dampers (by use of a simple optional adaption bracket).
- One Cassette to suit all damper material options.

... new design with even easier single-handed reset

Self Latching Removable Release Mechanism Cassette

The cassette mechanism is completely removable from the Fire/Shield 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 Fire/Shield Damper can be reset following periodic functional testing in accordance with British Standard BS 5588: Part 9 Code of Practice for Ventilation and Air Conditioning Ductwork.

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

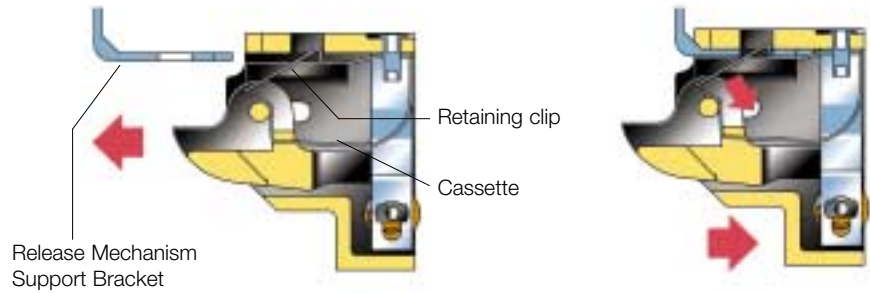
On temperature rise this expands and at 69 °C, causes the Fire/Shield damper blades to release.

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

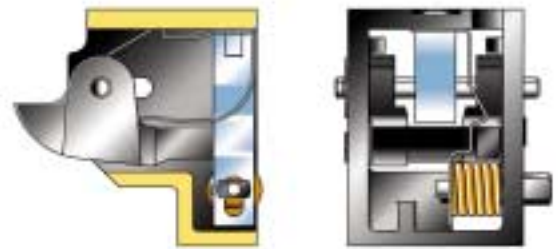
The cassette body will start to lose its structural strength at temperatures in excess 200 °C and will stop supporting the blades. (This may act as a backup to memory metal compression spring to cause damper closure).

Cassettes are only available for 69 °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. 69 °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.



Set Position



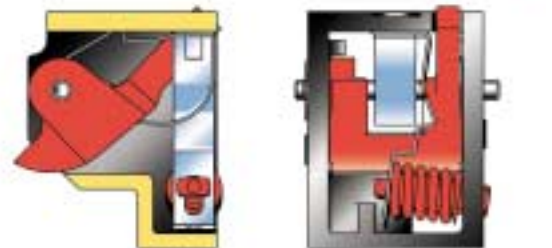
Manual Operation

Manual Operation for periodic functional testing in accordance with British Standard BS 5588: Part 9 Code of Practice for Ventilation and Air Conditioning Ductwork.



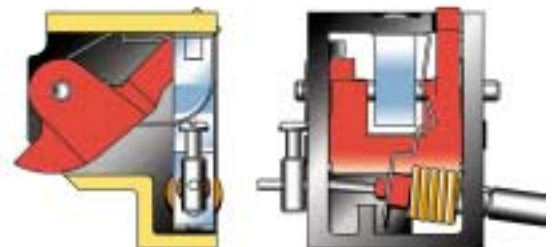
Thermal Actuator Operation

Memory metal coil springs, specially designed to fully expand at 69 °C and actuate damper closure.



Remote Release Operation

Remote release operation to close the Fire/Shield Damper is by Bowden cable with Manual action or Electrical 230V A.C. or 24V A.C. and D.C. Electro Magnet fail-safe action and independent of the thermal actuators.



Reset Operation

Single hand operation. Each blade pushes the latch back under spring tension. On full blade reset the latch springs out to secure.



Product Details

Casing

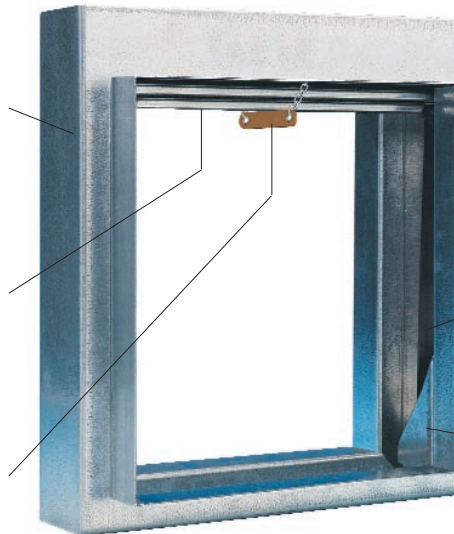
Manufactured from 1.2mm (18swg) galvanised steel casings in accordance with HVCA ductwork specification DW144.

Blades

Roll formed interlocking blades manufactured from 0.7mm galvanised steel.

Fusible Link

The chain and bar type link is supplied at a temperature rating of 69°C.



Springs

Stainless steel constant tension springs positioned out of the airstream to ensure positive closure of blades when the damper is installed either vertically or horizontally.

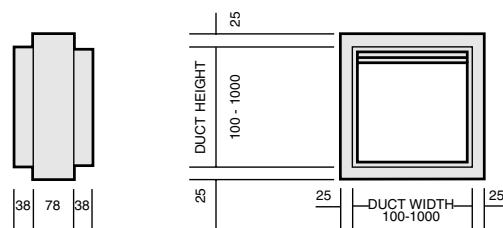
Locking Ramp

Manufactured from 1.6mm (16swg) galvanised steel. The locking ramp is designed to ensure the blade pack is closed off and remains locked in position until manually reset.

Dimensional Data Basic Dampers

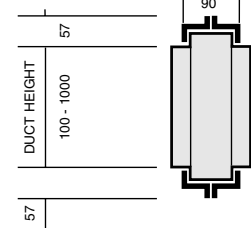
Type FBL

Blades partly in airstream. Square/Rectangular spigot connection. Vertical or horizontal mounting



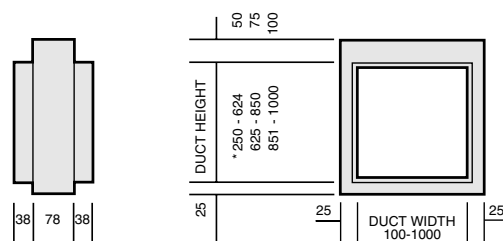
Dampers with Installation Frames

OVERALL WIDTH OF INSTALLATION FRAME IS DUCT WIDTH + 114



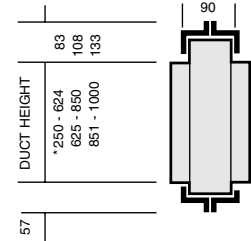
Type FBH

Blades effectively outside airstream. Square/Rectangular spigot connection. Vertical or horizontal mounting



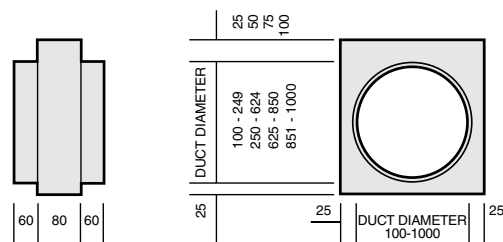
* USES SERIES FBL DAMPERS FOR DUCT HEIGHTS BELOW 250

OVERALL WIDTH OF INSTALLATION FRAME IS DUCT WIDTH + 114

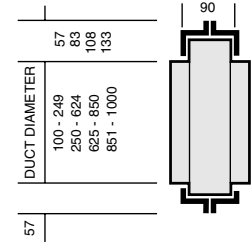


Type FBC

Blades effectively outside airstream. Circular spigot connection. Vertical or horizontal mounting



OVERALL WIDTH OF INSTALLATION FRAME IS DUCT WIDTH + 114



Type FBO Flat Oval Dampers, (not illustrated)

blade effectively outside airstream. Minimum size from 300 x 100 mm upto a maximum 1000 x 500mm.

Optional single pole change-over micro switch available.

actionair
no compromise...

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