

### Description

The type CFD-02 Medium Duty Fire and Smoke damper has been designed for building into walls, floors or bolting or welding to steel bulkheads. The damper has been successfully tested in accordance with BS476, and is certified by Lloyds Register of Shipping for A0 and A60 rated divisions when suitably lagged.

To ease installation these dampers can be supplied with pre insulated controls, and are designed to be suitable for mounting in any attitude with the airflow in either direction. These dampers are also suitable for operation At 250°C for one hour for smoke clearance.

### Specification

#### Casing

The damper casing is formed from 2.0 mm thick sheet steel into a rigid channel section to ensure proper alignment of blades and shafts. Damper units in excess of 1000 mm width or height shall be manufactured as a multiple assembly. Where circular dampers or dampers with width or height dimensions less than 150 mm are required, additional spigot adaptors are used which increase the damper insertion length from 200 to 300 mm.

#### Blades

The blades are a formed double-skin aerofoil section of 1.2 mm sheet metal which operate on the 'Firelock' principle creating a 3-pass labyrinth between the blades which fire cannot penetrate. Blade stops at the top and bottom of the casing and sprung side seals provide excellent low leakage characteristics.

#### Shafts

Stub shafts Ø 19.05 mm with continuous drive shafts and blades plug welded at each end.

#### Linkage

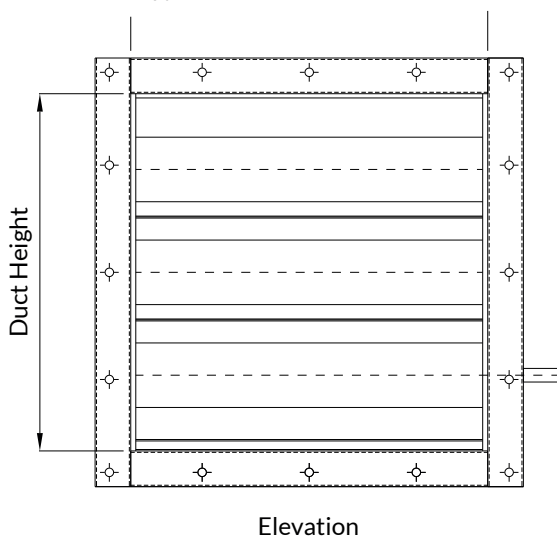
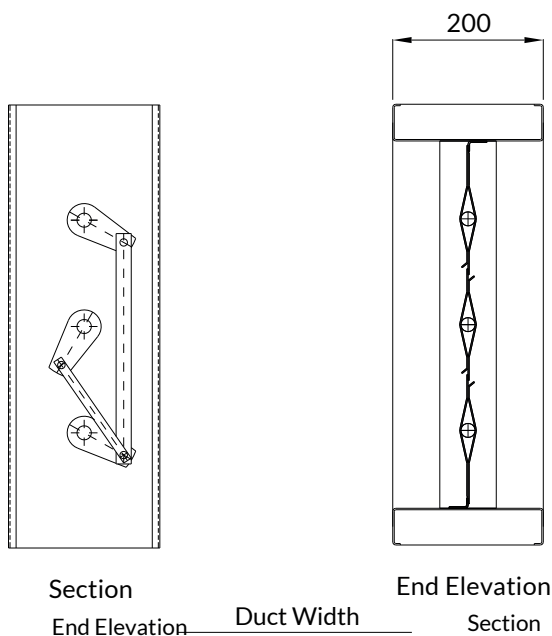
Opposed action linkage consisting of drive levers connected by flat bar link bars, driven through stainless steel pins. All linkage is contained within the depth of the damper casing.

#### Bearings

Phosphor bronze self lubricated 'Oilite' flanged bushes.

#### Operation

Manual Reset Mechanism, Pneumatic Actuator, Electric Actuator, Solenoid Release.



### Options

- Materials can be stainless steel, galvanized mild steel or other materials to suit the clients' specific requirements.
- Earth continuity bosses.
- Lifting lugs.
- Integral or removable enclosures for housing control equipment.
- High temperature bearings.
- Other variations to suit clients' specific requirements are also available.

# Fire & Smoke Damper

## CFD-02

### Installation & Assembly

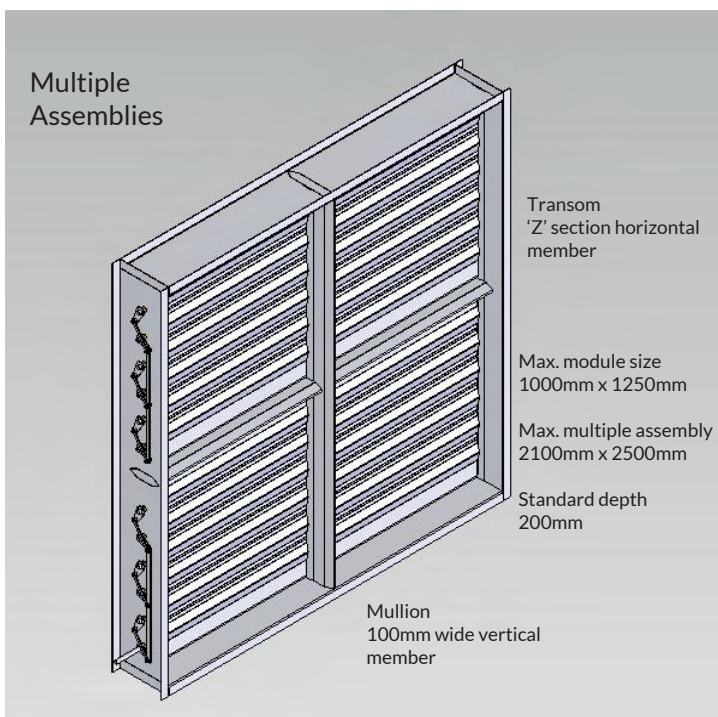
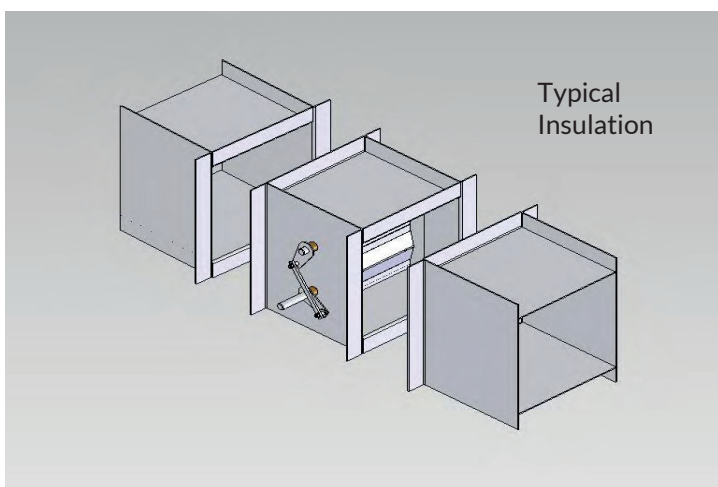
**Note:**

Larger dampers can be constructed by joining multiple assemblies together.

An approved fire-resistant sealant should be inserted between the damper and duct to ensure a good seal.

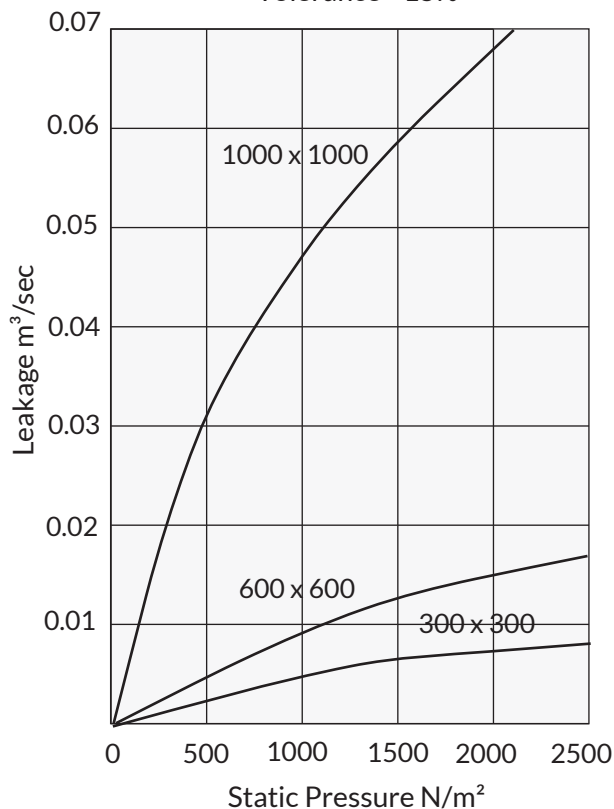
**Note:**

Each section shall have a drive spindle which can be linked together externally or driven independently.



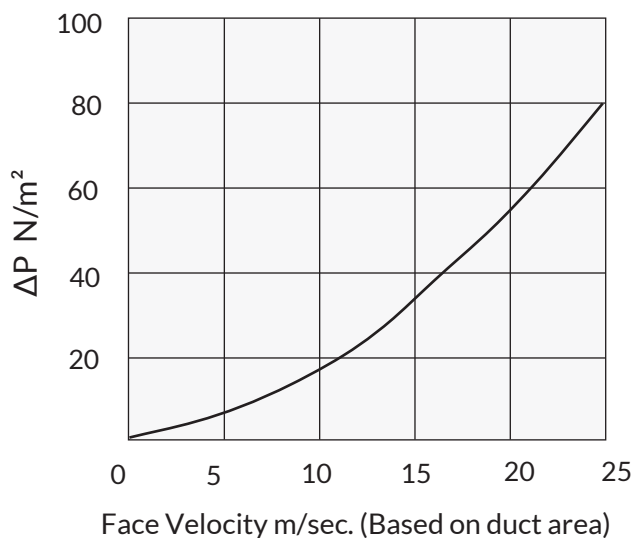
### Leakage Characteristic Curve

Tolerance  $\pm 15\%$



### Open Pressure Drop Characteristic Curve

Tolerance  $\pm 15\%$



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