



## **OPERATING & MAINTENANCE INSTRUCTIONS**

### **DUAL FLOW PRESSURE RELIEF DAMPER**

#### **DESCRIPTION**

The Puma range of Dual Flow Pressure Relief Dampers DF PRD's are designed to relieve the build-up of both negative and positive pressure of a synthetic gaseous fire extinguishing system discharge, whilst maintaining the fire integrity of the room.

All walls constructed to the relevant Building Standards & Regulations, that qualify as a ½ Hour, 1 Hour or 2 Hour Rating, can be fitted with a PUMA DF PRD to maintain the Fire Integrity of that wall, as long as the DF PRD is installed in accordance with the relevant Construction Standards with regard to Structural Strength and Wall Integrity.

The Puma DF PRD's are manufactured to a very high standard of construction. The frame and blades are formed from 18 SWG or 16 SWG zintec steel, oilite bearings and stainless steel shafts. Finished in attractive matt white, powder coated to RAL 9010. There are nine standard sizes. Please refer to Technical Sales Literature.

There are three standard versions of the Dual Flow Pressure Relief Damper which consists of the following components:

#### **Internal Walls up to 225mm**

1. Dual Flow Pressure Relief Damper – Mounted on inside of Room.
2. Wall Sleeve 120 – 225mm
3. Decorative Surround

#### **External Walls up to 340mm**

1. Dual Flow Pressure Relief Damper – Mounted on inside of Room.
2. Telescopic Duct 175 – 340mm
3. Half Size Weather Louvre c/w Bird screen mesh (fitted to top portion of Telescopic Duct on external face)

#### **External Walls up to 590mm**

1. Dual Flow Pressure Relief Damper – Mounted on inside of Room.
2. Telescopic Duct 300 – 590mm
3. Full Size Weather Louvre c/w Bird screen mesh (fitted to Telescopic Duct on external face)

## **OPERATION**

The weighted flaps on the Dual Inner Fire Section will begin to open at pressure of approximately 100Pa and be fully open at 150Pa.

The 'Cat Flaps' will open at a pressure of approx. 100 Pa.

They are designed to hold against wind turbulence and stack effect and also acts as a weather seal, dust and noise are also contained. The larger models are fitted with additional 3mm Diameter Stainless steel wire to hold the Catflap from being forced open further than the designed opening. The Cat Flap will always open to a Free Vent Area greater than the Free Vent Area of its appropriate Inner Fire Section.

## **INSTALLATION – WALL MOUNTING**

To ascertain builder's wall cut out size, see Puma certified drawing provided. If wall thickness exceeds more than 130mm and has a cavity space then opening should be lined with either the wall sleeve or the 2 Part Telescopic Duct.

Install telescopic wall liner starting with the **largest** section fitted on the **external** side of building wall. Then fit the smaller section to the internal wall using suitable fixings and sealing mastic.

The Dual Flow Pressure Relief Damper locates into Telescopic Wall Liner on internal side (intake room side) of the building wall. Seal the joints using 'fire resistant' mastic and securing to wall using appropriate fixings through holes provided in outer flange.

The Weather Louvre or Decorative Surround is fitted to the external side of the building or wall. Locating inside either the Wall Sleeve Telescopic Wall Liner. Seal the flanges using 'fire resistant' mastic and securing to wall using appropriate fixings through holes provided in outer flange (Note: Holes not provided in the Weather Louvre).

**NOTE: Ensure operation of cat flap is not obstructed as stated on outer warning label.  
(See certified drawing for flap clearance dimension)**

## **MAINTENANCE**

The Puma Dual Flow Pressure Relief damper has only mechanical moving parts and requires very low maintenance.

A regular check every 6 months on free movement of flaps on inner wall section is recommended to ensure full working operation of damper.

## **WARRANTY**

6 Years from date of purchase, subject to certain conditions available on request.