

Puma™

Inert Gas 'DUPLEX MS' Pressure Relief Dampers

2 Hour Fire Rated to BS EN 1634-1:2008

Fire Classification to BS EN 13501-2 - EW120

Compliance to BS EN 15004-1:2008

IG-01(Argon) - IG 100 (Nitrogen) - IG 541(Inergen) - IG-55 (Argonite/Proinert)

POSITIVE FUNCTION

The Duplex Pressure Relief Damper Fire Integrity Section (FIS) is fitted with balanced, weighted blades, hinged on stainless steel rods and bronze bearings. The precision engineering and blade overlap ensure an effective seal to the wall opening, offering minimum leakage

INTRINSIC SOUND ABSORPTION

All Duplex Pressure Relief Dampers have an external Self Closing Door 'SCD' held in place with a magnetic catch. This provides weatherproofing when used on external walls, an intrinsic sound barrier, and a positive air, dust & noise seal

THERMAL BARRIER

The Self Closing Door 'SCD' will provide a natural thermal barrier, ideal when fitted in external walls. This will help to prevent condensation forming on the Fire Integrity Section (FIS) blades. Additional insulation can be fitted to increase the thermal and sound absorption characteristics

QUALITY FINISH

All products are manufactured from Zintec Steel and polyester powder coated to RAL 9010 - White - Special colours are available on request



DUPLEX MS PRD showing Fire Integrity Section in the open position

OPERATION

The balanced profiled blades will commence opening at approximately 60 Pa. The blade opening is progressive, and is deemed to be fully open when the blades are open to an angle of 62 degrees.

All PRD's are set with balanced weights to provide the maximum Free Vent Area (FVA) at the given operating pressure. Standard pressures are 100 Pa, 250 Pa, 500 Pa, 750 Pa and 1000 Pa.

The Self Closing Door 'SCD' is fitted with a weatherproof seal and magnetic catch. The Self Closing Door will remain shut until the pressure exceeds 90 Pa, and does not affect the PRD Free Vent Area. Higher opening pressures are available with magnets with a greater flux capacity.

Typical ordering code PUMA DUPLEX MS 450 - 0 - EF
Where ' 0 ' = 100 Pa, ' 1 ' = 250 Pa, ' 2 ' = 500 Pa,
' 3 ' = 750 Pa and ' 4 ' = 1000 Pa
EF = External Flange IF = Internal Flange

Inert Gaseous Extinguishing systems such as INERGEN IG-01 - IG-100 - IG-541 and IG-55, require Over Pressure relief. The PUMA range of DUPLEX MS Fire Rated Pressure Relief Dampers is designed specifically for this purpose. Reference Standards - BS ISO 14520 and BS EN 15004-1:2008 - Article DG 513 BRE Global.

The range of TWELVE individual models has been designed with the maximum available Free Vent Area with a proven and tested design. The blade design, construction, and assembly has been tested by Exova Warrington to BS EN 1634-1:2008 - Rated at 2 Hours. All PRD's have Fire Classification to BS EN 13501-2 - EW120, Copies available on request.



INSTALLATION

The Duplex Pressure Relief Damper uniquely combines the Fire Integrity Section & Self Closing Door. This single unit can be installed from outside the building by denoting EF (External Flange), or from the inside by denoting IF (Internal Flange).

Please refer to O & M instructions for full installation details.



ISO 9001:2008
Certificate Number: 1206 Issue:01



Unit C, Alexander Bell Centre, Hopkinson Way, West Portway Business Park,
Andover, Hampshire, SP10 3UR, England

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Puma™ Products - innovation - design - quality

TECHNICAL SUPPORT

PUMA can offer a wealth of experience in sales, application, and technical support
Using the latest CAD design software, we can provide detailed drawings in dxf or pdf formats

SERVICES AVAILABLE

- Technical Support
- Installation and Setup
- Maintenance Advice
- Application Support
- Fitting Instructions
- 6 Year Warranty *



Puma Products Limited™ has supported the specific requirements of the Data Hall - Server Room - Electronic Data Processing environment for over 30 years. Located in the South of England, we at Puma are widely recognized as experts in the field of Air Movement. Using our knowledge and expertise, we have developed many products, such as Fresh Air Supply and Fire Extinguishant Gas Extract Systems, incorporating Fire/Smoke Dampers. The innovative Hot Water Condensate Pumps © continue to lead the market in 'Humidifier Flush Down' disposal.

In 1999 we developed the first Fire Rated Pressure Relief Dampers (PRD's) to relieve the Over Pressure spike on the release of high pressure Inert Gas Systems. Since then, we have evolved the product to introduce our range of DUPLEX Dampers. These incorporate both our Self Closing Door and Fire Integrity Section to produce one product. Stainless Steel 316L versions are available for Offshore and Coastal Environments. See 'DUPLEX ST' leaflet.

Twelve Vent Sizes Available

Model Number	Free Vent Area in m ²	Hole Cut-out in mm		Approx Weight kg
		Width	Height	
DUPLEX MS PRD 150	0.021	210	210	5
DUPLEX MS PRD 225	0.045	285	285	7.5
DUPLEX MS PRD 300	0.079	360	360	12.5
DUPLEX MS PRD 375	0.124	435	435	15
DUPLEX MS PRD 450	0.178	510	510	17.5
DUPLEX MS PRD 525	0.252	585	585	25
DUPLEX MS PRD 600	0.317	660	660	30
DUPLEX MS PRD 675	0.417	735	735	35
DUPLEX MS PRD 750	0.515	810	810	45
DUPLEX MS PRD 825	0.663	885	885	55
DUPLEX MS PRD 900	0.741	960	960	60
DUPLEX MS PRD 975	0.87	1035	1035	65

* Refer to Operating and Maintenance Instructions

3RD PARTY TESTED

BS EN 13030:2001 - Airflow Test
BS EN 1751:2014 - Leakage Test
BS EN 1314-1 - Free Area Calcs

BESPOKE SOLUTIONS

Puma Products operates a continuous design and improvement policy, and reserves the right to change designs and specifications without notice

CONTACT DETAILS

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