

Puma™

Inert Gas Pressure Relief Dampers®

2 Hour Fire Rated to BS EN 1634 - 1: 2008
Fire Classification to BS EN 13501 - EW120

Compliance to BS EN 15004-1:2008

IG-01 (Argon) - IG 100 (Nitrogen) - IG 541 (Inergen) - IG-55 (Argonite/Proinert)
- CO² (Carbon Dioxide)

POSITIVE FUNCTION

The Inert Gas 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 Pressure Relief Dampers are available with 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 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. For Offshore and Coastal environments 316L stainless steel versions are available.



Weatherproof Self Closing Door (SCD)

OPERATION

The balanced, profiled blades of the Fire Integrity Section (FIS) 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 PRD 450 FIS - 0 - WS - SCD

Where '0' = 100 Pa, '1' = 250 Pa, '2' = 500 Pa,
'3' = 750 Pa and '4' = 1000 Pa



Telescopic Duct (TD)

Inert Gaseous Extinguishing systems such as INERGEN IG-01 - IG-100 - IG-541 and IG-55 require Over Pressure relief. The PUMA range of Fire Rated Pressure Relief Dampers (PRD's) is designed specifically for this purpose.

Reference Standards - BS EN 15004-1:2008 - Para 5.1 Part h. Page 39 - Article DG 513 BRE Global.

The range of TWELVE individual models has been designed with the maximum available Free Vent Area from a proven and tested design. The blade design, construction, and assembly has been fire 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.

IG PRD's are also suitable for CO² systems.



Anti-Intrusion Security Bar

INSTALLATION

For wall depths of up to 130mm, only the Fire Integrity Section (FIS) and Self Closing Door (SCD) are required to fit the 'Stud Wall' or Fire Panel'. For wall depths between 120mm and 180mm, a Wall Sleeve (WS) would be required. For wall depths of 175mm to 340mm, a Telescopic Duct (TD) would be required. Special depth Telescopic Ducts are available on request.

Anti-Intrusion Security Bars (AISB) are available for high security sites. Weather Louvre's (WL) are available as an alternative to Weatherproof Self Closing Doors. In areas in which the wind force is expected to exceed 7 on the Beaufort Scale, additional measures will need to be taken to protect the SCD from damage. Please speak to our technical department for further advice.



ISO 9001:2008

Certificate Number: 1206 Issue:01

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Puma™ Products - innovation - design - quality



**PRD Fire Integrity Section (FIS)
Telescopic Duct (TD) and Self Closing
Door (SCD) Typical Order Code -
PRD 300 FIS-0-TD-SCD**

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. The range has increased to 12 standard sizes . We can offer special sizes in matrix form, paired side by side, or one above the other using various blade widths. Stainless Steel 316L versions are available. Refer to price list for IMO SOLAS Offshore and Coastal Environments, also see 'DUPLEX ST' PRD leaflet.

Twelve Vent Sizes Available

Model Number	Free Vent Area in m ²	Hole Cut-out for FIS Only	Approx. Weight kg	Hole Cut-out for FIS & SCD or SCD Only	Approx. Weight kg	Hole Cut-out for FIS, TD/ WS & SCD	Approx. Weight kg
		Width x Height		Width x Height		Width x Height	
PRD 150	0.021	205 x 205	3	215 x 215	5	225 x 225	10
PRD 225	0.045	280 x 280	5	290 x 290	8	300 x 300	12.5
PRD 300	0.079	355 x 355	7.5	365 x 365	12.5	375 x 375	20
PRD 375	0.124	430 x 430	9	440 x 440	14	450 x 450	23
PRD 450	0.178	505 x 505	12	515 x 515	17	525 x 525	28
PRD 525	0.252	580 x 580	16	590 x 590	26	600 x 600	31
PRD 600	0.317	655 x 655	20.5	665 x 665	32.5	675 x 675	45
PRD 675	0.417	730 x 730	25	740 x 740	40	750 x 750	52
PRD 750	0.515	805 x 805	32	815 x 815	48	825 x 825	65
PRD 825	0.623	880 x 880	35	890 x 890	52.5	900 x 900	72
PRD 900	0.741	955 x 955	37.5	965 x 965	57.5	975 x 975	76
PRD 975	0.870	1030 x 1030	40	1040 x 1040	62.5	1050 x 1050	82

* Refer to Operating and Maintenance Instructions



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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

3RD PARTY TESTED

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

SERVICES AVAILABLE

- Technical Support
- After Sales Support
- Maintenance Advice
- Application Support
- Fitting Instructions
- 6 Year Warranty *

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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