

# Blast Resistant Self Closing Door<sup>®</sup>

An external Blast Resistant Self Closing Door (BR SCD) can be installed as a standalone product to protected against external blasts or in conjunction with a pressure relief fire integrity section to relieve over pressure from a gas suppression system.

## THERMAL BARRIER

The Blast Resistant Self Closing Door (BR SCD) will provide a natural thermal barrier, sound barrier and explosion barrier. Additional insulation can be fitted to the inside of the door to increase the thermal and sound absorption characteristics

## QUALITY FINISH

The BR SCD is constructed from 3mm 316L stainless steel. Prior to assembly the material is pickle and passivated to clean welds and increase strength of material. Painting options are available upon request.



**Blast Resistant Self Closing Door (BR SCD)**

## Material of Manufacture

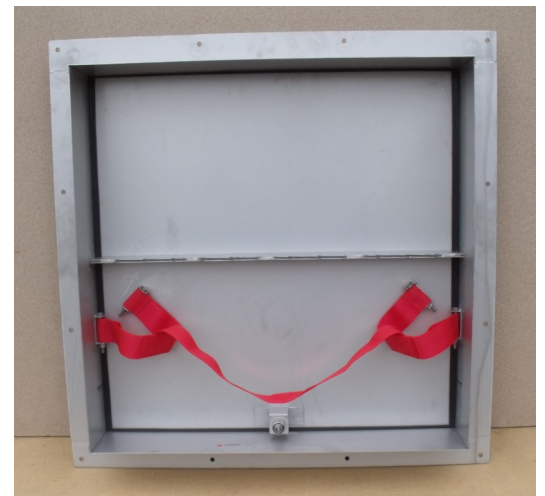
The BR SCD is manufactured from 3mm marine grade 316L stainless steel and is pickle and passivated for added corrosion resistance. Pickle and Passivation also cleans the folded and punched material including the welds. Due to the inherent properties of 316L the BR SCD is capable of withstanding forces of up to 100kpa/m<sup>2</sup>. Coupled with integrated additional restraints which will absorb the blast.

As the BR SCD is a normally closed device it will provide a complete seal from an external blast wave and any resulting debris. During normal operation the door will remain shut and protect the room/duct from any ingress of dust, debris or weather.

The BR SCD is fitted with a weatherproof seal and magnetic catch. As standard the door will remain shut until the pressure exceeds 100 Pa. Higher opening pressures are available using magnets with a greater flux capacity.

Blast Resistant Self Closing Door's (BRSCD) are designed to resist the effects of high pressure waves and potential debris during a blast event. These blast events arise when a fault occurs within a battery room or a combustible gas is ignited and thus creating an explosion. The doors will be closed during normal operation and will stop debris or external pressure entering ventilation duct systems or areas containing sensitive equipment. The blast door can be installed as a standalone product or with our pressure relief dampers if a fire rating is required.

The range of dampers have been designed with the maximum available Free Vent Area from a proven and tested design.



**Internal View Showing Opening Straps**

## INSTALLATION

The BR SCD can be installed alone on the external facade when protecting a non fire rated ductwork. When installed in a fire rated partition the BR SCD will need to be used in conjunction with an Inert PRD to meet the up to 4 hour fire rating to BS EN 1634-1:2014. Anti-Intrusion Security Bars (AISB) are available for high security sites. 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.



# Blast Resistant Self Closing Door®

## Puma Fire 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.

### 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
- 3 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

For more information on any of our products or services please visit us on the Web at:  
[www.pumafire.co.uk](http://www.pumafire.co.uk)  
Telephone + 44 (0)1264 333305  
[sales@pumafire.co.uk](mailto:sales@pumafire.co.uk)



Puma Fire 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. Refer to price list for Hydrocarbon Fire Rated IMO SOLAS Offshore and Coastal Environments Pressure Relief dampers, also see 'DUPLEX ST' PRD leaflet.

### Twelve Vent Sizes Available

Model Number	Free Vent Area in m <sup>2</sup>	Hole Cut-out for FIS & BR SCD or BR SCD Only	Approx. Weight kg	Hole Cut-out for FIS, TD/WS & BR SCD	Approx. Weight kg
		Width x Height		Width x Height	
BR SCD 150	0.021	215 x 215	5	225 x 225	10
BR SCD 225	0.045	290 x 290	8	300 x 300	12.5
BR SCD 300	0.079	365 x 365	12.5	375 x 375	20
BR SCD 375	0.124	440 x 440	14	450 x 450	23
BR SCD 450	0.178	515 x 515	17	525 x 525	28
BR SCD 525	0.252	590 x 590	26	600 x 600	31
BR SCD 600	0.317	665 x 665	32.5	675 x 675	45
BR SCD 675	0.417	740 x 740	40	750 x 750	52
BR SCD 750	0.515	815 x 815	48	825 x 825	65
BR SCD 825	0.623	890 x 890	52.5	900 x 900	72
BR SCD 900	0.741	965 x 965	57.5	975 x 975	76
BR SCD 975	0.870	1040 x 1040	62.5	1050 x 1050	82