OsecoElfab

Product **Catalog**

Rupture Discs | Burst Sensors | Holders
Custom OEM Assemblies | Speciality Discs
Explosion Panels | Flameless Vents | Accessories

A **Halma** company

Emergency Pressure Relief / Explosion Protection

A **Halma** company

OsecoElfab is part of the Halma Group, a global group of live-saving technology companies. Halma is a FTSE 100 company, and has been named one of Britain's Most Admired Companies. Halma and its 45 companies provide innovative products and services that help solve many of the key problems facing the world today. Halma employs over 7,000 people in more than 20 countries, with major operations in the UK, Mainland Europe, the USA and Asia Pacific. To achieve its purpose of growing a safer, cleaner, healthier future for everyone, every day, Halma operates in three sectors: Safety, Environment, Health.
OsecoElfab is part of Halma's Safety Sector.

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OE for Pharma

Never compromise on safety or performance

OE for Pharma is our sanitary brand. Our unique sanitary pressure relief and explosion protection solutions are designed for environments where protection from contamination is critical. They support process safety in aseptic and hygienic environments, and meet the relevant FDA, USP VI, ASME BPE and 3A Standard requirements. Every sanitary product is CIP/SIP compatible, and is designed to be durable and easy to clean for a safe, compliant and efficient workplace.

Pressure relief and explosion protection solutions that are part of our sanitary brand are marked in this catalogue with the OE for Pharma logo.

A Global **Presence**

OsecoElfab is a leading global provider of pressure relief and explosion protection solutions, with a heritage in the USA and UK going back decades. Our purpose is 'Protecting life. Solutions for a safer, cleaner world.' This purpose is deeply embedded in our culture, and we specialize in manufacturing rupture discs, explosion vents and associated burst detection systems to protect people, plant and the environment.

Our services encompass bespoke engineering and design consultations, comprehensive product training, site surveys and a stock consolidation program. Serving a diverse global clientele, our operational excellence is backed by two state-of-the-art manufacturing centers in Broken Arrow, Oklahoma (USA) and North Shields, UK. These are supported by six regional offices and over sixty approved representatives worldwide.

Manufacturing Capabilities

North Shields, UK:
- 2 units
- 30,000 ft² manufacturing floorspace
- ASME-certified Flow Lab
- R&D center
- 70 employees

Broken Arrow, USA:
- 3 units
- 50,000 ft² manufacturing floorspace
- ASME-certified Flow Lab
- R&D center
- 120 employees

Find your nearest representative on our website

Global
Excellence

Innovation

OsecoElfab has been a key player in pressure management for over 50 years. We lead the industry with our innovative products that are simple to use and highly reliable. Every solution is designed to maximize safety, reduce downtime and improve process and equipment performance. In our Innovation Hub, our dedicated Innovation Engineers spend their days looking for ways to improve existing products and create new ones. We're not afraid to embrace ideas that others may not pursue.

Customer Focus

We stand out as a customer-focused group. From tailored solutions and dedicated support to pressure management expertise, you can depend on us whenever you need us, wherever you are. Our emergency telephone hotline (US-based customers), sureships/expedited deliveries and priority manufacturing service support you to confidently keep your operations running smoothly and safely 24 hours a day, 7 days a week, 365 days a year. Beyond that, our team is always ready to help keep your team and equipment performing at their best through expert site surveys, stock rationalisation recommendations and pressure management training.

Quality Certificates and Approvals

- ASME (UD)
- PED (CE)
- CRN
- ATEX
- TÜV
- ISO 9001, 45001 and 14001
- Intertek
- ECEx Certificate of Conformity
- Safety Integrity Level (SIL)
- EAC CU TR 10, 12 and 32
- People's Republic of China Safety Quality Licence

Our Products and Services are Helping...

Astronauts to explore the cosmos

Scientists to change the way we think about the universe

Families to brighten up their lives with paints and dyes

Farmers to feed the world

Energy companies to power a sustainable future

Doctors to diagnose and treat rare diseases

Researchers to find a cure for cancer

Welded Cartridges

- Eliminate leak paths
- Reduce fugitive emissions
- Longer product life
- Easy installation

Manufactured in the USA

View Datasheets

OE Safety Cartridge

Our one-piece, leak-tight rupture disc cartridge installs in minutes and can help reduce fugitive emissions by eliminating leak paths. Use the OE Safety Cartridge with our OPR+/OPK+, PCR or FAS discs.

Typical sizes	1" - 10"	25 - 250mm
Typical burst pressures	10 - 2,000 psig	0.69 - 137.9 barg
Max. operating ratio	95% of marked burst pressure	
Max. performance tolerance	+/-5%	

K_R Values	
FAS	
K_{RG} 0.223	K_{RL} 0.19
OPR+	K_{RGL} 0.78
OPK+	K_{RGL} 1.5
PCR	K_{RGL} 2.17

Manufactured in the USA

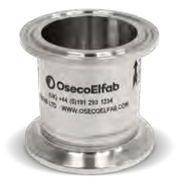
View Datasheet

HPSR - High Pressure Scored Reverse

A compression-loaded welded assembly designed for high-pressure gas and liquid applications of 2,500 psig and above.

Typical sizes	1" - 8"	25 - 200mm
Typical burst pressures	2,500 - 6,000 psig	172.3 - 413.7 barg
Max. operating ratio	95% of marked burst pressure	
Max. performance tolerance	+/-5%	

K_R Values
K_{RG} 1.45
K_{RL} 13.5



Manufactured in the UK

View Datasheet

Pure-Gard

The future of sanitary pressure relief: A welded innovation designed for maximum cleanability, efficiency and longevity. Comes with a 3-year warranty as standard.

Typical sizes	1" - 4"	25 - 100mm
Typical burst pressures	5 - 145 psig	0.34 - 10 barg
Max. operating ratio	95% of minimum burst pressure	
Max. performance tolerance	+/- 0.07 barg ≤ 0.97 barg +/- 0.14 barg > 0.97 - ≤ 4.48 barg	

K_R Value
K_{RGL} 0.85

Manufactured in the USA

View Datasheet

Oseco Safety Plug

Use the Oseco Safety Plug to protect the well casing integrity, reduce downtime and provide a safe work environment.

Typical sizes	2" and 3"	50mm and 80mm
Typical operating range	6,000-15,500 psig	413 - 1,068 barg
Flow rate	Up to 88 barrels/min (3,696 US gallons/min)	
Cycle capability	Tested to 3,500,000 cycles	

Fluid
Liquid

Manufactured in the USA

View Case Study

Top Hat Assembly

The Top Hat Assembly is designed for use in viscous service. The welded design eliminates leakage, is non-torque sensitive and eliminates product pockets and product build-up. It is typically installed with FAS rupture discs, but is available with most discs and sizes.

Typical sizes	1" - 6"	25 - 150mm
Typical burst pressures	Follow specifications of rupture disc	
Max. operating ratio	Follows specifications of rupture disc	
Max. performance tolerance	Follows specifications of rupture disc	

Fluid
Gas/Liquid

The values and data shown here are for a guide only. Specifications outside of these values may be possible. Please contact your OE representative for more information.

Reverse Acting Discs

- Tightest tolerances on the market
- High-performance
- High-cycling
- Non-fragmenting designs

Manufactured in the USA

View Datasheet

LoKr - Technically advanced low K_R rupture disc

Maximise system performance, particularly at high pressures, with this technically advanced reverse buckling disc offering the lowest K_R and the highest accuracy in the industry.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	10 - 2,500 psig	0.69 - 172.3 barg
Max. operating ratio	95% of marked burst pressure	
Max. performance tolerance	+/-5%	
Holder	LKR	

K_R Value
K_{RGL} 0.22

Manufactured in the USA

View Datasheet

PRO+*KRGL* - Precision Reverse Operating

The PRO+KRGL is a high-performance, high-cycling rupture disc. The fully opening, perimeter-scored design maximizes system performance in elevated temperatures up to 900°F.

Typical sizes	1" - 10"	25 - 250mm
Typical burst pressures	4 - 775 psig	0.3 - 53.4 barg
Max. operating ratio	95% of marked burst pressure	
Max. performance tolerance	+/-5%	
Holder	Insert (PRDI) / Bolted (PRDH)	

K_R Values	
PRO+ KRGL	K_{RGL} 0.69
PRO+	K_{RG} 0.29

Manufactured in the USA

View Datasheet

OPR+/OPK+

The versatile design of the high-performance OPR+/OPK+ rupture disc allows for potential stock reduction of up to 65%. This disc is available with the Flo-Tel burst sensor (OPFTR / OPFTK).

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	5 - 1,160 psig	0.35 - 79.9 barg
Max. operating ratio	95% of marked burst pressure	
Max. performance tolerance	+/-5%	
Holder	OPR/OPK	

K_R Value	
OPR+	K_{RGL} 0.78
OPK+	K_{RGL} 1.5
OPFTR	K_{RGL} 1.7
OPFTK	K_{RGL} 2.77

Manufactured in the UK

View Datasheet

Opti-Gard

The versatile design of the high-performance Opti-Gard rupture disc allows for potential stock reduction of up to 65%.

Typical sizes	1" - 24"	25 - 600mm
Typical burst pressures	5 - 1,015 psig	0.35 - 70 barg
Max. operating ratio	95% of minimum burst pressure	
Max. performance tolerance	+/-3%	
Holder	Reverse Disc Holder	

K_R Value
K_{RGL} 1.74

Manufactured in the UK

View Datasheet

Opti-Gard (High-Strength Magnet)

High-performance, reverse acting Opti-Gard disc with a high-strength magnet for use in 22cr and 25cr duplex holders.

Typical sizes	2" - 24"	50 - 600mm
Typical burst pressures	13 - 870 psig	0.9 - 60 barg
Max. operating ratio	95% of minimum burst pressure	
Max. performance tolerance	+/-3%	
Holder	Reverse Disc Holder	

Fluid
Gas/Liquid

Reverse Acting Discs

Opti-Gard SoLo

This versatile, single disc solution features an innovative, patented geometry that offers precise bursting for a wide range of low pressure applications.

Typical sizes	1" - 6"	25 - 150mm
Typical burst pressures	2 - 60 psig	0.14 - 4.14 barg
Max. operating ratio	95% of minimum burst pressure	
Max. performance tolerance	+/- 0.07 barg	
Holder	Reverse Disc Holder	

K_R Value
K_{RGL} 0.8

Manufactured in the UK

View Datasheet

Milli-Gard

Composite reverse acting disc for ultra-low pressure gas or vapour applications. Milli-Gard can also act as a single disc solution for either positive pressure or vacuum protection.

Typical sizes	2" - 12"	50 - 300mm
Typical burst pressures	0.044 - 7.25 psig	3 - 500 mbarg
Max. operating ratio	60% of minimum burst pressure	
Max. performance tolerance	+/- 25%	
Holder	Reverse Disc Holder	

K_R Value
K_{RGL} 0.8

Manufactured in the UK

View Datasheet

PLR - Precision Low Pressure Reverse

The PLR is an all-metal reverse buckling rupture disc with an armoured design for superior performance at very low pressures.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	2 - 132 psig	0.14 - 9.10 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 10%	
Holder	Insert (PRDI)	

Fluid
Gas/Liquid

Manufactured in the USA

View Datasheet

PSR - Precision Scored Reverse

Reverse buckling and with a non-fragmenting design, the PSR is an excellent choice for isolating safety relief valves and for applications requiring a high operating to set pressure ratio.

Typical sizes	1" - 8"	25 - 200mm
Typical burst pressures	15 - 125 psig	1.03 - 8.6 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 5%	
Holder	Insert (PRDI)	

K_R Value
K_{RGL} 2.13

Manufactured in the USA

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PCR - Precision Cut Reverse

The PCR is designed for high-cycling or high-vacuum gas and vapour applications such as Gas-Insulated Switchgear equipment.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	30 - 1,250 psig	2.07 - 86.2 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 5%	
Holder	Insert (PRDI)	

K_R Value
K_{RG} 2.17

Manufactured in the USA

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The values and data shown here are for a guide only. Specifications outside of these values may be possible. Please contact your OE representative for more information.

RUPTURE DISCS
SENSORS
HOLDERS
EXPLOSION PANELS
FLAMELESS VENTS
ACCESSORIES

Reverse Acting Discs

PRO-S

A technically advanced rupture disc for use in bioprocessing equipment. Precision scoring on the vent side leaves a smooth process side that is finished to 8-12 Ra micro-inches.

Typical sizes	1" - 4"	25 - 100mm
Typical burst pressures	16 - 150 psig	1.1 - 10.3 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/-5%	

K_R Value
K_{RGL} 5.07

Manufactured in the USA

View Datasheet

Opti-Gard Ferrule

A technically advanced solution for aseptic and hygienic applications. The disc features a smooth, uninterrupted surface finish that meets FDA requirements.

Typical sizes	1" - 4"	25 - 100mm
Typical burst pressures	13 - 300 psig	0.9 - 20.7 barg
Max. operating ratio	95% of minimum burst pressure	
Max. performance tolerance	+/-3%	

K_R Value
K_{RGL} 1.74

Manufactured in the UK

View Datasheet

Opti-Gard Ferrule SoLo

Innovative solution offering a high operating ratio and tight performance tolerances for accurate, reliable low-pressure protection in aseptic and hygienic applications.

Typical sizes	1" - 4"	25 - 100mm
Typical burst pressures	5 - 75 psig	0.35 - 5.2 barg
Max. operating ratio	95% of minimum burst pressure	
Max. performance tolerance	+/-3%	

K_R Value
K_{RGL} 0.85

Manufactured in the UK

View Datasheet

Bio-Gard

A peripherally scored, reverse-acting rupture disc offering full-bore relief for low-pressure protection in aseptic and hygienic plants.

Typical sizes	1" - 2"	25 - 50mm
Typical burst pressures	29 - 145 psig	2 - 10 barg
Max. operating ratio	90% of minimum burst pressure	
Max. performance tolerance	+/-10%	

Fluid
Gas/Liquid

Manufactured in the UK

View Datasheet

Forward Acting Discs

- Low to high pressures
- Lowest K_R value on the market
- Wide range of sizes
- Metal and composite designs

FAS - Forward Acting Scored

The FAS features the lowest K_R in the industry for a forward acting disc. Available in the Oseco Safety Cartridge™.

Typical sizes	1" - 24"	25 - 600mm
Typical burst pressures	40 - 5,000 psig	2.8 - 344.7 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 5%	
Holder	Insert (FRDI) / Bolted (FRDH)	

K_R Values
K_{RG}0.223
K_{RL}0.19

Manufactured in the USA

View Datasheet

Safe-Gard

Technically advanced rupture disc with cross-scoring for increased safety at very high pressures.

Typical sizes	1/2" - 20"	15 - 500mm
Typical burst pressures	51 - 2,683 psig	3.1 - 185 barg
Max. operating ratio	90% of minimum burst pressure	
Max. performance tolerance	+/- 5%	
Holder	Forward Disc Holder	

K_R Value
K_{RG} 0.68

Manufactured in the UK

View Datasheet

FAS (for Switchgear)

This high-performance forward acting disc is annealed and designed to meet the requirements of the GIS/AIS industry for leak-tightness, corrosion resistance and longevity.

Typical sizes	2" - 10"	50 - 250mm
Typical burst pressures	30 - 300 psig	2.1 - 20.7 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 5%	
Holder	Insert (FRDI)	

K_R Values
K_{RG} 0.223
K_{RL} 0.19

Manufactured in the USA

View Datasheet

(F)STD - Standard Forward Acting Rupture Disc

The OsecoElfab Standard is a forward acting rupture disc commonly used in high-pressure, small-diameter applications.

Typical sizes	1/4" - 24"	6 - 600mm
Typical burst pressures	3 - 3,000 psig	0.2 - 2,068 barg
Max. operating ratio	70% of marked burst pressure	
Max. performance tolerance	+/- 5%	
Holder	Insert (FRDI/RDI) / Bolted (FRDH)	

K_R Values
STD K_{RGL}0.88
STDV K_{RL}1.98

Manufactured in the USA

View Datasheet

CDD - Conventional Domed Disc

A versatile, forward acting, all-metal disc offering an economic solution for many chemical processing applications.

Typical sizes	1/8" - 32"	3 - 800mm
Typical burst pressures	7 - 20,300 psig	0.5 - 1,400 barg
Max. operating ratio	85% of minimum burst pressure	
Max. performance tolerance	+/- 5%	
Holder	Forward Disc Holder	

K_R Value
K_{RG} 1.4

Manufactured in the UK

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The values and data shown here are for a guide only. Specifications outside of these values may be possible. Please contact your OE representative for more information.

Forward Acting Discs

(F)CO/(F)COV-T - Flat Seat Composite Disc

Multi-layered forward acting rupture disc with an excellent pressure performance range in uncommon sizes.

Typical sizes	11/16" - 42"	18 - 1,050mm
Typical burst pressures	3 - 1,000 psig	0.2 - 68.9 barg
Max. operating ratio	80% of marked burst pressure	
Max. performance tolerance	+/-5%	
Holder	Insert (FRDI/RDI) / Bolted (FRDH)	

K_R Values
(F)CO K_{RGL}0.5
(F)COV K_{RGL}2.37

Manufactured in the USA

View Datasheet

DCD - Domed Composite Bursting Disc

A versatile, forward acting disc with a tri-membrane construction for improved protection and reliability at low to medium pressures.

Typical sizes	1" - 32"	25 - 800mm
Typical burst pressures	5 - 290 psig	0.3 - 20 barg
Max. operating ratio	85% of minimum burst pressure	
Max. performance tolerance	+/-5%	
Holder	Forward Disc Holder	

K_R Value
K_{RGL}3.94

Manufactured in the UK

View Datasheet

Forward Acting Discs (Transportation)

Manufactured in the USA and UK

View Datasheets

ICD - Intermodal Container Disc

The ICD offers overpresssure protection for intermodal tanks, intermodal containers, and other vessels used to transport dangerous goods.

Typical sizes	1.25" - 10"	32 - 250mm
Typical burst pressures	50 - 2,356 psig	3.45 - 162.5 barg
Max. operating ratio	90% of minimum burst pressure (UK) 90% of marked burst pressure (USA)	
Max. performance tolerance	+/- 5% (UK)	

K_R Values
USA: K_{RG}0.223
USA: K_{RL}0.19
UK: K_{RGL}0.68

Manufactured in the UK

View Datasheet

Tank-Safe

Reliable corrosion-resistant protection for rail cars and intermodal containers. The unique design meets international requirements for the transportation of dangerous goods.

Typical sizes	2", 2.5", 3"	50, 65, 80mm
Typical burst pressures	54.4 - 63.8 psig	3.75 - 4.4 barg
Max. operating ratio	Domed: 85% of min. burst pressure Flat: 40% of min. burst pressure	
Max. performance tolerance	+/- 5%	

Fluid
Gas/Liquid

Manufactured in the USA

View Datasheet

CRC - Composite Railcar Disc

The CRC is a composite railcar disc designed to withstand vacuum during unloading and transit. The disc is designed to fit standard threaded or bolted railroad tank car safety vents.

Typical sizes	3.125" O.D.	80mm
Typical burst pressures	165 psig	11.3 barg
Max. operating ratio	80% of marked burst pressure	

Fluid
Gas/Liquid

Manufactured in the USA

View Datasheet

SRC - Scored Railcar Disc

The scored technology in the SRC allows for a solid metal disc that eliminates the need for PTFE seals. The SRC is designed to fit standard threaded or bolted railroad tank car safety vents.

Typical size	3.15" O.D.	80mm
Typical burst pressure	165 psig	11.3 barg
Max. operating ratio	80% of marked burst pressure	

Fluid
Gas/Liquid

Manufactured in the USA

View Datasheet

HP-RC

The HP-RC railcar disc is manufactured using durable Ryton® plastic to resist corrosion and failure caused by coupling.

Typical sizes	3"	76 mm
Typical burst pressures	165 psig	11.3 barg

Fluid
Gas/Liquid

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Flat and Bi-Directional Discs

- Flat and domed designs
- Positive pressure and vacuum
- Very low pressures

Manufactured in the UK

View Datasheet

Flat Composite Disc

An economic solution offering enhanced protection, reliability and leak tightness for very low pressure applications.

Typical sizes	1" - 32"	25 - 800mm
Typical burst pressures	1 - 50 psig	0.07 - 3.5 barg
Max. operating ratio	40% of minimum burst pressure	
Max. performance tolerance	+/-5%	
Holder	Forward Disc Holder	

K_R Value
K_{RGL}3.94

Manufactured in the UK

View Datasheet

Two-Way Flat Composite

A single installation for positive and negative pressure protection, particularly suited for low pressure applications.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	1 - 30 psig	0.07 - 2.07 barg
Max. operating ratio	40% of minimum burst pressure	
Max. performance tolerance	+/-10%	
Holder	Forward Disc Holder	

Fluid
Gas/Liquid

Manufactured in the USA

View Datasheet

FLCO

Easy to install, non-torque sensitive, holderless rupture disc. Ideal for isolating relief valve outlets from a shared header. Teflon liners are available for both sides if corrosive media are present.

Typical sizes	2" - 36"	50 - 900mm
Typical burst pressures	1 - 100 psig	0.7 - 6.9 barg
Max. operating ratio	50% of marked burst pressure	
Max. performance tolerance	From +/- ¼ psig to +/- 4 psig depending on disc size	

Fluid
Gas/Liquid

Manufactured in the USA

View Datasheet

FLCOS

This is the FLCO disc with an integrated sensor added to create the most rugged and dependable disc+sensor combination on the market.

Typical size	Fits standard 150# ANSI RF flanges
Max. operating ratio	50% of marked burst pressure
Max. performance tolerance	+/-5% 40 psig and above +/-2 psig 3 psig up to 40 psig +2, -0 psig below 3 psig

Fluid
Gas/Liquid

Manufactured in the UK

View Datasheet

Two-Way Tank-Safe

A single disc for positive and negative pressure protection where a holder is not desired or needed.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	1 - 30 psig	0.07 - 2.07 barg
Max. operating ratio	40% of minimum burst pressure	
Max. performance tolerance	+/- 5%	

Fluid
Gas/Liquid

Flat and Bi-Directional Discs

Manufactured in the USA

View Datasheet

GR - Graphite Replacement

A corrosion-resistant, non-torque sensitive and non-fragmenting rupture disc. Available with a spacer block to replace graphite discs for processes using highly aggressive chemicals where fragmentation is an issue.

Typical sizes	1" - 10"	25 - 250mm
Typical burst pressures	2.5 - 150 psig	0.2 - 10.3 barg
Max. operating ratio	60% of marked burst pressure	
Max. performance tolerance	+/- 5%	

K_R Value
K_{RGL} 1.22

Manufactured in the USA

View Datasheet

Vapro/PosiPro

The bi-directional VAPRO/POSIPRO discs are excellent for low-pressure applications requiring both positive and vacuum pressure protection.

Typical sizes	3" - 10"	75 - 250mm
Typical burst pressures	6" - 30" W.C.	
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 5%	
Holder	POSI/VRDI	

Fluid
Gas

Manufactured in the UK

View Datasheet

Posi-Gard/Vac-Gard

The bi-directional Posi-Gard/Vac-Gard discs are excellent for low-pressure applications requiring both positive and vacuum pressure protection.

Typical sizes	2"- 12"	50 - 300mm
Typical burst pressures	0.07 - 7.25 psig	5 - 500 mbarg
Max. operating ratio	60% of minimum burst pressure	
Max. performance tolerance	+/- 25%	
Holder	Reverse Disc Holder	

Fluid
Gas

Manufactured in the UK

View Datasheet

Milli-Gard

Composite reverse acting disc for ultra-low pressure gas or vapour applications. Milli-Gard can also act as a single disc solution for either positive pressure or vacuum protection.

Typical sizes	2" - 12"	50 - 300mm
Typical burst pressures	0.044 - 7.25 psig	3 - 500 mbarg
Max. operating ratio	60% of minimum burst pressure	
Max. performance tolerance	+/- 25%	
Holder	Reverse Disc Holder	

K_R Value
K_{RGL} 0.8

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Graphite Discs

- An economic solution for corrosive processes where fragmentation is not an issue

Manufactured in the USA

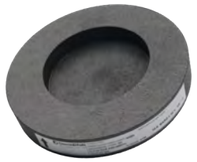
View Datasheet

GTM - GraphiTech Monoblock

The resin-impregnated graphite is ideal for use in highly corrosive processes. We can add vacuum support (GTMV), or invert the disc and add a liner for additional corrosion protection (GTI).

Typical sizes	1" - 24"	25 - 600mm
Typical burst pressures	0.5 - 400 psig	0.03 - 27.58 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/-5%	

K_R Values
GTM K_{RGL} 0.6
GTMV K_{RGL} 6.44
GTI K_{RGL} 0.5



Manufactured in the UK

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G3 - Graphite Monobloc

Our Graphite Monobloc bursting discs offer excellent corrosion resistance combined with low pressure capabilities. Unique and specialist designs include low-profile discs for MRI scanners and fully lined graphite blocks for switchgear units.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	Customizable. Contact OE for details.	
Max. operating ratio	85% of minimum burst pressure	
Max. performance tolerance	+/- 10%	

Fluid
Gas/Liquid

Manufactured in the UK

View Datasheet

Universal Arma-Gard

A corrosion-resistant, non-torque sensitive, holderless rupture disc for processes using highly aggressive chemicals, and where fragmentation is not an issue.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	1 - 798 psig	0.07 - 55 barg
Max. operating ratio	85% of minimum burst pressure	
Max. performance tolerance	+/- 10%	

K_R Value
K_{RGL} 0.69

Manufactured in the UK

View Datasheet

Two-Way Arma-Gard

A single graphite disc that protects against both positive and negative pressures.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	1 - 507 psig	0.07 - 35 barg
Max. operating ratio	85% of minimum burst pressure	
Max. performance tolerance	+/- 10%	

K_R Value
K_{RGL} 0.69

Manufactured in the UK

View Datasheet

G2D

The Graphite G2 disc is a tension-loaded forward acting rupture disc. It is corrosion resistant and can withstand operating temperatures up to 180°C.

Typical sizes	1" - 12"	25 - 300mm
Typical burst pressures	1 - 290 psig	0.07 - 20 barg
Max. operating ratio	85% of minimum burst pressure	
Max. performance tolerance	+/- 10%	

Fluid
Gas/Liquid

Custom OEM Assemblies

- High-integrity components
- For OEM equipment
- Fully customizable

Manufactured in the UK

View Datasheet

Capped and Crimped Brass Assemblies (OE2)

Cost-effective, high-volume, capped rupture disc plugs. The maintenance-free, threaded design enables quick and easy installation. These plugs are often used in fire suppression units and emergency flotation devices.

Typical disc sizes	6, 8, 10, 11mm	
Standard thread sizes	M12, M14, M16, M18	
Typical burst pressures	363 - 2,900 psig	25 - 200 barg
Disc type	Flat and domed forward discs available	

Manufactured in the UK

View Datasheet

Screwed and Bonded Brass Assemblies (O4A)

The rupture disc is housed in a tamper-proof body for quick, easy installation. The robust design is ideal for safety critical applications such as MRI scanners, medical equipment, industrial gas handling and cryogenic applications.

Typical disc sizes	15, 19, 25, 40mm	
Standard thread sizes	⅛", ¼", ⅜", ½", ¾", 1"	
Standard thread types	NPT, BSPT, BSPP	
Typical burst pressures	14.5 - 1,015 psig	1 - 70 barg
Disc type	Forward and reverse discs available	

Manufactured in the USA

View Datasheet

OTU / PRD Brass Assemblies

Our One-Time Use Pressure Relief Device provides simple, cost-effective overpressure protection for OEM applications using compressed air, gas or high-pressure water systems, particularly clean agent fire suppression systems, and tank and bottle protection.

Typical sizes	11/16" - 1.5"	
Typical burst pressures	100 – 30,000 psig	6.8 - 2,068 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 5%	

Manufactured in the USA and UK

Welded Steel Assemblies

A compression-loaded welded assembly designed for high-pressure gas and liquid applications of 2,500 psig and above. Available with most OE rupture discs.

Typical disc sizes	0.1" - 1.5"	3 - 40mm
Overall assembly heights	1.8" - 2.2"	46 - 56mm
Typical burst pressures	14.5 - 15,000 psig	1 - 1, 034 barg
Disc type	Forward and reverse discs available	

Manufactured in the USA

WDA - Welded Disc Assembly

This welded disc assembly is a one-piece design, and can take the place of traditional union holders in separator and dehydrator applications. Standard discs are the FAS or (F)STD, with others available on request.

Typical sizes	11/16" - 1.5"	
Typical burst pressures	100 – 30,000 psig	6.8 - 2,068 barg
Max. operating ratio	90% of marked burst pressure	
Max. performance tolerance	+/- 5%	

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Custom OEM Assemblies

Manufactured in the USA

SDA - Soldered Disc Assembly

OsecoElfab's soldered disc assemblies (SDA) are designed to protect machines and equipment from over pressurization. Standard disc is the (F)STD.

Typical sizes	3/16", 5/16", 1/2"	
Typical burst pressures	5,000 – 15,000 psig	344 – 1,034 barg
Max. operating ratio	70% of marked burst pressure	
Max. performance tolerance	+/- 5%	

Manufactured in the USA and UK

View Datasheets

Extruder Burst Plugs

High-performance, leak-tight rupture disc plugs to protect plastic extrusion processes from over pressurization.

	As manufactured in the US	As manufactured in the UK
Typical sizes	3/16"	5mm
Typical burst pressures	5,000 to 15,000 psig	103-1,034 barg
Max. operating ratio	70% of marked burst pressure	85% of minimum burst pressure
Max. performance tolerance	+/-5%	+/-5%

RUPTURE DISCS
SENSORS
HOLDERS
EXPLOSION PANELS
FLAMELESS VENTS
ACCESSORIES

Specialty Discs

- Pressure activation and protection
- For power and energy storage
- For renewables and hydrogen
- For lithium-ion batteries

Manufactured in the UK

View Datasheet

Lithium-ion Battery Protection (Flat Composite)

The ultra-low profile flat composite disc offers versatile, fast, accurate and reliable pressure relief for lithium-ion battery packs and enclosures.

Typical sizes	1" - 32"	25 - 800mm
Typical burst pressures	1 - 50 psig	0.07 - 3.5 barg
Max. operating ratio	40% of minimum burst pressure	
Max. performance tolerance	+/-5%	

K_R Value
K_{RGL} 3.94

Manufactured in the USA

View Datasheet

Lithium-ion Battery Protection (PRO-LP)

The domed PRO-LP (Low Pressure) holderless disc offers a robust solution to protect lithium-ion battery enclosures with fast, accurate, reliable pressure relief.

Typical sizes	1" - 4"	25 - 100mm
Typical burst pressures	5 - *Custom* psig	0.4 - *Custom* barg
Max. operating ratio	95% of marked burst pressure	
Max. performance tolerance	+/-5%	

K_R Value
K_{RG} 0.29

Manufactured in the USA and UK

View Technical Information

Dual-Gard (rupture disc)

Battery safety innovation: Dual-Gard integrates a breathing membrane with a metal rupture disc or panel to combine pressure equalization with emergency overpressure relief.

Typical sizes	1" - 4"	25 - 100mm
Typical burst pressures	4 - 30 psig	0.27 - 2.1 barg
Max. operating ratio	95% of marked burst pressure	
Max. performance tolerance	+/- 2 psig	+/- 0.14 barg

Fluid
Gas

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Specialty Discs

Manufactured in the USA and UK

View Datasheet

PAD - Pressure Activation Devices

Our Pressure Activation Devices provide a high-integrity, dependable solution for use in difficult downhole conditions.

Typical disc sizes	0.2", 0.3", 0.4"	5mm, 8mm, 11mm
Typical thread sizes	11/16 – 16, 24 & 32 UNF-2A	
Typical burst pressures	1,000 - 25,000 psig in 500 psig increments	
Max. operating ratio	90% of minimum burst pressure	

Manufactured in the USA and UK

Tool Activation Discs

OsecoElfab's ¼" and ½" burst plugs are ideal for activation of tools, as a drain plug or when space is limited. They typically use the (F)STD rupture disc.

Typical disc sizes	3/16" and 3/8"
Typical thread sizes	3/4-20 UNEF-2A
Typical burst pressures	Up to 30,000 psig
Max. performance tolerance	+/-5%

Manufactured in the USA and UK

Gas Insulated Switchgear Discs (OE9)

Long-life, custom designed discs for traditional power grid applications, with innovative designs supporting the transition to net zero energy.

Typical sizes	2" - 10"	50 - 250mm
Typical burst pressures	21 - 362 psig	1.5 - 25 barg
Max. operating ratio	90-95% of minimum burst pressure	
Max. performance tolerance	+/-5%	

RUPTURE DISCS
SENSORS
HOLDERS
EXPLOSION PANELS
FLAMELESS VENTS
ACCESSORIES

Sensors

- Non-invasive, magnetic
- Membrane, electrical
- ATEX-approved

Manufactured in the UK

View Datasheet

Flo-Tel 2

Eliminate re-wiring costs with Flo-Tel, a non-invasive, practical and reusable solution for detecting when a rupture disc has functioned.

Temperature range	-148ºF to 572ºF	-100ºC to 300ºC
Cable lengths available	2m, 5m, 10m	
IP rating	66	
ATEX	II 1G Ex ia IIC Ga	II 1D Ex ia IIIC Da

Values for intrinsically safe connection
Ui = 28v
Ii = 84mA
Pi = 0.55W
Li = 4.1µH
Ci = 3.64nF

Manufactured in the UK

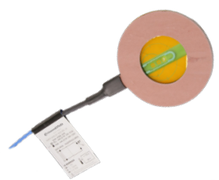
View Datasheet

Flo-Tel XD

The Flo-Tel XD consists of our non-invasive, reusable Flo-Tel burst detection system plus a certified junction box.

Temperature range	-40ºF to 572ºF	-40ºC to 300ºC
Cable lengths available	Compatible with most industry-standard cables	
IP rating	66, 67	
ATEX	II 2 G Ex d IIC II 1 D Ex ta IIIC	II 1 G Ex ia IIC II 1 G Ex ia IIC

Junction box specifications
Weidmuller 2.5mm² AKZ terminals + 1 spare
2 earthing clamps
3x M20 tappings
2x M20 EXd stopping-plugs



Manufactured in the UK

View Datasheet

Burst-Tel

Simple, intrinsically safe and instant burst detection, suitable for use in the most hazardous areas. Burst-Tel is ATEX approved.

Typical sizes	1" - 20"	25 - 500mm
Minimum pressures required	1 - 10 psig	0.07 - 0.7 barg
Temperature range	-4ºF to 347ºF	-20ºC to 175ºC
Cable lengths available	2m	
ATEX	II 1GD, EEx ia IIB	

Values for intrinsically safe connection
Ui = 25V
Ii = 125mA
Pi = 0.78W
Li = 2.2µH
Ci = 2nF

Manufactured in the USA

View Datasheet

AMS

Robust burst detection for highly corrosive and high-temperature environments.

Typical sizes	1" - 24"	
Cable	6ft, 24 AWG, 2 Conductor, Fluoropolymer insulation, Shielded	
Max. voltage and current	Voltage: 24V AC/DC	Current: 150 mA
Max. pre-burst resistance	20 Ohms	

Manufactured in the USA

View Datasheet

SVT

Install this ultra thin membrane sensor on top of existing rupture disc assemblies for instant notification of disc burst.

Typical sizes	1" - 36"	25 - 900mm
Cable	6ft, 24 AWG, 2 Conductor, Fluoropolymer insulation, Shielded	
Max. voltage and current	Voltage: 24V AC/DC	Current: 100 mA
Max. pre-burst resistance	20 Ohms	

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Sensors

Manufactured in the USA

View Datasheet

LPSF

Bi-directional burst detection for low-pressure applications using the VAPRO or POSIPRO rupture discs.

Typical sizes	21" - 10"	50 - 250mm
Cable	6ft, 24 AWG, 2 Conductor, Fluoropolymer insulation, Shielded	
Max. voltage and current	Voltage: 24V AC/DC	Current: 100 mA
Max. pre-burst resistance	20 Ohms	

Manufactured in the UK

View Datasheet

OE-Tel

Non-invasive, fail-safe burst detection with the first ATEX approved sensor for threaded rupture disc plugs and assemblies.

Burst pressure range	< 1,450 psig	< 100 barg
Temperature range	-67ºF to 194ºF	-55ºC to 90ºC
Cable lengths available	2m	
IP rating	66	
ATEX	II 1GD, Ex ia IIC	II 1GD, Ex ia IIIC

Values for intrinsically safe connection
Ui = 30V dc
Ii = 300mA
Pi = 550mW
Li = 0
Ci = Negligible

Manufactured in the USA

View Datasheet

ASF - Alarm Sensor Fitting

Minimize product loss in plastic and paper applications such as extrusion, molding and film manufacturing with accurate burst detection. Typically used with Extruder Burst Plugs.

Cable	16", 24 AWG, 2 Conductor, Fluoropolymer insulation, Shielded	
Max. voltage and current	Voltage: 24V AC/DC	Current: 100 mA
Max. pre-burst resistance	20 Ohms	

Manufactured in the UK

View Datasheet

Vent-Tel (Sanitary)

Eliminate leak paths and remove the risk of contamination with this non-invasive, reusable burst sensor for sanitary applications.

Temperature range	-148ºF to 392ºF	-100ºC to 200ºC
Cable lengths available	2m	
Connection	Tri-Clamp/ferrule and NAC/PAD	
ATEX	II 1GD Ex ia IIC	Ex ia IIIC

Values for intrinsically safe connection
Ui = 30v
Ii = 100mA
Pi = 0.75W
Co = 66nF
Lo = 3mH
Lo=/Ro = 40µH/Ω

Manufactured in the UK

View Datasheet

Bio-Tel

Sanitary membrane burst detector for aseptic and hygienic applications. Designed for use with the Bio-Gard, Opti-Gard Ferrule and Opti-Gard Ferrule SoLo rupture discs.

Typical sizes	1" - 2"	25 - 50mm
Temperature range	-20ºC to 175ºC (-4ºF to 347ºF)	
Cable lengths available	2m	
Max. voltage and current	Voltage: 25V	Current: 125 mA
Max. pre-burst resistance	30 Ohms	

RUPTURE DISCS
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ACCESSORIES

Sensors

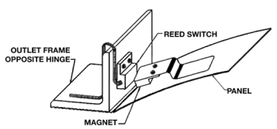
Manufactured in the USA

View Datasheet

OSS

Specialist detector made using hygienic materials for accurate burst detection in sanitary applications. Designed for use with the PRO-S rupture disc.

Typical sizes	1" - 4"	25 - 100mm
Temperature range	-60° F to 300° F	
Cable	18", 2 Conductor, Shielded with open leads	
Max. current	150 mA	
Max. pre-burst resistance	50 Ohms	

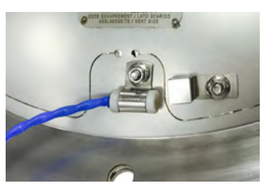


Manufactured in the USA

SVT-03

The SVT-03 alarm sensor is designed to detect the opening of an explosion vent. It features a magnetic reed switch and is intrinsically safe when used with an I.S. barrier.

Cable lengths available	12"	30cm
Max. sensing range	0.8"	20.32mm
Supply current	1.2A (1,200 mA)	
Compliance	RoHS compliant	



Manufactured in the UK

View Datasheet

Vent-Tel (Panels)

Non-invasive, ATEX approved, reusable burst detection for explosion vents and panels.

Temperature range	-148ºF to 392ºF	-100ºC to 200ºC
Cable lengths available	2m	
Connection	Screw connection to panel	
ATEX	II 1GD Ex ia IIC	Ex ia IIIC

Values for intrinsically safe connection
Ui = 30v Ii = 100mA Pi = 0.75W Co = 66nF Lo = 3mH Lo=/Ro = 40µH/Ω

Manufactured from the UK

View Datasheet

XPLO-TEL

ATEX certified, inductive, re-usable burst detection designed for installation with our Xplo-Gard flameless vents.

Max. temperature	+284°F	+140°C
Cable lengths available	2m, 10m	
IP rating	65, 67	
ATEX	Installing the breakable sensor in an ATEX zone requires supplying it with an ATEX certified intrinsic safety barrier.	

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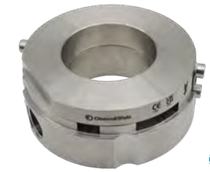
Holders

- Use the correct holder for each disc to ensure safe, correct disc function
- Various seating arrangements
- Liners available



Manufactured in the UK

View Datasheet

Reverse Disc Holder

Designed and manufactured to ensure the correct and safe performance of the reverse acting bursting discs manufactured in North Shields, when fitted between flanges. A pre-torqued option is available on request.

Typical sizes	1" - 24"	25 - 600mm
Discs	Opti-Gard, Opti-Gard SoLo, Milli-Gard, Posi-Gard/Vac-Gard	

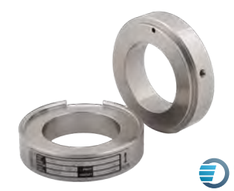
Manufactured in the UK

View Datasheet

Forward Disc Holder

Designed and manufactured to ensure the correct and safe performance of the forward acting rupture discs manufactured in North Shields, when fitted between flanges. A pre-torqued option is available on request.

Typical sizes	1" - 24"	25 - 600mm
Discs	Safe-Gard, Conventional Domed Disc, Domed Composite, Flat Composite, Two-Way Flat Composite	



Manufactured in the USA

View Datasheet

Insert Holder - FRDI / PRDI / RDI

Designed and manufactured to ensure the correct and safe performance of most of the rupture discs manufactured in the USA. The holder bolts between standard ANSI flanges and fits within the bolt circle.

Typical sizes	1" - 42"	25 - 1,066mm
Discs	FRDI (flat seat) - Use with the FAS, (F)CO and (F)STD PRDI (flat seat) - Use with the PRO+*KRGL*, PCR, PLR and PSR RDI (30° angular seat) - Use with the STD and CO	

Manufactured in the USA

View Datasheet

Pre-Torqued Insert Holder - FRDI(P) / PRDI(P)

Pre-torqued, self-centering holder design for challenging installations or where misaligned piping is a concern.

Typical sizes	1" - 12"	25 - 300mm
Standard ANSI ratings	150# and 300#	
Holders that can be pre-torqued	Flat Seat Insert Holders - FRDI and PRDI	

Manufactured in the USA

View Datasheet

Booted Holder

A solid PTFE or PFA insert is pressed into the inner diameter of the Insert Holder. This provides protection from aggressive corrosives and offers a cost-effective alternative to exotic metals.

Typical sizes	1" - 8"	25 - 200mm
Holders that can be booted	OPR/OPK Holder Flat Seat Insert Holders - FRDI and PRDI	

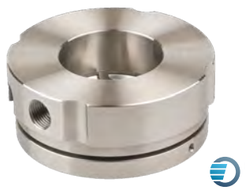
Holders

Manufactured in the USA

LKR Holder

Non-torque sensitive rupture disc holder, designed specifically for the LoKr reverse buckling rupture disc. The holder features a tapered seal design that makes installation easier.

Typical sizes	1" - 12"	25 - 300mm
Discs	LoKr	



Manufactured in the USA

View Datasheet

OPR/OPK Holder

Designed to ensure the correct and safe performance of our OPR+/OPK+ rupture discs. The holder bolts between standard ANSI flanges and interfaces with multiple flange ratings.

Typical sizes	1" - 12"	25 - 300mm
Discs	OPR+/OPK+	

Manufactured in the UK

DDA - Double Disc Assembly

This Assembly places two rupture discs in series to provide enhanced environmental protection. If the primary disc is damaged or corrodes, the secondary disc prevents environmental pollution. The intermediate pressure sensor alerts maintenance teams of the need to replace the primary disc.

Typical sizes	From 1"	From 25mm
Discs	The discs may comprise two forward acting discs, two reverse acting discs or a combination of forward and reverse acting discs. We recommend using the DDA with our leading Opti-Gard rupture discs.	

Manufactured in the USA

POSI/VRDI Holder

The POSI/VRDI holders are the primary holders for the POSIPRO and VAPRO rupture discs.

Typical sizes	3" - 10"	75 - 250mm
Discs	POSIPRO/VAPRO	

Manufactured in the USA

View Datasheet

Bolted Holder - FRDH / PRDH

The Bolted Holder is available with any combination of weld-neck or threaded inlet and outlet connections. Commonly used on skids, railcars and intermodal containers.

Typical sizes	1" - 8"	25 - 200mm
Discs	FRDH (flat seat) - for use with the FAS, CO and STD PRDH (flat seat) - for use with the PRO+KRGL	

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RUPTURE DISCS
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Holders

Manufactured in the USA

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Union Holder

Ideal for applications where installation space is limited. Installation time is also reduced as only the union nut is removed to obtain access to the rupture disc.

Typical sizes	1/2", 1", 11/2", 2"
Temperature range	100 - 1,000°F
Standard connection	NPT threads

Manufactured in the USA

View Datasheet

Threaded Holder

Pre-torqued, self-centering holder design for challenging installations or where misaligned piping is a concern.

Typical size	1/4", 1/2"
Standard connections	1/4" NPT or 1/2" NPT inlet with 1/2" NPT or muffled outlet

Explosion Panels

- Flat, Domed
- Round, Rectangular, Custom
- Single-skinned and multi-layered
- Specialist vents

Manufactured in the USA
View Datasheet

MV-RD

A domed all-metal vent ideal for bag houses, dust collectors and bulk storage units requiring a rectangular vent.

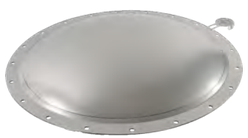
Typical sizes	12" x 12" to 36" x 44"	
Set pressure range	1.5 - 14 psig	0.1 - 0.96 barg
Temperature range	-20°F to 150°F	-28°C to 65°C
Max. operating ratio	80% of marked burst pressure	
Max. performance tolerance	+/- 0.25 psig	

Manufactured in the USA
View Datasheet

MV-RF

A flat all-metal explosion vent. The vent uses a stainless steel controlling membrane (no fluoropolymer), making it ideal for use where product build-up is a concern.

Typical sizes	8” x 8” to 44” x 69”	
Set pressure range	0.2 - 10 psig	0.014 - 0.68 barg
Max. operating ratio	60% of marked burst pressure	
Max. performance tolerance	+/-0.25 psig	



Manufactured in the USA
View Datasheet

MV-CD

A domed metal circular explosion vent designed for use with round ductwork.

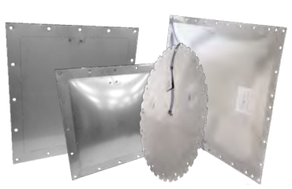
Typical sizes	8" - 36"	200 - 900mm
Set pressure range	1.5 - 10 psig	0.1 - 0.68 barg
Max. operating ratio	70% of marked burst pressure	
Max. performance tolerance	+/-0.25 psig	

Manufactured in the USA
View Datasheet

MV-CF

A circular flat metal vent featuring a simple design that is effective for ductwork and demanding applications requiring a circular fitting.

Typical sizes	8" - 42"	200 - 1,066mm
Set pressure range	0.5 - 10 psig	0.03 - 0.68 barg
Max. operating ratio	50% of marked burst pressure	
Max. performance tolerance	+/-0.25 psig	



Manufactured in the UK
View Datasheet

EB Explosion Panels

A full range of explosion vents manufactured at our North Shields facility. The range includes single-skinned, multi-layered, flat and domed designs.

Typical sizes	Custom sizes available	
Set pressure range	Multi-layered: 0.7 - 1.5 psig Single-skinned: 0.7 psig	Multi-layered: 0.05 - 0.1 barg Single-skinned: 0.1 barg
Max. operating ratio	Flat: 60% of minimum burst pressure Domed: 80% of minimum burst pressure	
Max. performance tolerance	+/- 25%	

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Explosion Panels

Manufactured in the UK
View Datasheet

Lift-Gard

Designed to protect vertical bucket elevators from explosion damage, Lift-Gard features a robust construction with an integral outer frame that cushions the panel from vibrations.

Typical sizes	Internal dimensions (mm): 305x299 – 1140x655 External dimensions (mm): 385x379 – 1220x735	
Set pressure range	1.5 psig	0.1 barg
Max. operating ratio	50% of minimum burst pressure	
Max. performance tolerance	+/-25%	

Manufactured in the USA
View Datasheet

MV-BE

A heavy-duty explosion panel designed to protect bucket elevators during deflagrations. The robust, integral frame cushions the panel from vibrations.

Typical sizes	12" x 18" to 18" x 36"	
Set pressure range	0.75 - 10 psig	0.05 - 0.68 barg
Temperature range	-40°F to 180°F	-40°C to 82°C
Max. operating ratio	50% of marked burst pressure	
Max. performance tolerance	+/-0.25 psig	

Manufactured in the USA
View Datasheet

GLVF

A lightweight explosion panel designed to protect bucket elevators during deflagrations. The panel features a built-in gasket and a built-in outlet frame.

Typical sizes	Custom sizes available	
Set pressure range	Custom burst pressures available	
Temperature range	-40°F to 180°F	-40°C to 82°C
Max. operating ratio	50% of marked burst pressure	
Max. performance tolerance	+/-0.25 psig	

Manufactured in the USA
View Datasheet

CRVC

A heavy-duty domed explosion panel suited to high-cycling processes and high pressures, with an option for internal insulation for high temperature applications (CRVCI).

Typical sizes	12" x 12" to 44" x 69"	
Set pressure range	1.3 - 10 psig	0.09 - 0.68 barg
Max. operating ratio	70% of marked burst pressure	
Max. performance tolerance	+/-0.25 psig	

Manufactured in the UK
View Datasheet

Thermal Vent

The innovative composite design of this panel reduces heat loss when used in high-temperature applications. The panel may be round or rectangular, and flat or domed.

Typical sizes	Round or rectangular - Custom sizes available	
Set pressure range	1.5 psig	0.1 barg
Max. operating ratio	60% of minimum burst pressure	
Max. performance tolerance	+/-25%	

Explosion Panels

Manufactured in the UK

View Datasheet

Hygienic Vent

Our hygienic vents feature a smooth, crevice-free design to eliminate residue and prevent bacteria build-up in situ.

Typical sizes	260 x 220mm to 1220 x 735mm	
Set pressure range	1.5 psig	0.1 barg
Temperature range	Specific to panel design	
Max. operating ratio	Specific to panel design	
Max. performance tolerance	+/-5%	

Manufactured from the UK

View Datasheet

FV-SA

Designed for hygienic use, the FV-SA features food-approved materials and a clean finishing process that offers an anti-bacterial barrier to prevent contamination. The panel complies with CE and FDA standards.

Typical sizes	24" x 24" to 40" x 40"	610x610mm to 1020x1020mm
Set pressure range	1.45 - 7 psig	0.1 - 0.5 bar
Temperature range	14°F to 482°F	-10°C to 250°C
Efficiency ratio	80% - 100%	
Max. performance tolerance	+/-15%	

Manufactured from the UK

View Datasheet

FV-C

The rectangular metal vent is curved to a custom radius for direct installation onto cylindrical vessels. Often used in low-pressure applications such as conveyors, silos, and cyclones.

Typical sizes	7” x 19” to 44” x 44”	170 x 470mm to 1130 x 1130mm
Set pressure range	5 - 145 psig	0.34 - 10 barg
Max. temperature range	-328°F to 932°F	-200°C to 500°C
Efficiency ratio	80% - 100%	
Max. performance tolerance	+/- 20%	

Manufactured in the USA

View Datasheet

CRP

The CRP is a lightweight explosion vent designed for use in power applications with electrical cabinets.

Typical sizes	8" x 8" to 44" x 69"	
Set pressure range	0.2 - 10 psig	0.014 - 0.68 barg
Max. operating ratio	50% of marked burst pressure	
Max. performance tolerance	+/- 50%	

Manufactured in the USA and UK

View Technical Information

Dual-Gard (panel)

BESS and battery safety innovation: Dual-Gard integrates a breathing membrane with a metal panel or rupture disc or panel to combine pressure equalization with emergency overpressure relief.

Typical sizes	Customizable based on application. Please contact your OE representative for detailed specifications.
Typical burst pressures	
Max. operating ratio	
Max. performance tolerance	

The values and data shown here are for a guide only. Specifications outside of these values may be possible. Please contact your OE representative for more information.

Flameless Vents

- Safe, accurate flameless venting
- Easy to install
- Easy to inspect and maintain
- Accurate efficiency ratings

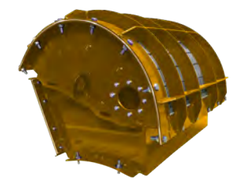
Manufactured from the UK

View Datasheet

XPLO-GARD

Xplo-Gard is a rectangular device combining an internal explosion panel with a stainless steel mesh body to relieve overpressure, prevent flame, heat and dust particles from entering the environment, and reduce the risk of a secondary explosion.

Typical sizes	7" x 19" to 44" x 44"	170 x 470mm to 1130 x 1130mm
Standard burst pressure range	1.5 - 4 psi	0.1 - 0.27 bar
Pred max.	33 psi	2.3 bar
Pmax	≤ 10 bar	
Max. performance tolerance	+/-15% of Pstat	

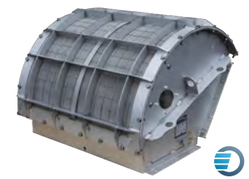


Manufactured from the UK

XPLO-GARD CURVE

Xplo-Gard CURVE features a curved flange for mounting directly onto cylindrical vessels. Used with the FV-C panel.

Typical sizes	7" x 19" to 44" x 44"	170 x 470mm to 1130 x 1130mm
Standard burst pressure range	1.5 - 4 psi	0.1 - 0.27 bar
Pred max.	33 psi	2.3 bar
Pmax	≤ 10 bar	
Max. performance tolerance	+/-15% of Pstat	



Manufactured from the UK

XPLO-GARD SANITARY

The vent body is manufactured from 316 Stainless Steel for use in hygienic or damp environments.

Typical sizes	24" x 24" to 40" x 40"	610 x 610mm to 1020 x 1020mm
Standard burst pressure range	1.45 - 7 psi	0.1 - 0.5 bar
Pred max.	33 psi	2.3 bar
Pmax	≤ 10 bar	
Max. performance tolerance	+/-15% of Pstat	

Accessories

Manufactured in the UK

Test-Tel

Quickly and easily check correct disc and sensor installation with the Test-Tel: A low-cost, portable tool designed to confirm correct installation.

- Low-cost
- Portable
- Simple to use
- Safe to use
- Time-saving
- Intrinsically safe
- ATEX approved

Manufactured in the UK
View Installation Guide

Excess Flow Valve / Tel-Tale Gauge

Innovative pressure gauge with an integral 'tell-tale' indicator for use between a rupture disc and safety relief valve or in double disc assemblies. Meets ASME requirements.

- ¼" or ½" connection
- Robust stainless steel construction
- Rapid shut-off function
- Prevents pressure build-up
- Offers essential safety protection
- Pressure gauge sold separately

Manufactured in the UK
View Installation Guide

System-Loc

An easy-to-use tool to install rupture disc holders correctly with no need for flange drilling.

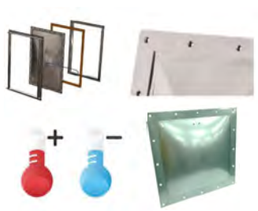
- Robust carbon steel design
- Color-coded for different sizes
- Easy to install: Fits into a machined groove on the holder inlet
- Suitable for multiple flange ratings

Manufactured in the USA
View Datasheet

Pipe Covers

Shield, save and protect safety relief valve discharge piping and free vented rupture discs from the effects of chemicals, rain, snow, insects and birds.

- Sizes 1" through 54"
- Fits over straight- or angle-cut discharge piping
- Tether retains cover after a relief
- Neon orange offers visual indication of overpressurization



Manufactured in the USA and UK

Explosion Vent Accessories

Our range of accessories for explosion vents include safety frames, gaskets, temperature adapters and insulation layers

- Safety frames: We customize our Stainless Steel safety frames to fit your OE explosion panels.
- Gaskets: We can supply full gaskets on request for added safety and security.
- Temperature adapters: A useful addition for temperature-sensitive processes.
- Insulation layers: Our engineers can advise on the best type of insulation for your conditions.

The values and data shown here are for a guide only. Specifications outside of these values may be possible. Please contact your OE representative for more information.

Accessories

- Safe, accurate flameless venting
- Easy to install
- Easy to inspect and maintain
- Accurate efficiency ratings

Manufactured in the USA

Spacers

Use a spacer to place a sensor downstream of a rupture disc when a separate disc and sensor are required. OE's 316 SS spacers are designed with a standard ferrule connection.

- Available in sizes 1" to 4"
- Standard length matches the most common industry holder sizes; custom lengths are available.
- 20 Ra finish on the inside diameter (32 Ra on the O.D.). Electropolishing available
- Rated up to 1500 psig and 900°F

Manufactured in the USA and UK
View Technical Information

Tri-Clamps

Stainless Steel tri-clamps for use in biopharmaceutical processes, and sanitary, hygienic and aseptic conditions.

- **From the USA:** 304 Stainless Steel tri-clamp fitting model 13MHHMD. All clamps include a 316 Stainless Steel ¾" hex nut for use with any standard torque wrench. Available in sizes 1" to 4". High pressure clamps available for special applications.
- **From the UK:** Stainless Steel tri-clamps in a range of sizes, both with and without our re-usable burst detection system Vent-Tel.

RUPTURE DISCS
SENSORS
HOLDERS
EXPLOSION PANELS
FLAMELESS VENTS
ACCESSORIES

Our Services

Field Audits

Is your plant compliant with ASME Section VIII, NFPA or CE requirements?

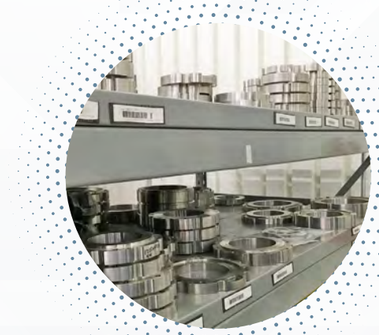
During a site survey, our pressure safety engineers will inspect all the rupture disc installation points and the key data. We then present the results of your surveyed applications in a report. The report will enable you to demonstrate compliance, improve inventory management, and avoid fines for non-compliance. We can survey a single application, several applications, or your entire plant.

LEARN MORE

Stock Rationalization

Reduce stock holdings by up to a third while reducing long-term costs.

We can use the findings from our site survey to identify opportunities for stock consolidation. By grouping variations in burst temperature, pressure, and construction material, we can offer recommendations on how to reduce the number and type of bursting discs and materials used on-site. Many customers have used this service to reduce stock holdings by up to a third.



LEARN MORE

Pressure Safety Training

Bring your plant personnel up-to-date with the latest trends in rupture disc technology and plant safety.

We take your safety seriously and go the extra mile to prove it, with safety training packages to support and upskill your team. They are available online or in-person at your facility or our offices. Topics can be tailored to your team's requirements, but will typically cover Rupture Disc and Explosion Panel Technology, Installation & Maintenance, Sizing & Selection, and Product Overviews.

LEARN MORE

Customized Design & Engineering

A collaborative design approach with our customers at the center.

You are the focus of our design process. From assessment and initial design concept to supplying the finished product, we will work closely with you at all stages. The process we follow is drawn from expert, first-hand experience of working with major organizations. It has been designed and developed to create state-of-the-art products tailored to your application needs.

LEARN MORE

ASME Flow Testing

In-house testing for rapid product development and quality assurance.

We use our Flow Laboratories in the USA and UK to calculate precise values for burst pressures, Minimum Net Flow Area (MNFA), and KR values for our rupture discs. We follow the ASME Boiler and Pressure Vessel Code (BPVC) standards. We can conduct capacity testing and apply the ASME UD-stamp to a wide range of rupture discs for systems built to ASME pressure vessel codes.

LEARN MORE

Expedited Orders

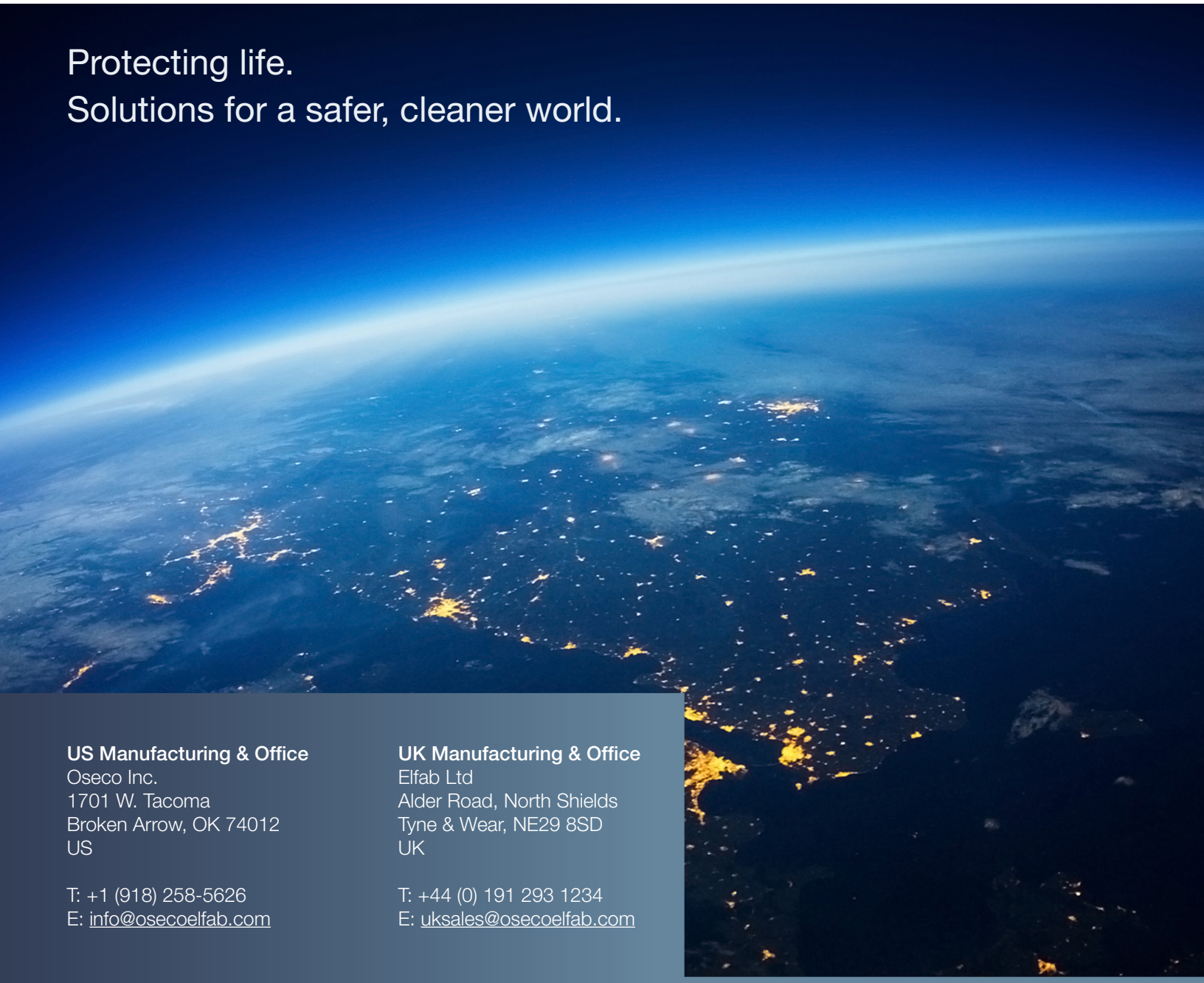
Creating and shipping your products quickly to get you back up and running.

We know that working with fluids under pressure can be unpredictable. Unplanned events can cause unexpected downtime. You need to resolve these emergency conditions as quickly and safely as possible. For urgent situations we offer expedited delivery options to keep your business running smoothly. For US-based customers, we offer a 24/7 emergency hotline for immediate support.

LEARN MORE

OsecoElfab

Protecting life.
Solutions for a safer, cleaner world.



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