

OSECO SAFETY CARTRIDGE

FEATURING FAS TECHNOLOGY

Reduce fugitive emissions with the Oseco Safety Cartridge, a one-piece, welded rupture disc solution that is leak-tight and installs in minutes.



The Oseco Safety Cartridge™ combines the traditional three components of a rupture disc system into one hermetically sealed component. It provides worry-free installation for your critical applications, while eliminating maintenance complexities, expenses and time requirements.

The Oseco Safety Cartridge™ system guarantees leak protection by completely removing the need to seal your rupture disc within a holder. These high performance, one-piece units come leak-tight from the factory and install in minutes.

No other rupture disc solution is as effective or as easy to install. The patented design makes the Oseco Safety Cartridge™ system the only widely available solution to eliminate exterior seam leakage.

Size	1" - 8"
Burst Pressure	80-2,000 psig
K_R Value	K _{RG} 0.223 K _{RL} 0.19
Operating Ratio	90%
Performance Tolerance	+/-5%
Manufacturing Range	0%

**Let us help you with all
your pressure relief questions.**

US office | Broken Arrow
+1 (918) 258 5626 | info@osecoelfab.com

UK office | North Shields
+44 (0)191 293 1234 | uksales@osecoelfab.com

osecoelfab.com



TECHNICAL SPECIFICATIONS



Size range	1"-8" (25-200mm)
Burst pressure range	80-2,000 psig (5.5-137.9 barg)
Temperature range	Up to 900°F (482°C)
Standard materials	Hastelloy® C, 316 Series Stainless Steel, Carbon Steel, Inconel® 600, Monel®
K _R Value	K _{RG} 0.223 K _{RL} 0.19
Max. Operating Ratio	90%
Performance Tolerance	+/-5%
Manufacturing Range	0%
Fragmentation	Non-fragmenting design
Vacuum service	Withstands full vacuum (14.7 psi) without separate vacuum support
Fluid compatibility	Gas service and liquid service
Torque requirements	Non-torque sensitive; Fully isolated pressure relief device allows for torquing to any gasket specifications.
Cycling or static service	Suitable for high-cycling applications
Relief valve isolation	Suitable for safety relief valve isolation
Leak tightness	Hermetically designed assembly eliminates leak paths. Leak checked to 1x10 ⁻⁸ cc-atm/sec using helium.
Design standards	Designed to meet ASME Section XIII standards

Certifications

ASME UD
CRN
CE

Related Products

Rupture discs
FAS
OPR+/OPK+
PCR

One Piece Unit
HPSR

Burst Pressure Ranges

Oseco Safety Cartridge Min/Max Burst Pressure @ 72° F (psig) / 22° C (barg)



SIZE		MATERIAL	MIN psig (barg)	MAX psig (barg)
inches	DN (mm)			
1	25	316 Stainless Steel Inconel Monel Hastelloy C	220 (15.2) 200 (13.8) 140 (9.7) 270 (18.6)	2000 (137.9)
1.5	40	316 Stainless Steel Inconel Monel Hastelloy C	160 (11.0) 170 (11.7) 120 (8.3) 250 (17.2)	2000 (137.9)
2	50	316 Stainless Steel Inconel Monel Hastelloy C	120 (8.3) 130 (9.0) 100 (6.9) 200 (13.8)	1500 (103.4)
3	80	316 Stainless Steel Inconel Monel Hastelloy C	110 (7.6) 100 (6.9) 80 (5.5) 160 (11.0)	1500 (103.4)
4	100	316 Stainless Steel Inconel Monel Hastelloy C	110 (7.6) 100 (6.9) 90 (6.2) 140 (9.7)	1200 (82.7)
6	150	316 Stainless Steel Inconel Monel Hastelloy C	100 (6.9) 110 (7.6) 100 (6.9) 160 (11.0)	1000 (68.9)
8	200	316 Stainless Steel Inconel Monel Hastelloy C	110 (7.6) 120 (8.3) 100 (6.9) 170 (11.7)	500 (34.4)

Burst Tolerance

+/-2 psig at or below
40 psig (2.8 barg)

+/-5% above
40 psig (2.8 barg)

Free Flow Area / Minimum Net Flow Area (MNFA)



NOMINAL BORE		MNFA	
inches	DN (mm)	Sq. Inch	mm ²
1	25	0.864	557
1.5	40	2.036	1,313
2	50	3.355	2,164
3	80	7.393	4,769
4	100	12.73	8,212
6	150	28.89	18,638
8	200	50.0	32,258

Standard height* conforms to:

CARTRIDGE SIZE		HOLDER SIZE	
inches	DN (mm)	inches	mm
1	25	1 5/8	41
1.5	40	1 5/8	41
2	50	1 5/8	41
3	80	1 5/8	41
4	100	1 7/8	47
6	150	2 1/2	63
8	200	2 7/8	73

*Special height available to fit any flange type or configuration, consult factory for more information

K_R Value (Frictional Loss Factor)

K _R	Oseco Safety Cartridge	
K _{RG}	0.223	
K _{RL}		0.19