

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	25mm - 200mm
Burst Pressure	5.5 - 137.9 barg
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.**

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TECHNICAL SPECIFICATIONS



Size range	25-200mm (1"-8")
Burst pressure range	5.5-137.9 barg (80-2,000 psig)
Temperature range	Up to 482°C (900°F)
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 @ 22° C (barg) / 72° F (psig)



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

Burst Tolerance

+/-0.14 barg at or below
2.8 barg (40 psig)

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

Free Flow Area / Minimum Net Flow Area (MNFA)



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

Standard height* conforms to:

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

*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