

OSECO SAFETY CARTRIDGE

FEATURING OPR+/OPK+ TECHNOLOGY

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









FLOW DIRECTION

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 CartridgeTM system the only widely available solution to eliminate exterior seam leakage.

Size 1" - 12"

Burst Pressure 10 - 1,160 psig*

K_R **Value** (**K**_{PGI}) OPR+: 0.78 / OPK+: 1.5

Operating Ratio 95%

Performance Tolerance +/-5%

Manufacturing Range 0%

* Burst pressures outside this range are possible, please consult factory

Let us help you with all your pressure relief questions.

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TECHNICAL SPECIFICATIONS



Size range	1"-12" (25-300mm)
Burst pressure range	10-1,160 psig (0.69-79.98 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	OPR+: 0.78 OPK+: 1.5
Max. Operating Ratio	95%
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: tested to one million cycles.
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

^{*} Weld technology for dissimilar materials

Certifications

ASME UD CRN CE

Related Products

Rupture discs FAS

OPR+/OPK+ PCR

Sensors

FLO-TEL+

One Piece Unit HPSR

Burst Pressure Ranges





SI	ZE	OPR+		OP	K+
(inches)	DN (mm)	MIN psig (barg)	MAX psig (barg)	MIN psig (barg)	MAX psig (barg)
1	25	100 (6.89)	250 (17.24)	250 (17.24)	1160 (79.98)
1.5	40	50 (3.44)	250 (17.24)	250 (17.24)	1087 (74.95)
2	50	25 (1.72)	250 (17.24)	250 (17.24)	1015 (69.98)
3	80	15 (1.03)	250 (17.24)	250 (17.24)	507* (34.96*)
4	100	10 (0.69)	175 (12.07)	175 (12.07)	363* (25.03*)
6 - 12	150 - 300	Consult factory for technical specifications			

^{*} Higher pressures available with the PCR rupture disc

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		OPR+		OPK+	
inches	DN (mm)	Sq. Inch	mm²	Sq. Inch	mm²
1	25	0.78	500	0.79	511
1.5	40	1.69	1,092	1.71	1,102
2	50	2.84	1,834	2.90	1,870
3	80	6.81	4,393	7.03	4,535
4	100	10.96	7,072	11.17	7,208
6	150	23.38	15,085	24.18	15,601
8	200	44.18	28,506	45.46	29,327
10	250	65.05	41,969	67.64	43,638
12	300	94.86	61,203	99.29	64,055

Standard height* conforms to:

CARTRIDGE SIZE		HOLDER SIZE		
inches	DN (mm)	inches	mm	
1	25	1.48	38	
1.5	40	1.68	42	
2	50	1.88	47	
3	80	2.17	55	
4	100	2.88	73	
6	150	2.91	73	
8	200	3.58	90	
10	250	4.14	105	
12	300	4.76	120	

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

K_R Value (Frictional Loss Factor)

K _R	OPR+	OPK+
K _{RGL}	0.78	1.5