

LoKr™ DUO

INNOVATIVE TWO-PIECE SAFETY CARTRIDGE

*Overcome installation issues, minimize leaking, upgrade your pressure relief performance, and reduce waste: **All the benefits of a LoKr Safety Cartridge in an economical 2-piece solution.***



The LoKr Duo™ provides the proven advantages of the LoKr Safety Cartridge (best-in-class low K_R , easy installation, and leak-tightness) in a two-piece, modular design.

Instead of a single welded cartridge that must be removed in its entirety after activation, the LoKr Duo separates into an outlet body and a welded inlet/rupture disc module. When the disc bursts, you simply replace the inlet module; the outlet body stays in line, saving time and reducing waste.

Key benefits of the two-piece cartridge include non-torque-sensitive installation, a hermetically sealed leak-tight construction, a wide range of sizes and pressures, high reliability and a non-fragmenting design.

Size	1"-10"
Burst Pressure	10 - 2,500 psig
Temperature	Up to 900°F
K_R Value (K_{RGL})	0.22
Operating Ratio	95%
Performance Tolerance	+/-5%
Manufacturing Range	0%

Let us help you with all your pressure relief questions.

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**REQUEST A QUOTE
FOR THE LoKr DUO**



TECHNICAL SPECIFICATIONS



Size range	1"-10" / 25-250mm
Burst pressure range	10-2,500 psig / 0.69-172.3 barg
Temperature range	Up to 900°F / 482°C
Standard materials	Disc: 316 Series Stainless Steel, Inconel® 600, Monel®, Hastelloy® C Body: 316 Series Stainless Steel, Carbon Steel, Inconel® 600, Monel®, Hastelloy® C
K _R Value	K _{RGL} : 0.22
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 1 million cycles)
Relief Valve Isolation	Suitable for safety relief valve isolation
Leak tightness	Hermetically sealed, welded inlet eliminates leak paths. Helium leak checked to 1x10 ⁻⁸ cc-atm/sec.
Design Standards	Designed to meet ASME Section XIII standards

Certifications

ASME UD

Related Products

OE Welded Cartridges

Oseco Safety Cartridge
LoKr Safety Cartridge
HPSR

Rupture Discs

LoKr

Sensors

AMS
SVT

Burst Pressure Ranges

LoKr Duo Min/Max Burst Pressure @ 72° F (psig) / 22° C (barg)



SIZE (inches) DN (mm)		MATERIAL	MIN psig / barg	MAX psig / barg
1	25	316 Inc Mon Hast C	15 / 1.04 25 / 1.73 15 / 1.04 25 / 1.73	2,000 / 137.8 2,000 / 137.8 2,000 / 137.8 2,500 / 172.3
1.5	40	316 Inc Mon Hast C	10 / 0.69	1,500 / 103.4 1,500 / 103.4 1,300 / 89.6 2,200 / 151.6
2	50	316 Inc Mon Hast C	10 / 0.69	1,200 / 82.7 1,500 / 103.4 1,200 / 82.7 2,200 / 151.6
3	80	316 Inc Mon Hast C	10 / 0.69	1,200 / 82.7 1,500 / 103.4 1,200 / 82.7 2,000 / 137.8
4	100	316 Inc Mon Hast C	10 / 0.69	1,200 / 82.7 1,500 / 103.4 1,200 / 82.7 1,500 / 103.4
6	150	316 Inc Mon Hast C	10 / 0.69	750 / 51.7
8	200	316 Inc Mon Hast C	10 / 0.69	600 / 41.3 600 / 41.3 600 / 41.3 750 / 51.7
10	250	316 Inc Mon Hast C	10 / 0.69	400 / 27.5 400 / 27.5 400 / 27.5 500 / 34.4

Free Flow Area / Minimum Net Flow Area (MNFA)



NOMINAL BORE		MNFA	
inches	DN (mm)	Sq. Inch	mm ²
1	25	0.86	554
1.5	40	2.04	1,316
2	50	3.36	2,167
3	80	7.39	4,767
4	100	12.73	8,212
6	150	28.89	18,638
8	200	50.02	32,227
10	250	78.85	50,870

Burst Tolerance

+/-2 psig ≤ 40 psig
+/-5% > 40 psig

+/-0.14 barg ≤ 2.8 barg
+/-5% > 2.8 barg

K_R Value (Frictional Loss Factor)

K _R	LoKr Duo
K _{RGL}	0.22



NOMINAL BORE		STANDARD HEIGHT*	
inches	DN (mm)	inches	mm
1	25	1.91	48.5
1.5	40	2.00	50.8
2	50	2.25	57.1
3	80	3.25	63.5
4	100	4.00	82.55
6	150	4.25	101.6
8	200	5.25	107.9
10	250	6.50	133.3

Standard height dimensions account for the welded cartridge assembly only. They do not account for gasket thickness.

FLANGE SPECIFICATIONS	
EN 1092-1 PN DESIGNATED	BS EN 1759-1 ANSI DESIGNATED
PN 6	ANSI 150
PN 10	ANSI 300
PN 16	ANSI 600
PN 20	ANSI 900
PN 25	ANSI 1500
PN 50	ANSI 2500
PN 63	
PN 100	