



L_oKr DUO™

TWO-PIECE SAFETY CARTRIDGE SOLUTION

Overcome installation issues, minimize leaking, and reduce waste in a cost-effective, two-piece modular Safety Cartridge



The Safety Cartridge Design Eliminates Common Pain Points

Featuring a two-piece, e-beam welded design, the LoKr Duo™ solves many pain points common to three-piece rupture discs. It offers improved leak tightness, easy installation, and easy maintenance in a cost-effective, modular safety cartridge.

- 1

LEAK-TIGHT

 - Inlet is hermetically sealed to remove leak paths upstream of the rupture disc
 - Process media cannot leak outside the piping
 - Supports LDAR and EPA Guidelines (VOCs, HRVOCs, and VHAPs)
- 2

EASY TO INSTALL

 - Two-piece assembly is easy and intuitive to install
 - This eliminates installation errors and reduces installation time
 - The disc dome is protected from damage during installation
- 3

NON TORQUE SENSITIVE

 - No need to pre-torque
 - Follow gasket torque values for worry-free installation
 - No risk of damage from uneven torque
 - Less sensitive to misaligned piping



Two-Piece Design Reduces Leaking, Waste and Cost

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.



- 4

BEST-IN-CLASS K_R VALUE

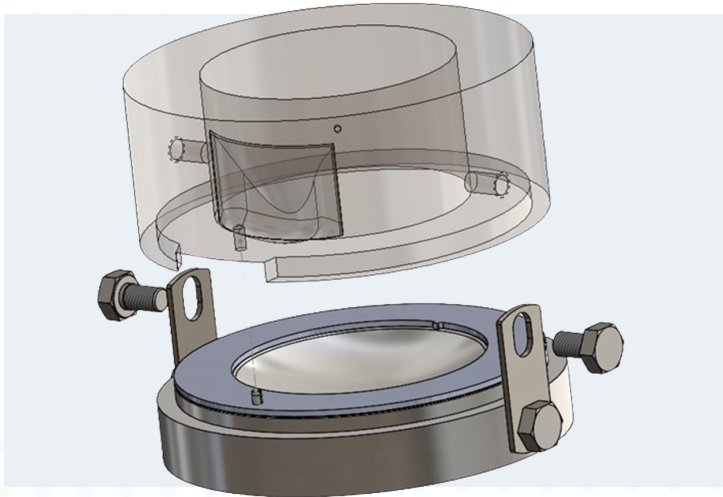
 - LoKr disc maximizes pressure relieving performance due to the low K_R / high Free Flow Area
 - Minimize required line sizes
 - Improve performance and efficiency, even at low flow rates
- 5

OPTIMIZE COSTS

 - Only the inlet is replaced, allowing you to optimize inventory
 - Cost-effective design, especially in larger sizes
 - Welded design allows you to remove, inspect, and replace the disc with no loss of performance (if undamaged)

The LoKr Duo: Two-Piece Safety Cartridge

Suitable for nearly all applications, the LoKr DUO offers all the benefits of the LoKr Safety Cartridge with a **REUSABLE OUTLET THAT IS COMPATIBLE WITH THREE-PIECE DESIGNS**



- Sizes 1"–12"
- Operating ratio: 95%
- Burst tolerance: +/-5% of specified burst pressure
- Materials available: 316 Series Stainless Steel, Inconel® 600, Monel® and Hastelloy® C
- Available for gas and liquid service
- Suitable for high-cycling or pulsating applications
- Leak checked to 1x10⁻⁸ cc-atm/sec using helium
- Non-fragmenting design
- Withstands full vacuum

Certifications

ASME UD

Related Products

OE Welded Cartridges
Oseco Safety Cartridge
LoKr Safety Cartridge
HPSR

Rupture Discs
LoKr

Sensors
AMS
SVT

Technical Specifications

COMMON APPLICATIONS: The LoKr Duo is a versatile solution for processing applications where safety, reliability and leak-tightness are paramount. It is ideal for operators who need the leak-free performance of a welded cartridge but want lower replacement costs and faster turnaround.

The table below outlines our standard sizes, materials, burst pressures, and MNFA. Specifications outside of those listed may be possible as a custom order. Please contact us to discuss your requirements.

NOMINAL BORE inches	MATERIAL	BURST PRESSURE		MINIMUM NET FLOW AREA (MNFA)		STANDARD CARTRIDGE HEIGHT	
		MIN psig / barg	MAX psig / barg	Sq. Inch	mm ²	inches	mm
1"	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	0.86	554	1.91	48.5
1.5"	316 Inc Mon Hast C	10 / 0.69	1,500 / 103.4 1,500 / 103.4 1,300 / 89.6 2,200 / 151.6	2.04	1,316	2.00	50.8
2"	316 Inc Mon Hast C	10 / 0.69	1,200 / 82.7 1,500 / 103.4 1,200 / 82.7 2,200 / 151.6	3.36	2,167	2.25	57.1
3"	316 Inc Mon Hast C	10 / 0.69	1,200 / 82.7 1,500 / 103.4 1,200 / 82.7 2,000 / 137.8	7.39	4,767	2.50	63.5
4"	316 Inc Mon Hast C	10 / 0.69	1,200 / 82.7 1,500 / 103.4 1,200 / 82.7 1,500 / 103.4	12.73	8,212	3.25	82.55
6"	316 Inc Mon Hast C	10 / 0.69	750 / 51.7	28.89	18,638	4.00	101.6
8"	316 Inc Mon Hast C	10 / 0.69	600 / 41.3 600 / 41.3 600 / 41.3 750 / 51.7	50.02	32,271	4.25	107.9
10"	316 Inc Mon Hast C	10 / 0.69	400 / 27.5 400 / 27.5 400 / 27.5 500 / 34.4	78.85	50,870	5.25	133.3
12"	316 Inc Mon Hast C	10 / 0.69	300 / 20.6	111.9	72,193	6.50	165.1

K_R Value

LoKr DUO	0.22
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Installation Instructions

- Easy to install
- Not torque sensitive
- No cap screws or bolts

SAFETY EQUIPMENT

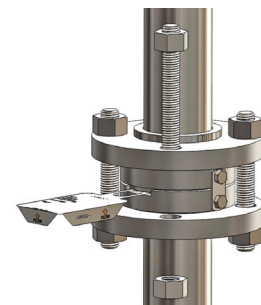
- Safety Goggles
- Gloves
- Other as required by facility

TOOLS & MATERIALS

- Cleaning Solvent compatible with service media
- Torquing Specifications
- Torque Wrench

The LoKr Duo represents a step up from pre-torqued holders. With its welded design, there are no cap screws, shoulder bolts or other fixings, which can be lost or broken, and become corroded and seized over time. It is also not sensitive to torque, allowing you to torque to the gasket manufacturer's specifications.

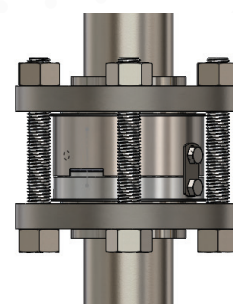
1 Disassembly



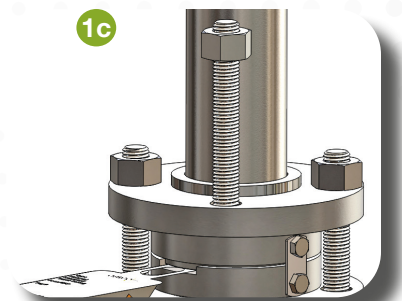
2 Placement & Alignment



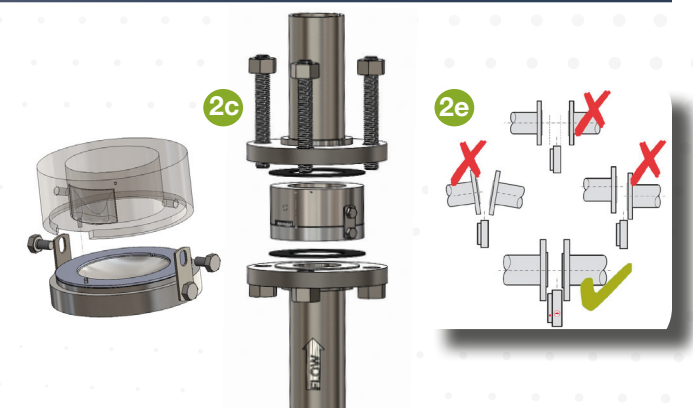
3 Torquing & Inspection



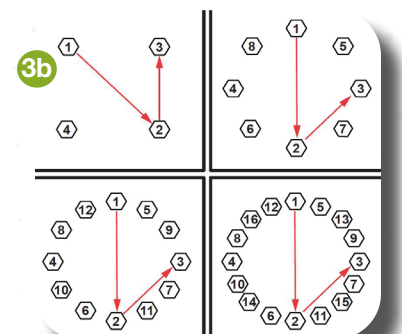
- 1a** Perform lockout & tagout procedures
- 1b** Depressurize system
- 1c** Loosen nuts, remove studs as needed, inspect for rust, galling, and other damage
- 1d** Remove assembly



- 2a** Clean flange surfaces, inspect for damage
- 2b** Place gaskets and Safety Cartridge between flanges
- 2c** Check flow arrows
- 2d** Lubricate Studs & Nuts, replace, and finger tighten
- 2e** Ensure proper piping alignment



- 3a** Determine Torque: Follow gasket manufacturer requirement or reference ASME PCC-1
- 3b** Torque evenly, in increments, up to 100%, following star pattern
- 3c** Follow facility's testing and inspection procedures



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Product Catalogue



Corporate Brochure



PRODUCT LINES



Emergency Pressure Relief

- Welded Rupture Disc Safety Cartridges™
- High Performance Rupture Discs (Bursting Discs)
- Holders / Double Disc Assemblies



Explosion Protection

- Explosion Vents and Burst Detection



Burst Sensors

- Non-Invasive, Reusable Sensors
- Membrane-style Sensors



Installation Tools and Accessories

- Test-Tel
- Tel-Tale / Excess Flow Valve
- System-Loc

SERVICES

Engineering and Maintenance
Training Seminars

Safety Surveys

Custom Engineered Solutions

Expedited Shipments

Emergency Response Team

24/7/365 Customer Service

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

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