

Over pressure or discharge indication for rupture disk and safety relief valve applications

The Rupture Disk Indicator RDI is a simple and effective means of indicating when the process media ruptures a disk or the valve has discharged.

Operation

The RDI installs onto the vent side of a rupture disk assembly or onto the discharge side of a relief valve. Upon rupture of the disk or discharge of the relief valve, the RDI alarm circuit is opened by the flowing media.

Features

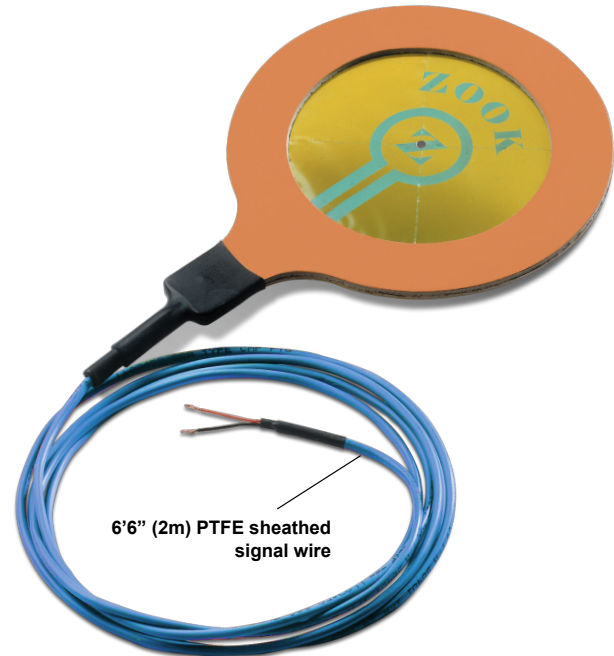
- One time use, cost effective, stand alone burst indication
- Sizes 1" thru 24" (25 mm thru 600 mm)
- Compatible with Metal or Graphite Rupture Disks or for stand alone use (relief valve applications)
- Resistant to most chemicals
- Minimizes downtime due to immediate burst indication
- Supplied ready for installation
- Installs easily into existing pipe systems
- Furnished with attached 6'6" (2m) PTFE sheathed signal wire
- No routine maintenance required
- Installs on outlet side of graphite rupture disk or metal rupture disk holder isolating the RDI from the process media
- RDI is considered a simple device, therefore ATEX approval is not required. Installation must be in accordance with ANSI/ISA RP12.6 and the NEC (ANSI/NFPA 70)

RDI Operating Limits

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Max. Voltage	24 VDC
Max. Current	150 mA
Temp. Range	-40°F to 400°F (-40°C to 204°C)

Specifications

RDI Size	Minimum Burst Pressure psi (barg) @ 72°F (22°C)	Nominal Indicator Thickness
1" (25 mm) - 2" (50 mm)	5 (0.34)	3/16" (4.7mm)
3" (75 mm)	3 (0.21)	
4" (100 mm)	2 (0.14)	
6" - 24" (150 mm - 600 mm)	1 (0.07)	



Materials

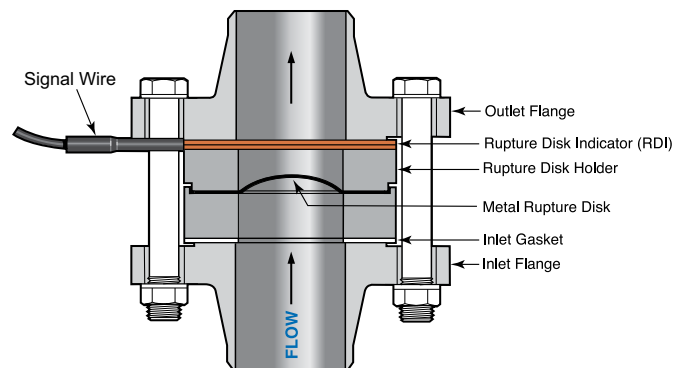
Gaskets – Compressed fiber

Membrane – Kapton

Conductive material – Silver

Leadwire – 6'6" (2m), 24 AWG, 2 conductor PTFE sheathed signal wire

Typical Installation



Ordering Information

When ordering RDI, specify: flange size, flange series, relieving pressure of pressure relief device, and coincident temperature. Contact ZOOK for stocked sizes ready for immediate shipment.

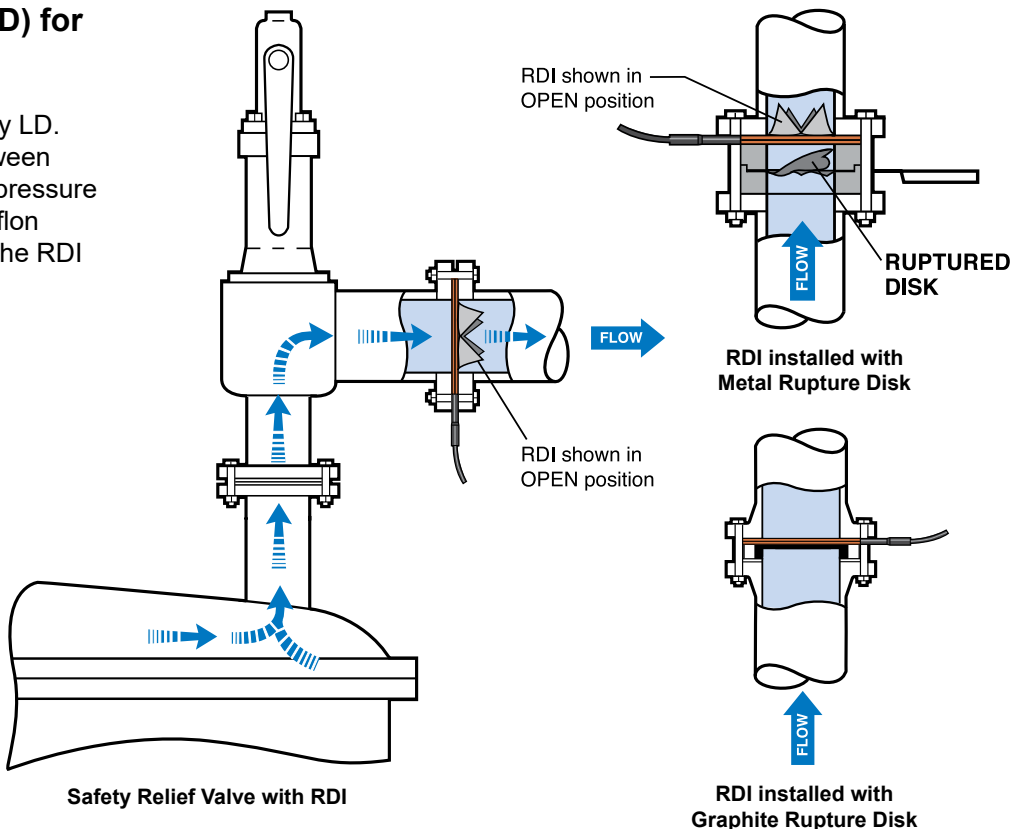
RDI Series Specifications

Optional Leak Detector (LD) for RDI Burst Sensor

For optional leak detection specify LD. The LD is a PFA seal affixed between two gaskets. When a build-up in pressure occurs the Leak Detector PFA Teflon seal will bulge and push against the RDI breaking the electrical circuit.

The LD is always installed on the pressure side of the RDI.

Note: Max. Temperature of 500°F (260°C)
Limitation of liner material

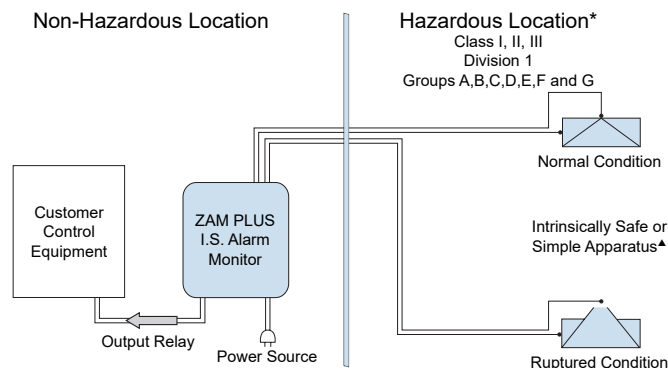


Monitor

The RDI Rupture Disk Indicator works with ZOOK ZAM Plus Alarm Monitor or any other monitoring system. Contact ZOOK for additional information. The monitor wired to the RDI will be activated providing immediate local or remote warning of a ruptured disk. The ZAM Plus monitor allows output to control pumps, valves, and other equipment which may be activated to control or shutdown a process.

CAUTION

The RDI is an electrical device suitable for use in hazardous locations (Class I, II, and III, Division 1 and 2, Group A thru G) provided that it is used with an approved intrinsically safe electrical alarm monitor. For services involving highly electrically conductive fluids, contact ZOOK for this type of application.



Notes:
*Contact ZOOK for information about mounting the ZAM Plus Alarm Monitor in hazardous locations.
▲Hazardous location equipment must be NEC compliant or simple apparatus.

zookdisk.com



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Safety through knowledge and performance.