



**Continental Disc[®]
Corporation**

PRODUCT SELECTION GUIDE

REVERSE ACTING RUPTURE DISCS
RUPTURE DISC HOLDERS

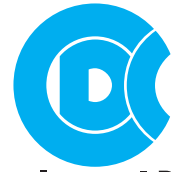
FORWARD ACTING RUPTURE DISCS
VENT PANELS

LOW PRESSURE RUPTURE DISCS
SPECIAL ASSEMBLIES

#1 QUALITY PROVIDER OF ENGINEERED PRESSURE SAFETY PRODUCTS



RUPTURE DISC SELECTION TREE



Continental Disc Corporation

BASIC

Type Selection

Determine Rupture Pressure (RP)

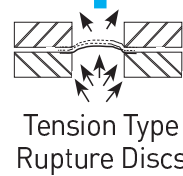
Determine Operating Pressure (OP)

High Cycling/Pulsating? Yes No

Calculate Operating Ratio Required

Above 80%

80% or Below



$$\frac{OP}{RP}$$

for enhanced performance...

Operating Temperature

Operating Temperature

Evaluate Rupture Disc Type Pressure / Temp / Vacuum Limitations

Evaluate Rupture Disc Type Pressure / Temp / Vacuum Limitations

Fragmenting / Non-Fragmenting Design

Fragmenting Non-Fragmenting Design

Select Rupture Disc

Select Rupture Disc

- HPX®
- SANITRX® HPX/II/LPX
- ULTRX®
- RCS
- LOTRX®

GRAFSERT® STD

- MICRO X®
- CAL-VAC®
- ENVIRO-SEAL
- COMPOSITE
- POS-A-SET®

DETAILED

Type Selection

Don't Forget to Consider:

- > Gas or Liquid Service
- > Primary/Secondary/Relief Valve
- > Material Requirements (Corrosion & Temperature)
- > Other factors may apply when choosing a rupture disc

TENSION TYPE RUPTURE DISCS

Fig. A

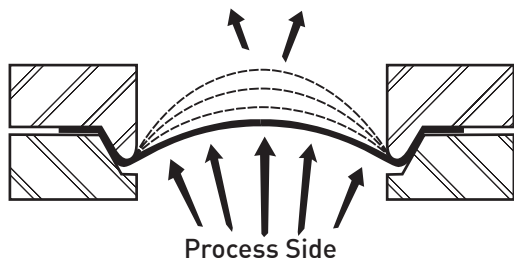
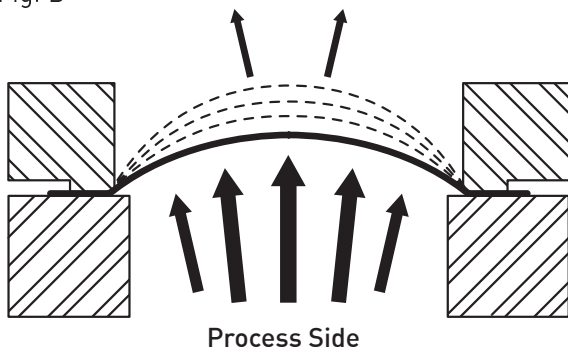


Fig. B



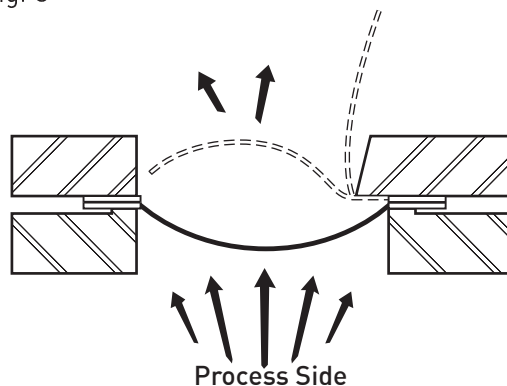
Tension Type Rupture Discs are oriented in a system with the process media pressure against the concave side of the rupture disc (Figure A, 30° Seat; Figure B, Flat Seat). As the process pressure increases beyond the allowable operating pressure, the rupture disc starts to grow. This growth will continue as the pressure increases, until the tensile strength of the material is reached and rupture occurs.

No single type of rupture disc will meet all the numerous applications of an industry.

Each type of rupture disc, tension or reverse acting, has its own characteristics and capabilities.

REVERSE ACTING RUPTURE DISCS

Fig. C



Reverse Acting Rupture Discs are oriented in a system with the process media pressure against the convex side of the disc (Figure C), placing the rupture disc in compression. As the burst pressure rating of the disc is reached, the compression loading on the rupture disc causes it to reverse, snapping through the neutral position and causing it to open by a predetermined scoring pattern.

A reverse acting rupture disc provides some advantages, as compared to tension type rupture discs, which may warrant consideration when selecting a rupture disc.

These advantages include:




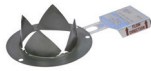











- Available with maximum recommended operating pressure ratios up to 95% of the stamped burst pressure
- Up to full vacuum capabilities without the need of an additional support member
- Longer service life under cyclic or pulsating conditions
- Constructed using thicker materials providing greater resistance to corrosion

This guide provides a brief overview of the various tension and reverse acting design rupture discs, holders, accessories and options offered by Continental Disc Corporation. For detailed information regarding a specific design, refer to specific product literature, or contact the factory directly.

TYPE
OF
DISC








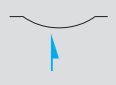
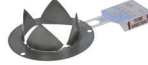


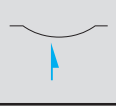



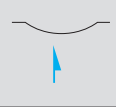









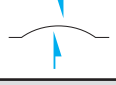




RUPTURE DISC SELECTION TABLE

CONTINENTAL DISC CORPORATION RUPTURE DISC TYPE	PROCESS ENVIRONMENT	SIZE	BURST PRESSURE RANGE	RECOMMENDED MAX. OPERATING TO BURST PRESSURE RATIO	MANUFACTURING RANGE	VACUUM SUPPORT REQUIRED TO WITHSTAND FULL VACUUM	STANDARD MATERIALS**							
							ALUMINUM	MONEL	INCONEL	NICKEL	316 SS or 316L SS	HASTELLOY® C	TANTALUM	GRAPHITE
HPX® 	Gas or Liquid (static, cyclic or pulsating)	1" - 8" 25 - 200 mm	10 - 1000 psig 0,689 - 68,9 barg	90% or 95%	ZERO -5% -10%	NO		★	★	★	★	★	★	
ULTRX® 	Gas or Liquid (static, cyclic or pulsating)	10" - 12" 250 - 300 mm	15 - 325 psig 1,03 - 22,4 barg	90%	ZERO -5% -10%	NO		★	★	★	★	★	★	
LOTRX® 	Gas or Liquid (static, cyclic or pulsating)	1" - 8" 25 - 200 mm	1.5 - 40 psig 0,103 - 2,76 barg	90%	ZERO -5% -10%	NO*		★	★	★	★	★	★	
RCS 	Gas or Liquid (static, cyclic or pulsating)	14" - 32" 350 - 800 mm	20 - 180 psig 1,38 - 12,4 barg	90%	ZERO -5% -10%	NO		★	★	★	★	★	★	
SANITRX HPX® 	Gas or Liquid (static, cyclic or pulsating)	1" - 3" 25 - 80 mm	10 - 250 psig 0,689 - 17,2 barg	90% or 95%	ZERO -5% -10%	NO		★	★	★	★	★		
SANITRX HPX® II 	Gas or Liquid (static, cyclic or pulsating)	1½" - 4" 40 - 100 mm	10 - 500 psig 0,689 - 34,5 barg	90% or 95%	ZERO -5% -10%	NO		★	★	★	★	★		
SANITRX® LPX 	Gas (static, cyclic or pulsating)	1½" - 3" 40 - 80 mm	5.8 - 10 psig 0,40 - 0,689 barg	90%	ZERO -5% -10%	NO					★			
MICRO X® 	Gas or Liquid (static)	1" - 36" 25 - 900 mm	15 - 3600 psig 1,03 - 248 barg	80%	ZERO -5% -10%	NO*		★	★	★	★	★	★	
COMPOSITE FS 	Gas or Liquid (static, cyclic or pulsating)	11/16" - 36" 17,5 - 900 mm	2 - 1440 psig 0,138 - 99,3 barg	80%	Standard, ¾, ½, ¼, ZERO	YES	★	★	★	★	★	★	★	
STANDARD 30° SEAT 	Gas or Liquid (static, cyclic or pulsating)	¼" - 30" 6 - 750 mm	3 - 75,000 psig 0,207 - 5171 barg	70%	Standard ¾, ½	YES	★	★	★	★	★	★	★	
COMPOSITE 30° SEAT 	Gas or Liquid (static, cyclic or pulsating)	1" - 30" 25 - 750 mm	2 - 1440 psig 0,138 - 99,3 barg	80%	Standard, ¾, ½, ¼, ZERO	YES	★	★	★	★	★	★	★	
CAL-VAC® 	Gas or Liquid (static, cyclic or pulsating)	3" - 12" 80 - 300 mm	1 - 30 INWC	Within 1 INWC of min setting	6 INWC min/ max	NOT Applicable		★	★	★	★	★	★	
POS-A-SET® 	Gas or Liquid (static, cyclic or pulsating)	3" - 12" 80 - 300 mm	1 - 30 INWC	Within 1 INWC of min setting	6 INWC min/ max	NOT Applicable		★	★	★	★	★	★	
ENVIRO-SEAL 	Gas or Liquid (static, cyclic or pulsating)	2" - 36" 50 - 900 mm	1 - 59 psig 0,069 - 4,07 barg	50%	Min./ Max	NO*		★	★	★	★	★	★	
GRAFSERT® 	Gas or Liquid (static, cyclic or pulsating)	½" - 24" 13 - 600 mm	0.25 - 720 psig 0,017 - 49,6 barg	80%	ZERO	NO*								★

*Dependent upon burst pressure.

**Materials not indicated or shown may be available by special design. Contact the factory.

RUPTURE DISC SELECTION TABLE

CONTINENTAL DISC CORPORATION RUPTURE DISC TYPE	FLOW DIRECTION	COMPATIBLE HOLDERS								RECOMMENDED FOR ISOLATION OF SAFETY RELIEF VALVE		AVAILABLE BURST DISC INDICATOR (B.D.I.®) (1 INCH AND ABOVE)	AVAILABLE ASME® CERTIFICATION	
		UNION	INSERT	FULL BOLTED	CLEAN-SWEEP	TITE-SEAL	SCREW TYPE	PRETORQUED	SANITARY	YES	NO			
 HPX®			+								+		+	
 ULTRX®			+								+		+	
 LOTRX®			+								+		+	
 RCS			+								+		+	
 SANITRX HPX®		No holder required. Installs between standard ferrules.								+			+	+
 SANITRX HPX® II		No holder required. Installs between standard ferrules.								+			+	+
 SANITRX® LPX		No holder required. Installs between standard ferrules.								+			+	+
 MICRO X®			+		+						+		+	
 COMPOSITE FS			+		+	+	+	+			+		+	
 STANDARD 30° SEAT		+	+	+	+	+	+				+		+	
 COMPOSITE 30° SEAT		+	+	+							+		+	
 CAL-VAC®			+								+		+	
 POS-A-SET®			+								+		+	
 ENVIRO-SEAL		No holder required. Installs between standard bore companion flanges.								Downstream Only			+	+
 GRAFSERT®		No holder required. Installs between standard bore companion flanges.									+		+	+

SANITRX®, SANITRX® LP, MINTRX®, STAR X® and KBA Rupture Discs available for maintenance replacement only.

REVERSE
ACTING

HPX® RUPTURE DISC



The **HPX® Rupture Disc** provides an industry leading selection of sizes, materials and burst ratings, as well as the versatility to optimize the operating ratio, manufacturing range and media type to the demands of your application. A high precision scored reverse acting rupture disc, the HPX® Rupture Disc is available with 90% or 95% operating ratios and is design tested for 250,000 cycles* from full vacuum to 95% of burst rating.

FEATURES/SPECIFICATIONS

- Sizes:**
1" - 8" (25mm - 200mm)
- Burst Pressure:**
10 - 1000 psig (0,689 - 68,9 barg)
- Manufacturing Range:**
ZERO, -5%, -10%
- Maximum Recommended Operating Ratio:**
Choice of 95% or 90%
- Available Maximum Temperature Limit:**
1000° F (538° C)
- Service:**
Gas or Liquid
- Nonfragmenting Design:**
Yes
- Withstand Full Vacuum:**
Yes
- Operating Conditions:**
Static, Cyclic or Pulsating
- Material(s):**
316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL® and Tantalum**
- Seat Configuration:**
Flat seat
- Holders:**
HPX® Insert Holder, HPX-PT® Pre-Torqued Insert Holder, HPX® Double Disc Insert Holder
- Compatible with the Following B.D.I. Alarm System:**
Universal
- Tagging:**
Three dimensional stainless steel flow direction tag attached to all sizes
- For Additional Information Refer To:**
HPX® Rupture Disc Product Family Literature

* Tests performed on 316 SS and HASTELLOY® C
** See HPX®-TA Datasheet for additional details

ULTRX® Rupture Disc



The **ULTRX® Rupture Disc** is a scored reverse acting rupture disc that utilizes failure initiating indents, a highly accurate manufacturing method to achieve and control a burst pressure at close tolerances, plus a precision semicircular score to provide a clean, consistent opening pattern.

FEATURES/SPECIFICATIONS

- Sizes:**
10" - 12" (250mm - 300mm)
- Burst Pressure:**
15 - 325 psig (1,03 - 22,4 barg)
- Manufacturing Range:**
ZERO, -5%, -10%
- Maximum Recommended Operating Ratio:**
90%
- Available Maximum Temperature Limit:**
1000° F (538° C)
- Service:**
Gas or Liquid
- Nonfragmenting Design:**
Yes
- Withstand Full Vacuum:**
Yes
- Operating Conditions:**
Static, Cyclic or Pulsating
- Material(s):**
316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL® and Tantalum
- Seat Configuration:**
Flat seat
- Holders:**
ULTRX® Insert, ULTRX® Double Disc Insert Holder
- Compatible with the Following B.D.I. Alarm System:**
Universal
- Tagging:**
Three dimensional stainless steel flow direction tag attached to all sizes
- For Additional Information Refer To:**
Reverse Acting Rupture Discs and Holders Datasheet



LOTRX® Rupture Disc



The **LOTRX® Rupture Disc** is a scored reverse acting rupture disc that utilizes failure initiating indents, a highly accurate manufacturing method to achieve and control a burst pressure at close tolerances, plus a precision semicircular score to provide a clean, consistent opening pattern.

FEATURES/SPECIFICATIONS

- Sizes:**
1" - 8" (25mm - 200mm)
- Burst Pressure:**
1.5 - 40 psig (0,103 - 2,76 barg)
- Manufacturing Range:**
ZERO, -5%, -10%
- Maximum Recommended Operating Ratio:**
90%
- Available Maximum Temperature Limit:**
1000° F (538° C)
- Service:**
Gas or Liquid
- Nonfragmenting Design:**
Yes
- Withstand Full Vacuum:**
Yes*
- Operating Conditions:**
Static, Cyclic or Pulsating
- Material(s):**
316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL® and Tantalum
- Seat Configuration:**
Flat seat
- Holders:**
LOTRX Insert Holder
- Compatible with the Following B.D.I. Alarm System:**
Universal
- Tagging:**
Three dimensional stainless steel flow direction tag attached to all sizes
- For Additional Information Refer To:**
Reverse Acting Rupture Discs and Holders Datasheet

RCS Rupture Disc Assembly

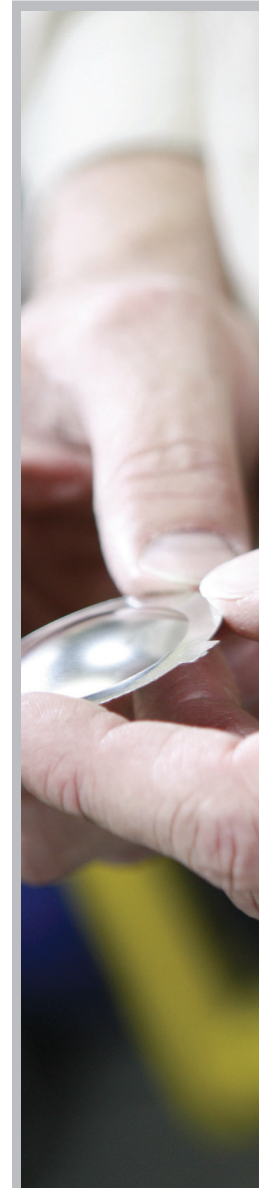


The **RCS Rupture Disc** is a reverse acting, cross-scored, solid metal rupture disc, providing reliable pressure relief protection, easy installation, and retrofit to your pre-existing piping arrangement.

FEATURES/SPECIFICATIONS

- Sizes:**
14" - 32" (350mm - 800mm)
- Burst Pressure:**
20 - 180 psig (1,38 - 12,4 barg)
- Manufacturing Range:**
ZERO, -5%, -10%
- Maximum Recommended Operating Ratio:**
90%
- Available Maximum Temperature Limit:**
1000° F (538° C)
- Service:**
Gas Only
- Nonfragmenting Design:**
Yes
- Withstand Full Vacuum:**
Yes
- Operating Conditions:**
Static, Cyclic or Pulsating
- Material(s):**
316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL® and Tantalum
- Seat Configuration:**
Flat seat
- Holders:**
RCS Insert Holder
- Compatible with the Following B.D.I. Alarm System:**
Universal
- Tagging:**
Three dimensional stainless steel flow direction tag attached to all sizes
- For Additional Information Refer To:**
RCS Rupture Disc Assembly Datasheet

REVERSE
ACTING



* Limitations apply and product specific literature should be reviewed. See "For Additional Information" section above.

TENSION/
FORWARD
ACTING

MICRO X® Cross Scored Rupture Disc



The **MICRO X® Rupture Disc** is a cross-scored flat seat tension type rupture disc. It is designed for non-fragmentation with a four-petal opening.

FEATURES/SPECIFICATIONS

Sizes:

1" - 36" (25mm - 900mm)

Burst Pressure:

15 - 3600 psig (1,03 - 248 barg)

Manufacturing Range:

ZERO, -5%, -10%

Maximum Recommended Operating Ratio:

80%

Available Maximum Temperature Limit:

1000° F (538° C)

Service:

Gas or Liquid

Nonfragmenting Design:

Yes

Withstand Full Vacuum:

Yes*

Operating Conditions:

Static

Material(s):

316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL® and Tantalum

Seat Configuration:

Flat seat

Holders:

UNISERT® Insert Holder, CLEAN-SWEEP Holder

Compatible with the Following B.D.I. Alarm System:

Universal

Tagging:

Three dimensional stainless steel flow direction tag attached to all sizes

For Additional Information Refer To:

UNISERT® Assembly Datasheet

* Limitations apply and product specific literature should be reviewed. See "For Additional Information" section above.

Composite Flat Seat Rupture Disc



The **Composite Flat Seat Rupture Disc** is designed for systems requiring a lower burst pressure than offered in a MICRO X® Rupture Disc. Continental Disc Corporation's seven-hole center pattern provides a non-fragmenting design when used with a TEFLON® seal.

FEATURES/SPECIFICATIONS

Sizes:

11/16" - 36" (17,5mm - 900mm)

Burst Pressure:

2 - 1400 psig (0,138 - 99,3 barg)

Manufacturing Range:

Standard, 3/4, 1/2, 1/4, ZERO

Maximum Recommended Operating Ratio:

80%

Available Maximum Temperature Limit:

500° F (260° F)

Service:

Gas or Liquid

Nonfragmenting Design:

Yes

Withstand Full Vacuum:

with Vacuum Support

Operating Conditions:

Static, Cyclic or Pulsating

Material(s):

316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL®, Tantalum, Aluminum, Silver and TEFLON®

Seat Configuration:

Flat seat

Holders:

UNISERT® Insert Holder, Screw Type Holder, CLEAN-SWEEP® Holder

Compatible with the Following B.D.I. Alarm System:

Universal

Tagging:

Three dimensional stainless steel flow direction tag attached to 1" (25mm) and above

For Additional Information Refer To:

UNISERT® Assembly Datasheet
Tite-Seal and Screw-Type Assembly Datasheet



Standard 30° Seat Rupture Discs



A **Standard Rupture Disc** is a solid metal, differential pressure relief device with an instantaneous, full-opening, non-reclosing design.

FEATURES/SPECIFICATIONS

- Sizes:**
1/4" - 30" (6mm - 750mm)
- Burst Pressure:**
3 - 75,000 psig (0,207 - 5171 barg)
- Manufacturing Range:**
Standard, 3/4, 1/2
- Maximum Recommended Operating Ratio:**
70%
- Available Maximum Temperature Limit:**
1000° F (538° C)
- Service:**
Gas or Liquid
- Nonfragmenting Design:**
No
- Withstand Full Vacuum:**
with Vacuum Support
- Operating Conditions:**
Static, Cyclic or Pulsating
- Material(s):**
316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL®, Tantalum, Aluminum and Silver
- Seat Configuration:**
30°
- Holders:**
Insert Holder, Full Bolted Holder, Union Holder, Screw Type Holder
- Compatible with the Following B.D.I. Alarm System:**
Universal
- Tagging:**
Three dimensional stainless steel flow direction tag attached to 1" (25mm) sizes and above except when used in a Union Holder
- For Additional Information Refer To:**
Standard Rupture Disc Datasheet

Composite 30° Seat Rupture Discs



The **Composite Rupture Disc** is designed for systems requiring a lower burst pressure than offered in Standard discs. Continental Disc Corporation's seven-hole center pattern is designed for non-fragmentation when used with a TEFLON® seal.

FEATURES/SPECIFICATIONS

- Sizes:**
1" - 30" (25mm - 750mm)
- Burst Pressure:**
2 - 1440 psig (0,138 - 99,3 barg)
- Manufacturing Range:**
Standard, 3/4, 1/2, 1/4, ZERO
- Maximum Recommended Operating Ratio:**
80%
- Available Maximum Temperature Limit:**
500° F (260° F)
- Service:**
Gas or Liquid
- Nonfragmenting Design:**
Yes
- Withstand Full Vacuum:**
with Vacuum Support
- Operating Conditions:**
Static, Cyclic or Pulsating
- Material(s):**
316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL®, Tantalum, Aluminum, Silver and TEFLON®
- Seat Configuration:**
30°
- Holders:**
Insert Holder, Full Bolted Holder, Union Holder
- Compatible with the Following B.D.I. Alarm System:**
Universal
- Tagging:**
Three dimensional stainless steel flow direction tag attached except for use in a Union Holder
- For Additional Information Refer To:**
Composite Type Rupture Disc Datasheet

TENSION/
FORWARD
ACTING



CAL-VAC® Rupture Disc Assembly



Insert Style

Sanitary Style

The **CAL-VAC® Rupture Disc Assembly** is a highly accurate pressure relief device for protecting vessels and equipment against damaging vacuum conditions. Proven features include:

- Designed to open on vacuum within a 6 INWC spread
- Pressure setting starting at 1 INWC
- Can be operated to within 1 INWC or 90%, dependent upon rating
- Dual directional pressure protection (positive or negative)
- Designed for non-fragmentation

FEATURES/SPECIFICATIONS

Sizes:

3" - 12" (80mm - 300mm)

Burst Pressure:

Positive: 2 - 150 psig (0,138 - 10,3 barg)
 Vacuum: 1 - 30 INWC*

Manufacturing Range:

Positive: Standard, 3/4, 1/2, 1/4, ZERO
 Vacuum: 6 INWC spread

Maximum Recommended Operating Ratio:

Positive: 80%
 Vacuum: 90% of MIN or within 1 INWC, whichever is greater

Available Maximum Temperature Limit:

400° F (204° C)

Service:

Gas or Liquid

Nonfragmenting Design:

Yes

Withstand Full Vacuum:

Not Applicable

Operating Conditions:

Static, Cyclic or Pulsating

Material(s):

316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL®, Tantalum and TEFLON®.

Seat Configuration:

Flat seat

Holders:

CAL-VAC® Sanitary Holder, CAL-VAC® Insert Holder

Compatible with the Following B.D.I. Alarm System:

Integral

Tagging:

Insert Style: Three dimensional stainless steel flow direction tag attached
 Sanitary Style: Unattached stainless steel tag provided

For Additional Information Refer To:

CAL-VAC® / POS-A-SET® Datasheet

* Contact your Sales Representative for higher pressure ratings

POS-A-SET® Rupture Disc Assembly



Insert Style

Sanitary Style

The **POS-A-SET® Rupture Disc Assembly** is a highly accurate pressure relief device for protecting vessels and equipment against damaging positive pressure conditions. Proven features include:

- Designed to open on positive pressure within a 6 INWC spread
- Positive pressure setting starting at 1 INWC
- Can be operated to within 1 INWC or 90%, dependent upon rating
- Dual directional pressure protection (positive or negative)
- Designed for non-fragmentation

FEATURES/SPECIFICATIONS

Sizes:

3" - 12" (80mm - 300mm)

Burst Pressure:

Positive: 1 - 30 INWC*
 Vacuum: 2 - 150 psig (0,138 - 10,3 barg)

Manufacturing Range:

Positive: 6 INWC spread
 Vacuum: Standard, 3/4, 1/2, 1/4, ZERO

Maximum Recommended Operating Ratio:

Positive: 90% of MIN or within 1 INWC, whichever is greater
 Vacuum: 80%

Available Maximum Temperature Limit:

400° F (204° C)

Service:

Gas or Liquid

Nonfragmenting Design:

Yes

Withstand Full Vacuum:

Not Applicable

Operating Conditions:

Static, Cyclic or Pulsating

Material(s):

316 SS, 316L SS, HASTELLOY® C, Nickel, MONEL®, INCONEL®, Tantalum and TEFLON®

Seat Configuration:

Flat seat

Holders:

POS-A-SET® Sanitary Holder, POS-A-SET® Insert Holder

Compatible with the Following B.D.I. Alarm System:

Integral

Tagging:

Insert Style: Three dimensional stainless steel flow direction tag attached
 Sanitary Style: Unattached stainless steel tag provided

For Additional Information Refer To:

CAL-VAC® / POS-A-SET® Datasheet

* Contact your Sales Representative for higher pressure ratings

ULTRA
LOW
PRESSURE



B.D.I.® Alarm System

ALARM SYSTEMS



Integral B.D.I.



Universal B.D.I.

The **B.D.I.® Alarm System** is designed specifically for use with Continental Disc Corporation rupture discs or vent panels.

The B.D.I.® Alarm System consists of an alarm strip, interfaced with a monitoring unit, computer, annunciator panel, control panel or other equipment. The alarm system is activated by the opening of a rupture disc or vent panel.

The B.D.I.® Alarm System is a normally closed, low-powered circuit. When a rupture disc opens, the alarm strip is severed, interrupting the circuit which activates a monitoring device. This device is used to signal that an overpressure condition has occurred and that media is venting.

Proven features include:

- Signals instantly when a rupture disc or vent panel has opened.
- Positive signal of fugitive emissions and/or the occurrence of an overpressure relief condition.
- Signals emergency equipment, control room and/or operating personnel to alter or stop a process.
- Prevents an undetected open vent line once an overpressure condition occurs.

The B.D.I. Alarm Strip is manufactured as either an Integral B.D.I. or a Universal B.D.I. design, dependent upon the rupture disc product it is to mate with.

Both the Integral B.D.I. and Universal B.D.I. designs are available with the choice of a molded plug or bare leads connection. B.D.I. Lead Wire Assemblies of different lengths are available to connect the Integral B.D.I. or Universal B.D.I. with molded plug connection to the monitoring system.

For Additional Information Refer To:
B.D.I.® BURST DISC INDICATOR Datasheet

RUPTURE DISC HOLDERS

RUPTURE DISC HOLDERS

HOLDER OPTIONS

Continental Disc Corporation holders are available in a variety of types and styles to meet your needs. The rupture disc selection table, as shown on pages 6-7, shows which disc may be used in specific holders, and the holder options which are available.

Continental Disc Corporation offers an extensive line of holders including:

- Insert Holders
- HPX-PT™ Pre-Torqued Holders
- Double Disc Holders
- Full Bolted Holders
- Screw Type Holders
- Union Type Holders
- CLEAN-SWEEP® Holders

Consult your Continental Disc Corporation representative or the factory for those applications needing additional features or modification.

Sealing Capabilities

Continental's holder designs provide superior sealing capabilities to prevent product loss or contamination. The tapered seat configuration of Continental's HPX®, UNISERT®, ULTRX® and RCS holders outperforms other, similar designs, without the need for "pre-torque" arrangements. However, a pre-torque-able holder is available for those customers who desire one, or whose specifications require it.

Insert Holders

Insert type rupture disc holders are flat faced assemblies that fit between two ASME, DIN or JIS companion flanges, as shown in the photograph to the right. Insert holders to fit other standards are available. These holders are designed for eleven different rupture disc styles, described in paragraphs 1 through 4 below. Common features of Continental Disc Corporation's Insert Holders include:



- Fit within companion flange bolts, allowing easy installation and removal
 - Pre-assembly clips are standard and provide means to assemble the rupture disc and holder together before installation in piping system
 - Stainless steel flow direction nameplates permanently attached to the holder
 - Stainless steel customer identification tag permanently attached
1. 7I Insert holders, designed for Standard and Composite rupture discs, are available in 30° light or heavy lip configurations, dependent upon size.
 2. The UNISERT® Insert holder has a flat seat configuration for use with either a MICRO X® or Composite flat seat rupture disc. Holder alignment pins and matching notches in the rupture disc provide correct rupture disc orientation in the holder. A J-Hook, along with flow direction arrows on the nameplate, aids in proper assembly installation between the companion flanges.
 3. The HPX®, ULTRX® and LOTRX® Insert holders are designed with either a tapered or flat raised seat on the holder inlet. This design allows a uniform seal load on the mating rupture disc. Each holder has a number of round and/or oblong pins and the mating rupture disc is identically notched, providing proper rupture disc orientation in the holder. A J-Hook and flow direction arrows on the nameplates aid in the correct assembly orientation between companion flanges.
 4. The RCS Insert holder is designed for simplicity and safety of installation with superior sealing capabilities. Three round pins located in the holder inlet and matching holes in the RCS Rupture Disc provide correct rupture disc and flow direction orientation. A tapered seat configuration allows a uniform seal load on the rupture disc.

HPX®-PT Pre-Torqued Holders

HPX-PT pre-torqued holders incorporate high strength steel socket head cap screws to ensure accurate loading and sealing of the HPX® rupture disc. The HPX-PT holder allows the disc to be correctly fitted in the workshop using precise recommended torque levels, prior to installation of the complete assembly between the flanges in the process system relief stream.



MARKETS & APPLICATIONS SERVED BY CONTINENTAL DISC CORPORATION PRODUCTS

From very tiny to very large, from extreme compression to barely a breath, Continental Disc Corporation has been manufacturing rupture discs (bursting discs) to operate in every application you can imagine. The list below shows just a few of the places where Continental rupture discs are doing the job. If you don't see your application listed, just contact us and let us show you how we have handled pressure problems just like yours.

CHEMICAL INDUSTRY

- Pressure Vessels for Primary Pressure Relief
 - Reactors, Spheres, Towers, Cylinders
 - Safety Relief Valve Isolation
- Shell and Tube Heat Exchangers
 - Low Pressure Side
 - High Pressure Side
- Pump Discharge to Prevent Blocked Discharge
- Utilities
 - Heating or Cooling Systems (Dowtherm®, Ammonia, Freon)
 - Steam
 - Cryogenic Gasses
 - Headers, Knock Out Drums, Flares, Thermal Oxidizers

OIL & GAS INDUSTRY

- Land-Based & Offshore Well-Drilling & Servicing
- Offshore Platforms & Pumping Stations
 - Double Discs for FPSO Heat Exchangers
- Refinery Operations
- Pipeline Pumping Stations

PHARMACEUTICAL & COSMETICS INDUSTRY

- Specialty Chemical (API) Manufacturing
- Hygienic Service for Human & Animal Health Products
 - Chemical Processing Vessels
 - Specialty Chemical Processing Equipment—Filters, Chromatographs, Autoclaves, Fermentation
 - Clean Steam for Cleaning or Process System
 - Storage Tanks for Chemicals & Finished Product
 - Clean-In-Place & Sterilize-In-Place Systems
 - Skid & Module Manufacturers

PULP & PAPER INDUSTRY

- Digester Pressure Protection
- Bleaching System
- Refiner Housing Pressure Protection
- Non-Condensable Gas Recovery & Discharge Header
- Chemical Processing Vessels

FOOD & BEVERAGE INDUSTRY

- Process Vessels for Aseptic Service
- Storage Vessels for Aseptic Service
- Stainless Steel Storage Vessels
- Clean Steam Systems for Processing & Cleaning Systems
- Fermentation Vessels
- Pump Discharge Lines
- Special Process Equipment

SPECIALTY GAS INDUSTRY

- Separation Towers (Oxygen, Nitrogen, Hydrogen, CO₂, Argon)
- Shell & Tube Heat Exchangers
- High & Low Pressure Storage Vessels
- Field Service Applications
- Transportation Tanks
- OEM's for Cylinders, Vessels, Trailers

ADDITIONAL SPECIALTY MARKETS

- Plastic Extrusion
- Chiller Systems (Ammonia or Freon)
- Mining
- Oilfield Service Industry
- Electrical Switchgear or Transformers
- Aircraft, Aerospace & Military Equipment
- Ultra-Pure Semiconductor Gas Systems
- High Pressure Hydraulics
- High Pressure Tanks
- Desalination
 - Municipal & Industrial Plants
 - Transition from Thermal to RO Technology
- Geothermal Energy
- LNG (Import And Export)
- Solar Energy
- Wind Energy
- Syngas
 - Biodiesel
 - Ethanol
 - Algae
 - Coal to Gas

MARKETS SERVED



