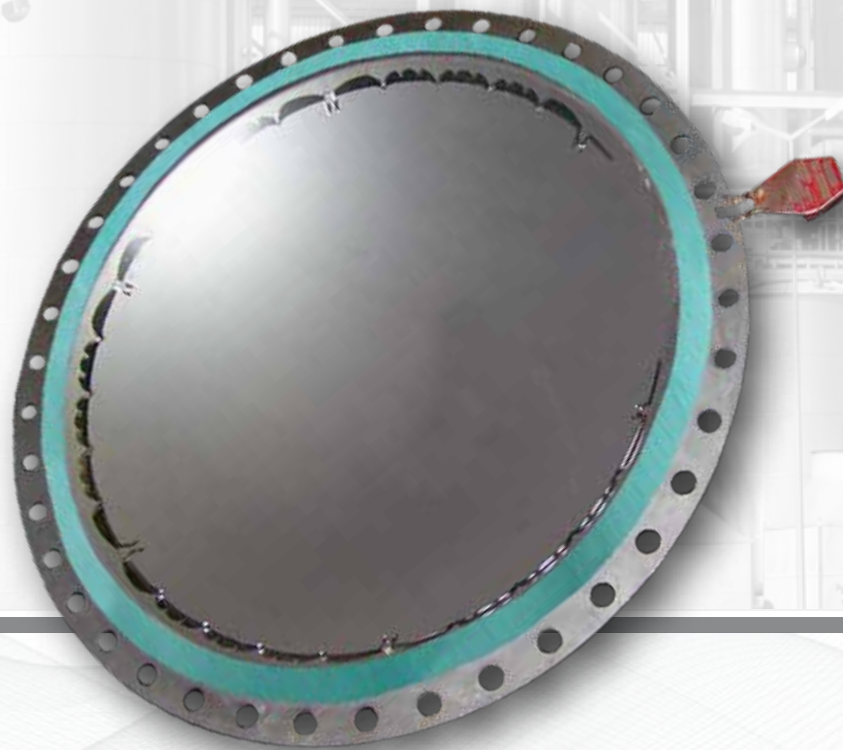




Catalog #77-4024



# RC™ Series Reverse Buckling Rupture Disk

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# RCV™ Reverse Buckling Rupture Disks

The RCV™ reverse buckling rupture disk is designed for low burst pressure applications where simple installation directly between companion flanges is preferred (*Optional safety heads are available*).

The two-layer construction is comprised of a solid metal seal membrane on the process side and precision cut metal support on the atmospheric side. The combined strength of the two layers determines the burst pressure of this reverse buckling disk.

At burst, the collapse of the downstream support reveals a tooth ring which cuts the seal open to provide pressure relief. Disk is supplied with compressed fiber gaskets. Contact BS&B for other gasket options.

## BURST ALERT® SENSORS

Type RCV rupture disks can be used in combination with a burst alert sensor applied on the downstream side of the disk. Refer to Catalog #77-1010 Burst Alert® Sensors for more information.

## DISK DOME PROTECTION

The user is cautioned to avoid RCV disk damage during handling and installation. Disk burst pressure is controlled by the shape of the RCV disk, any alteration will affect the expected performance.

Enhanced disk dome protection is provided with use of a BS&B safety head. Order as RCS™ disk. The RCS shares design characteristics with the RCV disk but is configured for use in BS&B safety head models.

RCS Reverse Buckling Rupture Disk and SRB-7RS™ TR Safety Head



## FEATURES

- Direct installation between companion flanges
- Provided with integral gaskets on both sides
- Smooth process side rupture disk seal resists product accumulation
- Suitable for operating pressure to 90% of the marked burst pressure (95% of the minimum burst pressure)
- Vacuum resistant
- Gas service (acceptable for liquid service with a compressible gas / vapor pocket between the liquid and disk)
- Designed for non-fragmentation
- Suitable for cycling service
- Recommended for relief valve isolation
- Available with ASME “UD” when installed with a safety head (model RCS)
- Available with “CE” marking with burst pressures 0.5 bar and higher

## MANUFACTURING DESIGN RANGE (MDR)

The standard MDR for the RC Series disk is 0%, -5%, -10%. The user’s requested burst pressure will be the marked burst pressure.

## BURST TOLERANCE

Marked Burst Pressure		Burst Tolerance	
psig	barg		
0.7 to 3	0.05 to 0.21	+/- 0.5 psig	+/- 0.03 barg
3 to 10	0.21 to 0.69	+/- 1 psig	+/- 0.07 barg
10 to 40	0.69 to 2.76	+/- 2 psig	+/- 0.14 barg
> 40	>2.76	+/-5%	

## STANDARD MATERIALS

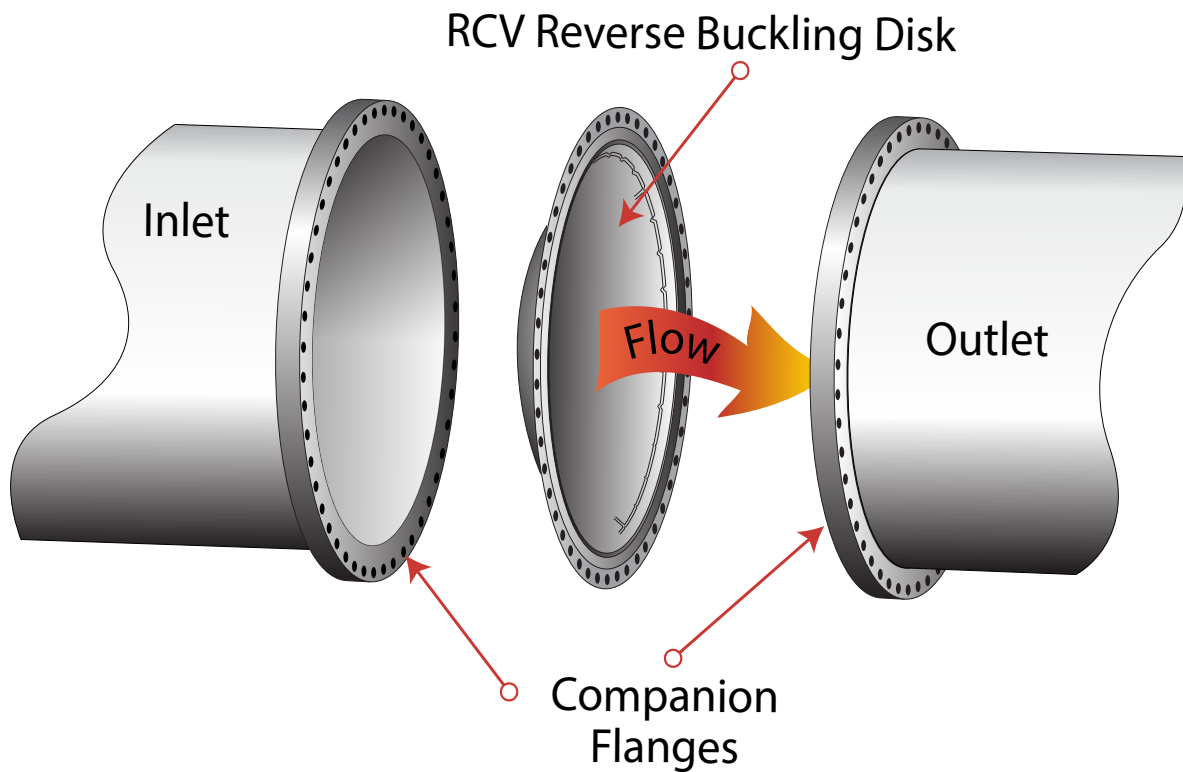
Sealing Membrane (process side)	
Stainless Steel	Inconel (Alloy 600)
Hastelloy® (Alloy C-276)	Monel® (Alloy 400)
Nickel	Special materials upon request
Downstream Support (vent side)	
Stainless Steel	Special materials upon request

*Note: Hastelloy® is a trademark of Haynes International Inc. Monel® and Inconel® are registered trademarks of Special Metals Corporation and its subsidiaries.*

RCV™ Disk Specifications Min / Max Pressure Rating at 72°F (22°C)

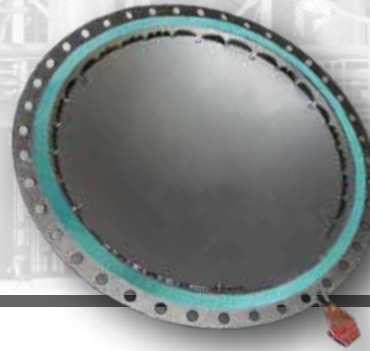
Disk Size		All Materials			
		Min Burst Pressure		Max Burst Pressure	
in	mm	psig	barg	psig	barg
2	50	45	3.10	125	8.62
3	80	22	1.52	98.5	6.80
4	100	8.7	0.60	85	5.86
6	150	7.3	0.50	70	4.8
8	200	7.3	0.50	50	3.45
10	250	5.8	0.40	50	3.45
12	300	2.9	0.20	50	3.45
14	350	2.9	0.20	50	3.45
16	400	2.9	0.20	50	3.45
18	450	1.5	0.10	50	3.45
20	500	1.5	0.10	50	3.45
24	600	0.7	0.048	50	3.45
26	650	0.7	0.048	50	3.45
28	700	0.7	0.048	50	3.45
30	750	0.7	0.048	50	3.45
32	800	0.7	0.048	50	3.45

CE marking available for burst pressures 0.5bar and higher.  
Larger sizes available. Consult BS&B for details.





**BS&B<sup>®</sup>**



RCV Reverse buckling  
Composite disk

## AMERICAS

### **Tulsa, OK USA**

T: +1 918 622 5950  
E: sales@bsbsystems.com

### **Houston, TX USA**

T: +1 713 682 4515  
E: sales@bsbsystems.com

### **Minneapolis, MN USA**

T: +1 952 941 0146  
E: sales@bsbipd.com

### **Edmonton, AB Canada**

T: +1 780 955 2888  
E: contacts@bsbprocess.com

### **Monterrey, Mexico**

T: +011 52 81 8299 5861  
E: sales@bsbsystems.com

### **Sao Paulo, Brasil**

T: +55 11 2084 4800  
E: sales@bsbbrasil.com

## EUROPE, MIDDLE EAST & AFRICA

### **Limerick, Ireland**

T: +353 61 484700  
E: sales@bsb.ie

### **Düsseldorf, Germany**

T: +49 211 930550  
E: info@bormann-neupertbsb.de

### **Manchester, UK**

T: +44 161 955 4202  
E: sales@bsb-systems.co.uk

### **The Hague, The Netherlands**

T: +31 20 399 9965  
E: info@bsbsystems.nl

### **Copenhagen, Denmark**

T: +45 29 65 69 61  
E: info@bsbsystems.dk

### **United Arab Emirates**

T: +971 (0) 55 518 0314  
E: sales@bsbsystems.ae

## ASIA PACIFIC

### **Singapore**

T: +65 6 513 9780  
E: sales@bsb.com.sg

### **Yokohama, Japan**

T: +81 45 450 1271  
E: information@bsb-systems.co.jp

### **Seoul, South Korea**

T: +82 2 2636 9110  
E: sales@bsbsystems.kr

### **Shanghai, China**

T: +86 21 6391 2299  
E: sales@bsbsystems.com

### **Chennai, India**

T: +91 44 2450 4200  
E: sales@bsbsystems.com

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