



CCS™ and CCS-L™

Precision Circular-Scored Reverse Buckling Rupture Disk



CCS-L™ Scored Reverse Buckling Rupture Disk (Lower Burst Pressures)

CCS™ Scored Reverse Buckling Rupture Disk

The CCS and CCS-L (for lower burst pressures) are precision circular scored reverse buckling rupture disks. When over-pressurized, the domed, solid metal, reverse buckling disks reverse and open along a pre-weakened circular score lines on the down-stream side of the disks. A hinge welded to the disk facilitates relief opening along the score line and retains the disk's central petal preventing fragmentation even at high burst pressures.

Features

- For gas or liquid service
- Designed for non-fragmentation
- Withstands full vacuum
- Suitable for operating pressure to 90% of the marked burst pressure and 95% of the minimum burst pressure (CEN ISO 4126-2 standard pending)
- Damage safety ratio 1.5. A damaged CCS and CCS-L disk will burst at or below 1.5 times its marked burst pressure
- Optimum fatigue resistance in pressure pulsating or cycling conditions
- Recommended for safety relief valve isolation
- Optional fluoropolymer/plastic liners on the process and / or down-stream side of the disk
- For installation in Types SRI-7RS, SRB-7RS, SRB-7FS, S90-7R, SPR-7R, SR-7R, and TR-Series safety heads

Burst Tolerance

Marked Burst Pressure	Burst Tolerance
≤ 40 psig (2.76 barg)	± 2 psig (0.138 barg)
> 40 psig (2.76 barg)	± 5%

Manufacturing Design Range (MDR)

The standard MDR for the CCS disk is 0%. The user's requested burst pressure will be the marked burst pressure. Optional MDR's of -5% and -10% may be selected as operating conditions permit. The MDR is applied to the minus side only of the requested burst pressure.



Activated, CCS™ Disk

CCS™ Disk Specifications Minimum / Maximum Pressure with Rating at 72°F (22°C)

Disk Size		CCS				CCS-L				Material
in	mm	psig		barg		psig		barg		
		Min	Max	Min	Max	Min	Max	Min	Max	
1	25	481	750	33.2	51.7	75	480	5.2	33.1	Tantalum, Nickel Alloy 200, Hastelloy® Alloy C-276 and 316ss, Inconel® Alloy 600, Monel® Alloy 400, and Titanium
1.5	40	421	600	29.0	41.4	75	420	5.2	29.0	
2	50	421	500	29.0	34.5	75	420	5.2	29.0	
3	80	281	500	19.4	34.5	45	280	3.1	19.4	
4	100	271	500	18.7	34.5	20	270	1.4	18.7	
6	150	101	200	7.0	13.8	20	100	1.4	7.0	
8	200	76	150	5.2	10.3	15	75	1.0	5.2	
10	250	60	100	4.1	6.89	13	60	0.9	4.1	
12	300	45	75	3.1	5.17	11	45	0.76	3.10	

The hinge attached to the disk is 316ss. Fluoropolymer liners are available at all burst pressures and may be applied to either side or both sides of a CCS or CCS-L Rupture Disk. Liners may not be available for all burst pressures shown.

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

AMERICAS

Tulsa, OK USA

T: +1 918 622 5950
F: +1 918 665 3904
E: sales@bsbsystems.com

Houston, TX USA

T: +1 713 682 4515
F: +1 713 682 5992
E: sales@bsbsystems.com

Minneapolis, MN USA

T: +1 952 941 0146
F: +1 952 941 0646
E: sales@bsbipd.com

Edmonton, AB Canada

T: +1 780 955 2888
F: +1 780 955 3975
E: contacts@bsbprocess.com

Monterrey, Mexico

T: +011 52 81 8299 5861
T: +011 52 81 8299 5862
E: sales@bsbsystems.com

Sao Paulo, Brasil

T: +55 11 2084 4800
F: +55 11 2021 3801
E: sales@bsbbrasil.com

EUROPE, MIDDLE EAST & AFRICA

Limerick, Ireland

T: +353 61 484700
F: +353 61 227987
E: sales@bsb.ie

Düsseldorf, Germany

T: +49 211 930550
F: +49 211 3982171
E: info@bormann-neupertbsb.de

Manchester, UK

T: +44 161 955 4202
F: +44 161 870 1086
E: sales@bsb-systems.co.uk

Moscow, Russia

T: +7 495 747 5916
F: +7 499 133 4394
E: sales@bsbsystems.ru

The Hague, The Netherlands

T: +31 70 362 2136
F: +31 70 360 4724
E: info@bsbsystems.nl

Copenhagen, Denmark

T: +45 3318 9000
F: +45 3318 9001
E: info@bsbsystems.dk

ASIA PACIFIC

Singapore

T: +65 6513 9780
F: +65 6484 3711
E: sales@bsb.com.sg

Yokohama, Japan

T: +81 45 450 1271
F: +81 45 451 3061
E: information@bsb-systems.co.jp

Seoul, South Korea

T: +82 2 2636 9110
F: +82 2 2636 9120
E: sales@bsbsystems.kr

Shanghai, China

T: +86 21 6391 2299
F: +86 21 6391 2117
E: sales@bsbsystems.com

Chennai, India

T: +91 44 2450 4200
F: +91 44 2450 1056
E: sales@bsbsystems.com

Visit our website for the most complete, up-to-date information

Products, specifications and all data in this literature are subject to change without notice. Questions regarding product selection and specifications for specific applications should be directed to BS&B. All sales are subject to the BS&B companies' standard terms and conditions of sale. Nothing herein should be construed as a warranty of merchantability or fitness for a particular purpose.

www.bsbsystems.com | www.bsb.ie



UD

©2018 BS&B Innovations, Ltd.