



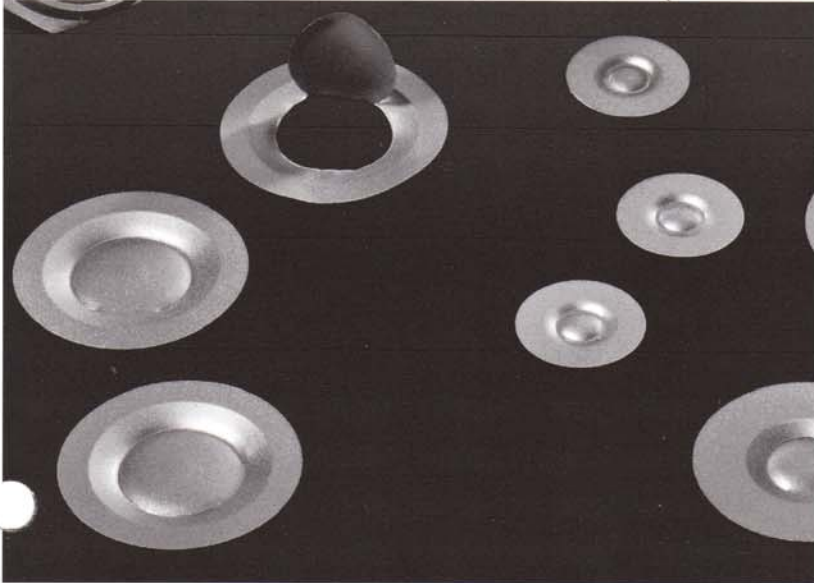
SAFETY SYSTEMS

FRB* FRUSTUM REVERSE BUCKLING RUPTURE DISK

CATALOG
77-4008

SECTION D-4

The most advanced rupture disk technology provides a reverse buckling style disk in sizes less than 1 inch (25mm) and in extremely low pressures. The reliable and accurate performance of the FRB makes it ideal for applications in the Aircraft, Defense and OEM Industries.



FEATURES

- Standard sizes: 1/4, 3/8, 1/2 inch (6.4, 9.5, 13mm)
- Pressure Ratings from 35 psid (2.41 bard) to 700 psid (48.28 bard)
- Opens along Circular Score
- Compression loaded, reverse buckling disk
- Standard materials: 316ss, Nickel 200, Inconel 600

BENEFITS

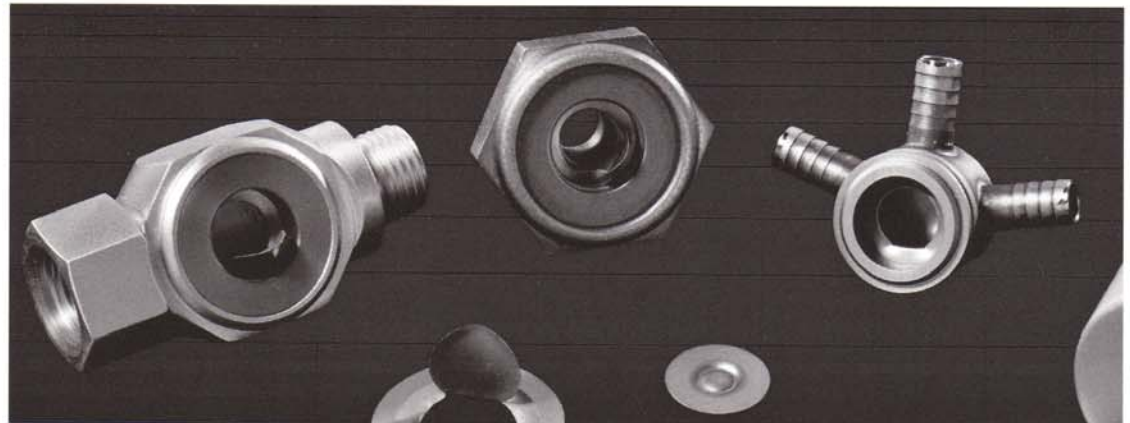
- Lowest possible burst pressure ratings available in small diameters
- Can operate up to 80% of its rated burst pressure
- Superior performance in cycling service
- Full opening in either gas or liquid service**
- Accurate and reliable burst ratings
- Minimal or no fragmentation
- Withstands full vacuum without extra support
- Various holder designs are available to meet customer's special applications

SAMPLE APPLICATIONS

- Lithium Batteries
- Fire Extinguishers
- Compressed Gas Cylinders
- Refrigeration Units
- Aerospace Missiles
- Aircraft Wheels

*US Patent #4,576,303

**See Engineering Information



NOTE: Disks alone will not be sold without BS&B's approval of holder design



FRB RUPTURE DISK SELECTION DATA

SAFETY SYSTEMS

Pressure Ratings at 72° F (22° C) For Gas or Vapor Service

DISK SIZE		DISK MATERIAL*											
		NICKEL 200				INCONEL 600				316 SS			
		MIN		MAX		MIN		MAX		MIN		MAX	
IN	MM	PSID	BARD	PSID	BARD	PSID	BARD	PSID	BARD	PSID	BARD	PSID	BARD
1/4	6.4	100	6.89	450	31.03	150	10.34	700	48.28	150	10.34	700	48.28
3/8	9.5	50	3.45	400	27.59	60	4.14	650	44.83	60	4.14	650	44.83
1/2	13	35	2.41	200	13.79	45	3.10	450	31.03	45	3.10	450	31.03

Pressure Ratings at 72° F (22° C) For Liquid Service

DISK SIZE		DISK MATERIAL*											
		NICKEL 200				INCONEL 600				316 SST			
		MIN		MAX		MIN		MAX		MIN		MAX	
IN	MM	PSID	BARD	PSID	BARD	PSID	BARD	PSID	BARD	PSID	BARD	PSID	BARD
1/4	6.4	250	17.24	450	31.03	250	17.24	700	48.28	250	17.24	700	48.28
3/8	9.5	150	10.34	400	27.59	150	10.34	650	44.83	150	10.34	650	44.83
1/2	13	80	5.52	200	13.79	80	5.52	450	31.03	80	5.52	450	31.03

* Consult factory for material and burst pressure availability.

ENGINEERING INFORMATION

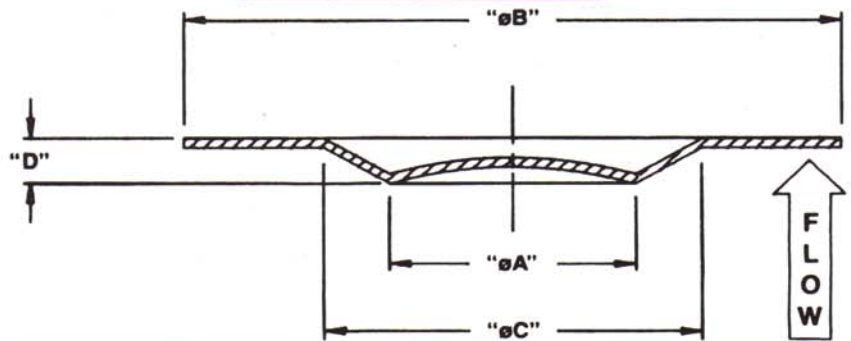
- Burst rating must be specified within the defined min/max pressures
- Consult factory for a burst range applicable to a specific burst pressure
- Minimum and maximum pressure ratings are applicable at 72°F (22° C)

NOTE

Recommended maximum temperature for each metal is:

Metal	°F	°C
Nickel 200	750	399
Inconel 600	900	482
316SS	900	482

DISK DIMENSIONS



NOMINAL SIZE INCHES	"A"	"B"***	"C"	"D"
	FLOW DIAMETER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAXIMUM HEIGHT
1/4	.215	.550	.315	.030
3/8	.350	.935	.500	.050
1/2	.525	.935	.750	.060

** Consult factory for other available diameters.

NOTE: 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, Attn: Customer Service Dept.

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