



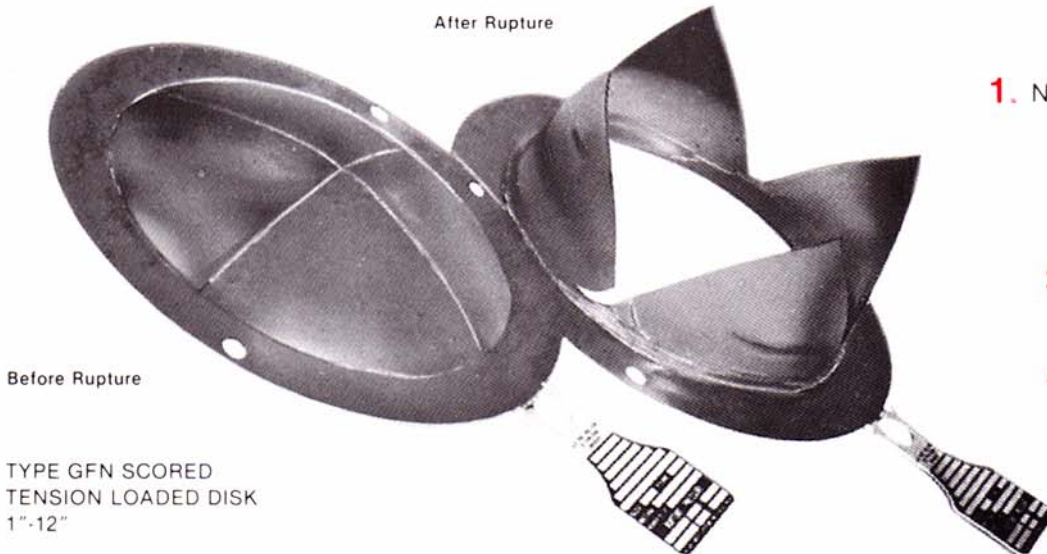
SAFETY SYSTEMS

GFN RUPTURE DISK, NF-7R AND NF-7RS SAFETY HEAD

CATALOG 77-5002

SECTION C-2

A UNIQUE TENSION LOADED RUPTURE DISK WHICH IS SCORED AFTER THE DISK IS CROWNED. THE GFN RUPTURE DISK IS WELL SUITED FOR APPLICATIONS BEYOND WHERE MOST TENSION LOADED DISKS CAN BE USED, ESPECIALLY IN POLYMERIZATION PROCESSES.



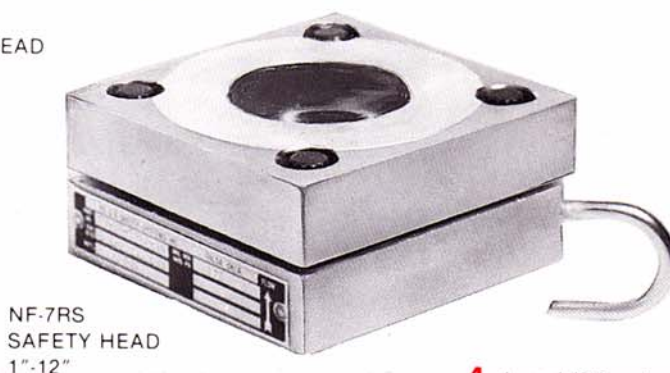
GFN BENEFITS:

1. Non-Fragmenting. Opens along pre-weakened score lines.
2. Will withstand full vacuum without vacuum supports.
3. Operates up to 85% of disk burst pressure.
4. 300% longer cycle life than other tension loaded disks in operating conditions of full vacuum to 85% of burst pressure.
5. Fail Safe—Disks damaged or installed incorrectly will rupture at rated pressure or lower.
6. For use in gas service. Consult factory for liquid service applications.



NF-7R AND NF-7RS FEATURES:

1. QUIK-SERT Type Safety Heads—reduced diameter assembly that fits between the studs of two ANSI flanges.
2. Positive locating pins center the disk correctly in the Safety Heads, thus eliminating disk slippage and possible incorrect installation.
3. For extra protection, a J-Bolt is standard on the Safety Head inlets. The Safety Heads can only fit between the companion flanges in the one direction that allows the J-Bolt to mate with the drilled hole in the companion flange inlet. Correct flow direction is thus assured.
4. In addition to the above features, the NF-7RS Safety Head can be pretorqued in the shop under controlled circumstances for exact calibration and easier, more economical installation.





SAFETY SYSTEMS

SELECTION DATA

SPECIFICATIONS FOR STANDARD GFN RUPTURE DISKS

Min/Max Disk Pressure Rating at 72°F (PSIG)										
Disk Size (Inches)	Disk Material*									
	Aluminum		Nickel-200		Inconel-600		Monel-400			
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
1	113	188	188	1500	225	1800	225	1500	335	1800
1½	81	135	135	1500	165	1800	165	1500	250	1800
2	68	113	113	1350	135	1800	135	1500	200	1800
3	54	90	90	1250	108	1600	108	1400	160	1600
4	45	75	75	1200	90	1400	90	1200	135	1400
6	36	60	60	1200	72	1400	72	1200	NA	NA
8	NA	NA	53	1100	63	1300	63	1100	NA	NA
10	NA	NA	45	1100	54	1300	54	1100	NA	NA
12	NA	NA	41	900	50	1100	50	900	NA	NA
16	NA	NA	35	150	42	270	NA	NA	NA	NA
18	NA	NA	33	138	39	240	NA	NA	NA	NA
20	NA	NA	32	126	36	213	NA	NA	NA	NA
24	NA	NA	30	105	33	177	NA	NA	NA	NA

ENGINEERING INFORMATION

Minimum and maximum pressure ratings are applicable at 72°F.

Manufacturing Range:

Available with either 5% or 10% manufacturing range. The total range is placed on the minus side of the requested rating.

*Consult factory for manufacturing ranges less than 5%.

Example.

If a 200 psig GFN is ordered with a 10% manufacturing range, it may be tagged at any pressure between 200 psig and 180 psig.

Burst Tolerances:

Burst tolerances are the maximum variation from the above tagged burst pressure.

Disks tagged above 40 psig. Burst Tolerance ± 5%. Disks tagged 40 psig and below: ± 2 psi.

Recommended maximum temperatures for each metal are:

Inconel: 1100°F. Monel: 900°F.
Nickel: 750°F. Aluminum: 250°F.

*Consult factory for availability of other materials.

Teflon[†] liners are available in all sizes as optional on the process or downstream side (or both).

† DuPont's registered trademark.

NF-7R AND NF-7RS SAFETY HEAD SPECIFICATIONS

Nominal Size (Inches)	ANSI Flange Rating (PSI)	Materials Available	Flange Thickness (Inches)	
			NF-7R	NF-7RS
1	150	Carbon Steel Stainless Steel (316) Monel Inconel Hastelloy C (Inlet & outlet materials need not be the same. Specify each.)	1½	1½
1	300		1½	1½
1½	150		1½	1¾
1½	300		1½	1¾
2	150		1½	1¾
2	300/600		1½	1¾
3	150		1⅝	2¾
3	300		1⅝	2¾
4	150		2¼	2¾
4	300		2¼	2¾
6	150		2⅓ ₁₆	3⅓ ₁₆
6	300		2⅓ ₁₆	3⅓ ₁₆

*Consult factory for 8" thru 12" sizes.

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 Department.