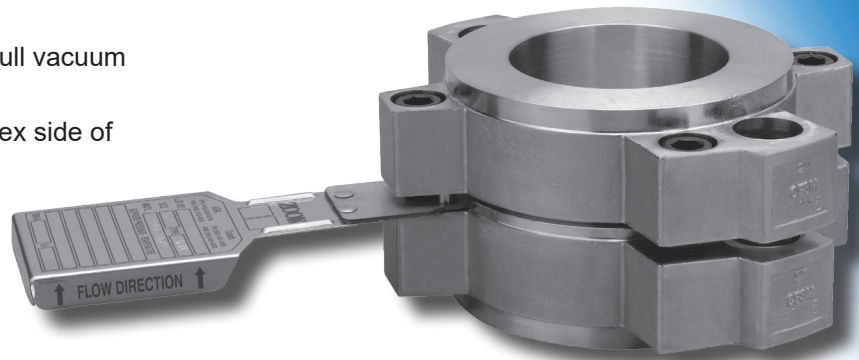




# FAX Series Scored Forward-Acting Metal Rupture Disks

## Features

- Solid metal cross-scored disk designed for Non-fragmentation
- Standard operating ratio of 85% of the marked rating on disk tag – may be extended to 90% of the minimum burst pressure. (Contact ZOOK for operating ratio on pressures below 40 psig)
- Standard manufacturing ranges of 0%, -5%, and -10% ensures marked rating on disk tag does not exceed the MAWP of equipment
- Wide range of standard and exotic materials available
- Sizes from 1" (25mm) through 24" (600mm)
- Burst ratings from 45 psi (3.10 barg) to 3600 psig (248.28 barg)
- Published minimum pressures withstands full vacuum without vacuum support
- Resists product build-up. The smooth convex side of the disk is exposed to the process media
- Unique design ensures proper disk orientation into holder
- 3-dimensional stainless steel tag is standard
- ASME UD (gas service only), CE, and TUV compliance available
- Scored after disk material is formed to a high crown height. Permits use of thicker material and allows lower burst ratings which withstand full vacuum
- Excellent for liquid, gas or 2 phased flow



FAX Series disk mounts into FAH Series disk holder (refer to FAH Series data sheet)

## Optional Features

- **Teflon liners** are available to provide protection from corrosive media. Note that the maximum temperature ratings for disks supplied with liners is lower than an unlined disk.
- **Protective Rings** are recommended to protect delicate liner materials and to provide stability on disks with lower pressure ratings.
- **Integral Burst Indication**
- **A Fail-Safe Design.** If the disk is damaged or incorrectly installed, it will always burst at or below the marked burst rating as indicated on the disk tag.

## Safety Relief Valve Protection

When a disk is mounted under a Relief Valve, the working components of the valve are isolated from hostile environments.

FAX	Base disk style – Solid metal Cross-Scored
FAX-R	Disk w/process side preventing ring
R-FAX-R	Disk w/vent and process side protective ring
FAX-L	Disk w/process side liner
FAX-LR	Disk w/process side liner and protective ring



**Safety** through **knowledge** and **performance**.

# FAX Series Specifications

## Minimum and Maximum Pressure Ratings - psig (barg) @ 72°F (22°C)

Disk Size	Minimum Burst Pressures <sup>1</sup> - psig @ 72°F (barg @ 22°C)					Maximum Burst Pressure	MNFA in <sup>2</sup> (cm <sup>2</sup> )
	Nickel	Inconel	Monel	316SS	Hastelloy C		
1"	79	110	100	110	165	3600	0.86
25 mm	(5.45)	(7.59)	(6.90)	(7.59)	(11.38)	(248.28)	(5.5)
1-1/2"	73	85	73	80	125	3600	2.04
40 mm	(5.03)	(5.86)	(5.03)	(5.52)	(8.62)	(248.28)	(13.16)
2"	61	70	65	61	102	3600	3.36
50 mm	(4.21)	(4.82)	(4.48)	(4.21)	(7.03)	(248.28)	(21.67)
3"	45	60	60	60	87	2159	7.39
80 mm	(3.10)	(4.14)	(4.14)	(4.14)	(6.00)	(148.90)	(47.67)
4"	45	60	55	60	84	2159	12.73
100 mm	(3.10)	(4.14)	(3.79)	(4.14)	(5.79)	(148.90)	(82.12)
6"	45	60	55	60	96	1440	28.89
150 mm	(3.10)	(4.14)	(3.79)	(4.14)	(6.62)	(99.31)	(187.37)
8"	45	60	55	60	93	1440	50.03
200 mm	(3.10)	(4.14)	(3.79)	(4.14)	(6.41)	(99.31)	(322.75)
10"	45	72	60	72	111	1440	78.85
250 mm	(3.10)	(4.97)	(4.14)	(4.97)	(7.66)	(99.31)	(508.67)
12"	45	82	65	82	120	720	113.10
300 mm	(3.10)	(5.66)	(4.48)	(5.66)	(8.28)	(49.66)	(729.62)
Max. Temp.	750°F (399°C)	900°F (482°C)	800°F (427°C)	900°F (482°C)	1000°F (538°C)		

**Notes:** For materials, sizes, burst ratings and temperatures not shown, contact ZOOK

<sup>1</sup>Minimum rating will support full vacuum without additional vacuum support

<sup>2</sup>Maximum temperature with optional Teflon® liner is 500°F (260°C) applies to all material types

**Teflon liner may be added to provide additional protection against corrosive media**

Requirements/Limitations when liner is added:

1. A protective ring is recommended
2. Max. Temperature of 500°F (260°C) – Limitations of liner material
3. Liner may be applied to all ratings. Contact ZOOK if liner is required on both sides of rupture disk

## Manufacturing Range / Burst Tolerance psig (barg) @ 72°F (22°C)

Specified Burst Pressure Rating	Manufacturing Ranges	Burst Tolerance
40 and below	0%, -5%, -10%	+/-2.00
(2.76 and below)		(+/-0.14)
above 40		+/-5%
(above 2.76)		(+/-5%)

**Notes:**

- 0% manufacturing range might not be available in all materials
- Burst tolerances are the maximum expected variation from the disk's marked burst pressure

## Certified Flow Resistance Factors

Disk Type	K <sub>rl</sub> (liquid)	K <sub>rg</sub> (Gas)
FAX / FAX-L	NA	1.63



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