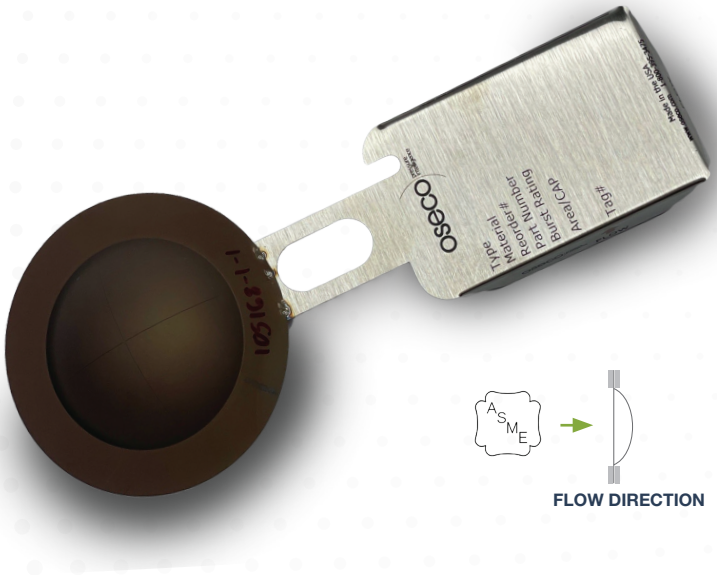
DATASHEET /
TECHNICAL SPECIFICATIONS

OsecoElfab

FAS FOR SWITCHGEAR

FORWARD ACTING SCORED

High-performance disc designed to meet the requirements of the GIS/AIS industry for **leak-tightness, corrosion resistance** *and* **longevity.**



The OsecoElfab FAS for Switchgear is designed and manufactured for the GIS/AIS industry.

The disc is cross-scored and annealed after the forming of its high crown. This process yields a high-performance disc to withstand high operating pressures wtihin the most difficult applications. With its specialist design, the FAS for Switchgear delivers the lowest Flow Resistance Factors (FRF/K_R) for gas applications in the market.

Customization outside of the ranges specified in this datasheet is possible - please contact us for further information.

Size	50mm - 250mm
Burst Pressure	2.1 - 20.7 barg
K_R Value	K_{RG} 0.223 K_{RL} 0.19
Operating Ratio	90%
Performance Tolerance	+/- 5%
Manufacturing Range	0%

Let us help you with all your pressure relief questions.

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TECHNICAL SPECIFICATIONS

Size range	50-250mm (2"-10")
Burst pressure range	2.1-20.7 barg (30-300 psig)
Temperature range	Up to 482°C (900°F)
Standard materials	Nickel (Others available on request)
K_R Value	K_{RG}: 0.223 K_{RL}: 0.19
Max. Operating Ratio	90%
Performance Tolerance	+/-5%
Manufacturing Range	0%
Fragmentation	Non-fragmenting design
Vacuum Service	Withstands full vacuum (14.7 psi) without separate vacuum support
Fluid compatibility	Gas service and liquid service
Torque requirements	See installation guide
Cycling or static service	Static service
Protective linings	PFA-grade Fluoropolymer liners available for atmospheric and/or process sides
Relief Valve Isolation	Suitable for safety relief valve isolation, especially at high pressures
Disc Surface Finish	Smooth surface on the process side to minimize product build-up
Design Standards	Designed to meet ASME Section XIII standards

Certifications

ASME UD
CRN
CE
CU/TR 032
China SELO

Related Products

Sensors
AMS
SVT
CMS

Holders
FRDI
FRDI - P
FRDH

Burst Pressure Ranges

FAS Min/Max Burst Pressure @ 22° C (barg) / 72° F (psig)

SIZE		MATERIAL	MIN barg (psig)	MAX* barg (psig)
DN (mm)	inches			
50	2	316 Stainless Steel Nickel Inconel Monel Hastelloy C	4.1 (60) 2.8 (40) 4.5 (65) 3.4 (50) 6.9 (100)	18.6 (270) 12.4 (180) 15.5 (225) 13.8 (200) 20.7 (300)
80	3	316 Stainless Steel Nickel Inconel Monel Hastelloy C	3.8 (55) 2.1 (30) 3.4 (50) 2.8 (40) 5.5 (80)	13.8 (200) 10.0 (145) 15.5 (225) 12.1 (175) 17.2 (250)
100	4	316 Stainless Steel Nickel Inconel Monel Hastelloy C	3.4 (50) 2.8 (40) 3.4 (50) 3.1 (45) 4.8 (70)	13.8 (200) 8.6 (125) 12.1 (175) 10.3 (150) 17.2 (250)
150	6	316 Stainless Steel Nickel Inconel Monel Hastelloy C	3.4 (50) 2.8 (40) 3.8 (55) 3.4 (50) 5.5 (80)	8.6 (125) 8.6 (125) 8.6 (125) 8.6 (125) 12.1 (175)
200	8	316 Stainless Steel Nickel Inconel Monel Hastelloy C	3.8 (55) 2.8 (40) 4.1 (60) 3.4 (50) 3.9 (85)	8.6 (125) 8.6 (125) 8.6 (125) 8.6 (125) 12.1 (175)
250	10	316 Stainless Steel Nickel Inconel Monel Hastelloy C	4.5 (65) 2.8 (40) 4.5 (65) 3.8 (55) 6.9 (100)	8.6 (125) 8.6 (125) 8.6 (125) 8.6 (125) 12.1 (175)

**300 Series Stainless Steel Ring added on vent side*

Free Flow Area / Minimum Net Flow Area (MNFA)

NOMINAL BORE		MNFA	
DN (mm)	inches	mm^2	Sq. Inch
50	2	2,164	3.355
80	3	4,769	7.393
100	4	8,212	12.73
150	6	18,638	28.89
200	8	32,258	50.0
250	10	50,903	78.9

Burst Tolerance

+/-5% > 2.8 barg +/-5% > 40 psig	+/-0.14 barg ≤ 2.8 barg +/-2 psig ≤ 40 psig

K_R Value (Frictional Loss Factor)

K_R	FAS
K_{RG}	0.223
K_{RL}	0.19