

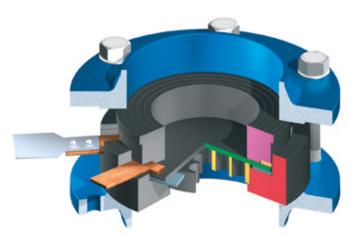
# DIABON® rupture disks

Rupture disks are used to assure high safety standards for operators and equipment in plants by avoiding uncontrolled pressure built-ups. Processing of highly corrosive media requires the use of corrosion resistant rupture disks.

SGL Carbon's rupture disks are made exclusively from [DIABON] graphite, PFA (fluoroplastic), PTFE and SIGRAFLEX® graphite foil. These materials are notable for their high resistance to a large number of aggressive media.

They are characterized by a precise threshold pattern with a large opening of the full cross section in case of activation.

While in metal safety disks the bursting pressure is a function of the operating temperature, we provide DIABON safety disks where this is only true at temperatures above  $50\,^{\circ}$ C [Series N, D and DV],  $250\,^{\circ}$ C [Series F] or even  $300\,^{\circ}$ C [Series HT].



 $\uparrow$  Example setup of DIABON series D safety disk



↑ DIABON safety disks

## **Customer benefits**

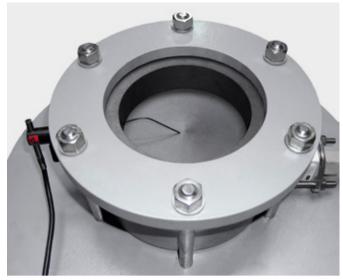
- Safety: large range of rupture disk design and material options available for multiple process conditions; alarm system can be provided
- Performance: brittle material behavior results in opening of the full cross section
- Service excellence: fast and competent services for repair and spare parts

By the way: DIABON phenolic resin impregnated graphite is certified by FDA (Food and Drug Administration)

#### Our solutions for typical applications

Several variants of bursting disks are available to serve your special purposes.

- Series N with resin impregnation for universal use in standard applications
- Series F with PFA coating for high temperature, vacuum and food applications
- Series HT for highest temperatures (up to 300 °C)
- Series D with a three-part construction for repeated reuse of holder and lowest costs
- Series DV with a three-part construction and a selfsupporting holder for repeated reuse of holder, ease of assembly (insensitive to torque) and low costs
- Bursting-type safety devices made from SIGRAFLEX graphite foil for very low pressures
- Also available are corrosion resistant alarm systems for rupture disks



↑ Rupture disk with alarm system

### Data for DIABON® safety disks

Technical specifications	Units							Series
		F	NI	N II	HTI	HTII	D	DV
Design						- Hillian		
Type of design		monoblock	monoblock	monoblock	monoblock	monoblock	three-part	three-part
Bursting pressure	barg	0.20 - 35	0.10 - 50	2.00 - 80	0.10 - 35	1.00 - 80	0.34 - 30	0.07 - 10
Temperature range	°C	-60 to +250	-60 to +200	-60 to +200	-60 to +300	-60 to +300	-60 to +200	-60 to +200
Bursting tolerance	%	+/- 10	+/- 10	+/- 10	+/- 10	+/- 10	+/- 10	+/- 5
Vacuum suited		•	•					
Bursting behavior unaffected by temperature		•			•	•		
FDA approved		•			•	•		
			SIGRAFLEX/	SIGRAFLEX/	SIGRAFLEX/	SIGRAFLEX/	SIGRAFLEX/	SIGRAFLEX/
		SIGRAFLEX/	resin	resin	SIGRAFLEX	SIGRAFLEX	resin	resin
Sealing		PFA	impregnation	impregnation	or PTFE	or PTFE	impregnation	impregnation
Mounting		DIN/ANSI	DIN/ANSI	DIN/ANSI	DIN/ANSI	DIN/ANSI	DIN/ANSI	DIN/ANSI



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#### TIS Rupture disks.01

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