

Composite bursting discs, Type C bi-directional

Benefits

- protection against overpressure and underpressure with a single bursting disc
- individual product specification for material, pressure and dimension
- lowest burst pressure and large dimensions possible
- fragment-free opening
- available with integrated burst detection
- possible support-free mounting

Description

Berstscheiben Schlesinger also offers bi-directional composite bursting discs.

The benefit: Plants can be secured against impermissible overpressure and underpressure with a single bursting disc.

Due to their construction, composite bursting discs are ideal for use at low to medium burst pressures.

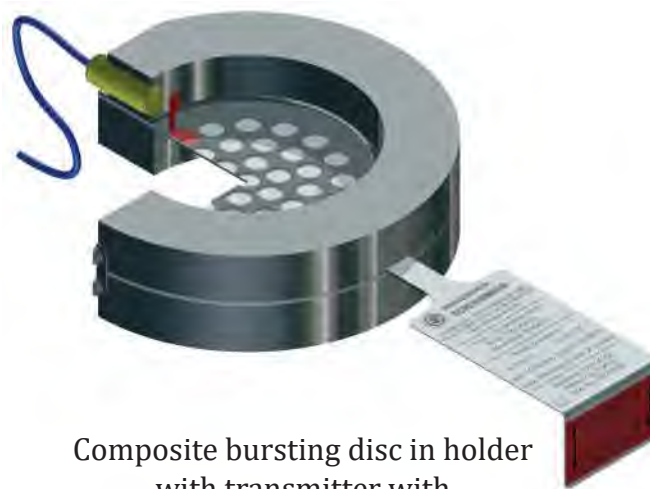
Installation

Our composite bursting discs are mounted directly between standard flanges according to EN1092 or ASME B16.5, in a holder between flanges or in a clamp threaded connector.

Since they open fragment free, they can easily be installed in front of a safety valve. In addition, we can provide our composite bursting discs with burst detection.



bi-directional
composite bursting disc



Composite bursting disc in holder
with transmitter with
inductive proximity switch

Function

If the pressure exceeds the permissible range during the process, the composite bursting disc ruptures. Thus the pressure can be released immediately. If the composite bursting disc is equipped with one of our signal transmitters, the response of the bursting disc is detected directly and this event is conveyed to the attached process control system.

Technical data

General remarks

Configuration	flat design, laser scored, multi-layer, fragment-free opening	
Media	gas, steam, liquids	
Temperature range	-80°C to +200°C (with PTFE/PFA) >200°C (only with metallic sealing diaphragm and fragmenting)	
Tolerance of burst pressure	<0,1 barg	±10 mbar
	>0,1 barg	±10%

Sealing materials

PTFE	standard seal
PFA	for high temperatures
Klingsil C4400*	for high temperatures
Graphite	for very high temperatures

*Inconel, Hastelloy and Klingsil are registered trade names

Materials

Stainless steel	standard application
Nickel	for lowest pressures
Inconel*	for high temperatures
Hastelloy*	esp. corrosion-resistant
Tantalum	extremely resistant to corrosion

Dimensions

DN	15 to 900
inch	1/2" to 36"

Certifications

ATEX approval
CE marking according to Directive 2014/68 EU
QM-system according to ISO 9001:2015

Technical data

Minimum burst pressures in barg at 20 °C		
DN	Nickel	Stainless steel
15	0,3	0,5
25	0,3	0,5
40	0,2	0,3
50	0,1	0,15
65	0,1	0,1
80	0,08	0,08
100	0,05	0,05
125	0,04	0,04
150	0,03	0,03
>200	0,02	0,02

Free cross-section [mm ²]		
DN	over-pressure	under-pressure
15	254	
25	452	
40	1075	350
50	1661	471
65	2733	648
80	4300	1555
100	6792	2375
125	10935	5183
150	16512	6361
>200	>27937	>10568