Rupture disc, Type BK

Benefits

- Individual product specification for material, pressure and dimension
- Suitable for medium and high pressure
- High corrosion and temperature stability as well as resistance to alternating pressure loads
- Fully vacuum resistant and gas-tight due to solid-metal construction
- Lowest leakage rates

Rupture disc, type BK

Note

Rupture discs are mounted in a holder or between flanges.

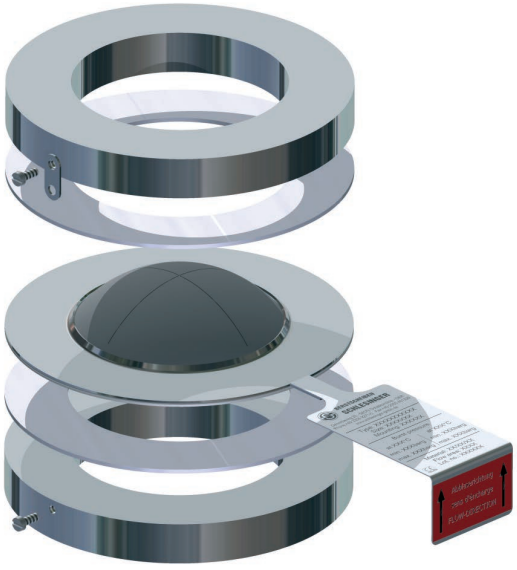
Detail rupture disc, type BK

Description

Rupture discs are cross-scored, full metal components of nickel, nickel-based materials (Inconel, Hastelloy)* or stainless steel.
They are mainly used in processes with medium and high pressures, high operating temperatures and considerable pressure fluctuations.
The scoring is located on the atmosphere side of the rupture disc, while the process facing side has a smooth finish so that adherence of the medium is prevented.

Our rupture discs have an imprinted cross-pattern and therefore only require half the nominal diameter as an opening space. They can therefore be installed in very small spaces.

*Inconel and Hastelloy are registered trade names



Rupture disc with seal in holder

Installation

Our rupture discs are mounted in the holder directly between standard flanges according to EN1092 or ASME B16.5. Furthermore they can be used within the BHS bursting disc holder type of Berstscheiben Schlesinger GmbH.

Rupture discs are used for their excellent properties for example in reactors, pressure vessels and gas cylinders either as sole pressure protection or in combination with a safety valve.

Function

If the pressure exceeds the permissible range during the process, the rupture disc ruptures. Thus the pressure can be released immediately.

Technical data

General remarks	
Configuration	full metal, laser scored, domed to the atmosphere
Media	gas, steam, liquid
Temperature range	-196°C bis +550°C
Tolerance of Burst pressure	±10% (±5% on request)

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

* Special materials on request.

Technical data

Sealing materials	
PTFE	standard seal
Klingersil* C4400	for high temperatures
Graphite	for very high temperatures

*Klingersil is a registered trade name.

Dimensions	
DN	20 to 400
inch	1/2“ to 16“

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

Minimum bursting pressure in barü at 20 °C		Free cross-section [mm²]
DN	Nickel Stainless steel/ Hastelloy/ Inconel	minimum
20	20	215
25	15	385
32	15	650
40	10	900
50	10	1450
65	10	2400
80	5	3900
100	5	6350
125	5	
150	5	10.500
200	5	15.500
250	5	27.000
300	5	
350	5	
400	5	

*Not listed materials on request