

High-purity gas bursting discs

Benefits

- Individual product specification for material, pressure and dimension
- Maximum leak-tightness, absence of particles and minimum leak rates
- Space-saving installation
- The VCR® screw coupling remains undamaged after bursting



High-purity gas bursting disc
in VCR® coupling

Description

Berstscheiben Schlesinger has developed high-purity gas bursting discs for VCR® systems, particularly for satisfying the highest requirements regarding leak-tightness, cleanliness and resilience. We offer our customers standard versions of high-purity gas bursting discs in the form of rupture discs or scored reverse buckling bursting discs. Our high-purity gas bursting discs are completely made of metal and are produced without the use of polymers. They are particularly known for their vacuum resistance and vacuum tightness.

Function

High-purity gas bursting discs are, for example, used in gas cabinets. The bursting disc reliably bursts when excessive overpressure is generated during the gas-mixing process and safely releases the overpressure.

Only the bursting disc without the screw coupling must be exchanged after bursting.

Installation

High-purity gas bursting discs are installed in VCR® screw couplings instead of sealing discs.



Technical data

General remarks	
Configuration	domed, scored, fragment-free opening
Media	gas, steam, liquid (gas cushion is required)
Temperature range	-80°C to +450°C
Tolerance of burst pressure	±10% (±5% on request)
leak rates	<10E-9 mbar x L/sec

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

Special materials on request

*Inconel and Hastelloy are registered trade names

Minimum bursting pressure in barg at 20 °C			Free cross-section[mm ²]
NPS	Nickel	Stainless steel	excessive pressure
¼"	10	25	17
½"	5	20	23
¾"	3	10	143
1"	2	5	283

Special materials on request

Dimensions	
Bursting disc	VCR® coupling
12,5 mm	¼ inch
20 mm	½ inch
35 mm	1 inch

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