

DonadonSDD KRD rupture discs



Model	KRD
Materials	Stainless steel, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium
Dimensions	DN 1”(25) – DN 36”(900)
Rupture pressure	0,41 bar g (6 psi g)- 137 bar g (2000 psi g) (depending on material and diameter)
Kr 1	0.48
Tolerance	from +/- 5 % to +/- 20%
Operating temperature	From – 196°C up to 480°C
Operating margin	90% - Able to reach 95% depending on the conditions of service
Fragmentation	No
Use under valve	Yes
Corrosion resistance	Very good
Linings	Yes
Container	HR/A , HR/P , HR/F , HTC
Rupture sensor	Electrical , Magnetic , Inductive , Optical
ASME Certification [UD STAMP]	Available
PED Certification [CE STAMP]	Available
ATEX EX II 2 GD Certification	Available

The DonadonSDD KRD rupture discs obtained with [NS Nanoscored technology](#) are compression or reverse circumference micro-scored discs.

KRD discs make use of the latest sector technology: the camber of the convex disc is not modified by the operating pressure except on reaching reverse pressure. This device works with ratios of up to 95% between operating and rupture pressure and withstands thousands of cycles without jeopardising its reliability.

At the moment of reversion, the disc ruptures in a few thousandths of a second along the scored line without fragments and with full opening. KRD discs have lower sensitivity to variations in temperature with respect to conventional discs and therefore are very useful in applications with large temperature variations.

Thanks to their innovative design, KRD discs can be used in the presence of liquids only, in cycling and pulsating conditions without reduction of safety margins. In addition, they are especially suitable for isolating safety valves. The wide choice of materials and the thickness used make KRD discs very resistant to corrosion. Greater protection can be obtained using a PTFE lining, which can be applied to the process side of the disc.

Vacuum support is not required and they are able to resist high counter-pressures.