



TECHNICAL DATASHEET

Y90 Sanitary Rupture Discs Advanced Pressure Protection for Hygienic Industries

DonadonSDD's Y90 reverse acting rupture discs are safety devices specifically designed to be set at very low burst pressure, to prevent sudden pressure variations from damaging industrial plants.

Reverse acting rupture discs have a convex disc camber that remains unaltered under operating pressure until reverse pressure is reached and this can ensure long service life.

DonadonSDD Y90 rupture discs uses advanced sector technology and provide reliable and precise protection in the most demanding applications, making DonadonSDD Y90 rupture discs the best choice for your plant's safety.

The low burst pressure range makes the Y90 ideal to offer pressure limitation to equipment where compliance with the Pressure Equipment legislation is not requested.

Keyfeatures & technical benefits

Hygienic Industries:

Designed to meet the high-quality standards required by 3-A SSI, GMP, and MOCA to ensure public health through hygiene equipment.

State-of-the-art Design:

Particularly suitable for the Pharmaceutical, Food, and Biotechnology industries, and represents the advanced for these sectors.

Smooth Surface:

Smooth surface finish ($0,2 < Ra < 0,4$ micron) makes it particularly suitable for C.I.P. and S.I.P. treatments to maintain aseptic conditions.

FDA-Certified Gaskets:

PTFE gaskets that are FDA and USP class VI, 3-A, and Eu 10/2011 compliant facilitate installation in Clamp fittings (sanitary, Tri-Clamp, Tank Connection).

High Certification Standards:

Our Y90 rupture discs are certified to the highest industry standards, including: PER 2016 UK Statutory Instruments 2016 No 1105 (UKCA STAMP) and CU TR 032 (EAC STAMP). PED 2014/68/UE (CE STAMP) is available – on specific request – for discs set below 0,5 Barg too.

Advanced Technology:

Y90 rupture discs obtained using our patented Laser NS Nanoscored technology are reverse-acting discs with micro-scored calibrated sections opening around the circumference, reducing the risk of petal detachment.

Reliable Performance:

Withstands thousands of cycles without compromising their reliability, with ratios up to 95% between operating and rupture pressure.

Rapid Non-Fragmenting Rupture:

The disc opens completely in a few milliseconds along a circumferential line scored on the downstream side of the disc, thus preventing fragmentation from forming.

Versatile Design:

Suitable for use with gas and liquids (with the presence of a minimum free vapour volume), cycling, and pulsating conditions without reducing safety margins.

High Pressure/Vacuum Resistance:

Does not require vacuum support, avoiding restrictions in the discharge area; capable of resisting high backpressures.

Why Choose DonadonSDD Y90 Rupture Discs?





- Highest industry certification standards, ensuring top-of-the-line safety for your industrial plant.
- Easy installation with certified PTFE gaskets.
- Designed to meet the highest quality standards required by 3-A SSI, GMP, and MOCA to ensure public health through hygiene equipment.
- Made of high-quality AISI 316L stainless steel and compliant with various industry regulations for safe and effective use.
- Smooth surface on the process side for C.I.P. and S.I.P. treatments to maintain aseptic conditions.
- Suitable for use in Pharmaceutical, Food, and Biotechnology industries.

DonadonSDD is now part of **Baker Hughes** 



TECHNICAL DATA

MODEL	Y90
MATERIALS	Stainless steel, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium
GASKET MATERIALS	PTFE
DIMENSIONS	From DN25 (1 inch) to DN150 (6 inches)
RUPTURE PRESSURE	0.1 - 8 bar g (Depending on size and material)
TOLERANCE	from +/- 5 % to +/- 20%
OPERATING TEMPERATURE	Max 260°C (Gaskets in PTFE)
FRAGMENTATION	No
USE IN COMBINATION WITH PSV	Suitable
OPERATING MARGIN	90% - Can reach up to 95% depending on service conditions.
RESISTANCE TO VACUUM PRESSURE	Yes, self-supporting under vacuum conditions
CORROSION RESISTANCE	Very good
LININGS	Available in PTFE and PFA
HOLDER	HTC
RUPTURE SENSOR	Electrical

PERFORMANCE ATTRIBUTES

<p>Operation Ratio</p>  <p>up to 95%</p>	<p>Non Fragmenting</p>  <p>yes</p>	<p>Vacuum Resistant</p>  <p>yes</p>	<p>Sanitary</p>  <p>yes</p>
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PROCESS MEDIA

<p>Liquid</p>  <p>yes, with the presence of a minimum free vapor volume</p>	<p>Vapor/Gas</p>  <p>yes</p>
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CERTIFICATIONS

