



## TECHNICAL DATASHEET

# SCR Sanitary Rupture Discs Advanced Pressure Protection for Hygienic Industries

DonadonSDD's SCR reverse acting rupture discs are essential safety devices that 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 SCR rupture discs uses advanced sector technology and provide improved performance and reliability to offer precise protection in the most high-risk applications, making DonadonSDD SCR rupture discs the best choice for your plant's safety.

## Keyfeatures & technical benefits

### Hygienic Applications:

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

### 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 certified in compliance with FDA and USP class VI, 3-A, and Eu 10/2011 regulations for easy installation in Clamp fittings (sanitary, Tri-Clamp, Tank Connection).

### High Certification Standards:

Our SCR discs are certified to the highest standards, including ASME XIII (UD STAMP), PED 2014/68/UE (CE STAMP), ATEX EX II 2 GD (CE STAMP), PER 2016 UK Statutory Instruments 2016 No 1105 (UKCA STAMP), CU TR 032 (EAC STAMP).

### Advanced Technology:

SCR rupture discs obtained using our patented Laser NS NanoScored technology are reverse-acting discs with micro-scored calibrated sections opening in petals, reducing the risk of petal detachment.

### Wide range of materials and thickness options:

PTFE or PFA lining (FDA approved) available for added protection.

### 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 petals lines scored on the downstream side of the disc, thus preventing fragmentation from forming.

### Versatile Design:

Suitable for both high and low bursting pressure; can be used with gas and liquids (with the presence of a minimum free vapour volume), in cycling and pulsating conditions without reduction of safety margins.

### High Pressure/Vacuum Resistant:

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

## Why Choose DonadonSDD SCR Rupture Discs?





- Certified to the highest standards, ensuring top performance and reliability.
- State-of-the-art Design: Particularly suitable for the Pharmaceutical, Food, and Biotechnology industries, and represents the advanced for these sectors.
- Made of high-quality materials for durability and aseptic conditions.
- Easy installation with certified PTFE gaskets.
- Krg (ASME-Certified velocity head loss) = 0.48, one of the lowest in the market.

## TECHNICAL DATA



DonadonSDD is now part of **Baker Hughes** 

|                               |   |
|-------------------------------|---|
| MODEL                         | SCR   |
| 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              | 0.4 - 8 bar g (Depending on size and material)                                    |
| KR G                          | 0.48  |
| 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                        | <a href="#">HTC</a>   |
| RUPTURE SENSOR                | <a href="#">Electrical</a>  |

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> |
|---|---|--|--|

PROCESS MEDIA

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

CERTIFICATIONS

