

SANITRX[®] LPX

RUPTURE DISC

The SANITRX[®] LPX Rupture Disc is a semicircular scored reverse acting rupture disc designed specifically for applications in the pharmaceutical, food & beverage and biotech industries that require **pressures below SANITRX[®] HPX**. This rupture disc is available to fit between industry standard sanitary ferrules, NA CONNECT[®] flanges or SANITRX[®] fittings. SANITRX LPX Rupture Discs are shipped in sanitary, environmentally friendly, non-toxic packaging.

DESIGNED FOR
LOW PRESSURE
SANITARY
APPLICATIONS

APPLICATIONS

- Filters
- Autoclaves
- Bioreactors
- Process Vessels
- Heat Exchangers
- Storage & Transport Vessels
- Fermenters
- Clean Steam Piping
- WFI Vessels & Piping
- CIP & SIP Skids and Piping
- Lyophilizers (Freeze Drying)
- Mixing, Drying, Granulating Equipment

FEATURES

- Cycle durability designed for a minimum of 1,000 cycles from full vacuum to the maximum recommended operating pressure
- 90% maximum recommended operating ratio
(see BURST PRESSURE RATINGS TYPES for details on next page)
- Non-fragmenting design
- Precision scoring on the vent side of the rupture disc dome assures optimum cleanability and improves rupture disc performance
- All rupture discs include sanitary, environmentally friendly, non-toxic packaging
- Permanently attached three-dimensional flow direction tag provides immediate visual verification of proper rupture disc orientation within the system
- Rupture disc can be operated to full vacuum
- Designed and tested for gas/vapor service only
- Fluoropolymer coating is available for corrosion protection on the process and/or vent side of the rupture disc
- Electropolished surface finishes are available as an option
- ASME Code Section VIII, Division 1 compliant. National Board Certified
 K_R flow resistance values: $K_{RG}(\text{gas}) = 1.13$

BENEFITS

- In compliance with ASME BPE and USP class VI essential criteria as follows:
 - SF1 surface finish (20 Ra microinch (0,5 Ra micrometers) or better)
 - Solid metal construction provides cleanability for CIP/SIP applications
 - Fully traceable materials including USP Class VI certified gaskets
 - All components are free of polishing compounds, release agents and animal derivatives
- Lower maintenance costs
- Increased productivity





UD
ASME Code Symbol Stamp
Available When Specified



Pressure Equipment Directive
Available When Specified



BURST PRESSURES //

The following table shows burst pressures available at 72°F (22°C)

SIZE	316 SS / 316L SS	
	MINIMUM	MAXIMUM
	psig / barg	psig / barg
1½"	5.8	10
40 mm	0,40	0,689
2"	5.8	10
50 mm	0,40	0,689
3"	5.8	10
80 mm	0,40	0,689

Minimum and Maximum pressures are based upon the corresponding minimum and maximum of the manufacturing range at 72°F (22°C).

GASKET MATERIALS & TEMPERATURES //

The following gasket materials are readily available¹

GASKET MATERIALS	FDA COMPLIANT	USP CLASS VI COMPLIANT	SERVICE TEMPERATURES			
			MINIMUM		MAXIMUM	
			°F	°C	°F	°C
Peroxide Cured Silicone	✓	✓	-80	-62	450	232
Platinum Cured Silicone	✓	✓	-80	-62	350	177
White VITON®	✓	✓	-20	-29	400	204
Black VITON®	✓	✓	-20	-29	400	204
White EPDM	✓	✓	-55	-48	275	135
Black EPDM	✓	✓	-55	-48	300	149
PTFE ²	✓	✓	-40	-40	450	232
Steel Reinforced PTFE ^{2,3}		✓	-20	-29	450	232

¹ Other materials available upon request

² PTFE and Steel Reinforced PTFE are recommended for use with the MBC™ Multi-Bolt Clamp

³ Not available in [NA] seat types

BURST PRESSURE RATING TYPES //

RATED RUPTURE DISC RATING TYPE

RATED BURST PRESSURE	MANUFACTURING RANGE	BURST TOLERANCE AROUND RATED (MARKED) BURST PRESSURE	MAXIMUM RECOMMENDED OPERATING PRESSURE
above 8 psig above 0,552 barg	Zero	-2 psig / +2 psig -0,138 barg / +0,138 barg	90% of [Rated (Marked) Burst Pressure - 2 psig] 90% of [Rated (Marked) Burst Pressure - 0,138 barg]
up to and including 8 psig up to and including 0,552 barg	Zero	±25%	90% of [Rated (Marked) Burst Pressure - 25%]

SPECIFIED RUPTURE DISC RATING TYPE

SPECIFIED BURST PRESSURE	PERFORMANCE TOLERANCE	EQUIVALENT MANUFACTURING RANGE	MAXIMUM RECOMMENDED OPERATING PRESSURE
above 8 psig above 0,552 barg	-2 psig / +2 psig -0,138 barg / +0,138 barg	Zero	90% of MIN of Performance Tolerance
up to and including 8 psig up to and including 0,552 barg	-25% / +25%	Zero	90% of MIN of Performance Tolerance

MIN/MAX RUPTURE DISC RATING TYPE

MAX BURST PRESSURE	MIN=	EQUIVALENT MANUFACTURING RANGE	MAXIMUM RECOMMENDED OPERATING PRESSURE
above 10 psig above 0,689 barg	MAX - 4 psig MAX - 0,276 barg	Zero	90% of MIN Burst Pressure
up to and including 10 psig up to and including 0,689 barg	MAX / 1.25 X 0.75	Zero	90% of MIN Burst Pressure



For more information on our sanitary accessory offerings, please see our [HPX PRODUCT FAMILY](#) literature.
For a guide on how to use the Burst Pressure Ratings tables, please see our [BURST RATING TYPES](#) datasheet.

NOTES: 1) Product parameters are based on United States customary units. Values in metric units are provided for reference only.
2) If the rupture disc becomes damaged, it will relieve at or less than 1.5 times the burst pressure.

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