

# **BIO-GARD**

#### SANITARY REVERSE ACTING RUPTURE DISC

Technically advanced solution for aseptic and hygienic applications



FDA USP Class VI 3A STANDARD ASME BPE

Meets bioprocessing requirements

Bio-Gard is a low-pressure, peripherally scored, reverse-acting rupture disc designed specifically for protection of aseptic and hygienic plant.

Bio-Gard has a smooth, uninterrupted surface finish to reduce microbial load and maximize the effectiveness of Steam/Sterilization (SIP) and Clean-In-Place (CIP) procedures.

Bio-Gard is compatible with all standard sanitary fittings and connectors. The non-fragmenting rupture disc design requires no additional vacuum support to withstand full vacuum.

Size	1" - 2"
Burst Pressure	29 - 145 psig
Operating Ratio	90%
Performance Tolerance	+/- 10%
Manufacturing Range	0%

Let us help you with all your pressure relief questions.

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# TECHNICAL SPECIFICATIONS



Size range	1"-2" (25-50mm)
Burst pressure range	29 psig to 145 psig (2 barg to 10 barg)
Suitable for CIP/SIP processes	Yes. Suitable for temperatures up to 392°F (200°C)
Standard materials	316 Stainless Steel as standard. Others available on request
Max. Operating Ratio	90% of minimum burst pressure (81% of nominal burst pressure)
Performance Tolerance	+/-10%
Manufacturing Range	0%
Fragmentation	Non-fragmenting design
Vacuum Service	Withstands full vacuum (14.7 psi) without separate vacuum support
Fluid compatibility	Gas service, vapour service
Surface finish	0.4µm Ra or better
Design Standards	Manufactured to ISO 4126-2:2019 standards

# **Certifications**

Meets FDA requirements Meets ASME BPE requirements Meets USP Class VI requirements CE PED SIL

### **Related Products**

Rupture Discs
Pure-Gard
Opti-Gard Ferrule
Opti-Gard SoLo
Ferrule
PRO-S

Sensors
Vent-Tel (Sanitary)

Accessories Tri-Clamps Spacers

#### **Burst Pressure Ranges**

Bio-Gard Min/Max Burst Pressure @ 68°F (20°C)



SI	SIZE MATERIAL MIN		MAX	
DN (mm)	inches	IVIAI ENIAL	barg (psig)	barg (psig)
25	1	316 Stainless Steel Hastelloy Nickel	2.5 (36) 3.0 (44) 2.0 (29)	10 (145)
40	1.5	316 Stainless Steel Hastelloy Nickel	2.0 (29) 2.5 (36) 2.0 (29)	10 (145)
50	2	316 Stainless Steel Hastelloy Nickel	2.0 (29) 2.5 (36) 2.0 (29)	8.0 (116) 6.0 (87) 6.0 (87)

#### Free Flow Area / Minimum Net Flow Area (MNFA)

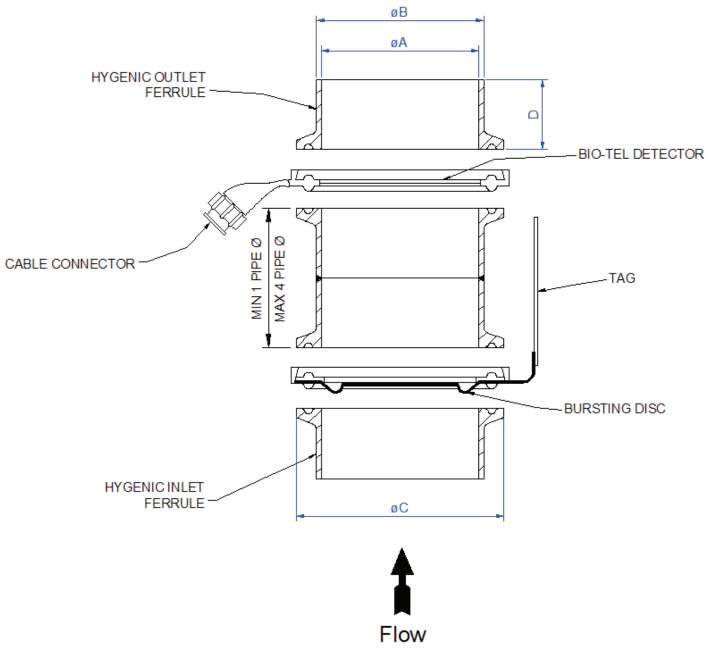
NOMINAL BORE		MNFA		
DN (mm)	inches	mm²	Sq. Inch	
25	1	327	0.51	
40	1.5	825	1.28	
50	2	1555	2.41	

#### **Burst Tolerance**

+/- 10% at all burst pressures

## Schematic Drawing





SIZE		А	В	С	D
DN (mm)	inches	(mm)	(mm)	(mm)	(mm)
25	1	22.6	25.6	50.5	
40	1.5	35.6	38.6	50.5	21.5
50	2	48.6	51.6	64	