

# OPTI-GARD FERRULE

## SANITARY REVERSE ACTING RUPTURE DISC

*Technically advanced solution for aseptic and hygienic applications*



**FDA  
USP Class VI  
3A STANDARD  
ASME BPE**

Meets bioprocessing requirements

Our Opti-Gard Ferrule is specially designed for the food and beverage, biotechnology and biopharmaceutical industries. It features a smooth, uninterrupted surface finish that meets FDA requirements.

Installation using ferrules and tri-clamps preserves the aseptic environment around the disc. Opti-Gard Ferrule is also available to fit within NovAseptic Connectors (NA-Connect) to radically reduce contamination build-up and allow for greater cleanliness and a sterile environment.

Opti-Gard Ferrule is the only rupture disc solution to combine NovAseptic fittings with the non-invasive burst detector, Flo-Tel. This ensures instantaneous notification of disc burst without direct contact to the process.

<b>Size</b>	25mm - 100mm
<b>Burst Pressure</b>	0.9 - 20.7 barg
<b><math>K_R</math> Value (<math>K_{RGL}</math>)</b>	1.74
<b>Operating Ratio</b>	95%
<b>Performance Tolerance</b>	+/- 3%
<b>Manufacturing Range</b>	0%

**Let us help you with all  
your pressure relief questions.**

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# TECHNICAL SPECIFICATIONS



Size range	25-100mm (1"-4")
Burst pressure range	0.9 barg to 20.7 barg (13 psig to 300 psig)
Suitable for CIP/SIP processes	Yes. Suitable for temperatures up to 200°C (392°F)
Standard materials	316 Stainless Steel as standard. Others available on request
Max. Operating Ratio	95%
Performance Tolerance	+/-3%
Manufacturing Range	0%
Fragmentation	Non-fragmenting design
Vacuum Service	Withstands full vacuum (14.7 psi) without separate vacuum support
Fluid compatibility	Gas service, liquid service, vapour service, two-phase service
Torque requirements	Not torque sensitive
Design Standards	Manufactured to ISO 4126-2:2019 or ASME XIII 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 SoLo  
Ferrule  
PRO-S

### Sensors

Vent-Tel (Sanitary)

### Accessories

Tri-Clamps  
Spacers

# Burst Pressure Ranges

Opti-Gard Ferrule Min/Max Burst Pressure @ 15-30°C (59-86°F)



SIZE		MATERIAL	MIN barg (psig)	MAX barg (psig)
DN (mm)	inches			
25	1	316 Stainless Steel/Inconel Nickel/Monel Hastelloy	4.8 (70)	20.7 (300)
40	1.5	316 Stainless Steel/Inconel Nickel/Monel Hastelloy	2.1 (30)	20.7 (300)
50	2	316 Stainless Steel/Inconel Nickel/Monel Hastelloy	0.9 (13)	10 (145)
65	2.5	316 Stainless Steel/Inconel Nickel/Monel Hastelloy	0.9 (13)	10 (145)
80	3	316 Stainless Steel/Inconel Nickel/Monel Hastelloy	0.9 (13)	10 (145)
100	4	316 Stainless Steel/Inconel Nickel/Monel Hastelloy	0.9 (13)	10 (145)

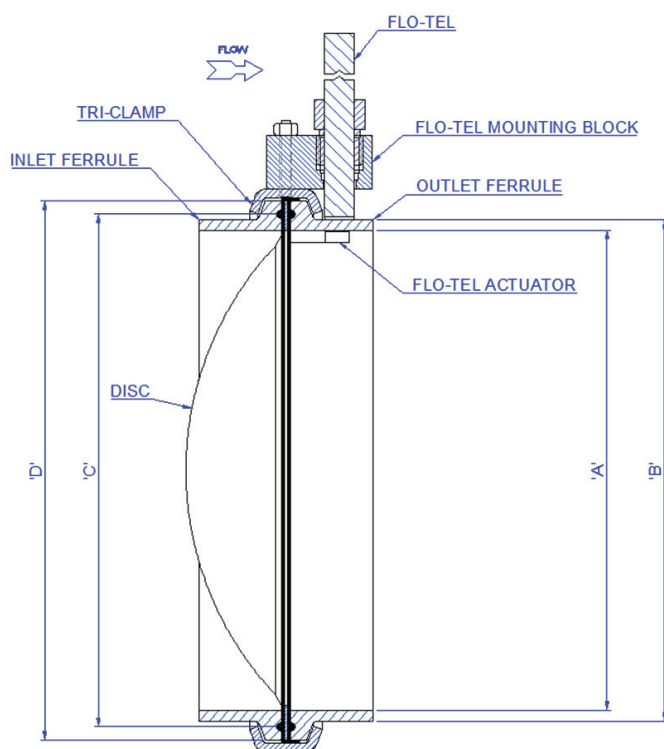
## Free Flow Area / Minimum Net Flow Area (MNFA)

NOMINAL BORE		MNFA	
DN (mm)	inches	mm <sup>2</sup>	Sq. Inch
25	1	297	0.461
40	1.5	739	1.146
50	2	1375	2.132
65	2.5	2247	3.484
80	3	3252	5.041
100	4	5757	8.923

## Burst Tolerance

+/- 0.14 barg ≤4.48 barg  
+/- 3% >4.48 barg

+/- 2.0 psig ≤65 psig  
+/-3% >65 psig



SIZE		Ferrule bore ID 'A'	Ferrule bore OD 'B'	Gasket pip 'C'	Ferrule face OD 'D'
DN (mm)	inches	(mm)	(mm)	(mm)	(mm)
25	1	22.1	25.4	43.5	50.5
40	1.5	34.8	38.1	43.5	50.5
50	2	47.5	50.8	56.5	64
65	2.5	60.2	63.5	70.5	77.5
80	3	72.9	76.2	83.5	91
100	4	97.4	101.6	110	119