



PURE-GARD

SANITARY WELDED RUPTURE DISC CARTRIDGE

Welded innovation in sanitary pressure relief, designed for maximum cleanability and efficiency

FDA

ASME BPE

ISO 1127

Meets bioprocessing requirements



Pure-Gard is an innovative, sanitary pressure relief solution specifically designed for applications where cleanability is of paramount importance. The new disc design provides a cleanable, robust solution to address the challenges of complex manufacturing environments including pharmaceutical, biopharmaceutical and food.

Using our tried-and-tested Opti-Gard technology, we electron-beam weld the disc between two metal ferrules to provide a solution that is installed independently to gaskets. You are free to use your preferred gaskets and change them as often as needed without needing to change the rupture disc.

| | |
|--|----------------|
| Size | 25 - 100mm |
| Burst Pressure | 0.34 - 10 barg |
| K_R Value (K_{RGL}) | 0.85 |
| Operating Ratio | 95% |
| Performance Tolerance | +/- 0.14 barg |
| Manufacturing Range | 0% |

Let us help you with all your pressure relief questions.

US office | Broken Arrow

+1 (918) 258 5626 | info@osecoelfab.com

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TECHNICAL SPECIFICATIONS



| | |
|--------------------------------|--|
| Size range | 25-100mm (1"-4") |
| Burst pressure range | 0.3 barg to 10 barg (5 psig to 145 psig) |
| Suitable for CIP/SIP processes | Yes. Suitable for temperatures up to 260°C (500°F) |
| Standard materials | 316 Stainless Steel. Others available on request. |
| Max. Operating Ratio | 95% of minimum burst pressure (92% of nominal burst pressure) |
| Performance Tolerance | +/- 0.14 barg or less up to 4.48 barg (+/- 3% above 4.48 barg) |
| Manufacturing Range | 0% |
| Fragmentation | Non-fragmenting design |
| Vacuum Service | See details on next page for minimum burst pressures required to withstand full vacuum |
| Fluid compatibility | Gas service, liquid service, vapour service, two-phase service |
| Surface finish | 0.4 µm Ra (15 micro inches) |
| Design Standards | Manufactured to ASME XIII or ISO 4126-2:2019 standards |

Certifications

Meets FDA requirements
Meets ASME BPE requirements
ASME UD
CE
PED
SIL

Related Products

Sensors
Vent-Tel (Sanitary)

Rupture Discs
Opti-Gard SoLo

Accessories
Tri-Clamps
Spacers

Burst Pressure Ranges

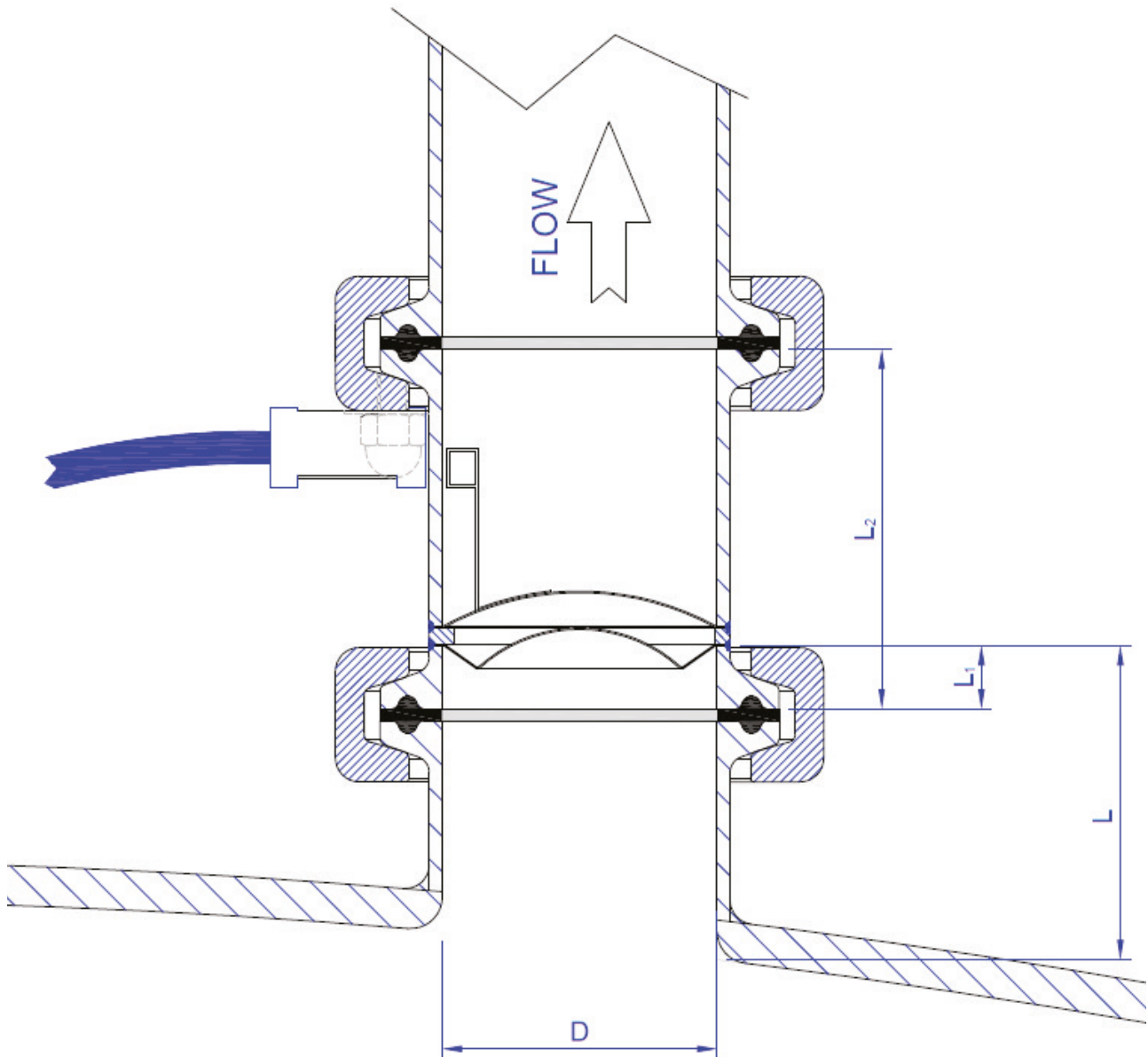
Pure-Gard Min/Max Burst Pressure @ 15-30°C (59-86°F)



| SIZE | | MATERIAL | Burst pressures | |
|---------|--------|---------------------|-----------------|-----------------|
| DN (mm) | inches | | MIN barg (psig) | MAX barg (psig) |
| 25 | 1 | 316 Stainless Steel | 1.58 (23) | 10 (145) |
| 40 | 1.5 | 316 Stainless Steel | 1.31 (19) | 9 (130) |
| 50 | 2 | 316 Stainless Steel | 1.03 (15) | 8 (116) |
| 65 | 2.5 | 316 Stainless Steel | 0.82 (12) | 8 (116) |
| 80 | 3 | 316 Stainless Steel | 0.75 (11) | 7 (101) |
| 100 | 4 | 316 Stainless Steel | 0.34 (5) | 7 (101) |

Minimum burst pressure to withstand full vacuum

| NOMINAL BORE | | MIN barg (psig) |
|--------------|--------|-----------------|
| DN (mm) | inches | |
| 25 | 1 | 1.72 (25) |
| 40 | 1.5 | 1.59 (23) |
| 50 | 2 | 1.45 (21) |
| 65 | 2.5 | 1.45 (21) |
| 80 | 3 | 1.59 (23) |
| 100 | 4 | 1.59 (23) |



| NOMINAL BORE (D) | | Pure-Gard | |
|------------------|--------|-------------------|---------------------|
| DN (mm) | inches | L/D geometry (L1) | Overall length (L2) |
| 25 | 1 | 8mm (0.31") | 45mm (1.77") |
| 40 | 1.5 | 8mm (0.31") | 45mm (1.77") |
| 50 | 2 | 8mm (0.31") | 45mm (1.77") |
| 65 | 2.5 | 9mm (0.35") | 46mm (1.81") |
| 80 | 3 | 10mm (0.39") | 47mm (1.85") |
| 100 | 4 | 10mm (0.39") | 47mm (1.85") |

'L' = Distance from the vessel to Pure-Gard. This distance will vary depending on application.



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