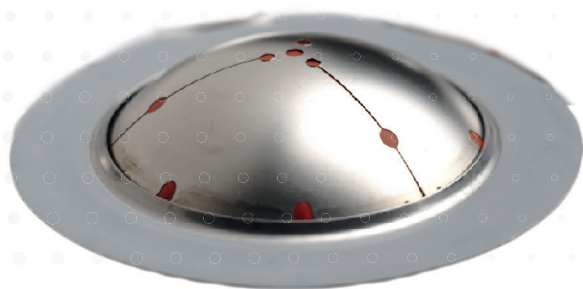


TWO-WAY TANK-SAFE

HOLDERLESS BIDIRECTIONAL RUPTURE DISC

A single disc for positive and negative pressure protection where a holder is not desired or needed.



Two-Way Tank-Safe dual-pressure rupture disc acts as a single design for both positive and negative pressure protection.

The unique construction of this disc comprises a slotted top section, seal membrane and vacuum support. The rupture disc can withstand the same pressure on both sides of the disc (2WS) or differing pressure on each side (2WD).

The holderless design makes this bursting disc ideal for applications where a rupture disc holder is not desired or needed. The non-fragmenting disc offers good life-cycle resistance and excellent relief valve isolation. Installing this disc can therefore contribute to keeping ongoing maintenance costs down.

We supply the Two-Way Tank-Safe bursting disc with a suitable gasket to allow for direct installation between industry-standard flanges.

| | |
|------------------------------|------------------|
| Size | 25 - 300 mm |
| Burst Pressure | 0.07 - 2.07 barg |
| Operating Ratio | 40% |
| Performance Tolerance | +/-5% |
| Manufacturing Range | 0% |

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

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**REQUEST A QUOTE FOR
TWO-WAY TANK-SAFE**



TECHNICAL SPECIFICATIONS



| | |
|------------------------|---|
| Size range* | 25mm to 300mm (1" to 12")* |
| Burst pressure range | 0.07 barg to 2.07 barg (1 psig to 30 psig) |
| Standard materials | 316 Stainless Steel (Others available on request) |
| Max. Operating Ratio | 40% of minimum burst pressure (36% of nominal burst pressure) |
| Performance Tolerance | +/-5% |
| Manufacturing Range | 0% |
| Fragmentation | Non-fragmenting design |
| Vacuum Service | Not suitable for vacuum service |
| Fluid compatibility | Liquid service, gas service, vapour service |
| Torque requirements | Not torque sensitive |
| Protective linings | Please contact us if you require protective linings |
| Relief Valve Isolation | Suitable for relief valve protection |
| Design Standards | Designed to meet ISO 4126-2:2019 |

* Larger sizes are available, please consult factory

Certifications

SIL

Burst Pressure Ranges

Two-Way Tank-Safe Min/Max Burst Pressure 15-30°C (59-86°F)



| SIZE | | TOP SECTION MATERIAL* | MIN barg (psig) | MAX barg (psig) |
|---------|--------|-------------------------------------|----------------------|------------------------|
| DN (mm) | inches | | | |
| 25 | 1 | Nickel Stainless Steel / Inconel | 0.21 (3) 0.42 (6) | 1.04 (15) 2.07 (30) |
| 40 | 1.5 | Nickel Stainless Steel / Inconel | 0.14 (2) 0.28 (4) | 0.7 (10) 1.38 (20) |
| 50 | 2 | Nickel Stainless Steel / Inconel | 0.14 (2) 0.28 (4) | 0.7 (10) 1.38 (20) |
| 65 | 2.5 | Nickel Stainless Steel / Inconel | 0.14 (2) 0.28 (4) | 0.7 (10) 1.38 (20) |
| 80 | 3 | Nickel Stainless Steel / Inconel | 0.14 (2) 0.28 (4) | 0.7 (10) 1.38 (20) |
| 100 | 4 | Nickel Stainless Steel / Inconel | 0.14 (2) 0.28 (4) | 0.7 (10) 1.38 (20) |
| 150 | 6 | Nickel Stainless Steel / Inconel | 0.07 (1) 0.14 (2) | 0.35 (5) 0.7 (10) |
| 200 | 8 | Nickel Stainless Steel / Inconel | 0.07 (1) 0.14 (2) | 0.35 (5) 0.7 (10) |
| 250 | 10 | Nickel Stainless Steel / Inconel | 0.07 (1) 0.14 (2) | 0.35 (5) 0.7 (10) |
| 300 | 12 | Nickel Stainless Steel / Inconel | 0.07 (1) 0.14 (2) | 0.35 (5) 0.7 (10) |

*All with Fluoropolymer seal

Notes

1) For two-way discs with the same burst pressure in both directions (2WS), the disc burst pressure can be specified anywhere between the minimum and maximum burst pressure ranges shown above. For example, for a 50mm disc you can specify a burst pressure anywhere between 2 psig and 20.psig.

2) For two-way discs with different burst pressures for forward and reverse operation (2WD), the maximum burst pressure specified may not exceed five times the specified low burst pressure. For example, if you specify a low burst pressure of 3 psig for a 50mm disc, the maximum burst pressure you specify may not exceed 15 psig.

Free Flow Area / Minimum Net Flow Area (MNFA)



| NOMINAL BORE | | HIGH-PRESSURE DIRECTION (2WS) | | LOW-PRESSURE DIRECTION (2WD) | |
|--------------|--------|-------------------------------|----------|------------------------------|----------|
| DN (mm) | inches | mm ² | Sq. Inch | mm ² | Sq. Inch |
| 25 | 1 | 491 | 0.76 | 152 | 0.23 |
| 40 | 1.5 | 1,018 | 1.58 | 418 | 0.64 |
| 50 | 2 | 1,735 | 2.71 | 699 | 1.08 |
| 65 | 2.5 | 3,117 | 4.86 | 1,159 | 1.79 |
| 80 | 3 | 4,657 | 7.26 | 1,742 | 2.70 |
| 100 | 4 | 7,088 | 11.05 | 2,732 | 4.23 |
| 150 | 6 | 16,513 | 25.75 | 6,408 | 9.93 |
| 200 | 8 | 29,865 | 46.58 | 11,780 | 18.25 |
| 250 | 10 | 47,144 | 73.53 | 18,566 | 28.77 |
| 300 | 12 | 68,349 | 106.6 | 26,906 | 41.70 |

Notes

- 1) For two-way discs with the same burst pressure in both directions (2WS), please refer to the column 'High-pressure direction' for the free flow area. The free flow area will be the same for forward or reverse operation of the bursting disc.
- 2) For two-way discs with different burst pressures for forward and reverse operation (2WD), please refer to both the 'High-pressure direction' and 'Low-pressure direction' columns for the free flow area of the disc. The disc free flow area will be significantly lower in the low-pressure direction.

Burst Tolerance

+/- 0.026 barg \leq 0.24 barg
 +/- 0.053 barg $>$ 0.24 - $<$ 0.5 barg
 +/- 5% \geq 0.5 barg

+/- 0.375 psig \leq 3.5 psig
 +/- 0.75 psig $>$ 3.5 - \leq 7.25 psig
 +/- 5% $>$ 7.25 psig