

Posi-Gard / Vac-Gard (PGD/VGD)

Technical Information



- Specifications
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- Product schematic

Specifications

| | |
|-------------------------------|--|
| Size range | 50mm to 300mm (2" to 12") |
| Burst pressure range | 5 mbar(g) to 500 mbar(g) (0.07 psi(g) and 7.25 psi(g)) |
| Temperature range | -40°C to 175°C (-40°F to 347°F) |
| Materials available | Stainless Steel and Fluoropolymer as standard, others available on request |
| Maximum operating ratio | 60% of minimum burst pressure (45% of nominal burst pressure) |
| Performance tolerance | +/- 25% (zero manufacturing design range) |
| Fragmenting / non-fragmenting | Non-fragmenting |
| Vacuum service | PGD full vacuum. VGD 1 bar(g) back pressure |
| Fluid compatibility | Gas, vapour |
| K _r value | n/a |
| Torque sensitive | No |
| Cycle life | Good |
| Reversal ratio | Consult installation guide for correct installation orientation |
| Damage ratio | <1 fail-safe |
| Protective linings | n/a |
| Relief valve isolation | Suitable |
| Leak tightness | Good |
| Disc surface finish | n/a |

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Performance data

Burst pressure range in mbar(g) (psi(g)) at 15-30°C (59-86°F)

| Nominal bore | | Material | |
|--------------|------|-----------------|------------|
| | | Stainless Steel | |
| mm | inch | min | max |
| 50 | 2 | 50 (0.72) | 500 (7.25) |
| 80 | 3 | 25 (0.36) | 400 (5.80) |
| 100 | 4 | 18 (0.26) | 250 (3.63) |
| 150 | 6 | 10 (0.15) | 200 (2.90) |
| 200 | 8 | 5 (0.07) | 150 (2.18) |
| 250 | 10 | 5 (0.07) | 150 (2.18) |
| 300 | 12 | 5 (0.07) | 150 (2.18) |

Free flow area / Minimum net flow area (MNFA)

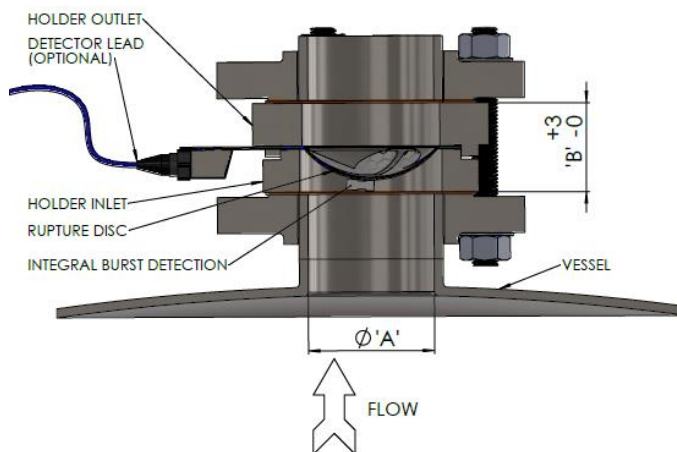
| Nominal bore | | MNFA | |
|--------------|------|-----------------|-------------------|
| mm | inch | mm ² | inch ² |
| 50 | 2 | 1,023 | 1.59 |
| 80 | 3 | 2,665 | 4.15 |
| 100 | 4 | 4,264 | 6.64 |
| 150 | 6 | 9,230 | 14.38 |
| 200 | 8 | 16,802 | 26.18 |
| 250 | 10 | 26,955 | 42.01 |
| 300 | 12 | 38,961 | 60.72 |

Performance tolerance (Zero manufacturing design range)

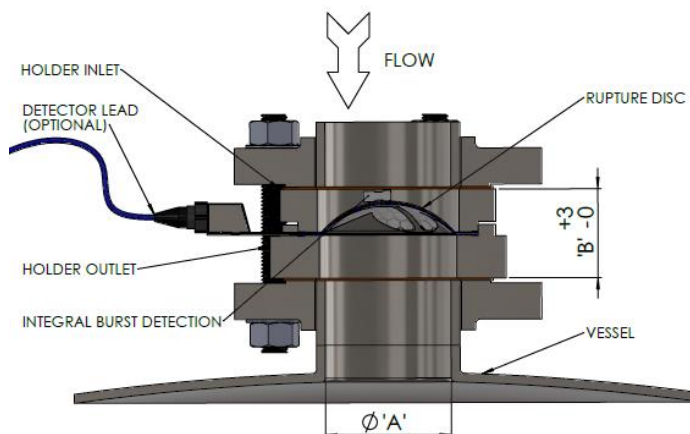
| Burst Pressure | Tolerance | Burst Pressure | Tolerance |
|----------------------|----------------------------------|-----------------------------|-----------|
| <14 mbarg (0.2 psig) | +/- 3.5 mbar(g) (0.05 psi(g)) | >14 mbar(g) (0.2 psi(g)) | +/- 25% |

Product Schematic

Posi-Gard
(Positive pressure protection)



Vac-Gard
(Vacuum protection)



| Nominal Bore (A) | | Face to face (B) | |
|------------------|------|--------------------|-----------------------|
| mm | Inch | Dome Protection mm | No Dome Protection mm |
| 50 | 2 | 44.4 (Std) | - |
| 65 | 2.5 | 50 (Std) | - |
| 80 | 3 | 55 (Std) | - |
| 100 | 4 | 58 (Std) | - |
| 150 | 6 | 74.5 (Std) | - |
| 200 | 8 | 90.5 | 51.5 (Std) |
| 250 | 10 | 105.5 | 51.5 (Std) |
| 300 | 12 | 120.5 | 51.5 (Std) |

| Flange Specifications | |
|----------------------------|---------------------------------|
| EN 1092-1 PN Designated | BS EN 1759-1 ANSI Designated |
| PN 6 | ANSI 150 |
| PN 10 | ANSI 300 |
| PN 16 | ANSI 600 |
| PN 20 | ANSI 900 |
| PN 25 | ANSI 1500 |
| PN 40 | ANSI 2500 |
| PN 50 | - |
| PN 63 | - |
| PN 100 | - |

Face to face dimensions account for the disc and holder assembly only. They do not account for gasket thickness.