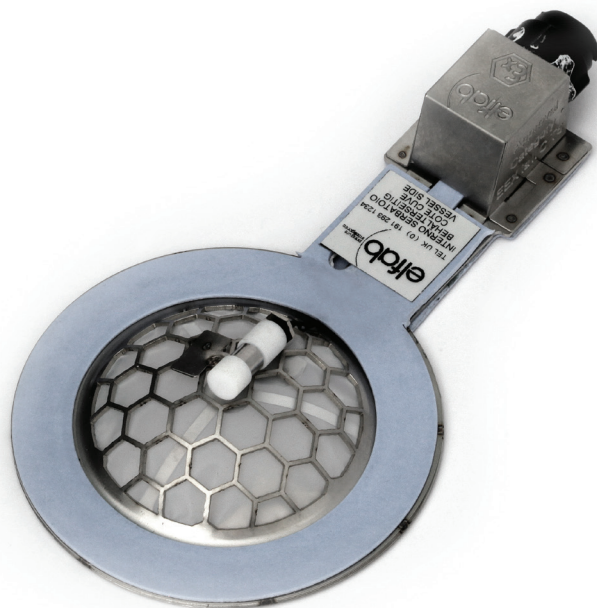


# POSI-GARD / VAC-GARD

VACUUM AND POSITIVE PRESSURE PROTECTION

*The bi-directional POSI-GARD / VAC-GARD discs are excellent for low pressure applications requiring both positive and vacuum pressure protection.*



This range of composite, low pressure reverse acting rupture discs are manufactured with integral burst detection. They feature a 5-pin DIN connection and are suitable for applications operating at low pressures.

Posi-Gard can withstand full vacuum, while Vac-Gard withstands up to 1 barg of back pressure. For ultra low pressures, have a look at our Milli-Gard rupture disc.

Both Posi-Gard and Vac-Gard offer non-fragmenting opening. Due to their modular content, we can offer them with bespoke designs for a broad range of non-standard specifications and applications.

The discs are supplied with integral burst detection as standard. We can supply an additional lead to connect the disc junction box to an intrinsically safe supply if required.

<b>Size</b>	50mm - 300mm
<b>Burst Pressure</b>	5 - 500 mbarg
<b>Operating Ratio</b>	60%
<b>Performance Tolerance</b>	+/- 25%
<b>Manufacturing Range</b>	0%

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

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# TECHNICAL SPECIFICATIONS



Size range	50mm to 300mm (2" to 12")
Burst pressure range	5 mbarg to 500 mbarg (0.07 psig and 7.25 psig)
Temperature range	-40°C to 175°C (-40°F to 347°F)
Standard materials	Stainless Steel and Fluoropolymer (others available on request)
Max. Operating Ratio	60% of minimum burst pressure (45% of nominal burst pressure)
Performance Tolerance	+/-25%
Manufacturing Range	0%
Fragmentation	Non-fragmenting design
Vacuum Service	PGD full vacuum. VGD 1 bar(g) back pressure
Fluid compatibility	Gas service, vapour service
Torque requirements	Not torque sensitive
Cycling or static service	Cycling service
Relief Valve Isolation	Suitable for safety relief valve isolation
Design Standards	Designed to meet ISO 4126-2:2019

## Certifications

SIL

## Burst Pressure Ranges

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



SIZE		MATERIAL	MIN mbarg (psig)	MAX mbarg (psig)
DN (mm)	inches			
50	2	316 Stainless Steel	50 (0.72)	500 (7.25)
80	3	316 Stainless Steel	25 (0.36)	400 (5.80)
100	4	316 Stainless Steel	18 (0.26)	250 (3.63)
150	6	316 Stainless Steel	10 (0.15)	200 (2.90)
200	8	316 Stainless Steel	5 (0.07)	150 (2.18)
250	10	316 Stainless Steel	5 (0.07)	150 (2.18)
300	12	316 Stainless Steel	5 (0.07)	150 (2.18)

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

NOMINAL BORE		MNFA	
DN (mm)	inches	mm <sup>2</sup>	Sq. Inch
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

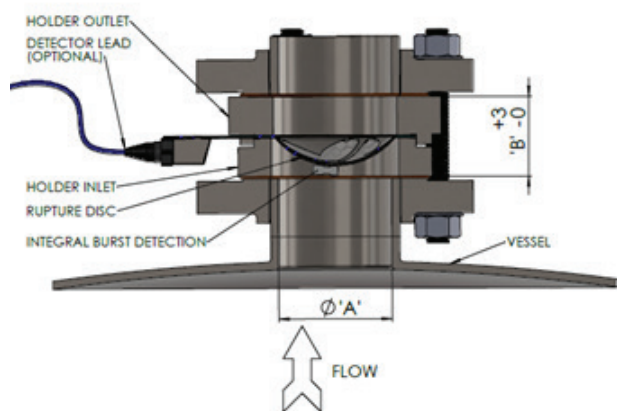
## Burst Tolerance

+/-3.5 < 14 mbarg  
+/-25% > 14 mbarg

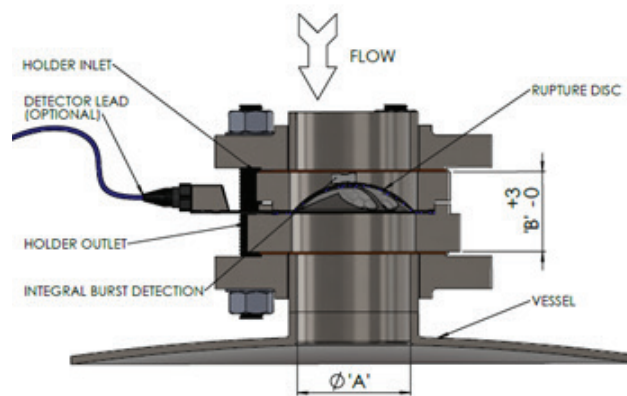
+/-0.05 psig < 0.2 psig  
+/-25% > 0.2 psig



## Posi-Gard (Positive pressure protection)



## Vac-Gard (Vacuum protection)



NOMINAL BORE (A)		FACE-TO-FACE (B)	
DN (mm)	inches	With 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)

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

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	-