

UNIVERSAL ARMA-GARD

GRAPHITE RUPTURE DISC

Corrosion-resistant, non-torque sensitive, holderless rupture disc for processes using highly aggressive chemicals, and where fragmentation is not an issue.



As a non-torque sensitive graphite rupture disc, the Universal Arma-Gard has a holderless design for easy installation between industry standard flanges (PN, ANSI, BS).

Arma-Gard is suitable for applications operating at low to very low pressures. The stainless-steel armoured ring protects the graphite disc both during installation and when in use. The bursting disc is therefore not affected by misaligned, poorly supported pipework or uneven torque tightening of pipe flange bolts.

Composite Universal Arma-Gard (AGX)

The composite construction of this disc offers the unique advantage of being able to withstand extremely low burst pressures as well as enduring very high temperatures.

Size	25mm - 300mm
Burst Pressure	0.07 - 55 barg
K_R Value (K_{RGL})	0.69
Operating Ratio	85% of min. burst pressure
Performance Tolerance	+/- 10%
Manufacturing Range	0%

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

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TECHNICAL SPECIFICATIONS



Size range	25mm - 350mm / 1" - 14"
Burst pressure range	0.07 - 55 barg / 1 - 798 psig
Temperature range	AGS: -50°C ~ 170°C
Standard materials	Graphite
K _R Value	0.69 (no support)
Max. Operating Ratio	85% of minimum burst pressure (76.5% of marked burst pressure)
Performance Tolerance	+/-10%
Manufacturing Range	0%
Fragmentation	Fragmenting
Vacuum Service	Vacuum support not required above 0.17MPa
Fluid compatibility	Gas service, liquid service, vapour service
Torque requirements	Not torque sensitive
Static or cycling service	Suitable for cycling service
Protective linings	Protective linings are available on both faces
Relief Valve Isolation	Not suitable for safety relief valve isolation
Design Standards	Designed to meet ISO 4126 standards

Certifications

SIL
PED 2014/68/EU

Related Products

Rupture Discs
Two-Way Arma-Gard
GraphiTech
Graphite G2 Disc

Burst Pressure Ranges

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



SIZE		ARMA-GARD (AGS)		COMPOSITE ARMA-GARD (AGX)	
DN (mm)	inches	MIN barg (psig)	MAX barg (psig)	MIN barg (psig)	MAX barg (psig)
25	1	0.7(10)	55(798)	0.35(5.1)	13(189)
40	1.5	0.48(7)	41(595)	0.25(3.6)	9.5(138)
50	2	0.28(4.1)	28(406)	0.15(2.2)	6(87)
65	2.5	0.21(3)	28(406)	0.1(1.5)	5.5(79.8)
80	3	0.21(3)	24(348)	0.1(1.5)	4.5(65.3)
100	4	0.14(2)	17(247)	0.06(0.87)	3(43.5)
150	6	0.1(1.5)	10(145)	0.05(0.73)	2(29)
200	8	0.07(1)	5.5(79.8)	0.03(0.44)	1(14.5)
250	10	0.07(1)	4.8(69.6)	0.03(0.44)	1(14.5)
300	12	0.07(1)	4.1(59.5)	0.03(0.44)	1(14.5)
350	14	0.07(1)	3.4(49.3)	-	-

Free Flow Area / Minimum Net Flow Area (MNFA)



NOMINAL BORE		AGS and AGX With vacuum dial (NVS)		AGS Without vacuum dial		AGX Without vacuum dial (etched stainless steel support)	
DN (mm)	inches	mm ²	Sq. Inch	mm ²	Sq. Inch	mm ²	Sq. Inch
25	1	269	0.42	507	0.79	284	0.44
40	1.5	665	1.03	1140	1.77	638	0.99
50	2	1348	2.09	2027	3.14	1135	1.76
65	2.5	2149	3.33	3167	4.91	1774	2.75
80	3	2925	4.53	4560	7.07	2554	3.96
100	4	4911	7.61	8107	12.57	4541	7.04
150	6	10780	16.71	18241	28.27	10217	15.84
200	8	17295	26.81	32429	50.27	17162	26.60
250	10	29943	46.41	50671	78.54	28379	43.99
300	12	43118	66.83	72966	113.10	40866	63.34

NB Burst Tolerance < 65mm

$\pm 0.07 \text{ barg} \leq 0.21 \text{ barg}$
 $\pm 0.17 \text{ barg} > 0.21 - \leq 1.7 \text{ barg}$
 $\pm 10\% > 1.7 \text{ barg}$

$\pm 1 \text{ psig} \leq 3 \text{ psig}$
 $\pm 2.5 \text{ psig} > 3 - \leq 24.7 \text{ psig}$
 $\pm 10\% > 24.7 \text{ psig}$

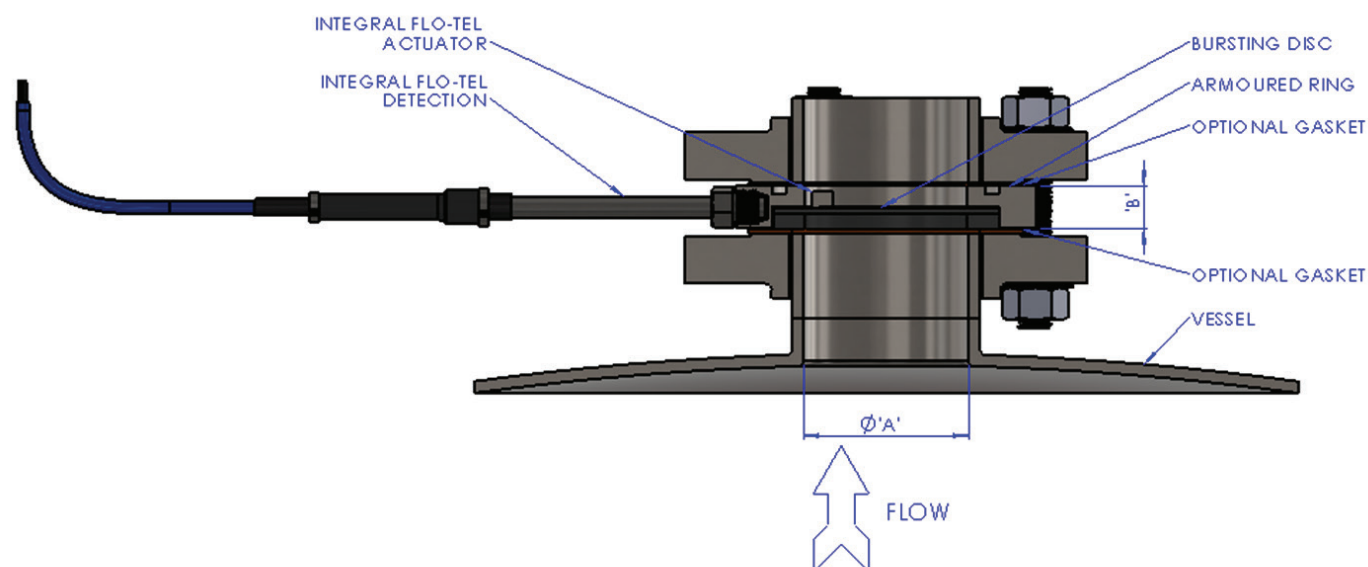
NB Burst Tolerance $\geq 65\text{mm}$

$\pm 0.035 \text{ barg} < 0.35 \text{ barg}$
 $\pm 10\% \geq 0.35 \text{ barg}$

$\pm 0.51 \text{ psig} < 5 \text{ psig}$
 $\pm 10\% \geq 5 \text{ psig}$

K_R Value (Frictional Loss Factor)

K _R	Universal Arma-Gard
K _{RGL}	0.69



NOMINAL BORE (A)		FACE-TO-FACE (B)		
DN (mm)	inches	No gasket (mm)	Fibre gasket (mm)	Envelope gasket (mm)
25	1	20	23	25
40	1.5	20	23	25
50	2	20	23	25
65	2.5	20	23	25
80	3	20	23	25
100	4	23	26	28
150	6	25	28	30
200	8	32	35	37
250	10	35	38	40
300	12	38	41	43
350	14	62*	65*	67*
400	16	65*	68*	70*
450	18	69*	72*	79*
500	20	74*	77*	79*

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	-

*Dimensions for indication only, actual dimensions to be clarified on purchase order