

Multi-Gard (MG)



Multigard is a compression-loaded radially scored reverse bursting disc, which brings the highest operating performance characteristics to the user. It is ideal for many applications and particularly suitable for relief valve isolation. Elfab's unique offset tag and System-Loc arrangement offer the Multigard user foolproof installation.

- Excellent operating performance
- Non fragmenting design
- Superior cyclic performance
- Foolproof and safe installation
- Ideal for relief valve isolation
- Smooth operating surface

Specifications

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SIZE RANGE	25 to 500 mm (1 to 20 ins)
BURST PRESSURE RANGE	2.0 to 40 bar g (30 to 580 psig)
TEMPERATURE RANGE	-200 to 500°C (-330 to 930°F)
MAXIMUM OPERATING RATIO	95%
FRAGMENTATION ON BURST	non fragmenting design
RELIEF VALVE ISOLATION	excellent
VACUUM SERVICE	suitable
FLUID COMPATIBILITY	gas, vapour or gas cap only
TORQUE-SENSITIVE	no
CYCLE LIFE	excellent
MATERIAL RANGE	good
REVERSAL RATIO	not applicable with offset tag + System-Loc
DAMAGE RATIO	<1 (fail-safe)
LEAK TIGHTNESS	excellent
PERFORMANCE TOLERANCE	±5%*(with no manufacturing range)

Pressure and Solutions Intelligence

Elfab is an ISO 9001 Certified Company and all Elfab's bursting discs are manufactured in-house to the highest standards, being tested and certified in accordance with BS2915, the British Standard for bursting discs. To ensure the correct performance of a bursting disc, it must be used in its correct holder, as specified by the bursting disc manufacturer.

As the temperature seen by a bursting disc changes its burst pressure and performance will change. As a result of extensive testing, Elfab can advise on these changes, or on other technical matters, such as discharge requirements, material selection and corrosion resistance, customised designs and burst detection.

Specifications and Performance

BURST PRESSURE RANGE in barg (psig) at 20 °C (68°F)					
Nominal Size		Nickel		316SS/ Inconel	
mm	inch	Min	Max	Min	Max
25	1	8.0(116)	30(435)	20(290)	40(580)
40	1½	5.0(72.5)	30(435)	15(218)	30(435)
50	2	4.0(58)	30(435)	10(145)	30(435)
65	2½	4.0(58)	25(363)	10(145)	27(392)
80	3	4.0(58)	20(290)	10(145)	25(363)
100	4	3.0(43.5)	15(218)	8.0(116)	25(363)
150	6	2.5(36.3)	14(203)	6.0(87)	20(290)
200	8	2.5(36.3)	13(189)	5.0(72.5)	15(218)
250	10	2.0(29)	12(174)	5.0(72.5)	15(218)
300	12	2.0(29)	12(174)	3.0(43.5)	15(218)
350	14	2.0(29)	10(145)	2.5(36.3)	12(174)
400	16	2.0(29)	8.0(116)	2.5(36.3)	10(145)
450	18	2.0(29)	7.0(102)	2.5(36.3)	8.0(116)
500	20	2.0(29)	6.0(87)	2.0(29)	8.0(116)

PERFORMANCE TOLERANCE (ZERO MANUFACTURING DESIGN RANGE)	
Burst Pressure	Tolerance
Entire Range	+/- 5%

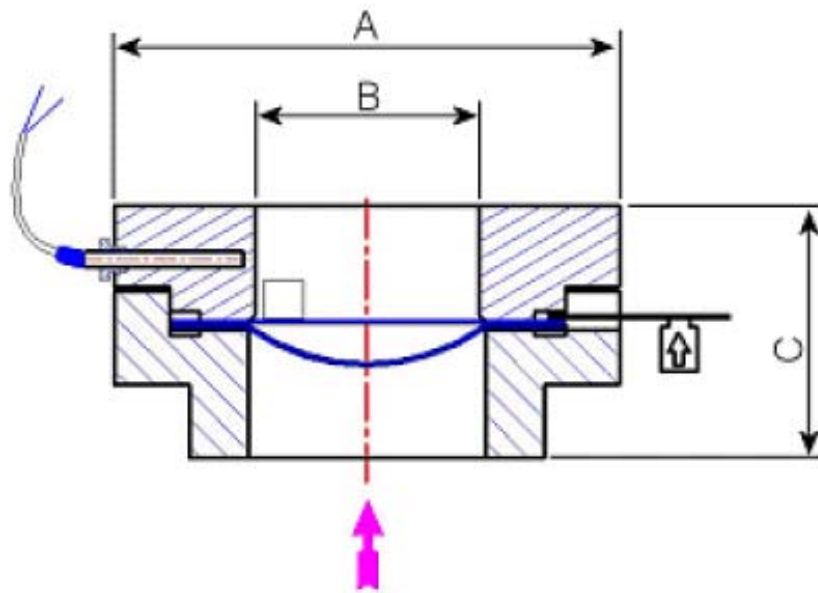
STANDARD TEMPERATURE RANGE °C (°F)			
Material	Material Temperature Limits °C (°F)		
	Minimum		Maximum
316SS	-80	(-112)	480 (900)
Inconel	-80	(-112)	600 (1112)
Nickel	-80	(-112)	400 (750)

FREE FLOW AREA / MINIMUM NET FLOW AREA (MNFA)

<i>Nominal Size</i>			
<i>mm</i>	<i>inch</i>	<i>mm²</i>	<i>inch²</i>
25	1	507	0.79
40	1½	1257	1.95
50	2	2027	3.14
65	2½	3319	5.14
80	3	5027	7.79
100	4	8108	12.57
150	6	17674	27.39
200	8	31420	48.70
250	10	49094	76.10
300	12	70695	109.58
350	14	96224	149.15
400	16	125680	194.80
450	18	159064	246.55
500	20	196375	304.38

HOLDER DIMENSIONS

<i>Nominal Size 'B'</i>		<i>Height 'C'</i>		<i>Outside Diameter 'A'</i>	
<i>mm</i>	<i>inch</i>	<i>mm</i>	<i>inch</i>	<i>BS EN 1092</i>	<i>ANSI</i>
25	1	58	2.28	PN 6 to 50	150 to 600lb
40	1½	60	2.36	PN 6 to 50	150 to 600lb
50	2	60	2.36	PN 6 to 50	150 to 600lb
65	2½	66	2.60	PN 6 to 50	150 to 600lb
80	3	68	2.68	PN 6 to 50	150 to 600lb
100	4	72	2.83	PN 6 to 50	150 to 600lb
150	6	79	3.11	PN 6 to 50	150 to 600lb
200	8	91	3.58	PN 6 to 50	150 to 600lb
250	10	106	4.17	PN 6 to 50	150 to 600lb
300	12	121	4.76	PN 6 to 50	150 to 600lb
350	14	133	5.24	PN 6 to 50	150 to 600lb
400	16	141	5.55	PN 6 to 50	150 to 600lb
450	18	145	5.71	PN 6 to 50	150 to 600lb
500	20	148	5.83	PN 6 to 50	150 to 600lb



Pressure and Solution Intelligence

The data shown on these sheets represents the standard offering from Elfab. Depending upon the requirements of your application, Elfab maybe able to provide a solution based on this product but outside the standard operating parameters. In addition, Elfab produces an extensive range of alternative products which maybe more suitable for your requirements.

As a result of extensive testing, Elfab can advise on these choices, or on other technical matters, such as discharge requirements, temperature testing, material selection and corrosion resistance, customised designs and burst detection.

To discuss your specific product or service requirements please contact your Elfab representative.