

OE6

ELECTRON-BEAM WELDED RUPTURE DISC ASSEMBLY

High-performance rupture disc assembly with a scored forward or reverse rupture disc electron-beam welded between the inlet and outlet sections of a plug



OsecoElfab's high-integrity, fail-safe OE6 rupture disc assembly is particularly suitable for harsh environments. The component can withstand extremely high and low temperatures, and operates efficiently at both very high pressures and in full vacuum.

OE6 is simple to install and features a zero-maintenance design. It is available with a wide range of inlet and outlet configurations for full customisation, with optional baffle outlets for controlled venting.

Standard disc sizes	15, 19, 25 mm
Standard thread sizes	1/8", 1/4", 3/8", 1/2", 3/4", 1"
Standard thread types	NPT, BSPT, BSPP
Burst Pressure	1 - 750 barg
Operating Ratio	Reverse: 90% Forward: 85%
Performance Tolerance	+/- 5%
Manufacturing Range	0%

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

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TECHNICAL SPECIFICATIONS



Standard disc sizes	15mm, 19mm, 25mm
Disc types	Reverse (compression loaded) or forward acting (tension loaded)
Disc connection to body	Electron-beam welded between inlet and outlet
Standard thread sizes	1/8", 1/4", 3/8", 1/2", 3/4", 1"
Standard inlet thread types	NPT, BSPT, BSPP (male or female) – Baffle or through
Standard outlet thread types	NPT, BSPT, BSPP (male or female) - Baffle or through
Burst pressure range	1 barg – 750 barg (14.5 psig – 10,878 psig)
Temperature range	-70°C to 400°C (-94 to 752°F)
Standard materials	Disc: 316 Stainless Steel, Nickel as standard (others available on request) Body: 316 Stainless Steel as standard (others available on request)
Max. Operating Ratio	Reverse: 90% Forward: 85%
Performance Tolerance	+/-5%
Manufacturing Range	0%
Fragmentation	Non-fragmenting designs available
Vacuum Service	Withstands full vacuum (14.7 psi) without separate vacuum support
Fluid compatibility	Reverse: Gas service, vapor service Forward: Gas service, vapor service, liquid service
Leak tightness	Leak-tight design: Checked to 1×10^{-8} cc-atm/sec using helium
Design Standards	Designed to meet ISO 4126-2:2019 and PED 2014/68/EU

Certifications

CE

Related Products

Sensors

OE-Tel

Rupture Discs

Opti-Gard
Safe-Gard

Burst Pressure Ranges

OE6 Min/Max Burst Pressure @ 15-30° C / 59-86° F



SIZE		DISC MATERIAL*	REVERSE ACTING DISC* (COMPRESSION LOADED)		FORWARD ACTING DISC* (TENSION LOADED)	
DN (mm)	inches		MIN barg (psig)	MAX barg (psig)	MIN barg (psig)	MAX barg (psig)
15	0.5	316 Stainless Steel	4 (58)	55 (800)	69 (1001)	750 (10,878)
		Nickel	3.3 (44)	55 (800)	35 (508)	600 (8,702)
19	0.75	316 Stainless Steel	4 (58)	40 (580)	45 (653)	600 (8,702)
		Nickel	2.5 (3.7)	40 (580)	27 (392)	500 (7,252)
25	1	316 Stainless Steel	2 (28)	55 (800)	34 (493)	500 (7,252)
		Nickel	1 (14.5)	40 (580)	21 (305)	400 (5,802)

*All with 316 Stainless Steel inlet and outlet

Free Flow Area / Minimum Net Flow Area (MNFA)

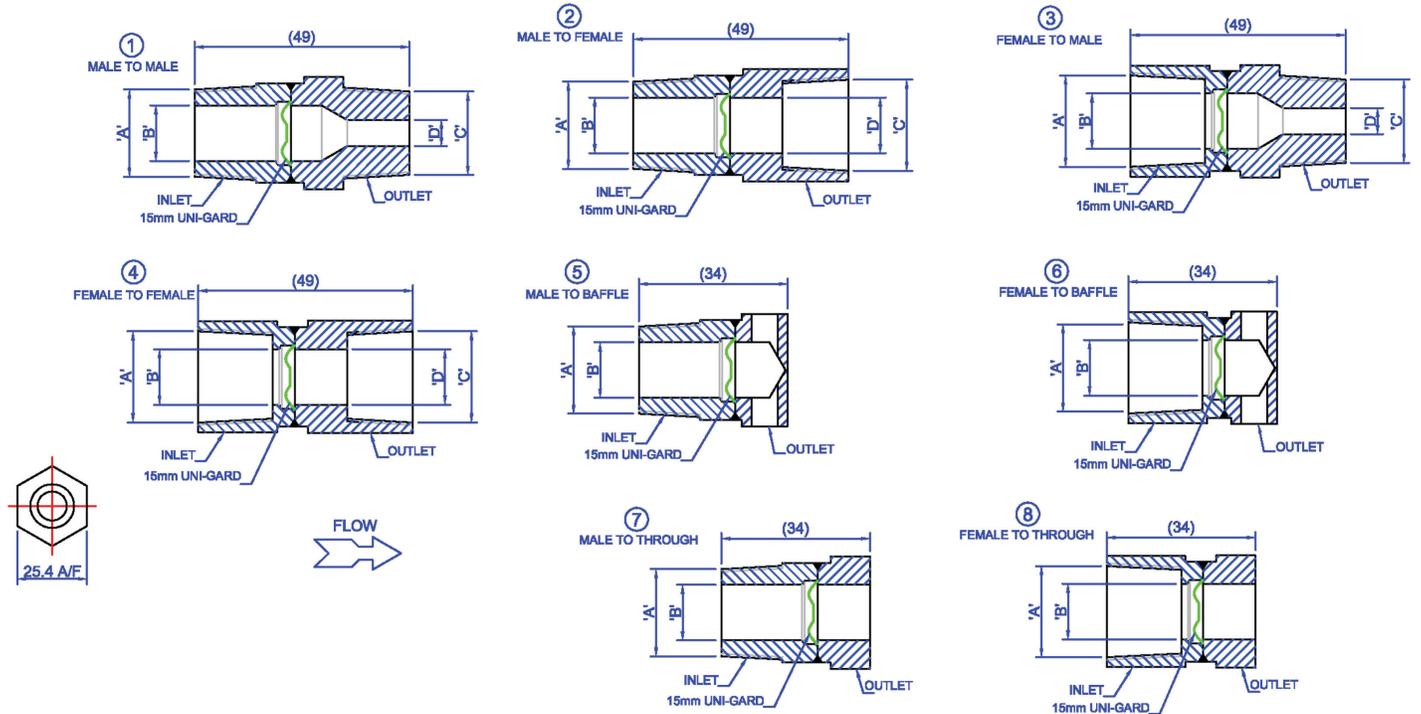
CONNECTION TYPE/SIZE		MNFA	
inches	DN (mm)	mm ²	Sq. Inch
1/8"	3	7.07	0.01
1/4"	6	28.28	0.04
3/8"	10	78.55	0.12
1/2"	12.7	126.7	0.19
3/4"	19	283.6	0.44
1"	25	490.9	0.76

Schematic Drawings



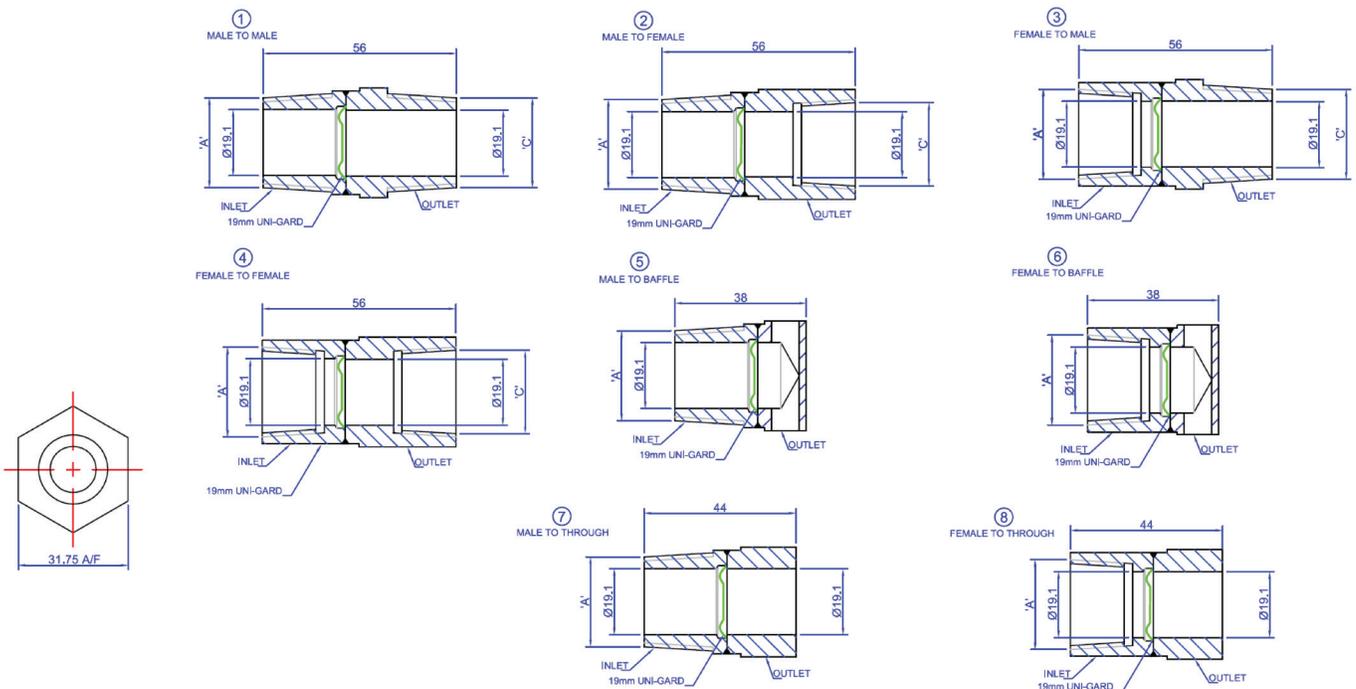
15mm disc, inlet and outlet configurations.

All dimensions can be customized. Please contact OE with your specifications.



19mm disc, inlet and outlet configurations.

All dimensions can be customized. Please contact OE with your specifications.



Schematic Drawings



25mm disc, inlet and outlet configurations.

All dimensions can be customized. Please contact OE with your specifications.

