

04A

ONE-TIME-USE SCREWED AND BONDED PLUG

A robust, tamper-proof rupture disc plug ideal for safety critical applications such as industrial gas handling or cryogenic applications.



Our O4A component combines a brass body as standard with either a stainless steel or nickel disc, depending on burst pressure and process requirements. The forward- or reverse-acting rupture discs are torqued and clamped between the inlet and outlet. The robust rupture disc plug offers a cost-effective and maintenance-free solution.

We use an approved thread-locking fluid to prevent tampering. The plug offers a range of thread forms and combinations of male or female baffle and through connections to suit varying specifications.

O4A is available with our innovative burst detection system, OE-Tel. OE-Tel is the first ATEX-approved burst detection system for OEM rupture disc components. With a fail-safe design, OE-Tel is not affected by downstream pressure fluctuations or corrosion.

Standard disc sizes

15, 19, 25, 40 mm

Standard thread sizes

1/8", 1/4", 3/8", 1/2", 3/4", 1"

Standard thread types

NPT, BSPT, BSPP

Burst Pressure

1 - 70 barg

Operating Ratio

Reverse: 90% / Forward: 85%

Performance Tolerance

/ 50/

Manufacturing Range

0%

Let us help you with all your pressure relief questions.

US office | Broken Arrow

+1 (918) 258 5626 | info@osecoelfab.com

UK office | North Shields

+44 (0)191 293 1234 | uksales@osecoelfab.com

osecoelfab.com



TECHNICAL SPECIFICATIONS



Standard disc sizes*	15mm, 19mm, 25mm, 40mm
Disc type	Forward acting (tension loaded) or reverse acting (compression loaded)
Disc connection to body	Bonded between inlet & outlet (Screwed and bonded with 'Loctite' 290 threadlocker)
Standard thread sizes*	1/8", 1/4", 3/8", 1/2", 3/4", 1"
Standard inlet thread types*	NPT, BSPT or BSPP (male or female) - Left- or right-handed
Standard outlet thread types*	Baffle or through
Burst pressure range	1 barg – 70 barg (14.5 psig – 1,015 psig)
Temperature range	-20°C to 150°C (-4 to 302°F)
Standard materials	Disc: 316 Stainless Steel, Nickel Body: Brass
Max. Operating Ratio	Reverse-acting disc: 90% of minimum burst pressure (1barg – 200barg) Forward-acting disc: 85% of minimum burst pressure (55barg – 200barg)
Performance Tolerance	+/-5%
Manufacturing Range	0%
Fragmentation	May fragment, depending on design
Vacuum Service	Withstands full vacuum (14.7 psi) and back pressure
Fluid compatibility	Reverse-acting disc: Gas, vapour Forward-acting disc: Gas, vapour, liquid
Leak tightness	Leak-tight: Helium leak-tested to 1x10 ⁻⁵ cc-atm/sec
Design Standards	Designed to meet ISO 4126-2:2019 and PED 2014/68/EU

Certifications

CE

Related Products

Sensors OE-Tel Rupture Disc Plugs OE2

OE5 OE6

Burst Pressure Ranges

O4A Min/Max Burst Pressure @ 15-30° C / 59-86° F

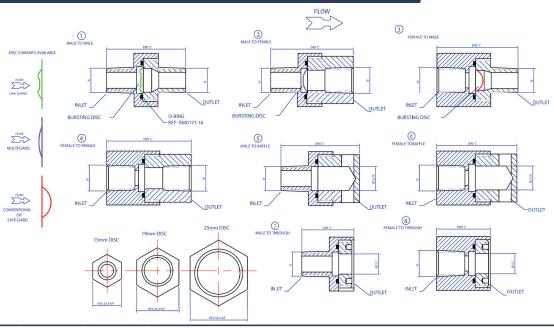


SIZ	ZE	DISC		CTING DISC ion loaded)	FORWARD ACTING DISC (tension loaded)		
DN (mm)	inches	MATERIAL*	MIN barg (psig)	MAX barg (psig)	MIN barg (psig)	MAX barg (psig)	
15	0.5	316 Stainless Steel Nickel	(**,		55 (800) 35 (508)	70 (1015)	
19	0.75	316 Stainless Steel 4 (58) 40 (580) Nickel 2.5 (37) 40 (580)		45 (653) 27 (392)	70 (1015)		
25	1	316 Stainless Steel 2 (28) 55 (800) Nickel 1 (14.5) 40 (580)		34 (493) 21 (305)	70 (1015)		
40	1.5	316 Stainless Steel Nickel	2 (28) 1 (14.5)	55 (800) 40 (580)	20 (290) 13 (190)	70 (1015)	

^{*}All with brass plug

Schematic Drawings: Standard O4A Assemblies





Face to face (Dim 'C' mm)

PLUG	CONFIGUE	RATION		15r	nm		19mm			25mm		
Item	Inlet	Outlet	1/4" NPT/BSPT Dimension 'A'	1/4" BSPP Dimension 'A'	3/8° NPT/BSPT Dimension 'A'	3/8" BSPP Dimension 'A'	½" NPT/BSPT Dimension 'A'	½" BSPP Dimension 'A'	34" NPT/BSPT Dimension 'A'	¾" BSPP Dimension 'A'	1" NPT/BSPT Dimensions 'A'	1" BSPP Dimensions 'A'
1	Male	Male	51.5	47.5	51.5	47.5	61.5	47	59	52	73	63.5
2	Male	Female	48.5	47	48.5	47	53.5	46.5	54	52	65.5	60.5
3	Female	Male	50	47.5	50	47.5	61	53.5	54	49	65.5	61
4	Female	Female	47	47	47	47	53	53	49	49	58	58
5	Male	Baffle	39.5	38	39.5	38	44.5	37.5	49	47	61.5	56.5
6	Female	Baffle	38	38	38	38	44	44	44	44	54	54
7	Male	Through	30.5	29	30.5	29	28.5	28.5	37	35	45	40
8	Female	Through	29	29	29	29	35	35	32	32	37.5	37.5

Free Flow Area (mm²)

PLUG CONFIGURATION				1 5r	nm		19mm			25mm		
Item	Inlet	Outlet	1/4" NPT/BSPT Dimension 'A'	1/4" BSPP Dimension 'A'	3/8° NPT/BSPT Dimension 'A'	³/8" BSPP Dimension 'A'	½" NPT/BSPT Dimension 'A'	½" BSPP Dimension 'A'	%" NPT/BSPT Dimension 'A'	¾" BSPP Dimension 'A'	1" NPT/BSPT Dimensions 'A'	1" BSPP Dimensions 'A'
1	Male	Male	28.26	28.26	70.8	70.8	126.6	126.6	486.3	486.3	506.4	506.4
2	Male	Female	28.26	28.26	70.8	70.8	126.6	126.6	286.3	286.3	506.4	506.4
3	Female	Male	28.26	28.26	70.8	70.8	126.6	126.6	314	314	518.4	518.4
4	Female	Female	70.8	70.8	70.8	70.8	126.6	126.6	314	314	518.4	518.4
5	Male	Baffle	28.26	28.26	70.8	70.8	126.6	126.6	301.4	301.4	471	471
6	Female	Baffle	70.8	70.8	70.8	70.8	126.6	126.6	301.4	301.4	471	471
7	Male	Through	28.26	28.26	70.8	70.8	126.6	126.6	286.3	286.3	506.4	506.4
8	Female	Through	70.8	70.8	70.8	70.8	126.6	126.6	314	314	518.4	518.4

Maximum installation torque (Nm)

PLU	PLUG CONFIGURATION 15mm				mm			19mm		25mm			
Item	ı Ir	nlet	Outlet	1/4" NPT/BSPT Dimension 'A'	1/4" BSPP Dimension 'A'	3/8' NPT/BSPT Dimension 'A'	3/8° BSPP Dimension 'A'	½" NPT/BSPT Dimension 'A'	½" BSPP Dimension 'A'	%" NPT/BSPT Dimension 'A'	¾" BSPP Dimension 'A'	1" NPT/BSPT Dimensions 'A'	1" BSPP Dimensions 'A'
1-8		All	All	30	30	40	40	50	50	60	60	70	70