

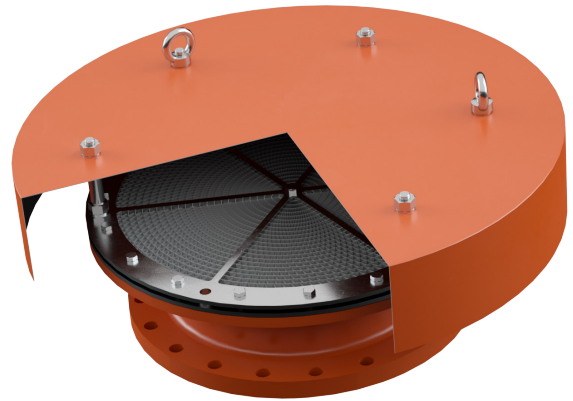
EVB Series

End-of-Line Deflagration Flame Arresters



With Replaceable Element for NEC Explosion Gas Group C

The Protectoseal EVB Series offers the highest level of protection against atmospheric deflagration when the ignition source is external to the piping system.



Principle of Operation

The EVB Series features Protectoseal's E-Flow® (Enhanced Crimped Ribbon Technology), which guarantees the best flow vs pressure drop characteristics in the industry.

During deflagration, heat dissipation cools the combustion products at the element surface, preventing the fire from spreading past the EVB and into the protected vent line.

Operating Conditions

The Protectoseal EVB Series is ATEX-approved for a maximum operating temperature of **+140°F** or **60°C**.

Explosion Gas Groups

The Protectoseal EVB Series is certified for gases in **NEC Group C** and **IEC Explosion Group IIB3**.

Standards Compliance

Protectoseal's EVB Series of End-of-line Deflagration Flame Arresters has been type-tested to **EN ISO 16852** and approved according to **ATEX Directive 2014/34/EU**.

Each EVB that passes through Protectoseal's facilities undergoes a rigorous inspection and verification of its safety and performance features.

Protectoseal Expertise

Protectoseal offers industry leading technical leadership with its renowned flame and explosion protection for the most diverse and challenging of industrial applications. By utilizing a range of testing facilities, advanced algorithms and computational fluid dynamics (CFD), our research and development team is constantly looking for new ways to challenge the status quo, thus providing best-in-class innovation.

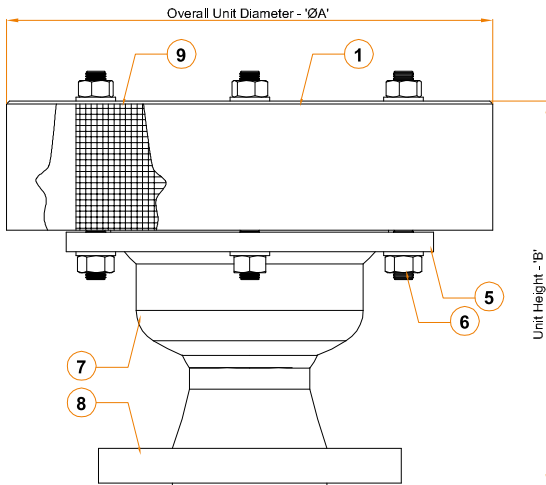
With over 95 years in the business, we have an established sales and service team to support clients with their initial specifications and throughout the product's life cycle.

Features and Benefits

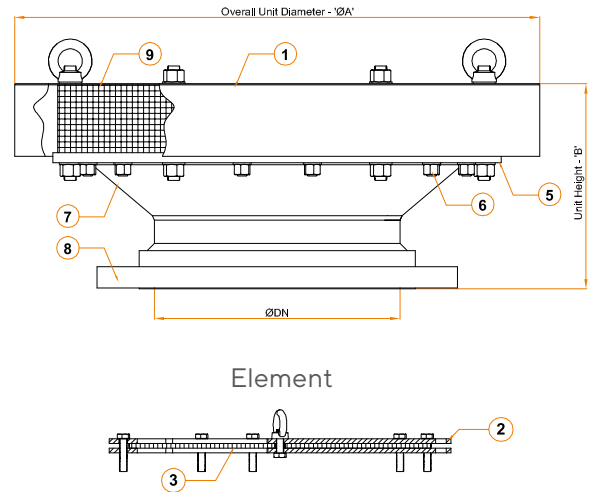
- Outstanding flow capacity with minimal pressure drop
- Elements feature replaceable, easy-to-clean crimped-ribbon
- Unique element design is less prone to fouling and clogging
- Sizes and materials to accommodate a vast array of applications
- Options for end connections include flanged or threaded
- Lightweight for installation convenience
- Bird screen installed as standard

General Arrangements:

EVB Flame Arresters: 0.5 - 1.5 inches



EVB Flame Arresters: 2 - 24 inches



Ref	Description	Carbon Steel Models	Stainless Steel Models
1	Weatherhood	316 Stainless Steel	316 Stainless Steel
2	Element Support Ring	Carbon Steel	316 Stainless Steel
3	Element Core	316 Stainless Steel	316 Stainless Steel
4*	Gasket	PTFE	PTFE
5	Element Flange	Carbon Steel	316 Stainless Steel
6	Fasteners	316 Stainless Steel	316 Stainless Steel
7	Reducer	Carbon Steel	316 Stainless Steel
8	Fixing Flange	Carbon Steel	316 Stainless Steel
9	Bird Screen	316 Stainless Steel	316 Stainless Steel

* Not shown in General Arrangement drawings above.

Selection Key

Positions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Example	E	V	B	-	0	5	0	A	T	-	1	0	0	T	S	-	N	1	.	0	0	-	N	/	0	0	0	W	0
Table	a	b	c	-	d		e	f	-	g			h	j	-	k	l				-	m	/	n	o	p	q	r	
Model No.	E	V	B	-				A		-	X	X	X		S	-	N	1	.	0	0	-	N	/	0		0	W	0

Standard Options		
a	Flame Arrester Type	End-of-Line Deflagration
b	Model Variation	Standard
c	Gas Group	C, IIB3
d	Size	Refer to Table 1
e	Pipe Connection Type	ANSI 150lb. RF
f	Flame Arrester Housing Material	Refer to Table 2
g	Element Size	XXX <i>(Place Holder - your local Protectoseal representative will fill out this section for you)</i>
h	Element Housing Material	Refer to Table 3
j	Element Core Material	316/316L Stainless Steel
k	Temp Rating	Standard (140°F, 60°C)
l	Operating Pressure Rating	Atmospheric Pressure (14.7 psia, 1.01 bara)
m	Short-Time Burn Capability	Factory Reserved <i>(Refer to ESA Series for short-time burn Flame Arresters)</i>

Non-Standard Options		
n	Body Modification	Standard - No Alterations
o	Finish/Paint	Refer to Table 4
p	Gasket/Seal	PTFE
q	Fasteners	316SS
r	Ports/Taps	Standard - No Ports/Taps

Table 1: Sizes

d	Size	ØA	B	f	h	Approx Weight
015	0.5", 15mm	9.65", 245mm	7.56", 192mm	C or S	D or T	15lbs, 7.0kg
020	0.75", 20mm	9.65", 245mm	7.76", 197mm	C or S	D or T	16lbs, 7.2kg
025	1", 25mm	9.65", 245mm	7.83", 199mm	D or T	D or T	17lbs, 7.5kg
040	1.5", 40mm	9.65", 245mm	8.07", 205mm	D or T	D or T	18lbs, 8.2kg
050	2", 50mm	9.65", 245mm	7.68", 195mm	D or T	D or T	19lbs, 8.6kg
080	3", 80mm	11.81", 300mm	9.06", 230mm	D or T	D or T	34lbs, 15.2kg
100	4", 100mm	14.17", 360mm	9.69", 246mm	D or T	D or T	45lbs, 20.2kg
150	6", 150mm	19.69", 500mm	12.80", 325mm	D or T	D or T	91lbs, 41.2kg
200	8", 200mm	19.69", 500mm	12.80", 325mm	C or S	D or T	101lbs, 46.0kg
250	10", 250mm	23.62", 600mm	19.37", 492mm	C or S	C or S	175lbs, 79.6kg
300	12", 300mm	25.98", 660mm	20.79", 528mm	C or S	C or S	228lbs, 103.2kg
350	14", 350mm	31.10", 790mm	13.46", 342mm	C or S	C or S	241lbs, 113.9kg
400	16", 400mm	33.07", 870mm	13.78", 350mm	C or S	C or S	297lbs, 134.9kg
450	18", 450mm	37.40", 950mm	15.35", 390mm	C or S	C or S	347lbs, 157.3kg
500	20", 500mm	40.55", 1030mm	15.87", 403mm	C or S	C or S	401lbs, 182.0kg
600	24", 600mm	47.24", 1200mm	18.15", 461mm	C or S	C or S	507lbs, 230.0kg

Note: Larger element configurations are available for higher flow applications.

Table 2: Flame Arrester Housing Materials

f	Flame Arrester Housing (Body) Material	o
C	Fabricated Carbon Steel	O
D	Cast Carbon Steel	O
S	Fabricated 316/316L Stainless Steel	F
T	Cast Stainless Steel	F

Table 3: Element Housing Materials

h	Element Housing (Body) Material
C	Fabricated Carbon Steel
D	Cast Carbon Steel
S	Fabricated 316/316L Stainless Steel
T	Cast Stainless Steel

Table 4: Finish/Paint

o	Finish/Paint
O	Primer & Top Coat Orange
F	Natural, Unpainted

Customer Support

Tel: 1.630.595.0800
Email: info@protectoseal.com
Fax: 1.630.595.8059
225 Foster Avenue Bensenville, IL 60106 U.S.A

