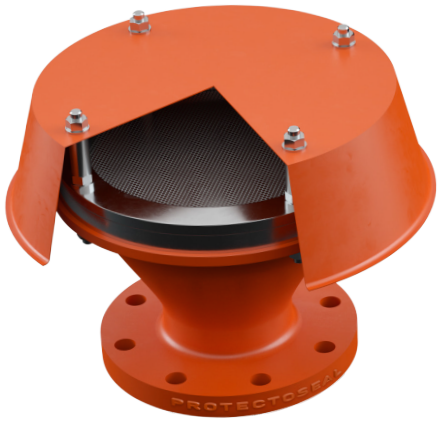
AVC Series

End-of-Line Deflagration Flame Arresters

PROTECTOSEAL®
Safety Without Compromise

With Replaceable Element for NEC Explosion Gas Group B

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



Principle of Operation

The AVC Series employs a small-apertured element that allows gas or vapor to pass safely. The flame arrester element cools the combustion products down. The AVC uses a specialized technology called sintered gauze to do this and consequently extinguish a flame.

Operating Conditions

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

Explosion Gas Groups

The Protectoseal AVC Series is certified for gases in **NEC Group B** and **IEC Group IIC**. These are the most volatile gas groups, which necessitate a more robust element, such as those found in the AVC Series, to withstand the atmospheric explosion.

Standards Compliance

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

Protectoseal Expertise

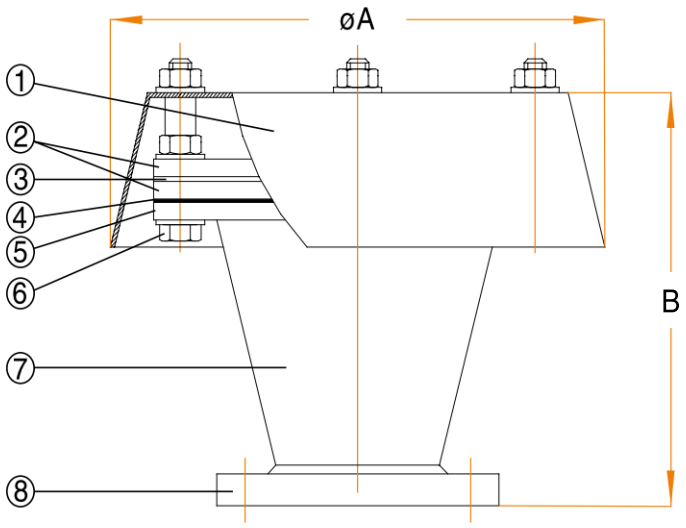
Protectoseal offers industry leading technical leadership with its renowned flame and explosion protection for the most diverse and challenging of industrial applications. By utilizing a range of testing facilities, advanced algorithms and computational fluid dynamics (CFD), our research and development 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

- Replaceable elements
- Variants available for sour operating conditions
- Available with an optional weatherhood
- Sizes and materials to accommodate a vast array of applications
- Lightweight for installation convenience

General Arrangements:



Ref	Description	Carbon Steel Models	Low Temperature Carbon Steel Models	Stainless Steel Models	Hatelloy Models
1	Weatherhood	Stainless Steel or Mild Steel	Stainless Steel	Stainless Steel	Hastelloy
2	Element Housing	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy
3	Element Core	Stainless Steel	Stainless Steel	Stainless Steel	Hastelloy
4	Gaskets	Klingsersil C4400	Klingsersil C4400	Klingsersil C4400	Klingersil C4400
5	Body Ring	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy
6	Fasteners	Carbon Steel	Stainless Steel	Stainless Steel	Hastelloy
7	Reducer	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy
8	Fixing Flange	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy

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	A	V	C	-	0	5	0	A	T	-	1	0	0	T	S	-	N	1	.	0	0	-	N	/	0	0	0	0	0
Table	a	b	c	-	d			e	f	-	g			h	j	-	k	l				-	m	/	n	o	p	q	r
Model No.	A	V	C	-				A		-	X	X	X		S	-	N	1	.	0	0	-	N	/	0		0	0	0

Standard Options		
a	Flame Arrester Type	End-of-Line Deflagration
b	Model Variation	Standard
c	Gas Group	B, IIC
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 *(Place Holder - your local Protectoseal representative will fill out this section for you)*
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 *(Refer to ESA Series for short-time burn Flame Arresters)*

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

Table 1: Sizes

d	Size	Ø Element	øA	B	f	h	Approx Weight
025	1", 25mm	2", 50mm	7.01", 178mm	5.31", 135mm	C or S	C or S	8lbs, 3.5kg
040	1.5", 40mm	3", 80mm	8.78", 223mm	6.22", 158mm	C or S	C or S	11lbs, 5.0kg
050	2", 50mm	4", 100mm	10.04", 255mm	6.97", 177mm	C or S	C or S	15lbs, 6.6kg
080	3", 80mm	6", 150mm	11.81", 300mm	8.86", 225mm	C or S	C or S	33lbs, 15kg
100	4", 100mm	8", 200mm	14.57", 370mm	10.28", 261mm	C or S	C or S	51lbs, 23kg
150	6", 150mm	8", 200mm	20.08", 510mm	13.35", 339mm	C or S	C or S	95lbs, 43kg
200	8", 200mm	12", 300mm	20.08", 510mm	13.43", 341mm	C or S	C or S	101lbs, 45.7kg
250	10", 250mm	16", 400mm	25.59", 650mm	22.95", 583mm	C or S	C or S	233lbs, 105.5kg
300	12", 300mm	18", 450mm	29.53", 750mm	22.91", 582mm	C or S	C or S	286lbs, 129.6kg
350	14", 350mm	20", 500mm	31.50", 800mm	28.50", 724mm	C or S	C or S	358lbs, 162.6kg
400	16", 400mm	24", 600mm	37.40", 950mm	30.31", 770mm	C or S	C or S	468lbs, 212.1kg

Table 2: Flame Arrester Housing Materials

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

Table 3: Element Housing Materials

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

Table 4: Finish/Paint

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

Customer Support

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