

# AVC Series Flame Arresters



Protecting People, Property and our Planet.

## End-of-line Deflagration Arrester with Replaceable Element for Explosion gas group IIB & IIC.

Elmac Technologies® AVC Series End-of-line Deflagration Arresters are designed to be installed at the end of a pipeline or exit vent from a vessel, where the ignition source is external, to provide protection against atmospheric deflagration.



### Principle of operation

A flame arrester uses an element with small apertures which allows gas or vapour to pass. If the apertures are smaller than the maximum experimental safe gap (MESG) for the gas or vapour then a flame cannot pass through the arrester and is subsequently contained or extinguished.

### Explosion groups

Elmac Flame Arresters in the AVC range are for use with gases in Group IIB & IIC. This is the most volatile gas group and requires a more substantial element to be able to cope with the atmospheric explosion.

### Standards compliance

All Elmac End-of-line Deflagration Arresters have been tested and certified in accordance with national and international standards. Actual device performance is verified in the Elmac Technologies state-of-the-art in-house test facility.



EMS535425

FM535423

### Elmac expertise

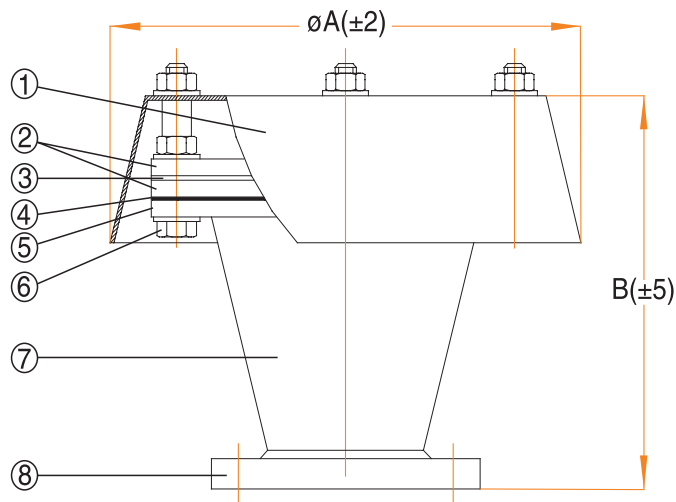
Elmac have been manufacturing flame arresters since 1948 and bring enhanced levels of flame and explosion protection to a diverse range of applications.

Elmac offers considerable technical leadership and, using test facilities along with Computational Fluid Dynamics capabilities, employs research teams renowned for developing solutions for the most challenging of industrial applications.

### Features and benefits

- Large variety of sizes and materials to suit a wide range of applications
- Variants available for different operating temperature range -20°C to +60°C
- Options available for sour environments
- Optional weatherhood
- Replaceable elements
- The Elmac technical team can advise on specific location queries

### General Arrangements:



### Materials Specifications

Ref	Description	Carbon Steel Models	Low Temp Carbon Steel Models	Stainless Steel Models	Hastelloy 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	Klingsil C4400	Klingsil C4400	Klingsil C4400	Klingsil 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

### Dimensions

NB (mm)	25	40	50	65	80	100	125	150	200	250	300	350	400
Ø Element (mm)	50	80	100	125	150	200	250	300	300	400	450	500	600
ØA (±2) mm	178	223	255	255	300	370	450	510	510	650	750	800	950
B (±5) mm	135	158	177	221	225	261	308	339	341	583	582	724	770
Approx Wt (kg)	3.5	5.0	6.6	9.5	14	23	32	43	45.7	105.5	129.6	162.6	212.1

### Customer Support

Tel: +44 (0) 1352 717 555

Email: sales@elmactech.com

Fax: +44 (0) 1352 717 642

Coast Road, Greenfield, Flintshire, CH8 9DP United Kingdom



Protecting People, Property and our Planet.