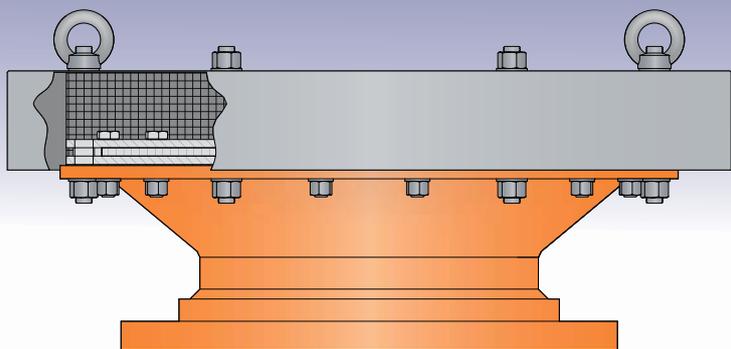


# EVB Series



## End of Line Deflagration Arrester with Replaceable Element

### Application:

The **Elmac Technologies®** EVB 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

The EVB series incorporates Elmac's enhanced crimped ribbon technology in the flame arresting element, the metal matrix of which has been optimised using CFD to ensure industry leading flow and pressure drop characteristics. During a deflagration the combustion products are cooled at the element surface by heat dissipation, which prevents continuation of the combustion process through the arrester and into the protected vent line.

### Benefits

- Exceptional flow capacities with minimal pressure drop
- Easy-clean, replaceable, crimped-ribbon elements
- Unique element design is less susceptible to fouling/clogging
- Sizes and materials to suit a wide range of applications
- End connections include flanged or threaded options
- Light weight for ease of installation
- Bird screen fitted as standard
- The Elmac technical team can advise on specific location queries

### Explosion Groups

Elmac EVB series end-of-line arresters are ATEX approved for gases in Explosion Groups up to and including IIB3.

### Standards Compliance

All Elmac deflagration arresters have been tested and certified in accordance with national or international standards. Actual device performance is verified in the Elmac Technologies "state of the art" in-house test facility.



EMS535425



FM535423



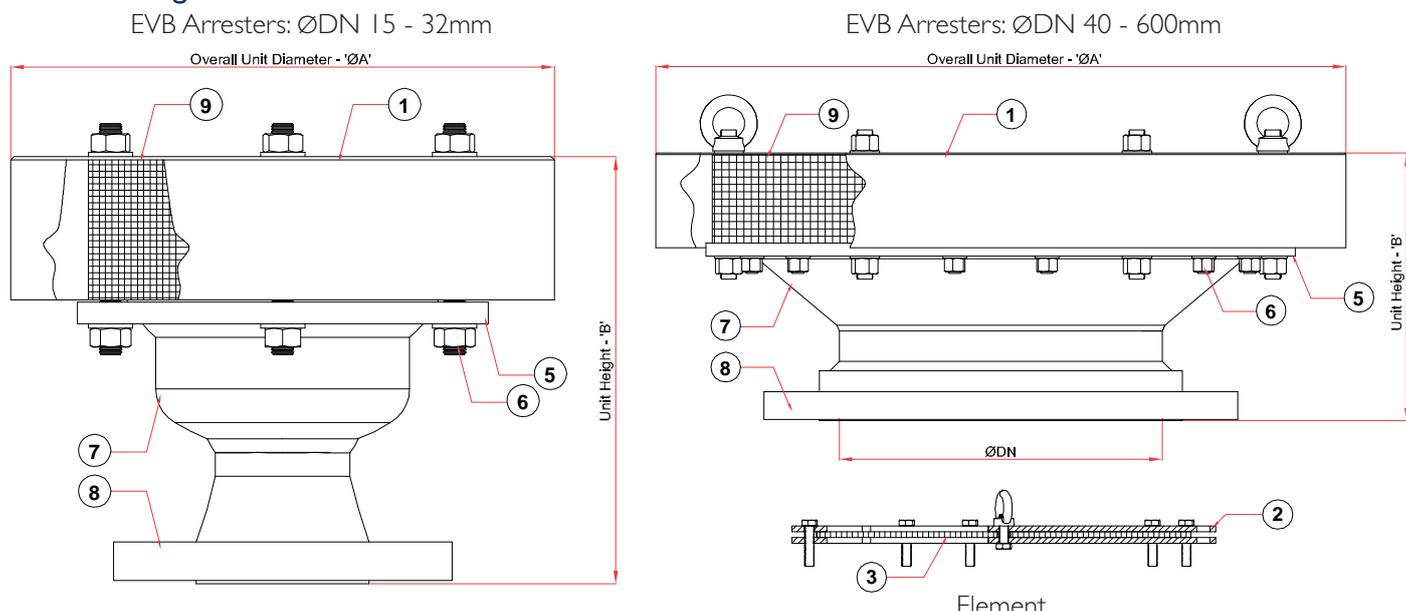
### Elmac Expertise

Elmac have been manufacturing protection equipment since 1948, and bring enhanced levels of flame and explosion protection to a diverse range of applications. Elmac Technologies offers considerable technical leadership and using test facilities along with CFD capabilities, employs research teams renowned for developing solutions for the most challenging of industrial applications.

# EVB Series

## End-of-Line Deflagration Arrester with Replaceable Element

### General Arrangements:



### Standard Material Specifications

Ref	Description	Carbon Steel	Stainless Steel
1	Weatherhood	316 Stainless Steel	316 Stainless Steel
2	Element Housing	Carbon Steel	316 Stainless Steel
3	Element Core	316L Stainless Steel	316L Stainless Steel
4*	Gasket	PTFE	PTFE
5	Element Flange	Carbon Steel	316 Stainless Steel
6	Fasteners	Carbon Steel BZP	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

### Dimensions

NB (mm)	15	20	25	32	40	50*	65	80*	100
ØA (mm)	245	245	245	245	245	245	300	300	360
B (mm)	192	197	199	200	195	195	230	230	246
Approx Wt (kg)	7.0	7.2	7.5	7.8	7.9	8.6	14.5	15.2	20.2

NB (mm)	125	150*	200*	250*	300*	350*	400*	450*	500*	600
ØA (mm)	420	420	500	600	600	790	870	950	1030	1200
B (mm)	279	325	325	492	492	342	350	390	403	461
Approx Wt (kg)	26.5	28.7	46.0	79.6	90.3	113.9	134.9	157.3	182.0	230.0

\* This size of arrester is available with a larger element for enhanced flow capabilities. Please contact Customer Support for details.

### Variations:

Feature	Standard Fitting	Options*
Arrester Materials	Carbon or Stainless Steel	Low Temperature Carbon Steel, Duplex Steel, Hastelloy
Element Material	316L Stainless Steel	Hastelloy
Connections	ANSI 150 Flange	PN16 Flange, Female BSP/NPT, Male BSP/NPT
Arrester Finish	Painted (Carbon Steel Arresters)	Offshore Paint, PTFE Coated, Others on Request
Bird Screen	316 Stainless Steel	304 Stainless Steel, PTFE Coated

\* May be limited according to arrester size

### Operating Conditions

The operating temperature range for EVB arresters is -20°C to +60°C.

### EVB Flow Curves

Pressure drop performance varies according to a particular arrester configuration. Further information is available on request from the Elmac Customer Support Team.

### Customer Support

#### Elmac Technologies Limited

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All specifications are correct at time of print, are for guidance purposes only and subject to change without prior notice.