Trouvay & Cauvin

Elmac Technologies®
Innovative Safety Solutions

TECHNICAL DATA
Flame Arresters

FE-IE Series

End of Line Deflagration Arrester with Replaceable Element for use with Pressure/ Vacuum Relief Valves

Application:

The **Elmac Technologies®** FE-IE series of end of line deflagration arresters are designed to be used in conjunction with pressure/vacuum relief valves, to prevent propagation of flames in gas or vapour mixtures. FE-IE arresters are specifically designed to be located below the inlet of a pressure/vacuum relief valve, thereby providing an extra layer of tank protection. FE-IE arresters are supplied as complete units ready for direct installation into piping systems.

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.

Benefits

- Variety of sizes and materials to suit a wide range of applications
- For use in conjunction with pressure/vacuum relief valves
- Options available for sour environments
- Replaceable elements
- The Elmac technical team can advise on specific location queries

Gas Groups

Elmac end of line deflagration arresters in the FE-IE series are for use with gases in Groups I, IIA, IIB1, IIB2 and IIB3.

Standards Compliance

All Elmac end of line deflagrations 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.

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 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.

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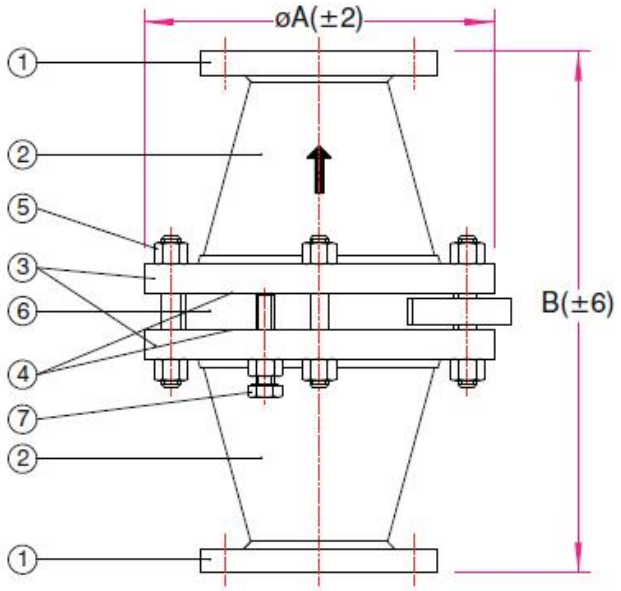
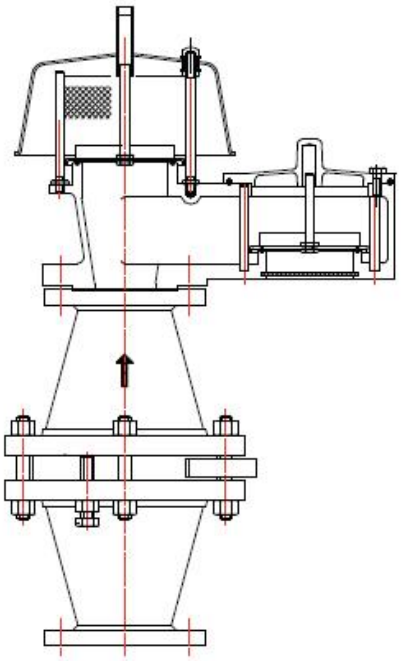
Standard Unit



As Connected to Pressure / Vacuum Relief Valve



Material Specifications

Ref	Description	Carbon Steel Models	Low Temp Carbon Steel Models	Stainless Steel Models	Hastelloy Models
1	Fixing Flanges	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy
2	Body	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy
3	Element Flanges	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy
4	Gaskets	Klingersil C4400	Klingersil C4400	Klingersil C4400	Klingersil C4400
5	Fasteners	Carbon Steel	Stainless Steel	Stainless Steel	Hastelloy
6	Element - housing	Carbon Steel	Low Temp Carbon Steel	Stainless Steel	Hastelloy
6	Element - core	Stainless Steel	Stainless Steel	Stainless Steel	Hastelloy
6	Element - periphery	Stainless Steel	Stainless Steel	Stainless Steel	Hastelloy
7	Jacking screws	Carbon Steel	Stainless Steel	Stainless Steel	Hastelloy

Model Specifications

NB (mm)	15	20	25	32	40	50	65
ø Element (mm)	93	93	93	124	124	156	189
øA mm	152	152	152	190	190	229	254
B mm	240	244	232	266	266	298	376
Approx Wt (kg)	8.7	9.7	10.7	16	18	23	29

NB (mm)	80	100	125	150	200	250	300
ø Element (mm)	215	270	326	381	490	599	709
øA mm	279	343	406	483	597	698	813
B mm	388	424	484	544	879	1197	1226
Approx Wt (kg)	38	56	88	110	200	380	450

Please contact the customer support team for pressure drop information.