

# DFB Series

## In-line Deflagration Flame Arresters



Protecting People, Property and our Planet.

### With Replaceable Element for Explosion Groups IIB1, IIB2 & IIB3.

The Elmac Technologies® DFB Series of In-line Deflagration Flame Arresters are designed to prevent propagation of flames in gas or vapour mixtures. By locating the arrester in close proximity to the potential source of ignition, any flame or explosion is confined to the immediate area.



### Principle of Operation

In the event of explosion, the combustion products are cooled at the element surface by heat dissipation, preventing continuation of the combustion process through the flame arrester and into the protected line. Accordingly, the flame cannot pass through the flame arrester, and is subsequently contained or extinguished.

### Explosion Groups

Elmac DFB Series are for use with gases in Explosion Groups IIA1, IIA, IIB1, IIB2 & IIB3.

### Standards Compliance

Elmac Technologies® Flame Arresters have been type -tested to EN ISO 16852 and certified according to ATEX Directive 2014/34/EU.

Actual device performance is verified in the Elmac Technologies® state-of-the-art in-house test facility.



### Elmac Expertise

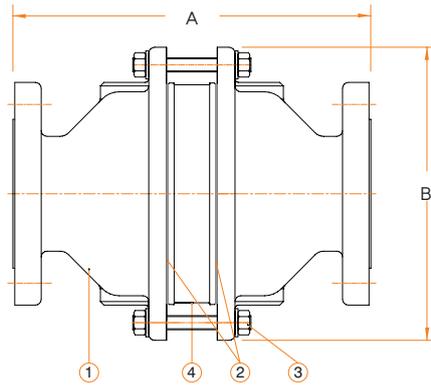
Elmac Technologies® has been manufacturing protection equipment since 1948 and brings enhanced levels of flame and explosion protection to a diverse range of applications.

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

### Features and Benefits

- Variety of sizes and materials to suit a wide range of applications
- Replaceable elements
- Bi-directional
- The Elmac technical team can advise on any technical queries

### General Arrangement:



### Material Specifications

Ref	Description	Carbon Steel*	Stainless Steel*
1	Body	Carbon Steel	Stainless Steel
2	Gaskets	Klingsil C4400	Klingsil C4400
3	Fasteners	Carbon Steel	Stainless Steel
4	Element - Housing	Carbon Steel	Stainless Steel
4	Element - Core	Stainless Steel	Stainless Steel
4	Element - Capscrew	Stainless Steel	Stainless Steel

\*Available in special materials upon request

DN (mm)	25	40	50	80	100	150
A (mm)	213	213	243	303	313	363
B (mm)	185	185	185	250	310	430
Approx Wt (kg)	16	17	18	29	44	80

### Operating Limits

DN (mm)	25	40	50	80	100	150
Maximum Operating Temperature (°C)	60	60	60	60	60	60
Maximum Operating Pressure (bara)	1.6	1.6	1.6	1.6	1.6	1.6
Pipe Length / Diameter Ratio (L/D)	50	50	50	50	50	50

DN (mm)	25	40	50	80	100	150
Maximum Operating Temperature (°C)	150	150	150	150	150	150
Maximum Operating Pressure (bara)	1.3	1.3	1.3	1.3	1.3	1.3
Pipe Length / Diameter Ratio (L/D)	40	40	40	40	40	40

### Customer Support

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



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