

DFC Series

In-line Deflagration Flame Arresters



Protecting People, Property and our Planet.

With Replaceable Element for Explosion Groups IIB & IIC.

The Elmac Technologies® DFC 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 DFC Series are ATEX certified for gases in Explosion Groups IIB and IIC.

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

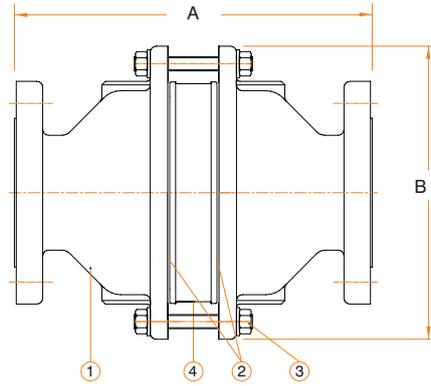
Elmac has been manufacturing protection equipment since 1948 and brings enhanced levels of flame and explosion protection to a diverse range of applications.

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	Klingersil C4400	Klingersil C4400
3	Fasteners	Carbon Steel	Stainless Steel
4	Element – Housing	Carbon Steel	Stainless Steel
4	Element – Core	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

Operating Limits*

DN(mm)	25	40	50	80	100*	150
Maximum Operating Temperature (°C)	60	60	60	60	60	60
Maximum Operating Pressure (bara)	1.10	1.10	1.10	1.10	1.10, 1.45	1.20
Pipe Length / Diameter Ratio (L/D)	30	30	30	10	10, 10	10

*DN 100 flame arrester has 1.10bara and 1.45bara options with different pressure drop characteristics

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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