

FAB Valve™ Series

Flame Arrester & Valve Combination



Elmac®
Technologies

Protecting People, Property and our Planet

Deflagration Flame Arrester for Explosion Groups IIA1, IIA, IIB1, IIB2 & IIB3 with integral Pressure/ Vacuum Relief

The Elmac Technologies® patented Flame Arrester Breather (FAB Valve™) Series integrates a RE-Flow™ Flame Arrester with a Pressure & Vacuum Relief Valve.

These devices are designed to protect tanks and process equipment from excessive pressure and vacuum and also from atmospheric deflagrations. FAB Valve™ series' conserve product and reduce pollution from evaporation losses. They are generally required by EPA and API regulations in venting applications.



Principle of Operation

The product functions as a combined end-of-line pressure/vacuum relief valve and a deflagration Flame Arrester. The pressure relief valve prevents vapour losses up to the specified set pressure and ensures reliable protection against excessive pressure.

The vacuum relief valve prevents the ingress of air up to the specified set vacuum pressure and ensures reliable protection against excessive vacuums.

The flame arrester element further protects the equipment against atmospheric deflagrations.

The Elmac Technologies® FAB Valve™ Series incorporates Elmac's E-Flow™ enhanced crimped ribbon technology in the flame arrester element. The channel dimensions of the flame arrester element are optimised for deflagration protection; whilst ensuring minimal maintenance requirements and maximum flow performance.

In the event of external ignition, the flame arrester prevents flame transmission from entering the piping systems and tanks. The FAB Valve™ Series' unique operating model allows self-draining of the flame arrester element. This allows visual inspection and ensures minimal clogging of the element under normal operating conditions.

Explosion Groups

The FAB Valve™ Series is ATEX certified for gases in Explosion Groups IIA1, IIA, IIB1, IIB2 & IIB3.



EMS535425



FM535423



Standards Compliance

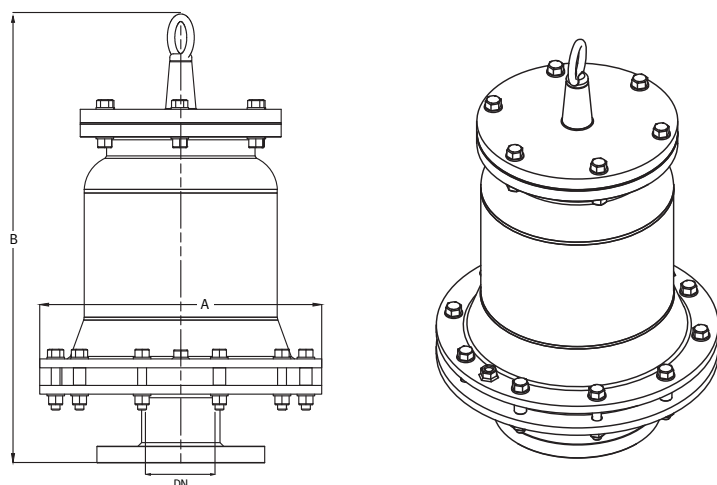
Elmac's FAB Valve™ series' have been type-tested to EN ISO 16852 and approved according to ATEX Directive 2014/34/EU.

Elmac Expertise

Elmac has been manufacturing protection equipment since 1936 and brings enhanced levels of flame and explosion protection to a diverse range of applications.

Elmac offers considerable technical leadership and R&D innovation with state of the art in-house design and testing facilities. It has acquired a reputation for developing solutions for the most challenging of industrial applications.

General Arrangements:



FAB Valve™ Specifications:

Pressure: +3.5 mbarg to +35 mbarg

Vacuum: -2.0 mbarg to -20 mbarg

Sealing: FEP, PTFE

Weight: Lead, stainless steel

Connection Size: DN50 (2") to DN300 (12")

Max. Operating Temperatures: 60 °C

Materials Types (Housing):

Carbon steel, stainless steel (other special materials are available upon request)

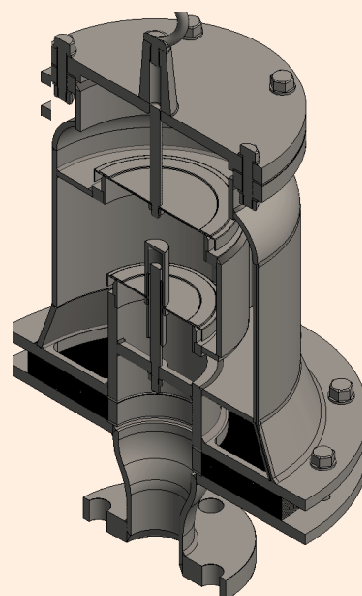
Dimensions

DN (mm)	50	80	100	150	200	250	300
A	320	320	405	452	555	610	645
B	455	455	560	755	875	925	960

NB: Please contact Elmac if you have specific requirements.

Features and benefits

- Exceptional flow capacity from a compact valve size
- Reduces explosion risk and environmental pollution
- Low leakage rates minimise evaporation losses
- Economic savings due to reduced product losses
- Self-draining element prevents rain, dirt or other foreign matter entering the piping system
- Easy visual in-situ inspection of the element
- E-Flow™ element provides optimum flow performance and minimal pressure drop
- Quick and easy to install and maintain with replaceable element
- Minimum plugging or clogging of the element with minimal maintenance
- The patented FAB Valve™ also incorporates the patented RE-Flow™ technology
- Optimised pallet design and sealing reduces chattering
- Unique valve design provides complete weather protection
- Protects against atmospheric deflagration



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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