

TECHNICAL DATA
Flame Arresters

MB-IB Def. Series



Microbore In-Line Deflagration Arresters

Application:

The Elmac Technologies® MB-IB series of microbore flame arresters is specially designed for the protection of gas sampling and analysis equipment where flammable vapours are present. Many other applications involving small bore pipework can be protected from explosion risk using microbore arresters.

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

- Available in 15mm and 20mm nominal bore
- Suitable for gases with MESG \geq 0.65mm (gas group IIB3)
- Available in carbon steel or stainless steel
- The Elmac technical team can advise on specific location queries

Gas Groups

Elmac in-line deflagration arresters in the MB-IB series are for use with gases in Groups I, IIA, IIB1, IIB2 and IIB3.

Standards Compliance

All Elmac in-line 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.



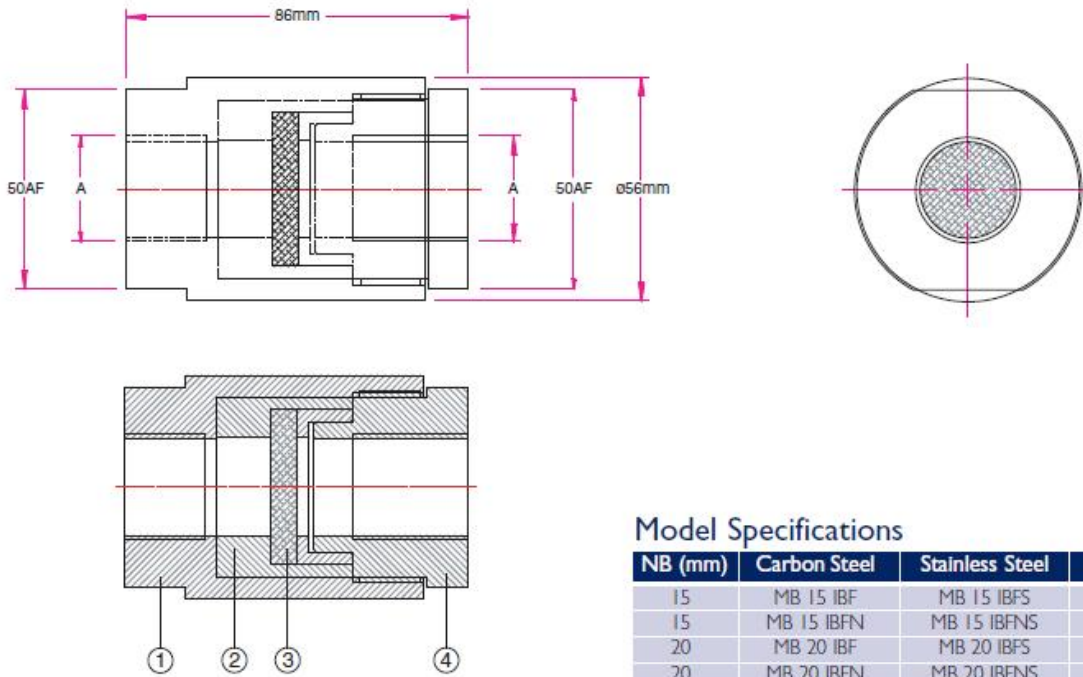
Elmac Expertise

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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Drawings:



Model Specifications

NB (mm)	Carbon Steel	Stainless Steel	Screw Connection 'A'
15	MB 15 IBF	MB 15 IBFS	1/2" BSP female
15	MB 15 IBFN	MB 15 IBFNS	1/2" NPT female
20	MB 20 IBF	MB 20 IBFS	3/4" BSP female
20	MB 20 IBFN	MB 20 IBFNS	3/4" NPT female

Material Specifications

Ref	Description	Carbon Steel Models	Stainless Steel Models
1	Body	Mild Steel	Stainless Steel
2	Element Body	Mild Steel	Stainless Steel
3	Element Core	316L Stainless Steel	316L Stainless Steel
4	End Connection	Mild Steel	Stainless Steel

MB-IB Flow Curves

Air flow at 1atmosphere (101.325kPa) and 0°C

