

# SV Series



## Light Duty End of Line Flame Arresters with Fixed Elements

### Application:

The Elmac Technologies Limited, SV series of light duty end of line deflagration arresters is designed for installation at the end of a pipeline or on an atmospheric vent from vessels where flammable gases or vapours may be present. SV arresters provide an economical solution for situations where a simple light weight product is required. Typical applications include gas purging of equipment, sample lines and instrumentation lines.

### 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 sizes from 15mm to 50mm nominal bore
- Suitable for gases with MESG  $\geq 0.65$ mm (gas group IIB3)
- Lightweight arresters in zinc alloy or aluminium alloy
- Optional weatherhood for environmental protection
- Male to female connection adapters available
- The Elmac technical team can advise on specific location queries

### Gas Groups

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

### Standards Compliance

All Elmac end of 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.



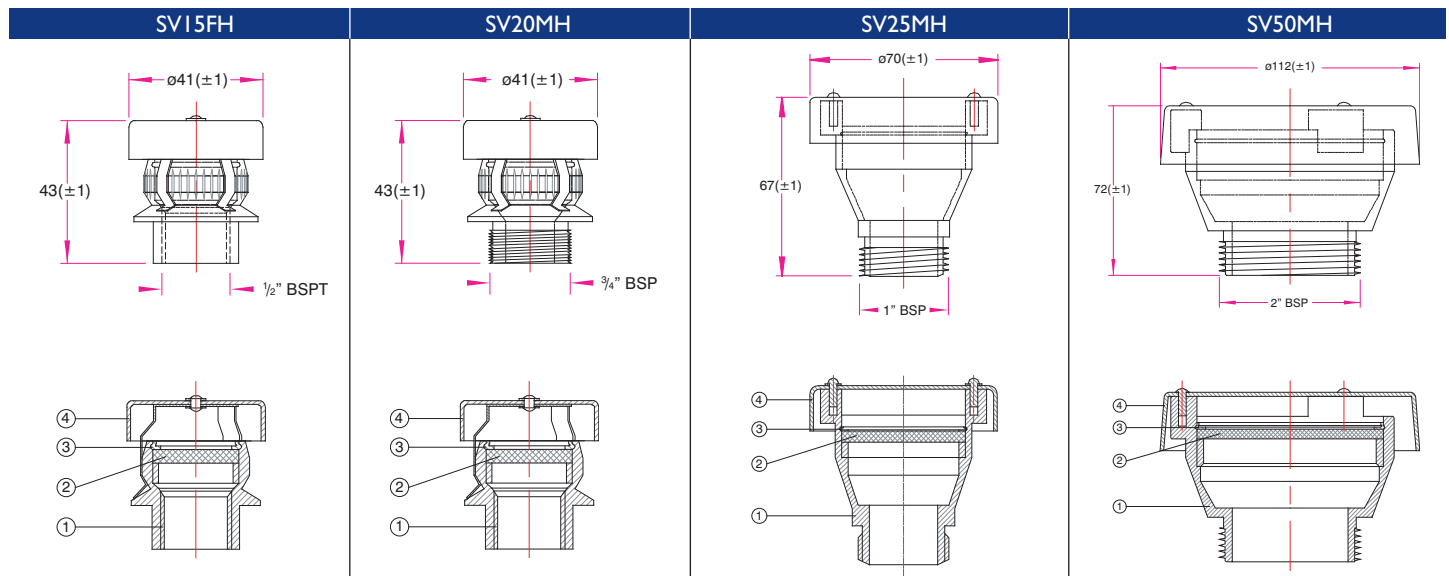
### Elmac Expertise

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:



### Material Specifications

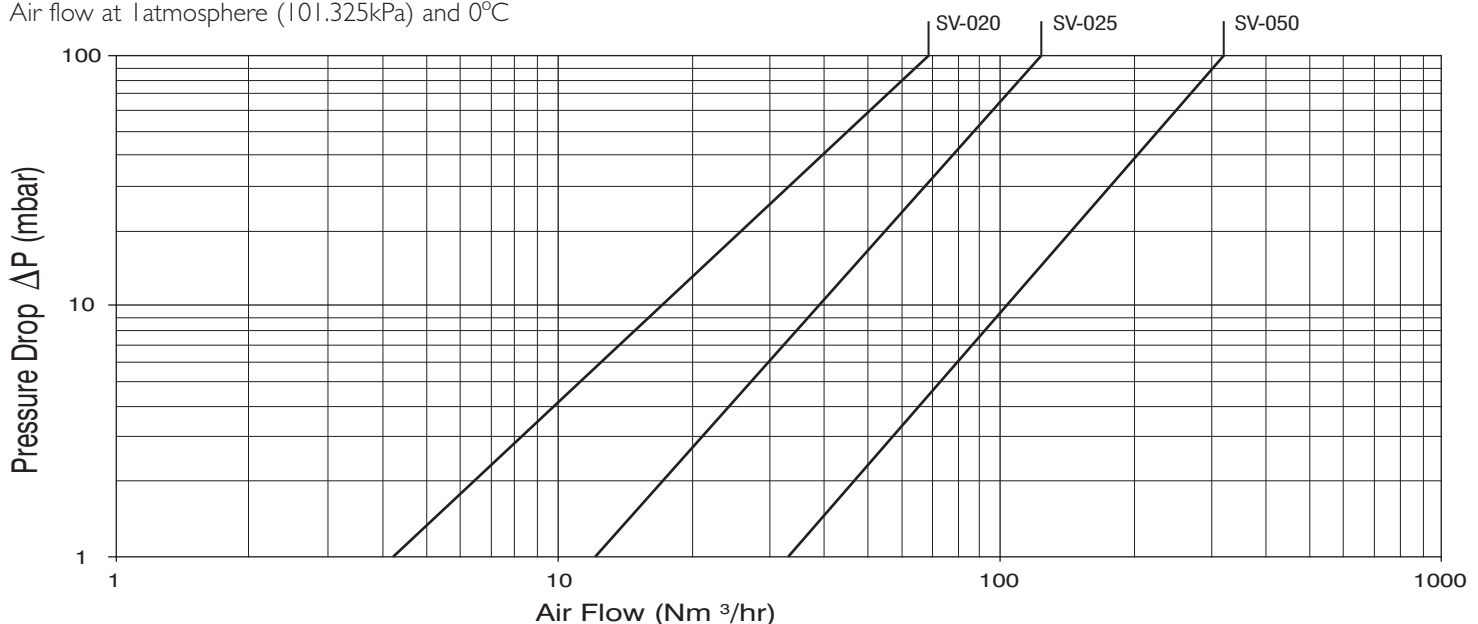
Ref	Description	SV15FH	SV20MH	SV25MH	SV50MH
1	Body	Mazak 3 Zinc Alloy	Mazak 3 Zinc Alloy	Mazak 3 Zinc Alloy	LM6 Aluminium Alloy
2	Element Core	316L Stainless Steel	316L Stainless Steel	316L Stainless Steel	316L Stainless Steel
3	Element Core Retaining Ring	Aluminium	Aluminium	Aluminium	Aluminium
4	Weatherhood	Aluminium	Aluminium	Aluminium	Aluminium

### Model Specifications

NB (mm)	Model Number (with weatherhood)	Model Number (without weatherhood)	Screw Connection	Approximate Weight (kg)	ø Element (mm)
15	SV15FH	SV15F	1/2" BSPT female	0.1	25
20	SV20MH	SV20M	3/4" BSP male	0.1	25
25	SV25MH	SV25M	1" BSP male	0.2	44
50	SV50MH	SV50M	2" BSP male	0.3	79

### SV Flow Curves

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



### Customer Support Team

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