



# Spark Arrestors/ **Pre-Filters**

For high efficiency air filtration systems

## Introduction

VOKES Spark Arrestors/Pre-Filters are designed for installation up-stream of absolute filters in applications where there is a risk of fire. Intended to protect absolute filter media from fire damage, they are non-combustible panels which prevent glowing embers and large particles from reaching the absolute filter. There are two types of unit, a spark arrestor which does not perform a filtration function and a combined spark arrestor/pre-filter.

Spark arrestors/pre-filters can be fitted into ductwork using separate frames, directly fitted to an absolute filter using a mounting frame or contained within the pre-filter sections of a Unipak Containment System. Although principally designed for use with high efficiency filters, they can also be used to protect other types of equipment.

# **Spark Arrestors**

VOKES Spark Arrestors are intended to perform the function of a spark trap and not a pre-filter. Fitted up-stream of an absolute filter, they are designed to prevent the passage of sparks and flames, while offering a minimal pressure drop.

Designed to meet performance requirements within the nuclear industry, they are also suitable for use in a wide range of air handling systems. Max. Temp.: 250°C continuous

#### Construction

Media: Contains alternate layers of flat and

crimped steel wire.

A rigid mild steel frame Frame:

with a corrosion and heat resistant paint finish. Similarly treated mild steel grilles are fitted on both sides.

Gasket: Available with or

> without a silicone rubber gasket.

Specification: VOKES spark arrestors

are designed to meet the requirements contained in AESS 30/93700 Type 2.

#### Performance

Air Volume Capacity:

Two standard spark arrestors are available with air volume capacities of 340 m<sup>3</sup>/h (94 l/s) and 1,700m<sup>3</sup>/h (470 l/s).

Initial <25 Pa. at the rated

Resistance: flow.

500°C short periods only

Dimensions: 340m³/h Spark Arrestor –

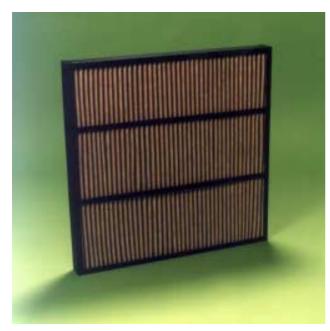
304 x 304 x 51mm (57mm with gasket)

1,700m<sup>3</sup>/h Spark Arrestor - 609 x 609 x 51mm (57mm with gasket)

# Spark Arrestor/Pre-Filters

VOKES Spark Arrestor/Pre-Filters are designed to be fitted up-stream of absolute filters, to provide a combined pre-filter and spark trap. In the event of a fire the glass wool filter media fuses, leaving a double layer of wire mesh to hold back the flames.

Designed to meet performance requirements within the nuclear industry, they are also suitable for use in a wide range of air handling systems. Where full fire protection is required, a separate VOKES Spark Arrestor should be fitted.



#### Construction

Media: A layer of glass wool filter media,

sandwiched between two layers of steel wire mesh and pleated to give an increased

surface area.

Frame: A rigid mild steel frame with horizontal

supporting strips. The frame assembly has a corrosion and heat resistant paint finish.

Gasket: Available with or without a silicone rubber

gasket.

Specification: VOKES spark arrestor/pre-filters are

designed to meet the requirements contained in AESS 30/93700 Type 1.

### **Performance**

Air Volume Capacity:

Two standard spark arrestor/pre-filters are available with air volume capacities of 340 m³/h (94 l/s) and 1,700m³/h (470 l/s).

Initial <50 Pa. at the rated flow.

Resistance:

Max. Temp.: 250°C continuous

500°C short periods only

Dimensions: 340 m³/h Spark Arrestor – 304 x 304 x 51mm

(57mm with gasket)

1,700m3/h Spark Arrestor - 609 x 609 x

51mm (57mm with gasket)



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The company reserves the right to change specifications without notice. Freedom from patent restrictions must not be assumed.



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