### **EXPLOSION PROOF IN-LINE** FLAME ARRESTER





The model KSFI Inline Flame Arrester is designed. manufactured, tested according to API 2000, British Standard Specification Code BS7244, and EN 12874 / ISO 16852.

The units are passive devices with no moving parts.

They prevent the propagation of flame from the exposed side of the unit to the protected side by the use of a 316L stainless steel crimped metal ribbon type flame cell element.

This construction produces a matrix of uniform opening that are carefully constructed to quench the flame by absorbing the heat.

### Introduction

This provides an extinguishing barrier to the ignited vapor mixture.

The KSFI flame arrestors have specifically designed heat transfer characteristics for slow moving flames and low to medium pressure fronts (low to medium deflagration).

Inline flame arresters can be installed either vertically or horizontally within a designated distance from the potential ignition extras.

The standard flame cell is suitable for NEC group D or IEA IIA gases. Cells for other gas groups are available as additional extras.

The standard design shall be used up to an operating temperature of + 60 deg C / 140 deg F and operating pressure up to 1.1 bar abs from size ½" / 15A to 12" / DN 300.

Upon request, it can be obtained for higher pressure and higher temperature with special approval.

The fame arresters are available with either aluminum, nodular iron, cast steel, 304SS, 316SS and 316LSS housings. Iron and steel housings are supplied epoxy coated.

Sizes range from 15mm to 600mm and available upon request.

Standard flanges are ANSI 150lb and other connections and size are available upon request.

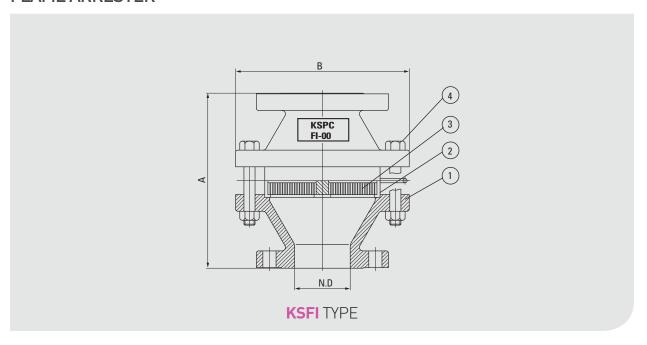
#### Maintenance

Periodic inspection and maintenance is required. The cell assembly can be removed for cleaning purposes. Cleaning ban be accomplished by dipping the entire cell assembly into an appropriate solvent. Care should be taken not to damage the cell openings as such deformations hamper the flow through the cell. The gaskets should be inspected and replaced if necessary.

# Section 3.1

## **EXPLOSION PROOF IN-LINE FLAME ARRESTER**





### **Dimension Table** (Size range 15mm nominal bore – 600mm ND)

Unit: Metric

SIZE	1/2"	1"	11/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"	20"	24"
ND	15	25	40	50	80	100	150	200	250	300	350	400	500	600
А	223	229	230	234	254	262	326	342	364	454	486	511	540	650
В	155	155	214	214	251	300	385	450	600	680	745	850	1000	1230

NOTES : Standard Connection : ANSI 150LB flange, JIS or different sizes available on request.

### **Materials of Construction**

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1. BODY	CAST ALUNIMUM	CAST or WELDED C.S	S.S				
2. ELEMENT RING	SS304	SS304	SS304 OR SS316L				
3. ELEMENT	SS316L						
4. STUD BOLT/NUT	A193-B7 / A194-2H OR S.S						
STANDARD PAINTING	IN-OUT SIDE EPOXY 150 MICRON WITHOUT S.S & AL PART.						

NOTE: C.I - Cast Iron, S.S - Stainless Steel, C.S - Carbon Steel, AL - Aluminum