

## 94450 Combination Deflagration Flame Arrester & Free Vent

The Shand & Jurs 94450 Combination Deflagration Flame Arrester/Free Vent provides both positive fire stop and maximum venting in a compact fitting.

This Shand & Jurs fitting features an easily accessible, unitized tube bank. It's completely removable for quick inspection and servicing, even under severe conditions of unpredictable corrosion or neglect.

The tube bank consists of passages formed by spirally winding alternate flat and corrugated sheet stock around a solid core. To insure maximum flow, constant tension control is maintained during winding.

The tube bank is contained by its shell between the body and free vent adapter. The hood and adapter can be easily removed as a unit.

Standard body construction material choices include light weight cast aluminum, cast steel, 304 or 316 stainless steel, ductile iron, and cast iron. Raised face or flat face flange to match ANSI, EN1092, or JIS connections.

For highly corrosive applications, body and tube bank construction of Duplex Stainless Steel, Hastelloy C, or Alloy 20 are available.

Temperature monitor device to be installed on unprotected side of Tube Bank.

Temperature monitor device available. Consult Factory.



### Features

- ATEX EN 12874 Approved
- ISO 16852 Approved
- One compact fitting for positive flame arrest & maximum flow venting
- Easily accessible, unitized tube bank
- Available in sizes 2'' (50 mm) through 12'' (300 mm) ANSI, EN1092, JIS sizes available
- Wide range of standard construction materials

## Specifications

### Sizes:

2", 3", 4", 6", 8", 10" and 12"

### Max. Operating Pressure:

2"-6" Size - 1.12 BARA (16.2 PSIA)  
8"-12" Size - 1.10 BARA (15.95 PSIA)

### Max. Operating Temp:

60°C (140°F)

### Flange Rating:

To match drilling of ANSI 125/150 lb. flat face, raised face, EN1092 PN 10/16, and JIS 10K options.

### Approval:

ATEX Directive 94/4/EC and EN 12874, ISO 16852 (Short Term Burn)  
**NOTE:** Aluminum and Cast Iron bodies are only approved for ISO 16852

### Gas Application:

IIA (NEC Group D)

## Materials of Construction

### Body:

Carbon Steel, 304 Stainless Steel, 316 Stainless Steel, Aluminum, Cast Iron, Ductile Iron, Duplex Stainless Steel, Hastelloy C, Alloy 20

### Tube Bank:

Carbon Steel, 304 Stainless Steel, 316 Stainless Steel, Carbon Steel, Duplex Stainless Steel, Hastelloy C, Alloy 20

### Hardware:

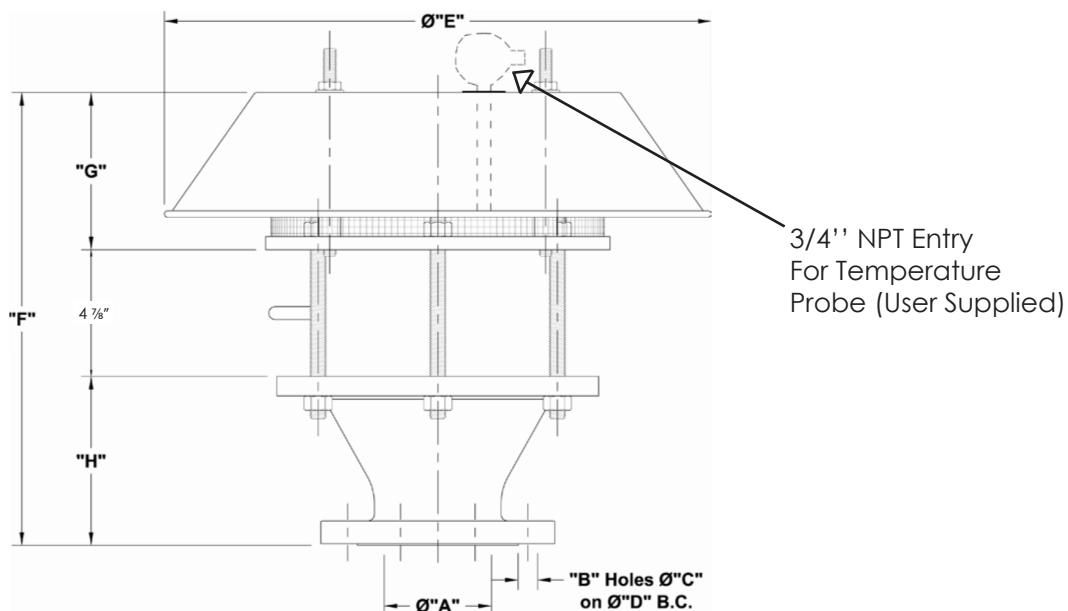
18-8 Stainless Steel, 304 Stainless Steel, 316 Stainless Steel, Duplex Stainless Steel, Hastelloy C, Alloy 20

### Gaskets:

High Temperature Synthetic Composition

## Outline Dimensions

Dimensions in Inches								
Vent Size	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
2"	2 ¼	4	¾	4 ¾	16	17 ¾	7	4 ¼
3"	3 ⅜	4	⅝	6	18 ⅝	17 ¾	7	5 ⅜
4"	4 ⅛	8	¾	7 ½	20 ⅛	17 ⅞	6 ⅜	6 ½
6"	6 ⅝	8	⅞	9 ½	27 ⅞	19 ⅞	7 ⅜	7 ½
8"	8 ⅛	8	⅞	11 ¾	29 ¼	24 ⅞	9 ⅝	9 ⅜
10"	10 ¼	12	1	14 ¼	45 ½	30 ¼	13 ¼	12
12"	12 ¾	12	1	17	45 ½	32 ¼	13 ¼	14



All designs subject to change. Certified dimensions and specifications available upon request.