94306 Vertical End Of Line Flame Arrester

The Shand & Jurs Flame Arresters are designed to provide a positive flame stop on low pressure tanks, storage tanks and anaerobic digesters containing flammable liquids, solvents or gases having a low flash point. The 94306 not only provides exceptional protection against propagation of flame from external source, but also offers maximum flow capacity.

Shand & Jurs Flame Arresters are generally installed with pressure-vacuum vents, or in-line free vent to atmosphere. The tube bank design consisting of a spiral-wound crimped ribbon around a solid core, maximize flow capacity with minimum pressure drop. This unique design meets FM Factory Mutual approval for all sizes and material options.

Standard construction includes cast aluminum, cast iron, and 316 stainless steel body materials suitable for most environments. Tube bank is available in aluminum and 316 stainless steel as standard. For highly corrosive and severe conditions, special materials and coatings are available.

Available with flat face flanges for aluminum only or flat face raised or face flanges for cast steel and stainless steel to match ANSI or EN1092-1 connections.

Periodic inspection, maintenance and replacement of the tube bank is easily accomplished by simply removing tie-bolts and expanding the remaining jack screws. Once the upper and lower body sections are expanded, the tube bank and shell are easily removed with the aid of a handle.

For in-line deflagration arrester, see the Shand & Jurs 94406.

Features

- Unitized tube bank design
- Maximum protection and efficiency with minimum pressure drop
- Wide range of standard construction materials
- Easy inspection and maintenance, due to simple removal of tube bank on site
- FM Approval, 2'' to 12" inclusive
- NEC Group D gas applications
- Location within 10 pipe diameters of potential atmosphere ignition source based on FM requirements

Specifications

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

Max. Static Pressure:
19.7 PSIA (5 PSIG)

Max. Operating Pressure:
15.7 PSIA (1.0 PSIG)

Flange Rating:
To match drilling of ANSI 150 lb. flat face or 150 lb. raised face (cast aluminum body option available with flat face only). EN1092-1 PN16 FF/RF.

Approval/Gas Application:
FM (Factory Mutual), NEC Group D Gas

Materials of Construction

Body:
Cast Steel, Cast Aluminum, 316 Stainless Steel

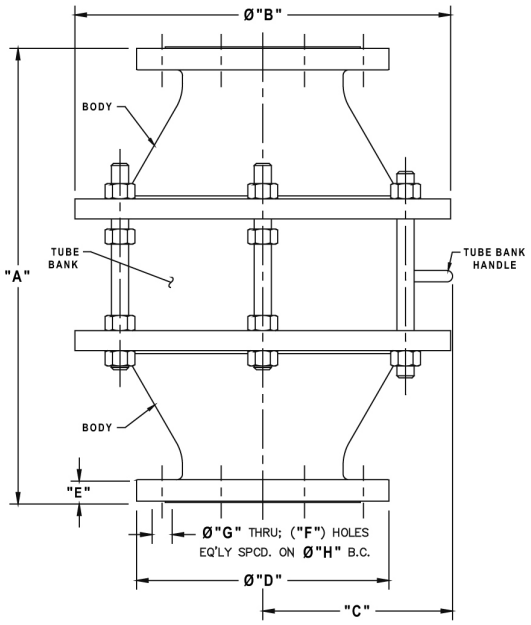
Hardware:
316 Stainless Steel Standard

Tube Bank:
Aluminum with Aluminum Shell;
316 Stainless Steel with 316 Stainless Steel Shell

Outline Dimensions

Dimensions in Inches									Approximate Shipping Wt. (lbs)	
Vent Size	"A"	Diameter "B"	"C"	Diameter "D"	"E"	Holes "F"	Diameter "G"	Diameter "H"	Alum.	Iron
2"	13 3/8	8 1/2	7 7/16	6	5/8	4	3/4	4 3/4	15	43
3"	15 5/8	10 1/2	8 5/16	7 1/2	3/4	4	3/4	6	25	65
4"	17 7/8	12 3/8	6 1/2	9	15/16	8	3/4	7 1/2	45	120
6"	19 7/8	16 3/8	8 1/4	11	1	8	7/8	9 1/2	69	207
8"	24 1/2	20 1/2	10 3/8	13 1/2	1 1/8	8	7/8	11 3/4	93	280
10"	28 7/8	24 1/2	12 1/4	16	1 3/16	12	1	14 1/4	165	480
12"	32 7/8	28 3/4	14 3/8	19	1 1/4	12	1	17	200	610

ANSI Connection shown. Other Connection Sizes Available.
Installation Note: Locate flame arrester within 10 pipe diameters of potential atmospheric ignition source.



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

94306 Ordering Guide

Model Number Selection

The model number will consist of a base number **94307** followed by 6 digit numbers. These digits will represent 2 option tables.

94307 - AB - CD - EF

Ordering Information

Specify:
1. Model 94307 Horizontal Flame Arrester
2. Size and Body Material
3. Tube Bank and Shell Material
4. Type of Flange Option
5. Special Materials or Coatings, If Required

Table AB - Size and Body / Table CD - Tube Bank and Shell

Option AB	Size	Body Material	Option CD	Tube Bank Material	Shell Material
12	2"	Cast Aluminum	12	Aluminum	Aluminum
			23	316 Stainless Steel	316 Stainless Steel
14	3"	Cast Aluminum	12	Aluminum	Aluminum
			23	316 Stainless Steel	316 Stainless Steel
15	4"	Cast Aluminum	12	Aluminum	Aluminum
			23	316 Stainless Steel	316 Stainless Steel
16	6"	Cast Aluminum	12	Aluminum	Aluminum
			23	316 Stainless Steel	316 Stainless Steel
17	8"	Cast Aluminum	12	Aluminum	Aluminum
			23	316 Stainless Steel	316 Stainless Steel
18	10"	Cast Aluminum	12	Aluminum	Aluminum
			23	316 Stainless Steel	316 Stainless Steel
19	12"	Cast Aluminum	12	Aluminum	Aluminum
			23	316 Stainless Steel	316 Stainless Steel
52	2	Cast Steel	23	316 Stainless Steel	316 Stainless Steel
42	2	Cast 316 Stainless Steel	22	316 Stainless Steel	316 Stainless Steel
54	3	Cast Steel	23	316 Stainless Steel	316 Stainless Steel
44	3	Cast 316 Stainless Steel	22	316 Stainless Steel	316 Stainless Steel
55	4	Cast Steel	23	316 Stainless Steel	316 Stainless Steel
45	4	Cast 316 Stainless Steel	22	316 Stainless Steel	316 Stainless Steel
56	6	Cast Steel	23	316 Stainless Steel	316 Stainless Steel
46	6	Cast 316 Stainless Steel	22	316 Stainless Steel	316 Stainless Steel
57	8	Cast Steel	23	316 Stainless Steel	316 Stainless Steel
47	8	Cast 316 Stainless Steel	22	316 Stainless Steel	316 Stainless Steel
58	10	Cast Steel	23	316 Stainless Steel	316 Stainless Steel
48	10	Cast 316 Stainless Steel	22	316 Stainless Steel	316 Stainless Steel
59	12	Cast Steel	23	316 Stainless Steel	316 Stainless Steel
49	12	Cast 316 Stainless Steel	22	316 Stainless Steel	316 Stainless Steel

HARDWARE: 18-8 SS Standard; Use CD (XX) option for 316 SS; 316 SS Standard for 316 SS Body

Table EF - Flange Type and Drain Plugs

Flange Style	With Drain Plugs Option EF
ANSI 150lb. FF	71
ANSI 150lb. RF	81
EN1092-1 PN16 FF	21
EN1092-1 PN16 RF	31

Note: 1. Raised faced flanges with smooth finish are standard.
For optional serrated raised faced flanges, consult factory.

2. Raised Face Flanges not available with Aluminum bodies.

Tube Banks Only

Parts Number	Size (Inches)	Tube Bank Material	Shell Material	Shipping Weight (lbs.)
9430-10150	2	Aluminum	Aluminum	9
9430-11110	2	316 Stainless Steel	316 Stainless Steel	25
9430-10151	3	Aluminum	Aluminum	14
9430-11111	3	316 Stainless Steel	316 Stainless Steel	35
9430-10152	4	Aluminum	Aluminum	20
9430-11112	4	316 Stainless Steel	316 Stainless Steel	60
9430-10153	6	Aluminum	Aluminum	35
9430-11113	6	316 Stainless Steel	316 Stainless Steel	100
9430-10154	8	Aluminum	Aluminum	55
9430-11114	8	316 Stainless Steel	316 Stainless Steel	160
9430-10155	10	Aluminum	Aluminum	85
9430-11115	10	316 Stainless Steel	316 Stainless Steel	240
9430-10156	12	Aluminum	Aluminum	120
9430-11116	12	316 Stainless Steel	316 Stainless Steel	320