

### Inline/End Of Line Flame Arrestor Series-A



The Paradox Standard In-Line Flame Arrestor prevents flame propagation by acting as a heat sink, cooling the flame front to cause it to be extinguished. This heat sink is made from spiral wound crimped ribbon that

allows gas to flow with a minimum pressure drop.

Standard Flame Arresters are only used for pipe lengths of less than 10 to 20 feet with one pipe bend depending on model size. In addition, it stops confined and unconfined, low-pressure deflagrations. All Paradox units are bidirectional and are proven to stop an ignited flammable

vapor mixture approaching from either direction or traveling at subsonic velocities.

Designed with flanged connections.
All our arresters come with strong lifting points designed to lift the entire unit and then some.



The arrestor provides the option of removal of the flame cell (element) for easy cleaning and replacement without disconnection of the pipe connection flanges. Standard housing construction is carbon steel and stainless steel. The element is available in 304 SS, 316 SS & Hastelloy. Special material and protective coatings are available on request, except for Aluminum. We do not fabricate any aluminum flame arrester products and consider them to be a liability.

Gas Groups IIA (D)
IIB3 ( C )
IIC (B)

• Tested for 2" (50mm) through 24" (600mm)



### **Series-A Flame Arrestors**

#### **Features and Benefits**

- All Paradox Detonation Arrestors are designed for low pressure deflagrations.
- Removable Element design allows for easy replacement.
- Large Inspection Ports
   are available on most
   models and allows for
   easy inspection and
   cleaning.
- outstanding corrosion and chemical resistance.
- Temperature ports optional in 1/2", 3/4" or 1"
   NPTF.
- Diff/pressure ports optional in 1/2", 3/4" or 1" NPTF
- Drains ports on optional in 1/2", 3/4" or 1" NPTF
- Instrumentation can be supplied as well.

Due to a potential failure, caused by melting of an aluminum element during a stabilized flame, we will not supply flame arresters made with aluminum castings and /or elements.



# Paradox's Large Crimp Opening Provide:

- Maximum flow
- Less Pressure Drop
- Easy Cleaning
- Less Clogging
- Less Maintenance
- Bi-directional Design
- Available in ANSI, DIN and JIS flange and NPT.

Phone:1-352-493-0616

Fax: 1-352-493-4401

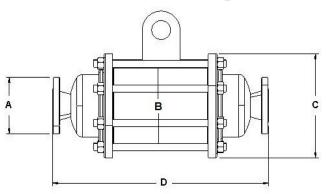
### **Material Specifications**

Housing	Cell	Gas Group
Carbon Steel 304 SS	304 SS 316 SS	IIA (D) IIB3 (C)
316L SS Hastelloy	Hastelloy	



# Model A– Deflagration Arrester





Model	A 150# ANSI Conn. Size in. (mm) (Optional 125# FF)	B Housing Size In. (mm)	C Outside Diam- eter In. (mm)	D Overall Length In. (mm)	Approx. Weight Lb.(Kg.) Grp D
A-1C	1 (25)	4 (101)	7.75 (196)	15 (381)	60 (27.2)
A-2C	2 (50)	6 (152.4)	9.0 (229)	15.18 (401.32)	65 (29.48)
A-3C(6)	3 (75)	6 (152.4)	9.0 (229)	18 (457)	80(36)
A-3C(8)	3 (75)	8 (200)	11 (279)	19 (482.6)	100 (45.3)
A-4C	4 (100)	8 (200)	11 (279)	19 (482.6)	110(50)
A-6C(10)	6 (150)	10(254)	13.5 (343)	19.75 (502)	140 (63)
A-6C(12)	6 (150)	12(304)	16 (406)	23 (584)	280(127)
A-8C(14)	8 (200)	18 (457)	23.5 (596)	29(737)	280(127)
A-8C(16)	8 (200)	16 (400)	20 (509)	34 (863)	270 (123)
A-10C(20)	10 (254)	20 (508)	23.5 (596)	44(1119)	330(149)
A-12C	12 (304)	22 (558)	27.5 (698)	31.7 (805)	450 (204)

Intermediate sizes may not be listed. & Sizes 14" through 36" and larger—dimensions available on request.

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## Series "A" In-Line Flame Arrester for Group D, C, or B Gas Specification Data Sheet

In-line Bi- Directional Flame Arrester
Vertically or Horizontally in Piping systems with a maximum 10' to 20' of pipe & one elbow from the ignition source depending on model size.
UL525/Propane/Ethylene/Hydrogen
2" through 24" Pipe sizes
Flanged or threaded connection available.
Available in ASME 150/125# Flat Face or Raised Faced Flange
Standard Model; Carbon Steel, also available in 304, 316L & most other Austenitic metal or hastelloy.
The element is crimped metal ribbon made from 304 Stainless Steel and is also available in 316L or hastelloy.
15.7 Psia.
-20°F to 140°F or (1024°C for 5 minutes Stabilized Burn Condition)
150 Psig.
NEC Group D,C, B( IEC Group IIA, IIB, IIC)

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