

## High Pressure Deflagration Flame Arrestor, Series B



The Paradox Deflagration Flame Arrestor, is designed to stop the propagation of a deflagration beyond the capabilities of a conventional end of line flame arrester. They are ideal for *short flare stacks* (<60ft.) with a ninety degree elbow at the bottom. The deflagration arrester is bi-directional and will stop both low and high pressure deflagrations.

### *Detonation Flame Arrester*

Like our detonation arresters, they have crimped ribbon with screen sections that allow for much larger cells than that of competitive crimped ribbon arresters, allowing maximum flow with maximum protection and requires less frequent maintenance due to clogging and greater ease in cleaning when service is required. This translates to less down time. Our element offers maximum flow to pressure drop characteristics enhancing the value of our product in any system.

Our deflagration arresters are designed with flanged connections, this Arrestor provides the option of the 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 S.S and 316 S.S. The larger models come with large access ports for inspection and easy cleaning.

“The Formed Head End Sections” have consistent design features throughout the size ranges with improved flow characteristics.

Special material and protective coatings are available on request.

- Available in sizes 2” to 12”
- All sizes have been thoroughly tested with 50 feet of run up pipe and a 90 degree bend.
- Initial Pressure 19.7 Pisa.
- Tested to API-2028 Sect 5 paragraph b.

## Features and Benefits

- **All Paradox Deflagration Flame Arrestors** are designed for low & high Pressure deflagrations and are Bi-Directional.
- **Removable Element** design allows for easy replacement.
- **Large Inspection Ports** are *optional* on larger models and allows for easy inspection and cleaning.
- **Outstanding corrosion** and chemical resistance.
- **Optional Drain, temperature & Pressure ports.**



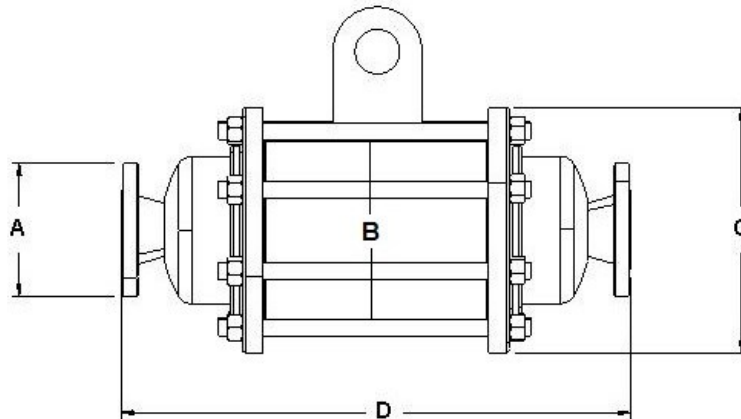
## Paradox's Large Crimp Opening Provide:

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

## Material Specifications

Housing	Cell	Gas Group
Carbon Steel	304 SS	IIC (B)
304 SS	316 SS	
316L SS	Hastelloy	
Hastelloy		

## Deflagration Flame Arresters, Series-B



### Detonation Flame arrester Specifications

Model	A 150# ANSIConn. Size in. (mm)	B Housing Size In. (mm)	C Outside Diam- eter In. (mm)	D Overall Length In. (mm)	Approx. Weight Lb.(Kg.) Grp D +/-10%
B-2C	2 (50)	8 (200)	11 (279)	22.5(571.5)	135 (61)
B-3C	3 (75)	8 (200)	11 (279)	22.5(571.5)	145(65)
B-4C	4 (100)	8 (200)	11 (279)	23 (584)	150 (68)
B-6C	6 (150)	12 (300)	16.00 (406)	30.39 (771.9)	355 (161)
B-8C	8 (200)	18.5 (470)	23.5 (597)	38 (965)	645 (292)
B-10C	10 (250)	22.5 (571.5)	27.5 (698)	42 (1067)	960 (435)
B-12C	12 (300)	26.5(673)	32.0 (813)	43.34 (1101)	1200 (544)



## Series "B" HP Deflagration Flame Arrester for Group D, Gas Specification Data Sheet

Flame Arrester Type	In-line, Bi- Directional, High Pressure, Deflagration Flame Arrester
Recommended installation /use	Vertically or Horizontally in a Piping systems with up to 60' plus 1, 90° Elbow. (For example; a 60 foot flare stack with 90° Elbow at the base and the flame arrester immediately before the elbow).
Design/Test Standard/Test Gas	Propane/Tested to API-2028 Sect 5 paragraph b.
Connection sizes	2" through 12" Pipe sizes.
Type of connection	Flanged connection.
Flange ratings	Available in ASME 150# Raised Faced Flange
Housing Materials	Standard Model; Carbon Steel, also available in 304, 316L & most other Austenitic metal or hastelloy.
Element Type/Material	The element is crimped metal ribbon made from 304 Stainless Steel and is also available in 316L or hastelloy.
Maximum Initial pressure	Initial Pressure 19.7 Pisa.
Operating temperature range	-17°C to +60°C or (1024°C for 5 minutes Stabilized Burn Condition, Type I USCG rating)
Hydrostatic Test Pressure	350 Psig.
Gas Group Application Rating	NEC Group D,( IEC Group IIA)