

Inline/End Of Line Flame Arrestor Series-A



The Paradox 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.

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 bi-directional and are proven to stop an ignited flammable vapor mixture approaching form either direction traveling at subsonic velocities.

Designed with flanged connections.

All of our arrester come with strong lifting points designed to lift the entire unit and then some.

The 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.

Special material and protective coatings are available on request, with the exception of Aluminum. Tested for 2" (50mm) through 24" (600mm)
Gas Groups I IA (D) IIB3 (C) IIC (B)

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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.

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

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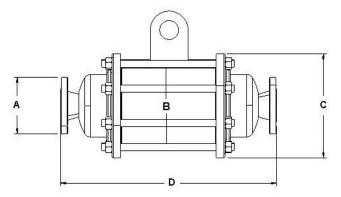


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SERIES-A Flame Arrester Specifications



| 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) | 16 (406) | 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-10C(20) | 10 (254) | 18 (457) | 23.5 (596) | 29(736) | 330(149) |
| A-12C | 12 (304) | 22 (558) | 27.5 (698) | 31.7 (805) | 450 (204) |

Sizes 14" through 36" and larger-dimensions available on request.



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

| Flame Arrester Type | In-line Bi- Directional Flame Arrester |
|-------------------------------|--|
| Recommended installation /use | Vertically or Horizontally in Piping systems with a maximum 10' to 20' of pipe & one elbow from the ignition source depending on model size. |
| Design/Test Standard/Test Gas | UL525/Propane/Ethylene/Hydrogen |
| Connection sizes | 2" through 24" Pipe sizes |
| Type of connection | Flanged or threaded connection available. |
| Flange ratings | Available in ASME 150/125# Flat Face or Raised Faced Flange |
| Housing Materials | Standard Model; Carbon Steel, also available in 304, 316L & most other Austenitic metal or hastel- loy. |
| 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 | 15.7 Psia. |
| Operating temperature range | -20°F to 140°F or (1024°C for 5 minutes Stabilized Burn Condition) |
| Hydrostatic Test Pressure | 350 Psig. |
| Gas Group Application Rating | NEC Group D,C, B(IEC Group IIA, IIB, IIC) |
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