

### Free Vent Flame Arrester SERIES-AVT



The Paradox Free Vent Flame Arrestors, are designed for free venting while simultaneously preventing flame propagation of confined and unconfined low pressure deflagrations. They prevent an ignited atmospheric vapor cloud from propagating beyond the Flame Arrestor into the line or tank.

For installation on the top of an atmospheric vent line or storage tank (end of line), with an operating pressure which is near atmospheric and there is little chance of flame stabilizing on the Flame Arrester element face.

Flame Arresters prevent

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 and are only used for pipe lengths of up to 10 feet with no pipe bend, stopping confined and unconfined, low pressure deflagrations.

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

Standard housing construction • Tested for 1" is carbon steel and stainless steel. The element is available in 304 S.S and 316 S.S.

through 6" Gas Groups IIA (D) IIB3 (C)



#### **Features and Benefits**

- All Paradox Flame
   Arrestors are de
   signed to arrest
   deflagrations.
- Removable
   Element design allows for easy replacement.
- outstanding corrosion and chemical resistance.
- Temperature
   ports are optional.

## 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.



# **Material Specifications**

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



## Series "AV" End of Line Flame Arrester for Group D, Gas Specification Data Sheet

Flame Arrester Type	End of Line Flame Arrester
Recommended installation /use	Vertically in Piping systems such as a vent line or directly onto storage tanks.
Design/Test Standard/Test Gas	ASTM F-1273 /UL525/ Test gas: Propane or Ethylene
Connection sizes	1" through 6" NPTF or 150# ANSI Flanges
Type of connection	NPTF Threaded or 150# ANSI Flanges connection.
Flange ratings	3000# or 150# ANSI
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	14.7 Psia.
Operating temperature range	-17ºC to +60ºC or (1024ºC for 5 minutes Stabilized Burn Condition)
Gas Group Application Rating	NEC Group D, & C