

### **Model A-MTF Burner Intake Flame Arrester**



The Paradox MTF 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.

MTF Flame Arresters are installed in Burners" intakes with no pipe or bends before the arrester intake. When used correctly, it stops confined and unconfined, low pressure deflagrations, preventing an ignited atmospheric vapor cloud from propagating beyond the Flame Arrestor, outside of the burner/flare intake. Used where the operating pressure is near atmospheric and there is little chance of flame stabilizing on the Flame Arrester element face. They are also ideal for installation in lightly constructed ventilation hood ducting in laboratories & similar applications like the units above used by Procter & Gamble.

Designed with butt weld connections and can be supplied with a customers preferred plate flange arrangement to fit to their burner/vent hood etc.

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

Standard housing construction is carbon steel, optionally stainless steel or aluminum is available. The element is available in 304ss and 316ss and aluminum.

Special material and protective coatings are available on request.

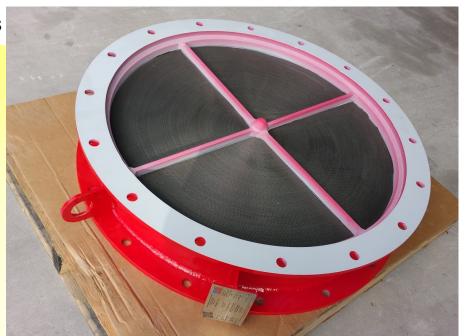
Gas
Groups IEC IA (NEC D)
Groups IEC IIB (NEC C)



### **Model-A-MTF Flame Arrestors**

#### **Features and Benefits**

- Designed for low pressure deflagrations.
- Easily removed for cleaning.
- Supplied with corrosion resistant paint & primer or unfinished.
- Temperature &/or pressure ports are available on all models.





# Paradox's Large Crimp Opening Provide:

- Maximum flow
- Less Pressure Drop
- Easy Cleaning
- Less Clogging
- Less Maintenance
- Bi-directional Design

**Material Specifications** 

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

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## **Model A-MTF Burner Intake Flame Arrester Specifications**

Model	B Housing Size In. (mm)	C Designed Flow Rate of Air (scfh)	D Est ΔP @ Flow Rate (in H2O)	Approx. Weight Lb.(Kg.) Grp D 304ss Element, CS Housing
A-MTF-0.7-12	12" (305)	21,900	0.75	73 (33)
A-MTF-2.7-24	24 (609)	99,000	0.88	160 (72.6)
A-MTF-5.4-36	36 (914)	198,000	0.80	360 (163.3)

Model	B Housing Size In. (mm)	C O.D (mm)	D Length (mm)	Approx. Weight Lb.(Kg.) Grp D 304ss Element, CS Housing
A-MTF-12	12" (305)	17.75"(450)	8"(203.2)	73 (33)
A-MTF-20	20"(609)	25(635)	8"(203.2)	160 (72.6)
A-MTF-36	36"(914)	41(1041)	8"(203.2)	360 (163.3)
A-MTF-48	48 (1219)	53"(1346)	8"(203.2)	650 (163.3)



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# Series "A-MTF" Burner Intake Flame Arrester for Group D Specification Data Sheet

Flame Arrester Type	In-line Bi- Directional Flame Arrester
Recommended installation /use	Vertically or Horizontally in the burner intake.
Design/Test Gas	Propane
Connection sizes	12" through 72" Pipe sizes
Type of connection	Butt weld or custom made flange.
Flange ratings	As designed
Housing Materials	Standard Model; Carbon Steel, also available in 304, 316L & most other Austenitic metal or hastelloy. Aluminum is now available
Element Type/Material	The element is crimped metal ribbon made from 304 Stainless Steel and is also available in 316L or hastelloy. Aluminum is now available.
Maximum Initial pressure	14.7 Psia.
Operating temperature range	-20ºF to 140ºF
Gas Group Application Rating	NEC Group D ( IEC Group IIA,)

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Figure 1. Flame Arrestor Available Constructions and Model Numbering System

The flame arrester below describes an 18", 150# RF concentric detonation arrester with a carbon steel housing and 304ss element matrix and includes 3/4" NPT drains, pressure and temp taps.

С	18 C		D	- C	S	R	_ D P T 3/4
Flame Arrestor Type	Connection Size 0.5" through	C= Concentric E=	NEC Gas Group	Housing Material	Element Material	Connection Type	Options
A = FA	48in.	Eccentric	D	C = Carbon steel	S = 304 SST	F = Flat face	D = Drain Tap & Plug
B = HPFA			С	S = 304 SST S1 = 316 SST	S1 = 316 SST H = Hastellov®	1 = 316 SST flange = Hastelloy® R = Raised face flange	P = Pressure Tap T = Temperature Probe Tap ½, ¾, 1 = NPT tap size
C = DFA			В	H = Hastelloy®	11 Plactoney		
D = H2 DFA							Or ½F, 3/4F,1F,etc; = 150# ANSI Flange size.