

# PROTEGO® In-line Flame Arresters Providing Safe & Efficient Flashback Protection



## PROBLEM

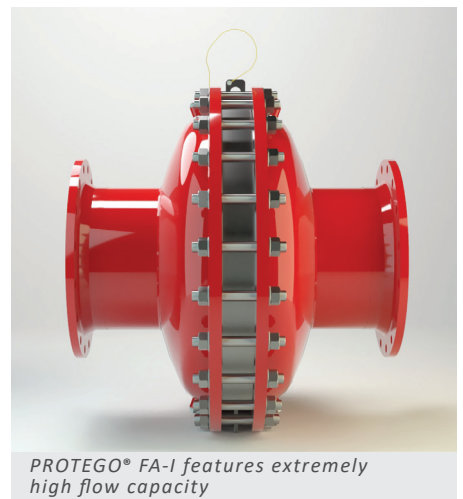
Flame Arresters should be installed at inlets of thermal combustion units (flares, oxidizers, incinerators) and at the inlet/outlet of blowers, vacuum pumps, and fans used in flammable vapor service. Detonation Arresters are safe to use but have high pressure drops, and high cost of ownership. Some “Flame Arresters” on the market however, may not be **safe** or **practical** to use for in-line applications because they have only been tested and type approved as **end-of-line** devices and are limited in the allowable run up distance between the flame source and the arrester.



*PROTEGO® FA-CN with “easy access” cover*



*PROTEGO® FA-E with eccentric housing  
(prevents condensate build-up)*



*PROTEGO® FA-I features extremely  
high flow capacity*

# Which Features do you Seek for In-line Flame Arresters?

## CHALLENGE

- Low cost of ownership
- High flow capacity
- Eccentric housing
- Ease of maintenance
- Fast delivery

## SOLUTION

Optimized models for specific needs:

- Dirty vapor streams:
  - The Model **FA-CN** has an “easy access” cover, very light filter element assembly, and very **low spare part prices**.
- Price sensitive applications/vapor stream temperature close to dew point/condensate collection a problem:
  - The **Model FA-E** features eccentric (anti-condensate build-up) housing and **low price/fast delivery**.
- High flow capacity:
  - The Model **FA-I** has **high flow capacity**. The filter assembly diameter can be enlarged upon request for even greater flow capacity.

## GENERAL INFORMATION

**PROTEGO®** FA-Series In-line Deflagration Arresters provide a **safe solution** for such applications. These units are tested and type approved in accordance to **ISO 16852/ 80079-49:2024** and in most applications are approved for installation up to 50 pipe diameters from the flame ignition source. Materials of construction available include, carbon steel, stainless steel, ETCFE coated housings, and Hastelloy C. Models are available which are **ATEX certified** for use with **Group IIA, IIB3**, and **IIC** vapor service and also for elevated pressure and/or elevated temperature service.



*PROTEGO® filter element assembly consists of multiple filter discs to make cleaning easy*

**PROTEGO® FLOW CAPACITIES ARE DETERMINED BY LIVE FIELD TESTS - NOT BY CALCULATION. SPECIALTY PRODUCTS FOR POLYMERS (STYRENE, ACRYLATES), WHICH DO NOT CLOG ARE ALSO AVAILABLE.**

## PROTEGO® HEAD OFFICE

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