



APPLICATIONS:

- Oil & Gas Refinery
- Pharmaceutical
- Sugar & Distillery
- Chemical and petrochemical
- Pulp and paper
- Oil exploration and production
- Sewage treatment
- Landfills & mining
- Power generation
- Bulk liquids transportation
- In some cases, the flames involve exothermic (heat-producing) reactions other than oxidation. Processes which generate the combustible or reactive gases include blending, reacting, separation, mixing, drilling, and digesting. These processes involve numerous equipment configurations and gas mixtures.

FEATURES

- Low Pressure drop due to crimped metal ribbon design Arrestor Elements
- Gap sizes range from 0.2 to 0.9 mm
- Maintenance friendly Multi-layer arrestor elements for easy removal & cleaning
- Wide range of material combinations available
- Tested as per IS 16485 std. from CIMFR-Dhanbad
- Size Range: from 1/4" to 24"
- Gas group : IIA, IIB & IIC



Flame Arresters - FAE (End Of Line)

07	HOOD
06	FASTENERS
05	GASKET
04	SPACER (STAR)
03	ARRESTOR ELEMENT
02	CAGE
01	BODY
SR.NO.	DESCRIPTION



Flame Arresters - FAI (Inline)

06	FASTENERS
05	GASKET
04	SPACER (STAR)
03	ELEMENT
02	CAGE
01	BODY
SR.NO.	DESCRIPTION

FLAME ARRESTER



Flame arresters are passive, mechanical devices installed on a storage tank nozzle or in a vapor piping system. Its primary function is to allow gases to pass through during normal operating conditions, but stop a flame in order to prevent an explosion or fire propagation under emergency situations. Stopping the flame protects the storage tank, or the equipment located in the piping system, from the catastrophic damage that may result from an uncontrolled ignition. For industries that handle, store, transfer and collect hazardous liquids, a single unchecked flame can cause extensive damage to both plant and equipment, not to mention the risk of personal injury or loss of life.

A variety of arrester designs are available. The selection of the appropriate arrester depends on the flammable properties of the vapor/air mixture, operating conditions as well as how and where the arrester is installed with respect to the potential ignition source. Shown below are three primary categories of arresters that are available in the market. The user must be assured that the arrester selected has been tested for conditions that match or exceed the intended application. Fainger's flame and detonation arresters are developed in accordance to the testing / listing criteria of nationally recognized independent agencies such as Underwriters Laboratories, Inc. (UL), Factory Mutual Research (FM) and the United States Coast Guard (USCG). Also available are models that are type approved according to the latest ATEX Directive and ISO 16852.





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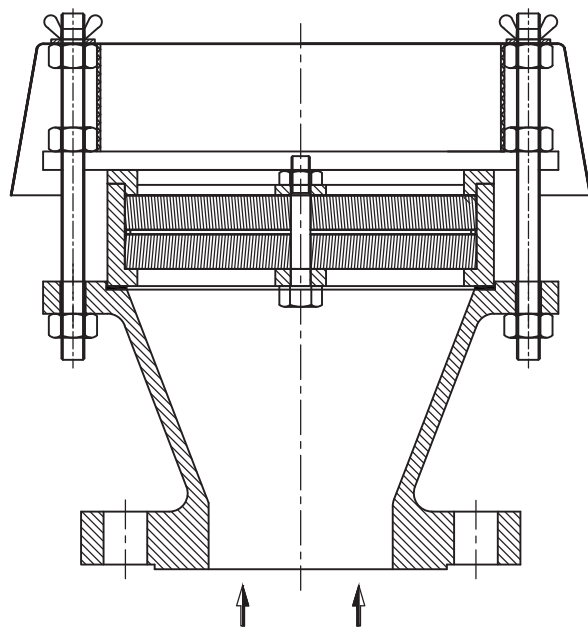
The selection of the appropriate arrester depends on the flammable properties of the vapor/air mixture, operating conditions as well as how and where the arrester is installed with respect to the potential ignition source.

FLAME ARRESTERS FALL INTO TWO MAJOR CATEGORIES:

End of line, vent to atmosphere arresters: to prevent an atmospheric fire or explosion from entering an enclosure.
In-Line : to prevent the propagation of an explosion within a pipeline.

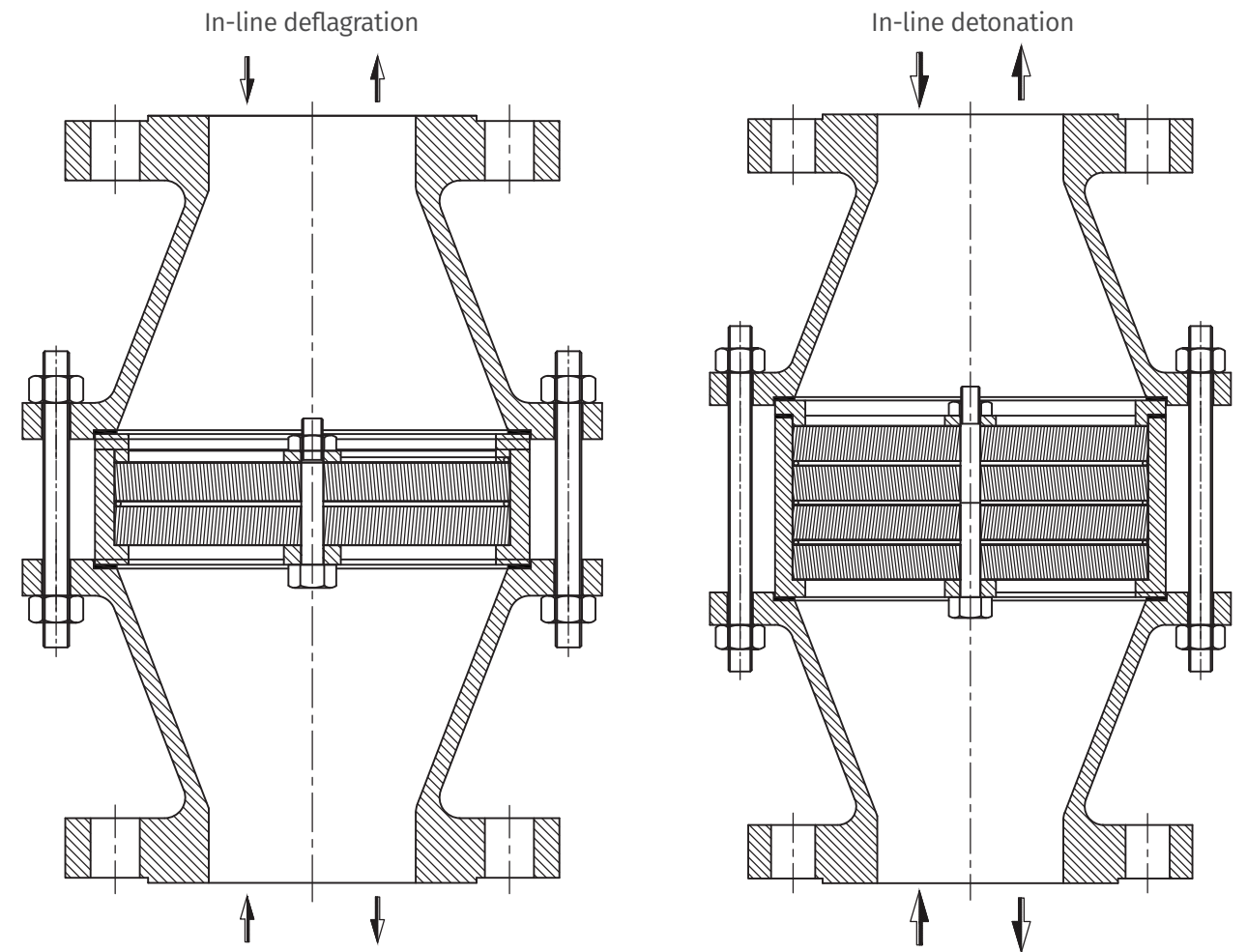
END OF LINE – DEFLAGRATION FLAME ARRESTER:

End of line arrestor are designed to prevent the travel of the external flame caused by an external source of ignition from entering a system and also sometimes to prevent the flash back of a flame which has been stabilized on the arrester. These are mounted at the end of a pipe (flanged or threaded inlet connection) and vents directly to the atmosphere.



IN-LINE DEFLAGRATION FLAME ARRESTER:

They prevent flash back against deflagrations in a pipe line. Therefore it is usually recommended that the flame arrester be located as close to the potential source of ignition as possible. The maximum distance from the potential source of ignition will always be defined for any in-line deflagration flame arrester and will be typically within 20 x the nominal bore of the pipe in which the arrester is installed. If compliance with this constraint is not possible then it will be necessary to install a detonation flame arrester which will withstand the more severe conditions that could occur.



IN-LINE DETONATION FLAME ARRESTER:

Detonation Flame Arrestors are designed to be installed in a pipeline where there is a significant distance between the arrester and the potential source of ignition, or where the pipe line contains multiple bends, elbows and other changes of direction, all of which create turbulence and increase flame front speed. In-line detonation Flame Arrester offer protection against high flame velocities, where the velocity is supersonic and is accompanied by a shock wave. Detonation arrestors must be especially applied when long pipes are connected between arrester and ignition source.

