SERIES A

In-line deflagration flame arrester

Series A assembly with removable flame element.

DUTY
Deflagration protection

FLOW DIRECTION
Bi-directional

CONNECTIONS
2-24 in. nominal

SERVICE
Removable element

Bi-directional protection against low-pressure deflagration in applications with controlled run-up piping. A spiral-wound crimped-ribbon element absorbs heat from the flame front while allowing the process gas to flow through the arrester.

Defined installation limits

Run-up piping and elbow restrictions depend on the model, size and gas. Confirm these limits before selection.

Service access

The flame element can be removed for cleaning or replacement without disconnecting the pipe connection flanges.

Construction options

Carbon steel and stainless steel housings, with stainless steel or Hastelloy element options. Aluminum construction is not offered.

Instrumentation

Optional temperature, differential-pressure and drain ports. Inspection ports are available on selected models.

DRAWINGS & INSTALLATION

Installation dimensions are under review. Request a confirmed product drawing before laying out piping, supports or installation clearances.

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SERIES A / TECHNICAL DATA

Specification overview

Initial pressure is absolute (psia); hydrostatic test pressure is gauge (psig).

Arrester type	In-line, bi-directional deflagration flame arrester
Installation	Vertical or horizontal; model-specific run-up and elbow limits apply. B-service configurations require straight run-up with no elbow.
Nominal connections	2-24 in. stated tested range; confirm other configurations
Connection options	Flanged or threaded; Class 150 raised face / Class 125 flat face options
Housing	Carbon steel; 304 / 316L stainless steel or Hastelloy options
Element	Crimped metal ribbon; 304 stainless steel with 316-series stainless steel or Hastelloy options
Maximum initial pressure	15.7 psia
Operating temperature	-20 °F to +140 °F
Hydrostatic test pressure	150 psig
Gas designations in source	IIA (D), IIB3 (C), IIC (B); model-specific limits apply
Test basis in source	UL 525; propane, ethylene and hydrogen

Series A is a deflagration arrester. It must not be substituted for a detonation arrester where the installation can develop detonation conditions.

The source separately records a 5-minute stabilized-burn condition at 1,024 °C. This is a reported test condition, not the continuous operating-temperature range.

The family uses model-specific connection and element configurations, including parenthetical suffixes such as A-6C(12). Match the complete designation and gas specification to the selected flow curve.

Publication updated 2026-10-28. Technical basis: Rev. 10 / June 6, 2023.
Confirm the current technical revision, application limits and model-specific approval or acceptance before use.

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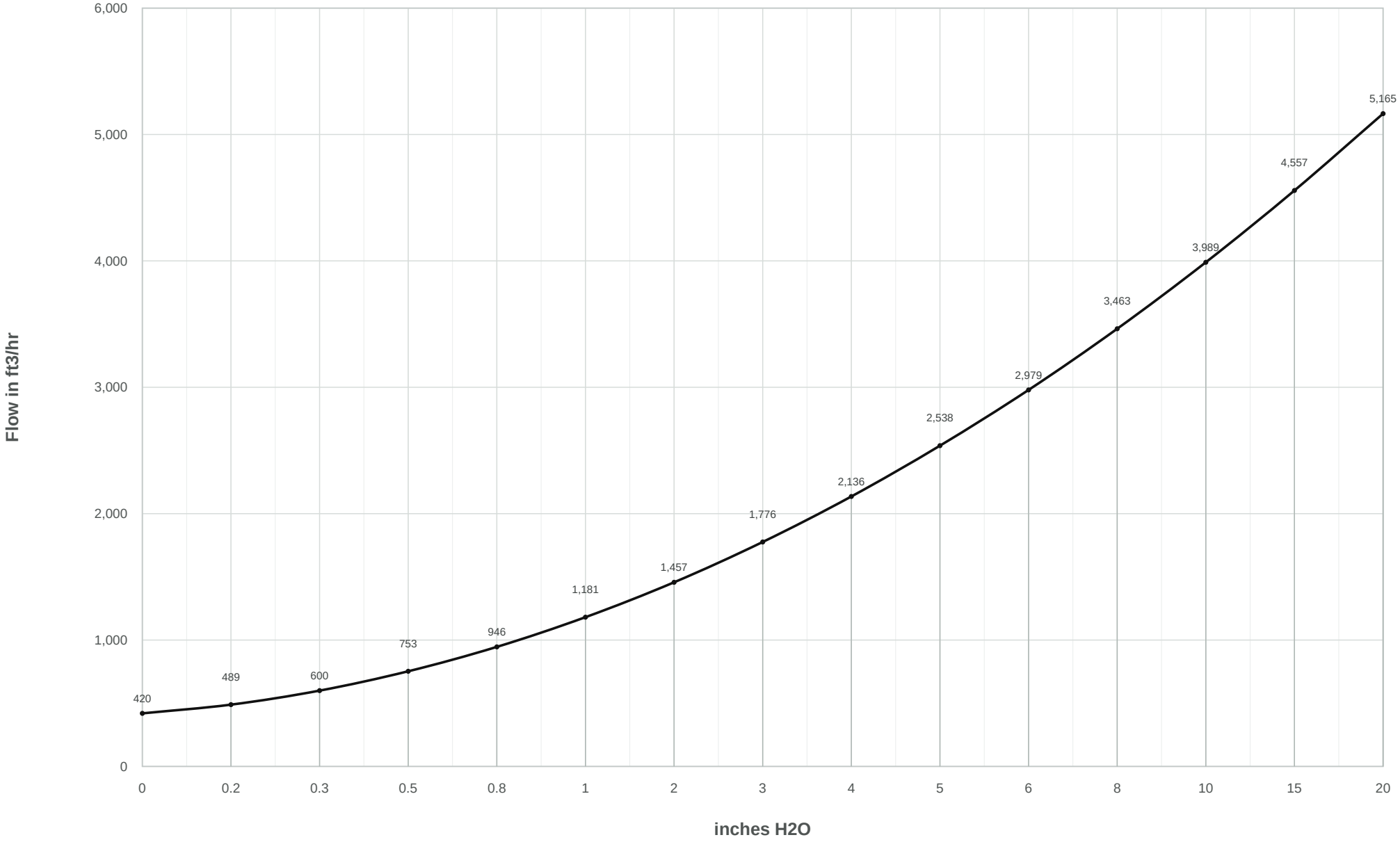
Model A-1C(4)-GD

Gas Group D (IIA) | Flow Capacity



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Original source values or curve geometry retained; white-background chart format standardized September 13, 2026.