Introduction

Enardo™ 7 Series deflagration flame arrestors are designed to stop the propagation of confined low pressure deflagrations. The Enardo 7 Series is typically used for end-of-line and near end-of-line applications when the system operating pressure is near atmospheric levels and when there is minimal probability of a flame stabilizing on the Flame Arrestor element for an extended period.

The Enardo 7 Series prevents flame propagation by absorbing and dissipating heat using spiral wound crimped ribbon flame cells. These cells allow maximum flow with maximum protection.

Designed with flanged connections, this arrestor allows removal of the flame cell element for easy cleaning and replacement without removing the arrestor body from the pipe connection. Standard housing construction is Aluminum, Carbon steel and Stainless steel. The element is available in Aluminum or Stainless steel. Special material and protective coatings are available on request.

ISO-16852 Certified 1 in. / 25 mm through 12 in. / 300 mm, D (IIA) and C (IIB3).

Factory Mutual Approved 2 in. / 50 mm to 12 in. / 300 mm, D (IIA).

Features

- Maximum Flow
- Less Pressure Drop
- Easy Cleaning
- Less Clogging
- Less Maintenance
- Single Element Design
- Fluoropolymer Coated Hardware Provides Outstanding Corrosion and Chemical Resistance
- Easy Accessible and Removable Flame Cell for Easy Inspection and Service
- Bi-directional Design
- Standard Temperature Probe on EN Models
- Available in ANSI, DIN and JIS Flanges

Models and Available Sizes

**Enardo 7 Series Deflagration Flame Arrestor:**

- 1 to 36 in. / 25 to 900 mm
- **Enardo EN-7 Series ISO-16852 Certified:**
  - 1 to 12 in. / 25 to 300 mm (1)
- **Enardo 7 Series Factory Mutual Approved:**
  - 2 to 12 in. / 50 to 300 mm

**Construction Materials**

**Housing:**
- Aluminum, Carbon steel, 304 Stainless steel, 316 Stainless steel and Hastelloy®
- Cell:
  - Aluminum, 304 Stainless steel, 316 Stainless steel, Hastelloy® and Exotic

**Gas Group**

- D (IIA), C (IIB3) and B (IIC)

**Additional Technical Data**

For more technical information, contact your local Sales Office or log on to: www.enardo.com

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1. Available in carbon steel and stainless steel only.

Hastelloy® is a mark owned by Haynes International, Inc.
### Table 1. Enardo EN-7 Series Flame Arrestor Dimensions

<table>
<thead>
<tr>
<th>MODEL</th>
<th>A (NOMINAL CONNECTION SIZE)</th>
<th>B (HOUSING SIZE)</th>
<th>C (OUTSIDE DIAMETER)</th>
<th>D (OVERALL LENGTH)</th>
<th>APPROXIMATE WEIGHT</th>
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<td>In.</td>
<td>mm</td>
<td>In.</td>
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1. Dimensions may vary somewhat from those given above. Allow for a tolerance of ± 1.00 in. / 25 mm. Specific dimensions available on request.

### Key to Enardo EN-7 Series Flame Arrestor Model Number

- **EN**
- **7**
- **Series Enardo 7 Series Flame Arrestor (Concentric)**
- **E7 if Eccentric**
- **Housing Size 04 = 4 in. to 24 = 24 in.**
- **Connection Size 01 = 1 in. to 12 = 12 in.**
- **IEC Gas Group IIA (D) or IIB (C)**
- **Housing Material C = Carbon steel 4 = 304 Stainless Steel 6 = 316 Stainless Steel H = Hastelloy®**
- **Cell Material 4 = 304 Stainless Steel 6 = 316 Stainless Steel H = Hastelloy®**
- **Connection Type F = Flat Faced R = Raised Face Flange**
- **Options 1 = Drain Port 2 = Temperature Probe (standard) 3 = Pressure Tap 4 = Miscellaneous Fittings 5 = Protective Coatings 6 = Special Features**

### Example:

**EN 7 2 0 1 0 / IIA — C 4 R — 1 2**

Indicates a 10 in. Concentric Enardo EN-7 Series Deflagration Flame Arrestor with a 20 in. Carbon steel housing. ANSI 150 lbs. raised faced flange connections and 304 Stainless steel IEC Group “IIA” flame cell element. It also has additional options of drain plugs and standard temperature probe.

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# Enardo 7 Series
Deflagration Flame Arrestor

## Carbon Steel and Stainless Steel Housings

![Enardo 7 Series Flame Arrestor Diagram](image)

*Not all models are available with FM approval. Consult Flame Arrestor Certifications page for more information.*

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### Table 2. Standard Enardo 7 Series Flame Arrestor Dimensions

<table>
<thead>
<tr>
<th>MODEL</th>
<th>A (NOMINAL CONNECTION SIZE)</th>
<th>B (HOUSING SIZE)</th>
<th>C (OUTSIDE DIAMETER)</th>
<th>D (OVERALL LENGTH)</th>
<th>APPROXIMATE WEIGHT (GROUP D MODELS)</th>
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### Key to Enardo 7 Series Flame Arrestor Model Number

- **Series**: Enardo 7 Series Flame Arrestor (Concentric) / Enardo 7 Series Flame Arrestor (Eccentric)
- **Connection Size**: 01 = 1 in. to 36 = 36 in.
- **Housing Size**: 04 = 4 in. to 72 = 72 in.
- **IEC Gas Group**: IIC (B) / IIB3 (C) / IIA (D)
- **Housing Material**: C = Carbon steel / 4 = 304 Stainless Steel / 6 = 316 Stainless Steel / H = Hastelloy® / E = Exotic
- **Cell Material**: A = Aluminum / 4 = 304 Stainless Steel / 6 = 316 Stainless Steel / H = Hastelloy® / E = Exotic
- **Connection Type**: F = Flat faced flange / R = Raised face flange
- **Options**: 1 = Drain Port / 2 = Pressure Tap / 3 = Temperature Probe Tap / 4 = Miscellaneous Fittings / 5 = Protective Coatings / 6 = Special Features

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### Example:

```
Enardo 7 Series Flame Arrestor
Enardo 7 Series

Example:

```

Indicates a 10 in. Concentric Enardo 7 Series Deflagration Flame Arrestor with a 20 in. Carbon steel housing, ANSI 150 lbs. raised faced flange connections and 304 S stainless steel NEC Group “D” flame cell element. It also has additional options of drain plugs and temperature probe taps.

Hastelloy® is a mark owned by Haynes International, Inc.
Aluminum Housing

Table 3. Cast Aluminum Enardo 7 Series Flame Arrestor Dimensions(1)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>A (NOMINAL CONNECTION SIZE)</th>
<th>B (HOUSING SIZE)</th>
<th>C (OUTSIDE DIAMETER)</th>
<th>D (OVERALL LENGTH)</th>
<th>APPROXIMATE WEIGHT WITH ALUMINUM CELL (GROUP D MODELS)</th>
<th>APPROXIMATE WEIGHT WITH STAINLESS STEEL CELL (GROUP D MODELS)</th>
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<td>24</td>
<td>600</td>
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<td>737</td>
</tr>
</tbody>
</table>

1. Dimensions may vary somewhat from those given above. Allow for a tolerance of ±1.00 in. / 25 mm. Specific dimensions available on request.

Figure 4. Cast Aluminum Enardo™ 7 Series Flame Arrestor Dimensions

Key to Cast Aluminum Enardo 7 Series Flame Arrestor Model Number

Series Enardo 7 Series Flame Arrestor (Concentric)
E7 if Eccentric

Housing Size
68 = 8 in. to 24 = 24 in.

Connection Size
02 = 2 in. to 12 = 12 in.

IEC Gas Group
IIA (D)

Housing Material
A = Aluminum
4 = 304 Stainless Steel
6 = 316 Stainless Steel
H = Hastelloy®

Cell Material
A = Aluminum
4 = 304 Stainless Steel
6 = 316 Stainless Steel
H = Hastelloy®

Connection Type
F = Flat Faced Flange
R = Raised Face Flange

Options
1 = Drain Port
2 = Pressure Tap
3 = Temperature Probe Tap
4 = Miscellaneous Fittings
5 = Protective Coatings
6 = Special Features

Example:

7 2 0 1 0 / D - A 4 F - 1 2

Indicates a Concentric Enardo 7 Series Deflagration Flame Arrestor with a 20 in. Aluminum housing, ANSI 10 in. flat faced flange connections and 304 Stainless Steel NEC Group “D” flame cell element. It also has additional options of drain plugs and temperature probe taps.

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