

Enardo 7 Series

Deflagration Flame Arrestor

D104107X016

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).



Figure 1. Enardo 7 Series

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

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

Hastelloy® is a mark owned by Haynes International, Inc.
1. Available in carbon steel and stainless steel only.

EN Certified Model

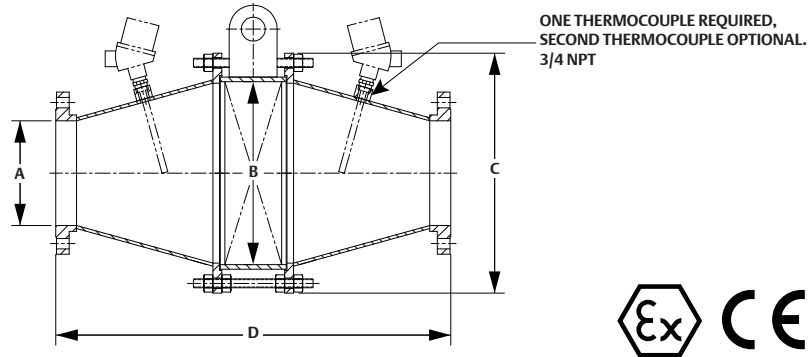


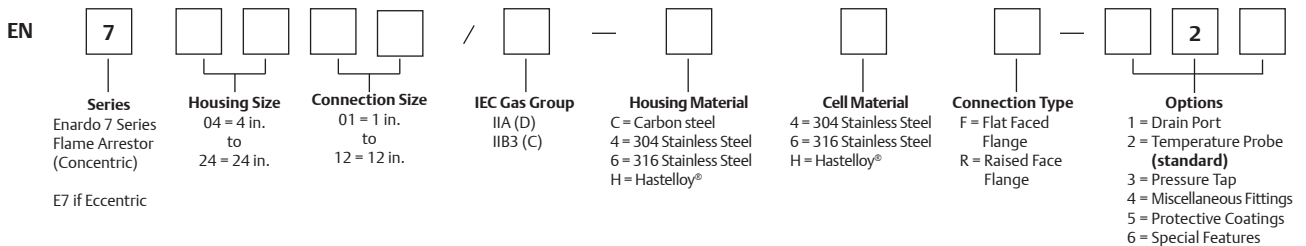
Figure 2. Enardo™ EN-7 Series Flame Arrestor Dimensions

Table 1. Enardo EN-7 Series Flame Arrestor Dimensions⁽¹⁾

MODEL	A (NOMINAL CONNECTION SIZE)		B (HOUSING SIZE)		C (OUTSIDE DIAMETER)		D (OVERALL LENGTH)		APPROXIMATE WEIGHT	
	In.	mm	In.	mm	In.	mm	In.	mm	Lbs	kg
Enardo EN-70402	2	50	4	100	7.75	197	15.25	387	65	29.5
Enardo EN-70602	2	50	6	150	10.25	260	16	406	68	31
Enardo EN-70603	3	75	6	150	10.25	260	16	406	72	32.5
Enardo EN-70803	3	75	8	200	12	305	16	406	95	43
Enardo EN-70804	4	100	8	200	12	305	16	406	101	46
Enardo EN-71204	4	100	12	300	16	406	21	533	168	76
Enardo EN-71206	6	150	12	300	16	406	21	533	181	82
Enardo EN-71606	6	150	16	400	20	508	33	838	278	126
Enardo EN-71608	8	200	16	400	20	508	33	838	298	135
Enardo EN-72008	8	200	20	500	24	610	38	965	386	175
Enardo EN-72010	10	250	20	500	24	610	38	965	443	201
Enardo EN-72410	10	250	24	600	29	737	41	1041	622	282
Enardo EN-72412	12	300	24	600	29	737	41	1041	672	305

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



Example:

EN 7 2 0 1 0 / IIA — C 4 R — 1 2

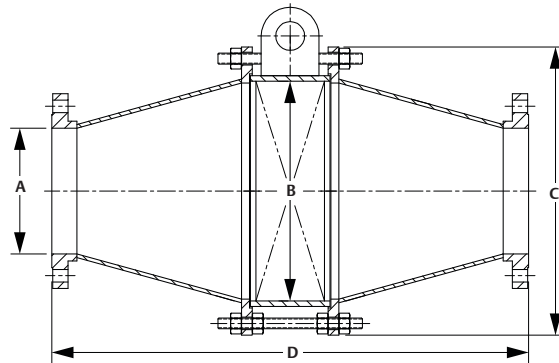
Indicates a 10 in. Concentric Enardo EN-7 Series Deflagration Flame Arrestor with a 20 in. Carbon steel housing. ANSI 150 lbs. raised faced flange connections and 304 Stainless steel IEC Group "IIA" flame cell element. It also has additional options of drain plugs and standard temperature probe.

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

Enardo 7 Series

Deflagration Flame Arrestor

Carbon Steel and Stainless Steel Housings



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

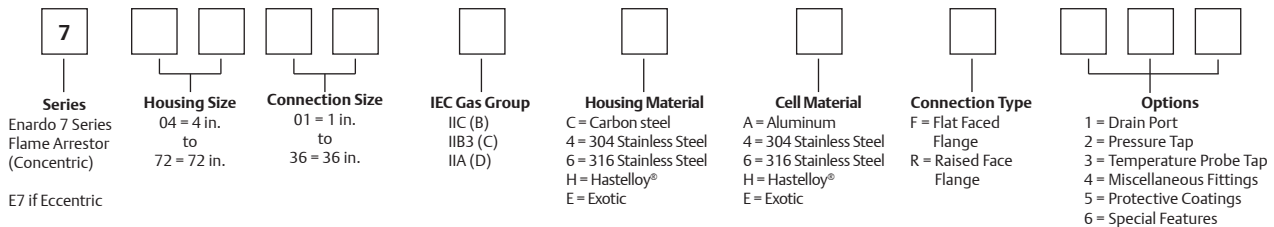
Figure 3. Standard Enardo™ 7 Series Flame Arrester Dimensions

Table 2. Standard Enardo 7 Series Flame Arrester Dimensions⁽¹⁾

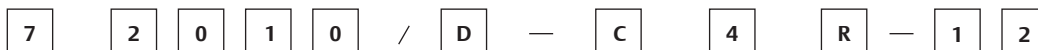
MODEL	A (NOMINAL CONNECTION SIZE)		B (HOUSING SIZE)		C (OUTSIDE DIAMETER)		D (OVERALL LENGTH)		APPROXIMATE WEIGHT (GROUP D MODELS)	
	In.	mm	In.	mm	In.	mm	In.	mm	Lbs	kg
Enardo 70401	1	25	4	100	7.75	197	15.63	397	60	27
Enardo 70402	2	50	4	100	7.75	197	15.25	387	63	29
Enardo 70602	2	50	6	150	10.25	260	16	406	66	30
Enardo 70802	2	50	8	200	12	305	16	406	85	38.6
Enardo 70603	3	75	6	150	10.25	260	16	406	70	31.8
Enardo 70803	3	75	8	200	12	305	16	406	90	40.8
Enardo 70804	4	100	8	200	12	305	16	406	95	43.1
Enardo 71006	6	150	10	250	14	356	21	533	135	61.2
Enardo 71206	6	150	12	300	16	406	21	533	165	74.8
Enardo 71408	8	200	14	350	18	457	25	635	225	102.1
Enardo 71608	8	200	16	400	20	508	33	838	270	122.5
Enardo 71810	10	250	18	450	22	559	30	762	335	152.0
Enardo 72010	10	250	20	500	24	610	38	965	400	181.4
Enardo 72212	12	300	22	550	26	660	34	863	477	216
Enardo 72412	12	300	24	600	29	737	41	1041	590	268

1. 14 inches to 36 in. and over – Dimensions available on request. 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 7 Series Flame Arrester Model Number



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 tainless 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

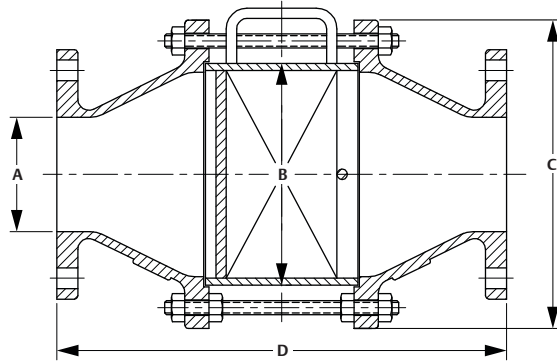


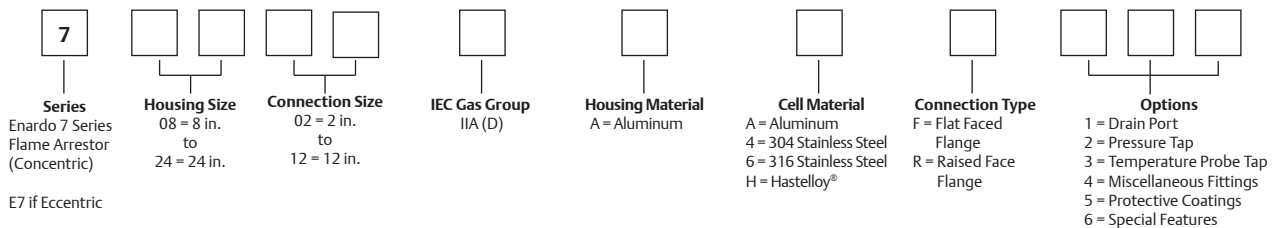
Figure 4. Cast Aluminum Enardo™ 7 Series Flame Arrestor Dimensions

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

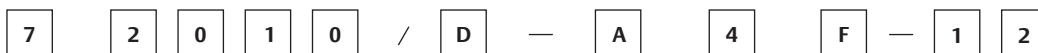
MODEL	A (NOMINAL CONNECTION SIZE)		B (HOUSING SIZE)		C (OUTSIDE DIAMETER)		D (OVERALL LENGTH)		APPROXIMATE WEIGHT WITH ALUMINUM CELL (GROUP D MODELS)		APPROXIMATE WEIGHT WITH STAINLESS STEEL CELL (GROUP D MODELS)	
	In.	mm	In.	mm	In.	mm	In.	mm	Lbs	kg	Lbs	kg
Enardo 70802	2	50	8	200	11.13	283	16.50	419	24	10.9	33	15.0
Enardo 70803	3	75	8	200	11.13	283	16.50	419	27	12.2	36	16.3
Enardo 70804	4	100	8	200	11.13	283	16.50	419	31	14.1	40	18.1
Enardo 71006	6	150	10	250	13.13	334	21.50	546	46	20.9	73	33.1
Enardo 71206	6	150	12	300	15.13	384	21.50	546	60	27.2	85	38.6
Enardo 71408	8	200	14	350	17.13	435	25.63	651	80	36.3	113	51.3
Enardo 71608	8	200	16	400	19.13	486	25.50	648	95	43.1	138	62.6
Enardo 72010	10	250	20	500	24.38	619	30.63	778	180	81.6	245	111.1
Enardo 72212	12	300	22	550	26	660	34	863	190	86	255	116
Enardo 72412	12	300	24	600	29	737	41	1041	230	104	315	143

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 Cast Aluminum Enardo 7 Series Flame Arrestor Model Number



Example:



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.

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