



An Ovivo Company

GAS CONTROL

VAREC 59 Series IN-LINE DETONATION FLAME ARRESTER

The 59 Series In-Line Detonation Flame Arresters are designed for installation in piping systems to provide explosion protection.

Introduction

The 59 Series In-Line Detonation Flame Arresters are tested for actual field conditions not mandated by existing standards, including momentum impulse (long run stable detonation), thermal failure and re-ignition of downstream unburned gases providing maximum protection against all modes of flame propagation.



Technical Data

TEST PROTOCOL

Tested in accordance with the United States Coast Guard CFR 154.

PROTECTION

Bi-directional. Quenches deflagrations, stable and overdriven detonations regardless of piping configuration. Complete testing through the flame profile curve.

INSTALLATION

The Series 59 can be installed in the vertical or horizontal position.

PASSIVE OPERATION

Completely self-contained with no reliance on power supplies, sensors, actuators or any external components.

MULTIPLE ELEMENT DESIGN

Elements easily removed, separated and cleaned in the field.

MECHANICAL DESIGN

Standard construction is carbon steel housing fabricated in accordance with ASME/ ANSI with 150 R.F. line flanges. Elements are 316 stainless steel.

Optional Features

- Arrester housing fabricated in 316 SS
- Class 300 ANSI R.F. or DIN mating flange connections
- Instrument and drain connections
- Special alloy fabrication and internal coatings
- Special surface finishes
- Special testing and designs

Specifications

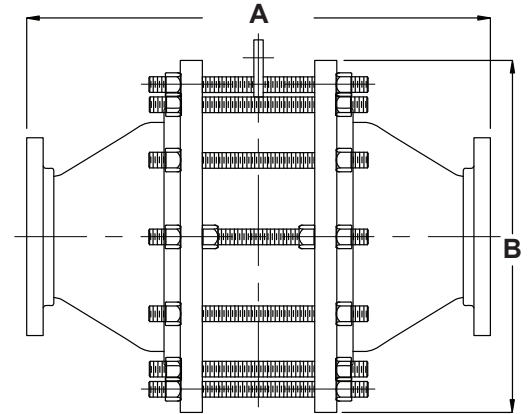
Sizes

2" - 12" NEC Group D Vapors
(IIA/M.E.S.G. .9mm)

Dimensions and Weights, inches [mm] and lbs. (kg)

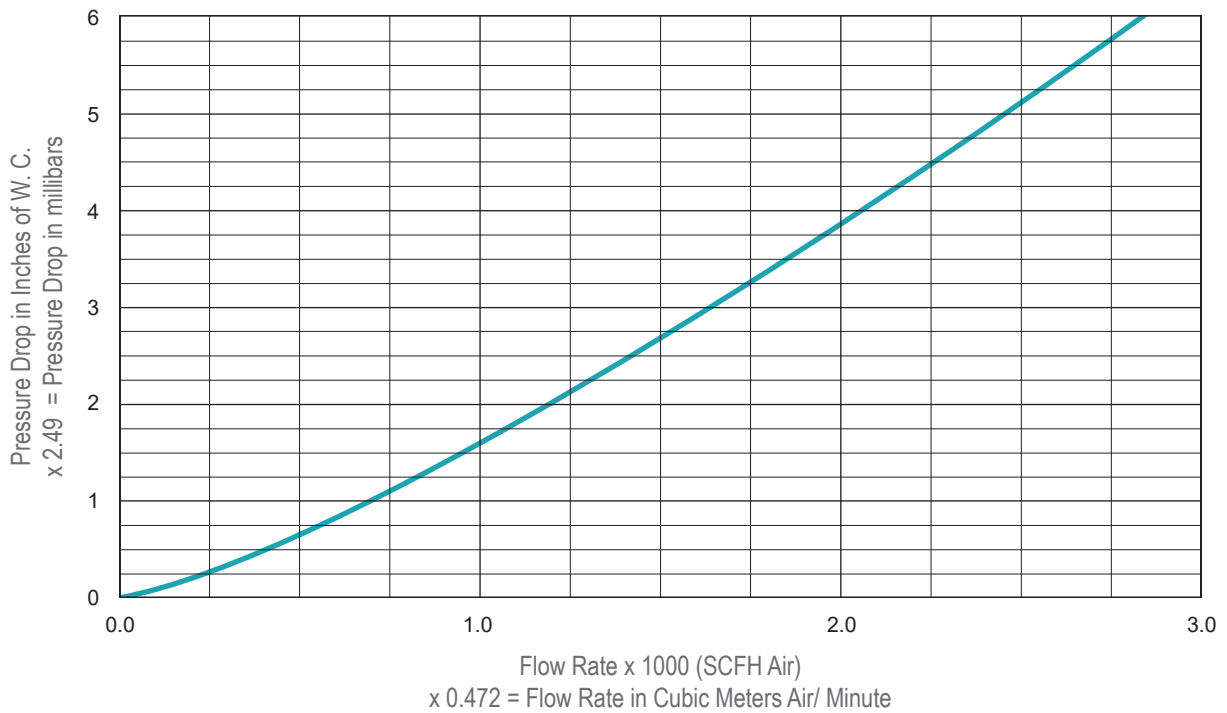
Size Code	002	003	004	006	008	010	012
Line Size	2 [50]	3 [80]	4 [100]	6 [150]	8 [200]	10 [250]	12 [300]
A	15 ⁷ / ₈ [403]	19 ³ / ₄ [502]	21 ³ / ₈ [543]	25 ⁷ / ₈ [657]	41 ¹ / ₈ [1045]	49 ¹ / ₈ [1248]	49 [1245]
B	9 [229]	11 [279]	16 [406]	19 ⁵ / ₈ [498]	23 ¹ / ₂ [597]	27 ¹ / ₂ [699]	32 [813]
Shipping Weight	80 (36)	135 (61)	280 (127)	365 (166)	740 (336)	1132 (513)	1480 (671)

Overall length may vary ± .25" (6mm)



Flow Curves

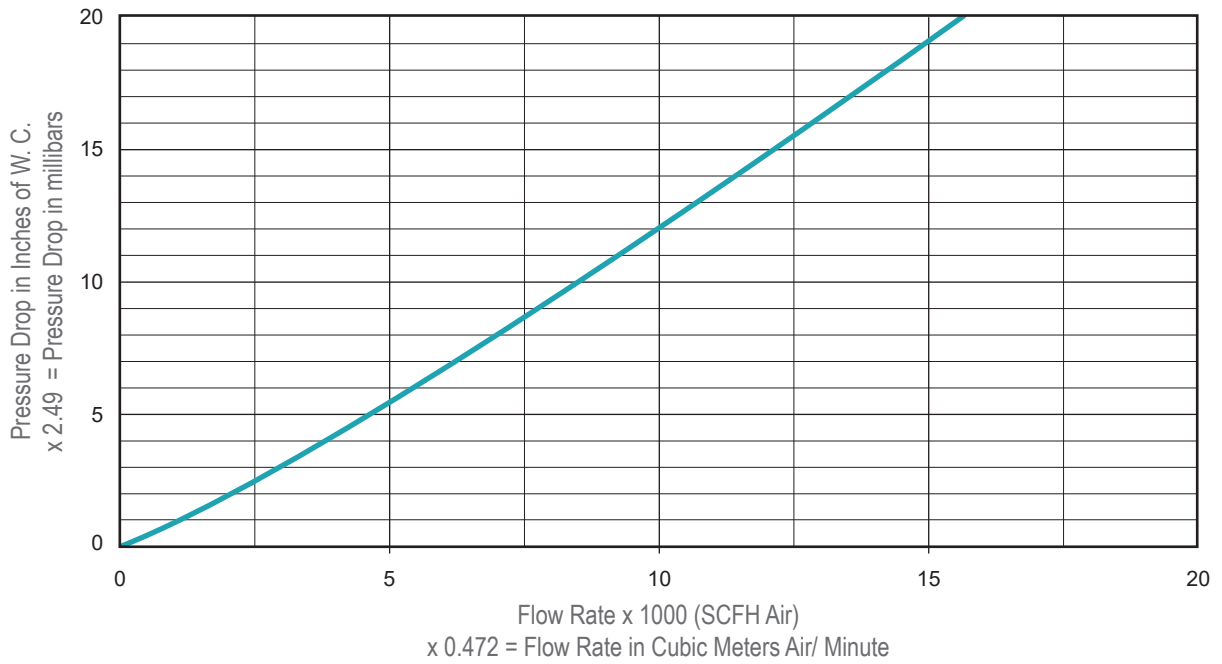
59 IN-LINE DETONATION ARRESTER (Model 59-002)



Specifications

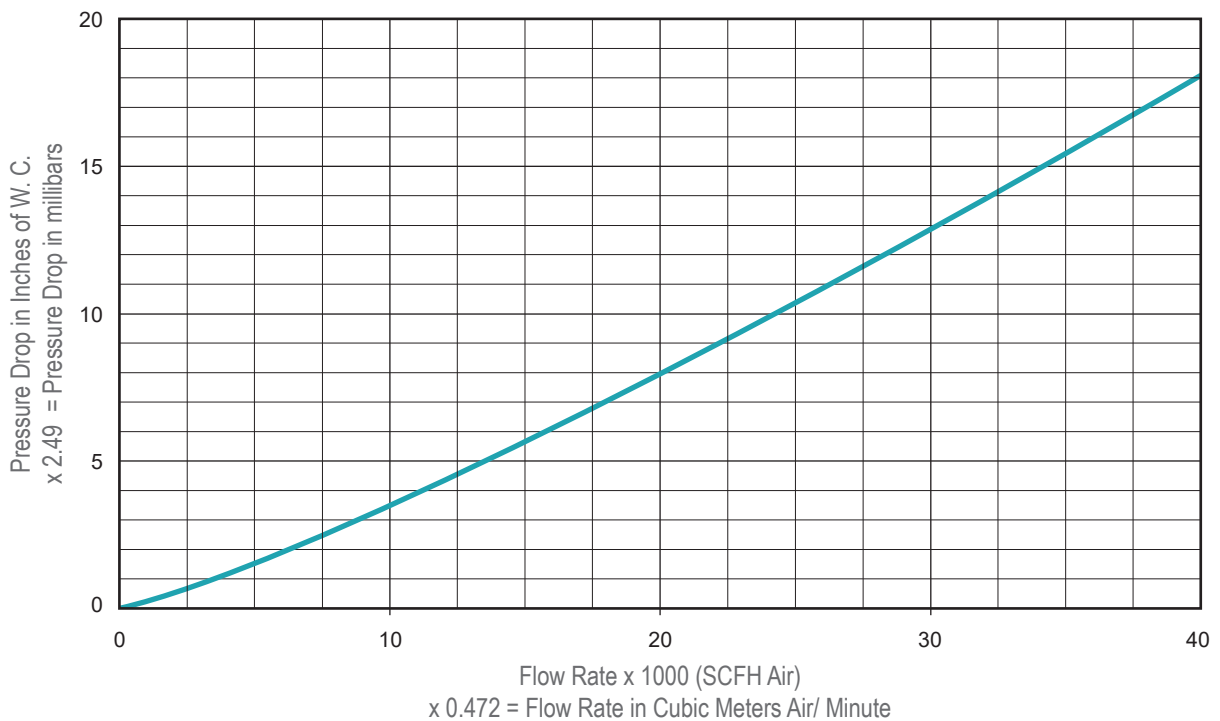
Flow Curves

59 IN-LINE DETONATION ARRESTER (Model 59-003)



Flow Curves

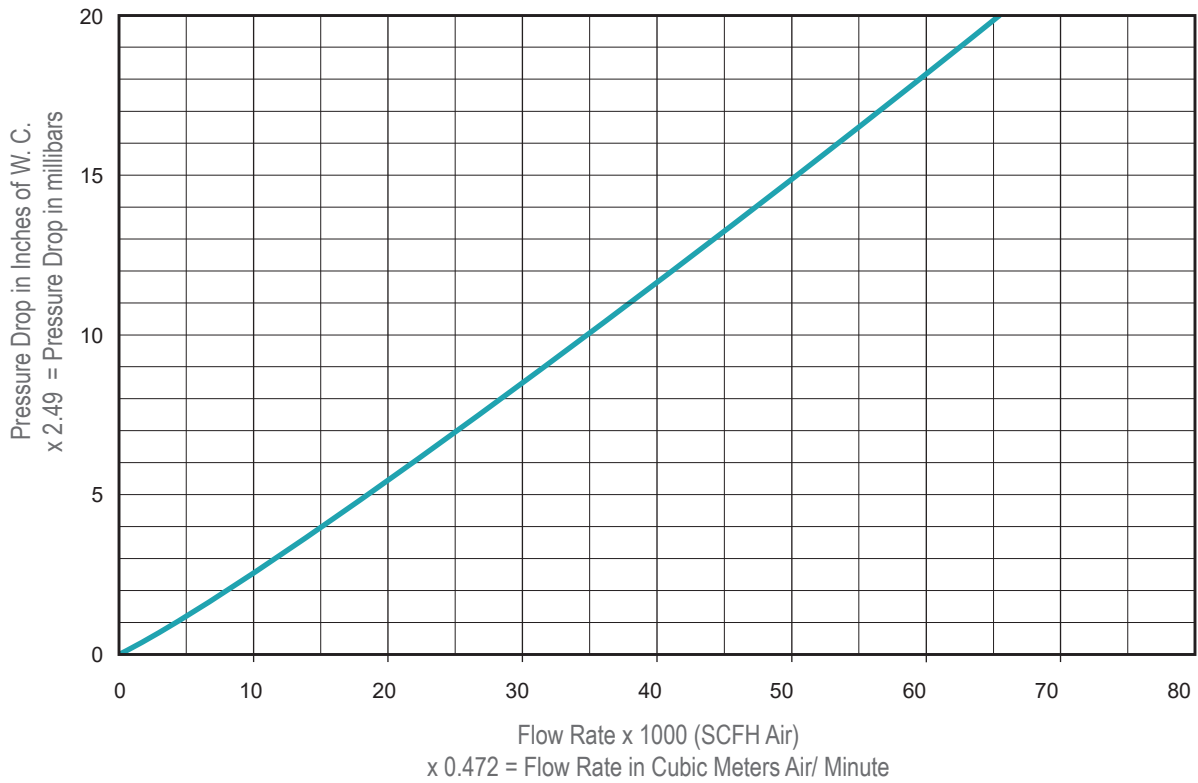
59 IN-LINE DETONATION ARRESTER (Model 59-004)



Specifications

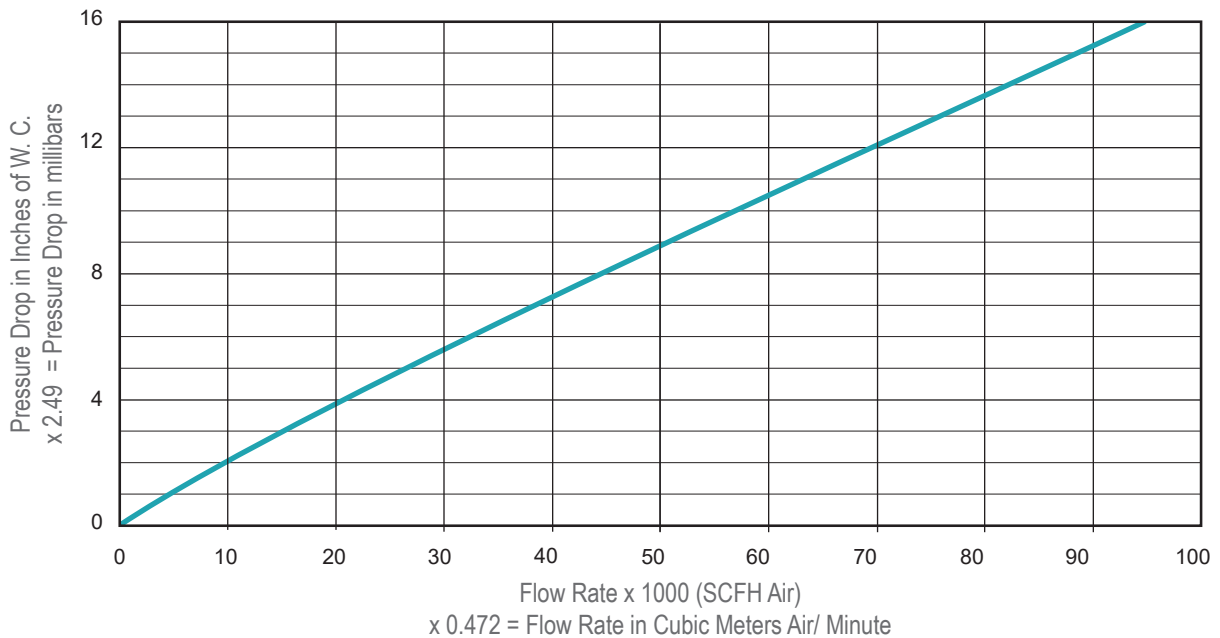
Flow Curves

59 IN-LINE DETONATION ARRESTER (Model 59-006)



Flow Curves

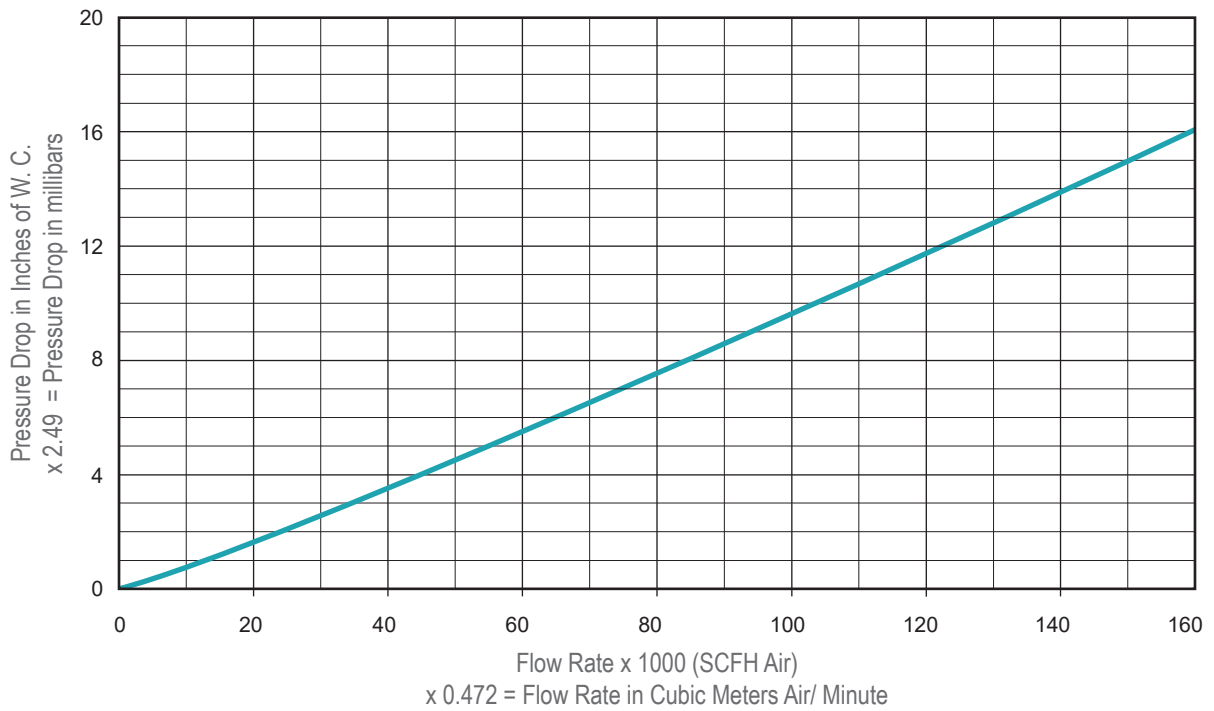
59 IN-LINE DETONATION ARRESTER (Model 59-008)



Specifications

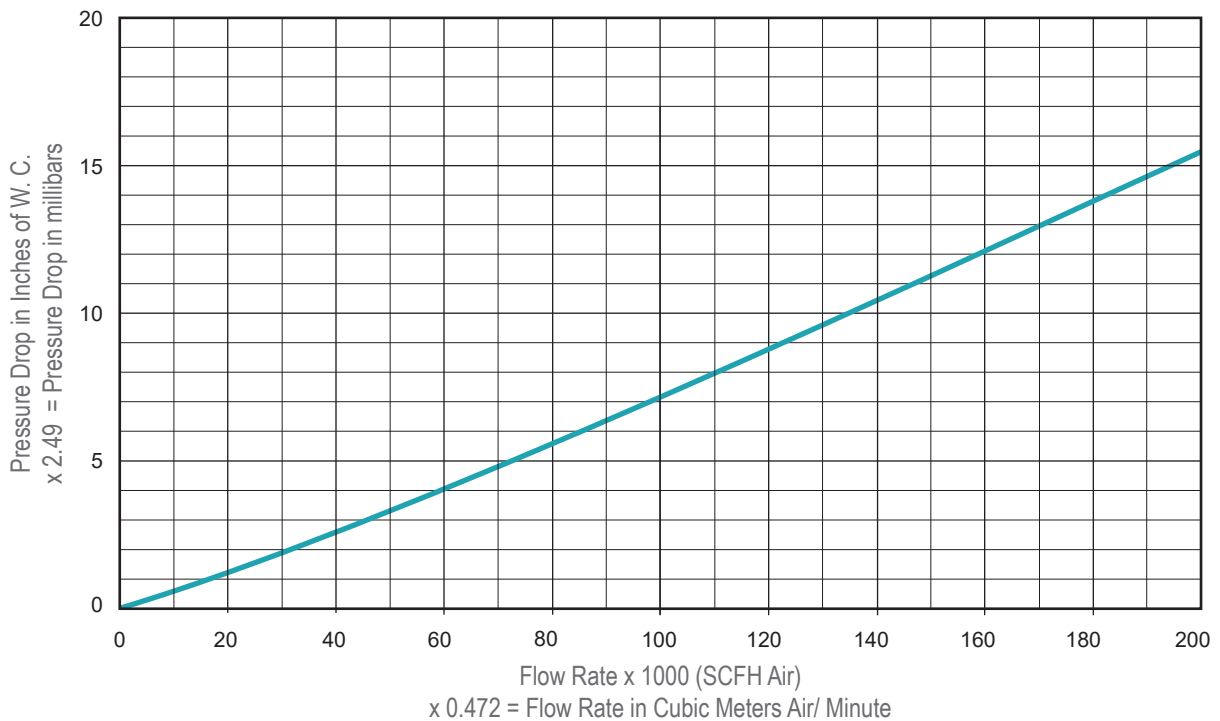
Flow Curves

59 IN-LINE DETONATION ARRESTER (Model 59-010)



Flow Curves

59 IN-LINE DETONATION ARRESTER (Model 59-012)



Ordering Information

Model	Description					
59	Detonation Flame Arrester					
Code	Line Size (in - ANSI 150 RF/ mm - PN16 DIN Flanges)					
002	2"					
003	3"					
004	4"					
006	6"					
008	8"					
010	10"					
012	12"					
050	50mm					
080	80mm					
100	100mm					
150	150mm					
200	200mm					
250	250mm					
300	300mm					
Code	Material of Construction (Housing)					
1	Carbon Steel					
2	316 SS					
7	304 SS					
8	Hastelloy					
Code	Orientation					
C	Concentric					
E	Eccentric					
Code	Element Material					
1	304 SS					
2	316 SS					
3	Hastelloy					
Code	Options					
1	Instrument/ Drain Connection					
2	Special Paint					
3	NDE					
4	Other Special Option - Must Specify on Purchase Order					
59	012	1	C	2	2	(Example)
Example: 12" Concentric, Detonation Flame Arrester with Carbon Steel Housing, 316SS Element and Special Paint Option.						