VAREC 59 Series
IN-LINE DETONATION FLAME ARRESTER

The 59 Series In-Line Detonation Flame Arreresters 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.

Techincal 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

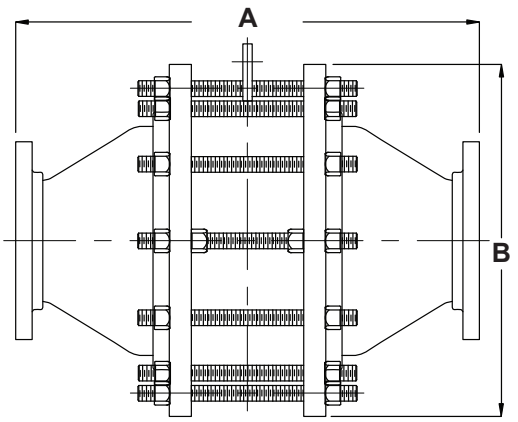
Specifications

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

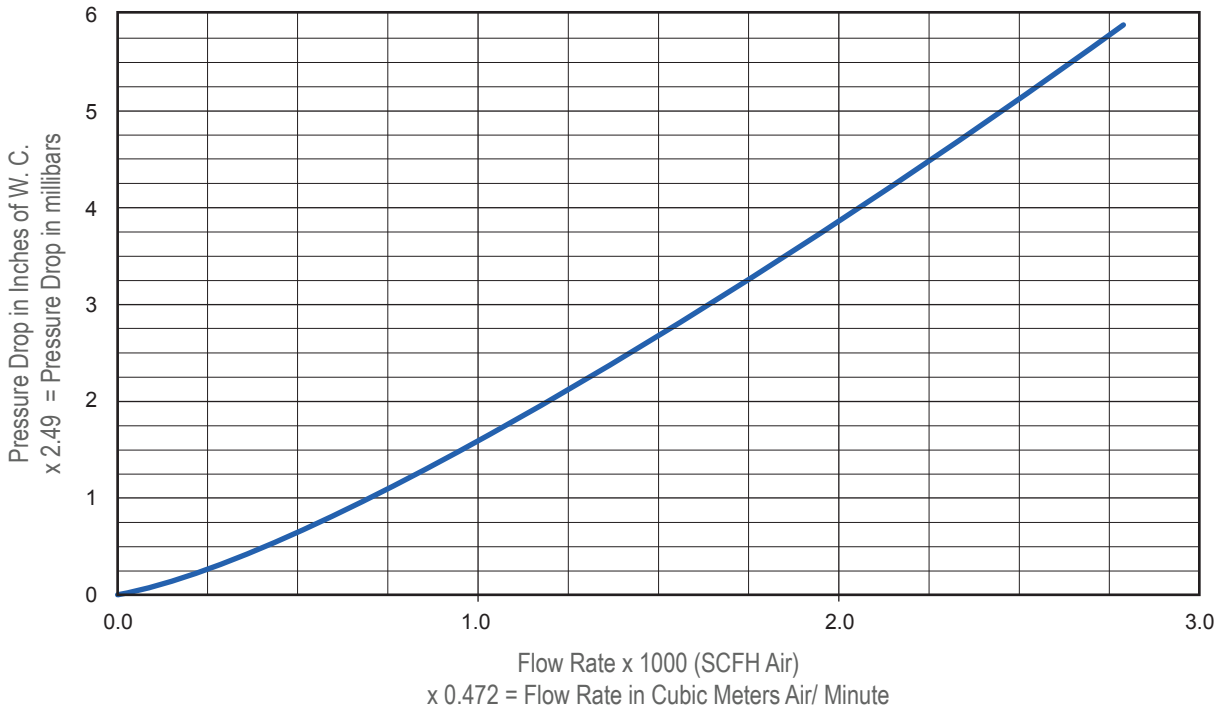
Dimensions and Weights, inches [mm] and lbs. (kg)

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)



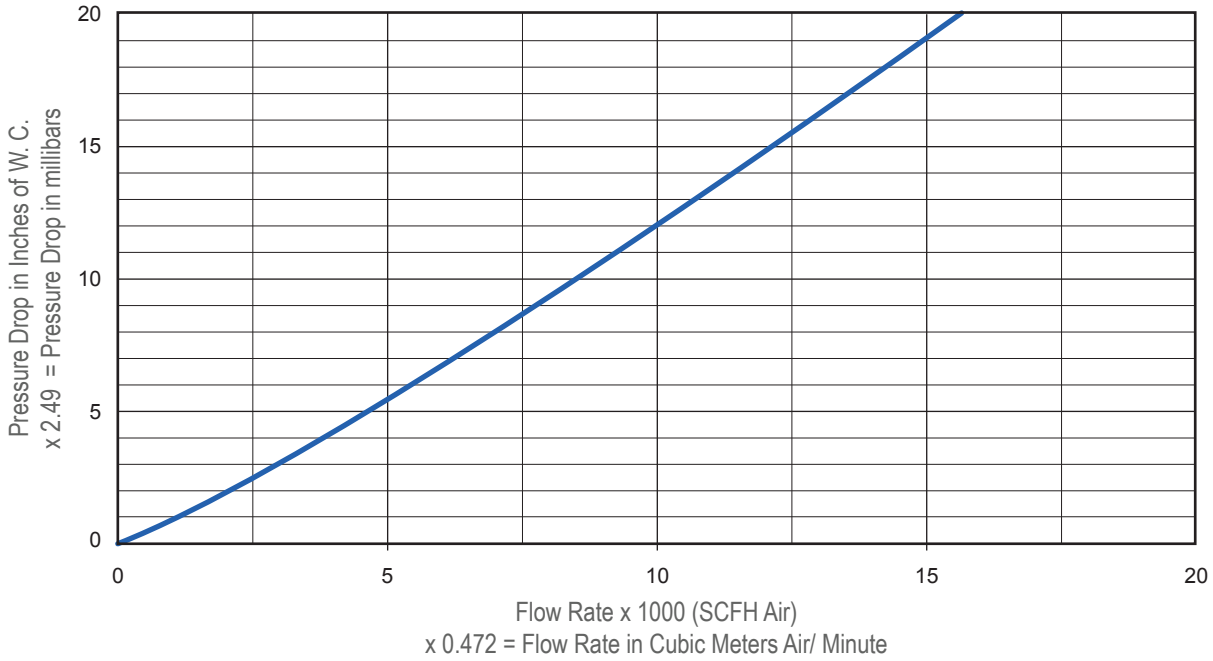
Flow Curves
59 IN-LINE DETONATION ARRESTER (Model 59-002)



Specifications

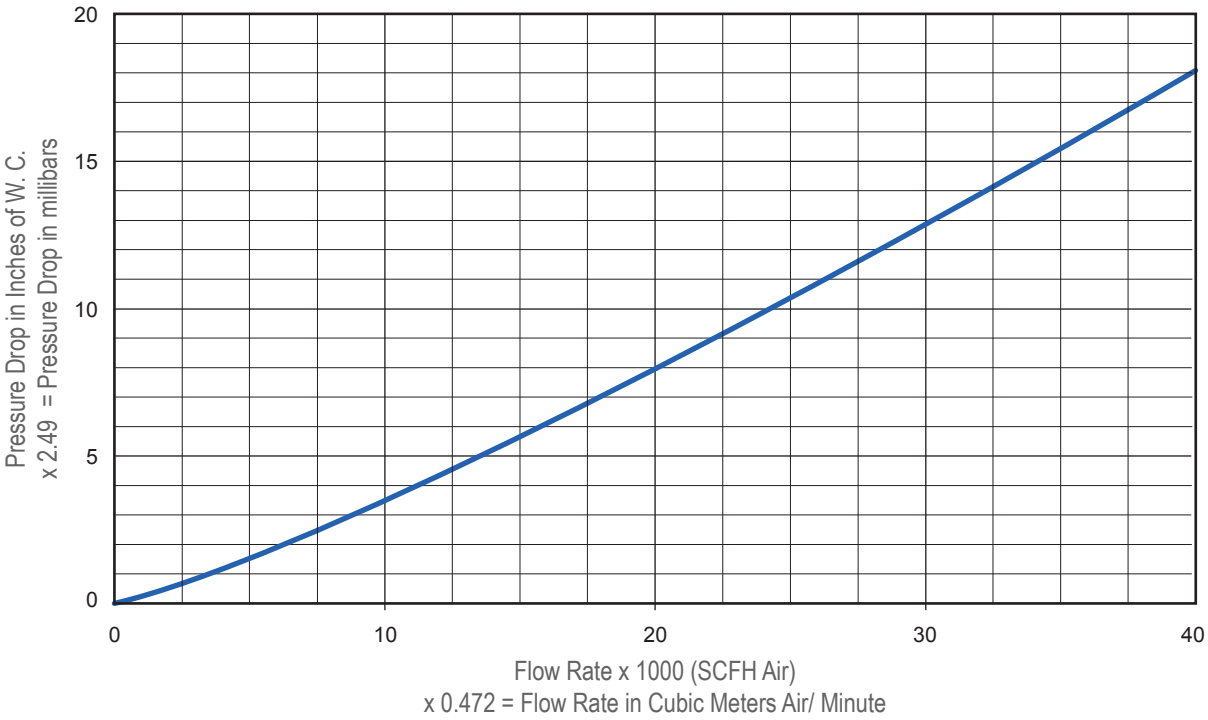
Flow Curves

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



Flow Curves

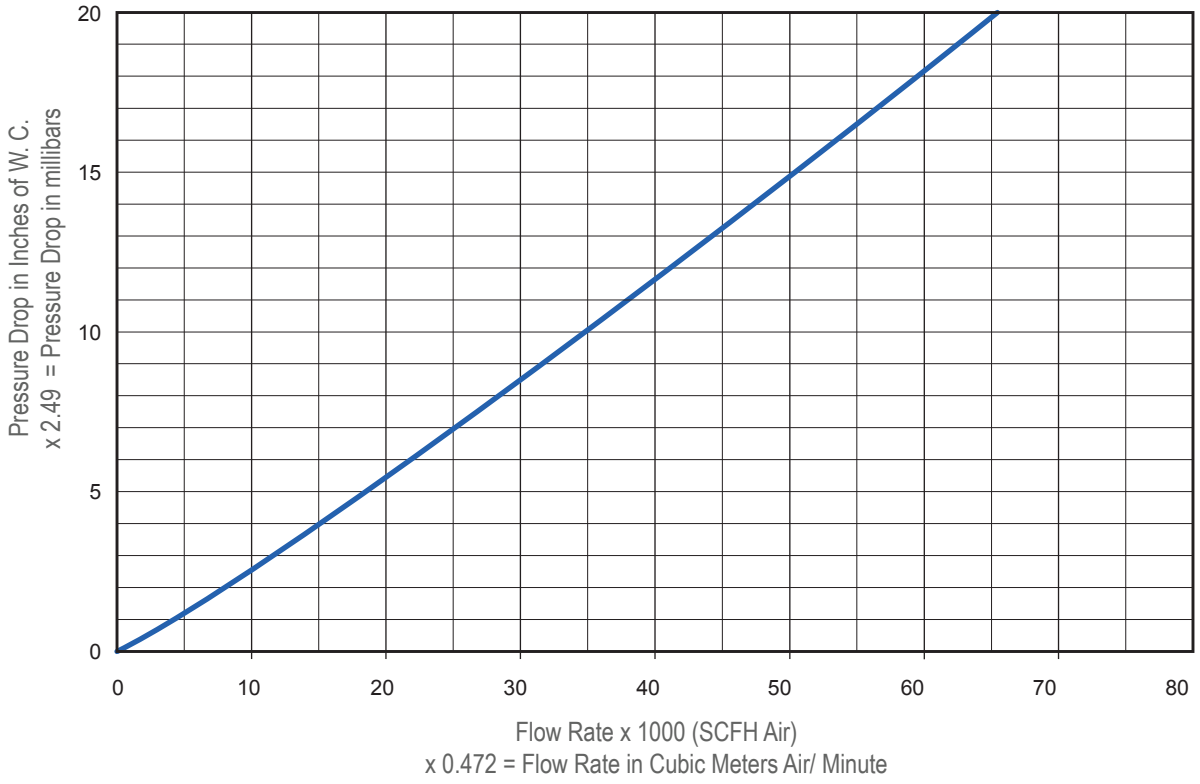
59 IN-LINE DETONATION ARRESTER (Model 59-004)



Specifications

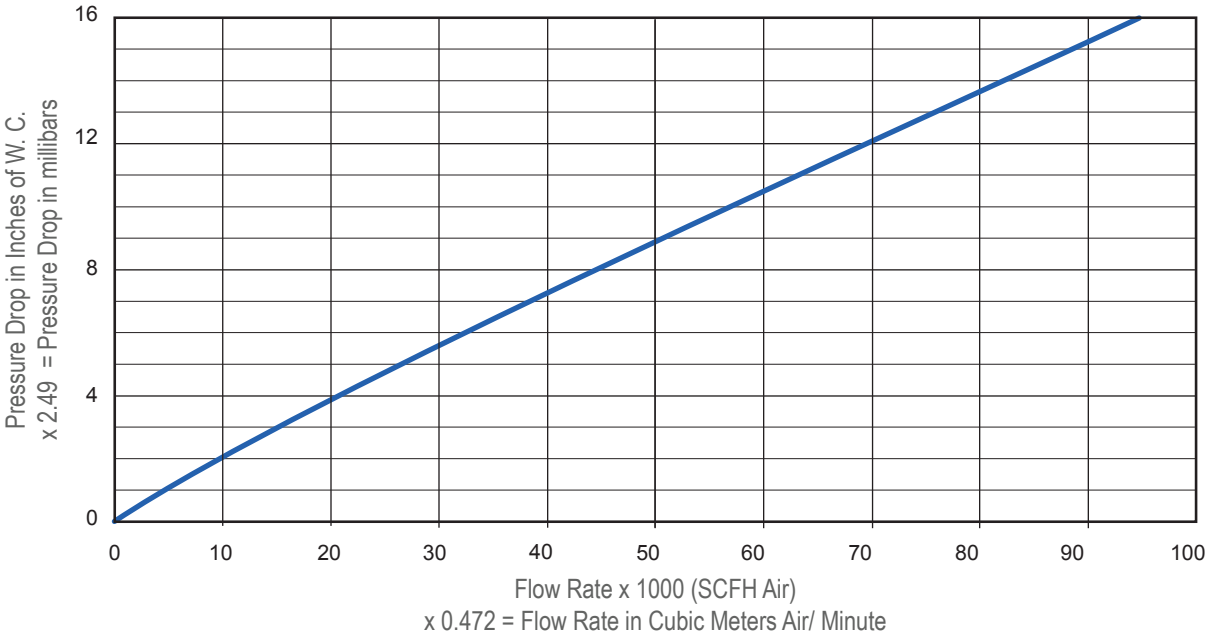
Flow Curves

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



Flow Curves

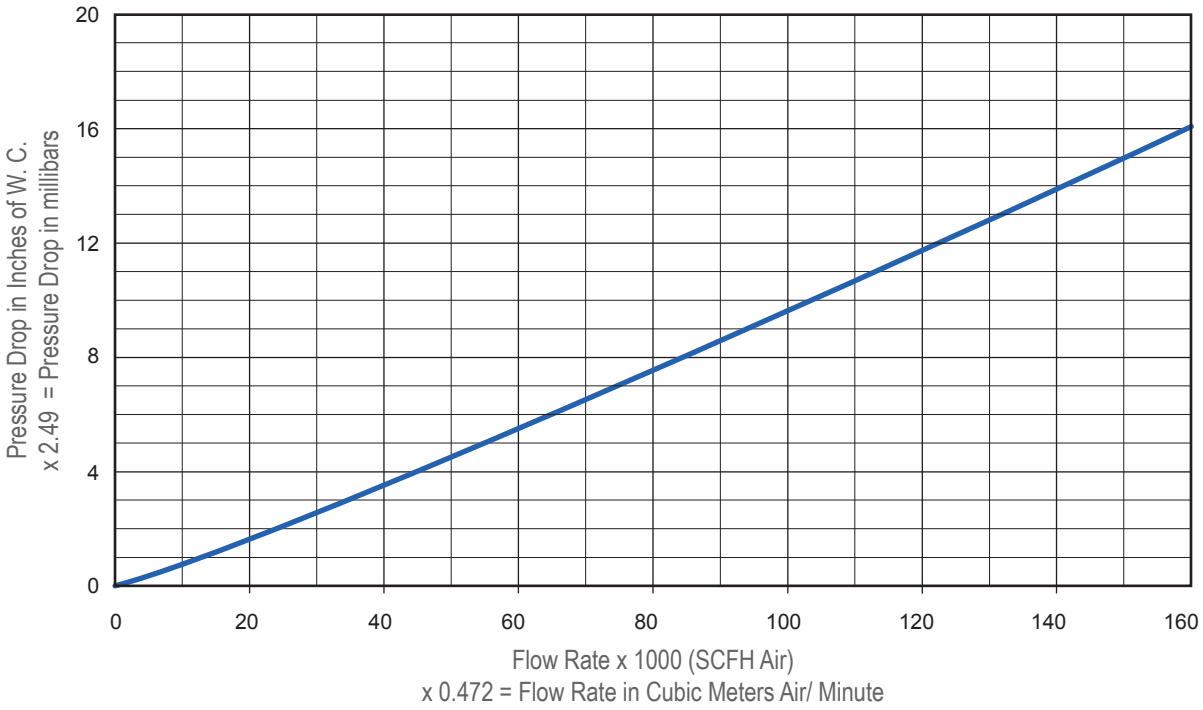
59 IN-LINE DETONATION ARRESTER (Model 59-008)



Specifications

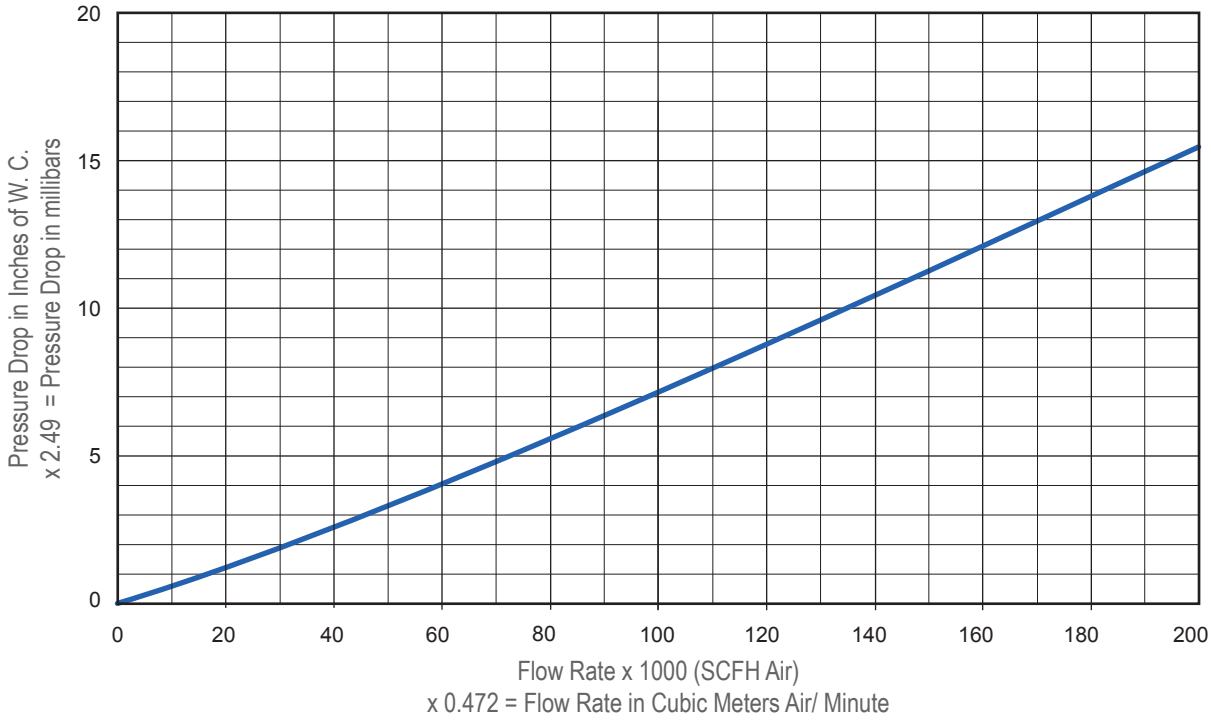
Flow Curves

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.