



THE SERIES 55 “2nd GENERATION” In-line Detonation Flame Arrester

Knowledge is power... At Westech we turn it into protection

United States Coast Guard Accepted

Accepted by the U.S. Coast Guard (U.S.C.G. CFR154) for 2” – 18” line sizes. They can be installed in any identical line size piping configuration regardless of length and restrictions.

Accepted by PTB for 4”, 6”, 8” and 10” sizes. Full line approval pending.

Tested in Excess of Existing Standards

Accepted to ATEX 94/9/EC and EN12874 as well as other international standards. (CSA, USCG, FM, UL, PTB, BSI, IMO)

Tested for conditions not mandated by existing standards, such as momentum impulse (long run stable detonation), thermal failure and reignition of downstream unburned gases providing maximum protection against all modes of flame propagation.

Passive Operation

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

Type I – Endurance Burn Accepted

Accepted by the U.S. Coast Guard for Type I continuous burn protection. Due to the increased stabilization flame protection, Type I arresters do not require additional temperature monitors, quick closing valves and associated equipment as is the case with Type II arresters.

Protection Independent of Location

Can arrest flame fronts anywhere in the piping system regardless of pipe length and configuration.

Self-Sealing Element Design

Unique self-sealing element design is impervious to impact damage from repeated high pressure (4,000+ psi/276 bar) detonation shock waves. Actual protection increases when exposed to these forces.

Detonation Momentum Attenuators

Incorporates Westech's patented Detonation Momentum Attenuators (DMA) plates to provide shock wave protection, as well as particulate knock out of entrained solids in the vapour stream.

Large Element Surface Area

Designed up to 31 times the surface area of conventional arresters decreasing pressure drop and fouling effects.

Low Pressure Drop

Reduces arrester costs as well as costs associated with piping systems and components.

Easily Cleaned

Unique element design allows for ease of removal and cleaning.

Increased Element Thickness

.025” (0.65 mm) provides substantial corrosion allowance for increased protection and longer element life.

Optional Features

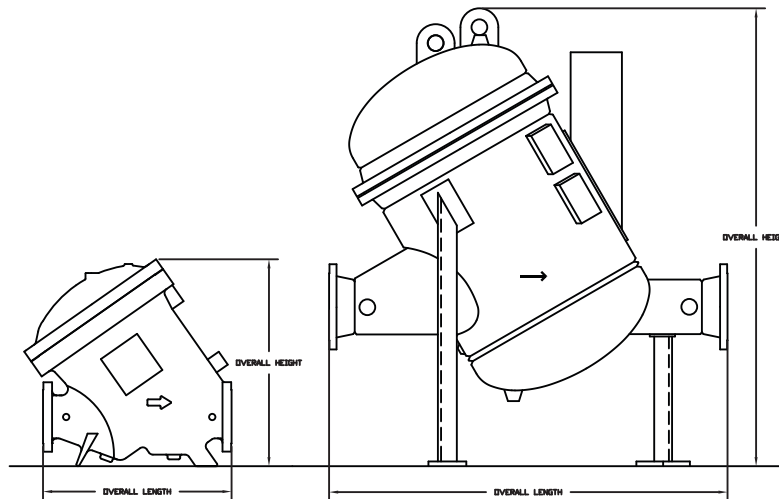
- Arrester housing fabricated in 316 SS
- DIN mating flange connections
- Special alloy fabrication and internal coatings
- Special surface finishes
- Special testing and designs



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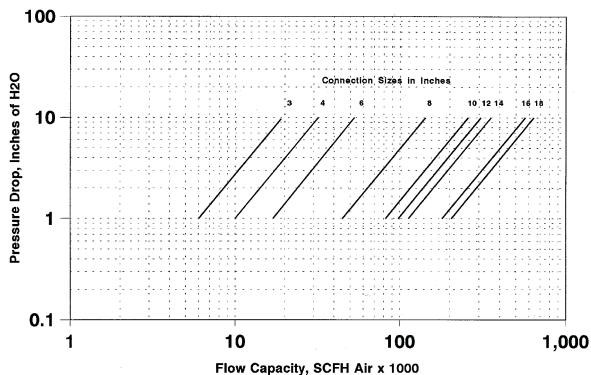
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WESTECH SERIES 55 MODEL WFA55 GENERAL DIMENSIONS						
ModelNumber	LineSize	OverallLength	OutsideDiameter	OverallHeight	OverallWeight	Element Weight
WFA55-03	3" (75mm)	187/8" (480mm)	15 1/2" (395mm)	22 3/8" (570mm)	340lbs (155kg)	65 lbs (30 kg)
WFA55-04-SC	4" (100mm)	26" (660mm)	20 15/16" (530mm)	28 3/16" (716mm)	650lbs (295kg)	65 lbs (30 kg)
WFA55-04-TC	4" (100mm)	26" (660mm)	20 15/16" (530mm)	38" 1/4" (970mm)	1480lbs (625kg)	100 lbs (45 kg)
WFA55-06-SC	6" (150mm)	29 3/4" (755mm)	25 1/2" (650mm)	32 3/5" (828mm)	1250lbs (567kg)	100 lbs (45 kg)
WFA55-06-TC	6" (150mm)	29 3/4" (755mm)	25 1/2" (650mm)	51 1/4" (1302mm)	2,000lbs (910kg)	220 lbs (100 kg)
WFA55-08	8" (200mm)	63" (1600mm)	35 3/4" (910mm)	73" (1854mm)	2,800lbs (1270kg)	165 lbs (75 kg) x 4
WFA55-10	10" (250mm)	65" (1650mm)	42 1/4" (1075mm)	80" (2032mm)	3,800lbs (1725kg)	165 lbs (75 kg) x 7
WFA55-12	12" (300mm)	67" (1700mm)	42 1/4" (1075mm)	82" (2083mm)	4,100lbs (1860kg)	210 lbs (95 kg) x 7
WFA55-14	14" (350mm)	77 5/8" (1970mm)	55" (1395mm)	86" (2184mm)	6,400lbs (2900kg)	215 lbs (95 kg) x 7
WFA55-16	16" (400mm)	81" (2055mm)	55" (1395mm)	93" (2362mm)	7,300lbs (3310kg)	270 lbs (120 kg) x 7
WFA55-18	18" (450mm)	80" (2030mm)	61 1/2" (1560mm)	100" (2540mm)	12,000lbs (5445kg)	315 lbs (145 kg) x 7



WESTECH INDUSTRIAL LTD.

Series 55 Detonation Flame Arrester Flow Chart Chart Compiled From Certified Flow Curves



APPLICATION DATA REQUIRED

1. Line size
2. Vapour pressure
3. Vapour composition (gas group)
4. Vapour temperature
5. Flow rate
6. Allowable pressure drop
7. Vertical or horizontal installation
8. Materials of construction
9. Options required
10. Process description

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Corporate Headquarters: Westech Industrial Ltd., 5636 Burbank Crescent, SE, Calgary, Alberta, Canada T2H 1Z6

Phone: 1-403-252-8803 Fax: 1-403-253-6803

Email: sales-export@westech-ind.com Website: <http://www.westech-ind.com>