

SAFETY  
WITHOUT  
COMPROMISE

# SERIES 30000

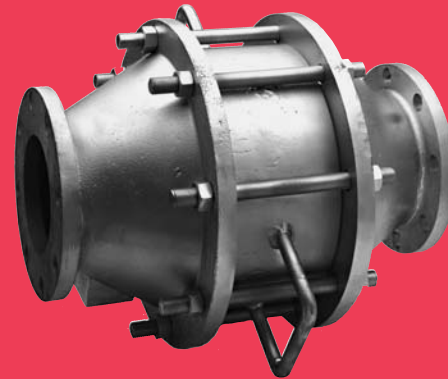
## Vent-Line / In-Line Crimped Metal Flame Arrester



PROTECTOSEAL

SERIES  
30000

- Sizes 6" (DN 150) through 12" (DN 300)
- Suitable for use with vapors equivalent to NEC 500 Group D, IEC Group IIA
- Protects against flame propagation in vent lines
- Straight-thru flow pattern minimizes element fouling
- Accurate and consistent element winding
- Low pressure drop, less susceptible to clogging
- Easy inspection and maintenance
- Factory inspected prior to shipment



### OBJECTIVE

The Protectoseal Series 30000 Vent-Line / In-Line Crimped Metal Flame Arrester is designed to be installed in open vent pipes from storage or processing tanks. The arresters are used to prevent the propagation of an external flame source through the vent openings and into the tank. They provide maximum air-flow consistent with vapor mixtures such as gasoline and methane (referenced by Group D atmospheres in the National Electric Code, NEC Article 500, generally equivalent to International Electrotechnical Commission, IEC Group IIA).

### TECHNIQUE

The Series 30000 utilizes wound, crimped 316 Stainless Steel foil strips to form a heat transfer matrix of uniform triangular cells within the circular element. The unitized crimped metal element provides a straight thru flow path, low pressure drop and is less susceptible to clogging. The element is mounted between arrester housings that connect to the pipe flanges. The arrester elements are removable and interchangeable to facilitate inspection and maintenance. A clean element may be inserted during inspection to insure positive flame protection at all times.

When properly mounted in an open pipe line, the Series 30000 Flame Arrester allows vapors to discharge into the atmosphere and allows air to be drawn into the pipe through the flame arrester element assembly. These arresters may be mounted within 20' of the end of the open straight vent pipe in either the vertical or horizontal position.

### SPECIAL FEATURES

**Easy Inspection and Maintenance.** The crimped metal arrester element is easily removable and interchangeable for inspection, cleaning or replacement.

**Sizes Available.** 6" (DN 150) through 12" (DN 300). Aluminum flanged bodies mate with 125# ANSI flat face flanges and DIN PN 16 flat face flanges. All other material flanged bodies mate with 150# raised face flanges and DIN PN 16 raised face flange.

**Precision Manufacturing.** The crimped metal arrester element design allows for flexibility in application. The ability to control the size of the element openings is the key to prevent the propagation of an external flame sources through the vent opening and into the tank.

**Quality Assurance.** Each unit is factory inspected to meet Protectoseal's high standards prior to shipment.

### PRO-FLOW III® Sizing and Selection Software.

Use PRO-FLOW III® to select the correct size unit for pressure and vacuum relief calculated in accordance with API 2000, NFPA 30 and OSHA 1910.106.

### CONSTRUCTION

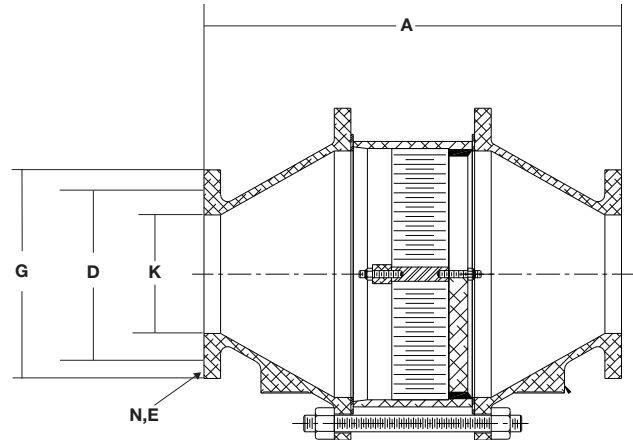
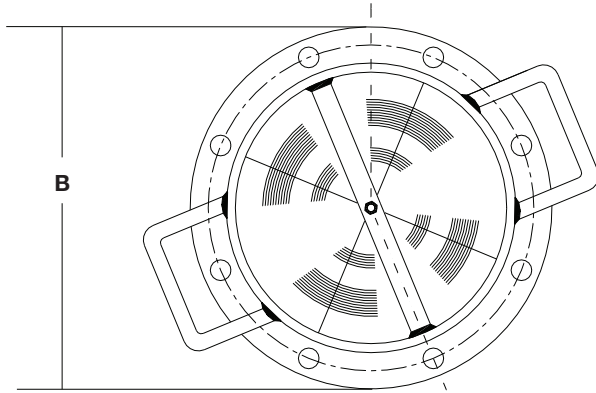
A comprehensive range of materials is offered as shown in the chart below. Other materials and features can be furnished upon request.

Available Options.

- Material certifications for castings
- Steam jacketing

Series	Housing & Element Housing	Element Winding
CS30000	Steel	S. S. 316
E30000	Aluminum	S. S. 316
F30000	S.S. 316	S. S. 316

*Note: Aluminum flanged to mate with 125# ANSI and DIN PN 16 flat face flanges. All other materials mate with 150# ANSI and DIN PN 16 raised face flanges.*



## DIMENSIONS & ORDERING INFORMATION (Dimensions shown are for reference only, contact Factory for certified drawings.)

Cat. No.*	Flange K	Length A	Width B	B.C. D	Dia. G	Dia. E	Holes N
30006	6"	22"	17½"	9½"	11"	7/8"	8
30006DN	DN150	559mm	445mm	240mm	285mm	22mm	8
30008	8"	30"	22"	11¾"	13½"	7/8"	8
30008DN	DN200	762mm	559mm	295mm	340mm	22mm	12
30010	10"	37⅞"	25¼"	14¼"	16"	1"	12
30010DN	DN250	962mm	641mm	355mm-	405mm	26mm	12
30012	12"	37⅞"	28½"	17"	19"	1"	12
30012DN	DN300	962mm	724mm	410mm	460mm	26mm	12

\* Please refer to chart on reverse for the available materials of construction.

## ADDITIONAL PRODUCTS FROM PROTECTOSEAL

### Series 18540



Pipe-Away Pressure Vacuum Relief Vent for applications that require hazardous vapors be processed into manifolded piping and not released into the atmosphere

### Series 7800



Emergency Vent protects tanks against rupture or explosion resulting from excessive internal pressure caused by exposure to fires.

### Series 4950



Vent Line / In-Line Parallel Plate Flame Arrester is designed for installation in open vent pipe or bleed lines from storage or processing tanks. Suitable for NEC Group D (IEC Group IIA) vapors

### Series 830



Combination Pressure / Vacuum Relief Vent & Flame Arrester provides pressure and vacuum relief as well as protection from propagation of externally introduced flames. Suitable for NEC Group D (IEC Group IIA) vapors.