

# SERIES 120

## Flash Arrester Fill Unit

# SERIES 120

- Sizes 2" through 4" NPT threaded connections
- Double-wall perforated flash arrester prevents flashback into the tank
- Designs allow for padlocking of the cap
- Easy inspection and maintenance
- Factory inspected prior to shipment
- Available in Aluminum



No. 120

### OBJECTIVE

The Protectoseal Series No. 120 units installed in storage tank fill openings protect tank contents from fire and explosion during filling operations.

The Series No. 120 is a combination unit. It is designed with a flash arrester to protect tank contents against exterior sources of ignition during filling operations, and to provide additional venting capacity under operating and emergency conditions. Provides auxiliary pressure and vacuum relief.

### TECHNIQUE

The Flash Arrester Fill Units are installed by threading the fitting directly onto the tank fill pipe. The perforated metal, double-wall flash arrester incorporated in each fitting prevents the propagation of fire into the tank. When installed with arresters long enough to reach ½" off tank bottoms, these fittings permit taking rodding and sampling readings. They can also be used as additional fittings exclusively for rodding and sampling where remote location of the fill pipe prevents this being done through the fill opening. It is recommended that the tank also be equipped with a Protectoseal Flame Arrester device, such as the Series Nos. 830, 860 or 670/6670. When properly sized and applied, these vents will prevent excessive pressure or vacuum accumulations within the tank during filling and emptying procedures.

### SPECIAL FEATURES

The Series 120 sturdy head and cap castings provide protection against corrosion for mechanical parts contained within the head housings. Caps are permanently fastened and hinged for easy opening. Design provides for padlocking. Covers open wide for unobstructed filling. Both the pressure relief valve and the vacuum relief valve open and close automatically. Valves operate by gravity. There are no springs to bind or corrode. Pressure and vacuum relief set at ½ oz./in.<sup>2</sup> on the 3" and 4" aluminum units. 2" aluminum unit has ¾ oz./in.<sup>2</sup> pressure and ½ oz./in.<sup>2</sup> vacuum set point.

**Positive Flame Arresting.** The perforated metal, double-wall flash arrester allows passage of vapors for pressure relief to atmosphere, as well as liquid flow into the tank. The precise perforations and metal thickness provide positive flash arresting protection, to prevent flashback into the tank.

**Sizes Available.** 2", 3" and 4" have standard NPT threaded connections. Use chart on reverse side for ordering.

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

### CONSTRUCTION

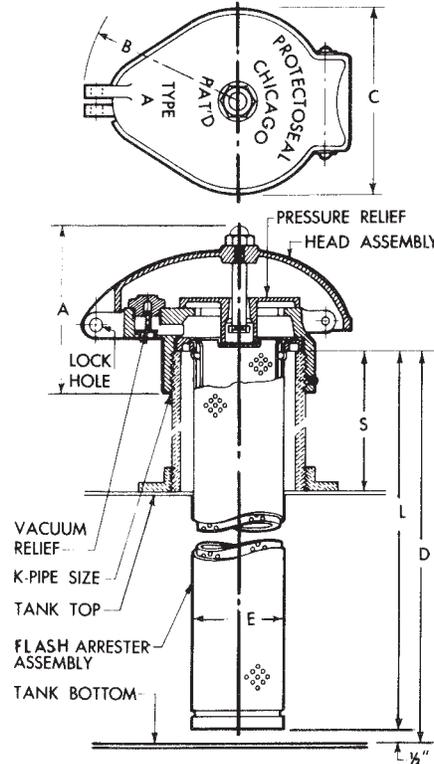
A comprehensive range of materials is offered as shown in the chart below. Other materials and features can be furnished upon request.

Series	Head Assembly	Flash Arrester Assembly
120	Aluminum 356	Brass
F120	S.S. 316	S.S. 316

*Note: Head Assembly and Flame Arrester Assembly are ordered as separate units.*

*Use chart on reverse for ordering information.*

## SERIES 120



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

Head Assembly Cat. No.	Flame Arrester Cat. No.	Pipe Size K	A	B	C	E	D	S	L*
122	122-36-L*	2"	3 <sup>7</sup> / <sub>8</sub> "	4 <sup>1</sup> / <sub>8</sub> "	3 <sup>3</sup> / <sub>4</sub> "	1 <sup>3</sup> / <sub>4</sub> "	To be specified by customer	To be specified by customer	"D" minus 1/2"
123	123-36-L*	3"	4 <sup>1</sup> / <sub>4</sub> "	5"	5"	2 <sup>1</sup> / <sub>2</sub> "	To be specified by customer	To be specified by customer	"D" minus 1/2"
124	124-36-L*	4"	5 <sup>1</sup> / <sub>4</sub> "	5 <sup>1</sup> / <sub>4</sub> "	6"	3"	To be specified by customer	To be specified by customer	"D" minus 1/2"

Note: Head Assembly and Flame Arrester Assembly are ordered as separate units. Use chart on reverse for 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.