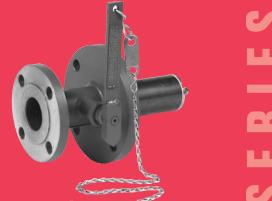


## SERIES 3000 Internal Safety Valve



- Sizes 2" through 12"
- Automatically closes in the event of a fire
- Simple, one hand valve operation
- Listed by Underwriters Laboratories in 2" through 12"
- Pressure equalizing by-pass valve
- Superior flow capability
- Easily replaceable fuse link
- 160° fusible link provided
- Factory tested for positive shut-off





#### OBJECTIVE

The Protectoseal Series 3000 Internal Safety Valves are intended for use on storage tanks containing flammable or combustible liquids. Safe and efficient, the valves protect the tanks and their contents against the hazards of exposure to fire and provide valuable aid in accident prevention. The design and operation of the units satisfy those regulations requiring tanks used to hold flammable or combustible liquids to be equipped with valves that close automatically when subjected to fire.

#### **TECHNIQUE**

The 3000 Series Internal Safety Valves are intended to provide automatic shut-off of liquid flow through a tank's outlet pipe if a fire near the valve is encountered. The valve mounts to a tank's outlet nozzle with the end of the valve in communication with the liquid stored in the tank. The outlet flange of the valve is connected to process piping as appropriate for a specific installation. The valve is normally maintained in the fully open position by means of a fusible link assembly attached to the handle. If a fire external to the tank should occur near the valve, the fusible link melts and the spring loaded Internal Safety Valve automatically closes to shut off the bulk flow of liquid through the pipe.

With the valve closed, the possibility of liquid from the tank contributing to the fire is minimized. Internal Safety Valves are not to be considered as primary operating shut off devices. Their function is to prevent the bulk flow of liquid out of the tank in the event of a fire involvement of the tank.

Each valve is equipped with a pressure equalizing poppet valve. If the main valve is to be opened against a full head of liquid stored in the tank, pushing on the handle will open a small spring loaded poppet at the center of the main shut off disk. Small amounts of liquid are allowed to flow though this poppet until the pressure on each side of the main shut off disk is equalized. The main valve can then be easily opened.

#### **SPECIAL FEATURES**

**Easy Inspection and Maintenance.** Design and light weight of entire unit permits easy handling for inspection and maintenance. Each valve is equipped with readily accessible packing glands and lock nuts to insure tight, leakproof seals around operating shaft. Packing materials can be replaced without removing valve from tank.

**By-Pass Valve.** All units provided with a by-pass valve that is operated by the main handle. This valve allows for pressure equalization between the tank and the pipe, thereby permitting ease of operation of the lever when opening the valve against the full liquid head inside the tank.

**UL Listed.** Listed by Underwriters Laboratories in 2" though 12" sizes.

**Quality Assurance.** All valves are 100% factory tested for positive shut-off and low leak rates, as well as conformance with Protectoseal's high standards of quality assurance.

**Sizes Available.** 2" through 12" mate with 150# raised face standard flanged ANSI connections. 2" and 3" also `available with standard NPT threaded connections.

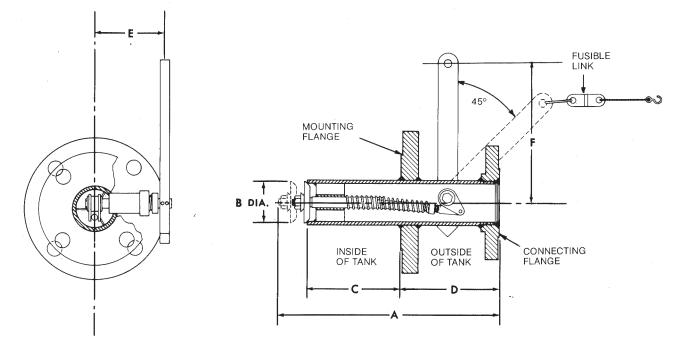
#### CONSTRUCTION

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

Series	Mounting	Body	Trim
C3000F	Flanged	Carbon Steel	316 S.S.
C3000T	Threaded	Carbon Steel	316 S.S.
F3000F	Flanged	316 S.S.	316 S.S.
F3000T	Threaded	316 S.S.	316 S.S.

All units flanged to mate with 150# R.F. ANSI. DIN flanging optional.

# **Specifications**

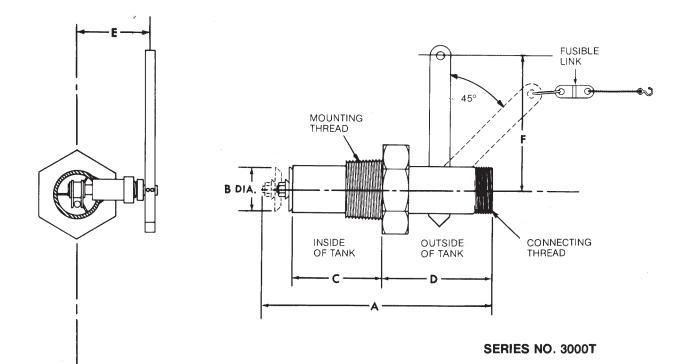


SERIES NO. 3000F

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

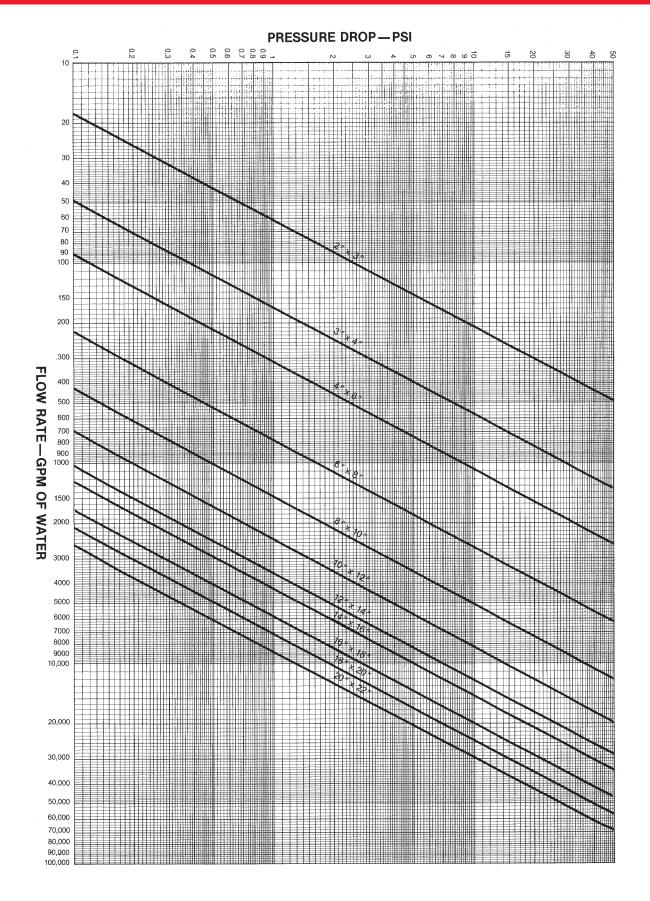
Cat. No.	Connecting Flange	Mounting Flange	А	В	C	D	E	F	Test Lab Listing
C3002F3	2"	3"	11 <sup>1</sup> /2"	2 <sup>3</sup> /8"	5"	5 <sup>3</sup> /16"	4 <sup>1</sup> /4"	7 <sup>1</sup> /4"	UL
C3003F4	3"	4"	13 <sup>1</sup> /4	31/2"	6"	5 <sup>5</sup> /8"	43/4"	73/8"	UL
C3004F6	4"	6"	17 <sup>5</sup> /8"	4 <sup>1</sup> /2"	10"	511/16"	5 <sup>1</sup> /4"	7 <sup>1</sup> /2"	UL
C3006F8	6"	8"	21 <sup>3</sup> /4"	65/8	11"	8"	7 <sup>3</sup> /8"	15"	UL
C3008F10	8"	10"	24 <sup>3</sup> /8"	85/8"	12"	9"	8 <sup>3</sup> /8"	15"	UL
C3010F12	10"	12"	26 <sup>1</sup> /8"	10 <sup>3</sup> /4"	12"	10"	10 <sup>1</sup> /2"	15"	UL
C3012F14	12"	14"	27 <sup>7</sup> /16"	12 <sup>3</sup> /4"	12 <sup>9</sup> /16"	10"	11 <sup>1</sup> /2"	18"	UL

		CONNECTING FLANGE				MOUNTING FLANGE				
			Dia.	Dia.	No.		Dia.	Dia.	No.	
Cat. No.	Size	0.D.	B.C.	Bolt	Bolts	0.D.	B.C	Bolt	Bolts	
C3002F3	2"	6"	43/4"	<sup>5</sup> /8"	4	7 <sup>1</sup> /2"	6"	<sup>5</sup> /8"	4	
C3003F4	3"	71/2"	6"	5/8"	4	9"	71/2"	<sup>5</sup> /8"	8	
C3004F6	4"	9"	7 <sup>1</sup> /2"	<sup>5</sup> /8"	8	11"	9 <sup>1</sup> /2"	3/4"	8	
C3006F8	6"	11"	9 <sup>3</sup> /8"	3/4"	8	13 <sup>1</sup> /2"	11 <sup>3</sup> /4"	3/4"	8	
C3008F10	8"	131/2"	11 <sup>3</sup> /4"	3/4"	8	16"	14 <sup>1</sup> /4"	7/8"	12	
C3010F12	10"	16"	14 <sup>1</sup> /4"	7/8"	12	19"	17"	<sup>7</sup> /8"	12	
C3012F14	12"	19"	17"	7/8"	12	21"	18 <sup>3</sup> /4"	1"	12	



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

Cat. No.	Connecting Thread	Mounting Thread	A	В	C	D	E	F
C3002T2	2" NPT	2" NPT	12"	2 <sup>3</sup> /16"	35/8"	6 <sup>3</sup> /8"	41/8"	6 <sup>5</sup> /8"
C3002T3	2" NPT	3" NPT	11 <sup>1</sup> /2"	23/8"	47/16"	5 <sup>1</sup> /2"	41/4"	71/4"
C3003T4	3" NPT	4" NPT	131/4	31/2"	5 <sup>3</sup> /16"	61/4"	43/4"	7 <sup>3</sup> /8"





225 Foster Ave., Bensenville, IL 60106-1690 P 630.595.0800 F 630.595.8059 info@protectoseal.com www.protectoseal.com

Page 4