

The Model 108-2SLF automatically relieves excess foam pump discharge pressure to prevent the pressure from exceeding the rating of the fire system components. The engineered SLF (sense line flush) feature assures accurate pressure control by continuously flushing the pilot sensing chamber (flow through design).

## SERIES FEATURES

- ▶ Limits maximum foam system pressure
- ▶ Opens quickly; accurately maintains pressure
- ▶ Adjustable: 1.3 - 5.5 bar, 4.4 - 12.4 bar, or 6.8 - 20.6 bar
- ▶ Pilot-operated main valve
- ▶ Pressure setting is adjustable with single screw
- ▶ Sense line flush can be manually selected
- ▶ Factory tested and pre-set to your requirements
- ▶ Globe or angle pattern
- ▶ Wide range of materials available

## OPERATION

The normally closed, spring loaded pilot, sensing pump discharge pressure, opens when pressure exceeds the spring setting, allowing the main valve to open. As the pump pressure increases, the pilot opens further, causing the main valve to do the same. Pressure is maintained at the controlled set point over a wide range of flows regardless of back pressure in the downstream piping. The valve closes gradually as pressures decreases below the set point.

## COMPONENTS

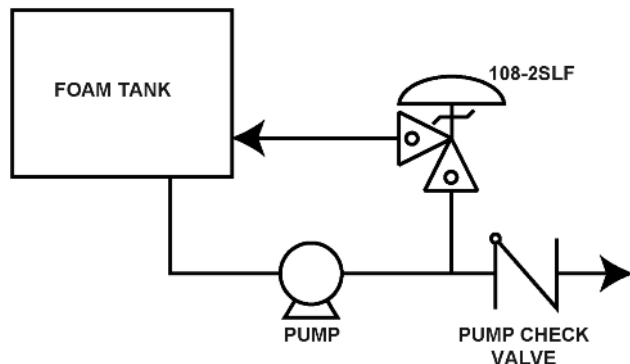
The Model 108-2SLF consists of the following components, arranged as shown on the schematic diagram:

- 1.) **Model 65 Basic Control Valve**, a hydraulically operated, diaphragm-actuated, globe or angle valve that closes with an elastomers-on-metal seal.
- 2.) **Model 1330SLF Pressure Relief Pilot**, a two-way, normally closed pilot valve that senses upstream pressure under its diaphragm and balances it against an adjustable spring load. An increase in pressure tends to make the pilot open.
- 3.) **Model 126 Ejector**, a simple tee fitting with a fixed orifice in its inlet port. It provides the proper pressure to the diaphragm chamber of the main valve depending upon the position of the pressure relief pilot.
- 4.) **Model 141-3 Flow Control Valve**, a needle-type valve that provides adjustable restricted flow in one direction and free flow in the opposite direction. On the 108-2SLF it acts as a closing speed control.
- 5.) **Model 300777 Orifice Fitting**, a key component of the sense line flush design.
- 6.) **Model 141-4 Ball Valve**, provides manual selection of the sense line flush feature. It is normally closed and is opened to flush the sense line and pilot diaphragm chamber.
- 7.) **Model 155 Visual Indicator**, optional component that shows valve operating position.

## SCHEMATIC



## RECOMMENDED INSTALLATION



## MAX. PRESSURE

END CONNECTIONS	DUCTILE IRON	STEEL/STN STL	BRONZE
Threaded	44.1 bar	44.1 bar	34.4 bar
Grooved	20.6 bar	20.6 bar	20.6 bar
150# Flanged	17.2 bar	19.6 bar	15.5 bar
300# Flanged	44.1 bar	51.0 bar	34.4 bar

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## SIZES

GLOBE/ANGLE -

1.25" (DN32) thru 6" (DN150)

(Consult factory for others)

## SPRING RANGES

1.3 - 5.5 bar, 4.4 - 12.4 bar, or 6.8 - 20.6 bar

**TEMPERATURE RANGE** (Buna-N Elastomers)

0° C - 82° C

**MATERIALS** (Consult factory for others)

### Body/Bonnet:

Ductile Iron ASTM A536-epoxy coated (standard)

Cast Steel ASTM A216 WCB - epoxy coated

Stainless Steel ASTM A743 CF8M

Nickel-aluminum Bronze ASTM B148 Alloy C95800

Cast Bronze

**Seat Ring:** Bronze (standard)

Stainless Steel ASTM A743/CF8M

Nickel-aluminum Bronze ASTM B148 Alloy C95800

**Stem:** Stainless Steel (standard), Monel

**Spring:** Stainless Steel

**Diaphragm:** Nylon Reinforced Buna-N (standard), Viton, EPDM

**Seat Disc:** Buna-N (standard), Viton, EPDM

**Pilot:** Cast Bronze (standard)

Stainless Steel ASTM A743/CF8M

Nickel-aluminum Bronze ASTM B148 Alloy C95800

**Tubing & Fittings:** Copper/Brass (standard),

## SPECIFICATIONS

The fire foam pressure relief valve shall function to limit pump discharge pressure to a predetermined maximum. The pressure relief pilot shall be normally closed, opening when the valve inlet pressure exceeds the set point. The pilot shall include a manually selectable sense line flush feature.

## DESIGN

The fire foam pressure relief valve shall be a single-seated, line pressure operated, diaphragm actuated, pilot controlled globe or angle valve. The valve shall seal by means of a corrosion-resistant seat and a resilient, rectangular seat disc. These and other parts shall be replaceable without removing the valve from the line. The stem of the main valve shall be guided top and bottom by integral bushings. Alignment of the body, bonnet and diaphragm assembly shall be by precision dowel pins. The diaphragm shall not be used as a seating surface, nor shall pistons be used as an operating means. The pilot system shall be furnished complete and installed on the main valve. The valve shall be operationally and hydrostatically tested prior to shipment.

## MATERIALS OF CONSTRUCTION

The main valve body and bonnet shall be ductile iron per ASTM A536, Grade 65-45-12. All internal ferrous surfaces shall be coated with 4 mils of epoxy. External surfaces shall be coated with 4 mils of epoxy followed by a coat of enamel paint. The main valve seat ring shall be bronze. Elastomers (diaphragms, resilient seats and O-rings) shall be Buna-N. The control pilot shall be bronze and control line tubing shall be copper.

## ACCEPTABLE PRODUCTS

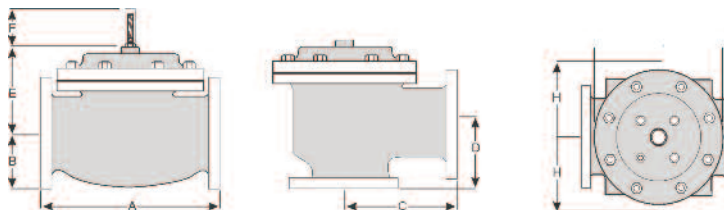
The fire pump relief valve shall be a Model 108-2SLF (globe) or 108-2SLFA (angle), as manufactured by OCV Control Valves, Tulsa, OK, USA.

METRIC DIMENSIONS-M.M.

DIM	END CONN	DN32 & DN40	DN50	DN65	DN80	DN100	DN150
A	SCREWED	222	251	267	330		
	GROOVED	222	251	267	330	387	508
	150# FLGD	216	238	267	305	381	451
	300# FLGD	222	251	283	324	397	473
C ANGLE	SCREWED	111	121	152	165		
	GROOVED	111	121	152	165	194	
	150# FLGD	108	121	152	152	191	254
	300# FLGD	111	127	162	162	198	267
D ANGLE	SCREWED	79	98	102	114		
	GROOVED	79	98	102	114	143	
	150# FLGD	76	98	102	102	140	152
	300# FLGD	79	105	111	111	148	165
E	ALL	152	152	178	165	203	254
F (OPT)	ALL	98	98	98	98	98	98
H	ALL	254	279	279	279	305	330

\*GROOVED END NOT AVAILABLE IN DN32

For maximum efficiency, the OCV control valve should be mounted in a piping system so that the valve bonnet (cover) is in the top position. Other positions are acceptable but may not allow the valve to function to its fullest and safest potential. In particular, please consult the factory before installing 8" (DN200) and larger valves, or any valves with a limit switch, in positions other than described. Space should be taken into consideration when mounting valves and their pilot systems.



QUALITY SYSTEM  
REGISTERED TO  
ISO 9001

A routine inspection & maintenance program should be established and conducted yearly by a qualified technician. Consult our factory @ 1-888-628-8258 for parts and service.

### How to order your Model 108-2SLF/108-2SLFA valve

When Ordering please provide:

Series Number - Valve size - Globe or Angle -

Pressure Class - End Flange Type - Trim Material -

Adjustment Range - Pilot Options - Special needs / or Installation Requirements

Represented by:

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