

# VARIABLE RANGE PUMP PROPORTIONER

## FEATURES

- **Bronze and stainless steel material construction for performance and durability**
- **Fresh, sea and brackish water compatible**
- **Horizontal or vertical mounted position**

## DESCRIPTION

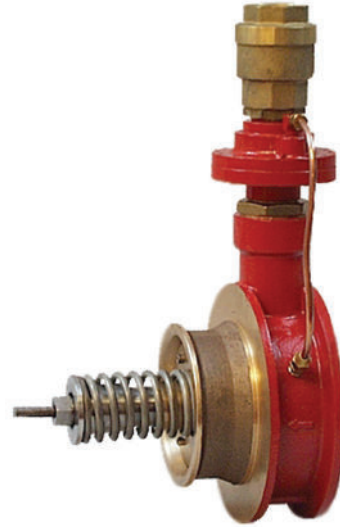
The Perimeter Solutions Variable Range Pump Proportioner is a foam solution proportioning device, designed to accurately proportion the foam concentrate into the water stream at both high and low system flow rates. The Perimeter Solutions Variable Range Pump Proportioner is designed as an integral component of the SOLBERG foam pump proportioning system.

The Perimeter Solutions Variable Range Pump Proportioner complies with N FPA 30, the Flammable and Combustible Liquids Code, Paragraph 16.5.1.6.2, which states that foam/water sprinkler systems are to provide foam solution to operating sprinklers with 4 sprinklers flowing. The Perimeter Solutions Variable Range Pump Proportioner meets this Code requirement.

## APPLICATION

The Perimeter Solutions Variable Range Pump Proportioner is designed for systems where proportioning of foam concentrate will begin at low flow rates, but as additional sprinklers operate, the proportioner will automatically adjust for the changes in system flow rates and maintain accurate foam concentrate proportioning. Considering that the fire data shows that only 4 to 5 sprinklers will be necessary to control the flammable liquid fire risks, the Perimeter Solutions Variable Pump Range Proportioner is the perfect solution for low system flow proportioning.

The primary applications for the Perimeter Solutions Variable Range Pump Proportioner include closed-head foam/water sprinkler systems, protecting risks such as flammable and combustible liquid storage rooms, chemical processing, loading racks, aircraft hangars, and tank farm protection systems using foam chambers.



## SPECIFICATIONS

The Perimeter Solutions Variable Range Pump Proportioner is acceptable for use with Perimeter Solutions foam concentrates, when used as an integral component of a SOLBERG foam pump proportioning system. The Perimeter Solutions Variable Range Pump Proportioner is designed to be installed as a between-the-flange proportioner, in standard 6.0" (152 mm) or 8.0" (203 mm) system piping. The foam concentrate inlet is 2.0" (51 mm) or 2.5" (64 mm) BSP female pipe size depending on the proportioner size selected.

The proportioner will accurately proportion foam concentrate at flow rates between 18 to 1,850 gpm (70 to 7000 lpm) for 6.0" (152 mm), and between 40 to 3,963 gpm (150 to 15000 lpm) for 8.0" (203 mm) sizes<sup>1</sup>.

1. The unit will operate with higher flows if the foam system can accept a higher pressure loss.

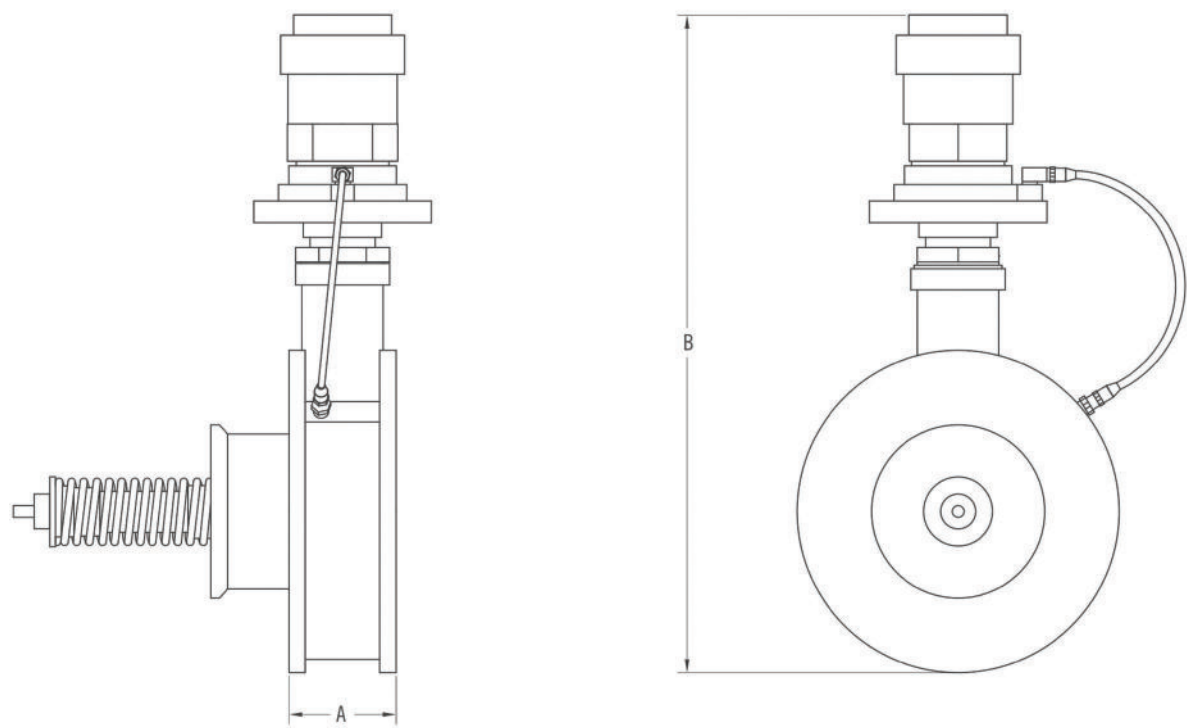
# VARIABLE RANGE PUMP PROPORTIONER

The Perimeter Solutions Variable Range Pump Proportioner is manufactured using a bronze body and cone shaped piston, stainless steel spring, and stainless steel foam metering orifice. The Perimeter Solutions Variable Range Pump Proportioner is to be installed with a minimum of 5 pipe diameters (30.0" (762 mm)) of straight pipe both upstream and downstream of the proportioner. The proportioner body is cast with a directional flow arrow on the proportioner body indicating the proper orientation of installation.

The Perimeter Solutions Variable Range Pump Proportioner operation in closed-head sprinkler systems is as follows:

Under static, no flow conditions in the water supply piping, the water and foam concentrate pressures are equal. During a fire situation as sprinklers begin to open, the foam concentrate is injected into the water supply through the foam concentrate metering orifice at the proper listed solution rate. As more sprinklers begin to operate, the change in foam-water solution demand is automatically adjusted for by the SOLBERG Variable Range Pump Proportioner, by injecting a carefully calibrated increased quantity of foam concentrate into the piping.

## DIMENSIONAL INFORMATION



# VARIABLE RANGE PUMP PROPORTIONER

## PERFORMANCE INFORMATION

| Model SVRPP                              | 6.0" (152 mm)                  | 8.0" (203 mm)                  |
|------------------------------------------|--------------------------------|--------------------------------|
| Size                                     | ON 150                         | ON 200                         |
| Foam Inlet Female                        | R 2.0" (51 mm)                 | R 2.5" (64 mm)                 |
| Flow Range                               | 18-1850 gpm (70-7000 lpm)      | 40-3963 gpm (150-15000 lpm)    |
| Connection Water                         | 6.0" between flange, DIN PN-16 | 8.0" between flange, DIN PN-16 |
| Connection Foam                          | 2.0" (51 mm) Female BSP        | 2.5" (64 mm) Female BSP        |
| Proportioning Rate (pre-calibrated)      | Foam Concentrates              | Foam Concentrates              |
| Inlet Pressure (max)                     | 232 psi (16 bar)               | 232 psi (16 bar)               |
| Inlet Pressure (min)                     | 73 psi (5 bar)                 | 73 psi (5 bar)                 |
| Pipe Length Upstream                     | 30.0" (762 mm)                 | 40.0" (1000 mm)                |
| Pipe Length Downstream                   | 30.0" (762 mm)                 | 40.0" (1000 mm)                |
| Flange Type                              | DIN PN16                       | DIN PN16                       |
| Between Flange Proportions (Dimension A) | 2.75" (69 mm)                  | 3.5" (88 mm)                   |
| Height (Dimension B)                     | 13.0" (330 mm)                 | 17.0" (430 mm)                 |

Note: Over pressurization of 14.5 psi (1 bar) minimum is required on the foam concentrate side.

## ORDERING INFORMATION

| VARIABLE RANGE PROPORTIONER |                                                                                | APPROXIMATE SHIPPING WEIGHT |    |
|-----------------------------|--------------------------------------------------------------------------------|-----------------------------|----|
| PART NO.                    | DESCRIPTION                                                                    | lb                          | kg |
| 30202                       | Ratio Controller - Variable Range Pump Proportioner, Model SVRPP 6.0" (152 mm) | 35                          | 16 |
| 30203                       | Ratio Controller - Variable Range Pump Proportioner, Model SVRPP 8.0" (203 mm) | 106                         | 48 |



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### FOR MORE INFORMATION

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