

# VARIABLE RANGE PROPORTIONER

## FEATURES

- FM Approved with SOLBERG RE-HEALING RF3, 3%, SOLBERG RE-HEALING 3x3 SP-100 AR-SFFF and SOLBERG ARCTIC 3x3% ATC Foam Concentrates
- UL Listed with SOLBERG RE-HEALING RF3, 3%, SOLBERG RE-HEALING 3x3 SP-100 AR-SFFF, SOLBERG EVOLUTION 3% SFFF, SOLBERG ARCTIC 3% AFFF and SOLBERG ARCTIC 3x3% ATC Foam Concentrates
- Bronze and stainless steel material construction for performance and durability
- Fresh, salt and brackish water compatible
- Horizontal or vertical mounted position

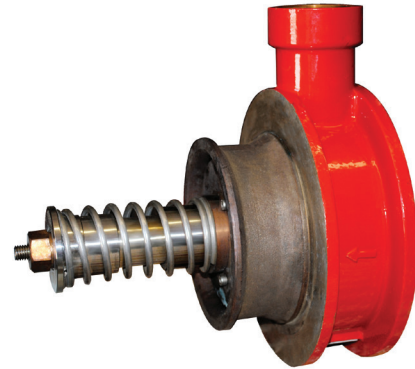
## DESCRIPTION

The SOLBERG® Variable Range Proportioner is a low foam solution proportioning device, designed to accurately proportion the foam concentrate into the water stream at both high and low system flow rates. The SOLBERG Variable Range Proportioner is designed as an integral component of the SOLBERG Bladder Tank proportioning system, to be used with SOLBERG foam concentrates in foam-water systems.

The SOLBERG Variable Range Proportioner complies with NFPA 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 SOLBERG Variable Range Proportioner was designed to meet this Code requirement.

## APPLICATION

The SOLBERG Variable Range Proportioner is designed for closed-head foam-water sprinkler 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 SOLBERG Variable Range Proportioner is the perfect solution for low system flow proportioning.

The primary applications for the SOLBERG Variable Range 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 SOLBERG Variable Range Proportioner is certified for use with SOLBERG RE-HEALING RF3, 3%, SOLBERG RE-HEALING 3x3 SP-100 AR-SFFF, SOLBERG EVOLUTION 3% SFFF, SOLBERG ARCTIC 3% AFFF and SOLBERG ARCTIC 3x3 ATC foam concentrates, when used as an integral component of a SOLBERG bladder tank proportioning system. The SOLBERG Variable Range Proportioner is designed to be installed as a between-the-flange proportioner, in standard 6.0" (152 mm) and 8.0" (203 mm) system piping. The foam concentrate inlet for the 6.0" VRP is 2.0" (50 mm) NPT and 2.5" (63 mm) NPT for the 8.0" VRP.

## VARIABLE RANGE PROPORTIONER

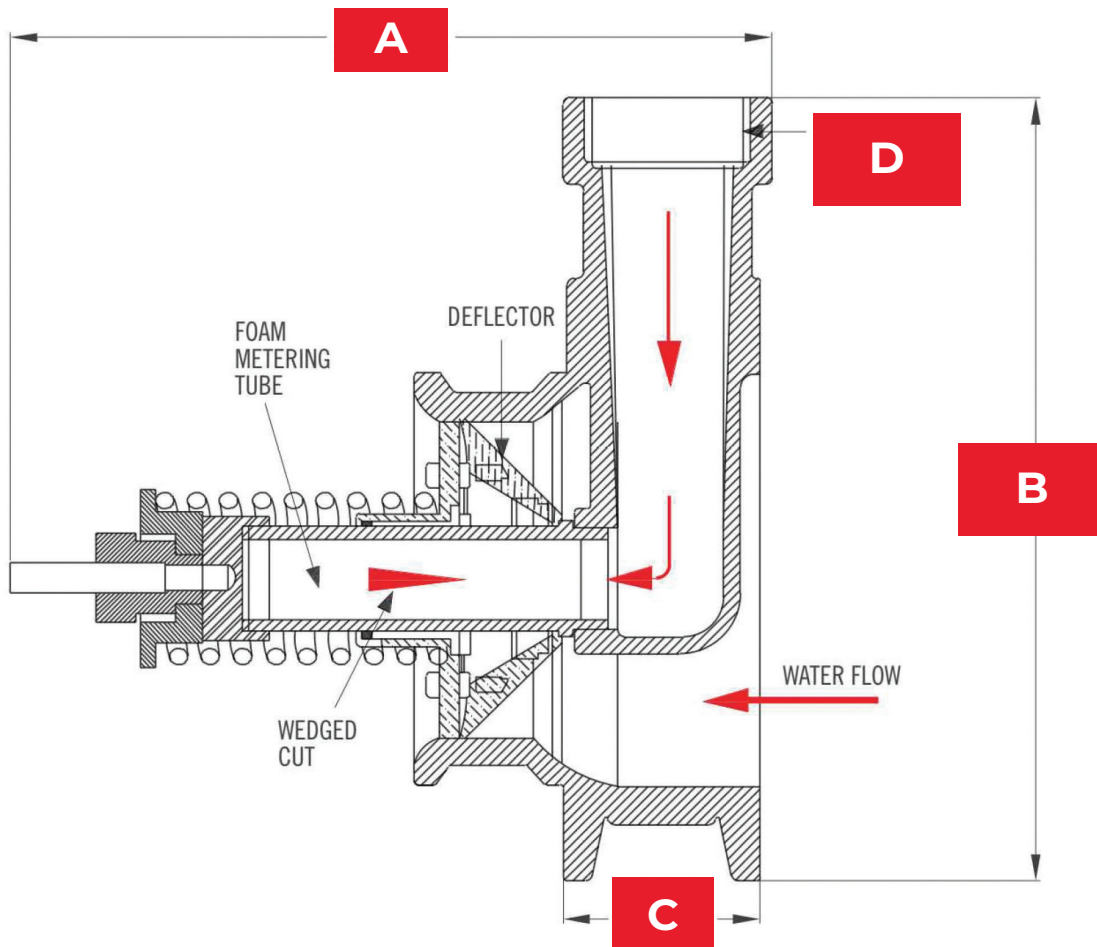
The SOLBERG Variable Range Proportioner is manufactured using a bronze body and cone shaped piston, stainless steel spring, and stainless steel foam metering orifice. The SOLBERG Variable Range Proportioner is to be installed with a minimum of 5 pipe diameters (30.0" (762 mm)) for the 6.0" VRP and 40.0" (1,016 mm) for the 8.0 VRP) 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.

### CERTIFICATIONS

Underwriters Laboratories, Inc. (UL) Listed - Standard 162, FM Approved per Approval Standard 5130.

### DIMENSIONAL INFORMATION

VRP	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Foam Inlet Threading
6" VRP	10.9 (277)	11.22 (285)	2.75 (70)	2" NPT
8" VRP	12.83 (326)	10.66 (271)	3.57 (91)	2.5" NPT 3" Groove



The SOLBERG Variable Range Proportioner operation in closed-head sprinkler systems is as follows:

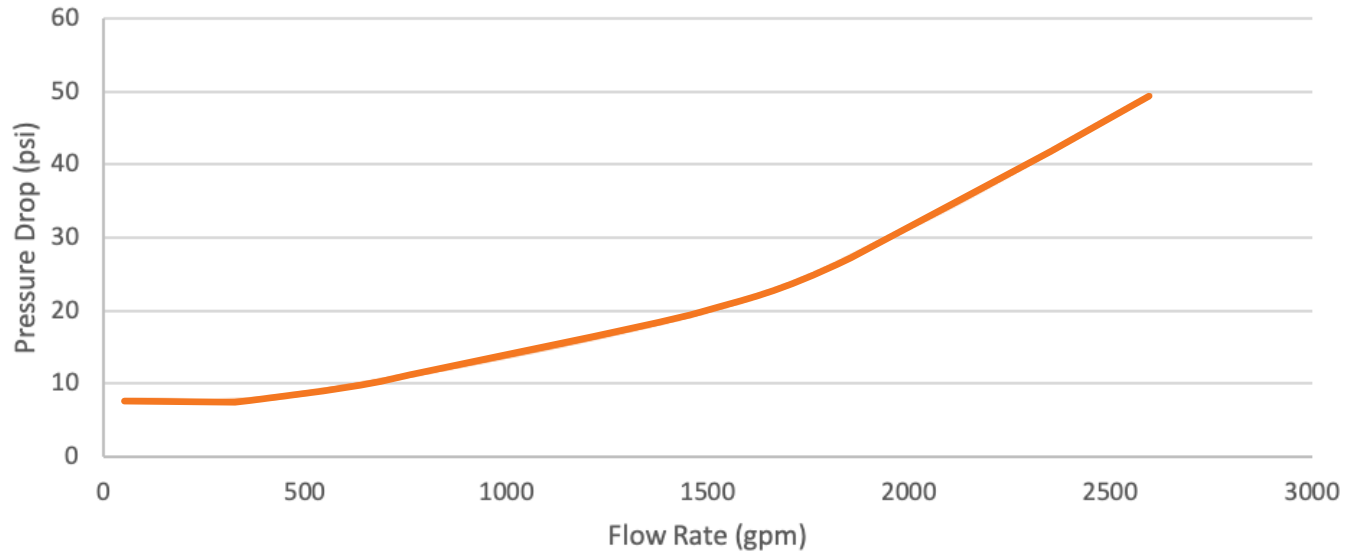
Under static, no flow conditions in the water supply piping, the water and foam concentrate pressures are equal. During a fire situation as sprinklers begin to open, the foam concentrate is injected into the water supply through the foam concentrate metering orifice at the proper listed solution rate.

As more sprinklers begin to operate, the change in foam-water solution demand is automatically adjusted for by the SOLBERG Variable Range Proportioner, by injecting a carefully calibrated increased quantity of foam concentrate into the piping.

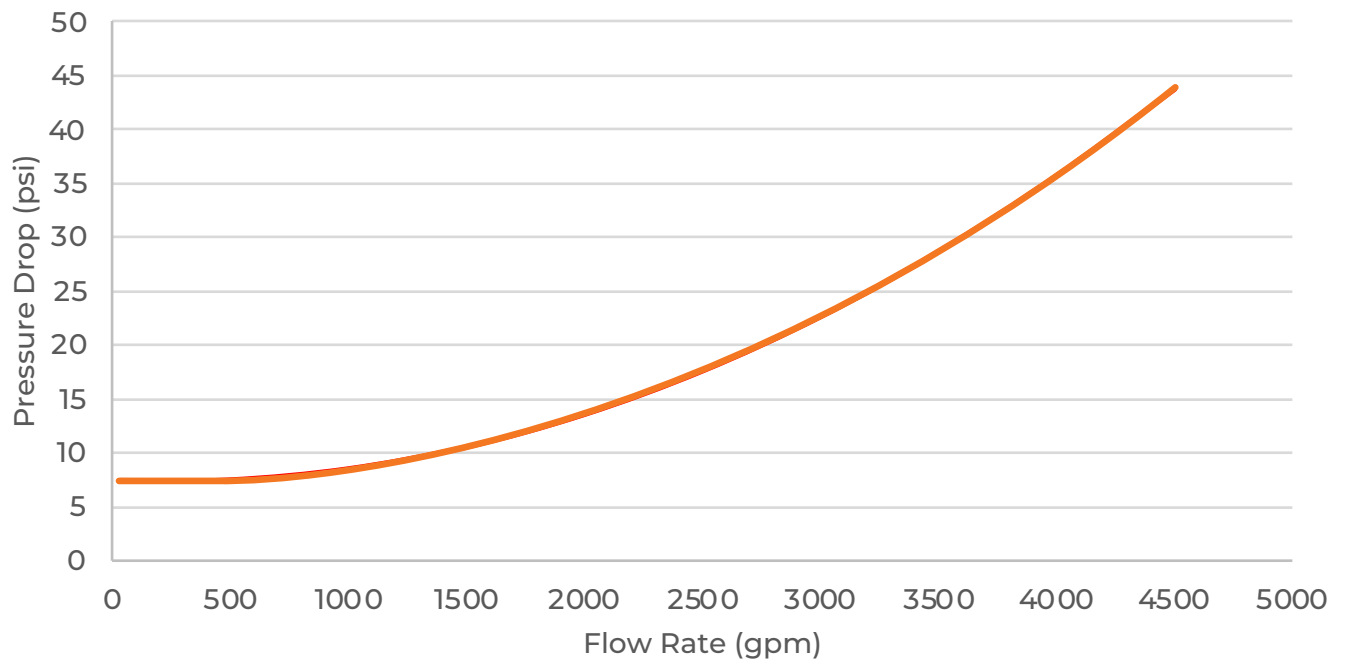
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## PRESSURE LOSS CURVE

### 6" Variable Range Proportioner Pressure Drop



### 8" Variable Range Proportioner Pressure Drop



# VARIABLE RANGE PROPORTIONER

## PERFORMANCE INFORMATION

6.0" MODEL SRVP	UL LISTED NOMINAL FLOW					FM APPROVED NOMINAL FLOW			
	SOLBERG RE-HEALING 3X3 SP-100 AR-SFFF gpm (lpm)	SOLBERG RE-HEALING RF3, 3% gpm (lpm)	SOLBERG ARCTIC 3% AFFF gpm (lpm)	SOLBERG ARCTIC 3x3% ATC gpm (lpm)	SOLBERG EVOLUTION 3% SFFF gpm (lpm)	SOLBERG RE-HEALING RF3, 3% gpm (lpm)	SOLBERG ARCTIC 3x3% ATC gpm (lpm)	*SOLBERG RE-HEALING 3X3 SP-100 AR-SFFF gpm (lpm)	*SOLBERG EVOLUTION 3% SFFF gpm (lpm)
Proportioning Rate (pre-calibrated)	35-2750 (132-10410)	119-2375 (450-8990)	87-2171 (329-8218)	84-1761 (318-6666)	93-2580 (352-9765)	108-1700 (405-6435)	94-1355 (356-5129)	*46-2715 (174-10277)	*44-2850 (167-10788)

\*FM Pending

8.0" MODEL SRVP	UL LISTED NOMINAL FLOW	*FM APPROVED NOMINAL FLOW
		SOLBERG RE-HEALING 3X3 SP-100 AR-SFFF gpm (lpm)
Proportioning Rate (pre-calibrated)	56-4112 (212-15564)	*60-3850 (227-14572)

\*FM Pending

Size	6.0" (150 mm)	8.0" (203 mm)
Foam Inlet Female	Threaded	Threaded, Grooved
Inlet Working Pressure (max.)	175 psi (12 Bar)	175 psi (12 Bar)
Inlet Working Pressure (min.)	30 psi (2 Bar)	30 psi (2 Bar)
Pipe Length Upstream	30.0" (762 mm)	40.0" (1,016 mm)
Pipe Length Downstream	30.0" (762 mm)	40.0" (1,016 mm)
Flange Size	6.0" (150 mm)	8.0" (203 mm)
Between Flange Dimensions	2.75" (69 mm)	3.6" (90.8 mm)
Height	11.0" (280 mm)	12.8" (326 mm)
Weight	29 lb (13 kg)	55.1 lb (25 kg)
Material	Bronze	Bronze

Note: DO NOT Exceed 35.0' (11 m) of equivalent length of pipe and fittings

## ORDERING INFORMATION

### VARIABLE RANGE PROPORTIONER

### APPROXIMATE SHIPPING WEIGHT

PART NO.	DESCRIPTION		APPROXIMATE SHIPPING WEIGHT	
			lb	kg
30200	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG ARCTIC 3% AFFF (87-2171 gpm / 329-8218 lpm) (UL)	UL	28.6	13
30201	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG 3x3 ATC/AFFF (84-1761 gpm / 318-6666 lpm) (UL), (94-1355 gpm / 356-5129 lpm) (FM)	UL, FM	28.6	13
30210	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG RE-HEALING RF3 (119-2375 gpm / 450-8991 lpm) (UL)	UL	28.6	13
30211	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG RE-HEALING RF3 (108-1700 gpm / 409-6435 lpm) (FM)	FM	28.6	13
30215	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG RE-HEALING 3x3 SP-100 AR-SFFF (35-2750 gpm / 132-10410 lpm) (UL)	UL	28.6	13
30218	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG RE-HEALING 3x3 SP-100 AR-SFFF (F Tube w/3.34 mm Shim 100-2570 gpm) (FM) (*46-2715 gpm)	FM	28.6	13
30234	SOLBERG Variable Range Proportioner, Model SVRP 8.0" (203 mm), SOLBERG RE-HEALING 3x3 SP-100 AR-SFFF (G Tube w/2.94 mm Shim *60-3850 gpm) (FM)	*FM	55.1	25
30235	SOLBERG Variable Range Proportioner, Model SVRP 8.0" (203 mm), SOLBERG RE-HEALING 3x3 SP-100 AR-SFFF (M Tube w/4.55 mm Shim 56-4112 gpm) (UL)	UL	55.1	25
30238	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG EVOLUTION 3% SFFF (F-Tube w/2.86 mm Shim 93-2580 gpm) (UL)	UL	28.6	13
	SOLBERG Variable Range Proportioner, Model SVRP 6.0" (150 mm), SOLBERG EVOLUTION 3% SFFF (*44-2850 gpm) (FM)	*FM	28.6	13

\*FM Pending

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## FOR MORE INFORMATION

Contact any of our worldwide Perimeter Solutions Fire Safety offices or visit:

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