

VARIABLE RANGE PROPORTIONER

HARDWARE



Features

FM Approved with RE-HEALING RF3, 3% and ARCTIC 3x3% ATC Foam Concentrates

UL Listed with RE-HEALING RF3, 3%, ARCTIC 3% AFFF and 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.

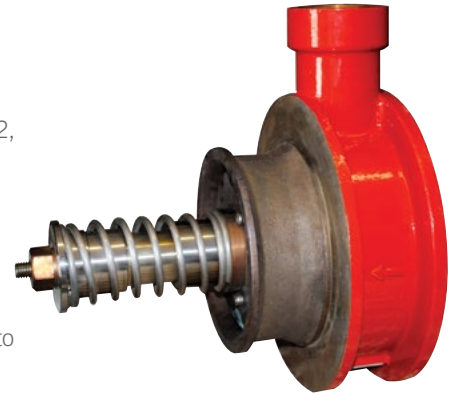
The SOLBERG Variable Range Proportioner complies with NFPA 30,

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%, ARCTIC 3% AFFF and 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) system piping. The foam concentrate inlet is 2.0" (50 mm) NPT female pipe size.

Solberg is a member of THE AMEREX GROUP, an alliance of independent companies with a singular purpose: revolutionize the course of fire suppression technology with safer, more effective, and more sustainable solutions. Together, we are Moving Industries Forward by Redefining Fire Suppression. www.solbergfoam.com

The proportioner will accurately proportion foam concentrate at flow rates between 80 to 2,100 gpm (302 to 7949 lpm) for 3% AFFF concentrate, between 80 to 1,698 gpm (302 to 6428 lpm) for 3x3 ATC concentrate and between 108-1700 gpm (405-6435 lpm) for RE-HEALING RF3, 3% foam concentrate.

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)) 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 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

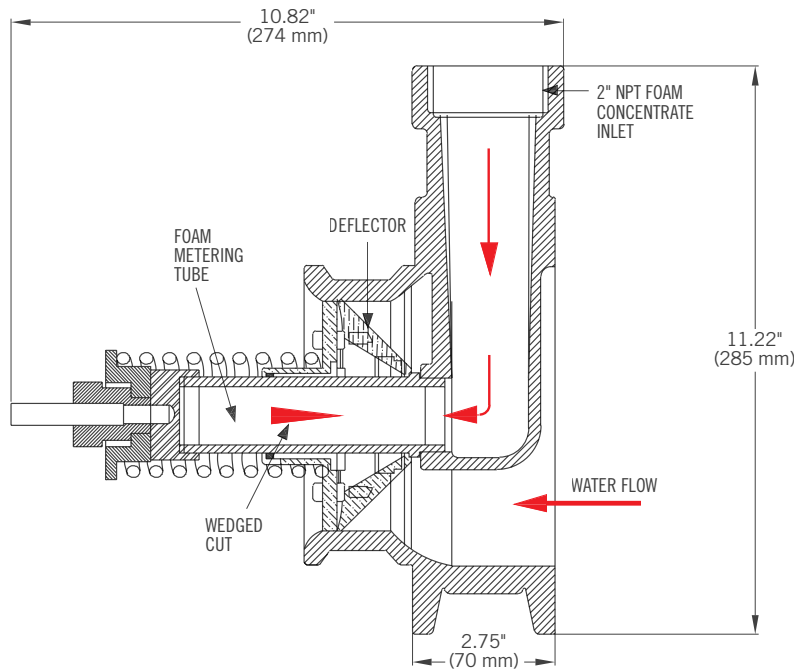
at the proper listed solution rate. As more sprinklers begin to operate, the change in foam-water solution demand is automatically adjusted for by the SOLBERG Variable Range Proportioner, by injecting a carefully calibrated increased quantity of foam concentrate into the piping.

Certifications

Underwriters Laboratories, Inc. (UL) Listed - Standard 162, FM Approved per Approval Standard 5130 with RE-HEALING RF3, 3% and ARCTIC 3x3 ATC Foam Concentrates.

**See FM Approval Guide for Details*

Dimensional Information



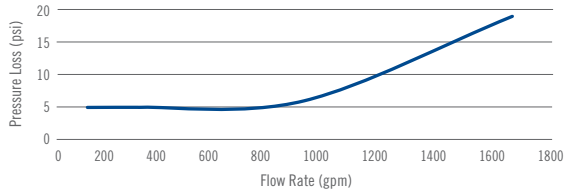


Pressure Loss Curves

NOMINAL FLOW RATES

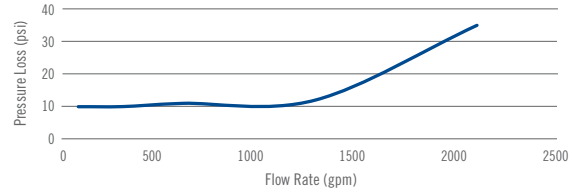
UL LISTED
RE-HEALING RF3, 3% FOAM CONCENTRATE

6 Inch Ratio Controller



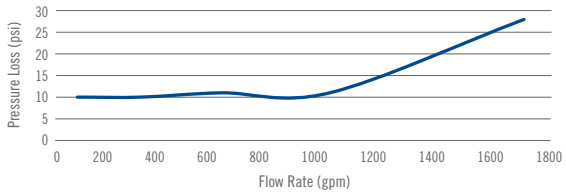
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ARCTIC™ 3% AFFF FOAM CONCENTRATE

6 Inch Ratio Controller



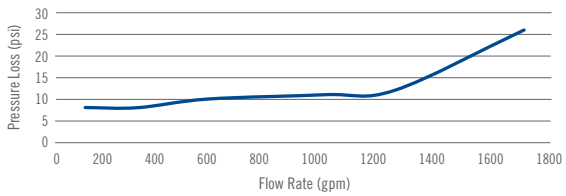
UL LISTED
ARCTIC™ 3X3% ATC™ FOAM CONCENTRATE

6 Inch Ratio Controller



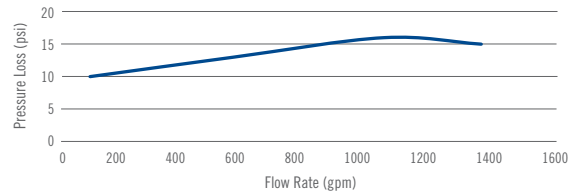
FM APPROVED
RE-HEALING RF3, 3% FOAM CONCENTRATE

6 Inch Ratio Controller



FM APPROVED
ARCTIC™ 3X3% ATC™ FOAM CONCENTRATE

6 Inch Ratio Controller

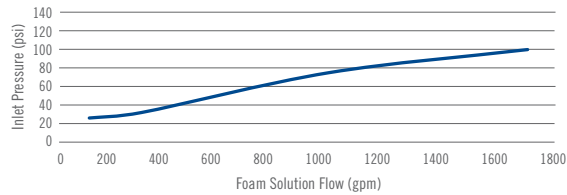


Inlet Pressure vs. Foam Solution Flow

FM APPROVED

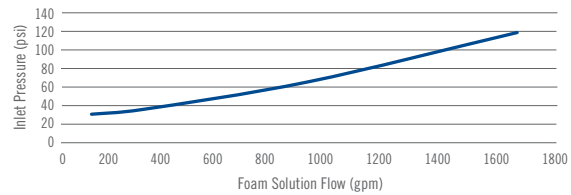
RE-HEALING RF3, 3% FOAM CONCENTRATE

6 Inch Ratio Controller



ARCTIC™ 3X3% ATC™ FOAM CONCENTRATE

6 Inch Ratio Controller



Performance Information

	UL LISTED NOMINAL FLOW			FM APPROVED NOMINAL FLOW	
	RE-HEALING RF3, 3% gpm (lpm)	ARCTIC 3% AFFF gpm (lpm)	ARCTIC 3x3% ATC gpm (lpm)	RE-HEALING RF3, 3% gpm (lpm)	ARCTIC 3x3% ATC gpm (lpm)
MODEL SRVP					
Proportioning Rate (pre-calibrated)	115-1700 (435-6435)	87-2171 (329-8218)	84-1761 (318-6666)	108-1700 (405-6435)	94-1355 (356-5129)
Size	6.0" (150 mm)				
Foam Inlet Female	Threaded				
Inlet Working Pressure (max.)	175 psi (12 bar)	175 psi (12 bar)	175 psi (12 bar)	175 psi (12 bar)	175 psi (12 bar)
Inlet Working Pressure (min.)	30 psi (2 bar)	30 psi (2 bar)	30 psi (2 bar)	30 psi (2 bar)	30 psi (2 bar)
Pipe Length Upstream	30.0" (762 mm)				
Pipe Length Downstream	30.0" (762 mm)				
Flange Size	6.0" (150 mm)				
Between Flange Dimensions	2.75" (69 mm)				
Height	11.0" (280 mm)				
Weight	29 lb (13 kg)				
Material	Bronze				

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

Ordering Information

VARIABLE RANGE PROPORTIONER

SHIPPING WEIGHT

PART NO.	DESCRIPTION		SHIPPING WEIGHT	
			lb	kg
30200	Ratio Controller - Variable Range, Model SVRP 6.0" (150 mm), ARCTIC 3% AFFF	UL	28.6	13
30201	Ratio Controller - Variable Range, Model SVRP 6.0" (150 mm), ARCTIC 3x3 ATC	UL, FM	28.6	13
30210	Ratio Controller - Variable Range, Model SVRP 6.0" (150 mm), RE-HEALING RF3, 3%	UL	28.6	13
30211	Ratio Controller - Variable Range, Model SVRP 6.0" (150 mm), RE-HEALING RF3, 3%	FM	28.6	13

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FORM NUMBER F-2011019-5

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