

## Threaded Proportioners (2 in. and 2 1/2 in.)

### Application

CHEMGUARD proportioners are specifically designed to accurately proportion and control the mixing of pressurized CHEMGUARD foam concentrates into a water stream with minimum pressure loss. CHEMGUARD proportioners are UL Listed and FM Approved with various CHEMGUARD foam concentrates, and the proportioners are used in conjunction with bladder tanks. Typical applications include flammable liquid storage tanks, loading racks, aircraft hangars, heliports, and anywhere flammable liquids are used, stored, processed, or transported.

### Description

Each CHEMGUARD proportioner consists of a body, inlet nozzle, and metering orifice, all of which are corrosion-resistant brass.

The proportioner body is designed with a female NPT threaded inlet and a male NPT threaded outlet in sizes of 2 in. or 2 1/2 in. Clearly marked on the proportioner body is the flow direction arrow, and the type and percentage of concentrate that it was designed to proportion.

The inlet nozzle is secured by a stainless steel retaining ring.

The metering orifice is sized according to the type and percentage of concentrate used, and the orifice is also secured with a stainless steel retaining ring.



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### Specifications

The proportioner body and inlet nozzle shall be of low zinc (less than 15%) brass. The nozzle and foam orifice retaining rings shall be of stainless steel.

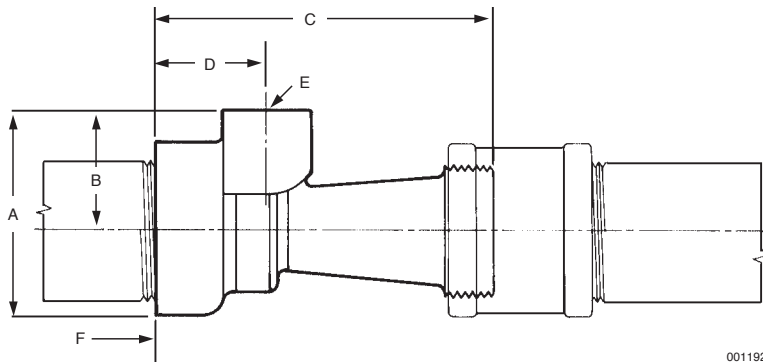
The proportioner body shall be designed with a female NPT inlet and a male NPT outlet. The body shall be clearly marked with a flow direction arrow, and the type and percentage of foam concentrate that it was designed to proportion.

The convergent inlet nozzle shall have a rounded inlet, and a smooth machined finish to ensure minimum stream constriction and maximum velocity. The nozzle shall be retained by a stainless steel retaining ring.

The foam concentrate metering orifice shall be machined to the proper diameter for the agent. It shall rest on a machined surface to prevent leakage and shall be secured by a removable stainless steel retaining ring.

### Proportioner Dimension Table

Proportioner Size	Dimensions					
	A (mm)	B (mm)	C (mm)	D (mm)	E (in.)	F (mm)
2 in.	3.94 (100)	2.44 (62)	9.1 (231)	2.25 (57)	1 NPT	10 (250)
2 1/2 in.	4.25 (108)	2.47 (63)	6.9 (175)	2.28 (58)	1 NPT	12 (300)



STRAIGHT PIPE LENGTH UPSTREAM

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## Ordering Information

Concentrate Used	Proportioner Part No.	
	2 in.	2 1/2 in.
1% AFFF (C1B)	702100*	702109*
3% AFFF (C3B)	702101**	702110**
3% AFFF (C306-MS)	702120*	702121*
3% AFFF (Low Temperature)	702102	702111
3% AR-AFFF (C334-LV)	702790**	702791**
3% AR-AFFF (C364)	702103*	702112*
6% AFFF	702104*	702113*
6% AR-AFFF (C364)	702105*	702114*
3% Fluoroprotein Foam	702106	702115
2% High Expansion C2	702107*	702116*
Shipping Weight	8 lb (3.6 kg)	8 lb (3.6 kg)

\* UL Listed with Bladder Tanks

\*\* UL Listed and FM Approved with Bladder Tanks

Proportioners are only FM Approved when used in conjunction with the specific foam concentrates and equipment shown in the Approval Guide ([www.approvalguide.com](http://www.approvalguide.com)).

## Nominal Flow Ranges

The following table lists the nominal flow range for each proportioner size. For flow ranges using specific concentrations, consult Tyco Fire Protection Products Technical Services.

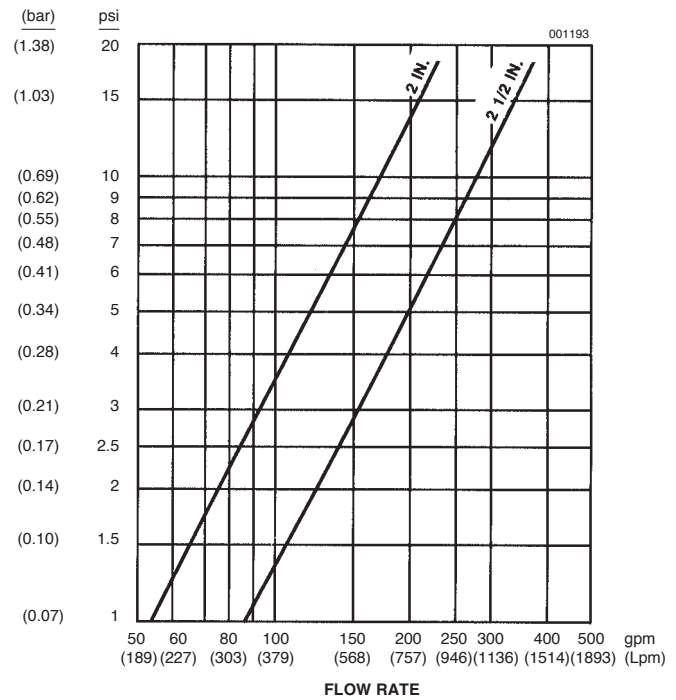
Proportioner Size	Nominal Flow Range	
	gpm	(Lpm)
2 in.	30 – 300	(114 – 1136)
2 1/2 in.	35 – 400	(132 – 1514)

**Note:** Refer to UL Online Certification Directory or FM Approval Guide for concentrate-specific flow ranges.

**Note:** The converted values in this document are provided for dimensional reference only and do not reflect an actual measurement.

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## Friction Loss Curves



**Note:** Consult Technical Services to determine proportioner size and maximum pipe run between foam tank and proportioner when using AR-AFFF Concentrate.

## Minimum Inlet Pressure Versus Water Flow

