



204 S. 6th Avenue  
Mansfield, Texas, USA 76063  
817-473-9964  
817-473-0606 fax  
www.chemguard.com



## High Back Pressure Foam Maker

Part No. CFM 70-25, CFM 90-15,  
CFM 250-40, CFM 270-25, CFM  
1000-40

### DESCRIPTION

The Chemguard High Back-Pressure Foam Maker (CFM) is designed to produce expanded foam that is introduced into a cone roof storage tank by sub-surface injection. The sub-surface method should only be used on tanks containing standard hydrocarbon based fuels such as: diesel, kerosene, gasoline, etc. It is not suitable for use on tanks that contain alcohols or polar solvent type liquids that are miscible in water. The foam maker is normally installed in a dedicated fire protection line or the tank product line and is generally located outside the dike area that surrounds the storage tank. In accordance with NFPA 11 subsurface injection is not recommended for any tank having a floating roof.

The CFM is capable of producing expanded foam with an expansion ratio of between 2:1 to 4:1. It is designed to discharge expanded foam against a back pressure which can be as high as 25% of the operating inlet pressure of the HBPFM. A minimum of 100 psi inlet pressure at the CFM is recommended for satisfactory operation.

The Chemguard CFM is suitable for use with various types of foam solution generating devices. These include bladder tanks, balanced pressure foam pump proportioning systems, in-line balanced pressure proportioning units and foam pumper trucks. Unless high water pressure is readily available, in-line eductors are generally not suitable for use with sub-surface systems, because in-line eductors have a relatively high pressure loss through the eductor. The residual pressure available on the discharge side of the eductor is often not high enough to ensure correct operation of the CFM and overcome friction loss in the piping and head pressure of

the product stored within the storage tank.

### FEATURES

- Five standard sizes available to handle a wide range of flow requirements
- Compatible with AFFF, AR-AFFF and Fluoro-Protein generated foam solutions
- Engineered to operate with a total back pressure up to 25% of the inlet pressure
- Manufactured in carbon steel with stainless steel air inlet screen and brass foam solution inlet orifice Inlet orifice machined and sized to match desired flow rate and pressure
- Inlet and outlet 150 lb. raised face flanged fittings
- U/L Listed

### OPTIONS

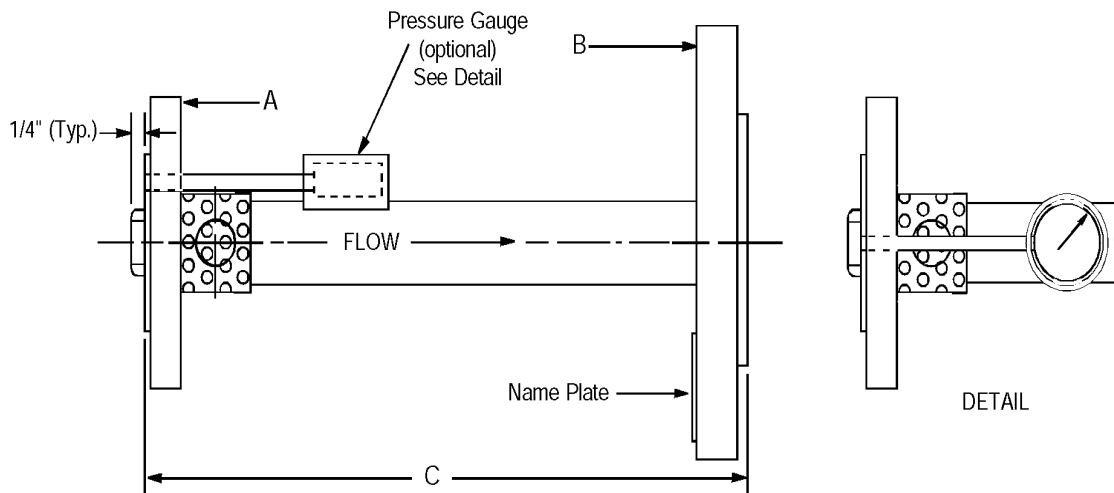
- CFM manufactured in stainless steel or brass, available on request
- 0 - 300 psi pressure gauge at inlet to CFM for monitoring of the foam solution inlet pressure
- Threaded inlet and outlets available on request
- CFM units available on request that are suitable for use with back pressures as high as 40% of the operating inlet pressure

## ORDERING INFORMATION

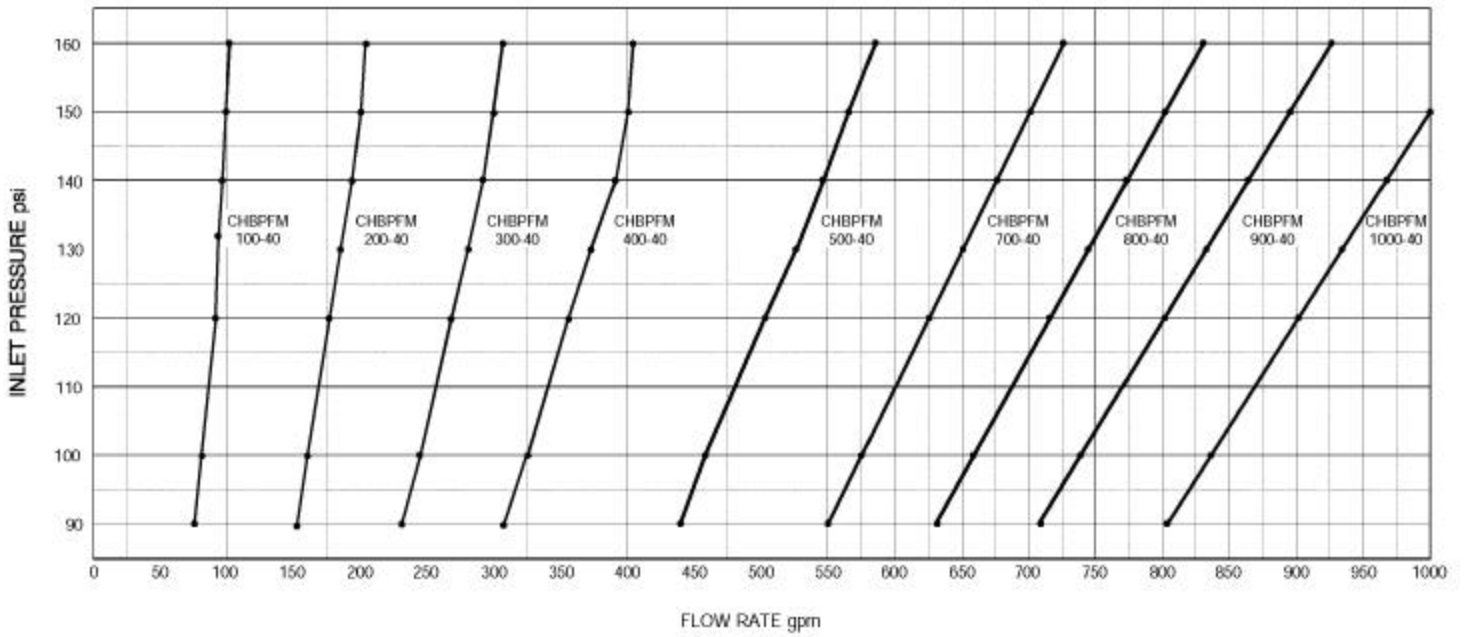
MODEL	FLOW RATE
CFM 70-25B	100 gpm @ 150 psi
CFM 90-15B	200 gpm @ 150 psi
CFM 250-40B	300 gpm @ 150 psi
CFM 270-25B	400 gpm @ 150 psi
CFM 1000-40B	565 gpm @ 150 psi

MODEL NO.	FLOW OPERATING	A INLET	B OUTLET	C LENGTH	WEIGHT
CHBPFM-100-40	100 gpm @ 150 psi	2"	4"	15 11/16"	26 lbs.
CHBPFM-200-40	200 gpm @ 150 psi	2 1/2"	5"	20 13/16"	34 lbs.
CHBPFM-300-40	300 gpm @ 150 psi	3"	6"	23 15/16"	49 lbs.
CHBPFM-400-40	400 gpm @ 150 psi	4"	8"	29 1/16"	72 lbs.
CHBPFM-500-40	565 gpm @ 150 psi	4"	8"	36 1/8"	106 lbs.
CHBPFM-700-40	700 gpm @ 150 psi	6"	8"	38"	110 lbs.
CHBPFM-800-40	800 gpm @ 150 psi	6"	8"	38"	110 lbs.
CHBPFM-900-40	900 gpm @ 150 psi	6"	8"	40"	130 lbs.
CHBPFM-1000-40	1000 gpm @ 150 psi	8"	10"	40"	150 lbs.

Note: All flanges are ASA 150 lbs.



### FLOW RATE vs INLET PRESSURE



D-HBPIrv1197

## SEMI-FIXED SUB-SURFACE SYSTEM

