



FOAM CHAMBERS/MAKERS

HIGH BACK-PRESSURE FOAM MAKER

DESCRIPTION

The Buckeye High Back-Pressure Foam Maker (HBPFM) is designed to produce an 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 and gasoline. 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 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 HBPFM 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 40% of the operating inlet pressure of the HBPFM. A minimum of 100 psi inlet pressure at the HBPFM is recommended for satisfactory operation.

The Buckeye HBPFM 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 HBPFM and overcome friction loss in the piping and head pressure of the product stored within the storage tank.

FEATURES

- Nine 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 40% 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.

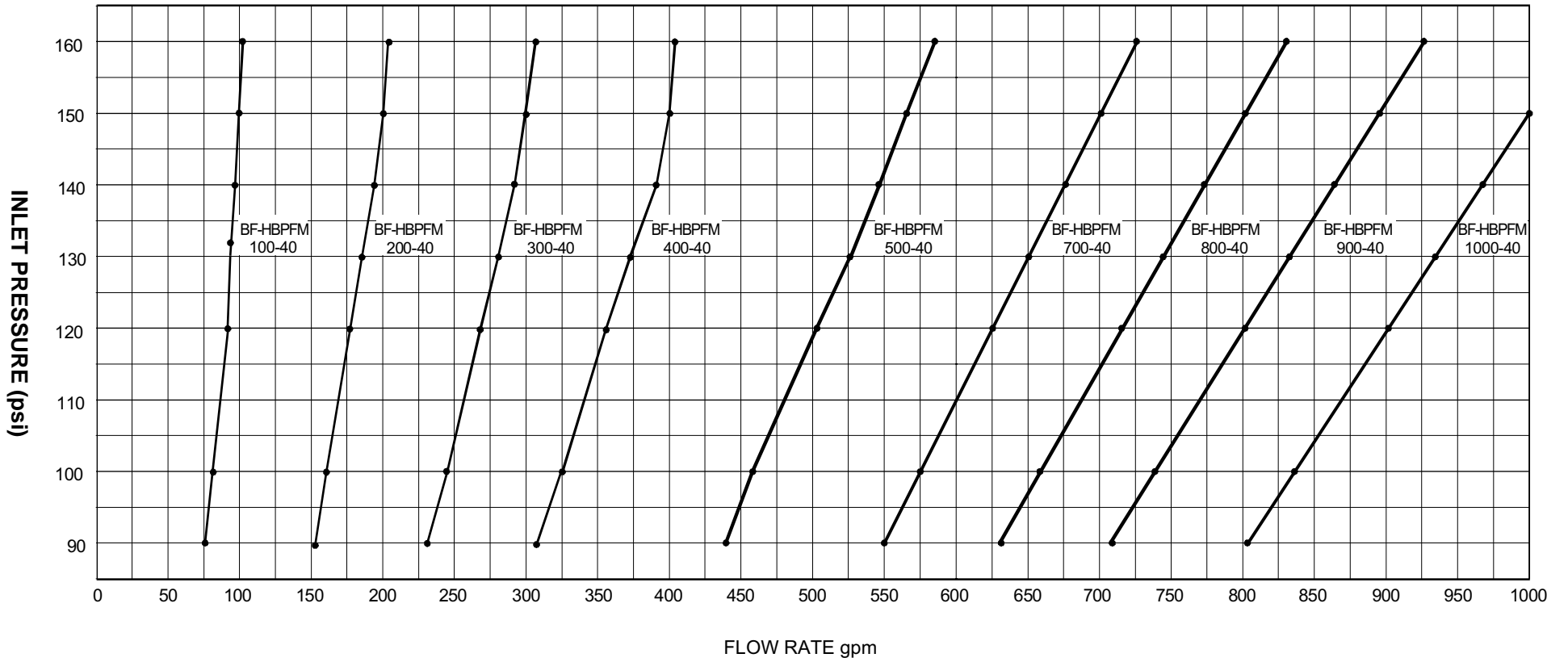
OPTIONS

- HBPFM manufactured in stainless steel or brass, available on request.
- 0 - 300 psi pressure gauge at inlet to HBPFM for monitoring of the foam solution inlet pressure.
- Threaded inlet and outlets available on request.





FLOW RATE vs INLET PRESSURE





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

