

Description

The FI-BPP Balanced Pressure Foam Proportioner is designed to provide accurate foam concentrate proportioning over a specified flow range. The unit is an in-line balanced pressure proportioning device intended for use with an atmospheric foam concentrate tank and a positive displacement foam concentrate pump.

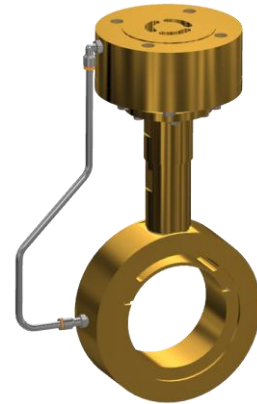
The proportioner assembly consists of a bronze body, a metering orifice, and a pressure balancing valve. The FI-BPP is available in two nominal sizes, 4 in. and 6 in., and is designed to proportion foam concentrate accurately over flow rates ranging from 900 L/min to 12,000 L/min.

The operating principle of the FI-BPP is based on maintaining equal pressure conditions between the foam concentrate inlet and the water inlet within the proportioner. This balanced pressure operation enables accurate proportioning performance over a range of system flow rates and operating pressures, while providing rapid response to variations in water supply pressure and flow demand.

Application

The FI-BPP Balanced Pressure Foam Proportioner is intended for use in fixed foam fire protection systems employing a positive displacement foam concentrate pump.

Typical applications include deluge foam systems where variable flow conditions may occur due to multiple discharge lines or varying numbers of open discharge devices supplied by the same foam proportioning system.



Operation

The proportioner automatically proportions the foam concentrate and controls its injection into the water stream, provided that the system flow rate and pressure remain within the operating range of the unit. Foam concentrate pressure shall be maintained at a minimum of 1 bar above the water inlet pressure. The recommended operating pressure range is between 4 bar and 16 bar.

To ensure correct proportioner performance, a straight pipe section equivalent to a minimum of five nominal pipe diameters shall be provided both upstream and downstream of the proportioner.

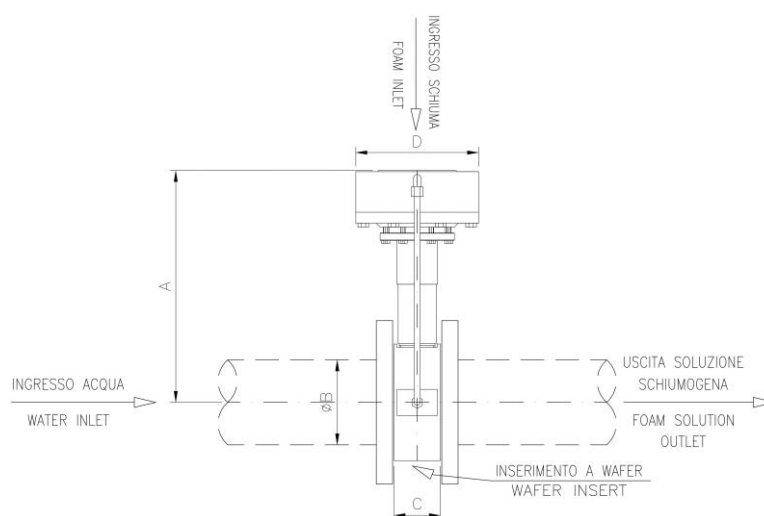
Compatibility with fluorine free foams

The FI-BPP proportioner is compatible with fluorine-free concentrates. For more detailed information, please contact the company.

Construction and operating features

- Available in 4" (DN100) and 6" (DN150) diameters
- Wafer-type connection for installation between ANSI or PN16 flanges. Flanged foam inlet connection UNI or ANSI available upon request
- Bronze body, st. steel nozzle, copper or st. steel trim trim, offering high corrosion resistance
- Suitable for horizontal or vertical installation
- Proportioner designed for foam concentrate mixing at 3%
- Working pressure between 4 bar and 16 bar

Dimensions and performances



Model	Measures				Flow rates				weight (Kg)
	A (mm)	B (Ø)	C (mm)	D	Min. Lt/min	Min. GPM	Max. Lt/min	Max. GPM	
FI-BPP 4	312	4"	62	2"	900	238	7000	1850	19
FI-BPP 6	335	6"	62	2"	3000	793	12000	3170	22

Pressure drop

