ANGUS FIRE

Balanced Pressure Foam Proportioners

■ Designed for use in fixed systems

■ Choice of models

■ Excellent corrosion resistance

Angus Balanced Pressure Foam Proportioners (BPPs) are designed for use in fixed systems to introduce foam concentrate at a predetermined rate into the fire-water supply, over a varying range of foam solution demands.

BPP's are used to maintain accurate foam induction over a wide range of flows and pressures as devices such as monitors and bund pourers are brought into use or disconnected during operations

There are five basic models with capacities from 220 litres/min. to 22,000 litres/min. and each unit is factory-calibrated to suit proportioning rates of 1%, 2%, 3% or 6% of a specified foam concentrate. A trimming screw facility on the foam inlet, permits adjustment during commissioning for exceptional operational accuracy.

The upper performance limit is defined as the flow at which the maximum specified pressure drop of 1.25 bar is reached. A pressure recovery improver is available as a cost option which extends the upper flow limit of the BPP by reducing pressure losses at high flows. Without the improver section there is a 7:1 ratio between the maximum and minimum flows and with the improver, this increases to 10:1.

The BPPs are wafer type, designed to be installed between ANSI 150 flanges and are manufactured from high grade corrosion resistant materials. They are simple to install, require no maintenance and their modular construction gives the engineer considerable flexibility in terms of selection of flow rate and positioning within the system.

To ensure accurate proportioning, the foam concentrate must be supplied to the unit at exactly the same pressure as that at the water inlet. This can be achieved by using the proportioner in conjunction with either a Balance Valve (Data Sheet 5043) or a Bag Tank Module (Data Sheet 5045) and it must be stated at the time of order which will be used.

Approvals

Underwriters Laboratories Inc: BPP80

Lloyd's Register of Shipping: BPP80, BPP100, BPP150, BPP200

Maritime and Coastguard Agency: BPP80, BPP100, BPP150, BPP200
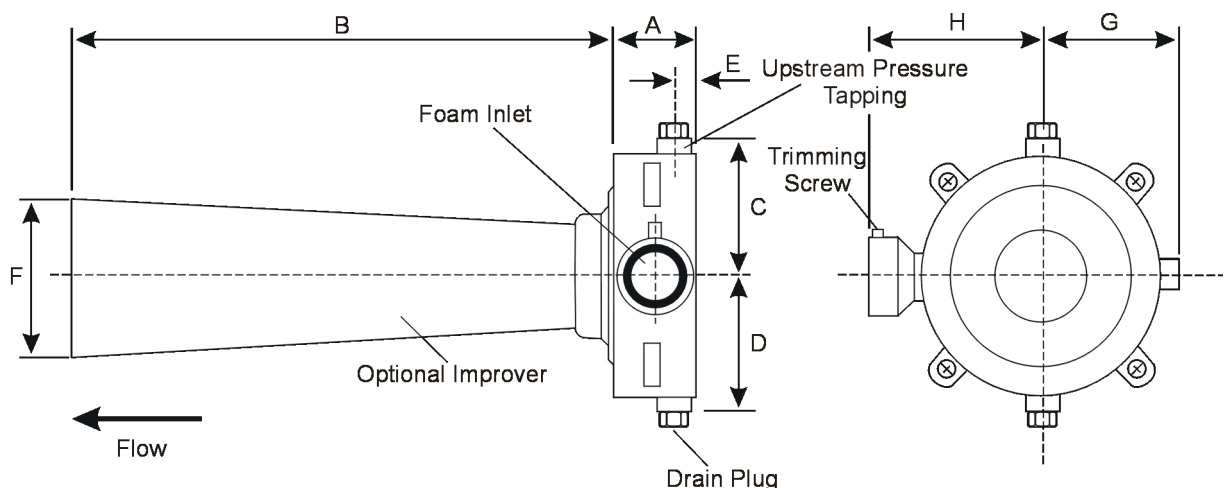
Balanced Pressure Foam Proportioners

Dimensions		BPP80	BPP100	BPP150	BPP200	BPP250
Model						
Dimension	A (mm)	70	70	80	120	115
	B (mm)	200	247	423	561	737
	C (mm)	83	100	123	150	188
	D (mm)	93	118	140	165	205
	E (mm)	20	22	22	27	27
	F (mm)	64 dia.	84 dia.	126 dia.	136 dia.	211 dia.
	G (mm)	83	105	132	158	188
	H (mm)	115	127	165	207	242
Foam inlet connection		1½" BSP (F)	1½"BSP(F)	2"BSP(F)	3" BSP (F)	3" BSP (F)
Upstream pressure tapping				½" BSP (F)		
Drain plug tapping		¼" BSP (F)	½" BSP (F)	¾" BSP (F)	1" BSP (F)	
Each unit is designed to fit between PN 20 flanges to ANSI B16.5		80mm	100mm	150mm	200mm	250mm

It should be noted that the body construction varies slightly across the range to accomodate the different bolt hole positions.

Specification	BPP80	BPP100	BPP150	BPP200	BPP250
Recommended min. flow (litres/min.)	220	410	675	1600	2200
Recommended max. flow					
- with improver (litres/min.)	2200	4100	6750	16000	22000
- without improver (litres/min.)	1600	2750	4725	10000	14000
Recommended min. working pressure			4 bar g		
Recommended max. working pressure			16 bar g		
Pressure loss across unit			Less than 1.25 bar g at recommended max. flows		

Note: The quoted pressure loss is at maximum flow and decreases significantly with lower flow rates.

Construction					
Materials - Body			Gunmetal LG4		
- improver			Cupro Nickel CN102		
Finish			Natural		
Approx. weight (Kg.) (including optional improver)	7	9.2	17	37	55