

Foam Proportioning

Threaded Balance Pressure Proportioners

Description

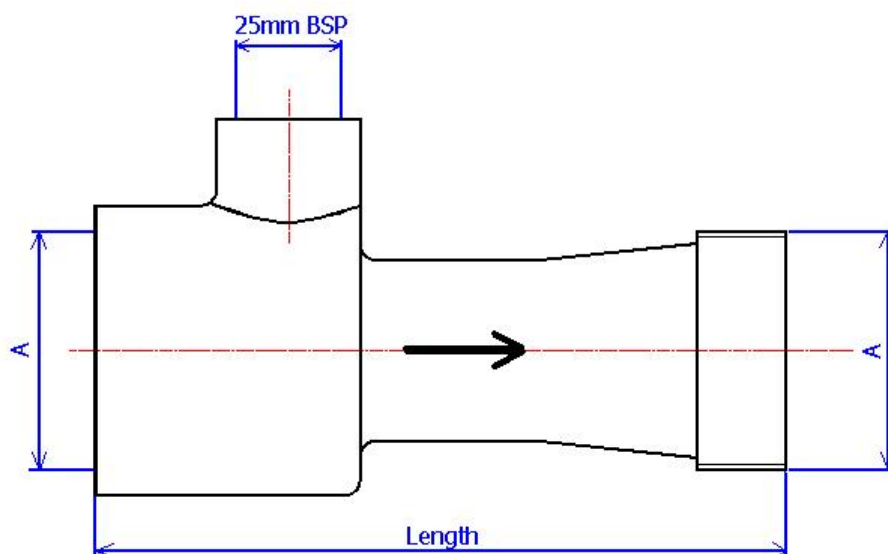
There are a number of implementations of balanced proportioning systems. Systems use a venturi device that is a variant of the line proportioner. The venturi produces only a moderate low-pressure zone and the pressure reduction is proportional to the flow through the proportioner. If the foam concentrate is supplied to the proportioner at the same pressure as the water and the proportioning rate is constant over a wide range of flows. Turn down ratios of 7 to 10 are possible with these systems.

The difference in the implementation of this proportioning method comes in the way the foam concentrate is supplied and how the pressure balance is maintained.

Pumped systems use a foam concentrate pump to supply the foam concentrate and a double acting control valve to regulate the foam concentrate supply pressure to the water supply pressure. Pumped systems are commonly used for large installations where one unit can be used for many different foam systems.

Bladder tank systems use the water from the water supply to pressurise a bladder containing foam concentrate. The bladder tank system naturally balances the water and foam concentrate pressures. This method is relatively low cost but refilling the system is quite difficult.

The Orion BVT series balanced pressure proportioners are available in 40, 50 and 65mm sizes.



ORION FIRE ENGINEERING PTY LIMITED

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Specifications

MODEL	Length mm	Thread A mm	Weight kg
40mm BVT	195	40mm BSP	2.1
50mm BVT	210	50mm BSP	3.2
65mm BVT	230	65mm BSP	4.3

MODEL	Std Flow Range lpm	ARAFF Flow Range lpm
40mm BVT	90 - 385	190 - 385
50mm BVT	114 - 681	227 - 681
65mm BVT	200 - 1300	320 - 1,300

Pressure loss through the proportioners is 200 kPa at maximum flow.

Materials of Construction

Standard proportioners are manufactured from gunmetal, alloy C83600 per AS 1565. For the BVT-40 and BVT-50 the body is 316 stainless steel

Models

MODEL	40mm BVT	50mm BVT	65mm BVT
1% AFFF	15241	12240	12248
3% AFFF	12122	11423	12522
6% AFFF	14163	13018	12509
3% ARFFF	15319	14107	12031
6% ARFFF	13202	13257	12238

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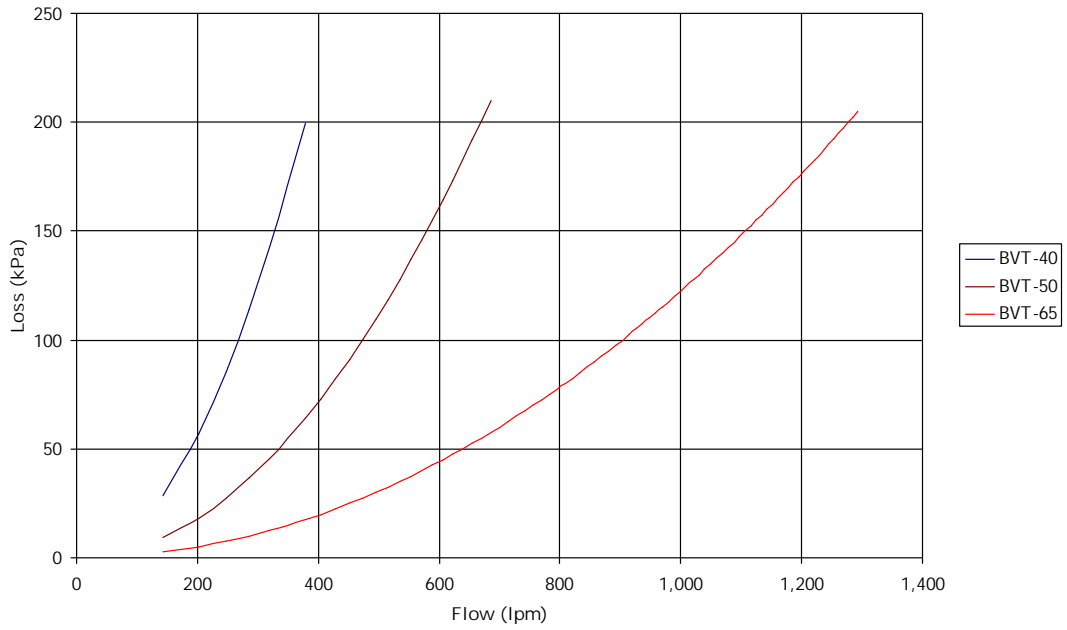
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BVT Friction Loss - 3% proportioning
BVT-40, BVT-50 & BVT-65



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