

Fixed Turbex Systems

FT1 -500P & FT2-500P Marine & Industrial Applications

High expansion foam has shown itself to be an exceptionally efficient fire fighting technique for large enclosed areas such as ships' engine rooms, warehouses, packaging plants, ships' holds, mines, chemical stores and incineration plants.

The efficiency of any high expansion foam system depends upon producing well-formed, high quality foam. It must then be delivered rapidly into the risk area, against a possible back pressure that may result from the confines of the application.

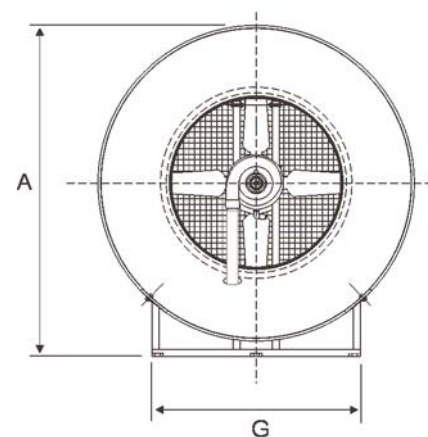
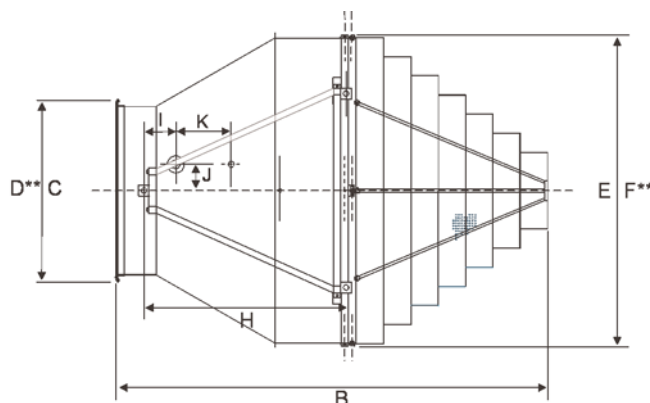
The Angus **Fixed Turbex Systems** employ high expansion foam generators with a cocoon shape designed to optimise performance. By combining a sophisticated spray nozzle with a uniquely tiered foam making net, the foam bubble

structure produced is uniform, slow draining and of a nominal expansion ratio 500:1 (500 parts of air to every one part of foam solution). Air is driven through the generator by a specially developed efficient water driven fan. This forced air technology ensures the foam can be pushed forward overcoming potential back pressures that would stall simpler blower type units.

The **FT1-500 P** and **FT2-500P** models must be fed with a premix solution of **Expandol** foam concentrate and water. Ideally this should be generated using an Angus proportioning device such as a balance pressure proportioner or fixed inductor for maximum accuracy and efficiency. These premix **Fixed Turbex Systems** are most effective where multiple units

are required to protect large areas with centralised foam proportioning.

The **FT1-500S** is supplied with an in-built induction device. A dedicated **Expandol** foam tank can be placed adjacent to this Fixed Turbex and all that is needed for operation is a suitable water supply. The self-inducing unit is ideally suited for smaller risk areas.



PERFORMANCE (typical at 18°C)

		FT1-500P (Premix)				FT1-5005 (self-inducing)				FT2-500P (Premix)			
		Flow L/min *	Exp. Foam Output m ³ /mint	Exp. Ratio	K Factor §	Flow L/min *	Exp. Foam Output m ³ /mint	Exp. Ratio	K Factor §	Flow L/min *	Exp. Foam Output m ³ /mint	Exp. Ratio	K Factor §
Inlet Pressure	3bar.g.	138	82	600:1	80	151	83	550:1	87	304	155	510:1	176
	5bar.g.	179	100	560:1		194	99	510:1		393	196	500:1	
	7bar.g.	211	114	540:1		230	113	490:1		465	214	460:1	

§ Flow (l/min.) = K√P where P = inlet pressure (bar.g.)

* Conversion factor to **US galls/min** = l/min. x **0.264**

† Conversion factor to **cu ft/min** = m³/min. x **35.64**

SPECIFICATION

		FT1 -500P	FT1 -5005	FT2-500P
Dimensions	A (mm)	942	942	1193
	B (mm)	1240	1240	1575
	C (mm)	668	668	668
	D ** (mm)	1118	1118	1118
	E (mm)	884	884	1138
	F ** (mm)	1118	1118	1372
	G (mm)	460	460	710
	H (mm)	600	600	740
	I (mm)	119.5	119.5	119.5
	J (mm)	85	85	85
	K (mm)	—	124.5	—
Water Inlet Connection			1 1/4" BSP Taper Male	
Foam Inlet Connection		◆	1/4" BSP Taper Male	◆
Materials	Body ‡	Mild steel - yellow thermoplastic powder finish or stainless steel to BS970 316		
	Support Frame ‡	Mild steel - black thermoplastic powder finish or stainless steel to BS970 316		
	Foam Making Net	Stainless steel to BS970 316		
	Turbine	Gunmetal LG2		
	Nozzle	Gunmetal LG2		
	Fan	Light alloy LM25 - black thermoplastic finish	LM25-yellow thermoplastic	
	Screws, Nuts, Fasteners	Stainless steel A4		
Inductor		◆	Gunmetal LG2	◆
Recommended Induction Rate		Expandol at 3%		
Approx. Weight		58kg	60kg	79kg

** Minimum diameter requirements when ducting is used (inlet D, outlet F).

‡ Mild steel recommended for indoor use and stainless steel recommended for outdoor use [these units are not suitable for cryogenic risks (LNG/LPG) see separate Datasheet 5106].

◆ Separate induction device required.