FOAM CHAMBER
TOPSIDE APPLICATION

Features



- Defined by NFPA 11 as Type II foam discharge outlet for delivering foam to the surface of a flammable liquid
- Unique Chamber design allows for Field Testing without removal of vapour seal assembly
- Bolted Inspection Access to Interior of Chamber
- Minimum working pressure is 2.8 bar (40 psi) Maximum working pressure is 7 bar (100 psi)
- Frangible Glass Vapour Seal breaks at pressures between 0.7 to 1.75 bar. Maximum permissible back pressure on seal is 0.06 bar
- Chamber is manufactured in Carbon Steel with a #304 StainlessSteel Screen covering the foam air intakes
- Tie-in connection are standard ANSI B16.5 Class 150# FF flanges
- Choice of Solid or Spilt Deflector
- Stainless Steel Orifice (calculated to flow predetermined foam solution at pressure available to the flanged inlet of chamber)
- Standard Primed finish. Option: Red Epoxy



Product Specification:

The Progard Foam Chamber is an air-aspirating foam discharge device that is installed to protect vertical fixed roof liquid storage tanks. The chamber is designed to be located just below the roof joint. It consists of an internal vapour seal to prevent vapour entry into the chamber and foam solution piping. An orifice plate is installed at the chamber entry inlet to deliver a predetermined foam solution flow rate at a specific pressure. The orifice is field replaceable in the event of a change in design parameters.

Upon entering the chamber, the foam solution passes through a venturi passage that draws air to create aerated foam. Air is drawn in through the holes located on the chamber covered with a stainless steel screen. With increased volume and pressure within the expansion chamber section, the foam will break through the vapour seal and discharges against a deflector inside the storage tank. The deflector directs the foam against the inside wall of the storage tank and is gently applied on to the burning fuel. This reduces submergence of the foam and agitation of the fuel surface (NFPA Type II application). A minimum operating pressure at 40 psi is required at the chamber inlet to operate properly.

On removing the top cover plate, the foam chamber can be subject to testing without removing the vapour seal. In the event that a vapour seal needs to be replaced, simply remove this top cover to access to the damaged vapour seal which is held by screwed-down bolts.

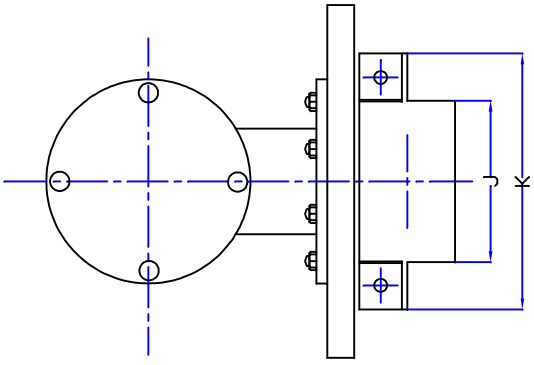
Ordering Information

When Ordering a Progard Foam Chamber , please specify the following:

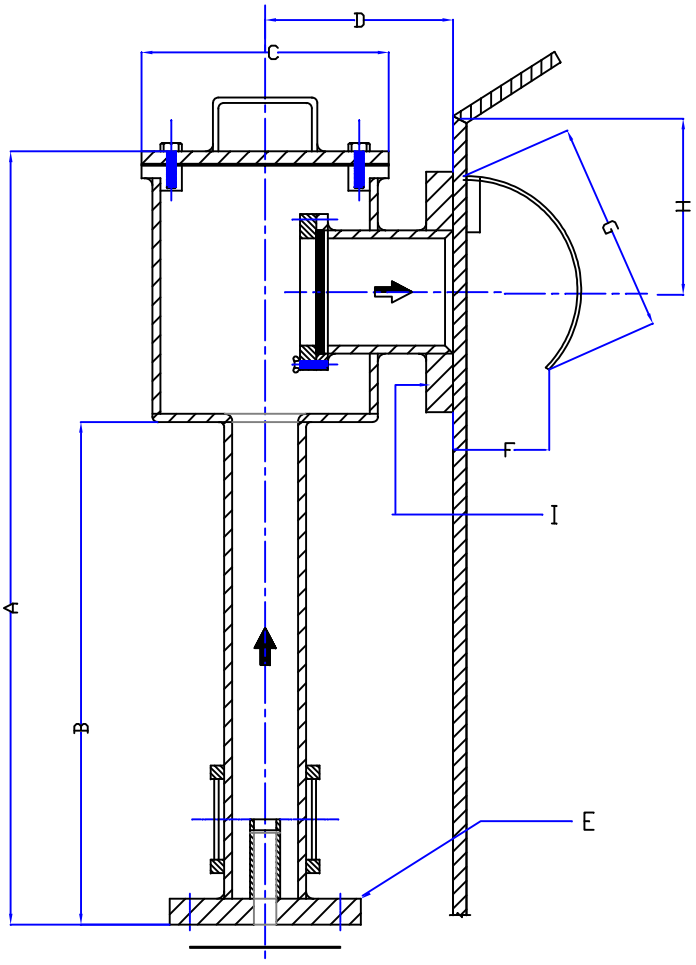
1. Chamber Model, inlet and outlet flange sizes
2. Foam Solution Flow Rate and Operating Inlet Pressure (chamber inlet)
3. Type of Deflector required - Solid or Spilt
4. Type of Paint Finish

Technical Information

Model	Product Description	Flow		Shipping Weight	
		GPM	*Litre/min*	Lbs	*Kgs*
01 AFC2.0	Foam Chamber/Maker	19 -89	*72 - 336*	62	28
01 FC2.0S1	Solid Deflector	-	-	5	*2.3*
01 FC2.0S2	Split Deflector	-	-	5	2.3
01 FC2.0MP	Mounting Pad	-	-	15	6.8
01 AFC2.5	Foam Chamber/Maker	51 -178	*193 - 672*	77	35
01 FC2.5S1	Solid Deflector	-	-	5	*2.3*
01 FC2.5S2	Split Deflector	-	-	5	2.3
01 FC2.5MP	Mounting Pad	-	-	15	6.8
01 AFC3.0	Foam Chamber/Maker	102 - 356	*386 - 1,344*	115	*52*
01 FC3.0S1	Solid Deflector	-	-	10	4.5
01 FC3.0S2	Split Deflector	-	-	10	4.5
01 FC3.0MP	Mounting Pad	-	-	20	9
01 AFC4.0	Foam Chamber/Maker	204 - 711	*773 - 2,687*	172	*78*
01 FC4.0S1	Solid Deflector	-	-	20	*9*
01 FC4.0S2	Split Deflector	-	-	20	9
01 FC4.0MP	Mounting Pad	-	-	35	16
01 AFC6.0	Foam Chamber/Maker	409 - 1,067	*1,545 - 4,032*	237	*108*
01 FC6.0S1	Solid Deflector	-	-	30	14
01 FC6.0S2	Split Deflector	-	-	30	14
01 FC6.0MP	Mounting Pad	-	-	50	23



DEFLECTOR
TOP VIEW



FOAM CHAMBER
SIDE VIEW

Chamber Dimensions (in millimetres)

	01 FC2.0	01 FC2.5	01 FC3.0	01 FC4.0	01 FC6.0
A	630	723	1,055	1,175	1,250
B	518	463	745	815	820
C	205	230	285	360	406
D	160	127	203	216	229
E	50NB *2”*	65NB *2-1/2”*	80NB *3”*	100NB *4”*	150NB *6”*
F	20	31	40	55	65
G	100	165	230	300	370
H	168	203	241	280	305
I	80NB *3”*	100NB *4”*	150NB *6”*	200NB *8”*	250NB *10”*
J	71	120	175	220	280
K	175	223	276	325	400