

High Expansion Foam Generator (UL)

Special Features

- Highly reliable and compact design
- Very high output of foam
- Fixed type Foam generator
- Easy installation with units capable of being mounted in the horizontal or vertical position
- No outside source of power required - only the pressurized foam solution
- Units will operate with foam solution pressures as low as 2.8 bar (40 psi).



Description

The IFP TURBO-HX, High Expansion Foam Generators are powered by a water turbine, constructed with corrosion resistant Stainless Steel 316 grade for use in challenging environment. The generators are designed to expand the foam solution with Expansion ratios from 350:1 to 925:1, depending upon the solution flow rate and the water pressure. The High Expansion Foam Generator requires no other source of power such as electricity or gasoline engines. They are powered by the foam solution driving a hydraulic (water) motor or turbine. The expansion of foam solution is achieved by spraying the solution onto a stainless steel screen, then an air stream created by the fan attached to the motor blows air through the screen to produce a mass of foam bubbles. The continuous flow of the foam solution and the movement of air through the screen will produce large volumes of finished foam.

Applications

IFP TURBO-HX High Expansion Foam Generators are suitable for use in total flooding as well as local application high-expansion foam systems. Total flooding high-expansion foam systems are commonly used to protect the following hazards.

- | | |
|---|---|
| • Oil Refineries & Oil Installations | • Flammable Liquid including Paint Stores |
| • Chemical Stores. | • Aircraft Hangars |
| • Control of Vapour release from toxic/flammable liquid spills. | • Cable Ducts & Transformer Rooms |
| • Petrochemical Plants | • Fertilizer Plant |
| • Tire & Rubber Stores. | • Basements & Substations. |
| • Ship holds & Engine Rooms. | • Mining |

Approvals and Certifications

IFP TURBO-HX, High-Expansion Foam Generators are UL Listed for use with IFP UNILIGHT-HX 2% High-Expansion Foam Concentrate for use with both fresh and salt water.

Materials of Construction

	Material
Model	IFP TURBO-HX 3000 IFP TURBO-HX 10000 IFP TURBO-HX 21000
Body/ shell	SS316/SS304
Nozzle	Gun Metal
Foam screen	SS316/SS304
Flange	SS316/SS304
Fan	Mild Steel
Turbine Assembly	Gun Metal
Paint	Polyurethane Finish

Performance Data

Model	Type	Part Number	Inlet Pressure, psi (bar)	Water Flow, gpm (lpm)	Foam Production cfm (cmm)	Foam Expansion Ratio
UL Listed Performance Data (with IFP UNILIGHT-HX 2% concentrate)						
IFP TURBO-HX 3000	Horizontal or Vertical	403040	40(2.8) 70(4.8) 100(6.9)	40(150) 53(200) 62(233)	1815 (53) 2756 (78) 3250 (92)	354 390 395
IFP TURBO-HX 10000	Horizontal or Vertical	403050	40(2.8) 70(4.8) 100(6.9)	69 (260) 85 (320) 98 (372)	6224 (176) 8421 (238) 10500 (297)	675 743 799
IFP TURBO-HX 21000	Horizontal or Vertical	403060	40(2.8) 70(4.8) 100(6.9)	110 (415) 142 (538) 176 (660)	10366 (293) 14321 (405) 21592 (611)	707 754 925

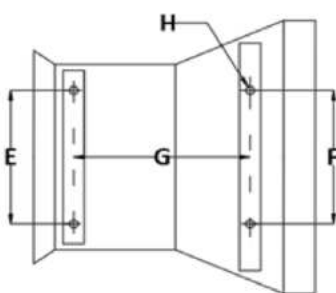
Ordering Information

Part Number	Generator Model	Description	Colour	Weight (kg)
403040	IFP TURBO-HX 3000	Horizontal or Vertical	Red	75
403050	IFP TURBO-HX 10000	Horizontal or Vertical	Red	100
403060	IFP TURBO-HX 21000	Horizontal or Vertical	Red	220

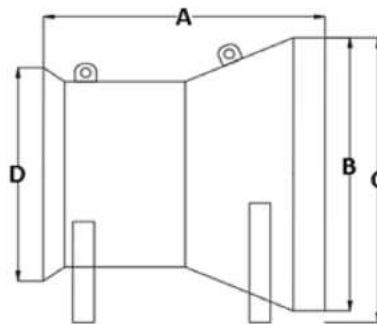
General Dimension

TURBO-HX 3000, TURBO-HX 10000, TURBO-HX 21000

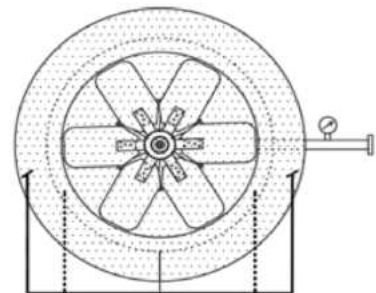
GENERAL MEASUREMENTS OF HORIZONTAL HX GENERATORS:



BOTTOM VIEW



SIDE VIEW



FRONT VIEW

MODEL	A	B	C	D	E	F	G	H
IFP TURBO-HX 3000	985	800	850	495	300	300	620	18
IFP TURBO-HX 10000	1360	1370	1470	1070	600	600	750	18
IFP TURBO-HX 21000	1222	1800	1900	1450	950	950	770	18

Note: All the dimensions are in mm.

All dimensions are in mm

E = Front Leg Hole to Hole Distance

F = Back Leg Hole to Hole Distance

G = Distance between Front Leg to Back Leg

H = Mounting Hole Size

Tolerance in dimension ($\pm 5\%$)

All dimensions are in mm

Contacts in Emergency : +919903914042; +919903973902

REV-04/2025

Integrated Fire Protection Pvt. Ltd.

60A, Pandit Madan Mohan Malabya Sarani, Kolkata - 700 020 INDIA

Phone : (91) (33) 2454-1061, 2475-5634, Fax : (91) (33) 2476-1107, 2283-1331

E-mail : integratedfire@gmail.com

www.integratedfire.net