



شركة المصنع السعودي لأجهزة الإطفاء
SAUDI FACTORY FOR FIRE EQUIPMENT Co.



AUTOMATIC/MODULAR CLEAN AGENT FIRE EXTINGUISHERS

SUPPRESS FIRE QUICKLY

RESTRICTED DAMAGES

LIMITED FLOOR SPACE

ALLOW VISIBILITY

Option - 1
HFC227ea

Option - 2
FK-5-1-12



We are very proud to be a vital part of the development of Saudi Arabia and Middle East since **1983** in fire protection industry.

MODULAR CYLINDER - IN GENERAL

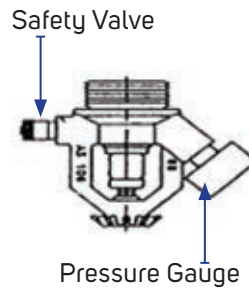
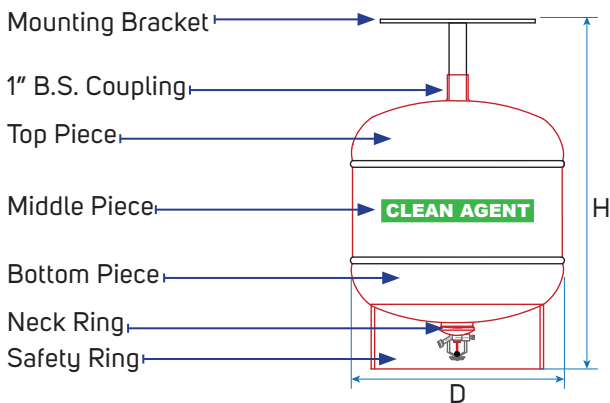
SFFECO modular series extinguishers are self-contained standalone system, ideally economical, simple and flexible to suit pre-prevailing local conditions. The Design concept of operation features the sprinkler technology incorporating a gas tight quartzoid bulb sprinkler head fitted with an optional pyrotechnic electric actuator, 24 vdc, means of actuating the system can be from a remote controlled release fire extinguishing control panel or thermally fusing the glass bulb which comes in various fixed temperature ranges.

SFFECO modular cylinders furnished with ceiling mounting brackets are of carbon steel material, factory argon/CO2 weld, sand blasted, white finished, oven baked and coated with electrostatic powder.

SFFECO modular automatic installations are primarily well-suited for the protection of electrical equipment rooms, server rooms, gas stations, paint spray booths, flammable liquid storage areas, and engine compartment in particular for boats and small rooms that are particularly exposed to danger of fire. Cylinders are hydrostatically tested at 30 bar.



CYLINDER DETAILS:



Discharge Nozzle Details:
Material : Brass Chrome Plated
Type : Glass Bulb

TECHNICAL DETAILS:

Model		SFM6	SFM10	SFM15	SFM20	SFM25	SFM30	SFM35	SFM40	SFM45
Agent Weight	(Kg)	6	10	15	20	25	30	35	40	45
Minimum Fill Range	(Kg)	2.5	4	6	8	10	13	15	18	20
Maximum Fill Range	(Kg)	6	10	15	20	25	31	36	42	47
Pressure	(Bar)	15	15	15	15	15	15	15	15	15
Enclosure Volume (M ³) Protected By HFC227ea With 7% Conc. @ 21°C *	(Min.)	4.56	7.30	10.95	14.60	18.25	23.73	27.38	32.86	36.51
	(Max.)	10.95	18.25	27.38	36.51	45.64	56.59	65.72	76.67	85.80
Enclosure Volume (M ³) Protected By FK-5-1-12 With 4.5% Conc. @ 21°C *	(Min.)	3.83	6.13	9.19	12.25	15.31	19.91	22.97	27.57	30.63
	(Max.)	9.19	15.31	22.97	30.63	38.28	47.47	55.13	64.32	71.98
Cylinder Dimension **	H (mm)	340	460	500	565	490	550	570	450	470
	D (mm)	Ø 280	Ø 280	Ø 280	Ø 280	Ø 370	Ø 370	Ø 370	Ø 505	Ø 505
Temp. Rating	Standard is 68°C (57°C / 79°C / 93°C / 141°C can be supply upon request)									

* Considering standard gas concentration for Class C hazard as per NFPA 2001-2018 edition, table A.5.4.2.2(b).

** Tolerance of enclosure height (H) is 10mm and diameter (D) is 5mm.

1 Extinguishing Agent

HFC227ea

CF₃-CHF-CF₃

Heptafluoropropane fire suppression agent is the first environmentally acceptable replacement for Halon 1301. It has zero ozone depleting potential, a low global warming potential, and a short atmospheric lifetime. It is particularly useful where an environmentally acceptable agent is essential, where clean-up of other media presents a problem, where weight versus suppression potential is a factor, where an electrically non-conductive medium is needed, and where people compatibility is an overriding factor. Clean Agent can be used to protect a wide range of applications from sensitive electrical equipment to industrial applications using flammable liquids. Consult the current NFPA Standard 2001 for specific applications. Clean Agent fire suppression agent is used with SFFECO's total flooding systems.

Clean Agent can be used on many types of fires. It is effective for many surface fires, such as flammable liquids, and most solid combustible materials.

Clean Agent is manufactured to these specifications:

Molecular Formula	CF ₃ -CHF-CF ₃
Form or Odor	Colorless, Odorless Liquefied Compressed Gas
Molecular Weight	170.03
Boiling Point	-16.4°C / 2.48°F
Melting Point	-131°C / -203.8°F
Critical Temperature	101.7°C / 215.1°F
Critical Pressure	422.3 PSIA
Vapor Pressure @ 21°C/70°F	58.8 PSIA

Concentration % by Volume

Class A	6.7%
Class B*	8.7%
Class C	7%

* Please see NFPA 2001 Annex B for detailed information

2 Extinguishing Agent

FK-5-1-12

CF₃CF₂C(O)CF(CF₃)₂

SFFECO FK-5-1-12 agent is a Fluorinated Ketone (FK-5-1-12) Dodecafluoro-2-methylpentan-3-one compound of carbon, fluorine and oxygen (CF₃CF₂C(O)CF(CF₃)₂). SFFECO FK-5-1-12 is a clear, colorless, almost odorless, electrically non-conductive liquid with a density approximately 11 times that of air.

SFFECO FK-5-1-12 is used as a fire protection fluid and can effectively be applied in streaming, localized flooding, total flooding, inerting and explosion suppression applications in the following areas: Data Processing Centers, Military Systems, Recreation, Oil & Gas, Telecommunications, Cultural Facilities, Commercial and Military Aviation, Transportation, Commercial Marine, Medical Facilities, Manufacturing Facilities, Storage Areas.

Molecular Formula	CF ₃ CF ₂ C(O)CF(CF ₃) ₂
Form or Odor	Clear, Colourless, Low Odour Liquid
Molecular Weight	316.04
Boiling Point	49°C / 120.6°F
Melting Point	-108.0°C / -162.4°F
Critical Temperature	168.66°C / 335.6°F
Critical Pressure	1865 kPa / 270.44 psi
Vapor Pressure @ 21°C/70°F	4.722 PSIA

Concentration % by Volume

Class A	4.5%
Class B*	5.9%
Class C	4.5%

* Please see NFPA 2001 Annex B for detailed information

SFFECO FK-5-1-12 is acceptable by NFPA and can be used as an alternative to HFC 227ea. It is an electrically non-conductive; so it is best suited in places where electronic components are located such as control room. The short atmospheric lifetime of SFFECO FK-5-1-12 results in a direct global warming potential which is negligible.

SFFECO FK-5-1-12 is an effective fire extinguishing agent that can be used for the fire protection of Class A (Solid), Class B (Liquid and Gas), and Class C (Electrically Energized) hazards.

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FIRE HOSE REEL



FIRE HOSE



PUMPS



BLADDER TANKS



FIRE CABINETS



DIESEL TANK



SFFECO KITCHENHOOD SYSTEM



SFFECO-227 HFC-227ea CLEAN AGENT FIRE SUPPRESSION SYSTEM



CO2 SYSTEM



SFFECO FX5112 CLEAN AGENT FIRE SUPPRESSION SYSTEM



TROLLEY / MODULAR EXTINGUISHERS



FIRE DOORS AND FRAMES



THERMO-ACT SYSTEM



PORTABLE EXTINGUISHERS



FOAM CONCENTRATES



HYDRANTS



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In line with our policy of continuous product improvement, SFFECO reserves the right to modify specifications without prior notice.

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