



**WORLD LEADER IN
MARINE FIRE SUPPRESSION TECHNOLOGY**



WWW.SEA-FIRE.CO.UK

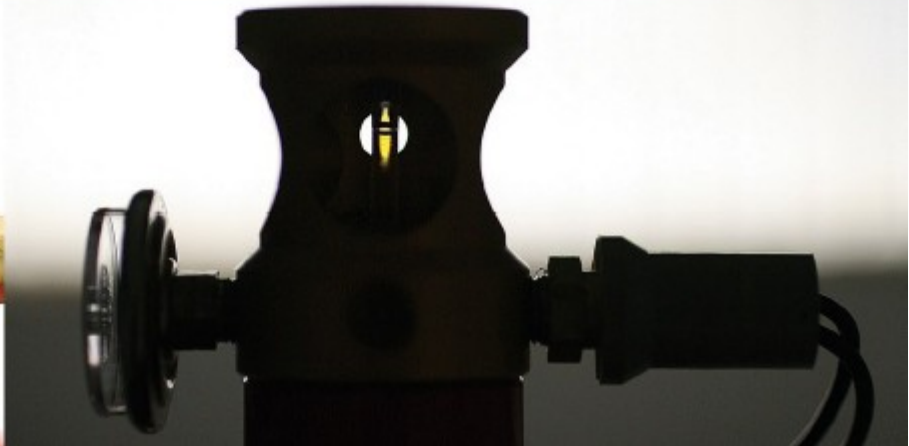


WHO IS SEA-FIRE?

Sea-Fire, a *World Leader in Marine Fire Suppression Technology*, is not just a company; it is a company of people dedicated to the protection of people and their investments. With Sea-Fire's FM-200 Automatic and Manual/Automatic fire suppression systems, boat owners enjoy the peace of mind that comes with constant protection. Sea-Fire's FG and FD Pre-Engineered products offer the ultimate in 24/7 fire protection: fully automatic, with no hands-on firefighting required.

Sea-Fire's vast experience distinguishes us as a global leader in the design and manufacture of fire extinguishers and fire suppression systems for the marine and pleasure craft industry. Our fire suppression systems and related products are recognized worldwide for their advanced technology, innovation in design, and quality in manufacture. Sea-Fire products are designed to be cost-effective and environmentally responsible systems that provide fast, effective fire protection trusted by more boaters than any other.

Proud of its reputation and devoted to its customers, Sea-Fire systems are produced in the United Kingdom and offered throughout an ever-widening circle of boat builders and marine product distributors, all of whom share a discerning taste for quality workmanship and service. Sea-Fire is trusted by their customers to ensure continuous improvements and enhanced product design as they strive to elevate standards and underline their commitment to quality products and total customer satisfaction that can only mean this: ***You're safe with Sea-Fire***



WHY FM-200 AUTOMATIC FIRE PROTECTION?

Sea-Fire was the first fire extinguisher manufacturer to utilize FM-200 for marine applications. The most widely accepted and safest fire extinguishing agent available in today's market, FM-200 delivers optimum extinguishing performance operating primarily by removing heat energy from a fire and inhibiting combustion. A clean, gaseous vapour, FM-200 produces no messy foam or powder residue, leaving sensitive electronics, radar equipment, and the engine itself fully operational. This results in some insurance companies offering lower rates for vessels fitted with a Sea-Fire FM-200 extinguishing system.

SECURITY

Recognized as the premier replacement for Halon, FM-200 enjoys worldwide acceptance. FM-200 is the same agent used to protect sensitive computer equipment, library records and museum artifacts, FM-200 has also replaced ozone depleting CFC propellants in pharmaceutical inhalers. Non-toxic and non-corrosive, more than 70 industry toxicity tests have verified the safety of its use in occupied areas.

NO SECOND CHANCES

With a Sea-Fire system onboard your vessel, there is no need for hands on fire fighting if an engine room fire should occur. Upon detection of an excessive heat source a Sea-Fire FM-200 system will immediately deploy, delivering optimum extinguishing performance in seconds. Manual activation is also an option, with use of a cable release which is safely located outside the engine compartment to further minimize the risk of fire damage upon detection of smoke or flames.

SAFETY

Sea-Fire's primary focus is people and their safety is paramount. Sea-Fire's innovative design was the first to feature a custom developed safety pin which protects the installer, service technician and boat owner from accidental discharge during system installation and maintenance.

SERVICE

Sea-Fire sets the standard in its industry for cutting edge technology with all FM-200 Pre-Engineered systems meeting stringent standards of approval. Should you experience a malfunction with any Sea-Fire product or component our dedicated staff will be eager to demonstrate our commitment to superior customer service.

VISIT OUR WEBSITE: WWW.SEA-FIRE.CO.UK



SEA-FIRE FM-200 AUTOMATIC & MANUAL

FM-200 PRE-ENGINEERED FOR VOLUMES UP TO 1,500 CU FT (42.5 M³)

FD MODEL SERIES

Maximum Volume
of Protection
cubic feet = cu.ft.
cubic meters = cu.m.

FD Model Number
Manual/Automatic "M"
Automatic "A"

150 CU. FT. (4.2 CU. M.)	FD 150M	FD 150A
175 CU. FT. (5.0 CU. M.)	FD 175M	FD 175A
200 CU. FT. (5.7 CU. M.)	FD 200M	FD 200A
225 CU. FT. (6.4 CU. M.)	FD 225M	FD 225A
250 CU. FT. (7.1 CU. M.)	FD 250M	FD 250A
275 CU. FT. (7.8 CU. M.)	FD 275M	FD 275A
300 CU. FT. (8.5 CU. M.)	FD 300M	FD 300A
325 CU. FT. (9.2 CU. M.)	FD 325M	FD 325A
350 CU. FT. (9.9 CU. M.)	FD 350M	FD 350A
400 CU. FT. (11.3 CU. M.)	FD 400M	FD 400A
450 CU. FT. (12.7 CU. M.)	FD 450M	FD 450A
500 CU. FT. (14.2 CU. M.)	FD 500M	FD 500A
550 CU. FT. (15.6 CU. M.)	FD 550M	FD 550A
600 CU. FT. (17.0 CU. M.)	FD 600M	FD 600A
650 CU. FT. (18.4 CU. M.)	FD 650M	FD 650A
700 CU. FT. (19.8 CU. M.)	FD 700M	FD 700A
750 CU. FT. (21.2 CU. M.)	FD 750M	FD 750A
800 CU. FT. (22.7 CU. M.)	FD 800M	FD 800A
850 CU. FT. (24.1 CU. M.)	FD 850M	FD 850A
900 CU. FT. (25.5 CU. M.)	FD 900M	FD 900A
950 CU. FT. (26.9 CU. M.)	FD 950M	FD 950A
1000 CU. FT. (28.3 CU. M.)	FD 1000M	FD 1000A
1050 CU. FT. (29.8 CU. M.)	FD 1050M	
1100 CU. FT. (31.3 CU. M.)	FD 1100M	
1150 CU. FT. (32.6 CU. M.)	FD 1150M	
1200 CU. FT. (34.0 CU. M.)	FD 1200M	
1250 CU. FT. (35.4 CU. M.)	FD 1250M	
1300 CU. FT. (36.8 CU. M.)	FD 1300M	
1350 CU. FT. (38.2 CU. M.)	FD 1350M	
1400 CU. FT. (39.6 CU. M.)	FD 1400M	
1450 CU. FT. (41.1 CU. M.)	FD 1450M	
1500 CU. FT. (42.5 CU. M.)	FD 1500M	



SELECTING THE PROPER MODEL SIZE EXTINGUISHING SYSTEM:

1. Determine the volume of the engine compartment to be protected in cubic feet or cubic meters: Measure Length, Width and Height (LxWxH) of compartment taking into consideration the curvature of the hull.
2. Select an automatic ("A") designation or manual/automatic ("M") designation.
3. From the SEA-FIRE® Model Series FG or FD specification table, select the model that meets or exceeds the calculated volume of the engine compartment.

GENERAL INFORMATION:

Application: SEA-FIRE FM-200® extinguishing systems are designed to protect enclosed compartments. The systems are ideal for marine engine compartment protection where the potential for a fire hazard may occur. SEA-FIRE FM-200® FG & FD extinguishing systems are designed to induce a minimum atmospheric concentration of 8.7% within the protected compartment. FG models are suitable for use from 0°F (-18°C) to 130°F (54°C) and FD models from 20°F (-7°C) to 130°F (54°C).

Refill/Recharge: FG models are non-refillable. Contact SEA-FIRE for Customer Replacement Program. All FD models are factory refillable. Contact SEA-FIRE or an authorized dealer for details.

Custom (Optimum Fill) Models: The specification table lists the standard FG & FD model sizes. Custom or ("Optimum Fill") models are also available. Models can be filled with FM-200® extinguishing agent in cubic foot or cubic meter increments to a specific volume requirement (i.e. 213 cubic feet). Contact SEA-FIRE or an authorized representative for details.

Installation: SEA-FIRE FG & FD models are pre-engineered systems. This means that each system model size is designed to protect up to a specific volume of engine compartment space. As a result, selection and specification of a model size is easy.

Installation is relatively simple. All systems arrive complete and ready for installation including detailed installation instructions and a sturdy mounting bracket.

Manual/Automatic systems: All FG & FD systems operate automatically through heat activation. However systems with an "M" designation contain a manual capability feature. That is, the boat operator has the option of pulling a discharge cable which activates the fire system.

Warranty: SEA-FIRE quality is in every FM-200® extinguishing system. SEA-FIRE warrants all FG & FD models for a three year period. Contact SEA-FIRE or an authorized representative for details.

Warning: Diesel power craft must also install an automatic engine shutdown system as the extinguishing system may not extinguish the fire. (Refer to Accessories page for details)

AUTOMATIC FIRE EXTINGUISHING SYSTEM

FM-200 PRE-ENGINEERED

FOR VOLUMES UP TO 240 CU FT (6.8 M³)

FG MODEL SERIES

20 standard models available:
FM and USCG approved, ranging in
size from 25 cubic feet (0.71 cu.m.)
up to 240 cubic feet (6.8 cu.m.) of
engine compartment protection.

Maximum Volume of Protection cubic feet = cu.ft. cubic meters = cu.m.	FG Model Number Manual/Automatic "M" Automatic "A"	
825 CU. FT. (0.7 CU. M.)	FG 25M	FG 25A
850 CU. FT. (1.4 CU. M.)	FG 50M	FG 50A
875 CU. FT. (2.1 CU. M.)	FG 75M	FG 75A
100 CU. FT. (2.8 CU. M.)	FG 100M	FG 100A
125 CU. FT. (3.5 CU. M.)	FG 125M	FG 125A
150 CU. FT. (4.2 CU. M.)	FG 150M	FG 150A
175 CU. FT. (5.0 CU. M.)	FG 175M	FG 175A
200 CU. FT. (5.7 CU. M.)	FG 200M	FG 200A
225 CU. FT. (6.4 CU. M.)	FG 225M	FG 225A
240 CU. FT. (6.8 CU. M.)	FG 240M	FG 240A

PROTECTING YOUR INVESTMENT WITH FM-200®

FM-200® is extremely safe for people and equipment. More than 70 industry toxicity tests verify its safe use in occupied areas. FM-200® is recognized as the premier Halon replacement and it enjoys worldwide acceptability. Since 1993, tens of thousands of FM-200® systems have been installed in more than 70 countries. It's the same agent used to protect equipment and artifacts in libraries, computer centers and museums. In fact, FM-200® has been designed to replace CFC propellants in pharmaceutical inhalers, including those which dispense asthma medication. Designed to provide non-toxic and non-corrosive protection, the agent is non-ozone depleting.

FM-200® has no imposed environmental phase-out schedule, and the agent has received approvals from environmental authorities around the world.

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All FD/FG Models Include

- Automatic Discharge (Heat Actuated)
- Pressure Gauge
- Pressure Switch (system supervision)
- Protective Guard
- Mounting Bracket
- Indicator Light and Bezel
- Installation, Operation And Maintenance Manual

U.S.C.G.
APPROVED

FM
APPROVED

ABYC

member
NFA



ACCESSORIES

Designed and Engineered for use with SEA-FIRE FM-200® Fire Extinguishing systems

Automatic Engine Shutdown

ESRS MODEL SERIES III (3) CIRCUIT
ESRS MODEL SERIES V (5) CIRCUIT
ESRS MODEL SERIES VIII (8) CIRCUIT

In the engine compartment of a marine vessel, an automatic extinguishing system may be adversely affected by the equipment it was designed to protect. Running engines, generators, and powered ventilation can consume or deplete extinguishing agent before the fire is completely extinguished. The SEA-FIRE ESRS engine shutdown system will automatically shutdown engines and powered ventilation upon discharge of the fire extinguishing system. Three model sizes are available with shutdown capability for up to eight devices (engines, blowers, etc.).

Each ESRS system includes a panel mounted display with visual and audible alarm, discharge lights and an override switch for engine restart and control. Standard models are 12 and 24 VDC (combinations available). All ESRS shutdown models comply with ISO marine 0046 and meet CE approval standards.



ESRS Relay



ESRS Display

Discharge Alarm

SDDA-1 PN131-290

Features both visual and audible alarm in the event of a SEA-FIRE extinguishing system discharge. The SDDA-I model is a panel mounted display. The unit is solid state one piece construction and is designed for 12 to 24 VDC operation. The SDDA-1 model complies with ISO marine 8846 and meets CE approval standards.



Manual Discharge Cable Assemblies



SEA-FIRE FG or FD manual/automatic "M" models require a discharge cable assembly for manual discharge of the extinguishing system. The SMAC discharge cable is available in various lengths for manual discharge from 6 feet (183 mm) up to 75 feet (2286 mm). Each cable assembly kit includes a pull handle, cable, escutcheon plate, safety pin, tie and instructions.

MODEL	PN	LENGTH
SMAC- 6	135-006	6 FT/1.83M
SMAC- 8	135-008	8 FT/2.44M
SMAC-10	135-010	10 FT/3.05M
SMAC-12	135-012	12 FT/3.66M
SMAC-14	135-014	14 FT/4.27M
SMAC-16	135-016	16 FT/4.88M
SMAC-18	135-018	18 FT/5.49M
SMAC-20	135-020	20 FT/6.10M
SMAC-22	135-022	22 FT/6.71M
SMAC-26	135-026	26 FT/7.93M
SMAC-30	135-030	30 FT/9.15M
SMAC-36	135-036	36 FT/10.98M
SMAC-40	135-040	40 FT/12.20M
SMAC-D3	131-060	Dual Discharge Cable Adapter

Remote Warning Bell

Available for use with SEA-FIRE engine shutdown systems



SFAB-12
12VDC Red
round dBA 82

SFAB-24
24VDC Red
round dBA 85



OTHER SEA-FIRE FM-200 PRODUCTS

Engineered Systems

For volumes from 1,500 cu ft (42.5 m³)
up to 17,500 cu ft (500m³)



"H" Series Engineered

Distinguished as world leader in the development of pre-engineered fire suppression systems for pleasure craft, Sea-Fire accepted the challenge of providing environmentally responsible fire protection solutions for mission critical equipment, high value assets and people living and working in large scale marine environments.

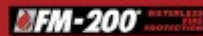
Developed for high volume applications, Sea-Fire's "H" Series custom-engineered fire suppression systems are the solution for protection of large pleasure craft, yachts, transport vessels, workboats and onshore/offshore marine applications. "H" Series systems carry Factory Mutual (FM), United States Coast Guard (USCG), American Bureau of Shipping (ABS), Transport Canada (TC), Registro Italiano Navale (RINA), Maritime Coastal Agency (MCA) Lloyds Register and Germanischer Lloyd (GL) approvals, verifying conformity with stringent national and international standards. Engineered systems are tested in accordance with IMO/SOLAS requirements, and can be configured for spaces from 1,500 to 17,500 cubic feet.



"H" Series

Stinger Series

For volumes from 25 cu ft (.71 m³) up to 150 cu ft (4.2 m³)



"FT" Stinger Pre-Engineered

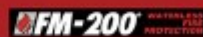
6 standard models sizes available. United States Coast Guard approved in sizes from 25 cubic feet (.71 cu. meters) up to 150 cubic feet (4.2 cu. meters) of protected volume. Stinger's innovative design is ideal for the protection of small volume areas (i.e.- electrical chase, wire harnesses, electrical boxes and long narrow enclosures) where access is difficult for traditional fixed suppression systems, and fit or the potential for slow reaction are challenges presented by the hazard being protected.



"FT" Series

Portable Fire Extinguishers

Performs over a wide range of temperature conditions



"C" Series Portable

FM-200® portable fire extinguishers are designed for the protection of areas where the benefits of "clean agent" fire extinguishing are required. Typically, these are areas that contain critical or irreplaceable assets which may be damaged or destroyed by water, foam, dry chemical, or carbon dioxide extinguishers. FM-200® portable fire extinguishers are ideal for small oil, grease, or electrical fires that may arise in the galley or accommodation space of a marine vessel.



"C" Series