

#### YOUR ONBOARD SAFE CHOICE

# WORLD LEADER IN MARINE FIRE SUPPRESSION TECHNOLOGY

# **Pre-engineered Fire Suppression System**NFG & NFD Series

#### SB-004-REV-A

Sea-Fire NFG & NFD Fire Suppression Systems are pre-engineered and designed to protect enclosed compartments.

All NFG & NFD systems operate automatically through heat activation. Discharge will occur when the sensor valve temperature rises to the system activation point as shown on the label attached to each unit. Systems with a manual ("M") designation contain a manual capability feature. This feature provides the operator with the option of pulling a discharge cable which activates the fire system.

Sea-Fire NFG & NFD Fire Suppression Systems are designed to induce minimum atmospheric concentration of 5.85% within the protected compartment.

The Sea-Fire NFG & NFD series cylinder assemblies are equipped with a factory installed pressure switch which is intended for cylinder pressure monitoring and may also be used to control various electrical functions (engine shutdown, air exchange equipment, etc.)

#### Product features

- Pre-engineered to protect a specific volume of enclosed space
- Automatically discharged through heat activation
- System supervisory pressure switch
- Comes with safety pin to arm/disarm manual cable release during inspection/maintenance
- Equipped with bi-directional cable release bracket for ease of install from either side of cylinder
- Made in the U.S.A.

#### **FK-5-1-12 Agent**

- People safe at design concentration
- Environmentally responsible (no ozone depletion + GWP (global warming potential) of less than 1)
- Globally accepted
- Not damaging to equipment and machinery
- No clean-up after discharge
- No forseeable phase-out schedule



#### **Mounting**

- NFG25-NFG100 Vertical & Horizontal
- NFD125-NFD825 Vertical & Horizontal
- NFD850-NFD1800 Vertical only

#### **System specifications**

- Protects spaces up to 1800 ft<sup>3</sup> (51 m<sup>3</sup>)
  - Available in increments of 25 ft<sup>3</sup> (0.7 m<sup>3</sup>)
- Activation temp:
  - NFG 25-75 : 200-250°F (93-121°C)
  - NFG 76-100 : 175-225°F (79-107°C)
- NFD 101-1800 : 175-225°F (79-107°C)
- NFD models are refillable
- NFG models are non-refillable
- Operating temperature range: 20°F to 130°F (-7°C to 55°C)

### **Applications include**

- Engine Compartment
- Machinery Compartment
- Generator Area
- Electrical Control Room
- Fuel Storage Lockers
- Lazarette



# **Pre-engineered Fire Suppression System**

# NFG & NFD Series

## **Selecting the proper system**

- Determine the volume of the enclosure in cubic feet or cubic meters: measure Length x Width x Height (LxWxH) taking into consideration the curvature of the hull
- Select an automatic only ("A") or manual/automatic ("M") model from the chart that meets or exceeds the calculated volume of the protected enclosure

#### What's included?

- Fire Suppression System
- System Mounting Bracket
- Suppression System Indicator Light
- System Installation & Instruction Manual

# **Accessory items to consider**

- Manual Discharge Cable
- MSRS (Machinery Shutdown Restart System) & Display Panels
- High Temperature Sensor



## **System Model Chart**

Model	Volume of Protection	Unit (Width x Height)	Ship Weight
NFG Series			
NFG 25 A M	25 ft <sup>3</sup> (0.7 m <sup>3</sup> )	5.0" X 12.7" (127mm x 323mm)	6.34 lbs (2.88 kg)
NFG 50 A M	50 ft <sup>3</sup> (1.4 m <sup>3</sup> )	5.0" X 18.8" (127mm x 478mm)	9.69 lbs (4.40 kg)
NFG 75 A M	75 ft <sup>3</sup> (2.1 m <sup>3</sup> )	5.0" X 18.8" (127mm x 478mm)	11.03 lbs (5.01 kg)
NFG 100 A M	100 ft <sup>3</sup> (2.8 m <sup>3</sup> )	5.2" X 19.0" (132mm x 483mm)	13.27 lbs (6.03 kg)
NFD Series			
NFD 125 A M	125 ft <sup>3</sup> (3.5 m <sup>3</sup> )	5.7" X 20.6" (145mm x 523mm)	18.01 lbs (8.19 kg)
NFD 150 A M	150 ft <sup>3</sup> (4.2 m <sup>3</sup> )	5.7" X 20.6" (145mm x 523mm)	19.36 lbs (8.80 kg)
NFD 175 A M	175 ft <sup>3</sup> (5.0 m <sup>3</sup> )	5.7" X 20.6" (145mm x 523mm)	20.70 lbs (9.41 kg)
NFD 200 A M	200 ft <sup>3</sup> (5.7 m <sup>3</sup> )	5.7" X 20.6" (145mm x 523mm)	22.04 lbs (10.02 kg)
NFD 225 A M	225 ft <sup>3</sup> (6.4 m <sup>3</sup> )	8.0" X 20.1" (203mm x 511mm)	31.08 lbs (14.13 kg)
NFD 250 A M	250 ft <sup>3</sup> (7.1 m <sup>3</sup> )	8.0" X 20.1" (203mm x 511mm)	32.43 lbs (14.74 kg)
NFD 275 A M	275 ft <sup>3</sup> (7.8 m <sup>3</sup> )	8.0" X 20.1" (203mm x 511mm)	33.77 lbs (15.35 kg)
NFD 300 A M	300 ft <sup>3</sup> (8.5 m <sup>3</sup> )	8.0" X 20.1" (203mm x 511mm)	35.11 lbs (15.96 kg)
NFD 325 A M	325 ft <sup>3</sup> (9.2 m <sup>3</sup> )	8.0" X 24.7" (203mm x 627mm)	40.95 lbs (18.61 kg)
NFD 350 A M	350 ft <sup>3</sup> (9.9 m <sup>3</sup> )	8.0" X 24.7" (203mm x 627mm)	42.30 lbs (19.23 kg)
NFD 400 A M	400 ft <sup>3</sup> (11.3 m <sup>3</sup> )	8.0" X 24.7" (203mm x 627mm)	44.98 lbs (20.45 kg)
NFD 450 A M	450 ft <sup>3</sup> (12.7 m <sup>3</sup> )	8.0" X 28.7" (203mm x 729mm)	51.47 lbs (23.40 kg)
NFD 500 A M	500 ft <sup>3</sup> (14.2 m <sup>3</sup> )	8.0" X 28.7" (203mm x 729mm)	54.15 lbs (24.61 kg)
NFD 550 A M	550 ft <sup>3</sup> (15.6 m <sup>3</sup> )	9.0" X 29.0" (229mm x 737mm)	66.74 lbs (30.34 kg)
NFD 600 A M	600 ft <sup>3</sup> (17.0 m <sup>3</sup> )	9.0" X 29.0" (229mm x 737mm)	69.42 lbs (31.55 kg)
NFD 650 A M	650 ft <sup>3</sup> (18.4 m <sup>3</sup> )	9.0" X 29.0" (229mm x 737mm)	72.11 lbs (32.78 kg)
NFD 700 A M	700 ft <sup>3</sup> (19.8 m <sup>3</sup> )	9.0" X 33.8" (229mm x 859mm)	79.79 lbs (36.27 kg)
NFD 750 A M	750 ft <sup>3</sup> (21.2 m <sup>3</sup> )	9.0" X 33.8" (229mm x 859mm)	82.48 lbs (37.49 kg)
NFD 800 A M	800 ft <sup>3</sup> (22.7 m <sup>3</sup> )	9.0" X 33.8" (229mm x 859mm)	85.18 lbs (38.72 kg)
NFD 850 M	850 ft <sup>3</sup> (24.1 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	111.45 lbs (50.66 kg)
NFD 900 M	900 ft <sup>3</sup> (25.5 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	114.13 lbs (51.88 kg)
NFD 950 M	950 ft <sup>3</sup> (26.9 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	116.82 lbs (53.10 kg)
NFD 1000 M	1000 ft <sup>3</sup> (28.3 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	119.50 lbs (54.32 kg)
NFD 1050 M	1050 ft <sup>3</sup> (29.7 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	122.19 lbs (55.54 kg)
NFD 1100 M	1100 ft <sup>3</sup> (31.1 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	124.87 lbs (56.76 kg)
NFD 1150 M	1150 ft <sup>3</sup> (32.6 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	127.56 lbs (57.98 kg)
NFD 1200 M	1200 ft <sup>3</sup> (34.0 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	130.24 lbs (59.20 kg)
NFD 1250 M	1250 ft <sup>3</sup> (35.4 m <sup>3</sup> )	16.5" X 30.7" (419mm x 780mm)	132.93 lbs (60.42 kg)
NFD 1300 M	1300 ft <sup>3</sup> (36.8 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	147.71 lbs (67.14 kg)
NFD 1350 M	1350 ft <sup>3</sup> (38.2 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	150.40 lbs (68.36 kg)
NFD 1400 M	1400 ft <sup>3</sup> (39.6 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	153.08 lbs (69.58 kg)
NFD 1450 M	1450 ft <sup>3</sup> (41.1 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	155.77 lbs (71.41 kg)
NFD 1500 M	1500 ft <sup>3</sup> (42.5 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	158.93 lbs (72.24 kg)
NFD 1550 M	1550 ft <sup>3</sup> (43.9 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	161.44 lbs (73.38 kg)
NFD 1600 M	1600 ft <sup>3</sup> (45.3 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	163.82 lbs (74.46 kg)
NFD 1650 M	1650 ft <sup>3</sup> (46.7 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	166.51 lbs (75.69 kg)
NFD 1700 M	1700 ft <sup>3</sup> (48.1 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	169.19 lbs (76.90 kg)
NFD 1750 M	1750 ft <sup>3</sup> (49.6 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	171.88 lbs (78.13 kg)
NFD 1800 M	1800 ft <sup>3</sup> (51.0 m <sup>3</sup> )	16.5" X 39.9" (419mm x 1014mm)	174.58 lbs (79.35 kg)

## **Approvals**

















