3M[™] Novec[™] 1230 Fire Protection Fluid

- ▶ Clean agent with very low Global Warming Potential (GWP <1)
- Low toxicity in a properly designed system (no harm to personnel)
- No damage to sensitive equipment
- Not targeted for emission reduction or phase-out
- ▶ 3MTM Blue SkySM warranty 20 year protection against environmental regulation

You need a FIREBOY automatic fire suppression system because:

- ▶ Continuous protection.
- ▶ Automatic operation.
- Manual operation if required.
- Peace of mind!
- Often detects and suppresses a fire before you know!
- Why would you NOT protect your boat and it's occupants?

 Coverage from 25-1,800 ft³ (0.7-51 m³) for engine rooms, machinery spaces, and other enclosed spaces for Class B fires. Factory Mutual and USCG Approved - Clean Agents are approved by all notified bodies.



- 1. Choose either the CG or MA Series.
- 2. Determine the volume of your engine compartment in cubic feet or cubic meters, LxWxH. For after-market installations, the gross volume MUST be used unless the boat manufacturer has attached a nameplate stating the volume of the fixed tanks to be deducted (CE and ISO 9094 requires NET volume calculation).
- 3. Based on steps 1 and 2, choose your model from the following charts. When in doubt, always choose the model that covers greater volume to ensure adequate protection.

Example: MA0200NVC = automatic discharge with optional manual discharge when used with a Fireboy Manual Discharge Cable, 200 cubic feet of coverage.

4. When choosing the MA Series, select the length of Manual Discharge Cable required (see page 2).

READY TO INSTALL

Each Fireboy system comes complete with a powder coated steel shelf bracket system, status indicator light, and owner's manual.

WARNING: Diesel engines require the installation of a Fireboy Engine Shutdown System. See separate sheet.

GA Series also available up to 4,000 ft³ (113.3 m³)

CG SERIES

- Automatic discharge only (@ 175°F / 79°C)
- Engine rooms up to 1,000 ft³ (28.3 m³)
- Heavy-duty mounting bracket
- Helm display

MA SERIES

- Automatic and manual discharge when used with a Firebov Manual Discharge Cable (sold separately)
- Engine rooms up to 1,800 ft³ (51 m³)
- Heavy-duty mounting bracket
- ▶ Helm display











firebov-xintex.com

CG SERIES MODEL SELECTION CHART - 3M NOVEC 1230 FIRE PROTECTION FLUID SYSTEM

Designed for engine rooms and machinery spaces up to 1,000 ft³ (28.3 m³), this automatic discharge series includes bracket and helm display. Discharges at 175°F (79°C) or optional 155°F (68°C).

	VOLUME PROTECTED		DIAMETER		TOTAL HEIGHT		AGENT WEIGHT		SHIPPING WEIGHT		SYSTEM PRESSURE	
MODEL NUMBER	ft³	m³	in	mm	in	mm	lbs	kgs	lbs	kgs	psi (@70° F)	
CG0025NVC	25	0.7	3.3	85	10.9	278	1.3	0.6	5	2.4	360	
CG0050NVC	50	1.4	3.3	85	14.7	373	2.7	1.2	8	3.8	360	
CG0075NVC	75	2.1	4.3	110	17	432	4	1.8	14	6.3	360	
CG0100NVC	100	2.8	4.3	110	17	432	5.4	2.4	15	6.9	360	
CG0125NVC	125	3.5	5.1	130	18.7	474	6.7	3	19	8.5	360	
CG0150NVC	150	4.3	5.1	130	18.7	474	8.1	3.7	24	10.8	360	
CG0175NVC	175	4.9	6.3	160	18.7	476	9.4	4.3	26	11.9	360	
CG0200NVC	200	5.7	6.3	160	18.7	476	10.7	4.9	28	12.5	360	
CG0225NVC	225	6.4	6.3	160	18.7	476	12.1	5.5	32	14.3	360	
CG0250NVC	250	7	6.3	160	18.7	476	13.4	6.1	33	14.9	360	
CG0275NVC	275	7.8	7.1	180	34	863	14.8	6.7	36	16.5	360	
CG0300NVC	300	8.5	7.1	180	34	863	16.1	7.3	38	17.1	360	
CG0325NVC	325	9.2	7.1	180	20.8	527	17.5	7.9	43	19.4	360	
CG0350NVC	350	10	7.1	180	20.8	527	18.8	8.5	44	19.9	360	
CG0375NVC	375	10.6	7.1	180	20.8	527	20.1	9.1	45	20.4	360	
CG0400NVC	400	11.3	7.1	180	28.8	731	21.5	9.8	53	23.9	360	
CG0450NVC	450	12.7	7.1	180	28.8	731	24.2	11	55	24.1	360	
CG0500NVC	500	14.1	7.1	180	28.8	731	26.9	12.2	60	27.4	360	
CG0550NVC	550	15.6	7.1	180	28.8	731	29.6	13.4	63	28.5	360	
CG0600NVC	600	17	7.1	180	35	888	32.2	14.6	71	32.4	360	
CG0650NVC	650	18.4	7.1	180	35	888	34.9	15.8	75	34	360	
CG0700NVC	700	19.8	7.1	180	35	888	37.6	17.1	78	35.2	360	
CG0750NVC	750	21.2	7.1	180	35	888	40.3	18.3	84	37.9	360	
CG0800NVC	800	22.6	10	254	23	585	43	19.5	89	40.4	360	
CG0850NVC	850	24	10	254	23	585	45.7	20.7	93	42	360	
CG0900NVC	900	25.5	10	254	29.2	742	48.4	22	95	43.2	360	
CG0950NVC	950	26.9	10	254	29.2	742	51	23.1	99	44.8	360	
CG1000NVC	1000	28.3	10	254	29.2	742	53.7	24.4	101	45.9	360	
LOW PROFILE MODE	1	•		•		•		•		•	<u> </u>	
CG0600NVC-4	600	17	10	254	23	585	32.2	14.6	71	32.1	360	
CG0650NVC-4	650	18.4	10	254	23	585	34.9	15.8	74	33.6	360	
CG0700NVC-4	700	19.8	10	254	23	585	37.6	17.1	77	34.7	360	

CG0600NVC-4	600	1/	10	254	23	585	32.2	14.6	/1	32.1	360
CG0650NVC-4	650	18.4	10	254	23	585	34.9	15.8	74	33.6	360
CG0700NVC-4	700	19.8	10	254	23	585	37.6	17.1	77	34.7	360
CG0750NVC-4	750	21.2	10	254	23	585	40.3	18.3	82	37.3	360
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MANUAL DISCHARGE CABLES

Fireboy High-Temperature Manual Discharge Cables allow for the manual discharge of an MA or GA system. Meets the U.S. Coast Guard flame-test guidelines. Use the shortest possible. Maximum 1440° of total bends.

MODEL	Ft	М	MODEL	Ft	М
E-4209-06	6	1.8	E-4209-36	36	10.4
E-4209-08	8	2.9	E-4209-40	40	12.1
E-4209-10	10	3	E-4209-45	45	13.6
E-4209-12	12	3.6	E-4209-50	50	15.2
E-4209-14	14	4.2	E-4209-55*	55	16.7
E-4209-16	16	4.8	E-4209-60	60	18.2
E-4209-18	18	5.4	E-4209-65*	65	19.7
E-4209-20	20	6	E-4209-70*	70	21.2
E-4209-22	22	6.6	E-4209-75*	75	22.8
E-4209-24	24	7.2	E-4209-80*	80	24.3
E-4209-26	26	7.9	E-4209-85*	85	25.8
E-4209-28	28	8.5	E-4209-90*	90	27.3
E-4209-30	30	9.1	E-4209-95*	95	28.8
E-4209-34	34	10.3	E-4209-100*	100	30

Fireboy High-Temperature Manual Discharge Cables are fire-resistant and are required for all



MA and GA Series installations. Sold separately. Shown to the right with optional angle adapter. CAA-0285-01



READY TO INSTALL

Each Fireboy system includes a heavy-duty powder coated steel shelf bracket system, helm display and owner's manual.







MA SERIES MODEL SELECTION CHART - 3M NOVEC 1230 FIRE PROTECTION FLUID SYSTEM

▶ Ideal for boats with engine rooms up to 1,800 ft³ (51 m³) in size, this discharge, when used with Fireboy Manual Discharge Cable which is sold separately. Discharges at 175°F (79°C) or optional 155°F (68°C).

	VOLUME PROTECTED		DIAMETER		TOTAL HEIGHT		AGENT WEIGHT		SHIPPING WEIGHT		SYSTEM PRESSURE
MODEL NUMBER	ft³	m³	in	mm	in	mm	lbs	kgs	lbs	kgs	psi (@70° F)
MA0025NVC	25	0.7	3.3	85	12.4	316	1.3	0.6	5	2.4	360
MA0050NVC	50	1.4	3.3	85	16.2	411	2.7	1.2	9	3.9	360
MA0075NVC	75	2.1	4.3	110	18.5	470	4	1.8	14	6.3	360
MA0100NVC	100	2.8	4.3	110	18.5	470	5.4	2.4	15	6.9	360
MA0125NVC	125	3.5	5.1	130	20.2	512	6.7	3	19	8.5	360
MA0150NVC	150	4.3	5.1	130	20.2	512	8.1	3.7	24	10.9	360
MA0175NVC	175	4.9	6.3	160	20.2	514	9.4	4.3	26	12	360
MA0200NVC	200	5.7	6.3	160	20.2	514	10.7	4.9	28	12.6	360
MA0225NVC	225	6.4	6.3	160	20.2	514	12.1	5.5	32	14.4	360
MA0250NVC	250	7	6.3	160	20.2	514	13.4	6.1	33	14.9	360
MA0275NVC	275	7.8	7.1	180	19.9	506	14.8	6.7	37	16.6	360
MA0300NVC	300	8.5	7.1	180	19.9	506	16.1	7.3	38	17.1	360
MA0325NVC	325	9.2	7.1	180	22.3	565	17.5	7.9	43	19.6	360
MA0350NVC	350	10	7.1	180	22.3	565	18.8	8.5	44	20.1	360
MA0375NVC	375	10.6	7.1	180	22.3	565	20.1	9.1	46	20.7	360
MA0400NVC	400	11.3	7.1	180	30.3	769	21.5	9.8	53	24.2	360
MA0450NVC	450	12.7	7.1	180	30.3	769	24.2	11	56	25.4	360
MA0500NVC	500	14.1	7.1	180	30.3	769	26.9	12.2	61	27.6	360
MA0550NVC	550	15.6	7.1	180	30.3	769	29.6	13.4	63	28.8	360
MA0600NVC	600	17	7.1	180	36.5	926	32.2	14.6	72	32.7	360
MA0650NVC	650	18.4	7.1	180	36.5	926	34.9	15.8	76	34.2	360
MA0700NVC	700	19.8	7.1	180	36.5	926	37.6	17.1	78	35.4	360
MA0750NVC	750	21.2	7.1	180	36.5	926	40.3	18.3	84	38.1	360
MA0800NVC	800	22.6	10	254	24.5	623	43	19.5	90	40.7	360
MA0850NVC	850	24	10	254	24.5	623	45.7	20.7	93	42.3	360
MA0900NVC	900	25.5	10	254	30.7	781	48.4	22	103	46.8	360
MA0950NVC	950	26.9	10	254	30.7	781	51	23.1	107	48.4	360
MA1000NVC	1000	28.3	10	254	30.7	781	53.7	24.4	109	49.5	360
MA1050NVC	1050	29.7	10	254	30.7	781	56.4	25.6	113	51.1	360
MA1100NVC	1100	31.1	10	254	30.7	781	59.1	26.8	116	52.7	360
MA1150NVC	1150	33	10	254	30.7	781	61.8	28	125	56.9	360
MA1200NVC	1200	34	10	254	30.7	781	64.5	29.3	129	58.6	360
MA1250NVC	1250	35.4	10	254	35.5	901	67.2	30.5	130	59	360
MA1300NVC	1300	36.8	10	254	35.5	901	69.8	31.7	134	60.6	360
MA1350NVC	1350	38.2	10	254	35.5	901	72.5	32.9	137	62.1	360
MA1400NVC	1400	39.6	10	254	35.5	901	75.2	34.1	140	63.3	360
MA1450NVC	1450	41	10	254	35.5	901	77.9	35.3	143	64.9	360
MA1500NVC	1500	42.5	10	254	35.5	901	80.6	36.6	146	66.1	360
MA1550NVC	1550	43.9	10	254	44.7	1136	83.3	37.8	153	69.3	360
MA1600NVC	1600	45.3	10	254	44.7	1136	86	39	156	70.8	360
MA1650NVC	1650	46.7	10	254	44.7	1136	88.7	40.2	159	72.2	360
MA1700NVC	1700	48.1	10	254	44.7	1136	91.3	41.4	162	73.7	360
MA1750NVC	1750	49.6	10	254	44.7	1136	94	42.6	166	75.1	360
MA1800NVC	1800	51	10	254	44.7	1136	96.7	43.9	169	76.6	360
LOW PROFILE MODEL	S										
MA0600NVC-4	600	17	10	254	24.5	623	32.2	14.6	75	33.8	360
MA0650NVC-4	650	18.4	10	254	24.5	623	34.9	15.8	77	35	360
MA0700NVC-4	700	19.8	10	254	24.5	623	37.6	17.1	83	37.5	360
MA0750NVC-4	750	21.2	10	254	24.5	623	40.3	18.3	88	40	360

DON'T JUST MANAGE A FIRE. EXTINGUISH IT.

3M Novec 1230 Fire Protection Fluid is a highly-effective clean agent fire suppressant, designed to extinguish a fire in its incipient stage before it has a chance to spread.

Novec 1230 Fluid evaporates more than 50 times faster than water. It also allows the clean agent to transition from a liquid to a gaseous state very rapidly when discharged through a nozzle, and readily achieve vapor extinguishing concentrations in air. Novec 1230 fluid is a great alternative.



- ▶ Low toxicity (no harm to personnel)
- ► Extinguishes fires in less than half the time of CO2 & inert gases
- ▶ No damage to sensitive equipment
- Not targeted for emission reduction or phase-out

ON BOARD, ON GUARD!





THE FIREBOY ADVANTAGE

TOTAL FLOODING, CLEAN AGENT FIRE EXTINGUISHER SYSTEMS

U.S. Coast Guard studies show that approximately 90% of all marine fires start in the engine compartment. The same studies show that only one in ten marine fires is successfully extinguished with typical dry-chemical portable fire extinguishers due to the inherent difficulties of fighting a fire manually. In addition, dry-chemical fire extinguishers leave behind a powder that can damage the engine and sensitive electronic equipment.

Since pioneering the use of Halon systems in the early 1970's, Fireboy has designed safe and effective engine room fire protection with no water or powdery residue. All systems are heat activated to discharge the clean agent gas automatically at 175°F (79°C) with no operator intervention required. With a Fireboy system, the fire extinguishing agent is released much faster than any possible crew response, resulting in a faster fire-out time and less damage.

CONSTANT PROTECTION, NO HARMFUL RESIDUE

- ▶ Discharge is automatic at 175°F (79°C) for round-the-clock engine room fire protection
- ▶ Many marine insurance providers offer a discount to boaters who install a fixed fire extinguisher system (contact your insurer for details)
- ▶ Total flooding of the engine compartment in less than 10 seconds for fast smothering of the fire
- ▶ 3M Novec 1230 Fire Protection Fluid leaves no harmful residue to clean up
- ▶ 3 year limited warranty
- ▶ All steel refillable cylinders (except systems discharged in a fire)

- ▶ Helm display LED "charged/ discharged" status indicator panel included (see photo on page 2)
- ▶ Easy to read color coded pressure gauge on cylinder also identifies "charged/discharged" status
- ▶ Coverage from 25 ft³ to 1,800 ft³ in a broad array of increments provides maximum coverage at lowest cost
- ▶ Integrated shelf bracket mounting system (see photo on page 2)
- ▶ Up to 4,000 ft³ available with GA 3M Novec 1230 Systems
- ▶ Rugged industrial designed pressure gauge insures trouble free performance

- ▶ International system approvals (FM, USCG, CE, RINA, BV)
- ▶ 3M Novec 1230 Fire Protection Fluid clean extinguishing agent is approved for marine use worldwide (EPA SNAP, European)
- ▶ Approved for Class B fires in engine rooms, machinery spaces and similar industrial applications

FIREBOY - XINIEX fireboy-xintex.com















Fireboy-Xintex is an ISO 9001:2008

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