

# GA SERIES MODEL SELECTION CHART 3M™ NOVEC™ 1230 FIRE PROTECTION FLUID SYSTEM

3M™ Novec™ 1230 Fire Protection Fluid is an advanced, “next-generation” Halon and CO<sub>2</sub> replacement, offering a number of important advantages over other clean agents and CO<sub>2</sub> in marine applications.

With zero ozone depletion potential, short atmospheric lifetime and a global warming potential of <1, Novec 1230 fluid has proven to be the first chemical Halon replacement to offer a viable, long-term, sustainable solution for marine fire protection. Double the agent amount and shipping weight for GA2 two (2) cylinder system.

PROPERTIES	NOVEC 1230	HFC-125	HFC-227ea	HFC-23
Ozone Depletion Potential (ODP) <sup>1</sup>	0.0	0.0	0.0	0.0
Global Warming Potential–IPCC <sup>2</sup>	1	3500	3220	14800
Atmospheric Lifetime (Years)	0.014 (5 days)	29	34.2	270

<sup>1</sup> World Meteorological Organization (WMO) 1998, Model-Derived Method

<sup>2</sup> Intergovernmental Panel on Climate Change. (IPCC) 2007 Method, 100 Year ITH, CO<sub>2</sub> = 1

## GA1 MODEL SELECTION CHART / 600 - 2,000 FT<sup>3</sup> / SINGLE CYLINDER SYSTEM

GA1 MODEL NUMBER	VOLUME PROTECTED		DIAMETER		TOTAL HEIGHT		AGENT WEIGHT		SHIPPING WEIGHT		SYSTEM PRESSURE
	ft <sup>3</sup>	m <sup>3</sup>	in	mm	in	mm	lbs	kgs	lbs	kgs	psi (@70° F)
GA10600NVC-B	600	17.0	10	254	27.1	689	32.2	14.6	70	31.8	360
GA10650NVC-B	650	18.4	10	254	27.1	689	34.9	15.8	73	33.1	360
GA10700NVC-B	700	19.8	10	254	27.1	689	37.6	17.1	76	34.5	360
GA10750NVC-B	750	21.2	10	254	27.1	689	40.3	18.3	78	35.4	360
GA10800NVC-B	800	22.6	10	254	27.1	689	43.0	19.5	81	36.7	360
GA10850NVC-B	850	24.0	10	254	27.1	689	45.7	20.7	84	38.1	360
GA10900NVC-B	900	25.5	10	254	33.3	846	48.4	22.0	91	41.3	360
GA10950NVC-B	950	26.9	10	254	33.3	846	51.0	23.1	94	42.6	360
GA11000NVC-B	1,000	28.3	10	254	33.3	846	53.7	24.4	97	44.0	360
GA11050NVC-B	1,050	29.7	10	254	33.3	846	56.4	25.6	99	44.9	360
GA11100NVC-B	1,100	31.1	10	254	33.3	846	59.1	26.8	102	46.3	360
GA11150NVC-B	1,150	33.0	10	254	33.3	846	61.8	28.0	105	47.6	360
GA11200NVC-B	1,200	34.0	10	254	33.3	846	64.5	29.3	108	49.0	360
GA11250NVC-B	1,250	35.4	10	254	38.1	968	67.2	30.5	117	53.1	360
GA11300NVC-B	1,300	36.8	10	254	38.1	968	69.8	31.7	120	54.4	360
GA11350NVC-B	1,350	38.2	10	254	38.1	968	72.5	32.9	123	55.8	360
GA11400NVC-B	1,400	39.6	10	254	38.1	968	75.2	34.1	125	56.7	360
GA11450NVC-B	1,450	41.0	10	254	38.1	968	77.9	35.3	128	58.1	360
GA11500NVC-B	1,500	42.5	10	254	38.1	968	80.6	36.6	131	59.4	360
GA11550NVC-B	1,550	43.9	10	254	47.3	1202	83.3	37.8	141	64.0	360
GA11600NVC-B	1,600	45.3	10	254	47.3	1202	86.0	39.0	144	65.3	360
GA11650NVC-B	1,650	46.7	10	254	47.3	1202	88.7	40.2	147	66.7	360
GA11700NVC-B	1,700	48.1	10	254	47.3	1202	91.3	41.4	149	67.6	360
GA11750NVC-B	1,750	49.6	10	254	47.3	1202	94.0	42.6	152	69.0	360
GA11800NVC-B	1,800	51.0	10	254	47.3	1202	96.7	43.9	155	70.3	360
GA11850NVC-B	1,850	52.4	10	254	47.3	1202	99.4	45.1	157	71.2	360
GA11900NVC-B	1,900	53.8	10	254	47.3	1202	102.1	46.3	160	72.6	360
GA11950NVC-B	1,950	55.2	10	254	47.3	1202	104.8	48.5	163	73.9	360
GA12000NVC-B	2,000	56.6	10	254	47.3	1202	107.5	48.8	166	75.3	360

# GA2 MODEL SELECTION CHART / 1,200 - 4,000 FT<sup>3</sup> / TWO CYLINDER SYSTEM

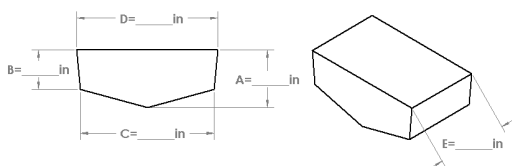
GA2 MODEL NUMBER	VOLUME PROTECTED		DIAMETER		TOTAL HEIGHT		AGENT WEIGHT		SHIPPING WEIGHT		SYSTEM PRESSURE
	ft <sup>3</sup>	m <sup>3</sup>	in	mm	in	mm	lbs	kgs	lbs	kgs	psi (@70° F)
GA21200NVC-B	1,200	34.0	10	254	27.1	689	32.2	14.6	70	31.8	360
GA21300NVC-B	1,300	36.8	10	254	27.1	689	34.9	15.8	73	33.1	360
GA21400NVC-B	1,400	39.6	10	254	27.1	689	37.6	17.1	76	34.5	360
GA21500NVC-B	1,500	42.5	10	254	27.1	689	40.3	18.3	78	35.4	360
GA21600NVC-B	1,600	45.3	10	254	27.1	689	43.0	19.5	81	36.7	360
GA21700NVC-B	1,700	48.1	10	254	27.1	689	45.7	20.7	84	38.1	360
GA21800NVC-B	1,800	51.0	10	254	33.3	846	48.4	22.0	91	41.3	360
GA21900NVC-B	1,900	53.8	10	254	33.3	846	51.0	23.1	94	42.6	360
GA22000NVC-B	2,000	56.6	10	254	33.3	846	53.7	24.4	97	44.0	360
GA22100NVC-B	2,100	59.5	10	254	33.3	846	56.4	25.6	99	44.9	360
GA22200NVC-B	2,200	62.3	10	254	33.3	846	59.1	26.8	102	46.3	360
GA22300NVC-B	2,300	65.1	10	254	33.3	846	61.8	28.0	105	47.6	360
GA22400NVC-B	2,400	68.0	10	254	33.3	846	64.5	29.3	108	49.0	360
GA22500NVC-B	2,500	70.8	10	254	38.1	968	67.2	30.5	117	53.1	360
GA22600NVC-B	2,600	73.6	10	254	38.1	968	69.8	31.7	120	54.4	360
GA22700NVC-B	2,700	76.5	10	254	38.1	968	72.5	32.9	123	55.8	360
GA22800NVC-B	2,800	79.3	10	254	38.1	968	75.2	34.1	125	56.7	360
GA22900NVC-B	2,900	82.0	10	254	38.1	968	77.9	35.3	128	58.1	360
GA23000NVC-B	3,000	85.0	10	254	38.1	968	80.6	36.6	131	59.4	360
GA23100NVC-B	3,100	87.8	10	254	47.3	1,202	83.3	37.8	141	64.0	360
GA23200NVC-B	3,200	90.6	10	254	47.3	1,202	86.0	39.0	144	65.3	360
GA23300NVC-B	3,300	93.4	10	254	47.3	1,202	88.7	40.2	147	66.7	360
GA23400NVC-B	3,400	96.3	10	254	47.3	1,202	91.3	41.4	149	67.6	360
GA23500NVC-B	3,500	99.1	10	254	47.3	1,202	94.0	42.6	152	69.0	360
GA23600NVC-B	3,600	101.9	10	254	47.3	1,202	96.7	43.9	155	70.3	360
GA23700NVC-B	3,700	104.8	10	254	47.3	1,202	99.4	45.1	157	71.2	360
GA23800NVC-B	3,800	107.6	10	254	47.3	1,202	102.1	46.3	160	72.6	360
GA23900NVC-B	3,900	110.4	10	254	47.3	1,202	104.8	48.5	163	73.9	360
GA24000NVC-B	4,000	113.2	10	254	47.3	1,202	107.5	48.8	166	75.3	360

## GA1 & GA2 NOVEC 1230 GROSS ENGINE ROOM VOLUME WORKSHEET (TYPICAL)

Fireboy-Xintex will certify the volume of the engine room from manufacturer CAD drawing including volume calculations, or from a completed Engine Room Volume Worksheet

$$\frac{\text{A}}{\text{D}} \text{ in.} + \frac{\text{B}}{\text{C}} \text{ in.} = \frac{\text{in.}}{2} = \text{in.} \times \frac{\text{in.}}{\text{C}} = \text{in.}^2$$

$$\frac{\text{in.}}{\text{D}} - \frac{\text{in.}}{\text{C}} = \frac{\text{in.}}{2} = \text{in.} \times \frac{\text{in.}}{\text{B}} = + \text{in.}^2$$



$$\text{Additional Volume(s)} + \frac{\text{in.}^3}{1728}$$

$$\text{Gross Engine Room Volume} = \text{ft.}^3$$

GA1 Maximum Protected Volume = **2,000 cu. ft.**  
 GA2 Maximum Protected Volume = **4,000 cu. ft.**

Download the complete 3M™ Novec™ and HFC-227ea worksheets at: <http://www.fireboy-xintex.com/ga-fire-extinguisher>