

## Clean Agent Extinguishers, Automatic or Manual-Automatic

These are fixed units, usually ceiling mounted, thermally actuated to discharge throughout an enclosure. Because each unit is self-actuating, extinguishers are to be used singly (one per enclosure) only. They contain an electrically nonconducting gaseous fire extinguishant that does not leave a residue upon evaporation. Since these clean agents have different extinguishing concentrations, the individual manufacturer's listing should be consulted for proper design concentrations. NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems should be consulted for toxicity data. FM Approval is limited to volumes of 1000 ft<sup>3</sup> (28 m<sup>3</sup>) or less, unless manual actuation means is provided. Application limitations are stated in individual listing. Manufacturer's installation instructions must be followed explicitly. Supplemental U.S. Coast Guard approvals are delineated in the individual listing.

### Models NFG & NFD Novec™ 1230 Clean Agent Extinguishers

<b>System Designation:</b>	Models NFG & NFD
<b>System Type:</b>	Automatic and Manual/Automatic Clean Agent Extinguishers for the Protection of Class B Hazards
<b>Agent Identification:</b>	3M™ Novec™ 1230 (FK 5-1-12)
<b>Minimum Design Concentration for Hazard Class</b>	Class B: 5.85%
<b>System Pressure:</b>	500 psi (34.5 bar)
<b>Minimum and Maximum Agent Storage Temperatures:</b>	NFG: 20°F to 130°F (-7°C to 54°C) NFD 225-825: 20°F to 130°F (-7°C to 54°C) NFD 850-1800: 32°F to 130°F (0°C to 54°C)
<b>Automatic Activation Temperatures:</b>	NFG 25-75: 200°F (93°C) NFG 100-200: 175°F (79°C) NFD: 175°F (79°C)
<b>Mounting Configurations:</b>	NFG: Vertical or Horizontal NFD 225-825: Vertical or Horizontal NFD 850-1800: Vertical Only
<b>Minimum and Maximum Ceiling Heights:</b>	12 in to 14 ft (0.3 m to 4.3 m)
<b>Maximum Coverage Area:</b>	32 ft x 32 ft (9.8 m x 9.8 m)
<b>Maximum Coverage Volume:</b>	Model NFG: 200 ft <sup>3</sup> (5.7 m <sup>3</sup> ) Model NFD: 1800 ft <sup>3</sup> (51.0 m <sup>3</sup> )
<b>Installation Instructions and Owner's Manual:</b>	Fire-Hawk Novec™ 1230 Model NFG & NFD Fire Suppression Systems Installation Instructions Owners Manual, P/N 123-456, Revision B
<b>Limitations or Exceptions to the Approval:</b>	<ul style="list-style-type: none"> <li>- Installations must be located within 3 feet of the ceiling of the protected enclosure</li> <li>- All Model NFG extinguishers are non-refillable (non-serviceable)</li> <li>- Further limitations as defined in the manual listed above</li> </ul>
<b>Approved Filling Stations:</b>	<p>Metalcraft, Inc. 9351-G Philadelphia Rd Baltimore MD 21237</p> <p>Sea-Fire Europe Ltd. Portfield Rd Unit 2 Discovery, Voyager Park Portsmouth UK</p>

<b>Company Name:</b>	Fire Hawk
<b>Company Address:</b>	9351-G Philadelphia Rd, Baltimore, Maryland 21237, USA
<b>Company Website:</b>	<a href="http://fire-hawksafety.com">http://fire-hawksafety.com</a>

<b>New/Updated Product Listing:</b>	No
<b>Listing Country:</b>	United States of America
<b>Agent Type:</b>	3M Novec 1230
<b>Certification Type:</b>	FM Approved
<b>Class of Work:</b>	5612-Exting Agent, Liquefied Gas