Fenwal Engineered Fire Suppression System
Designed for use with 3M™ Novec™ 1230 Fire Protection Fluid
Bottom Discharge Agent Storage Container

F-44-1920-1

P/N: 44-19204X-00X

FEATURES
- 350, 560, and 850-lb. Capacities
- Electric Initiator Actuation
- 3-inch Discharge Valve
- Optional Liquid Level Indicator
- Standard Low Pressure Supervisory Pressure Switch
- UL Listed
- FM Approved

DESCRIPTION
Fenwal Engineered Fire Suppression System Desiged
for use with 3M™ Novec™ 1230 Fire Protection Fluid
Bottom Discharge Agent Storage Containers store Novec
1230 fluid super-pressurized with dry nitrogen to 360 psig
(70°F). They are painted red and are equipped with a
3-inch burst disc type discharge valve, a replaceable initi-
at or well, a screen assembly, pressure gauge, supervi-
sory pressure switch with cable assembly, fill port, overpressure relief valve, safety cap, liquid level measur-
ing device (optional) and lifting lugs. A 3-inch Flex Hose
(P/N 29-117134-002) is available to facilitate piping con-
nections. Initiator assemblies P/N 44-191001-001 must
be ordered for each container.

OPERATION
The agent storage container discharges when the initia-
tor is actuated, causing the burst-disc valve to rupture.

INSTALLATION
The container is installed in a vertical position with the
valve assembly pointing up. Interconnection for dis-
charge piping is 3-inch NPT. A 3-inch flex hose is avail-
able to facilitate connection between the container and
discharge piping. A 3-inch, 300-lb. malleable-iron
threaded pipe union manufactured per ANSI B16.39 is
required to mate the tank discharge port to the flex-hose
assembly.

The container is secured in place by one set of mounting
brackets (P/N 29-232334-00X) which are bolted together
around the container and affixed to a solid wall or a strut
assembly. Two 1/2-inch diameter bolts are required to
secure the mounting brackets to a vertical surface and
two 1/2-inch diameter 9-inch long threaded rods are
needed to hold the two mounting brackets together.

After the container is securely mounted, it is connected to
discharge piping per the system drawings. The initiator
assembly is then installed.

MAINTENANCE
According to NFPA standards the following inspection
and/or maintenance procedure must be scheduled as
listed below and performed upon the occurrence of any
event which might affect the reliability of the system.

QUARTERLY INSPECTION
1. Check the pressure gauges of each agent storage
   container. If the pressure is less than 325 PSIG at
   70°F (22.9 kg/cm² at 21°C), the container should be
   removed and carefully inspected by certified person-
   nel. It should then be reconditioned, recharged or
   replaced as it’s condition indicates. Pressure varies
   with temperature.
2. Check all component supporting hardware and
tighten, repair, or replace as required.
3. Visually check all components for evidence of physi-
cal abuse and take whatever action is required.
   Replace any component if at all in doubt of its ability
to perform properly.
SEMI-ANNUAL INSPECTION

Qualified personnel are to determine the amount of agent in all containers. The optional liquid level indicator may be used to measure agent supply and compare it to the original net weight which is marked on the container label. If the measured net weight is less than 95% of the original charged net weight the container should be tested for leakage, recharged and reinstalled.

Inspect all piping, fittings and nozzles for looseness, dirt or other damage. All outlet piping must be clean and free of dirt, chips, fillings and other foreign material that may cause the system to become inoperative or ineffective at the time of discharge.

RECONDITIONING

After a system has been discharged, it is recommended that the local authorized Fenwal distributor be contacted to recondition the system.

The reconditioning kit for these containers is P/N 31-193017-001. The initiator, not included, is ordered separately.

ORDERING INFORMATION

KEY TO PART NUMBERS

93-19204X-00X
1: w/o Liquid Level Indicator
2: w/ Liquid Level Indicator
1: 5 ft.³ Volume (350 lb.)
0: 8 ft.³ Volume (560 lb.)
2: 12 ft.³ Volume (850 lb.)

ACCESSORIES

<table>
<thead>
<tr>
<th>Accessory</th>
<th>44-192041-00X</th>
<th>44-192040-00X</th>
<th>44-192042-00X</th>
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<tbody>
<tr>
<td>Bracket (Black) (Two Required per Container)</td>
<td>29-232334-004</td>
<td>29-232334-002</td>
<td>29-232334-000</td>
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<tr>
<td>LLI Tape Assembly</td>
<td></td>
<td>283894</td>
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<td>LLI Rod Assembly (Pre-Sept. 99)</td>
<td>31-194099-012</td>
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SPECIFICATIONS

AGENT STORAGE CONTAINERS

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<tbody>
<tr>
<td>Fill Range (lb. without LLI)</td>
<td>178 - 354</td>
<td>184 - 567</td>
<td>427 - 854</td>
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<tr>
<td>Fill Range (lb. with LLI)</td>
<td>178 - 354</td>
<td>184 - 567</td>
<td>427 - 854</td>
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<tr>
<td>Height (in.)</td>
<td>57</td>
<td>58-1/2</td>
<td>60-1/2</td>
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<tr>
<td>Diameter (in.)</td>
<td>16</td>
<td>20</td>
<td>24</td>
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<tr>
<td>Internal Volume (ft.³)</td>
<td>5</td>
<td>8</td>
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<tr>
<td>Empty Weight (lbs.)</td>
<td>250</td>
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<td>Maximum Static Load</td>
<td>600</td>
<td>910</td>
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<tr>
<td>Temperature Range</td>
<td>0 to 130°F (-17.7 to 54°C)</td>
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<tr>
<td>Safety Release Burst Range</td>
<td>850 to 1000 PSIG</td>
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<td>Construction Specification</td>
<td>DOT-4BW500</td>
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SUPERVISORY PRESSURE SWITCHES

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<th>06-115549-003</th>
<th>06-115549-002</th>
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<tr>
<td>Shipped/Optional</td>
<td>Shipped with Containers</td>
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<tr>
<td>Contact Rating</td>
<td>2 Amps @ 24 Vdc</td>
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<tr>
<td>Operation</td>
<td>Open Under Pressure (Contacts close at: 200, ±15 PSIG)</td>
<td>Closed Under Pressure (Contacts close at: 200, ±15 PSIG)</td>
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DIMENSIONAL INFORMATION
TANK AND BRACKET DIMENSIONS

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<th>Dimension (in.)</th>
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<tr>
<td>A</td>
<td>5 ft.³ (350 lb.)</td>
<td>8 ft.³ (560 lb.)</td>
<td>12 ft.³ (850 lb.)</td>
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<td>B</td>
<td>16-1/2</td>
<td>16-1/2</td>
<td>17</td>
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<tr>
<td>C</td>
<td>16</td>
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<td>24</td>
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<tr>
<td>D</td>
<td>7-1/8</td>
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<td>7-7/8</td>
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<td>F</td>
<td>4-3/16</td>
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<tr>
<td>G</td>
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<td>7-1/4</td>
<td>8-3/4</td>
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<td>22</td>
<td>26-5/8</td>
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<td>J</td>
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<td>9-1/2</td>
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AGENT STORAGE CONTAINER OUTLINE

BRACKET OUTLINE
ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The Novec 1230 fluid shall be stored in vertically mounted cylindrical containers with a 3-inch burst disc type discharge valve. Containers shall be super-pressurized with dry nitrogen to 360 PSIG at 70°F. This container shall be Fenwal P/N 44-19204X-00X.

Containers shall be UL Listed and FM Approved.

Each agent storage container shall have a fill range of 178-354, 284-567, or 427-854 lb. and be of a construction that complies with DOT-4BW500.

The agent storage container shall incorporate lifting lugs, overpressure relief, 3-inch burst-disk type discharge valve, fill port, cable assembly, pressure gauge, supervisory pressure switch, liquid-level indicator (optional), and a safety cap. Electrical device’s connecting leads shall be completely supervised.

A compatible flex hose shall be available to facilitate installation and connection to discharge piping.

The container shall be secured in place by two opposing steel mounting brackets. These brackets shall be Fenwal P/N 29-232334-00X.

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