MODULAR FIRE SUPPRESSION SYSTEM

CLEAN AGENT, like other halocarbon, extinguishes fire simply by removing heat from the fire. Upon discharge, clean agent creates a gaseous mixture with surrounding air. CLEAN AGENT is both low in acute toxicity and is a highly-efficient extinguishant, so that it puts out fire long before the agent reaches concentration that could harm humans.

We provide **FK-5-1-12** and **HFC-227ea** clean agents as per the client requirement. The normal operating pressure of a Direct Low Pressure Clean Agent Fire Suppression Systems is for the unit is 195 psig at 70°F [13.5 bar at 21.1 °C]. This is accomplished by super pressurizing the system with a charge of nitrogen added to the CLEAN AGENT.

Gas quantity required for a hazard is calculated based on the largest partition of the panel cabinet.

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AGENT STORAGE CONTAINERS

The agent is stored in aluminium or steel containers and is super pressurized with nitrogen. All system containers are stamped in accordance with the relevant DOT/TC requirements. All size container valves are equipped with a pressure relief (rupture disc) device in compliance with DOT requirements.

Storage Temperature: 0°F (-17.8°C) to 130°F [+54.4°C]

Available Cyl. Filling Capacities: - minimum 1kg up to 6 kg

VALVE ASSEMBLY

Each container is equipped with a nickel-plated brass valve assembly. Each valve assembly is equipped with a pressure gauge to monitor container pressure, and a quarter turn ball valve that interfaces with the Detection tubing. The valve assembly utilizes a straight siphon tube only for the unit to only be mounted in a vertical (upright) position.

UL LISTED – DETECTION TUBING (FDT)

The Detection Tubing - 4/6 mm size is a linear, pneumatic, fire detection device that responds to a combination of the heat and radiant energy from a fire.

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The detection tubing performs three functions: heat detection, system activation, and agent discharge. One end of the tubing is installed to the top of the container valve. The tubing is then installed throughout the hazard volume and finally pressurized with nitrogen. The tube is designed to rupture at any point along its length upon direct flame impingement or when the temperature reaches above 125 °C to 145°C. The rupture of the tubing releases the nitrogen pressure causing the unit to actuate. The portion of the tubing nearest the fire ruptures, resulting in a formation of a discharge nozzle that will perform complete discharge of the CLEAN AGENT.

PRESSURE SWITCH

The pressure supervisory switch is used to monitor the pressure inside the unit container. The pressure supervisory switch is factory installed into the pressure switch port located on the valve assembly. If the unit loses pressure and reaches a pressure of 150 psig ± 10 psi [10.3 ± 0.7 bar] or below, the switch contacts will activate, providing a signal to indicate that the unit has lost pressure.

END OF LINE CONNECTOR

A pressure gauge is connected into the End of Line Adapter so that the gauge indicates the pressure inside the tube.

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DLP SS FITTINGS

T Connector

End Plug

The fittings used for connecting detection tube are all nickel-plated brass fittings. These high-pressure fittings help in routing the tube inside the cabinet.

DLP SYSTEM PANEL

The panel is given to monitor the gas pressure inside the cylinder and the tube. A hooter is inbuilt in the panel if the pressure decreases or if the gas is released, it will be activated.

It also has a potential free contact for integration with main fire alarm panel (FAS).

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