



**AVENGER K  
&  
AVENGER FLEX**

**RESTAURANT  
FIRE SUPPRESSION  
SYSTEM**

 **AVENGER**

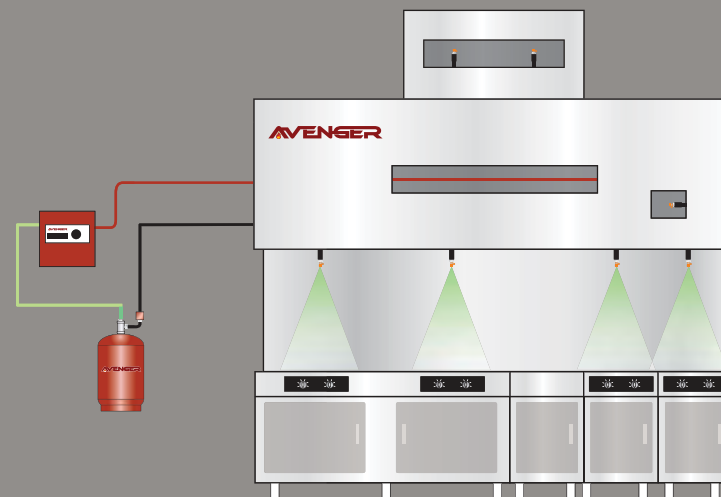


7051 Village Drive, Suite 100  
Buena Park, CA 90621-2268 U.S.A.  
[www.avengersystems.com](http://www.avengersystems.com)

# Fixed or Flexible to protect kitchen appliances and hoods.

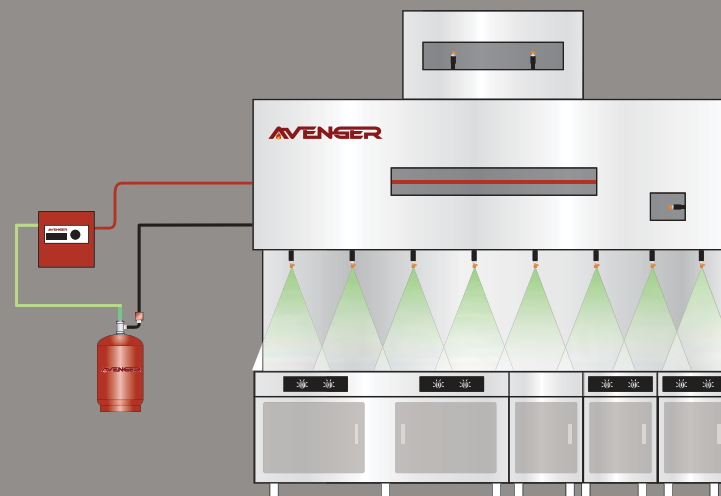
## Avenger K Restaurant Fire Suppression System

Avenger offers two systems to meet the industry's varying needs. With the Avenger K Restaurant Fire Suppression System you get appliance-specific coverage that typically offers lower initial cost. The AK system is ideal for uses where appliance location is fixed such as in fast food chains, casual dining, cruise ships and school cafeterias.



## Avenger Flex Restaurant Fire Suppression System

The Avenger Flex Restaurant Fire Suppression System adds greater flexibility by letting you reconfigure a kitchen or move appliances without moving nozzles. Because of its adaptability, this system is the most cost effective choice over the life of the system. The AF system was designed with fine dining, culinary schools, military facilities, hotels and hospitals in mind.



■ DETECTION

■ ACTUATION

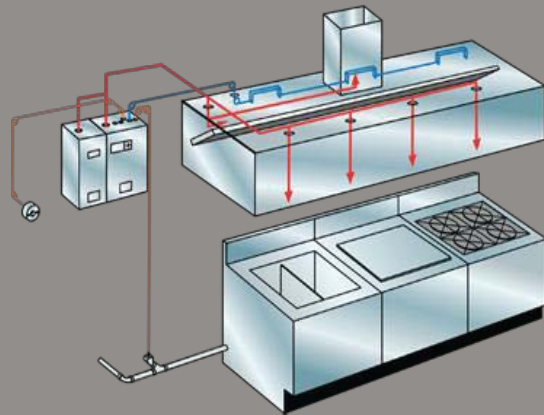
■ DISCHARGE



# AVENGER SYSTEM COMPONENT DESCRIPTION

## General:

The Avenger K & Avenger FLEX Systems are pre-engineered, wet chemical, stored-pressure type systems with a fixed nozzle agent distribution network. The uncomplicated nature of the Avenger system virtually eliminates design & installation errors. Avenger is listed by Underwriter's Laboratories, Inc. and is tested to UL standard 300.



The Avenger system shall be designed, installed and maintained in accordance with the Avenger Design & Installation manual, NFPA 17A, NFPA 96, and local codes and ordinances by an Authorized Avenger Systems Distributor using factory trained personnel.

## Agent Cylinders: (2.75, 3.75, 4.75 & 6 gallons)

The agent cylinders are mild steel DOT 4BW240 specification cylinders, tested to 480 PSI (3309 kPa). The agent cylinder/discharge valve assembly is factory charged with Avenger liquid fire suppressant, a potassium acetate-based solution that suppresses cooking grease fires both through saponification and cooling. The cylinders are pressurized to 240 PSI (1655 kPa).

## STAINLESS STEEL ENCLOSURE:

For our modern, fashionable world, Avenger decided to add some beauty to our Restaurant Fire Suppression System by providing stainless steel cylinders & releasing module enclosures. The pressure gauges for the nitrogen and agent cylinders are visible without removing the front cover of the enclosure.

## ADVANCED RELEASE MECHANISM MODULES:

The release mechanism is a spring-loaded mechanical/pneumatic type, capable of actuating from one to ten agent cylinder/valve assemblies with just one nitrogen cylinder. It is operated either automatically by the detection network or manually by a remote manual pull station. Avenger offers two types of Releasing Modules:

### a.) Mechanical Release Module (MRM):

The MRM is a spring-loaded type using a mechanical input and electrical, mechanical, and pneumatic outputs. The MRM enclosure has a system status indicator and a window to observe the nitrogen cylinder pressure.

### b.) Pneumatic Release Module (PRM)

The PRM offers superior detection by using a linear pneumatic detection system. The PRM detection system consists of the PRM, thermal tubing, and end of line fitting. The tubing is pressurized through a small "accumulator" inside the enclosure and routed throughout the hazard area.

## AVENGER OFFERS TWO OPTIONS FOR DETECTION:

### a.) FUSIBLE LINK DETECTION:

The link-to-link system consists of four major components; conduit connector, cable segment beginning and end, conduit box, and link-to-link cable segments.

### b.) LINEAR PNEUMATIC DETECTION:

The linear pneumatic detection system utilizes pneumatic detection tubing. When exposed to a fire condition the tubing ruptures, relieving all of the pressure in the tubing and accumulator thus firing the system using a nitrogen cylinder.

## DISCHARGE NOZZLES:

Specially-designed discharge nozzles are made of chrome-plated brass, and shall consist of a one piece tip/body, strainer and blow-off cap.

# AVENGER

7051 Village Drive, Suite 100  
Buena Park, CA 90621-2268 U.S.A.  
Phone: +1 714-522-2246  
Email: [info@avengersystems.com](mailto:info@avengersystems.com)

[www.avengersystems.com](http://www.avengersystems.com)

Proudly Manufactured in the United States

For more information please contact: