



PAFSS KitchenGuard Mini - Data Sheet & Engineering Specification

Features

- CE Marked
- Neutral PH and 99% biodegradable wet chemical agent.
- Fast acting detection.
- Simple and reliable stored pressure operation.
- Visual pressure gauge provides confirmation of system readiness.
- UL listed Linear heat and flame tube detection requiring no mechanical operation or power supply to function.
- Unobtrusive and aesthetically appealing for kitchen environments.
- Quick and easy to install and maintain.
- Manufactured in the U.K.



Application

The Jactone PAFSS KitchenGuard Mini domestic fire suppression system is an automatic, pre-engineered fire suppression system that has been designed to protect domestic kitchen equipment including burner ranges and induction hobs.

KitchenGuard Mini is suitable for protecting domestic cooking areas in student accommodation, HMO's, blocks of flats or other multi-occupancy buildings and other similar establishments.

(Note: KitchenGuard Mini does not cover the protection of industrial or commercial catering equipment or specialist fish and chip shop fryer ranges.)

KitchenGuard Mini systems must only be used indoors or in environments where the temperature range falls within the operating conditions of 0°C to +60°C. KitchenGuard Mini must be designed and installed in accordance with the latest revision of the manufacturer's system manual.





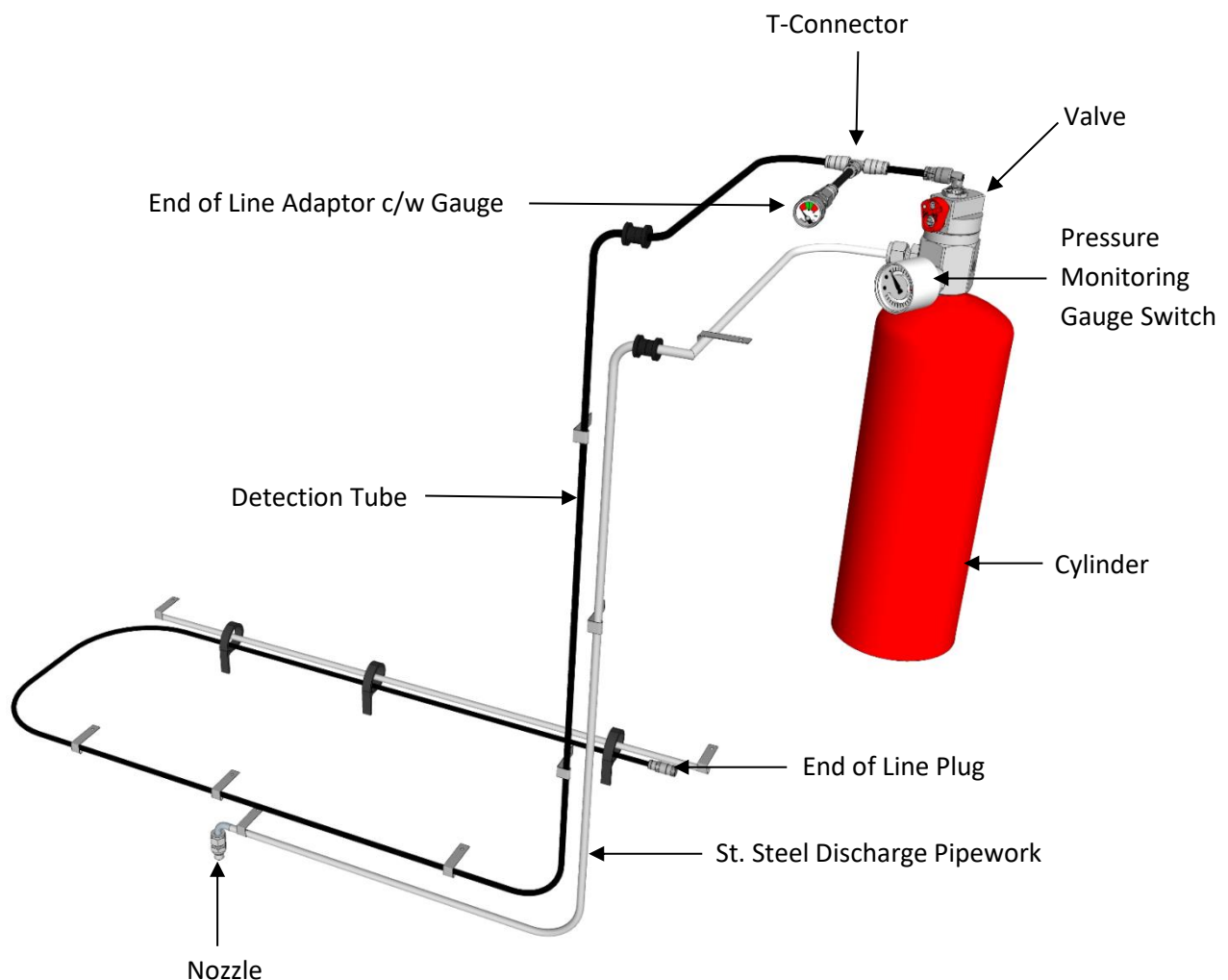
System Description

The KitchenGuard Mini domestic kitchen fire suppression system is a pre-engineered, wet chemical, stored pressure system. KitchenGuard Mini utilises pressurised detection tubing and fixed stainless steel pipework connected to a precisely positioned nozzle to deliver the wet chemical agent onto the designated risk area.

The system has automatic detection but can also be operated manually (if a manual actuator option is fitted). A pressure monitoring switch can also be provided which can be used to integrate the system with fire alarms, local alarm units, electric and gas shut offs or other power supplies (to the appliance).

KitchenGuard Mini systems consist of a single 2 Litre cylinder utilising a single nozzle.

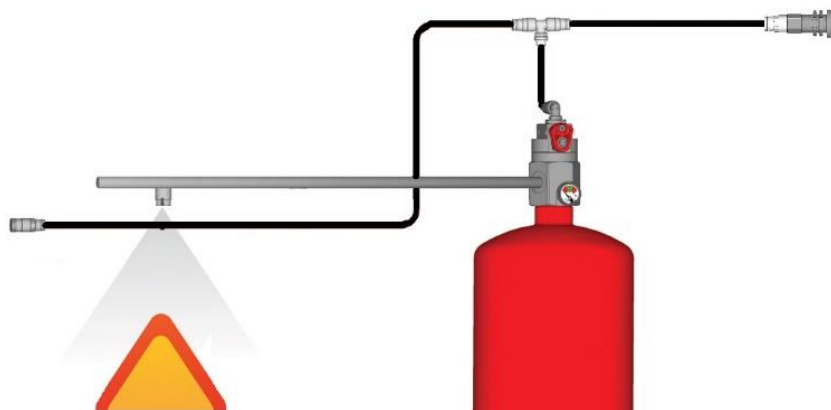
Each system is filled with 2 Litres of wet chemical agent and is pressurised to 12 Bar (@20°C). Pressurised detection tubing, connected to the cylinder valve, is routed in front or behind the filters and above the appliance across any extract ductwork. Small bore stainless steel discharge pipework is routed from the cylinder valve to a specially designed nozzle which is positioned to cover the appliance below.





Detection

The KitchenGuard Mini system uses a linear, specialised polymer detection tube that is pressurised to 12 Bar (@20°C) with dry nitrogen. When the tube is exposed to flame or heat, it bursts at the hottest point, releasing the pressure. This rapid depressurisation provides a pneumatic signal which causes the cylinder valve to open. The stored pressure inside the cylinder propels the wet chemical agent out of the cylinder through the discharge pipework network and out of the nozzle onto the protected appliance.



Supply

KitchenGuard Mini is installed and maintained by 'Approved Installers' who will have attended a training course conducted by the manufacturer. The course must be attended and completed before systems are supplied or can be installed by an Approved Installer. The training course covers the design, installation, servicing and maintenance of the system. The Approved Installer is issued with a copy of the latest revision of the system manual at the time of training. Handover documents detailing the instructions for system owners are also available.

Availability

KitchenGuard Mini is available from Approved Installers who have been trained by the manufacturer.

Maintenance

Maintenance of KitchenGuard Mini must only be completed by an Approved Installer.

Systems are subject to a basic service every 12 months, an extended service every 4 years and an overhaul every 8 years.



Component Description

KitchenGuard Mini Wet Chemical Agent – The extinguishing agent is used specifically for deep fat or F class type fires. The PH value is neutral at 7 and contains environmentally friendly, more than 99% biodegradable, bio-compatible surfactants. It is available in containers for refilling of KitchenGuard Mini modules when required.

Cylinder – Cylinders are supplied in one size, 2 Litres, and are pre-pressurised to 12 Bar (@20°C). The cylinders use simple and reliable stored pressure operation, i.e. the cylinder contains both the wet chemical agent and the propellant gas (nitrogen). There are no cartridges or other devices required for system activation.

Detection Tube – The KitchenGuard Mini detection tube is a specialised polymer designed to burst when there is a fire or high ambient temperature. The tube is UL Certified to UL 521 and is unaffected by dirt, dust, debris and oil.

Discharge Nozzles – KitchenGuard Mini nozzles are manufactured of stainless steel. There is just one nozzle type.

- FSN052 - 70° full cone nozzle: for the protection of domestic cooking appliances

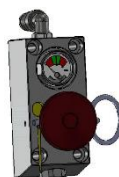
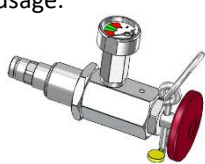
KitchenGuard Mini Nozzles have a nozzle protection disc fitted to prevent ingress of cooking grease/oil or other debris into the nozzle orifice.



End of Line Adaptor c/w gauge – The end of line adaptor c/w gauge acts as the point of pressurisation on the system and allows for simple visual pressure monitoring.



Manual Actuator – **OPTIONAL** - The manual actuator provides a quick and effective means of manually discharging the system. Fitment of a manual actuator is optional. The operator activates the system using the manual actuator by pulling out the safety pin and then pressing quickly and firmly onto the strike knob. Appropriate signage is supplied with each actuator showing the actions for usage.



Pressure Monitoring Gauge Switch – **OPTIONAL** – KitchenGuard Mini can be monitored by using a pressure monitoring gauge switch fitted to the system valve. These volt free contacts change state upon loss of pressure in the system and can be used to initiate a variety of safeguarding actions including alarm notification and shutdown of the appliances. They can be offered with either 1 or 2 switch contacts for Low Pressure monitoring only or for both Low Pressure AND Discharge monitoring.



Stainless Steel Pipework and Fittings - KitchenGuard uses small diameter 4mm I.D. pipework and compression fittings which help reduce overall installation time.



Engineering Specification

System Description

- The system shall be an automatic fire suppression system using a wet chemical agent suitable for oil / grease / fat fires.
- The system shall be capable of protecting domestic cooking equipment including burner ranges and induction hobs.
- The system shall be pre-engineered and have minimum and maximum guidelines tested by the manufacturer.
- The system shall be installed by approved installers who have attended the manufacturers training course.

Quality Control

- The manufacturer of the system shall have at least 40 years' experience of engineering and manufacturing fire and safety products used for extinguishing fires in cooking environments. The manufacturer shall be ISO 9001 registered.
- The manufacturer of the system shall hold an approval for a fire suppression system for larger commercial catering equipment such as LPS1223.
- The wet chemical agent shall be environmentally friendly with a neutral pH.

Components

- The system shall utilise a UL listed linear heat detector for fire detection.
- The system shall be stored pressure with a visual indication of system readiness.
- The system shall not require any external power or energy supply to function.

Delivery

- All system components shall be securely packaged to provide protection during shipment.

Environmental Conditions

- The system shall be capable of operating within a temperature range of 0°C to +60°C.

Manufacturer

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The manufacturer reserves the right to implement technical changes, improvements and amendments to KitchenGuard Mini systems. It is the responsibility of the Approved Installer to always consult the latest version of the system manual.