FIREGUARD GLOBAL LTD

K12 KITCHEN HOOD

WET CHEMICAL FIRE SUPPRESSION SYSTEM

NEW FEATURE ADDITIONS

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NEXGEN K12 NEW FEATURES

1. Continuous wire arrangement for holding fusible links.
2. Henny penny fryer added with protection from two positions.
3. Mechanical actuation unit can have up to 3 SPDT / DPDT switches.
4. Mechanical actuation unit is enclosed for grease protection.
5. Mechanical actuation unit has protection stoppers
6. Overlapping protection of kitchen equipment.
7. Hybrid system - mechanical detection to allow electrical activation of agent cylinder.
8. Enhanced system capacity-more number of cylinders in single actuation.
9. Multi cylinder connectivity using manifold connection.
10. Large options of pressure monitoring devices.
11. Choice of material for agent supply line.

FIRE GUARD
FIREGUARD GLOBAL LTD

BENEFITS TO NEW FEATURES

CHEF:

FULLY CUSTOMIZABLE SOLUTIONS FOR ALL TYPES OF OPERATIONAL NEEDS.

USER:

COST EFFECTIVE SOLUTIONS TO COVER ALL TYPES OF KITCHEN EQUIPMENT

- Lower material and equipment cost.
- Solution from small to very large kitchen equipment
- Fast and simple installation saves installation time and investment.
- Solution for all types of protection needs.
- Reliability with wide choice, to monitor system's operational health.
- Reduced downtime during maintenance and system restoration saves operational cost.

CBA:

CAN CATER TO LARGE RANGE OF SUPPRESSION REQUIREMENTS.

- Only two nozzle arrangement eliminates large inventory requirements.
- Offer fast and easy maintenance.
- Provide customized solution in terms of equipment sizes, equipment protection requirement and material.
- Provide cost effective solutions.

FEATURE-1

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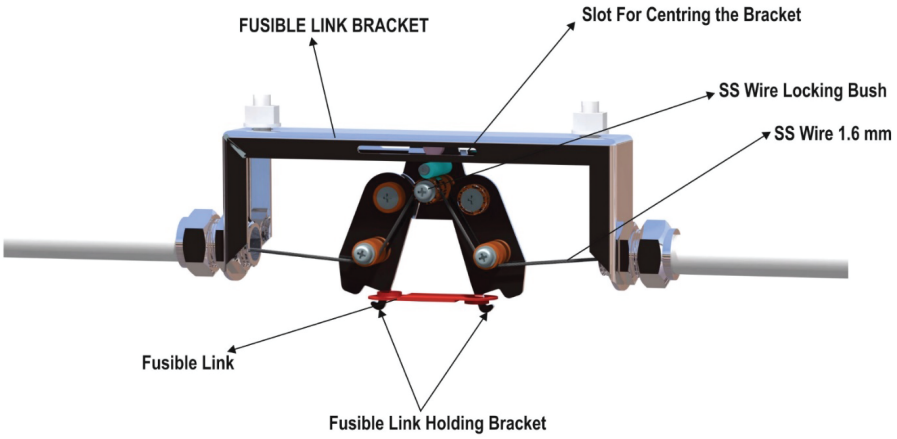
CONTINUOUS WIRE ARRANGEMENT FOR HOLDING FUSIBLE LINKS.

➤ **Allows a single length of detection wire to run from the MAU to End of line.**



➤ **Benifit**

- Allows faster installation and restoration of detection system due to easy replacement of fusible link.
- Easier and precise positioning of the fusible link during installation and replacement of fusible link during maintenance to be carried out every 6 months.

➤ **Special bracket keeps the fusible like holder upright.**

➤ **Benifit**

- Allows centering of the fusible link and keeping it horizontal above the heat source for optimum detection via heat absorption.
- Does not allow the holder to dislodge and fall in to the fire source to cause splashing of burning fuel.

FEATURE-2

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HENNY PENNY FRYER ADDED WITH PROTECTION FROM TWO POSITIONS.

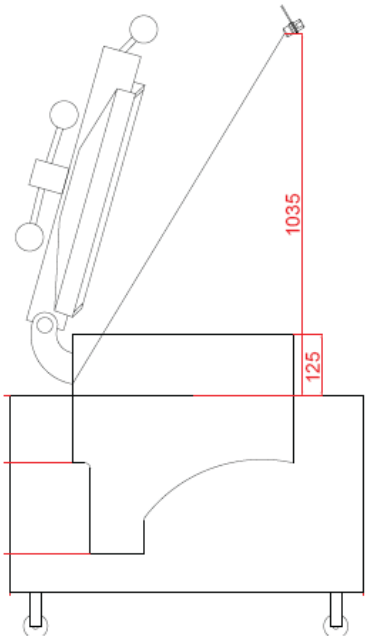
- **Model - Henny Penny Pressure Fryers model 500 and 600 models**
- **The henny penny appliances/fryers are deemed hazard-specific due to their setup, application, and/or extra capabilities that provide protection issues with traditional protection.**
- **Ceasefire recommends after extensive test and verification, applying the agent to the appliance using a certain nozzle position.**
- **Benifit**
  - Tried and tested fire suppression system for these specialized fryers.
  - Two positions of nozzles available to facilitate easy access to the fryer as per requirement of the chef and user.

FEATURE-1

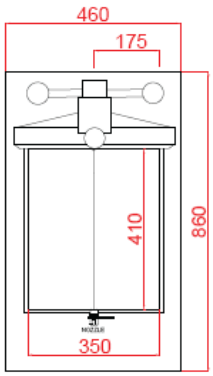
FIREGUARD GLOBAL LTD

HENNY PENNY FRYER ADDED WITH PROTECTION FROM TWO POSITIONS.

➤ **Henny Penny Fryer – Center-Offset Nozzle position**

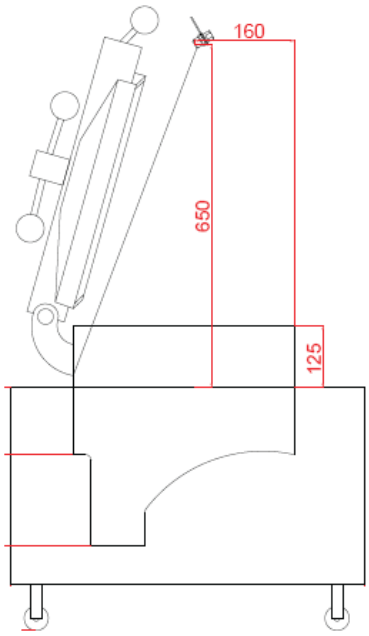


SIDE VIEW

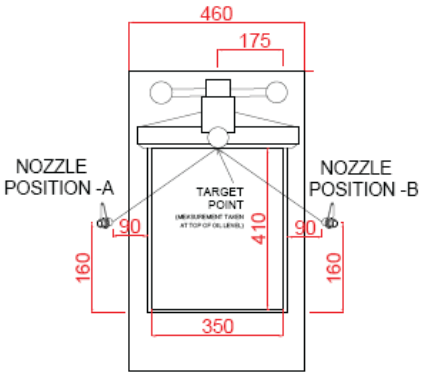


TOP VIEW

➤ **Henny Penny Fryer – Side-Offset Nozzle position**



SIDE VIEW



TOP VIEW

FEATURE-3

FIREGUARD GLOBAL LTD

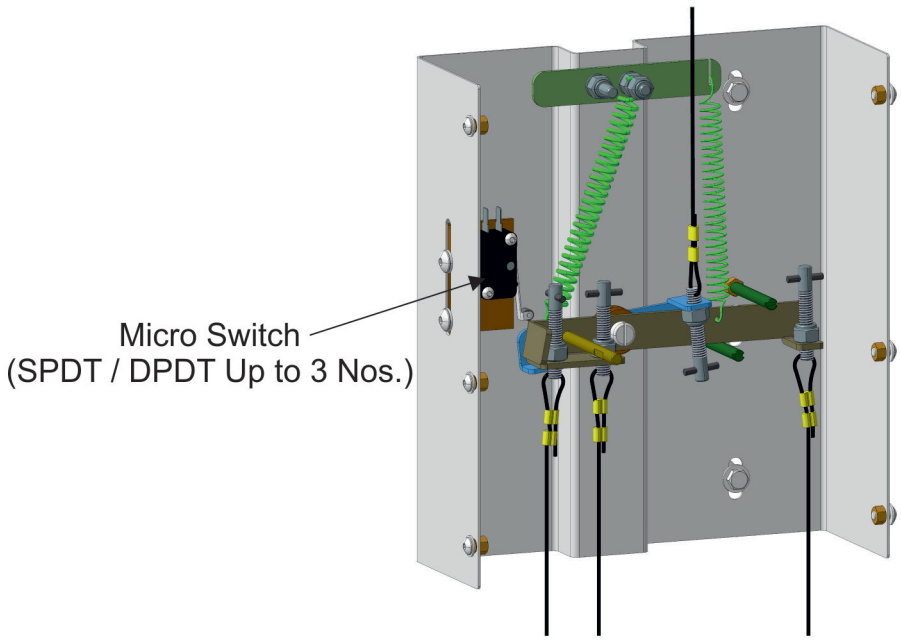
MECHANICAL ACTUATION UNIT CAN HAVE UPTO 3 SPDT / DPDT SWITCHES.

➤ **Mechanical Actuation Unit (MAU) can be equipped with up to three SPDT or DPDT microswitches to allow multiple third party integration to perform following functions.**

- Electric appliance shutdown
- Make up air shutdown
- Electric gas valve shutdown
- Shunt-breaker/relay
- Alarm initiation (Hooter/ Strobe/ FAS/ BMS etc.).
- Solenoid release (operate SOV and Gas shutoff valve)

➤ **Benifit**

- Eliminates requirement of additional devices and their cost while allowing multiple third party devices to be operated.



FEATURE-4

FIREGUARD GLOBAL LTD

MECHANICAL ACTUATION UNIT IS EN-CLOSED FOR GREASE PROTECTION.

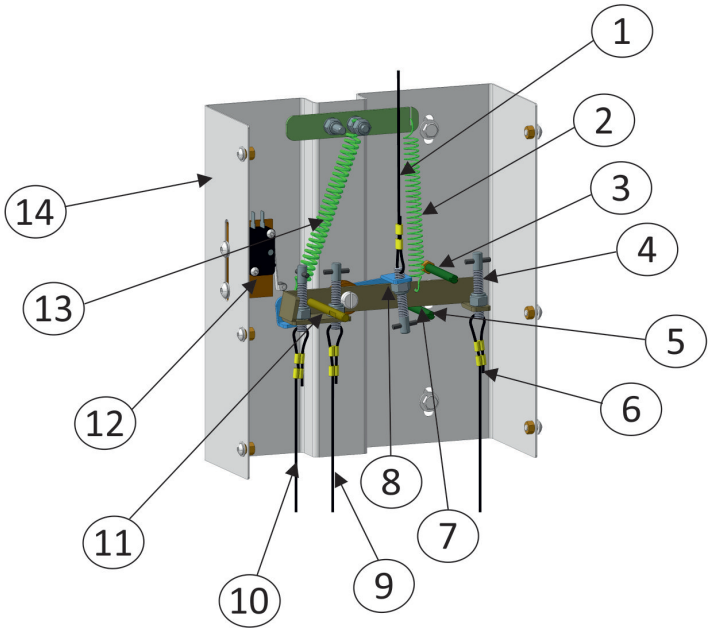
- **Mechanical actuation unit is closed from all sides.**
- **Benifit**
  - Protects internal devices of Mechanical Actuation unit from grease ingress and damage due to it.

FEATURE-5

FIREGUARD GLOBAL LTD

MECHANICAL ACTUATION UNIT HAS PROTECTION STOPPERS.

- **Mechanical actuation unit has two stoppers (Refer table SL No.3 and 5).**
- **Stopper pin 1(Sl3) is permanently fixed to prevent the upward movement of the manual actuation lever to protect spring (Sl13).**
- **Stopper pin 2(Sl5) is fixed to prevent the downward movement of the manual actuation lever to help installation and removed after commissioning.**



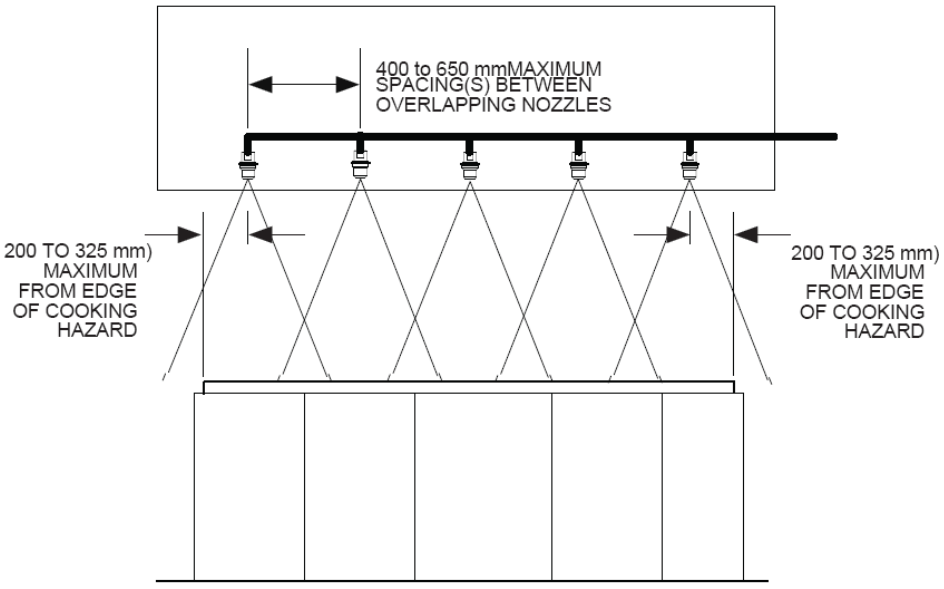
SR.No	PART DESCRIPTION
1	SS WIRE CONNECTING FUSIBLE LINK NETWORK
2	SS SPRING FOR MANUAL ACTUATION
3	STOPPER PIN 1 (FIXED)
4	TENSIONER NUT AND BOLT ASSEMBLY
5	STOPPER PIN 2 (TO BE REMOVED AFTER INSTALLATION)
6	SS WIRE CONNECTING FOR MANUAL PULL
7	SS LEVER FOR MANUAL ACTUATION
8	SS LEVER FOR AUTOMATIC ACTUATION
9	SS WIRE CONNECTION FOR VALVE ACTUATION UNIT
10	SS WIRE CONNECTION FOR GAS SHUT OFF VALVE
11	USED AND READY INDICATOR
12	MICRO SWITCH.(SPDT/DPDT Up to 3 Nos.)
13	SS SPRING FOR AUTOMATIC ACTIVATION
14	BRACKET FOR MECHANICAL ACTIVATION UNIT.

FEATURE-6

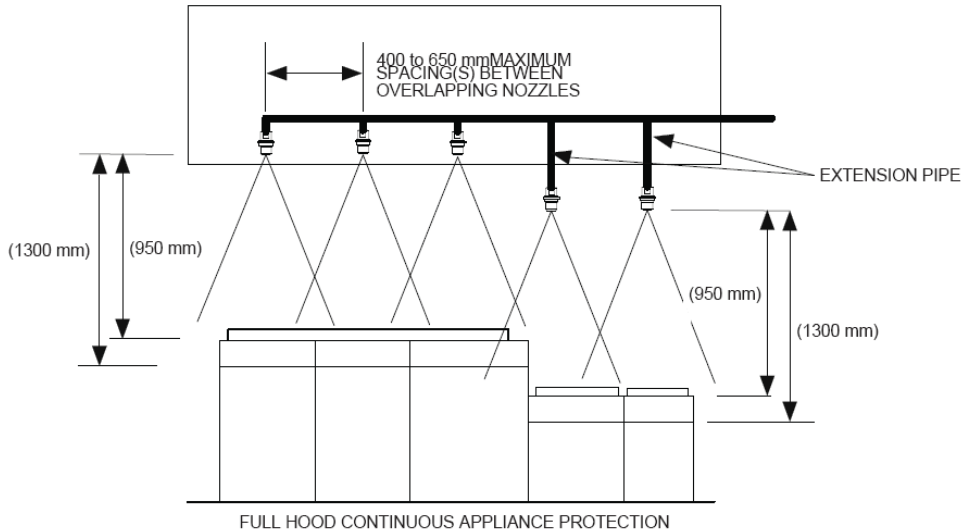
FIREGUARD GLOBAL LTD

OVERLAPPING PROTECTION OF KITCHEN EQUIPMENT.

- **Allows continuous protection of all kitchen equipment under the extractor hood using a singular type of 40 degree nozzle.**
- **Benifit**
  - Gives complete control over kitchen operation to chef's requirements by allowing interchangeability of kitchen equipment or resetting of equipment arrangement as per cooking load.



FULL HOOD CONTINUOUS APPLIANCE PROTECTION



FULL HOOD CONTINUOUS APPLIANCE PROTECTION

FEATURE-7

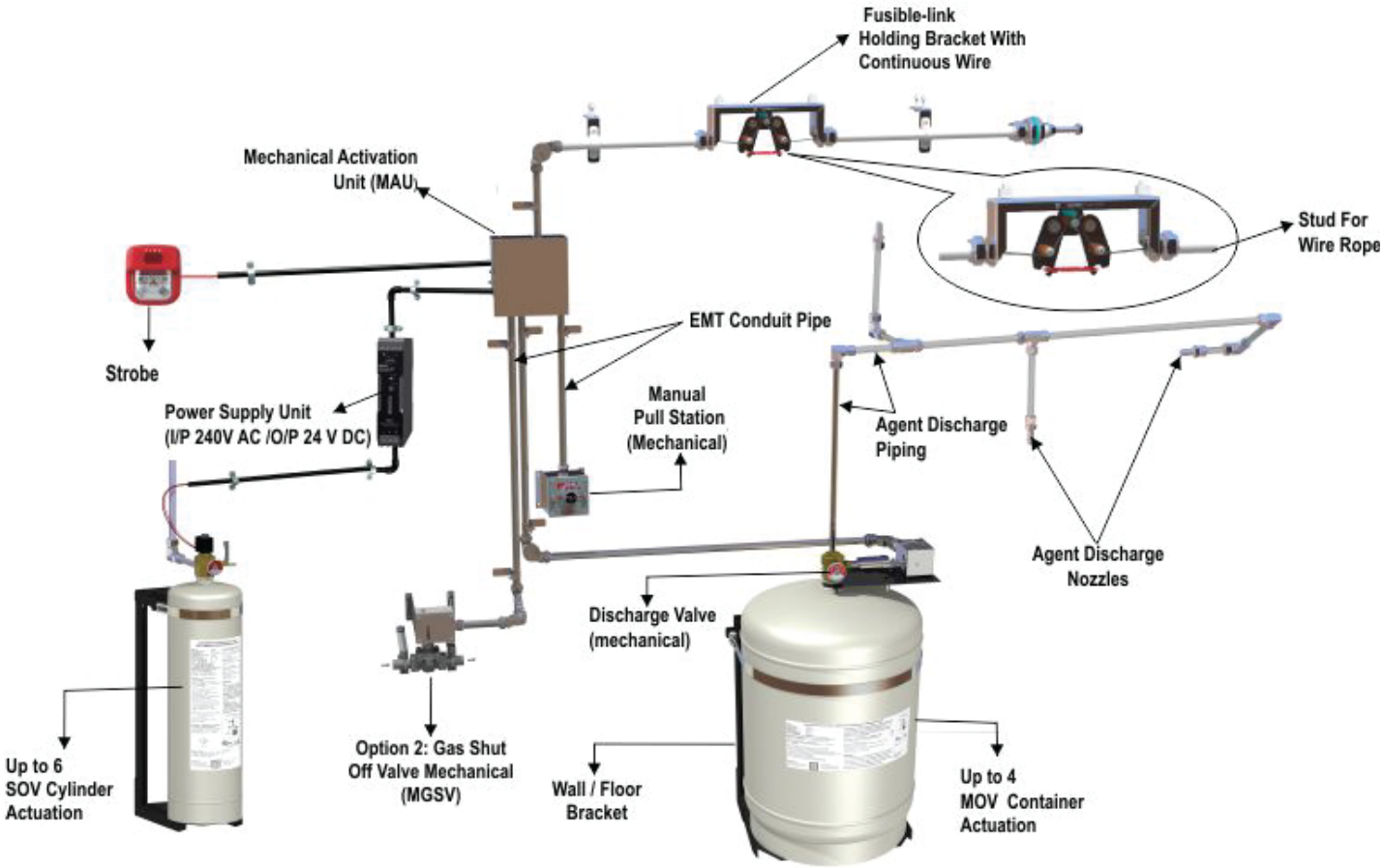
FIREGUARD GLOBAL LTD

HYBRID SYSTEM-MECHANICAL DETECTION TO ALLOW ELECTRICAL ACTIVATION OF AGENT CYLINDER.

➤ **Allows activation of up to 6 Solenoid Activated Valve (SOV) via microswitches in MAU.**

➤ **Benifit**

- Greater agent requirement to full fill coverage of larger hoods or excess number of nozzles (up to 120 nozzles system in a practical scenario).
- Single detection system can cater to large number of equipment.

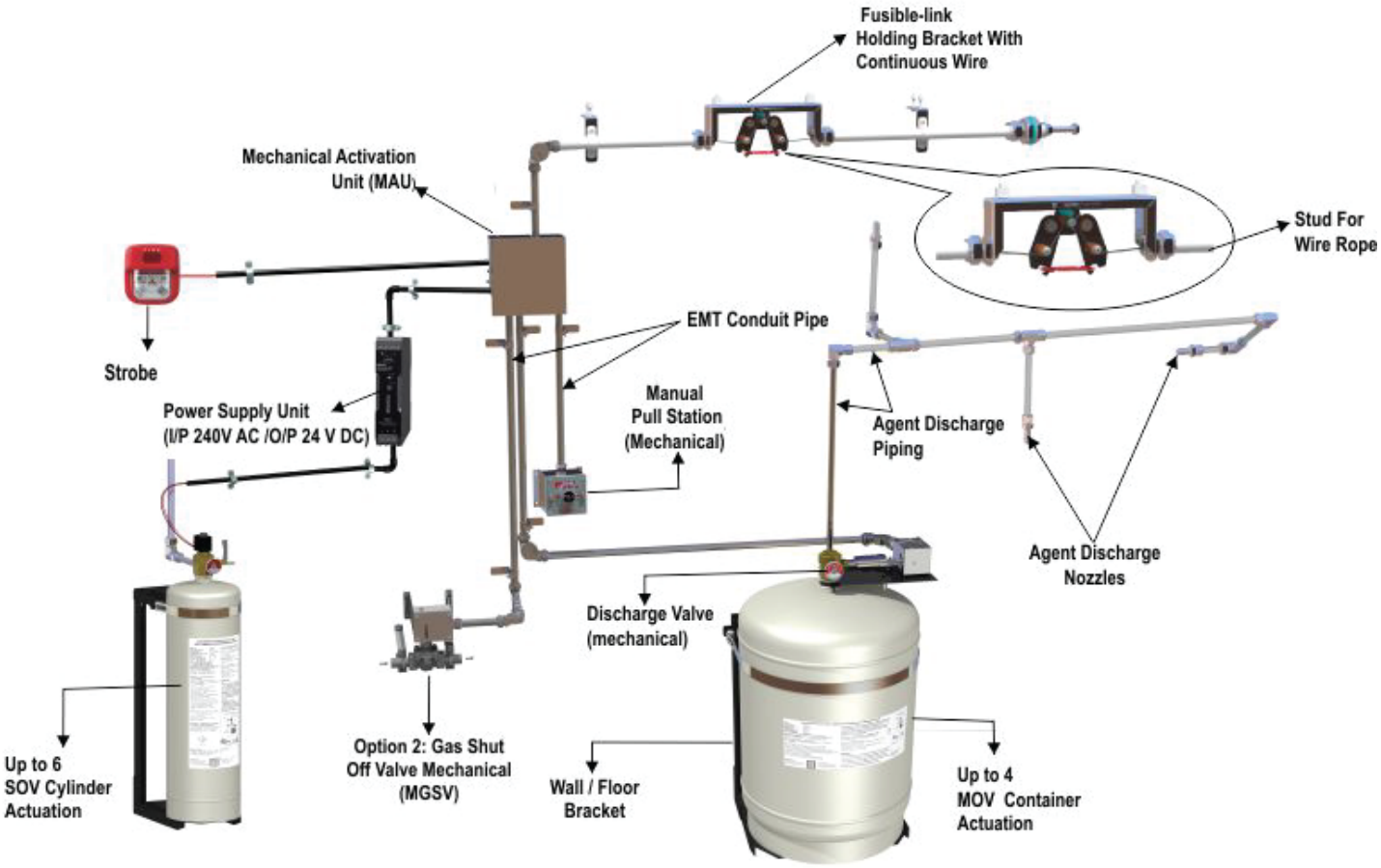


FEATURE-8

FIREGUARD GLOBAL LTD

ENHANCED MECHANICAL SYSTEM.

- **Allows activation of up to 4 Mechanical Actuated Valves (MOV) and up to 6 Solenoid Activation Valve (SOV) simultaneously .**
- **Benifit**
  - Greater agent requirement to full fill coverage of larger hoods or excess number of nozzles.
  - Single detection system can cater to large number of equipment.

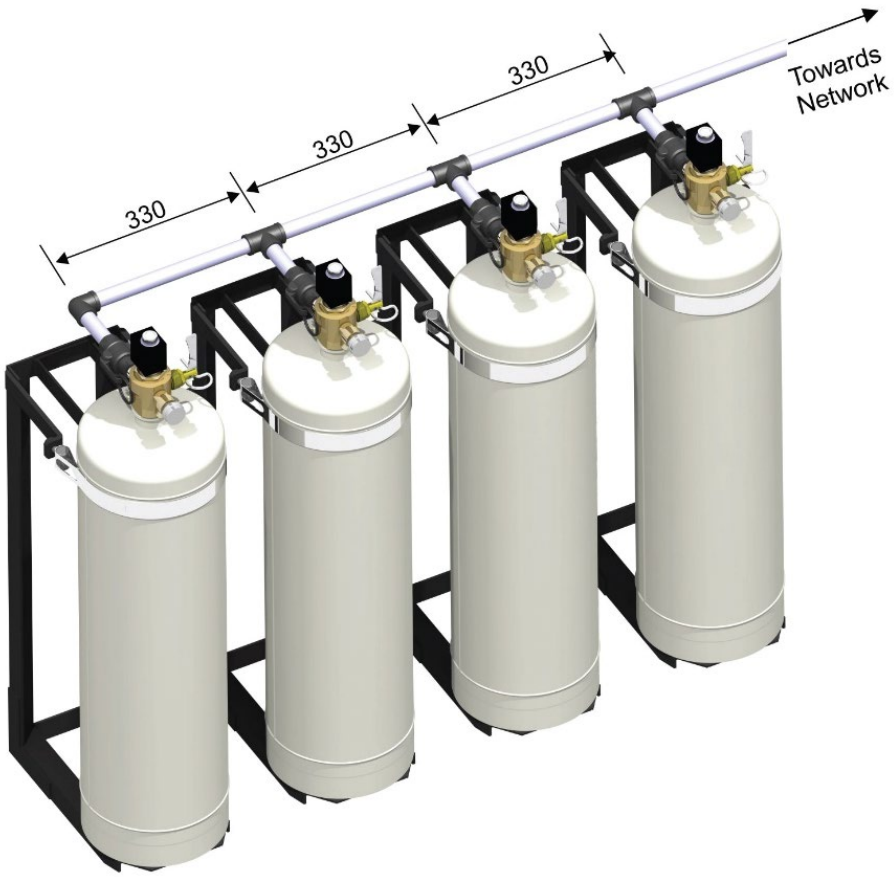


FEATURE-9

FIREGUARD GLOBAL LTD

MULTI CYLINDER CONNECTIVITY USING MANIFOLD CONNECTION.

- **Allows multiple cylinders of container sizes of 14L, 18L, 22L, 27L and 32L capacity to be connected via single supply line. Eliminates the need for multiple supply line runs from agent cylinder to the hood.**
- **Benifit**
  - Reduces the time, pipping and labour cost for installing multiple supply line.

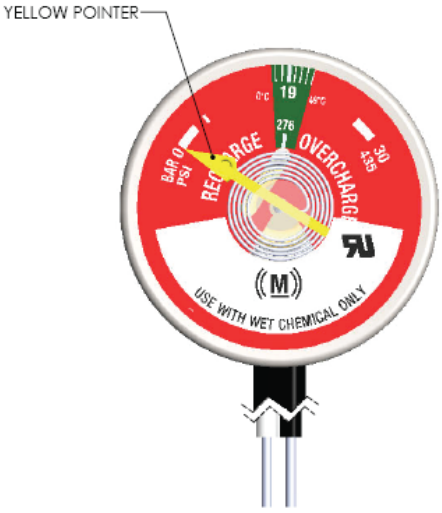


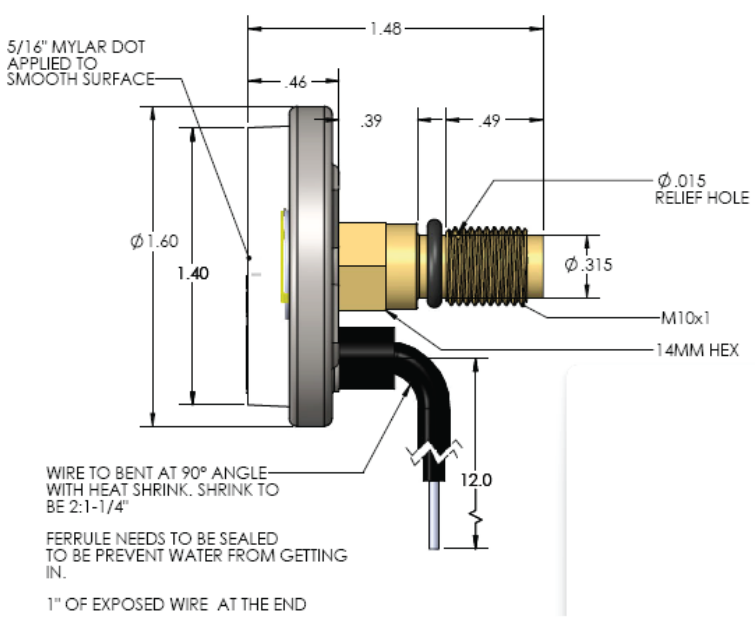
FEATURE-10

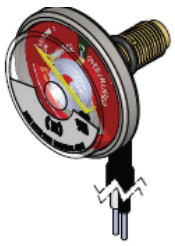
FIREGUARD GLOBAL LTD

LARGE OPTIONS OF PRESSURE MONITORING DEVICES.

- **Allows monitoring of real time system health via various pressure devices. An unique feature that presents a solution true only in self propelled stored pressure devices.**
- **Options available: Pressure Gauge, Pressure Gauge Switch and Pressure Switch.**
- **Benifit**
  - Real time monitoring increases system reliability.
  - Pressure Gauge Switch allows visual and automatic monitoring of system health 24/7.







FEATURE-11

FIREGUARD GLOBAL LTD

CHOICE OF MATERIAL FOR AGENT SUPPLY LINE.

➤ **The Extinguishing Agent is delivered from the Extinguishing Agent container to each discharge nozzle through the piping. The discharge pipe used in the system is made of schedule 10/10S black iron, chrome-plated, or stainless-steel material. The system is compatible with the following types of pipes:**

a. Stainless-steel Schedule 10/10S or Black iron, chrome-plated Schedule 10/10S threaded piping and fittings with dimensions of 3/8-inch (10NB) and ½-inch (15NB) that meet ASTM A312, A358, A778, A53, A106, and API 5L ASME/ANSI B36.19, B36.10 standards. The threaded pipes and fittings are utilized in the installation of systems with the multiple agent containers to create piping networks and piping manifolds.

b. Stainless-steel Pipe/tubes with 1mm wall thickness of outer diameter of 16mm, 10mm and 6mm and compression fittings /connectors are utilized in the installation of system with single agent containers to create piping networks

➤ **Benifit**

- Use pipe types as per availability.
- Cost effective solutions as per preferred design.
- Use of compression or threaded fittings as per site conditions.