

# PAFSS<sup>®</sup>

PNEUMATICALLY ACTUATED FIRE SUPPRESSION SYSTEMS



Automatic Fixed Fire  
Extinguishing Systems  
for small enclosures  
and microenvironments  
Issue 2

**Jactone**  
CONFIDENCE *through* QUALITY

• U.K. MANUFACTURER • 

## Fire Suppression Systems



### Why choose PAFSS

There are many situations where dealing with a fire at source will both minimise the damage of valuable assets by extinguishing the fire early and before it more fully develops, enabling a quicker recovery of operations.

The range of Jactone PAFSS builds on years of experience and technical knowledge acquired in the fire industry.

Jactone PAFSS can cover a range of applications and can be tailored to customer requirements, but the following common features apply:

- ✓ Simple to install and cost effective to maintain.
- ✓ Superbly engineered specialist valves and pressure vessel(s) containing an appropriately selected extinguishing agent.
- ✓ Linear heat and flame detection allows for an unlimited number of detection points.
- ✓ Flexible detection tubing can be located adjacent to the identified fire risk areas, resulting in fast action.
- ✓ Detection tube remains unaffected by dirt, dust, debris and oil.
- ✓ Failsafe by design principles and simplicity.
- ✓ Totally self-contained. No need for any external energy or power supply for detection or actuation and remaining operational during power interruption.
- ✓ Reliable discharge – Low pressure systems are set to 15 bar working pressure.
- ✓ All discharge pipework (Indirect systems) is stainless steel – vital in potentially corrosive environments.
- ✓ Reliable, vibration resistant push-fit detection tube fittings – for enhanced system leak tightness.

### Unique Features Include:

- ✓ **Innovative Technology**
- ✓ **Compact Valves**
- ✓ **Integrated Functions**
  - Isolation Valves
  - Reed Switches
    - Valve position monitoring
    - Discharge confirmation
- ✓ **System Monitoring**
  - Low pressure
  - Discharge confirmation
- ✓ **Reduced possibility of damage and leakage**

### Principles of Operation

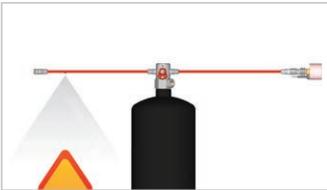
The heart of any Jactone PAFSS is the special detection tubing which acts as a linear heat and flame detector. The pressurised tubing is completely flexible, tough enough to withstand the harshest of conditions and can be run throughout the installation adjacent to identified fire risks. Upon flame or heat impingement, the tube ruptures at the hot spot and by depressurisation the cylinder valve is activated to operate the suppression system. No external energy or any power is needed for detection or actuation.



## Fire Suppression Systems

### System Selection

#### Direct Systems

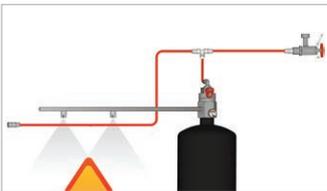


Jactone Direct PAFSS are efficient and simple self-activating systems for small enclosed hazard areas. They are failsafe against malfunction.

Upon flame impingement or heat, the pressurised detection tube (which is connected to a cylinder containing the suppression agent) ruptures with a burst at the hottest point. The agent is then discharged through the burst hole directly at the heart of the fire.

Direct systems are available in low pressure and high pressure format, depending on the most appropriate extinguishant selected.

#### Indirect Systems



Jactone Indirect PAFSS are efficient and simple self-activating systems for larger enclosed and even open hazard areas.

Upon flame impingement or heat, the pressurised detection tube will burst and by depressurisation will activate the cylinder valve to open. The agent is then released through separate pipework and nozzles which are aiming at the hazard area.

Indirect systems are available in low pressure and high pressure format, depending on the most appropriate extinguishant selected.

### Extinguishants

It is clear that specific risks require specific extinguishing materials. Possible materials that can be used in Jactone PAFSS include :

- ✓ Novec 1230
- ✓ CO2
- ✓ ABC Powder
- ✓ BC Powder
- ✓ AFFF (Foam)
- ✓ Other extinguishants available on request

 Jactone PAFSS complies with the requirements of the Pressure Equipment Directive (P.E.D. - 97/23/EC) and consequently carries the CE mark.

### Applications

#### Electrical Enclosures

Electrical distribution cabinets, process control cabinets, communication racks.



#### Material Storage

Fume cupboards, chemical stores, flammable material stores.



#### Industrial Equipment

Fork lifts, plant / machinery engine protection, industrial process equipment.



#### CNC Machines (automated operations)

Machining centres, injection moulding machines, robotic welding machines.



#### Power Generation

Mobile electrical generators, wind turbines.



#### Transport

Buses, boats, trains - engine compartments



# PAFSS®

PNEUMATICALLY ACTUATED FIRE SUPPRESSION SYSTEMS

- > Jactone PAFSS is manufactured in the UK 
- > PAFSS - On guard 24 hours a day, 365 days a year



Call us on  
**+44 (0)1902 357777**



Email us at  
**pafss@jactone.com**



Visit us at  
**www.jactone.com**



Fax us at  
**+44 (0)1902 357711**

JACTONE PRODUCTS LIMITED  
Springvale Business Park  
Springvale Avenue  
Bilston  
West Midlands  
WV14 0QL  
UNITED KINGDOM



Certificate No. FM 25049