We set the standard in safety

Direct fire suppression system

Reliable protection to fire hazards in buses and coaches

Ardent®

Previously known as **Forman**

Ardent's direct fire suppression system provides reliable protection to fire hazards in buses and coaches, including zero emission vehicles and diesel ICE engine compartments.

The system combines reliable, heat-sensitive tubing for rapid fire detection with a dry chemical suppression agent that deploys and suppresses fire in seconds, offering complete protection in every area of the vehicle.

What does our direct fire suppression system do?

Designed for simple installation and maintenance, our systems are supported by a team of fully trained field engineers throughout the UK to provide support, advice, and training as required.

Increased reliability
Precision engineered to minimise the risk of leaks and loss of pressure, this is the most reliable pressurised system on the market. Its high-grade detection tubing is tested for effectiveness in the most extreme conditions to ensure gas leakage is kept to a minimum. In addition, a three-piece crimp on the end-of-line ensures an effective seal. The pressure gauge is easily tested at service without the need to have it removed from the tank.

Expert support
Our team is on hand before, during, and after installation to help with any concerns you might have.

Enhanced suppression capabilities
Combining high-pressure with a powerful dry agent, our system suppresses a fire in seconds.

Reduced downtime
The system can be installed into new vehicles or retrofit in a matter of hours, offering a simple maintenance procedure.

Ideal for zero emission vehicles
The detection tubing is easily routed around the many fire hazards in a ZEV and, as a pneumatic system, it can still deploy in the event of a power failure.

How does it work?

The direct fire suppression system integrates with our V-IS Information System to enable drivers to receive clear, concise updates about the status of the fire suppression system. The V-IS can play warnings and alerts to the cab and saloon through independent speaker outputs, including low pressure and system deployment warnings.

The direct fire suppression system is fully pneumatic. This means it does not need a power supply to detect or suppress a fire.

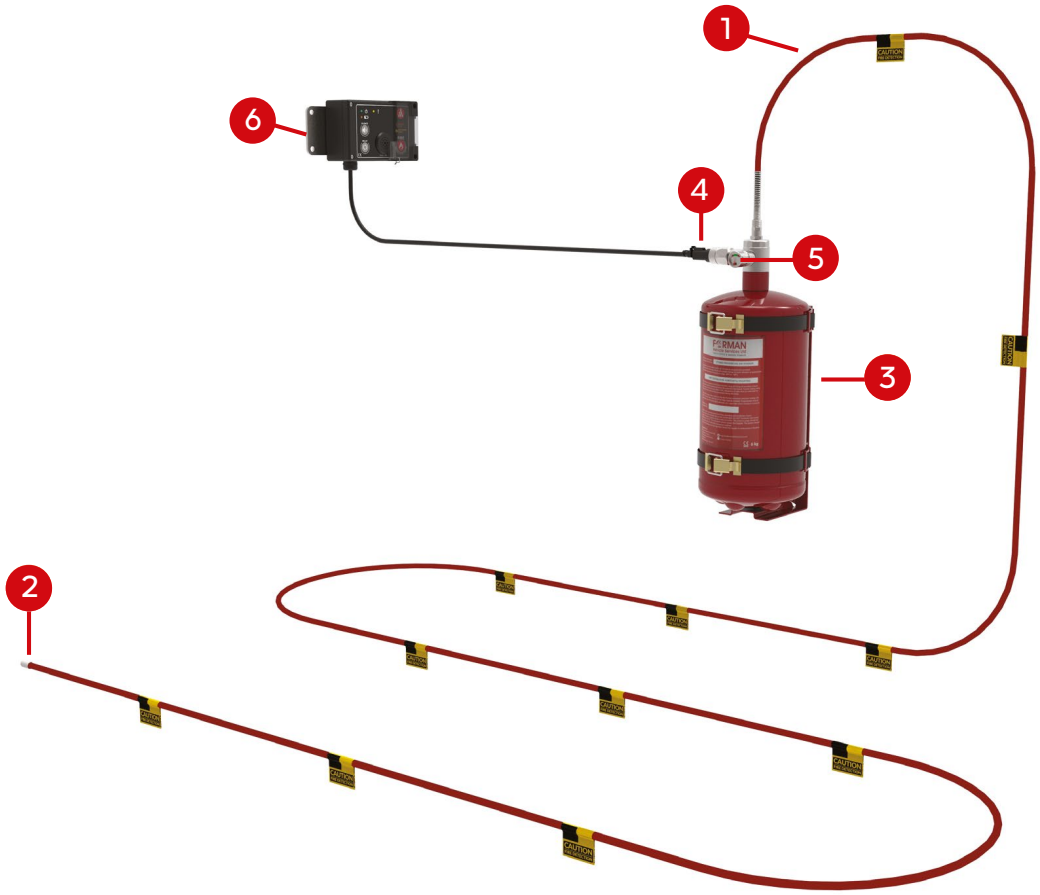
It uses a pressurised, heat-sensitive detection tubing that is routed around all the fire hazards in the vehicle. This might be the engine compartment of a diesel bus, or the batteries in an electric vehicle. When exposed to a fire, the tube ruptures, causing the pressure to drop. This opens the cylinder valve on the tank and discharges the agent.

The agent – ABC dry chemical powder – travels through the tube and out of the rupture, directly targeting the fire.

The system offers an optional output to interface with the vehicle or with the vehicle information system.



Example layout



1. Flexible detection tubing
2. Detection tube end-of-line
3. Dry chemical agent tank and bracket
4. Pressure monitoring switch
5. Pressure gauge
6. Output to interface with vehicle or VMMS (optional)

Key technical specification

Fire detection method	Linear heat detection tube
Fire detection temperature	110°C
Suppression agent	Dry chemical ABC powder
Agent tank capacity	2 kg, 4 kg, 6 kg
Agent tank construction	Mild Steel with red corrosion resistant paint
Discharge time	8 to 14 seconds
Canister operating temperature range	-30 °C to +60 °C
Bump (EN 60068-2-27)	50g
Shock (EN 60068-2-27)	40g
Vibration (EN 60068-2-6)	5 – 200 Hz, 10g , amplitude ≤ ± 15 mm 200 – 500 Hz, 5g

For the complete technical specification and operating instructions, please get in touch.

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For help protecting vehicles and people against the risk of fire around the clock, call us on +44 (0) 1423 326 740

Ardent®

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