



The Advantage of FiWaGuard System



FiWaGuard Sensor Tubing is dual purpose for fire protection and for Pneumatic activation of extinguishing systems.

The heart of the FiWaGuard product range is our FiWaGuard Sensor Tubing which acts as a linear heat and flame detector. The pressurized sensor tubing is completely flexible and can be run throughout the installation to follow the hazard risk areas. Upon flame impingement or heat the tube ruptures at the hot spot and by depressurization the cylinder valve is activated to operate the extinguishing system.

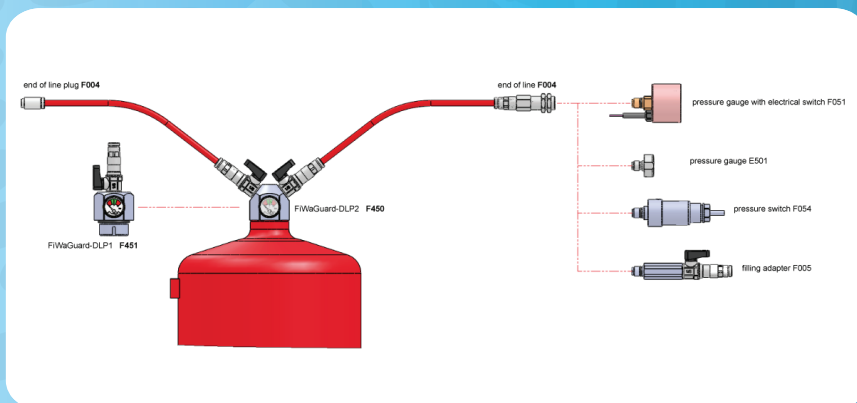
Choosing the right Agent



FiwaGuard systems as compatibly with most commercially available fire suppression agents:

- 3M Novec 1230 (ULI, ULC. FM Approved)
- FM200
- Dry Chemical
- Dry Chemical foam

Direct Systems



The Direct release system utilizes the tubing as both fire detection and fire suppressant delivery system. The portion of the tube nearest to the hottest point of the fire ruptures, forming an effective discharge "nozzle". The pressure drop in the releases the entire content of the cylinder through this nozzle.

Directly operating FiWaGuard Valves

A most efficient as a self-activating system for small enclosed hazard areas. Failsafe against malfunction. Upon flame impingement or heat the pressurized sensor tube which is connected to a cylinder containing the suppression agent ruptures with a burst at the hottest point. The agent is then discharge through the burst hole directly to the heart of the fire. Flexible and fast acting.

Direct Low Pressure with integrated Ball Valve

Directly operating low pressure valve of the FiWaGuard product range with two outlets for FiWaGuard sensor tubes and integrated ball valve.

Direct High Pressure

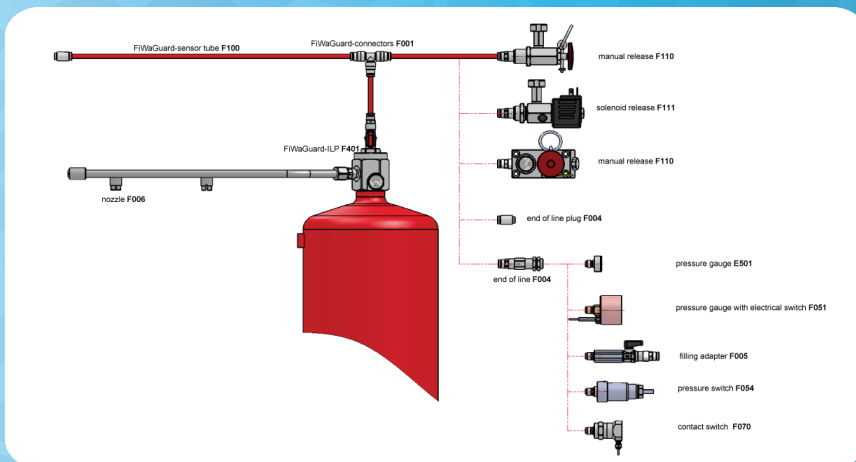
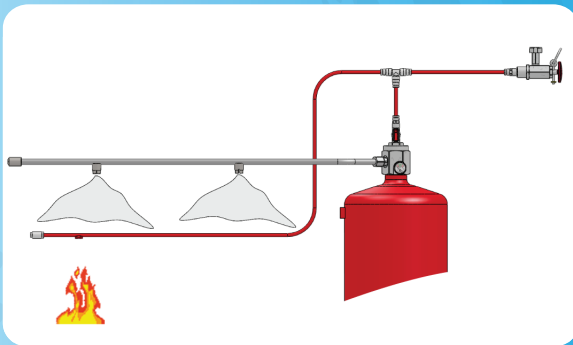
Directly operating high pressure valve of FiWaGuard product range and integrated ball valve.

Direct High Pressure

Directly operating high pressure valve of FiWaGuard product range and integrated ball valve. Small size.

For small cylinders with screw-in threads.

Indirect Systems



With the Indirect release system, the Tubing is used only as detection device. The fire suppression agent is delivered via copper tubing, stainless steel tubing or braided hose. Once the tube "burst", the suppressant is discharge through strategically placed nozzles within the protected enclosure.

Indirectly operating FiWiGuard valves

Most efficient and a self-activated system for larger and even open hazard areas. Upon impingement or heat the pressurized sensor tube which again is connected to a cylinder will burst and by depressurization will activate the cylinder valve to open. The agent then is released through separate pipe work and nozzles which are aiming at the hazard area. Flexible and fast acting.

Indirect Low Pressure with integrated Ball Valve

Indirectly operating low pressure valve of the FiWaGuard product range with integrated ball valve.

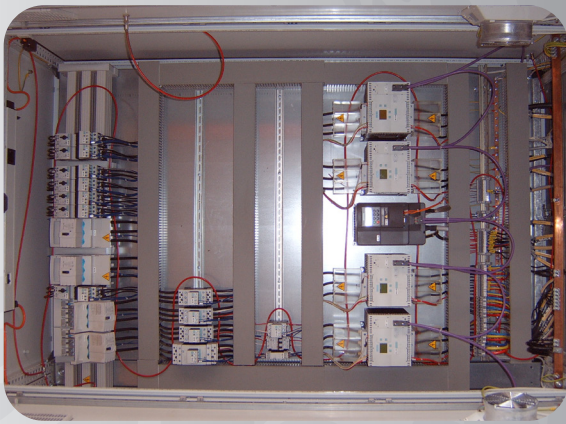
Indirect High Pressure with integrated Ball Valve

Indirectly operating high pressure valve of the FiWaGuard product range with integrated ball valve.

Product Range



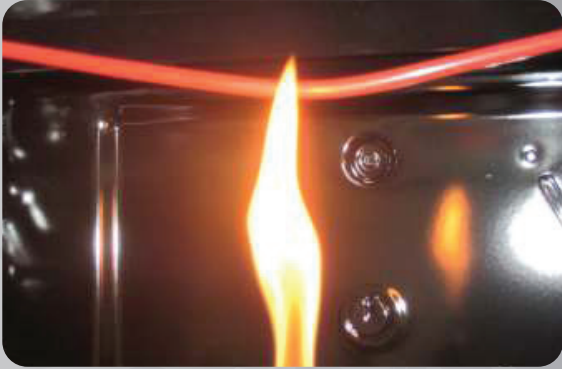
Typical Applications



The purpose of FiwaGuard small extinguishing systems is to detect a developing fire, to extinguish and prevent the fire spreading to the immediate surroundings. Small extinguishing installations are used in several areas, for example:

- Laboratory facilities
- Ships and boats
- Construction machines
- Telecommunication installation
- Server room / server racks
- Data processing centres / IT installations
- Machine tools / mechanical equipment
- Grinder, miller and electrical discharge machines
- Paternoster racks
- Switchboards
- Laboratory hoods
- Paint finish systems
- Underground mining machines
- Tour buses
- Rolling stock
- Agriculture and silviculture engines
- Wind energy plants

Sensor Tube



- Used in conjunction with FiWaGuard sensor tube, the system meets ISO16750-3:2007 standard.
- Easy and quick installation and removal of the sensor tube FiWaGuard by using tailor made tools.
- Nickel plated surface.
- Various models available.

FiWaGuard sensor tubes consist of high-tech plastic and have been developed especially for the use in automatic fire extinguishing systems. After a proper installation according to the instructions the sensor tube has to be pressurized with the prescribed operating pressure. Due to the thermal material characteristics and the internal overpressure the sensor tube bursts at direct flame or at a strong increase in temperature and operates as a reliable detector in case of fire. The material characteristics, the internal overpressure and the rate of increase in temperature are significant factors for the response behaviour.

Basically the sensor tube should be installed in the area of risk such, that it should be activated always before the adjacent components fail. When using particularly thin inflammable materials for the delimitation of objects, where necessary, the effectiveness of the sensor tube has to be proved by a test.

ILP Range



ILP

- High flow capacity.
- No pressure drop across the sensor tube during discharge.
- Integrated ball valve.
- Integrated position control of the ball valve: open/closed.
- Integrated position control for ball valve: open.

DLP Range



DLP

- Option for 2 tube connections.
- Integrated ball valve and position control.
- Position control: open/closed.



For further details please contact us on:

Tel: 0027 11 493 4864

Fax: 0027 11 252 5685

Email: trackfire@mweb.co.za

5 Hay Street, Booysens, Johannesburg, 2190

P.O. Box 38030, Booysens, Johannesburg, 2016