

FIXED EXTINGUISHING SYSTEM with FLEXIBLE HOSE DETECTION

FIRE PROTECTION

COMPLETE AND AUTONOMOUS PROTECTION



SIEX allows adapting their automatic extinguishing equipment to the standalone pneumatic detection and release mechanism via a flexible hose. The device is totally independent, and can work without electricity or fire detection panel: It is, in other words, the ideal solution for small enclosures or high-value assets.

The detection tube is connected either directly to the SIEX cylinder valve or indirectly throughout the protected hazard. It is simple and effective to operate: As a flexible pressurized hose, it breaks with the high temperature of the fire in the area closest to the seat of the fire.

This thermal detection mechanism is very reliable thanks to its simplicity. It allows releasing the agent on the exact hazard point in the initial stages of the fire, without allowing it to spread or damage other parts.

It can be installed in two configuration schemes: For INDIRECT EXTINGUISHING, the tube is used as detector, and for DIRECT EXTINGUISHING, whereby the tube works simultaneously as detector and agent discharge means.

Its simplicity, low cost and effectiveness make it the ideal choice for small or hard-to-access hazards, or hazards with high-value equipment or components such as: electrical panels, vehicles, industrial machinery, engines, etc.

UNBEATABLE ADAPTABILITY BENEFITS

- SPACE. Both the cylinder and the detector tube can be placed in the required position. It protects the most varied structures or objects, ensuring IMMEDIATE DETECTION. It can be installed in small spaces which other detection systems simply do not reach.
- DISCHARGE. SIEX units with detection tube act directly in small enclosures, making it the most economical and simple configuration. For larger spaces, it can be installed as the detection mans that indirectly activates agent discharge through nozzles.
- HAZARD. Suitable for any kind of hazard due to the wider range of systems and agents available on the market: SIEX-HCTM, SIEX-CO₂TM, INERT-SIEXTM, SIEXTM IND, SIEXTM TOTAL K and SIEX-NCTM 1230.



ECONOMY

The SIEX systems fitted with detection tube are cost-effective and simple to operate:

- FEWER COMPONENTS: it does not require a fire panel or detectors (for direct extinguishing, not even nozzles or pipes).
- EASY TO INSTALL: quick to set up, reduces handling, connections and assembly work. Required training is minimal.

It is advantageous both in terms of performance and for people involved: streamlines installation and reduces work of the installer, providing immediate detection that alerts users, quickly extinguishes fire to minimize damage and facilitates getting back to normal, without cleaning or downtimes that adversely affect the business.

DOUBLE FUNCTION

DIRECT EXTINGUISHING:

Designed to act on the fire without pipes and nozzles. It is especially suitable for protecting small hazards in closed areas. For DIRECT extinguishing, the tube is used as detector and agent discharge method. It is ideal for small volumes where installing pipes or conventional detection means is not possible.

The temperature rise breaks the tube at the hottest point, closest to the breakout, triggering discharge of the extinguishing agent in the seat of the fire.

The standard system consists of: cylinder, valve (with a pressure switch port), fixing hardware, end of line with a pressure gauge and detection tube.

INDIRECT EXTINGUISHING:

It is generally used to cover larger risks. Given the high effectiveness of the pipe in heat spots from the fire, it is used in these cases as a heat sensor that activates the cylinder valve pneumatically and independently. It thus allows for the agent to be released through the pipes and nozzles independently of external electrical detection systems. It just needs the heat of the fire for operation. Heat ruptures the tube closest to the seat of the fire, causing depressurization that opens the valve and triggers discharge.

A standard set-up includes: cylinder, valve (with a pressure switch and pressure gauge port), fixing hardware, end of line with a pressure gauge or manual release, detection tube and nozzles. This system can be released automatically (pipe) or manually (operators).

COMPONENTS

VALVES:

There are two different brass valves, depending on the system used.

For direct extinguishing, bottles shall be equipped with an RGS-MAM-02 valve or an 12-3FD valve should indirect extinguishing be required. Both have a burst disc.

TUBE:

Breaks when temperature reaches a certain value. It should always be pressurized in direct detection systems.

You can protect lengths of up to 25 metres, both in direct and indirect setups.

PRESSURE SWITCH:

It connects to the cylinder valve and alerts the fire panel in the event of discharge or changes in internal pressure. It is installed dry and can be easily handled with the cylinders pressurized.

APPLICATIONS:

ENGINES AND INDUSTRIAL MACHINERY

Production downtime due to breakdown of a machine, engine or vehicle is costly and problematic, especially if it is due to fires that, if not controlled in time, may affect other devices, the rest of a line or materials and products.

Risk factors are very different: from power failures, mechanical problems, overheating, friction, dust and dirt, improper maintenance and repair work with sparking, among others.

ATMs

Usually located on the outside of banks and savings banks, these are high-value machines whose safety is of paramount importance for these companies. Its internal mechanisms, along with continued 24/365 operation pose a risk which may involve a high probability of fire.

DPCS AND ELECTRICAL PANELS

Protection of both is a top priority. DPCs store an organization's information and documents and electrical panels power various equipment.

Both are characterized by being located in cabinets, usually in rooms dedicated to these functions.

They pose a significant risk since they work with electrical connections and concentrate energy in densely occupied spaces: Overheating, overloads and short-circuits are common fire causes. These need to be considered for protection and to prevent spreading.

CNC MACHINERY

The detection tube provides ideal protection for this type of equipment exposed to overheating, sparks, etc.

INDUSTRIAL KITCHENS

Perfect for the protection of industrial kitchens, especially in those that have interchangeable cooking elements.

LABORATORY FUME HOODS

The existence of laboratory equipment, usually hot and emitting fumes and vapors in these small enclosures, makes this detection system highly attractive.







EQUIPMENT ACCORDING TO WORKING PRESSURE:

HIGH PRESSURE:

ACCORDING It is suitable for risks requiring inert gases or CO₂, since these agents work at high pressures, above other systems, offering differentiating features. CO₂ is suitable for direct or indirect extinguishing as required.

Inert gases, in turn, are used for direct extinguishing. The most common is the IG-01 agent (argon, Ar).

Among its advantages, the high pressure stores a much higher amount of agent and can thus protect the same hazards with less storage volume.

Capacity (L)

	DIRECT EXTINGUISHING	INDIRECT EXTINGUISHING
SIEX-CO₂™	3 / 6.7 / 13.4	6.7 / 13.4 / 26.8 / 40.2/ 67
INERT-SIEX™ 01 (ARGON)	3 / 6.7 / 13.4	6.7 / 13.4 / 26.8 / 40.2/ 67 / 80 /140
SIEX-HC™ 227	3 / 6.7	3 / 6.7 / 13.4
SIEX-HC™ 125	3 / 6.7 / 13.4	3 / 6.7 / 13.4
SIEX-HC™ 13	3 / 6.7 / 13.4	3 / 6.7 / 13.4
SIEX™ IND (POWDER)	3 / 6.7 / 13.4	3 / 6.7 / 13.4

LOW PRESSURE:

Suitable for protecting small areas with direct extinguishing, but can also be used to cover larger hazards by indirect extinguishing. Suitable for use with agents such as halocarbon gases and dry chemical. In both cases, cylinders with a capacity of 3, 6.7 and 13.4 litres are provided.

Dry chemical can be the best option if these enclosures cannot be closed or have numerous openings, by allowing local application.

Halocarbon chemical gas systems are the most common and most frequently sold, and are used in standalone hazards due to their lasting stability and extinguishing effectiveness. the most common and most frequently sold

Complete adaptability to the hazard. High working pressure for SIEX-CO[™], Inert Systems and SIEX-HC[™] 13.

Working at low pressure for Dry Chemical and Chemical Agent systems. SIEX 2001 S.L. C. Merindad de Montija nº 6 P.I. Villalonquéjar 09001 Burgos (SPAIN)

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