



**SIEX** <sup>CFT</sup>  
100

FIXED EXTINGUISHING SYSTEM  
with **IG-100**  
extinguishing agent

**CONSTANT  
FLOW  
TECHNOLOGY**

**FIRE  
PROTECTION**

# THE BEST PROTECTION WITH NITROGEN



Society is becoming aware that environmental protection is an absolute necessity and therefore calls for eco-friendly products that deliver more effective firefighting capabilities. To this end, SIEX has developed the INERT-SIEX™ CFT-100 (Constant Flow Technology) system that combines the latest firefighting technology using a totally ecological agent, nitrogen, a major component of the atmosphere which therefore has no adverse effects on the environment.

This innovative technology provides a constant flow of agent without using a calibrated restrictor, combined with maximum protection and great firefighting efficiency. Moreover, given the high availability of this agent, added to its significant benefits in both firefighting and improving discharge efficiency, the resulting system is extraordinarily competitive and efficient.

The use of IG-100 agent—effective for any type of application—ensures a compact, flexible design adaptable to any risk, suitable for use with selector valves, wide range of discharge pressures, with the greatest market coverage and maximum safety and effectiveness.

# INERT-SIEX™ CFT-100: THE LATEST TECHNOLOGY

Traditionally, systems using IG-100 as the extinguishing agent have used, with undoubted success, a calibrated restrictor at the outlet of the storage cylinders to reduce outlet pressure. SIEX has introduced an improvement in such systems, using the latest technology, providing benefits to the facility itself and the protected enclosure.

The INERT-SIEX™ CFT-100 (Constant Flow Technology) system includes the use of constant flow valve RGS-MAM-RD, which, through an advanced pneumatic mechanism allows delivering a constant discharge flow of the agent. The discharge pressure can be easily configured according to installation requirements.

This innovative technology enables to optimize the design of the firefighting system with IG-100 as the discharge pressure and flow control allow users to reduce the size of tubing needed for proper distribution of the agent and reduce overpressure that take place in the protected enclosure, minimizing the area for the relief of excess pressure.



**THIS PNEUMATIC SYSTEM  
ALLOWS DRAMATICALLY IM-  
PROVING THE RELIABILITY  
AND SECURITY OF THESE  
SYSTEMS, SINCE THEY ELI-  
MINATE THE RISKS OF FAI-  
LURE CAUSED BY LOSS OF  
PROPERTY IN THOSE EM-  
PLOYING MECHANICAL ME-  
CHANISMS.**



## IG-100 — ECO-FRIENDLY AND VERSATILE

INERT-SIEX™ CFT-100 (Constant Flow Technology) uses nitrogen as an extinguishing agent for the protection of enclosures both occupied and non-occupied by personnel. This gas is the main component of the atmosphere (78%). It is a very stable and unreactive molecule, even under typical fire conditions.

It is a VERY VERSATILE AGENT whose performance is significantly improved with the use of advanced technology featured in the built-in RGS-MAM-RD valve, which delivers a constant discharge.

Nitrogen is completely ENVIRONMENTALLY FRIENDLY since it is obtained from the air. As an extinguishing gas, it does not contribute to global warming (GWP), and when it is returned to the atmosphere after simple ventilation, it does not affect the ozone layer (ODP), or have negative effects on the environment.

It is a common agent and using it is sustainable, effective and clean. Its widespread use is one of the reasons for its continued popularity, thanks to its performance, scalability and technical suitability.

He is considered a CLEAN agent because it leaves no particles after discharge that could interfere with people or objects. It does not harm electronic equipment or machinery, does not react with moisture or produce any hazardous compound. It is inert and does not cause corrosion. It should be noted that it is completely safe for people in the design concentrations.

# THE IDEAL STORAGE FOR EACH PROJECT

The storage capacity of the SIEX CFT system's IG-100 agent is one of the unique features that make it ideal for protecting against any hazard.

INERT-SIEX™ CFT-100 (Constant Flow Technology) offers modular 26.8, 40, 67, 80 and 140 litre units operating at a maximum pressure of 150 bar for the protection of small hazards. It also has modular systems and cylinder banks that can store IG-100 agent at 200 and 300 bar pressure, allowing the storage of large amounts of extinguishing gas to protect large enclosures far removed from the cylinder storage area.

INERT-SIEX™ CFT-100 (Constant Flow Technology) features the full range of pressures accepted by current regulations for various volumes. It can thus ensure the design concentration required for each hazard using only the necessary amount of agent and assure its proper distribution.

LOAD M <sup>3</sup> INERT-SIEX™ CFT-100					
PRESSURE BAR	CYLINDERS CAPACITY				
	26.8	40	67	80	140
200	5.05	7.54	12.64	15.10	26.40
300	7.03	10.49	17.56	21.00	37.70

# NITROGEN: THE SAFEST PROTECTION

Nitrogen is extracted from the atmosphere and stored as a pressurized gas of high purity. By its chemical characteristics, most notably its stability, it behaves like an inert agent that is not altered under any circumstances (temperature, storage, handling, humidity, etc.).

It is stored at high pressure in gaseous state to reduce the size and number of cylinders and thus minimize the space required for the equipment.

Aiming to reduce installation costs, improve safety and enhance discharge performance, the breakthrough RGS-MAM-RD valve, developed by SIEX, provides constant and adjustable flow pressure, usually below 60 bar, downstream of the cylinder valve, so storage cylinders can be stored in an area removed from the protected hazard, making it possible to deal with any architectural obstacle.

## CONSTANT IG-100 FLOW DURING DISCHARGE

**COMPLETELY  
ECOLOGICAL AND  
ENVIRONMENTALLY  
FRIENDLY.**

**HARMLESS  
TO THE  
ENVIRONMENT  
AND THE OZONE  
LAYER (ODP  
ZERO).**

**ZERO GLOBAL  
WARMING  
POTENTIAL  
(GWP).**

**COMPLETELY  
CLEAN AGENT  
LEAVES NO  
RESIDUE.**

**SUITABLE FOR  
USE IN AREAS  
OCCUPIED BY  
PERSONNEL**

**ADEQUATELY  
PROTECTS THE  
MOST SENSITIVE  
EQUIPMENT**

**HIGH  
EXTINGUISHING  
CAPABILITY**

**PERFECT  
DISTRIBUTION IN  
THE PROTECTED  
ENCLOSURE**

# QUALITY AND EXPERIENCE FOR PROTECTING HIGH-CEILING ENCLOSURES

The IG-100 agent has a slightly lower density than air, so after mixing upon discharge it completely fills the enclosure and tends to remain in its middle and upper area.

Thus, it is suitable for places where there is a risk of fire in any part of the enclosure and especially towards the top, where false ceilings, or agent leakage at the bottom. Likewise, it can achieve great heights thanks to its high storage pressure.

INERT-SIEX™ CFT-100 (Constant Flow Technology) acts throughout the volume, including all areas of difficult access, which it reaches easily without residue or particles.

SIEX knows the importance of keeping clients informed in all phases of the project with the aim of achieving the best results for the protection of what is most valuable to them. It puts all its experience to work to make this a reality.

The INERT-SIEX™ CFT-100 (Constant Flow Technology) system is the result of a major innovation effort and complies with the most relevant national and international standards such as UNE EN 15004-8, ISO 14520:13, NFPA 2001 and CEA 4008.

It holds the most important certifications in the firefighting industry: VdS, UL and FM in addition to other international approvals.



## CYLINDER VALVE: CONSTANT FLOW TECHNOLOGY

Incorporates the use of advanced CFT technology implemented in the RGS-MAM-RD valve, which employs an effective pneumatic mechanism for controlling the discharge flow and also allowing constant pressure, resulting in a more flexible design for each installation.

These units designed to withstand pressures up to 300 bar, are robust, safe and able to provide the flow necessary to meet the requirements of any project.

## PRESSURE GAUGE

Suitable for facilitating a local, accurate and precise measurement of the pressure and thus the cylinder load, thus facilitating system maintenance.

## GAUGES WITH ELECTRICAL CONTACTS

A single device indicates locally the storage pressure at all times and, when the pressure falls below a certain level, sends an electrical signal remotely wherever required.





## CONTINUOUS WEIGHING

It is a very effective, easy-to-install system. The cylinders hang from this device so that a preset load loss causes movement of a counterweight which triggers an electrical alarm signal. The mechanical operation avoids any contact with the agent and thus reduces possibility of leakage to zero.

The device is factory certified and calibrated, so they can be safely installed with total assurance of proper operation.

## PRESSURE SWITCH

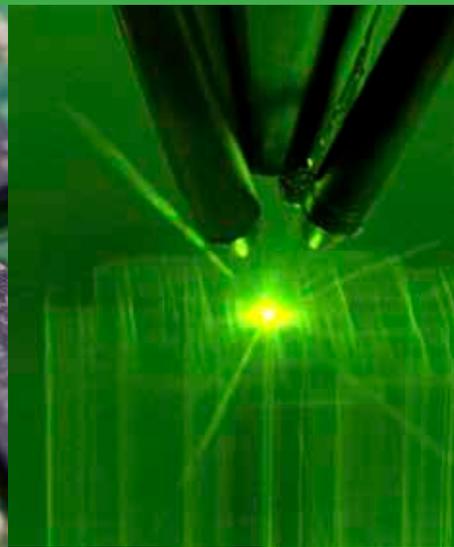
Fitted in the port intended for this device, the pressure switch monitors pressure inside the container. It sends a signal to the fire panel in case of failure. It is also available for explosive environments, in any location



# APLICACIONES

- *MUSEUMS AND ART GALLERIES*
- *TELECOMMUNICATION SYSTEMS*
- *COMPUTER ROOMS*
- *HOSPITALS*
- *PETROCHEMICAL FACILITIES*
- *LABORATORIES AND CLEAN ROOMS*
- *ELECTRICAL CABINETS AND SUBSTATIONS*
- *ARCHIVES AND LIBRARIES*
- *DPCS*
- *OTHERS*





# BENEFITS

- *CONTROLLED DISCHARGE OF IG-100 AGENT*
- *ENVIRONMENTALLY FRIENDLY GAS, EXTRACTED DIRECTLY FROM THE ATMOSPHERE.*
- *UNQUESTIONABLE ENVIRONMENTAL BENEFITS (ZERO ODP AND GWP).*
- *CLEAN AND FREE OF RESIDUES, ALLOWING IMMEDIATE RETURN TO BUSINESS.*
- *TOTAL AVAILABILITY WORLDWIDE, WITHOUT BRAND RESTRICTIONS.*
- *COST-EFFECTIVE, STABLE AND EASY TO REFILL.*
- *ALLOWS FOR LONG AND COMPLEX PIPE RUNS.*
- *COMPREHENSIVE ADVICE AT EVERY STAGE.*
- *UNBEATABLE ABILITY TO FLOOD THE ENTIRE PROTECTED ENCLOSURE.*
- *MULTIPURPOSE: VERY WIDESPREAD USE AS AN EXTINGUISHING AGENT.*
- *SAFE EVACUATION OF PERSONNEL: GOOD VISIBILITY, NO-RISK DESIGN CONCENTRATION.*
- *SIEX QUALITY AND SAFETY GUARANTEE, BACKED BY THE MOST RELEVANT INTERNATIONAL AGENCIES: VDS, UL AND FM\**

## **SIEX**

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