

# Fire protection with environmental care

Safe and sustainable Sinorix NXN only uses natural agents and compounds for reliable extinguishing that does not harm the environment.

#### What is Sinorix NXN?

Sinorix NXN is the latest generation of inert gas extinguishing technology, and completes the Siemens fire safety offering. It is based on the three, natural extinguishing agents, argon, nitrogen and carbon dioxide, and features a completely new mechanical design concept.

### Why is Sinorix NXN different?

Sinorix NXN comes with ADVtechnology (Advanced Double actuation Valve technology) – a radically new cylinder valve concept: system design, installation and maintenance are now all simpler, faster and more efficient.

The same set of components is used for all extinguishing agents, making planning, installation and maintenance easier, faster and more flexible.

The cylinder valve can be opened with a lower pressure, which means that just one pneumatic actuator type covers the full pressure range (8–360 bar). Just one type of cylinder valve is used for all cylinders and all actuation types: electric, pneumatic, double pneumatic, and manual.

The valve actuators, such as electric, pneumatic, double pneumatic, and manual are smaller and lighter and can be mounted by hand with minimal force.

## Safe for the environment

Selecting sustainable products that protect the environment is a vital concern for us all. Sinorix NXN uses only agents and compounds, which are found naturally in our atmosphere and do not harm the environment. They are neither subject to any regulatory restrictions, nor do they damage the ozone layer.

## Are natural extinguishing agents suitable for every type of application?

In pure form or mixed compounds, natural extinguishing agents provide outstanding properties to combat a wide variety of fire hazards. Their respective traits give Sinorix NXN great flexibility when designing the appropriate fire safety concept.

To be specific, nitrogen is most suitable when protecting critical electrical infrastructure, such as that typically found in switching rooms, energy storage systems or data centers. Argon is the perfect fit for areas at risk of metal fires and for chemical storage rooms. Whereas, carbon dioxide is used in local, unmanned applications, such as oil baths and transformer stations.

Argon, nitrogen and carbon dioxide all follow the EN standards and guidelines and are VdS, as well as CNPP certified.

## **Typical applications**

Data centers and server rooms



Li-ion battery storage systems



Power distribution/ E-houses



Electrical switching rooms



Telecommunication systems



Gas turbines



Industrial applications



**Cable ducts** 



## Sinorix NXN natural agent system portfolio

## **ADVtechnology**



## **Cylinder Valve**

- extinguishing agents
  Seal concept for ports allows pressure-free assembly and
- (Re)filling via discharge port

## Check valve and pressure regulator

- One type for all agents
- Incorrect assembly impossible



## Pressure regulator

## **Electromagnetic actuator**

- · All functions monitored such as unblocked, blocked, actuator installed
- · Blocking with standard padlock
- Actuator cable with LED

#### Manifold

- One type for all PN360 certified
- Connectable by hand (no tools)
- O-Ring sealing



#### Pneumatic and manual actuator





- Activation range 8-360 bar
- Control line remains intact during cylinder replacement

## Control and discharge hose

- One type for all gases PN360
- · Material: highest flexibility for easy installation (flexible rerouting)



## What happens in the event of a fire?

Sinorix solutions extinguish the fire by inertization, i.e. by displacing the oxygen in the room. When activated, natural extinguishing agents eliminate the danger without leaving behind any residue that requires clean-up or disposal. This means that business operations can be rapidly resumed.

## A reliable partner at your side for the entire lifecycle of your fire safety system

Providing extinguishing solutions requires considerable expertise, especially during planning and design.

Siemens provides the latest digital planning and design tools, online product catalogue, system configuration, BIM, Step and DWG data including online ordering process, as well as calculation, planning tools and specification texts.

Furthermore, Siemens design experience and technical support is invaluable to avoid overengineering. Optimal design can greatly reduce project costs as well as ensuring maximum safety.

In addition to local representation, Siemens provides its customers and partners with optimal technical support, via its international competence center. Siemens also has a test laboratory where solutions for new and highly challenging situations are perfected.

## The key to a successful fire safety protection system

A complete fire safety system goes beyond fire extinguishing. Sinorix systems are developed for easy integration in complete fire safety solutions, including fire detection and evacuation.



This integration further increases safety and reduces risks. It also optimizes facility management by enabling cloud-based, digital services.

You can rest assured that, by choosing Siemens Sinorix NXN, people, assets, processes and the environment are all perfectly protected.

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We work together with customers and partners to create an ecosystem that both intuitively responds to the needs of people and helps customers achieve their business goals.

It helps our customers to thrive, communities to progress and supports sustainable development to protect our planet for the next generation.

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