

A close-up photograph of a Siemens Sinorix Silent Nozzle. The nozzle is made of brass and has a long, perforated tube extending from a central grey pipe. The Siemens logo is visible on the brass fitting. The background is a light blue gradient.

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# Sinorix Silent Nozzle – for safe and quiet extinguishing

Our innovative silent extinguishing technology enables disturbance-free operation of hard disk drives in data centers and server rooms.

Hard disk drives like those found in data centers and server rooms can be sensitive to noise. That is why we have introduced our innovative silent extinguishing technology.

#### Protecting data centers and server rooms

Data centers and server rooms are at the heart of the modern business world. With an estimated 35 million servers worldwide that are processing ever-increasing quantities of data throughout a global network of several billion devices, the need to ensure business continuity and protect knowledge from being lost is essential. Thus, in the event of a fire in a data center or server room, every second counts.

#### Mastering high risk of fire

In a data center or server room, the hardware, electrical power and extensive cabling that drive computing systems create a continuous risk of potential ignition. In addition, the many thousands of plastic components supply plentiful sources of combustible material. These factors lead to an increased risk of fire.

#### Potential damage to hard disk drives

Technological findings show that malfunctions can occur in hard disk drives once automated dry extinguishing systems are released. These malfunctions range from automatic shutdowns to more severe disturbances, with a corresponding loss of data. Having always been a pioneer in the development of advanced extinguishing technologies we decided to find an answer.

#### Safe and quiet extinguishing is the key

Studies by Siemens and independent organizations concluded that it was primarily the high noise level generated by conventional extinguishing systems during the discharge process that created the hard disk drive malfunctions. That is why we are introducing Sinorix™ Silent Nozzle in combination with Sinorix CDT (Constant Discharge Technology) for safe and quiet extinguishing in data centers and server rooms.

**Answers for infrastructure.**



1 Sinorix Silent Nozzle reliably protects data centers and server rooms.

### Introducing an innovative nozzle design

Thanks to its linear design, Sinorix Silent Nozzle provides an outstanding extinguishing performance, allowing the agent to be distributed smoothly and efficiently into the protected area. Furthermore, it has the same extinguishing efficiency as a conventional system.

With Sinorix Silent Nozzle, the extinguishing process is designed in such a way that the noise level remains below the level that has been found in tests to pose a risk to hard disk drives. In addition, the discharge of the agent, and hence the sound, is focused in a predefined direction, preventing additional sound-generated problems.

### Advantages of using Sinorix CDT as extinguishing system

In data centers and server rooms, inert gas extinguishing systems are highly recommended because of the high sensitivity of the server room equipment. The Sinorix CDT technology consists of a cylinder valve with a pressure-regulating function which discharges the gas into the flooding zone at constant mass flow throughout the entire flooding time. This eliminates the peak at the beginning of the discharge and thus lowers the maximum noise level.

### Silent extinguishing at its best

Pairing the Sinorix Silent Nozzle with Sinorix CDT ensures significantly reduced noise levels and the best performance possible. This allows safe and fast extinguishing as well as disturbance-free operation of hard disk drives before, during and after an extinguishing process.

### Highlights

- Application-tailored technologies for safe and quiet extinguishing
- Significantly reduced noise level for disturbance-free operation of hard disk drives before, during and after the extinguishing process
- Special nozzle design allows smooth and efficient distribution of extinguishing agent
- Same extinguishing efficiency as a conventional system