Spark sensor

Fire protection and predictive maintenance in one.

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Simple monitoring of fire risks

Sparks and embers in machining processes cause enormous fire damage every year. However, anyone who has never had a fire in production is unable to assess the specific risks in their own company.

This is why industrial and craft businesses are often unsure whether and what fire risks are present in their machines or systems.
If it is not yet clear whether it is worth investing in an automatic extinguishing system, the first step can be an evaluation.

In such cases in particular, a simple process monitoring system with a spark sensor is suitable – as a starting point and as minimum protection for the company and the environment.

Minimum protection increases safety

On the one hand, the spark sensor makes it easy to determine the actual danger posed by sparks or glowing embers during operation. At the same time, it ensures a minimum level of safety for production and personnel against fires and explosions.

Both the investment and the outlay are manageable and affordable, even for small businesses. This real-time process monitoring gives users a constant overview of all processes and enables immediate action to be taken in the event of deviations and errors.

Predictive maintenance

The spark sensor is also used for predictive maintenance. If the spark sensor detects ignition sources conspicuously often, this can be an indication that the tool is starting to wear or that there are faults in the machine.

It is then possible to get to the bottom of the cause in good time and rectify the problem before further damage occurs.

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Spark sensor

Mode of operation

One or more detectors are installed in the machine or the extraction pipe. The detector or detectors detect the infrared radiation emitted by sparks or glowing embers. When sparks or glowing embers occur, the spark sensor closes a relay contact.

Depending on demand and internal requirements, the machine or the entire process can be switched off automatically so that no further sparks or glowing embers occur.

Variants

We offer the spark sensors in different versions. They can monitor not only closed extraction systems for sparks and embers, but also areas with daylight. The spark sensor in the daylight-insensitive version is suitable, for example, for open system areas or for zones with inspection and maintenance hatches.

For monitoring processes with high temperatures, we place a high-temperature adapter in front of the detector. Typical applications are dryers and processes with temperatures from around 60 °C, where the detector cannot be installed directly in the area to be monitored.

Easy to integrate

The spark sensor is easy to install and can also be retrofitted into existing processes. No extensive adaptations or conversions are required.

This is what you need for installation

- Ø 40 mm hole in the machine or in the suction pipe
- 24 V DC
- Integration of the spark sensor signal via relay contact

You have questions or would like to get advice? Just get in touch with us.

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