

## Spark detector FUX 4000 UEWA Spark detector FUX 4000 Ex Dust

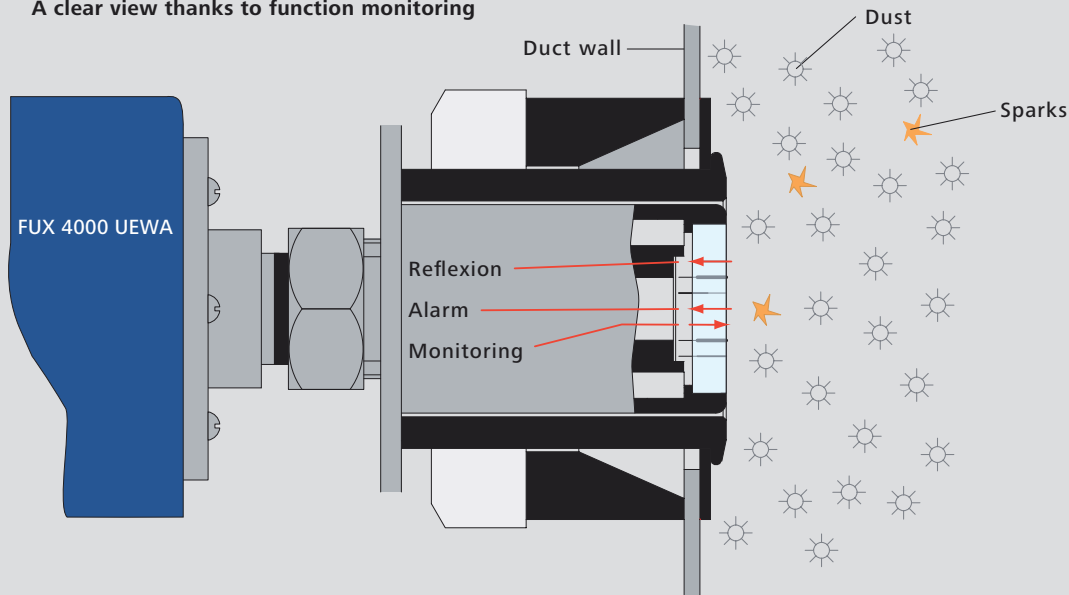
*Cool down.  
Fire Protection by*

**MINIMAX**

### ► Product ► Use + Advantages

- ▶ Developed by dedicated engineers who recognize the hazards created by industrial conveying systems, the new Minimax FUX 4000 UEWA spark detector represents an entirely new generation of fire detection systems. In addition to its main function of detecting sparks this detector also continuously monitors its own visibility and the correct performance of its electronics.
- ▶ This new and unique process, developed by Minimax, represents a quantum leap in the safety requirements of spark extinguishing systems. Developed for the immediate and efficient identification of sparks in industrial environments, the Minimax FUX 4000 UEWA continuously monitors its optical system against possible contamination. Should the visibility of the detector become impaired due to pollution, a signal is relayed to the control panel notifying plant personnel. A yellow LED also illuminates on the detector.
- ▶ The Minimax FUX 4000 UEWA is predominantly used in pneumatic conveying systems, where the highest degree of durability and reliability are required. Maintenance intervals can be optimized as the FUX 4000 UEWA detector reacts automatically to pollution and malfunction. The benefits of these detectors lead to considerable cost savings in:
  - wood and paper industry
  - textile industry
  - food industry
  - coal dust drawing
  - caoutchouc industry
  - chemical industry
  - artificial fertilizer industry
  - and in dry systems
- + The monitoring system ensures highest degree of reliability while at the same minimizing operating expenses.
- + Automatic, continuous monitoring against contamination and damage of the optical window
- + Failure identification of the electronics owing to the patented Minimax monitoring system
- + Additional test detectors are no longer necessary
- + Optimize of maintenance intervals lower maintenance costs
- + Can be fully integrated into all Minimax fire extinguishing systems without any difficulty
- + Upgrading of existing systems possible
- + Practically flush-mounted optical window
- + Ex-classification in accordance with ATEX 94/9/EG for Zones 20/22

## FUX 4000 UEWA A clear view thanks to function monitoring



- ▶ The self-monitoring spark detector detects potential sources of ignition, such as sparks or glowing embers, within the material conveying and air filtering systems while simultaneously checking its optical integrity against pollution and its internal circuitry for malfunction, ensuring a continuous and reliable operation.
- ▶ Functional faults and dirt on the optics are displayed through the yellow LED on the detector and fire detection control panel.
- ▶ An evaluation unit with a spectral sensitivity in the near infrared range – a spectral region where glowing particles are known to emit intense levels of radiation – is used to detect all possible sources of ignition eliminating or minimizing the risk of potential disasters.
- ▶ The sensor transmits the signal reflected from the external optic cover to a microcontroller, where it is analyzed. This process ensures a clear and precise differentiation between stand-by mode, spark detection, pollution of the optic and malfunction of the internal electronics.
- ▶ Both advances in technology and the highest engineering standards known guarantee that the Minimax spark detectors FUX 4000 UEWA operates with reliability and efficiency, even in the most harsh environments.

## Technical data

Operating voltage	7.6 -13.2 V DC
Zero signal current	approx. 2.5 mA bei 9 V
Alarm current	approx. 20 mA bei 9 V
Alarm indication	LED red
Fixed alarm indication at the detector	+15 V constant voltage (+U <sub>konst</sub> ) if required
Malfunction indication in case of CPU malfunction, contamination of optical window	LED yellow, additional analyzing line (STOER)
Spectral sensitivity	780 - 1,120 nm
Detection criteria	Intensity change
Viewing angle	100°
Ambient temperature	-20 °C to +70 °C
Relative air humidity	max. 95 %
IP rating	IP 65
VdS approval	G 208192

## Versions

Version	Art.-No.	Installation
FUX 4000 UEWA	904692	Single-hole installation/ single-hole installation with air purge device SiEx 4000 SiEx 4000 with air purge device
FUX 4000 Ex Dust	907432	Single-hole installation/ single-hole installation with air purge device

Subject to technical alterations.

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