minimax

UniVario YMX5000
Modular flame and spark detection system
with self-monitoring sensors

Always keep an eye on things

The modular UniVario YMX5000 detection system consists of an control unit with three ports and detached sensor units for spark and fast flame detection. The system meets individual requirements in a broad spectrum of applications. It is ideally suited for confined installation conditions in harsh, industrial environments.
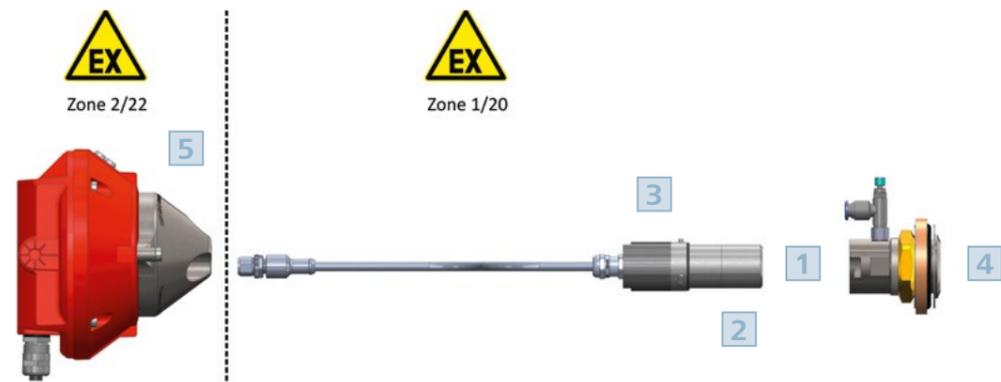
The UniVario industrial fire detector family has been expanded with the new YMX5000 series in the field of spark extinguishing systems and other special applications. Its control unit monitors essential functions automatically and offers additional safety through its status display and history memory. Various configuration options increase the system flexibility.

The electronics of the sensor units are located in a flame-proof stainless steel enclosure. YMX5000 FUX sensor units are used wherever there is an increased fire risk from sparks. The FUX DL/DLS (daylight/daylight special) versions can be used in areas exposed to daylight or with special requirements in terms of the detection spectrum. YMX5000 FMX sensor units are rapid three-channel IR flame detectors capable of reliably detecting open flames without false alarms.

Optics test: The sensor units cyclically check the optics for possible contamination or damage – a unique selling point that increases operational reliability and is second to none. For the application area of spark detection in particular, the FUX sensor unit can be used at extreme temperatures between -40 °C and 105 °C, and with fiber optics as FUX HT (high temperature) at process temperatures of up to 300 °C.

The "Ex" sensor units are suitable for use in Ex zones 1, 2, 20, 21, and 22 and are operated on the YMX5000 3GD evaluation unit, which can be used in Ex zones 2 and 22. Silicone-free versions are available for painting technology applications and for use in the food industry.

Installation and maintenance of the sensor units is simple, safe and inexpensive thanks to a single-hole mounting

with bayonet locking as well as interchangeable optics. The flush wall connection within transport air ducts minimizes the wear of the optics and guarantees a long service life. If necessary, additional air flushing can be integrated, leaving the sensor's large viewing angle of 120° unaffected.

EX Zone 2/22   EX Zone 1/20

1 Optics monitoring and 120° viewing angle	**4** Air flushing with 120° viewing angle
2 Interchangeable optics	**5** Control unit for connecting up to three sensor units
3 Operating temperatures from -40 to 105 °C possible	

Modular UniVario YMX5000 system

	Standard	Ex	Accessories
Control unit	YMX5000	YMX5000 3GD	Pipe/wall mounting bracket MX5000
Spark detector sensor unit	YMX5000 FUX OS/OP	YMX5000 FUX Ex OS/OP	YMX5000 assembly kit
	YMX5000 FUX HT	YMX5000 FUX Ex HT	YMX5000 air flushing assembly kit
	YMX5000 FUX DL/DLS	YMX5000 FUX DL/DLS Ex	YMX5000 interchangeable optics
Flame detector sensor unit	YMX5000 FMX	YMX5000 FMX Ex	YMX5000 bracket

There are many good reasons for spark or fire detection with the UniVario YMX5000 system:

- A high-performance modular system also suitable for applications in explosion hazard areas

- Cyclical self-test and monitoring of the optics of all sensors regarding visibility and function increase operational and system safety

- Self-monitoring allows for extended inspection intervals, enabling limited service personnel to be deployed optimally

- Large viewing angle of 120° even with air flushing

- Up to three sensor units can be connected to the control unit

- The FUX sensor unit can be used in temperature ranges between -40 °C and 105 °C as standard

- Additional fiber optics enable application areas up to 300 °C to be monitored

- The daylight-insensitive FUX DL and FUX DLS sensor units can be used in areas exposed to daylight, such as drop chutes, as well as in applications with a different detection spectrum.

- Silicone-free versions are available for painting technology applications and the food industry

- Single-hole mounting for quick and cost-effective setup even in confined spaces

- Easy to service and maintain thanks to cost-saving interchangeable optics instead of complete detector replacement

- Can be used to retrofit existing installations

- Worldwide approvals according to VdS, FM, ATEX, EAC, CCC, IECEx and NEC