UniVario Flame Detector FMX5000 UV
The Watchful Eye

Fire Protection Systems
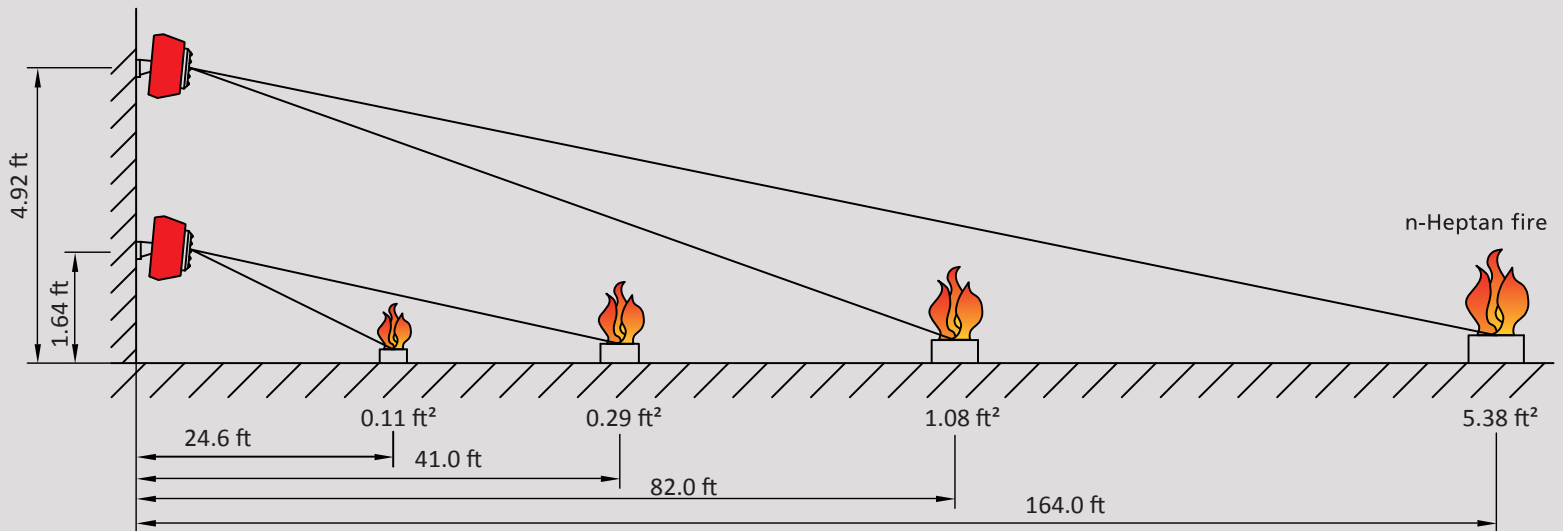
MINIMAX

➤ **Product**   ➤ **Application**   ✛ **Advantages**

➤ The FMX5000 UV flame detector evaluates the UV range of the optical spectrum.

➤ FMX5000 UV flame detectors meet the highest sensitivity (class 1) in accordance with EN 54-10.

➤ Fire-specific signals are digitally processed by the microcontroller preventing false alarms (e.g. lightning).

➤ The detector window is monitored for optical integrity in the UV spectral range.

➤ The integrated microcontroller monitors the function of the detector. Faults are displayed on the detector and a signal is sent to the fire control panel.

➤ Heavy-duty industrial housing for rough industrial applications.

➤ FMX5000 UV flame detectors are designed to detect open flames caused by the combustion of solid or liquid materials (e.g. plastics, wood, metals, gases, oil products, etc.).

➤ Typical applications include:
  – Tank farm monitoring
  – Heating and coal-fired power plants
  – Motor test benches
  – Large industrial plants
  – Airplane and helicopter hangars
  – Chemical storages and chemical production plants
  – Fuel stores
  – Pump stations
  – Magnesium dry treatment (milling)
  – Print shops
  – Wood product industry

✛ Monitoring of the function of window, sensor, software and hardware controlled by microcontroller.

✛ Maximum response sensitivity.

✛ High resistance to interference, due to evaluation algorithms.

✛ Application parameter is set via DIP switch or service device.

✛ Specific customer evaluation algorithms possible for special applications.

✛ Special oil-tight, chemical-resistant and silicone-free versions available.

✛ Optional upgrades:
  – Communication module for use as a ring bus participant
  – Relay module with floating contacts for disturbance and alarm

✛ Various installation adapters available.

✛ Comprehensive service options.

4.92 ft

1.64 ft

n-Heptan fire

0.11 ft²   0.29 ft²   1.08 ft²   5.38 ft²

24.6 ft

41.0 ft

82.0 ft

164.0 ft

➤ As the first flame detector suitable for industrial use, the UniVario FMX5000 UV can be integrated into an Apollo bus system, due to the optional UniVario KMX5000 AP communication module. This makes individual alarm identification and parameterization possible.

➤ A separate cable connection port makes installation and maintenance easy and inexpensive.

➤ The large range of power supply and an optional module with relay contacts enable the stand-alone mode and application in different danger alarm or control units.

➤ Because the FMX5000 requires minimal energy, ultra thin cables can be used and multiple sensors can be placed along one line.

➤ Converting from limit mode to ring bus mode is achieved by simply installing a communication module – there is no need to switch cables.

➤ The new, innovative housing design is extremely robust, seawater-resistant and has an IP 67 rating. The FMX5000 UV is made for the most extreme industrial application environments.

➤ Due to measures taken on the housing and safety-oriented electronic design, the FMX5000 UV flame detector exceeds modern EMC requirements.

➤ Failure signals are registered at a central position via a separate current increasing line.

Technical data

Type	Features	Spectral sensitivity	Temperature range of operation	Type of protection	External display	Approval	Monitoring surface (VdS) rel. to risk m²
UniVario FMX5000 UV	Alarm/disturbance and function LED Optional upgrades: – Communication module – Relay module Can be configured according to your needs Service interface Data storage Power supply 7.6 V to 30 V DC	185 nm to 260 nm	-4 °F to 176 °F −20 °C to +80 °C	IP 67	Can be connected	VdS G206132 EN 54-10 class 1 FM 3030815	max. 7,273 ft. sq. (676 m²) Room height max. 147 Ft. (45 m)

Subject to technical modifications

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VdS
Certified according to
ISO 9001

FM