Global Strength. Local expertise.
At your service

WORLDWIDE HEADQUARTERS
1400 Pennbrook Parkway, Lansdale,
PA 19446,
Tel: +1 215-362-0700, (Toll Free)
Tel: +1 800-558-5236,
Fax: +1 800-877-1295

EMEA - ENSCHEDE
Kopersteden 1,
P.O. Box 198,
7500 AD Enschede,
The Netherlands,
Tel. +31 (0)53-428-4444

APAC - SINGAPORE
2 Serangoon North Avenue 5,
#07-01, Singapore 554911
Tel. +65-6577-4360,
Fax: +65-6481-8791

Johnson Controls

Johnson Controls

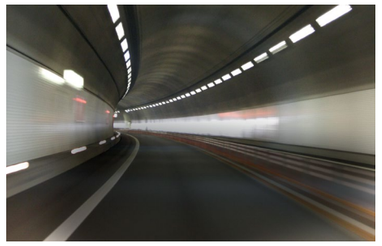
Protecting Vital Assets with Fast, Reliable and Accurate Detection

The FLAMEVision family of infra-red flame detectors reliably pinpoint the source of a fire, eliminating any guesswork and enabling fast response to a fire incident.

Utilising advanced patented infrared (IR) array and triple IR solar blind technologies, which separately identify flame and non-flame sources, the FLAMEVision family of detectors provide reliable and cost effective fire detection solutions.

FLAMEVision can be trusted in high dependency situations where fast acting and accurate flame detection is essential, providing superior performance in all weather conditions and all lighting situations with the added benefit of fire event location information provided by the IR array.

High hazard industries such as oil & gas, petrochemical and power generation provide vital resources globally. These assets demand best in-class fire protection products as do many other industries where hydrocarbons are processed or stored on site or where the processes involved are subject to high risk of fire. Solutions must be easy to implement and stay ahead of the curve. The range of applications where flame detectors are used are diverse and can vary from an oil refinery to a timber yard, or an aircraft hanger to the monitoring of a waste skip behind a shopping mall.



Whatever the facilities there are common objectives paramount to their daily operations:

// Ensure regulatory safety standards are met or exceeded

// Ensure health and safety of employees and the environment

// Mitigate risk factors

// Maximize plant and asset utilization

// Maximize staff efficiency and effectiveness

// Adhere to corporate sustainability policies

There's a lot to consider for site owners, corporate decision-makers, construction firms and fire protection contractors.

The FLAMEVision family of detectors meets the requirements of these industries. Built on the proven technology of the FV300 and earlier generations of Tyco flame detectors, the range has been enhanced with the addition of the FV400. This has extended the capabilities of the technology, providing greater customer choice, whilst ensuring consistency of operability and maintenance procedures for the user.

Benefits of FLAMEVision technology

The FLAMEVision family can protect all hydrocarbon risks in nonhazardous and classified hazardous explosive atmospheres. There is a wide range of system design options available including several monitoring and control interface types and integrated video camera for verification purposes. Installation and maintenance procedures are easy and efficient, minimising the lifetime cost of ownership and reducing the need for complex test equipment and high level operator training.

Based on common hardware,the individual detector types are easily serviceable.

Designed to detect hot CO_2 and flame flickering, the FLAMEVision detectors utilise either a triple IR sensor or an array of IR sensors plus background radiation sensors for added reliability, with the capability of detecting the location of the fire, changing nature and multiple incidents.

Fast Acting - A fire can cause major damage to a facility leading to extended loss of production and costly repairs. For example, fast detection of a fire means action can be taken before extensive damage takes place. FLAMEVision reacts to minimise the effect of fire and improve life safety with less disruption and downtime.

Dynamic masking - FLAMEVision maintains detection coverage even when a flame is part of the process protected. For example, it is not uncommon for a process to produce a flame, such as a flare stack or a glass bottle manufacturer where flaming glass is moulded. In such cases, traditional protection methods involve positioning the detector away from the area where the flame appears or to turn them off during the process. FLAMEVision allows electronic masking of the affected area in the field of view, and if connected to the control system, the mask can be switched on or off to match the running of the process. This ensures maximum protection at all time.

Accuracy - Event location information pin-points fires using the IR array to enable targeted shutdown and suppression. If a fire is detected in a compressor house with multiple compressors, knowing which unit is on fire allows shutdown and suppression to be applied to the effected machine allowing others to continue to run or allow more controlled shutdowns of other parts of the system. This results in less downtime for the industrial process taking place.

Complete peace of mind - FLAMEVision detectors continually monitor all electronics and perform regular optical "through window" test of the sensor using infrared radiation of the same wavelength as that produced by real fires. Unlike other detectors, this automatic testing ensures that contaminants on the lens that could reduce sensitivity to fires, cannot build up unnoticed.

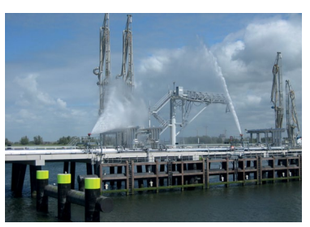
Hazardous explosive atmospheres - FLAMEVision is approved for the protection of dust and gas hazards for all area classifications. So the same detectors can be used in all areas of a facility simplifying the design process and keeps uniformity to the site allowing service technicians to work on all detectors in the same manner.

Reliability - The choice of infrared (IR) array and enhanced triple IR solar blind technologies minimises unwanted alarms. For example, UV type detectors often alarm if there is lightening which can result in costly plant shutdowns. FLAMEVision minimises this risk.

Easy integration - FLAMEVision detectors interconnect to site control and safety (PLC) systems via a range of industrial interface standards. Often a requirement on large oil and gas sites or industrial complexes where monitoring the fire detection system via the (PLC) control system is required, FLAMEVision sensors can easily be integrated into these systems, alternatively they can directly connect to the Tyco MZX addressable fire detection system whereby data is collated by the control panel and sent to the site safety system.

Operator verification - The optional built-in video camera assists operators to verify the incident and ensure appropriate actions are taken. Additional benefits include post event analysis and verification of alignment of sensors on site. With a remote unmanned facility, operators many miles away can verify the fire incident and implement the appropriate emergency action.

Optimum protection in all weather conditions FLAMEVision maintains sensitivity using the enhanced IR sensors through heavy rain, snow, fog and morning dew. On a loading jetty or other outside application, it is essential that detection is maintained whatever the time of day or weather conditions.



Simpler maintenance - Universal mechanical mounting and cabling arrangements makes FLAMEVision installation friendly and efficient to maintain. A pocket sized intrinsically safe test tool enables simple and effective testing of the FLAMEVision sensors and enable maintenance engineers to swiftly conduct site wide testing without the need for a second person to help carry heavy test equipment and reducing cost.