

Features & Benefits

- Single detector for multiple fuels. Certified for 5 different hydrocarbon fires
- Lowest cost of coverage in the industry, extended detection range, new standard set for cone of vision
- Best combination of flame detection and false alarm rejection
- Reliable flame detection with modulated infrared background present
- Calibrated automatic optical check for each sensor eliminates need for testing with external test lamp
- Event logging with time and date stamp
- Mechanical design; robust, sealed, easier installation and can easily be retrofitted
- Integral 4-port wiring compartment provides protection against explosion/flame, or increased safety (Eexd e) upon installation in hazardous areas
- Heated optics; enable optimal performance in adverse environments (microprocessor controlled)
- Low maintenance cost
- Designed in compliance with the latest approval directives, certified to FM3260:2000, CSA, ATEX, CE and DNV
- Available in copper-free aluminium or 316 stainless steel



Application/Description

The Multispectrum X33AF flame detector is the future generation detector for performance and technology. The detector utilizes advanced signal processing algorithms, supported by an embedded 32-bit microprocessor, to provide continuous protection in the presence of false alarm sources and environments with infrared radiation present.

It is suitable for indoor and outdoor applications that require the highest level of false alarm rejection and fire detection performance.

The detector is available in aluminium or 316 stainless steel for installation in the harshest environments. The flame detector has a detection range to gasoline of over 60m, and a solid cone of vision for methane. The detector offers fire alarm/fault relays, isolated 4 to 20 mA and RS485 output.

The AutoFlame X33AF provides superior performance in applications that are at the extremes, and where background infrared radiation is a normal condition (Offshore production platforms, Offshore production ships, Refineries, Production facilities, Loading racks, Compressor stations, Turbine enclosures).

Technical specifications	
Shipping weight (g)	Aluminium: 3600g Stainless steel: 5600g
Enclosure material	Copper-free aluminium or 316 stainless steel
Power consumption	13W maximum during operating (24V DC) conditions
Temperature range	Operating: -40C to +75C Storage: -55 to + 85C Humidity: 0-95%
Operating voltage	24V DC Operating range is 18 to 32V DC
Vibration	Meets MILSPEC 810C, method 514.2, curve AW
Conduit entry size	4 x 25mm
Mounting	Swivel
Certification	DNV Certification: DNV A-9801 Environmental: Ingress Protection to IP66/ NEMA Type 4X EMC Directive: CE Certified FM/CSA: Class I, Div. 1, Groups B, C & D; Class II, Div. 1, Groups E, F, & G; Class III (T3C). Class I, Div. 2, Groups A, B, C & D; Class II, Div. 2, Groups F & G; Class III (T3C). CENELEC: Standard Temperature Model EEx d e IIC T6 (T amb = -55°C to +60°C) EEx d e IIC T5 (T amb = -55°C to +75°C) Extended Temperature Model EEx d IIC T6 (T amb = -55°C to +60°C) EEx d IIC T5 (T amb = -55°C to +75°C) EEx d IIC T4 (T amb = -55°C to +125°C)

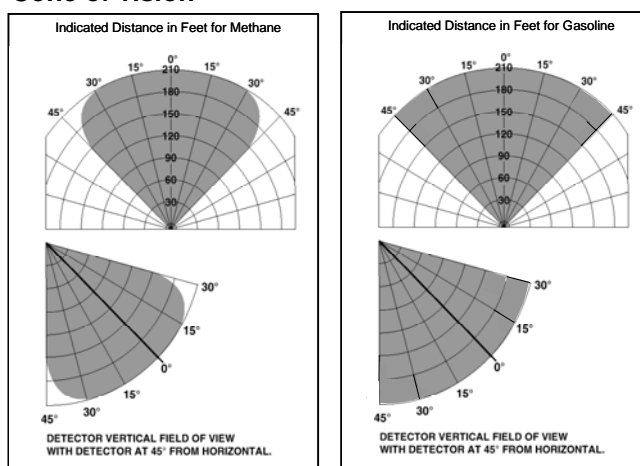
Response characteristics				
	Fuel	Size	Distance F1 (m)	Average response time (sec)
Very High Sensitivity	n-Heptane	1 x 1 foot (0.1m ²)	210 (64)*	11.1
	n-Heptane	1 x 1 foot (0.1m ²)	100 (30)	3.0
	Diesel **	1 x 1 foot (0.1m ²)	150 (45)*	13.1
	Methanol	1 x 1 foot (0.1m ²)	150 (45)	17.6
	Methane	30 inch plume (0.9m)	100 (30)	2.0
	JP-5 **	2 x 2 feet (0.4 m ²)	210 (64)*	3.3
Medium Sensitivity	JP-5 **	2 x 2 feet (0.4 m ²)	100 (30)	1.6
	n-Heptane	1 x 1 foot (0.1m ²)	100 (30)	11.3
	n-Heptane	1 x 1 foot (0.1m ²)	60 (18)	1.9
	Diesel **	1 x 1 foot (0.1m ²)	70 (21)	3.8
	Methanol	1 x 1 foot (0.1m ²)	70 (21)	9.4
	Methane	30 inch plume (0.9m)	65 (20)	2.5
	Methane	30 inch plume (0.9m)	55 (17)	2.1
	JP-5 **	2 x 2 feet (0.4 m ²)	100 (30)	2.3

* Outdoor test condition

** 10 sec. pre-burn from ignition.

Part number	Description
116-5861-011.4310	AutoFlame X33AF Stainless Steel
116-5861-011.4320	AutoFlame X33AF Aluminium
116-5861-011.4340	AutoFlame X33AF SS, High temp.
116-5861-011.4341	AutoFlame X33AF SS, addressable
116-5861-011.4360	AutoFlame X33AF Alu., High Temp.
116-5861-011.4361	AutoFlame X33AF Alu., addressable

Cone of vision



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