Dräger Flame 3000
Multi-Channel IR Visual Flame Detection

Dräger Flame 3000 is an imaging based explosion proof flame detector. This multi-channel IR visual flame detection system uses digital signal processing and advanced algorithms to process and interpret flame characteristics. This principle offers an extended field of view and fewer false alarms compared to conventional flame detectors.

SUPERIOR FALSE ALARM IMMUNITY

The unique software algorithm of the Dräger Flame 3000 is capable of discriminating between genuine fire conditions and other radiant sources that may course conventional detectors to become desensitized or produce unwanted alarms. The detector is immune to common sources of unwanted alarms such as hot work, hot CO_2 emissions and flare reflections. This makes it to a great partner on your oil rig or industry plant. So chances of a false alarm are significantly diminished.

FIELD OF VIEW

The Dräger Flame 3000 has 120° horizontal and 80° vertical field of view with increased range of 60 metres to an n-heptane 0.1m² pan fire. This saves you both: maintenance and installation costs.

The detector's Field of View is a rectangular pyramid shape and represents a radial projection of the sensing element; therefore, giving it the largest coverage area of any flame detector currently available. This unique Field of View does not reduce at the outer limits unlike conventional flame detectors.

DETECTOR FLEXIBILITY

The Dräger Flame 3000 can be operated as a stand-alone unit, it can also be integrated with a control system or fire panel to provide fault, and fire signalling. This is achieved using a 0 to 20 mA and/or relay outputs.

FUNCTIONAL TESTING

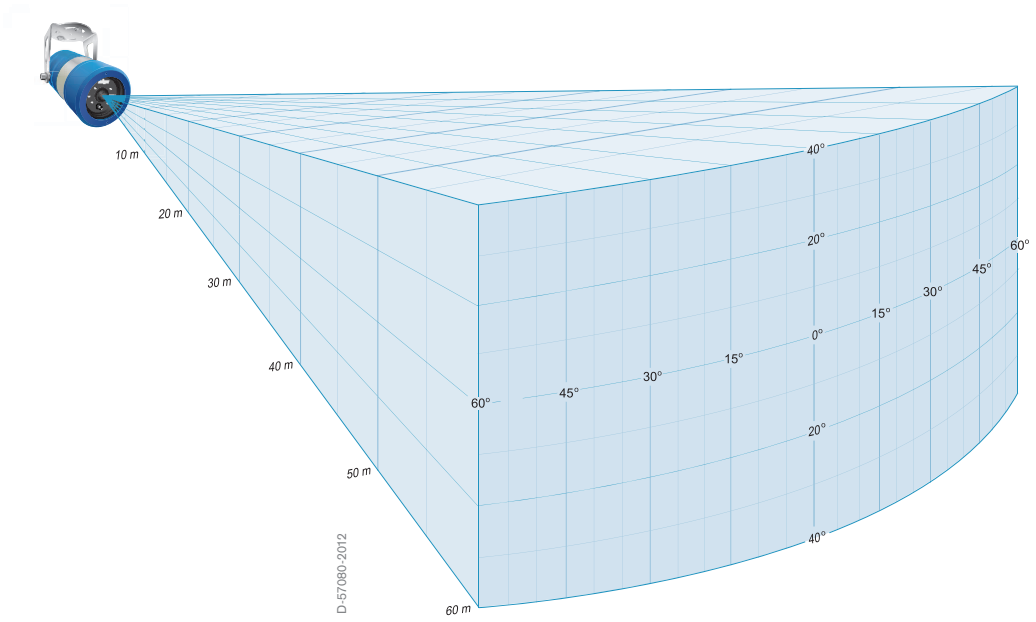
The Dräger FS-5000 Flame simulator can dependably activate a Dräger Flame 3000 from a distance of up to 8m. The electronics are housed in an enclosure which is designed for Zone 1 hazardous areas. Again, this further reduces maintenance costs by eliminating the need for scaffolds or ladders when testing the device.

Further advantages

- easy to install
- tri-colour LED for a simple status indication
- combinable in a Dräger fire and gas detection system
- Approvals: FM, Atex, FMC, IECEx

D-490075-2012

Dräger Flame 3000
Your imaging based flame detector



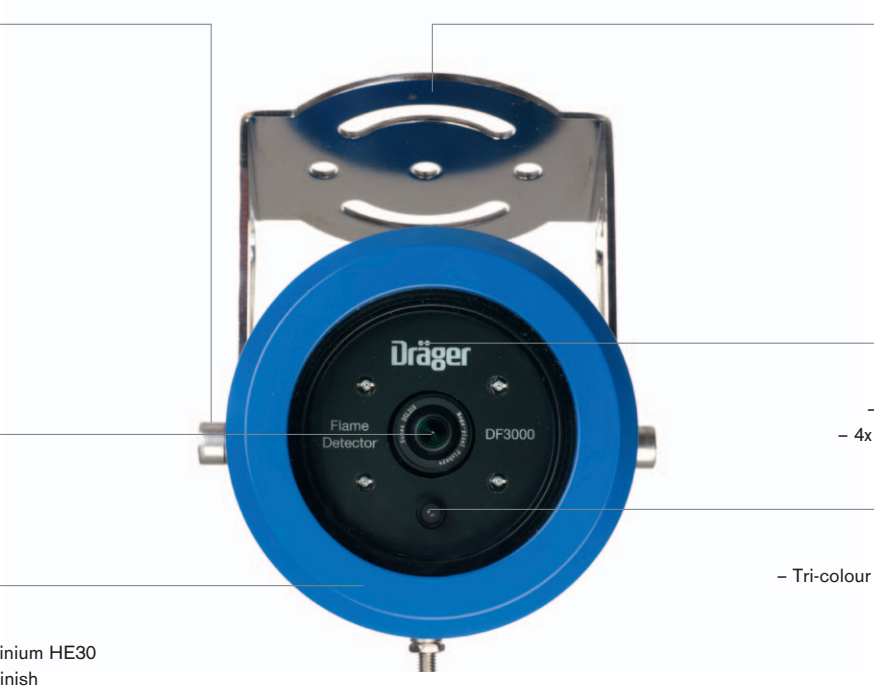
The Dräger Flame 3000
The Dräger Flame 3000 ensures that the user can easily calculate the area of coverage due to the precise and pyramidical field of view. There is no loss of coverage in the corner most regions as experienced through conventional flame detection methods.

ORDER INFORMATION

Dräger Flame 3000 M25 Aluminium	4209460
Dräger Flame 3000 M20 Aluminium	4209462
Dräger Flame 3000 ¾" NPT Aluminium	4209464
Dräger Flame 3000 ½" NPT Aluminium	4209476
Dräger Flame 3000 M25 Stainless Steel	4209468
Dräger Flame 3000 M20 Stainless Steel	4209470
Dräger Flame 3000 ¾" NPT Stainless Steel	4209477
Dräger Flame 3000 ½" NPT Stainless Steel	4209474
Dräger FS-5000	4209307

Support Fixings
– Stainless Steel 316 fixings
– Size: M8

Mounting Bracket
– Stainless Steel 316



DF3000 Faceplate
– Colour identifing faceplate
– 4x NIR sources for lens check

Lens
– Camera Lens used for the visual flame detection

Status Indicator
– Tri-colour LED for status visualisation

Detector Housing
– Stainless Steel 316 or Aluminium HE30
– Dräger Blue Epoxy coated finish

TECHNICAL DATA

Type		Multi-Channel IR Visual Flame Detector	
Field of View		Horizontal	120°
		Vertical	80°
Response Time			
Sensitivity	Methane Jet Fire	0.9m (3ft) plume	26m (85 feet)
	Ethanol	0.1m² (1sqft) pan	30m (98 feet)
	n-Heptane: Pan Fire	0.1m² (1sqft) pan	60m (200 feet)
	n-Heptane: in direct sunlight	0.1m² (1sqft) pan	60m (200 feet)
	n-Heptane: in modulated sunlight	0.1m² (1sqft) pan	60m (200 feet)
	n-Heptane: modulated black body	0.1m² (1sqft) pan	60m (200 feet)
	n-Heptane: Arc welding	0.1m² (1sqft) pan	60m (200 feet)
	n-Heptane: 1000watt lamp	0.1m² (1sqft) pan	60m (200 feet)
	Gasoline Fire	0.1m² (1sqft) pan	60m (200 feet)
	JP4	0.1m² (1sqft) pan	90m (300 feet)
	Ethylene Glycol	0.1m² (1sqft) pan	20m (65 feet)
	Diesel	0.1m² (1sqft) pan	50m (165 feet)
	Crude Oil (heavy fuel oil) Pan Fire	0.25m² (2.7sqft)	50m (165 feet)

TECHNICAL DATA

Type	Multi-Channel IR Visual Flame Detector	
		2 Relays for Fault & Alarm Ratings 125 VAC, 0.5 A; 30 VDC, 2A (optional)
Supply Voltage		18 to 30 VDC
Current consumption		6 watts (typical)
Ambient Conditions	Temperature	–60 °C to +85 °C, –76 °F to +185 °F
	Pressure	915 to 1055 hPa, 27.9 to 31.2 inch of Hg
	Humidity	0 to 99 %RH, non-condensing
Enclosure		IP 66, NEMA 4X
Cable Entry		M20, M25, 1/2" NPT or 3/4" NPT
Dimensions (L x D)		200 x 100 mm, (7.9 x 3.9 inches) Approx
Weight	Aluminium	2.5 kg, (5.5 lbs) Approx
	Stainless Steel	6.0 kg, (13.2 lbs) Approx
Approvals	ATEX	II 2 G Ex d IIC T4
	IECEx	Ex d IIC T4
	FM 3260/CFM	Class I, Division 1 Groups B, C and D
		Class I, Zone 1, A Ex d IIC; T5

90 41 484 | 08.12-1 | Marketing Communications | PP | PR | LE | Printed in Germany | Chlorine-free – environmentally compatible | Subject to modifications | © 2012 Drägerwerk AG & Co. KGaA

HEADQUARTERS
Dräger Safety AG & Co. KGaA
Revalstrasse 1
23560 Lübeck, Germany

www.draeger.com

SYSTEM CENTERS

P. R. CHINA
Beijing Fortune Draeger Safety Equipment Co., Ltd.
A22 Yu An Rd, B Area,
Tianzhu Airport Industrial Zone,
Shunyi District, Beijing 101300
Tel +86 10 80 49 80 00
Fax +86 10 80 49 80 05

GERMANY
Dräger Safety AG & Co. KGaA
Revalstrasse 1,
23560 Lübeck
Tel +49 451 882-2794
Fax +49 451 882-4991

FRANCE
Dräger Safety France SAS
3c route de la Fédération, BP 80141
67025 Strasbourg Cedex 1
Tel +33 3 88 40 59 29
Fax +33 3 88 40 76 67

SINGAPORE
Draeger Safety Asia Pte Ltd
67 Ayer Rajah Crescent #06-03
Singapore 139950
Tel +65 68 72 92 88
Fax +65 65 12 19 08

UNITED KINGDOM
Draeger Safety UK Ltd.
Blyth Riverside Business Park
Blyth, Northumberland NE24 4RG
Tel +44 1670 352 891
Fax +44 1670 544 475

USA
Draeger Safety, Inc.
505 Julie Rivers, Suite 150
Sugar Land, TX 77478
Tel +1 281 498 1082
Fax +1 281 498 5190