

Dräger Flame 1300



ST-474-2004

The Dräger Flame 1300 is an IR flame detector, designed for the detection of organic based fires such as hydrocarbon fuels and vapours. The detector provides flexibility with its numerous output modes, and advanced design features ensure reliability in the detection of fires whilst at the same time providing excellent immunity to potential false alarm sources.



ST-341-2004

Dräger Flame 1300:
Explosion proof IR flame detector for hydrocarbon based fires

Simple installation

Installation is simple! The detector is easily installed with a stainless steel mounting bracket; which can be rotated to ensure optimum positioning of the detector in relation to the potential fire source. Angular markings allow the positioning angles of the detector to be recorded for future reference.

Detector flexibility

As well as a 4 to 20 mA output and 3 relays, an optional RS 485 output is also available, which can be multi-dropped to a central location. This provides a number of options for detector monitoring and the triggering of the necessary control action upon the detection of a fire.

Automatic and manual optics checks

Automatic checks of the detector electronics and optics ensure no fault goes undetected. Additionally the test can be triggered manually at anytime.

Isolated 4 to 20 mA as standard

Complete flexibility enables the detector to be operated from a separate power supply (as a 4 wire device) or as a 3 wire device where there is no requirement for an isolated output.

Easily visible status LED

A tri-coloured LED which is visible at the front of the detector provides a simple status indication to personnel in close proximity to the detector. Green indicates normal operation; yellow indicates a fault and red indicates the presence of radiation.

Worldwide Approvals

The Dräger Flame 1300 can be used worldwide with the following approvals: ATEX, IECEX, FM and CSA.

TECHNICAL DATA

Type	Explosion proof IR flame detector for hydrocarbon based fires	
Spectral response	4.2 to 4.7 micron	
Field of view	Horizontal 90°, vertical 90°	
Sensitivity	0.1 m ² gasoline fire at 18 metres, 1 sq. foot fire at 60 feet	
Response time t90	3,5 seconds, typical, configurable up to 30 seconds	
Signal output	Fault	0 mA
	Optics/electronics check failure	2 mA
	Normal operation	4 mA
	Fire pre-warning	16 mA
	Fire	20 mA (factory configurable for latching/non-latching alarm)
	3 relays for fault, alarm and accessory, ratings 125 VAC, 0.5 A; 30 VDC, 2 A optional RS 485	
Supply voltage	18 to 32 VDC, current consumption 160 mA quiescent state at 24 VDC	
Ambient conditions	Temperature	- 40 to + 70 °C, - 40 to + 158 °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	
Size (L x D, approx.)	275 mm x 155 mm, 10.8" x 6.1"	
Weight (approx.)	3.5 kg, 7.7 lbs	
Approvals	ATEX	II 2G EEx d IIC T6/T5; - 50 ≤ Tamb ≤ + 60 / + 70 °C
	IECEX	Ex d IIC T6/T5; - 50 ≤ Tamb ≤ + 60 / + 70 °C
	FM/CSA	Class I, Groups A, B, C, D
		Class I, Zone 1, Groups IIA, IIB & IIC
	Ex d II C; T6/T5; - 40 ≤ Tamb ≤ + 60 / + 70°C	

ORDER INFORMATION

Dräger Flame 1300, Al housing, M20 entries	23 50 422
Dräger Flame 1300, Al housing, M25 entries	23 50 429
Dräger Flame 1300, Al housing, 1/2" NPT entries	23 50 435
Dräger Flame 1300, Al housing, 3/4" NPT entries	23 50 441
Dräger Flame 1300, SS housing, M20 entries	23 50 425
Dräger Flame 1300, SS housing, M25 entries	23 50 432
Dräger Flame 1300, SS housing, 1/2" NPT entries	23 50 438
Dräger Flame 1300, SS housing, 3/4" NPT entries	23 50 444

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