Dräger Flame 2300

The Dräger Flame 2300 is an explosion proof combined UVIR flame detector used for the detection of hydrocarbon based fires. 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.

Simple installation and commissioning
Installation is simple! The detector is easily installed with a stainless steel mounting bracket; this 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.

False alarm immunity
The Dräger Flame 2300 provides the highest level of false alarm immunity. This is because the detector requires both IR and UV sensors to alarm before the detector will itself output an alarm condition and such action ensures that false alarms are all but non-existent.

Worldwide Approvals
The Dräger Flame 2300 can be used worldwide with the following approvals: ATEX, IECEx, FM and CSA.

Dräger Flame 2300:
Explosion proof combined UVIR flame detector for hydrocarbon based fires

TECHNICAL DATA

Type	Explosion proof UVIR flame detector for hydrocarbon based fires	
Spectral response	IR 4.2 to 4.7 micron, UV 0.185 to 0.26 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	3.3 seconds, typical; configurable up to 30 seconds	
Signal output	Fault	0 mA
	Optics/electronics check failure	2 mA
	Normal operation	4 mA
	IR presence	8 mA
	UV presence	12 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 175 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 2300, Al housing, M20 entries	23 50 424
Dräger Flame 2300, Al housing, M25 entries	23 50 430
Dräger Flame 2300, Al housing, 1/2" NPT entries	23 50 436
Dräger Flame 2300, Al housing, 3/4" NPT entries	23 50 442
Dräger Flame 2300, SS housing, M20 entries	23 50 427
Dräger Flame 2300, SS housing, M25 entries	23 50 433
Dräger Flame 2300, SS housing, 1/2" NPT entries	23 50 439
Dräger Flame 2300, SS housing, 3/4" NPT entries	23 50 445