DATA SHEET

IREx OPTICAL DETECTOR

DESCRIPTION

Fike IREx Optical Detectors use a photodiode to continuously measure the wavelength of radiant light that passes in front of the polished sapphire lens. It responds to radiant energy caused by flames and is used to activate Fike Explosion isolation and suppression systems.

FEATURES AND BENEFITS

- Wide viewing angle for greater process monitoring coverage
- Flush sapphire polished lens provides durable, precision optics
- Extremely fast response time
- High overpressure and temperature rating
- Corrosion resistant wetted parts
- Titanium nitride coating available for increased wear resistance of wetted parts
- Optional air purge mounting flange to protect lens from dust impingement
- CE, ATEX, FM and CSA approved

APPROVALS:

- FM- Class II, III, Div 1, Group E, F, G
- CE
- ATEX
- - II 1/2 G Ex ia II C T 6
- - II 1/2 D Ex tD A20 IP67 T110°C
- CSA - Class II, III, Div 1, Group E, F, G

SPECIFICATIONS

Part Number	29998431-S Standard
	29998441-S Titanium Nitride (TiN Coated)
Detection Range	400nm – 1,100nm (peak 850nm)
Deflagration Overpressure	174psig (12barg)
Detector Protection Degree	IP65 (FM & CSA) IP67 (ATEX); NEMA 4X and Type 4X
Wetted Parts	Sensor head 1.4404 (316L SST); available with titanium nitride (TiN) coating for increased wear resistance Sapphire glass polished lens Inner O-ring: FKM Viton (FDA Approved) Outer O-ring: Silicon (FDA Approved)
Housing	1.4404 (316L SST) and Aluminum
Temperature Range	Process: -20 to 80°C (-4 to 176°F) Ambient: -20 to 65°C (-4 to 149°F) Storage: -20 to 65°C (-4 to 149°F)
Output Connection	Shielded cable 5 x 0.25mm^2
Power Supply	18-30 VDC
Nominal Current	Stand-By (no alarm) < 10mA Alarm < 30mA
Power Consumption	20mA max
Output Signal	1 x electronic switch (alarm contact) Contact rating = 28 volts, 100 mA, 700 mW (ATEX); 18 volts, 20 mA, 360mW (FM & CSA) 4 – 20 mA current loop

Form No. X.1.38.01

704 SW 10th Street • P.O. Box 610 • Blue Springs, Missouri 64013-0610 U.S.A.
Phone: 816•229•3405 • www.fike.com

(This page is left blank intentionally)

Form No. X.1.38.01, December 2012. Specifications are subject to change without notice.