OPTICAL BEAM SMOKE DETECTOR

A Conventional Device

PDS220-0004-2-5

Applications:

- Warehouses
- Factories
- Shopping Malls
- Churches
- Leisure Centres
- Power Stations
- Industrial Plants
- Museums

Description

The system comprises of a transmitter unit that projects a modulated infrared light beam to a receiver unit. The received signal is analysed and should smoke be present for a predetermined time, a fire condition is activated. The system needs to be mounted so that the beam will project between 0.3 and 0.6 metres below and parallel to the ceiling. Lateral detection may be up to 7.5 metres either side of the beam. The minimum lateral detection is 0.3metres.

Sensitivity of the optical beam detector is not expressed in obscuration per metre as the beam 'sees' the total amount of smoke within its path. The beam will signal an alarm when the received signal has reduced by the selected alarm threshold. If 25% were selected then the received signal would have to reduce by 25% for an alarm to be signalled. If the threshold is now set at 50%, the beam detector will be less sensitive.

Distance between transmitter and receiver must not be less than 10m or greater than 100m. The control unit must be located within 100 metres cable run of the receiver unit.

Specifications

Low Level Controller	
CONSTRUCTION	
Housing	Double pressed sheet steel
Rating	IP50
Finish	White Ral 9010
Height	260mm
Width	210mm
Weight	2.25 kg
ELECTRICAL	
Input Voltage	12 – 24 V dc
Supply Current	8mA @ 24 V dc
Temperature Range	-20 to +55 °C
CONSTRUCTION	
Housing	Zinc Alloy
Rating	IP50
Finish	White Ral 9010
Height	95mm
Width	115mm
Weight	400 gms
ELECTRICAL	
Input Voltage	Transmitter - (12 – 24 V dc)
Supply Current	Transmitter – 5mA @ 24V dc
Temperature Range	-20 to +55 °C
Alignment	External Universal Bracket
Approvals	SSL AS1603.7 (AFP-1207),
Product Code	220-0004