



Product Data Sheet

FD705RZ

Reflective Zone Powered Beam Detector - 5-50 m

General

The FD705RZ consists of an infrared transmitter and receiver in one single compact housing. The infrared signal is reflected by a prism and analysed for smoke presence. It is particularly designed to be used where point smoke detectors are not applicable due to height or inaccessibility. The unit is connected directly to a conventional zone on the fire control panel, and draws power from the conventional zone. In case of a fire the unit draws a higher level of current, which in turn will be interpreted as a fire by the fire control panel. This does away with the need for an external 24V source to power the unit.

Installer friendly

Wiring is restricted to a minimum as the transmitter and receiver are in the same housing. The detector is very easily aligned by checking the red and green LED's. A course "Prism Find" and then "Alignment Mode" fine-tune ensures optimum operation.

Mechanical alignment is provided by two adjustment thumb wheels on two sides of the detector. Adjustment is achievable in both axis.

Reducing false alarms

Alarm thresholds of 12%, 25%, 35% and 50% can be selected to suit the environment. If the received infrared signal reduces to below the selected threshold and is present for approximately 10 seconds, a fire will be indicated.

If the infrared beam is obscured rapidly to a level of 90 % or greater for approximately 10 seconds, a fault is indicated. This condition can be entered in a number of ways, for example, an object being placed in the beam path, transmitter failure, loss of the prism, or sudden misalignment of the detector. The detector monitors long term degradation of signal strength caused by component ageing or build up of dirt on optical surfaces. The unit may easily be tested by using the graduated obscuration test card supplied.



Standard Features

- Range from 5 - 50 m
- Up to ceiling heights of 25 m
- Low current consumption
- 4 selectable alarm thresholds
- Self check and automatic contamination compensation
- Vertical or horizontal mount
- Easy wiring and unique alignment
- Microprocessor controlled
- EN54/CPD approved

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Specifications

Supply voltage	10.2 - 30 VDC
Range	5 - 50 m
Lateral detection	7.5 m
Current consumption	
Quiescent	< 4 mA
Alarm	470 Ohm
Optical wave length	880 nm
Operating temperature	-30°C to 55°C
Size	210 x 130 x 120 mm
IP rating	IP50
Construction	Flame retardent ABS
Colour	Gray-black

Ordering Information

Part No.	Description
FD705RZ	Reflective Zone Powered Beam Detector - 5-50 m
FD710RZ	Reflective Zone Powered Beam Detector - 50-100 m
OR2000	Reflective prism for beam detectors

