

BDH110



5m-70m reflective optical beam detector

Includes: a detection unit, a control unit, reflector unit.

Linear smoke detector: reflective optical beam smoke detector with a motorized head, capable of aligning itself automatically during the commissioning phase and of re-aligning itself during service.

The system comprises a motorized head unit containing an infra-red transmitter and receiver, a ground level controller and prism reflector.

The presence of Smoke is revealed by the analysis of the returned infrared beam thus allowing the system to detect fire in its early stages. Operational adjustments can be made from ground level by means of the controller unit.

The standard protection system covers a range of 5 to 70 meters. Range-expander kits are also available: a 70 to 140 meter kit which uses 4 reflectors and an 140 to 160 meter kit which uses 9 reflectors.

Commission: the beam alignment phase is an extremely simple procedure. In fact, the beam aligns itself on the centre of the reflector.

Adjust thresholds: the beam detector sensitivity is fully adjustable between 25 and 50% of beam obscuration.

Check contamination compensation: the beam detector automatically compensates for dust build up on the lenses. You can check the status of the device on the display and need clean the lenses only when required.

Alarm and fault delay: the alarm delay can be set at 1 and 30 seconds (in steps of 1 second), whereas the Fault delay can be set at 1 to 60 seconds.

Change latching mode: the beam detector relays can be set to latch on alarm or auto reset depending on application requirements.

Turn on and off: the beam detector can be switched off from the control panel. Should you forget to turn it back on, it will resume normal operation after 8 hours.

Self test: the beam detector can be tested from ground level as part of routine maintenance.

IP65: the enclosure is IP65 rated. The device is fully sealed, therefore, is suitable for installation in unfriendly (dusty or dirty) environments and can even be pressure washed.

Technical details

Enclosure	White high heat abs UL94 HB
Enclosure rating	IP65
Operating temperature	-10°C/+55°C
Time to fault	Adjustable between 2 and 60s
Time to fire	Adjustable between 2 and 30s
Sensitivity	Fully adjustable between 25% & 50%
Operating voltage	12 / 30 V
Quiescent current	3,5 mA
Alarm current	3,5 mA
Alarm latching	Non latching option
Fault relay	2A @ 30 V
Fire relay	2A @ 30 V
Dimensions (WxHxD)	155x180x137 mm
Weight	Head 1,1kg; Controller 0.55kg