

# LIFT Beam

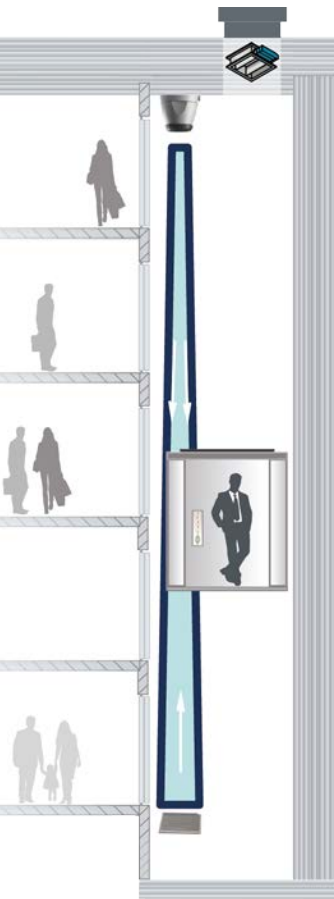
## Motorised Reflective Optical Beam Smoke Detector

The LB-CONTROLLER unit support up to two motorised reflective, auto aligning infrared optical LB-BEAMS, thus saving on installation time and costs. This innovative system has been designed to include pioneering technology in the firefighting and the elevator industry that fully addresses the needs of the installer and user, both now and in the future.

With its industry leading optics specifically adapted to the requirements in narrow elevator shafts, the LIFT Beam is ideally suited for the protection of minimized areas where the use of traditional detection technologies was up to now the only possible solution. With LIFT Beam there is no future for systems based on point detectors or smoke aspiration.



A LIFT Beam system combines an infrared transmitter and receiver (LB-BEAM) in the same discrete unit and operates by projecting a well-defined beam to a reflective prism (LB-PRISM), which returns the beam to the receiver for analysis. Smoke in the beam path causes a drop in power, which, if below a pre-determined level, results in an alarm signal.



### Operation

Getting the system operational is simplified by a number of ground breaking features that combine to make the LIFT Beam the UNIQUE and easy to install lift shaft smoke detector. LB-BEAM alignment generally takes under 5 minutes.

Mounting angles for LB-BEAM and LB-PRISM are included in the system package which allow a greater degree of flexibility during installation.

Once the LB-BEAMS are connected, an integrated LASER can be activated. This allows the reflective LB-PRISM to be positioned quickly and with confidence. Once the LASER has been used to coarsely align the LB-BEAM, Auto-Align takes over and automatically steers the LB-BEAM head into the optimum position. During alignment the system automatically switches to high current mode and drops back to low current mode when in normal operation, however, alignment is still possible in low current mode.

### Features

- Allows for 2 LB-BEAMS per LB-CONTROLLER
- Each LB-BEAM configurable from 8m to 100m
- Integral LASER alignment
- Auto-Align Fast Automatic LB-BEAM Alignment
- Building Movement and Contamination Compensation
- Low consumption LB-CONTROLLER
- Programmable Sensitivity and Fire Thresholds
- Plug & Play connection over RJ45 connectors

### Approvals

World-wide CPD approvals according EN 54-12

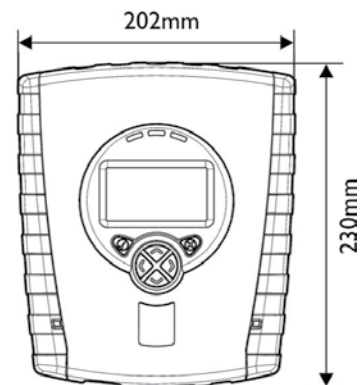
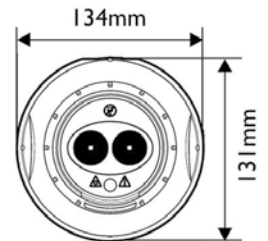
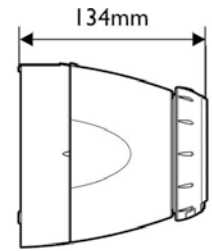


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## Installation recommendations

Please refer to LB-User Guide for mounting instructions. The installation of the LIFT BEAM can be undertaken in accordance with recognised national or international standards and codes of practice.

Specifications and cabling information are provided for information only and are believed to be accurate. BK-Factory assumes no responsibility for their use. Data and design are subject to change without notice. Installation and wiring instructions are shipped with the products and should always be used for actual installation.



### TECHNICAL SPECIFICATION

Parameter	Min.	Typ.	Max.	Unit
Operating Voltage (to LB CONTROLLER)	14	-	36	VDC
Operating Current (constant) - with 1 LB-BEAM	5	5.5	6	mA
Operating Current (constant) - with 2 LB-BEAMs	7.5	8	8.5	mA
Operating Current (constant) -alignment modes, with 1 or 2 LB-BEAMs	36	37	46	mA
Response Threshold/ Sensitivity (Default 35%)	0.45 10	- -	3.98 60	dB %
Delay to Alarm – user settable (Default 20 sec)	2	20	30	Sec
Delay to Fault – user settable (Default 20 sec)	2	20	30	Sec
Operating distance (separation) *	8	-	100	m
Maximum angular alignment of LB-BEAM	-	-	±3.5	Deg
Optical wavelength		850		nm
Fault level/ Rapid obscuration ( $\Delta \leq 2$ sec)	-	-	87	%
Operating temperature	-10	-	+55	Deg C
Storage temperature	-40	-	+85	Deg C
Relative humidity (non condensing)	-	-	93	%
IP rating		54		
Cable length – LB-CONTROLLER to LB-BEAM	-	4	100	m
Housing flammability rating	UL94 V0			
CPD Reference	0832-CPR-F0664			
UL File	S3417			
Dimensions and Weight	Width mm	Height mm	Depth mm	Weight Kg
LB-CONTROLLER, including base:	202	230	87	1.0
LB-BEAM, including base:	134	131	134	0.5
LB-PRISM:	100	100	10	0.1

All figures are quoted for 25 deg C

\*4 Reflectors required for > 50 m operation



FURTHER INFORMATION

( [www.bluekit.eu](http://www.bluekit.eu) )

) INTELLIGENT LIFT SHAFT SYSTEMS

) EUROPE-WIDE AVAILABLE