

Manual

Light Bollard 40156E-Series



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1 Introduction

1.1 Product name and item number

Products name:	Light Bollard
Item number	40156EBKD, 40156EBKR, 40156EBKS 40156EBMD, 40156EBMR, 40156EBMS

1.2 Information on the manufacturer

Name:	Schake GmbH
Address:	Eckeseyer Straße 195, 58089 Hagen
E-Mail:	info@schake.de
Phone:	+49 (0)2331/38606-0

1.3 Target group

These operating instructions are intended for the following personnel:

- Installation personnel
Personnel who assemble and set up the light bollard at the place of use.
- Maintenance personnel
Generally the same persons as the installation personnel.

1.4 Life cycles of the light bollard

The Lightr Bollard undergoes the following life cycles:

- Manufacturing
- Transportation
- Assembly
- Operation
- Maintenance
- Disassembly

2 Safety information

2.1 Intended use

The light bollards of the 40156E series are used for direct and indirect lighting on footpaths, squares and other open spaces, etc. as an open space design and lighting element



Figure 1

Clear lamp glass: 40156EBKD

40156EBKR

40156EBKS



Figure 2

Matt lamp glass: 40156EBMD

40156EBMR

40156EBMS

- The light bollard is designed for outdoor use, i.e. it is weatherproof.
- The light bollard is protected against rain and splashing water (IP54).
- The IP code is only guaranteed when correctly mounted.
- Any other use than previously mentioned may cause damage to this light bollard. Furthermore, it is associated with hazards like short-circuit, fire, electric shock, etc.
- It is essential to observe safety instructions and technical data!

2.2 Predictable misuse

The light bollard must not be used for purposes other than intended. The following foreseeable misuses are not permitted:

- Interior lighting
- Self-repair measures

2.3 Symbols and notes

This manual may use the following symbols, signal words and notes to warn of hazards and to ensure safe operation. The symbols are shown and explained below.



WARNING

This signal word marks an immediate danger.
Failure to observe may result in serious injury or death.

2.4 Safety instructions

The devices described have been developed and built according to the current state of the art. The design complies with the European and national requirements of the Low Voltage Directive. Do not carry out any independent modifications regarding to electronic components or repairs to the device. The conformity has been proven, the corresponding declarations and documents are deposited with the manufacturer.

To maintain this condition and to ensure safe operation, you as user must observe information in this manual! It contains important information on commissioning and handling. Also pay attention to this when passing this product to third parties. Therefore, keep this manual for future reference!

2.4.1 Special safety instructions

Installation may only be performed by a qualified electrician who is familiar with the associated regulations and hazards! The installation must be carried out according to the national regulations (VDE 0100)!

- The light bollard is only approved for connection to 230 V / 50 Hz. Before connecting to the power supply, make sure the nominal voltage and current specifications match the specifications on the type plate.
- The light bollard may only be connected to cables according to section 3.3 "Technical data".
- The light bollard must be directly protected with a 16 A fuse or a circuit breaker by manufacturer and a residual current circuit breaker with a maximum of 30 mA must be connected upstream.

- This light bollard conforms protection class I and therefore must be connected to the protective earth conductor.
- Always ensure that the light bollard is disconnected before assembly, cleaning or other activities on the charging station.
- Wear of metallic or conductive jewelry, such as necklaces, bracelets, rings, etc., is prohibited during all operations, including cleaning!
- Under no circumstances cover the light bollard by heat-insulating materials!
- Do not attach any additional decoration objects on the charging station.
- Do not use charging station in rooms or in adverse surrounding conditions where flammable gases, vapors or dusts are or could be present.
- Never exceed maximum connected load (see section "Technical data").
- In case of any kind of damage, especially to the housing (tightness!), which no longer permits safe operation of the charging station, the power supply line carrying current must be disconnected from the power supply immediately, the charging station must be taken out of operation and secured against being used again!
- In commercial facilities, the accident prevention regulations of the German Federation of Institutions for Statutory Accident Insurance and Prevention (Verband der gewerblichen Berufsgenossenschaften) for electrical systems and equipment must be observed.
- The light bollard has to be mounted on a solid base, e.g. concrete, stone slabs, or similar.
- Do not install the light bollard in areas at risk from flooding.
- For safety reasons, the use of metal structures on buildings and furniture as live conductors is not permitted.
- Do not modify or convert the entire light bollard!
- Never use abrasive cleaners or solvents for cleaning.
- Do not look directly into the light source to avoid eye damage

2.4.2 Operation



During operation, note that the light bollard is connected to the local power supply. Improper use may result in injury or even death due to electric shock.

The outer housing of the light bollard is also grounded.

For safe operation, the user of the light bollard must fulfill the following obligations:

Read and follow the instructions and notes in the operating manual.

3 Description of product

3.1 General functioning of the light bollard

The light bollard serves the following applications:

- Illuminating and marking paths, squares, parks and other open spaces
- Open space design element
- Ambient lighting element

Areas of application for the light bollard are

- Outdoor areas

3.2 Components

The light bollard consists of following main components:

- Subassemblies made of welded tubes
- Protective glass made of acrylic glass
- Welded base plates for dowelling at the place of use
- Wago clamps for connection to the local power supply system with plastic protective housing
- LED module

3.3 Technical Data

3.3.1 Dimensions and mass

Parameter		Unit	Value
Height bollard (L)		[cm]	105
Diameter bollard (Ø)		[cm]	152,4
Width baseplate (H)		[cm x cm]	200 x 200
Thickness baseplate (t)		[cm]	0,8
Gewicht (m)		[kg]	14

3.3.2 Electrics

Parameter	Unit	Value
AC voltage (U)	[V]	230
Frequency (f)	[Hz]	50
Power (P)	[W]	12

3.3.3 Lightsource

Parameter	Unit	Value
Color		neutral-white
Color temperature	[K]	4000
Luminous flux	[lm]	1050
Angle of radiation	[°]	180

3.3.4 Materials

Parameter	Characteristics
Construction material	Steel (S235JR)
Surface	Galvanized according to DIN EN ISO 1461 und powder coated
Schutzglas	Acrylic glass clear/satinized (depending on version)

4 Installation and assembly

4.1 Requirements for installation personnel

Installation and assembly may only be carried out by qualified personnel.

4.2 Requirements for the installation site

The light bollard is intended for outdoor installation. Furthermore, the following specifications must be complied.

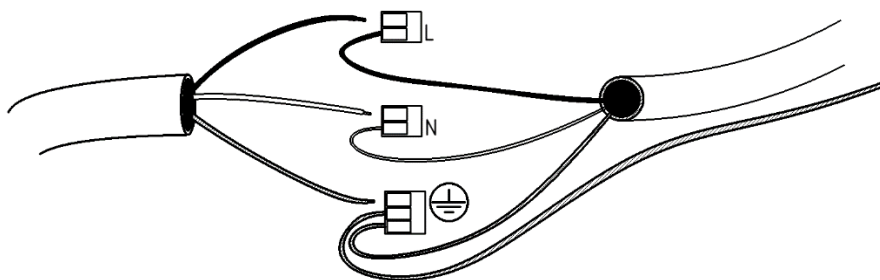
Parameter	Unit	Value
Min. Temperature	[°C]	-20
Max. Temperature	[°C]	+40
Protective conductor resistor	[Ω]	<0,3
Insulation test	[MΩ]	>1,0
Visual inspection		
continuity test of the sockets		

4.3 Installation of the light bollard

For installation, observe the guidelines in section 2.4 "Safety instructions".

The following steps needs to be performed for installation:

1. the connections of the illuminated bollard must be attached to the local power supply first, as the connections are no longer accessible after fixing installation



2. doweling the illuminated bollard base plates at the intended location

5 Commissioning

5.1 Requirements for the performing personnel

Commissioning may only be performed by qualified personnel.

5.2 Switching the light bollard on/off

The light bollard is supplied with power via a connection to the local power supply using Wago terminals. There is no on/off switch on the illuminated bollard. Switching takes place via external circuits.

5.3 Set up

Before setting up at the destination, the light bollard should be connected to 230V AC and to test the sockets.

6 Maintenance and service

6.1 Requirements for the executing personnel

Maintenance and servicing may only be carried out by qualified personnel.

7 Decommissioning / Dismantling / Disposal

The disposal of the light bollard must be performed professionally.

8 Protocols / Certificates / Technical Drawings

- Declaration of Conformity by Schake GmbH for the light bollard
- Risk assessment by Schake GmbH for the light bollard
- Technical Drawings