

## Technical data sheet

### Throughbeam photoelectric sensor receiver

Part no.: 50108813

LSE 96K/P-1039.1-41



For illustration purposes only

#### Contents

- Technical data
- Electrical connection
- Suitable transmitters
- Accessories



## Technical data

### Basic data

|                     |                       |
|---------------------|-----------------------|
| Series              | 96                    |
| Operating principle | Throughbeam principle |
| Device type         | Receiver              |

### Special version

|                 |               |
|-----------------|---------------|
| Special version | Time function |
|-----------------|---------------|

### Optical data

|                 |                 |
|-----------------|-----------------|
| Operating range | see transmitter |
|-----------------|-----------------|

### Electrical data

|                         |                        |
|-------------------------|------------------------|
| <b>Performance data</b> |                        |
| Supply voltage $U_B$    | 10 ... 30 V, DC        |
| Residual ripple         | 0 ... 15 %, From $U_B$ |
| Open-circuit current    | 0 ... 50 mA            |

### Outputs

|                                     |            |
|-------------------------------------|------------|
| Number of digital switching outputs | 1 Piece(s) |
|-------------------------------------|------------|

### Switching outputs

|      |                          |
|------|--------------------------|
| Type | Digital switching output |
|------|--------------------------|

### Switching output 1

|                     |                       |
|---------------------|-----------------------|
| Switching element   | Transistor, PNP       |
| Switching principle | Light/dark switchable |

### Time behavior

|                     |        |
|---------------------|--------|
| Switching frequency | 500 Hz |
|---------------------|--------|

### Connection

|                       |            |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

### Connection 1

|                    |           |
|--------------------|-----------|
| Type of connection | Connector |
| Thread size        | M12       |
| Material           | Plastic   |
| No. of pins        | 4 -pin    |
| Encoding           | A-coded   |

### Mechanical data

|                       |                                                                |
|-----------------------|----------------------------------------------------------------|
| Dimension (W x H x L) | 30 mm x 90 mm x 70 mm                                          |
| Housing material      | Plastic                                                        |
| Plastic housing       | PC                                                             |
| Lens cover material   | Plastic                                                        |
| Net weight            | 150 g                                                          |
| Note                  | Housing part used contains perfluorobutanesulfonic acid (PFBS) |

### Operation and display

|                      |                    |
|----------------------|--------------------|
| Type of display      | LED                |
| Operational controls | 270° potentiometer |

### Environmental data

|                                |               |
|--------------------------------|---------------|
| Ambient temperature, operation | -40 ... 55 °C |
|--------------------------------|---------------|

### Certifications

|                      |               |
|----------------------|---------------|
| Degree of protection | IP 67         |
| Protection class     | II            |
| Approvals            | c UL US       |
| Standards applied    | IEC 60947-5-2 |

### Classification

|                       |          |
|-----------------------|----------|
| Customs tariff number | 85365019 |
| ECLASS 5.1.4          | 27270901 |
| ECLASS 8.0            | 27270901 |
| ECLASS 9.0            | 27270901 |
| ECLASS 10.0           | 27270901 |
| ECLASS 11.0           | 27270901 |
| ECLASS 12.0           | 27270901 |
| ECLASS 13.0           | 27270901 |
| ECLASS 14.0           | 27270901 |
| ECLASS 15.0           | 27270901 |
| ETIM 5.0              | EC002716 |
| ETIM 6.0              | EC002716 |
| ETIM 7.0              | EC002716 |
| ETIM 8.0              | EC002716 |
| ETIM 9.0              | EC002716 |
| ETIM 10.0             | EC002716 |

## Electrical connection

### Connection 1

|                    |           |
|--------------------|-----------|
| Type of connection | Connector |
| Thread size        | M12       |
| Material           | Plastic   |
| No. of pins        | 4 -pin    |
| Encoding           | A-coded   |

## Suitable transmitters

|                                                                                   | Part no. | Designation     | Operating range<br>Operating range<br>limit | Description                                                                                                                           |
|-----------------------------------------------------------------------------------|----------|-----------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|  | 50108812 | LSS 96K-1079-43 | 0 ... 30 m<br>0 ... 35 m                    | Operating range limit: 0 ... 35 m<br>Light source: LED, Infrared<br>Supply voltage: DC<br>Connection: Connector, M12, Plastic, 4 -pin |

## Accessories

### Connection technology - Connection cables

|                                                                                   | Part no. | Designation        | Article          | Description                                                                                                                                                                        |
|-----------------------------------------------------------------------------------|----------|--------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50130652 | KD U-M12-4A-V1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 5.000 mm<br>Sheathing material: PVC  |
|  | 50130690 | KD U-M12-4W-V1-050 | Connection cable | Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 5.000 mm<br>Sheathing material: PVC |

### Mounting technology - Mounting brackets

|                                                                                     | Part no. | Designation | Article         | Description                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|----------|-------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50025570 | BT 96       | Mounting device | Design of mounting device: Angle, L-shape<br>Fastening, at system: Through-hole mounting<br>Mounting bracket, at device: Screw type<br>Type of mounting device: Rigid<br>Material: Metal |

### Mounting technology - Rod mounts

|                                                                                     | Part no. | Designation | Article         | Description                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------|----------|-------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50104897 | BT 450.3-96 | Mounting device | Design of mounting device: Mounting system<br>Fastening, at system: For 12 mm rod<br>Mounting bracket, at device: Screw type<br>Type of mounting device: Turning, 360°, Adjustable<br>Material: Metal |

Accessories

| Note                                                                             |                                                                                                                                  |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
|  | <p>A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.</p> |