

## Technical data sheet

### Throughbeam photoelectric sensor receiver

Part no.: 50140114

LE12/2

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For illustration purposes only



## Technical data

### Basic data

|                     |                          |
|---------------------|--------------------------|
| Series              | 12                       |
| Operating principle | Throughbeam principle    |
| Device type         | Receiver                 |
| Application         | Detection of small parts |

### Optical data

|                 |                            |
|-----------------|----------------------------|
| Operating range | 0 ... 1 m                  |
| Operating range | Guaranteed operating range |
| Light source    | LED                        |

### Electrical data

|                    |                              |
|--------------------|------------------------------|
| Protective circuit | Overvoltage protection       |
|                    | Polarity reversal protection |

### Performance data

|                           |                                        |
|---------------------------|----------------------------------------|
| Supply voltage $U_B$      | 11 ... 26 V, DC, Incl. residual ripple |
| Current consumption, max. | 14 mA                                  |
| Residual ripple           | 10 %, From $U_B$                       |

### Outputs

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

### Switching outputs

|                         |       |
|-------------------------|-------|
| Voltage type            | DC    |
| Switching current, max. | 50 mA |

### Switching output 1

|                     |                 |
|---------------------|-----------------|
| Switching element   | Transistor, NPN |
| Switching principle | Light switching |

### Time behavior

|                 |        |
|-----------------|--------|
| Response time   | 0.5 ms |
| Readiness delay | 100 ms |

### Connection

#### Connection 1

|                      |                      |
|----------------------|----------------------|
| Function             | Signal IN            |
|                      | Voltage supply       |
| Type of connection   | Cable                |
| Cable length         | 2,000 mm             |
| Sheathing material   | PVC                  |
| Cable color          | Black                |
| Number of conductors | 3 -wire              |
| Wire cross section   | 0.08 mm <sup>2</sup> |

### Mechanical data

|                       |                          |
|-----------------------|--------------------------|
| Dimension (W x H x L) | 7.7 mm x 27.8 mm x 14 mm |
| Housing material      | Plastic                  |
| Plastic housing       | PC-PBT                   |
| Lens cover material   | Plastic                  |
| Housing color         | Black                    |

### Operation and display

|                 |            |
|-----------------|------------|
| Type of display | LED        |
| Number of LEDs  | 2 Piece(s) |

### Environmental data

|                                |               |
|--------------------------------|---------------|
| Ambient temperature, operation | -25 ... 55 °C |
| Ambient temperature, storage   | -25 ... 75 °C |

### Certifications

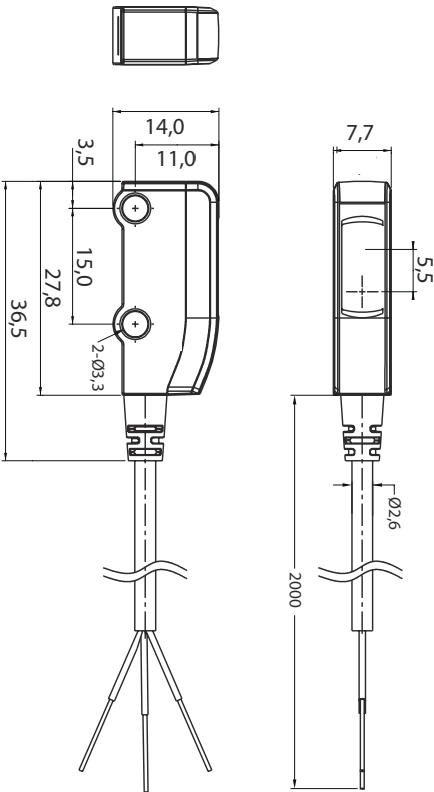
|                      |               |
|----------------------|---------------|
| Degree of protection | IP 67         |
| Standards applied    | IEC 60947-5-2 |

### 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 |

Dimensioned drawings

All dimensions in millimeters



Electrical connection

Connection 1

|                      |                |
|----------------------|----------------|
| Function             | Signal IN      |
|                      | Voltage supply |
| Type of connection   | Cable          |
| Cable length         | 2,000 mm       |
| Sheathing material   | PVC            |
| Cable color          | Black          |
| Number of conductors | 3 -wire        |
| Wire cross section   | 0.08 mm²       |

Conductor color

Conductor assignment

|       |     |
|-------|-----|
| Brown | V+  |
| Black | OUT |
| Blue  | GND |

Operation and display

| LED | Display                  | Meaning               |
|-----|--------------------------|-----------------------|
| 1   | Green, continuous light  | Operational readiness |
| 2   | Orange, continuous light | Object detected       |
|     | Orange, flashing         | Overcurrent           |

Suitable transmitters

|                                                                                   | Part no. | Designation | Article                                      | Description                                                                                                                   |
|-----------------------------------------------------------------------------------|----------|-------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
|  | 50140837 | LS12        | Throughbeam photoelectric sensor transmitter | Application: Detection of small parts<br>Light source: LED, Red<br>Supply voltage: DC<br>Connection: Cable, 2,000 mm, 2 -wire |

Notes

|                                                                                                         |                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  Observe intended use! |                                                                                                                                                                                                                                                                                                                   |
|                         | <div><div>⚡</div><div>This product is not a safety sensor and is not intended as personnel protection.</div></div> <div><div>⚡</div><div>The product may only be put into operation by competent persons.</div></div> <div><div>⚡</div><div>Only use the product in accordance with its intended use.</div></div> |