

## Technical data sheet

### Throughbeam photoelectric sensor transmitter

Part no.: 50140837

LS12

#### Contents

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- Operation and display
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For illustration purposes only



## Technical data

### Basic data

Series	12
Operating principle	Throughbeam principle
Device type	Transmitter
Application	Detection of small parts

### Optical data

Operating range	0 ... 1 m (guaranteed operating range)
Operating range limit	(typical operating range)
Light source	LED, Red
Wavelength	630 nm
Transmitted-signal shape	Pulsed

### 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 $U_B$

### Time behavior

Response time	0.5 ms
Readiness delay	100 ms

### Connection

Number of connections	1 Piece(s)
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#### Connection 1

Function	Voltage supply
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	2 -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
Net weight	40 g
Housing color	Black

### Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)

### Environmental data

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

### Certifications

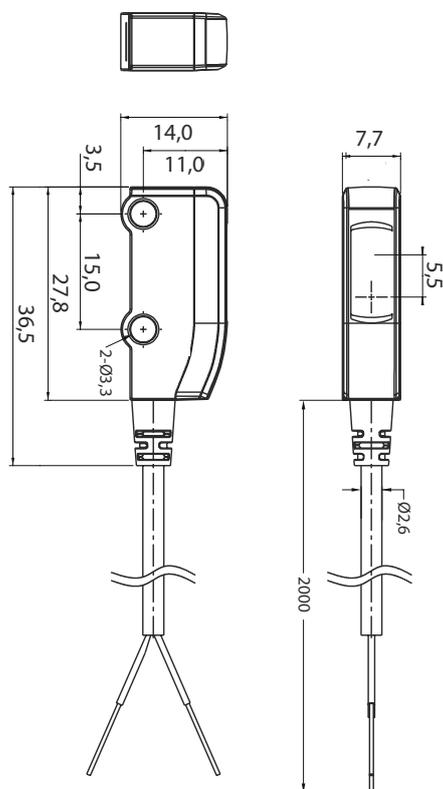
Degree of protection	IP 67
Standards applied	IEC 60947-5-2

### 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
ECLASS 16.0	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	Voltage supply
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	2 -wire
Wire cross section	0.08 mm <sup>2</sup>

### Conductor color

### Conductor assignment

Brown	V+
Blue	GND

## Operation and display

LED	Display	Meaning
1	Green, continuous light	Operational readiness

## Suitable receivers

	Part no.	Designation	Operating range Operating range limit	Description
	50140114	LE12/2	0 ... 1 m	Application: Detection of small parts Light source: LED Supply voltage: DC Digital switching outputs: 1 Piece(s) Switching output 1: Transistor, NPN, Light switching Connection: Cable, 2,000 mm, 3 -wire

## Notes



### Observe intended use!



- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with its intended use.