

## Technical data sheet

### Safety light curtain transmitter

Part no.: 72000103

ELC100T17-300



Figure can vary

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## Technical data

### Basic data

Series	ELC100
Device type	Transmitter
Contains	2x sliding block
Application	Finger protection

### Characteristic parameters

Type	4, IEC/EN 61496
SIL	3, IEC 61508
SILCL	3, IEC/EN 62061
Mission time $T_M$	20 years, EN ISO 13849-1

### Protective field data

Resolution	17 mm
Protective field height	300 mm
Operating range	0.5 ... 3 m

### Optical data

Synchronization	Optical between transmitter and receiver
Light source	LED, Infrared
Wavelength	940 nm
Transmitted-signal shape	Pulsed
LED risk group	Exempt group (in acc. with EN 62471:2008)

### Electrical data

Protective circuit	Overvoltage protection Short circuit protected
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### Performance data

Supply voltage $U_B$	24 V, DC, -20 ... 20 %
Current consumption, max.	50 mA

### Connection

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

Function	Machine interface
Type of connection	Connector
Thread size	M12
Material	Metal
No. of pins	4 -pin

### Cable properties

Permissible conductor cross section, typ.	0.25 mm <sup>2</sup>
Length of connection cable, max.	15 m
Permissible cable resistance to load, max.	20 $\Omega$

### Mechanical data

Dimension (W x H x L)	34.7 mm x 315 mm x 35.4 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic / PMMA
Material of end caps	Diecast zinc
Net weight	510 g
Housing color	Yellow, RAL 1021
Type of fastening	Groove mounting Mounting bracket

### Operation and display

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

### Environmental data

Ambient temperature, operation	0 ... 55 °C
Ambient temperature, storage	-30 ... 70 °C
Relative humidity (non-condensing)	0 ... 95 %

### Certifications

Degree of protection	IP 65
Protection class	III
Certifications	c CSA US TÜV Süd
Vibration resistance	50 m/s <sup>2</sup>
Shock resistance, continuous shock	15 g, 6 ms IEC 60068-2-27
Shock resistance, single shock	40 m/s <sup>2</sup> , 100,000 on each spatial axis
US patents	US 6,418,546 B

### Classification

Customs tariff number	85365019
eCl@ss 5.1.4	27272704
eCl@ss 8.0	27272704
eCl@ss 9.0	27272704
eCl@ss 10.0	27272704
eCl@ss 11.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549

# Dimensioned drawings

All dimensions in millimeters

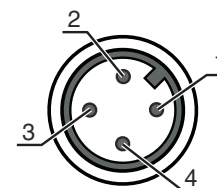


## Electrical connection

### Connection 1

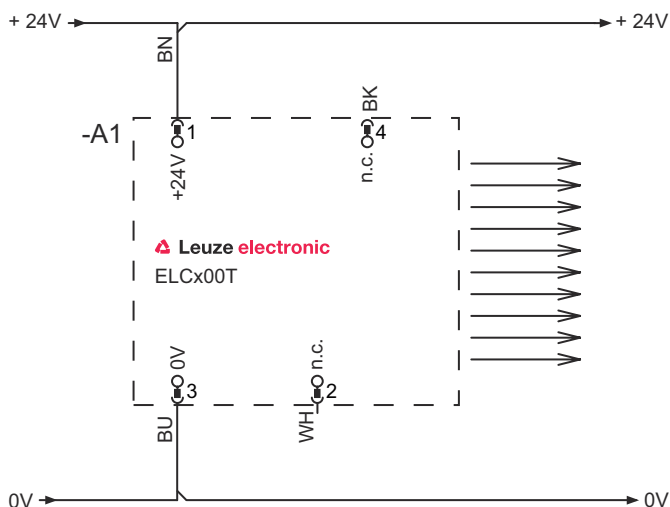
Function	Machine interface
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin

Pin	Pin assignment	Conductor color
1	+24V	Brown
2	n.c.	White
3	0 V	Blue
4	n.c.	Black



## Circuit diagrams


### Connection diagram transmitter



## Operation and display

LED	Display	Meaning
1	Red, flashing	Error
	Flash sequence 2x ON/OFF (250 ms), followed by a pause (750 ms)	Connection error
	Red, flashing, 10 Hz	Device error
2	Off	Device switched off
	On	Device switched on

## Suitable receivers

	Part no.	Designation	Article	Description
	72001103	ELC110R17-300	Safety light curtain receiver	Resolution: 17 mm Protective field height: 300 mm Response time: 5.6 ms Connection: Connector, M12, Metal, 4 -pin

## Part number code

Part designation: ELC1yyzaa-hhhh

ELC	Safety light curtain
x	1: ELC100
yy	00: transmitter 10: receiver – automatic restart
z	<b>Device type</b> T: transmitter R: receiver

## Part number code

**ELC**      **Safety light curtain**

<b>a</b>	<b>Resolution</b> 17: 17 mm 30: 30 mm
<b>hhhh</b>	<b>Protective field height</b> 300 ... 1500: from 300 mm to 1500 mm

Note	
	A list with all available device types can be found on the Leuze website at <a href="http://www.leuze.com">www.leuze.com</a> .

## Notes

⚠ Observe intended use!	
	<ul style="list-style-type: none"> <li>The product may only be put into operation by competent persons.</li> <li>Only use the product in accordance with its intended use.</li> </ul>

## Accessories

### Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50133860	KD S-M12-5A-P1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

### Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
	424432	BT-2SB05	Mounting bracket set	Design of mounting device: Mounting clamp Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable, On the lateral C-groove Type of mounting device: Turning, 8° Swivel range: -8 ... 8° Material: Metal

## Accessories

## Services

	Part no.	Designation	Article	Description
	S981050	CS40-I-140	Safety inspection "Safety light barriers"	<p>Details: Checking of a safety light barrier application in accordance with current standards and guidelines. Inclusion of the device and machine data in a database, production of a test log per application.</p> <p>Conditions: It must be possible to stop the machine, support provided by customer's employees and access to the machine for Leuze employees must be ensured.</p> <p>Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure.</p>
	S981046	CS40-S-140	Start-up support	<p>Details: For safety devices including stopping time measurement and initial inspection.</p> <p>Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses.</p> <p>Restrictions: Max. 2 h., no mechanical (mounting) and electrical (wiring) work performed, no changes (attachments, wiring, programming) to third-party components in the nearby environment.</p>

### Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.