

## **Technical data sheet** Safety light curtain transmitter Part no.: 72100103

ELC105T17-300



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## **Technical data**

#### Basic data

Series	ELC150
Device type	Transmitter
Contains	2x sliding block
Application	Finger protection

#### **Characteristic parameters**

Туре
SIL
SILCL
Mission time T <sub>M</sub>

#### 4, IEC/EN 61496 3, IEC 61508 3, IEC/EN 62061 20 years, EN ISO 13849-1

#### **Protective field data**

Resolution	17 mm
Protective field height	300 mm
Operating range	0.5 6 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
	Performance data	
	Supply voltage U <sub>B</sub>	24 V, DC, -20 20 %
	Current consumption, max.	50 mA
С	onnection	
Number of connections		1 Piece(s)
	Connection 1	
	Function	Machine interface
	Type of connection	Cable with connector
	Cable length	200 mm
	Sheathing material	PUR
	Number of conductors	4 -wire
	Thread size	M12
	Material	Metal
	No. of pins	4 -pin
	Cable properties	
	Permissible conductor cross section, typ.	0.25 mm²
	Length of connection cable, max.	15 m

20 Ω

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#### 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 UL US	
	TÜV Süd	
Vibration resistance	50 m/s²	
Shock resistance, continuous shock	15 g, 6 ms IEC 60068-2-27	
Shock resistance, single shock	40 m/s², 100,000 on each spatial axis	
US patents	US 6,418,546 B	
Classification		
Customs tariff number	85365019	
ECLASS 5.1.4	27272704	
ECLASS 8.0	27272704	
ECLASS 9.0	27272704	
ECLASS 10.0	27272704	
ECLASS 11.0	27272704	
ECLASS 12.0	27272704	
ECLASS 13.0	27272704	
ETIM 5.0	EC002549	
ETIM 6.0	EC002549	
ETIM 7.0	EC002549	
ETIM 8.0	EC002549	

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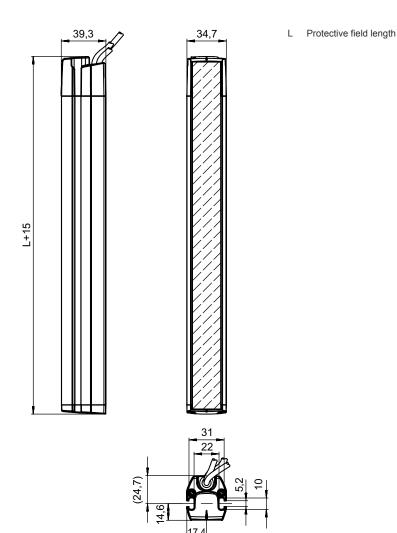
Permissible cable resistance to

load, max.

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## **Dimensioned drawings**

All dimensions in millimeters



## **Electrical connection**

**Connection 1** 

Function	Machine interface
Type of connection	Cable with connector
Cable length	200 mm
Sheathing material	PUR
Cable color	Black
Number of conductors	4 -wire
Wire cross section	0.2 mm²
Thread size	M12
Туре	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

#### 3/6

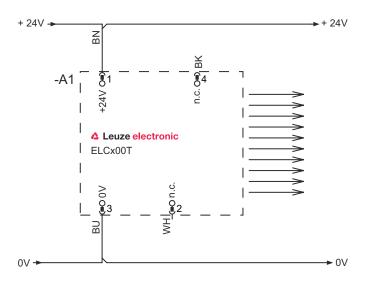
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## **Electrical connection**

Pin	Pin assignment	Conductor color	2
1	+24 V	Brown	
2	n.c.	White	
3	0 V	Blue	3
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
72101103	ELC150R17-300	Safety light curtain receiver	Resolution: 17 mm Protective field height: 300 mm Response time: 5.6 ms Connection: Cable with connector, M12, Metal, 4 -pin, 200 mm, PUR



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## Part number code

Part designation: ELC1yyzaa-hhhh



ELC	Safety light curtain
1	1: ELC150
уу	00: transmitter 50: Receiver – automatic restart
z	Device type T: transmitter R: receiver
а	Resolution 14: 14 mm 17: 17 mm 30: 30 mm
hhhh	Protective field height 300 1500: from 300 mm to 1500 mm
١	Note

A list with all available device types can be found on the Leuze website at www.leuze.com.

Notes

Observe intended use!
<ul> <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 Connector, LED: No Connection 2: Open end Shielded: Yes Cable length: 5.000 mm Sheathing material: PUR

## Mounting technology - Other

	Part no.	Designation	Article	Description
Ci Ci	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: Swiveling Swivel range: -8 8 ° Material: Metal

#### Accessories

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#### Services

	Part no.	Designation	Article	Description
()	S981050	CS40-I-140	Safety inspection	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. 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. Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure.
с. С	S981046	CS40-S-140	Start-up support	Details: For safety devices including stopping time measurement and initial inspection. Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses. 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.

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