

Technical data sheet Safety light curtain transmitter

Part no.: 68020413 MLC500T40-1350G



The Sensor People In der Braike 1, 73277 Owen

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Technical data

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Basic data

Series	MLC 500		
Device type	Transmitter		
Cascading	Guest		
Contains	2x BT-NC sliding block		
Application	Access guarding		
	Danger zone guarding		
	Hand protection		

Characteristic parameters

Туре	4, IEC/EN 61496
SIL	3, IEC 61508
SILCL	3, IEC/EN 62061
Mission time T _M	20 years, EN ISO 13849-1

40 mm 1,350 mm 0 ... 20 m

Protective field data

Resolution	
Protective field height	
Operating range	

Optical data

Number of beams	54 Piece(s)
Light source	LED, Infrared
LED light wavelength	940 nm
Transmitted-signal shape	Pulsed
LED risk group	Exempt group (in acc. with EN 62471:2008)

Connection

Number of connections		1 Piece(s)
	Connection 1	
	Function	Cascade, Host In
		Cascade, Middle Guest In
Type of connection		Cable with connector
	Cable length	330 mm
	Sheathing material	PUR
	Thread size	M12
	Material	Plastic
	No. of pins	8 -pin

Mechanical data

Dimension (W x H x L)	29 mm x 1,364 mm x 53 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic / PMMA
Material of end caps	Diecast zinc
Net weight	1,473 g
Housing color	Yellow, RAL 1021
Type of fastening	Groove mounting
	Mounting bracket
	Swivel mount
Environmental data	
Ambient temperature, operation	0 55 °C
Ambient temperature, storage	-30 70 °C
Relative humidity (non-condensing)	0 95 %
Certifications	
Certifications	
Degree of protection	IP 65
	IP 65 III
Degree of protection	
Degree of protection Protection class	
Degree of protection Protection class	III c CSA US
Degree of protection Protection class	III c CSA US c TÜV NRTL US
Degree of protection Protection class Certifications	III c CSA US c TÜV NRTL US TÜV Süd
Degree of protection Protection class Certifications Vibration resistance	III c CSA US c TÜV NRTL US TÜV Süd 50 m/s ²
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Degree of protection Protection class Certifications Vibration resistance Shock resistance US patents Classification Customs tariff number	III c CSA US c TÜV NRTL US TÜV Süd 50 m/s ² 100 m/s ² US 6,418,546 B 85365019
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ETIM 5.0

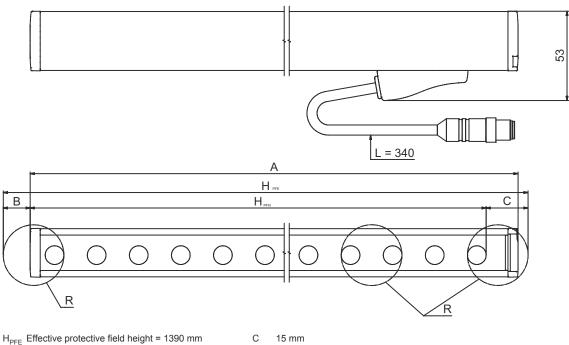
ETIM 6.0

ETIM 7.0

Dimensioned drawings

All dimensions in millimeters

Calculation of the effective protective field height H_{PFE} = H_{PFN} + B + C



- H_{PFN} Nominal protective field height = 1350 mm Total height = 1364 mm А
- В 25 mm

R

Effective protective field height ${\rm H}_{\rm PFE}$ goes beyond the dimensions of the optics area to the outer borders of the circles labeled with R.

Electrical connection

Connection 1

Function	Cascade, Host In
	Cascade, Middle Guest In
Type of connection	Cable with connector
Cable length	330 mm
Sheathing material	PUR
Cable color	Black
Type of stranding	Pair stranding (twisted pair)
Wire cross section	0.14 mm ²
Thread size	M12
Туре	Male
Material	Plastic
No. of pins	8 -pin
Encoding	A-coded

Suitable receivers

 Part no.	Designation	Article	Description
68021413	MLC520R40-1350G	Safety light curtain receiver	Resolution: 40 mm Protective field height: 1,350 mm Response time: 12 ms Connection: Cable with connector, M12, Plastic, 8 -pin, 330 mm, PUR

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Part number code

Part designation: MLCxyy-za-hhhhei-ooo



MLC	Safety light curtain
x	Series 3: MLC 300 5: MLC 500
уу	Function classes 00: transmitter 01: transmitter (AIDA) 02: transmitter with test input 10: basic receiver - automatic restart 11: basic receiver - automatic restart (AIDA) 20: standard receiver - EDM/RES selectable 30: extended receiver - blanking/muting
Z	Device type T: transmitter R: receiver
а	Resolution 14: 14 mm 20: 20 mm 30: 30 mm 40: 40 mm 90: 90 mm
hhhh	Protective field height 150 … 3000: from 150 mm to 3000 mm
e	Host/Guest (optional) H: Host MG: Middle Guest G: Guest
i	Interface (optional) /A: AS-i
000	Option /V: high Vibration-proof EX2: explosion protection (zones 2 + 22) SPG: Smart Process Gating
Not	te
() () () () () () () () () () () () () (A list with all available device types can be found on the Leuze website at www.leuze.com.

Notes



Observe intended use!

 $\ensuremath{\mathfrak{b}}$ Only use the product in accordance with its intended use.

Accessories

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Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	429278	CB-M12-2000E-8TP	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 8 -pin Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
1111	429006	BT-2L-HG	Mounting device set	Mounting bracket, at device: Screw type Material: Metal

Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
P.Q.	429395	BT-2HF-G	Mounting bracket set	Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic

Alignment aids

 Part no.	Designation	Article	Description
520101	AC-ALM-M	Alignment aid	Housing material: Plastic

Services

	Part no.	Designation	Article	Description
()	S981050	CS40-I-140	Safety inspection "Safety light barriers"	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.
, U	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.

Accessories





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