

Technical data sheet Multiple light beam safety device

Part no.: 66001300

MLD300-T4



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MID 200

Technical data



Basic data

Carios

Series	MLD 300
Device type	Transmitter
Functions	
Functions	Range reduction
Characteristic parameters	
Туре	2, IEC/EN 61496
SIL	1, IEC 61508
SILCL	1, IEC/EN 62061
MTTF _d	204 years, EN ISO 13849-1
Mission time T _M	20 years, EN ISO 13849-1
Protective field data	
Operating range	0.5 50 m
Optical data	
Number of beams	4 Piece(s)
Beam spacing	300 mm
Light source	LED, Infrared
LED light wavelength	850 nm
Mean power of transmitter diode	1.369 µW
Transmitted-signal shape	Pulsed
LED group	1
Electrical data	
Protective circuit	Overvoltage protection
	Short circuit protected
Performance data	
Supply voltage U _B	24 V, DC, -20 20 %
Current consumption, max.	50 mA, Without external load
Fuse	External with max. 3 A

Connection

Number of connections	1 Piece(s)	

Connection 1	
Machine interface	
Connector	
M12	
Metal	
5 -pin	

Cable properties

Oable properties	
Permissible conductor cross section, typ.	0.25 mm ²
Length of connection cable, max.	100 m
Permissible cable resistance to load, max.	200 Ω

Mechanical data

Dimension (W x H x L)	52 mm x 1,000 mm x 64.7 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic / PMMA
Material of end caps	Diecast zinc
Net weight	2,200 g
Housing color	Yellow, RAL 1021
Type of fastening	Groove mounting
	Swivel mount

Operation and display

Type of display	LED
Number of LEDs	4 Piece(s)

Environmental data

Ambient temperature, operation	-30 55 °C
Ambient temperature, storage	-40 75 °C
Relative humidity (non-condensing)	0 95 %

Certifications

Degree of protection	IP 67
Protection class	III
Certifications	c CSA US
	c TÜV NRTL US
	TÜV Süd
US patents	US 6,418,546 B
	US 7,741,595 B

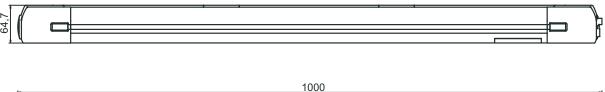
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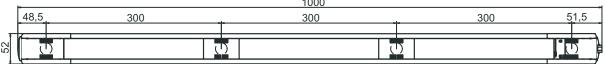
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ETIM 5.0	EC001832
ETIM 6.0	EC001832
ETIM 7.0	EC001832

Dimensioned drawings



All dimensions in millimeters



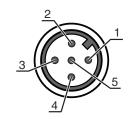


Electrical connection

Connection 1

Function	Machine interface
Type of connection	Connector
Thread size	M12
Туре	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Pin	Pin assignment	Conductor color
1	+24V	Brown
2	n.c.	White
3	0 V	Blue
4	Transmitter range switching: 0 V = entire range, 24 V = reduced range	Black
5	n.c.	Gray



Operation and display

LEDs per light axis Meaning

Green, continuous light	Transmitted beam active
Off	Transmitted beam not active

Suitable receivers

Part no.	Designation	Article	Description
66033300	MLD310-R4	Multiple light beam safety device receiver	Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 25 ms Connection: Connector, M12, Metal, 5 -pin

Suitable receivers



Part no.	Designation	Article	Description
66043300	MLD312-R4	Multiple light beam safety device receiver	Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 25 ms Connection: Connector, M12, Metal, 5 -pin
66053300	MLD320-R4	Multiple light beam safety device receiver	Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 25 ms Connection: Connector, M12, Metal, 8 -pin
66054300	MLD320-R4M	Multiple light beam safety device receiver	Special version: Integrated status indicator Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 25 ms Connection: Connector, M12, Metal, 8 -pin
66063300	MLD330-R4	Multiple light beam safety device receiver	Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 50 ms Connection: Connector, M12, Metal, 8 -pin
66064300	MLD330-R4M	Multiple light beam safety device receiver	Special version: Integrated muting indicator, Integrated status indicator Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 50 ms Connection: Connector, M12, Metal, 8 -pin
66073300	MLD335-R4	Multiple light beam safety device receiver	Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 50 ms Connection: Connector, M12, Metal, 8 -pin
66074300	MLD335-R4M	Multiple light beam safety device receiver	Special version: Integrated muting indicator, Integrated status indicator Number of beams: 4 Piece(s) Beam spacing: 300 mm Response time: 50 ms Connection: Connector, M12, Metal, 8 -pin

Part number code

Part designation: MLDxyy-zab/t

MLD Multiple light beam safety device

Series

3: MLD 300 5: MLD 500 Multiple light beam safety device

Part number code

MLD



уу	Function classes 00: transmitter 10: automatic restart 12: external testing 20: EDM/RES 30: muting 35: timing controlled 4-sensor muting
z	Device type T: transmitter R: receiver RT: transceiver xT: transmitter with high range xR: receiver for high range

Number of beams

L: integrated laser alignment aid (for transmitter/receiver)

M: integrated status indicator (MLD 320, MLD 520) or integrated status and muting indicator (MLD 330, MLD 335, MLD 510/A, MLD 530,

MLD 535)

E: connection socket for external muting indicator (AS-i models only)

Safety-related switching outputs (OSSDs), connection technology

-: transistor output, M12 plug

A: integrated AS-i interface, M12 plug, (safety bus system)

Note



Accessories

Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50133859	KD S-M12-5A-P1-020	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR
	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
	50136146	KD S-M12-5A-P1-250	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 10,000 mm Sheathing material: PVC

Accessories



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.
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



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