

# //MULTIPLE LIGHT BEAM SAFETY DEVICES

## WHEN FUNCTIONALITY BECOMES ECONOMICAL

Multiple light beam safety devices with muting function ensure constant personnel protection (access guarding) with unobstructed material infeed, e. g., in conveyor systems. Options such as the integrated laser alignment aid, an integrated muting indicator and the patented swivel mount for easy fastening and alignment round out the program.

### /// MLD 500 transmitter/receiver



This type 4 series can be used both for access guarding as well as for applications with muting. Through various function classes (MLD 510, 520, 530, 535), the optimum design can always be selected. Configuration via PC or DIP switch is not necessary.



#### PART NUMBER CODES – MLD 500, MLD 300 multiple light beam safety devices

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##### Type

MLD Multiple light beam safety device

##### Series

3 MLD 300  
5 MLD 500

##### Function

00 Transmitter  
10 Automatic restart  
12 External testing (MLD 300 only)  
20 Start/restart interlock selectable, contactor monitoring selectable  
30 2-sensor muting (timing controlled, sequence controlled)  
35 4-sensor muting (timing controlled)

##### Device type

T Transmitter  
R Receiver  
RT Transceiver  
xT Transmitter for high range  
xR Receiver for high range

##### No. of beams

2 2-beam  
3 3-beam  
4 4-beam

##### Option

L Integrated laser alignment aid  
M Integrated indicator  
E Connection socket for external muting indicator (AS-i models only)

##### Safety-related switching outputs (OSSD), connection system

- Transistor output, M12 plug  
A Integrated AS-i interface, M12 plug, (safety bus system)

## MLD 535

Through extensive functions, such as start/restart interlock, contactor monitoring, timing controlled 2-sensor muting, sequence controlled 2-sensor muting and timing controlled 4-sensor muting, these multiple light beam safety devices can be used in different areas.

### Benefits:

- The configuration is simply performed by means of wiring, i.e. no software, PC or DIP switch are necessary
- Use at ambient temperatures as low as -30 °C is possible
- Start/restart interlock (RES), selectable
- Contactor monitoring (EDM), selectable
- Configurable operating modes
- Integrated muting function, no additional muting module is necessary
- 2-sensor muting, (timing controlled, sequence controlled)
- Timing controlled 4-sensor muting
- Options: integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	Design
66573100	▶ MLD535-R2	500 mm	2x		Connector, M12, 8-pin, metal	
66501100	◀ MLD500-T2	500 mm	2x	0.5 ... 50 m	Connector, M12, 5-pin, metal	
66573500	▶ MLD535-XR2	500 mm	2x		Connector, M12, 8-pin, metal	
66501500	◀ MLD500-XT2	500 mm	2x	20 ... 70 m	Connector, M12, 5-pin, metal	
66574100	▶ MLD535-R2M	500 mm	2x		Connector, M12, 8-pin, metal	Integrated muting indicator, integrated status indicator
66501100	◀ MLD500-T2	500 mm	2x	0.5 ... 50 m	Connector, M12, 5-pin, metal	
66576100	▶ MLD535-R2L	500 mm	2x		Connector, M12, 8-pin, metal	Reflective element for laser alignment aid
66502100	◀ MLD500-T2L	500 mm	2x	0.5 ... 50 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66575100	▶ MLD535-R2LM	500 mm	2x		Connector, M12, 8-pin, metal	Integrated muting indicator, integrated status indicator, reflective element for laser alignment aid
66502100	◀ MLD500-T2L	500 mm	2x	0.5 ... 50 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66576500	▶ MLD535-XR2L	500 mm	2x		Connector, M12, 8-pin, metal	Reflective element for laser alignment aid
66502500	◀ MLD500-XT2L	500 mm	2x	20 ... 70 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66573200	▶ MLD535-R3	400 mm	3x		Connector, M12, 8-pin, metal	
66501200	◀ MLD500-T3	400 mm	3x	0.5 ... 50 m	Connector, M12, 5-pin, metal	
66573600	▶ MLD535-XR3	400 mm	3x		Connector, M12, 8-pin, metal	
66501600	◀ MLD500-XT3	400 mm	3x	20 ... 70 m	Connector, M12, 5-pin, metal	
66574200	▶ MLD535-R3M	400 mm	3x		Connector, M12, 8-pin, metal	Integrated muting indicator, integrated status indicator
66501200	◀ MLD500-T3	400 mm	3x	0.5 ... 50 m	Connector, M12, 5-pin, metal	
66576200	▶ MLD535-R3L	400 mm	3x		Connector, M12, 8-pin, metal	Reflective element for laser alignment aid
66502200	◀ MLD500-T3L	400 mm	3x	0.5 ... 50 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66575200	▶ MLD535-R3LM	400 mm	3x		Connector, M12, 8-pin, metal	Integrated muting indicator, integrated status indicator, reflective element for laser alignment aid
66502200	◀ MLD500-T3L	400 mm	3x	0.5 ... 50 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66576600	▶ MLD535-XR3L	400 mm	3x		Connector, M12, 8-pin, metal	Reflective element for laser alignment aid
66502600	◀ MLD500-XT3L	400 mm	3x	20 ... 70 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66573300	▶ MLD535-R4	300 mm	4x		Connector, M12, 8-pin, metal	
66501300	◀ MLD500-T4	300 mm	4x	0.5 ... 50 m	Connector, M12, 5-pin, metal	
66573700	▶ MLD535-XR4	300 mm	4x		Connector, M12, 8-pin, metal	
66501700	◀ MLD500-XT4	300 mm	4x	20 ... 70 m	Connector, M12, 5-pin, metal	
66574300	▶ MLD535-R4M	300 mm	4x		Connector, M12, 8-pin, metal	Integrated muting indicator, integrated status indicator
66501300	◀ MLD500-T4	300 mm	4x	0.5 ... 50 m	Connector, M12, 5-pin, metal	
66576300	▶ MLD535-R4L	300 mm	4x		Connector, M12, 8-pin, metal	Reflective element for laser alignment aid
66502300	◀ MLD500-T4L	300 mm	4x	0.5 ... 50 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66575300	▶ MLD535-R4LM	300 mm	4x		Connector, M12, 8-pin, metal	Integrated muting indicator, integrated status indicator, reflective element for laser alignment aid
66502300	◀ MLD500-T4L	300 mm	4x	0.5 ... 50 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid
66576700	▶ MLD535-XR4L	300 mm	4x		Connector, M12, 8-pin, metal	Reflective element for laser alignment aid
66502700	◀ MLD500-XT4L	300 mm	4x	20 ... 70 m	Connector, M12, 5-pin, metal	Integrated laser alignment aid

▶ receiver / ◀ transmitter  
Included in delivery: sliding blocks

Switching sensors

Measuring sensors

Products for safety at work

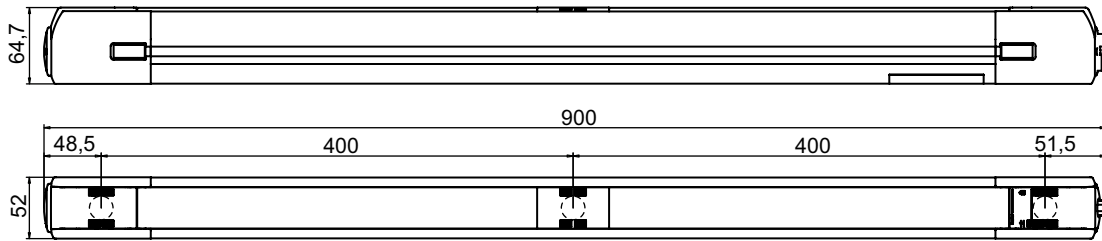
Identification

Data transmission / Control components

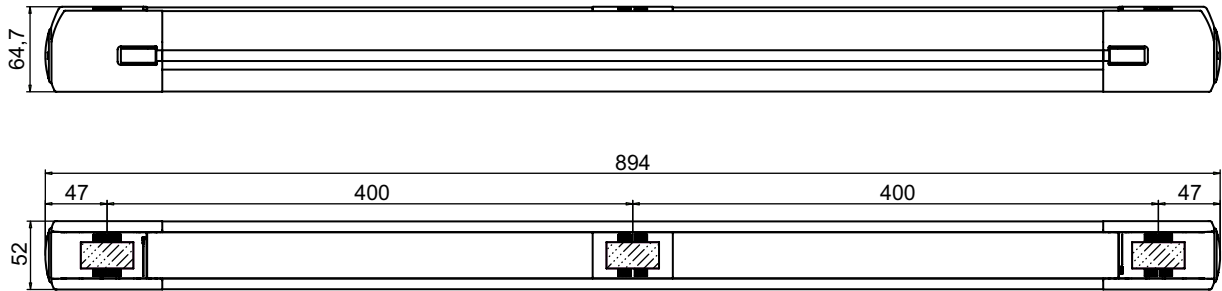
Industrial image processing

Accessories

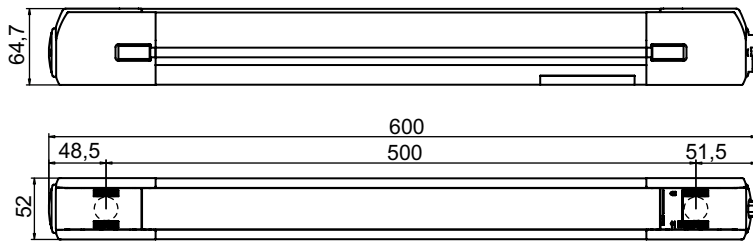
**Dimensioned drawings: MLD 500Transceiver**



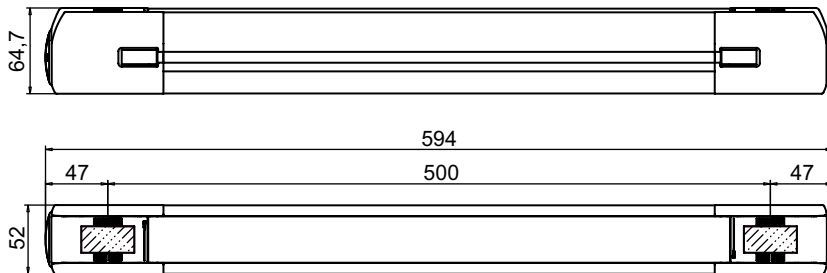
MLD 500 multiple light beam safety device, 3-beam, Transceiver



MLD-M multiple light beam safety device, 3-beam, deflecting mirror



MLD 500 multiple light beam safety device, 2-beam, Transceiver



MLD-M multiple light beam safety device, 2-beam, deflecting mirror