

PRODUCTS FOR SAFETY AT WORK

INNOVATIVE SOLUTIONS FOR PERSONNEL PROTECTION AT YOUR PRODUCTION SYSTEMS

As one of the technology leaders in the area of optoelectronic safety sensors for industrial automation, we offer effective personnel protection devices in accordance with international safety standards.



"In addition to reliability, the ideally fault-free integration of a solution in the processes is decisive for practical use. With our broad product range and extensive selection of services and consulting options, our offerings can be tailored to your needs."

Joachim Koperski,
Director of Product Center – Light Curtains



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Switching
Sensors

Measuring
Sensors

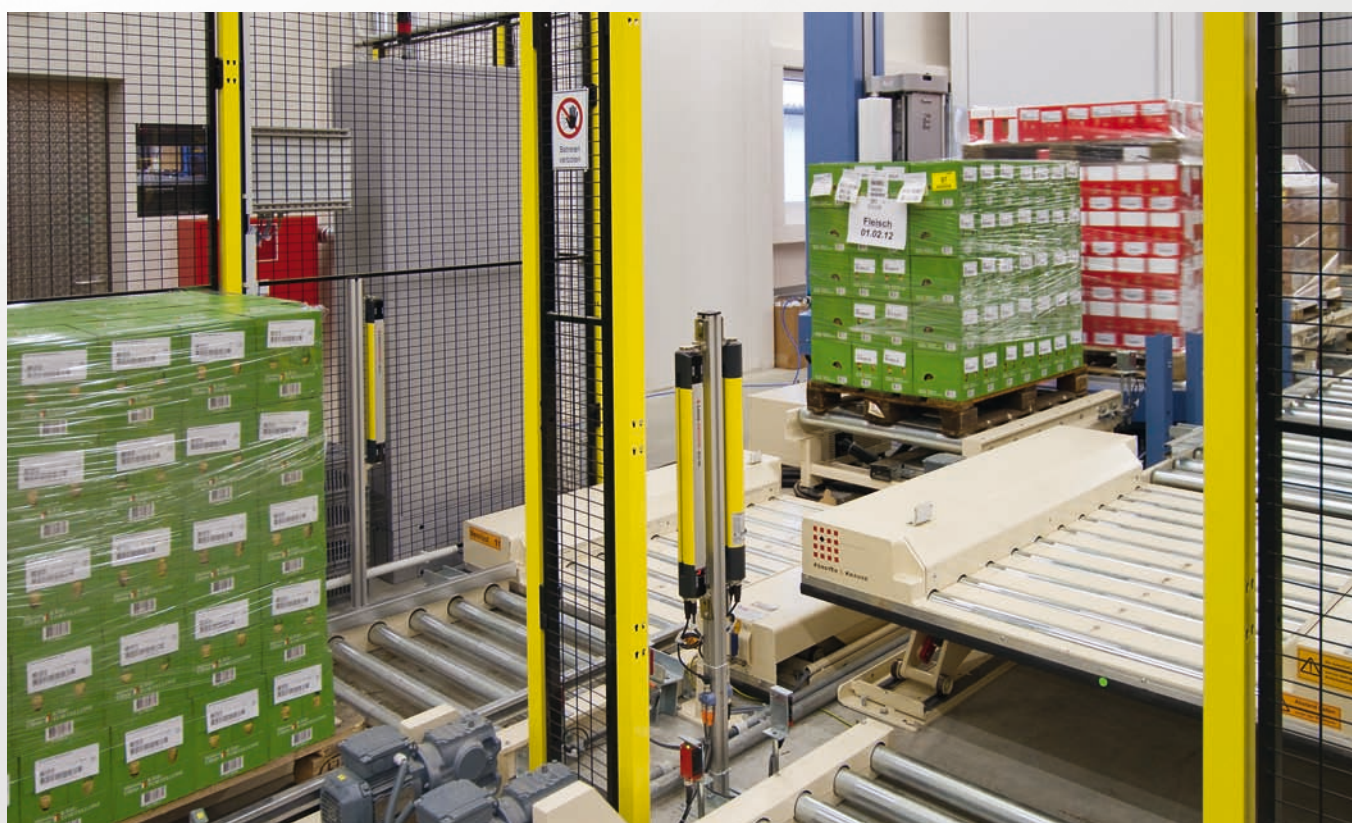
Products for
Safety at Work

Identification

Data Transmission /
Control Components

Industrial Image
Processing

Accessories



/ OPTOELECTRONIC SAFETY SENSORS

EVERYTHING FOR SAFETY

Whether individual devices or optimally matched sets: in our extensive line of safety sensors, you will always find a suitable and efficient safety solution for point-of-operation, danger-zone and access guarding. All devices satisfy the applicable legal regulations and standards.



Safety Light Curtains

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Multiple Light Beam Safety Devices

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Single Light Beam Safety Devices

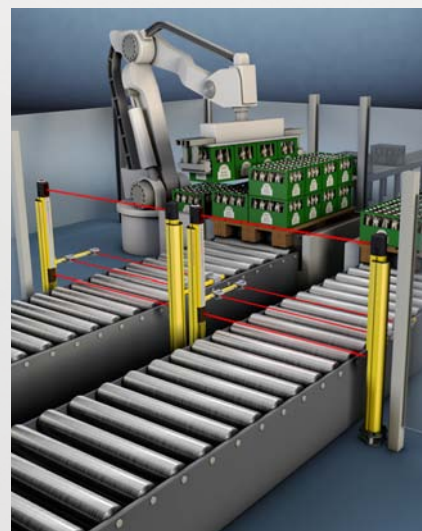
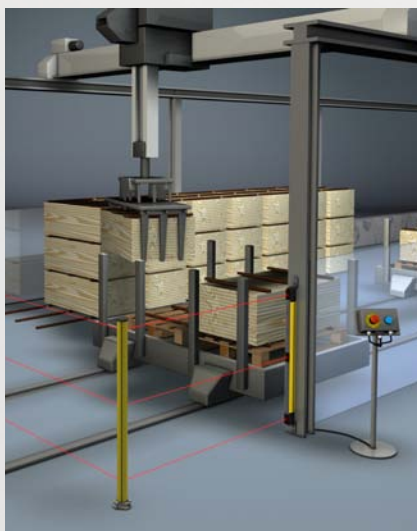
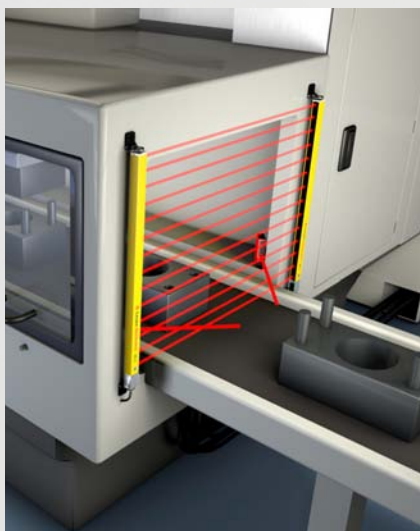
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Safety Laser Scanners

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Protective Sensor Sets

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//SAFETY LIGHT CURTAINS

CURTAIN FOR EFFICIENT SAFETY

Reliable and interference-immune sensor safety technology ensures high system availability and productivity. Wherever man and machine work "hand in hand", our safety light curtains can be used vertically as hand and finger protection, as access guarding as well as horizontally as area protection. With respect to integration capability, availability and cost effectiveness, they meet the highest requirements.

/// MLC 500



The MLC 500 series includes the newest generation of extremely sturdy type 4 safety light curtains. Three function classes – Basic, Standard and Extended – enable the most efficient use of devices from simple standard applications to complex controlled special safeguarding processes. The devices can be used universally, due to metal end caps, a flexible fastening concept and the option of form-locking installation. There are also variants which have an AIDA-compliant pin assignment.



Direct access to the online product selector at www.leuze.com/en/mlc500

PART NUMBER CODES – safety light curtains MLC 500 and MLC 300

MLC 3 0 0 T 1 4 h h h h H

Model

MLC Safety light curtain

Series

3 MLC 300
5 MLC 500

Function

00 Transmitter
01 Transmitter (AIDA)
10 Automatic restart
11 Automatic restart (AIDA)
20 EDM/RES selectable
30 Muting/Blanking/Linkage (only MLC 530)

Device type (only MLC 520)

T Transmitter
R Receiver

Resolution

14 14 mm / range 0 – 6 m (only MLC 500)
20 20 mm / range 0 – 14 m
30 30 mm / range 0 – 10 m
40 40 mm / range 0 – 20 m
90 90 mm / range 0 – 20 m

Protective field height

hhhh 150...3000 mm

Host/guest (only MLC 520)

H Host
MG MiddleGuest
G Guest

Switching
Sensors

Measuring
Sensors

Products for
Safety at Work

Identification

Data Transmission /
Control Components

Industrial Image
Processing

Accessories

MLC 510

This Basic version of the type 4 safety light curtains provides the most important functions. Range reduction on the transmitter, reversible transmission channels, a LED display as well as an automatic start/restart interlock round out the range of service.

Benefits:

- Automatic start/restart
- Optimal handling
- Prevention of mutual interference of the sensors by selectable transmission channels and range reduction, if applicable
- Universal application due to standard functions
- Short delivery times and global availability
- QR code on the sensor for quick service information

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68001101	► MLC510R14-150	150 mm	14 mm		Connector, M12, metal	5	Basic
68000101	◄ MLC500T14-150	150 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001103	► MLC510R14-300	300 mm	14 mm		Connector, M12, metal	5	Basic
68000103	◄ MLC500T14-300	300 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001104	► MLC510R14-450	450 mm	14 mm		Connector, M12, metal	5	Basic
68000104	◄ MLC500T14-450	450 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001106	► MLC510R14-600	600 mm	14 mm		Connector, M12, metal	5	Basic
68000106	◄ MLC500T14-600	600 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001107	► MLC510R14-750	750 mm	14 mm		Connector, M12, metal	5	Basic
68000107	◄ MLC500T14-750	750 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001109	► MLC510R14-900	900 mm	14 mm		Connector, M12, metal	5	Basic
68000109	◄ MLC500T14-900	900 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001110	► MLC510R14-1050	1,050 mm	14 mm		Connector, M12, metal	5	Basic
68000110	◄ MLC500T14-1050	1,050 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001112	► MLC510R14-1200	1,200 mm	14 mm		Connector, M12, metal	5	Basic
68000112	◄ MLC500T14-1200	1,200 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001113	► MLC510R14-1350	1,350 mm	14 mm		Connector, M12, metal	5	Basic
68000113	◄ MLC500T14-1350	1,350 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001115	► MLC510R14-1500	1,500 mm	14 mm		Connector, M12, metal	5	Basic
68000115	◄ MLC500T14-1500	1,500 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001116	► MLC510R14-1650	1,650 mm	14 mm		Connector, M12, metal	5	Basic
68000116	◄ MLC500T14-1650	1,650 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001118	► MLC510R14-1800	1,800 mm	14 mm		Connector, M12, metal	5	Basic
68000118	◄ MLC500T14-1800	1,800 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001119	► MLC510R14-1950	1,950 mm	14 mm		Connector, M12, metal	5	Basic
68000119	◄ MLC500T14-1950	1,950 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001121	► MLC510R14-2100	2,100 mm	14 mm		Connector, M12, metal	5	Basic
68000121	◄ MLC500T14-2100	2,100 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001122	► MLC510R14-2250	2,250 mm	14 mm		Connector, M12, metal	5	Basic
68000122	◄ MLC500T14-2250	2,250 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001124	► MLC510R14-2400	2,400 mm	14 mm		Connector, M12, metal	5	Basic
68000124	◄ MLC500T14-2400	2,400 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001125	► MLC510R14-2550	2,550 mm	14 mm		Connector, M12, metal	5	Basic
68000125	◄ MLC500T14-2550	2,550 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001127	► MLC510R14-2700	2,700 mm	14 mm		Connector, M12, metal	5	Basic
68000127	◄ MLC500T14-2700	2,700 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001128	► MLC510R14-2850	2,850 mm	14 mm		Connector, M12, metal	5	Basic
68000128	◄ MLC500T14-2850	2,850 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68001130	► MLC510R14-3000	3,000 mm	14 mm		Connector, M12, metal	5	Basic
68000130	◄ MLC500T14-3000	3,000 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

MLC 511

The devices have a plug connection with AIDA-compliant M12 pin assignment (Automatisierungs-Initiative deutscher Automobilisten (AIDA) = Automation Initiative of German automobile manufacturers).

Benefits:

- Automatic start/restart
- Optimal handling
- Range reduction on demand
- Universal application due to standard functions
- Short delivery times and global availability
- QR code on the sensor for quick service information

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68005103	► MLC511R14-300	300 mm	14 mm		Connector, M12, metal	4	Basic
68004103	◄ MLC501T14-300	300 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005104	► MLC511R14-450	450 mm	14 mm		Connector, M12, metal	4	Basic
68004104	◄ MLC501T14-450	450 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005106	► MLC511R14-600	600 mm	14 mm		Connector, M12, metal	4	Basic
68004106	◄ MLC501T14-600	600 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005107	► MLC511R14-750	750 mm	14 mm		Connector, M12, metal	4	Basic
68004107	◄ MLC501T14-750	750 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005109	► MLC511R14-900	900 mm	14 mm		Connector, M12, metal	4	Basic
68004109	◄ MLC501T14-900	900 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005110	► MLC511R14-1050	1,050 mm	14 mm		Connector, M12, metal	4	Basic
68004110	◄ MLC501T14-1050	1,050 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005112	► MLC511R14-1200	1,200 mm	14 mm		Connector, M12, metal	4	Basic
68004112	◄ MLC501T14-1200	1,200 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005113	► MLC511R14-1350	1,350 mm	14 mm		Connector, M12, metal	4	Basic
68004113	◄ MLC501T14-1350	1,350 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005115	► MLC511R14-1500	1,500 mm	14 mm		Connector, M12, metal	4	Basic
68004115	◄ MLC501T14-1500	1,500 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005116	► MLC511R14-1650	1,650 mm	14 mm		Connector, M12, metal	4	Basic
68004116	◄ MLC501T14-1650	1,650 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	
68005118	► MLC511R14-1800	1,800 mm	14 mm		Connector, M12, metal	4	Basic
68004118	◄ MLC501T14-1800	1,800 mm	14 mm	0 ... 6 m	Connector, M12, metal	4	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

MLC 520

The Standard version of these type 4 safety light curtains features a start/restart interlock (RES) and contactor monitoring (EDM) for increased performance – and it is simple to handle and integrate into your systems.

Benefits:

- Basic functions such as automatic start/restart, start/restart interlock (RES), contactor monitoring (EDM)
- Optimal handling due to function selection without PC as well as LED and 7-segment display with integrated 3-zone alignment aid
- Prevention of mutual interference of the sensors by selectable transmission channels and range reduction, if applicable
- Short delivery times and global availability
- QR code on the sensor for quick service information

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68002101	► MLC520R14-150	150 mm	14 mm		Connector, M12, metal	8	Standard
68000101	◄ MLC500T14-150	150 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002103	► MLC520R14-300	300 mm	14 mm		Connector, M12, metal	8	Standard
68000103	◄ MLC500T14-300	300 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002104	► MLC520R14-450	450 mm	14 mm		Connector, M12, metal	8	Standard
68000104	◄ MLC500T14-450	450 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002106	► MLC520R14-600	600 mm	14 mm		Connector, M12, metal	8	Standard
68000106	◄ MLC500T14-600	600 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002107	► MLC520R14-750	750 mm	14 mm		Connector, M12, metal	8	Standard
68000107	◄ MLC500T14-750	750 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002109	► MLC520R14-900	900 mm	14 mm		Connector, M12, metal	8	Standard
68000109	◄ MLC500T14-900	900 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002110	► MLC520R14-1050	1,050 mm	14 mm		Connector, M12, metal	8	Standard
68000110	◄ MLC500T14-1050	1,050 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68002112	► MLC520R14-1200	1,200 mm	14 mm		Connector, M12, metal	8	Standard
68000112	◄ MLC500T14-1200	1,200 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002113	► MLC520R14-1350	1,350 mm	14 mm		Connector, M12, metal	8	Standard
68000113	◄ MLC500T14-1350	1,350 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002115	► MLC520R14-1500	1,500 mm	14 mm		Connector, M12, metal	8	Standard
68000115	◄ MLC500T14-1500	1,500 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002116	► MLC520R14-1650	1,650 mm	14 mm		Connector, M12, metal	8	Standard
68000116	◄ MLC500T14-1650	1,650 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002118	► MLC520R14-1800	1,800 mm	14 mm		Connector, M12, metal	8	Standard
68000118	◄ MLC500T14-1800	1,800 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002119	► MLC520R14-1950	1,950 mm	14 mm		Connector, M12, metal	8	Standard
68000119	◄ MLC500T14-1950	1,950 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002121	► MLC520R14-2100	2,100 mm	14 mm		Connector, M12, metal	8	Standard
68000121	◄ MLC500T14-2100	2,100 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002122	► MLC520R14-2250	2,250 mm	14 mm		Connector, M12, metal	8	Standard
68000122	◄ MLC500T14-2250	2,250 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002124	► MLC520R14-2400	2,400 mm	14 mm		Connector, M12, metal	8	Standard
68000124	◄ MLC500T14-2400	2,400 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002125	► MLC520R14-2550	2,550 mm	14 mm		Connector, M12, metal	8	Standard
68000125	◄ MLC500T14-2550	2,550 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002127	► MLC520R14-2700	2,700 mm	14 mm		Connector, M12, metal	8	Standard
68000127	◄ MLC500T14-2700	2,700 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002128	► MLC520R14-2850	2,850 mm	14 mm		Connector, M12, metal	8	Standard
68000128	◄ MLC500T14-2850	2,850 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68002130	► MLC520R14-3000	3,000 mm	14 mm		Connector, M12, metal	8	Standard
68000130	◄ MLC500T14-3000	3,000 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

MLC 530

Whenever you need additional control functions, the MLC 530 Extended version is the perfect choice. With its 5 different operating modes, the integrated muting function and 3 different scan modes, the sensor leaves almost nothing to be desired. Device linking enables the construction of 2-channel, contact-based safety circuits as well as serial connections of several devices with safety-related switching outputs (OSSD).

Benefits:

- Integrated function for timing controlled muting for temporary proper bridging of the protective function, e. g. when transporting materials through the protective field
- Fixed or floating beam blanking, reduced resolution: necessary whenever objects must be in the protective field for operational reasons.
- Different scan modes: to adjust availability, select SingleScan, DoubleScan or MaxiScan.
- Teaching without PC: configuration and teaching, e. g. of floating beam blanking, is quick and easy.

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68003101	► MLC530R14-150	150 mm	14 mm		Connector, M12, metal	8	Extended
68000101	◄ MLC500T14-150	150 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003103	► MLC530R14-300	300 mm	14 mm		Connector, M12, metal	8	Extended
68000103	◄ MLC500T14-300	300 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003104	► MLC530R14-450	450 mm	14 mm		Connector, M12, metal	8	Extended
68000104	◄ MLC500T14-450	450 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003106	► MLC530R14-600	600 mm	14 mm		Connector, M12, metal	8	Extended
68000106	◄ MLC500T14-600	600 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003107	► MLC530R14-750	750 mm	14 mm		Connector, M12, metal	8	Extended
68000107	◄ MLC500T14-750	750 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003109	► MLC530R14-900	900 mm	14 mm		Connector, M12, metal	8	Extended
68000109	◄ MLC500T14-900	900 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003110	► MLC530R14-1050	1,050 mm	14 mm		Connector, M12, metal	8	Extended
68000110	◄ MLC500T14-1050	1,050 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003112	► MLC530R14-1200	1,200 mm	14 mm		Connector, M12, metal	8	Extended
68000112	◄ MLC500T14-1200	1,200 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003113	► MLC530R14-1350	1,350 mm	14 mm		Connector, M12, metal	8	Extended
68000113	◄ MLC500T14-1350	1,350 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003115	► MLC530R14-1500	1,500 mm	14 mm		Connector, M12, metal	8	Extended
68000115	◄ MLC500T14-1500	1,500 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68003116	► MLC530R14-1650	1,650 mm	14 mm		Connector, M12, metal	8	Extended
68000116	◄ MLC500T14-1650	1,650 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003118	► MLC530R14-1800	1,800 mm	14 mm		Connector, M12, metal	8	Extended
68000118	◄ MLC500T14-1800	1,800 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003119	► MLC530R14-1950	1,950 mm	14 mm		Connector, M12, metal	8	Extended
68000119	◄ MLC500T14-1950	1,950 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003121	► MLC530R14-2100	2,100 mm	14 mm		Connector, M12, metal	8	Extended
68000121	◄ MLC500T14-2100	2,100 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003122	► MLC530R14-2250	2,250 mm	14 mm		Connector, M12, metal	8	Extended
68000122	◄ MLC500T14-2250	2,250 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003124	► MLC530R14-2400	2,400 mm	14 mm		Connector, M12, metal	8	Extended
68000124	◄ MLC500T14-2400	2,400 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003125	► MLC530R14-2550	2,550 mm	14 mm		Connector, M12, metal	8	Extended
68000125	◄ MLC500T14-2550	2,550 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003127	► MLC530R14-2700	2,700 mm	14 mm		Connector, M12, metal	8	Extended
68000127	◄ MLC500T14-2700	2,700 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003128	► MLC530R14-2850	2,850 mm	14 mm		Connector, M12, metal	8	Extended
68000128	◄ MLC500T14-2850	2,850 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68003130	► MLC530R14-3000	3,000 mm	14 mm		Connector, M12, metal	8	Extended
68000130	◄ MLC500T14-3000	3,000 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

MLC 520 Host

The so-called host-guest devices enable the combination of access guarding or point of operation guarding with area protection. In this way, it is possible, for example, to eliminate additional measures such as guards to protect against stepping behind machines. Furthermore, the MLC HG devices offer all of the advantages of the MLC 500 series.

Benefits:

- Point of operation guarding with area protection
- Multi-side guarding thanks to optimized cable routing

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68012103	► MLC520R14-300H	300 mm	14 mm		Connector, M12, metal	8	Standard
68010103	◄ MLC500T14-300H	300 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012104	► MLC520R14-450H	450 mm	14 mm		Connector, M12, metal	8	Standard
68010104	◄ MLC500T14-450H	450 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012106	► MLC520R14-600H	600 mm	14 mm		Connector, M12, metal	8	Standard
68010106	◄ MLC500T14-600H	600 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012107	► MLC520R14-750H	750 mm	14 mm		Connector, M12, metal	8	Standard
68010107	◄ MLC500T14-750H	750 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012109	► MLC520R14-900H	900 mm	14 mm		Connector, M12, metal	8	Standard
68010109	◄ MLC500T14-900H	900 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012110	► MLC520R14-1050H	1,050 mm	14 mm		Connector, M12, metal	8	Standard
68010110	◄ MLC500T14-1050H	1,050 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012112	► MLC520R14-1200H	1,200 mm	14 mm		Connector, M12, metal	8	Standard
68010112	◄ MLC500T14-1200H	1,200 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012113	► MLC520R14-1350H	1,350 mm	14 mm		Connector, M12, metal	8	Standard
68010113	◄ MLC500T14-1350H	1,350 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012115	► MLC520R14-1500H	1,500 mm	14 mm		Connector, M12, metal	8	Standard
68010115	◄ MLC500T14-1500H	1,500 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012116	► MLC520R14-1650H	1,650 mm	14 mm		Connector, M12, metal	8	Standard
68010116	◄ MLC500T14-1650H	1,650 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	
68012118	► MLC520R14-1800H	1,800 mm	14 mm		Connector, M12, metal	8	Standard
68010118	◄ MLC500T14-1800H	1,800 mm	14 mm	0 ... 6 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

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MLC 520 MiddleGuest

The so-called host-guest devices enable the combination of access guarding or point of operation guarding with area protection. In this way, it is possible, for example, to eliminate additional measures such as guards to protect against stepping behind machines. The MiddleGuest devices can be used as the middle segment of a three-link chain.

Benefits:

- Point of operation guarding with area protection
- Multi-side guarding thanks to optimized cable routing

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins
68023103	► MLC520R14-300MG	300 mm	14 mm		Connector, M12, plastic	8
68022103	◄ MLC500T14-300MG	300 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023104	► MLC520R14-450MG	450 mm	14 mm		Connector, M12, plastic	8
68022104	◄ MLC500T14-450MG	450 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023106	► MLC520R14-600MG	600 mm	14 mm		Connector, M12, plastic	8
68022106	◄ MLC500T14-600MG	600 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023107	► MLC520R14-750MG	750 mm	14 mm		Connector, M12, plastic	8
68022107	◄ MLC500T14-750MG	750 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023109	► MLC520R14-900MG	900 mm	14 mm		Connector, M12, plastic	8
68022109	◄ MLC500T14-900MG	900 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023110	► MLC520R14-1050MG	1,050 mm	14 mm		Connector, M12, plastic	8
68022110	◄ MLC500T14-1050MG	1,050 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023112	► MLC520R14-1200MG	1,200 mm	14 mm		Connector, M12, plastic	8
68022112	◄ MLC500T14-1200MG	1,200 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023113	► MLC520R14-1350MG	1,350 mm	14 mm		Connector, M12, plastic	8
68022113	◄ MLC500T14-1350MG	1,350 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023115	► MLC520R14-1500MG	1,500 mm	14 mm		Connector, M12, plastic	8
68022115	◄ MLC500T14-1500MG	1,500 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023116	► MLC520R14-1650MG	1,650 mm	14 mm		Connector, M12, plastic	8
68022116	◄ MLC500T14-1650MG	1,650 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68023118	► MLC520R14-1800MG	1,800 mm	14 mm		Connector, M12, plastic	8
68022118	◄ MLC500T14-1800MG	1,800 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

MLC 520 Guest

The so-called host-guest devices enable the combination of access guarding or point of operation guarding with area protection. In this way, it is possible, for example, to eliminate additional measures such as guards to protect against stepping behind machines. The guest devices are always the final device in a 2 to 3-link chain.

Benefits:

- Point of operation guarding with area protection
- Multi-side guarding thanks to optimized cable routing

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins
68021103	► MLC520R14-300G	300 mm	14 mm		Connector, M12, plastic	8
68020103	◄ MLC500T14-300G	300 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021104	► MLC520R14-450G	450 mm	14 mm		Connector, M12, plastic	8
68020104	◄ MLC500T14-450G	450 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021106	► MLC520R14-600G	600 mm	14 mm		Connector, M12, plastic	8
68020106	◄ MLC500T14-600G	600 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021107	► MLC520R14-750G	750 mm	14 mm		Connector, M12, plastic	8
68020107	◄ MLC500T14-750G	750 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021109	► MLC520R14-900G	900 mm	14 mm		Connector, M12, plastic	8
68020109	◄ MLC500T14-900G	900 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021110	► MLC520R14-1050G	1,050 mm	14 mm		Connector, M12, plastic	8
68020110	◄ MLC500T14-1050G	1,050 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021112	► MLC520R14-1200G	1,200 mm	14 mm		Connector, M12, plastic	8
68020112	◄ MLC500T14-1200G	1,200 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021113	► MLC520R14-1350G	1,350 mm	14 mm		Connector, M12, plastic	8
68020113	◄ MLC500T14-1350G	1,350 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021115	► MLC520R14-1500G	1,500 mm	14 mm		Connector, M12, plastic	8
68020115	◄ MLC500T14-1500G	1,500 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021116	► MLC520R14-1650G	1,650 mm	14 mm		Connector, M12, plastic	8
68020116	◄ MLC500T14-1650G	1,650 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8
68021118	► MLC520R14-1800G	1,800 mm	14 mm		Connector, M12, plastic	8
68020118	◄ MLC500T14-1800G	1,800 mm	14 mm	0 ... 6 m	Connector, M12, plastic	8

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

/// MLC 300



The 300 series MLC safety light curtains are the latest generation of extremely slim and robust type 2 devices with slightly set back front screen and reinforced side walls. The devices are available in the Basic and Standard versions, thereby fulfilling various requirements. They can be used universally, due to metal end caps, a flexible fastening concept and the option of form-locking installation. There are also variants which have an AIDA-compliant pin assignment.



Direct access to the online product selector at www.leuze.com/en/mlc300

PART NUMBER CODES – safety light curtains MLC 500 and MLC 300

MLC 300 T 14 h h h H

Model

MLC Safety light curtain

Series

3 MLC 300

5 MLC 500

Function

00 Transmitter

01 Transmitter (AIDA)

10 Automatic restart

11 Automatic restart (AIDA)

20 EDM/RES selectable

30 Muting/Blanking/Linkage (only MLC 530)

Device type (only MLC 520)

T Transmitter

R Receiver

Resolution

14 14 mm / range 0 – 6 m (only MLC 500)

20 20 mm / range 0 – 14 m

30 30 mm / range 0 – 10 m

40 40 mm / range 0 – 20 m

90 90 mm / range 0 – 20 m

Protective field height

hhhh 150...3000 mm

Host/guest (only MLC 520)

H Host

MG MiddleGuest

G Guest

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MLC 310

This type 2 Basic version provides the most important functions. Range reduction on the transmitter, reversible transmission channels, a LED display as well as an automatic start/restart interlock round out the range of service.

Benefits:

- Automatic start/restart
- Optimal handling
- Prevention of mutual interference of the sensors by selectable transmission channels and range reduction, if applicable
- Universal application due to standard functions
- Short delivery times and global availability
- QR code on the sensor for quick service information

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68091201	► MLC310R20-150	150 mm	20 mm		Connector, M12, metal	5	Basic
68090201	◄ MLC300T20-150	150 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091202	► MLC310R20-225	225 mm	20 mm		Connector, M12, metal	5	Basic
68090202	◄ MLC300T20-225	225 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091203	► MLC310R20-300	300 mm	20 mm		Connector, M12, metal	5	Basic
68090203	◄ MLC300T20-300	300 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091204	► MLC310R20-450	450 mm	20 mm		Connector, M12, metal	5	Basic
68090204	◄ MLC300T20-450	450 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091206	► MLC310R20-600	600 mm	20 mm		Connector, M12, metal	5	Basic
68090206	◄ MLC300T20-600	600 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091207	► MLC310R20-750	750 mm	20 mm		Connector, M12, metal	5	Basic
68090207	◄ MLC300T20-750	750 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091209	► MLC310R20-900	900 mm	20 mm		Connector, M12, metal	5	Basic
68090209	◄ MLC300T20-900	900 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091210	► MLC310R20-1050	1,050 mm	20 mm		Connector, M12, metal	5	Basic
68090210	◄ MLC300T20-1050	1,050 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091212	► MLC310R20-1200	1,200 mm	20 mm		Connector, M12, metal	5	Basic
68090212	◄ MLC300T20-1200	1,200 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091213	► MLC310R20-1350	1,350 mm	20 mm		Connector, M12, metal	5	Basic
68090213	◄ MLC300T20-1350	1,350 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091215	► MLC310R20-1500	1,500 mm	20 mm		Connector, M12, metal	5	Basic
68090215	◄ MLC300T20-1500	1,500 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091216	► MLC310R20-1650	1,650 mm	20 mm		Connector, M12, metal	5	Basic
68090216	◄ MLC300T20-1650	1,650 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68091218	► MLC310R20-1800	1,800 mm	20 mm		Connector, M12, metal	5	Basic
68090218	◄ MLC300T20-1800	1,800 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

MLC 311

The devices have a plug connection with AIDA-compliant M12 pin assignment (Automatisierungs-Initiative deutscher Automobilisten (AIDA) = Automation Initiative of German automobile manufacturers).

Benefits:

- Basic functions such as automatic start/restart, start/restart interlock (RES), contactor monitoring (EDM)
- Optimal handling due to function selection without PC as well as LED and 7-segment display with integrated 3-zone alignment aid
- Range reduction on demand
- Universal application due to standard functions
- Short delivery times and global availability
- QR code on the sensor for quick service information

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68095403	► MLC311R40-300	300 mm	40 mm		Connector, M12, metal	4	Basic
68094403	◄ MLC301T40-300	300 mm	40 mm	0 ... 20 m	Connector, M12, metal	4	
68095404	► MLC311R40-450	450 mm	40 mm		Connector, M12, metal	4	Basic
68094404	◄ MLC301T40-450	450 mm	40 mm	0 ... 20 m	Connector, M12, metal	4	
68095406	► MLC311R40-600	600 mm	40 mm		Connector, M12, metal	4	Basic
68094406	◄ MLC301T40-600	600 mm	40 mm	0 ... 20 m	Connector, M12, metal	4	
68095407	► MLC311R40-750	750 mm	40 mm		Connector, M12, metal	4	Basic
68094407	◄ MLC301T40-750	750 mm	40 mm	0 ... 20 m	Connector, M12, metal	4	

Included in delivery: sliding blocks.

Further products of this series can be found on our website.

► receiver / ◄ transmitter

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68095409	► MLC311R40-900	900 mm	40 mm		Connector, M12, metal	4	Basic
68094409	◄ MLC301T40-900	900 mm	40 mm	0 ... 20 m	Connector, M12, metal	4	
68095410	► MLC311R40-1050	1,050 mm	40 mm		Connector, M12, metal	4	Basic
68094410	◄ MLC301T40-1050	1,050 mm	40 mm	0 ... 20 m	Connector, M12, metal	4	
68095412	► MLC311R40-1200	1,200 mm	40 mm		Connector, M12, metal	4	Basic
68094412	◄ MLC301T40-1200	1,200 mm	40 mm	0 ... 20 m	Connector, M12, metal	4	

Included in delivery: sliding blocks.
Further products of this series can be found on our website.
► receiver / ◄ transmitter

MLC 320

The Standard version of this type 2 safety light curtain, with a start/restart interlock (RES) and contactor monitoring (EDM), also features practical function extensions for increased performance – still being simple to handle and integrate into your systems.

Benefits:

- Basic functions such as automatic start/restart, start/restart interlock (RES), contactor monitoring (EDM)
- Optimal handling due to function selection without PC as well as LED and 7-segment display with integrated 3-zone alignment aid
- Prevention of mutual interference of the sensors by selectable transmission channels and range reduction, if applicable
- Universal application due to standard functions
- Short delivery times and global availability
- QR code on the sensor for quick service information

Part no.	Part description	Protective field height	Resolution	Operating range	Connection	No. of pins	Function package
68092201	► MLC320R20-150	150 mm	20 mm		Connector, M12, metal	8	Standard
68090201	◄ MLC300T20-150	150 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092202	► MLC320R20-225	225 mm	20 mm		Connector, M12, metal	8	Standard
68090202	◄ MLC300T20-225	225 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092203	► MLC320R20-300	300 mm	20 mm		Connector, M12, metal	8	Standard
68090203	◄ MLC300T20-300	300 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092204	► MLC320R20-450	450 mm	20 mm		Connector, M12, metal	8	Standard
68090204	◄ MLC300T20-450	450 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092206	► MLC320R20-600	600 mm	20 mm		Connector, M12, metal	8	Standard
68090206	◄ MLC300T20-600	600 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092207	► MLC320R20-750	750 mm	20 mm		Connector, M12, metal	8	Standard
68090207	◄ MLC300T20-750	750 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092209	► MLC320R20-900	900 mm	20 mm		Connector, M12, metal	8	Standard
68090209	◄ MLC300T20-900	900 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092210	► MLC320R20-1050	1,050 mm	20 mm		Connector, M12, metal	8	Standard
68090210	◄ MLC300T20-1050	1,050 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092212	► MLC320R20-1200	1,200 mm	20 mm		Connector, M12, metal	8	Standard
68090212	◄ MLC300T20-1200	1,200 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092213	► MLC320R20-1350	1,350 mm	20 mm		Connector, M12, metal	8	Standard
68090213	◄ MLC300T20-1350	1,350 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092215	► MLC320R20-1500	1,500 mm	20 mm		Connector, M12, metal	8	Standard
68090215	◄ MLC300T20-1500	1,500 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092216	► MLC320R20-1650	1,650 mm	20 mm		Connector, M12, metal	8	Standard
68090216	◄ MLC300T20-1650	1,650 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	
68092218	► MLC320R20-1800	1,800 mm	20 mm		Connector, M12, metal	8	Standard
68090218	◄ MLC300T20-1800	1,800 mm	20 mm	0 ... 15 m	Connector, M12, metal	5	

Included in delivery: sliding blocks.
Further products of this series can be found on our website.
► receiver / ◄ transmitter

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//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



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.



Direct access to the online product selector at www.leuze.com/en/mld500

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

MLD 3 0 0 T 2 L -

Model

MLD Multiple light beam safety device

Series

3 MLD 300

5 MLD 500

Function

00 Transmitter

10 Automatic restart

12 External testing (only MLD 300)

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 (only AS-i variants)

Safety-related switching outputs (OSSD), connection system

- Transistor output, M12 plug

A Integrated AS-Interface, M12 connector (safety bus systems)

MLD 510

These multiple light beam safety devices are equipped with an automatic restart.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30 °C is possible
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Interface	Special design
66533500	► MLD510-XR2	500 mm	2		Connector, M12, metal	5		
66501500	◄ MLD500-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5		
66533100	► MLD510-R2	500 mm	2		Connector, M12, metal	5		
66501100	◄ MLD500-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5		
66536500	► MLD510-XR2L	500 mm	2		Connector, M12, metal	5		Reflective element for laser alignment aid
66502500	◄ MLD500-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5		Integrated laser alignment aid
66536100	► MLD510-R2L	500 mm	2		Connector, M12, metal	5		Reflective element for laser alignment aid
66502100	◄ MLD500-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5		Integrated laser alignment aid
66533501	► MLD510-XR2/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	
66501501	◄ MLD500-XT2/A	500 mm	2	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533101	► MLD510-R2/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	
66501101	◄ MLD500-T2/A	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533502	► MLD510-XR2E/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501501	◄ MLD500-XT2/A	500 mm	2	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533102	► MLD510-R2E/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501101	◄ MLD500-T2/A	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66534101	► MLD510-R2M/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator
66501101	◄ MLD500-T2/A	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66535101	► MLD510-R2LM/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66502101	◄ MLD500-T2L/A	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536501	► MLD510-XR2L/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid
66502501	◄ MLD500-XT2L/A	500 mm	2	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536101	► MLD510-R2L/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid
66502101	◄ MLD500-T2L/A	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536502	► MLD510-XR2LE/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid Connection socket for external muting indicator
66502501	◄ MLD500-XT2L/A	500 mm	2	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536102	► MLD510-R2LE/A	500 mm	2		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid Connection socket for external muting indicator
66502101	◄ MLD500-T2L/A	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66533600	► MLD510-XR3	400 mm	3		Connector, M12, metal	5		
66501600	◄ MLD500-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5		
66533200	► MLD510-R3	400 mm	3		Connector, M12, metal	5		
66501200	◄ MLD500-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5		
66536600	► MLD510-XR3L	400 mm	3		Connector, M12, metal	5		Reflective element for laser alignment aid
66502600	◄ MLD500-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5		Integrated laser alignment aid
66536200	► MLD510-R3L	400 mm	3		Connector, M12, metal	5		Reflective element for laser alignment aid
66502200	◄ MLD500-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5		Integrated laser alignment aid
66533601	► MLD510-XR3/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	
66501601	◄ MLD500-XT3/A	400 mm	3	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533201	► MLD510-R3/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	
66501201	◄ MLD500-T3/A	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533602	► MLD510-XR3E/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501601	◄ MLD500-XT3/A	400 mm	3	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533202	► MLD510-R3E/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501201	◄ MLD500-T3/A	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66536602	► MLD510-XR3LE/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid Connection socket for external muting indicator
66502601	◄ MLD500-XT3L/A	400 mm	3	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536202	► MLD510-R3LE/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid Connection socket for external muting indicator
66502201	◄ MLD500-T3L/A	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66534201	► MLD510-R3M/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator
66501201	◄ MLD500-T3/A	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66535201	► MLD510-R3LM/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66502201	◄ MLD500-T3L/A	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

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Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Interface	Special design
66536601	► MLD510-XR3L/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid
66502601	◄ MLD500-XT3L/A	400 mm	3	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536201	► MLD510-R3L/A	400 mm	3		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid
66502201	◄ MLD500-T3L/A	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66533700	► MLD510-XR4	300 mm	4		Connector, M12, metal	5		
66501700	◄ MLD500-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5		
66533300	► MLD510-R4	300 mm	4		Connector, M12, metal	5		
66501300	◄ MLD500-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5		
66536700	► MLD510-XR4L	300 mm	4		Connector, M12, metal	5		Reflective element for laser alignment aid
66502700	◄ MLD500-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5		Integrated laser alignment aid
66536300	► MLD510-R4L	300 mm	4		Connector, M12, metal	5		Reflective element for laser alignment aid
66502300	◄ MLD500-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5		Integrated laser alignment aid
66533701	► MLD510-XR4/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	
66501701	◄ MLD500-XT4/A	300 mm	4	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533301	► MLD510-R4/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	
66501301	◄ MLD500-T4/A	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533702	► MLD510-XR4E/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501701	◄ MLD500-XT4/A	300 mm	4	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533302	► MLD510-R4E/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501301	◄ MLD500-T4/A	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66534301	► MLD510-R4M/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator
66501301	◄ MLD500-T4/A	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66535301	► MLD510-R4LM/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66502301	◄ MLD500-T4L/A	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536701	► MLD510-XR4L/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid
66502701	◄ MLD500-XT4L/A	300 mm	4	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536301	► MLD510-R4L/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid
66502301	◄ MLD500-T4L/A	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536702	► MLD510-XR4LE/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid Connection socket for external muting indicator
66502701	◄ MLD500-XT4L/A	300 mm	4	20 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536302	► MLD510-R4LE/A	300 mm	4		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid Connection socket for external muting indicator
66502301	◄ MLD500-T4L/A	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid

Included in delivery: sliding blocks

► receiver / ◄ transmitter

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Laser class 1



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MLD 520

These multiple light beam safety devices offer a selectable start/restart interlock (RES) and contactor monitoring (EDM).

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30 °C is possible
- Start/restart interlock (RES), selectable
- Contactor monitoring (EDM), selectable
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66553500	► MLD520-XR2	500 mm	2		Connector, M12, metal	8	
66501500	◄ MLD500-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66553100	► MLD520-R2	500 mm	2		Connector, M12, metal	8	
66501100	◄ MLD500-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66554500	► MLD520-XR2M	500 mm	2		Connector, M12, metal	8	Integrated status indicator
66501500	◄ MLD500-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66554100	► MLD520-R2M	500 mm	2		Connector, M12, metal	8	Integrated status indicator
66501100	◄ MLD500-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66555500	► MLD520-XR2LM	500 mm	2		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66502500	◄ MLD500-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66555100	► MLD520-R2LM	500 mm	2		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66502100	◄ MLD500-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66556500	► MLD520-XR2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66502500	◄ MLD500-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66556100	► MLD520-R2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66502100	◄ MLD500-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66553600	► MLD520-XR3	400 mm	3		Connector, M12, metal	8	
66501600	◄ MLD500-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66553200	► MLD520-R3	400 mm	3		Connector, M12, metal	8	
66501200	◄ MLD500-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66554600	► MLD520-XR3M	400 mm	3		Connector, M12, metal	8	Integrated status indicator
66501600	◄ MLD500-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66554200	► MLD520-R3M	400 mm	3		Connector, M12, metal	8	Integrated status indicator
66501200	◄ MLD500-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66555600	► MLD520-XR3LM	400 mm	3		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66502600	◄ MLD500-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66555200	► MLD520-R3LM	400 mm	3		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66502200	◄ MLD500-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66556600	► MLD520-XR3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66502600	◄ MLD500-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66556200	► MLD520-R3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66502200	◄ MLD500-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66553700	► MLD520-XR4	300 mm	4		Connector, M12, metal	8	
66501700	◄ MLD500-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66553300	► MLD520-R4	300 mm	4		Connector, M12, metal	8	
66501300	◄ MLD500-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66554700	► MLD520-XR4M	300 mm	4		Connector, M12, metal	8	Integrated status indicator
66501700	◄ MLD500-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66554300	► MLD520-R4M	300 mm	4		Connector, M12, metal	8	Integrated status indicator
66501300	◄ MLD500-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66555700	► MLD520-XR4LM	300 mm	4		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66502700	◄ MLD500-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66555300	► MLD520-R4LM	300 mm	4		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66502300	◄ MLD500-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66556700	► MLD520-XR4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66502700	◄ MLD500-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66556300	► MLD520-R4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66502300	◄ MLD500-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

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MLD 530

Many functions, such as start/restart interlock, contactor monitoring, timing controlled 2-sensor muting and sequence controlled 2-sensor muting, ensure great flexibility.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The 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, sequential)
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66563500	► MLD530-XR2	500 mm	2		Connector, M12, metal	8	
66501500	◄ MLD500-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66563100	► MLD530-R2	500 mm	2		Connector, M12, metal	8	
66501100	◄ MLD500-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66564100	► MLD530-R2M	500 mm	2		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66501100	◄ MLD500-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66565100	► MLD530-R2LM	500 mm	2		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66502100	◄ MLD500-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66566500	► MLD530-XR2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66502500	◄ MLD500-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66566100	► MLD530-R2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66502100	◄ MLD500-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66563600	► MLD530-XR3	400 mm	3		Connector, M12, metal	8	
66501600	◄ MLD500-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66563200	► MLD530-R3	400 mm	3		Connector, M12, metal	8	
66501200	◄ MLD500-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66564200	► MLD530-R3M	400 mm	3		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66501200	◄ MLD500-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66565200	► MLD530-R3LM	400 mm	3		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66502200	◄ MLD500-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66566600	► MLD530-XR3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66502600	◄ MLD500-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66566200	► MLD530-R3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66502200	◄ MLD500-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66563700	► MLD530-XR4	300 mm	4		Connector, M12, metal	8	
66501700	◄ MLD500-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66563300	► MLD530-R4	300 mm	4		Connector, M12, metal	8	
66501300	◄ MLD500-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66564300	► MLD530-R4M	300 mm	4		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66501300	◄ MLD500-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66565300	► MLD530-R4LM	300 mm	4		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66502300	◄ MLD500-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66566700	► MLD530-XR4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66502700	◄ MLD500-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66566300	► MLD530-R4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66502300	◄ MLD500-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

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
- The 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, sequential)
- Timing controlled 4-sensor muting
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

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

Included in delivery: sliding blocks
► receiver / ◄ transmitter

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/// MLD 500 Transceiver

With this type 4 design, all active components, such as transmitter, receiver and the integrated evaluation unit, are contained in a common housing. This reduces wiring considerably.



Direct access to the online product selector at www.leuze.com/en/mld500-t

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

M L D 3 0 0 T 2 L -

Model

MLD Multiple light beam safety device

Series

3 MLD 300

5 MLD 500

Function

00 Transmitter

10 Automatic restart

12 External testing (only MLD 300)

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 (only AS-i variants)

Safety-related switching outputs (OSSD), connection system

- Transistor output, M12 plug

A Integrated AS-Interface, M12 connector (safety bus systems)

MLD 510

These multiple light beam safety devices are equipped with an automatic restart.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30 °C is possible
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Interface	Special design
66537100	► MLD510-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	5		
66500100	◄ MLD-M002	500 mm	2					
66537101	► MLD510-RT2/A	500 mm	2	0.5 ... 8 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66500100	◄ MLD-M002	500 mm	2					
66537102	► MLD510-RT2E/A	500 mm	2	0.5 ... 8 m	Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66500100	◄ MLD-M002	500 mm	2					
66538101	► MLD510-RT2M/A	500 mm	2	0.5 ... 8 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator
66500100	◄ MLD-M002	500 mm	2					
66538102	► MLD510-RT2ME/A	500 mm	2	0.5 ... 8 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator Connection socket for external muting indicator
66500100	◄ MLD-M002	500 mm	2					
66537200	► MLD510-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	5		
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m				
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m				
66537201	► MLD510-RT3/A	400 mm	3	0.5 ... 6 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m				
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m				
66537202	► MLD510-RT3E/A	400 mm	3	0.5 ... 6 m	Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m				
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m				
66538201	► MLD510-RT3M/A	400 mm	3	0.5 ... 6 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m				
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m				
66538202	► MLD510-RT3ME/A	400 mm	3	0.5 ... 6 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated muting indicator Integrated status indicator Connection socket for external muting indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m				
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m				

Included in delivery: sliding blocks
► transceiver / ◄ mirror

MLD 520

These multiple light beam safety devices offer a selectable start/restart interlock (RES) and contactor monitoring (EDM).

Benefits:

- The configuration is simply performed by means of wiring, i.e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30 °C is possible
- Start/restart interlock (RES), selectable
- Contactor monitoring (EDM), selectable
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66557100	► MLD520-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	
66500100	◄ MLD-M002	500 mm	2				
66558100	► MLD520-RT2M	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	Integrated status indicator
66500100	◄ MLD-M002	500 mm	2	0.5 ... 8 m			
66557200	► MLD520-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			
66558200	► MLD520-RT3M	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	Integrated status indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			

Included in delivery: sliding blocks
► transceiver / ◄ mirror

Switching
Sensors

Measuring
Sensors

Products for
Safety at Work

Identification

Data Transmission /
Control Components

Industrial Image
Processing

Accessories

MLD 530

Many functions, such as start/restart interlock, contactor monitoring, timing controlled 2-sensor muting and sequence controlled 2-sensor muting, ensure great flexibility.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The 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, sequential)
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66567100	► MLD530-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	
66500100	◄ MLD-M002	500 mm	2				
66568100	► MLD530-RT2M	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500100	◄ MLD-M002	500 mm	2				
66567200	► MLD530-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			
66568200	► MLD530-RT3M	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			

Included in delivery: sliding blocks
► transceiver / ◄ mirror

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
- The 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, sequential)
- Timing controlled 4-sensor muting
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66577100	► MLD535-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	
66500100	◄ MLD-M002	500 mm	2				
66578100	► MLD535-RT2M	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500100	◄ MLD-M002	500 mm	2				
66577200	► MLD535-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			
66578200	► MLD535-RT3M	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			

Included in delivery: sliding blocks
► transceiver / ◄ mirror

/// MLD 300



Like the protective sensors of the MLD 500 series (type 4), these type 2 multiple light beam safety devices are also available in various function classes (MLD 310, 312, 320, 330, 335). Configuration via PC or DIP switch is not necessary.



Direct access to the online product selector at www.leuze.com/en/mld300

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

MLD 3 0 0 T 2 L -

Model

MLD Multiple light beam safety device

Series

3 MLD 300
5 MLD 500

Function

00 Transmitter
10 Automatic restart
12 External testing (only MLD 300)
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 (only AS-i variants)

Safety-related switching outputs (OSSD), connection system

- Transistor output, M12 plug
A Integrated AS-Interface, M12 connector (safety bus systems)

MLD 310

These multiple light beam safety devices are equipped with an automatic restart.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30 °C is possible
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66033500	► MLD310-XR2	500 mm	2		Connector, M12, metal	5	
66001500	◄ MLD300-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66033100	► MLD310-R2	500 mm	2		Connector, M12, metal	5	
66001100	◄ MLD300-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	

Included in delivery: sliding blocks
► receiver / ◄ transmitter

Switching
Sensors

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Sensors

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Safety at Work

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Control Components

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Processing

Accessories

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66036500	► MLD310-XR2L	500 mm	2		Connector, M12, metal	5	Reflective element for laser alignment aid
66002500	◄ MLD300-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66036100	► MLD310-R2L	500 mm	2		Connector, M12, metal	5	Reflective element for laser alignment aid
66002100	◄ MLD300-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66033600	► MLD310-XR3	400 mm	3		Connector, M12, metal	5	
66001600	◄ MLD300-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66033200	► MLD310-R3	400 mm	3		Connector, M12, metal	5	
66001200	◄ MLD300-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66036600	► MLD310-XR3L	400 mm	3		Connector, M12, metal	5	Reflective element for laser alignment aid
66002600	◄ MLD300-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66036200	► MLD310-R3L	400 mm	3		Connector, M12, metal	5	Reflective element for laser alignment aid
66002200	◄ MLD300-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66033700	► MLD310-XR4	300 mm	4		Connector, M12, metal	5	
66001700	◄ MLD300-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66033300	► MLD310-R4	300 mm	4		Connector, M12, metal	5	
66001300	◄ MLD300-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66036700	► MLD310-XR4L	300 mm	4		Connector, M12, metal	5	Reflective element for laser alignment aid
66002700	◄ MLD300-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66036300	► MLD310-R4L	300 mm	4		Connector, M12, metal	5	Reflective element for laser alignment aid
66002300	◄ MLD300-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
 ► receiver / ◄ transmitter

MLD 312

These multiple light beam safety devices are equipped with an automatic restart. The receivers are equipped with a test input for the periodic function test by means of an external safety monitoring device.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as –30 °C is possible
- Test input for periodic function test
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66043500	► MLD312-XR2	500 mm	2		Connector, M12, metal	5	
66001500	◄ MLD300-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66043100	► MLD312-R2	500 mm	2		Connector, M12, metal	5	
66001100	◄ MLD300-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66046500	► MLD312-XR2L	500 mm	2		Connector, M12, metal	5	Reflective element for laser alignment aid
66002500	◄ MLD300-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66046100	► MLD312-R2L	500 mm	2		Connector, M12, metal	5	Reflective element for laser alignment aid
66002100	◄ MLD300-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66043600	► MLD312-XR3	400 mm	3		Connector, M12, metal	5	
66001600	◄ MLD300-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66043200	► MLD312-R3	400 mm	3		Connector, M12, metal	5	
66001200	◄ MLD300-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66046600	► MLD312-XR3L	400 mm	3		Connector, M12, metal	5	Reflective element for laser alignment aid
66002600	◄ MLD300-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66046200	► MLD312-R3L	400 mm	3		Connector, M12, metal	5	Reflective element for laser alignment aid
66002200	◄ MLD300-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66043700	► MLD312-XR4	300 mm	4		Connector, M12, metal	5	
66001700	◄ MLD300-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66043300	► MLD312-R4	300 mm	4		Connector, M12, metal	5	
66001300	◄ MLD300-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66046700	► MLD312-XR4L	300 mm	4		Connector, M12, metal	5	Reflective element for laser alignment aid
66002700	◄ MLD300-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66046300	► MLD312-R4L	300 mm	4		Connector, M12, metal	5	Reflective element for laser alignment aid
66002300	◄ MLD300-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
 ► receiver / ◄ transmitter

MLD 320

These multiple light beam safety devices offer a selectable start/restart interlock (RES) and contactor monitoring (EDM).

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30 °C is possible
- Start/restart interlock (RES), selectable
- Contactor monitoring (EDM), selectable
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66053500	► MLD320-XR2	500 mm	2		Connector, M12, metal	8	
66001500	◄ MLD300-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66053100	► MLD320-R2	500 mm	2		Connector, M12, metal	8	
66001100	◄ MLD300-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66054500	► MLD320-XR2M	500 mm	2		Connector, M12, metal	8	Integrated status indicator
66001500	◄ MLD300-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66054100	► MLD320-R2M	500 mm	2		Connector, M12, metal	8	Integrated status indicator
66001100	◄ MLD300-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66055500	► MLD320-XR2LM	500 mm	2		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66002500	◄ MLD300-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66055100	► MLD320-R2LM	500 mm	2		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66002100	◄ MLD300-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66056500	► MLD320-XR2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66002500	◄ MLD300-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66056100	► MLD320-R2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66002100	◄ MLD300-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66053600	► MLD320-XR3	400 mm	3		Connector, M12, metal	8	
66001600	◄ MLD300-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66053200	► MLD320-R3	400 mm	3		Connector, M12, metal	8	
66001200	◄ MLD300-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66054600	► MLD320-XR3M	400 mm	3		Connector, M12, metal	8	Integrated status indicator
66001600	◄ MLD300-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66054200	► MLD320-R3M	400 mm	3		Connector, M12, metal	8	Integrated status indicator
66001200	◄ MLD300-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66055600	► MLD320-XR3LM	400 mm	3		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66002600	◄ MLD300-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66055200	► MLD320-R3LM	400 mm	3		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66002200	◄ MLD300-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66056600	► MLD320-XR3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66002600	◄ MLD300-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66056200	► MLD320-R3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66002200	◄ MLD300-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66053700	► MLD320-XR4	300 mm	4		Connector, M12, metal	8	
66001700	◄ MLD300-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66053300	► MLD320-R4	300 mm	4		Connector, M12, metal	8	
66001300	◄ MLD300-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66054700	► MLD320-XR4M	300 mm	4		Connector, M12, metal	8	Integrated status indicator
66001700	◄ MLD300-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66054300	► MLD320-R4M	300 mm	4		Connector, M12, metal	8	Integrated status indicator
66001300	◄ MLD300-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66055700	► MLD320-XR4LM	300 mm	4		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66002700	◄ MLD300-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66055300	► MLD320-R4LM	300 mm	4		Connector, M12, metal	8	Integrated status indicator Reflective element for laser alignment aid
66002300	◄ MLD300-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66056700	► MLD320-XR4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66002700	◄ MLD300-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66056300	► MLD320-R4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66002300	◄ MLD300-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

Switching
Sensors

Measuring
Sensors

Products for
Safety at Work

Identification

Data Transmission /
Control Components

Industrial Image
Processing

Accessories

MLD 330

Many functions, such as start/restart interlock, contactor monitoring, timing controlled 2-sensor muting, sequence controlled 2-sensor muting, ensure great flexibility.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The 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, sequential)
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66063500	► MLD330-XR2	500 mm	2		Connector, M12, metal	8	
66001500	◄ MLD330-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66063100	► MLD330-R2	500 mm	2		Connector, M12, metal	8	
66001100	◄ MLD330-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66064100	► MLD330-R2M	500 mm	2		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66001100	◄ MLD330-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66065100	► MLD330-R2LM	500 mm	2		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66002100	◄ MLD330-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66066500	► MLD330-XR2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66002500	◄ MLD330-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66066100	► MLD330-R2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66002100	◄ MLD330-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66063600	► MLD330-XR3	400 mm	3		Connector, M12, metal	8	
66001600	◄ MLD330-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66063200	► MLD330-R3	400 mm	3		Connector, M12, metal	8	
66001200	◄ MLD330-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66064200	► MLD330-R3M	400 mm	3		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66001200	◄ MLD330-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66065200	► MLD330-R3LM	400 mm	3		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66002200	◄ MLD330-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66066600	► MLD330-XR3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66002600	◄ MLD330-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66066200	► MLD330-R3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66002200	◄ MLD330-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66063700	► MLD330-XR4	300 mm	4		Connector, M12, metal	8	
66001700	◄ MLD330-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66063300	► MLD330-R4	300 mm	4		Connector, M12, metal	8	
66001300	◄ MLD330-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66064300	► MLD330-R4M	300 mm	4		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66001300	◄ MLD330-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66065300	► MLD330-R4LM	300 mm	4		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66002300	◄ MLD330-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66066700	► MLD330-XR4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66002700	◄ MLD330-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66066300	► MLD330-R4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66002300	◄ MLD330-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

MLD 335

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
- The 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, sequential)
- Timing controlled 4-sensor muting
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66073500	► MLD335-XR2	500 mm	2		Connector, M12, metal	8	
66001500	◄ MLD300-XT2	500 mm	2	20 ... 70 m	Connector, M12, metal	5	
66073100	► MLD335-R2	500 mm	2		Connector, M12, metal	8	
66001100	◄ MLD300-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66074100	► MLD335-R2M	500 mm	2		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66001100	◄ MLD300-T2	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	
66075100	► MLD335-R2LM	500 mm	2		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66002100	◄ MLD300-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66076500	► MLD335-XR2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66002500	◄ MLD300-XT2L	500 mm	2	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66076100	► MLD335-R2L	500 mm	2		Connector, M12, metal	8	Reflective element for laser alignment aid
66002100	◄ MLD300-T2L	500 mm	2	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66073600	► MLD335-XR3	400 mm	3		Connector, M12, metal	8	
66001600	◄ MLD300-XT3	400 mm	3	20 ... 70 m	Connector, M12, metal	5	
66073200	► MLD335-R3	400 mm	3		Connector, M12, metal	8	
66001200	◄ MLD300-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66074200	► MLD335-R3M	400 mm	3		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66001200	◄ MLD300-T3	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	
66075200	► MLD335-R3LM	400 mm	3		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66002200	◄ MLD300-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66076600	► MLD335-XR3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66002600	◄ MLD300-XT3L	400 mm	3	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66073700	► MLD335-XR4	300 mm	4		Connector, M12, metal	8	
66001700	◄ MLD300-XT4	300 mm	4	20 ... 70 m	Connector, M12, metal	5	
66076200	► MLD335-R3L	400 mm	3		Connector, M12, metal	8	Reflective element for laser alignment aid
66002200	◄ MLD300-T3L	400 mm	3	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66073300	► MLD335-R4	300 mm	4		Connector, M12, metal	8	
66001300	◄ MLD300-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66074300	► MLD335-R4M	300 mm	4		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66001300	◄ MLD300-T4	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	
66075300	► MLD335-R4LM	300 mm	4		Connector, M12, metal	8	Integrated muting indicator Integrated status indicator Reflective element for laser alignment aid
66002300	◄ MLD300-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid
66076700	► MLD335-XR4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66002700	◄ MLD300-XT4L	300 mm	4	20 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid
66076300	► MLD335-R4L	300 mm	4		Connector, M12, metal	8	Reflective element for laser alignment aid
66002300	◄ MLD300-T4L	300 mm	4	0.5 ... 50 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

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/// MLD 300 Transceiver

With this type 2 design, all active components, such as transmitter, receiver and the integrated evaluation unit, are contained in a common housing. This reduces wiring considerably.



Direct access to the online product selector at www.leuze.com/en/mld300-t

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

MLD 300 T 2 L -

Model

MLD Multiple light beam safety device

Series

3 MLD 300

5 MLD 500

Function

00 Transmitter

10 Automatic restart

12 External testing (only MLD 300)

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 (only AS-i variants)

Safety-related switching outputs (OSSD), connection system

- Transistor output, M12 plug

A Integrated AS-Interface, M12 connector (safety bus systems)

MLD 310

These multiple light beam safety devices are equipped with an automatic restart.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30°C is possible
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins
66037100	► MLD310-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	5
66500100	◄ MLD-M002	500 mm	2			
66037200	► MLD310-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	5
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m		
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m		

Included in delivery: sliding blocks
► transceiver / ◄ mirror

MLD 312

These multiple light beam safety devices are equipped with an automatic restart. The transceivers are equipped with a test input for the periodic function test by means of an external safety monitoring device.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30°C is possible
- Test input for periodic function test
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins
66047100	► MLD312-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	5
66500100	◄ MLD-M002	500 mm	2			
66047200	► MLD312-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	5
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m		
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m		

Included in delivery: sliding blocks
► transceiver / ◄ mirror

MLD 320

These multiple light beam safety devices offer a selectable start/restart interlock (RES) and contactor monitoring (EDM).

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30°C is possible
- Start/restart interlock (RES), selectable
- Contactor monitoring (EDM), selectable
- Options: integrated laser alignment aid, integrated muting indicator

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66057100	► MLD320-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	
66500100	◄ MLD-M002	500 mm	2				
66058100	► MLD320-RT2M	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	Integrated status indicator
66500100	◄ MLD-M002	500 mm	2				
66057200	► MLD320-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			
66058200	► MLD320-RT3M	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	Integrated status indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			

Included in delivery: sliding blocks
► transceiver / ◄ mirror

MLD 330

Many functions, such as start/restart interlock, contactor monitoring, timing controlled 2-sensor muting, sequence controlled 2-sensor muting, ensure great flexibility.

Benefits:

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The 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, sequential)
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66067100	► MLD330-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	
66500100	◄ MLD-M002	500 mm	2				
66068100	► MLD330-RT2M	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500100	◄ MLD-M002	500 mm	2				
66067200	► MLD330-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			
66068200	► MLD330-RT3M	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			

Included in delivery: sliding blocks
► transceiver / ◄ mirror

MLD 335

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
- The 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, sequential)
- Timing controlled 4-sensor muting
- Options: integrated laser alignment aid, integrated muting indicator, 7-segment display

Part no.	Part description	Beam spacing	Number of beams	Operating range	Connection	No. of pins	Special design
66077100	► MLD335-RT2	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	
66500100	◄ MLD-M002	500 mm	2				
66078100	► MLD335-RT2M	500 mm	2	0.5 ... 8 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500100	◄ MLD-M002	500 mm	2				
66077200	► MLD335-RT3	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			
66078200	► MLD335-RT3M	400 mm	3	0.5 ... 6 m	Connector, M12, metal	8	Integrated muting indicator Integrated status indicator
66500200	◄ MLD-M003	400 mm	3	0.5 ... 6 m			
66500201	◄ MLD-XM03	400 mm	3	0.5 ... 8 m			

Included in delivery: sliding blocks
► transceiver / ◄ mirror

//SINGLE LIGHT BEAM SAFETY DEVICES

SAFETY CAN ALSO BE FLEXIBLE

Due to their compact dimensions, single beam safety devices are able to make full use of their advantages in constrained spaces or where no flat planar areas exist. They can be very flexibly integrated in various installation heights as well as in existing machine designs and very reliably perform a wide range of detection, identification and protection tasks here.

Type 4 Single Light Beam Safety Devices

All Single Light Beam Safety Devices of this category are self-monitoring, i.e., no additional test components are necessary for operation. Furthermore, they convince with ranges of up to 100 m and can, thus, be used very flexibly in a wide range of applications. Configuration is simply performed without a PC via the wiring.

/// MLD 510



These single light beam safety devices are equipped with an automatic restart.



Benefits:

- The configuration is simply performed by means of wiring, i.e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30 °C is possible
- Options: integrated laser alignment aid

Direct access to the online product selector at www.leuze.com/en/mld510

Part no.	Part description	Operating range	Connection	No. of pins/ No. of conductors	Interface	Special design
66533400	► MLD510-XR1		Connector, M12, metal	5		
66501400	◄ MLD500-XT1	20 ... 100 m	Connector, M12, metal	5		
66533000	► MLD510-R1		Connector, M12, metal	5		
66501000	◄ MLD500-T1	0.5 ... 70 m	Connector, M12, metal	5		
66536000	► MLD510-R1L		Connector, M12, metal	5		Reflective element for laser alignment aid
66502000	◄ MLD500-T1L	0.5 ... 70 m	Connector, M12, metal	5		Integrated laser alignment aid
66533401	► MLD510-XR1/A		Connector, M12, metal	5	AS-Interface Safety at Work	
66501401	◄ MLD500-XT1/A	20 ... 100 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533001	► MLD510-R1/A		Connector, M12, metal	5	AS-Interface Safety at Work	
66501001	◄ MLD500-T1/A	0.5 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533402	► MLD510-XR1E/A		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501401	◄ MLD500-XT1/A	20 ... 100 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66533002	► MLD510-R1E/A		Connector, M12, metal	5	AS-Interface Safety at Work	Connection socket for external muting indicator
66501001	◄ MLD500-T1/A	0.5 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	
66536002	► MLD510-R1LE/A		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid Connection socket for external muting indicator
66502001	◄ MLD500-T1L/A	0.5 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid
66536001	► MLD510-R1L/A		Connector, M12, metal	5	AS-Interface Safety at Work	Reflective element for laser alignment aid
66502001	◄ MLD500-T1L/A	0.5 ... 70 m	Connector, M12, metal	5	AS-Interface Safety at Work	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

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/// MLD 520



These single light beam safety devices offer a selectable start/restart interlock (RES) and contactor monitoring (EDM).

**Benefits:**

- The configuration is simply performed by means of wiring, i. e. no software, PC or DIP switch are necessary
- The use at ambient temperatures as low as -30°C is possible
- Start/restart interlock (RES), selectable
- Contactor monitoring (EDM), selectable
- Options: integrated laser alignment aid

Direct access to the online product selector at www.leuze.com/en/mld520

Part no.	Part description	Operating range	Connection	No. of pins/ No. of conductors	Special design
66553400	► MLD520-XR1		Connector, M12, metal	8	
66501400	◄ MLD500-XT1	20 ... 100 m	Connector, M12, metal	5	
66553000	► MLD520-R1		Connector, M12, metal	8	
66501000	◄ MLD500-T1	0.5 ... 70 m	Connector, M12, metal	5	
66556000	► MLD520-R1L		Connector, M12, metal	8	Reflective element for laser alignment aid
66502000	◄ MLD500-T1L	0.5 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

/// MLD 530



Many functions, such as start/restart interlock, contactor monitoring, timing controlled 2-sensor muting and sequence controlled 2-sensor muting, ensure great flexibility.

**Benefits:**

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

Direct access to the online product selector at www.leuze.com/en/mld530

Part no.	Part description	Operating range	Connection	No. of pins/ No. of conductors	Special design
66563400	► MLD530-XR1		Connector, M12, metal	8	
66501400	◄ MLD500-XT1	20 ... 100 m	Connector, M12, metal	5	
66563000	► MLD530-R1		Connector, M12, metal	8	
66501000	◄ MLD500-T1	0.5 ... 70 m	Connector, M12, metal	5	
66566000	► MLD530-R1L		Connector, M12, metal	8	Reflective element for laser alignment aid
66502000	◄ MLD500-T1L	0.5 ... 70 m	Connector, M12, metal	5	Integrated laser alignment aid

Included in delivery: sliding blocks
► receiver / ◄ transmitter

Type 2 Single Light Beam Safety Devices

These single beam safety devices are operated in combination with a suitable test unit. Together with these, they form type 2 electro-sensitive protective equipment. They are a cost-optimized alternative if shorter ranges are needed. With their compact housing dimensions, they can be easily integrated.

/// SLSR 46B



The SLSR 46B light beam safety device convinces with ranges of up to 40 m at an attractive price. With the aid of the LED on the receiver, it can very easily be aligned and adjusted. Its status display is highly visible over the entire range for reliable operation.



Benefits:

- Single light beam safety device with visible red light and high functional reserve
- Solid plastic housing, degree of protection IP 67 for industrial application
- Wide voltage range from 10 to 30 V with pnp transistor output for PLC applications
- Clearly visible alignment indicator in the front screen

Direct access to the online product selector at www.leuze.com/en/slsr46b

Part no.	Part description	Operating range	Connection	No. of pins	Special design
50108539	► SLSR 46B.8	0 ... 40 m	Cable, 2,000 mm, PUR		Activation input
50108541	◄ SLSR 46B/66		Cable, 2,000 mm, PUR		
50108538	► SLSR 46B.8-S12	0 ... 40 m	Connector, M12, plastic	4	Activation input
50108540	◄ SLSR 46B/66-S12		Connector, M12, plastic	4	

► transmitter / ◄ receiver

/// SLSR 25B



The SLSR 25B light beam safety device scores with its optimized light beam propagation (opening angle) with time-saving alignment. In combination with a safety-relevant control system (testing according to EN IEC 61496-1), it forms a category 2 contactless protective device and works with a range of up to 22 m.



Benefits:

- Single light beam safety device with visible red light and high functional reserve
- Solid plastic housing, degree of protection IP 67 for industrial application
- Wide voltage range from 10 to 30 V with pnp transistor output for PLC applications
- All common connection variants

Direct access to the online product selector at www.leuze.com/en/slsr25b

Part no.	Part description	Operating range	Connection	No. of pins	Special design
50108489	► SLSR 25B.8-S12	0 ... 20 m	Connector, M12, plastic	4	Activation input
50108492	◄ SLSR 25B/66-S12		Connector, M12, plastic	4	
50108491	► SLSR 25B.8	0 ... 20 m	Cable, 2,000 mm, PUR		Activation input
50108494	◄ SLSR 25B/66		Cable, 2,000 mm, PUR		
50108490	► SLSR 25B.8-S8	0 ... 20 m	Connector, M8, plastic	4	Activation input
50108493	◄ SLSR 25B/66-S8		Connector, M8, plastic	4	
50110151	► SLSR 25B.8,200-S12	0 ... 20 m	Cable with connector, M12, metal, 200 mm, PUR	4	Activation input
50110152	◄ SLSR 25B/66,200-S12		Cable with connector, M12, metal, 200 mm, PUR	4	

► transmitter / ◄ receiver

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/// SLS 318



The case often arises in which single beam safety devices have to be integrated into very tight installation areas. In this instance, SLS 318 protective sensors are the preferred choice. Because of their slender cylindrical construction they can be mounted quickly and easily, even in areas where space is restricted.

**Benefits:**

- Protective throughbeam photoelectric sensors with high performance reserve in visible red light and straight optics
- Sturdy stainless steel or plastic housing with cylindrical M18 design
- Degree of protection IP 67 for industrial application
- Activation input for testing and interlinking of the sensor
- Complementary switching outputs for light/dark switching or as a control function
- Very short construction for application in limited spaces
- LED display in transmitter and receiver

Direct access to the online product selector at www.leuze.com/en/sls318

Part no.	Part description	Operating range	Connection	No. of pins	Special design
50083116	► SLSS 318K-S12	0 ... 10 m	Connector, M12, plastic	4	Activation input
50083117	◄ SLSE 318K/P-S12		Connector, M12, plastic	4	
50082199	► SLSS 318M-S12	0 ... 10 m	Connector, M12, plastic	4	Activation input
50082200	◄ SLSE 318M/P-S12		Connector, M12, plastic	4	
50083132	► SLSS 318K	0 ... 10 m	Cable, 2,000 mm, PVC		Activation input
50083133	◄ SLSE 318K/P		Cable, 2,000 mm, PVC		

► transmitter / ◄ receiver

/// SLS 96 M/P



With its robust metal housing and the optional optics heating, the SLS 96 M/P light Beam Safety Device is the right choice for even extreme environmental conditions in rough industrial applications.

**Benefits:**

- High functional reserve in the visible red light and infrared light range
- Wide voltage range from 10 to 30 V with pnp transistor output for PLC applications
- 2 displays on transmitter and receiver for status display with start-up and running operation
- Optics heating for use with low temperatures

Direct access to the online product selector at www.leuze.com/en/sls96m_p

Part no.	Part description	Operating range	Connection	No. of pins	Special design
50025209	► SLSS 96M-1210-T2-24	0 ... 30 m	Terminal	3	Activation input
50031562	◄ SLSE 96M/P-1200-T2-21		Terminal	3	
50031249	► SLSS 96M-1210-T2-45	0 ... 30 m	Connector, M12, metal	4	Activation input
50031250	◄ SLSE 96M/P-1200-T2-41		Connector, M12, metal	4	
50025215	► SLSS 96M-1080-T2-45	0 ... 50 m	Connector, M12, metal	4	Activation input
50025193	◄ SLSE 96M/P-1070-T2-41		Connector, M12, metal	4	
50025213	► SLSS 96M-1080-T2-24	0 ... 50 m	Terminal	3	Activation input
50025192	◄ SLSE 96M/P-1070-T2-21		Terminal	3	
50111085	► SLSS 96M-1089-T2-24 Ex n	0 ... 50 m	Terminal	3	Activation input Ex-protected
50111086	◄ SLSE 96M/P-1079-T2-21 Ex n		Terminal	3	Ex-protected
50029454	► SLSS 96M-1090-T2-24	0 ... 50 m	Terminal	3	Activation input Heating
50029455	◄ SLSE 96M/P-1071-T2-21		Terminal	3	Heating
50080478	► SLSS 96M-1090-T2-45	0 ... 50 m	Connector, M12, metal	4	Activation input Heating
50080479	◄ SLSE 96M/P-1071-T2-41		Connector, M12, metal	4	Heating

► transmitter / ◄ receiver

/// SLS 96 K/P



The unique feature of the SLS 96 K/P light beam safety device is its solid plastic housing in protection rating IP 67. With the SLS 96 K/P-1207, a model for multiple axis operation is also available.



Benefits:

- High functional reserve in the visible red light and infrared light range
- Wide voltage range from 10 to 30 V with pnp transistor output for PLC applications
- 2 displays on transmitter and receiver for status display with start-up and running operation
- Variants for multi-axis operation

Direct access to the online product selector at www.leuze.com/en/sls96k_p

Part no.	Part description	Operating range	Connection	No. of pins	Special design
50028011	► SLSS 96K-1210-T2-45	0 ... 30 m	Connector, M12, metal	4	Activation input
50028012	◄ SLSE 96K/P-1200-T2-41		Connector, M12, metal	4	
50041109	◄ SLSE 96K/P-1207-T2-41		Connector, M12, metal	4	
50028009	► SLSS 96K-1210-T2-24	0 ... 30 m	Terminal	3	Activation input
50028010	◄ SLSE 96K/P-1200-T2-21		Terminal	3	
50035078	◄ SLSE 96K/P-1207-T2-21		Terminal	3	
50031559	► SLSS 96K-1080-T2-45	0 ... 50 m	Connector, M12, metal	4	Activation input
50031561	◄ SLSE 96K/P-1070-T2-41		Connector, M12, metal	4	
50081292	► SLSS 96K-1080-T2-24	0 ... 50 m	Terminal	3	Activation input
50081293	◄ SLSE 96K/P-1070-T2-21		Terminal	3	

► transmitter / ◄ receiver

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"In our Service Center in Owen, we have a lot of expert colleagues who, as sensor people, can reliably handle your questions and problems – and are happy to help you around the clock."

Simone Fischer,
Customer Advisor in the
Customer Care Center

You can reach the sensor people around the clock www.leuze.com/en/support



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//SAFETY LASER SCANNERS

FLEXIBLE FIELD MONITORING

The immense flexibility of the safety laser scanners is the result of the independent protective/warning field pairs, which can assume any field contours as well as the ability to change over between these pairs. Because of their compact construction, the ROTOSCAN RS4 safety laser scanners enable a very flexible installation position and use in mobile applications.

/// Safety Laser Scanners “Basic” function package



Even the basic function package is enough to secure a danger zone in accordance with the latest safety standards.



Benefits:

- Any type of protective/warning field contours
- Start/restart interlock (RES), selectable
- Monitored field pair changeover
- Warning field monitoring
- Selectable resolution
- Additional alarm output
- Start test

Direct access to the online product selector at www.leuze.com/en/sls-b

Part no.	Part description	Number of protective fields	Resolution	Operating range	Safety-related switching outputs
50034195	RS4-4	4	70/150 mm	4 m/4 m	2, transistor, PNP

Included in delivery: RS4soft and RS4-MG-X1-Set, RS4-MG-X2-Set plugs

/// Safety Laser Scanners “Extended” function package



This function package enables a high level of flexibility in the safeguarding of entries and points of operation through eight reversible protective field/warning field pairs.



Benefits:

- Any type of protective/warning field contours
- Start/restart interlock (RES), selectable
- Monitored field pair changeover
- Warning field monitoring
- Selectable resolution
- Reference boundary monitoring
- Additional alarm output
- Start test

Direct access to the online product selector at www.leuze.com/en/sls-e

Part no.	Part description	Number of protective fields	Resolution	Operating range	Safety-related switching outputs
520082	RS4-2E	4	70/150 mm	2.15 m/2.15 m	2, transistor, PNP
520085	RS4-4E	8	30/40/50/70/150 mm	1.6 m/2.2 m/2.8 m/4 m/4 m	2, transistor, PNP
520044	RS4-6E	8	30/40/50/70/150 mm	1.6 m/2.2 m/2.8 m/6.25 m/6.25 m	2, transistor, PNP

Included in delivery: RS4soft and RS4-MG-X1-Set, RS4-MG-X2-Set plugs

/// Safety Laser Scanners “MotionMonitoring” function package



With this function package, you can perform speed monitoring with distance measurement in the protective field without it being affected by moving personnel.



Benefits:

- Monitoring of side-tracking skates
- Reliable distance measurement for positioning
- Any type of protective/warning field contours
- Start/restart interlock (RES), selectable
- Monitored field pair changeover
- Warning field monitoring
- Selectable resolution
- Reference boundary monitoring
- Additional alarm output
- Start test

Direct access to the online product selector at www.leuze.com/en/sls-mm

Part no.	Part description	Number of protective fields	Resolution	Operating range	Safety-related switching outputs
520099	RS4-4M	8	30/40/50/70/150 mm	1.6 m/2.2 m/2.8 m/4 m/4 m	2, transistor, PNP
520045	RS4-6M	8	30/40/50/70/150 mm	1.6 m/2.2 m/2.8 m/6.25 m/6.25 m	2, transistor, PNP
520098	RS4-2M	8	70/150 mm	2.15 m/2.15 m	2, transistor, PNP

Included in delivery: RS4soft and RS4-MG-X1-Set, RS4-MG-X2-Set plugs

SMARTER PRODUCT USABILITY

It's the accessories that make our range of products complete.

We place great value on, e. g., flexible mounting solutions and simple integration through variable connection technology, alignment aids and innovative mounting systems. Pre-configured and pre-mounted systems also facilitate fast and simple commissioning of, e. g., muting systems for applications in safety at work.



Discover our extensive line of accessories on the web at: www.leuze.com/en/accessories

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//PROTECTIVE SENSOR SETS

PLUG & PLAY FOR EFFICIENT ACCESS GUARDING

If you would like to more easily and more quickly implement access guarding with reduced logistical work, protective sensor sets are an attractive solution. Components that are electronically and mechanically optimized to one another and which are equipped with connectors ensure fast start-up of the Plug & Play complete solutions.

/// MLDSET



These are muting systems for access guarding with 2- and 3-beam MLD transceiver devices, pre-mounted in Leuze electronic Device Columns.



Benefits:

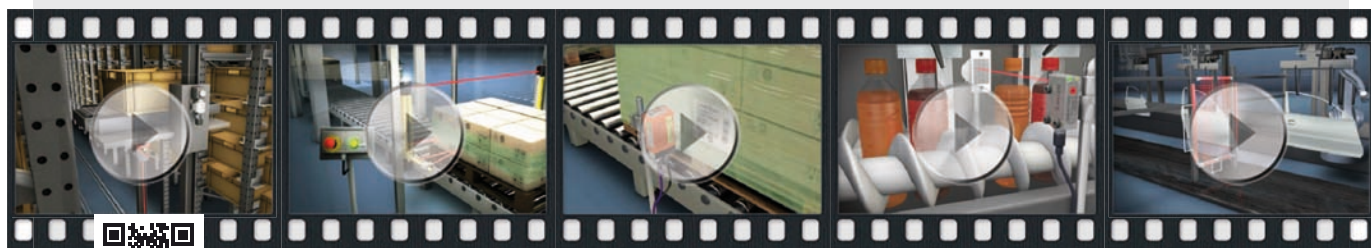
- Pre-mounted and aligned muting sensors with complete wiring
- Configuration without PC via wiring in the switch cabinet
- Various muting modes (parallel, sequential, partial)
- Also for low-temperature applications down to -30°C

Direct access to the online product selector at www.leuze.com/en/mldset

Part no.	Part description	Beam spacing	Number of beams	Operating range	Muting sensors	Column height without foot	Muting type
66900022	MLDSET-M1-1300L	500 mm	2	0 ... 8 m	2 PRK 25B retro-reflective photoelectric sensors	1,300 mm	Sequence controlled 2-sensor muting
66900021	MLDSET-M1-1300T	500 mm	2	0 ... 8 m	2 PRK 25B retro-reflective photoelectric sensors	1,300 mm	Timing controlled 2-sensor muting
66900024	MLDSET-M1-1600L	500 mm	2	0 ... 8 m	2 PRK 25B retro-reflective photoelectric sensors	1,600 mm	Sequence controlled 2-sensor muting
66900023	MLDSET-M1-1600T	500 mm	2	0 ... 8 m	2 PRK 25B retro-reflective photoelectric sensors	1,600 mm	Timing controlled 2-sensor muting
66900012	MLDSET-M1-1600T4	500 mm	2	0 ... 8 m	4 PRK 25B retro-reflective photoelectric sensors	1,600 mm	Timing controlled 4-sensor muting
66900026	MLDSET-M2-1300L	400 mm	3	0 ... 6 m	2 PRK 25B retro-reflective photoelectric sensors	1,300 mm	Sequence controlled 2-sensor muting
66900025	MLDSET-M2-1300T	400 mm	3	0 ... 6 m	2 PRK 25B retro-reflective photoelectric sensors	1,300 mm	Timing controlled 2-sensor muting
66900028	MLDSET-M2-1600L	400 mm	3	0 ... 6 m	2 PRK 25B retro-reflective photoelectric sensors	1,600 mm	Sequence controlled 2-sensor muting
66900027	MLDSET-M2-1600T	400 mm	3	0 ... 6 m	2 PRK 25B retro-reflective photoelectric sensors	1,600 mm	Timing controlled 2-sensor muting
66900013	MLDSET-M2-1600T4	400 mm	3	0.5 ... 6 m	4 PRK 25B retro-reflective photoelectric sensors	1,600 mm	Timing controlled 4-sensor muting

Included in delivery: mounting kit for floor assembly

SMARTER APPLICATION KNOW-HOW



Take a look at our product clips: www.leuze.com/en/product-clips

/// MLD-UDC



MLD 500 transceiver or transmitter-receiver systems with different numbers of beams and ranges which are pre-mounted in device columns facilitate the installation of the most diverse constructional systems even in combination with deflecting mirror columns. They are suitable for single- and multiple-sided access guarding.



Benefits:

- Pre-mounted safety sensors in sturdy device columns
- Configuration without PC via wiring in the switch cabinet
- Extremely diverse access guarding systems with the addition of deflecting mirror columns
- All columns with automatic resetting after mechanical impacts
- Also for low-temperature applications down to -30 °C

Direct access to the online product selector at www.leuze.com/en/mld-udc

Part no.	Part description	Beam spacing	Number of beams	Operating range	Column height without foot
426538	► MLD520-RT2-UDC-900-S2	500 mm	2	0.5 ... 8 m	835 mm
426509	◄ MLD-M002-UDC-900-S2	500 mm	2		835 mm
426540	► MLD530-RT2M-UDC-900-S2	500 mm	2	0.5 ... 8 m	835 mm
426509	◄ MLD-M002-UDC-900-S2	500 mm	2		835 mm
426539	► MLD530-R2LM-UDC-900-S2	500 mm	2		835 mm
426303	◄ MLD500-T2L-UDC-900-S2	500 mm	2	0.5 ... 50 m	900 mm
426302	► MLD520-R2L-UDC-900-S2	500 mm	2		900 mm
426303	◄ MLD500-T2L-UDC-900-S2	500 mm	2	0.5 ... 50 m	900 mm
426535	► MLD530-RT2M-UDC-1000-S2	500 mm	2	0.5 ... 8 m	1,000 mm
426305	◄ MLD-M002-UDC-1000-S2	500 mm	2		1,000 mm
426304	► MLD520-RT2-UDC-1000-S2	500 mm	2	0.5 ... 8 m	1,000 mm
426305	◄ MLD-M002-UDC-1000-S2	500 mm	2		1,000 mm
426307	► MLD530-R2LM-UDC-1000-S2	500 mm	2		1,000 mm
426306	◄ MLD500-T2L-UDC-1000-S2	500 mm	2	0.5 ... 50 m	1,000 mm
426308	► MLD520-R2L-UDC-1000-S2	500 mm	2		1,000 mm
426306	◄ MLD500-T2L-UDC-1000-S2	500 mm	2	0.5 ... 50 m	1,000 mm
426379	► MLD510-R2-UDC-1000-S2-P	500 mm	2		1,000 mm
426345	◄ MLD500-T2-UDC-1000-S2-P	500 mm	2	0.5 ... 50 m	1,000 mm
905061	► MLD530-RT2M-UDC-1300-S2	500 mm	2	0.5 ... 8 m	1,300 mm
905065	◄ MLD-M002-UDC-1300-S2	500 mm	2		1,300 mm
426543	► MLD520-RT2-UDC-1300-S2	500 mm	2	0.5 ... 8 m	1,300 mm
905065	◄ MLD-M002-UDC-1300-S2	500 mm	2		1,300 mm
426313	► MLD535-RT2M-UDC-1600-S2	500 mm	2	0.5 ... 8 m	1,600 mm
905066	◄ MLD-M002-UDC-1600-S2	500 mm	2		1,600 mm
426534	► MLD520-RT2-UDC-1600-S2	500 mm	2	0.5 ... 8 m	1,600 mm
905066	◄ MLD-M002-UDC-1600-S2	500 mm	2		1,600 mm
905062	► MLD530-RT2M-UDC-1600-S2	500 mm	2	0.5 ... 8 m	1,600 mm
905066	◄ MLD-M002-UDC-1600-S2	500 mm	2		1,600 mm
426519	► MLD530-RT2M-UDC-1900-S2	500 mm	2	0.5 ... 8 m	1,900 mm
426314	◄ MLD-M002-UDC-1900-S2	500 mm	2		1,900 mm
426541	► MLD520-RT2-UDC-1900-S2	500 mm	2	0.5 ... 8 m	1,900 mm
426314	◄ MLD-M002-UDC-1900-S2	500 mm	2		1,900 mm
426530	► MLD510-R2-UDC-2500-S2-P	500 mm	2		2,500 mm
426531	◄ MLD500-T2-UDC-2500-S2-P	500 mm	2	0.5 ... 50 m	2,500 mm
426542	► MLD520-RT3-UDC-1300-S2	400 mm	3	0.5 ... 6 m	1,300 mm
905067	◄ MLD-M003-UDC-1300-S2	400 mm	3		1,300 mm
905063	► MLD530-RT3M-UDC-1300-S2	400 mm	3	0.5 ... 6 m	1,300 mm
905067	◄ MLD-M003-UDC-1300-S2	400 mm	3		1,300 mm
905064	► MLD530-RT3M-UDC-1600-S2	400 mm	3	0.5 ... 6 m	1,600 mm
905068	◄ MLD-M003-UDC-1600-S2	400 mm	3		1,600 mm
426537	► MLD535-RT3M-UDC-1600-S2	400 mm	3	0.5 ... 6 m	1,600 mm
905068	◄ MLD-M003-UDC-1600-S2	400 mm	3		1,600 mm
426536	► MLD520-RT3-UDC-1600-S2	400 mm	3	0.5 ... 6 m	1,600 mm
905068	◄ MLD-M003-UDC-1600-S2	400 mm	3		1,600 mm
426544	► MLD535-RT3M-UDC-1900-S2	400 mm	3	0.5 ... 6 m	1,900 mm
426508	◄ MLD-M003-UDC-1900-S2	400 mm	3		1,900 mm
426591	► MLD530-RT3M-UDC-1900-S2	400 mm	3	0.5 ... 6 m	1,900 mm
426508	◄ MLD-M003-UDC-1900-S2	400 mm	3		1,900 mm
426554	► MLD510-R4L-UDC-1600-S2	300 mm	4		1,600 mm
426553	◄ MLD500-T4L-UDC-1600-S2	300 mm	4	0.5 ... 50 m	1,600 mm
426558	► MLD510-R4L-UDC-1600-S2.1	300 mm	4		1,600 mm
426557	◄ MLD500-T4L-UDC-1600-S2.1	300 mm	4	0.5 ... 50 m	1,600 mm

Included in delivery: mounting kit for floor assembly
► receiver or transceiver / ◄ transmitter or mirror

Switching
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/ SAFE LOCKING DEVICES, SWITCHES AND PROXIMITY SENSORS

FROM EXTREMELY ECONOMICAL TO EXTREMELY TOUGH

Safety switches and magnetically coded safety systems are used for monitoring moveable safety guards, such as safety doors, sliding grilles or flaps. Opening the protective devices triggers an E-STOP command. Safety locking devices keep the protective doors locked, thereby preventing the inadmissible access of people until the guarded machine no longer poses a danger.



Safety Switches

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Safety Locking Devices

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Safety Command Devices

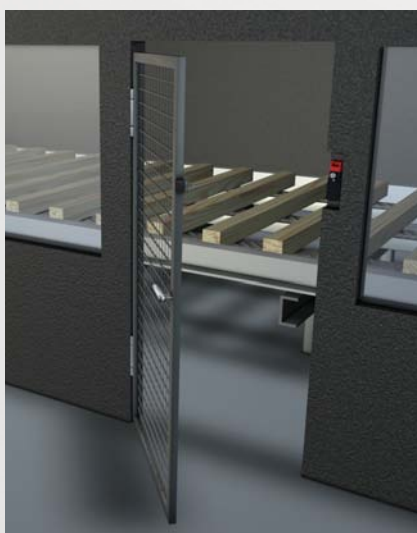
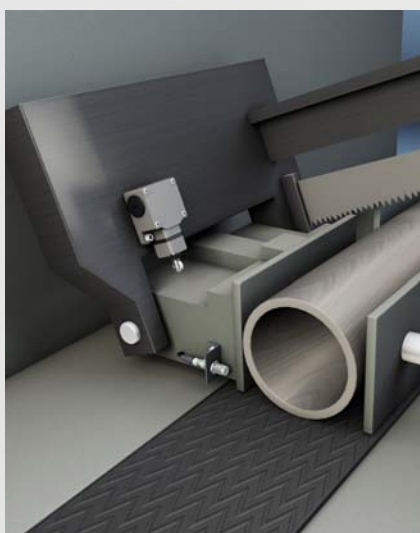
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Magnetically Coded Sensors

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Safety Transponders

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//SAFETY SWITCHES

OPEN IS OFF

For doors, flaps and covers that must be closed during the operation of machines, safety switches for position monitoring and for the protection of personnel and systems are required. In addition to standard designs for universal use, safety hinge switches and safety position switches are available as alternatives to hinge switches on flaps.

Safety Switch with Separate Actuator

Standard designs with separate actuators allow different approach directions and thereby facilitate universal use.

/// S20



The S20 is a safety switch without locking device that can be used, e. g., on machines and systems where the operator is protected from the point of operation by grid doors or sliding gates.



Benefits:

- Housing made of glass fiber reinforced plastic – degree of protection IP 67
- Suited for normal duty applications
- Easy mounting with standard construction
- Universal use with 5 actuator approach directions
- Self-centering through funnel-shaped insertion opening

Direct access to the online product selector at www.leuze.com/en/s20

Part no.	Part description	Contact equipment	Housing material	Connection	Cable entry	Approach actuation directions	Actuation force (pull-out)
63000101	S20-P1C1-M20-FH	1NC + 1NO, creep contact	Plastic	Terminal	1x, M20 × 1.5	4 × side (90°) 1 × top	10 N
63000102	S20-P1C3-M20-LH	1NC + 1NO, creep contact	Plastic	Terminal	3x, M20 × 1.5	4 × side (90°) 1 × top	10 N
63000103	S20-P4C1-M20-FH	2NC + 1NO, creep contact	Plastic	Terminal	1x, M20 × 1.5	4 × side (90°) 1 × top	10 N
63000104	S20-P4C3-M20-LH	2NC + 1NO, creep contact	Plastic	Terminal	3x, M20 × 1.5	4 × side (90°) 1 × top	10 N
63000105	S20-P4C1-M20-FH30	2NC + 1NO, creep contact	Plastic	Terminal	1x, M20 × 1.5	1 × top 4 × side (90°)	30 N
63000106	S20-P4C1-M12-FH	2NC + 1NO, creep contact	Plastic	Connector, M12, plastic		1 × top 4 × side (90°)	10 N
63000100	S20-P3C1-M20-FH	2NC, creep contact	Plastic	Terminal	1x, M20 × 1.5	4 × side (90°) 1 × top	10 N

Note: Actuators must be ordered separately!

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Added value made attainable!

We offer specific and measurable added value in the areas of usability, application know-how and service – to help make our customers more successful. In the future, these areas will also be our yardstick for new product developments, innovative service offerings and extensive market expertise.



More information on our active customer orientation: www.leuze.com/en/ssb



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/// S200



This safety switch is used, e. g., for heavy doors or rolling gates in rough environments, i. e., it is preferred for “heavy duty” applications.

**Benefits:**

- Housing made of metal – degree of protection IP 67
- Suited for heavy duty applications
- Easy mounting with standard construction
- Universal use with 5 actuator approach directions
- Self-centering through funnel-shaped insertion opening

Direct access to the online product selector at www.leuze.com/en/s200

Part no.	Part description	Contact equipment	Housing material	Connection	Cable entry	Approach actuation directions	Actuation force (pull-out)
63000201	S200-M1C1-M20	1NC + 1NO, creep contact	Metal	Terminal	1x, M20 × 1.5	4 × side (90°) 1 × top	10 N
63000202	S200-M4C1-M20	2NC + 1NO, creep contact	Metal	Terminal	1x, M20 × 1.5	4 × side (90°) 1 × top	10 N
63000203	S200-M4C1-M12	2NC + 1NO, creep contact	Metal	Connector, M12, metal		4 × side (90°) 1 × top	10 N
63000200	S200-M3C1-M20	2NC, creep contact	Metal	Terminal	1x, M20 × 1.5	4 × side (90°) 1 × top	10 N

Note: Actuators must be ordered separately!

Safety Position Switch

Because of their construction design, these switches are used for the position monitoring of machines or as an alternative to hinge switches – always with the prerequisite that appropriate actuation tappets or notches can actuate the switch when friction closed.

/// S300



The S300 safety position switches have a metal housing in accordance with protection rating IP 67. The models equipped with various contact sets enable integration in control circuits up to category 4 in accordance with EN ISO 13849. In addition, models are available with different actuators and supports and connection options.

**Benefits:**

- Metal housing for “heavy duty” applications
- Switching direction selectable
- Universal use with individually set actuator approach directions and angles
- Stable lever fastening in 10 ° raster
- Models with plunger and roller actuator, extremely long-life and robust

Direct access to the online product selector at www.leuze.com/en/s300

Part no.	Part description	Contact equipment	Housing material	Connection	No. of pins	Cable entry	Approach actuation directions	Switching direction
63000307	S300-P13C1-M12-CB	2NC + 1NO, creep contact	Plastic	Connector, M12, plastic	8		4 × side (90°) 360 °	One side Both sides
63000309	S300-P13C1-M12-SB	2NC + 1NO, creep contact	Plastic	Connector, M12, plastic	8		4 × side (90°) 360 °	One side Both sides
63000310	S300-P0C1-M20-CB	1NC + 1NO, snap-action contact	Plastic	Terminal	4	1x, M20 × 1.5	4 × side (90°) 360 °	One side Both sides
63000300	S300-M0C3-M20-15	1NC + 1NO, snap-action contact	Metal	Terminal	4	3x, M20 × 1.5	4 × side (90°) 1 × top	Both sides
63000302	S300-M0C3-M20-31	1NC + 1NO, snap-action contact	Metal	Terminal	4	3x, M20 × 1.5	4 × side (90°) 360 °	Both sides One side
63000308	S300-P13C1-M20-SB	2NC + 1NO, creep contact	Plastic	Terminal	6	1x, M20 × 1.5	4 × side (90°) 360 °	One side Both sides
63000306	S300-P13C1-M20-CB	2NC + 1NO, creep contact	Plastic	Terminal	6	1x, M20 × 1.5	4 × side (90°) 360 °	One side Both sides
63000304	S300-M13C3-M20-CB	2NC + 1NO, creep contact	Metal	Terminal	6	3x, M20 × 1.5	4 × side (90°) 360 °	One side Both sides
63000305	S300-M13C3-M20-SB	2NC + 1NO, creep contact	Metal	Terminal	6	3x, M20 × 1.5	4 × side (90°) 360 °	One side Both sides
63000301	S300-M13C3-M20-15	2NC + 1NO, creep contact	Metal	Terminal	6	3x, M20 × 1.5	4 × side (90°) 1 × top	Both sides
63000303	S300-M13C3-M20-31	2NC + 1NO, creep contact	Metal	Terminal	6	3x, M20 × 1.5	4 × side (90°) 360 °	Both sides One side

Note: Actuators must be ordered separately!

Safety Hinge Switch

Safety hinge switches are used for the position monitoring of hard guards that can rotate (e. g. protective hoods) by means of a monitoring switch (without guard interlocking) integrated into the hinge.

/// S400



The S400 safety hinge switches unite the safety switch and door hinge functions in one component. Because external actuators are not required with this switch, it can also be used problem-free in environments with high dust concentration levels or with heavy particle loads (protection rating IP 67). By means of a repeatable setting (switching angle alignment), fault-free function is ensured even with warped or misaligned doors.



Benefits:

- Maximum opening angle of the protective device, 180 °
- Repeatable setting (switching angle alignment) with skewed or misaligned doors
- Compact, rounded-off construction design in robust metal version, degree of protection 67
- Encapsulated, internal actuator guarantees proper functioning, even under difficult conditions
- Highly tamperproof due to covered screws
- Cable or M12 connection

Direct access to the online product selector at www.leuze.com/en/s400

Part no.	Part description	Contact equipment	Housing material	Connection	No. of pins/ No. of conductors	Side of cable entry
63000406	S400-M4-CB02M12-W	2NC + 1NO, creep contact	Metal	Cable with M12 connector, M12, metal, 200 mm, PVC	8	Wall side
63000411	S400-M4-CB2PUR-W	2NC + 1NO, creep contact	Metal	Cable, 2,000 mm, PUR	7	Wall side
63000402	S400-M4CB2-T	2NC + 1NO, creep contact	Metal	Cable, 2,000 mm, PVC	7	From above (with left installation)
63000400	S400-M4CB2-B	2NC + 1NO, creep contact	Metal	Cable, 2,000 mm, PVC	7	From below (with left installation)
63000403	S400-M4M12-T	2NC + 1NO, creep contact	Metal	Connector, M12, metal	8	From above (with left installation)
63000401	S400-M4M12-B	2NC + 1NO, creep contact	Metal	Connector, M12, metal	8	From below (with left installation)
63000407	S400-M1-CB02M12-W	2NC + 1NO, snap-action contact	Metal	Cable with M12 connector, M12, metal, 200 mm, PVC	8	Wall side

/// S410



With its wider mounting fork, this safety hinge switch is suitable above all for use with glass or plastic parts, as larger support surfaces are needed for stability in these cases.



Benefits:

- Wide fork dimensions for stability on glass and plastic
- Maximum opening angle of the protective device, 180 °
- Repeatable setting (switching angle alignment) with skewed or misaligned doors
- Degree of protection IP 67
- Compact, rounded-off construction design in robust metal version
- Encapsulated, internal actuator guarantees proper functioning, even under difficult conditions
- Highly tamperproof due to covered screws
- Cable or M12 connection

Direct access to the online product selector at www.leuze.com/en/s410

Part no.	Part description	Contact equipment	Housing material	Connection	No. of pins/ No. of conductors	Side of cable entry
63000410	S410-M4-CB02M12-W	2NC + 1NO, creep contact	Metal	Cable with M12 connector, M12, metal, 200 mm, PVC	8	Wall side
63000412	S410-M4-CB2PUR-W	2NC + 1NO, creep contact	Metal	Cable, 2,000 mm, PVC	7	Wall side
63000408	S410-M1CB2-T	2NC + 1NO, snap-action contact	Metal	Cable, 2,000 mm, PVC	7	From above (with left installation)
63000404	S410-M1CB2-B	2NC + 1NO, snap-action contact	Metal	Cable, 2,000 mm, PVC	7	From below (with left installation)
63000409	S410-M1M12-T	2NC + 1NO, snap-action contact	Metal	Connector, M12, metal	8	From above (with left installation)
63000405	S410-M1M12-B	2NC + 1NO, snap-action contact	Metal	Connector, M12, metal	8	From below (with left installation)

//SAFETY LOCKING DEVICES

THE DOOR STAYS CLOSED!

Safety locking devices keep protective doors securely locked and thereby prevent the inadmissible access of people until the guarded machine no longer poses a danger. Not until there is no longer a danger to the machine or to the workers is access released by an electric signal. With their robust design, all Leuze electronic safety switches and locking devices are designed for rough industrial applications.

/// L10



The compact and economical L10 safety locking device reduces wiring through manual locking and releasing.



Benefits:

- Particularly economical locking solution for rarely-used maintenance doors and applications without electrical control signals
- Hardly any wiring and cabling costs due to manual locking and unlocking
- 6 different heavy duty actuators for the most diverse installation conditions

Direct access to the online product selector at www.leuze.com/en/l10

Part no.	Part description	Contact equipment	Housing material	Cable entry	Approach actuation directions	Locking actuation	Locking type
63000552	L10-P3C1-M20-SB20	2NC + 1NO, creep contact	Plastic	1x, M20 × 1.5	1 × top 4 × side (90°)	Manual unlocking by means of knurled nut	Mechanical
63000558	L10-P3C1-M20-K0	2NC + 1NO, creep contact	Plastic	1x, M20 × 1.5	4 × side (90°) 1 × top	Manual unlocking by means of key	Mechanical
63000554	L10-P3C1-M20-LB10	2NC + 1NO, creep contact	Plastic	1x, M20 × 1.5	4 × side (90°) 1 × top	Manual unlocking by means of knurled nut	Mechanical
63000555	L10-P3C1-M20-LB20	2NC + 1NO, creep contact	Plastic	1x, M20 × 1.5	4 × side (90°) 1 × top	Manual unlocking by means of knurled nut	Mechanical
63000553	L10-M3C1-M20-SB20	2NC + 1NO, creep contact	Metal	1x, M20 × 1.5	1 × top 4 × side (90°)	Manual unlocking by means of knurled nut	Mechanical
63000559	L10-M3C1-M20-K0	2NC + 1NO, creep contact	Metal	1x, M20 × 1.5	4 × side (90°) 1 × top	Manual unlocking by means of key	Mechanical
63000550	L10-P2C1-M20-SB20	2NC, creep contact	Plastic	1x, M20 × 1.5	1 × top 4 × side (90°)	Manual unlocking by means of knurled nut	Mechanical
63000551	L10-M2C1-M20-SB20	2NC, creep contact	Metal	1x, M20 × 1.5	1 × top 4 × side (90°)	Manual unlocking by means of knurled nut	Mechanical

Note: Actuators must be ordered separately!

/// L100



The versatile safety locking device is used both for personnel safety as well as for machine protection and is used to guard machines and systems that have stopping times.



Benefits:

- 6 different heavy duty actuators for the most diverse installation conditions
- Standard construction in models with electromagnetic or spring force-actuated interlocking type and auxiliary release function
- Adjustable switch-on current reduction

Direct access to the online product selector at www.leuze.com/en/l100

Part no.	Part description	Contact equipment	Housing material	Cable entry	Approach actuation directions	Locking actuation	Locking type
63000600	L100-P3C3-M20-SLM24	1NC, 1NC + 1NO, creep contact	Plastic	3x, M20 × 1.5	1 × top 4 × side (90°)	Spring	Spring force
63000601	L100-P3C3-M20-MLM24	1NC, 1NC + 1NO, creep contact	Plastic	3x, M20 × 1.5	1 × top 4 × side (90°)	Magnet	Electromagnetic
63000602	L100-P4C3-M20-SLM24	1NC, 2NC, creep contact	Plastic	3x, M20 × 1.5	1 × top 4 × side (90°)	Spring	Spring force

Note: Actuators must be ordered separately!

/// L200



The L200 safety locking device designed for highly demanding applications is predestined for guarding large protective doors and sliding gates, in logistics operations, for example, or with very big machinery, and under harsh conditions.



Benefits:

- Heavy duty access guarding on big machinery and systems in harsh ambient conditions
- Emergency unlock function (ergonomically optimized panic button) for manually opening the protective devices in the event of an emergency
- Suitable for extreme mechanical loads
- Auxiliary unlocking (for spring locking)
- LED status displays

Direct access to the online product selector at www.leuze.com/en/l200

Part no.	Part description	Contact equipment	Housing material	Cable entry	Approach actuation directions	Locking actuation	Locking type
63000652	L200-M1C3-SLM24-PB-L2G	1NC + 1NO, 2NC, creep contact	Metal	3x, M20 x 1.5	1 x top 4 x side (90°)	Spring	Spring force
63000650	L200-M1C3-SLM24-L2G	1NC + 1NO, 2NC, creep contact	Metal	3x, M20 x 1.5	1 x top 4 x side (90°)	Spring	Spring force
63000651	L200-M1C3-MLM24-L2G	1NC + 1NO, 2NC, creep contact	Metal	3x, M20 x 1.5	1 x top 4 x side (90°)	Magnet	Electromagnetic

Note: Actuators must be ordered separately!

Switching
Sensors

Measuring
Sensors

Products for
Safety at Work

Identification

SMARTER **PRODUCT USABILITY**

Optimum handling, very simple mounting and alignment, uncomplicated integration in fieldbus systems and fast configuration.

Discover our product innovations!



Direct access to our product innovations: www.leuze.com/en/innovations



Data Transmission /
Control Components

Industrial Image
Processing

Accessories

//SAFETY COMMAND DEVICES

AND OFF!

For stopping in emergencies, EN ISO 12100-1 stipulates protective devices and supplementary measures such as E-Stop buttons or emergency rope switches. Leuze electronic offers solutions that are optimized with respect to safety and ergonomics.

/// ERS200



The ERS200 E-Stop rope switch is a safety command device in accordance with EN ISO 13850 and EN 60947-5-5 and is used with preference with expansive points of operation. The rope-pull activation guarantees that it is easy to reach all along the point of operation.



Benefits:

- Pulling the rope or rope fracture safely stops the machine
- Clicks in on both sides with friction-locking contacts
- Easy alignment with switching point indicator
- Easy integration with 3 cable approach directions
- Compact metal housing, degree of protection IP 67
- Reset button with status display
- Temperature compensation for longer rope lengths

Direct access to the online product selector at www.leuze.com/en/ers200

Part no.	Part description	Contact equipment	Housing material	Connection	No. of pins	Cable entry	Actuation directions	Actuation force (pull-out)	Actuating path with forced separation	Rope length, max.
63000500	ERS200-M0C3-M20-HLR	1NC + 1NO	Metal	Terminal	4	3x, M20 × 1.5	On longitudinal axis	83 N	8 mm	24 m
63000522	ERS200-M0C3-M20-HAR	1NC + 1NO	Metal	Terminal	4	3x, M20 × 1.5	To right	235 N	14 mm	70 m
63000524	ERS200-M0C3-M20-HAL	1NC + 1NO	Metal	Terminal	4	3x, M20 × 1.5	To left	235 N	14 mm	70 m
63000501	ERS200-M1C3-M20-HLR	2NC	Metal	Terminal	4	3x, M20 × 1.5	On longitudinal axis	83 N	8 mm	24 m
63000525	ERS200-M1C1-M20-HAL	2NC	Metal	Terminal	4	1x, M20 × 1.5	To left	235 N	14 mm	70 m
63000523	ERS200-M1C1-M20-HAR	2NC	Metal	Terminal	4	1x, M20 × 1.5	To right	235 N	14 mm	70 m
63000502	ERS200-M4C3-M20-HLR	2NC + 1NO	Metal	Terminal	6	3x, M20 × 1.5	On longitudinal axis	83 N	8 mm	24 m
63000503	ERS200-M4C1-M20-HLR	2NC + 1NO	Metal	Connector	6	1x, M20 × 1.5	On longitudinal axis	83 N	8 mm	24 m
63000504	ERS200-M4C1-M12-HLR	2NC + 1NO	Metal	Connector	8	1x, M20 × 1.5	On longitudinal axis	83 N	8 mm	24 m
63000520	ERS200-M4C3-M20-HAR	2NC + 1NO	Metal	Terminal	6	3x, M20 × 1.5	To right	235 N	14 mm	70 m
63000521	ERS200-M4C3-M20-HAL	2NC + 1NO	Metal	Terminal	6	3x, M20 × 1.5	To left	235 N	14 mm	70 m

Note: Steel rope, rope clamps and other accessories must be ordered separately

/// ESB200



E-Stop buttons of the ESB200 series are used at points of operation where it makes sense to be able to enter a stop command at a specific location. The diversity of the series allows the devices to be installed, for example, on profiles as well as in control panels, etc.



Benefits:

- Contact sets for integration up to cat. 4 in accordance with EN ISO 13849
- 2 safety circuits, 1 signal circuit
- Either screw terminals or M12 connection
- Ergonomically optimized
- Degree of protection IP 67 and IP 69K

Direct access to the online product selector at www.leuze.com/en/esb200

Part no.	Part description	Contact equipment	Housing material	Connection	No. of pins	Cable entry	Scanner actuation force
63000000	ESB200-4TR-C	2NC + 1NO	Plastic	Terminal	6	5x, M16 × 1.5	25 N
63000002	ESB200-4KR-C	2NC + 1NO	Plastic	Terminal	6	5x, M16 × 1.5	25 N
63000004	ESB200-4TR-M12p	2NC + 1NO	Plastic	Connector	8	M12	25 N
63000006	ESB200-4KR-M12p	2NC + 1NO	Plastic	Connector	8	M12	25 N

Included in delivery: mounting screws, 1 "STOP" ring, 2 keys (depending on variant)

//MAGNETICALLY CODED SENSORS

ACTIVE WITHOUT CONTACT

The magnetically coded safety system is predestined for use under critical environmental conditions, i. e. wherever stress due to dust and humidity is high. Easy start-up, compact housing and extremely low costs characterize this robust series.

/// MC3



The MC3x coded magnetic sensor contains specially combined reed contacts that are contactlessly activated by the coded magnetic field of the actuator. With their cast housing, the extremely tamperproof switches are suitable for demanding applications in dusty or humid environments.

**Benefits:**

- Monitoring of moving guards on machines with sufficiently short stopping times for demanding applications
- For dusty or humid environments
- High-strength plastic housing
- Highly tamperproof
- Designs for many different types of applications
- PVC or PUR cable, M8 plug

Direct access to the online product selector at www.leuze.com/en/mc3

Part no.	Part description	Contact equipment	Connection	Sao, max.	Off, min.	Sar, min.	Dimensions
63001020	MC388-S2C2-A	2NO	Cable with wire-end sleeves, 2,000 mm, PVC	9 mm	19 mm	22 mm	25 mm × 13 mm × 88 mm
63001021	MC388-S2C5-A	2NO	Cable with wire-end sleeves, 5,000 mm, PVC	9 mm	19 mm	22 mm	25 mm × 13 mm × 88 mm
63001025	MC388-S2R10-A	2NO	Cable with wire-end sleeves, 10,000 mm, PUR	9 mm	19 mm	22 mm	25 mm × 13 mm × 88 mm
63001027	MC388-S2-C02M12-A	2NO	Cable with M12 connector, M12, metal, 200 mm, PVC	9 mm	19 mm	22 mm	25 mm × 13 mm × 88 mm
63001026	MC388-S2M8-A	2NO	Connector, M8, metal	9 mm	19 mm	22 mm	25 mm × 13 mm × 88 mm
63001003	MC388-S1R2-A	1NC + 1NO	Cable with wire-end sleeves, 2,000 mm, PUR	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001000	MC388-S1C2-A	1NC + 1NO	Cable with wire-end sleeves, 2,000 mm, PVC	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001004	MC388-S1R5-A	1NC + 1NO	Cable with wire-end sleeves, 5,000 mm, PUR	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001001	MC388-S1C5-A	1NC + 1NO	Cable with wire-end sleeves, 5,000 mm, PVC	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001005	MC388-S1R10-A	1NC + 1NO	Cable with wire-end sleeves, 10,000 mm, PUR	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001002	MC388-S1C10-A	1NC + 1NO	Cable with wire-end sleeves, 10,000 mm, PVC	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001007	MC388-S1-C02M12-A	1NC + 1NO	Cable with M12 connector, M12, metal, 200 mm, PVC	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001006	MC388-S1M8-A	1NC + 1NO	Connector, M8, metal	6 mm	13 mm	30 mm	25 mm × 13 mm × 88 mm
63001070	MC336-S2C2-A	2NO	Cable with wire-end sleeves, 2,000 mm, PVC	7 mm	17 mm	20 mm	26.2 mm × 13 mm × 36 mm
63001071	MC336-S2C5-A	2NO	Cable with wire-end sleeves, 5,000 mm, PVC	7 mm	17 mm	20 mm	26.2 mm × 13 mm × 36 mm
63001077	MC336-S2-C02M12-A	2NO	Cable with M12 connector, M12, metal, 200 mm, PVC	7 mm	17 mm	20 mm	26.2 mm × 13 mm × 36 mm
63001076	MC336-S2M8-A	2NO	Connector, M8, metal	7 mm	17 mm	20 mm	26.2 mm × 13 mm × 36 mm
63001053	MC336-S1R2-A	1NC + 1NO	Cable with wire-end sleeves, 2,000 mm, PUR	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001050	MC336-S1C2-A	1NC + 1NO	Cable with wire-end sleeves, 2,000 mm, PVC	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001054	MC336-S1R5-A	1NC + 1NO	Cable with wire-end sleeves, 5,000 mm, PUR	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001051	MC336-S1C5-A	1NC + 1NO	Cable with wire-end sleeves, 5,000 mm, PVC	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001055	MC336-S1R10-A	1NC + 1NO	Cable with wire-end sleeves, 10,000 mm, PUR	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001052	MC336-S1C10-A	1NC + 1NO	Cable with wire-end sleeves, 10,000 mm, PVC	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001057	MC336-S1-C02M12-A	1NC + 1NO	Cable with M12 connector, M12, metal, 200 mm, PVC	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001056	MC336-S1M8-A	1NC + 1NO	Connector, M8, metal	3 mm	8 mm	11 mm	26.2 mm × 13 mm × 36 mm
63001120	MC330-S2C2-A	2NO	Cable with wire-end sleeves, 2,000 mm, PVC	6 mm	15 mm	18 mm	M30 × 36 mm
63001121	MC330-S2C5-A	2NO	Cable with wire-end sleeves, 5,000 mm, PVC	6 mm	15 mm	18 mm	M30 × 36 mm
63001127	MC330-S2-C02M12-A	2NO	Cable with M12 connector, M12, metal, 200 mm, PVC	6 mm	15 mm	18 mm	M30 × 36 mm
63001126	MC330-S2M8-A	2NO	Connector, M8, metal	6 mm	15 mm	18 mm	M30 × 36 mm
63001103	MC330-S1R2-A	1NC + 1NO	Cable with wire-end sleeves, 2,000 mm, PUR	6 mm	12 mm	14 mm	M30 × 36 mm
63001100	MC330-S1C2-A	1NC + 1NO	Cable with wire-end sleeves, 2,000 mm, PVC	6 mm	12 mm	14 mm	M30 × 36 mm
63001104	MC330-S1R5-A	1NC + 1NO	Cable with wire-end sleeves, 5,000 mm, PUR	6 mm	12 mm	14 mm	M30 × 36 mm
63001101	MC330-S1C5-A	1NC + 1NO	Cable with wire-end sleeves, 5,000 mm, PVC	6 mm	12 mm	14 mm	M30 × 36 mm
63001105	MC330-S1R10-A	1NC + 1NO	Cable with wire-end sleeves, 10,000 mm, PUR	6 mm	12 mm	14 mm	M30 × 36 mm
63001102	MC330-S1C10-A	1NC + 1NO	Cable with wire-end sleeves, 10,000 mm, PVC	6 mm	12 mm	14 mm	M30 × 36 mm
63001107	MC330-S1-C02M12-A	1NC + 1NO	Cable with M12 connector, M12, metal, 200 mm, PVC	6 mm	12 mm	14 mm	M30 × 36 mm
63001106	MC330-S1M8-A	1NC + 1NO	Connector, M8, metal	6 mm	12 mm	14 mm	M30 × 36 mm

Included in delivery: 1 actuator, mounting material

Notice: An MSI-MC3x safety relay is required for certified application! This must be ordered separately.

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SensorsProducts for
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Control ComponentsIndustrial Image
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//SAFETY TRANSPONDERS

PURE FLEXIBILITY!

Safety transponders are well-suited for applications in which a very high level of safety and the highest protection against manipulation are necessary. Their high-strength plastic housings offer reliable protection against contamination and humidity in rough environmental conditions.

/// RD800



No matter if you require the RD800-S for single connections or the RD800-M for multiple applications – depending on the degree of risk, you can select ready-configured systems with standard or unique code detection (S- or U-variants). Teachable P-variants are a good choice if, for example, increased flexibility on-site is necessary.



Benefits:

- Standard code, unique code or flexibly programmable code
- M12 connection on the left or right for the most possible freedom during assembly
- Three-sided actuator mounting for quick and easy attachment
- Four multicolored LEDs for detailed diagnostics and effective installation and testing routines
- Degree of protection IP 67 and IP 69K with smooth, stable plastic housing for easy cleaning
- Permanent laser print for the long-term readability of product data

Direct access to the online product selector at www.leuze.com/en/rd800

Part no.	Part description	Application	Code type	Connection	No. of pins	Plug outlet	Sao, max.	Sar, min.
63002002	RD800-SSCA-M12L	Individual use	Standard code	Connector, M12, metal	5	On left side	10 mm	16 mm
63002000	RD800-SSCA-M12R	Individual use	Standard code	Connector, M12, metal	5	On right side	10 mm	16 mm
63002003	RD800-SUCA-M12L	Individual use	Unique code	Connector, M12, metal	5	On left side	10 mm	16 mm
63002001	RD800-SUCA-M12R	Individual use	Unique code	Connector, M12, metal	5	On right side	10 mm	16 mm
63002012	RD800-MSCA-M12L	Individual use Series use	Standard code	Connector, M12, metal	8	On left side	10 mm	16 mm
63002010	RD800-MSCA-M12R	Individual use Series use	Standard code	Connector, M12, metal	8	On right side	10 mm	16 mm
63002013	RD800-MUCA-M12L	Individual use Series use	Unique code	Connector, M12, metal	8	On left side	10 mm	16 mm
63002011	RD800-MUCA-M12R	Individual use Series use	Unique code	Connector, M12, metal	8	On right side	10 mm	16 mm
63002021	RD800-MP-M12L	Individual use Series use	Flexible programming	Connector, M12, metal	8	On left side	10 mm	16 mm
63002020	RD800-MP-M12R	Individual use Series use	Flexible programming	Connector, M12, metal	8	On right side	10 mm	16 mm

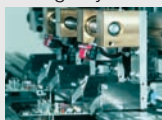
Included in delivery: 1 actuator, washers (stainless steel), caps

SMARTER APPLICATION KNOW-HOW

You need application know-how – we have the required expertise in your sector of industry!



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Robotics/handling



Automotive industry



Machine tools



Packaging industry



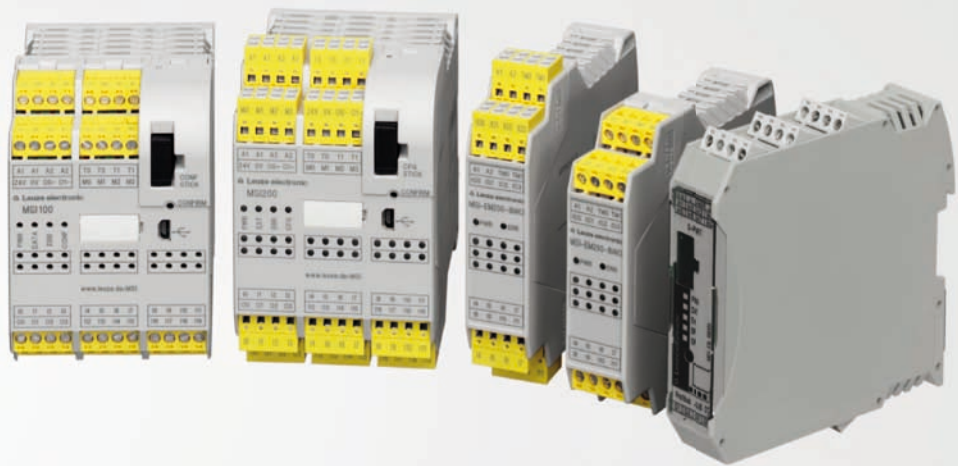
Laboratory analysis

More on our industry-specific knowledge: www.leuze.com/en/industry

/ SAFE CONTROL COMPONENTS

A SENSOR ALONE DOES NOT MAKE A SAFE WORKPLACE

Not until the safety sensors are efficiently and reliably integrated in the machine safety circuit can the topic of safety at work be implemented in such a way that the sensors do not interfere with the machine processes and yet still offer the best-possible protection. Our safety relays and AS-Interface solutions open all possibilities to you here.



Safety Relays

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AS-Interface Safety at Work

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//SAFETY RELAYS

MORE SPACE IN THE CABINET

With a width of just 17.5 mm and 22.5 mm, these safety relays are characterized by very narrow housings. As a result, you can realize the one- or two-channel connection of safety-related sensors in a space-saving and simple manner over up to three switch-off circuits. The devices have interchangeable connection terminals.

/// MSI-CM



The MSI-CM safety relay is used as a contact extension module in accordance with DIN EN 60204-1/VDE 0113 Part 1 for contact extension for E-Stop relays and two-hand control units. Depending on the wiring and proper integration of the feedback path, a Performance Level PL e in accordance with EN ISO 13849-1 is achieved.



Benefits:

- Contact extension module with extension block in accordance with DIN EN 60204-1/VDE 0113 Part 1
- Contact extension for E-Stop relays and two-hand control units
- 1- or 2-channel wiring
- Designs with screw terminals as well as with spring-cage terminals
- 5 release contacts, 1 signal contact, 1 feedback contact
- Detachable connection terminals for simple device swap-out

Direct access to the online product selector at www.leuze.com/en/msi-cm

Part no.	Part description	Connection	PL	Category	STOP category
547933	MSI-CM52B-01	Screw terminal	e	4	0
547934	MSI-CM52B-02	Spring-cage terminal	e	4	0

/// MSI-DT



This safety relay with adjustable delay time is equipped with two release current paths which release undelayed in accordance with stop category 0. Two additional release current paths release in accordance with stop category 1 with adjustable delay time.



Benefits:

- Adjustable delay time (can be steplessly preset from 0.1...30 s)
- Monitoring of E-Stop buttons, protective doors, AOPDs
- Monitoring of safety circuits in accordance with DIN EN 60204-1/VDE 0113-1
- 1- or 2-channel wiring with cross connection recognition
- Designs with screw terminals as well as with spring-cage terminals
- Two undelayed and two slow-release release contacts
- Automatic and manual start circuit
- Detachable connection terminals for simple device swap-out

Direct access to the online product selector at www.leuze.com/en/msi-dt

Part no.	Part description	Connection	PL	Category	STOP category
547935	MSI-DT30B-01	Screw terminal	e	4	0
547936	MSI-DT30B-02	Spring-cage terminal	e	4	0

/// MSI-SR4



The MSI-SR4 is used for evaluating safety-sensor input signals. Light curtains, E-Stop buttons and safety switches, for example, can thereby be integrated in the machine process in a safety-oriented manner.



Benefits:

- Standard link between machine control and optoelectronic protective devices as well as safety switches
- Flexibly covers a wide range of applications
- Monitored start/restart button
- Automatic start/restart
- Short reaction time of just 10 ms, easy connection and time-saving mounting
- Detachable connection terminals for simple device swap-out
- Designs with screw terminals as well as with spring-cage terminals

Direct access to the online product selector at www.leuze.com/en/msi-sr4

Part no.	Part description	Connection	PL	Category	STOP category	Number of safety-related switching outputs (OSSDs)	Switching element
547950	MSI-SR4B-01	Screw terminal	e	4	0	3	Relay, make-contact
547951	MSI-SR4B-02	Spring-cage terminal	e	4	0	3	Relay, make-contact

/// MSI-SR5



Two devices can be connected to the MSI-SR5 safety relay, either with two transistor OSSDs or by designing as a two-channel contact circuit. As a result, two sensors can be connected to a common switch-off circuit – for applications up to Performance Level PL_e acc. to EN ISO 13849-1.



Benefits:

- Very short response time
- Monitored reset button
- Dual evaluation of different sensor technologies
- LED displays, K1 and K2, supply voltage
- Housing width 22.5 mm
- Potential-free safety-related switching outputs
- Detachable connection terminals for simple device swap-out
- Designs with screw terminals as well as with spring-cage terminals

Direct access to the online product selector at www.leuze.com/en/msi-sr5

Part no.	Part description	Connection	PL	Category	STOP category	Number of safety-related switching outputs (OSSDs)	Switching element
547952	MSI-SR5B-01	Screw terminal	e	4	0	2	Relay, make-contact
547953	MSI-SR5B-02	Spring-cage terminal	e	4	0	2	Relay, make-contact

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/// MSI-RM2

With the MSI-RM2 relay module, a compact and – at the same time – economical solution is available in combination with safety sensors for applications up to Performance Level PL_e. The relay module, only 17.5 mm wide, has two potential-free make contact circuits with a response time of only 10 ms.

**Benefits:**

- For converting electronic switch-off signals from safety sensors to potential-free, contact-based signals
- Detachable connection terminals for simple device swap-out
- Designs with screw terminals as well as with spring-cage terminals

Direct access to the online product selector at www.leuze.com/en/msi-rm2

Part no.	Part description	Connection	Category	Number of safety-related switching outputs (OSSDs)	Switching element
547954	MSI-RM2B-01	Screw terminal	Up to 4 (depending on the category of the upstream protective device)	2	Relay, make-contact
547955	MSI-RM2B-02	Spring-cage terminal	Up to 4 (depending on the category of the upstream protective device)	2	Relay, make-contact

/// MSI-2H

The MSI-2H is the link between two-hand command devices and the machine control. The device checks the simultaneous activation of the two, 2-channel buttons and ensures a controlled process start. The module is used everywhere that feeding-in is not automatic, but rather has to be performed manually by people.

**Benefits:**

- Two-hand control unit for presses, punching machines and other machines that are manually loaded
- Extended simultaneity monitoring for an increased level of acceptance of the safeguards,
- Can also be used as a protective door monitor acc. to EN 60204-1 STOP-0
- Detachable connection terminals for simple device swap-out
- Designs with screw terminals as well as with spring-cage terminals

Direct access to the online product selector at www.leuze.com/en/msi-2h

Part no.	Part description	Connection	PL	Category	STOP category	Number of safety-related switching outputs (OSSDs)	Switching element
547956	MSI-2HB-01	Screw terminal	e	4	0	2	Relay, make-contact
547957	MSI-2HB-02	Spring-cage terminal	e	4	0	2	Relay, make-contact

/// MSI-T



MSI-T is a safety monitoring device for the periodic testing of one-channel testable Optoelectronic Protective Devices of type 2 acc. to EN IEC 61496. Up to 6 type 2 sensors can be connected to the device in series.

**Benefits:**

- 2 safety relay outputs with internal monitoring
- Filter time 130 ms
- STOP 1 function
- LED indicators
- Low space requirements
- Detachable connection terminals for simple device swap-out
- Designs with screw terminals as well as with spring-cage terminals

Direct access to the online product selector at www.leuze.com/en/msi-t

Part no.	Part description	Connection	PL	Category	Number of safety-related switching outputs (OSSDs)	Switching element	Number of digital switching outputs	Number of digital switching inputs	Filter time	Time delay
547962	MSI-TSB-01	Screw terminal	Up to d	2	2	Relay, make-contact	3	4		600 ms
547958	MSI-TR1B-01	Screw terminal	Up to d	2	2	Relay, make-contact	3	4		
547960	MSI-TR2B-01	Screw terminal	Up to d	2	2	Relay, make-contact	3	4	130 ms	
547963	MSI-TSB-02	Spring-cage terminal	Up to d	2	2	Relay, make-contact	3	4		600 ms
547959	MSI-TR1B-02	Spring-cage terminal	Up to d	2	2	Relay, make-contact	3	4		
547961	MSI-TR2B-02	Spring-cage terminal	Up to d	2	2	Relay, make-contact	3	4	130 ms	

/// MSI-MC3x



MSI-MC300 safety relays are suitable for integration of MC 300 magnetically coded sensors in control circuits up to category 4 and Performance Level PL_e in accordance with EN ISO 13849-1. These kinds of magnetically coded safety systems are used, for example, to monitor movable guards such as protective doors, sliding grids or flaps.

**Benefits:**

- Compact controller with long mechanical life time (10 million switching cycles)
- All Magnetically Coded Sensors (1NC/1NO) from Leuze electronic are connectable
- Automatic and start/restart operation

Direct access to the online product selector at www.leuze.com/en/msi-mc3x

Part no.	Part description	Connection	PL	Category	STOP category	Number of safety-related switching outputs (OSSDs)	Switching element	Number of digital switching outputs	Pickup delay, automatic start	Pickup delay, manual start
549941	MSI-MC310	Screw terminal	Up to and including e	Up to and including 4: 1 sensor connected	0	2	Relay, make-contact	1	400 ms	600 ms
549942	MSI-MC311	Screw terminal	Up to and including e	Up to and including 4: 1 sensor connected	0	2	Relay, make-contact	1	30 ms	150 ms

//PROGRAMMABLE SAFETY CONTROLLERS

PROGRAMMED FOR SAFETY

With the MSI 100 and MSI 200 programmable safety controllers, you obtain a system solution for small- to medium-size machines with maximum flexibility. Extension with I/O and communication modules possible. Configuration and start-up is simple and fast with the convenient MSIsafesoft programming software and its function modules.

/// MSI 100



The relay monitors E-Stop buttons, two-hand controls, safety doors or safety sensors with two transistor outputs in machines and systems. With an overall width of just 67.5 mm, the device makes available 20 safe inputs, 4 signal outputs for diagnostics and 4 safe outputs (OSSDs).



Benefits:

- Freely configurable safety base module
- Monitoring of all safe functions in machines and systems
- Transfers diagnostic data to the PLC via MSI-FB fieldbus modules (option)
- Free choice of connection system: screw terminal blocks or spring-cage terminal blocks; both can be pulled off and interchanged as desired

Direct access to the online product selector at www.leuze.com/en/msi100

Part no.	Part description	Connection	Number of safe inputs	Number of safe semiconductor outputs	Number of ground-switching outputs	Number of signal outputs	Number of cycle outputs
547802	MSI101	Screw terminal	20 (up to SIL 3 / IEC 62061)	4	2	4	2
547812	MSI102	Spring-cage terminal	20 (up to SIL 3 / IEC 62061)	4	2	4	2

Included in delivery: 1 terminal set, 1 data memory module, 1 TBUS safety connection plug
Note: Commissioning set must be ordered separately

/// MSI 200



The relay features the same functionality as the MSI100. In addition, it can be expanded with dockable extension modules to up to 140 safe inputs or 100 inputs and 44 safe outputs – quickly and easily with the TBUS DIN rail connection system.



Benefits:

- Up to 10 safe MSI-EM I/O extension modules can be connected, i. e., up to a maximum of 140 inputs or 100 inputs and 44 outputs are feasible
- Convenient and fast extension or modular exchange of the components via the TBUS DIN rail connection system

Direct access to the online product selector at www.leuze.com/en/msi200

Part no.	Part description	Connection	Number of possible safe extension modules	Number of safe inputs	Number of safe semiconductor outputs	Number of ground-switching outputs	Number of signal outputs	Number of cycle outputs
547803	MSI201	Screw terminal	10	20 (up to SIL 3 / IEC 62061)	4	2	4	2
547813	MSI202	Spring-cage terminal	10	20 (up to SIL 3 / IEC 62061)	4	2	4	2

Included in delivery: 1 terminal set, 1 data memory module, 2 TBUS safety connection plugs
Note: Commissioning set must be ordered separately

/// MSI-EM



The MSI-EM extension module expands the MSI 200 programmable safety controller with 8 safe inputs and 4 freely configurable channels. These may be either safe inputs or outputs (OSSDs).



Benefits:

- 4 freely configurable channels-either safety outputs (OSSDs) of safe inputs
- Connect up to 10 MSI EM and realize up to 140 inputs or 100 inputs and 44 outputs
- Designs with screw terminals as well as with spring-cage terminals – both types of terminal blocks can be freely interchanged
- Simple connection via TBUS DIN rail connector
- Compact housing width 22 mm

Direct access to the online product selector at www.leuze.com/en/msi-em

Part no.	Part description	Connection	Number of safe inputs	Number of safe semiconductor outputs	Number of clock/signal outputs
547804	MSI-EM201-8I4IO	Screw terminal	20 (up to SIL 3 / IEC 62061)	4	2
547814	MSI-EM202-8I4IO	Spring-cage terminal	12 (up to SIL 3 / IEC 62061) of which 4 are configurable as input or output	4	2

Included in delivery: 1 TBUS safety connection plug

/// MSI-FB



This is a fieldbus module for the MSI 100 and MSI 200 programmable safety controllers for connecting to PROFIBUS.



Benefits:

- Transfers diagnostic data (not safety-oriented)
- 4 additional inputs and 4 additional outputs for communication of the PLC with field devices (sensor /actuator systems)
- Certified in accordance with DPV1 specification (EN 50170)
- Simple connection via TBUS DIN rail connector
- Compact housing width 22 mm

Direct access to the online product selector at www.leuze.com/en/msi-fb

Part no.	Part description	Connection	Interface
547806	MSI-FB-PB101	Screw terminal	PROFIBUS DP

Included in delivery: 1 TBUS safety connection plug

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//AS-INTERFACE SAFETY AT WORK

LEADER FOR A GOOD REASON

Compared to conventional point-to-point wiring, AS-Interface (AS-i) excels with its low installation, wiring and connection costs. The very simple retrofitability of the safety technology with larger AS-i systems can further greatly reduce installation costs.

Safety Monitors

The ASM1 AS-i safety monitor is the core component of the AS-Interface Safety at Work system. Using configuration software, it monitors the safety-related network devices that are assigned to it, e. g., command devices, multiple light beam safety devices and safety switches.

/// ASM1



The ASM1 AS-i safety monitor is the core component of the AS-Interface Safety at Work system. Using configuration software, it monitors the safety-related network devices that are assigned to it, e. g., command devices, multiple light beam safety devices and safety switches.



Benefits:

- Housing width 45 mm
- Height/installation depth: 102/120 mm
- Degree of protection IP 20
- Performance Level PL e and category 4 acc. to EN ISO 13849-1, SIL 3 acc. to IEC 61508 as well as SILCL 3 acc. to EN IEC 62061
- Up to 31 safe AS-i slaves can be connected
- 48 system components can be configured (e. g. E-Stop monitoring devices, OR, AND, turn on/off delays)
- RS 232 interface for PC-supported system configuration and system diagnostics as well as configuration data transfer to replacement device
- SERVICE button for automatic system integration (teach-in) of AS-i sensors on sensor exchange
- Immediate switch-off STOP 0 and delayed switch-off STOP 1 of the release circuits can be configured

Direct access to the online product selector at www.leuze.com/en/asm1

Part no.	Part description	Number of safety-related switching outputs (OSSDs)	Number of configurable function modules	Number of OR and AND inputs	Muting function
580020	ASM1/1	1	32	2	No
580055	ASM1E-m/1	1	48	6	Yes
580024	ASM1E/1	1	48	6	No
580021	ASM1/2	2	32	2	No
580056	ASM1E-m/2	2	48	6	Yes
580025	ASM1E/2	2	48	6	No

Included in delivery: device front cover for protection and sealing

/// ASM2



In addition to the functions of the ASM 1, this safety monitor offers higher-level start and E-Stop functions through safe coupling of adjacent AS-i networks. Moreover, safe activation of decentrally distributed AS-i actuators with the same AS-i address is possible.



Benefits:

- Housing width 45 mm
- Height/installation depth: 102/120 mm
- Degree of protection IP 20
- Performance Level PL e and category 4 acc. to EN ISO 13849-1, SIL 3 acc. to IEC 61508 as well as SILCL 3 acc. to EN IEC 62061
- Up to 31 safe AS-i slaves can be connected
- 48 system components can be configured (e. g. E-Stop monitoring devices , OR, AND, turn on/off delays)
- RS 232 interface for PC-supported system configuration and system diagnostics as well as configuration data transfer to replacement device
- SERVICE button for automatic system integration (teach-in) of AS-i sensors on sensor exchange
- Immediate switch-off STOP 0 and delayed switch-off STOP 1 of the release circuits can be configured

Direct access to the online product selector at www.leuze.com/en/asm2

Part no.	Part description	Number of safety-related switching outputs (OSSDs)	Number of configurable function modules	Number of OR and AND inputs	Muting function
580057	ASM2E-m/1	1	48	6	Yes
580028	ASM2E/1	1	48	6	No
580058	ASM2E-m/2	2	48	6	Yes
580029	ASM2E/2	2	48	6	No

Included in delivery: device front cover for protection and sealing

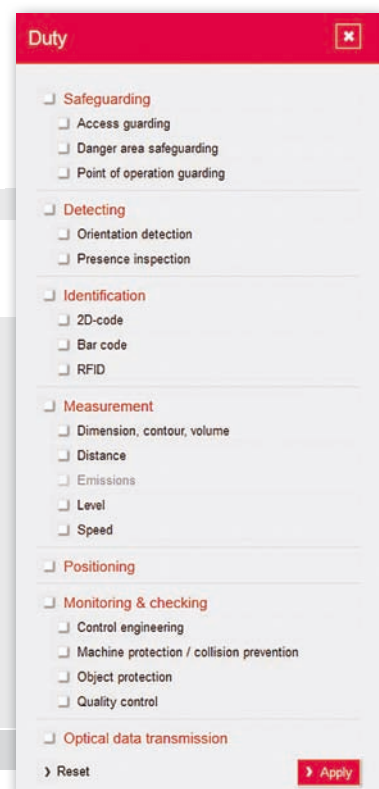
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/ MACHINE SAFETY SERVICES

SYSTEM SAFETY IS PLANNING AND MAINTENANCE

Sustainable safety at work begins with professional planning and doesn't end with the start-up of the corresponding systems. With our engineering tools, you can efficiently plan safety at work right from the start. During operation, periodic inspections and trainings are then necessary and prescribed in order to ensure proper function and operation of the systems. We offer you an extensive and convenient package of all of these services for all of your safety at work measures.

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/// Safety Inspections



Safety at work is a management issue – this applies in principle around the world. In Germany, periodic testing of the machine is required by law. Safety inspections ensure compliance with safety and quality standards and serve as preventive maintenance measures.

Benefits:

- EU conformity and legal certainty with proof of safety and quality standards
- Solution proposals for the rapid removal of safety deficiencies
- Comprehensible and well-documented test results in accordance with DIN ISO 9001:2000
- Standards-specific test protocol
- Accident risk and machine downtime minimization
- High availability of the machine due to regular inspections

Direct access to the products at www.leuze.com/en/inspections

Part no.	Part description	Description
S991005	CS-SCP/FR	Start-up support for a simple device from Leuze electronic without using PC, for safety devices incl. stopping time measurement and initial inspection, max. 2 h, no mechanical (assembly) and electrical (wiring) work → devices and connection cables are installed, no modifications (mounted components, wiring, programming) to third-party components in environment, without travel costs and accommodation expenses.
S991016	CS-SIF/FR	Initial safety inspection for a third-party device, entry of device and machine data in a database, checking of an ESPE application in compliance with current standards and directives, compilation of a test report for each application, compilation of a collective report for all inspections of an order.
S991015	CS-SIL/FR	Initial safety inspection for a Leuze device, entry of device and machine data in a database, checking of an ESPE application in compliance with current standards and directives, compilation of a test report for each application, compilation of a collective report for all inspections of an order.
S991004	CS-SIN/FR	Follow-up safety inspection for a Leuze device, only possible if Leuze has already performed an initial inspection, checking of device and machine data and comparison with data in database, checking of an ESPE application in compliance with current standards and directives, compilation of a test report for each ESPE application, compilation of a collective report for all inspections of an order.
S991019	CS-SIO/FR	Follow-up safety inspection for a third-party device, only possible if Leuze has already performed an initial inspection, checking of device and machine data and comparison with data in database, checking of an ESPE application in compliance with current standards and directives, compilation of a test report for each application, compilation of a collective report for all inspections of an order.
S991002	CS-SRS/FR	Start-up support for a programmable device from Leuze electronic, for safety devices incl. stopping time measurement and initial inspection, max. 3 h, no mechanical (assembly) and electrical (wiring) work → devices and connection cables are installed, no modifications (mounted components, wiring, programming) to third-party components in environment, without travel costs and accommodation expenses.
S991017	CS-SSF/FR	Start-up support / service deployment for components from Leuze electronic, full-day flat-rate per person, incl. travel and (if necessary) accommodation in Germany, no mechanical (assembly) and electrical (wiring) work → devices and connection cables are installed, no modifications (mounted components, wiring, programming) to third-party components in environment, performed at location of customer's choosing.
S991018	CS-SSH/FR	Start-up support / service deployment for components from Leuze electronic, half-day flat-rate per person, incl. travel in Germany, no mechanical (assembly) and electrical (wiring) work → devices and connection cables are installed, no modifications (mounted components, wiring, programming) to third-party components in environment, performed at location of customer's choosing.
S991012	CS-THO/CT	Accommodation expenses upon presentation of an invoice
S991013	CS-THO/FR	Flat-rate for accommodation expenses per night and person
S991000	CS-TTD/KM	Personal car travel costs per kilometer
S991010	CS-TTE/KM	Travel expenses per kilometer in Germany
S991014	CS-TTX/CT	Travel costs per person according to expense report
S991006	CS-TTX/HR	Travel costs per hour and person
S991039	CS-TXE/FR	Flat-rate for single journey and accommodation expenses in NL, BE, LX, CH, AT, CZ, DK
S991011	CS-TXN/FR	Flat-rate for one-way travel in Germany without accommodation expenses
S991003	CS-TXP/FR	Travel with route planning in Germany without accommodation expenses
S991001	CS-WTM/HR	Labor costs per hour and person

For work abroad: travel costs and accommodation extra, according to expenditure

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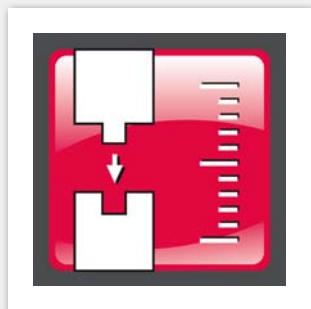
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/// Stopping Time Measurement



Only with a sufficiently dimensioned safety distance that corresponds with the stopping time of the machine can it be guaranteed that the dangerous movement will stop before the person reaches the point of operation. Stopping time measurements are therefore an important part of a properly carried out safety inspection.

Benefits:

- Standards-compliant performance of 10 measurements per dangerous movement
- Graphic evaluation of the brake behavior on request
- Stop activation with "Autohand" without electrical intervention in the machine control system
- Use of appropriate measurement transducers for the respective machine type: Rotary encoder for rotation movements (e. g. rotary indexing table) and rope length transmitter for linear movements
- State-of-the-art calibrated measurement devices; documented test results in accordance with DIN ISO 9001:2000

Direct access to the products at www.leuze.com/en/stm

Part no.	Part description	Description
S991007	CS-SMS/FR	"Standard" stopping time measurement on an ESPE unit, performed if an ESPE unit safeguards exactly one hazardous movement, e.g. a press with one vertical movement and an opening which is safeguarded by a light curtain. 10 measurements performed, evaluation in accordance with ISO 13855:2010, Appendix D or in accordance with EN 999.
S991008	CS-SMX/FR	"Extended" stopping time measurement on an ESPE unit, performed if an ESPE unit safeguards multiple hazardous movements, e.g. assembly machines with several valves, 10 measurements performed for each hazardous movement, evaluation in accordance with ISO 13855:2010, Appendix D or in accordance with EN 999.
S991009	CS-WT1/FR	Hour flat-rate for waiting times per person

For work abroad: travel costs and accommodation extra, according to expenditure

/// Safety Consulting



Our experts are always up-to-date on the latest technology and standards. You can therefore be certain that our safety consulting offers you legal security. Pass the responsibility on to us - we find safety risks in good time and provide you with qualified assistance in initiating the necessary measures.

Benefits:

- Safety consulting helps prevent safety-related errors and also saves time and money while improving machine safety and giving the system operator legal certainty
- Responsibility is transferred to our experts for risk assessment as well as SISTEMA calculations and tests
- All Machinery Directive and CE requirements are upheld and all documents are also checked for completeness and fulfillment of legal requirements
- Our experts are independent, experienced and always up-to-date concerning standards and directives; they work effectively because they know systems both within and across sectors as well as their associated hazards and methods of resolution

Direct access to the products at www.leuze.com/en/consulting

Part no.	Part description	Description
S991020	CS-SCF/FR	Full-day flat-rate for training course / consultation, performed at location of customer's choosing, incl. travel costs and (if necessary) accommodation expenses if within Germany.
S991021	CS-SCH/FR	Half-day flat-rate for training course / consultation, performed at location of customer's choosing, incl. travel costs if within Germany.

For work abroad: travel costs and accommodation extra, according to expenditure

/// Seminars and Workshops



In addition to product training courses, our training program also includes seminars on the basics of machinery directives, CE certification and practical safety technology. We will also gladly provide instruction on-site at your facilities or in English.

Benefits:

- Compact knowledge of everything to do with safety at work
- Free safety engineering workshops with Safexpert software
- Safety seminars cover all key points concerning retrofitting and operation of machines
- After standards workshops, the participant is always up-to-date when it comes to the current standards situation
- Product trainings guarantee optimal knowledge of a product, meaning you can detect application problems and prevent production downtimes
- Direct dialog between our specialists and participants for exchanges of experiences, application tips and problem-solving
- A certificate confirms participation in our seminars

Direct access to the products at www.leuze.com/en/seminars

Part no.	Part description	Description
S991030	CS-KRS/AS	Leuze product training, day rate, incl. travel costs and, if necessary, accommodation expenses in Germany
S991031	CS-KRS/NM	"Standards workshop" training course, price per participant
S991033	CS-KRS/PS	Training on Leuze product, price per participant
S991038	CS-KRS/SE	"Safexpert / SiStema application" training course, full-day flat-rate incl. travel costs and (if necessary) accommodation expenses in Germany
S991032	CS-KRS/SS	"Safety seminar" training course, price per participant

For work abroad: travel costs and accommodation extra, according to expenditure

SMARTER APPLICATION KNOW-HOW

OUR MANY YEARS OF EXPERIENCE – YOUR EXTENSIVE KNOWLEDGE ABOUT SAFETY AT WORK!

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"In our seminars you will acquire compact knowledge about safety at work. A day that is well worth your while!"

Markus Erdorf,
Safety Consultant and Trainer



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/// Safety Engineering Software



The network-enabled PC program takes you step-by-step through CE conformity assessment, culminating in the CE sign of approval. It supports you with risk assessment and during the creation of the technical documentation. Safexpert also helps locate all relevant standards within seconds.

Benefits:

- Step by step to CE marking, including systematic risk assessment, even for extensive projects
- Support in fulfilling legally mandated documentation obligation (Machinery Directive, appendix V)
- Saves time and cost-intensive research work; earlier projects can be used as templates
- Safety-relevant issues can be involved in the design process from the very beginning and integrated in the documentation
- Determination of the required SIL and Performance Level in accordance with EN 62061 and EN ISO 13849-1 as well as the interface to SISTEMA IFA software
- Update service keeps you constantly at the latest standardization status

Direct access to the products at www.leuze.com/en/ses

Safexpert basic package

The three basic packages – Basic, Compact and Professional – cover a variety of requirements with their different function ranges. The Basic version contains many important functions for industrial requirements. The other two packages supplement the software with the addition of pictograms, examples and standards packages. All configuration levels can be expanded individually with assistants or expansion modules.

Part no.	Part description	Software package	License	User interface languages	Project languages	Language version, standards	Operating instructions template	CE-compliant risk assessment	CE guidelines	Norm manager	Icons library
600146	SE-BPB/EP	Basic	Single-station license	German English French	German English French Spanish		No	Yes	Yes	No	No
600192	SE-BPB/F	Basic	First license, floating license	German English French	German English French Spanish		No	Yes	Yes	No	No
600193	SE-BPB/S	Basic	Additional license, floating license	German English French	German English French Spanish		No	Yes	Yes	No	No
600194	SE-BPC/F	Compact	First license, floating license	German English French	German English French Spanish		Yes	Yes	Yes	Yes	Yes
600195	SE-BPC/S	Compact	Additional license, floating license	German English French	German English French Spanish		Yes	Yes	Yes	Yes	Yes
600198	SE-BPP/FE	Professional	First license, floating license	German English French	German English French Spanish	English	Yes	Yes	Yes	Yes	Yes
600196	SE-BPP/FD	Professional	First license, floating license	German English French	German English French Spanish	German	Yes	Yes	Yes	Yes	Yes
600199	SE-BPP/SE	Professional	Additional license, floating license	German English French	German English French Spanish	English	Yes	Yes	Yes	Yes	Yes
600197	SE-BPP/SD	Professional	Additional license, floating license	German English French	German English French Spanish	German	Yes	Yes	Yes	Yes	Yes

Setup per internet download, release via Internet.

Safexpert expansion modules

With the three current expansion modules – NormManager, Operating instructions wizard and Test and acceptance wizard – you can match your software package to your individual needs.

Part no.	Part description	Type of expansion module	User interface languages	License	Suitable for
600164	SE-ASB/F	Calculation wizard	German English French	First license, floating license	Safexpert basic package Basic Safexpert basic package Compact Safexpert basic package Professional
600165	SE-ASB/S	Calculation wizard	German English French	Additional license, floating license	Safexpert basic package Basic Safexpert basic package Compact Safexpert basic package Professional
600162	SE-ASN/F	NormManager	German English French	First license, floating license	Safexpert basic package Basic
600163	SE-ASN/S	NormManager	German English French	Additional license, floating license	Safexpert basic package Basic
600166	SE-ASP/F	Test and acceptance wizard incl. test list in accordance with MRL	German English French	First license, floating license	Safexpert basic package Basic Safexpert basic package Compact Safexpert basic package Professional
600167	SE-ASP/S	Test and acceptance wizard incl. test list in accordance with MRL	German English French	Additional license, floating license	Safexpert basic package Basic Safexpert basic package Compact Safexpert basic package Professional

Switching
SensorsMeasuring
Sensors

Safexpert standards packages

The Standard and StandardPlus standards packages contain full-text versions of important mechanical engineering standards as PDF files. With these packages, you have access to more than 65 European standards at a great price/performance ratio.

Part no.	Part description	Software package	Standards package	Language of standards package	Number of simultaneous accesses to standards	Type of subscriber	Suitable for
600143	SE-NPNS	Network license			5	Yearly subscription, automatic extension	Standard standards packet
600140	SE-NPNP	Network license			5	Yearly subscription, automatic extension	StandardPlus standards packet
600142	SE-NPPD	Standards package	Standard Plus	German			Safexpert basic package Professional
600145	SE-NPPE	Standards package	Standard Plus	English			Safexpert basic package Professional
600141	SE-NPSD	Standards package	standard	German			Safexpert basic package Compact Safexpert NormManager
600144	SE-NPSE	Standards package	standard	English			Safexpert basic package Compact Safexpert NormManager

Products for
Safety at Work

Identification

Safexpert maintenance contracts

Safexpert is permanently being developed and adapted to current specifications, laws, directives and standards. These updates are free of charge if a maintenance contract has been concluded. Depending on the configuration level selected, the maintenance service includes maintenance of the software system, the data packages or the standards packages. During maintenance, the software also provides information on the validity of the standards and shows when projects are affected by changes to standards.

Part no.	Part description	Software package	License	Languages	Suitable for	Type of subscriber
600172	SE-MCC/F	Maintenance contract	First license		Safexpert basic package Compact, first license	Yearly subscription, automatic extension
600170	SE-MCB/F	Maintenance contract	First license		Safexpert basic package Basic, first license	Yearly subscription, automatic extension
600174	SE-MCP/F	Maintenance contract	First license		Safexpert basic package Professional, first license	Yearly subscription, automatic extension
600171	SE-MCB/S	Maintenance contract	Additional license		Safexpert basic package Basic, additional license	Yearly subscription, automatic extension
600175	SE-MCP/S	Maintenance contract	Additional license		Safexpert basic package Professional, additional license	Yearly subscription, automatic extension
600173	SE-MCC/S	Maintenance contract	Additional license		Safexpert basic package Compact, additional license	Yearly subscription, automatic extension
600178	SE-MCD/MD	Data package		German	Safexpert basic package Compact Safexpert basic package Professional	Yearly subscription, automatic extension
600179	SE-MCD/ED	Data package		German	Safexpert basic package Compact Safexpert basic package Professional	Yearly subscription, automatic extension
600169	SE-MCD/EE	Data package		English	Safexpert basic package Compact Safexpert basic package Professional Safexpert NormManager	Yearly subscription, automatic extension
600168	SE-MCD/ME	Data package		English	Safexpert basic package Compact Safexpert basic package Professional Safexpert NormManager	Yearly subscription, automatic extension
600176	SE-MCN/F	Standards package maintenance contract: StandardPlus	First license	German	Safexpert maintenance contract Professional, first license	Yearly subscription, automatic extension
600177	SE-MCN/S	Standards package maintenance contract: StandardPlus	Additional license	German	Safexpert maintenance contract Professional, additional license	Yearly subscription, automatic extension

Data Transmission /
Control ComponentsIndustrial Image
Processing

Accessories

Safexpert updates

Of course, you can also update your existing Safexpert version to the current version on your own, i. e. without a maintenance contract. It's easy and inexpensive. To do this, we offer corresponding packages, depending on which legacy version you own. Of course, existing data is transferred.

Part no.	Part description	License	Update	Suitable for
600132	SE-UP-1/S	Additional license, floating license	Safexpert from version current-1 to the current version	Safexpert basic package Basic Safexpert basic package Compact
600131	SE-UP-1/F	First license, floating license	Safexpert from version current-1 to the current version	Safexpert basic package Basic Safexpert basic package Compact
600133	SE-UP-2/F	First license, floating license	Safexpert from version current-2 to the current version	Safexpert basic package Basic Safexpert basic package Compact
600134	SE-UP-2/S	Additional license, floating license	Safexpert from version current-2 to the current version	Safexpert basic package Basic Safexpert basic package Compact
600136	SE-UP-3/S	Additional license, floating license	Safexpert from version current-3 to the current version	Safexpert basic package Compact
600135	SE-UP-3/F	First license, floating license	Safexpert from version current-3 to the current version	Safexpert basic package Compact
600138	SE-UP-4/S	Additional license, floating license	Safexpert from version current-4 to the current version	Safexpert basic package Compact
600137	SE-UP-4/F	First license, floating license	Safexpert from version current-4 to the current version	Safexpert basic package Compact

Safexpert upgrades

You can easily upgrade your current software package to any higher configuration level online. Reinstallation of the system is not necessary and existing data is transferred. The scopes correspond to those of the Compact or Professional packages.

Part no.	Part description	License	Upgrade	Language of standards package	Suitable for
600126	SE-UG-EB	First license, floating license	On Safexpert basic package Basic		Safexpert Basic special version (600146)
600121	SE-UG-BC/F	First license, floating license	On Safexpert basic package Compact		Safexpert basic package Basic
600127	SE-UG-EC	First license, floating license	On Safexpert basic package Compact		Safexpert Basic special version (600146)
600112	SE-UG-BC/S	Additional license, floating license	On Safexpert basic package Compact		Safexpert basic package Basic
600124	SE-UG-CPD/F	First license, floating license	On Safexpert basic package Professional	German	Safexpert basic package Compact
600128	SE-UG-EPD	First license, floating license	On Safexpert basic package Professional	German	Safexpert Basic special version (600146)
600122	SE-UG-BPD/F	First license, floating license	On Safexpert basic package Professional	German	Safexpert basic package Basic
600125	SE-UG-CPE/F	First license, floating license	On Safexpert basic package Professional	English	Safexpert basic package Compact
600123	SE-UG-BPE/F	First license, floating license	On Safexpert basic package Professional	English	Safexpert basic package Basic
600129	SE-UG-EPE	First license, floating license	On Safexpert basic package Professional	English	Safexpert Basic special version (600146)
600113	SE-UG-CPD/S	Additional license, floating license	On Safexpert basic package Professional	German	Safexpert basic package Compact
600115	SE-UG-BPD/S	Additional license, floating license	On Safexpert basic package Professional	German	Safexpert basic package Basic
600116	SE-UG-BPE/S	Additional license, floating license	On Safexpert basic package Professional	English	Safexpert basic package Basic
600114	SE-UG-CPE/S	Additional license, floating license	On Safexpert basic package Professional	English	Safexpert basic package Compact

SMARTER PRODUCT USABILITY



A²LS.

Active ambient light suppression for reliable detection

integratedlaser alignment.

Convenient alignment function for large distances



brightvision®

Simplified commissioning of sensors through highly visible light spot



thinkmodular.

Freely selectable range of functions



omnimount.

Integrated mounting and alignment concept without additional components

integratedconnectivity.

The most important fieldbus interfaces in one unit



Additional usability highlights can be found under: www.leuze.com/en/products

NOTES

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