ITEM 156580 LCA-4TR-50-1360-AP-156580

Description	Technical data	Accessories	Downloads

Features

- Resolution 50 mm
- Protective field height 1,360 mm
- Extended range 20 m
- LED indicator for weak signal
- With plug connector M12
- Two safety outputs (OSSD)
- Installation material is included with the product

Protective function

> Figure
Body protection (arms / legs)

LED function display

> Figure
Transmitter

> Figure
Receiver

LED OK	Normal operation
LED ERROR	Fault state
LED STOP	Stop state
LED TEST	Test function
LED START	Start/ restart
LED SIGNAL LOW	Weak signal

Pin assignment transmitter

Plug connector (view of connection side)	Pin	Designation	Function	Conductor coloring of connection cable
	1	24 V DC	Operating voltage, 24 V DC	BN
	2	RANGE 0	Device configuration, corresponds to the standard EN 61131-2	WH
	3	0 V DC	Operating voltage, 0 V DC	BU
	4	RANGE 1	Device configuration, corresponds to the standard EN 61131-2	BK
	5	FE	Function earth (must be connected to meet the EMC requirements)	GY

Connector assignment receiver

Plug connector (view of connection side)	Pin	Designation	Function	Conductor coloring of connection cable
	1	FO1A	Safety output, channel 1	WH
	2	24 V DC	Operating voltage, 24 V DC	BN
	3	FO1B	Safety output, channel 2	GN
	4	K1_K2/RESTART	Feedback external contactors	YE
	5	SEL_A	Device configuration	GY
	6	SEL_B	Device configuration	PK
	7	0 V DC	Operating voltage, 0 V DC	BU
	8	FE	Function earth (must be connected to meet the EMC requirements)	RD

Approvals

Mechanical values and environment

Number of safety outputs	2 Static, self-monitoring PNP safety outputs [1]
Resolution	50 mm
Height of the protective field	1360 mm
Height of the sensor	1413 mm
Maximum length of connection cables	100 m
Range of the protective field	20000 mm
Dimensions	28x30 mm [2]
Ambient temperature	-30 ... 55 °C
Degree of protection	IP 65 / IP 67
Installation position	Any [3]
Reaction time	6,5 ms
Connection	Plug connector M12 (5-pin transmitter / 8-pin receiver)

Electrical connection ratings

Cascadable	No

Muting possible	In combination with external sensors and an evaluation unit
Operating voltage DC	24 V DC -20% ... +20%
Current consumption	400 mA
Power consumption	
Transmitter	1 W
Receiver	2 W
LED indicator	Yes [4]

Reliability values acc. to EN ISO 13849-1

ESPE type	4 [5]
Performance Level	PL e [6]
PFH_D	$1,45 \times 10^{-8}$
Safety Integrity Level	SIL 3 / SILCL 3 [7]
Mission time	20 y

[1] With short circuit and overload protection

[2] In cross-section

[3] Optional: adjustable holders

[4] Self-diagnostics and status

[5] Acc. to EN 61496-1

[6] acc. to EN ISO 13849-1
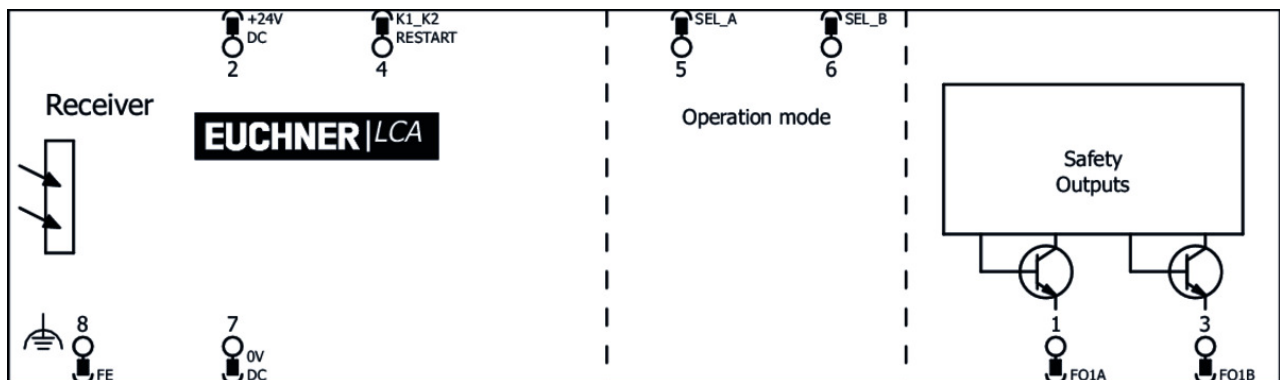
[7] According to IEC 61508-1...4 / IEC 62061

Dimension drawing
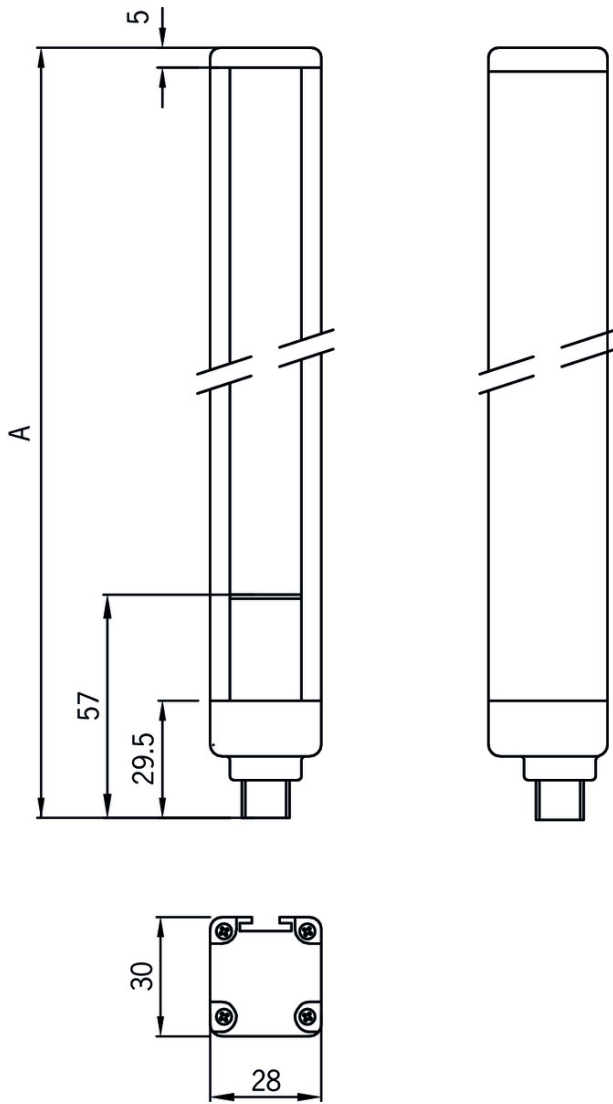
Legende

A = Height of the sensor (see technical data)

Wiring diagram receiver

Wiring diagram transmitter

Mounting accessories

Socket for mounting pillars 202 x 224 x 55 mm

156884 AM-OS-P-AA-156884

Features
› Socket for mounting pillars
› Spring-mounted floor plate made of steel
› Improved compensation of unevenness
› Adjustable via adjusting screws
› Height 55 mm

Socket for mounting pillars 202 x 224 x 34 mm

156885 AM-OS-P-AB-156885

Features
› Socket for mounting pillars
› Adjustable via adjusting screws
› Height 34 mm

Mounting pillar for protective field heights from 1210 to 1360 mm

156888 AM-OS-C-A1-1670-156888

Features
› Mounting pillar for light grids and light curtains LCA
› For protective field heights from 1210 to 1360 mm
› Protects against damage
› Straightforward adjustment using spherical circular level in the cover

Mounting pillar with cable gland for protective field heights from 1210 to 1360 mm

156892 AM-OS-C-A1-M-1670-156892

Features
› Mounting pillar for light grids and light curtains LCA

- › For protective field heights from 1210 to 1360 mm
- › With integrated cable gland PG11
- › Protects against damage
- › Straightforward adjustment using spherical circular level in the cover

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▾ 12 x vibration damper for protective field heights of 1,210 to 1,810 mm or 2- to 4-beam light grids

156918 AM-OS-D-V12-156918

▾ Features

- › Vibration damper for light grids and light curtains LCA
- › For protective field heights 1210 - 1810 mm or 2- 4 beams
- › Packaging unit 12 pcs.
- › For reducing vibration
- › Protects against damage
- › Installation either on the product or on mounting pillar

▾ 6 x adjustable holder

156920 AM-OS-B-A1-V06-156920

▾ Features

- › Set of 6 holders for light grids and light curtains LCA
- › For protective field heights from 1210 mm
- › Adjustable horizontally / vertically
- › Quick mount using two screws
- › Can be mounted directly on LCA

▾ 4 x adjustable holder 180°

156921 AM-OS-B-A2-V04-156921

▾ Features

- › Set of 4 holders for light grids and light curtains LCA
- › Can be rotated by 180°
- › Adjustable horizontally / vertically
- › Quick mount using two screws
- › Can be mounted directly on LCA

Function expansion

▾ Mounting pillar with deflection mirror for protective field heights from 1060 to 1360 mm

156897 AE-OS-SC-1670-156897

▾ Features

- › Mounting pillar with deflection mirror for light grids and light curtains LCA
- › For protective field heights from 1060 to 1360 mm
- › Protects against damage
- › Straightforward adjustment using spherical circular level in the cover

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▾ Deflection mirror for protective field height 1360 mm

156911 AE-OS-S-1360-156911

Features

> Deflection mirror with adjustable holder for light curtains LCA
> For protective field height 1360 mm

Miscellaneous accessories

Laser alignment aid

156915 AY-OS-LSR-156915

Features

> Laser alignment aid for light grids and light curtains LCA
> Light source: Laser diode – wavelength 650 nm
> Laser class 2
> Usable range 100 m
> Straightforward clamping on the transmitter

Test rod Ø 50 mm

156925 AY-OS-FTR-50-156925

Features

> Test rod for light curtains LCA
> Used for function test
> Ø 50 mm
> Cylinder with matt surface

Connection material

Connection cable with straight plug connector M12, 5-pin, 5m

100183 C-M12F05-05X034PV05,0-MA-100183

Features

> M12 female plug, 5-pin
> Straight plug connector
> PVC cable
> Cable length 5 m
> With flying lead

113620 C-M12F05-05X034PU05,0-MA-113620

Features

> M12 female plug, 5-pin
> Straight plug connector
> PUR cable
> Cable length 5 m
> With flying lead

Connection cable with plug connector M12, 5-pin, 10m

100184 C-M12F05-05X034PV10,0-MA-100184

Features

> M12 female plug, 5-pin

> Straight plug connector
> PVC cable
> Cable length 10 m
> With flying lead

Connection cable with plug connector M12, 5-pin, 20m

100185 C-M12F05-05X034PV20,0-MA-100185
Features

> M12 female plug, 5-pin
> Straight plug connector
> PVC cable
> Cable length 20 m
> With flying lead

Connection cable with straight plug connector M12, 5-pin, 10m

113640 C-M12F05-05X034PU10,0-MA-113640
Features

> M12 female plug, 5-pin
> Straight plug connector
> PUR cable
> Cable length 10 m
> With flying lead

Connection cable with straight plug connector M12, 5-pin, 20 m

113682 C-M12F05-05X034PU20,0-MA-113682
Features

> M12 female plug, 5-pin
> Straight plug connector
> PUR cable
> Cable length 20 m
> With flying lead

Connection cable with straight plug connector M12, 5-pin, 30 m

122784 C-M12F05-05X034PU30,0-MA-122784
Features

> M12 female plug, 5-pin
> Straight plug connector
> PUR cable
> Cable length 30 m
> With flying lead

Connection cable with 2 plug connectors M12, 5-pin, 5m

100180 C-M12F05-05X034PV05,0-M12M05-100180
Features

> M12 female plug to M12 plug connector, 5-pin
> Straight female plug and plug connector
> PVC cable

> Cable length 5 m

119932 C-M12F05-05X034PU05,0-M12M05-119932
🔽 Features

> M12 female plug to M12 plug connector, 5-pin
> Straight female plug and plug connector
> PUR cable
> Cable length 5 m

🔽 Connection cable with 2 plug connectors M12, 5-pin, 10m

100181 C-M12F05-05X034PV10,0-M12M05-100181
🔽 Features

> M12 female plug to M12 plug connector, 5-pin
> Straight female plug and plug connector
> PVC cable
> Cable length 10 m

119947 C-M12F05-05X034PU10,0-M12M05-119947
🔽 Features

> M12 female plug to M12 plug connector, 5-pin
> Straight female plug and plug connector
> PUR cable
> Cable length 10 m

🔽 Connection cable with 2 plug connectors M12, 5-pin, 20m

100182 C-M12F05-05X034PV20,0-M12M05-100182
🔽 Features

> M12 female plug to M12 plug connector, 5-pin
> Straight female plug and plug connector
> PVC cable
> Cable length 20 m

119971 C-M12F05-05X034PU20,0-M12M05-119971
🔽 Features

> M12 female plug to M12 plug connector, 5-pin
> Straight female plug and plug connector
> PUR cable
> Cable length 20 m

🔽 Connection cable with plug connector M12, 8-pin, 5m

100177 C-M12F08-08X025PV05,0-MA-100177
🔽 Features

> M12 female plug, 8-pin
> Straight plug connector
> PVC cable
> Cable length 5 m
> With flying lead

115112 C-M12F08-08X025PU05,0-MA-115112
⌄ Features

> M12 female plug, 8-pin
> Straight plug connector
> PUR cable
> Cable length 5 m
> With flying lead

⌄ Connection cable with plug connector M12, 8-pin, 10m

100178 C-M12F08-08X025PV10,0-MA-100178
⌄ Features

> M12 female plug, 8-pin
> Straight plug connector
> PVC cable
> Cable length 10 m
> With flying lead

115113 C-M12F08-08X025PU10,0-MA-115113
⌄ Features

> M12 female plug, 8-pin
> Straight plug connector
> PUR cable
> Cable length 10 m
> With flying lead

⌄ Connection cable with plug connector M12, 8-pin, 20m

100179 C-M12F08-08X025PV20,0-MA-100179
⌄ Features

> M12 female plug, 8-pin
> Straight plug connector
> PVC cable
> Cable length 20 m
> With flying lead

115114 C-M12F08-08X025PU20,0-MA-115114
⌄ Features

> M12 female plug, 8-pin
> Straight plug connector
> PUR cable
> Cable length 20 m
> With flying lead

⌄ Connection cable with plug connector M12, 8-pin, 30m

115116 C-M12F08-08X025PV30,0-MA-115116
⌄ Features

> M12 female plug, 8-pin
> Straight plug connector
> PVC cable
> Cable length 30 m
> With flying lead

115257 C-M12F08-08X025PU30,0-MA-115257

Features

- M12 female plug, 8-pin
- Straight plug connector
- PUR cable
- Cable length 30 m
- With flying lead

Connection cable with 2 plug connectors M12, 1m

123430 C-M12M08-08X025PV01,0-M12F08-123430

Features

- 8-pin M12 male plug, straight
- 8-pin M12 female connector, straight
- PVC cable
- Cable length 1m

Connection cable with 2 plug connectors M12, 2m

123431 C-M12M08-08X025PV02,0-M12F08-123431

Features

- 8-pin M12 male plug, straight
- 8-pin M12 female connector, straight
- PVC cable
- Cable length 2m

Connection cable with 2 plug connectors M12, 5m

123432 C-M12M08-08X025PV05,0-M12F08-123432

Features

- 8-pin M12 male plug, straight
- 8-pin M12 female connector, straight
- PVC cable
- Cable length 5m

Connection cable with 2 plug connectors M12, 10m

123433 C-M12M08-08X025PV10,0-M12F08-123433

Features

- 8-pin M12 male plug, straight
- 8-pin M12 female connector, straight
- PVC cable
- Cable length 10m

Instructions

Manual de instrucciones Barreras/cortinas fotoeléctricas LCA 4

	Doc. no.	Version	Language	Download
Betriebsanleitung Lichtgitter/ Lichtvorhänge LCA 4 Operating Instructions Light Grids/ Light Curtains LCA 4	2504709	02-02/18	🇩🇪 🇺🇸	📄 5.2 MB
Mode d'emploi Barrières photoélectriques / rideaux lumineux LCA 4	2504709	02-02/18	🇫🇷	📄 3.1 MB
Manual de instrucciones Barreras/cortinas fotoeléctricas LCA 4	2504709	02-02/18	🇪🇸	📄 3.1 MB

Catalogs

Light grids and light curtains LCA Barreras fotoeléctricas y cortinas fotoeléctricas LCA Barrières photoélectriques et rideaux lumineux LCA Lichtgitter und Lichtvorhänge LCA

	Doc. no.	Version	Language	Download
Lichtgitter und Lichtvorhänge LCA	157084	03-03/18	🇩🇪	📄 2.5 MB
Barrières photoélectriques et rideaux lumineux LCA	157086	03-03/18	🇫🇷	📄 2.5 MB
Barreras fotoeléctricas y cortinas fotoeléctricas LCA	157087	03-03/18	🇪🇸	📄 2.5 MB
Light grids and light curtains LCA	157085	03-03/18	🇺🇸	📄 2.5 MB

Declaration of conformity

EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2503625	02-08/17	🇩🇪 🇪🇸 🇫🇷 🇮🇹 🇺🇸	📄 0.2 MB