

C41E-0101AG300

C4000 Micro

SAFETY LIGHT CURTAINS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Resolution	Protective field height	System part	Type	Part no.
14 mm	150 mm	Receiver	C41E-0101AG300	1024055

Other models and accessories → www.sick.com/C4000_Micro



Detailed technical data

Features

System part	Receiver
Resolution	14 mm
Scanning range	2.5 m
Protective field height	150 mm
Synchronization	Optical synchronisation

Safety-related parameters

Type	Type 4 (IEC 61496-1)
Safety integrity level	SIL3 (IEC 61508) SILCL3 (EN 62061)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	15×10^{-9} (EN ISO 13849)
T_M (mission time)	20 years (EN ISO 13849)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

Functions

	Functions	Delivery status
Protective operation	✓	
Restart interlock	✓	Internal
External device monitoring (EDM)	✓	Deactivated

Interfaces

System connection	Male connector M12, 8-pin
Direction of cable connection	Straight
Conductor cross-section	0.25 mm ²
Permitted cable length	≤ 15 m ¹⁾
Configuration method	Hard wired
Display elements	7-segment display

¹⁾ Depending on load, power supply and wire cross-section. The technical specifications must be observed.

²⁾ For additional information on Flexi Soft -> www.sick.com/Flexi_Soft.

Fieldbus, industrial network	
Integration via Flexi Soft safety controller	CANopen ²⁾ DeviceNet™ EtherCAT® EtherNet/IP™ Modbus TCP PROFIBUS DP PROFINET

¹⁾ Depending on load, power supply and wire cross-section. The technical specifications must be observed.

²⁾ For additional information on Flexi Soft -> www.sick.com/Flexi_Soft.

Electrical data

Protection class	III (IEC 61140)
Supply voltage V_S	24 V DC (19.2 V ... 28.8 V) ¹⁾
Residual ripple	≤ 10 % ²⁾
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored
ON state, switching voltage HIGH	24 V DC (15 V DC ... 28.8 V DC)
OFF state, switching voltage LOW	2 V DC
Current-carrying capacity per OSSD	≤ 500 mA

¹⁾ The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK.

²⁾ Within the limits of V_S .

Mechanical data

Dimensions	See dimensional drawing
Housing cross-section	33.5 mm x 28.5 mm
Housing material	Aluminum extruded profile

Ambient data

Enclosure rating	IP65 (IEC 60529)
Ambient operating temperature	-30 °C ... +55 °C
Storage temperature	-30 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)
Shock resistance	10 g, 16 ms (EN 60068-2-27)

Classifications

ECl@ss 5.0	27272704
ECl@ss 5.1.4	27272704
ECl@ss 6.0	27272704
ECl@ss 6.2	27272704
ECl@ss 7.0	27272704
ECl@ss 8.0	27272704
ECl@ss 8.1	27272704
ECl@ss 9.0	27272704
ECl@ss 10.0	27272704

ECI@ss 11.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	46171620

Dimensional drawing (Dimensions in mm (inch))

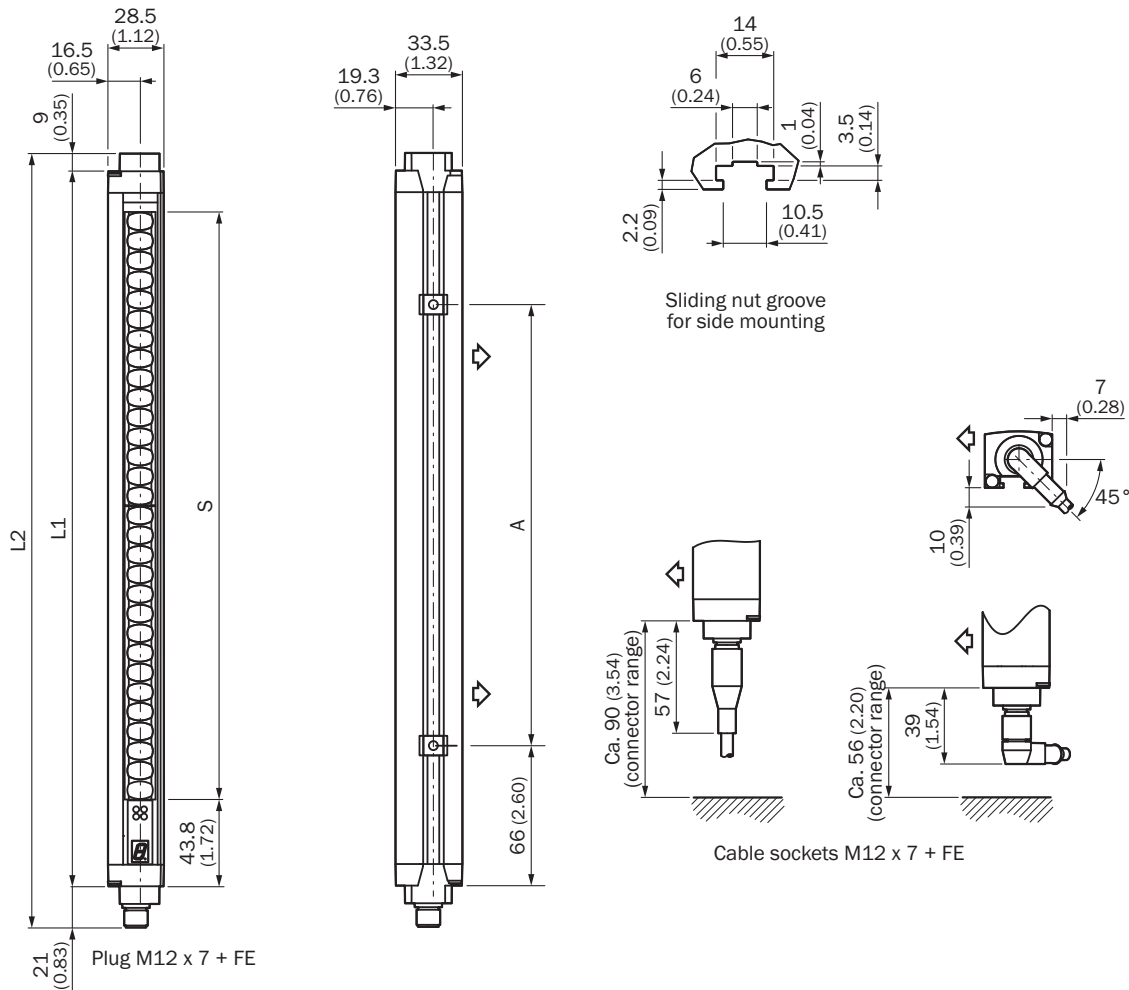


Illustration sender (receiver mirror image)

Protective field height S	L1	L2	A
150 (5.91)	246 (9.69)	276 (10.87)	106 (4.17)
300 (11.81)	364 (14.33)	394 (15.51)	224 (8.82)
450 (17.72)	515 (20.28)	545 (21.46)	374 (14.72)
600 (23.62)	666 (26.22)	696 (27.40)	524 (20.639)
750 (29.53)	816 (32.13)	846 (33.31)	674 (26.54)
900 (35.43)	967 (38.07)	997 (39.25)	824 (32.44)
1,050 (41.34)	1,117 (43.98)	1,147 (45.16)	974 (38.35)

Protective field height S	L1	L2	A
1,200 (47.24)	1,266 (49.84)	1,296 (51.02)	1,124 (44.25)

Recommended accessories

Other models and accessories → www.sick.com/C4000_Micro

	Brief description	Type	Part no.
Alignment aids			
	<ul style="list-style-type: none"> Description: Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam! 	AR60	1015741
	<ul style="list-style-type: none"> Description: Adapter AR60 for housing cross-section 34 mm x 29 mm 	AR60 adapter, 34x29	4032462
Cleaning agent			
	<ul style="list-style-type: none"> Description: Plastic cleaner and care product, anti-static, 0.5 liter 	Plastic cleaner	5600006
Optics cloths			
	<ul style="list-style-type: none"> Description: Cloth for cleaning optical surfaces 	Lens cloth	4003353
Mounting brackets and plates			
	<ul style="list-style-type: none"> Description: Mounting bracket, rigid, including fixing screws and washers Packing unit: 4 pieces Suitable for: All protective field heights in small housing 	BEF-3WNKBAST4	2044068
Plug connectors and cables			
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 8-pin, straight Connection type head B: Flying leads Authorizations: UL Cable: 5 m, PUR, halogen-free Description: Shielded Connection systems: Flying leads 	DOL-127SG05ME25KM0	6020354
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 8-pin, straight Connection type head B: Flying leads Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor Signal type: Sensor/actuator cable Cable: 5 m, 7-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded Connection systems: Flying leads 	DOL-127SG05ME25KM0	2076541
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 8-pin, straight Connection type head B: Flying leads Authorizations: UL Cable: 10 m, PUR, halogen-free Description: Shielded Connection systems: Flying leads 	DOL-127SG10ME25KM0	6020352

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Flying leads • Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor • Signal type: Sensor/actuator cable • Cable: 10 m, 7-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Connection systems: Flying leads 	DOL-127SG10ME25KM0	2076543
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight • Connection type head B: Flying leads • Authorizations: UL • Cable: 15 m, PUR, halogen-free • Description: Shielded • Connection systems: Flying leads 	DOL-127SG15ME25KM0	6020872
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight • Connection type head B: Flying leads • Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor • Signal type: Sensor/actuator cable • Cable: 15 m, 7-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Connection systems: Flying leads 	DOL-127SG15ME25KM0	2076544
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight • Connection type head B: Flying leads • Authorizations: UL • Cable: 2.5 m, PUR, halogen-free • Description: Shielded • Connection systems: Flying leads 	DOL-127SG2M5E25KM0	6020537
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight • Connection type head B: Flying leads • Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor • Signal type: Sensor/actuator cable • Cable: 2.5 m, 7-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Connection systems: Flying leads 	DOL-127SG2M5E25KM0	2076540
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight • Connection type head B: Flying leads • Authorizations: UL • Cable: 7.5 m, PUR, halogen-free • Description: Shielded • Connection systems: Flying leads 	DOL-127SG7M5E25KM0	6020353
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight • Connection type head B: Flying leads • Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor • Signal type: Sensor/actuator cable • Cable: 7.5 m, 7-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Connection systems: Flying leads 	DOL-127SG7M5E25KM0	2076542
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled • Connection type head B: Flying leads • Authorizations: UL • Cable: 5 m, PUR, halogen-free • Description: Shielded • Connection systems: Flying leads 	DOL-127SW05ME25KM0	6021342

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled • Connection type head B: Flying leads • Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor • Signal type: Sensor/actuator cable • Cable: 5 m, 7-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Connection systems: Flying leads 	DOL-127SW05ME25KM0	2076548
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled • Connection type head B: Flying leads • Authorizations: UL • Cable: 15 m, PUR, halogen-free • Description: Shielded • Connection systems: Flying leads 	DOL-127SW15ME25KM0	6021343
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled • Connection type head B: Flying leads • Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor • Signal type: Sensor/actuator cable • Cable: 15 m, 7-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Connection systems: Flying leads 	DOL-127SW15ME25KM0	2076551
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled • Connection type head B: Flying leads • Authorizations: UL recognized in accordance with AWM Style 20549 (80 °C / 300 V), jacket, UL recognized in accordance with AWM Style 10493 (80 °C / 300 V), conductor • Signal type: Sensor/actuator cable • Cable: 7.5 m, 7-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Connection systems: Flying leads 	DOL-127SW7M5E25KM0	2076549
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled • Connection type head B: Flying leads • Authorizations: UL • Cable: 7.5 m, 8-wire, PUR, halogen-free • Description: Shielded • Connection systems: Flying leads 	DOL-127SW7M5E25KM0	6034783
Terminal and alignment brackets			
	<ul style="list-style-type: none"> • Description: Mounting kit 6, side bracket, rotatable • Material: Zinc diecast • Packing unit: 4 pieces • Suitable for: All protective field heights 	BEF-1SHABAZN4	2019506
	<ul style="list-style-type: none"> • Description: Omega bracket, rotatable, fixable with only one screw, for mounting on the swivel mount • Packing unit: 4 pieces • Items supplied: Including spacer discs • Suitable for: All protective field heights in small housing 	BEF-2SMKEAAL4	2044848

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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