

C40E-1303FK010

C4000 Palletizer

SAFETY LIGHT CURTAINS





Ordering information

C4000 Palletizer Advanced without extension connection

Illustration may differ

Resolution	Scanning range	Protective field height	System part	Туре	Part no.
30 mm	7 m	1,350 mm	Receiver	C40E- 1303FK010	1043159

Other models and accessories → www.sick.com/C4000_Palletizer



Detailed technical data

Features

Description	C4000 Palletizer Advanced without extension connection
Application	Normal industrial environment
System part	Receiver
Resolution	30 mm
Scanning range	7 m
Protective field height	1,350 mm
Synchronization	Optical synchronisation
Items supplied	Receiver 8 sliding nuts for side mounting Test rod with diameter corresponding to the resolution of the safety light curtain Adhesive label with information on the daily check Operating instructions on CD-ROM CDS (Configuration & Diagnostic Software)

Safety-related parameters

Туре	Type 4 (IEC 61496-1)
Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
$\mbox{PFH}_{\mbox{\scriptsize D}}$ (mean probability of a dangerous failure per hour)	15 * 10 ⁻⁹
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
Function range	Advanced	
Protective operation	1	
Restart interlock	1	Internal
External device monitoring (EDM)	1	Deactivated
Beam coding	✓	Code 1

	Functions	Delivery status
Configurable scanning range	1	0.5 m 7 m
Reduced resolution	1	2 beams
Self-teaching dynamic blanking for goods detection	✓	
Self-teaching dynamic blanking for pallet detection	✓	
Multiple sampling	1	2x evaluation
Direction monitoring	1	
Object entry monitoring	1	
Safe SICK device communication via EFI	✓	

Functions in combination with UE402

Bypass	✓
Operating mode switching	✓

Interfaces

System connection	Hirschmann male connector M26, 12-pin
Direction of cable connection	Straight
Conductor cross section	0.75 mm ²
Permitted cable length	\leq 50 m $^{1)}$
Configuration connection	Female connector M8, 4-pin
Configuration method	PC with CDS (Configuration and Diagnostic Software)
Display elements	7-segment display

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

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 ³⁾
ON state, switching voltage HIGH	24 V DC (V _S – 2.25 V DC V _S)
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 500 mA
Application diagnostic output (ADO)	
Output voltage HIGH (active)	24 V DC (15 V DC 28.8 V DC)
Output voltage LOW (deactivated)	High resistance
Output current HIGH (active)	≤ 100 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.

Mechanical data

Dimensions	See dimensional drawing
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 $^{^{2)}}$ Within the limits of $\mbox{\rm V}_{\mbox{\scriptsize S}}.$

 $^{^{3)}}$ Applies to the voltage range between $\mbox{-30 V}$ and +30 V.

C40E-1303FK010 | C4000 Palletizer

SAFETY LIGHT CURTAINS

Housing cross-section	48 mm x 40 mm
Housing material	Aluminum extruded profile
Weight	2,850 g

Ambient data

Enclosure rating	IP65 (EN 60529)
Ambient operating temperature	0 °C +55 °C
Storage temperature	-25 °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)

Other information

Wave length	850 nm
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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
eCl@ss 11.0	27272704
eCl@ss 12.0	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))

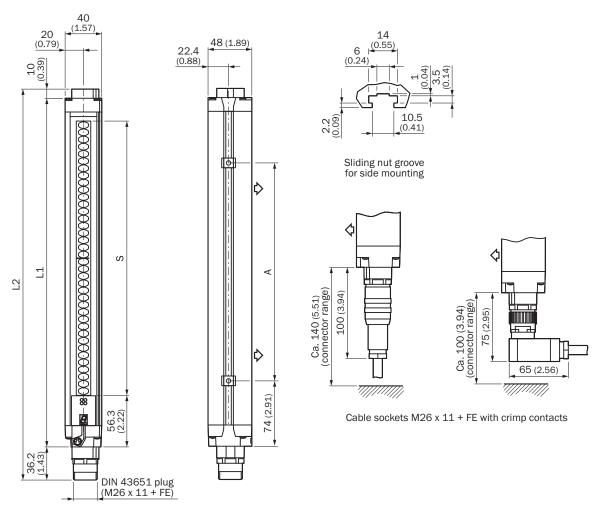


Illustration sender (receiver mirror image)

Protective field height S	L1	L2	A
300	381	427	224
450	532	578	374
600	682	728	524
750	833	879	674
900	984	1.030	824
1.050	1.134	1.180	974
1.200	1.283	1.329	1.124
1.350	1.435	1.481	1.274
1.500	1.586	1.632	1.424
1.650	1.736	1.782	1.574
1.800	1.887	1.933	1.724

Recommended accessories

Other models and accessories → www.sick.com/C4000_Palletizer

	Brief description	Туре	Part no.			
Alignment aids						
	Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!, 19 mm x 67.3 mm x 66.9 mm	AR60	1015741			
	Adapter AR60 for housing cross-section 48 mm x 40 mm	AR60 adapter, 48x40	4032461			
	Adapter AR60 for housing cross-section 48 mm x 40 mm in PU3H device column	AR60 adapter, 48x40, PU3H	4056731			
Optics cloths						
SICK	Cloth for cleaning optical surfaces	Lens cloth	4003353			
Test and mon	itoring tools					
	30 mm diameter, 250 mm length	Test rod 30 mm	2022602			
Mounting brad	ckets and plates					
	4 pieces, Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers	BEF-3WNGBAST4	7021352			
Plug connecto	ors and cables					
	Head A: female connector, M26, 12-pin, straight Head B: Flying leads Cable: PVC, unshielded, 5 m Without EFI: Pin 9 and 10 not connected	DOL-0610G05M075KM1	2046888			
	Head A: female connector, M26, 12-pin, straight Head B: Flying leads Cable: PVC, unshielded, 10 m Without EFI: Pin 9 and 10 not connected	DOL-0610G10M075KM1	2046889			
	Head A: female connector, M26, 12-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	DOL-0612G05M075KM0	2022545			
	Head A: female connector, M26, 12-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	DOL-0612G10M075KM0	2022547			
	Head A: female connector, M26, 12-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 15 m	DOL-0612G15M075KM0	2022548			
	Head A: female connector, M26, 12-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 20 m	DOL-0612G20M075KM0	2022549			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m	DSL-8U04G02M025KM1	6034574			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 10 m	DSL-8U04G10M025KM1	6034575			

	Brief description	Туре	Part no.		
	Head A: female connector, M26, 12-pin, straight Cable: unshielded 12 crimping contacts enclosed	DOS-0612G000GA3KM0	6020757		
	Head A: female connector, M26, 12-pin, angled Cable: unshielded 12 crimping contacts enclosed	DOS-0612W000GA3KM0	6020758		
	Head A: male connector, M26, 12-pin, straight Cable: unshielded 12 crimping contacts enclosed	STE-0612G000GA3KM0	6021191		
	Head A: male connector, M26, 12-pin, angled Cable: unshielded 12 crimping contacts enclosed	STE-0612W000GA3KM0	6021192		
Terminal and	Terminal and alignment brackets				
	4 pieces, Mounting kit 6, side bracket, rotatable, zinc diecast	BEF-1SHABAZN4	2019506		
9	4 pieces, Omega bracket, rotatable, fixable with only one screw, for mounting on the swivel mount	BEF-2SMMEAAL4	2044847		
	4 pieces, Mounting kit 2, rotatable, swivel mount, Polyamide PA6	BEF-2SMMEAKU4	2019659		
Switching am	Switching amplifiers				
	 Applications: Functionality upgrade Compatible sensor types: C4000 safety light curtains Description: Upgrades the C4000 Standard, Advanced, Palletizer, Entry/Exit, and Fusion to include the functions defined in the technical specifications, e.g., bypass, operating mode switching, and PSDI in the case of C4000 Standard, Advanced. 	UE402	1023577		

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."

WORLDWIDE PRESENCE:

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