



C4P-SA06011A00

deTec

SAFETY LIGHT CURTAINS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
C4P-SA06011A00	1220086

The system plug has to be ordered separately. For details, see "Accessories".

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

Illustration may differ



Detailed technical data

Features

Application	Normal industrial environment
System part	Sender
Resolution	14 mm
Scanning range	20 m
Protective field height	600 mm
No blind zones	Yes
Synchronization	Optical synchronisation
Integrated laser alignment aid	✓
Items supplied	Sender

Safety-related parameters

Type	Type 4 (IEC 61496-1)
Safety integrity level	SIL3 (IEC 61508) SILCL3 (IEC 62061)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
PFH_D (mean probability of a dangerous failure per hour)	
Single device	15.3 x 10 ⁻⁹
Cascade with one guest	30.5 x 10 ⁻⁹
Cascade with two guest devices	45.6 x 10 ⁻⁹
T_M (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

Functions

Protective operation	✓
Automatic calibration of the protective field width	✓

Beam coding	✓
Cascading	✓
Smart presence detection	✓

Interfaces

System connection	Depending on system plug (M12 male connector, 5-pin or 8-pin)
Extension connection	Depending on system plug (without extension connection or with M12 female connector, 5-pin)
Configuration method	DIP switch on system plug
Display elements	LEDs
Fieldbus, industrial network	
Integration via Flexi Soft safety controller	CANopen, DeviceNet™, EtherCAT®, EtherNet/IP™, Modbus TCP, PROFIBUS DP, PROFINET ¹⁾

¹⁾ 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)
Ripple	≤ 10 %
Power consumption typical	1.6 W (DC)

Mechanical data

Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile

Ambient data

Enclosure rating	IP65 (IEC 60529) IP67 (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 (IEC 60068-2-6)
Shock resistance	10 g, 16 ms (IEC 60068-2-27)

Other information

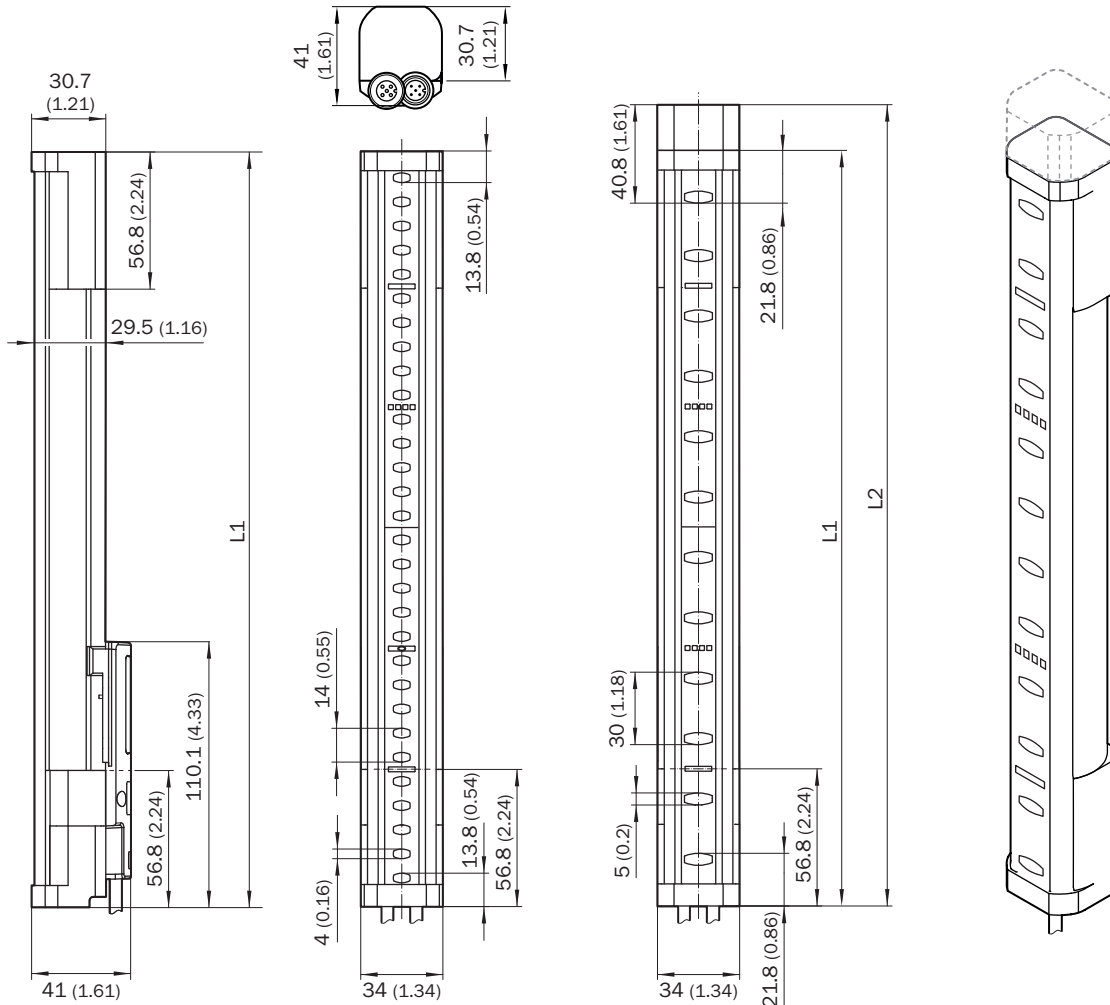
Wave length	850 nm
Type of light	Near-infrared (NIR), invisible
Integrated laser alignment aid	✓
Laser class	1
Wave length	650 nm
Type of light	Visible red light

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
ETIM 5.0	EC002549
ETIM 6.0	EC002549
UNSPSC 16.0901	46171620

Dimensional drawing (Dimensions in mm (inch))




Protective field height	L1	L2
300 (11.81)	313 (12.32)	332 (13.07)
450 (17.72)	463 (18.23)	482 (18.98)
600 (23.62)	613 (24.13)	632 (24.88)
750 (29.53)	763 (30.04)	782 (30.79)
900 (35.43)	913 (35.94)	932 (36.69)
1,050 (41.34)	1,063 (41.85)	1,082 (42.6)
1,200 (47.24)	1,213 (47.75)	1,232 (48.5)

Protective field height	L1	L2
1,350 (53.15)	1,362 (53.62)	1,381 (54.37)
1,500 (59.06)	1,512 (59.53)	1,531 (60.28)
1,650 (64.96)	1,662 (65.43)	1,681 (66.18)
1,800 (70.87)	1,812 (71.34)	1,831 (72.09)
1,950 (76.77)	1,962 (77.24)	1,981 (77.99)
2,100 (82.68)	2,112 (83.15)	2,131 (83.9)









Recommended accessories

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

	Brief description	Description	Type	Part no.
Other mounting accessories				
	1 piece, Alignment tool for aligning sensors in areas with limited accessibility, e.g. device columns		Alignment tool	4084133
Terminal and alignment brackets				
	2 pieces, FlexFix bracket for 1 device (e.g. sender or receiver), can be aligned $\pm 15^\circ$, including M5 screw, plastic		BEF-1SHABPKU2	2098709
	4 pieces, FlexFix bracket for 2 devices (e.g. sender and receiver), can be aligned $\pm 15^\circ$, including M5 screw, plastic		BEF-1SHABPKU4	2066614
	2 pieces, QuickFix bracket for 1 device (e.g. sender or receiver), plastic		BEF-3SHABPKU2	2066048
	4 pieces, QuickFix bracket for 2 devices (e.g. sender and receiver), plastic		BEF-3SHABPKU4	2098710
Adapters and distributors				
	IO-Link connector		IO-Link connector	2092757
	Muting connector		Muting connector	2092758
	T-piece for simultaneous connection to sender and receiver, splits the cable from the control cabinet to the sender and receiver		DSC-1205T000025KM0	6030664
	T-distributor for simultaneous connection to sender and receiver, splits the cable from the control cabinet between the sender and receiver		DSC-1208T000025KM0	6058647
Plug connectors and cables				
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m		YF2A15-020UB5XLEAX	2095617

	Brief description	Description	Type	Part no.
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m		YF2A15-050UB5XLEAX	2095618
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m		YF2A15-100UB5XLEAX	2095619
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 15 m		YF2A15-150UB5XLEAX	2095620
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 20 m		YF2A15-200UB5XLEAX	2095614
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 30 m		YF2A15-300UB5XLEAX	2095621
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2.5 m		YF2A18-025UA5XLEAX	2099229
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m		YF2A18-050UA5XLEAX	2095653
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 7.5 m		YF2A18-075UA5XLEAX	2099230
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m		YF2A18-100UA5XLEAX	2095654
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 15 m		YF2A18-150UA5XLEAX	2095679
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 20 m		YF2A18-200UA5XLEAX	2095680
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 30 m		YF2A18-300UA5XLEAX	2095681

	Brief description	Description	Type	Part no.
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 1 m		YF2A15-010UB5M2A15	2096007
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m		YF2A15-020UB5M2A15	2096009
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m		YF2A15-050UB5M2A15	2096010
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m		YF2A15-100UB5M2A15	2096011
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 15 m		YF2A15-150UB5M2A15	2096171
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 0.6 m		YF2A15-C60UB5M2A15	2096006
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 1 m		YF2A18-010UA5M2A18	2096032
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m		YF2A18-020UA5M2A18	2096033
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m		YF2A18-050UA5M2A18	2096034
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m		YF2A18-100UA5M2A18	2096035

	Brief description	Description	Type	Part no.
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 0.6 m		YF2A18-C60UA5M2A18	2096031
Others				
		deTec deTec system plug	1000	2076832
			1100	2076833
			1200	2076834
			1300	2076835
Programming and configuration tools				
	The 5-pin M12 button makes it possible to switch on and off the laser alignment aid integrated into the deTec4 Prime sender.		Pushbutton for laser alignment aid, M12, 5-pin	2082166
	The 8-pin M12 button makes it possible to switch on and off the laser alignment aid integrated into the deTec4 Prime sender.		Pushbutton for laser alignment aid, M12, 8-pin	2082167
	The pushbutton in combination with T-connector M12, 5-pin makes it possible to switch on and off the laser alignment aid integrated into the deTec4 Prime sender and works as a T-distributor for simultaneous connection to sender and receiver, splits the cable from the control cabinet between the sender and receiver.		T-connector with pushbutton for laser alignment aid, M12, 5-pin	2077933
Reset pushbuttons and multiple pushbuttons				
		Reset pushbuttons and multiple pushbuttons ER12 including retaining clip, "RESET" cover and "RESET/OVERRIDE" cover	ER12-SB3C5	6045316

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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