

# WLA12L-24162830A00 W12

**PHOTOELECTRIC SENSORS** 





#### Ordering information

Туре	part no.
WLA12L-24162830A00	1125938

Other models and accessories → www.sick.com/W12

Illustration may differ



#### Detailed technical data

#### **Features**

Functional principle	Photoelectric retro-reflective sensor
Functional principle detail	Without reflector minimum distance (autocollimation/coaxial optics)
Sensing range	
Sensing range min.	0 m
Sensing range max.	11 m
Maximum distance range from reflector to sensor (operating reserve 1)	0 m 11 m
Recommended distance range from reflector to sensor (operating reserve 3,75)	0 m 7.5 m
Reference reflector	Reflector P250F
Recommended sensing range for the best per- formance	0 mm 600 mm
Polarisation filter	Yes
Emitted beam	
Light source	Laser
Type of light	Visible red light
Shape of light spot	Ellipse shape
Light spot size (distance)	0.4 mm x 0.35 mm (300 mm)

 $<sup>^{1)}</sup>$  Do not intentionally look into the laser beam. Never point the laser beam at people's eyes.

Maximum dispersion of the emitted beam around the standardized transmission axis (squint angle)	$< +/- 1.2^{\circ} (at T_U = +23 {^{\circ}C})$
Focus position	300 mm
Key laser figures	
Normative reference	EN 60825-1:2014, IEC 60825-1:2014
Laser class	1 <sup>1)</sup>
Wave length	655 nm
Pulse duration	4 μs
Maximum pulse power	< 2.13 mW
Average service life	$50,000 \text{ h at T}_{\text{U}} = +25  ^{\circ}\text{C}$
Adjustment	
Teach-in button	BluePilot For sensitivity adjustment
IO-Link	For configuring the sensor parameters and Smart Task functions
Display	
LED blue	BluePilot: Alignment aid
LED green	Operating indicator Static on: power on Flashing: IO-Link mode
LED yellow	Status of received light beam Static on: object not present Static off: object present Flashing: Below the 1.5 function reserve
Special applications	Detecting small objects, Detection of objects moving at high speeds, Detecting objects wrapped in film

 $<sup>^{1)}\,\</sup>mathrm{Do}$  not intentionally look into the laser beam. Never point the laser beam at people's eyes.

## Safety-related parameters

MTTF <sub>D</sub>	371 years
<b>DC</b> <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	10 years

#### Communication interface

IO-Link	✓ , IO-Link V1.1
Data transmission rate	COM2 (38,4 kBaud)
Cycle time	2.3 ms
Process data length	16 Bit
Process data structure	Bit 0 = switching signal Q <sub>L1</sub>
	Bit 1 = switching signal $Q_{L2}$
	Bit 2 15 = Current receiver level (live)
VendorID	26
DeviceID HEX	0x8002DD
DeviceID DEC	8389341
Compatible master port type	A
SIO mode support	Yes

#### Electronics

Supply voltage U <sub>B</sub>	10 V DC 30 V DC <sup>1)</sup>
Ripple	≤ 5 V
Usage category	DC-12 (According to EN 60947-5-2) DC-13 (According to EN 60947-5-2)
Current consumption	$\leq$ 14 mA, without load. At U <sub>B</sub> = 24 V
Protection class	III
Digital output	
Number	2 (Complementary)
Туре	Push-pull: PNP/NPN
Switching mode	Light/dark switching
Signal voltage PNP HIGH/LOW	Approx. U <sub>B</sub> -2.5 V / 0 V
Signal voltage NPN HIGH/LOW	Approx. $U_B / < 2.5 \text{ V}$
Output current I <sub>max.</sub>	≤ 100 mA
Circuit protection outputs	Reverse polarity protected
	Overcurrent protected
	Short-circuit protected
Response time	≤ 200 µs <sup>2)</sup>
Repeatability (response time)	85 μs <sup>2)</sup>
Switching frequency	2,500 Hz <sup>3)</sup>
Pin/Wire assignment	
BN 1	+ (L+)
WH 2	$\bar{\mathbb{Q}}_{L1}/MF$
	Digital output, dark switching, object present $\rightarrow$ output $\bar{Q}_{L1}$ HIGH $^{4)}$ The pin 2 function of the sensor can be configured
	Additional possible settings via IO-Link
BU 3	- (M)
ВК 4	QL1/C Digital output, light switching, object present $\rightarrow$ output Q <sub>L1</sub> LOW <sup>4)</sup> The pin 4 function of the sensor can be configured
	Additional possible settings via IO-Link

<sup>1)</sup> Limit values

#### Mechanics

Housing	Rectangular
Dimensions (W x H x D)	15.6 mm x 49.5 mm x 43.1 mm
Connection	Male connector M12, 4-pin
Material	
Housing	Metal, zinc diecast
Front screen	Plastic, PMMA
Male connector	Plastic, VISTAL®

<sup>&</sup>lt;sup>2)</sup> Signal transit time with resistive load in switching mode.

<sup>3)</sup> With light/dark ratio 1:1.

<sup>4)</sup> This switching output must not be connected to another output.

Weight	Approx. 77 g
Maximum tightening torque of the fixing screws	1.4 Nm

#### Ambient data

Enclosure rating	IP66 (EN 60529) IP67 (EN 60529) IP69 (EN 60529)
Ambient operating temperature	-20 °C +55 °C
Ambient temperature, storage	-40 °C +70 °C
Warm-up time	$<$ 15 min, Where T $_{\rm u}$ is under $-$ 10 °C
Typ. Ambient light immunity	Artificial light: $\leq 50,000 \text{ lx}$ Sunlight: $\leq 50,000 \text{ lx}$
Shock resistance	$50$ g, $11\mathrm{ms}$ (25 positive and 25 negative shocks along X, Y, Z axes, $150$ total shocks (EN60068-2-27))
Vibration resistance	$10~\rm{Hz} \dots 2,\!000~\rm{Hz}$ (Amplitude 0.5 mm / $10~\rm{g},20~\rm{sweeps}$ per axis, for X, Y, Z axes, 1 octave/min, (EN60068-2-6))
Air humidity	$35\ \%\dots 95\ \%,$ relative humidity (no condensation)
Electromagnetic compatibility (EMC)	EN 60947-5-2
Resistance to cleaning agent	ECOLAB
UL File No.	NRKH.E181493 & NRKH7.E181493

#### Smart Task

Smart Task name	Base logics
Logic function	Direct AND OR
Timer function	Deactivated Switch-on delay Off delay ON and OFF delay Impulse (one shot)
Inverter	Yes
Switching frequency	SIO Logic: 2000 Hz $^{1)}$ IOL: 1600 Hz $^{2)}$
Response time	SIO Logic: 250 $\mu s^{1)}$ IOL: 300 $\mu s^{2)}$
Repeatability	SIO Logic: 120 $\mu$ s <sup>1)</sup> IOL: 150 $\mu$ s <sup>2)</sup>
Switching signal	
Switching signal Q <sub>L1</sub>	Switching output
Switching signal $\bar{Q}_{L1}$	Switching output

 $<sup>^{1)}</sup>$  Use of Smart Task functions without IO-Link communication (SIO mode).

## Diagnosis

Device temperature	
Measuring range	Very cold, cold, moderate, warm, hot
Device status	Yes

<sup>&</sup>lt;sup>2)</sup> Use of Smart Task functions with IO-Link communication function.

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Detailed device status	Yes
Operating hour counter	Yes
Operating hours counter with reset function	Yes
Quality of teach	Yes
Quality of run	Yes, Contamination display

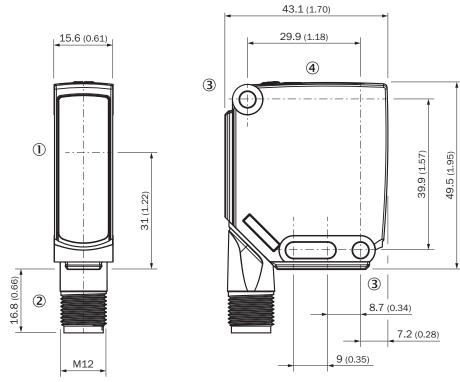
#### Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
ECOLAB certificate	✓
cULus certificate	✓
IO-Link certificate	✓
Laser safety (IEC 60825-1) declaration of manufacturer	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

#### Classifications

ECLASS 5.0	27270902
ECLASS 5.1.4	27270902
ECLASS 6.0	27270902
ECLASS 6.2	27270902
ECLASS 7.0	27270902
ECLASS 8.0	27270902
ECLASS 8.1	27270902
ECLASS 9.0	27270902
ECLASS 10.0	27270902
ECLASS 11.0	27270902
ECLASS 12.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

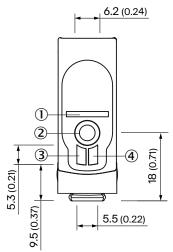
## **Dimensional drawing**



Dimensions in mm (inch)

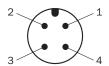
- ① Center of optical axis
- ② Connection
- 3 Mounting hole, Ø 4.2 mm
- (4) display and adjustment elements

#### display and adjustment elements



- ① LED blue
- ② Teach-in button
- 3 LED green
- 4 LED yellow

## Connection type M12 male connector, 4-pin



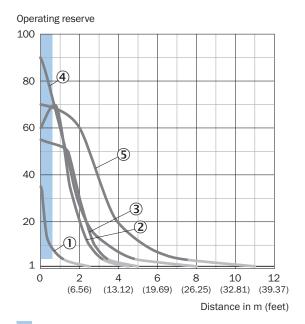
## Truth table Push-pull: PNP/NPN - light switching Q

	Light switching Q (normally closed (upper switch), normally open (lower switch))			
	Object not present → Output HIGH	Object present → Output LOW		
Light receive	<b>⊘</b>			
Light receive indicator	<b>:</b>			
Load resistance to L+		4		
Load resistance to M	A			
	+ (L+) Q - (M)	+ (L+)		

## Truth table Push-pull: PNP/NPN – dark switching $\bar{Q}$

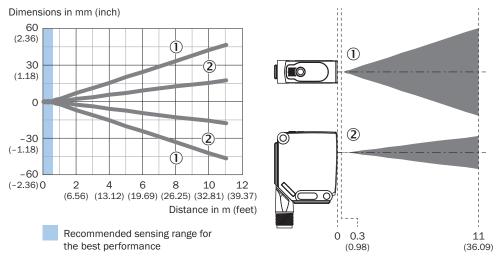
	Dark switching $\overline{\mathbb{Q}}$ (normally open (upper switch), normally closed (lower switch))		
	Object not present → Output LOW	Object present → Output HIGH	
Light receive	<b>⊘</b>		
Light receive indicator	<b>:</b> •		
Load resistance to L+	A		
Load resistance to M		A	
	+ (L+) Q - (M)	+ (L+	

#### Characteristic curve



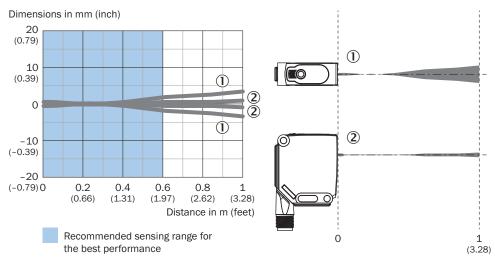
- Recommended sensing range for the best performance
- ① Reflective tape REF-IRF-56
- ② PL10F reflector
- 3 Reflector PL20F
- ④ Reflective tape REF-AC1000
- ⑤ Reflector P250F

#### Light spot size



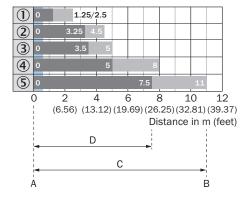
- 1 Light spot horizontal
- ② Light spot vertical

### Light spot size (detailed view) Close range



- 1 Light spot horizontal
- ② Light spot vertical

## Sensing range diagram



#### Recommended sensing range for the best performance

1	Reflective tape REF-IRF-56
2	PL10F reflector
3	Reflector PL20F
4	Reflective tape REF-AC1000
5	Reflector P250F
А	Sensing range min. in m
В	Sensing range max. in m
С	Maximum distance range from reflector to sensor (operating reserve 1)
D	Recommended distance range from re- flector to sensor (operating reserve 3,75)

#### Recommended accessories

Other models and accessories → www.sick.com/W12

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
	<ul> <li>Description: Plate N03 for universal clamp bracket, zinc coated</li> <li>Material: Steel, zinc diecast</li> <li>Details: Zinc plated steel (sheet), Zinc die cast (clamping bracket)</li> <li>Items supplied: Universal clamp (5322626), mounting hardware</li> <li>Usable for: UC12, W14-2, W18-2, W18-3, W11-2, W12-3, W12-2 Laser, W12G, W12 Teflon, W16, W24-2 Ex, PowerProx, W11G-2, TranspaTect, W18-3 Ex, W24-2, PL50A, PL80A, PL40A, P250</li> </ul>	BEF-KHS-N03	2051609	
n n	<ul> <li>Description: Clamping block for dovetail mounting</li> <li>Material: Aluminum</li> <li>Details: Aluminum (anodised)</li> <li>Items supplied: Mounting hardware included</li> <li>Suitable for: W11-2, W12-3</li> </ul>	BEF-KH-W12	2013285	
	<ul> <li>Description: Mounting bracket, large</li> <li>Material: Stainless steel</li> <li>Details: Stainless steel</li> <li>Items supplied: Mounting hardware included</li> <li>Suitable for: W11-2, W12-3, W16</li> </ul>	BEF-WG-W12	2013942	
	<ul> <li>Material: Aluminum</li> <li>Details: Aluminum</li> <li>Items supplied: Including mounting material (sensor) and mounting material (bracket)</li> <li>Usable for: Adapter plate for W23L/W27L to W12L</li> </ul>	BEF-AP-W12	2127742	
reflectors and	optics			
	<ul> <li>Description: Fine triple reflector, screw connection, suitable for laser sensors</li> <li>Dimensions: 52 mm 62 mm</li> <li>Ambient operating temperature: -30 °C +65 °C</li> </ul>	P250F	5308843	

	Brief description	Туре	part no.
connectors ar	nd cables		
<b>1</b>	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A14-050VB3XLEAX	2096235
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-050UB3XLEAX	2095608
6 3	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, angled, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 0.6 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14- C60UB3N2A14	2095728
68	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, angled, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-050UB3N2A14	2095787
6 3	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, angled, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-100UB3N2A14	2096114
63	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, angled, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 15 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-150UB3N2A14	2096115
53	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Male connector, M12, 4-pin, angled, A-coded Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Note: Only suitable for PNP sensors Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YI2A14- C60UB3N2A14	2095788
9 2	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, angled, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Note: Only suitable for PNP sensors</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YI2A14-020UB3N2A14	2095790
10 PG	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Male connector, M12, 4-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 0.2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14- C20UB3M2A14	2096013
F. F.	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Male connector, M12, 4-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14- C60UB3M2A14	2095999
Ro Ro	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 1 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> </ul>	YF2A14-010UB3M2A14	2095997

	Brief description	Туре	part no.
	Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation		
66	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-020UB3M2A14	2096000
No to	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-050UB3M2A14	2096001
No No	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 6 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-060UB3M2A14	2102153
F 16	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-100UB3M2A14	2096002
As do	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 0.6 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14- C60VB3M2A14	2096248
A ST	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 1.5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-015VB3M2A14	2096598
A ST	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-020VB3M2A14	2096599
16 80	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-050VB3M2A14	2096600
66	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-100VB3M2A14	2096601
66	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 20 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-200VB3M2A14	2096602
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, angled, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> </ul>	STE-1204-W	6022084

	Brief description	Туре	part no.
	• Permitted cross-section: ≤ 0.75 mm <sup>2</sup>		
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Cutting technology</li> <li>Permitted cross-section: 0.34 mm² 0.75 mm²</li> </ul>	STE-1204-GQU8	6044998
	Connection type head A: Male connector, M12, 4-pin, straight, A-coded Connection systems: Cutting technology Permitted cross-section: 0.14 mm² 0.34 mm² Note: Test voltage 1.25 kV eff/60 s, insulation group C to VDE 0110, for field bus technology	STE-1204-GQU6	6042089
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm²</li> </ul>	DOS-1204-G	6007302
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Cutting technology Permitted cross-section: 0.14 mm² 0.34 mm²	DOS-1204-GQU6	6042088
<b>Co</b>	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Cutting technology</li> <li>Permitted cross-section: 0.34 mm² 0.75 mm²</li> </ul>	DOS-1204-GQU8	6053328
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	DOS-1204-W	6007303
9 3	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Male connector, M12, 4-pin, angled, A-coded Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Note: Only suitable for PNP sensors Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YI2A14-050UB3N2A14	2145704
66	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Male connector, M12, 4-pin, angled, A-coded Signal type: Sensor/actuator cable Cable: 3 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Note: Only suitable for PNP sensors Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YI2A14-030UB3N2A14	2145706
22	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Male connector, M12, 4-pin, angled, A-coded Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Note: Only suitable for PNP sensors Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YI2A14-100UB3N2A14	2145705
10 PG	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 4-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 1 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-010VB3M2A14	2110005

	Brief description	Туре	part no.	
network devic	network devices			
0.000000		SIG300-OAOGAA100	1131014	
0.000000		SIG300-0A04AA100	1131011	
000000		SIG300-0A05AA100	1131012	
0.0000000		SIG300-0A06AA100	1131013	

## 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:**

Contacts and other locations -www.sick.com

