



AS30-WBM314I220A00

AS30

ARRAY SENSORS





Ordering information

Туре	Part no.
AS30-WBM314I220A00	1095579

Included in delivery: REF-AX-002 (1)

Other models and accessories → www.sick.com/AS30

Illustration may differ



Detailed technical data

Features

Sensor principle Proximity system, Reflector mode Functional principle Web guiding, positioning, Width measurement, Center point measurement Principle of operation (default) Width measurement Dimensions (W x H x D) 31 mm x 62 mm x 52.2 mm Sensing distance ≤ 25 mm Housing design Rectangular Working range 20 mm 30 mm Measurement range 30 mm Minimum detectable object (MDO) 0.2 mm Light source LED, White Wave length 400 nm 700 nm Light spot size 38.9 mm x 11.1 mm Repeatability 0.03 mm ¹¹) Linearity (position value) ± 2 % Resolution 1 μm Adjustment Io-Link, Display Teach-in mode Edge detection Area detection		
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Housing design Rectangular Working range 20 mm 30 mm Measurement range 30 mm Minimum detectable object (MDO) 0.2 mm Light source LED, White Wave length 400 nm 700 nm Light spot size 38.9 mm x 11.1 mm Repeatability 0.03 mm ¹) Linearity (position value) ± 2 % Resolution 1 μm Adjustment IO-Link, Display Teach-in mode Edge detection	Dimensions (W x H x D)	31 mm x 62 mm x 52.2 mm
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Wave length 400 nm 700 nm Light spot size 38.9 mm x 11.1 mm Repeatability 0.03 mm ¹) Linearity (position value) ± 2 % Resolution 1 μm Adjustment IO-Link, Display Teach-in mode Edge detection	Minimum detectable object (MD0)	0.2 mm
Light spot size 38.9 mm x 11.1 mm Repeatability 0.03 mm ¹⁾ Linearity (position value) \$\frac{\pmathbf{\pmath}}{2}\pmathbf{	Light source	LED, White
Repeatability 0.03 mm ¹⁾ Linearity (position value) ± 2 % Resolution 1 µm Adjustment 10-Link, Display Teach-in mode Edge detection	Wave length	400 nm 700 nm
Linearity (position value) ± 2 % Resolution 1 µm Adjustment IO-Link, Display Teach-in mode Edge detection	Light spot size	38.9 mm x 11.1 mm
Resolution 1 μm Adjustment IO-Link, Display Teach-in mode Edge detection	Repeatability	0.03 mm ¹⁾
Adjustment IO-Link, Display Teach-in mode Edge detection	Linearity (position value)	± 2 %
Teach-in mode Edge detection	Resolution	1 µm
	Adjustment	IO-Link, Display
	Teach-in mode	

 $^{^{1)}}$ With respect to sensing distance.

Mechanics/electronics

Supply voltage	18 V 30 V
Ripple	\leq 5 V $^{1)}$
Current consumption	< 3.1 W $^{2)}$
Switching frequency	500 Hz
Switching output	Push-pull: PNP/NPN
Switching output (voltage)	Push-pull: PNP/NPN HIGH = U_V - 3 V/LOW \leq 3 V
Analog output	4 mA 20 mA
Resolution of analog output	12 bit
Output rate of analog output	1 ms
Output current I _{max.}	< 100 mA
Initialization time	0.48 s
Connection type	Male connector M12, 5-pin
Protection class	III ³⁾
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Enclosure rating	IP67
Weight	250 g
Housing material	Metal, zinc diecast
Optics material	Glass, Anti-reflex coating

 $^{^{1)}\,\}mathrm{May}$ not exceed or fall below U_{V} tolerances.

Communication interface

IO-Link	√
VendorID	26
DeviceID HEX	0x80020A
DeviceID DEC	8389130
Cycle time	> 1.1 ms

Ambient data

Ambient operating temperature	-10 °C +55 °C
Ambient temperature, storage	-25 °C +75 °C
Shock load	According to IEC 60068
UL File No.	NRKH.E181493 & NRKH7.E181493

Smart Task

Smart Task name	Base logics
Logic function	Direct AND OR Window
Switching signal	
Switching signal Q _{L1}	Switching output

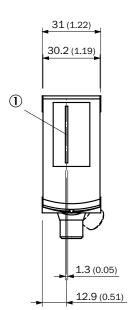
²⁾ Without load.

³⁾ I_N = 2 A.

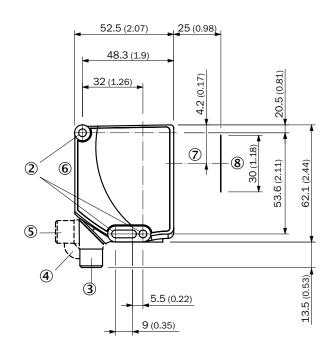
	Switching signal Q _{L2}	Switching output
Classifications		
ECLASS 5.0		27270906
ECLASS 5.1.4		27270906
ECLASS 6.0		27270906
ECLASS 6.2		27270906
ECLASS 7.0		27270906
ECLASS 8.0		27270906
ECLASS 8.1		27270906
ECLASS 9.0		27270906
ECLASS 10.0		27270906
ECLASS 11.0		27270906
ECLASS 12.0		27270906
ETIM 5.0		EC001820
ETIM 6.0		EC001820
ETIM 7.0		EC001820
ETIM 8.0		EC001820
UNSPSC 16.0901		39121528

Dimensional drawing (Dimensions in mm (inch))

AS30-xxx31xxxxxxxx

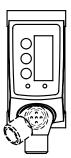


- ① Center field of view
- ② Fixing hole
- ③ M12 male connector, delivery state
- ④ M12 male connector, end stop right
- ⑤ M12 male connector, end stop left
- ⑥ Display and adjustment elements
- ⑦ Optical axis
- 8 Field of view



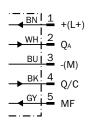
Adjustments

Display and adjustment elements



Connection diagram

Cd-435



Recommended accessories

Other models and accessories → www.sick.com/AS30

	Brief description	Туре	Part no.	
Connection modules				
	IO-Link V1.1 Class A port, USB2.0 port, optional external power supply 24V $/$ 1A	IOLA2US-01101 (SiLink2 Master)	1061790	
Universal bar	clamp systems			
	Plate K for universal clamp bracket, steel, zinc coated, Universal clamp (2022726), mounting hardware	BEF-KHS-K01	2022718	
	Mounting bar, straight, 200 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12G-A	4056054	
	Mounting bar, L-shaped, 150 mm x 150 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12L-A	4056052	
Mounting bra	ackets and plates			
C. Cea	Aluminum, mounting hardware for the sensor included	BEF-AP-AS30	2124602	
Plug connect	ors and cables			
	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A15- 050VB5XLEAX	2096240	
	 Connection type head A: Male connector, M12, 5-pin, straight Description: Unshielded, Head A: male connector, M12, 5-pin, straight, unshielded, for cable diameter 4 mm 6 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² Note: For field bus technology 	STE-1205-G	6022083	

	Brief description	Туре	Part no.			
Reflectors						
	Fine triple, planar, suitable for laser sensors, 75 mm x 25 mm, PMMA/ABS, screwable	PL25FA	5340878			
Terminal and	alignment brackets					
R	Holder for reflector foil (scope of delivery AS30) or accessory reflector. Simply align and set the correct scanning distance., steel, zinc coated, Reflector holder, screw set for AS30 and reflector PL25FA (5340878)	REFLECTORHOLD- ER SD25	2107380			
	Bracket for easy mounting of ELA external illumination as a backlight. Suitable for all AS30 Prime with 25 mm sensing distance., steel, zinc coated, Mounting bracket, Screw set for AS30 and ELA	SET FORK HOLD- ER ELA SD25	2134662			
Sensor Integr	Sensor Integration Gateway					
	 Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) Logic editor: yes Communication interface: IO-Link, USB, Ethernet, PROFINET, REST API Product category: IO-Link Master 	SIG200-0A0412200	1089794			
	 Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) Logic editor: yes Communication interface: IO-Link, USB, Ethernet, REST API Product category: IO-Link Master 	SIG200-0A0G12200	1102605			

Recommended services

Additional services → www.sick.com/AS30

	Туре	Part no.
Function Block Factory		
 Description: The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&R. More information on the FBF can be found here. Note: You can configure your function block at Function Block Factory. As a login please use your SICK ID. 	Function Block Factory	On request

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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