



AS30-EBM314I220C00

AS30

ARRAY SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | part no. |
|--------------------|----------|
| AS30-EBM314I220C00 | 1121191 |

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

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

Detailed technical data

Features

| | |
|---|----------------------------------|
| Sensor principle | Proximity system, Reflector mode |
| Functional principle | Web guiding, positioning |
| Principle of operation (default) | Web guiding |
| 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 | 20 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 Area detection |

¹⁾ With respect to sensing distance.

Mechanics/electronics

| | |
|---|---|
| Supply voltage | 18 V ... 30 V |
| Ripple | $\leq 5 \text{ V}^{1)}$ |
| Current consumption | $< 3.1 \text{ W}^{2)}$ |
| Switching frequency | 500 Hz |
| Switching output | Push-pull: PNP/NPN |
| Switching output (voltage) | Push-pull: PNP/NPN HIGH = $U_V - 3 \text{ V}$ /LOW $\leq 3 \text{ V}$ |
| Analog output | 4 mA ... 20 mA |
| Resolution of analog output | 12 bit |
| Output rate of analog output | 1 ms |
| Output current I_{max} | $< 100 \text{ mA}$ |
| 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 | Zinc diecast |
| Optics material | Anti-reflex coating |

1) May not fall below or exceed U_V tolerances.

2) Without load.

3) $I_N = 2 \text{ A}$.

Communication interface

| | |
|-------------------|--------------------|
| IO-Link | ✓ |
| VendorID | 26 |
| DeviceID HEX | 0x80020B |
| DeviceID DEC | 8389131 |
| Cycle time | $> 1.1 \text{ ms}$ |

Ambient data

| | |
|--------------------------------------|---------------------------------------|
| Ambient operating temperature | $-10 \text{ °C} \dots +55 \text{ °C}$ |
| Ambient temperature, storage | $-25 \text{ °C} \dots +75 \text{ °C}$ |
| 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 |

| Switching signal Q _{L2} | Switching output |
|----------------------------------|------------------|
|----------------------------------|------------------|

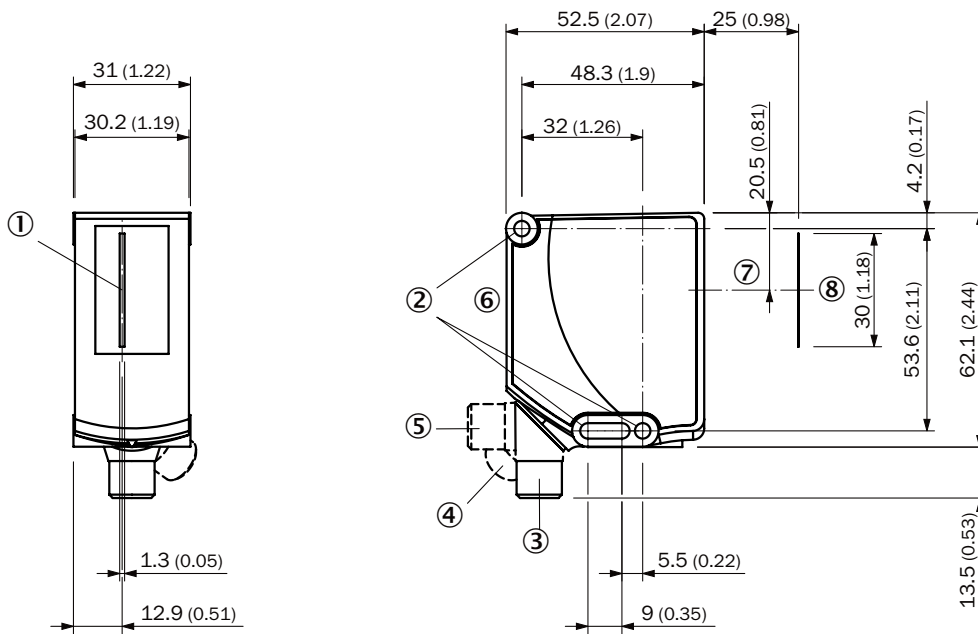
Certificates

| | |
|--|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China RoHS | ✓ |
| cULus certificate | ✓ |
| IO-Link | ✓ |
| Photobiological safety (IEC EN 62471) | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

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 |

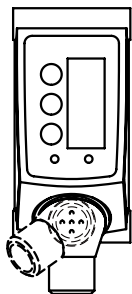
Dimensional drawing AS30-xxx31xxxxxxx



Dimensions in mm (inch)

- 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

display and adjustment elements











Connection diagram Cd-435



Recommended accessories

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

| | Brief description | Type | part no. |
|---|---|---------------------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Holder for reflector foil (scope of delivery AS30) or accessory reflector. Simply align and set the correct scanning distance. Material: Steel Details: Steel, zinc coated Items supplied: Reflector holder, screw set for AS30 and reflector PL25FA (5340878) Suitable for: AS30 | REFLECTORHOLD-ER SD25 | 2107380 |
|  | <ul style="list-style-type: none"> Description: Bracket for easy mounting of ELA external illumination as a backlight. Suitable for all AS30 Prime with 25 mm sensing distance. Material: Steel Details: Steel, zinc coated Items supplied: Mounting bracket, Screw set for AS30 and ELA Suitable for: AS30, ELA, AS30 | SET FORK HOLD-ER ELA SD25 | 2134662 |
|  | <ul style="list-style-type: none"> Description: Plate K for universal clamp bracket Material: Steel Details: Steel, zinc coated Items supplied: Universal clamp (2022726), mounting hardware Usable for: W11-2, W12-3, W14-2, W18-3, W23-2, W24-2, W27-3, W30, W32, W34, W36, PL50A, PL80A, P250, UC12, LUT3, KT2, KT5-2, KT8, CS8, DT2, DS30, DS40, W12-2 Laser, W16, W26, KT5 | BEF-KHS-K01 | 2022718 |
|  | <ul style="list-style-type: none"> Material: Aluminum Details: Aluminum Items supplied: Mounting hardware for the sensor included Usable for: Adapter plate for AX20 to AS30 | BEF-AP-AS30 | 2124602 |
| connectors and cables | | | |
|  | <ul style="list-style-type: none"> Connection type head A: Male connector, M12, 5-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² Note: For field bus technology | STE-1205-G | 6022083 |
|  | <ul style="list-style-type: none"> 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, Uncontaminated zones | YF2A15-050VB5XLEAX | 2096240 |

| | Brief description | Type | part no. |
|--|--|-----------------------------------|----------|
| network devices | | | |
|  | | SIG200-0A04I2200 | 1089794 |
|  | | SIG200-0A0G12200 | 1102605 |
|  | | IOLA2US-01101 (SiLink2 Master) | 1061790 |
| reflectors and optics | | | |
|  | <ul style="list-style-type: none"> • Description: Fine triple, planar, suitable for laser sensors • Dimensions: 75 mm 25 mm • Ambient operating temperature: -30 °C ... +65 °C | PL25FA | 5340878 |

SICK AT A GLANCE

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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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