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DATA SHEET

AS30-MBM834I320A00

AS30
Array sensors

SICK Sensor Intelligence



Illustration may differ

ARRAY SENSORS

AS30-MBM834I320A00

ORDERING INFORMATION

Type	part no.
AS30-MBM834I320A00	1118222

Further device versions and accessories at www.sick.com/AS30

DETAILED TECHNICAL DATA

FEATURES

Sensor principle	Proximity system, Reflector mode
Functional principle	Multi-edge, Web guiding, positioning, Width measurement, Center point measurement
Principle of operation (default)	Multi-edge: Detection and evaluation of up to 8 edges
Housing design	Middle
Dimensions (W x H x D)	31 mm x 62 mm x 52.2 mm
Light source	LED, White
Light spot size	210 mm x 13.2 mm
Wave length	400 nm ... 700 nm
Working range	90 mm ... 110 mm
Measurement range	165 mm
Sensing distance	≤ 100 mm
Minimum detectable object (MDO)	2 mm
Linearity (position value)	± 1 %
Resolution	0.1 mm
Repeatability	0.15 mm [1]
Adjustment	IO-Link
Teach-in mode	Edge detection Area detection Edge functions (width, sum, smallest, largest, midpoint or subtraction)
Output time	2 ms
Safety-related parameters	
$MTTF_D$	271 years

[1] With respect to sensing distance.

INTERFACES

IO-Link	✓
VendorID	26
DeviceID HEX	0x800209
DeviceID DEC	8389129
Cycle time	> 1.1 ms

ELECTRONICS

Supply voltage	18 V ... 30 V
Ripple	≤ 5 V [1]
Current consumption	< 3.1 W [2]
Initialization time	0.48 s
Switching frequency	500 Hz
Switching output	Push-pull: PNP/NPN
Switching output (voltage)	Push-pull: PNP/NPN HIGH = U_V - 3 V/LOW ≤ 3 V
Analog output	4 mA ... 20 mA
Resolution of analog output	12 bit
Output rate of analog output	2 ms
Output current $I_{max.}$	< 100 mA
Protection class	III [3]
Circuit protection	U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Connection type	Plug, M12, 5-pin

[1] May not fall below or exceed U_V tolerances.

[2] Without load.

[3] I_N = 2 A.

MECHANICS

Housing material	Zinc diecast
Optics material	Anti-reflex coating
Weight	250 g

AMBIENT DATA

Ambient operating temperature	–10 °C ... +55 °C
Ambient temperature, storage	–25 °C ... +75 °C
Shock load	According to IEC 60068
Enclosure rating	IP67
UL File No.	NRKH.E181493 & NRKH7.E181493

SMART TASK

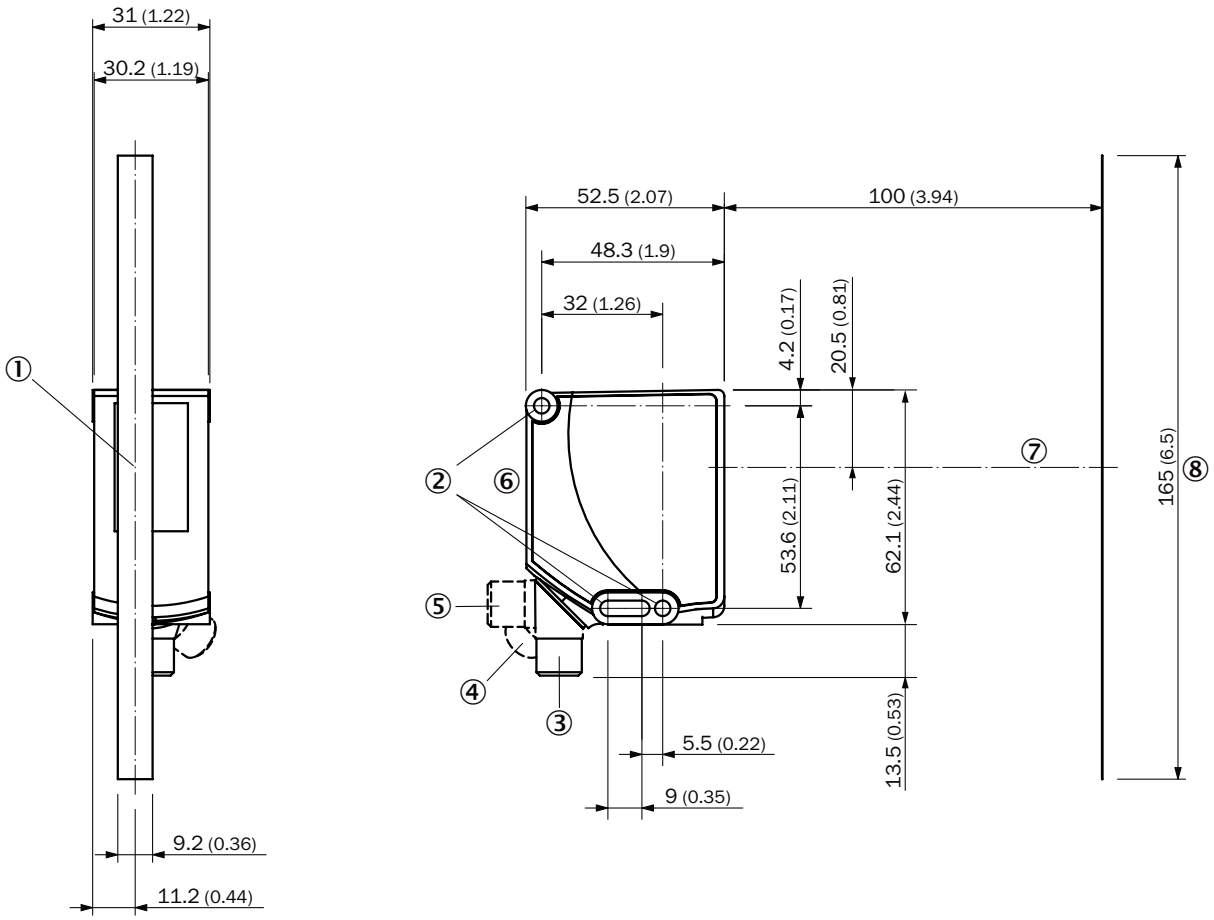
Smart Task name	Base logics
Logic function	Direct AND OR Window
Switching signal	
Switching signal Q_{L1}	Switching output

Switching signal Q_{L2}	Switching output

CERTIFICATES

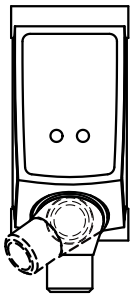
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓
IO-Link certificate	✓
Photobiological safety (IEC EN 62471)	✓
Information according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

DIMENSIONAL DRAWING AS30-XXX83XXXXXXXX

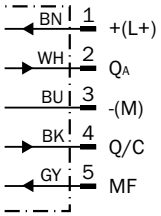


Dimensions in mm (inch)
① Center field of view
② fixing hole
③ M12 male connector, delivery state
④ M12 male connector, end stop right
⑤ M12 male connector, end stop left
⑥ display and adjustment elements
⑦ Optical axis
⑧ Field of view

DISPLAY AND ADJUSTMENT ELEMENTS



CONNECTION DIAGRAM CD-435



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1118222

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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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