



DATA SHEET

RAY26P-34112C30ZZZ

RAY26 Reflex Array
Photoelectric sensors

SICK

Sensor Intelligence



Illustration may differ

PHOTOELECTRIC SENSORS

RAY26P-34112C30ZZZ

ORDERING INFORMATION

Type	part no.
RAY26P-34112C30ZZZ	1121282

Further device versions and accessories at www.sick.com/RAY26_Reflex_Array



DETAILED TECHNICAL DATA

FEATURES

Functional principle	Photoelectric retro-reflective sensor
Functional principle detail	Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
Dimensions (W x H x D)	24.6 mm x 82.5 mm x 53.3 mm
Housing design (light emission)	Rectangular
Minimum object size	2 mm, position-independent detection within the light array
Detection height	10 mm
Sensing range max.	0 m ... 1.5 m ^{1) 2)}
Distance of the sensor to reflector	≥ 0 m
Type of light	Visible red light
Light source	PinPoint LED ³⁾
Light spot size (distance)	10 mm x 9 mm (1 m)
Wave length	635 nm
Adjustment	BluePilot: Teach-in
AutoAdapt	✓
Special applications	Detecting objects with position tolerances, Detecting perforated objects, Detecting uneven, shiny objects, Detecting transparent objects, Detecting flat objects

¹⁾ Reflector PL80A.
²⁾ At minimum object size 10 mm.
³⁾ Average service life: 100,000 h at T_u = +25 °C.

MECHANICS/ELECTRONICS

Supply voltage U_B	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp}
Current consumption	25 mA ²⁾ 40 mA ³⁾
Switching output	Push-pull: PNP/NPN ⁴⁾
Output function	Factory setting: Pin 2 / white: NPN normally closed (light switching), PNP normally open (dark switching), Pin 4 / black: NPN normally open (dark switching), PNP normally closed (light switching)
Switching mode	Light/dark switching
Signal voltage PNP HIGH/LOW	Approx. $V_s - 2.5 \text{ V} / 0 \text{ V}$
Signal voltage NPN HIGH/LOW	Approx. $V_s / < 2.5 \text{ V}$
Output current $I_{\max}$	≤ 100 mA
Response time	≤ 500 μs ⁵⁾
Switching frequency	1,000 Hz ⁶⁾
Connection type	Cable with M12 male connector, 4-pin, 270 mm ⁷⁾
Cable material	Plastic, PVC
Circuit protection	A ⁸⁾ B ⁹⁾ C ¹⁰⁾ D ¹¹⁾
Protection class	III
Weight	100 g
Housing material	Plastic, VISTAL®
Optics material	Plastic, PMMA
Enclosure rating	IP66 IP67
Ambient operating temperature	-40 °C ... +60 °C ^{12) 13)}
Ambient temperature, storage	-40 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

¹⁾ Limit values.²⁾ 16 V DC ... 30 V DC, without load.³⁾ 10 V DC ... 16 V DC, without load.⁴⁾ Pin 4 and pin 2: This switching output must not be connected to another output.⁵⁾ Signal transit time with resistive load in switching mode.⁶⁾ With light/dark ratio 1:1 in switching mode.⁷⁾ Do not bend below 0 °C.⁸⁾ A = V_s connections reverse-polarity protected.⁹⁾ B = inputs and output reverse-polarity protected.¹⁰⁾ C = interference suppression.¹¹⁾ D = outputs overcurrent and short-circuit protected.¹²⁾ Avoid condensation on the front screen of the sensor and on the reflector.¹³⁾ Allowed temperature change after Teach +/- 20 K.**SAFETY-RELATED PARAMETERS**

MTTF _D	709 years
DC _{avg}	0 %

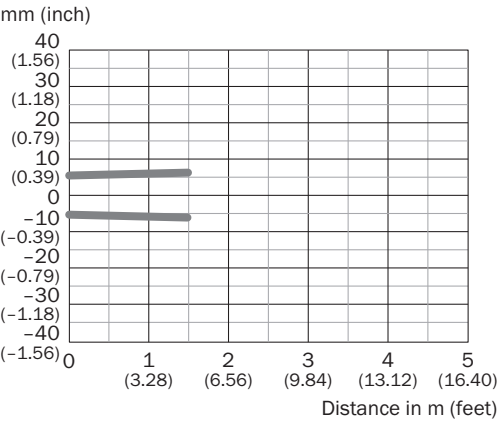
CERTIFICATES

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	✓
Photobiological safety (DIN EN 62471) certificate	✓

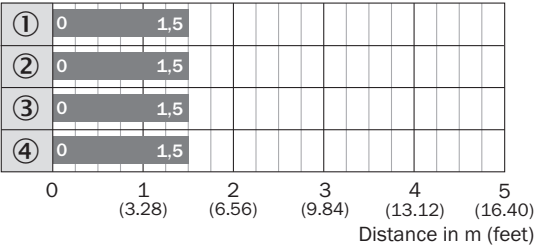
CONNECTION DIAGRAM CD-414



LIGHT SPOT SIZE

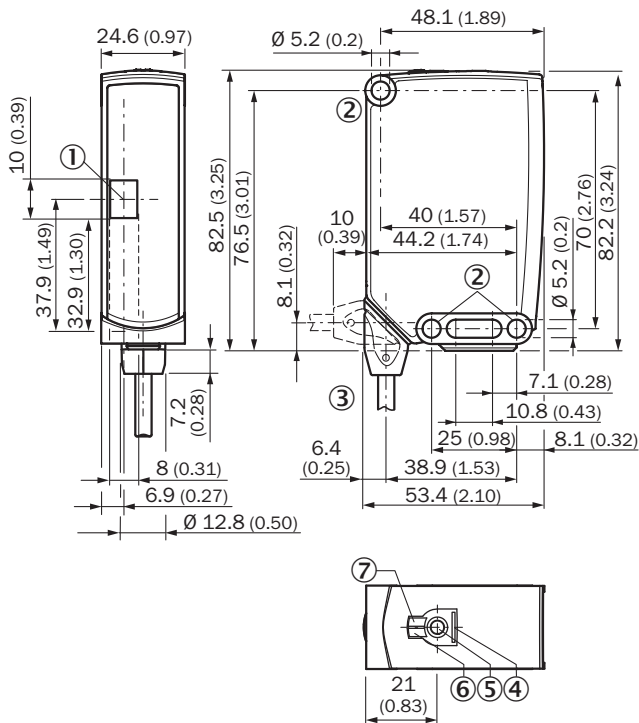


SENSING RANGE DIAGRAM



- Sensing range
- ① Reflector PL80A
 - ② Reflector PL40A
 - ③ Reflector PL30A
 - ④ Reflector P250F

DIMENSIONAL DRAWING



Dimensions in mm (inch)

- ① Center of optical axis
- ② Mounting hole, $\varnothing 5.2$ mm
- ③ Connection
- ④ BluePilot blue: AutoAdapt indicator during run mode
- ⑤ Teach-in button
- ⑥ LED indicator yellow: Status of received light beam
- ⑦ LED indicator green: Supply voltage active

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/1121282



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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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