RAY26P-34137B30ZZZ

RAY26 Reflex Array

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

RAY26P-34137B30ZZZ | RAY26 Reflex Array

PHOTOELECTRIC SENSORS

Ordering information

Type	part no.
RAY26P-34137B30ZZZ	1121281

Other models and accessories ➔ www.sick.com/RAY26_Reflex_Array

Illustration may differ

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	5 mm, position-independent detection within the light array
Detection height	24 mm
Sensing range max.	0 m ... 4.5 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)	24 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: input, teach-in, Pin 4 / black: NPN normally closed (light switching), PNP normally open (dark switching)
Switching mode	Light/dark switching
Signal voltage PNP HIGH/LOW	Approx. V_S – 2.5 V / 0 V
Signal voltage NPN HIGH/LOW	Approx. VS / < 2.5 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

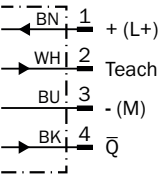|	
$MTTF_D$	709 years
DC_{avg}	0 %

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓
cULus certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

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

Connection diagram Cd-505

BN	1	+ (L+)
WH	2	Teach
BU	3	- (M)
BK	4	$\overline{Q}$

Light spot size

mm (inch)

Distance in m (feet)

Sensing range diagram

①	0	4.5
②	0	3
③	0	3

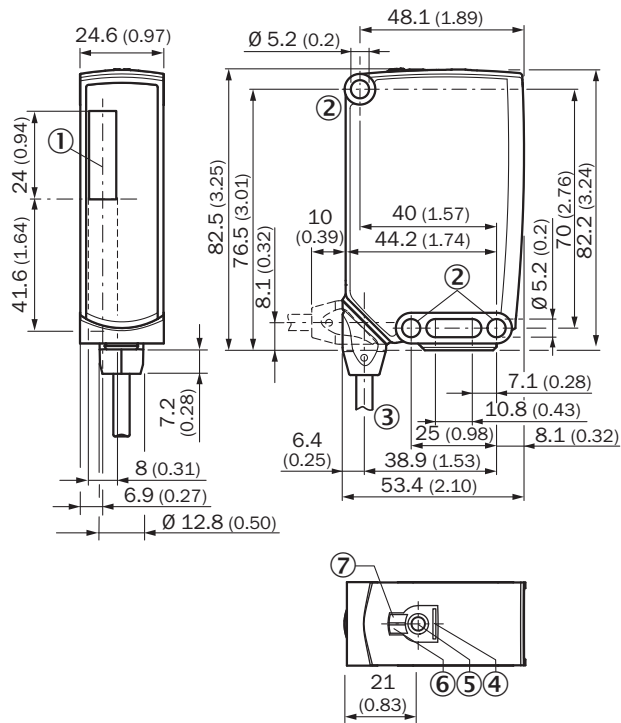Distance in m (feet)
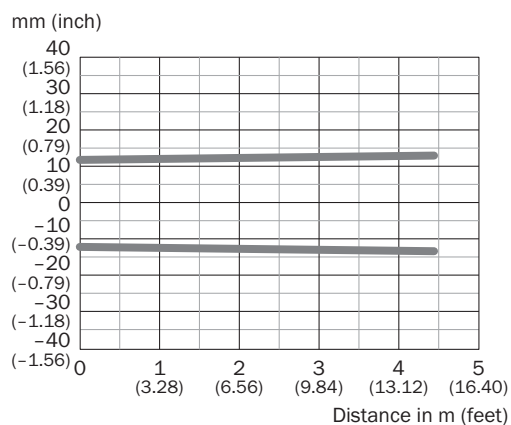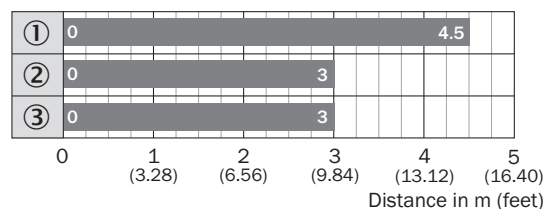
■ Sensing range
① Reflector PL80A
② Reflector PL81
③ Reflector PL100

Dimensional drawing

Dimensions in mm (inch)
① Center of optical axis
② Mounting hole, Ø 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

Recommended accessories

Other models and accessories ➜ www.sick.com/RAY26_Reflex_Array

	Brief description	Type	part no.
reflectors and optics			
	• **Description:** Rectangular, screw connection • **Dimensions:** 84 mm 84 mm • **Ambient operating temperature:** –30 °C … +65 °C	PL80A	1003865
	• **Description:** Rectangular, screw connection • **Dimensions:** 100 mm 100 mm • **Ambient operating temperature:** –20 °C … +65 °C	PL100	5321625
	• **Description:** Rectangular, self-adhesive • **Dimensions:** 50 mm 80 mm • **Ambient operating temperature:** –20 °C … +65 °C	PL81	5322795
Mounting systems			
	• **Description:** Mounting bracket • **Material:** Steel • **Details:** Steel, zinc coated • **Items supplied:** Mounting hardware included • **Suitable for:** W23-2, W27-3, Reflex Array	BEF-WN-W23	2019085
connectors and cables			
	• **Connection type head A:** Male connector, M12, 4-pin, straight, A-coded • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm²	STE-1204-G	6009932
	• **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

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