Product family overview

RAY26 Reflex Array

Photoelectric sensor with light array for detecting flat objects

SICK
Sensor Intelligence.

Advantages

Simple alignment and reliable object detection

The RAY26 Reflex Array photoelectric sensor has a uniform, highly visible light band. The photoelectric sensor can be aligned quickly and easily thanks to this light band. After alignment, only teach-in is needed before the sensor is ready for object detection.

Save valuable time during commissioning thanks to the quick alignment and easy adjustment of the sensor

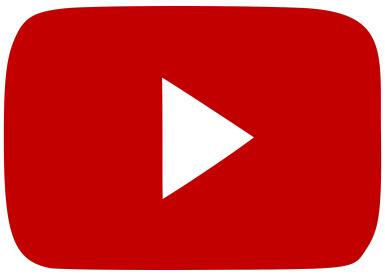
Predictive maintenance thanks to the transmission of maintenance signals

During operation, blue LEDs indicate the degree of contamination of the sensor and reflector. The integrated IO-Link technology enables quick and reliable transmission of these maintenance signals to the controller (PLC). This means maintenance and cleaning of the sensor can be planned at an early stage, avoiding unplanned downtime.

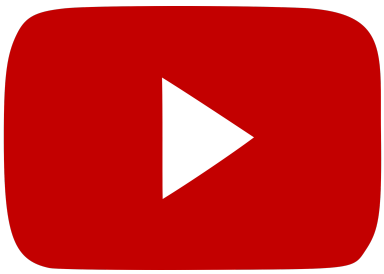
Prevent unplanned downtime with the help of predictive maintenance

Conveyor belt suppression

Conveyor belt suppression enables gradual deactivation of the detection zone (A) right above the conveyor belt. This suppresses the interference of the conveyor belt that causes the sensor to switch during system operation.



Conveyor belt suppression, manually



Conveyor belt suppression, via IO-Link

Ensure plant availability quickly and easily with conveyor belt suppression

RAY26 Reflex Array

Technical data overview

Dimensions (W x H x D)	24.6 mm x 82.5 mm x 53.3 mm
Functional principle detail	Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
Light source	PinPoint LED
Type of light	Visible red light
Enclosure rating	IP66, IP67
Housing material	Plastic
Adjustment	Teach-in button

Product description

Photoelectric sensors from the RAY26 Reflex Array product family enable reliable object detection of flat objects as well as fast commissioning. When combined with a reflector, the photoelectric sensors also detect small, flat, transparent or uneven objects from a size of 3 mm. Within a 55 mm-high uniform light array, the sensors detect the leading edge of the respective object for this purpose. This means that even perforated objects can be reliably detected without multiple switching.

At a glance

- Sender and receiver in a single housing, combined with a reflector
- Detection of objects > 1 mm or > 3, 5, 10 mm, depending on the detection height
- ASIC from SICK
- Visible uniform light array (PinPoint LED)
- AutoAdapt technology (predictive maintenance) and conveyor belt suppression

Your benefits

- Reduce overall costs by up to 50% compared to solutions with separate sender and receiver housings
- Reliable, position-independent detection of very flat objects
- Productivity increase thanks to reliable object detection (regardless of object property) and prevention of multiple switching (for perforated, non-uniform objects)
- Quick and easy optical alignment, commissioning and monitoring
- Reduction of downtime of conveyor systems

Ordering information

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

- **Minimum object size:** ≥ 1 mm
- **Sensing range max.:** 0 m ... 1.5 m
- **Detection height:** 20 mm
- **Functional principle detail:** Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
- **Functional principle:** Photoelectric retro-reflective sensor
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light
- **Adjustment:** Teach-in button

Switching output	Connection type	Type	Part no.
PNP	Male connector M12, 4-pin	RAY26P-24862130A00	1120666
Push-pull: PNP/NPN	Cable with M12 male connector, 4-pin, 270 mm [1]	RAY26P-34162130A00	1106994
	Male connector M12, 4-pin	RAY26P-24162130A00	1106993

[1] Do not bend below 0 °C.

- **Minimum object size:** ≥ 3 mm, ≥ 5 mm, ≥ 10 mm
- **Sensing range max.:** 0 m, 0 m, 0 m ... 2 m, 3 m, 4.5 m
- **Detection height:** 55 mm
- **Functional principle detail:** Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
- **Functional principle:** Photoelectric retro-reflective sensor
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light
- **Adjustment:** Teach-in button

Switching output	Connection type	Type	Part no.
PNP	Cable with M12 male connector, 4-pin, 270 mm [1]	RAY26P-34862330A00	1120665
Push-pull: PNP/NPN		RAY26P-34162330A00	1221943
	Cable, 4-wire, 2 m [1]	RAY26P-1H162330A00	1221945
	Male connector M12, 4-pin	RAY26P-24162330A00	1221060

[1] Do not bend below 0 °C.

- **Minimum object size:** ≥ 5 mm
- **Sensing range max.:** 0 m ... 3 m
- **Detection height:** 55 mm
- **Functional principle detail:** Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
- **Functional principle:** Photoelectric retro-reflective sensor
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light
- **Adjustment:** Teach-in button

Switching output	Connection type	Type	Part no.
PNP	Cable with M12 male connector, 4-pin, 270 mm [1]	RAY26P-34862530A00	1121881
Push-pull: PNP/NPN		RAY26P-34162530A00	1221947
	Cable, 4-wire, 2 m [1]	RAY26P-1H162530A00	1221948
	Male connector M12, 4-pin	RAY26P-24162530A00	1221946

[1] Do not bend below 0 °C.

- **Minimum object size:** ≥ 10 mm
- **Sensing range max.:** 0 m ... 4.5 m
- **Detection height:** 55 mm
- **Functional principle detail:** Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
- **Functional principle:** Photoelectric retro-reflective sensor
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light
- **Adjustment:** Teach-in button

Switching output	Connection type	Type	Part no.
PNP	Cable with M12 male connector, 4-pin, 270 mm [1]	RAY26P-34862930A00	1121370
Push-pull: PNP/NPN		RAY26P-34162930A00	1221950
		RAY26P-34162A30A00	1111102
			1113471
	Cable, 4-wire, 2 m [1]	RAY26P-1H162930A00	1221951
	Male connector M12, 4-pin	RAY26P-24162930A00	1221949

[1] Do not bend below 0 °C.

- **Minimum object size:** ≥ 2 mm
- **Sensing range max.:** 0 m ... 1.5 m
- **Detection height:** 10 mm
- **Functional principle detail:** Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
- **Functional principle:** Photoelectric retro-reflective sensor
- **Switching output:** push-pull: PNP/NPN

Switching mode	Type of light	Adjustment	Connection type	Type	Part no.
Light/dark switching	Visible red light	Teach-in button	Cable with M12 male connector, 4-pin, 270 mm [1]	RAY26P-34112C30ZZZ	1121282

[1] Do not bend below 0 °C.

- **Minimum object size:** ≥ 5 mm
- **Sensing range max.:** 0 m ... 4.5 m
- **Detection height:** 24 mm
- **Functional principle detail:** Without reflector minimum distance (autocollimation/coaxial optics), Reflex Array
- **Functional principle:** Photoelectric retro-reflective sensor
- **Switching output:** push-pull: PNP/NPN

Switching mode	Type of light	Adjustment	Connection type	Type	Part no.
Light/dark switching	Visible red light	Teach-in button	Cable with M12 male connector, 4-pin, 270 mm [1]	RAY26P-34137B30ZZZ	1121281

[1] Do not bend below 0 °C.

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com