# Multitalents for detecting polybags and flat mail items

The RAY10 and RAY26 Reflex Array sensors allow for efficient detection solutions for objects with low edge heights

Waldkirch, February 2019 – RAY10 and RAY26 are the names of the new product families of Reflex Array sensors from SICK. The sensors work with a 2D light band that allows them to reliably detect flat and location-tolerant objects on conveying systems. This saves you up to 50 percent of the installation effort and costs involved in light grid solutions or multiple photoelectric sensors. The compact RAY10 and the performance-oriented RAY26 are specialized for different installation and detection conditions and can recognize objects with edge heights between 3 millimeters and 10 millimeters. They therefore offer a high degree of mounting flexibility for a wide range of detection and installation situations. In CEP hubs and distribution centers, the RAY10 and RAY26 have proven themselves to be reliable, integration-friendly, and efficient sensor solutions for detecting polybags and flats – which are increasingly being used by senders to minimize shipping costs – as well as newspapers and other flat mail items and location-tolerantobjects.

The 2D light array of the RAY10 and RAY26 is also ideally suited to detecting pallets of varying heights, detecting objects with perforated surface structures, and detecting flat and location-tolerantobjects in front of weighing or labeling systems in intralogistics – for the sole use of photoelectric sensors with a punctiform light beam consistently leads to multiple switching operations for these critical objects.

**RAY10: The especially space-saving light band photoelectric sensor for leading edge detection**

The RAY10 Reflex Array sensor is designed for use in the vicinity of machines where there is limited mounting space and therefore allows for space-saving sensor solutions. Installation is made significantly easier thanks to the bright PinPoint LED with its sharp-edged light spot and the integrated alignment aid. At a detection height of 25 millimeters, the RAY10 masters minimum object heights from 5 millimeters, with a response time of just 0.5 ms. This means that the sensor even provides reliable detection results at high conveying speeds and guarantees high plant throughput, such as on CEP conveying lines. This makes it the winner in price-performance in this size.

**RAY26: Reliable best performance, even for the flattest object leading edges or high detection heights**

The RAY26 sensor works at a detection height of 55 millimeters and, depending on the sensor version, can recognize minimum edge heights between 3 millimeters and 10 millimeters. With the selection of object size and the conveyor belt suppression function, the sensor settings can be quickly and flexibly adapted to the objects to be detected and the framework conditions (conveyor belt) during commissioning and operation via IO-Link. This greatly reduces the time-consuming local manual intervention, optimizing the availability and productivity of processes and plants. The RAY26’s sensor integration is also made significantly easier through the bright PinPoint LED. The bottom line is that the RAY26 currently sets the benchmark for price-performance on the market thanks to these features.

**Predictive maintenance**

RAY10 and RAY26 are equipped with an optical indicator which promptly informs the user when the sensor and reflector are due for cleaning. The sensors also transmit the information to the control via IO-Link. Both features ensure the highest possible sensor availability and help to prevent unplanned conveyor system downtimes.

**Application potential beyond logistics**

The RAY10 and RAY26 Reflex Array sensors combined with reflectors avoid the often space-critical installation of photoelectric sensors positioned above one another, which also requires lengthy adjustments, and the increased effort of a light grid solution – advantages that also win over customers outside of the logistics sector. In addition to the varied application possibilities in logistics, there are also countless application examples in other sectors where objects need to be detected using their leading edge. These examples include processing carton blanks in packaging technology, detecting profile material in the steel industry, detecting radiator condensers on conveying systems in the automobile industry, protrusion monitoring of printed circuit boards in electronics production, or the automated detection of boards, plates, and panels in the timber industry.

Image:   
*The RAY10 and RAY26 Reflex Array sensors can detect leading edges only a few millimeters high and therefore reliably record flat and location-tolerant objects.*

SICK is one of the world’s leading producers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. e. h. Erwin Sick, the company with headquarters in Waldkirch im Breisgau near Freiburg ranks among the technological market leaders. With more than 50 subsidiaries and equity investments as well as numerous agencies, SICK maintains a presence around the globe. In the 2017 fiscal year, SICK had almost 9,000 employees worldwide and a group revenue of around EUR 1.5 billion.

Additional information about SICK is available on the Internet at http://www.sick.com or by phone on +49 (0) 7681 202 4183.